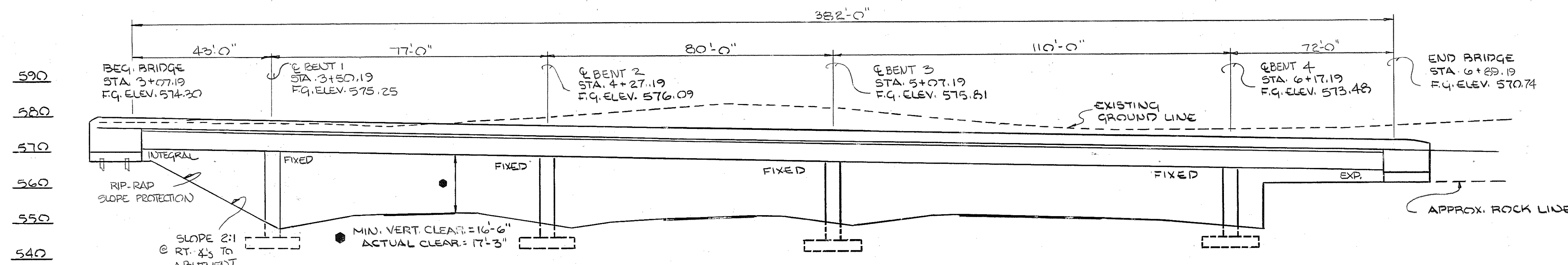


| PROJECT NO. | YEAR | SHEET NO. |
|----------------|------|-----------|
| I-440-4(53)200 | 1983 | |

| REVISIONS | | | |
|-----------|---------|--------|--------------------------|
| NO. | DATE | BY | BRIEF DESCRIPTION |
| 1 | 2-8-83 | S.H. | GENERAL REVISIONS |
| 2 | 4-7-83 | AMS | STRUCT. LIGHTING DETAILS |
| 3 | 4-26-85 | C.N.K. | DESIGN CHANGE |

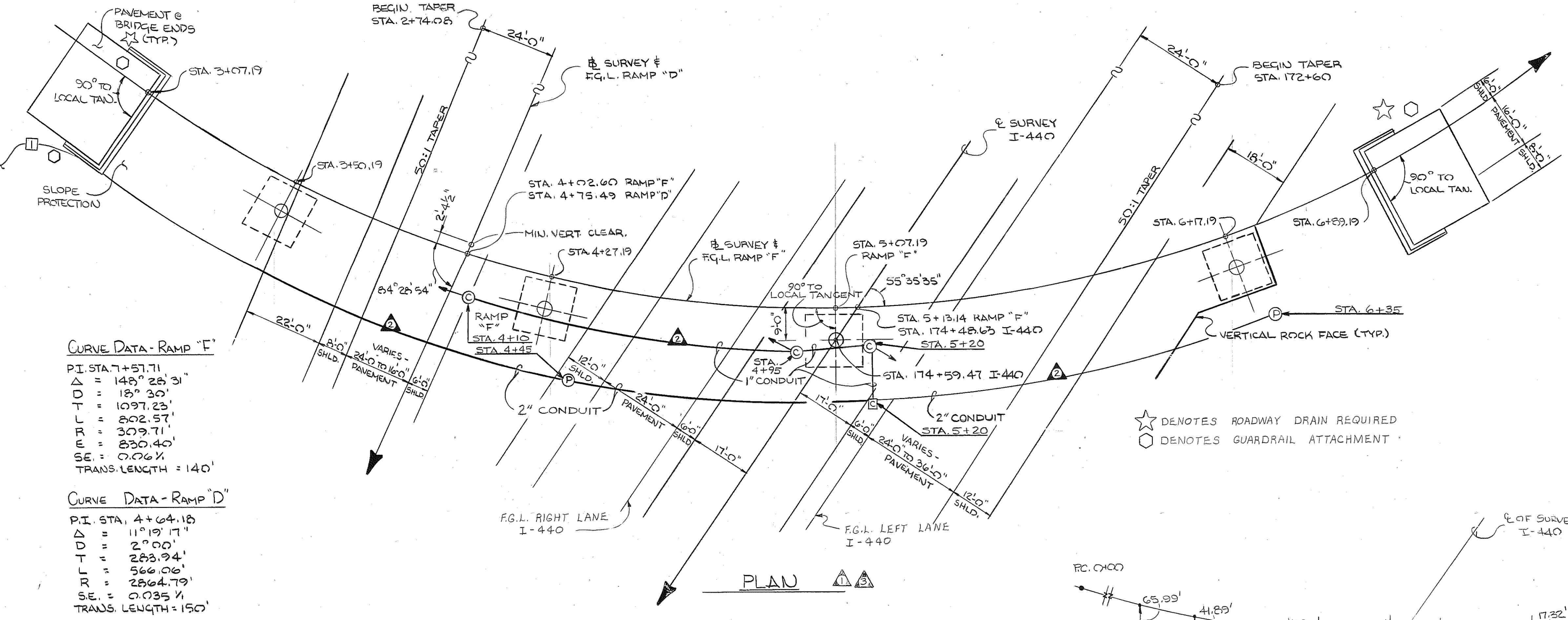


▲▲ ELEVATION @ RIGHT ANGLES TO FINISHED GRADE LINE RAMP "F"

| LIST OF DWG'S | DWG. NO. | LAST REV. DATE |
|-----------------------------------|-----------|----------------|
| LAYOUT | M-119-25 | 4-26-85 |
| GEN. NOTES & ESTIMATED QUANTITIES | M-119-26 | 4-26-85 |
| FOUNDATION DATA | M-119-27 | 2-8-83 |
| SUPERSTRUCTURE | M-119-28 | 4-26-85 |
| SUPERSTRUCTURE DETAILS | M-119-29 | 4-26-85 |
| SUPERSTRUCTURE DETAILS | M-119-30 | 4-26-85 |
| SUPERSTRUCTURE DETAILS | M-119-31 | 4-26-85 |
| SUPERSTRUCTURE DETAILS | M-119-32 | 4-26-85 |
| ABUTMENT NO. 1 | M-119-33 | 4-26-85 |
| ABUTMENT NO. 2 | M-119-34 | 4-26-85 |
| BENT NO. 1, 2 & 3 | M-119-35 | 4-26-85 |
| BILL OF STEEL | M-119-36 | 4-26-85 |
| BILL OF STEEL | M-119-36A | 4-26-85 |

