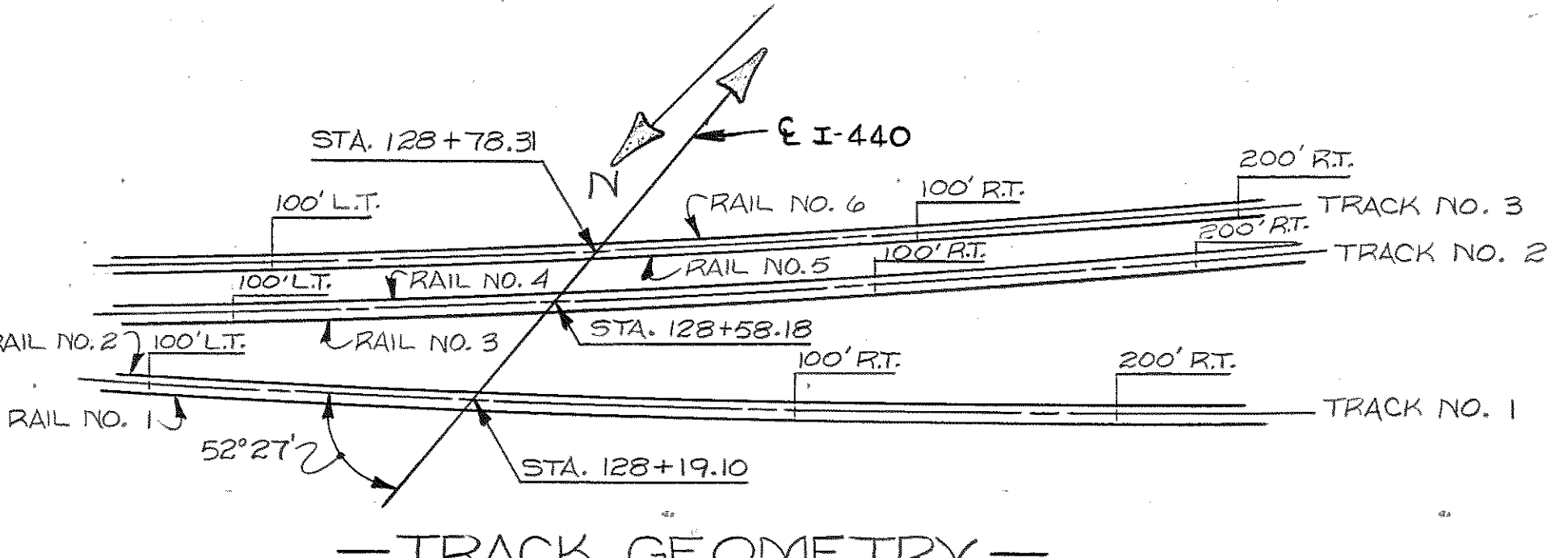
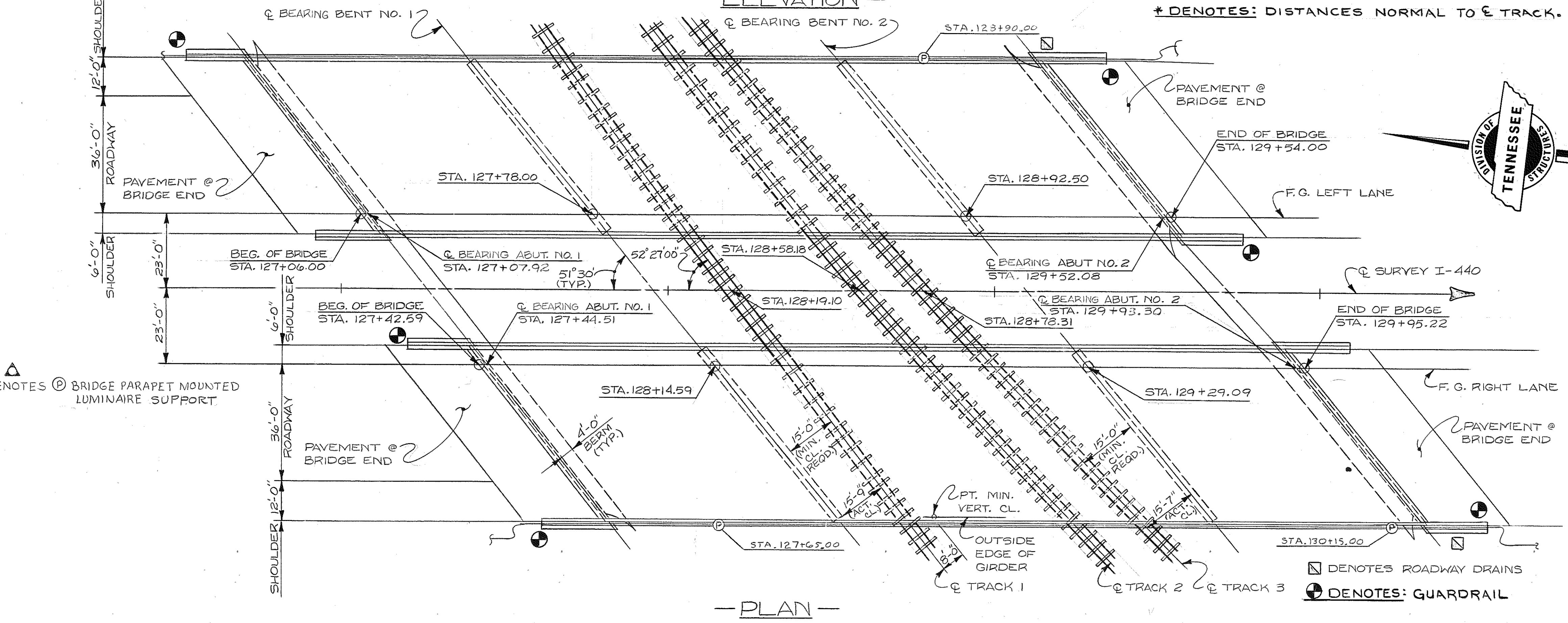
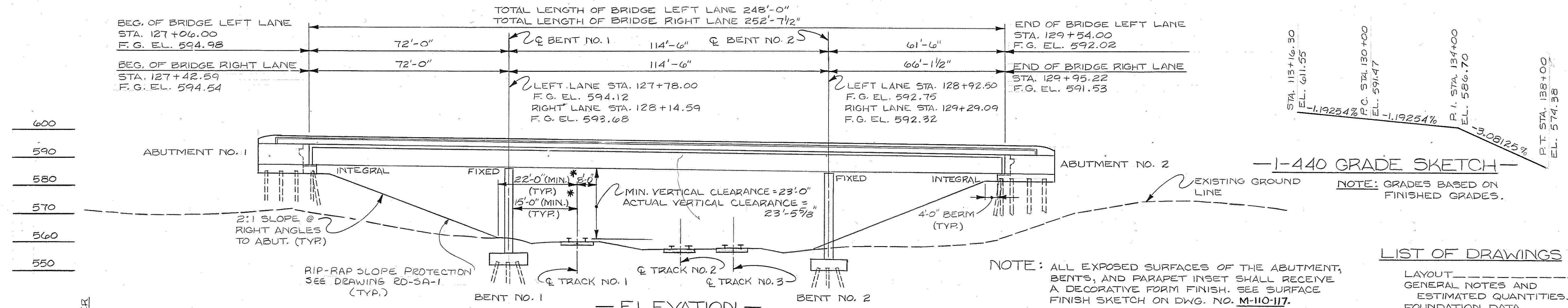


PROJECT NO.	YEAR	SHEET NO.
I-440-4(53)206	1983	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	6-15-83	WMK	General Revisions



TOP OF RAIL PROFILES

STA.	TRACK NO. 1		TRACK NO. 2		TRACK NO. 3	
	RAIL NO. 1	RAIL NO. 2	RAIL NO. 3	RAIL NO. 4	RAIL NO. 5	RAIL NO. 6
50	561.39	561.88	561.49	561.87	558.99	558.78
100	561.27	562.18	561.35	562.16	559.18	558.58
150	561.02	562.37	561.07	562.36	559.26	558.15

TRACK LOCATION DATA
(100' CHORDS) (Q OF TRACKS)

TRACK NO.	Q I-440		LEFT		RIGHT	
	T	B.S. Δ	200'	100'	100'	200'
1	128+19.10	125+05.66	TAN	TAN	232° 15' 20"	231° 34' 20"
2	128+58.10	127+44.74	49° 12' 40"	48° 34' 00"	227° 15' 00"	226° 35' 00"
3	128+78.31	127+44.74	49° 05' 30"	48° 28' 00"	226° 56' 20"	226° 25' 00"

NOTE: ALL ANGLES TURNED TO THE RIGHT.
POINT OF SWITCH: TRACK NO. 1 @ 306.8 LT. ON TANGENT.

LIST OF DRAWINGS

DWG. NO.	LAST REV.	DATE
LAYOUT	M-110-116	
GENERAL NOTES AND ESTIMATED QUANTITIES	M-110-117	
FOUNDATION DATA	M-110-118	
SUPERSTRUCTURE (LEFT LANE)	M-110-119	
SUPERSTRUCTURE (RIGHT LANE)	M-110-120	
SUPERSTRUCTURE DETAILS (LEFT LANE)	M-110-121	
SUPERSTRUCTURE DETAILS (RIGHT LANE)	M-110-122	
PRESTRESSED BOX BEAM (SPANS 1)	M-110-123	
PRESTRESSED BOX BEAM (SPANS 2)	M-110-124	
PRESTRESSED BOX BEAM (SPANS 3)	M-110-125	
ABUTMENT 1 AND 2 (LEFT LANE)	M-110-126	

LIST OF STANDARD DRAWINGS

DWG. NO.	LAST REV.	DATE
STANDARD FILE DETAILS	H-5-111	11-12-82
STANDARD REINFORCING BAR SUPPORT DETAILS FOR CONCRETE SLAB	K-80-14	8-27-76
SLOPE PROTECTION	RD-5A-1	1-11-82
MISCELLANEOUS ABUTMENT AND DRAINAGE DETAILS	K-85-150	1-9-75
STD. DWG. REINFORCED CONCRETE PAVEMENT AT BRIDGE ENDS	K-86-144	7-17-81
BRIDGE RAILING ~ CONCRETE PARAPET	M-28-1	7-17-81
STD. DRAWING LIGHT STANDARD SUPPORT DETAILS	M-8-149	11-20-75
TENNESSEE STD. PRECAST, PRESTRESSED BRIDGE DECK PANELS	M-103-149	4-21-83

LIST OF SPECIAL PROVISIONS

NO.	LAST REV.	DATE
105A REGARDING APPROVAL OF SHOP DRAWINGS		9-8-81
907A REGARDING EPOXY COATED REINF. STEEL		4-16-83
604A REGARDING CLASS 'A' CONCRETE FOR BRIDGE DECKS		12-20-82

2-54'-0" ROADWAYS

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

LAYOUT BRIDGE 3
INTERSTATE 440 OVER
L AND N RAILROAD
STATION 128+78.31
DAVIDSON COUNTY
1983

DESIGNED BY: WM. M. KLAHR DATE: 11-82
DRAWN BY: VICKY FORREST DATE: 11-82
SUPERVISED BY: HMB; R. L. H. DATE: 11-82
CHECKED BY: KLALIA DATE:

CORRECT *Colleen L. Lovell*
ENGINEER OF STRUCTURES
APPROVED *Lewis Evans*
DIRECTOR OF HIGHWAYS

GENERAL NOTES:

SPECIFICATIONS: STANDARD ROAD AND BRIDGE SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION (MARCH 1981 EDITION)

LOADING: HS20-44 WITH ALTERNATE MILITARY.

CONCRETE: TO BE CLASS "A" (CAST-IN-PLACE) $f'_c = 3,000$ PSI. [EXCEPT FOR BRIDGE DECK]

CONCRETE FOR BRIDGE DECK: CLASS "A" CONCRETE FOR BRIDGE DECKS SHALL BE IN ACCORDANCE WITH SECTION 604 OF THE STANDARD SPECIFICATIONS EXCEPT AS FOLLOWS:

MINIMUM 28 DAY COMPRESSIVE STRENGTH: 4,500 PSI.
MAXIMUM WATER/CEMENT: 5.0 GAL./SACK OF CEMENT
AIR CONTENT: $6\% \pm 2\%$

BRIDGE DECK FORMS: BRIDGE DECK FORMS FOR CONCRETE DECKS SHALL BE CONSTRUCTED USING EITHER REMOVABLE FORMS OR PERMANENT FORMS. PERMANENT FORMS MAY BE EITHER REMAIN-IN-PLACE STEEL OR PRECAST, PRESTRESSED CONCRETE PANELS. IN EITHER CASE, FORMS SHALL BE ATTACHED BY MEANS OTHER THAN WELDING TO SUPPORT MEMBERS. THE CONTRACTOR SHALL TAKE STEPS TO ASSURE THE STABILITY OF THE EXTERIOR GIRDER AGAINST TWISTING OR OVERTURNING DURING SLAB POURING OPERATIONS.

REINFORCING STEEL: TO BE ASTM A615 GRADE 60. STANDARD CRSI HOOK DETAILS APPLY UNLESS OTHERWISE NOTED ON BILL OF STEEL. BENDING DIMENSIONS SHOWN ARE BASED ON GRADE 60. SPACING DIMENSIONS ARE CENTER TO CENTER UNLESS OTHERWISE NOTED ON DETAIL DRAWINGS. THE SUFFIX "E" FOR BARS SO MARKED, DENOTES EPOXY COATED REINFORCEMENT. SEE SPECIAL PROVISION 907A.

SPECIAL NOTE FOR RAILROAD CROSSING: THE CONTRACTOR SHALL CONDUCT HIS WORK SO AS TO PROTECT THE RAILROAD TRACKS AND PROPERTIES FROM ANY DAMAGE. THE WORK SHALL BE DONE IN ACCORDANCE WITH REGULATIONS STIPULATED BY THE L&N RAILROAD SO AS TO MAINTAIN CLEARANCE AND NOT INTERRUPT TRAFFIC.

GENERAL NOTES (CONTINUED):

SPECIAL NOTE: FOUNDATIONS FOR BENTS SHALL EXCAVATED TO THE BOTTOM OF FOOTING ELEVATIONS SHOWN; ROD SOUNDINGS SHALL THEN BE MADE AS DIRECTED BY THE ENGINEER. FROM THE RESULTS OBTAINED THE ENGINEER WILL DECIDE IF PILES WILL BE USED OR THE FOOTINGS CARRIED TO ROCK. COST OF THE ROD SOUNDINGS WILL BE INCLUDED IN ITEMS BID ON. NO REINFORCING STEEL FOR BENT COLUMNS SHALL BE ORDERED UNTIL FINAL FOOTING ELEVATIONS HAVE BEEN DETERMINED.

PILES: TO BE HPI0X42 DRIVEN TO REFUSAL ON ROCK OR A MINIMUM BEARING OF 51 TONS FOR THE ABUTMENTS AND 54 TONS AT THE BENTS.

NOTE: ALL FILL SHALL BE IN PLACE PRIOR TO EXCAVATING FOR BENT FOOTINGS. AFTER CONSTRUCTING THE BENT, EXTREME CARE SHALL BE TAKEN WHEN BACKFILLING SO AS NOT TO DAMAGE OR MISALIGN THE BENT.

BRIDGE RAIL SYSTEM: BUILD PARAPETS ACCORDING TO STD. DWS. M-28-1.

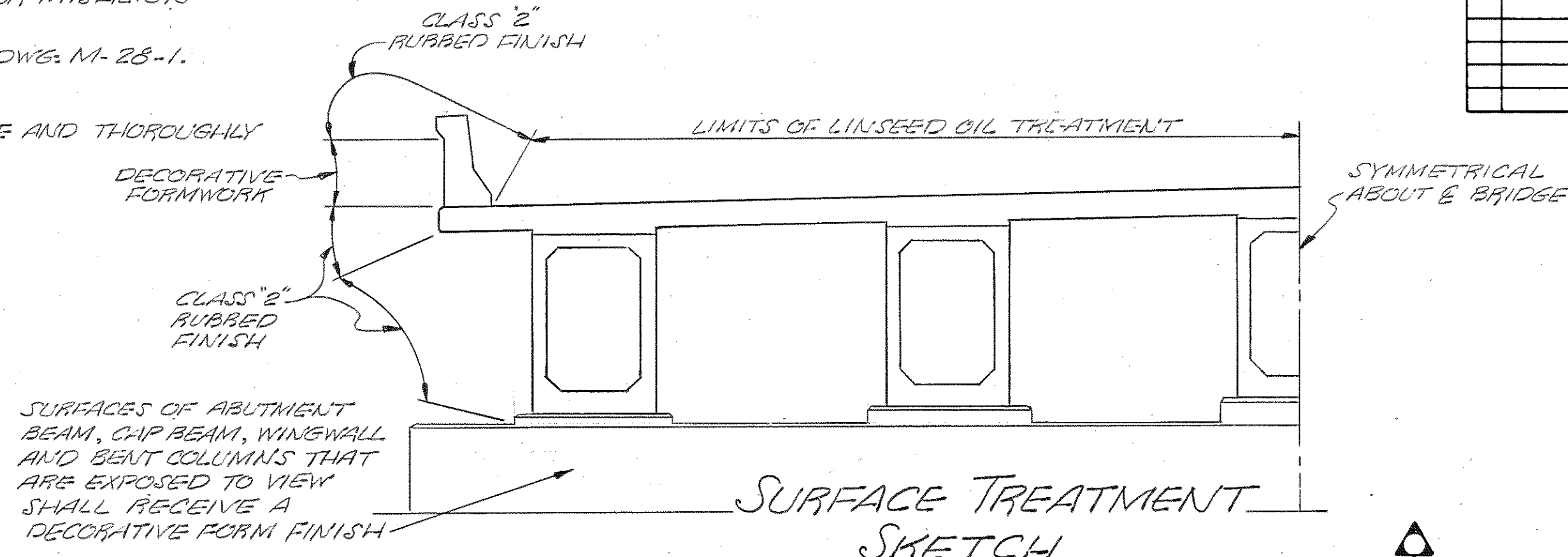
SHOP DRAWINGS: SEE SPECIAL PROVISION NO. 105A.

NOTE: THE PILLS AT THE ENDS OF THE BRIDGE SHALL BE IN PLACE AND THOROUGHLY COMPACTED BEFORE ANY ABUTMENT PILES ARE DRIVEN.

DESIGN SPECIFICATIONS: AASHTO 1977. EDITION WITH ADDENDA.

NOTE: MACHINED RIP-RAP FOR SLOPE PROTECTION SHALL BE 3" TO 6" IN SIZE AND MEET THE QUALITY REQUIREMENTS OF SUB-SECTION 918-10 AND BE PAID FOR UNDER ITEM NO. 709-05.04.

SEE STD. DWS. NO. RD-SA-1.



ESTIMATED QUANTITIES*

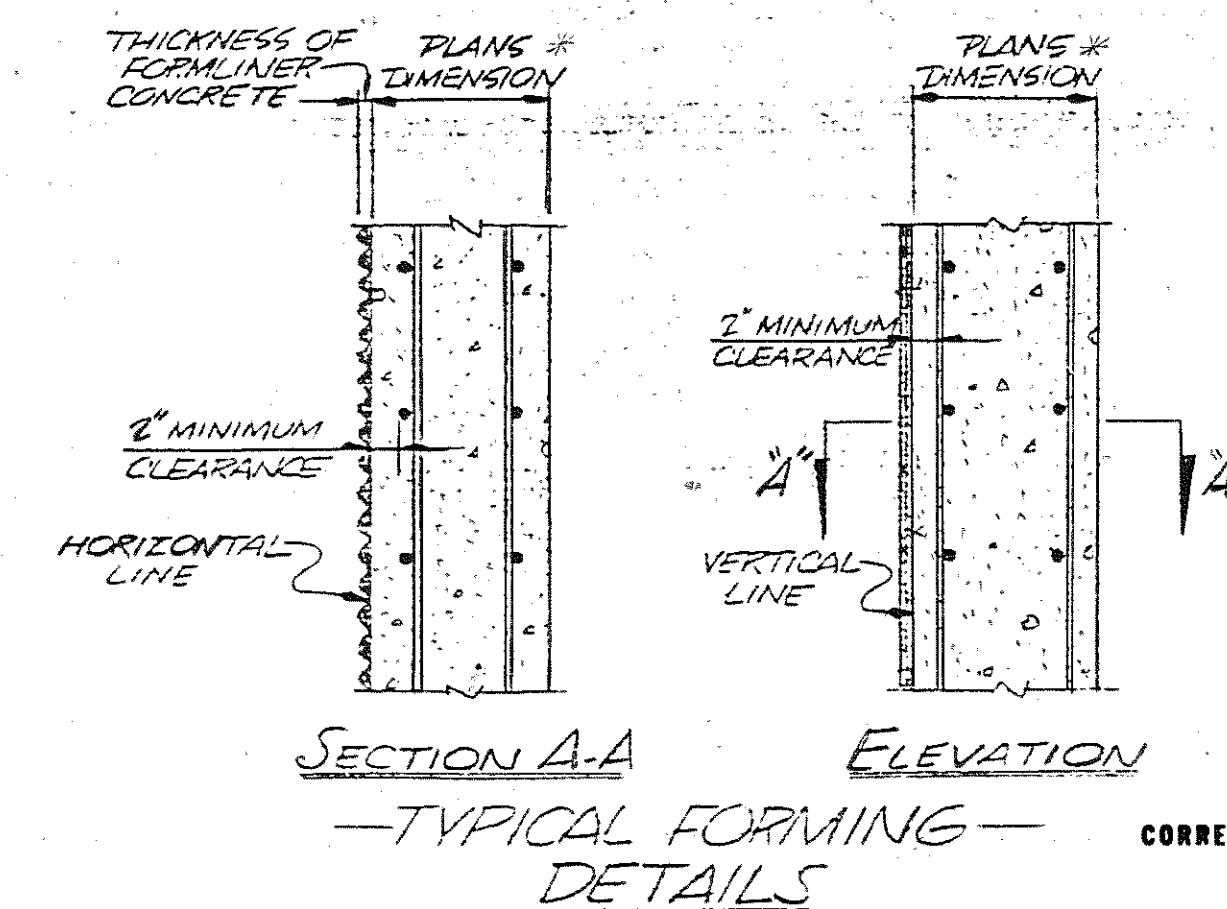
ITEM NO.	204-02.01	204-04.01	204-05	604-02.03	604-03.01	604-03.02	606-22.03	606-32.03	606-42.03	615-02.12	620-03	709-05.04	710-10	710-11	604-03.03	604-01.12	714-01.03
ITEM	DRY EXCAVATION (BRIDGES)	ROCK EXCAVATION (BRIDGES)	ROCK DRILLING (BRIDGES)	EPOXY-COATED REINFORCING STEEL	CLASS "A" CONCRETE (BRIDGES)	STEEL BAR REINFORCEMENT (BRIDGES)	STEEL PILES (10-INCH) (DRIVING)	STEEL PILES (10-INCH) (FURNISH DOMESTIC)	STEEL PILES (10-INCH) (FURNISH FOREIGN)	PRESTRESSED CONCRETE BOX-BEAM (69" X 48")	CONCRETE PARAPET	MACHINED RIP-RAP (3 IN. TO 6 IN.)	6" PERFORATED C.M. PIPE (18 GA.) WITH POROUS BACKFILL	6" C.M. PIPE UNDERDRAINS (18 GA.)	LINSEED OIL TREATMENT	CLASS "A" CONCRETE (BRIDGE DECK) C.Y.	STRUCTURE LIGHTING (BRIDGE NO. 3)
UNIT	C.Y. (1)	C.Y. (1)	L.F. (1)	LBS. (2)	C.Y. (1)	LBS. (1)	L.F.	L.F.	L.F.	L.F. (3)	L.F.	C.Y.	L.F. (4)	L.F.	S.Y.	C.Y. (1)	L.S. (7)
SUPERSTRUCTURE				109,085	79.9	6,291										358.2	
ABUTMENT NO. 1	86				23.6	5,266	287	287	287				91	11			
BENT NO. 1	194	9	18		165.2	37,923											
BENT NO. 2	393	9	18		156.8	38,072											
ABUTMENT NO. 2	86				23.6	5,266	391	391	391				91	11			
PAVEMENT @ BRIDGE ENDS				6,097	60.0	27,684											
TOTALS	759	18	36	115,182	509.1	120,502	678	678	678	1218	558		182	22	1733	358.2	
SUPERSTRUCTURE				111,903	79.9	6,167										364.9	
ABUTMENT NO. 1	86				23.6	5,189	260	260	260				91	11			
BENT NO. 1	133	9	18		164.1	34,830											
BENT NO. 2	85				128.4	32,584	149	149	149								
ABUTMENT NO. 2	86				23.6	5,189	346	346	346				91	11			
PAVEMENT @ BRIDGE ENDS				6,097	60.0	27,684											
TOTALS	390	9	18	118,000	479.6	111,643	755	755	755	1,241	567		182	22	1,760	364.9	
GRAND TOTALS	1149	27	54	233,182	988.7	232,145	1433	1433	1433	2,459	1,125	722	364	44	3,493	723.1	1

- ① EXCAVATION BASED ON EXISTING GROUND.
- ② COST OF BITUMINOUS-FIBERBOARD AND ALL MISCELLANEOUS JOINT MATERIAL TO BE INCLUDED IN BRIDGE ITEMS BID ON.
- ③ COST OF ELASTOMERIC PADS, RUBBER BONDING CEMENT AND DOWEL BARS TO BE INCLUDED IN COST OF PRESTRESSED BEAM.
- ④ COST OF POLYETHYLENE SHEETING AND ALL MISCELLANEOUS ITEMS NECESSARY FOR INSTALLATION TO BE INCLUDED IN COST OF PERFORATED C.M. PIPE.
- ⑤ THE COST OF THE 24 THREADED STEEL INSERTS AND 24 7/8" X 4" HEX HEAD BOLTS, (A307), TO BE INCLUDED IN BRIDGE ITEMS BID ON.
- ⑥ ALL REINFORCING STEEL IN THE TRAFFIC FACE OF PARAPETS SHALL BE EPOXY-COATED. COST TO BE INCLUDED IN THE PRICE BID FOR ITEM NO. 620-03.
- ⑦ NOTE: LUMP SUM FOR STRUCTURE LIGHTING TO INCLUDE THE INSTALLATION OF 609 LF OF 2" PVC CONDUIT, 3 LIGHT SUPPORTS WITH 12 ANCHOR BOLTS AND ALL MISCELLANEOUS HARDWARE NECESSARY FOR INSTALLATION.

CONCRETE FINISHES:

PORTIONS OF THE BRIDGE SURFACE DESIGNATED TO RECEIVE A CLASS 2 "RUBBED FINISH" SHALL BE FINISHED ACCORDING TO SUB-SECTION 604-22 OF THE STANDARD SPECIFICATIONS. PORTIONS OF THE BRIDGE SURFACE DESIGNATED TO RECEIVE A DECORATIVE FORM FINISH SHALL BE FORMED USING A FORMLINER SIMILAR TO BURKE FORMLINER B2308 CONCRETE HAIR LITHOTEX FORMLINER FRACTURED FINISH GROOVED T-150, SYMONS 3/4" NARROW FRACTURED FINISH P/C 30909-9 OR EQUAL. AFTER STRIPPING FORMLINERS THE DECORATIVE FORM FINISHED AREAS SHALL RECEIVE A CLASS 1, ORDINARY FINISH IN ACCORDANCE WITH SUBSECTION 604-23 OF THE STANDARD SPECIFICATIONS. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR APPROVAL A SAMPLE CASTING USING THE FORMLINER TO BE FURNISHED. THE COST OF ALL CONCRETE FINISHES SHALL BE INCLUDED IN THE UNIT PRICE OF ITEMS BID ON. SURFACES RECEIVING A DECORATIVE OR CLASS 2 FINISH SHALL NOT RECEIVE A LINSEED OIL TREATMENT. SEE SURFACE FINISH SKETCH THIS SHEET. UNDER NO CIRCUMSTANCES WILL MECHANICALLY FRACTURED SURFACES BE ALLOWED.

