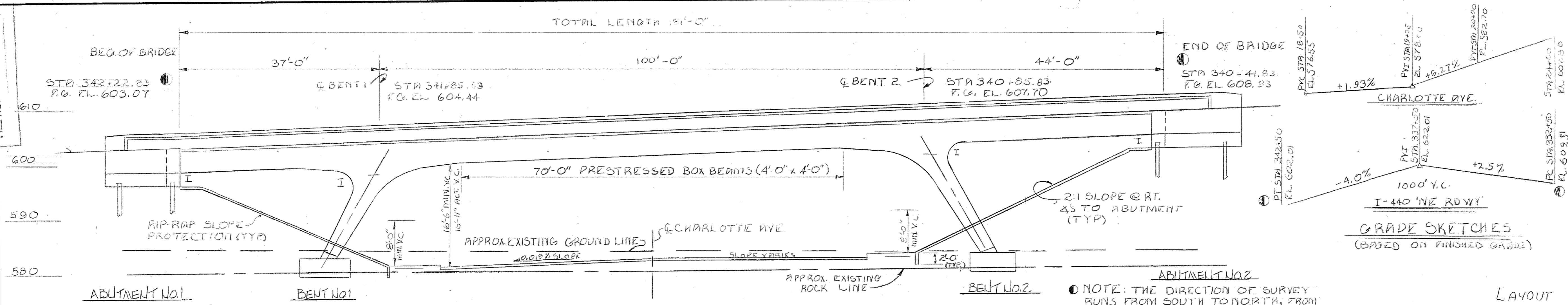
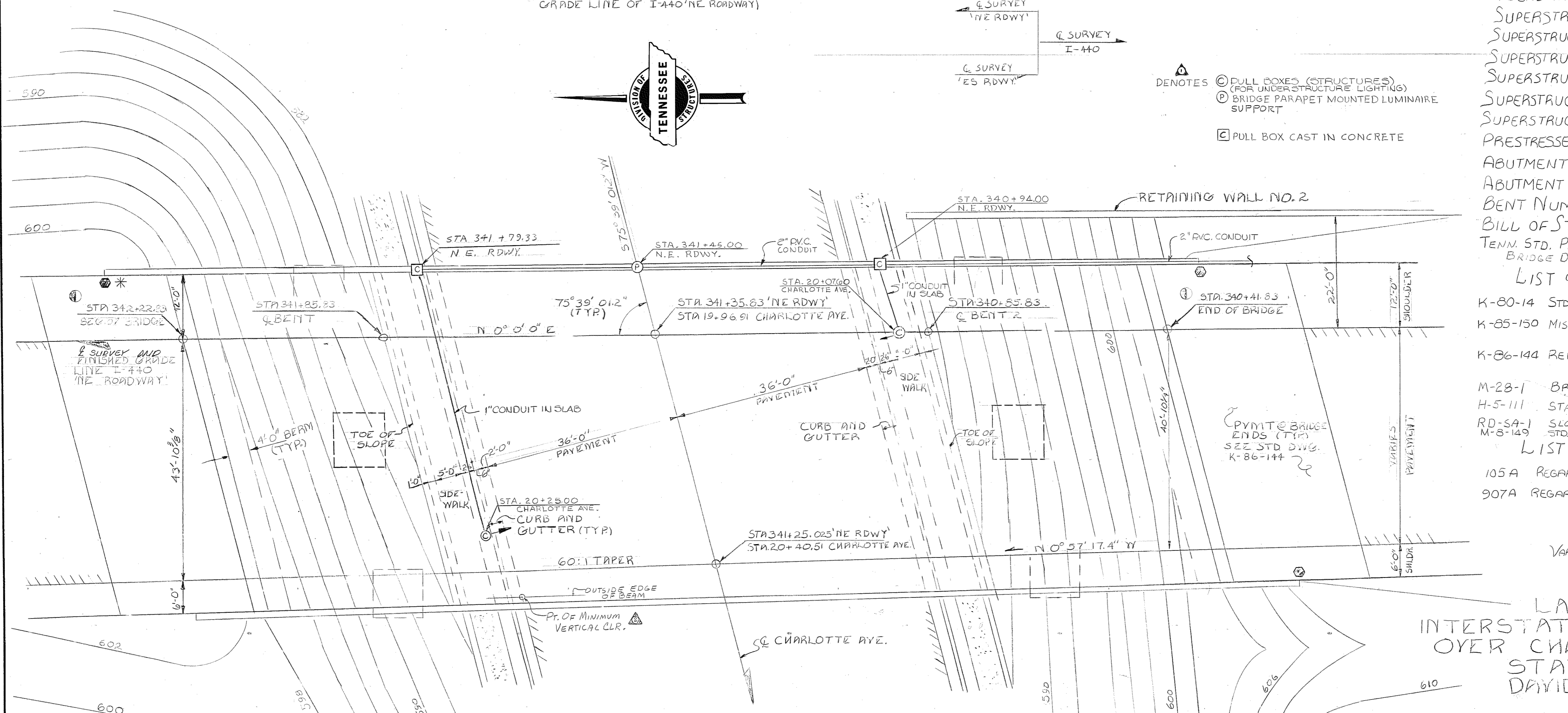
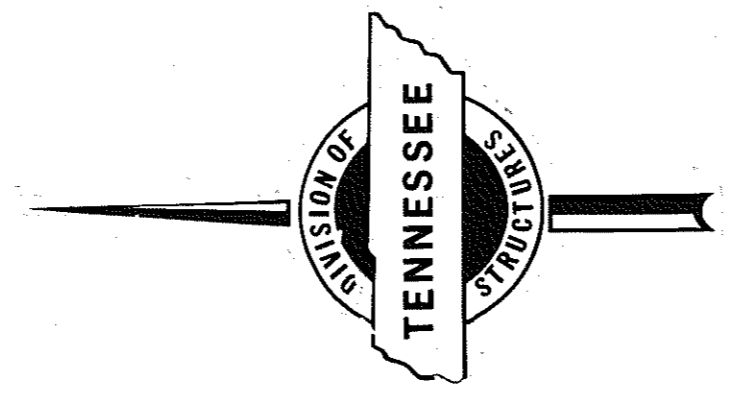


PROJECT NO.	YEAR	SHEET NO.
T440-4(53)206	1983	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1		HMB	ADDED LIGHTING
2	6-28-83	JHW	PR. OF MIN. VERT. CLR.



ELEVATION
(AT RIGHT ANGLES TO FINISHED GRADE LINE OF I-440 'NE RDWY')



PLAN

⊙ DENOTES GUARDRAIL ATTACHMENT Req'd.
* DENOTES BRIDGE DRAINS

GRADE SKETCHES
(BASED ON FINISHED GRADE)

LIST OF DRAWINGS

DRWG. NO.	REVISION DATE
LAYOUT	M-110-87
GENERAL NOTES AND ESTIMATED QUANTITIES	M-110-88
FOUNDATION DATA	M-110-89
SUPERSTRUCTURE	M-110-90
SUPERSTRUCTURE DETAILS	M-110-91
SUPERSTRUCTURE DETAILS	M-110-92
SUPERSTRUCTURE DETAILS	M-110-93
SUPERSTRUCTURE DETAILS	M-110-94
SUPERSTRUCTURE DETAILS	M-110-94A
PRESTRESSED BOX BEAM	M-110-95
ABUTMENT NUMBER 1	M-110-96
ABUTMENT NUMBER 2	M-110-97
BENT NUMBERS 1+2	M-110-98
BILL OF STEEL	M-110-99
TENN. STD. PRECAST PRESTRESSED BRIDGE DECK PANELS	M-103-149 & 150

LIST OF STANDARD DRAWINGS

K-80-14	STD. REINFORCING BAR SUPPORT DETAILS	8-27-76
K-85-150	MISCELLANEOUS ABUTMENT AND DRAINAGE DETAILS	1-9-75
K-86-144	REINFORCED CONCRETE PAVEMENT AT BRIDGE ENDS	7-17-81
M-28-1	BRIDGE RAILING CONCRETE PARAPET	7-17-81
H-5-111	STANDARD PILE DETAILS	11-12-82
RD-SA-1	SLOPE PROTECTION	1-11-82
M-8-149	STD. DRG. LIGHT STD. SUPPORT DETAILS	11-20-75

LIST OF SPECIAL PROVISIONS

105A	REGARDING APPROVAL OF SHOP DRAWINGS	9-3-81
907A	REGARDING EPOXY COATED REINFORCING STEEL	9-8-81

VARIABLE ROADWAY - 58'-10 1/4" TO 61'-10 3/8"

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

LAYOUT OF BRIDGE 1
INTERSTATE 440 N.E. ROADWAY
OVER CHARLOTTE AVENUE
STATION 341+35.83
DAVIDSON COUNTY
1983

CORRECT *Clifton L. Farwell*
ENGINEER OF STRUCTURES
APPROVED *Louis Brown*
DIRECTOR OF HIGHWAYS

M-110-87

DESIGNED BY H. WALKER DATE 8-82
DRAWN BY J. PURVIS DATE 12-82
SUPERVISED BY P. L. H. DATE 12-82
CHECKED BY H. WALKER DATE 12-82

CLASS. "A" GRADING "D" 16 C.Y.

PROJECT NO.	YEAR	SHEET NO.
I440-4(S3)206	1983	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	12-8-83	J.H.W.	SENT REINFORCING STEEL
2	1-7-84	H.W.	REVISED QUANTITIES & NOTE
3	12-13-83	H.W.	REVISED STEEL QUANTITY
4		HALL	ADDED LIGHTING

GENERAL NOTES

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

LOADING: HS 20-44 WITH ALTERNATE MILITARY.

DESIGN SPECIFICATIONS: AASHTO 1977 EDITION WITH ADDENDA

CONCRETE: TO BE CLASS "A" (CAST IN PLACE). F_c 3,000 psi.

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 4500 psi
 MINIMUM WATER/CEMENT 5.0 gal/SACK OF CEMENT
 AIR CONTENT 6% ± 2%
 PAYMENT WILL BE UNDER ITEM 604-01.12

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 40. 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.)

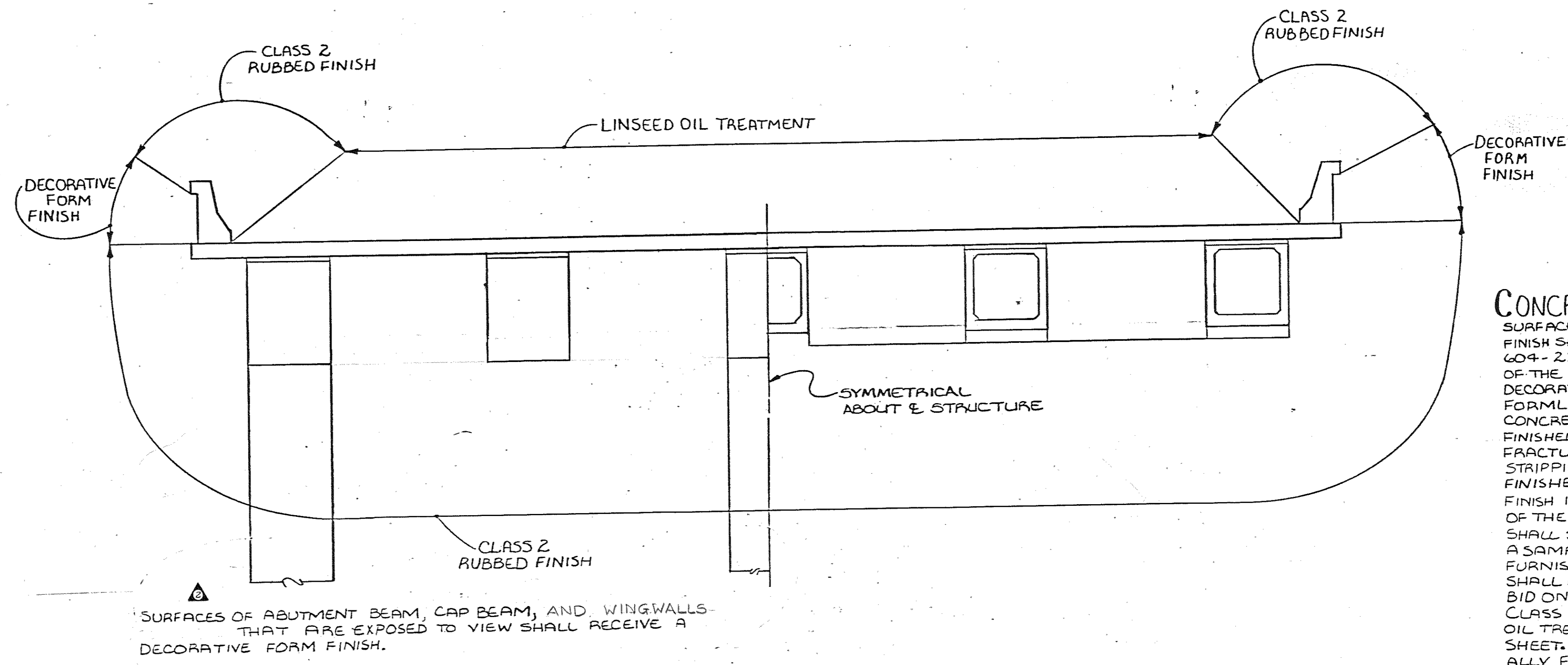
SPECIAL NOTE - FOOTING FOR BENTS: AFTER EXCAVATION TO ROCK FOR FOOTING HAS BEEN COMPLETED, HOLES 6' DEEP SHALL BE DRILLED AT POINTS DESIGNATED BY THE ENGINEER. FROM THE RESULTS OBTAINED, THE ENGINEER SHALL DETERMINE THE FINAL FOOTING ELEVATIONS. NO REINFORCING STEEL FOR BENT COLUMNS SHALL BE ORDERED UNTIL FINAL FOOTING ELEVATIONS HAVE BEEN DETERMINED.

NOTE - BENTS LOCATED IN THE TOE OF ABUTMENT FILL: 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 STANDARD DRAWING M-28-1.

SHOP DRAWINGS: SEE SPECIAL PROVISION NO. 105A.

PILES: TO BE HP 10X42 DRIVEN TO REFUSAL ON ROCK OR A MINIMUM BEARING OF 50 TONS FOR ABUTMENT 1 OR 55 TONS FOR ABUTMENT 2.



CONCRETE FINISHES: PORTIONS OF THE BRIDGE SURFACE DESIGNATED TO RECEIVE A CLASS 2 RUBBED FINISH SHALL BE FINISHED ACCORDING TO SUBSECTION 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 BG 308 CONCRETE HARF, LITHOTEX FORMLINER FRACTURED FINISHED GROOVED T-150, SYMONS 3/4" NARROW FRACTURED FIN 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. ESTIMATED QUANTITIES ARE BASED ON PLANS DIMENSIONS.

SURFACE FINISH SKETCH

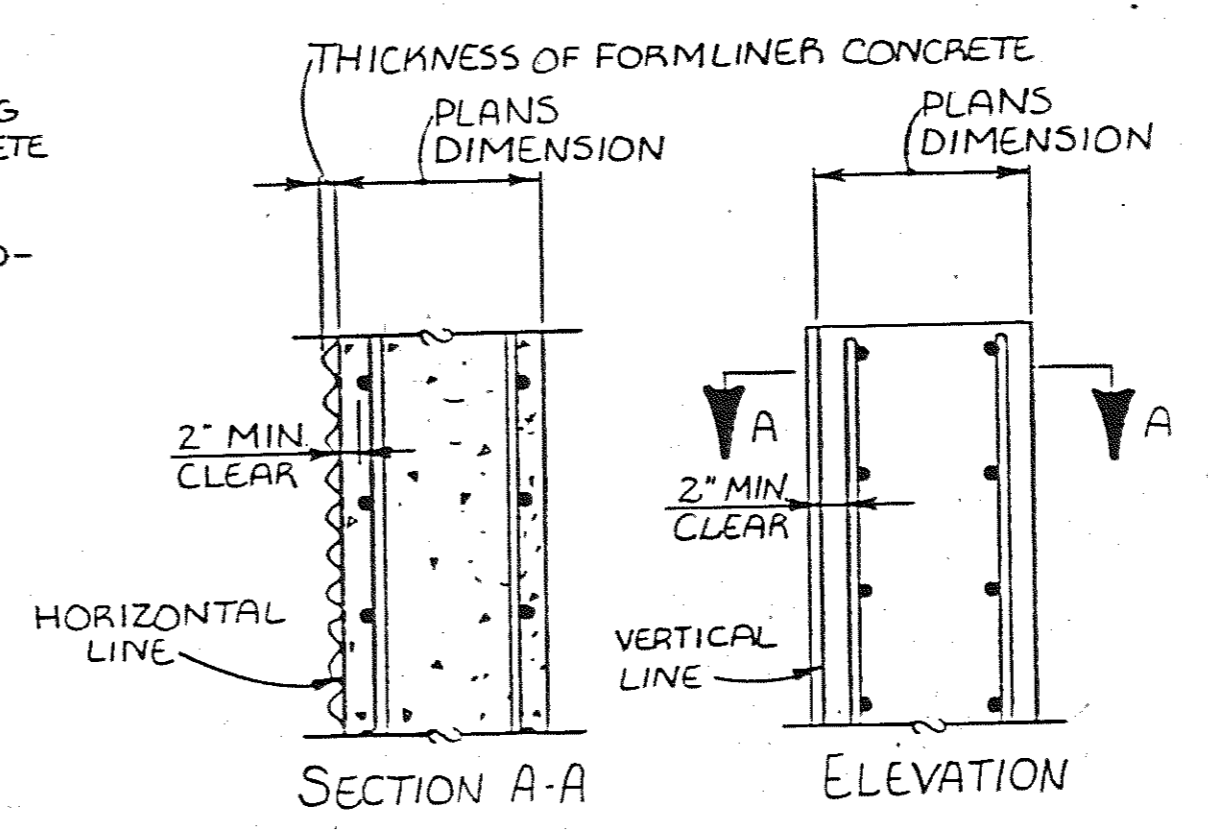
NOTE: MACHINED RIP-RAP FOR SLOPE PROTECTION SHALL BE 3" TO 6" IN SIZE AND MEET THE QUALITY REQUIREMENTS OF SUBSECTION 918-10 AND BE PAID FOR UNDER ITEM NO. 709-05.04.
 SEE STANDARD DWG. RD-SA-1.

ESTIMATED QUANTITIES

ITEM NUMBER	204-02.01	709-05.04	204-04.01	204-05	604-03.01	604-03.02	604-03.03	615-02.14	620-03	710-10	710-11	606-22.03	606-32.03	606-42.03	604-01.12	604-02.03	714-01.01
ITEM	DRY EXCAVATION (BRIDGES) C.Y.	MACHINED RIP-RAP (3 TO 6 IN.) C.Y.	ROCK EXCAVATION (BRIDGES) C.Y.	ROCK DRILLING (BRIDGES) LF.	CLASS "A" CONCRETE (BRIDGES) C.Y.	STEEL BAR REINFORCEMENT (BRIDGES) LBS.	LINSEED OIL TREATMENT S.Y.	PRESTRESSED CONCRETE BOX BEAM (.48" x .48") LF.	CONCRETE PARAPET LF.	6" PERFORATED C.M. PIPE (18 GA.) W/ POROUS BACKFILL LF.	6" C.M. PIPE UNDERDRAINS (18 GA.) LF.	STEEL PILES (10 INCH) (DRIVING) LF.	STEEL PILES (10 INCH) (FURNISH DOMESTIC) LF.	STEEL PILES (10 INCH) (FURNISH FOREIGN) LF.	CLASS "A" CONCRETE (BRIDGE DECK) C.Y.	EPOXY COATED REINFORCING STEEL LBS.	STRUCTURE LIGHTING (BRIDGE NO. 1) L.S.
SUPRASTRUCTURE					508.7	32,245	1,184	350	400	72	14	174	174	174	300.4	131,884	
ABUTMENT NO. 1	63	41			19.5	3,658											
BENT NO. 1	173		148	18	92.6	27,463											
BENT NO. 2	309		109	18	100.1	30,012				75	14	237	237	237		8,107	
ABUTMENT NO. 2	61	43			126.9	27,125	320										
PYMT @ BRIDGE ENDS								350	400	147	28	411	411	411	300.4	139,991	1
TOTAL	606	84	257	36	866.7	124,055	1,504	350	400	147	28	411	411	411	300.4	139,991	1

- ① EXCAVATION BASED ON LOWER ROAD PROFILE.
- ② NOTE: THE COST OF BITUMINOUS-FIBERBOARD, JOINTS, ETC., AND ALL MISCELLANEOUS JOINT MATERIAL TO BE INCLUDED IN BRIDGE ITEMS BID ON.
- ③ NOTE: COST OF POLYETHYLENE SHEETING AND ALL MISCELLANEOUS ITEMS NECESSARY FOR INSTALLATION TO BE INCLUDED IN COST OF PERFORATED C.M. PIPE.
- ④ NOTE: THE COST OF 1/2" THREADED STEEL INSEATS AND 1/2" 7/8" Ø x 4" HEX HEAD BOLTS, (A307), TO BE INCLUDED IN BRIDGE ITEMS BID ON.
- ⑤ ALL REINFORCING STEEL IN THE TRAFFIC FACE OF PARAPETS SHALL BE EPOXY COATED. COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 620-03.
- ⑥ NOTE: LUMP SUM FOR STRUCTURE LIGHTING TO INCLUDE THE INSTALLATION OF 155 LF OF 2" PVC CONDUIT, 68 LF OF 1" GALVANIZED STEEL CONDUIT, 4 PULL BOXES, 1 LIGHT SUPPORT WITH 4 ANCHOR BOLTS, AND ALL MISCELLANEOUS HARDWARE NECESSARY FOR INSTALLATION.

NOTE: THESE DETAILS ARE TYPICAL FOR ALL STRUCTURAL ELEMENTS REQUIRING DECORATIVE FORM LINERS EXCEPT CONCRETE PARAPETS. PARAPET DIMENSIONS MAY BE REDUCED BY THE THICKNESS OF THE FORM LINER IN ORDER TO UTILIZE STANDARD PARAPET FORMS REINFORCING BAR BENDING DIMENSIONS SHALL BE REDUCED ACCORDINGLY.



DESIGNED BY HOUSTON WALKER DATE 8-82
 DRAWN BY DEANNA TUBBIN LMD DATE 12-82
 SUPERVISED BY A.W. HARRISON DATE 12-82
 CHECKED BY H. WALKER DATE 12-82

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

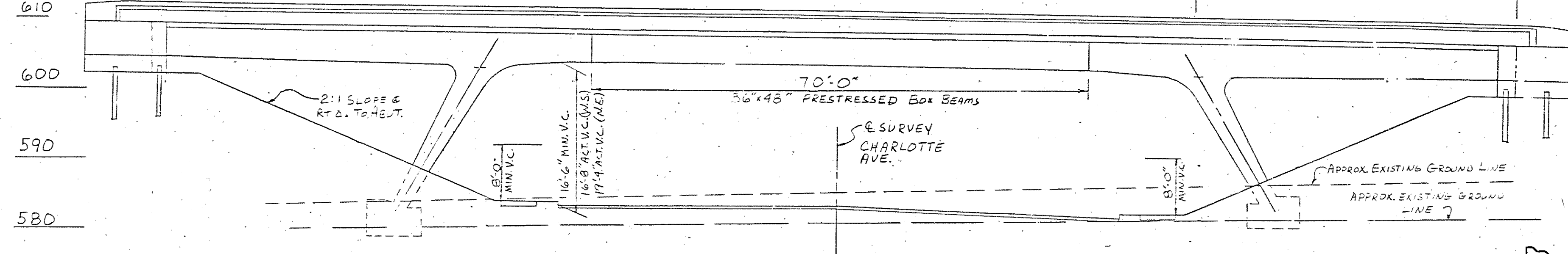
GENERAL NOTES AND
 ESTIMATED QUANTITIES
 I 440 NE. ROADWAY OVER
 CHARLOTTE AVENUE
 STATION 341+35.83 (NE. RDWY)
 DAVIDSON COUNTY

1983

CORRECT *Chilton L. Lora*
 APPROVED *Louis Lora*
 DIRECTOR OF HIGHWAYS

M-110-88

TOTAL LENGTH OF BRIDGE = 195'-0" W.S. & N.E. ROADWAYS		END OF BRIDGE	
BEGINNING OF BRIDGE			
620	STA. 339+43.25(±) W.S. 47'-6" (±) W.S. F.G. EL. 615.00	STA. 339+90.75(±) W.S. 100'-0" (±) W.S. F.G. EL. 613.43	STA. 340+90.75(±) W.S. 47'-6" (±) W.S. F.G. EL. 619.33
	STA. 340+41.5(±) N.E. 47'-6" (±) N.E. F.G. EL. 609.23	STA. 340+89.0(±) N.E. 100'-0" (±) N.E. F.G. EL. 608.81	STA. 341+38.25(±) W.S. 47'-6" (±) N.E. F.G. EL. 614.75
610			STA. 341+38.25(±) W.S. 47'-6" (±) N.E. F.G. EL. 606.96

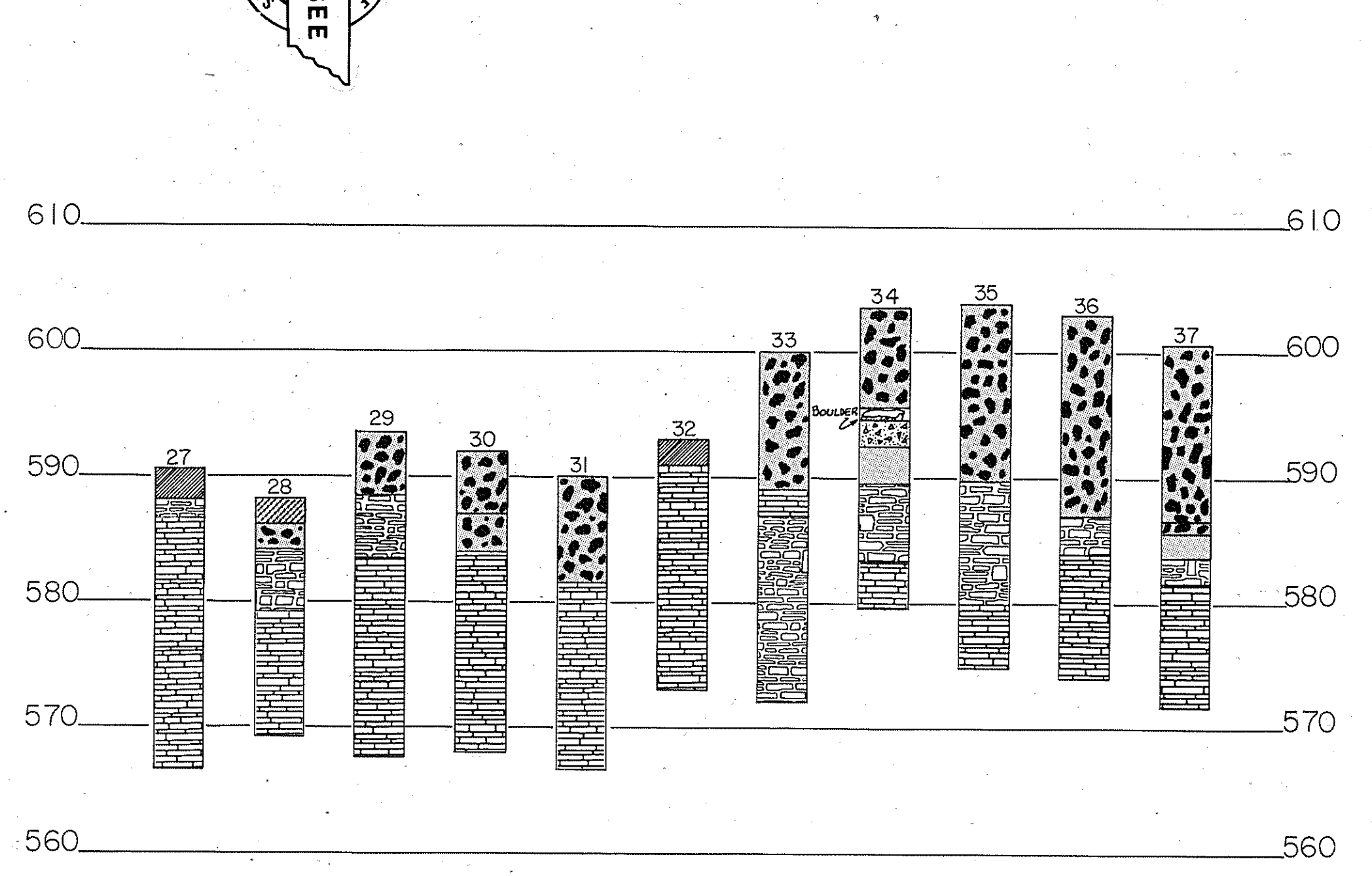
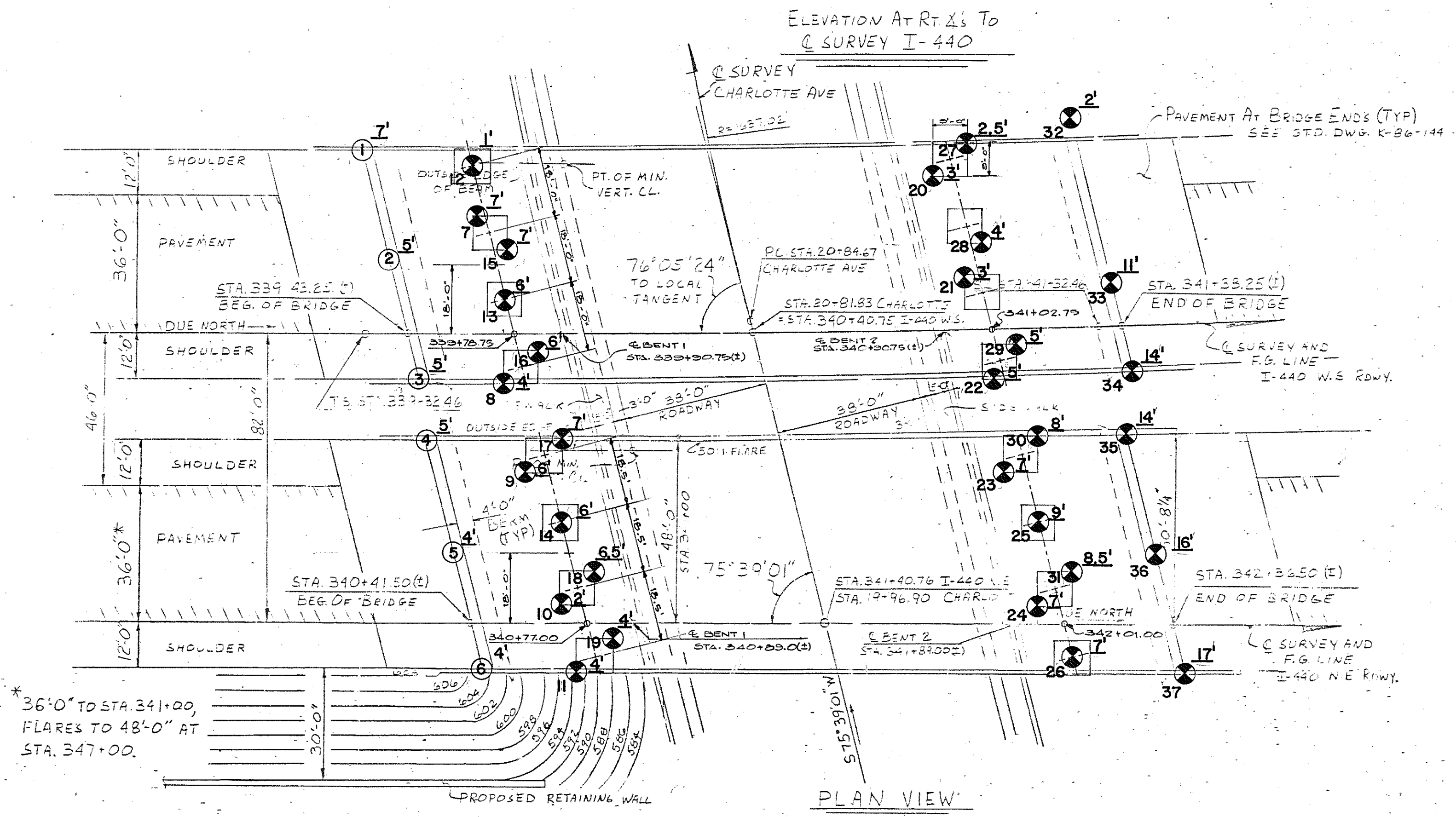
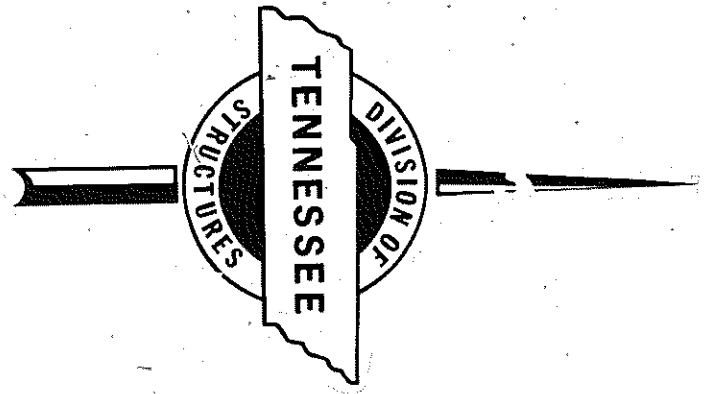


- REQUIRED:
- 1) APPROXIMATE EXISTING GROUND LINE AND ROCK LINE.
 - 2) SUFFICIENT GROUND, ROCK AND CORING INFORMATION FOR BRIDGE FOUNDATIONS.

PROJECT NO.	YEAR	SHEET NO.	
I-440-4(3)201	1982		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	6-15-88	JHW	ADDED NOTE

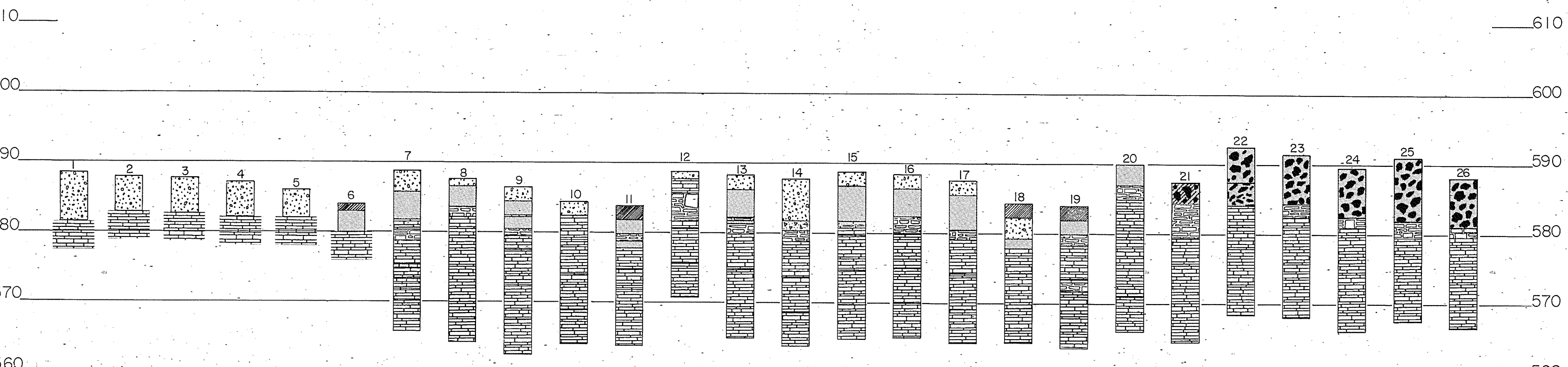
B.M. No. 40
CONC. MON. WITH BRASS CAP
1074.86' RT. STA. 117+00.96
ELEV. 552.24

B.M. No. 37
CONC. MON. WITH BRASS CAP
149.87' RT. STA. 139+23.52
N.E. CORNER OF PARK CIRCLE
ELEV. 581.29



GROUND AND TOP OF ROCK ELEVATIONS

1. R 588.4 G 587.9	14. G 587.8± R 581.8±	27. G 590.6 R 588.1
2. G 587.9 R 582.9	15. G 588.8 R 581.8	28. G 588.2 R 584.2
3. G 587.7 R 582.7	16. G 588.4 R 582.4	29. G 593.7 R 587.7
4. G 587.1 R 582.1	17. G 587.7 R 580.7	30. G 592.0± R 584.0±
5. G 588.0± R 582.0±	18. G 584.2 R 577.7	31. G 590.0± R 581.5±
6. G 588.4 R 580.4	19. G 584.0 R 580.0	32. G 593.0± R 591.0±
7. G 588.8 R 581.8	20. G 590.0 R 587.0	33. G 600.0± R 589.0±
8. G 587.7 R 583.7	21. G 587.4 R 584.4	34. G 603.6 R 589.6
9. G 588.4 R 580.4	22. G 592.5 R 584.0	35. G 603.0± R 589.9±
10. G 584.3 R 582.3	23. G 591.5 R 584.5	36. G 602.0± R 586.9±
11. G 583.9 R 579.9	24. G 589.5± R 582.5±	37. G 600.7 R 583.7
12. G 588.8 R 587.8	25. G 591.0 R 582.0	
13. G 588.3 R 582.3	26. G 588.1 R 581.1	

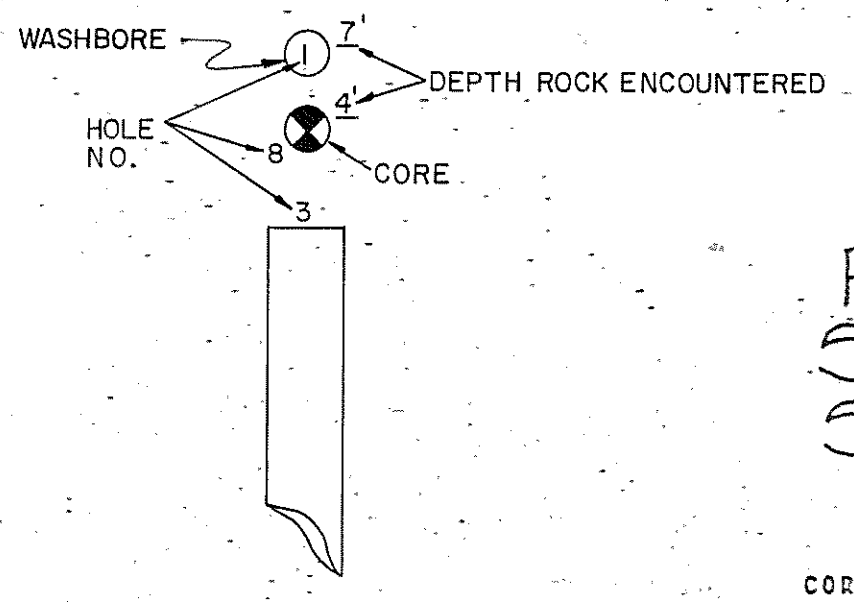


DESIGNED BY J. HAZEN WALKER DATE 4-82
DRAWN BY MARK DUE DATE 5-82
SUPERVISED BY HARRISON E. BEARDS DATE 5-82
CHECKED BY DATE

- Legend
- RESIDUAL SILTS AND CLAYS
 - SILTY CLAY, GRAVEL AND BRICK
 - SOIL AND BOULDER FILL
 - PAVEMENT, CLAY AND BOULDERS
 - PAVEMENT
 - CONCRETE
 - WEATHERED SHALY LIMESTONE (8 TONS/FT.³)
 - SHALY LIMESTONE (8 TONS/FT.³)

NOTE: FOUNDATION DATA SHEET IS DRAWN LOOKING IN OPPOSITE DIRECTION OF LAYOUT DRAWING.

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 E.S. AND N.E.
ROADWAYS OVER CHARLOTTE AVENUE
STATION 340+41.33 (W.S. ROADWAY)
STATION 341+38.95 (N.E. ROADWAY)
DAVIDSON COUNTY
1982

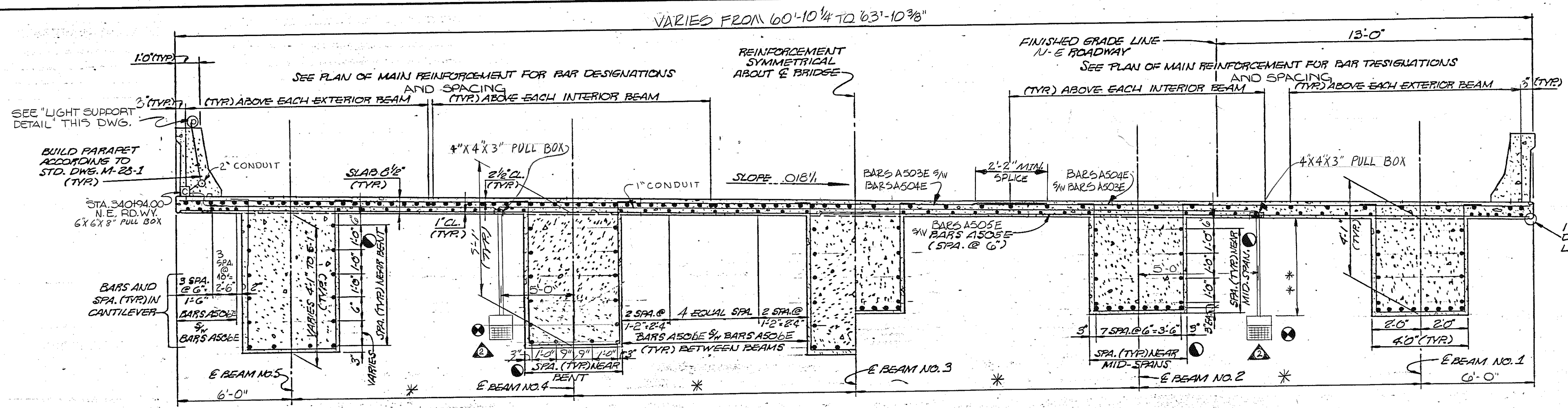
CORRECT *Colleton L. Linnell*
ENGINEER OF STRUCTURES
APPROVED *Lewis G. Linnell*
DIRECTOR OF HIGHWAYS

DESIGN DIV
FILE NO.

CONSTRUCTION No. 19014-311-44

PROJECT NO.	YEAR	SHEET NO.
I440-4(53)206	1983	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	4-21-83	JHW	CHANGED STEEL QUANTITIES
2	12-13-83	JHW	CHANGED STEEL QUANTITY
3		HALL	ADDED LIGHTING



TYPICAL CROSS-SECTION NEAR BENT

TYPICAL CROSS-SECTION NEAR MID-SPAN (SPANS 1 AND 3 ONLY)

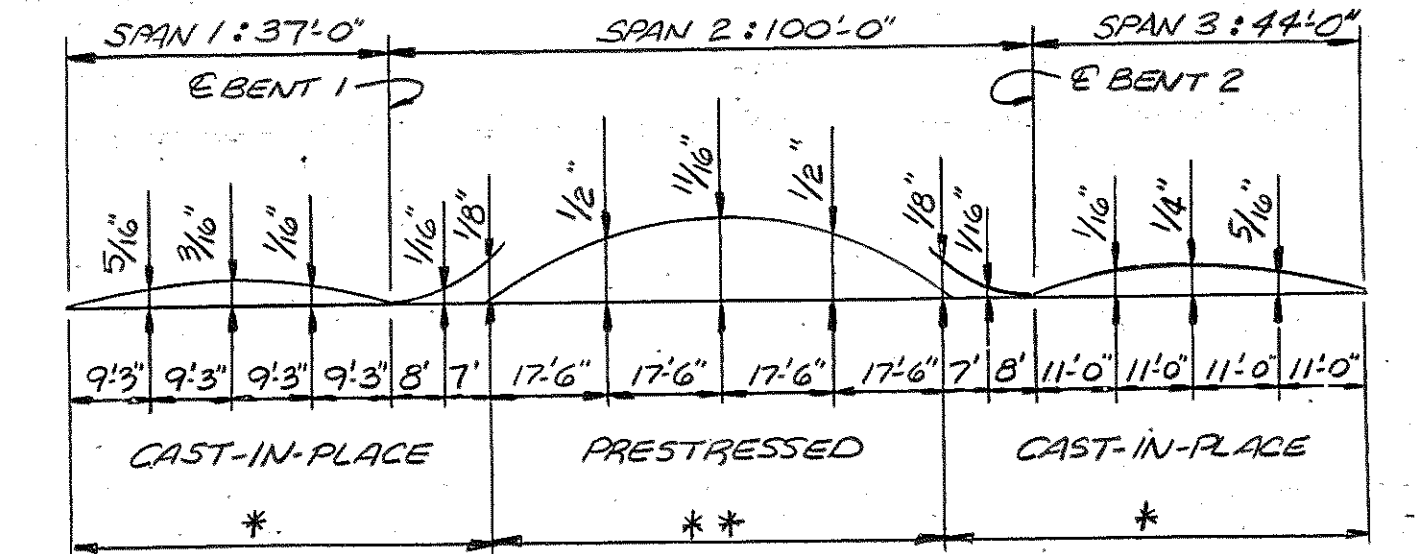
SEE LONGITUDINAL SECTION OF BEAMS IN SPANS 1 & 3 FOR BAR DESIGNATIONS. DWG NO. M-110-92.

LOOKING FORWARD ON SURVEY

- △ ** DENOTES THIS LENGTH TO BE FIELD DETERMINED AND APPROVED BY RESIDENT ENGINEER. LUMINAIRE SHALL BE LOW ENOUGH AS NOT TO ILLUMINATE SUPERSTRUCTURE BUT HIGH ENOUGH TO GAIN MAXIMUM VERTICAL CLEARANCE OVER ROADWAY OR SHOULDER.
- NOTE: THE LUMINAIRES ARE NOT INCLUDED IN THIS PROJECT.

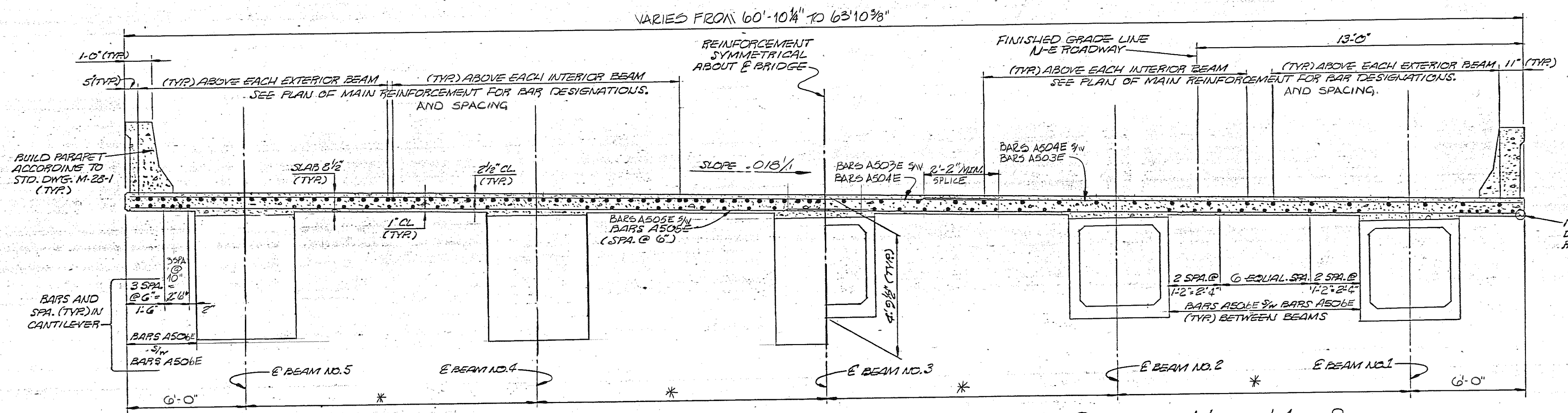
* DENOTES DIMENSION VARIES FROM 12'-2 9/16\"/>

NOTE: WHEN POURING SLAB PROVISIONS SHALL BE MADE FOR SETTING REINFORCING STEEL FOR PARAPETS. THE PARAPET SHALL NOT BE POURED UNTIL THE SLAB IS POURED AND CURED.



DEAD LOAD CORRECTION CURVE

- * THIS CURVE IS FOR DEAD LOAD CAMBER AND SHOULD BE INCREASED BY THE AMOUNT OF ANTICIPATED TAKE UP IN FALSEWORK.
- ** THIS CURVE IS FOR DEAD LOAD SLAB AND ALL DEAD LOADS THAT ARE APPLIED AFTER THE SLAB IS IN PLACE.

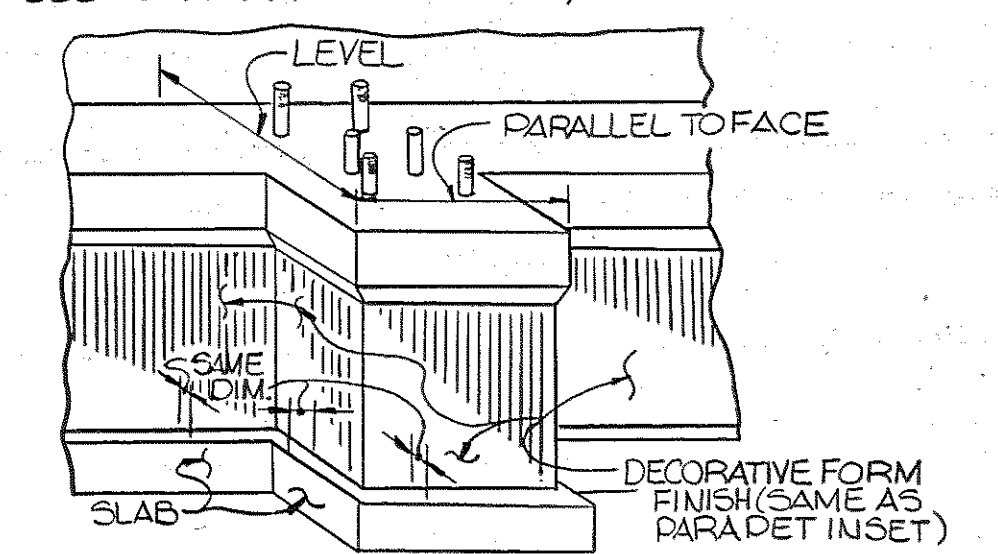


TYPICAL CROSS-SECTION NEAR BENT

TYPICAL CROSS-SECTION NEAR MID-SPAN (SPAN NO. 2 ONLY)

LOOKING FORWARD ON SURVEY

NOTE: WHEN POURING WING WALLS, PROVISIONS SHALL BE MADE FOR SETTING REINFORCING STEEL FOR PARAPETS. FOR DETAILS OF PARAPET SEE STANDARD DRAWING NO. M-22B-1.



LIGHT SUPPORT DETAIL
SEE "STANDARD DRAWING LIGHT SUPPORT DETAILS" STD. DWG. NO. M-8-149 FOR THE REMAINING DETAILS.
NOTE: LIGHT STANDARD SUPPORT TO CONFORM TO PARAPET SHAPE.

