

ADDENDUM #1

ISSUED JANUARY 25, 2019 FOR BIDDERS OF

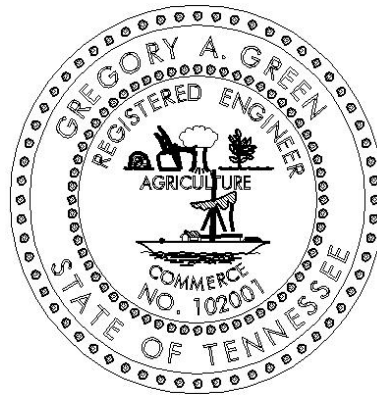
BRIDGE REHABILITATION LOVELY BLUFF ROAD OVER CLINCH RIVER  
RGCA PROJECT NO. 18703  
BID NO. 4925

The purpose of the subject Addendum No. 1 is to make changes in the Contract Documents.

CONTRACT DOCUMENTS

1. Change Item No. 502-06.01 to Item No. 604-10.32 on Sheet No. 2 Estimated Roadway Quantities with Special Note and to the Bid Schedule.
2. Changed Item No. 604-10.01 to Item No. 604-10.50 on Sheet No. 2 Estimated Roadway Quantities and to the Bid Schedule.
3. Added Item No. 604-10.63 on Sheet No. 2 Estimated Roadway Quantities with Special Note and to the Bid Schedule.

Attached with this Addendum is a pdf of the revised Bid Schedule, the revised Sheet 002 and a copy of the original bridge plans.



END OF ADDENDUM

PROPOSED BRIDGE REHABILITATION
LOVELY BLUFF ROAD over CLINCH RIVER- BID NO. 4925
ESTIMATED ROADWAY QUANTITIES
REVISED 1-25-19

Table with 6 columns: ITEM NO., DESCRIPTION, UNIT, QUANTITY, UNIT PRICE, TOTAL PRICE. Rows include items like EXPANSION JOINT REPAIR, BRIDGE DECK REPAIRS, CONCRETE REPAIRS, etc.

TOTAL BID THIS PROJECT:

\_\_\_\_\_ AND
(Dollars)
\_\_\_\_\_ (\$\_\_\_\_\_)

**GENERAL NOTES - ROADWAY**

**LOVELY BLUFF ROAD  
OVER CLINCH RIVER IN  
ANDERSON COUNTY**

**ESTIMATED ROADWAY QUANTITIES**

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
① 604-10.32	EXPANSION JOINT REPAIR	L.F.	80
② 604-10.50	BRIDGE DECK REPAIRS (PARTIAL DEPTH OF SLAB)	S.Y.	4
② 604-10.63	CONCRETE REPAIRS (CRACKS)	L.F.	25
705-08.10	PORTABLE IMPACT ATTENUATOR NCHRP350 TL-2	EACH	2
712-01	TRAFFIC CONTROL	LS	1
① 712-02.02	INTERCONNECTED PORTABLE BARRIER RAIL	L.F.	300
③ 712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	20
③ 712-05.03	WARNING LIGHTS (TYPE C)	EACH	20
③ 712-04.50	BARRIER RAIL DELINEATORS	EA	10
③ 712-06	SIGNS (CONSTRUCTION)	S.F.	216
③ 712-09.01	REMOVABLE PAVEMENT MARKING LINE	LF	1000
③ 712-09.04	REMOVABLE STOP LINE	LF	40
717-01	MOBILIZATION	LS	1
730-40	TEMPORARY TRAFFIC SIGNAL SYSTEM	EACH	1

- ① BID PRICE INCLUDES THE REMOVAL AND REPLACEMENT OF THE EXPANSION JOINT. A LEVELING DEVICE/SUPPORT IS TO BE ADDED ON TOP OF THE DIAPHRAGMS AT THE ABUTMENTS ALONG WITH THE TOP OF THE GIRDERS. SEE STANDARD DRAWING SBR-2-117.
- ② ITEM SHALL BE BID AS A CONTINGENCY AND MAY BE INCREASE OR DECREASED OR ELIMINATED AS DIRECTED BY THE ENGINEER.
- ③ ITEMS MAY BE INCREASED OR DECREASED AS DIRECTED BY THE ENGINEER.

**CONCRETE REPAIR NOTES FOR WALL CRACKS, PARARET CRACKS AND FLOOR BEAM SPALL**

**CONCRETE REMOVAL**

- UNBOUND CONCRETE SURFACE AREAS SHALL HAVE PERIMETER BOUNDARIES SAW CUT TO A MINIMUM DEPTH OF 1/2-INCH. SAW CUTS SHALL BE MADE PERPENDICULAR TO THE CONCRETE SURFACE AND ALL CONCRETE REMOVAL BOUNDARIES SHALL BE STRAIGHT AND ALIGNED PARALLEL TO OPPOSITE BOUNDARY EDGES RESULTING IN REPAIR AREAS THAT ARE RECTANGULAR IN SHAPE.
- ALL CONCRETE SHALL BE REMOVED FROM WITHIN REPAIR BOUNDARY TO MINIMUM DEPTH OF 1/2-INCH. PROVIDE A SURFACE WITH SUITABLE PROFILE FOR BOND, AS DEFINED IN REPAIR MORTAR MANUFACTURER'S WRITTEN RECOMMENDATIONS. IF DELAMINATIONS, CRACKING, OR UNSOUND MATERIALS EXIST BEYOND MINIMUM REMOVAL DEPTH THEN REMOVAL SHALL CONTINUE UNTIL ALL UNSOUND, DELAMINATED OR CRACKED CONCRETE HAS BEEN REMOVED FROM CAMVY.

**PREPARING REINFORCING STEEL**

- REMOVE EXISTING EXPOSED BOTTOM LAYER OF REINFORCING IN AREA OF DELAMINATION. THESE BARS ARE TOO DAMAGED TO BE RESTORED. ANY REINFORCING EXPOSED DURING THE REMOVAL OF THE CONCRETE WHICH HAVE SUFFICIENT SECTION REMAINING SHOULD BE CLEANED TO BRIGHT STEEL, PRIOR TO INSTALLATION OF THE REPAIR MORTAR.
- WHERE 1/2 OR MORE OF THE DIAMETER OF REINFORCEMENT STEEL IS EXPOSED EITHER BY EXISTING CONDITIONS OR CONCRETE REMOVAL AND IS DEEMED SOUND ENOUGH TO REMAIN OR THE BOND BETWEEN THE CONCRETE AND REINFORCING STEEL IS BROKEN, THE CONCRETE SHALL BE REMOVED TO PROVIDE A MINIMUM 3/4-INCH CLEARANCE AROUND ENTIRE PERIMETER OF STEEL AND ALONG ENTIRE EXPOSED LENGTH.
- REPLACEMENT REINFORCEMENT SHALL BE EPOXY COATED #4 BARS EPOXY GROUTED INTO SOUND CONCRETE AT THE EDGE OF THE REPAIR BOUNDARY.

**CONCRETE PREPARATION AND CLEANING**

- AREAS TO RECEIVE CONCRETE REPAIR SHALL BE STRUCTURALLY SOUND AND FREE FROM DETERIORATED CONCRETE, DUST, DIRT, DEBRIS, LOOSE BED CONCRETE, PAINT, OIL, EFFLORESCENCE, LAITANCE, AND OTHER CONTAMINANTS, AND SHALL HAVE A MINIMUM CONCRETE SURFACE PROFILE (CSP) EQUAL TO THAT RECOMMENDED BY THE REPAIR MORTAR MANUFACTURER PER ICRI GUIDELINE 3102.

**REPAIR MORTAR TROWEL APPLIED**

- MIX AND APPLY REPAIR MORTAR PER MANUFACTURER'S RECOMMENDATIONS WITHIN THE OPEN TIME OF THE PRODUCT SCRUB COAT OR ANY BONDING AGENTS. FINISH TO LEVEL OF SURROUNDING CONCRETE SURFACE UTILIZING TECHNIQUES RECOMMENDED BY THE MANUFACTURER.
- FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR PRIMING PRIOR TO APPLYING MORTAR.
- PROPER CURING PROCEDURES ARE IMPORTANT TO ENSURE THE DURABILITY AND QUALITY OF THE REPAIR. FOLLOW CAREFULLY MANUFACTURER'S RECOMMENDATIONS ON CURING COMPOUNDS AND AMBIENT ENVIRONMENTAL CONDITION LIMITS.

**CONCRETE REPAIR MORTARS**

CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR APPROVAL THE CONCRETE REPAIR MORTAR THEY INTEND TO USE FOR THIS PROJECT. THE FOLLOWING PRODUCTS ARE PROVIDED AS POSSIBLE APPROVED REPAIR MORTARS BUT ARE NOT INTENDED TO BE EXCLUSIVE.

- VERTICOAT - THE EUCLID CHEMICAL COMPANY
- EUCOPATCH - THE EUCLID CHEMICAL COMPANY
- SIKI REPAIR 223 - SHA CORPORATION
- SIKI REPAIR SHA-SKA CORPORATION
- SIKI TOP 123 PLUS SHA CORPORATION

**CONSTRUCTION SPECIFICATIONS**

STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION, JANUARY 1, 2015 EDITION AND RELATED SPECIAL PROVISIONS.

**EROSION CONTROL**

THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO CONTROL EROSION AND WATER POLLUTION THROUGH THE CONSTRUCTION PERIOD. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE IN PLACE BEFORE MOVING OPERATIONS BEGIN. CLEARING AND GRUBBING SHALL BE HELD TO THE MINIMUM WIDTH NECESSARY TO ACCOMMODATE ROADWAY SLOPES. EMBANKMENTS AND EXCAVATED AREAS WILL BE PROMPTLY STABILIZED TO MINIMIZE EROSION. SILT FENCES SHALL BE USED ALONG THE TOE OF THE FILL SLOPES AND RIP RAP CHECK DAMS IN DITCHES, OR ANY OTHER AREAS WHERE EROSION IS A PROBLEM AND SILT DUE TO RUN OFF MIGHT ENTER THE STREAM OR ADJACENT PROPERTY.

ANY STOCKPILED SOIL OR FILL MATERIAL WILL BE LOCATED AND TREATED IN A MANNER AS TO PREVENT SILT FROM ENTERING THE STREAM. NO EXCAVATED MATERIAL WILL BE DISCHARGED INTO THE STREAM. ALL EXCAVATED MATERIAL SHALL BE DISPOSED OF IN A LOCATION ABOVE THE NORMAL HIGH WATER ELEVATION.

SEEDING NEWLY GRADED EARTHEN AREAS ON THIS PROJECT THAT ARE NOT TO BE RIP-RAP OR STABILIZED SHALL BE SEEDED IN ACCORDANCE WITH SECTION 801, STANDARD SPECIFICATIONS. ALL EXISTING ROADS OR RAMPS WITHIN THE R.O.W. AND NOT IN THE GRADED AREA THAT ARE TO BE ABANDONED SHALL BE SCARIFIED, OBLITERATED, AND SEEDED.

**MISCELLANEOUS**

IT SHALL BE THE RESPONSIBILITY OF THE ENGINEER TO PROVIDE THE INITIAL FIELD LAYOUT (LINES AND GRADES). IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE THE NECESSARY ADDITIONAL FIELD LAYOUT (LINES AND GRADES) OF THE WORK BASED ON DATA SHOWN ON THE PLANS AND CONTROL POINTS ESTABLISHED BY THE ENGINEER. SUCH LAYOUT SHALL BE DONE IN A WORKMANLIKE MANNER AND COPIES OF THE FIELD NOTES FURNISHED TO THE ENGINEER. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN AND PRESERVE ALL STAKES AND OTHER MARKS ESTABLISHED BY THE ENGINEER UNTIL AUTHORIZED TO REMOVE THEM. IF SUCH MARKS ARE DESTROYED BY THE CONTRACTOR THROUGH HIS NEGLIGENCE PRIOR TO THEIR AUTHORIZED REMOVAL, THEY SHALL BE REPLACED BY THE ENGINEER AT HIS DISCRETION. THE EXPENSE OF THE REPLACEMENT WILL BE DEDUCTED FROM ANY AMOUNTS DUE OR BECOME DUE THE CONTRACTOR. ALL CONSTRUCTION STAKES ESTABLISHED BY THE CONTRACTOR SHALL BE SUBJECT TO CHECK BY THE ENGINEER.

THE CONTRACTOR MUST FURNISH CERTIFICATION FOR ALL MATERIALS THAT THEY MEET THE REQUIREMENTS OF THESE PLANS AND SPECIFICATIONS.

ANY UNUSABLE MATERIAL RESULTING FROM THE CONSTRUCTION WORK WILL BE REMOVED FROM THE SITE BY THE CONTRACTOR.

**TRAFFIC CONTROL**

THE EXISTING ROAD WILL REMAIN BE OPEN TO TRAFFIC WHILE USING THE EXISTING ROAD TO DETOUR THE TRAFFIC AROUND THE SITE UNTIL THE CONSTRUCTION OF THIS PROJECT IS COMPLETE.

THE CONTRACTOR SHALL PROVIDE ADEQUATE SIGNS AND/OR BARRICADES REQUIRED TO PROVIDE FOR THE SAFETY OF THE TRAVELING PUBLIC. TRAFFIC CONTROL DEVICES SHALL MEET THE REQUIREMENTS OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD)," FOR DETAILS SEE SHEET 4, TRAFFIC CONTROL PLAN.

**UTILITIES**

UNDERGROUND AND OVERHEAD UTILITIES WERE FOUND AT THE BRIDGE SITE. HOWEVER THE CONTRACTOR WILL BE REQUIRED TO VERIFY THIS FOR HIMSELF BY CONTACTING THE UTILITY OWNERS IN THE AREA.

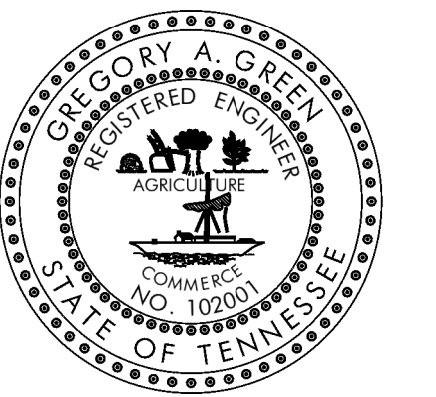
SHOULD UTILITIES BE FOUND AT THE SITE, THE FOLLOWING WILL APPLY:

UTILITY OWNERS ARE TO RESET, RELAY, OR ADJUST POWER AND TELEPHONE LINES AND POLES, WATER LINES, GAS LINES AND ALL OTHER PUBLIC UTILITIES CONFLICTING WITH THE PROPOSED IMPROVEMENTS. THE CONTRACTOR WILL BE REQUIRED TO COOPERATE WITH THE OWNERS OF LOCAL UTILITIES IN THE ADJUSTMENT OF THEIR FACILITIES WHICH INTERFERE WITH CONSTRUCTION.

THE CONTRACTOR WILL BE RESPONSIBLE FOR THE CONTACTING ALL RESPONSIBLE UTILITIES PRIOR TO SUBMITTING HIS BID, IN ORDER TO DETERMINE THE EXTENT TO WHICH UTILITY RELOCATIONS AND OR ADJUSTMENTS WILL HAVE UPON THE SCHEDULE OF WORK FOR THIS PROJECT, IF ANY.

THE CONTRACTOR WILL NOTIFY EACH INDIVIDUAL UTILITY OWNER OF HIS PLANS OF OPERATION IN THE AREA OF THE UTILITIES. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL CONTACT THE UTILITY OWNERS AND REQUEST THEM TO PROPERLY LOCATE THEIR RESPECTIVE UTILITIES ON THE GROUND.

SOME UTILITIES CAN BE LOCATED BY CALLING THE TENNESSEE ONE CALL SYSTEM, INC. AT 1-800-352-1111.



NO.	DATE	DESCRIPTION	BY	CKD.
REVISIONS				



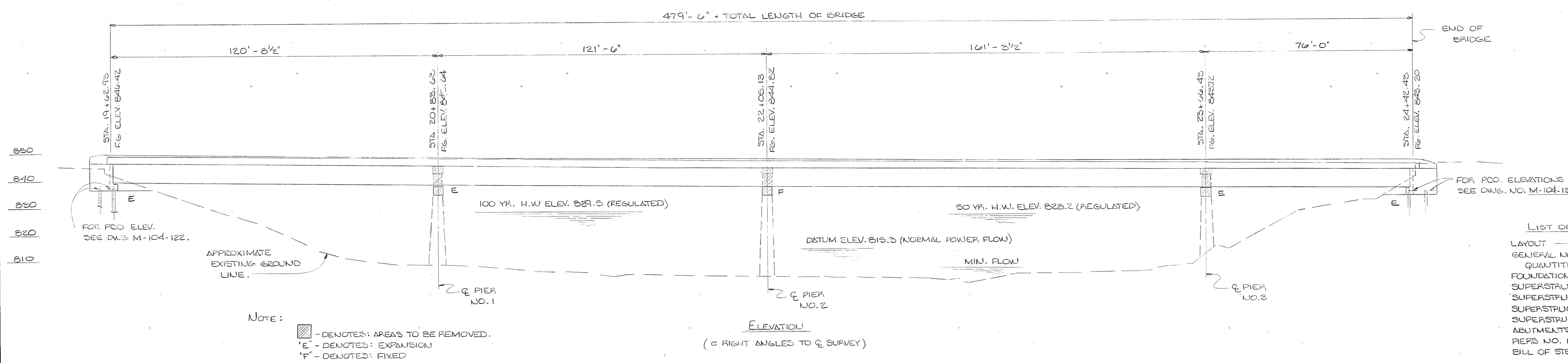
**ROBERT G. CAMPBELL & ASSOC., L.P.**  
CONSULTING ENGINEERS  
KNOXVILLE, TENNESSEE

**LOVELY BLUFF ROAD  
OVER CLINCH RIVER**

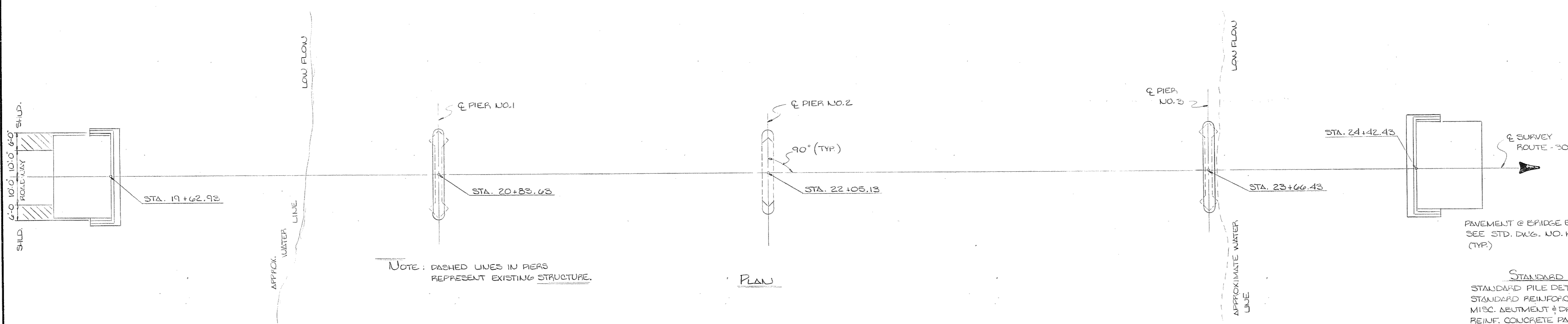
**ESTIMATED QUANTITIES  
GENERAL NOTES**

DESIGNED BY <b>GG</b>	CHECKED BY <b>RGC</b>	SCALE <b>N.T.S.</b>	SHEET No. <b>2</b>
DRAWN BY <b>GG</b>	DATE <b>JAN., 2019</b>	FILE NO. <b>13701</b>	OF <b>4</b> SHEETS