* NOTE: ALL ESTIMATED QUANTITIES BASED ON PLANS DIMENSIONS.



CONST. NO. 19014-3111-49

PROJECT NO.	YEAR	SHEET NO.
I 440-4(53)206	1983	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	2/27/83	WMK	ADDED QUANT.
2	2-24-83	HMB	RIP-RAP QUANTITIES.
3	6-15-83	WMK	GENERAL
4	6-24-83	WMK	QUANTITY (604-03.02)
5	1-3-84	WMK	QUANTITY (604-02.03)

DESIGNED BY MIKE KLAHR DATE _____
DRAWN BY CHLOE/ESS DATE _____
SUPERVISED BY D. HARRISON/H. BROOKS DATE _____
CHECKED BY KLAHR DATE _____

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS
GENERAL NOTES AND
ESTIMATED QUANTITIES
INTERSTATE 440 OVER
L.&N. RAILROAD
STATION 128+78.31
DAVIDSON COUNTY
CORRECT *Chloe L. Essell* 1983
APPROVED *J. Lewis Evans*
ENGINEER OF STRUCTURES
DIRECTOR OF HIGHWAYS

M-110-117

END OF BRIDGE LEFT - END OF BRIDGE RIGHT
 STA. 127+00 - STA. 127+42.50
 F.C.E. 594.85 - F.G. E. 594.54

TOTAL LENGTH OF BRIDGE RIGHT - 248'-0"
 72'-0" C. BRG. NO. 1
 176'-0" C. BRG. NO. 2

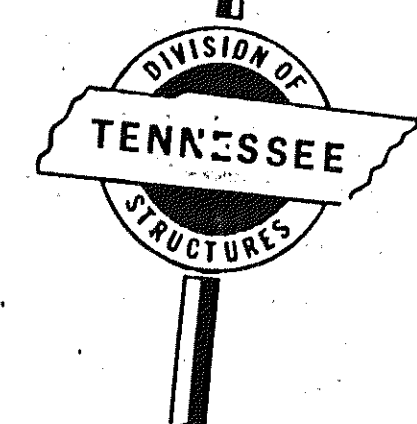
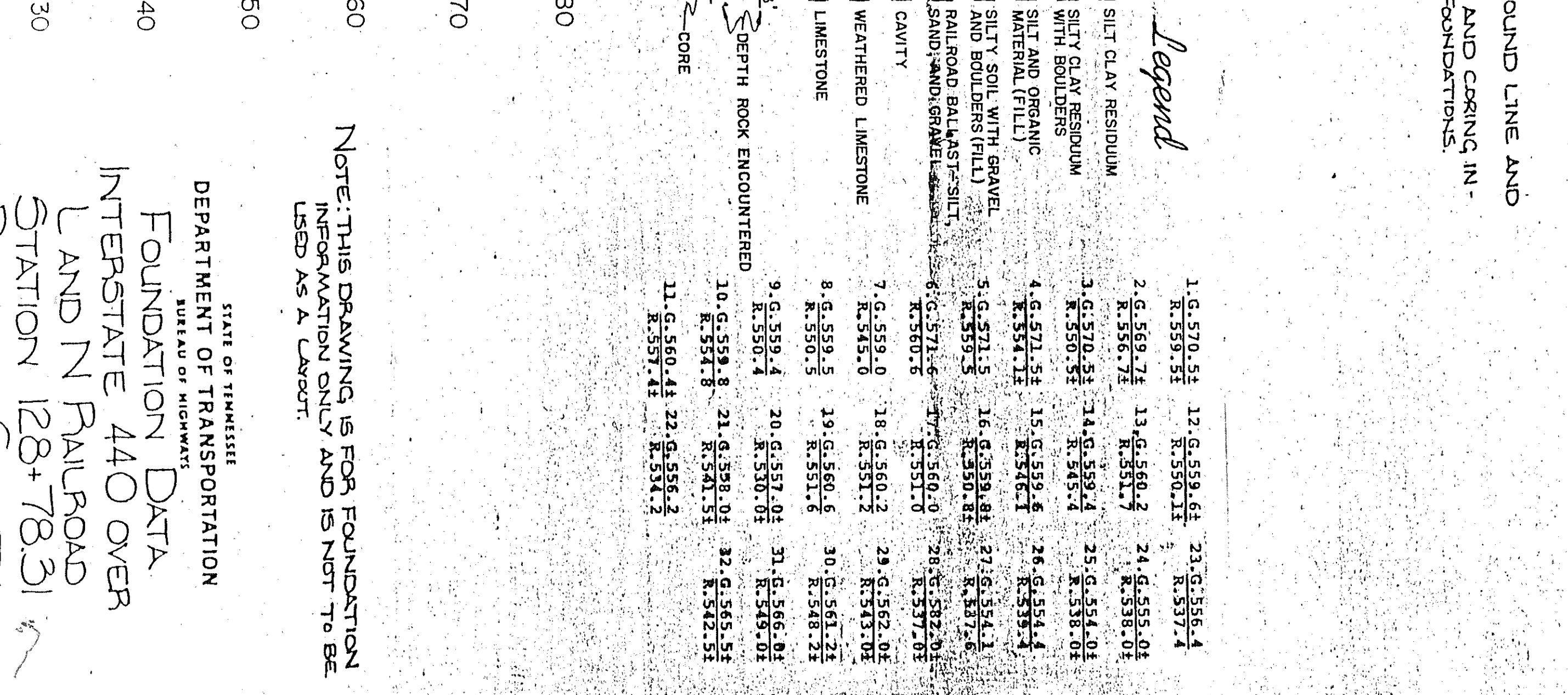
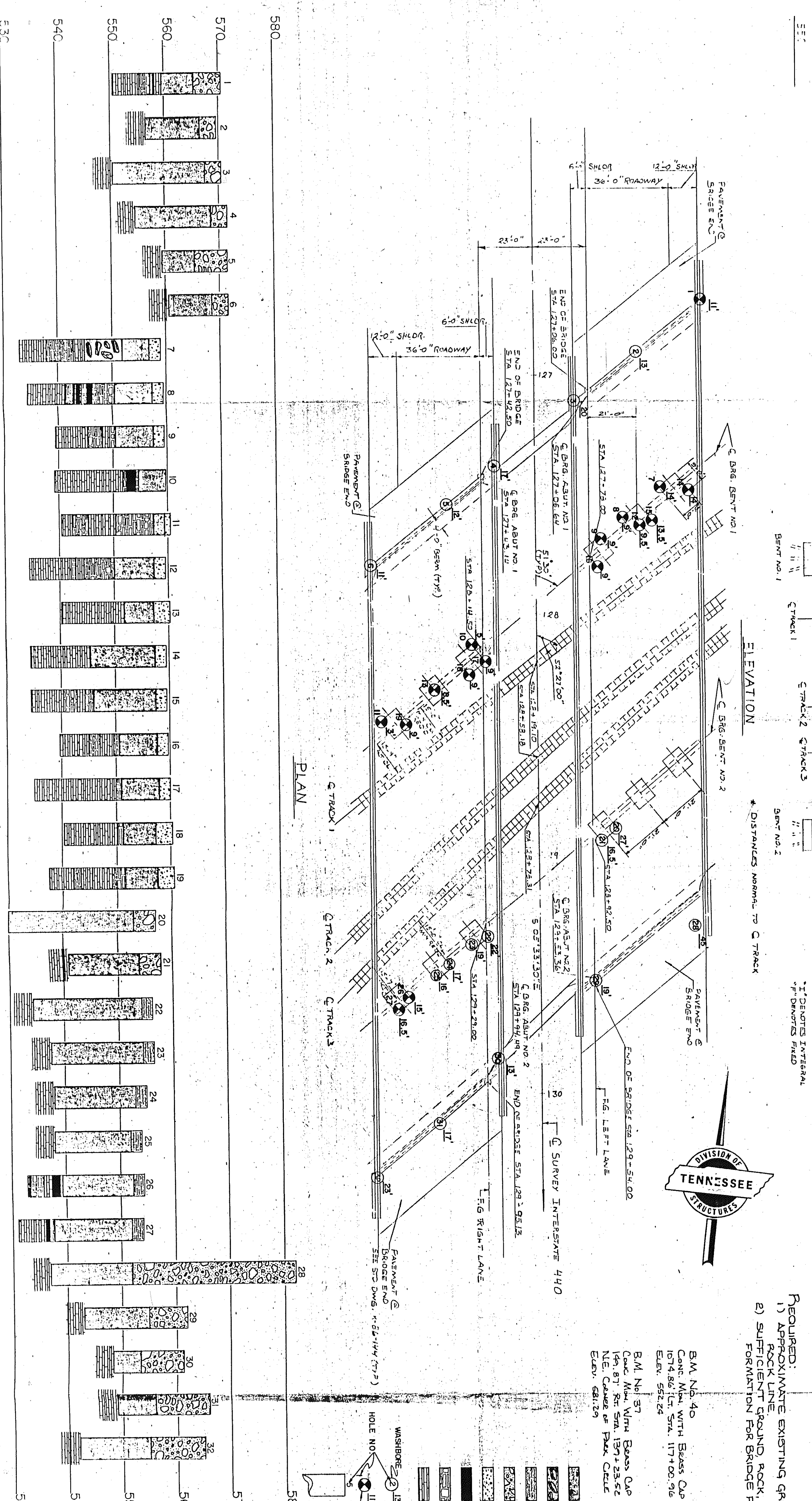
END OF BRIDGE LEFT - END OF BRIDGE RIGHT
 STA. 129+51.00 - STA. 129+95.13
 F.C.E. 592.02 - F.G. E. 591.53

PROJECT NO. 19014-3111-44
 YEAR 1982
 SHEET NO. 140-4(53)206

REVISIONS

NO.	DATE	BY	DESCRIPTION
1			
2			

530
540
550
560
570
580



REQUIRED:
 1) APPROXIMATE EXISTING GROUND LINE AND
 ROCK LINE
 2) SUFFICIENT GROUND ROCK AND CORING IN-
 FORMATION FOR BRIDGE FOUNDATIONS.

Legend

- SILT CLAY RESIDUUM
- SILT CLAY RESIDUUM WITH BOULDERS
- SILT AND ORGANIC MATERIAL (FILL)
- SILT SOIL WITH GRAVEL AND BOULDERS (FILL)
- RAIL ROAD BALLAST-SILT SAND-SAND/GRAMEL
- CAVITY
- WEATHERED LIMESTONE
- LIMESTONE
- WASHBORE
- DEPTH ROCK ENCOUNTERED
- HOLE NO.
- CORE

1. G. 570.54 R. 559.51	12. G. 559.64 R. 550.11	23. G. 556.4 R. 537.4
2. G. 566.74 R. 551.7	13. G. 560.2 R. 538.04	24. G. 555.04 R. 535.4
3. G. 570.54 R. 550.8	14. G. 562.4 R. 538.04	25. G. 554.04 R. 538.04
4. G. 571.54 R. 551.1	15. G. 559.6 R. 535.4	26. G. 554.4 R. 535.4
5. G. 571.54 R. 550.84	16. G. 559.84 R. 534.4	27. G. 554.4 R. 534.4
6. G. 571.6 R. 550.0	17. G. 560.0 R. 537.04	28. G. 552.04 R. 537.04
7. G. 559.0 R. 545.0	18. G. 560.2 R. 543.04	29. G. 562.04 R. 543.04
8. G. 559.0 R. 550.6	19. G. 560.6 R. 548.24	30. G. 561.24 R. 548.24
9. G. 559.4 R. 550.04	20. G. 557.04 R. 530.04	31. G. 566.04 R. 549.04
10. G. 559.8 R. 551.8	21. G. 558.04 R. 541.51	32. G. 565.54 R. 542.51
11. G. 560.44 R. 557.44	22. G. 556.2 R. 534.2	

NOTE: THIS DRAWING IS FOR FOUNDATION INFORMATION ONLY AND IS NOT TO BE USED AS A LAYOUT.

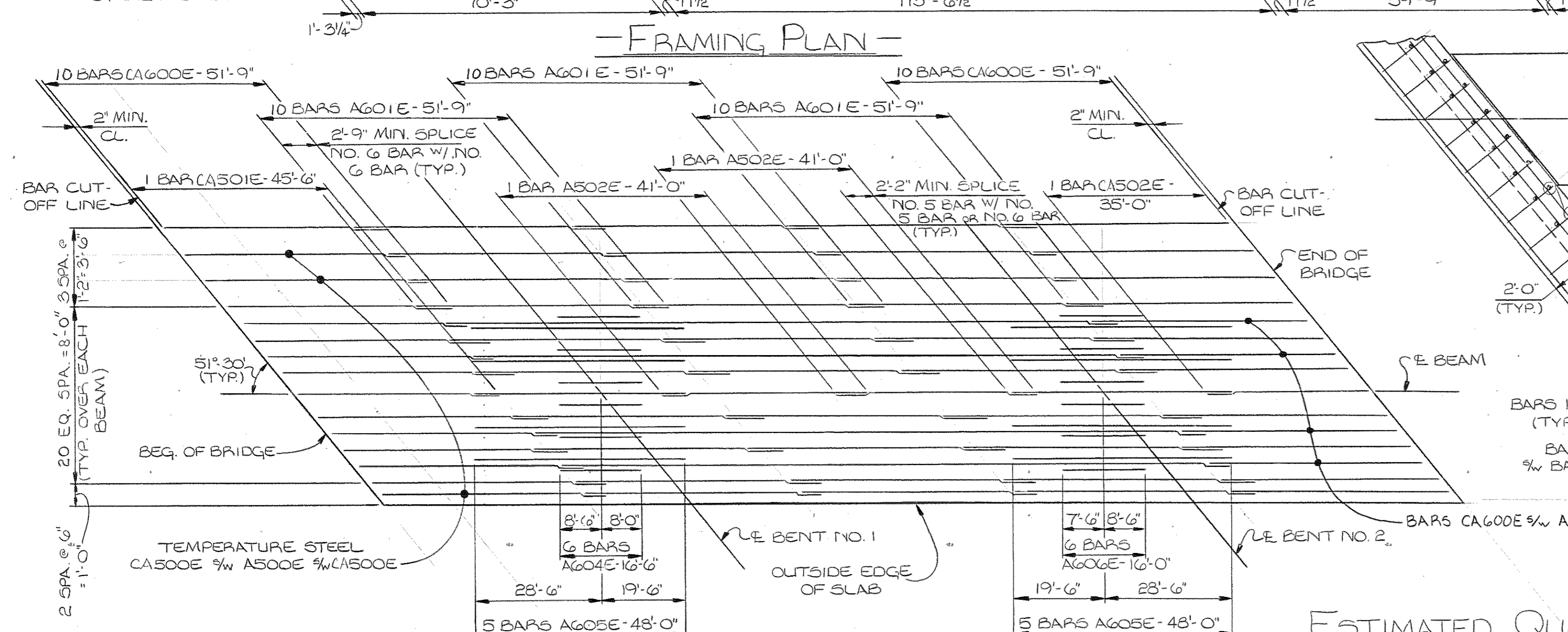
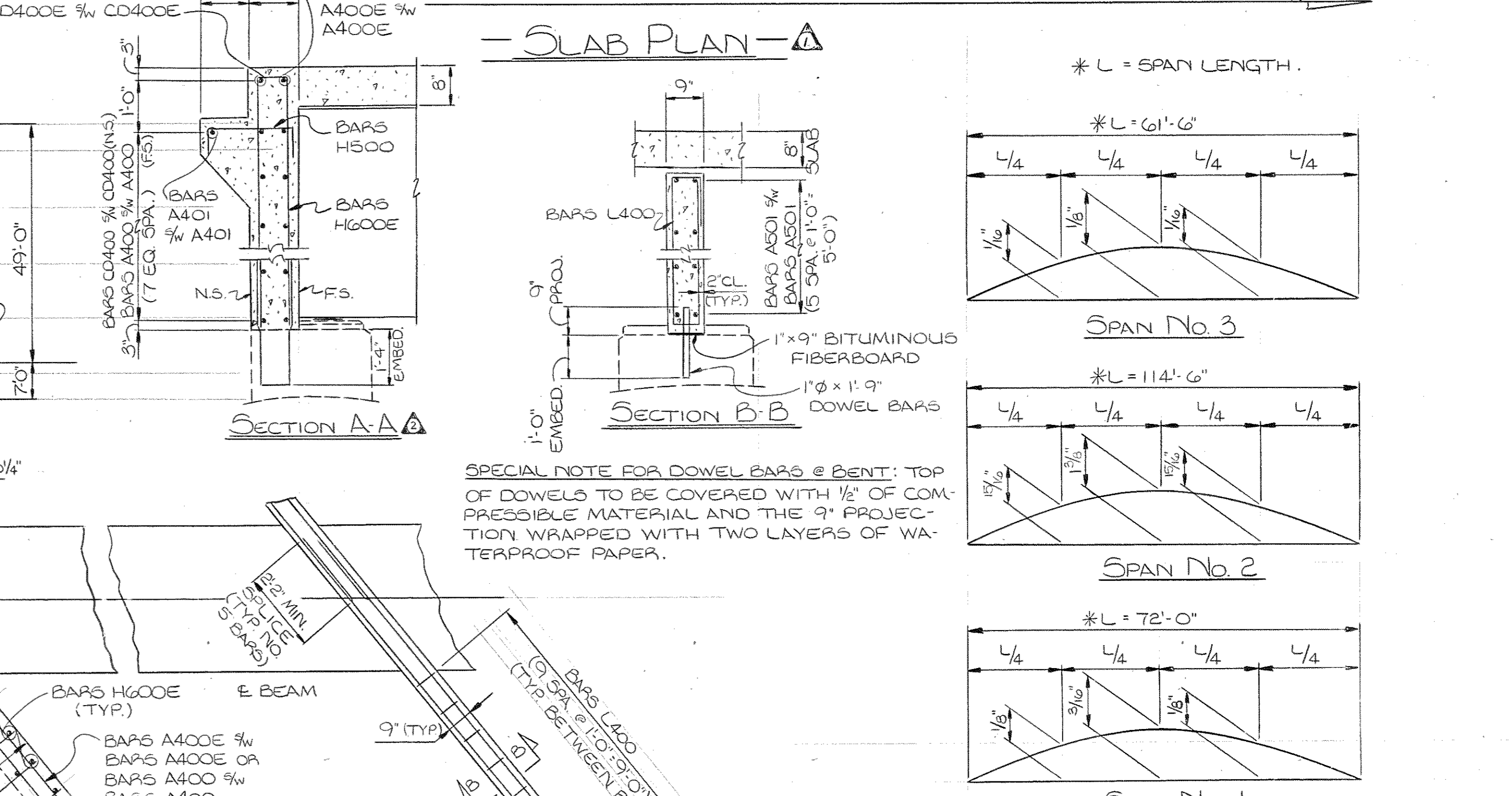
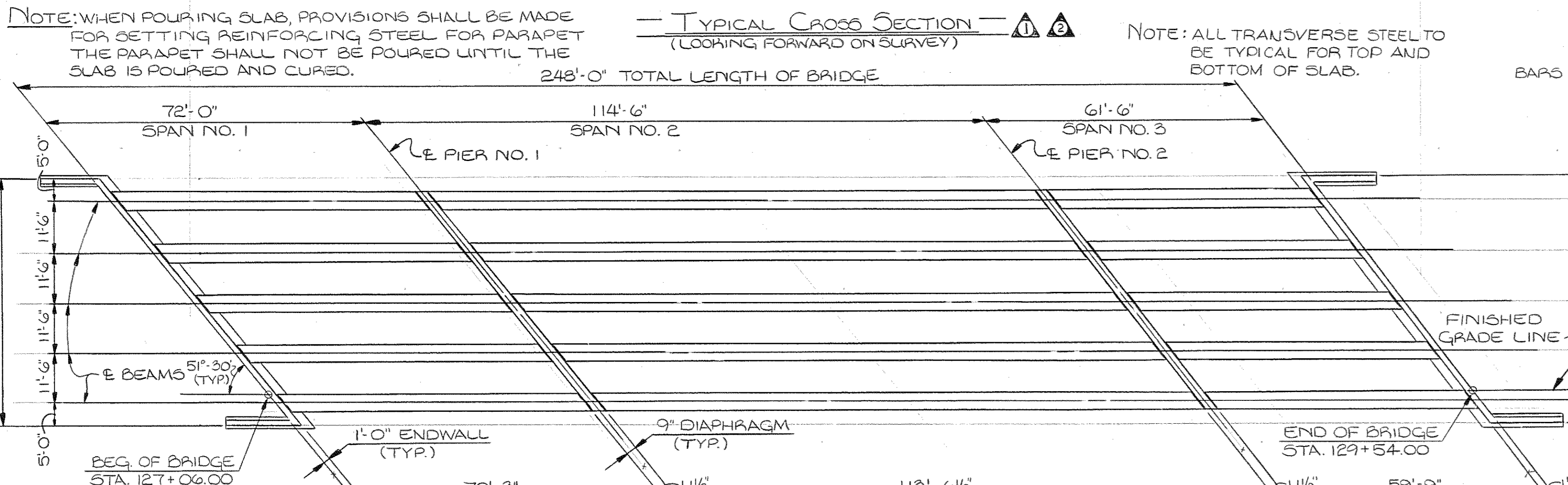
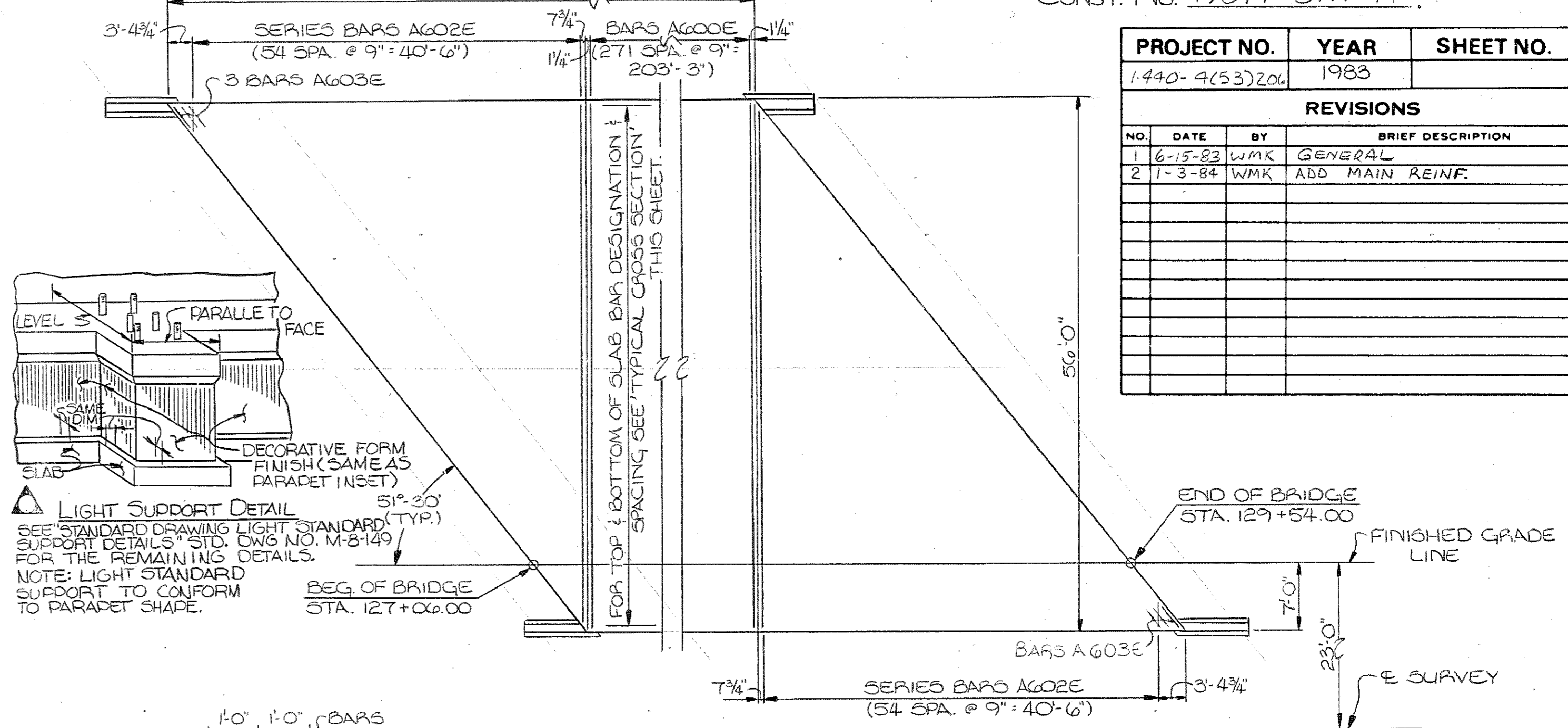
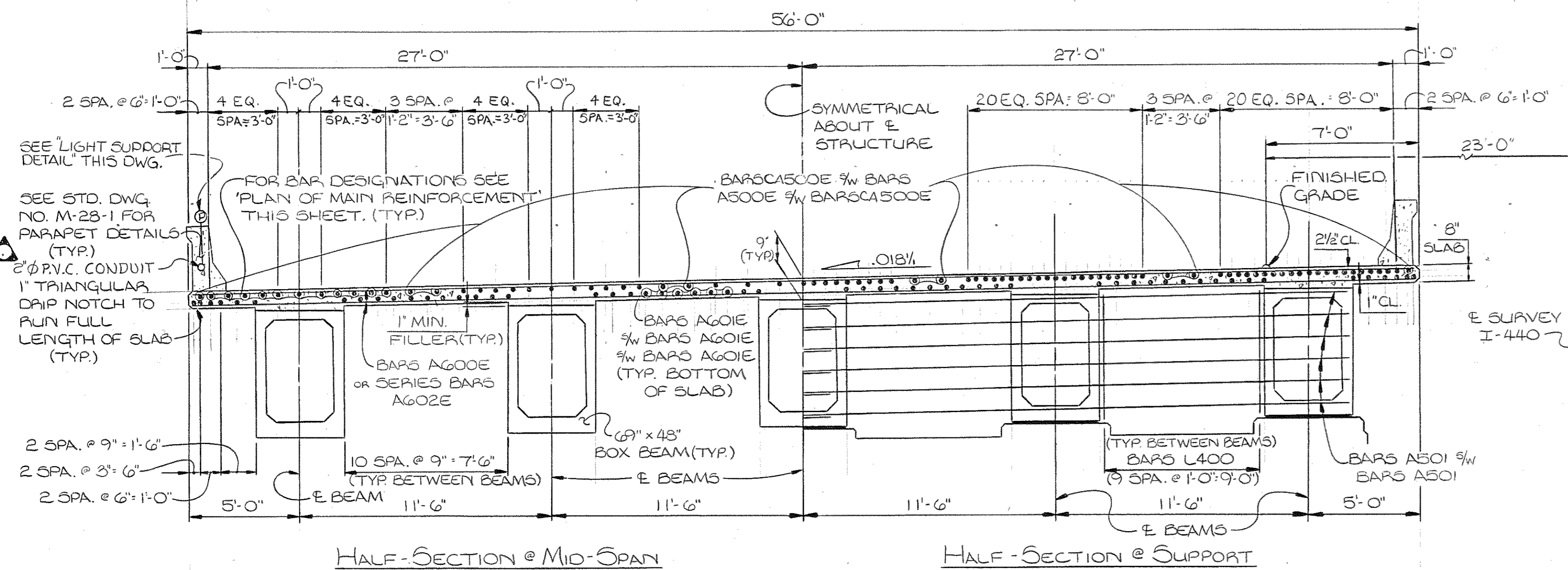
STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 FOUNDATION DATA
 INTERSTATE 440 OVER
 LAND N RAILROAD
 STATION 128+78.31
 DAVIDSON COUNTY
 1982

DESIGNED BY: [Name]
 DRAWN BY: [Name]
 CHECKED BY: [Name]
 DATE: 4-82

CORRECTED BY: [Name]
 APPROVED BY: [Name]
 DIVISION OF STRUCTURES

M-110-118

PROJECT NO.		YEAR		SHEET NO.	
1440-4(53)204		1983			
REVISIONS					
NO.	DATE	BY	GENERAL	BRIEF DESCRIPTION	
1	6-15-83	WMK	GENERAL		
2	1-3-84	WMK	ADD MAIN REINF.		



