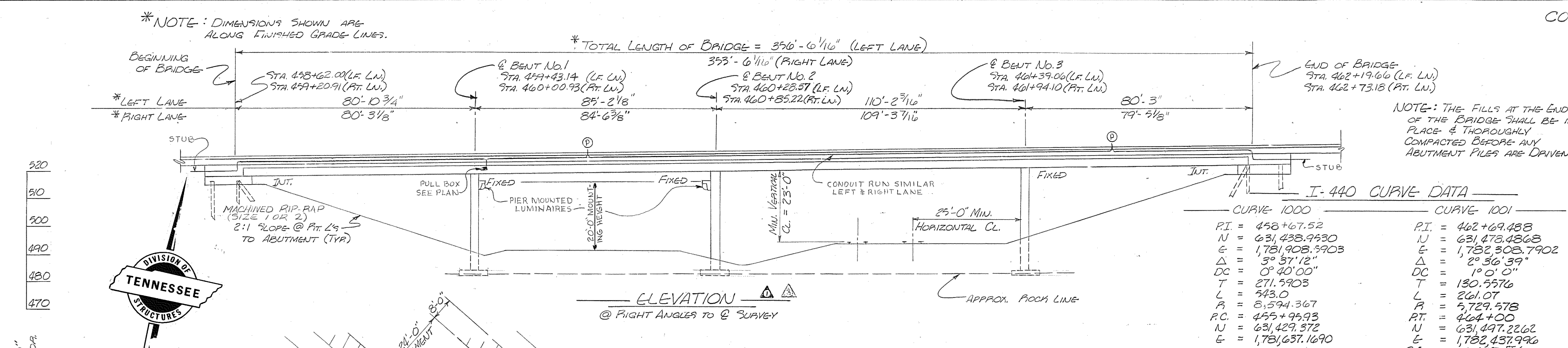


PROJECT NO.	YEAR	SHEET NO.
1-24-1(55)51	1982	

REVISIONS

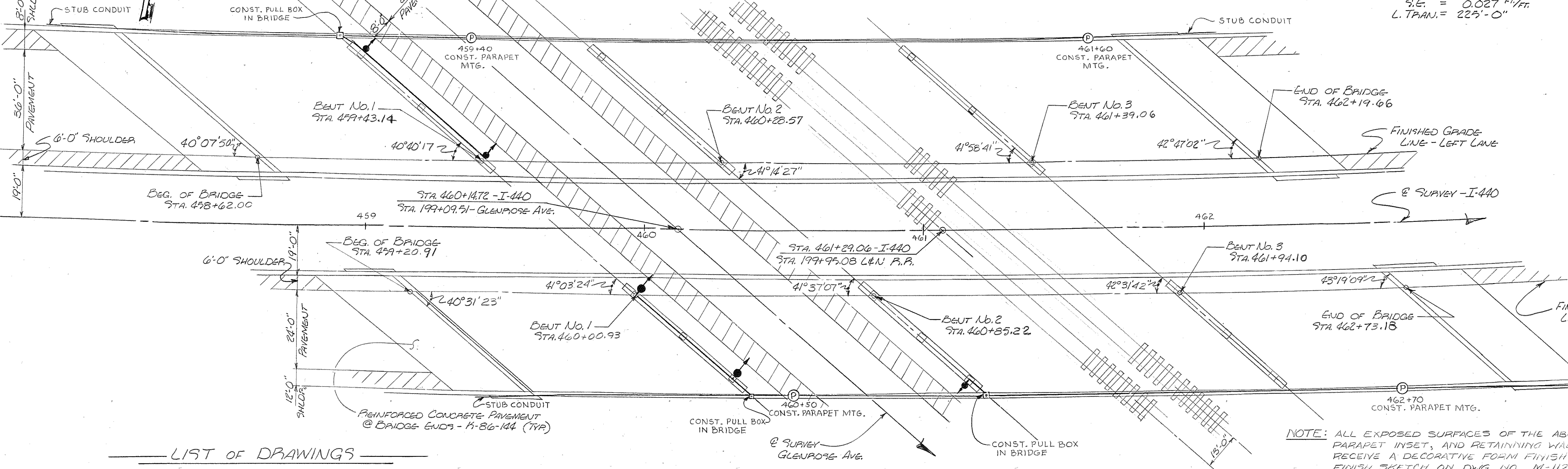
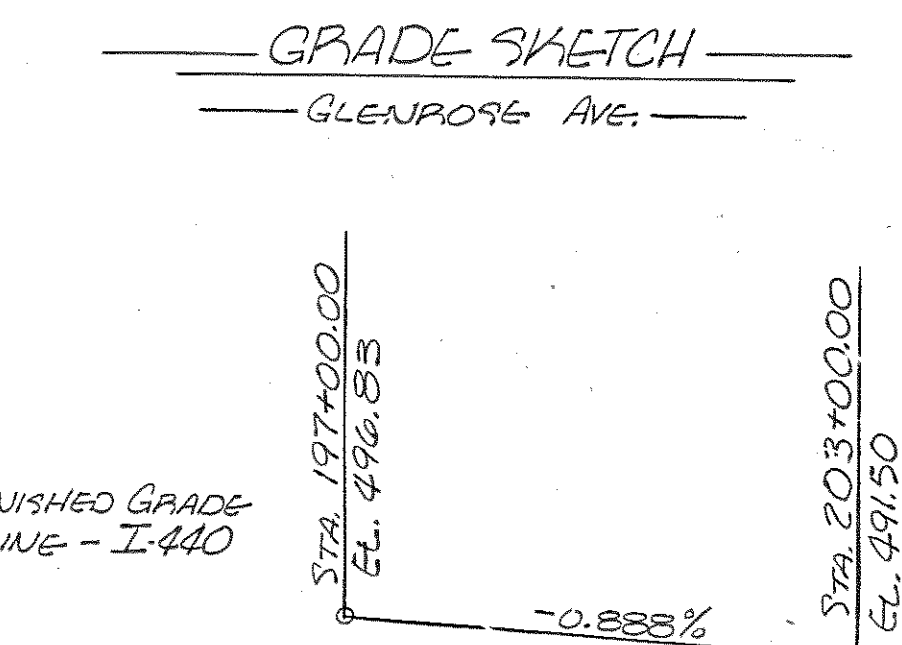
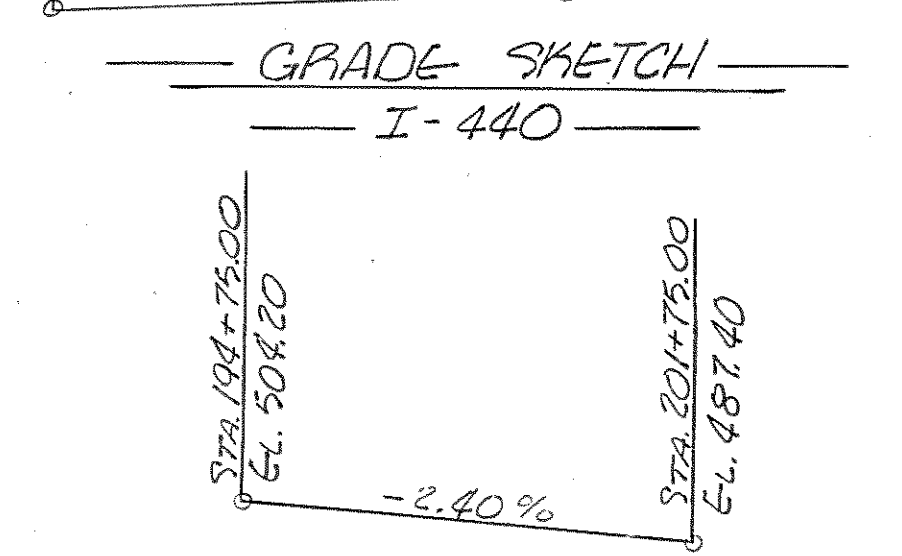
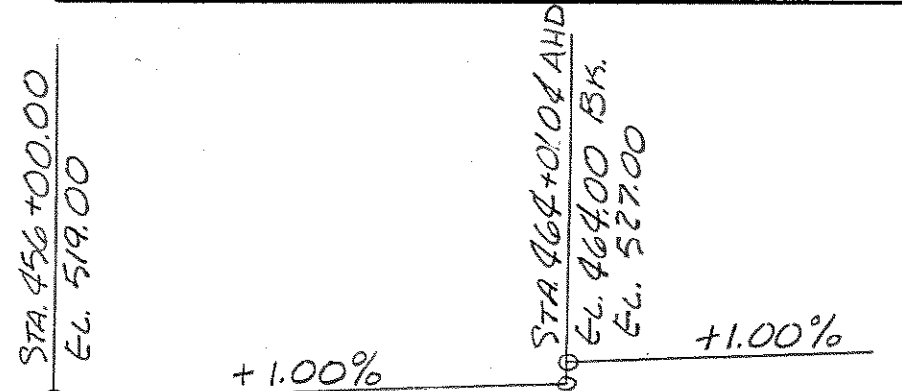
NO.	DATE	BY	BRIEF DESCRIPTION
1	1/24/83	F.C.	LIGHTING
2	3-14-83	N.C.B.	ADDED LATEST REVISION DATES.
3	7-25-83	W.C.B.	RAISED F.I.C. STA. TO TWO (2) PLACES & THOROUGHLY COMPACTED BEFORE ANY ABUTMENT PILES ARE DRIVEN.
4	4-11-84	N.C.B.	ADDED LATEST REVISION DATES & CHANGE LATEST REVISION DATE.

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



I-440 CURVE DATA

CURVE 1000		CURVE 1001	
PI = 458+67.52	N = 631,438.9430	PI = 462+69.488	N = 631,478.4868
E = 1,781,908.5903	Δ = 3° 37' 12"	E = 1,782,308.7902	Δ = 2° 36' 39"
DC = 0° 40' 00"	T = 271.5903	DC = 1° 0' 0"	T = 130.5576
L = 443.0	F = 8,594.367	L = 261.07	F = 5,729.578
P.C. = 455+95.93	N = 631,429.372	P.T. = 464+00	N = 631,497.2262
E = 1,781,637.1690	E = 1,781,637.1690	E = 1,782,437.996	E = 1,782,437.996
		S.E. = 0.027 F'/FT	
		L. TRAN. = 225'-0"	



NOTE: ALL EXPOSED SURFACES OF THE ABUTMENT, BENTS, PARAPET INSET, AND RETAINING WALLS SHALL RECEIVE A DECORATIVE FORM FINISH. SEE SURFACE FINISH SKETCH ON DWG. NO. M-112-60.

LIST OF DRAWINGS

TITLE	DWG. NO.	LAST REV. DATE
LAYOUT OF BRIDGES	M-112-59	7-25-83; 4-11-84
GENERAL NOTES & ESTIMATED QUANTITIES	M-112-60	3-14-83; 7-25-83
FOUNDATION DATA	M-112-61	12-7-82
STAKE-OUT	M-112-62	7-25-83
SUPERSTRUCTURE - LEFT LANE	M-112-63	1-10-83
SUPERSTRUCTURE - RIGHT LANE	M-112-64	1-10-83; 1-24-83
SUPERSTRUCTURE - DETAILS - LF. LN.	M-112-65	4-12-83
SUPERSTRUCTURE - DETAILS - RT. LN.	M-112-66	4-12-83
STRUCTURAL STEEL	M-112-67	7-25-83
STRUCTURAL STEEL	M-112-68	7-25-83
ABUTMENTS No. 1 & 2 - LF. LN.	M-112-69	3-14-83; 7-25-83
ABUTMENTS No. 1 & 2 - RT. LN.	M-112-70	3-14-83; 7-25-83
BENTS No. 1, 2, & 3 - LF. LN.	M-112-71	7-25-83
BENTS No. 1, 2, & 3 - RT. LN.	M-112-72	7-25-83
BILL OF STEEL	M-112-73	3-14-83; 7-25-83

LIST OF STANDARD DRAWINGS

TITLE	DWG. NO.	LAST REV. DATE
REINFORCING BAR SUPPORT	K-80-14	8-27-76
MISCELLANEOUS ABUTMENT AND DRAINAGE DETAILS	K-85-150	1-9-75
REINFORCED CONCRETE PAVEMENT AT BRIDGE ENDS	K-86-144	7-17-81
BRIDGE RAILING - CONCRETE PARAPET	M-28-1	7-17-81
TENNESSEE PRECAST/PREFABRICATION BRIDGE DECK PANELS	M-103-199 & 50	7-7-82
STD. PILE DETAILS	H-5-111	11-27-73

LIST OF SPECIAL PROVISIONS

NO.	TITLE	LAST REV. DATE
107A	REGARDING APPROVAL OF SHOP DRAWINGS	9-8-81
602	REGARDING SECTION 602-STEEL STRUCTURES	9-8-81
602A	REGARDING SECTION 602-STEEL STRUCTURES	9-8-81
907A	REGARDING EPOXY COATED REINFORCING STEEL	9-8-81

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS
LAYOUT OF BRIDGES
INTERSTATE 440 OVER GLENROSE AVENUE
AND L&N RAILROAD
STATION 460+14.72
DAVIDSON COUNTY
1982

DESIGNED BY: BOWMAN DATE: 8-82
DRAWN BY: J.W. PATTON DATE: 8-82
SUPERVISED BY: B.W. & B.W.H. DATE: 8-82
CHECKED BY: DATE:

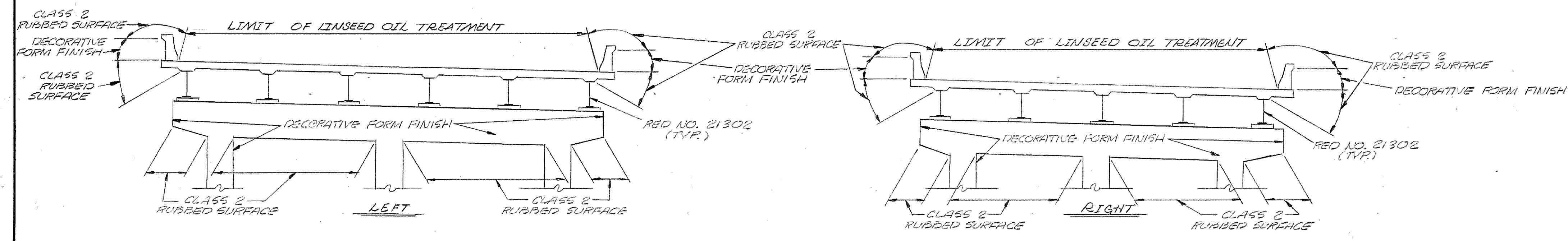
CORRECT: Clifton L. Lovell
ENGINEER OF STRUCTURES
APPROVED: Lewis Evans
DIRECTOR OF HIGHWAYS

M-112-59

CLASS "A" GRADING "D" = 35 CY.

PROJECT NO.	YEAR	SHEET NO.
IR-24-1(5)55	1982	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	1-10-82	WCB	Added Note
2	1-24-82	F.C.	LIGHTING
3	3-14-82	WCB	ADDED FILES FLANGED REIN. QUANTITY
4	1-25-82	WCB	CHANGED REIN. QUANTITY



SURFACE FINISH SKETCH
SEE TYPICAL FORMING DETAILS AND NOTES, THIS SHEET.

GENERAL NOTES CONT.
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 P.S.I.
MAXIMUM WATER/CEMENT 7.0 GAL/SACK OF CEMENT
AIR CONTENT 6% ± 2%
PAVEMENT WILL BE UNDER ITEM 604-01.12

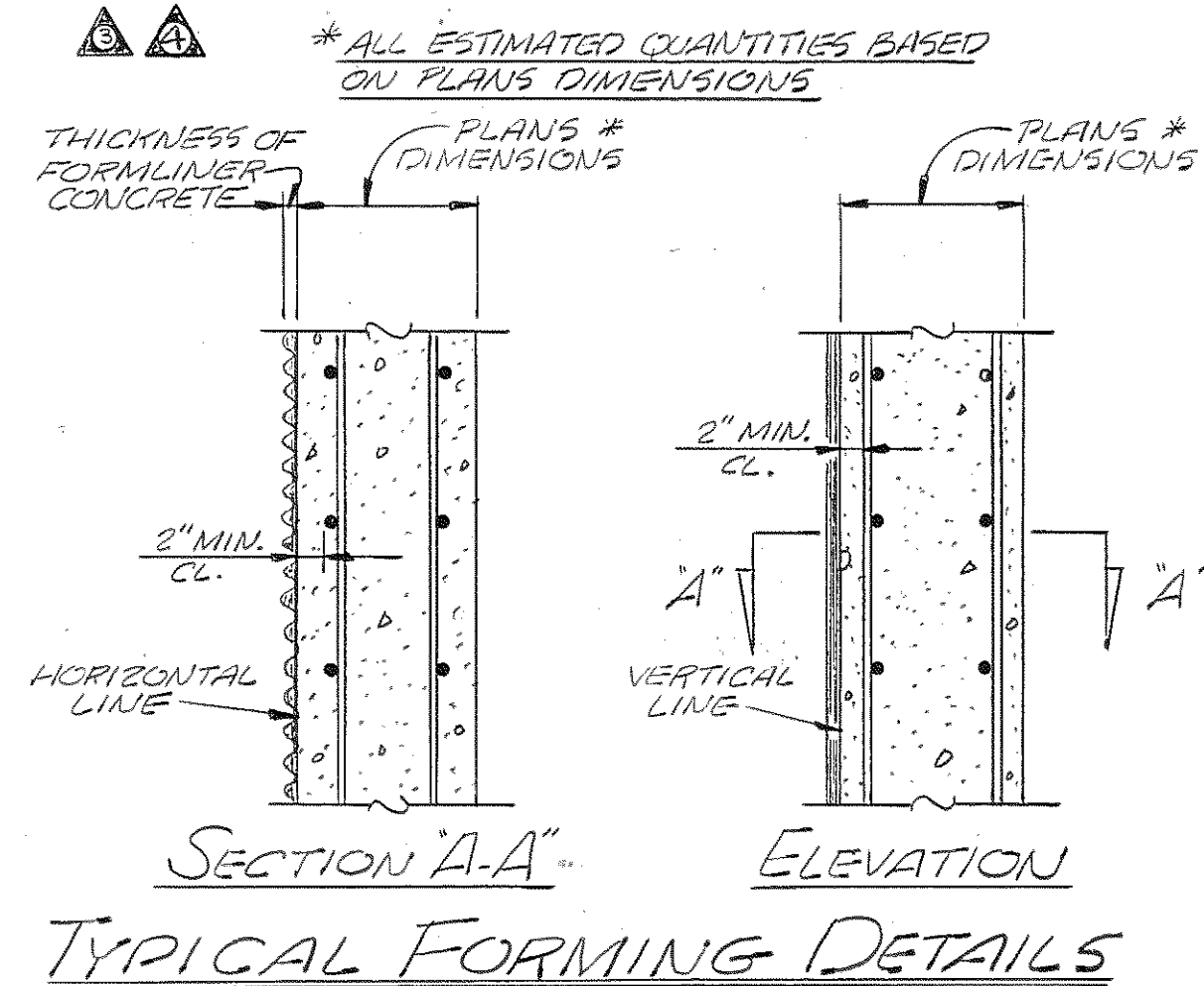
GENERAL NOTES
SPECIFICATIONS: STANDARD ROAD AND BRIDGE SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION, MARCH, 1981 EDITION.
LOADING: HS20-44 WITH ALTERNATE MILITARY. DESIGNAL SPECIFICATIONS: AASHTO 1977 EDITION WITH ADDENDA.
CONCRETE: TO BE CLASS "A" (CAST IN PLACE) f'c = 2,000 P.S.I.
BRIDGE DECK FORMS: BRIDGE DECK FORMS FOR CONCRETE DECKS SHALL BE CONSTRUCTED USING EITHER REMOVABLE FORMS OR PERMANENT FORMS. PERMANENT FORMS MAY BE EITHER REMAIN-IN-PLACE STEEL OR PRECAST, PRESTRESSED CONCRETE PANELS. IN EITHER CASE, FORMS SHALL BE ATTACHED BY MEANS OTHER THAN WELDING TO SUPPORT MEMBERS. THE CONTRACTOR SHALL TAKE STEPS TO ASSURE THE STABILITY OF THE EXTERIOR GIRDER AGAINST TWISTING OR OVERTURNING DURING SLAB POURING OPERATIONS.
REINFORCING STEEL: TO BE ASTM A615 GRADE 60. STANDARD CRSI HOOK DETAILS APPLY UNLESS OTHERWISE NOTED ON BILL OF STEEL. BENDING DIMENSIONS SHOWN ARE BASED ON GRADE 60. SPACING DIMENSIONS ARE CENTER TO CENTER UNLESS OTHERWISE NOTED ON DETAIL DRAWINGS. THE SUFFIX "E", FOR BARS SO MARKED, DENOTES EPOXY COATED REINFORCEMENT. SEE SPECIAL PROVISION 907A.
SPECIAL NOTE FOR RAILROAD CROSSING: THE CONTRACTOR SHALL CONDUCT HIS WORK SO AS TO PROTECT THE RAILROAD TRACKS AND PROPERTIES FROM ANY DAMAGE. THE WORK SHALL BE DONE IN ACCORDANCE WITH REGULATIONS STIPULATED BY THE L. & N. RAILROAD SO AS TO MAINTAIN CLEARANCE AND NOT INTERRUPT TRAFFIC.
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 BY THE ENGINEER, FROM THE RESULTS OBTAINED BY THE ENGINEER SHALL DETERMINE THE FINAL FOOTING ELEVATIONS. NO REINFORCING STEEL FOR BENT COLUMNS SHALL BE ORDERED UNTIL FINAL FOOTING ELEVATIONS HAVE BEEN DETERMINED.
BRIDGE RAIL SYSTEM: BUILD PARAPETS ACCORDING TO STANDARD DRAWING, M-28-1.
SHOP DRAWINGS: SEE SPECIAL PROVISION NO. 105A.
BEARING DEVICES: BEARING DEVICES SHALL BE IN ACCORDANCE WITH THE DETAILS AND DIMENSIONS SHOWN ON DRAWING, M-112-62. THE CONTRACTOR MAY ALSO SUBMIT ALTERNATE DETAILS FOR APPROVAL.
RADIOGRAPHIC, ULTRASONIC, AND MAGNETIC INSPECTION: SEE SPECIAL PROVISION NO. 602. NOTES ON DRAWING NO. M-112-62.
STEEL STRUCTURES: SEE TENNESSEE STANDARD SPECIFICATIONS SECTION 602 AND NOTES ON DRAWING NO. M-112-62.
STRUCTURAL STEEL: SEE NOTES ON DRAWING, NO. M-112-62.
FILES: TO BE HPI0 X42 DRIVEN TO REFUSAL ON ROCK OR A MINIMUM BEARING OF 46 TONS.

ESTIMATED QUANTITIES

ITEM NO.	204-02.01	204-04.01	204-05	604-01.12	604-02.03	604-03.01	604-03.02	604-03.03	714-01.11	620-03	710-10	710-11	602-14.04	602-18.04	602-40.04	709-05.03	606-22.03	606-32.03	606-42.03
ITEM	DRY EXCAVATION (BRIDGES) C.Y.	ROCK EXCAVATION (BRIDGES) C.Y.	ROCK DRILLING (BRIDGES) L.F.	CLASS "A" CONCRETE (BRIDGE DECK) C.Y.	EPOXY COATED REINFORCING STEEL LB.	CLASS "A" CONCRETE (BRIDGES) C.Y.	STEEL BAR REINFORCEMENT (BRIDGES) LB.	LINSEED OIL TREATMENT S.Y.	STRUCTURE LIGHTING (T-440 OVER GLENROSE AVE. & L.N. R.R.) L.S.	CONCRETE PARAPET (M-28-1) L.F.	6" PERFORATED C.M. PIPE (18 GA.) W/ FOUR (4) BACKFILL L.F.	6" C.M. PIPE UNDERDRAINS (18 GA.) L.F.	STEEL STRUCTURES (ERECTOR) L.S.	STEEL STRUCTURES (FURNISH DOMESTIC) L.S.	STEEL STRUCTURES (FURNISH FOREIGN) L.S.	MACHINED RIP-RAP (SIZE 6R2) C.Y.	STEEL PILES (10 INCH) (DRIVING) L.F.	STEEL PILES (10 INCH) (FURNISH DOMESTIC) L.F.	STEEL PILES (10 INCH) (FURNISH FOREIGN) L.F.
RIGHT LANE				402.2	188,939	31.9	2,070				75	13					260	260	260
ABUTMENT NO.1		77	12			21.2	4,791												
BENT NO.1	141	9	6			78.9	13,739												
BENT NO.2	94	9	6			81.7	14,238												
BENT NO.3	235	9	6			80.8	14,073												
ABUTMENT NO.2		74	12			20.5	4,360				71	13					300	300	200
PAVEMENT @ BRIDGE ENDS					7,509	108.4	25,085												
SUB TOTAL	470	178	42	402.2	196,448	423.4	78,376	1578	1	741	146	36	1	1	1	268	560	560	560
LEFT LANE				486.2	228,877	37.9	2,230				90	18					290	290	290
ABUTMENT NO.1		83	12			23.8	5,367												
BENT NO.1	141	9	6			81.1	16,454												
BENT NO.2	94	9	6			84.0	16,962												
BENT NO.3	235	9	6			83.1	16,819												
ABUTMENT NO.2		79	12			22.2	5,188				86	18					360	360	360
PAVEMENT @ BRIDGE ENDS					9,033	92.0	30,282												
SUB TOTAL	470	189	42	486.2	237,910	424.1	93,302	1,938	1	760	176	36	1	1	1	295	640	640	640
GRAND TOTAL	940	376	84	888.4	434,358	847.5	171,678	3,516	2	1501	322	72	1	1	1	563	1,200	1,200	1,200

- NOTE: EXCAVATION BASED ON LOWER ROAD PROFILE.
- NOTE: COST OF POLYETHYLENE SHEETING AND ALL MISCELLANEOUS ITEMS NECESSARY FOR INSTALLATION TO BE INCLUDED IN COST OF PERFORATED C.M. PIPE.
- NOTE: THE COST OF 10 THREADED STEEL INSERTS AND 10 7/8" Ø 2 1/2" HEX HEAD BOLTS (A307), TO BE INCLUDED IN BRIDGE ITEMS BID ON.
- NOTE: LUMP SUM: TOTAL ESTIMATED WEIGHT OF 829,239 lbs.

26,415	lbs. A36	RIGHT LANE
345,349	lbs. A572	
2,489	lbs. A325	LEFT LANE
33,776	lbs. A36	
418,288	lbs. A572	
2,920	lbs. A325	
- TOTAL ESTIMATED WEIGHT FOR A36 INCLUDES SHEAR CONNECTORS AND BEARING DEVICES.
- THE COST OF 22 ELASTOMERIC PADS TO BE INCLUDED IN STRUCTURAL STEEL QUANTITY.
- LUMP SUM FOR STRUCTURE LIGHTING, ITEM 714-01.11 INCLUDES 955 FT. 1" CONDUIT WITH 5-4" x 4" x 3" JUNCTION BOXES, 3-4" x 4" x 3" PULL BOXES, 4- PARAPET LUMINAIRE SUPPORTS AND ALL NECESSARY MATERIALS FOR INSTALLATION OF STRUCTURE LIGHTING.



NOTE: THESE DETAILS ARE TYPICAL FOR STRUCTURAL ELEMENTS REQUIRING DECORATIVE FORMLINERS EXCEPT CONCRETE PARAPETS. PARAPET DIMENSIONS MAY BE REDUCED BY THE THICKNESS OF THE FORMLINERS IN ORDER TO UTILIZE STANDARD PARAPET FORMS. REINFORCING BAR BENDING DIMENSIONS SHALL BE REDUCED ACCORDINGLY. PORTIONS OF THE BRIDGE SURFACE DESIGNATED TO RECEIVE A CLASS 2 "RUBBED FINISH" SHALL BE FINISHED ACCORDING TO SUB-SECTION 604-22 OF THE STANDARD SPECIFICATIONS. PORTIONS OF THE BRIDGE SURFACE DESIGNATED TO RECEIVE A DECORATIVE FORM FINISH SHALL BE FORMED USING A FORMLINER SIMILAR TO BURKE FORMLINER B2308 CONCRETE HARP, LITHOTEX FORMLINER FRACTURED FINISH GROOVED T-ISO, SYMONS 3/4" NARROW FRACTURED FIN. 30909 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.

PAINT: SYSTEM B - INORGANIC ZINC - VINYL SYSTEM - RED NO. 21302 - TOP COAT - FOR PREPARATION OF SURFACES SEE TENNESSEE STANDARD SPECIFICATION 603.05 (b).

