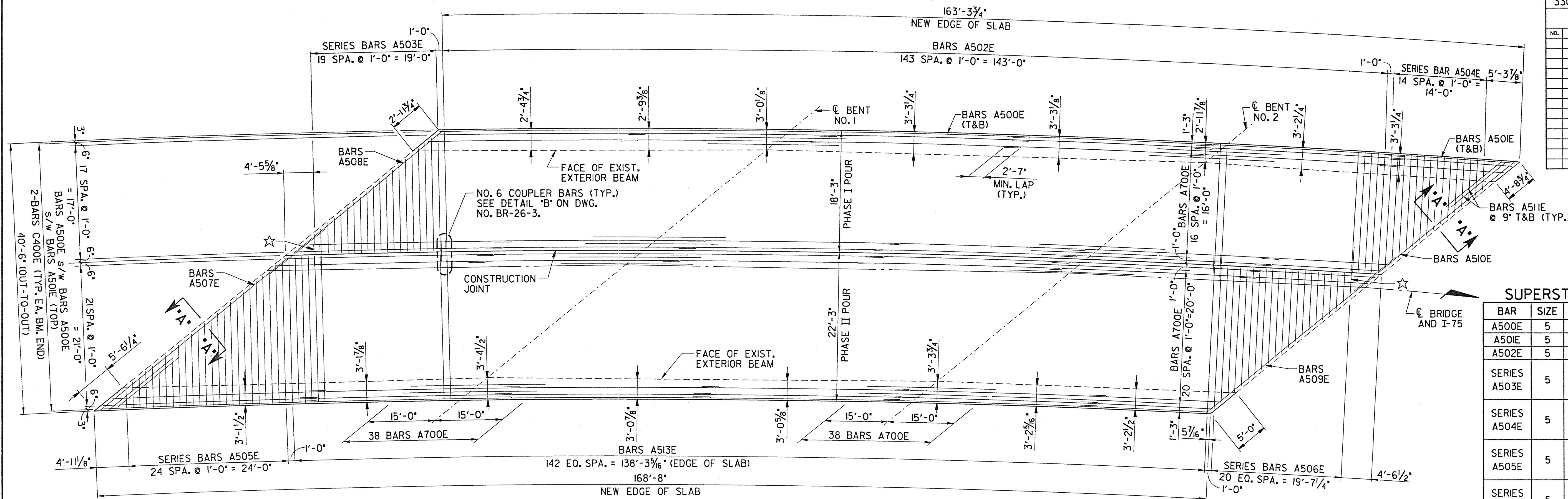


PROJECT NO.	YEAR	SHEET NO.	
33004-4135-04	1996		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION



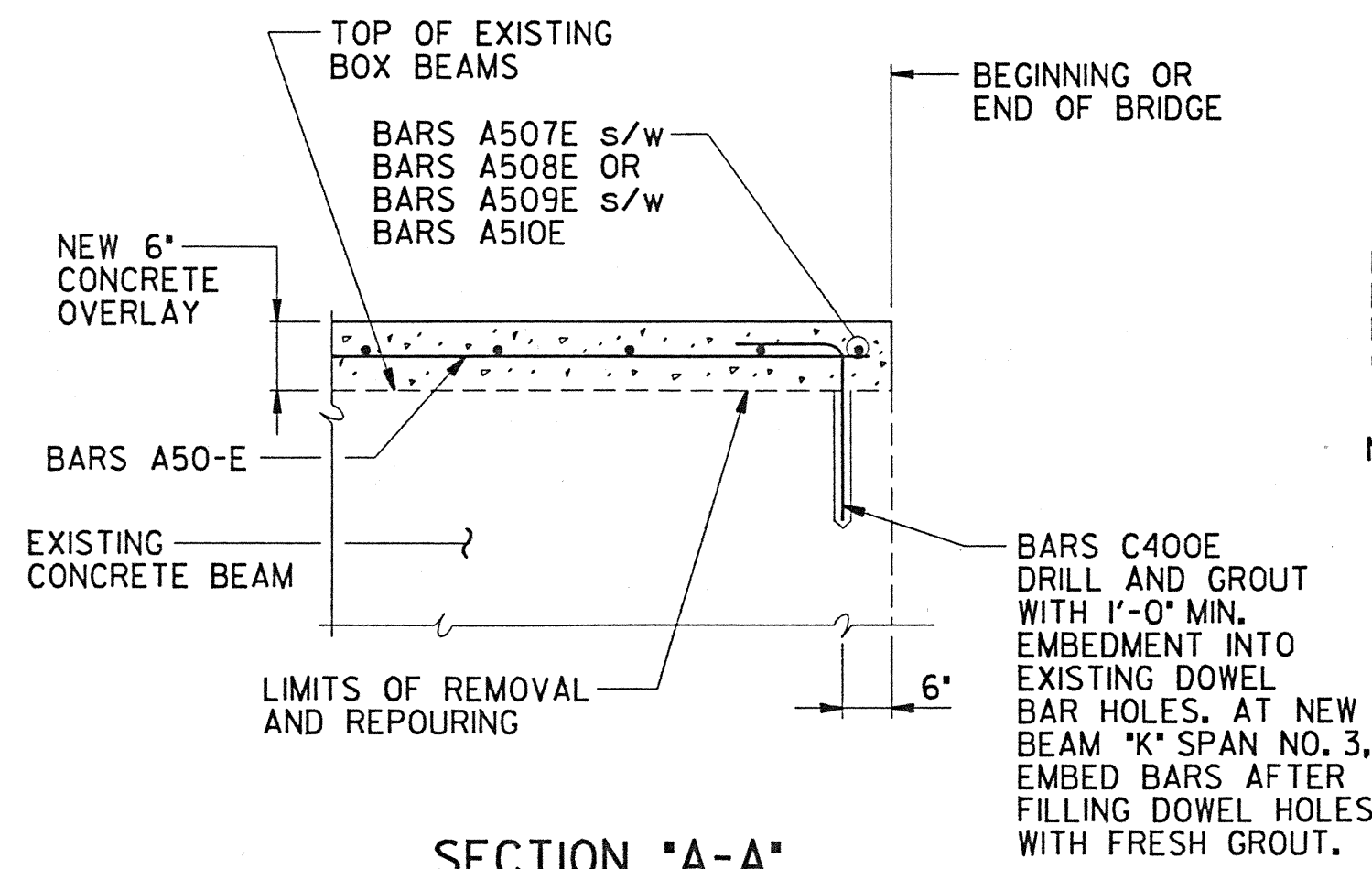
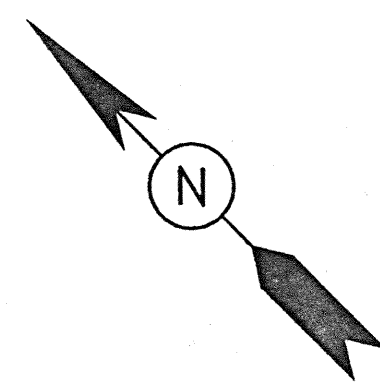
SLAB PLAN
(TOP OF 6" OVERLAY)

