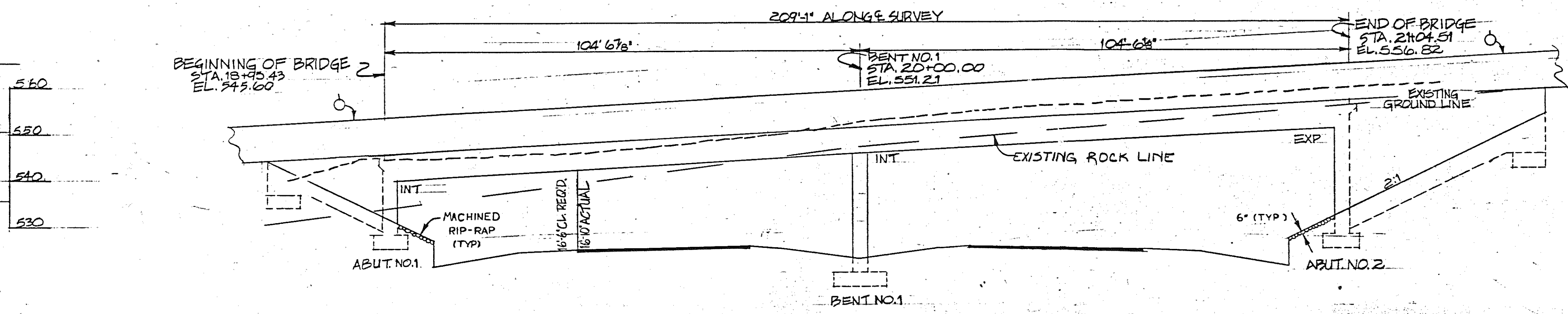
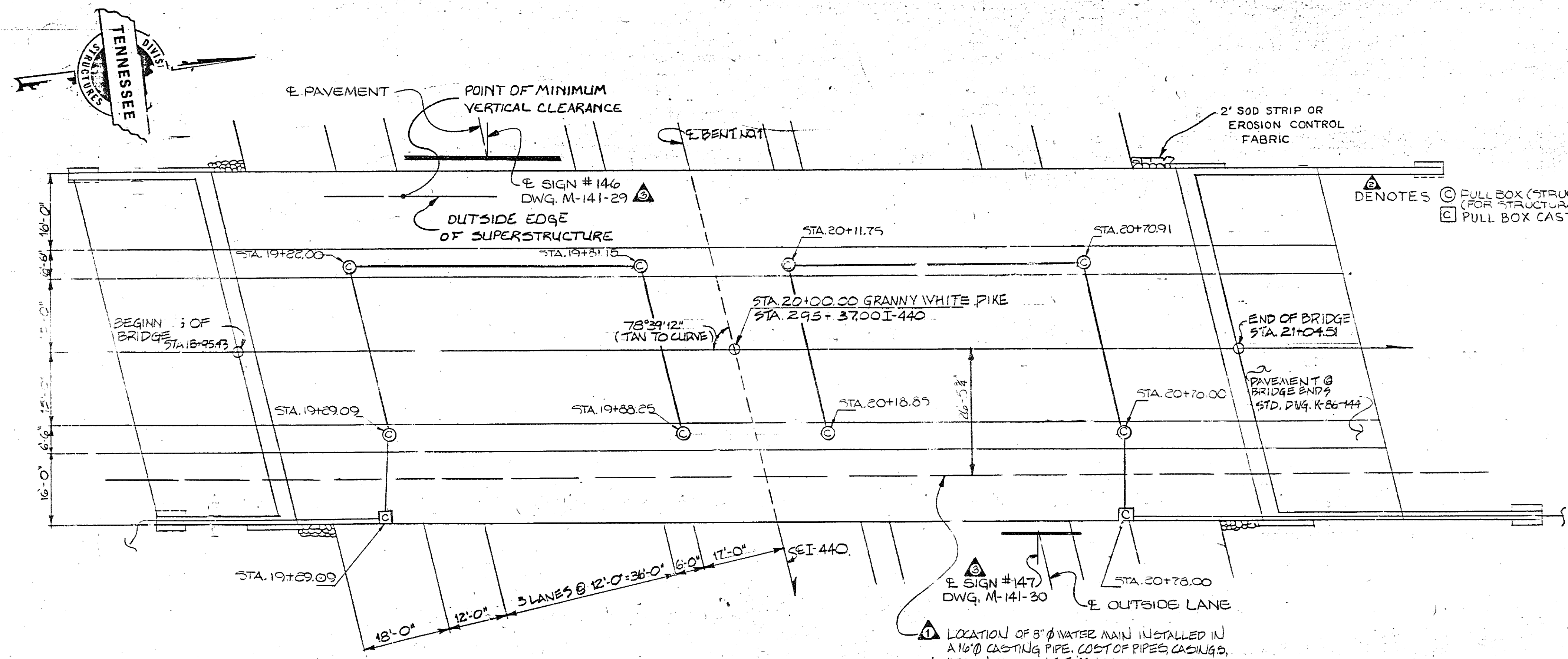


PROJECT NO.	YEAR	SHEET NO.	
I-440-4(44)209	1982		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	12-9-82	HMB	ADD 8" WATER MAIN
2		HMB	ADDED LIGHTING
3	1-12-84	ELO	ADDED SIGNS
4	6-21-84	KE	ADDED DRAWING



ELEVATION AT RIGHT ANGLES TO SURVEY OF GRANNY WHITE PIKE



PLAN

LIST OF DRAWINGS

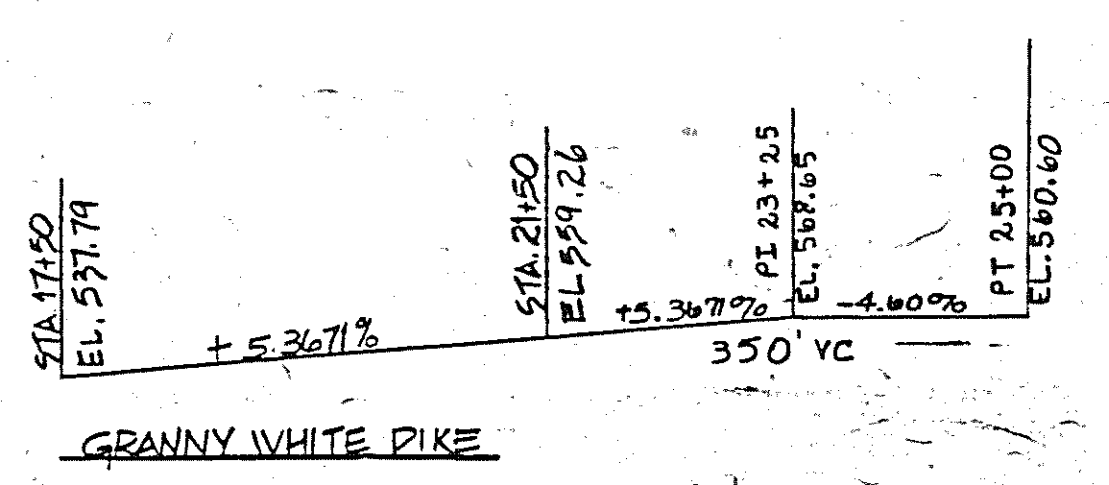
TITLE	DWG. NO.	LATEST REVISION DATE
LAYOUT	M-110-41	
GENERAL NOTES AND ESTIMATED QUANTITIES	M-110-42	
FOUNDATION DATA	M-110-43	
SUPERSTRUCTURE	M-110-44	
SUPERSTRUCTURE DETAILS	M-110-45	
SUPERSTRUCTURE DETAILS	M-110-46	
SUPERSTRUCTURE DETAILS	M-110-47	
ABUTMENT NO. 1	M-110-48	
ABUTMENT NO. 1 DETAILS	M-110-49	
ABUTMENT NO. 2	M-110-50	
ABUTMENT NO. 2 DETAILS	M-110-51	
BENT NO. 1	M-110-52	
BILL OF STEEL	M-110-53	
BILL OF STEEL	M-110-54	
RETAINING WALL @ ABUTMENT 2	M-110-54C	

LIST OF STANDARDS

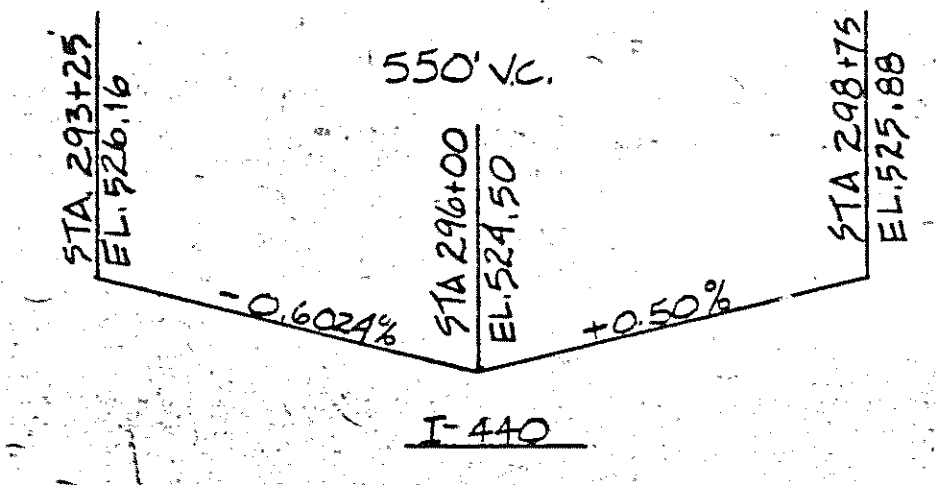
STD. PILE DETAILS	K-80-14	11-27-73
STD. REINF. BAR SUPPORT	K-85-150	8-27-76
MISC. ABUTMENT & DRAINAGE DETAILS	K-85-150	1-9-75
REINF. CONCRETE PAVEMENT @ BRIDGE ENDS	K-85-144	7-17-81
TN. STD. PRECAST PRESTRESSED BRIDGE LIT. PANELS DESIGN CRITERIA	M-103-149	7-7-82
TN. STD. PRECAST PRESTRESSED BRIDGE DECK PANELS GENERAL DETAILS	M-103-150	7-7-82

LIST OF SPECIAL PROVISIONS

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



HORIZONTAL CURVE DATA I-440
 P.I. STA. 295+38.70 L = 791.608'
 Δ = 05° 56' 23" E = 10.774'
 D.C. = 0° 45' S.E. = .0214
 T = 396.336'
 R = 7639.437'
 L = 791.963'



DESIGNED BY KEN ELROD DATE 5-82
 DRAWN BY KEN OWENS DATE 10-82
 SUPERVISED BY HARRISON BROOKS DATE 6-82
 CHECKED BY DATE

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 LAYOUT
 GRANNY WHITE PIKE
 OVER INTERSTATE 440
 STATION 295+37.00
 DAVIDSON COUNTY
 1982

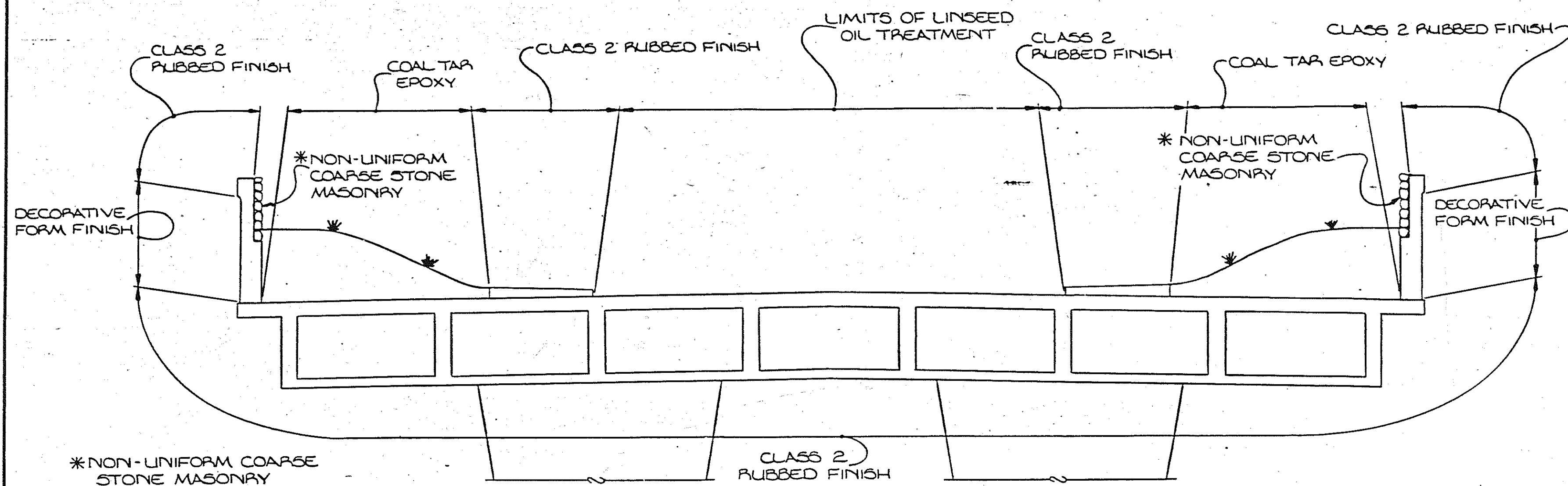
CORRECT *William L. Linnell*
 ENGINEER OF STRUCTURES
 APPROVED *James E. Wilson*
 DIRECTOR OF HIGHWAYS

M-110-41

CLASS "A" GRADING "D" 175 C.Y.

PROJECT NO.	YEAR	SHEET NO.
T-440-4(54) 201	1982	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	9-29-83	HMB	CONCRETE FINISH NOTE
2		HALL	ADDED LIGHTING
3	5-25-84	KE	STEEL REINFORCEMENT QTY'S
4	6-14-84	KE	ABUT./PIER COARSE STONE MASONRY
5	3-18-85	KE	EPOXY COATED REINF. STEEL
6	5-10-85	KE	SUPERSTRUCTURE STEEL & CONC.



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 BC308 CONCRETE HAAR, LITHOTEX FORMLINER FRACTURED FINISHED GROOVED T-150, SYMONS 3/4" NARROW FRACTURED FIN PL 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. ALL EXPOSED SURFACES OF ABUTMENTS AND BENTS SHALL RECEIVE A DECORATIVE FORM FINISH.

GENERAL NOTES:

- SPECIFICATIONS: STANDARD ROAD AND BRIDGE SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION. (MARCH, 1981 EDITION).
- LOADING: H-20-44.
- DESIGN SPECIFICATIONS: AASHTO 1977 EDITION WITH ADDENDA.
- CONCRETE: TO BE CLASS "A" (CAST IN PLACE), f'c 3000 PS.I. EXCEPT CONCRETE FOR BRIDGE DECK. SEE SPECIAL NOTE FOR CONCRETE BRIDGE DECK.
- SPECIAL NOTE FOR CONCRETE 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 PS.I.
MAXIMUM WATER/CEMENT 5.0 GAL./SACK OF CEMENT
AIR CONTENT 6% ± 2%
PAYMENT WILL BE UNDER ITEM 604-01.12.
- NOTE: BEARING PADS SHALL BE IN ACCORDANCE WITH THE DETAILS AND DIMENSIONS SHOWN ON DWG. NO. M-110-50. THE CONTRACTOR MAY ALSO SUBMIT ALTERNATE DETAILS FOR APPROVAL. SEE NOTE 5.
- 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 LASH HOOK DETAILS APPLY UNLESS OTHERWISE NOTED ON BILL OF MATERIALS. BENDING DIMENSIONS SHOWN ARE BASED ON GRADE 60. SPACING DIMENSIONS ARE CENTER TO CENTER UNLESS OTHERWISE NOTED ON DETAIL DRAWINGS. THE SUFFIX 'E' FOR BARS SO MARKED DENOTES EPOXY COATED REINFORCEMENT. SEE SPECIAL PROVISION 907A.
- SPECIAL NOTE - FOOTING FOR BENTS AND ABUTMENTS: AFTER EXCAVATION TO ROCK FOR FOOTINGS 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 AND ABUTMENT WALL SHALL BE ORDERED UNTIL FINAL FOOTING ELEVATIONS HAVE BEEN DETERMINED.
- CONCRETE SEAL: TO BE COAL TAR EPOXY, AASHTO M: 200, TYPE C. CONCRETE SHALL BE CLEAN AND DRY BEFORE APPLYING THE CONCRETE SEAL AND THE THICKNESS OF THE SEAL SHALL NOT BE LESS THAN 50 MILS.
- SHOP DRAWINGS: SEE SPECIAL PROVISION NO. 105A.
- NOTE: THE CONTRACTOR SHALL SUPPORT THE ABUTMENTS UNTIL THE SUPERSTRUCTURE IS IN PLACE. FALSEWORK HAS BEEN REMOVED AND BACKFILLING HAS BEEN COMPLETED.
- BRIDGE RAIL SYSTEM: BUILD PARAPET WALLS ACCORDING TO DETAILS SHOWN ON DWG. M-110-44.

ESTIMATED QUANTITIES

ITEM NO.	204-02.01	204-04.01	204-05	604-02.03	604-03.01	604-03.02	604-03.03	710-10.	710-11	920-01.11	908-21.01	604-01.12	709-05-04
ITEM	DRY EXCAVATION (BRIDGES) C.Y.	ROCK EXCAVATION (BRIDGES) C.Y.	ROCK DRILLING (BRIDGES) L.F.	EPOXY COATED REINFORCING STEEL LBS.	CLASS "A" CONCRETE (BRIDGES) C.Y.	STEEL BAR REINFORCEMENT (BRIDGES) LBS.	LINSEED OIL TREATMENT SY.	6" PERFORATED C.M. PIPE (18 GA.) W/POROUS BACKFILL L.F.	6" C.M. PIPE UNDERDRAINS (18 GA.) L.F.	ROADWAY EXPANSION DEVICE L.F.	BEARINGS EA.	CLASS "A" CONCRETE (BRIDGE DECK) C.Y.	MACHINED RIP-RAP (3 IN. TO 6 IN.) C.Y.
SUPERSTRUCTURE				2,075.29	807.4	172,640		1,807				481.0	
ABUTMENT NO. 1	441	31	12		227.0	34,435		80	38				33
BENT NO. 1		354	12		200.0	23,927							
ABUTMENT NO. 2	168	1320	12	5,858	410.0	103,838		80	46	83.0	8		33
PVMT @ BRIDGE ENDS				11,406	150.1	32,371							
TOTAL	609	1,705	36	224,793	1,792.5	367,211	860	1967	84	83.0	8	481.0	66

ESTIMATED QUANTITIES - CONT'D

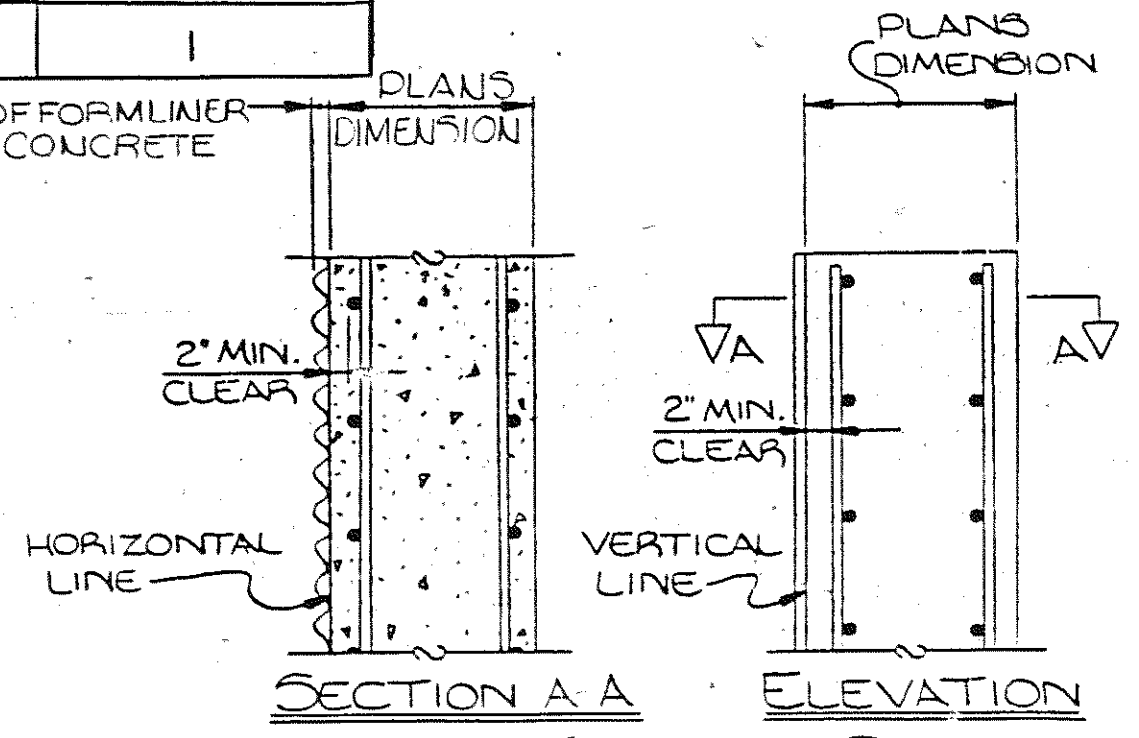
ITEM NO.	606-22.03	606-32.03	606-43.03	714-01.01
ITEM	STEEL PILES (10 INCH) (DRIVING) L.F.	STEEL PILES (10 INCH) (FURNISH DOMESTIC) L.F.	STEEL PILES (10 INCH) (FURNISH FOREIGN) L.F.	STRUCTURE LIGHTING (BRIDGE NO.1) LBS.
SUPERSTRUCTURE				
ABUTMENT NO. 1	80	80	80	
BENT NO. 1				
ABUTMENT NO. 2	70	70	70	
PVMT @ BRIDGE ENDS				
TOTAL	150	150	150	1

NOTE: MACHINED RIP-RAP FOR EROSION PROTECTION SHALL BE 3" TO 6" IN SIZE AND MEET THE QUALITY REQUIREMENT OF SUBSECTION 918-10 AND PAID FOR UNDER ITEM 709-05-04. SEE SPECIAL PROVISION 105A-1.

- EXCAVATION BASED ON EXISTING GROUND
- NOTE: COST OF COAL TAR EPOXY IS TO BE INCLUDED IN ITEMS BID ON.
- NOTE: COST OF POLYETHYLENE SHEETING AND ALL MISCELLANEOUS ITEMS NECESSARY FOR INSTALLATION TO BE INCLUDED IN COST OF PERFORATED PIPE.
- THE COST OF THE MATERIALS AND INSTALLATION OF THE COVER PLATE FOR THE EXPANSION DEVICE UNDER FILL IS TO BE INCLUDED IN THE PRICE BID FOR ITEM 920-01.11. SEE DWG. NO. M-110-47 FOR EXAMPLE DETAIL.
- NOTE: ACCEPTABLE EXPANSION DEVICES INCLUDE:
A) ON-FLEX 25 BY STRUCTURAL ACCESSORIES, INC.
B) AS200 BY ACME HIGHWAY PRODUCT, INC.
C) WABO-MAURER 5200 BY WATSON BOWMAN ASSOCIATES, INC. OR EQUAL. TOTAL REQUIRED MOVEMENT = 1 1/2".
- NOTE: AT THE CONTRACTOR'S OPTION, ALTERNATE BEARING DEVICES MAY BE SUBMITTED FOR APPROVAL TO THE ENGINEER OF STRUCTURES. THE BEARINGS SHALL BE CAPABLE OF PROVIDING THE FOLLOWING MINIMUM REQUIREMENTS UNDER SERVICE LOADS:

BEARING	TOTAL MOVEMENT	DEAD LOAD REACTION	LIVE LOAD REACTION
ABUT. #2	1 1/2"	123 KIPS	58 KIPS
- NOTE: CONCRETE AND REINFORCING STEEL FOR PARAPET WALLS ARE INCLUDED IN ITEMS 604-03.01 AND 604-03.02.
- LUMP SUM: FOR STRUCTURE LIGHTING, ITEM NO. 714-01.01 INCLUDES 120 FT. OF 2" Ø CONDUIT, 330 FT. OF 1" Ø GALVANIZED STEEL CONDUIT, 10 JUNCTION OR PULL BOXES, AND ALL NECESSARY MATERIALS FOR INSTALLATION OF STRUCTURE LIGHTING.

SPECIAL NOTE FOR FILL PLACEMENT ON BRIDGE DECK: THE FILL MATERIAL SHALL BE PLACED ON THE BRIDGE DECK IN THE LOCATION AND TO THE DIMENSIONS SHOWN ON ROADWAY SHEET NO. . THE CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS DURING THE PLACEMENT OF THE FILL MATERIAL TO PROTECT THE STRUCTURE FROM DAMAGE DUE TO EXCESSIVE LOADS OR OTHER DAMAGE DUE TO CONSTRUCTION EQUIPMENT. THE MAXIMUM ALLOWABLE WEIGHT OF THE LOADED TRUCKS OR SPREADING EQUIPMENT SHALL BE 30 TONS. BEFORE SPREADING THE MAXIMUM ALLOWABLE DEPTH OF FILL MATERIAL SHALL BE SIX (6) FEET AND NO DUMPING WILL BE ALLOWED ON THE CANTILEVER PORTIONS OF THE BRIDGE DECK. EXTREME CARE SHALL BE TAKEN WHEN PLACING FILL MATERIAL AGAINST THE BRIDGERAILS AND CURBS. ALL CONSTRUCTION EQUIPMENT ON THE BRIDGE DECK SHALL HAVE RUBBER TIRES. THE FILL MATERIAL SHALL CONSIST OF A SIX INCH GRAVEL BASE AND A MAXIMUM OF 2'-6" OF EARTH FILL WITH SODDING. A FILTER CLOTH SHALL SEPARATE THE GRAVEL BASE FROM THE EARTH FILL. FOR PAYMENT AND MATERIAL SPECIFICATIONS SEE ROADWAY SHEET NO. .