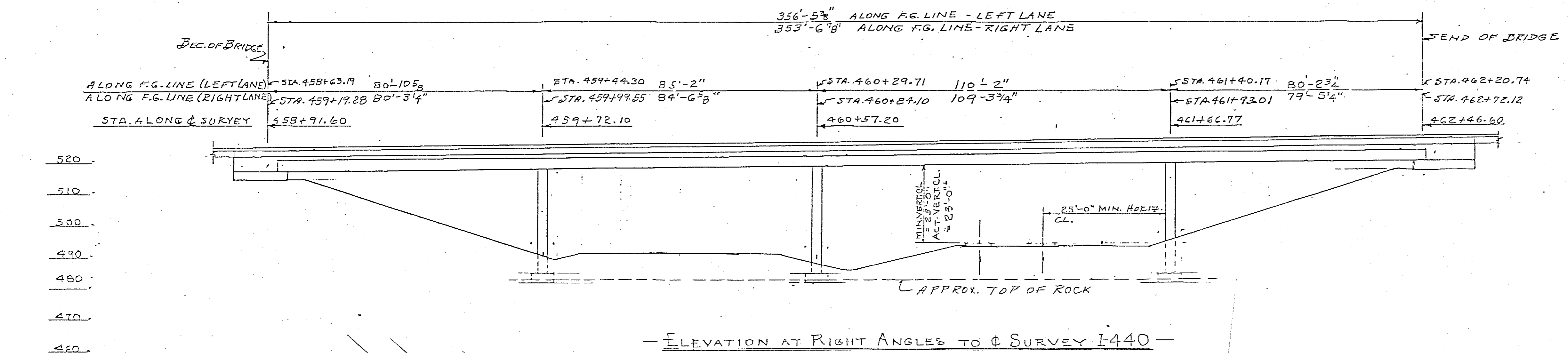
GENERAL NOTES and ESTIMATED QUANTITIES
INTERSTATE-440 Over
GLENROSE AVENUE and L. and N. RAILROAD
STATION 460 of 14.72
DAVIDSON COUNTY
1982

DESIGNED BY WILLIAM BOWMAN DATE 9-82
DRAWN BY GRANT LLOYD DATE 9-82
SUPERVISED BY ROGER L. HARRISON DATE 9-82
CHECKED BY DATE

CORRECT *Colleen L. Powell*
ENGINEER OF STRUCTURES
APPROVED *James L. Powell*
DIRECTOR OF HIGHWAYS

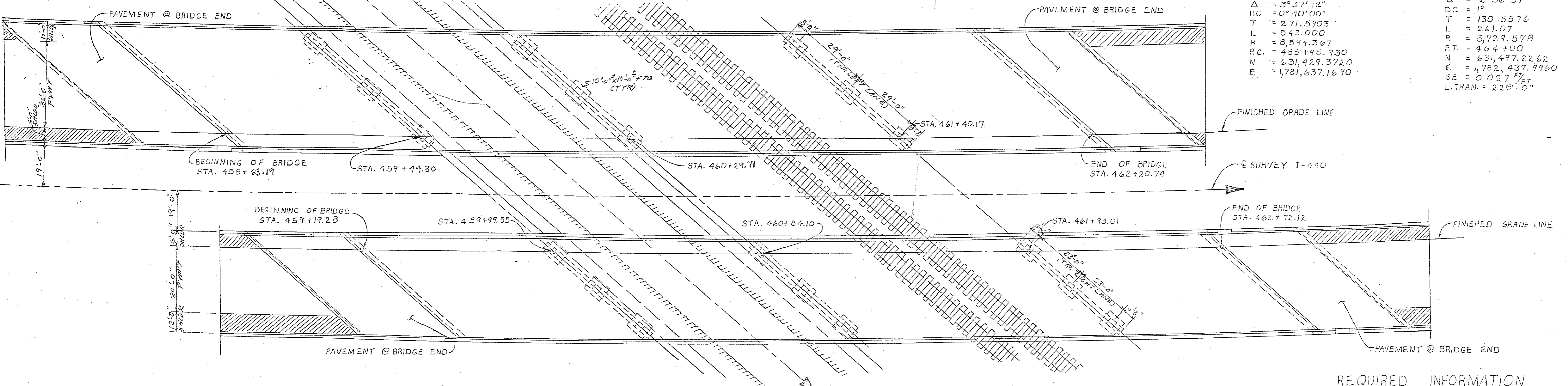
M-112-60

PROJECT NO.	YEAR	SHEET NO.	
	1982		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	12-7-82	W.R.W.	Added sheet



HORIZONTAL CURVE DATA

CURVE 1000	CURVE 1001
P.I. = 458+67.520	P.I. = 462+67.488
N = 631,438.7530	N = 631,478.4868
E = 1,781,908.5903	E = 1,782,308.7902
Δ = 3°37'12"	Δ = 2°36'39"
DC = 0°40'00"	DC = 1°
T = 271.5903	T = 130.5576
L = 543.000	L = 261.07
R = 8,594.367	R = 5,729.578
P.C. = 455+95.930	P.T. = 464+00
N = 631,429.3720	N = 631,497.2262
E = 1,781,637.1690	E = 1,782,437.9960
	SE = 0.027 F ₁₀₀ /FT
	L. TRAN. = 225'-0"

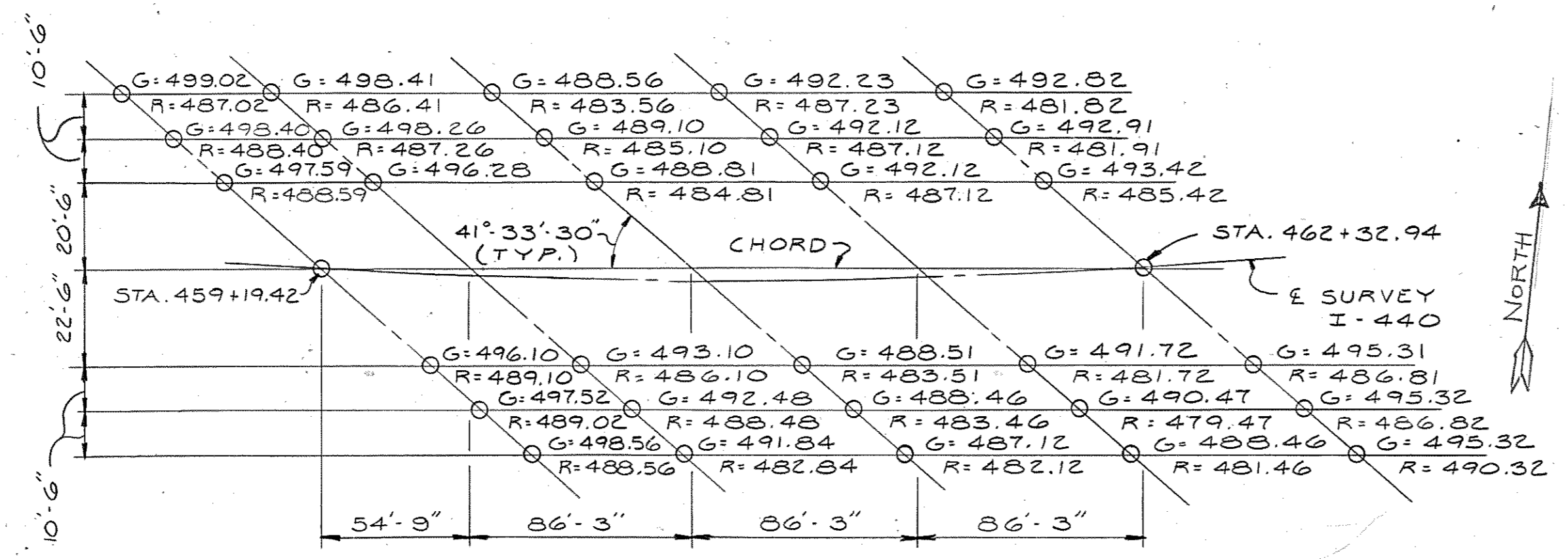


REQUIRED INFORMATION

APPROXIMATE EXISTING GROUND LINE AND ROCK LINE.
SUFFICIENT GROUND, ROCK AND CORING INFORMATION FOR BRIDGE FOUNDATIONS.

NOTE

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



SOUNDING SKETCH

NOTE: G: GROUND ELEVATION
R: ROCK ELEVATION
NOTE: INFORMATION FROM 1969 DATA

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS
FOUNDATION DATA
I-440 OVER GLENROSE AVENUE
AND L. & N. RAILROAD
STATION
DAVIDSON COUNTY

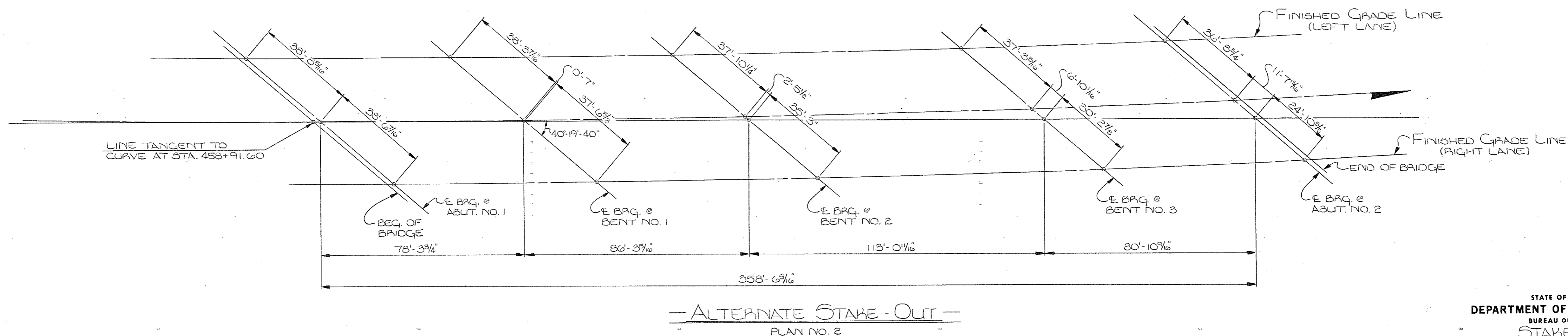
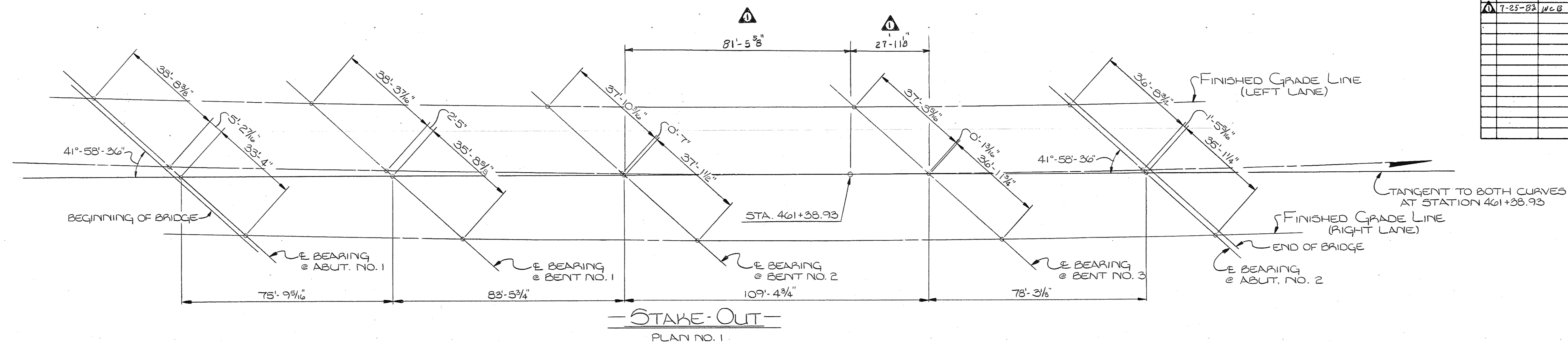
CORRECT *Chellon L. Lovell* 1982
ENGINEER OF STRUCTURES
APPROVED *Lucretia Evans*
DIRECTOR OF HIGHWAYS

DESIGNED BY: B. BOWMAN
DRAWN BY: S. SHULTZ
SUPERVISED BY: FIELDS & WOODS
CHECKED BY: _____

DATE: 8-12-82
DATE: 8-12-82
DATE: _____
DATE: _____

CONST. No. 19002-3141-44

PROJECT NO.	YEAR	SHEET NO.	
I-24-1(55)51	1982		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	7-25-83	WCB	ADDED DIMENSIONS



STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 STAKE-OUT
 RIGHT AND LEFT LANE
 INTERSTATE 440 OVER GLENROSE
 AVENUE AND L & N RAILROAD
 STATION 460+14.72
 DAVIDSON COUNTY
 1982

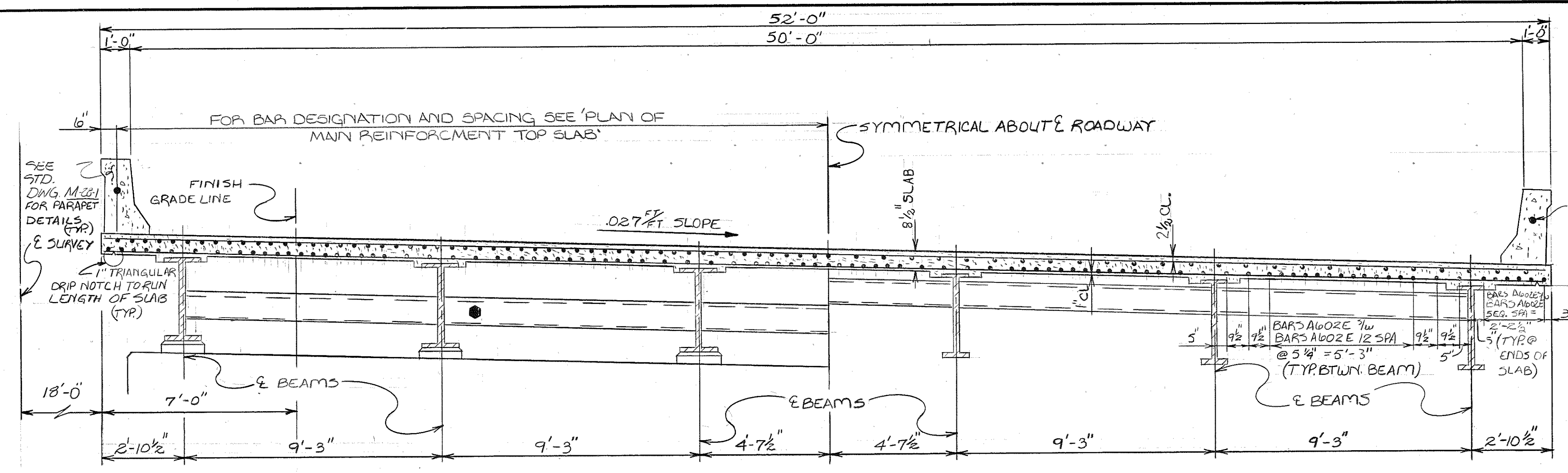
DESIGNED BY BUD BOWMAN
 DRAWN BY M. DYE
 SUPERVISED BY R. H. ELLIOTT
 CHECKED BY _____
 DATE 8-82
 DATE _____
 DATE _____

CORRECT *Calvin S. Howell*
 ENGINEER OF STRUCTURES
 APPROVED *Louis Lane*
 DIRECTOR OF HIGHWAYS

M-112-62

PROJECT NO.	YEAR	SHEET NO.
I-24-1(55)51	1982	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	1-10-82	WCB	CHANGED STEEL GRADE
2	1-24-82	FC	CONDUIT



HALF-SECTION NEAR BENT

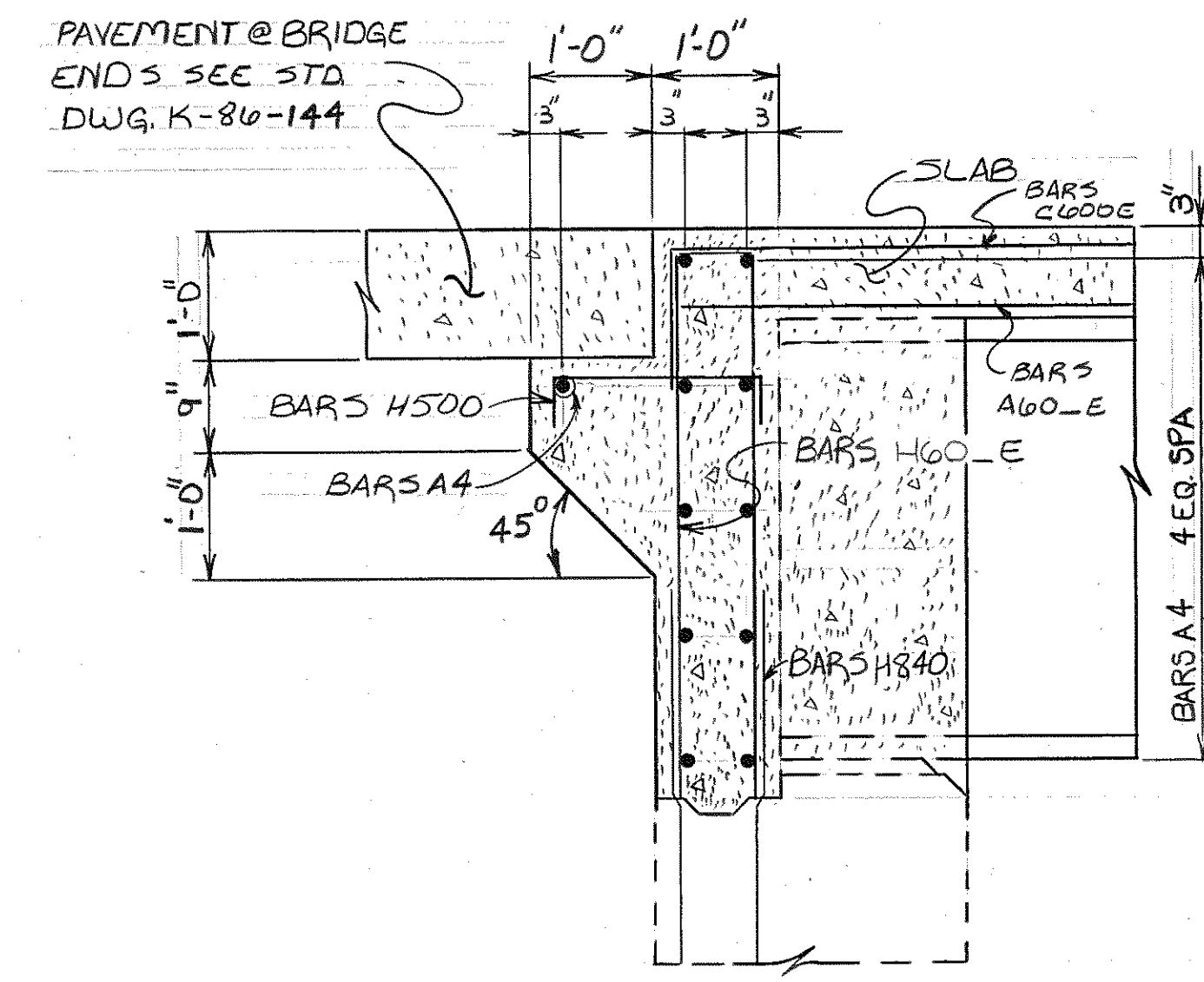
ALL DIAPHRAGMS TO BE AASHTO M183 (ASTM A36)

TYPICAL CROSS-SECTION

(LOOKING BACK ON SURVEY)

HALF-SECTION NEAR ABUTMENT

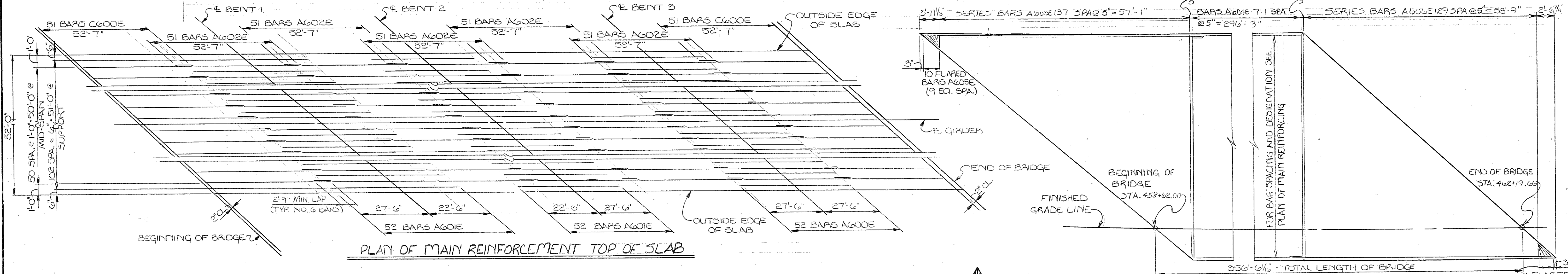
NOTE: FOR DIAPHRAGM DETAILS SEE DWG. NO. M-112-68



PART LONGITUDINAL SECTION

(TYP. AT ABUTMENTS)

ESTIMATED QUANTITIES				
ITEM	EPOXY COATED REINFORCEMENT LBS	CLASS 'A' CONCRETE (BRIDGES) C.Y.	STEEL BAR REINFORCEMENT LBS	CLASS 'A' CONCRETE (BRIDGE DECK) C.Y.
SUPERSTRUCTURE	228,877	37.9	2,230	486.2



PLAN OF MAIN REINFORCEMENT TOP OF SLAB

SLAB PLAN

- NOTE: NO PORTION OF THE PARAPET SHALL BE POLIRED UNTIL THE ENTIRE DECK SLAB IS IN PLACE.
- NOTE: OUTSIDE EDGE OF SLAB AND BRIDGE RAIL TO CONFORM TO HORIZONTAL CURVE.
- NOTE: THE CONCRETE DECK SHALL NOT BE POURED UNTIL ALL STRUCTURAL STEEL IS ERECTED AND ALL WELDING AND/OR BOLTING COMPLETE.
- NOTE: WHEN POLIRING SLAB, PROVISIONS SHALL BE MADE FOR SETTING REINFORCING STEEL FOR PARAPET. THE PARAPET SHALL NOT BE POURED UNTIL THE SLAB IS POURED AND CURED.
- NOTE: WHEN POLIRING WINGWALLS, PROVISIONS SHALL BE MADE FOR SETTING REINFORCING STEEL FOR PARAPET FOR DETAILS OF PARAPET SEE STANDARD DRAWING NO. M-28-1
- APPROVAL OF MATERIALS: NO FABRICATION SHALL BE STARTED UNTIL THE MATERIALS INVOLVED HAVE BEEN APPROVED BY THE TENNESSEE DEPARTMENT OF TRANSPORTATION, DIVISION OF MATERIALS AND TESTS OR L&N RAILROAD WITH A COPY OF THE TEST REPORTS ALSO GOING TO THE TENNESSEE DEPARTMENT OF TRANSPORTATION, DIVISION OF MATERIALS AND TESTS.
- IDENTITY OF MAIN MATERIALS: SEE SPECIAL PROVISION NO. 602

- STRUCTURAL STEEL: SHALL CONFORM TO AASHTO M223 (ASTM A572) UNLESS OTHERWISE NOTED.
- ALL STRUCTURAL STEEL FOR GIRDER FLANGES IN TENSION AND ALL WEBS SHALL MEET THE SUPPLEMENTAL REQUIREMENTS FOR LONGITUDINAL CHARTY V-NOTCH TESTS SPECIFIED IN AASHTO MATERIAL SPECIFICATIONS. ZONE 2 OF TABLE SL SHALL APPLY.
- WELDING: AWS DL-1-80 STRUCTURAL WELDING CODE, AASHTO STANDARD SPECIFICATIONS FOR WELDING OF STRUCTURAL STEEL HIGHWAY BRIDGES, THIRD EDITION, 1981, AND SPECIAL PROVISION NO. 602.
- FIELD CONNECTIONS: SHALL BE 7/8" φ HIGH TENSILE STRENGTH BOLTS ASTM-A325 (OR ASTM A490) UNLESS OTHERWISE SHOWN. SEE AASHTO SPECIFICATIONS ART. 2.10.20. ALL HIGH STRENGTH BOLTED CONNECTIONS ARE FRICTION TYPE.
- HEAT CURVING STEEL GIRDERS: HEAT CURVING WILL BE PERMITTED FOR GIRDERS WITH RADIUS OF CURVATURE IN EXCESS OF 150 FEET PROVIDED THE PROCEDURE IS IN ACCORDANCE WITH AASHTO ART. 2.10.5 AND THE VERTICAL CAMBER IS ADJUSTED IN ACCORDANCE WITH ART. 1.7.14.
- ADDITIONAL FIELD SPLICE NOTE: FIELD SPLICES NECESSARY DUE TO LENGTHS INVOLVED MAY BE LOCATED BY THE FABRICATOR SUBJECT TO APPROVAL BY THE ENGINEER.
- NOTE: UNLESS OTHERWISE NOTED, SEE AASHTO SPECIFICATIONS ART. 1.7.21 FOR MINIMUM SIZE OF FILLET WELD.

SHOP ASSEMBLY: PROGRESSIVE SHOP ASSEMBLY WILL BE ALLOWED. SEE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, ART. 2.10.14 (B).