SUPERSTRUCTURE BILL OF STEEL

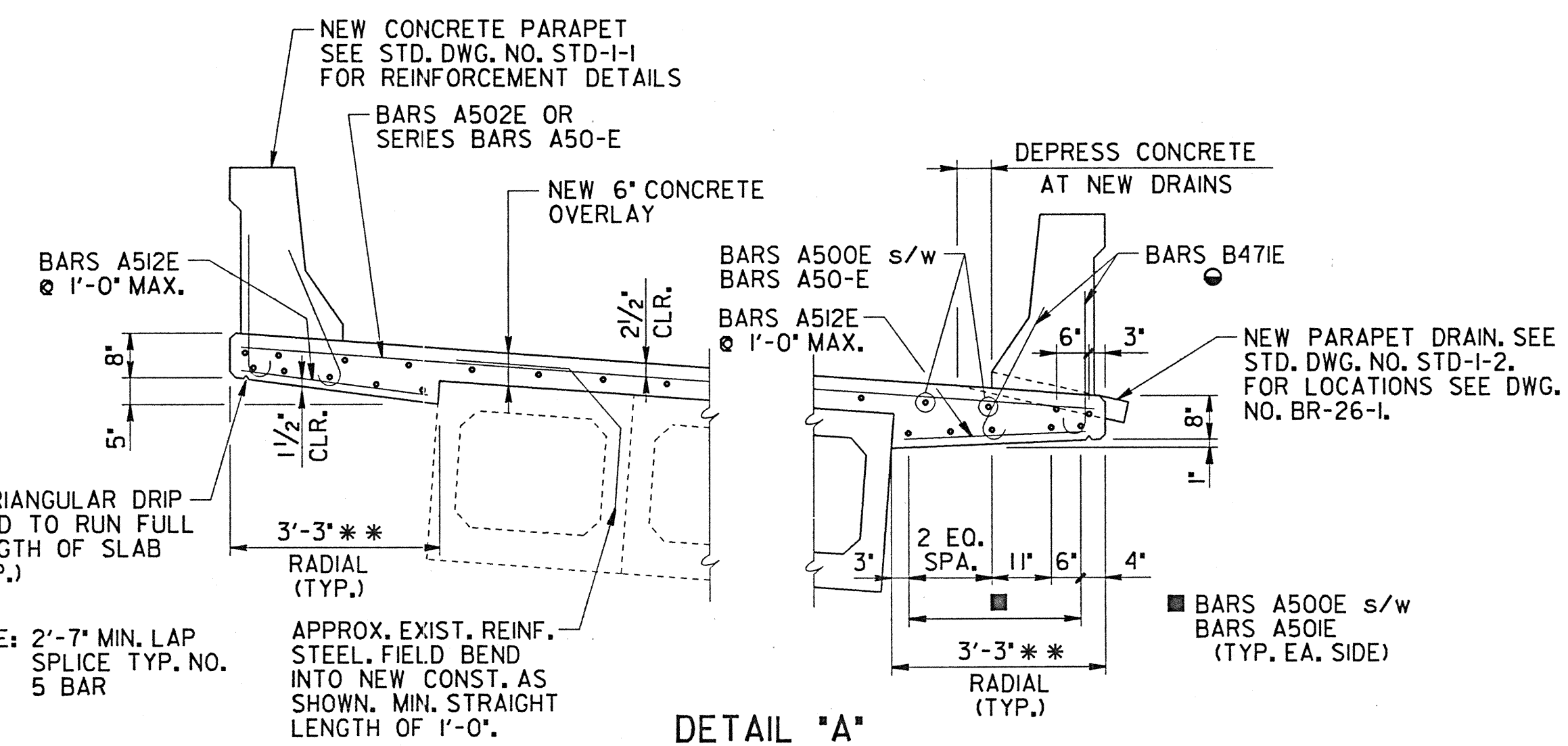
BAR	SIZE	NO. REQ'D.	LENGTH
A500E	5	260	30'-0"
A501E	5	52	3'-3"
A502E	5	144	17'-11"
SERIES A503E	5	1	LENGTH VARIES FROM 3'-0" TO 17'-2" IN INC. OF 9" (20 BARS) TOTAL LENGTH = 201'-8"
SERIES A504E	5	1	LENGTH VARIES FROM 17'-6" TO 3'-3" IN INC. OF 1'-0 1/4" (15 BARS) TOTAL LENGTH = 155'-8"
SERIES A505E	5	1	LENGTH VARIES FROM 3'-3" TO 21'-6" IN INC. OF 9" (25 BARS) TOTAL LENGTH = 309'-5"
SERIES A506E	5	1	LENGTH VARIES FROM 21'-1" TO 3'-0" IN INC. OF 11" (21 BARS) TOTAL LENGTH = 252'-11"
A507E	5	1	36'-8"
A508E	5	1	29'-5"
A509E	5	1	32'-8"
A510E	5	1	26'-5"
A511E	5	4	8'-0"
A512E	5	322	2'-9"
A513E	5	143	21'-11"
A700E	7	76	30'-0"
B471E	4	666	2'-10"
C400E	4	44	2'-9"
SERIES C470E	4	4	17'-6"
SERIES C471E	4	4	17'-10"
NO. 6 COUPLER	6	322	2'-10"

☆ DENOTES: THREAD ONE END OF BAR IN PLACE OF REQ'D. COUPLER BAR AT THIS LOCATION.