- TYPICAL FORMING DETAILS -

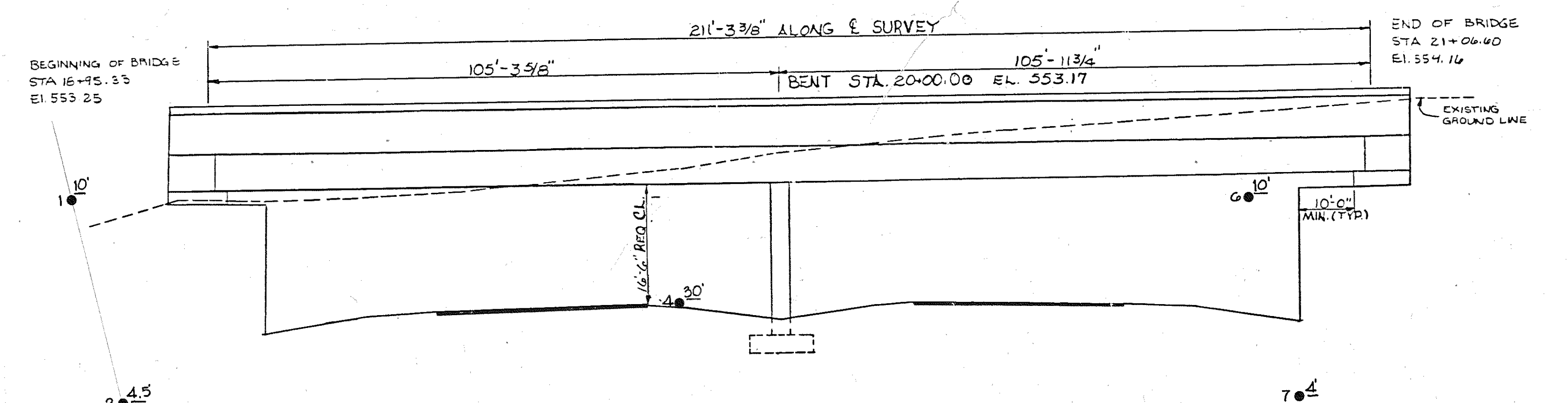
NOTE: THESE DETAILS ARE TYPICAL FOR ALL STRUCTURAL ELEMENTS REQUIRING DECORATIVE FORM LINERS EXCEPT CONCRETE PARAPETS. PARAPET DIMENSIONS MAY BE REDUCED BY THE THICKNESS OF THE FORM LINER IN ORDER TO UTILIZE STANDARD PARAPET FORMS REINFORCING BAR BENDING DIMENSIONS SHALL BE REDUCED ACCORDINGLY.

DESIGNED BY: KEN ELAOD DATE: 5-82
 DRAWN BY: M. DYE DATE: 6-82
 SUPERVISED BY: HARRISON & BROOKS DATE: 6-82
 CHECKED BY: KEN ELAOD DATE: 8-82

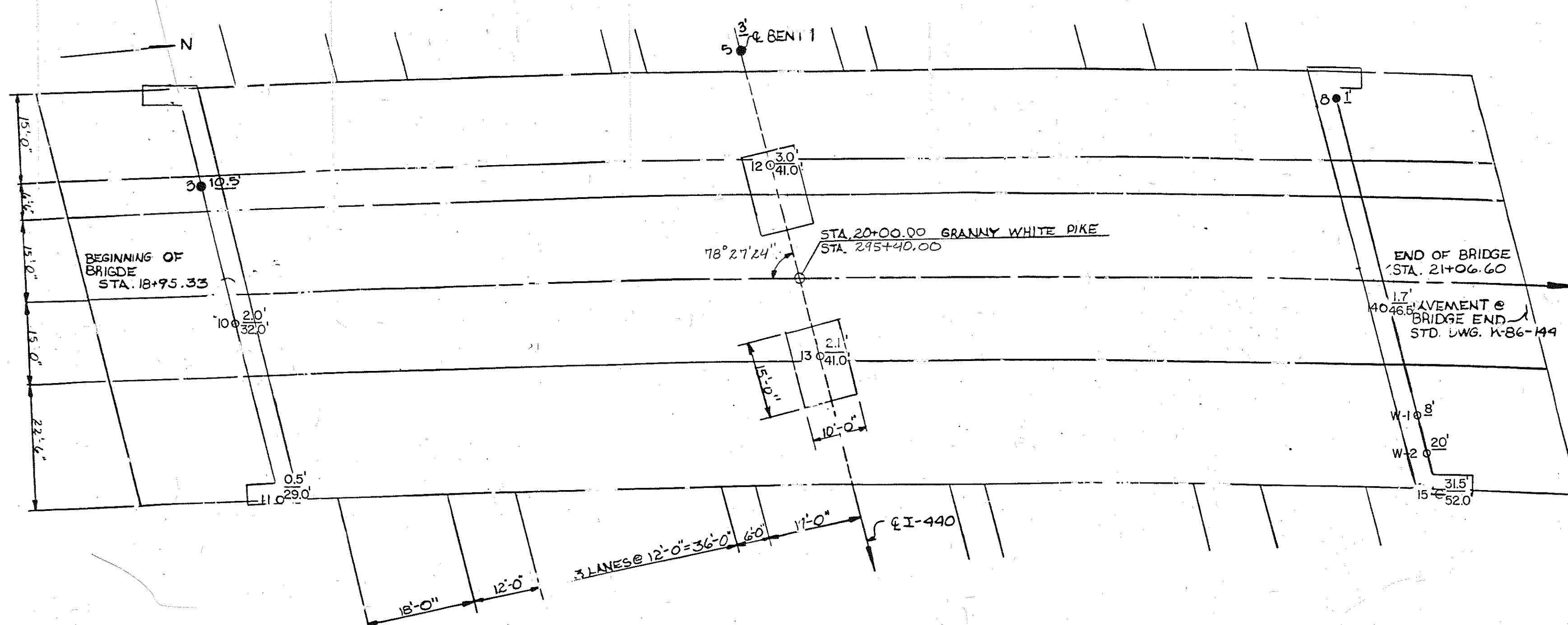
STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 GENERAL NOTES
 AND ESTIMATED QUANTITIES
 GRANNY WHITE PIKE
 OVER INTERSTATE 440
 STATION 295+37.00
 DAVIDSON COUNTY
 CORRECT: *Chellon L. Lovell* 1982
 APPROVED: *Kenneth S. Lewis*
 ENGINEER OF STRUCTURES
 DIRECTOR OF HIGHWAYS

PROJECT NO.	YEAR	SHEET NO.
	1982	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION

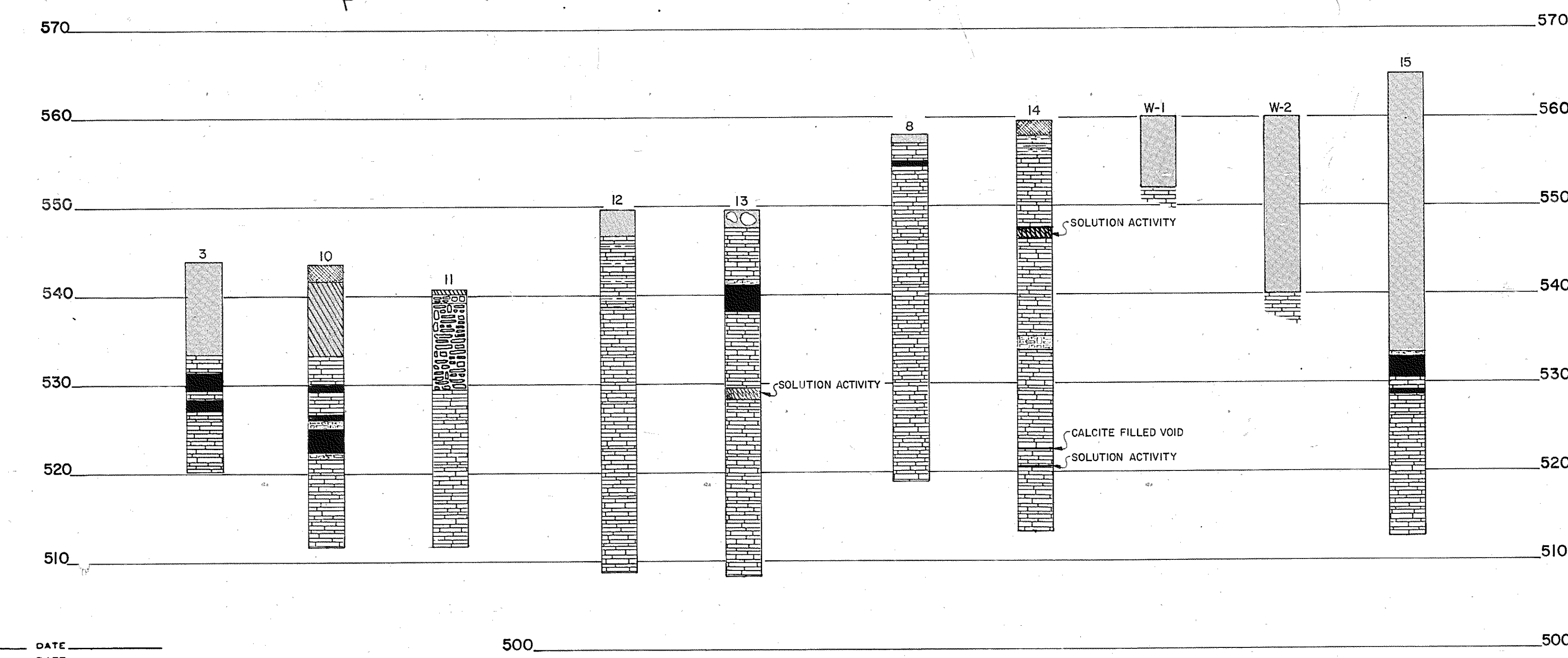
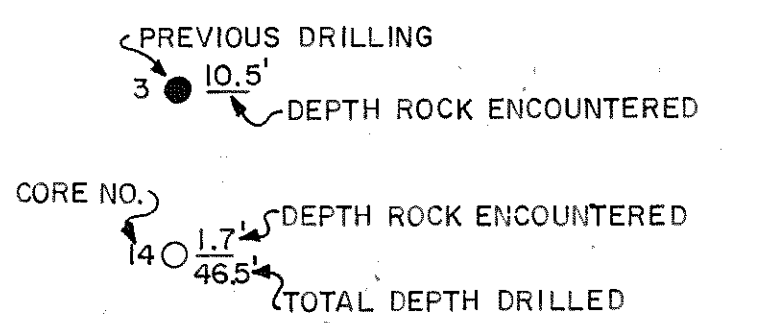


REQUIRED
 1. SUFFICIENT GROUND ROCK AND CORING INFORMATION FOR BRIDGE FOUNDATION.
 2. APPROXIMATE EXISTING GROUND LINE AND ROCK LINE INFORMATION.
 NOTE: THIS DRAWING IS FOR FOUNDATION INFORMATION ONLY AND IS NOT TO BE USED AS A LAYOUT.



Ground and Rock Elevation

W-1	G 550.0	R 552.0	11	G 540.8	R 540.3
W-2	G 544.0	R 544.0	12	G 549.7±	R 546.7±
3	G 544.0±	R 533.5±	13	G 549.8±	R 547.7±
8	G 558.0±	R 557.0±	14	G 559.5	R 557.8
10	G 543.7±	R 533.2±	15	G 564.9	R 533.4



- SUB-BASE AND ASPHALT
- RAILWAY FILL MATERIAL
- CLAY AND RAILWAY FILL MATERIAL
- CLAY AND BOULDERS
- CLAY
- CAVITY
- WEATHERED LIMESTONE
- LIMESTONE WITH INTERBEDDED WEATHERED SHALE
- LIMESTONE

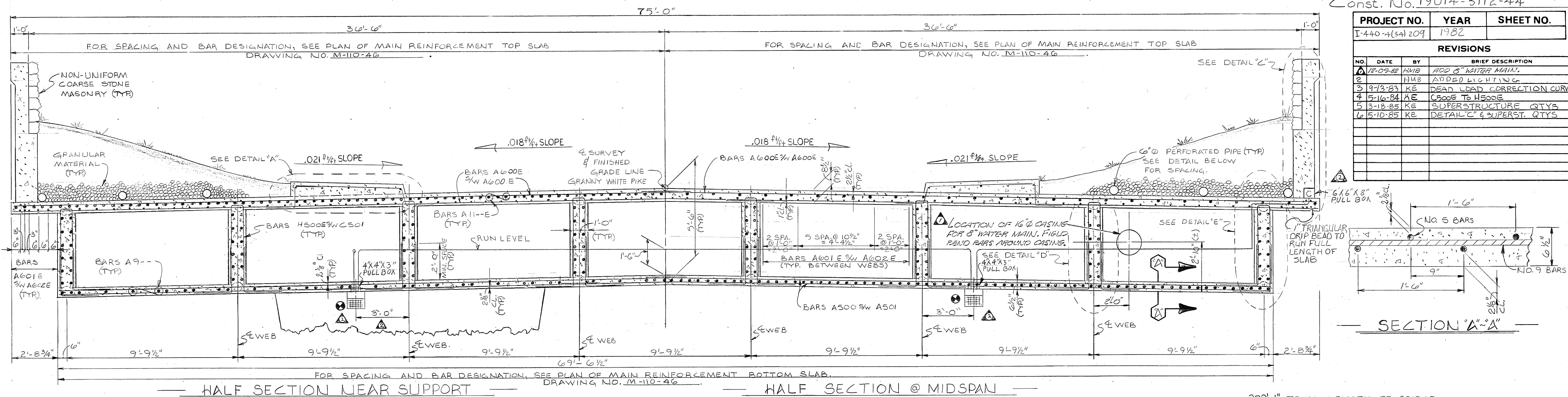
STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 FOUNDATION DATA
 GRANNY WHITE PIKE
 OVER INTERSTATE 440
 STATION 295+37.00
 DAVIDSON COUNTY

DESIGNED BY KEN ELROD
 DRAWN BY J. HILL, JR.
 SUPERVISED BY
 CHECKED BY

CORRECT *Colleton L. Lovell* 1982
 APPROVED *Lewis C. ...*
 ENGINEER OF STRUCTURES
 DIRECTOR OF HIGHWAYS

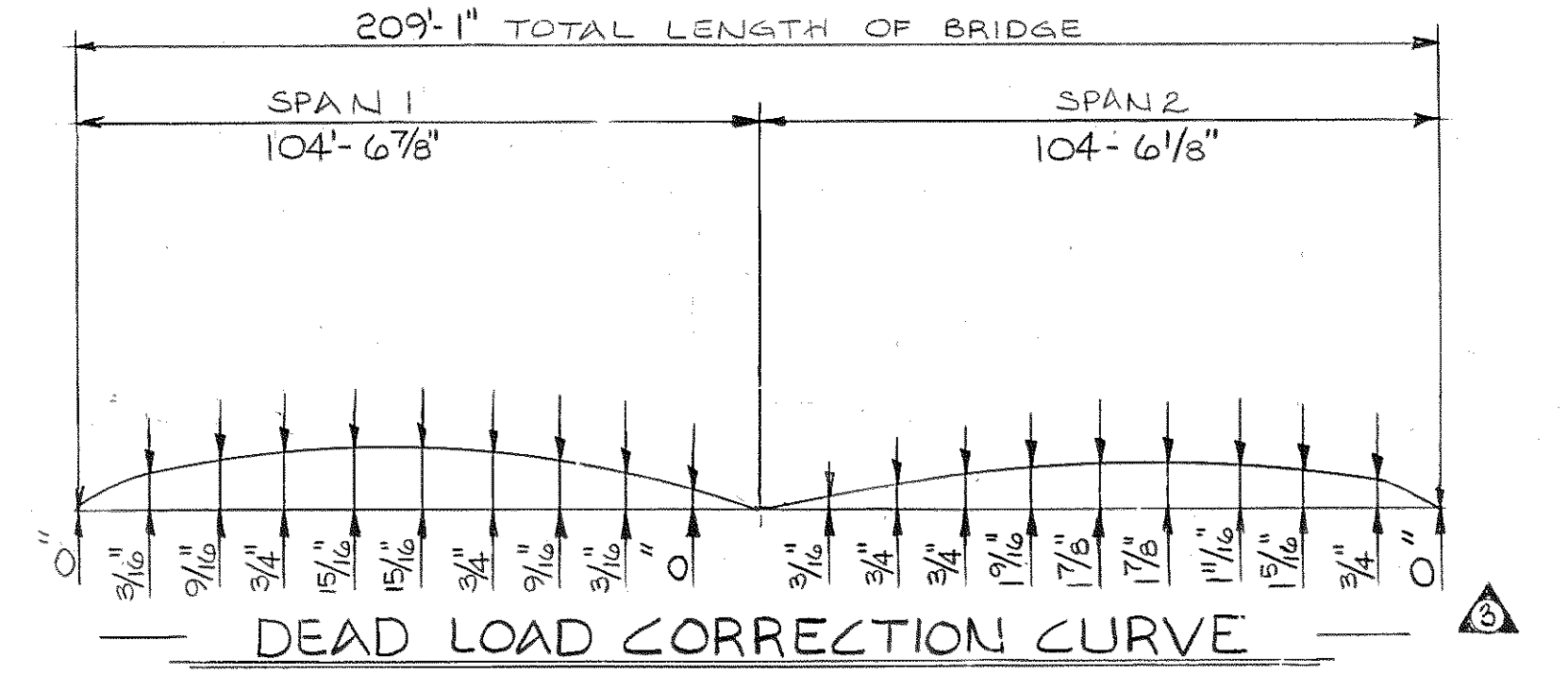
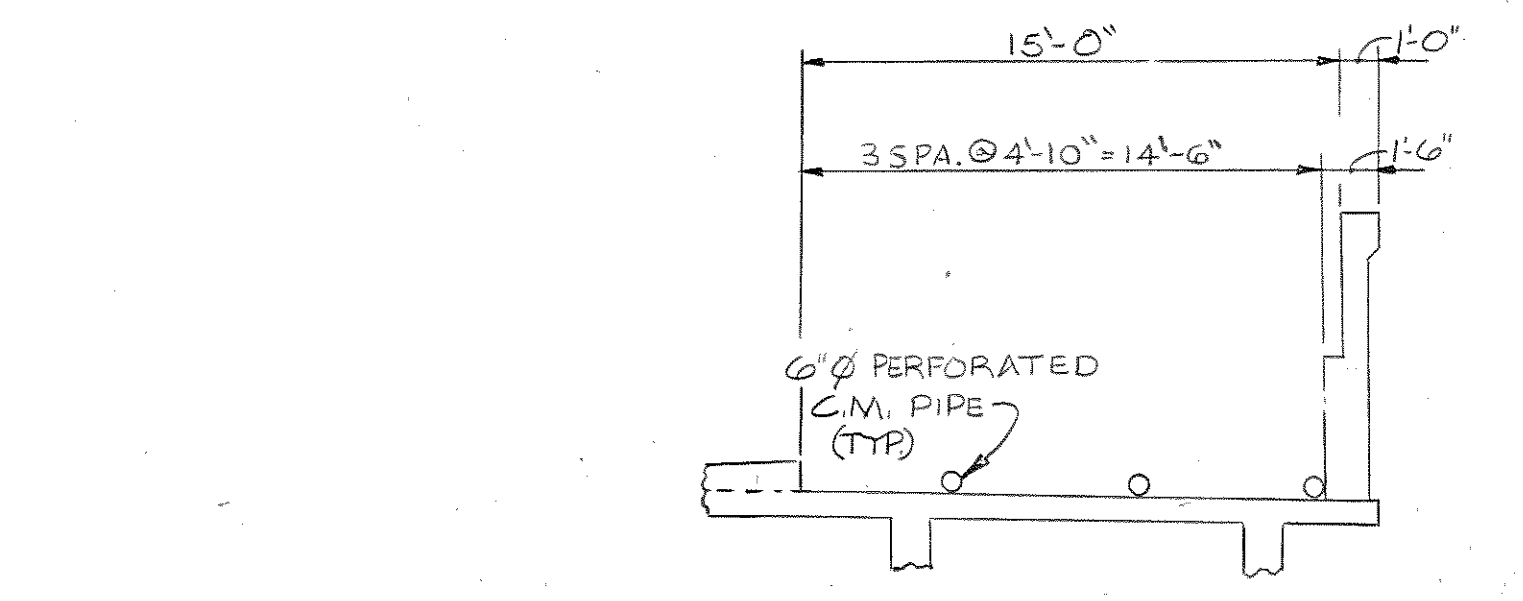
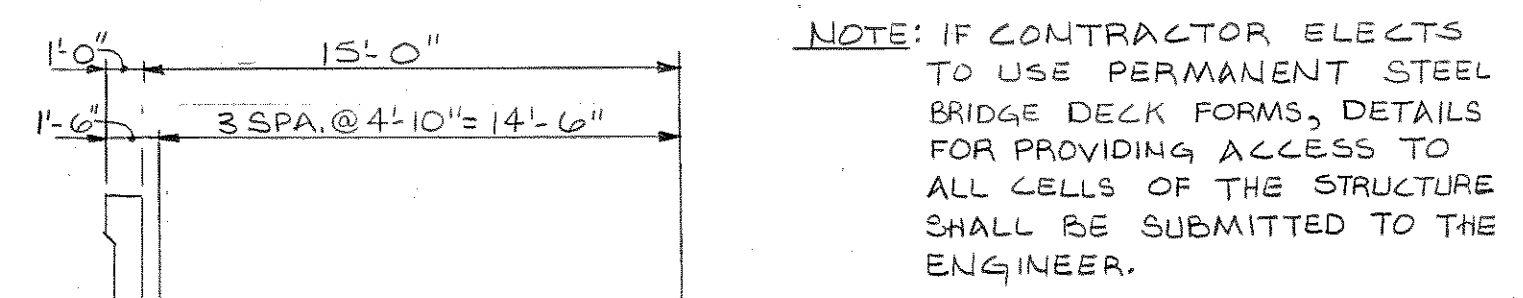
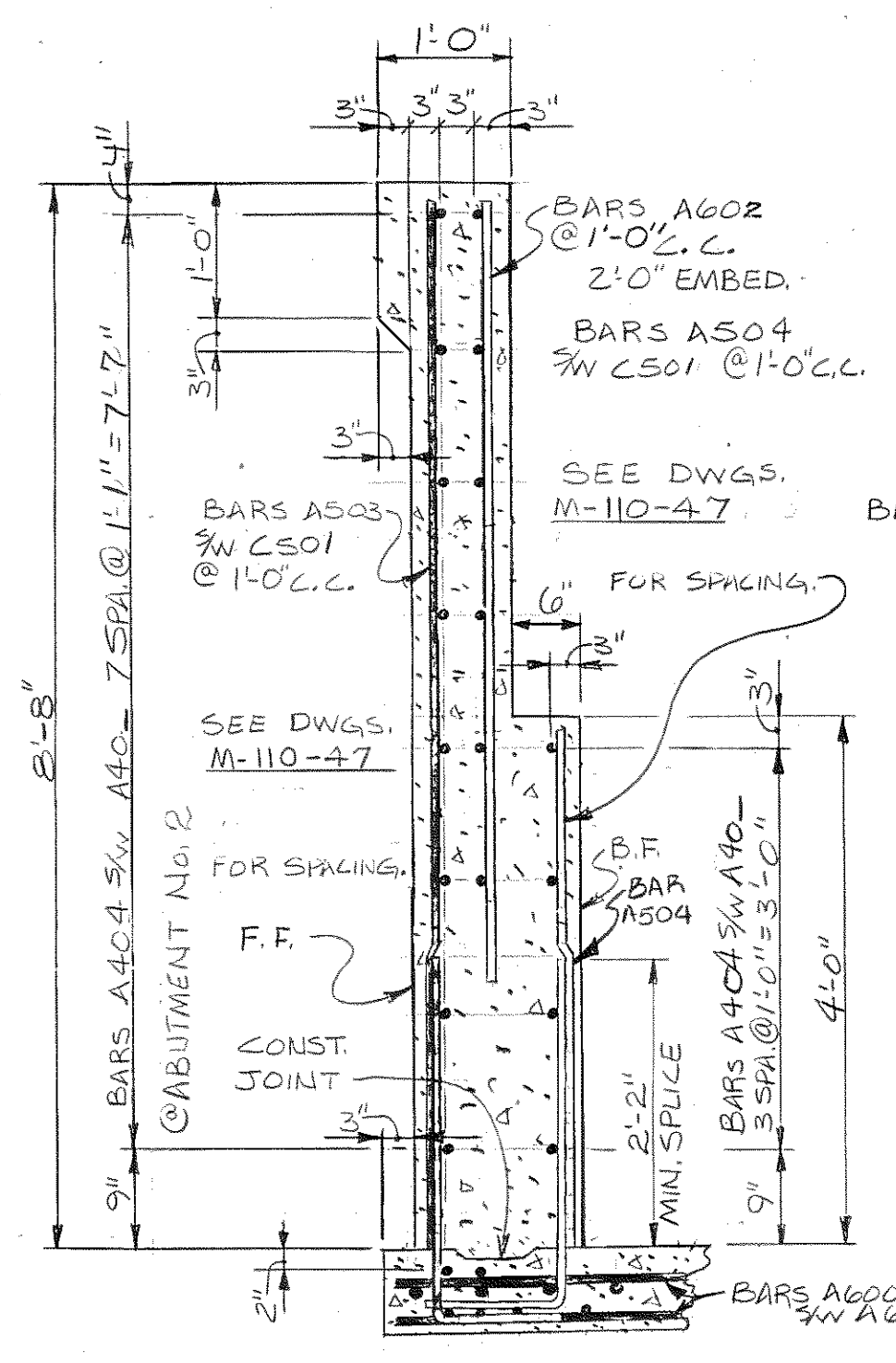
PROJECT NO.	YEAR	SHEET NO.
I-440-4(SA) 209	1982	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	12-09-82	HMB	ADD 8" WATER MAIN.
2		HMB	ADDED LIGHTING.
3	9-13-83	KE	DEAD LOAD CORRECTION CURVE
4	5-16-84	AE	C500E TO H500E
5	3-18-85	KE	SUPERSTRUCTURE QTY'S
6	5-10-85	KE	DETAIL 'C' & SUPERST. QTY'S

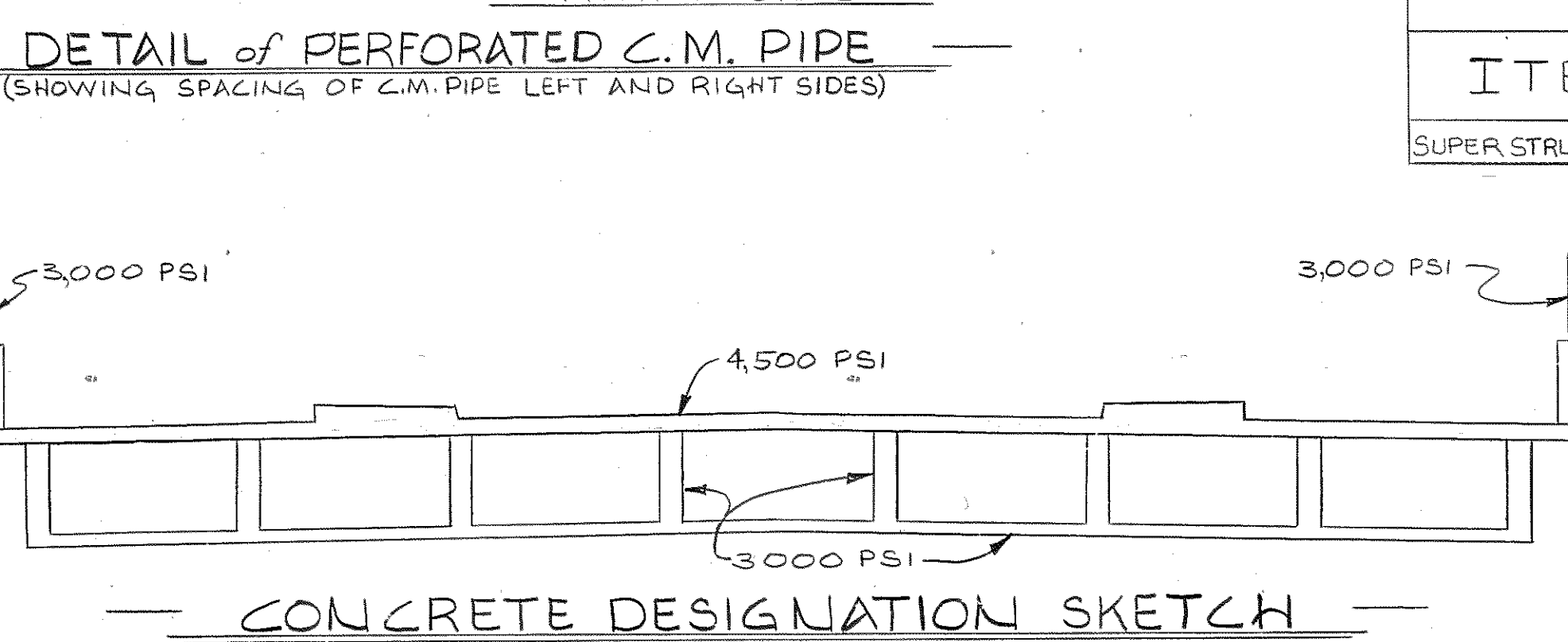
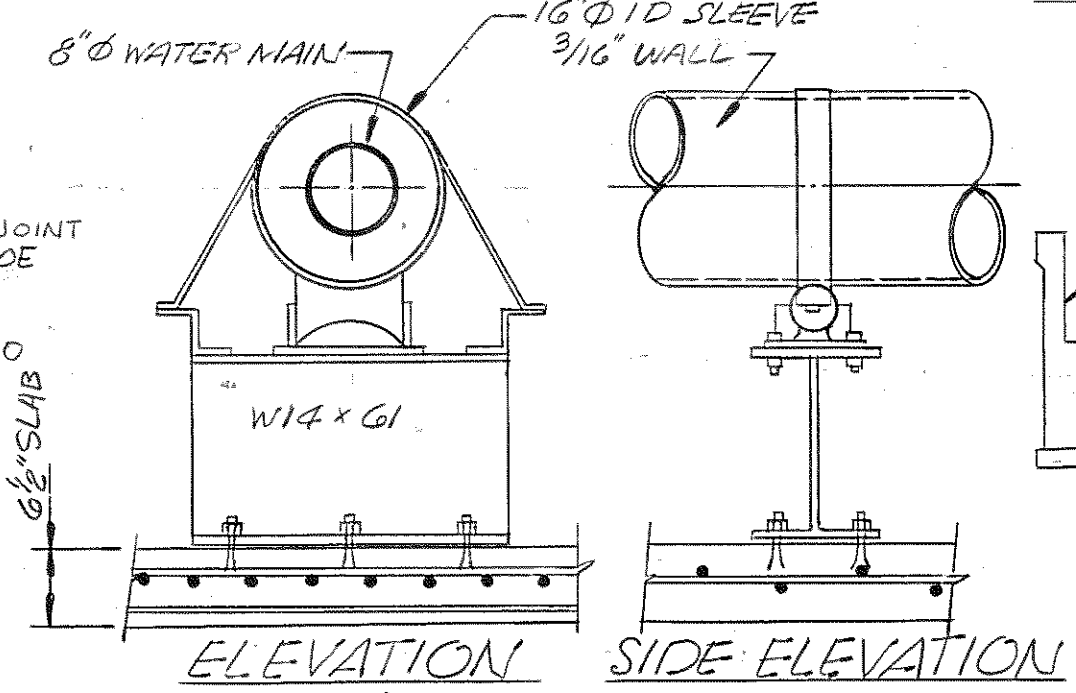


NOTE: LUMINAIRES ARE NOT INCLUDED IN THIS PROJECT.

