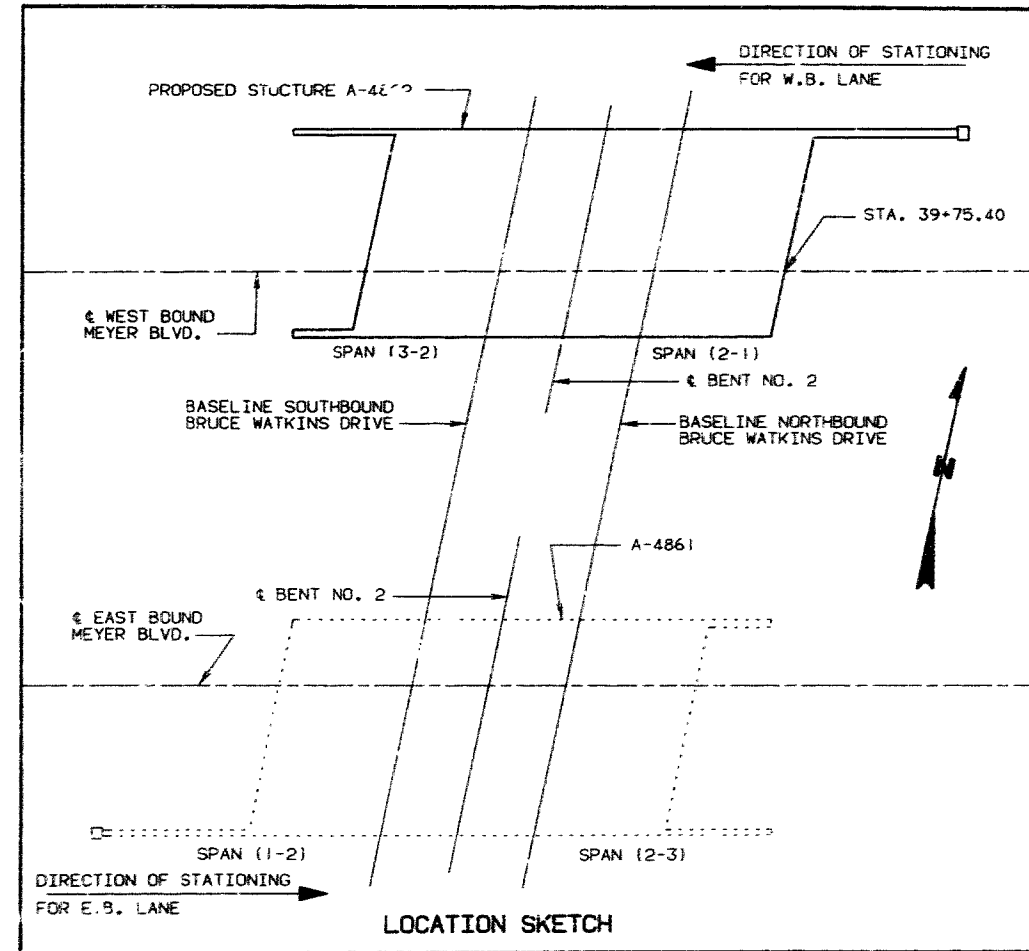


MISSOURI HIGHWAY AND TRANSPORTATION COMMISSION

STATE	PROJ. NO.	SHEET NO.
MO.		257
SEC./SUR. 3	TWP. 48	RGE. 33

- 1 INDEX OF DRAWINGS
- 2 PLAN AND ELEVATION
- 3 QUANTITIES, GEN. NOTES, AND PILE DATA
- 4 BORINGS
- 5 ABUTMENT NO. 1
- 6 ABUTMENT NO. 1
- 7 ABUTMENT NO. 1
- 8 ABUTMENT NO. 1
- 9 ABUTMENT NO. 1
- 10 ABUTMENT NO. 1
- 11 ABUTMENT NO. 1
- 12 ABUTMENT NO. 1
- 13 ABUTMENT NO. 1
- 14 ABUTMENT NO. 1
- 15 ABUTMENT NO. 1
- 16 INT. BT. NO. 2
- 17 INT. BT. NO. 2
- 18 INT. BT. NO. 2
- 19 ABUTMENT NO. 3
- 20 ABUTMENT NO. 3
- 21 ABUTMENT NO. 3
- 22 ABUTMENT NO. 3
- 23 ABUTMENT NO. 3
- 24 ABUTMENT NO. 3
- 25 ABUTMENT NO. 3
- 26 ABUTMENT NO. 3
- 27 ABUTMENT NO. 3
- 28 ABUTMENT NO. 3
- 29 VERTICAL DRAINS AT ABUTMENT NO. 1
- 30 VERTICAL DRAINS AT ABUTMENT NO. 3
- 31 LAMINATED BEARINGS AT ABUTMENT NO. 1 & 3
- 32 PRESTRESSED GIRDER ELEVATION
- 33 FASCIA GIRDER ELEVATION
- 34 PLAN OF TOP SLAB (ALL OPTIONS)
- 35 PLAN OF BOTTOM SLAB (C.I.P. OPTION)
- 36 PLAN OF BOTTOM SLAB (PRECAST PANEL OPTION)
- 37 SECTION THRU SLAB (C.I.P. OPTION)
- 38 SECTION THRU SLAB (PRECAST PANEL OPTION)
- 39 SLAB POURING SEQUENCE
- 40 END ABUTMENT DIAPH. DETAILS
- 41 INT. BENT DIAPH. AND INT. DIAPH. DETAILS
- 42 PRECAST PANEL OPTION
- 43 PREFORMED COMPRESSION JOINT SEAL DETAILS
- 44 PREFORMED COMPRESSION JOINT SEAL DETAILS
- 45 PART PLAN OF SIDEWALK AND PLANTER
- 46 PART PLAN OF SIDEWALK AND PLANTER
- 47 DETAILS OF RIGHT CURB AND PLANTER WALL
- 48 SECTION NEAR RIGHT PLANTER WALL
- 49 DETAILS OF LEFT PARAPET AND CURB
- 50 PLAN OF PLANTER WALLS AT ABUTMENT NO. 1 & 3
- 51 DETAILS OF PLANTER WALLS AT ABUTMENT NO. 1 & 3
- 52 DETAILS OF TRELLIS AT PRECAST COLUMN
- 53 DETAILS OF INTERMEDIATE TRELLIS COLUMN
- 54 DETAILS OF TRELLIS COLUMN
- 55 ELEVATION OF BRIDGE FENCE
- 56 BRIDGE FENCE DETAILS
- 57 PLANTER DRAINAGE DETAILS
- 58 PLANTER CONDUIT AND LIGHTING DETAILS
- 59 DETAILS OF UNDERDECK LIGHTING
- 60 BAR LIST
- 61 BAR LIST
- 62 BAR LIST
- 63 BAR LIST
- 64 BAR LIST

298 310



B.M. #134 "R" ELEV. 943.30 "+" E.N.E. TOP FLANGE BOLT F.H., AT N.W. CORNER MEYER BLVD. AND CHESTNUT AVE.

BRIDGE MEYER BLVD. (W.B.L.) OVER RTE. 71

STATE ROAD FROM 63RD ST. TO 75TH ST. IN KANSAS CITY

PROJECT NO. F.A. 71-4(54) STA. 384+28.70
 JOB NO. 4U-10-71 RTE. 71

JACKSON COUNTY

Date 2/14/91

STD. 611.60
STD. 706.35
A-4862

DESIGNED JUNE 1990
 DETAILED NOV. 1990
 CHECKED DEC. 1990

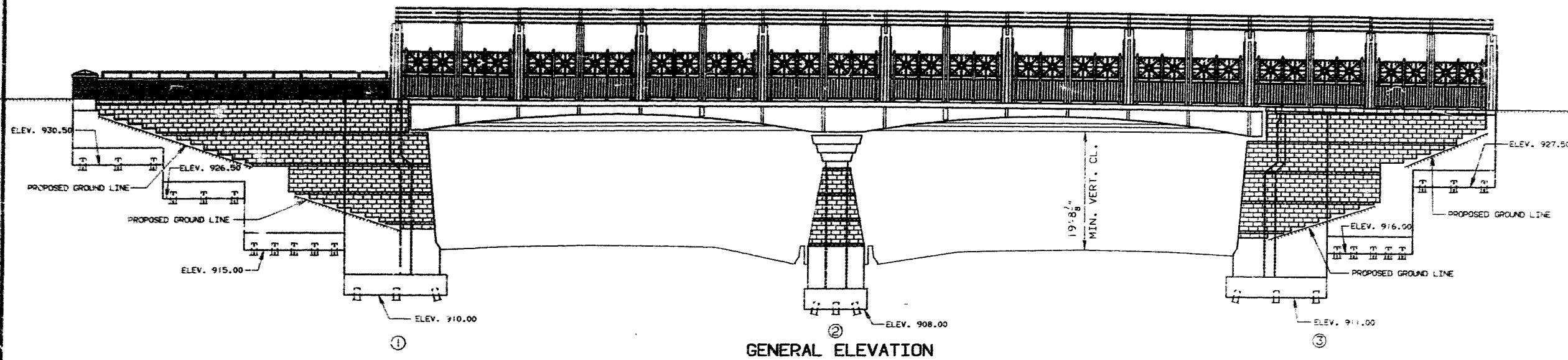
NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 1 OF 34

(61.9', 61.9') PRESTRESSED CONCRETE I-GIRDER SPANS

+0.45% GRADE

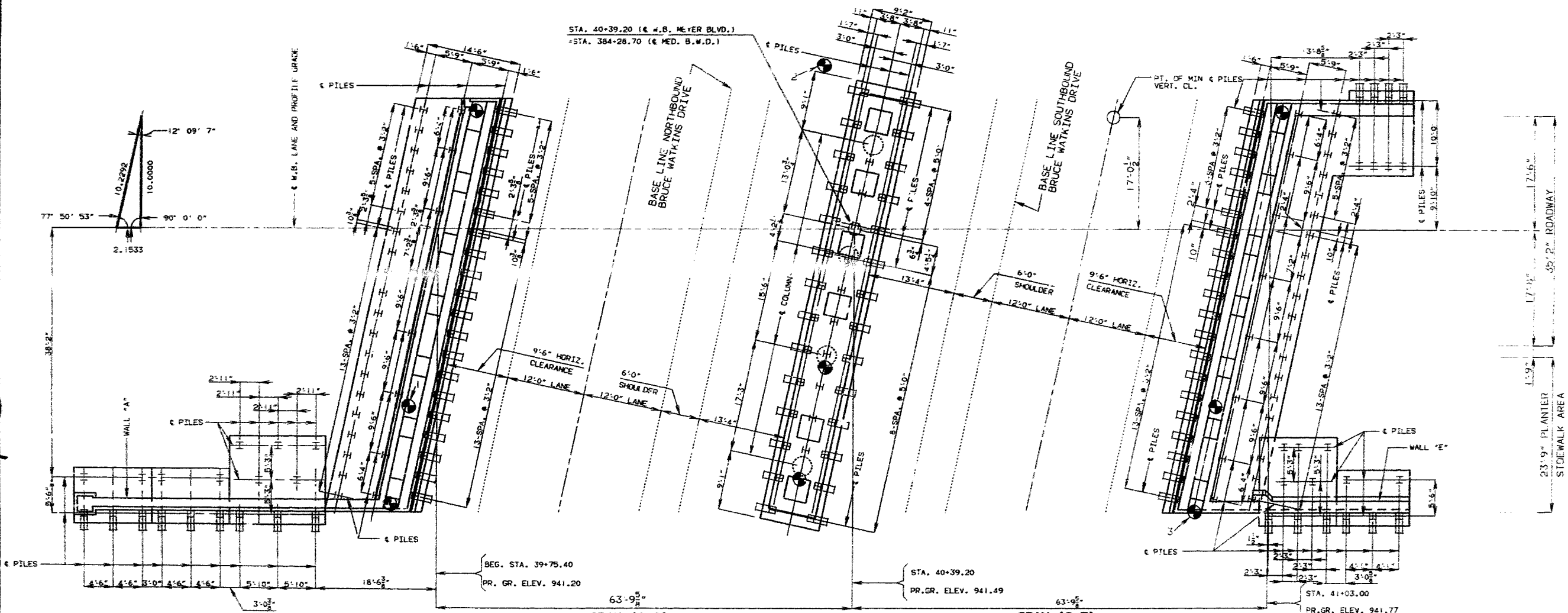
STATE	PROJ. NO.	SHEET NO.
MD.		133



GENERAL ELEVATION

NOTE: ① INDICATES LOCATION OF BORINGS. BORING DATA FOR ALL LOCATIONS IS AVAILABLE UPON REQUEST FROM DISTRICT OFFICE. BORING DATA FOR NUMBERED LOCATIONS IS DETAILED ON SHEET NO. 4 OF 66.

290 311



SPAN (1-2)

PLAN

SPAN (2-3)

JACKSON COUNTY

A-4862

DETAILED OCT. 1990
CHECKED NOV. 1990

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

SHEET NO. 2 OF 64

STATE	PROJ. NO.	SHEET NO.
MO.		261

GENERAL NOTES:

DESIGN SPECIFICATIONS: A.A.S.H.T.O.-1989
LOAD FACTOR DESIGN
A.A.S.H.T.O.-1983 GUIDE SPECIFICATIONS
FOR SEISMIC DESIGN
SEISMIC PERFORMANCE CATEGORY A

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

DESIGN UNIT STRESSES:
CLASS B CONCRETE (SUBSTRUCTURE) F'C=3,000 PSI.
CLASS B1 CONCRETE (PARAPET AND CURB) F'C=4,000 PSI.
CLASS B2 CONCRETE (SUPERSTRUCTURE EXCEPT PRESTRESSED GIRDERS AND PARAPET AND CURB) F'C=4,000 PSI.
CLASS A1 CONCRETE F'C=5,000 PSI. PRECAST CONCRETE (SEE SPECIAL PROVISIONS)
REINFORCING STEEL (GRADE 60) F_y=60,000 PSI.
STRUCTURAL CARBON STEEL F_y=36,000 PSI.
STAINLESS STEEL (A.S.T.M. A276) F_y=40,000 PSI.
STRUCTURAL STEEL TUBING (A.S.T.M. A-500) GRADE B F_y=46,000 PSI.
STEEL PILE F_y=9,000 PSI.
FOR PRESTRESSED GIRDER STRESSES, SEE SHEET NO.32.

FABRICATED STEEL CONNECTION:
FIELD CONNECTIONS, HIGH STRENGTH BOLTS 3/4"Ø, HOLES 13/16"Ø,
EXCEPT AS NOTED.

REINFORCING STEEL:
MINIMUM CLEARANCE TO REINFORCING STEEL SHALL BE 1 1/2", UNLESS OTHERWISE SHOWN.
ALL REINFORCING BARS IN TOPS OF 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 DUROMETER NEOPRENE PADS.

PAINT:
FOR PAINTING OF STRUCTURAL STEEL AND ORNAMENTAL STEEL SEE SPECIAL PROVISIONS.
AREAS TO BE ENCASED IN END BENT CONCRETE SHALL BE PAINTED ONE COAT OF SYSTEM C PRIMER AND SCRATCHED OR DAMAGED SURFACES ARE TO BE TOUCHED UP IN THE FIELD BEFORE CONCRETE IS POURED.

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

NOTE: ALL STEEL SHALL BE A-36 EXCEPT AS NOTED.

ESTIMATED QUANTITIES			
ITEM		SUBSTR.	SUPERSTR. TOTAL
CLASS I EXCAVATION	CU. YD.	1135	1135
STRUCTURAL STEEL PILE (10")	LIN. FT.	418	418
STRUCTURAL STEEL PILES (12")	LIN. FT.	1825	1825
PREBORE FOR PILING	LIN. FT.	2078	2078
CLASS B CONCRETE (SUBSTR.)	CU. YD.	995.1	995.1
PROTECTIVE COATING-CONCRETE BENTS(DELETERIOUS AGENTS)	LUMP SUM		1
SLAB ON CONCRETE I-GDR.	SQ.YDS.		877
LEFT PARAPET AND CURB	LIN.FT.		146
RIGHT CURB AND PLANTER WALL	LIN.FT.		128
RIGHT PLANTER WALL	LIN.FT.		118
PLANTER WALLS AT END ABUTMENTS	LIN.FT.		50
WING WALL AT ABUTMENT NO. 1	LIN. FT.		46
LAMINATED NEOPRENE BEARING PADS	EACH		14
COMPRESSION EXP. JT. SEAL	LIN. FT.		92
PRESTRESSED CONCRETE I-GDR. (60' SPAN)	EACH		14
REINFORCING STEEL (GRADE 60)	LB.	92560	92560
REINFORCING STEEL (GRADE 60) EPOXY	LB.	4780	4780
PLANTER LIGHTING ON STRUCTURE	LUMP SUM		1
LIGHTING CONDUIT(2"Ø)	LUMP SUM		1
FABRICATED STRUCTURAL CARBON STEEL(MISC.)	LB.		12,050
PLANTER DRAIN SYSTEM	EACH		1
VERTICAL DRAINS AT END ABUTMENTS	EACH	2	2
PAINTING	LUMP SUM		1
PEDESTRIAN HANDRAIL	LIN.FT.		42
PRECAST COLUMN	EACH		20
TRELLIS	LUMP SUM		1
MASONRY PROTECTION SYSTEM	LUMP SUM		1
GRAFFITI PROTECTION SYSTEM	LUMP SUM		1
FASCIA BRICK, CONCRETE BLOCK AND CMU BLOCK	SQ. FT.	5585	5585
ORNAMENTAL FENCE PANEL (8'-11-1/2")	EACH		14
ORNAMENTAL FENCE PANEL (8'-1")	EACH		4
SIDEWALK PAVING BRICK	SQ.FT.		1056
LAMINATED NEOPRENE BRG PADS (P/S STRUCTURE)	EACH		14

THE COST OF FURNISHING, FABRICATING AND INSTALLING LAMINATED NEOPRENE BEARING PADS, COMPLETE-IN-PLACE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR LAMINATED NEOPRENE BEARING PADS PER EACH. PAYMENT FOR PARAPET AND CURB AND PLANTER WALL SHALL INCLUDE BRICK VENEER, PRECAST CAP, REINFORCING STEEL, AND CONCRETE COMPLETE-IN-PLACE, PER LIN. FT.

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

THE COST OF PAINTING FASCIA GIRDER, PED. RAIL, TRELLIS AND ORNAMENTAL FENCE WILL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR PAINTING LUMP SUM.(SEE SPECIAL PROVISIONS).
FOR SIDEWALK PAVING BRICK REQUIREMENTS SEE SPECIAL PROVISIONS.

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

PILE DATA								
BENT NO.	1	WALL "A"		2	3	WALL "E"		
PILE TYPE AND SIZE	HP12x53	HP12x53		HP10x42	HP12x53	HP12x53		
NUMBER	48	8	5	5	38	56	8	5
APPROXIMATE LENGTH FT.	11	16	27	31	11	11	16	27
DESIGN BEARING TONS	69	70	25	18	52	70	56	23
HAMMER ENERGY REQUIRED FT.-LBS.	17,000	17,200	7,000	7,000	12,200	17,200	13,800	7,000

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.
MANUFACTURED PILE POINT SHALL BE USED ON ALL PILES IN THIS STRUCTURE.
SEE SPECIAL PROVISIONS.

PREBORE FOR PILES AT ABUT. NO.1, BENT NO. 2, AND ABUT. NO. 3 TO ELEVATIONS 900.0, 898.0, AND 901.0 RESPECTIVELY.

ESTIMATED QUANTITIES FOR ALTERNATE SLAB			
TYPE OF SLAB	REINF. (LBS.)		CONC. (CU. YD.)
	EPOXY	PLAIN	
CAST-IN-PLACE CONVENTIONAL FORMS	68,250	2230	236.8
PRECAST PANEL FORMS	62,550	2230	215.6

NOTE: THE TABLE OF ESTIMATED QUANTITIES FOR ALTERNATE SLABS 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 ALTERNATE SLAB USED.
SEE SPECIAL PROVISIONS FOR ALTERNATE METHODS OF FORMING SLABS

PRECAST PANEL QUANTITIES ARE BASED ON SKEWED END PANELS.

* BASED ON MINIMUM TOP FLANGE THICKNESS AND MINIMUM JOINT FILLER THICKNESS.

281 312

STATE	PROJ. NO.	SHEET NO.
MO.		202

STANDARD PENETRATION TEST			STANDARD PENETRATION TEST			STANDARD PENETRATION TEST		
DEPTH	BLOWS/6"	POCKET PEN., TSF	DEPTH	BLOWS/6"	POCKET PEN., TSF	DEPTH	BLOWS/6"	POCKET PEN., TSF
5.0 FT.	7-7-6	1.0				5.0 FT.	3-2-2	-
10.0 FT.	3-5-4	1.0				10.0 FT.	3-6-7	1.5
						15.0 FT.	2-3-5	1.5
						20.0 FT.	3-3-6	1.5
30.0 FT.	5-5-7	1.5	30.0 FT.	6-8-8	.75	25.0 FT.	4-4-5	1.75
35.0 FT.	4-6-8	1.5	35.0 FT.	6-5-7	.75	30.0 FT.	3-6-7	2.5
40.0 FT.	10-16-30		40.0 FT.	11-20-18	3.25	35.0 FT.	4-7-7	2.25
						40.5 FT.	23-28-34	9.0

294 313

①
(CORE)

②
(CORE)

③
(CORE)

BORING DATA

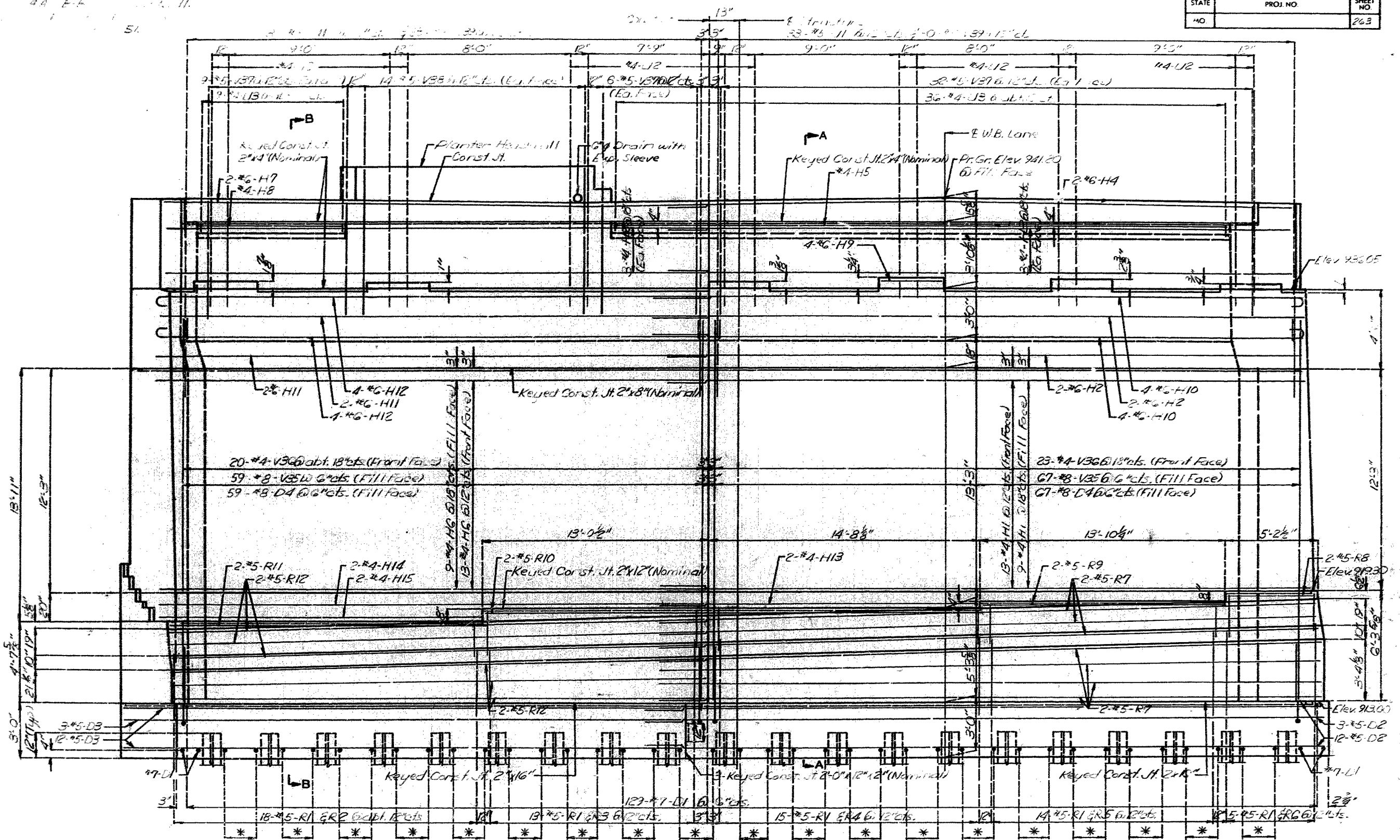
NOTE: FOR LOCATION OF BORINGS, SEE SHEET NO. 1. BORING DATA FOR ALL LOCATIONS IS AVAILABLE UPON REQUEST FROM DISTRICT OFFICE.

DETAILED JUNE 1990
CHECKED SEPT. 1990

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

SHEET NO. 4 OF 64

STATE	PROJ. NO.	SHEET NO.
MO		263



293 314

ELEVATION

DETAILS OF ABUTMENT NO. 1

*4#7-E1 (Equal) Spaced Between Pile

DATE: 11/11/90
CHECKED: 10/1/90

Note: This drawing is not to scale. Follow dimensions.

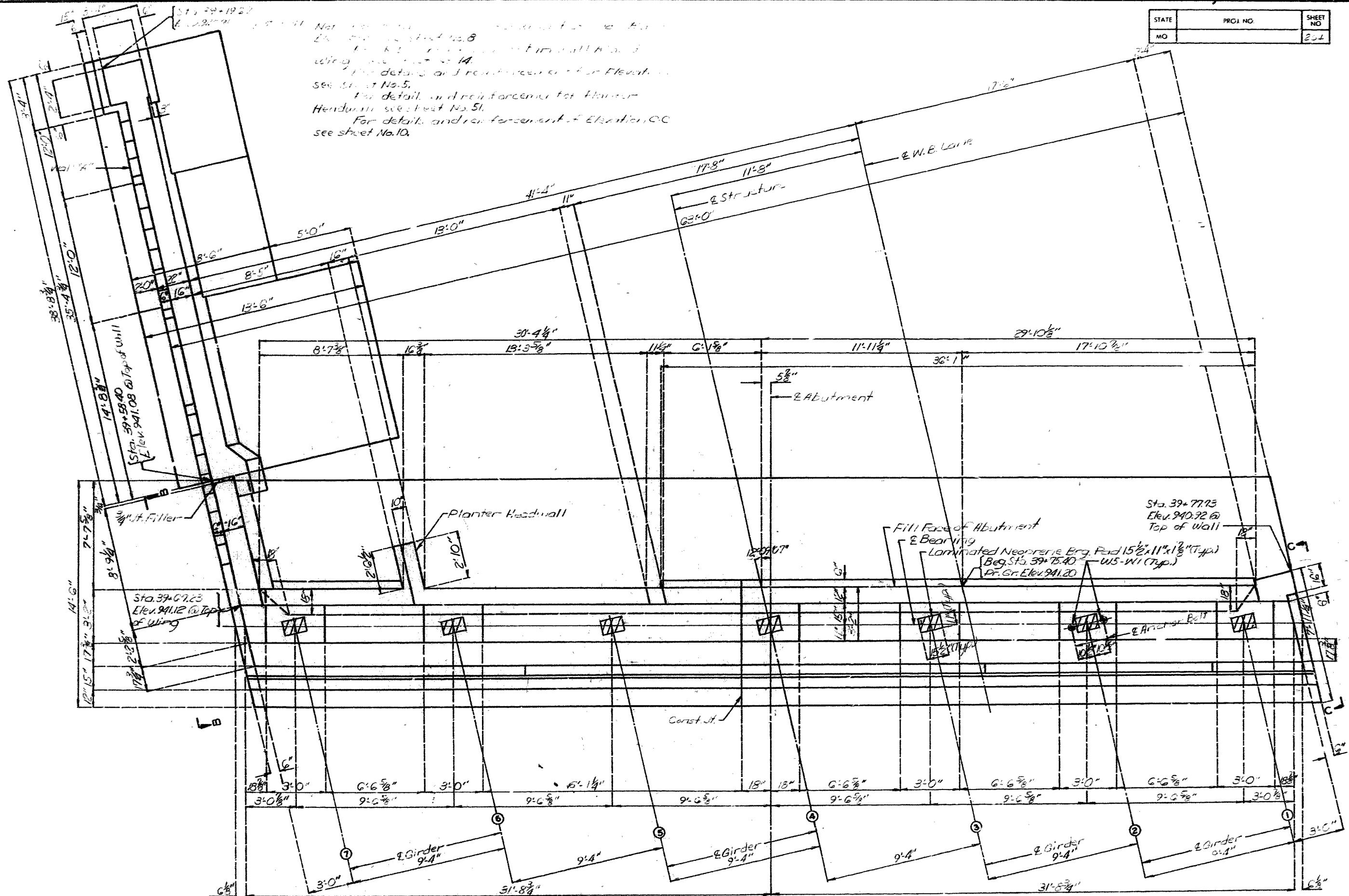
Sheet No. 5 of CA

JACKSON COUNTY

A-4862

STATE	PROJ. NO.	SHEET NO.
MO		204

Note: For details and reinforcement of Abutment No. 1 see sheet No. 8.
 For details and reinforcement of all Abutments see sheet No. 14.
 For details and reinforcement of Floor Elevation see sheet No. 5.
 For detail and reinforcement for Planter Headwall see sheet No. 51.
 For details and reinforcement of Elevation, C.C. see sheet No. 10.



295 3/5

QUALITY REVIEW
 DETAILED Aug 1990
 CHECKED Oct 1990

Note: This drawing is not to scale. Follow dimensions.

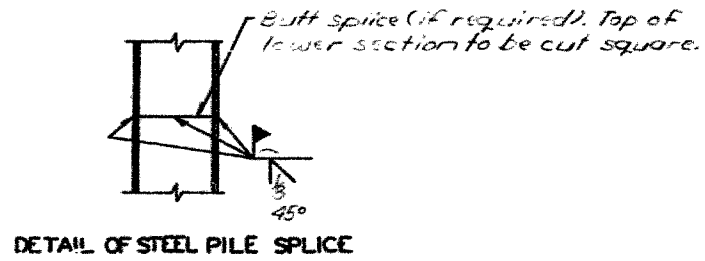
DETAILS OF ABUTMENT NO. 1

Sheet No. 6 of 64

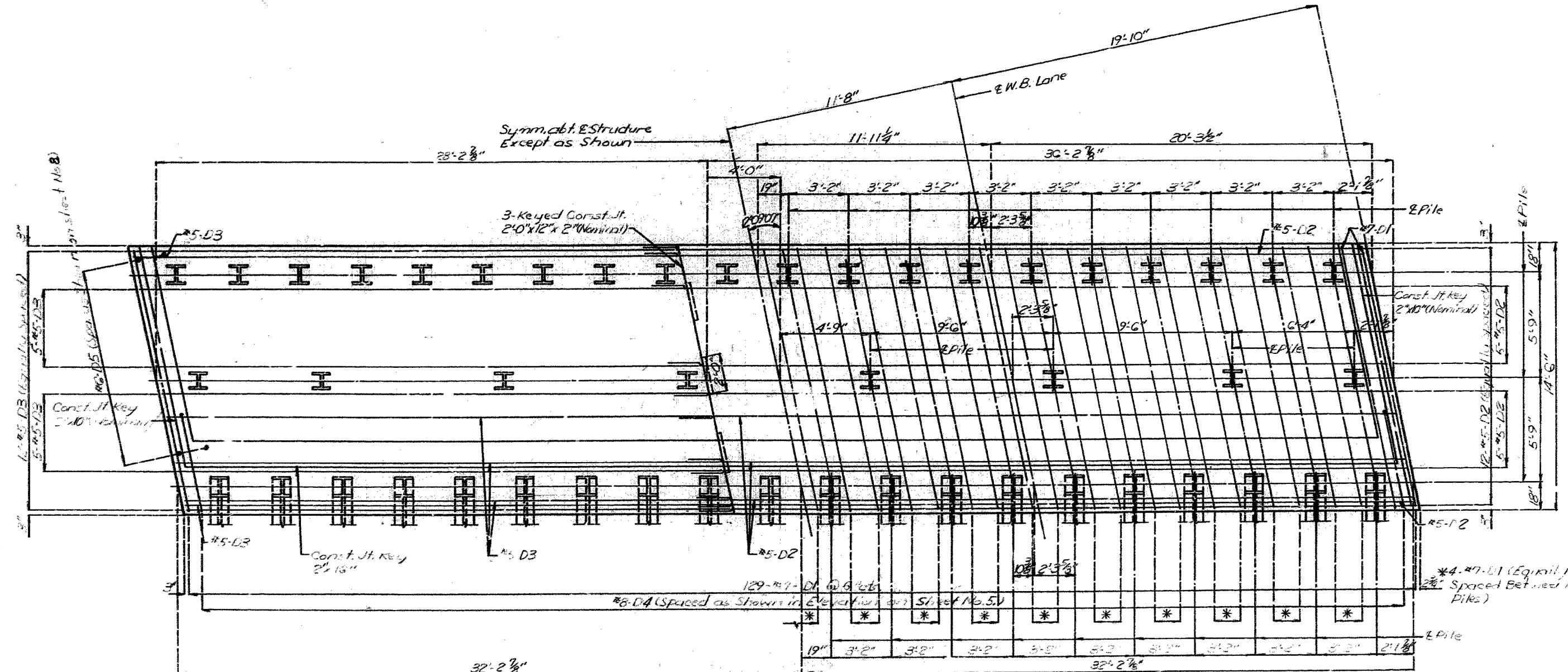
JACKSON COUNTY

A-4862

STATE	PROJ. NO.	SHEET NO.
MO		265



896 316

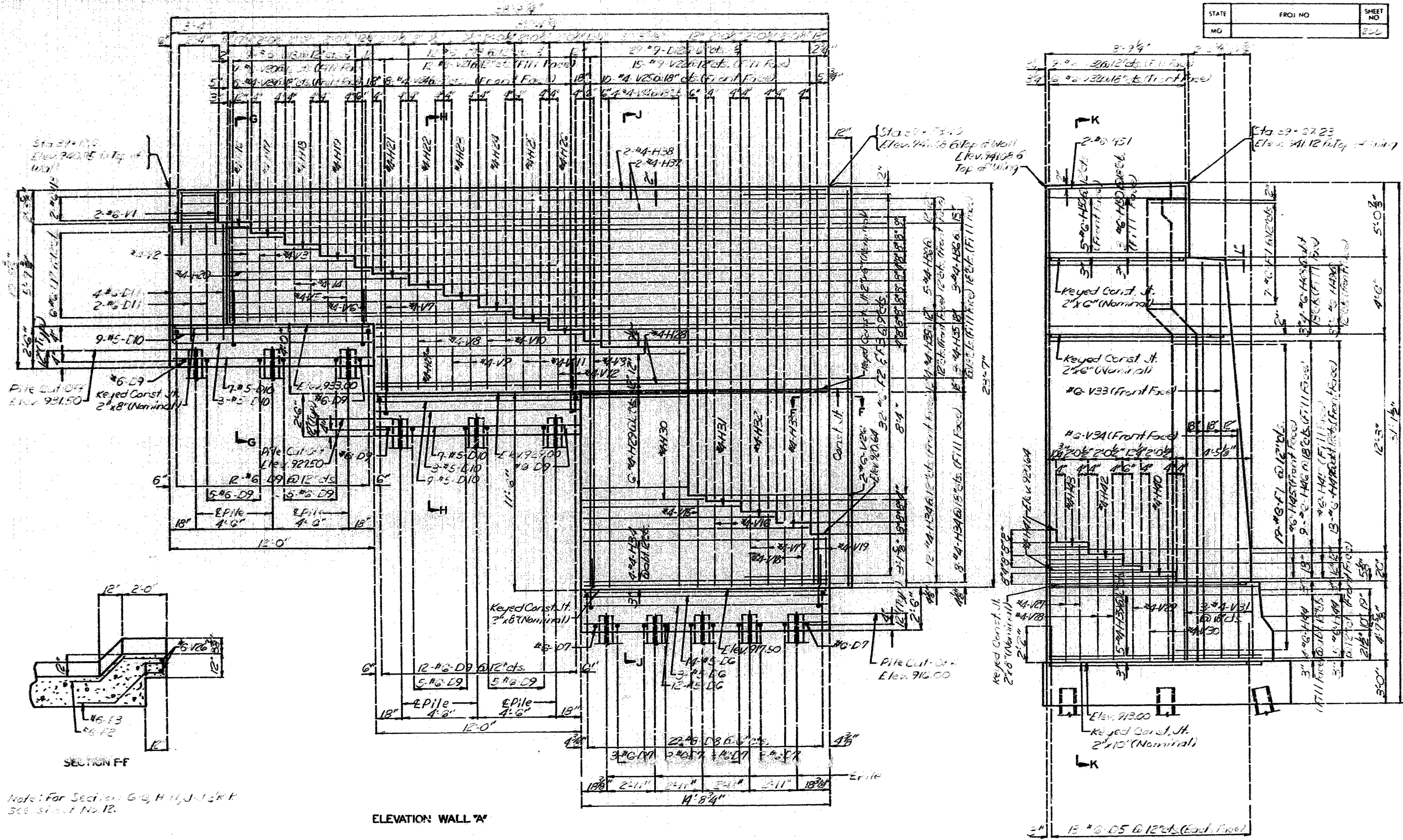


PLAN OF FOOTING
DETAILS OF ABUTMENT NO. 1

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 7 of 64

STATE	FROI NO	SHEET NO
MO		200



Pile Cut-Off
Elev. 931.50
Kejed Const. Jt.
2'-8" (Nominal)

Pile Cut-Off
Elev. 927.50
Kejed Const. Jt.
2'-8" (Nominal)

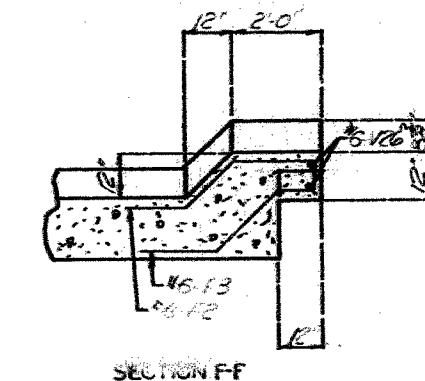
Sta. 9+37.23
Elev. 941.06 @ Top of Wall
Elev. 941.06 @ Top of Wing

Sta. 9+37.23
Elev. 941.12 @ Top of Wing

Pile Cut-Off
Elev. 916.00

Kejed Const. Jt.
2'-8" (Nominal)

Elev. 913.00
Kejed Const. Jt.
2'-10" (Nominal)



Note: For Section G-G, H-H, J-J, K-K
SEE SHEET No. 12.

ELEVATION WALL 'A'

ELEVATION B-B

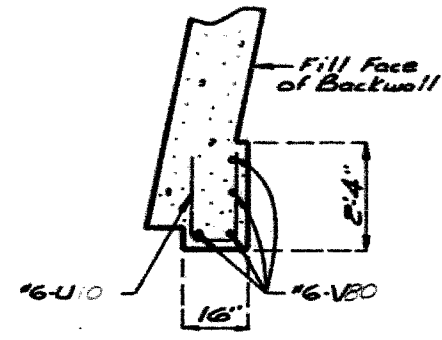
DETAILS OF ABUTMENT NO. 1

Note: This drawing is not to scale. Follow dimensions.

289737

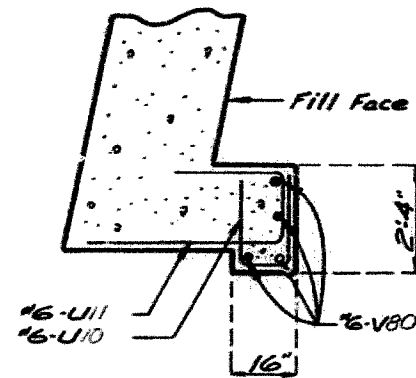
QUALITY REVIEW
 DETAILED Aug. 1930
 CHECKED Oct. 1930

STATE	PROJ NO	SHEET NO
MO		209

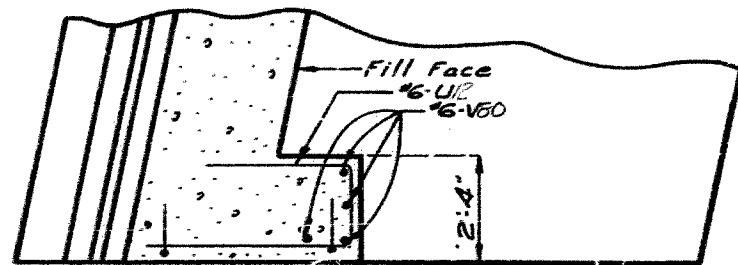


SECTION A-A

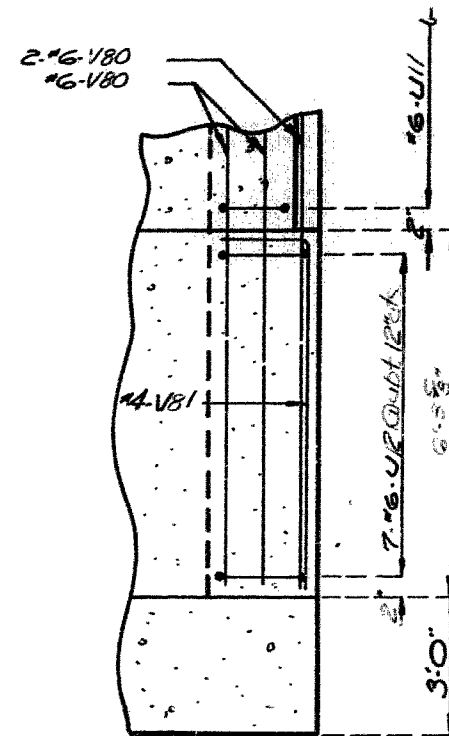
Note: Backwall, Beam, and Footing reinforcement not shown for clarity. For location of Elevation C-C see sheet No. 6



SECTION B-B

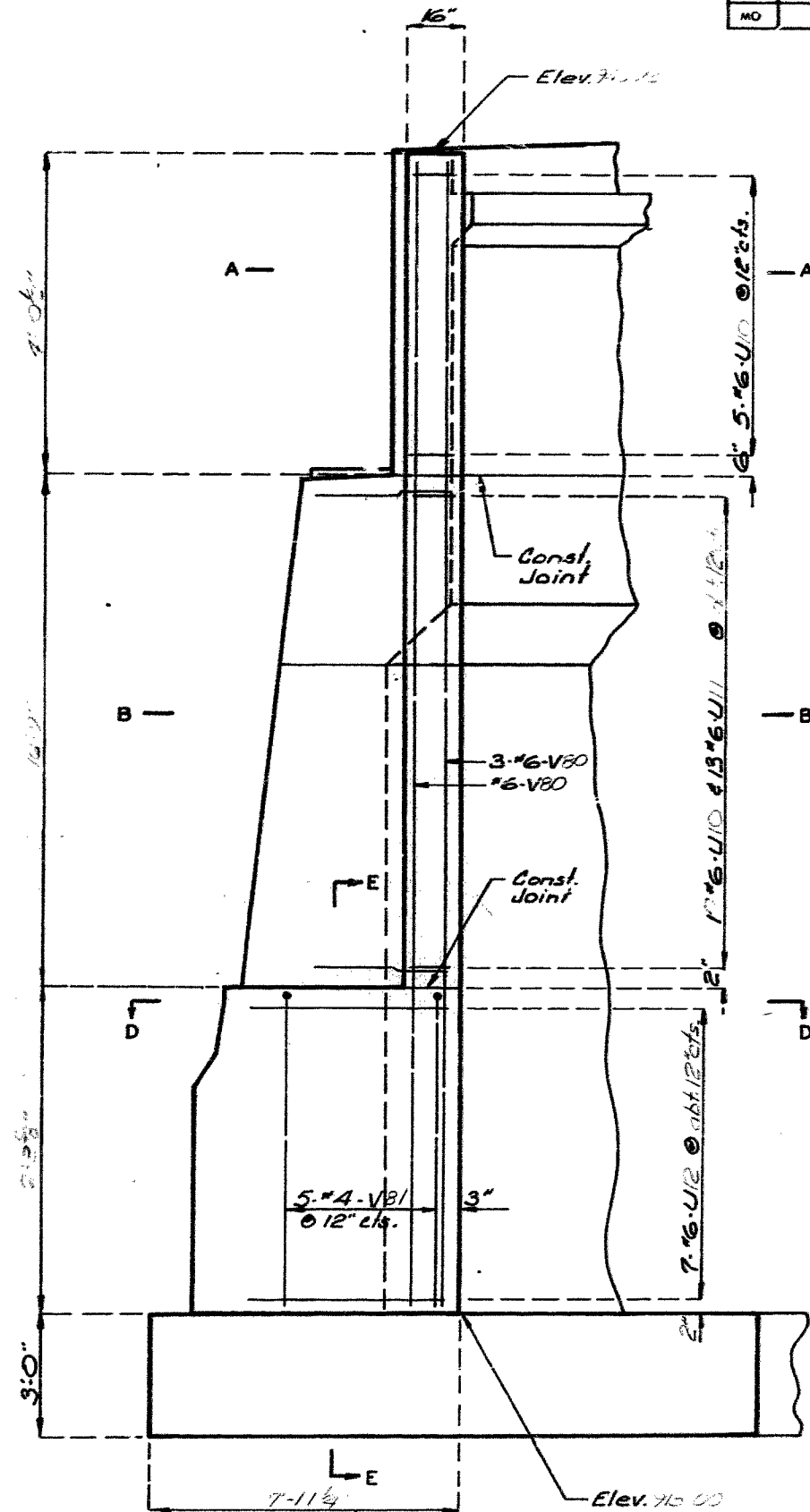


SECTION D-D



SECTION E-E

DETAILS OF ABUTMENT NO. 1



ELEVATION C-C

299 319

QUALITY REVIEW
 DETAILED Dec. 1990
 CHECKED Oct. 1990

Note: This drawing is not to scale. Follow dimensions.

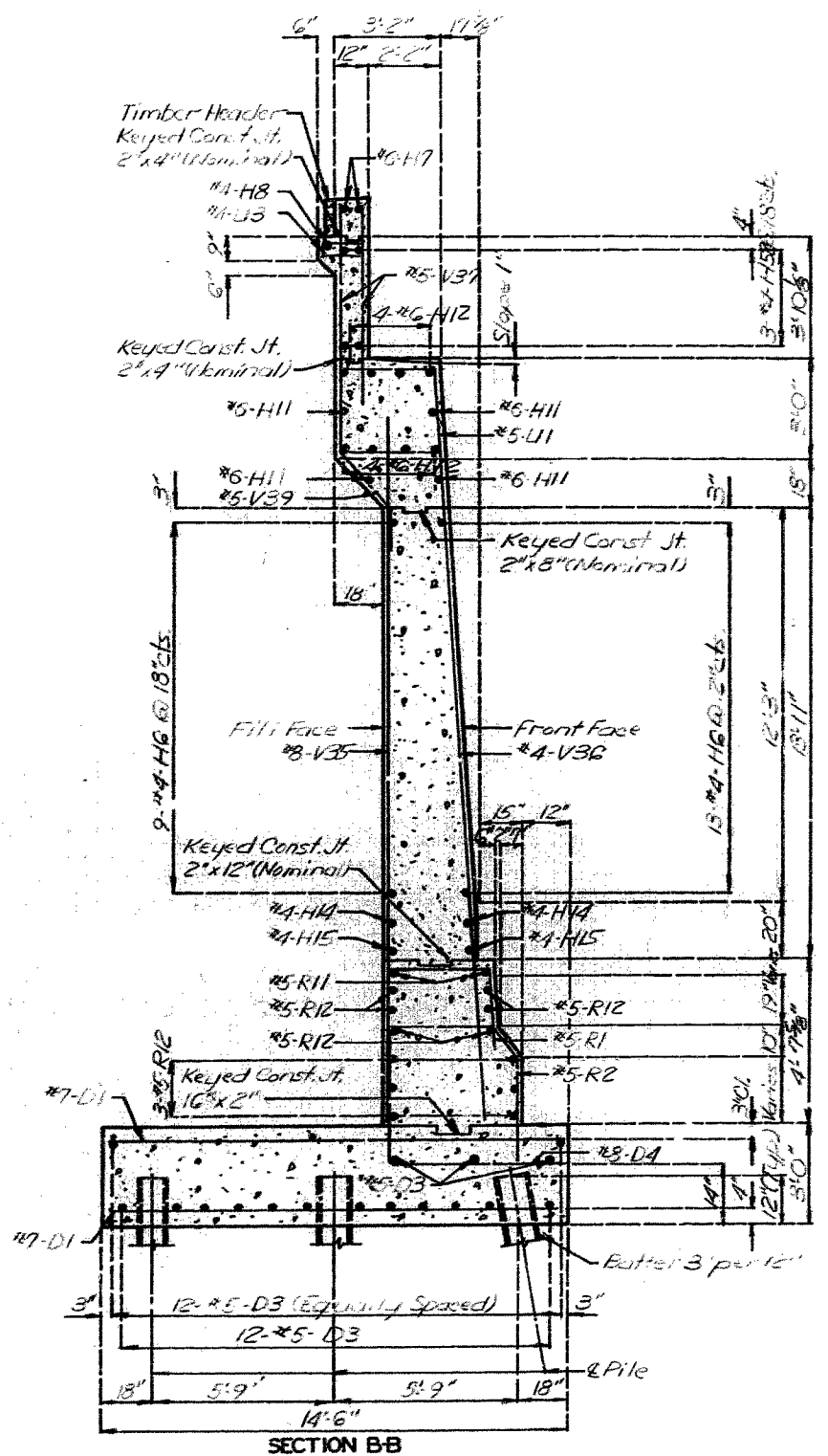
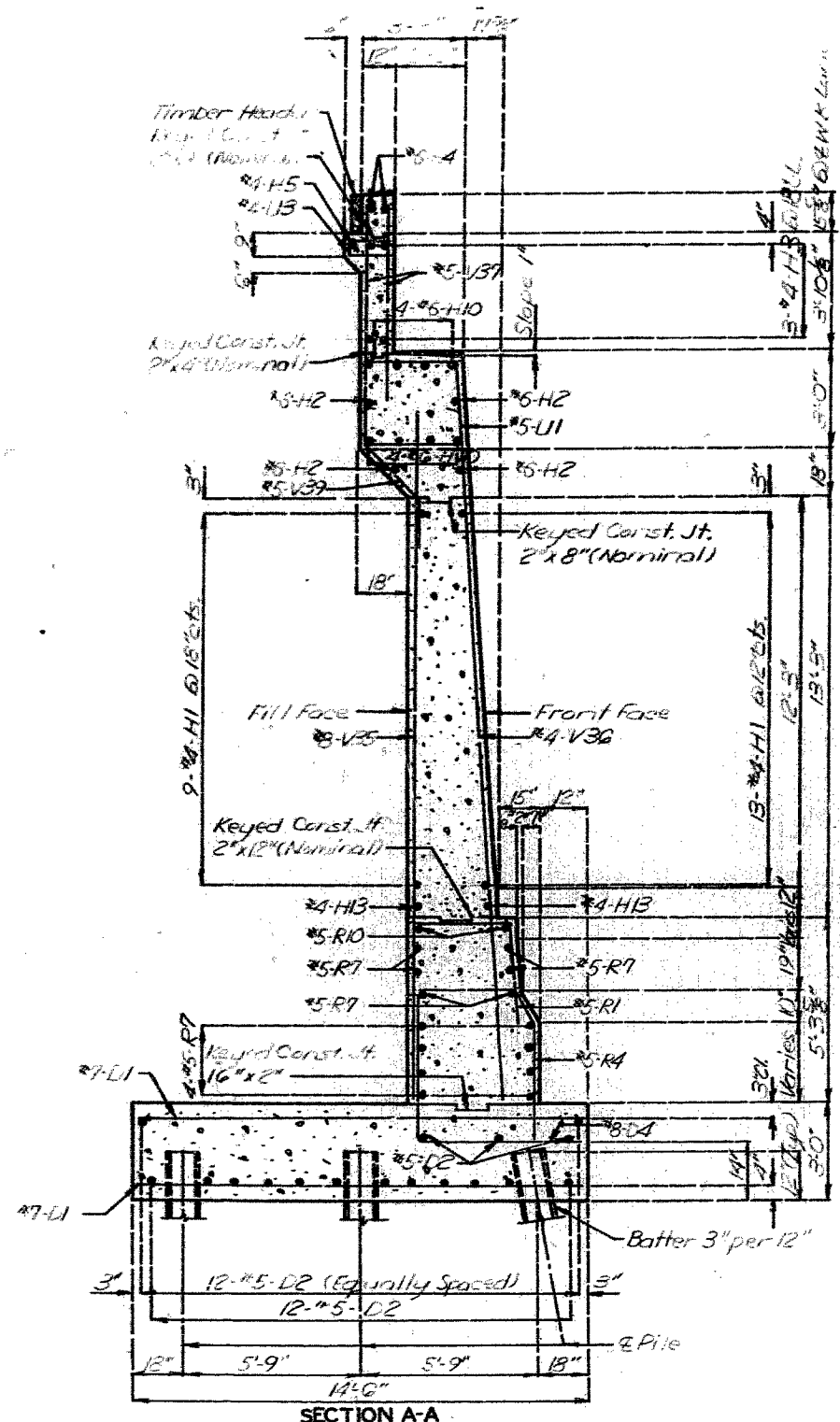
Sheet No. 10 of 64