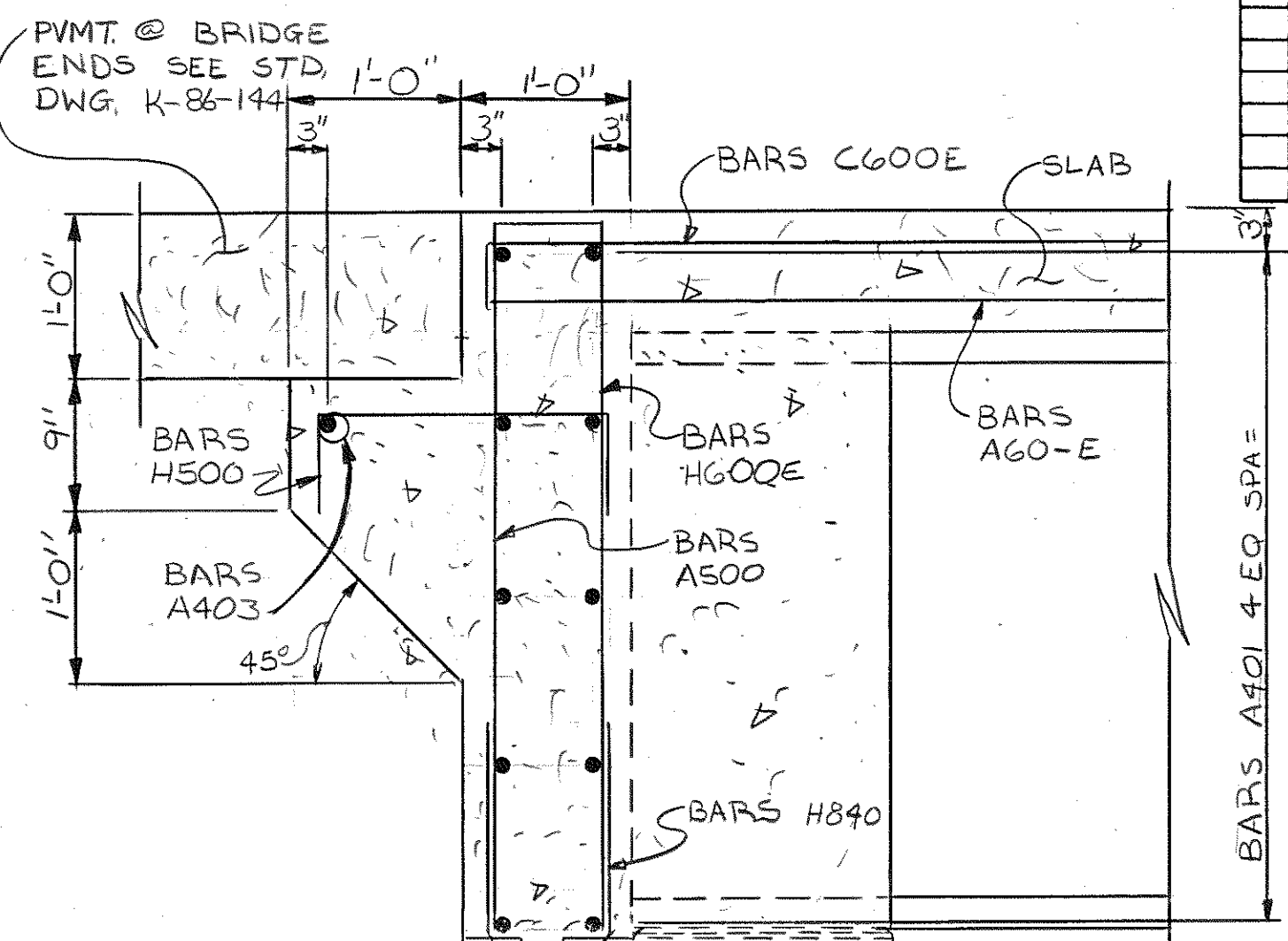
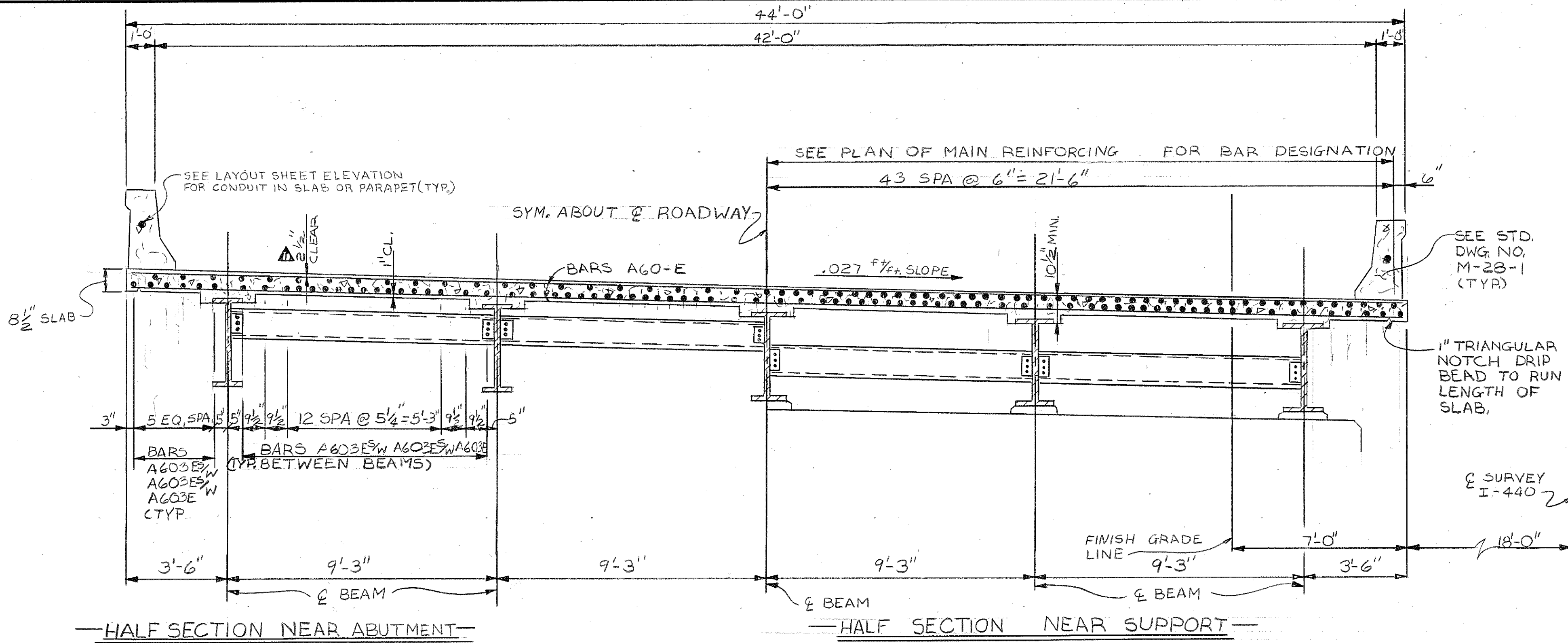
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS
SUPERSTRUCTURE
INTERSTATE 440 LEFT LANE OVER
GLENROSE AVENUE & L&N RAILROAD
STATION 460+14.72
DAVIDSON COUNTY
1982

DESIGNED BY BOWMAN DATE -82
DRAWN BY Michael K. Fagan (M) DATE 8-82
SUPERVISED BY HARRIS/D DATE 8-82
CHECKED BY _____ DATE _____

CORRECT Colleen L. Rowell
ENGINEER OF STRUCTURES
APPROVED James E. ...
DIRECTOR OF HIGHWAYS

Const. No. 19002-3141-44

PROJECT NO.	YEAR	SHEET NO.	
I-24-1(55)51	1982		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	1-10-83	WCB	CHANGED CLEARANCE
2	1-24-83	F.C.	CONDUIT

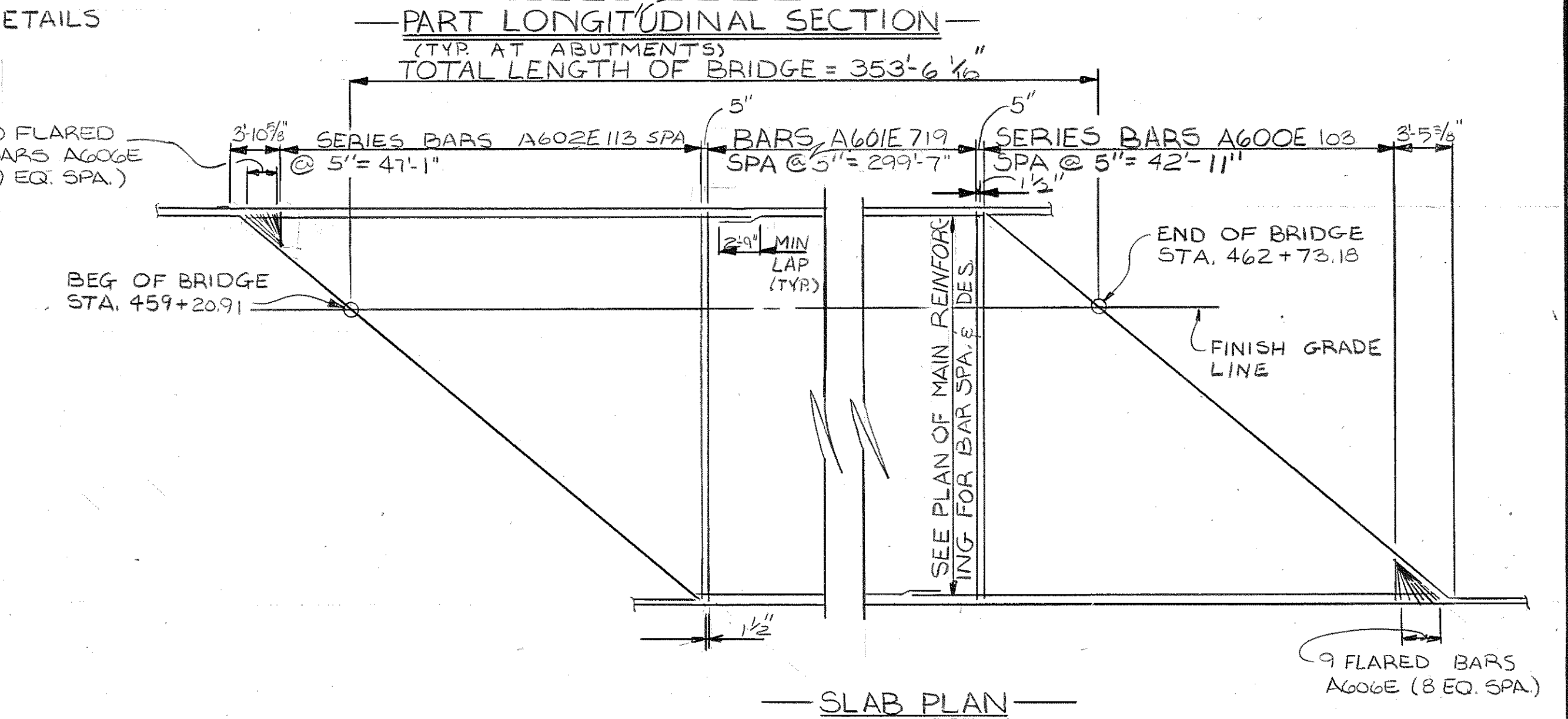


—HALF SECTION NEAR ABUTMENT—
 —TYPICAL CROSS SECTION—
 (LOOKING BACK ON SURVEY)
 —HALF SECTION NEAR SUPPORT—

NOTE: FOR DIAPHRAGM DETAILS SEE DWG. NO. M-112-64

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

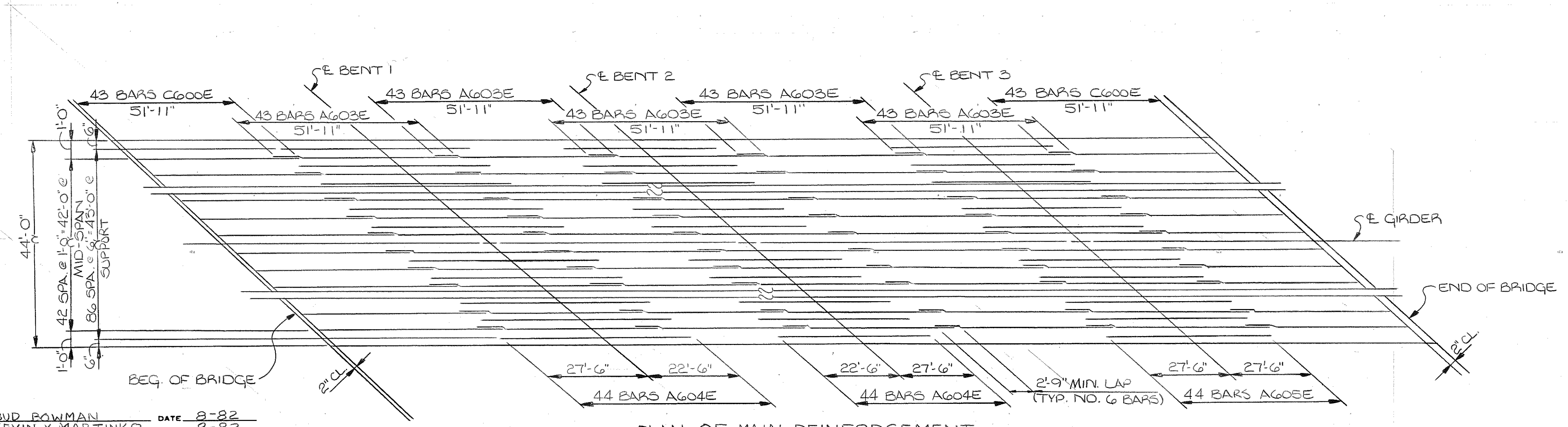
NOTE: WHEN POURING SLAB, PROVISIONS SHALL BE MADE FOR SETTING REINFORCING STEEL FOR PARAPET. THE PARAPET SHALL NOT BE POURED UNTIL THE SLAB IS POURED AND CURED.
 NOTE: WHEN POURING WINGWALLS, PROVISIONS SHALL BE MADE FOR SETTING REINFORCING STEEL FOR WINGPOST AND PARAPET. FOR DETAILS OF WINGPOST AND PARAPET SEE STANDARD DRAWING NO. M-23-1.



—SLAB PLAN—

ESTIMATED QUANTITIES

ITEM	CLASS "A" CONCRETE BRIDGE DECK (CY)	CLASS "A" CONCRETE BRIDGES (CY)	REINFORCING STEEL LBS.	EPOXY COATED STEEL LBS.
SUPER-STRUCTURE	402.2	31.9	2070	188,387



—PLAN OF MAIN REINFORCEMENT—
 (TOP OF SLAB)

DESIGNED BY BUD ROWMAN DATE 8-82
 DRAWN BY KEVIN X. MARTINKO DATE 8-82
 SUPERVISED BY HARRISON DATE 8-82
 CHECKED BY DATE

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 SUPERSTRUCTURE RIGHT LANE
 INTERSTATE 440 OVER
 GLENROSE AVENUE AND
 L&N RAILROAD
 STATION 460+14.72
 DAVIDSON COUNTY
 1982

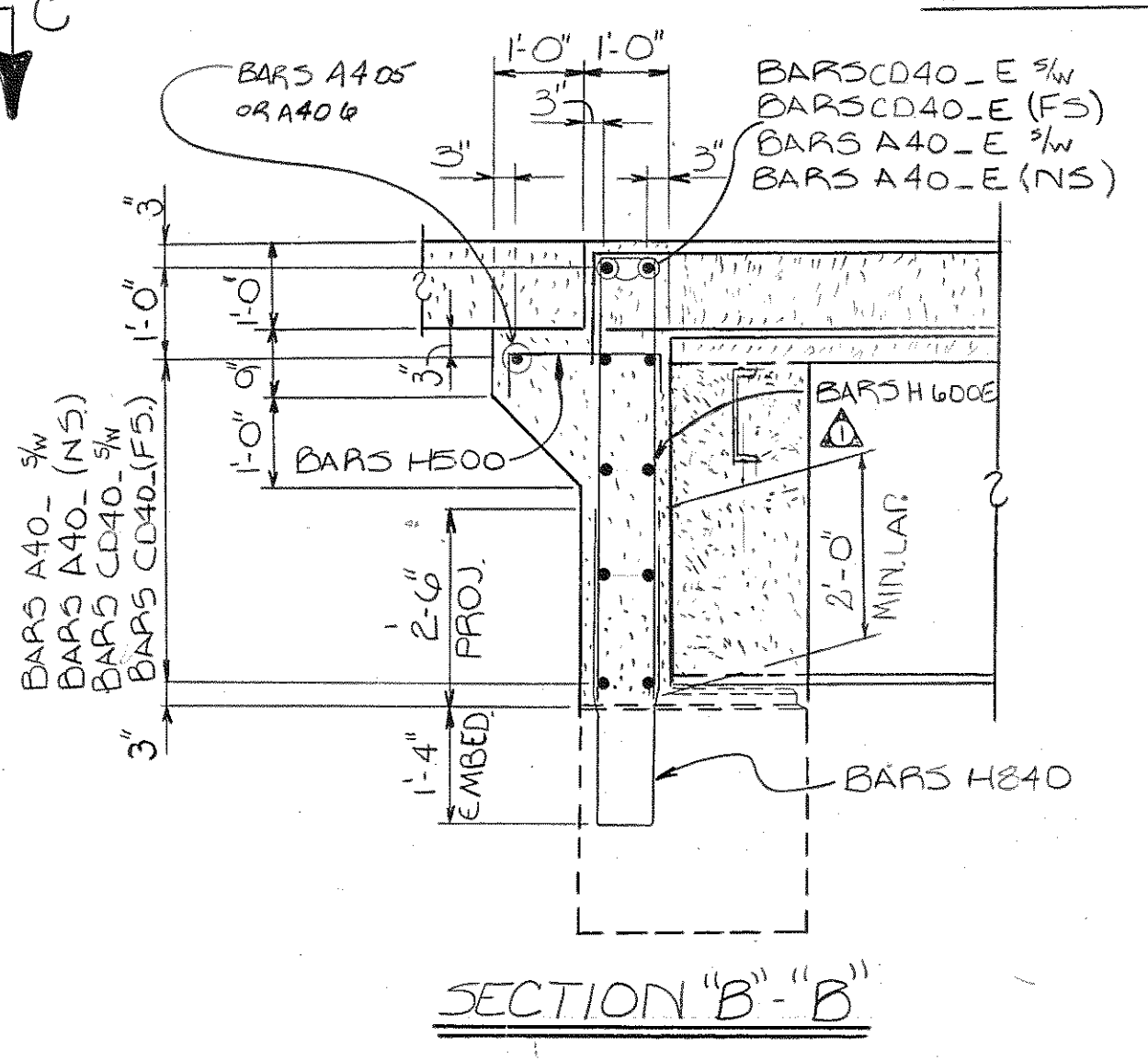
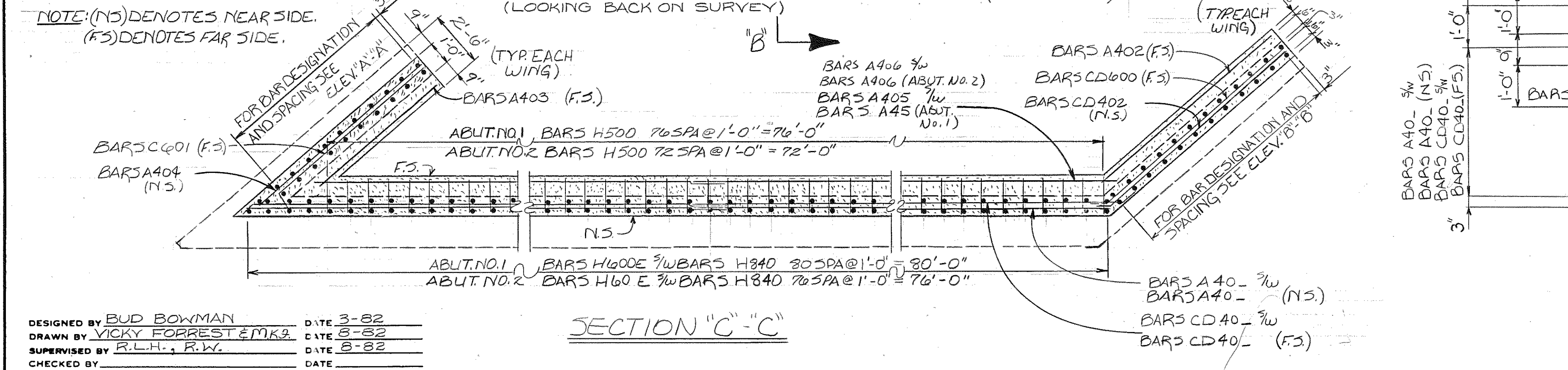
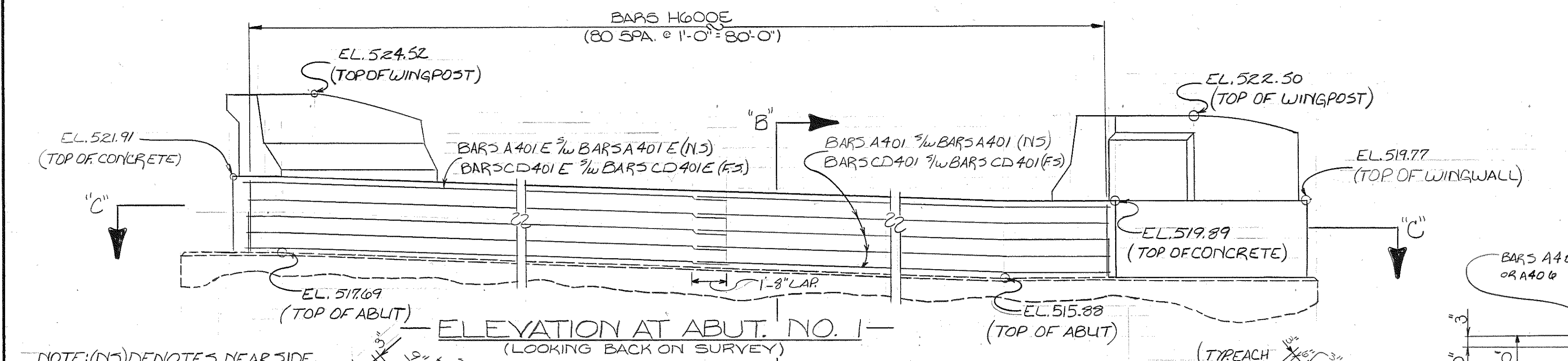
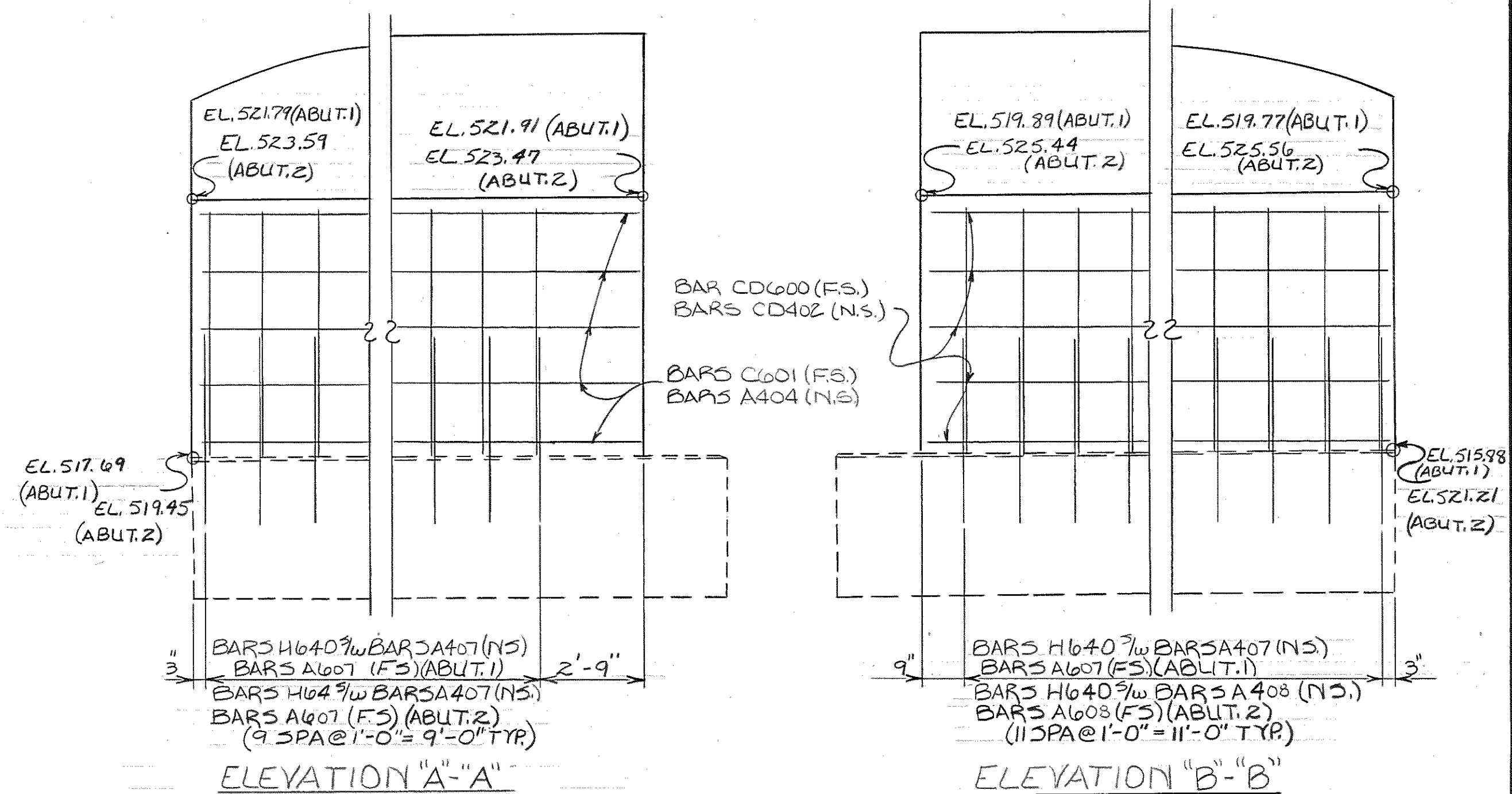
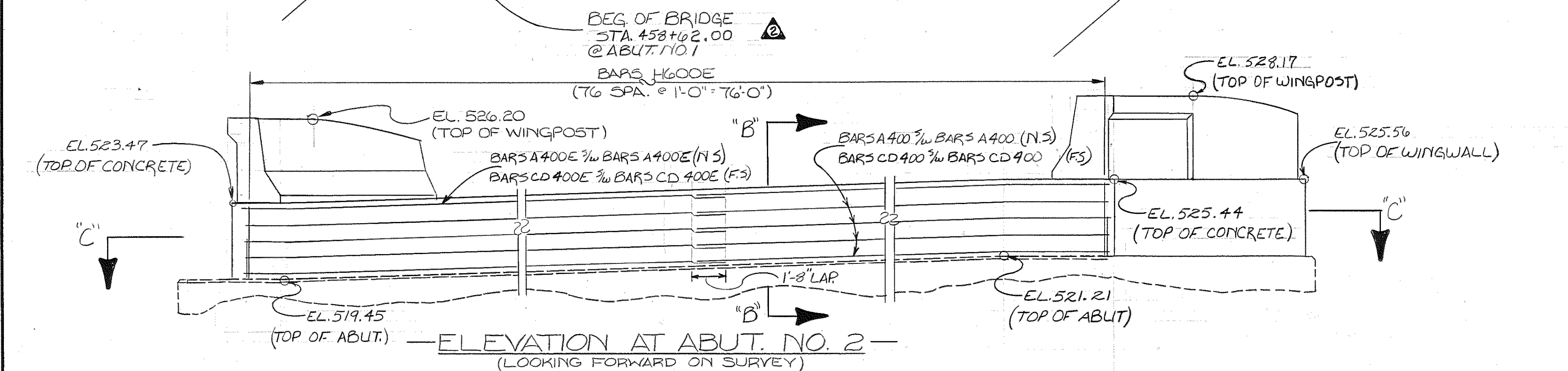
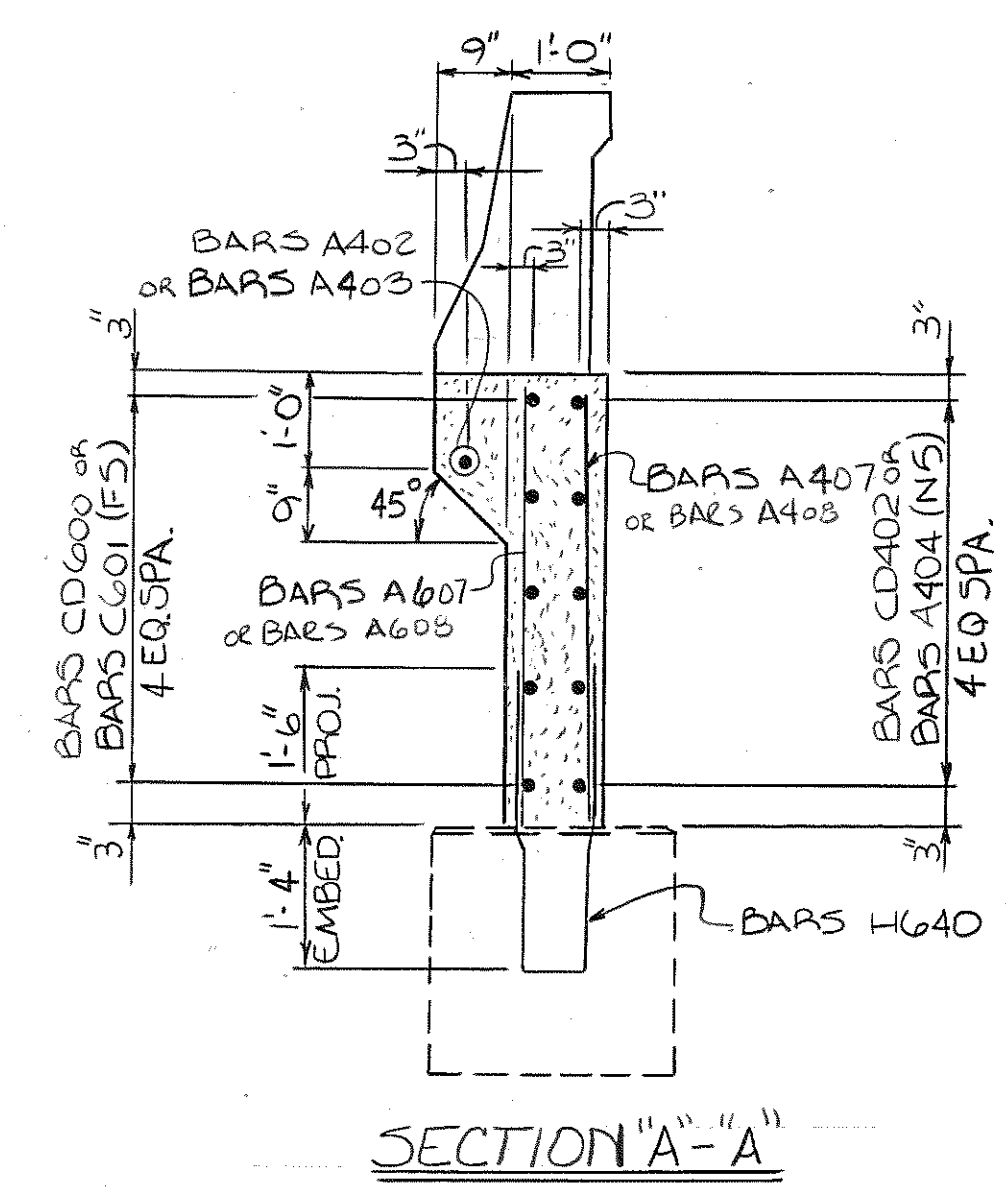
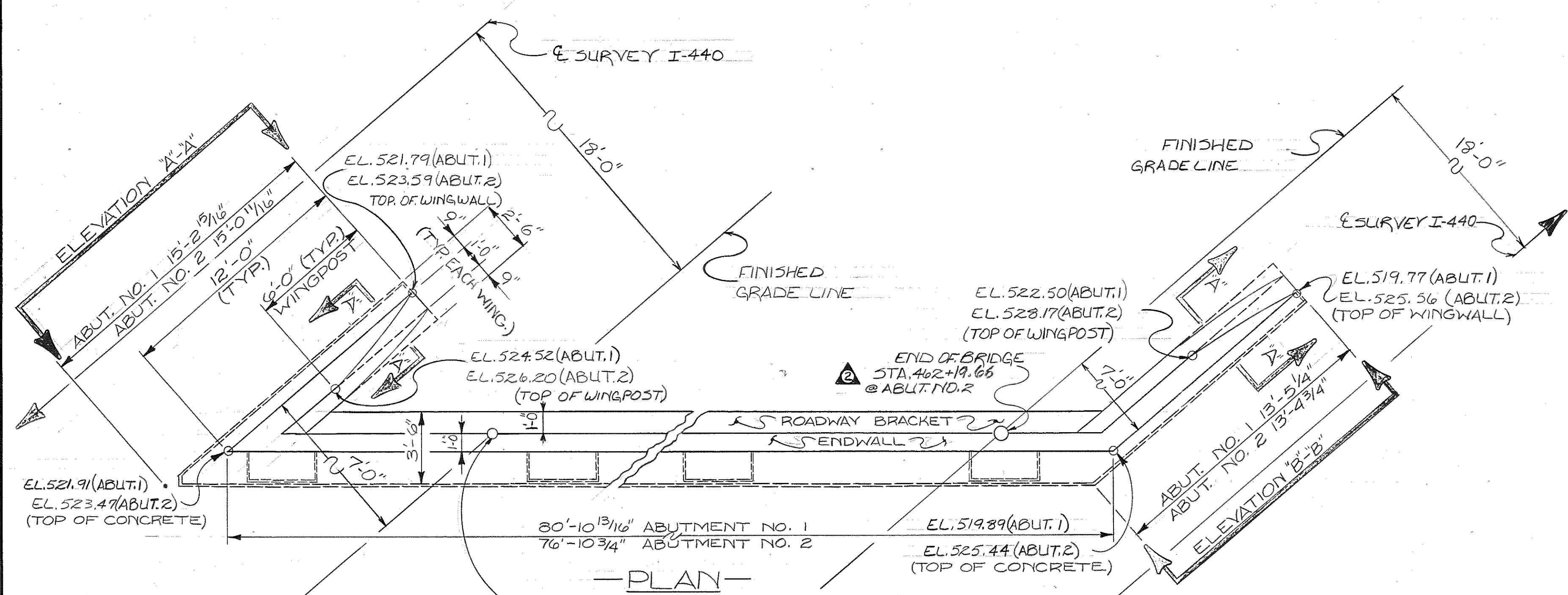
CORRECT Colleton L. Foreall
 ENGINEER OF STRUCTURES
 APPROVED Lewis Brans
 DIRECTOR OF HIGHWAYS

M-112-04

Bridge Deck Bridges

PROJECT NO.	YEAR	SHEET NO.
I-24-1(55)51	1982	

REVISIONS		
NO.	DATE	BRIEF DESCRIPTION
1	4-4-82	W.C.B. SHOW END OF BRIDGE IN SECT. B-B.
2	7-12-82	H.C.B. CHANGED BEG. AND END OF BRIDGE SPACING.