NOTE: F.F. DENOTES FRONT FACE B.F. DENOTES BACK FACE



ESTIMATED QUANTITIES				
ITEM	CLASS "X" CONCRETE C.T. (BRIDGE DECKS)	EPOXY COATED REINFORCING STEEL	STEEL BAR REINFORCEMENT (BRIDGES) LBS.	CLASS "X" CONCRETE (BRIDGES) C.T.
SUPER STRUCTURE	481.0	207.529	172,640	807.41



DESIGNED BY KEN ELROD DATE
 DRAWN BY Grant Leroy Lloyd DATE JUN 82
 SUPERVISED BY Roger L. Harbison DATE JUN 82
 CHECKED BY DATE

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 SUPERSTRUCTURE
 GRANNY WHITE PIKE Over INTERSTATE-440
 STATION: 295+37.00
 DAVIDSON COUNTY
 1982

CORRECT *Calvin L. Howell*
 ENGINEER OF STRUCTURES

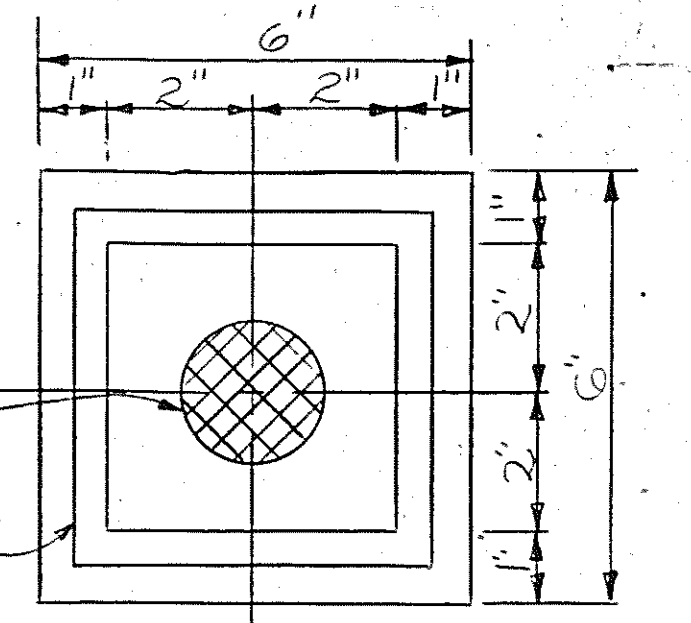
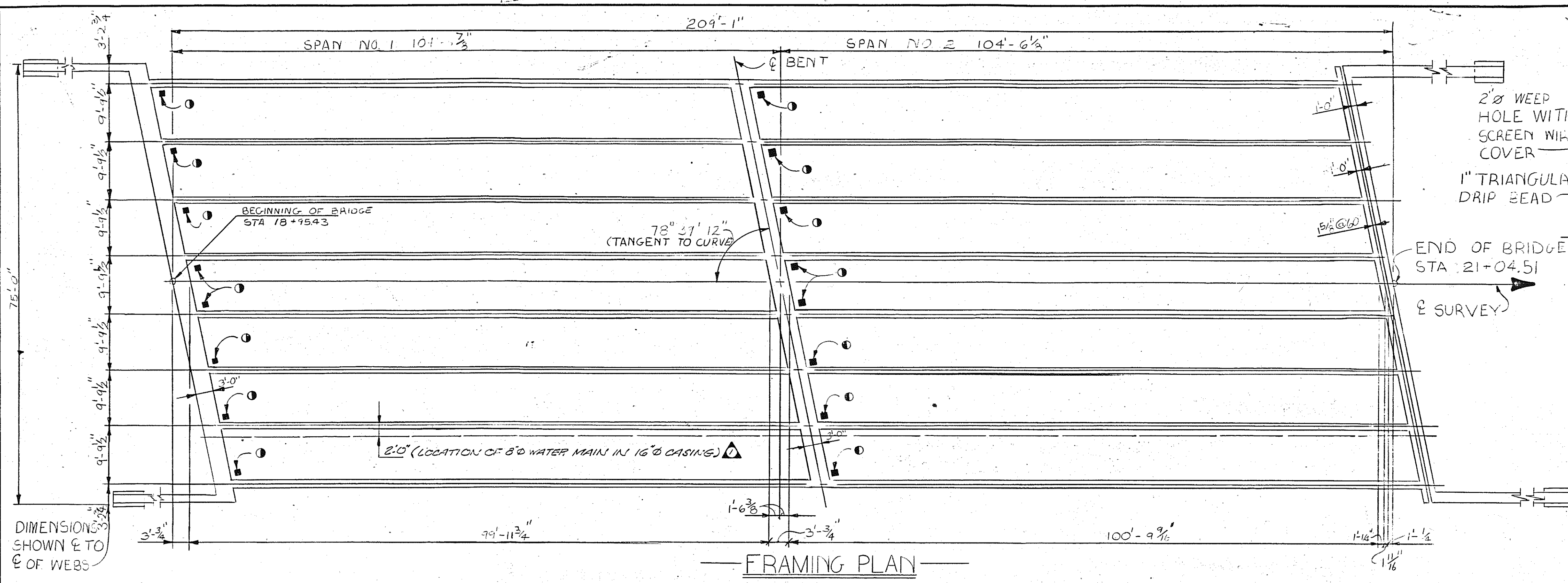
APPROVED *Louis Evans*
 DIRECTOR OF HIGHWAYS

M-110-44

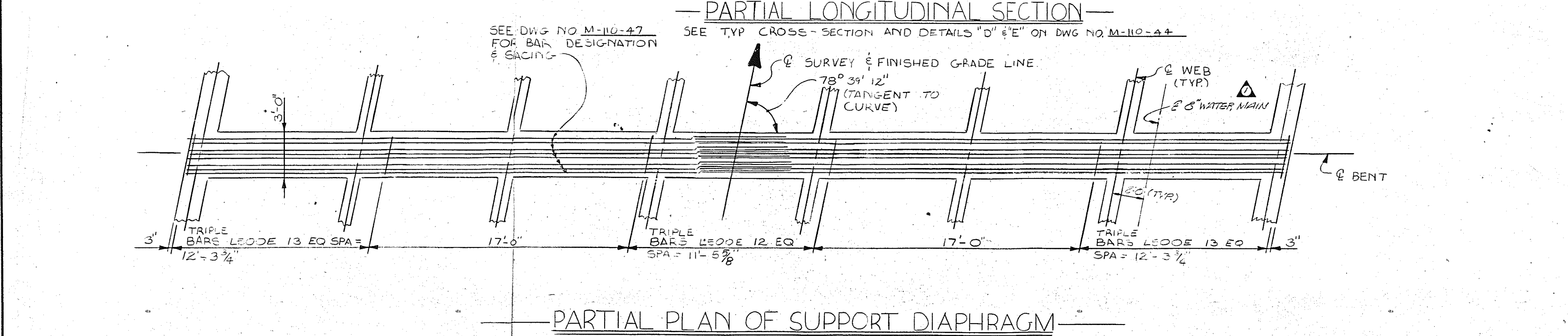
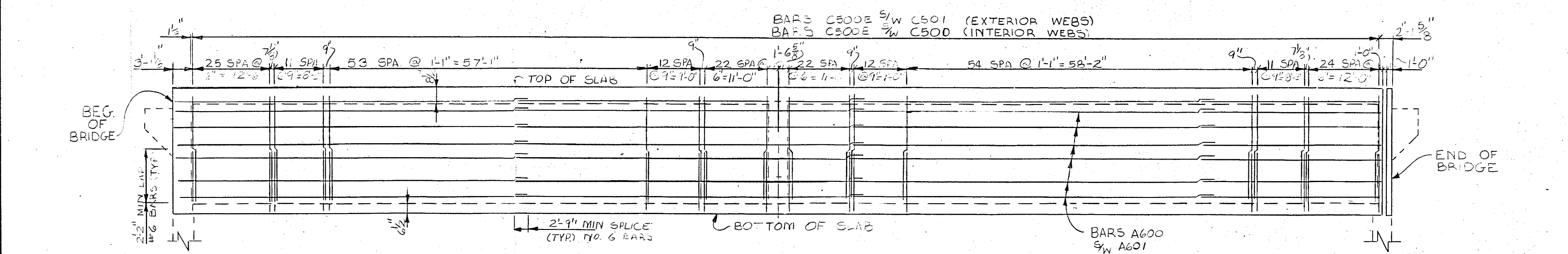
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PROJECT NO.	YEAR	SHEET NO.
I-440-4(54)209	1982	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	12-9-82	HMB	ADD 8" WATER MAIN



WEEP HOLE DETAIL
 2" Ø WEEP HOLE WITH SCREEN WIRE COVER REQUIRED AT LOW POINT IN EACH CELL EXCEPT AS NOTED.



DESIGNED BY KENNY ELROD DATE JUNE 1981
 DRAWN BY KEVIN A. MARTINIAN DATE JUNE 1982
 SUPERVISED BY MAH. R. RLL DATE JUNE 1982
 CHECKED BY DATE

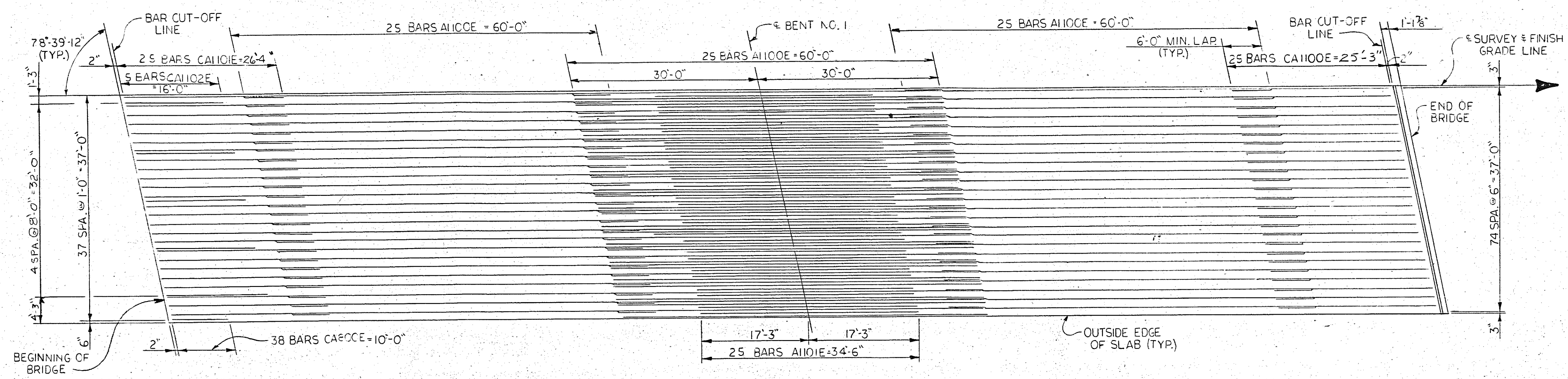
STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 SUPERSTRUCTURE DETAILS
 GRANNY WHITE PIKE
 OVER INTERSTATE 440
 STATION 295+37.00
 DAVIDSON COUNTY
 1982

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

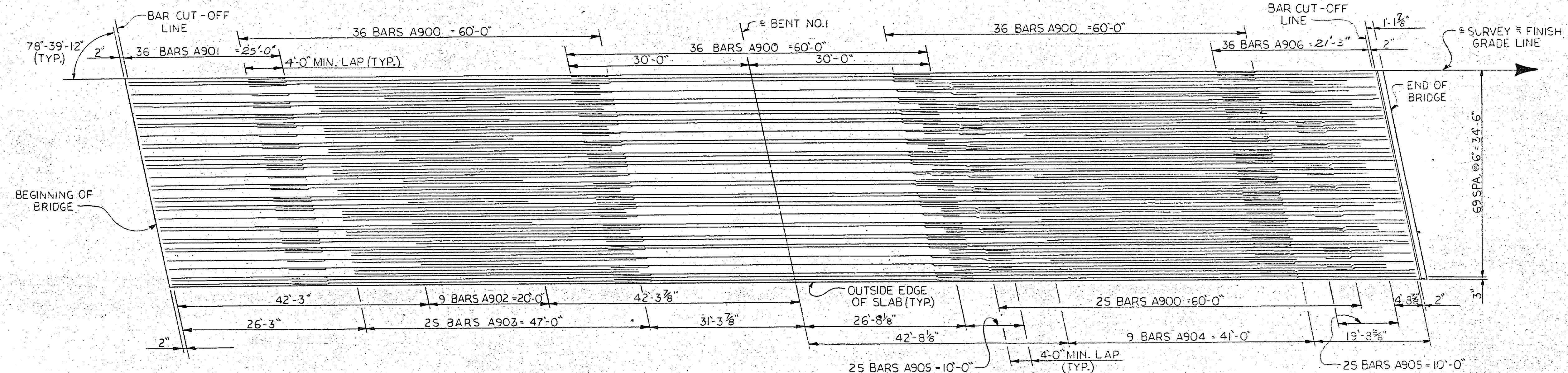
M-110-45

PROJECT NO.	YEAR	SHEET NO.
I-440-45A-209	1982	

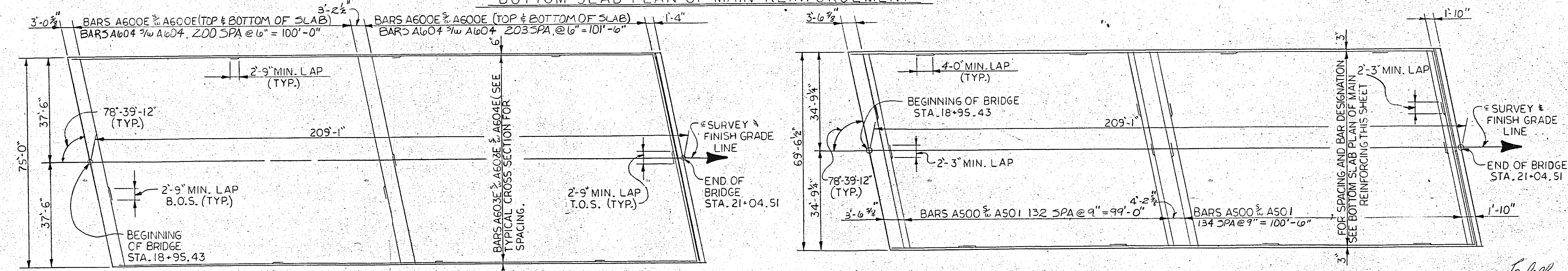
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION



TOP SLAB PLAN OF MAIN REINFORCEMENT



BOTTOM SLAB PLAN OF MAIN REINFORCEMENT



BOTTOM SLAB PLAN (SHOWING TRANSVERSE STEEL)

DESIGNED BY: KEN ELROD
 DRAWN BY: F.F. FROST
 SUPERVISED BY: HARRISON
 CHECKED BY: _____

DATE: _____
 DATE: 6/82
 DATE: 6/82
 DATE: _____

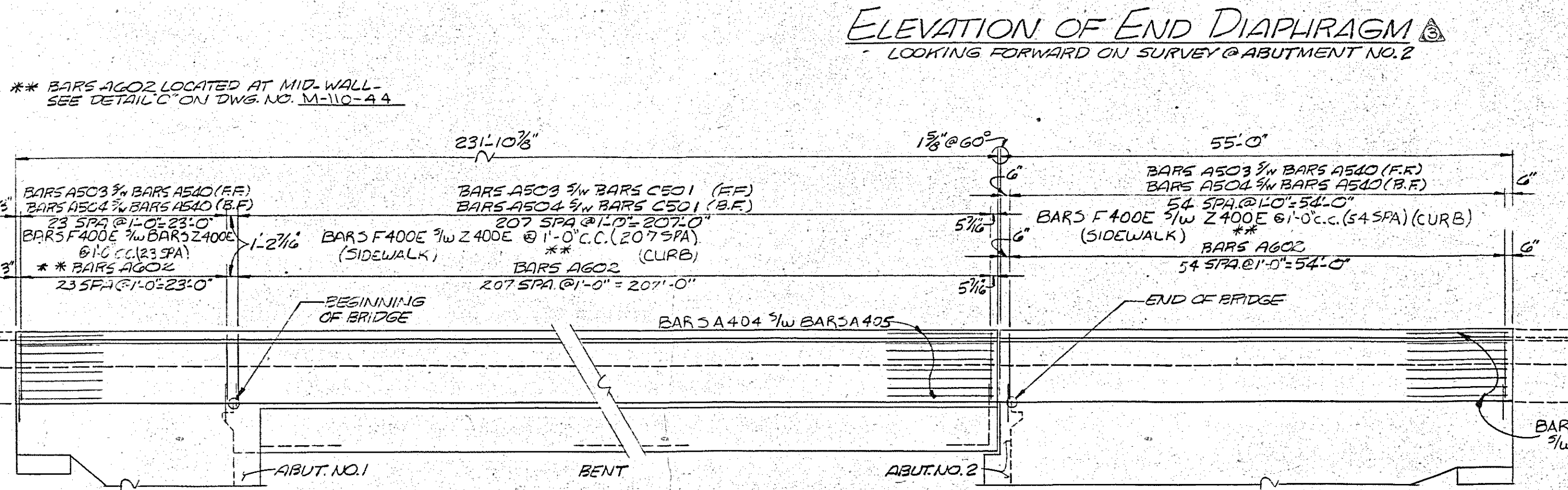
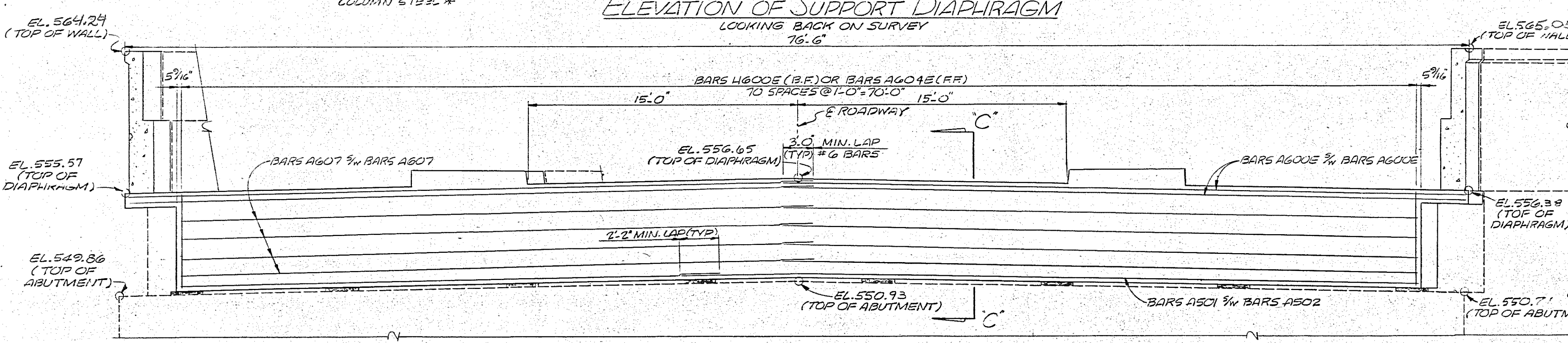
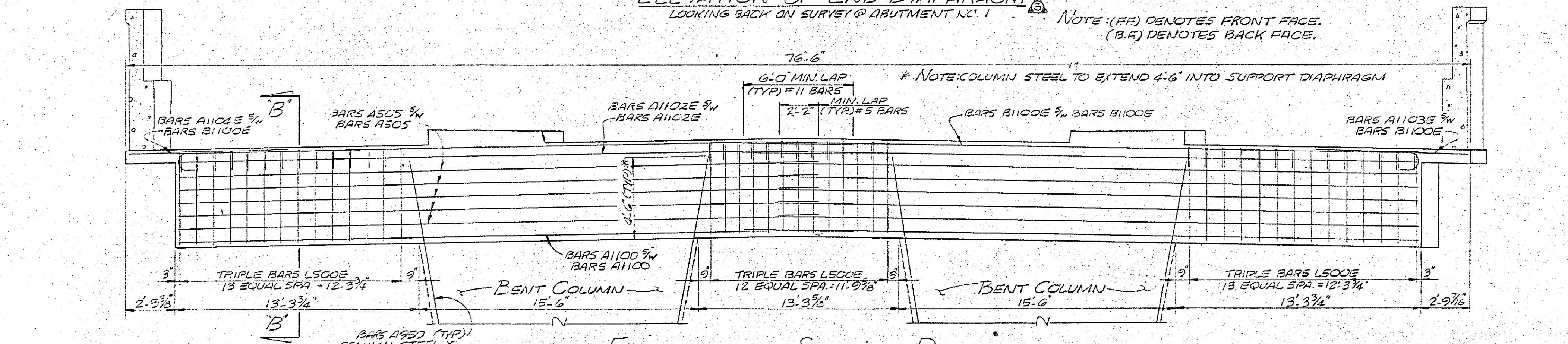
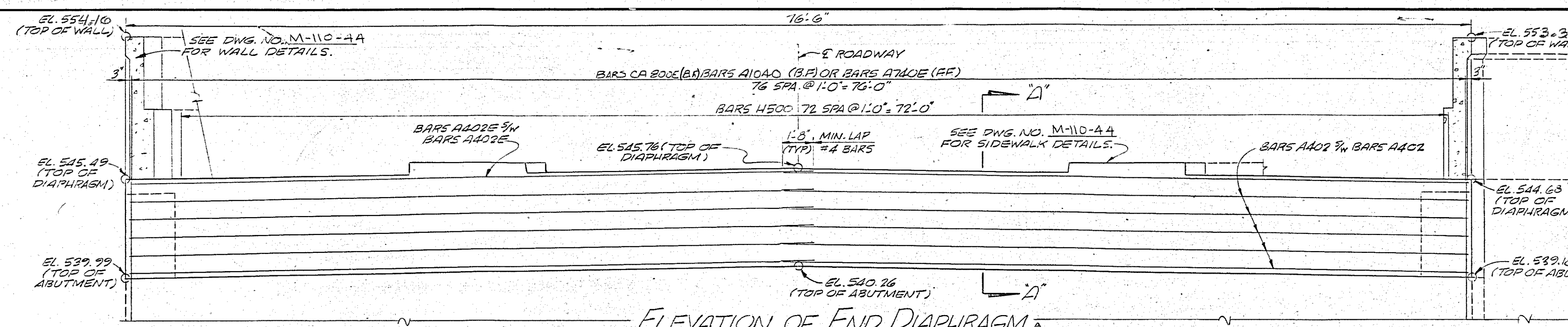
TOP SLAB PLAN (SHOWING TRANSVERSE STEEL)

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 SUPERSTRUCTURE DETAILS
 GRANNY WHITE PIKE
 OVER INTERSTATE 440
 STATION 295+37.00
 DAVIDSON COUNTY
 1982

