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—CONTINUES ON SHEET 1-A—

## 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

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.

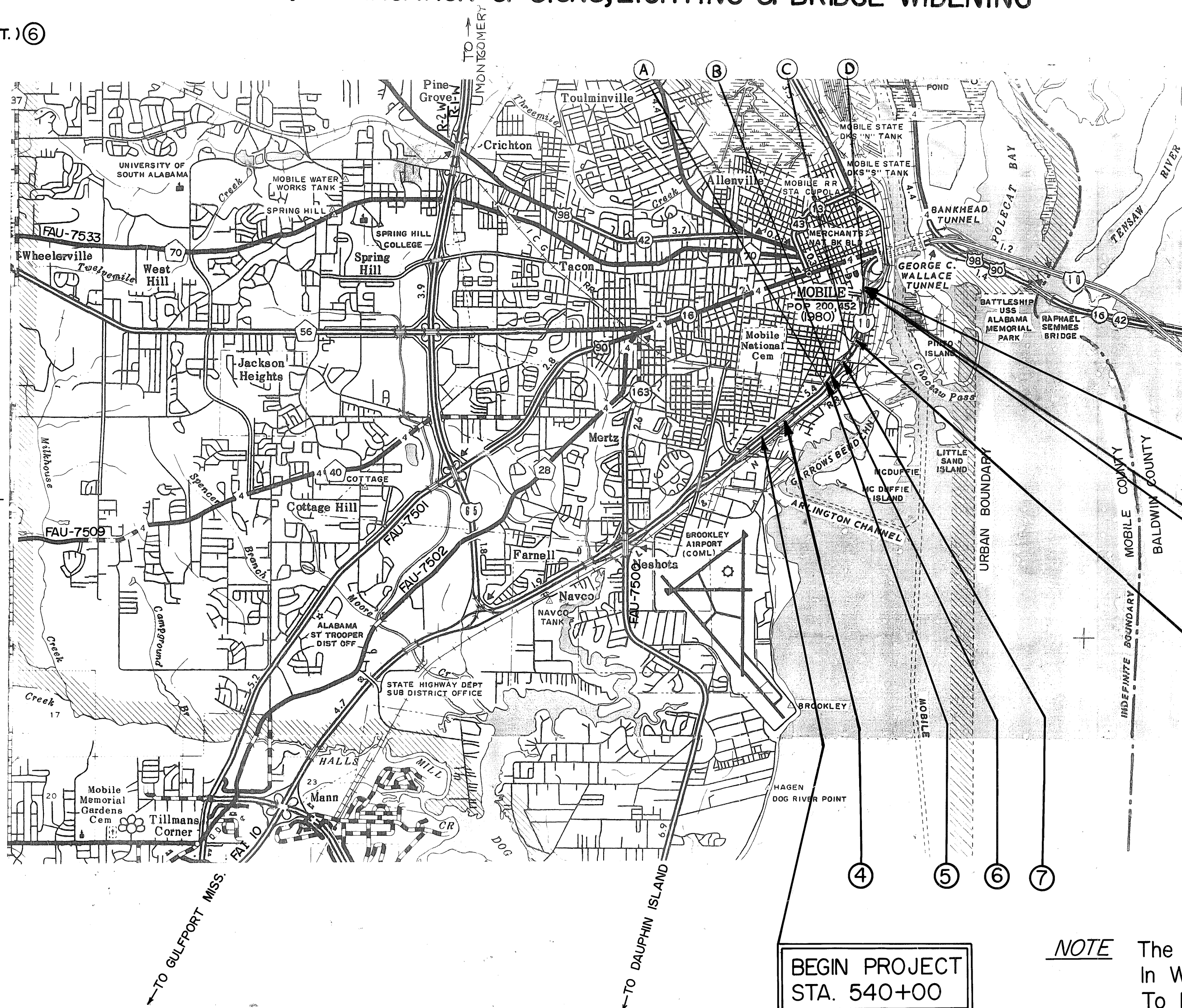
### "EQUATIONS"

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

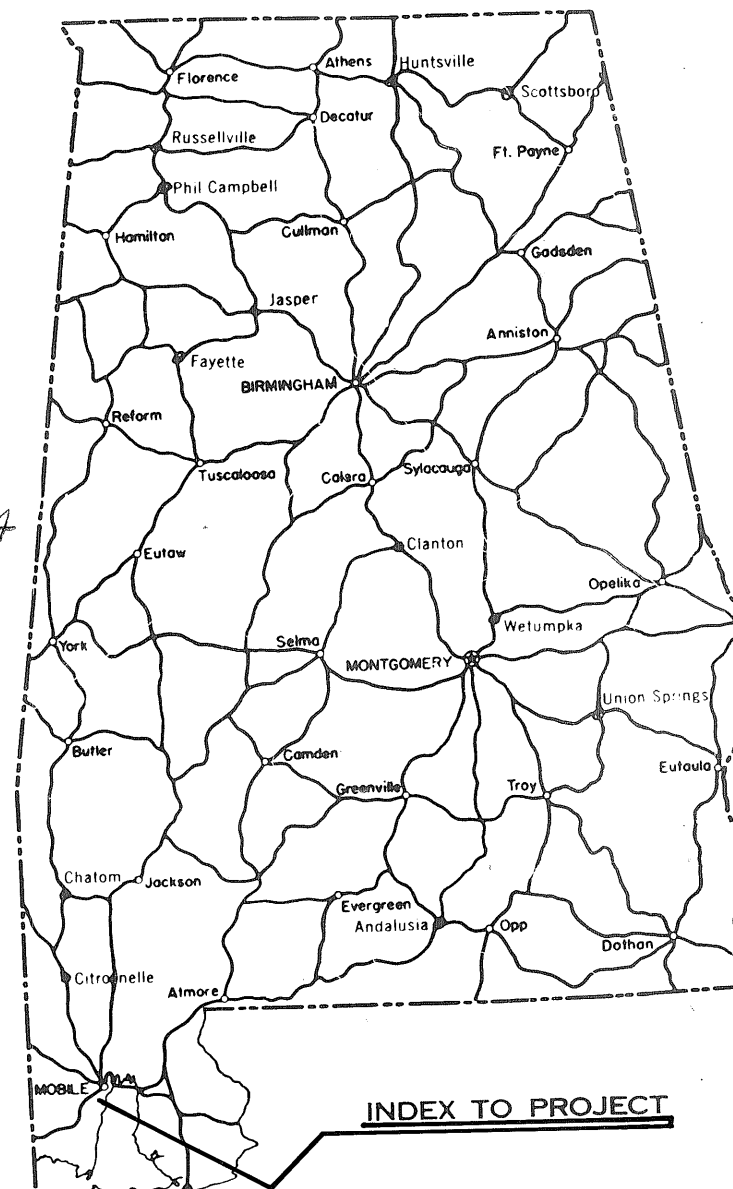
NOTE: PROJECT I-IR-IDR-10-1(84)24  
AND PROJECT I-IR-IDR-10-1(83)20  
ARE TO BE LET IN THE SAME  
CONTRACT.

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-IDP-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-IDP-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

STATE OF ALABAMA HIGHWAY DEPARTMENT

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
77-77AS	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, PSCP-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

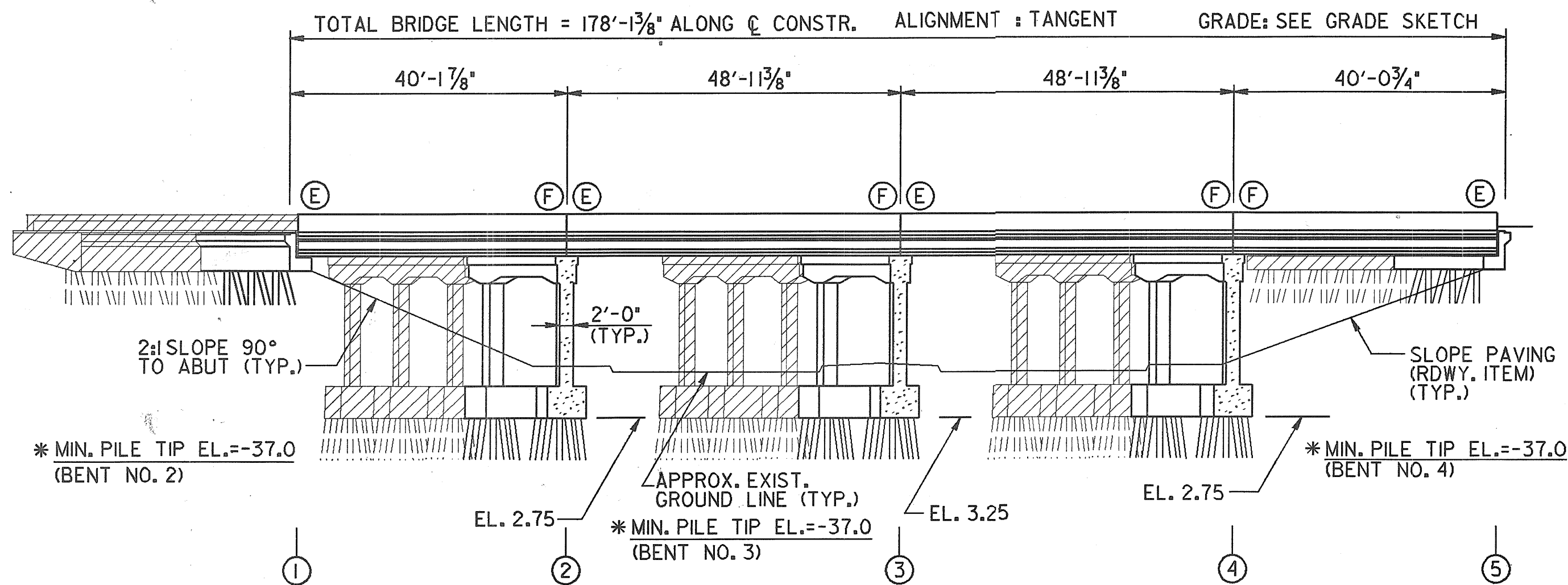
ITEM NO.	UNIT	DESCRIPTION
416A-003	TON	BITUMINOUS CONCRETE WEARING SURFACE (MIX B)
416C-000	TON	BITUMINOUS CONCRETE PLANT MIX, LEVELING
416D-000	TON	BITUMINOUS CONCRETE PLANT MIX, WIDENING
420A-001	TON	OPEN GRADED PLANT MIXED SEAL (MIX B)
430B-001	TON C I P	AGGREGATE SURFACING (PROCESSED REEF SHELLS)
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

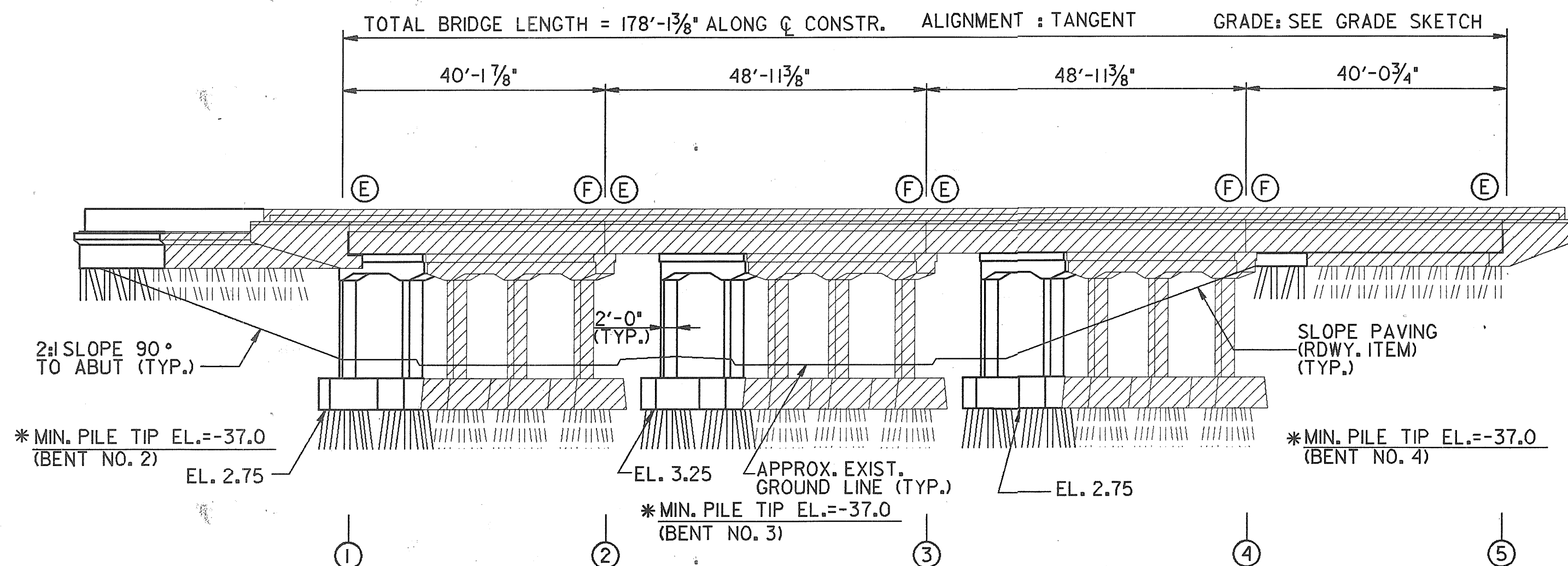
REQUIRED WIDENING AND PARTIAL REMOVAL OLD R.C.D.G. BRIDGES

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	2672	515,250	8	2	6		8	2	6		10,235	20,051	13,325		113,120		1		2,249	1	4,689	1379		



\* - indicates below zero elevation

ELEVATION W.B.L.  
(LOOKING NORTH)  
SCALE: 1/16" = 1'-0"

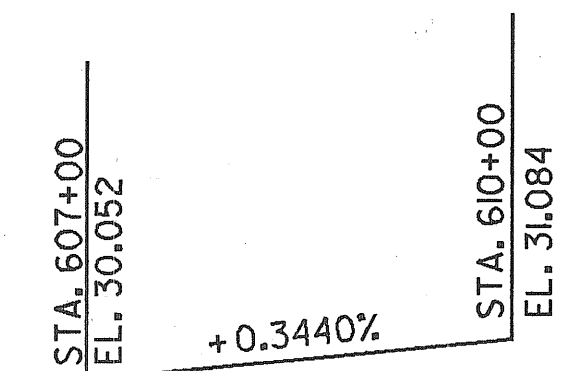


ELEVATION E.B.L.  
(LOOKING NORTH)  
SCALE: 1/16" = 1'-0"

### BRIDGE GENERAL NOTES

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

ROADWAY : 63'-1 3/4" (WESTBOUND) AND 75'-0 1/4" (EASTBOUND) PROPOSED INTERIOR GUTTER TO EXISTING EXTERIOR GUTTER WITH BARRIER RAIL.



GRADE SKETCH (I-10)

- 1.
2. HS20-44 AND ALTERNATE LOADING PPM20-4, DATED 8-10-56.
5. ABUTS. - 25 TONS, BENTS 53 TONS.
- 7.
- 13.
- 15.
- 16.
- 18.
- 21.
- 23.
- 24.
- 25.
- 27.

NOTE : EXISTING BRIDGE TO BE RETAINED FOR INSIDE WIDENING IS INDICATED BY CROSS-HATCHED AREAS (TYP. ALL BRIDGE SHEETS). SEE OUTSIDE WIDENING BRIDGE SHEETS FOR REMAINING REMOVAL OF EXTERIOR PORTION OF EXISTING BRIDGES.

NOTE : THE FINAL BRIDGE DECK FINISH BEHIND THE SCREED SHALL BE OBTAINED BY EITHER WOOD FLOATING OR BURLAP DRAG TO MATCH THE EXIST. DECK FINISH.

NOTE : (E) DENOTES EXPANSION  
(F) DENOTES FIXED

△ NOTE : TEST PILES SHALL NOT BE LOAD TESTED UNTIL SEVEN (7) DAYS, MINIMUM, AFTER DRIVING.

■ NOTE : USE 3" CLEAR FROM FACE OF PILE TO SPIRAL REINF. STEEL. CONCRETE SHALL BE A FLY-ASH MIX USING TYPE II CEMENT OR TYPE I CEMENT PROVIDED THE TRICALCIUM ALUMINATE CONTENT IN THE TYPE I CEMENT IS LESS THAN 8%. THE AMOUNT OF THE FLY-ASH SHALL NOT BE LESS THAN 12 LBS. PER BAG OF CEMENT.

○ NOTE : QUANTITY SHOWN IS ALL BRIDGE END SLAB WORK INCLUDING OUTSIDE WIDENING

NOTE : SEE BRIDGE SHEET 2 FOR EXIST. VERTICAL CLEARANCE. SEE OUTSIDE WIDENING BRIDGE SHEETS FOR PROPOSED MINIMUM VERTICAL CLEARANCE.

### 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 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.

### ESTIMATED QUANTITIES - "IR" FUNDS

QUANTITY	UNIT	DESCRIPTION
1	LUMP SUM	REMOVAL OF OLD BRIDGE @ STA. 607+73.22 (PARTIAL ONLY W.B.L. & E.B.L.-INSIDE WIDENING)
290	CU. YD.	UNCLASSIFIED BRIDGE EXCAVATION
60500	LB.	STEEL REINFORCEMENT
1	EACH	STEEL TEST PILES (HP10x42)
1	EACH	PRETENSIONED - PRESTRESSED CONCRETE TEST PILES (14" SQUARE)
1	EACH	LOADING TESTS (HP10x42)
1	EACH	LOADING TESTS (14" SQUARE)
1344	LIN. FT.	STEEL PILING (HP10x42)
1907	LIN. FT.	PRETENSIONED - PRESTRESSED CONCRETE PILING (14" SQUARE)
12600	LB.	STRUCTURAL STEEL
258	CU. YD.	BRIDGE SUBSTRUCTURE CONCRETE, CLASS "A"
1	LUMP SUM	REINFORCED BRIDGE CONCRETE SUPERSTRUCTURE, STA. 607+73.22, APPROX. 289 CU. YD.
1032	LIN. FT.	PRETENSIONED - PRESTRESSED CONCRETE GIRDERS, TYPE II (SPECIALTY ITEM)
1670	SQ. YD.	REINFORCED CEMENT CONCRETE BRIDGE END SLAB

### REQUIRED

WIDENING 40'-1 7/8", 48'-11 3/8", 48'-11 3/8", 40'-0 3/4"  
PRETENSIONED - PRESTRESSED AASHTO GIRDERS,  
TYPE II 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 THRU 12

EXIST. ORIGINAL BRIDGE PLANS \_\_\_\_\_ BR. SHT. NO. E26 THRU E35

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

PRECAST PRESTRESSED CONCRETE PILES \_\_\_\_\_ STD. DWG. NO. PSCP-1

LIGHT POLE SUPPORT \_\_\_\_\_ STD. DWG. LPS-1

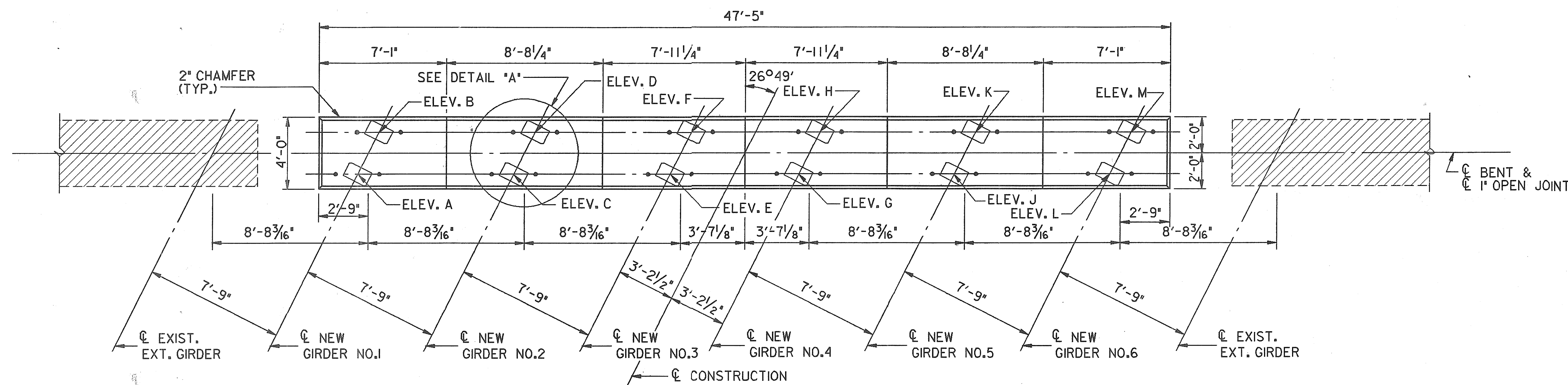
\* \* TRAFFIC PROTECTORS WILL ONLY BE REQUIRED UNDER THE NEW CONSTR. AREAS (5'-0" MIN. OUTSIDE THE LIMITS OF NEW CONSTR.)