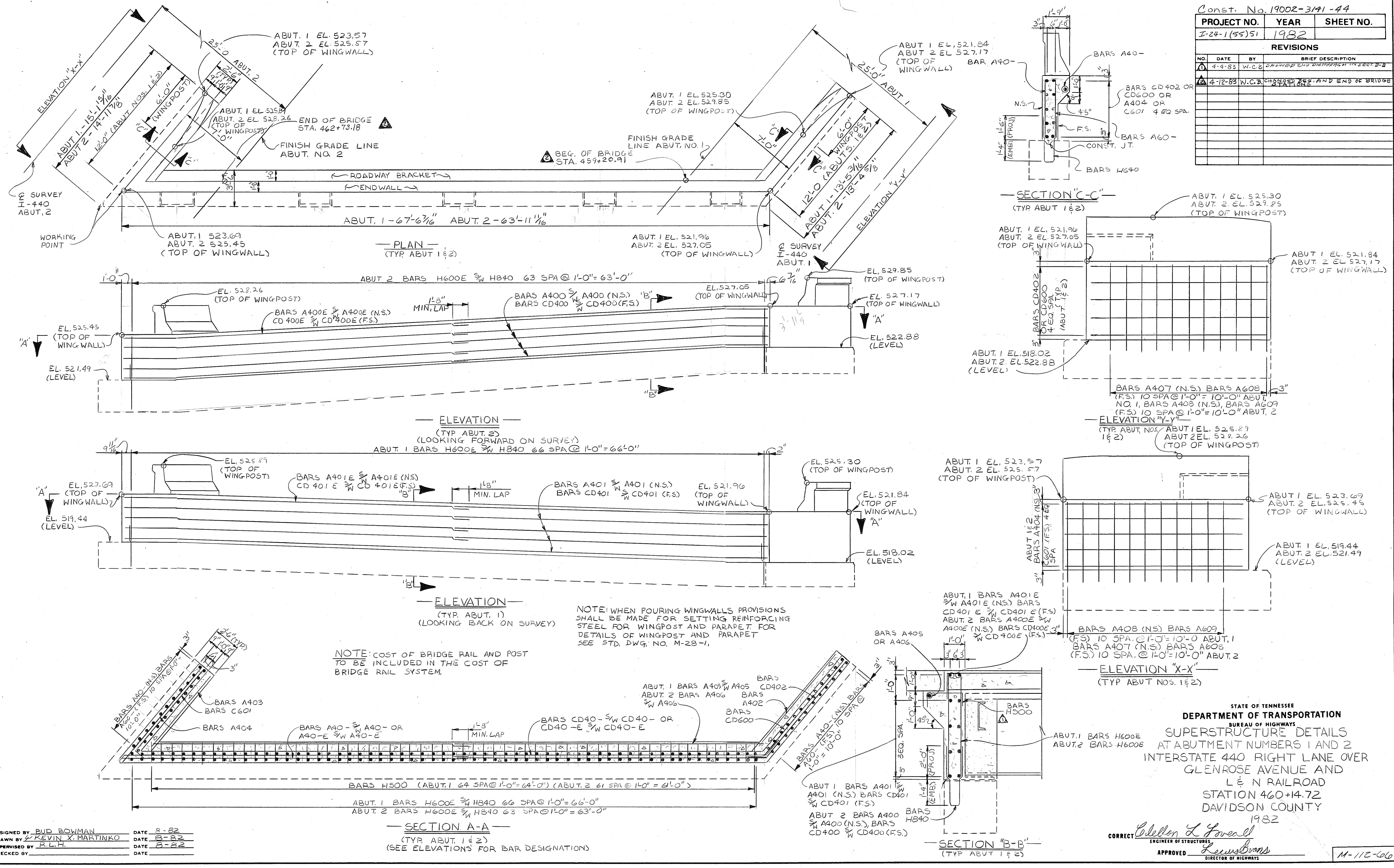
DESIGNED BY BUD BOWMAN DATE 3-82
 DRAWN BY VICKY FORREST & MKR DATE 8-82
 SUPERVISED BY R.L.H., R.W. DATE 8-82
 CHECKED BY DATE

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 SUPERSTRUCTURE DETAILS
 AT ABUTMENT NO. 1 AND NO. 2
 LEFT LANE
 INTERSTATE 440 OVER GLENROSE AVENUE
 AND L & N RAILROAD
 STATION 460+14.72
 DAVIDSON COUNTY
 1982
 CORRECTED BY *William L. Fawcett*
 ENGINEER OF STRUCTURES
 APPROVED BY *Louis E. Evans*
 DIRECTOR OF HIGHWAYS

Const. No. 19002-3141-44

PROJECT NO.	YEAR	SHEET NO.
I-24-1(55)51	1982	

REVISIONS		
NO.	DATE	BRIEF DESCRIPTION
1	4-4-83	W.C.B. SHOWED END DIMENSIONS IN SECT. B-B
2	4-12-83	W.C.B. CHANGED REF. AND END OF BRIDGE STATIONS



DESIGNED BY BUD BOWMAN DATE 8-82
 DRAWN BY KEVIN X. MARTINKO DATE 8-82
 SUPERVISED BY R.L.H. DATE 8-82
 CHECKED BY DATE

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 SUPERSTRUCTURE DETAILS
 AT ABUTMENT NUMBERS 1 AND 2
 INTERSTATE 440 RIGHT LANE OVER
 GLENROSE AVENUE AND
 L & N RAILROAD
 STATION 460+14.72
 DAVIDSON COUNTY
 1982

CORRECT *William L. Fovell*
 ENGINEER OF STRUCTURES
 APPROVED *Kevin X. Martinko*
 DIRECTOR OF HIGHWAYS

M-112-666

PROJECT NO.	YEAR	SHEET NO.
IR-24-1(55)51	1982	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	7-25-83	W.C.B.	CHANGED SPAN LENGTHS.

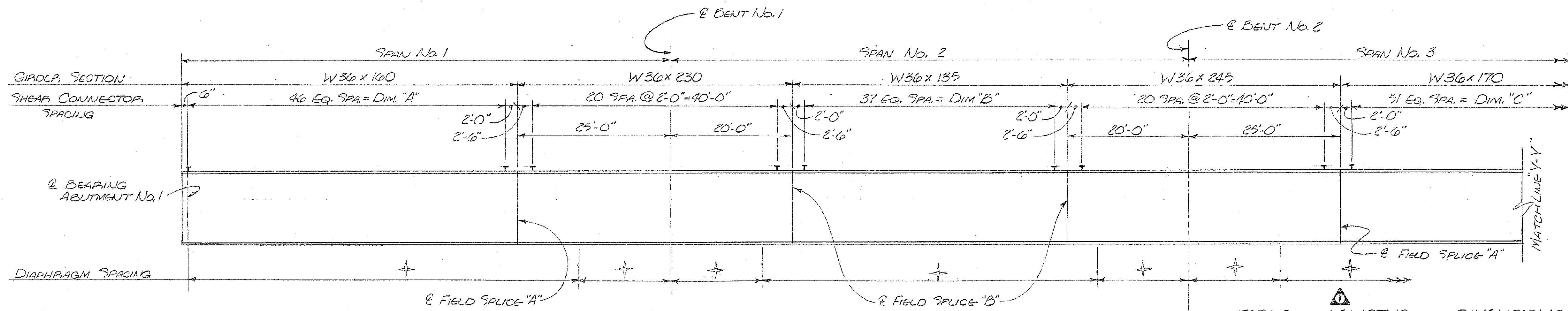


TABLE OF LENGTHS AND DIMENSIONS

BEAM	SPAN LENGTHS				DIMENSIONS			
	1	2	3	4	A	B	C	D
LEFT LAWS	1	2	3	4	5	6	7	8
RIGHT LAWS	1	2	3	4	5	6	7	8

NOTE: ALL STRUCTURAL STEEL TO BE AASHTO M-223 (ASTM A572) UNLESS OTHERWISE NOTED.

LOAD DATA CHART

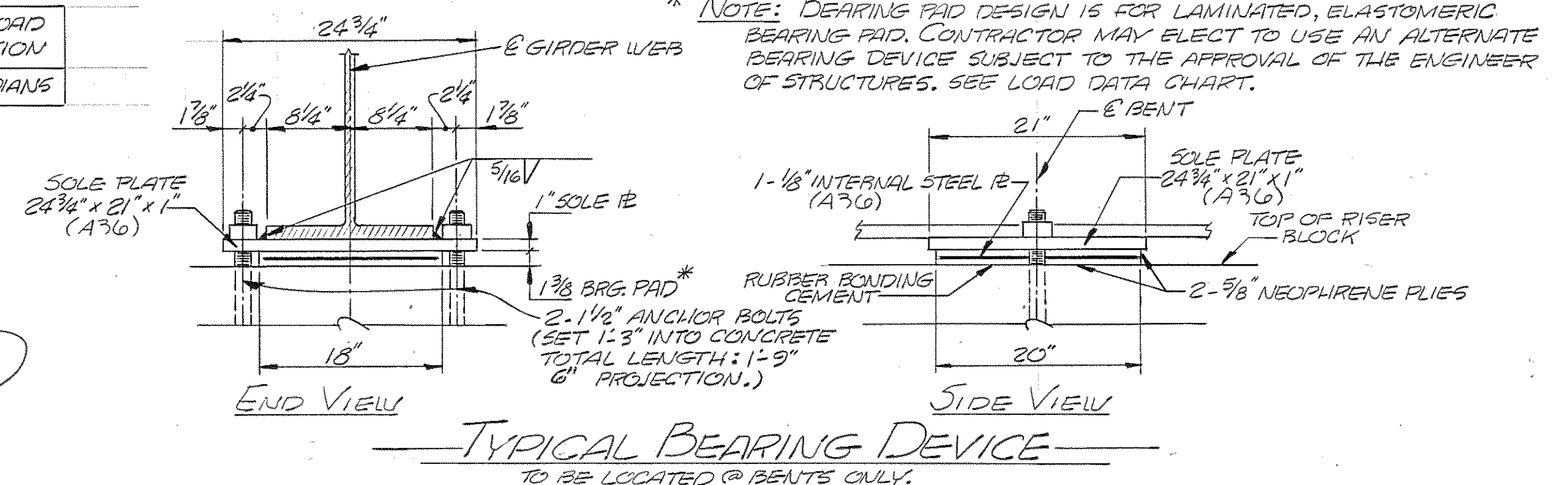
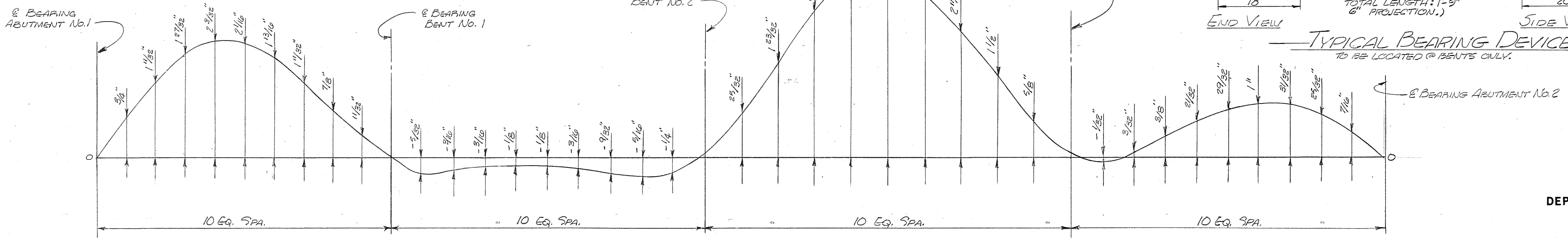
DEAD LOAD (KIPS)	LIVE LOAD (KIPS)	MOVEMENT (IN.)	LIVE LOAD ROTATION
176.7	84.6	0	.0045 RADIAN

GIRDER ELEVATION

NOTE: FOR SPAN LENGTHS & DIMENSIONS "A" THRU "D" SEE "TABLE OF LENGTHS AND DIMENSIONS" THIS SHEET. FOR DIAPHRAGM SPACINGS, SEE "FRAMING PLAN" ON DWG. NO. M-112-63.

STUD DETAIL

NOTE: STUD MATERIAL TO BE AASHTO M-183 (ASTM A36)



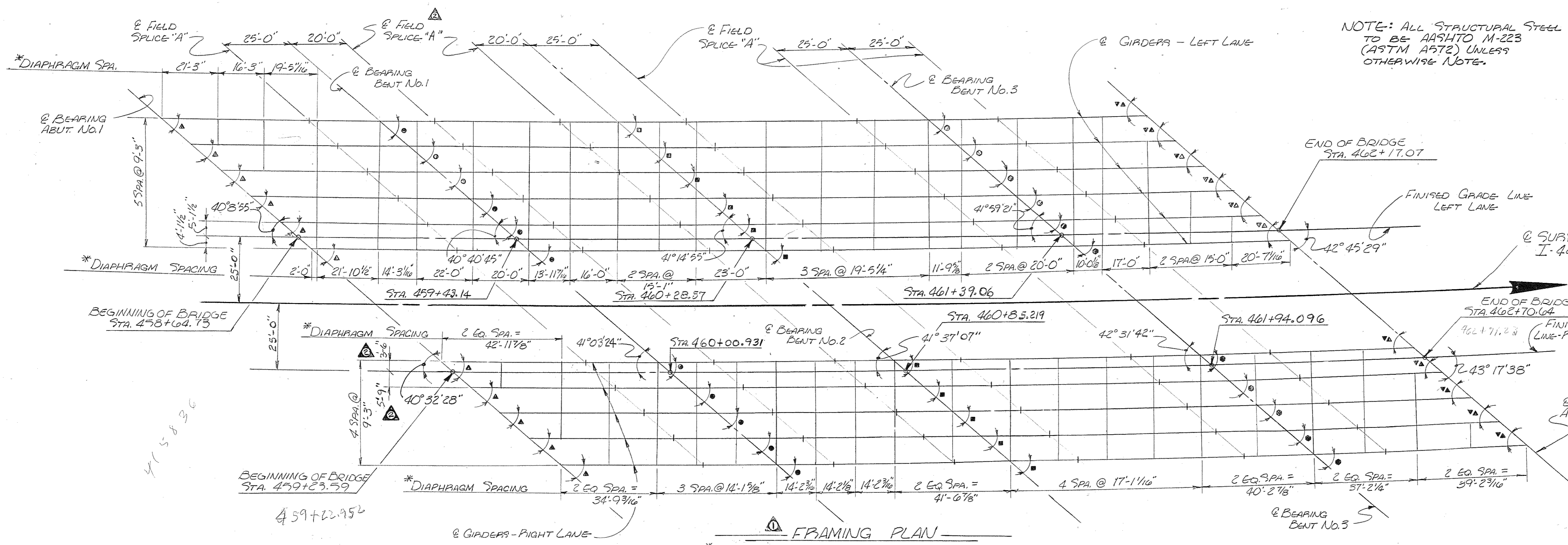
STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 STRUCTURAL STEEL
 INTERSTATE 440 OVER GLENROSE AVENUE
 AND L & N RAILROAD
 STATION 460+14.72
 DAVIDSON COUNTY
 1982

DESIGNED BY W.C. BOWMAN DATE 8-82
 DRAWN BY J.W. PATTON DATE 8-82
 SUPERVISED BY B.W. & P.L.H. DATE 8-82
 CHECKED BY DATE

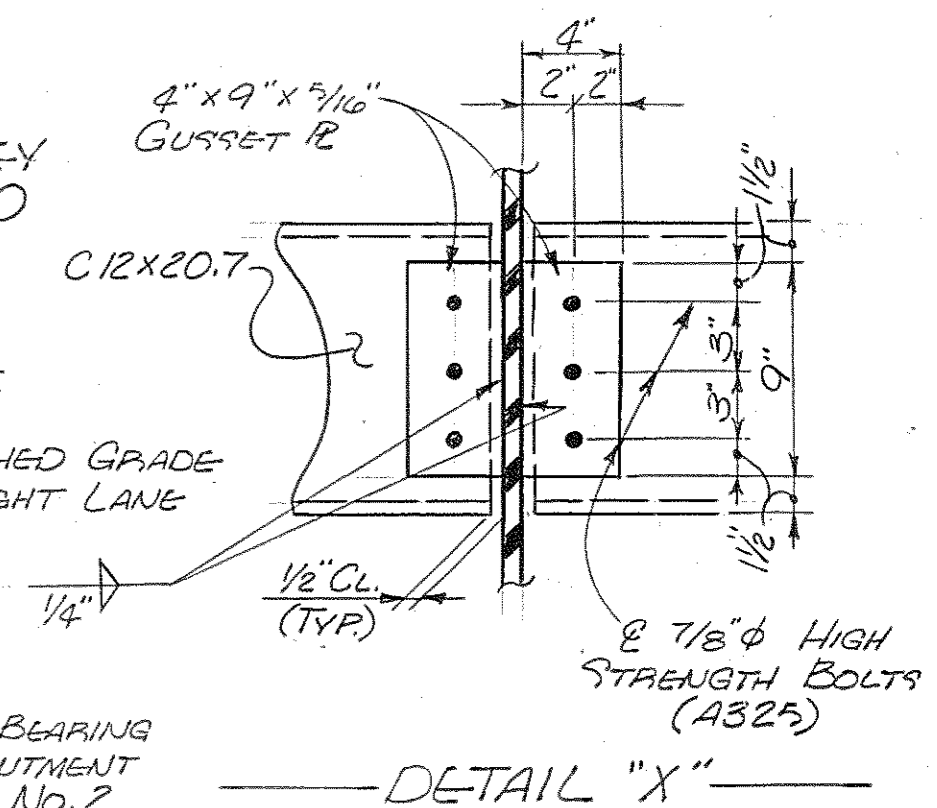
CORRECT *Clendon L. Sorell*
 ENGINEER OF STRUCTURES
 APPROVED *Lewis Grand*
 DIRECTOR OF HIGHWAYS

PROJECT NO.	YEAR	SHEET NO.
IR-24-1(55)51	1982	

REVISIONS		
NO.	DATE	BRIEF DESCRIPTION
1	4/12/82	W.C.B. CHANGE BENT STATIONS & ANGLES
2	7-25-83	W.C.B. CHANGED FLANGE SPLICES TO FIELD LINE STATIONS & ADDED POURING SEQUENCE & POURING SEQUENCE NOTE.
3	4-11-84	W.C.B. ADDED POURING SEQUENCE & POURING SEQUENCE NOTE.



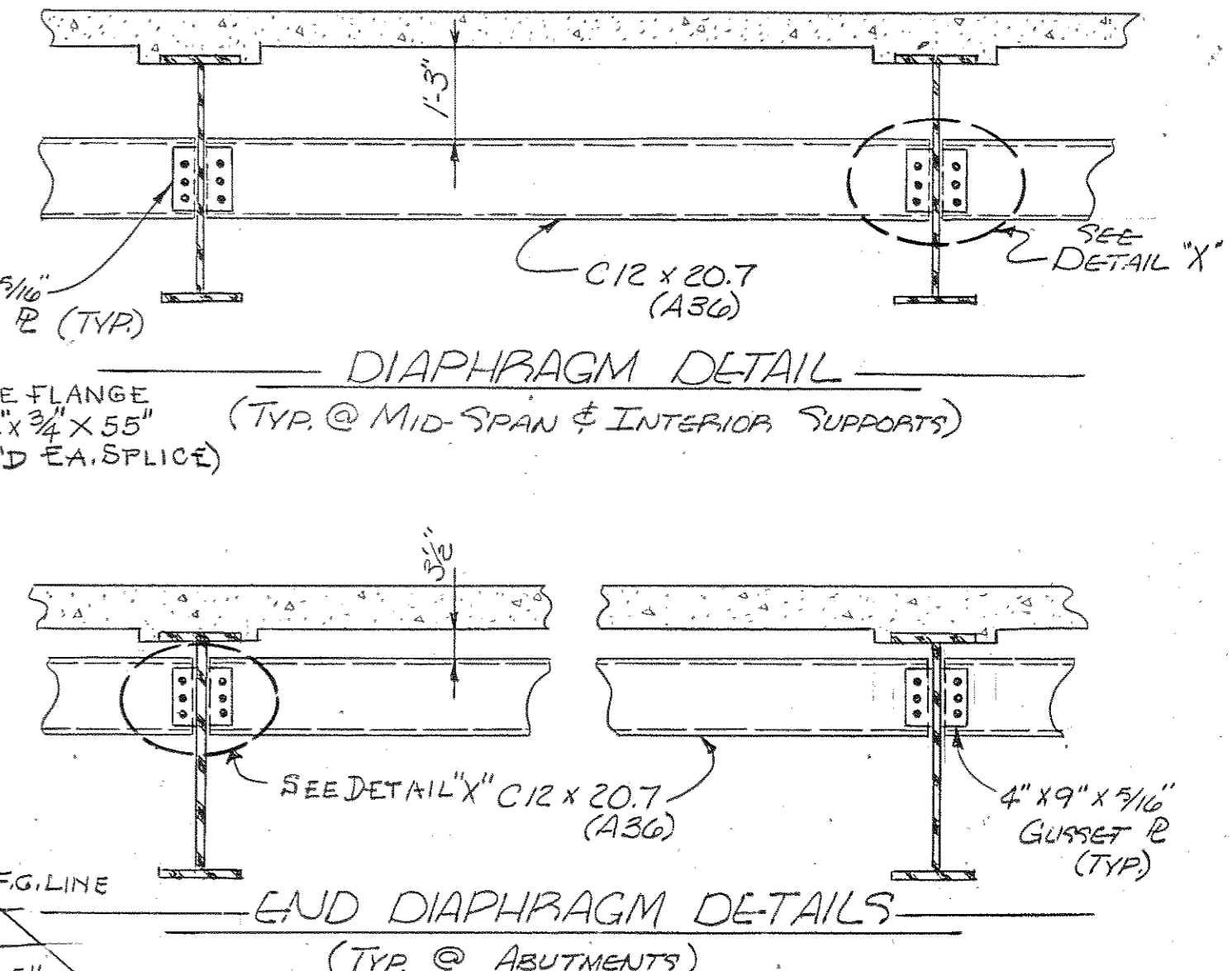
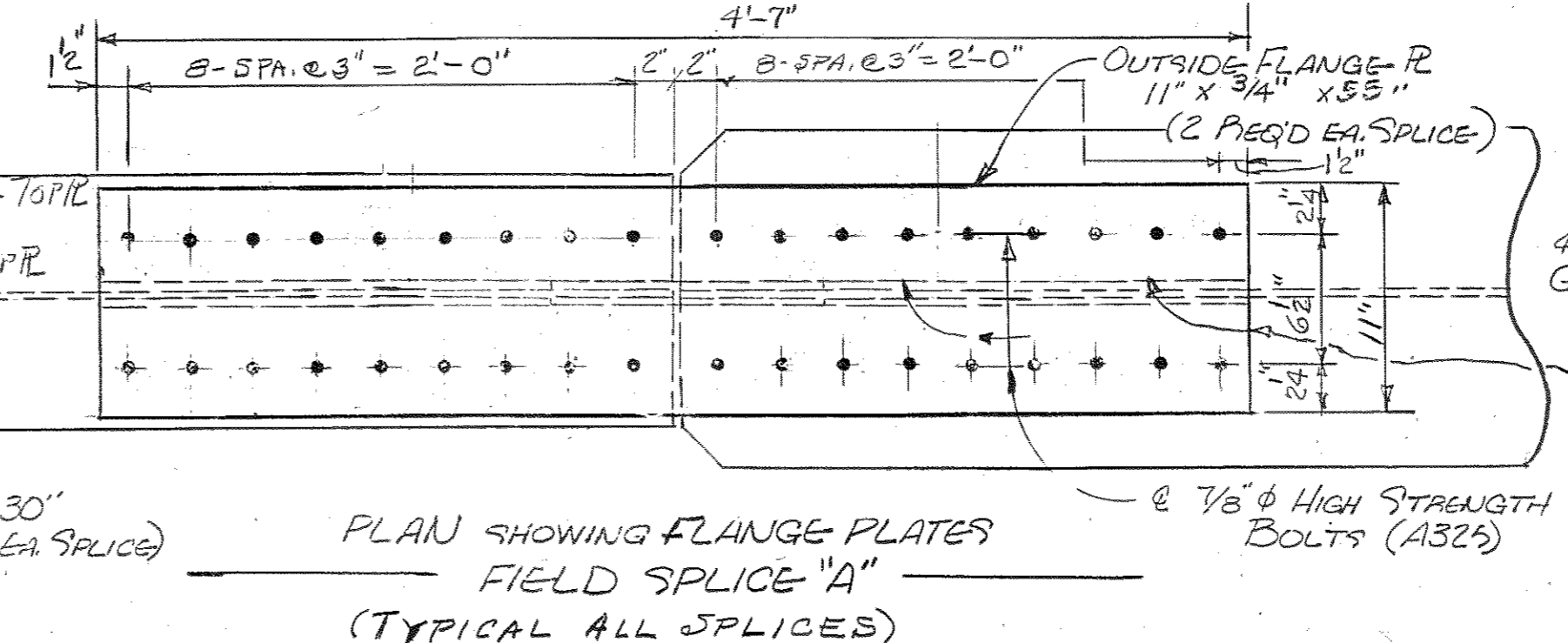
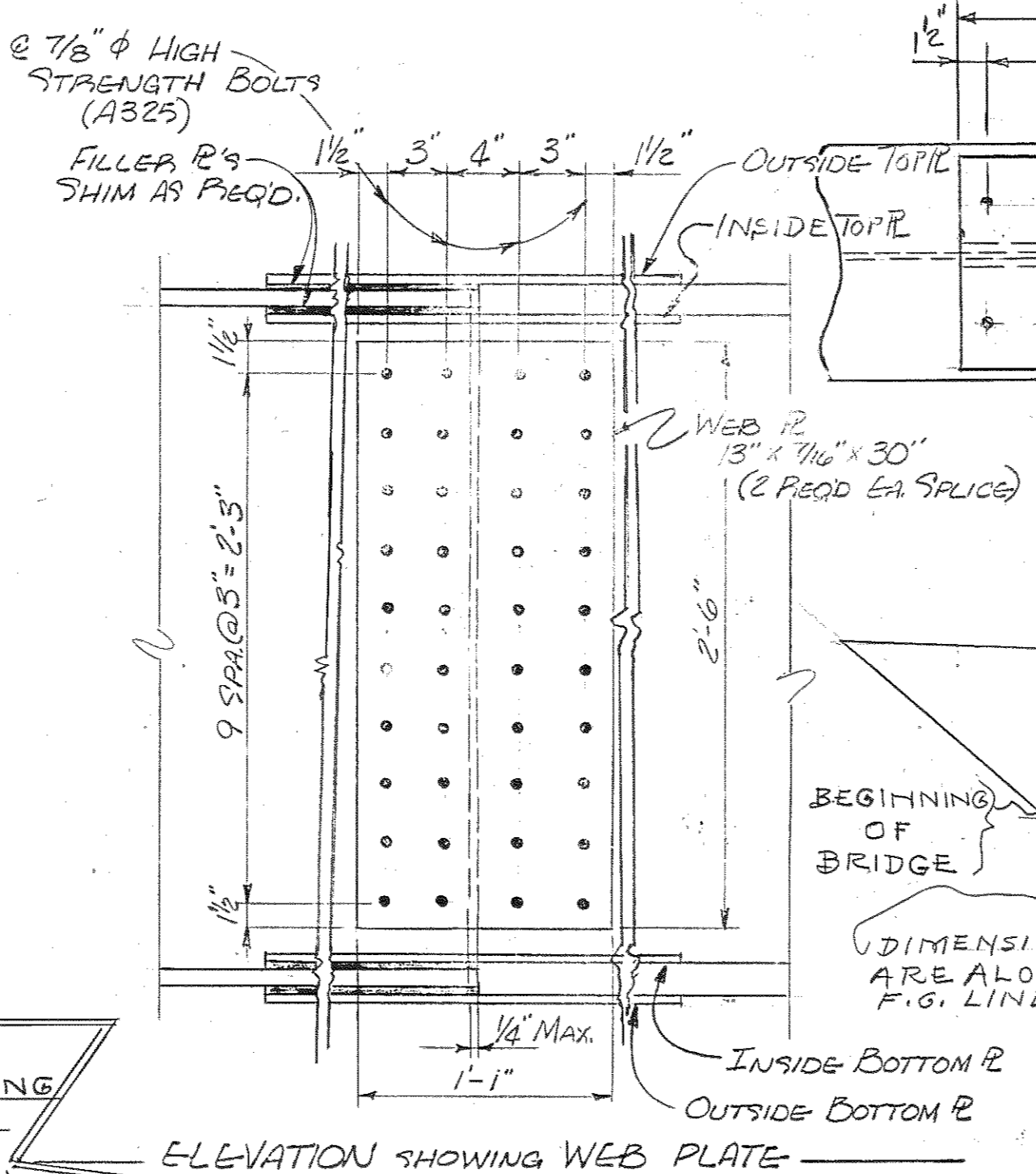
NOTE: ALL STRUCTURAL STEEL TO BE AASHTO M-223 (ASTM A572) UNLESS OTHERWISE NOTE.