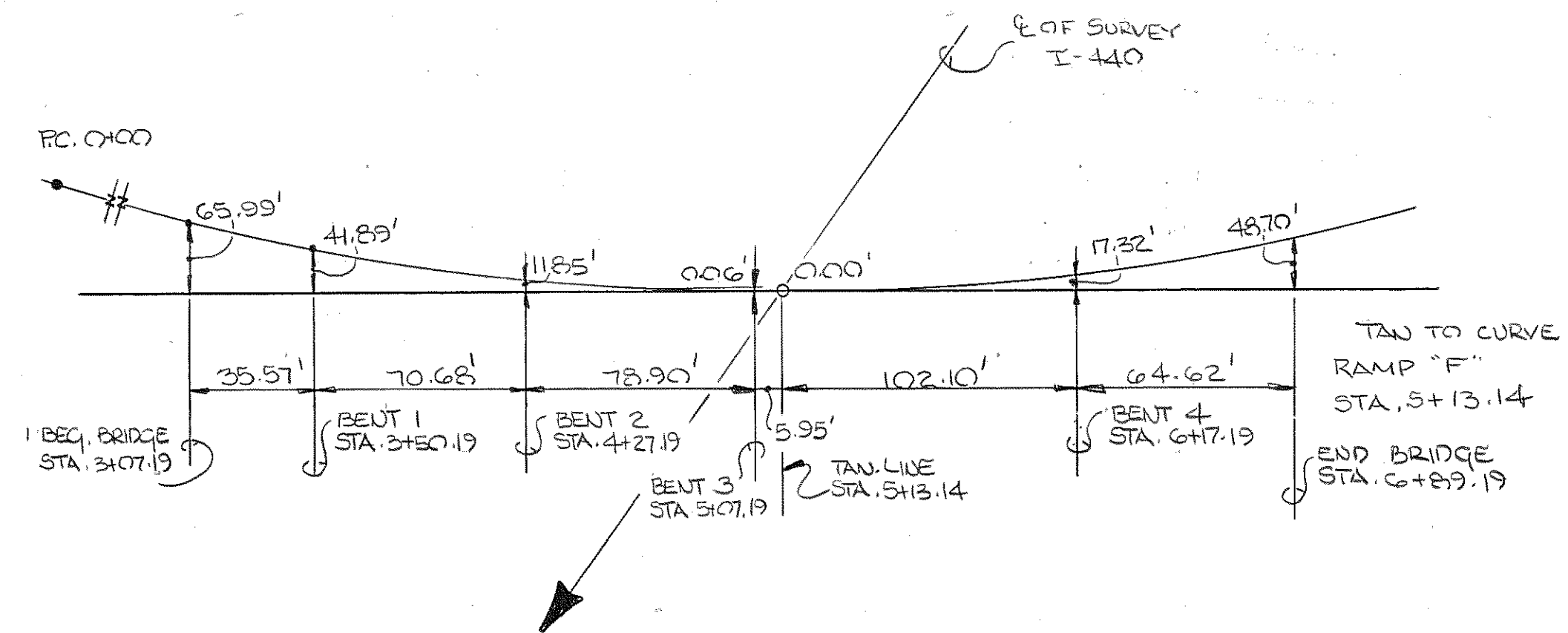
| LIST OF STANDARD DRAWINGS | DWG. NO. | LAST REV. DATE |
|---|-----------------|----------------|
| STD. REINF. BRIDGE SUPPORT | K-80-14 | 8-27-76 |
| MISC. ABUTMENT & DRAINAGE DETAILS | K-85-150 | 1-9-75 |
| REINF. CONC. PAVEMENT & BRIDGE ENDS | K-86-144 | 7-17-81 |
| BRIDGE PAVING-CONCRETE PARAPET | M-28-1 | 7-17-81 |
| SLOPE PROTECTION | RD-SA-1 | 1-11-82 |
| STD. PILE DETAILS | H-5-111 | 11-12-82 |
| TENN. STD. PRECAST PRESTRESSED BRIDGE DECK PANELS | M-103-149 & 150 | 7-7-82 |
| ▲ LIGHT STD. SUPPORT DETAILS | M-8-149 | 11-20-75 |

| LIST OF SPECIAL PROVISIONS | PROV. NO. | LAST REV. DATE |
|--|-----------|----------------|
| REGARDING APPROVAL OF SHOP DRAWINGS | 105A | 9-8-81 |
| REGARDING EPOXY COATED REINFORCING STEEL | 907A | 9-8-81 |



CURVE DATA - RAMP "F"
 P.I. STA. 7+57.71
 $\Delta = 148^\circ 28' 31''$
 $D = 18^\circ 30'$
 $T = 1097.23'$
 $L = 802.57'$
 $R = 309.71'$
 $E = 830.40'$
 $SE = 0.06\%$
 TRANS. LENGTH = 140'

CURVE DATA - RAMP "D"
 P.I. STA. 4+64.15
 $\Delta = 11^\circ 19' 17''$
 $D = 2^\circ 00'$
 $T = 283.94'$
 $L = 566.06'$
 $R = 2864.79'$
 $SE = 0.035\%$
 TRANS. LENGTH = 150'



▲▲ STAKEOUT PLAN

30'-0" ROADWAY WITH PARAPET RAILING
 STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 LAYOUT BRIDGE 7
 RAMP "F" OVER RAMP "D" AND I-440
 STATION 174+48.63
 DAVIDSON COUNTY
 1983

DESIGNED BY S. HARDIE, C.N.K. DATE 11/82
 DRAWN BY J. FIELDS DATE 11/82
 SUPERVISED BY J. FIELDS DATE 11/82
 CHECKED BY C.N.K. DATE 11/82

CORRECT *Blanton Lovell*
 ENGINEER OF STRUCTURES
 APPROVED *Lewis Evans*
 DIRECTOR OF HIGHWAYS
 M-119-25

CLASS 'A' GRADING 'D' = 212.9 C.Y.

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

| REVISIONS | | | |
|-----------|---------|--------|--------------------------------|
| NO. | DATE | BY | BRIEF DESCRIPTION |
| 1 | 2-8-83 | S.H. | GENERAL REVISIONS |
| 2 | 4-7-83 | A.M.S. | STRUCT. LIGHTING DETAILS |
| 3 | 4-26-83 | CAK | GENERAL REVISION OF QUANTITIES |

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

LOADING: HS 20-44 WITH ALTERNATE MILITARY.

DESIGN SPECIFICATIONS: AASHTO 1977 EDITION WITH ADDENDA.

CONCRETE: TO BE CLASS "A", f'c = 3000 PSI. UNLESS OTHERWISE NOTED

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.

ABUTMENT NO. 2:

SPECIAL NOTE - FOOTING FOR BENTS: AFTER EXCAVATION TO ROCK FOR FOOTING HAS BEEN COMPLETED, HOLES 6'-0" DEEP SHALL BE DRILLED AT POINTS DESIGNATED BY THE ENGINEER. FROM THE RESULTS OBTAINED, THE ENGINEER SHALL DETERMINE THE FINAL FOOTING ELEVATIONS. NO REINFORCING STEEL FOR BENT COLUMNS SHALL BE ORDERED UNTIL FINAL FOOTING ELEVATIONS HAVE BEEN DETERMINED.

BRIDGE RAIL SYSTEM: BUILD PARAPETS ACCORDING TO STANDARD DRAWING M-28-1. ALL REINFORCING STEEL IN THE TRAFFIC FACE OF PARAPETS SHALL BE EPOXY COATED. COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 620-03.

SHOP DRAWINGS: SEE SPECIAL PROVISION NO. 105 A.