PROJECT NO.	YEAR	SHEET NO.	
BR2-0100 (7)	1982		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION



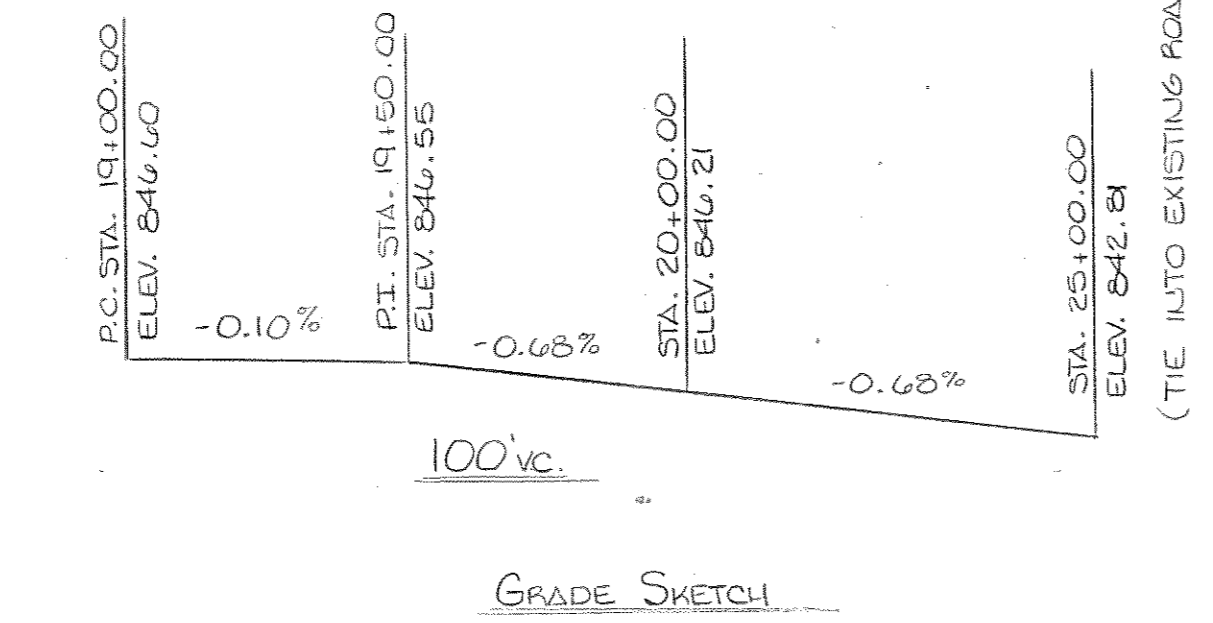
LIST OF DWGS.	DWG. NO.	LAST REV. DATE
LAYOUT	M-104-115	
GENERAL NOTES AND ESTIMATED QUANTITIES	M-104-116	10-22-82
FOUNDATION DATA	M-104-117	
SUPERSTRUCTURE	M-104-118	10-22-82
SUPERSTRUCTURE DETAILS	M-104-119	
SUPERSTRUCTURE DETAILS	M-104-120	
SUPERSTRUCTURE DETAILS	M-104-121	1-14-82
ABUTMENTS NO. 1 & 2	M-104-122	5-7-82
PIERS NO. 1, 2, & 3	M-104-123	5-7-82
BILL OF STEEL	M-104-124	



STANDARD DWG.	DWG. NO.	LAST REV. DATE
STANDARD PILE DETAILS	H-5-111	11-27-78
STANDARD REINFORCING BAR SUPPORT	K-20-14	8-27-76
MISC. ABUTMENT & DRAINAGE DETAILS	K-25-150	1-09-75
REINF. CONCRETE PAVEMENT @ BRIDGE ENDS	K-26-144	7-17-81
BRIDGE RAILING CONC. PARAPET	M-28-1	7-17-81
TENNESSEE STANDARD PRECAST PRESSED STEEL BRIDGE DECK PANELS	K-80-15A	

— HYDRAULIC DATA —

DRAINAGE AREA	2921	SQ. MI.
100 YR. DISCHARGE	48,000	CFS.
50 YR. DISCHARGE	40,000	CFS.
AREA PROVIDED BELOW	7840	S.F.
ELEV. 829.5	5.7	F.P.S.
100 YR. VELOCITY		



NOTE: ELEV. SHOWN ARE BASED ON FINISHED GRADE.

32'-0" ROADWAY WITH PARAPET  
 STATE OF TENNESSEE  
 DEPARTMENT OF TRANSPORTATION  
 BUREAU OF HIGHWAYS  
 LAYOUT  
 R-3002 OVER CLINCH RIVER,  
 STATION 22+05.13  
 ANDERSON COUNTY  
 1982

DESIGNED BY J. JETT DATE 6-1-81  
 DRAWN BY K. COLEMAN DATE 12-7-81  
 SUPERVISED BY J. FIELDS DATE 12-7-81  
 CHECKED BY J. JETT DATE 11-81

CORRECT *William T. Lowell*  
 ENGINEER OF STRUCTURES  
 APPROVED *Richard Grand*  
 DIRECTOR OF HIGHWAYS

= GENERAL NOTES =

CONST. NO. 01036-3303-94

PROJECT NO.	YEAR	SHEET NO.
SPZ-0100 (7)	1982	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	1-11-82	AMS	REVISED NOTE 7c, 9
2	2-16-82	AMS	REVISED NOTE 7c
3	10-22-82	RSH	CLASS "A" CONC. QTY.

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

LOADING: HS20-44

DESIGN SPECIFICATIONS: AASHTO 1977 EDITION WITH ADDENDA.

CONCRETE: TO BE CLASS "A"  $f'_c = 3,000$  PSI.

BRIDGE DECK FORMS: BRIDGE DECK FORMS FOR CONCRETE DECKS SHALL BE CONSTRUCTED USING EITHER REMOVAL 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. SEE STANDARD DWG. K-80-15A. 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 CROSS 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.

BRIDGE RAIL SYSTEM: BUILD PARAPETS ACCORDING TO STANDARD DWG. M-28-1.

LINSEED OIL PROTECTIVE TREATMENT: SURFACES RECEIVING TEXTURED COATED FINISH SHALL NOT RECEIVE A LINSEED OIL TREATMENT. SEE TEXTURED COATING DETAIL, THIS SHEET.

STRUCTURAL STEEL: SEE NOTES ON DRAWING NO. M-104-11B.

WELDING: SEE SPECIAL PROVISION NO. 602 AND NOTES ON DRAWING NO. M-104-11B.

HIGH STRENGTH BOLTS: SEE AASHTO STANDARD SPECIFICATION FOR HIGHWAY BRIDGES 1977 EDITION WITH ADDENDA AND NOTES ON DRAWING NO. M-104-11B.

RADIOGRAPHIC, ULTRASONIC, AND MAGNETIC INSPECTION. SEE SPECIAL PROVISION NO. 602 AND NOTES ON DWG. NO. M-104-11B.

STEEL STRUCTURES: SEE TENNESSEE STANDARD SPECIFICATIONS SECTION 602 AND NOTES ON DRAWING NO. M-104-11B.

PILES: TO BE HP10 x 42 DRIVEN TO REFUSAL ON ROCK OR A MINIMUM BEARING OF 52 TONS FOR THE ABUTMENTS.

PAINT: THE NEW SUPERSTRUCTURE SHALL BE PAINTED WITH SYSTEM "B" INORGANIC ZINC-VINYL SYSTEM BROWN TOP COAT. SEE TENNESSEE STANDARD SPECIFICATIONS SECTION 603.05 (b) FOR PREPARATION OF SURFACES. THE PONY TRUSS SHALL BE PAINTED WITH A SYSTEM "A" SILICO CHROMATE BROWN TOP COAT. SEE TENNESSEE STANDARD SPECIFICATIONS SECTION 603.05 (b) FOR PREPARATION OF SURFACES.

GROUTED BARS IN DRILLED HOLES: HOLES FOR GROUTED BARS ARE TO BE DRILLED 1/2 INCH IN DIAMETER, LARGER THAN THE BAR. AFTER CLEANING HOLE, PACK WITH GROUT AND DRIVE BAR TO ITS SEAT.

APPROVED GROUTS ARE: EPI TOP 100 (CELANESE COATING CO.); COLMA-DUP OF SIKASTIX 370 (SIKA CHEMICAL CORP.); FX-75 HYDRO-ESTER, BONDING AGENT (FOX INDUSTRIES) AND FEL-POXY 102 (FEL-PRO BUILDING PRODUCTS, INC.)

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. #1 & 2	2 1/4"	112.3	88.5
PIERS #1 & 3	1 1/2"	339.7	155.7
PIER #2	0	339.2	160.1

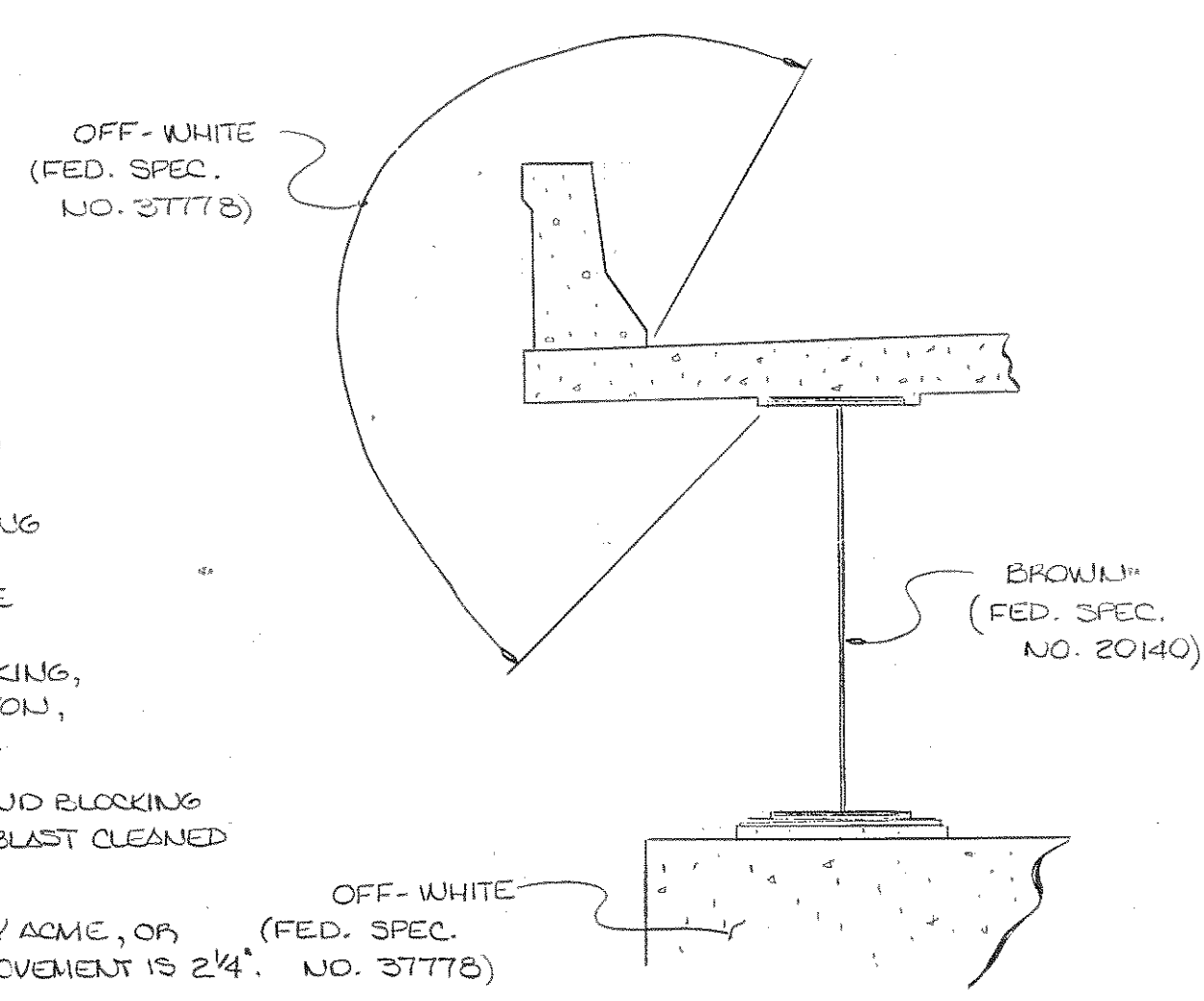
= ESTIMATED QUANTITIES =

ITEM NO'S	204-02.01	602-13	603-02.01	604-02.03	604-03.01	604-03.02	604-03.03	604-04.01	604-04.02	620-03	710-10	710-11	606-22.03	606-32.03	606-42.03	602-17	202-04.01	602-45	920-01.11	908-21.02	908-21.03	908-21.04
ITEMS	DAY EXCAVATION (BRIDGES) (CY) ①	STEEL STRUCTURES (ERECTOR) (LS) ⑥	REPAIRING EXISTING STEEL STRUCTURES (PONY TRUSS) (LS) ②	EPOXY COATED REINFORCING STEEL (LBS) ④	CLASS "A" CONCRETE (BRIDGES) (CY) ②	STEEL BAR REINFORCEMENT BRIDGES (LBS)	LINSEED OIL TREATMENT (SY)	APPLIED TEXTURED COATED FINISHING NEW STRUCTURES (SY)	APPLIED TEXTURED COATED FINISHING EXISTING STRUCTURES (SY)	CONCRETE PARAPET (LF) ③	6" $\phi$ PERFORATED C.M. PIPE (18 GA.) W/POPOUS BACKFILL (LF) ③	6" $\phi$ C.M. PIPE UNDERDRAINS (18 GA.) (LF)	STEEL PILES (10 INCH $\phi$ DRIVING) (L.F.)	STEEL PILES (10") (FURNISH DOMESTIC) (LF)	STEEL PILES (10") (FURNISH FOREIGN) (LF)	STEEL STRUCTURES (FURNISH DOMESTIC) (LS)	REMOVAL OF STRUCTURES (LS) ⑦	STEEL STRUCTURES (FURNISH FOREIGN) (LS)	ROADWAY EXPANSION DEVICE (LF) ⑧	BEARING (ABUT. NO. 1 & 2) (EA) ⑩	BEARING (PIER NO. 1, 2, 3) (EA)	BEARING (PIER NO. 2) (EACH)
SUPERSTRUCTURE				102,748	514.0	91,605																
ABUTMENT NO. 1	40				14.5	5770					53	8	400	400	400					33	3	
PIER NO. 1					16.8	2,931																3
PIER NO. 2					16.8	2,931																3
PIER NO. 3					16.8	2,931																3
ABUTMENT NO. 2	40				14.5	5770					53	8	400	400	400					33	3	
PVMT AT BRIDGE ENDS				4,063	63.8	12,274							80	80	80							3
TOTALS	80	LUMP SUM	LUMP SUM	106,811	657.2	124,212	1870.9	889	270	989	106	16	880	880	880	LUMP SUM	LUMP SUM	LUMP SUM	66	6	6	3

NOTES:

- ① EXCAVATION BASE ON EXISTING GROUND.
- ② NOTE: COST OF RUBBER BONDING CEMENT AND ELASTOMERIC BEARING PADS TO BE INCLUDED IN UNIT PRICE BID FOR CLASS "A" CONCRETE.
- ③ COST OF POLYETHYLENE SHEETING AND ALL MISCELLANEOUS ITEMS NECESSARY FOR INSTALLATION TO BE INCLUDED IN COST OF PERFORATED C.M. PIPE.
- ④ NOTE: THE COST OF (16) THREADED STEEL INSERTS AND (16) 7/8"  $\phi$  x 4" HEX HEAD BOLTS, (A307), TO BE INCLUDED IN BRIDGE ITEMS BID ON.
- ⑤ ALL REINFORCING STEEL IN THE TRAFFIC FACE OF PARAPETS SHALL BE EPOXY COATED. COST TO BE INCLUDED IN THE PRICE BID FOR ITEMS 620-03.
- ⑥ LUMP SUM: TOTAL ESTIMATED WEIGHT OF 438,740 LBS. OF STRUCTURAL STEEL INCLUDES BOLTS, SHEAR CONNECTORS & SOLE PLATES FOR BEARINGS. ALSO SEE TENNESSEE STD. SPECIFICATIONS SECTION 602.27 AND 602.28 (359,847 LBS. OF (A572) STEEL; 78,893 LBS. (A36) STEEL.

- ⑦ REMOVAL OF STRUCTURES, ITEM 202-04.01, INCLUDES:
  - a. COMPLETE REMOVAL AND DISPOSAL OFF SITE OF THREE HIGH STEEL TRUSS SPANS, 120.7 FT., 121.5 FT., AND 161.3 FT. AND ONE STEEL STRINGER SPAN 14.9 FT., ALL WITH TIMBER DECKING. MATERIALS TO BECOME THE PROPERTY OF THE CONTRACTOR.
  - b. COMPLETE REMOVAL AND DISPOSAL OFF SITE OF THE EXISTING ABUTMENTS, INCLUDING CONFLICTING SUBFOOTINGS OR PILES.
  - c. COMPLETE REMOVAL OF THE NORTHERN MOST PIER, TO ONE FOOT BELOW THE EXISTING GROUND.
  - d. PARTIAL REMOVAL OF THE REMAINING THREE PIERS TO BE MODIFIED ACCORDING TO THE DETAILS ON M-104-123.
- ⑧ REMOVAL AND TRANSPORT, IN TACT WITH TIMBER DECK REMOVED, OF THE EXISTING 61.2 FT. PONY TRUSS SPAN. THE SPAN, LESS DECK IS TO BE DELIVERED AND OFF LOADED ONTO GRILLAGE OR OTHER SUITABLE BLOCKING, TO THE ANDERSON COUNTY HIGHWAY DEPARTMENT, STATE ROUTE 61, CLINTON, TENNESSEE 37716, MR. CHARLES SHOOFMAN, TELEPHONE NO. 457-5400.
- ⑨ REPAIRING EXISTING STEEL STRUCTURES (PONY TRUSS), ITEM 603-02.01: AFTER DELIVERY AND BLOCKING UP OF THE PONY TRUSS DESCRIBED IN NOTE 7c; THE STRUCTURE SHALL BE BLAST CLEANED AND PAINTED. SEE PAINT NOTE ON THIS SHEET.
- ⑩ ACCEPTABLE EXPANSION DEVICES ARE SB 300 BY WARGO-MAURER, AS 300 BY ACME, OR OX-FLEX #45 BY OLD NORTH MANUFACTURING COMPANY. ANTICIPATED MOVEMENT IS 2 1/4". FENDER PLATE TO BE INCLUDED IN ITEM NO. 920-01.11.
- ⑪ COST OF FENDER PLATE, INSERTS, AND 7/8"  $\phi$  BOLTS TO BE INCLUDED IN PRICE BID FOR ITEM 908-21.03.



FINISHING CONCRETE SURFACES: CONCRETE FINISHING SHALL BE IN ACCORDANCE WITH SECTION 604.22 OF THE TENNESSEE STANDARD SPECIFICATIONS.

A TEXTURED COATED FINISH SHALL BE USED IN LIEU OF A CLASS 2 FINISH. THE COLOR OF THE FINISH SHALL BE SIMILAR TO OFF-WHITE FEDERAL SPECIFICATION NO. 3777B, FEDERAL COLOR STANDARD NO. 595A, AND A COLOR SAMPLE SHALL BE SUBMITTED TO THE ENGINEER OF STRUCTURES FOR APPROVAL. IN ADDITION TO THE OTHER REQUIREMENTS ALL EXPOSED ABUTMENT AND PIER SURFACES SHALL RECEIVE AN OFF-WHITE FINISH.