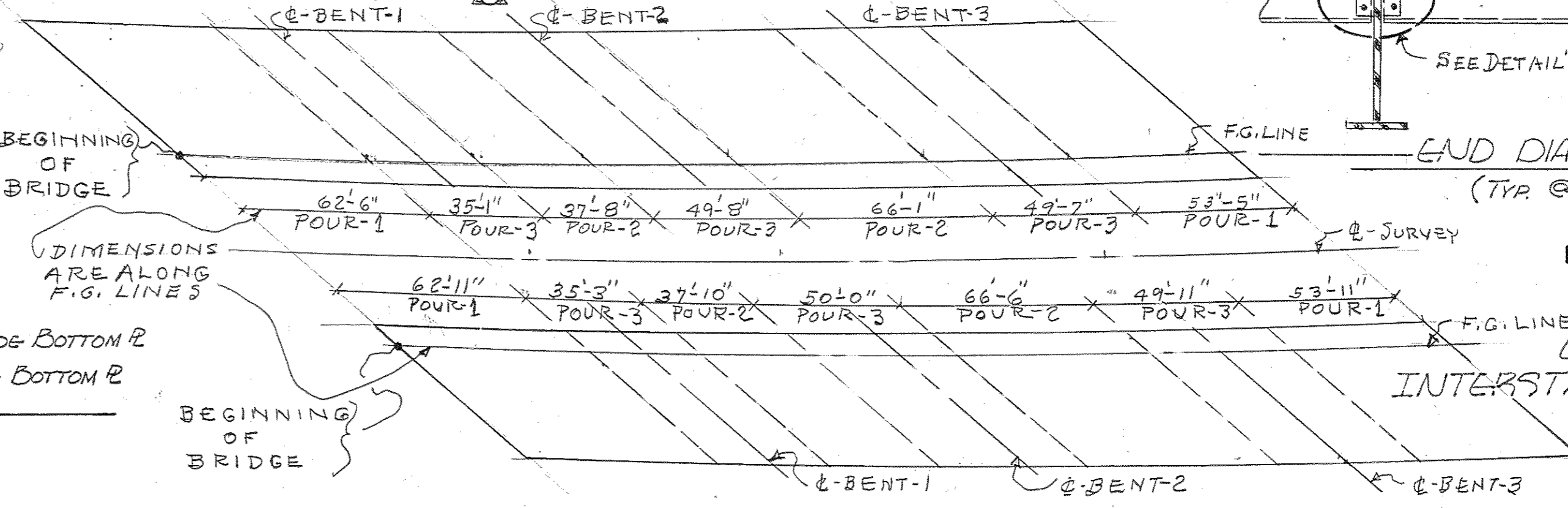
FRAMING PLAN
NOTE: DIAPHRAGMS ARE TO BE RADIAL. DIMENSIONS GIVEN ARE ALONG @ EXTERIOR GIRDERS AS SHOWN.

TABLE OF ANGLES

GIRDER	LOCATION					
	▲	●	■	●	▼▲	
LEFT LANE	1	39° 43' 43"	40° 20' 27"	40° 55' 1"	41° 39' 43"	42° 17' 43"
	2	39° 53' 11"	40° 24' 50"	40° 59' 18"	41° 43' 54"	42° 23' 52"
	3	39° 57' 38"	40° 29' 12"	41° 3' 36"	41° 48' 4"	42° 29' 59"
	4	40° 2' 4"	40° 33' 33"	41° 7' 51"	41° 52' 14"	42° 36' 5"
	5	40° 6' 29"	40° 37' 53"	41° 12' 6"	41° 56' 22"	42° 42' 9"
	6	40° 10' 53"	40° 42' 12"	41° 16' 20"	42° 1' 27"	42° 48' 11"
RIGHT LANE	1	40° 30' 50"	41° 1' 46"	41° 35' 33"	42° 29' 26"	43° 15' 25"
	2	40° 35' 9"	41° 6' 2"	41° 39' 42"	42° 35' 27"	43° 21' 16"
	3	40° 39' 26"	41° 10' 15"	41° 43' 50"	42° 41' 26"	43° 27' 6"
	4	40° 43' 43"	41° 14' 27"	41° 47' 57"	42° 47' 24"	43° 32' 54"
	5	40° 47' 59"	41° 18' 39"	41° 52' 4"	42° 53' 20"	43° 38' 41"



NOTE: THE SLAB SHALL NOT BE POURED UNTIL ALL STRUCTURAL STEEL IS ERECTED AND ALL WELDING OR BOLTING COMPLETE. ALL POURS ARE TO BE MADE IN NUMERICAL SEQUENCE. POUR NO. 1 SHALL PROCEED IN A DIRECTION FROM MID-SPAN TO THE ABUTMENT. POURS WITH THE SAME NUMERICAL DESIGNATION MAY BE MADE SIMULTANEOUSLY. THE CONTRACTOR SHALL MAKE ADEQUATE PROVISIONS DURING PLACEMENT OF SLAB TO PREVENT THE EXTERIOR BEAM FROM TWISTING. NO PORTION OF THE CURB OR PARAPET SHALL BE POURED UNTIL THE ENTIRE SLAB IS IN PLACE.



DESIGNED BY W.C. BOWMAN DATE 8-82
 DRAWN BY J.W. PATTON DATE 8-82
 SUPERVISED BY P.W. & P.L.H. DATE 8-82
 CHECKED BY DATE

FIELD SPLICE DETAILS

NOTE: FOR STRUCTURAL STEEL GENERAL NOTES SEE DRAWING NO. M-112-63

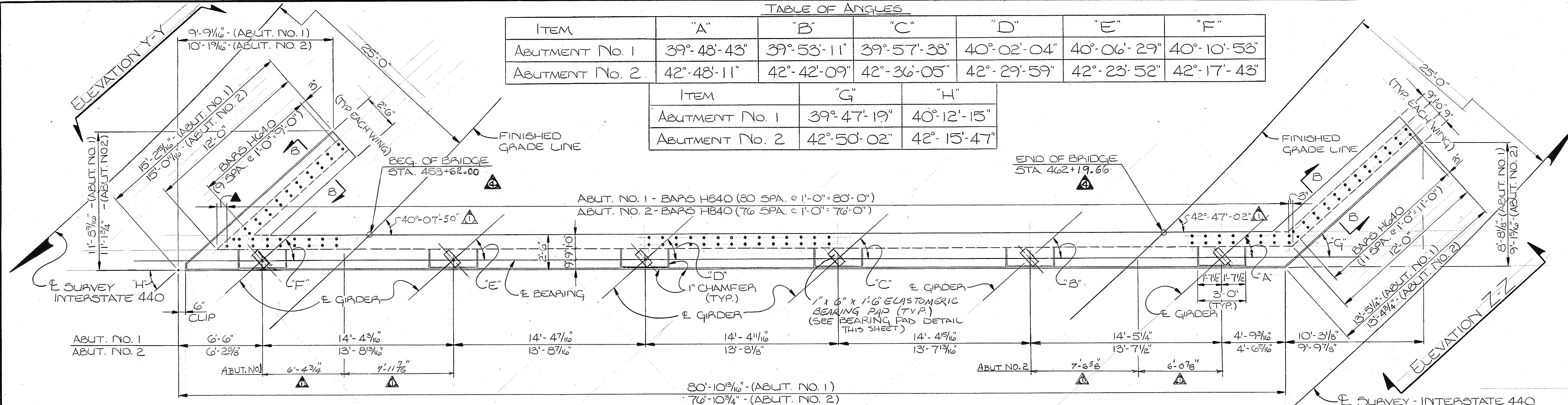
STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 STRUCTURAL STEEL
 LEFT AND RIGHT LANES,
 INTERSTATE 440 OVER GLENROSE AVENUE
 AND L & N RAILROAD
 STATION 460+14.72
 DAVIDSON COUNTY
 1982

ITEM	"A"	"B"	"C"	"D"	"E"	"F"
ABUTMENT No. 1	39°-48'-43"	39°-53'-11"	39°-57'-38"	40°-02'-04"	40°-06'-29"	40°-10'-53"
ABUTMENT No. 2	42°-48'-11"	42°-42'-09"	42°-36'-05"	42°-29'-59"	42°-23'-52"	42°-17'-43"

ITEM	"G"	"H"
ABUTMENT No. 1	39°-47'-19"	40°-12'-15"
ABUTMENT No. 2	42°-50'-02"	42°-15'-47"

PROJECT NO.	YEAR	SHEET NO.
IR-24-1(55)51	1982	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	3-3-82	W.C.B.	LOCATED BEARING PILES FROM PILING PLAN
2	3-14-82	W.C.B.	ADDED PILES
3	4-4-82	W.C.B.	REVISED BEARING PADS
4	7-12-82	W.C.B.	CHANGED BY S. ANDERSON OF BRIDGE STATION
5	7-25-82	W.C.B.	CHANGED ELEVATIONS

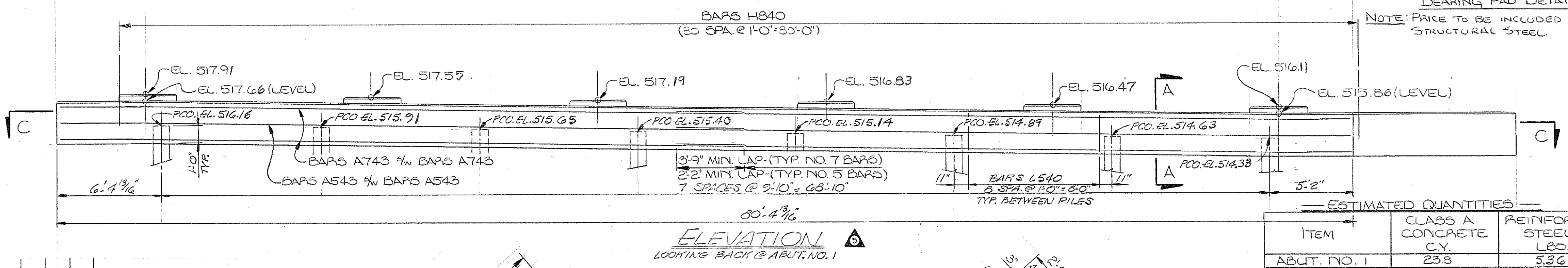
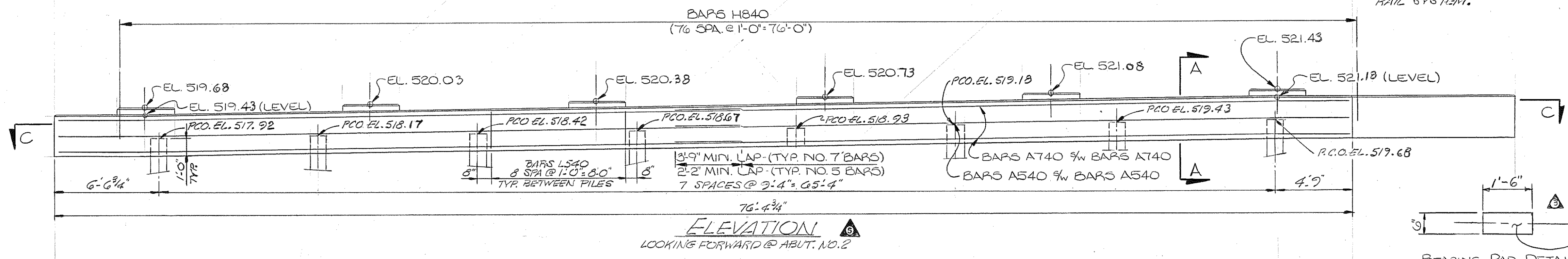


▲ DENOTES 7/16" @ ABUT. NO. 1
7/4" @ ABUT. NO. 2

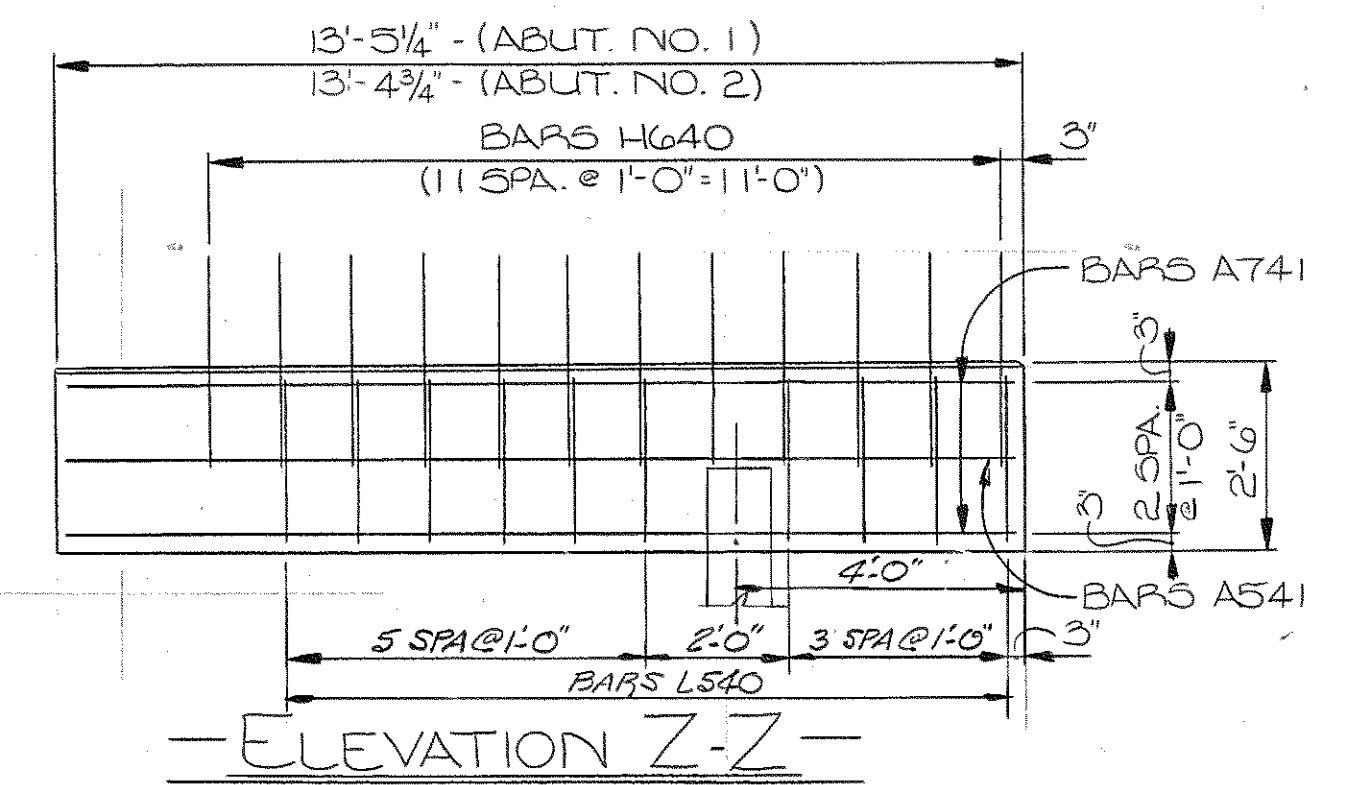
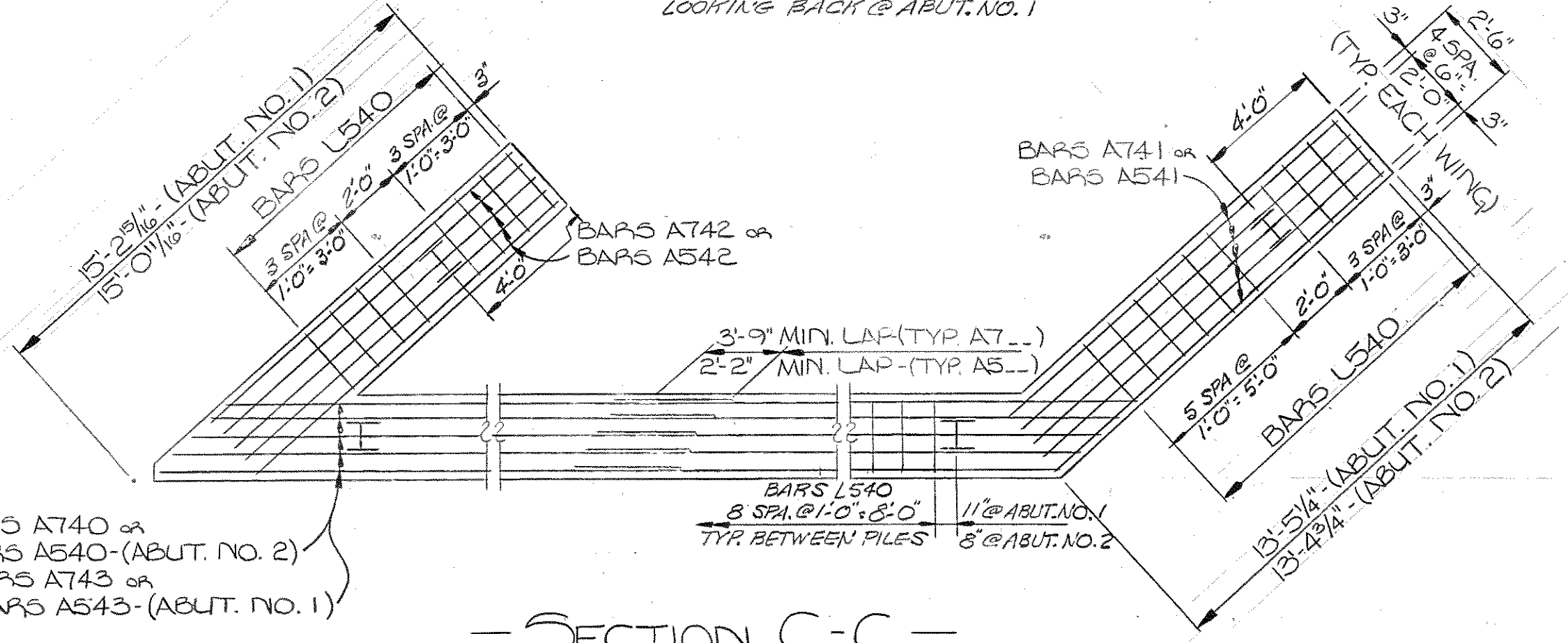
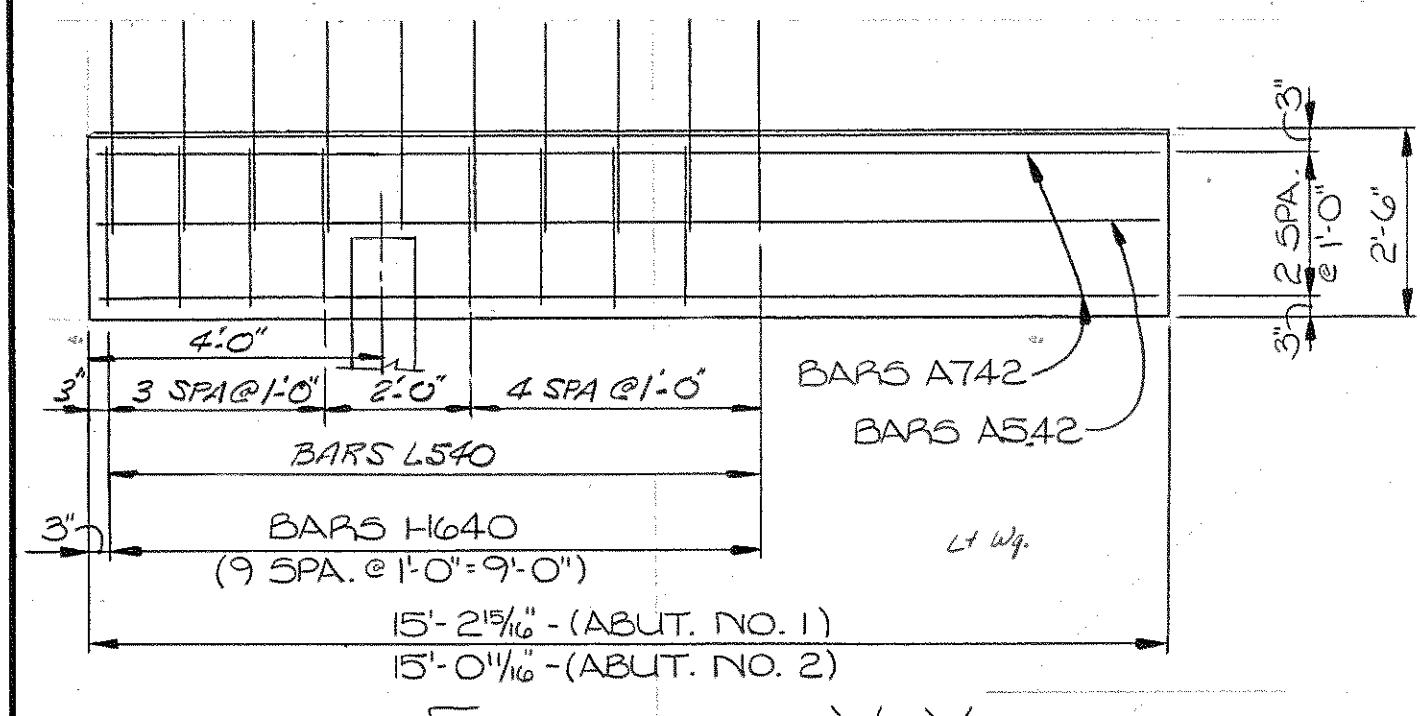
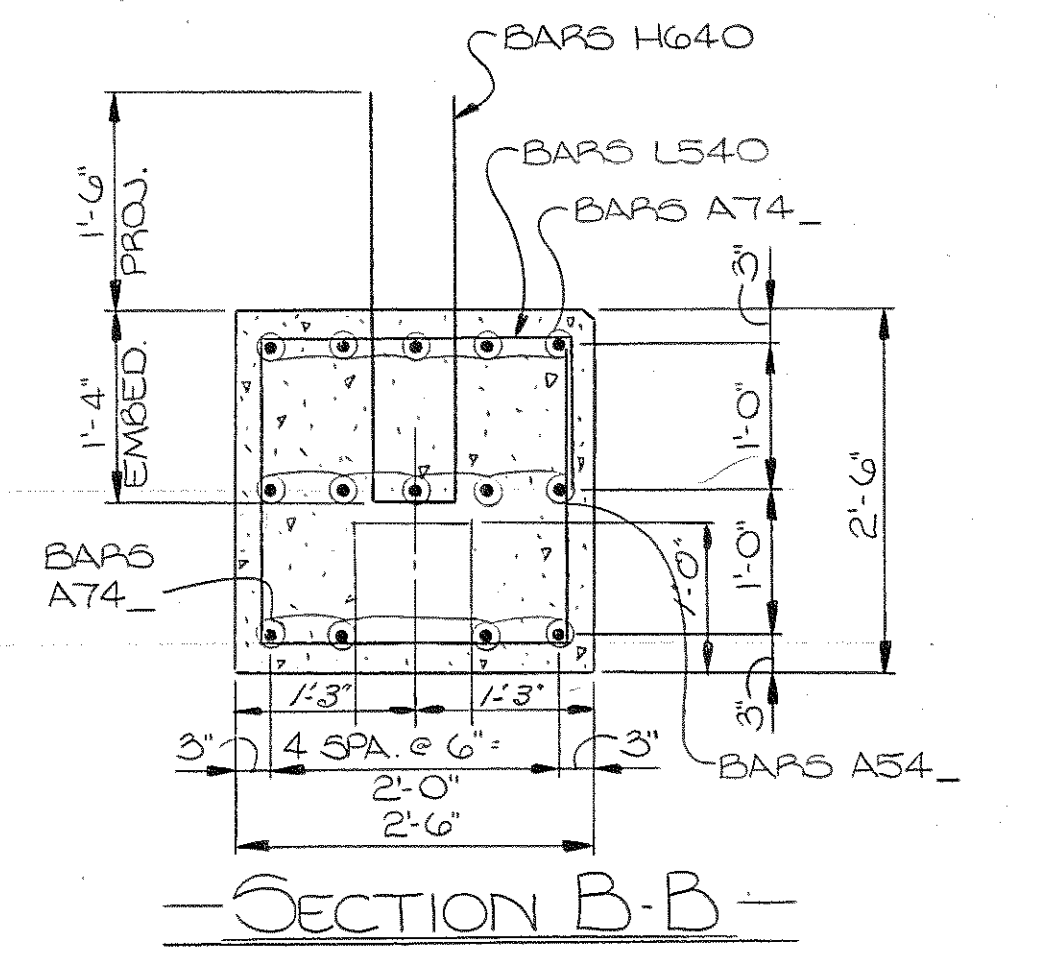
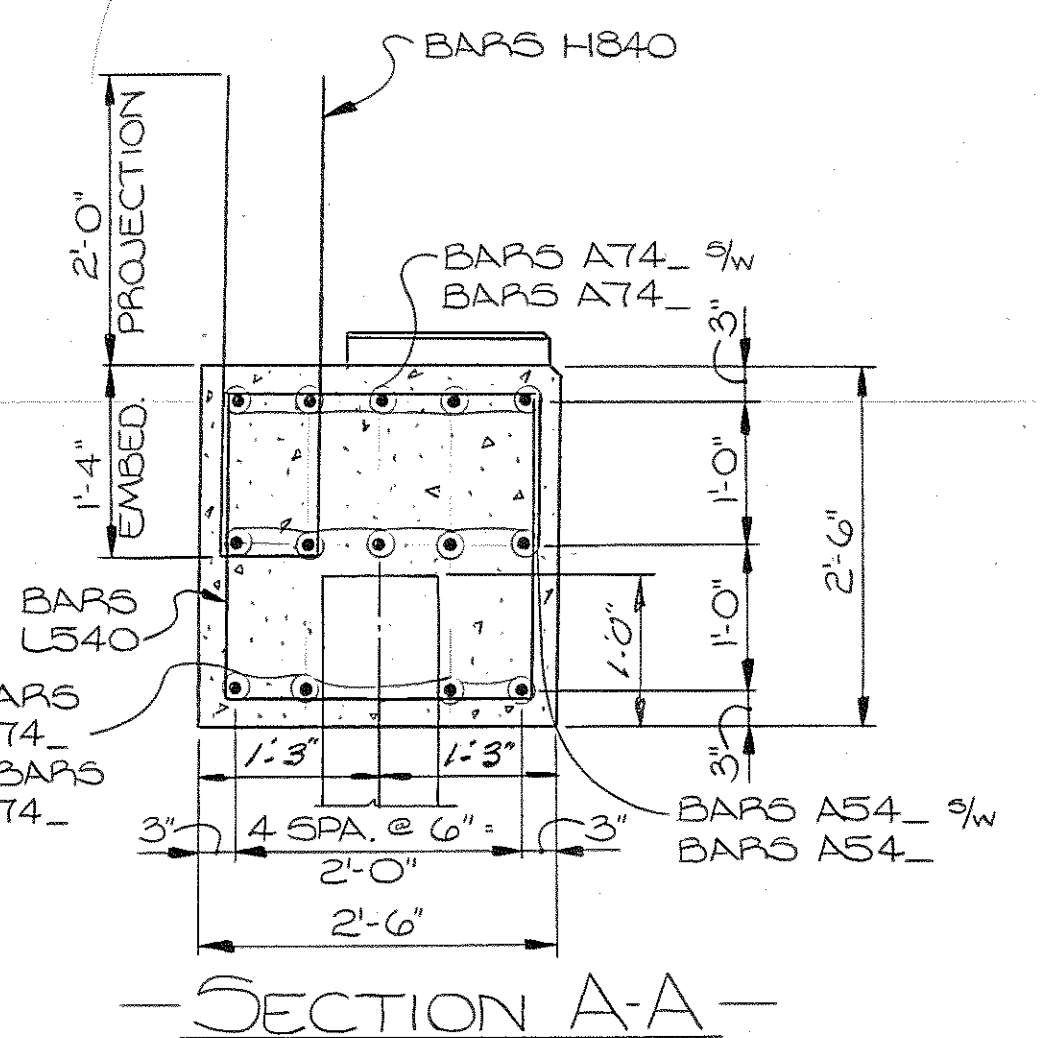
NOTE: RISER BLOCKS TO BE POURED MONOLITHICALLY WITH ABUTMENT BEAM.