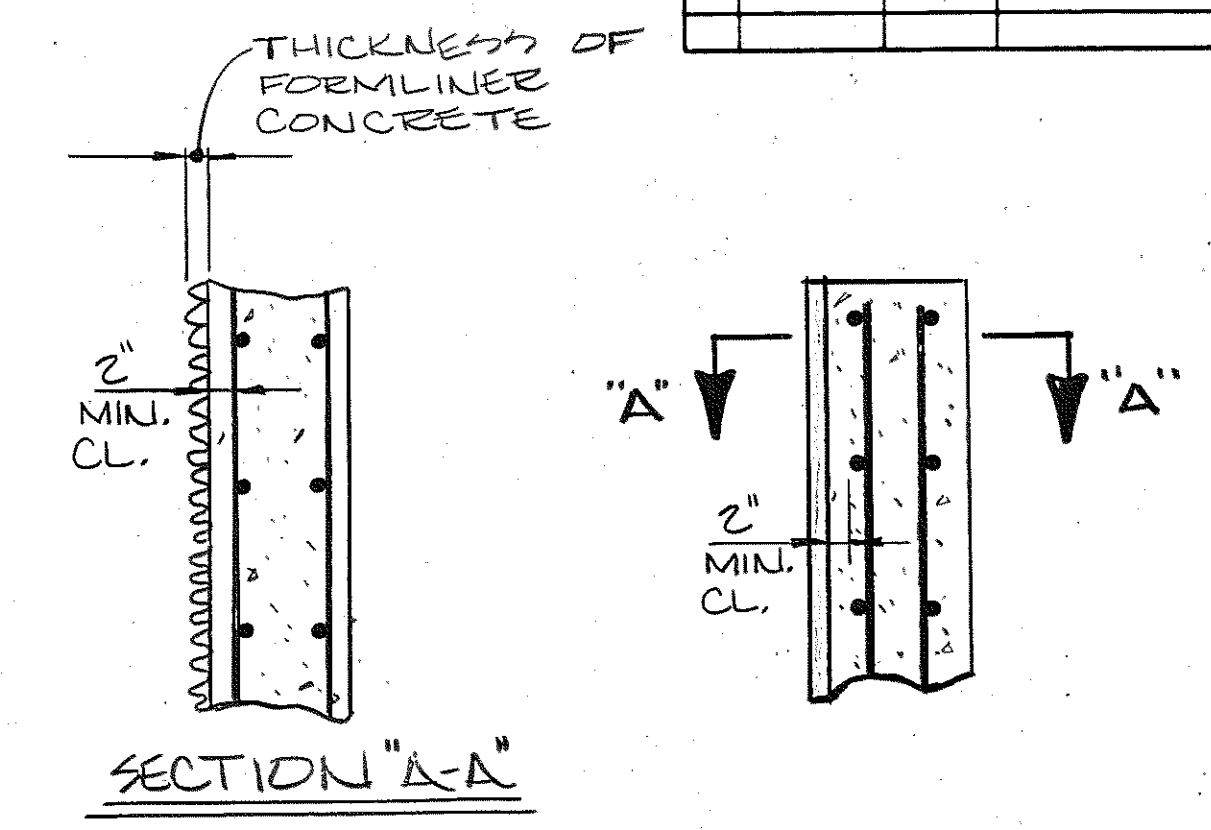
BRIDGE DECK: CLASS A CONCRETE FOR BRIDGE DECKS SHALL BE IN ACCORDANCE WITH SECTION 604 OF THE STANDARD SPECIFICATIONS EXCEPT AS FOLLOWS:

- MINIMUM 28 DAY COMPRESSIVE STRENGTH 4500 PSI
- MAXIMUM WATER/CEMENT 5.0 gal/SACK OF CEMENT
- AIR CONTENT 6% ± 2%

PAYMENT WILL BE UNDER ITEM 604-01.12

PILES: TO BE H10X42 DRIVEN TO REFUSAL ON ROCK OR A MINIMUM BEARING OF 50 TONS FOR ABUTMENT NO. 1.

SPECIAL NOTE: FOUNDATIONS FOR ABUTMENT NO. 1 SHALL BE EXCAVATED TO THE BOTTOM OF FOOTING ELEVATIONS SHOWN; ROD SOUNDINGS SHALL THEN BE MADE AS DIRECTED BY THE ENGINEER. FROM THE RESULTS OBTAINED THE ENGINEER WILL DECIDE IF PILES WILL BE USED OR THE FOOTINGS CARRIED TO ROCK. COST OF ROD SOUNDINGS TO BE INCLUDED IN ITEMS BID ON. NO REINFORCING STEEL FOR ABUTMENT NO. 1 SHALL BE ORDERED UNTIL FINAL FOOTING ELEVATIONS HAVE BEEN DETERMINED.



NOTE: THESE DETAILS ARE TYPICAL FOR ALL 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 DIMENSIONS SHALL BE REDUCED ACCORDINGLY.

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 B6 308 CONCRETE HAEP, LITHOTEX FORMLINER FRACTURED FINISH GROOVED T-150, SYMONS 3/4" NARROW FRACTURED FIN. P/C 20409-9 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 FINISHED. 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.

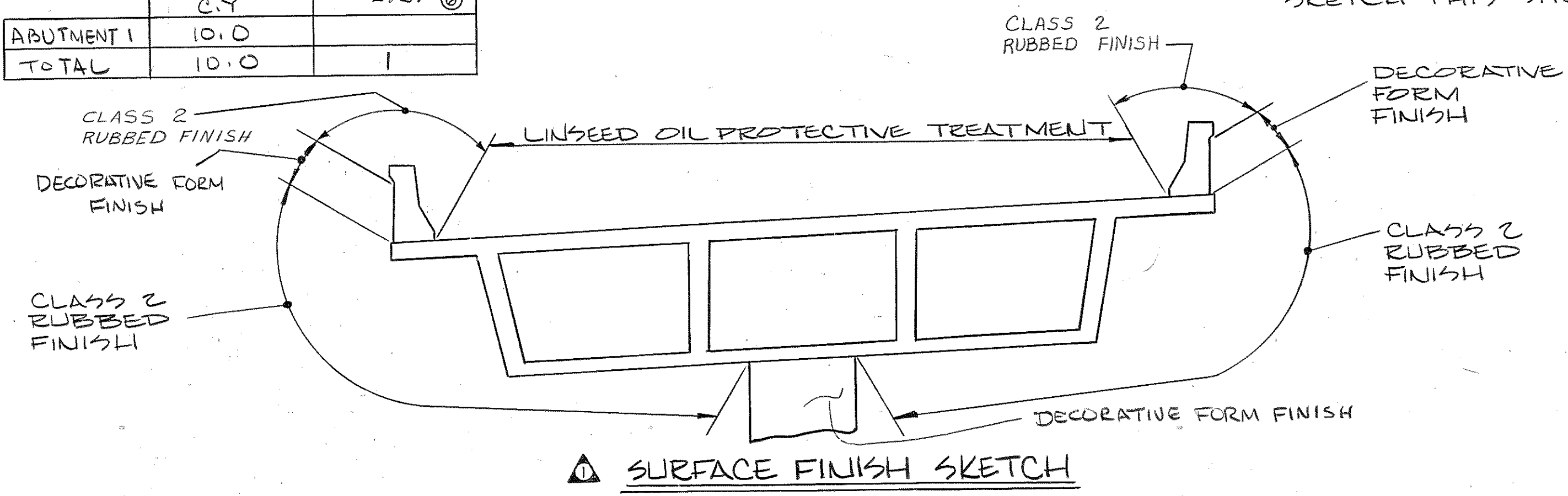
ESTIMATED QUANTITIES

| ITEM NUMBERS | 204-02.01 | 204-04.01 | 204-05 | 604-01.12 | 604-02.03 | 604-03.02 | 604-03.03 | 620-03 | 710-10 | 710-11 | 604-03.01 | 606-22.03 | 606-32.03 | 606-42.03 |
|------------------------|---------------------------------|--------------------------------|------------------------------|---|-------------------------------------|--|----------------------------|-------------------------|--|--|-------------------------------------|--|---|--|
| ITEMS | DRY EXCAVATION (BRIDGES) C.Y. ① | ROCK EXCAVATION (BRIDGES) C.Y. | ROCK DRILLING (BRIDGES) L.F. | CLASS "A" CONCRETE (BRIDGE DECK) (C.Y.) | EPOXY COATED REINFORCING STEEL LBS. | STEEL BAR REINFORCEMENT (BRIDGES) LBS. | LINSEED OIL TREATMENT S.Y. | CONCRETE PARAPET L.F. ④ | 6" PERF. C.M. PIPE (18 GA.) W/POROUS BACKFILL L.F. ② | 6" C.M. PIPE UNDERDRAINS (18 GA.) L.F. | CLASS "A" CONCRETE (BRIDGES) (C.Y.) | STEEL PILES (10 INCH) (DRIVING) L.F. ③ | STEEL PILES (10 INCH) (FURNISH DOMESTIC) L.F. | STEEL PILES (10 INCH) (FURNISH FOREIGN) L.F. |
| SUPERSTRUCTURE | | | | 310.6 | 174,907 | 96,600 | | | | | 454.0 | | | |
| ABUTMENT NO. 1 | 79 | | | | 1,227 | 3,160 | | | 39 | 16 | 20.9 | 260 | 260 | 260 |
| BENT NO. 1 | | 80 | 12 | | | 11,127 | | | | | 43.9 | | | |
| BENT NO. 2 | | 82 | 12 | | | 11,127 | | | | | 43.9 | | | |
| BENT NO. 3 | | 76 | 12 | | | 11,127 | | | | | 43.9 | | | |
| BENT NO. 4 | | 213 | 12 | | | 11,127 | | | | | 43.9 | | | |
| ABUTMENT NO. 2 | 79 | 15 | 12 | | | | | | 48 | 15 | 18.4 | | | |
| PAVEMENT @ BRIDGE ENDS | 86 | | | | 4,146 | 11,229 | | | | | 59.0 | | | |
| TOTAL | 158 | 466 | 60 | 310.6 | 180,280 | 157,829 | 1275 | 826 | 87 | 31 | 727.9 | 260 | 260 | 260 |

| | 709-05.04 | 714-01.07 |
|--|-----------|-----------|
| MACHINED RIP-RAP 3 IN TO 6 IN C.Y. | 10.0 | |
| STRUCTURE LIGHTING (BRIDGE NO. 7) L.S. ⑥ | | 1 |
| ABUTMENT 1 | 10.0 | |
| TOTAL | 10.0 | 1 |