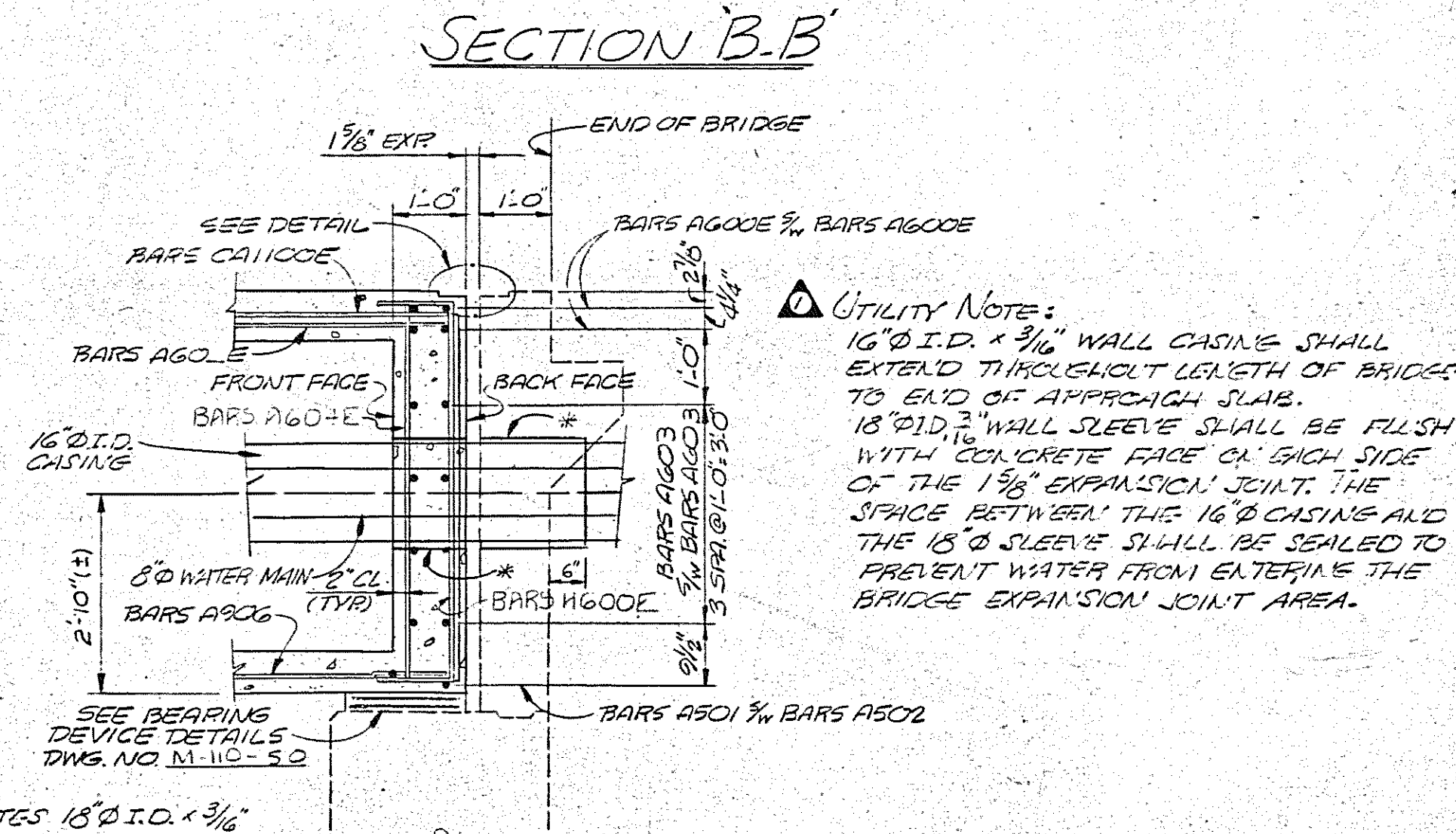
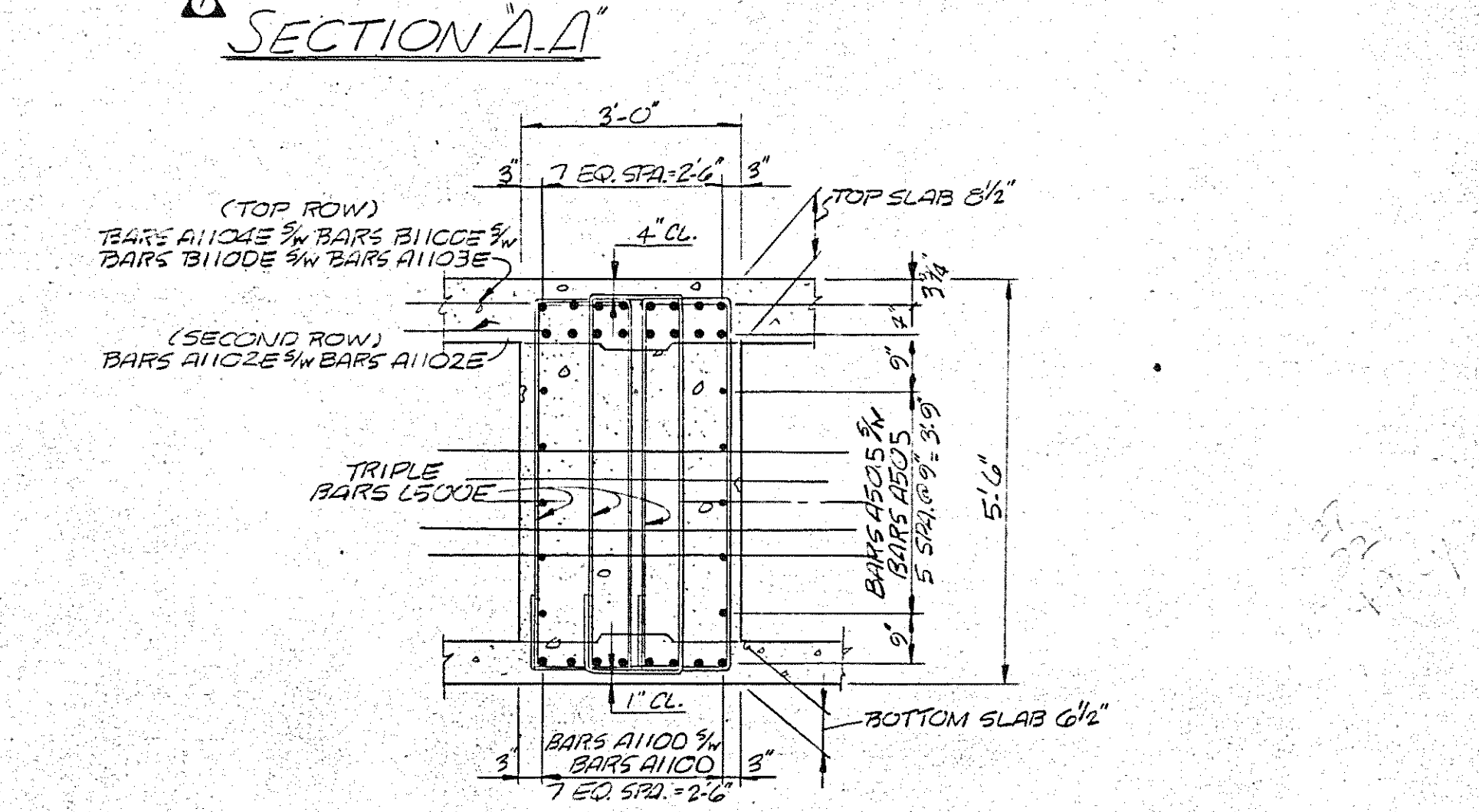
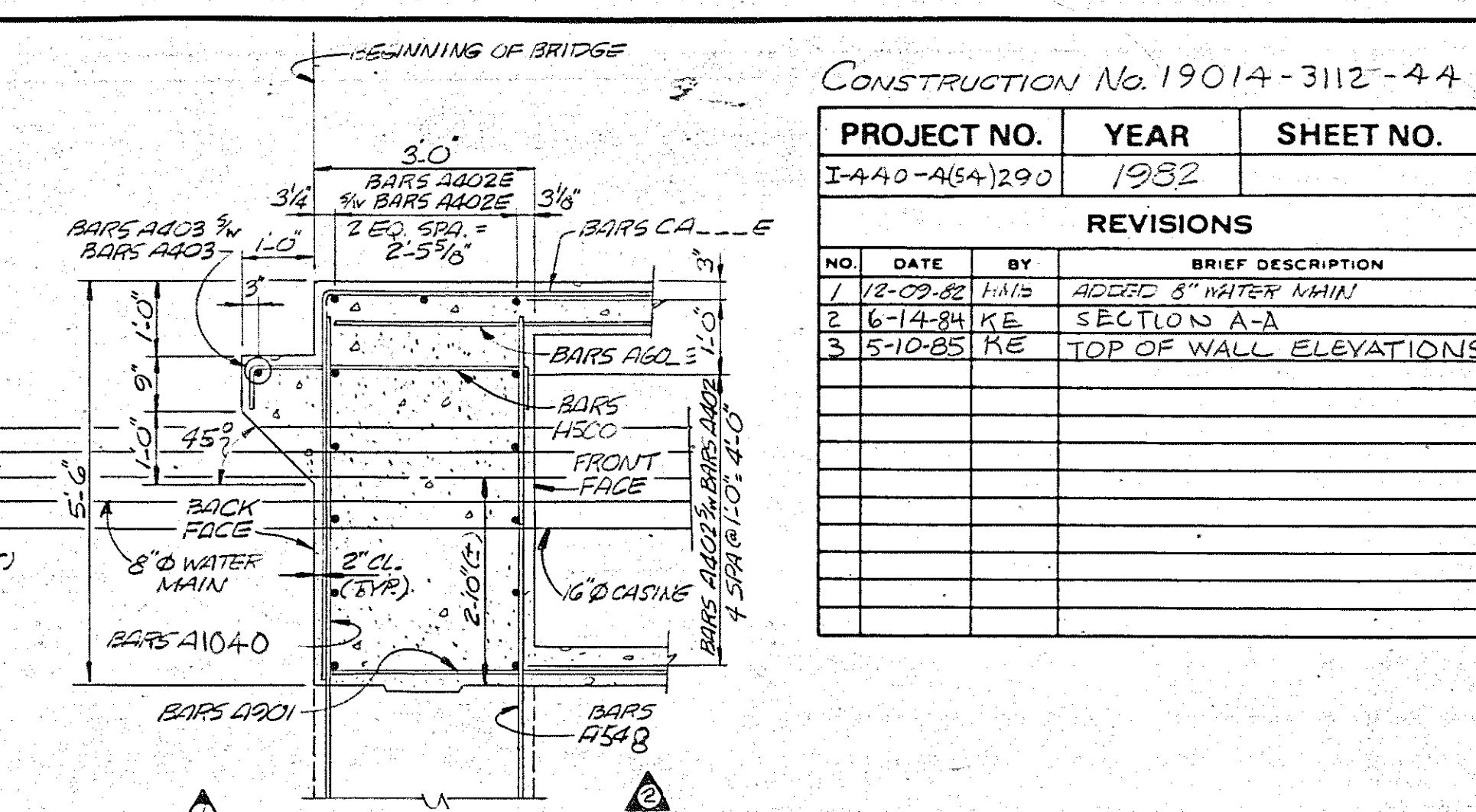
CORRECT: *William L. Foveall*
 ENGINEER OF STRUCTURES
 APPROVED: *Lewis Evans*
 DIRECTOR OF HIGHWAYS

PROJECT NO.	YEAR	SHEET NO.
I-440-A(5A)290	1982	

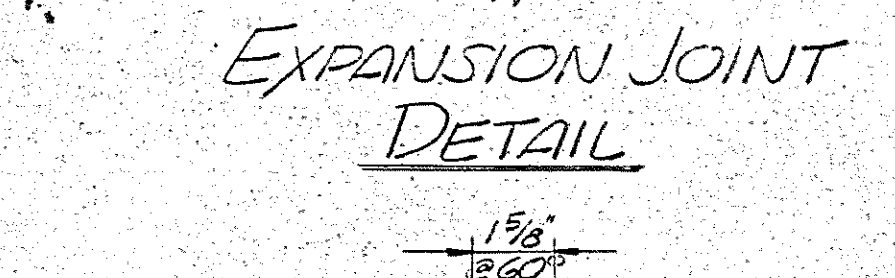
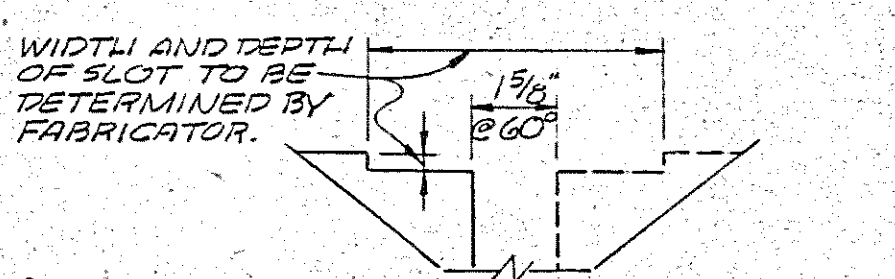
REVISIONS		
NO.	DATE	BRIEF DESCRIPTION
1	12-09-82	H.H.Z. ADD 8" WATER MAIN
2	16-14-84	KE SECTIONS A-A
3	5-10-85	KE TOP OF WALL ELEVATIONS



DESIGNED BY: KEN ELROD DATE: 05-82
 DRAWN BY: CHILDRESS DATE: 06-82
 SUPERVISED BY: HARRISON DATE: 06-82
 CHECKED BY: _____ DATE: _____



UTILITY NOTE:
 16" O.D. x 3/16" WALL CASING SHALL EXTEND THROUGHOUT LENGTH OF BRIDGE TO END OF APPROACH SLAB.
 18" O.D. x 1/4" WALL SLEEVES SHALL BE FLUSH WITH CONCRETE FACE ON EACH SIDE OF THE 1 1/2" EXPANSION JOINT. THE SPACE BETWEEN THE 16" CASING AND THE 18" SLEEVE SHALL BE SEALED TO PREVENT WATER FROM ENTERING THE BRIDGE EXPANSION JOINT AREA.

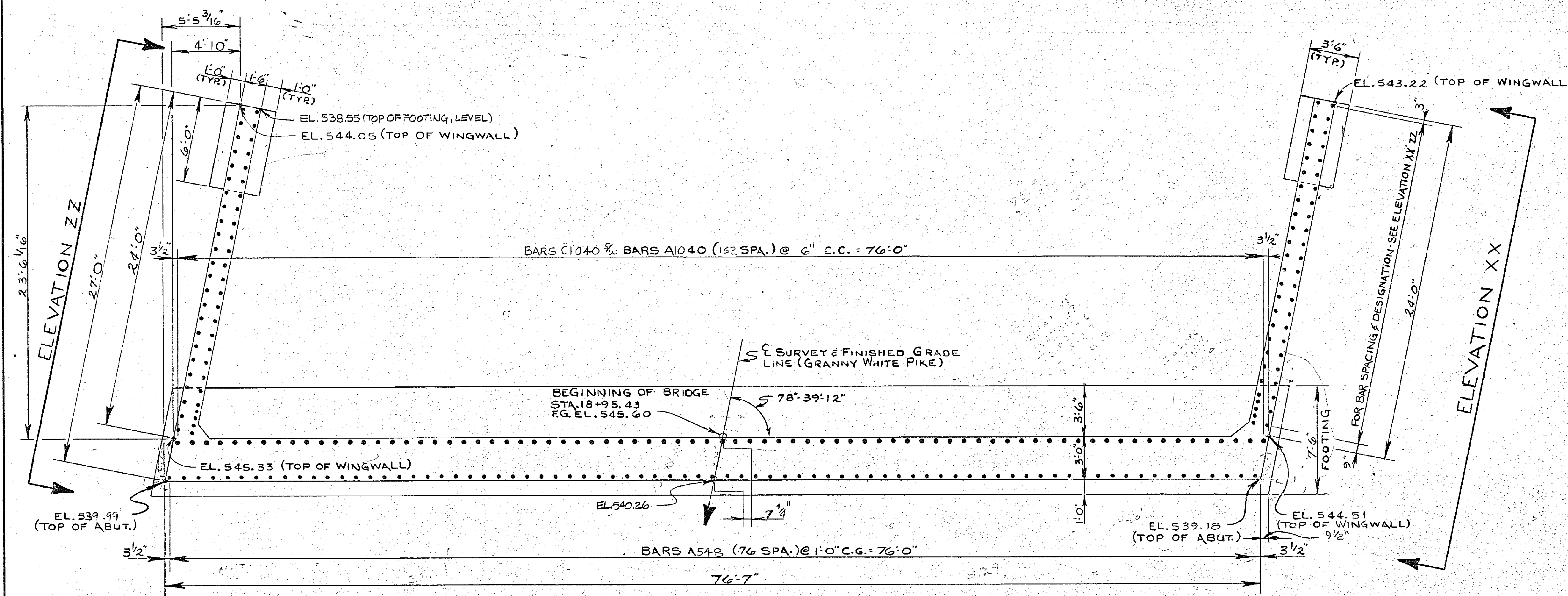


STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 SUPERSTRUCTURE DETAILS
 GRANNY WHITE PIKE
 OVER INTERSTATE 440
 STATION 295+37
 DAVIDSON COUNTY
 1982

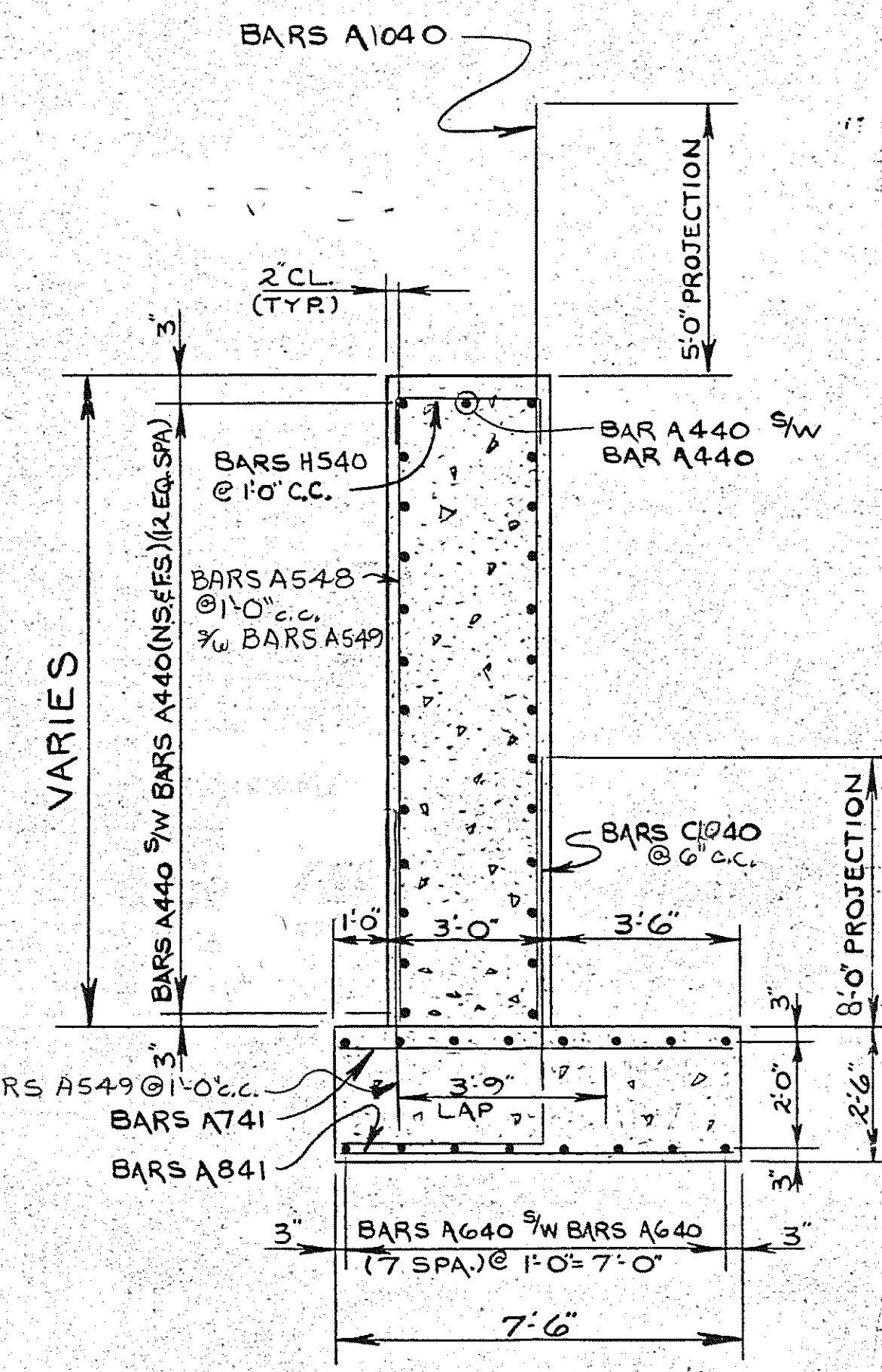
CORRECT: Phillip L. Swall
 ENGINEER OF STRUCTURES
 APPROVED: Louis Evans
 DIRECTOR OF HIGHWAYS

PROJECT NO.	YEAR	SHEET NO.
I-440-4(54)209	1982	

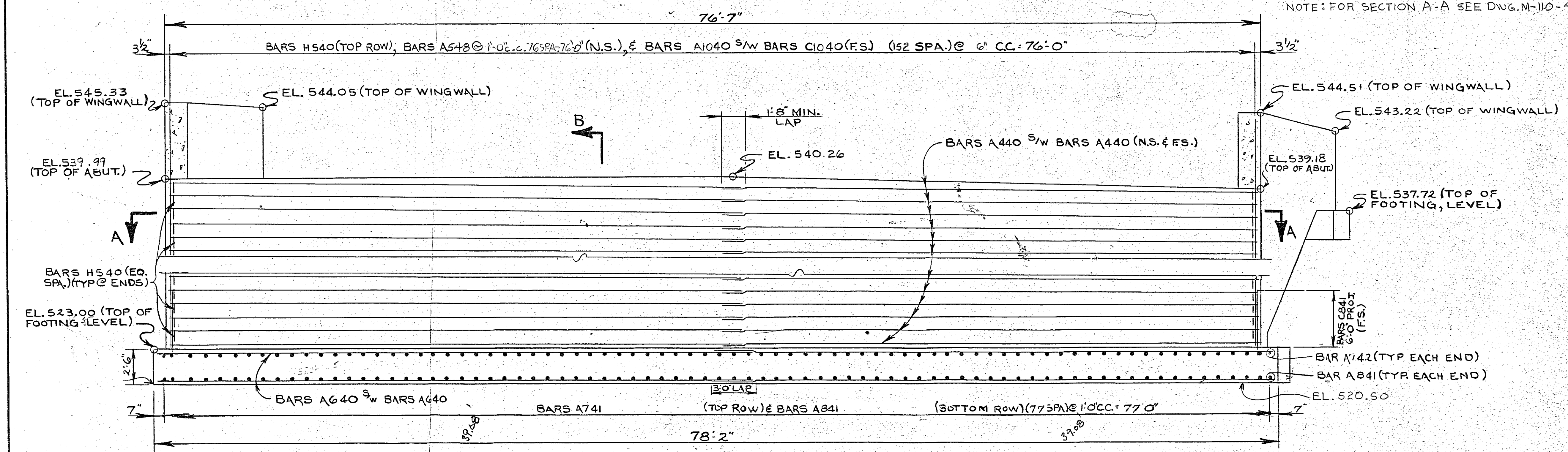
REVISIONS		
NO.	DATE	BRIEF DESCRIPTION
1	6-14-84	KE REVISED FOOTING ELEV. & QUANTITIES



PLAN



SECTION BB



ELEVATION
(LOOKING BACK ON SURVEY)

ESTIMATED QUANTITIES

ABUTMENT	CLASS "A" CONCRETE (CY.)	REINFORCING STEEL (LBS.)
1	227.0	37,435

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS
ABUTMENT NO. 1
GRANNY WHITE PIKE
OVER
I 440
STATION 295+37.00
DAVIDSON COUNTY
1982

DESIGNED BY: MEN ELROD DATE: _____
DRAWN BY: RICK HINDMAN DATE: 5-82
SUPERVISED BY: DON HARRISON DATE: 5-82
CHECKED BY: _____ DATE: _____