ESTIMATED QUANTITIES

CLASS "A" CONCRETE (BRIDGE DECK) C.Y.	EPOXY-COATED REINFORCING STEEL (BRIDGES) LBS.	CLASS "A" CONCRETE (BRIDGES) C.Y.	STEEL BAR REINFORCEMENT (BRIDGES) LBS.
300.4	191,884	508.67	32,245

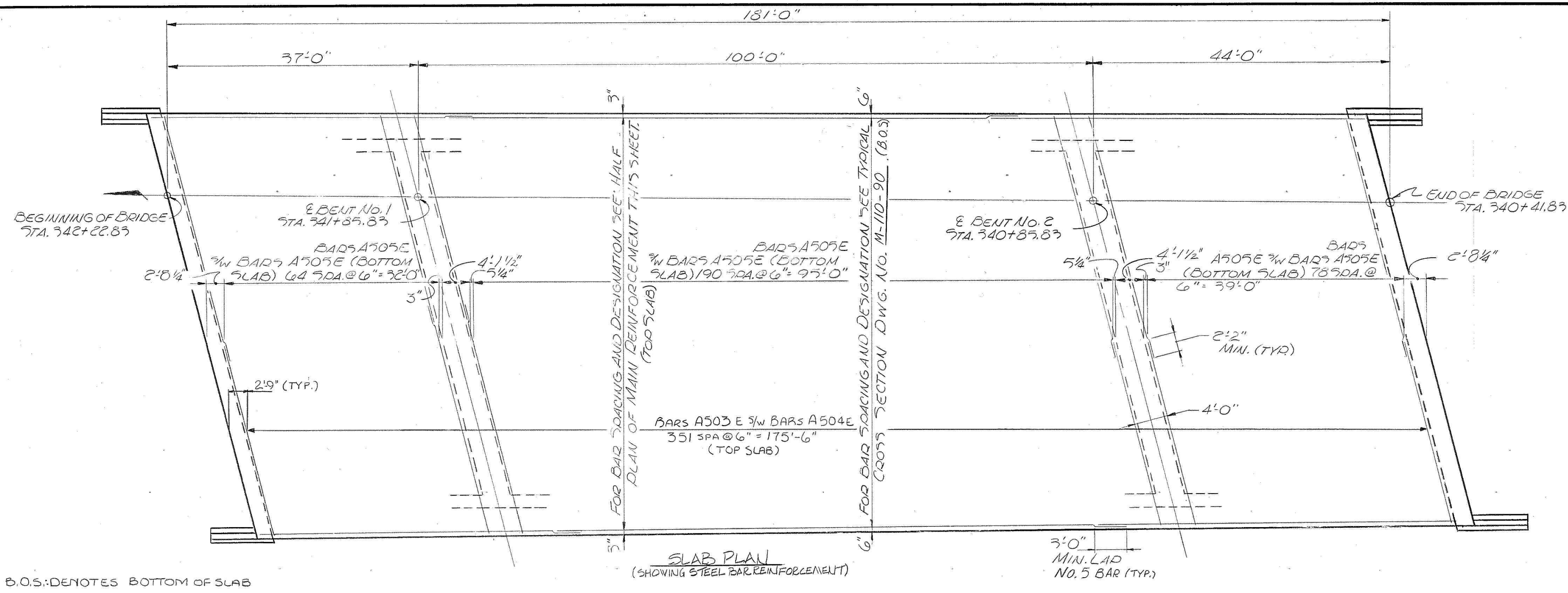
DESIGNED BY: HOUSTON WALKER DATE: 8-82
DRAWN BY: MIKE CHILDRESS DATE: 12-82
SUPERVISED BY: DON HARRISON & H.M.B. DATE: 12-82
CHECKED BY: H. WALKER DATE: 12-82

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS
SUPERSTRUCTURE
INTERSTATE 440 N.E. ROADWAY
OVER CHARLOTTE AVENUE
STATION 341 + 35.83 (N.E.)
DAVIDSON COUNTY
1983
CORRECT: *Charles L. Small*
ENGINEER OF STRUCTURES
APPROVED: *Louis Brown*
DIRECTOR OF HIGHWAYS
M-110-90

Const. No. 19014-3111-44

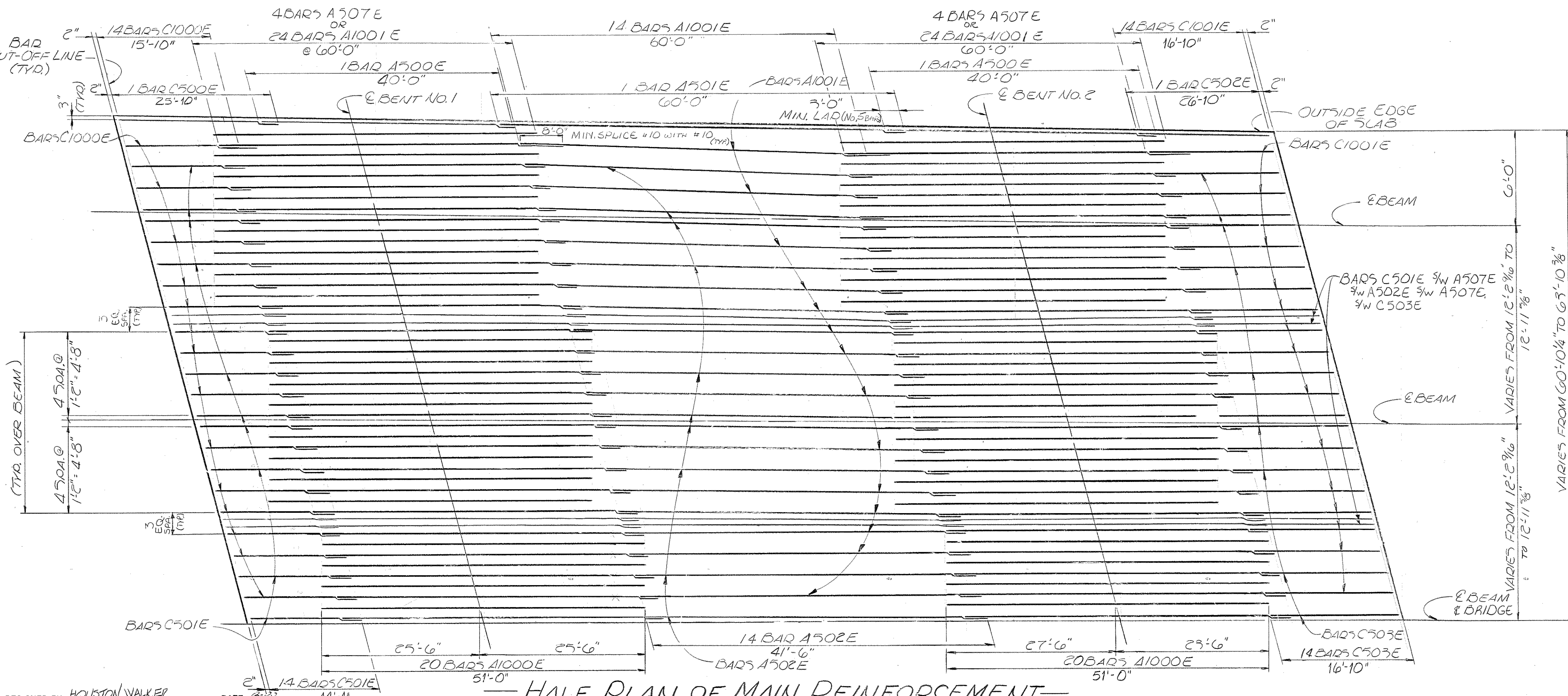
PROJECT NO.	YEAR	SHEET NO.
I440-4(33)206	1983	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION



B.O.S.: DENOTES BOTTOM OF SLAB

SLAB PLAN (SHOWING STEEL BAR REINFORCEMENT)



HALF PLAN OF MAIN REINFORCEMENT

DESIGNED BY HOUSTON WALKER DATE 8-82
 DRAWN BY PEGGY JACKSON DATE 12-82
 SUPERVISED BY HARRISON & BROOKS DATE 12-82
 CHECKED BY H. WALKER DATE 12-82

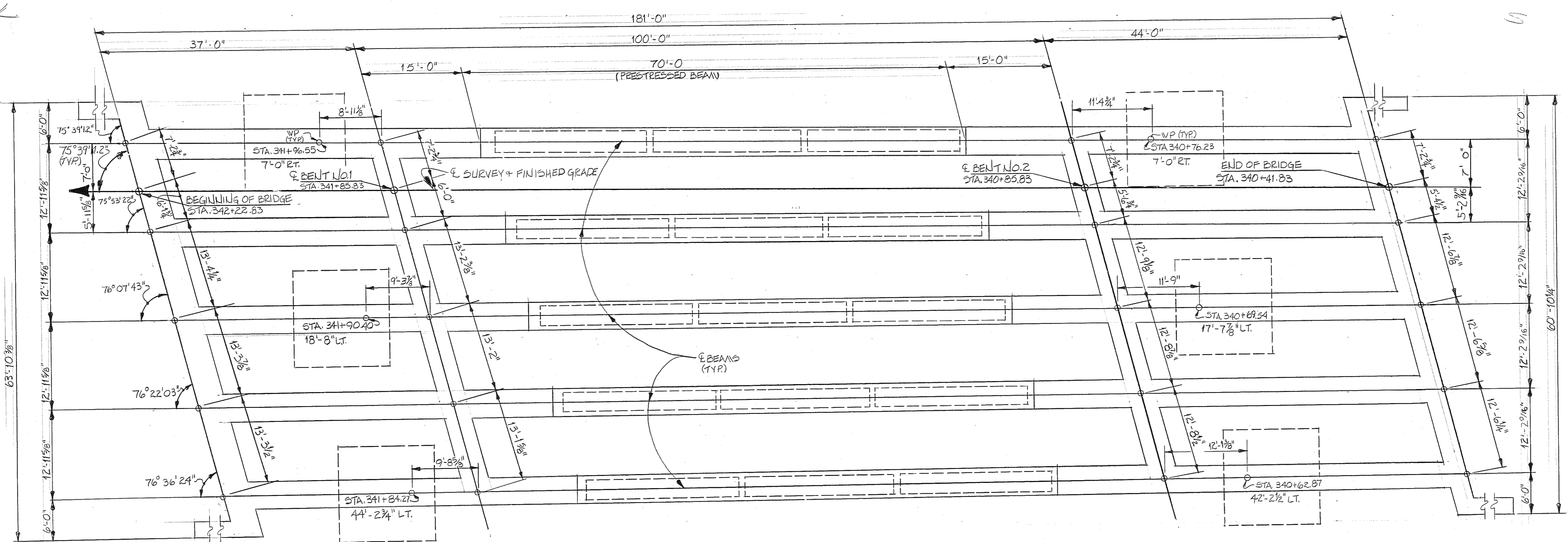
STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

SUPERSTRUCTURE DETAILS
 INTERSTATE 440 N.E. OVER
 CHARLOTTE AVENUE
 STATION 341+35.83 (N.E. ROADWAY)
 DAVIDSON COUNTY
 1983

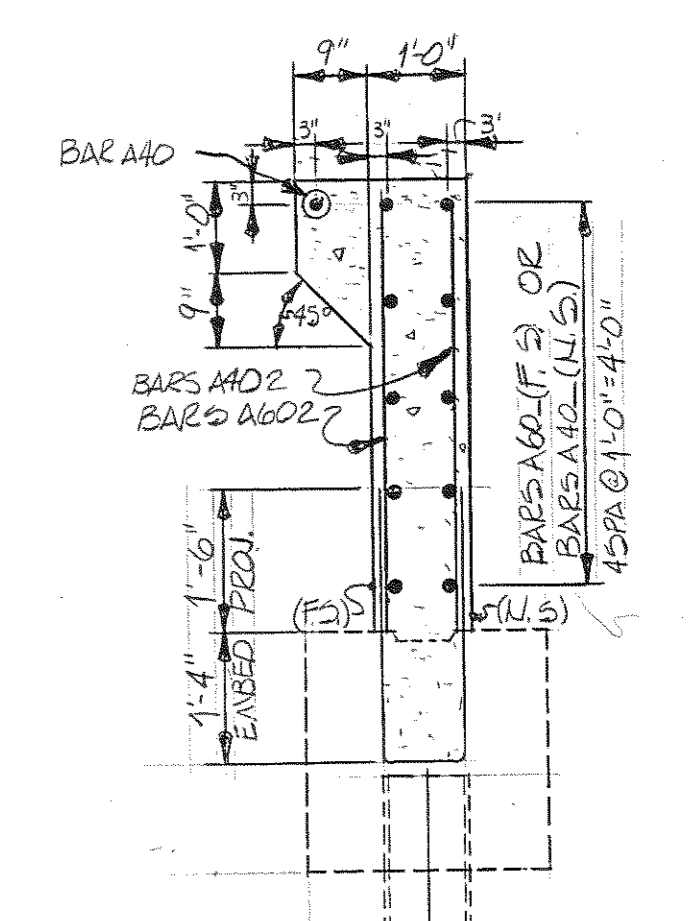
CORRECT *Collier L. Lowell*
 ENGINEER OF STRUCTURES
 APPROVED *Louis Leland*
 DIRECTOR OF HIGHWAYS

M-110-91

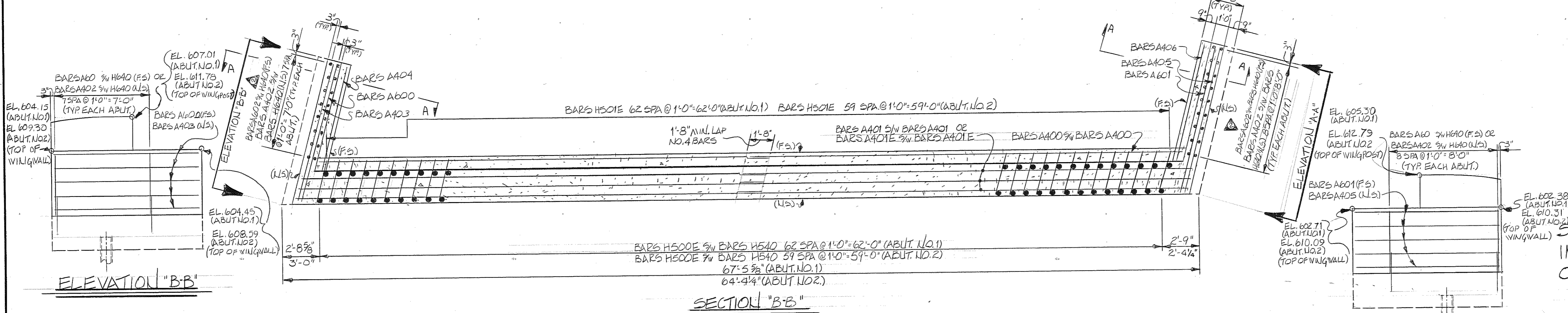
PROJECT NO.	YEAR	SHEET NO.	
1440-4(53)206	1983		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	4-21-83	H.W.	LOCATED BENT FTG.; DIMENSIONS ADDED
2	12-13-83	H.W.	BAR S A602



FRAMING PLAN



SECTION 'A-A'



ELEVATION 'B-B'

SECTION 'B-B'

ELEVATION 'A-A'

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 SUPERSTRUCTURE DETAILS
 INTERSTATE 440 NE. ROADWAY
 OVER CHARLOTTE AVENUE
 STATION 341+35.83 (NE)
 DAVIDSON COUNTY
 1983

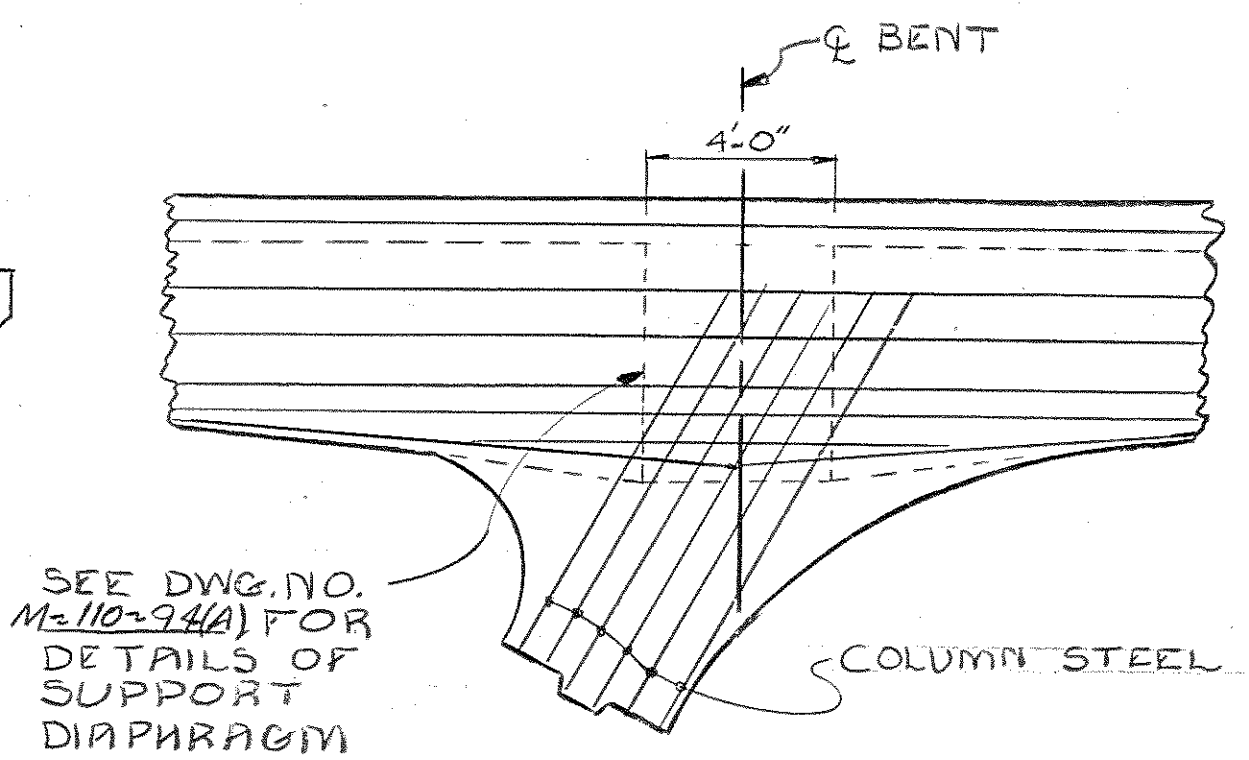
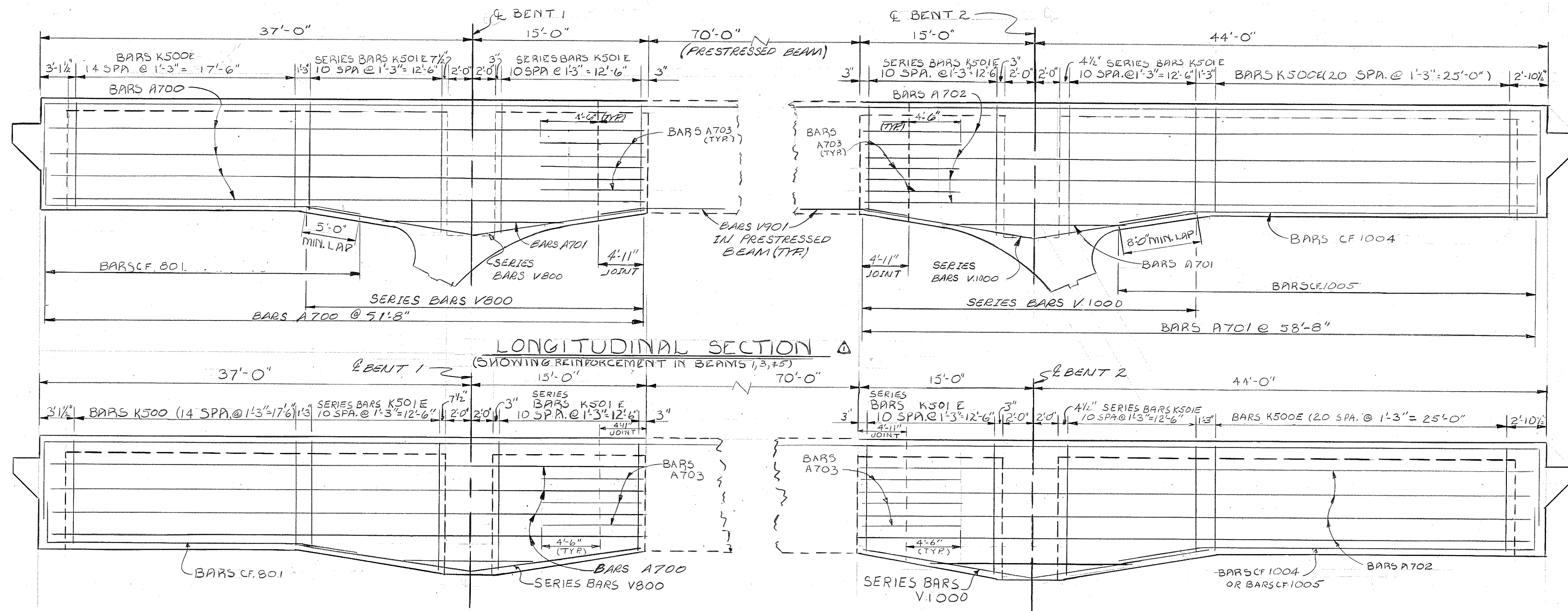
DESIGNED BY HOLSTON WALKER DATE 8-82
 DRAWN BY KELI OVENS DATE 12-82
 SUPERVISED BY R.L. HARRISON & H.W. BROOKS DATE 12-82
 CHECKED BY H. WALKER DATE 12-82

CORRECT *William L. Small*
 ENGINEER OF STRUCTURES
 APPROVED *Louis E. Evans*
 DIRECTOR OF HIGHWAYS

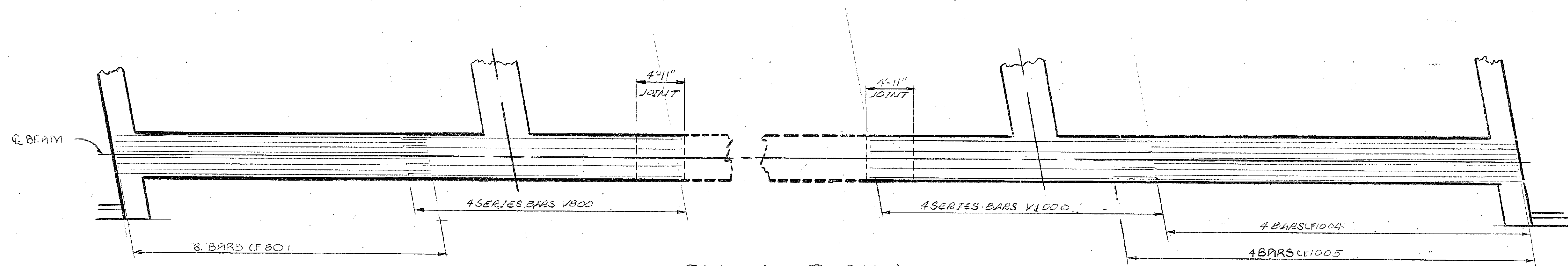
M-110-92

PROJECT NO.	YEAR	SHEET NO.
I440-4(53)206	1983	

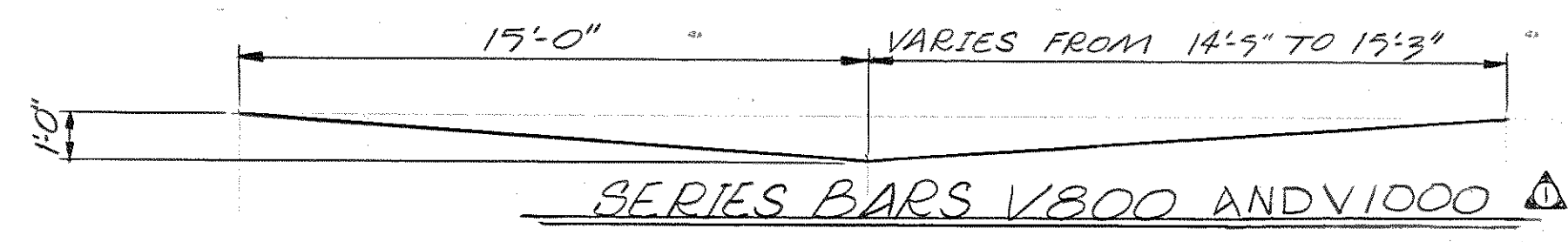
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	4-21-83	H.W.	REVISED REINF. STEEL DETAIL



DETAIL "A"
(SHOWING REINFORCEMENT @ HAUNCH OF BEAM)



PARTIAL PLAN (SHOWING MAIN REINFORCEMENT)



SERIES BARS V800 AND V1000

DESIGNED BY H. WALKER DATE 8-82
 DRAWN BY W. PURVIS DATE 12-82
 SUPERVISED BY R. L. H. & H. M. B. DATE 12-82
 CHECKED BY H. WALKER DATE 12-82

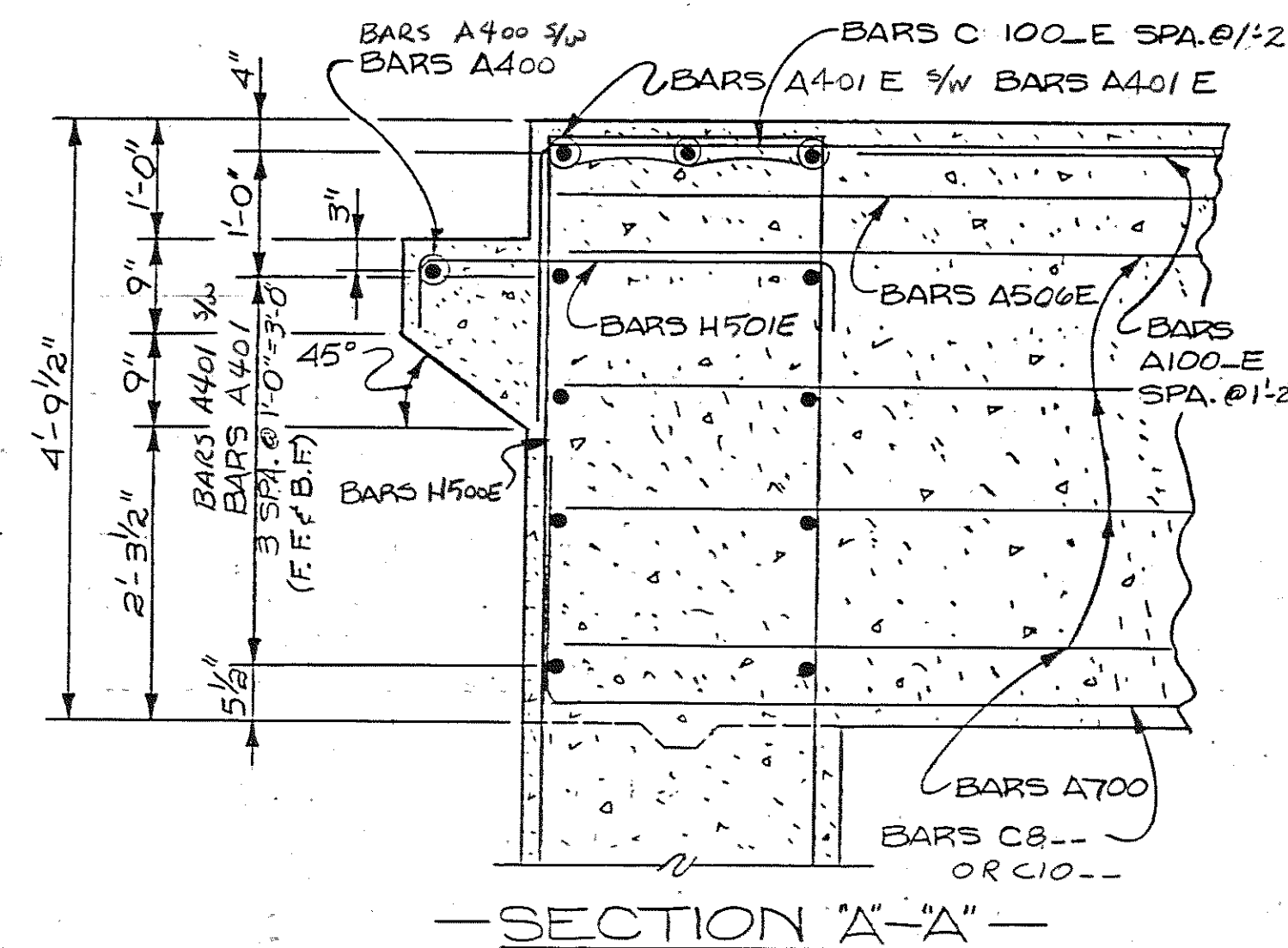
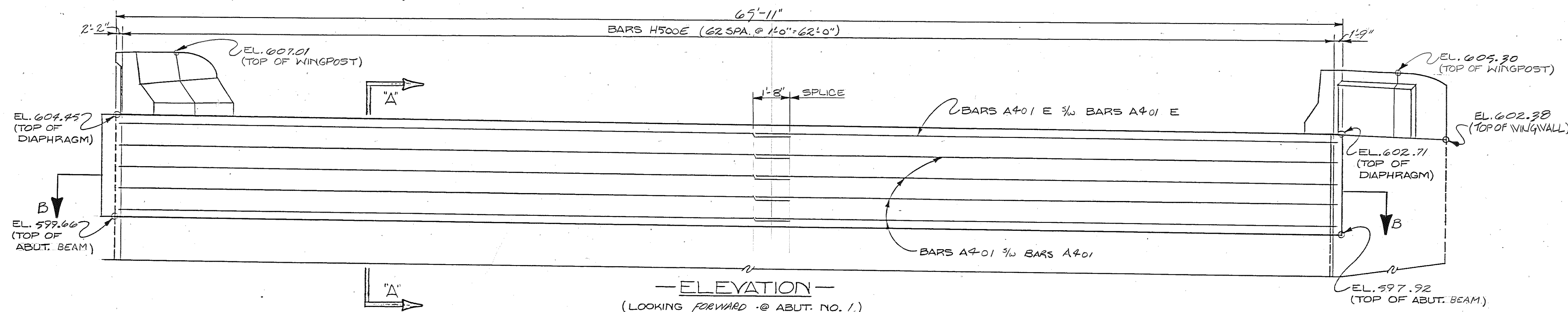
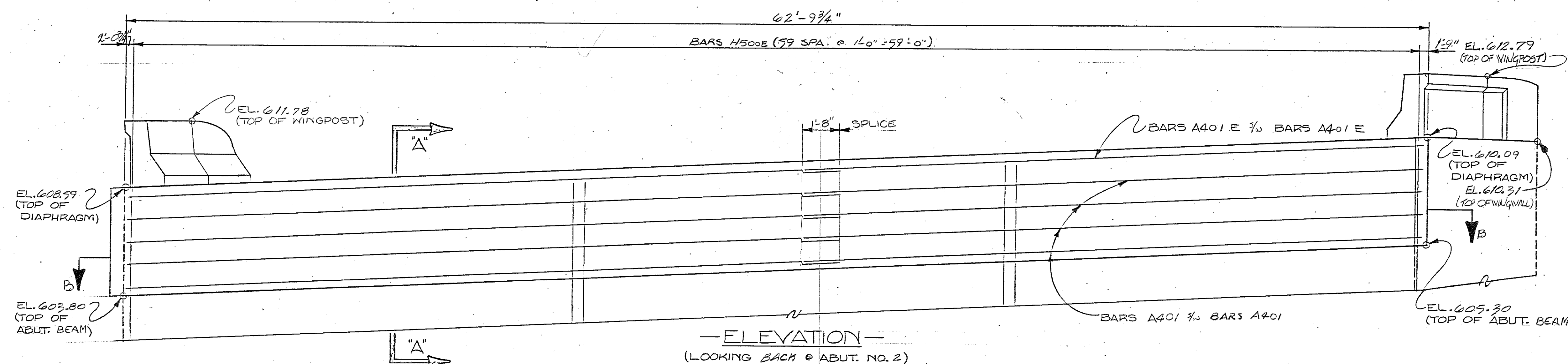
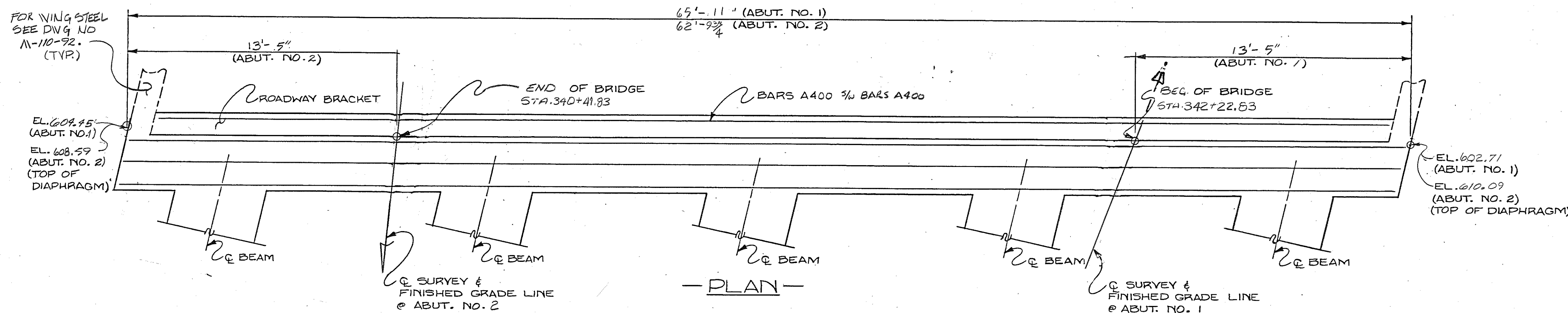
STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 SUPERSTRUCTURE DETAILS
 INTERSTATE 440 N.E. ROADWAY
 OVER CHARLOTTE AVENUE
 STATION 341+35.83 (N.E.)
 DAVIDSON COUNTY
 1983

CORRECT Levellon L. Forewell
 ENGINEER OF STRUCTURES
 APPROVED Louis Brans
 DIRECTOR OF HIGHWAYS

CONST. NO. 19014-3111-44

PROJECT NO.	YEAR	SHEET NO.
I440-4(53)206	1983	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION



NOTE: FOR SECTION "B"-B SEE DWG. NO. M-110-92.

DESIGNED BY HOUSTON WALKER DATE 12-82
 DRAWN BY YICKY FORREST DATE 12-82
 SUPERVISED BY R. L. HARRISON & HMB DATE 12-82
 CHECKED BY H. WALKER DATE 12-82

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

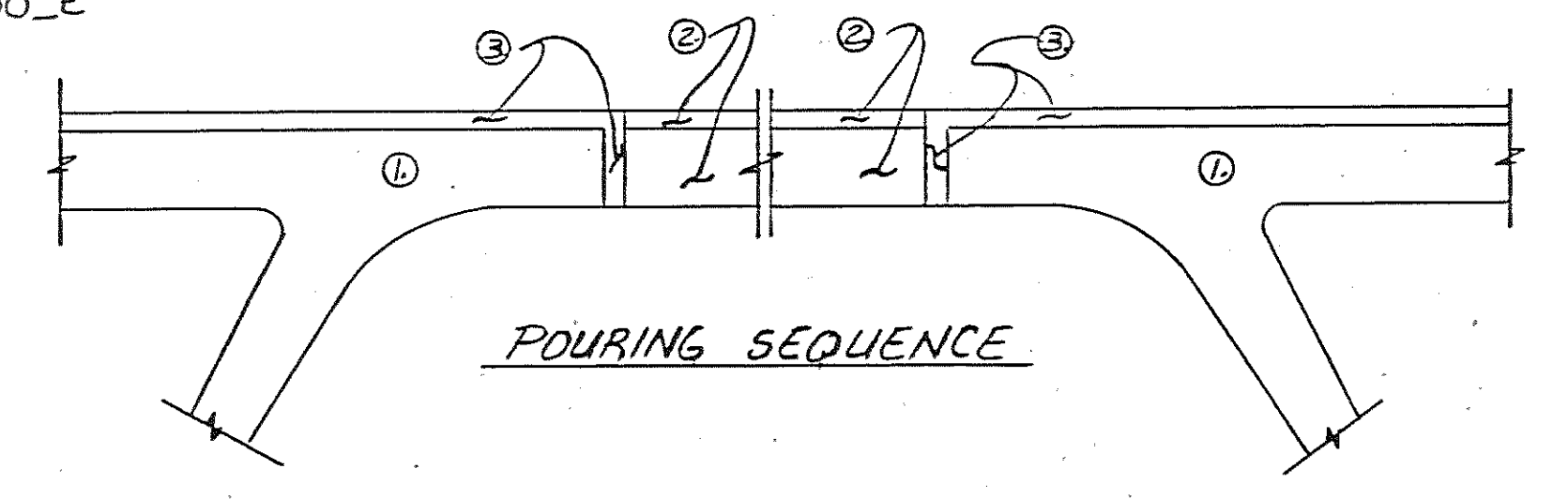
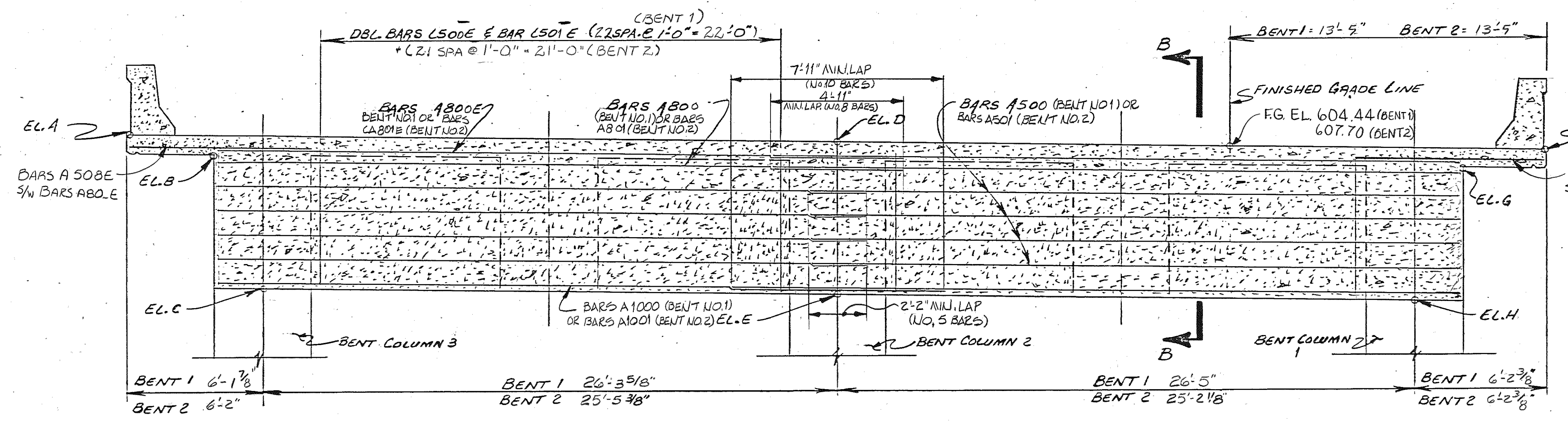
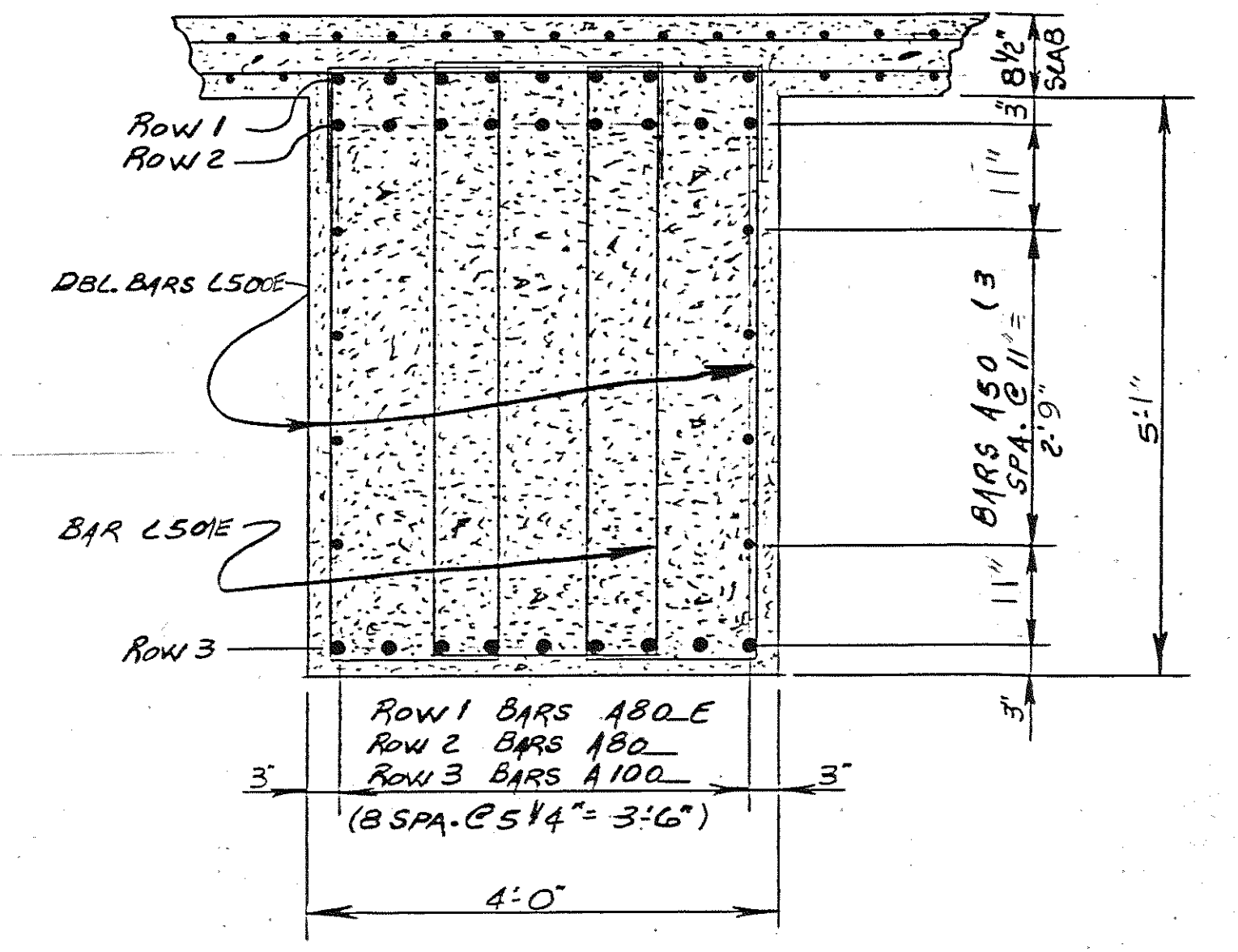
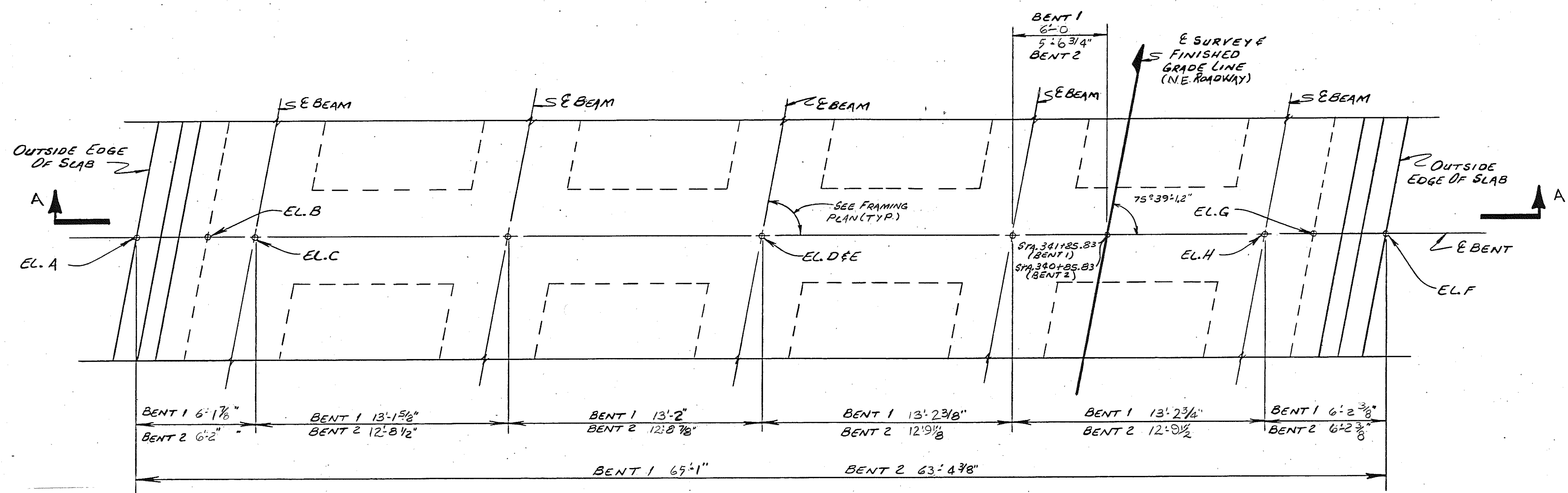
SUPERSTRUCTURE DETAILS
 INTERSTATE 440 N.E. ROADWAY
 OVER CHARLOTTE AVENUE
 STATION 341. + 35.83 (N.E.)
 DAVIDSON COUNTY
 1983

CORRECT *Clifton L. Seveall*
 ENGINEER OF STRUCTURES

APPROVED *Lewis Brown*
 DIRECTOR OF HIGHWAYS

M-110-94

PROJECT NO.	YEAR	SHEET NO.	
440-4(S)206	1983		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	4/2/83	H.W.	REVISED ELEV'S. & DIMENSIONS



- ① POUR THE SUBSTRUCTURE AND WEBS OF THE CAST-IN-PLACE SECTION.
 - ② POSITION THE PRESTRESSED BEAMS ON THEIR TEMPORARY SUPPORTS AND POUR THE SLAB OVER THE PRESTRESSED BOX SECTION.
 - ③ POUR THE REMINDER OF THE SLAB AND THE CONNECTION DIAPHRAGM.
- NOTE: DO NOT REMOVE ANY FALSEWORK UNTIL THE ENTIRE SLAB HAS BEEN POURED AND CURED AS PER SPECIFICATIONS.

ITEMS	A	B	C	D	E	F	G	H
BENT 1	605.80	605.02	599.84	604.94	599.15	604.09	603.45	598.46
BENT 2	608.93	608.16	602.99	608.15	602.36	607.37	606.76	601.73

DESIGNED BY HOUSTON WALKER DATE 8-82
 DRAWN BY RICK HINDMAN DATE 12-82
 SUPERVISED BY DON HARRISON & HMB DATE 12-82
 CHECKED BY H. WALKER DATE 12-82

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 SUPERSTRUCTURE DETAILS
 @ BENTS
 INTERSTATE 440 NE. ROADWAY
 OVER CHARLOTTE AVENUE
 STATION 341+39.83 (NE)
 DAVIDSON COUNTY
 1983

CORRECTED: *Colleen L. Powell*
 ENGINEER OF STRUCTURES
 APPROVED: *Richard E. Evans*
 DIRECTOR OF HIGHWAYS

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

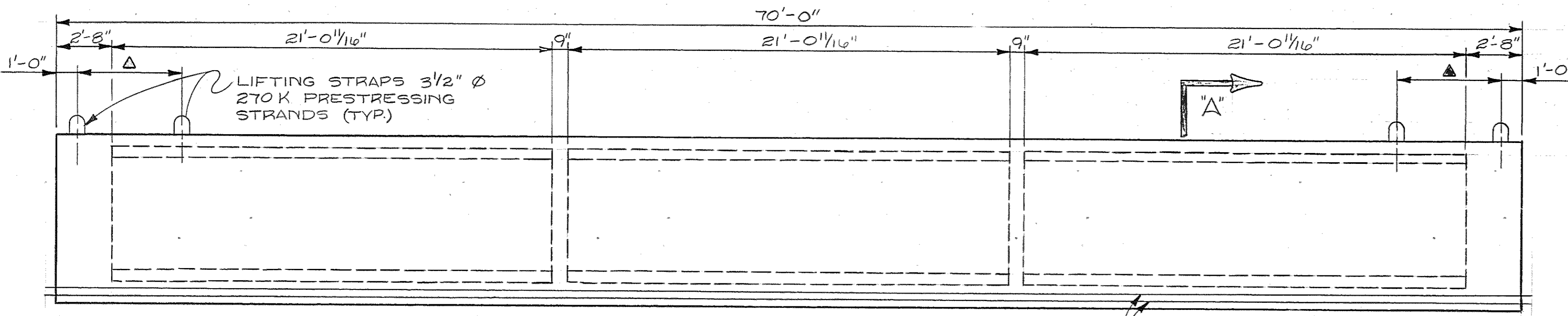
REVISIONS				
NO.	DATE	BY	REVISION	BRIEF DESCRIPTION
1	2/8/83	HW	REVISED QUAN.	
2	4/21/83	HNO	REVISED BAR LENGTHS	

BILL OF STEEL ~ PER BEAM

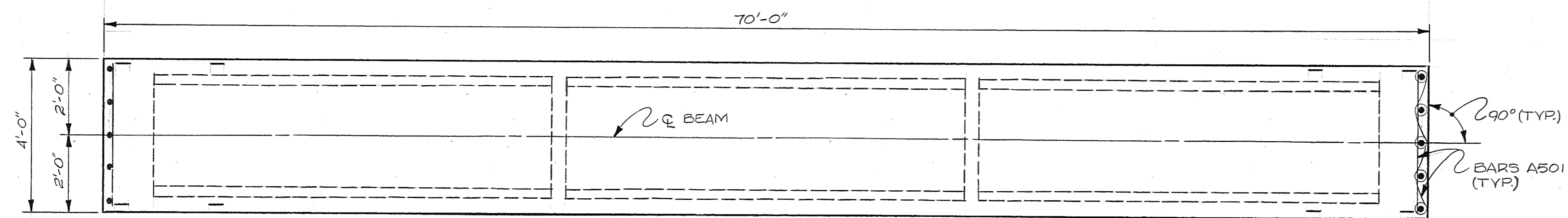
BAR	SIZE	NO. REQD.	BENDING DIMENSIONS				LENGTH
			A	B	C	D	
A300	3	8					35'-6"
A500	5	4					39'-0"
A501	5	20					3'-8"
A700	7	28					9'-3"
C300	3	20	2'-5"	1'-0"			3'-5"
C400	4	108	3'-8"	6"			4'-2"
C700	7	8	17'-6"	1'-2"			18'-8"
H400	4	54	3'-7 1/2"	1'-0"	1'-0"		5'-7"
ZA400	4	108	2'-10"	1'-0"	7 1/2"	4"	4'-5"
V901	9	8	4'-9"	7'-6"	3 1/4"		12'-3"

GENERAL NOTES

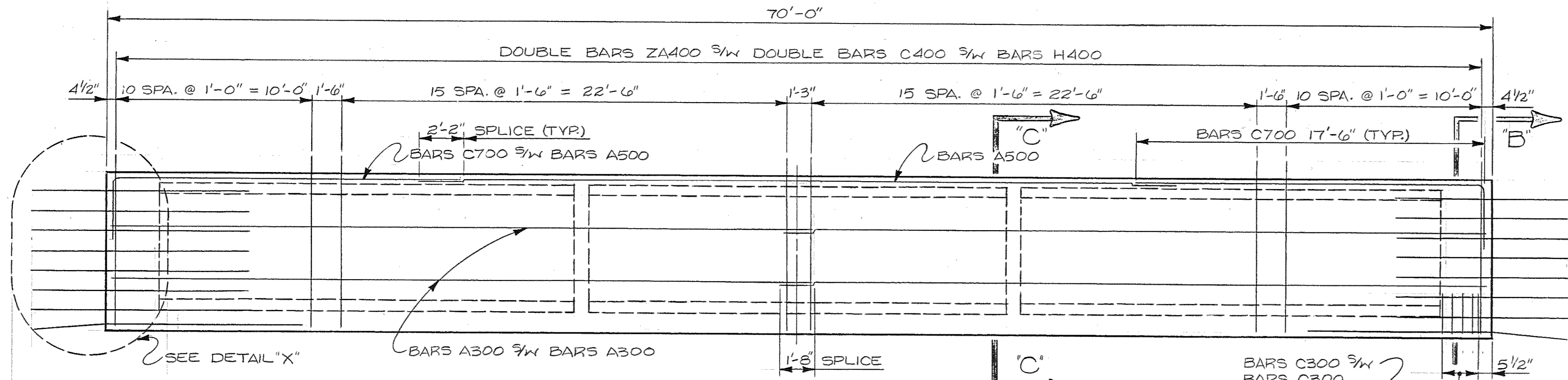
- THE TOP OF ALL BEAMS ARE TO BE ROUGH FLOATED. AT APPROXIMATELY THE TIME OF INITIAL SET, THE TOP OF THE BEAMS WILL ALSO BE SCRUBBED TRANSVERSELY WITH A COARSE WIRE BRUSH TO REMOVE ALL LAITANCE AND PRODUCE A ROUGH SURFACE. WHERE PRECAST SLAB PANELS ARE TO BE USED AND SET ON FELT PADS, THE OUTER TWO INCHES OF THE TOP FLANGE MAY BE TROWELED.
- MILD STEEL REINFORCING SHALL BE ASTM A615 GRADE 60.
- ALL PRESTRESSING STRANDS TO BE 1/2" Ø ASTM GRADE 270 K 7 WIRE UNCOATED STRESS-RELIEVED PRESTRESSING STRANDS.
- AN INITIAL FORCE OF 28,936 LBS. SHALL BE APPLIED TO EACH STRAND IN ALL BEAMS.
- THE PRESTRESSING STRANDS SHALL BE LEFT PROJECTING 3" ± FROM THE ENDS OF THE BEAMS. THERE SHALL NOT BE ANY PROTECTIVE COATING PLACED ON THE ENDS OF THE BEAMS OR ON THE PROJECTING STRANDS.
- THE CONCRETE FOR THIS CONSTRUCTION SHALL BE OF SUCH PROPERTIES AS TO ATTAIN A COMPRESSIVE STRENGTH OF NOT LESS THAN 6,000 + 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 5,000 + PSI. SEE GENERAL NOTE SHEET FOR CONCRETE FINISHING NOTE.
- 1" Ø WEEP HOLES REQUIRED AT LOW POINT OF EACH CELL.
- EACH CELL SHALL BE VENTED, (DURING THE FABRICATION PHASE), IN SUCH A MANNER SO AS NOT TO ALLOW EXTERNAL WATER TO ENTER THE CELL.



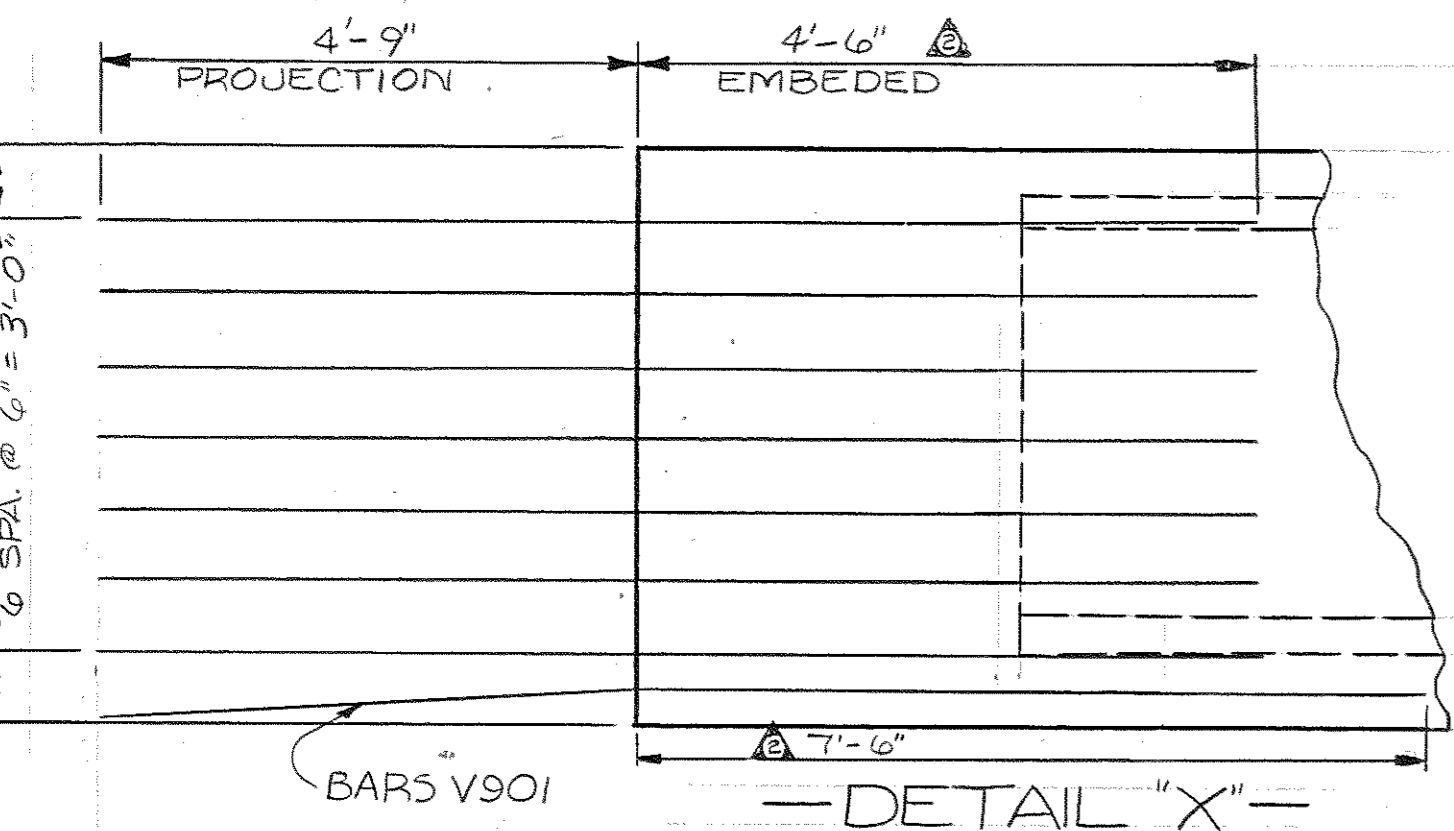
ELEVATION
(SHOWING PRESTRESSING STRANDS)



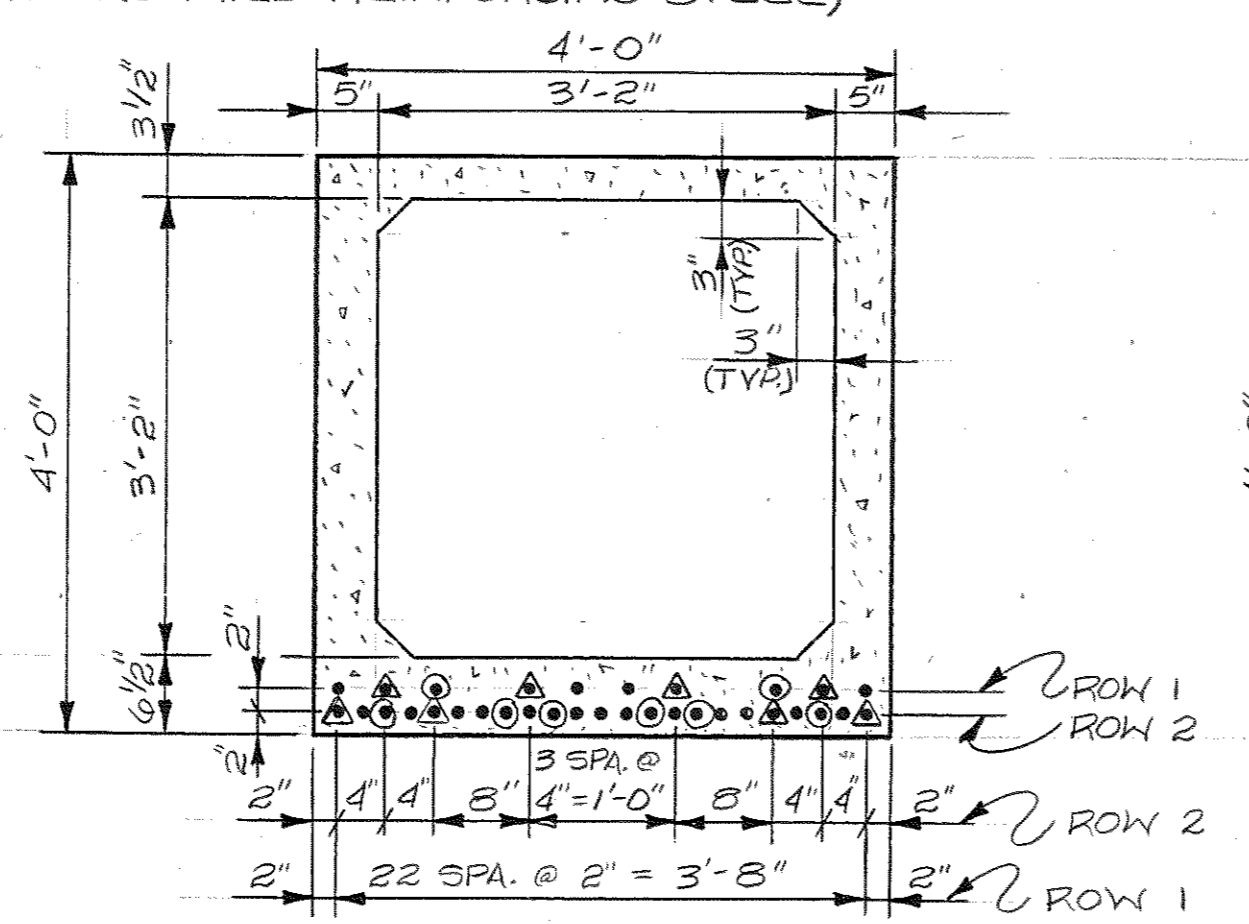
PLAN



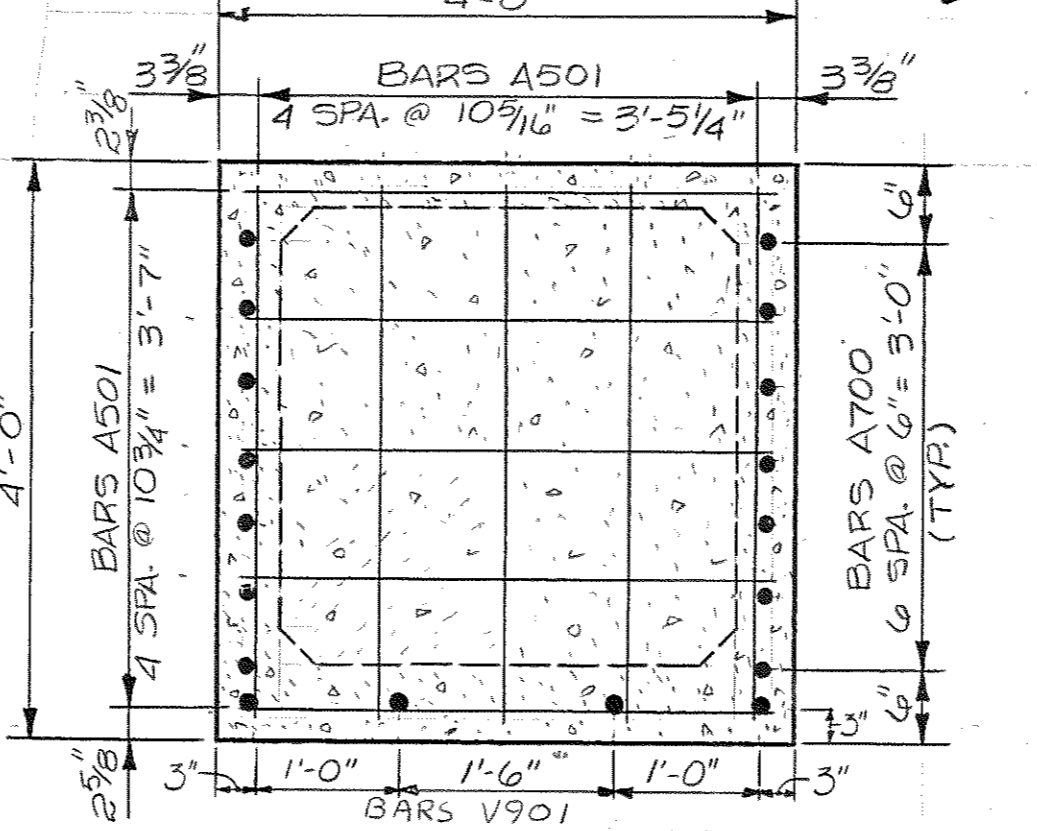
ELEVATION
(SHOWING MILD REINFORCING STEEL)



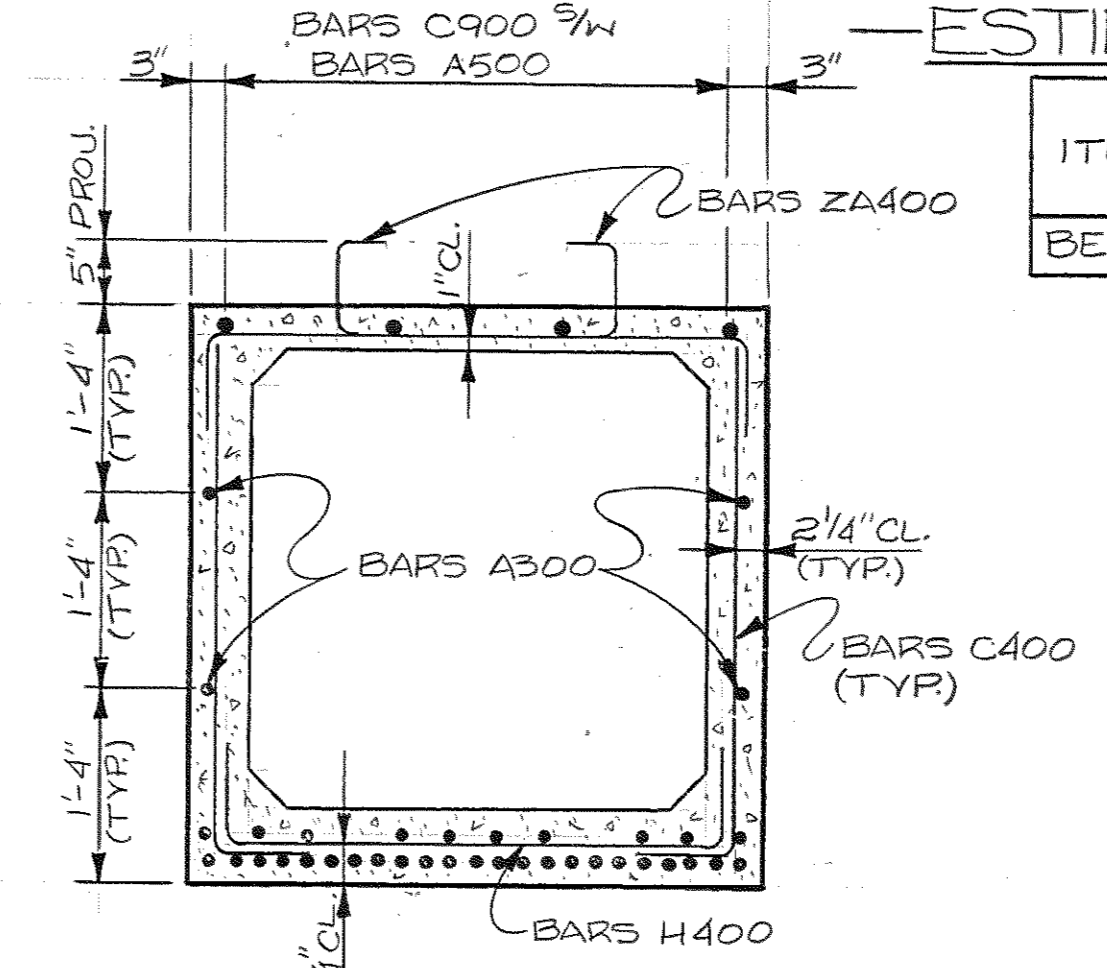
DETAIL "X"



SECTION "A-A"
(SHOWING PROPERTIES AND PRESTRESSING STRANDS)



SECTION "B-B"
(SHOWING REINFORCING IN END GRID)



SECTION "C-C"
(SHOWING PROJECTING BARS)

ESTIMATED QUANTITIES ~ PER BEAM

ITEM	NO. REQD.	CLASS "A" CONCRETE C.Y.	REINFORCING STEEL LBS.	PRESTRESSING STEEL LBS.
BEAM	5	18.3	2593	1,007

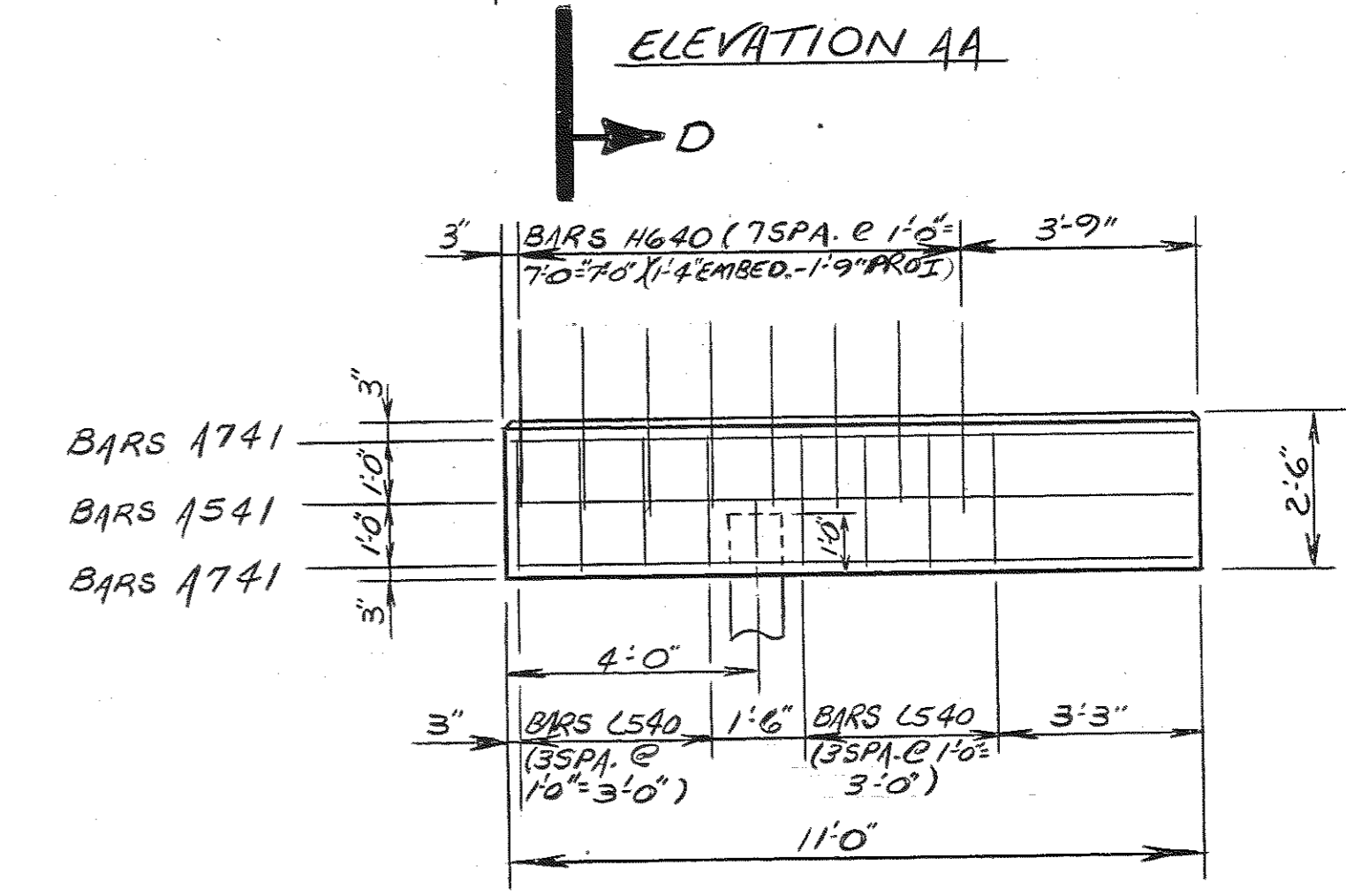
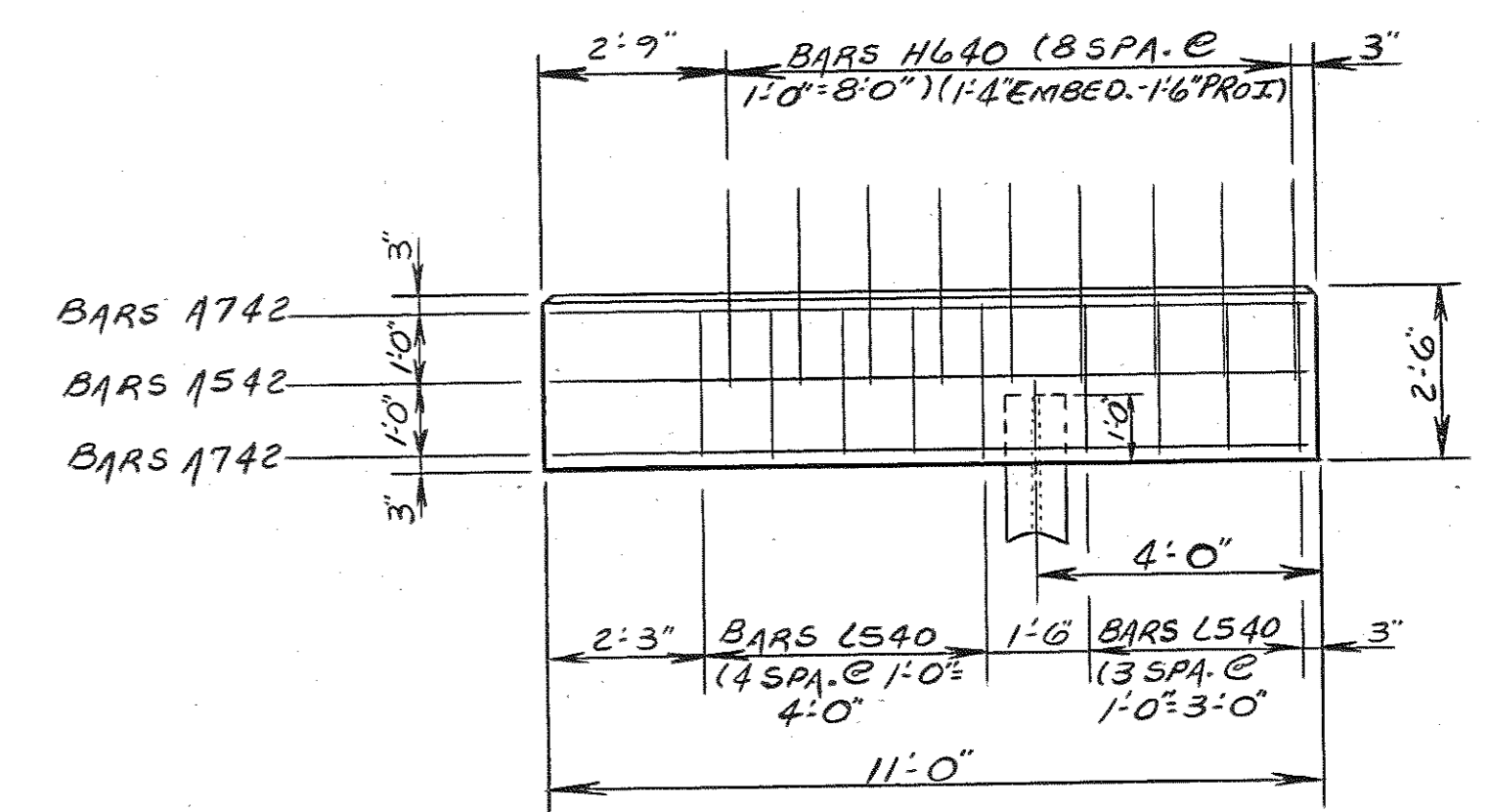
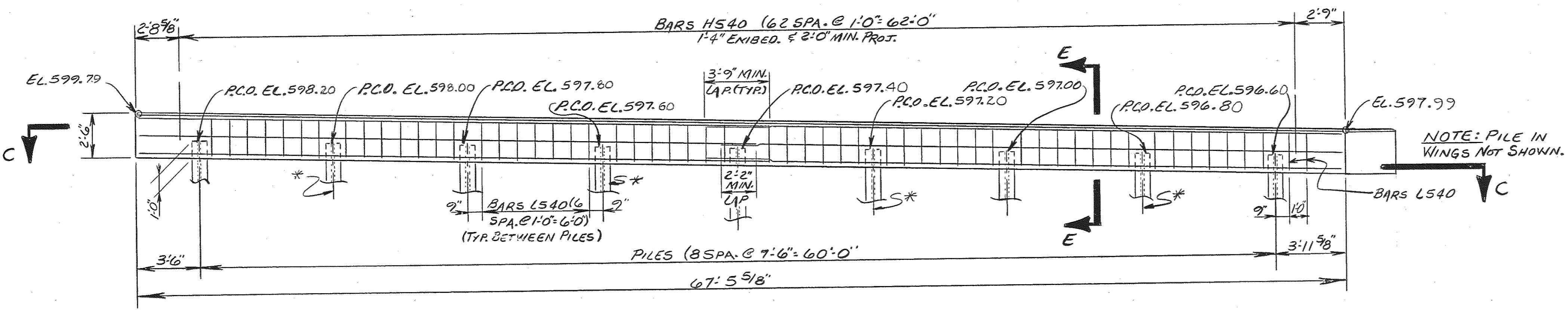
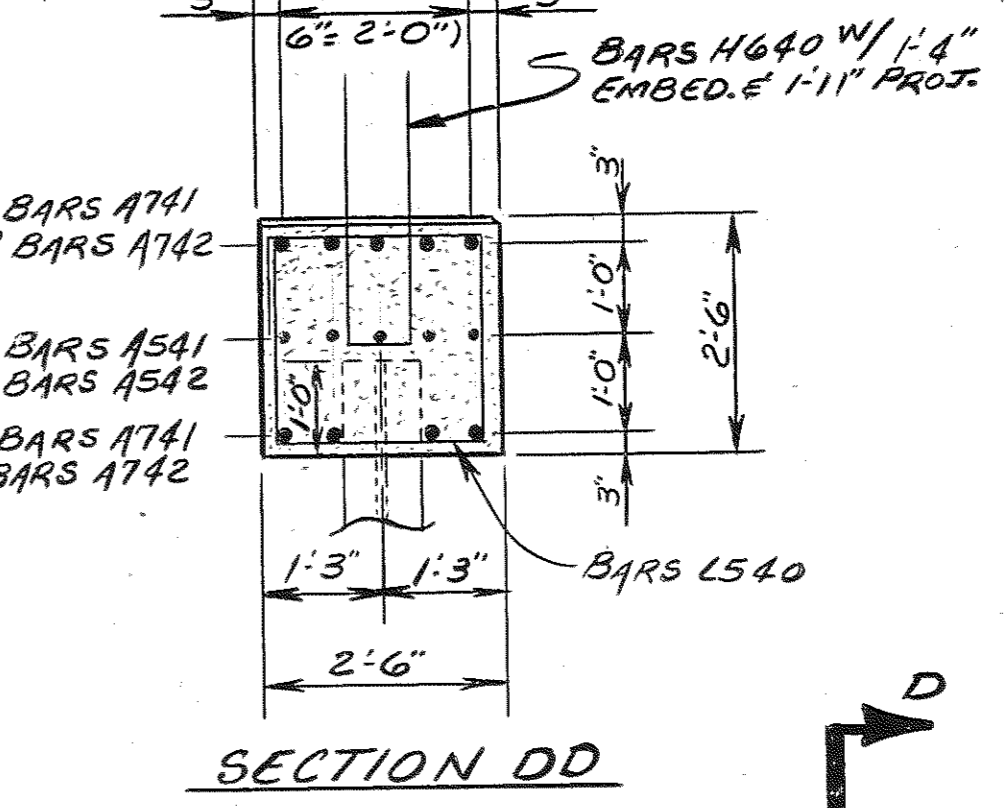
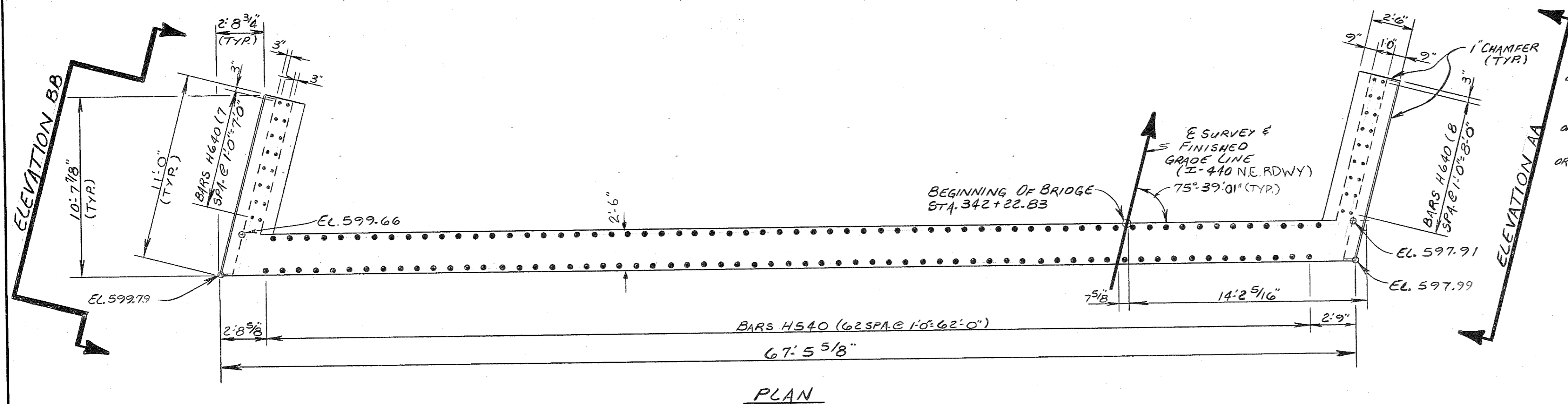
DESIGNED BY HOUSTON WALKER DATE 8-82
 DRAWN BY VICKY FORREST DATE 12-82
 SUPERVISED BY R. L. HARBISON + HS DATE 12-82
 CHECKED BY H. WALKER DATE 12-82

▲ : DENOTES 8 STRANDS WRAPPED 15'-0" FROM END OF BEAM.
 ○ : DENOTES 2 STRANDS WRAPPED 10'-0" FROM END OF BEAM.

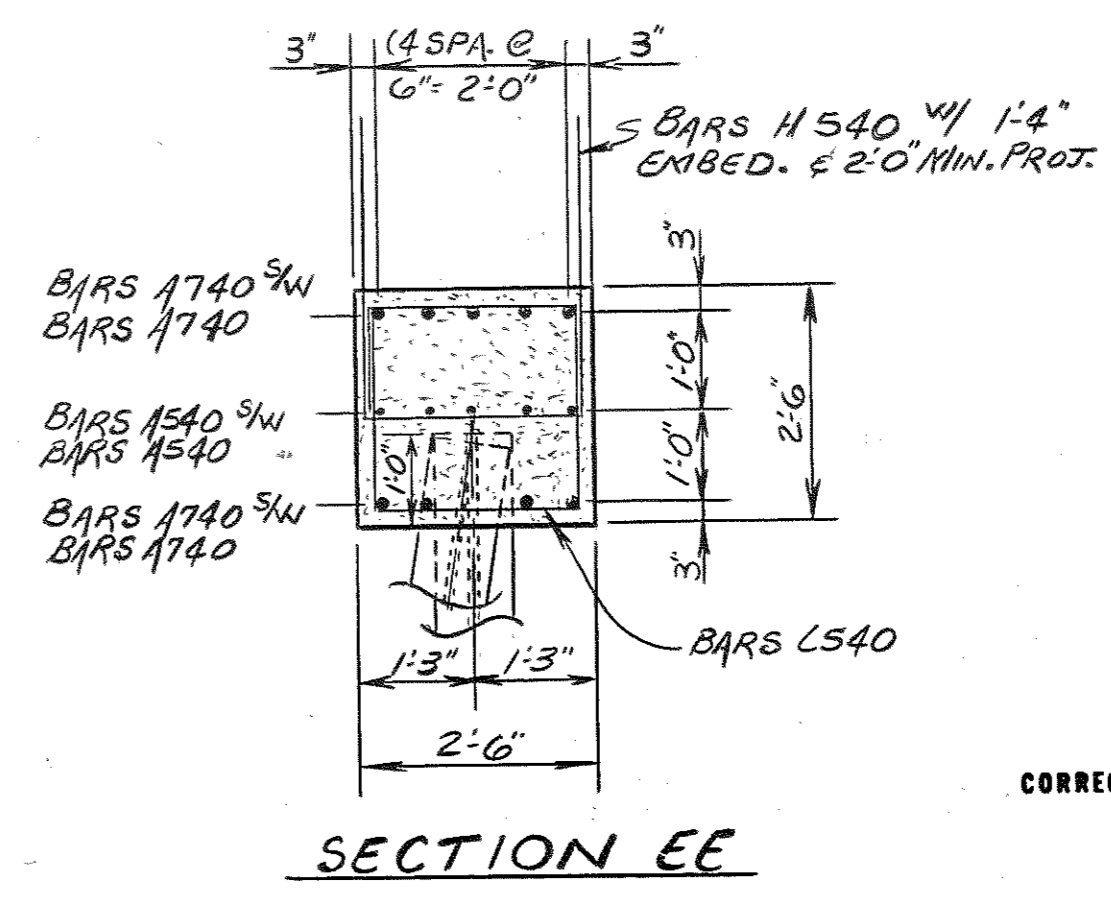
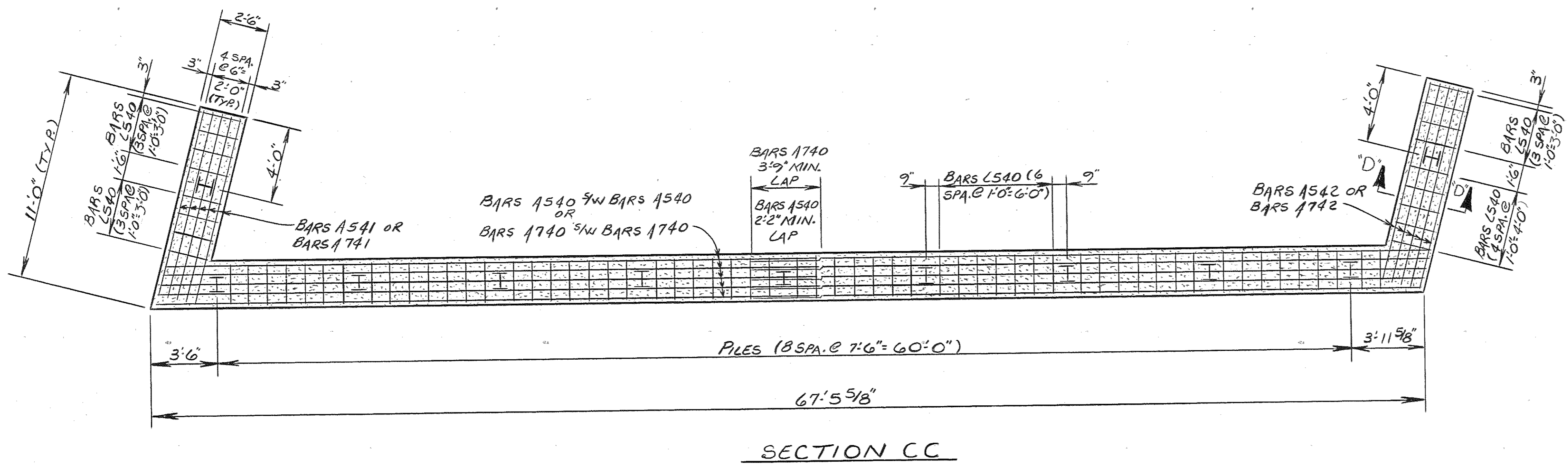
STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 PRESTRESSED BOX BEAM
 INTERSTATE 440 N.E. ROADWAY
 OVER CHARLOTTE AVENUE
 STATION 341 + 35.83 (NE)
 DAVIDSON COUNTY
 1983

CORRECT *Clifton L. Lovell*
 ENGINEER OF STRUCTURES
 APPROVED *James Brown*
 DIRECTOR OF HIGHWAYS

PROJECT NO.	YEAR	SHEET NO.	
1440-4(63)206	1983		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION



* DENOTES: PILES BATTERED FORWARD 2-12.
P.C.O. EL. DENOTES: PILE CUT-OFF ELEVATION.



ESTIMATED QUANTITIES

ITEMS	CLASS "A" CONCRETE (CY.)	STEEL BAR REINFORCEMENT (LBS.)
1 BUT. NO. 1	19.5	3,658

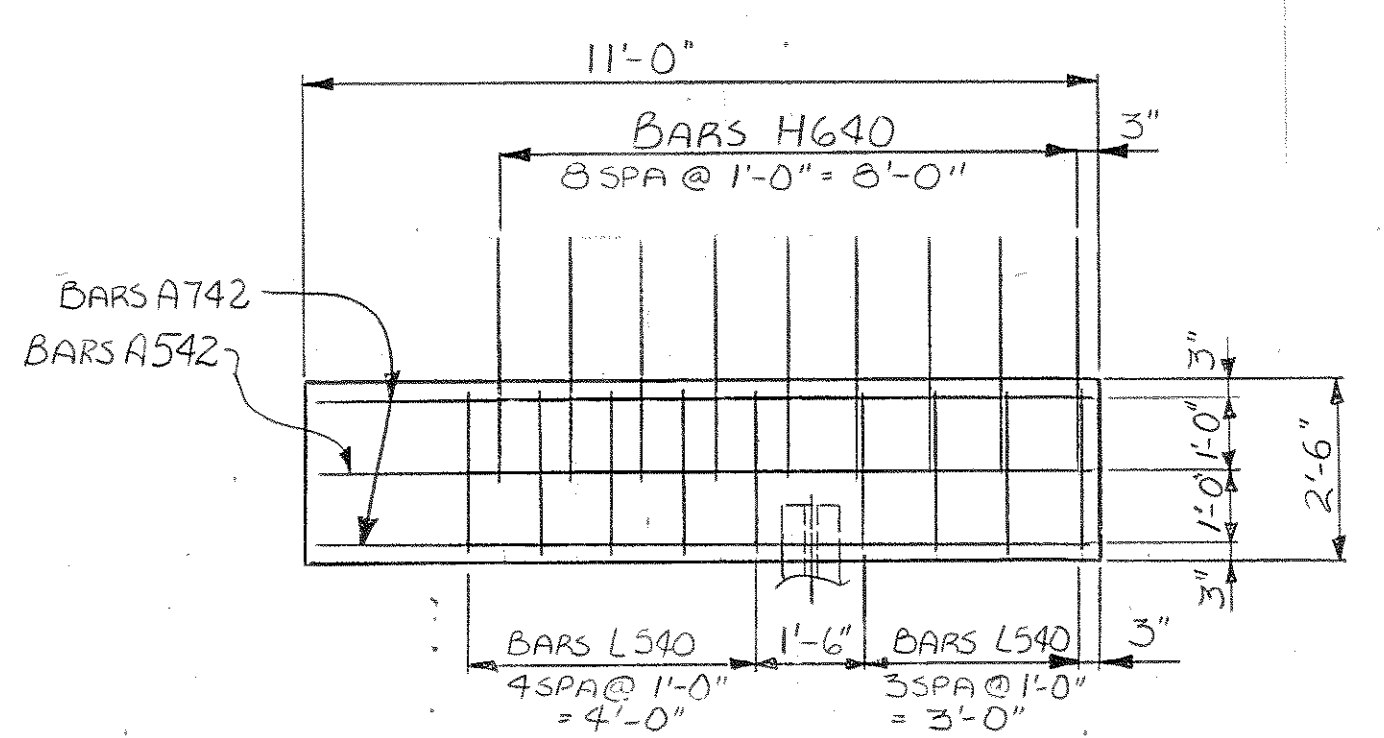
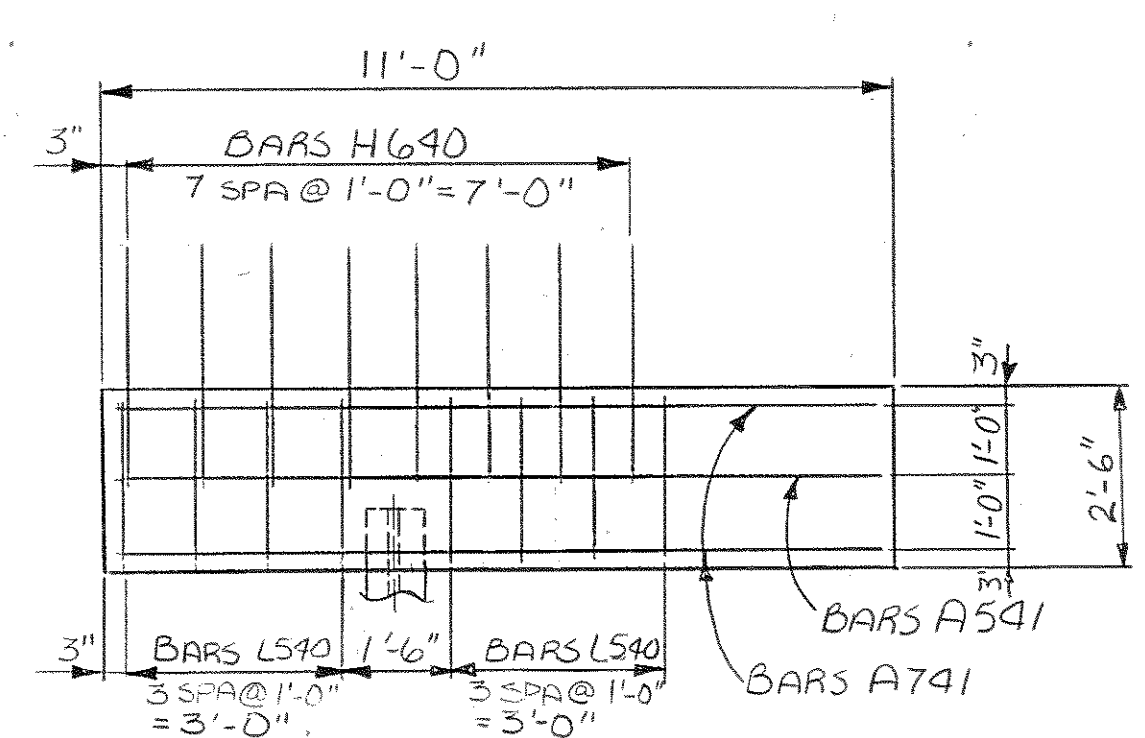
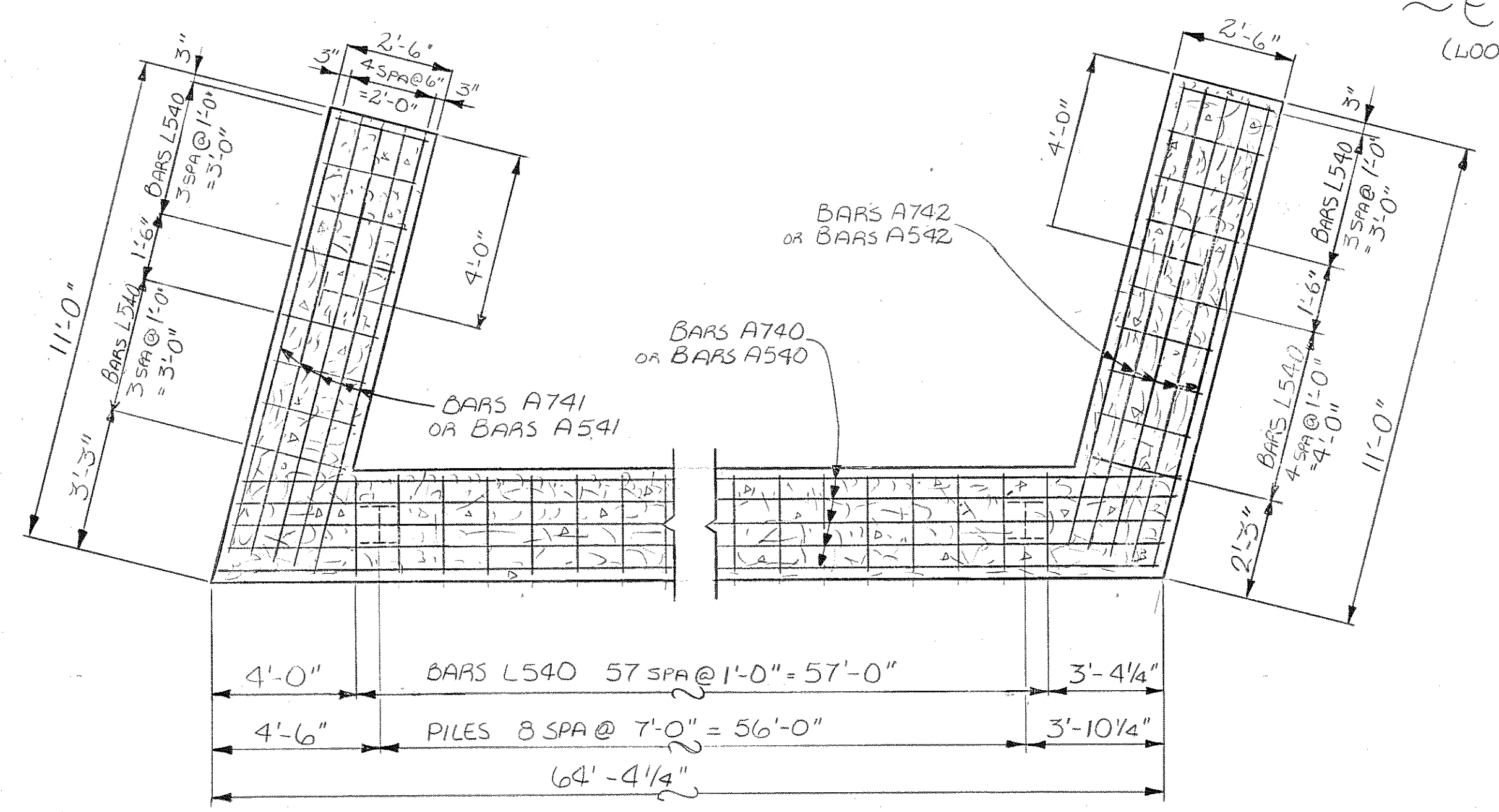
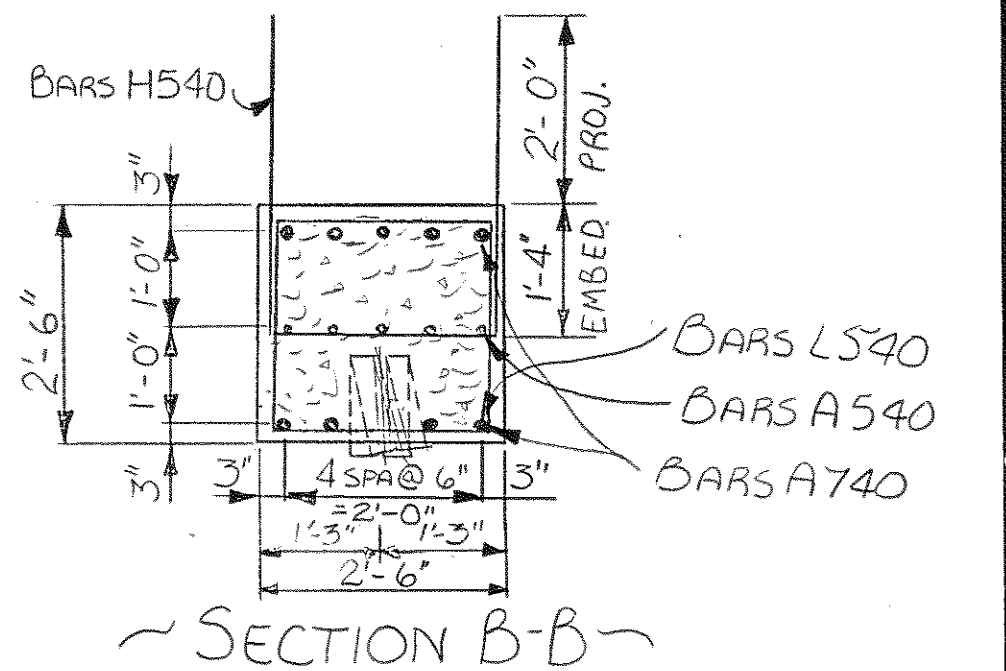
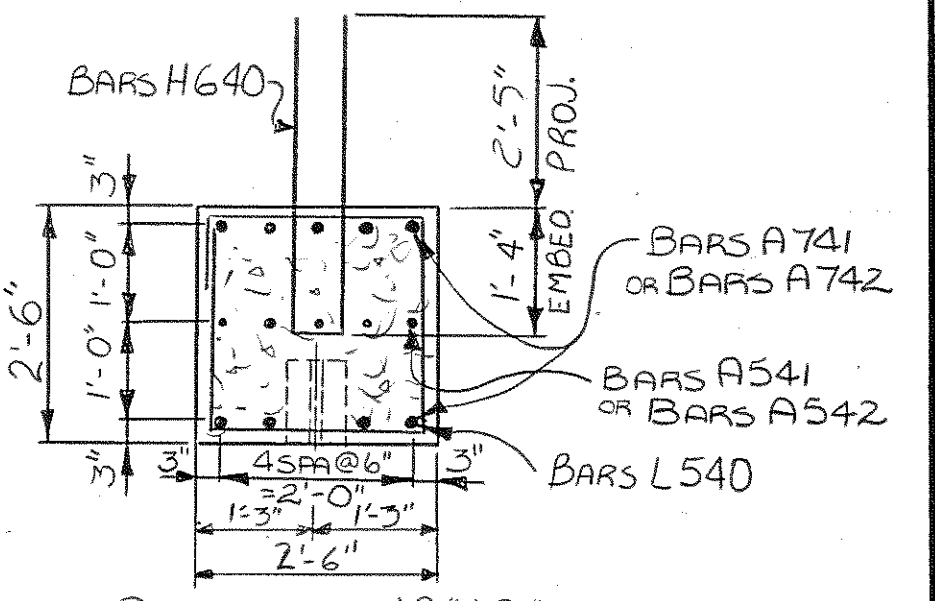
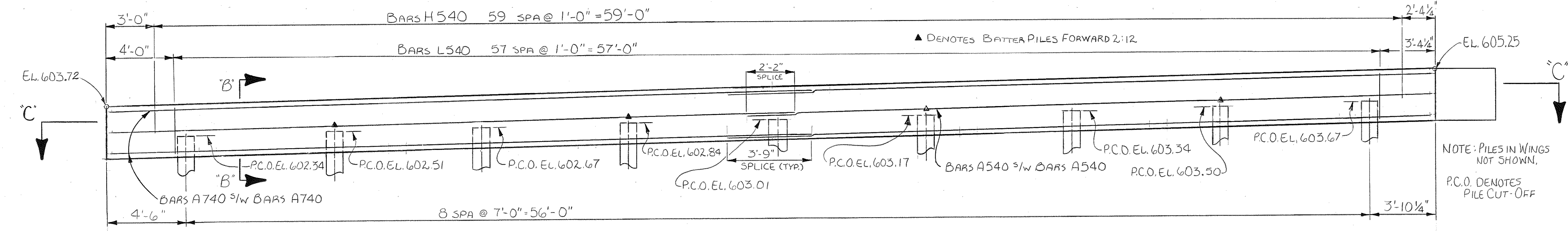
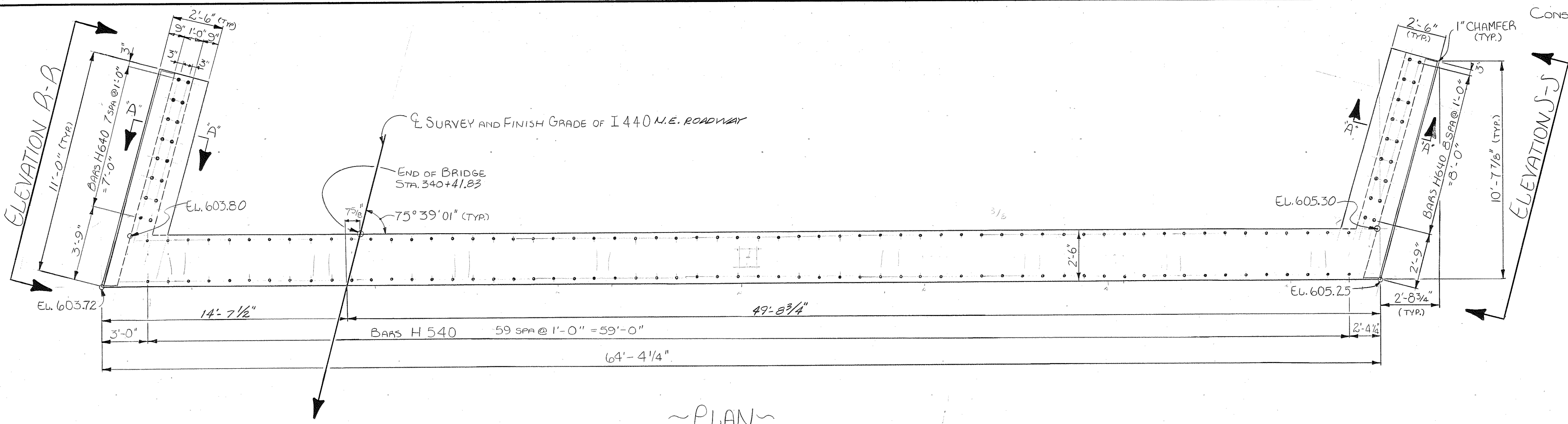
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS
ABUTMENT NO. 1
INTERSTATE 440 NE ROADWAY
OVER
CHARLOTTE AVENUE
STATION 341+35.83 (NE)
DAVIDSON COUNTY
1983

DESIGNED BY H. WALKER DATE 8-82
DRAWN BY RICK HINDMAN DATE 12-82
SUPERVISED BY DON HARRISON/MLM DATE 12-82
CHECKED BY H. WALKER DATE 12-82

CORRECT *Glendon L. Foveall*
ENGINEER OF STRUCTURES
APPROVED *David Evans*
DIRECTOR OF HIGHWAYS

PROJECT NO.	YEAR	SHEET NO.
E440-4(53)206	1983	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION



ESTIMATED QUANTITIES

ITEM	CLASS "A" CONCRETE C.Y.	REINFORCING STEEL LBS.
ABUTMENT No. 2	18.9	3552

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAYS

ABUTMENT No. 2

INTERSTATE 440 N.E. ROADWAY OVER CHARLOTTE AVENUE STATION 341+35.83 (N.E.) DAVIDSON COUNTY

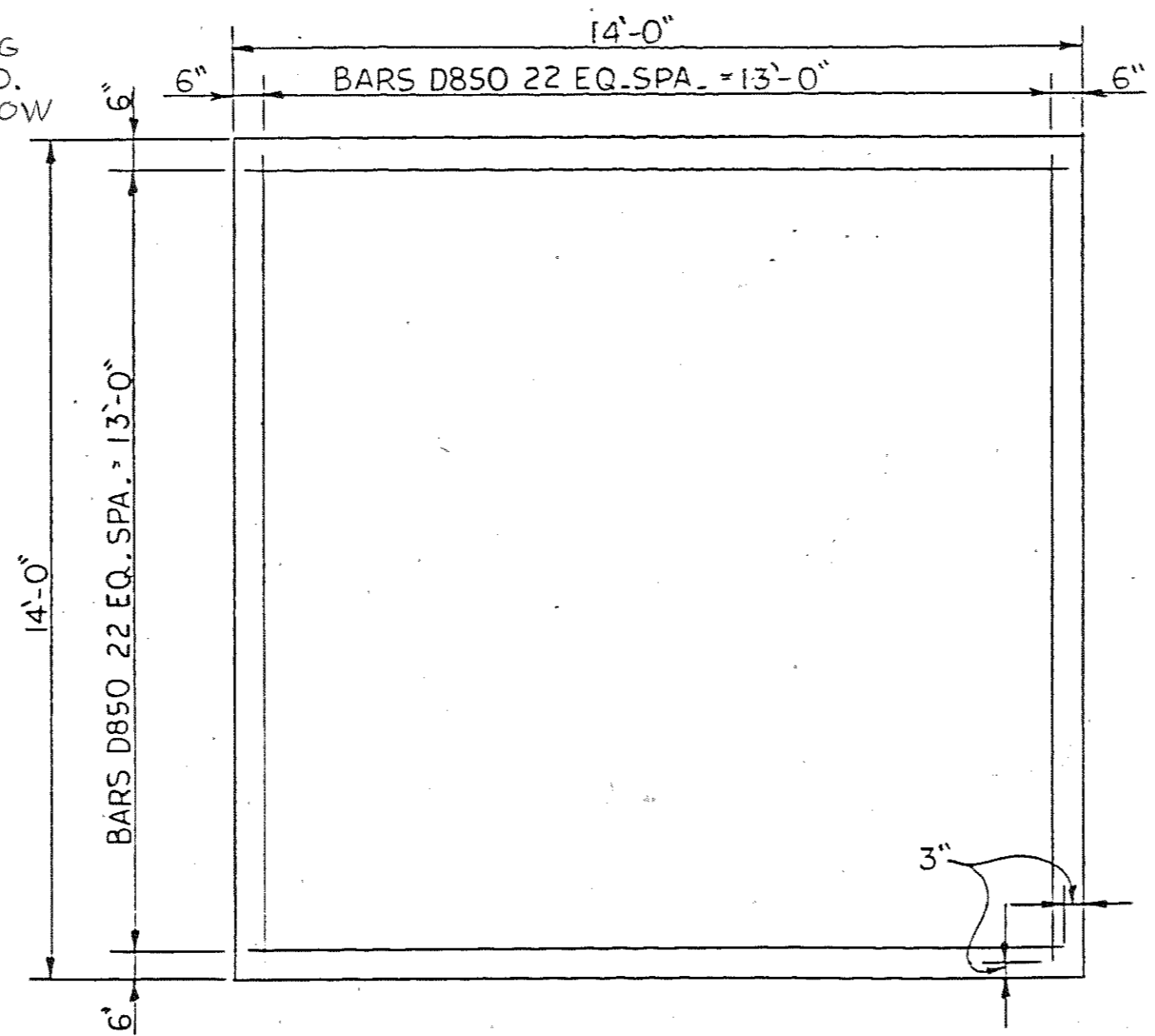
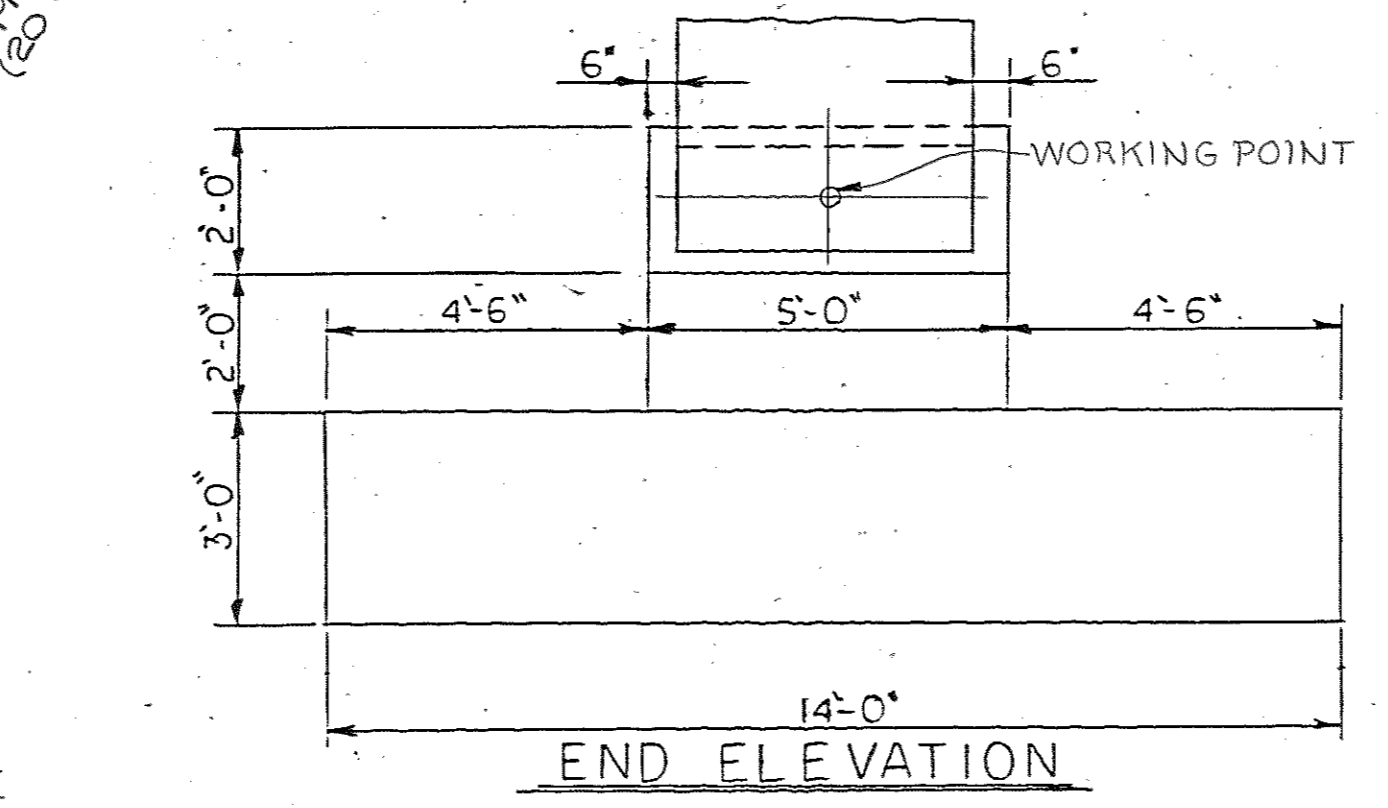
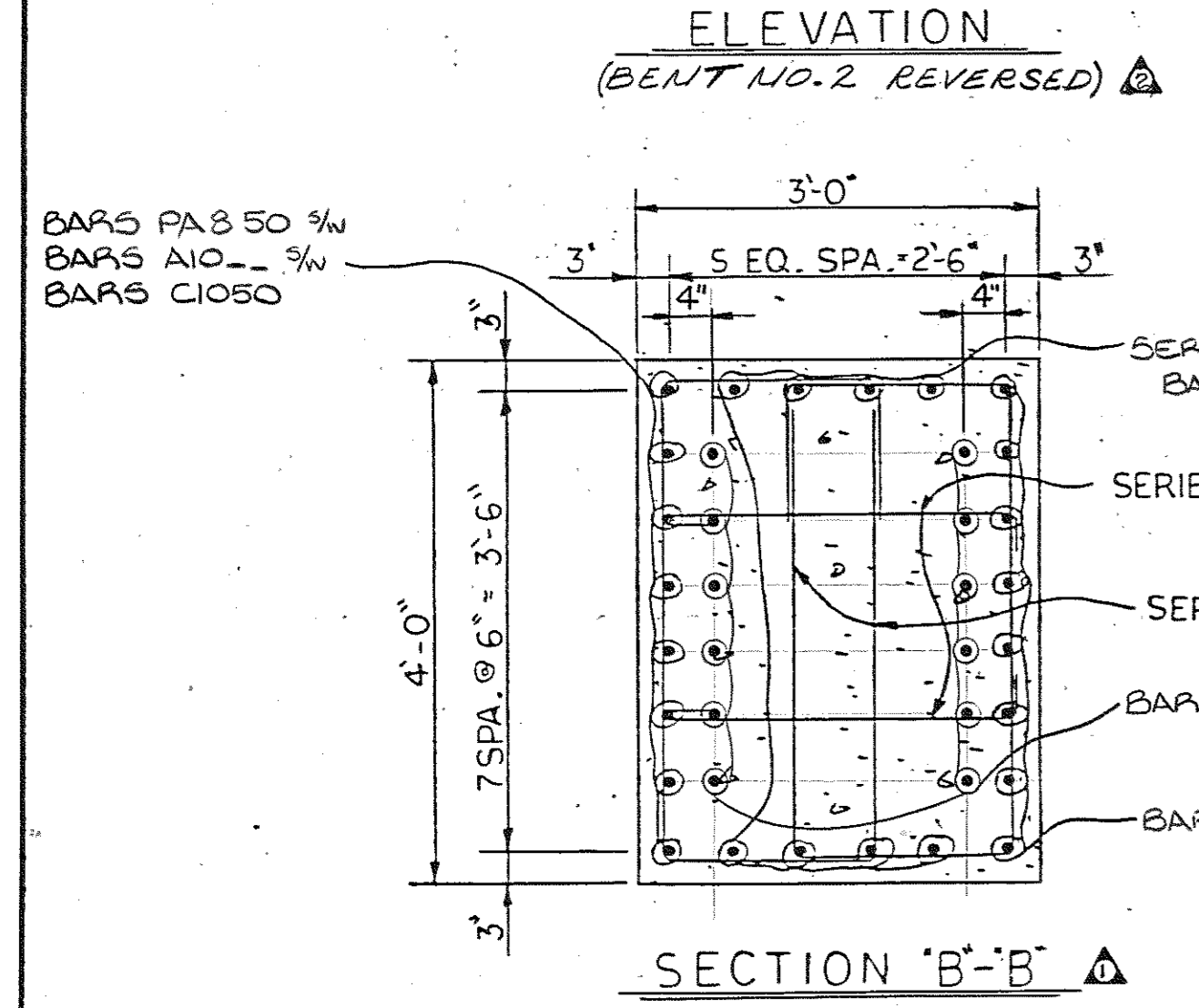
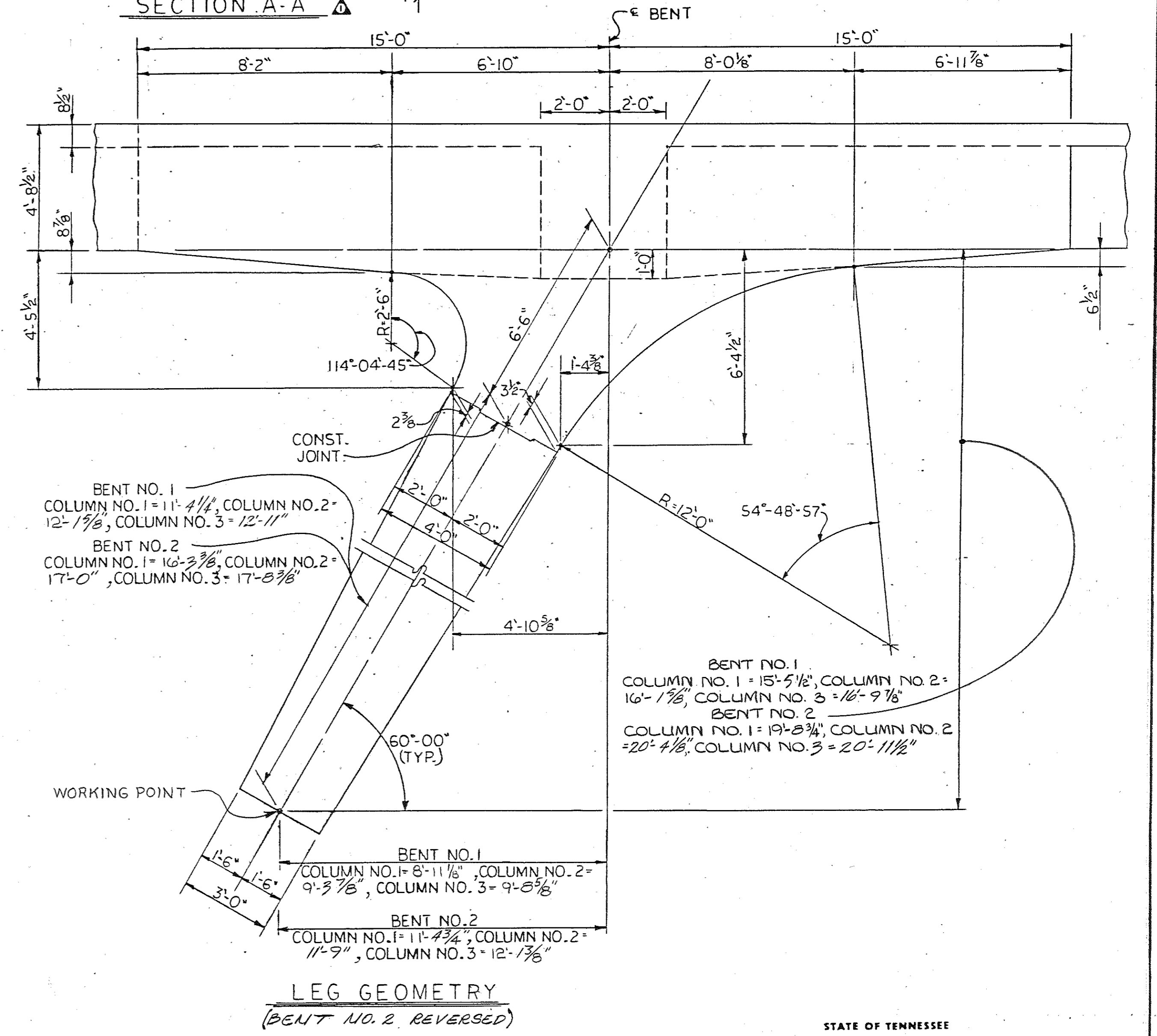
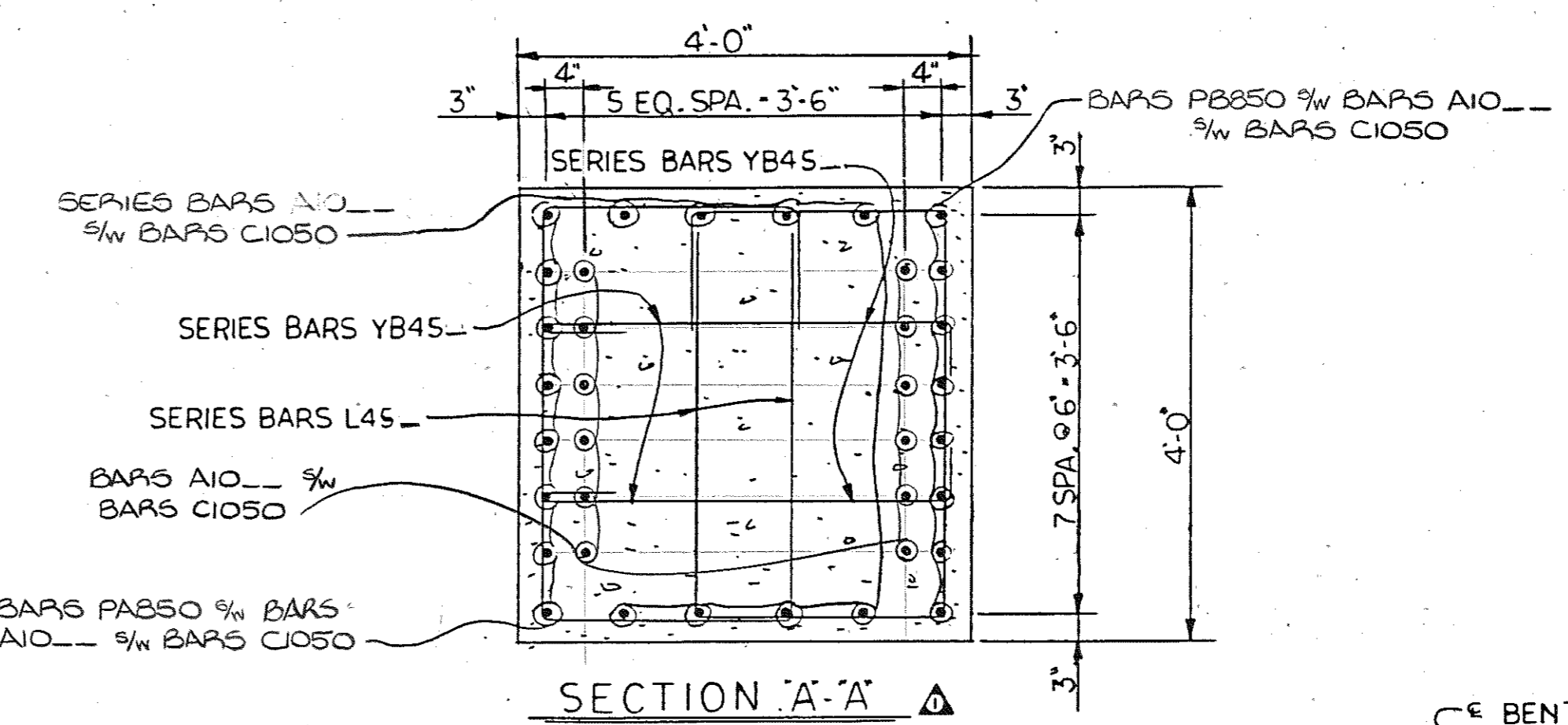
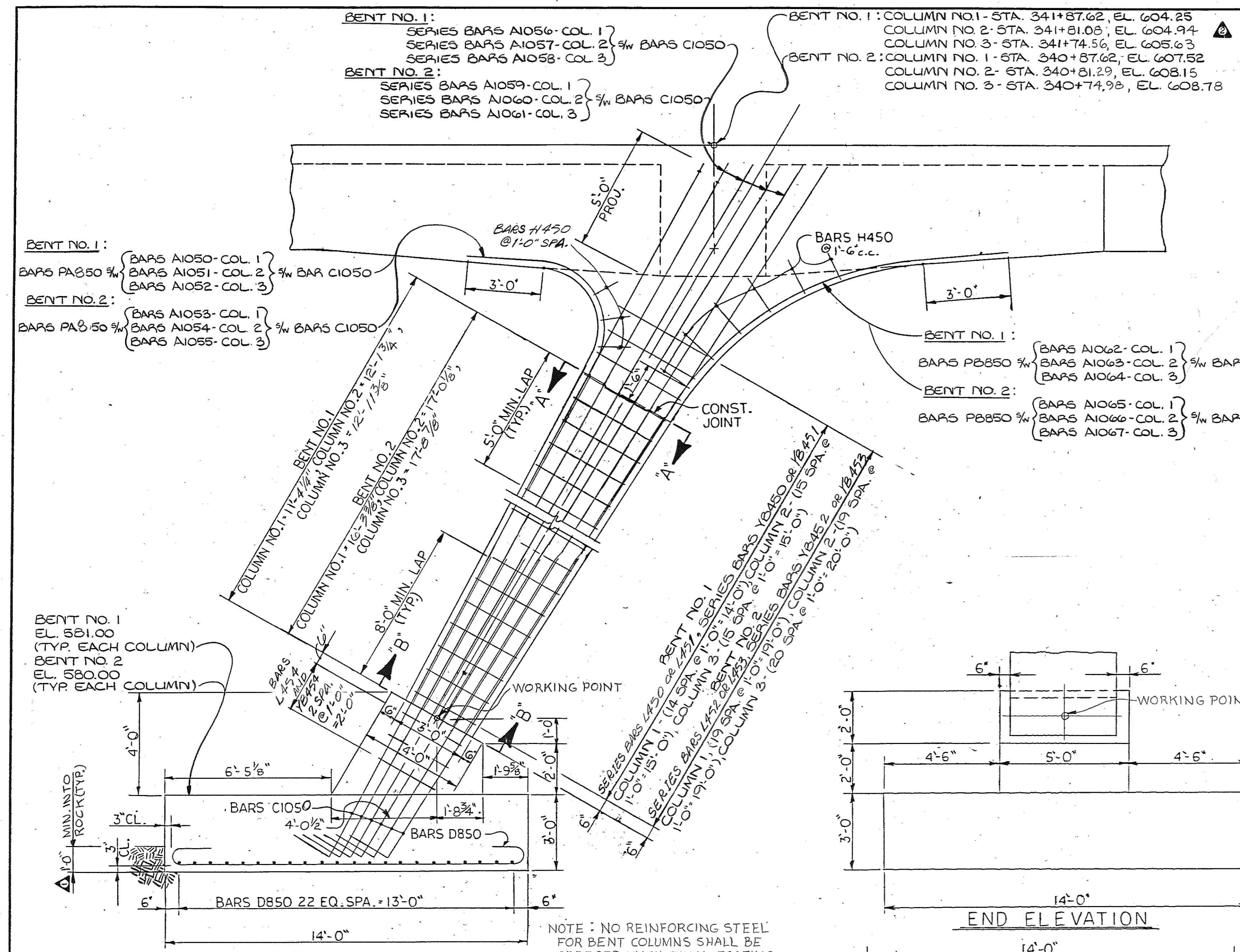
CORRECTED BY William L. Lovelle 1983 ENGINEER OF STRUCTURES

APPROVED BY Lewis Choud DIRECTOR OF HIGHWAYS

DESIGNED BY HOUSTON WALKER DATE 8-82
 DRAWN BY MD + DEANNA WILSON DATE 12-82
 SUPERVISED BY R.L. HARRISON/HMB DATE 12-82
 CHECKED BY H. WALKER DATE 12-82

PROJECT NO.	YEAR	SHEET NO.
I440-4(53)206	1983	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	2-8-83	J.H.W.	COLUMN STEEL, FTG. EMBED.
2	4-21-83	H.W.	ADDED NOTE & DIMENSIONS & CHANGED STATIONS & ELEV'S.



ESTIMATED QUANTITIES

ITEM	CLASS "A" CONCRETE C.Y.	REINFORCING STEEL LBS.
BENT NO. 1	92.6	27,463
BENT NO. 2	100.1	30,012

NOTE: CONCRETE QUANTITIES CALCULATED TO CONSTRUCTION JOINT.

DESIGNED BY: H. WALKER DATE: 11-82
 DRAWN BY: FRANK F. FROST DATE: 12-82
 SUPERVISED BY: HARRISON & BROOKS DATE: 12-82
 CHECKED BY: H. WALKER DATE: 12-82

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 BENT NO. 1 AND 2 DETAILS
 INTERSTATE 440 NE. ROADWAY
 OVER CHARLOTTE AVENUE
 STATION 341+35.83 (N.E.)
 DAVIDSON COUNTY
 1983

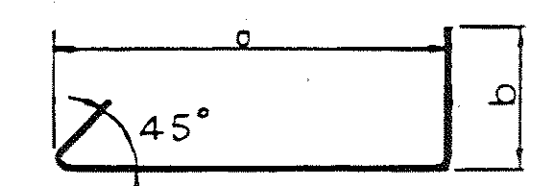
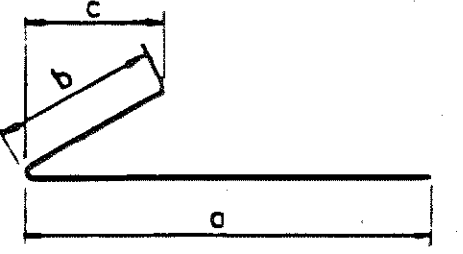
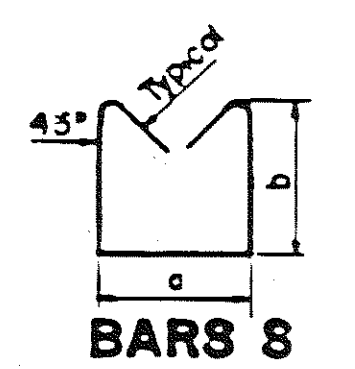
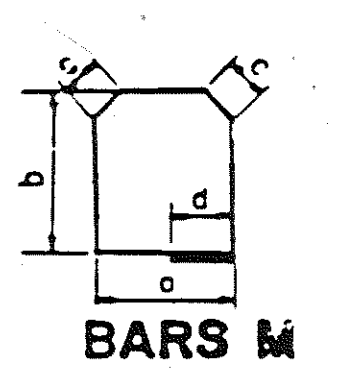
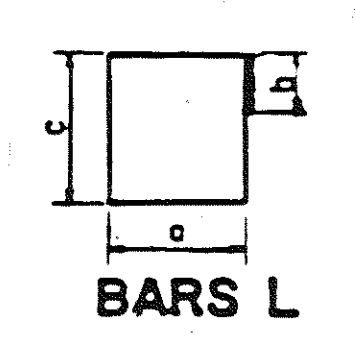
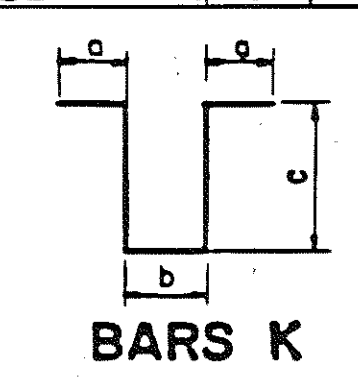
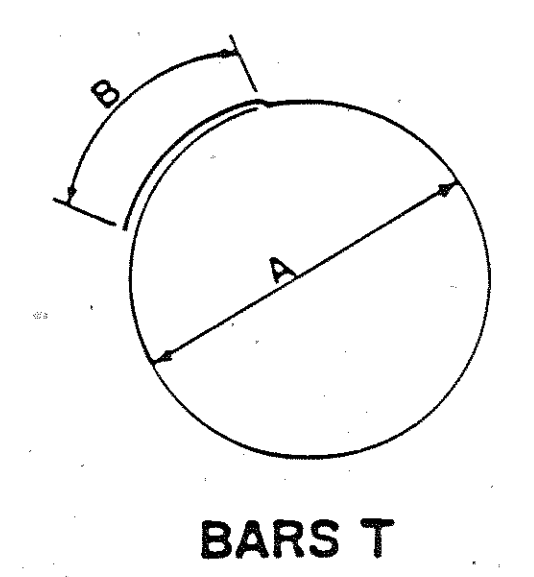
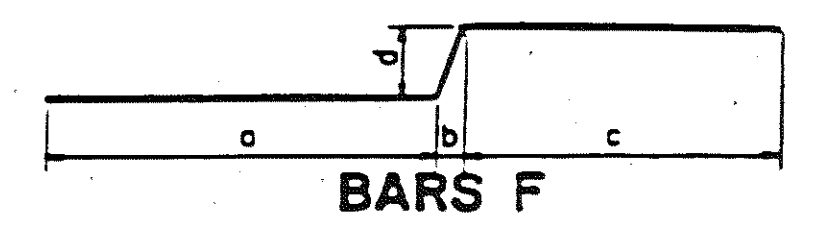
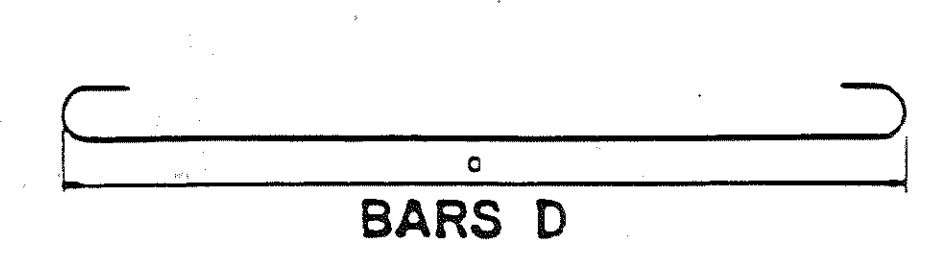
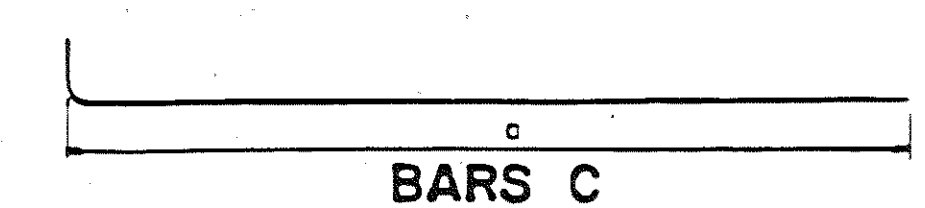
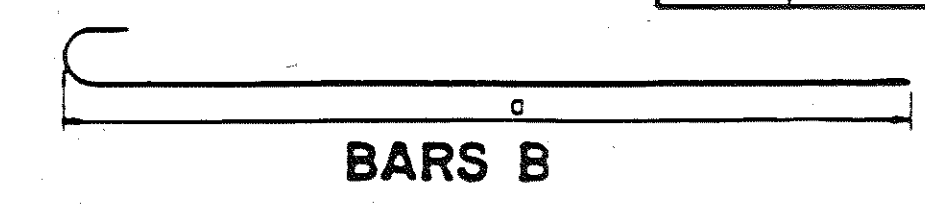
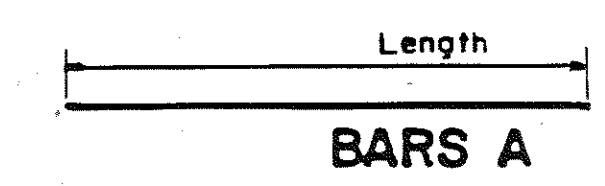
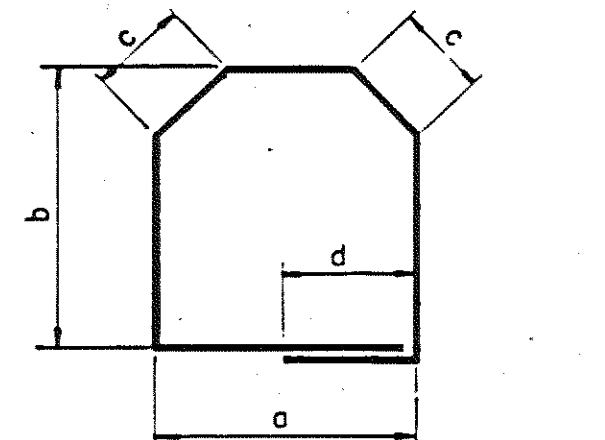
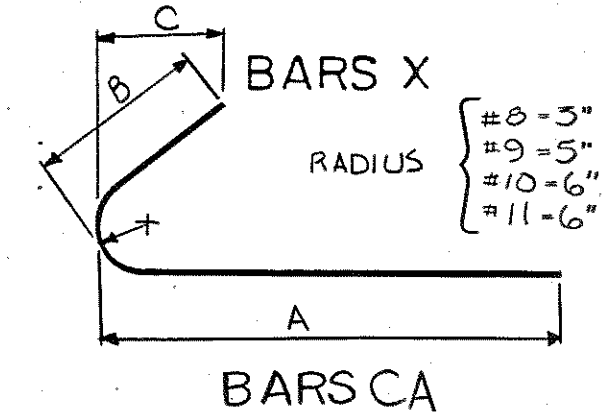
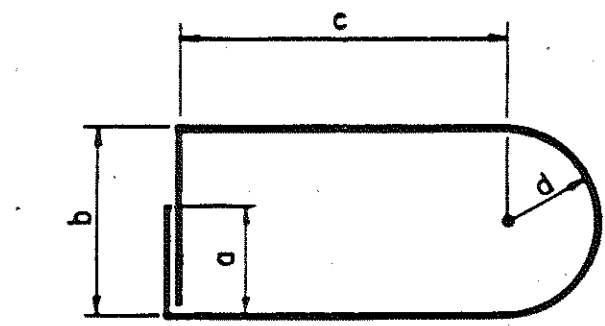
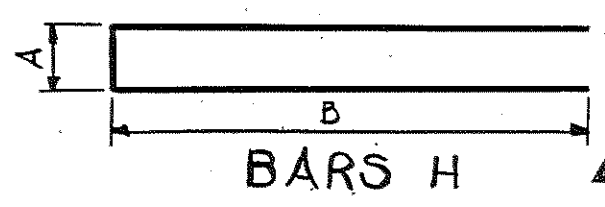
CORRECT: *Colton L. Foveall*
 ENGINEER BY STRUCTURES
 APPROVED: *James Evans*
 DIRECTOR OF HIGHWAYS

BILL OF STEEL

CONST. No. 19014-3111-44

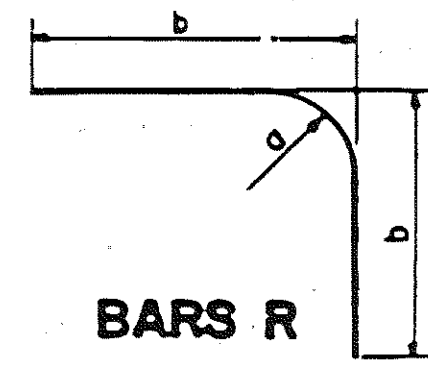
Main table with columns for SUPERSTRUCTURE, SUPERSTRUCTURE (EPOXY COATED) CONT., ABUTMENT NO. 2, and BENT NO. 1 CONT. Each column contains bar details like BAR, LOCATION, SIZE, NO REQ'D, BENDING DIMENSIONS, and LENGTH.

REVISIONS table with columns: NO., DATE, BY, BRIEF DESCRIPTION. Includes three revision entries.

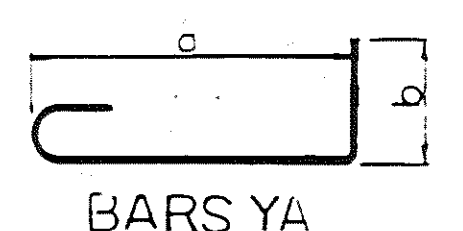


BARS CB

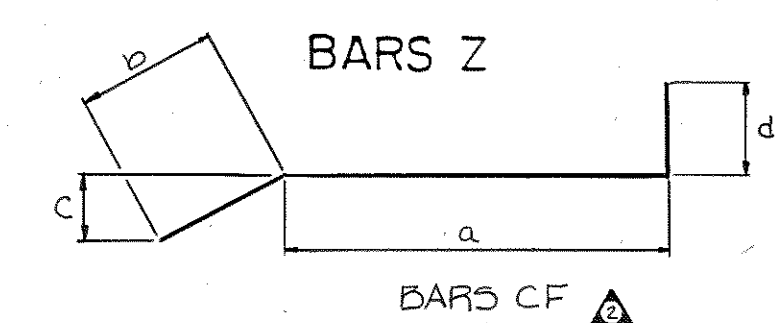
BARS YB



BARS R

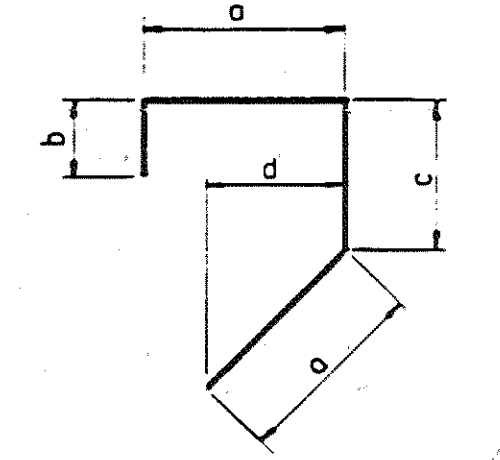


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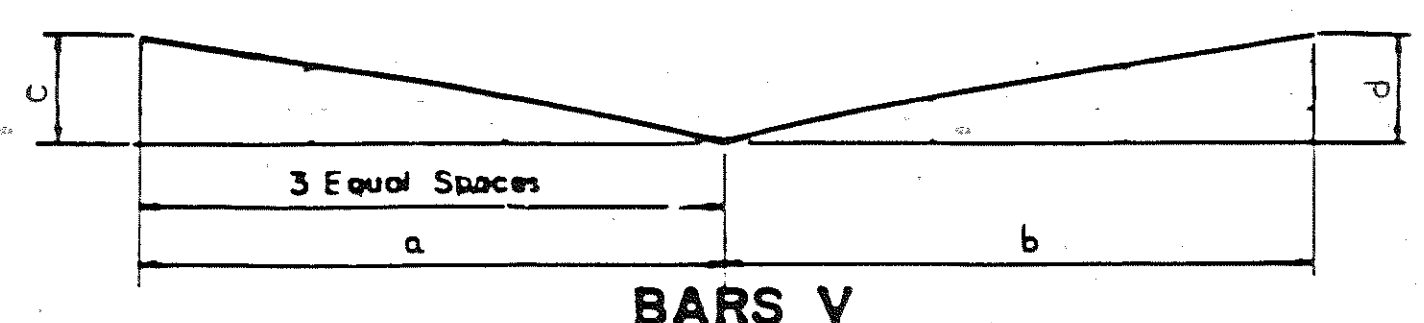


BARS Z

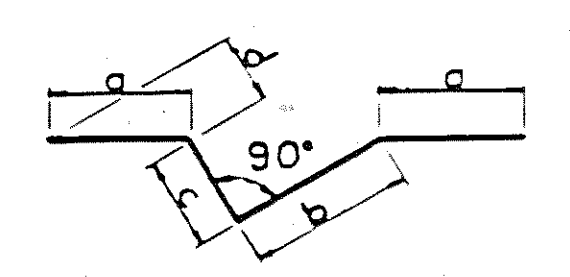
BARS CD



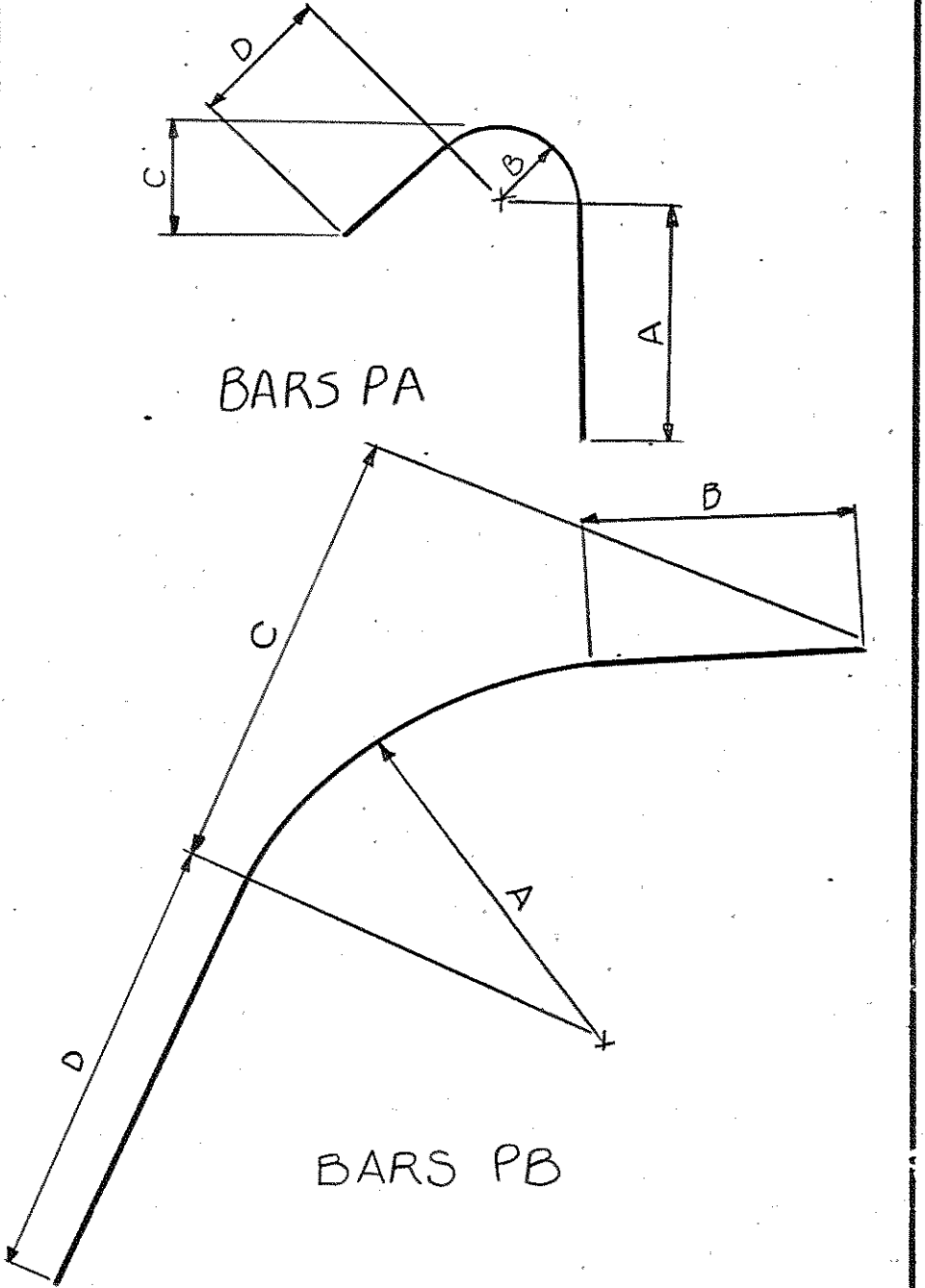
BARS J



BARS V



BARS JX



REINFORCING STEEL CODE

Table with columns: TYPE, SIZE, SERIES. Shows code A, size 5, and series 06.

NOTE: Dimensions shown on this sheet are outside to outside of bar. Standard C R S I. Hook Details Shall Apply, Except As Noted.

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAYS

BILL OF STEEL

Interstate 440 N.E. ROADWAY OVER CHARLOTTE AVENUE STATION 341+35.83(N.E) DAVIDSON COUNTY

1983

Corrected by Colleen L. Foveall, Engineer of Structures. Approved by Lewis Evans, Director of Highway.

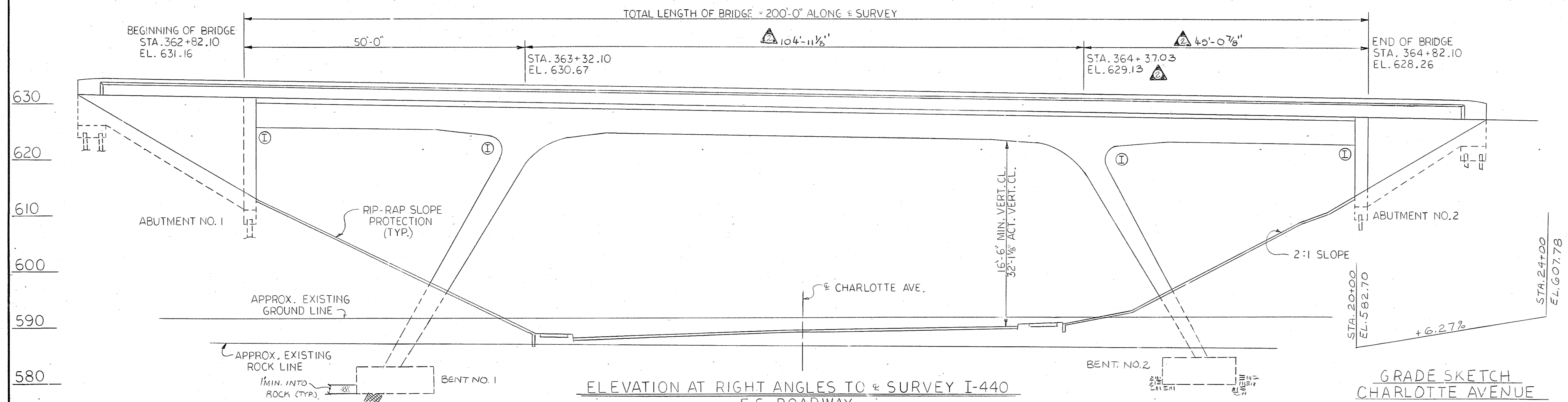
DESIGNED BY Houston Walker DATE 8-82. DRAWN BY Deanna C. Affin DATE 12-82. SUPERVISED BY R.L. Harrison & Brooks DATE 12-82. CHECKED BY H. Walker DATE 12-82.

M-110-99

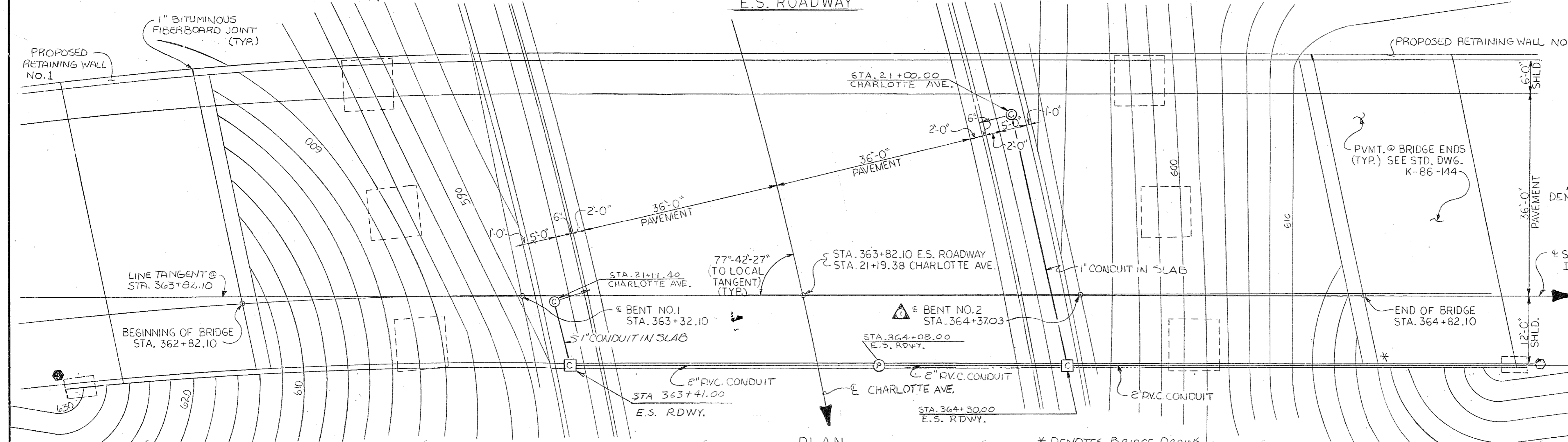
5-0-2

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

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1		HMB	ADDED LIGHTING
2	2-2-84	HALL	REVISED BENT NO. 2

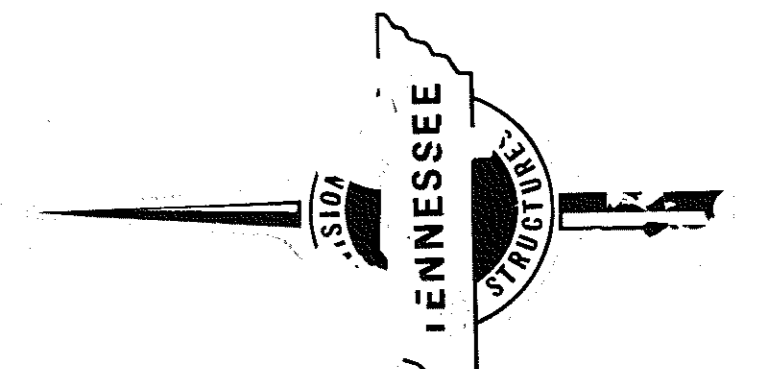


1200' v.c.
 GRADE SKETCH
 I-440 E.S. ROADWAY
 NOTE: ELEVATIONS ARE BASED ON FINISH GRADE.



GRADE SKETCH
 I-440 E.S. ROADWAY
 NOTE: ELEVATIONS ARE BASED ON FINISH GRADE.

* DENOTES BRIDGE DRAINS
 Ⓢ DENOTES GUARDRAIL ATTACHMENT



CURVE DATA

CHARLOTTE AVE.	I440 E.S.
P.I. = 22+71.42	P.I. = 361+85.69
Δ = 13° 01' 00"	Δ = 6° 00' 00"
D = 3° 30'	D = 1° 30'
L = 371.905'	L = 200.18'
T = 186.757'	T = 3819.72'
R = 1637.022'	R = 5.24'
E = 10.62'	E = .044%
S.E. = REVERSE CROWN	LS = 200.00'
TRANS. LENGTH = 100'	OS = 1° 30' 00"
	LT = 133.34'
	ST = 166.67'

LIST OF DRAWINGS

BRIDGE DRAWINGS	DWG. NO.	LAST REV. DATE	BRIDGE DRAWINGS	DWG. NO.	LAST REV. DATE
LAYOUT OF BRIDGE	M-110-100	2-2-84	PRESTRESSED BEAM DETAILS	M-110-109	4-21-83
ESTIMATED QUANTITIES	M-110-101	2-2-84	ABUTMENT NO. 1	M-110-110	
* GENERAL NOTES			ABUTMENT NO. 1 DETAILS	M-110-111	11-18-83
FOUNDATION DATA	M-110-102	6-15-83	ABUTMENT NO. 2	M-110-112	12-5-83
SUPERSTRUCTURE	M-110-103	4-21-83	ABUTMENT NO. 2 DETAILS	M-110-113	11-18-83
SUPERSTRUCTURE DETAILS	M-110-104	2-2-84	BENT NO. 1 & 2	M-110-114	2-2-84
SUPERSTRUCTURE DETAILS	M-110-105	2-2-84	BILL OF STEEL	M-110-115	2-2-84
SUPERSTRUCTURE DETAILS	M-110-106	2-2-84	BILL OF STEEL	M-110-115A	11-18-83
SUPERSTRUCTURE DETAILS	M-110-107	2-2-84	TENNESSEE STD. PRECAST PRESTRESSED BRIDGE DECK PANELS	M-103-149 +150	
SUPERSTRUCTURE DETAILS	M-110-108	2-2-84			

LIST OF SPECIAL PROVISIONS

SPECIAL PROVISION NO.	REGARDING	LAST REV. DATE
105A	APPROVAL OF SHOP DRAWINGS	9-08-81
907A	EXPOXY COATED REINFORCING STEEL	9-08-81

NOTE: THE CONTRACTOR SHALL SUPPORT THE ABUTMENTS UNTIL THE SUPERSTRUCTURE IS IN PLACE, FALSEWORK HAS BEEN REMOVED AND BACKFILLING HAS BEEN COMPLETED.

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

DESIGNED BY H. WALKER DATE 11-82
 DRAWN BY FRANK F. FRONT DATE 12-82
 SUPERVISED BY HAROLD S. H. M. B. DATE 12-82
 CHECKED BY H. WALKER DATE 12-82

CORRECT
 APPROVED
 ENGINEER OF STRUCTURES
 DIRECTOR OF HIGHWAYS

CLASS "A" GRADING "D" 154 C.Y.

GENERAL NOTES

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

LOADING: HS 20-44 WITH ALTERNATE MILITARY.

DESIGN SPECIFICATIONS: AASHTO 1977 EDITION WITH ADDENDA

CONCRETE: TO BE CLASS "A" (CAST IN PLACE), F_c 3,000 psi.

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 4500 psi
 MINIMUM WATER / CEMENT 5.0 gal / SACK OF CEMENT
 AIR CONTENT 6% ± 2%

PAYMENT WILL BE UNDER ITEM 604-01.12

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 CASH 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 307A.)

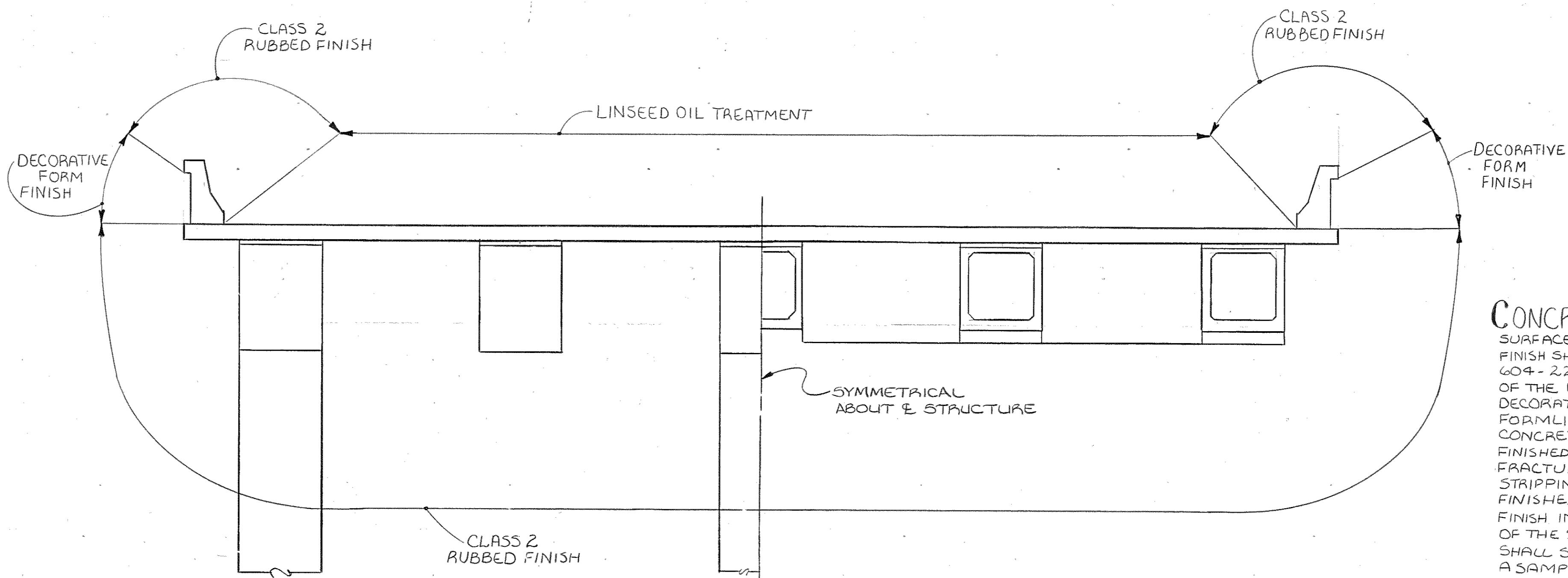
SPECIAL NOTE - FOOTING FOR BENTS: AFTER EXCAVATION TO ROCK FOR FOOTING HAS BEEN COMPLETED, HOLES 6' DEEP SHALL BE DRILLED AT POINTS DESIGNATED BY THE ENGINEER. FROM THE RESULTS OBTAINED, THE ENGINEER SHALL DETERMINE THE FINAL FOOTING ELEVATIONS. NO REINFORCING STEEL FOR BENT COLUMNS SHALL BE ORDERED UNTIL FINAL FOOTING ELEVATIONS HAVE BEEN DETERMINED.

NOTE - BENTS LOCATED IN THE TOE OF ABUTMENT FILL: 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 STANDARD DRAWING M-28-1.

SHOP DRAWINGS: SEE SPECIAL PROVISION NO. 105A.

PILES: TO BE HP 10x42 DRIVEN TO REFUSAL ON ROCK OR A MINIMUM BEARING OF 51 TONS FOR THE ABUTMENTS.



SURFACES OF ABUTMENT BEAM, CAP BEAM, AND WINGWALL THAT ARE EXPOSED TO VIEW SHALL RECEIVE A DECORATIVE FORM FINISH.

SURFACE FINISH SKETCH

NOTE: MACHINED RIP-RAP FOR SLOPE PROTECTION SHALL BE 3" TO 6" IN SIZE AND MEET THE QUALITY REQUIREMENTS OF SUBSECTION 918-10 AND BE PAID FOR UNDER ITEM 709-05.04. SEE STANDARD DWG. NO. FD-SA-1

CONST. No. 19014-3111-44

PROJECT NO.	YEAR	SHEET NO.	
I440-4(53)206	1983		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	4-21-83	H.W.	REVISED QUANTITIES & NOTE
2	11-14-83	H.W.	STEEL QUANTITIES
3	11-18-83	H.W.	STEEL QUANTITIES
4		HALL	ADDED LIGHTING
5	2-2-84	HALL	REVISED QUANTITIES

CONCRETE FINISHES: PORTIONS OF THE BRIDGE SURFACE DESIGNATED TO RECEIVE A CLASS 2 RUBBED FINISH SHALL BE FINISHED ACCORDING TO SUBSECTION 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 BG 308 CONCRETE HARP, LITHOTEX FORMLINER FRACTURED FINISHED GROOVED T-150, SYMONS 3/4" NARROW FRACTURED FIN 7/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. ESTIMATED QUANTITIES ARE BASED ON PLANS DIMENSIONS.

ESTIMATED QUANTITIES

ITEM NUMBER	204-02.01	709-05.04	204-04.01	204-05	604-03.01	604-03.02	604-03.03	615-02.14	620-03	710-10	710-11	606-22.03	606-32.03	606-42.03	604-01.12	604-02.03	714-01.02
ITEM	DAY EXCAVATION (BRIDGES) C.Y.	MACHINED RIP-RAP (3 TO 6 IN.) C.Y.	ROCK EXCAVATION (BRIDGES) C.Y.	ROCK DRILLING (BRIDGES) L.F.	CLASS "A" CONCRETE (BRIDGES) C.Y.	STEEL BAR REINFORCEMENT (BRIDGES) LBS.	LINSEED OIL TREATMENT S.Y.	PRESTRESSED CONCRETE BOX BEAM (98" x 43") L.F.	CONCRETE PARAPET L.F.	6" PERFORATED C.M. PIPE (18 GA.) W/ POROUS BACKFILL L.F.	6" C.M. PIPE UNDERDRAINS (18 GA.) L.F.	STEEL PILES (10 INCH) (DRIVING) L.F.	STEEL PILES (10 INCH) (FURNISH DOMESTIC) L.F.	STEEL PILES (10 INCH) (FURNISH FOREIGN) L.F.	CLASS "A" CONCRETE (BRIDGE DECK) C.Y.	EPOXY COATED REINFORCING STEEL (BRIDGES) LBS.	STRUCTURE LIGHTING (BRIDGE NO. 2) L.S.
SUPERSTRUCTURE					533.8	37,470	1167								293.8	142,876	
ABUTMENT NO. 1	78			12	159.2	34,415							222	222	222		
BENT NO. 1	386		193	12	98.8	31,996											
BENT NO. 2	517		106	12	95.3	31,143											
ABUTMENT NO. 2	79			12	94.0	14,690						344	344	344			
PYMT @ BRIDGE ENDS					59.1	21,517	286									6,060	
TOTAL	1,020	113	299	48	1036.2	171,231	1453	350	457	80	27	566	566	566	293.8	149,536	1

① EXCAVATION BASED ON LOWER ROAD PROFILE.

② NOTE: THE COST OF BITUMINOUS-FIBERBOARD AND ALL MISCELLANEOUS JOINT MATERIAL TO BE INCLUDED IN BRIDGE ITEMS BID ON.

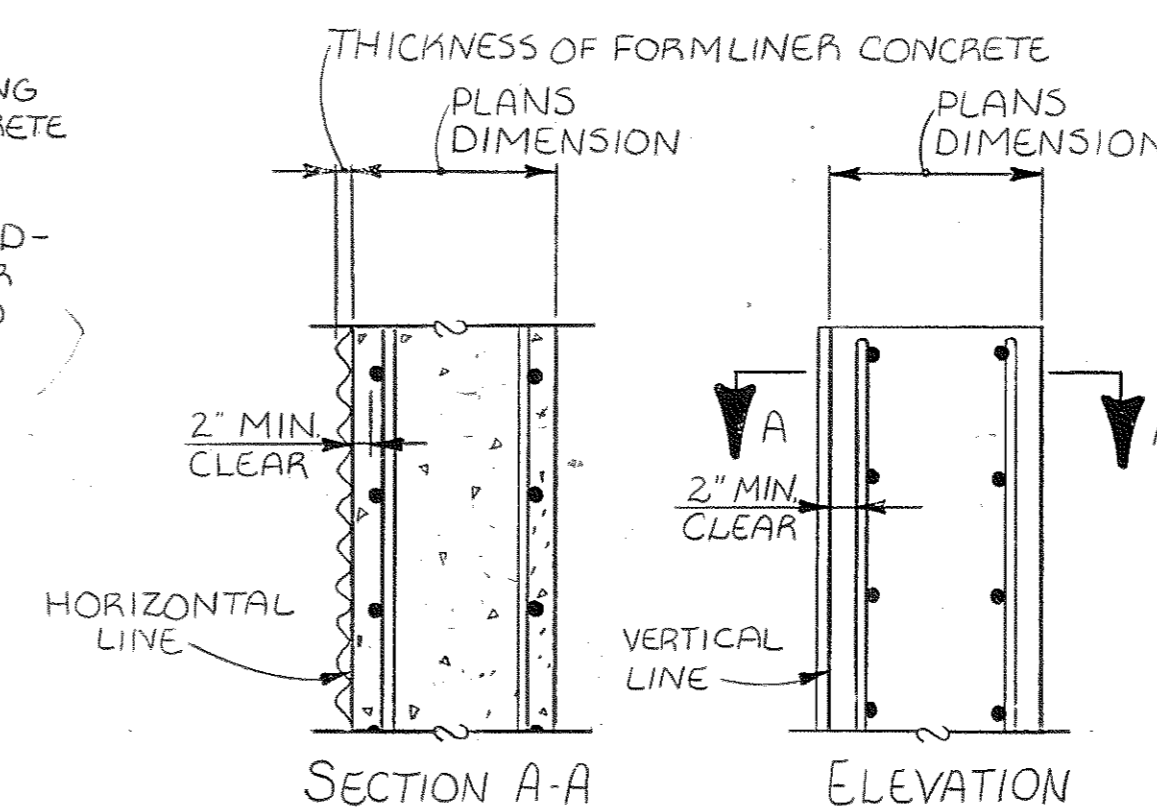
③ NOTE: COST OF POLYETHYLENE SHEETING AND ALL MISCELLANEOUS ITEMS NECESSARY FOR INSTALLATION TO BE INCLUDED IN COST OF PERFORATED C.M. PIPE.

④ NOTE: THE COST OF 8 THREADED STEEL INSERTS AND 8 7/8" Ø x 4" HEX HEAD BOLTS, (A307), TO BE INCLUDED IN BRIDGE ITEMS BID ON.

⑤ ALL REINFORCING STEEL IN THE TRAFFIC FACE OF PARAPETS SHALL BE EPOXY COATED. COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 620-03.

⑥ NOTE: LUMP SUM FOR STRUCTURE LIGHTING TO INCLUDE THE INSTALLATION OF 181 L.F. OF 2" PVC CONDUIT, 62 L.F. OF 1" GALVANIZED STEEL CONDUIT, 4 PULL BOXES, 1 LIGHT SUPPORT WITH 4 ANCHOR BOLTS AND ALL MISCELLANEOUS HARDWARE NECESSARY FOR INSTALLATION.

NOTE: THESE DETAILS ARE TYPICAL FOR ALL STRUCTURAL ELEMENTS REQUIRING DECORATIVE FORM LINERS EXCEPT CONCRETE PARAPETS. PARAPET DIMENSIONS MAY BE REDUCED BY THE THICKNESS OF THE FORM LINER IN ORDER TO UTILIZE STANDARD PARAPET FORMS REINFORCING BAR BENDING DIMENSIONS SHALL BE REDUCED ACCORDINGLY.



TYPICAL FORMING DETAILS

DESIGNED BY HOUSTON WALKER DATE 8-82
 DRAWN BY DEBORA CHAFFIN LMD DATE 12-82
 SUPERVISED BY BILL HARRISON H.M.B. DATE 12-82
 CHECKED BY H. WALKER DATE 12-82

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

GENERAL NOTES AND
 ESTIMATED QUANTITIES
 I 440 ES ROADWAY OVER
 CHARLOTTE AVENUE
 STATION 363+82.10 (E.S. RDWY)
 DAVIDSON COUNTY

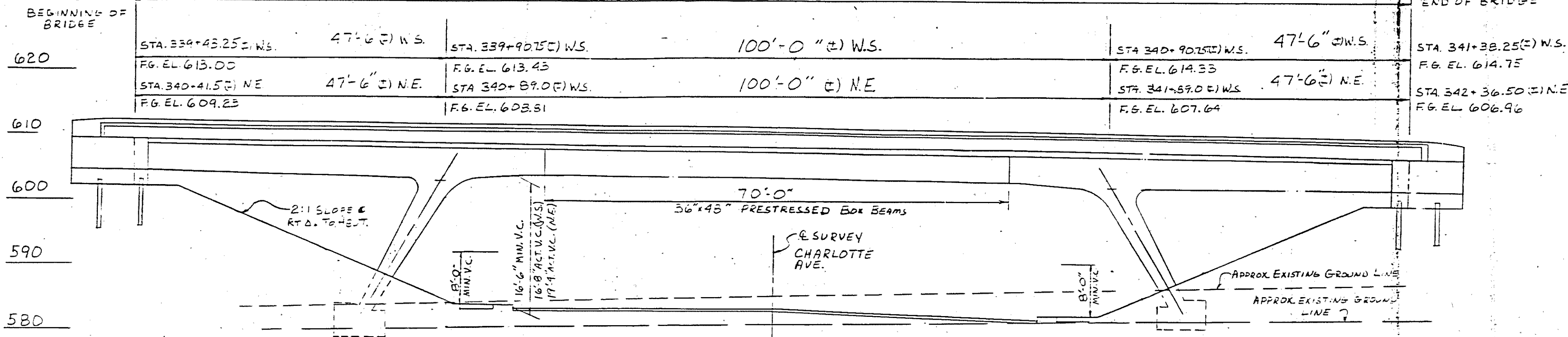
CORRECT *William L. Lovell* 1983
 ENGINEER OF STRUCTURES

APPROVED *Louis Grand*
 DIRECTOR OF HIGHWAYS

M-110-101

TOTAL LENGTH OF BRIDGE = 195'-0" W.S. & N.E. ROADWAYS

P.E. No. 19014-1101-44 CONST. No. 19014-3111-44

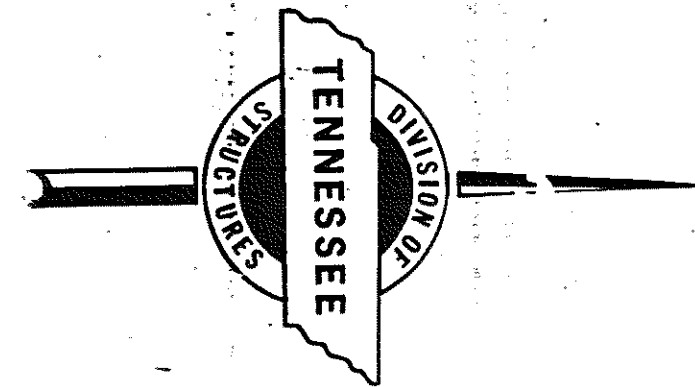


- REQUIRED:
- 1) APPROXIMATE EXISTING GROUND LINE AND ROCK LINE.
 - 2) SUFFICIENT GROUND, ROCK AND CORING INFORMATION FOR BRIDGE FOUNDATIONS.

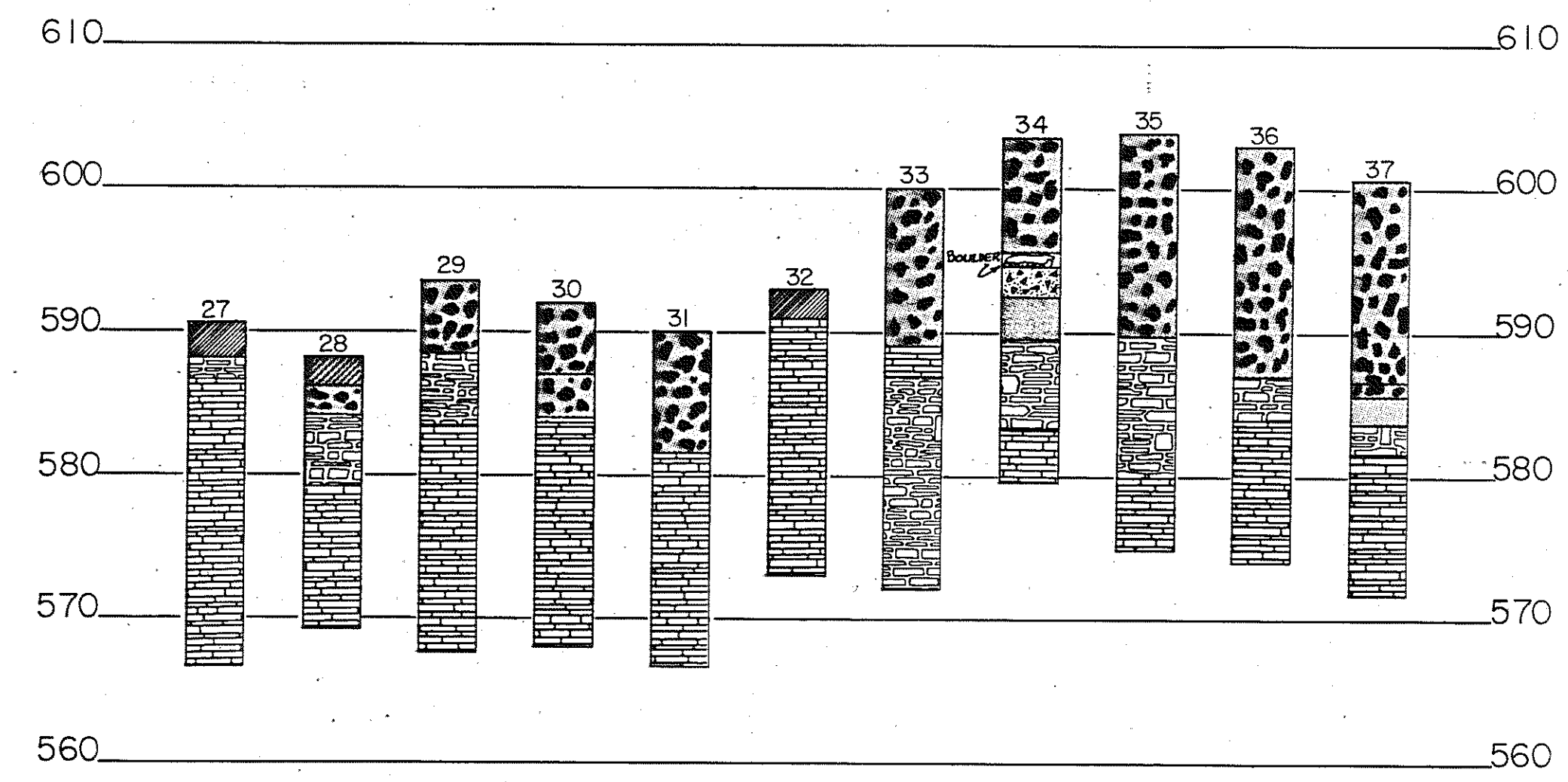
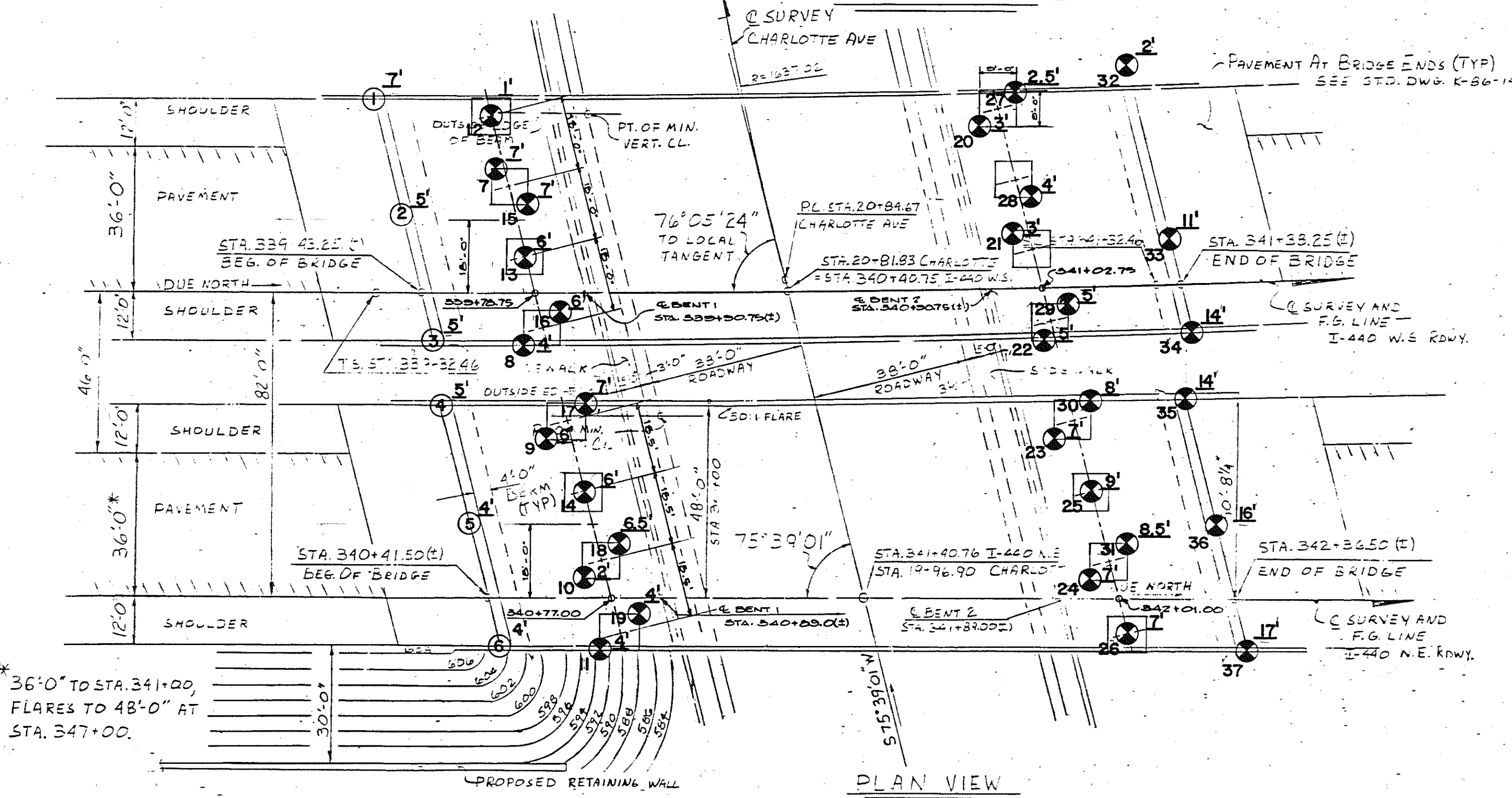
B.M. No. 40
CONC. MON. WITH BRASS CAP
1074.86' LT. STA. 117+00.96
ELEV. 552.24

B.M. No. 37
CONC. MON. WITH BRASS CAP
149.87' RT. STA. 139+23.52
N.E. CORNER OF PARK CIRCLE
ELEV. 581.29

PROJECT NO.	YEAR	SHEET NO.	
1440-4(5)201	1982		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	6/15-83	JHN	ADDED NOTE

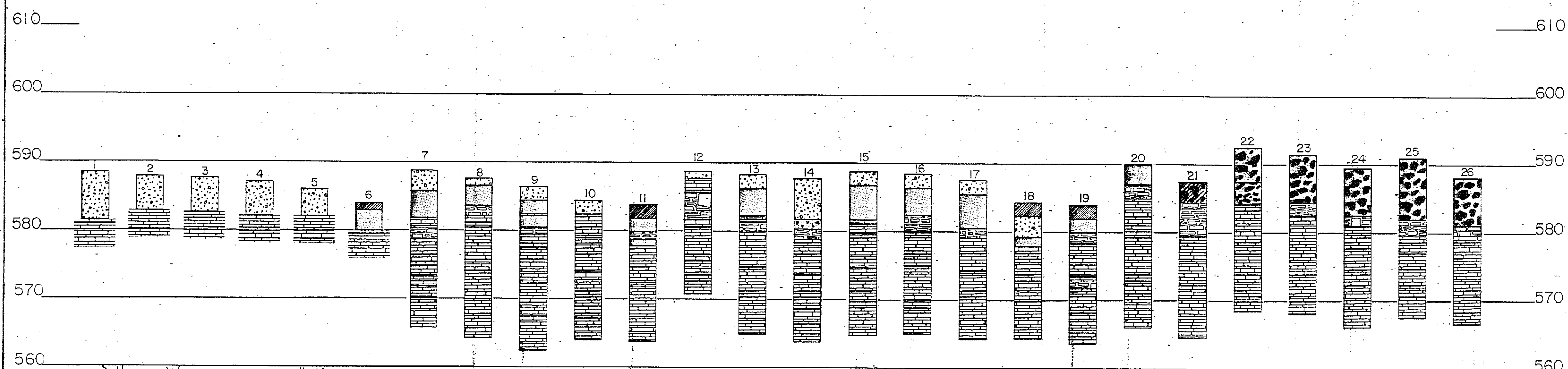


ELEVATION AT RT. & S TO
C SURVEY I-440



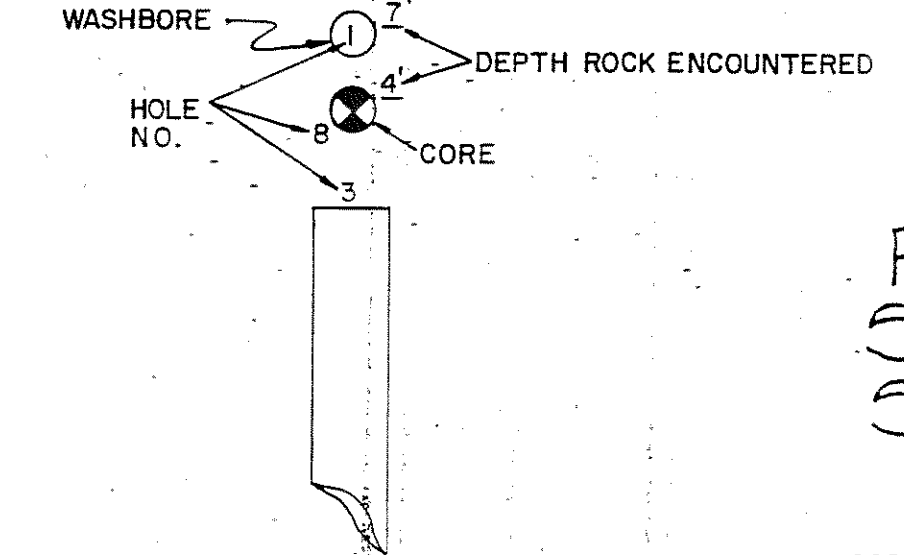
GROUND AND TOP OF ROCK ELEVATIONS

1. G 588.4 R 581.4	14. G 587.8 R 581.8	27. G 590.6 R 588.1
2. G 587.9 R 582.9	15. G 588.8 R 581.8	28. G 588.2 R 584.2
3. G 587.7 R 582.7	16. G 588.4 R 582.4	29. G 593.7 R 587.7
4. G 587.1 R 582.1	17. G 587.7 R 580.7	30. G 592.0 R 584.0
5. G 586.0 R 582.0	18. G 584.2 R 577.7	31. G 590.0 R 581.5
6. G 584.4 R 580.4	19. G 584.0 R 580.0	32. G 593.0 R 591.0
7. G 588.8 R 581.8	20. G 590.0 R 587.0	33. G 600.0 R 589.0
8. G 587.7 R 583.7	21. G 587.4 R 584.4	34. G 603.6 R 589.6
9. G 584.4 R 580.4	22. G 592.5 R 584.0	35. G 603.0 R 589.9
10. G 584.3 R 582.3	23. G 591.5 R 584.5	36. G 602.9 R 586.9
11. G 583.9 R 579.9	24. G 589.5 R 582.5	37. G 600.7 R 583.7
12. G 588.8 R 587.8	25. G 591.0 R 582.0	
13. G 588.3 R 582.3	26. G 588.1 R 581.1	



Legend

- RESIDUAL SILTS AND CLAYS
- SILTY CLAY, GRAVEL AND BRICK
- SOIL AND BOULDER FILL
- PAVEMENT, CLAY AND BOULDERS
- PAVEMENT
- CONCRETE
- WEATHERED SHALY LIMESTONE (8 TONS/FT.³)
- SHALY LIMESTONE (8 TONS/FT.³)



NOTE: FOUNDATION DATA SHEET IS DRAWN LOOKING IN OPPOSITE DIRECTION OF LAYOUT DRAWING.

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 E.S. AND N.E.
ROADWAYS OVER CHARLOTTE AVENUE
STATION 363+82.10 (E.S. ROADWAY)
STATION 341+38.95 (N.E. ROADWAY)
DAVIDSON COUNTY
1982

CORRECT: *Colleen L. Linnell*
ENGINEER OF STRUCTURES

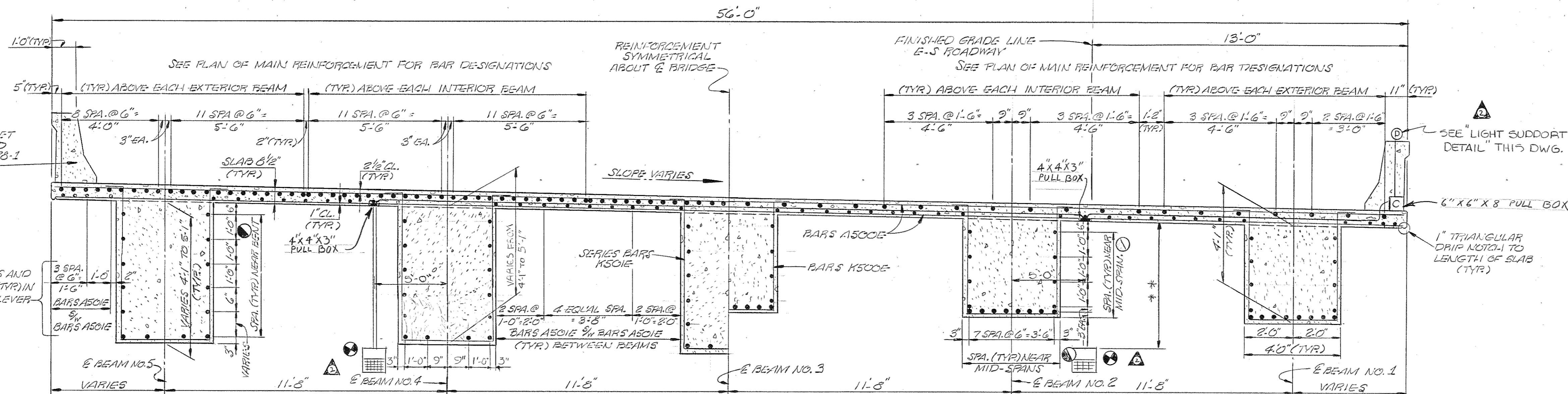
APPROVED: *Louis E. Linnell*
DIRECTOR OF HIGHWAYS

M-110-102

DESIGNED BY: S. HUTTON WALKER DATE: 4-82
DRAWN BY: MARK DUE DATE: 5-82
SUPERVISED BY: HERRING & BROOKS DATE: 5-82
CHECKED BY: DATE:

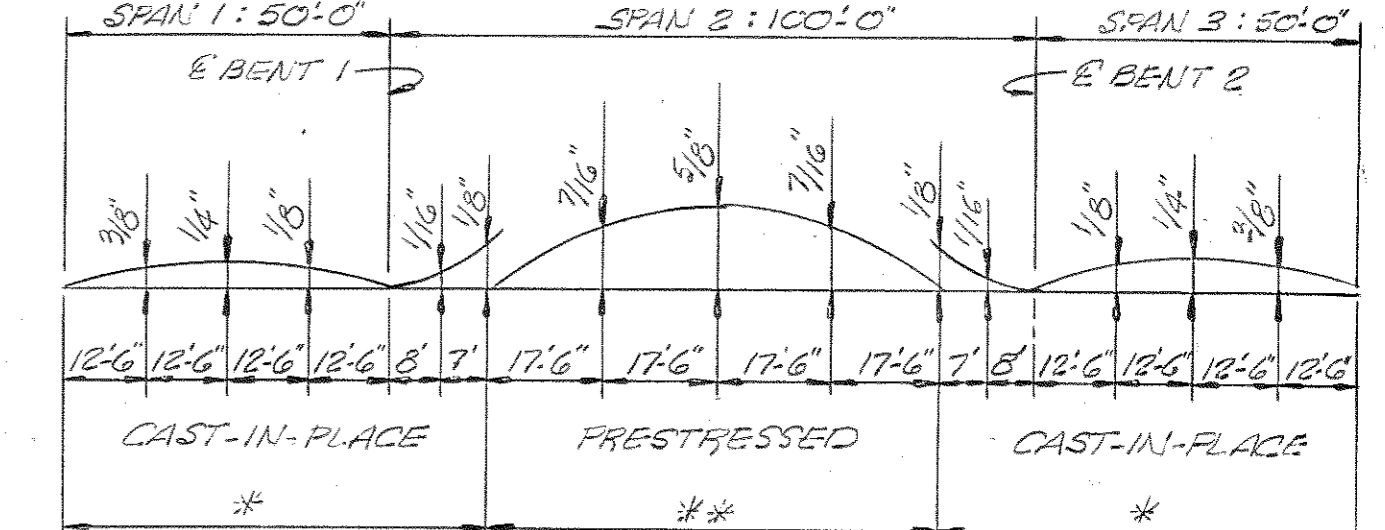
PROJECT NO.	YEAR	SHEET NO.
I440-4(53)206	1983	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	4-21-83	JHW	CHANGED STEEL QTY.
2		HALL	ADDED LIGHTING
3	2-2-84	HALL	CHANGED QUANTITIES



TYPICAL CROSS-SECTION NEAR BENT

TYPICAL CROSS-SECTION NEAR MID-SPAN



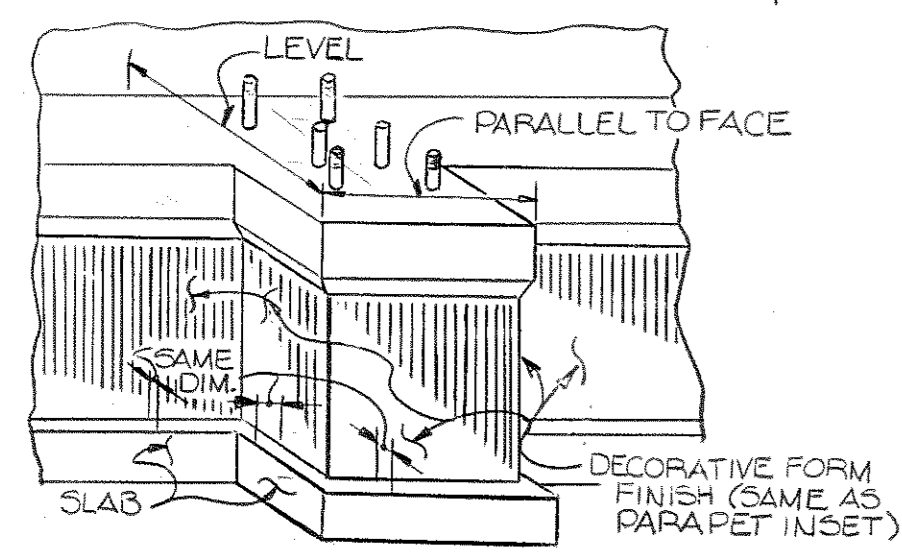
DEAD LOAD CORRECTION CURVE

* THIS CURVE IS FOR DEAD LOAD CAMBER ONLY AND SHOULD BE INCREASED BY THE AMOUNT OF ANTICIPATED TAKE UP IN FALSEWORK.

** THIS CURVE IS FOR DEAD LOAD SLAB AND ALL DEAD LOADS THAT ARE APPLIED AFTER THE SLAB IS IN PLACE & SHOULD BE CORRECTED TO COMPENSATE FOR THE EFFECTS OF VERTICAL CURVE.

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

NOTE: ALL GIRDERS TO BE SUPPORTED DURING CONSTRUCTION OF SLAB TO PREVENT ROTATION.



LIGHT SUPPORT DETAIL
SEE "STANDARD DRAWING LIGHT STANDARD SUPPORT DETAILS" STD. DWG. NO. M-8-149 FOR THE REMAINING DETAILS.
NOTE: LIGHT STANDARD SUPPORT TO CONFORM TO PARAPET SHAPE.

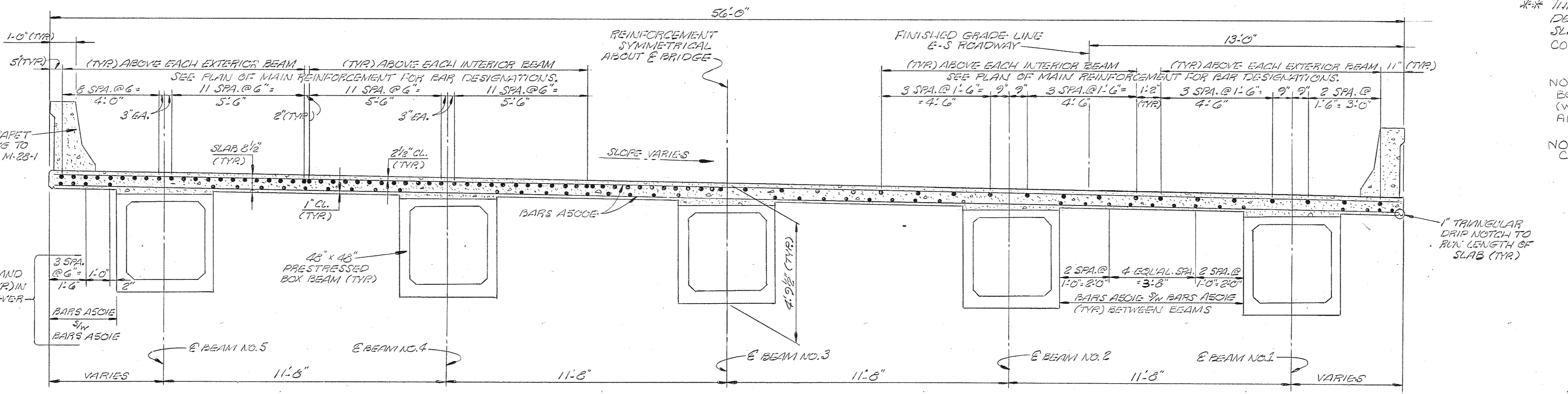
SEE LONGITUDINAL SECTION OF BEAMS IN SPANS 1 & 3 FOR BAR DESIGNATIONS. DWG. NO. M-110-105

LOOKING FORWARD ON SURVEY

*** DENOTES THIS LENGTH TO BE FIELD DETERMINED AND APPROVED BY RESIDENT ENGINEER. LUMINAIRE SHALL BE LOW ENOUGH AS NOT TO ILLUMINATE SUPERSTRUCTURE BUT HIGH ENOUGH TO GAIN MAXIMUM VERTICAL CLEARANCE OVER ROADWAY OR SHOULDER.

NOTE: LUMINAIRES ARE NOT INCLUDED IN THIS PROJECT.

NOTE: WHEN POURING SLAB PROVISIONS SHALL BE MADE FOR SETTING REINFORCING STEEL FOR PARAPET. THE PARAPET SHALL NOT BE POURED UNTIL THE SLAB IS POURED AND CURED.



TYPICAL CROSS-SECTION NEAR BENT

TYPICAL CROSS-SECTION NEAR MID-SPAN

ESTIMATED QUANTITIES

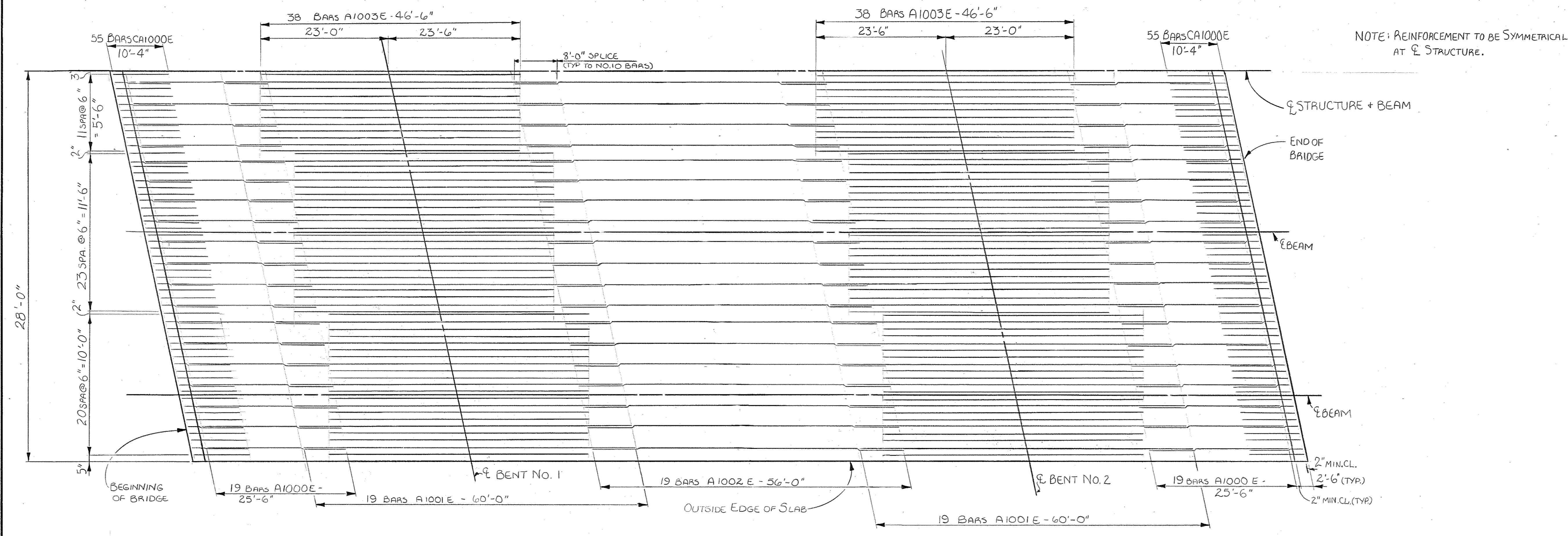
CLASS "A" CONCRETE (BRIDGE DECK) C.Y.	EPOXY-COATED REINFORCING STEEL (BRIDGES) LBS.	CLASS "A" CONCRETE (BRIDGES) C.Y.	STEEL BAR REINFORCEMENT (BRIDGES) LBS.
293.8	142,876	580.9	37,470

DESIGNED BY HOUSTON WALKER DATE 8-82
DRAWN BY MIKE CHILDRESS DATE 12-82
SUPERVISED BY DON HARRISON - P.M.E. DATE 12-82
CHECKED BY H. WALKER DATE 12-82

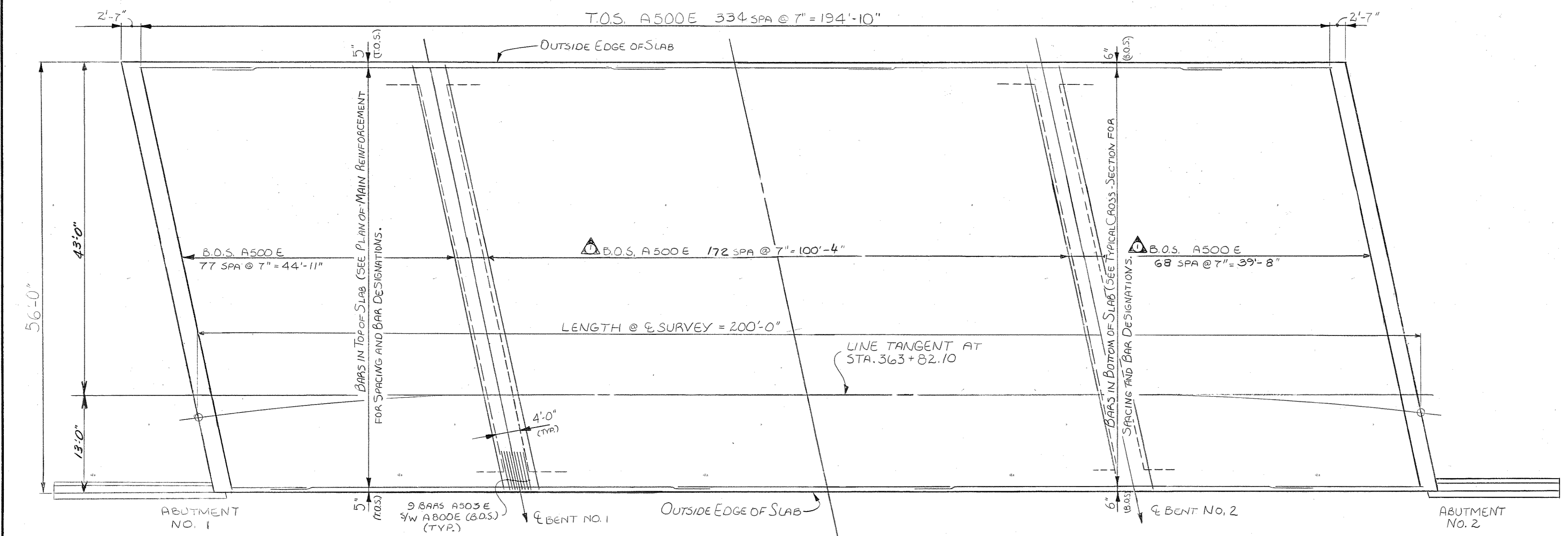
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS
SUPERSTRUCTURE
INTERSTATE 440 E-S ROADWAY
OVER CHARLOTTE AVENUE
STATION 363+82.10
DAVIDSON COUNTY
1983
CORRECTED BY [Signature]
APPROVED [Signature]
DIRECTOR OF HIGHWAYS

PROJECT NO.	YEAR	SHEET NO.
I440-4(53)206	1983	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	2-2-84	HALL	REVISED B.O.S. REINFORCING



HALF PLAN OF MAIN REINFORCEMENT



SLAB PLAN

DESIGNED BY HOUSTON WALKER DATE 8-82
 DRAWN BY DEANNA CHAFFIN DATE 12-82
 SUPERVISED BY B.L. HARRISON-H.B. DATE 12-82
 CHECKED BY H. WALKER DATE 12-82

NOTE: OUTSIDE EDGE OF SLAB AND BRIDGE RAIL TO CONFORM TO HORIZONTAL CURVE.

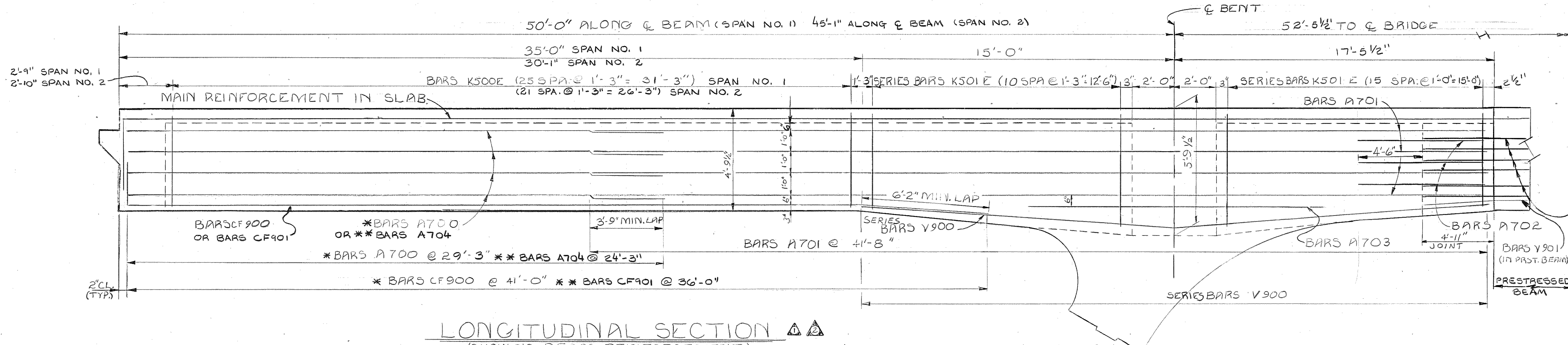
NOTE: T.O.S. DENOTES TOP OF SLAB
 B.O.S. DENOTES BOTTOM OF SLAB

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 SUPERSTRUCTURE DETAILS
 I 440 ES. ROADWAY OVER
 CHARLOTTE AVENUE
 STATION 363+82.10 (E.S. RDWY)
 DAVIDSON COUNTY

CORRECT *Colleen L. Loreal* 1983
 ENGINEER OF STRUCTURES
 APPROVED *Lewis Evans*
 DIRECTOR OF HIGHWAYS

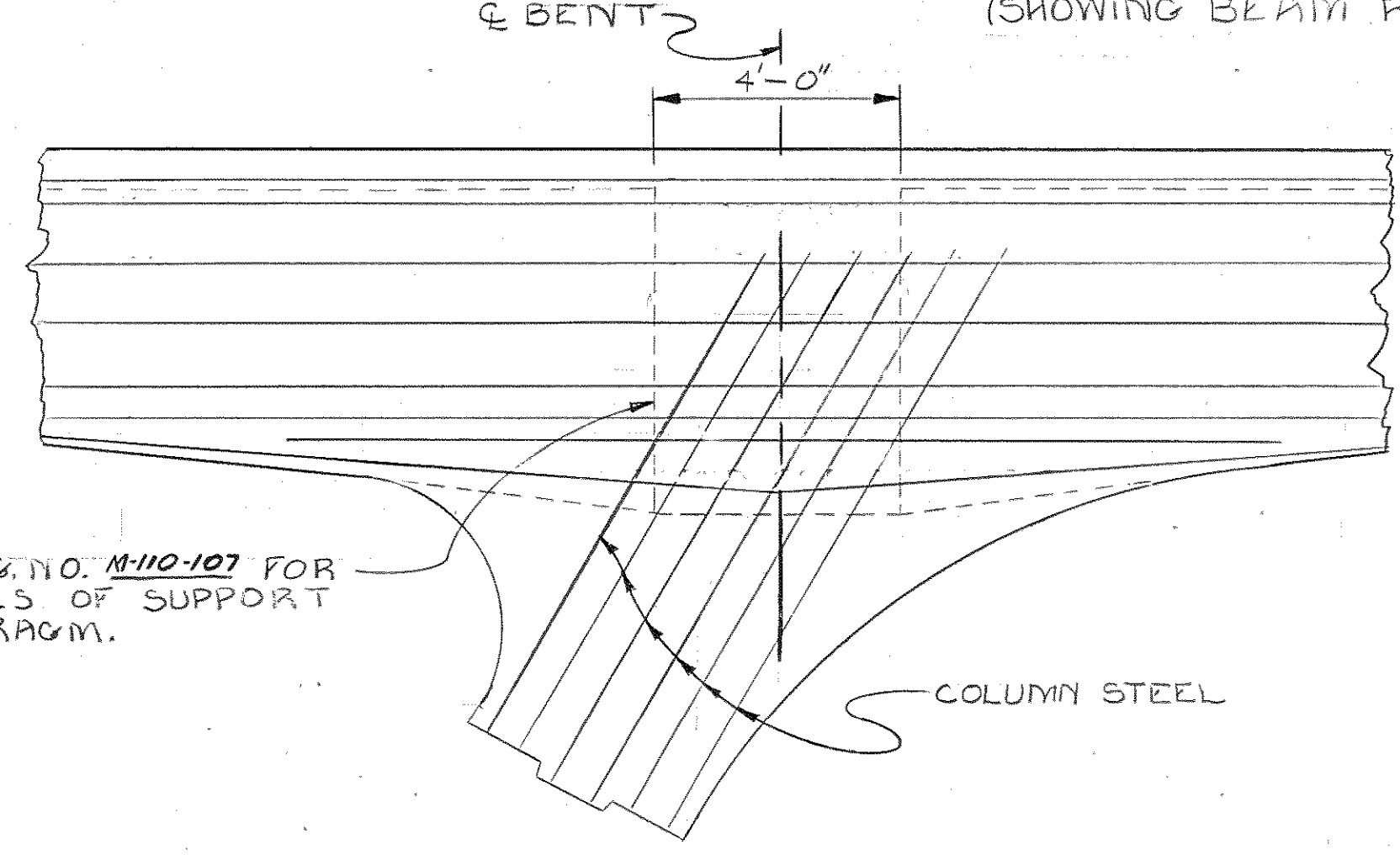
PROJECT NO.	YEAR	SHEET NO.
I440-4(53)206	1983	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	4-21-83	H.W.	REVISE BARS A702 AND C900
2	2-2-84	HALL	REVISED BENT 2

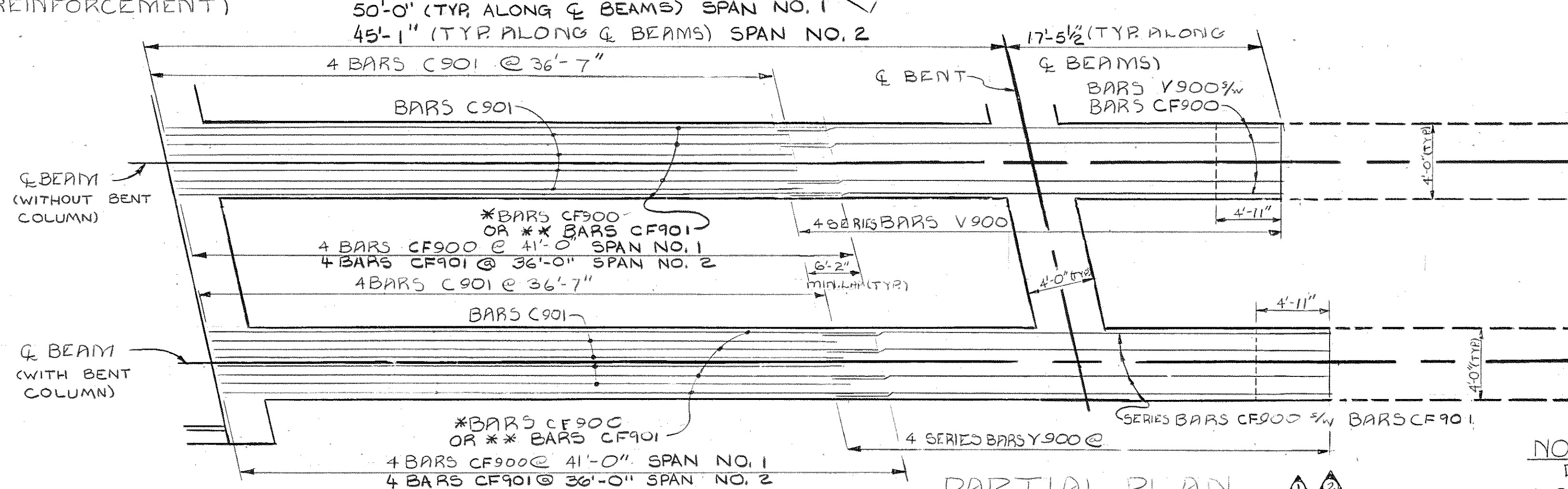


BARS A700 ARE IN PRESTRESSED BEAM (SEE DWG. NO. M-110-109)
 & BRIDGE

NOTE: BRIDGE IS SYMMETRICAL ABOUT &
 15'-0" VARIES FROM 16'-11" TO 17'-9"

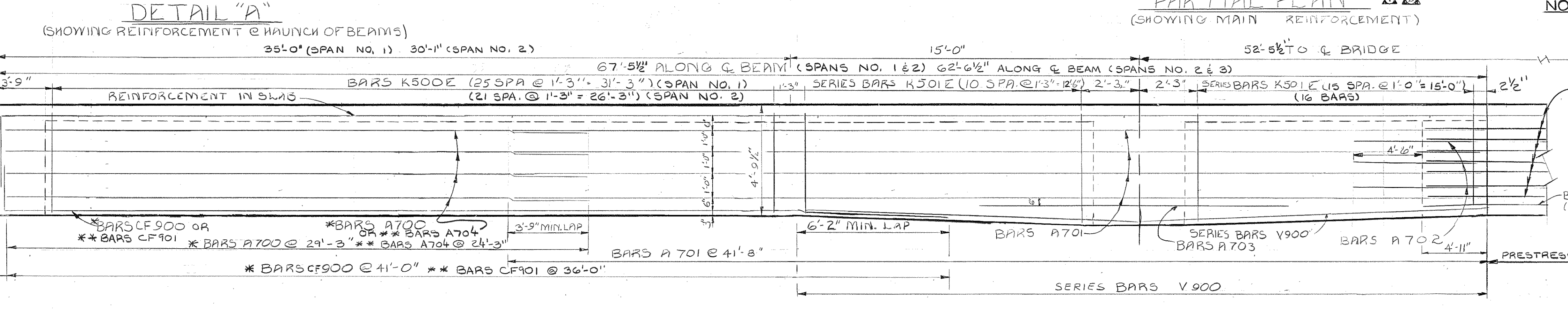


SEE DWG. NO. M-110-107 FOR DETAILS OF SUPPORT DIAPHRAGM.



△ SERIES V BARS
 & BRIDGE

NOTE: REFER TO CROSS-SECTION, DWG. NO. M-110-103 FOR BEAM DESIGNATIONS.
 NOTE: ALL BEAMS ARE HAUNCHED, ONLY 1, 3, & 5 HAVE COLUMNS.