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF HIGHWAYS  
GENERAL NOTES AND  
ESTIMATED QUANTITIES  
R-3002 OVER CLUNCH RIVER  
STATION 22+05.13  
ANDERSON COUNTY  
1982

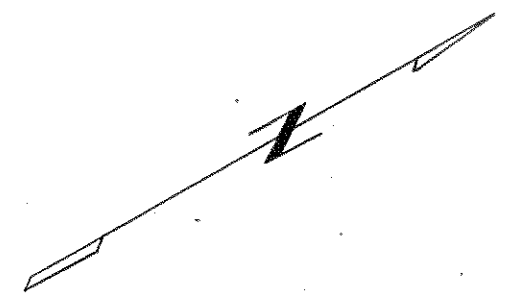
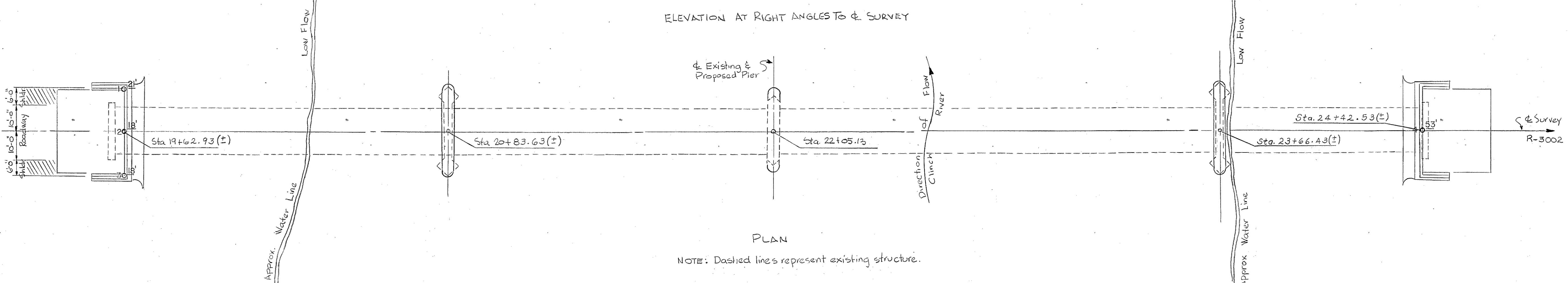
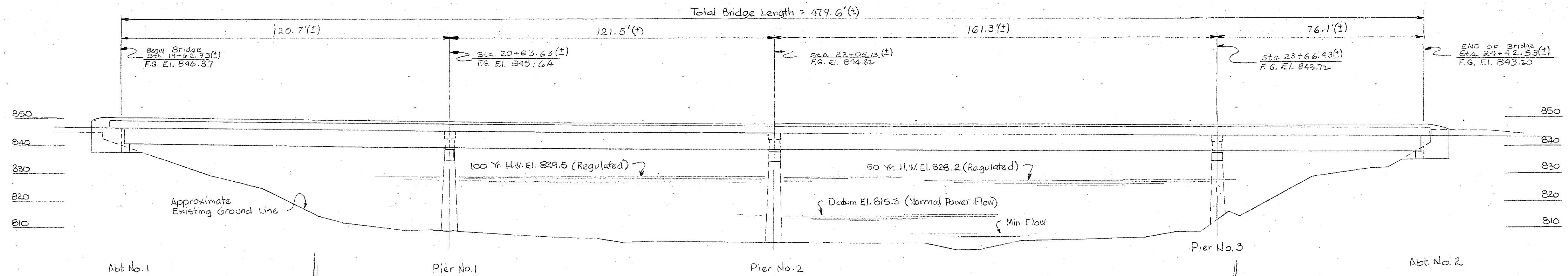
CORRECT *William L. Fowell*  
ENGINEER OF STRUCTURES  
APPROVED *Thomas Evans*  
DIRECTOR OF HIGHWAYS

DESIGNED BY J. JETT  
DRAWN BY K. COLEMAN  
SUPERVISED BY J. FIELDS  
CHECKED BY J. JETT

DATE 10-81  
DATE 10-81  
DATE 11-2-81

PROJECT NO.	YEAR	SHEET NO.
BRZ-0100(7)	1982	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION



**BENCHMARKS:**

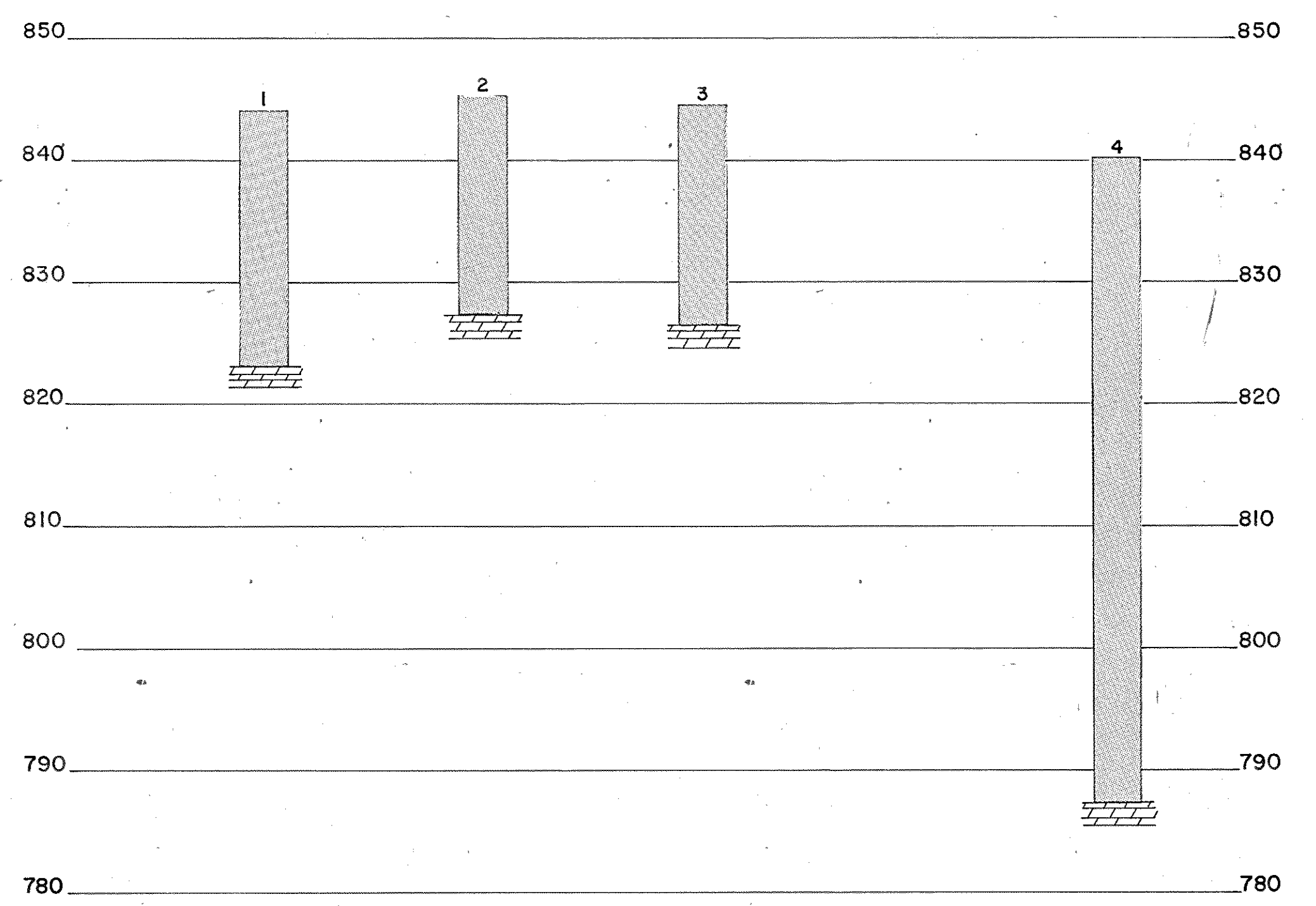
B.M. No. 2 Elev. 845.57 Nail in power pole 27' Rt. Sta. 19+53

B.M. No. 3 Elev. 848.03 (C.R. 55) Anchor Bolt on Bridge Pier 10' Rt. Sta. 22+06

**Note:** This Drawing is for foundation data only and is not to be used as a layout.

**General Notes:**

- ① Sufficient Ground, Rock, and Coring Information for Bridge Abutment Foundation.
- ② Show Approximate Existing Ground Line, and Rock Line on Elevation.



DESIGNED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

DRAWN BY: J. Hill, Jr. DATE: 5-81

SUPERVISED BY: M. Z. TURK DATE: 5-81

CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

CORRECT *Chellon L. Lovell*  
ENGINEER OF STRUCTURES

APPROVED *Lewis Evans*  
DIRECTOR OF HIGHWAYS

PROJECT NO.	YEAR	SHEET NO.
BRZ-0100 (7)	1982	

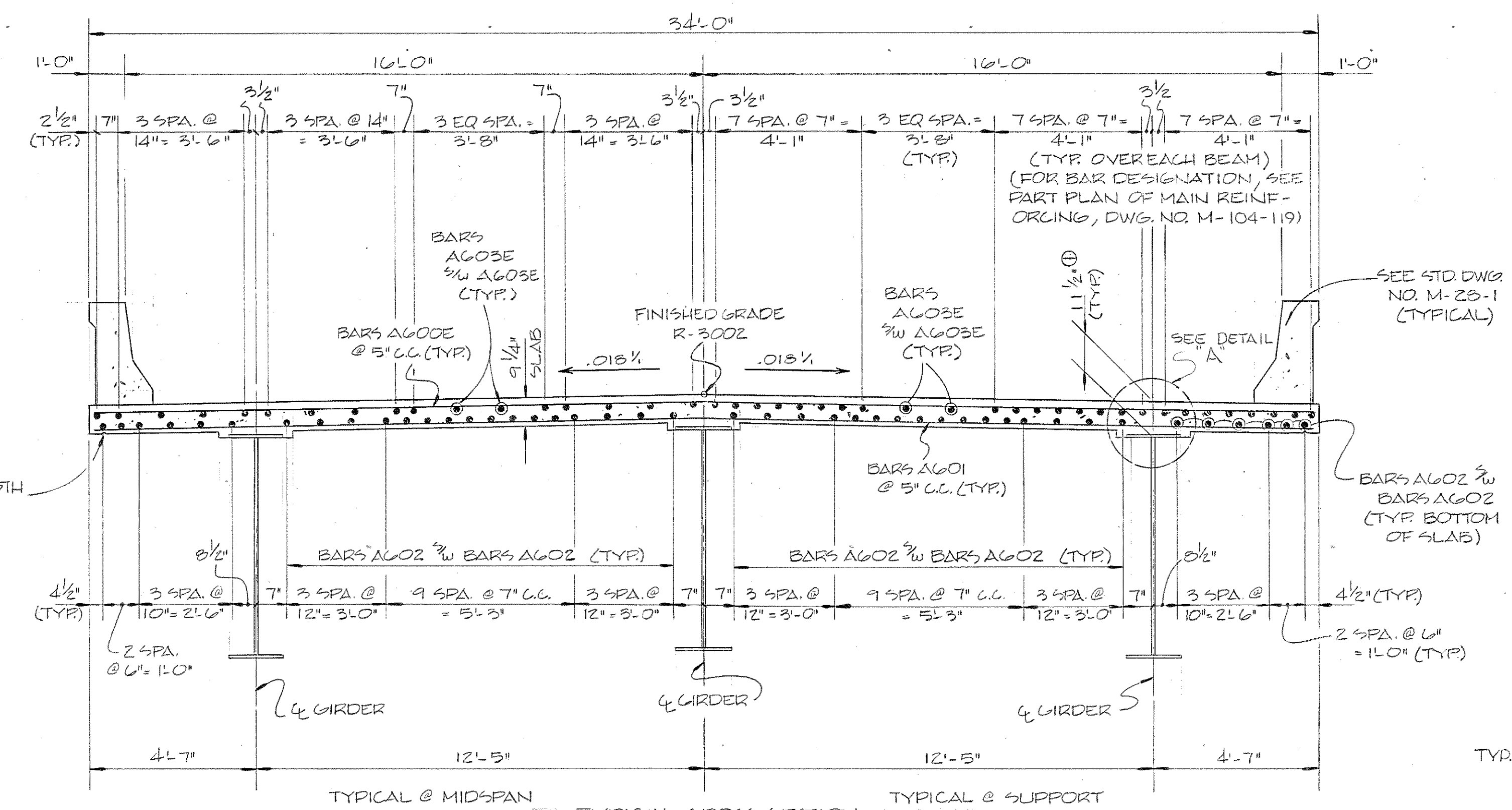
  

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	3-16-82	AMS	BEARING STIFFENER DETAIL
2	10-22-82	RSH	CLASS 'A' CONC. QTY.

⊕ DENOTES: DIMENSION GIVEN IS FROM TOP OF SLAB TO BOTTOM OF FLANGE. TYPICAL @ ALL GIRDERS.

**GENERAL NOTES**

- NO PORTION OF THE PARAPET SHALL BE POURED UNTIL THE ENTIRE DECK SLAB IS IN PLACE.
- THE CONCRETE DECK SHALL NOT BE POURED UNTIL ALL STRUCTURAL STEEL IS ERECTED AND ALL WELDING AND/OR BOLTING COMPLETE.
- WHEN POURING SLAB, PROVISIONS SHALL BE MADE FOR SETTING REINFORCING STEEL FOR PARAPET. THE PARAPET SHALL NOT BE POURED UNTIL SLAB IS POURED AND CURED.
- 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.
- 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, 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 CHARPY V-NOTCH TESTS SPECIFIED IN AASHTO MATERIAL SPECIFICATIONS, ZONE 2 OF TABLE 51 SHALL APPLY.
- WELDING: AWS D1.1-80 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 UNLESS OTHERWISE SHOWN. SEE AASHTO SPECIFICATIONS ART. 2.10.20. ALL HIGH STRENGTH BOLTED CONNECTIONS ARE FRICTION TYPE.
- ADDITIONAL SHOP SPlice NOTE: SHOP SPICES NECESSARY DUE TO LENGTHS OR SIZE OF MATERIAL INVOLVED MAY BE LOCATED BY THE FABRICATOR SUBJECT TO APPROVAL BY THE ENGINEER OF STRUCTURES.
- 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).



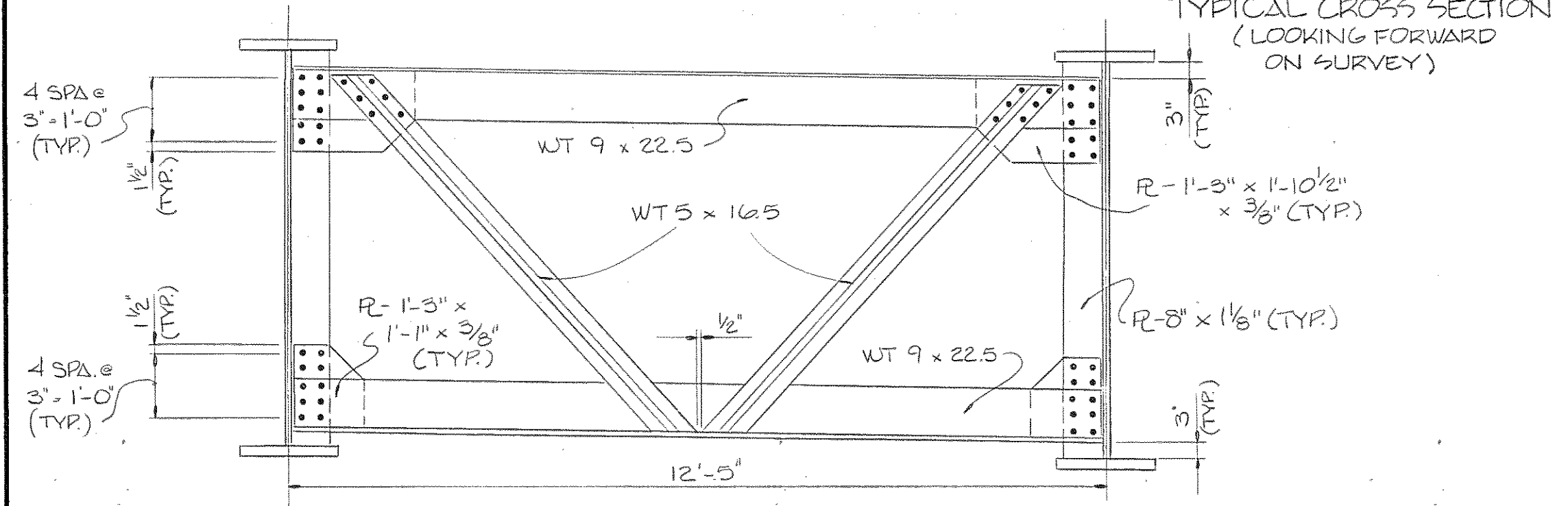
1" TRIANGULAR DRIP BEAD TO RUN FULL LENGTH OF SLAB (TYP.)