NOTE: SLAB OFFSETS AT INTERMEDIATE POINTS ALONG EXTERIOR BEAMS ARE GIVEN AT 1/3 POINTS. OFFSET DIMENSIONS ARE AT RIGHT ANGLES TO BEAM FACE UNLESS SHOWN OTHERWISE.



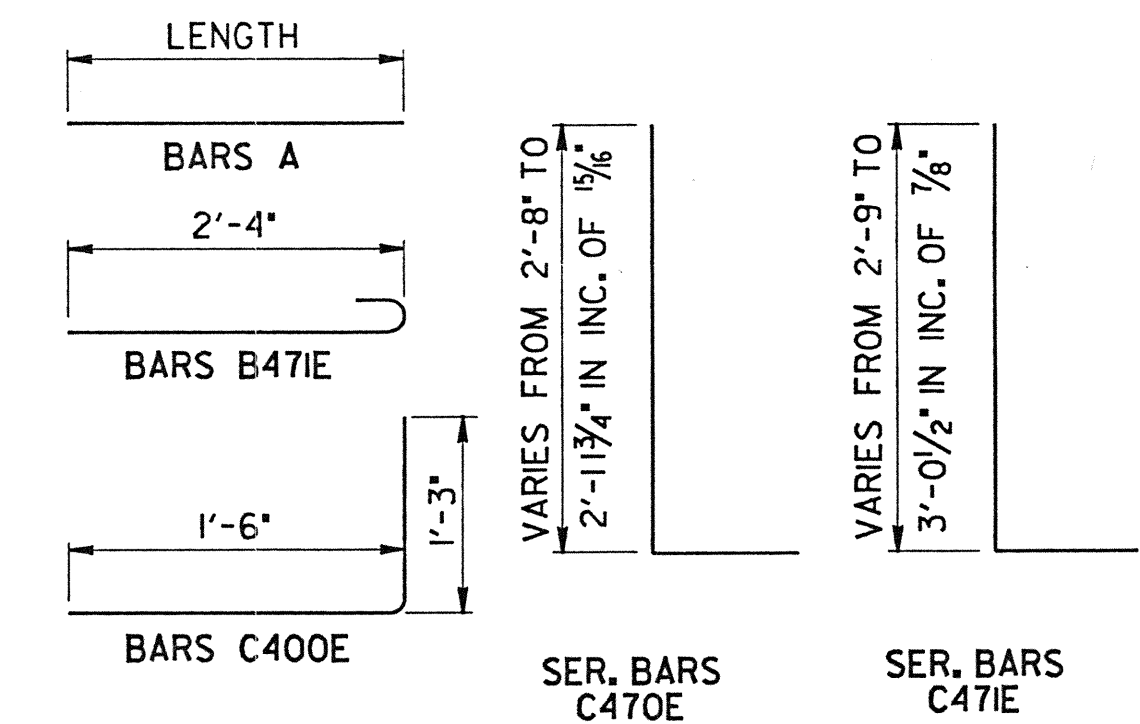
SECTION 'A-A'
(SHOWING END OF OVERLAY AT EXISTING AND NEW BEAM ENDS.)



DETAIL 'A'
(SHOWING CANTILEVER REINFORCEMENT)

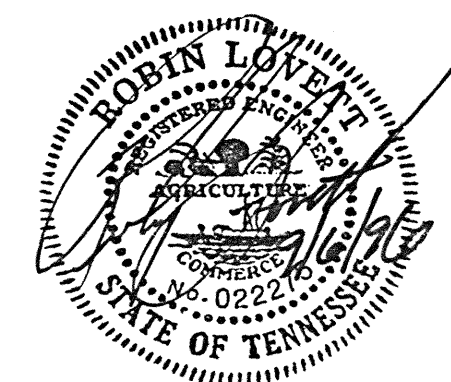
** DENOTES: NEW CANTILEVER TO BE FORMED TO HORIZONTAL CURVE WITH VARYING OFFSETS (SHOWN THIS SHEET) FROM EXTERIOR FACE OF EXIST. BEAMS.

○ DENOTES: WHEN POURING CANTILEVERS, PROVISIONS SHALL BE MADE FOR SETTING REINFORCING STEEL FOR PARAPET. THE PARAPET SHALL NOT BE POURED UNTIL THE CANTILEVERS ARE POURED AND CURED. SEE STD. DWG. NO. STD-I-1.



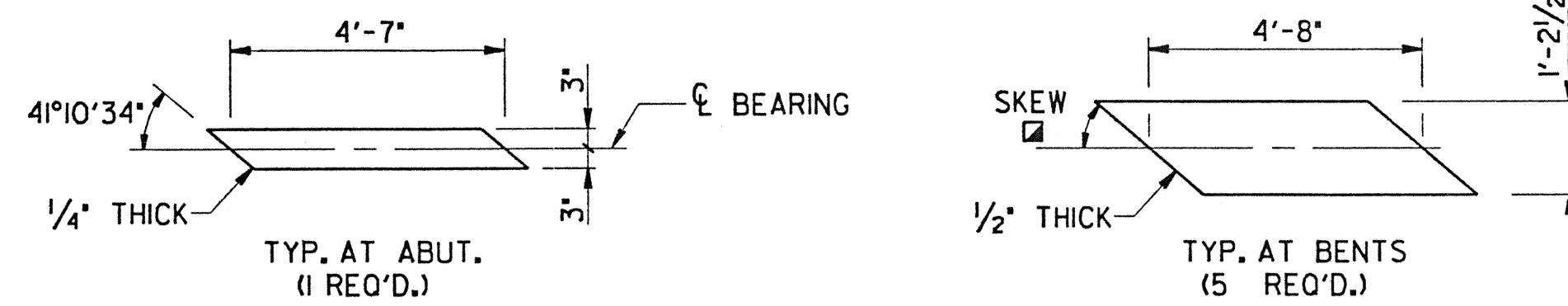
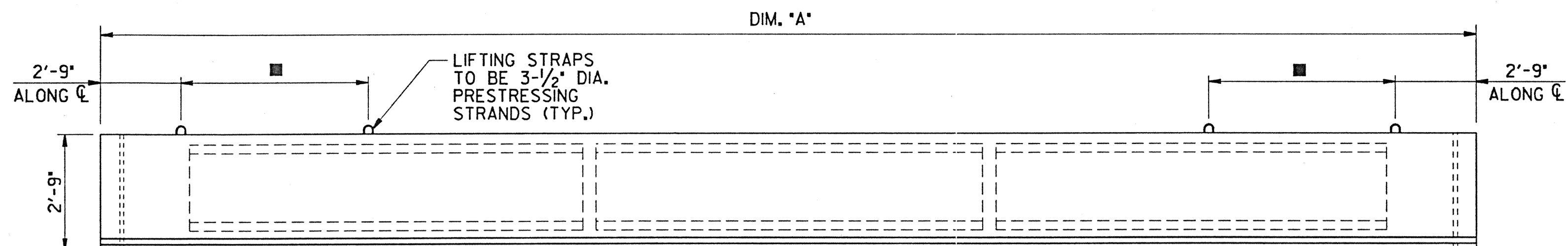
NOTE: ALL REINFORCING STEEL SHALL BE EPOXY COATED. THE COST OF EPOXY COATED REINFORCING STEEL TO BE INCLUDED IN ITEM NO. 604-10.18, REINFORCING STEEL (REPAIRS), LBS.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
SUPERSTRUCTURE DETAILS
INTERSTATE 75
OVER
INTERSTATE 24
BRIDGE NO. 33-I75-1.41
HAMILTON COUNTY
1996