BARS A700 ARE IN PRESTRESSED BEAM (SEE DWG. NO. M-110-109)
 & BRIDGE

△ * DENOTES: BARS NEAR ABUT. NO. 1 OR BENT NO. 1
 ** DENOTES: BARS NEAR ABUT. NO. 2 OR BENT NO. 2

LONGITUDINAL SECTION (SHOWING BEAM REINFORCEMENT) (BEAMS 2 AND 4)

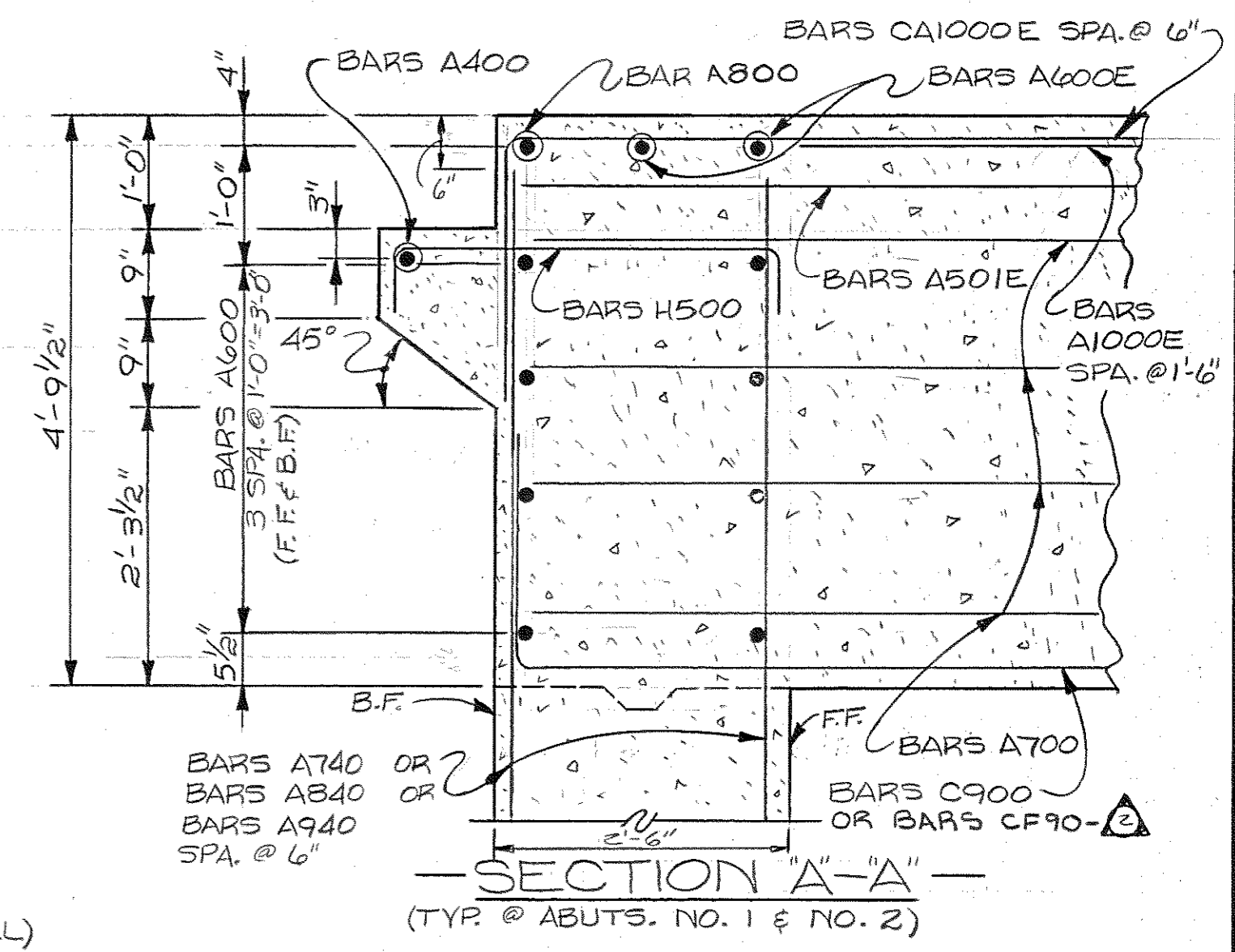
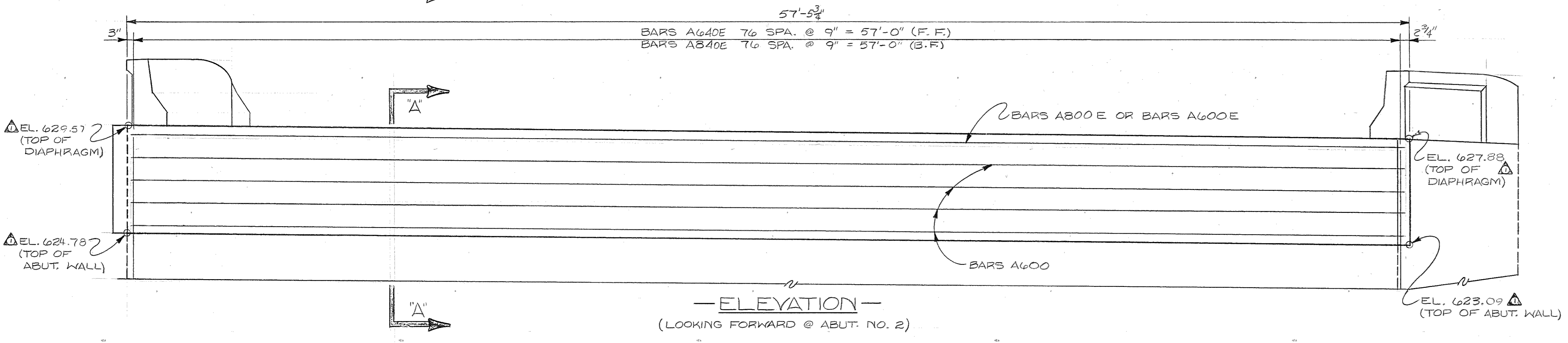
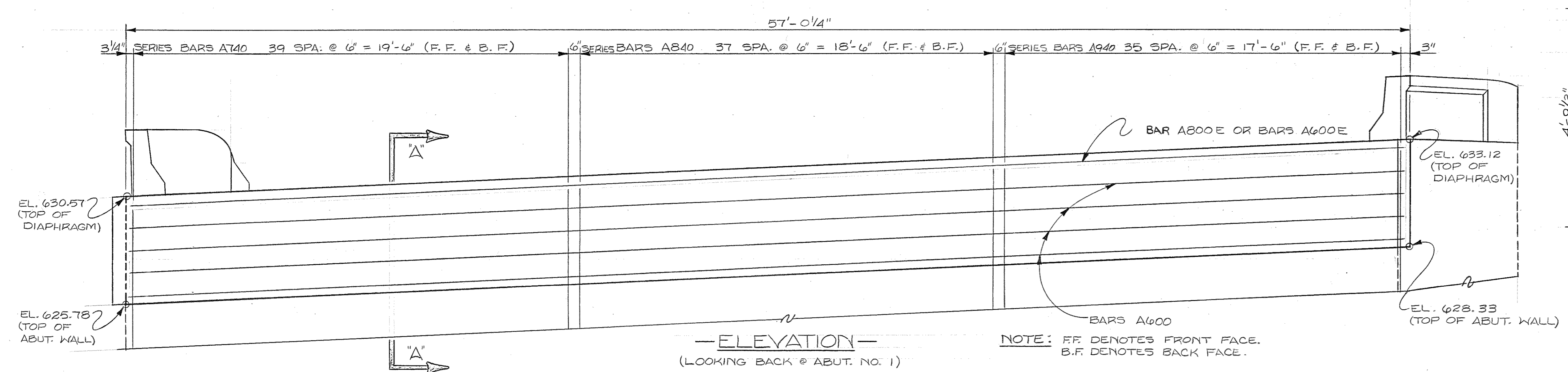
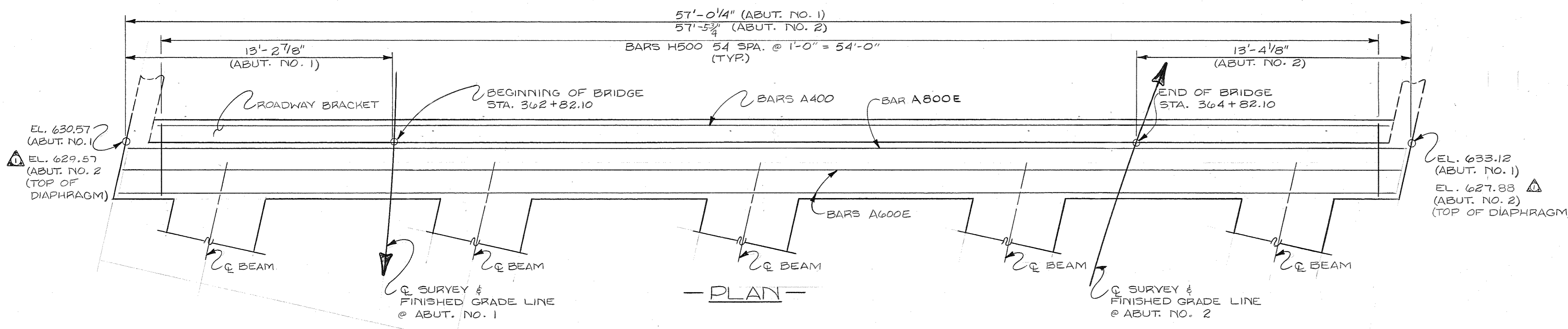
STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 SUPERSTRUCTURE DETAILS
 INTERSTATE 440 E.S.
 OVER CHARLOTTE AVENUE
 STATION 363+82.10
 DAVIDSON COUNTY
 1983

DESIGNED BY H. WALKER DATE 8-82
 DRAWN BY W. PURVIS DATE 12-82
 SUPERVISED BY R. H. H.M.B. DATE 12-82
 CHECKED BY H. WALKER DATE 12-82

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

PROJECT NO.	YEAR	SHEET NO.
T440-4(53)206	1983	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	7-22-83	HW	ELEVATIONS CHANGED
2	2-2-84	HALL	GEN. REV.



DESIGNED BY HOUSTON WALKER DATE 12-82
DRAWN BY YICKY FORREST DATE 12-82
SUPERVISED BY R.L. HARRISON H.M.B. DATE 12-82
CHECKED BY H. WALKER DATE 12-82

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

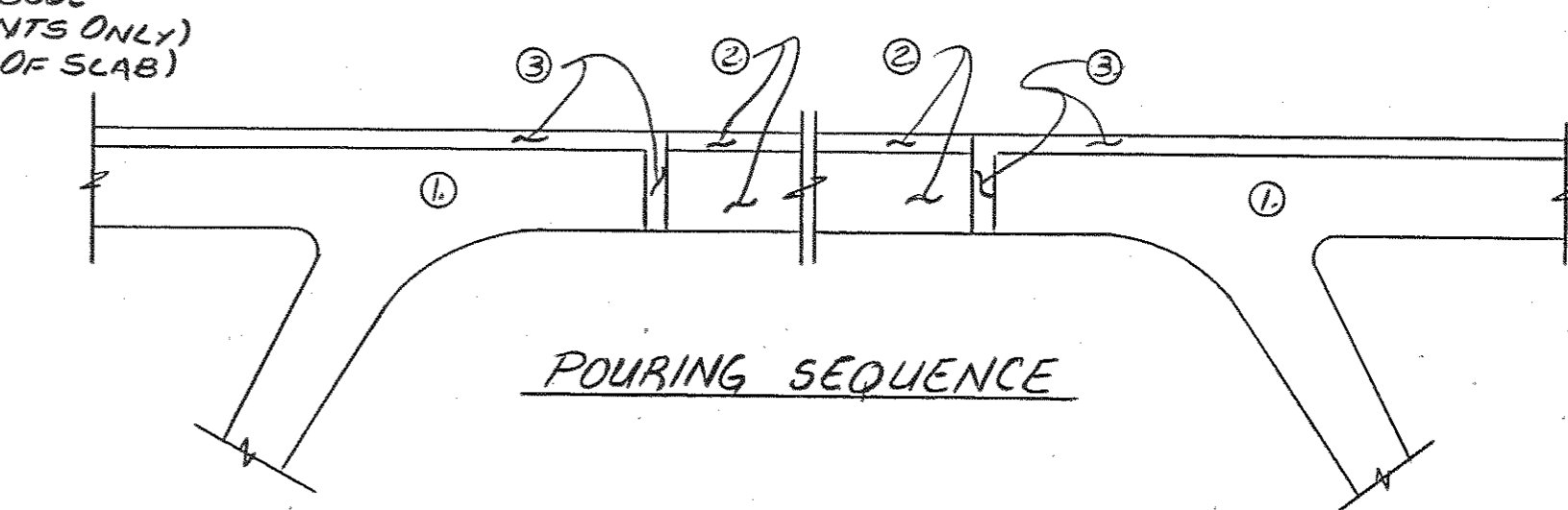
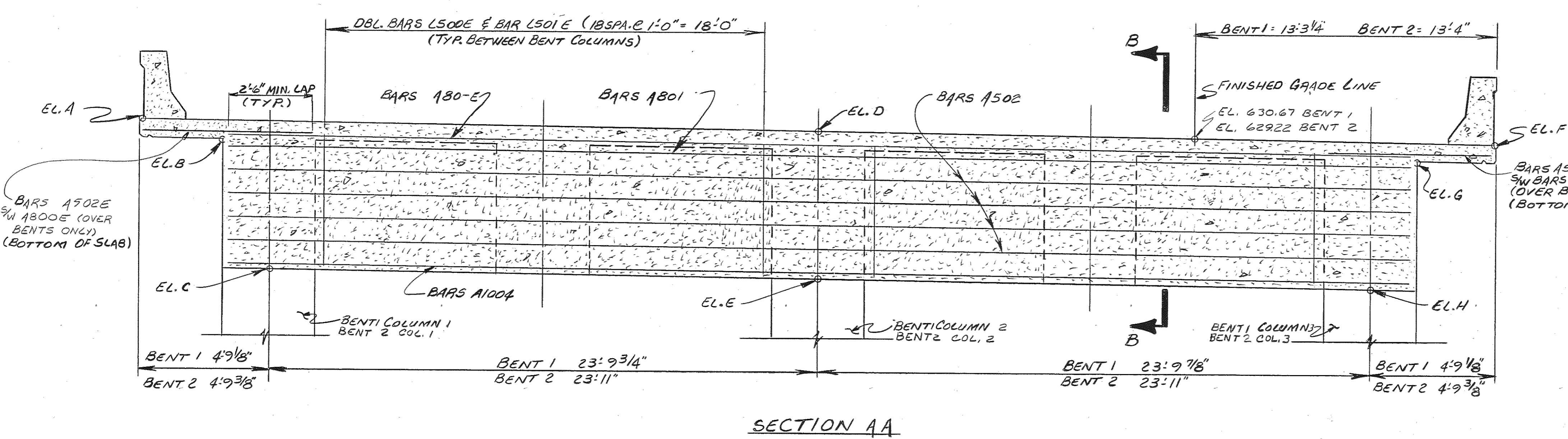
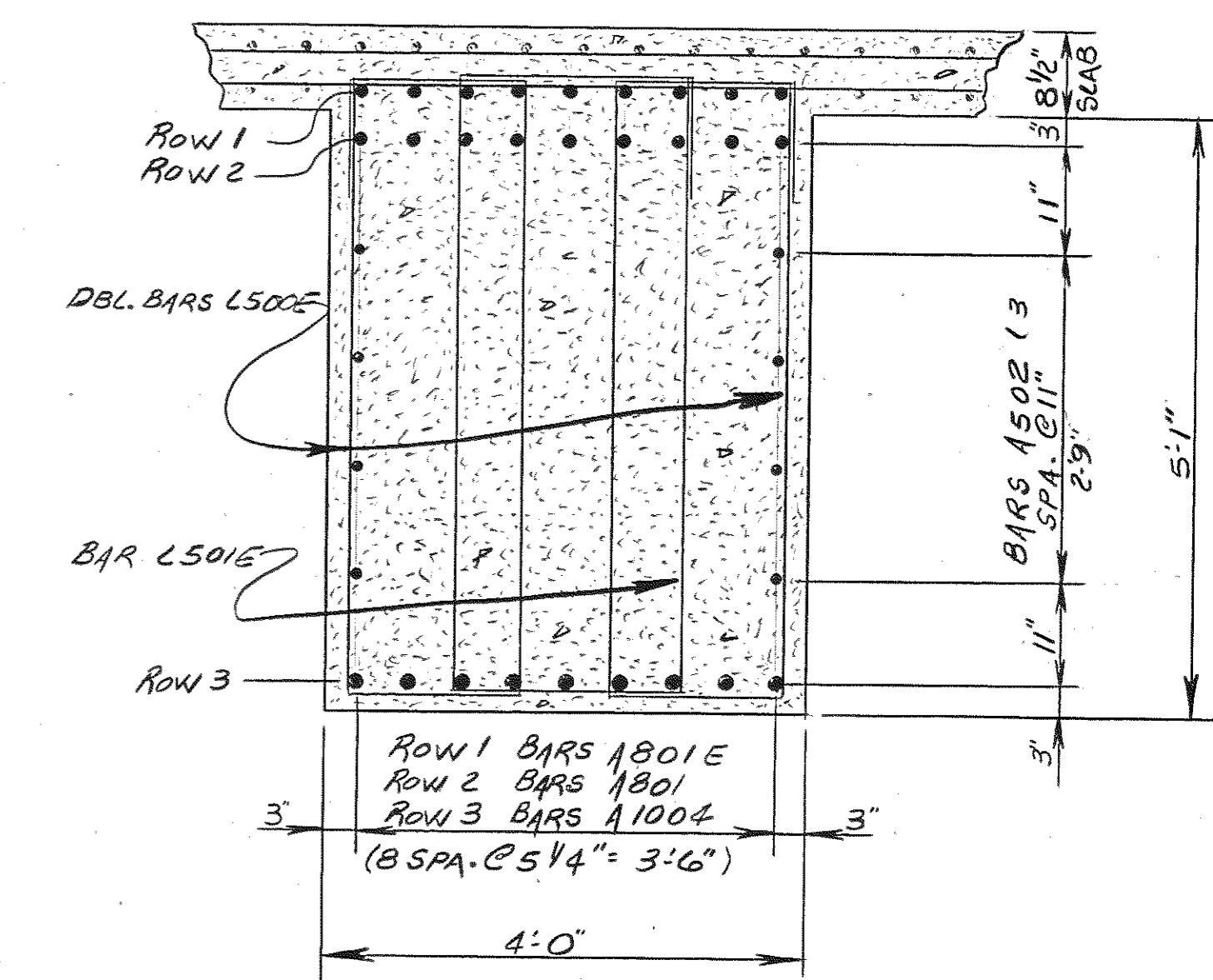
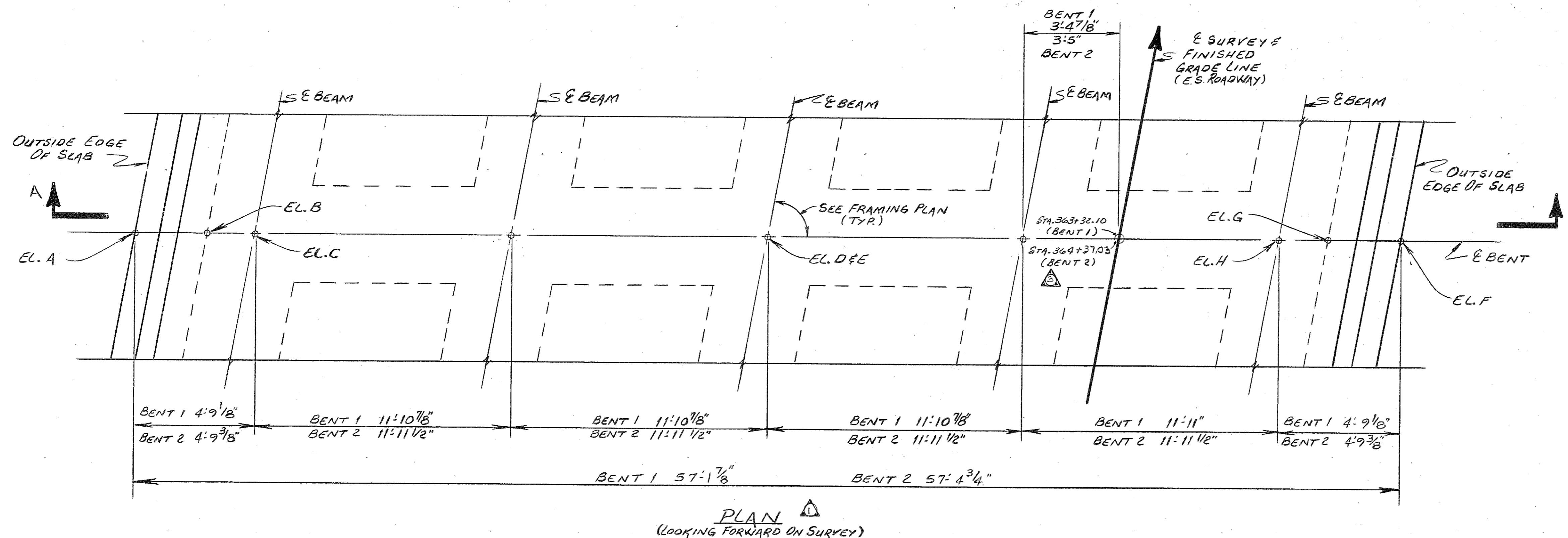
SUPERSTRUCTURE DETAILS
INTERSTATE 440 E.S. ROADWAY
OVER CHARLOTTE AVENUE
STATION 363+82.10
DAVIDSON COUNTY
1983

CORRECT *Clallen L. Lovell*
ENGINEER OF STRUCTURES
APPROVED *James Evans*
DIRECTOR OF HIGHWAYS

M-110-106

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

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	4/21/82	H.W.	ADDED STA. C & SURVEY
2	7/22/83	H.W.	CHANGED ELEVATIONS
3	2-2-84	HALL	CHANGED STA. & ELEV. @ BENT 2



- POUR THE SUBSTRUCTURE AND WEBS OF THE CAST-IN-PLACE SECTION.
 - POSITION THE PRESTRESSED BEAMS ON THEIR TEMPORARY SUPPORTS AND POUR THE SLAB OVER THE PRESTRESSED BOX SECTION.
 - POUR THE REMINDER OF THE SLAB AND THE CONNECTION DIAPHRAGM.
- NOTE: DO NOT REMOVE ANY FALSEWORK UNTIL THE ENTIRE SLAB HAS BEEN POURED AND CURED AS PER SPECIFICATIONS.

TABLE OF ELEVATIONS

ITEMS	A	B	C	D	E	F	G	H
BENT 1	632.66	631.83	626.65	631.36	625.57	630.07	629.53	624.49
BENT 2	630.68	629.97	624.72	629.66	623.87	628.68	628.04	623.05

DESIGNED BY HOUSTON WALKER DATE 11-82
 DRAWN BY RICK HINDMAN DATE 12-82
 SUPERVISED BY DON HARBISON & HMB DATE 12-82
 CHECKED BY H WALKER DATE 12-82

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 SUPERSTRUCTURE DETAILS
 @ BENTS
 INTERSTATE 440 E.S. ROADWAY
 OVER CHARLOTTE AVENUE
 STATION 363+82.10
 DAVIDSON COUNTY
 1983

CORRECT
 ENGINEER OF STRUCTURES
 APPROVED
 DIRECTOR OF HIGHWAYS

PROJECT NO.	YEAR	SHEET NO.
T440-4(53)206	1983	

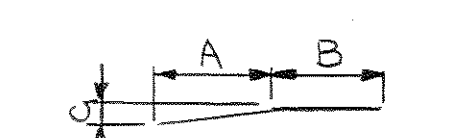
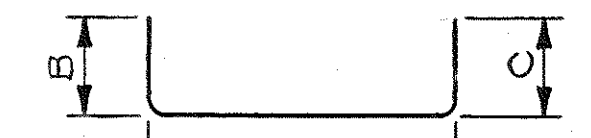
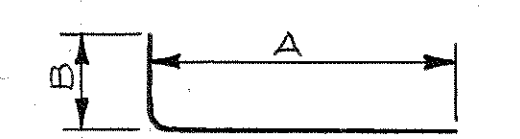
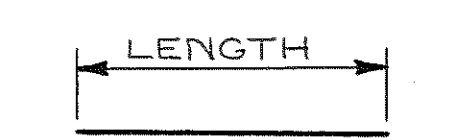
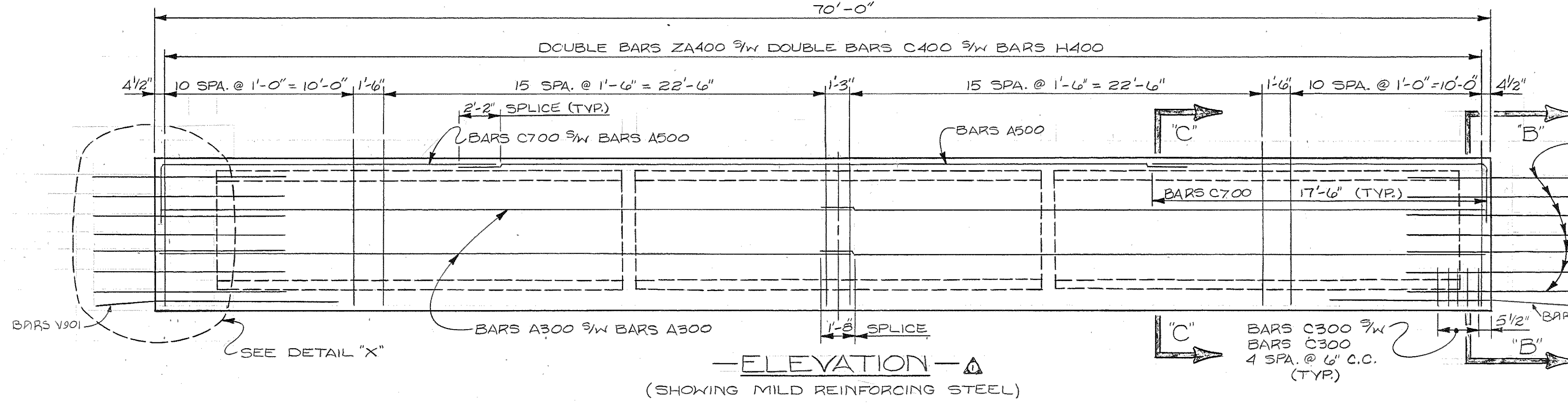
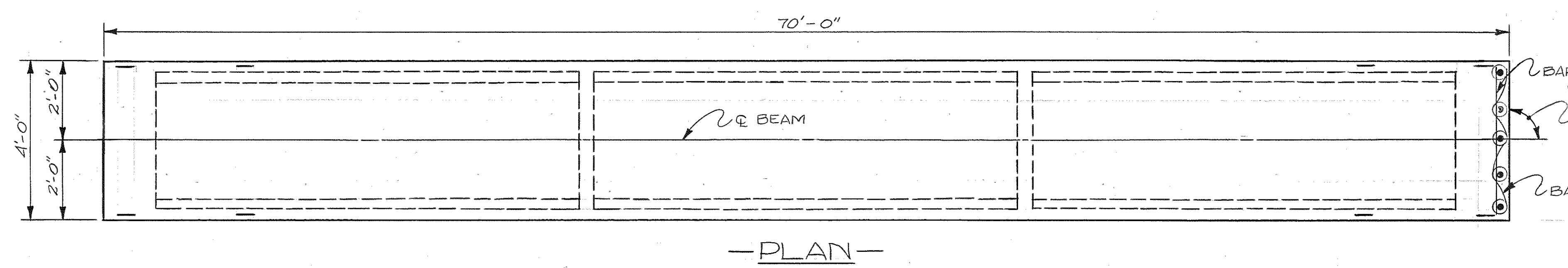
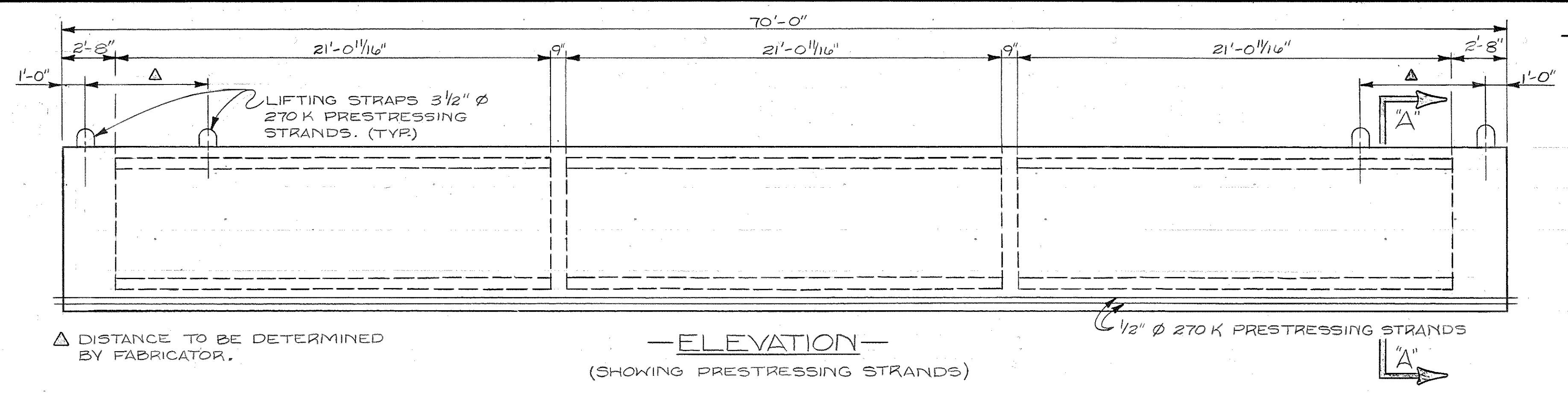
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	2-8-83	H.W.	REVISED QUANT
2	4-8-83	HMB	REVISED BAR LENGTHS

-BILL OF STEEL~PER BEAM-

BAR	SIZE	NO. REQD.	BENDING DIMENSIONS				LENGTH
			A	B	C	D	
A300	3	8					35'-6"
A500	5	4					39'-0"
A501	5	20					3'-8"
A700	7	28					9'-3"
C300	3	20	2'-5"	1'-0"			3'-5"
C400	4	108	3'-8"	6"			4'-2"
C700	7	8	17'-6"	1'-5"			18'-3"
H400	4	54	3'-7 1/2"	1'-0"	1'-0"		5'-7"
ZA400	4	108	2'-10"	1'-0"	7 1/2"	4"	4'-8"
Y901	9	8	4'-9"	7'-6"	3 1/4"		12'-3"

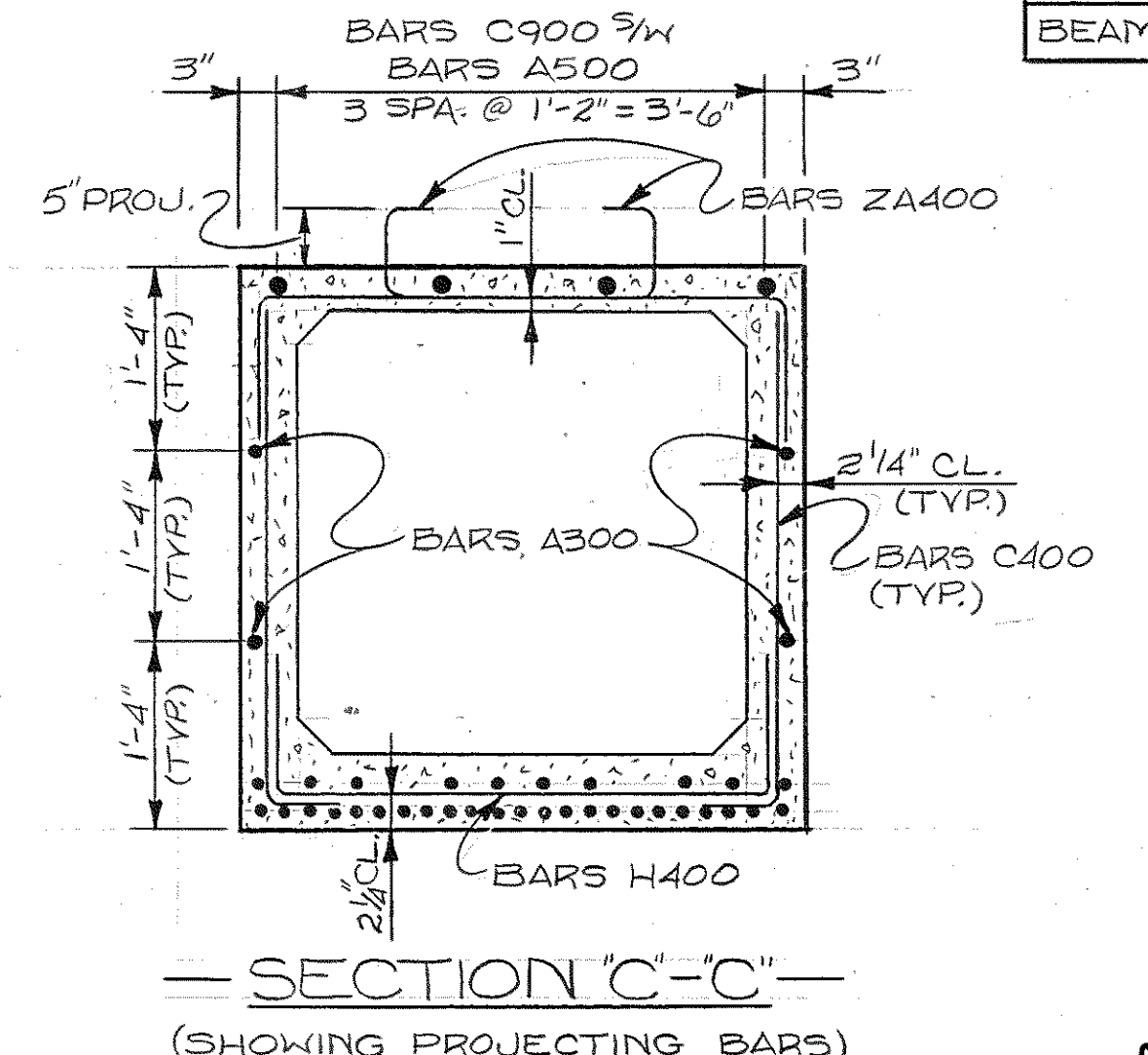
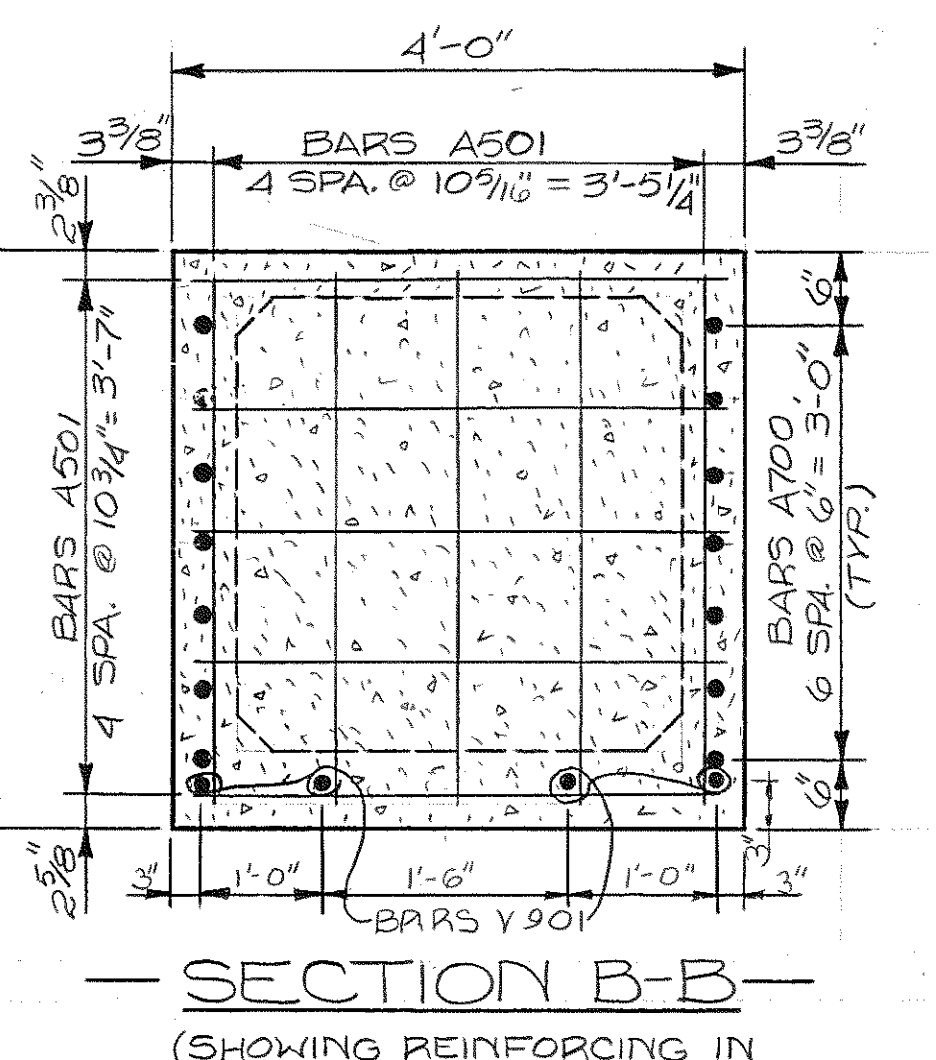
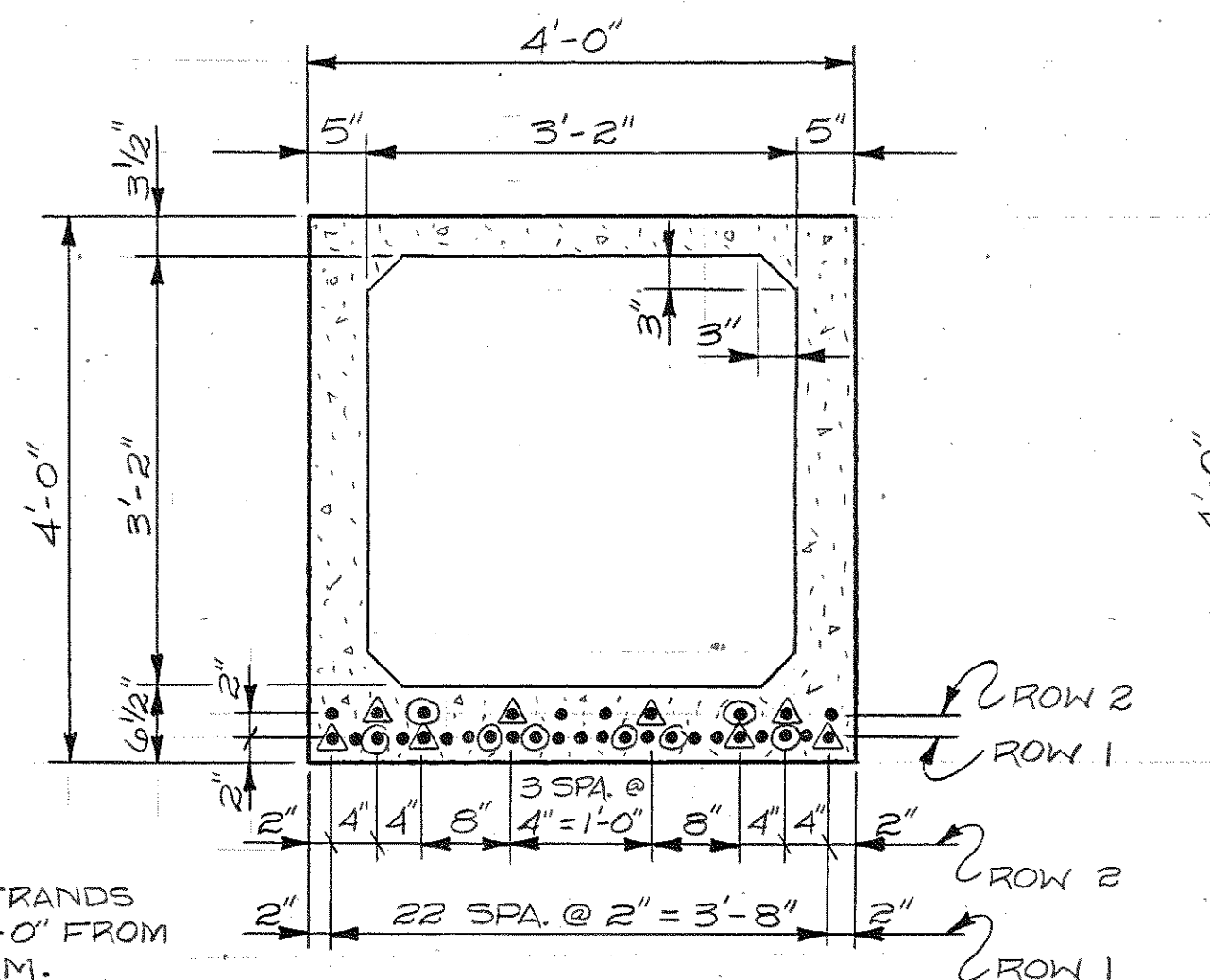
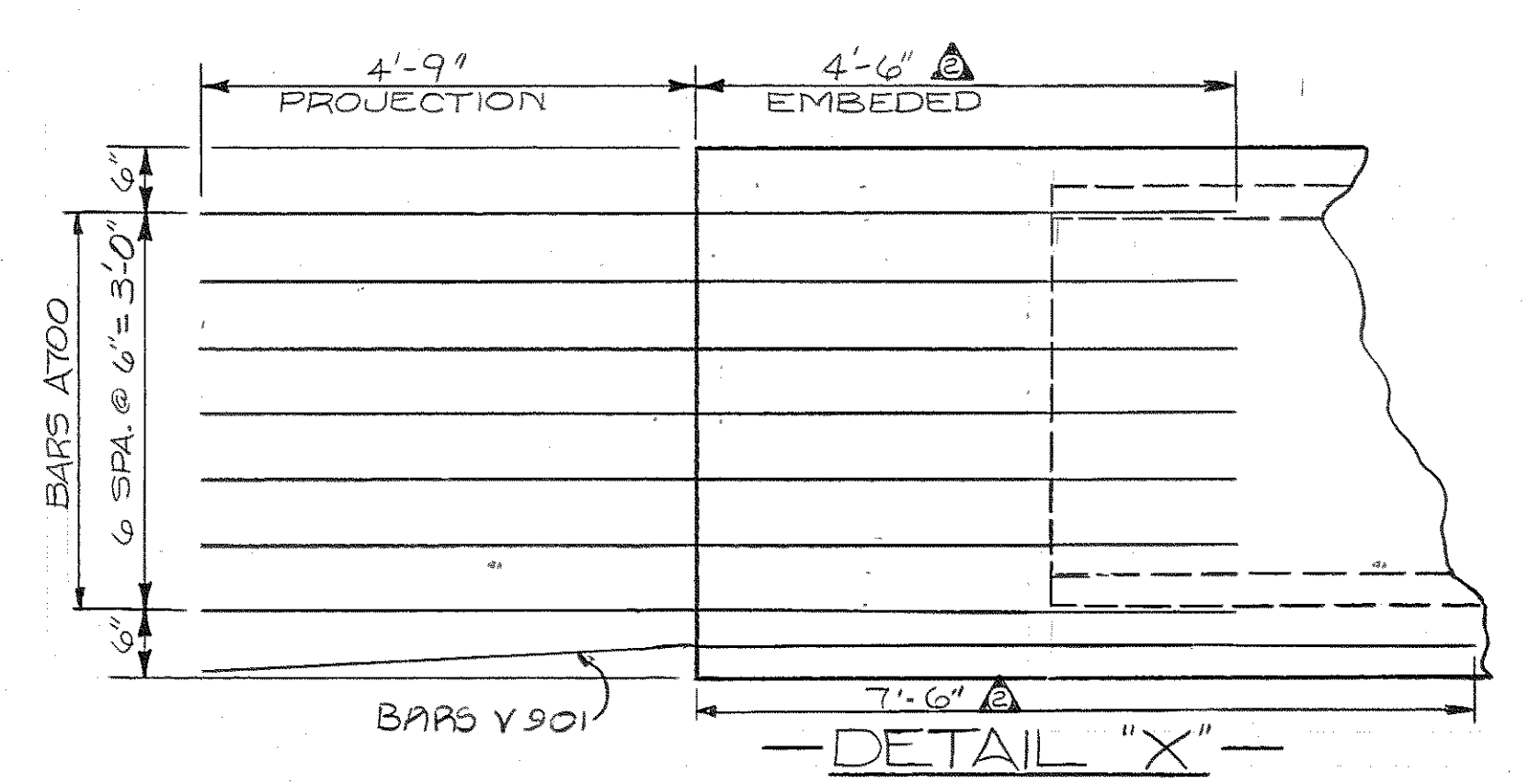
-GENERAL NOTES-

- 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.
- MILD STEEL REINFORCING SHALL BE ASTM A615 GRADE 60.
- ALL PRESTRESSING STRANDS TO BE 1/2" Ø ASTM GRADE 270K, 7 WIRE UNCOATED STRESS-RELIEVED PRESTRESSING STRANDS.
- AN INITIAL FORCE OF 28,936 LBS. SHALL BE APPLIED TO EACH STRAND IN ALL BEAMS.
- THE PRESTRESSING STRANDS SHALL BE LEFT PROJECTING 3" ± FROM THE ENDS OF THE BEAMS. THERE SHALL NOT BE ANY PROTECTIVE COATING PLACED ON THE ENDS OF THE BEAMS OR ON THE PROJECTING STRANDS.
- THE CONCRETE FOR THIS CONSTRUCTION SHALL BE OF SUCH PROPERTIES AS TO ATTAIN A COMPRESSIVE STRENGTH OF NOT LESS THAN 6,000 + PSI AT THE AGE OF 28 DAYS AND STRESS TRANSFER SHALL NOT BE MADE TO THE BRIDGE MEMBER UNTIL THE TEST SPECIMENS INDICATE THAT CONCRETE HAS REACHED A COMPRESSIVE STRENGTH OF AT LEAST 5,000 + PSI. SEE GENERAL NOTE SHEET FOR CONCRETE FINISHING NOTE.
- 1" Ø WEEP HOLES REQUIRED AT LOW POINT OF EACH CELL.
- EACH CELL SHALL BE VENTED, (DURING THE FABRICATION PHASE), IN SUCH A MANNER SO AS NOT TO ALLOW EXTERNAL WATER TO ENTER THE CELL.



-ESTIMATED QUANTITIES~PER BEAM-

ITEM	NO. REQD.	CLASS "A" CONCRETE C.Y.	REINFORCING STEEL LBS.	PRESTRESSING STEEL LBS.
BEAM	5	18.3	2,593	1,007



DESIGNED BY HOUSTON WALKER DATE 8-82
 DRAWN BY YICKY FORREST DATE 12-82
 SUPERVISED BY R.L. HARBISON/HMB DATE 12-82
 CHECKED BY H. WALKER DATE 12-82

△: DENOTES 8 STRANDS WRAPPED 15'-0" FROM END OF BEAM.
 ○: DENOTES 8 STRANDS WRAPPED 10'-0" FROM END OF BEAM.

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 PRESTRESSED BOX BEAM
 INTERSTATE 440 E.S. ROADWAY
 OVER CHARLOTTE AVENUE
 STATION 363+82.10
 DAVIDSON COUNTY
 1983

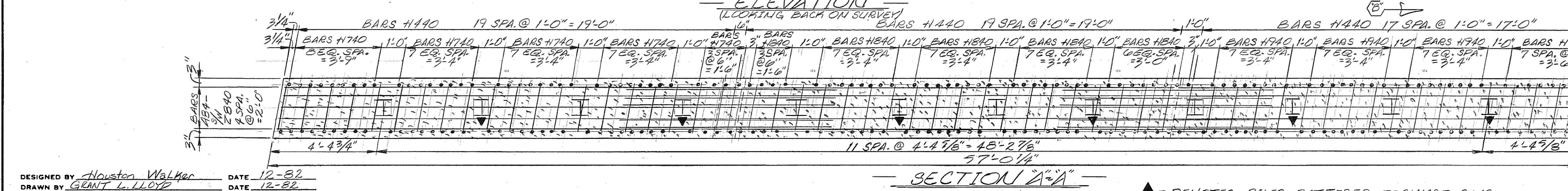
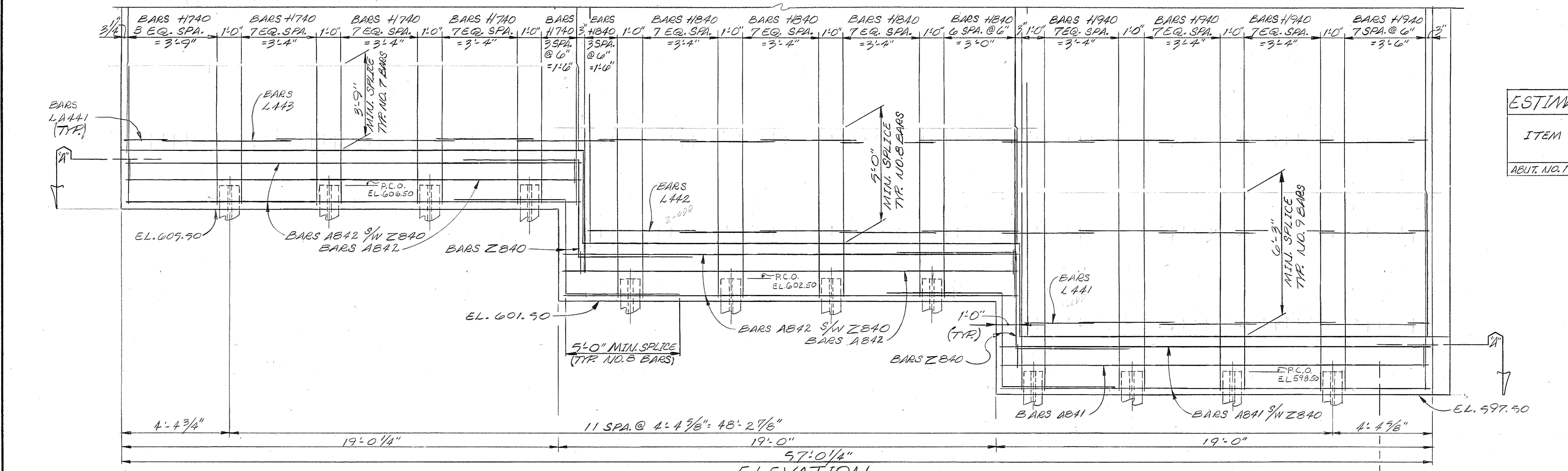
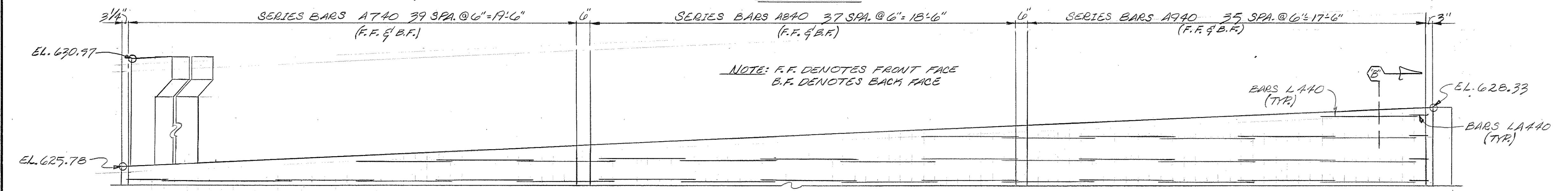
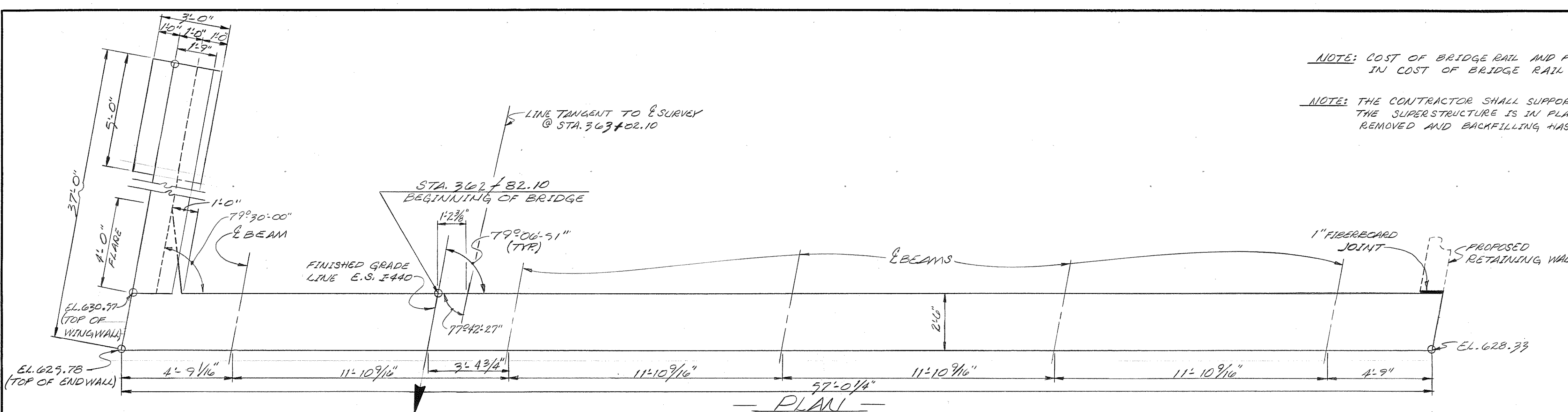
CORRECT *Clifton L. Sevell*
 ENGINEER OF STRUCTURES
 APPROVED *Louis Evans*
 DIRECTOR OF HIGHWAYS

PROJECT NO.	YEAR	SHEET NO.
T440-4(53)206	1983	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION

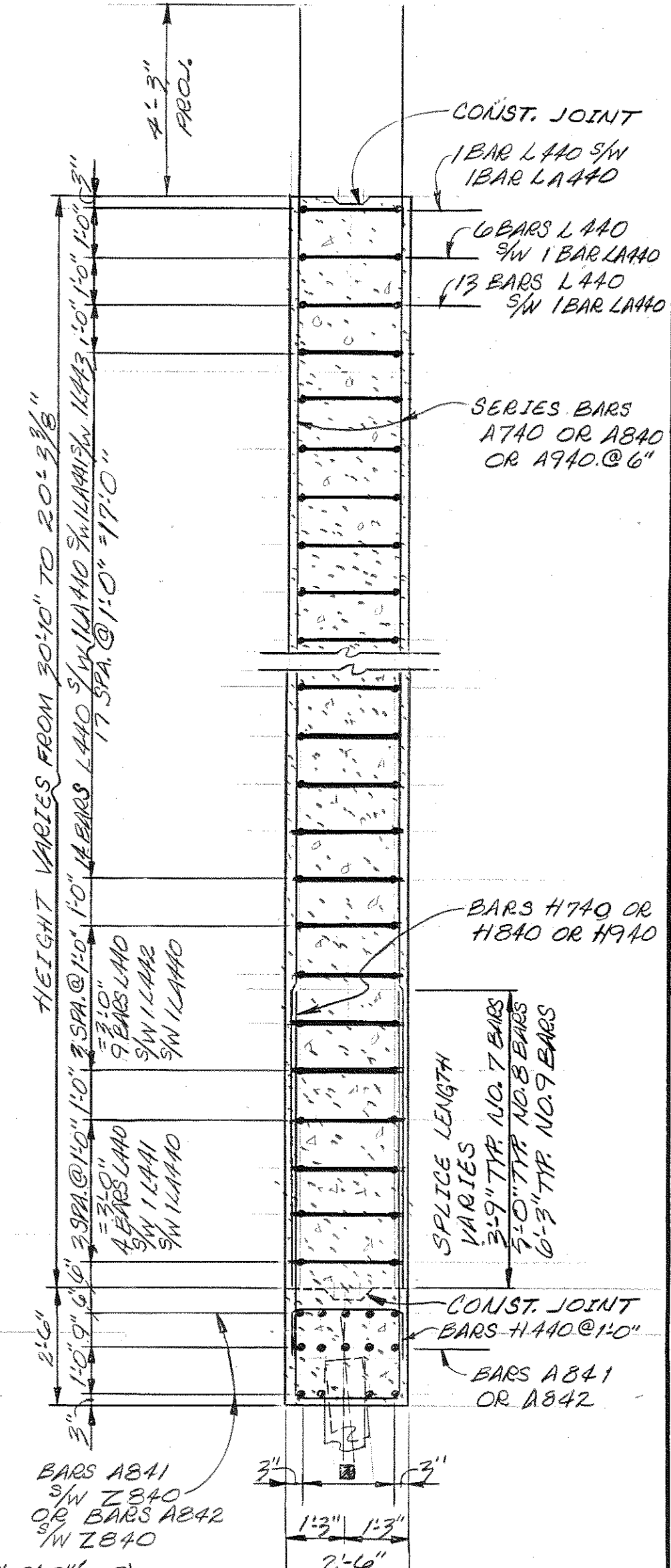
NOTE: COST OF BRIDGE RAIL AND POST IS TO BE INCLUDED IN COST OF BRIDGE RAIL SYSTEM.

NOTE: THE CONTRACTOR SHALL SUPPORT THE ABUTMENTS UNTIL THE SUPERSTRUCTURE IS IN PLACE, FALSEWORK HAS BEEN REMOVED AND BACKFILLING HAS BEEN COMPLETED.