(FOR BAR DESIGNATION, SEE PART PLAN OF MAIN REINFORCING, DWG. NO. M-104-119)

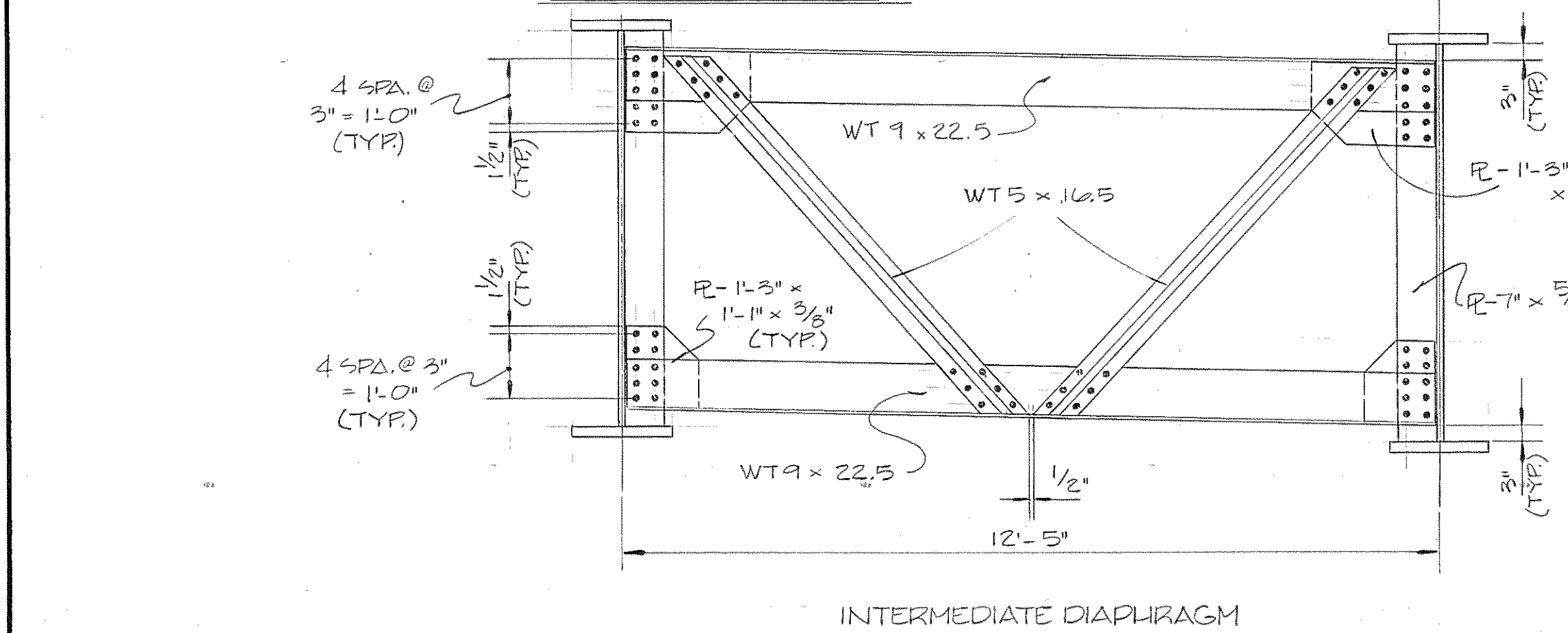
SEE STD. DWG. NO. M-23-1 (TYPICAL)

SEE DETAIL A

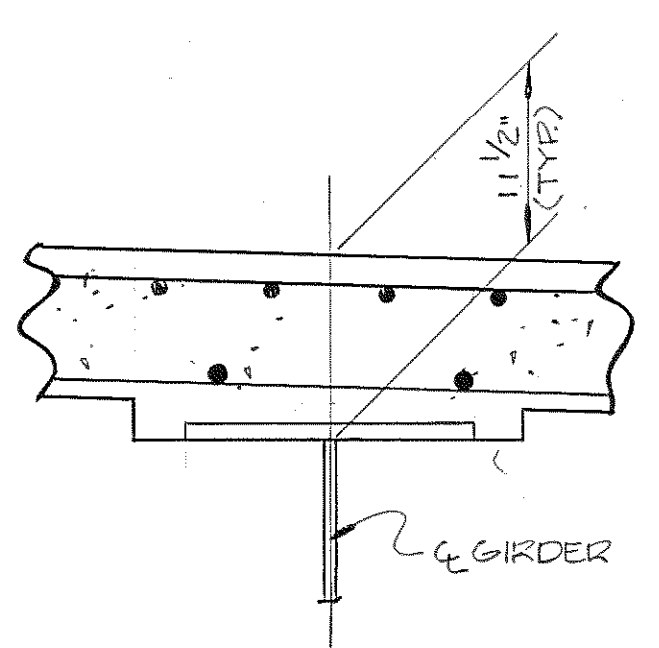
TYPICAL @ MIDSAN TYPICAL CROSS SECTION (LOOKING FORWARD ON SURVEY) TYPICAL @ SUPPORT



DIAPHRAGMS & PIERS

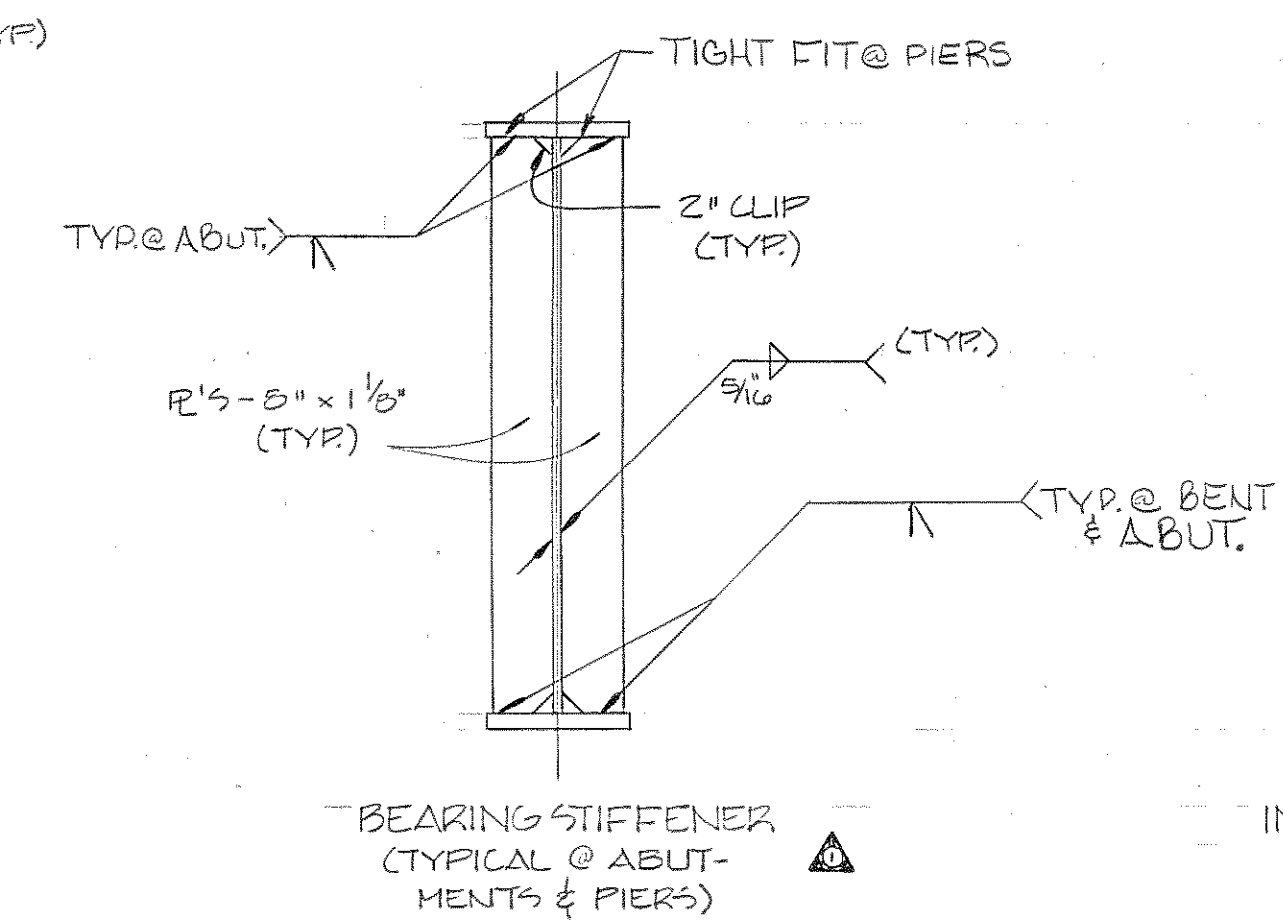


INTERMEDIATE DIAPHRAGM

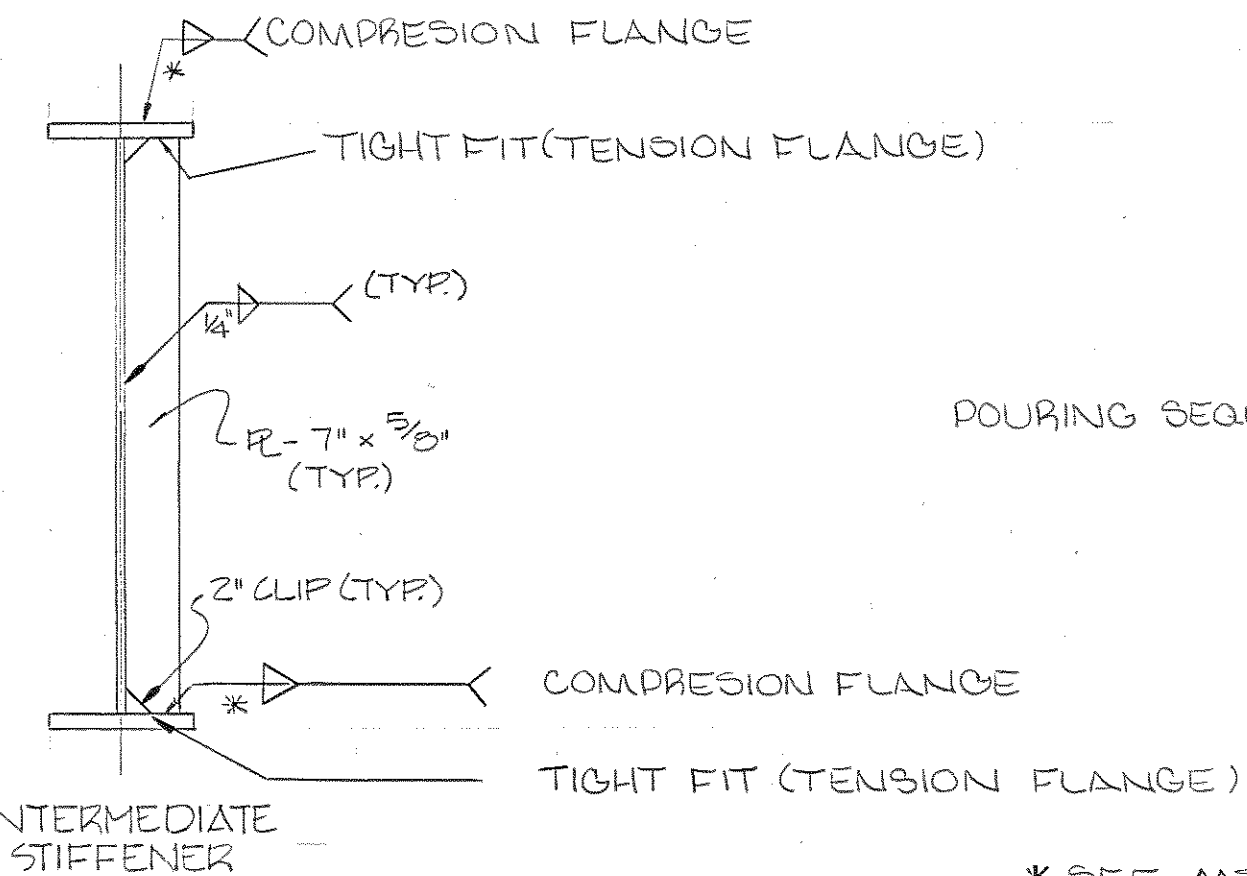


DETAIL 'A' (TYP. @ ALL GIRDERS)

NOTE: USE 7/8" φ A325 BOLTS & A36 STEEL FOR ALL CROSS FRAMING STEEL.



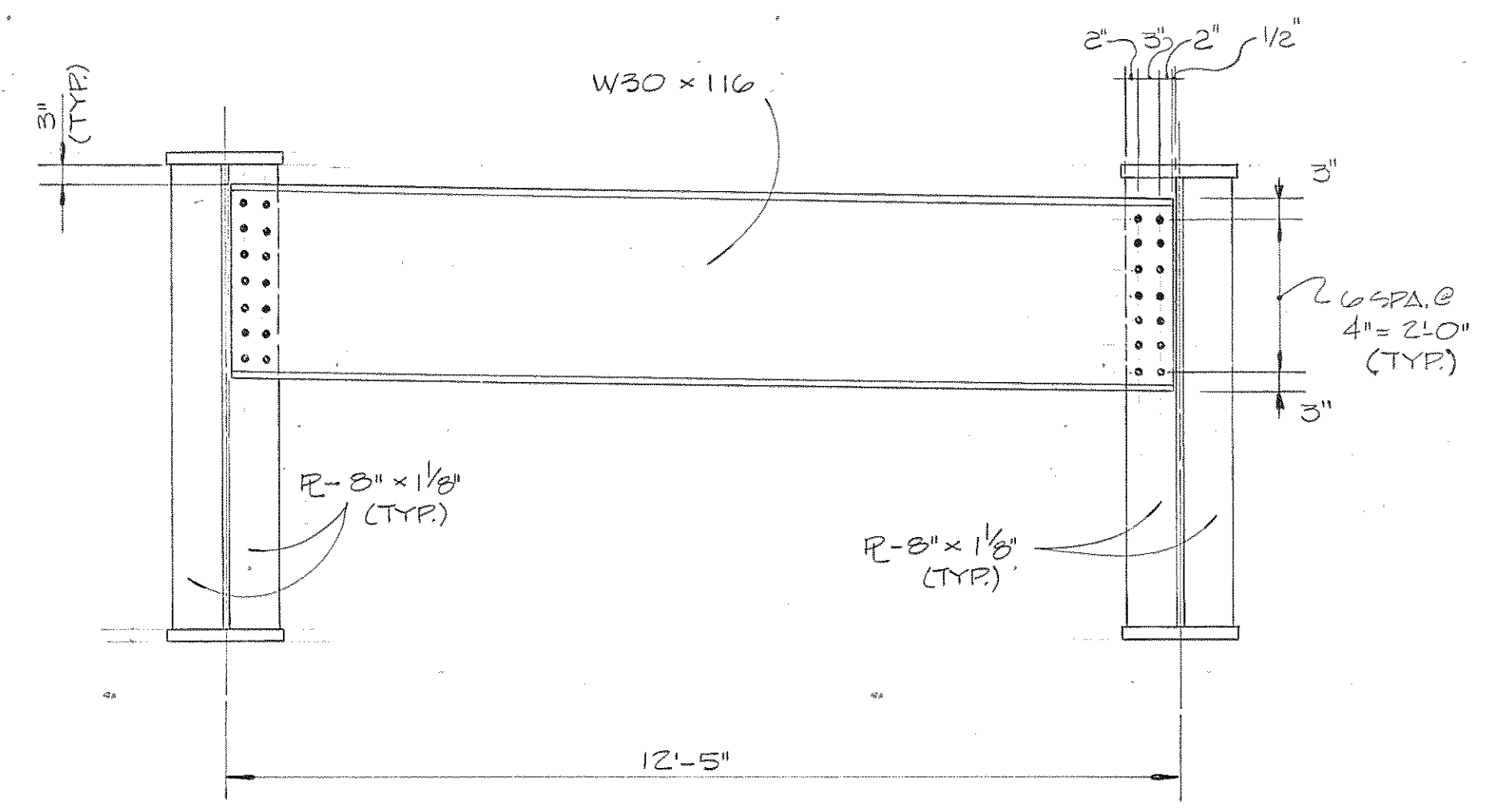
BEARING STIFFENER (TYPICAL @ ABUTMENTS & PIERS)



INTERMEDIATE STIFFENER

POURING SEQUENCE

\* SEE AASHTO SPECIFICATIONS ART. 1.7.21b FOR SIZE OF FILLET WELD.



DIAPHRAGMS @ ABUTMENTS (TYPICAL)

ESTIMATED QUANTITIES		
CLASS 'A' CONCRETE (CY)	REINFORCING STEEL (LBS)	EPOXY-COATED REINF. STEEL (LBS)
514.0	91,605	102,743

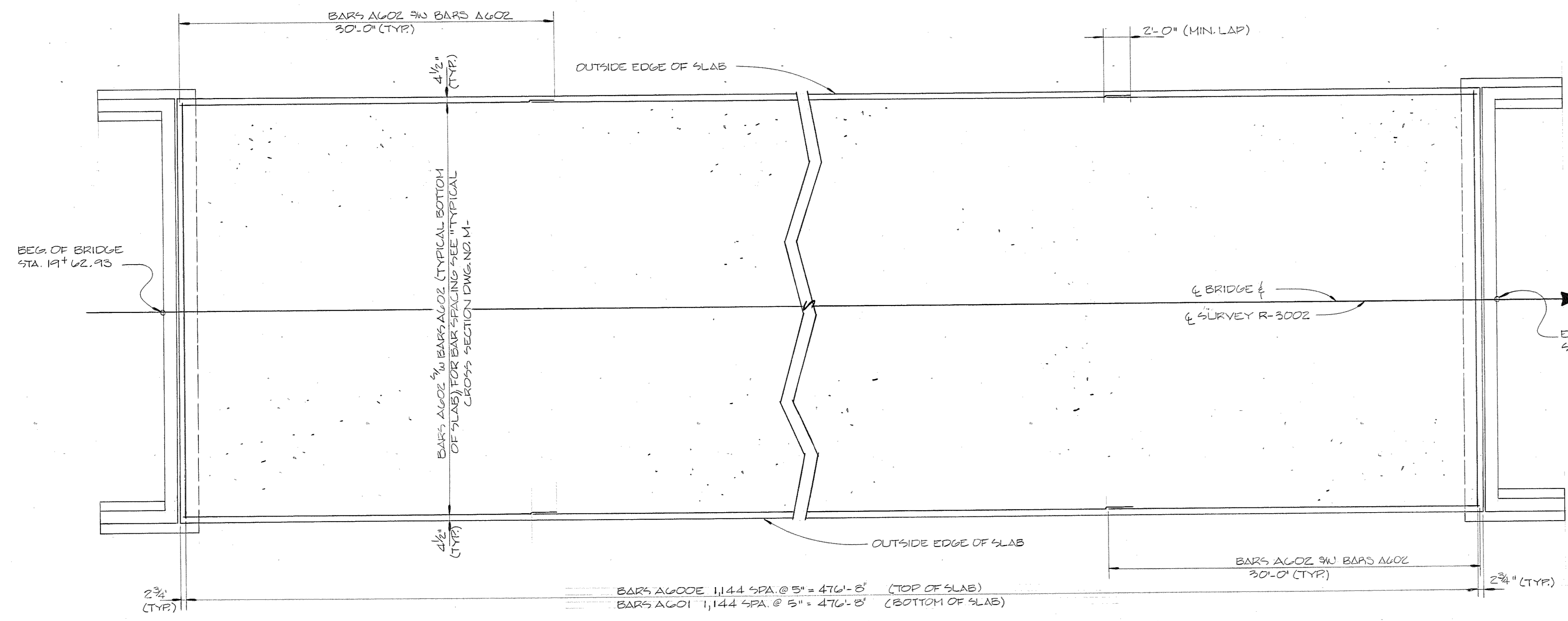
STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF HIGHWAYS  
SUPERSTRUCTURE  
R-3002 OVER CLINCH RIVER  
STATION 22+05.13  
ANDERSON COUNTY  
1982

DESIGNED BY J.L. JETT DATE 6-81  
DRAWN BY D.F. BRILEY DATE 10-81  
SUPERVISED BY FIELDS & SMITH DATE 10-81  
CHECKED BY DATE

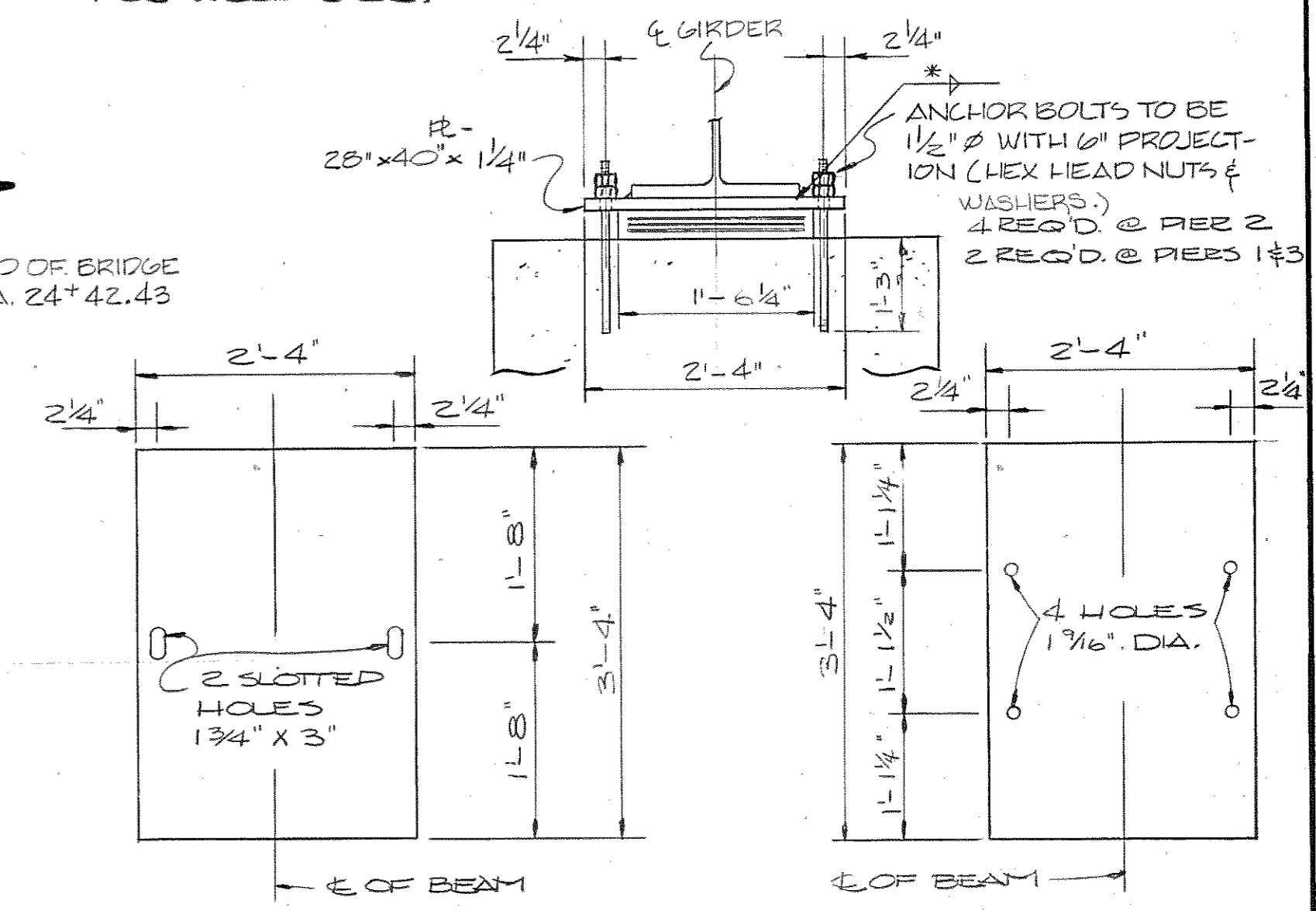
CORRECT *Colleen L. Small*  
ENGINEER OF STRUCTURES  
APPROVED *David G. ...*  
DIRECTOR OF HIGHWAYS