### NOTE :

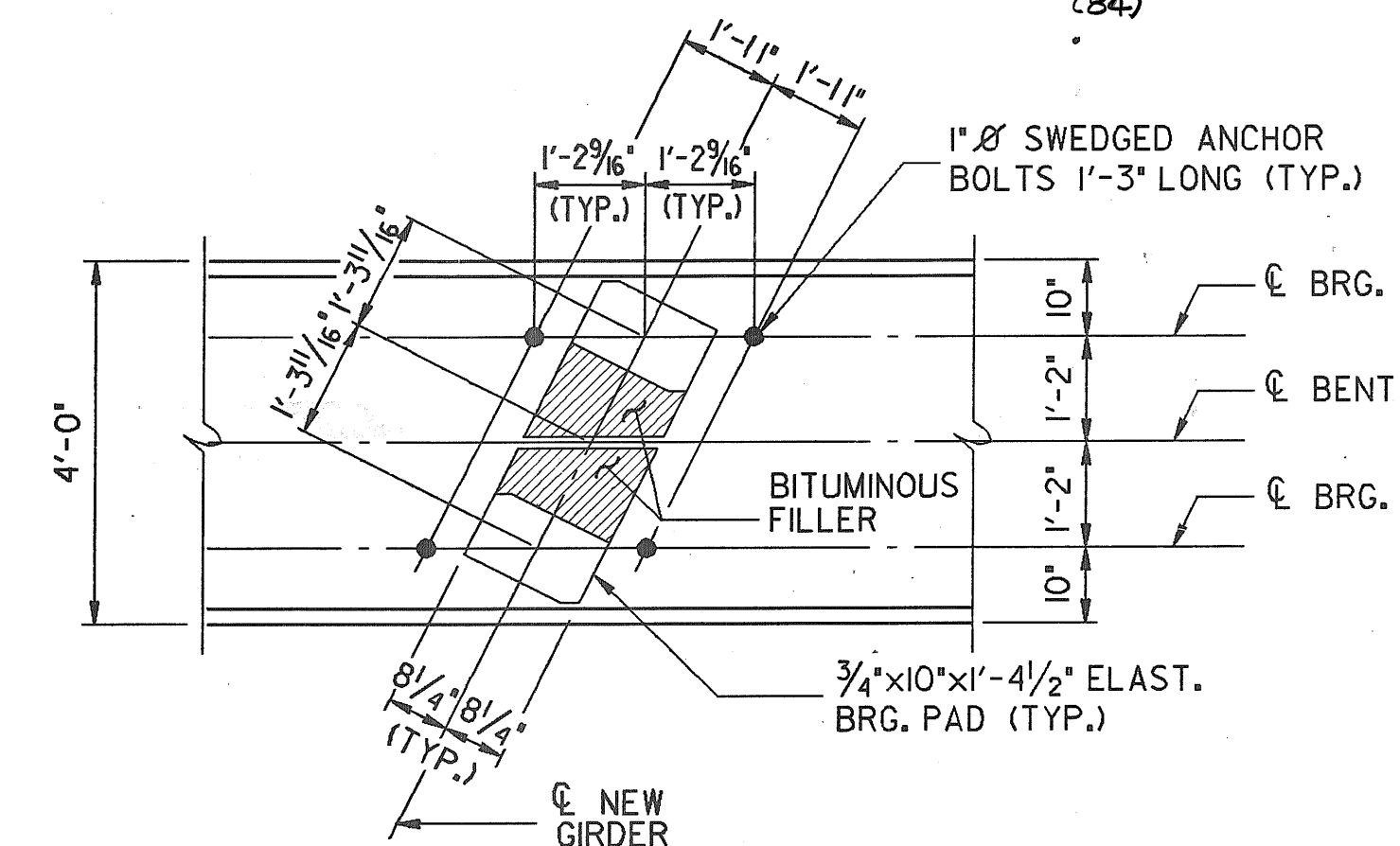
ALL INTERIOR JOINTS SHALL BE RECONSTRUCTED IN ACCORDANCE WITH BRIDGE SHEET 3A OF 3A. QUANTITIES FOR THIS WORK ARE INCLUDED IN ESTIMATED QUANTITIES SHOWN ON GENERAL ELEVATION SHEET OF OUTSIDE WIDENING.

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  J. L. Wood TITLE - SENIOR VICE-PRESIDENT DATE 6-12-87  Alabama Reg. Engineer No. 12008	BRIDGE SHEET NO. 1 OF 24  REVISIONS	STATE OF ALABAMA HIGHWAY DEPARTMENT  PROJECT NO. IR-10-1(84) INSIDE WIDENING OF I-10 BRIDGES OVER VIRGINIA STREET AT STATION 608+62.33 MOBILE COUNTY, ALABAMA			
	APPROVED:	GENERAL ELEVATION			
	SECTION SUPERVISOR William D. Witter CHIEF BRIDGE DESIGN ENGINEER	SCALE: AS SHOWN	DESIGNED: DWT DRAWN: BWSC CAD/D REINF. CHKD: CHECKED: TWW	QUANTITIES COMP: DWT CHKD: TWW	DATE 06/19/87
	Charlie H. Cook BRIDGE ENGINEER				

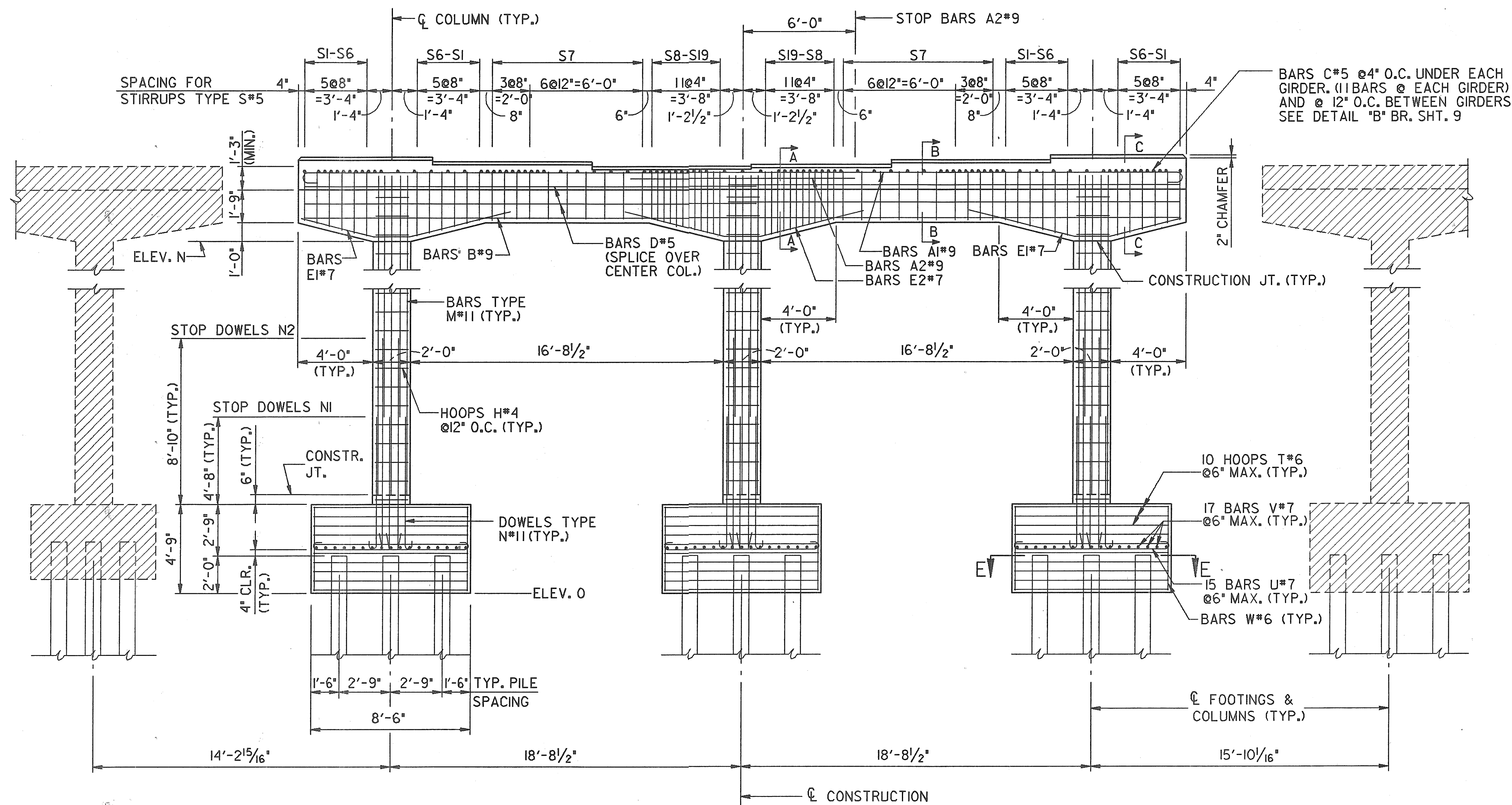
FHWA REG. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	ALA.	I-10-10-1	1987	30 G	159H



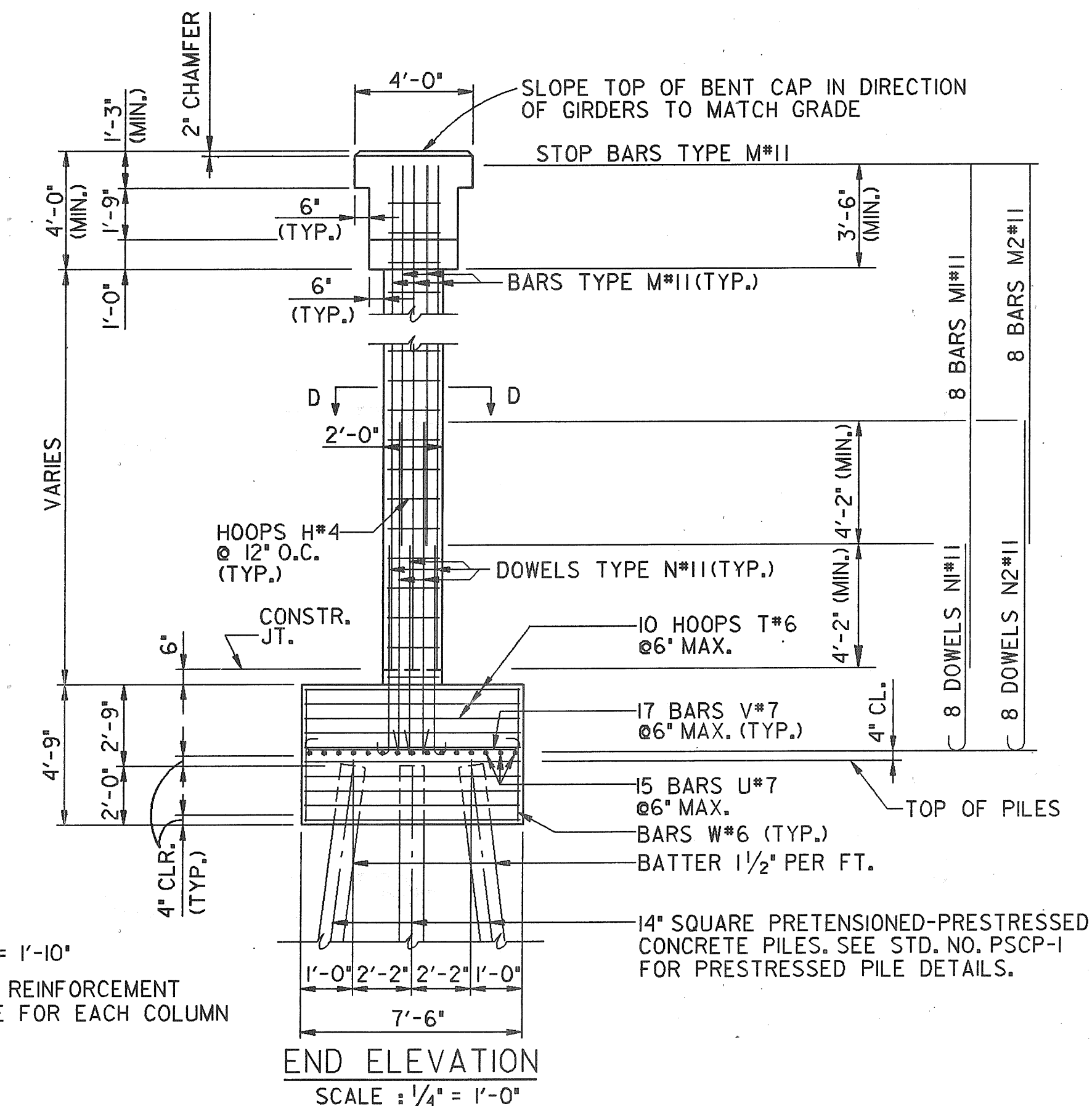
PLAN  
SCALE : 1/4" = 1'-0"



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



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



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

NOTE : BAR SPLICE #5 = 1'-10"  
NOTE : FOOTING SIZE & REINFORCEMENT  
TO BE THE SAME FOR EACH COLUMN

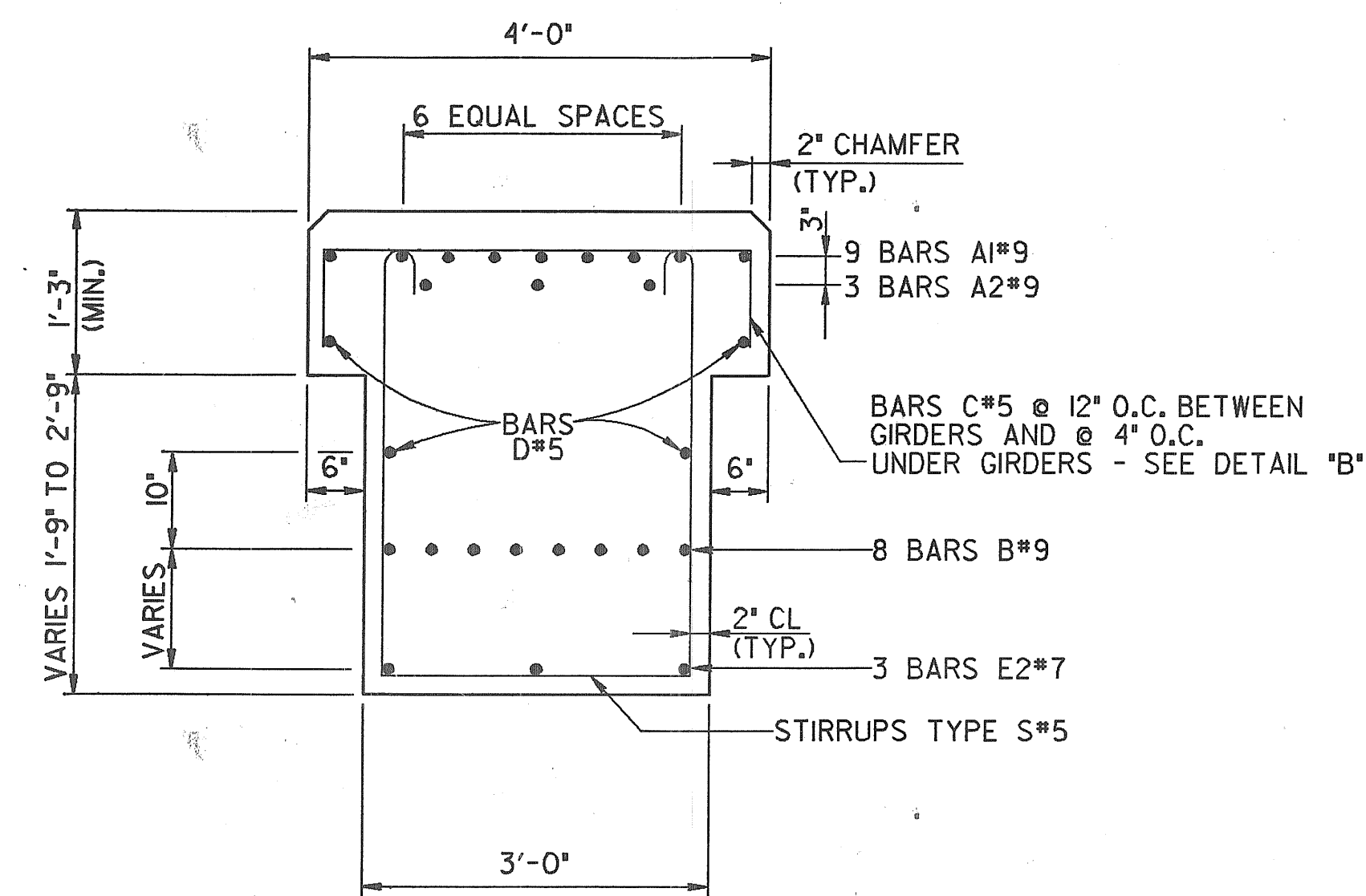
TABLE OF ELEVATIONS

	A	B	C	D	E	F	G	H	J	K	L	M	N	O
BENT NO. 2	26.5110	26.5200	26.4034	26.4124	26.2957	26.3047	26.3089	26.3179	26.4435	26.4525	26.5781	26.5871	22.2957	2.75
BENT NO. 3	26.6794	26.6884	26.5718	26.5808	26.4641	26.4731	26.4773	26.4863	26.6119	26.6209	26.7465	26.7555	22.4641	3.25
BENT NO. 4	26.8478	26.8568	26.7401	26.7491	26.6325	26.6415	26.6456	26.6546	26.7802	26.7892	26.9148	26.9238	22.6325	2.75

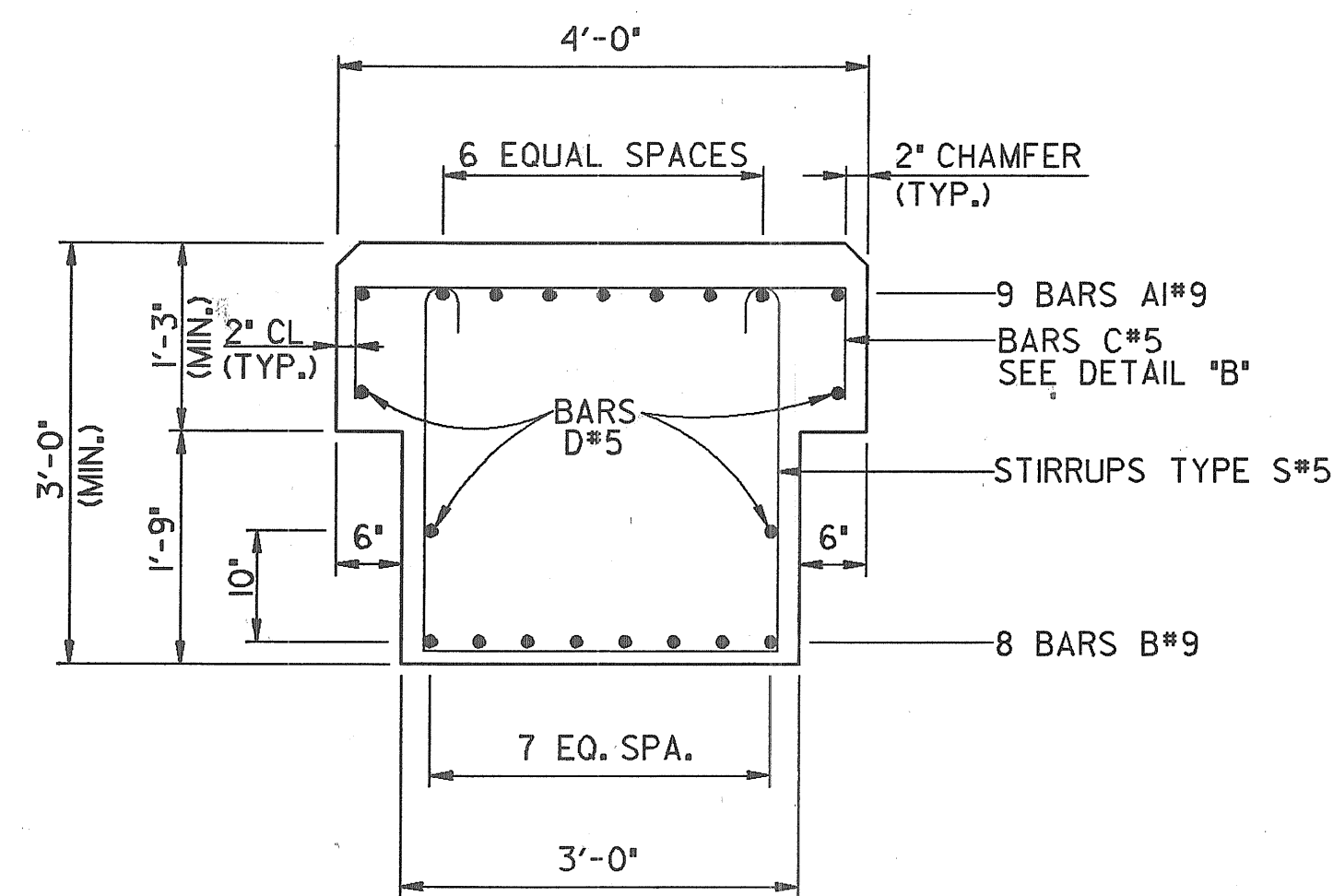
TABLE OF ESTIMATED QUANTITIES

ITEM	UNITS	BENT NO. 2	BENT NO. 3	BENT NO. 4
SUBSTRUCTURE CONCRETE	CU. YD.	62.6	62.4	62.8
STEEL REINFORCEMENT	LBS.	14656	14571	14741