ESTIMATED QUANTITIES

ITEM	EPOXY COATED REINFORCING STEEL LBS.	CLASS 'A' CONCRETE C.Y.	STEEL BAR REINFORCEMENT LBS.	CLASS 'A' CONCRETE (BRIDGE DECK) C.Y.
SUPERSTRUCTURE	109,085	79.9	6,291	358.2

DESIGNED BY W.M. KLAHR DATE
DRAWN BY M. DYE DATE 11-82
SUPERVISED BY B.C.H. & H.M.B. DATE 11-82
CHECKED BY KLAHR DATE

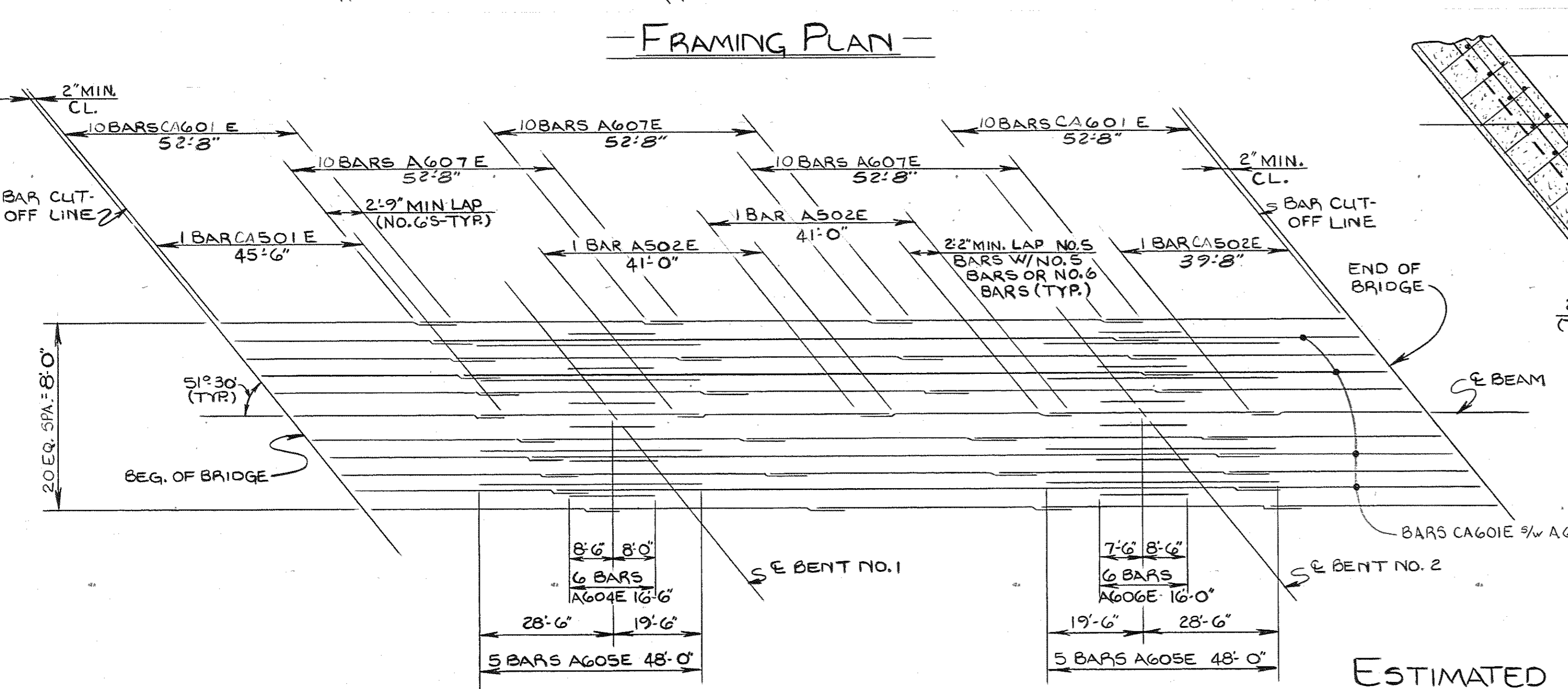
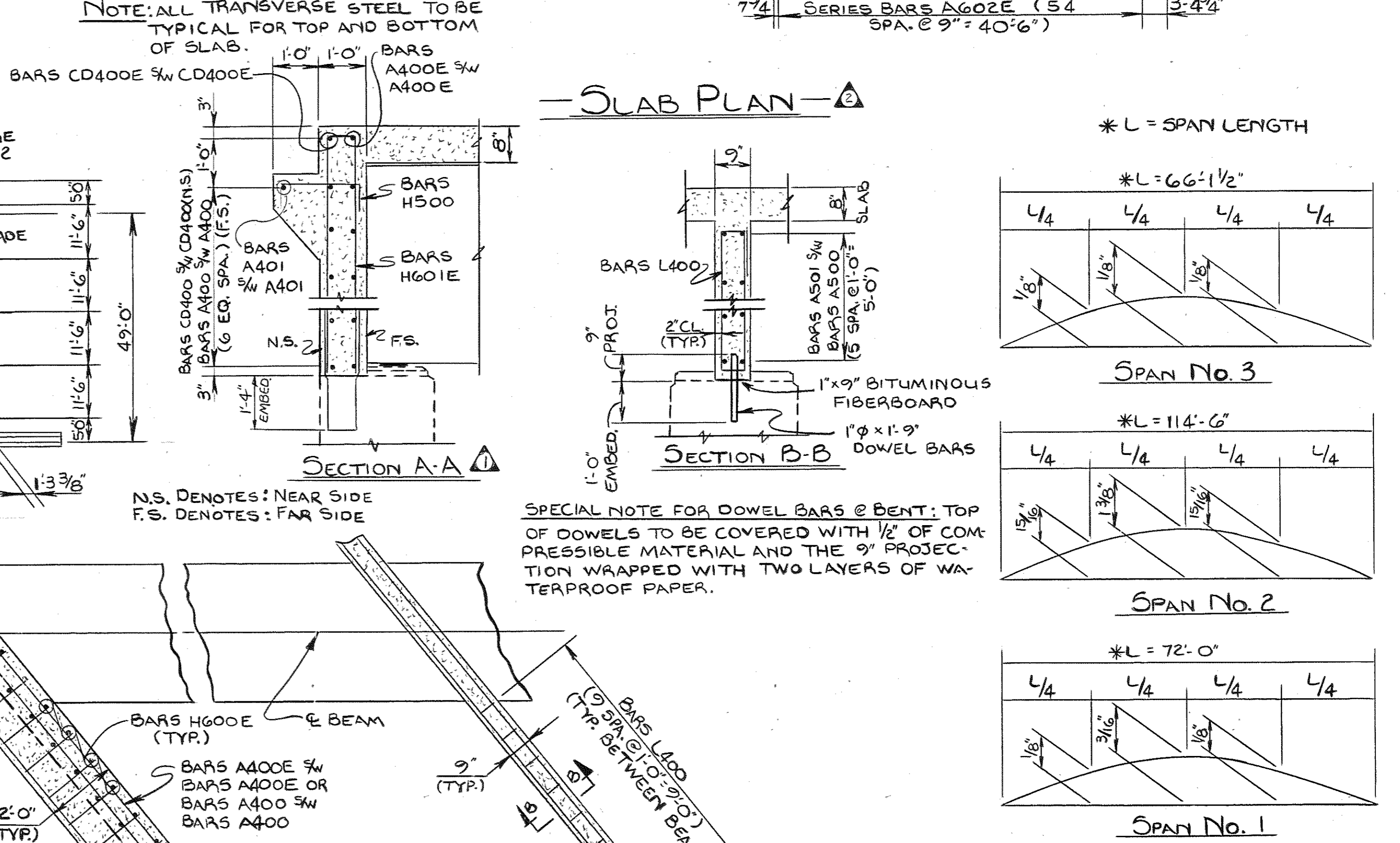
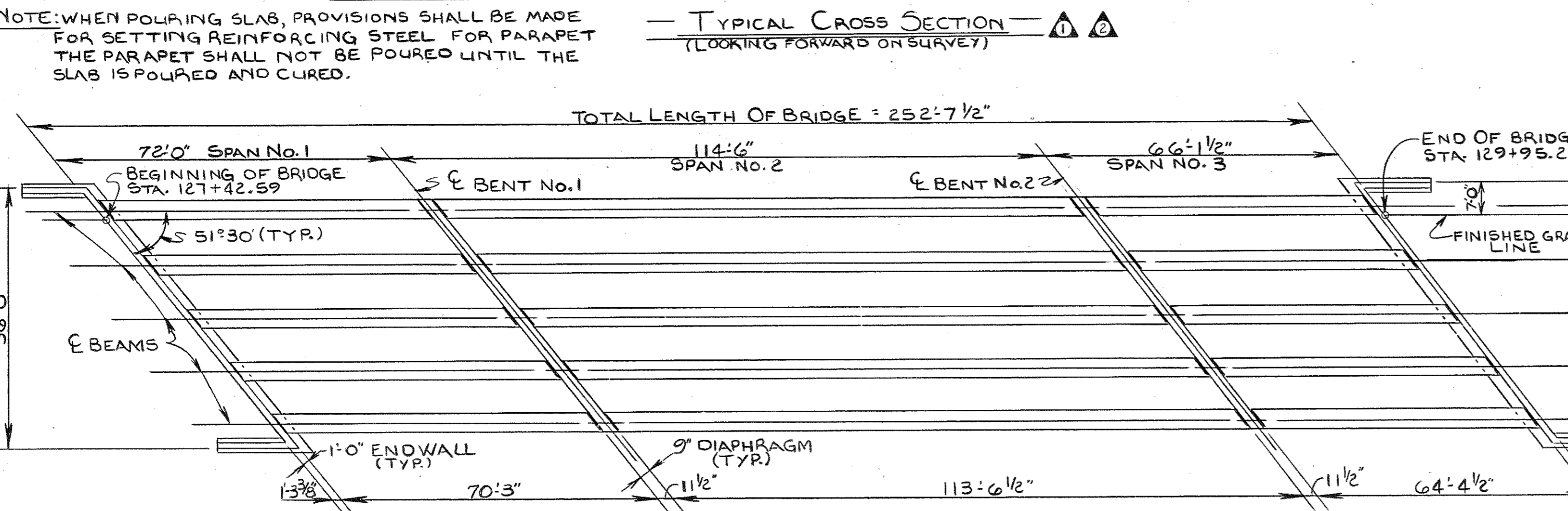
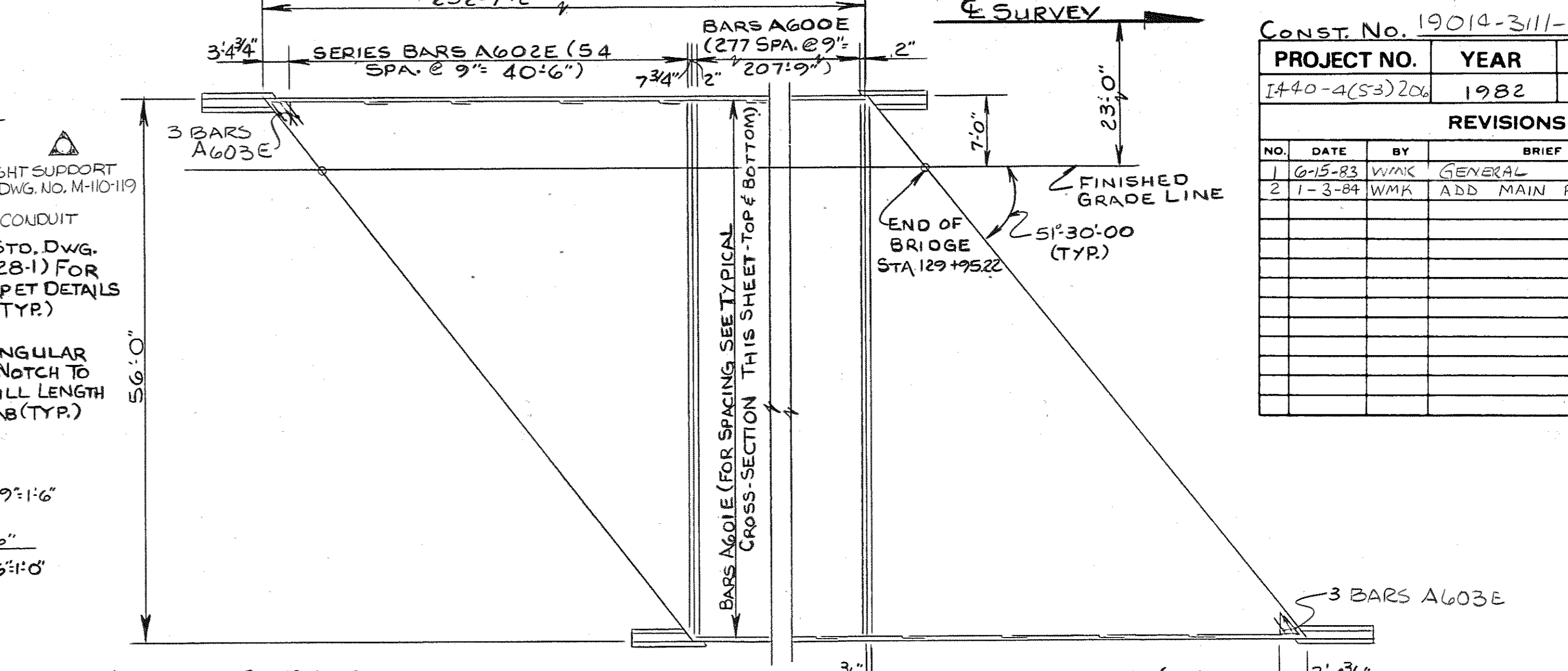
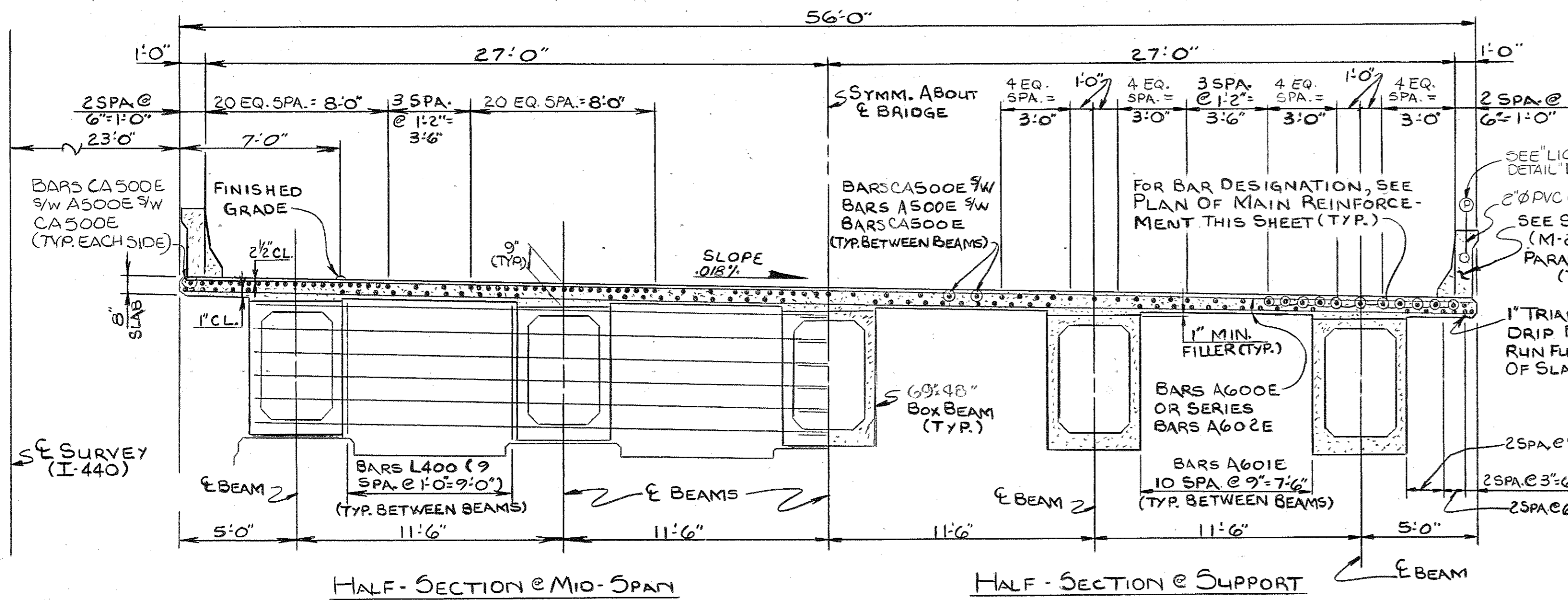
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS
SUPERSTRUCTURE
LEFT LANE
INTERSTATE 440 OVER
L AND N RAILROAD
STATION 128+78.31
DAVIDSON COUNTY
1983

CORRECT *Charles L. Lovell*
ENGINEER OF STRUCTURES

APPROVED *Lewis J. ...*
DIRECTOR OF HIGHWAYS

M-110-119

CONST. NO. 19014-3111-44			
PROJECT NO.	YEAR	SHEET NO.	
1440-4(S3)204	1982		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	6-15-83	W/M/K	GENERAL
2	7-3-84	W/M/K	ADD MAIN REINF.



ITEM	EPOXY COATED REINFORCING STEEL LBS.	CLASS 'A' CONCRETE (C.Y.)	STEEL BAR REINFORCEMENT LBS.	CLASS 'A' CONCRETE (BRIDGE DECK) C.Y.
SUPERSTRUCTURE	111,903	79.9	6,167	364.9

DESIGNED BY W.M. KLAHR DATE -82
 DRAWN BY RICK HINDMAN DATE 12-82
 SUPERVISED BY DON HARRISON DATE 12-82
 CHECKED BY KLAHR DATE -82

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 SUPERSTRUCTURE
 RIGHT LANE
 INTERSTATE 440 OVER
 L AND N RAILROAD
 STATION 128+78.31
 DAVIDSON COUNTY
 1983

CORRECT *Clifton L. Lovell*
 ENGINEER OF STRUCTURES
 APPROVED *Randy Evans*
 DIRECTOR OF HIGHWAYS

K1-110-120

PROJECT NO.	YEAR	SHEET NO.
I-440-4(13)209	1983	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	6/15/83	HMB	GENERAL REVISIONS

NOTE: WHEN POURING WINGWALLS, PROVISIONS SHALL BE MADE FOR SETTING REINFORCING STEEL FOR WINGPOST AND PARAPET. FOR DETAILS OF WINGPOST AND PARAPET SEE STD. DWG. NO. M-28-1

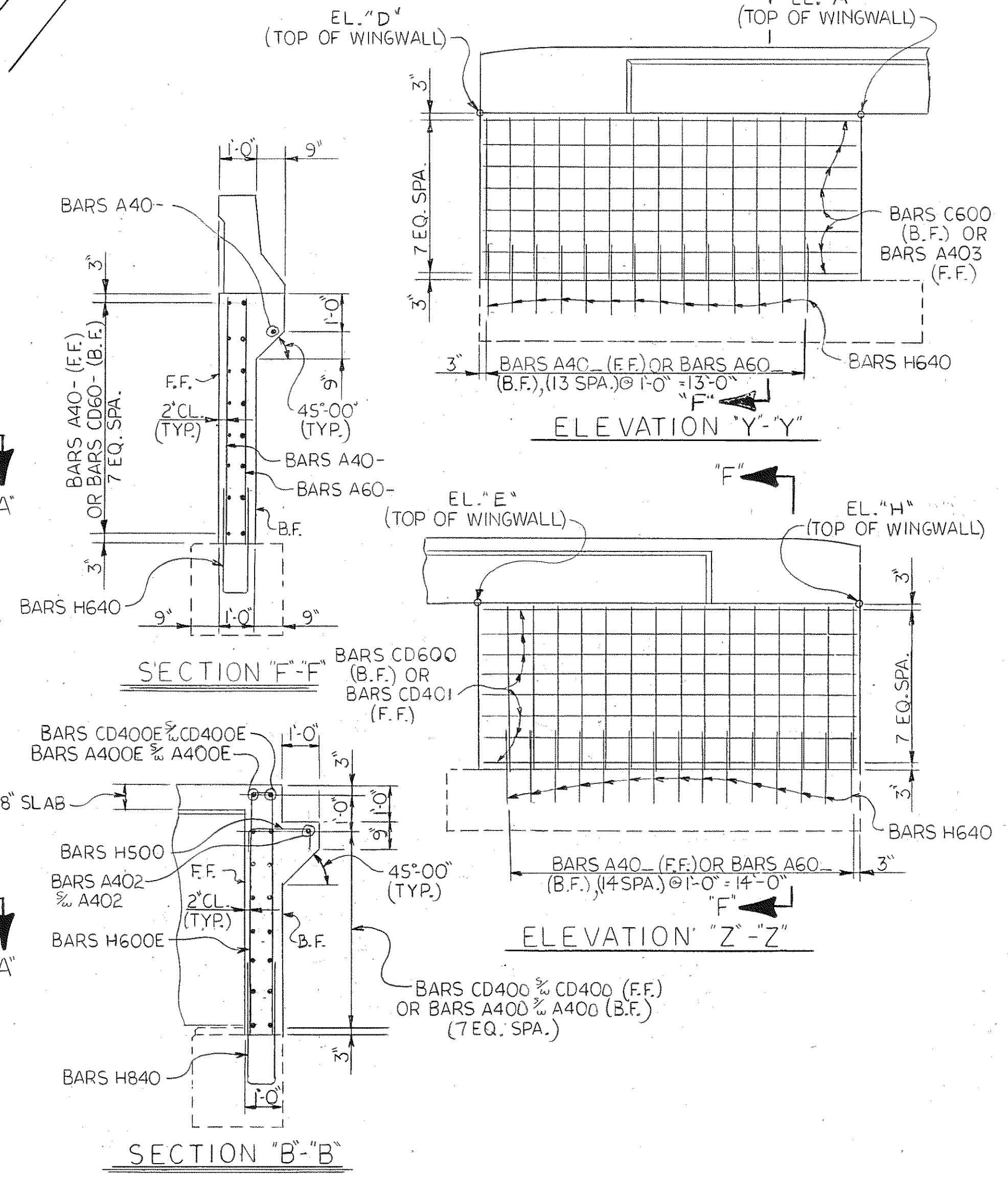
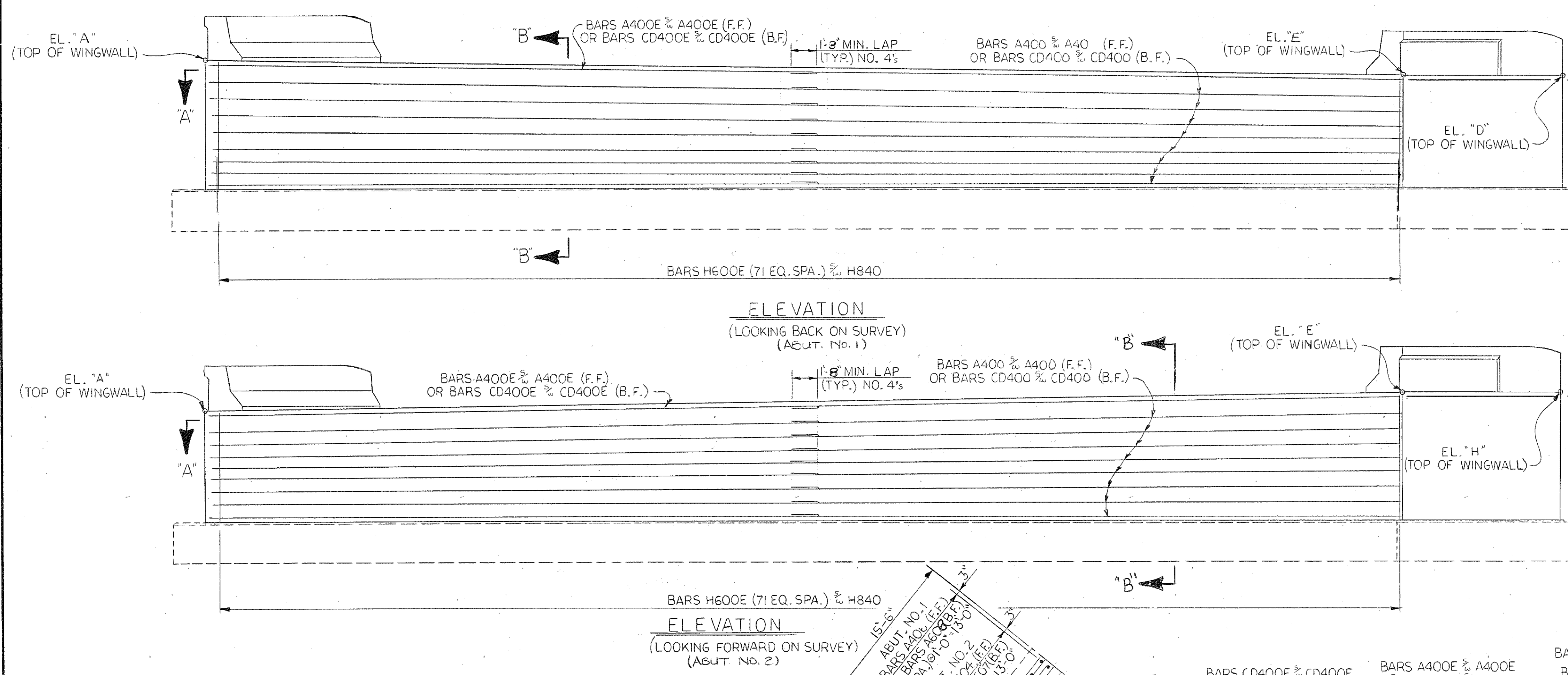
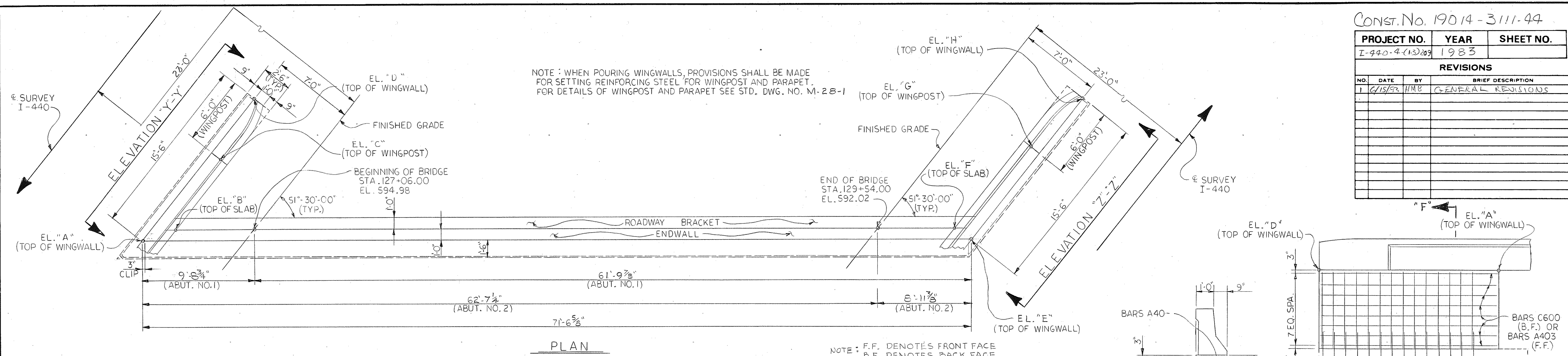
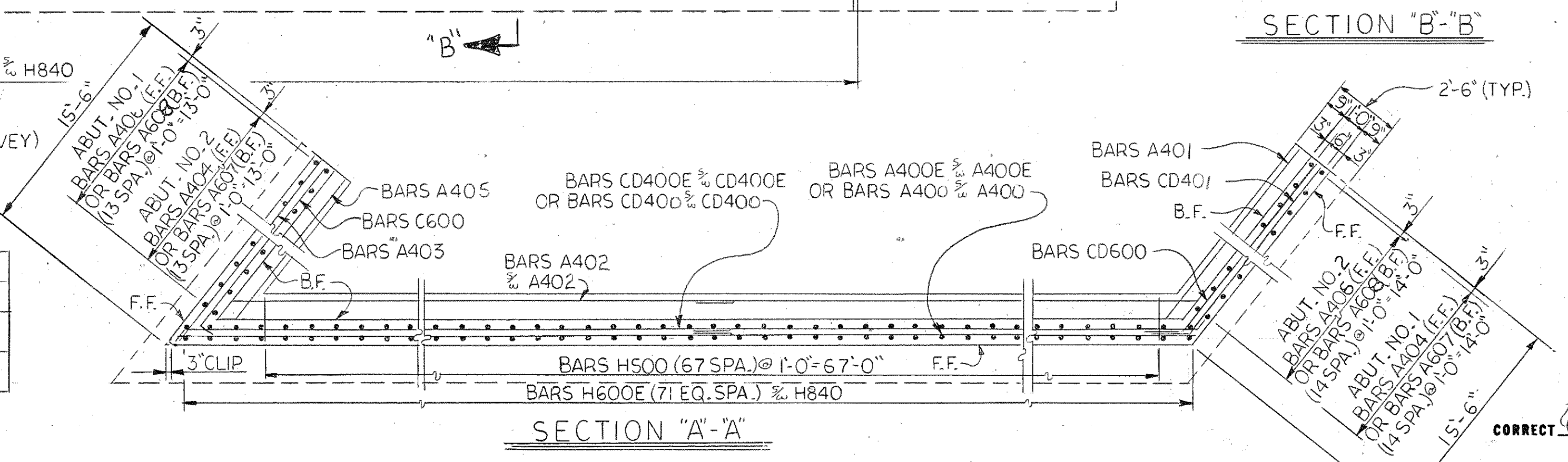


TABLE OF STATIONS AND ELEVATIONS

ITEM	STATION	ELEVATIONS							
		"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"
ABUT. No. 1	127+06.00	595.02	595.02	597.78	595.21	594.55	594.58	597.32	594.75
ABUT. No. 2	129+54.00	591.64	591.62	594.19	591.45	592.05	592.06	594.58	591.86

DESIGNED BY M. KLAHR DATE 12-82
 DRAWN BY FRANK FROST DATE 12-82
 SUPERVISED BY HARRISON DATE 12-82
 CHECKED BY ELROD & KLAHR DATE



STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 SUPERSTRUCTURE DETAILS
 AT ABUTMENT NO. 1 AND 2
 LEFT LANE
 INTERSTATE 440 OVER
 L & N RAILROAD
 STATION 128+78.31
 DAVIDSON COUNTY
 1983

CORRECT
 ENGINEER OF STRUCTURES
 APPROVED
 DIRECTOR OF HIGHWAYS

PROJECT NO.	YEAR	SHEET NO.	
I-440-4(532)09	1983		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	6/15/83	NMR	GENERAL REVISIONS

NOTE: WHEN POURING WINGWALLS, PROVISIONS SHALL BE MADE FOR SETTING REINFORCING STEEL FOR WINGPOST AND PARAPET. FOR DETAILS OF WINGPOST AND PARAPET SEE STD. DWG. NO. M-28-1

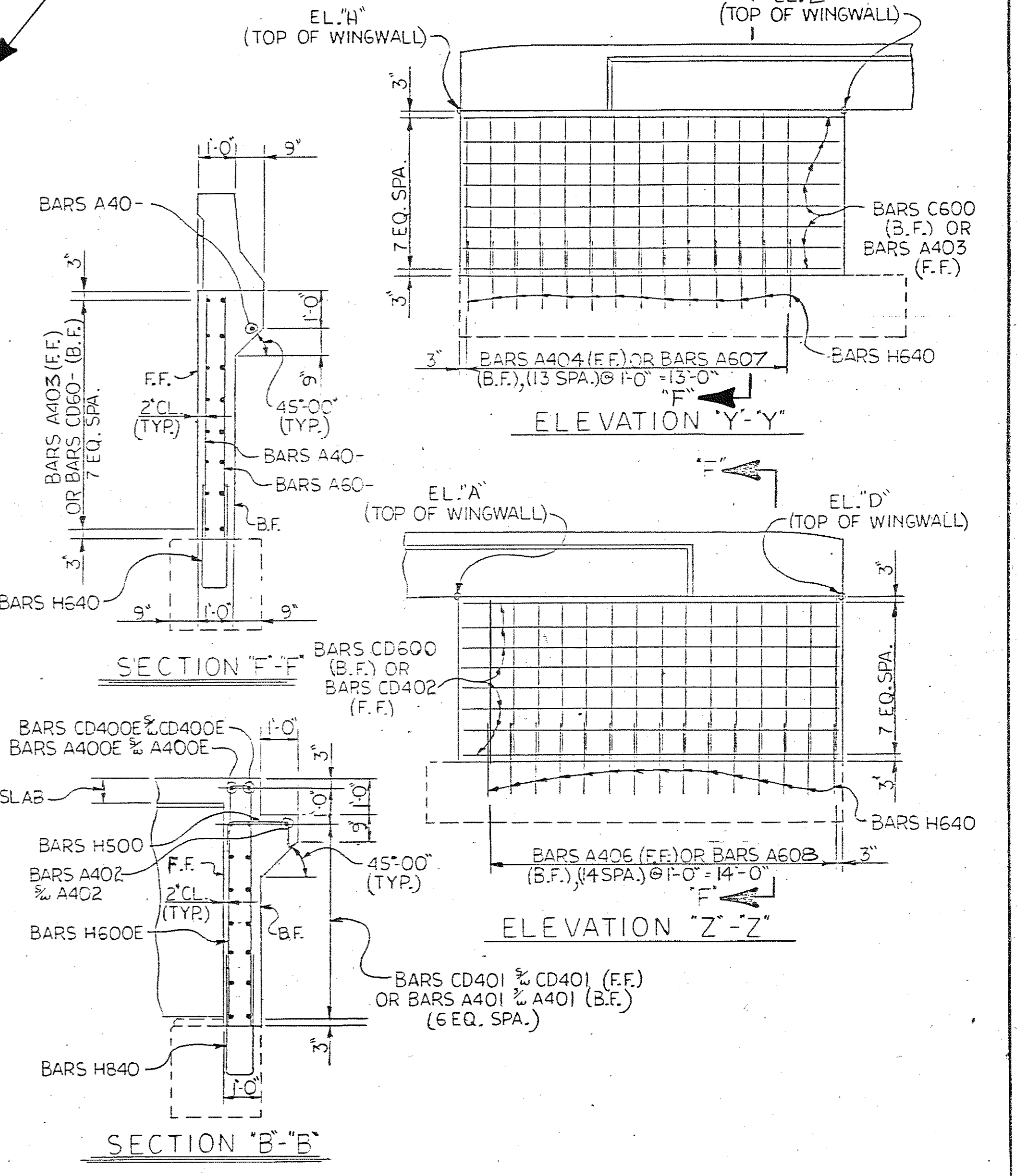
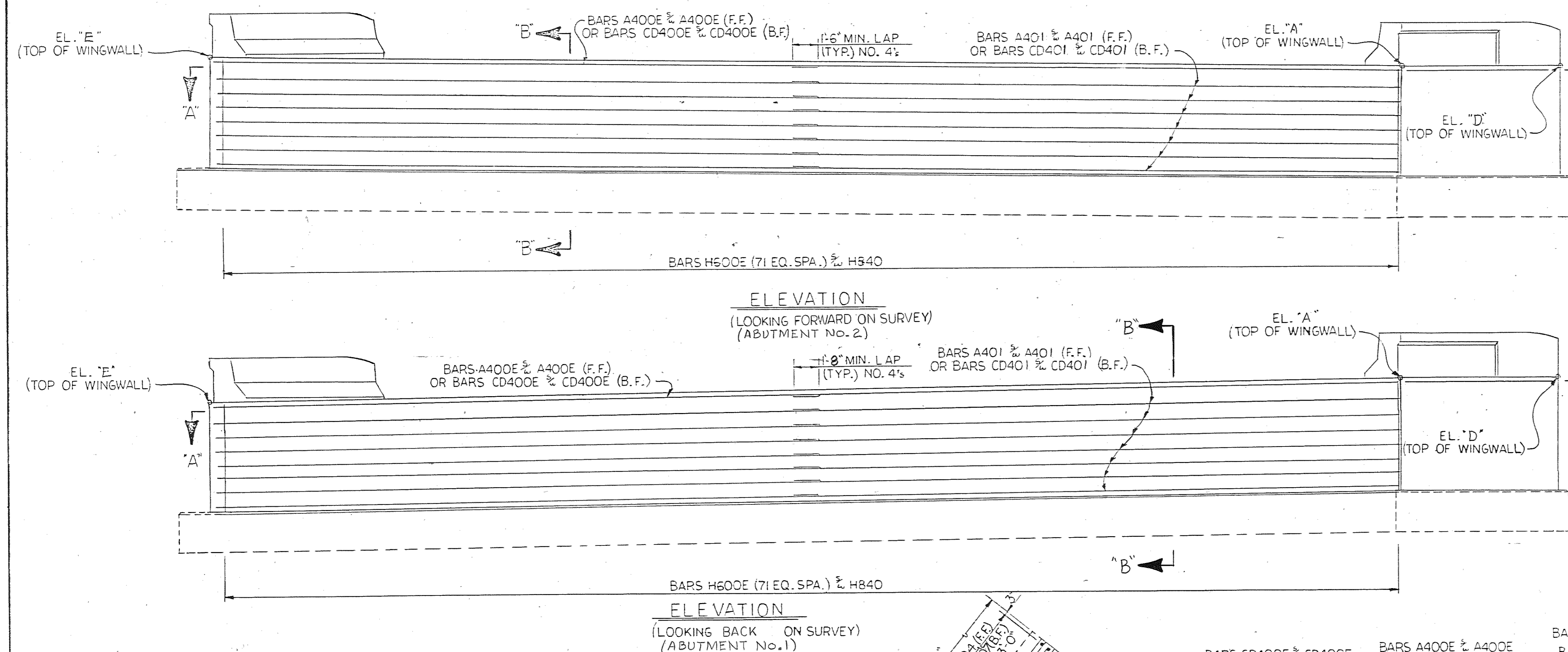
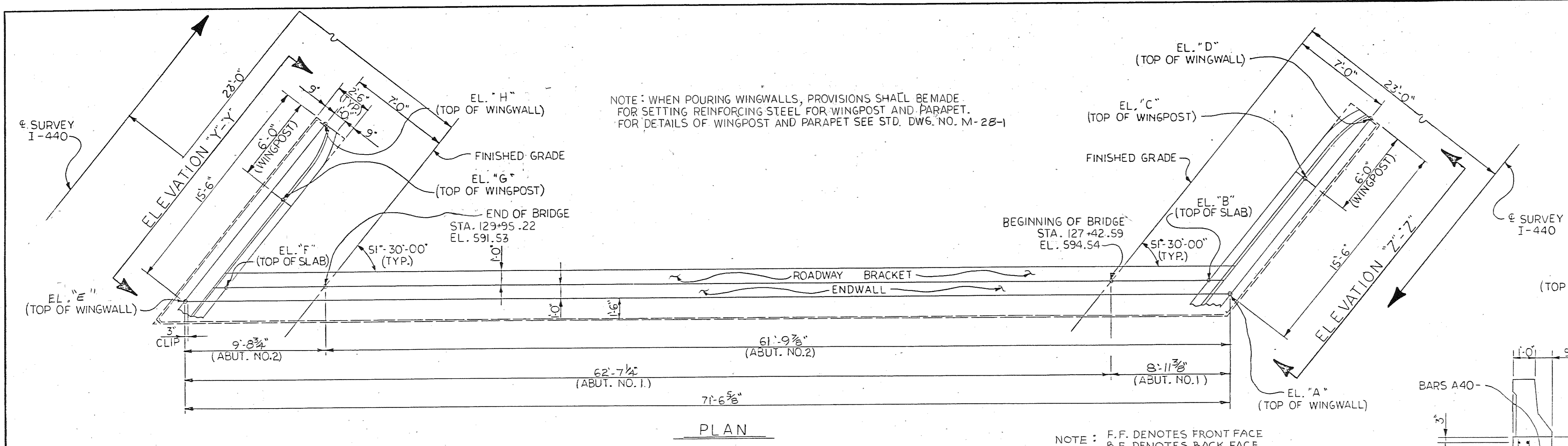
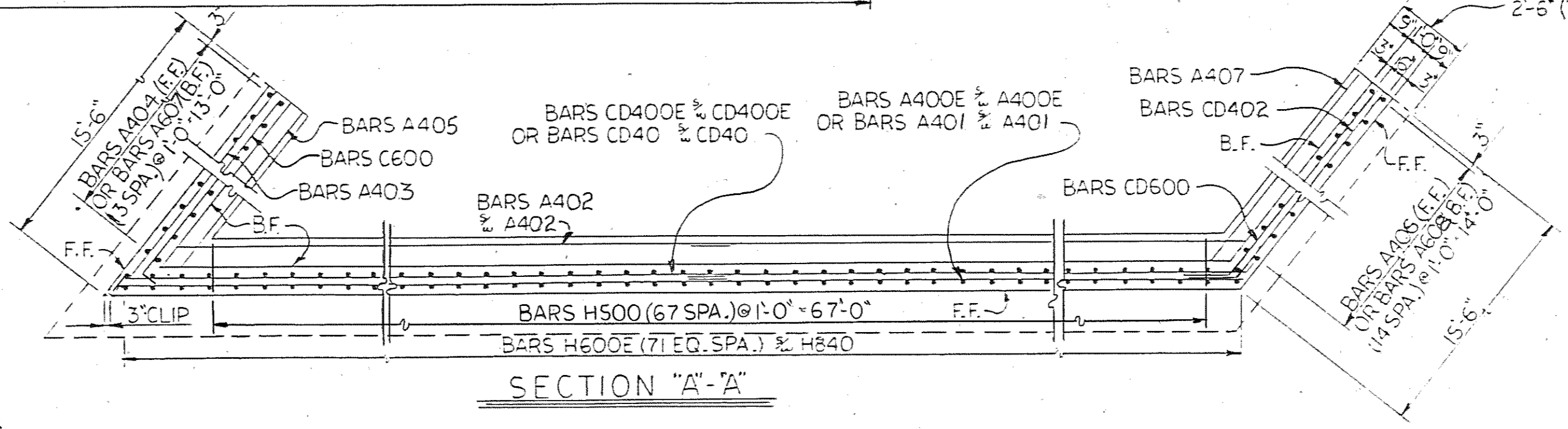


TABLE OF STATIONS AND ELEVATIONS

ITEM	STATION	ELEVATIONS							
		"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"
ABUT. NO. 1	127+42.59	594.76	594.69	597.66	594.94	593.18	593.24	595.98	593.38
ABUT. NO. 2	129+95.22	590.18	590.21	592.75	589.98	591.77	591.67	594.31	591.59

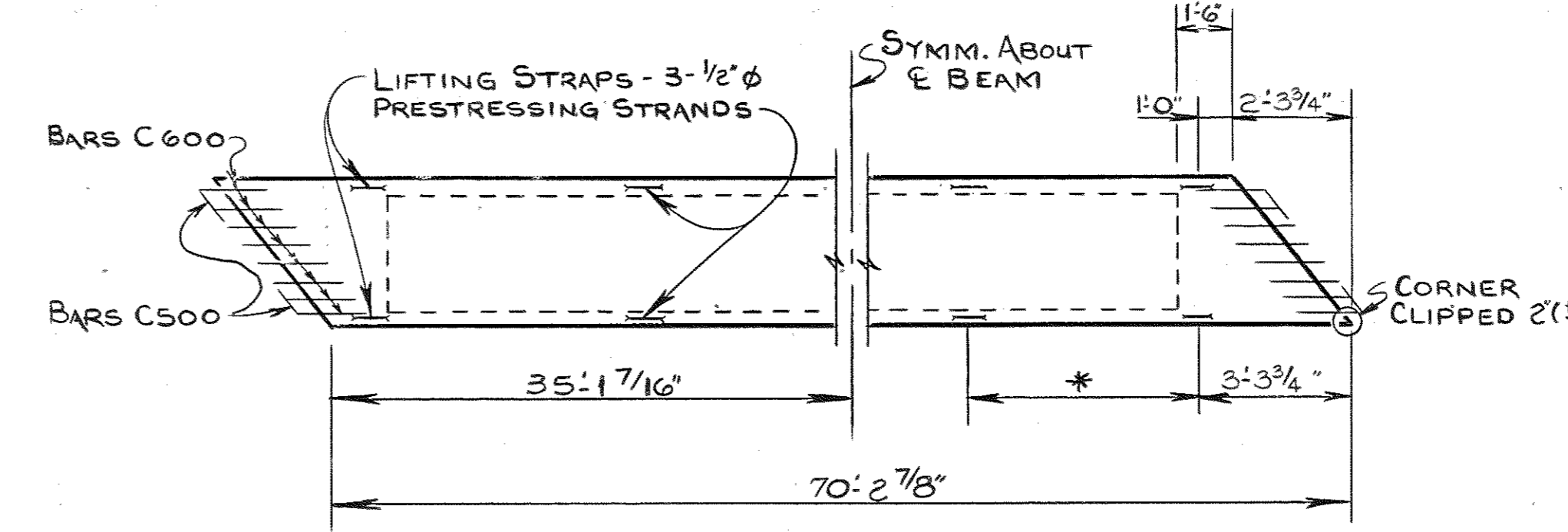
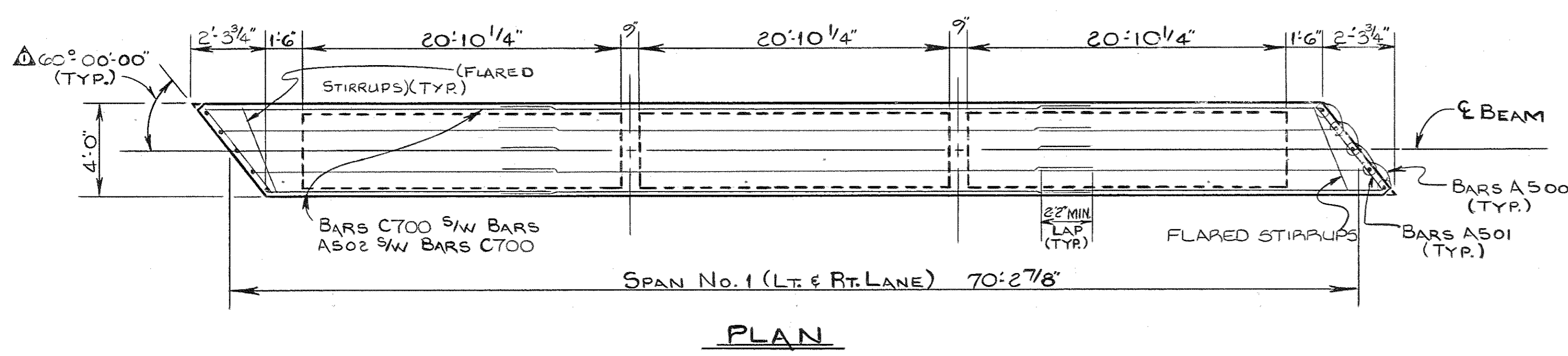


STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 SUPERSTRUCTURE DETAILS
 AT ABUTMENT NO. 1 AND 2
 RIGHT LANE
 INTERSTATE 440 OVER
 L & N RAILROAD
 STATION 128+78.31
 DAVIDSON COUNTY
 1983

DESIGNED BY: M. KLAHR DATE: 12-82
 DRAWN BY: FRANK FROST DATE: 12-82
 SUPERVISED BY: HARRISON DATE: 12-82
 CHECKED BY: ELROD & KLAHR DATE:

CORRECT: *William L. Loveless*
 ENGINEER OF STRUCTURES
 APPROVED: *Paul E. Evans*
 DIRECTOR OF HIGHWAYS

PROJECT NO.	YEAR	SHEET NO.	
I440-4(53)204	1983		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	4-21-83	HVB	REVISED ANGLE & STEEL QTS.

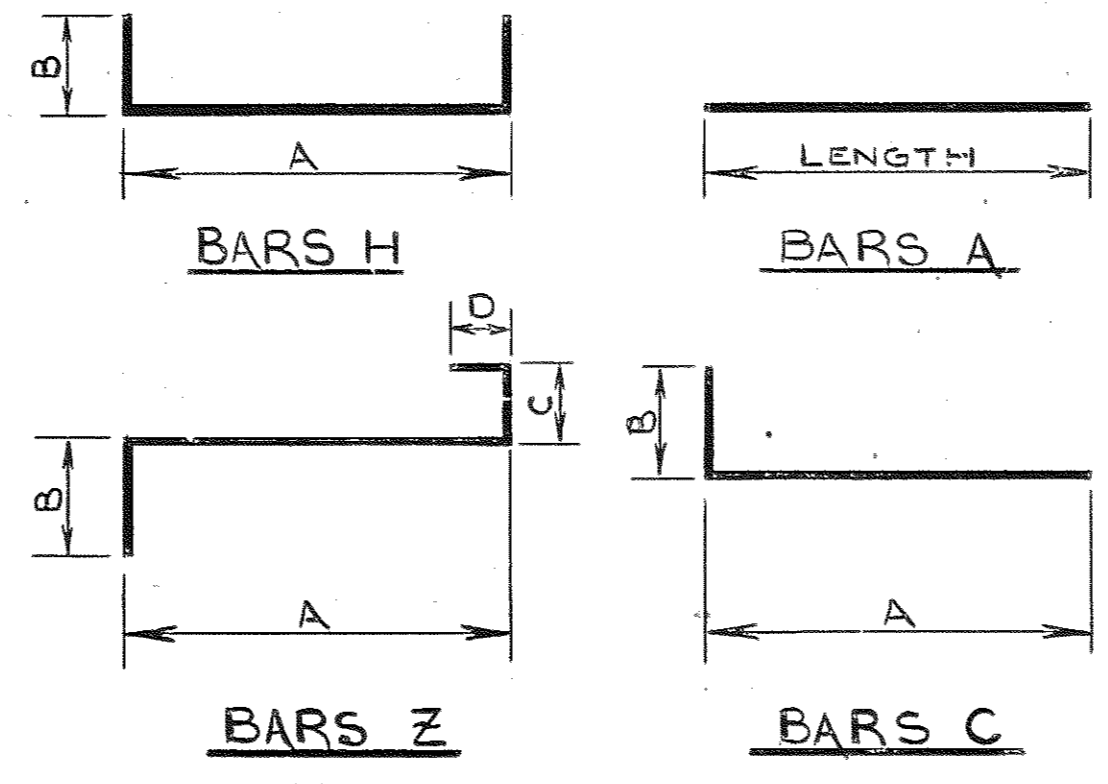
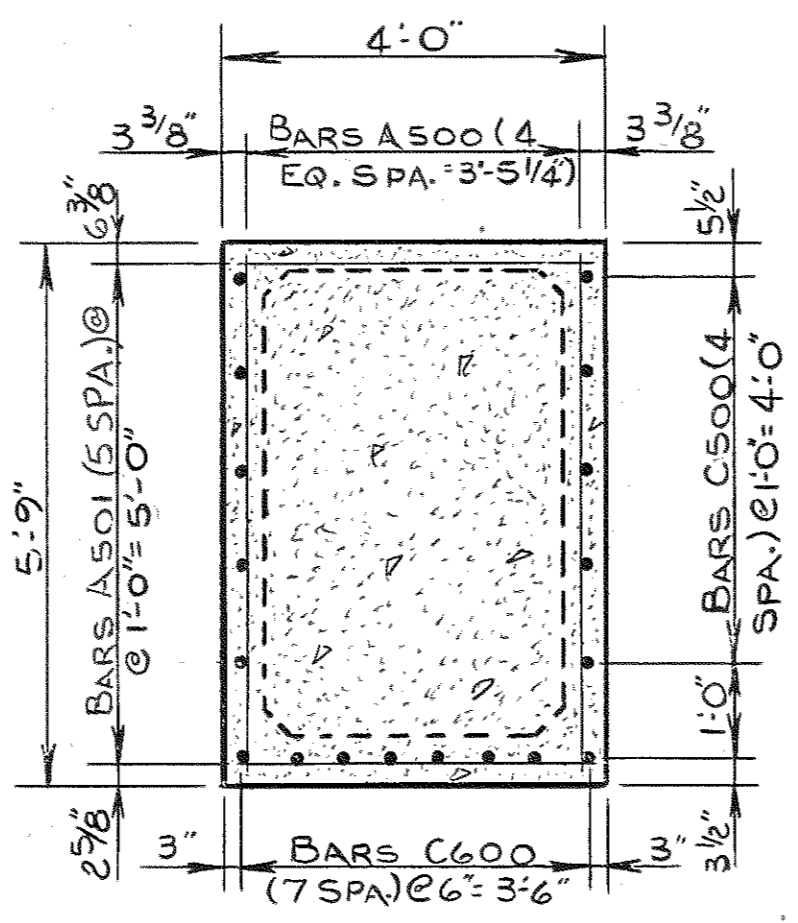
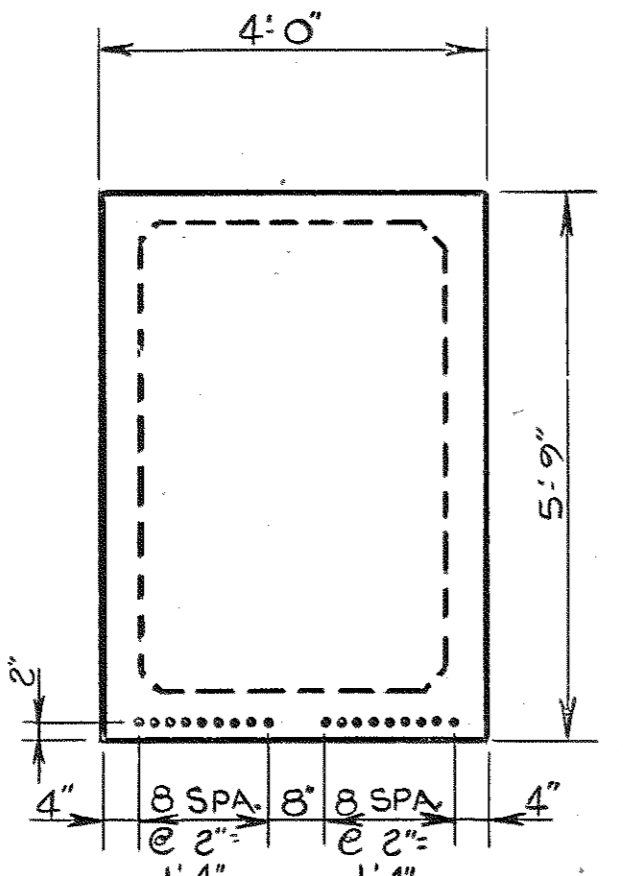
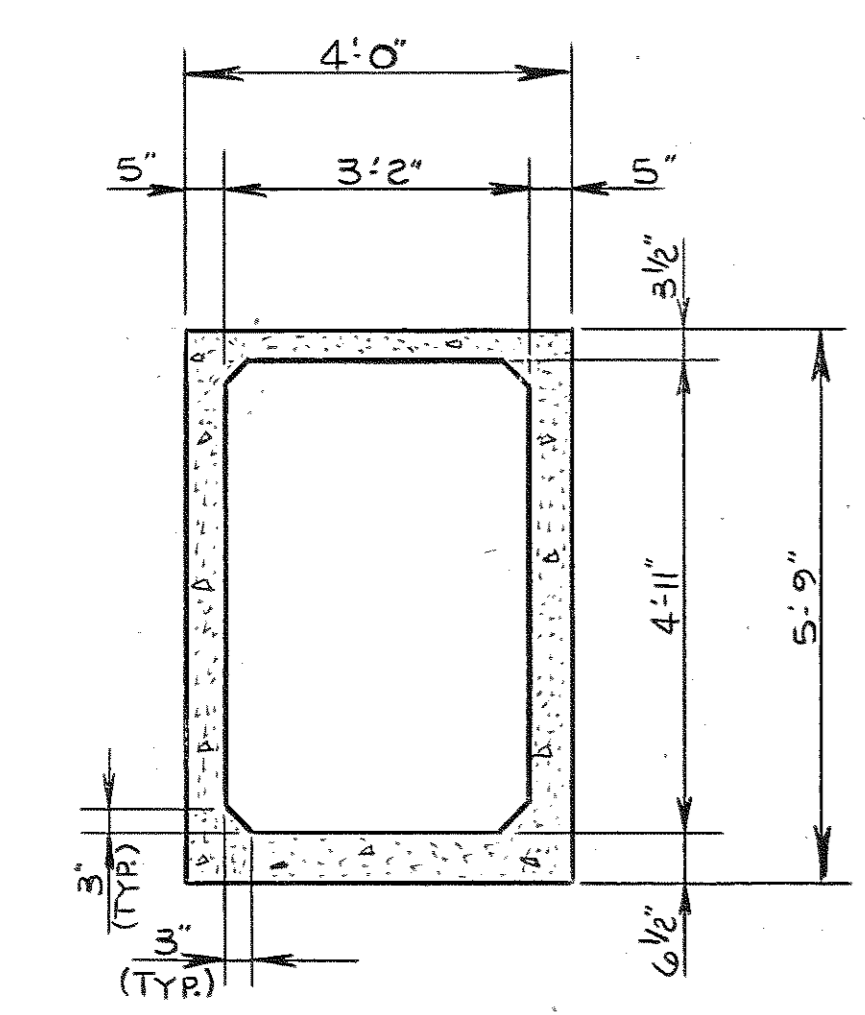
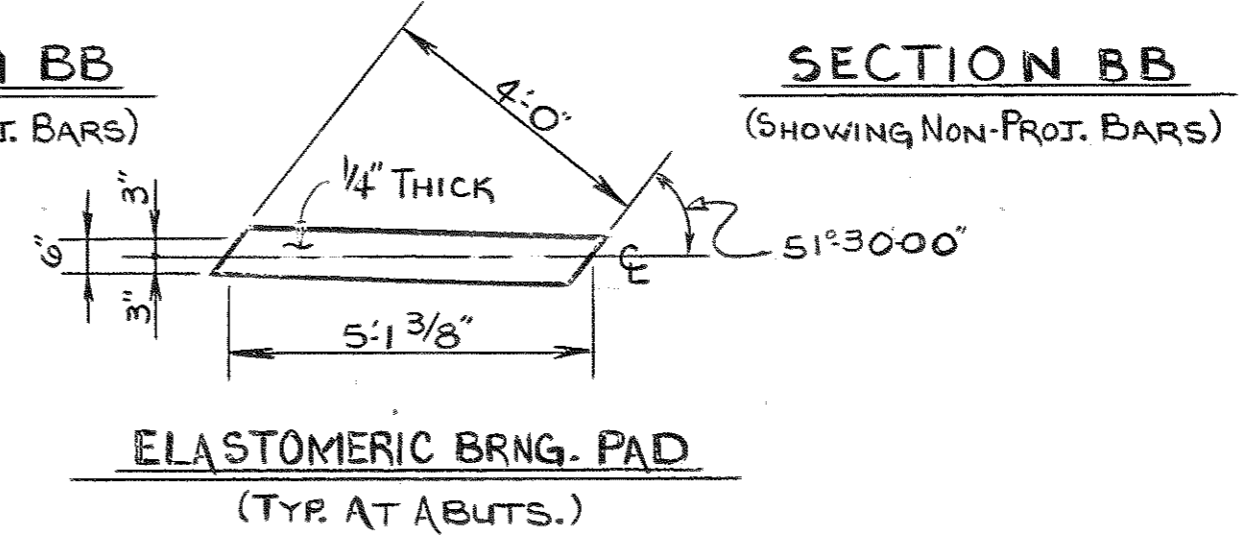
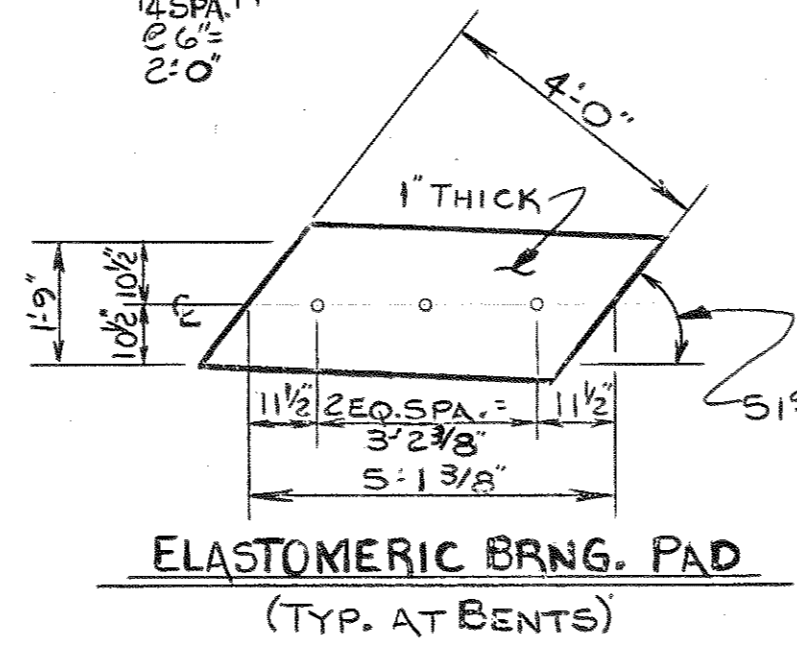
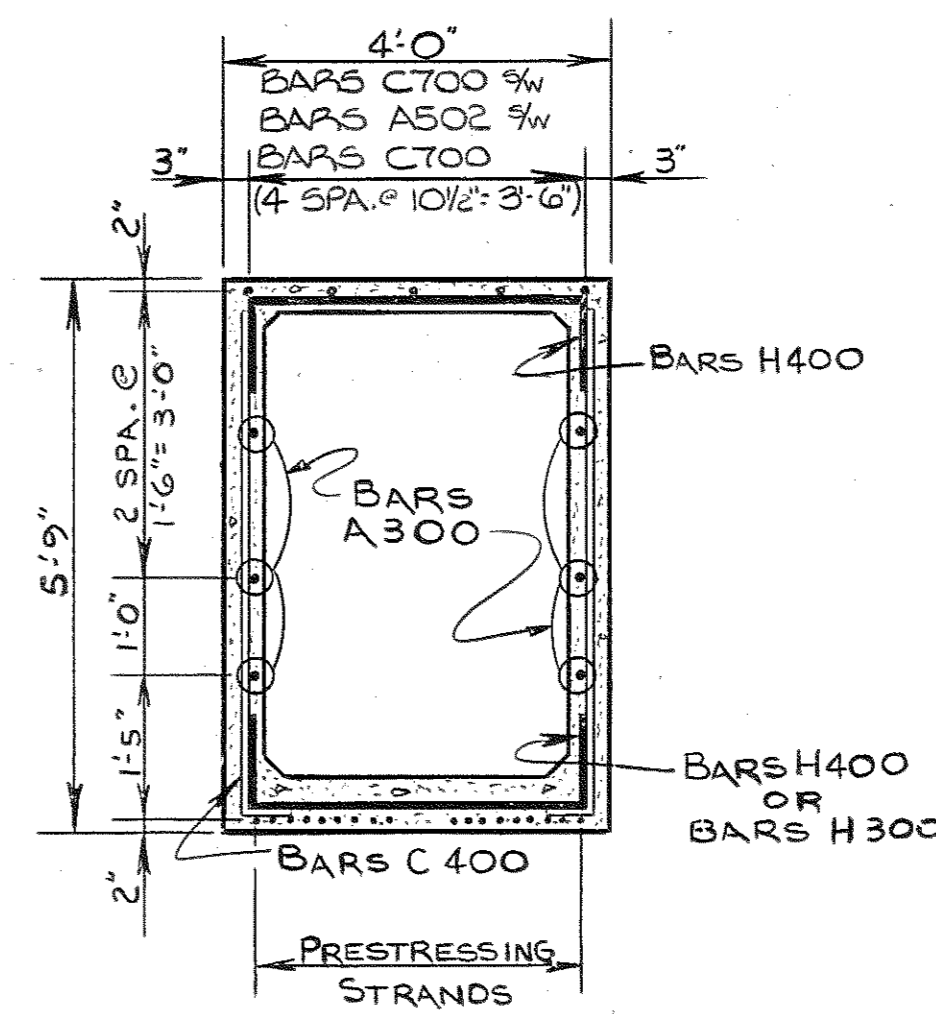
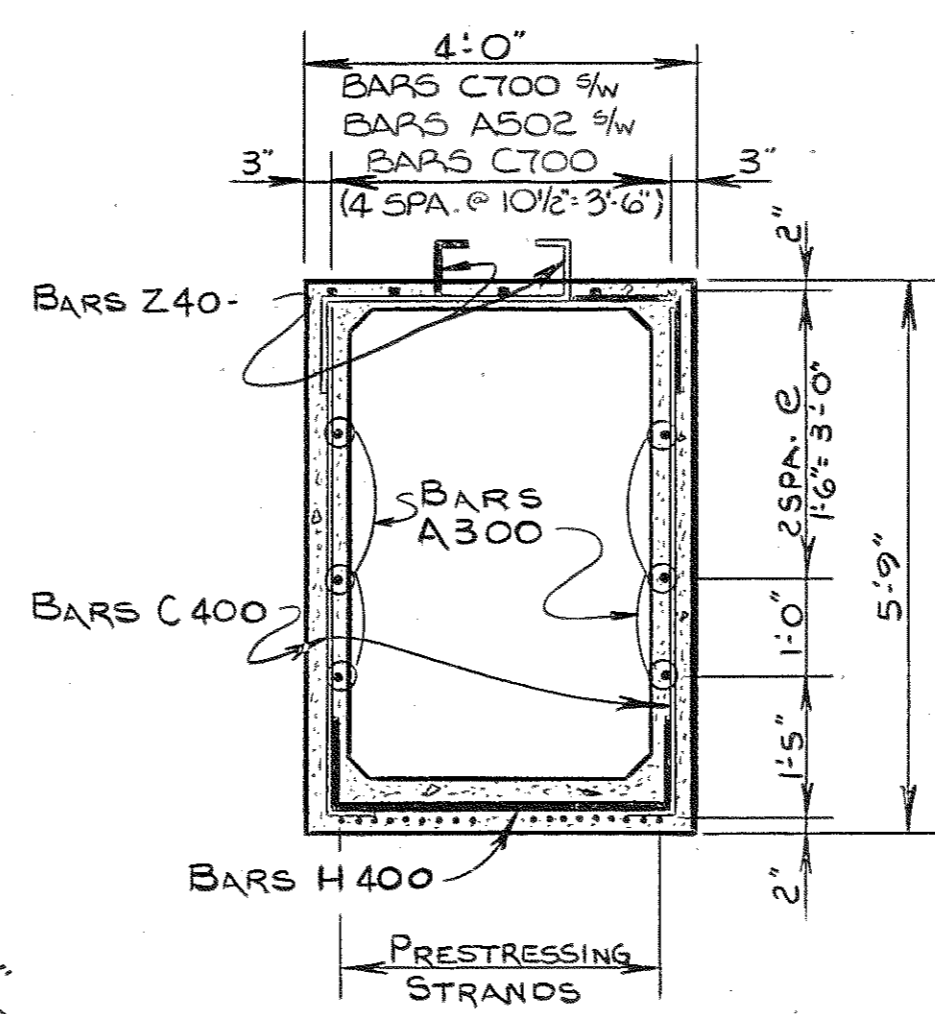
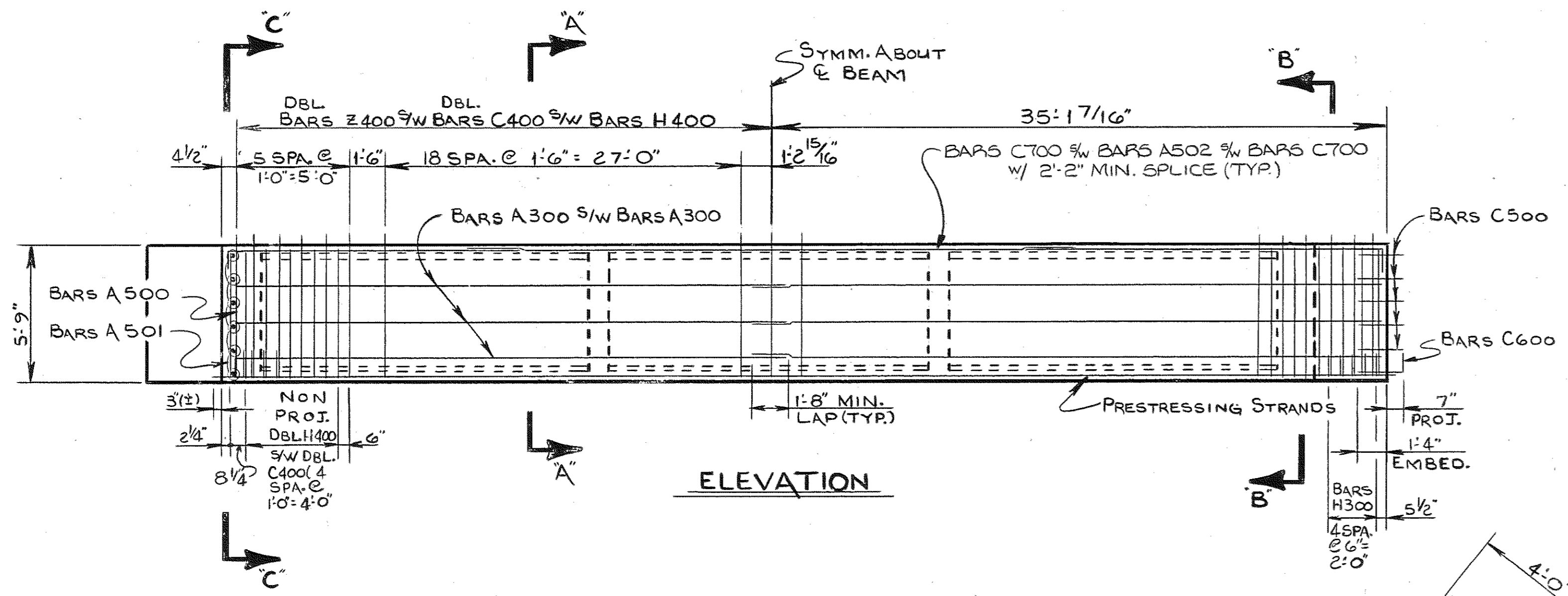


PART PLAN

* DENOTES: DISTANCE DETERMINED BY FABRICATOR

GENERAL NOTES

1. THE TOP OF ALL BEAMS ARE TO BE ROUGH FLOATED. AT APPROXIMATELY THE TIME OF INITIAL SET, THE TOP OF THE BEAMS WILL ALSO BE SCRUBBED TRANSVERSELY WITH A COARSE WIRE BRUSH TO REMOVE ALL LAITANCE AND PRODUCE A ROUGH SURFACE. WHERE PRECAST SLAB PANELS ARE TO BE USED AND SET ON FELT PADS, THE OUTER TWO INCHES OF THE TOP FLANGE MAY BE TROWELED.
2. MILD STEEL REINFORCING SHALL BE ASTM A615 GRADE 60.
3. ALL PRESTRESSING STRANDS TO BE 1/2" φ ASTM GRADE 270K, 7 WIRE UNCOATED STRESS-RELIEVED PRESTRESSING STRANDS.
4. AN INITIAL FORCE OF 28936 LBS., SHALL BE APPLIED TO EACH STRAND IN ALL BEAMS.
5. AFTER THE BEAM IS REMOVED FROM THE PRESTRESSING BED, BARS C600 AND C500 SHALL BE BENT A SUFFICIENT AMOUNT SO AS TO PERMIT THE 'C' BARS OF ADJOINING BEAM TO MESH WHEN IN THE ERECTED POSITION.
6. THE PRESTRESSING STRANDS SHALL BE LEFT PROTECTING 3" FROM THE ENDS OF THE BEAMS. THERE SHALL NOT BE ANY PROTECTIVE COATING PLACED ON THE ENDS OF THE BEAMS OR ON THE PROTECTING STRANDS.
7. ELASTOMERIC PADS TO BE 1/4" x 6" = 5:13/8" AT ABUTMENT ENDS AND 1" x 1-9" x 5:13/8" AT BENTS.
8. THE CONCRETE FOR THIS CONSTRUCTION SHALL BE OF SUCH PROPERTIES AS TO ATTAIN A COMPRESSIVE STRENGTH OF NOT LESS THAN 6000 + 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 5000 + PSI. SEE GENERAL NOTE SHEET FOR CONCRETE FINISHING NOTE.
9. 1" φ WEEP HOLES REQ'D. AT LOW POINT OF EACH CELL.
10. EACH CELL SHALL BE VENTED, (DURING FABRICATION PHASE), IN SUCH A MANNER SO AS NOT TO ALLOW EXTERNAL WATER TO ENTER CELL.



BILL OF STEEL (PER BEAM)

BARS	SIZE	No. REQ'D.	A	B	C	D	LENGTH
A300	3	12					35:9"
A500	5	10					5:5"
A501	5	12					4:3"
A502	5	5					33:5"
H300	3	10	3 7/2"	1:0"			5:7"
C400	4	122	5:5"	6"			5:11"
C500	5	20	1:11"	10"			2:9"
C600	6	16	4:11"	10"			2:9"
C700	7	10	20:7"	1:0"			21:6"
H400	4	71	3:7 1/2"	1:0"			5:7"
Z400	4	102	2:10"	1:0"	7 1/2"	4"	4:8"

ESTIMATED QUANTITIES

(PER)	CLASS 'A' CONCRETE (C.Y.)	STEEL REINFORCEMENT LBS.	PRESTRESSING STRANDS LBS.
Box BEAM	23.2	2,094	604

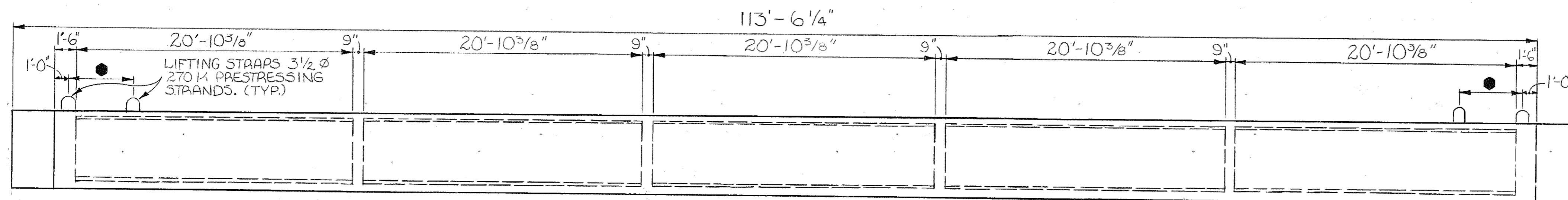
NOTE: COST OF ELASTOMERIC PADS, 60 DOWEL BARS, AND RUBBER BONDING CEMENT TO BE INCLUDED IN COST OF BEAM.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS
PRESTRESSED BOX BEAM DETAILS
LEFT & RIGHT LANES (SPANS 1)
INTERSTATE 440 OVER
L & N RAILROAD
STATION 128+78.31
DAVIDSON COUNTY
1983

DESIGNED BY: KLAHR DATE: 11-82
DRAWN BY: RICK HINDMAN DATE: 11-82
SUPERVISED BY: DON HARRISON DATE: 11-82
CHECKED BY: OUPS & KLAHR DATE: 11-82

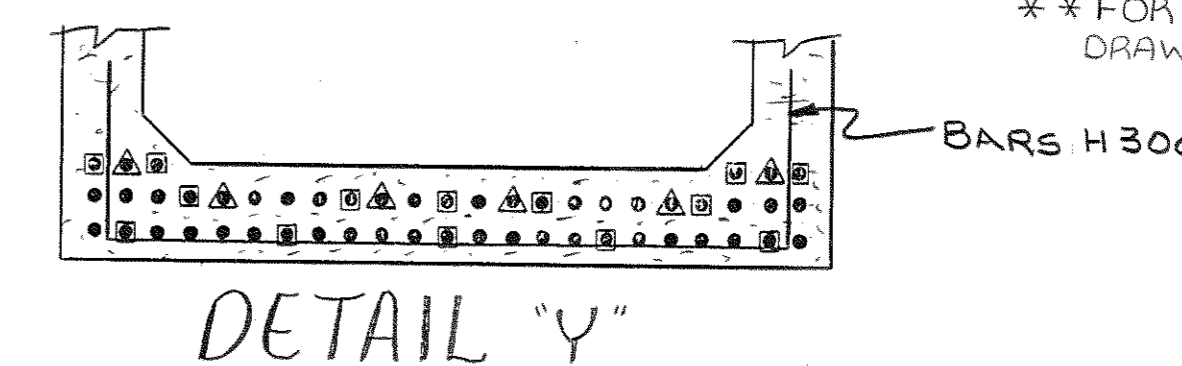
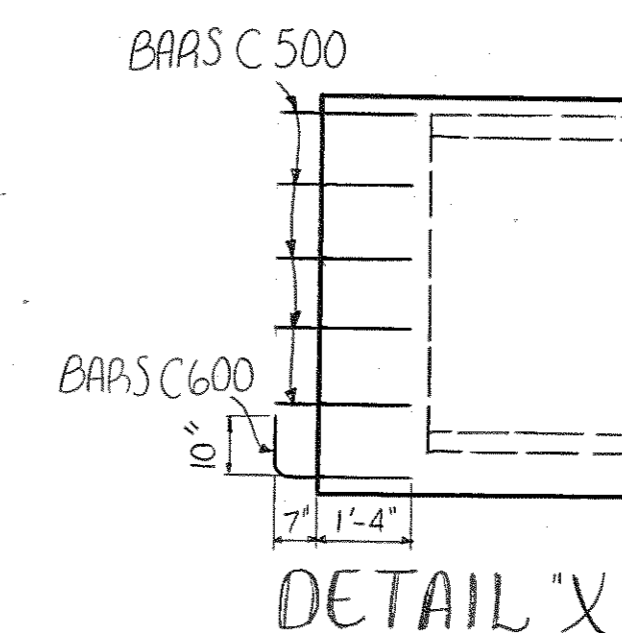
CORRECT: *William L. Lovell*
ENGINEER OF STRUCTURES
APPROVED: *Lewis Evans*
DIRECTOR OF HIGHWAYS

PROJECT NO.	YEAR	SHEET NO.	
I440 4(53)206	1983		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	4-21-83	HVB	REV. ANGLE & STEEL QTS.

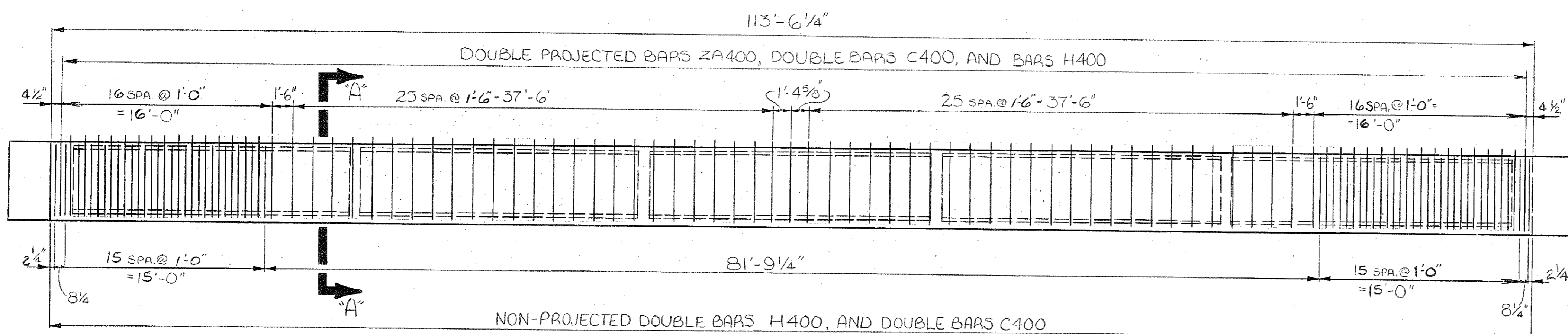


● DIMENSION TO BE DETERMINED BY FABRICATOR.

ELEVATION



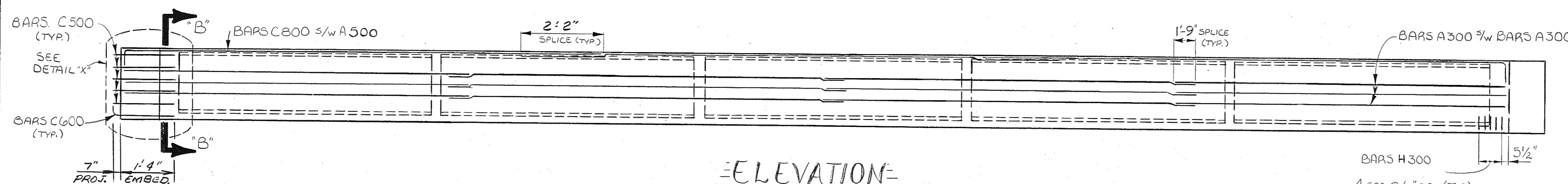
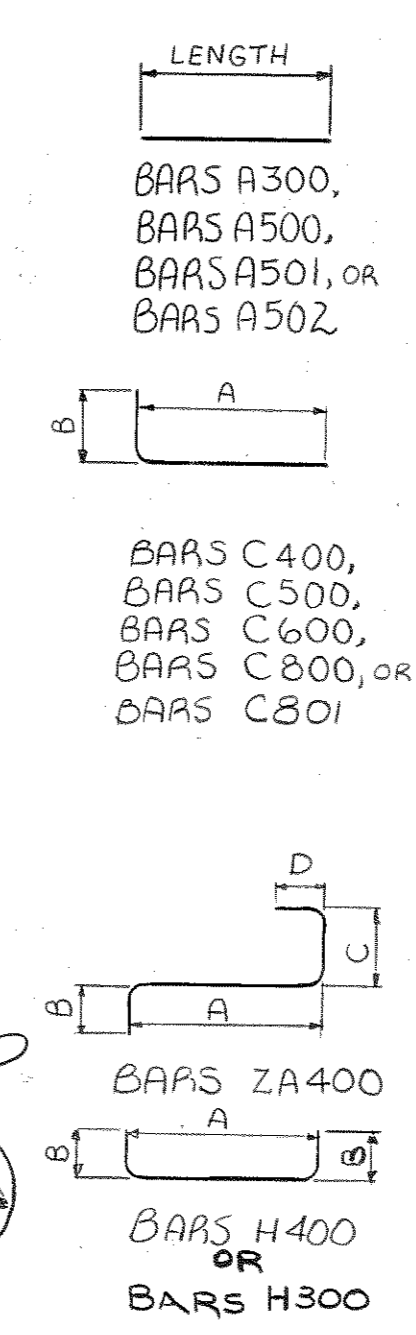
** FOR GENERAL NOTES SEE DRAWING NO. M-110-123.