PROJECT NO.	YEAR	SHEET NO.	
BRZ-0100 (7)	1982		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION

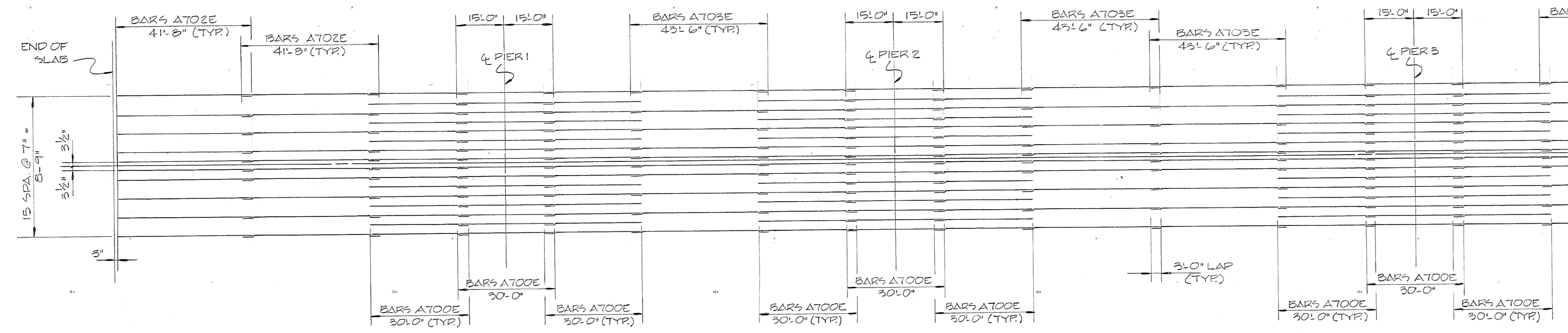
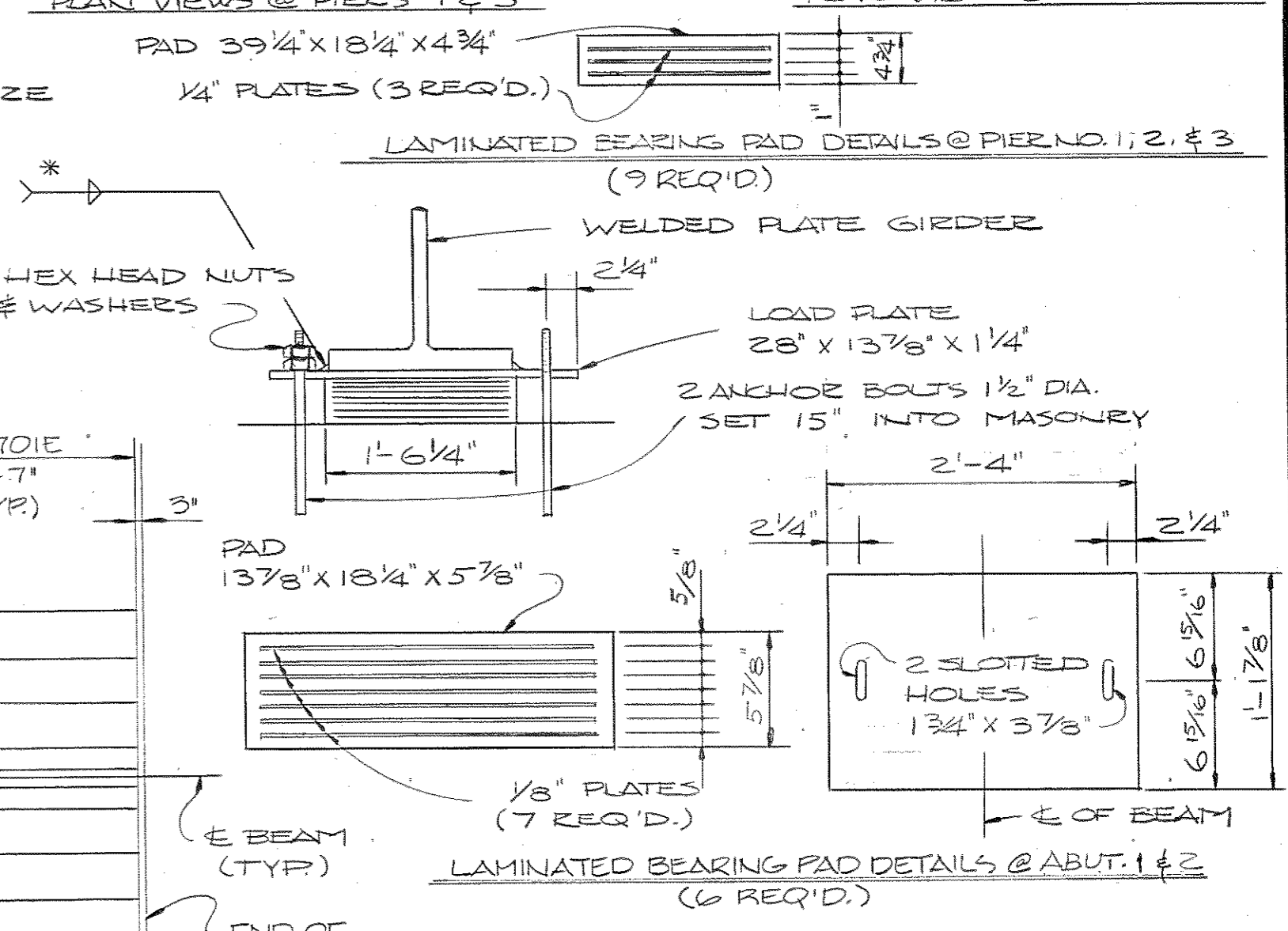
\* SEE AASHTO ART. 1.7.21b FOR WELD SIZE.



SLAB PLAN



\* SEE AASHTO ART. 1.7.21 FOR WELD SIZE



PART PLAN OF MAIN REINFORCING (TYPICAL OVER EACH BEAM)

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF HIGHWAYS

SUPERSTRUCTURE DETAILS  
R-3002 OVER CLINCH RIVER  
STATION 22+05.13  
ANDERSON COUNTY  
1982

DESIGNED BY J.L. JETT  
DRAWN BY W.E. BRILEY  
SUPERVISED BY FIELDS & SMITH  
CHECKED BY \_\_\_\_\_

DATE \_\_\_\_\_  
DATE 10-81  
DATE \_\_\_\_\_  
DATE \_\_\_\_\_

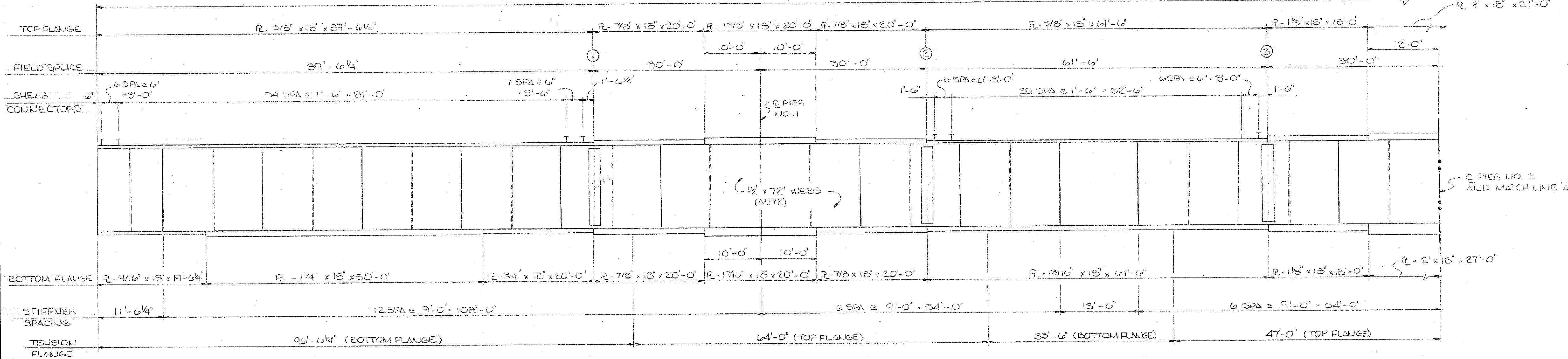
CORRECT *Calder L. Howell*  
ENGINEER OF STRUCTURES  
APPROVED *David G. ...*  
DIRECTOR OF HIGHWAYS



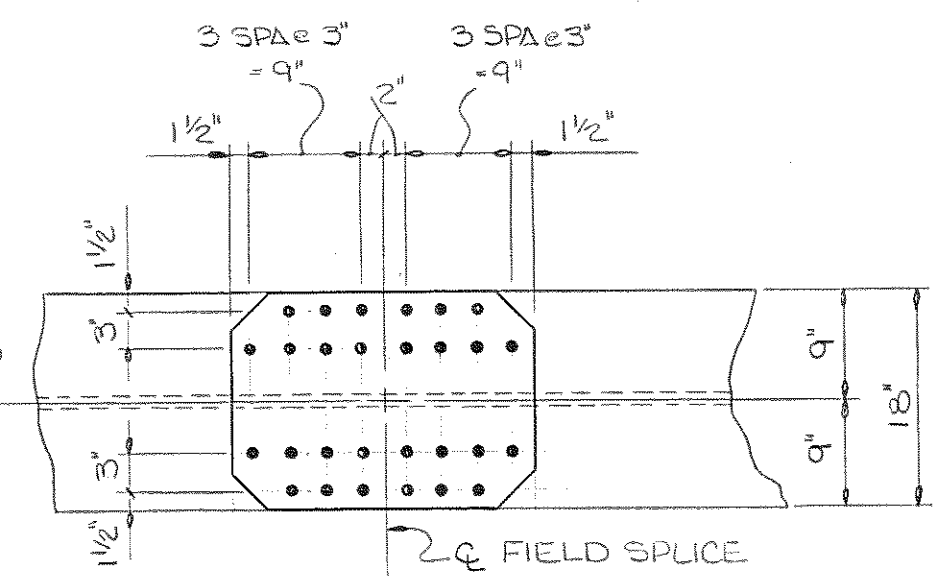
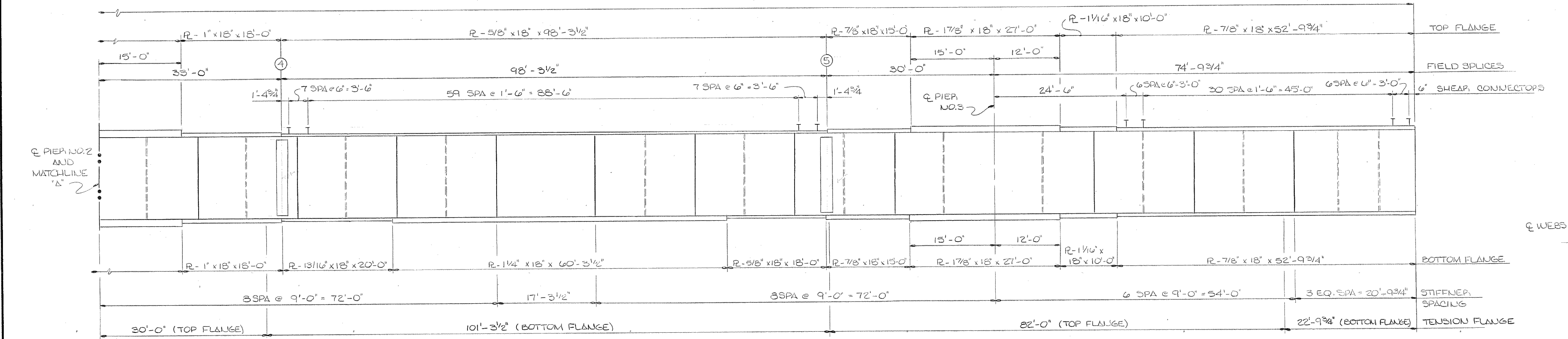
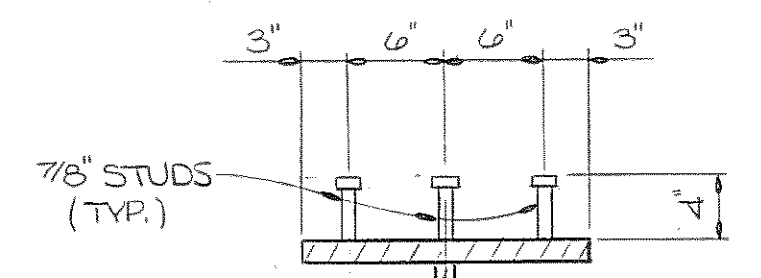
PROJECT NO.	YEAR	SHEET NO.
BRZ-0100 (7)	1982	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION



NOTE: SOLID LINES REPRESENT DIAPHRAGMS AND STIFFENERS. DASHED LINES REPRESENT STIFFENERS ONLY.

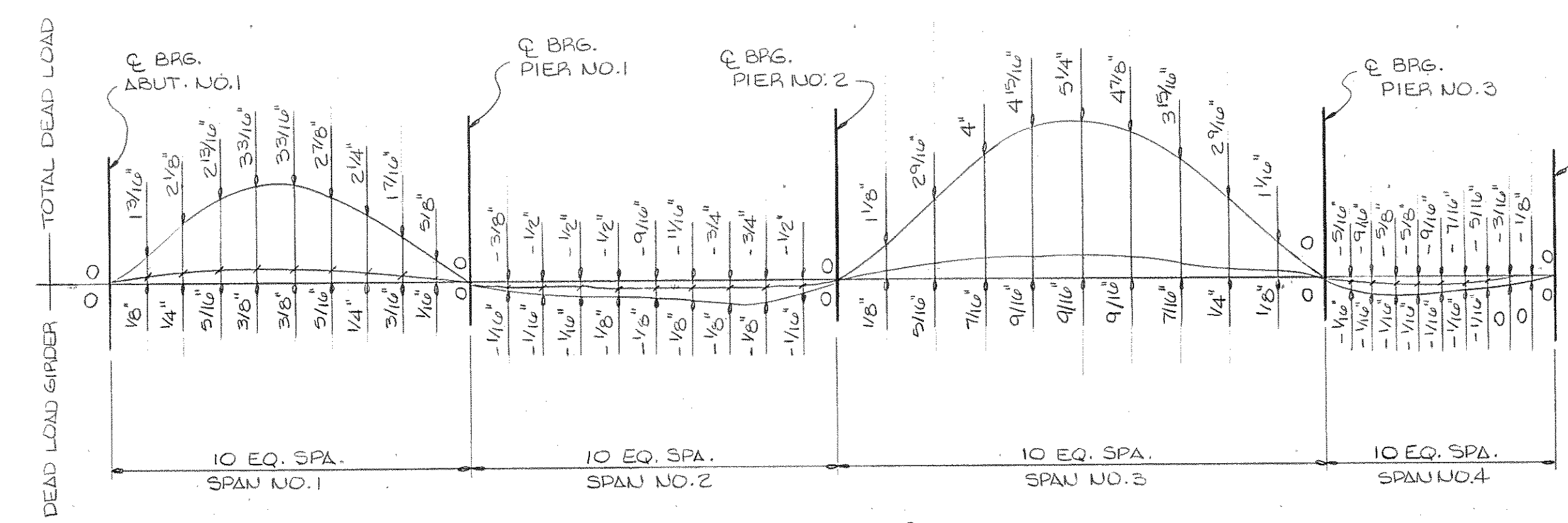


NOTE: ALL WEBS, FLANGES, FIELD SPlice PLATES, AND STIFFENERS TO BE (A572).

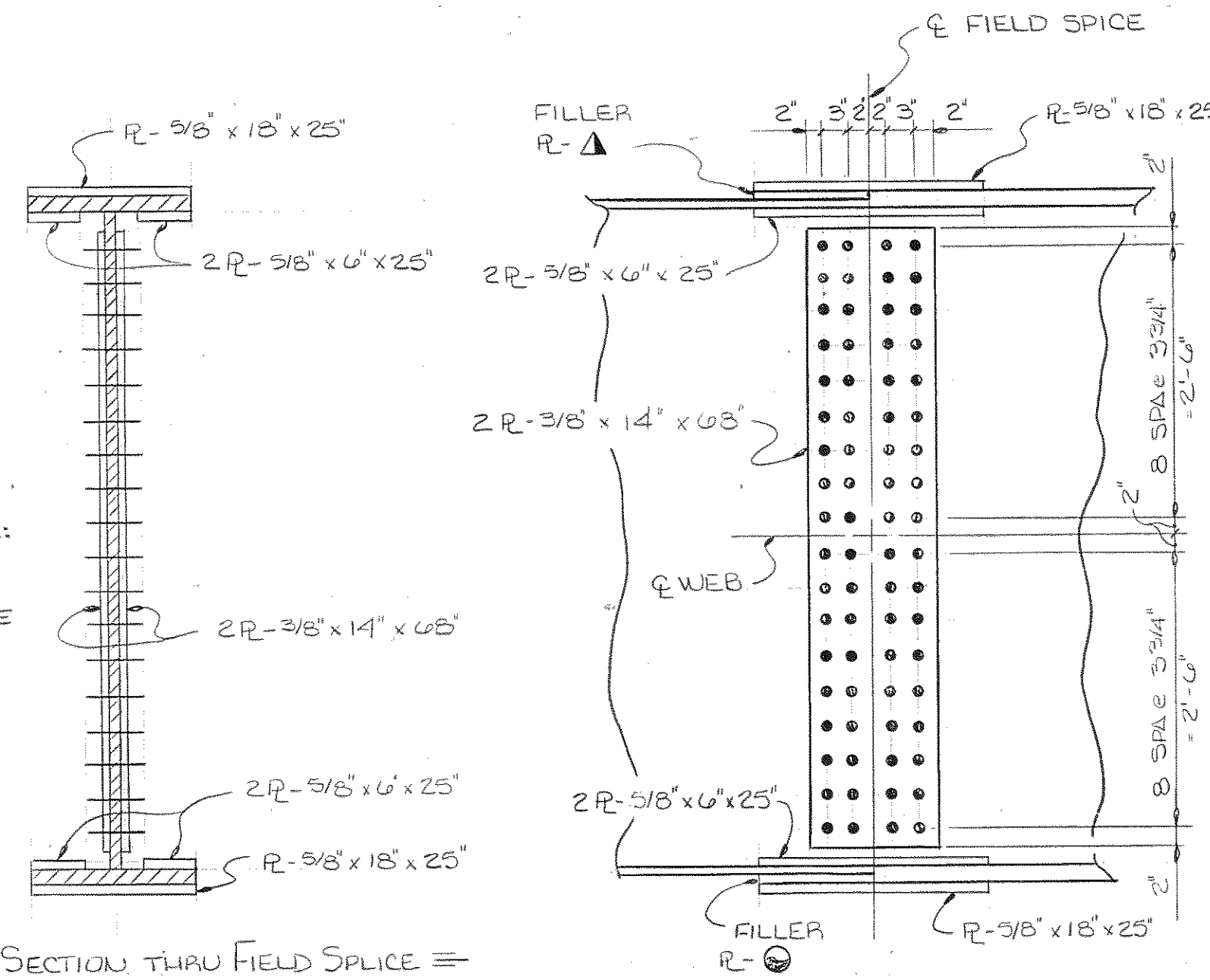
TYPICAL GIRDER DETAIL

- ▲ - DENOTES FILLER R SIZE (TOP FLANGES)
  - 1- 1/4" x 18" x 12 1/2"
  - 2- 1/4" x 18" x 12 1/2"
  - 3- 1/2" x 18" x 12 1/2"
  - 4- 3/8" x 18" x 12 1/2"
  - 5- 1/4" x 18" x 12 1/2"
- - DENOTES FILLER R SIZE (BOTTOM FLANGES)
  - 1- 1/8" x 18" x 12 1/2"
  - 2- 1/16" x 18" x 12 1/2"
  - 3- 5/16" x 18" x 12 1/2"
  - 4- 3/16" x 18" x 12 1/2"
  - 5- 1/4" x 18" x 12 1/2"

NOTE: ALL BOLTS ARE 7/8" φ (A325).