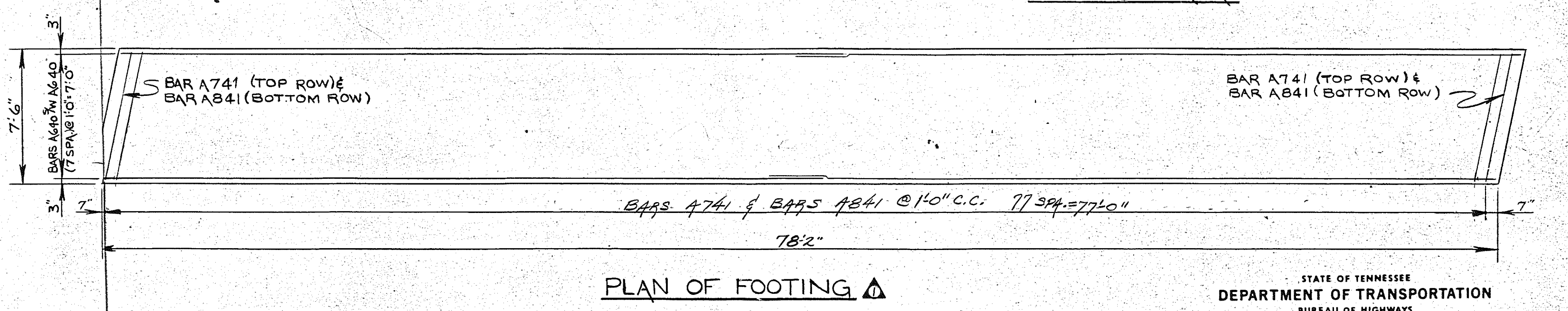
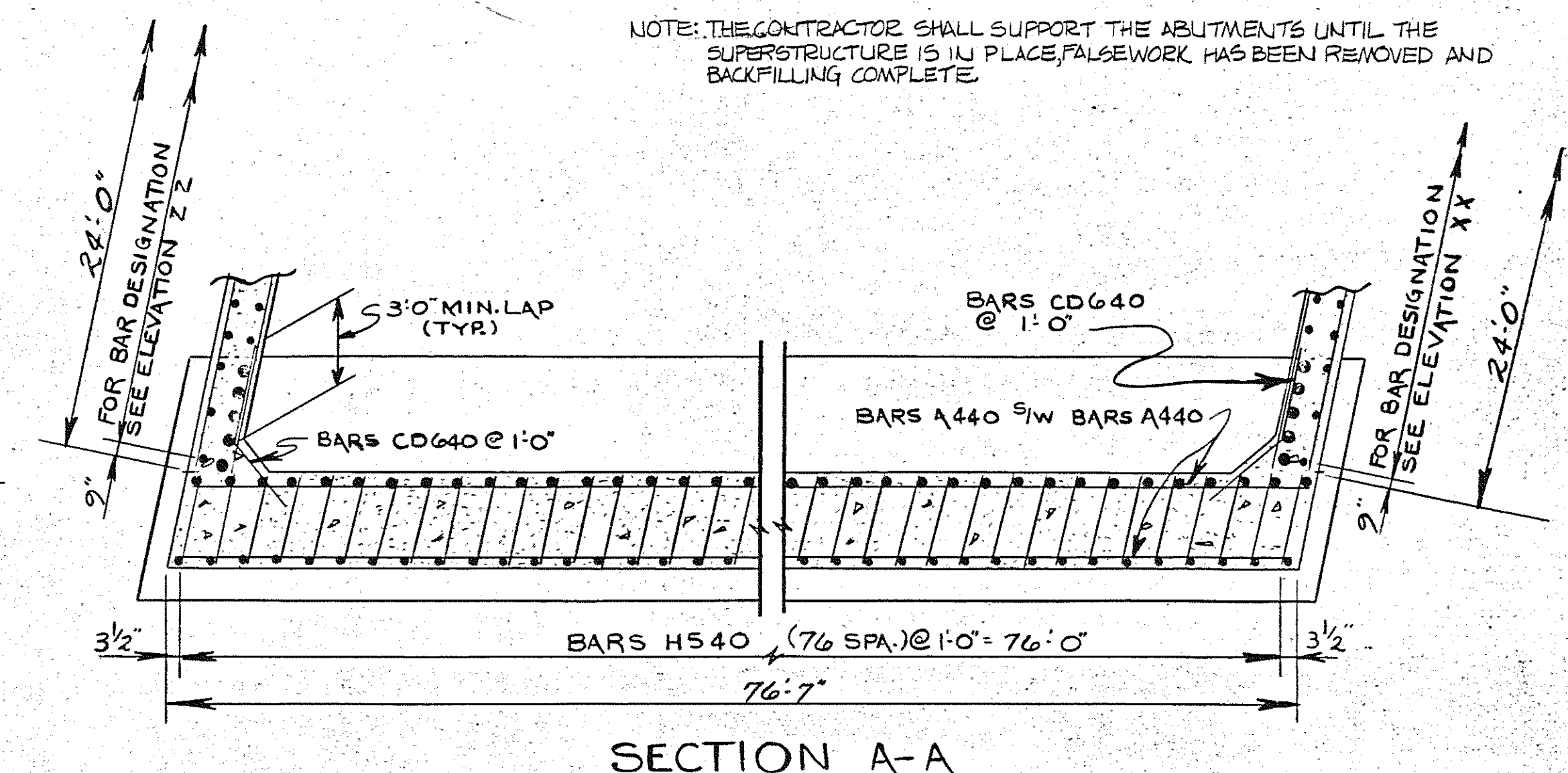
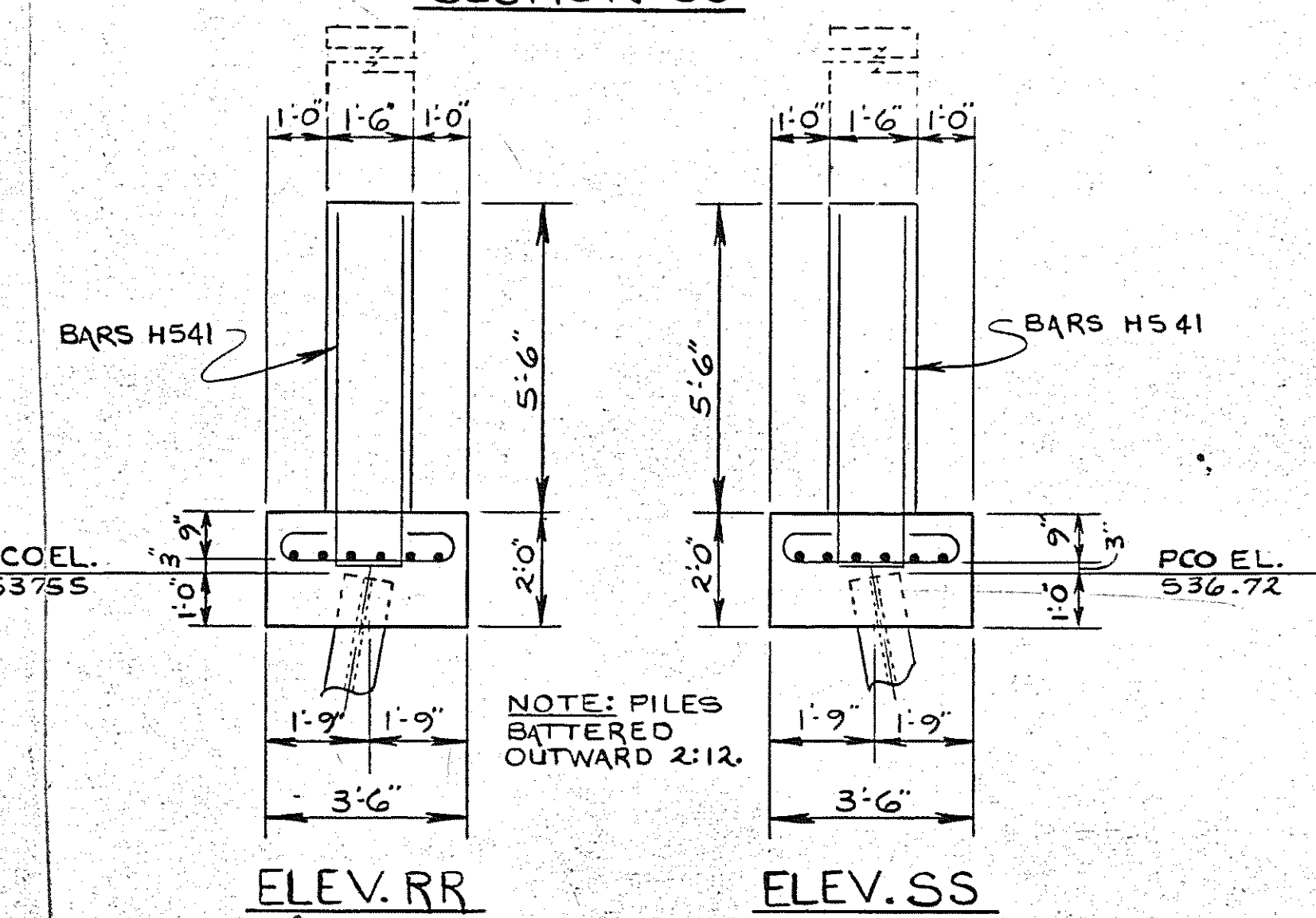
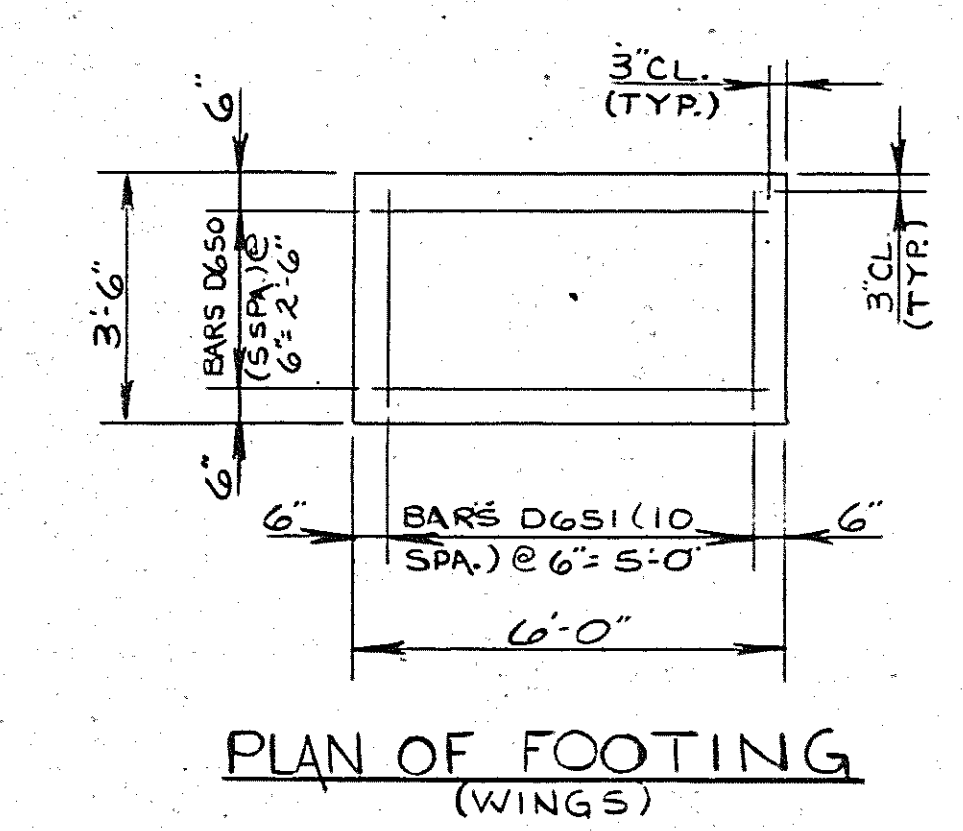
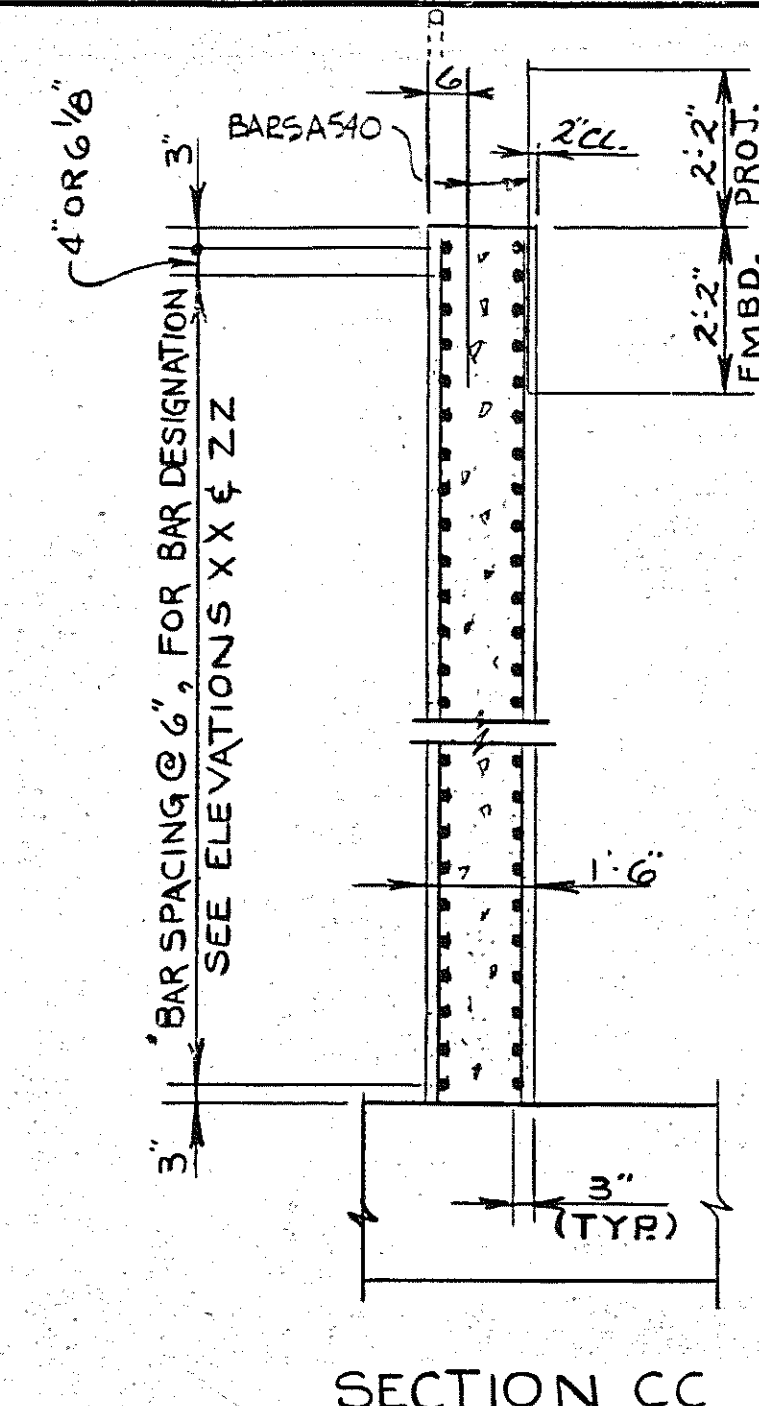
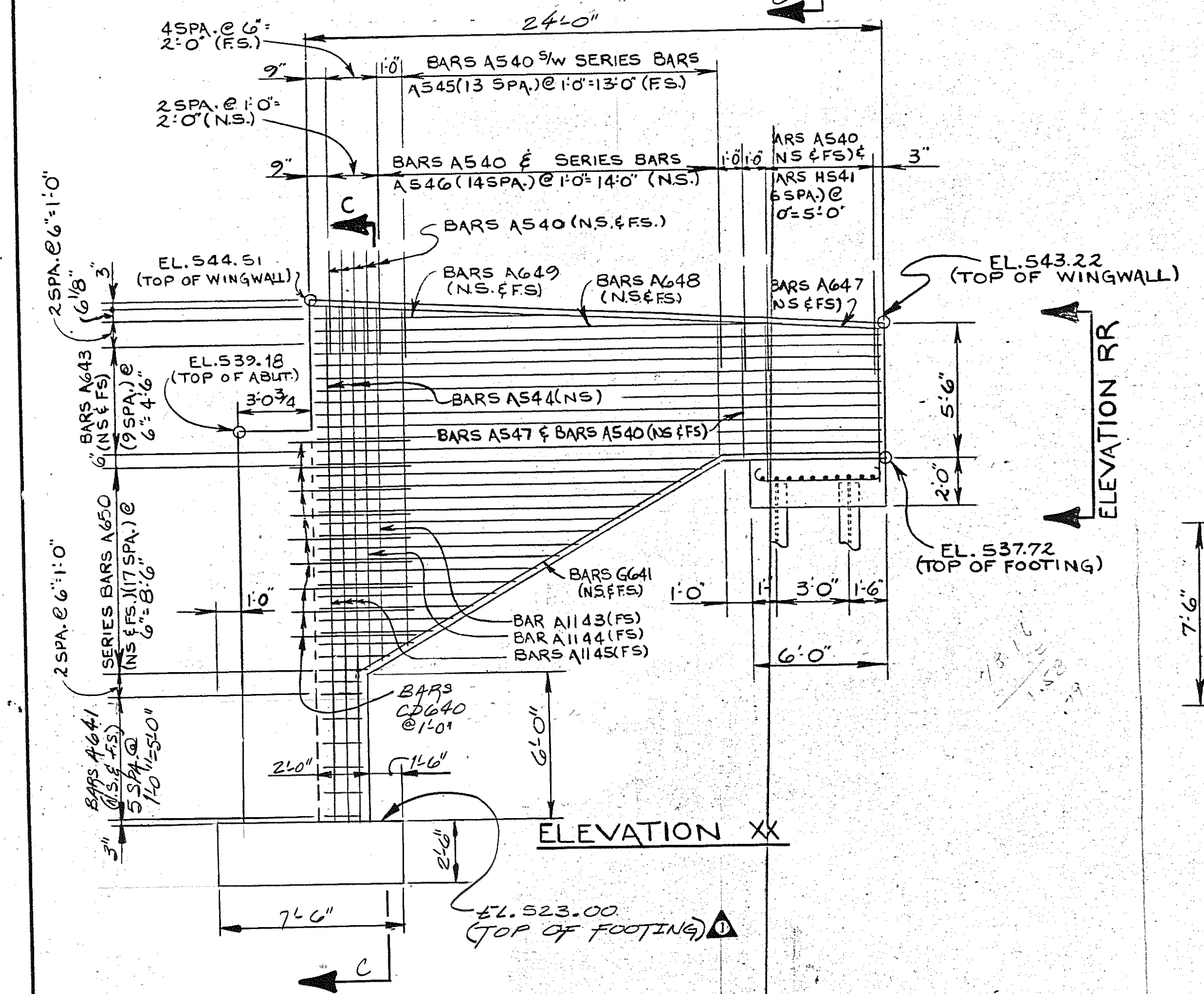
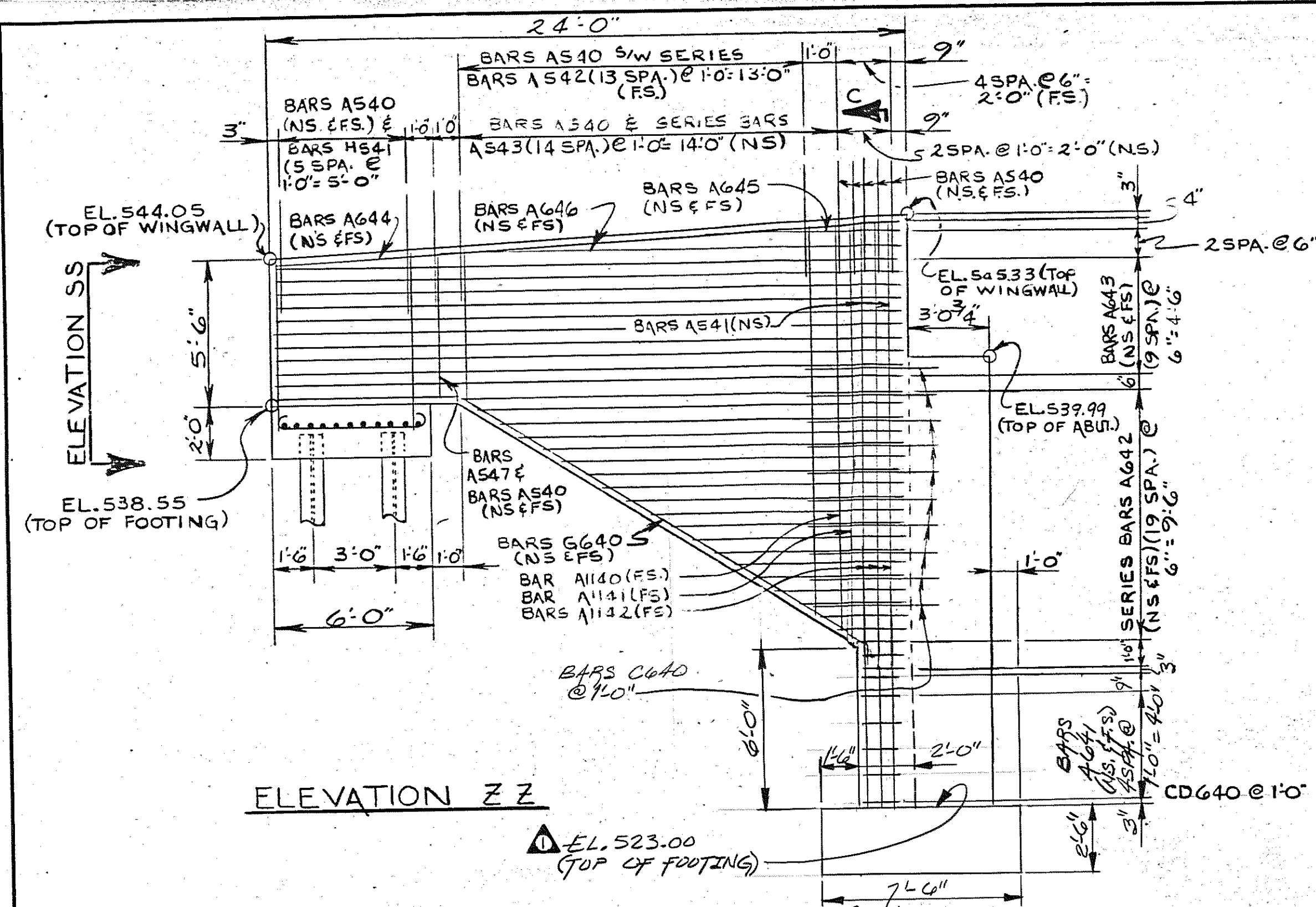
NS. DENOTES: NEAR SIDE
FS. DENOTES: FAR SIDE

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

CONST. NO. 1901A-3112-44

PROJECT NO.	YEAR	SHEET NO.
I-440-A(54)209	1982	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	6-14-84	KE	FOOTING PLAN & ELEVATIONS



NS. DENOTES: NEAR SIDE
 F.S. DENOTES: FAR SIDE

NOTE: WHEN POURING WINGWALLS, PROVISIONS SHALL BE MADE FOR SETTING REINFORCING STEEL FOR PARAPET. PARAPET FOR DETAILS OF PARAPET SEE DWG. NO. M-110-44.

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

DESIGNED BY: KEN ELROD DATE: 5-82
 DRAWN BY: RICK HINDMAN DATE: 5-82
 SUPERVISED BY: DON HARRISON DATE: 5-82
 CHECKED BY: DATE:

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

ABUTMENT NO. 1 DETAILS
 GRANNY WHITE PIKE
 OVER
 I 440
 STATION 295+37.00
 DAVIDSON COUNTY
 1982

CORRECT: *Colleen L. Lovell*
 ENGINEER OF STRUCTURES

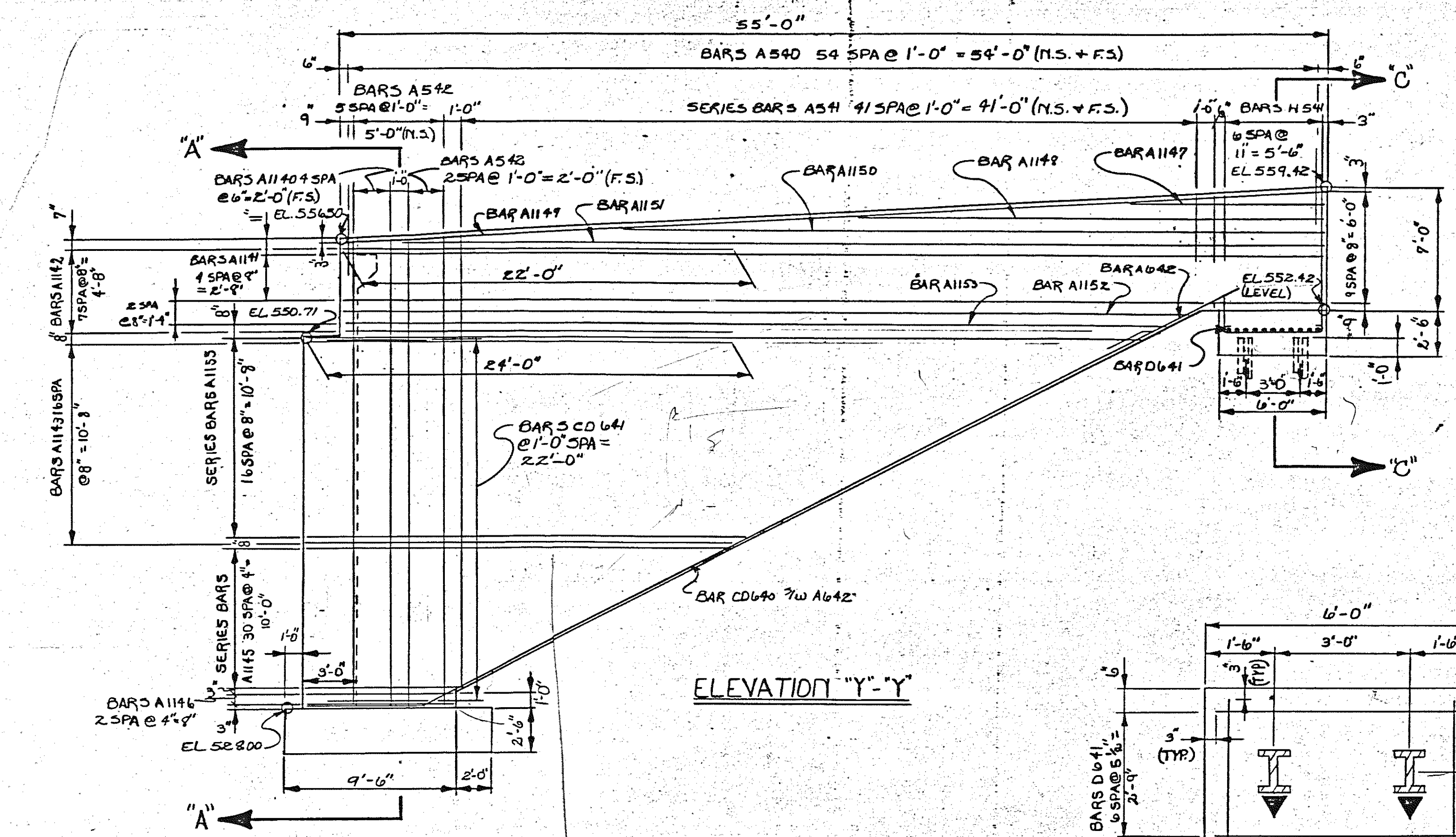
APPROVED: *Louis Evans*
 DIRECTOR OF HIGHWAYS

M-110-49

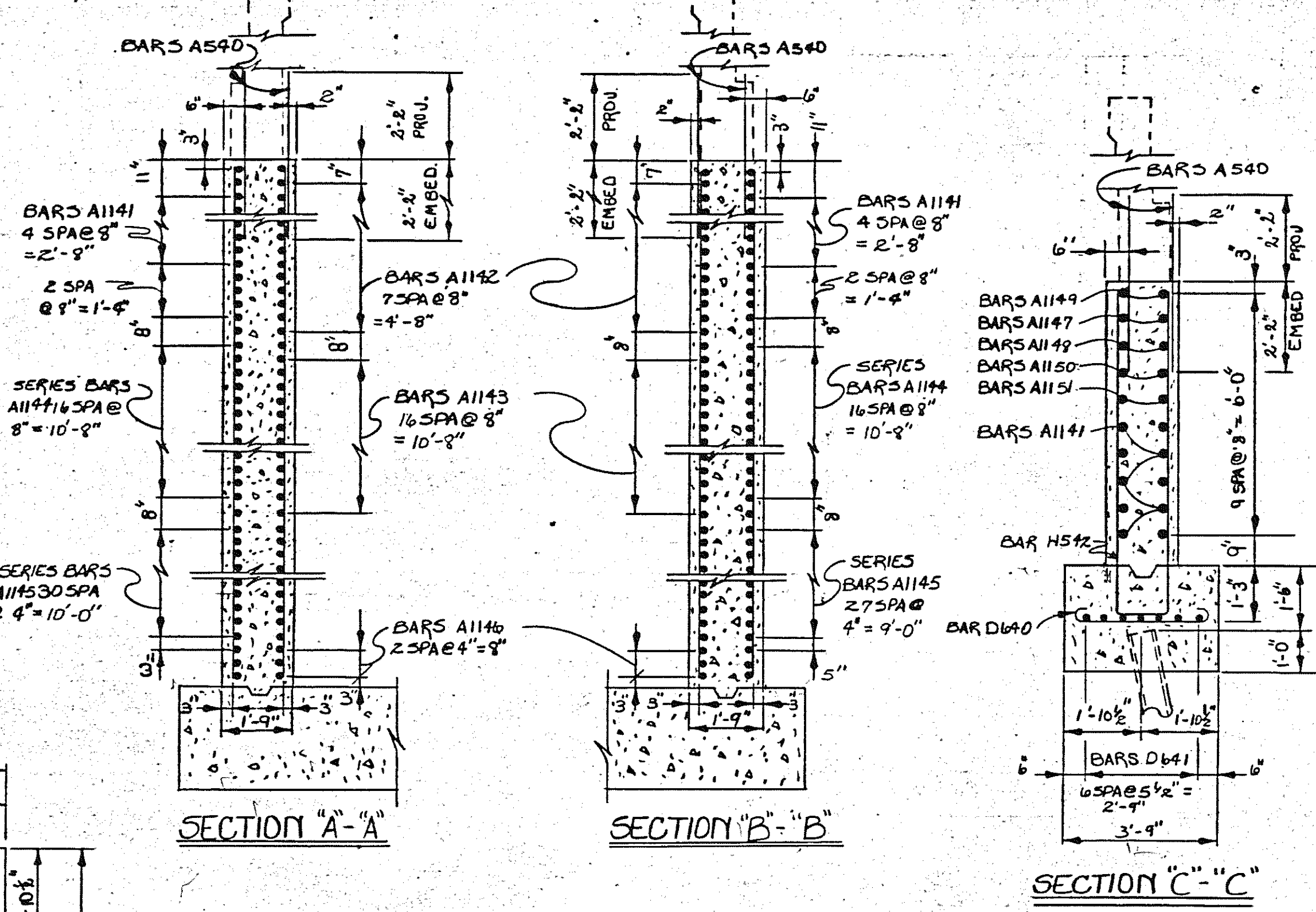
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	5-25-84	KE	BAR A1042E TO A1041