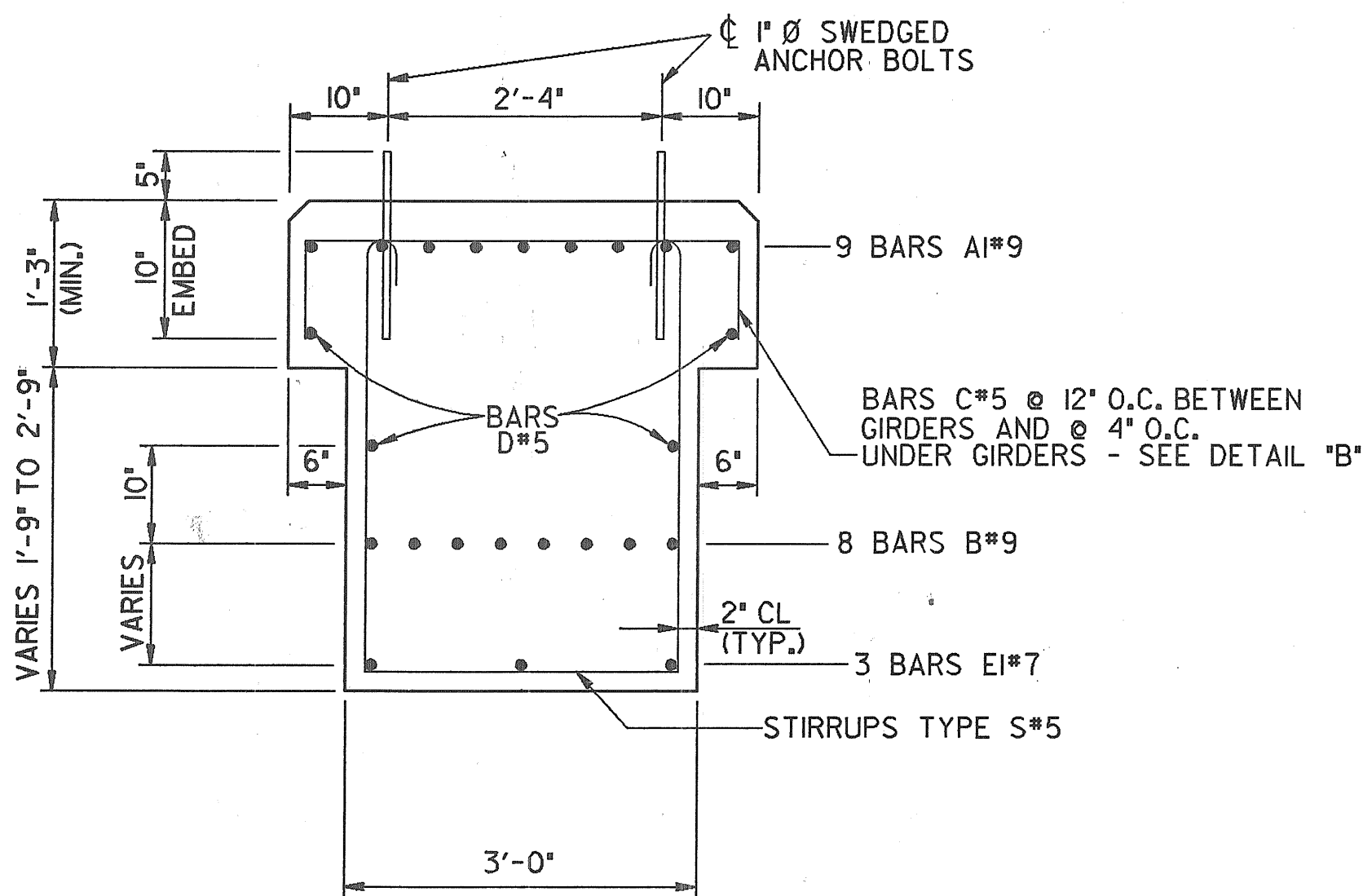
BRIDGE SHEET NO. 8 OF 24 REVISIONS	STATE OF ALABAMA HIGHWAY DEPARTMENT			
	PROJECT NO. IR-10-1(84) INSIDE WIDENING OF I-10 BRIDGES OVER VIRGINIA STREET AT STATION 608+62.33 MOBILE COUNTY, ALABAMA			
	BENTS NO. 2, NO. 3, & NO. 4			
	APPROVED:  SECTION SUPERVISOR <i>William J. McWaters</i> CHIEF BRIDGE DESIGN ENGINEER <i>Charles H. Cook</i> BRIDGE ENGINEER	SCALE: AS SHOWN	DESIGNED: <i>DWT</i> DRAWN: BWS CAD/D REINF. CHKD: CHECKED: TWW	QUANTITIES COMP: <i>DWT</i> CHKD: TWW



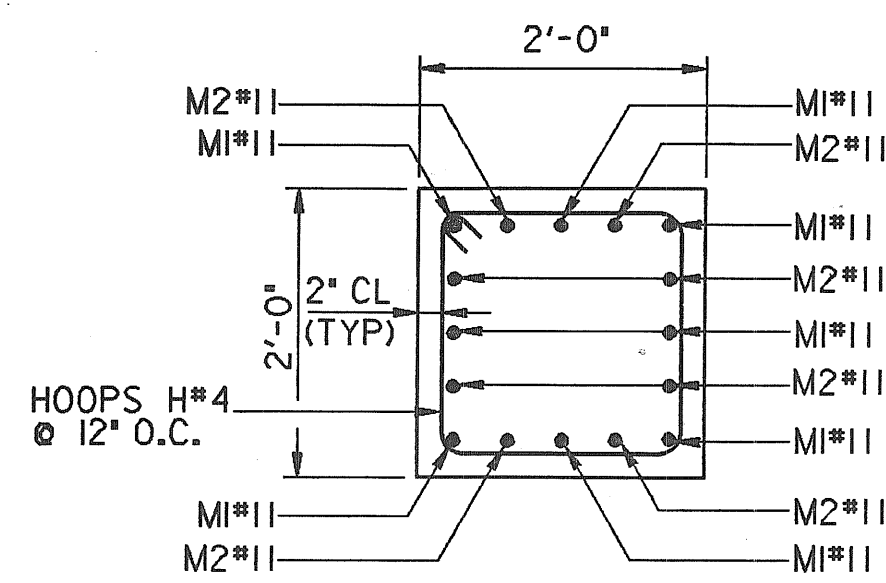
SECTION "A-A"  
SCALE : 3/4" = 1'-0"



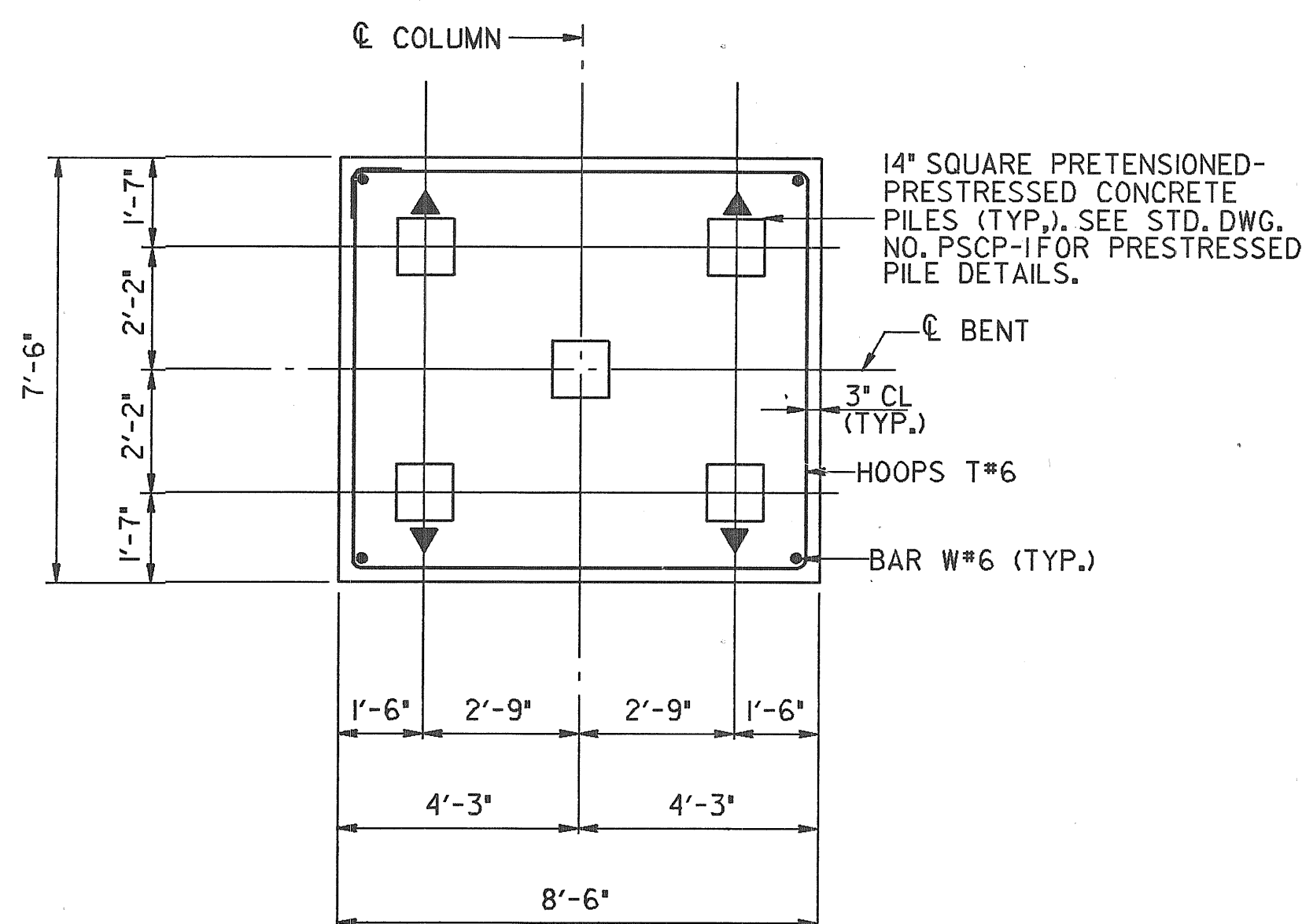
SECTION "B-B"  
SCALE : 3/4" = 1'-0"



SECTION "C-C"  
SCALE : 3/4" = 1'-0"

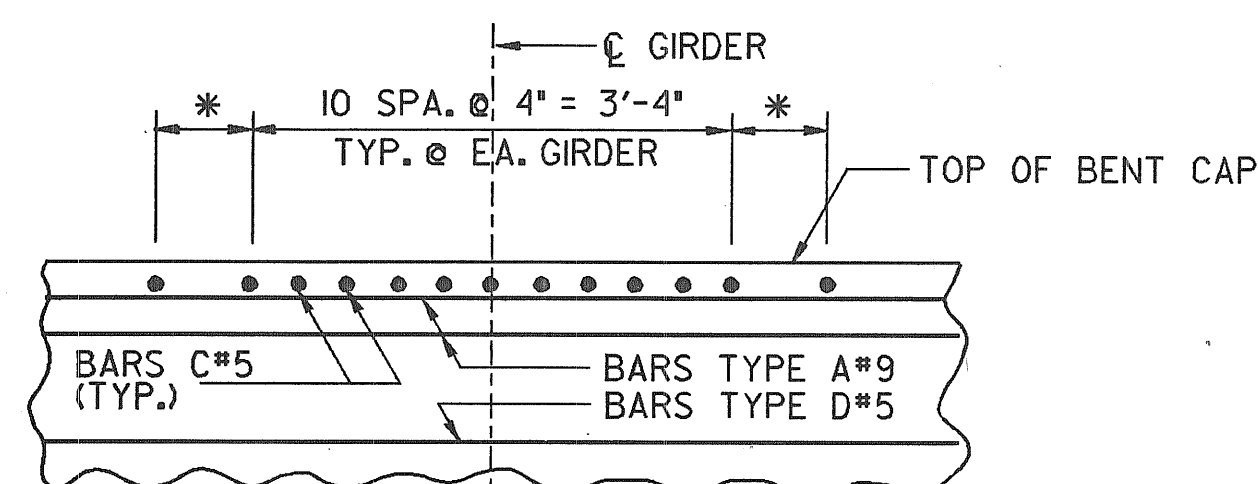


SECTION "D-D"  
SCALE : 3/4" = 1'-0"

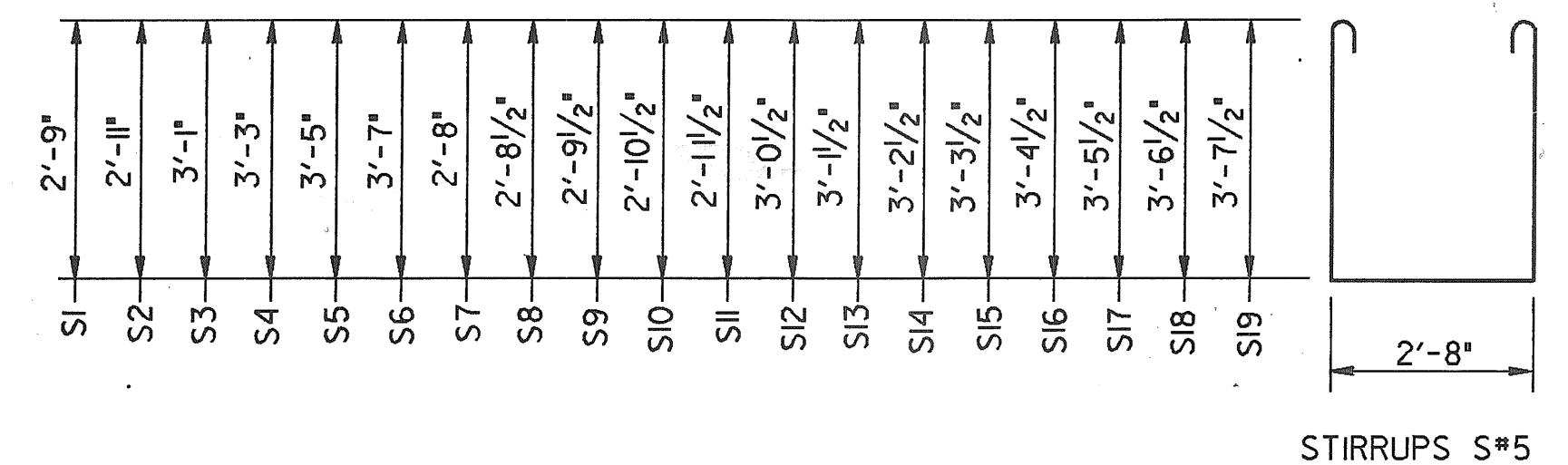
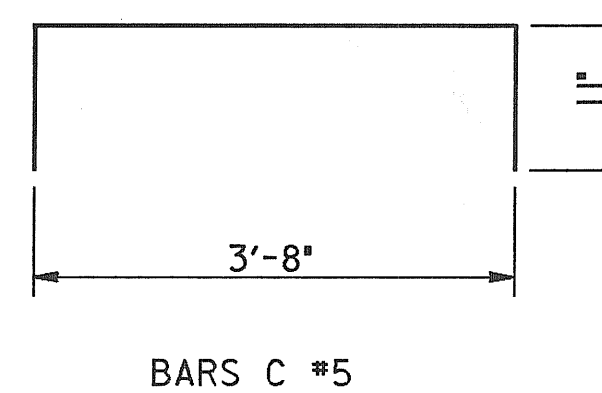
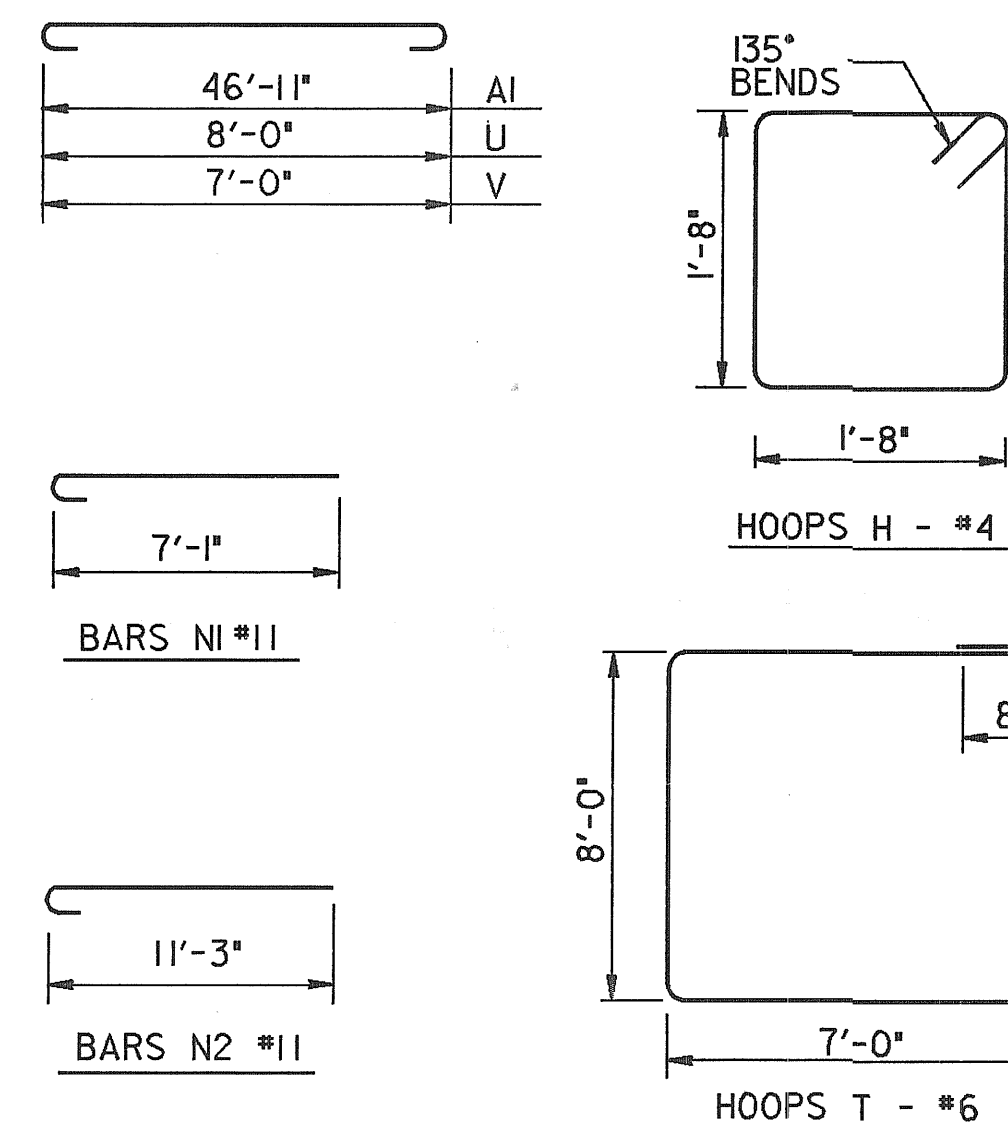
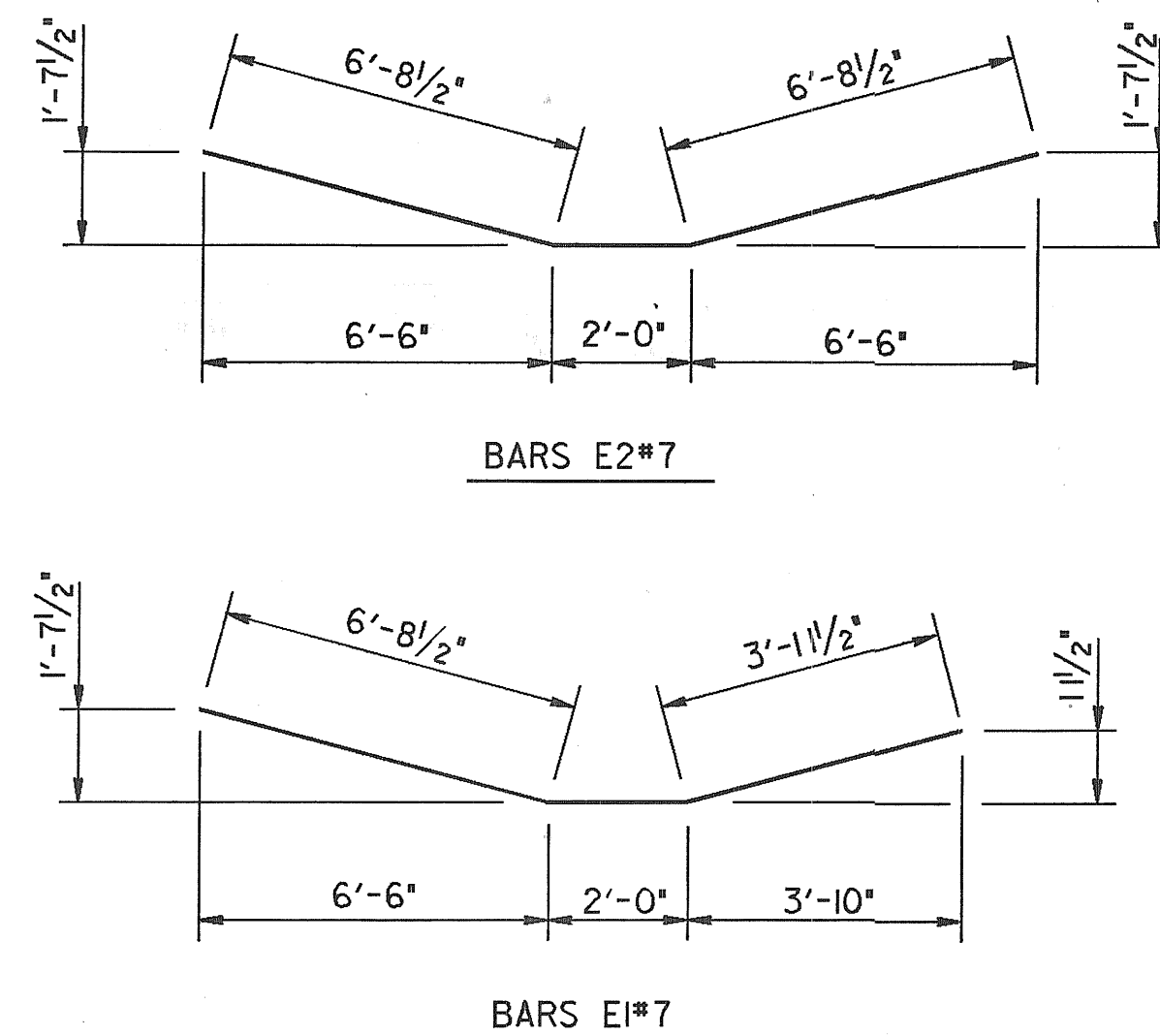