NOTE: BAR DESIGNATION, SPACING, AND DIMENSIONS TO BE TYPICAL FOR ABUTMENT NO. 1 AND NO. 2 UNLESS OTHERWISE DESIGNATED.

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



ITEM	CLASS A CONCRETE C.Y.	REINFORCING STEEL LBS.
ABUT. NO. 1	23.8	5,367
ABUT. NO. 2	22.2	5,183



DESIGNED BY: EUD BOWMAN
 DRAWN BY: M.DYE
 SUPERVISED BY: B.L.H. & P.W.
 CHECKED BY: _____

DATE: 3-82
 DATE: 8-82
 DATE: 8-82
 DATE: _____

BARS A740 3/4 W BARS A740 or BARS A540 3/4 W BARS A540 (ABUT. NO. 2)
 BARS A743 3/4 W BARS A743 or BARS A543 3/4 W BARS A543 (ABUT. NO. 1)

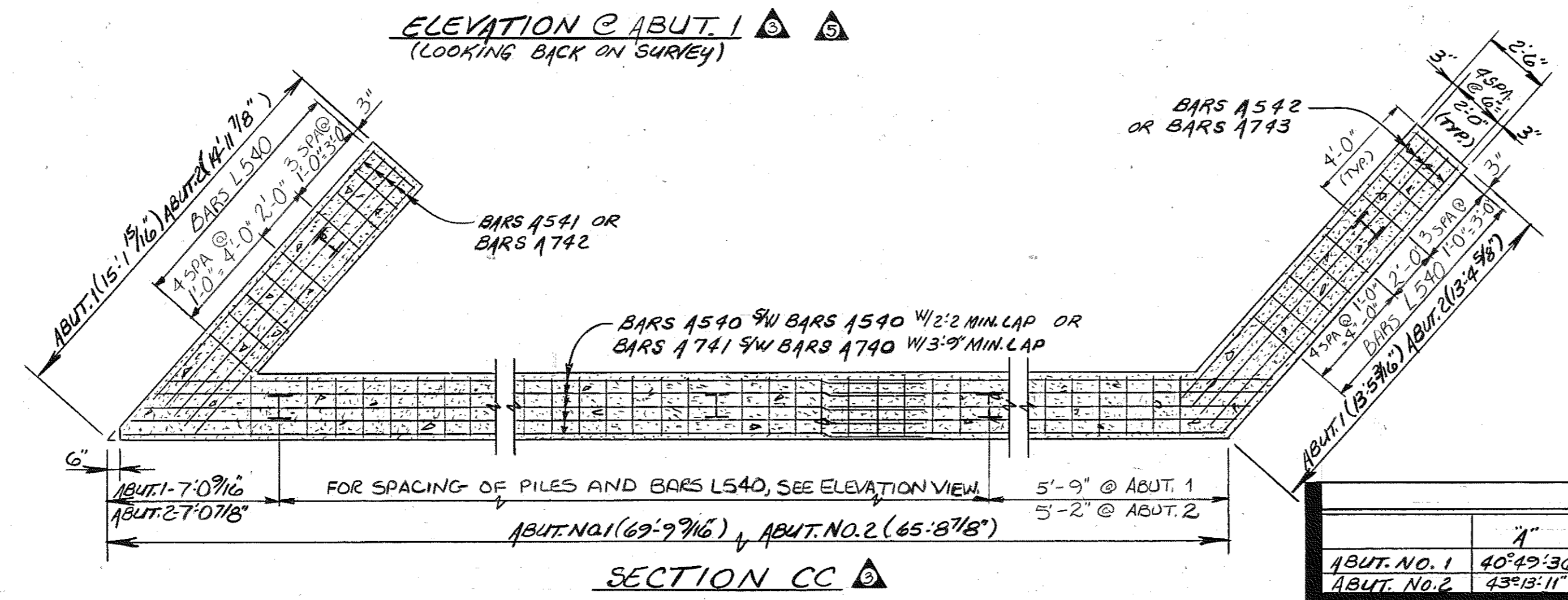
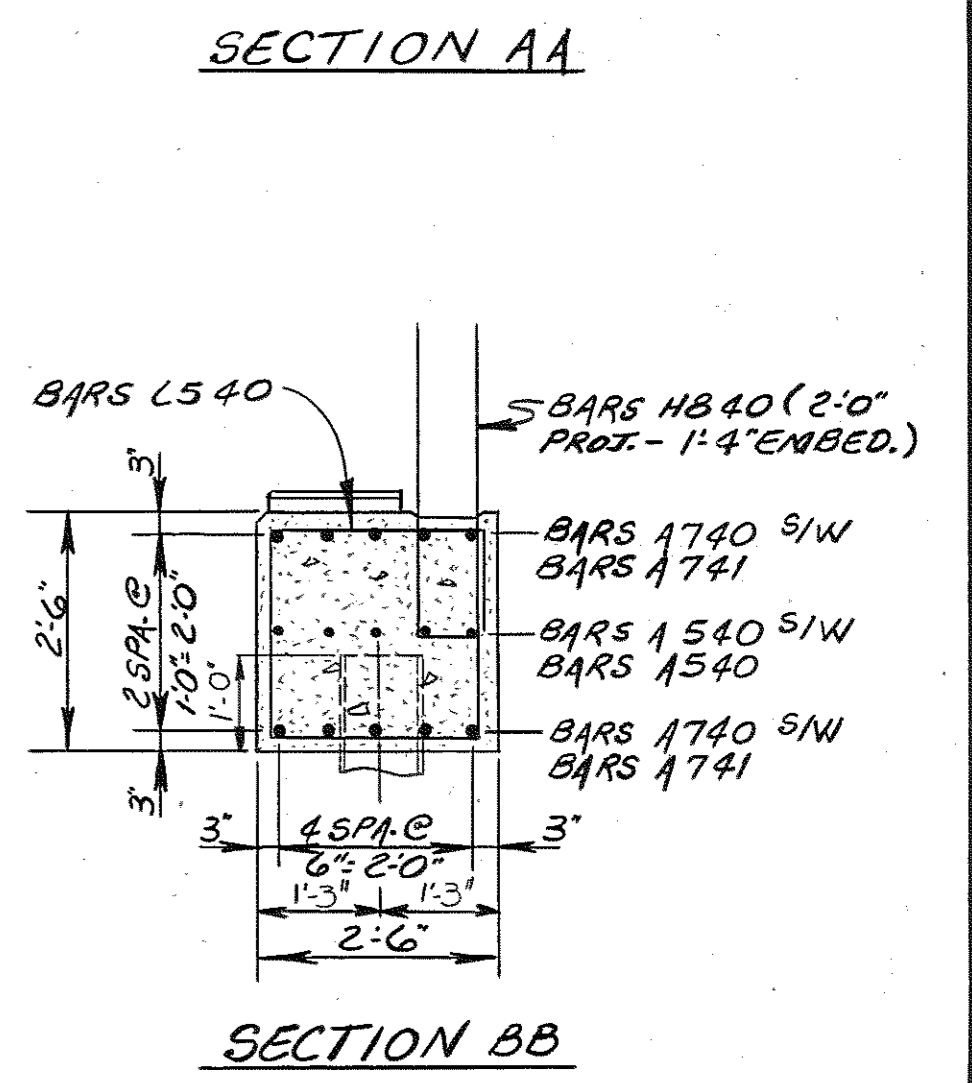
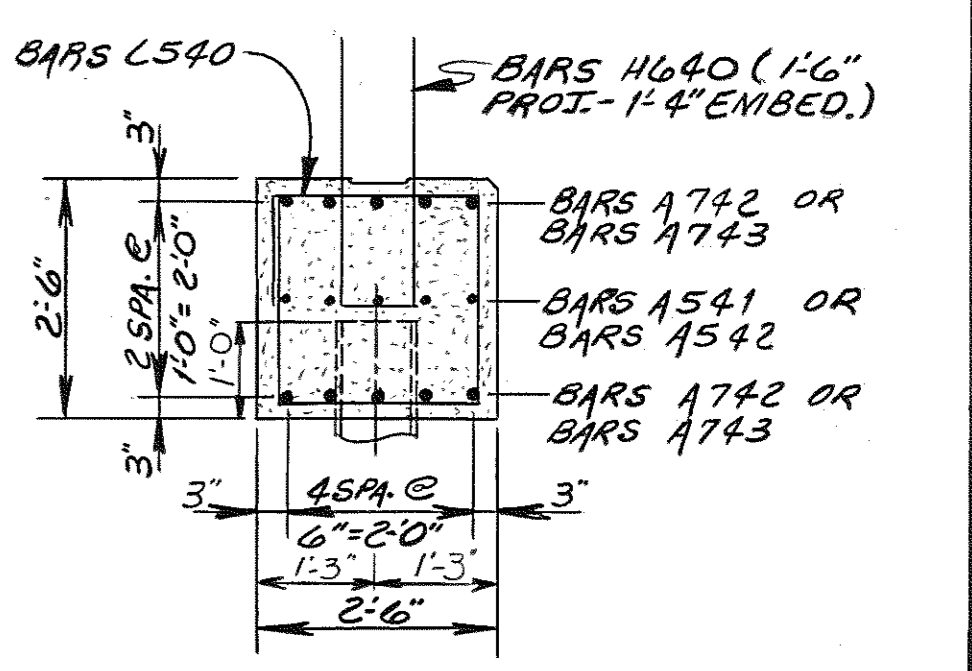
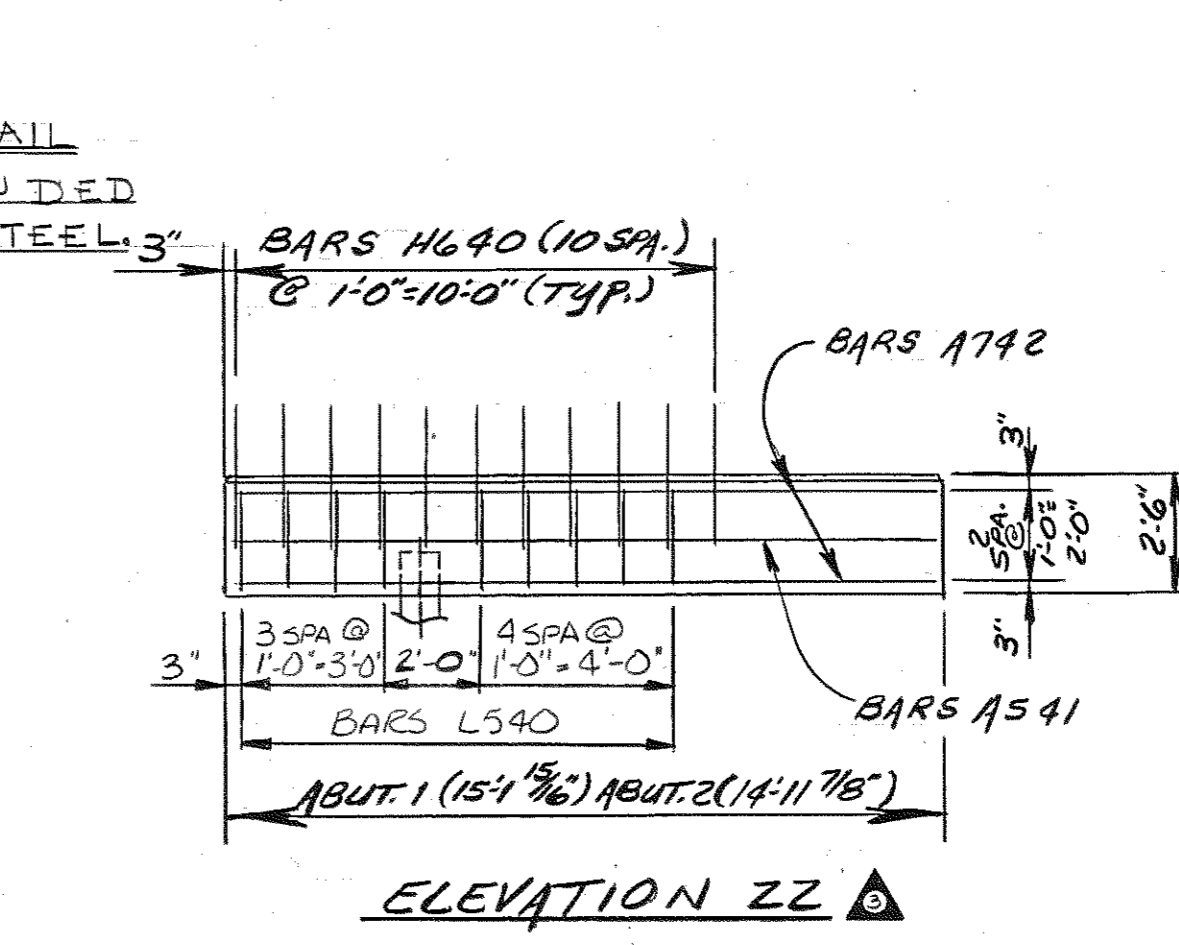
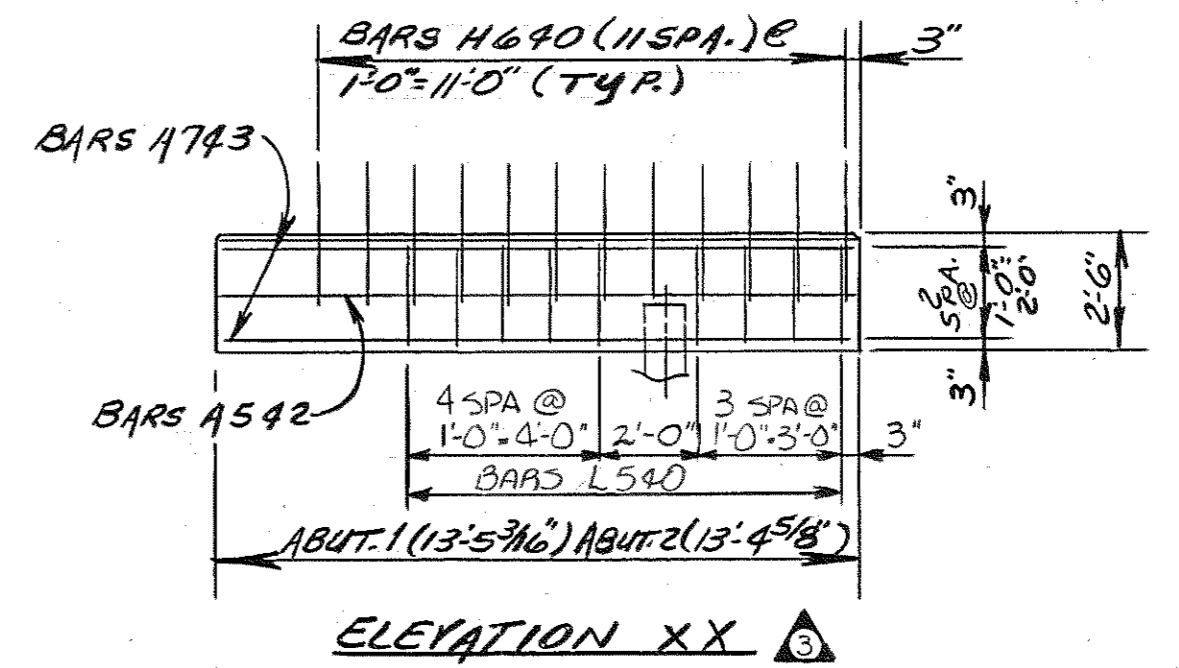
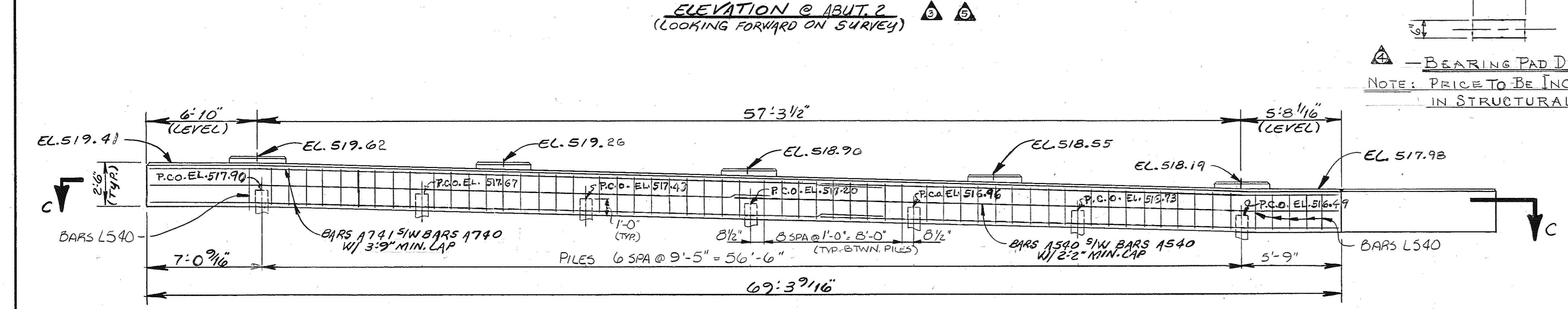
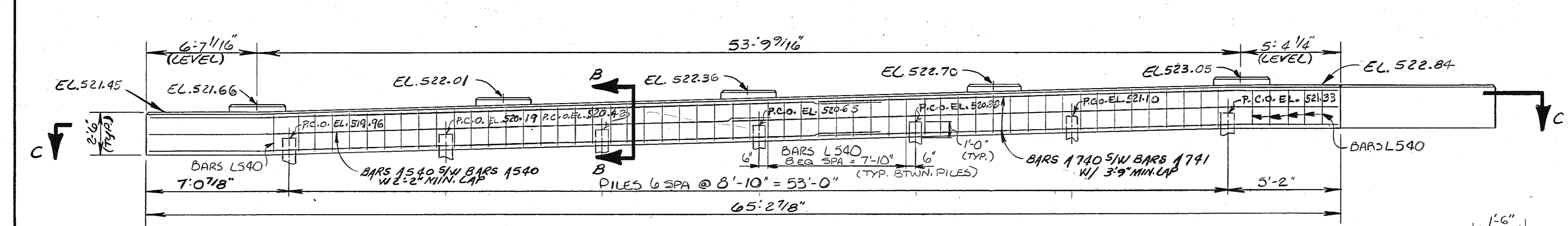
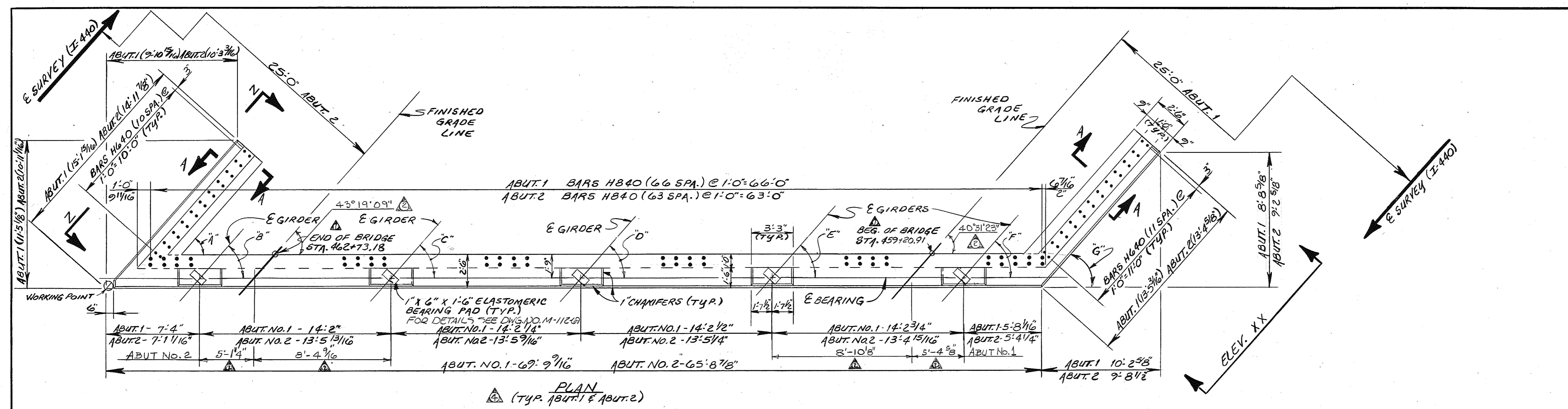
STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 ABUTMENT NO. 1 AND NO. 2
 LEFT LANE
 INTERSTATE 440 OVER GLENROSE AVENUE AND L AND N RAILROAD STATION 460+14.72
 DAVIDSON COUNTY
 1982

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

CONST. NO. 19002-3141-44

PROJECT NO.	YEAR	SHEET NO.
IR-24-1(5)51	1982	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	1-10-83	W.C.B.	CHANGED STATIONS
2	3-3-83	W.C.B.	LOCATED GIRDERS FROM FIN. GRADE LINE ALONG & BEARING REINFORCEMENTS AT 45° ANGLE.
3	3-14-83	W.C.B.	ADDED PILES
4	4-4-83	W.C.B.	ADDED BEARING PAD DETAILS.
5	7-25-83	W.C.B.	CHANGED ELEVATIONS



BEARING PAD DETAIL
 NOTE: PRICE TO BE INCLUDED IN STRUCTURAL STEEL

NOTE: WHEN POURING ABUTMENT BEAM PROVISIONS SHALL BE MADE FOR SETTING ANCHOR BOLTS. IF THE CONTRACTOR ELECTS TO DRILL THE HOLES FOR THE ANCHOR BOLTS, THE REINFORCING STEEL SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE DRILLING. BOLT PROTECTION 6" WITH ABUTMENT BEAM.
 NOTE: RISER BLOCK BEARING PAD SURFACES TO CONFORM TO BOTTOM OF BEAM GRADE.