NOTE: WHEN POURING WINGWALLS, PROVISIONS SHALL BE MADE FOR SETTING REINFORCING STEEL FOR PARAPET WALLS FOR DETAILS OF PARAPET WALLS SEE DRAWING NO. M-110-44

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



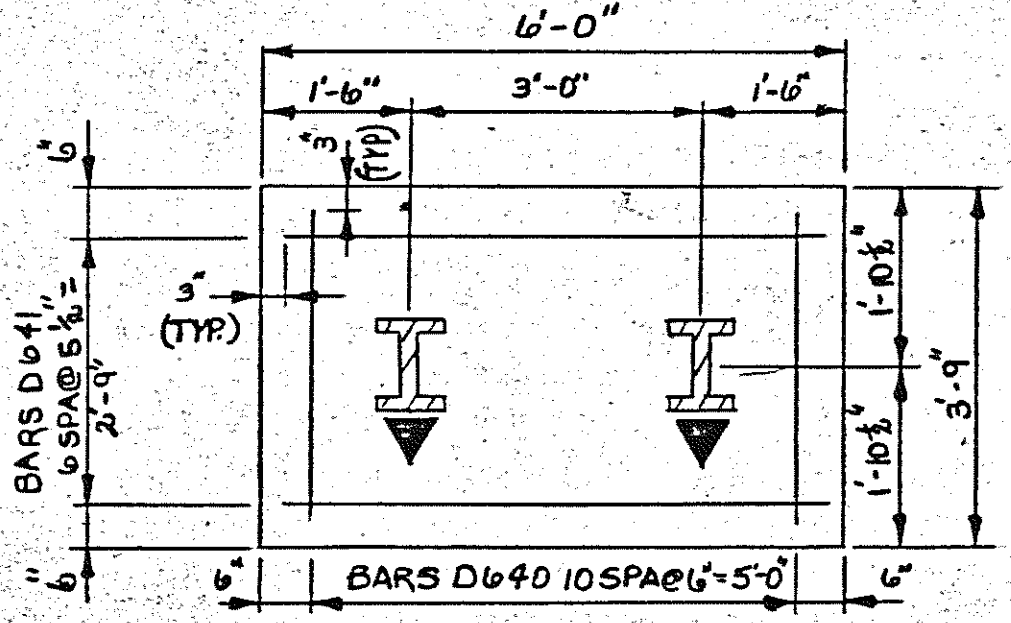
ELEVATION "Y"- "Y"



SECTION "A"- "A"

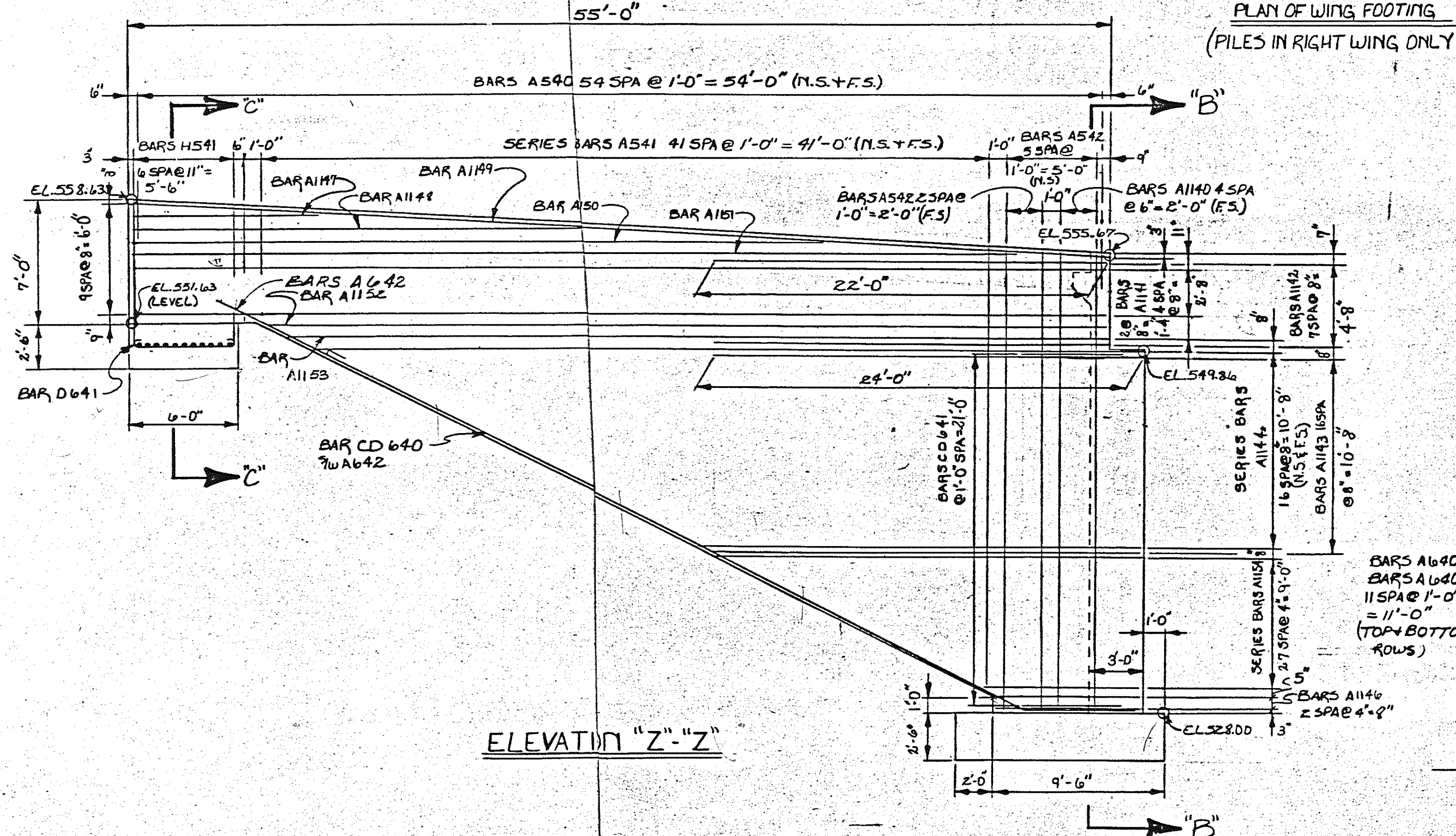
SECTION "B"- "B"

SECTION "C"- "C"

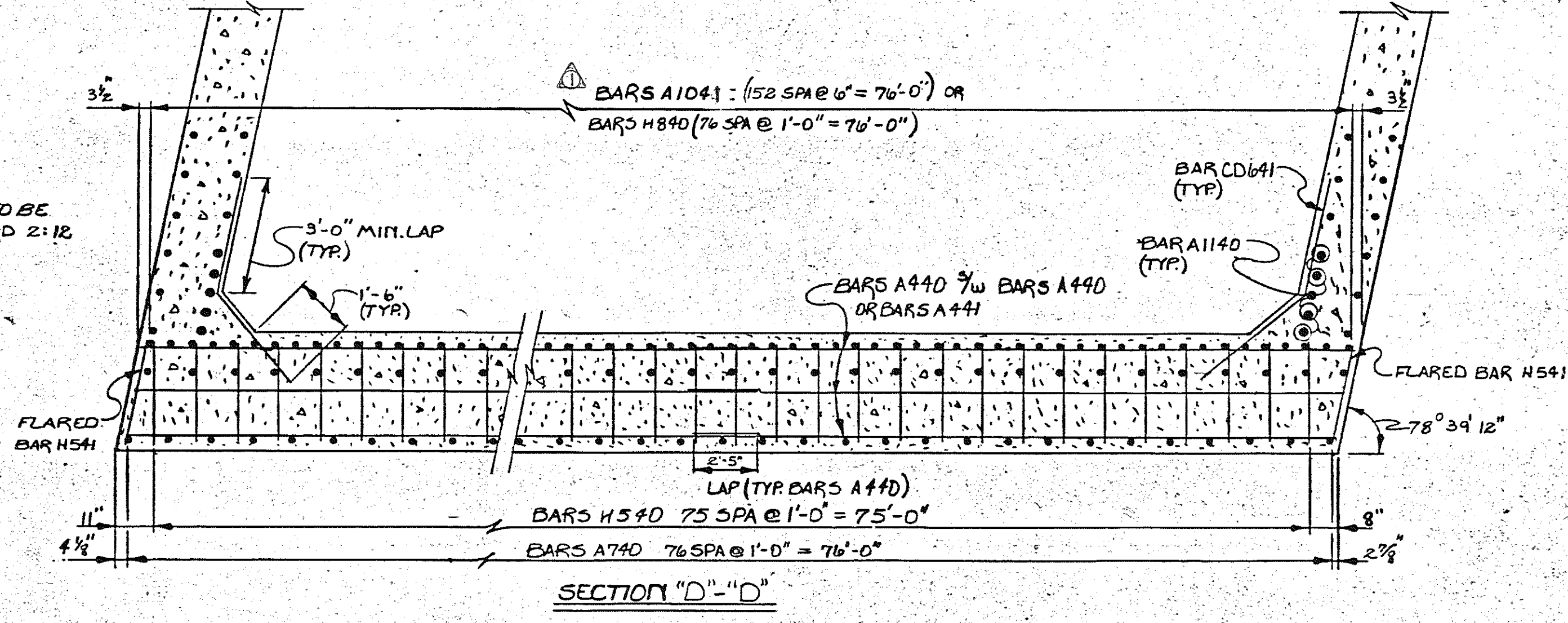


PLAN OF WING FOOTING
(PILES IN RIGHT WING ONLY)

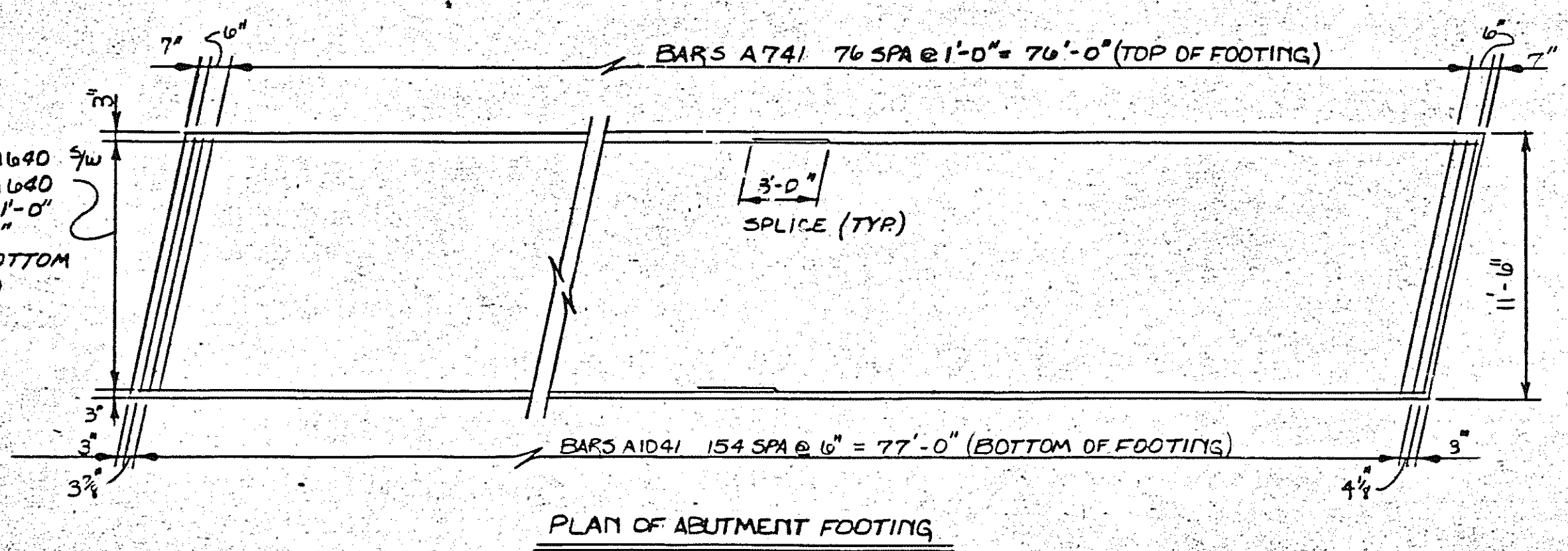
▲ DENOTES PILES TO BE BATTERED OUTWARD 2:12



ELEVATION "Z"- "Z"



SECTION "D"- "D"



PLAN OF ABUTMENT FOOTING

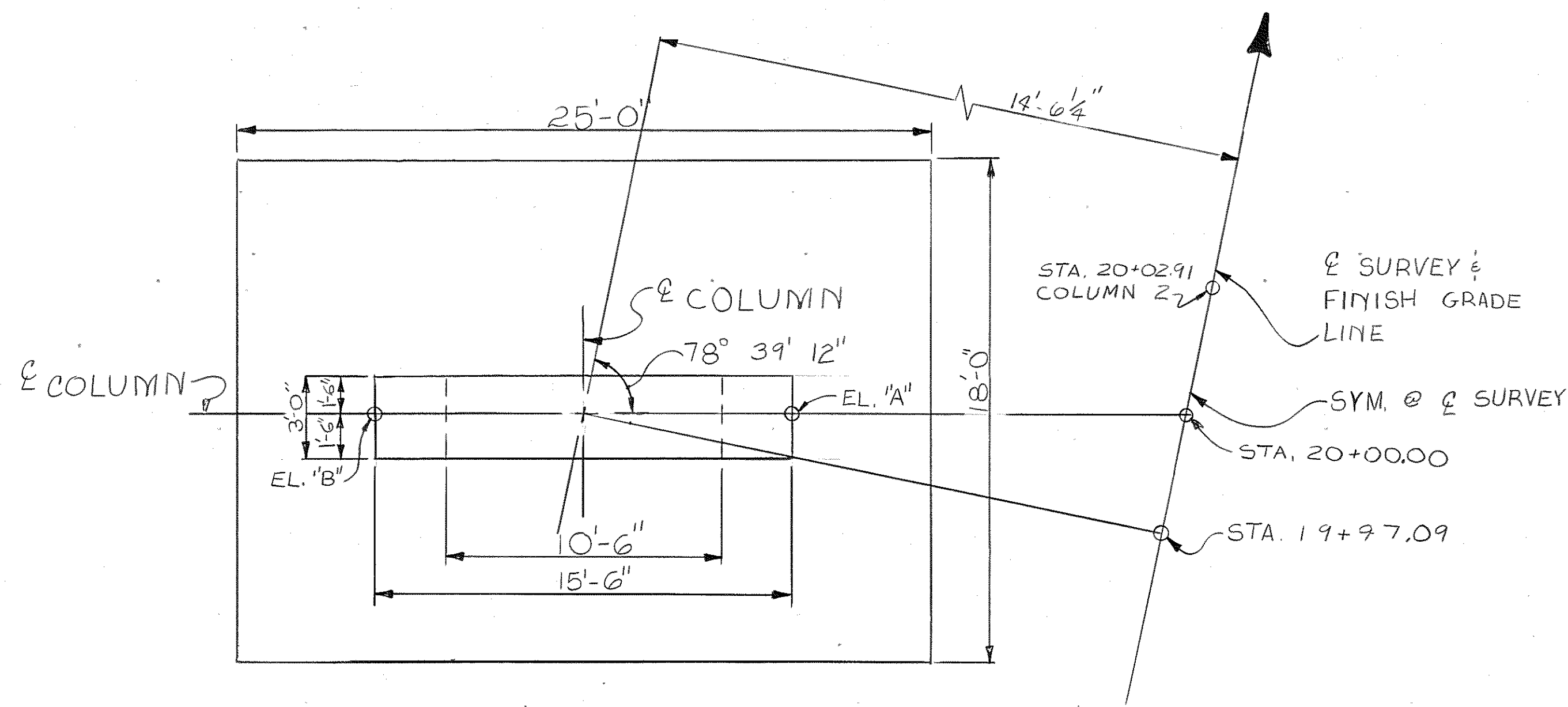
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS
ABUTMENT NO. 2 DETAILS
GRANNY WHITE PIKE
OVER INTERSTATE 440
STATION 295+37.00
DAVIDSON COUNTY
1982

DESIGNED BY KEN ELROD DATE 81
DRAWN BY MIKE FAGAN DATE 82
SUPERVISED BY HARRISON DATE 82
CHECKED BY DATE

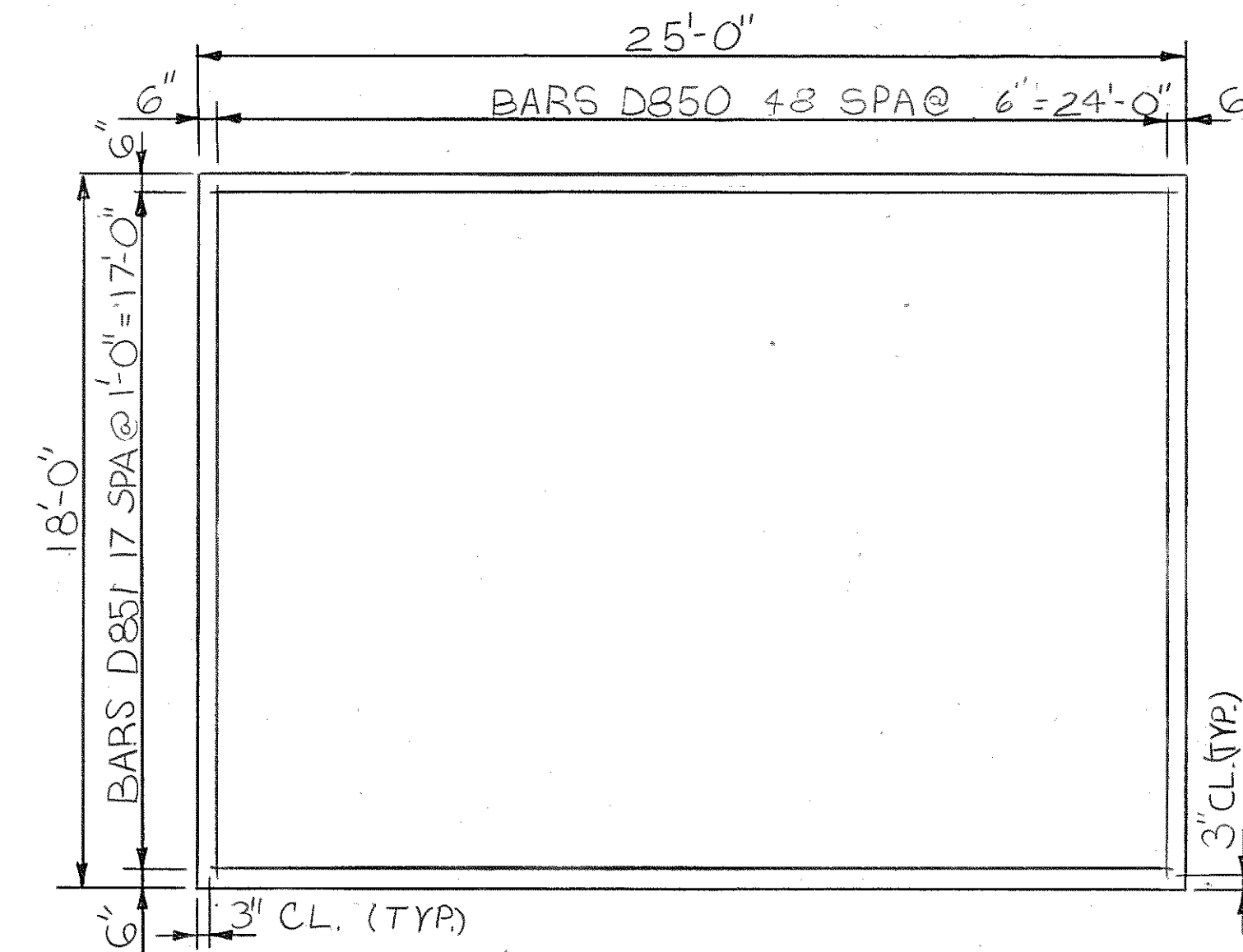
CORRECT *Colleen L. Linnell*
ENGINEER OF STRUCTURES
APPROVED *James J. Brown*
DIRECTOR OF HIGHWAYS

PROJECT NO.	YEAR	SHEET NO.
I-440-A(54)209	1982	

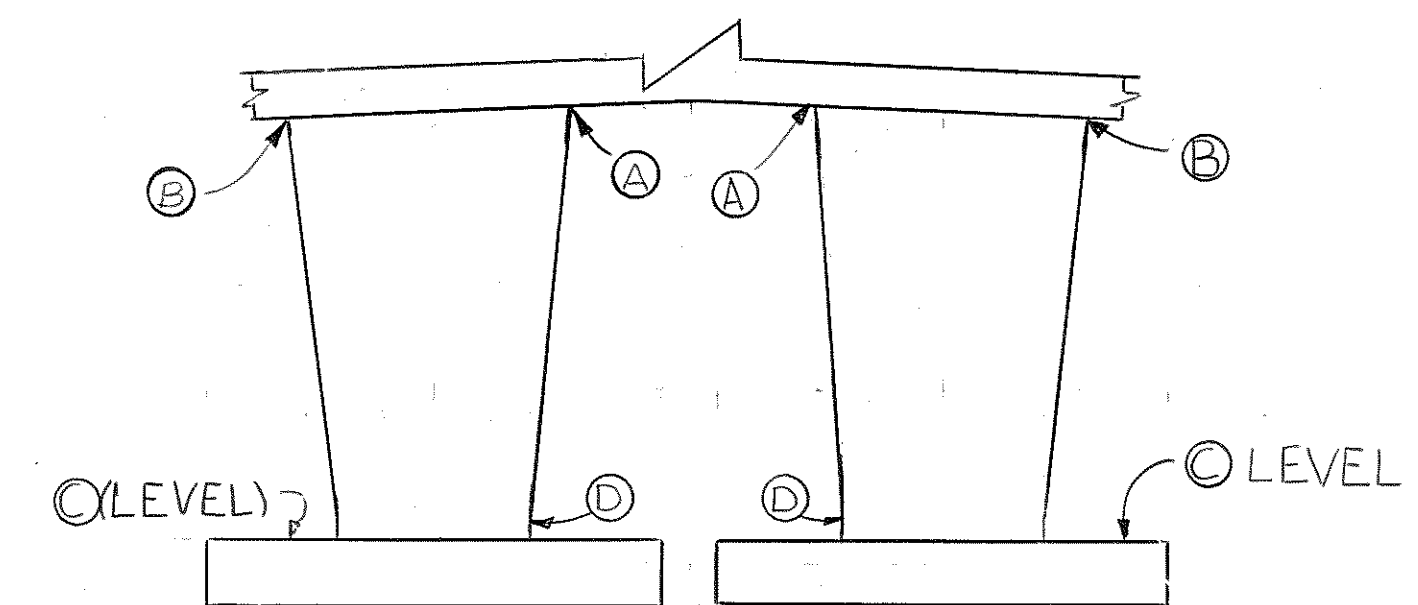
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION



PLAN
(COLUMN 1)



PLAN OF FOOTING
(SHOWING REINFORCING STEEL)

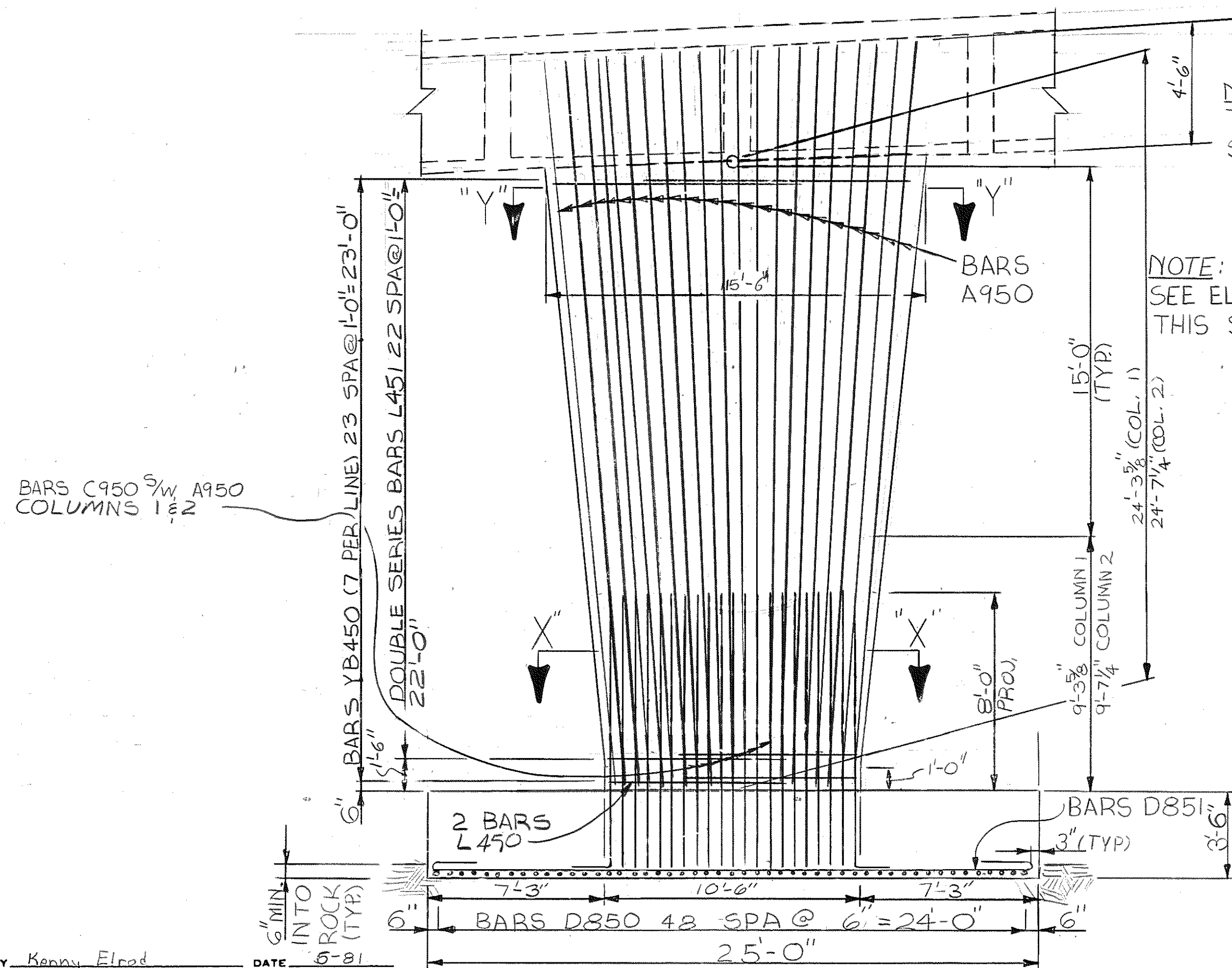


COLUMN 1 COLUMN 2
ELEVATION DETAILS
(LOOKING FORWARD ON SURVEY)