ESTIMATED QUANTITIES

ITEM	CLASS 'A' CONCRETE C.Y.	REINFORCING STEEL LBS.
ABUT. NO. 1	148.3	34,368



■ = DENOTES 4 SPA. @ 6\"/>

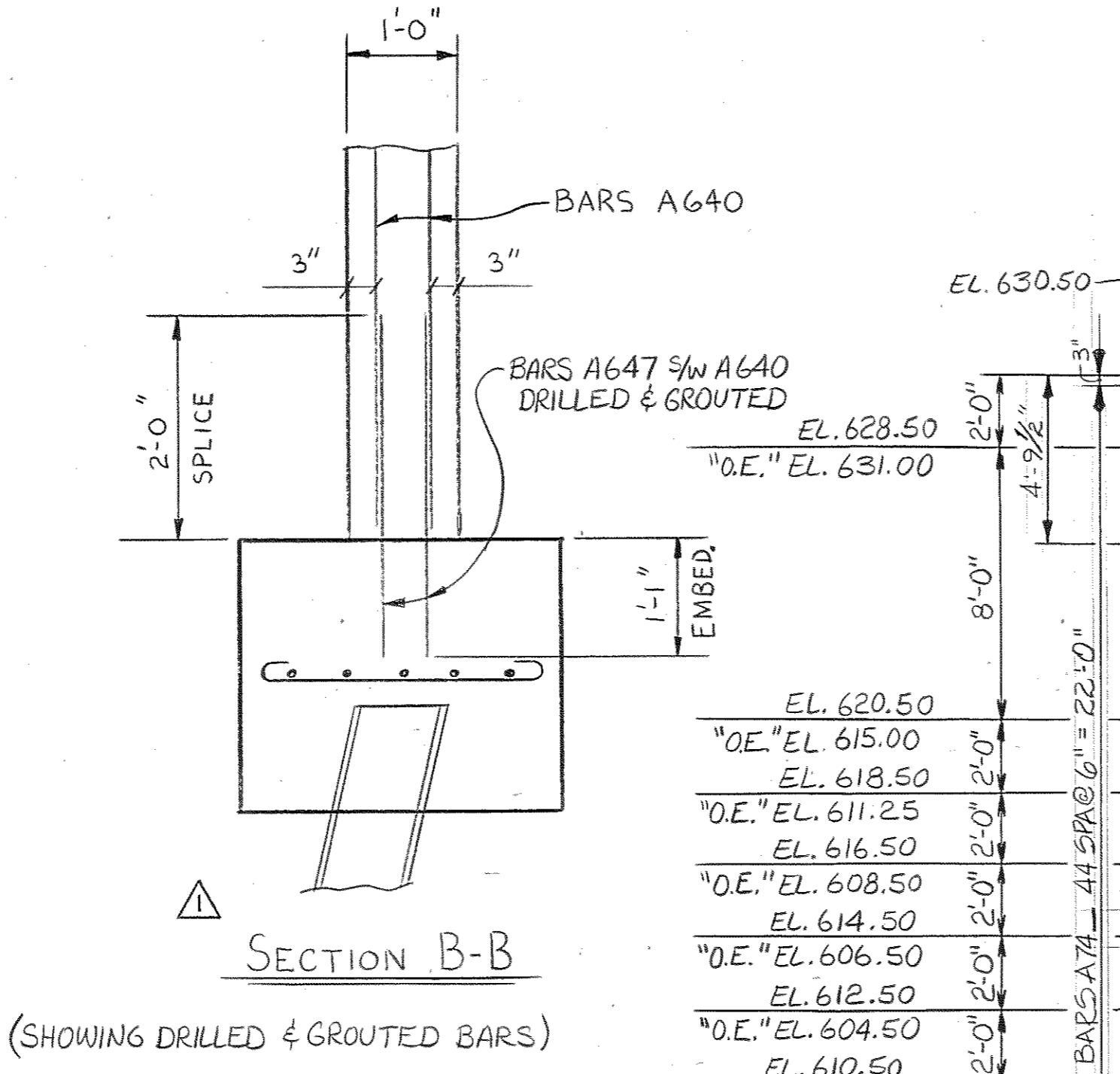
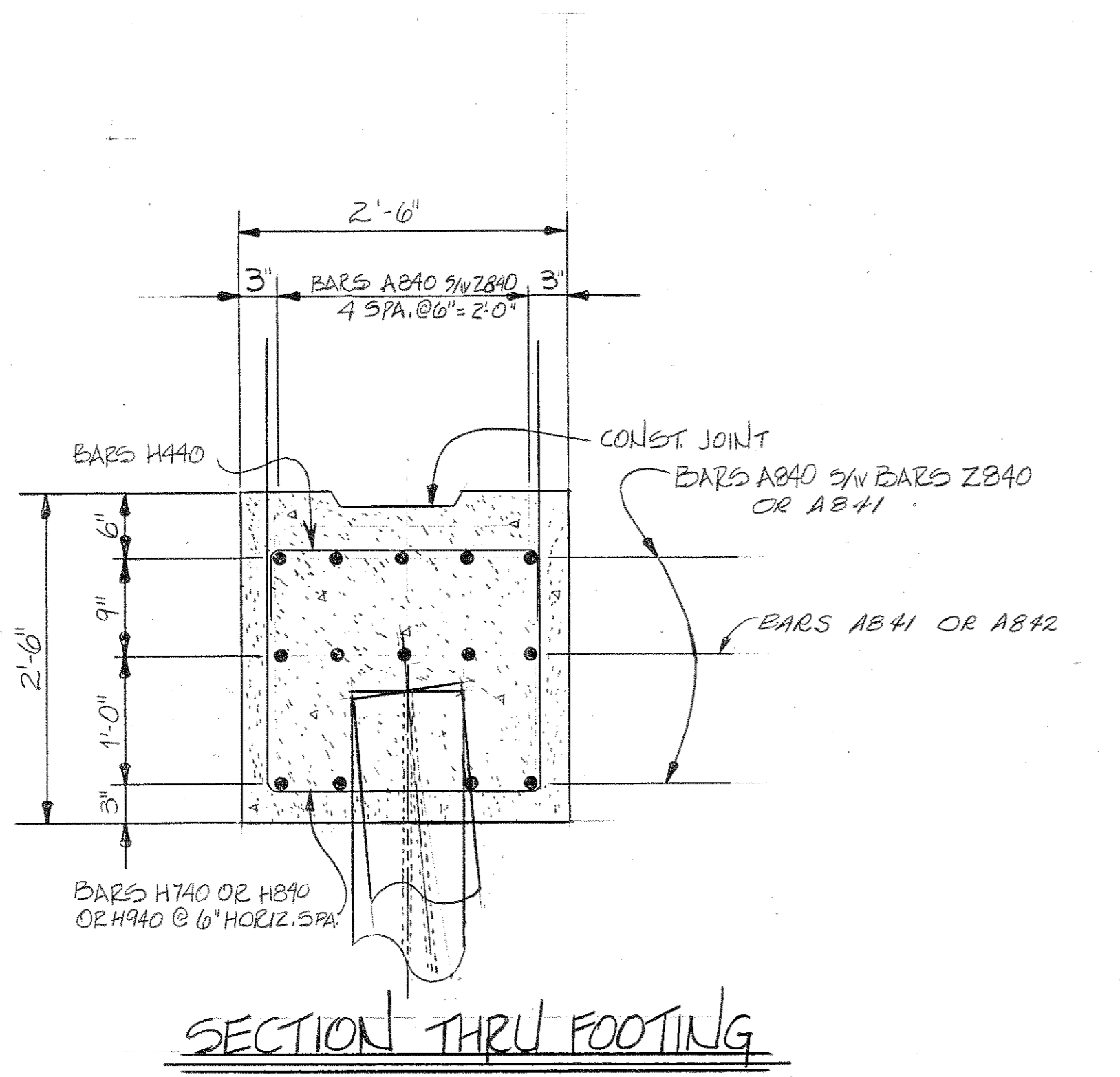
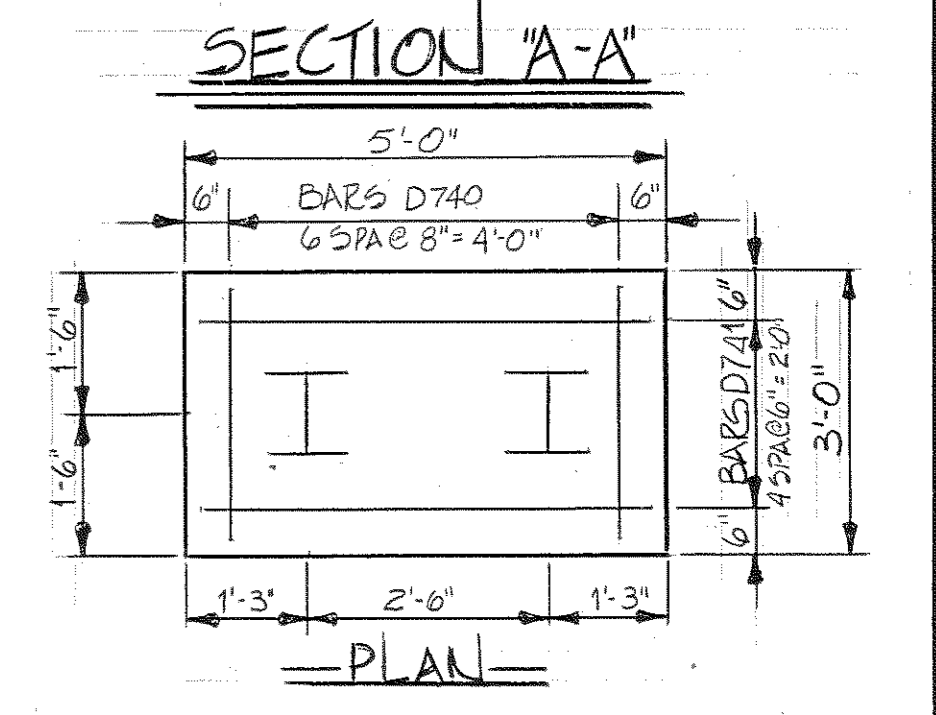
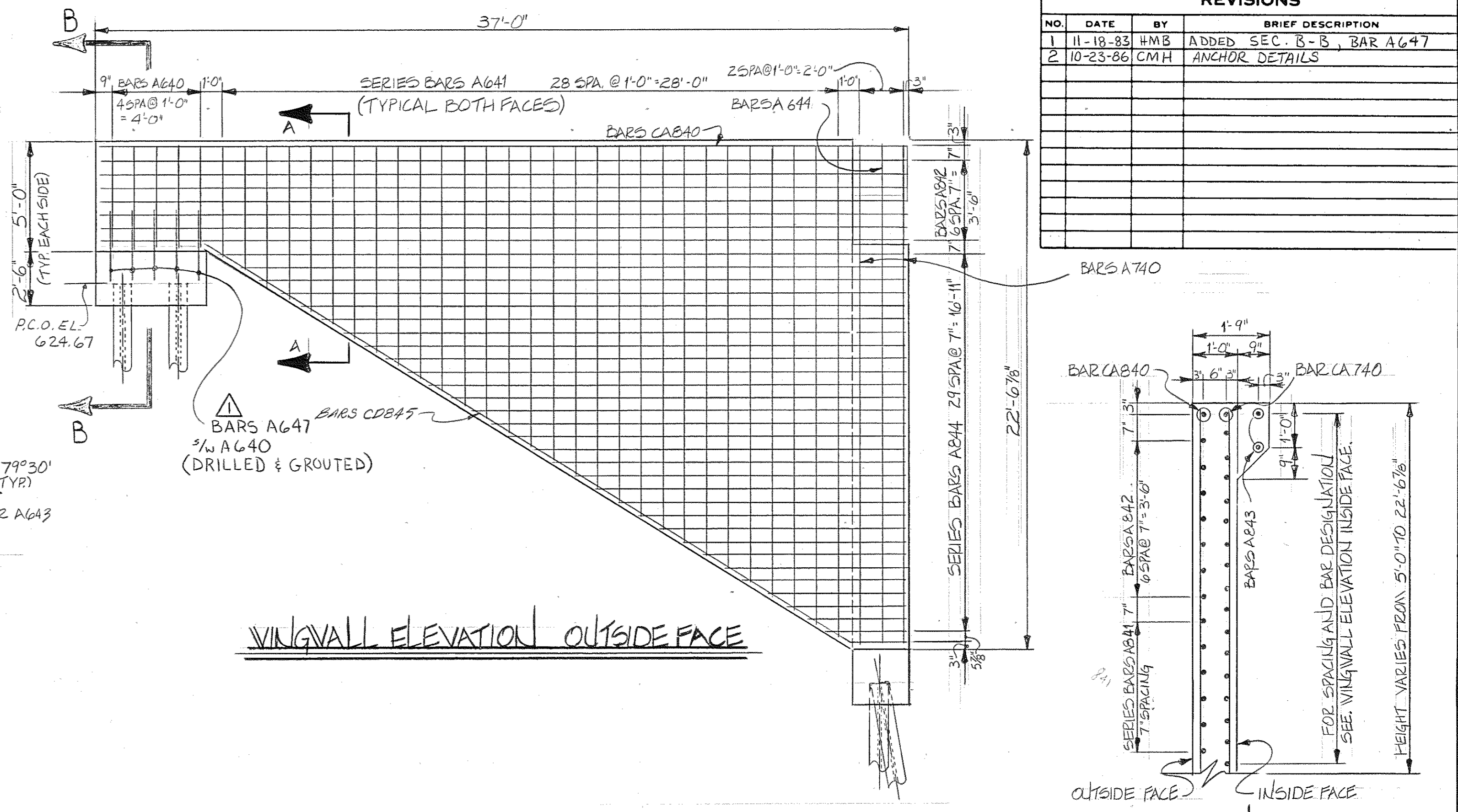
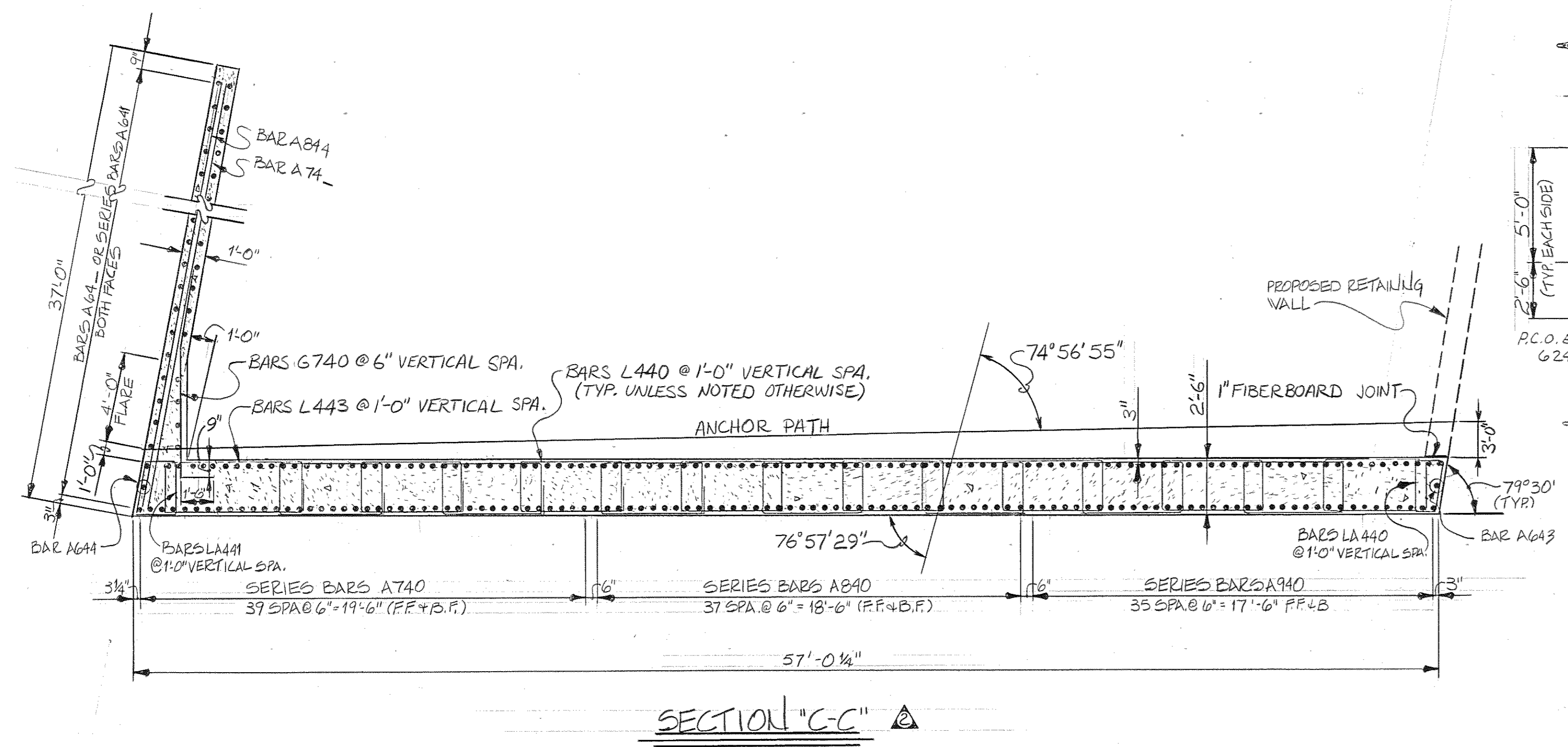
STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 ABUTMENT NO. 1
 INTERSTATE 440 E.S. ROADWAY
 Over CHARLOTTE AVENUE
 STATION: 363+82.10
 DAVIDSON COUNTY
 1983

DESIGNED BY Houston Walker DATE 12-82
 DRAWN BY GRANT L. LLOYD DATE 12-82
 SUPERVISED BY Roger L. Anderson/H.M.B. DATE 12-82
 CHECKED BY H. WALKER DATE 12-82

▲ = DENOTES PILES BATTERED FORWARD 2:12

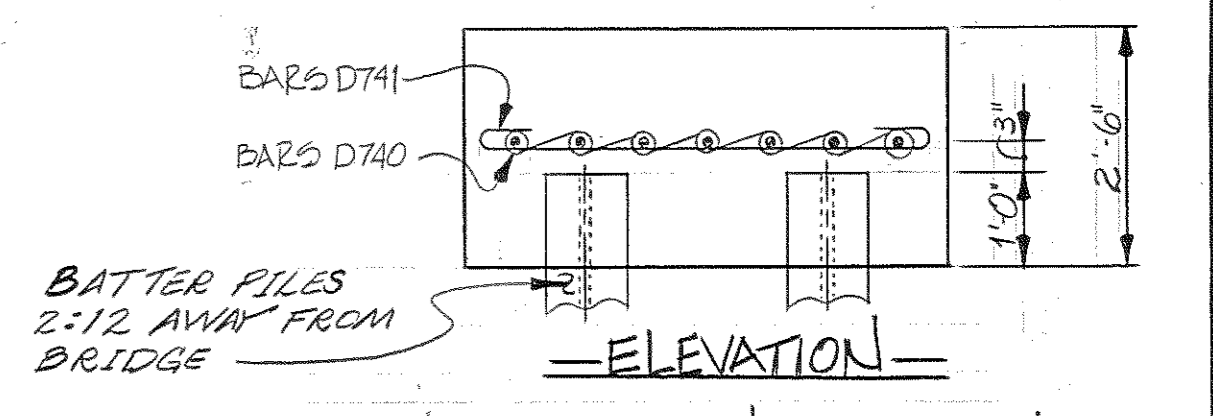
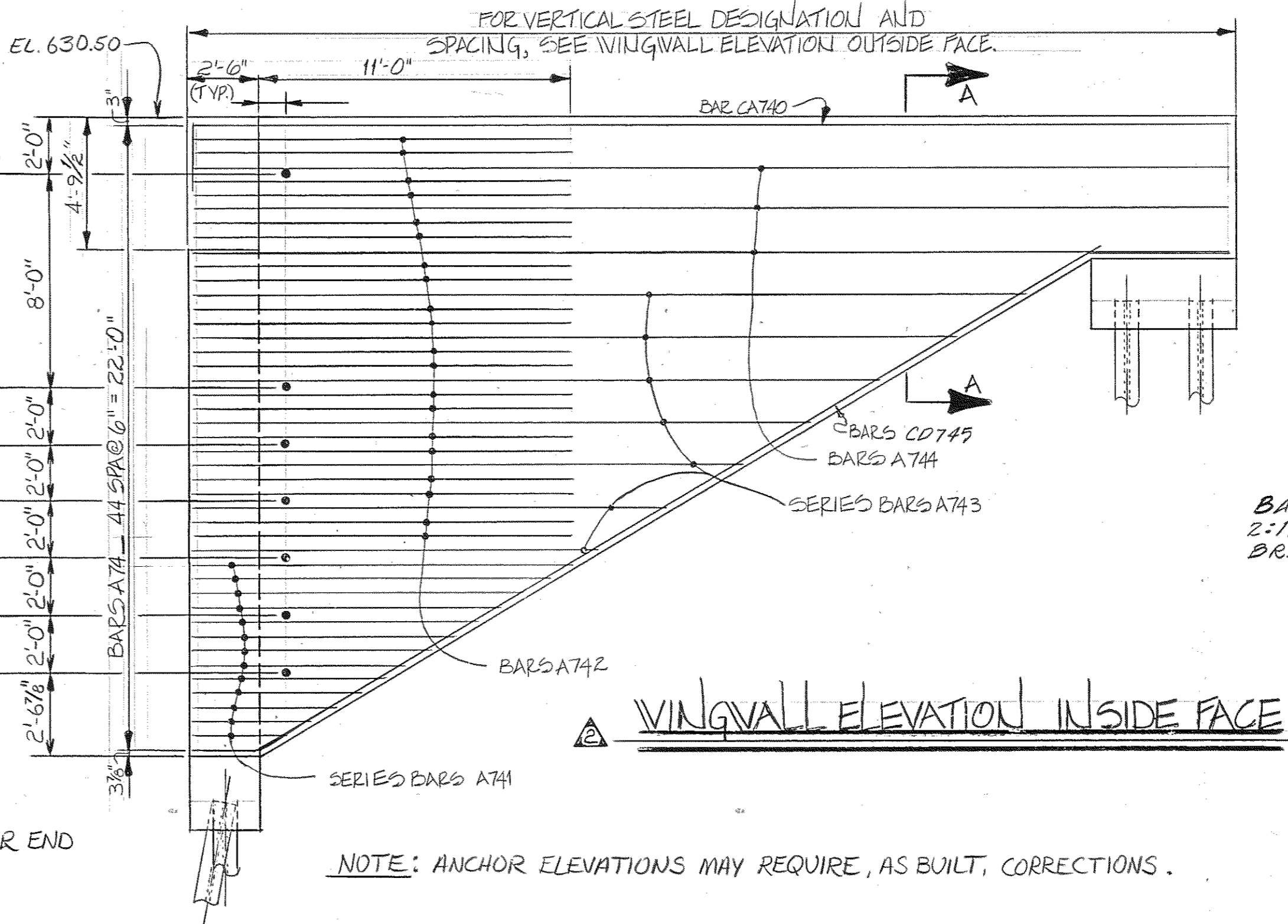
CORRECT
 ENGINEER OF STRUCTURES
 APPROVED
 DIRECTOR OF HIGHWAYS

PROJECT NO.		YEAR		SHEET NO.	
I440-4(53)206		1983			
REVISIONS					
NO.	DATE	BY	BRIEF DESCRIPTION		
1	11-18-83	HMB	ADDED SEC. B-B BAR A647		
2	10-23-86	CMH	ANCHOR DETAILS		



NOTE: SECTION B-B ADDED TO SHOW DETAILS AS CONSTRUCTED

NOTE: "O.E." = OTHER END



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS
ABUTMENT NUMBER 1 DETAILS
INTERSTATE 440 E.S. ROADWAY
OVER CHARLOTTE AVENUE
STATION 363+82.10
DAVIDSON COUNTY
1983

DESIGNED BY HOLLISTON WALKER DATE 12-82
DRAWN BY VELL OWENS DATE 12-82
SUPERVISED BY G. HARRIS/ J. M. BROOKS DATE 12-82
CHECKED BY H. WALKER DATE 12-82

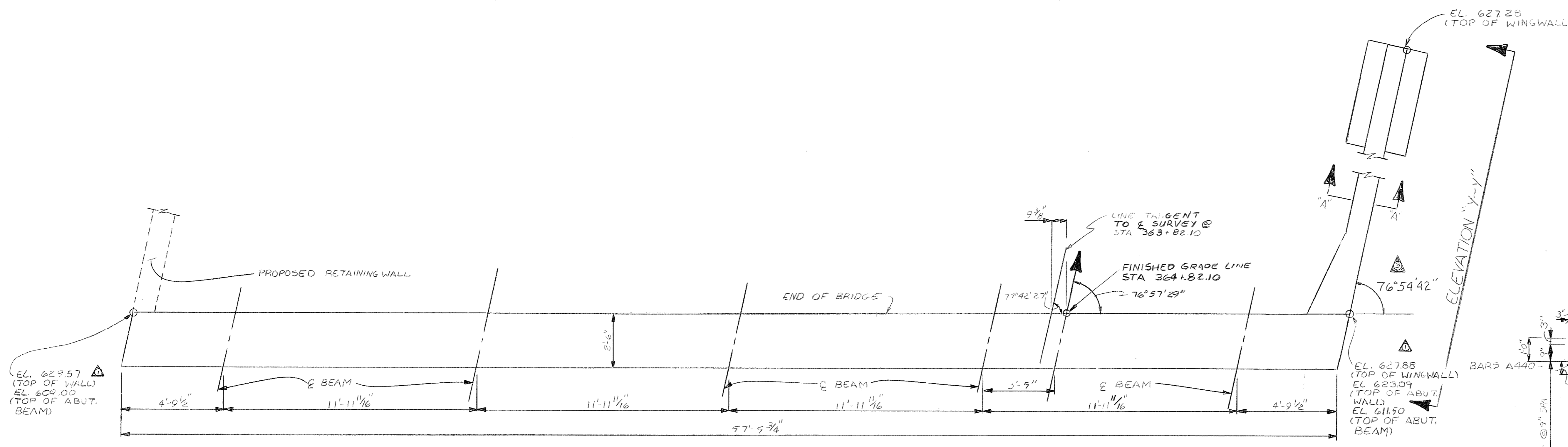
CORRECT *Colleen L. Ansell*
ENGINEER OF STRUCTURES
APPROVED *Louis Parsons*
DIRECTOR OF HIGHWAYS

Const No 19014-3111-44

PROJECT NO.	YEAR	SHEET NO.
I440-4(53)206	1983	

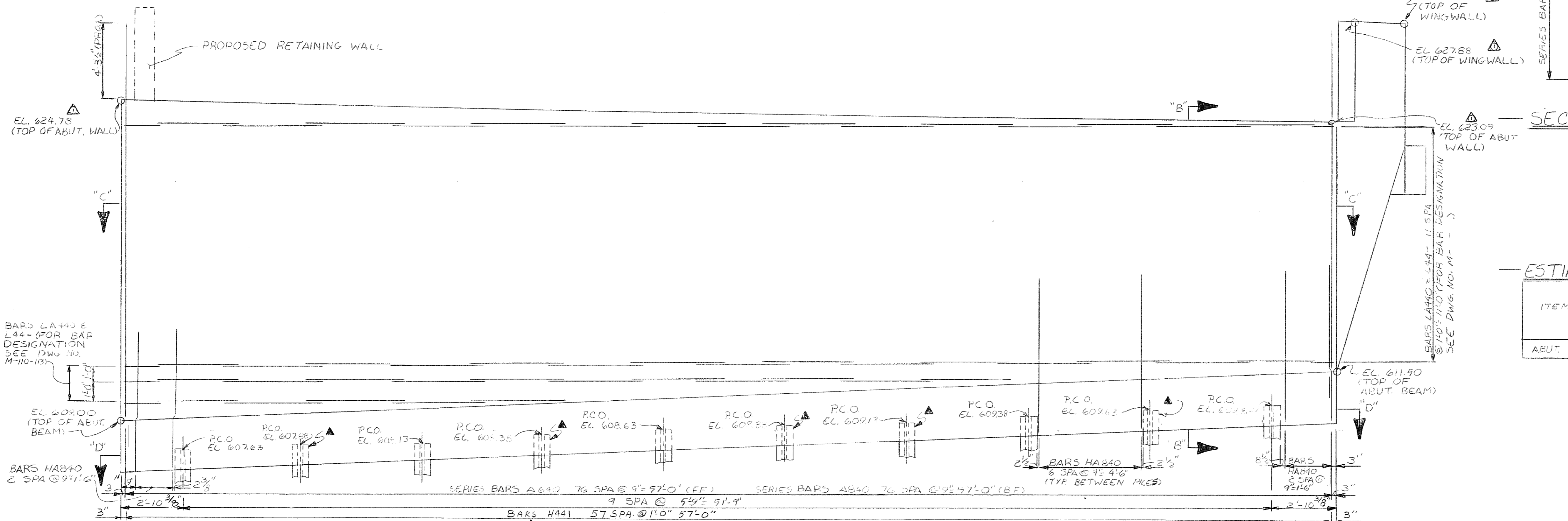
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	7-22-83	HW	CHANGED ELEVATIONS
2	11-14-83	HW	ADDED BARS H441
3	12-5-83	HW	ANGLE FOR WINGWALL

NOTE: COST OF BRIDGE RAIL AND POST IS TO BE INCLUDED IN THE COST OF BRIDGE RAIL SYSTEM.



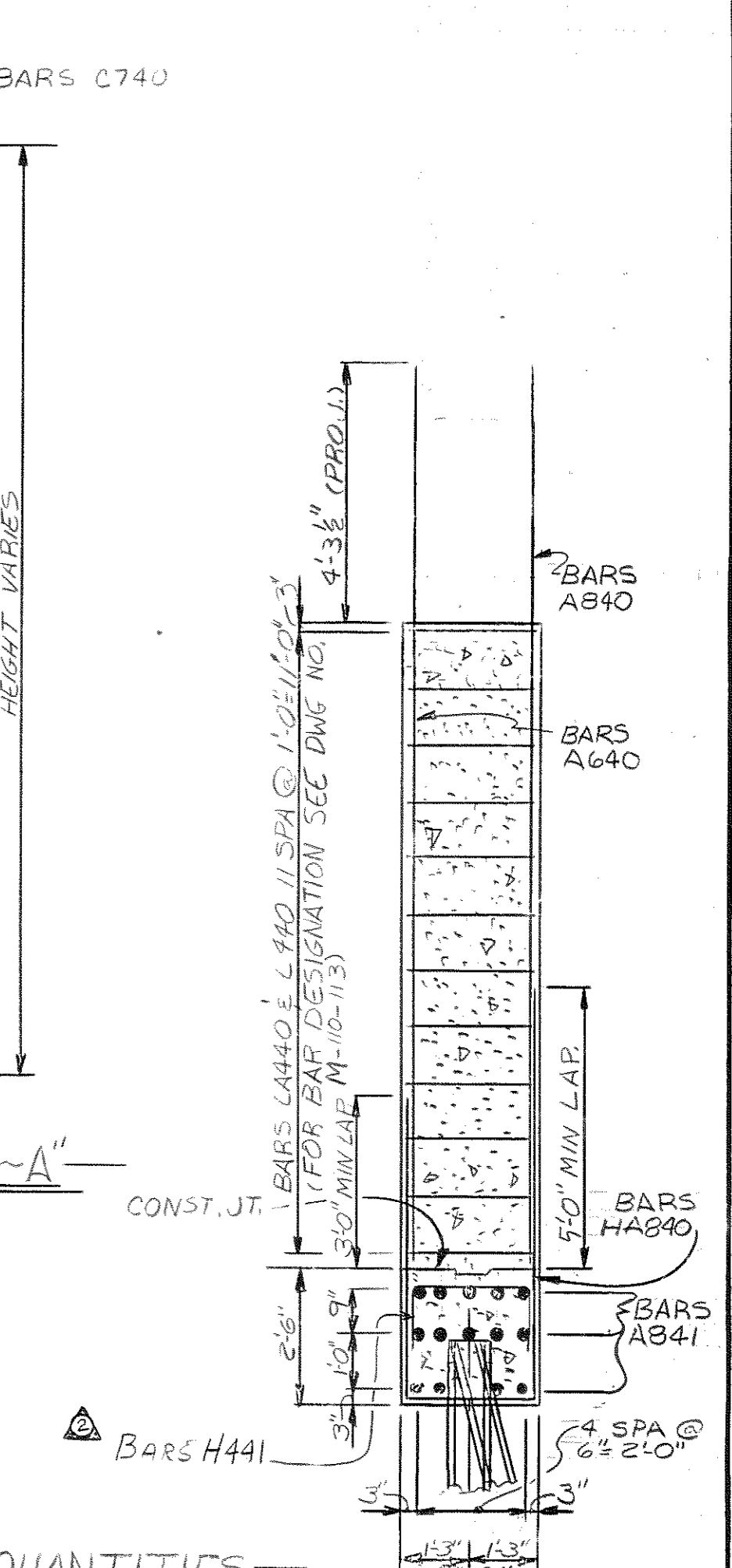
PLAN

▲ DENOTES BATTER PILES 2:1
 P.C.O. DENOTES PILE CUT-OFF
 F.F. DENOTES FRONT FACE
 B.F. DENOTES BACK FACE



ELEVATION

(LOOKING FORWARD ON SURVEY)



ESTIMATED QUANTITIES

ITEM	CLASS "A" CONCRETE	REINFORCING STEEL LBS.
ABUT. 2	34.4	14,634

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
ABUTMENT NUMBER 2
 INTERSTATE 440 E.S. ROADWAY
 OVER CHARLOTTE AVENUE
 STATION 363+82.10
 DAVIDSON COUNTY
 1983

DESIGNED BY H. WALKER DATE 2-82
 DRAWN BY R. FLEWELL & J. M. BENTLEY DATE 1-82
 SUPERVISED BY R. FLEWELL & J. M. BENTLEY DATE 12-82
 CHECKED BY H. WALKER DATE 12-82

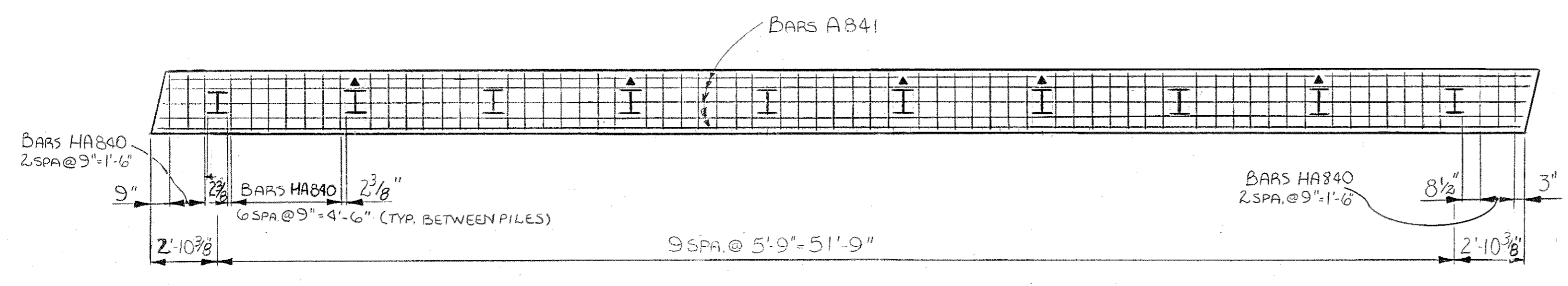
CORRECT *Colleton L. Linnell*
 ENGINEER OF STRUCTURES
 APPROVED *Louis B. Brown*
 DIRECTOR OF HIGHWAYS

▲ DENOTES BATTERED PILES 2:12
P.C.O. DENOTES PILE CUT-OFF

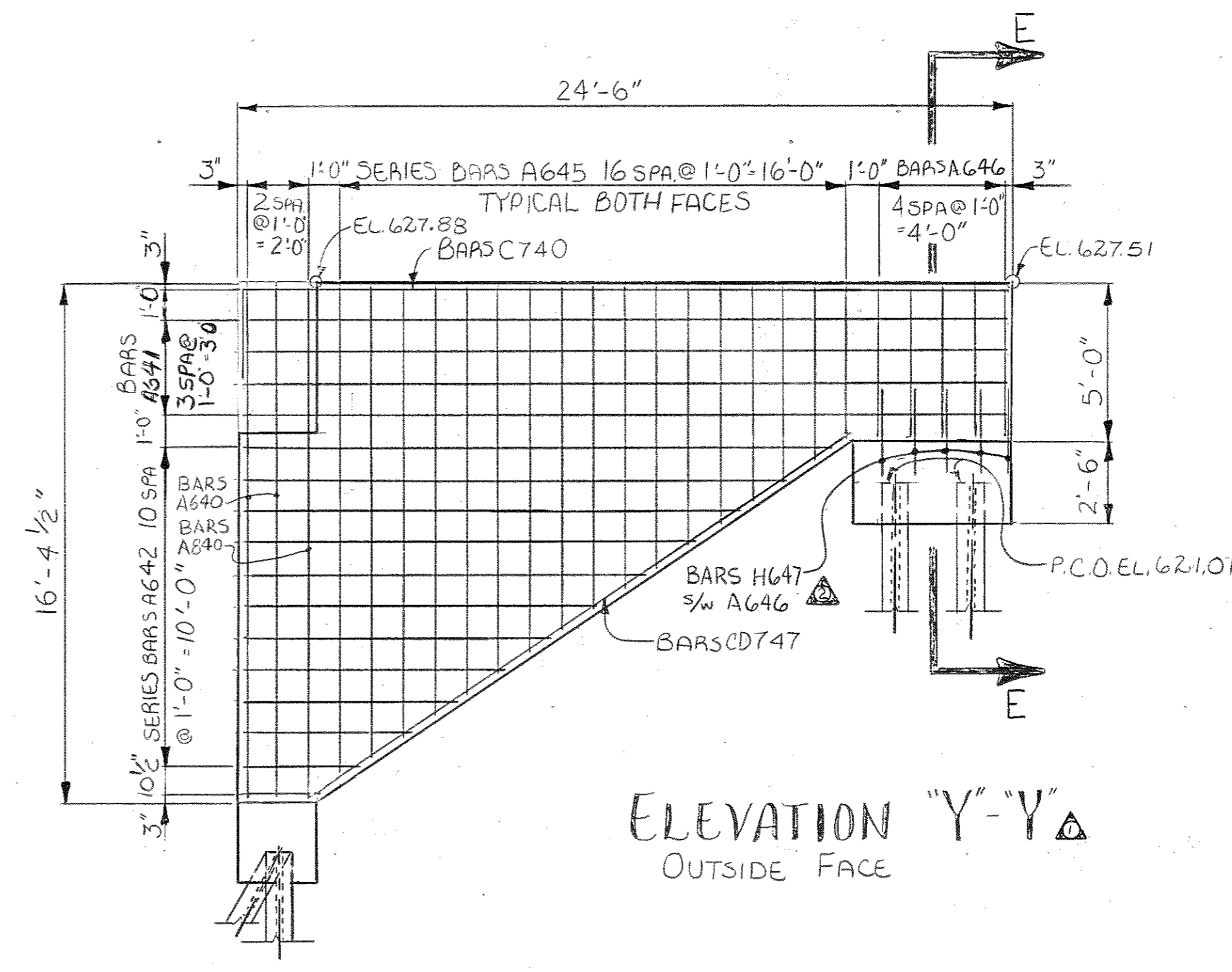
CONST. NO. 19014-3111-44

PROJECT NO.	YEAR	SHEET NO.
I440-4(55)206	1983	

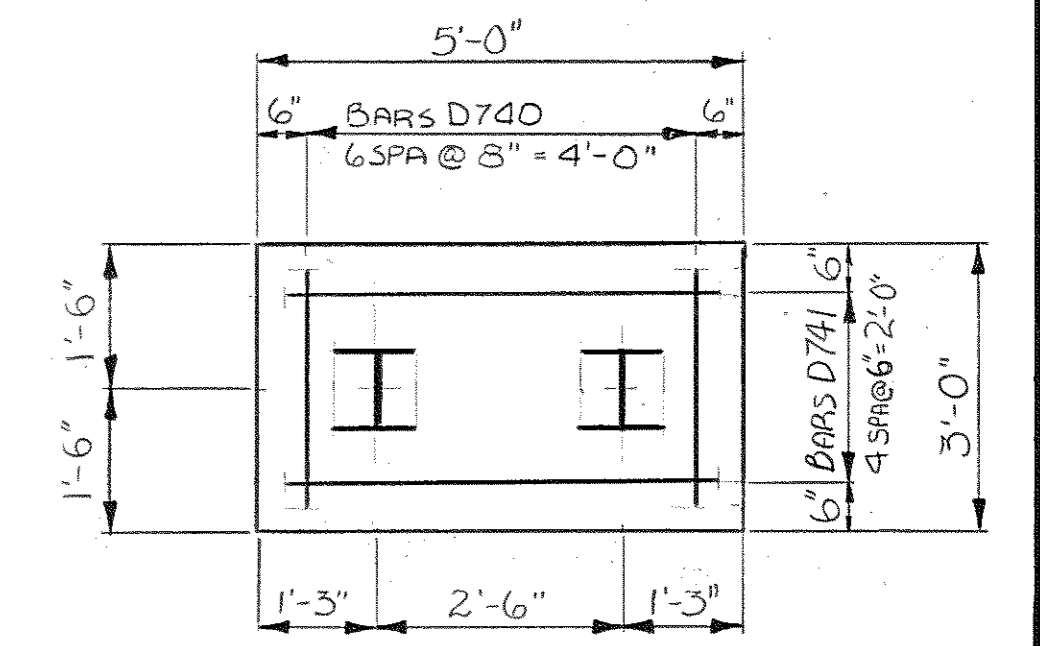
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	7-22-83	HW	CHANGED ELEV'S, & DIMS.
2	11-18-83	HW	SEC. E-E, BARS H647
3	10-29-88	CMA	ANCHOR DETAILS



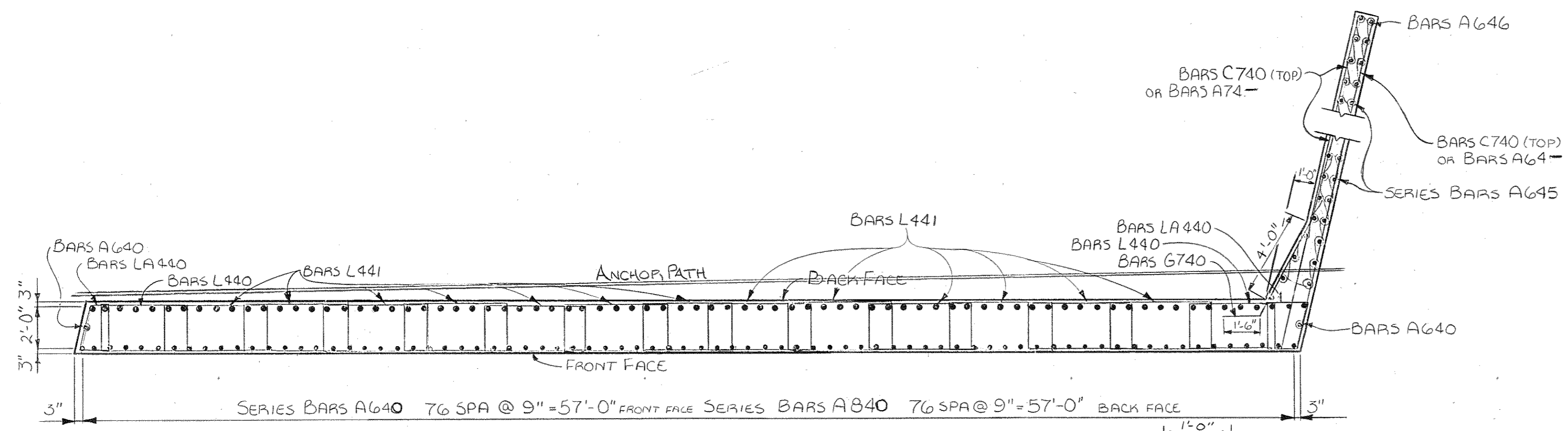
SECTION "D"-D



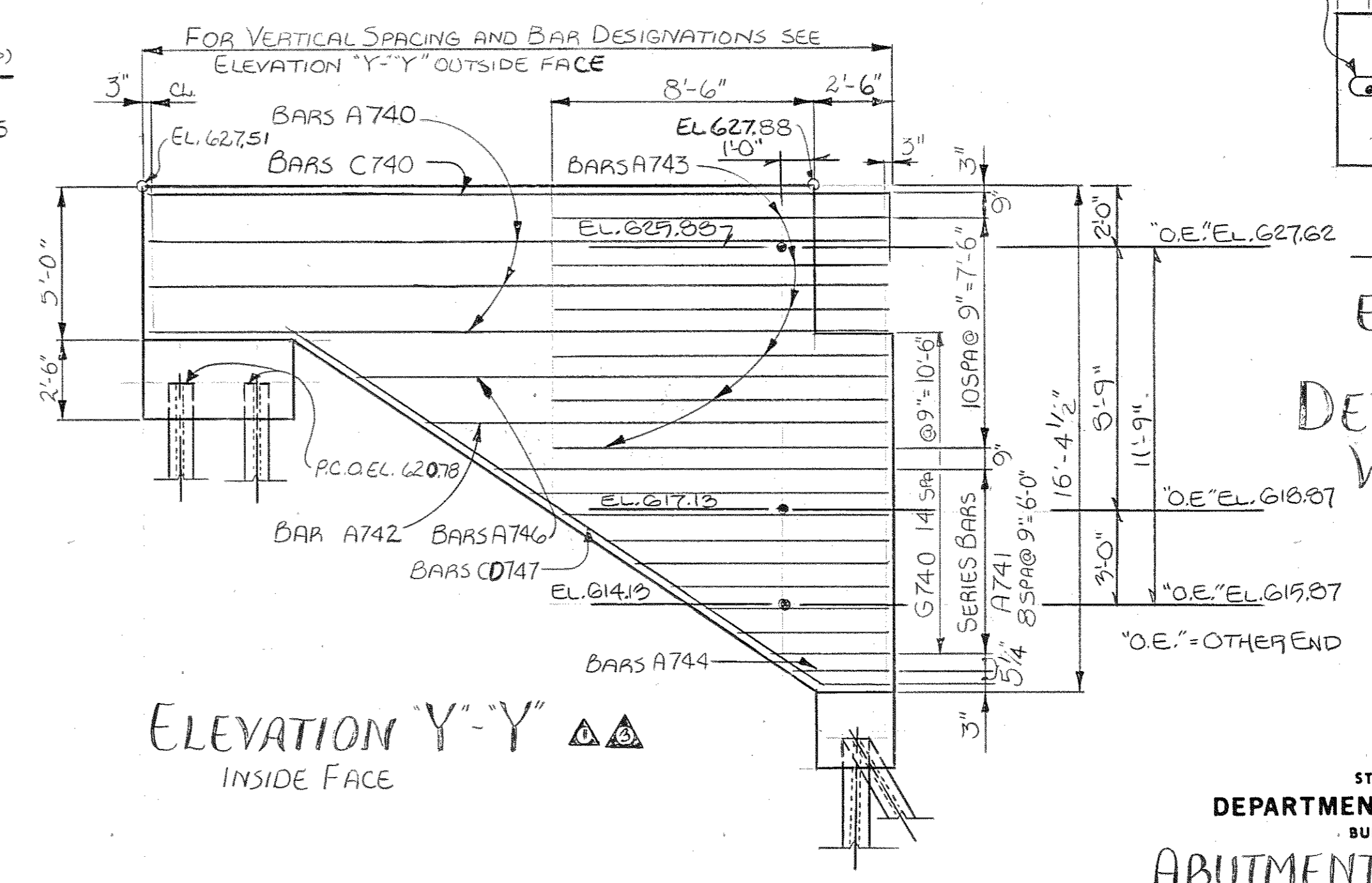
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OUTSIDE FACE



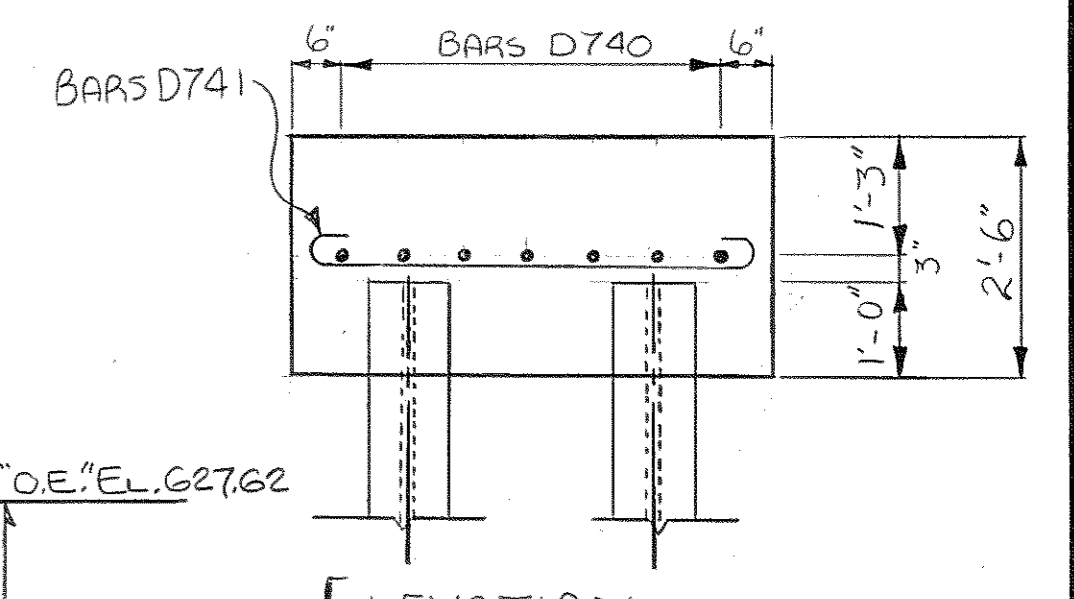
PLAN



SECTION "C"-C

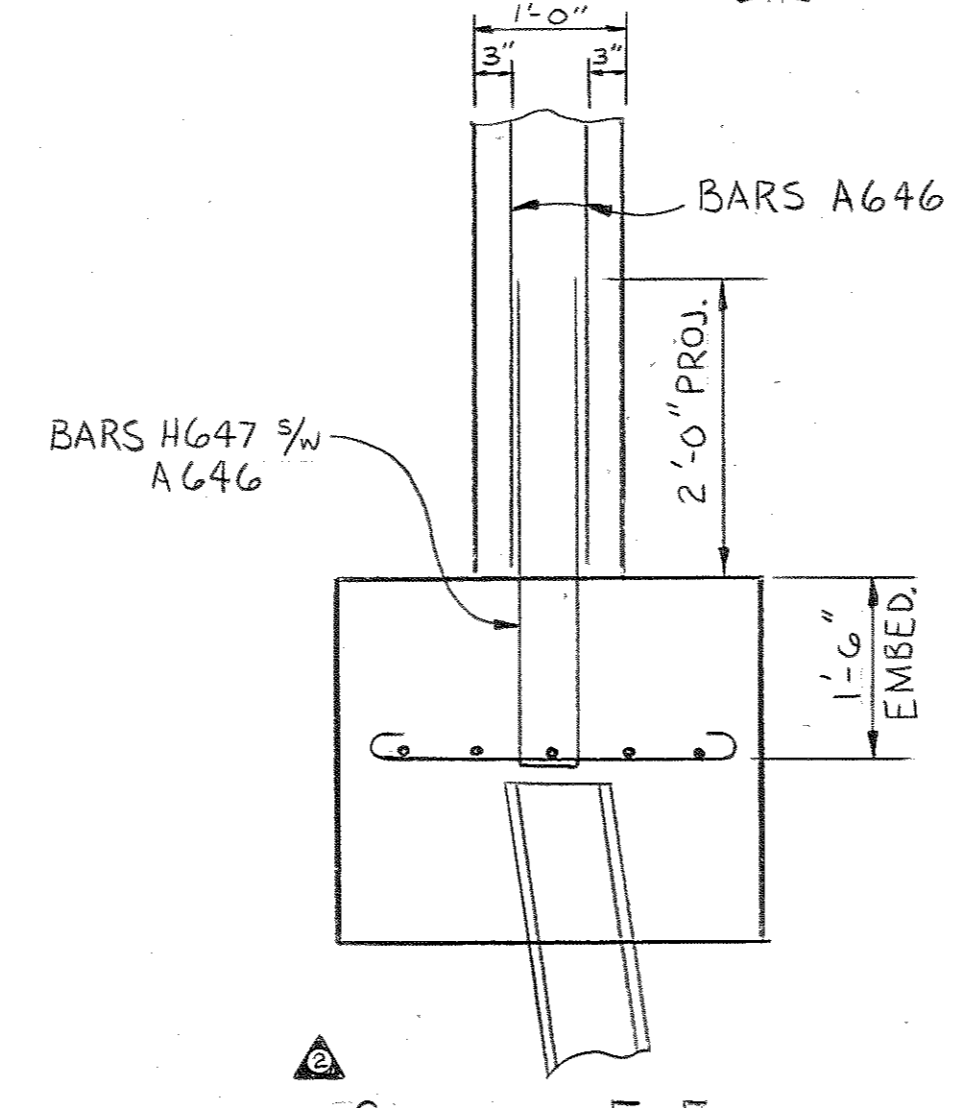


ELEVATION "Y"-Y
INSIDE FACE



ELEVATION

DETAILS OF WING FOOTING



SECTION E-E

DESIGNED BY HOUSTON WALKER DATE 8-82
DRAWN BY DEANNA CHAFFIN DATE 12-82
SUPERVISED BY R.L. HARRISON - H.M.B. DATE 12-82
CHECKED BY H. WALKER DATE 12-82