ESTIMATED QUANTITIES

	CONCRETE	REINFORCING CLASS 'A' STEEL (C.Y.)	STEEL LBS.
ABUT. NO. 1	21.2	4.791	
ABUT. NO. 2	20.5	4,380	

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 ABUTMENT NO'S. 1 & 2
 INTERSTATE 440 - RIGHT LANE
 OVER
 GLENROSE AVENUE &
 LEN RAILROAD
 STATION 460+14.72
 DAVIDSON COUNTY
 1982

DESIGNED BY: BUD BOYMAN DATE: -82
 DRAWN BY: RICK HINDMAN DATE: B-82
 SUPERVISED BY: DON HARRISON DATE: B-82
 CHECKED BY: _____ DATE: -82

TABLE OF ANGLES

	"A"	"B"	"C"	"D"	"E"	"F"	"G"
ABUT. NO. 1	40°49'36"	40°47'59"	40°43'43"	40°39'26"	40°35'09"	40°30'58"	40°27'12"
ABUT. NO. 2	43°13'11"	43°15'25"	43°21'16"	43°27'06"	43°32'54"	43°38'41"	43°31'42"

CORRECT: Clifton L. Lovell
 ENGINEER OF STRUCTURES
 APPROVED: Daniel Evans
 DIRECTOR OF HIGHWAYS

M-112-70

CONST. NO. 19002-3141-44

PROJECT NO.	YEAR	SHEET NO.
IR-24-1(55)51	1982	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	1/24/83	F.C.	LIGHTING
2	4/12/83	M.C.B.	CHANGED BENT STATIONS
3	7-25-83	M.C.B.	CHANGED 3M. SEAT ELEV'S

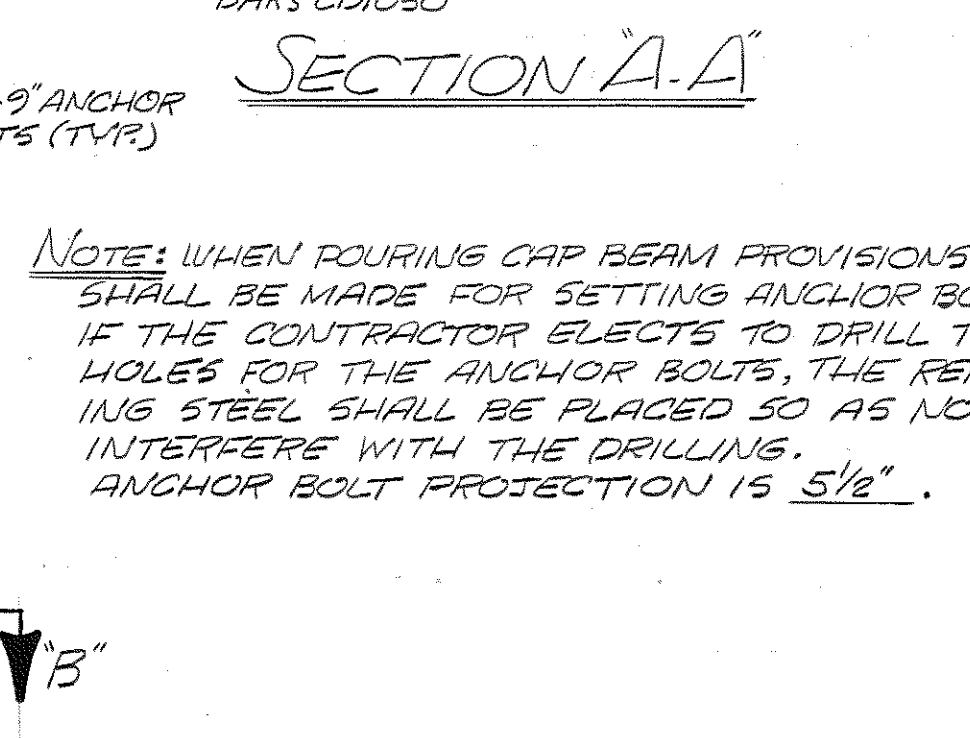
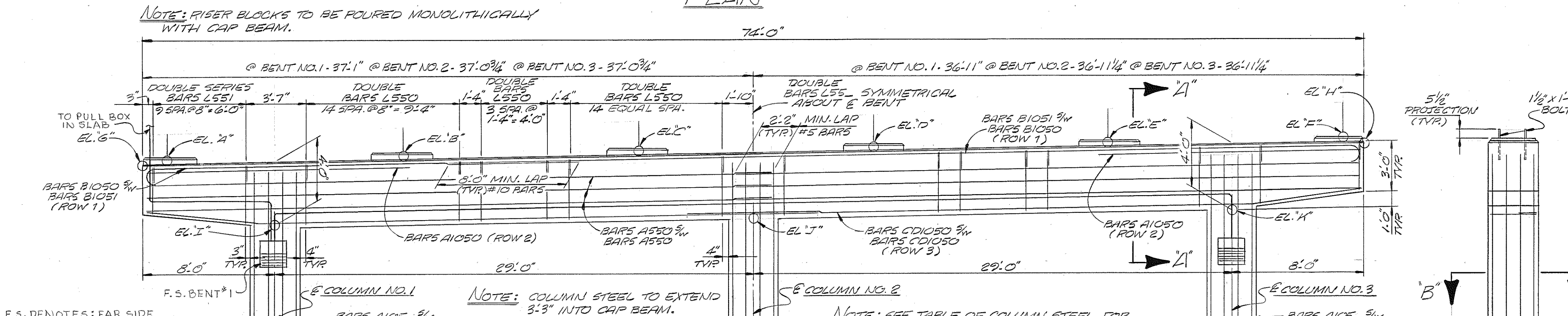
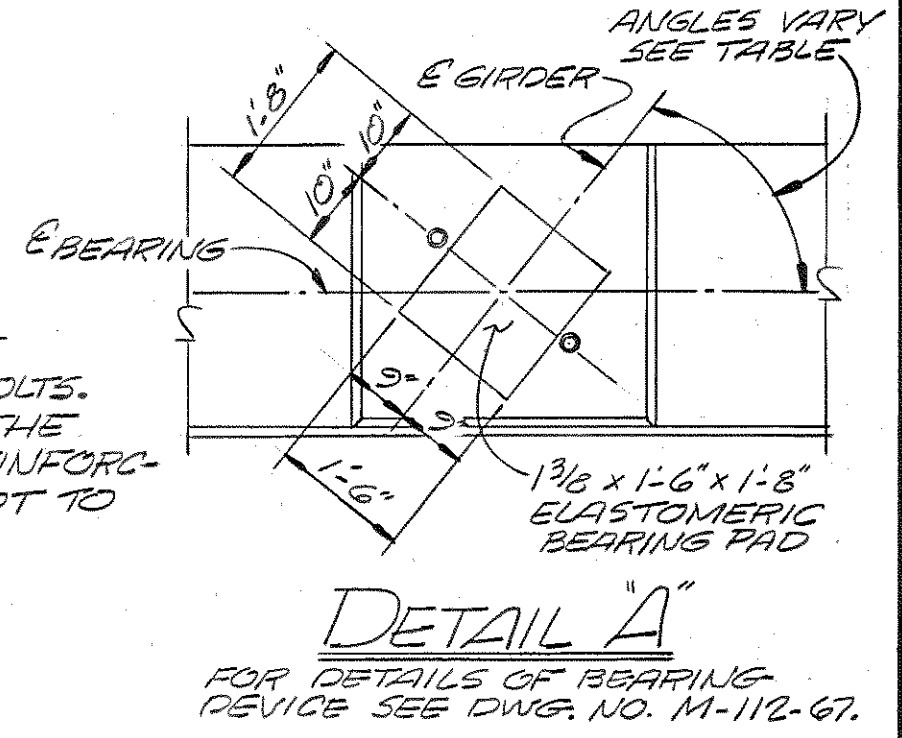
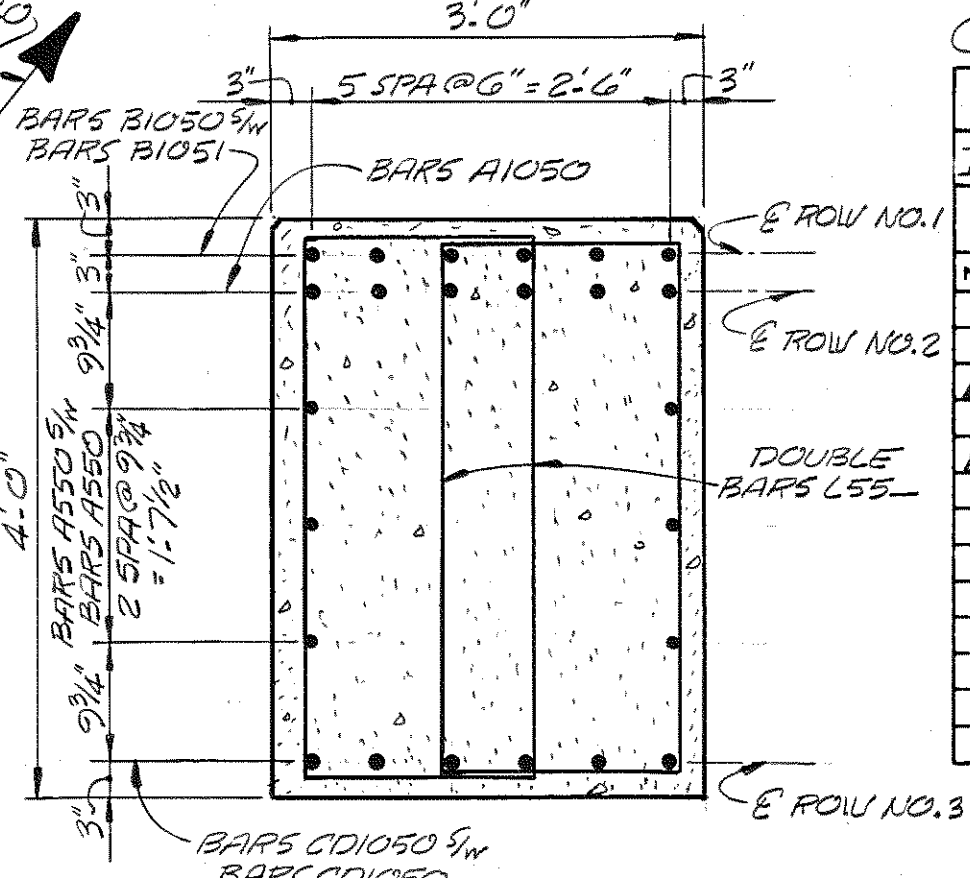
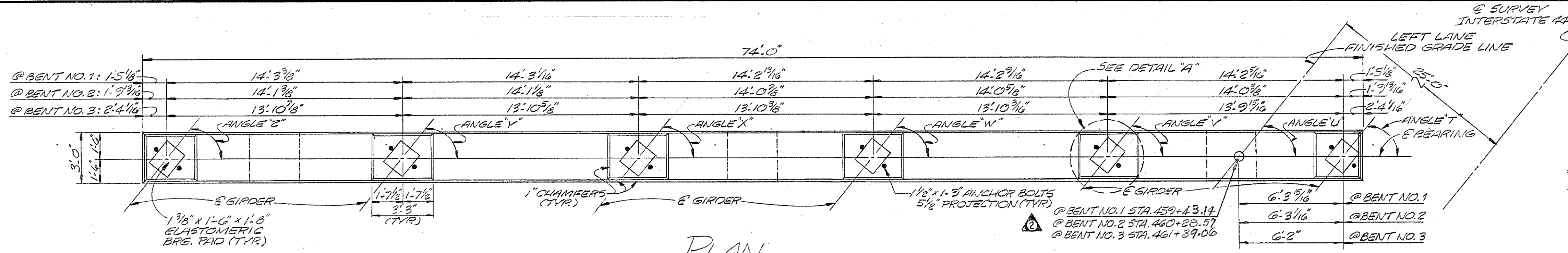


TABLE OF COLUMN STEEL

	COLUMN No. 1		COLUMN No. 2		COLUMN No. 3	
	VERTICAL	TIES	VERTICAL	TIES	VERTICAL	TIES
BENT No. 1	BARS A1051 (12 BARS)	BARS L450 25 SPA. @ 1'-0" x 25'-0"	BARS A1052 (12 BARS)	BARS L450 25 SPA. @ 1'-0" x 25'-0"	BARS A1053 (12 BARS)	BARS L450 26 SPA. @ 1'-0" x 26'-0"
BENT No. 2	BARS A1054 (12 BARS)	BARS L450 28 SPA. @ 1'-0" x 28'-0"	BARS A1055 (12 BARS)	BARS L450 28 SPA. @ 1'-0" x 28'-0"	BARS A1056 (12 BARS)	BARS L450 29 SPA. @ 1'-0" x 29'-0"
BENT No. 3	BARS A1057 (12 BARS)	BARS L450 27 SPA. @ 1'-0" x 27'-0"	BARS A1058 (12 BARS)	BARS L450 27 SPA. @ 1'-0" x 27'-0"	BARS A1059 (12 BARS)	BARS L450 28 SPA. @ 1'-0" x 28'-0"

TABLE OF ANGLES

	BENT NO. 1	BENT NO. 2	BENT NO. 3
ANGLE "T"	40°42'12"	41°16'20"	42°01'27"
ANGLE "U"	40°40'45"	41°14'55"	41°59'21"
ANGLE "V"	40°37'33"	41°12'06"	41°56'22"
ANGLE "W"	40°33'33"	41°07'51"	41°52'14"
ANGLE "X"	40°29'18"	41°03'36"	41°48'04"
ANGLE "Y"	40°24'50"	40°59'18"	41°43'54"
ANGLE "Z"	40°20'27"	40°55'01"	41°39'43"

ESTIMATED QUANTITIES

	CLASS "A" CONCRETE (BRIDGES) C.Y.	STEEL BAR REINFORCEMENT (BRIDGES) LBS.
BENT NO. 1	81.1	16,454
BENT NO. 2	84.0	16,962
BENT NO. 3	83.1	16,819

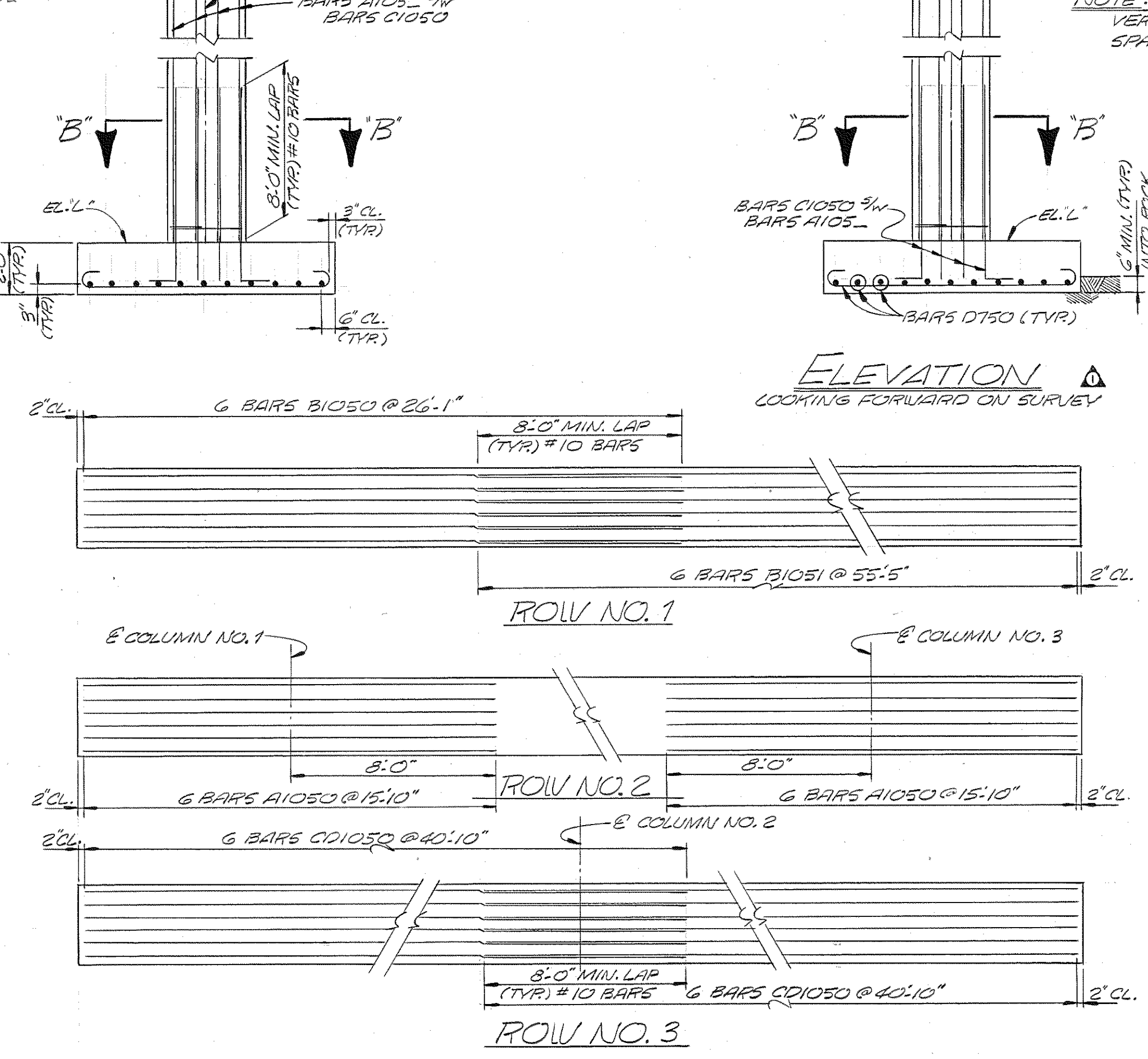
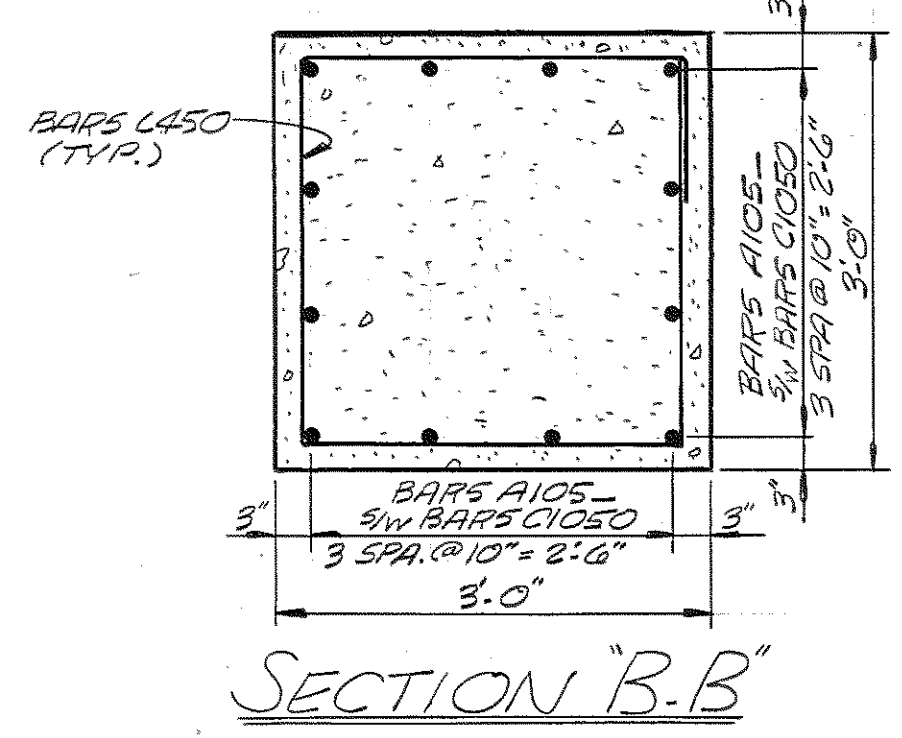
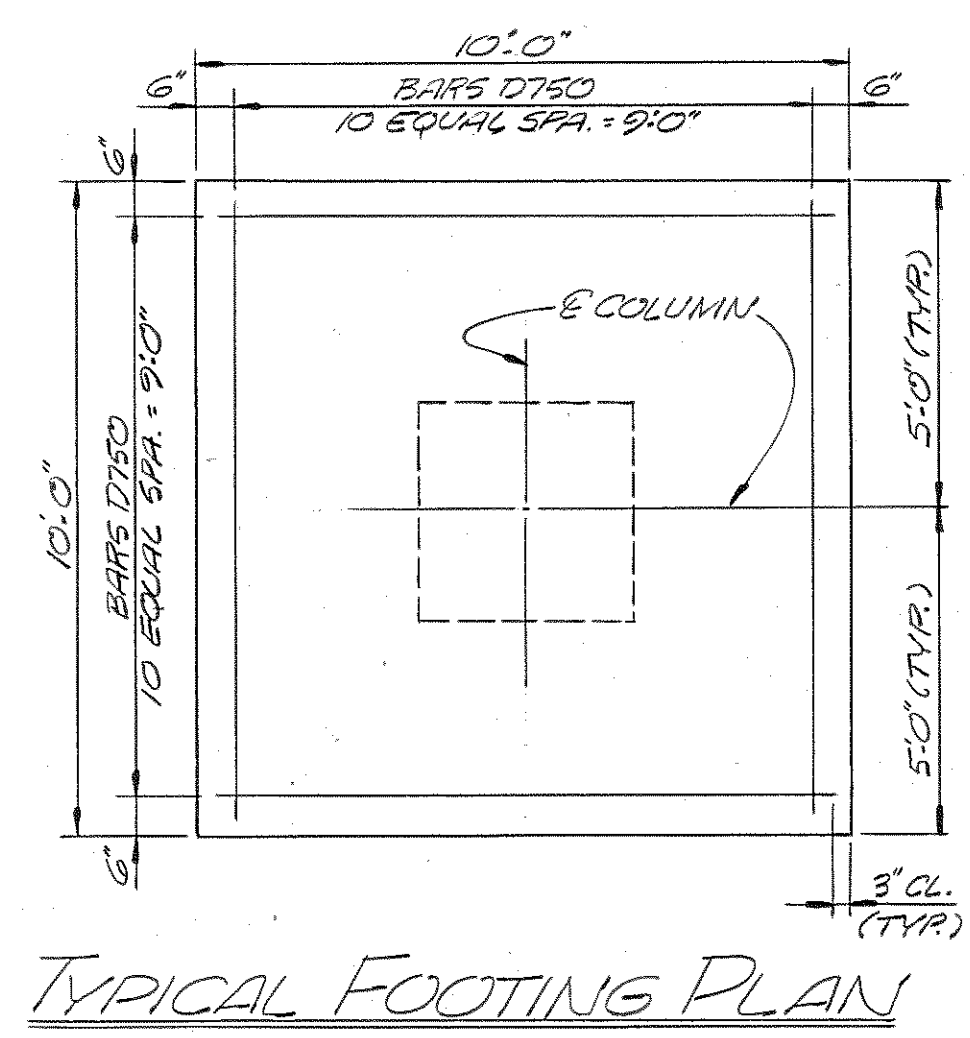


TABLE OF STATIONS AND ELEVATIONS

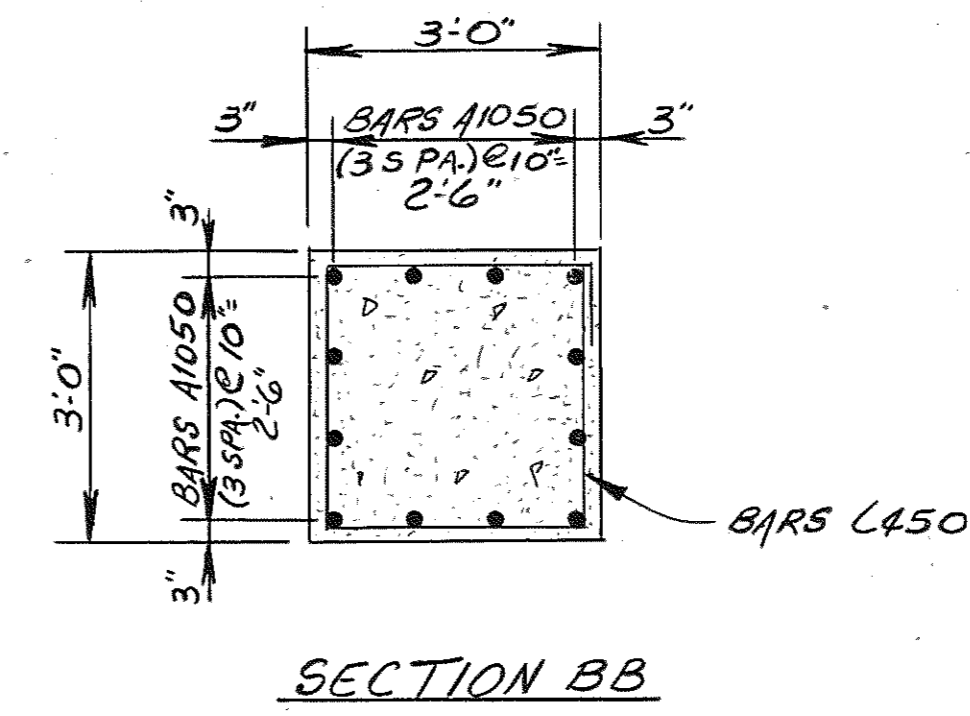
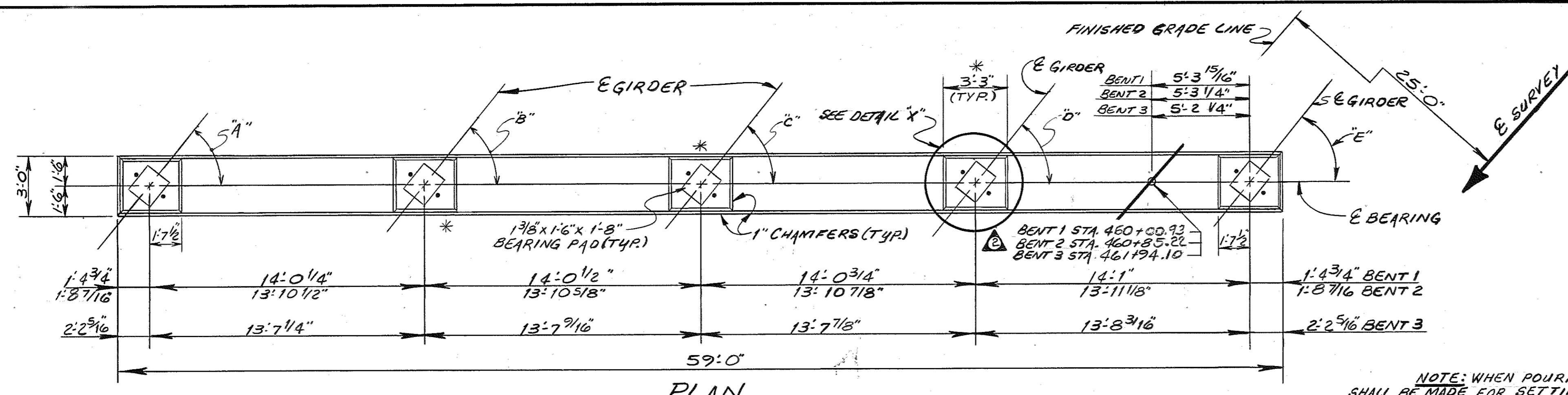
	STA.	EL. "A"	EL. "B"	EL. "C"	EL. "D"	EL. "E"	EL. "F"	EL. "G"	EL. "H"	EL. "I"	EL. "J"	EL. "K"	EL. "L"
BENT NO. 1	STA. 459+44.30	516.81	517.17	517.53	517.89	518.25	518.61	516.55	518.42	512.72	513.48	514.20	487.00
BENT NO. 2	STA. 460+29.71	517.69	518.04	518.39	518.75	519.10	519.46	517.40	519.26	513.60	514.33	515.05	487.00
BENT NO. 3	STA. 461+40.17	518.80	519.15	519.50	519.86	520.21	520.56	518.52	520.37	514.72	515.45	516.17	487.00

DESIGNED BY: BOYMAN DATE: 8-82
 DRAWN BY: MIKE CHILDRESS DATE: 8-82
 SUPERVISED BY: DEAN HARRISON DATE: 8-82
 CHECKED BY: _____ DATE: _____

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 BENTS No. 1, 2 AND 3
 LEFT LANE INTERSTATE 440 OVER
 GLENROSE AVENUE AND L^{AND}N. RAILROAD
 STATION 460+14.72
 DAVIDSON COUNTY
 1982
 CORRECTED Phillip L. Fovall
 ENGINEER OF STRUCTURES
 APPROVED Lewis Evans
 DIRECTOR OF HIGHWAYS

M-112-71

CONST. No. 19002-314-44			
PROJECT NO.	YEAR	SHEET NO.	
IR-24-1(55)51	1982		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	1/24/83	F.C.	LIGHTING
2	4/12/83	W.C.B.	CHANGED BENT STATIONS
3	7-25-82	W.C.	CHANGED BEAM SEAT ELEVATIONS