TABLE OF ELEVATIONS

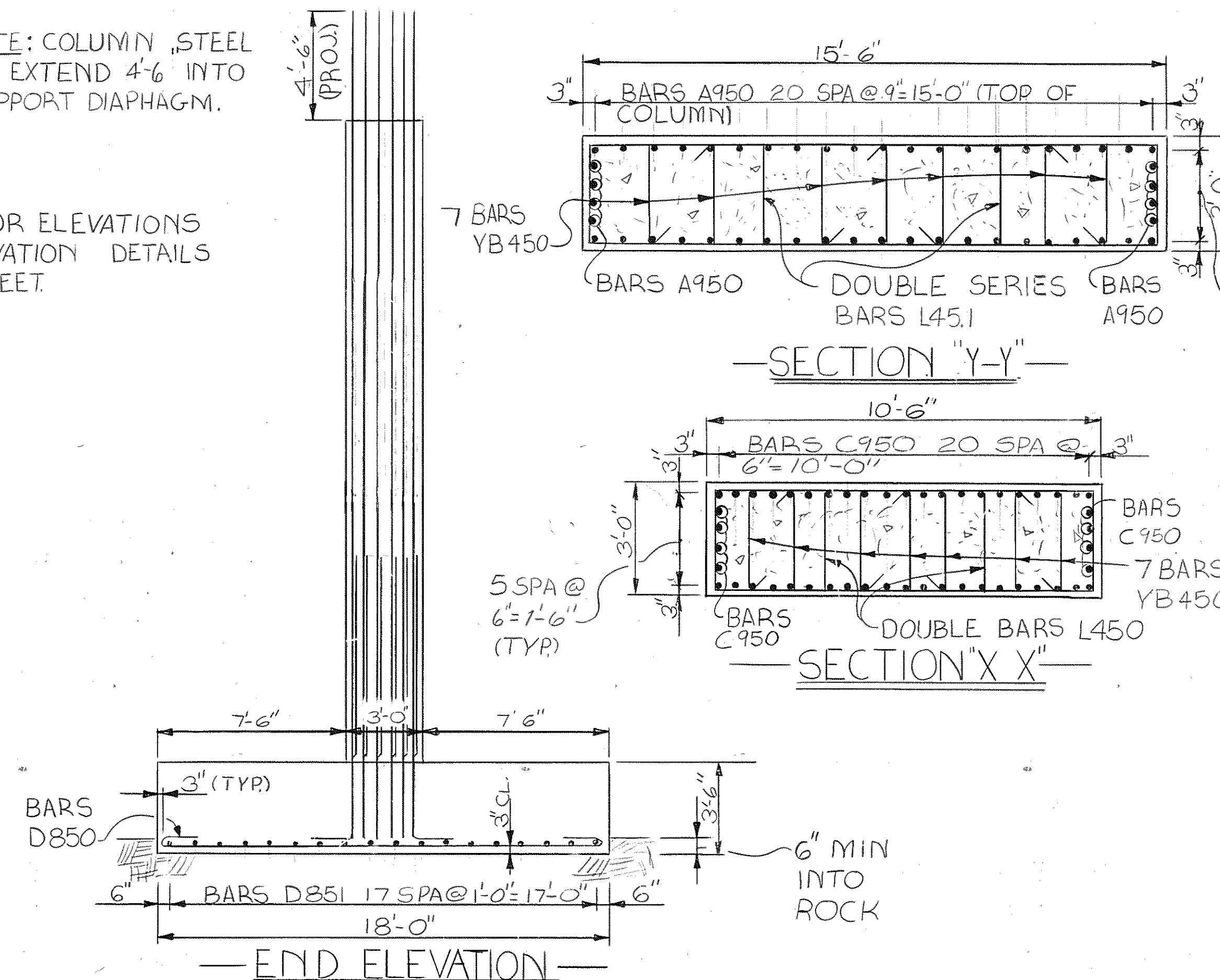
ELEVATIONS	A	B	C	D
COLUMN 1	545.52	545.08	521.00	522.00
COLUMN 2	545.82	545.39	521.00	522.00

EL. A & B GIVEN @ COLUMN



ELEVATION

(LOOKING FORWARD ON SURVEY - COL. 1) (LOOKING BACK ON SURVEY - COL. 2)



END ELEVATION

ITEM	CONCRETE CLASS 'A' C.Y.	REINFORCING STEEL LBS.
BENT 1	200.0	23,927

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS
BENT NUMBER 1
GRANNY WHITE PIKE
OVER INTERSTATE 440
STATION 295+37.00
DAVIDSON COUNTY

1982
CORRECTED
ENGINEER OF STRUCTURES
APPROVED
DIRECTOR OF HIGHWAYS

DESIGNED BY: Kenneth Flood DATE: 6-8-81
DRAWN BY: Kevin Macgregor DATE: 6-1-82
SUPERVISED BY: Harbison & Brooks DATE: 6-1-82
CHECKED BY: _____ DATE: _____

BILL OF STEEL

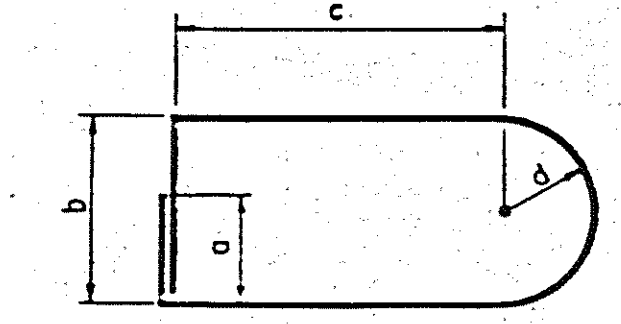
Const. No. 19014-3112-44

SUPERSTRUCTURE										SUPERSTRUCTURE (CONT.)										ABUTMENT NO. 1										ABUTMENT NO. 1 (CONT.)									
BAR	LOCATION	SIZE	NO REQD	BENDING DIMENSIONS				LENGTH	BAR	LOCATION	SIZE	NO REQD	BENDING DIMENSIONS				LENGTH	BAR	LOCATION	SIZE	NO REQD	BENDING DIMENSIONS				LENGTH	BAR	LOCATION	SIZE	NO REQD	BENDING DIMENSIONS				LENGTH				
				a	b	c	d						a	b	c	d					a	b	c	d					a	b	c	d							
A402	IDIA @ ABUT. NO. 1	4	120					38'-11"	A600E	TOP SLAB	6	810					39'-6"	A440	ABUT. WALL	4	52					39'-0"	C1040	ABUT. FIG. + WALL	10	153			10'-2"		13'-9"				
A403	IDIA @ ABUT. NO. 2	4	2					37'-5"	A601E	TOP SLAB	6	160					45'-10"	A540	LVINGWALLS	5	90					4'-4"	A1140	LT. VINGWALL	11	1					15'-4"				
A404	PARAPET WALL	4	324					30'-0"	A602E	TOP SLAB	6	100					60'-0"	A541	LT. VINGWALL	5	2					22'-2"	A1141	LT. VINGWALL	11	1					15'-8"				
A405	PARAPET WALL	4	36					7'-5"	A603E	ABUT. DIAPHRAM	6	71					5'-3"	A542	LT. VINGWALL	5	1					22'-2"	A1142	LT. VINGWALL	11	3					12'-2"				
A406	PARAPET WALL	4	18					26'-6"	A604E	WALL	6	71					6'-0"	A543	RT. VINGWALL	5	1					22'-2"	A1143	RT. VINGWALL	11	1					14'-8"				
A500	BOTTOM SLAB	5	268					30'-0"	A605E	WALL	6	71					7'-2"	A544	RT. VINGWALL	5	2					21'-4"	A1144	RT. VINGWALL	11	1					15'-0"				
A501	BOTTOM SLAB	5	268					41'-2"	A606E	DIA. @ ABUT. NO. 2	6	71	5'-3"	1'-0"			7'-2"	A545	LT. VINGWALL	5	1					21'-4"	A1145	RT. VINGWALL	11	3					21'-4"				
A503	WALL	5	574					8'-5"	A607E	TOP SLAB	8	77	10'-0"	5'-0"			14'-11"	A546	RT. VINGWALL	5	2					21'-4"	A1146	RT. VINGWALL	11	3					21'-4"				
A504	WALL	5	574					3'-9"	A608E	TOP SLAB	8	77	10'-0"	5'-0"			14'-11"	A547	LT. VINGWALL	5	2					21'-4"	A1147	RT. VINGWALL	11	3					21'-4"				
A505	DIAPHRAM	5	10					38'-4"	A609E	TOP SLAB	11	150					60'-0"	A548	RT. VINGWALL	5	1					21'-4"	A1148	RT. VINGWALL	11	1					14'-8"				
A506	OUTSIDE WEBS	5	508	2'-6"	1'-10"			3'-6"	A610E	TOP SLAB	11	50					34'-6"	A549	LT. VINGWALL	5	1					138'-3"	A1149	RT. VINGWALL	11	1					14'-8"				
A507	WEBS/WALL	5	430	2'-8"	1'-10"			3'-8"	A611E	TOP SLAB	11	50					34'-6"	A550	RT. VINGWALL	5	1					138'-3"	A1150	RT. VINGWALL	11	1					14'-8"				
A508	WEBS/WALL	5	430	2'-8"	1'-10"			3'-8"	A612E	TOP SLAB	11	50					34'-6"	A551	LT. VINGWALL	5	1					138'-3"	A1151	RT. VINGWALL	11	1					14'-8"				
A509	WEBS/WALL	5	430	2'-8"	1'-10"			3'-8"	A613E	TOP SLAB	11	50					34'-6"	A552	RT. VINGWALL	5	1					138'-3"	A1152	RT. VINGWALL	11	1					14'-8"				
A510	WEBS/WALL	5	430	2'-8"	1'-10"			3'-8"	A614E	TOP SLAB	11	50					34'-6"	A553	LT. VINGWALL	5	1					138'-3"	A1153	RT. VINGWALL	11	1					14'-8"				
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A512	WEBS/WALL	5	430	2'-8"	1'-10"			3'-8"	A616E	TOP SLAB	11	50					34'-6"	A555	LT. VINGWALL	5	1					138'-3"	A1155	RT. VINGWALL	11	1					14'-8"				
A513	WEBS/WALL	5	430	2'-8"	1'-10"			3'-8"	A617E	TOP SLAB	11	50					34'-6"	A556	RT. VINGWALL	5	1					138'-3"	A1156	RT. VINGWALL	11	1					14'-8"				
A514	WEBS/WALL	5	430	2'-8"	1'-10"			3'-8"	A618E	TOP SLAB	11	50					34'-6"	A557	LT. VINGWALL	5	1					138'-3"	A1157	RT. VINGWALL	11	1					14'-8"				
A515	WEBS/WALL	5	430	2'-8"	1'-10"			3'-8"	A619E	TOP SLAB	11	50					34'-6"	A558	RT. VINGWALL	5	1					138'-3"	A1158	RT. VINGWALL	11	1					14'-8"				
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A517	WEBS/WALL	5	430	2'-8"	1'-10"			3'-8"	A621E	TOP SLAB	11	50					34'-6"	A560	RT. VINGWALL	5	1					138'-3"	A1160	RT. VINGWALL	11	1					14'-8"				
A518	WEBS/WALL	5	430	2'-8"	1'-10"			3'-8"	A622E	TOP SLAB	11	50					34'-6"	A561	LT. VINGWALL	5	1					138'-3"	A1161	RT. VINGWALL	11	1					14'-8"				
A519	WEBS/WALL	5	430	2'-8"	1'-10"			3'-8"	A623E	TOP SLAB	11	50					34'-6"	A562	RT. VINGWALL	5	1					138'-3"	A1162	RT. VINGWALL	11	1					14'-8"				
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A522	WEBS/WALL	5	430	2'-8"	1'-10"			3'-8"	A626E	TOP SLAB	11	50					34'-6"	A565	LT. VINGWALL	5	1					138'-3"	A1165	RT. VINGWALL	11	1					14'-8"				
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A525	WEBS/WALL	5	430	2'-8"	1'-10"			3'-8"	A629E	TOP SLAB	11	50					34'-6"	A568	RT. VINGWALL	5	1					138'-3"	A1168	RT. VINGWALL	11	1					14'-8"				
A526	WEBS/WALL	5	430	2'-8"	1'-10"			3'-8"	A630E	TOP SLAB	11	50					34'-6"	A569	LT. VINGWALL	5	1					138'-3"	A1169	RT. VINGWALL	11	1					14'-8"				
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A531	WEBS/WALL	5	430	2'-8"	1'-10"			3'-8"	A635E	TOP SLAB	11	50					34'-6"	A574	RT. VINGWALL	5	1					138'-3"	A1174	RT. VINGWALL	11	1					14'-8"				
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A533	WEBS/WALL	5	430	2'-8"	1'-10"			3'-8"	A637E	TOP SLAB	11	50					34'-6"	A576	RT. VINGWALL	5	1					138'-3"	A1176	RT. VINGWALL	11	1					14'-8"				
A534	WEBS/WALL	5	430	2'-8"	1'-10"			3'-8"	A638E	TOP SLAB	11	50					34'-6"	A577	LT. VINGWALL	5	1					138'-3"	A1177	RT. VINGWALL	11	1					14'-8"				
A535	WEBS/WALL	5	430	2'-8"	1'-10"			3'-8"	A639E	TOP SLAB	11	50					34'-6"	A578	RT. VINGWALL	5	1					138'-3"	A1178	RT. VINGWALL	11	1					14'-8"				
A536	WEBS/WALL	5	430	2'-8"	1'-10"			3'-8"	A640E	TOP SLAB	11	50					34'-6"	A579	LT. VINGWALL	5	1					138'-3"	A1179	RT. VINGWALL	11	1					14'-8"				
A537	WEBS/WALL	5	430	2'-8"	1'-10"			3'-8"	A641E	TOP SLAB	11	50					34'-6"	A580	RT. VINGWALL	5	1					138'-3"	A1180	RT. VINGWALL	11	1					14'-8"				
A538	WEBS/WALL	5	430	2'-8"	1'-10"			3'-8"	A642E	TOP SLAB	11	50					34'-6"	A581	LT																				

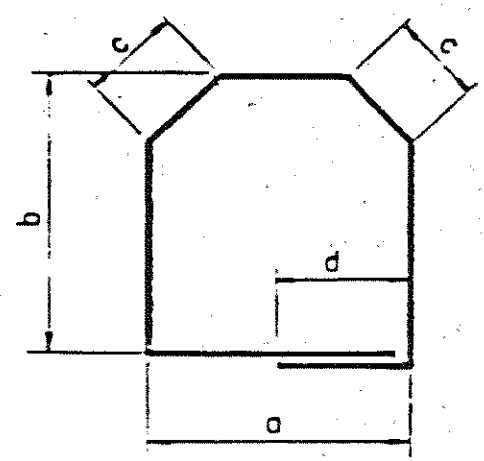
BILL OF STEEL

Const. No. 19014-312-44

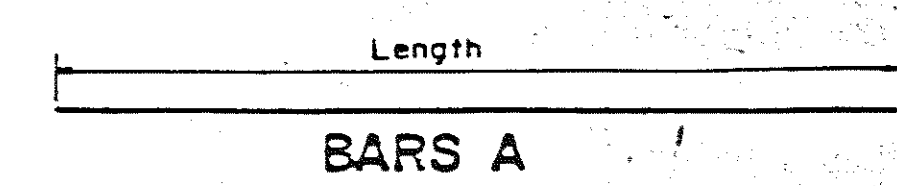
ABUTMENT NO. 2 (CONT.)										BENT NO. 1																	
BAR	LOCATION	SIZE	NO REQD	BENDING DIMENSIONS				LENGTH	BAR	LOCATION	SIZE	NO REQD	BENDING DIMENSIONS				LENGTH	BAR	LOCATION	SIZE	NO REQD	BENDING DIMENSIONS				LENGTH	
				a	b	c	d					a	b	c	d					a	b	c	d				
SERIES	WINGWALL	11	2	LENGTH VARIES FROM					L450	COLUMN	4	4	7'-2"	1'-0"	12'-8"		20'-7"										
A1144	25'-11 3/4" TO 45'-11 3/4" IN INC. OF 1'-2 3/8" (17 BARS)	11	2	LENGTH VARIES FROM 41'-8"					SERIES	COLUMN	4	4	LENGTH 'X' VARIES FROM 7'-3" TO 10'-8" IN INC. OF 1'-3/8" (23 BARS)														
A1145	9'-6" TO 24'-0" IN INC. OF 6 1/2" (28 BARS)	11	2	LENGTH VARIES FROM				46'-0"					1'-0" 12'-8"				55'-11"										
A1146	WINGWALL	11	12					8'-2"																			
A1147	WINGWALL	11	4					16'-8"	YD450	COLUMN	4	336	2'-8"	4 1/2"					3'-1"								
A1148	WINGWALL	11	4					29'-1"																			
A1149	WINGWALL	11	4					54'-8"	DB50	FOOTING	8	98	17'-6"					19'-4"									
A1150	WINGWALL	11	4					41'-5"	DB51	FOOTING	8	36	21'-4"					26'-4"									
A1151	WINGWALL	11	4					49'-0"																			
A1152	WINGWALL	11	4					47'-5"	A950	COLUMN	9	100					29'-0"										
A1153	WINGWALL	11	4					46'-3"																			
SERIES	WINGWALL	11	2	LENGTH VARIES FROM					C950	COLUMN	9	100	11'-0"				12'-6"										
A1154	8'-11" TO 24'-9 3/4" IN INC. OF 7" (28 BARS)	11	2	LENGTH VARIES FROM				47'-4"																			
SERIES	WINGWALL	11	2	LENGTH VARIES FROM																							
A1155	29'-4" TO 48'-6" IN INC. OF 1'-2 3/8" (17 BARS)	11	2	LENGTH VARIES FROM				66'-7"																			
A44E	BACKWALL	4	4					39'-4"																			
F44OE	SIDEWALK	4	2	2'-0"	1"	6'-2"	11'-0"	9'-2"																			
Z44OE	SIDEWALK	4	2	2'-0"	1'-2"			5'-1"																			
A74OE	BACKWALL	7	77					5'-8"																			
H64OE	BACKWALL	6	153	8"	3'-0"			6'-6"																			
C90OE	BACKWALL	9	145	4'-0"			5'-11"																				
C60OE	BACKWALL	6	73	3'-0"			3'-11"																				