NOTE: DEAD LOAD CORRECTION CURVE: GIRDERS SHALL BE CAMBERED TO COMPENSATE FOR DEAD LOAD DEFLECTION AND VERTICAL CURVE



TYPICAL SECTION THRU FIELD SPICE

TYPICAL FIELD SPICE 1 THRU 5

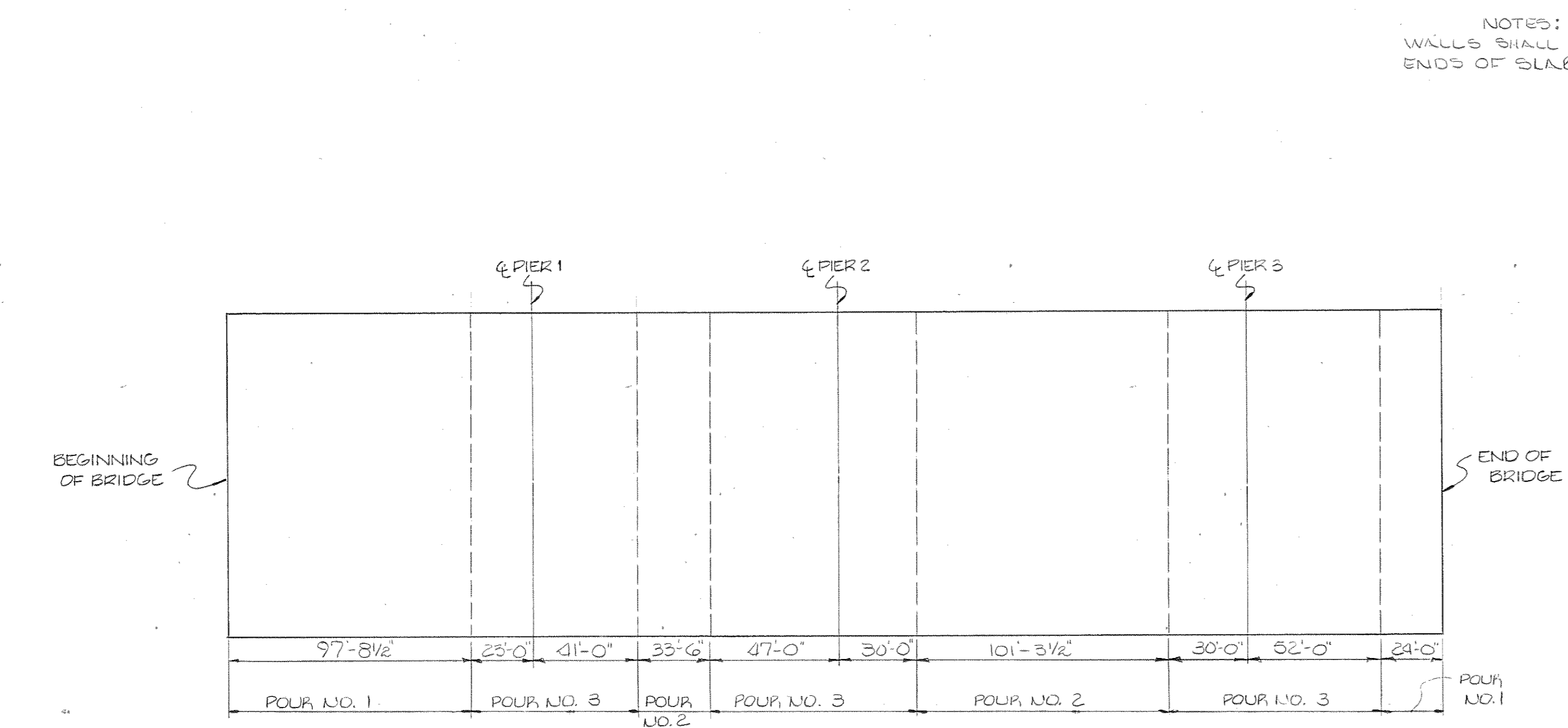
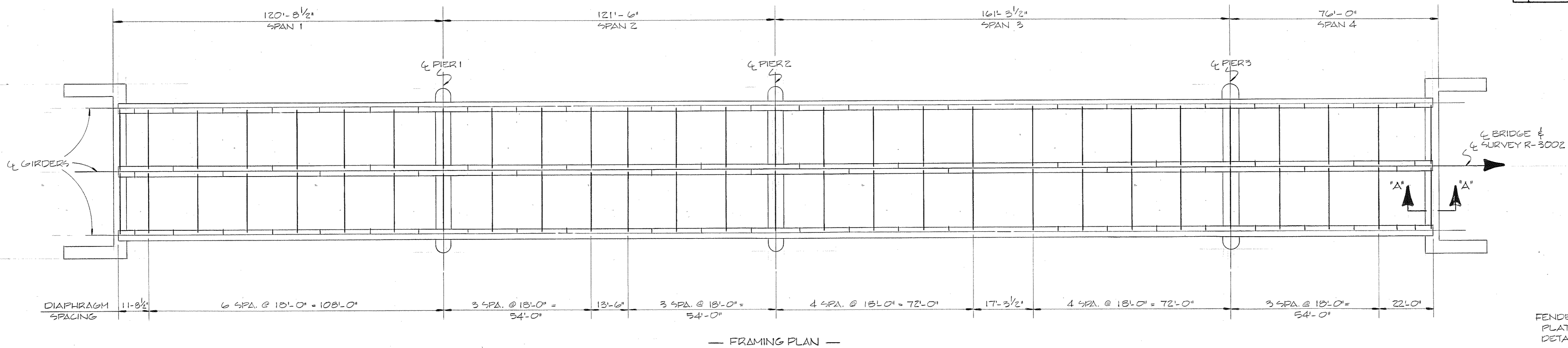
DESIGNED BY J. JETT  
 DRAWN BY H. COLEMAN  
 SUPERVISED BY J. FIELDS  
 CHECKED BY

DATE 10-81  
 DATE 10-81  
 DATE

STATE OF TENNESSEE  
 DEPARTMENT OF TRANSPORTATION  
 BUREAU OF HIGHWAYS  
 SUPERSTRUCTURE DETAILS  
 R-3002 OVER CLINCH RIVER  
 STATION 22+05.13  
 ANDERSON COUNTY  
 1982

CORRECT *Clifton L. Forewell*  
 ENGINEER OF STRUCTURES  
 APPROVED *Lewis Evans*  
 DIRECTOR OF HIGHWAYS

PROJECT NO.	YEAR	SHEET NO.	
BRZ-0100(7)	1982		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	1-14-82	AMS	REVISED SECTION A-A, FRONT ELEVATION OF ROADWAY EXPANSION DEVICE INSTAL.

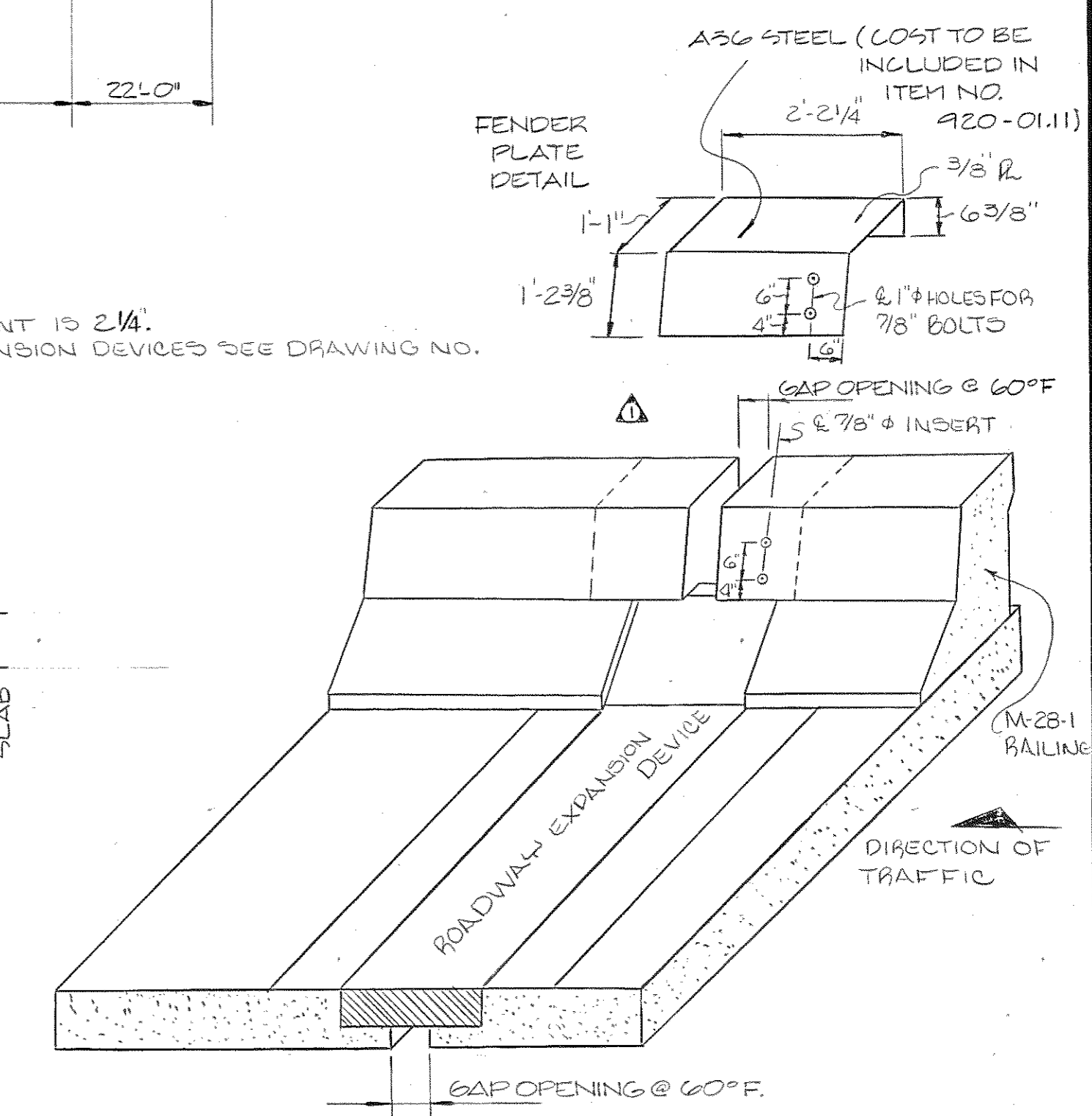
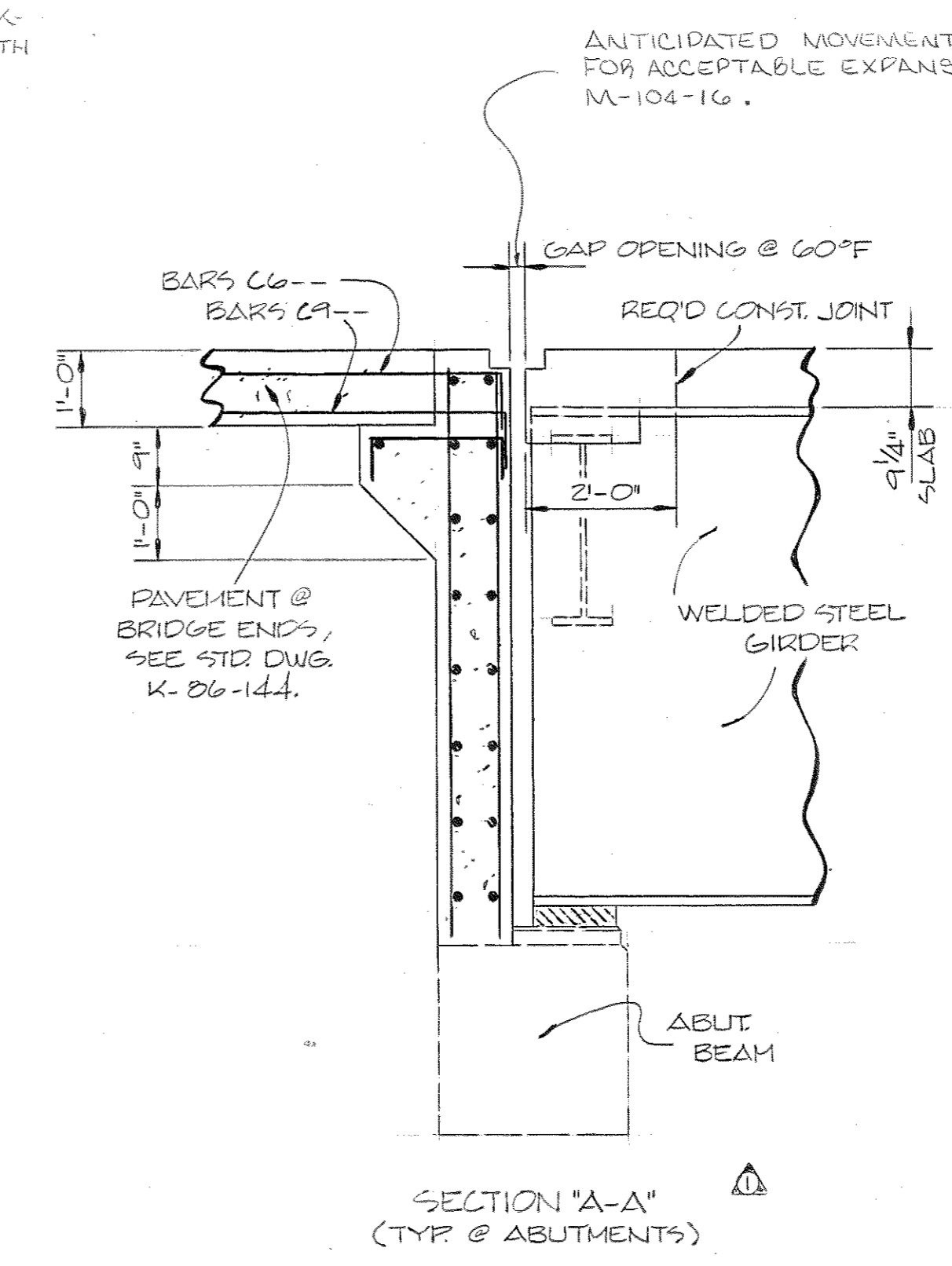


NOTES: THE TOP 12" OF ABUTMENT BACK-WALLS SHALL BE POURED CONCURRENTLY WITH ENDS OF SLAB.

POUR NO. 1 IS THE DEAD LOAD POSITIVE MOMENT AREA OF THE EXTERIOR SPANS.  
 POUR NO. 2 IS THE DEAD LOAD POSITIVE MOMENT AREA OF THE INTERIOR SPANS.  
 POUR NO. 3 IS OVER THE INTERIOR SUPPORTS WITH LIMITS BEING THE INFLECTION POINTS OF THE DEAD LOAD MOMENT.