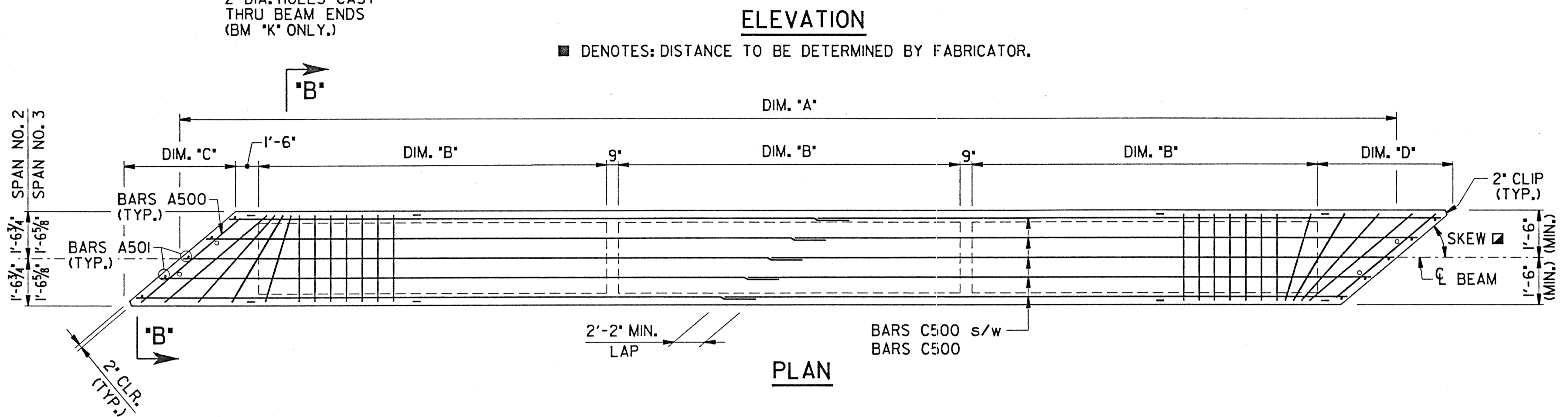


DESIGNED BY: R. LOVETT DATE: 9/96
DRAWN BY: G. CERTH DATE: 9/96
SUPERVISED BY: PETRONE DATE: 9/96
CHECKED BY: WILSON, PETRONE DATE: 9/96

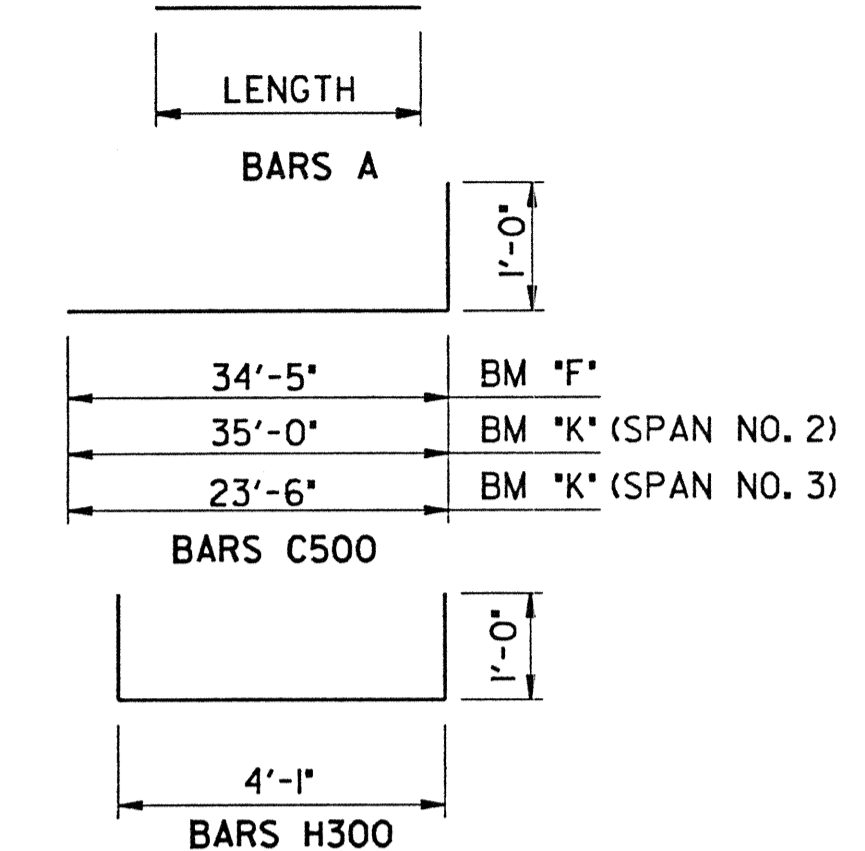
PROJECT NO.	YEAR	SHEET NO.	
33004-4135-04	1996		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION



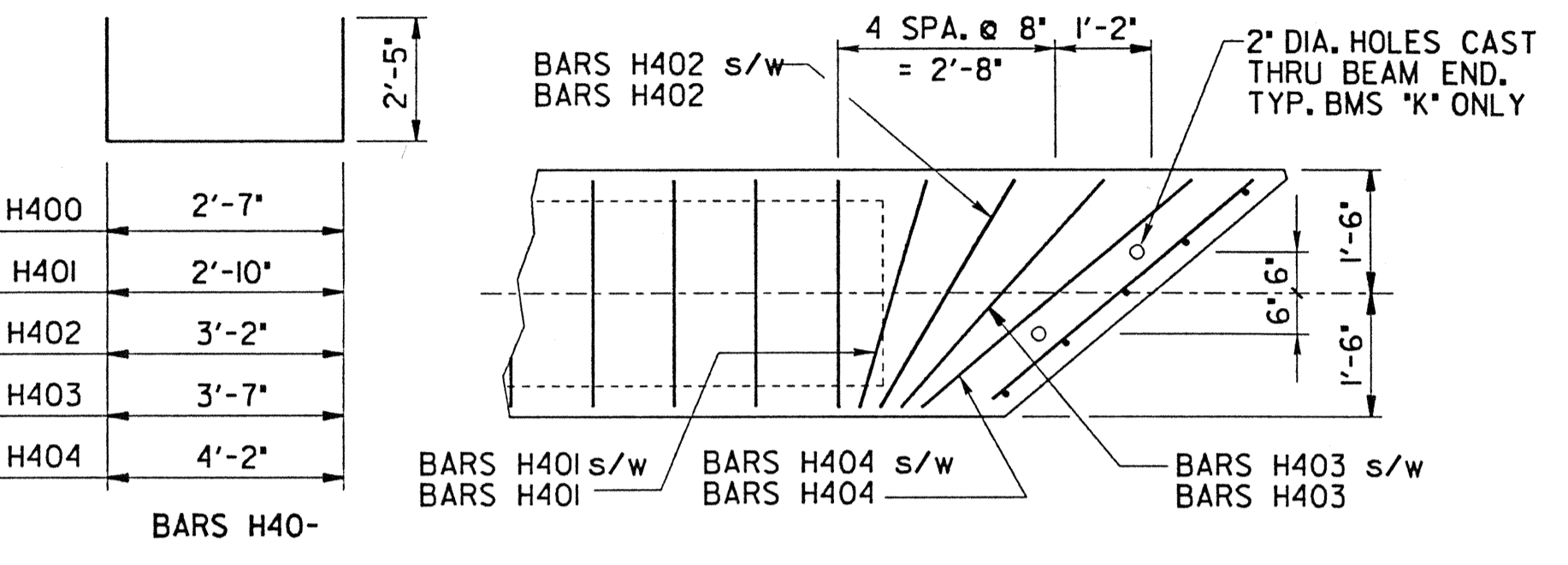
ELASTOMERIC BEARING PAD DETAILS



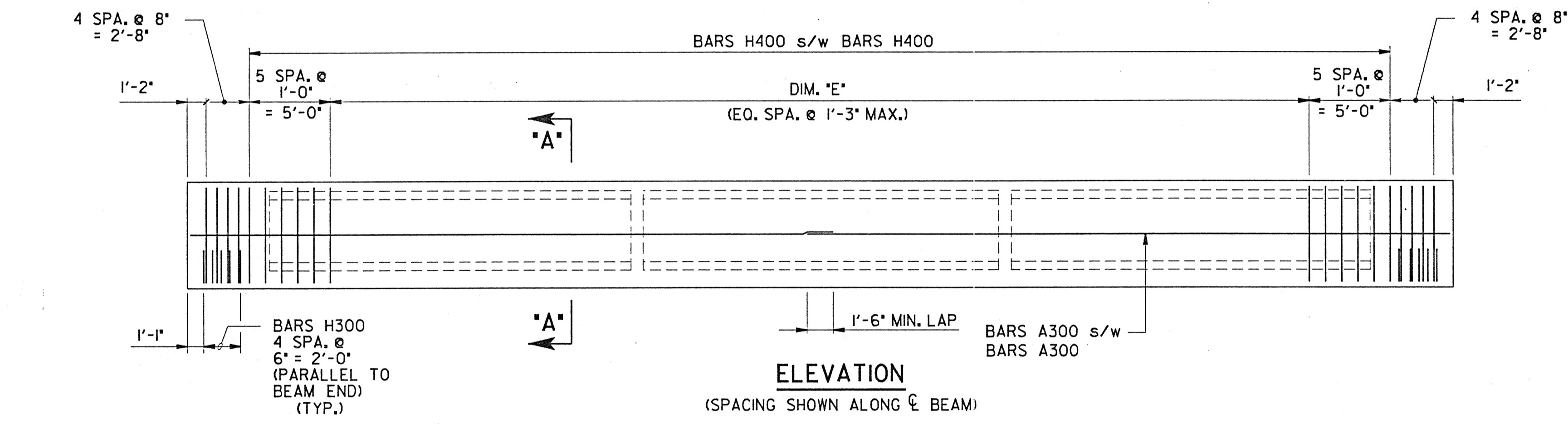
PLAN



BILL OF STEEL (PER BEAM)



PART-PLAN (NARROW END, FLARED END TYP.)