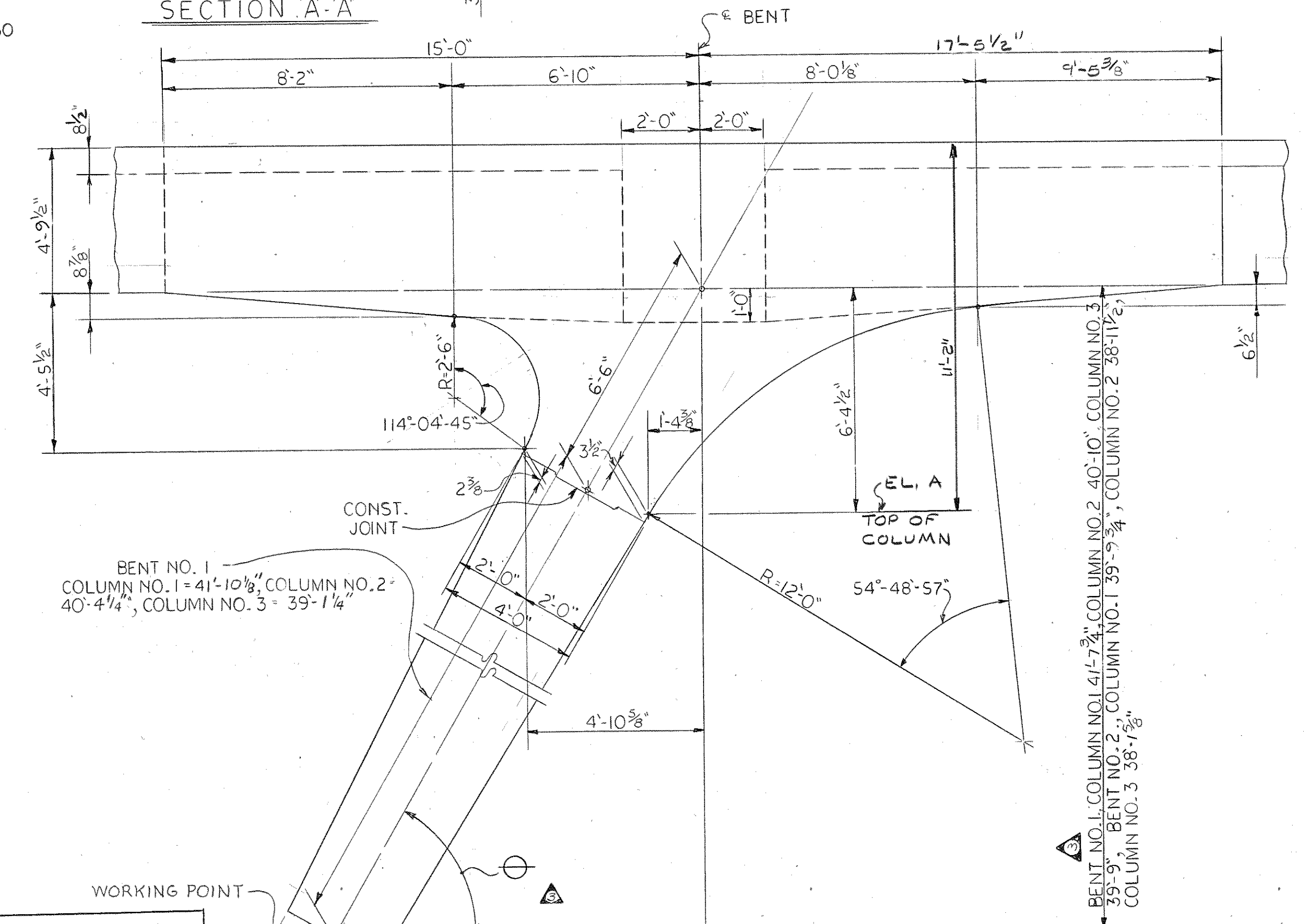
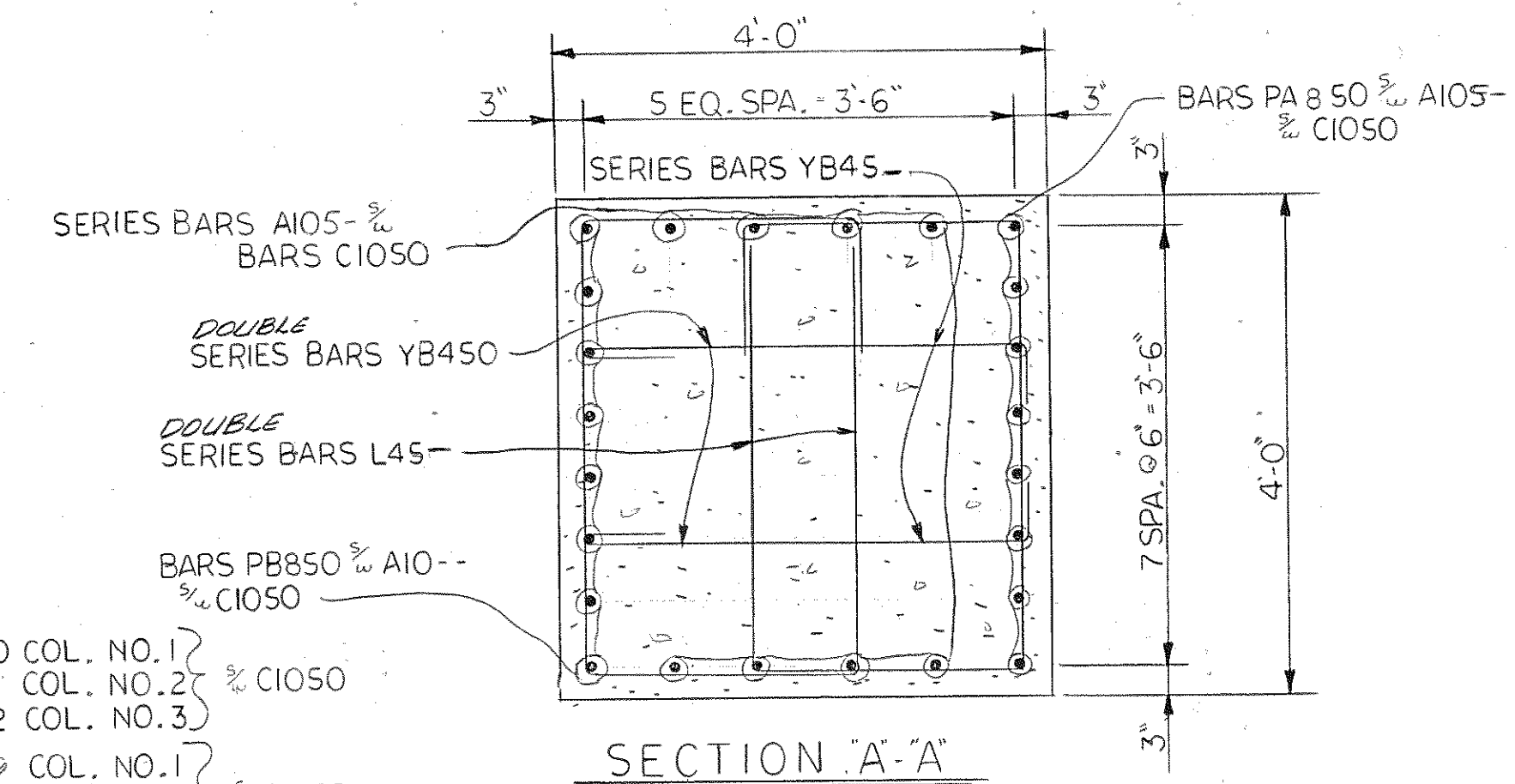
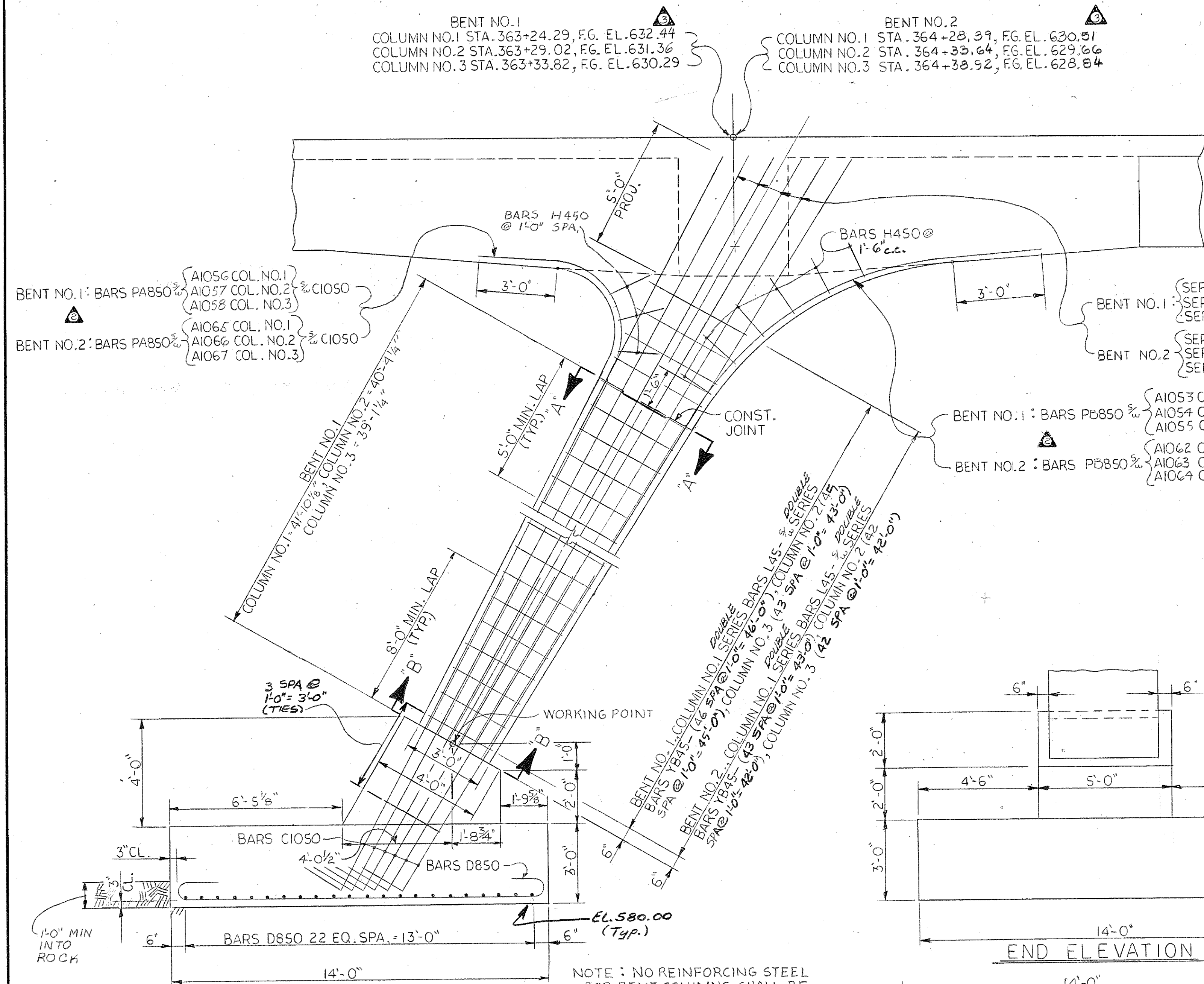
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS
ABUTMENT NUMBER 2 DETAILS
I 440 E.S. ROADWAY
OVER CHARLOTTE AVENUE
STA. 363+82.10 (E.S. ROADWAY)
DAVIDSON COUNTY
1983

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

M-110-113

PROJECT NO.	YEAR	SHEET NO.
I440-4(53)206	1983	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	4-21-83	H.W.	ADDED NOTE + DIMENSIONS
2	6-1-83	H.W.	CHANGE PB BARS TO PA & PA BARS TO PB BARS
3	7-22-83	H.W.	CHANGED DIM, ANGLES, & ELEV.
4	2-2-84	HALL	REVISED BENT NO. 2



BENT NO. 1		BENT NO. 2	
COL. NO.	EL. "A"	COL. NO.	EL. A
1	621.27	1	619.34
2	620.19	2	618.49
3	619.12	3	617.67

COL.	BENT NO. 1			BENT NO. 2		
	1	2	3	1	2	3
⊖	59°52'	60°	60°	60°24'	60°10'	59°55'

ELEVATION @ BENT NO. 1
 (BENT NO. 2 REVERSED)

END ELEVATION

SECTION B-B

PLAN OF FOOTING
 (SHOWING REINFORCING STEEL)

ESTIMATED QUANTITIES

ITEM	CLASS "A" CONCRETE C.Y.	REINFORCING STEEL LBS.
BENT NO. 1	132.1	31,996
BENT NO. 2	128.6	31,143

NOTE: CONCRETE QUANTITIES CALCULATED TO CONSTRUCTION JOINT.

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 BENT NO. 1 AND 2 DETAILS
 INTERSTATE 440 E.S. ROADWAY
 OVER CHARLOTTE AVENUE
 STATION 363+82.10
 DAVIDSON COUNTY
 1983

CORRECT: *Colton L. Foveall*
 ENGINEER OF STRUCTURES
 APPROVED: *Leuis Evans*
 DIRECTOR OF HIGHWAYS

M-110-114

DESIGNED BY: H. WALKER
 DRAWN BY: FRANK F. FROST
 SUPERVISED BY: HARRISON M.B.
 CHECKED BY: H. WALKER

DATE: 11-82
 DATE: 12-82
 DATE: 12-82
 DATE: 12-82

NOTE: NO REINFORCING STEEL FOR BENT COLUMNS SHALL BE ORDERED UNTIL FINAL FOOTING ELEVATIONS ARE DETERMINED. IF FINAL ELEVATIONS ARE BELOW EL. 578.00 CONTACT ENGINEER OF STRUCTURES.

BILL OF STEEL

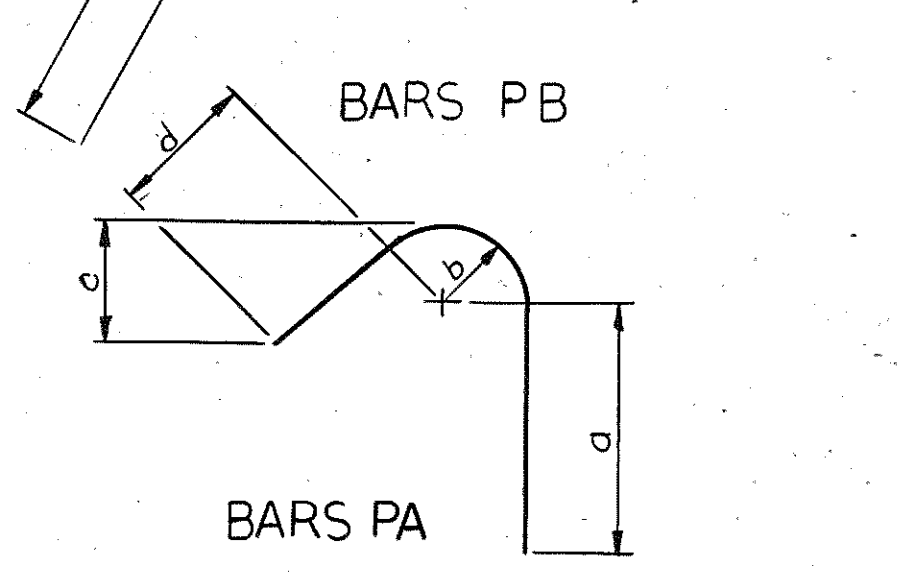
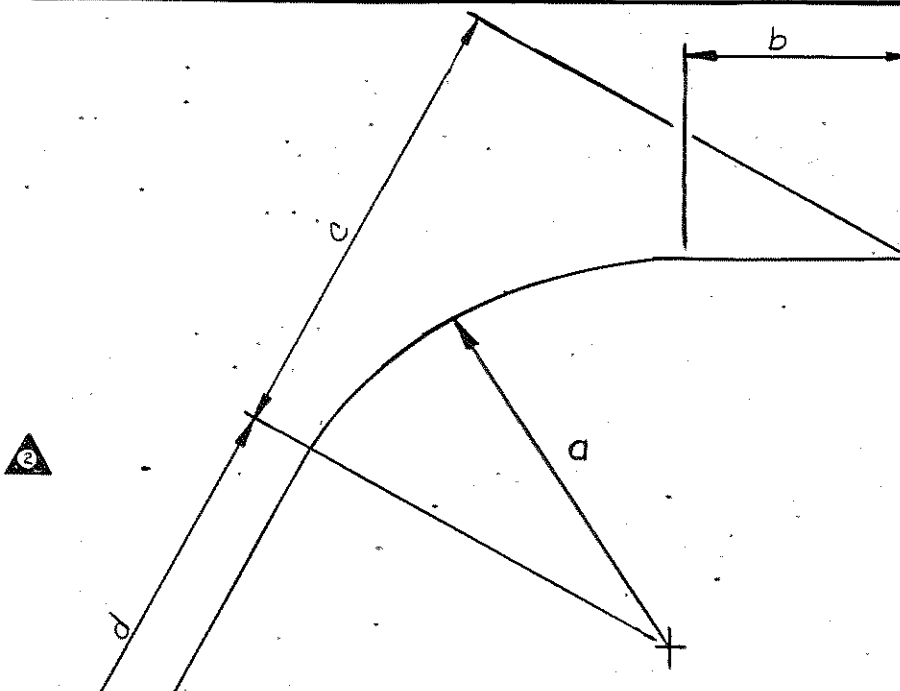
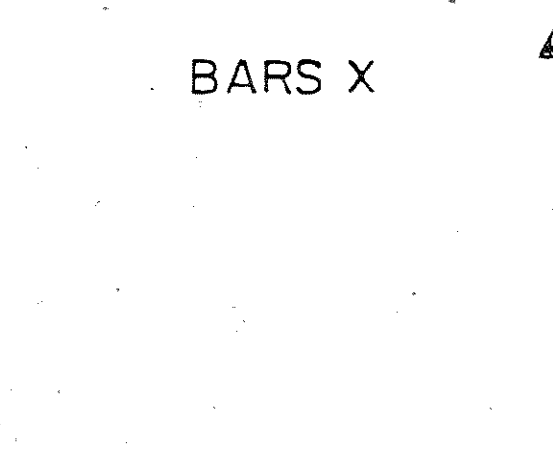
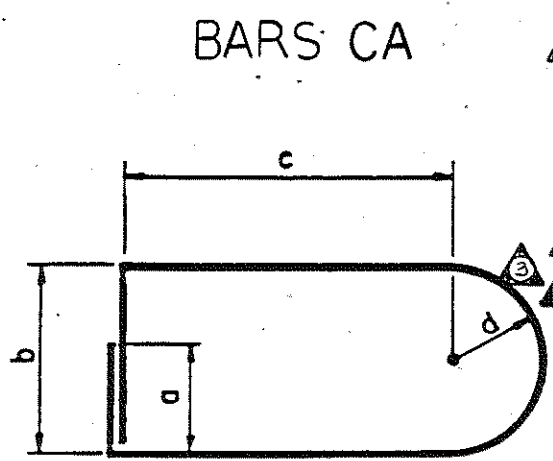
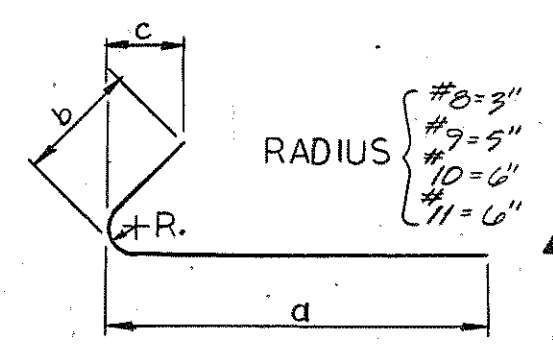
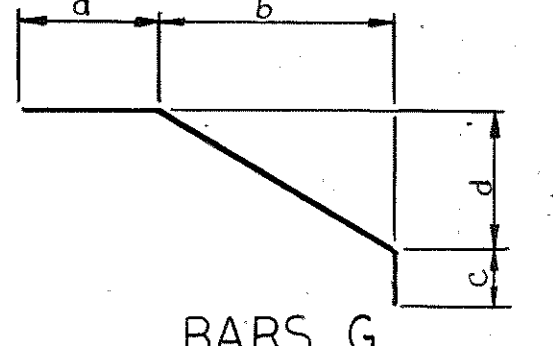
Const. No. 19014-311-92

Table with columns: PER ROAD DIST NO., STATE, PER AD PROJ NO., FISCAL YEAR, SHEET NO., TOTAL SHEETS.

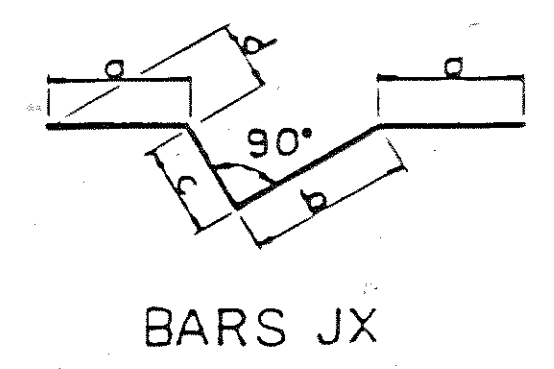
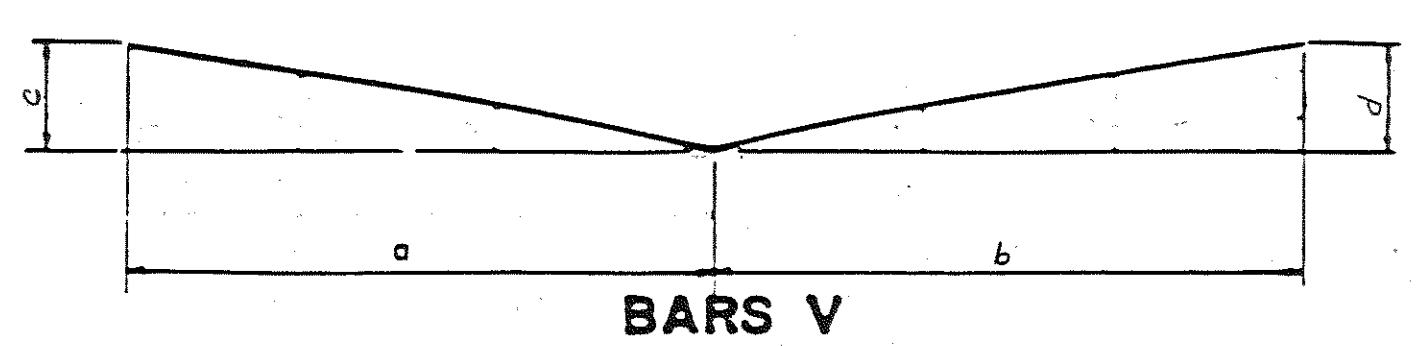
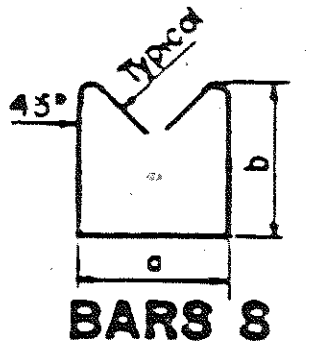
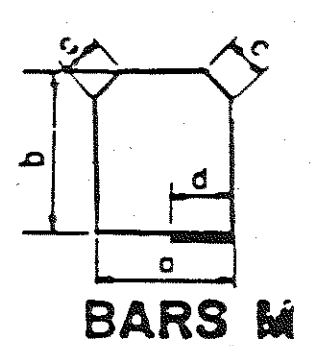
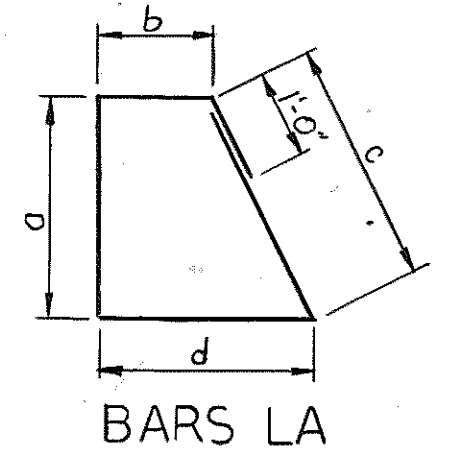
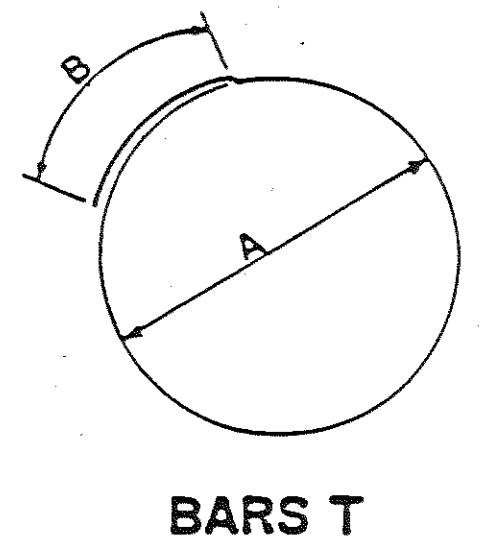
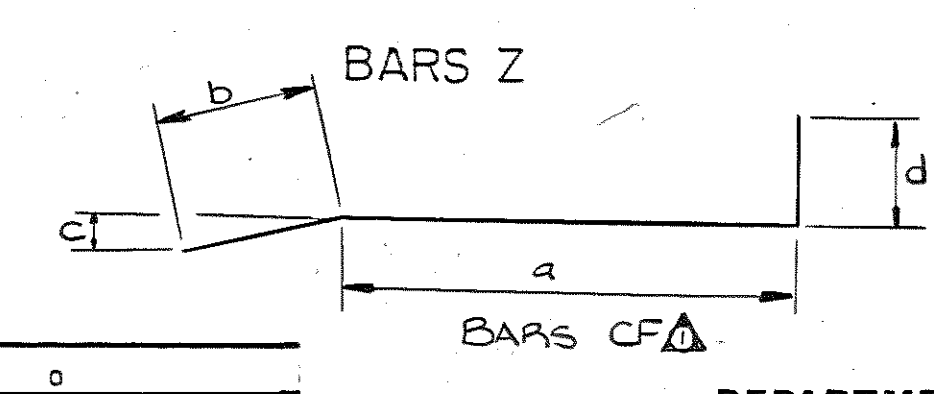
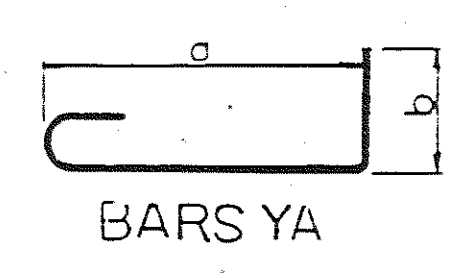
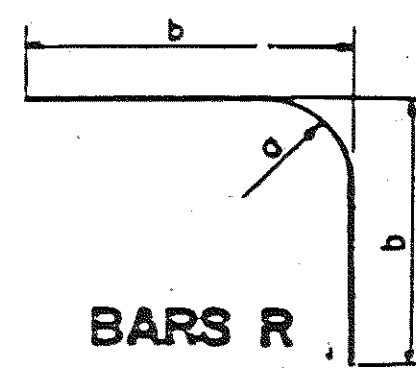
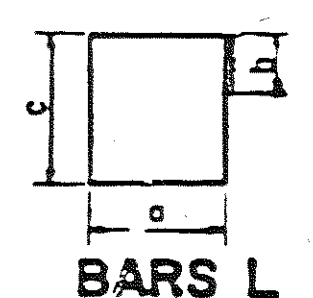
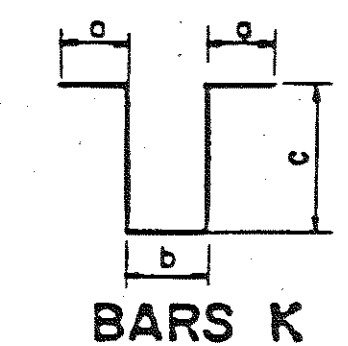
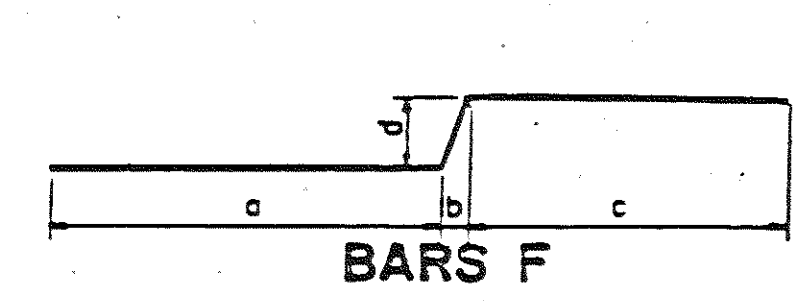
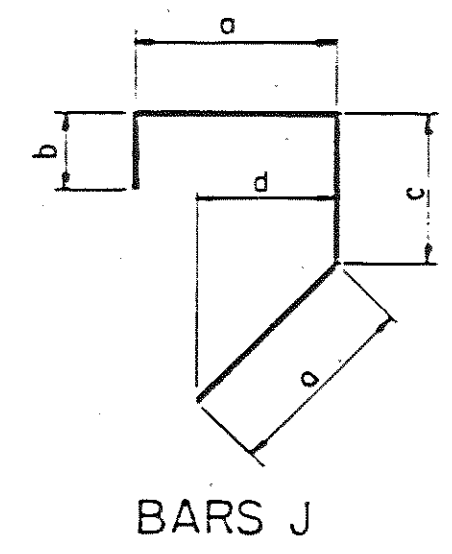
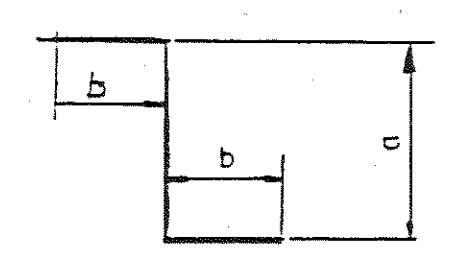
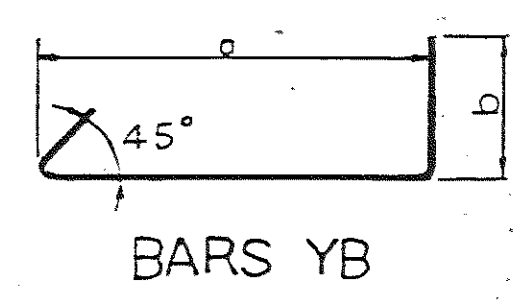
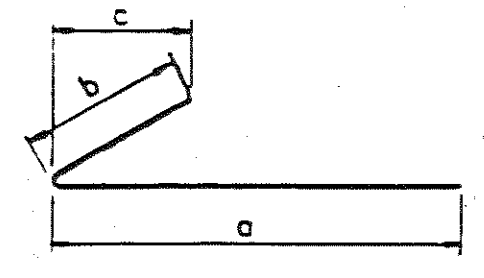
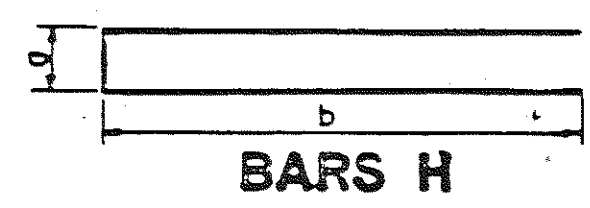
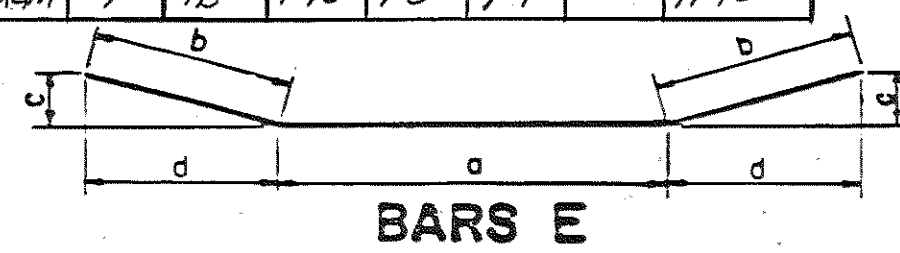
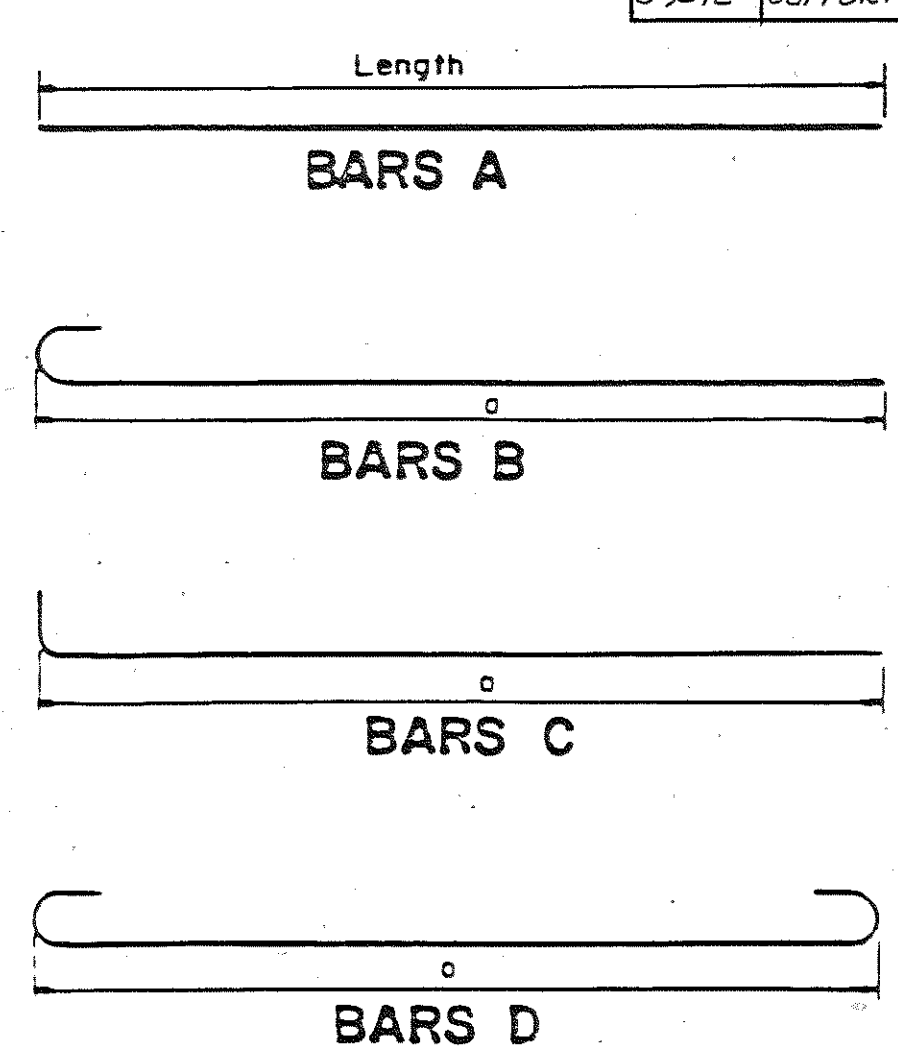
REVISIONS

Table with columns: NO., DATE, BY, BRIEF DESCRIPTION.

Main table with columns: BAR, LOCATION, SIZE, NO REQ, BENDING DIMENSIONS, LENGTH. Divided into SUPERSTRUCTURE, PAVEMENT @ BRIDGE ENDS, ABUTMENT NO. 1, and ABUTMENT NO. 1 (Cont.).



REINFORCING STEEL CODE
TYPE SIZE SERIES
A 5 05
NOTE: Dimensions shown on this sheet are outside to outside of bar. Standard C R S. I. Hook Details Shall Apply, Except As Noted.



DESIGNED BY: HOUSTON WALKER DATE: 12-82
DRAWN BY: G. LLOYD DATE: 12-82
SUPERVISED BY: Roger L. Harrison - H.M.S. DATE: 12-82
CHECKED BY: H. WALKER DATE: 12-82

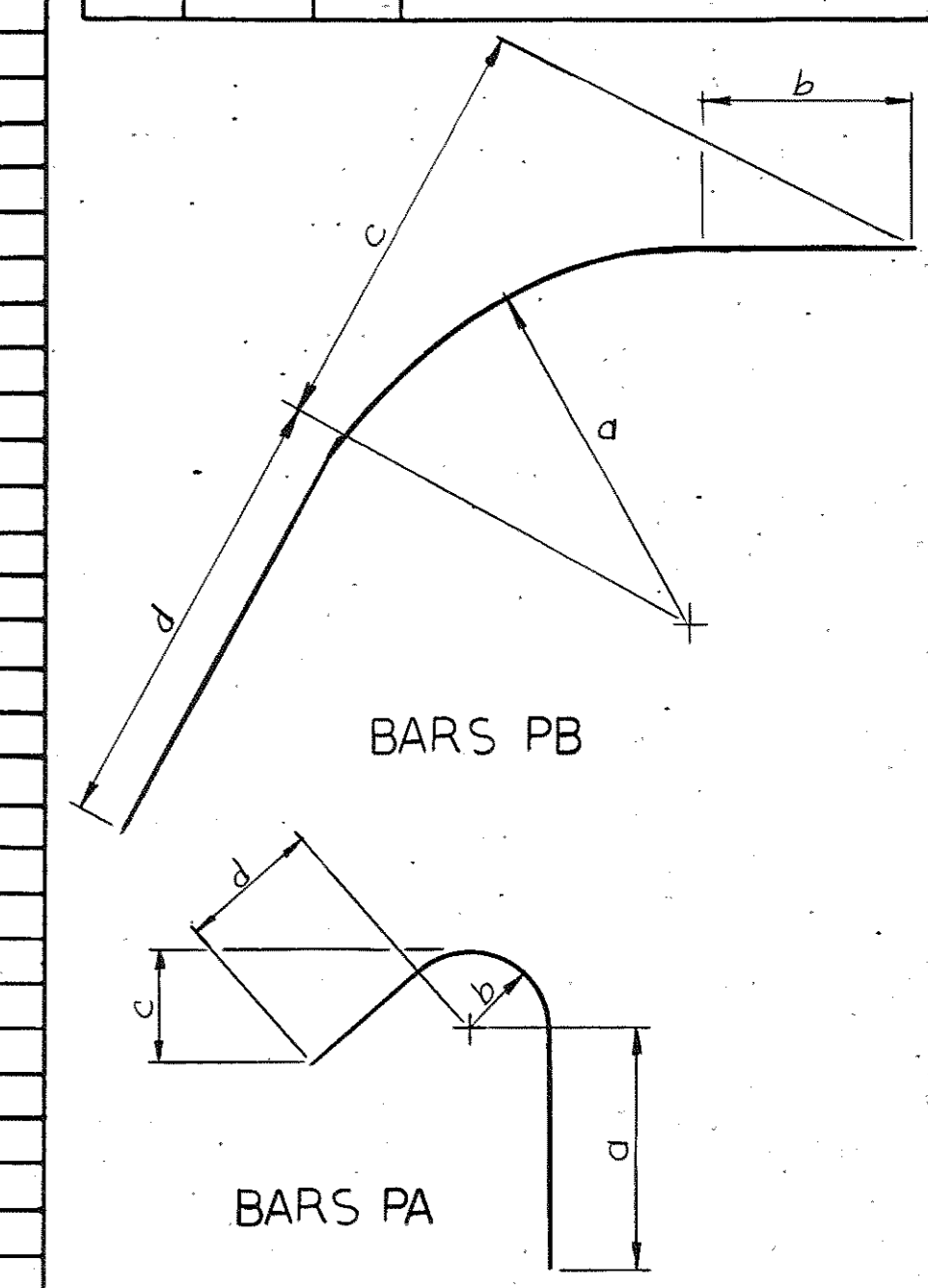
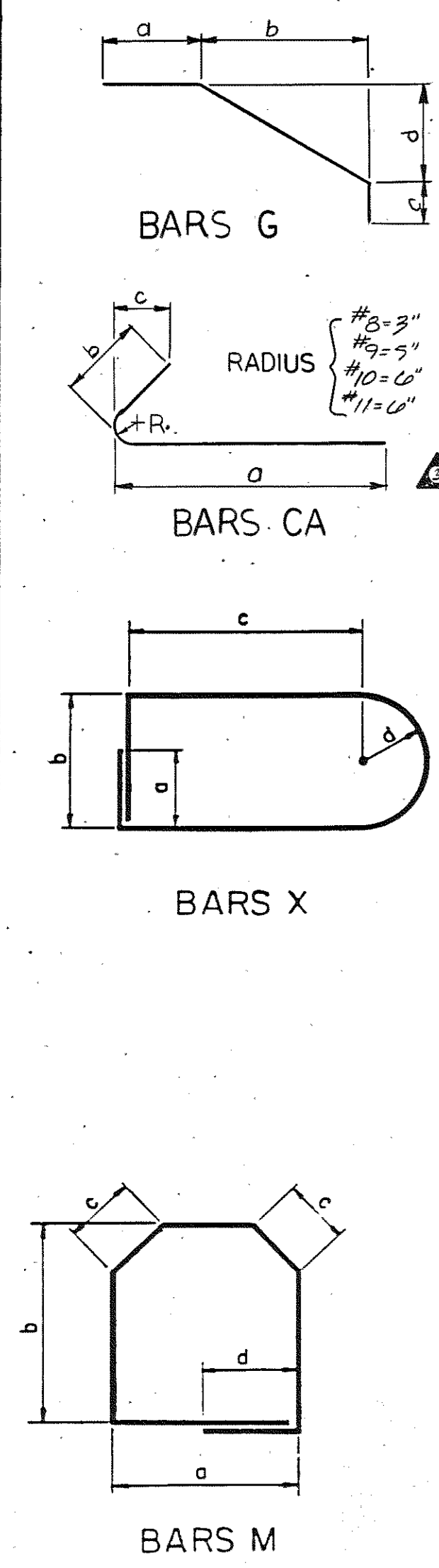
STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAYS
BILL OF STEEL
INTERSTATE 440 E.S. ROADWAY Over CHARLOTTE AVENUE STATION: 363+82.10 DAVIDSON COUNTY 1983
CORRECT: Colleen L. Foreall ENGINEER OF STRUCTURES
APPROVED: Lewis Evans DIRECTOR OF HIGHWAYS
M-110-115

BILL OF STEEL

Const. No. 19014-311-44

REV. NO.	DATE	BY	BRIEF DESCRIPTION
1	6-1-83	H.W.	BARS PB50, PB850, A1060
2	11-14-83	HW	BARS H441
3	11-18-83	HW	BARS AG47

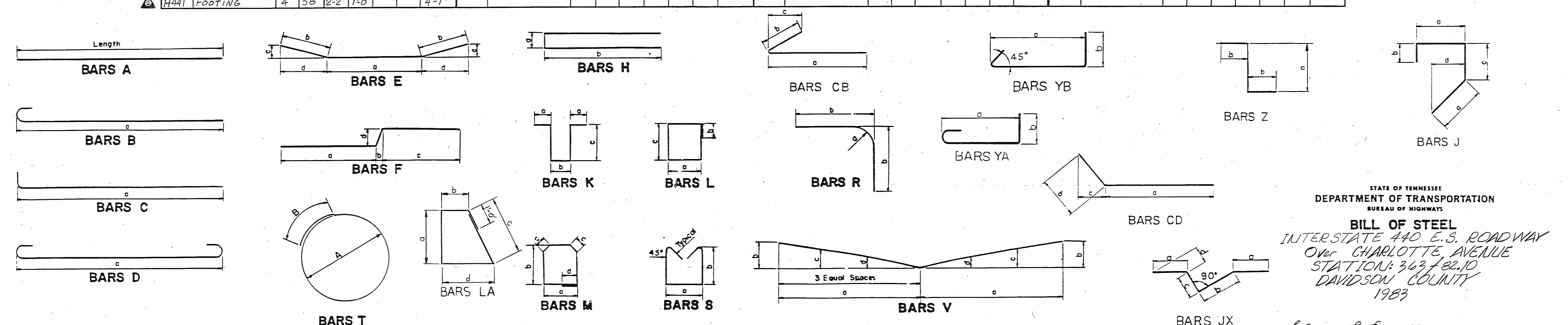
ABUTMENT NO. 2										BENT NO. 1										BENT NO. 2									
BAR	LOCATION	SIZE	NO. RECD	BENDING DIMENSIONS				LENGTH	BAR	LOCATION	SIZE	NO. RECD	BENDING DIMENSIONS				LENGTH	BAR	LOCATION	SIZE	NO. RECD	BENDING DIMENSIONS				LENGTH			
				a	b	c	d																						
AG41	WING WALL	6	4	VARIES IN LENGTH FROM 3'-8" TO 18'-8" IN INC. OF 1'-6" (11 BARS)				24'-0"	SERIES				VARIES IN LENGTH FROM 3'-11" TO 3'-11"				21'-0"	SERIES				VARIES IN LENGTH FROM 4'-8-9" TO 4'-9-11" IN INC. OF 4'-9/16" (4 BARS)				17'-4"			
AG42	WING WALL	6	1	VARIES IN LENGTH FROM 15'-10" TO 4'-0" IN INC. OF 8" (17 BARS)				12'-10"	A1050	COLUMN NO. 1	10	2	VARIES IN LENGTH FROM 50'-5" TO 51'-7" IN INC. OF 4'-9/16" (4 BARS)				20'-0"	A1051	COLUMN NO. 2	10	2	VARIES IN LENGTH FROM 48'-4" TO 49'-6" IN INC. OF 4'-9/16" (4 BARS)				19'-8"			
AG45	WING WALL	6	2	VARIES IN LENGTH FROM 15'-10" TO 4'-0" IN INC. OF 8" (17 BARS)				17'-10"	A1052	COLUMN NO. 3	10	2	VARIES IN LENGTH FROM 47'-2" TO 50'-4" IN INC. OF 4'-9/16" (4 BARS)				19'-0"	A1061	COLUMN NO. 3	10	2	VARIES IN LENGTH FROM 47'-8" TO 48'-10" IN INC. OF 4'-9/16" (4 BARS)				19'-0"			
AG46	WING WALL	6	10	VARIES IN LENGTH FROM 15'-10" TO 4'-0" IN INC. OF 8" (17 BARS)				4'-6"	A1053	COLUMN NO. 1	10	8	VARIES IN LENGTH FROM 53'-6" TO 53'-6" IN INC. OF 0%				53'-6"	A1062	COLUMN NO. 1	10	8	VARIES IN LENGTH FROM 50'-4" TO 50'-4" IN INC. OF 0%				50'-4"			
AG47	WING WALL FTG.	6	5	VARIES IN LENGTH FROM 15'-10" TO 4'-0" IN INC. OF 8" (17 BARS)				7'-5"	A1054	COLUMN NO. 2	10	8	VARIES IN LENGTH FROM 52'-0" TO 52'-0" IN INC. OF 0%				52'-0"	A1063	COLUMN NO. 2	10	8	VARIES IN LENGTH FROM 49'-10" TO 49'-10" IN INC. OF 0%				49'-10"			
A740	WING WALL	7	3	VARIES IN LENGTH FROM 12'-10" TO 4'-0" IN INC. OF 1'-1/4" (9 BARS)				2'-0"	A1055	COLUMN NO. 3	10	8	VARIES IN LENGTH FROM 50'-9" TO 50'-9" IN INC. OF 0%				50'-9"	A1064	COLUMN NO. 3	10	8	VARIES IN LENGTH FROM 49'-4" TO 49'-4" IN INC. OF 0%				49'-4"			
A741	WING WALL	7	1	VARIES IN LENGTH FROM 12'-10" TO 4'-0" IN INC. OF 1'-1/4" (9 BARS)				7'-5'-9"	A1056	COLUMN NO. 1	10	8	VARIES IN LENGTH FROM 51'-5" TO 51'-5" IN INC. OF 0%				51'-5"	A1065	COLUMN NO. 1	10	8	VARIES IN LENGTH FROM 48'-4" TO 48'-4" IN INC. OF 0%				48'-4"			
A742	WING WALL	7	1	VARIES IN LENGTH FROM 12'-10" TO 4'-0" IN INC. OF 1'-1/4" (9 BARS)				15'-2"	A1057	COLUMN NO. 2	10	8	VARIES IN LENGTH FROM 50'-0" TO 50'-0" IN INC. OF 0%				50'-0"	A1066	COLUMN NO. 2	10	8	VARIES IN LENGTH FROM 47'-10" TO 47'-10" IN INC. OF 0%				47'-10"			
A743	WING WALL	7	6	VARIES IN LENGTH FROM 12'-10" TO 4'-0" IN INC. OF 1'-1/4" (9 BARS)				10'-10"	A1058	COLUMN NO. 3	10	8	VARIES IN LENGTH FROM 48'-9" TO 48'-9" IN INC. OF 0%				48'-9"	A1067	COLUMN NO. 3	10	8	VARIES IN LENGTH FROM 47'-4" TO 47'-4" IN INC. OF 0%				47'-4"			
A744	WING WALL	7	1	VARIES IN LENGTH FROM 12'-10" TO 4'-0" IN INC. OF 1'-1/4" (9 BARS)				4'-0"	CB50	FOOTING	8	138	VARIES IN LENGTH FROM 13'-6" TO 13'-6" IN INC. OF 0%				13'-6"	DB50	FOOTING	8	138	VARIES IN LENGTH FROM 13'-6" TO 13'-6" IN INC. OF 0%				13'-6"			
A746	WING WALL	7	1	VARIES IN LENGTH FROM 12'-10" TO 4'-0" IN INC. OF 1'-1/4" (9 BARS)				17'-5"	H470	COLUMN NO. 1,2,3	4	27	VARIES IN LENGTH FROM 3'-9" TO 3'-9" IN INC. OF 0%				6'-8"	H450	COLUMN NO. 1,2,3	4	27	VARIES IN LENGTH FROM 3'-9" TO 3'-9" IN INC. OF 0%				6'-8"			
AB41	ABUTMENT	8	14	VARIES IN LENGTH FROM 15'-10" TO 4'-0" IN INC. OF 8" (17 BARS)				57'-0"	L450	COLUMN NO. 1	4	2	DIM. A VARIES FROM 1'-3" TO 2'-5" IN INC. OF 0%				600'-0"	L452	COLUMN NO. 1	4	2	DIM. A VARIES FROM 1'-2" TO 2'-4" IN INC. OF 0%				55'-2"			
C740	WING WALL	7	2	VARIES IN LENGTH FROM 15'-10" TO 4'-0" IN INC. OF 8" (17 BARS)				2'-2"	L451	COLUMN NO. 2	4	2	DIM. A VARIES FROM 1'-2" TO 2'-4" IN INC. OF 0%				57'-10"	L453	COLUMN NO. 2	4	2	DIM. A VARIES FROM 1'-2" TO 2'-4" IN INC. OF 0%				54'-4"			
CD747	WING WALL	7	2	VARIES IN LENGTH FROM 15'-10" TO 4'-0" IN INC. OF 8" (17 BARS)				2'-0"	L452	COLUMN NO. 3	4	2	DIM. A VARIES FROM 1'-2" TO 2'-4" IN INC. OF 0%				55'-6'-2"	L454	COLUMN NO. 3	4	2	DIM. A VARIES FROM 1'-2" TO 2'-4" IN INC. OF 0%				54'-4"			
D740	FOOTING	7	7	VARIES IN LENGTH FROM 15'-10" TO 4'-0" IN INC. OF 8" (17 BARS)				4'-2"	L451	COLUMN NO. 2	4	2	DIM. A VARIES FROM 1'-2" TO 2'-4" IN INC. OF 0%				57'-10"	L453	COLUMN NO. 2	4	2	DIM. A VARIES FROM 1'-2" TO 2'-4" IN INC. OF 0%				54'-4"			
D741	FOOTING	7	5	VARIES IN LENGTH FROM 15'-10" TO 4'-0" IN INC. OF 8" (17 BARS)				4'-2"	L452	COLUMN NO. 3	4	2	DIM. A VARIES FROM 1'-2" TO 2'-4" IN INC. OF 0%				55'-6'-2"	L454	COLUMN NO. 3	4	2	DIM. A VARIES FROM 1'-2" TO 2'-4" IN INC. OF 0%				54'-4"			
G740	WING WALL	7	15	VARIES IN LENGTH FROM 15'-10" TO 4'-0" IN INC. OF 8" (17 BARS)				8'-7"	PB850	COLUMN NO. 1,2,3	8	24	DIM. A VARIES FROM 1'-2" TO 2'-4" IN INC. OF 0%				54'-4"	PB850	COLUMN NO. 1,2,3	8	24	DIM. A VARIES FROM 1'-2" TO 2'-4" IN INC. OF 0%				54'-4"			
HAB40	ABUTMENT	8	69	VARIES IN LENGTH FROM 15'-10" TO 4'-0" IN INC. OF 8" (17 BARS)				14'-8"	PB850	COLUMN NO. 1,2,3	8	24	DIM. A VARIES FROM 1'-2" TO 2'-4" IN INC. OF 0%				54'-4"	PB850	COLUMN NO. 1,2,3	8	24	DIM. A VARIES FROM 1'-2" TO 2'-4" IN INC. OF 0%				54'-4"			
L440	ABUTMENT	4	26	VARIES IN LENGTH FROM 15'-10" TO 4'-0" IN INC. OF 8" (17 BARS)				13'-2"	PB850	COLUMN NO. 1,2,3	8	24	DIM. A VARIES FROM 1'-2" TO 2'-4" IN INC. OF 0%				54'-4"	PB850	COLUMN NO. 1,2,3	8	24	DIM. A VARIES FROM 1'-2" TO 2'-4" IN INC. OF 0%				54'-4"			
L441	ABUTMENT	4	170	VARIES IN LENGTH FROM 15'-10" TO 4'-0" IN INC. OF 8" (17 BARS)				14'-10"	PB850	COLUMN NO. 1,2,3	8	24	DIM. A VARIES FROM 1'-2" TO 2'-4" IN INC. OF 0%				54'-4"	PB850	COLUMN NO. 1,2,3	8	24	DIM. A VARIES FROM 1'-2" TO 2'-4" IN INC. OF 0%				54'-4"			
L4440	ABUTMENT	4	26	VARIES IN LENGTH FROM 15'-10" TO 4'-0" IN INC. OF 8" (17 BARS)				5'-9"	SERIES				DIM. A VARIES FROM 2'-7" TO 3'-10" IN INC. OF 0%				19'-0"	SERIES				DIM. A VARIES FROM 2'-8" TO 3'-11" IN INC. OF 0%				20'-0"			
AG40	ABUTMENT	6	1	VARIES IN LENGTH FROM 15'-10" TO 4'-0" IN INC. OF 8" (17 BARS)				13'-7'-0"	YB450	COLUMN NO. 1	4	2	DIM. A VARIES FROM 2'-8" TO 3'-10" IN INC. OF 0%				19'-0"	YB451	COLUMN NO. 1	4	2	DIM. A VARIES FROM 2'-8" TO 3'-11" IN INC. OF 0%				20'-0"			
AB45	ABUTMENT	8	1	VARIES IN LENGTH FROM 15'-10" TO 4'-0" IN INC. OF 8" (17 BARS)				13'-11'-6"	YB452	COLUMN NO. 2	4	2	DIM. A VARIES FROM 2'-8" TO 3'-10" IN INC. OF 0%				19'-0"	YB453	COLUMN NO. 2	4	2	DIM. A VARIES FROM 2'-8" TO 3'-11" IN INC. OF 0%				20'-0"			
H441	FOOTING	4	58	VARIES IN LENGTH FROM 15'-10" TO 4'-0" IN INC. OF 8" (17 BARS)				4'-1"	YB453	COLUMN NO. 3	4	2	DIM. A VARIES FROM 2'-8" TO 3'-10" IN INC. OF 0%				19'-0"	YB454	COLUMN NO. 3	4	2	DIM. A VARIES FROM 2'-8" TO 3'-11" IN INC. OF 0%				20'-0"			



REINFORCING STEEL CODE

TYPE	SIZE	SERIES
A	5	06

NOTE: Dimensions shown on this sheet are outside of bar. Standard C R S I. Hook Details Shall Apply, Except As Noted.



STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
BILL OF STEEL
 INTERSTATE 440 E.S. ROADWAY
 Over CHARLOTTE AVENUE
 STATION: 363+82.10
 DAVIDSON COUNTY
 1983

CORRECT Clallon L. Forevall
 ENGINEER OF STRUCTURES
 APPROVED Freddie Evans
 DIRECTOR OF HIGHWAYS

DESIGNED BY HOUSTON WALKER DATE 12-82
 DRAWN BY G. L. Lloyd DATE 12-82
 SUPERVISED BY Eng. L. Harrison DATE 12-82
 CHECKED BY H. WALKER DATE 12-82

M-110-115A
 5-0-2