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 J.L. JETT DATE 6-81  
 DRAWN BY R.F. BRILEY DATE 10-81  
 SUPERVISED BY J. FIELDS & A. SMITH DATE 10-81  
 CHECKED BY DATE

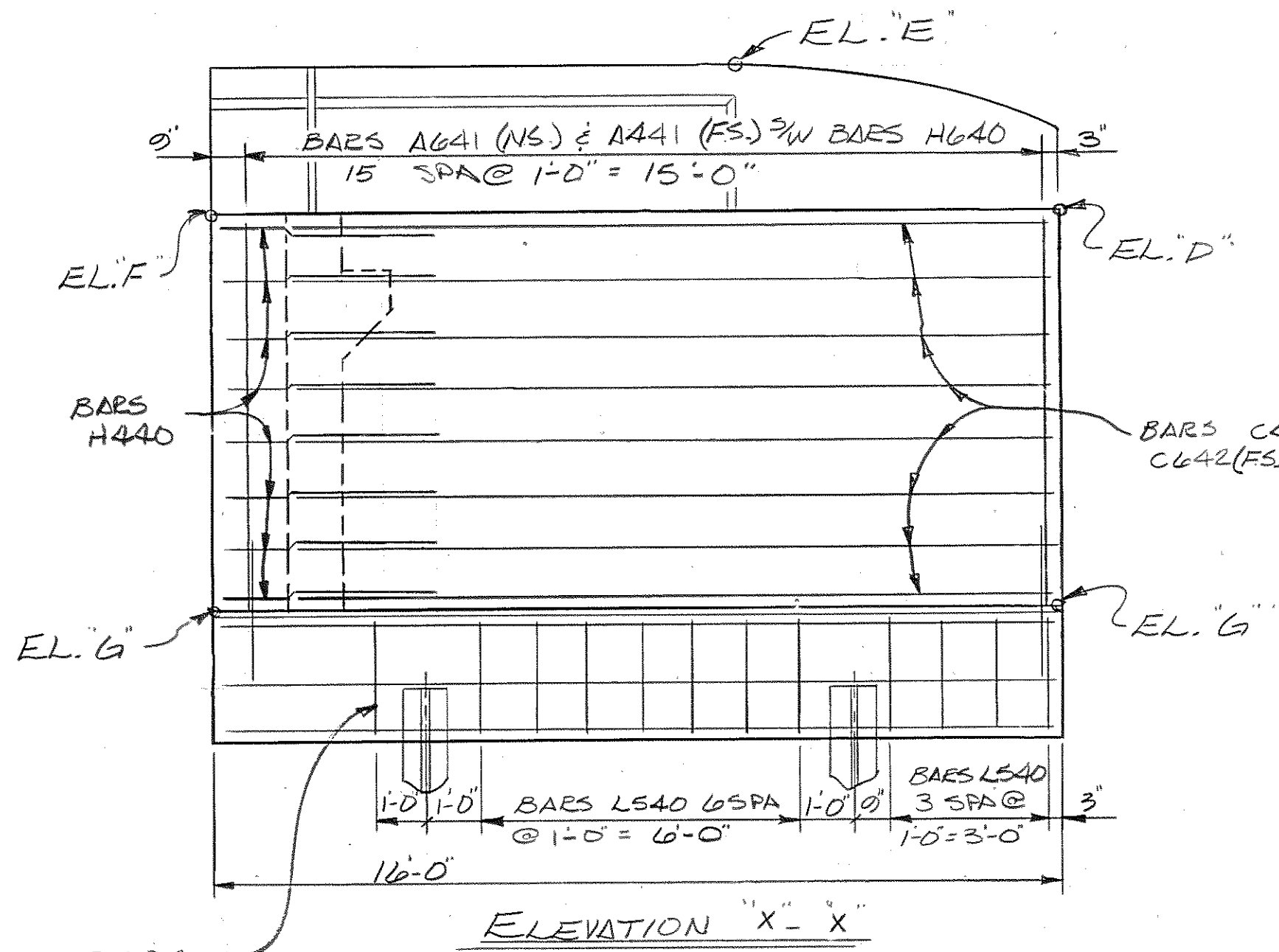
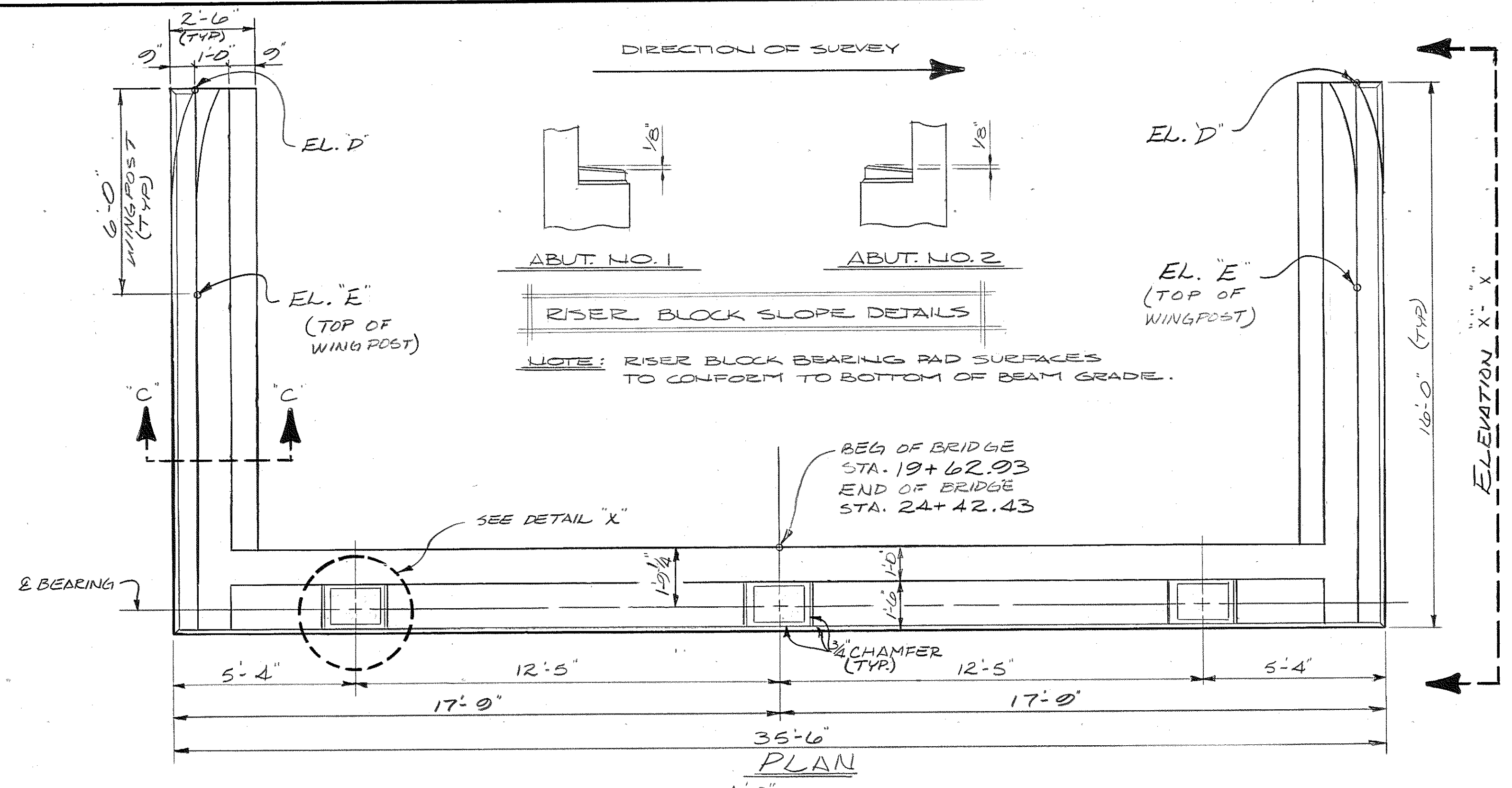


STATE OF TENNESSEE  
 DEPARTMENT OF TRANSPORTATION  
 BUREAU OF HIGHWAYS  
 SUPERSTRUCTURE DETAILS  
 R-3002 OVER  
 CLINCH RIVER  
 STATION 22+05.13  
 ANDERSON COUNTY  
 1982

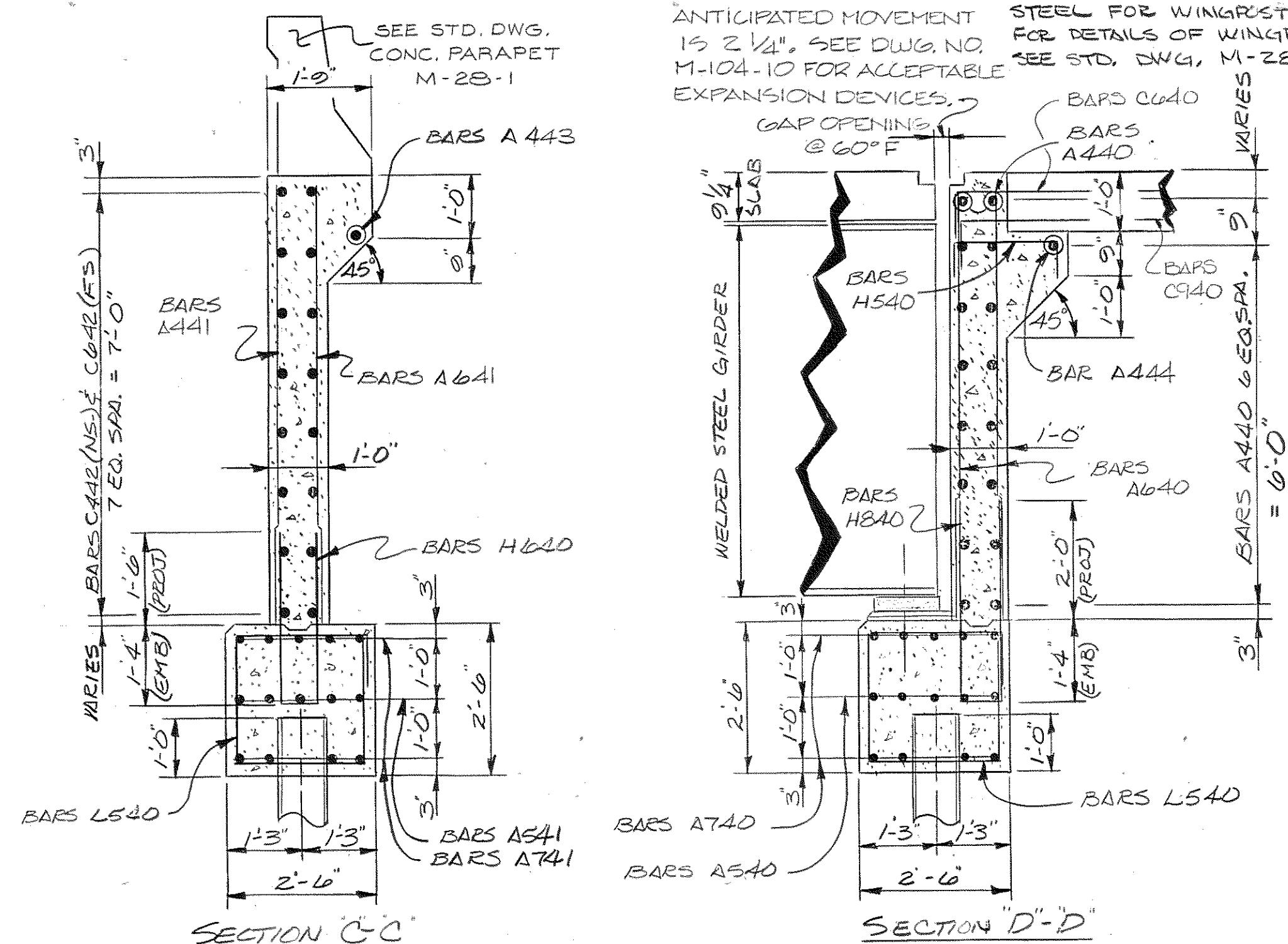
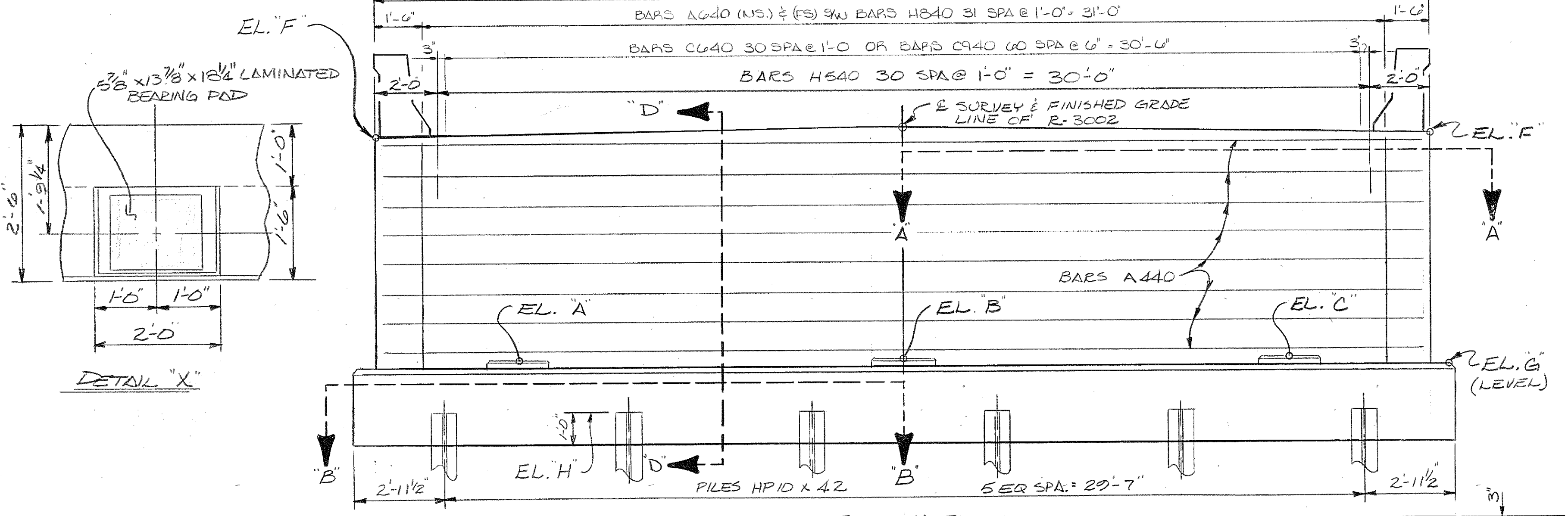
CORRECT *Leibel, J. Howard*  
 ENGINEER OF STRUCTURES  
 APPROVED *Lewis Evans*  
 DIRECTOR OF HIGHWAYS

PROJECT NO.	YEAR	SHEET NO.
BRZ-0100(7)	1982	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	1-14-82	AMS	REVISED SECTION "D-D"
2	5-7-82	AMS	ELEVATIONS



- NOTES:
1. RISER BLOCKS TO BE FORMED MONOLITHICALLY WITH ABUTMENT BEAM.
  2. COST OF BRIDGERSIL AND POST IS TO BE INCLUDED IN THE COST OF BRIDGE-RAIL SYSTEM.
  3. RISER BLOCK BEARING PAD SURFACES TO CONFORM TO BOTTOM OF BEAM GRADE.
  4. WHEN FORMING WINGWALLS, PROVISIONS SHALL BE MADE FOR SETTLING REINFORCING STEEL FOR WINGPOST AND PARAPET. FOR DETAILS OF WINGPOST AND " SEE STD. DWG. M-22-1.



ESTIMATED QUANTITIES

ITEM	CONCRETE CLASS 'A' (C.Y.)	REINFORCING STEEL (LBS.)
ABUTMENT NO 1	14.5	5770
ABUTMENT NO 2	14.5	5770

ELEVATIONS

ITEM	A	B	C	D	E	F	G	H
ABUT 1	838.60	838.82	838.60	840.17	848.81	846.10	838.35	836.85
ABUT 2	838.37	838.59	839.37	842.20	845.51	842.71	835.12	833.62

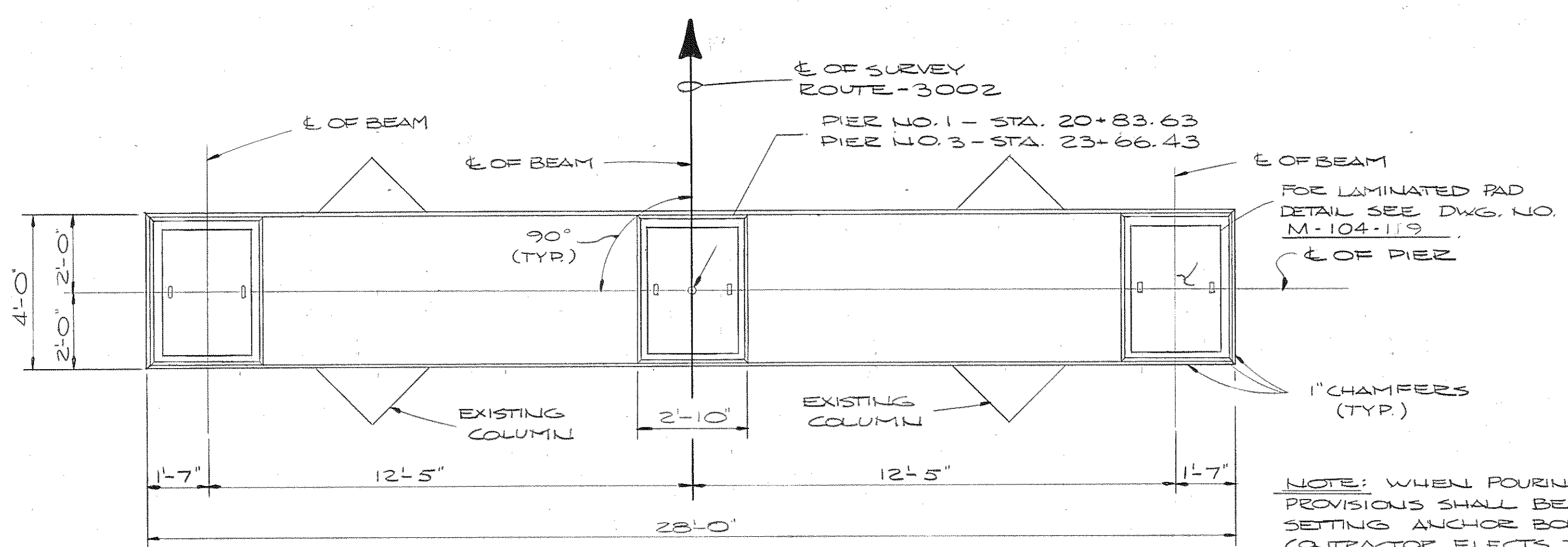
STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF HIGHWAYS  
ABUTMENTS NUMBER 1 & 2  
R-3002 OVER CLINCH RIVER  
STATION 22+05.13  
ANDERSON COUNTY  
1982

DESIGNED BY J. L. JETT  
DRAWN BY K. FRANKENFELD  
SUPERVISED BY SIM FIELDS  
CHECKED BY  
DATE 7-81  
DATE 10-81  
DATE 10-81

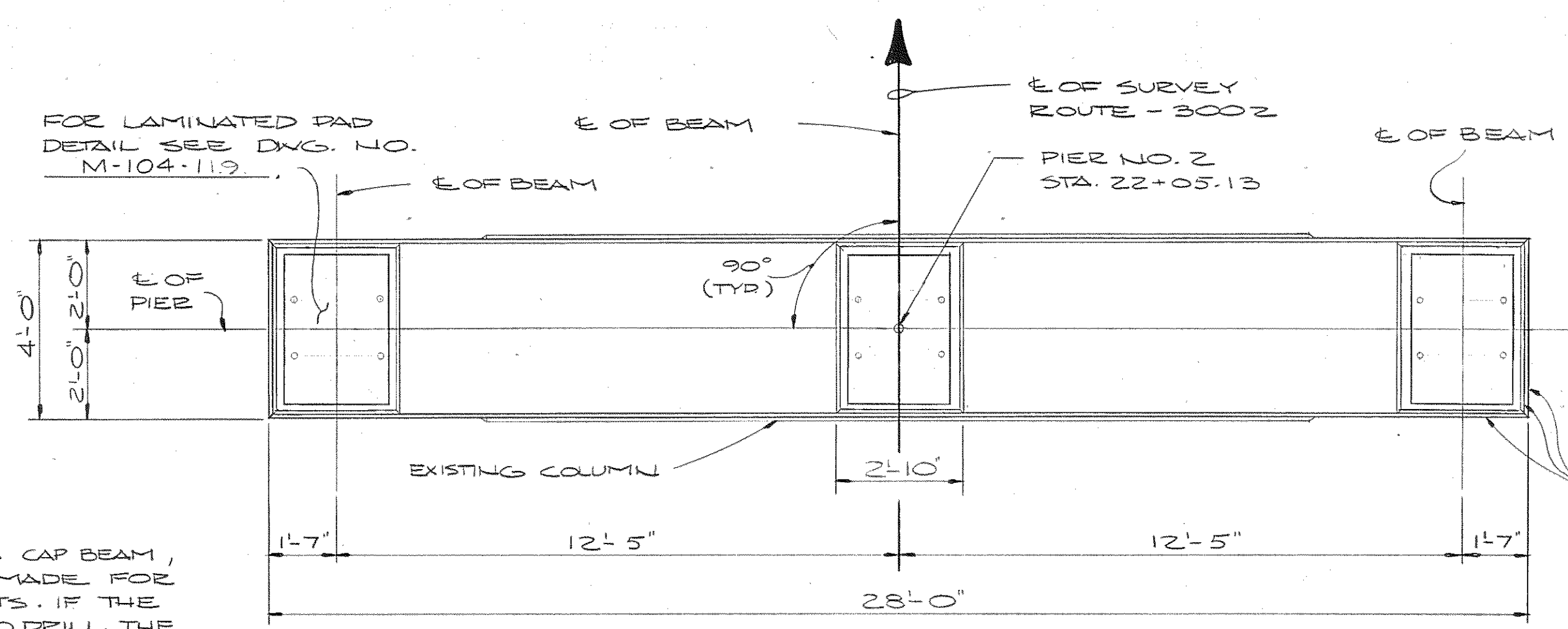
CORRECT *Clifton L. Forewell*  
ENGINEER OF STRUCTURES  
APPROVED *Lewis Evans*  
DIRECTOR OF HIGHWAYS