ELEVATION (SPACING SHOWN ALONG CL BEAM)

BAR	SIZE	BM *F*		BM *K* (SPAN NO. 2)		BM *K* (SPAN NO. 3)	
		NO. REQ'D.	LENGTH	NO. REQ'D.	LENGTH	NO. REQ'D.	LENGTH
A300	3	4	34'-1"	4	34'-7"	4	23'-2"
A500	5	8	4'-2"	8	4'-2"	8	4'-1"
A501	5	10	2'-5"	10	2'-5"	10	2'-5"
C500	5	10	35'-5"	10	36'-0"	10	24'-6"
H300	3	10	6'-1"	10	6'-1"	10	6'-1"
H400	4	102	7'-5"	104	7'-5"	66	7'-5"
H401	4	4	7'-8"	4	7'-8"	4	7'-8"
H402	4	4	8'-0"	4	8'-0"	4	8'-0"
H403	4	4	8'-5"	4	8'-5"	4	8'-5"
H404	4	4	9'-0"	4	9'-0"	4	9'-0"

TABLE OF BEAM LENGTHS AND DIMENSIONS

BEAM	SPAN NO.	DIMENSION					SKEW
		A	*B*	*C*	*D*	*E*	
F	2	66'-10 1/2"	19'-7 1/4"	3'-6 1/4"	4'-10 1/2"	49'-2 1/2"	40° 01' 22"
K	2	67'-11 5/8"	19'-11 5/8"	3'-7 1/4"	4'-11 3/8"	50'-3 5/8"	39° 25' 09"
K	3	45'-1"	12'-4 5/8"	3'-4 1/4"	4'-8 3/4"	27'-5"	41° 10' 34"

ESTIMATED QUANTITIES (PER BEAM)

SPAN NO.	BEAM	NO. BEAMS REQ'D.	CLASS *A*	REINFORCING STEEL	PRESTRESSING STRANDS
			C.Y.	LB.	(LOW RELAXATION) LB.
2	*F*	1	13	1098	562
2	*K*	1	13	1114	785
3	*K*	1	9	788	237

NOTE: COST OF ELASTOMERIC PADS AND RUBBER BONDING CEMENT TO BE INCLUDED IN THE COST OF PRESTRESSED BEAM.

NOTES

THE CONCRETE FOR THIS CONSTRUCTION SHALL BE OF SUCH PROPERTIES AS TO ATTAIN A COMPRESSIVE STRENGTH OF NOT LESS THAN 5,400 PSI. AT THE AGE OF 28 DAYS AND STRESS TRANSFER SHALL NOT BE MADE TO THE BRIDGE MEMBER UNTIL THE TEST SPECIMENS INDICATE THAT THE CONCRETE HAS REACHED A COMPRESSIVE STRENGTH OF AT LEAST 4,000 PSI.

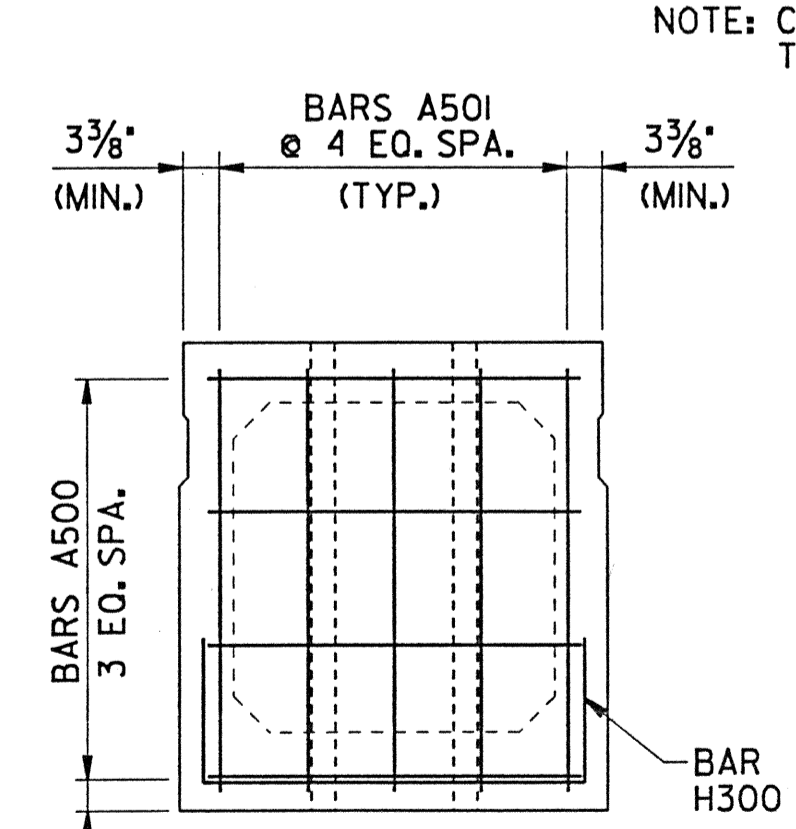
THE CONTRACTOR SHALL FIELD VERIFY SPAN LENGTHS AND ALL BEAM DIMENSIONS SHOWN BEFORE FABRICATING BEAMS.

SEE STD-14-3 FOR BOX BEAM STANDARD DETAILS, NOTES AND REINFORCING.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

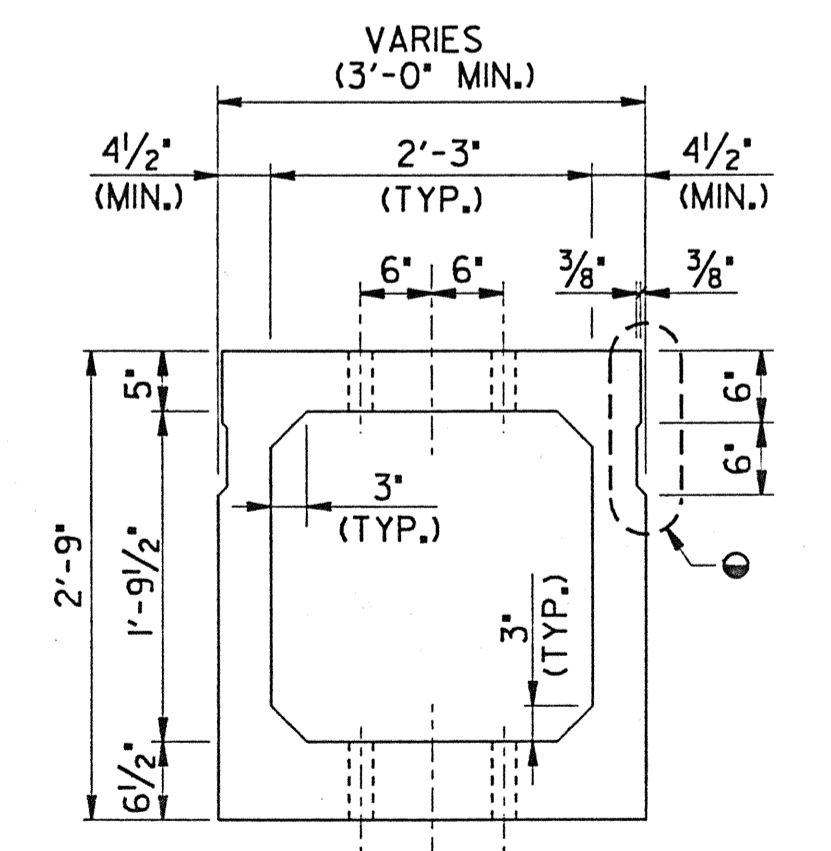
PRESTRESSED BEAM DETAILS
INTERSTATE 75
OVER
INTERSTATE 24
BRIDGE NO. 33-I75-1.41
HAMILTON COUNTY
1996