JACKSON COUNTY

A-4862

STATE	PROJ. NO.	SHEET NO.
MO		209

388 320



DETAILS OF ABUTMENT NO.1

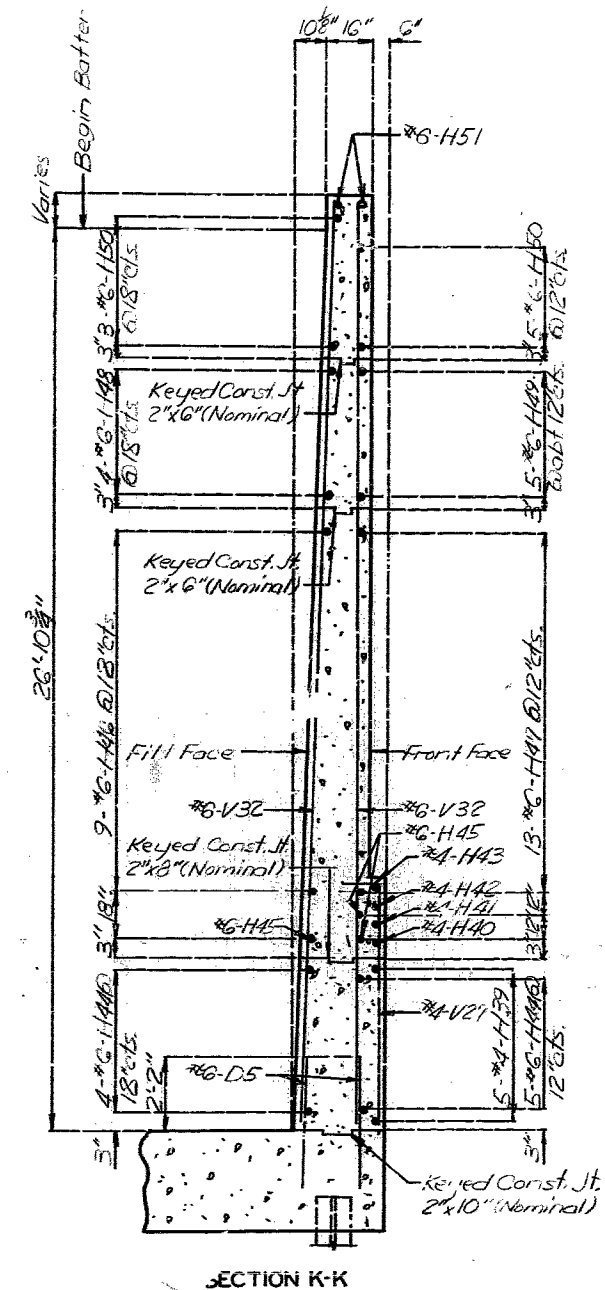
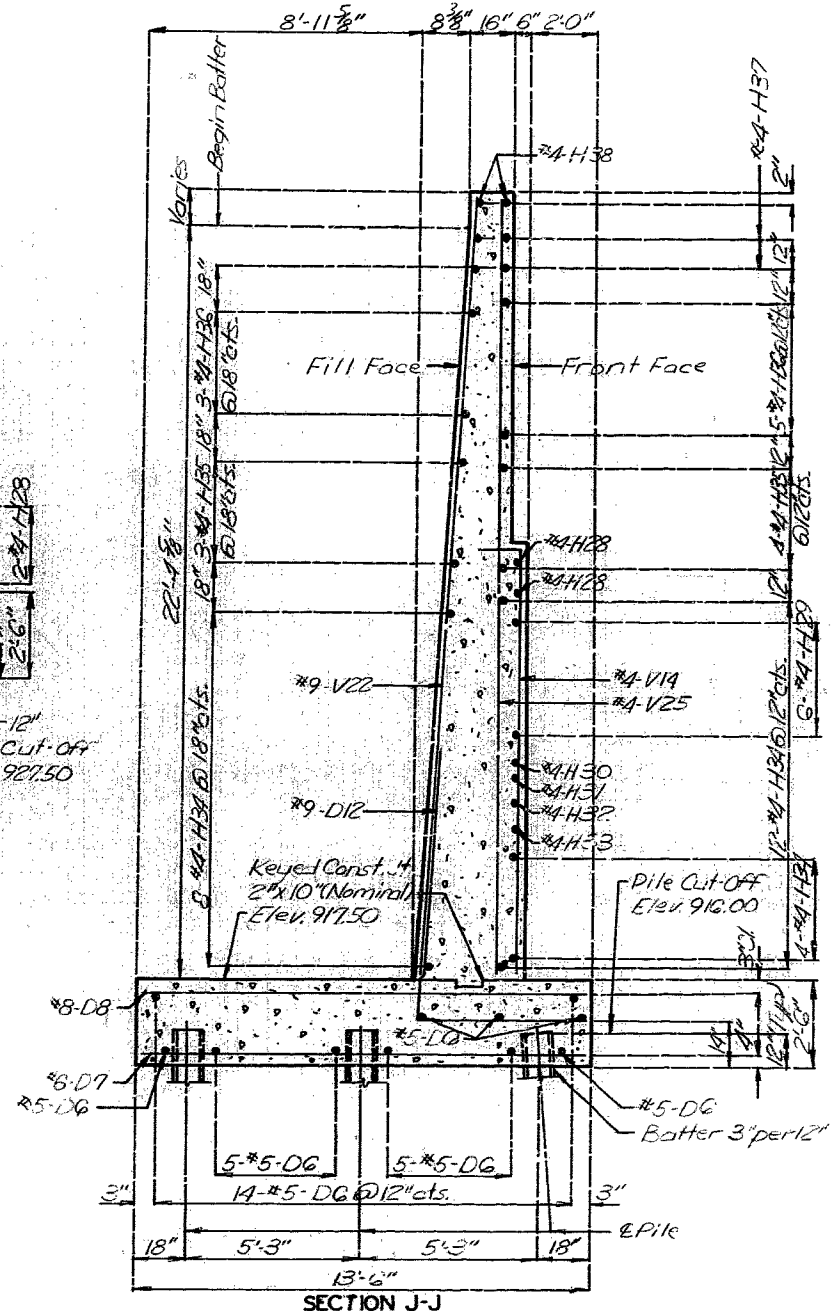
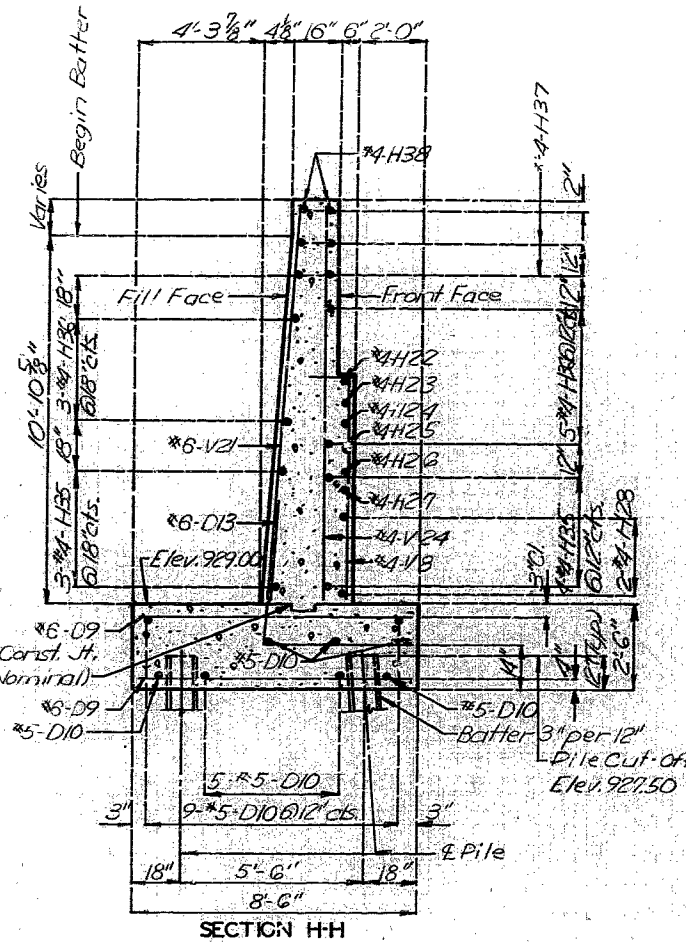
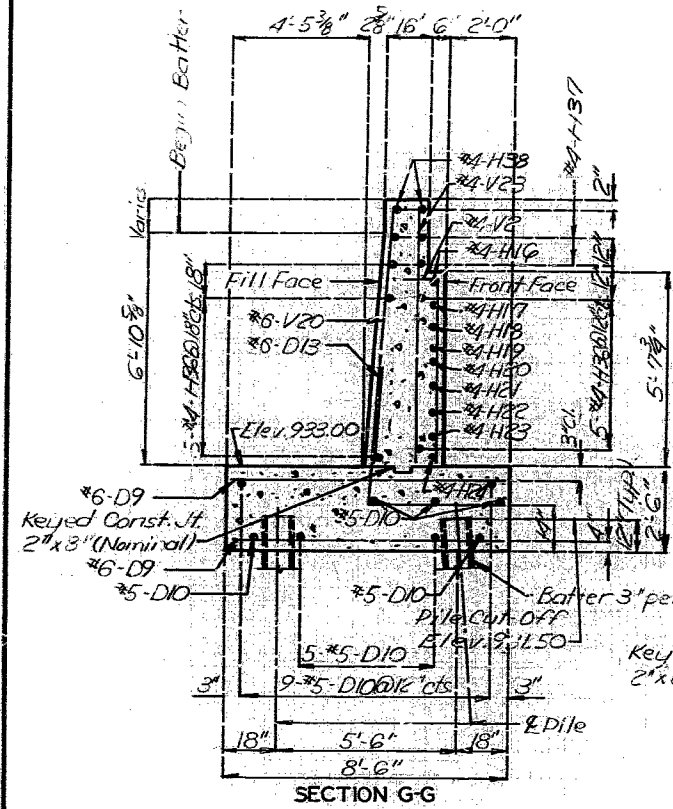
Note: For location of section B-B see sheet 11 of 5.
For details of Tim. Lumber see sheet 11 of 31.

DETAILED Aug. 1990
CHECKED Oct. 1990

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 11 of 64

STATE	PRJ. NO.	SHEET NO.
MO		270



Note: For location of Sections G-G, H-H, J-J & K-K see sheet No. 8.

304 321

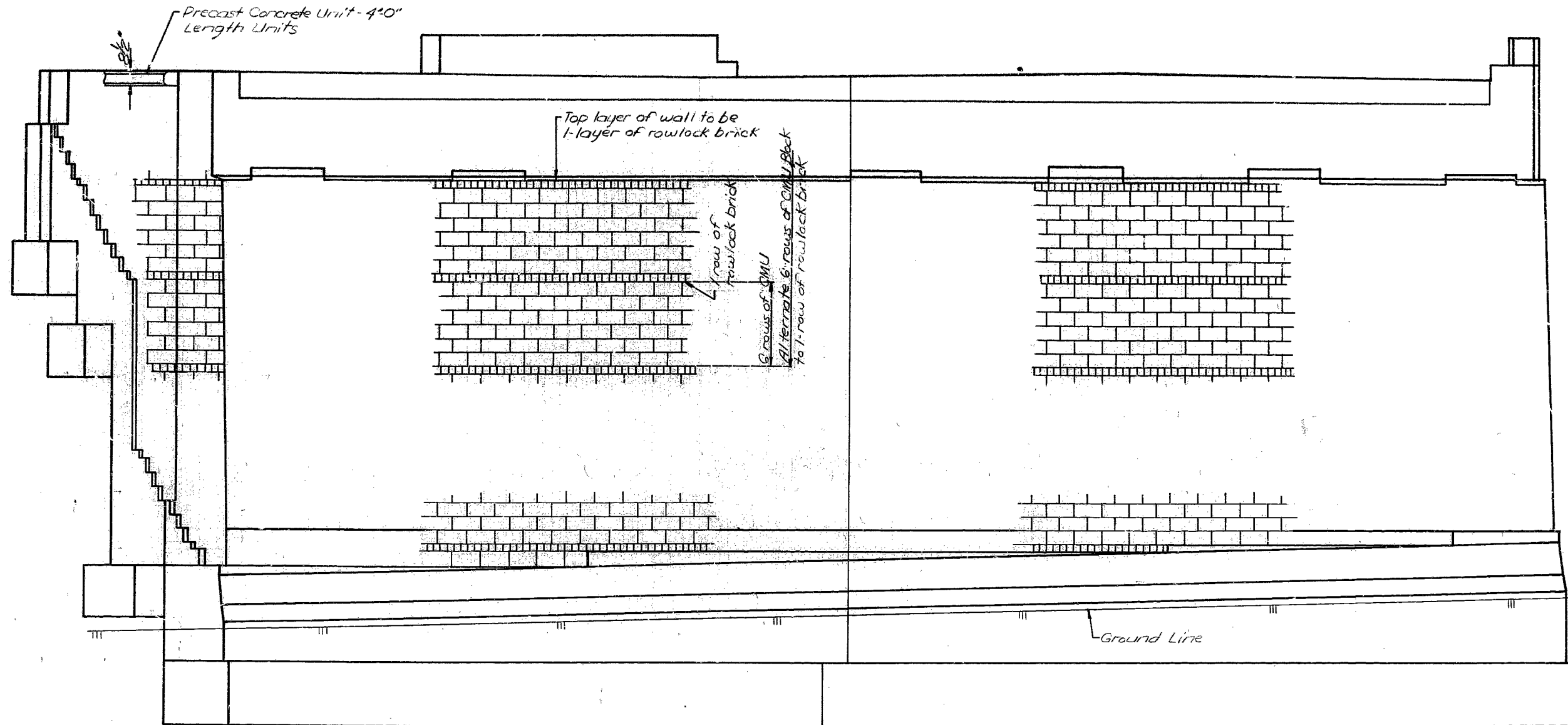
DETAILS OF ABUTMENT NO. 1

DETAILED Aug. 1930
CHECKED Oct. 1930

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 12 of 64

STATE	PROJ. NO.	SHEET NO.
MO		271



ELEVATION SHOWING BLOCKING AND BRICKING DETAILS

Note: Weepholes shall be placed along bottom course of masonry spaced at 16" cts. See Special Provision also for weepholes.

Note: See Special Provisions for brick and CMU Block Requirements.

DETAILS OF ABUTMENT NO. 1

302 302

QUALITY REVIEW
 DETAILED July 1990
 CHECKED Oct. 1990

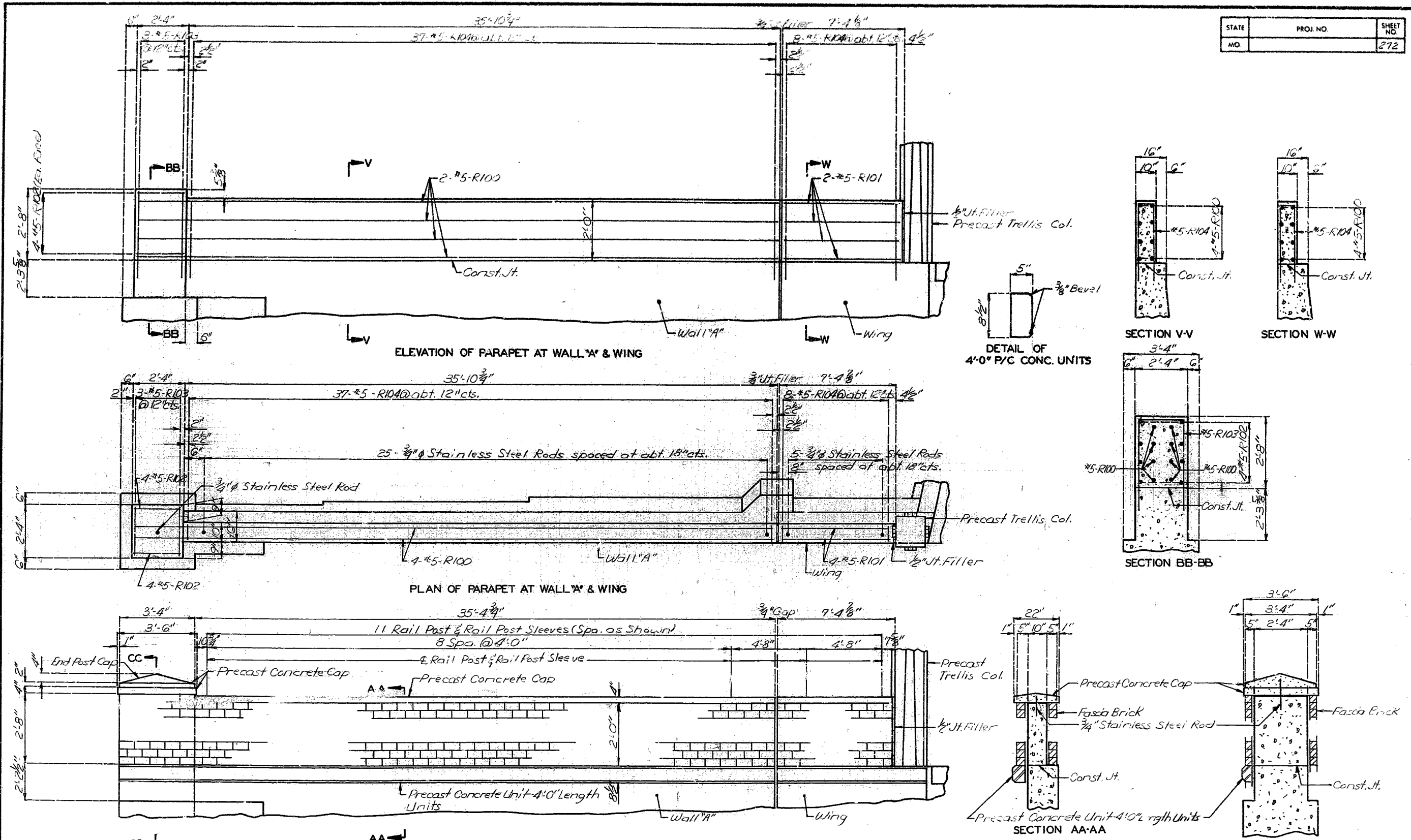
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 13 of 64

JACKSON COUNTY

A-4862

STATE	PROJ. NO.	SHEET NO.
MO.		272



Note: See Special Provisions for bricking requirements.

Note: For details of Precast Cap see sheet No. 15.
For details of handrail see sheet No. 15.

Note: All concrete, reinforcing steel, brick fascia, 3/4 stainless steel rods, precast conc caps and end post cap, above const joint shall be included in the bid item for wing wall at Abutment No. 1 (Lin. Ft.) complete-in-place (See Spec Prov.).

DETAILS AT ABUTMENT NO. 1

DETAILED Nov. 1990
CHECKED Nov. 1990

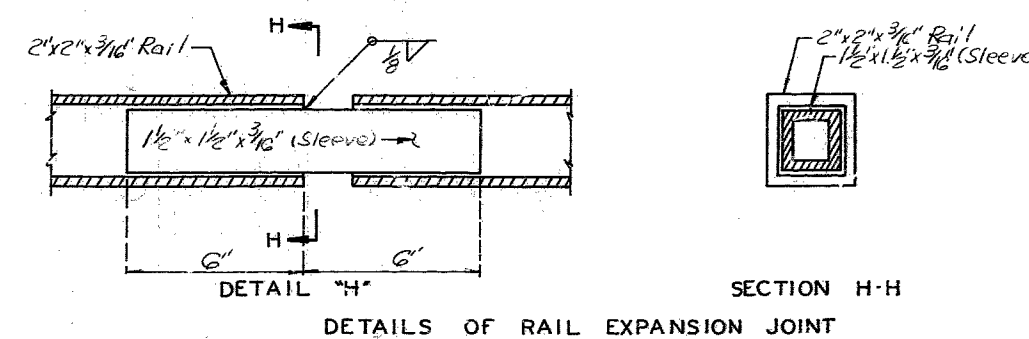
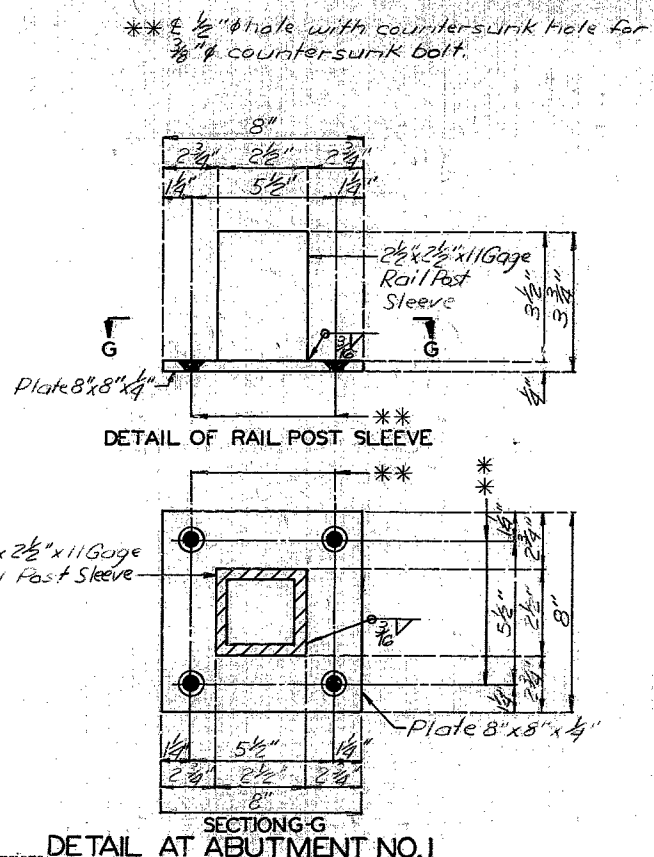
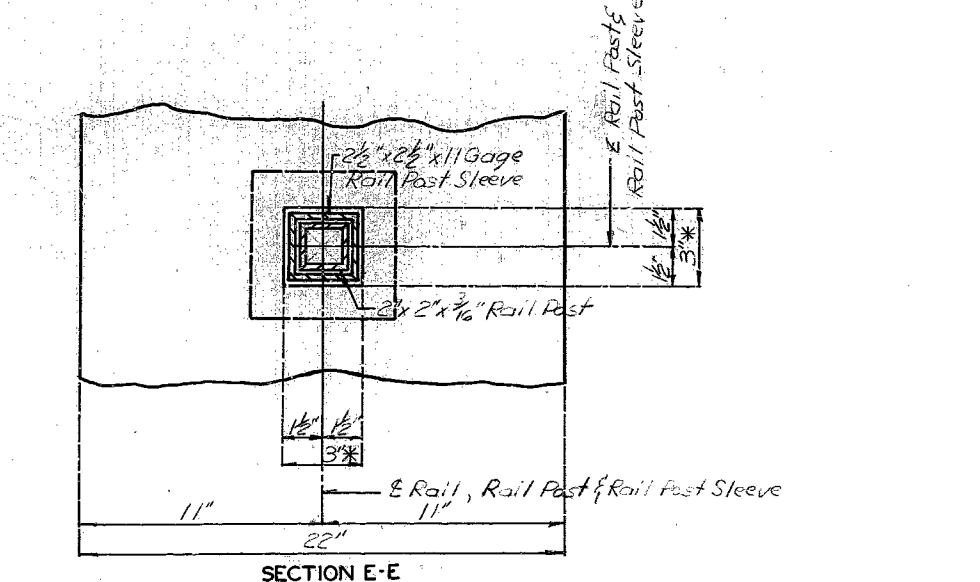
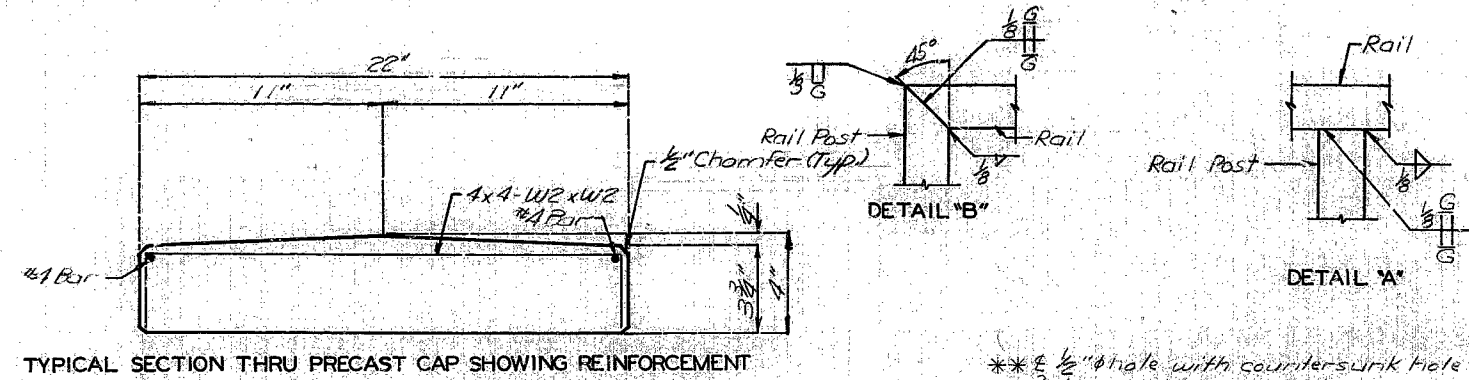
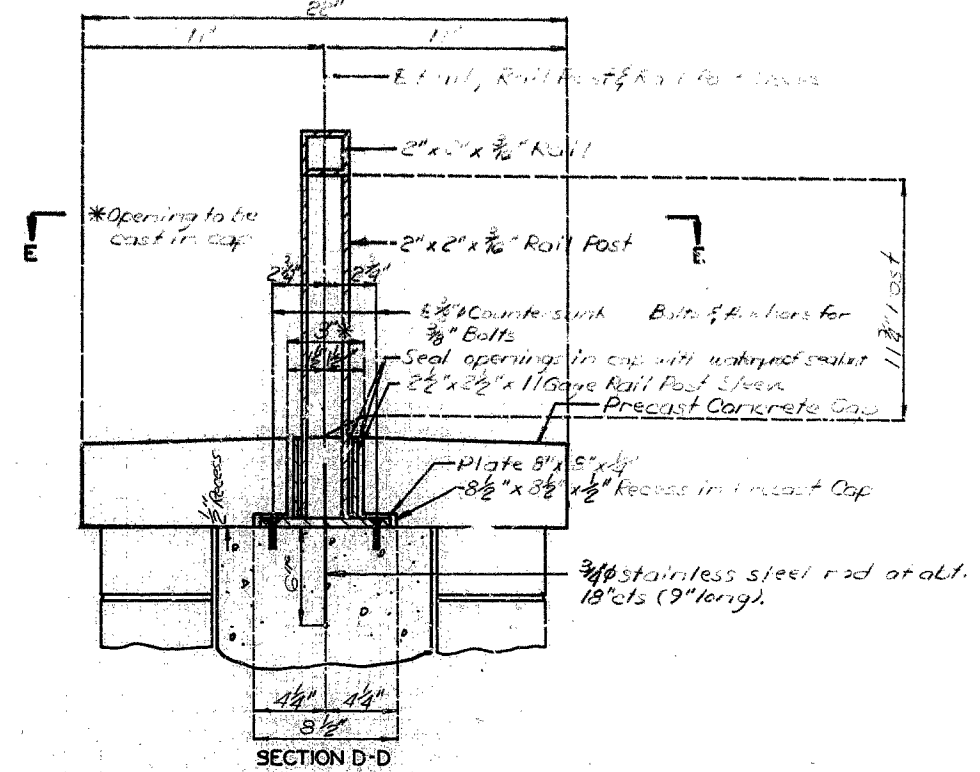
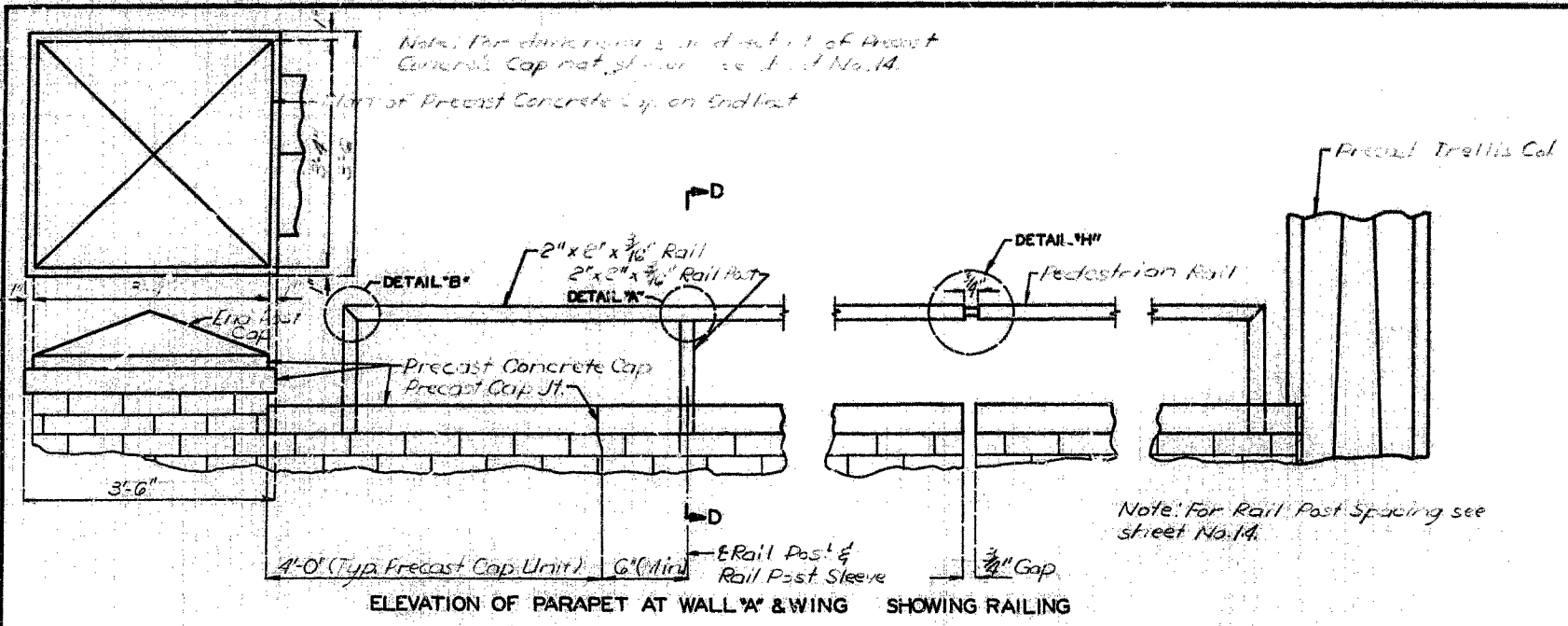
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 14 of C4

JACKSON COUNTY A-4862

323

STATE	PROJ NO	SHEET NO
MO		273



Note: Rail, Rail Post and Rail Post Sleeve shall be square tubing ASTM 11500.
 Rail Post Sleeve Base Plate 8"x8"x1/4" shall be of A36 material.
 Fabrication of structural steel shall be in accordance with Section 712 of the standard specifications.
 Concrete anchors shall be the cone expansion type for hot-dip galvanized bolts. Concrete anchors shall have a concrete pull-out strength (Ultimate Load) of at least 15,500 pounds in 3,000 psi concrete.
 Rail, Rail Post, Rail Post Sleeve and Base Plate to be painted in the shop or field with one coat of inorganic zinc prime paint, Std. Spec. 1045.

304 304

QUALITY REVIEW 08/17/14

DETAILED Nov. 1990
 CHECKED Nov. 1990

Note: This drawing is not to scale. Follow dimensions.

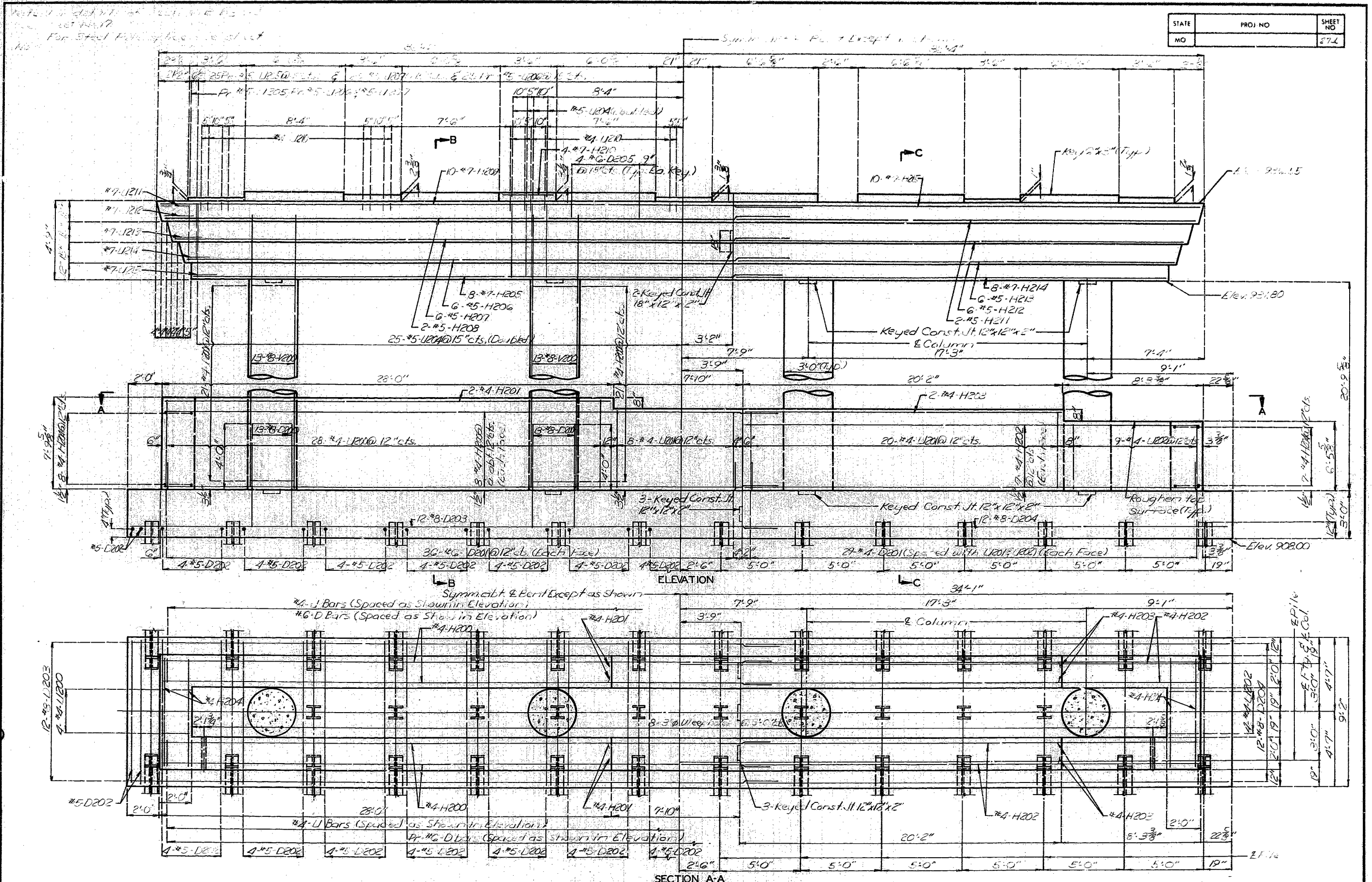
DETAIL AT ABUTMENT NO. 1

Sheet No. 15 of 64

JACKSON COUNTY

A-4862

STATE	PROJ NO	SHEET NO
MO		874



305-325

QUANTITY PREP
DETAILED JULY 1990
CHECKED Sept. 1990

Note: This drawing is not to scale. Follow dimensions.

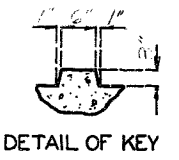
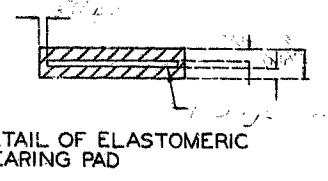
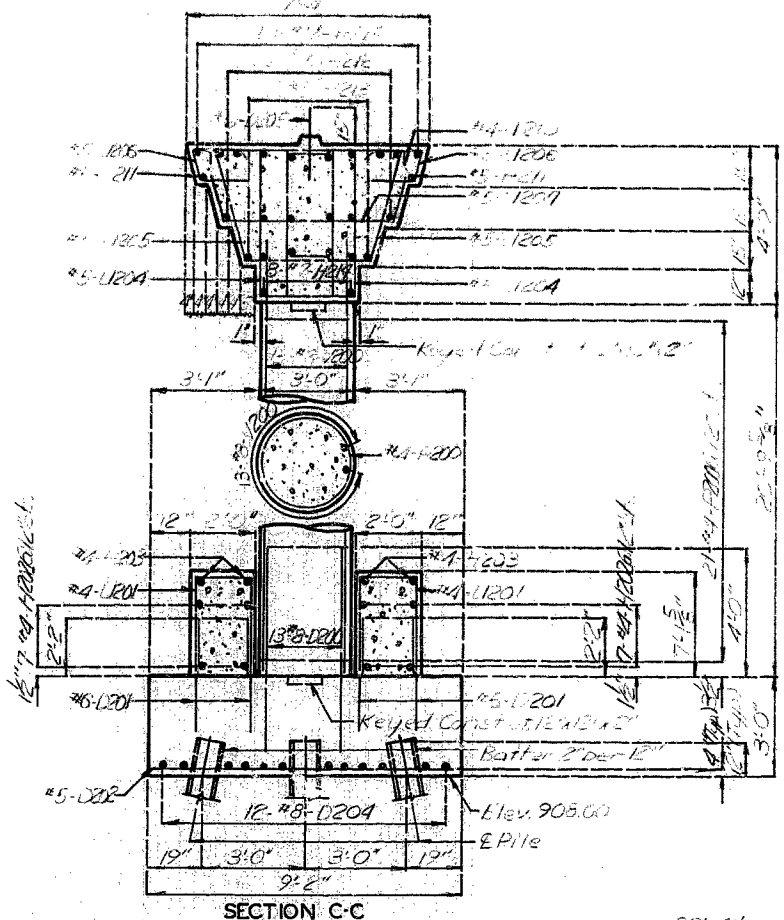
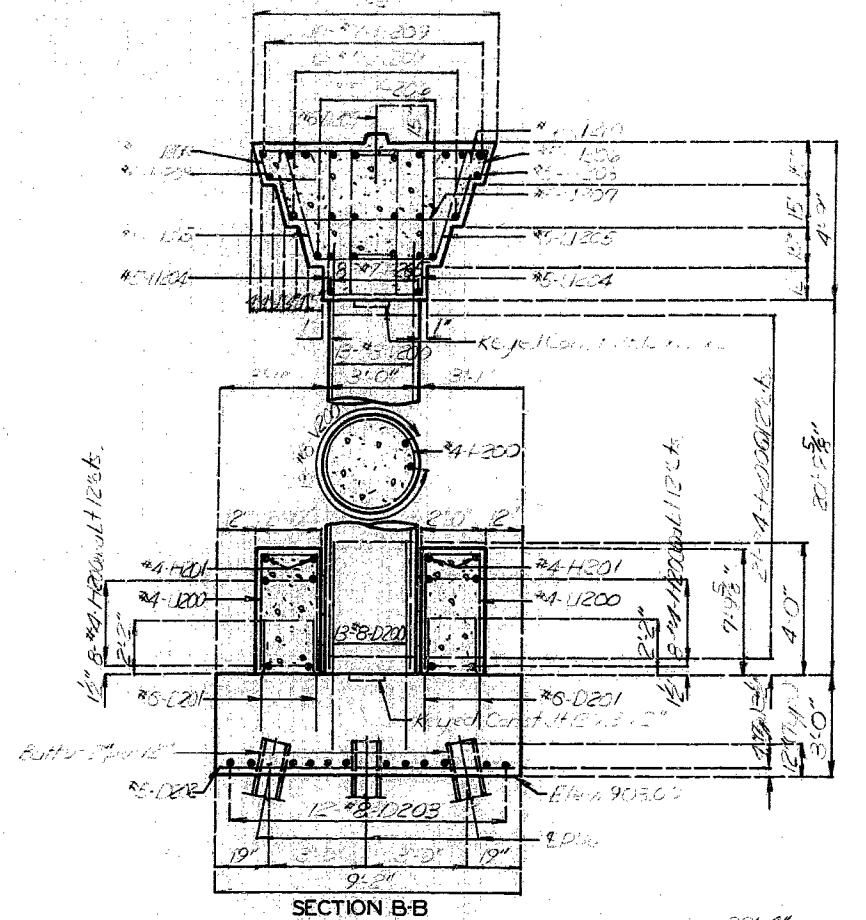
SECTION A-A
DETAILS OF INTERMEDIATE BENT NO. 2

Sheet No. 16 of 64

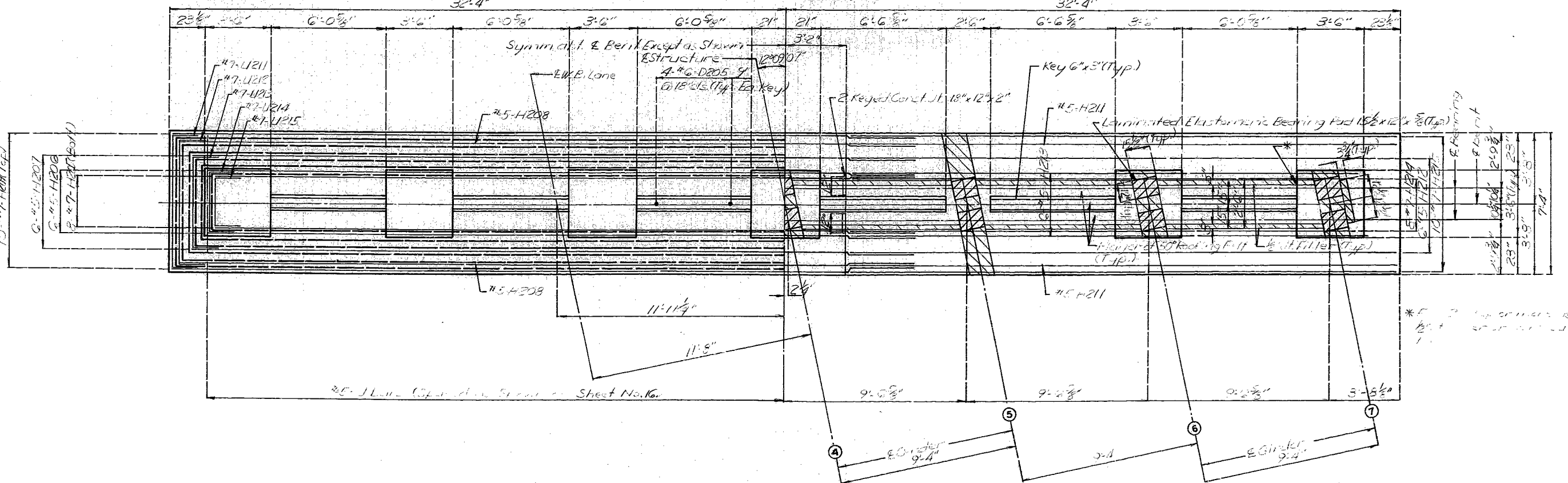
JACKSON COUNTY

A-4862

STATE	PRC. NO	SHEET NO
MO		275



Note: For location of elastic E-Pad see sheet No. 16.



PLAN OF BEARING BEAM
DETAILS OF INTERMEDIATE BENT NO.2

306 326

DETAILED JULY 1990
CHECKED Sept. 1970

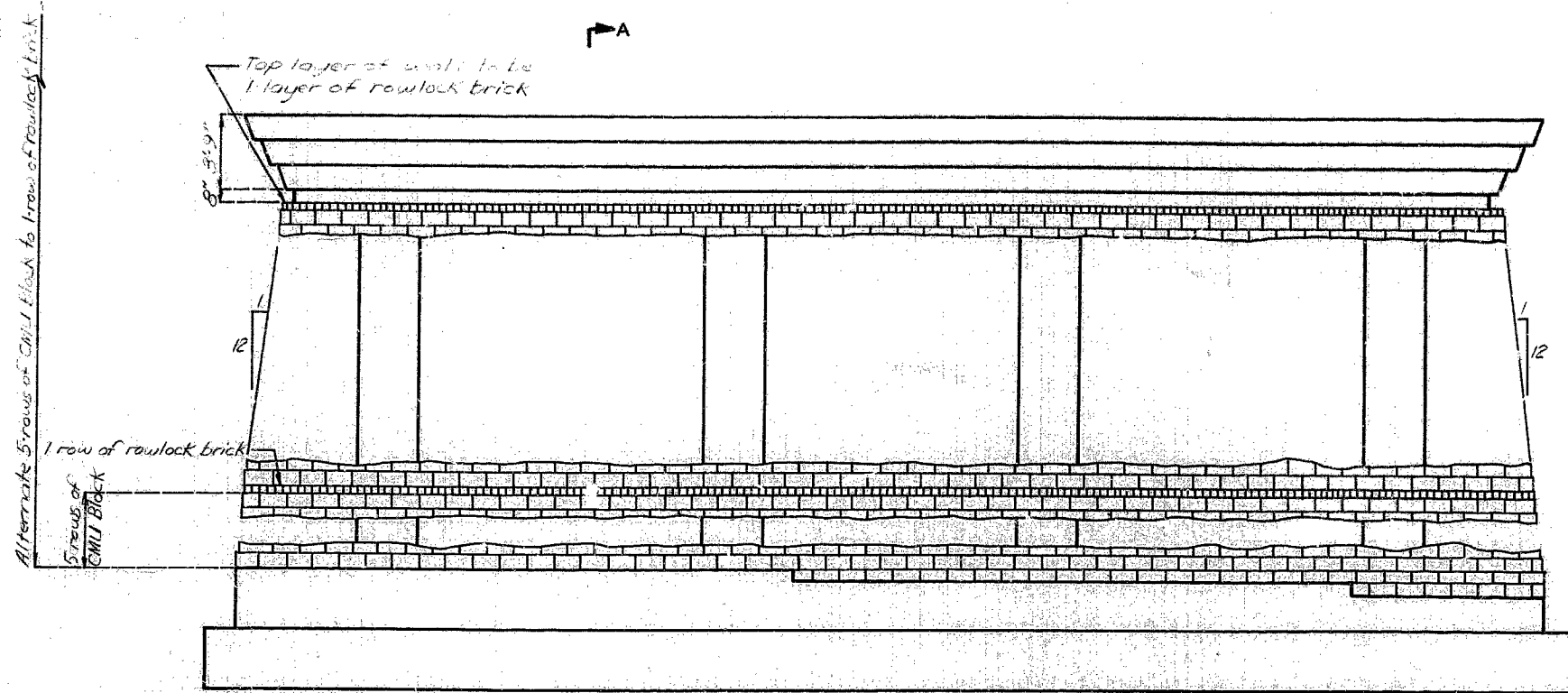
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 17 of 64

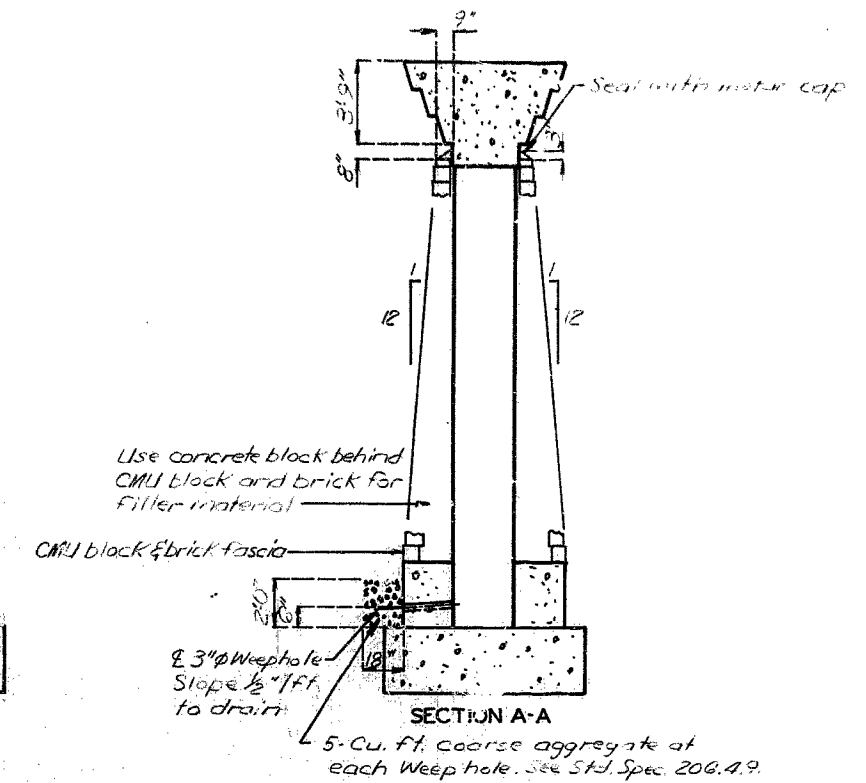
JACKSON COUNTY

A-4862

STATE	PROJ. NO.	SHEET NO.
MO		270



ELEVATION SHOWING BLOCKING AND BRICKING DETAILS



Note: For location of Weepholes see sheet No. 16.
 See Special Provisions for Brick and CMU Block requirements.

307 307

DETAILS OF INTERMEDIATE BENT NO. 2

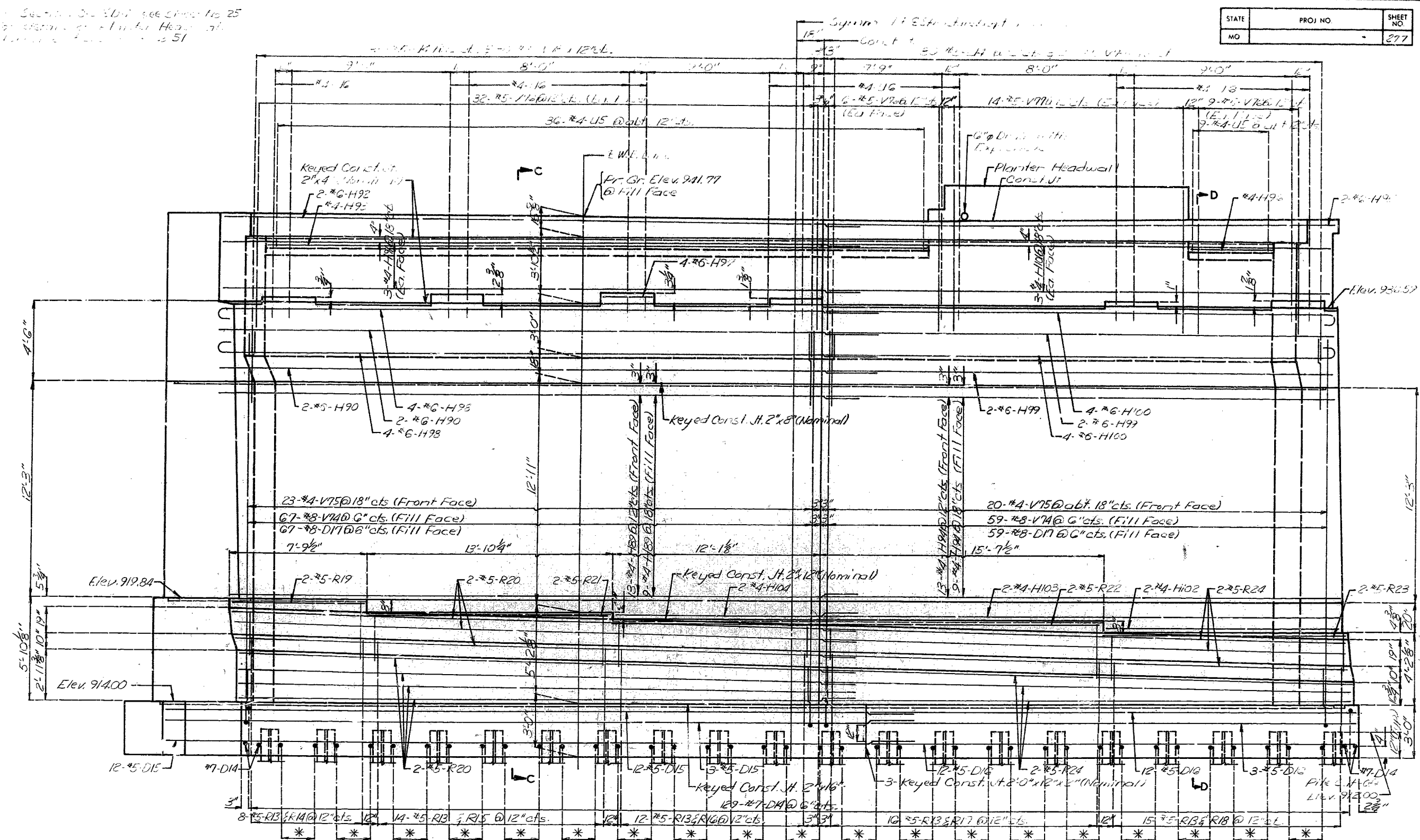
QUALITY REVIEW
 DETAILED JULY 1990
 CHECKED Sept. 1990

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 18 of 64

STATE	PROJ NO	SHEET NO
MO		277

1. See Section 2-101 see sheet no 25
 2. For stationing of Abutment Headwall
 3. For stationing of Piles see sheet no 25



388 328

ELEVATION

DETAILS OF ABUTMENT NO. 3

* 4-#7-D14 (Equally Spaced Between Piles)

QUALITY REPRO
 DETAILER Aly 1990
 CHECKED Nov 1990

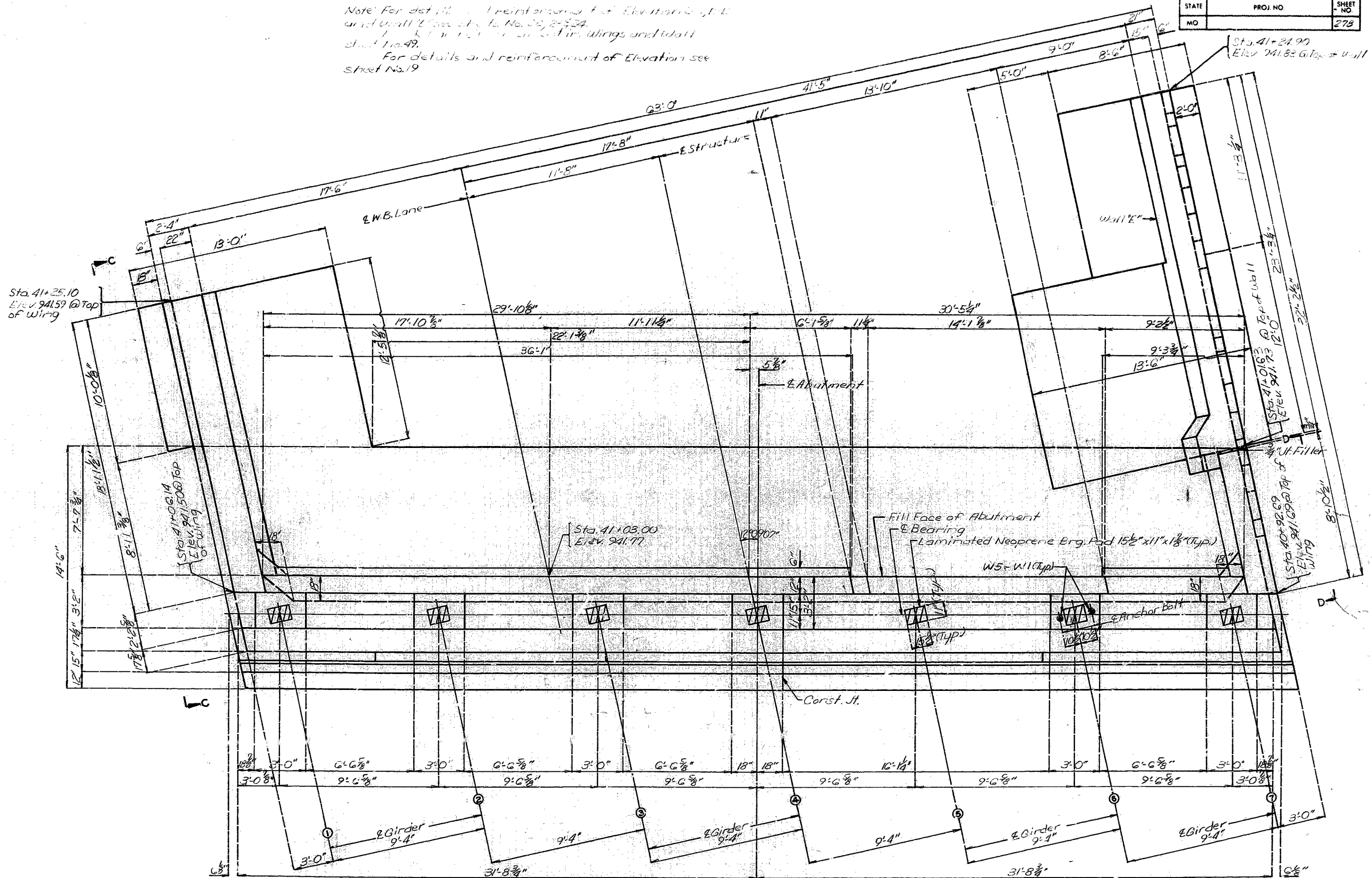
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 19 of 64

STATE	PROJ. NO.	SHEET NO.
MO		278

Note: For details of reinforcement for Elevation see sheet No. 49 and Wall Elevation sheet No. 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.