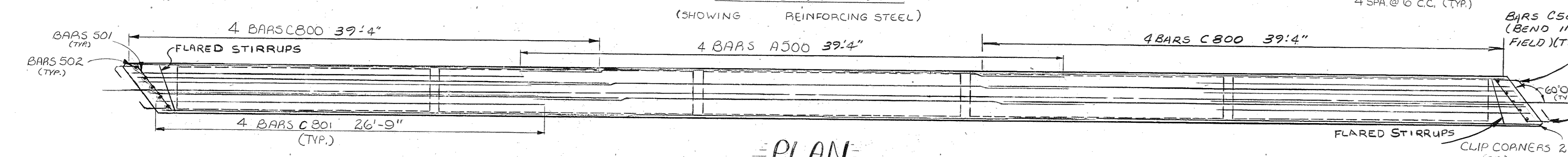
ELEVATION
(SHOWING STIRRUP SPACING)

BILL OF STEEL ~ PER BEAM

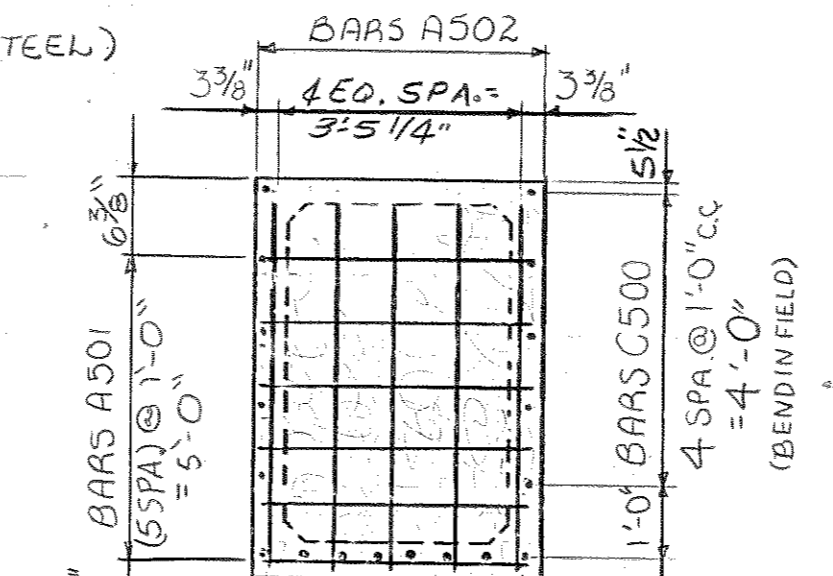
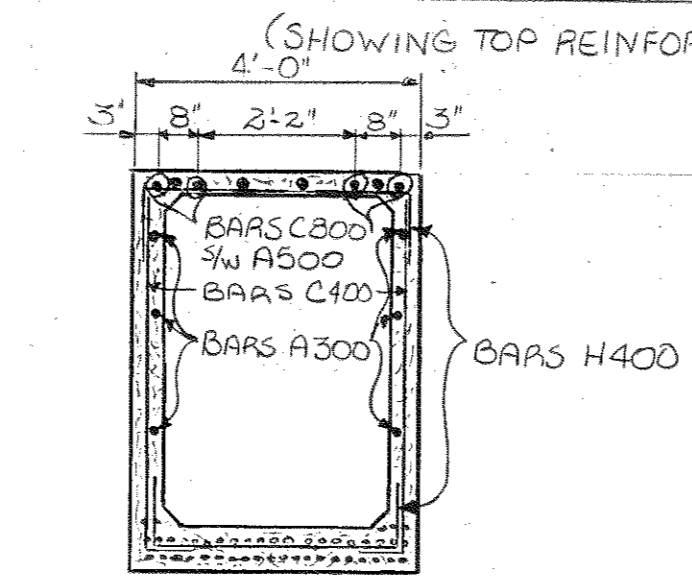
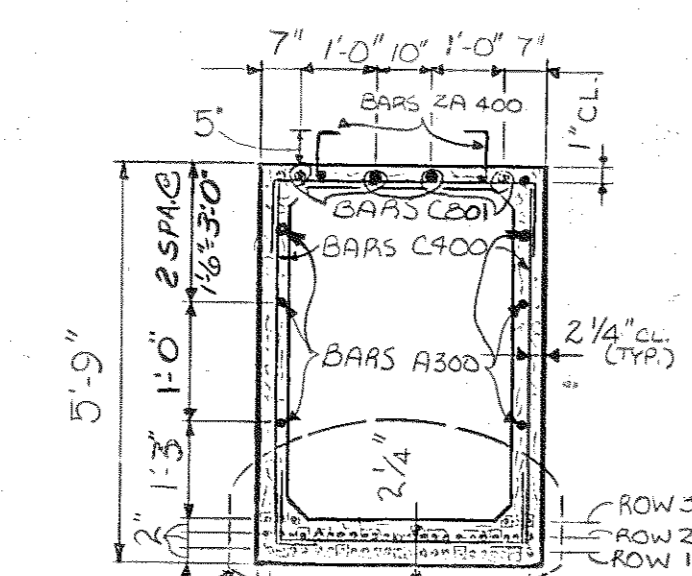
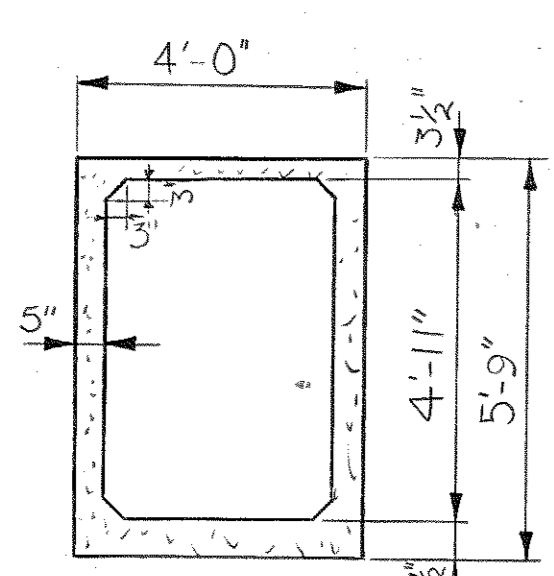
BAR	SIZE	NO. REQD.	BENDING DIMENSIONS				LENGTH
			A	B	C	D	
△ A 300	3	24					29'-7"
△ A 500	5	4					39'-4"
A 501	5	12					4'-3"
A 502	5	10					5'-5"
H 300	3	10	37 1/2"	1'-0"			5'-7"
△ C 400	4	238	5'-5"	6"			5'-11"
C 500	5	20	1'-11"	10"			2'-8"
△ C 600	6	16	1'-11"	10"			2'-8"
△ C 800	8	8	39 1/2"	1'-4"			40'-7"
△ C 801	8	8	26'-9"	1'-4"			28'-0"
△ H 400	4	151	3'-7 1/2"	1'-0"			5'-7"
△ ZA 400	4	174	2'-10"	1'-0"	7 1/2"	4"	4'-8"



ELEVATION
(SHOWING REINFORCING STEEL)



PLAN



DESIGNED BY W.M. KLAHA DATE 5-6-82
 DRAWN BY DEANNA CHAFFIN DATE 11-19-82
 SUPERVISED BY B.L. HARRISON DATE 11-82
 CHECKED BY OUPS & KLAHA DATE

SECTION 'A'-'A'
 (SHOWING PROJECTING BARS AND PRESTRESSING STRANDS.)

SECTION 'A'-'A'
 (SHOWING NON-PROJECTING BARS)

SECTION 'B'-'B'
 (SHOWING REINFORCING IN END GAID)

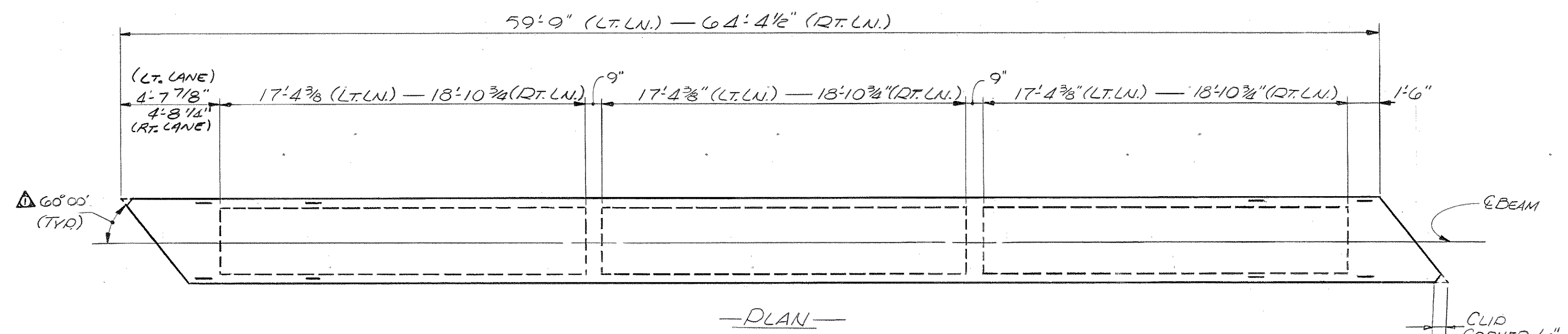
ESTIMATED QUANTITIES ~ PER BEAM

ITEM	NO. REQD.	CLASS 'A' CONCRETE CY.	REINFORCING STEEL LBS.	PRESTRESSING STEEL LBS.
BEAM	10	36.8	4,193	3,113

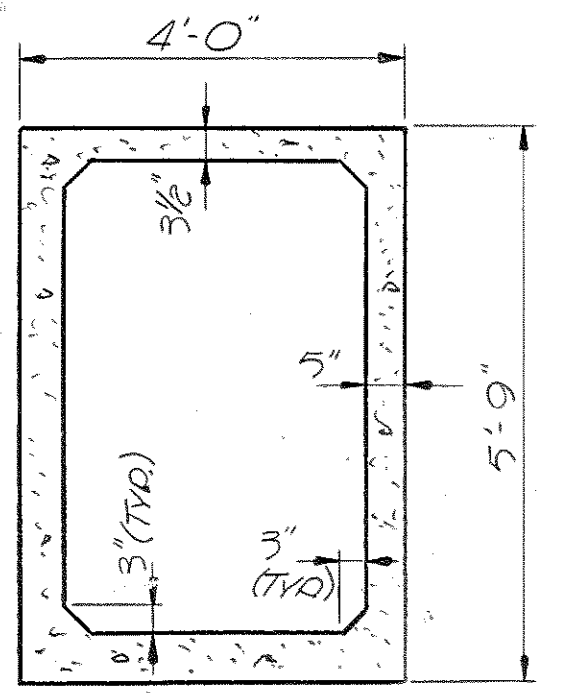
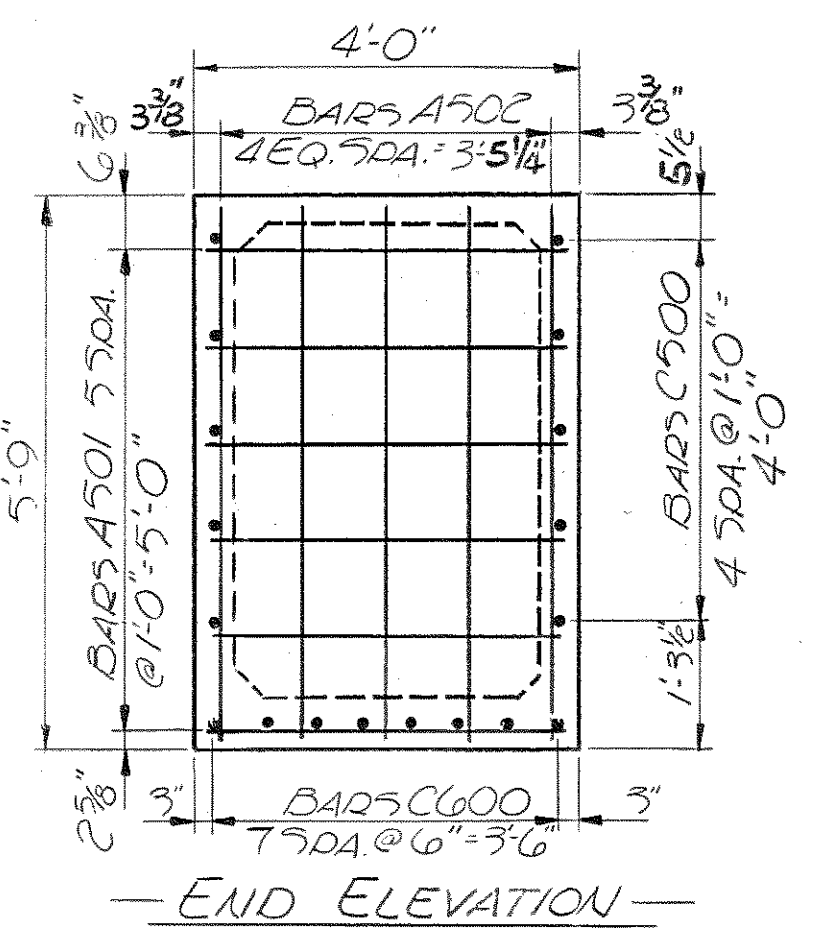
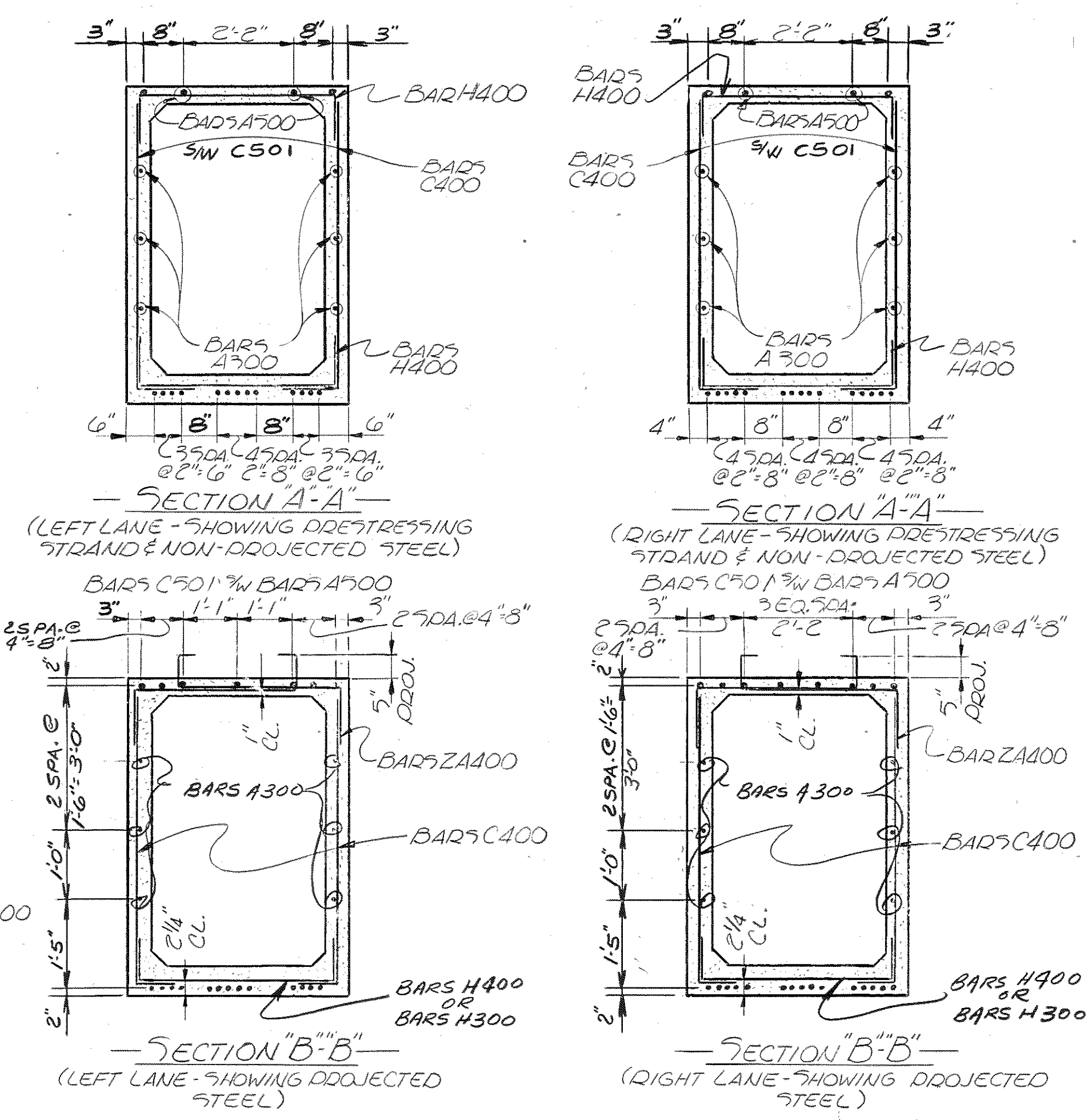
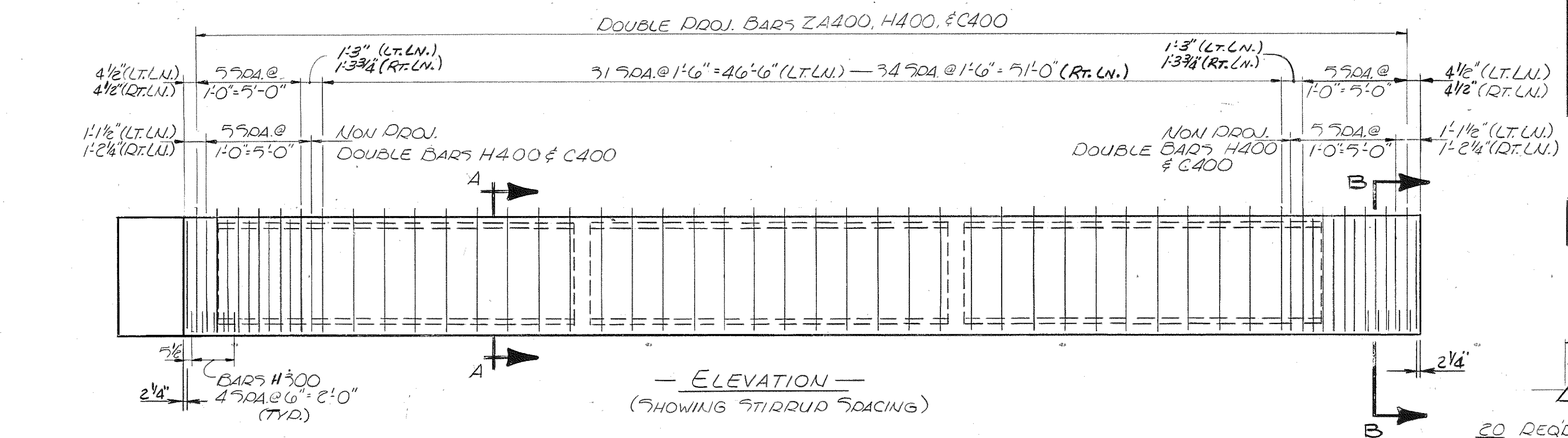
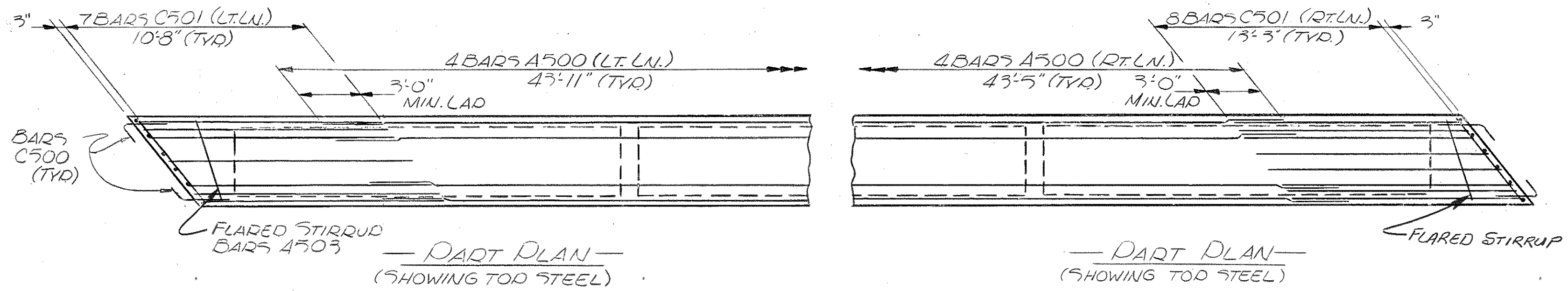
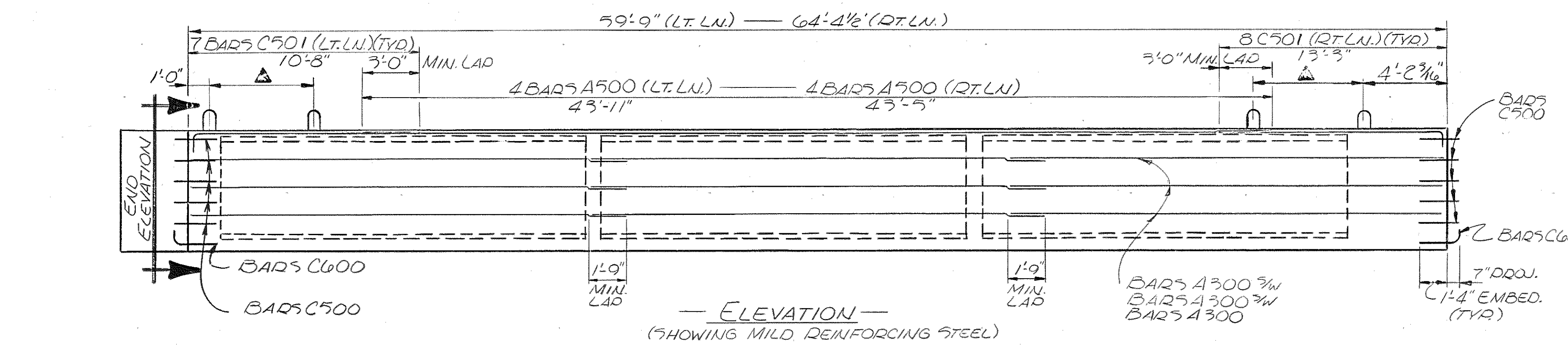
NOTE: COST OF ELASTOMERIC PADS, AND 60 DOWEL BARS, AND RUBBER BONDING CEMENT TO BE INCLUDED IN THE COST OF PRESTRESSED BEAM.

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
PRESTRESSED BOX BEAM
 SPAN NO. 2, LEFT AND RIGHT LANES
 INTERSTATE 440 OVER
 L & N RAILROAD
 STATION 128+78.31
 DAVIDSON COUNTY
 1983
 CORRECT *Colleen L. Forewell*
 ENGINEER OF STRUCTURES
 APPROVED *Louis Evans*
 DIRECTOR OF HIGHWAYS

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	4-21-83	HVB	REVISED ANGLE & STEEL QTS.



▲: DENOTES 3/4" Ø LIFTING STRAP
 2 TO 4 PRESTRESSING STRANDS
 LENGTH TO BE DETERMINE BY FABRICATOR



BILL OF STEEL - DEQ BEAM

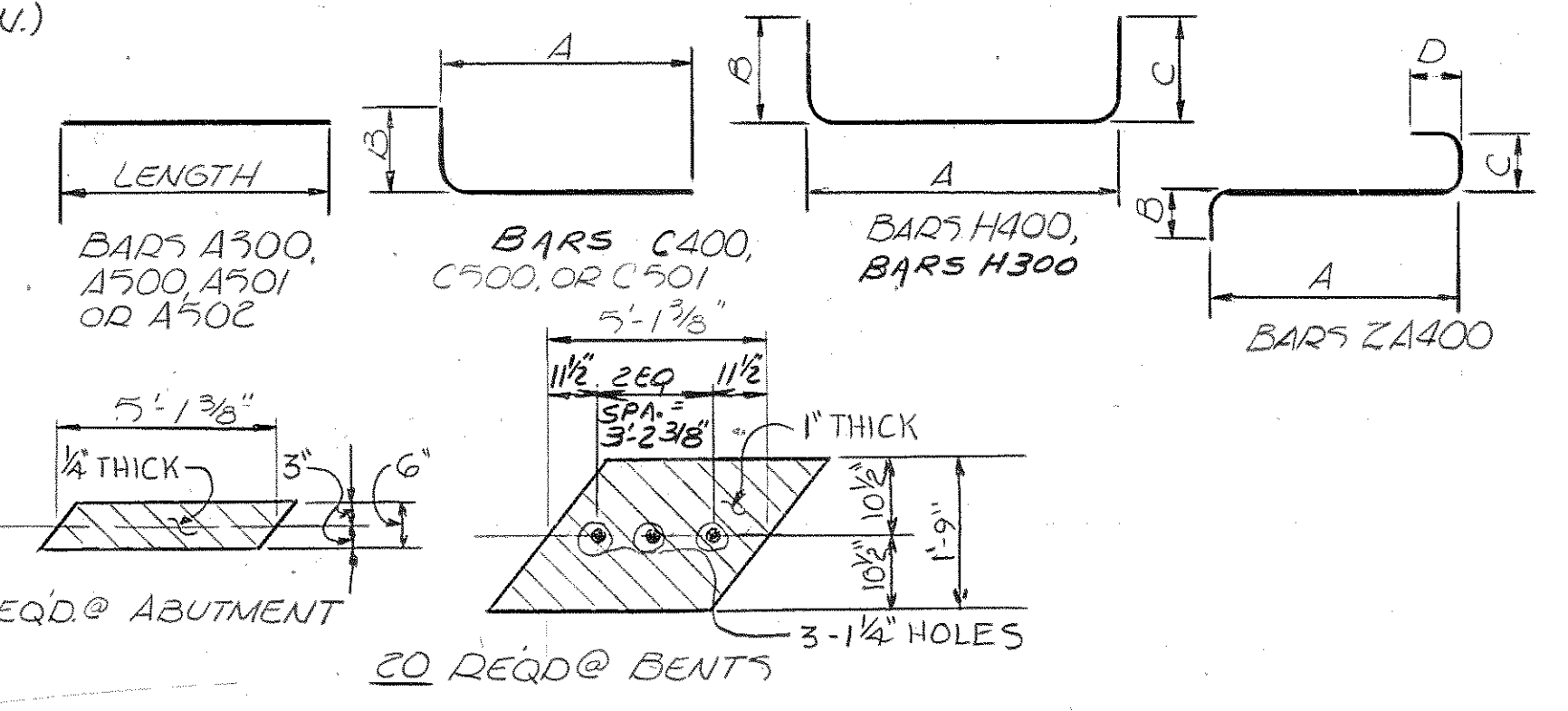
LEFT LANE					RIGHT LANE				
BAR	SIZE	NO. REQD.	BENDING DIMENSIONS	LENGTH	BAR	SIZE	NO. REQD.	BENDING DIMENSIONS	LENGTH
			A B C D					A B C D	
A300	3	18		20'-8"	A300	3	18		22'-3"
A500	3	4		43'-11"	A500	3	4		43'-5"
A700	5	12		4'-3"	A700	5	12		4'-3"
A502	5	10		5'-5"	A502	5	10		5'-5"
H300	3	10	3 7/8" 1'-0"	5'-7"	H300	3	10	3 7/8" 1'-0"	5'-7"
C400	4	112	5'-5" 6"	5'-11"	C400	4	118	5'-5" 6"	5'-11"
C500	5	20	1'-11" 1'-0"	2'-8"	C500	5	20	1'-11" 1'-0"	2'-8"
C501	5	14	10" 10"	11'-5"	C501	5	16	13" 10"	14'-0"
C600	6	16	1'-11" 1'-0"	2'-8"	C600	6	16	1'-11" 1'-0"	2'-8"
H400	4	68	3 7/8" 1'-0"	5'-7"	H400	4	71	3 7/8" 1'-0"	5'-7"
Z4400	4	88	2'-10" 1'-0" 7 1/2" 4"	4'-8"	Z4400	4	94	2'-10" 1'-0" 7 1/2" 4"	4'-8"

ESTIMATED QUANTITIES - PER BEAM

ITEM	No. REQD.	CLASS 'A' CONCRETE	REINFORCING STEEL	PRESTRESSING STEEL
BEAM		C.Y.	LB'S.	LB'S.
LEFT LANE	5	20.9	1,711	411
RIGHT LANE	5	22.2	1,840	511

NOTE: COST OF ELASTOMERIC PAD, 30 DOWEL BARS AND RUBBER BONDING CEMENT TO BE INCLUDED IN THE COST OF PRESTRESSED BEAM.