PROJECT NO.	YEAR	SHEET NO.
BRZ-01007	1982	

REVISIONS				
NO.	DATE	BY	BRIEF DESCRIPTION	
1	5-7-82	AMS	ELEVATIONS	



PLAN

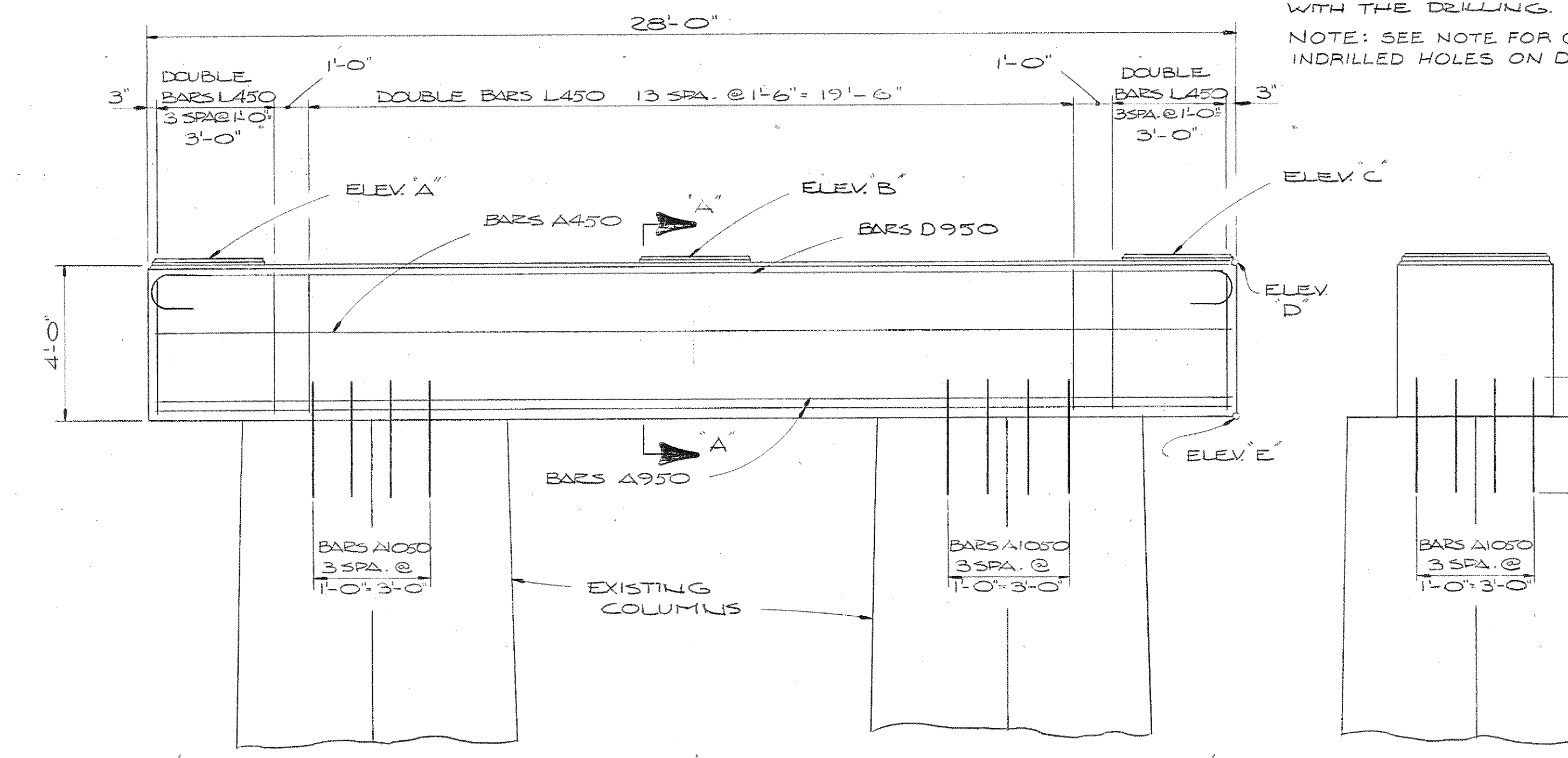
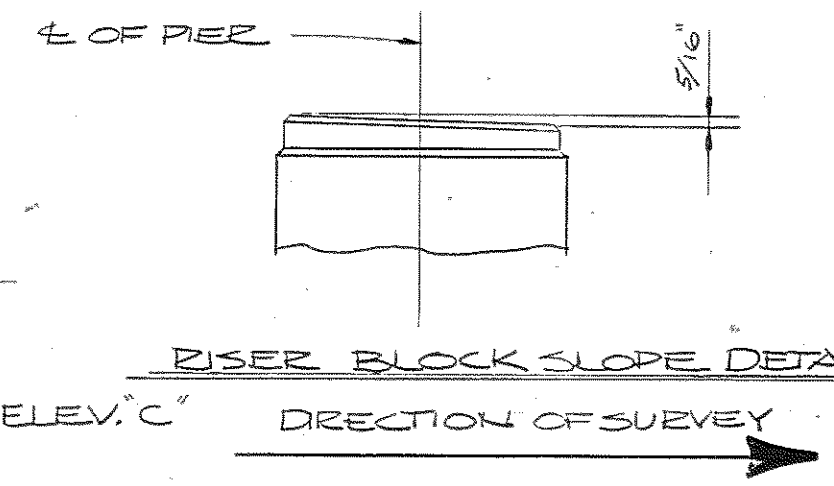


PLAN

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 1'-0".

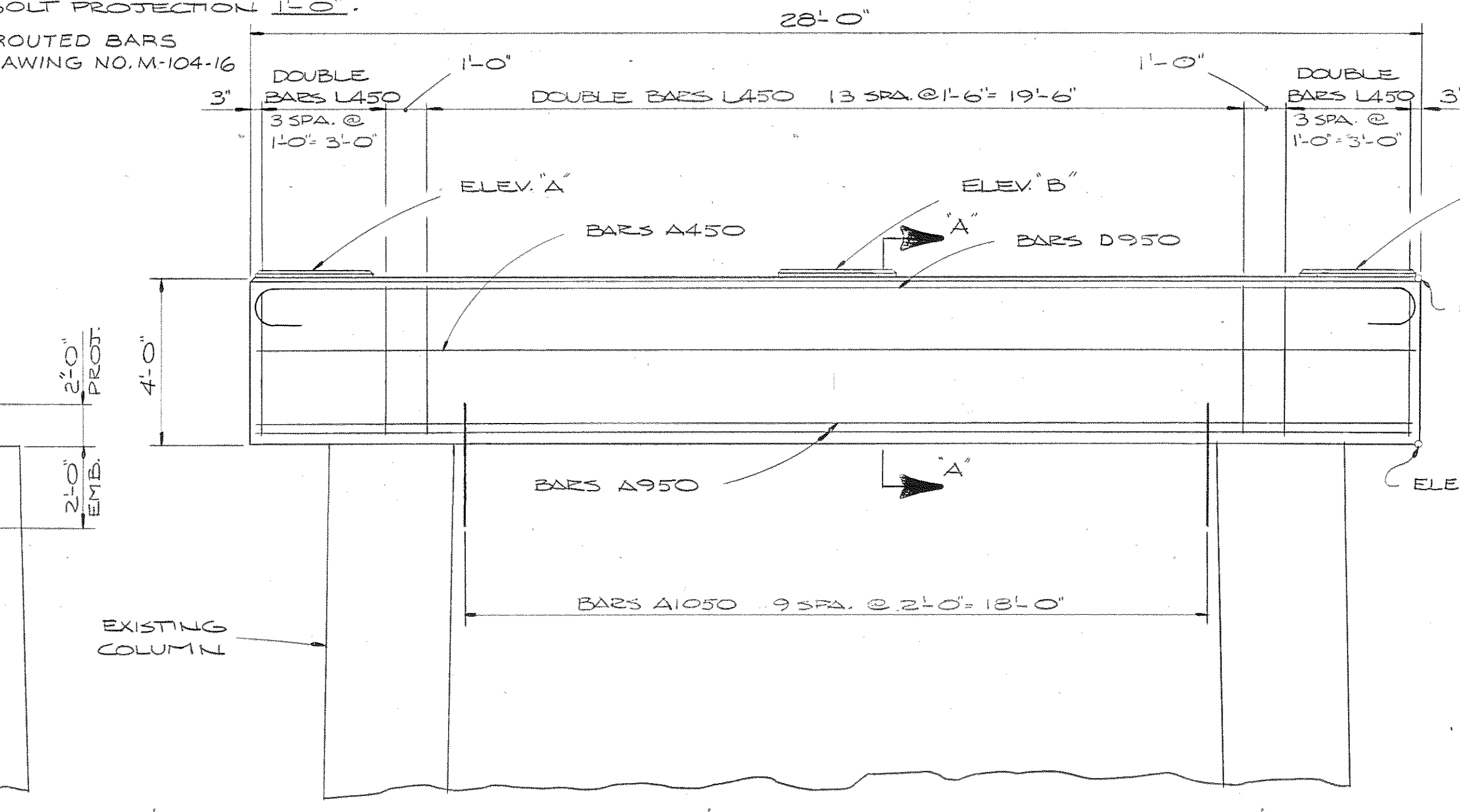
NOTE: SEE NOTE FOR GROUTED BARS IN DRILLED HOLES ON DRAWING NO. M-104-16

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

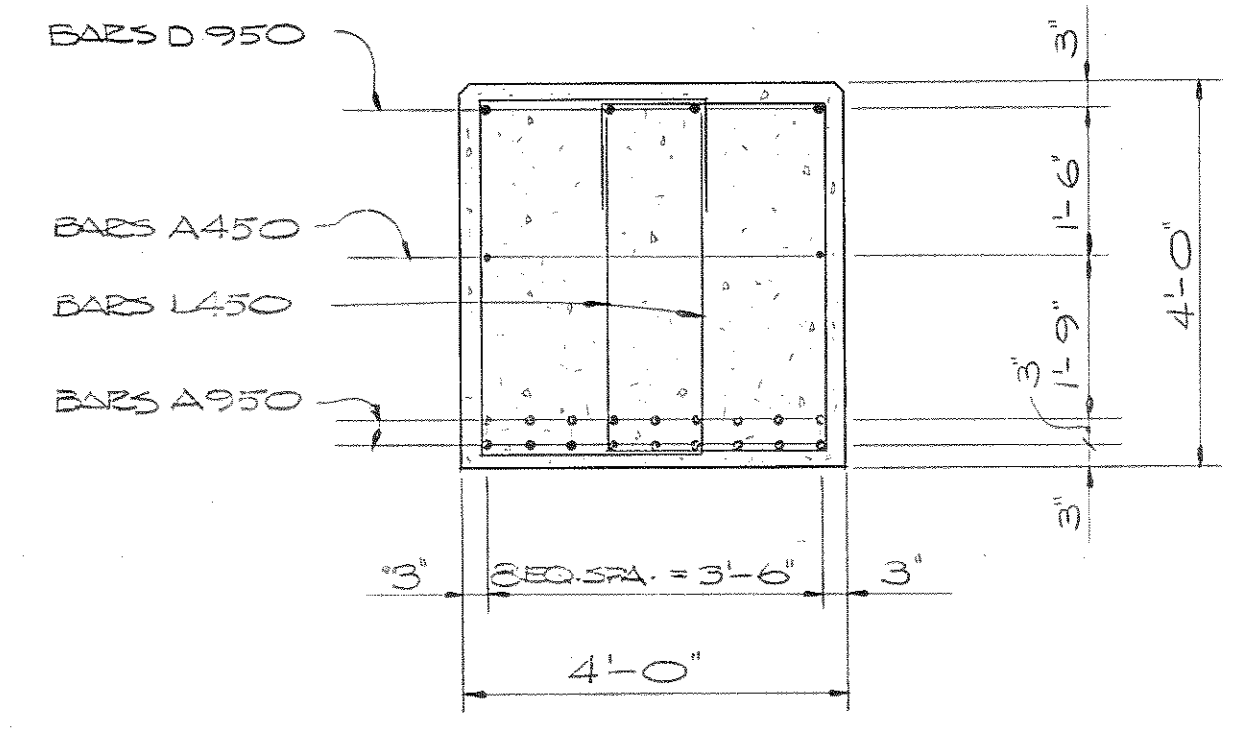


ELEVATION PIERS 1 & 3  
(LOOKING FORWARD ON SURVEY)

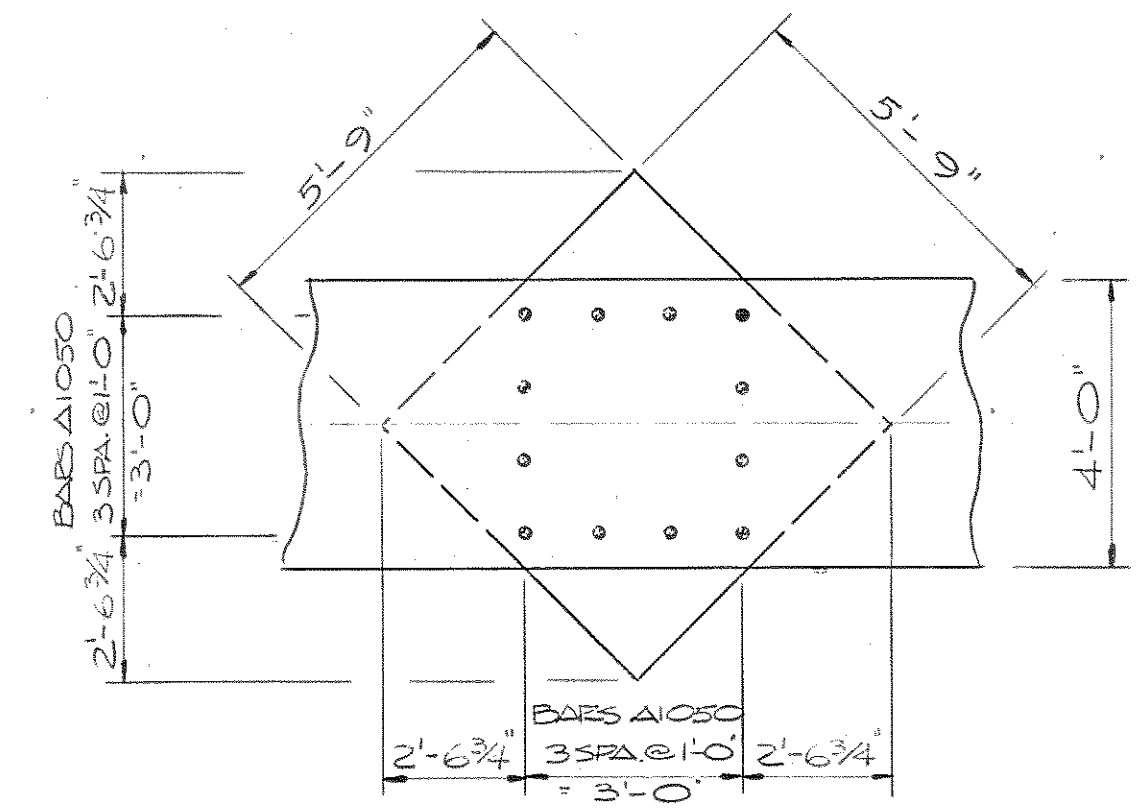
NOTE: EXISTING COLUMNS ARE TO BE REMOVED DOWN TO ELEV. "E".



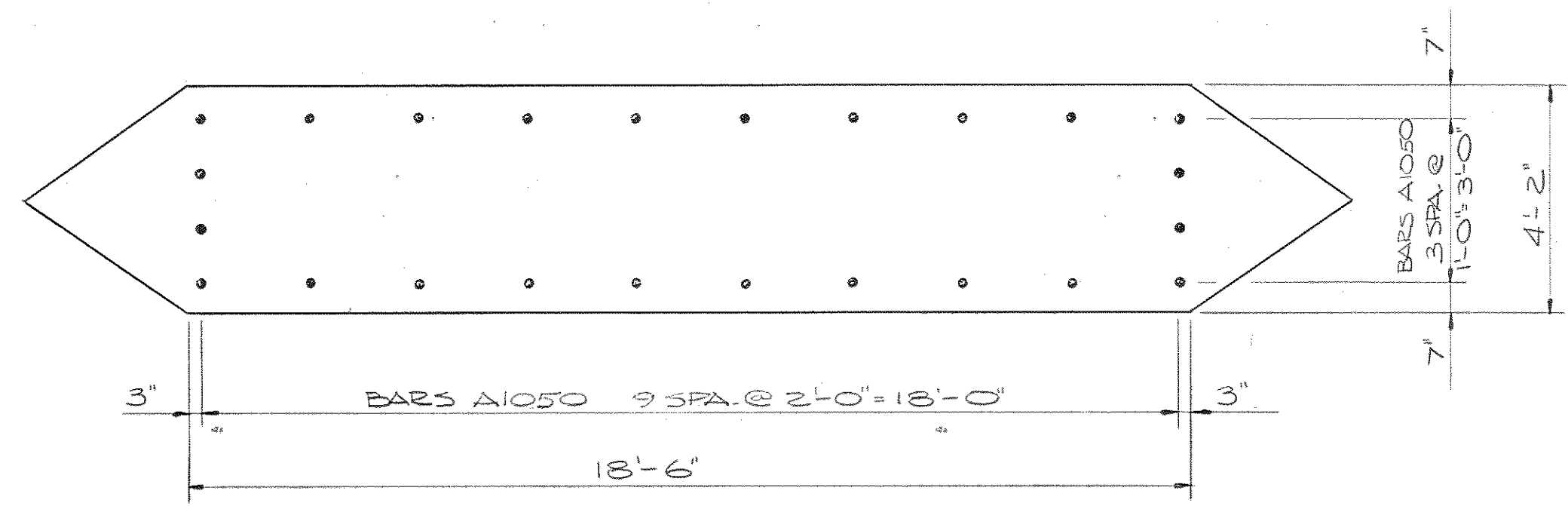
ELEVATION PIER 2  
(LOOKING FORWARD ON SURVEY)



SECTION A-A



PLAN SHOWING SPACING OF DOWEL BARS  
(TYPICAL PIERS 1 & 3)



PLAN SHOWING SPACING OF DOWEL BARS  
(TYPICAL PIER 2)

ITEM	A	B	C	D	E
PIER NO. 1	837.84	838.06	837.84	837.59	833.59
PIER NO. 2	836.97	837.19	836.97	836.72	832.72
PIER NO. 3	835.88	836.10	835.88	835.63	831.63

NOTE: CONTRACTOR SHALL REMOVE EXISTING CAP BEAM AND COLUMNS TO ELEVATION SHOWN ON CONTRACT DRAWINGS. FIELD MEASUREMENTS SHALL THEN BE TAKEN AND FINAL ADJUSTMENTS MADE BEFORE ANY PER STEEL IS ORDERED.

ESTIMATED QUANTITIES		
ITEM	CONCRETE CLASS "A" C.Y.	REINFORCING STEEL LBS.
PIER NO. 1	16.8	2,931
PIER NO. 2	16.8	2,931
PIER NO. 3	16.8	2,931

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF HIGHWAYS

PIERS NO. 1, 2 & 3  
R-3002 OVER CLINCH RIVER  
STATION 22+05.13  
ANDERSON COUNTY  
1982

DESIGNED BY J. WETT DATE 4-81  
DRAWN BY R. CLEISTY DATE 10-81  
SUPERVISED BY J. FIELDS DATE 10-81  
CHECKED BY DATE

CORRECT  
ENGINEER OF STRUCTURES  
APPROVED Lewis Evans  
DIRECTOR OF HIGHWAYS