NOTES

- EXCAVATION BASED ON LOWER ROAD PROFILE.
- COST OF POLYETHYLENE SHEETING AND ALL MISCELLANEOUS ITEMS NECESSARY FOR INSTALLATION TO BE INCLUDED IN COST OF PERFORATED C.M. PIPE.
- THE COST OF 12 THREADED STEEL NUTS AND 12 7/8" X 4" HEX HEAD BOLTS, (A507) TO BE INCLUDED IN BRIDGE ITEMS BID ON.
- ALL REINFORCING STEEL IN THE TRAFFIC FACE OF PARAPETS SHALL BE EPOXY COATED. COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 620-03.
- INCLUDES CAST STEEL DRIVING POINTS, EACH PILE, PRUYN NO. HP75750 BY ASSOCIATED PILE AND FITTING CORP., OR APPROVED EQUAL.
- LUMP SUM FOR STRUCTURE LIGHTING, ITEM NO 714-01.07 INCLUDES 415 FT. 2" Ø CONDUIT WITH PULL WIRES, 135 FT. 1" Ø CONDUIT WITH PULL WIRES, 4 PULL BOXES, 8 ANCHOR BOLTS AND NECESSARY MATERIALS FOR INSTALLATION OF STRUCTURE LIGHTING.



NOTE: ALL EXPOSED SURFACES OF THE ABUTMENT, BENTS, AND PARAPET INSET SHALL RECEIVE A DECORATIVE FORM FINISH. SEE SURFACE FINISH SKETCH THIS SHEET.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

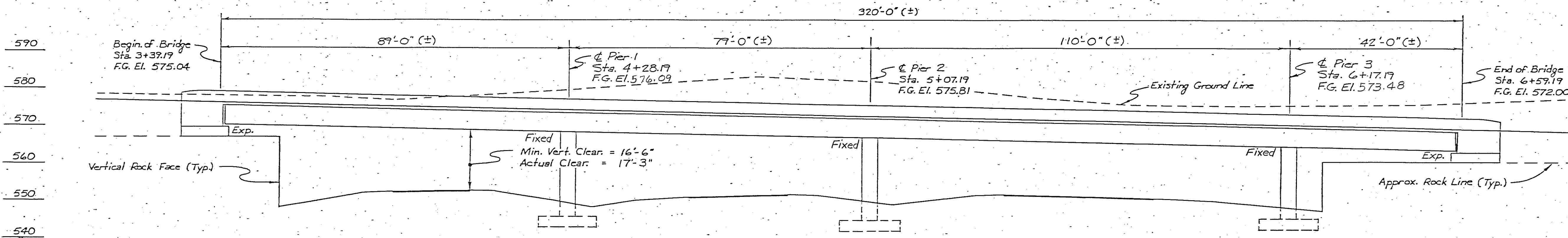
GENERAL NOTES AND ESTIMATED QUANTITIES
RAMP "F" OVER RAMP "D" AND INTERSTATE 440
STATION 174+48.63
DAVIDSON COUNTY
1983

DESIGNED BY STEVE HARDIE, S.C.N. DATE 9-82
DRAWN BY S. SHULTZ DATE 11-82
SUPERVISED BY FIELDS & SMITH DATE 11-82
CHECKED BY C.N. KING DATE 2-83

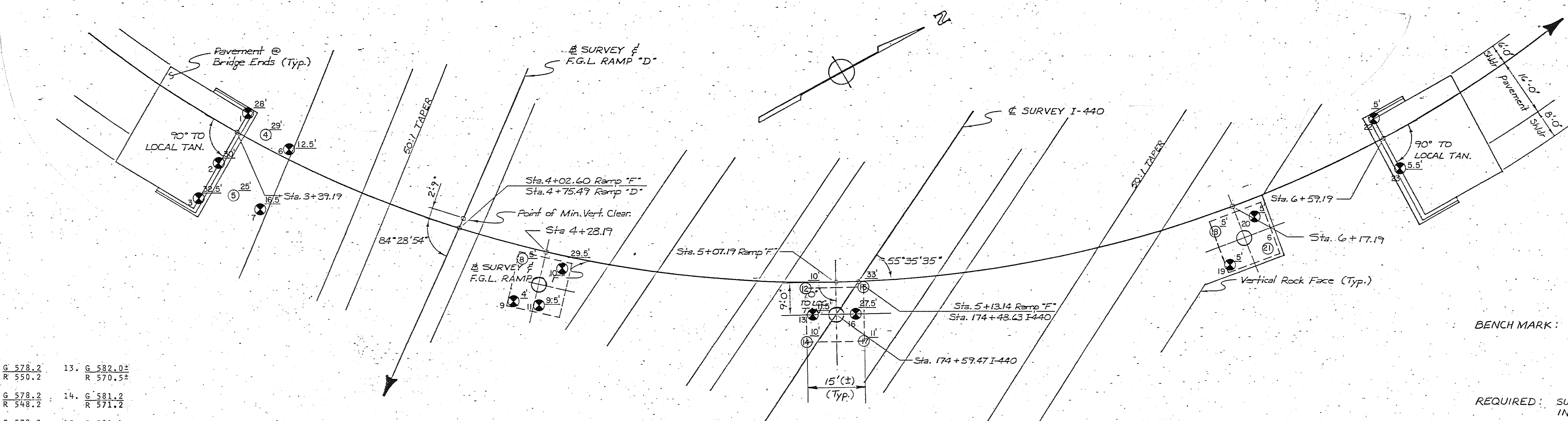
CORRECT *William L. Foveall*
ENGINEER OF STRUCTURES
APPROVED *Louis Evans*
DIRECTOR OF HIGHWAYS

M-119-26

| PROJECT NO. | YEAR | SHEET NO. | |
|----------------|---------|-----------|-------------------|
| I-440-4(53)206 | 1982 | | |
| REVISIONS | | | |
| NO. | DATE | BY | BRIEF DESCRIPTION |
| 1 | 12-8-83 | S. H. | GENERAL REVISIONS |
| | | | |
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ELEVATION @ RIGHT ANGLES TO FINISHED GRADE LINE RAMP "F"



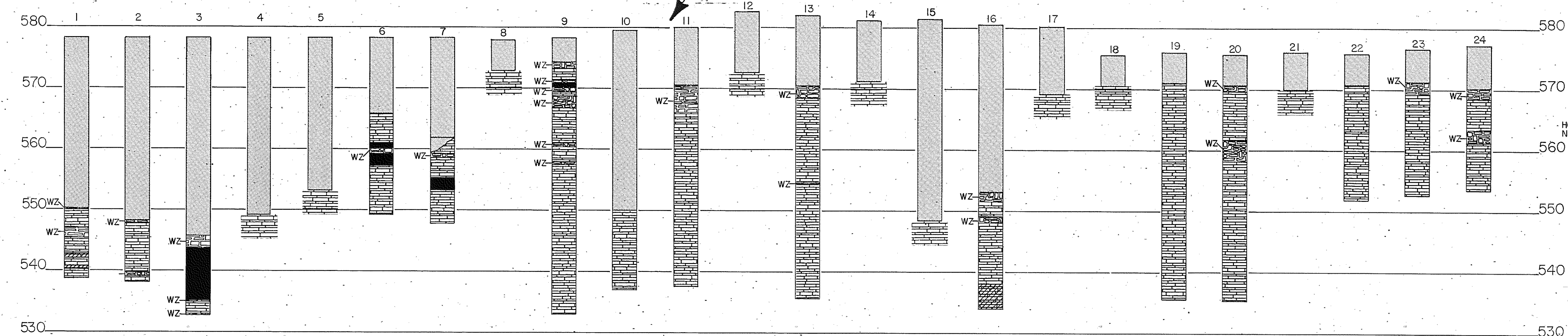
CURVE DATA - RAMP "F"
 PI STA. 7+57.71
 Δ = 143°25'31"
 D = 18'30"
 T = 1077.23'
 L = 802.57'
 R = 309.71'
 E = 830.40'
 SE = 0.06'
 TRANS. LENGTH = 140'

CURVE DATA - RAMP "D"
 PI STA. 4+64.18
 Δ = 11°13'17"
 D = 2'00"
 T = 283.94'
 L = 566.06'
 R = 2864.77'
 SE = 0.035'
 TRANS. LENGTH = 150'

BENCH MARK: MONUMENT #30 - BRASS CAP IN CURB LOCATED IN S.E. CORNER OF LANCASTER AVE. & WEST END. ELEV. 568.26.

REQUIRED: SUFFICIENT GROUND, ROCK AND CORING INFORMATION FOR BRIDGE FOUNDATIONS.

| | |
|-------------------------|--------------------------|
| 1. G 578.2 R 550.2 | 13. G 582.0± R 570.5± |
| 2. G 578.2 R 548.2 | 14. G 581.2 R 571.2 |
| 3. G 578.2 R 545.7 | 15. G 581.4 R 548.4 |
| 4. G 578.2 R 549.2 | 16. G 580.5± R 553.0± |
| 5. G 578.2 R 553.2 | 17. G 580.1 R 569.1 |
| 6. G 578.2± R 565.7± | 18. G 575.6 R 570.6 |
| 7. G 578.2± R 561.7± | 19. G 576.0 R 571.0 |
| 8. G 577.8 R 572.8 | 20. G 575.7 R 570.7 |
| 9. G 578.2 R 574.2 | 21. G 576.0 R 570.0 |
| 10. G 579.4 R 549.9 | 22. G 575.9 R 570.9 |
| 11. G 580.0 R 570.5 | 23. G 576.6 R 571.1 |
| 12. G 582.7 R 572.7 | 24. G 577.0 R 570.0 |



Legend

- CLAY
- CAVITY
- WEATHERED LIMESTONE W/ CLAY SEAMS 8 T5F
- WEATHERED LIMESTONE 8-10 T5F
- FRACTURED LIMESTONE 10 T5F
- LIMESTONE 20 T5F
- DEPTH ROCK ENCOUNTERED
- CORE
- WZ - WEATHERED ZONE

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

FOUNDATION DATA
 RAMP "F" OVER RAMP "D" AND I-440
 STATION 174 + 48.63
 DAVIDSON COUNTY
 1982

DESIGNED BY: S. HARDIE
 DRAWN BY: S. HARDIE
 SUPERVISED BY: A.M. SMITH
 CHECKED BY: _____

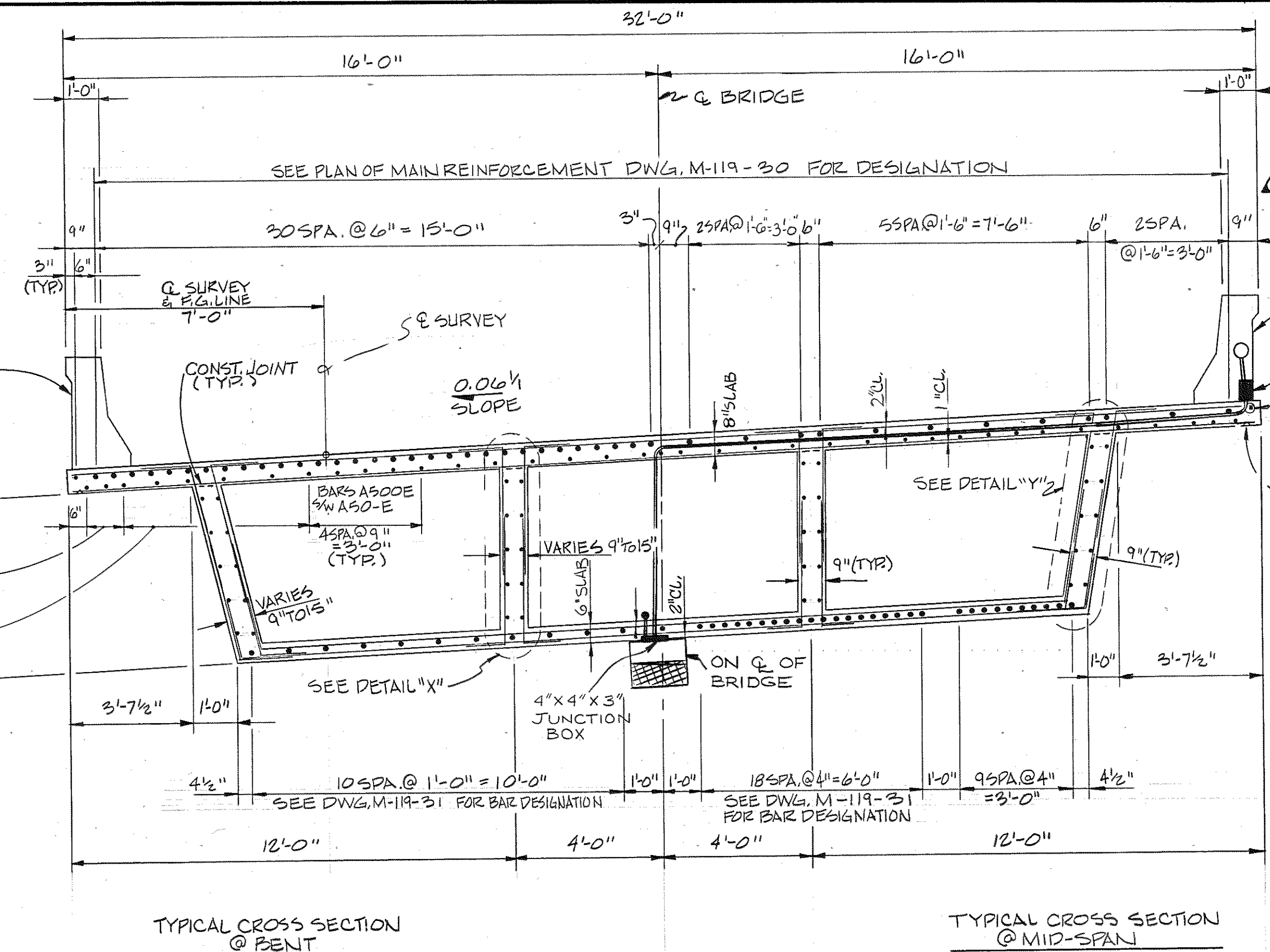
DATE: _____
 DATE: 10-82
 DATE: _____
 DATE: _____