For details and reinforcement of Elevation see sheet No. 19



389 329

PLAN
DETAILS OF ABUTMENT NO. 3

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 20 of C4

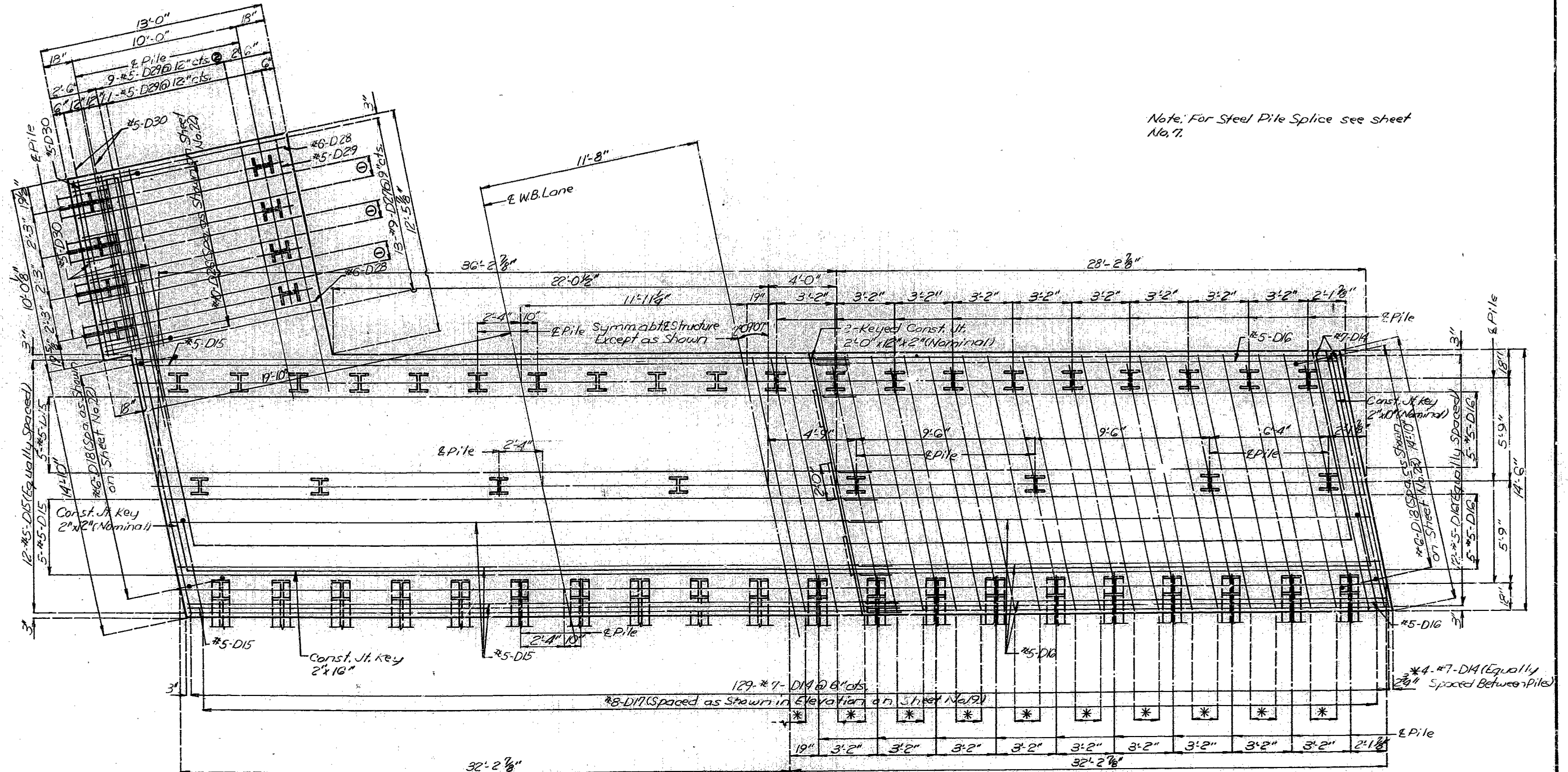
JACKSON COUNTY

A-4862

QUALITY REPORT
 DETAILED Aug. 1990
 CHECKED Nov. 1990

STATE	PROJ. NO.	SHEET NO.
MO.		277

- ① 3-#6-D28
- ② Shift bars to miss piles



310 330

QUALITY REVIEW
 DETAILED Aug. 1990
 CHECKED Nov. 1990

Note: This drawing is not to scale. Follow dimensions.

PLAN OF FOOTING
 DETAILS OF ABUTMENT NO. 3

Sheet No. 21 of 24

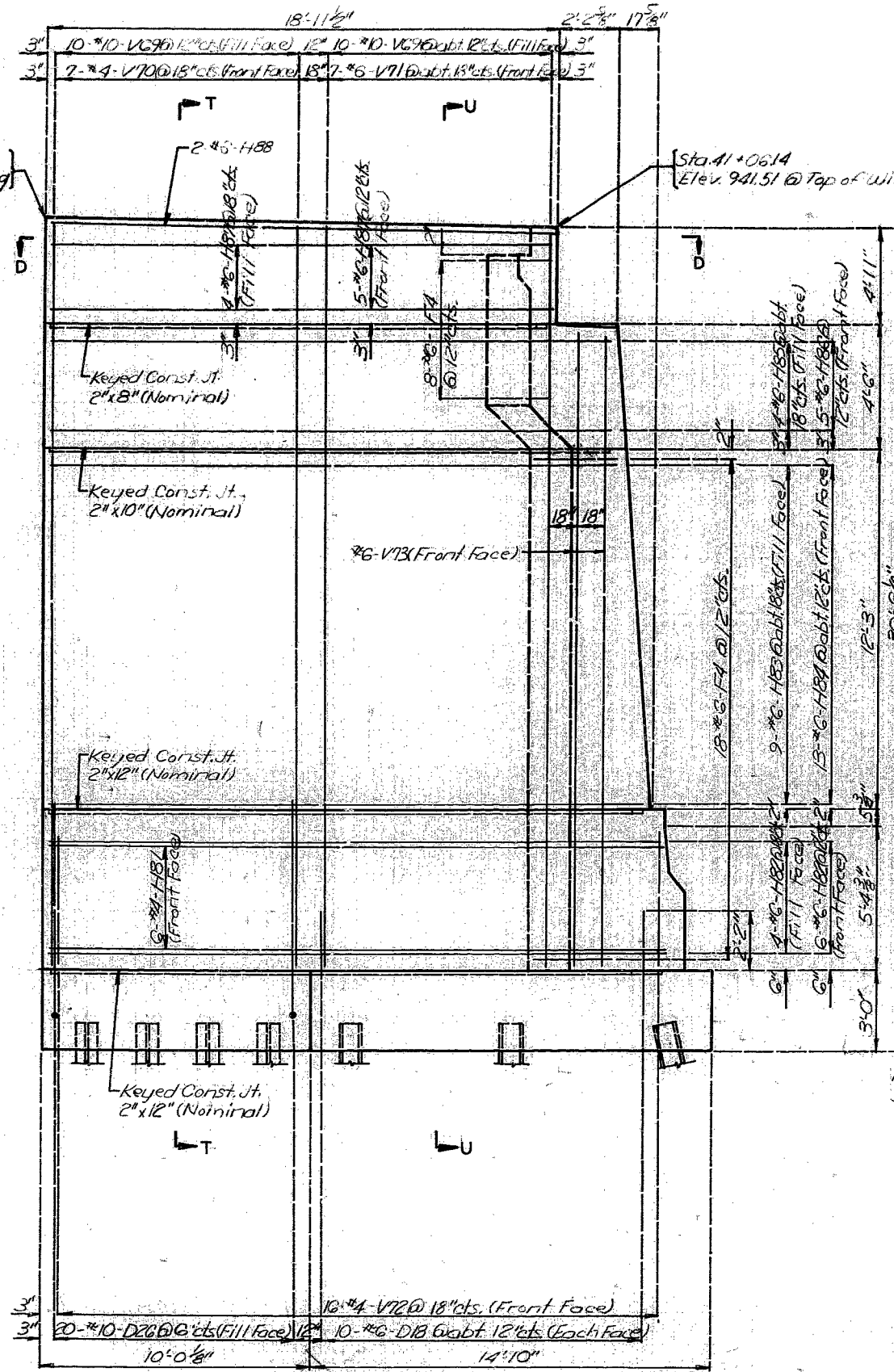
JACKSON COUNTY

A-4862

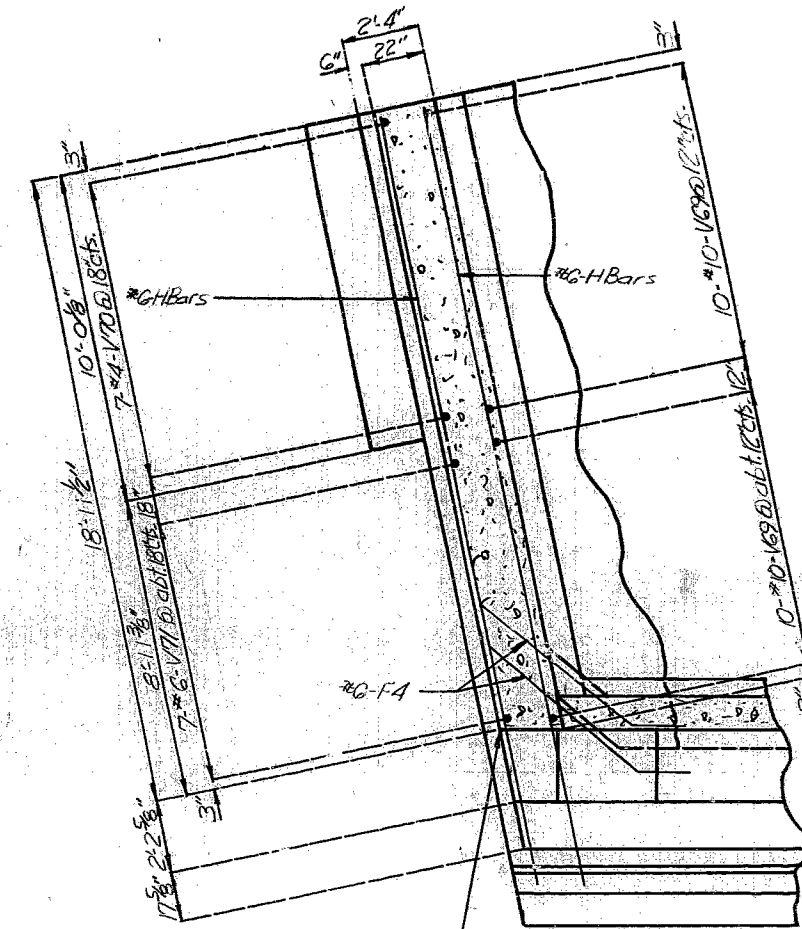
STATE	PROJ. NO.	SHEET NO.
MO.		230

Sta. 41+25.10
Elev. 941.59 @ Top of Wing

Sta. 41+06.14
Elev. 941.51 @ Top of Wing



Note: For Section T-T & U-U
see sheet No. 27.



SECTION D-D

ELEVATION C-C

DETAILS OF ABUTMENT NO. 3

374 331

QUALITY REPORT
 DETAILED Aug. 1990
 CHECKED Nov. 1990

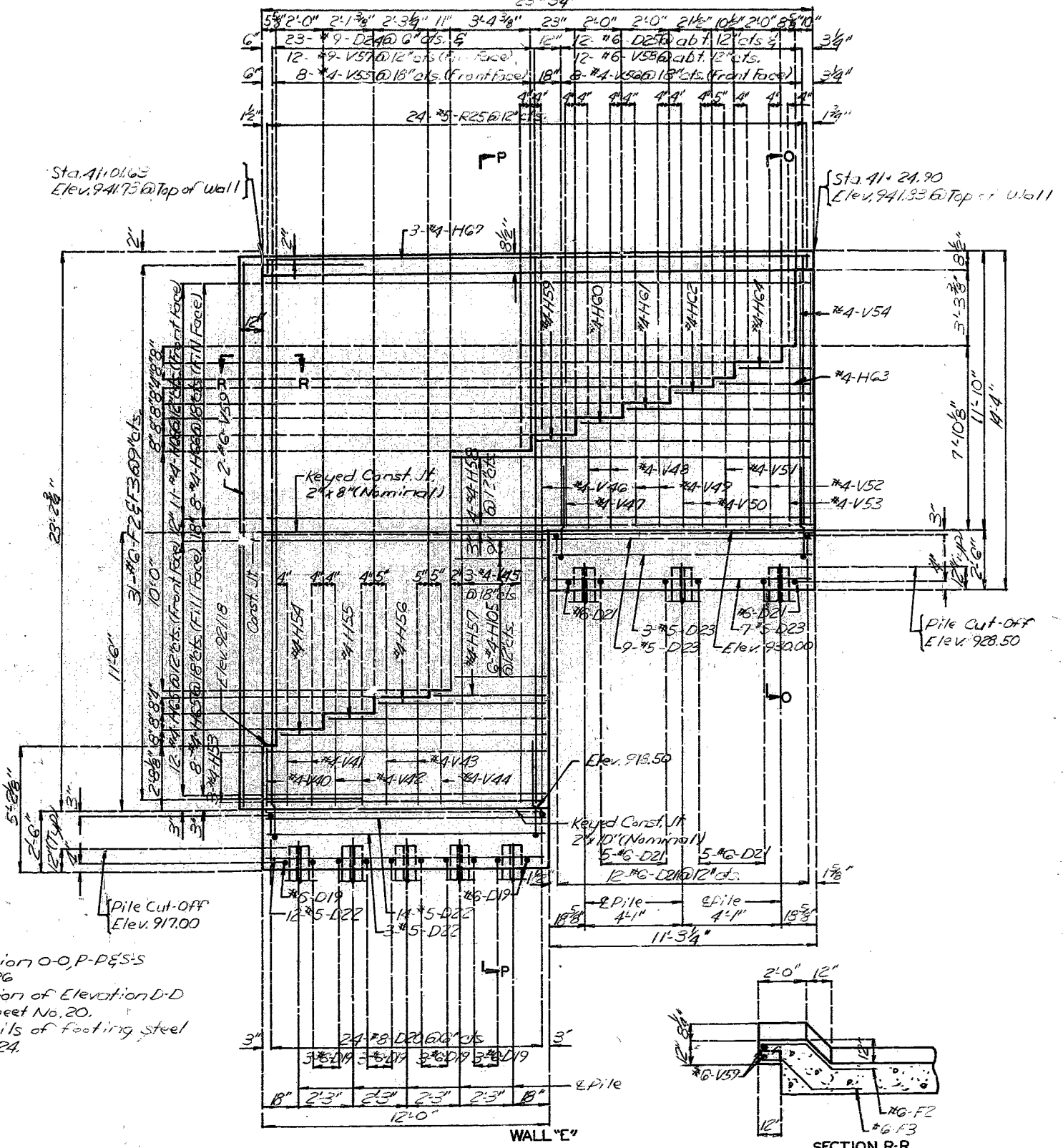
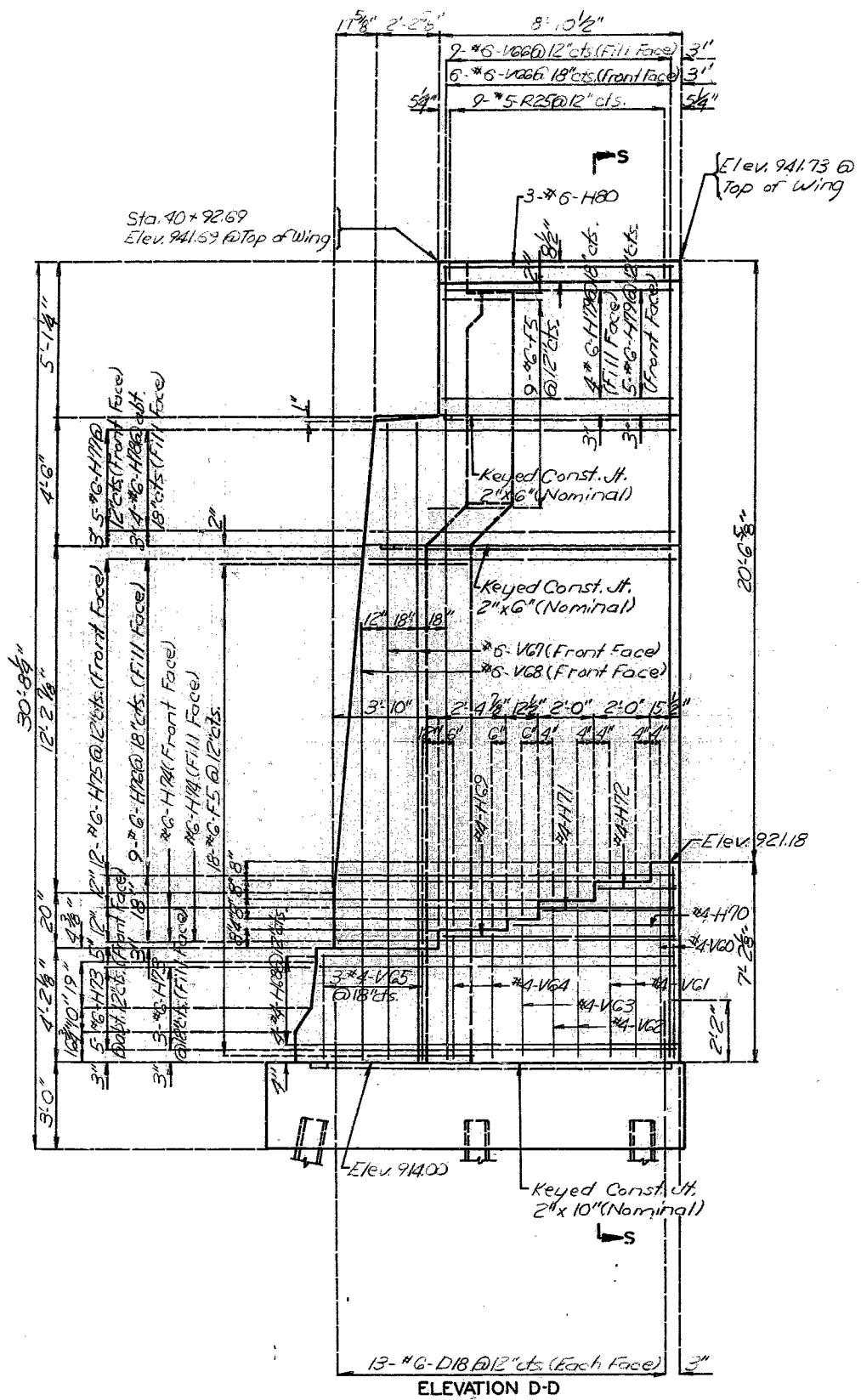
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 22 of 64

JACKSON COUNTY

A-4862

STATE	PROJ. NO.	SHEET NO.
MO.		281



Note: For Section O-O, P-P & S-S see sheet No. 26
 For location of Elevation D-D and Wall 'E' sheet No. 20.
 For details of footing steel see sheet No. 24.

DETAILS OF ABUTMENT NO. 3

312 332

QUALITY REPORT
 DETAILED Aug. 1990
 CHECKED No. 1 1990

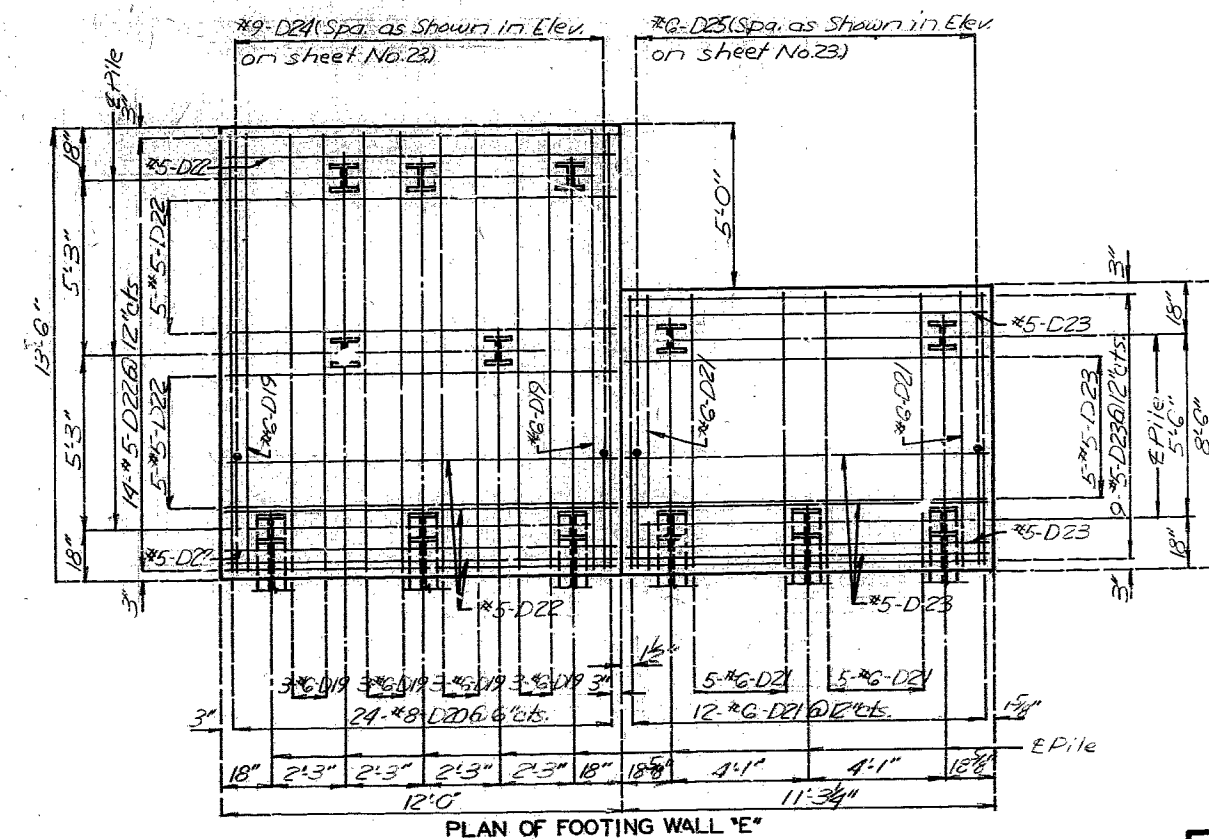
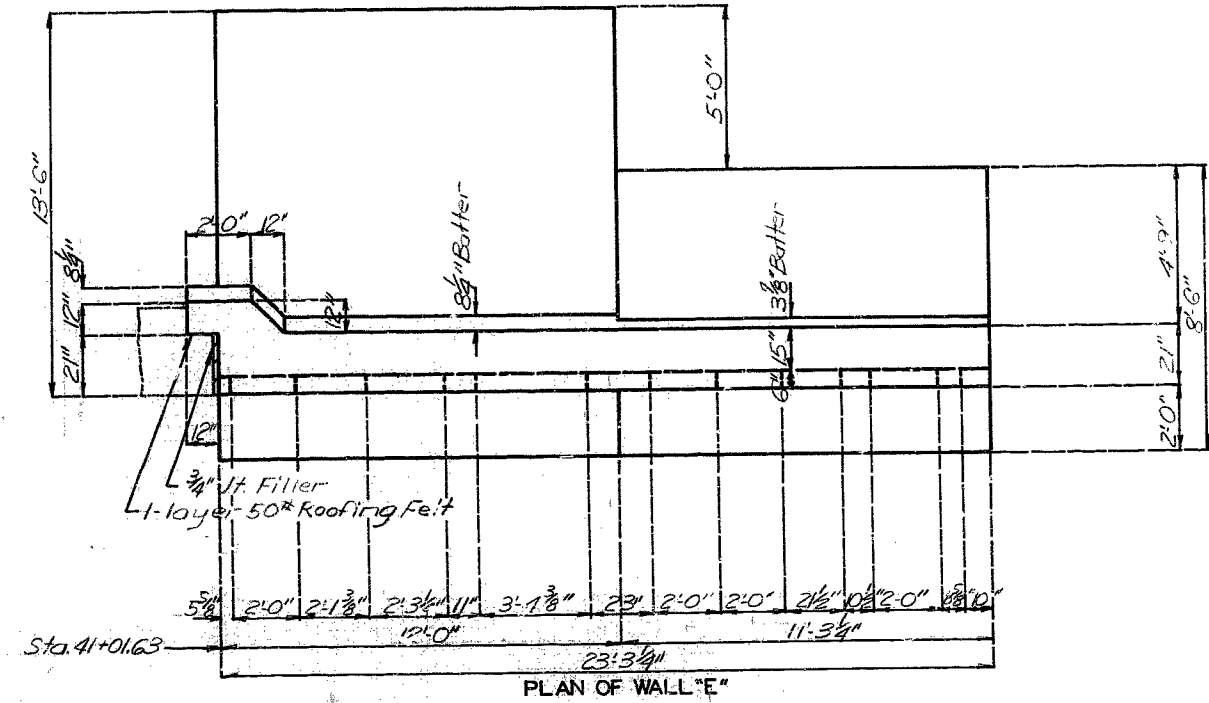
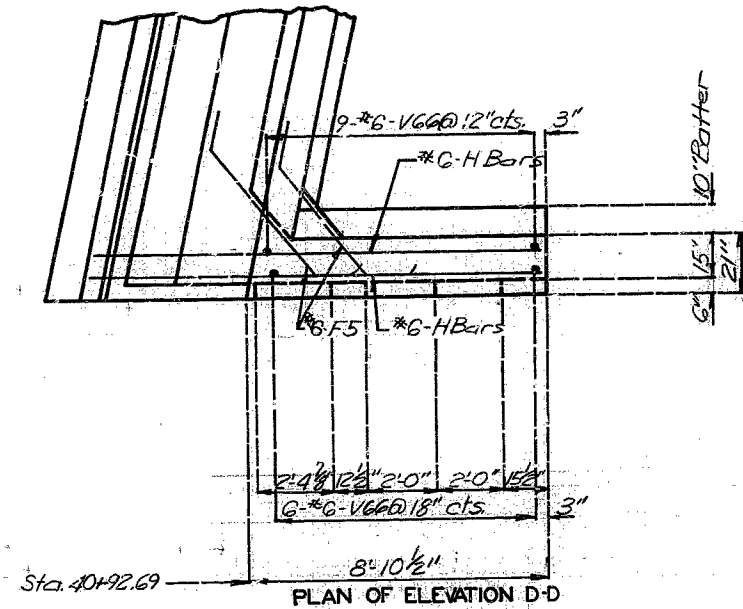
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 23 of 64

JACKSON COUNTY

A-4862

STATE	PROJ. NO.	SHEET NO.
N. J.		292



313 333

QUALITY REVIEW
 DETAILED Aug. 1990
 CHECKED Nov. 1990

Note: This drawing is not to scale. Follow dimensions.

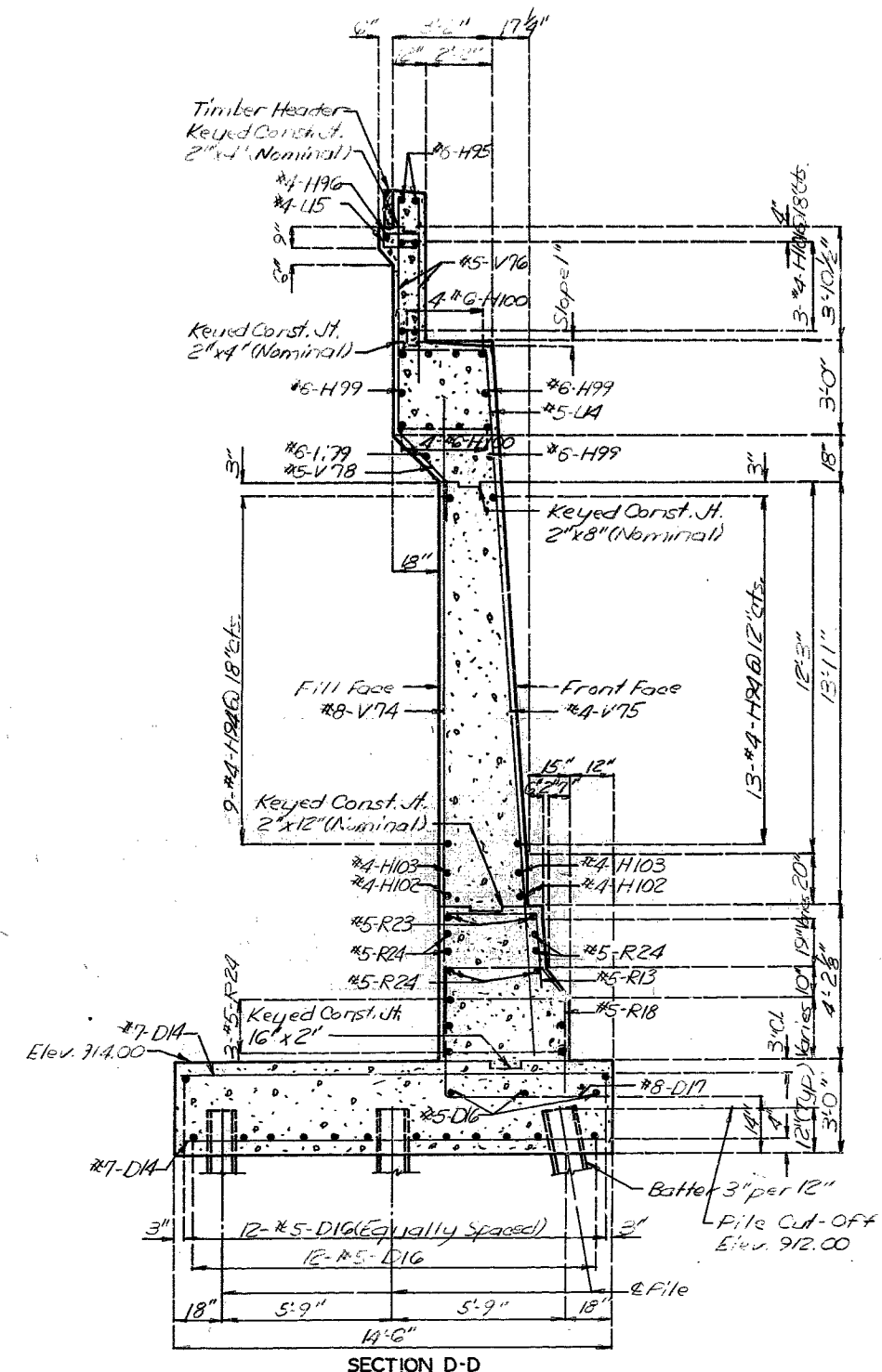
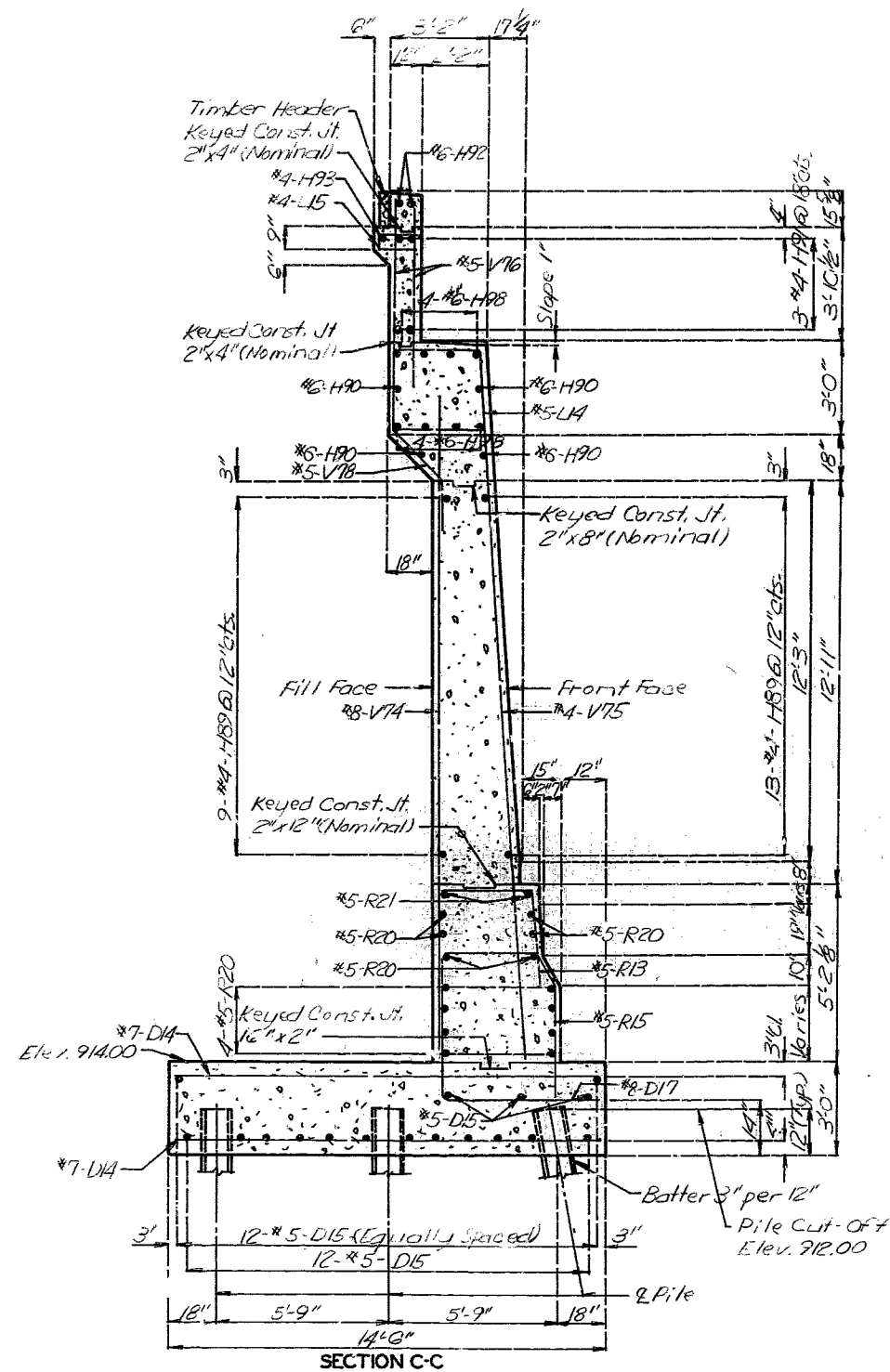
DETAILS OF ABUTMENT NO.3

Sheet No. 24 of 64

JACKSON COUNTY

A-4862

STATE	PROJ. NO.	SHEET NO.
MO		233



DETAILS OF ABUTMENT NO. 3

Note: For location of Section C-C & D-D see sheet no. 19.
For details of Timber Header see sheet no. 31.

314 334

QUALITY REVIEW
 DETAILED Aug. 1990
 CHECKED Nov. 1990

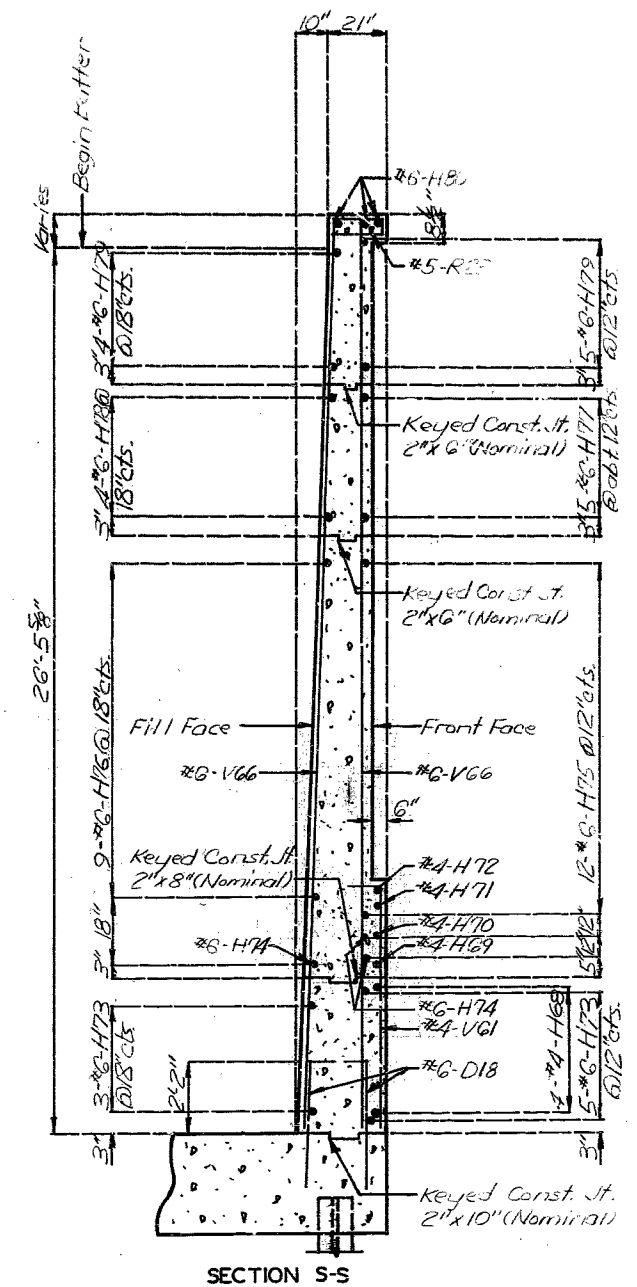
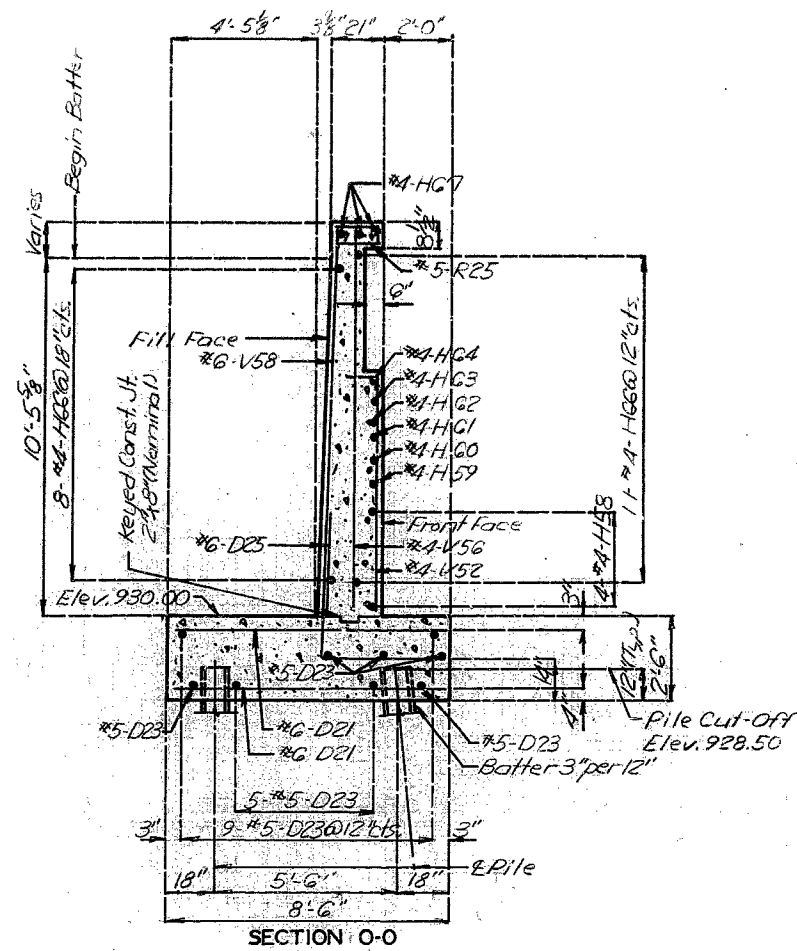
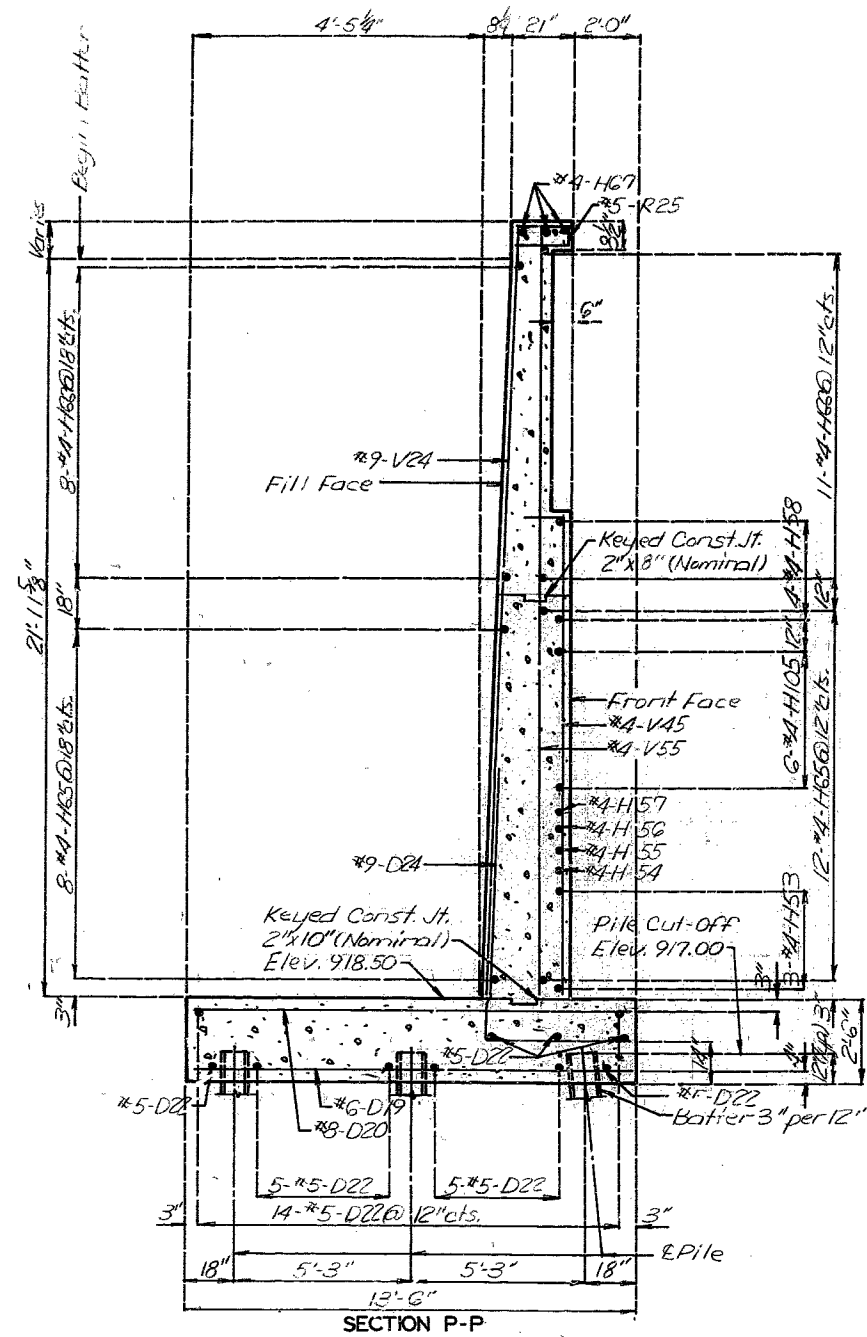
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 25 of 64

JACKSON COUNTY

A-4862

STATE	PROJ. NO.	SHEET NO.
MO.		5-4



Note: For location of Section O-O, P-P & S-S see sheet No. 23.

DETAILS OF ABUTMENT NO. 3

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 26 of 64

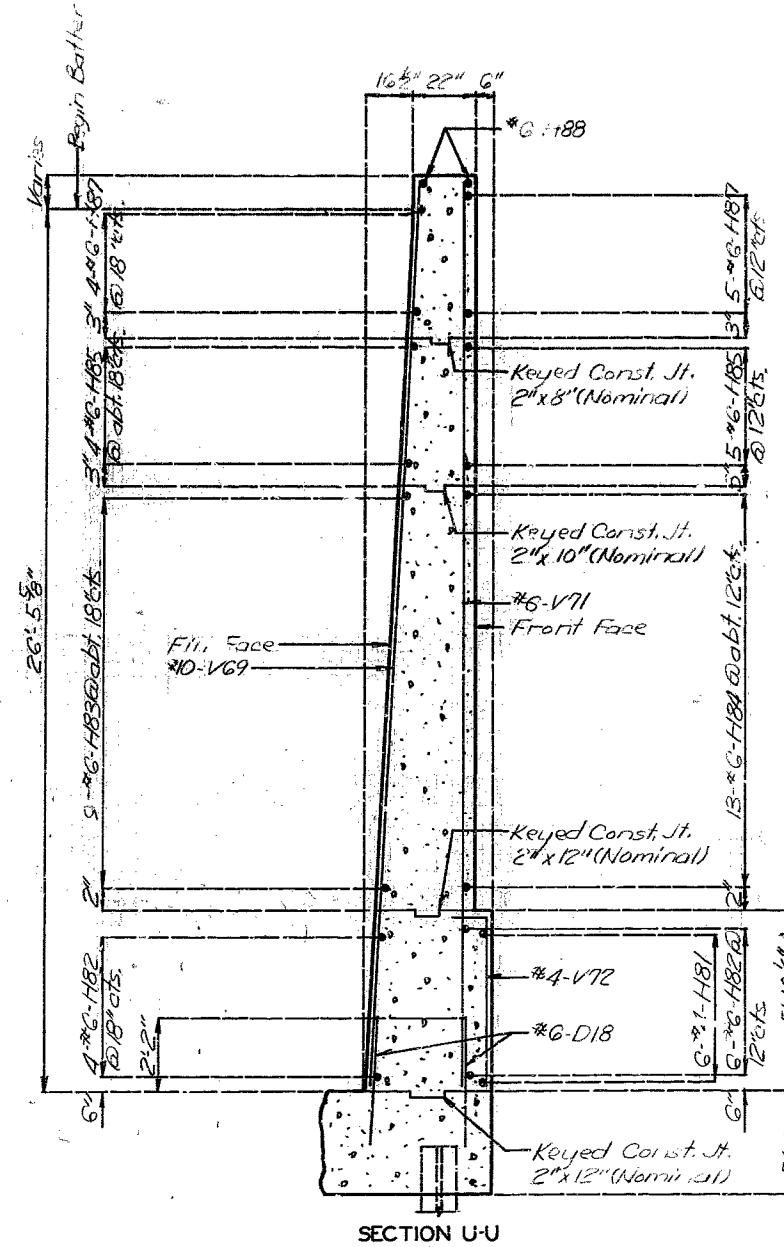
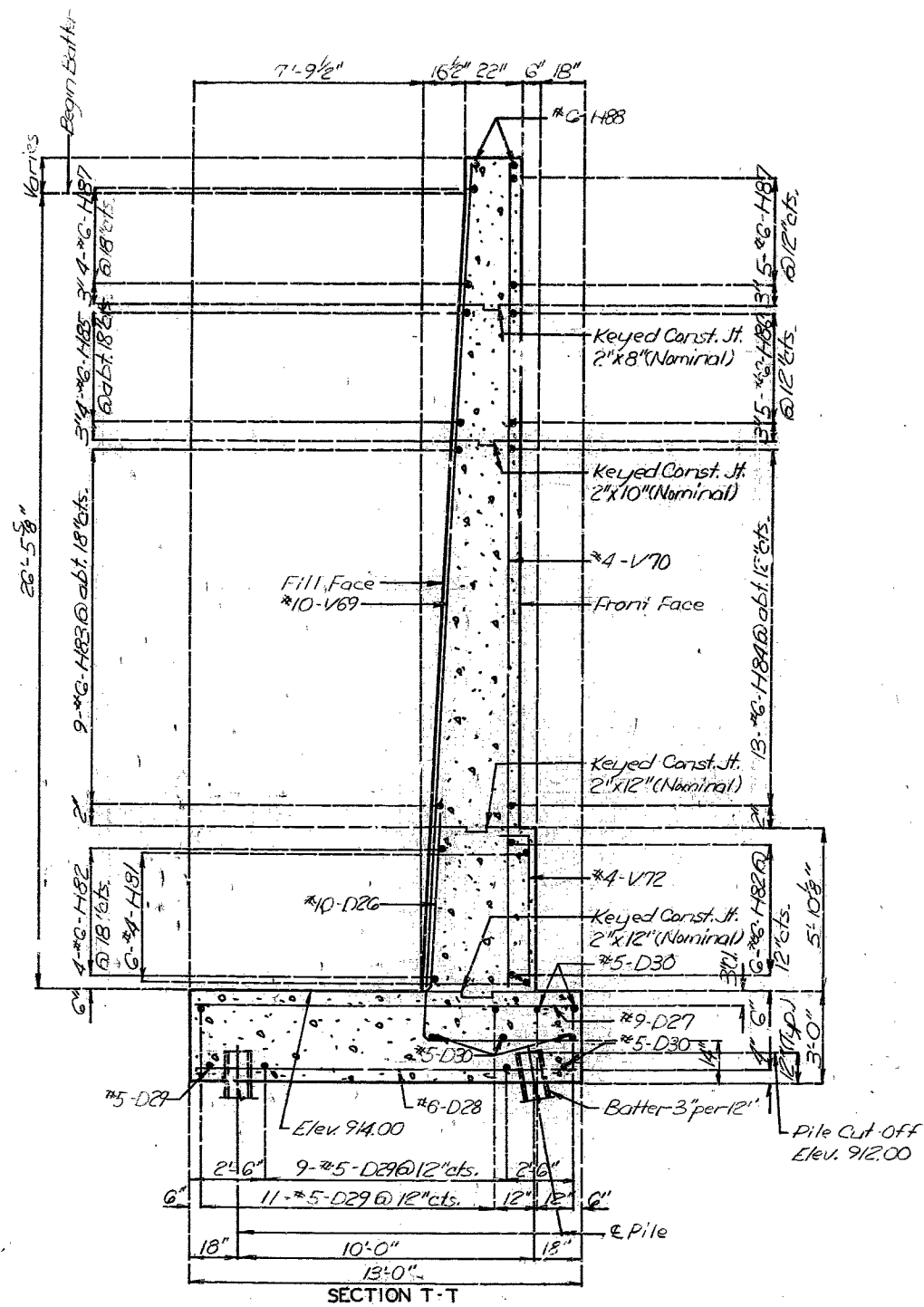
JACKSON COUNTY

A-4862

315 335

QUALITY REPROD
 DETAILED Aug 1990
 CHECKED Nov 1990

STATE	PROJ NO	SHEET NO
MO		285



Note: For location of section T-T & U-U see sheet No. 22.

DETAILS OF ABUTMENT NO. 3

376 336

QUALITY CONTROL

DETAILED Aug. 1930
 CHECKED Nov. 1930

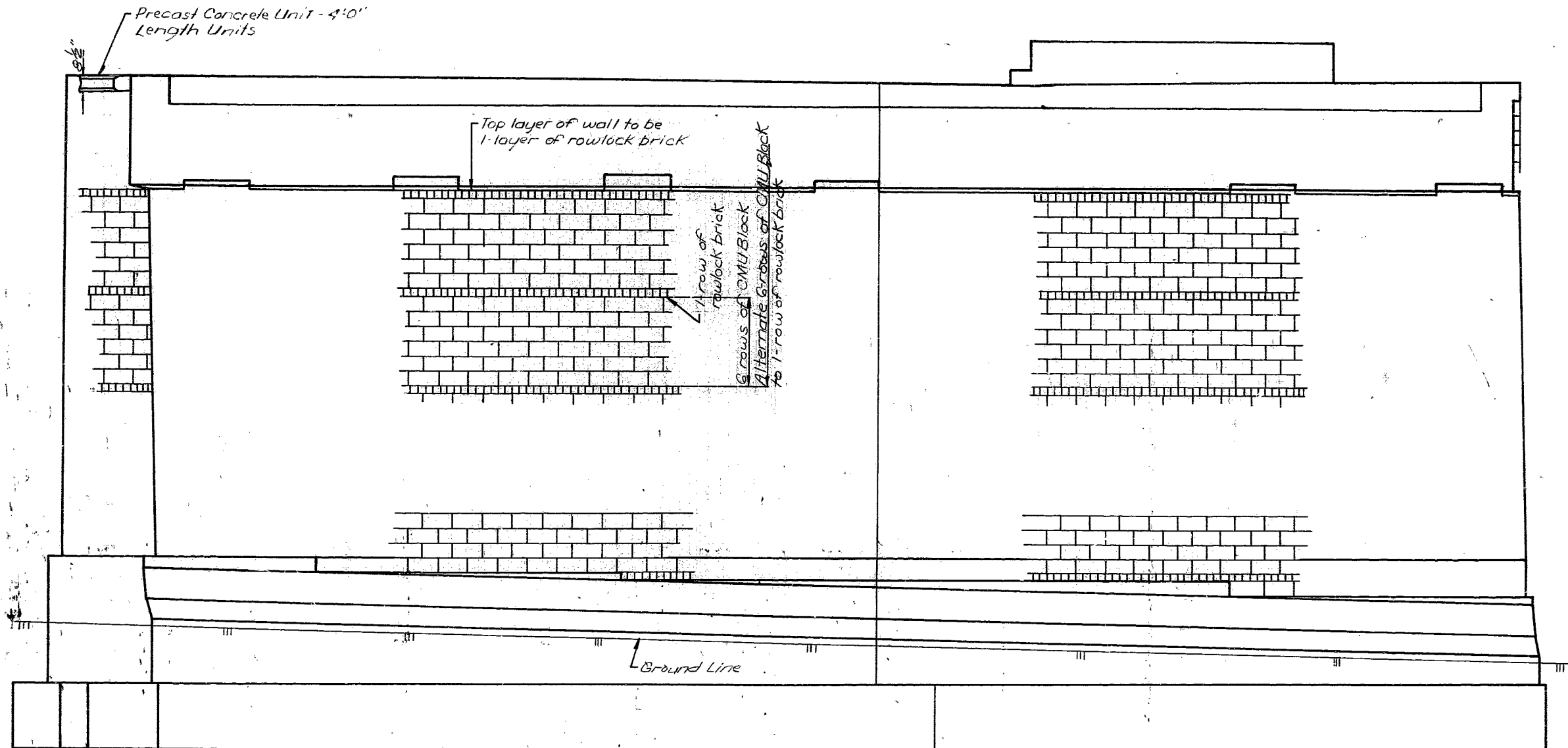
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 27 of 64

JACKSON COUNTY

A-4862

STATE	PROJ. NO.	SHEET NO.
MO.		28 of 24



ELEVATION SHOWING BLOCKING AND BRICKING DETAILS

Note: Weepholes shall be placed along bottom course of masonry spaced at 16" o.c.s.
See Special Provisions for brick and CMU Block requirements.

DETAILS OF ABUTMENT NO. 3

37 337

QUALITY REPRO
 DETAILED Aug. 1990
 CHECKED Nov. 1992

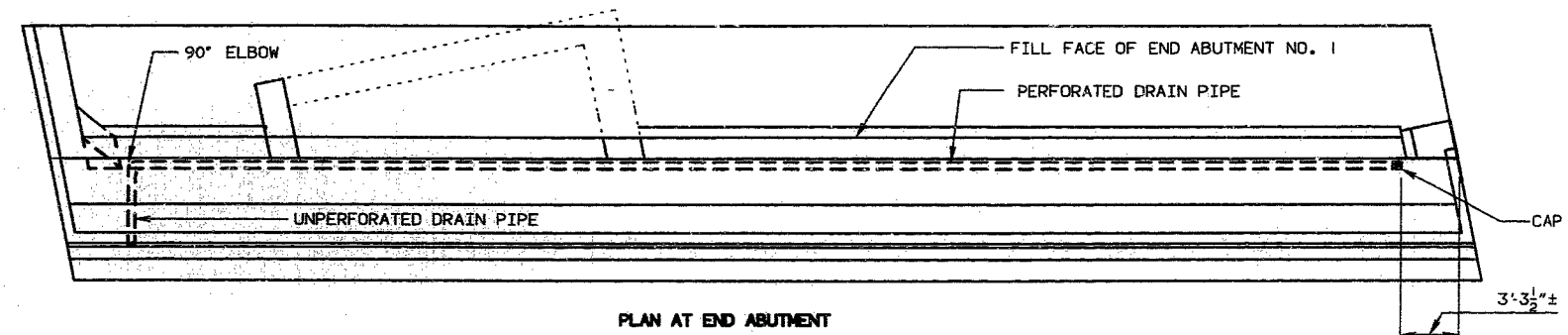
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 28 of 24

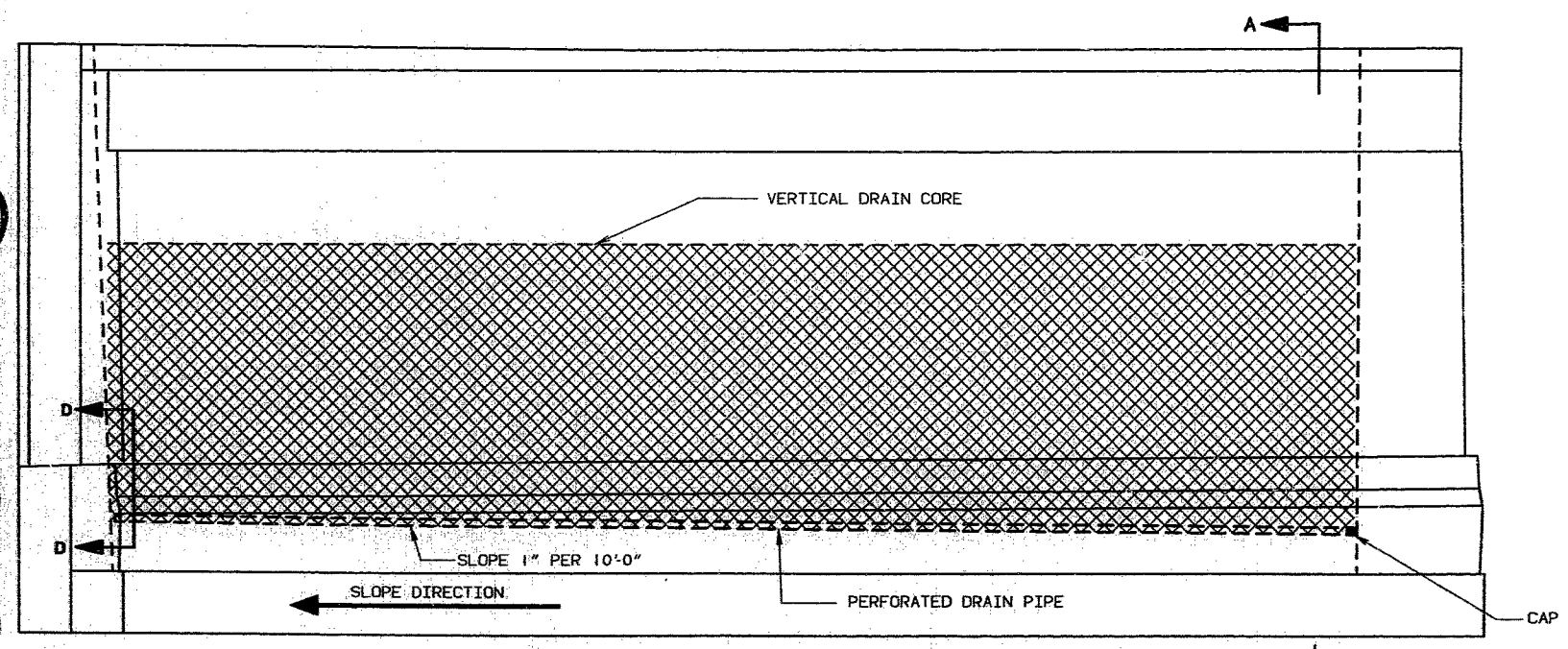
JACKSON COUNTY

A-4862

STATE	PROJ. NO.	SHEET NO.
MO.		287

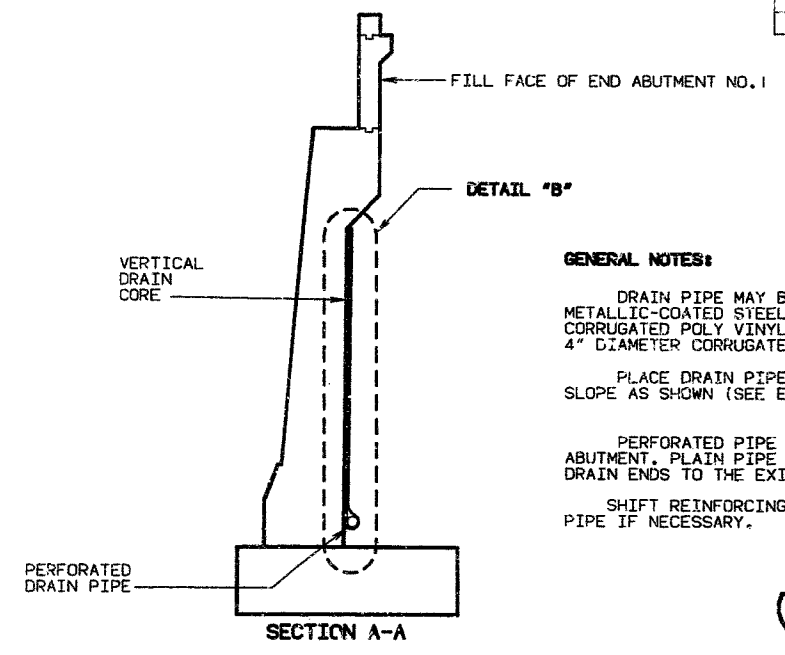


PLAN AT END ABUTMENT

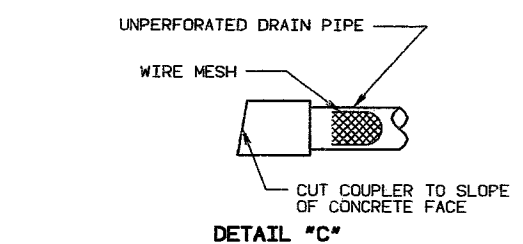


ELEVATION AT END ABUTMENT

VERTICAL DRAIN AT ABUTMENT NO. 1



SECTION A-A



DETAIL "C"

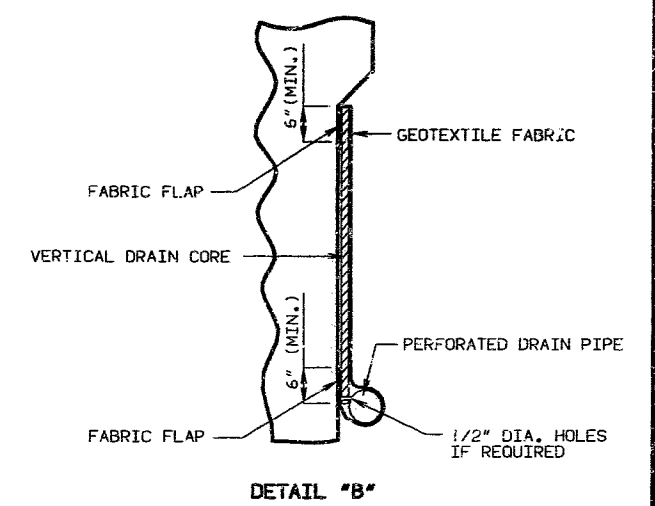
GENERAL NOTES:

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

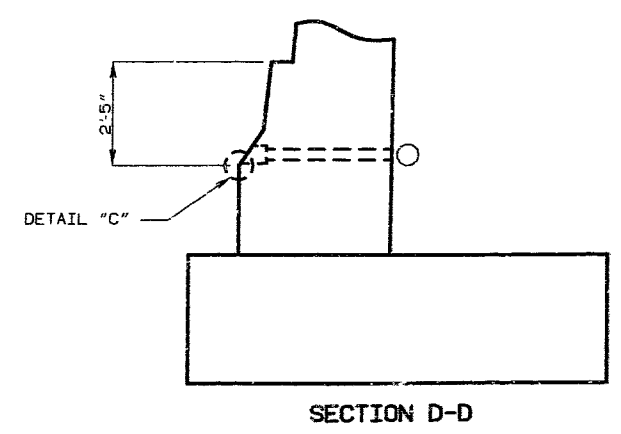
PLACE DRAIN PIPE AT END ABUTMENT AND SLOPE AS SHOWN (SEE ELEVATION AT END ABUTMENT).

PERFORATED PIPE SHALL BE USED ALONG THE WALL OF THE ABUTMENT. PLAIN PIPE SHALL BE USED WHERE THE VERTICAL DRAIN ENDS TO THE EXIT AT FRONT FACE OF ABUTMENT.

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



DETAIL "B"



SECTION D-D

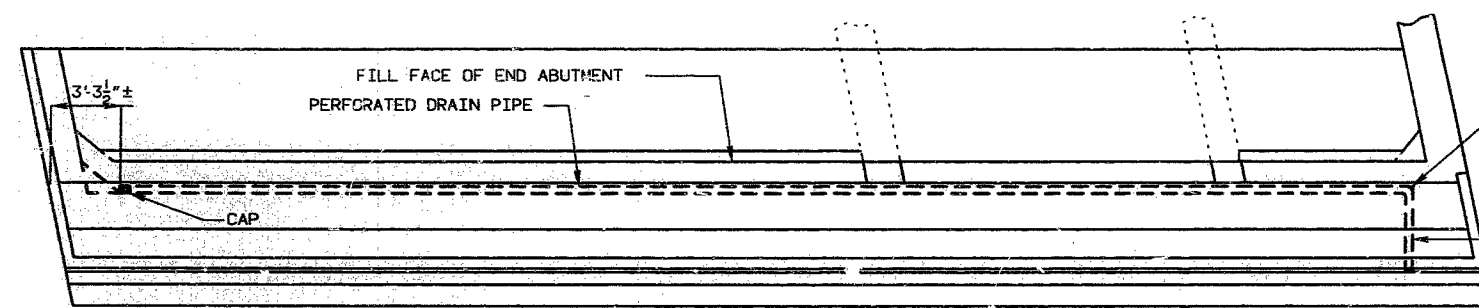
318 338

DETAILED AUG. 1990
CHECKED SEPT. 1990

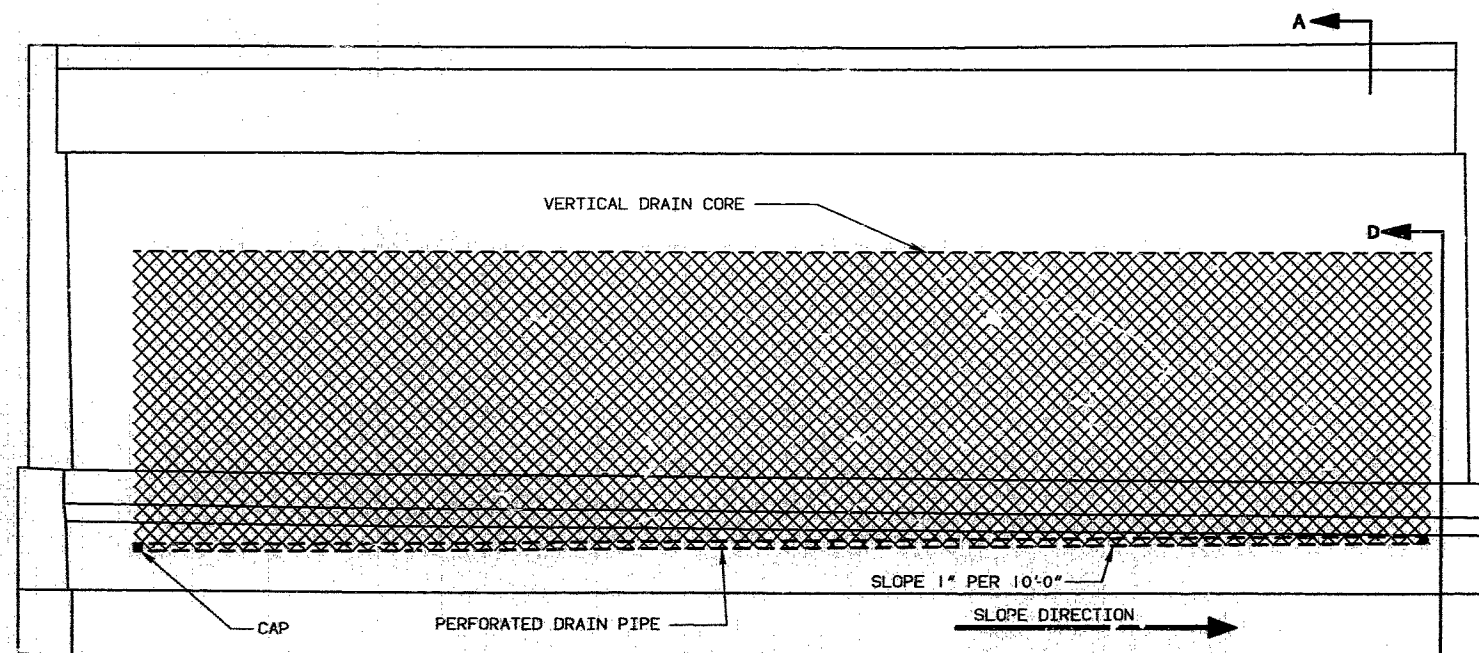
NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 29 OF 64

STATE	PROJ. NO.	SHEET NO.
MO.		288

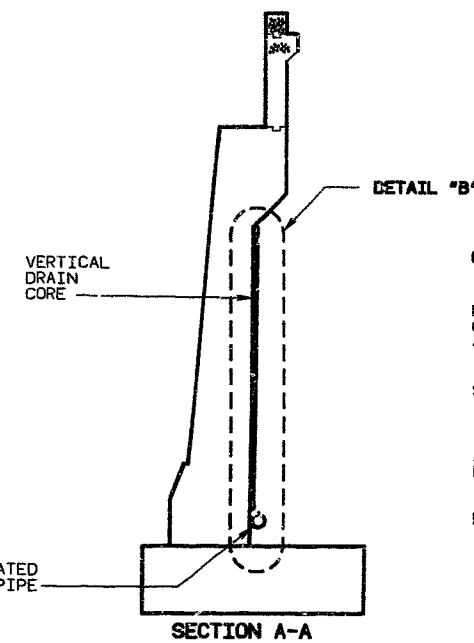


PLAN AT END ABUTMENT

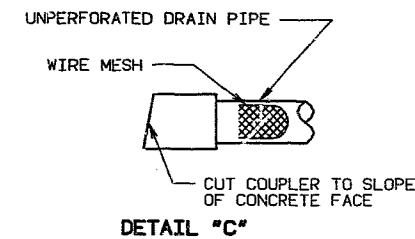


ELEVATION AT END ABUTMENT

VERTICAL DRAIN AT ABUTMENT NO. 3



SECTION A-A



DETAIL "C"

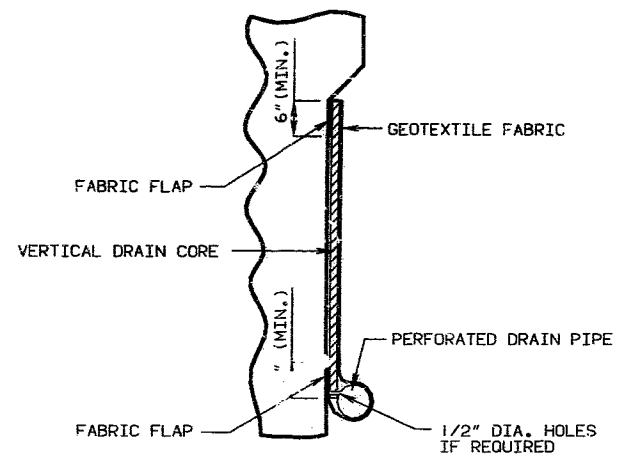
GENERAL NOTES:

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

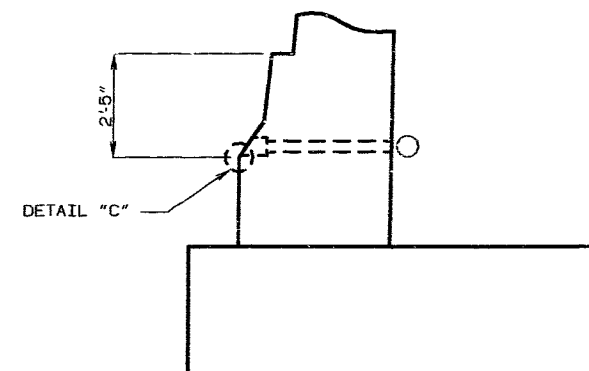
PLACE DRAIN PIPE AT END ABUTMENT AND SLOPE AS SHOWN (SEE ELEVATION AT END ABUTMENT).

PERFORATED PIPE SHALL BE USED ALONG THE WALL OF THE ABUTMENT. PLAIN PIPE SHALL BE USED WHERE THE VERTICAL DRAIN ENDS TO THE EXIT AT FRONT FACE OF ABUTMENT.

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



DETAIL "B"



SECTION D-D

319 339

DETAILED AUG. 1990
CHECKED SEPT. 1990

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

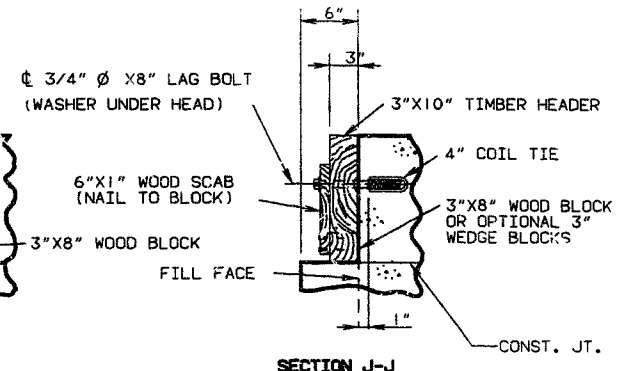
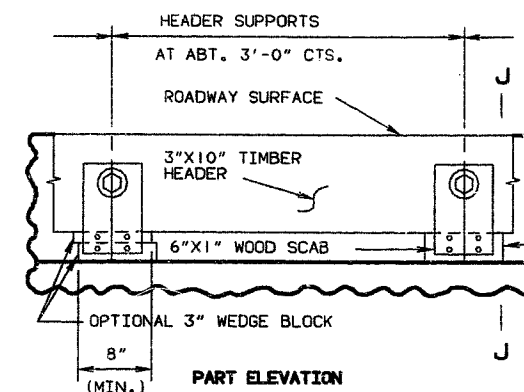
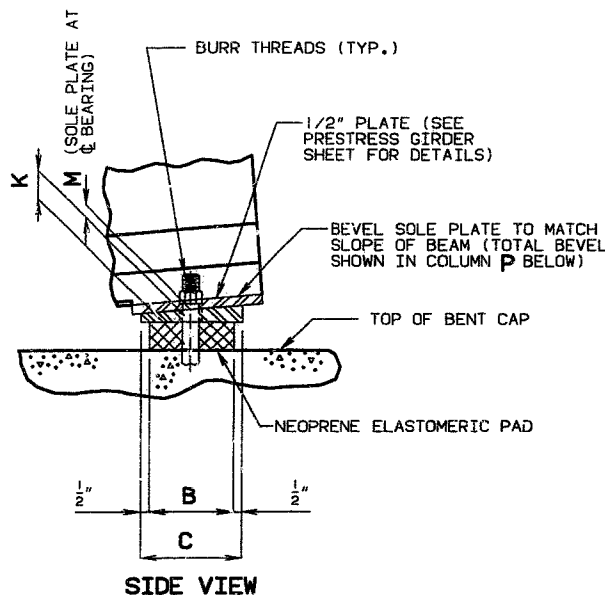
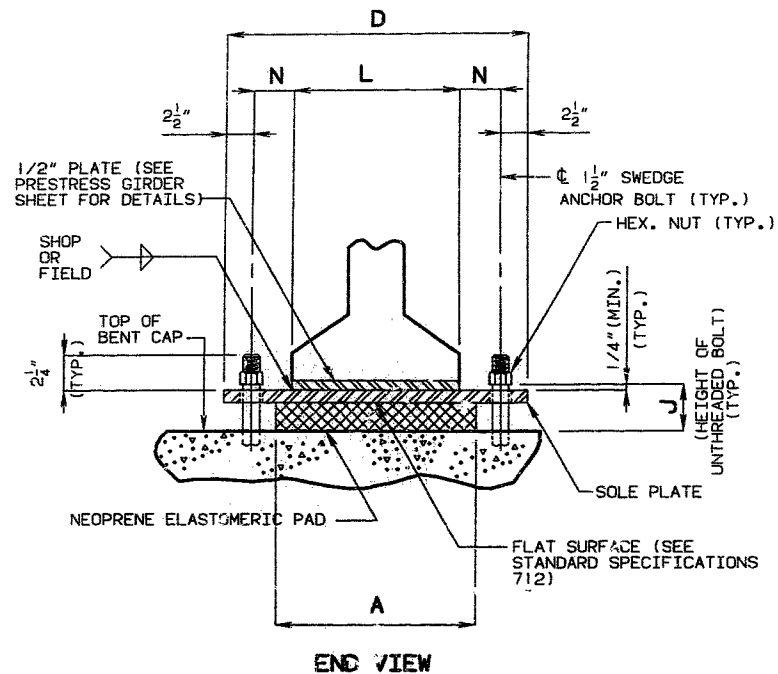
SHEET NO. 30 OF 64

JACKSON

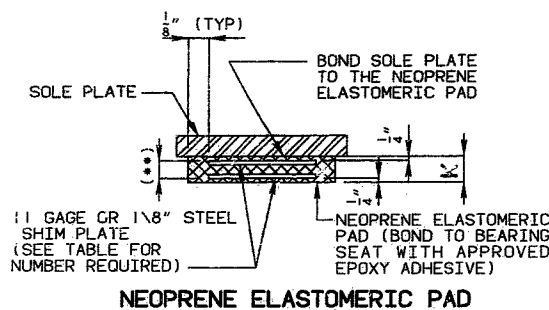
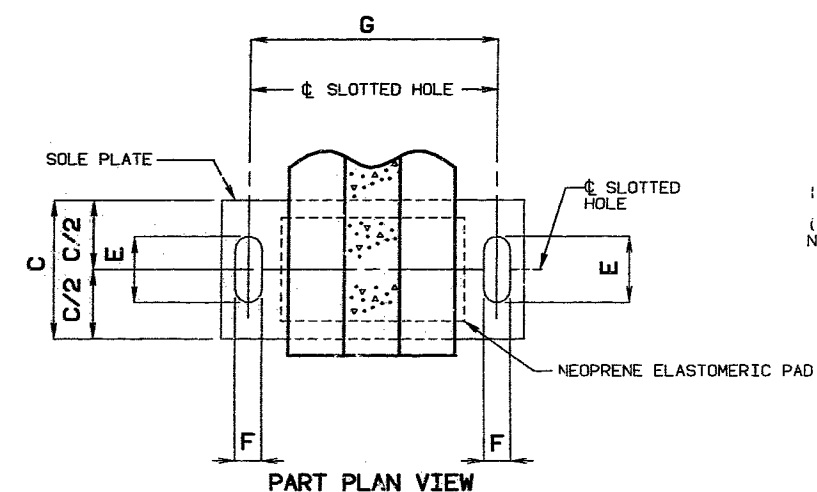
COUNTY

A-4862

STATE	PROJ. NO.	SHEET NO.
MO.		289



NOTE: COST OF TIMBER HEADERS COMPLETE IN PLACE TO BE INCLUDED IN CONTRACT UNIT PRICE FOR CONCRETE.
 DETAILS OF TIMBER HEADER AT END ABUTMENTS

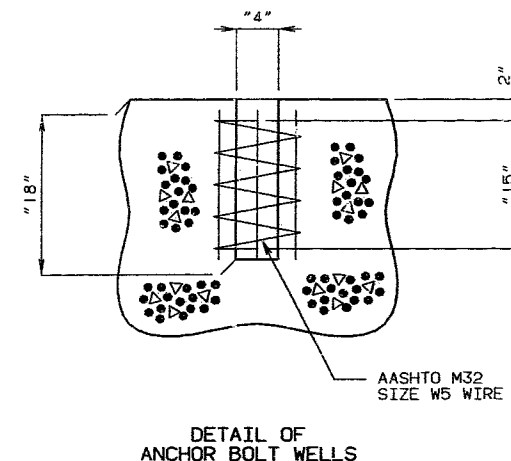


(**) LAYERS OF 1/2" ELASTOMER ALTERNATING WITH 11 GAGE OR 1/8" STEEL SHIM PLATE.

GENERAL NOTES:

ANCHOR BOLTS SHALL BE 1/2" Ø A588 STEEL SWEDGED BOLTS AND SHALL EXTEND 15" INTO THE CONCRETE WITH A194-2, 2H OR A563-C, C3, D, DH, DH3 HEAVY HEXAGON NUTS. ACTUAL MANUFACTURER'S CERTIFIED MILL TEST REPORTS (CHEMICAL AND MECHANICAL) SHALL BE PROVIDED. (SWEDGING 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 INORGANIC ZINC. WELD AREAS TO BE TOUCHED UP AFTER ASSEMBLY.

THE NEOPRENE ELASTOMERIC PADS SHALL BE 60 DUROMETER.
 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 (PRESTRESS STRUCTURES), EACH.



NOTE: THE LOCATION OF THE ANCHOR BOLTS IN RELATION TO THE SLOTTED HOLES IN THE SOLE PLATE SHALL CORRESPOND WITH THE TEMPERATURE AT THE TIME OF ERECTION. AT 60° F. THE SLOTTED HOLES SHOULD CENTER ON THE ANCHOR BOLTS.

BENT NO.	EXPANSION BEARINGS													NUMBER OF SHIM PLATES(*)	NUMBER REQUIRED
	A	B	C	D	E	F	G	J	K	L	M	N	P		
1	15 1/2"	11"	12"	26"	4 1/4"	1 5/8"	21"	3 5/8"	1 7/8"	17"	1 1/2"	2"	-	3	7
3	15 1/2"	11"	12"	26"	4 1/2"	1 5/8"	21"	3 5/8"	1 7/8"	17"	1 1/2"	2"	-	3	7
														TOTAL BEARINGS	14

(*) THE REQUIRED SHIM PLATE SHALL BE PLACED BETWEEN EQUAL LAYERS OF ELASTOMER AND MOLDED TOGETHER TO FORM AN INTEGRAL UNIT.

DETAILS OF LAMINATED NEOPRENE BEARINGS (PRESTRESS STRUCTURES)

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

SHEET NO. 31 OF 64

JACKSON

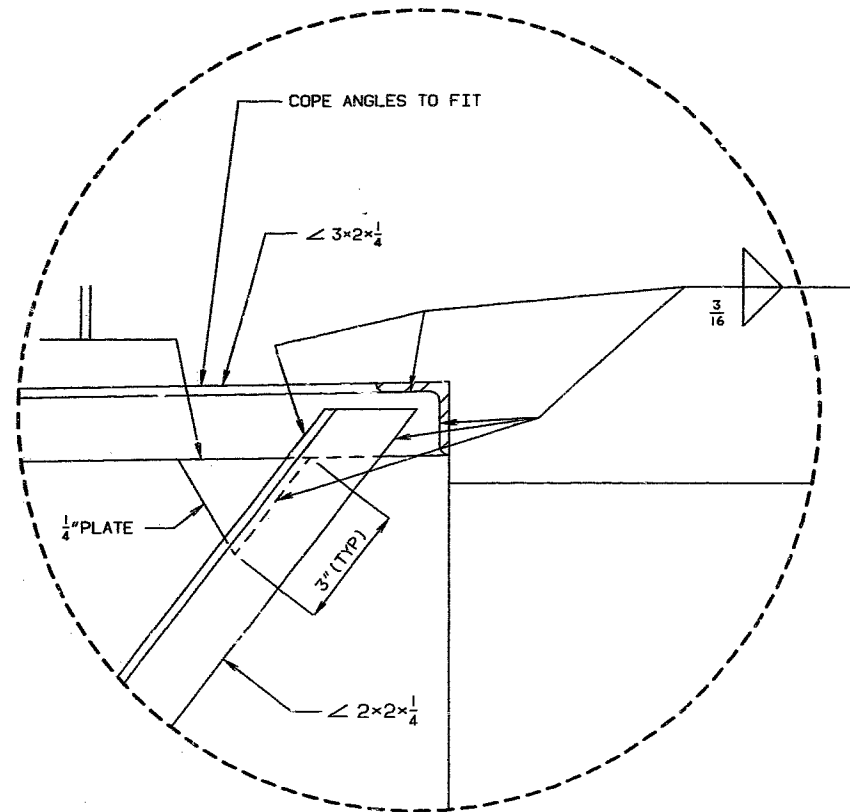
COUNTY

A-4862

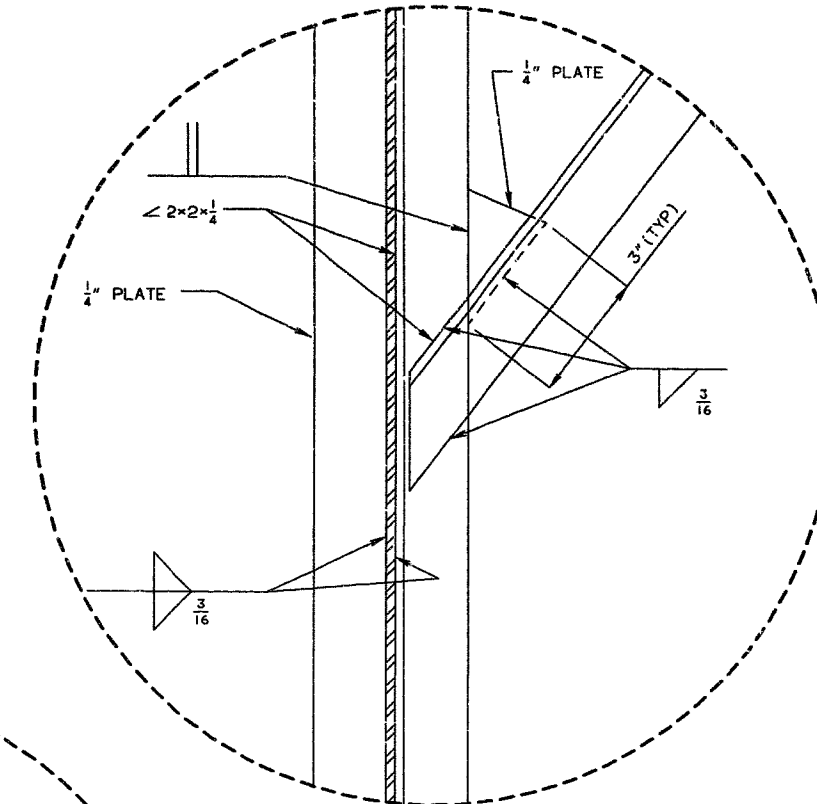
LAMINATED BRG. REVISED
 P/S JAN. 1980 DEC. 1989

DETAILED AUG 19 90
 CHECKED AUG. 19 90

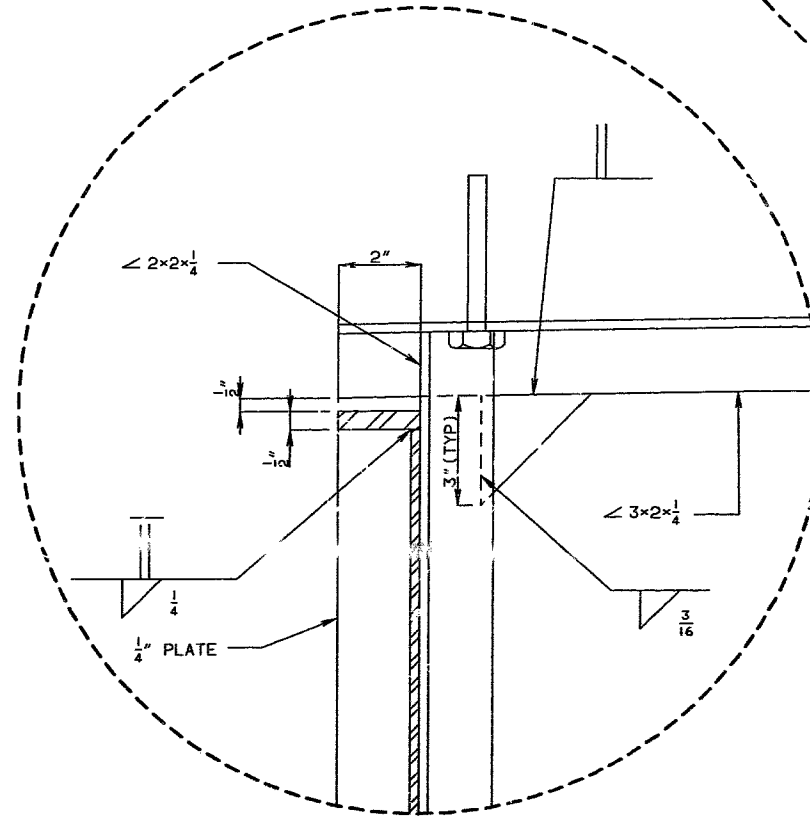
STATE	PROJ. NO.	SHEET NO.
MO.		



DETAIL "D"



DETAIL "B"



DETAIL "C"

NOTE: FOR LOCATION DETAILS B, C, AND D, SEE SHEET NO.33

34

DETAILED JAN. 1993
CHECKED JAN. 1993

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS. Δ REVISED 1/27/93

SEE FINAL PLANS

SHEET NO. 33A OF 64

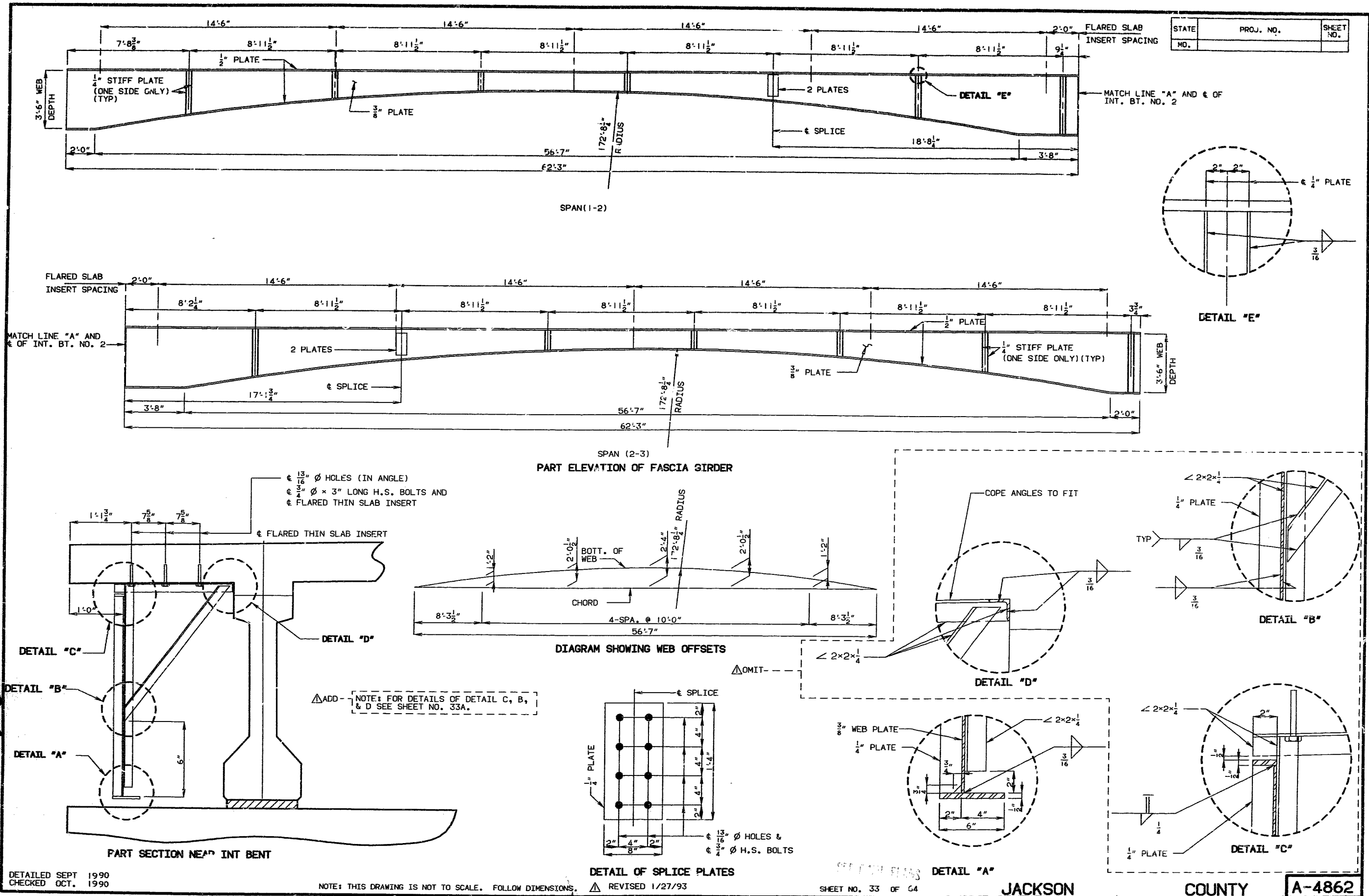
JACKSON

COUNTY

A-4862

DRAWING NO. 4862-044 SCALE: 1/8"=1'-0" DRAWN: JLR/10-14-82 BY: JMC
 DATE: 1/28/93 TIME: 11:17 AM ACCESS: NONE
 LARRY J. BECKEL
 PLOT

STATE	PROJ. NO.	SHEET NO.
NO.		



348

DRAWN BY: J. L. GIBSON
 DATE: 1/26/93
 SCALE: 1/8" = 1'-0"
 CHECKED BY: J. L. GIBSON
 DATE: 1/26/93
 PROJECT: JACKSON COUNTY
 SHEET: 33 OF 64

DETAILED SEPT 1990
 CHECKED OCT. 1990

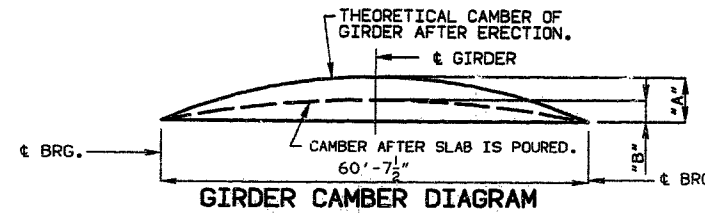
NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.
 REVISED 1/27/93

JACKSON COUNTY
 SHEET NO. 33 OF 64
 A-4862

NOTE: IF GIRDER CAMBER IS DIFFERENT FROM THAT SHOWN IN THE CAMBER DIAGRAM, IT SHALL BE NECESSARY TO ADJUST THE SLAB HAUNCHES, INCREASE THE SLAB THICKNESS, OR TO RAISE THE GRADE UNIFORMLY THROUGHOUT THE STRUCTURE. NO PAYMENT WILL BE MADE FOR ADDITIONAL LABOR OR MATERIALS REQUIRED FOR VARIATION IN HAUNCHING, SLAB THICKNESS, OR GRADE ADJUSTMENT. CONCRETE IN THE SLAB HAUNCHES IS INCLUDED IN THE ESTIMATED QUANTITIES FOR ALTERNATE SLABS.

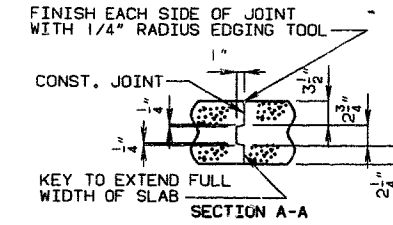
INT. GIRDER NO. 5	15"	7 1/16"	1 1/8"	7 1/16"	9 1/16"	11 1/16"	13"	11"	13 1/8"	2 1/16"
INT. GIRDERS NO. 2, 3, 4, & 6	3 1/16"	1 1/16"	3 1/4"	1 1/16"	9 1/16"	11 1/16"	1 1/16"	7 1/8"	1 1/16"	11 1/16"
EXT. GIRDERS NO. 1 & 7	1 1/16"	1 1/16"	3 1/4"	1 1/16"	9 1/16"	11 1/16"	1 1/16"	7 1/8"	1 1/16"	11 1/16"
BOTT. OF SLAB	[Diagram showing slab haunching profile]									
TOP OF GIRDER	[Diagram showing girder haunching profile]									

THEORETICAL SLAB HAUNCHING DIAGRAM



GIRDER	SPAN (1-2)		SPAN (2-3)	
	"A"	"B"	"A"	"B"
EXTERIOR	1 5/8"	1"	1 5/8"	1"
INTERIOR	1 5/8"	13/16"	1 5/8"	13/16"

NOTE: GIRDER CAMBER @ 0.25 PT. = 0.7125 X 0.5 PT.



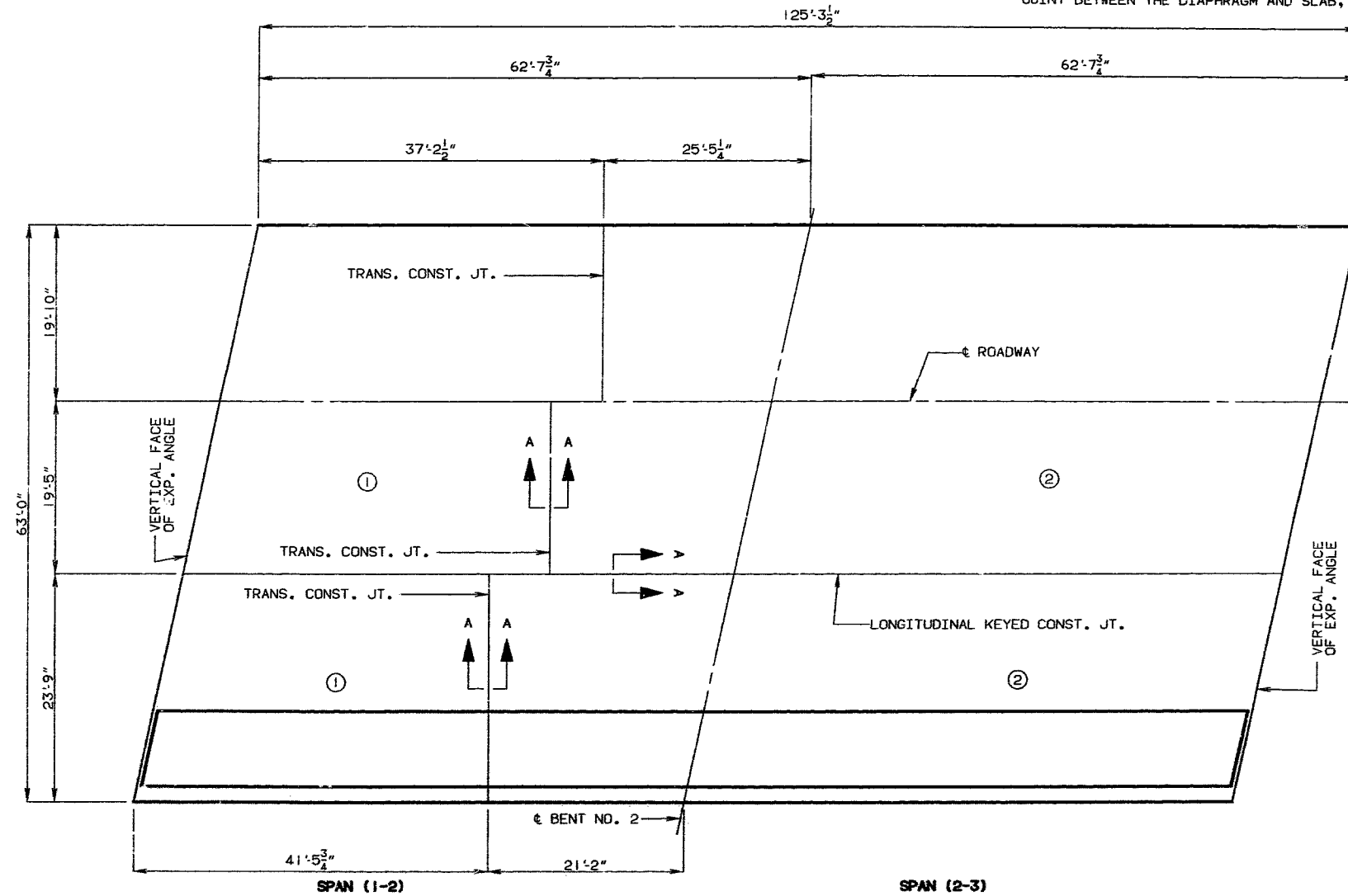
THE CONCRETE DIAPHRAGM AT THE INTERMEDIATE BENTS SHALL BE POURED A MINIMUM OF 30 MINUTES AND A MAXIMUM OF 2 HOURS BEFORE THE SLAB IS POURED.

IF THE PRECAST PRESTRESSED 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 YD³/HR.

	SEQUENCE OF POURS		MIN. RATE OF POUR CU. YDS./HR. WITH RETARDER
	DIRECTION		
BASIC SEQUENCE	1	2	25
	EITHER DIRECTION		
ALTERNATE "A" FOURS	1 + 2		25
	END TO END		

SLAB POURING SEQUENCE

NOTE: THE CONTRACTOR SHALL FURNISH AN APPROVED RETARDER TO RETARD THE SET OF THE CONCRETE TO 2.5 HOURS AND SHALL POUR AND SATISFACTORILY FINISH THE SLAB POURS AT THE RATE GIVEN. END DIAPHRAGMS AT EXPANSION DEVICES MAY BE POURED WITH A CONSTRUCTION JOINT BETWEEN THE DIAPHRAGM AND SLAB, OR MONOLITHIC WITH THE SLAB.



SLAB POURING SEQUENCE

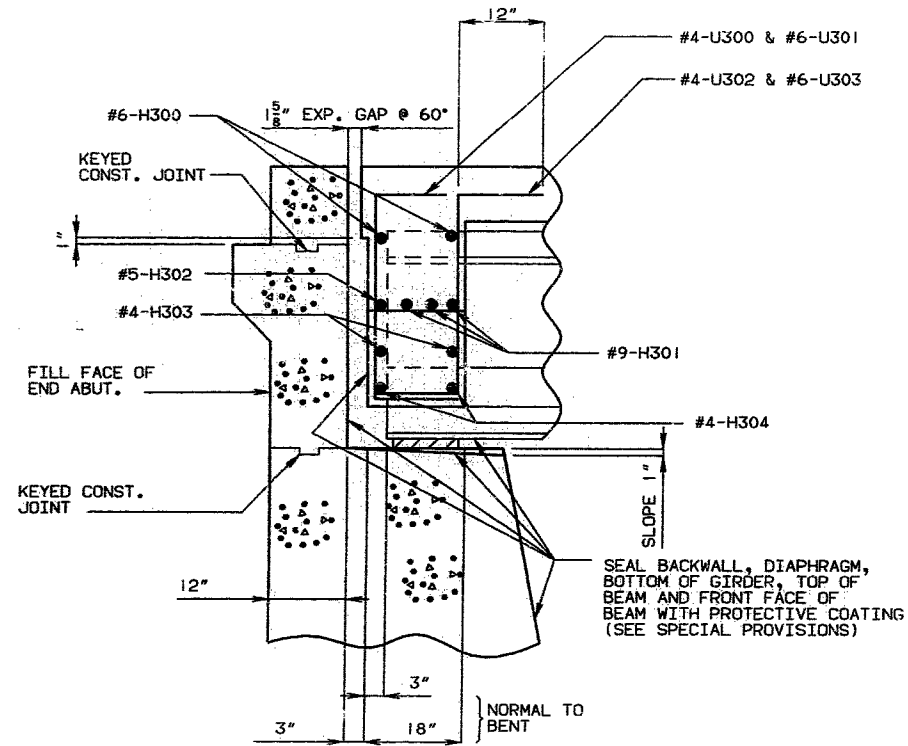
NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 39 OF 64

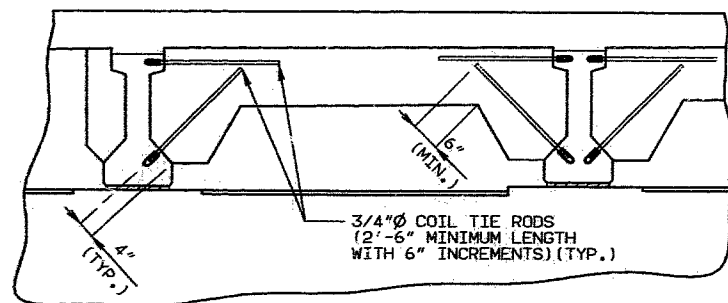
328 343

DETAILED JULY 1990
CHECKED SEPT. 1990

293

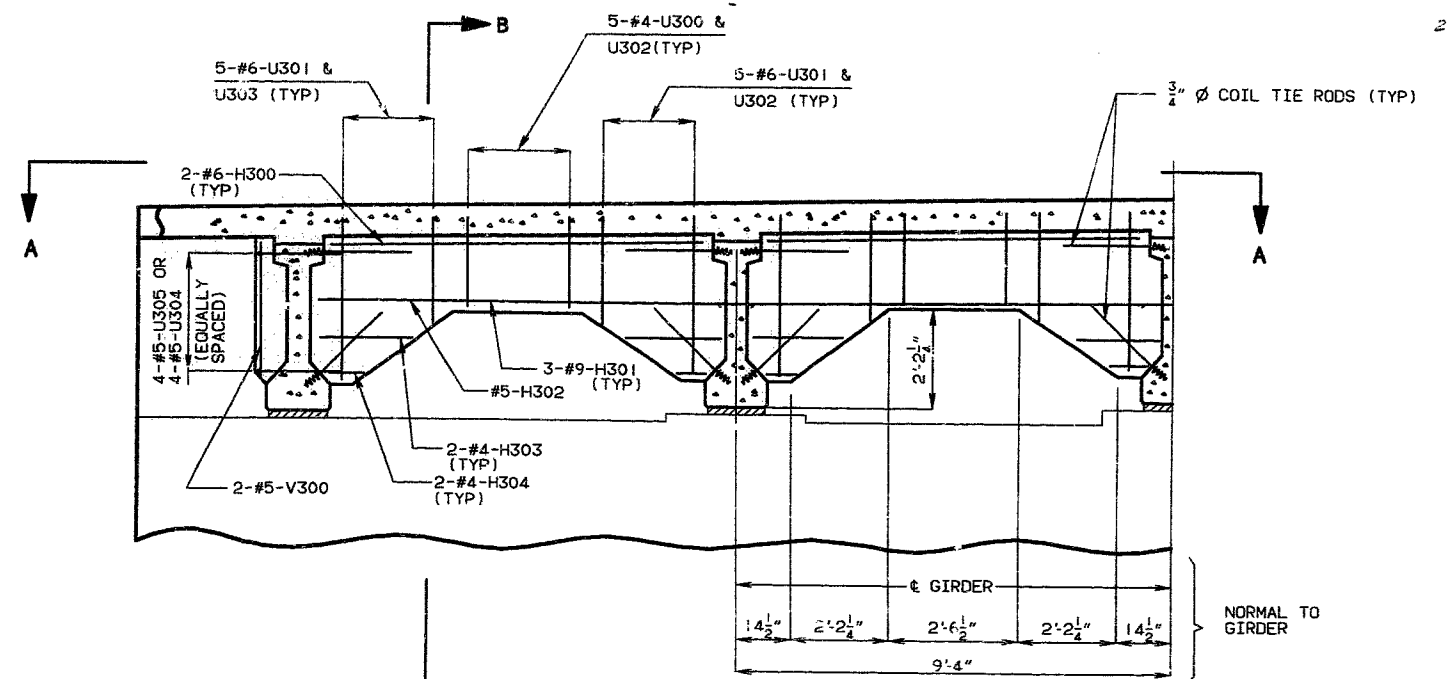


PART SECTION B-B

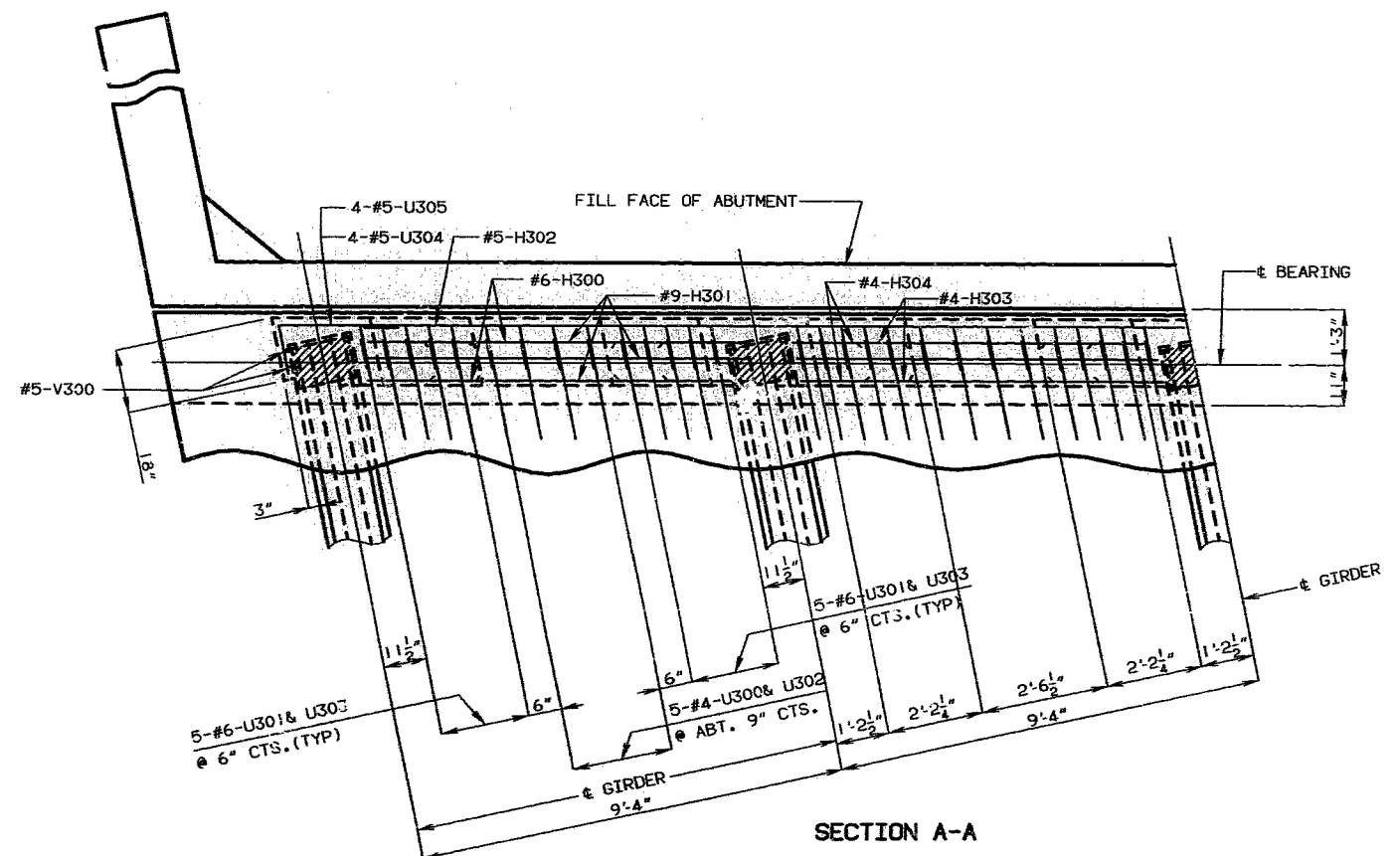


DETAILS OF COIL TIES AT END ABUTMENTS

DETAILS OF DIAPH. AT ABUTMENT NO. 1 AND 3



PART SECTION NEAR END ABUTMENT



SECTION A-A

DETAILED JULY 1990
CHECKED AUG. 1990

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

SHEET NO. 40 OF 64

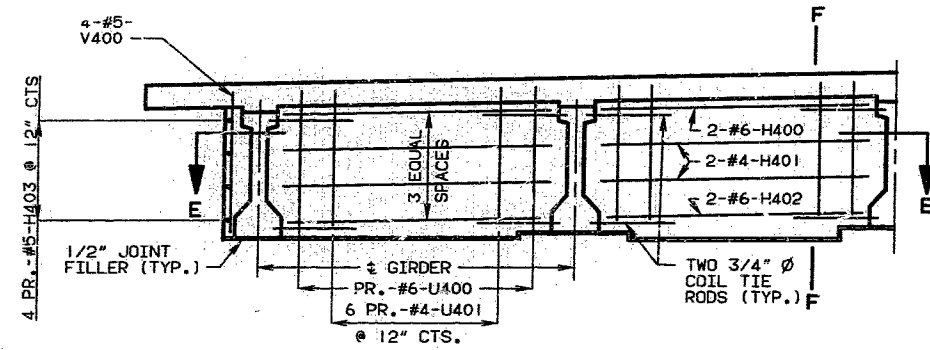
JACKSON

COUNTY

A-4862

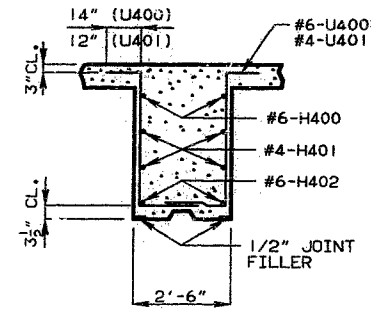
3029 344

STATE	PROJ. NO.	SHEET NO.
MO.		299



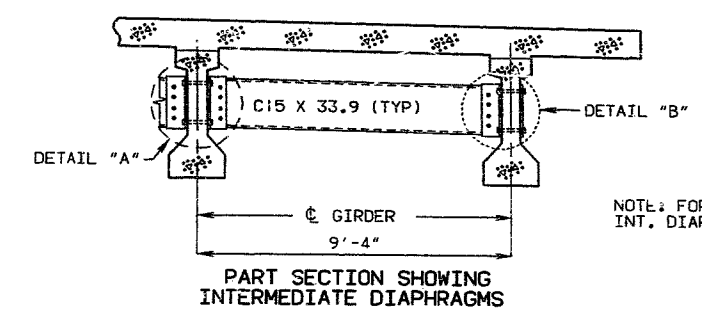
HALF SECTION NEAR INTERMEDIATE BENT

NOTE: FOR LOCATION OF H404 & H405 (STRAND TIE BARS) OF INT. BENTS SEE GIRDER SHEET NO. 32.