SECTION "E-E" @ TOP OF PILES  
SCALE : 3/8" = 1'-0"

▲ DENOTES : PILES TO BE BATTERED & DIRECTION

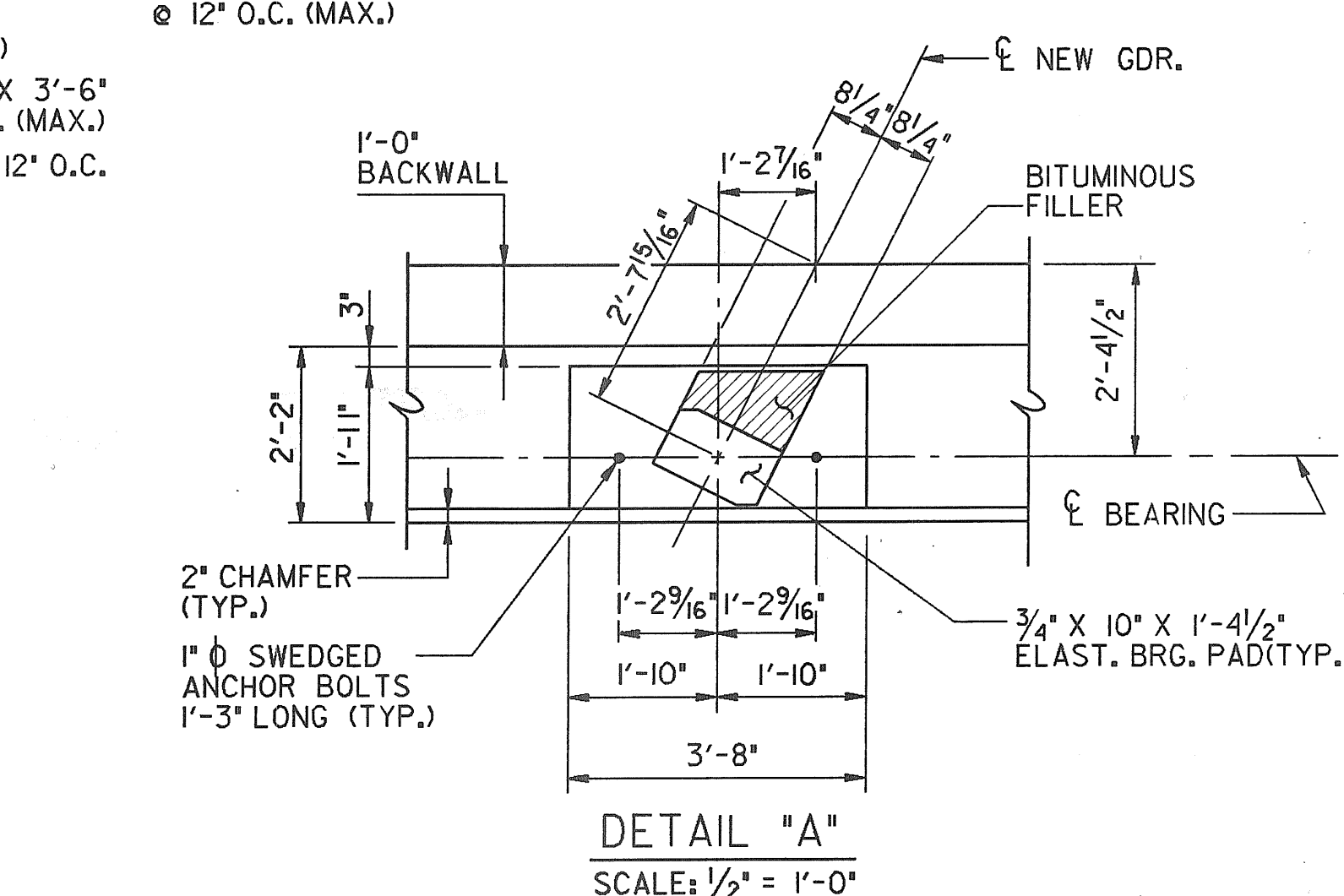
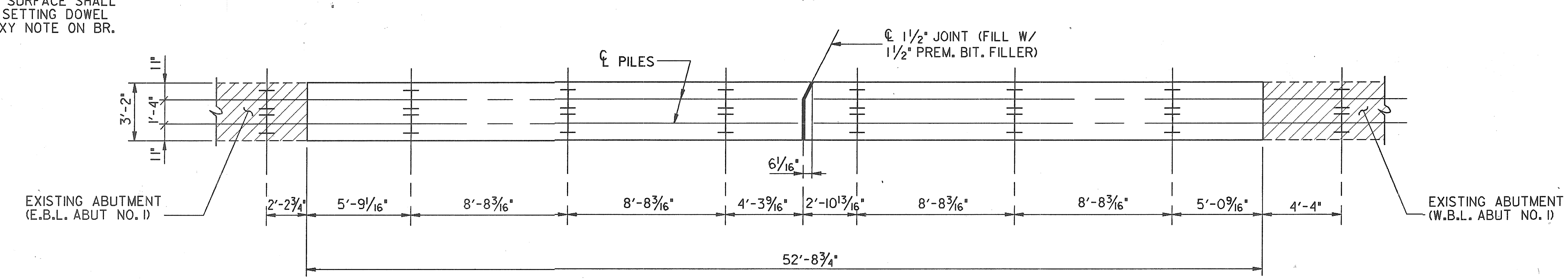
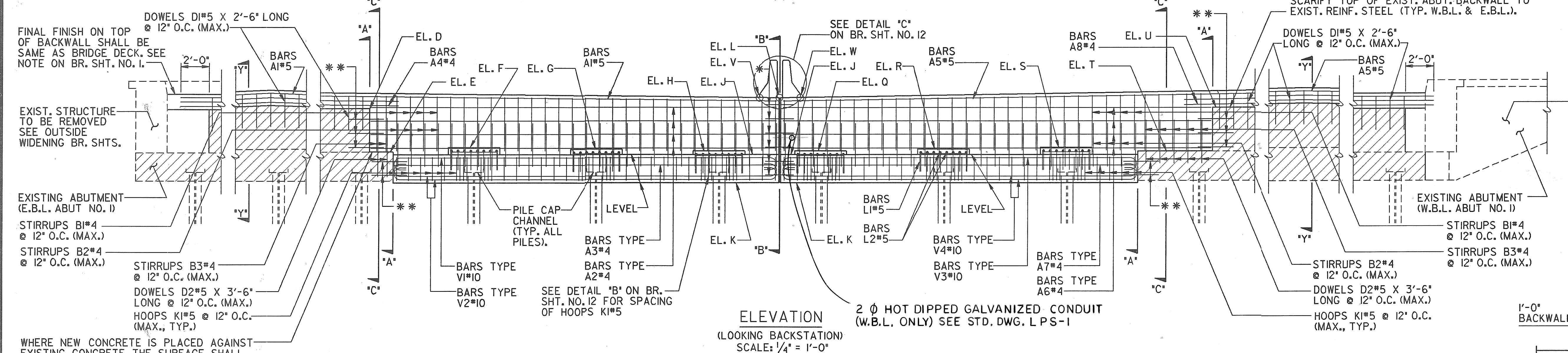
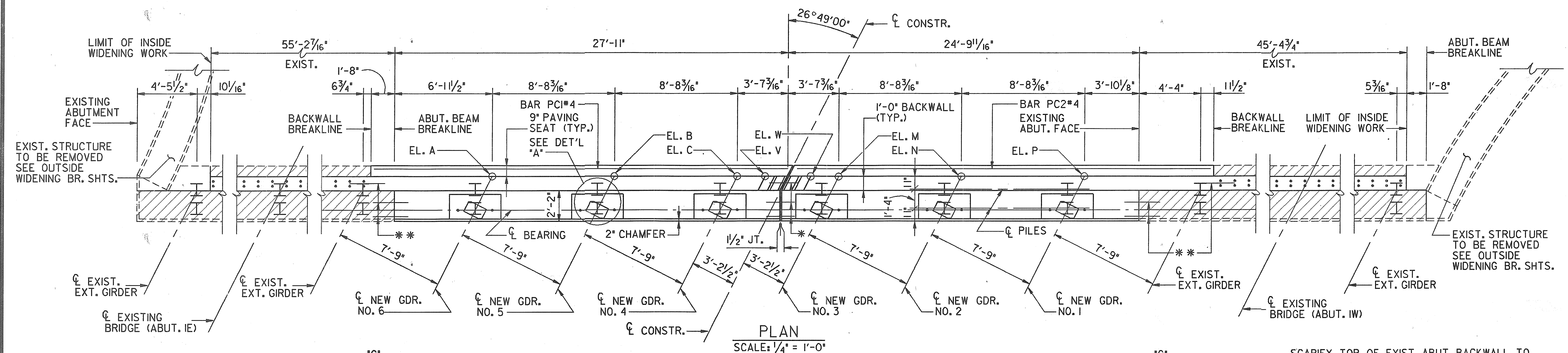


DETAIL "B"  
NO SCALE



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
A1	9	9	49'-5"	9	49'-5"	9	49'-5"
A2	9	3	12'-0"	3	12'-0"	3	12'-0"
B	9	8	46'-11"	8	46'-11"	8	46'-11"
C	5	91	5'-6"	91	5'-6"	91	5'-6"
D	5	8	24'-4 1/2"	8	24'-4 1/2"	8	24'-4 1/2"
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	7'-8"	54	7'-8"	57	7'-8"
MI	11	24	17'-9 1/2"	24	17'-5 1/2"	24	18'-1 1/2"
M2	11	24	13'-7 1/2"	24	13'-3 1/2"	24	13'-1 1/2"
NI	11	24	8'-8"	24	8'-8"	24	8'-8"
N2	11	24	12'-10"	24	12'-10"	24	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	20	9'-2"	20	9'-2"	20	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	7	45	9'-8"	45	9'-8"	45	9'-8"
V	7	51	8'-8"	51	8'-8"	51	8'-8"
W	6	12	4'-3"	12	4'-3"	12	4'-3"

BARGE, WAGGONER, SUMNER, & CANNON	BRIDGE SHEET NO. 9 OF 24		STATE OF ALABAMA HIGHWAY DEPARTMENT		
	REVISIONS		PROJECT NO. IR-10-K(84) INSIDE WIDENING OF I-10 BRIDGES OVER VIRGINIA STREET AT STATION 608+62.33 MOBILE COUNTY, ALABAMA		
	APPROVED:		BENT DETAILS		
	SECTION SUPERVISOR William J. McArthur CHIEF BRIDGE DESIGN ENGINEER Charles H. Cook BRIDGE ENGINEER		SCALE: AS SHOWN	DESIGNED: DuT DRAWN: BWSC CAD/D REINF CHKD: TWW CHECKED: TWW	QUANTITIES CHKD: DATE 06/19/87



\* 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 & ABUTMENT BEAM REINFORCEMENT TO EXTEND INTO NEW BACKWALLS & ABUTMENT BEAMS. 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.

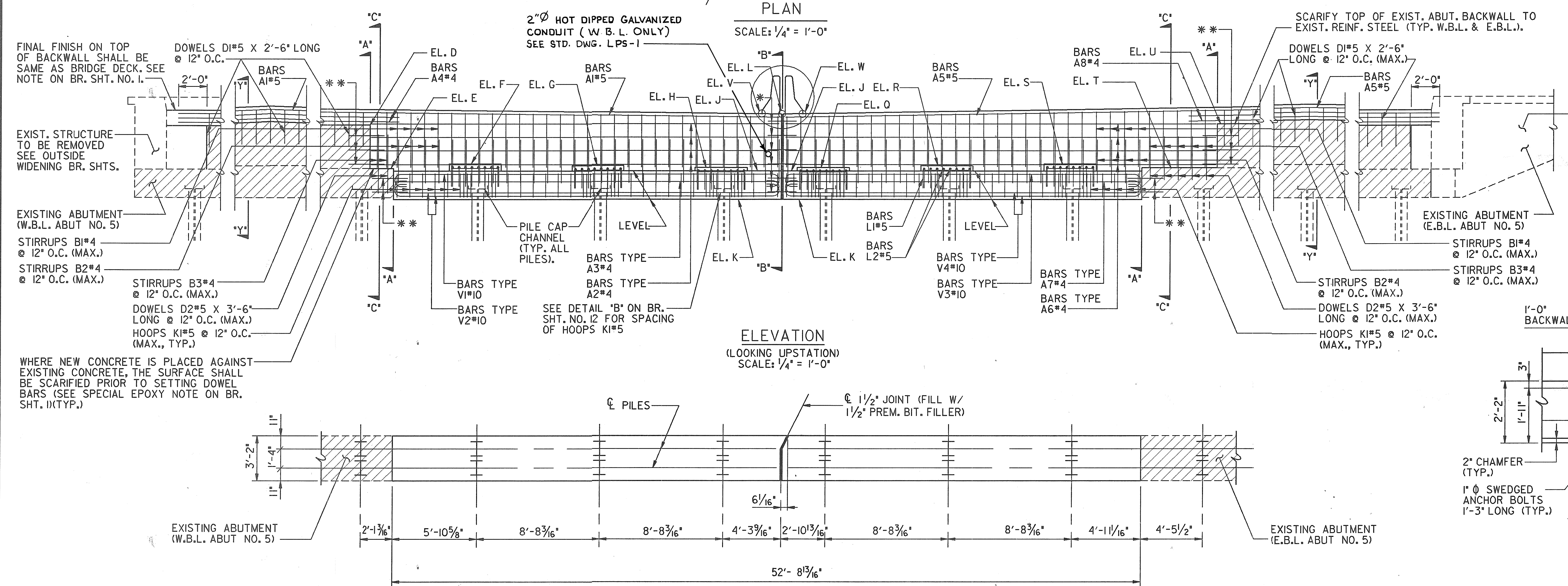
NOTE: POUR BARRIER RAILS WITH BRIDGE END SLAB BARRIER RAILS. BARS BL TO BE CONTINUED FROM BRIDGE END SLAB RAILS.

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

TABLE OF ELEVATIONS

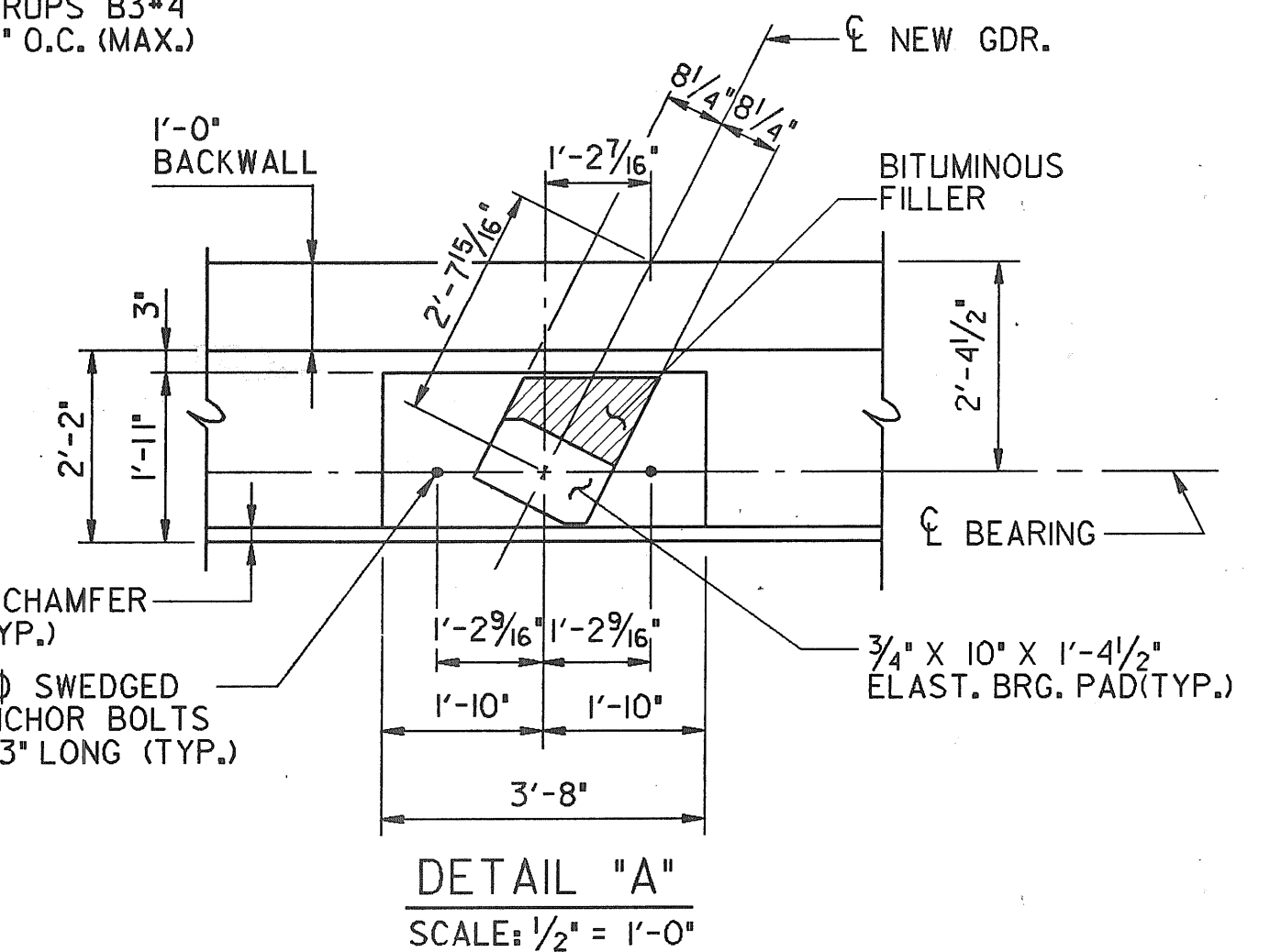
ABUT. NO. 1	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U	V	W
	30.2153	30.0809	29.9461	28.713±	26.17	26.4537	26.3190	26.1844	25.9174	23.9174	29.8904	29.9350	30.0425	30.1503	26.1674	26.2750	26.3827	26.07	29.001±	29.9154	29.9104

BARCE, WAGGONER, SUMNER, & CANNON	BRIDGE SHEET NO. 10 OF 24		STATE OF ALABAMA HIGHWAY DEPARTMENT	
	REVISIONS		PROJECT NO. IR-10-10(84) INSIDE WIDENING OF I-10 BRIDGES OVER VIRGINIA STREET AT STATION 608+62.33 MOBILE COUNTY, ALABAMA	
	APPROVED:		ABUTMENT NO. 1	
	SECTION SUPERVISOR <i>William J. McArthur</i> CHIEF BRIDGE DESIGN ENGINEER BRIDGE ENGINEER		DESIGNED: <i>Dot</i> DRAWN: BWSC CAD/D REINF. CHKD: CHECKED: TWW	
	SCALE: AS SHOWN		QUANTITIES COMP: CHKD: DATE 06/19/87	