CORRECT: _____
 ENGINEER IN STRUCTURES

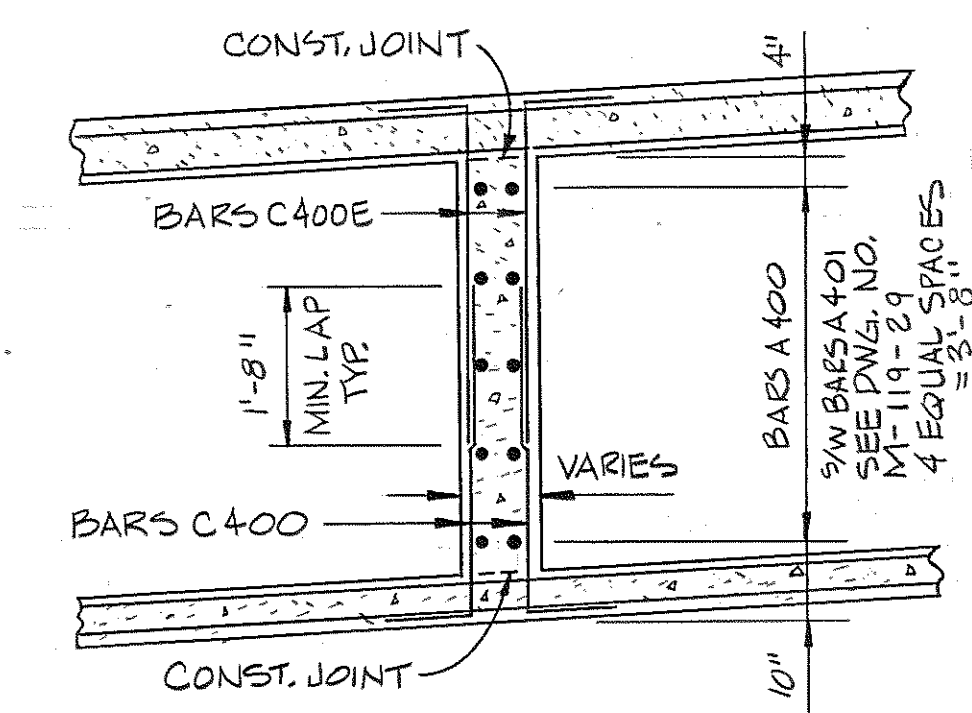
APPROVED: _____
 DIRECTOR OF HIGHWAYS

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

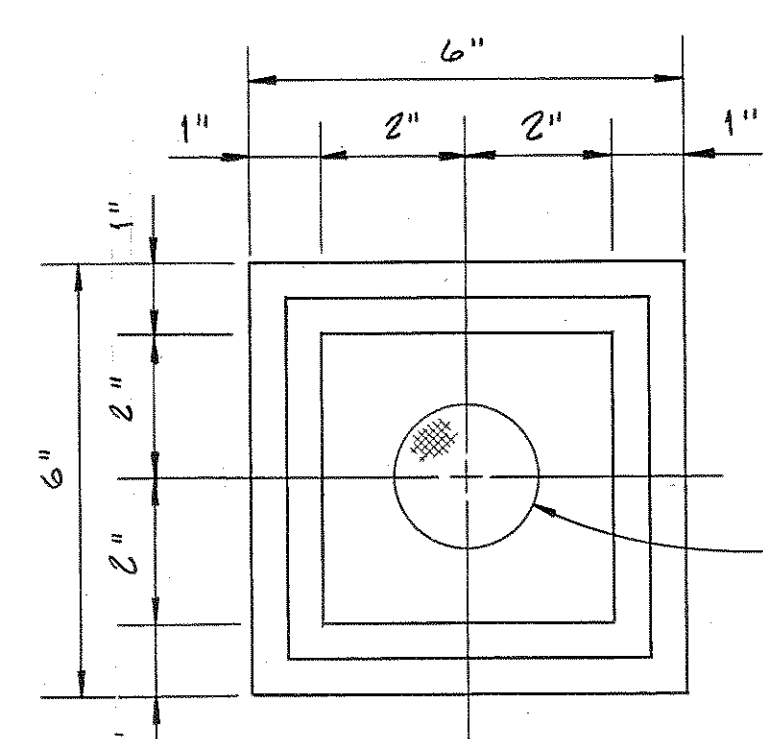
| REVISIONS | | | |
|-----------|---------|--------|--------------------------|
| NO. | DATE | BY | BRIEF DESCRIPTION |
| 1 | 2-8-83 | S.H. | GENERAL REVISIONS |
| 2 | 4-7-83 | A.M.S. | STRUCT. LIGHTING DETAILS |
| 3 | 4-26-83 | C.N.K. | DESIGN CHANGE |



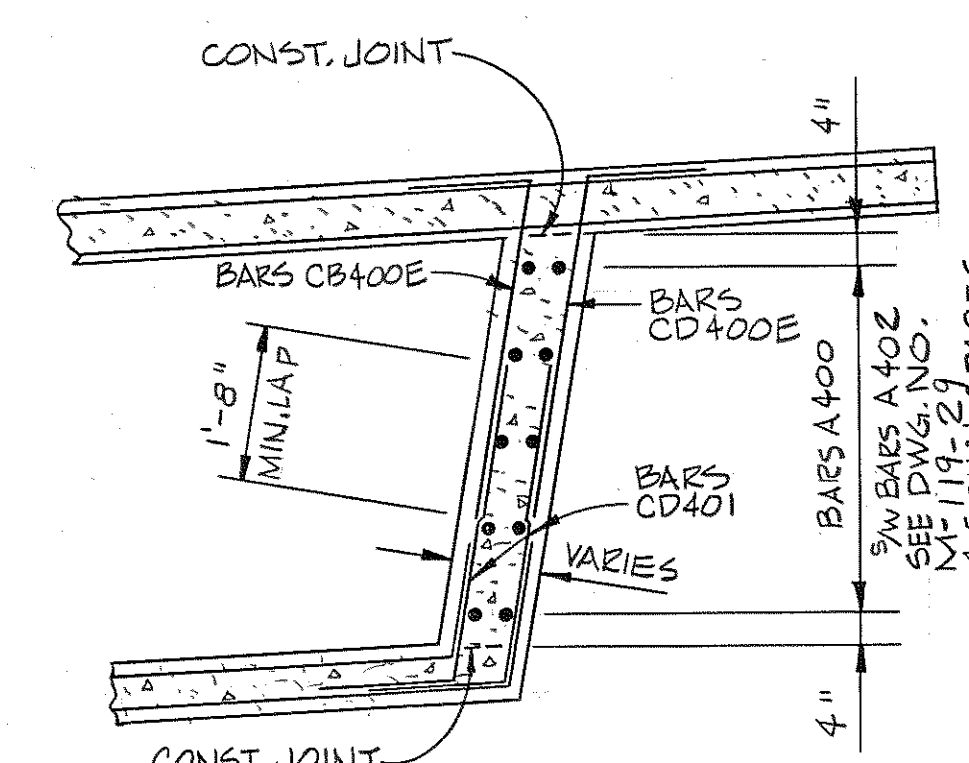
NOTE: OUTSIDE EDGE OF SLAB AND BRIDGE RAIL TO CONFORM TO HORIZONTAL CURVE.