NOTE: FOR GENERAL NOTES SEE DWG. NO. M-110-123.



— ELASTOMERIC BEARING PADS —

DESIGNED BY MIBK BLAHD DATE 11-82
 DRAWN BY PEGGY JACKSON DATE 11-82
 SUPERVISED BY HUB RLN DATE 11-82
 CHECKED BY OUBS & BLAHD DATE

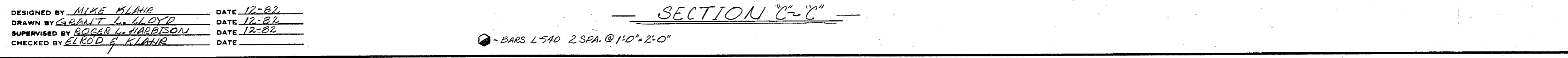
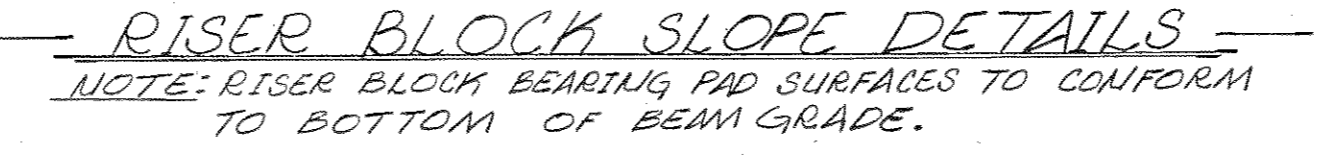
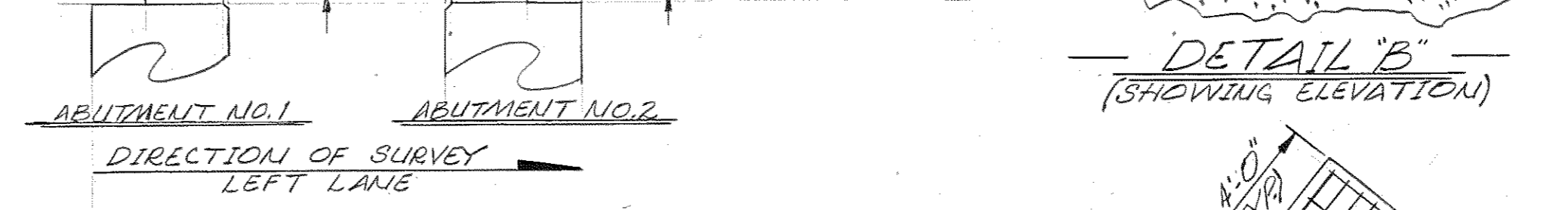
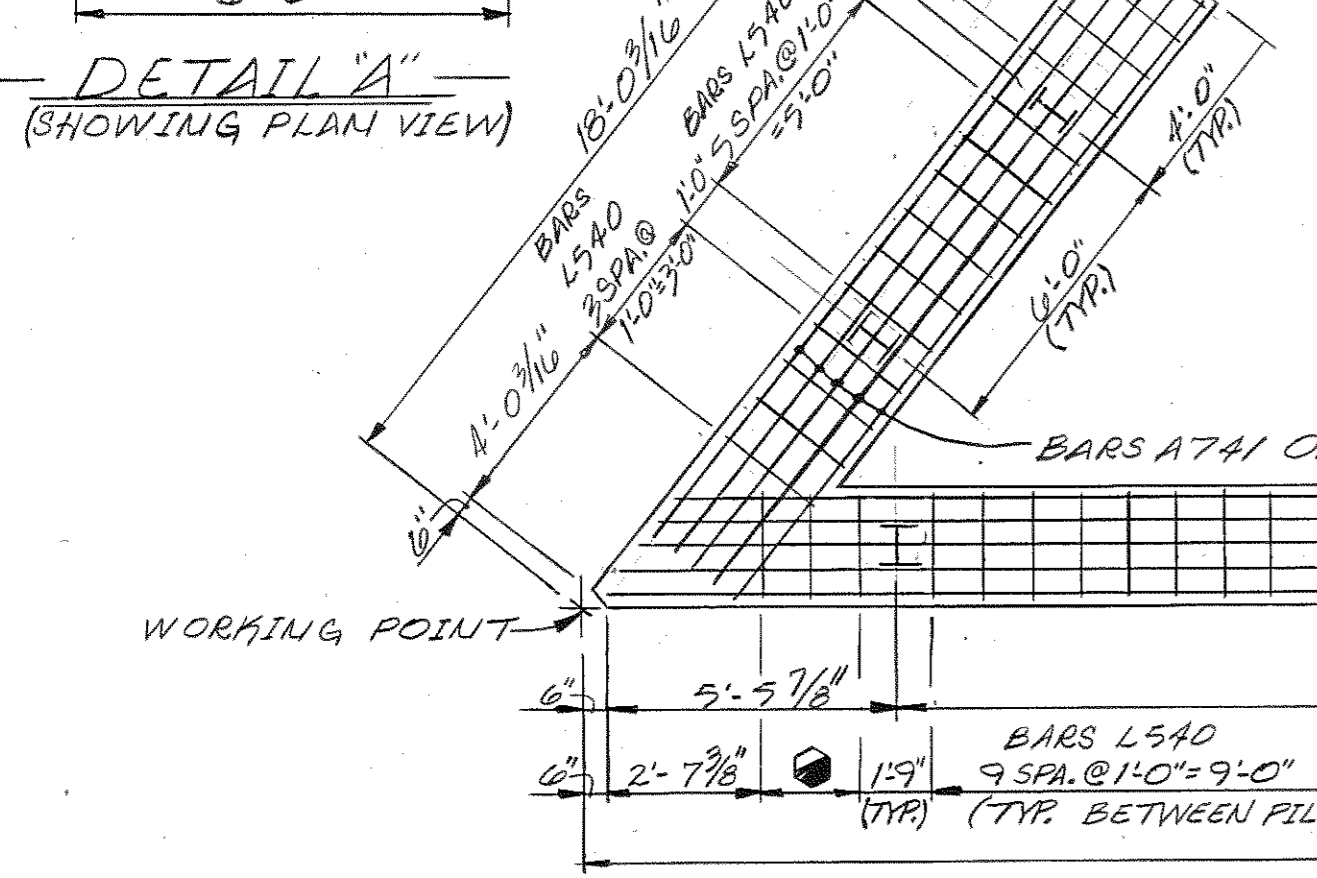
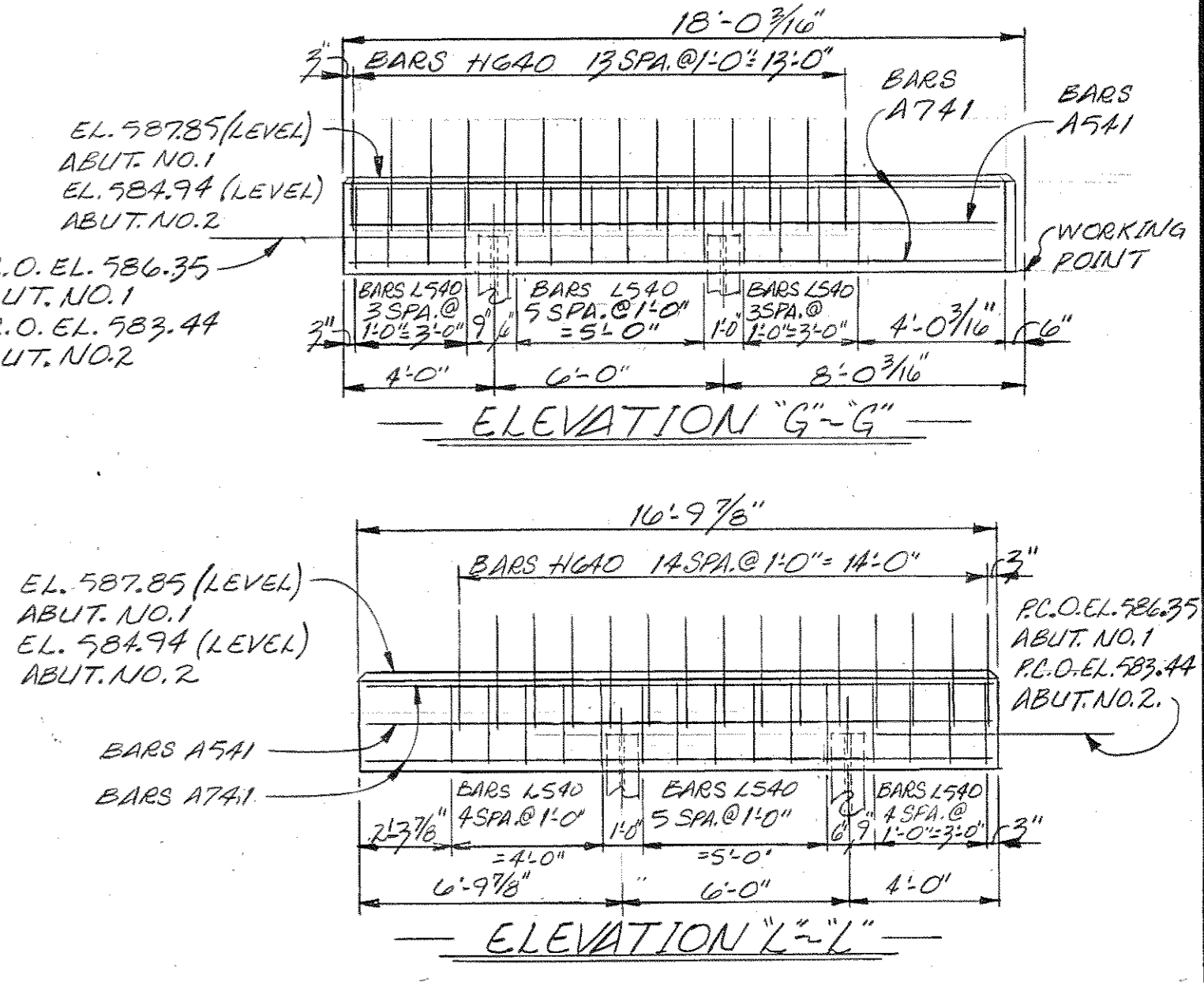
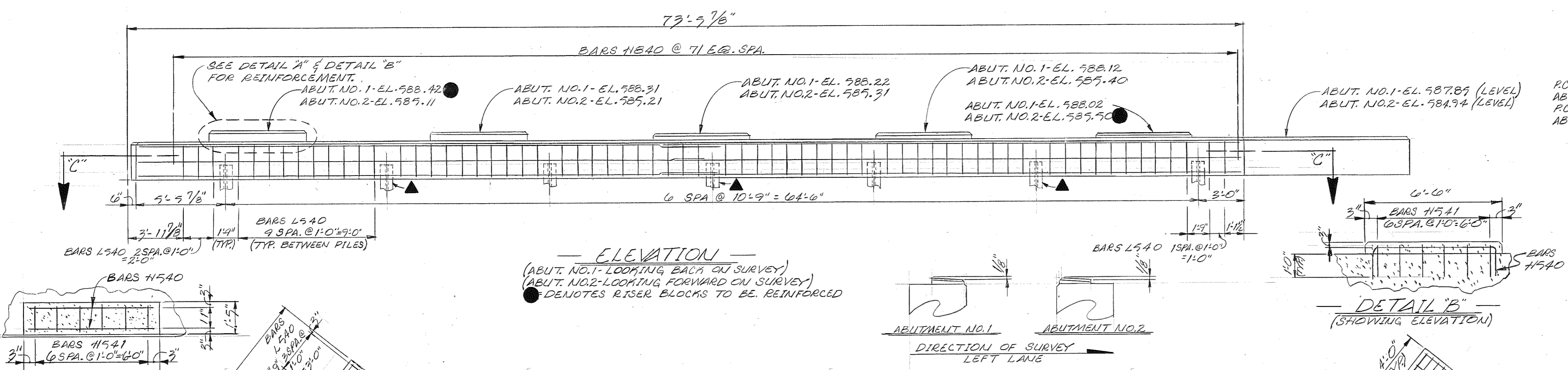
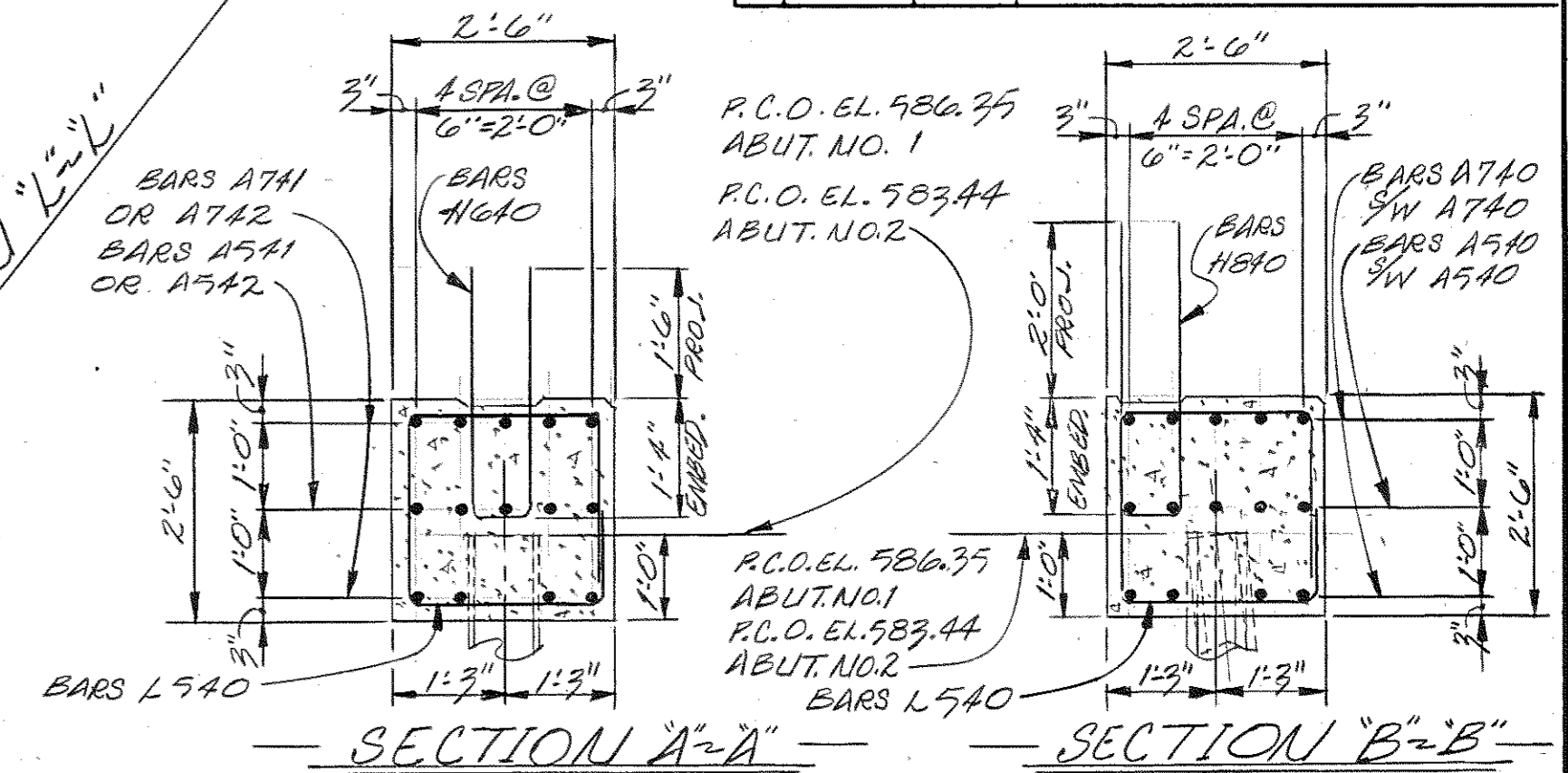
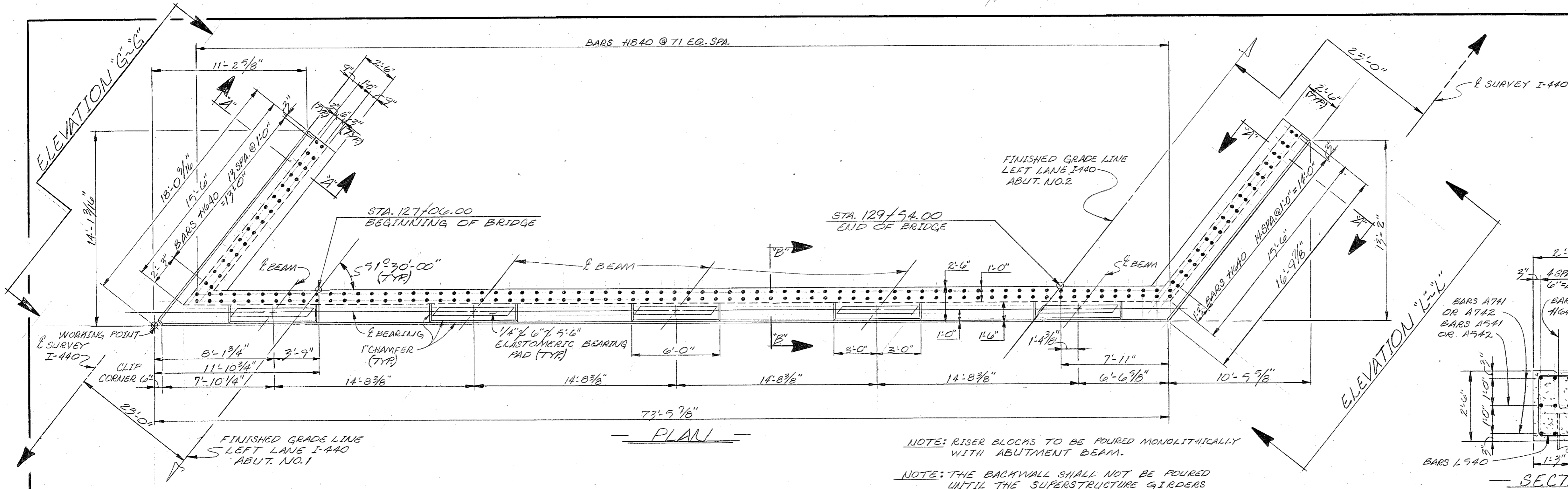
STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

PRESTRESSED BOX BEAM
 SPAN NO. 3 LEFT AND RIGHT LANES
 INTERSTATE 440 OVER
 L&N. RAILROAD
 STA. 128+78.31
 DAVIDSON COUNTY
 1983

CORRECT
 Engineer of Structures
 APPROVED *William L. Foveal*
 DIRECTOR OF HIGHWAYS

PROJECT NO.	YEAR	SHEET NO.
T-440-945320a	1983	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	6-5-83	MK	GENERAL



ESTIMATED QUANTITIES

Item	CLASS "A" CONCRETE C.Y.	REINFORCING STEEL LBS.
ABUTMENT NO. 1	23.6	5,266
ABUTMENT NO. 2	23.6	5,266

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 ABUTMENTS NO. 1 and 2
 LEFT LANE
 INTERSTATE 440 Over L&N. RAILROAD
 STATION: 128+78.31
 DAVIDSON COUNTY
 1983

DESIGNED BY MIKE MLINA
 DRAWN BY GLENN L. LLOYD
 SUPERVISED BY ROGER L. HARBISON
 CHECKED BY ELROD S. KILMER

DATE 12-82
 DATE 12-82
 DATE 12-82
 DATE

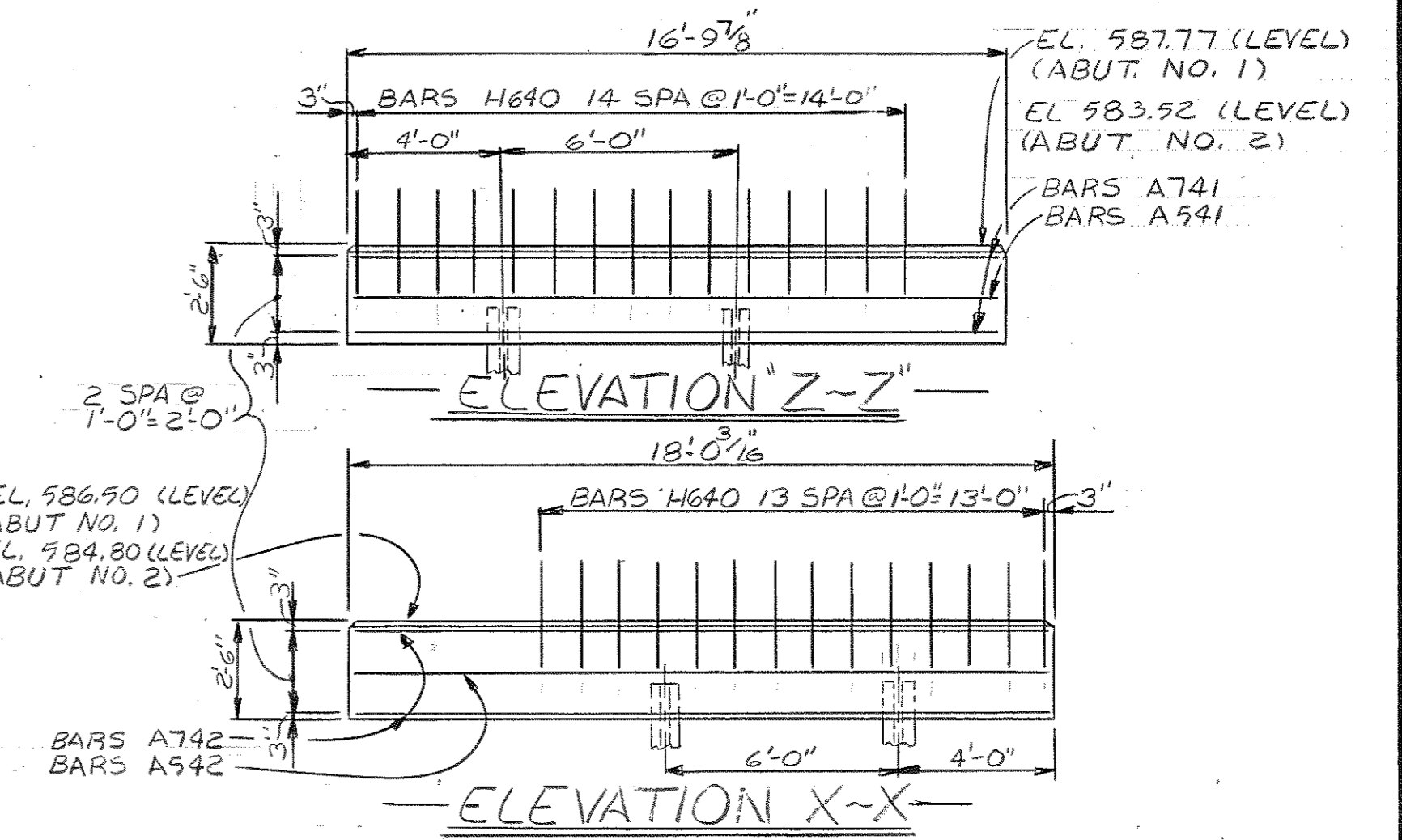
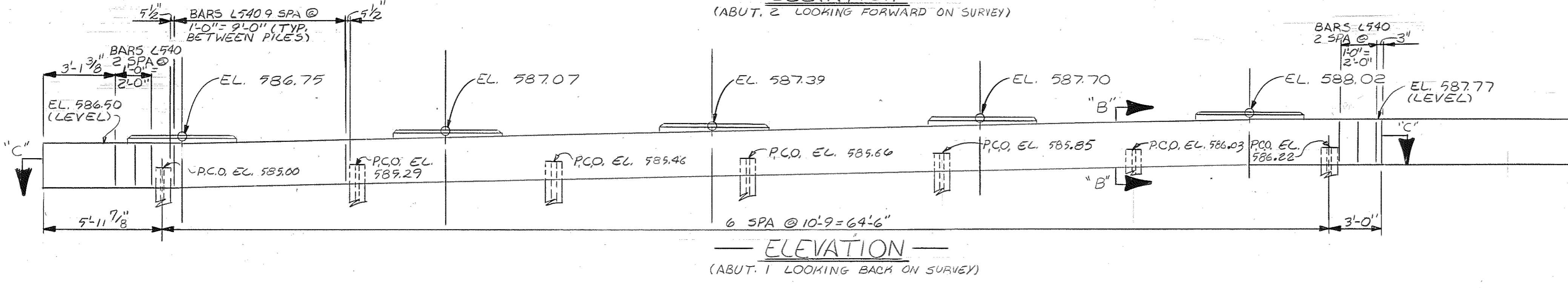
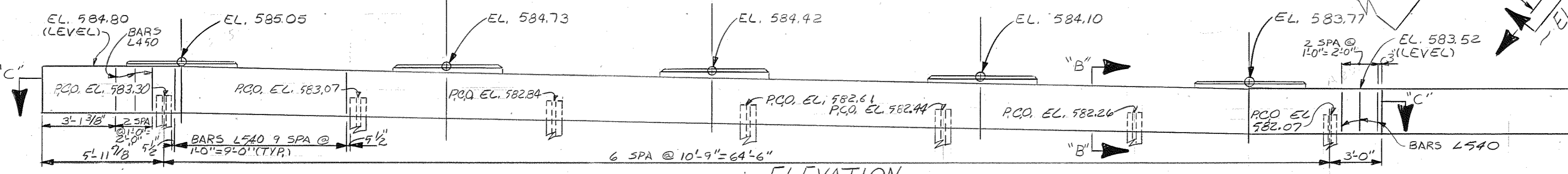
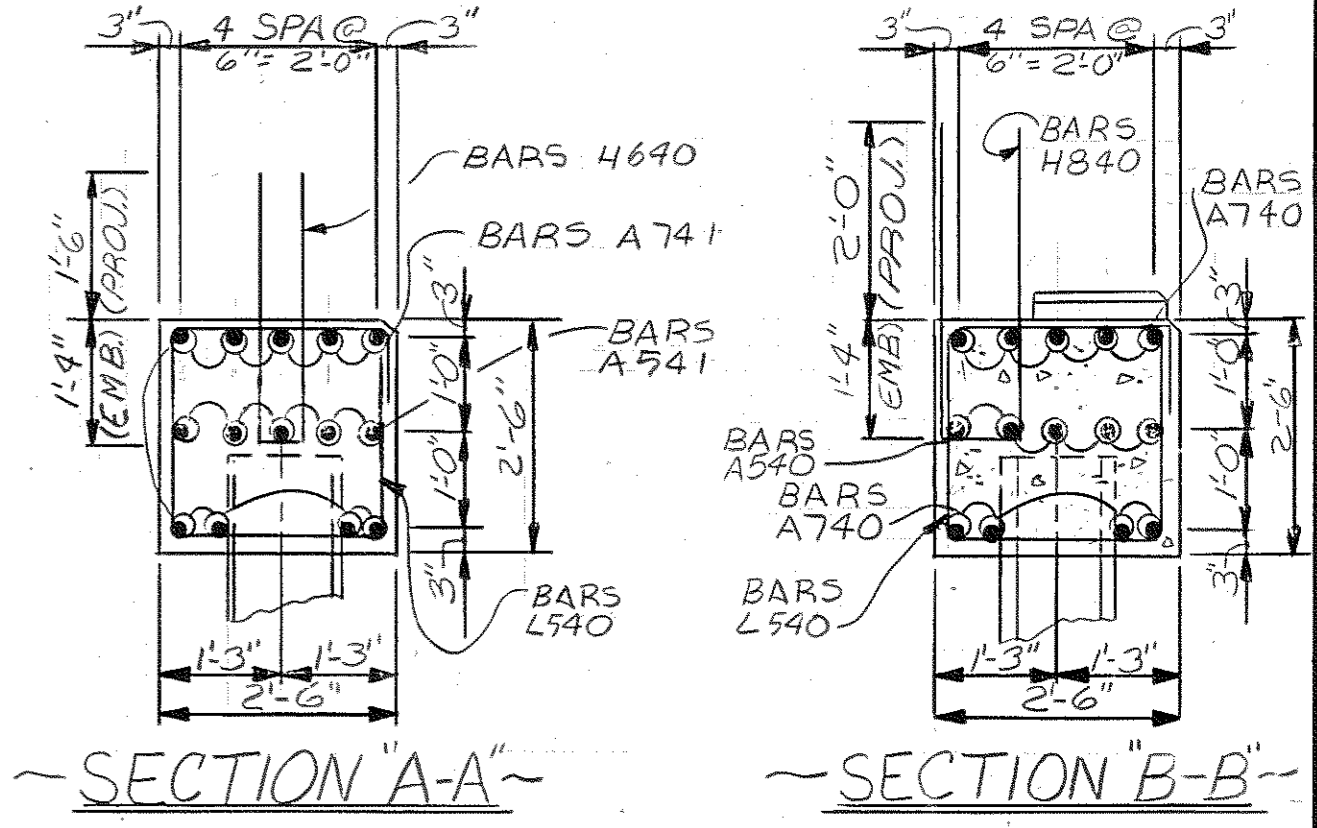
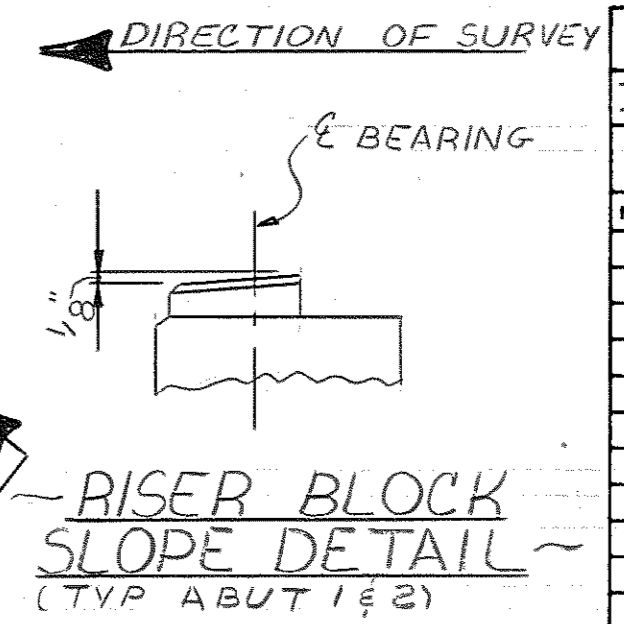
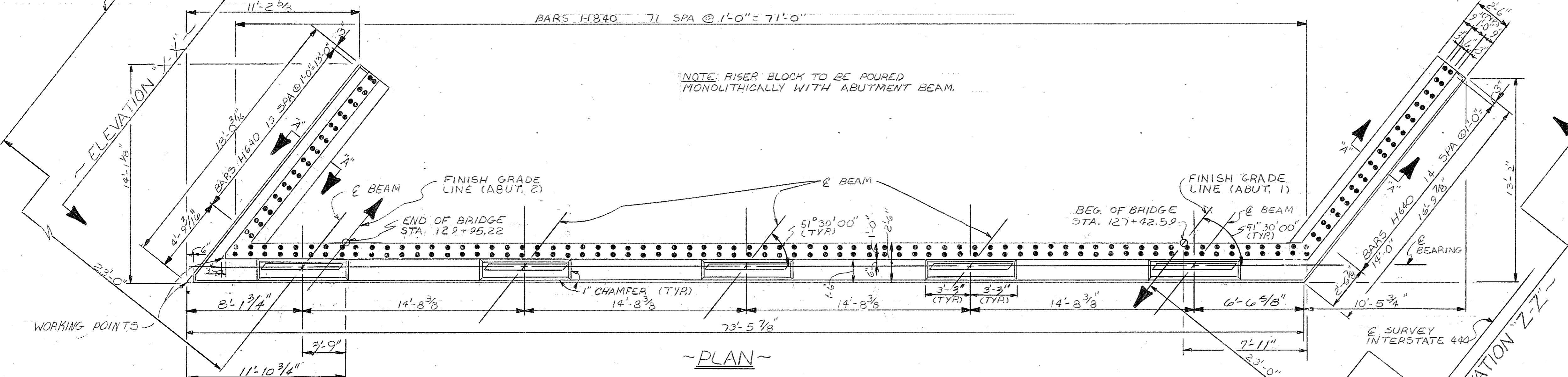
CORRECT *Glenn L. Lloyd*
 ENGINEER OF STRUCTURES
 APPROVED *James E. Evans*
 DIRECTOR OF HIGHWAYS