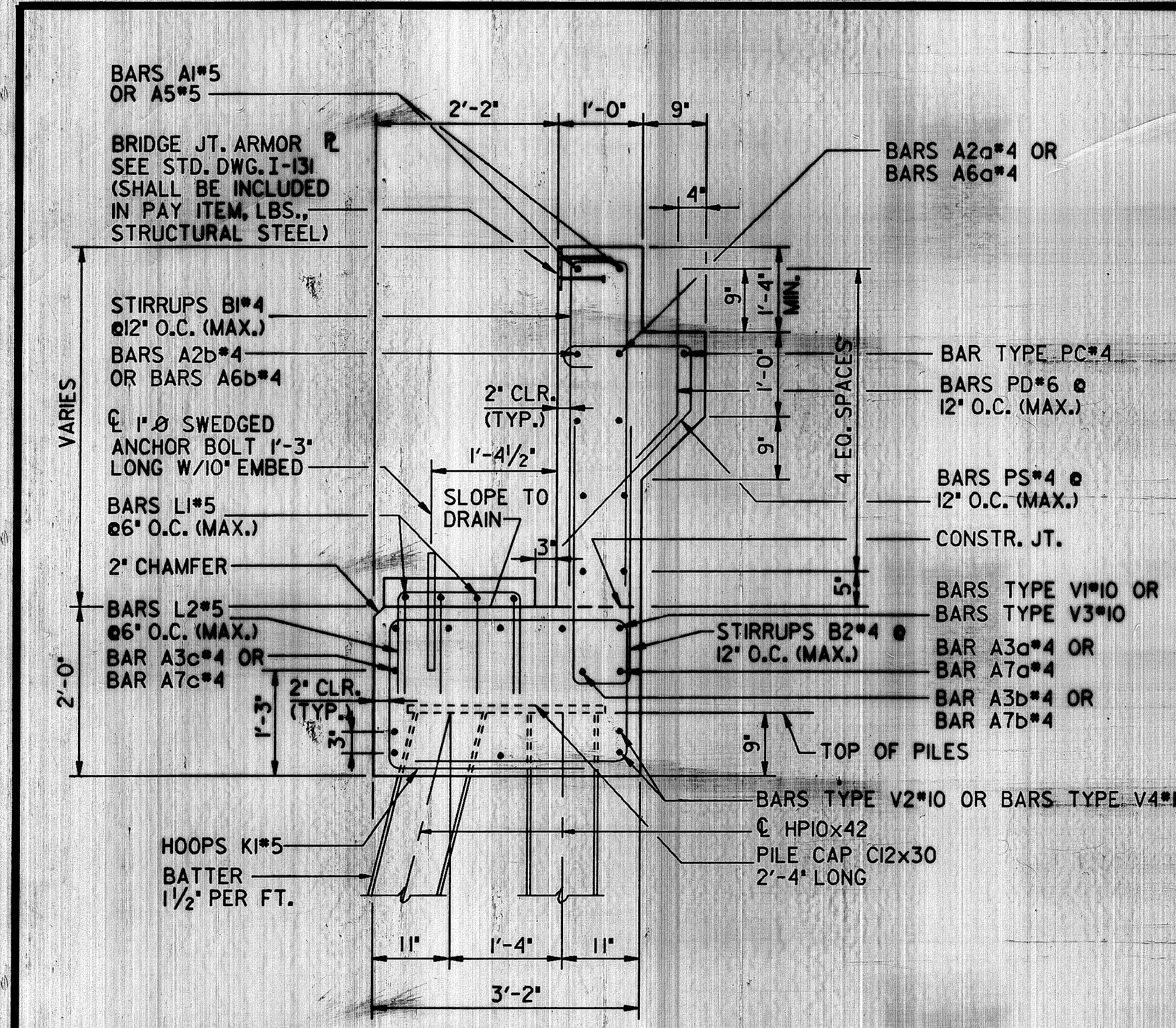


## TABLE OF ELEVATIONS

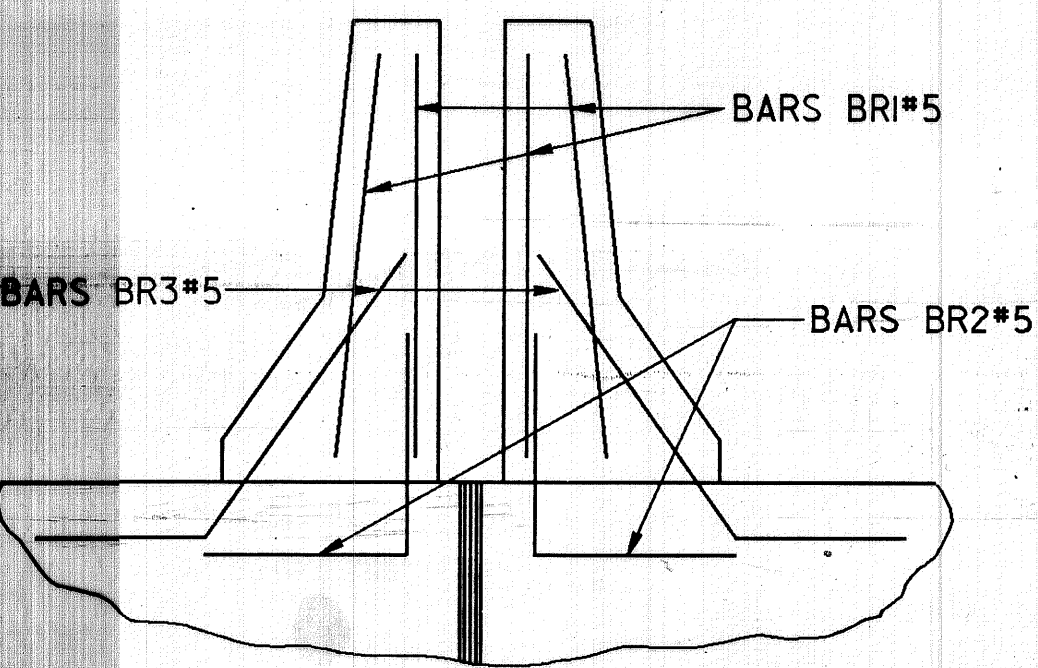
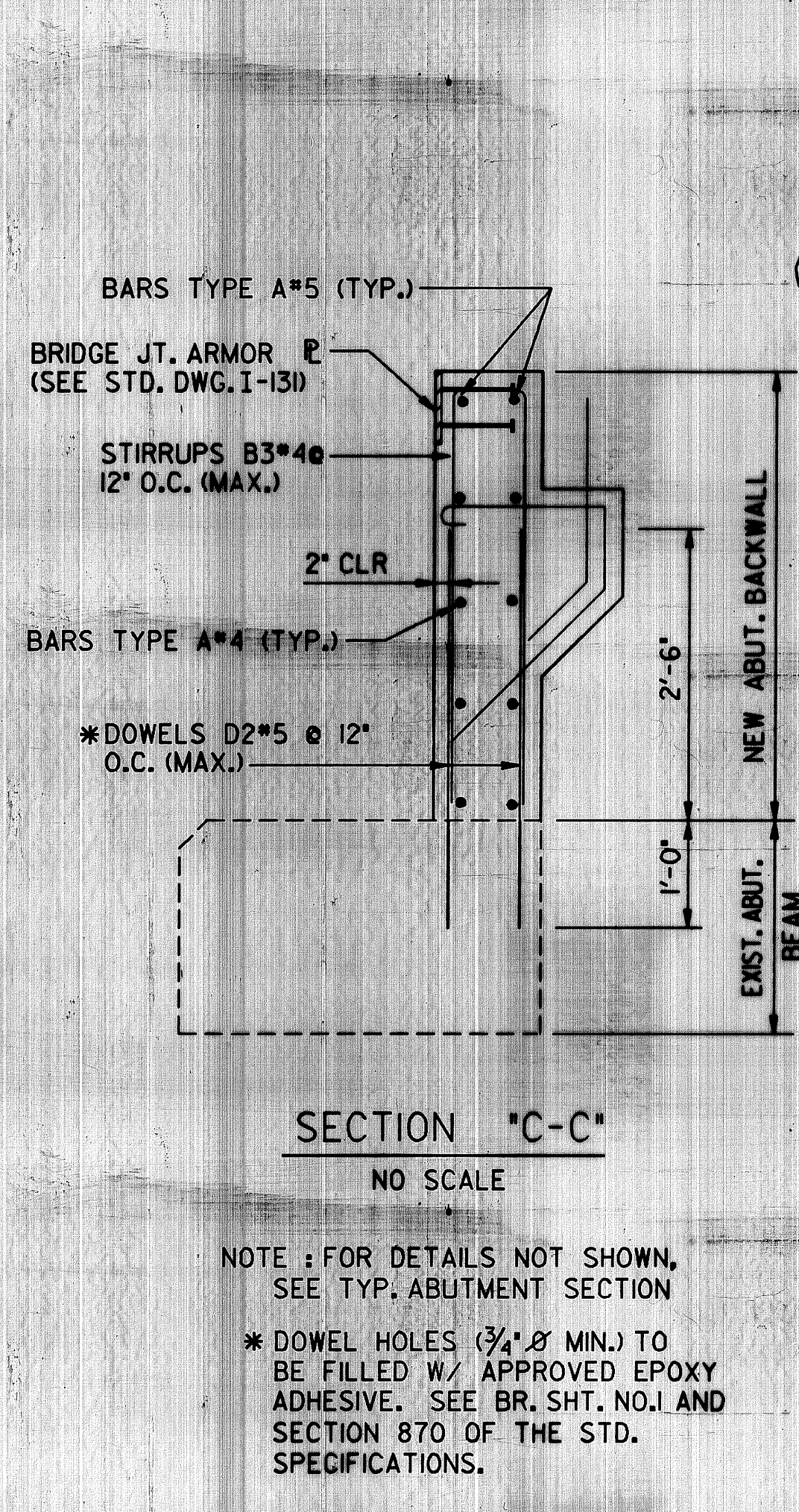
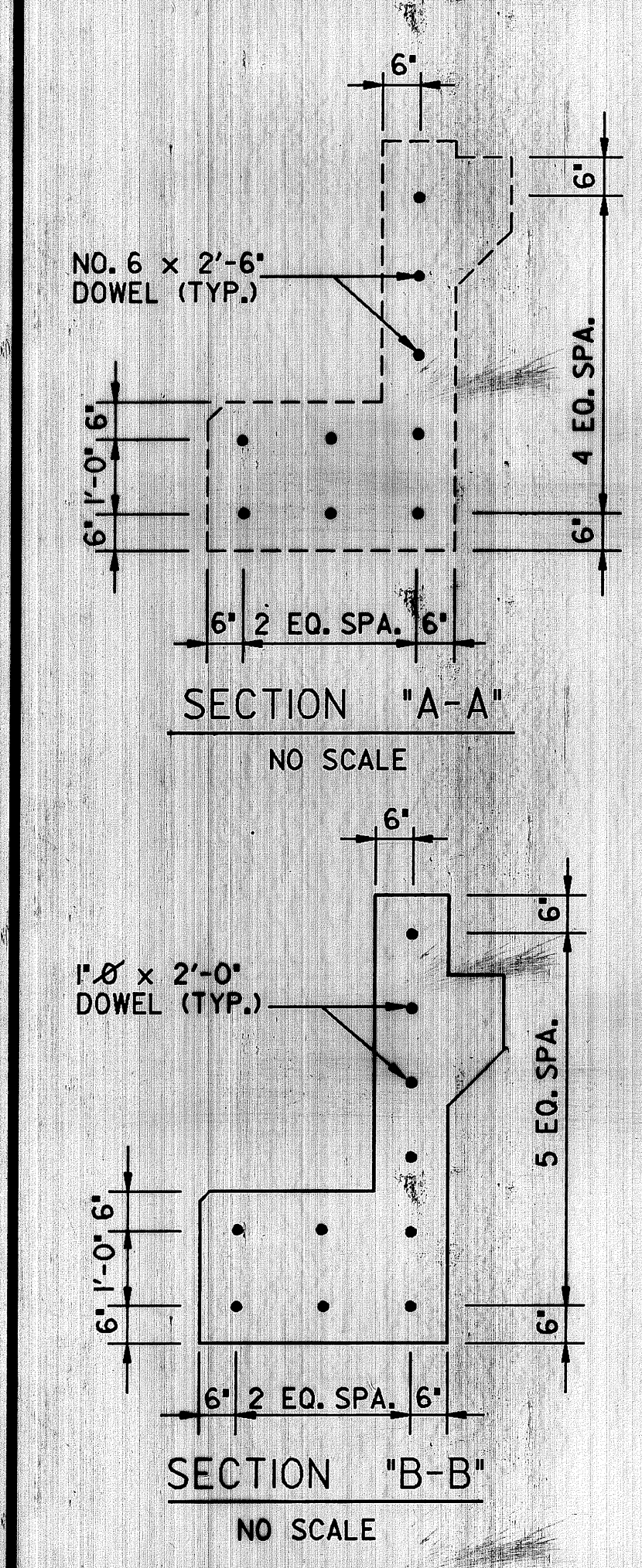
	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U	V	W
ABUT. NO. 5	30.7630	30.6553	30.5477	29.551±	26.69	26.9848	26.8771	26.7695	26.5195	24.5195	30.5031	30.5588	30.6934	30.8280	26.7788	26.9134	27.0481	26.75	29.458±	30.5230	30.5280



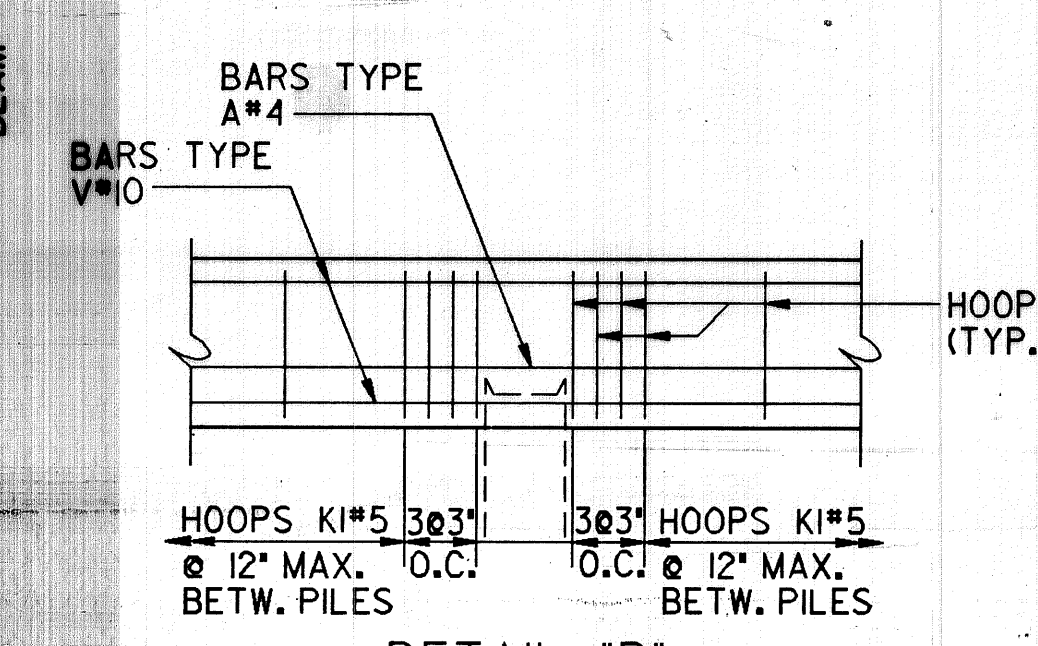
BARGE, WAGGONER, SUMNER, & CANNON	BRIDGE SHEET NO. 11 OF 24		STATE OF ALABAMA HIGHWAY DEPARTMENT			
	REVISIONS		PROJECT NO. IR-10-I(84) INSIDE WIDENING OF I-10 BRIDGES OVER VIRGINIA STREET AT STATION 608+62.33 MOBILE COUNTY, ALABAMA			
	APPROVED:		ABUTMENT NO. 5			
	SECTION SUPERVISOR <i>William D. McAten</i> CHIEF BRIDGE DESIGN ENGINEER		SCALE:  AS SHOWN	DESIGNED: <i>DWT</i>  DRAWN: BWSC CAD/D  REINF CHKD:  CHECKED: <i>TWW</i>	QUANTITIES  COMP:  CHKD:	DATE  06/19/87
	<i>Charles H. Cook</i> BRIDGE ENGINEER					



TYPICAL ABUTMENT SECTION  
SCALE: 3/4" = 1'-0"



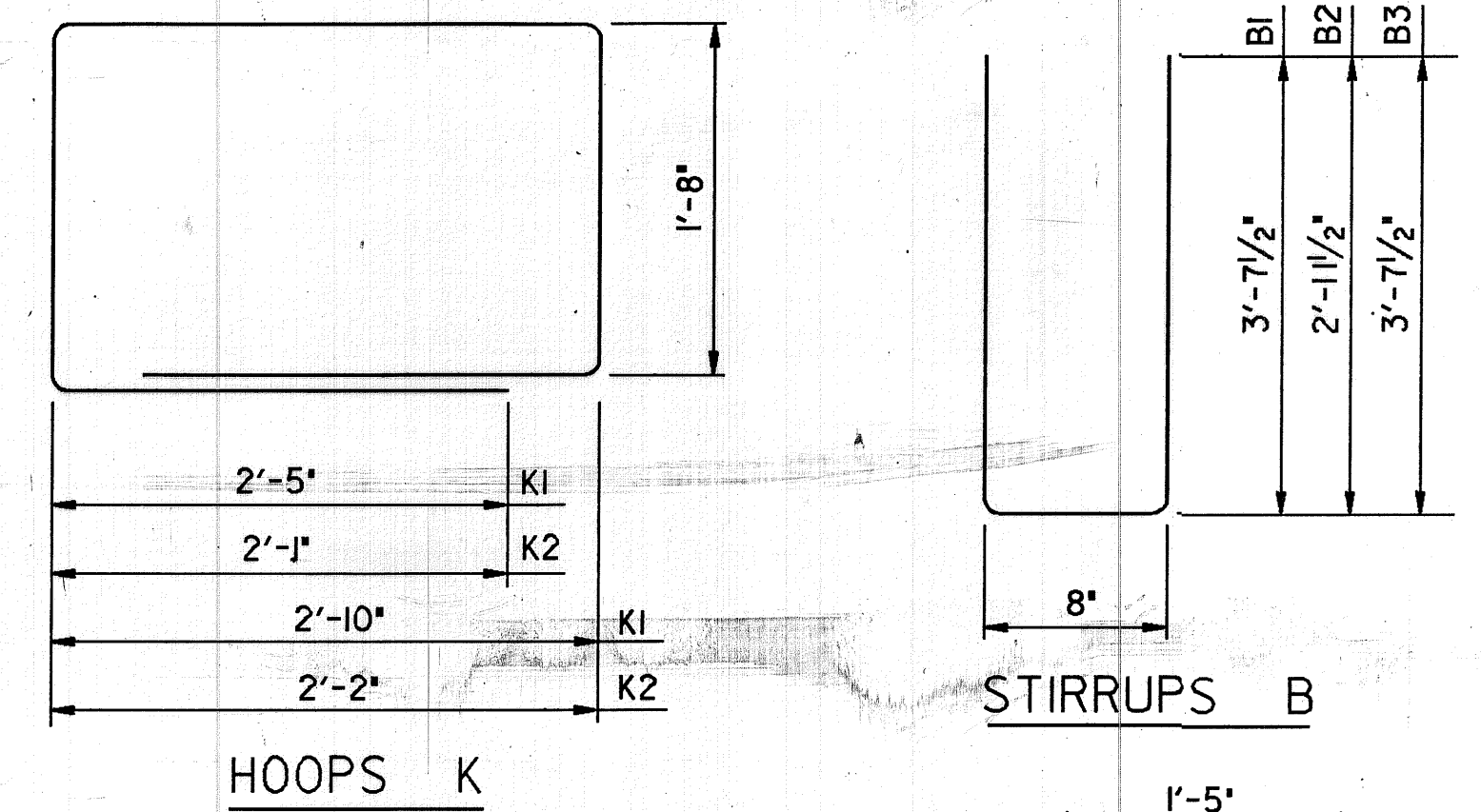
DETAIL "C"  
NO SCALE  
NOTE: BARS BR2 & BARS BR3 EMBED 7" ALSO FOR ADDITIONAL INFORMATION, SEE BR. SHT. 3 & STD. DWG. I-131



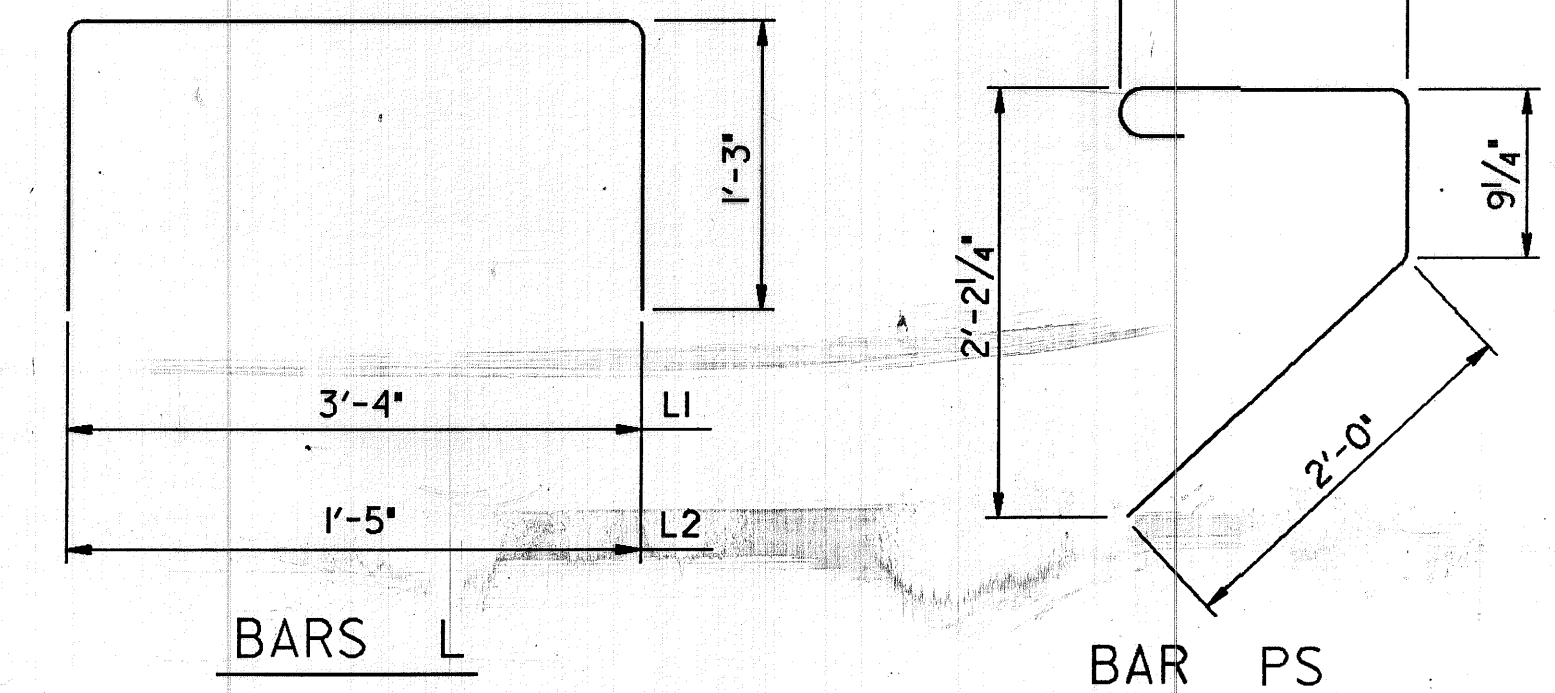
DETAIL "B"  
NO SCALE

ABUT. NO. 1	ABUT. NO. 5	
27'-5 1/2"	27'-7 1/2"	V1a
27'-1 1/2"	27'-3 1/2"	V1b
27'-0"	27'-2"	V1c
27'-5 1/2"	27'-7 1/2"	V2a
27'-0"	27'-2"	V2b
24'-6"	24'-4"	V3a
24'-10 1/2"	24'-8"	V3b
25'-0"	24'-9 1/2"	V3c
24'-6"	24'-4"	V4a
25'-0"	24'-9 1/2"	V4b

BARS V

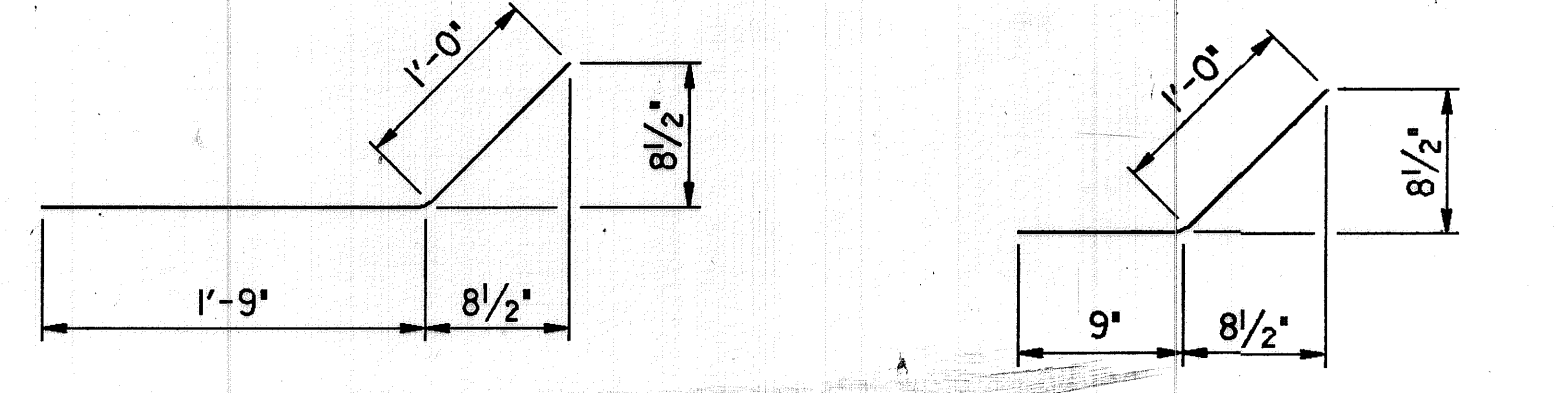


HOOPS K



BARS L

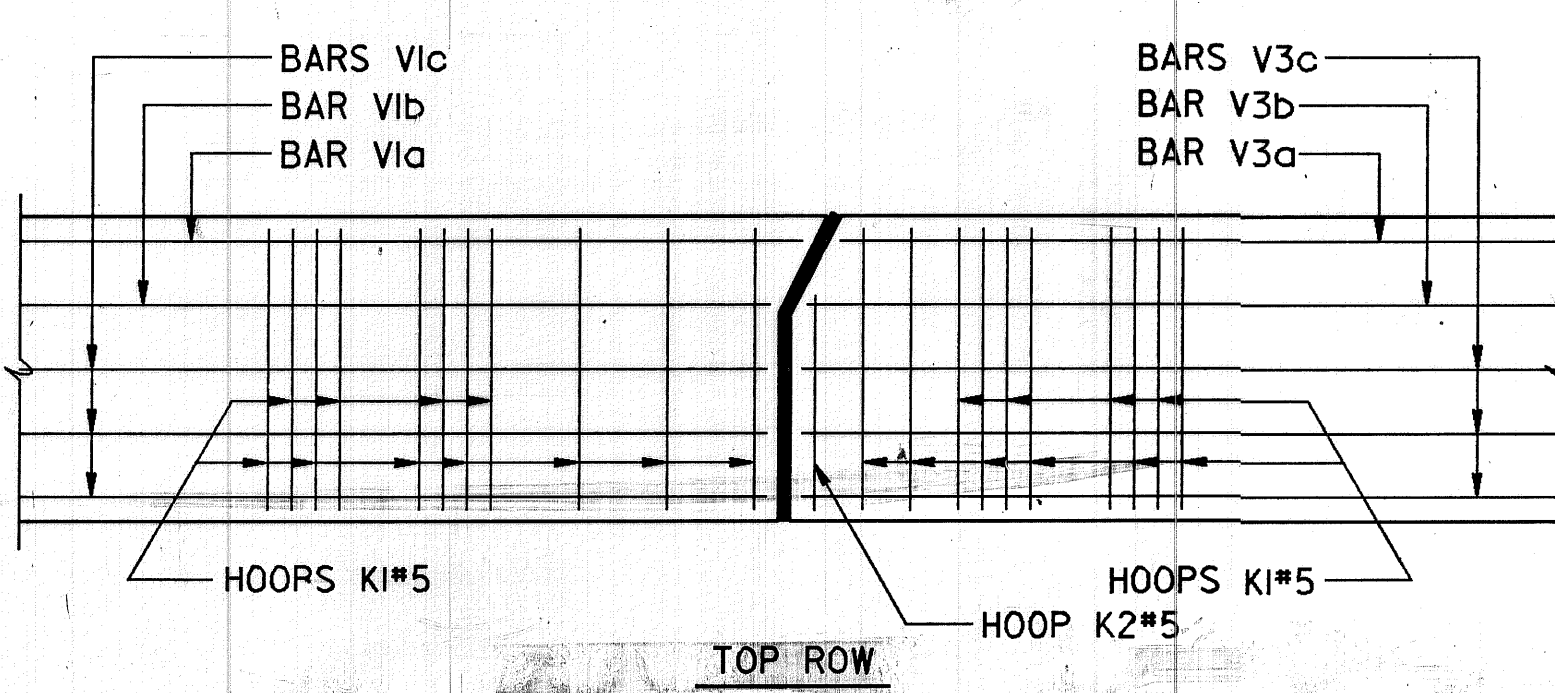
BAR PS



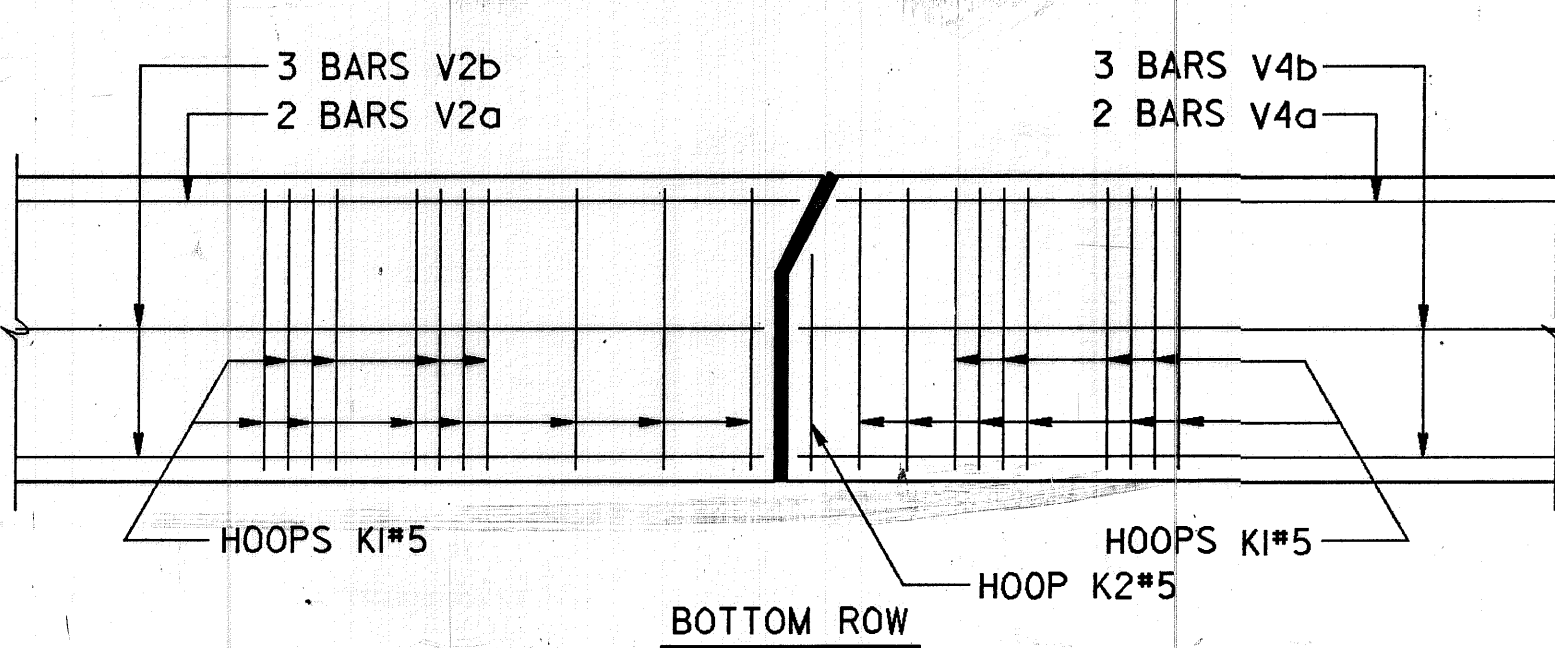
BAR PDI

BAR PD2

(USED IN EXIST. PAVING SEAT)



TOP ROW

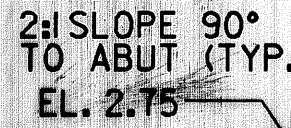


BOTTOM ROW

PARTIAL PLAN ABUTMENT  
BEAM REINFORCING  
NO SCALE

FHWA REG. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	ALA.	IR-10-10-1	1987	30 K	159 H

(84



ELEVATION W.B.L.  
(LOOKING NORTH)  
SCALE:  $\frac{1}{16}'' = 1'-0''$



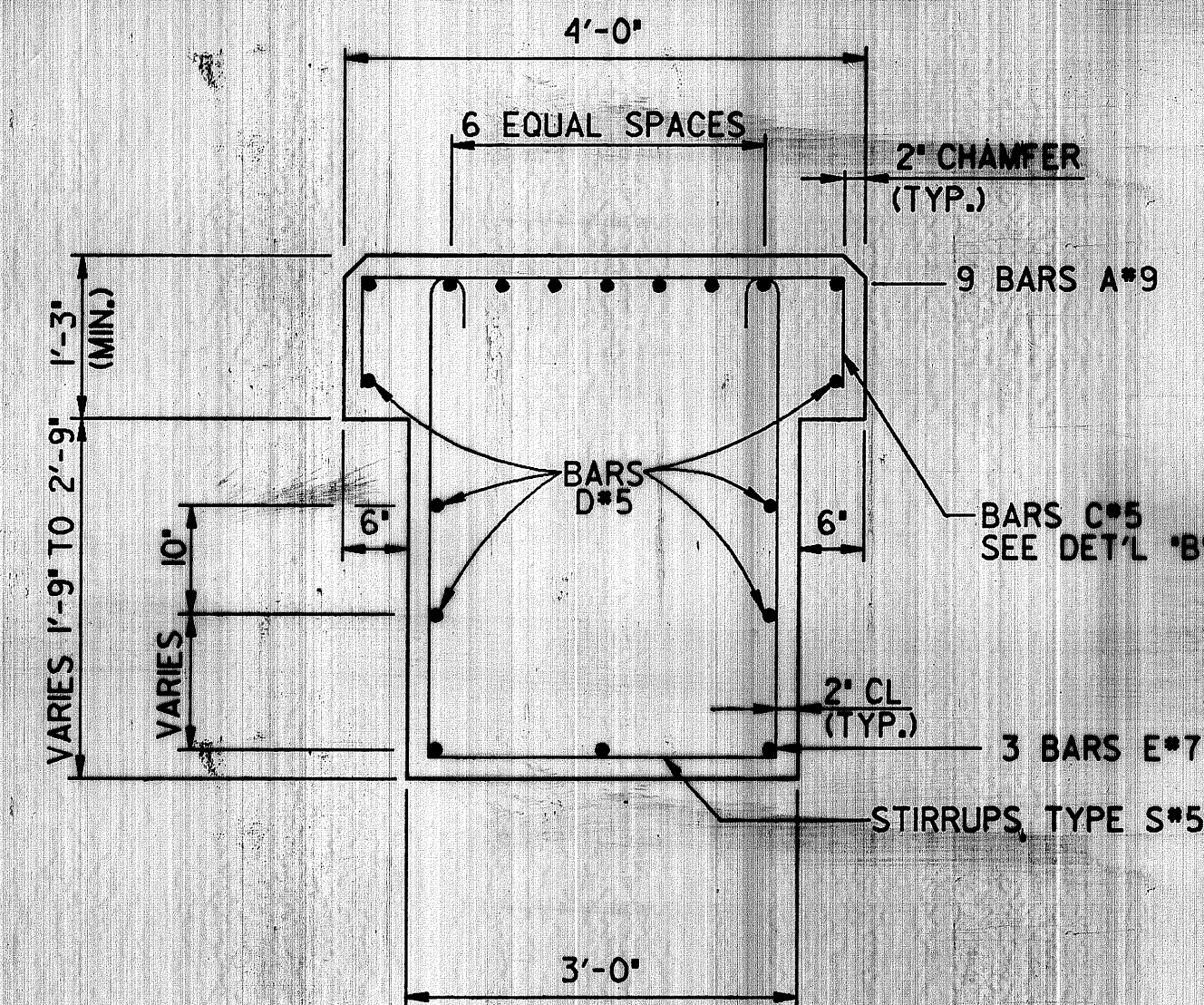
ELEVATION E.B.L.  
(LOOKING NORTH)  
SCALE:  $\frac{1}{16}'' = 1'-0''$

7.  
13  
15  
16  
18  
21  
23  
24  
25  
27

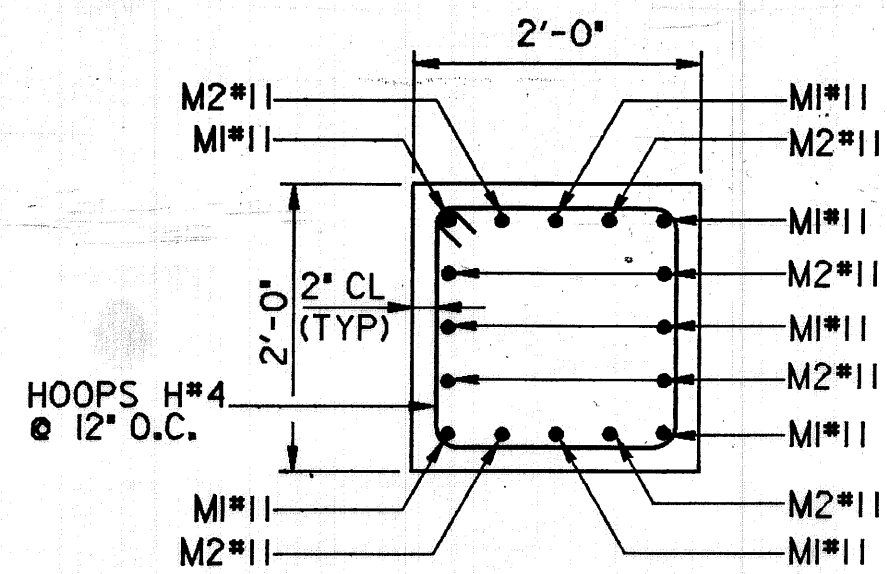


BARGE, WAGGONER, SUMNER, & CANNON	BRIDGE SHEET NO. 13 OF 24	STATE OF ALABAMA HIGHWAY DEPARTMENT			
	REVISIONS	PROJECT NO. IR-10-I(84) OUTSIDE WIDENING OF I-10 BRIDGES OVER VIRGINIA STREET AT STATION 608+62.33 MOBILE COUNTY, ALABAMA			
	APPROVED:	GENERAL ELEVATION			
	SECTION SUPERVISOR <i>William J. McIver</i> CHIEF BRIDGE DESIGN ENGINEER <i>Charlie H. Cook</i> BRIDGE ENGINEER	SCALE:  AS SHOWN	DESIGNED: <i>OUT</i> DRAWN: BWSC. CAD/D REINF CHKD: CHECKED: <i>TWW</i>	QUANTITIES COMP: <i>OUT</i> CHKD: <i>TWW</i>	DATE  06/19/87

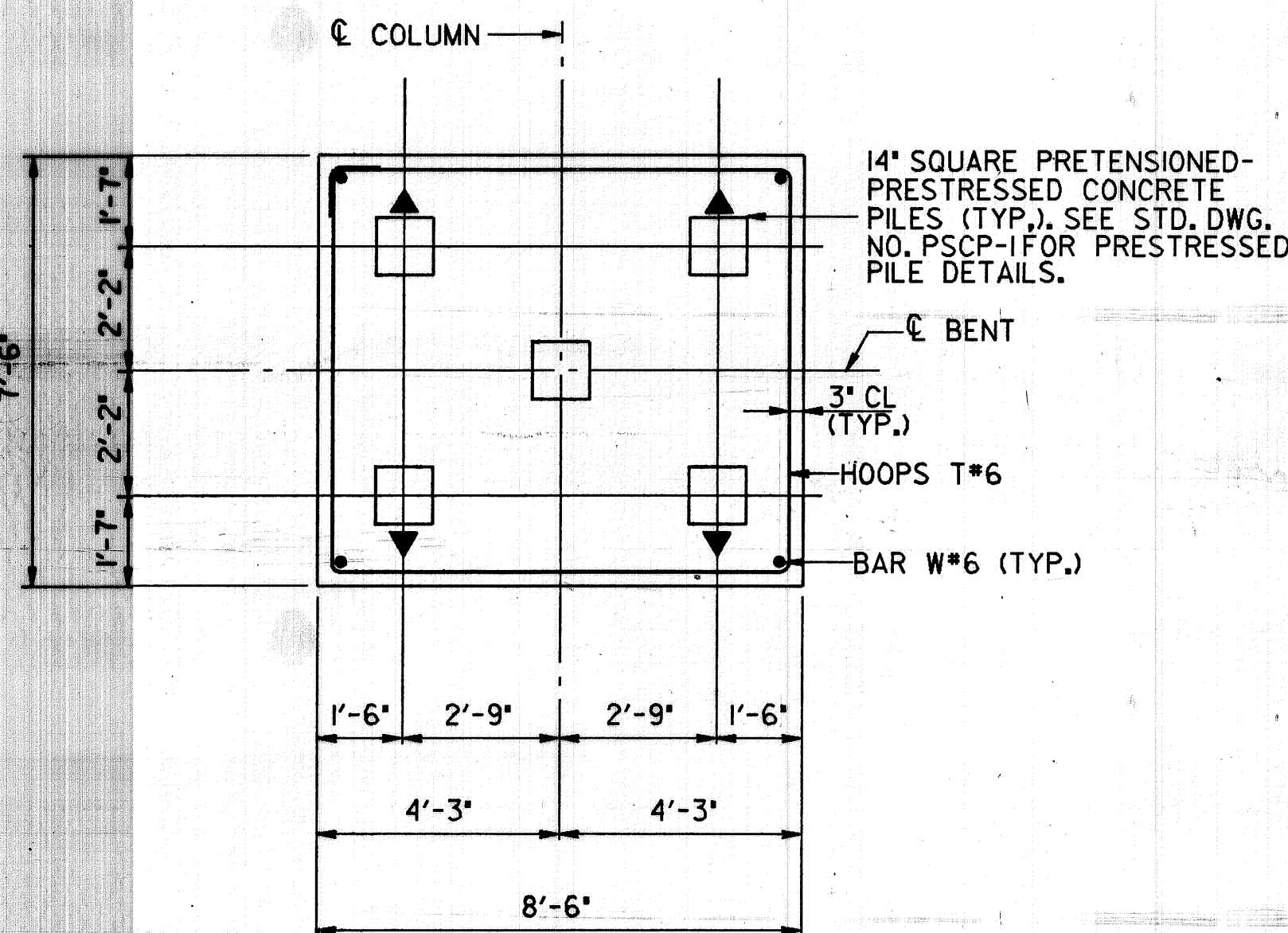




SECTION "F-F"  
SCALE : 3/4" = 1'-0"

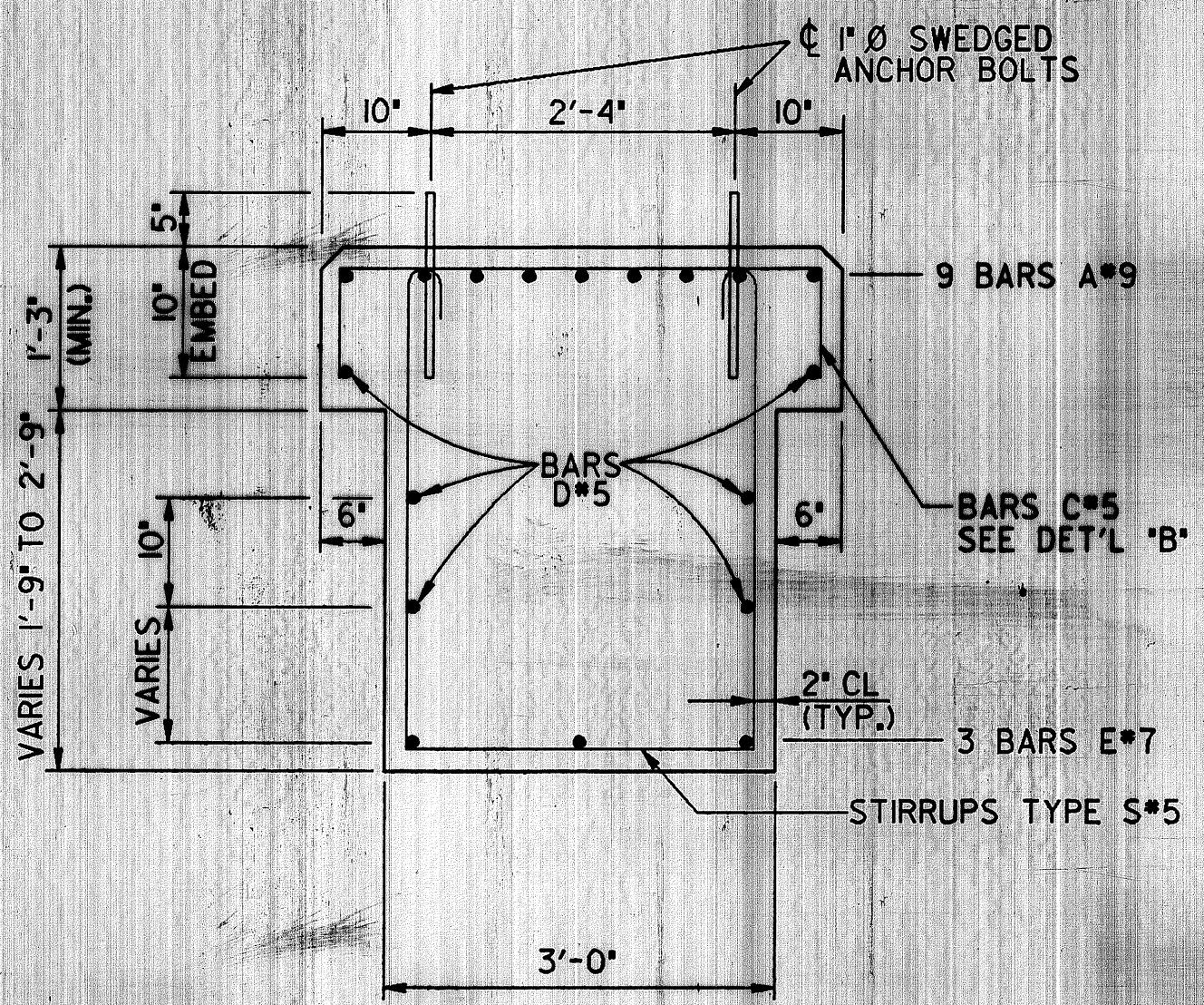


SECTION "H-H"  
SCALE : 3/4" = 1'-0"

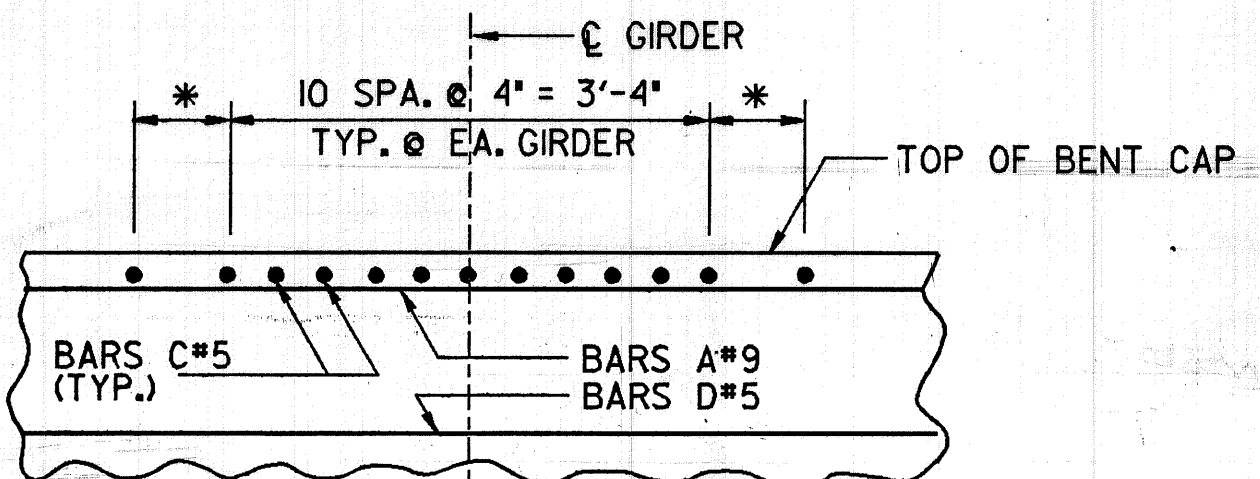


SECTION "J-J" @ TOP OF PILES  
SCALE : 3/8" = 1'-0"

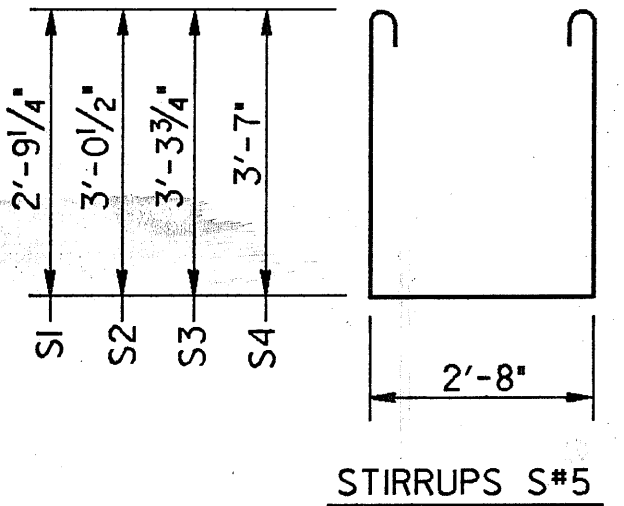
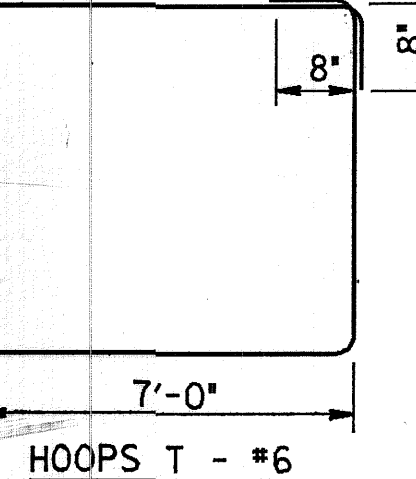
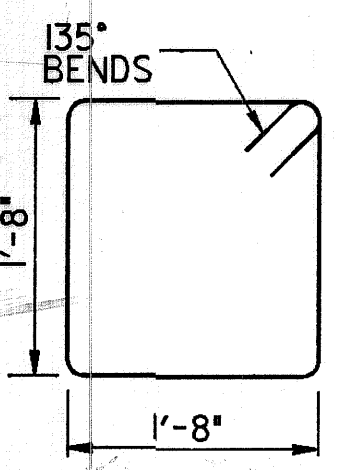
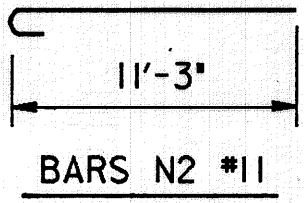
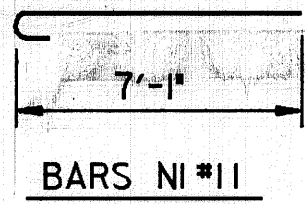
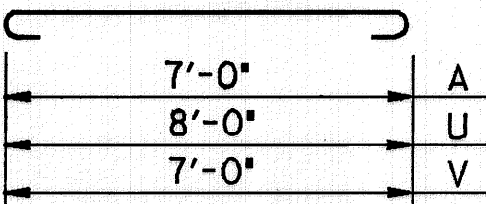
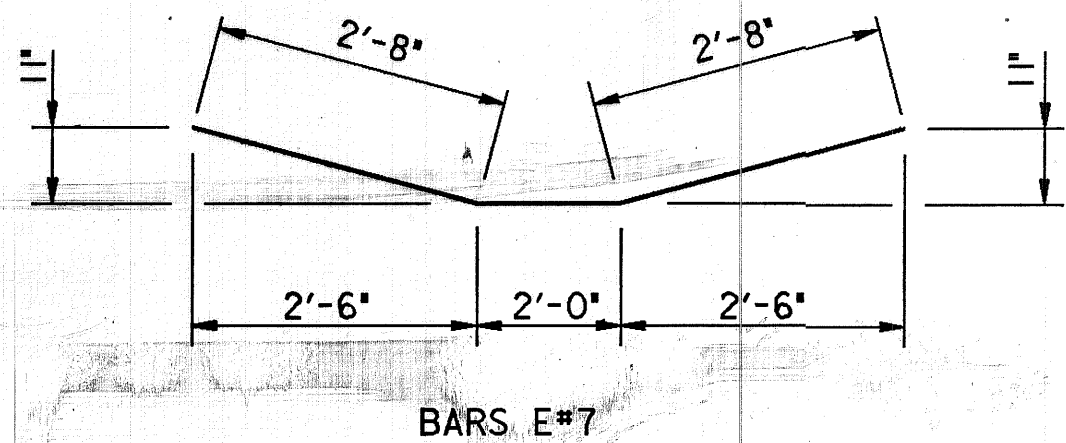
▲ DENOTES : PILES TO BE BATTERED & DIRECTION



SECTION "G-G"  
SCALE : 3/4" = 1'-0"



DETAIL "B"  
NO SCALE

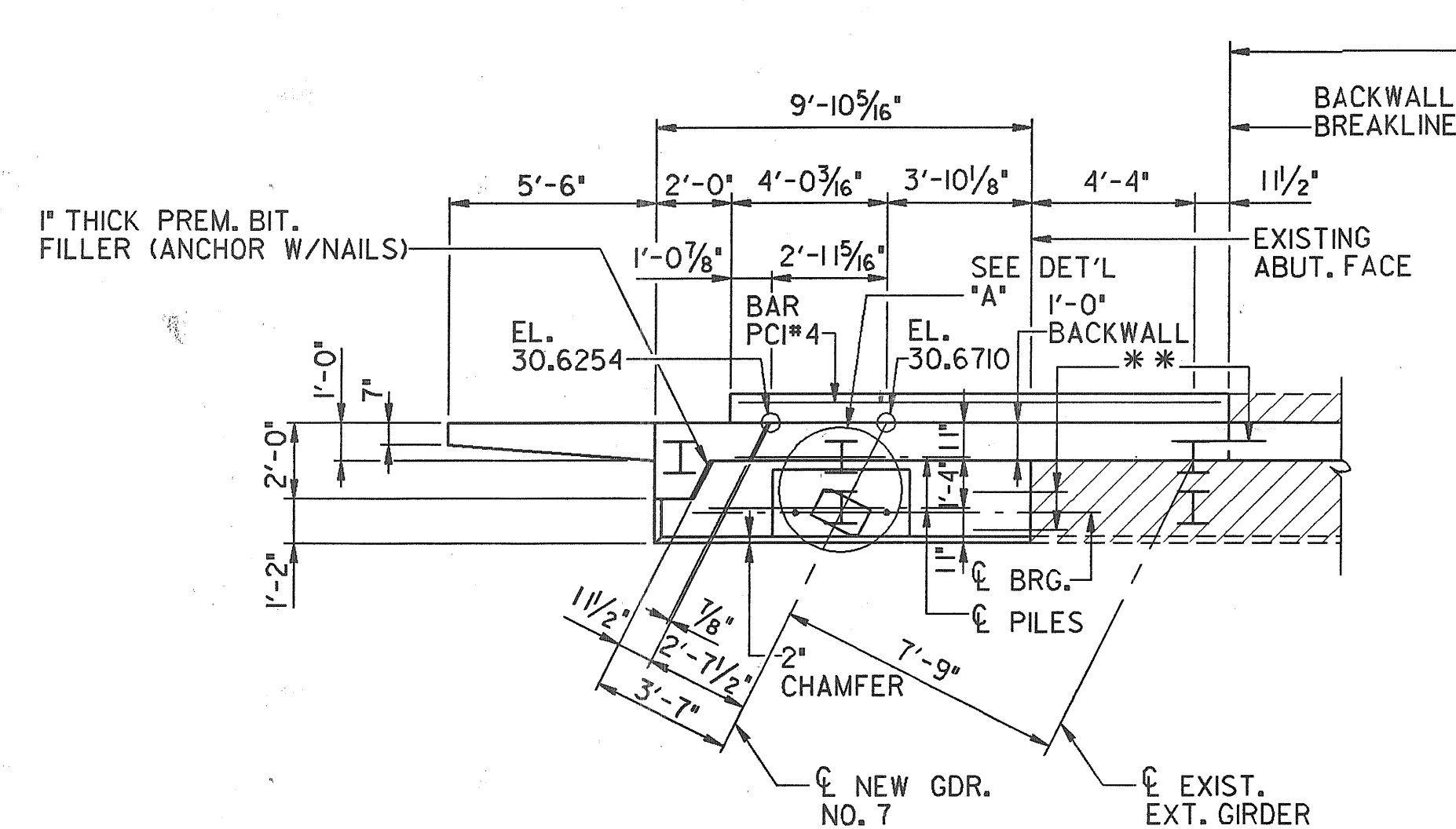


BILL OF STEEL REINFORCEMENT (TOTAL E.B.L. & W.B.L.)							
BAR	SIZE	BENT NO. 2		BENT NO. 3		BENT NO. 4	
		NO. REQ'D	LENGTH	NO. REQ'D	LENGTH	NO. REQ'D	LENGTH
A	9	18	9'-6"	18	9'-6"	18	9'-6"
C	5	30	5'-6"	30	5'-6"	30	5'-6"
D	5	12	7'-0"	12	7'-0"	12	7'-0"
E	7	6	7'-4"	6	7'-4"	6	7'-4"
H	4	36	7'-8"	36	7'-8"	38	7'-8"
M1	11	16	18'-0"	16	17'-8 1/2"	16	18'-3"
M2	11	16	13'-10"	16	13'-6 1/2"	16	14'-1"
N1	11	16	8'-8"	16	8'-8"	16	8'-8"
N2	11	16	12'-10"	16	12'-10"	16	12'-10"
S1	5	4	9'-4 1/2"	4	9'-4 1/2"	4	9'-4 1/2"
S2	5	4	9'-11"	4	9'-11"	4	9'-11"
S3	5	4	10'-5 1/2"	4	10'-5 1/2"	4	10'-5 1/2"
S4	5	4	11'-0"	4	11'-0"	4	11'-0"
T	6	20	31'-4"	20	31'-4"	20	31'-4"
U	7	30	9'-8"	30	9'-8"	30	9'-8"
V	7	34	8'-8"	34	8'-8"	34	8'-8"
W	6	8	4'-3"	8	4'-3"	8	4'-3"

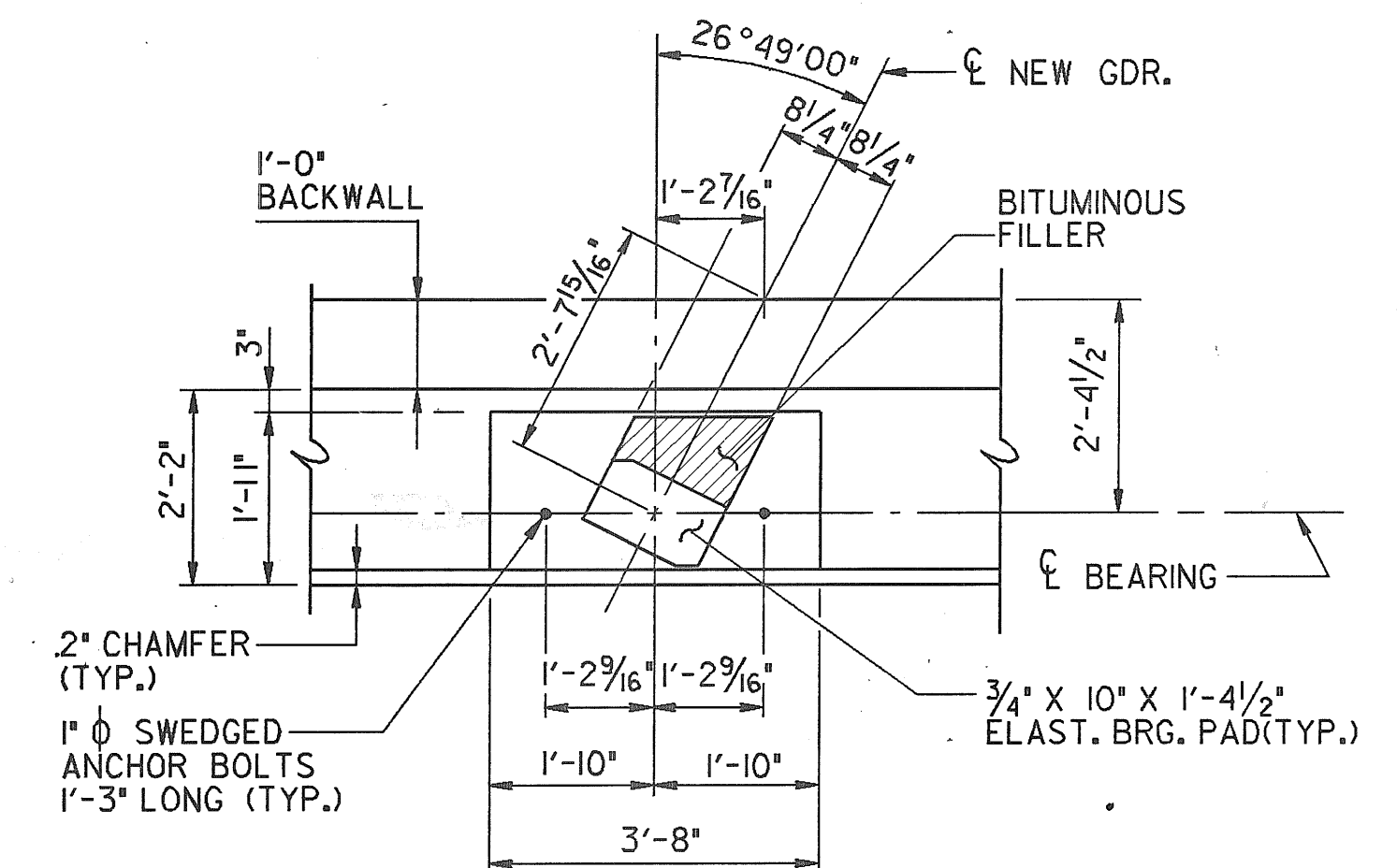
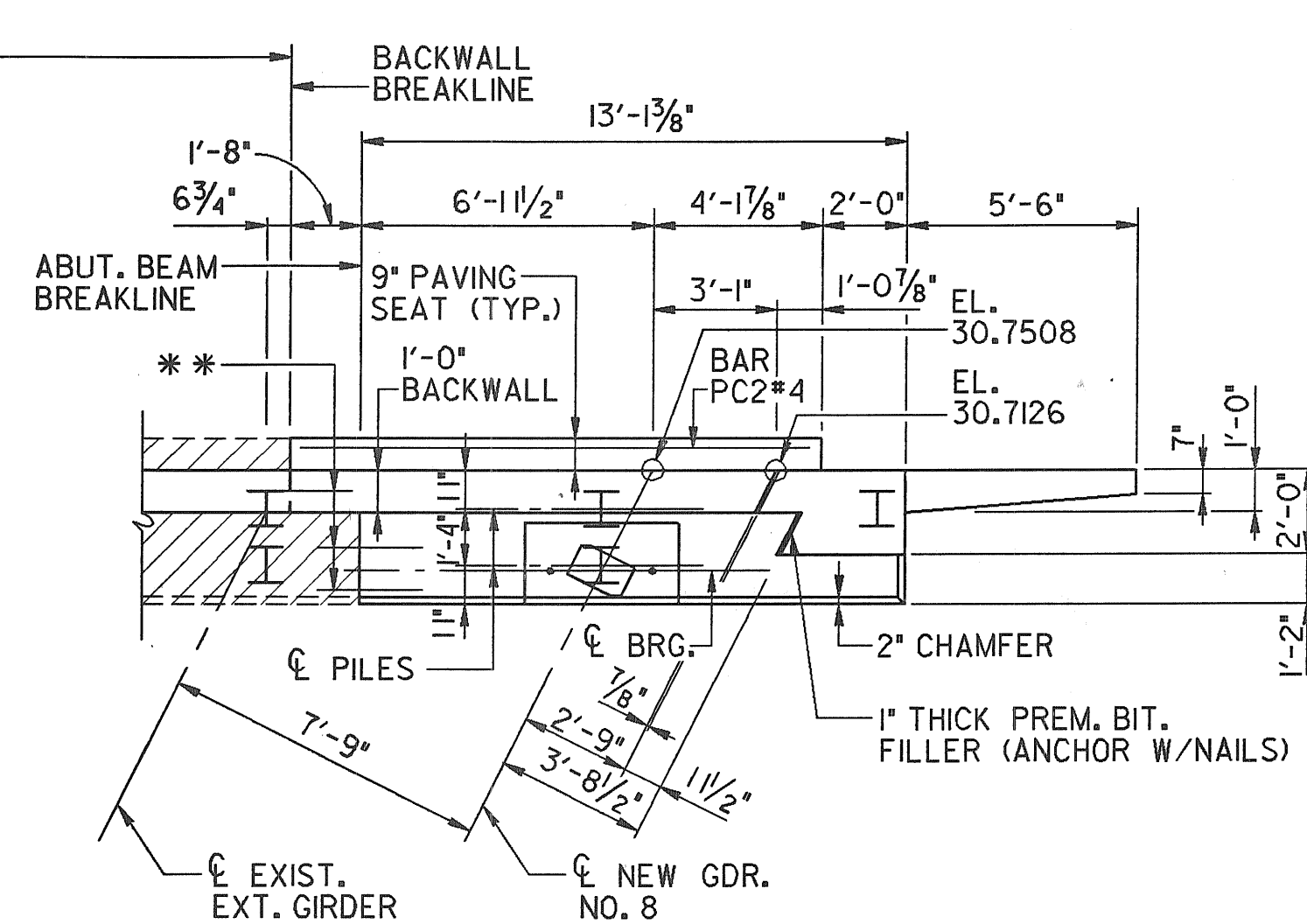
BARGE, WAGGONER, SUMNER, & CANNON	BRIDGE SHEET NO. 21 OF 24	STATE OF ALABAMA HIGHWAY DEPARTMENT			
	REVISIONS	PROJECT NO. IR-10-10(84) OUTSIDE WIDENING OF I-10 BRIDGES OVER VIRGINIA STREET AT STATION 608+62.33 MOBILE COUNTY, ALABAMA			
	APPROVED:	BENT DETAILS			
	SECTION SUPERVISOR William J. McTear CHIEF BRIDGE DESIGN ENGINEER Charlie H. Cook BRIDGE ENGINEER	SCALE: AS SHOWN	DESIGNED: DWT DRAWN: BWS CAD/D REINF CHKD: TWW CHECKED: TWW	QUANTITIES COMP: CHKD:	DATE 06/19/87

BARGE, WAGONER, SUMNER, & CANNON	BRIDGE SHEET NO. 22 OF 24		STATE OF ALABAMA HIGHWAY DEPARTMENT		
	REVISIONS		PROJECT NO. IR-10-(K4) OUTSIDE WIDENING OF I-10 BRIDGES OVER VIRGINIA STREET AT STATION 608+62.33 MOBILE COUNTY, ALABAMA		
	APPROVED:		ABUTMENT NO. 1		
SECTION SUPERVISOR <i>William J. McRae</i> CHIEF BRIDGE DESIGN ENGINEER <i>Charlie H. Cook</i> BRIDGE ENGINEER		SCALE:  AS SHOWN	DESIGNED: <i>DWT</i> DRAWN: BWSC CAD/D REINF CHKD: CHECKED: <i>TWW</i>	QUANTITIES COMP: CHKD:	DATE  06/19/87

FHWA REG. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	ALA.	I-10-10-1 (84)	1987	30 V	159 H



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



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

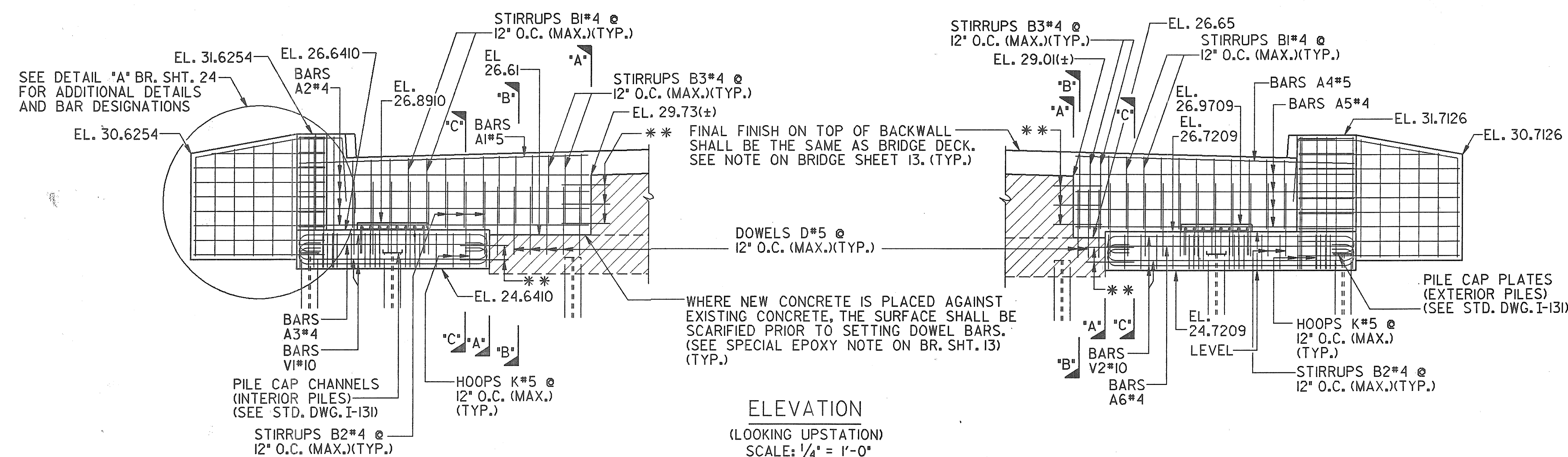
\*\* INDICATES DOWEL BARS NO.6 X 2'-6" LONG EMBEDDED 1'-0" INTO EXIST. CONC. DOWEL HOLES (1" Ø MIN.) TO BE FILLED W/APPROVED EPOXY ADHESIVE. SEE BR. SHT. NO.13 AND SECTION 870 OF THE STD. SPECIFICATIONS.

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

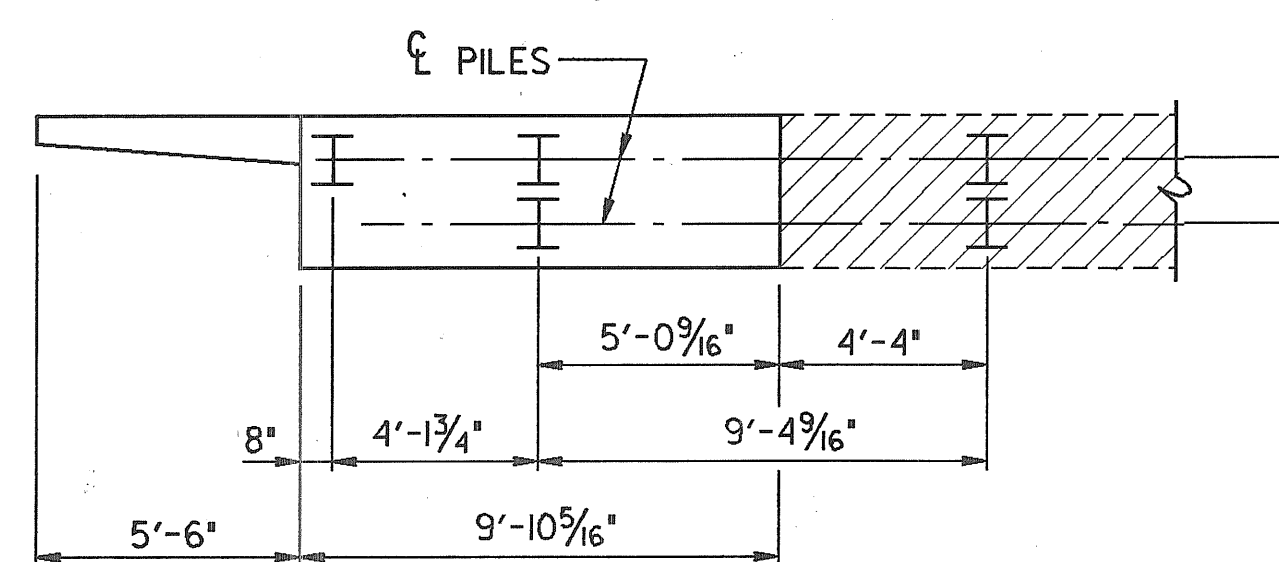
NOTE: FINISH GRADE OF RAISED BACKWALL ON EXISTING ABUTMENTS SHALL MATCH EXISTING BRIDGE DECK SLOPE.

NOTE: SEE DETAIL "B" BR. SHT. 24 FOR SPACING OF HOOPS K#5

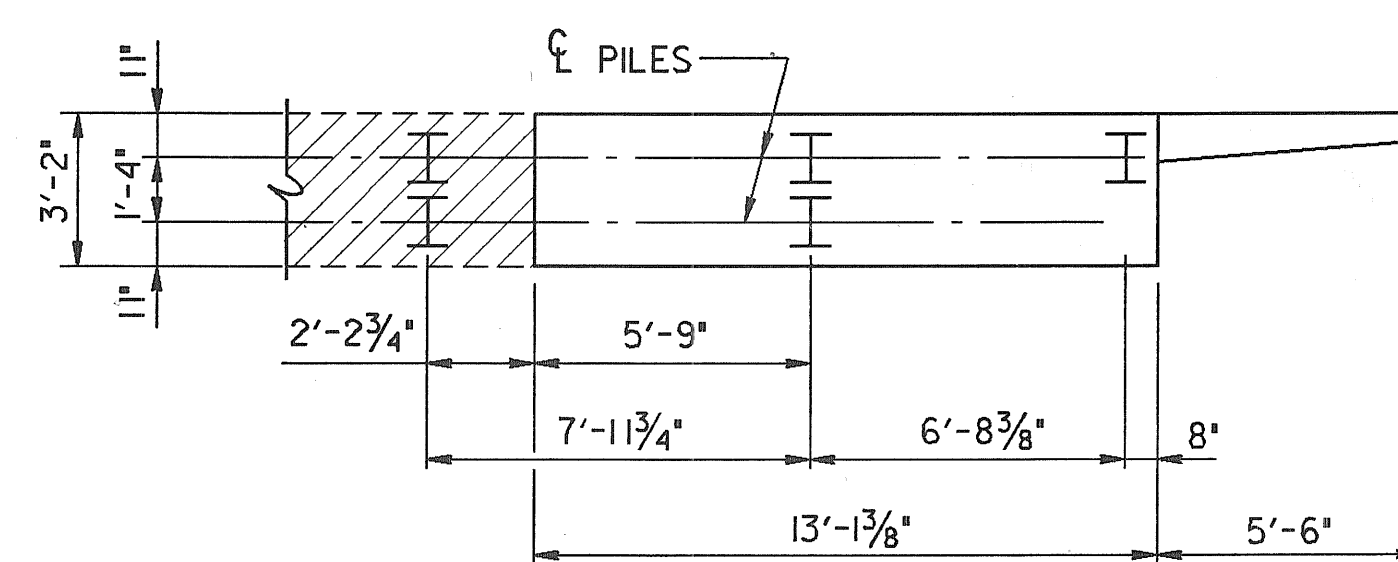
NOTE: SPLICE BARS #4 = 1'-6"  
#5 = 1'-10"



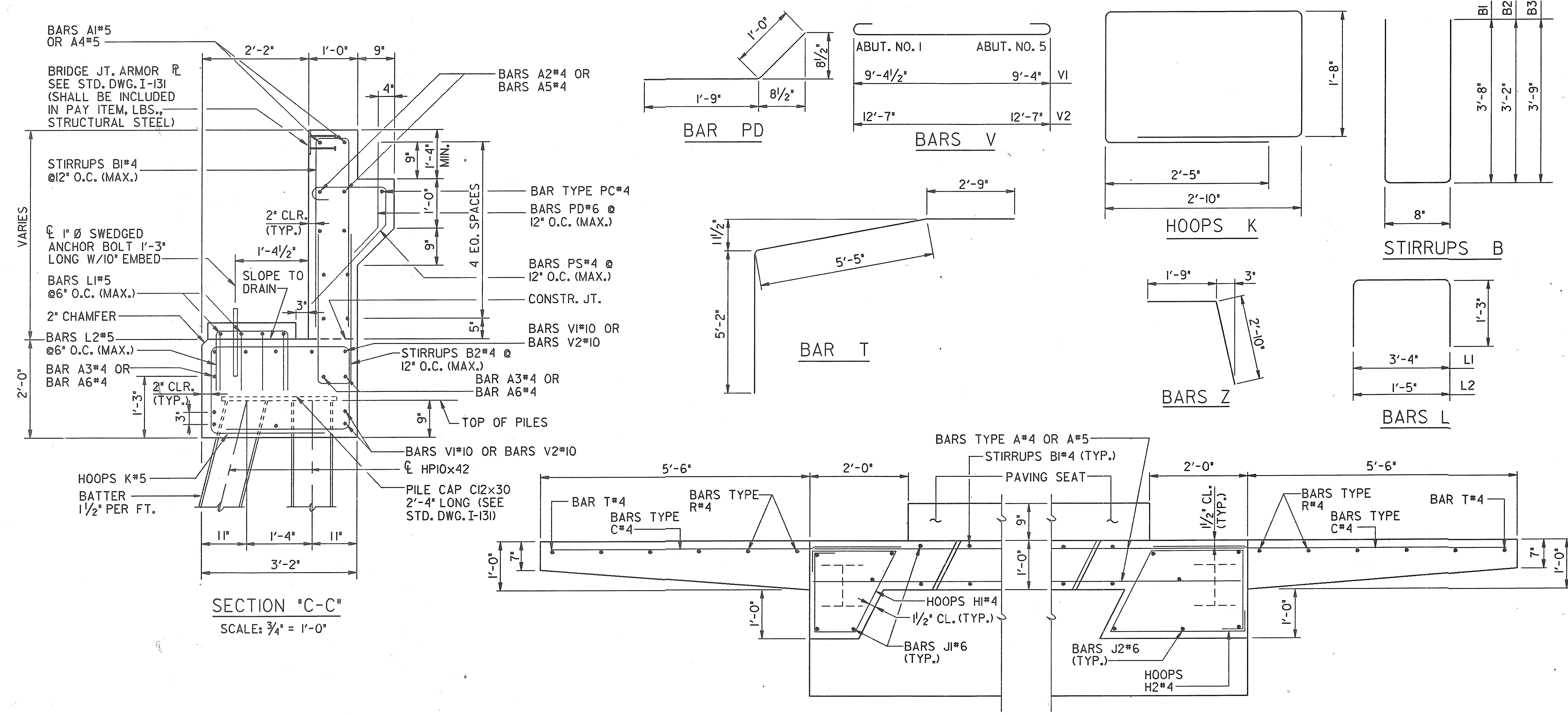
ELEVATION  
(LOOKING UPSTATION)  
SCALE: 1/4" = 1'-0"



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

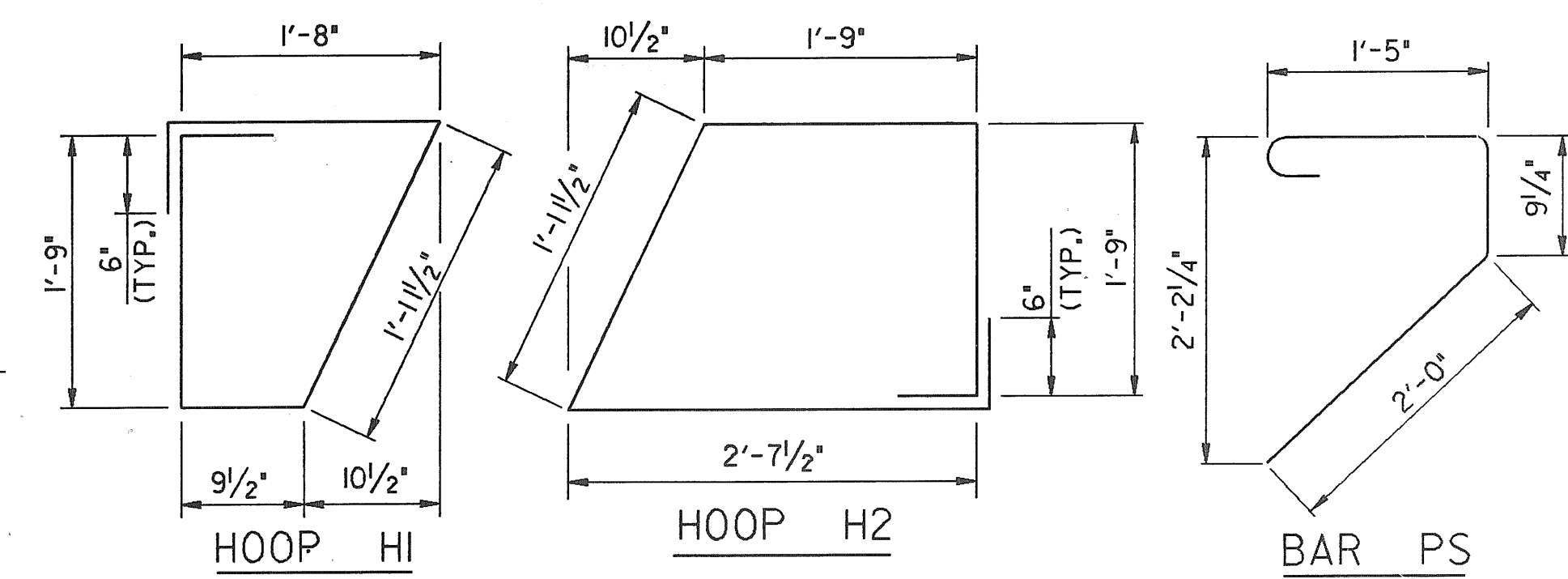


BARGE, WAGGONER, SUMNER, & CANNON	BRIDGE SHEET NO. 23 OF 24		STATE OF ALABAMA HIGHWAY DEPARTMENT		
	REVISIONS		PROJECT NO. IR-10-10(84) OUTSIDE WIDENING OF I-10 BRIDGES OVER VIRGINIA STREET AT STATION 608+62.33 MOBILE COUNTY, ALABAMA		
	APPROVED:		ABUTMENT NO. 5		
	SECTION/SUPERVISOR <i>William D. McAllen</i> CHIEF BRIDGE DESIGN ENGINEER <i>Charles H. Cook</i> BRIDGE ENGINEER		SCALE: AS SHOWN	DESIGNED: <i>DUT</i> DRAWN: BWSC CAD/D REINF. CHKD: CHECKED: <i>TWW</i>	QUANTITIES COMP: CHKD: DATE 06/19/87



BILL OF STEEL REINFORCEMENT					
		ABUT. NO. 1		ABUT. NO. 5	
BAR	SIZE	NO. REQ'D	LENGTH	NO. REQ'D	LENGTH
A1	5	2	14'-11"	2	14'-10"
A2	4	8	14'-11"	8	14'-10"
A3	4	3	9'-4 1/2"	3	9'-4"
A4	5	2	14'-6"	2	14'-6"
A5	4	8	14'-6"	8	14'-6"
A6	4	3	12'-7"	3	12'-7"
B1	4	19	8'-0"	19	8'-0"
B2	4	19	7'-0"	19	7'-0"
B3	4	9	8'-2"	9	8'-2"
C1	4	14	7'-2"	14	7'-2"
C2	4	2	5'-11"	2	5'-11"
D	5	18	3'-6"	18	3'-6"
H1	4	7	7'-2"	7	7'-2"
H2	4	7	9'-1"	7	9'-1"
J1	6	7	6'-7"	7	6'-7"
J2	6	8	6'-7"	8	6'-7"
K	5	40	11'-0"	40	11'-0"
L1	5	8	5'-10"	8	5'-10"
L2	5	16	3'-11"	16	3'-11"
PC1	4	1	12'-11"	1	12'-11"
PC2	4	1	12'-6"	1	12'-5"
PD	6	28	2'-9"	28	2'-9"
PS	4	28	4'-8 1/4"	28	4'-8 1/4"
R1	4	2	5'-5"	2	5'-5"
R2	4	2	5'-7"	2	5'-7"
R3	4	2	5'-9"	2	5'-9"
R4	4	2	5'-11"	2	5'-11"
R5	4	2	6'-1"	2	6'-1"
T	4	2	13'-4"	2	13'-4"
V1	10	10	12'-2 1/2"	10	12'-2"
V2	10	10	15'-5"	10	15'-5"
Z	5	4	4'-7"	4	4'-7"
DOWEL	6	18	2'-6"	18	2'-6"

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



ITEM	UNITS	ABUT. NO. 1	ABUT. NO. 5
SUBSTRUCTURE CONCRETE	CU.YD.	13.5	13.5
STEEL REINFORCEMENT	LBS.	2992	2989
STRUCTURAL STEEL	LBS.	492	492

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

BRIDGE SHEET NO. 24 OF 24 REVISIONS APPROVED: SECTION SUPERVISOR CHIEF BRIDGE DESIGN ENGINEER BRIDGE ENGINEER	STATE OF ALABAMA HIGHWAY DEPARTMENT PROJECT NO. IR-10-10(84) OUTSIDE WIDENING OF I-10 BRIDGES OVER VIRGINIA STREET AT STATION 608+62.33 MOBILE COUNTY, ALABAMA		
	ABUTMENT DETAILS		
	SCALE: AS SHOWN DESIGNED: DWT DRAWN: BWSC CAD/D REIN. CHKD: TWW CHECKED: TWW	QUANTITIES COMP: DWT CHKD: TWW	DATE 06/19/87
	BARGE, WAGGONER, SUMNER, & CANNON		

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		
		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.
	Medium damp brown & tan clay w/sand	10.3	11		
2.0 10.0		15.3	10		
	Stiff wet gray & brown silty clay w/a small amount of sand	20.3	12		
-4.0 16.0		25.3	15		
	Medium wet tan & gray sand w/clay	30.3	37		
-14.0 26.0		35.3	41		
	Dense wet tan coarse sand	40.1	50		
-26.0 38.0		45.3	54		
	Very dense wet yellow & tan sand	50.2	50		
-36.8 48.8			.9		
	Very dense wet gray sand	55.5	53		
-38.2 50.2		60.5	52		

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