DETAIL "X"
TYPICAL INTERIOR WEBS
SEE DWG. NO. M-119-29



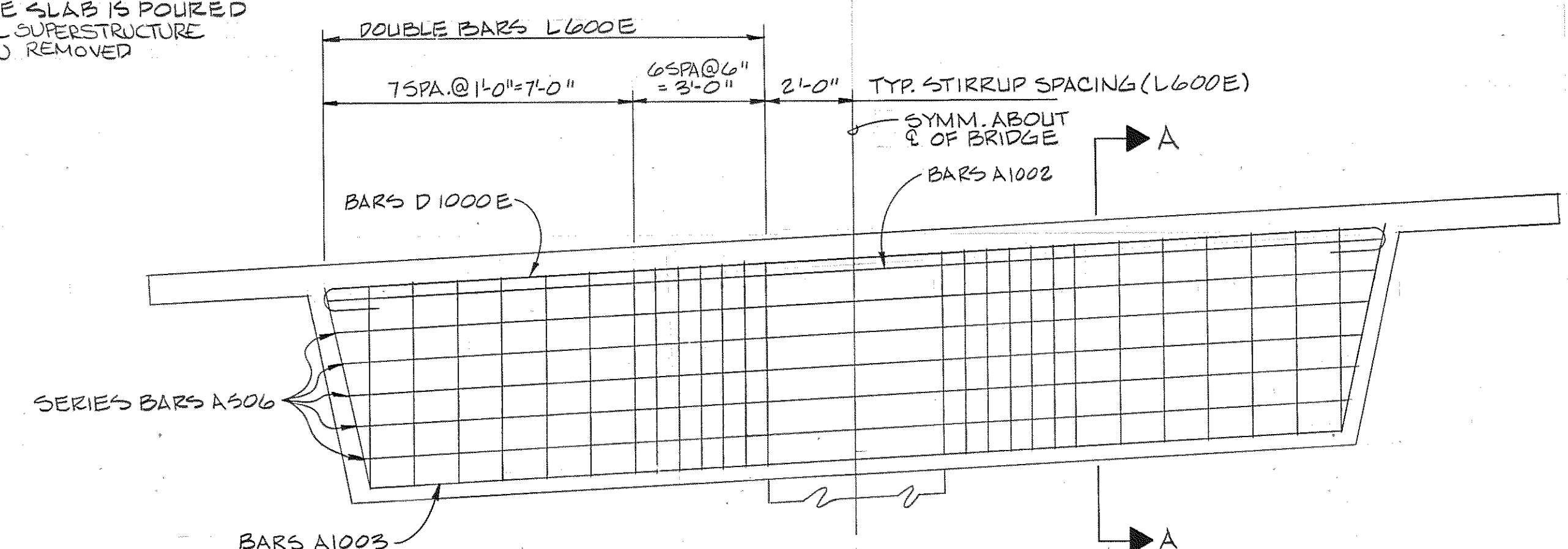
DETAIL "A"
(SEE SHEET M-119-29)



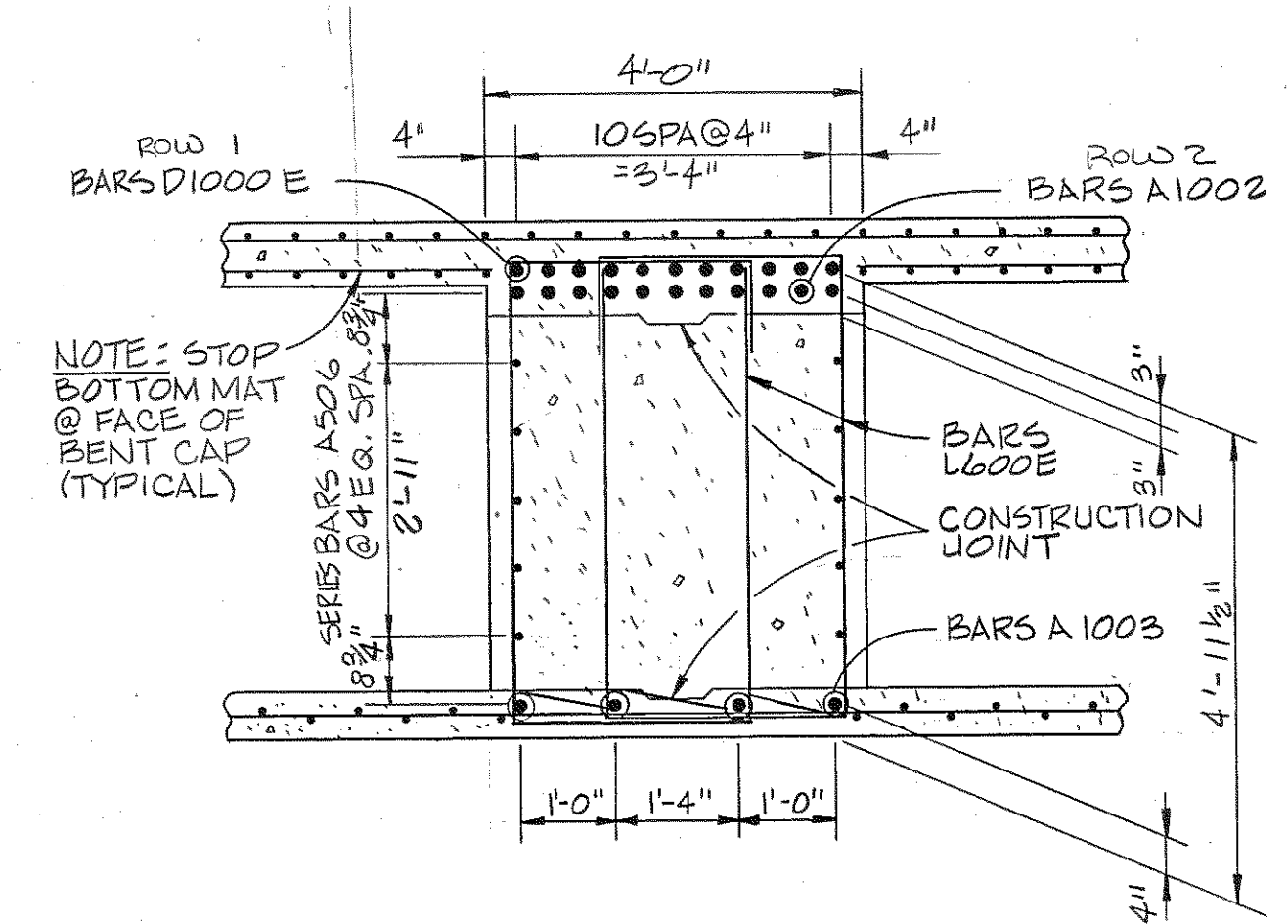
DETAIL "Y"
TYPICAL EXTERIOR WEBS

NOTE: IF THE CONTRACTOR ELECTS TO USE PERMANENT STEEL BRIDGE DECK FORMS, DETAILS FOR PROVIDING ACCESS TO ALL CELLS OF THE STRUCTURE SHALL BE SUBMITTED TO THE ENGINEER.

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, AND ALL SUPERSTRUCTURE FALSEWORK HAS BEEN REMOVED.