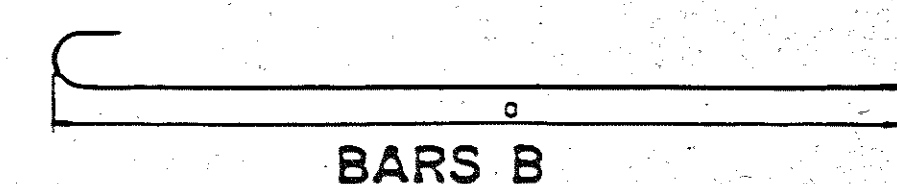
BARS X



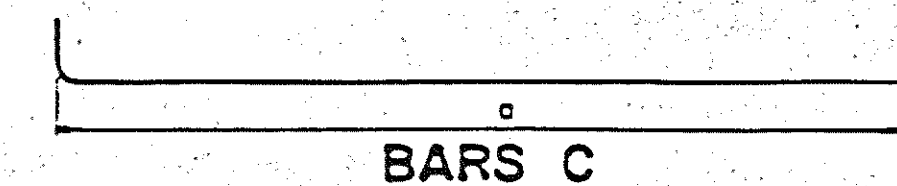
BARS M



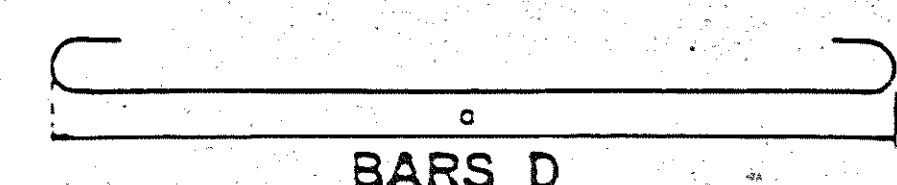
BARS A



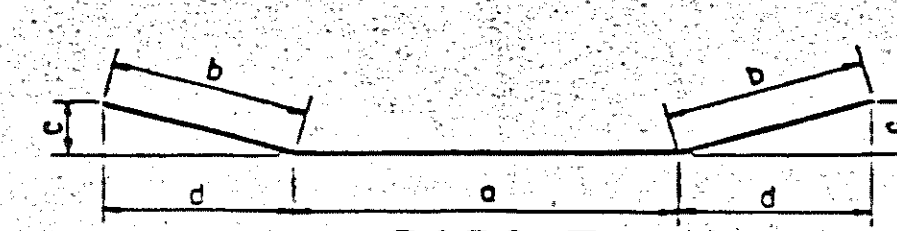
BARS B



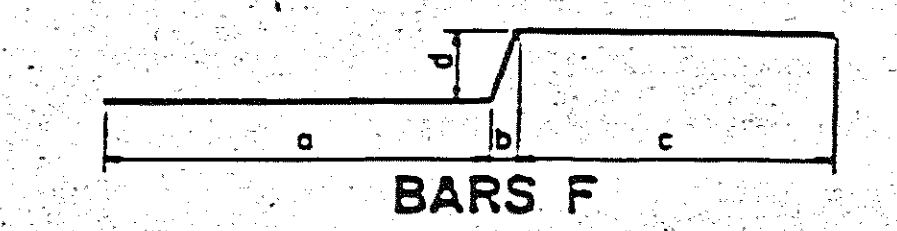
BARS C



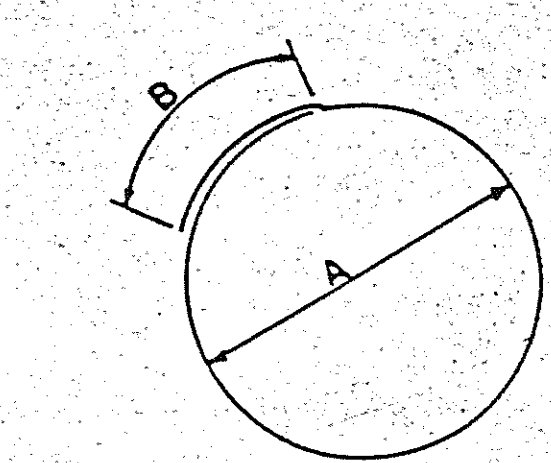
BARS D



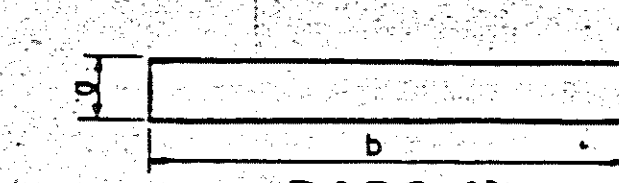
BARS E



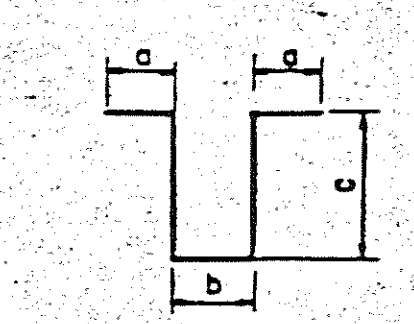
BARS F



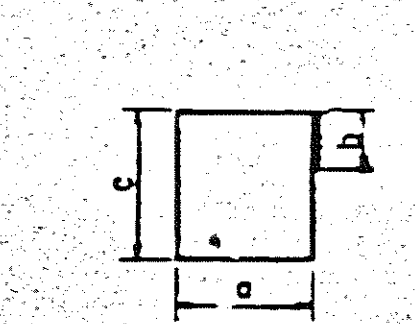
BARS T



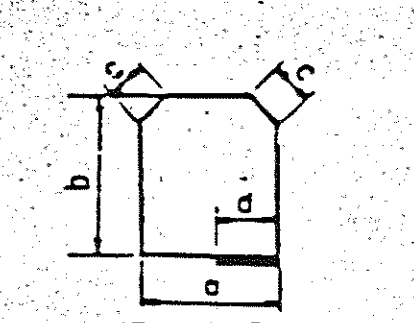
BARS H



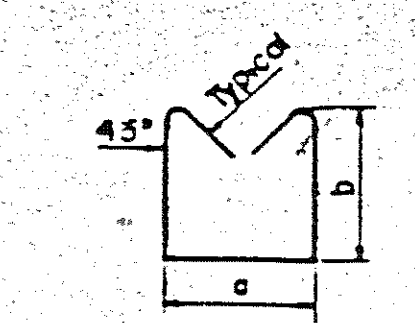
BARS K



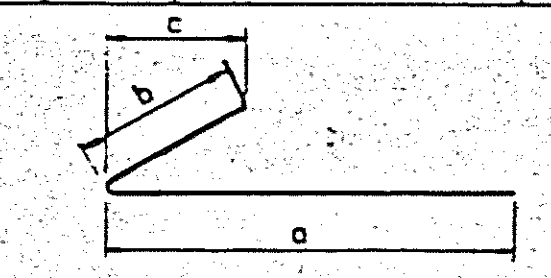
BARS L



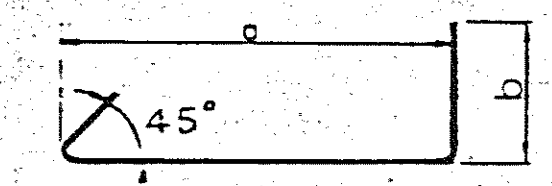
BARS M



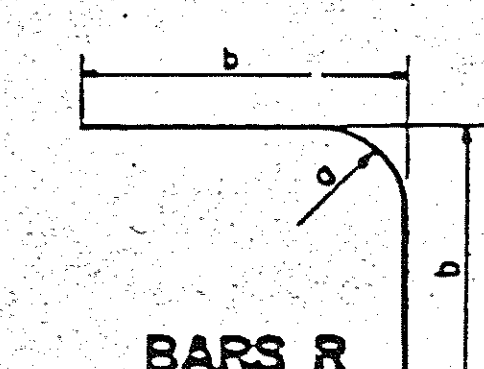
BARS S



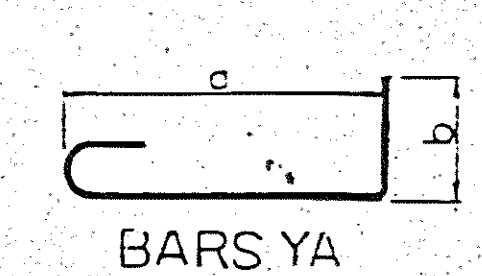
BARS CB



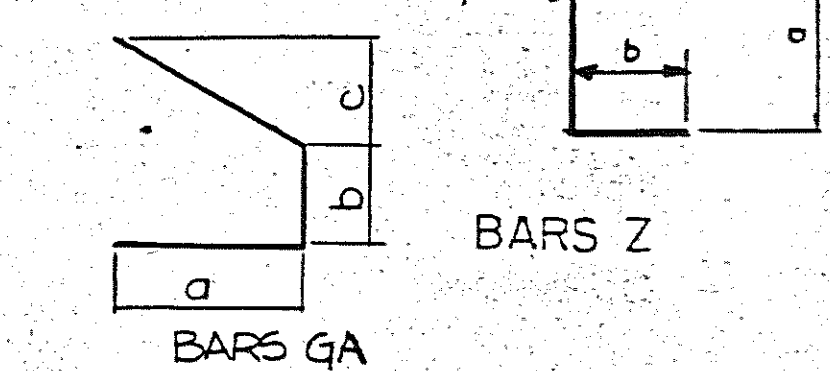
BARS YB



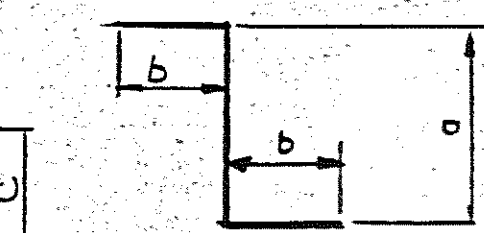
BARS R



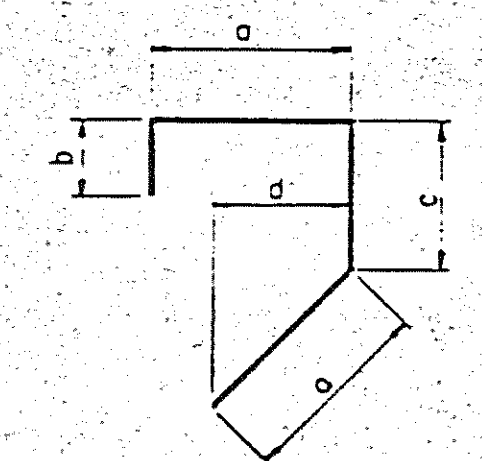
BARS YA



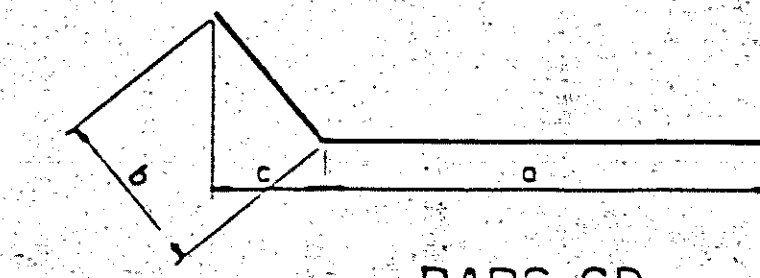
BARS GA



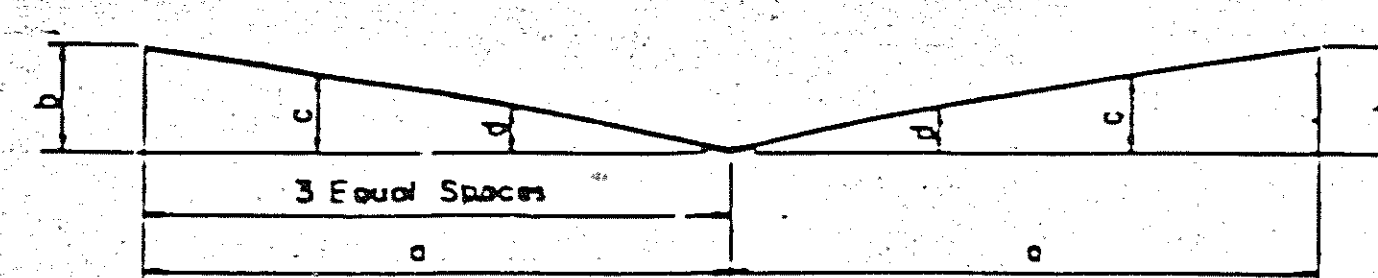
BARS Z



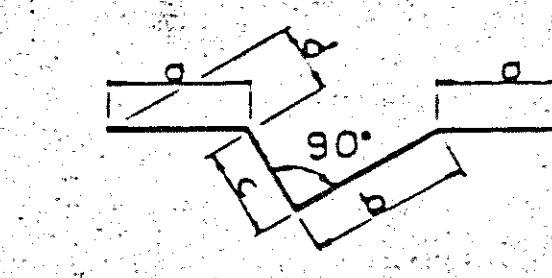
BARS J



BARS CD



BARS V



BARS JX

REINFORCING STEEL CODE

TYPE	SIZE	SERIES
A	5	06

NOTES: 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: KEN ELROD DATE: 6-81
 DRAWN BY: KEN OVENS DATE: 6-82
 SUPERVISED BY: R.L. HARRISON DATE: 6-82
 CHECKED BY: DATE:

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
BILL OF STEEL
 GRANNY WHITE PIKE OVER
 INTERSTATE 440
 STATION 295+37.00
 DAVIDSON COUNTY
 1982

FOR BEST COPY CONTACT: *Robert J. Foveall*
 ENGINEER
 APPROVED: *Louis Evans*
 DIRECTOR OF HIGHWAYS

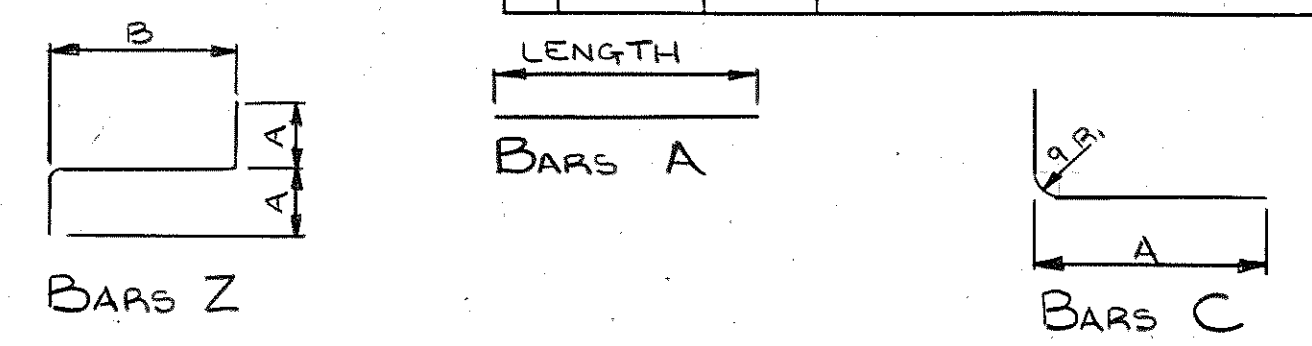
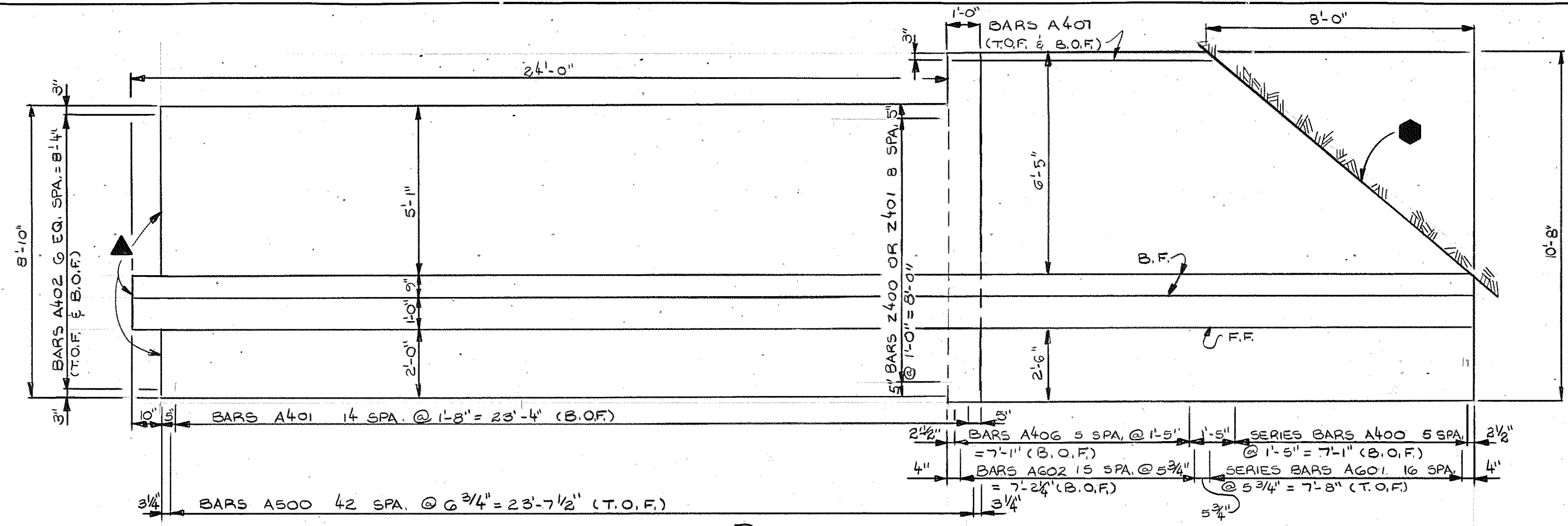
M-110-54

5-0-2

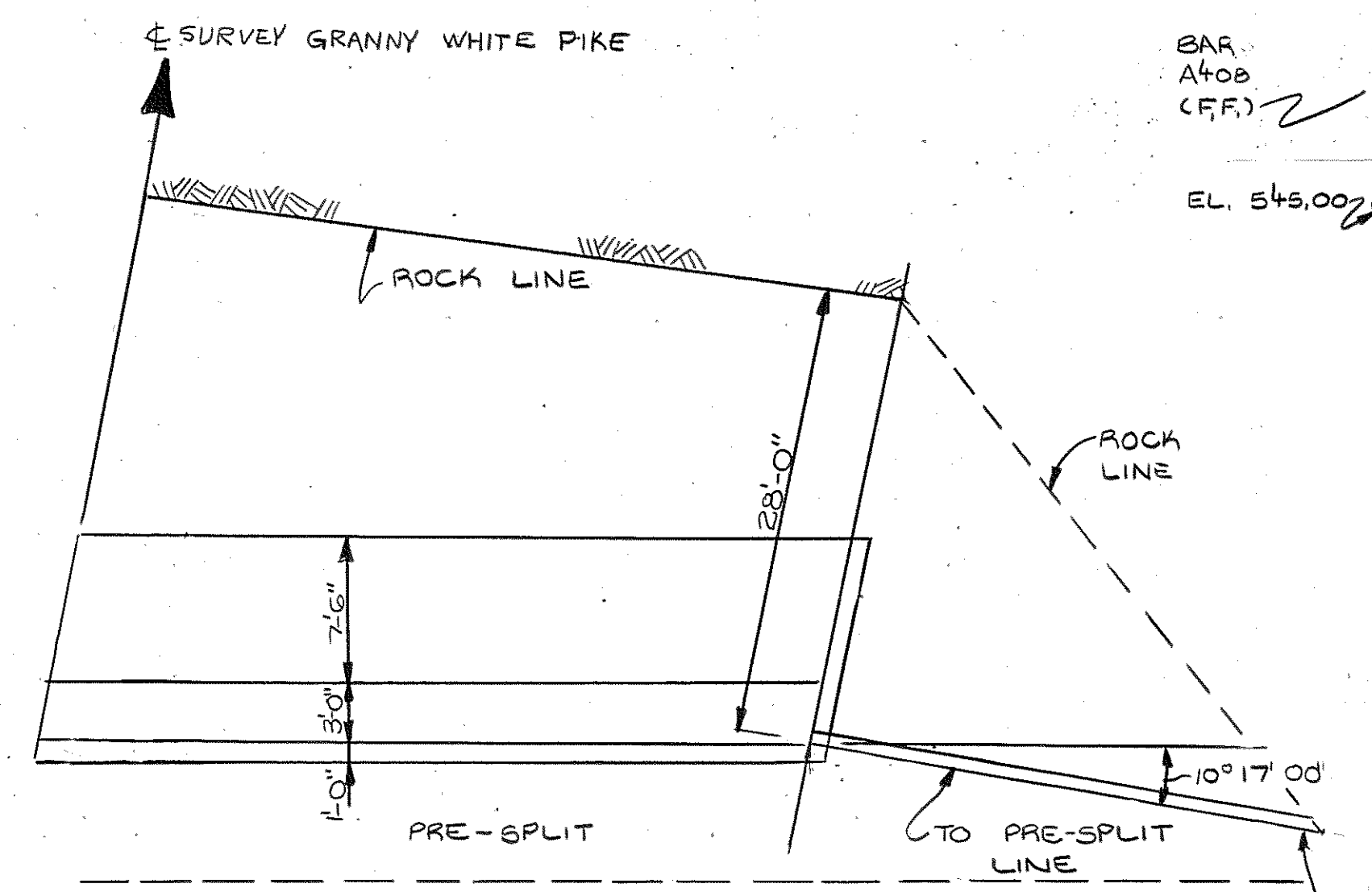
PROJECT NO.	YEAR	SHEET NO.
E-440-4(54)209	1984	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	6-18-84	HMB	ADDED RET. WALL DWG. NO. M-110-54A

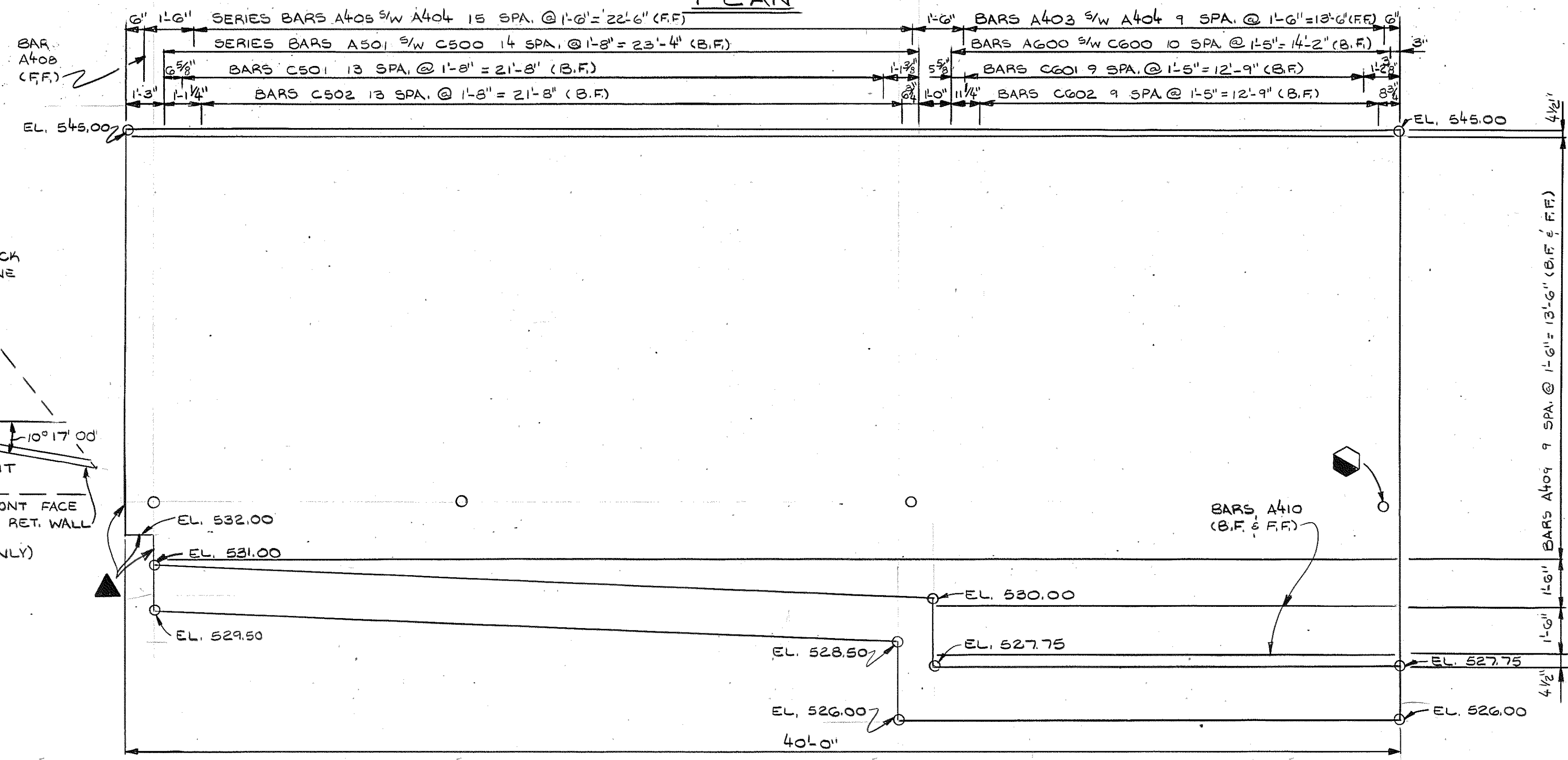
- DENOTES: APPROXIMATE LOCATION OF ROCK CUT.
- ▲ DENOTES: 1/2" BITUMINOUS FIBERBOARD BETWEEN ABUTMENT AND RETAINING WALL.
- ◻ DENOTES: 4" Ø WEEP HOLES SEE DWG. NO. M-103-137.



PLAN



PLAN OF STRUCTURE NO. 1
(GRANNY WHITE PIKE BRIDGE) (ABUT. NO. 2 RIGHT ONLY)



ELEVATION

BILL OF STEEL

BARS	LOCATION	SIZE	NO. REQD	BENDING DIMENSIONS				LENGTH
				A	B	C	D	
SER. A400	FOOTING	4	1					40'-9"
A401	FOOTING	4	15					8'-6"
A402	FOOTING	4	14					38'-10"
A403	WALL	4	10					16'-11"
A404	WALL & FOOTING	4	26					3'-0"
SER. A405	WALL	4	1	LENGTH VARIES FROM 13'-8" TO 14'-8" IN INC. OF 3/4" (16 BARS)				226'-8"
A406	FOOTING	4	6					10'-4"
A407	FOOTING	4	2					7'-10"
A408	WALL	4	1					12'-10"
A500	FOOTING	5	43					8'-6"
SER. A501	WALL	5	1	LENGTH VARIES FROM 14'-8" TO 13'-8" IN INC. OF 0 3/4" (15 BARS)				212'-6"
A600	WALL	6	11					17'-0"
SER. A601	FOOTING	6	1	LENGTH VARIES FROM 3'-11" TO 10'-4" IN INC. OF 4 3/4" (17 BARS)				121'-3"
A602	FOOTING	6	16					10'-4"
C500	WALL & FOOTING	5	15	3'-6"				6'-8"
C501	WALL & FOOTING	5	14	8'-11"				12'-11"
C502	WALL & FOOTING	5	14	8'-6"				8'-8"
C600	WALL & FOOTING	6	11	4'-11"				7'-11"
C601	WALL & FOOTING	6	10	9'-7"				13'-4"
C602	WALL & FOOTING	6	10	6'-4"				10'-2"
Z400	FOOTING	4	9	2'-0"	2'-6"			6'-5"
Z401	FOOTING	4	9	2'-0"	2'-8"			6'-2"
A409	WALL	4	20					29'-8"
A410	WALL	4	4					14'-8"

NOTE: FOR ADDITIONAL DETAILS SEE DWGS. NO. M-103-132, M-103-133, AND M-103-137.

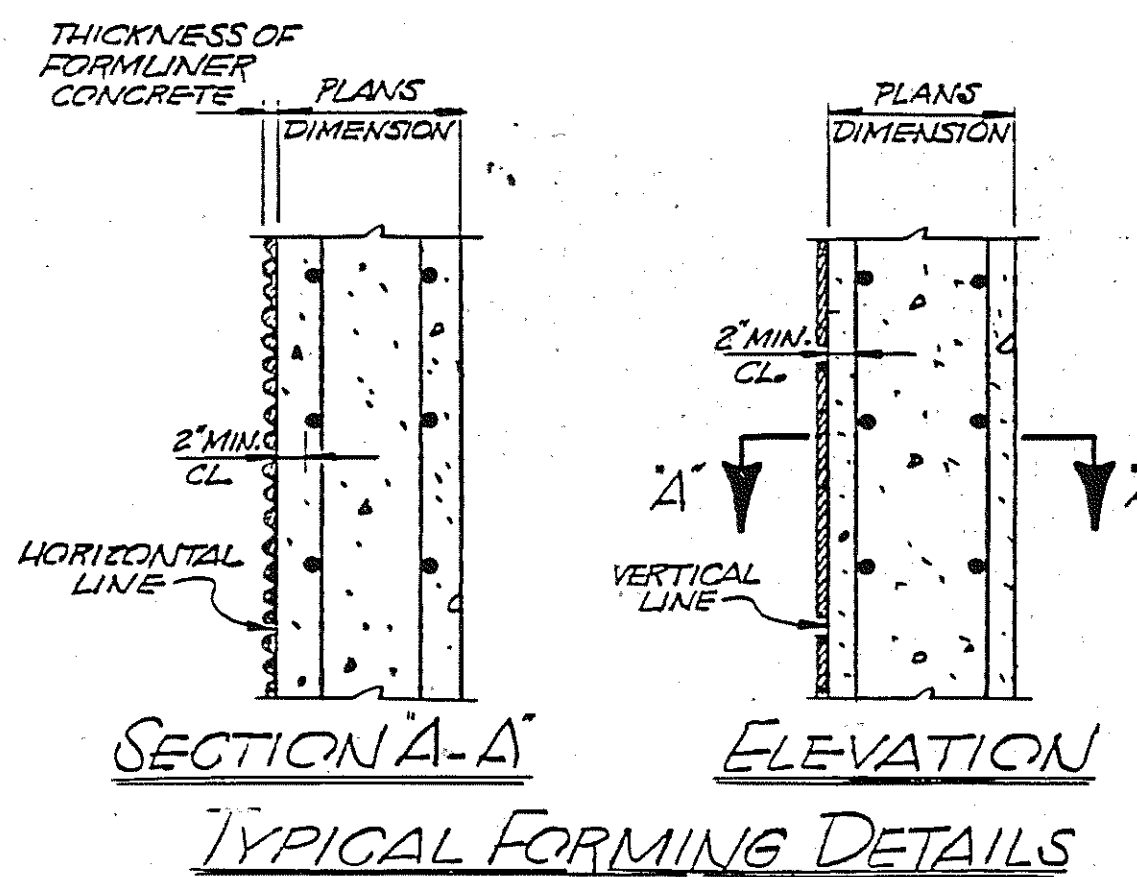
ESTIMATED QUANTITIES

204-05	204-04-01	604-03-02	604-03-01	710-10	710-11
ROCK DAILING (BRIDGES) L.F.	ROCK EXCAVATION (BRIDGES) C.Y.	STEEL BAR REINFORCEMENT (BRIDGES) LBS.	CLASS "A" CONCRETE (BRIDGES) C.Y.	6" PERFOR. CM PIPE (18 GA) W/ POROUS BACKFILL L.F.	6" CM. PIPE UNDERDRAINS (18 GA) L.F.
24	18	3,703	55.6	38	6

NOTE: NO REINFORCING STEEL SHALL BE ORDERED UNTIL FINAL FOOTING ELEVATIONS ARE ESTABLISHED.

NOTE: CONSTRUCTION OF RETAINING WALLS MAY REQUIRE SHEETING OR SHORING TO PROTECT ADJACENT PROPERTY, EXISTING TRAFFIC AND FOUNDATION EXCAVATIONS. SUCH SHEETING OR SHORING IS CONSIDERED INCIDENTAL TO THE CONSTRUCTION OF THE RETAINING WALL AND THE COST OF SUCH SHEETING OR SHORING IS TO BE INCLUDED IN THE PRICE FOR OTHER ITEMS BID ON.

FORMWORK NOTE:
THESE DETAILS ARE TYPICAL FOR ALL STRUCTURAL ELEMENTS REQUIRING DECORATIVE FORMLINERS EXCEPT CONCRETE PARAPETS. PORTIONS OF THE RETAINING WALL DESIGNATED TO RECEIVE A DECORATIVE FORM FINISH SHALL BE FORMED USING A FORMLINER SIMILAR TO BURKE FORMLINER B6308 CONCRETE HARP, LITOTEX FORMLINER FRACTURED FINISH GROOVED T-150, SIMONS 3/4" NARROW FRACTURED FIN. FIG 30909-9 OR EQUAL. AFTER STRIPPING FORMLINERS, THE DECORATIVE FORM FINISHED AREAS SHALL RECEIVE A CLASS I, ORDINARY FINISH IN ACCORDANCE WITH SUBSECTION G04-23 OF THE STANDARD SPECIFICATIONS. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR APPROVAL A SAMPLE CASTING USING THE FORMLINER TO BE FURNISHED. UNDER NO CIRCUMSTANCES WILL MECHANICALLY FRACTURED SURFACES BE ALLOWED. THE COST OF ALL CONCRETE FINISHES SHALL BE INCLUDED IN THE UNIT PRICE OF ITEMS BID ON.



TYPICAL FORMING DETAILS

DESIGNED BY KENNY ELROD DATE 6-84
 DRAWN BY KEVIN MARTINKO DATE 6-84
 SUPERVISED BY MARILYN BRADY DATE 6-84
 CHECKED BY Z. ROOKS DATE 6-84

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 RETAINING WALL @ ABUTMENT 2
 GRANNY WHITE PIKE AND INTERSTATE 440
 STATION 295+37.00
 DAVIDSON COUNTY
 1984
 CORRECT *Levellan L. Howell*
 ENGINEER OF STRUCTURES
 APPROVED *James Evans*
 DIRECTOR OF HIGHWAYS

M-110-54C

CLASS "A" GRADING "D" 44. cy.