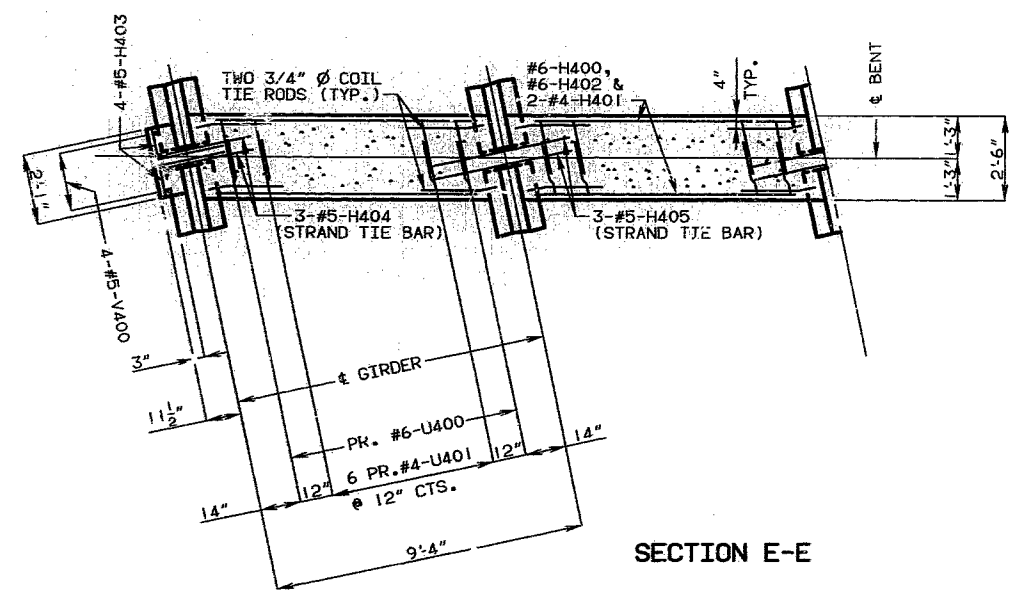
SECTION F-F

NOTE: DIAPHRAGMS AT INTERMEDIATE BENT ARE VERTICAL.

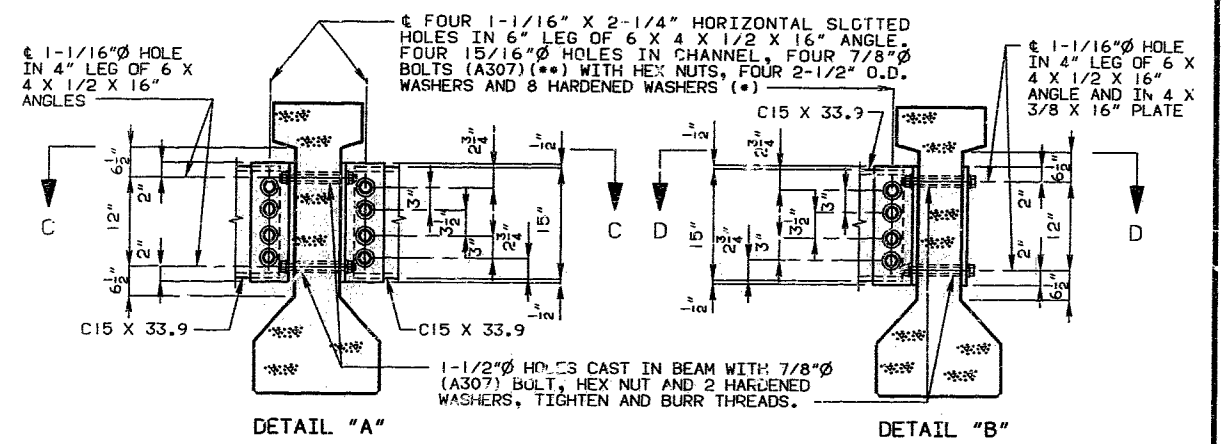


PART SECTION SHOWING INTERMEDIATE DIAPHRAGMS

NOTE: FOR LOCATION OF STEEL INT. DIAPH. SEE SHEET NO. 32.

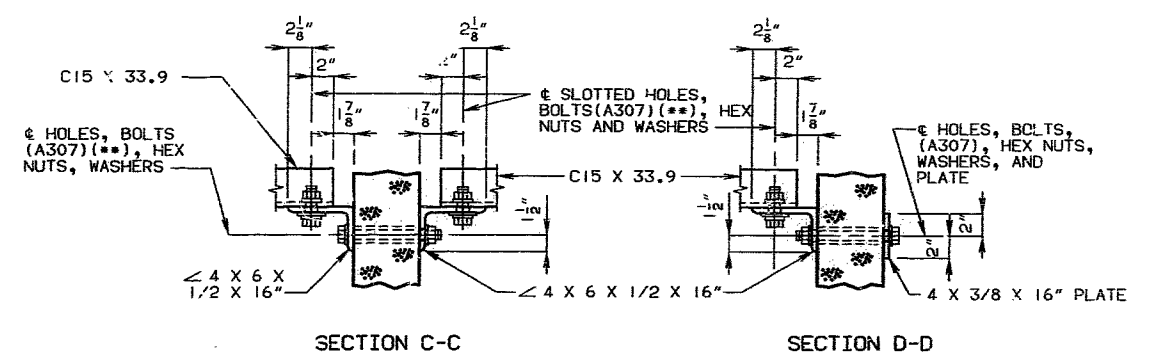


SECTION E-E



DETAIL "A"

DETAIL "B"



SECTION C-C

SECTION D-D

STEEL DIAPHRAGM NOTES:

- (*) IN LIEU OF 2 1/2" O.D. WASHERS, CONTRACTOR MAY SUBSTITUTE A 3/16" (MIN. THICKNESS) PLATE WITH FOUR 15/16" HOLES AND 1 HARDENED WASHER PER BOLT.
- (**) THESE BOLTS SHALL BE TIGHTENED TO PROVIDE A TENSION OF ONE-HALF THAT SPECIFIED BY SECTION 712.10.2 OF THE MISSOURI STANDARD SPECIFICATIONS.
- ALL DIAPHRAGM MATERIALS INCLUDING BOLTS, NUTS, AND WASHERS SHALL BE GALVANIZED.
- FABRICATED STRUCTURAL STEEL SHALL BE A36 EXCEPT AS NOTED.
- PAYMENT FOR FURNISHING AND INSTALLING STEEL INTERMEDIATE DIAPHRAGMS SHALL BE INCLUDED IN CONTRACT UNIT PRICE FOR PRESTRESSED CONCRETE I-GIRDERS.
- SHOP DRAWINGS WILL NOT BE REQUIRED FOR STEEL INTERMEDIATE DIAPHRAGMS AND ANGLE CONNECTIONS.

330 345

DETAILED JULY 1990
CHECKED SEPT. 1990

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

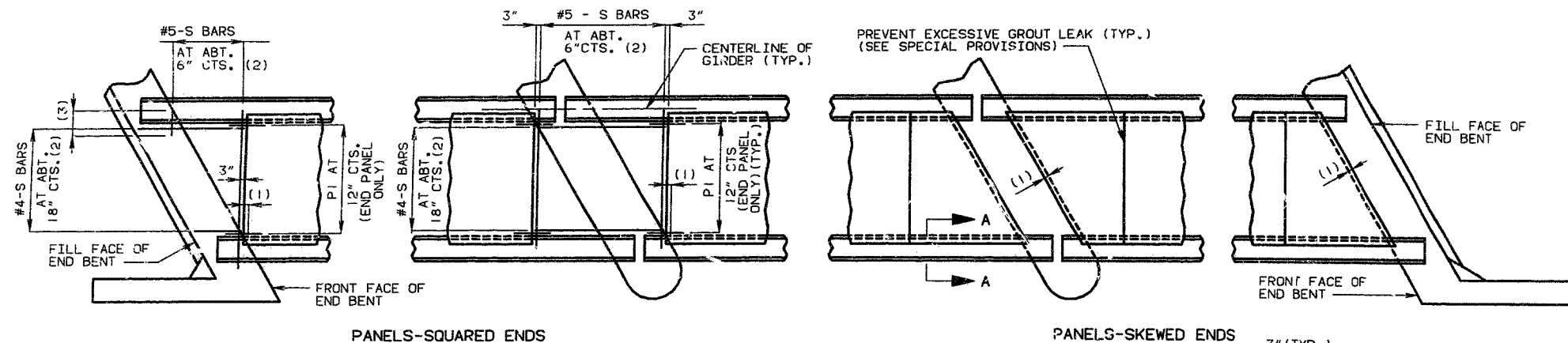
SHEET NO. 41 OF 64

JACKSON

COUNTY

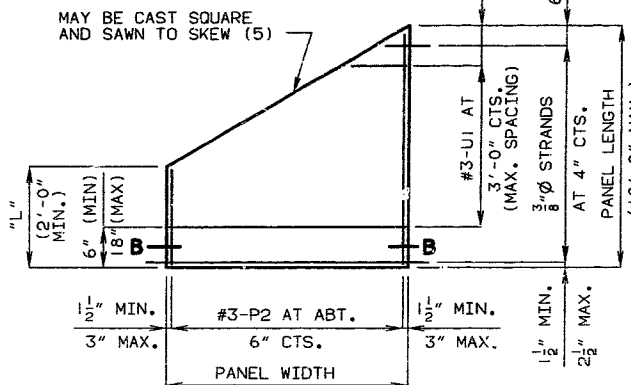
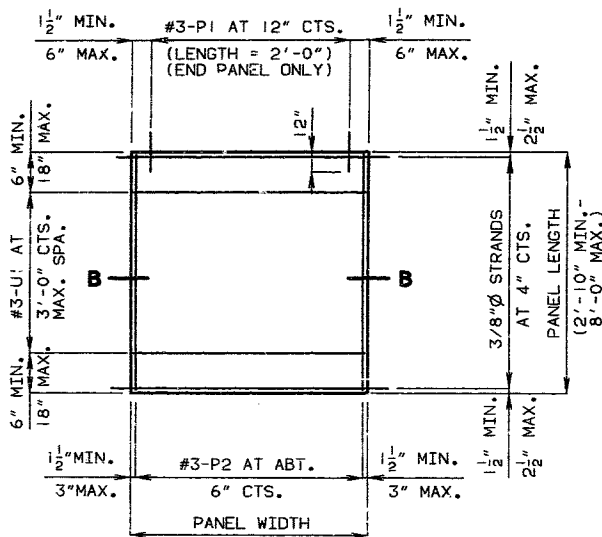
A-4862

STATE	PROJ. NO.	SHEET NO.
MO.		300

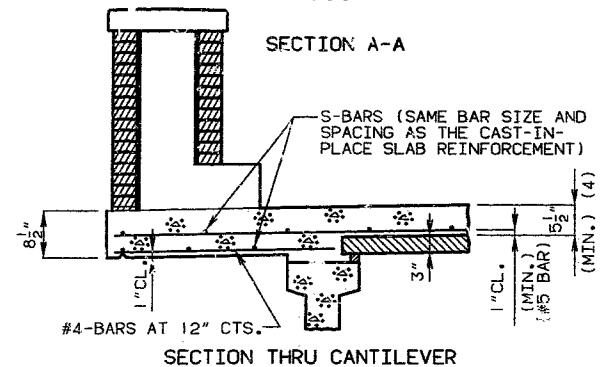
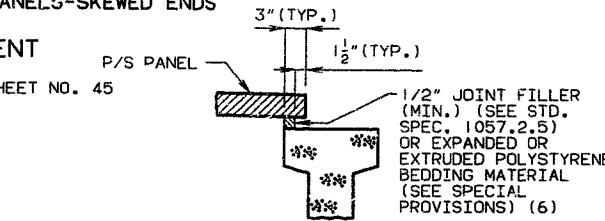


PLAN OF PRECAST PRESTRESSED PANELS PLACEMENT

NOTE: FOR DETAILS OF HOLES IN PANEL FOR LIGHTING CONDUIT SEE SHEET NO. 45



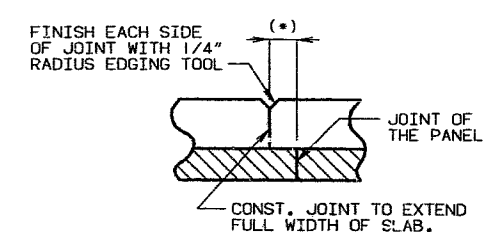
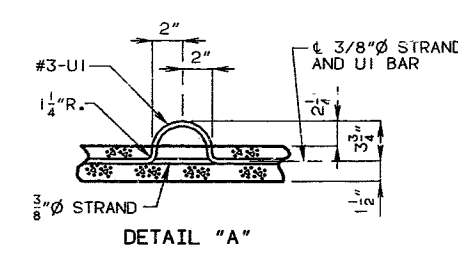
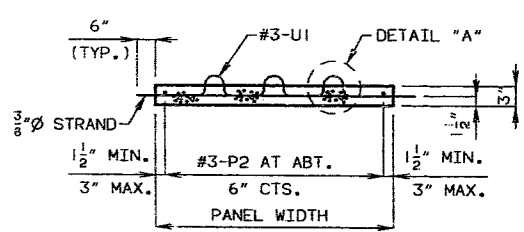
PLAN OF PRECAST PRESTRESSED PANEL (SKEWED END-OPTIONAL)



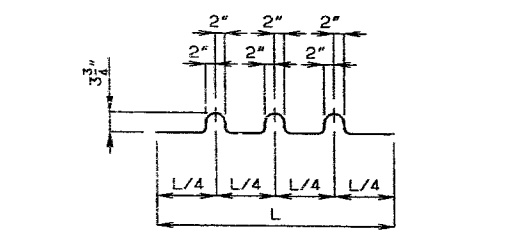
NOTES:

- END PANELS TO BE DIMENSIONED 1-1/2" INCHES FROM THE INSIDE FACE DIAPHRAGM.
- 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. SLAB EXTERIOR GIRDER HAUNCH SHALL BE THE SAME AS CAST-IN-PLACE. SLAB THICKNESS OVER PRESTRESSED PANELS VARIES DUE TO GIRDER CAMBER.
- EXTEND S-BARS 18 INCHES BEYOND THE FRONT FACE OF END BENTS ONLY. SUPPORT FROM DIAPHRAGM FORMS IS REQUIRED UNDER THE OPTIONAL SKEWED END UNTIL CAST-IN-PLACE CONCRETE HAS REACHED 3,000 PSI COMPRESSIVE STRENGTH.
- IN ORDER TO MAINTAIN MINIMUM SLAB THICKNESS, IT MAY BE NECESSARY TO RAISE THE GRADE UNIFORMLY THROUGHOUT THE STRUCTURE. NO PAYMENT WILL BE MADE FOR ADDITIONAL LABOR OR MATERIALS REQUIRED FOR NECESSARY GRADE ADJUSTMENT.
- ANY STRAND 2'-0" OR SHORTER SHALL HAVE A #4 REINFORCING BAR ON EACH SIDE OF IT CENTERED BETWEEN STRANDS 2'-0" OR SHORTER MAY THEN BE DEBONDED AT THE FABRICATORS OPTION.
- 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.

DETAILS OF PRECAST PRESTRESSED PANELS



(*) ADJUST THE PERMISSIBLE CONSTRUCTION JOINT TO A CLEARANCE OF 6 INCHES MINIMUM FROM THE JOINTS OF THE PANELS.



3" PANEL (P/S) REVISED: AUG. 1934 SEPT. 1989

DETAILED JUNE 19 90 CHECKED AUG. 19 90

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

SHEET NO. 42 OF 64

JACKSON

COUNTY

A-4862

NOTE:

USE SLAB HAUNCHING DIAGRAM ON SHEET NO.39. 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 A1 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 ULTI STRENGTH = 23,000 LBS. (270 KSI). LARGER STRANDS MAY BE USED WITH THE SAME SPACING AND INITIAL TENSION.

INITIAL PRESTRESSING FORCE = 14.9 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 1/2 INCH. THICKER JOINT FILLER OR POLYSTYRENE BEDDING MATERIAL MAY BE USED ON ONE OR 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 AND THE MAXIMUM CHANGE IN THICKNESS BETWEEN ADJACENT PANELS SHALL BE 1/4 INCH. THE POLYSTYRENE BEDDING MATERIAL MAY BE CUT TO MATCH HAUNCH HEIGHT ABOVE TOP OF FLANGE.

AT THE CONTRACTORS OPTION, THE VARIATION IN SLAB THICKNESS OVER PRESTRESSED PANELS MAY BE ELIMINATED OR REDUCED BY INCREASING AND VARYING THE GIRDER TOP FLANGE THICKNESS. DIMENSIONS SHALL BE SHOWN ON THE SHOP DRAWINGS.

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.I. 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.

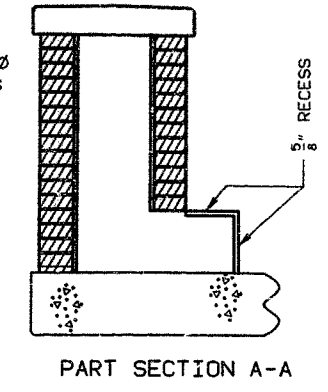
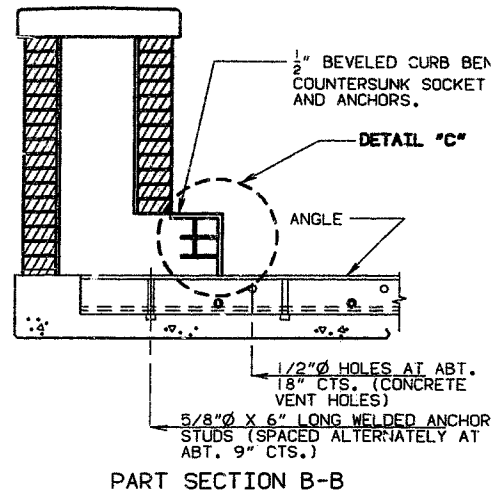
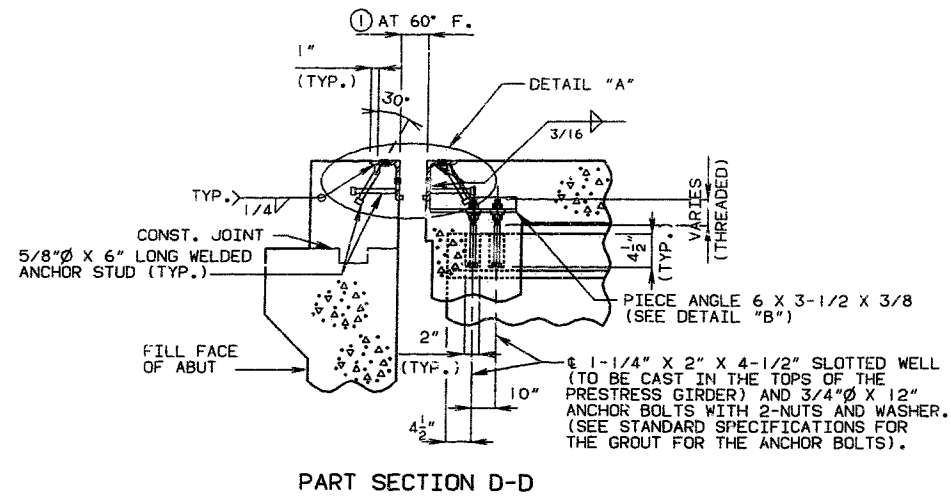
IF U1 BARS INTERFERE WITH PLACEMENT OF SLAB STEEL, U1 LOOPS MAY BE BENT OVER, AS NECESSARY, TO CLEAR SLAB STEEL.

WELDED WIRE FABRIC OR WELDED DEFORMED BAR MATS PROVIDING A MINIMUM AREA OF REINFORCING PERPENDICULAR TO STRANDS OF 0.22 SQ. IN./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 REINFORCING STEEL SHALL BE TIED SECURELY TO THE 3/8" Ø STRANDS WITH THE FOLLOWING MAXIMUM SPACING IN EACH DIRECTION: #3-P2 BARS AT 16 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.

STATE	PROJ. NO.	SHEET NO.
MO.		38



GENERAL NOTES:

STRUCTURAL STEEL FOR EXPANSION DEVICE SHALL BE FABRICATED IN ONE SECTION, EXCEPT THAT WHEN THE LENGTH IS OVER 50', SPLICING IS PERMISSIBLE.

THE EXPANSION DEVICE SHALL BE BENT TO CONFORM TO CROWN AND GRADE OF ROADWAY.

STRUCTURAL STEEL FOR THE ARMORED JOINT SHALL BE GRADE A36.

ANCHORS FOR COMPRESSION SEAL ARMOR SHALL BE APPROVED STUD WELDED ANCHORS (C1010 THRU C1020).

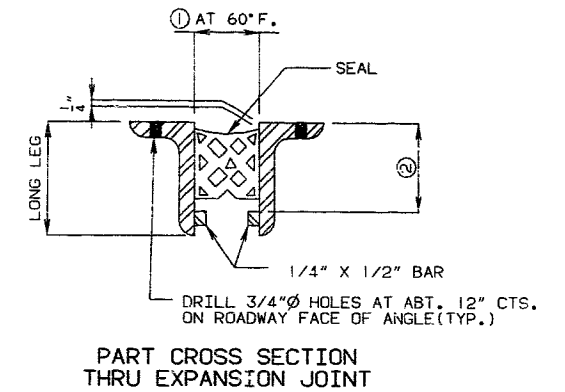
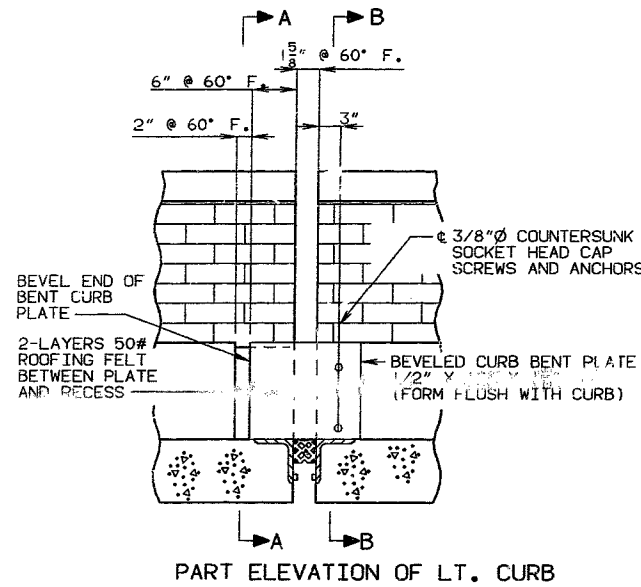
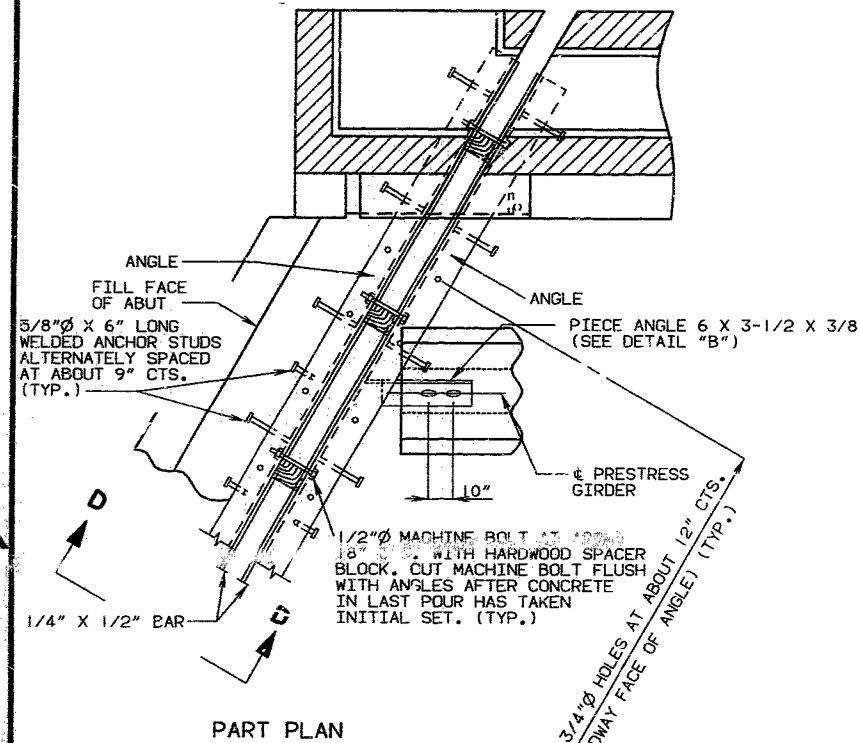
PLAN DIMENSIONS ARE BASED ON INSTALLATION AT 60° F.

DIMENSION ① SHALL BE INCREASED 1/16" FOR EACH 10° FALL IN TEMPERATURE AND DECREASED 1/16" FOR EACH 10° RISE IN TEMPERATURE AT INSTALLATION.

SEE SPECIAL PROVISIONS FOR THE REQUIREMENTS OF COMPRESSION JOINT SEAL.

FURISHING, PAINTING AND INSTALLING THE STRUCTURAL STEEL ARMORED JOINT AND CURB PLATES SHALL BE INCLUDED IN CONTRACT UNIT PRICE FOR PREFORMED EXPANSION JOINT SEAL.

NEOPRENE EXTRUSIONS SHALL MEET A.S.T.M. D3542-83.



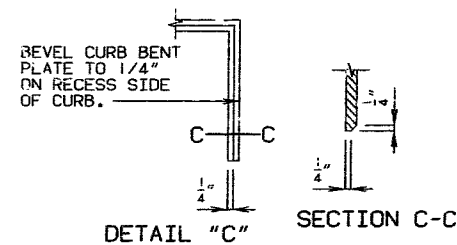
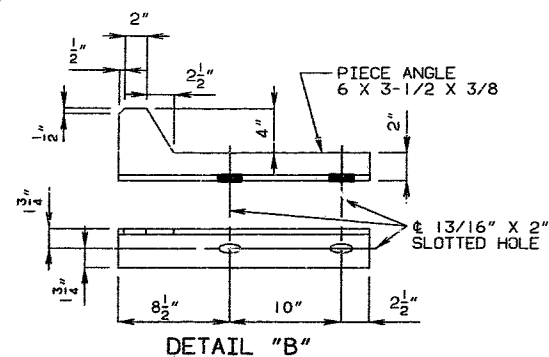
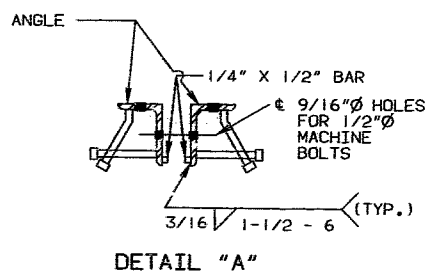
SEAL (WIDTH)	①	②	REQUIRED MOVEMENT RANGE
2.5"	1-5/8"	SEAL DEPTH + 3/4"	0.9"

NOTE: DEPTH OF SEAL SHALL NOT BE LESS THAN WIDTH OF SEAL.

SIZE OF ARMOR JOINT

VERTICAL LEG OF ANGLE SHALL BE A MINIMUM OF DEPTH OF SEAL + 1-1/2". HORIZONTAL LEG OF ANGLE SHALL BE A MINIMUM OF 3". MINIMUM THICKNESS OF ANGLE SHALL BE 1/2" ..

IF A SEAL SIZE LARGER THAN THAT INDICATED ON THE PLANS IS USED, THE MOVEMENT RANGE, THE OPENINGS AT 60° AND ALL DIMENSIONS FOR THE ARMOR ANGLES SHALL BE SHOWN ON THE SHOP DRAWINGS.



DETAILS OF PREFORMED COMPRESSION JOINT SEAL AT ABUT NO. 1 & 3.

PCJC-P/S EB-LA REVISED MAR 1990
OCT. 1973

DETAILED JULY 1990
CHECKED SEPT. 1990

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

SHEET NO. 43 OF 64

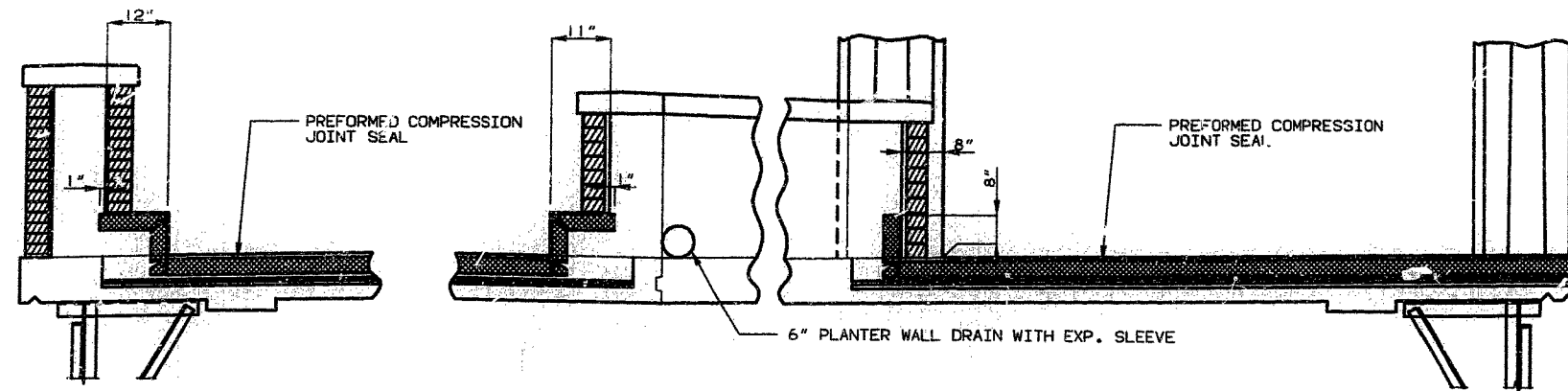
JACKSON

COUNTY

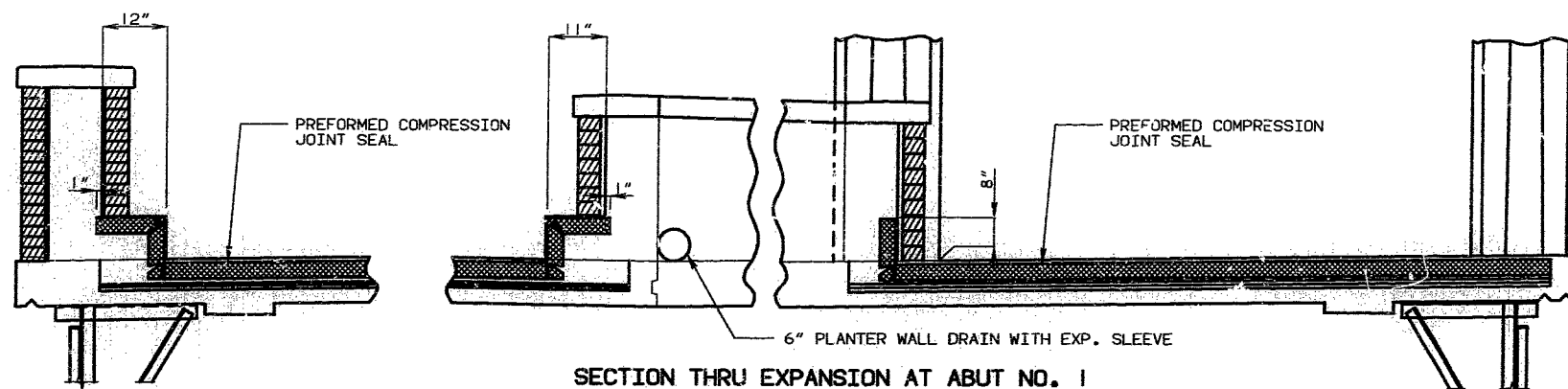
A-4862

STATE	PROJ. NO.	SHEET NO.
MD.		302

NOTE: FOR DETAILS NOT SHOWN SEE SHEET NO. 43.



SECTION THRU EXPANSION AT ABUT NO. 3



SECTION THRU EXPANSION AT ABUT NO. 1

VIEWS SHOWING LIMITS OF EXP. DEVICE

333 348

DETAILED SEPT 1990
CHECKED NOV. 1990

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

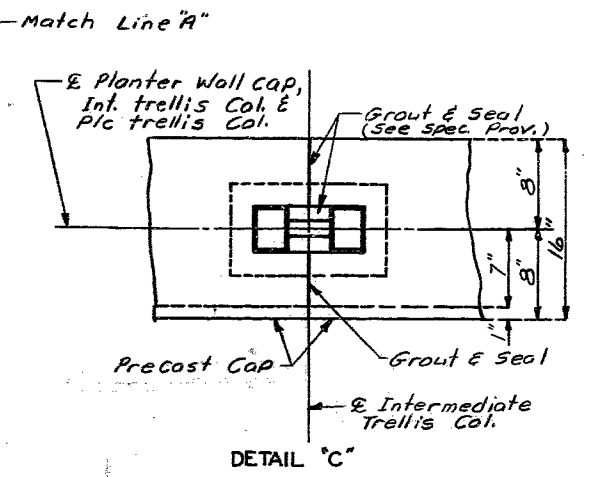
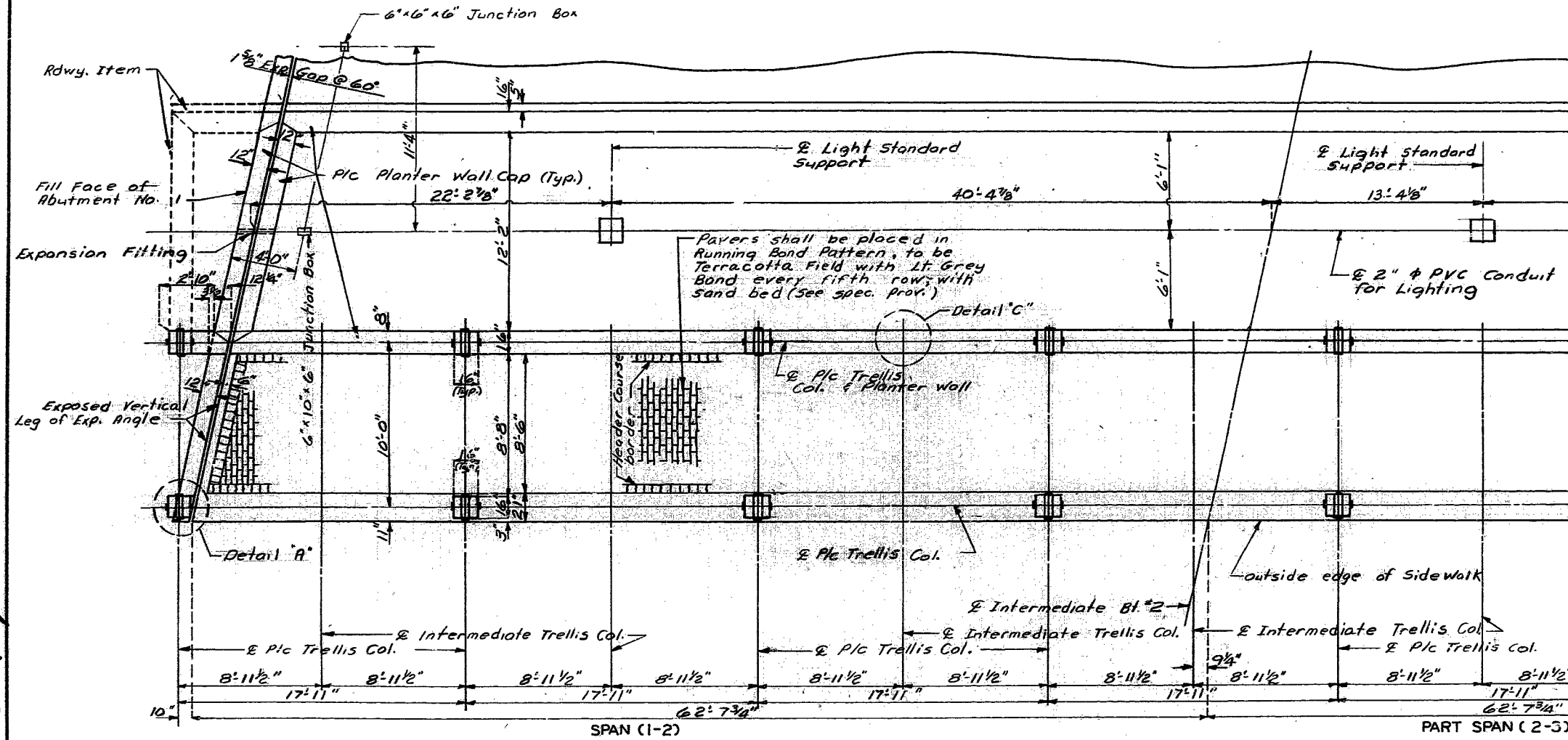
SHEET NO. 44 OF 64

JACKSON

COUNTY

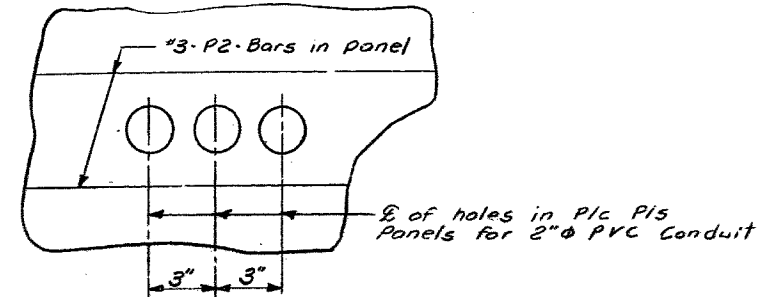
A-4862

STATE	PROJ. NO.	SHEET NO.
MO		302



PART PLAN SHOWING TRELLIS SPACING PLANTER & SIDEWALK

Note: For Details of Planter Drainage Details, see sheet No. 57. Dimensions shown are Horiz. Dims.
 For Details of Intermediate Trellis Col., see sheet No. 53.
 For Details of Precast Trellis Col., see sheet No. 54.
 For Details of Planter Walls, see sheets No. 47 & 48.
 For Detail "A", see sheet No. 46.
 For Conduit Details, see sheet No. 58.



DETAIL SHOWING HOLES IN PRECAST PRESTRESSED PANELS AT 6x10x6 JUNCTION BOX

334 349

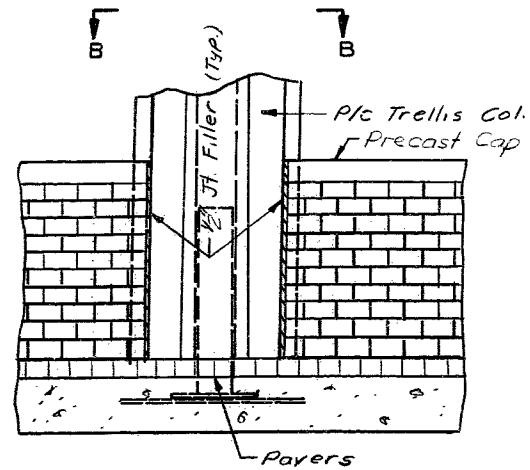
QUALITY REVIEW
 DETAILED July 1990
 CHECKED Nov. 1990

Note: This drawing is not to scale. Follow dimensions.

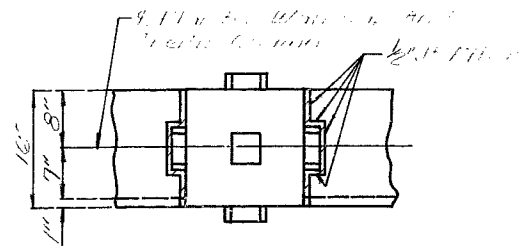
Sheet No. 45 of 64

JACKSON COUNTY A-4862

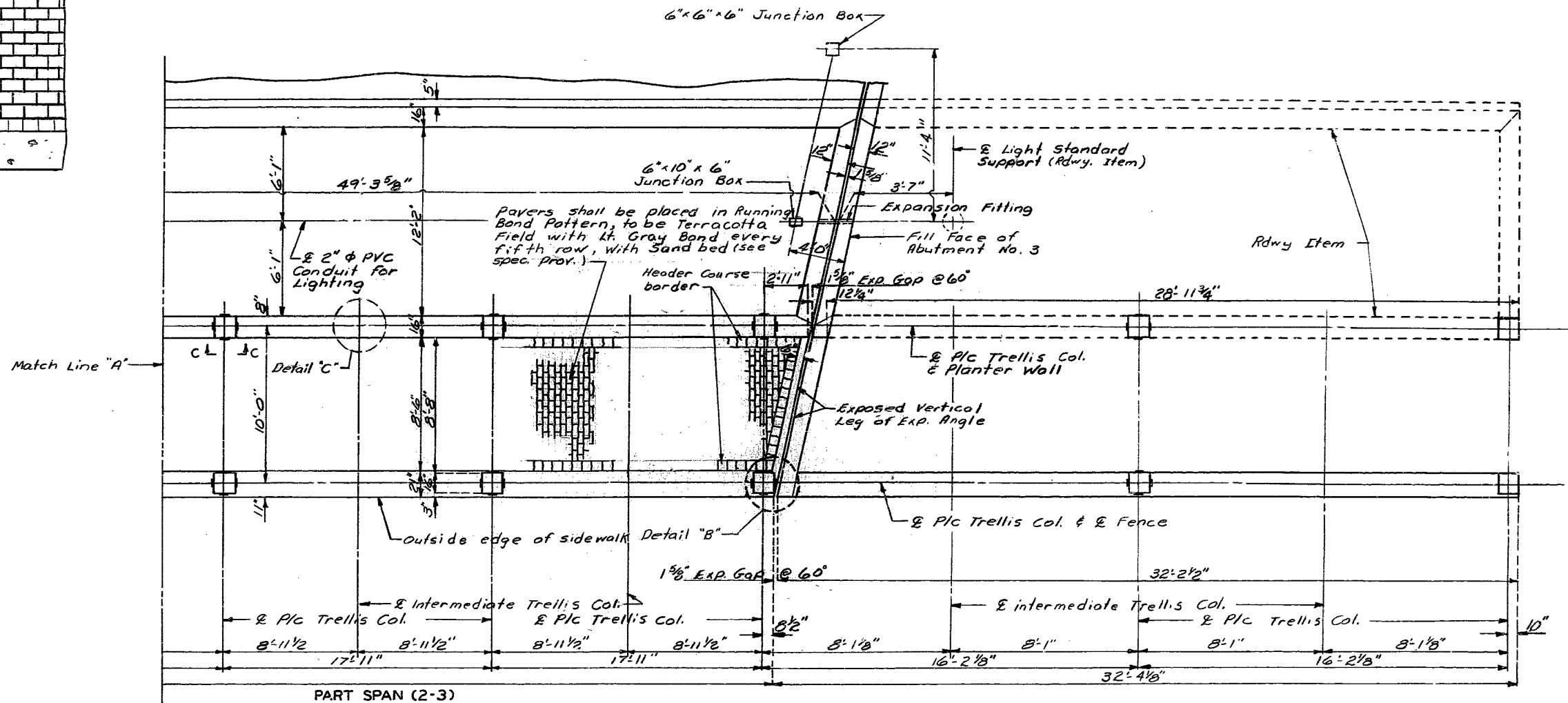
STATE	PROJ NO	SHEET NO
MO		34



PART SECTION C-C

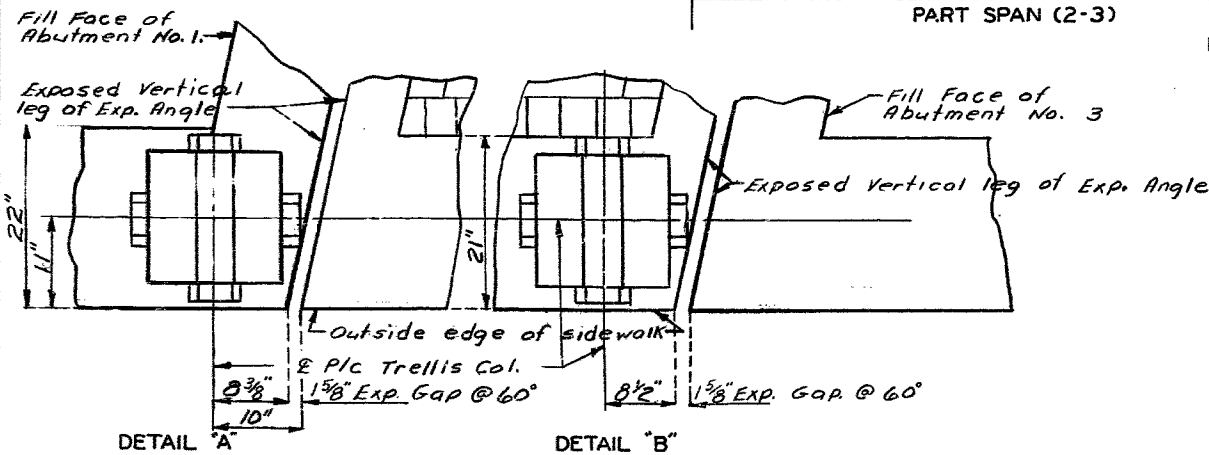


SECTION B-B



PART SPAN (2-3)

PART PLAN SHOWING TRELLIS SPACING, PLANTER & SIDEWALK



DETAIL A

DETAIL B

Note: Dimensions shown are horiz. dims.
 For Details of Intermediate Trellis Col., see sheet No. 53.
 For Details of Precast Trellis Col., see sheet No. 54.
 For Details of Planter Walls, see sheets No. 47 & 43.
 For Detail C, see sheet No. 45.

335350

QUALITY REVIEW
 DETAILED July 1990
 CHECKED Nov. 1990

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 41 of 64

JACKSON

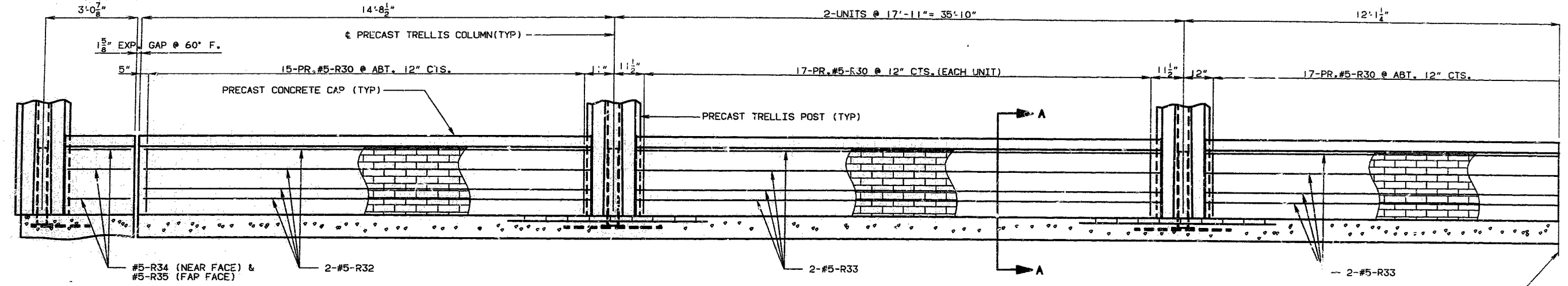
COUNTY

A-4862

STATE	PROJ. NO.	SHEET NO.
MO.		305

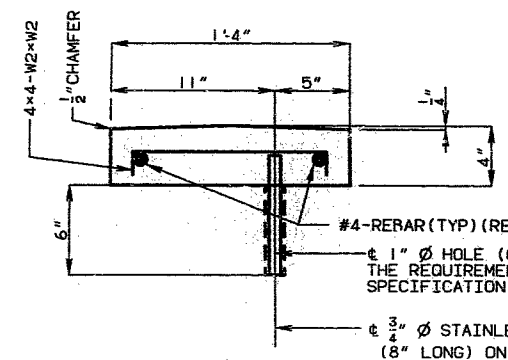
NOTE: BRICK SHALL BE SECURED TO CONCRETE BACKING BY USE OF FLEXIBLE ANCHOR. SEE SPECIAL PROVISION FOR TYPE, SIZE, AND SPACING.
SEE SPECIAL PROVISIONS FOR EXP. CONTROL JOINTS IN PRECAST CONC. CAP.

NOTE: LONGITUDINAL DIMENSIONS ARE ALONG TOP OF SLAB AT EDGE OF WALKWAY AT THE FACE OF PLANTER. THE CONTRACT UNIT PRICE SHALL INCLUDE THE COST OF ALL CONCRETE, REINFORCEMENT, BRICK VENEER AND PRECAST CAP COMPLETE-IN-PLACE.

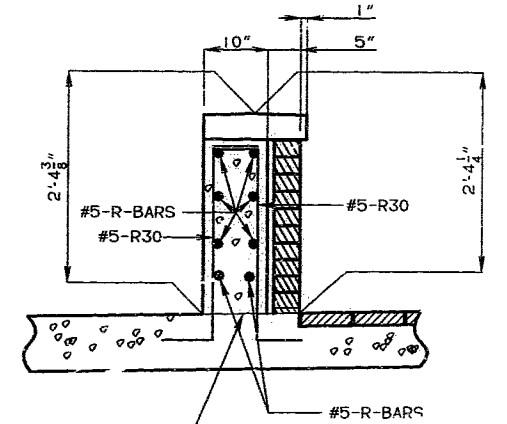


SPAN (1-2)

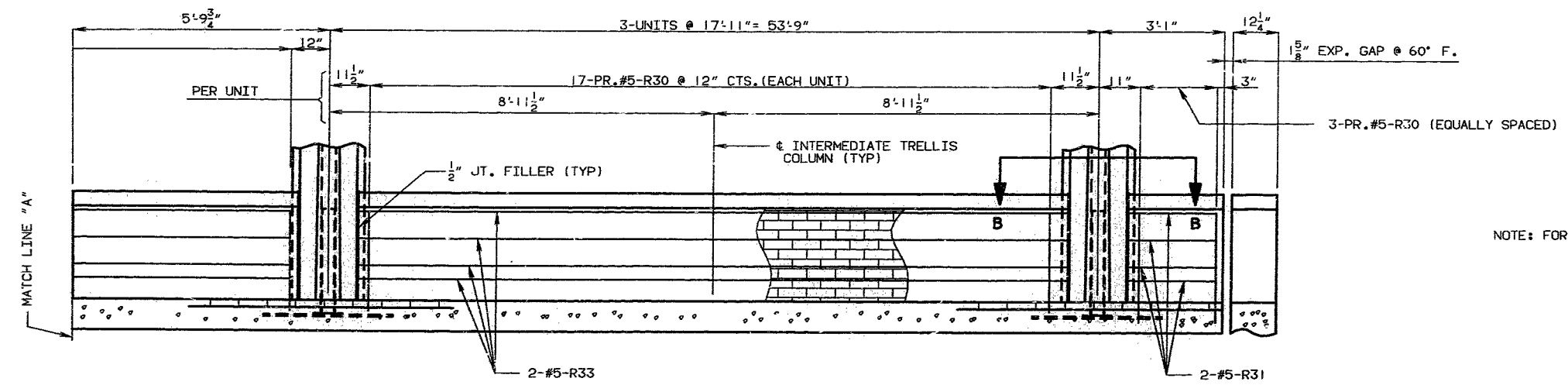
NOTE: FOR R-BARS NOT SHOWN SEE SHEET NO.50 & 51.



TYPICAL SECTION THRU PRECAST CAP



SECTION A-A



SPAN (2-3)

SECTION NEAR RT. PLANTER WALL AND TRELLIS COLUMNS

NOTE: FOR DETAILS OF SECTION B-B SEE SHEET NO.46.

336 351

DETAILED AUG 19 90
CHECKED SEPT. 19 90

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

SHEET NO. 47 OF 64

JACKSON

COUNTY

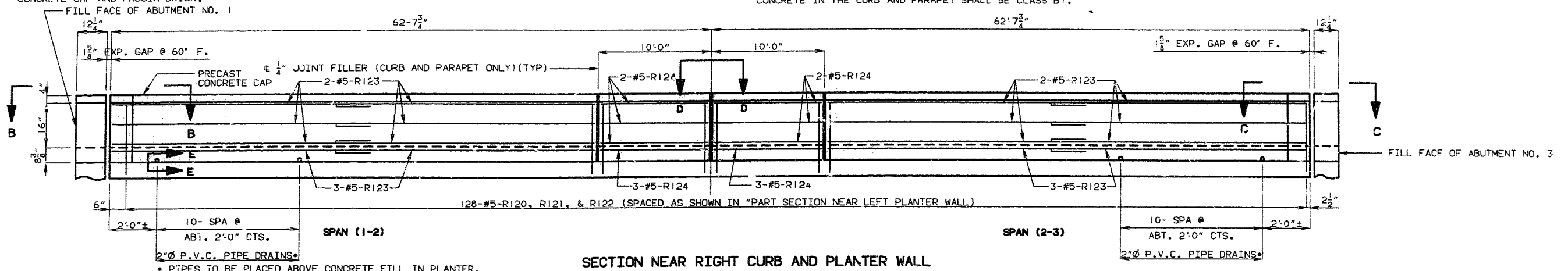
A-4862

STATE	PROJ. NO.	SHEET NO.
MD.		305

NOTE: BRICK 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 FASCIA BRICK.

NOTE: DIMENSIONS SHOWN ARE HORIZONTAL DIMENSIONS ALONG CURB LINE.
LAY BRICK IN STANDARD RUNNING BOND.

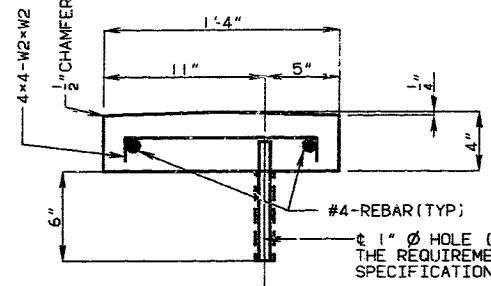
NOTE: TOP OF PARAPET SHALL BE BUILT PARALLEL TO GRADE WITH JOINT FILLER PLACED NORMAL TO GRADE. ALL EXPOSED EDGES OF CURB SHALL HAVE EITHER A 1/2" RADIUS OR A 3/8" BEVEL, UNLESS OTHERWISE NOTED. THE CONTRACT UNIT PRICE SHALL INCLUDE THE COST OF ALL CONCRETE, REINFORCEMENT, BRICK, VENEER AND PRECAST CAP COMPLETE-IN-PLACE. CONCRETE IN THE CURB AND PARAPET SHALL BE CLASS B1.



SECTION NEAR RIGHT CURB AND PLANTER WALL

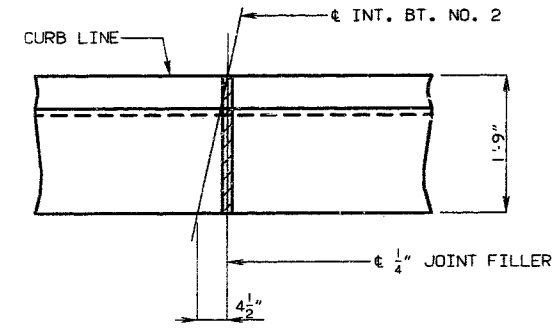
NOTE: FOR DETAILS OF PLANTER WALL AT ABUTS. SEE SHEET NO.50, & 51.

NOTE: USE A MINIMUM LAP OF 17" FOR #5 HORIZONTAL BARS IN CURB AND PARAPET.

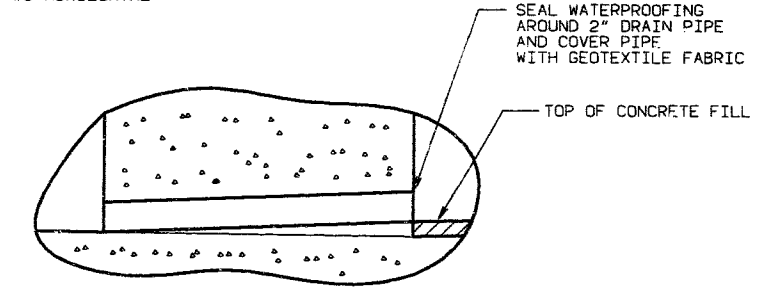


TYPICAL SECTION THRU PRECAST CAP

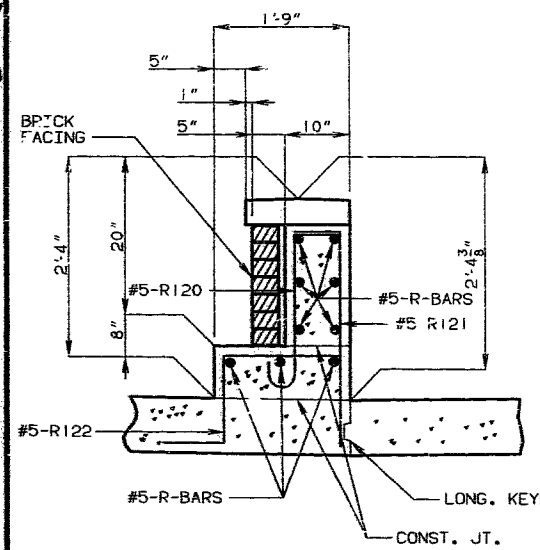
NOTE: FOR R-BARS NOT SHOWN SEE SHEET NO.50 & 51.



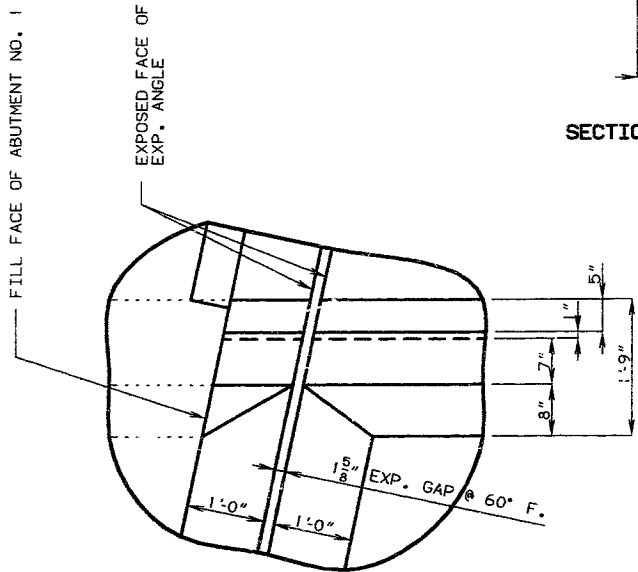
SECTION D-D



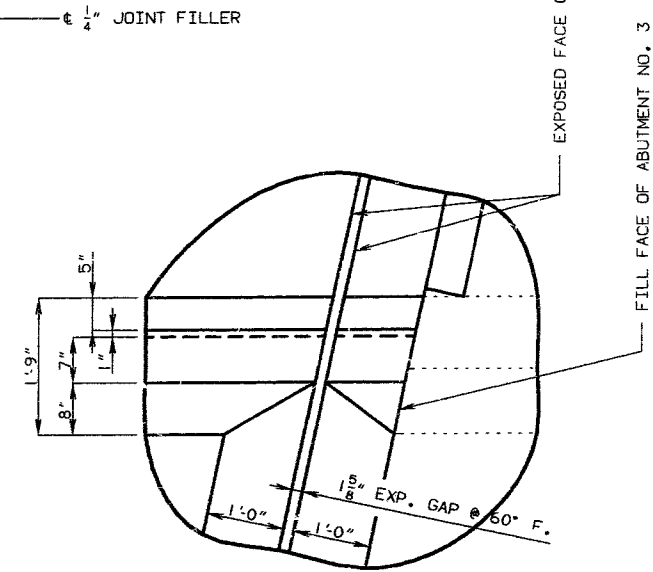
SECTION E-E



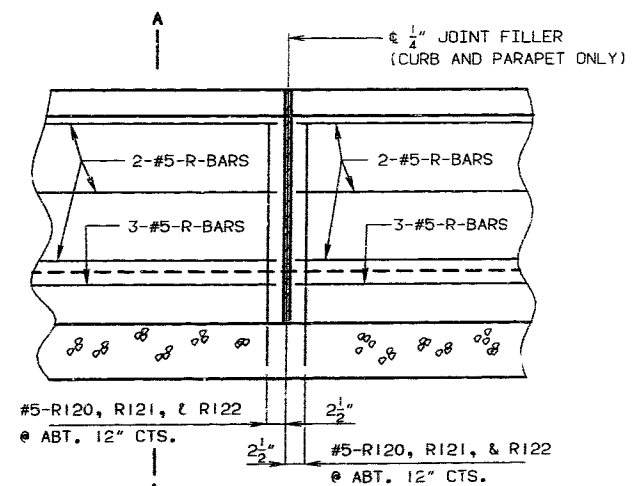
SECTION A-A



SECTION B-B



SECTION C-C



PART SECTION NEAR LEFT PLANTER WALL
NOTE: BRICKING NOT SHOWN FOR CLARITY.

DETAILS OF RIGHT CURB AND PLANTER WALL

337 352

DETAILED SEPT 1990
CHECKED SEPT 1990

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

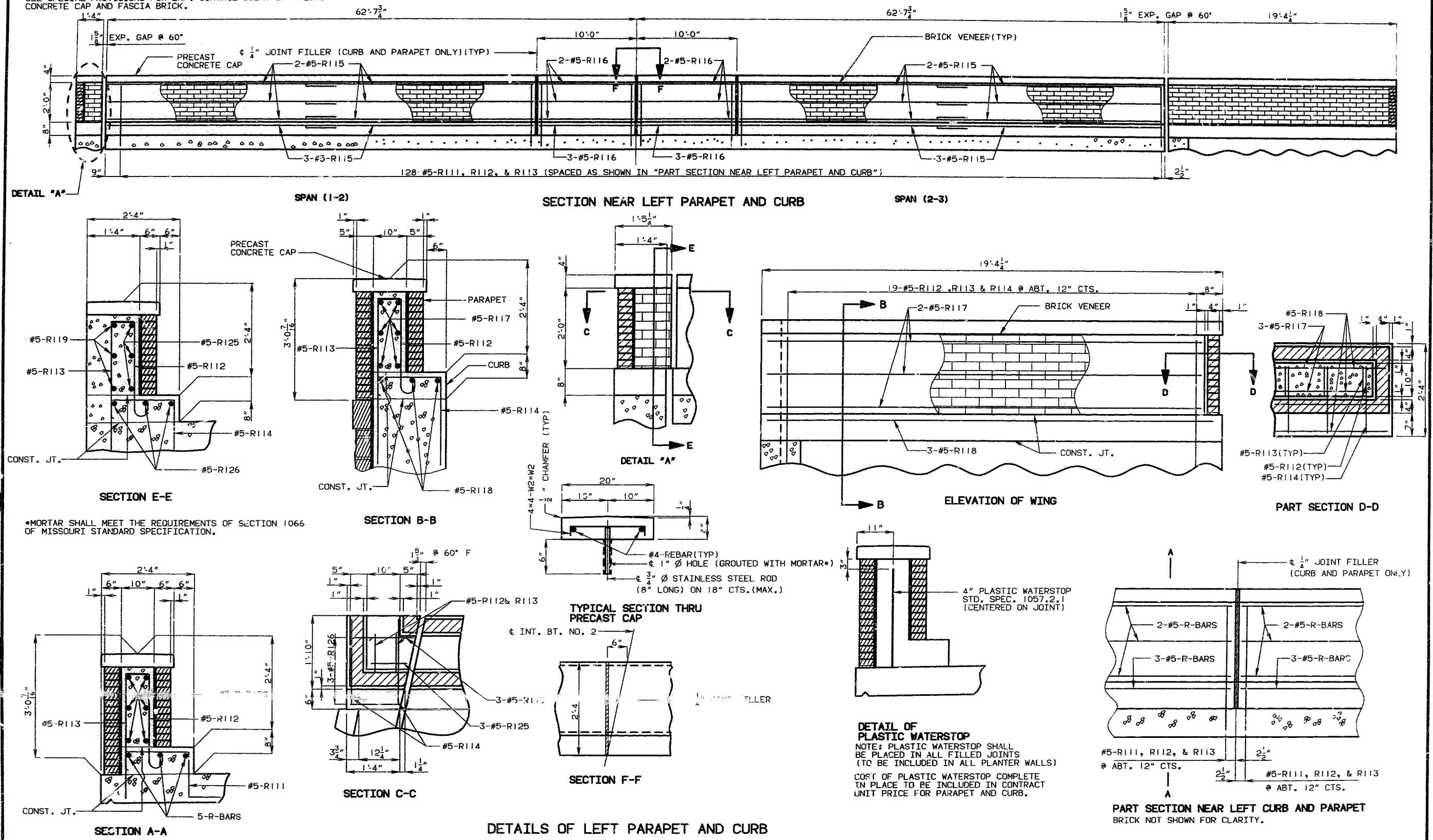
SHEET NO. 48 OF 64

STATE	PROJ. NO.	SHEET NO.
MO.		507

NOTE: BRICK SHALL BE SECURED TO CONCRETE BACKING BY USE OF FLEXIBLE ANCHOR. SEE SPECIAL PROVISION FOR TYPE, SIZE, AND SPACING.
 NOTE: DIMENSIONS SHOWN ARE HORIZONTAL DIMENSIONS ALONG CURB LINE.
 SEE SPECIAL PROVISIONS FOR EXP. CONTROL JOINT IN PRECAST CONCRETE CAP AND FASCIA BRICK.

NOTE: TOP OF PARAPET 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.
 WHEN THE PARAPET AND CURB IS BID BY LINEAR FEET, THE CONTRACT UNIT PRICE SHALL INCLUDE THE COST OF ALL CONCRETE, REINFORCEMENT, AND BRICK VENEER COMPLETE-IN-PLACE.
 CONCRETE IN THE CURB AND PARAPET SHALL BE CLASS B1.

NOTE: USE A MINIMUM LAP OF 17" FOR #5 HORIZONTAL BARS IN CURB AND PARAPET.



3533

*MORTAR SHALL MEET THE REQUIREMENTS OF SECTION 1066 OF MISSOURI STANDARD SPECIFICATION.

DETAIL OF PLASTIC WATERSTOP
 NOTE: PLASTIC WATERSTOP SHALL BE PLACED IN ALL FILLED JOINTS (TO BE INCLUDED IN ALL PLANTER WALLS)
 COST OF PLASTIC WATERSTOP COMPLETE IN PLACE TO BE INCLUDED IN CONTRACT UNIT PRICE FOR PARAPET AND CURB.

DETAILED JULY 1990
 CHECKED AUG. 1990

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

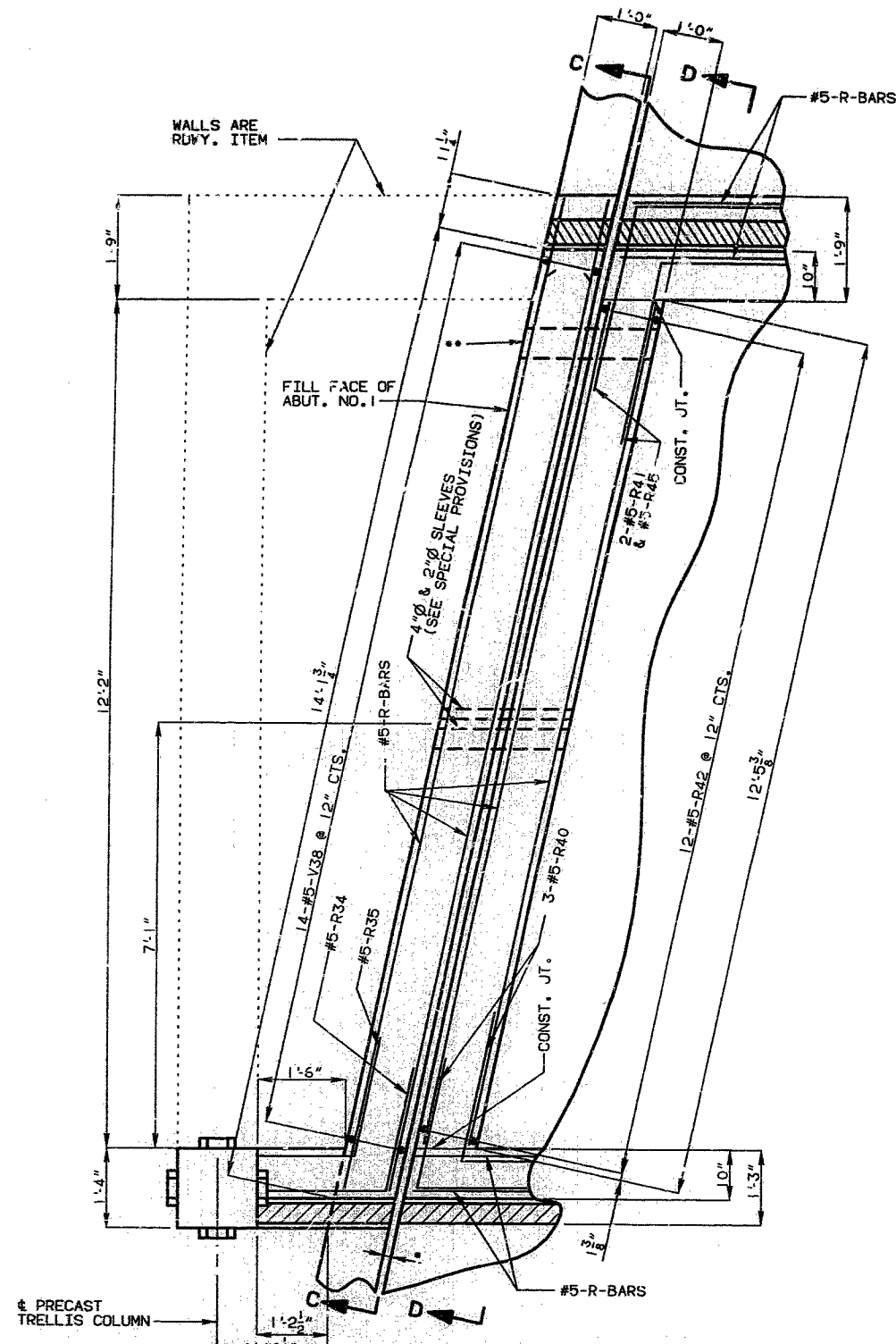
SHEET NO. 49 OF 64

JACKSON COUNTY A-4862

** 6"Ø P.V.C. PLANTER DRAIN WITH EXP. SLEEVE. FOR DETAILS NOT SHOWN, SEE SHEET NO. 57.

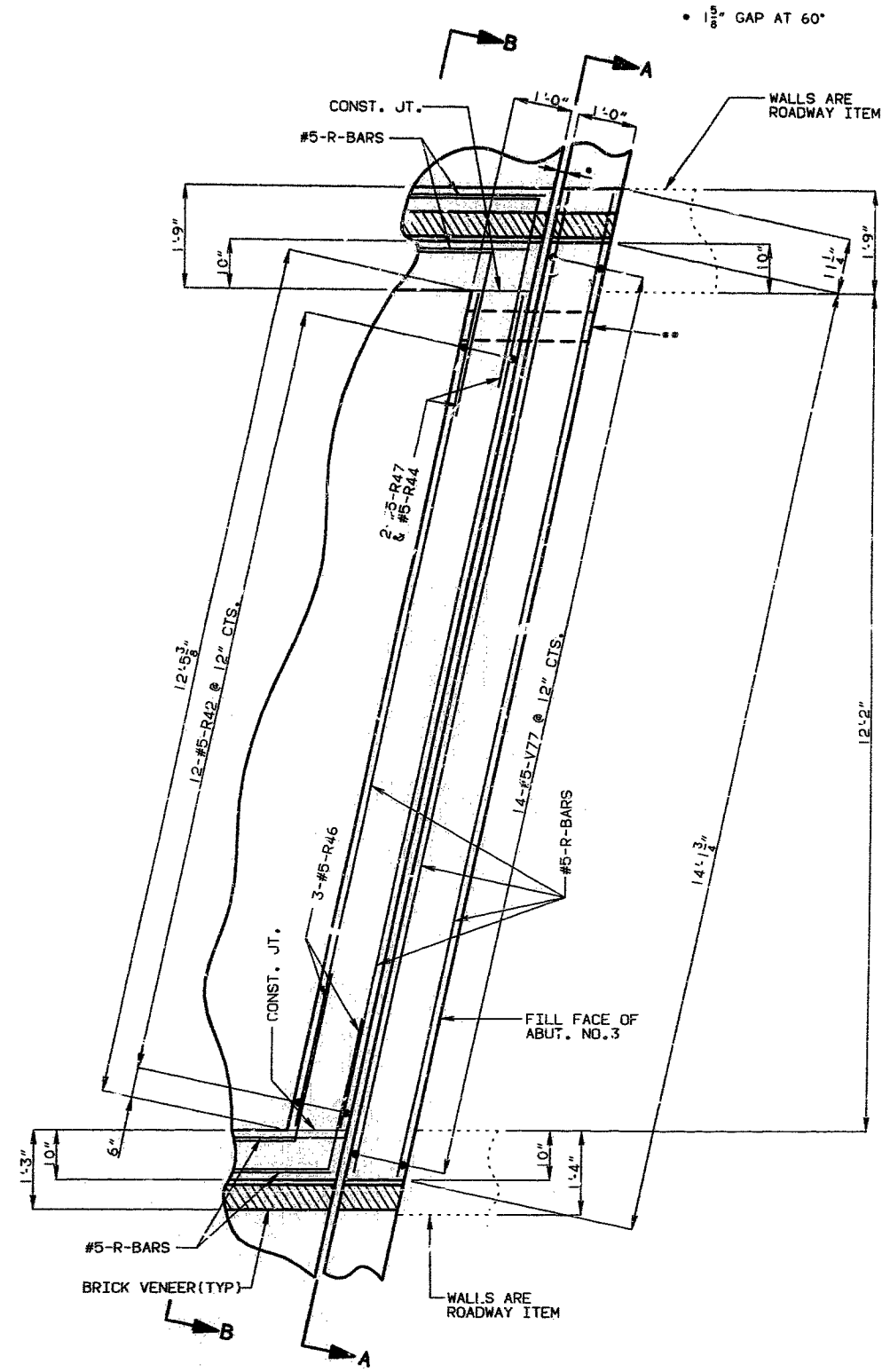
STATE	PROJ. NO.	SHEET NO.
MO.		308

NOTE: FOR DETAILS OF SECTION A-A, B-B, C-C, AND D-D SEE SHEET NO. 51.



PLAN OF PLANTER WALL @ ABUT. NO. 1

(BELOW PRECAST CAP)



PLAN OF PLANTER WALL @ ABUT. NO. 3

(BELOW PRECAST CAP)

• 1/8" GAP AT 60°

339 354

DETAILED OCT. 19 90
CHECKED NOV. 19 90

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

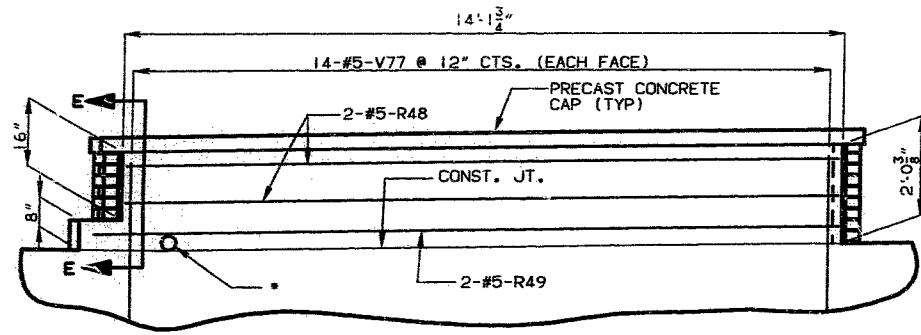
SHEET NO. 50 OF 64

JACKSON

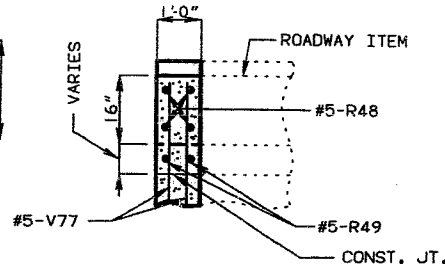
COUNTY

A-4862

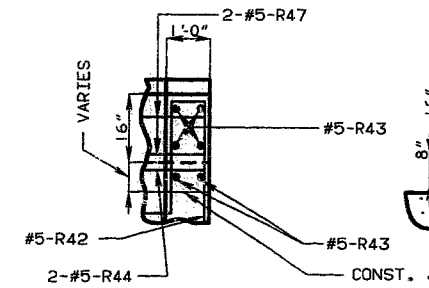
STATE	PROJ. NO.	SHEET NO.
MO.		309



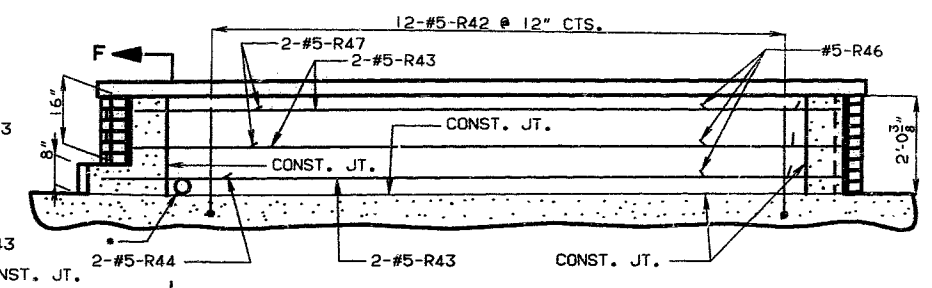
SECTION A-A



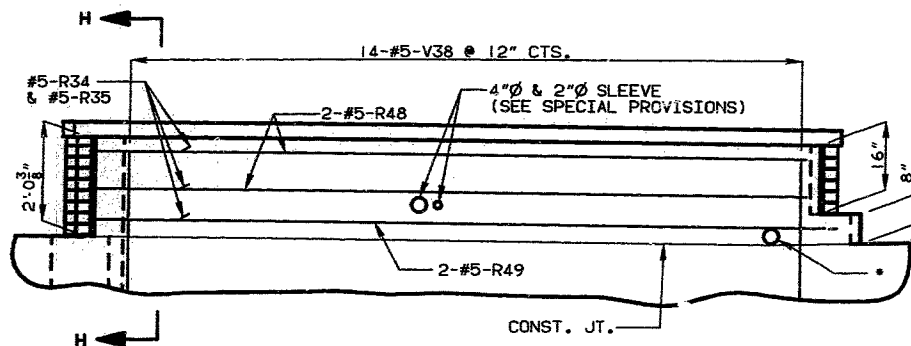
SECTION E-E



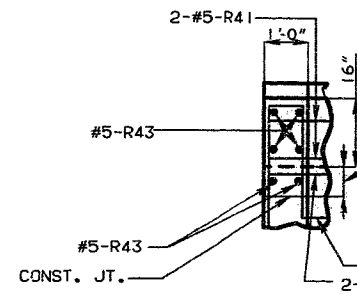
SECTION F-F



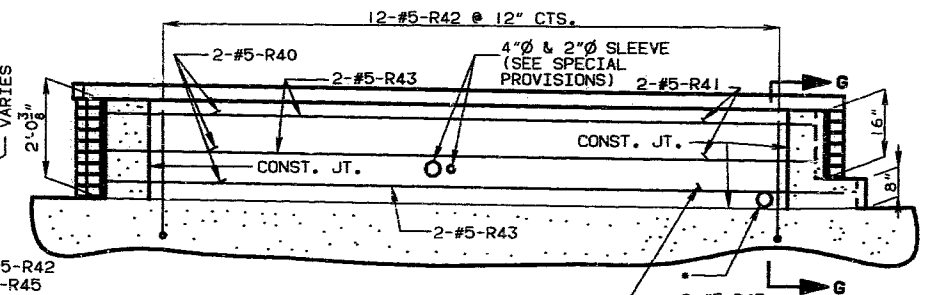
SECTION B-B



SECTION C-C

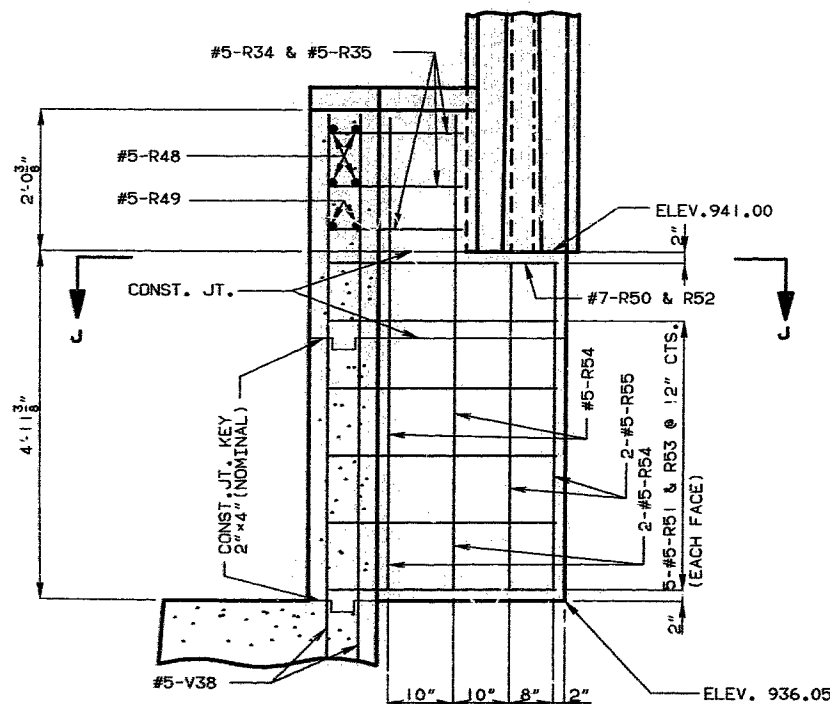


SECTION G-G

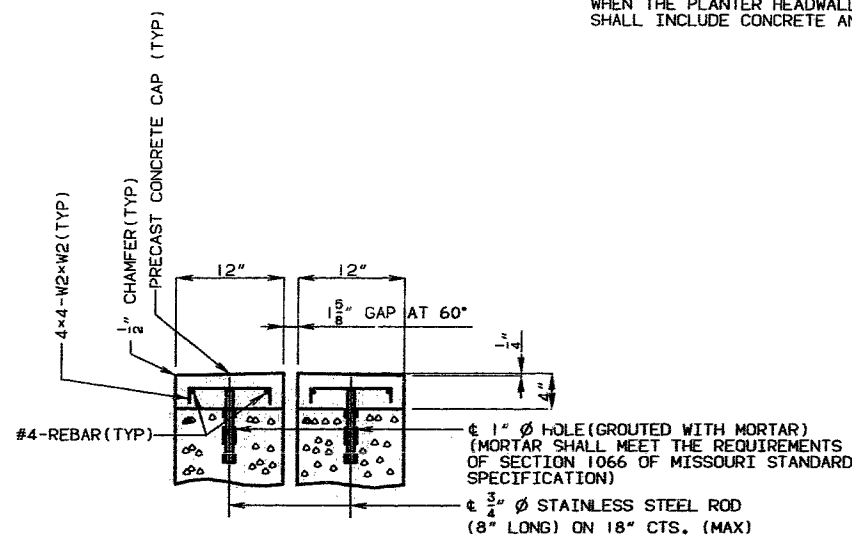


SECTION D-D

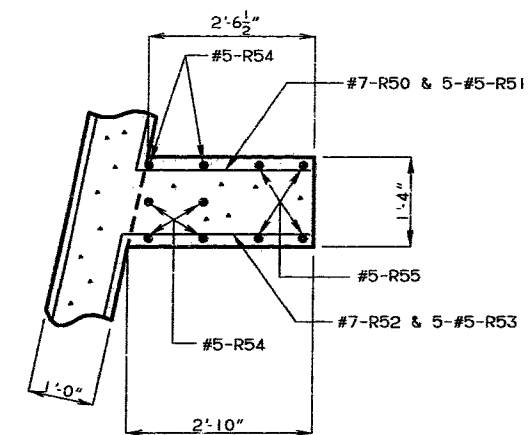
NOTE: FOR LOCATION OF SECTION A-A, B-B, C-C, AND D-D SEE SHEET NO.50.
 * 6" P.V.C. PLANTER DRAIN WITH EXP. SLEEVE. FOR DETAILS NOT SHOWN SEE SHEET NO.57.
 WHEN THE PLANTER HEADWALLS ARE BID BY THE LINEAR FEET, THE CONTRACT UNIT PRICE SHALL INCLUDE CONCRETE AND REINFORCING COMPLETE-IN-PLACE.



SECTION H-H



TYPICAL SECTION THRU PLANTER HEADWALL AT ABUTMENTS



SECTION J-J

DETAILS OF PLANTER HEADWALL AT ABUT. NO. 1 AND 3.

348 355
 DETAILED OCT. 1990
 CHECKED NOV. 1990

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

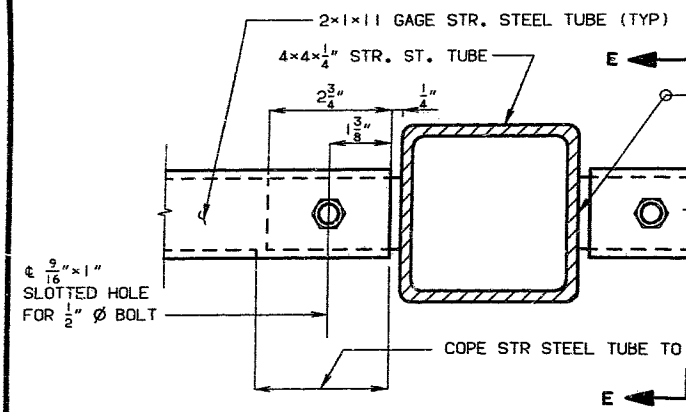
SHEET NO. 51 OF 64

JACKSON

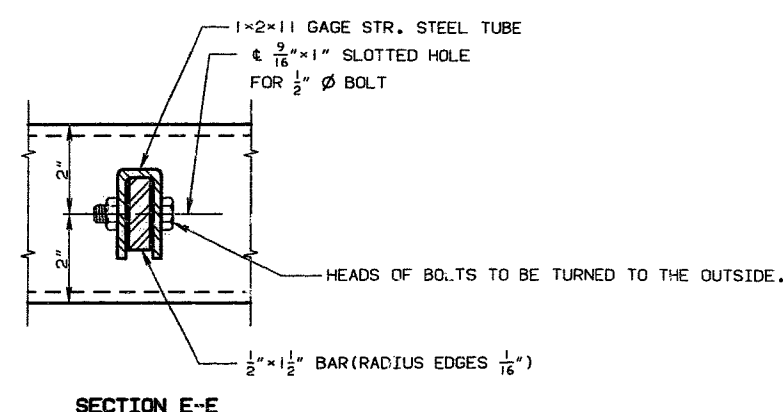
COUNTY

A-4862

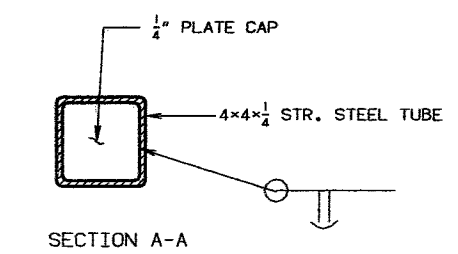
STATE	PROJ. NO.	SHEET NO.
MO.		270



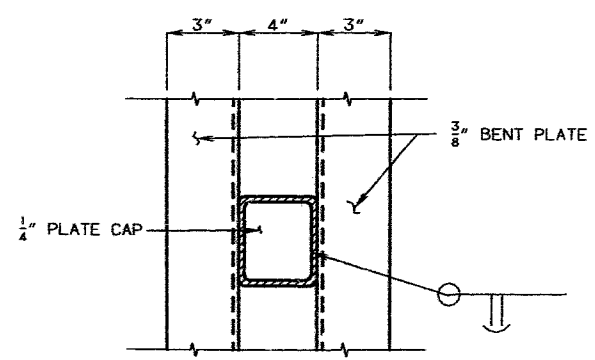
SECTION D-D



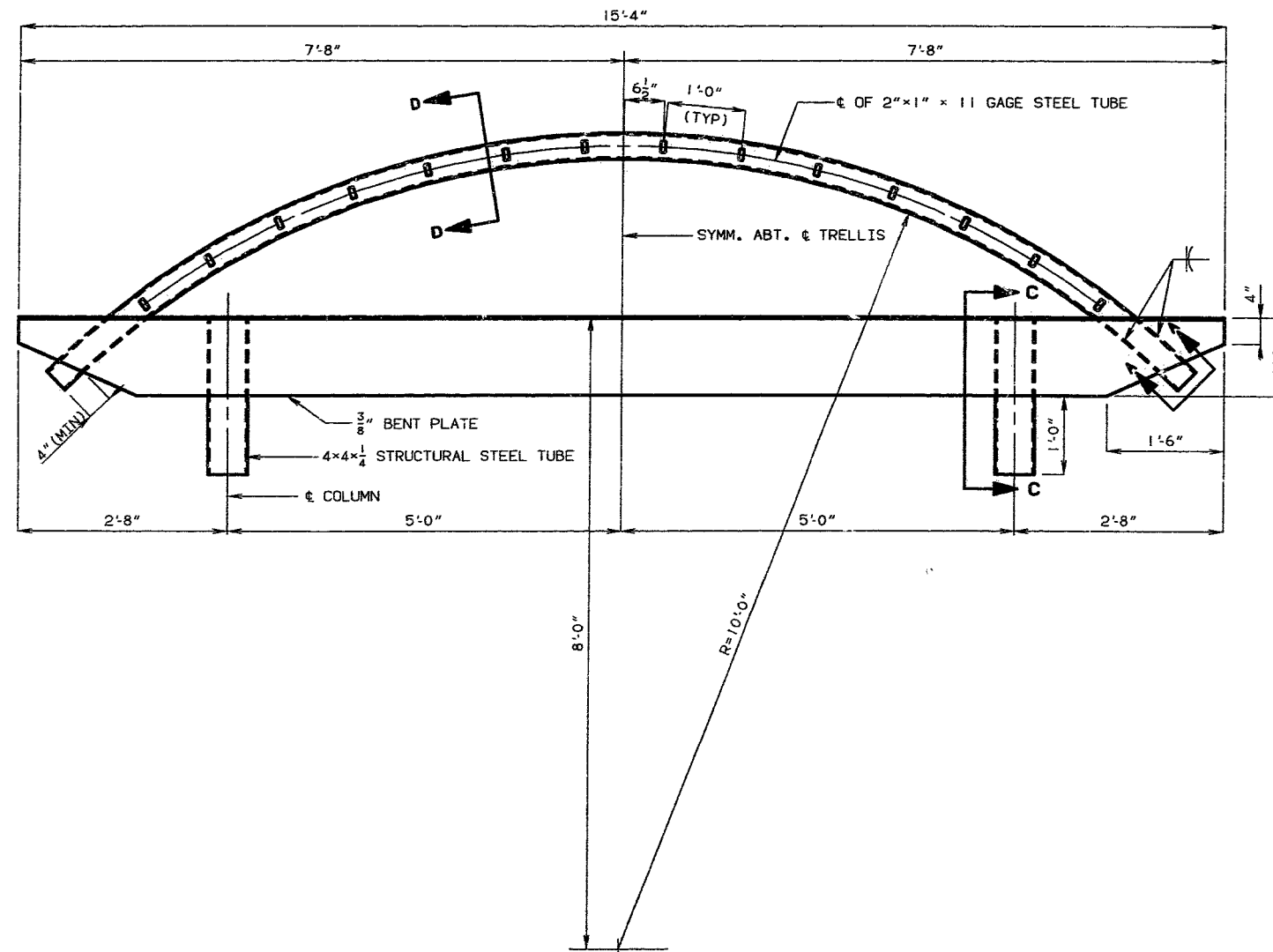
SECTION E-E



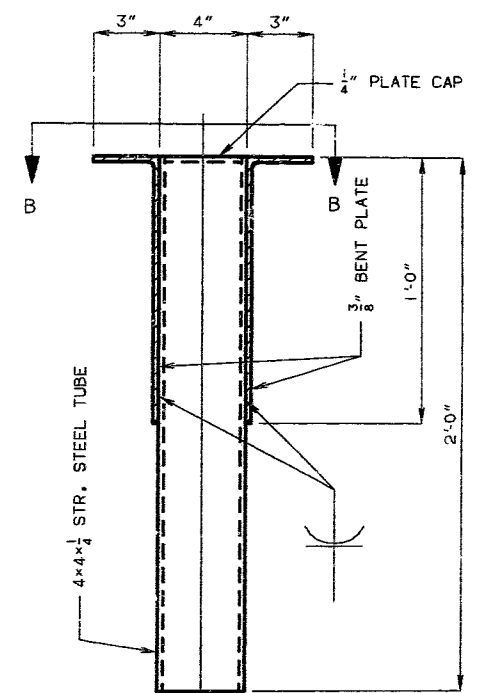
SECTION A-A



SECTION B-B



DETAILS OF TRELLIS AT PRECAST COLUMN



SECTION C-C

34/356

DETAILED AUG 1990
CHECKED SEPT. 1990

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

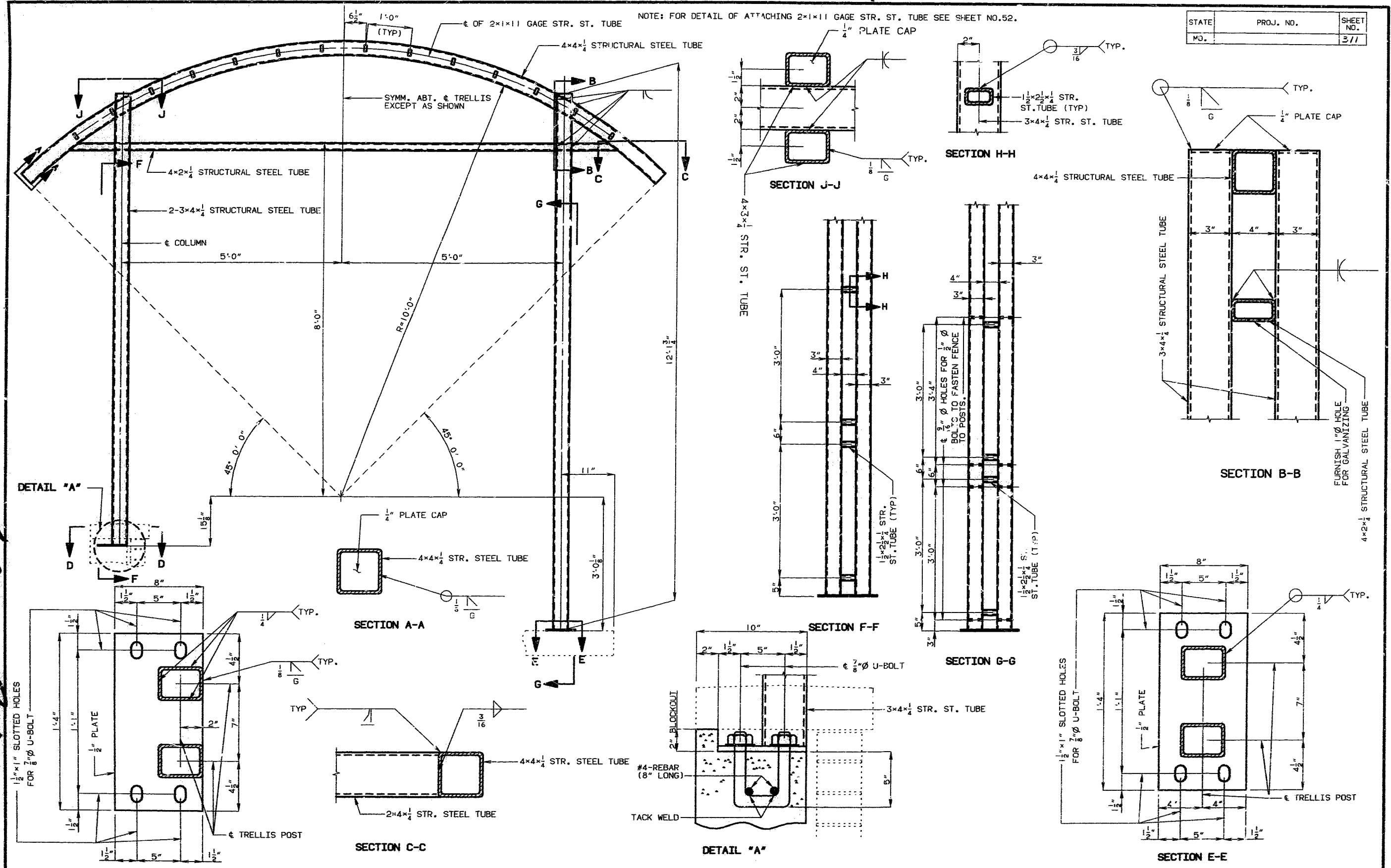
SHEET NO. 52 OF 64

JACKSON

COUNTY

A-4862

STATE	PROJ. NO.	SHEET NO.
MO.		3/1



342 357

DETAILED AUG 1990
CHECKED NOV. 1990

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

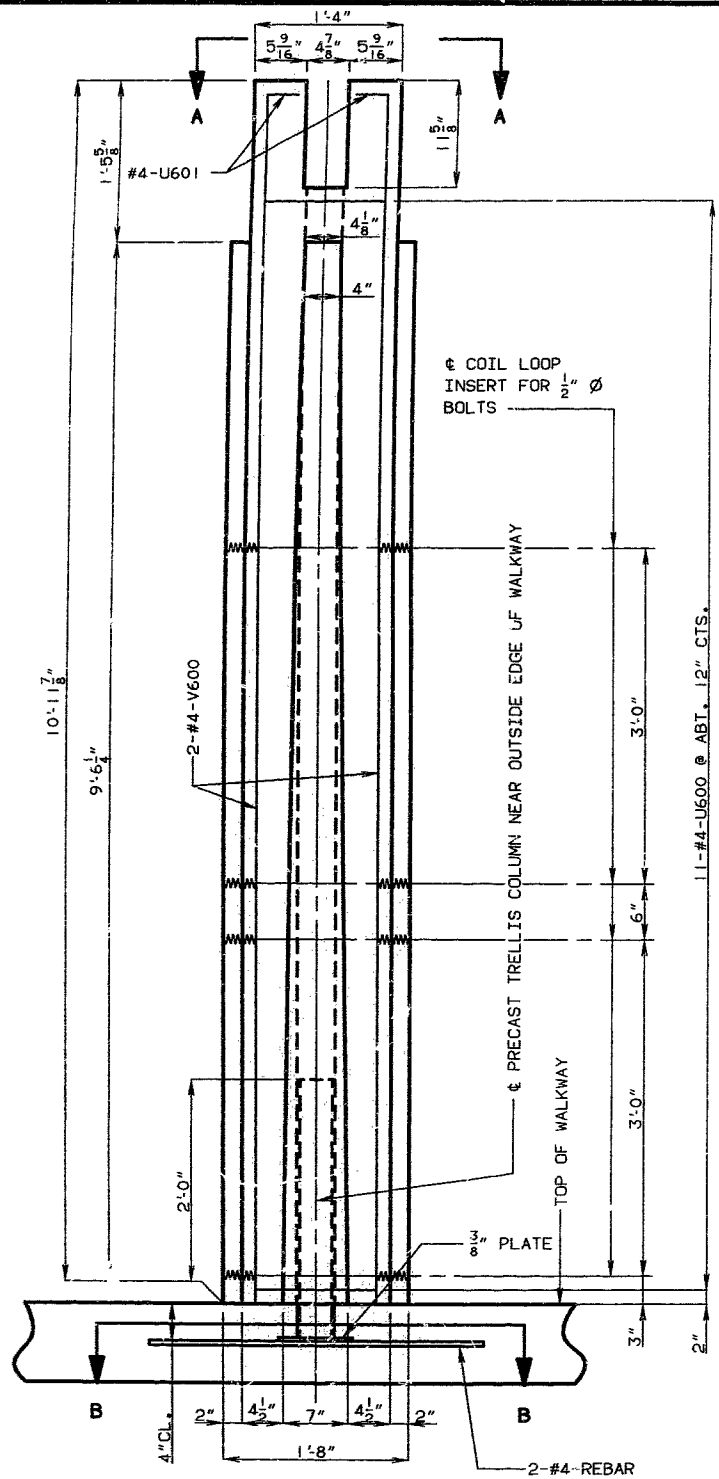
SHEET NO. 53 OF 64

JACKSON

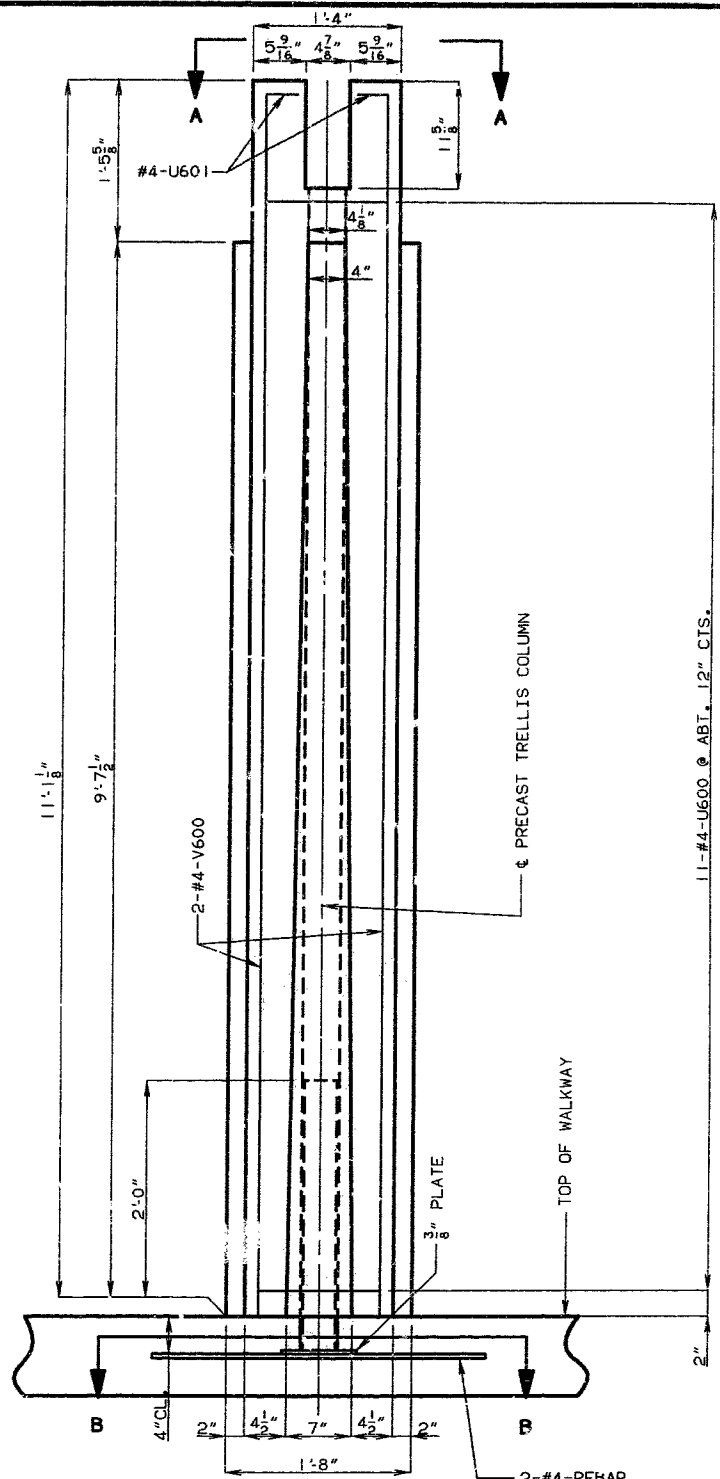
COUNTY

A-4862

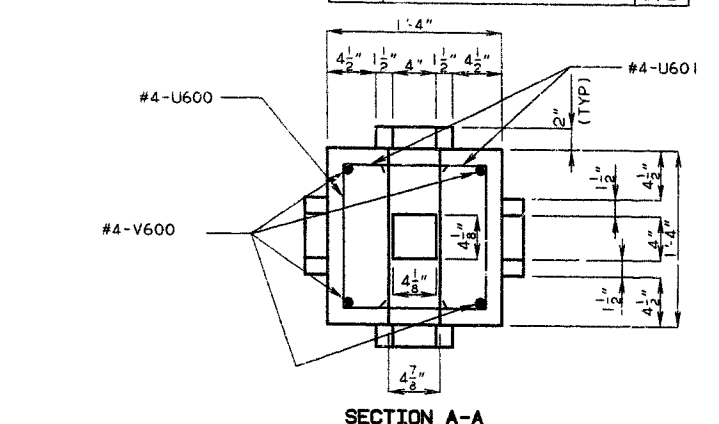
STATE	PROJ. NO.	SHEET NO.
MO.		3 / 2



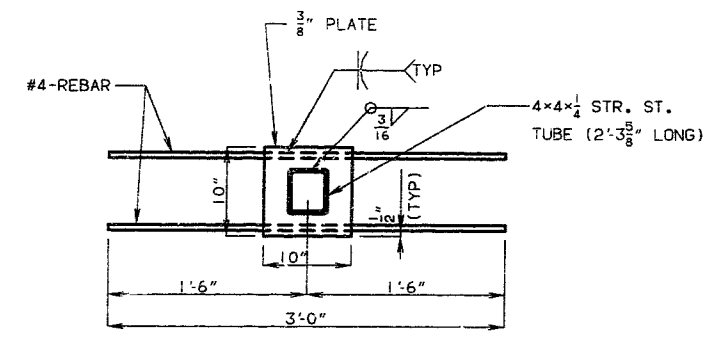
DETAIL OF TRELLIS COLUMN AT OUTSIDE OF WALKWAY



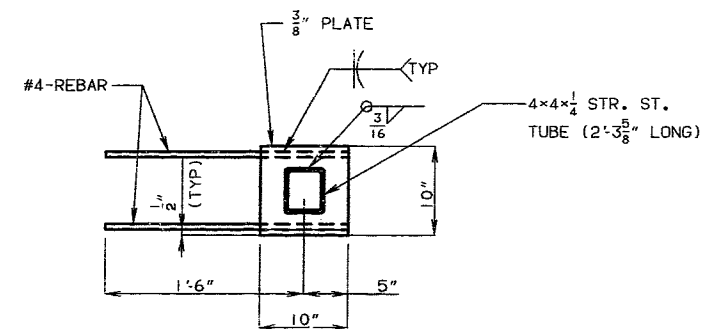
DETAIL OF TRELLIS COLUMN AT & OF PLANTER WALL



SECTION A-A



SECTION B-B



TYPICAL DETAIL OF ANCHOR SYSTEM FOR PRECAST COLUMN AT END OF WING, WALLS (RDWY. ITEM) AND AT FILL FACE OF END BENT

NOTE: ALL 4x4x1/4 STR. ST. TUBE SHALL BE CAST VERTICAL
 NOTE: FOR LOCATION OF ALL PRECAST TRELLIS COLUMN SEE SHEET NO. 45 & 46.
 COST OF FABRICATION AND INSTALLATION OF ANCHOR SYSTEM FOR PRECAST COLUMN SHALL BE INCLUDED IN PRICE BID FOR "SLAB ON CONCRETE I-GIRDER".

PRECAST TRELLIS COLUMN DETAILS

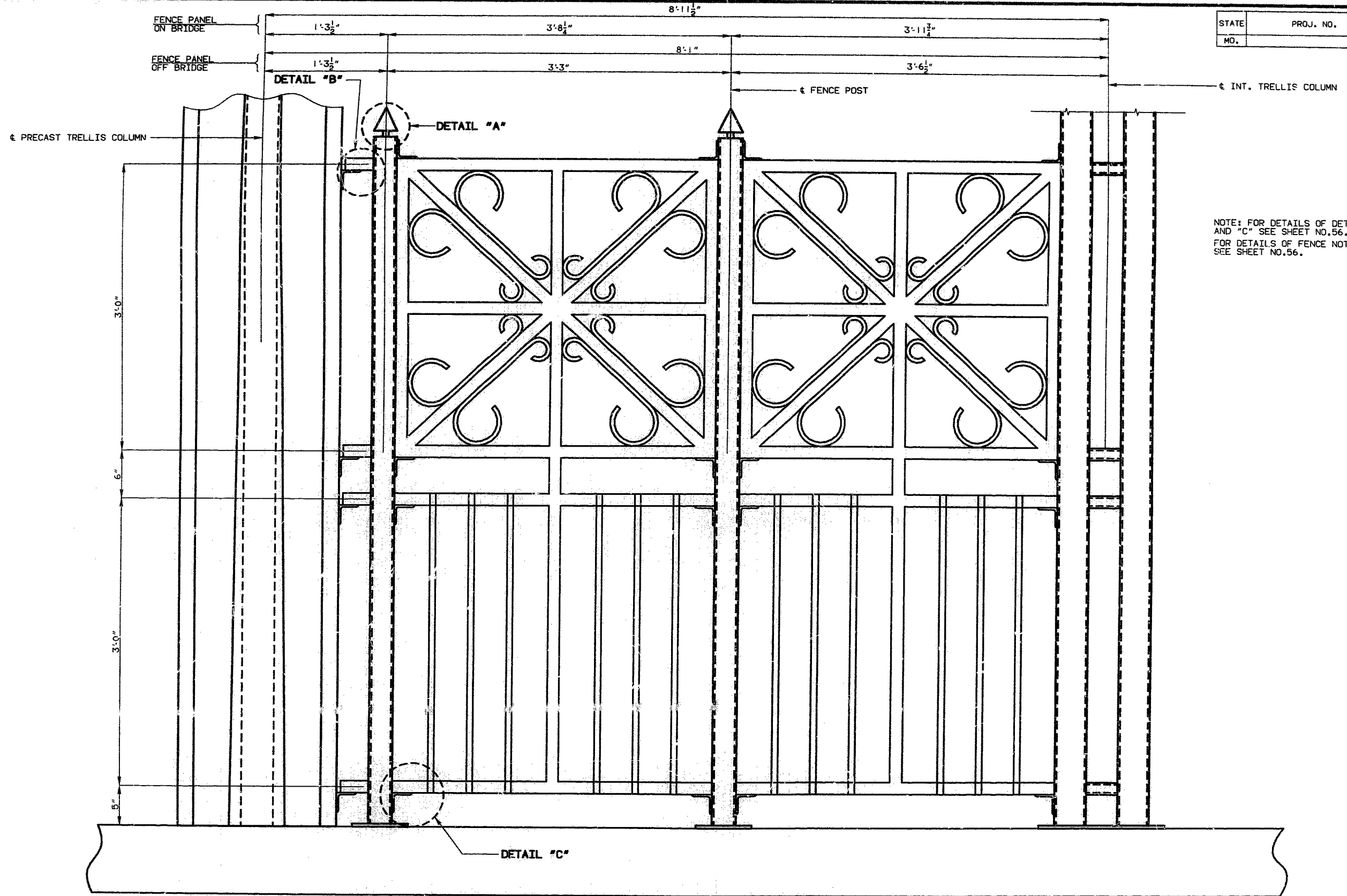
343308

DETAILED JULY 1990
 CHECKED NOV. 1990

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

SHEET NO. 54 OF 64

STATE	PROJ. NO.	SHEET NO.
MO.		3/3



NOTE: FOR DETAILS OF DETAIL "A", "B", AND "C" SEE SHEET NO. 56. FOR DETAILS OF FENCE NOT SHOWN SEE SHEET NO. 56.

344 359

PART ELEVATION OF BRIDGE FENCE

DETAILED JULY 1990
CHECKED SEPT. 1990

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

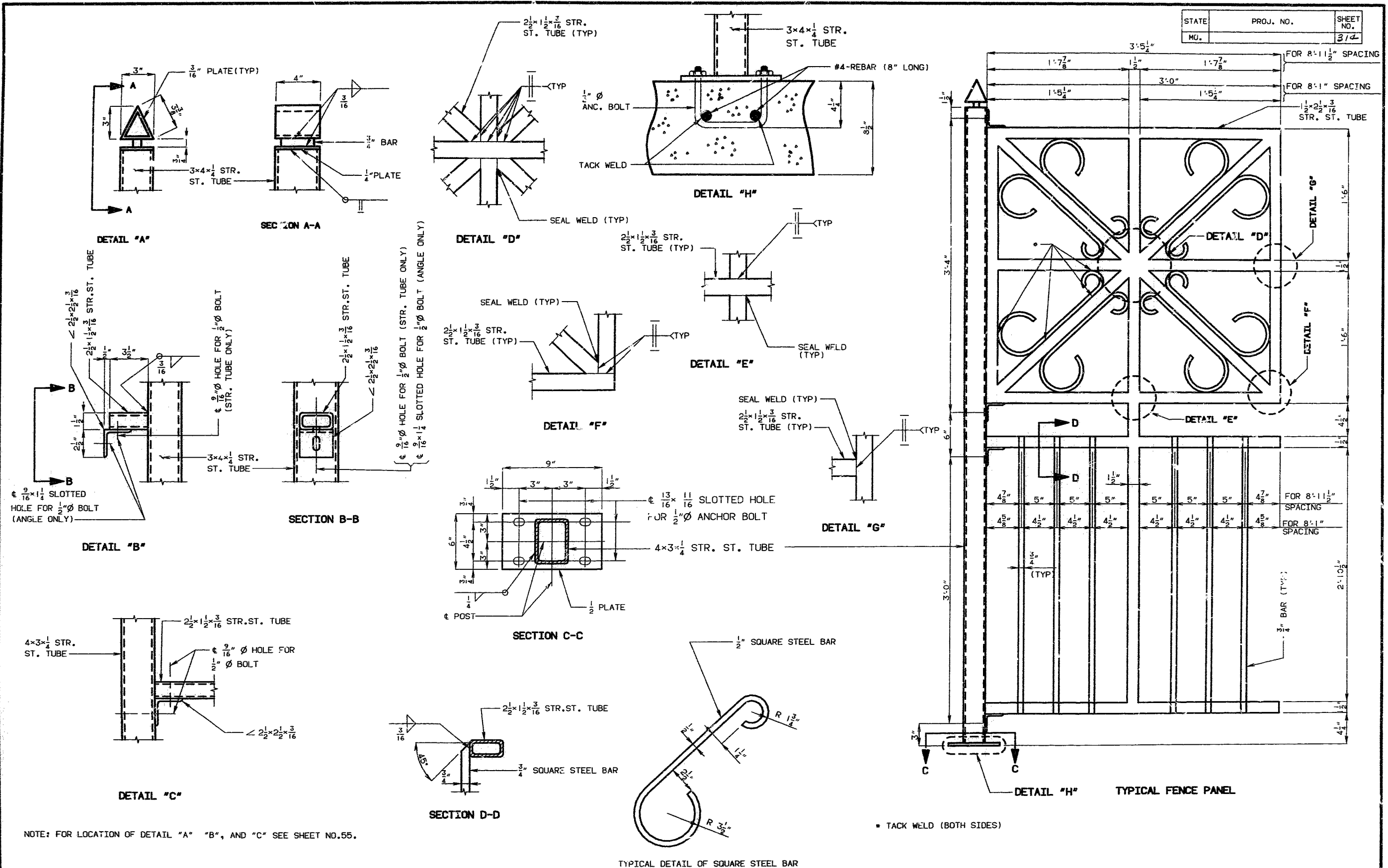
SHEET NO. 55 OF 64

JACKSON

COUNTY

A-4862

STATE	PROJ. NO.	SHEET NO.
MU.		374



345 360

NOTE: FOR LOCATION OF DETAIL "A", "B", AND "C" SEE SHEET NO. 55.

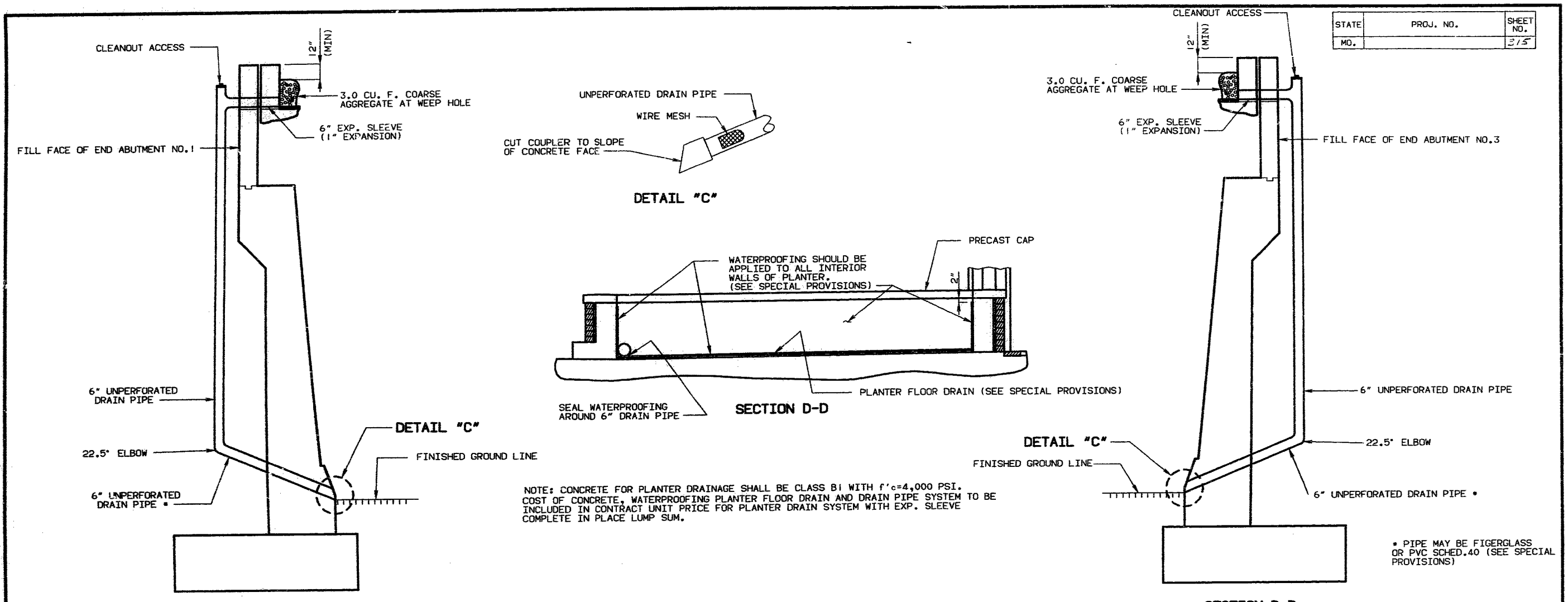
NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

• TACK WELD (BOTH SIDES)

DETAILED AUG. 1990
CHECKED NOV. 1990

SHEET NO. 56 OF 64

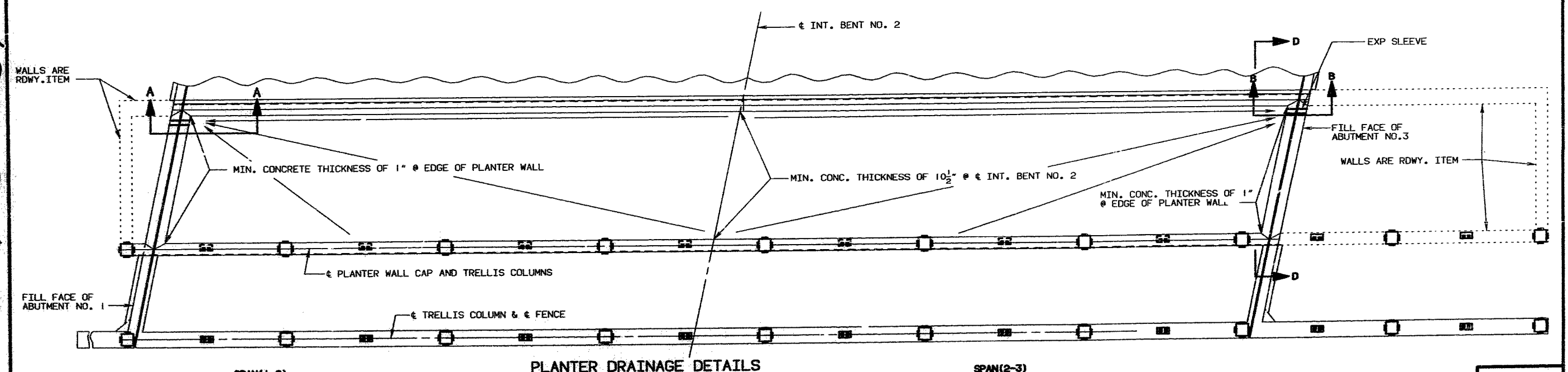
STATE	PROJ. NO.	SHEET NO.
MO.		315



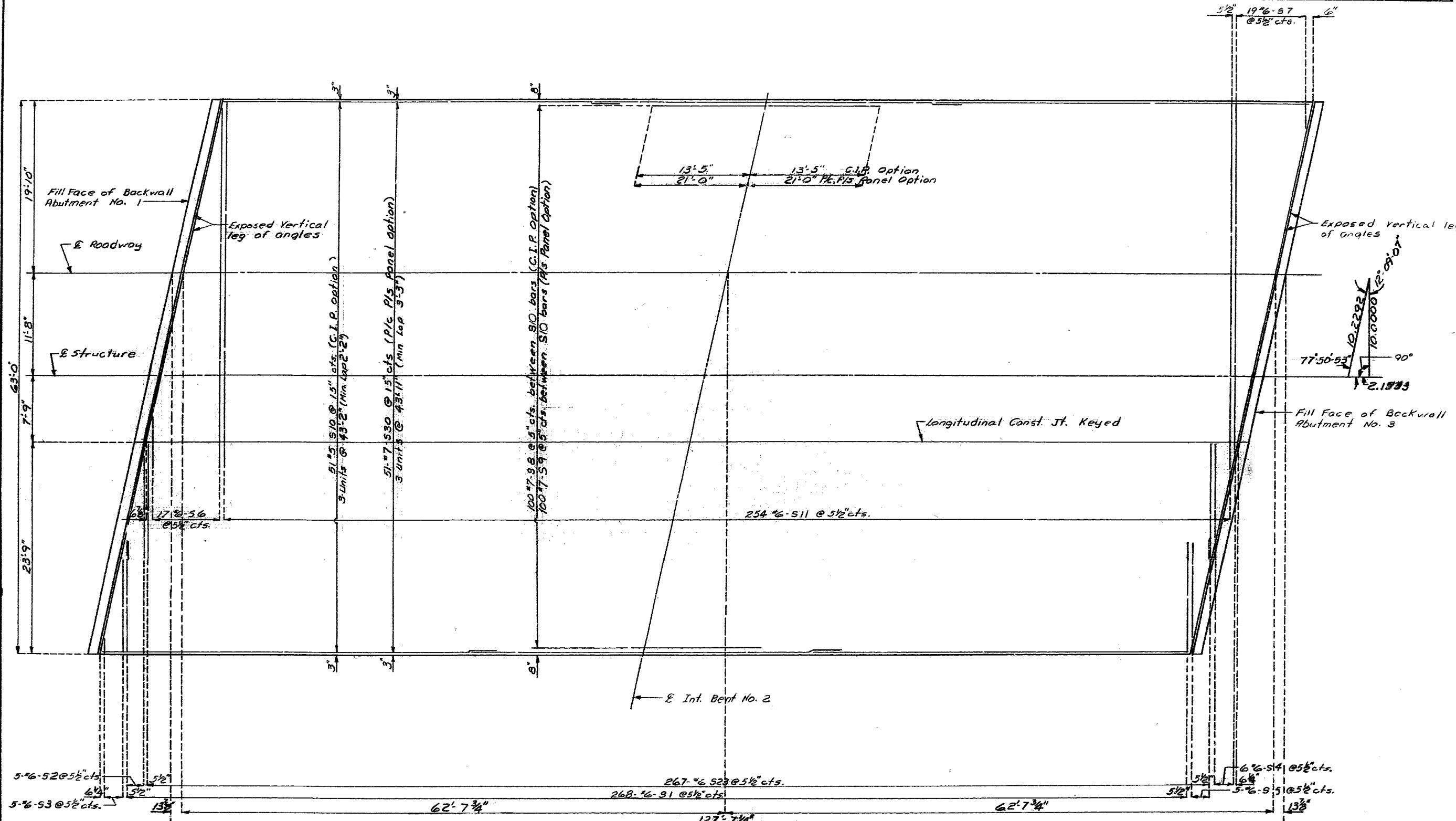
NOTE: CONCRETE FOR PLANTER DRAINAGE SHALL BE CLASS B1 WITH $f'c=4,000$ PSI. COST OF CONCRETE, WATERPROOFING PLANTER FLOOR DRAIN AND DRAIN PIPE SYSTEM TO BE INCLUDED IN CONTRACT UNIT PRICE FOR PLANTER DRAIN SYSTEM WITH EXP. SLEEVE COMPLETE IN PLACE LUMP SUM.

* PIPE MAY BE FIBERGLASS OR PVC SCHED.40 (SEE SPECIAL PROVISIONS)

346361



STATE	PROJ. NO.	SHEET NO.
MO.		272



323 362

Note: Dimensions shown are horizontal.

PLAN OF SLAB SHOWING TOP REINFORCEMENT
(All Options except as noted)

Note: Longitudinal reinforcing steel shall be placed so that ends shall not be more than 1" from vertical face of Exp. angle.

Note: For details and location of Planter drains and lighting, see sheet No. 57458. For details of Prestressed Panel option, see sheet No. 30442. For Theoretical slab Bouncing Diagram, see sheet No. 39. For details and reinforcement of Parapet & Curbs not shown, see sheet Nos. 47, 48 & 49.

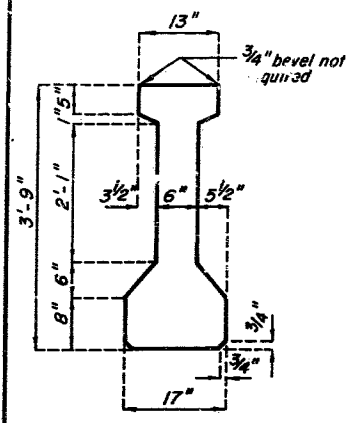
QUALITY REPORT
 DETAILED July 1990
 CHECKED Sept. 1990

Note: This drawing is not to scale. Follow dimensions.

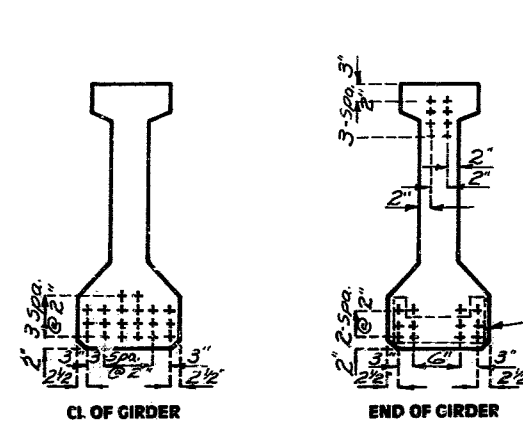
Sheet No. 34 of 64

JACKSON COUNTY A-4862

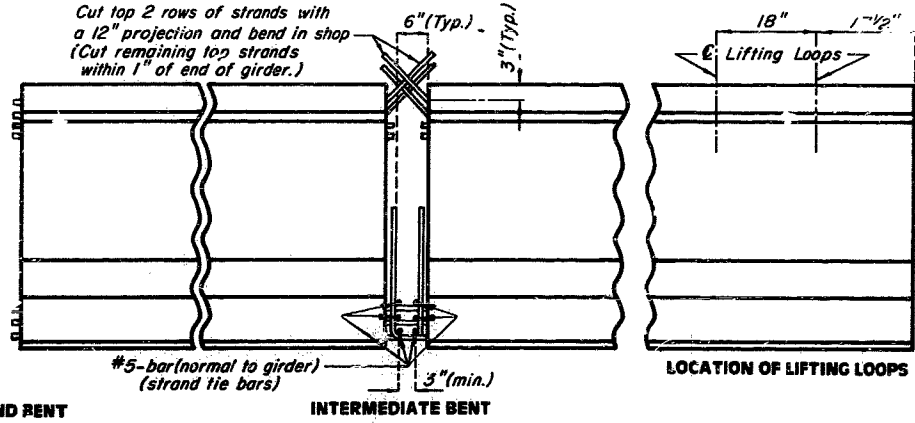
STATE	PROJ NO	SHEET NO
MO		270



GIRDER DIMENSIONS



STRAND ARRANGEMENTS

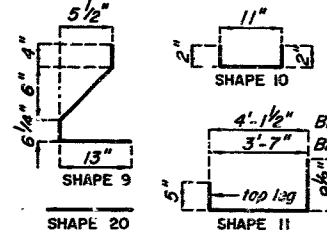


STRAND DETAILS AT GIRDER ENDS

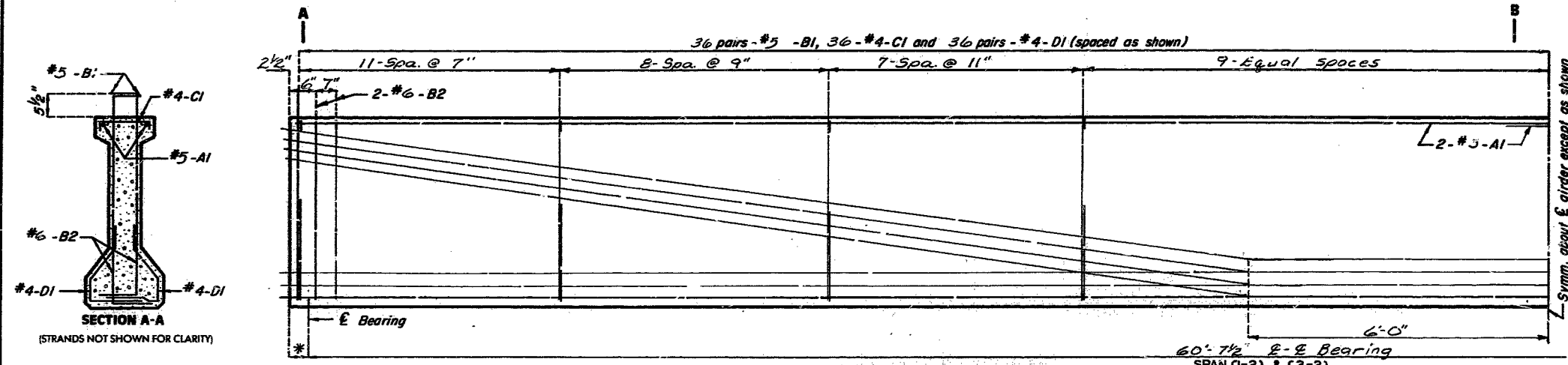
NOTE:
 CONCRETE FOR PRESTRESSED GIRDERS SHALL BE CLASS A1 WITH $f_c = 5,000$ PSI.
 (+) INDICATES PRESTRESSED STRAND.
 USE 20 STRANDS WITH AN INITIAL PRESTRESS FORCE OF 620 KIPS.
 PRESTRESSING TENDONS SHALL BE UNCOATED, SEVEN-WIRE, LOW RELAXATION STRANDS - 1/2 INCH DIAMETER CONFORMING TO A.A.S.H.T.O. M203, GRADE 270. SEE MO. STD. SPECIFICATIONS 705.4.8.

Note: Prestressing stands at End Abuts. No. 1 & 3 shall be trimmed to within 1/8" of conc. if exposed, or 1" of conc. if encased. Exposed ends of girders shall be given 2 coats of an asphalt paint. Ends of girders which will be encased in conc. diaphragms shall not be painted.

BILL OF REINFORCING STEEL - EACH GIRDER			
NO.	SIZE & MARK	ACTUAL LENGTH	SHAPE
4	5 A1	31'-9"	20
142	5 B1	5'-2"	11
8	6 B2	4'-7"	11
71	4 C1	13"	10
142	4 D1	2'-7"	9



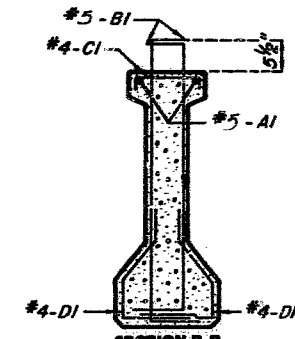
NOTE:
 ALL DIMENSIONS IN BENDING DIAGRAM ARE OUT TO OUT.
 HOOKS AND BENDS SHALL BE IN ACCORDANCE WITH THE CRSI MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES SETUP AND TIE DIMENSIONS.
 ACTUAL LENGTHS ARE MEASURED ALONG CENTERLINE BAR TO THE NEAREST INCH.
 MINIMUM CLEARANCE TO REINFORCING SHALL BE 1".
 ALL REINFORCEMENT SHALL BE GRADE 60.
 THE TWO D1 BARS MAY BE FURNISHED AS ONE BAR AT THE FABRICATOR'S OPTION.



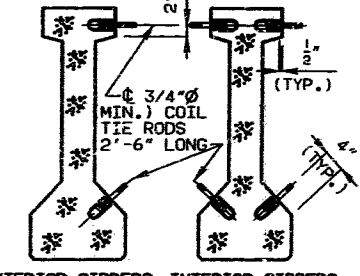
PART ELEVATION OF GIRDER



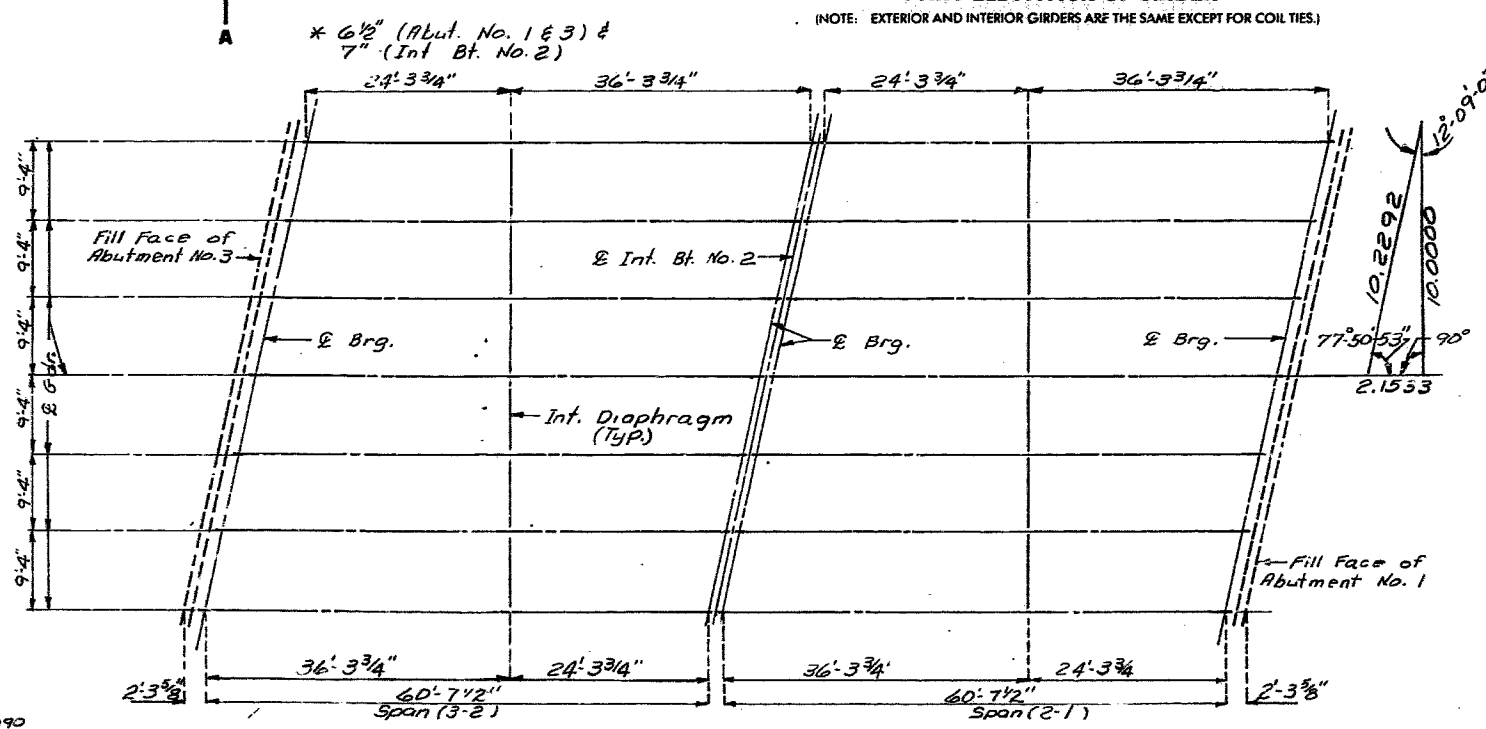
SECTION A-A (STRANDS NOT SHOWN FOR CLARITY)



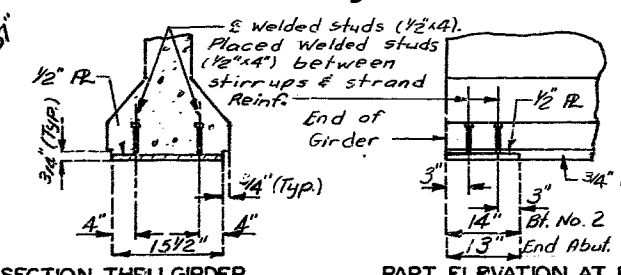
SECTION B-B (STRANDS NOT SHOWN FOR CLARITY)



EXTERIOR GIRDERS INTERIOR GIRDERS DETAILS OF COIL TIES AT END ABUTS.



PART ELEVATION AT END OF GDR.

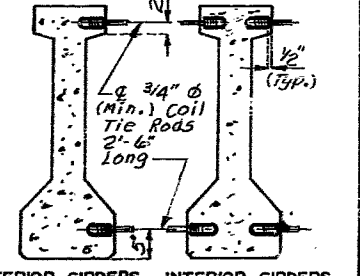


SECTION THRU GIRDER

PART ELEVATION AT END OF GDR.

*Note: Paint the 1/2" sole Plate with 2 coats of inorganic zinc (5 mils min.) or galvanize in accordance with A.S.T.M. A123.
 Cost of furnishing, painting and installing the 1/2" sole Plate and welded studs in the prestressed girder shall be included in the price bid for Prestressed Conc. I-Girder per each.*

NOTE:
 COST OF 3/4" COIL TIE RODS PLACED IN DIAPHRAGMS IS INCLUDED IN CONTRACT UNIT PRICE FOR PRESTRESSED CONCRETE MEMBERS.
 COIL TIES SHALL BE HELD IN PLACE IN THE FORMS BY SLOTTED WIRE-SETTING-STUDS PROJECTING THRU FORMS. STUDS ARE TO BE LEFT IN PLACE OR REPLACED WITH TEMPORARY PLUGS UNTIL GIRDERS ARE ERECTED AND THEN REPLACED BY COIL TIE RODS.



EXTERIOR GIRDERS INTERIOR GIRDERS DETAILS OF COIL TIES AT INT. BENT

384 363

SPS 55.4.6 REVISED APR. 1973 JUNE 1987

DETAILED July 1990
 CHECKED Sept. 1990

Note: This drawing is not to scale. Follow dimensions.

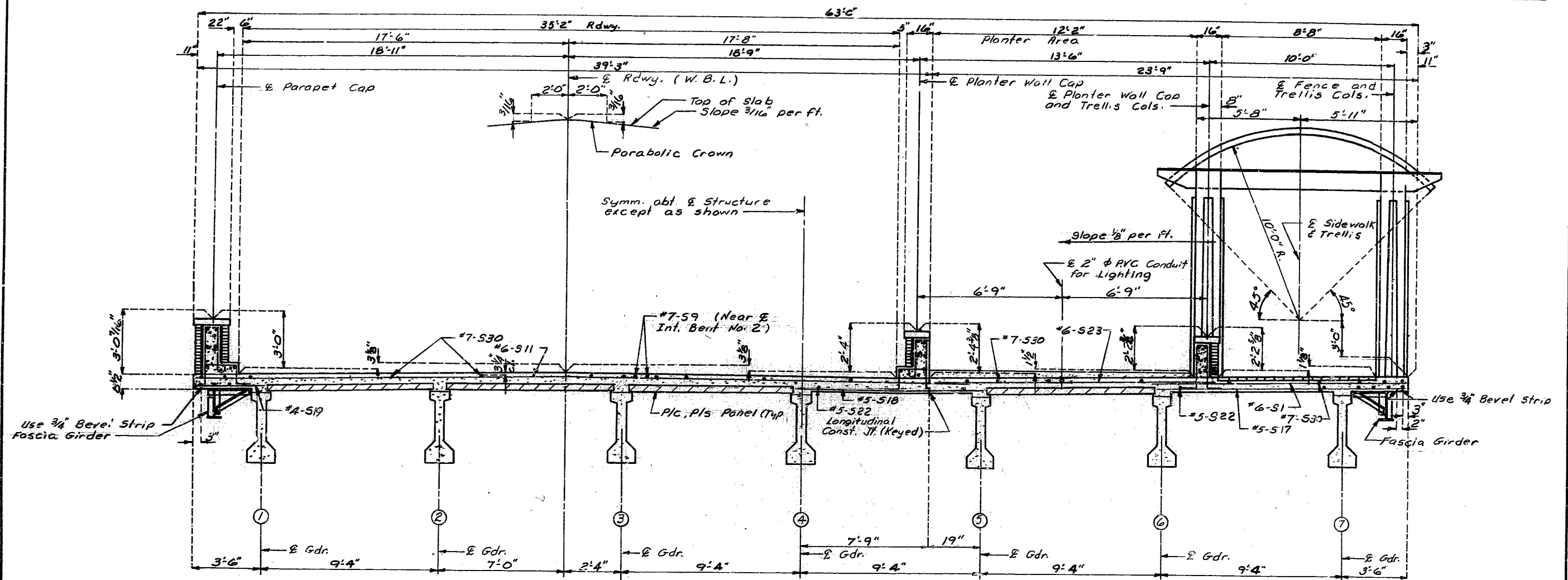
Sheet No. 52 of 61.

JACKSON

COUNTY

A-4862

STATE	PROJ. NO.	SHEET NO.
MO.		276



SECTION THRU SLAB NEAR E SPAN
(Precast Prestressed Panels)

Note: For details of trellis, see sheet No. 52.
 For details of Curb and parapet, see sheet Nos. 47, 48 & 49.
 For details of Fascia Girder, see sheet No. 33.
 For details of Conduit, see sheet No. 58.

327 564

QUALITY REVIEW
 DETAILED JUNE 1990
 CHECKED Sep. 1990

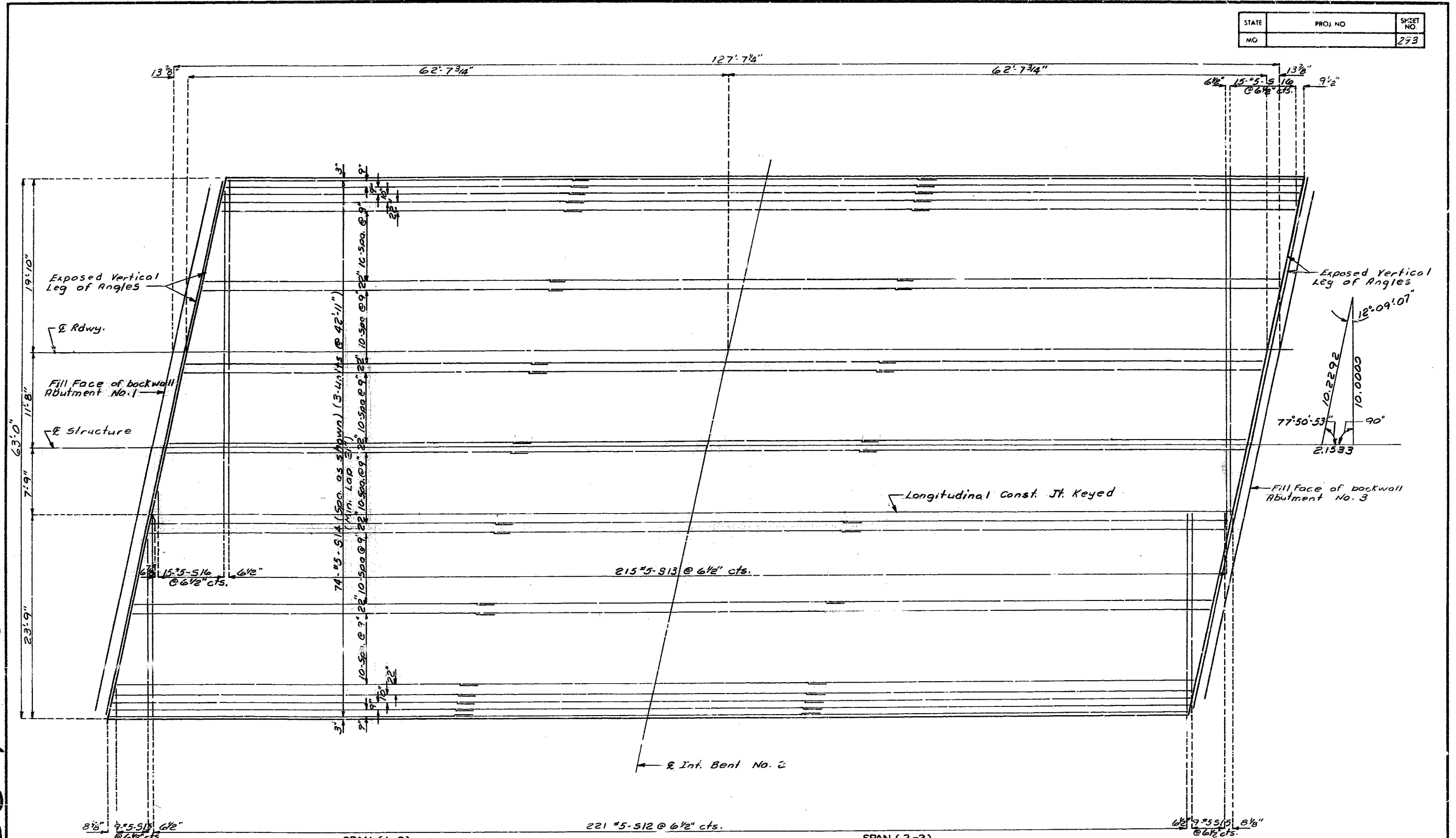
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 23 of 64

JACKSON COUNTY

A-4862

STATE	PROJ NO	SHEET NO
MO		293



324 363

PLAN OF SLAB SHOWING BOTTOM REINFORCEMENT
(C.I.P. Option only)

Note: Dimensions shown are horizontal.

Note: For details and location of Planter, Drains and Lighting, see sheet No. 57453.
For Theoretical slab Haunching Diagram, see sheet No. 39.
For details of Curb and parapet not shown, see sheet Nos. 47, 48 & 49.
Longitudinal reinforcing steel shall be placed so that ends shall not be more than 1"± from vertical face of Exp. angle.

QUALITY REPORT

DETAILED July 1990
CHECKED Sept. 1990

Note: This drawing is not to scale. Follow dimensions.

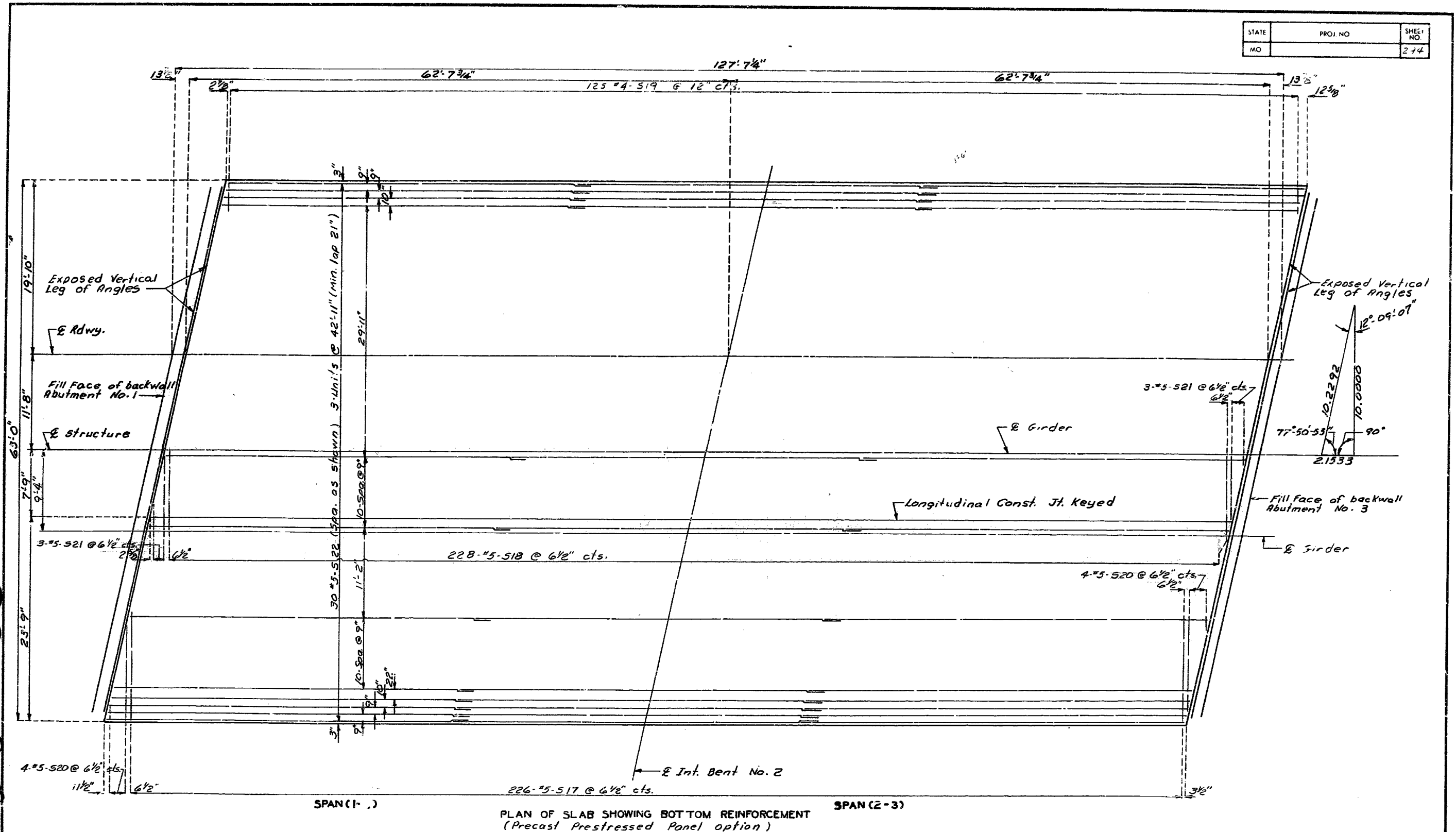
Sheet No. 35 of 64

JACKSON

COUNTY

A-4862

STATE	PROJ. NO.	SHEET NO.
MO		274



Note: Dimensions shown are horizontal.

Note: For details and location of Planter Drains and Lighting, see sheet No. 575-58.
For Theoretical slab Haunching Diagram, see sheet No. 39.
For details of Precast Prestressed Panels, see sheet No. 42.
Longitudinal reinforcing steel shall be placed so that ends shall not be more than 1" ± from vert. face of Exp. angle.

QUALITY REVIEW
DETAILED July 1990
CHECKED Sept. 1990

Note: This drawing is not to scale. Follow dimensions.

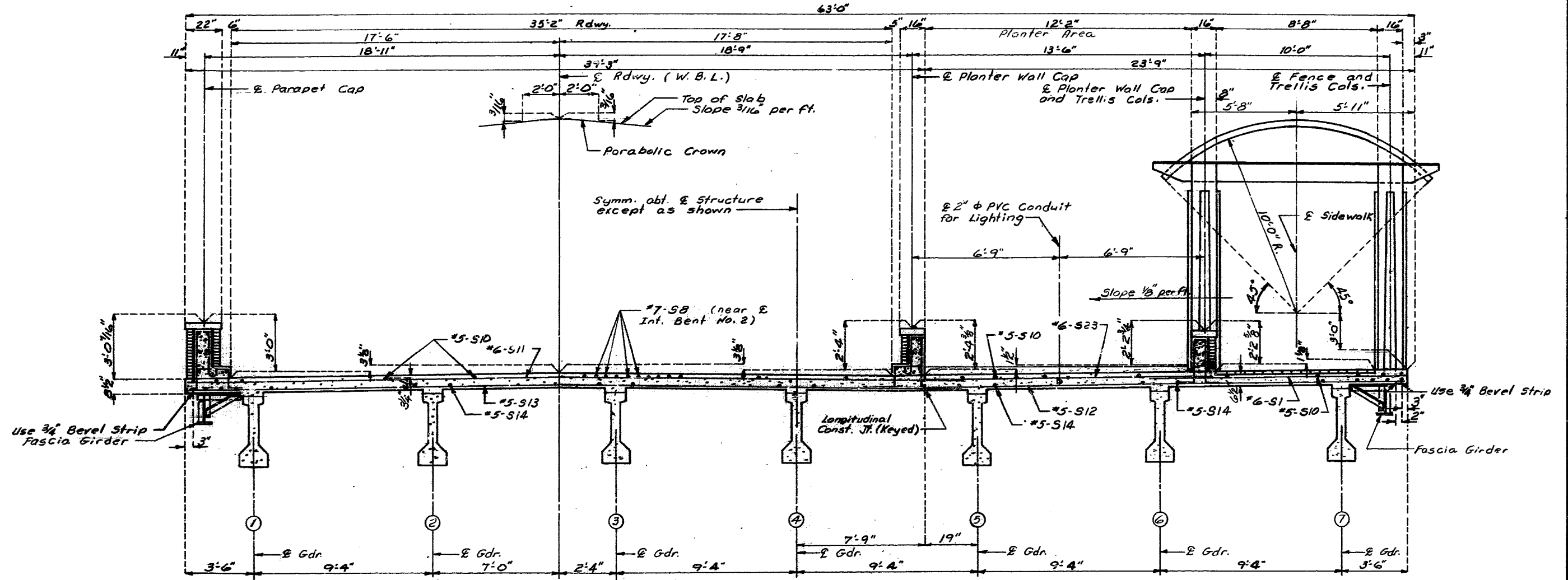
Sheet No. 36 of 64

JACKSON

COUNTY

A-4862

STATE	PRJ. NO.	SHEET NO.
MO.		295



SECTION THRU SLAB NEAR E SPAN
(C.I.P. Option)

Note: For details of trellis, see sheet Nos. 52.
 For details of Curb and Parapet, see sheet Nos. 47, 48 & 49.
 For details of Fascia Girder, see sheet No. 35.
 For details of Conduit, see sheet No. 53.

326367

QUALITY MEMO
 DETAILED JUNE 1990
 CHECKED Sept. 1990

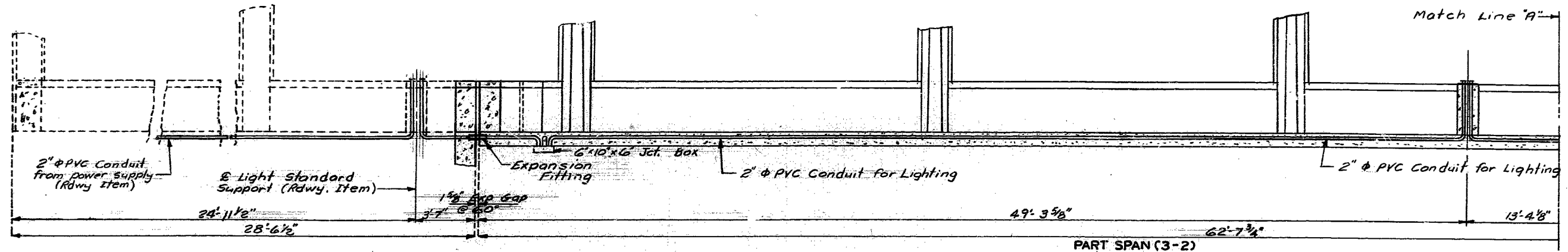
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 37 of 64

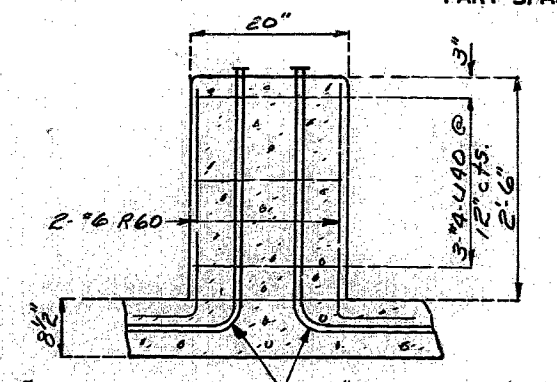
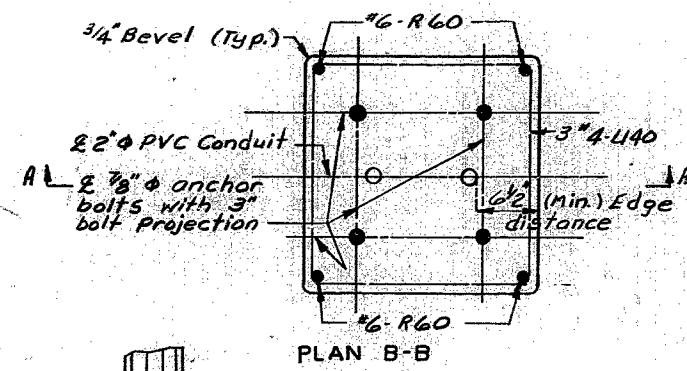
JACKSON COUNTY

A-4862

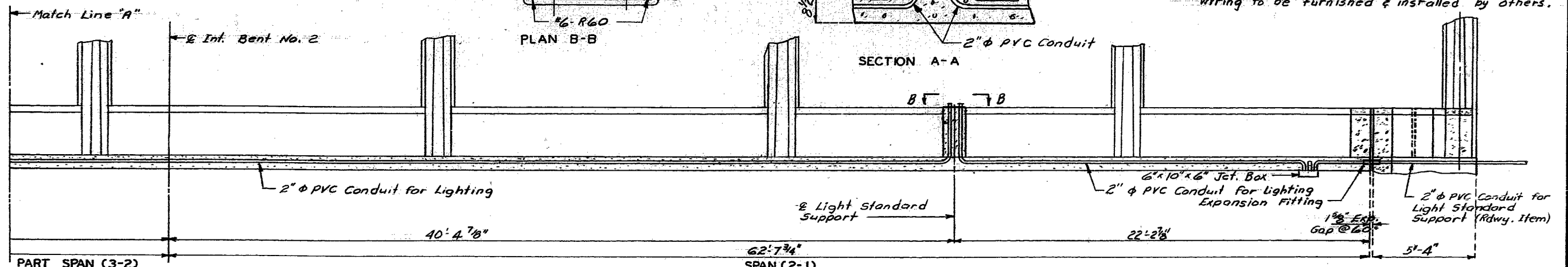
STATE	PROJ. NO.	SHEET NO.
MO.		316



PART SPAN (3-2)



Note: All conduit on structure shall be ridged non-metallic schedule 40 heavy wall PVC (polyvinyl chloride Plastic). Each section of conduit shall bear the underwriters Laboratories, Inc., (UL) Label.
 All junction boxes shall be PVC molded & surface mounted and equal to carbon Electrical Construction Products or Triangle Conduit and Cable Company, Inc. The conduit terminations be permanent or separable. The terminations and covers shall be of watertight construction.
 Weepholes shall be provided at appropriate locations to drain any moisture in the conduit lines. Wiring to be furnished & installed by others.



SECTION AT C OF CONDUIT & PLANTER SHOWING CONDUIT

Note: Longitudinal Dimensions are along top of Slab @ C Planter.
 For details of conduit not shown see sheet No. 45.

347368

QUALITY REVIEW
 DETAILED Aug. 1990
 CHECKED Nov. 1990

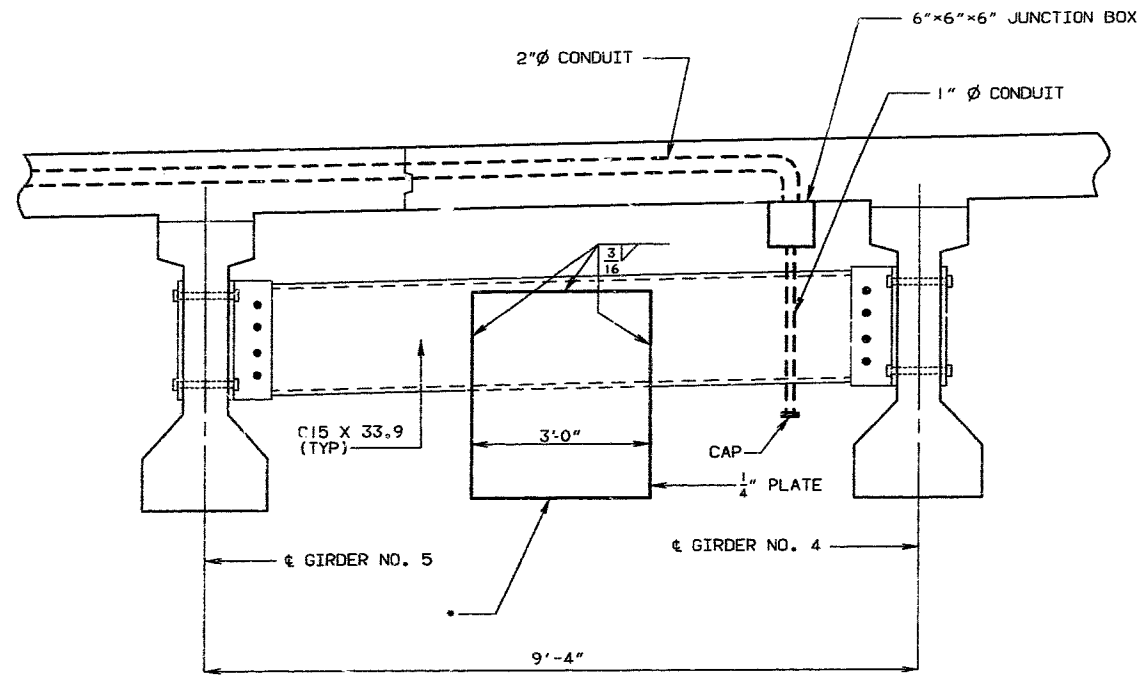
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 53 of 64

JACKSON COUNTY

A-4862

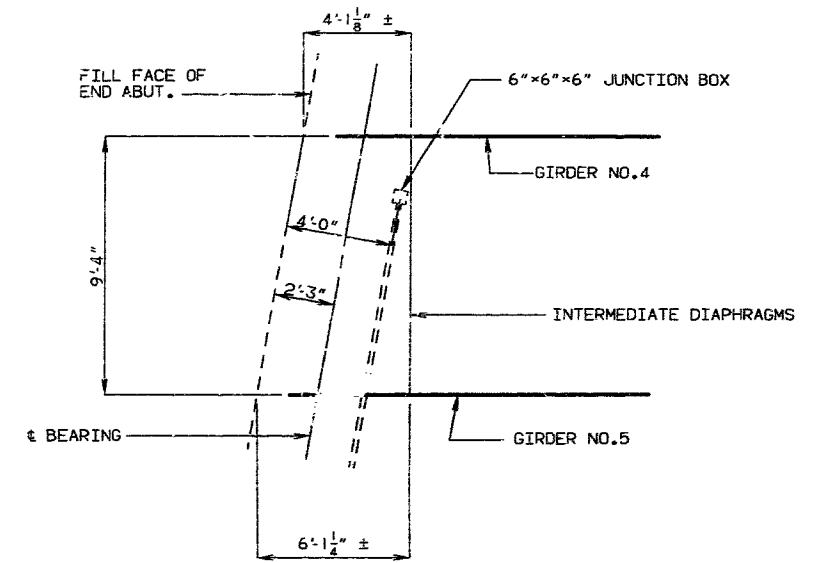
STATE	PROJ. NO.	SHEET NO.
M.		3/7



* PLACE 1/4" PLATE EVEN WITH THE BOTTOM OF GIRDER NO. 4 AND CENTER BETWEEN GIRDER NO. 4 AND NO.5 (FOR MOUNTING OF LIGHTING)

PART SECTION SHOWING INTERMEDIATE DIAPHRAGM

NOTE: FOR DETAILS OF DIAPHRAGM NOT SHOWN SEE SHEET NO.41.



SPAN (1-2)(3-2)

NOTE: PLACEMENT OF ALL LUMINAIRES SHALL BE IN THE DIRECTION PRESCRIBED BY THE ENGINEER.

DETAILS OF UNDERDECK LIGHTING

348569

DETAILED DEC. 1990
CHECKED DEC. 1990

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

SHEET NO. 59 OF 64

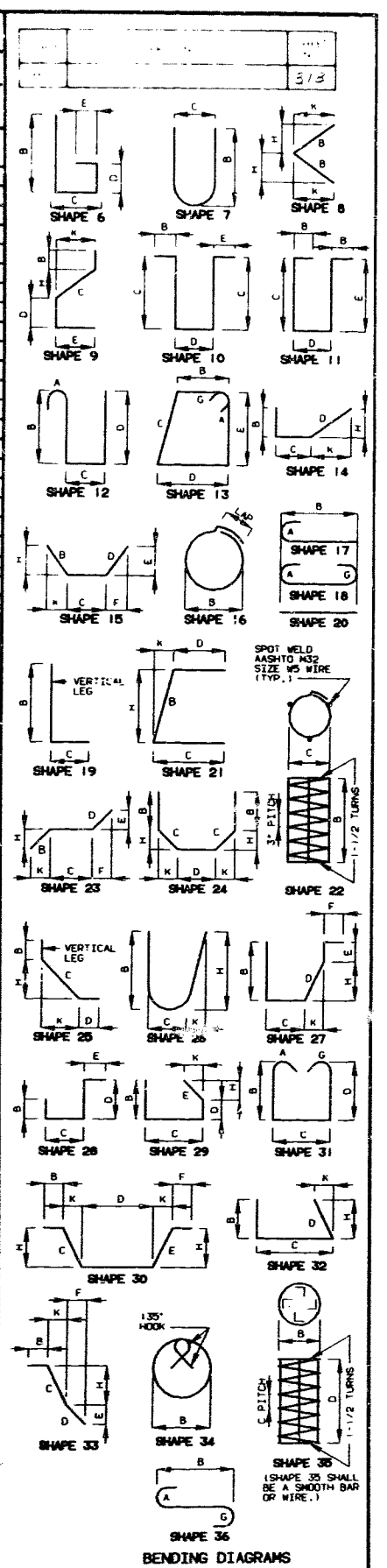
JACKSON

COUNTY

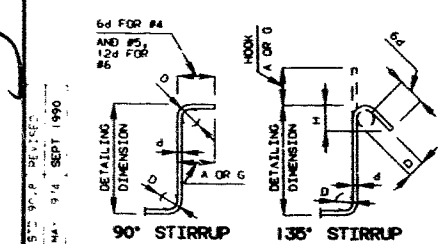
A-4862

COMPLETE BILL OF REINFORCING STEEL. Table with columns: NO., RED'D., MARK NO., SIZE MARK, LOCATION, ABUT. NO., DIMENSIONS (B, C, D, E, F, H, K), NOMINAL LENGTH, ACTUAL LENGTH, WEIGHT.

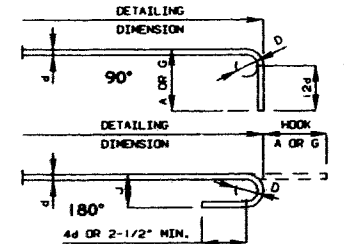
COMPLETE BILL OF REINFORCING STEEL. Table with columns: NO., RED'D., MARK NO., SIZE MARK, LOCATION, ABUT. NO., DIMENSIONS (B, C, D, E, F, H, K), NOMINAL LENGTH, ACTUAL LENGTH, WEIGHT.



349 370 (handwritten vertical note)

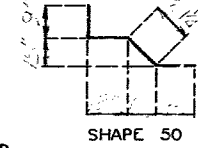


STIRRUP HOOK DIMENSIONS. GRADES 40 - 50 - 60 KSI. Table listing dimensions for various bar sizes (4, 5, 6, 8) and hook angles (90°, 135°).



END HOOK DIMENSIONS. Table listing dimensions for various bar sizes (4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 18) and hook angles (90°, 180°).

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



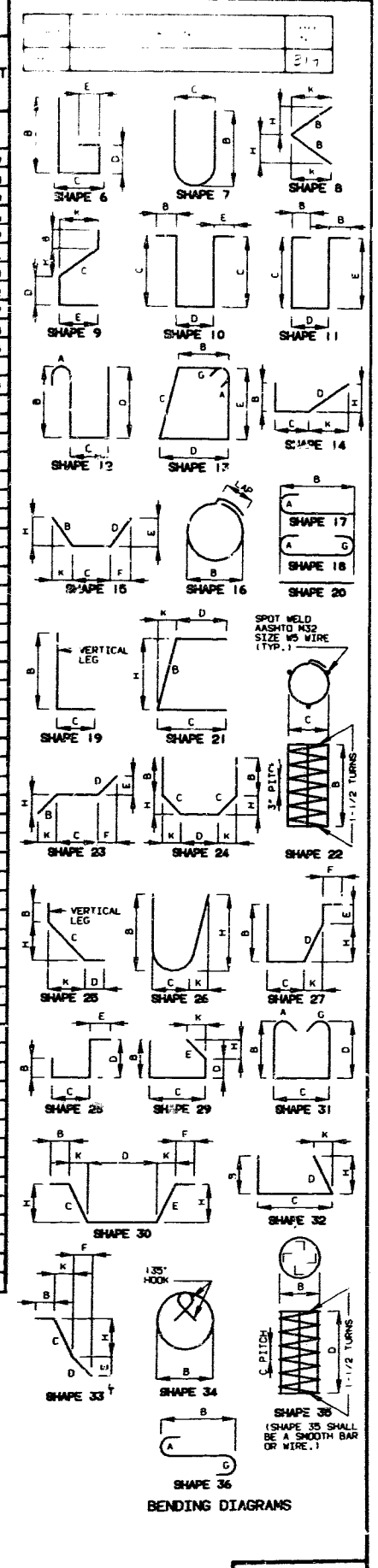
DATE: 9/4 SEPT 1990. CHECKED JAN 1991.

COMPLETE BILL OF REINFORCING STEEL

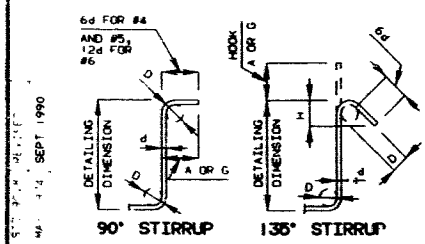
Table with columns: NO. RED'D., MARK NO., LOCATION, EPOXY, SHAPE NO., STIRRUP, DIMENSIONS (B, C, D, E, F, H, K), NOMINAL LENGTH, ACTUAL LENGTH, WEIGHT. Rows include items like WALL 'A', WING, BEAM, and FOOTING.

COMPLETE BILL OF REINFORCING STEEL

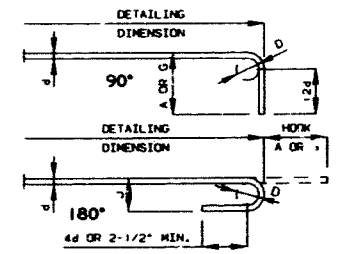
Table with columns: NO. RED'D., MARK NO., LOCATION, EPOXY, SHAPE NO., STIRRUP, DIMENSIONS (B, C, D, E, F, H, K), NOMINAL LENGTH, ACTUAL LENGTH, WEIGHT. Rows include items like BRICK LEDGE, BEAM, COLUMNS, and FOOTING.



Handwritten notes and signatures on the left margin.



STIRRUP HOOK DIMENSIONS table with columns for BAR SIZE, D (IN.), and hook dimensions for 90° and 135° hooks.



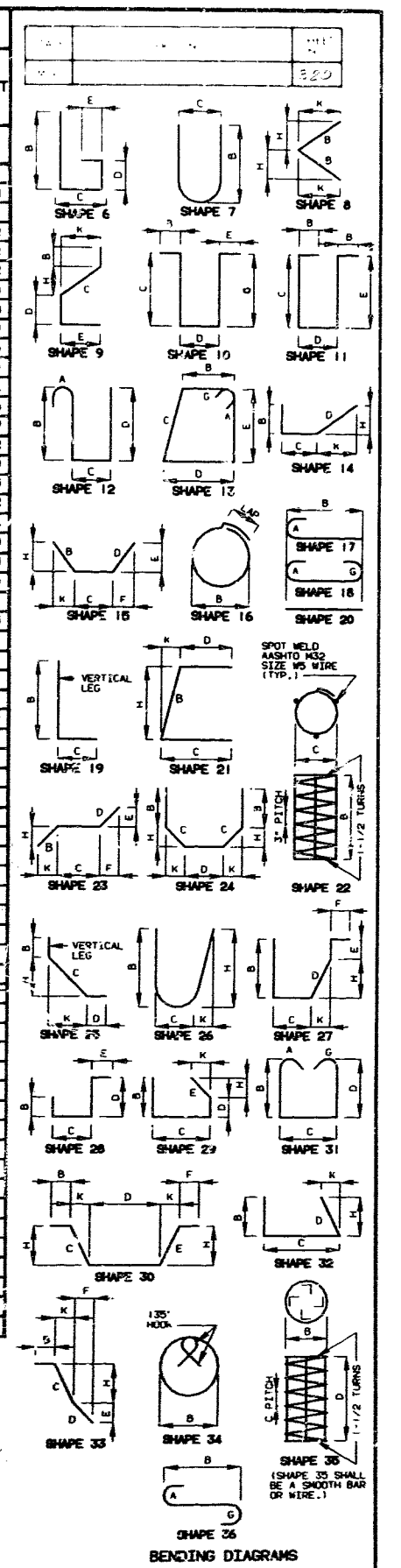
END HOOK DIMENSIONS table with columns for BAR SIZE, D (IN.), and hook dimensions for 180° and 90° hooks.

NOTE: ALL STANDARD HOOKS AND BENDS OTHER THAN 180 DEG. TO BE BENT WITH THE SAME PROCEDURE AS FOR 90 DEG. STD. HOOKS.

DETAILED JAN. 1991 CHECKED JAN. 1991

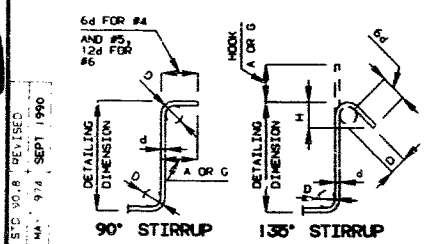
COMPLETE BILL OF REINFORCING STEEL table with columns for NO. REINFORCING, MARK NO., LOCATION, DIMENSIONS (B, C, D, E, F, H, K), NOMINAL LENGTH, ACTUAL LENGTH, WEIGHT.

COMPLETE BILL OF REINFORCING STEEL table with columns for NO. REINFORCING, MARK NO., LOCATION, DIMENSIONS (B, C, D, E, F, H, K), NOMINAL LENGTH, ACTUAL LENGTH, WEIGHT.

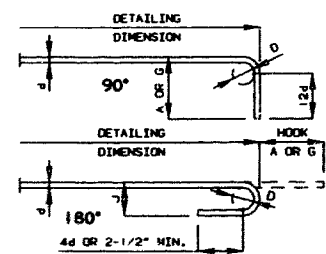


Handwritten vertical text: 35X 370

TWO ADDITIONAL 4# REINFORCING BARS ARE INCLUDED IN THE BAR BILL FOR TESTING.

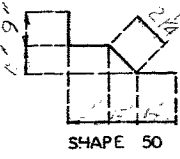


STIRRUP HOOK DIMENSIONS table with columns for BAR SIZE, HOOK A OR G, HOOK B OR G, APPROX. H.



END HOOK DIMENSIONS table with columns for BAR SIZE, ALL GRADES, 180° HOOKS, 90° HOOKS.

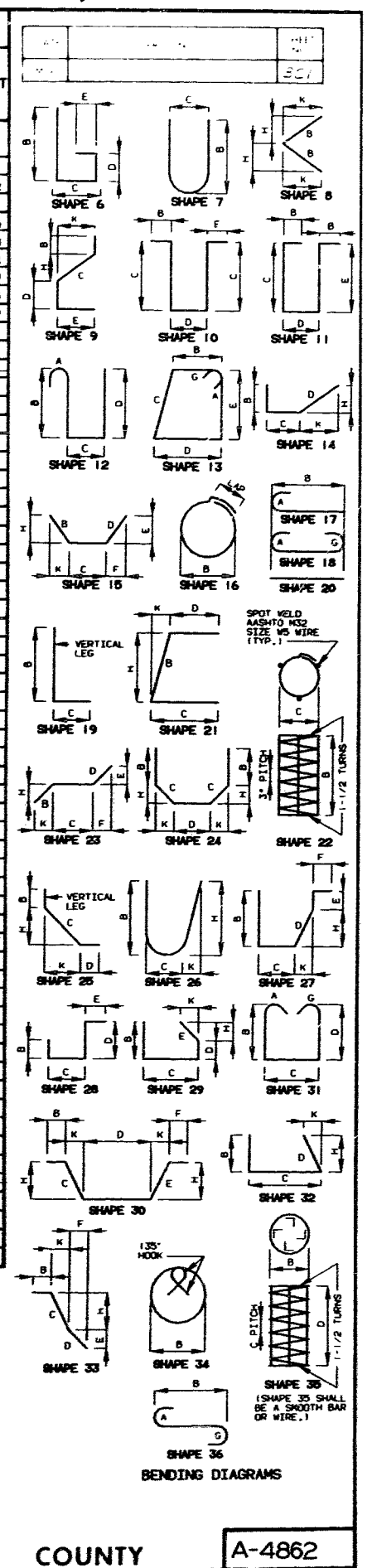
NOTE: ALL STANDARD HOOKS AND BENDS OTHER THAN 180 DEG. TO BE BENT WITH THE SAME PROCEDURE AS FOR 90 DEG. STD. HOOKS.



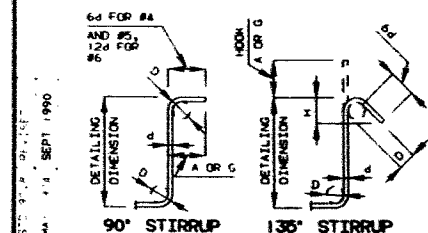
DETAILED JAN. 1991, CHECKED JAN. 1991

COMPLETE BILL OF REINFORCING STEEL. Table with columns: NO. RED'D., MARK NO., SIZE, LOCATION, EPOXY, SHAPE NO., STIRRUP, S, SLABS, X, STARTS, X, VARIES, V, NO. EACH, DIMENSIONS (B, C, D, E, F, H, K), NOMINAL LENGTH, ACTUAL LENGTH, WEIGHT.

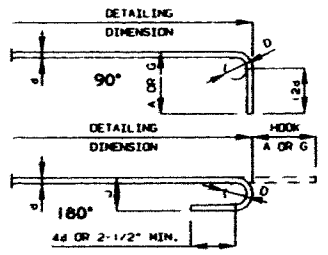
COMPLETE BILL OF REINFORCING STEEL. Table with columns: NO. RED'D., MARK NO., SIZE, LOCATION, EPOXY, SHAPE NO., STIRRUP, S, SLABS, X, STARTS, X, VARIES, V, NO. EACH, DIMENSIONS (B, C, D, E, F, H, K), NOMINAL LENGTH, ACTUAL LENGTH, WEIGHT.



TWO ADDITIONAL #7-58# #7-59 ARE INCLUDED IN THE BAR BILL FOR TESTING.



STIRRUP HOOK DIMENSIONS. Table with columns: BAR SIZE, D (IN.), 90° HOOK, 135° HOOK, APPROX. H.



END HOOK DIMENSIONS. Table with columns: BAR SIZE, D (IN.), ALL GRADES, 180° HOOKS, 90° HOOKS.

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.

DETAILED JAN. 1991 CHECKED JAN. 1991

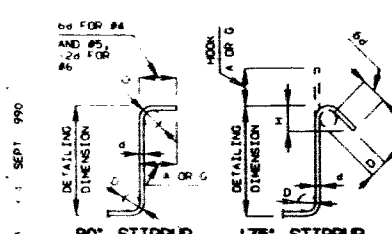
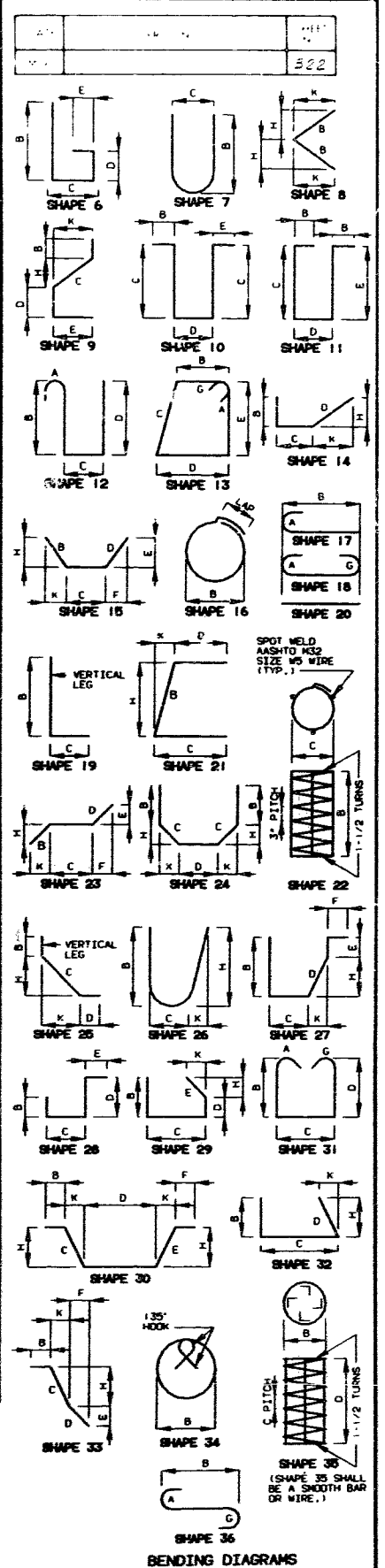
Sheet No. 63 of 64

COMPLETE BILL OF REINFORCING STEEL

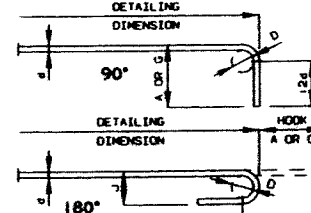
Table with columns: NO. RED'D., MARK NO., LOCATION, DIMENSIONS (B, C, D, E, F, H, K), NOMINAL LENGTH, ACTUAL LENGTH, WEIGHT. Includes items 20, 26, 6, 8, 24, 36, 2, 48, 60, 120, 60, 120, 8, 8, 8, 12, 24, 12, 16, 12, 30, 24, 72, 3, 6, 4, 24, 4, 12, 2.

COMPLETE BILL OF REINFORCING STEEL

Table with columns: NO. RED'D., MARK NO., LOCATION, DIMENSIONS (B, C, D, E, F, H, K), NOMINAL LENGTH, ACTUAL LENGTH, WEIGHT. Includes items 4, 4, 8, 4, 1, 5, 1, 5, 6, 4, 128, 149, 149, 21, 36, 18, 6, 3, 3, 3, 128, 128, 36, 18, 240, 8, 8, 48, 3, 45, 220, 40, 80.



STIRRUP HOOK DIMENSIONS GRADES 40 - 50 - 60 KSI. Table with columns: BAR SIZE, D, 90° HOOK, 135° HOOK.



END HOOK DIMENSIONS ALL GRADES. Table with columns: BAR SIZE, D, 180° HOOKS, 90° HOOKS.

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. EA. = 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. PAYMENTS 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) = Fy 60,000 PSI.

Handwritten '353' and 'BR'

DATE: JAN. 1990 CHECKED: JAN. 1990

Sheet No. 64 + 64

STATE	PROJ. NO.	SHEET NO.
MD.		201

FINAL PLAN

GENERAL NOTES:

DESIGN SPECIFICATIONS: A.A.S.H.T.O.-1989
LOAD FACTOR DESIGN
A.A.S.H.T.O.-1983 GUIDE SPECIFICATIONS
FOR SEISMIC DESIGN
SEISMIC PERFORMANCE CATEGORY A

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

DESIGN UNIT STRESSES:
CLASS B CONCRETE (SUBSTRUCTURE) F'C=3,000 PSI.
CLASS 3I CONCRETE (PARAPET AND CURB) F'C=4,000 PSI.
CLASS B2 CONCRETE (SUPERSTRUCTURE EXCEPT PRESTRESSED GIRDERS AND PARAPET AND CURB) F'C=4,000 PSI.
CLASS A1 CONCRETE F'C=5,000 PSI. PRECAST CONCRETE (SEE SPECIAL PROVISIONS)
REINFORCING STEEL (GRADE 60) FY=60,000 PSI.
STRUCTURAL CARBON STEEL FY=36,000 PSI.
STAINLESS STEEL (A.S.T.M. A276) FY=40,000 PSI.
STRUCTURAL STEEL TUBING (A.S.T.M. A-500) GRADE B FY=46,000 PSI.
STEEL PILE FB=9,000 PSI.
FOR PRESTRESSED GIRDER STRESSES, SEE SHEET NO.32.

FABRICATED STEEL CONNECTION:
FIELD CONNECTIONS, HIGH STRENGTH BOLTS 3/4"Ø, HOLES 13/16"Ø,
EXCEPT AS NOTED.

REINFORCING STEEL:
MINIMUM CLEARANCE TO REINFORCING STEEL SHALL BE 1 1/2", UNLESS OTHERWISE SHOWN.
ALL REINFORCING BARS IN TOPS OF 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 DUROMETER NEOPRENE PADS.

PAINT:
FOR PAINTING OF STRUCTURAL STEEL AND ORNAMENTAL STEEL SEE SPECIAL PROVISIONS.
AREAS TO BE ENCASED IN END BENT CONCRETE SHALL BE PAINTED ONE COAT OF SYSTEM C PRIMER AND SCRATCHED OR DAMAGED SURFACES ARE TO BE TOUCHED UP IN THE FIELD BEFORE CONCRETE IS POURED.

JOINT FILLER:
ALL JOINT FILLER SHALL MEET THE REQUIREMENTS OF STD. SPEC. 1057.2.4,
EXCEPT AS NOTED.
NOTE: ALL STEEL SHALL BE A-36 EXCEPT AS NOTED.

ESTIMATED QUANTITIES				
ITEM		SUBSTR.	SUPERSTR.	TOTAL
CLASS I EXCAVATION	CU. YD.	2361.5		2361.5
STRUCTURAL STEEL PILE (10")	LIN. FT.	441		441
STRUCTURAL STEEL PILES (12")	LIN. FT.	3174		3174
PREBORE FOR PILING	LIN. FT.	2085		2085
CLASS B CONCRETE (SUBSTR.)	CU. YD.	995.1		995.1
PROTECTIVE COATING-CONCRETE BENTS(DELETERIOUS AGENTS)	LUMP SUM			
SLAB ON CONCRETE I-GDR.	SQ.YDS.		877	877
LEFT PARAPET AND CURB	LIN.FT.		146	146
RIGHT CURB AND PLANTER WALL	LIN.FT.		128	128
RIGHT PLANTER WALL	LIN.FT.		118	118
PLANTER WALLS AT END ABUTMENTS	LIN.FT.		50	50
WING WALL AT ABUTMENT NO. 1	LIN. FT.		46	46
LAMINATED NEOPRENE BEARING PADS	EACH		14	14
COMPRESSION EXP. JT. SEAL	LIN. FT.		92	92
PRESTRESSED CONCRETE I-GDR. (60' SPAN)	EACH		14	14
REINFORCING STEEL (GRADE 60)	LB.	93,220		93,220
REINFORCING STEEL (GRADE 60) EPOXY	LB.	4780		4780
PLANTER LIGHTING ON STRUCTURE	LUMP SUM			
LIGHTING CONDUIT(2"Ø)	LUMP SUM			
FABRICATED STRUCTURAL CARBON STEEL(MISC.)	LB.		12,050	12,050
PLANTER DRAIN SYSTEM	EACH			
VERTICAL DRAINS AT END ABUTMENTS	EACH	2		2
PAINTING	LUMP SUM			
PEDESTRIAN HANDRAIL	LIN.F		42	42
PRECAST COLUMN	EACH		20	20
TRELLIS	LUMP SUM			
MASONRY PROTECTION SYSTEM	LUMP SUM			
GRAFFITI PROTECTION SYSTEM	LUMP SUM			
FASCIA BRICK, CONCRETE BLOCK AND CMU BLOCK	SG. FT.	5760		5760
ORNAMENTAL FENCE PANEL (8'-11-1/2")	EACH		14	14
ORNAMENTAL FENCE PANEL (8'-1")	EACH		4	4
SIDEWALK PAVING BRICK	SO.FT.		0	0
LAMINATED NEOPRENE BRG PADS (P/S STRUCTURE)	EACH		14	14
CONTINGENT ITEMS :				
PILE TIP REINF.	EACH	173		173

THE COST OF FURNISHING, FABRICATING AND INSTALLING LAMINATED NEOPRENE BEARING PADS, COMPLETE-IN-PLACE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR LAMINATED NEOPRENE BEARING PADS PER EACH. PAYMENT FOR PARAPET AND CURB AND PLANTER WALL SHALL INCLUDE BRICK VENEER, PRECAST CAP, REINFORCING STEEL, AND CONCRETE COMPLETE-IN-PLACE, PER LIN. FT.

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

THE COST OF PAINTING FASCIA GIRDER, PED. RAIL, TRELLIS AND ORNAMENTAL FENCE WILL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR PAINTING LUMP SUM.(SEE SPECIAL PROVISIONS).

FOR SIDEWALK PAVING BRICK REQUIREMENTS SEE SPECIAL PROVISIONS.

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

BENT NO.	PILE DATA							
	1	WALL "A"		2	3	WALL "E"		
PILE TYPE AND SIZE	HP12x53	HP12x53		HP10x42	HP12x53	HP12x53		
NUMBER	48	8	5	5	38	56	8	5
APPROXIMATE LENGTH FT.	14	19	30	34	12	14	19	30
DESIGN BEARING TONS	69	70	25	18	52	70	56	23
HAMMER ENERGY REQUIRED FT.-LBS.	17,000	17,200	7,000	7,000	12,200	17,200	13,800	7,000

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.
MANUFACTURED PILE POINT SHALL BE USED ON ALL PILES IN THIS STRUCTURE.
SEE SPECIAL PROVISIONS.

PREBORE FOR PILES AT ABUT. NO.1, BENT NO. 2, AND ABUT. NO. 3 TO ELEVATIONS 900.0, 898.0, AND 901.0 RESPECTIVELY.

TYPE OF SLAB	ESTIMATED QUANTITIES FOR ALTERNATE SLABS		CONC. (CU. YD.)
	REINF. EPOXY (LBS.)	PLAIN	
CAST-IN-PLACE CONVENTIONAL FORMS	68,250	2230	236.8
PRECAST PANEL FORMS	62,550	2230	215.6

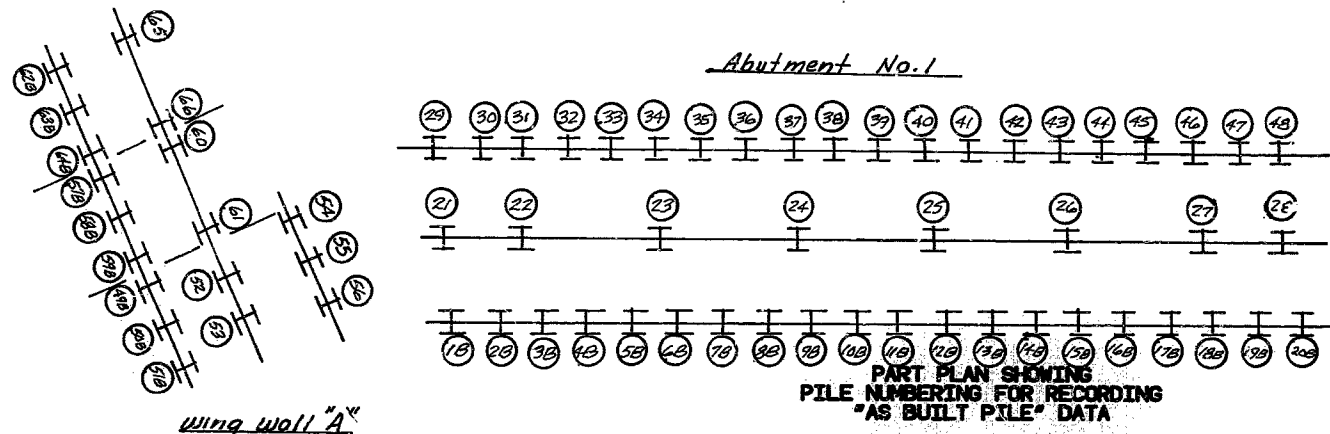
NOTE: THE TABLE OF ESTIMATED QUANTITIES FOR ALTERNATE SLABS REPRESENTS THE QUANTITIES USED BY THE STATE IN PREPARING THE COST ESTIMATE FOR CONCRETE SLABS. VARIATIONS MAY BE ENCOUNTERED IN THESE ESTIMATED QUANTITIES BUT THESE VARIATIONS CANNOT BE USED FOR AN ADJUSTMENT IN THE CONTRACT UNIT PRICE PER SQUARE YARD OF ALTERNATE SLAB USED.
SEE SPECIAL PROVISIONS FOR ALTERNATE METHODS OF FORMING SLABS

PRECAST PANEL QUANTITIES ARE BASED ON SKEWED END PANELS.

• BASED ON MINIMUM TOP FLANGE THICKNESS AND MINIMUM JOINT FILLER THICKNESS.

B.M. ELEV. 942.13 CURB INSIDE WING EAST AND EB MEYER BRIDGE

STATE	PROJ. No.	SHEET NO.
MO.	<i>E.A.-71-4 (56)</i>	<i>261A</i>



376

"AS BUILT PILE" DATA						
PILE NO.	LENGTH IN PLACE (FT.)	COMPUTED BEARING (TONS)	SPLICE	PILE TIP	PRE-BORE	REMARKS
1B	14	159.1	8	1	10	All piling driven to Practical Refusal
2B	14	143.1	8	1	10	plan batter
3B	14	159.1	8	1	10	HP 12 x 53#
4B	14	143.1	8	1	10	
5B	14	159.1	8	1	10	
6B	14	150.7	8	1	10	
7B	14	150.7	8	1	10	
8B	14	143.1	8	1	10	
9B	14	159.1	8	1	10	
10B	14	150.7	8	1	10	
11B	14	159.1	8	1	10	
12B	14	143.1	8	1	10	
13B	14	136.3	8	1	10	
14B	14	143.1	8	1	10	
15B	14	143.1	8	1	10	
16B	14	143.1	8	1	10	
17B	14	143.1	8	1	10	
18B	14	143.1	8	1	10	
19B	14	143.1	8	1	10	
20B	14	136.3	8	1	10	
21	13	173.3	8	1	10	
22	13	173.3	8	1	10	
23	13	141.8	8	1	10	
24	14	164.2	8	1	10	
25	14	173.3	8	1	10	
26	14	164.2	8	1	10	
27	14	173.3	8	1	10	
28	14	156.0	8	1	10	
29	14	173.3	8	1	10	
30	14	173.3	8	1	10	
31	13	173.3	8	1	10	
32	14	164.2	8	1	10	
33	13	173.3	2	1	10	
34	13	141.8	8	1	10	
35	13	156.0	8	1	10	
36	14	164.2	8	1	10	
37	14	183.5	8	1	10	
38	14	156.0	8	1	10	

"AS BUILT PILE" DATA						
PILE NO.	LENGTH IN PLACE (FT.)	COMPUTED BEARING (TONS)	SPLICE	PILE TIP	PRE-BORE	REMARKS
39	14	173.3	8	1	10	
40	13	141.8	8	1	10	
41	13	141.8	8	1	10	
42	13	173.3	8	1	10	
43	13	141.8	8	1	10	
44	14	141.8	8	1	10	
45	13	141.8	8	1	10	
46	13	156.0	8	1	10	
47	14	156.0	8	1	10	
48	13	173.3	8	1	10	
49B	19	159.1	8	1	15	
50B	19	143.1	8	1	15	
51B	19	159.1	8	1	15	
52	18	156.0	8	1	15	
53	19	173.3	8	1	15	
54	18	173.3	8	1	15	
55	18	173.3	8	1	15	
56	19	173.3	R	1	15	
57B	31	89.5		1	27	
58B	31	79.5		1	27	
59B	30	119.3		1	27	
60	29	97.5		1	27	
61	29	111.4		1	27	
62B	34	89.5		1	31	
63B	34	71.6		1	31	
64B	34	79.5		1	31	
65	33	156.0		1	31	
66	33	156.0		1	31	
	1125		448	66	890	sub total

"AS BUILT PILE" DATA			
PILE NO.	LENGTH IN PLACE (FT.)	COMPUTED BEARING (TONS)	REMARKS

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: THIS SHEET TO BE COMPLETED BY MHTD CONSTRUCTION PERSONNEL.

MISC. PILES IN PLACE, A
PILES IN PLACE
MAY 1992

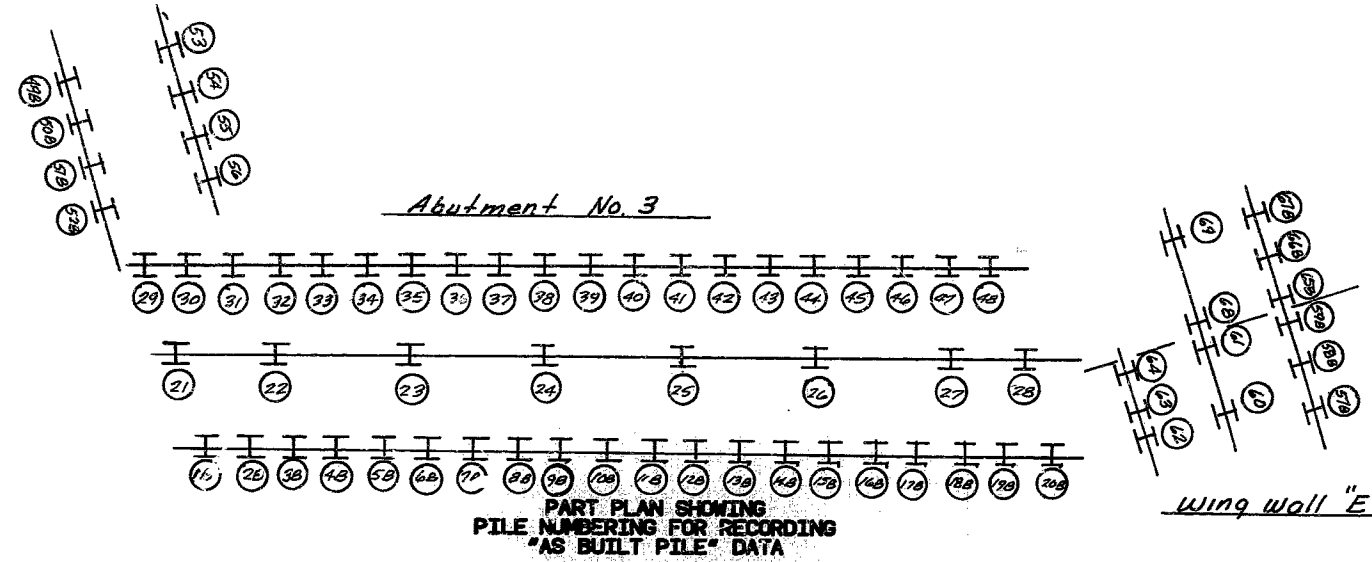
DETAILED 11-24-92
CHECKED 19

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

SHEET NO. 3A OF 64.

COUNTY A-4862

STATE	PROJ. NO.	SHEET NO.
MD.	E.A.-71-4(56)	2613



PILE NO.	LENGTH IN PLACE (FT.)	COMPUTED BEARING (TONS)	SPLICE	PILE TIP	PRE-BORE	REMARKS
1B	14	168.4	8	1	10	All piles driven to practical refusal
2B	14	136.3	8	1	10	plan batter
3B	14	136.3	8	1	10	HP 12X53 ²²
4B	14	136.3	8	1	10	
5B	14	168.4	8	1	10	
6B	14	150.7	8	1	10	
7B	14	159.1	8	1	10	
8B	15	150.7	8	1	10	
9B	15	136.3	8	1	10	
10B	15	159.1	8	1	10	
11B	15	150.7	8	1	10	
12B	15	136.3	8	1	10	
13B	15	143.1	8	1	10	
14B	15	136.3	8	1	10	
15B	15	136.3	8	1	10	
16B	15	150.7	8	1	10	
17B	15	150.7	8	1	10	
18B	15	143.1	8	1	10	
19B	15	143.1	8	1	10	
20B	15	143.1	8	1	10	
21	14	156.0	8	1	10	
22	14	173.3	8	1	10	
23	13	173.3	8	1	10	
24	14	164.2	8	1	10	
25	14	173.3	8	1	10	
26	14	135.7	8	1	10	
27	14	141.8	8	1	10	
28	14	135.7	8	1	10	
29	13	164.2	8	1	10	
30	14	148.6	8	1	10	
31	14	148.6	8	1	10	
32	14	135.7	8	1	10	
33	13	135.7	8	1	10	
34	14	141.8	8	1	10	
35	14	135.7	8	1	10	
36	14	135.7	8	1	10	
37	14	164.2	8	1	10	
38	14	141.8	8	1	10	

PILE NO.	LENGTH IN PLACE (FT.)	COMPUTED BEARING (TONS)	PILE	PRE-BORE	REMARKS
39	13	156.0	8	1	10
40	13	141.8	8	1	10
41	14	173.3	8	1	10
42	14	156.0	8	1	10
43	14	148.6	8	1	10
44	14	164.2	8	1	10
45	14	141.8	8	1	10
46	14	135.7	8	1	10
47	14	141.8	8	1	10
48	14	156.0	8	1	10
49B	14	143.1	8	1	10
50B	14	143.1	8	1	10
51B	14	143.1	8	1	10
52B	14	150.7	8	1	10
53	14	141.8	8	1	10
54	14	156.0	8	1	10
55	14	141.8	8	1	10
56	14	156.0	8	1	10
57B	19	110.1	8	1	15
58B	19	110.1	8	1	15
59B	19	122.3	8	1	15
60	18	109.1	8	1	15
61	18	120.0	8	1	15
62	19	133.3	8	1	15
63	19	120.0	8	1	15
64	18	120.0	8	1	15
65B	30	78.7	1	27	
66B	30	91.8	1	27	
67B	30	91.8	1	27	
68	29	100.0	1	27	
69	29	100.0	1	27	
1089		512	69	815	Sub Total

PILE NO.	LENGTH IN PLACE (FT.)	COMPUTED BEARING (TONS)	REMARKS

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: THIS SHEET TO BE COMPLETED BY MHTD CONSTRUCTION PERSONNEL.

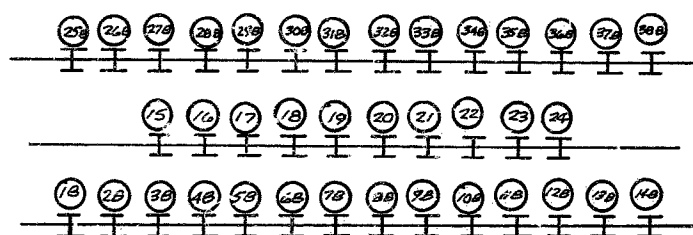
MISC. PILES IN PLACE REVISOR: 377
 MAY 1992
 CHECKED 11-25-19 92

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

SHEET NO. 38 OF 64

COUNTY A-4862

STATE	PROJ. NO.	SHEET NO.
MO.	FA-71-4 (56)	261C



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

"AS BUILT PILE" DATA						
PILE NO.	LENGTH IN PLACE (FT.)	COMPUTED BEARING (TONS)	SPLICE	PILE TIP	PRE-BORE	REMARKS
1B	12	127.6		1	10	All pile driven to Practical Refusal
2B	11	109.3		1	10	plan batter
3B	11	99.8		1	10	HP 10 x 42**
4B	12	114.8		1	10	
5B	12	114.8		1	10	
6B	12	114.8		1	10	
7B	12	120.9		1	10	
8B	12	114.8		1	10	
9B	12	114.8		1	10	
10B	12	114.8		1	10	
11B	11	99.8		1	10	
12B	11	99.8		1	10	
13B	11	104.4		1	10	
14B	11	97.3		1	10	
15	11	114.3		1	10	
16	12	104.3		1	10	
17	12	120.0		1	10	
18	12	133.3		1	10	
19	12	120.0		1	10	
20	11	114.3		1	10	
21	11	109.1		1	10	
22	11	120.0		1	10	
23	11	109.1		1	10	
24	11	109.1		1	10	
25B	11	114.8		1	10	
26B	12	104.4		1	10	
27B	12	104.4		1	10	
28B	12	127.6		1	10	
29B	12	104.4		1	10	
30B	11	114.8		1	10	
31B	12	114.8		1	10	
32B	12	127.6		1	10	
33B	12	120.9		1	10	
34B	12	104.4		1	10	
35B	11	99.8		1	10	
36B	12	104.4		1	10	
37B	12	104.4		1	10	
38B	12	104.4		1	10	

"AS BUILT PILE" DATA						
PILE NO.	LENGTH IN PLACE (FT.)	COMPUTED BEARING (TONS)	SPLICE	PILE TIP	PRE-BORE	REMARKS
	441		0	38	390	sub total
	0					
	441					Lin. Ft. Total 10x12" Pile
	1125					} sheet #3A
	448			66	890	
	1089					} sheet #3B
	512			69	815	
	3174					Lin. Ft. total 12x53" pile
				173		total Tips
					2085	Lin. Ft. Total Pre Bore

"AS BUILT PILE" DATA			
PILE NO.	LENGTH IN PLACE (FT.)	COMPUTED BEARING (TONS)	REMARKS

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: THIS SHEET TO BE COMPLETED BY MHTD CONSTRUCTION PERSONNEL.

378

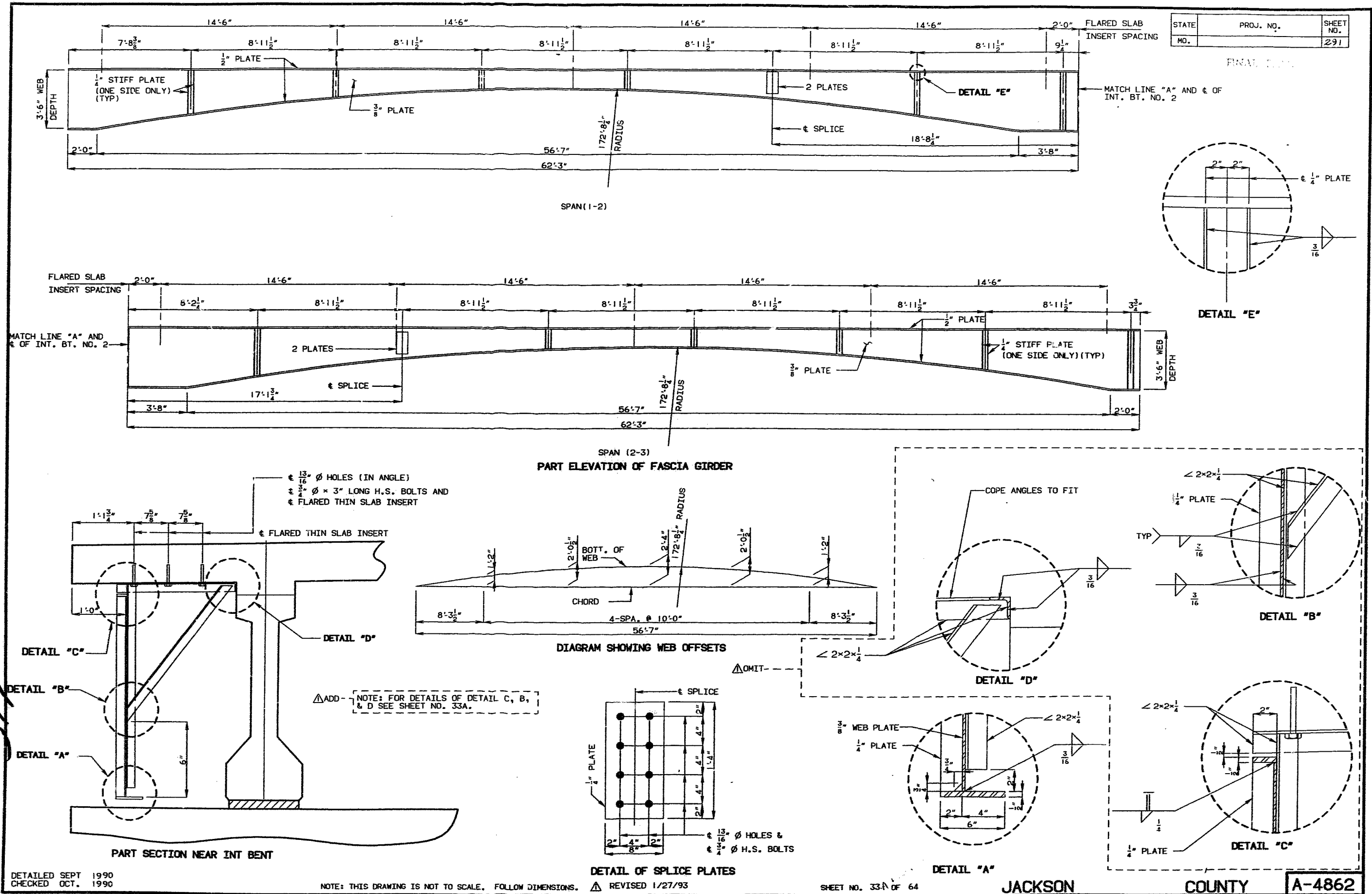
MISC. PILES IN PLACE
 PILES IN PLACE
 MAY 1992

DETAILED 11-25-1992
 CHECKED 19

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

SHEET NO. 3CA of 64

COUNTY A-4862



STATE	PROJ. NO.	SHEET NO.
MO.		291

DETAILED SEPT 1990
CHECKED OCT. 1990

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

REVIS 1/27/93

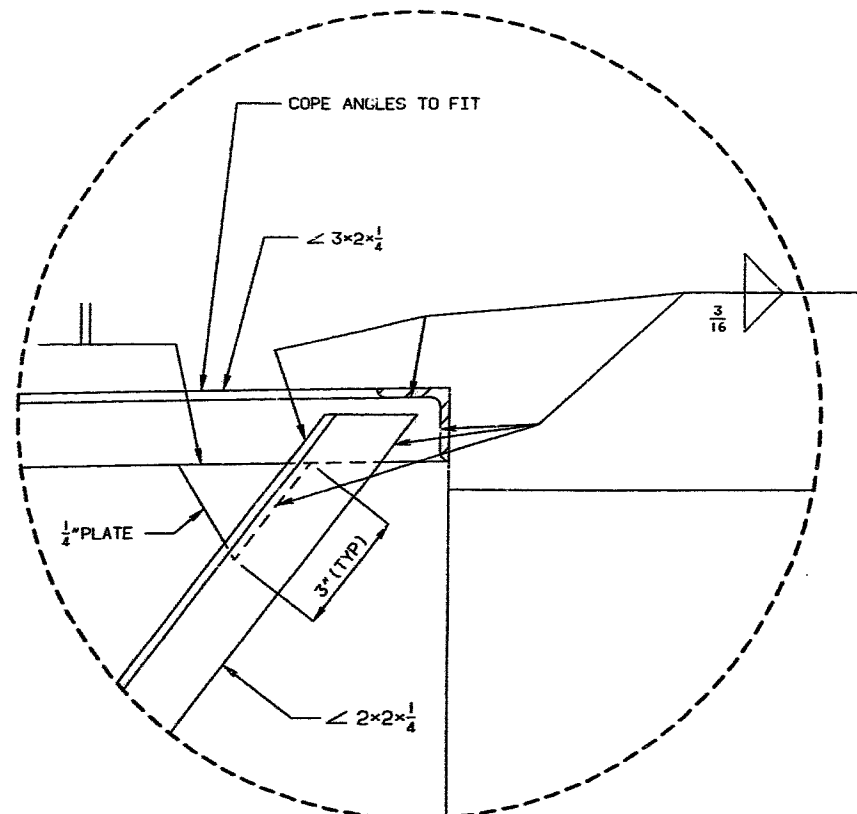
SHEET NO. 33 OF 64

JACKSON

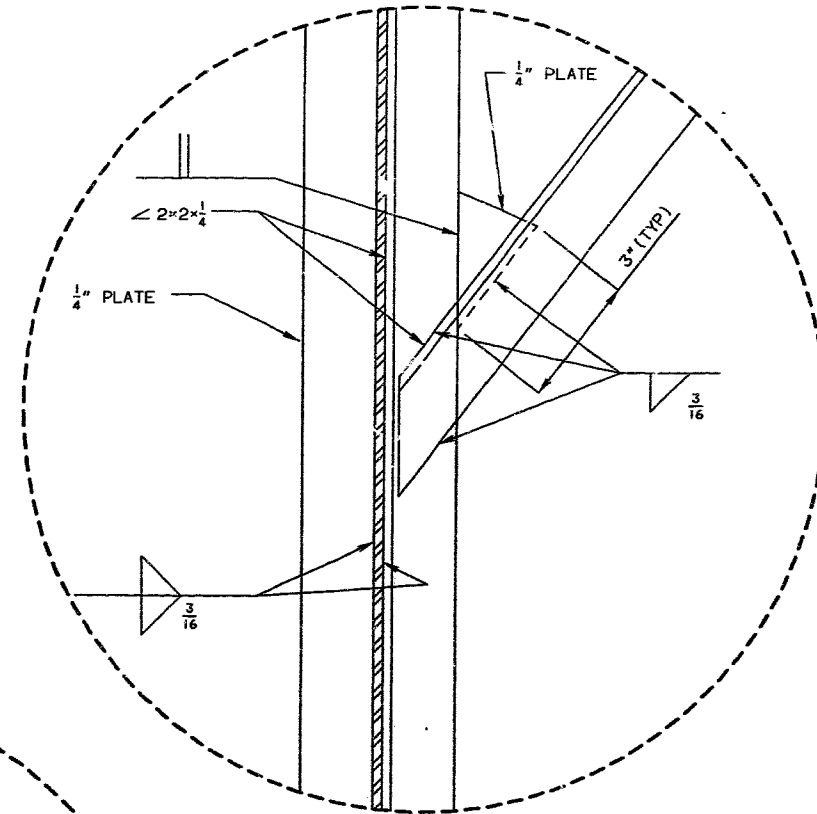
COUNTY

A-4862

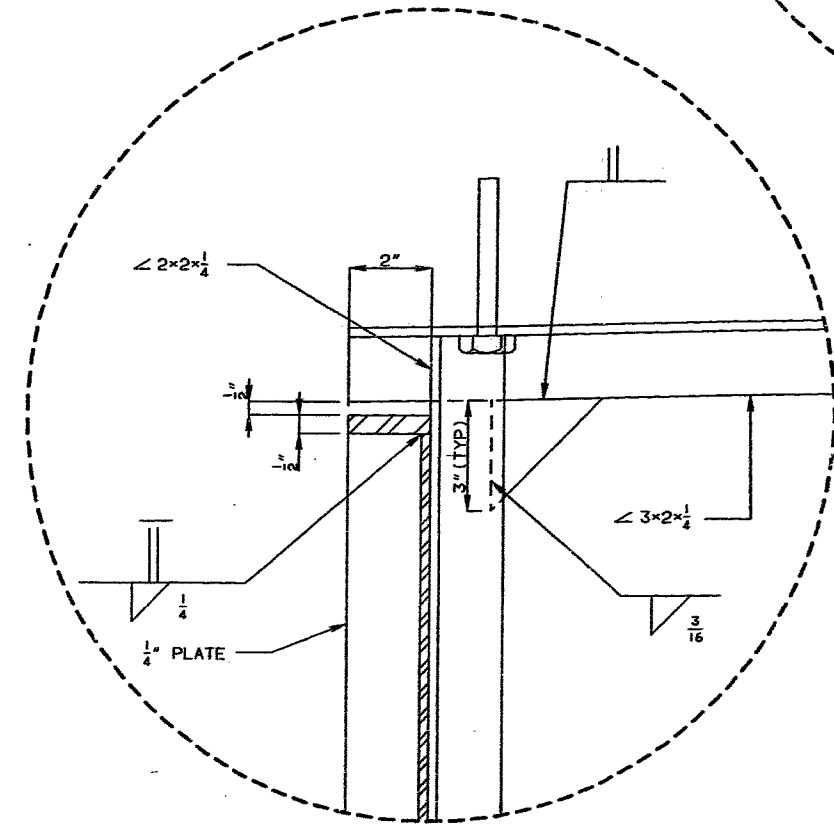
STATE	PROJ. NO.	SHEET NO.
MD.		29/A



DETAIL "D"



DETAIL "B"



DETAIL "C"

NOTE: FOR LOCATION DETAILS B, C, AND D, SEE SHEET NO.33

380

DETAILED JAN. 1993
CHECKED JAN. 1993

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS. Δ REVISED 1/27/93

SHEET NO. 33A OF 64

JACKSON

COUNTY

A-4862