C SURVEY INTERSTATE 440

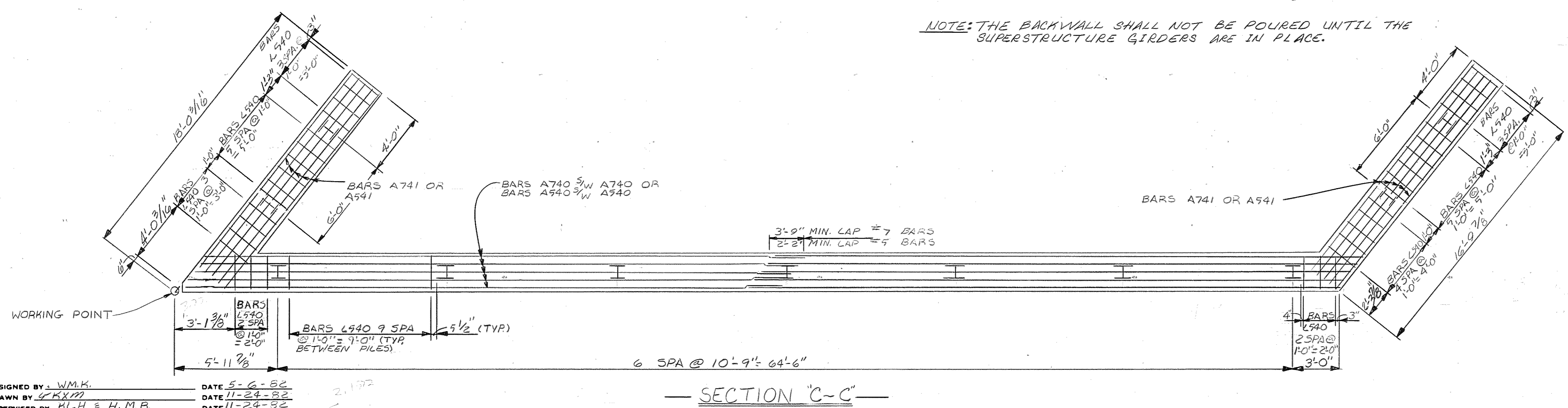
RISE BLOCK BEARING PAD SURFACES TO CONFORM TO BOTTOM OF BEAM GRADE.

Const. No. 19014-3111-44

PROJECT NO.	YEAR	SHEET NO.	
I440-4(53)200	1983		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	6-15-83	MK	GENERAL



NOTE: THE BACKWALL SHALL NOT BE POURED UNTIL THE SUPERSTRUCTURE GIRDERS ARE IN PLACE.



ESTIMATED QUANTITIES

ITEM	CLASS 'A' CONCRETE C.Y.	STEEL BAR REINFORCEMENT LBS.
ABUT. 1	23.6	5,189
ABUT. 2	23.6	5,189

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 ABUTMENTS 1 AND 2 (RIGHT LANE)
 INTERSTATE 440
 OVER L & N RAILROAD
 STATION 128+78.31
 DAVIDSON COUNTY
 1983

DESIGNED BY W.M.K.
 DRAWN BY K.M.M.
 SUPERVISED BY H.M.B.
 CHECKED BY E.R.D. & K.L.A.H.R.
 DATE 5-6-83
 DATE 11-24-82
 DATE 11-24-82
 DATE

CORRECT *William S. Howell*
 ENGINEER OF STRUCTURES
 APPROVED *Leslie B. Brown*
 DIRECTOR OF HIGHWAYS

M-110-127

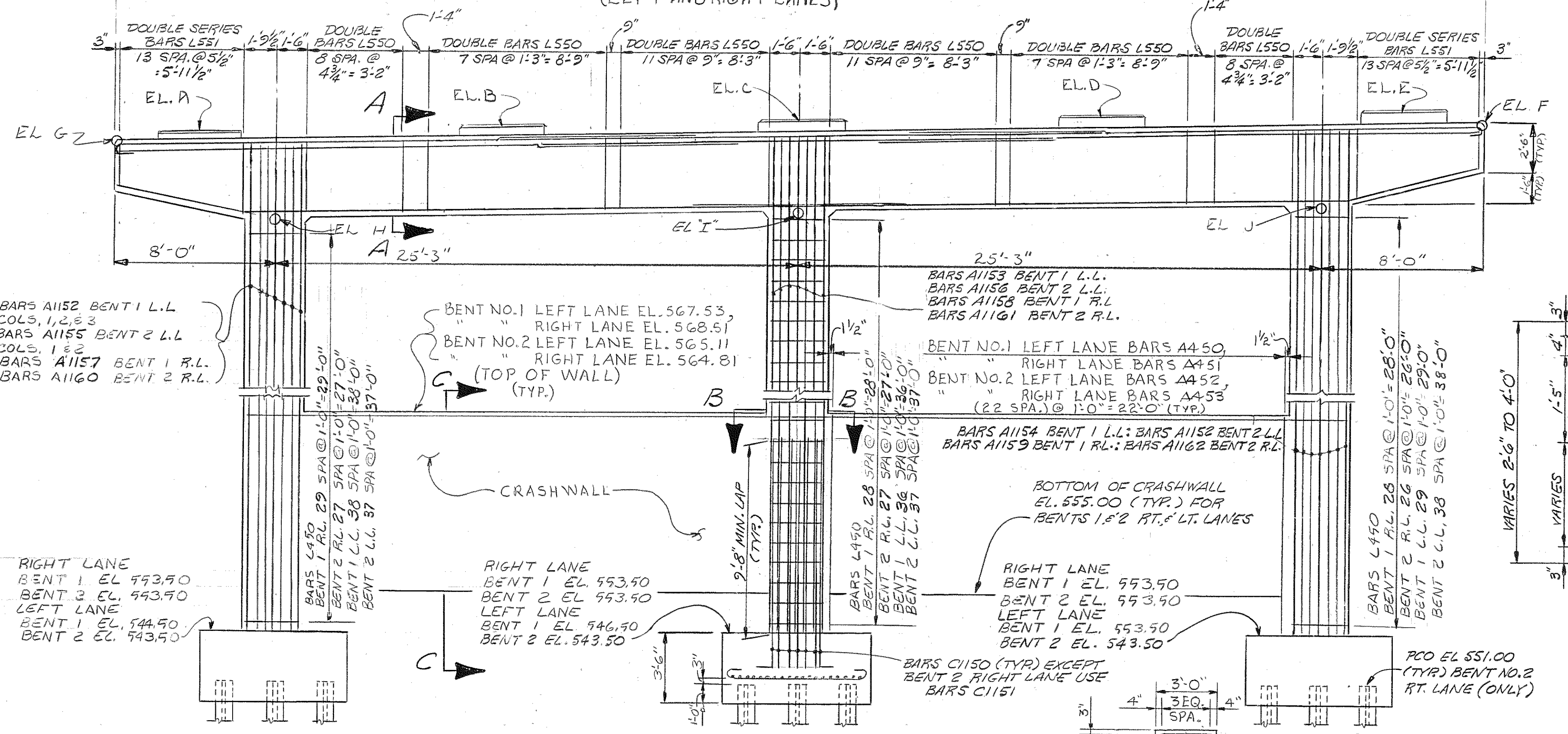
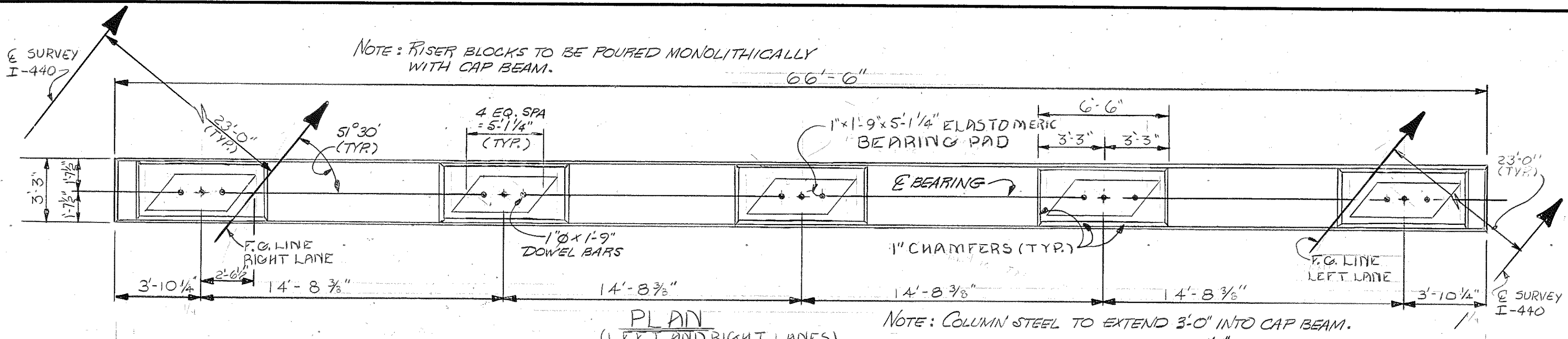
Const. No. 19014-3111-44

PROJECT NO.	YEAR	SHEET NO.
1440-4(53)206	1983	

REVISIONS				
NO.	DATE	BY	ADDED	BRIEF DESCRIPTION
1	2/18/83	W.M.K.		ADDED CRASHWALL
2	6/15/83	W.M.K.		GENERAL
3	1/24/83	W.M.K.		STEEL QUANTITIES

TABLE OF ELEVATIONS (CONT)

LEFT LN	F	G	H	I	J
BENT 1	587.38	586.79	583.04	583.19	583.33
BENT 2	586.14	585.62	581.68	581.88	582.08
RT. LN.	F	G	H	I	J
BENT 1	585.71	586.98	582.83	582.35	581.86
BENT 2	584.35	585.62	581.47	580.99	580.50



NOTE: WHEN POURING CAP BEAM, PROVISIONS SHALL BE MADE FOR SETTING DOWEL BARS. IF THE CONTRACTOR ELECTS TO DRILL THE HOLES FOR THE DOWEL BARS THE REINFORCING STEEL SHALL BE PLACED SO AS NOT TO INTERFERE WITH DRILLING.

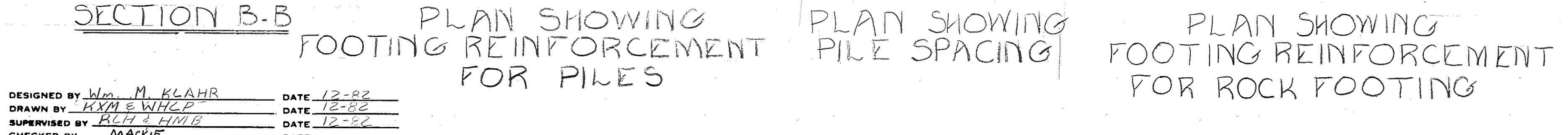
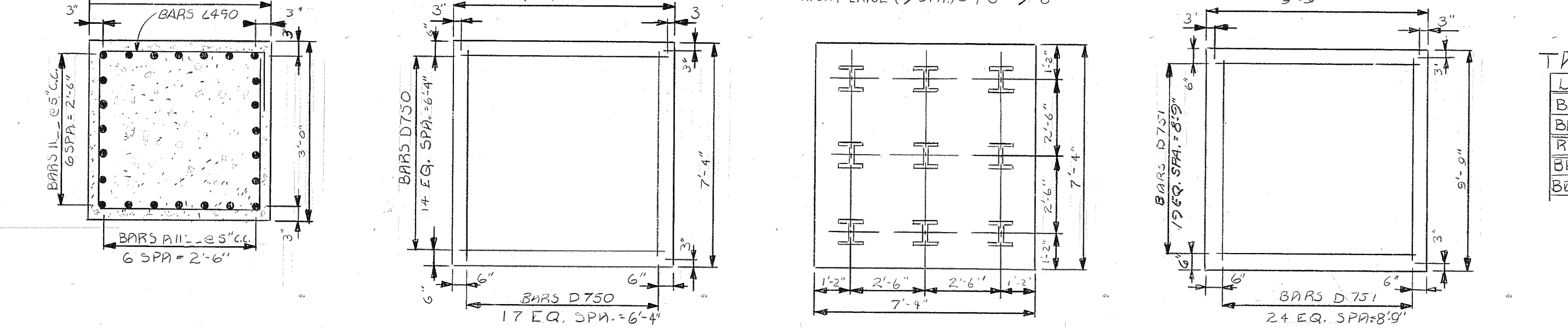
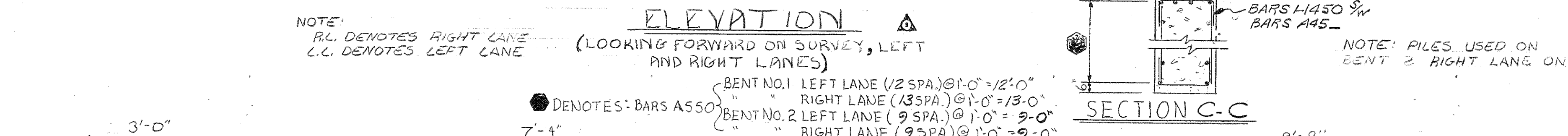
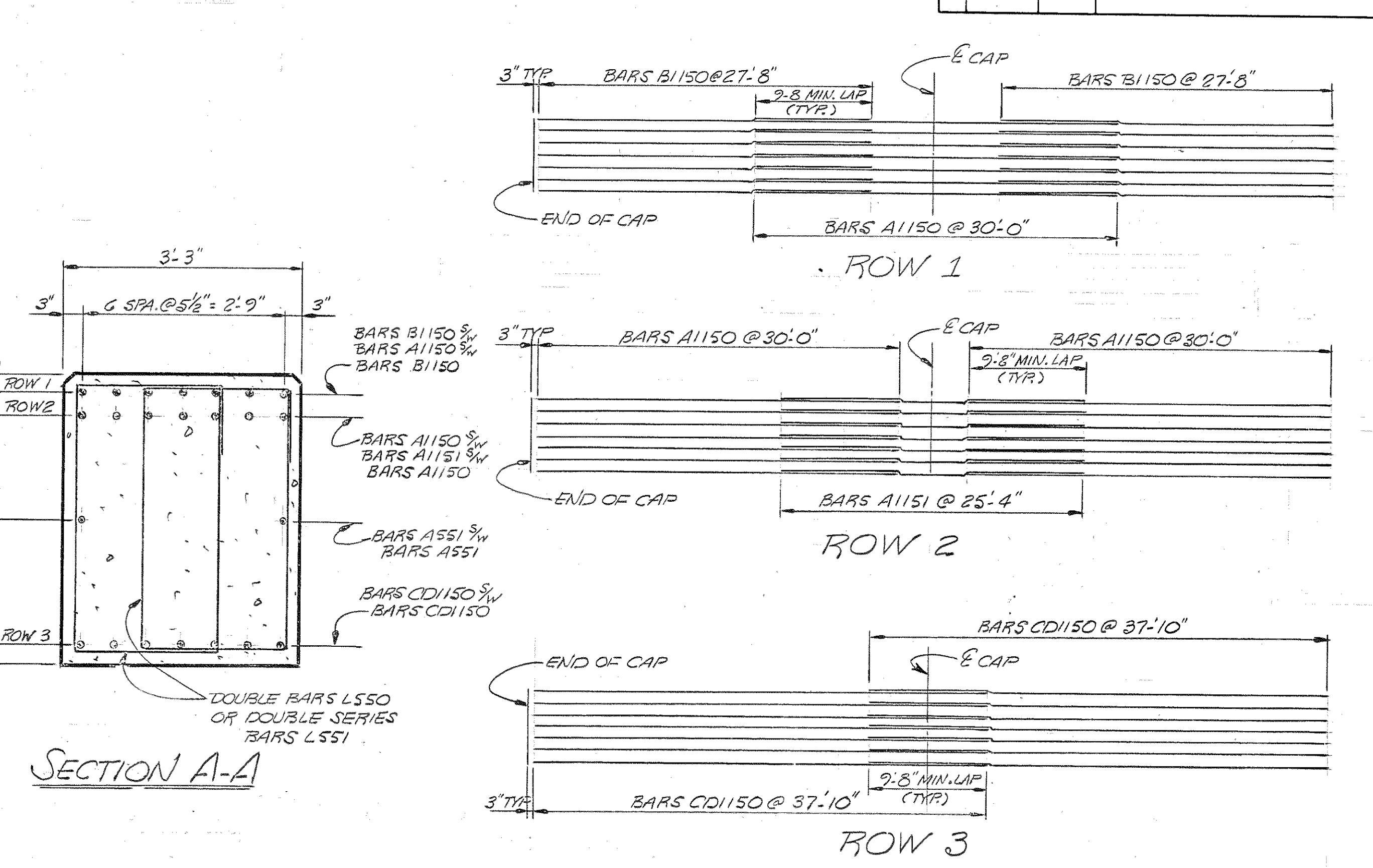


TABLE OF ELEVATIONS

LEFT LN	A	B	C	D	E
BENT 1	587.16	587.26	587.36	587.46	587.55
BENT 2	585.79	585.89	585.99	586.09	586.19
RT. LN.	A	B	C	D	E
BENT 1	587.15	586.84	586.52	586.20	583.88
BENT 2	583.79	583.47	583.15	584.84	584.52

ESTIMATED QUANTITIES

LANE	ITEM	CLASS 'A' CONCRETE (C.Y.)	REINFORCING STEEL LBS.
RIGHT	BENT 1	164.1	34,830
LANE	BENT 2	128.4	32,584
LEFT	BENT 1	165.2	37,923
LANE	BENT 2	156.8	33,072

DESIGNED BY W.M. KLAHR DATE 12-82
 DRAWN BY K.M. WHCP DATE 12-82
 SUPERVISED BY R.H. HMB DATE 12-82
 CHECKED BY MACKIE DATE

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 BENTS NO. 1 AND 2
 LEFT AND RIGHT LANES
 INTERSTATE 440 OVER
 W. AND N. RAILROAD
 STATION 128+73.31
 DAVIDSON COUNTY
 1983
 CORRECT *William L. Lamm*
 ENGINEER OF STRUCTURES
 APPROVED *Leona S. ...*
 DIRECTOR OF HIGHWAYS

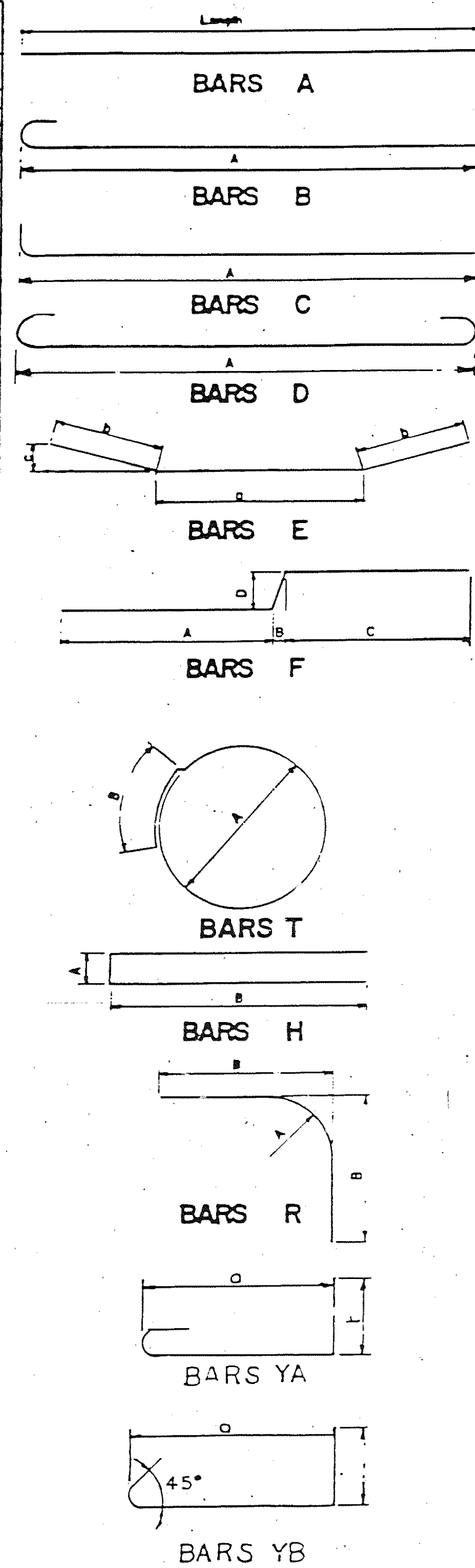
Table with columns for DISTRICT, STATE, PROJ. NO., FISCAL YEAR, SHEET NO., TOTAL SHEETS

BILL OF STEEL

RIGHT LANE

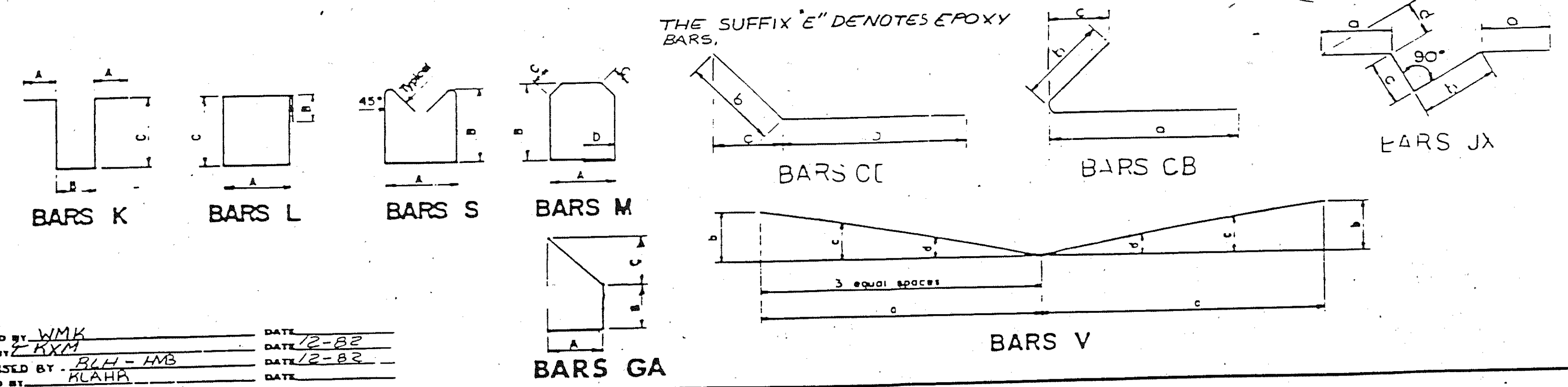
LEFT LANE

Main table for Right Lane containing columns for Bar, Location, Size, No. Bars, Bending Dimensions, Length, and various structural components like SUPERSTRUCTURE, BENT NUMBER 1, BENT NUMBER 2, PAVEMENT @ BRIDGE ENDS, and ABUTMENTS 1 & 2.



Main table for Left Lane containing columns for Bar, Location, Size, No. Bars, Bending Dimensions, Length, and various structural components like SUPERSTRUCTURE, BENT NUMBER 1, BENT NUMBER 2, PAVEMENT @ BRIDGE ENDS, and ABUTMENTS 1 & 2.

THE SUFFIX "E" DENOTES EPOXY BARS.



REINFORCING STEEL CODE

Table with columns for Type, Size, Series

NOTE: Dimensions shown on this sheet are furnished to outside of Bar. Standard C.R.S. hook details shall apply, except as noted.

Table with columns for NO., DATE, BY, BRIEF DESCRIPTION (REVISIONS)

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAYS

BILL OF STEEL INTERSTATE 440 OVER L AND N RAILROAD STATION 128+78.31 DAVIDSON COUNTY 19 83

Signature and approval information: CORRECTED BY, APPROVED BY