SECTION *B-B*



PRESTRESSED BEAM DESIGN DATA PER BEAM

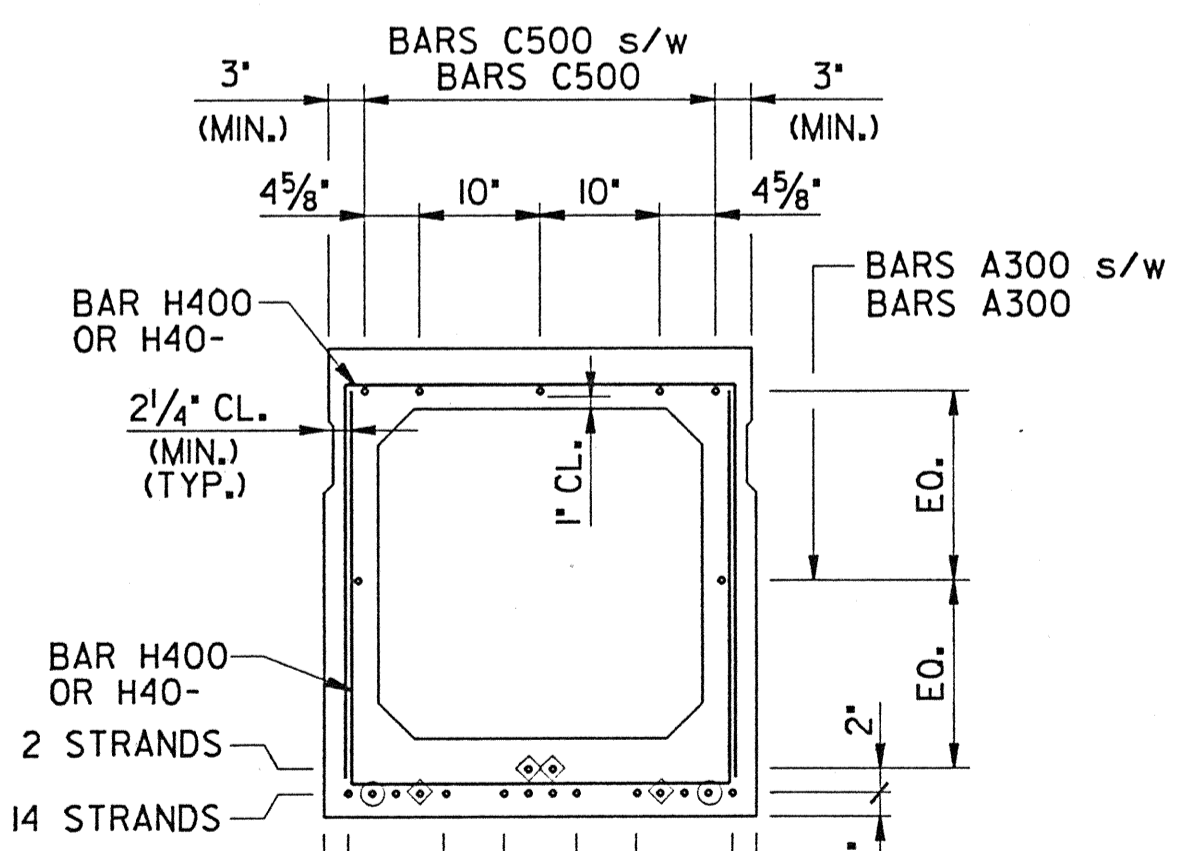
LIVE LOAD DISTRIBUTION FACTOR: 0.55 WHEELS
SUPERIMPOSED DEAD LOAD: 846 LB/FT BMS *K*
SUPERIMPOSED DEAD LOAD: 464 LB/FT BMS *F*



SECTION SHOWING PROPERTIES

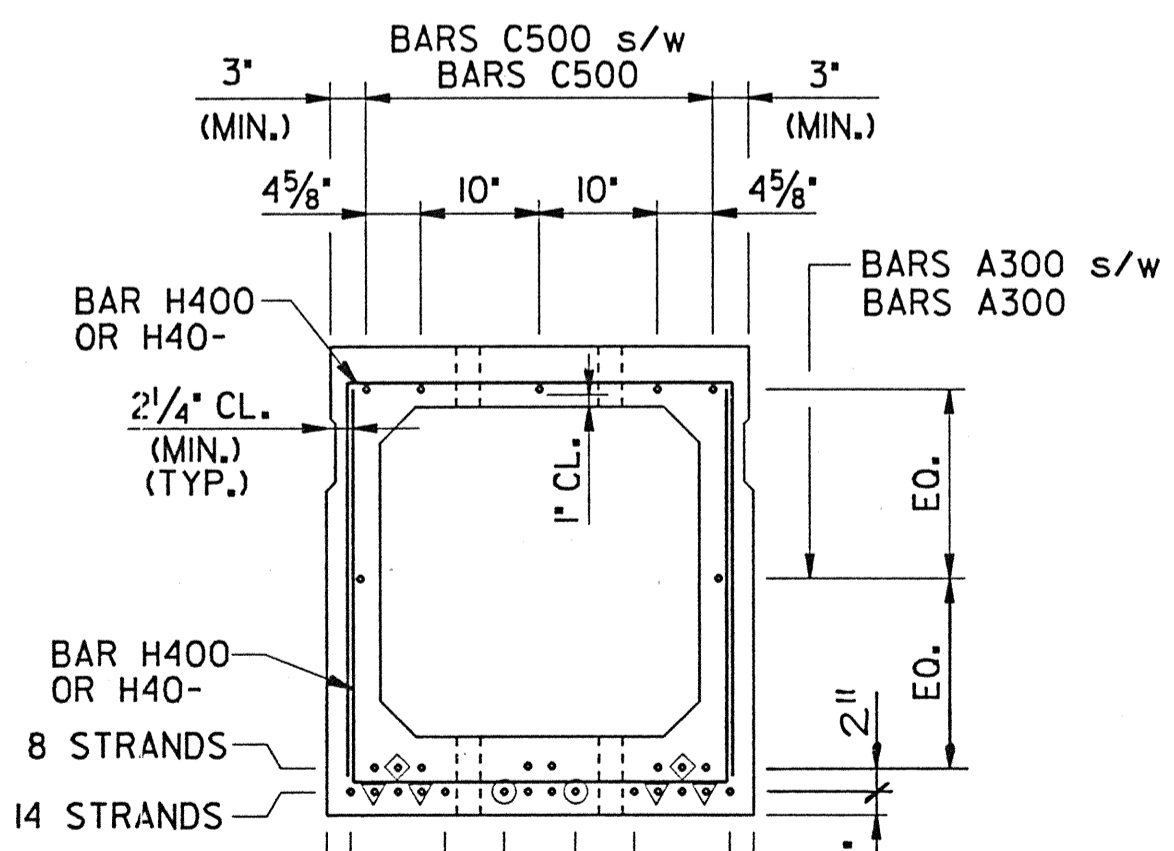
● DENOTES: KEY WAY ON INSIDE FACE ONLY OF BEAMS *K*, (TYP.)