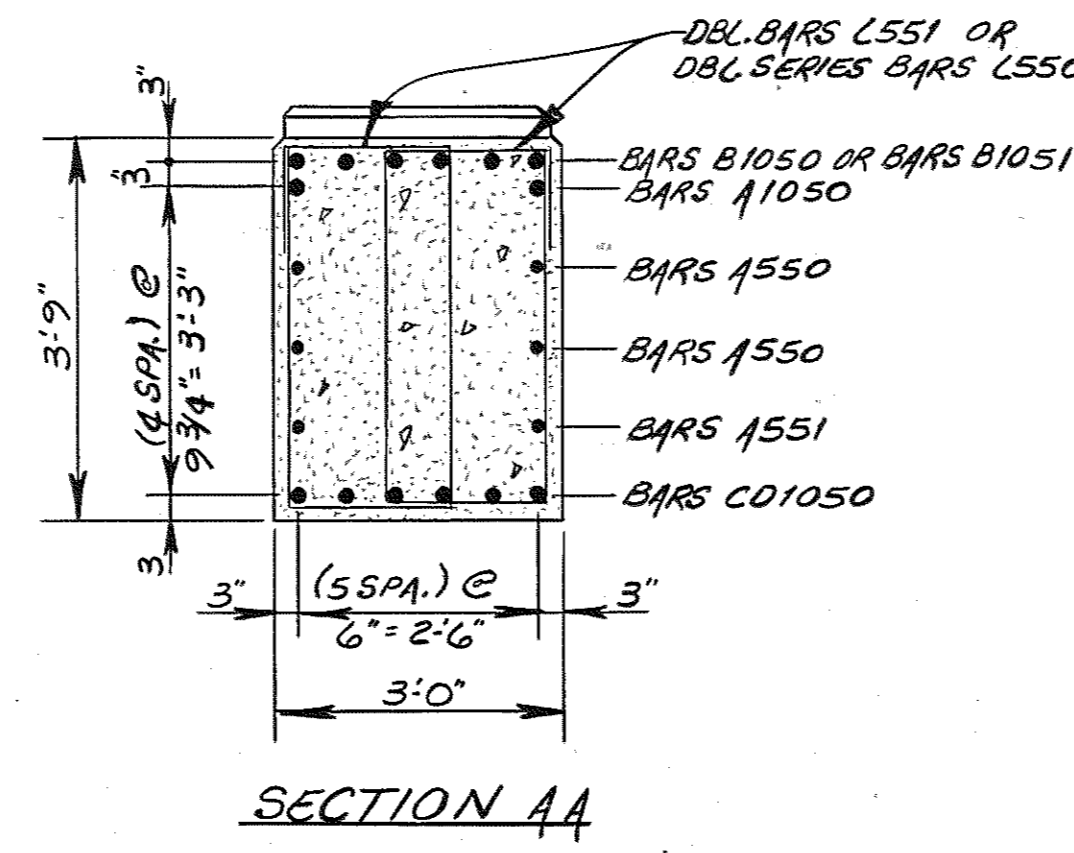
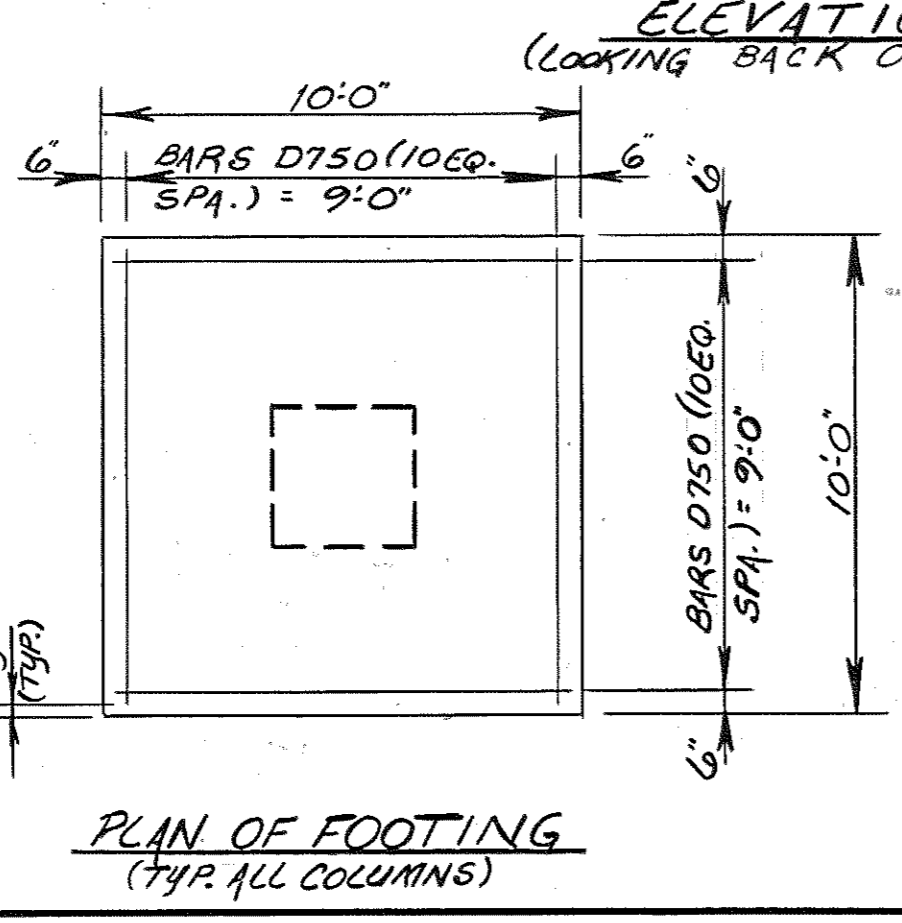
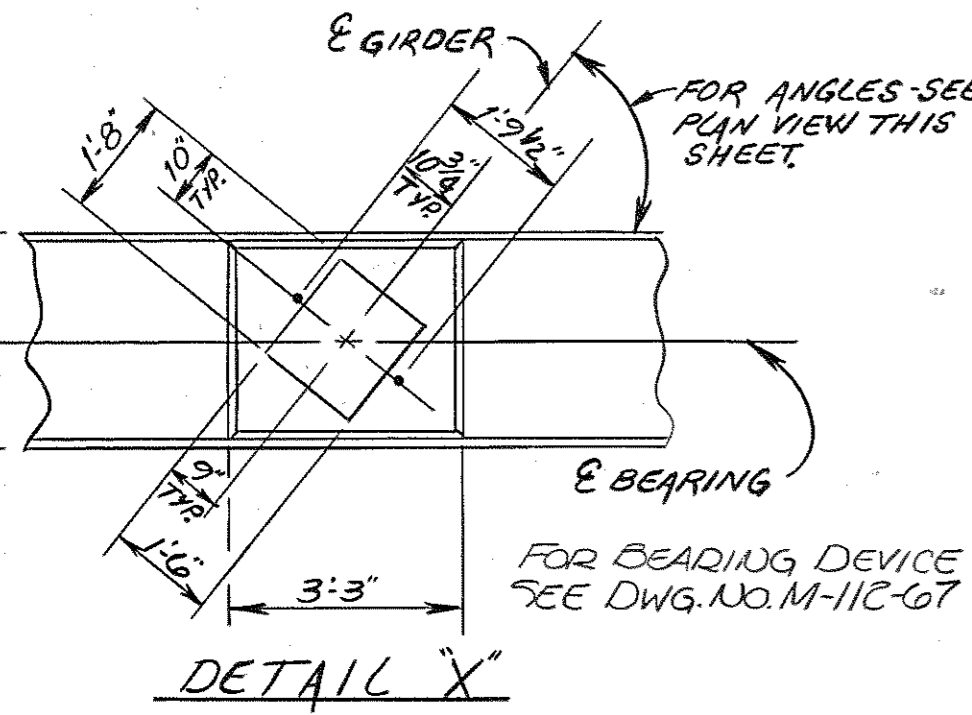
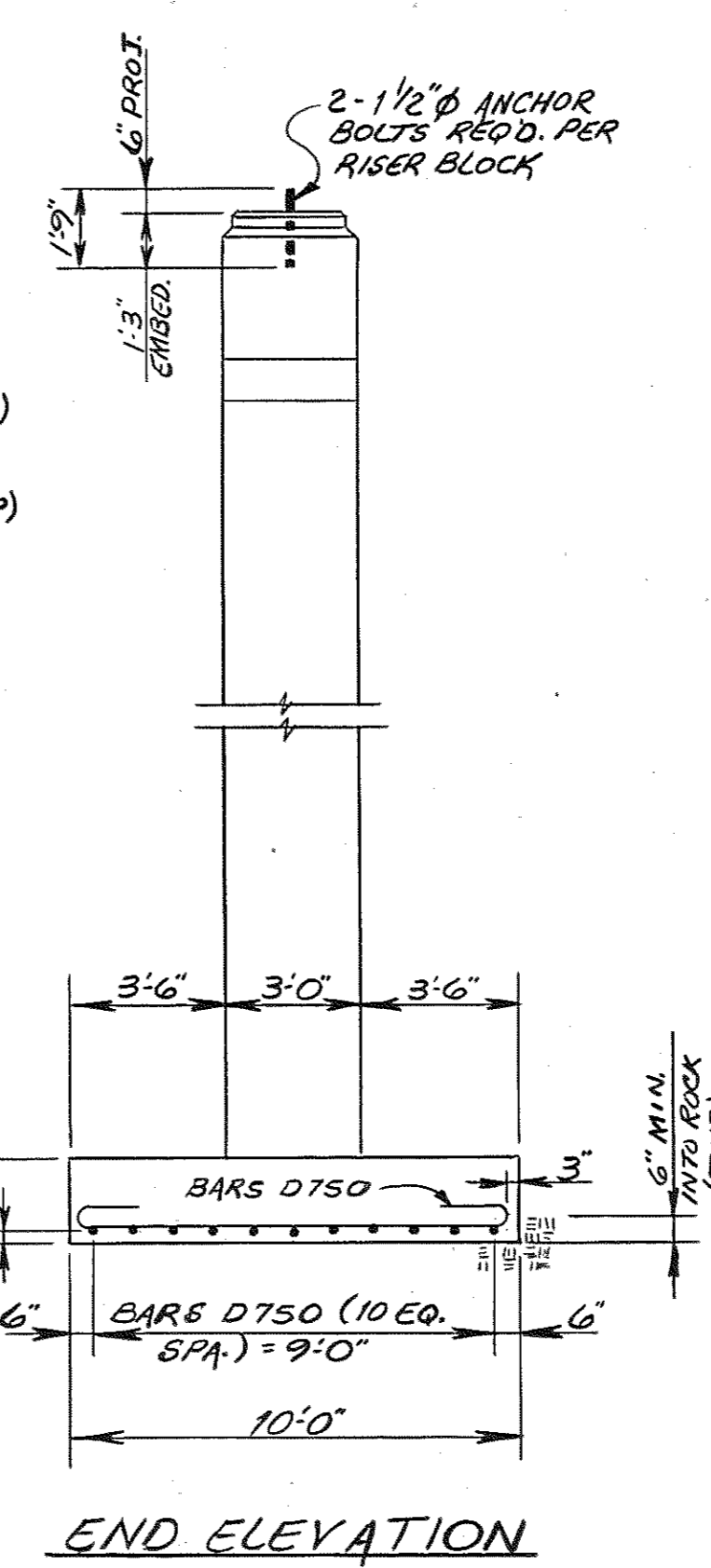
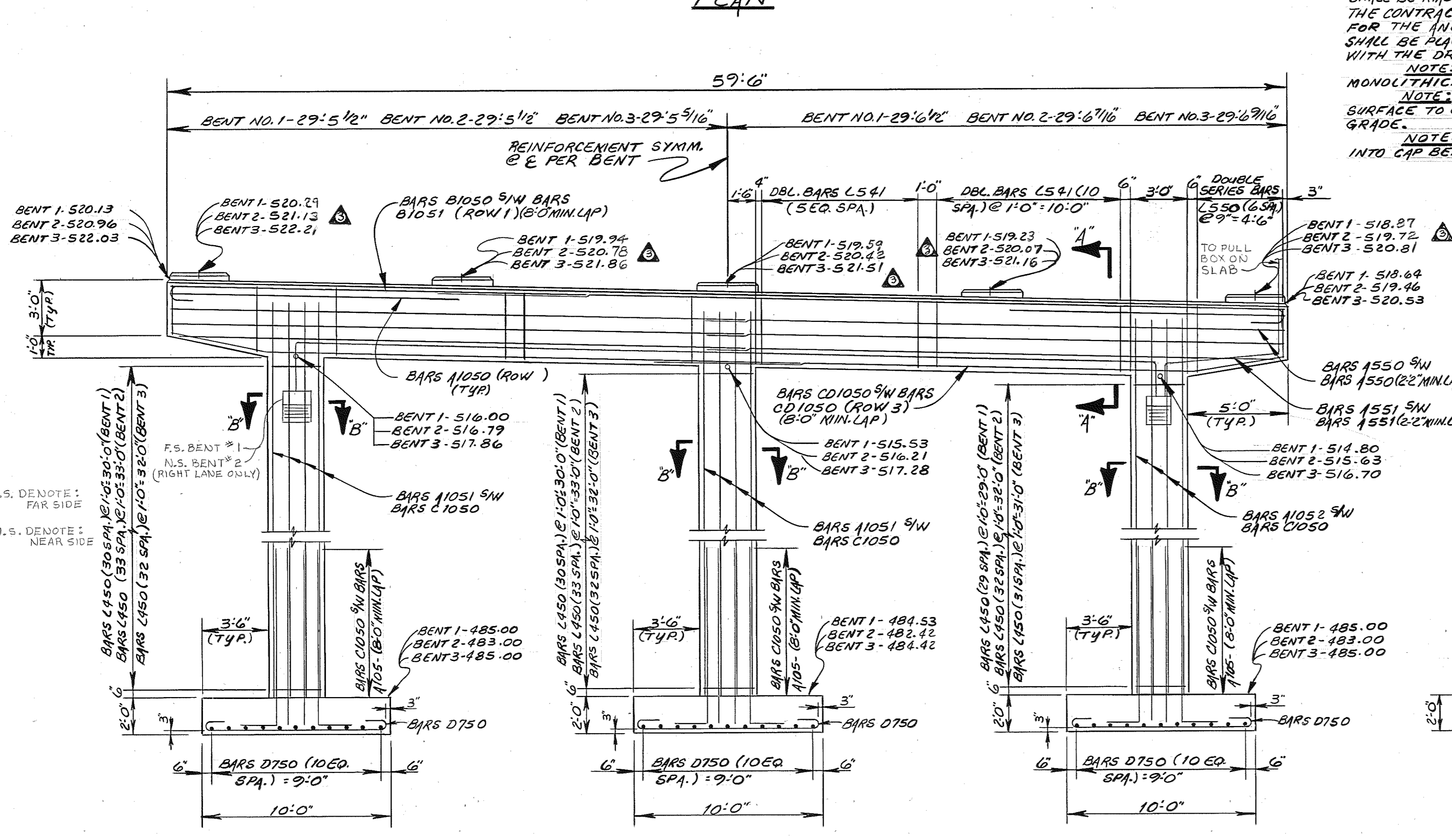
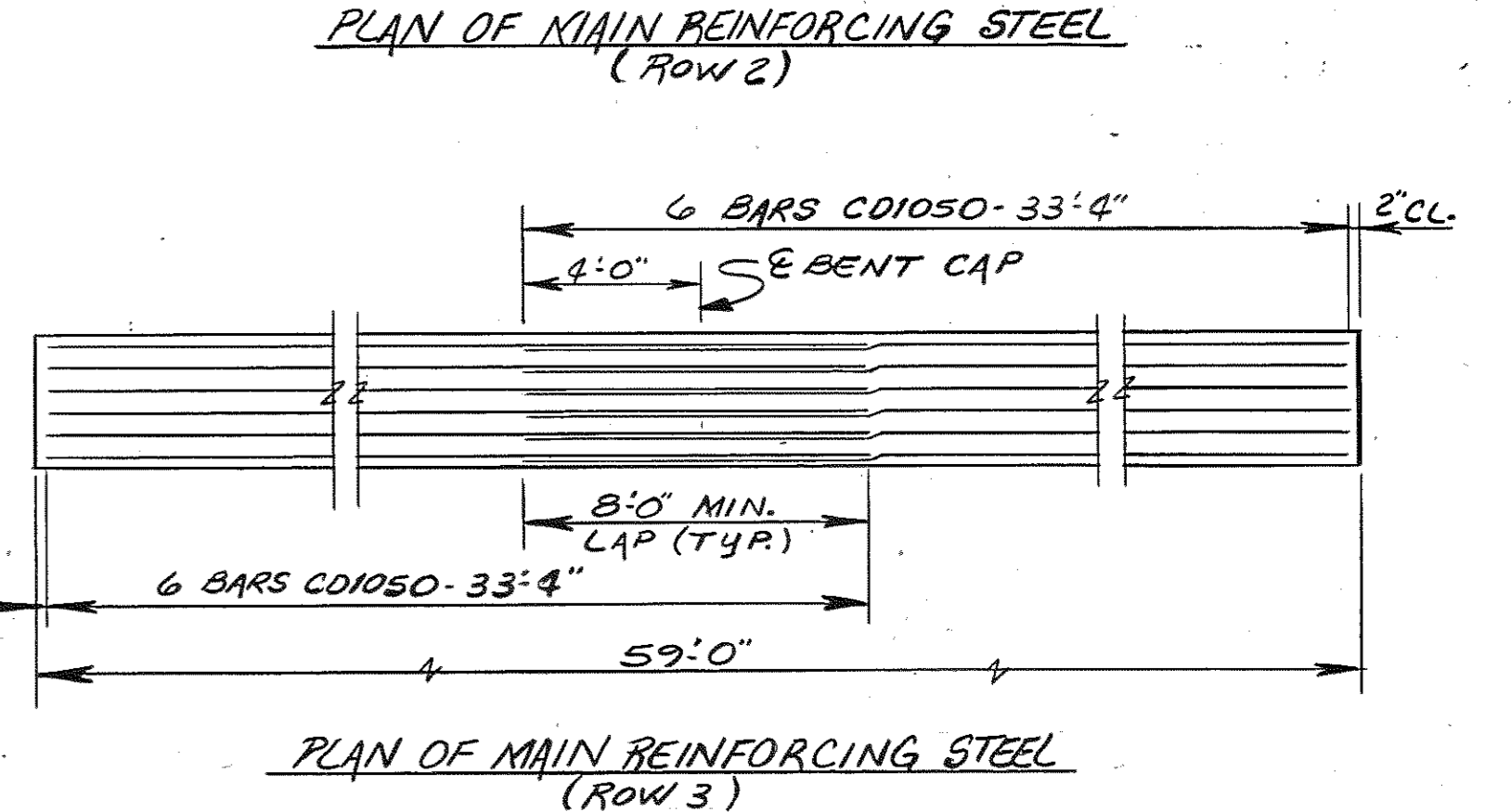
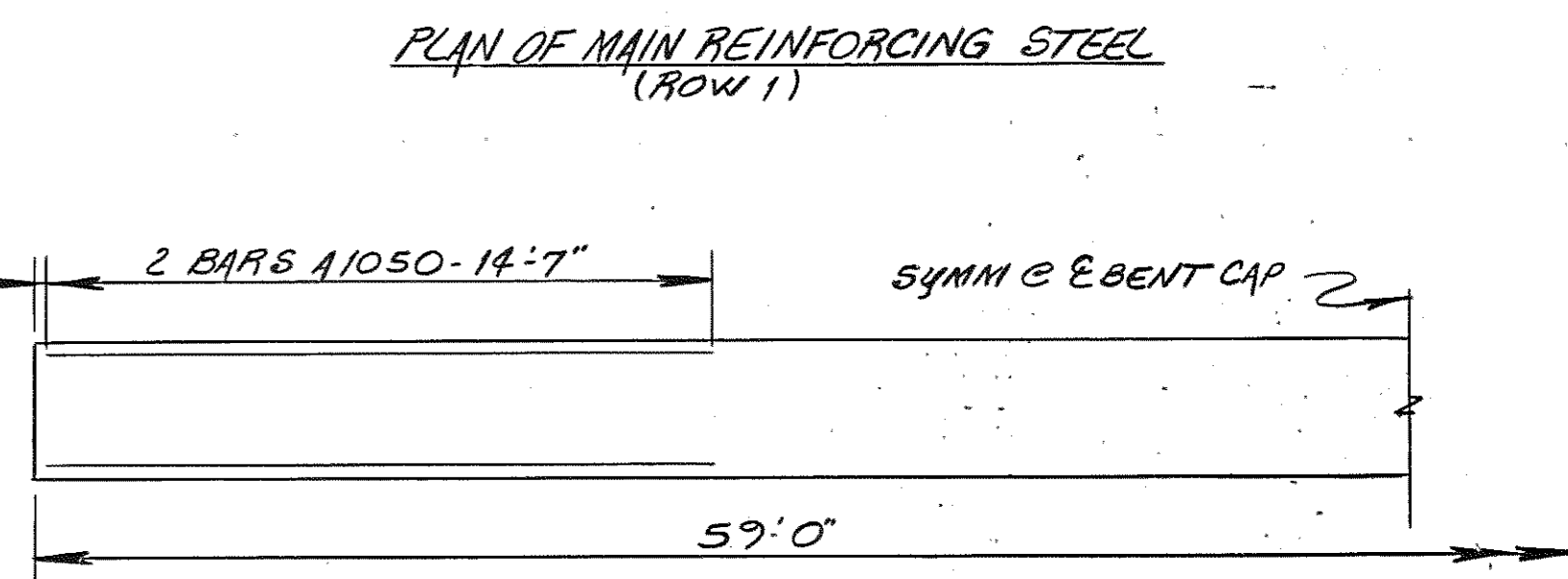
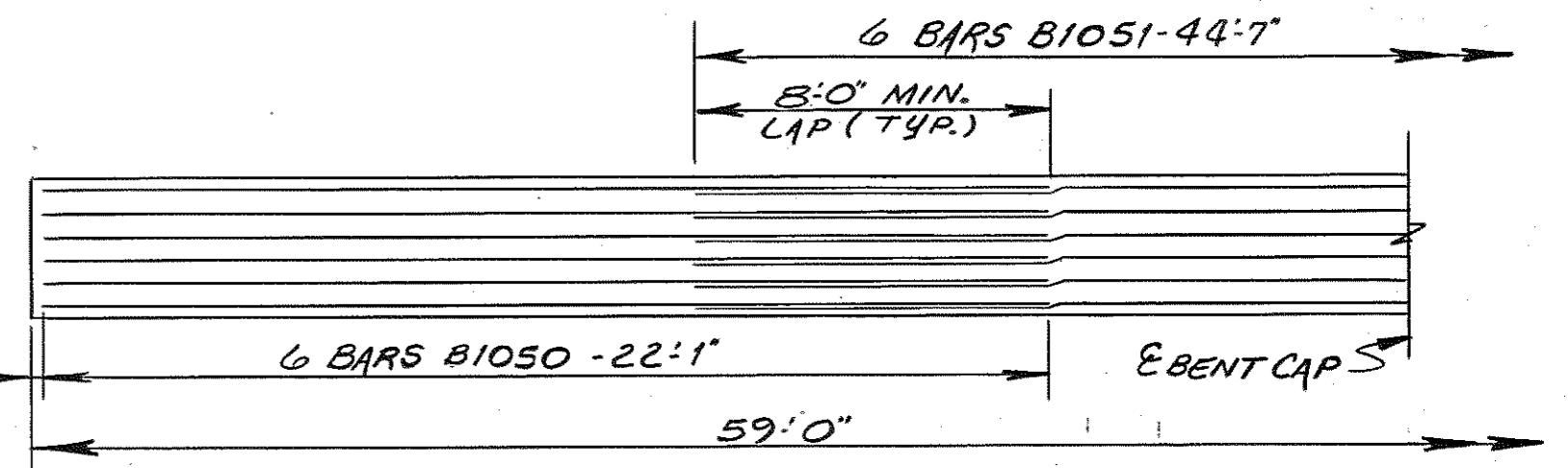


NOTE: WHEN POURING CAP BEAM, PROVISIONS SHALL BE MADE FOR SETTING ANCHOR BOLTS. IF THE CONTRACTOR ELECTS TO DRILL THE HOLES FOR THE ANCHOR BOLTS, THE REINFORCING STEEL SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE DRILLING. BOLT PROTECTION 6".

NOTE: RISER BLOCKS TO BE POURED MONOLITHICALLY WITH CAP BEAM.

NOTE: RISER BLOCK BEARING PAD SURFACE TO CONFORM TO BOTTOM OF BEAM GRADE.

NOTE: COLUMN STEEL TO EXTEND 3'3" INTO CAP BEAM.



ESTIMATED QUANTITIES

	CLASS 4 CONCRETE (CY)	REINFORCING STEEL (LBS.)
BENT NO.1	78.9	12,780
BENT NO.2	81.7	13,279
BENT NO.3	80.8	13,114

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

BENT NO'S 1, 2 & 3
INTERSTATE 440-RIGHT LANE
OVER
GLENROSE AVENUE &
LEN RAILROAD
STATION 460+14.72
DAVIDSON COUNTY
1982

DESIGNED BY BUD BOWMAN DATE 8-82
DRAWN BY RICK HINDMAN DATE 8-82
SUPERVISED BY DON HARRISON DATE 8-82
CHECKED BY DATE 8-82

APPROVED *Clifton L. Foreall*
ENGINEER OF STRUCTURES
APPROVED *David Evans*
DIRECTOR OF HIGHWAYS

MT-112-72

TABLE OF ANGLES

	"A"	"B"	"C"	"D"	"E"
BENT 1	41°18'39"	41°14'27"	41°10'15"	41°06'02"	41°01'48"
BENT 2	41°52'04"	41°47'57"	41°43'50"	41°39'42"	41°35'33"
BENT 3	42°53'20"	42°47'24"	42°41'26"	42°35'27"	42°29'26"

RIGHT LANE

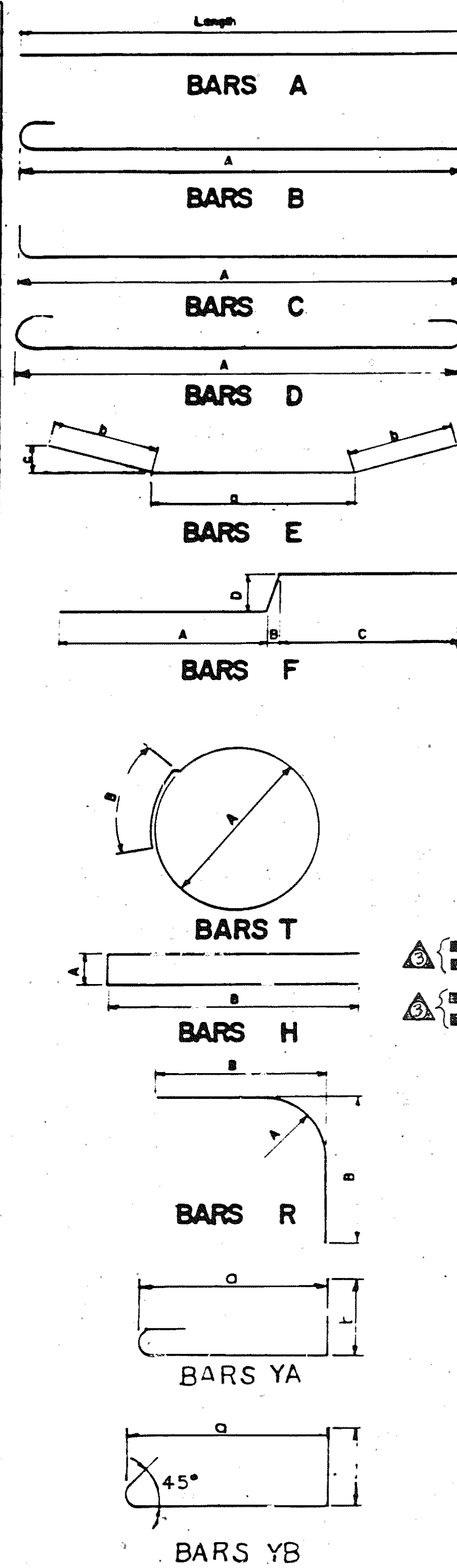
BILL OF STEEL

LEFT LANE

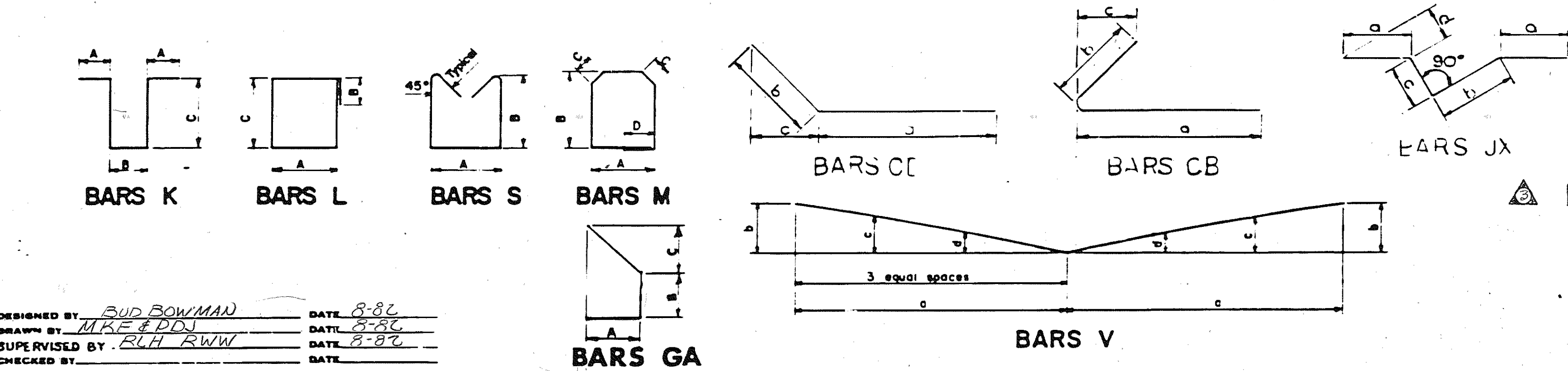
Const. No. 19002-3141-44

Table with project details: FED. ROAD DIST. NO., STATE, FED. AID PROJ. NO., FISCAL YEAR, SHEET NO., TOTAL SHEETS.

Main table for Right Lane, divided into SUPERSTRUCTURE, ABUTMENT NO. 1, BENT NO. 1, ABUTMENT NO. 2, BENT NO. 2, BENT NO. 3, and PAVEMENT AT BRIDGE ENDS. Columns include Bar, Location, Size, No. Req'd, Banding Dimensions, Length, and various bar specifications.



Main table for Left Lane, divided into SUPERSTRUCTURE, ABUTMENT NO. 1, BENT NO. 1, ABUTMENT NO. 2, BENT NO. 2, BENT NO. 3, and PAVEMENT AT BRIDGE ENDS. Columns include Bar, Location, Size, No. Req'd, Banding Dimensions, Length, and various bar specifications.



NOTE: SUFFIX 'E' DENOTES EPOXY COATED STEEL.

REINFORCING STEEL CODE

Table with columns: Type, Size, Series. Includes notes: NOTE: Dimensions shown on this sheet are outside to outside of Bar Standard. C, R, S, L hook details shall apply, except as noted.

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAYS BILL OF STEEL INTERSTATE 440 OVER GLENGROSE AVENUE AND L.N. RAILROAD STATION 460+19.72 DAVIDSON COUNTY 1982

REVISIONS table with columns: NO., DATE, BY, BRIEF DESCRIPTION. Includes entries for W.C.B. CHANGED L540 QUANTITY, W.C.B. CHANGED D750 QUANTITIES, and W.C.B. ADDED NOTES.

CORRECT: Colleen L. Szwed APPROVED: [Signature] DIRECTOR OF HIGHWAYS

M-112-73

(Add Date of Rev 2 when through with other sheets)

DESIGNED BY: BUD BOWMAN DATE: 8-82 DRAWN BY: MIKE PDD DATE: 8-82 SUPERVISED BY: BLH RWW DATE: 8-82 CHECKED BY: DATE: