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STATE OF ALABAMA HIGHWAY DEPARTMENT

PLAN AND PROFILE OF PROPOSED STATE HIGHWAY PROJECT NO. I-IR-IDR-10-1(84)24 MOBILE COUNTY

ON I-10 STA. 540+00 TO STA. 660+06.82

SCALES PLAN 1 INCH = 100 FT.
PROFILE HORIZ. 1 INCH = 100 FT. VER. 1 INCH = 5 FT.
LAYOUT, 1 IN. = 5,280 FT.

IN PLACE I-OVER BRIDGES (TO BE WIDENED)

BEGIN STA. 555+41.45 TO END STA. 558+71.29	DUAL BRIDGES—329.84 LIN. FT. (BROAD ST.)	④
BEGIN STA. 591+16.85 TO END STA. 593+52.66	DUAL BRIDGES—235.81 LIN. FT. (TENN. ST.)	⑤
BEGIN STA. 597+19.36 TO END STA. 598+81.05	DUAL BRIDGES—161.69 LIN. FT. (WARREN-LAWRENCE ST.)	⑥
BEGIN STA. 607+73.22 TO END STA. 609+51.33	DUAL BRIDGES—178.11 LIN. FT. (VIRGINIA ST.)	⑦
BEGIN STA. 621+66.47 TO END STA. 623+43.66	DUAL BRIDGES—177.19 LIN. FT. (TEXAS ST.)	⑧

TOTAL EFFECT = 1082.64 LIN. FT.

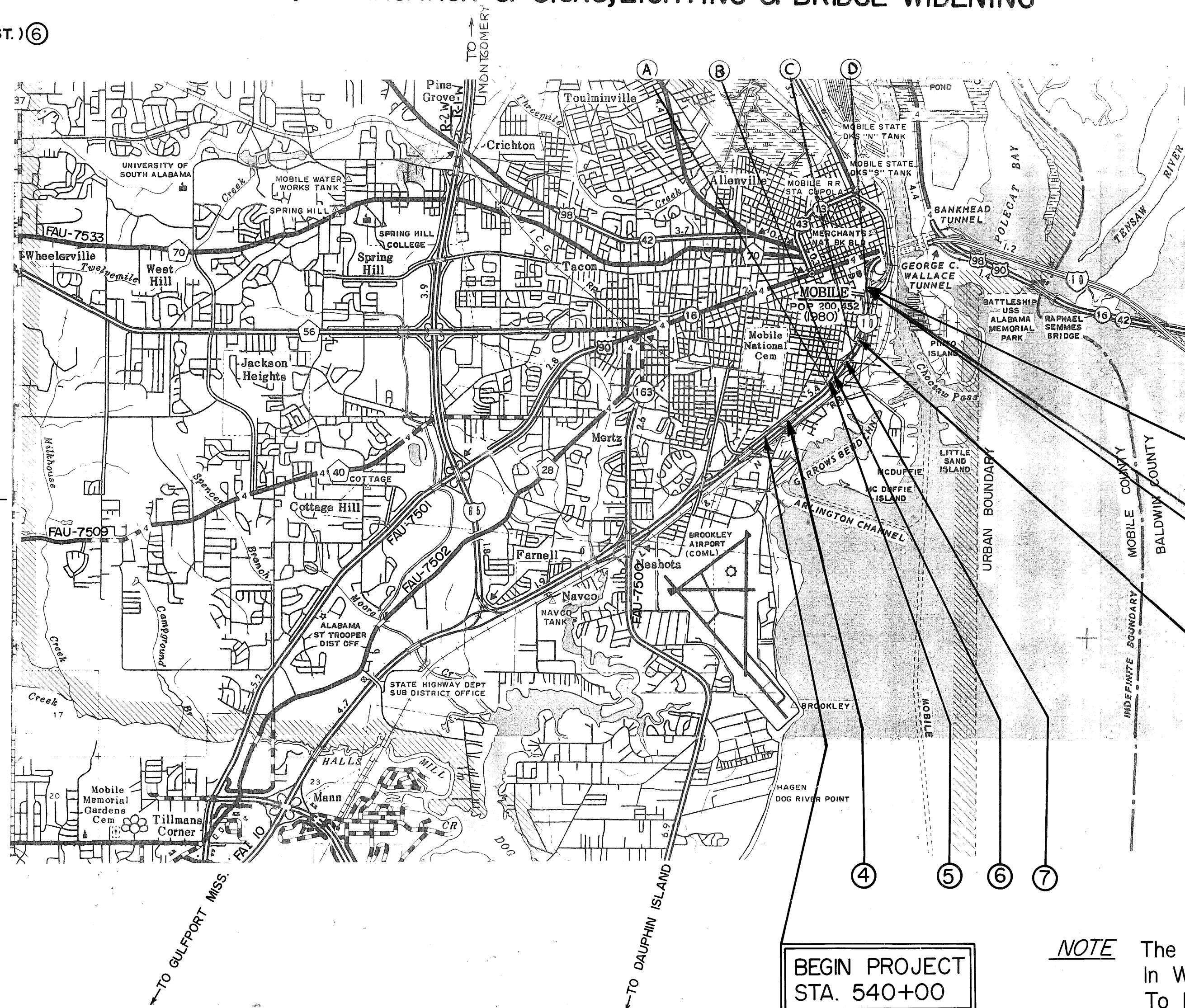
"EQUATIONS"

④	STA. 590+86.21 BK = STA. 590+84.08 AH =	2.13 LIN. FT.
⑤	STA. 597+11.86 BK = STA. 597+11.68 AH =	0.18 LIN. FT.
⑥	STA. 614+67.29 BK = STA. 614+66.60 AH =	0.69 LIN. FT.
⑦	STA. 640+39.22 BK = STA. 646+50.00 AH =	-610.78 LIN. FT.

TOTAL EFFECT = -607.78 LIN. FT.

NO "EXCEPTIONS"

REMOVAL & REPLACEMENT OF CONCRETE PAVEMENT, ADDITIONAL LANES INSIDE & OUTSIDE, MODIFICATION OF SIGNS, LIGHTING & BRIDGE WIDENING



BEGIN PROJECT
STA. 540+00

END WORK STA.
48+00 WBR

END PROJECT
STA. 660+06.82

STA. 660+06.82 BK =
45+30.13 WBR AH

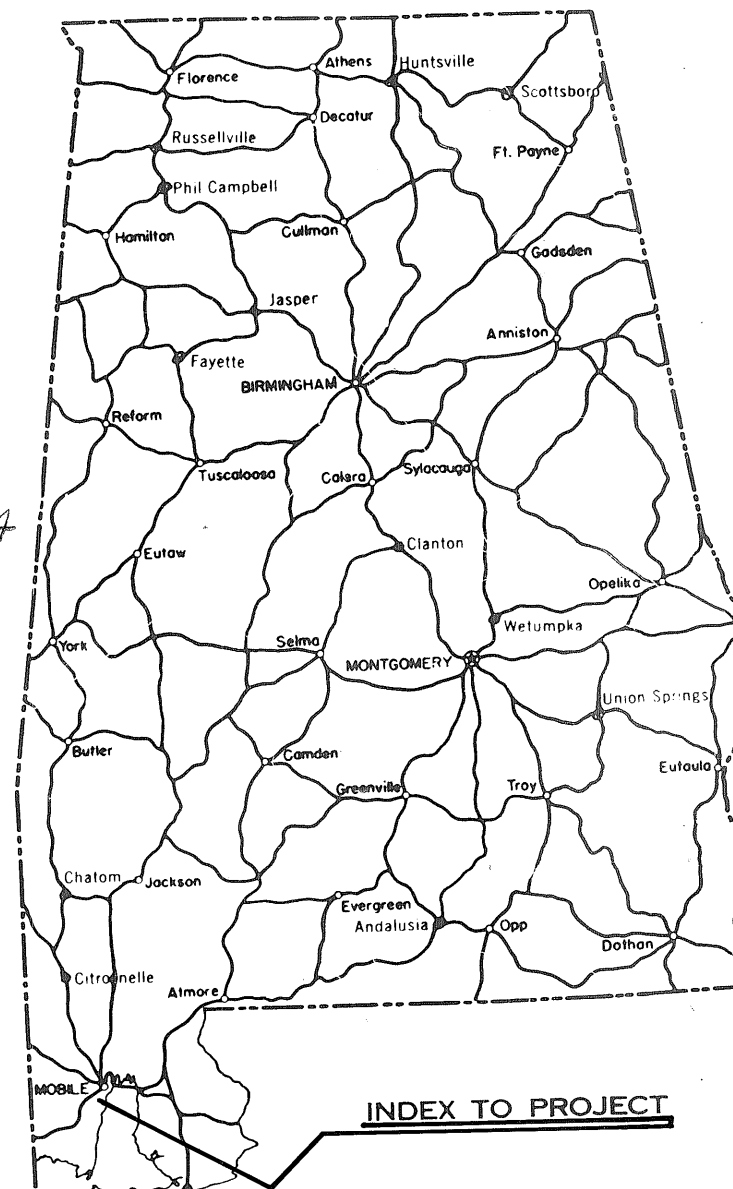
NOTE: PROJECT I-IR-IDR-10-1(84)24
AND PROJECT I-IR-IDR-10-1(83)20
ARE TO BE LET IN THE SAME
CONTRACT.

NOTE The Contractor Shall Notify The Railroad
in Writing 10 (Ten) Days Before Work Is
To Begin On This Project.

CONVENTIONAL SIGNS

STATE AND NATIONAL LINE	— — — — —	SHIP AND BARGE LINE	— — — — —
COUNTY LINE	— — — — —	INTRA-COASTAL WATERWAY	— — — — —
CITY OR TOWN BOUNDARY	— — — — —	POWER POLE	— — — — —
FENCE LINE	— — — — —	TELEPHONE OR TELEGRAPH POLE	— — — — —
WOOD	— — — — —	MARSH	— — — — —
BARBED WIRE	— — — — —	FAP OR FAS ROUTE	— — — — —
CHAIN LINK	— — — — —	RAILROAD	— — — — —
STONE WALL	— — — — —	RIGHT OF WAY LINE	— — — — —
NATIONAL FOREST BOUNDARY	— — — — —	PROPERTY LINE	— — — — —
MILITARY RESERVATION BOUNDARY	— — — — —	LEVEE	— — — — —
EXISTING CULVERT	— — — — —	GUARD RAIL	— — — — —
PROPOSED CULVERT	— — — — —	PROJECT CENTER LINE	— — — — —
BRIDGE	— — — — —		
NAVIGABLE STREAMS	— — — — —		

NOTE THE PROJECT NO. I-IR-IDR-10-1(84)24
AS INDICATED ON SHEET NO. 1 IS
THE CORRECT IDENTIFICATION
FOR THESE PLANS. IT SHALL BE
UNDERSTOOD THAT THIS NUMBER
SUPERSEDES PROJECT NO. I-IR-IDR-10-1(83)24
AS LISTED ON SHEET 1A THROUGH 159H



DESIGN DESIGNATION

ADT (1987)	53,000
ADT (2007)	93,300
K	10%
D	55%
T ADT	11%
V = 50 MPH (DESIGN SPEED)	
ACTUAL MINIMUM STOPPING SIGHT DISTANCE =	N/A

NOTE: THESE PLANS HAVE BEEN PREPARED TO CONFORM
WITH ALABAMA HIGHWAY DEPARTMENT STANDARD
SPECIFICATIONS DATED 1985.

SUBMITTED FOR APPROVAL

STATE OF ALABAMA HIGHWAY DEPARTMENT

APPROVED
HIGHWAY DIRECTOR

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED:

DIVISION ADMINISTRATOR DATE

PRELIMINARY PROJECT NO. I-IR-ID-1(84)
CODE NO. 4311-109-36-DID-001-075-472-2

TOTAL STATIONING OF PROJECT	12,006.82 FT.
EQUATIONS AND EXCEPTIONS	-607.78 FT.
NET LENGTH OF PROJECT	11,399.04 FT. = 2.158 MI.
NET LENGTH OF BRIDGES	1,082.64 FT. = 0.205 MI.
NET LENGTH OF ROADWAYS	10,316.40 FT. = 1.953 MI.

INDEX TO SHEETS CONTINUED

FEDERAL REGION NO.	STATE	PROJECT NUMBER	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	ALA.	I-IR-10-1 (84)	1987	1A	159-H

SHEET NO.

LISTING

"	"	9	OMIT
"	"	10	OMIT
"	"	11	OMIT
"	"	12	PAVING LAYOUT STA. 535+50 TO STA. 550+00
"	"	13	PAVING LAYOUT STA 550+00 TO STA 566+00
"	"	14	" " " 566+00 TO STA. 582+00
"	"	15	" " " 582+00 TO STA. 595+00
"	"	16	" " " 595+00 TO STA. 611+00
		17	" " " 611+00 TO STA. 625+00
		18	" " " 625+00 TO STA. 640+00
		19	" " " 640+00 TO STA. 660+00
		20	OMIT
		21	OMIT
		22	OMIT
		23	OMIT
		24	OMIT
		25-25I UTILITY SHEETS	
		26-26G DRAINAGE SHEETS	
		27-27R BRIDGE SHEETS OVER BROAD STREET	
		28-28U BRIDGE SHEETS OVER TENNESSEE STREET AND ILLINOIS CENTRAL GULF RAILROAD	
		29-29U BRIDGE SHEETS OVER WARREN-LAWRENCE CONNECTOR	
		30-30W BRIDGE SHEETS OVER VIRGINIA STREET	
		31-31Y BRIDGE SHEETS OVER TEXAS STREET	
		32-32A TEST BORING RECORD	
		33 INTERIOR JOINT REPAIR	
		34-34U LIGHTING DETAILS	
P		35-35R TRAFFIC STRIPING LAYOUT AND SIGN LAYOUT	
		36	OMIT
		37	DETAIL FOR MOUNTING WARNING SIGNS ON MEDIAN BARRIER
		38	SPECIAL PROJECT DETAIL BARRIER WITH LUMINAIRE MOUNTING DETAILS
		39	OMIT
		40	SPECIAL DWG. NO. BES-450-0 DETAILS OF BRIDGE END SLAB
		41	" " " GR-630-FD FLARE DETAIL AND WARRANTY CRITERIA FOR GUARDRAIL
		42	" " " GR-630-S GALVANIZED STEEL BEAM GUARDRAIL
		43-43B	" " " RPC-530 (3-SHEETS) DETAILS OF BEDDING OF PIPE
		44	" " " GA-630-8 DETAILS OF TYPE 8 GUARDRAIL END ANCHORS
		45	" " " GA-630-10 DETAILS OF TYPE 10 GUARDRAIL END ANCHORS
		46	" " " GA-630-13 DETAILS OF GUARDRAIL END ANCHOR TYPE 13
		47-47A	" " " GR-9A & GUARDRAIL END ANCHOR TY 3 (FOR INFORMATION PURPOSE ONLY)
		48	" " " PU-606 DETAILS FOR PIPE UNDERDRAIN INSTALLATION
		49	" " " 197-4L M SUPERELEVATION OF CURVES FOR FOUR (4) LANE HIGHWAYS
		50	" " " PM-705-1 PAVEMENT MARKERS
		51	" " " IHS-710-14 HIGHWAY SIGN MOUNTING FOR STANDARD SIGNS
		52	" " " B-107-1 BARRICADES TYPE I, TYPE II AND TYPE III
		53	" " " LCS-107 REQUIREMENTS FOR LIGHTING CONSTRUCTION SIGNS
		54	" " " T.C.D. 100 DETAILS FOR TRAFFIC CHANNELIZING DEVICES
		55	" " " T.C.M. 703 PAVEMENT LEGENDS AND MARKINGS
		56	" " " P.M.-705-2 APPLICATION OF PAVEMENT MARKERS
		57-57A	" " " P.M.-705-3 REFLECTORIZED MARKINGS

58	OMIT
59	OMIT
60	SPECIAL DWG. NO. ECN-659 EROSION CONTROL NETTING
61	" " " IPS-701-8 TRAFFIC STRIPING AUXILIARY LANES AND RAMPS
62	" " " IPS-701-5 TRAFFIC STRIPES FOR 6 LANE RURAL HIGHWAYS WITH PAVED SHOULDERS
63	OMIT
64	OMIT
65	SPECIAL DWG. NO. 623-XY DETAILS OF CONCRETE CURBS & CONCRETE CURB & GUTTER MOUNTABLE & BARRIER TYPES
66	" " " B-614 SLOPE PAVING ON SLOPES UNDER SEPARATION BRIDGES
67	" " " CPJ-450 PLAIN AND REINFORCED CEMENT CONC. PAVT. AND BRIDGE END SLAB JOINTS
68	" " " NC-623 GORE AT TERMINALS OF ENTRANCE & EXIT RAMPS. RURAL OR URBAN SECTIONS
69	" " " IPS-10(SC) DETAILS SHOWING NOSE GORE REQUIRED ADJACENT TO RECOVERY LANE & REQUIRED ADJACENT TO RECOVERY LANE
70	" " " GTE-629 CONCRETE MEDIAN BARRIER TYPE 6-A FOR USE WITH G-R-E-A-T SYSTEM (PORTABLE)
71	" " " GR-630-PP DETAIL OF GUARDRAIL FOR BRIDGE PIER PROTECTION ON EXISTING PROJ WITH SLOPES GREATER THAN 10:1
72	" " " J.B.-621-P PRE-CAST JUNCTION BOX-TYPE 1P, 2P & 5
73	" " " PNJB-629 PRE-CAST CONCRETE BARRIER TYPE-6
74-74A	" " " FE-619 DETAIL OF CONCRETE FLARED END SECTION W/GRATE FOR CONCRETE AND METAL PIPE
75	" " " S.W.-618 DETAILS OF SIDEWALKS
76	SPECIAL PROJECT DETAIL - STEEL PLATE ON CONC. MEDIAN BARRIER
77-77A	SPECIAL PROJECT DWG (2-SHTS) WIND VELOCITY CHART
78	SPECIAL PROJECT DETAIL INLET TYPE E3 AND E4 FOR USE WITH CONC. MEDIAN BARRIER
79	" " " CONC. MEDIAN BARRIER TREATMENT UNDERPASS PIERS
80	" " " DETAILS SHOWING LOCATION OF BASE PLATES & REQD JOINT FOR OVERHEAD SIGN SUPPORT TY 5 MEDIAN BARRIER
81	SPECIAL DWG. NO. 710-2 BEAM POST DETAILS BASE CONN. TY-1 FUSE PLATE
82	SPECIAL DWG. NO. CC-530 DETAILS OF CONC. COLLAR
83	" " " SS-654 SOD TERRACE OUTLETS & FLUMES
84	" " " EC-665-F DETAILS OF SILT FENCE
85	SPEC. DETAIL DETAILS OF TY. 2 MOD, TY. 4A MOD. CONC. BARRIER & TRANSITION ALSO DETAIL OF TY. 10 MOD. CONC. BARRIER
86	SPEC. DWG. NO. 710-3 BEAM POST DETAILS BASE CONN. TY-2 FUSE PLATE
87-87H	STD. DWG. NO. BRIDGE STANDARDS --- BGN-1, PSCL-1, TPI 2 SHEETS, I-100, I-131 3 SHEETS, LPS-1
88-88Z10	BRIDGE PLAN SHEETS FOR INFORMATION PURPOSES ONLY
89-89H	STANDARD HIGHWAY SIGNS - 1-9-10-11-21-22-23-24-25
90	SPEC. DWG. NO. I.F.-634 -- INDUSTRIAL FENCE
91	" " " C.S.P.-532 DETAILS OF CORRUGATED SLOTTED DRAIN PIPE 12"-30" DIAMETER
92	" " " JB-620-B DETAILS OF JUNCTION BOX FOR PIPES 15"-60" TYPE I (0'-10' FILL HEIGHT)
93-93B	" " " I.H.S.-710-4 (3-SHTS) MULTI-DIRECTIONAL BREAKAWAY BASE
94	" " " I.H.S.-710-11 ALUMINUM LAMINATED SIGNS
95	" " " IA-720-G DETAILS OF G-R-E-A-T SYSTEM-IMPACT ATTENUATOR
96	" " " IHS-710-24 MOUNTING FLAT SHT. ALUM. SIGNS ON EXTRUDED ALUMINUM STIFFENERS
97	" " " MP-710 DETAILS FOR MILEPOST ON 2 LANE OR 4 LANE HIGHWAY
98-125I	CROSS SECTIONS EBR STA. 541+50 ~ 660+19
125J-125K	OMIT
126-148	CROSS SECTIONS WBR STA 540+00 ~ 597+25.70
149-159F	CROSS SECTIONS WBR STA. 609+18.44 ~ 653+00
159G	CROSS SECTIONS MEDIAN STA. 655+50 ~ 660+00
159-H	SPEC. DWG. NO. IHS-710-19 DETAILS OF MOUNTING SIGN ON ROUND BREAKAWAY POST

P Add STD DWG 9/3/87.

FHWA REG.NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	AL	I-IR-10-1 (E4)	1987	35A	159 H

SUMMARY OF QUANTITIES

BRIDGE		ROADWAY		TOTAL
I-FUNDS	IR-FUNDS	I-FUNDS	IR-FUNDS	
			2313	2313
			3223	3223
		50	50	100
		476	4272	4748
		1500	500	2000
		5050	4605	9655
213100	515250			728350
2	8			10
	2			2
2	6			8
2	8			10
	2			2
2	6			8
3402	10235			13637
	2005			2005
5213	13325			18538
34830	113120			147950
1	1			2
893	2249			3142
1				1
1	1			1
	1			1
	1			1
	1			1
	1			1
	1			1
	1			1
	1			1
	4689			4689
1379	1379			2758
	49			49
		16	402	418
			77	77
			3	3
			42	42
		84	180	264
		4290	5616	9906
		0.22	0.28	0.50
		5628	6416	12044

ITEM NO.	UNIT	DESCRIPTION
416A-003	TON	BITUMINOUS CONCRETE WEARING SURFACE (MIX B)
416C-000	TON	BITUMINOUS CONCRETE PLANT MIX, LEVELING
416D-000	TON	BITUMINOUS CONCRETE PLANT MIX, WIDENING
420A-001	TON	OPEN GRADED PLANT MIXED SEAL (MIX B)
430B-001	TON C I P	AGGREGATE SURFACING (PROCESSED REEF SHELLS)
450B-000	SQ YD	REINFORCED CEMENT CONCRETE BRIDGE END SLAB
502A-000	POUND	STEEL REINFORCEMENT
505A-000	EACH	STEEL TEST PILES (HP 10X42)
505A-005	EACH	PRETENSIONED-PRESTRESSED CONCRETE TEST PILE (12 INCHES SQUARE)
505A-006	EACH	PRETENSIONED-PRESTRESSED CONCRETE TEST PILE (14 INCHES SQUARE)
505B-000	EACH	LOADING TESTS (HP 10X42)
505B-005	EACH	LOADING TESTS (12 INCHES SQUARE)
505B-006	EACH	LOADING TESTS (14 INCHES SQUARE)
505C-000	LIN FT	STEEL PILING (HP 10X42)
505C-005	LIN FT	PRETENSIONED-PRESTRESSED CONCRETE PILING (12 INCHES SQUARE)
505C-006	LIN FT	PRETENSIONED-PRESTRESSED CONCRETE PILING (14 INCHES SQUARE)
508A-000	POUND	STRUCTURAL STEEL
508C-030	SET	BEARING PLATES BRONZE (ONE SET CONSISTS OF 30 PLATES)
510A-000	CU YD	BRIDGE SUBSTRUCTURE CONCRETE, CLASS A
510C-000	LUMP SUM	REINFORCED BRIDGE CONCRETE SUPERSTRUCTURE, STA. 555+41.45, APPROX. 867 CU. YDS. - (INSIDE WIDENING)
510C-001	LUMP SUM	REINFORCED BRIDGE CONCRETE SUPERSTRUCTURE, STA. 555+41.45, APPROX. 769 CU. YDS. - (OUTSIDE WIDENING)
510C-002	LUMP SUM	REINFORCED BRIDGE CONCRETE SUPERSTRUCTURE, STA. 591+16.85, APPROX. 366 CU. YDS. - (INSIDE WIDENING)
510C-003	LUMP SUM	REINFORCED BRIDGE CONCRETE SUPERSTRUCTURE, STA. 591+16.85, APPROX. 319 CU. YDS. - (OUTSIDE WIDENING)
510C-004	LUMP SUM	REINFORCED BRIDGE CONCRETE SUPERSTRUCTURE, STA. 597+19.36, APPROX. 262 CU. YDS. - (INSIDE WIDENING)
510C-005	LUMP SUM	REINFORCED BRIDGE CONCRETE SUPERSTRUCTURE, STA. 597+19.36, APPROX. 147 CU. YDS. - (OUTSIDE WIDENING)
510C-006	LUMP SUM	REINFORCED BRIDGE CONCRETE SUPERSTRUCTURE, STA. 607+73.22, APPROX. 289 CU. YDS. - (INSIDE WIDENING)
510C-007	LUMP SUM	REINFORCED BRIDGE CONCRETE SUPERSTRUCTURE, STA. 607+73.22, APPROX. 182 CU. YDS. - (OUTSIDE WIDENING)
510C-008	LUMP SUM	REINFORCED BRIDGE CONCRETE SUPERSTRUCTURE, STA. 621+66.47, APPROX. 249 CU. YDS. - (INSIDE WIDENING)
510C-009	LUMP SUM	REINFORCED BRIDGE CONCRETE SUPERSTRUCTURE, STA. 621+66.47, APPROX. 255 CU. YDS. - (OUTSIDE WIDENING)
513B-004	LIN FT	PRETENSIONED-PRESTRESSED CONCRETE GIRDERS, TYPE II (SPECIALTY ITEM)
513B-005	LIN FT	PRETENSIONED-PRESTRESSED CONCRETE GIRDERS, TYPE III (SPECIALTY ITEM)
523B-000	EACH	LIFTING BEARING
530A-001	LIN FT	18" ROADWAY PIPE (CLASS 3 R.C.)
530A-101	LIN FT	18" ROADWAY PIPE (CLASS 3 R.C.) (EXTENSION)
530A-102	LIN FT	24" ROADWAY PIPE (CLASS 3 R.C.) (EXTENSION)
530A-105	LIN FT	42" ROADWAY PIPE (CLASS 3 R.C.) (EXTENSION)
530A-200	LIN FT	15" ROADWAY PIPE (14 GAUGE C.C.S.P.I.)
532A-001	LIN FT	15" B.C.C.S. SLOTTED DRAIN PIPE
600A-000	LUMP SUM	MOBILIZATION
606A-005	LIN FT	6" UNDERDRAIN PIPE, TYPE 9

SUMMARY OF QUANTITIES
PROJECT NO. I-IR-10-1(84)
MOBILE COUNTY

FEDERAL REGION NO.	STATE	PROJECT NUMBER	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	ALA.	I-IR-10-1(84)	1987	3-K	159H

REQUIRED WIDENING AND PARTIAL REMOVAL OLD R.C.D.G. BRIDGES

RESURFACING, WIDENING AND PARTIAL REMOVAL OLD R.C.C. BRIDGES																											
STATION	SIDE	E LENGTH LIN. FT.	206A REMOVAL OF OLD BRIDGE LUMP SUM	215A UNCLASSIFIED BRIDGE EXCAVATION CU. YD.	502A STEEL REINFORCEMENT LB.	505A STEEL TEST PILE (HP10X42) EACH	505A PRESTRESSED CONC TEST PILES (EACH)			505B LOADING TEST (HP 10X42) EACH	505B LOADING TEST (EACH)			505C STEEL PILING (HP 10X42) LIN FT	505C PRETENSIONED- PRESTRESSED CONC. PILING (LIN FT)			508A STRUCTURAL STEEL LB	508C BEARING PLATES BRONZE SET			510A BRIDGE SUBSTRUCTURE CONC. CL. A. Cu.Yds	510-C REINFORCED BRIDGE CONC. SUPERSTRUCTURE LUMP SUM	513B PRETENSIONED PRESTRESSED CONCRETE GIRDERS TYPE II	513B PRETENSIONED PRESTRESSED CONCRETE GIRDERS TYPE III	STD DWG No's	
							12"sq	14"sq	24"sq		12"sq	14"sq	24"sq		12"sq	14"sq	24"sq			30							
555+41.45	206A-50		1	755	141,400	1		1		1		1		2,250		3,988		22,130		1		595	1 @ 867cy.				
			591+16.85	206A-52		1	340	71,700	1		1		1		1,152		1,225		12,700				298	1 @ 366cy.		1379	
			1	1095	213,100	2		2		2		2		3,402		5,213		34,830		1		893	1		1379		
555+41.45	206A-51		1	755	136,900	1		1		1		1		2,340		3,988		26,480		1		581	1 @ 769				
			591+16.85	206A-53		1	450	81,200	1		1		1		1,440		1,627		16,110				336	1 @ 319cy		1379	
			597+19.36	INSIDE OUTSIDE	1	300	52,550	1	1		1	1		946	1,203		12,300					248	1 @ 262cy	938			
			597+19.36		1	190	26,000	1	1		1	1		637	802		10,690				134	1 @ 147CY	313				
			607+73.22	INSIDE OUTSIDE	1	290	60,500	1		1		1		1,344	1,907		12,600					258	1 @ 289	1,032			
			607+73.22		1	193	31,500	1		1		1		672	1,271		10,530				134	1 @ 182	344				
621+66.47	INSIDE OUTSIDE	1	259	58,500	1		1		1		1		1,344	1,936		9,200				258	1 @ 249	1,030					
621+66.47		1	235	68,100	1		1		1		1,512	2,596		15,210				300	1 @ 255	1,032							
			1	2,672	515,250	8	2	6		8	2	6		10,235	2,005	13,325		113,120		1		2,249	1	4,689	1,379		

ESTIMATED QUANTITIES - "IR" FUNDS		
QUANTITY	UNIT	DESCRIPTION
1	LUMP SUM	REMOVAL OF OLD BRIDGE @ STA. 597+19.36 (PARTIAL ONLY W.B.L. & E.B.L.-INSIDE WIDENING)
300	CU. YD.	UNCLASSIFIED BRIDGE EXCAVATION
52,550	LB.	STEEL REINFORCEMENT
1	EACH	STEEL TEST PILES (HP10x42)
1	EACH	PRETENSIONED-PRESTRESSED CONCRETE TEST PILES (12" SQUARE)
1	EACH	LOADING TESTS (HP10x42)
1	EACH	LOADING TESTS (12" SQUARE)
946	LIN. FT.	STEEL PILING (HP10x42)
1203	LIN. FT.	PRETENSIONED-PRESTRESSED CONCRETE PILING (12" SQUARE)
12,300	LB.	STRUCTURAL STEEL
248	CU. YD.	BRIDGE SUBSTRUCTURE CONCRETE, CLASS "A"
1	LUMP SUM	REINFORCED BRIDGE CONCRETE SUPERSTRUCTURE, STA. 597+19.36, APPROX. 262 CU. YD. (W.B.L. & E.B.L.)
938	LIN. FT.	PRETENSIONED - PRESTRESSED CONCRETE GIRDERS, TYPE II (SPECIALTY ITEM)
1364	SQ. YD.	REINFORCED CEMENT CONCRETE BRIDGE END SLAB

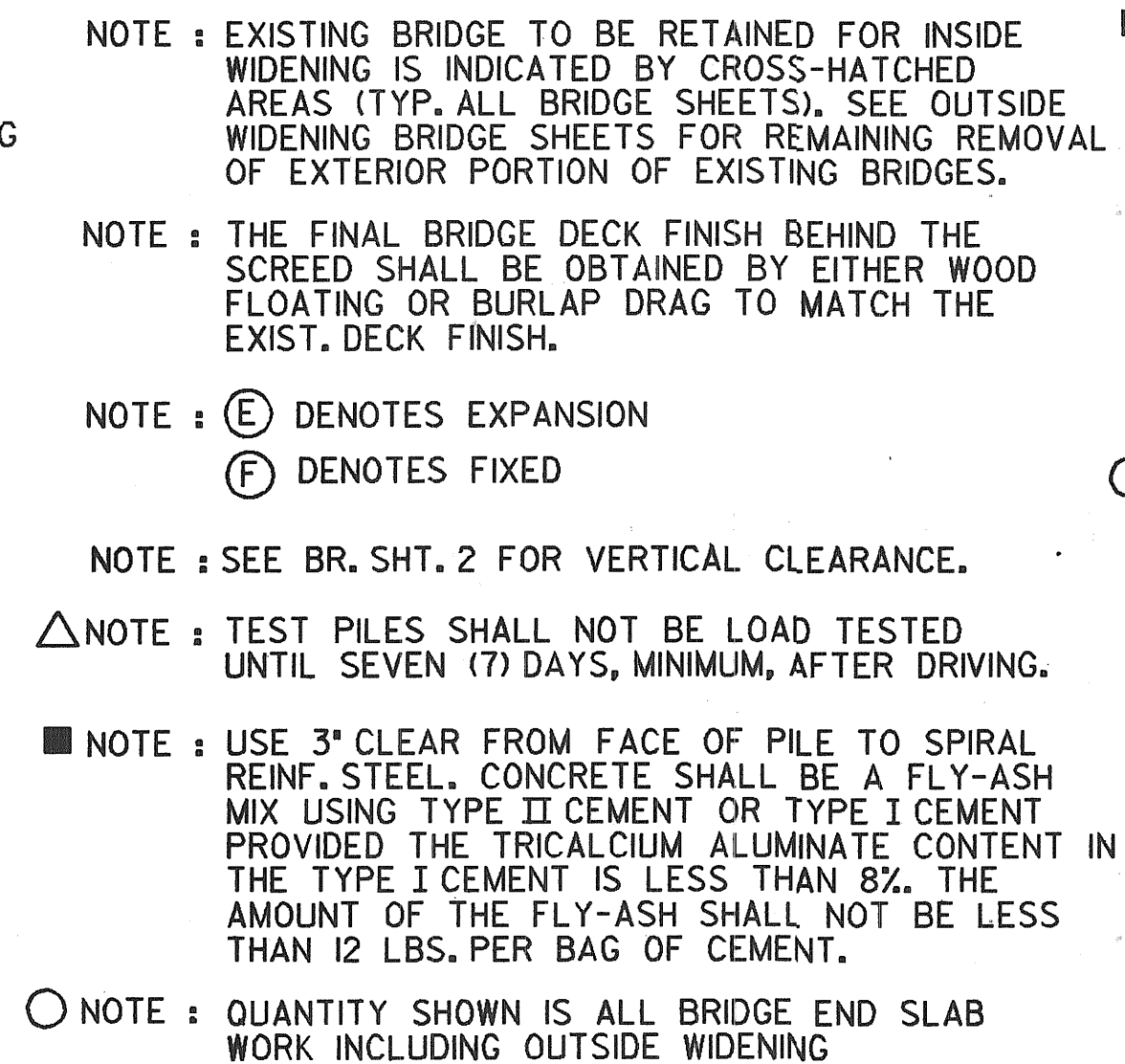
WIDENING 35'-9/8", 45'-0/2", 44'-11/8", 43'-11/2"
 PRETENSIONED - PRESTRESSED AASHTO GIRDERS,
 TYPE I SIMPLE SPAN _____ BR. SHT. NO. 1 THRU 7
 WIDENING CONCRETE INT. BENTS (PILE FTGS.) _____ BR. SHT. NO. 8 AND 9
 WIDENING CONCRETE AND STEEL PILE ABUTMENTS _____ BR. SHT. NO. 10 AND 11
 EXIST. ORIGINAL BRIDGE PLANS _____ BR. SHT. NO. E20 THRU E25
 TEST BORING RECORD _____ BR. SHT. NO. 2A OF 3A
 BRIDGE GENERAL NOTES _____ STD. DWG. BGN-1 (1 SHT.)
 STANDARD DETAILS _____ STD. DWG. 1-131 (3 SHTS.)
 * TRAFFIC PROTECTION _____ STD. TP-1 (2 SHTS.)
 REINFORCED CONCRETE
 BRIDGE END SLAB _____ SPECIAL DWG. NO. BES-450-0
 PRESTRESSED-PRETENSIONED CONCRETE PILES _____ STD. DWG. NO. PSCP-1
 LIGHT POLE SUPPORT _____ STD. DWG. LPS-1
 * * TRAFFIC PROTECTORS WILL ONLY BE REQUIRED
 UNDER THE NEW CONSTR. AREAS (5'-0" MIN.
 OUTSIDE THE LIMITS OF NEW CONSTR.)

PRIOR TO PLACING NEW CONC. AGAINST ANY
BROKEN OR SCARIFIED SURFACE, A TYPE
II EPOXY ADHESIVE SHALL BE APPLIED TO
THE ROUGHENED CONC.

ALL DOWEL BARS PLACED IN EXIST. CONC.
SHALL BE SET W/ A TYPE I, GRADE I
EPOXY ADHESIVE.

SEE SECTION 870, EPOXY ADHESIVES, OF
THE STD. SPECIFICATIONS.

1. TEMPORARY BARRIER RAILS SHALL BE ERECTED CONCURRENT W/ REMOVAL OF EXIST. DECK, CURB, & HANDRAIL.
2. THE TOP OF EXIST. DECK SLAB SHALL BE SAWED A MIN. OF 1/2 INCH, MAX OF ONE (1) INCH DEEP ALONG BREAKLINE PRIOR TO REMOVING THE SUPERSTRUCTURE CONCRETE.
3. ALL PLAN ELEVATIONS & DIMENSIONS ARE TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR & ANY NECESSARY ADJUSTMENTS MADE PRIOR TO ORDERING ANY MATERIAL.



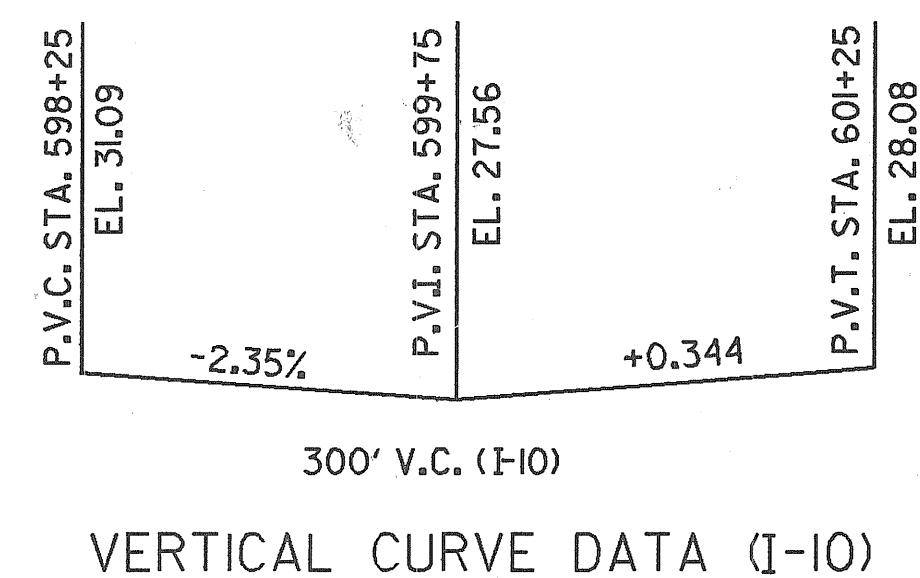
NOTE :
ALL INTERIOR JOINTS SHALL BE RECONSTRUCTED
IN ACCORDANCE WITH BRIDGE SHEET 3A OF 3A.
QUANTITIES FOR THIS WORK ARE INCLUDED IN
ESTIMATED QUANTITIES SHOWN ON GENERAL
ELEVATION SHEET OF OUTSIDE WIDENING.




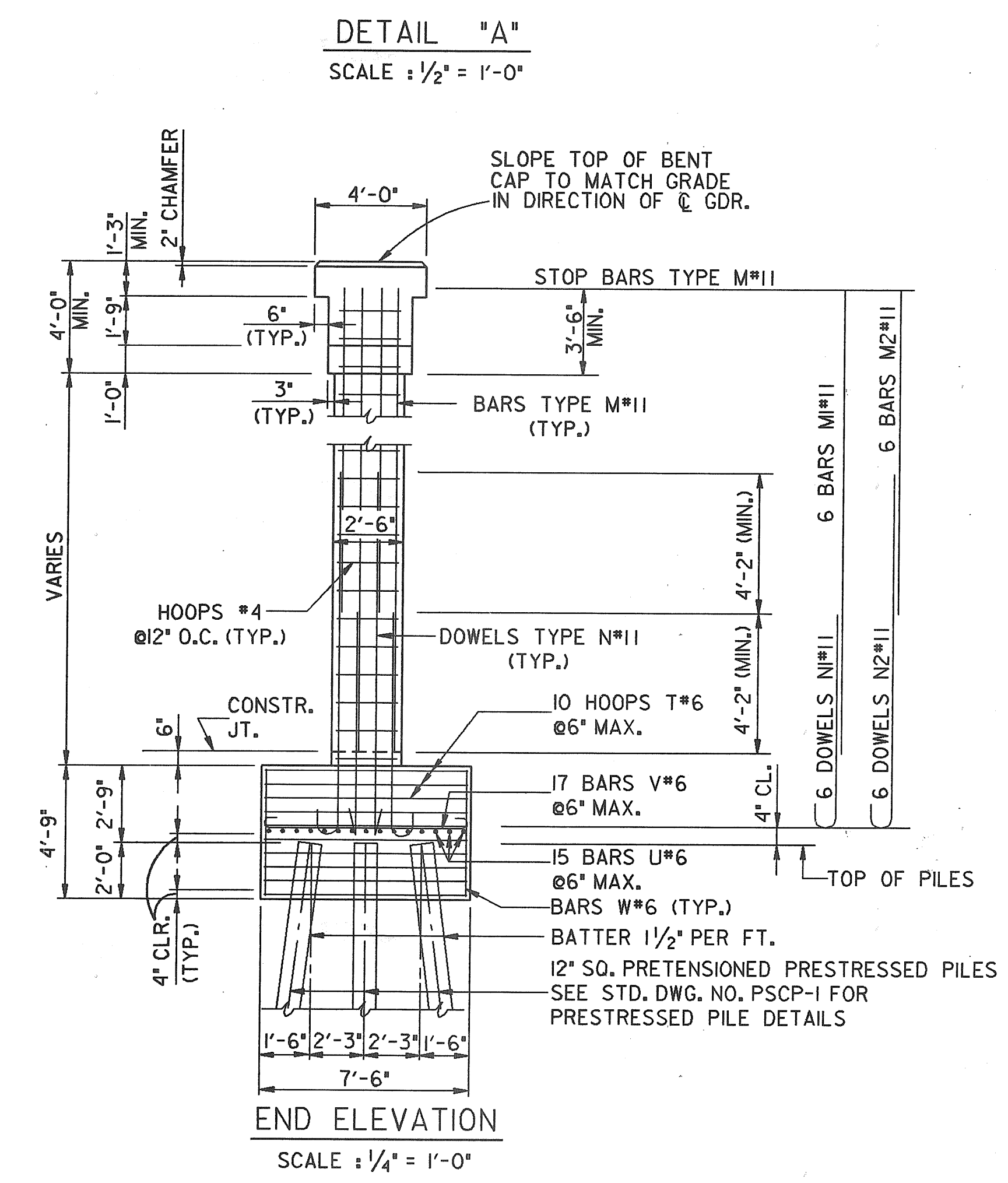
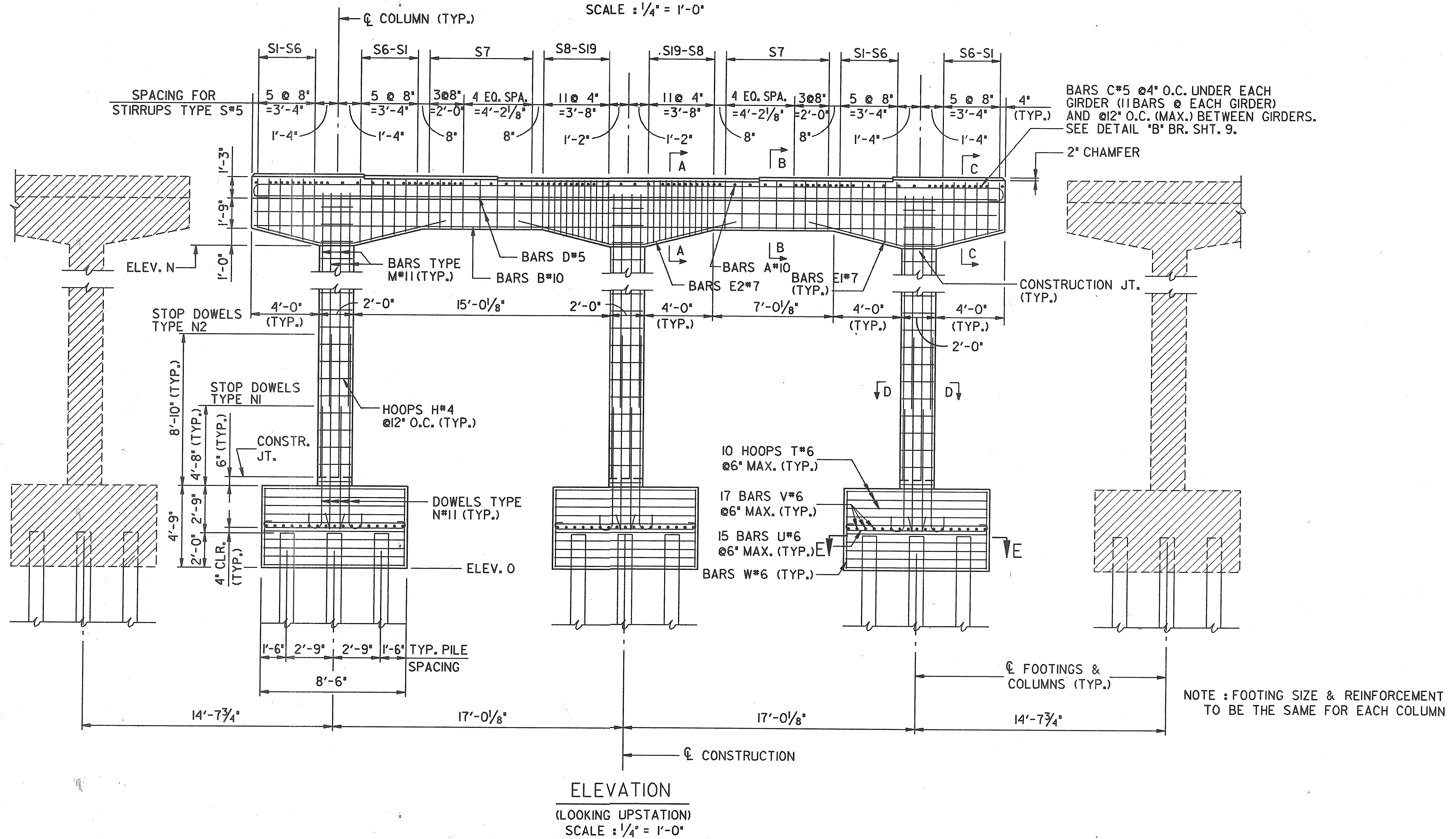
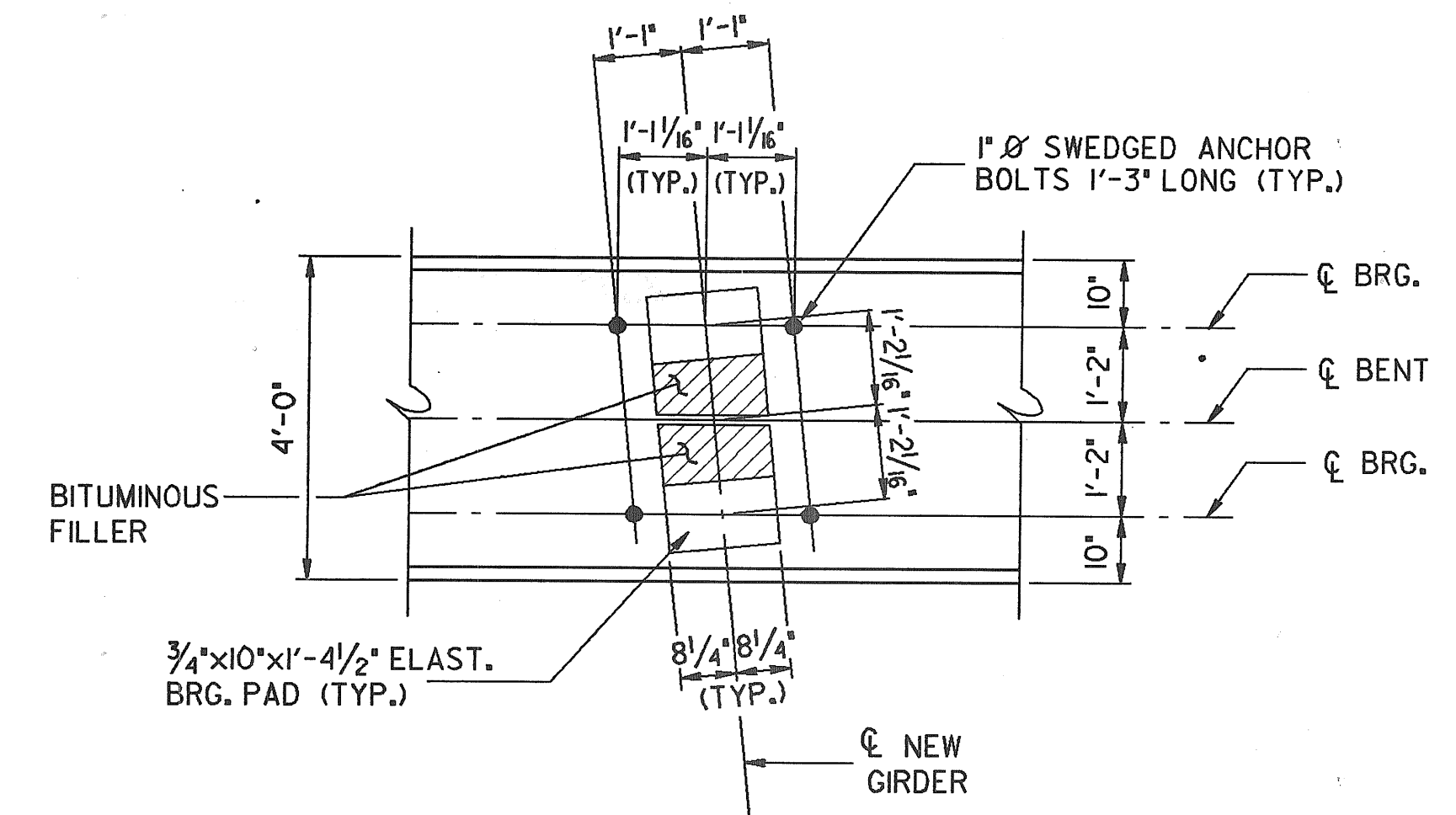
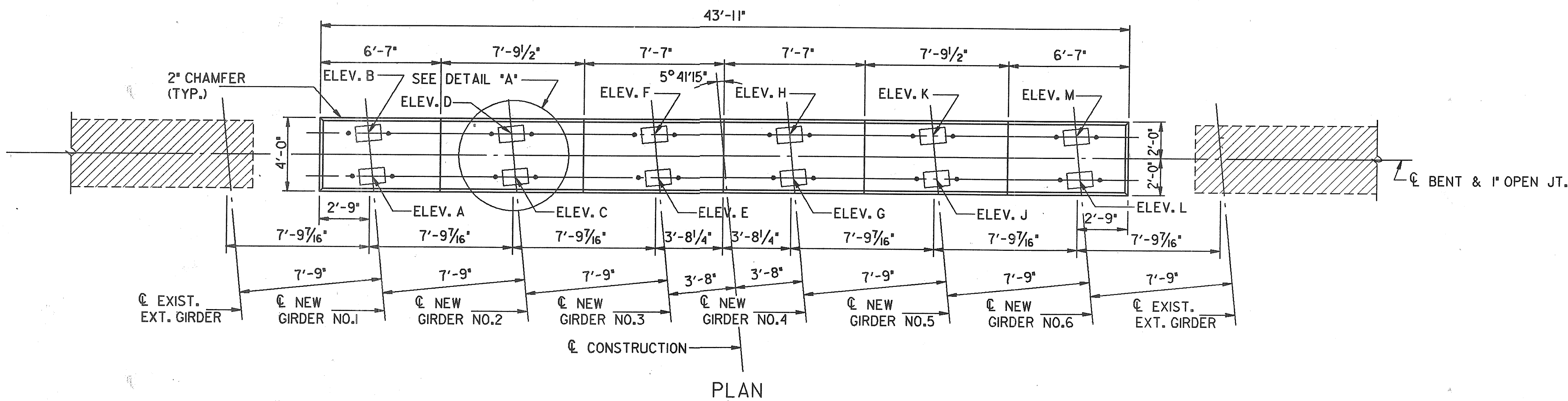
SEE STANDARD DRAWING NO. BGN-1(I(SHT.)

ROADWAY : 75'-5 $\frac{3}{4}$ " (WESTBOUND) AND 75'-5 $\frac{3}{4}$ " (EASTBOUND)
PROPOSED INTERIOR GUTTER TO EXISTING EXTERIOR
GUTTER WITH BARRIER RAIL.

- 1.
2. HS20-44 AND ALTERNATE LOADING PPM20-4, DATED 8-10-56.
5. ABUTS. - 21 TONS, BENTS 40 TONS.
- 7.
- 13.
- 16.
- 18.
- 19.
- 21.
- 23.
- 24.
- 25.
- 27.



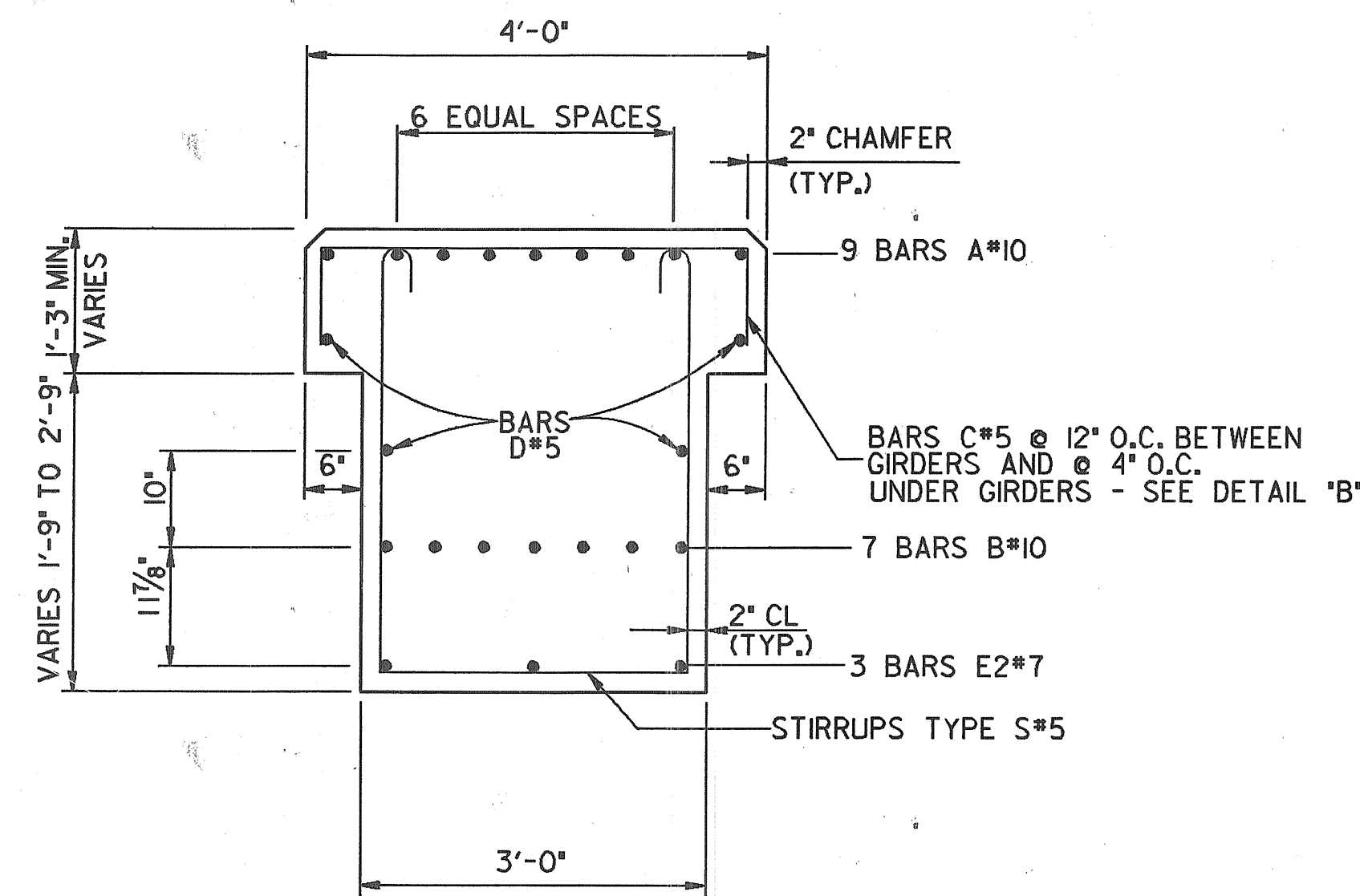
I CERTIFY THAT CHECKS OF (1) DESIGN CALCULATIONS AND (2) DETAILS AND DRAFTING OF PLANS HAVE BEEN MADE BY COMPETENT ENGINEERS OF THIS ORGANIZATION BARGE, WAGGONER, SUMNER, & CANNON <u>James F. Wood</u> <u>6-16-87</u> TITLE SENIOR VICE-PRESIDENT  Alabama Reg. Engineer No. 12008	BRIDGE SHEET NO. 1 OF 22 REVISIONS		STATE OF ALABAMA HIGHWAY DEPARTMENT PROJECT NO. IR-10-1(84) INSIDE WIDENING OF I-10 BRIDGES OVER WARREN-LAWRENCE CONNECTOR AT STATION 598+00.16 MOBILE COUNTY, ALABAMA			
	APPROVED:		GENERAL ELEVATION			
	SECTION SUPERVISOR <u>William D. McLean</u> CHIEF BRIDGE DESIGN ENGINEER <u>Charles H. Cook</u> BRIDGE ENGINEER		SCALE: AS SHOWN	DESIGNED: JCP DRAWN: BWSC CAD/D REINF CHKD: TWJW CHECKED: TWJW	QUANTITIES COMP: JCP CHKD: TWJW	DATE 6/17/87
	BARGE, WAGGONER, SUMNER, & CANNON					



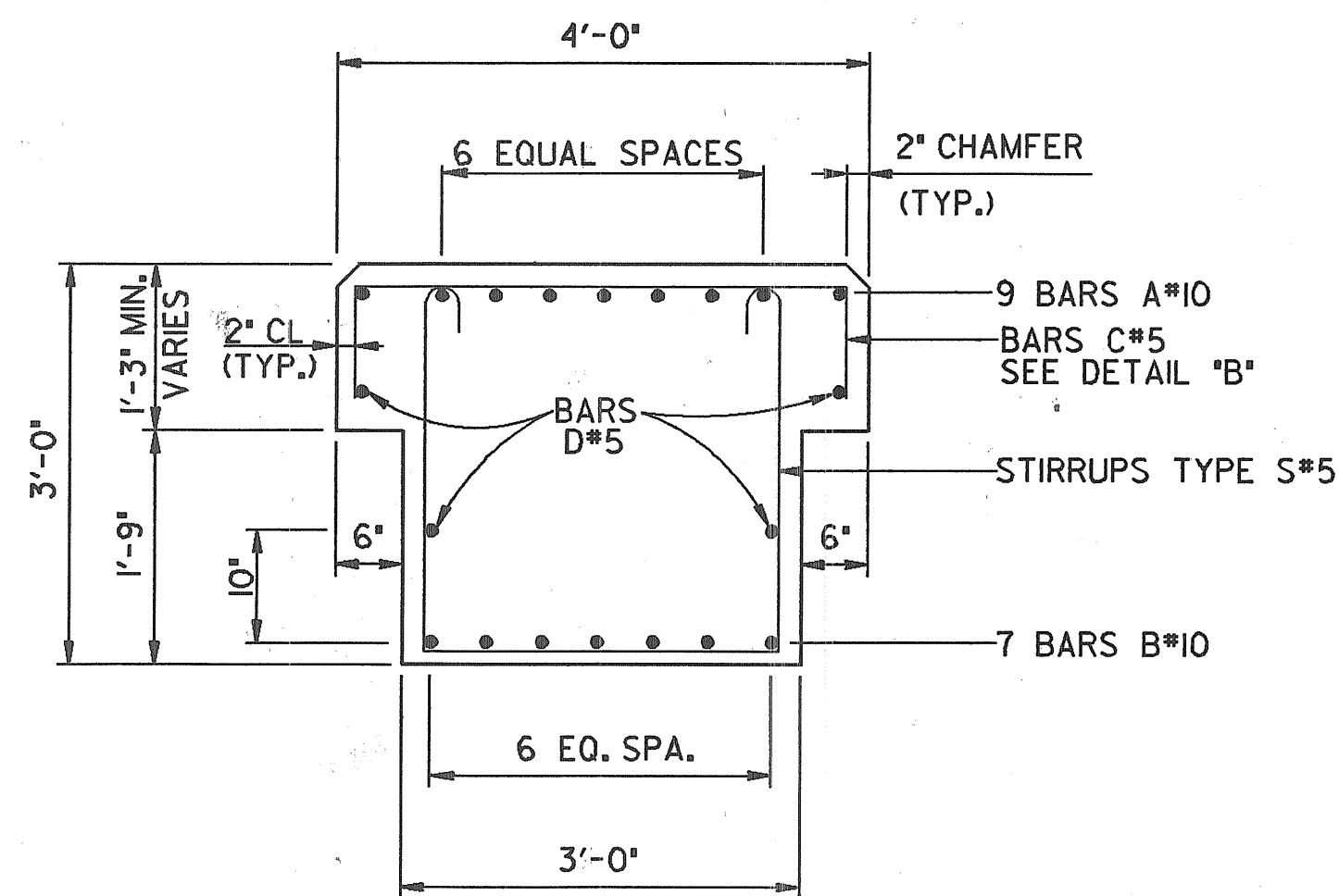
	A	B	C	D	E	F	G	H	J	K	L	M	N	O
BENT NO. 2	28.8179	28.7628	28.7149	28.6598	28.6120	28.5569	28.6291	28.5740	28.7684	28.7133	28.9077	28.8526	24.5569	5.45
BENT NO. 3	27.7595	27.7044	27.6565	27.6014	27.5535	27.4984	27.5707	27.5156	27.7099	27.6548	27.8492	27.7941	23.4984	6.25
BENT NO. 4	26.7281	26.6777	26.6237	26.5730	26.5194	26.4686	26.5353	26.4843	26.6733	26.6221	26.8114	26.7601	22.4686	5.45

		BENT NO. 2	BENT NO. 3	BENT NO. 4
ITEM	UNITS			
SUBSTRUCTURE CONCRETE	CU. YD.	61.2	60.2	60.1
STEEL REINFORCEMENT	LBS.	12,746	12,395	12,347

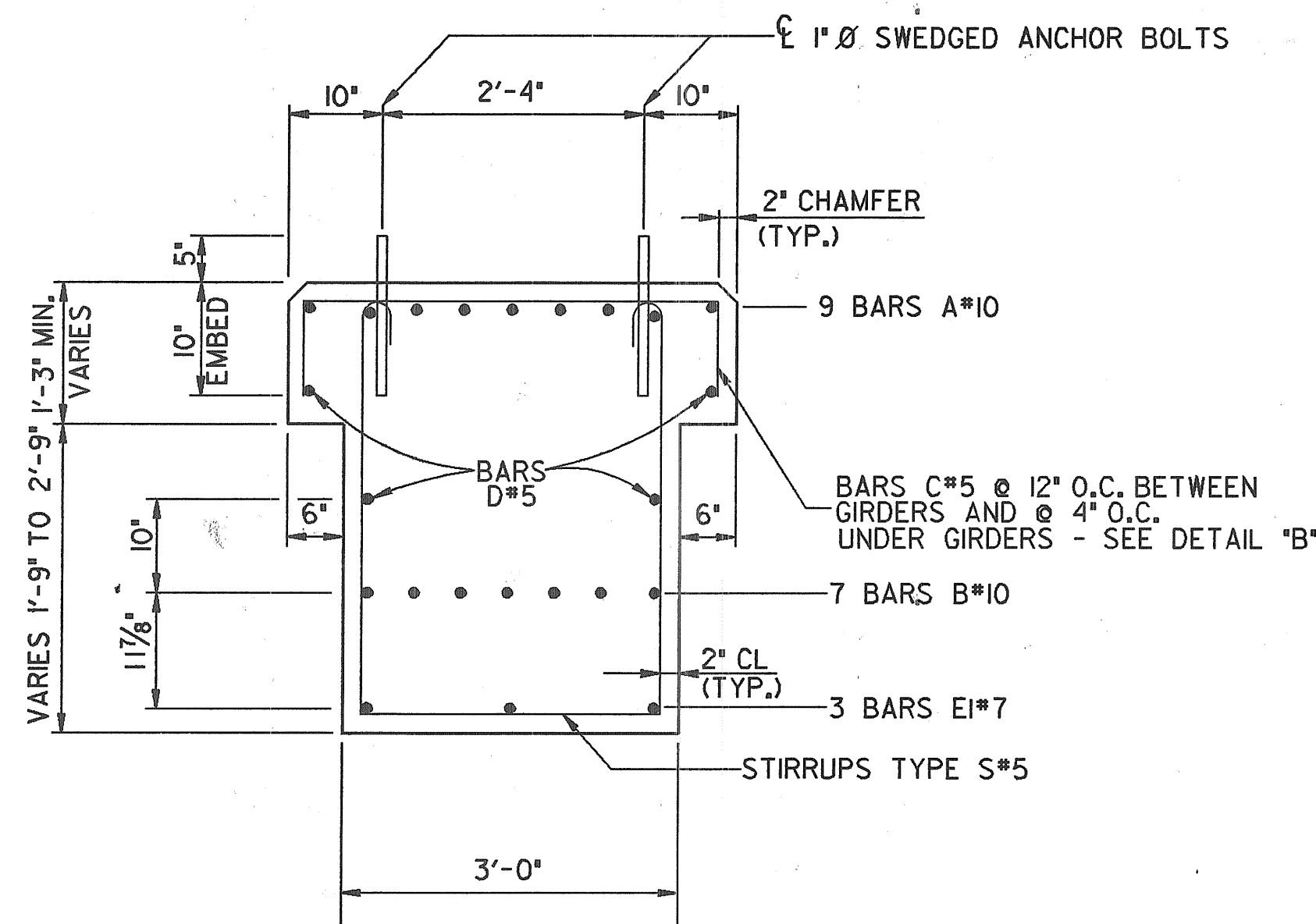
BARGE, WAGGONER, SUMNER, & CANNON	BRIDGE SHEET NO. 8 OF 22		STATE OF ALABAMA HIGHWAY DEPARTMENT	
	REVISIONS		PROJECT NO. IR-10-10-1 (84) INSIDE WIDENING OF I-10 BRIDGES OVER WARREN-LAWRENCE CONNECTOR AT STATION 598+00.16 MOBILE COUNTY, ALABAMA	
	APPROVED:		BENTS NO. 2, NO. 3, & NO. 4	
	SECTION SUPERVISOR <i>William M. Allen</i> CHIEF BRIDGE DESIGN ENGINEER		SCALE: AS SHOWN	DESIGNED: JCP. DRAWN: BWSC CAD/D REINF. CHKD: TWJ CHECKED: TWJ
	BRIDGE ENGINEER <i>Charles H. Cook</i>		QUANTITIES COMP: JCP CHKD: TWJ	DATE 6/17/87



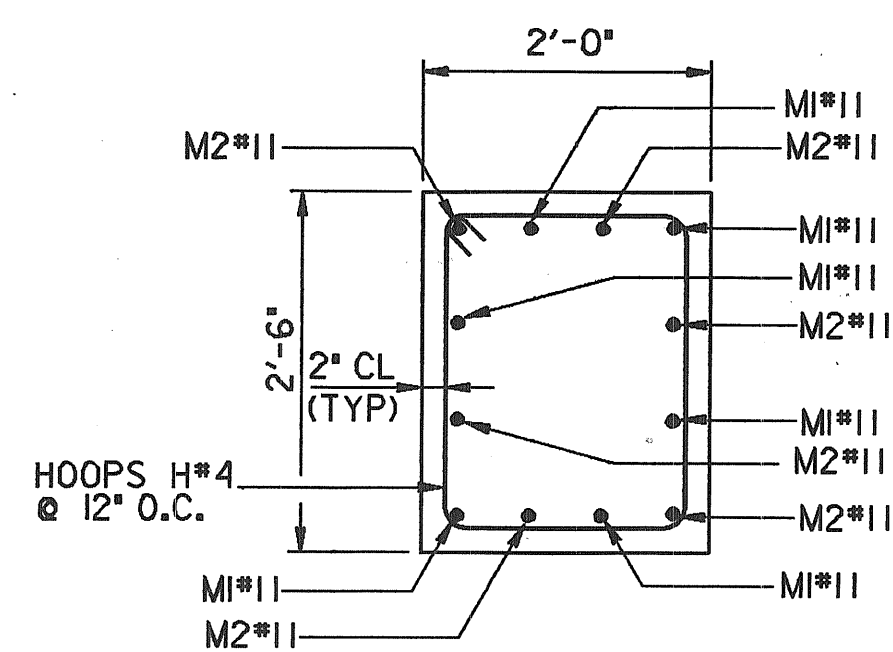
SECTION "A-A"
SCALE: $\frac{3}{4}" = 1'-0"$



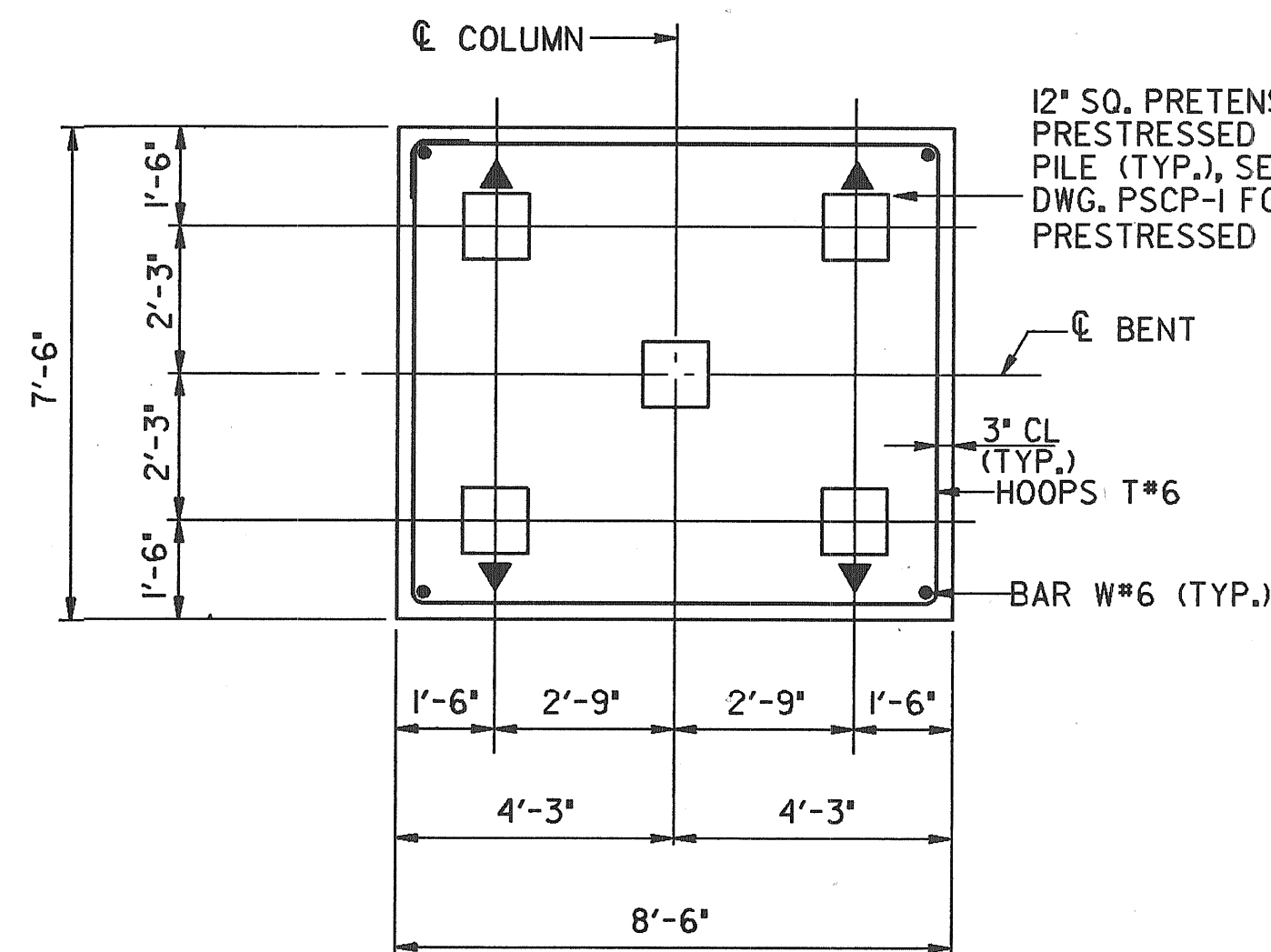
SECTION "B-B"
SCALE: $\frac{3}{4}" = 1'-0"$



SECTION "C-C"
SCALE: $\frac{3}{4}" = 1'-0"$

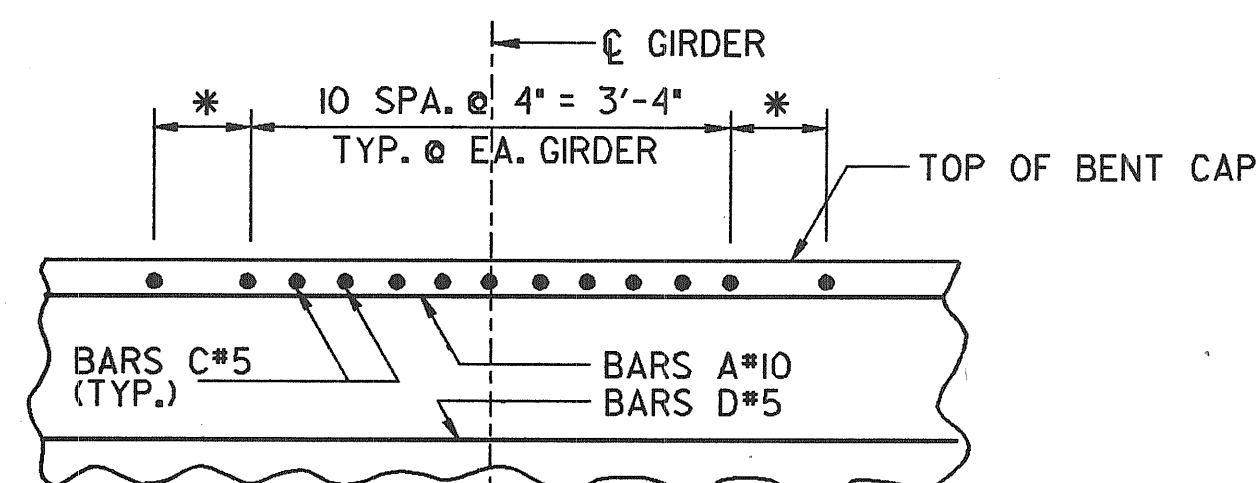


SECTION "D-D"
SCALE: $\frac{3}{4}" = 1'-0"$



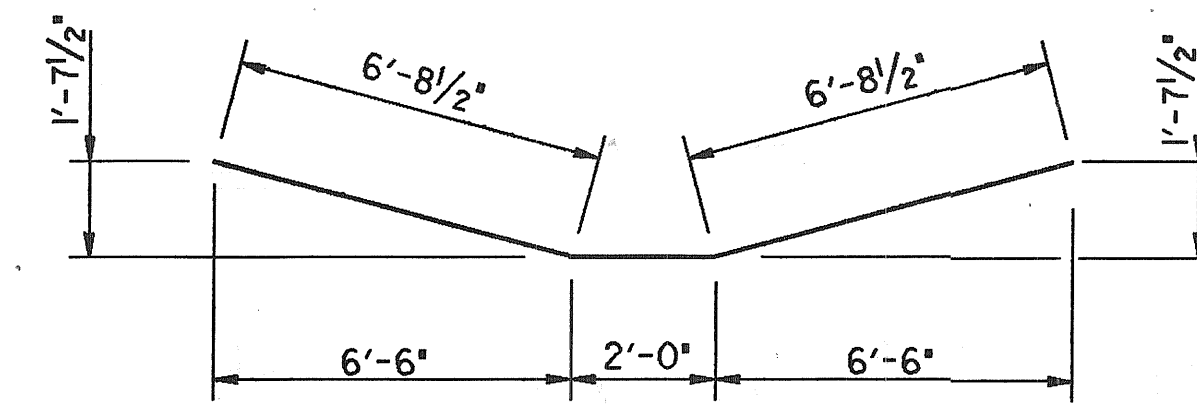
SECTION "E-E" @ TOP OF PILES
SCALE: $\frac{3}{8}" = 1'-0"$

▲ DENOTES : PILES TO BE BATTERED & DIRECTION

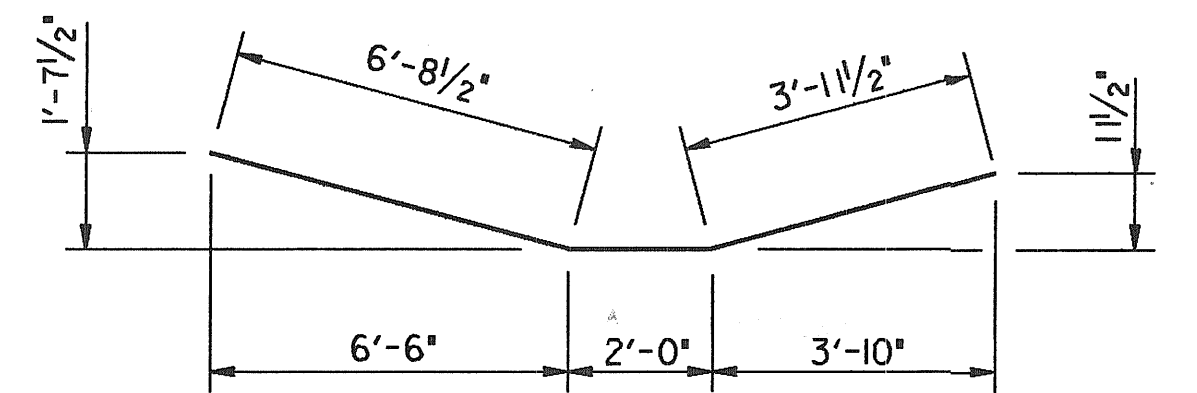


DETAIL "B"
NO SCALE

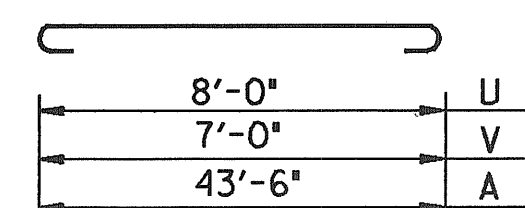
* 12" MAX. O.C. BETW. GIRDERS



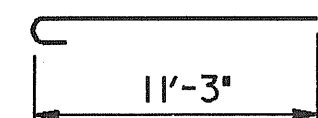
BARS E#7



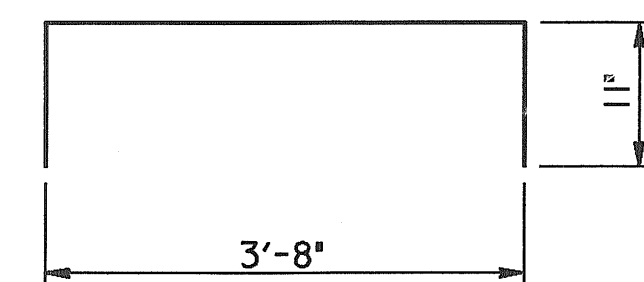
BARS E#7



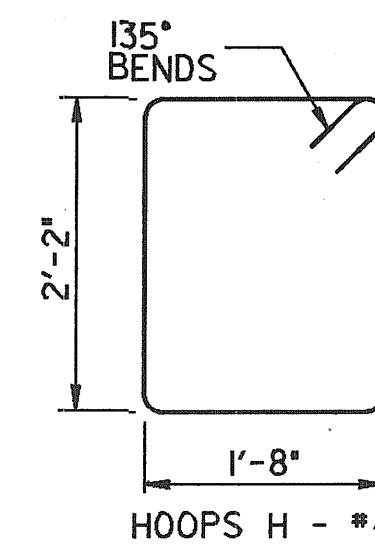
BARS N#11



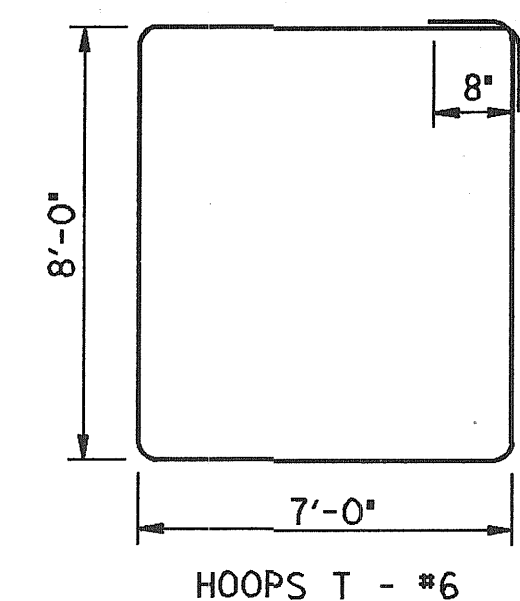
BARS N#11



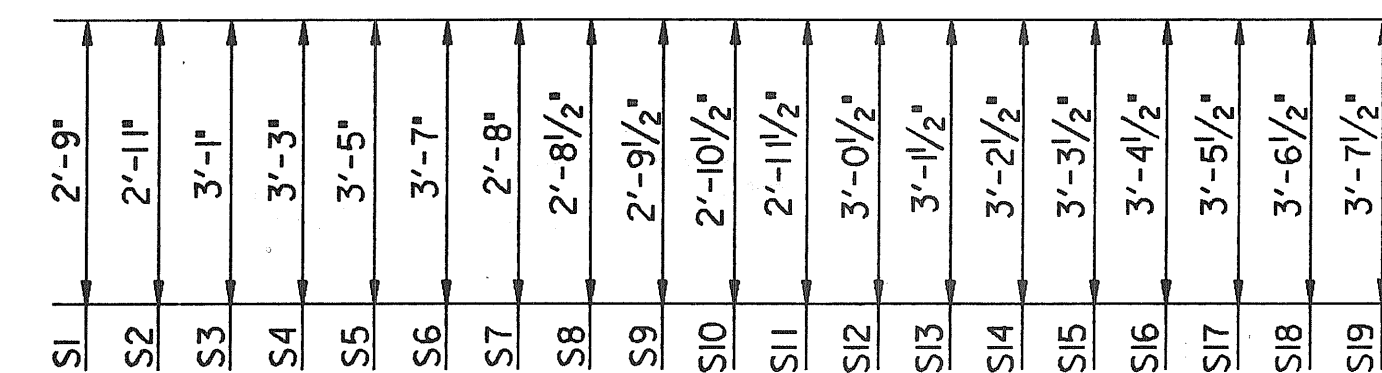
BARS C#5



HOOPS H - #4



HOOPS T - #6



STIRRUPS S#5

BILL OF STEEL REINFORCEMENT							
BAR	SIZE	BENT NO. 2		BENT NO. 3		BENT NO. 4	
		NO. REQ'D	LENGTH	NO. REQ'D	LENGTH	NO. REQ'D	LENGTH
A	10	9	46'-4"	9	46'-4"	9	46'-4"
B	10	7	43'-6"	7	43'-6"	7	43'-6"
C	5	88	5'-6"	88	5'-6"	88	5'-6"
D	5	4	43'-6"	4	43'-6"	4	43'-6"
E1	7	6	12'-8"	6	12'-8"	6	12'-8"
E2	7	3	15'-5"	3	15'-5"	3	15'-5"
H	4	54	8'-8"	48	8'-8"	48	8'-8"
M1	11	18	17'-4"	18	15'-6"	18	15'-3"
M2	11	18	13'-2"	18	11'-4"	18	11'-1"
N1	11	18	8'-8"	18	8'-8"	18	8'-8"
N2	11	18	12'-10"	18	12'-10"	18	12'-10"
S1	5	4	9'-4"	4	9'-4"	4	9'-4"
S2	5	4	9'-8"	4	9'-8"	4	9'-8"
S3	5	4	10'-0"	4	10'-0"	4	10'-0"
S4	5	4	10'-4"	4	10'-4"	4	10'-4"
S5	5	4	10'-8"	4	10'-8"	4	10'-8"
S6	5	4	11'-0"	4	11'-0"	4	11'-0"
S7	5	16	9'-2"	16	9'-2"	16	9'-2"
S8	5	2	9'-3"	2	9'-3"	2	9'-3"
S9	5	2	9'-5"	2	9'-5"	2	9'-5"
S10	5	2	9'-7"	2	9'-7"	2	9'-7"
S11	5	2	9'-9"	2	9'-9"	2	9'-9"
S12	5	2	9'-11"	2	9'-11"	2	9'-11"
S13	5	2	10'-1"	2	10'-1"	2	10'-1"
S14	5	2	10'-3"	2	10'-3"	2	10'-3"
S15	5	2	10'-5"	2	10'-5"	2	10'-5"
S16	5	2	10'-7"	2	10'-7"	2	10'-7"
S17	5	2	10'-9"	2	10'-9"	2	10'-9"
S18	5	2	10'-11"	2	10'-11"	2	10'-11"
S19	5	2	11'-1"	2	11'-1"	2	11'-1"
T	6	30	31'-4"	30	31'-4"	30	31'-4"
U	6	45	9'-4"	45	9'-4"	45	9'-4"
V	6	51	8'-4"	51	8'-4"	51	8'-4"
W	6	12	4'-3"	12	4'-3"	12	4'-3"

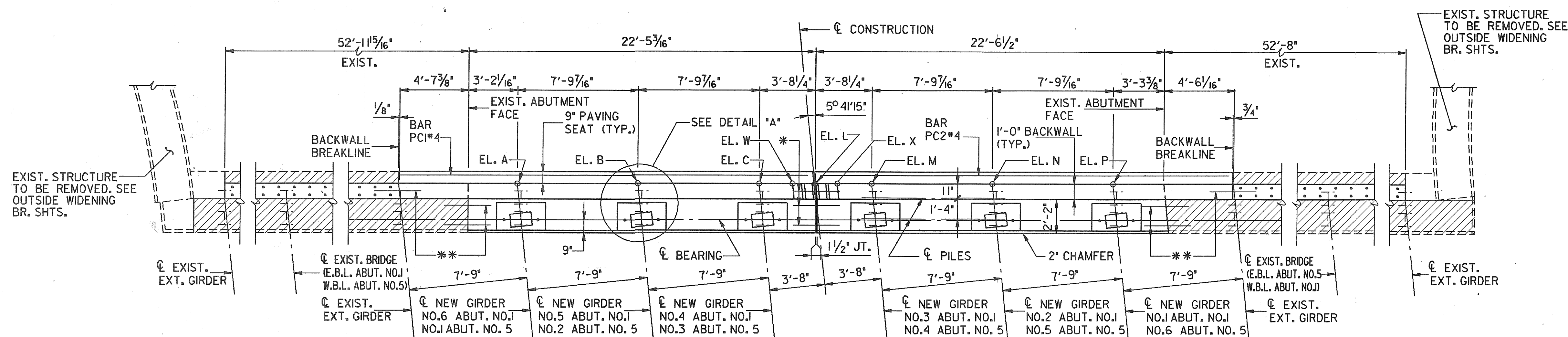
NOTE: ALL BAR BENDING DIMENSIONS ARE OUT TO OUT UNLESS OTHERWISE NOTED.

BARCE, WAGGONER, SUMNER, & CANNON	BRIDGE SHEET NO. 9 OF 22	STATE OF ALABAMA HIGHWAY DEPARTMENT.			
	REVISIONS	PROJECT NO. IR-10-1(84) INSIDE WIDENING OF I-10 BRIDGES OVER WARREN-LAWRENCE CONNECTOR AT STATION 598+00.16 MOBILE COUNTY, ALABAMA			
	APPROVED:	BENT DETAILS			
	SECTION SUPERVISOR <i>William D. McAttee</i> CHIEF BRIDGE DESIGN ENGINEER	SCALE: AS SHOWN	DESIGNED: JCP DRAWN: BWSC CAD/D REINF. CHKD: TWJWJ CHECKED: TWJWJ	QUANTITIES COMP: CHKD:	DATE 6/17/87

FHWA REG. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	ALA.	I-IR-10-1	1987	29 I	159H
(84)					

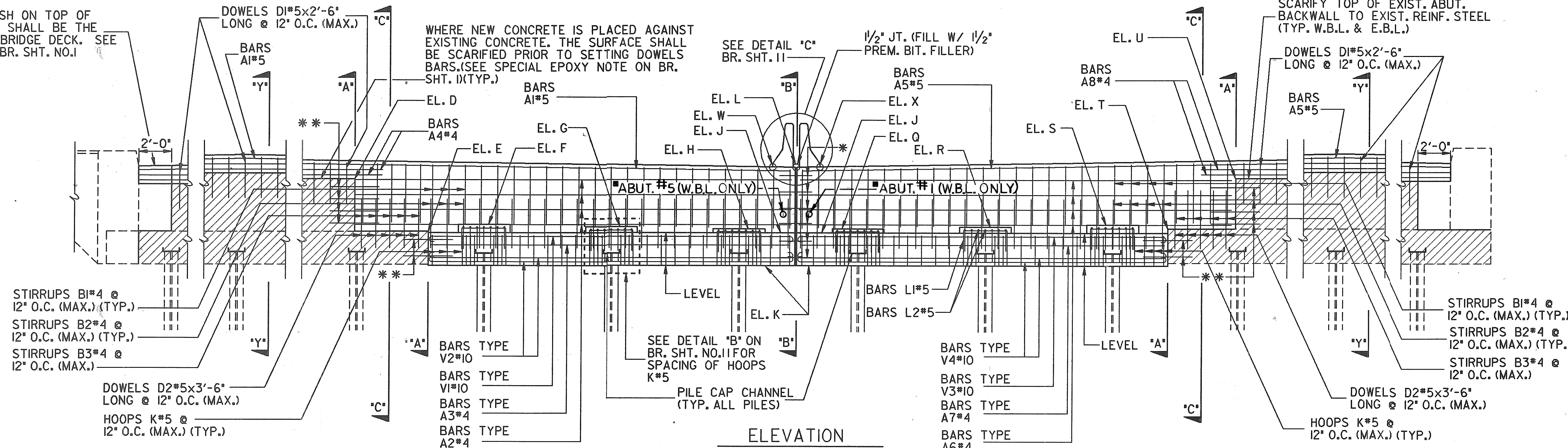
TABLE OF ELEVATIONS

ABUT. NO. 1	ABUT. NO. 5
A	33.4946
B	33.3553
C	33.2128
D	32.403±
E	29.45
F	29.6643
G	29.5251
H	29.3858
J	29.185
K	27.1185
L	33.1468
M	33.1954
N	33.2952
P	33.3983
Q	29.3685
R	29.4715
S	29.5745
T	29.33
U	31.979±
W	33.1726
X	33.1661



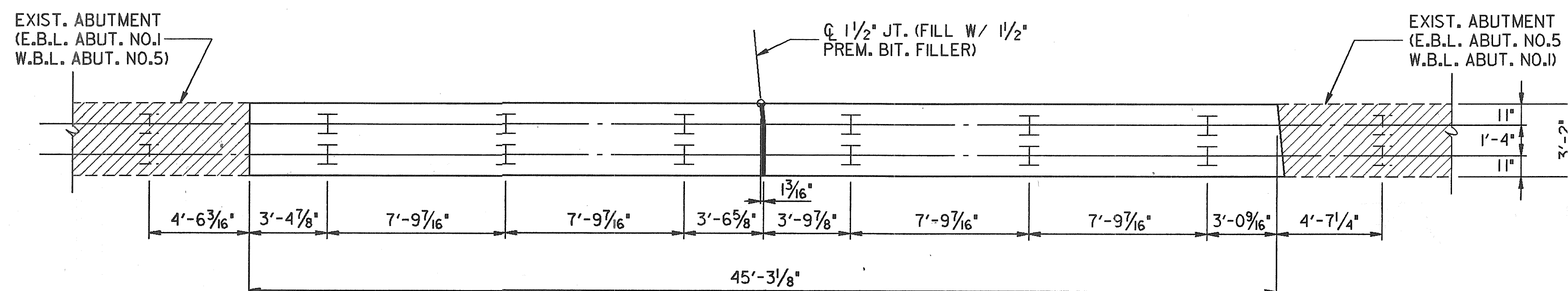
PLAN
SCALE: 1/4" = 1'-0"

FINAL FINISH ON TOP OF BACKWALL SHALL BE THE SAME AS BRIDGE DECK. SEE NOTE ON BR. SHT. NO. 1



ELEVATION
(ABUTMENT NO. 5 SHOWN
ABUTMENT NO. 1 SIMILAR)
SCALE: 1/4" = 1'-0"

2" Ø HOT DIPPED GALVANIZED CONDUIT (W.B.L. ONLY) SEE STD. DWG. LPS-1



PILE LOCATION PLAN
SCALE: 1/4" = 1'-0"

* INDICATES 1" Ø X 2'-0" PLAIN ROD DOWEL. GREASE ONE END AND WRAP W/TAR PAPER.

** INDICATES DOWEL BARS NO. 6 X 2'-6" LONG EMBEDDED 1'-0" INTO EXIST. CONC. DOWEL HOLES (1" Ø MIN.) TO BE FILLED W/APPROVED EPOXY ADHESIVE. SEE BR. SHT. NO. 1 AND SECTION 870 OF THE STD. SPECIFICATIONS.

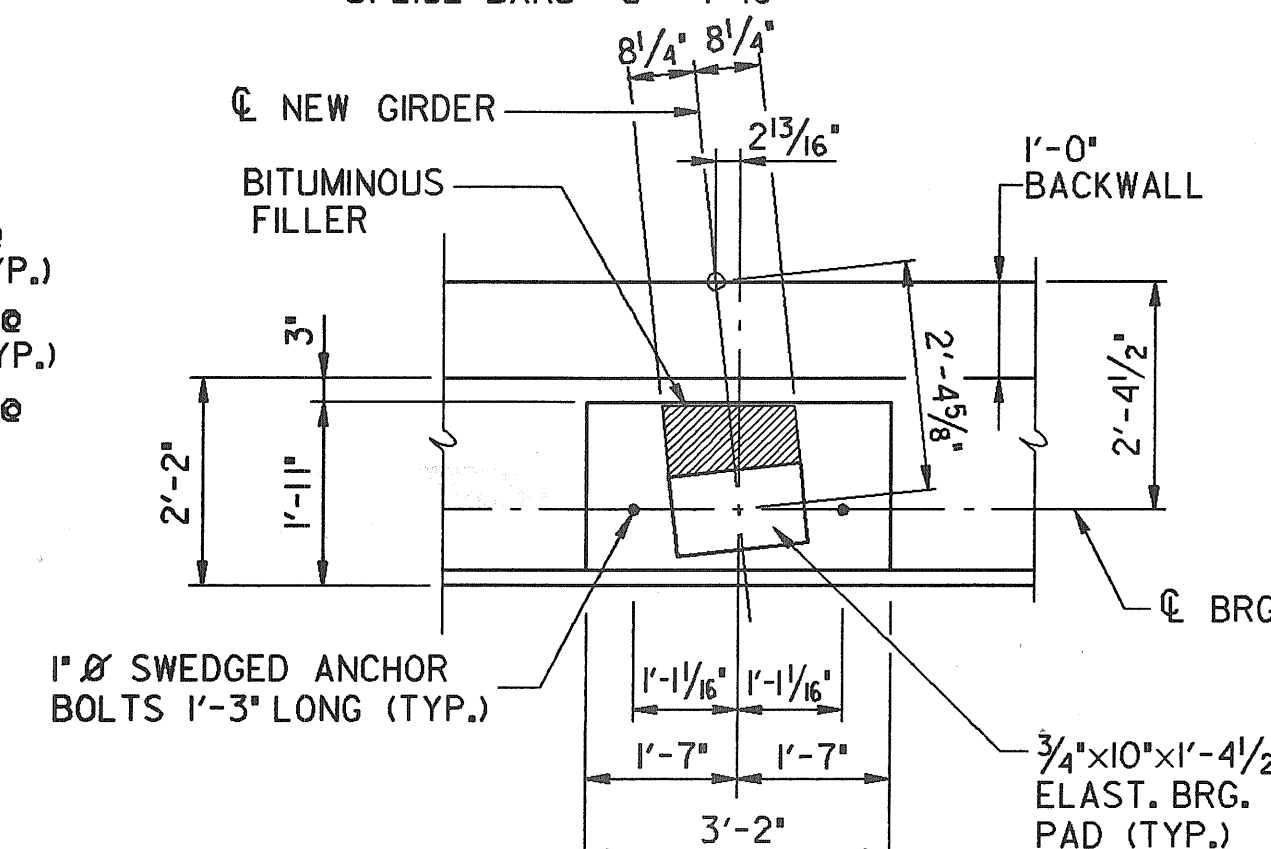
NOTE: EXIST. HORIZONTAL BACKWALL REINFORCEMENT TO EXTEND INTO NEW BACKWALLS. MIN. EXTENSION INTO NEW CONC. = 1'-6". EXISTING REINFORCEMENT TO BE CLEANED AND STRAIGHTENED.

NOTE: FOR SECTION "Y-Y" SEE BR. SHT. NO. 3.

NOTE: FINISH GRADE OF RAISED BACKWALL ON EXISTING ABUTMENTS SHALL MATCH EXISTING BRIDGE DECK SLOPE.

NOTE: POUR BARRIER RAILS WITH BRIDGE END SLAB BARRIER RAILS. BARS BL TO BE CONTINUED FROM BRIDGE END SLAB RAILS.

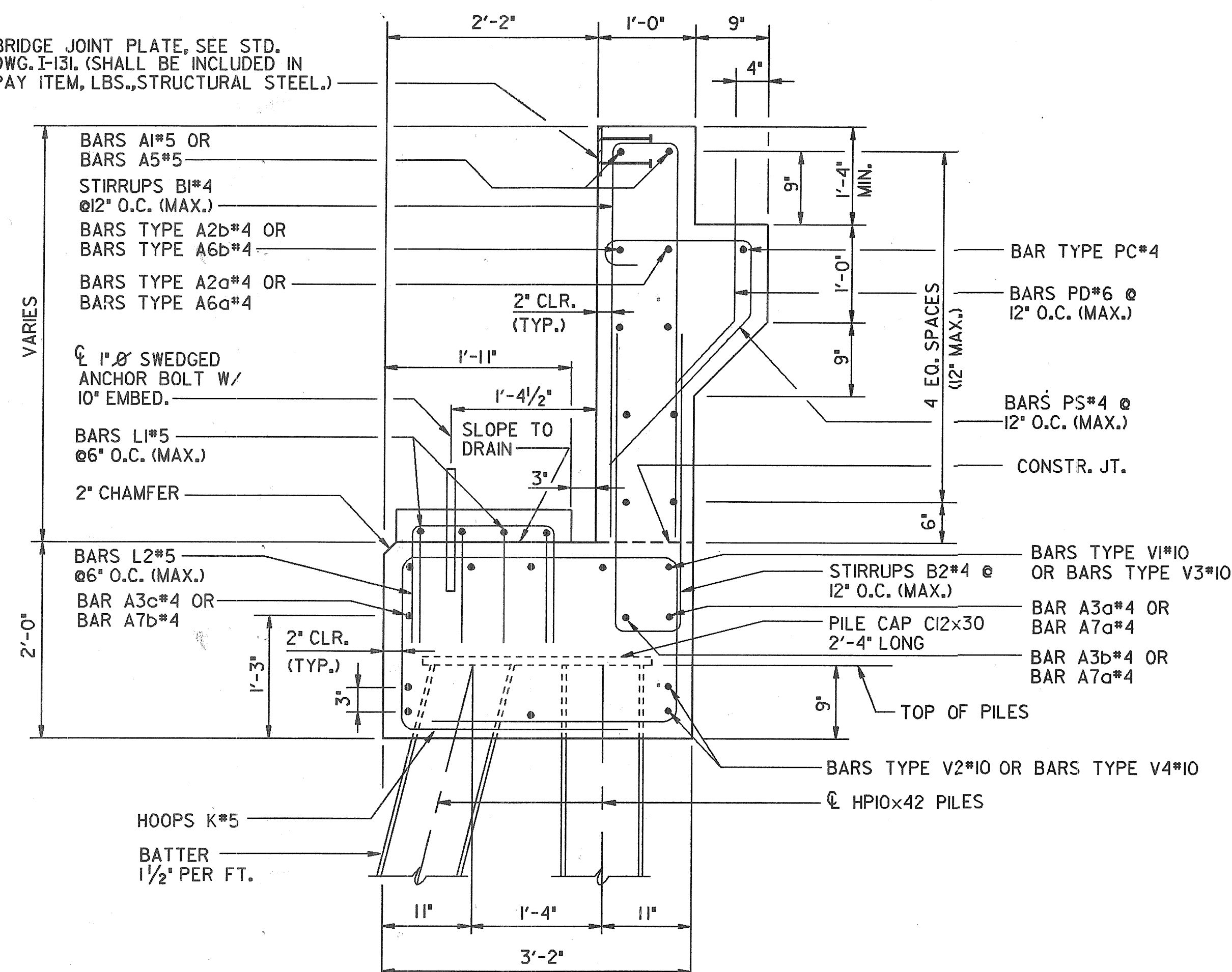
NOTE: SPLICE BARS #4 = 1'-6"
SPLICE BARS #5 = 1'-10"



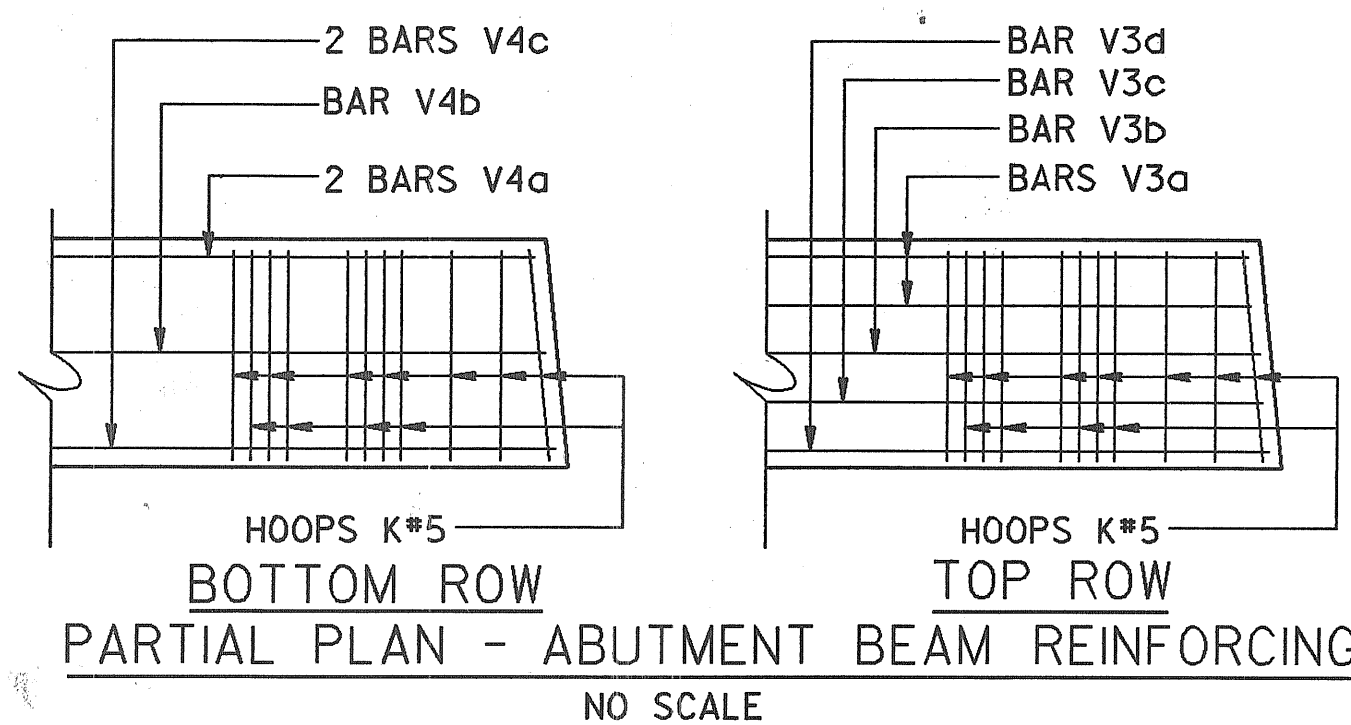
DETAIL "A"
SCALE: 1/2" = 1'-0"

BRIDGE SHEET NO. 10 OF 22 REVISIONS	STATE OF ALABAMA HIGHWAY DEPARTMENT			
	PROJECT NO. IR-10-K(84) INSIDE WIDENING OF I-10 BRIDGES OVER WARREN-LAWRENCE CONNECTOR AT STATION 598+00.16 MOBILE COUNTY, ALABAMA			
	ABUTMENTS NO. 1 & NO. 5			
	APPROVED:	DESIGNED: JCTP	QUANTITIES	DATE
SECTION SUPERVISOR William J. Mott CHIEF BRIDGE DESIGN ENGINEER Charles H. Cook BRIDGE ENGINEER	AS SHOWN	DRAWN: BWSC CAD/D REINF CHKD: CHECKED: TWW	COMP:	6/17/87

BRIDGE JOINT PLATE, SEE STD.
DWG. I-131. (SHALL BE INCLUDED IN
PAY ITEM, LBS., STRUCTURAL STEEL.)

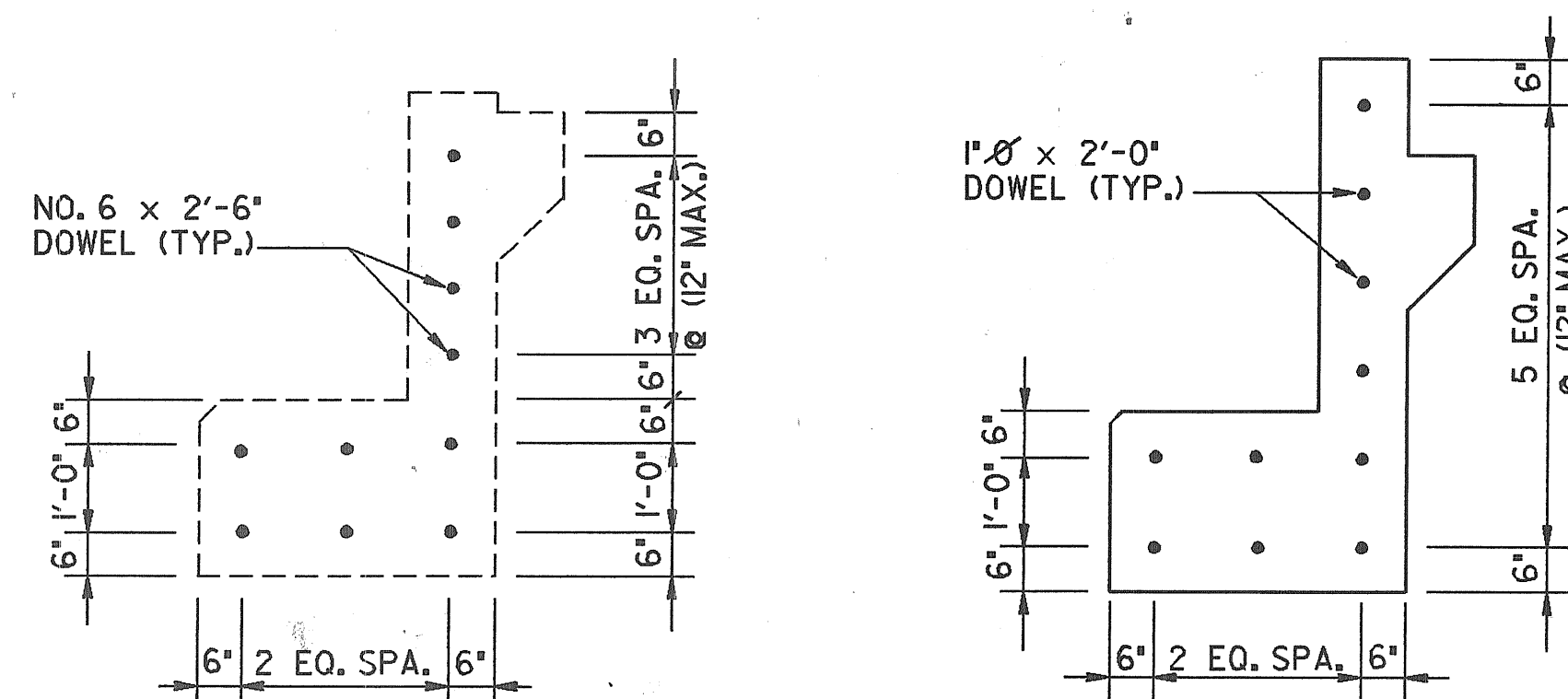


TYPICAL ABUTMENT SECTION
SCALE: 1\"/>



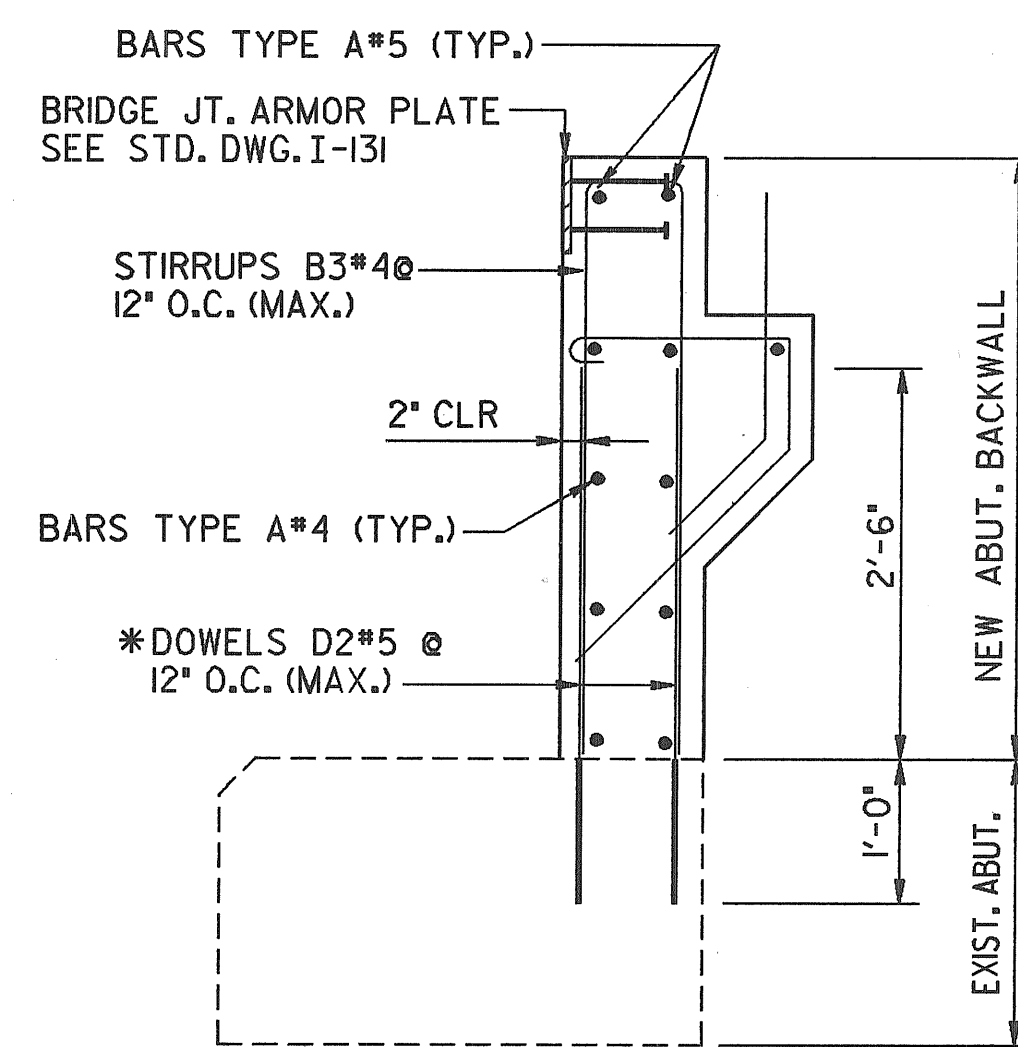
BOTTOM ROW
PARTIAL PLAN - ABUTMENT BEAM REINFORCING
NO SCALE

TOP ROW
PARTIAL PLAN - ABUTMENT BEAM REINFORCING
NO SCALE

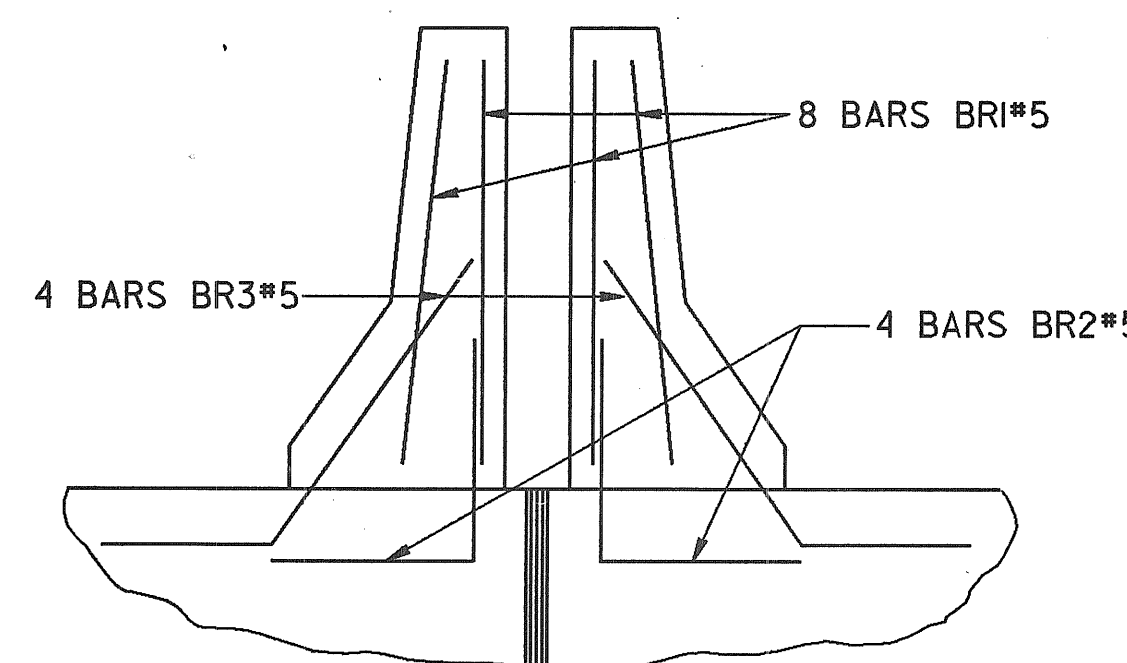


SECTION "A-A"
NO SCALE

SECTION "B-B"
NO SCALE

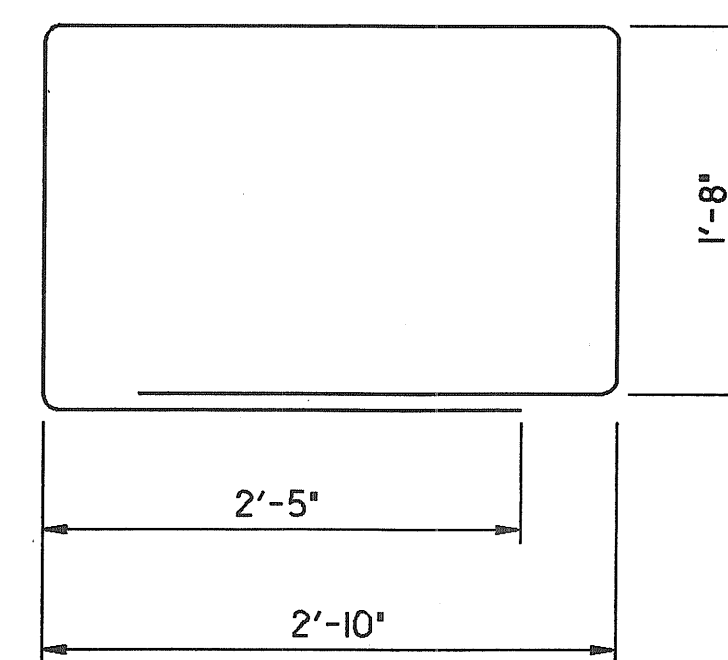


SECTION "C-C"
NO SCALE

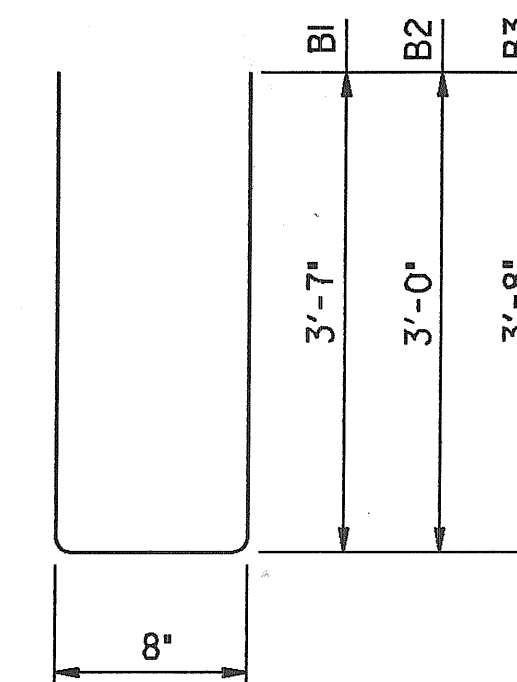


DETAIL "C"
NO SCALE

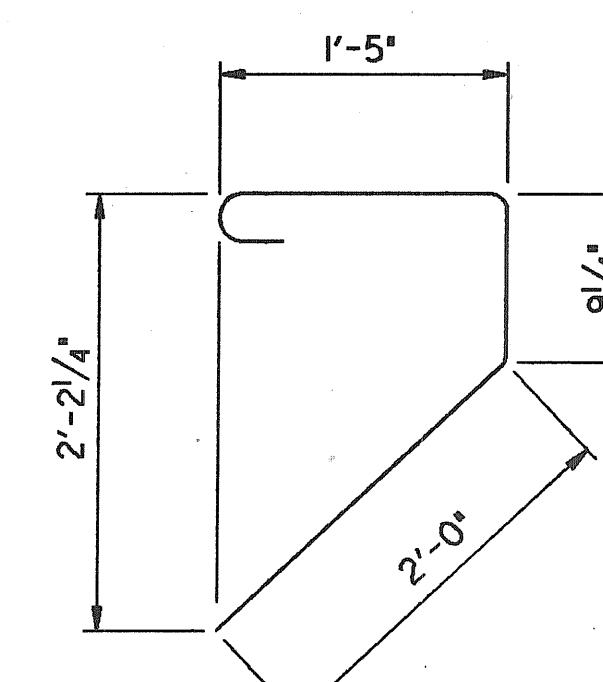
NOTE: BARS BR2 & BARS BR3 EMBED. 7\"/>



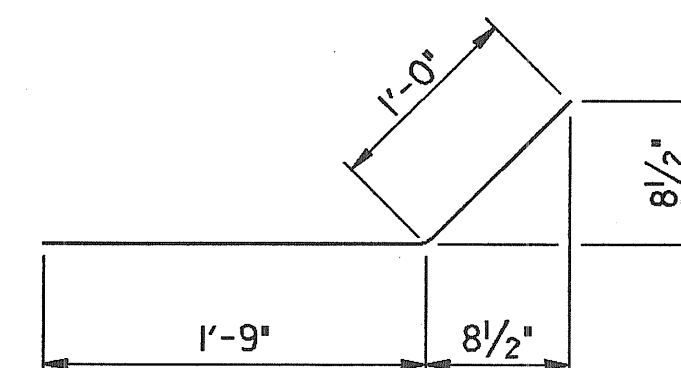
HOOPS K



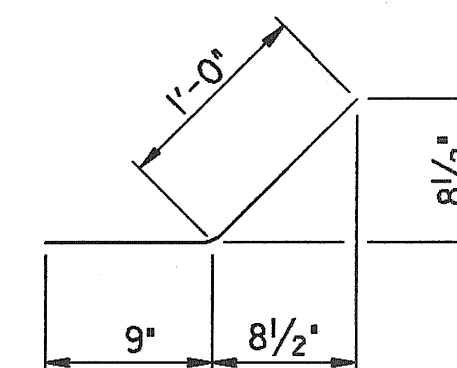
STIRRUPS B



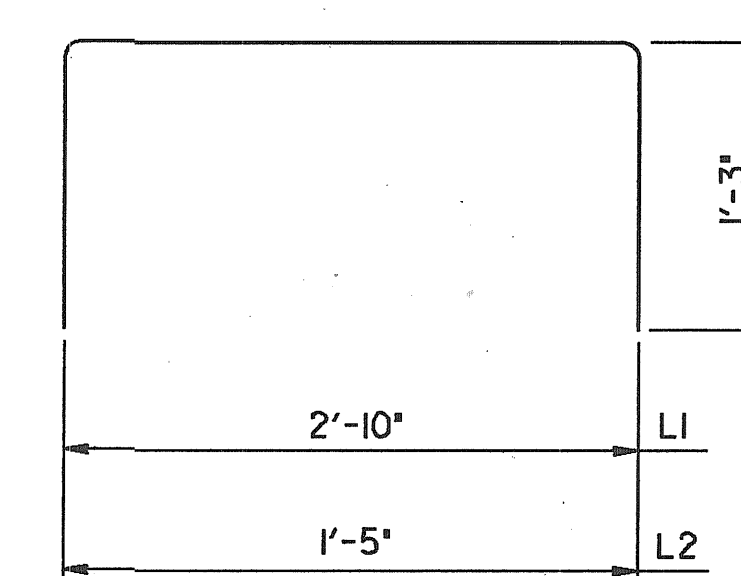
BAR PS



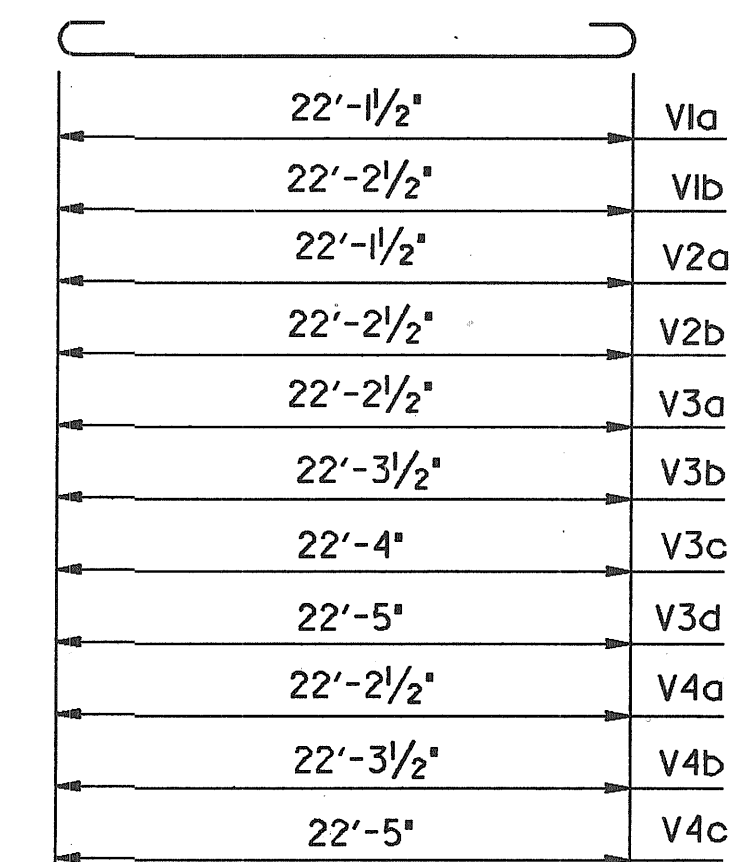
BAR PDI



BAR PD2
(USED IN EXIST.
PAVING SEAT)



BARS L



BARS V

BILL OF STEEL REINFORCEMENT					
BAR	SIZE	ABUT. NO. 1		ABUT. NO. 5	
		NO. REQ'D	LENGTH	NO. REQ'D	LENGTH
A1	5	4	39'-4"	4	39'-4"
A2a	4	4	26'-9"	4	26'-9"
A2b	4	4	26'-10"	4	26'-10"
A3a	4	1	22'-1 1/2"	1	22'-1 1/2"
A3b	4	1	22'-2"	1	22'-2"
A3c	4	1	22'-2 1/2"	1	22'-2 1/2"
A4	4	8	26'-9"	8	26'-9"
A5	5	4	27'-1"	4	27'-1"
A6a	4	4	26'-7"	4	26'-7"
A6b	4	4	26'-6"	4	26'-6"
A7a	4	2	22'-2 1/2"	2	22'-2 1/2"
A7b	4	1	22'-5"	1	22'-5"
A8	4	8	26'-7"	8	26'-7"
V1a	10	1	24'-1 1/2"	1	24'-1 1/2"
V1b	10	4	25'-0 1/2"	4	25'-0 1/2"
V2a	10	2	24'-1 1/2"	2	24'-1 1/2"
V2b	10	3	25'-0 1/2"	3	25'-0 1/2"
V3a	10	2	25'-0 1/2"	2	25'-0 1/2"
V3b	10	1	25'-1 1/2"	1	25'-1 1/2"
V3c	10	1	25'-2"	1	25'-2"
V3d	10	1	25'-3"	1	25'-3"
V4a	10	2	25'-0 1/2"	2	25'-0 1/2"
V4b	10	1	25'-1 1/2"	1	25'-1 1/2"
V4c	10	2	25'-3"	2	25'-3"
PC1	4	1	26'-8 1/2"	1	26'-8 1/2"
PC2	4	1	26'-9"	1	26'-9"
K	5	79	11'-0"	79	11'-0"
B1	4	46	7'-10"	46	7'-10"
B2	4	46	6'-8"	46	6'-8"
B3	4	10	8'-0"	10	8'-0"
BR1	5	8	2'-3"	8	2'-3"
BR2	5	4	2'-9 1/2"	4	2'-9 1/2"
BR3	5	4	3'-6"	4	3'-6"
PS	4	56	4'-8 1/4"	56	4'-8 1/4"
PDI	6	56	2'-9"	56	2'-9"
PD2	6	102	1'-9"	102	1'-9"
L1	5	24	5'-4"	24	5'-4"
L2	5	42	3'-11"	42	3'-11"
D1	5	196	2'-6"	196	2'-6"
D2	5	20	3'-6"	20	3'-6"
DOWEL	6	20	2'-6"	20	2'-6"
DOWEL	1" Ø	10	2'-0"	10	2'-0"

NOTE: ALL BAR BENDING DIMENSIONS ARE
OUT TO OUT UNLESS OTHERWISE NOTED.

TABLE OF ESTIMATED QUANTITIES ▲

ITEM	UNITS	ABUT. NO. 1	ABUT. NO. 5
SUBSTRUCTURE CONCRETE	CU.YD.	26.6	26.7
STEEL REINFORCEMENT	LBS.	6273	6273
STRUCTURAL STEEL	LBS.	2291	2291

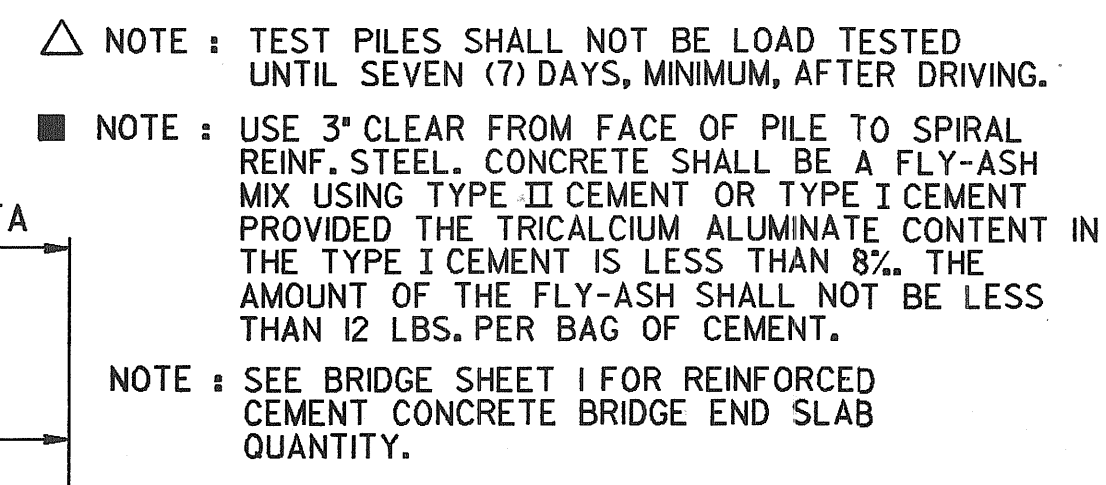
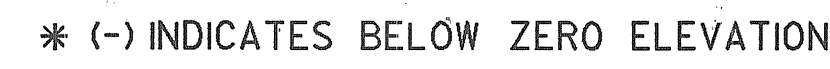
▲ COMBINED TOTAL FOR E.B.L. &
W.B.L. INSIDE WIDENING.

BRIDGE SHEET NO. 11 OF 22 REVISIONS APPROVED: SECTION SUPERVISOR <i>William D. McElroy</i> CHIEF BRIDGE DESIGN ENGINEER BRIDGE ENGINEER <i>Charlie H. Cook</i>	STATE OF ALABAMA HIGHWAY DEPARTMENT PROJECT NO. IR-10-(K84) INSIDE WIDENING OF I-10 BRIDGES OVER WARREN-LAWRENCE CONNECTOR AT STATION 598+00.16 MOBILE COUNTY, ALABAMA		
	ABUTMENT DETAILS		
	SCALE: AS SHOWN	DESIGNED: JCP DRAWN: BWS CAD/D REINF CHKD: TWW CHECKED: TWW	QUANTITIES COMP: JCP CHKD: TWW
	DATE 6/17/87		

NOTE: FOR DETAILS NOT SHOWN,
SEE TYP. ABUTMENT SECTION

* DOWEL HOLES (3/4" Ø MIN.) TO
BE FILLED W/ APPROVED EPOXY
ADHESIVE. SEE BR. SHT. NO. 1 AND
SECTION 870 OF THE STD.
SPECIFICATIONS.

ESTIMATED QUANTITIES - "IR" FUNDS		
QUANTITY	UNIT	DESCRIPTION
1	LUMP SUM	REMOVAL OF OLD BRIDGE @ STA. 597+19.36 (PARTIAL ONLY W.B.L. & E.B.L. - OUTSIDE WIDENING)
190	CU. YD.	UNCLASSIFIED BRIDGE EXCAVATION
26000	LB.	STEEL REINFORCEMENT
1	EACH	STEEL TEST PILES (HPI0x42)
1	EACH	PRETENSIONED-PRESTRESSED CONCRETE TEST PILES (12" SQUARE)
1	EACH	LOADING TESTS (HPI0x42)
1	EACH	LOADING TESTS (12" SQUARE)
637	LIN. FT.	STEEL PILING (HPI0x42)
802	LIN. FT.	PRETENSIONED-PRESTRESSED CONCRETE PILING (12" SQUARE)
10690	LB.	STRUCTURAL STEEL
134	CU. YD.	BRIDGE SUBSTRUCTURE CONCRETE, CLASS "A"
1	LUMP SUM	REINFORCED BRIDGE CONCRETE SUPERSTRUCTURE, STA. 597+19.36, APPROX. 147 CU. YD.
313	LIN. FT.	PRETENSIONED - PRESTRESSED CONCRETE GIRDERS, TYPE II (SPECIALTY ITEM)



REQUIRED

WIDENING 35'-9 $\frac{1}{8}$ ", 45'-0 $\frac{1}{2}$ ", 44'-11 $\frac{1}{8}$ ", 35'-11 $\frac{1}{2}$ "
 PRETENSIONED - PRESTRESSED AASHTO GIRDERS,
 TYPE II SIMPLE SPAN _____ BR. SHT. NO. 12 THRU 18

WIDENING CONCRETE EXT. BENTS (PILE FTGS.) _____ BR. SHT. NO. 19 AND 20

WIDENING CONCRETE AND STEEL PILE ABUTMENTS _____ BR. SHT. NO. 21 AND 22

EXIST. ORIGINAL BRIDGE PLANS _____ BR. SHT. NO. E20 THRU E25

TEST BORING RECORD _____ BR. SHT. NO. 2A OF 3A

BRIDGE GENERAL NOTES _____ STD. DWG. BGN-1 (1 SHT.)

STANDARD DETAILS _____ STD. DWG. I-131 (3 SHTS.)

* TRAFFIC PROTECTION _____ STD. TP-1 (2 SHTS.)

REINFORCED-CONCRETE
 BRIDGE END SLAB _____ SPECIAL DWG. NO. BES-450-0

PRETENSIONED-PRESTRESSED CONCRETE PILES _____ STD. DWG. NO. PSCP-1

INTERIOR JOINT REPAIR _____ BR. SHT. NO. 3A OF 3A

** TRAFFIC PROTECTORS WILL ONLY BE REQUIRED
 UNDER THE NEW CONSTR. AREAS (5'-0" MIN.
 OUTSIDE THE LIMITS OF NEW CONSTR.)

SPECIAL NOTE
REGARDING EPOXY ADHESIVES

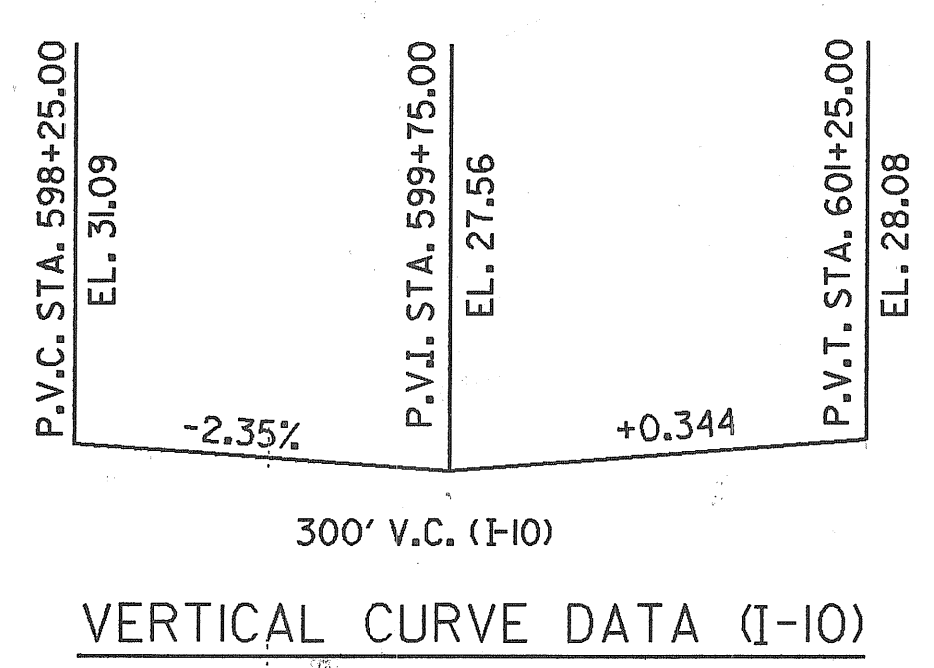
PRIOR TO PLACING NEW CONC. AGAINST ANY
BROKEN OR SCARIFIED SURFACE, A TYPE
II EPOXY ADHESIVE SHALL BE APPLIED TO
THE ROUGHENED CONC.

ALL DOWEL BARS PLACED IN EXIST. CONC.
SHALL BE SET W/ A TYPE I, GRADE I
EPOXY ADHESIVE.

SEE SECTION 870, EPOXY ADHESIVES, OF
THE STD. SPECIFICATIONS.

SPECIAL NOTES

1. TEMPORARY BARRIER RAILS SHALL BE ERECTED CONCURRENT W/ REMOVAL OF EXIST. DECK, CURB, & HANDRAIL.
2. THE TOP OF EXIST. DECK SLAB SHALL BE SAWED A MIN. OF $\frac{1}{2}$ " MAX. OF ONE (1) INCH DEEP ALONG BREAKLINE PRIOR TO REMOVING THE SUPERSTRUCTURE CONCRETE.
3. ALL PLAN ELEVATIONS & DIMENSIONS ARE TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR & ANY NECESSARY ADJUSTMENTS MADE PRIOR TO ORDERING ANY MATERIAL.

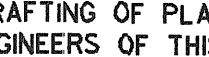





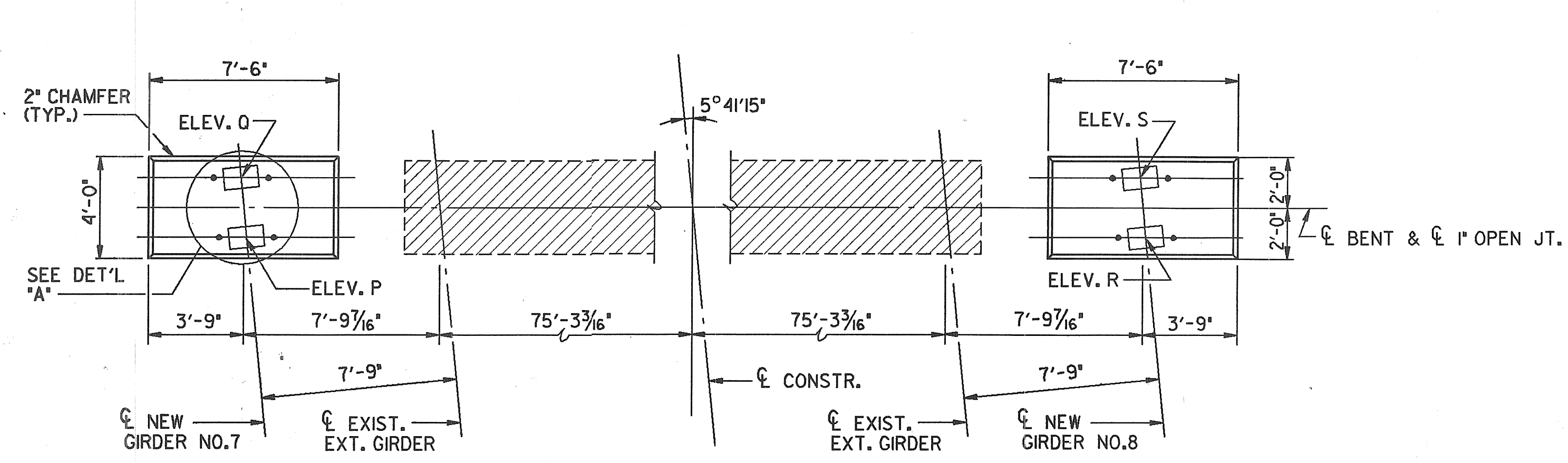
BRIDGE GENERAL NOTES

SEE STANDARD DRAWING NO. BGN-1(I(SHT.))

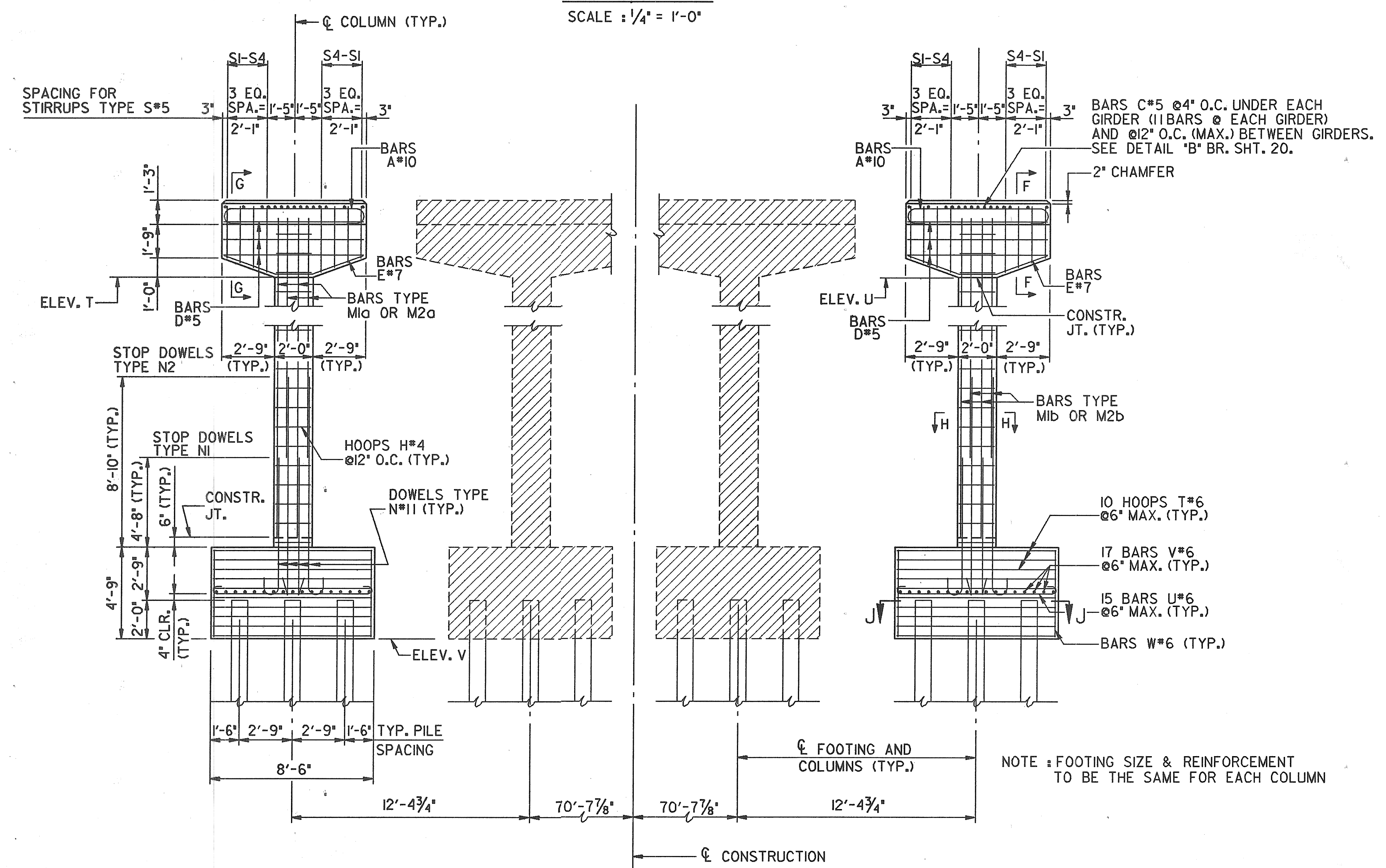
ROADWAY : 83'-5 $\frac{3}{4}$ " (WESTBOUND) AND 83'-5 $\frac{3}{4}$ " (EASTBOUND)
GUTTER TO GUTTER WITH BARRIER RAIL.

- 1.
2. HS20-44 AND ALTERNATE LOADING PPM20-4, DATED 8-10-56.
5. ABUTS. - 21 TONS, BENTS 40 TONS.
- 7.
- 13.
- 15.
- 16.
- 18.
- 19.
- 21.
- 23.
- 24.
- 25.
- 27.

1 CERTIFY THAT CHECKS OF (1) DESIGN CALCULATIONS AND (2) DETAILS AND DRAFTING OF PLANS HAVE BEEN MADE BY COMPETENT ENGINEERS OF THIS ORGANIZATION BARGE, WAGGONER, SUMNER, & CANNON  6-16-87 TITLE - SENIOR VICE-PRESIDENT  Alabama Reg. Engineer No. 12008	BARGE, WAGGONER, SUMNER, & CANNON	BRIDGE SHEET NO. 12 OF 22 REVISIONS	STATE OF ALABAMA HIGHWAY DEPARTMENT PROJECT NO. IR-10-1(84) OUTSIDE WIDENING OF I-10 BRIDGES OVER WARREN-LAWRENCE CONNECTOR AT STATION 598+00.16 MOBILE COUNTY, ALABAMA			
		APPROVED: SECTION SUPERVISOR  CHIEF BRIDGE DESIGN ENGINEER  BRIDGE ENGINEER	AS SHOWN	DESIGNED: JCP DRAWN: BWSC CAD/D REINF CHKD: CHECKED: TWW	QUANTITIES COMP: JCP CHKD: TWW	DATE 6/17/87



PLAN
SCALE: 1/4" = 1'-0"



ELEVATION
(LOOKING UPSTATION)
SCALE: 1/4" = 1'-0"

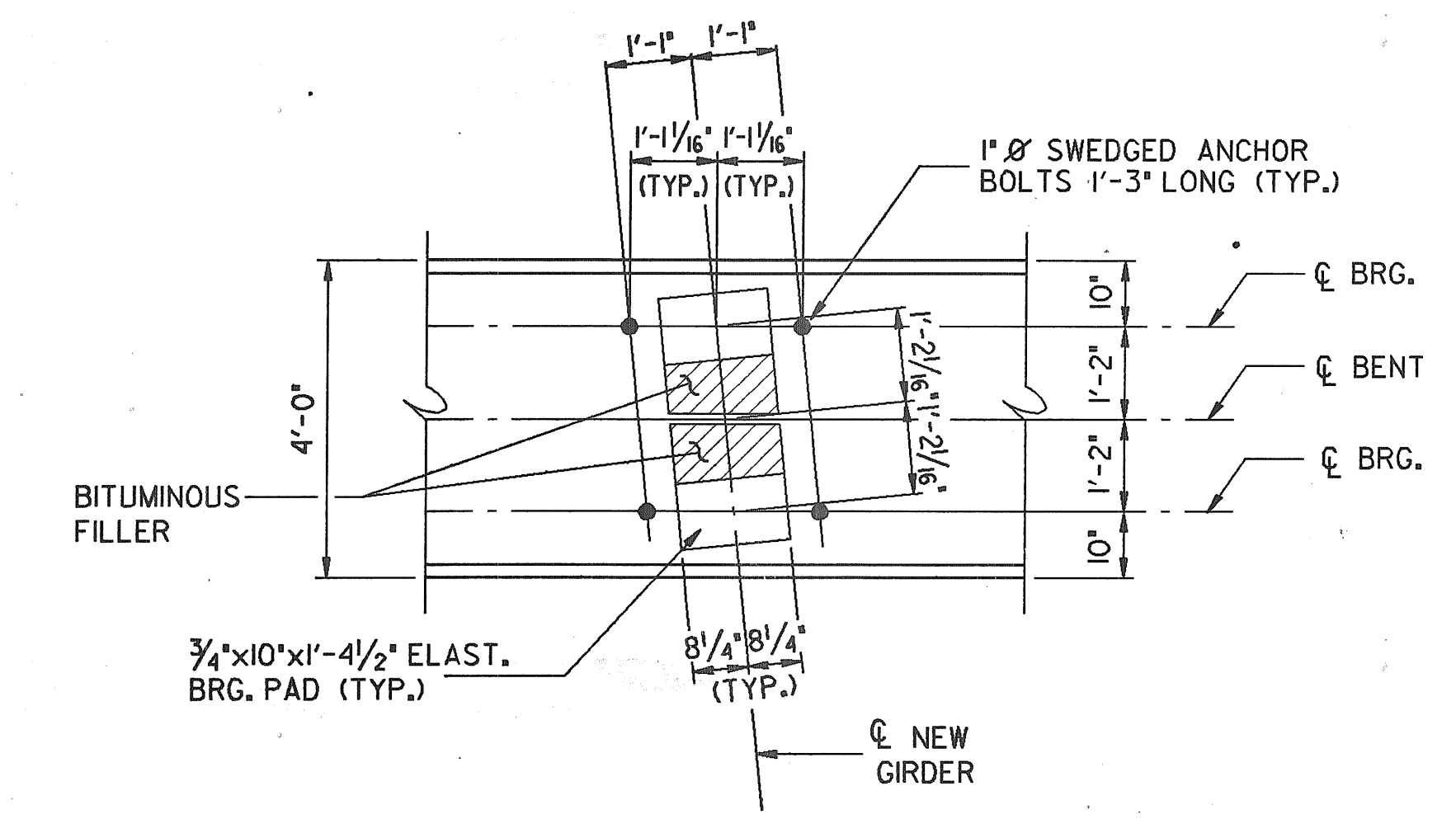
TABLE OF ELEVATIONS

	P	Q	R	S	T	U	V
BENT NO. 2	28.5756	28.5203	28.9626	28.9074	24.5203	24.9074	5.45
BENT NO. 3	27.5171	27.4619	27.9042	27.8490	23.4619	23.8490	6.25
BENT NO. 4	26.4944	26.4451	26.8534	26.8007	22.4451	22.8007	5.45

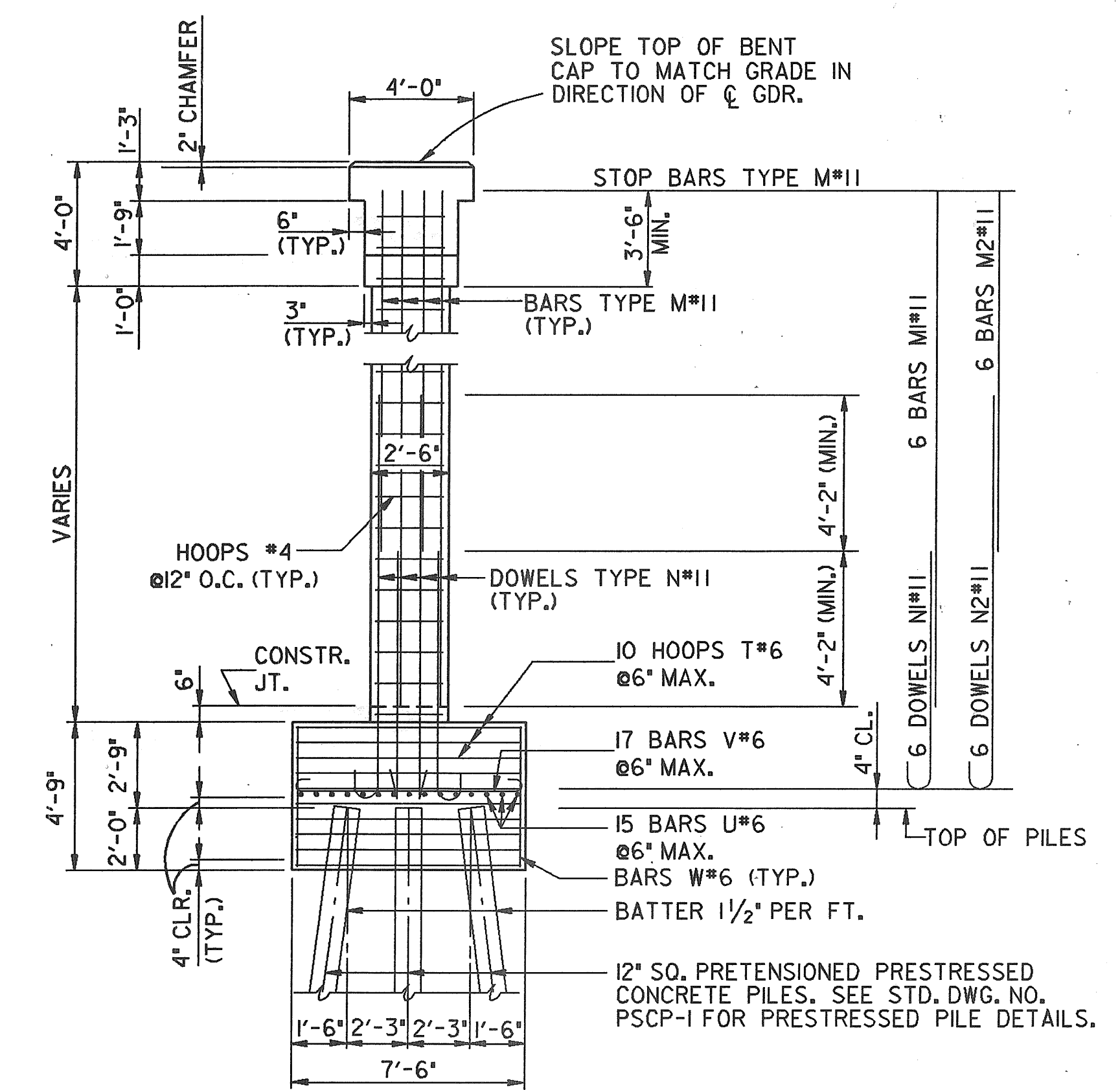
TABLE OF ESTIMATED QUANTITIES

ITEM	UNITS	BENT NO. 2	BENT NO. 3	BENT NO. 4
SUBSTRUCTURE CONCRETE	CU. YD.	35.3	34.4	34.3
STEEL REINFORCEMENT	LBS.	6667	6404	6378

COMBINED TOTAL FOR E.B.L. & W.B.L. OUTSIDE WIDENING.

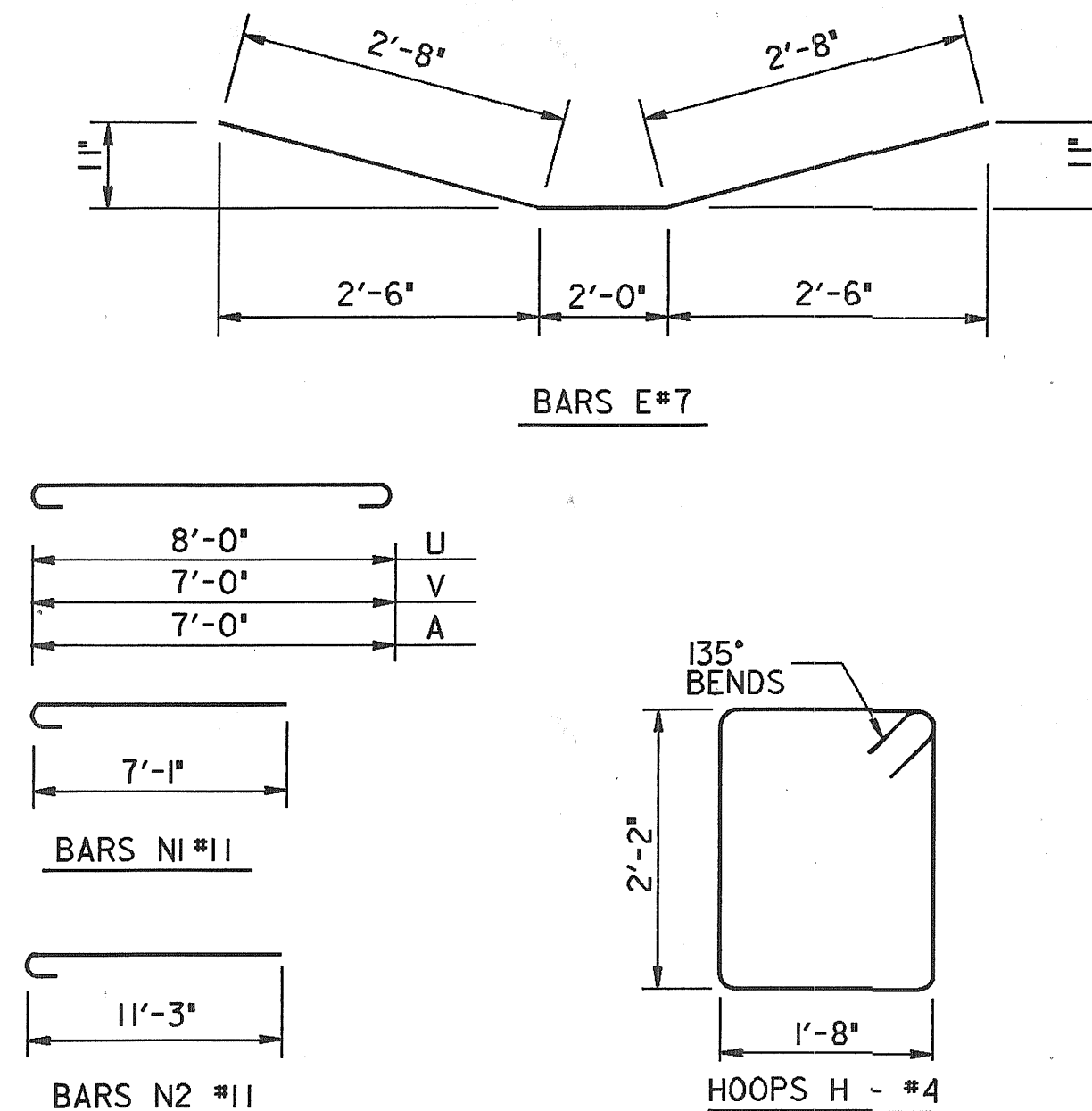
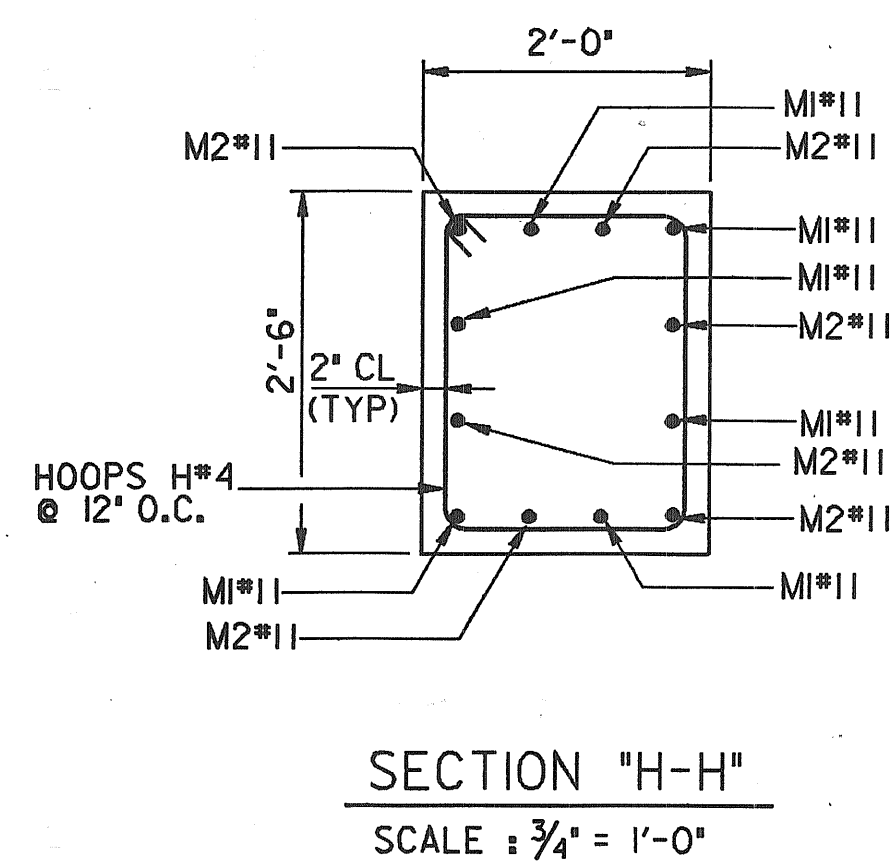
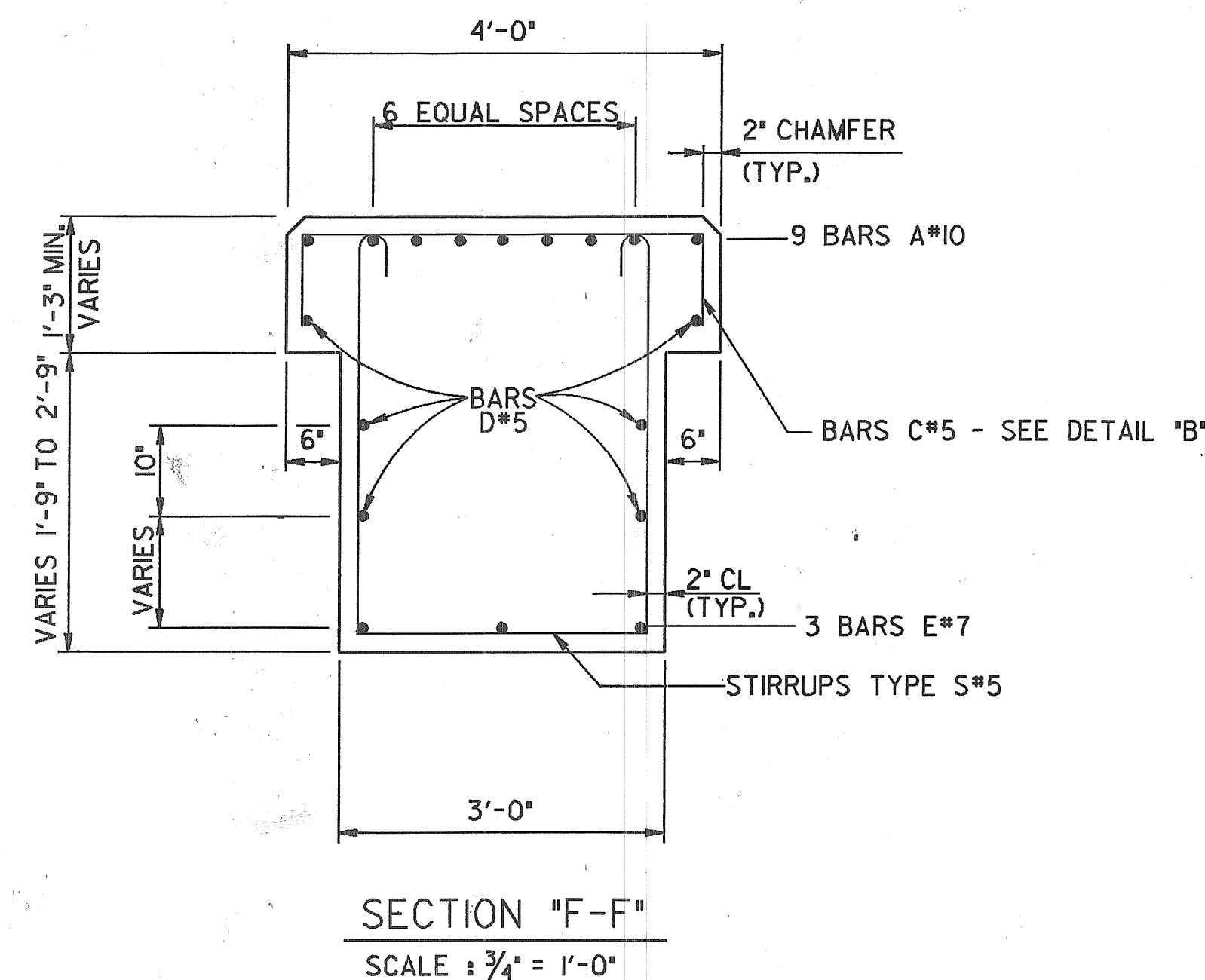


DETAIL "A"
SCALE: 1/2" = 1'-0"



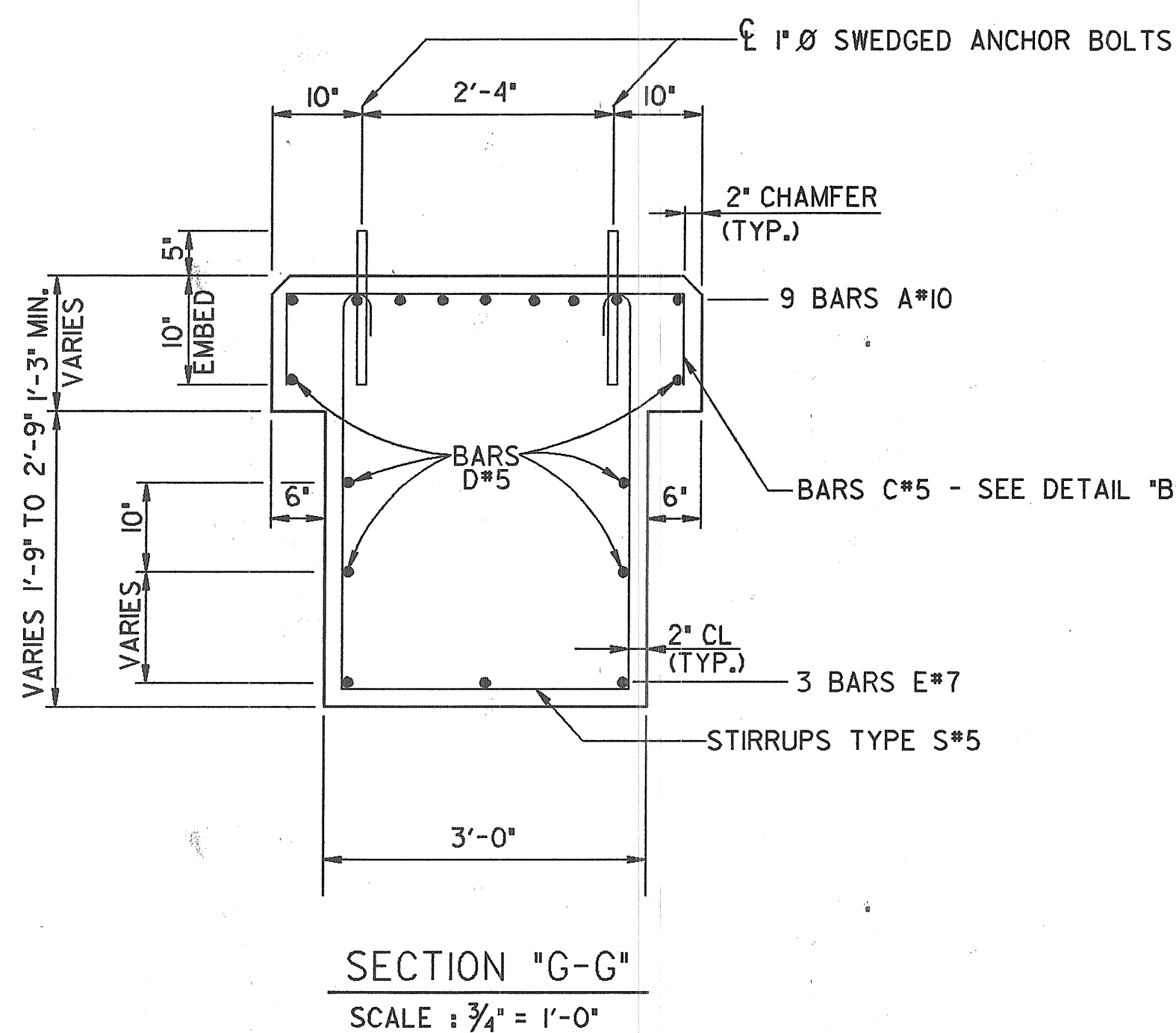
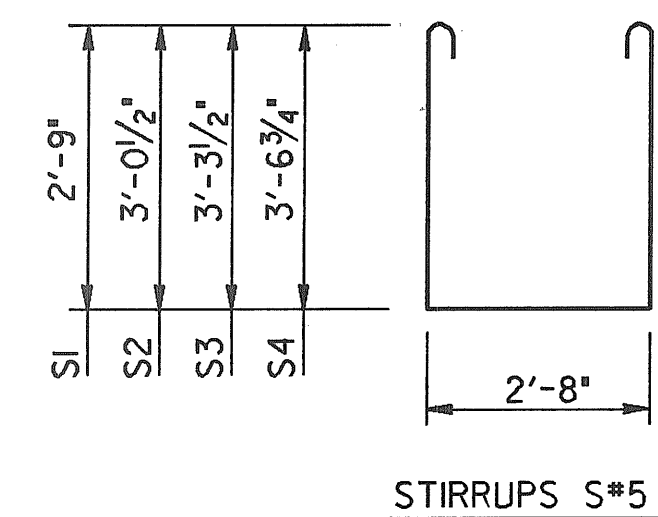
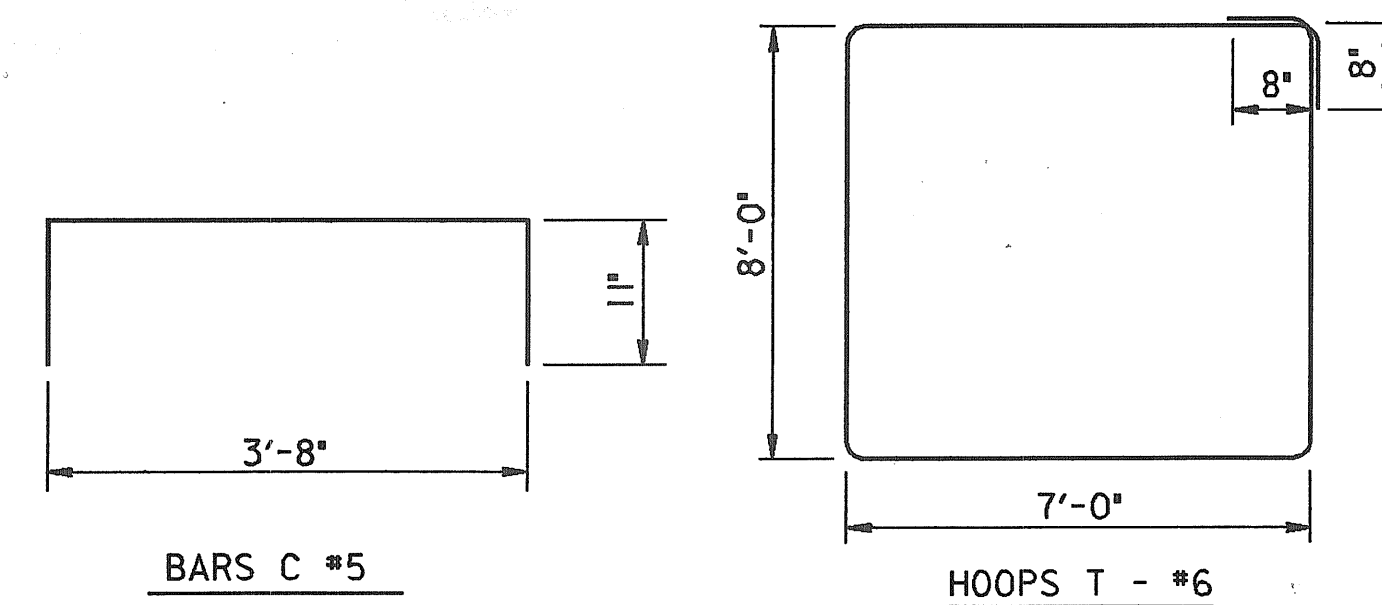
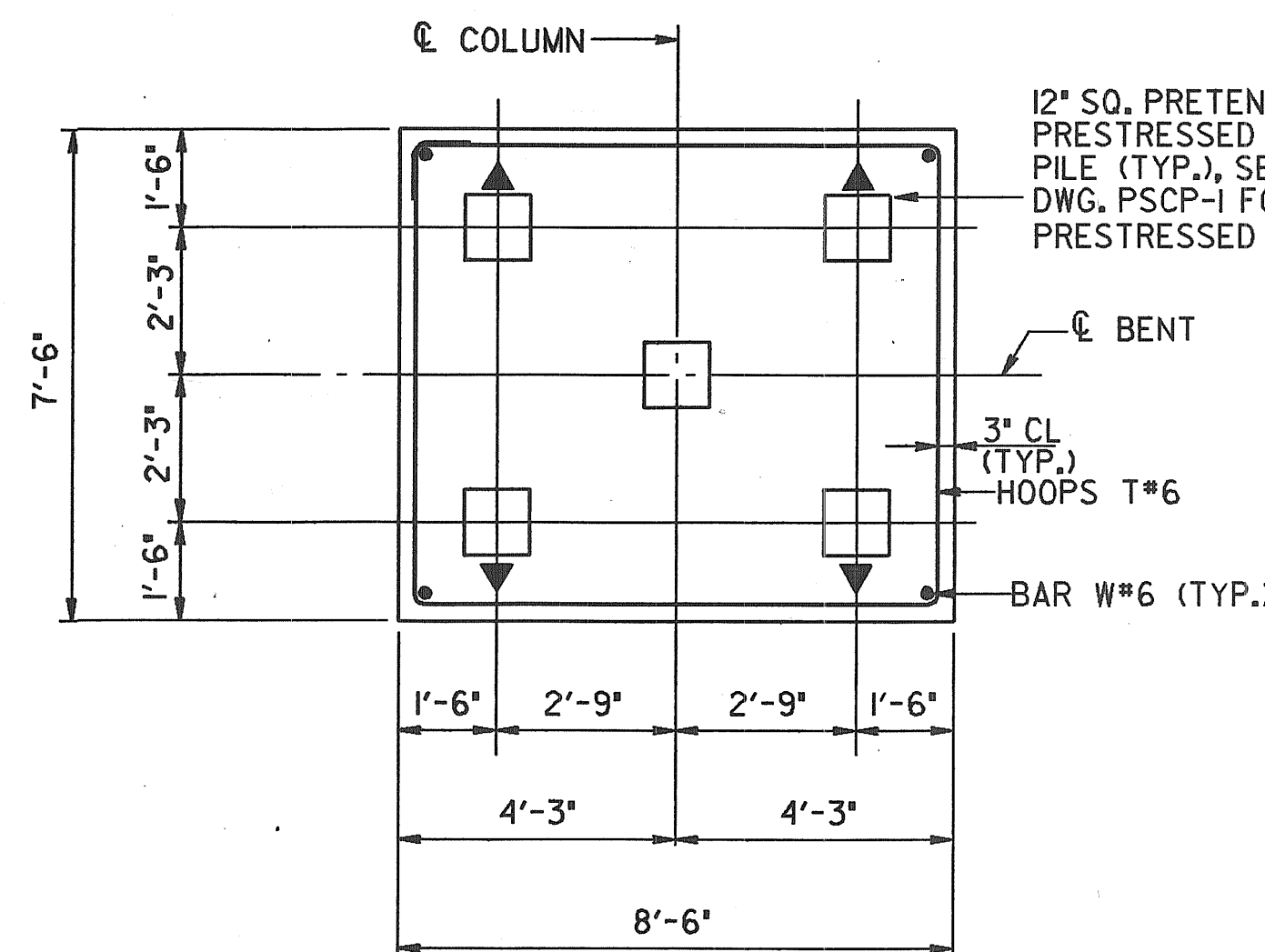
END ELEVATION
SCALE: 1/4" = 1'-0"

BRIDGE SHEET NO. 19 OF 22 REVISIONS APPROVED: SECTION SUPERVISOR <i>William D. Mott</i> CHIEF BRIDGE DESIGN ENGINEER BRIDGE ENGINEER <i>Charles H. Cook</i>	STATE OF ALABAMA HIGHWAY DEPARTMENT PROJECT NO. IR-10-K(84) OUTSIDE WIDENING OF I-10 BRIDGES OVER WARREN-LAWRENCE CONNECTOR AT STATION 598+00.16 MOBILE COUNTY, ALABAMA BENTS NO. 2, NO. 3, & NO. 4		
	SCALE:	DESIGNED: JCP	QUANTITIES
	AS SHOWN	DRAWN: BWSC CAD/D	COMP: JCP
		REINF. CHKD:	CHKD: TWW
	CHECKED: TWW	DATE	6/17/87



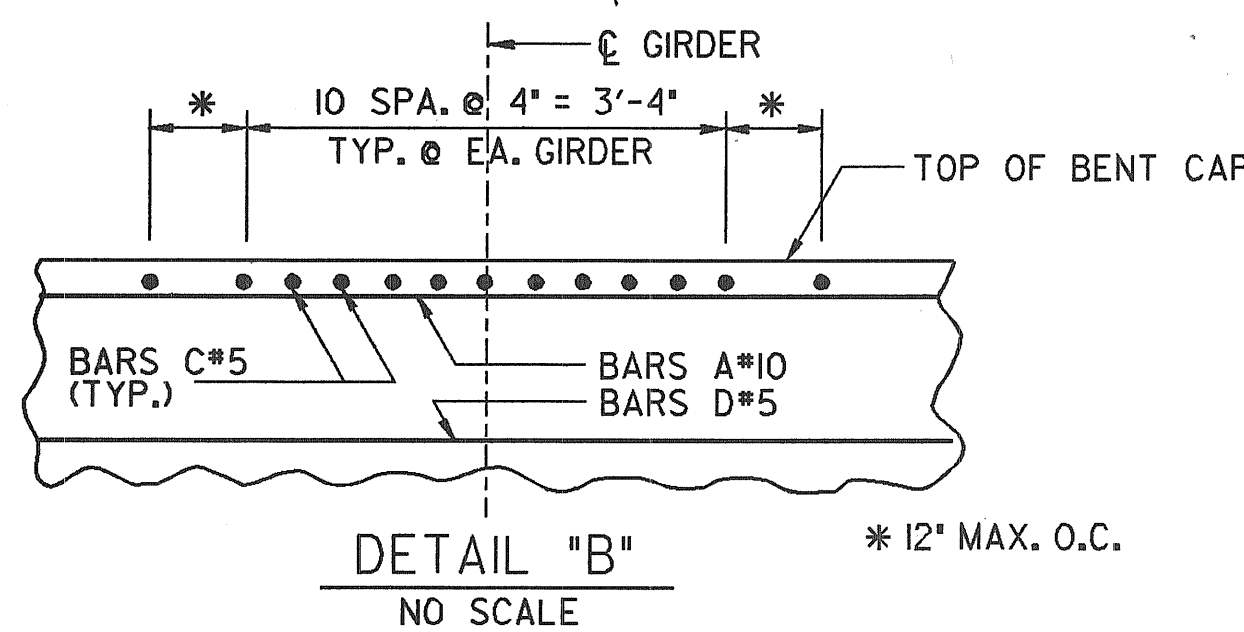
BILL OF STEEL REINFORCEMENT							
BAR	SIZE	BENT NO. 2		BENT NO. 3		BENT NO. 4	
		NO. REQ'D	LENGTH	NO. REQ'D	LENGTH	NO. REQ'D	LENGTH
A	10	18	9'-10"	18	9'-10"	18	9'-10"
C	5	30	5'-6"	30	5'-6"	30	5'-6"
D	5	12	7'-0"	12	7'-0"	12	7'-0"
E	7	6	7'-4"	6	7'-4"	6	7'-4"
H	4	36	8'-8"	32	8'-8"	32	8'-8"
M1a	11	6	17'-4"	6	15'-6"	6	15'-3"
M1b	11	6	17'-9"	6	15'-10"	6	15'-8"
M2a	11	6	13'-2"	6	11'-4"	6	11'-1"
M2b	11	6	13'-7"	6	11'-8"	6	11'-6"
N1	11	12	8'-8"	12	8'-8"	12	8'-8"
N2	11	12	12'-10"	12	12'-10"	12	12'-10"
S1	5	4	9'-2"	4	9'-2"	4	9'-2"
S2	5	4	9'-9"	4	9'-9"	4	9'-9"
S3	5	4	10'-3"	4	10'-3"	4	10'-3"
S4	5	4	10'-9 1/2"	4	10'-9 1/2"	4	10'-9 1/2"
T	6	20	31'-4"	20	31'-4"	20	31'-4"
U	6	30	9'-4"	30	9'-4"	30	9'-4"
V	6	34	8'-4"	34	8'-4"	34	8'-4"
W	6	8	4'-3"	8	4'-3"	8	4'-3"

NOTE: ALL BAR BENDING DIMENSIONS ARE OUT TO OUT UNLESS OTHERWISE NOTED.



SECTION "J-J" @ TOP OF PILES
SCALE: 3/8" = 1'-0"

▲ DENOTES: PILES TO BE BATTERED & DIRECTION

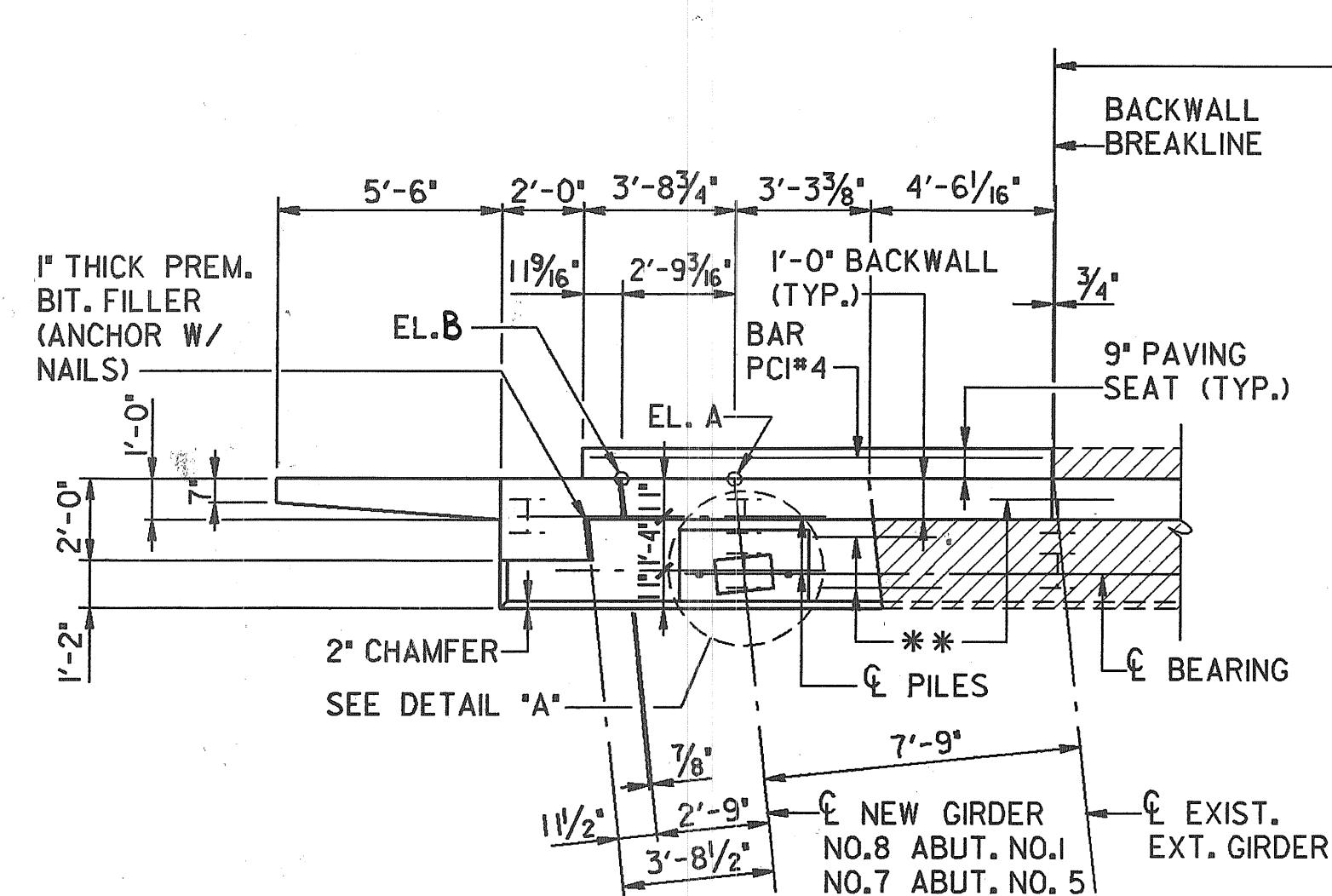


BRIDGE SHEET NO. 20 OF 22	STATE OF ALABAMA HIGHWAY DEPARTMENT			
	PROJECT NO. 1R-10-1(84) OUTSIDE WIDENING OF I-10 BRIDGES OVER WARREN-LAWRENCE CONNECTOR AT STATION 598+00.16 MOBILE COUNTY, ALABAMA			
	BENT DETAILS			
	DESIGNED: JCP DRAWN: BWSC CAD/D REINF. CHKD: TWW CHECKED: TWW	QUANTITIES CHKD:	DATE 6/17/87	

FHWA REG. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	ALA.	I-IR-10-1 (84)	1987	297	1594

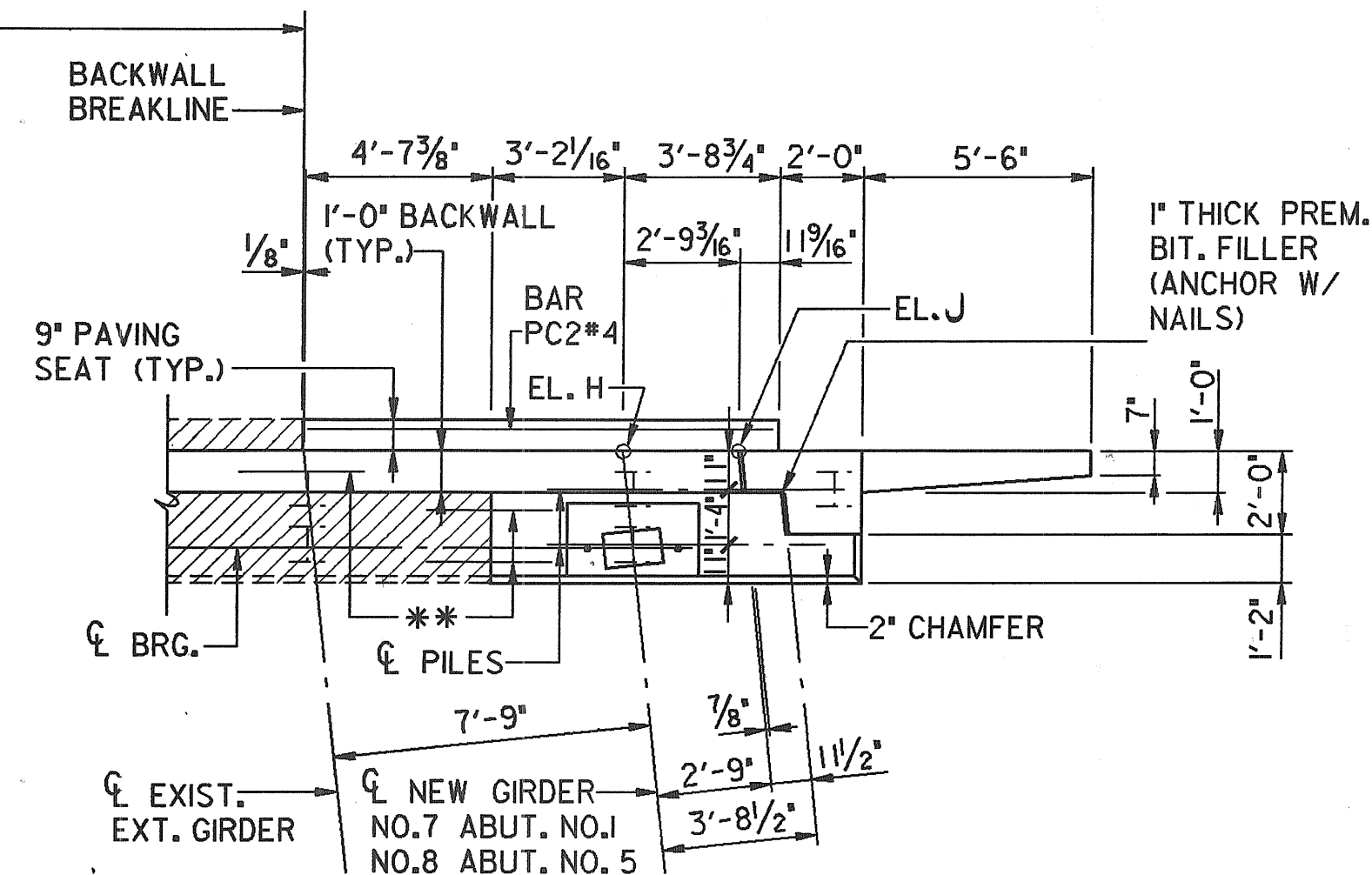
TABLE OF ELEVATIONS

ABUT. NO. 1	ABUT. NO. 5
A 33.5460	29.5449
B 33.5146	29.5021
C 34.5146	30.5021
D 29.7193	25.8197
E 29.4693	25.5697
F 29.42	25.42
G 32.147±	28.254±
H 33.1663	29.8490
J 33.1147	29.8163
K 34.1147	30.8163
L 29.3323	26.1244
M 29.0823	25.8744
N 29.38	25.71
P 32.1020±	28.5330±



PLAN

SCALE : $\frac{1}{4}" = 1'-0"$

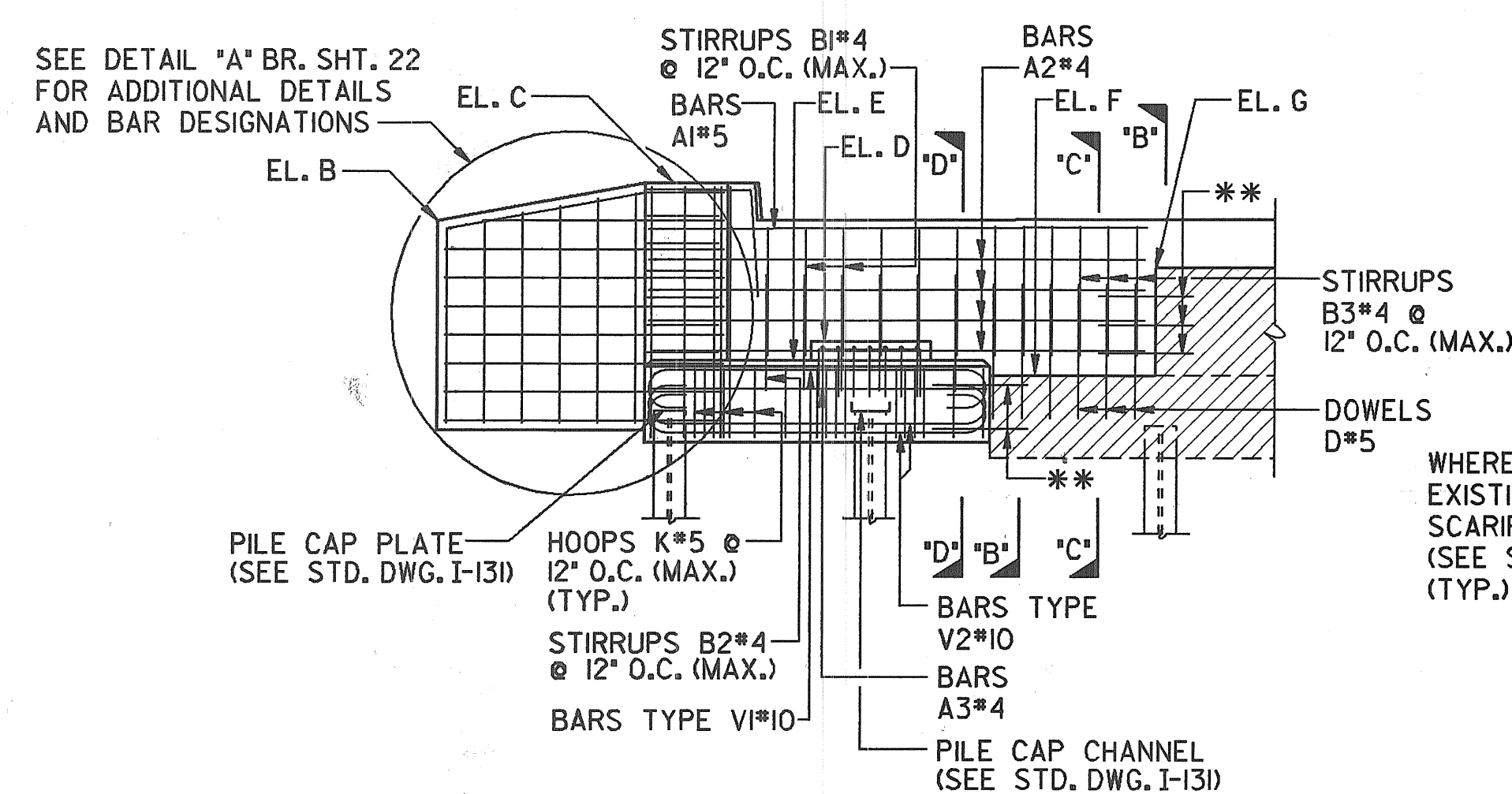


** INDICATES DOWEL BARS NO.6 X 2'-6" LONG
 EMBEDDED 1'-0" INTO EXIST. CONC. DOWEL
 HOLES (1" Ø MIN.) TO BE FILLED W/APPROVED
 EPOXY ADHESIVE. SEE BR. SHT. NO.12 AND
 SECTION 870 OF THE STD. SPECIFICATIONS.

NOTE: EXIST. HORIZONTAL BACKWALL REINFORCEMENT
TO EXTEND INTO NEW BACKWALLS. MIN. EXTENSION
INTO NEW CONC. = 1'-6". EXISTING REINFORCEMENT
TO BE CLEANED AND STRAIGHTENED.

NOTE: FINISH GRADE OF RAISED BACKWALL ON
EXISTING ABUTMENTS SHALL MATCH
EXISTING BRIDGE DECK SLOPE.

NOTE: SEE DETAIL "B" BR. SHT. 22 FOR SPACING
OF HOOPS K*5

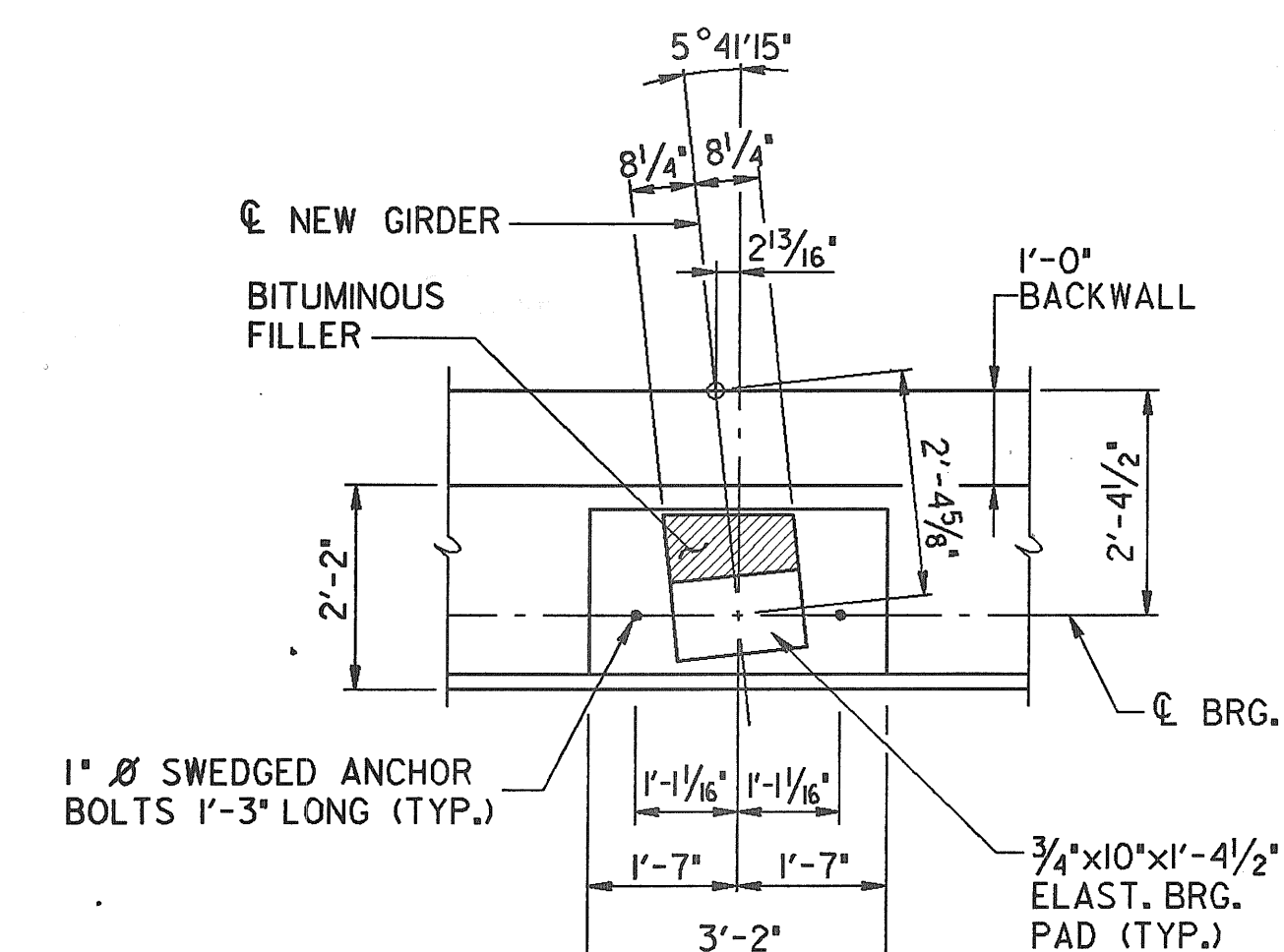
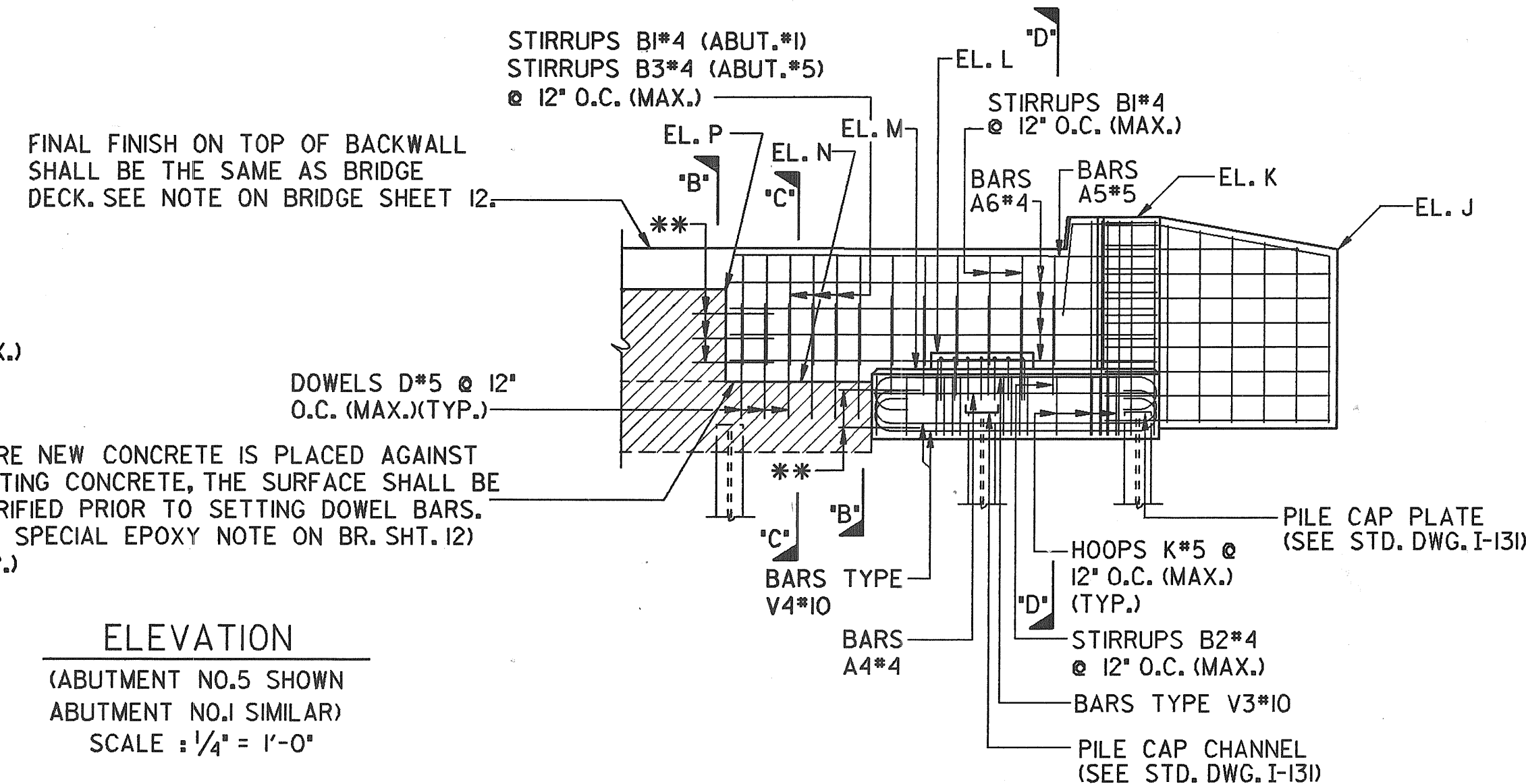


FINAL FINISH ON TOP OF BACKWALL
SHALL BE THE SAME AS BRIDGE
DECK. SEE NOTE ON BRIDGE SHEET 12-
(.)

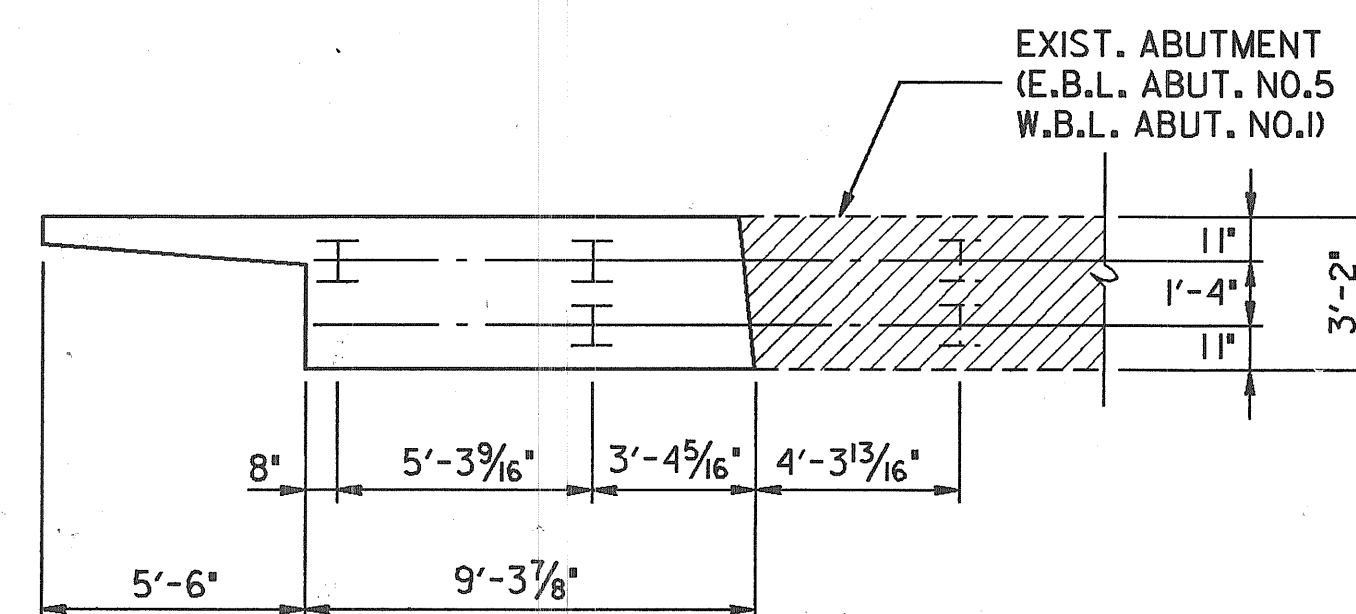
DOWELS D#5 @ 12"
O.C. (MAX.) (TYP.)-
RE NEW CONCRETE IS PLACED AGAINST
EXISTING CONCRETE, THE SURFACE SHALL BE
VERIFIED PRIOR TO SETTING DOWEL BARS.
SPECIAL EPOXY NOTE ON BR. SHT. 12)
(.)

ELEVATION

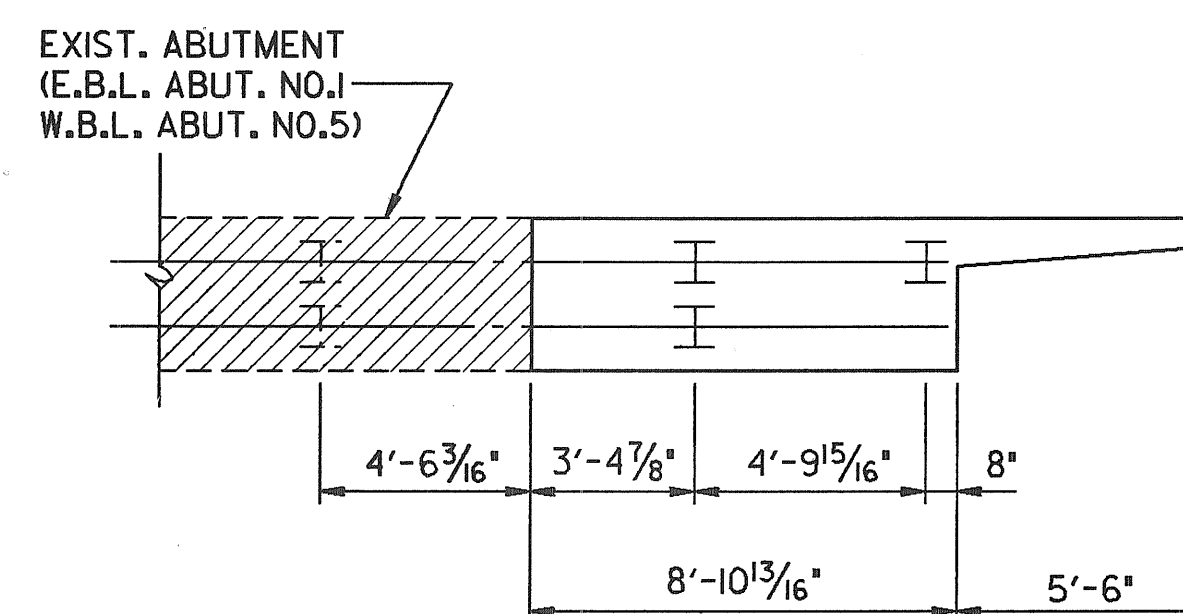
(ABUTMENT NO.5 SHOWN
ABUTMENT NO.1 SIMILAR)
SCALE : $\frac{1}{4}" = 1'-0"$



DETAIL "A"
SCALE : 1/2" = 1'-0"



PILE LOCATION PLAN
SCALE : $\frac{1}{4}" = 1'-0"$



BARGE, WAGGONER, SUMNER, & CANNON

BRIDGE SHEET NO. 21 OF 22
REVISIONS

STATE OF ALABAMA
HIGHWAY DEPARTMENT

PROJECT NO. IR-10-1(84)
OUTSIDE WIDENING OF I-10 BRIDGES
OVER WARREN-LAWRENCE CONNECTOR
AT STATION 598+00.16
MOBILE COUNTY, ALABAMA.

ABUTMENTS NO. 1 & NO. 5

SECTION SUPERVISOR
William J. McAten
CHIEF BRIDGE DESIGN ENGINEER
Charlie H. Cook
BRIDGE ENGINEER

SCALE:	DESIGNED: JCF	QUANTITIES	DATE
AS SHOWN	DRAWN: BWS CAD/D	COMP:	6/17/87
	REINF CHKD:	CHKD:	
	CHECKED: TWJ		

FEDERAL REGION NO.	STATE	PROJECT NUMBER	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	ALA.	I-IR-10-1 (84)	1987	32 A	159 H

WARREN-LAWRENCE ST.

LOCATION: Sta. 597+99.40; C/L of I-10

ELEV. DEPTH	DESCRIPTION	N	CR	S	REMARKS
14.0 0.0					
	Medium moist brown very silty clay w/sand	5.5	8		I-10 over Warren-Lawrence St.
3.0 11.0		10.5	7		
	Medium damp yellow & brown very silty clay w/a small amount of sand	15.5	5		
-3.5 17.5					
	Medium wet yellow, tan & gray very silty clay w/sand	20.5	4		
-9.0 23.0					
	Very stiff damp yellow, tan, & gray very sandy clay	25.5	16		
-15.5 29.5					
	Dense wet white coarse sand	30.5	36		
-18.0 32.0					
	Very dense wet yellow very stily sand w/occasional small amounts of organic material	35.5	55		
		40.4	50		
			.9		
		45.5	50		
		50.5	50		
			.9		
		55.5	53		
-46.5 60.5		60.5	55		

VIRGINIA ST.

LOCATION: Sta. 608+60.70; C/L of I-10

ELEV. DEPTH	DESCRIPTION	N	CR	S	REMARKS
10.0 0.0					
6.0 4.0	Loose moist red sand w/clay				I-10 over Virginia St.
2.2 7.8	Loose damp red sand w/clay	5.5	6		
1.2 8.8	Medium wet red & gray sand				
	Soft wet gray, brown, & tan clay	10.5	2		
-8.0 18.0		15.5	2		
	Medium damp gray clay w/organic material	20.5	4		
-17.4 27.4		25.5	4		
	Medium damp brown & tan clay w/silt	30.5	6		
-22.0 32.0					
	Medium wet tan & gray sand	35.5	26		
-25.0 35.0					
	Dense wet tan coarse sand	40.3	50		
-35.0 45.0			.8		
	Very dense wet gray slightly coarse sand	45.5	57		
	Very dense wet yellow & tan slightly coarse sand	50.3	50		
			.8		
		55.5	53		
-50.5 60.5		60.5	52		

TEXAS ST.

LOCATION: Sta. 622+47; 20' Rt. C/L of W.B.L. of I-10

ELEV. DEPTH	DESCRIPTION	N	CR	S	REMARKS
12.0 0.0					
9.0 3.0	Loose moist tan, brown, & gray sand w/clay & silt	5.3	6		I-10 over Texas St.
2.0 10.0	Medium damp brown & tan clay w/sand				
	Stiff wet gray & brown silty clay w/a small amount of sand	10.3	11		
-4.0 16.0		15.3	10		
	Medium wet tan & gray sand w/clay	20.3	12		
-14.0 26.0		25.3	15		
	Dense wet tan coarse sand	30.3	37		
-26.0 38.0		35.3	41		
	Very dense wet yellow & tan sand	40.1	50		
			.8		
-36.8 48.8		45.3	54		
-38.2 50.2	Very dense wet gray sand	50.2	50		
			.9		

SPECIAL NOTE: SUBSURFACE INFORMATION SHOWN ON THIS DRAWING WAS OBTAINED SOLELY FOR USE IN ESTABLISHING DESIGN CONTROLS FOR THIS PROJECT. THE ACCURACY OF THIS INFORMATION IS NOT GUARANTEED & IT IS NOT TO BE CONSTRUED AS PART OF THE PLANS GOVERNING CONSTRUCTION OF THIS PROJECT.

N - IS PENETRATION IN BLOWS PER FOOT (ASTM D-1586)

- 5 CR - IS % CORE RECOVERY, NX OR AX DESIGNATES BIT SIZE (ASTM D-2113)
- SYMBOLS DESCRIBED BELOW:
- UNDISTURBED SAMPLE (ASTM D-1587)
- WATER TABLE, TIME OF BORING
- WATER TABLE, 24 HOUR READING
- LOSS OF DRILLING FLUID

BRIDGE SHEET NO. 2 A OF 3 A		STATE OF ALABAMA HIGHWAY DEPARTMENT	
REVISIONS		PROJECT NO. I-IR-10-1C(84) WIDENING OF I-10 BRIDGES OVER BROAD ST., TENN. ST., WAR.-LAW. ST., VIRGINIA ST., AND TEXAS ST. MOBILE COUNTY, ALABAMA	
APPROVED:		TEST BORING RECORD	
SECTION SUPERVISOR <i>William D. Mott</i> CHIEF BRIDGE DESIGN ENGINEER		SCALE:	DESIGNED: G.W.
BRIDGE ENGINEER <i>Charlie H. Cook</i>		TRACED:	QUANTITIES
		CHECKED: F.B.	DATE MARCH 1986