DESIGNED BY: R. LOVETT DATE: 9/96
DRAWN BY: C. GERTH DATE: 9/96
SUPERVISED BY: PETRONE DATE: 9/96
CHECKED BY: WILSON, PETRONE DATE: 9/96



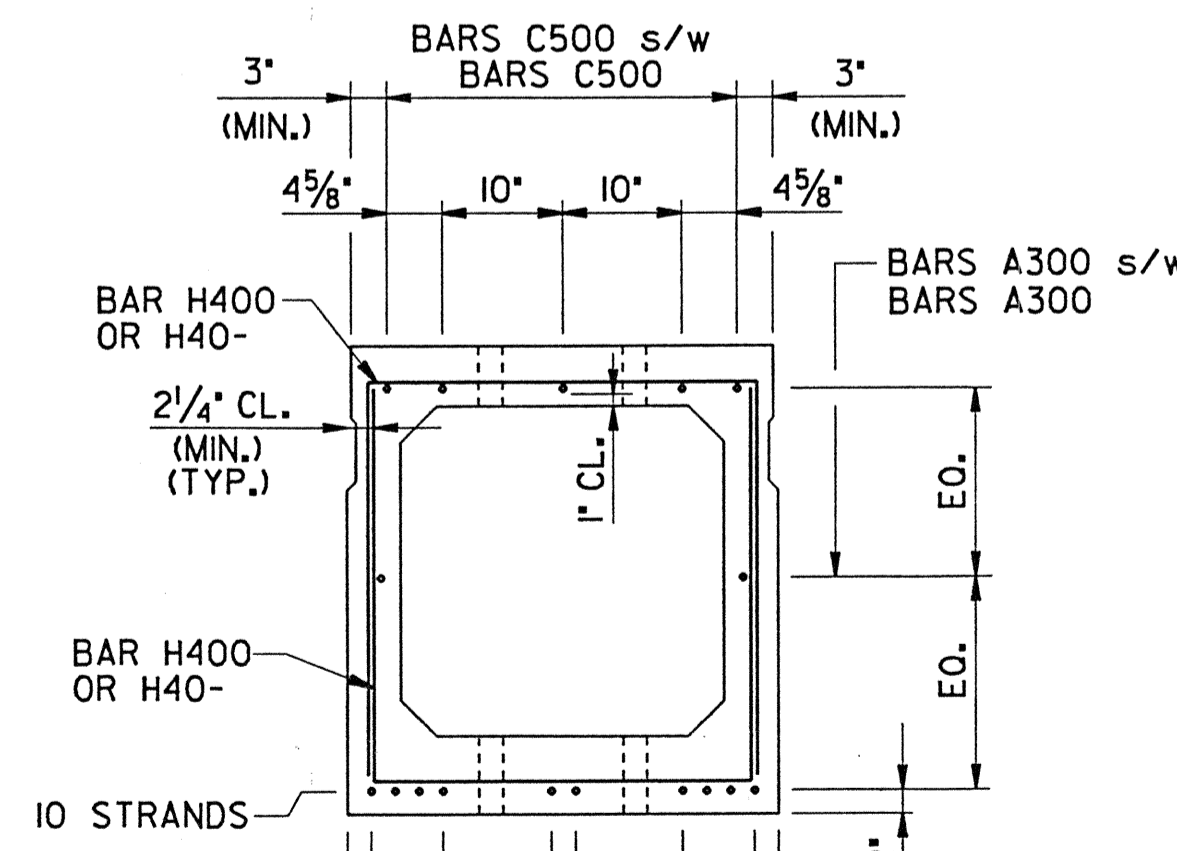
SECTION *A-A* (SHOWING SPAN NO. 2, BM *F* STRAND PATTERN)

▲ DENOTES: 3 SPA. @ 2" = 6"
○ DENOTES: BREAK BOND FOR 9'-0" FROM BEAM END.
◇ DENOTES: BREAK BOND FOR 3'-0" FROM BEAM END.



SECTION *A-A* (SHOWING SPAN NO. 2, BM *K* STRAND PATTERN)

▲ DENOTES: 3 SPA. @ 2" = 6"
▽ DENOTES: BREAK BOND FOR 9'-0" FROM BEAM END.
○ DENOTES: BREAK BOND FOR 6'-0" FROM BEAM END.
◇ DENOTES: BREAK BOND FOR 3'-0" FROM BEAM END.



SECTION *A-A* (SHOWING SPAN NO. 3, BM *K* STRAND PATTERN)

▲ DENOTES: 3 SPA. @ 2" = 6"

05-SEP-1996 2:10:4
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