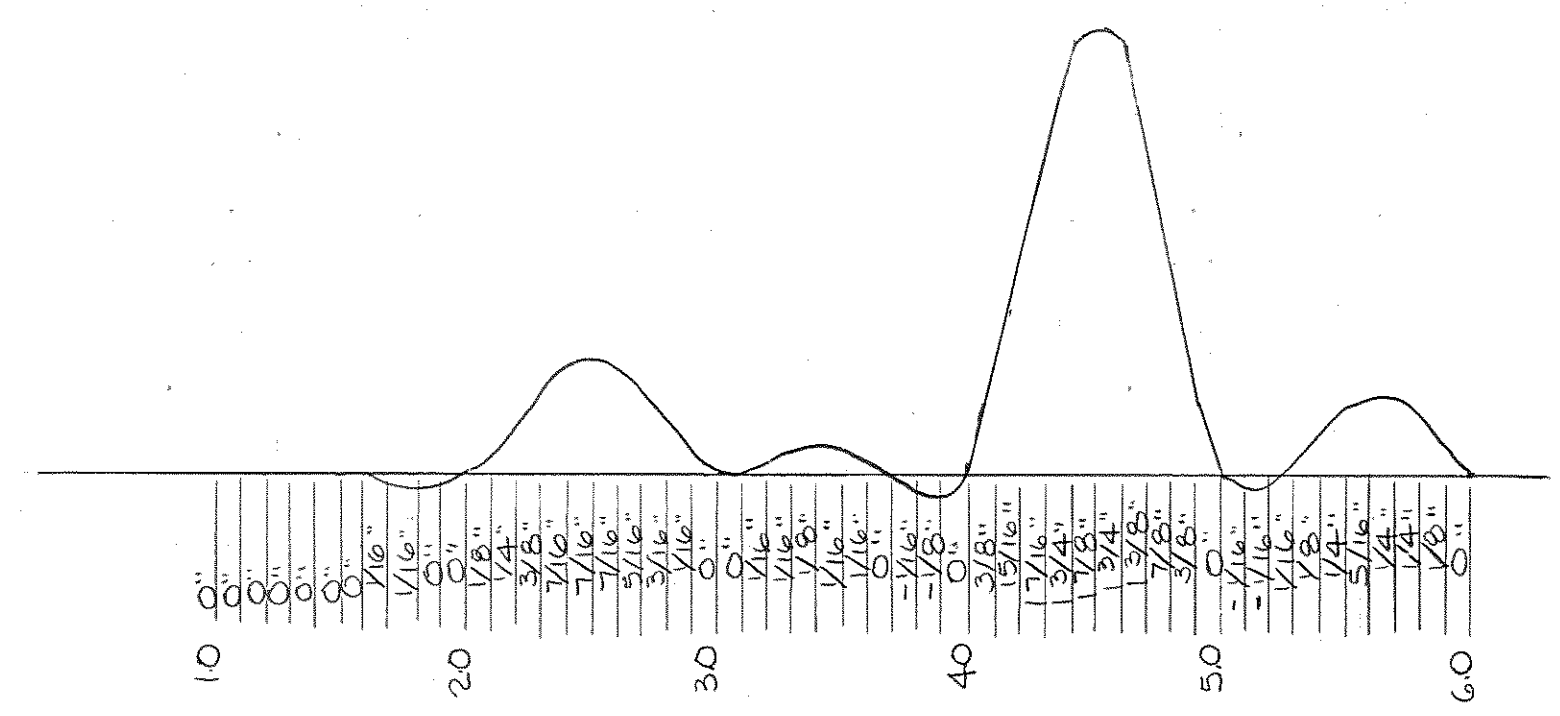
TYPICAL CROSS SECTION AT DIAPHRAGM



SECTION "A-A"

| ESTIMATED QUANTITIES | | | | |
|----------------------|-------------------------------------|-------------------------|------------------------|------------------|
| ITEM | CLASS "A" CONCRETE BRIDGE DECK C.Y. | CLASS "A" CONCRETE C.Y. | REINFORCING STEEL LBS. | EPOXY STEEL LBS. |
| SUPERSTRUCTURE | 310.6 | 454.0 | 96,600 | 174,907 |

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

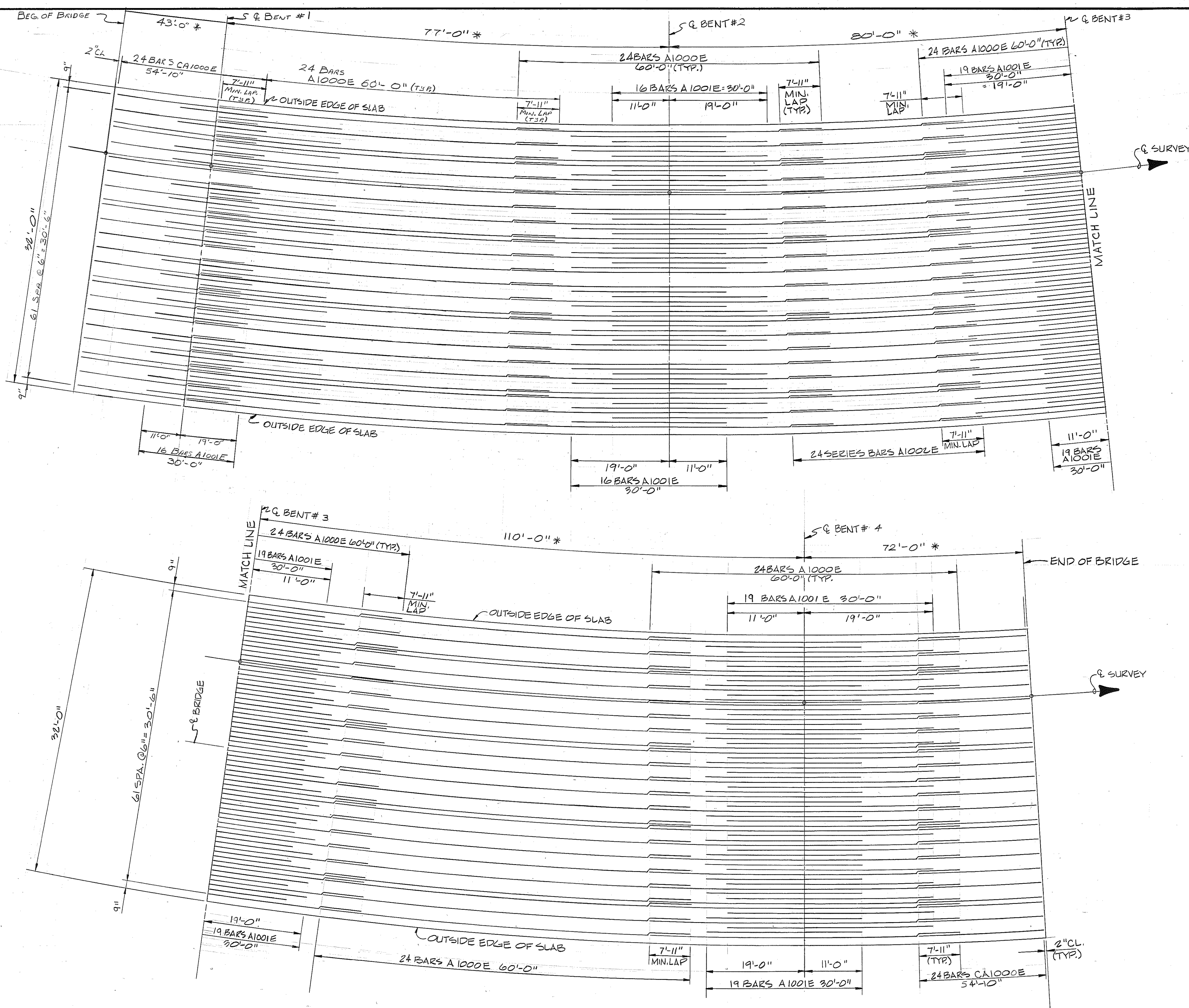


DEAD LOAD CORRECTION CURVE

DESIGNED BY S. HARDIE / C.N.K. DATE 11-82
DRAWN BY TULL BENTON DATE 11-82
SUPERVISED BY J. FIELDS & A.M. SMITH DATE 11-82
CHECKED BY C.N.K. DATE 8-84

CORRECTED BY *Clifton L. Lound*
ENGINEER OF STRUCTURES
APPROVED BY *Lewis Evans*
DIRECTOR OF HIGHWAYS

| PROJECT NO. | YEAR | SHEET NO. | |
|----------------|---------|-----------|-------------------|
| I-440-4(53)206 | 1983 | | |
| REVISIONS | | | |
| NO. | DATE | BY | BRIEF DESCRIPTION |
| 1 | 2-8-83 | S.H. | GENERAL REVISIONS |
| 2 | 7-26-83 | C.N.K. | DESIGN CHANGE |
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* DENOTES DIMENSION ALONG & SURVEY

NOTE: NO. 10 BARS SPLICE 7'-11"
 TOP OF TOP SLAB
 PLAN OF MAIN REINFORCEMENT

DESIGNED BY S. HARDIE + C.N. KING DATE 11-82
 DRAWN BY TULL BENTON DATE 11-82
 SUPERVISED BY J. FIELDS & A.M. SMITH DATE 11-82
 CHECKED BY C.N. KING DATE 8-84

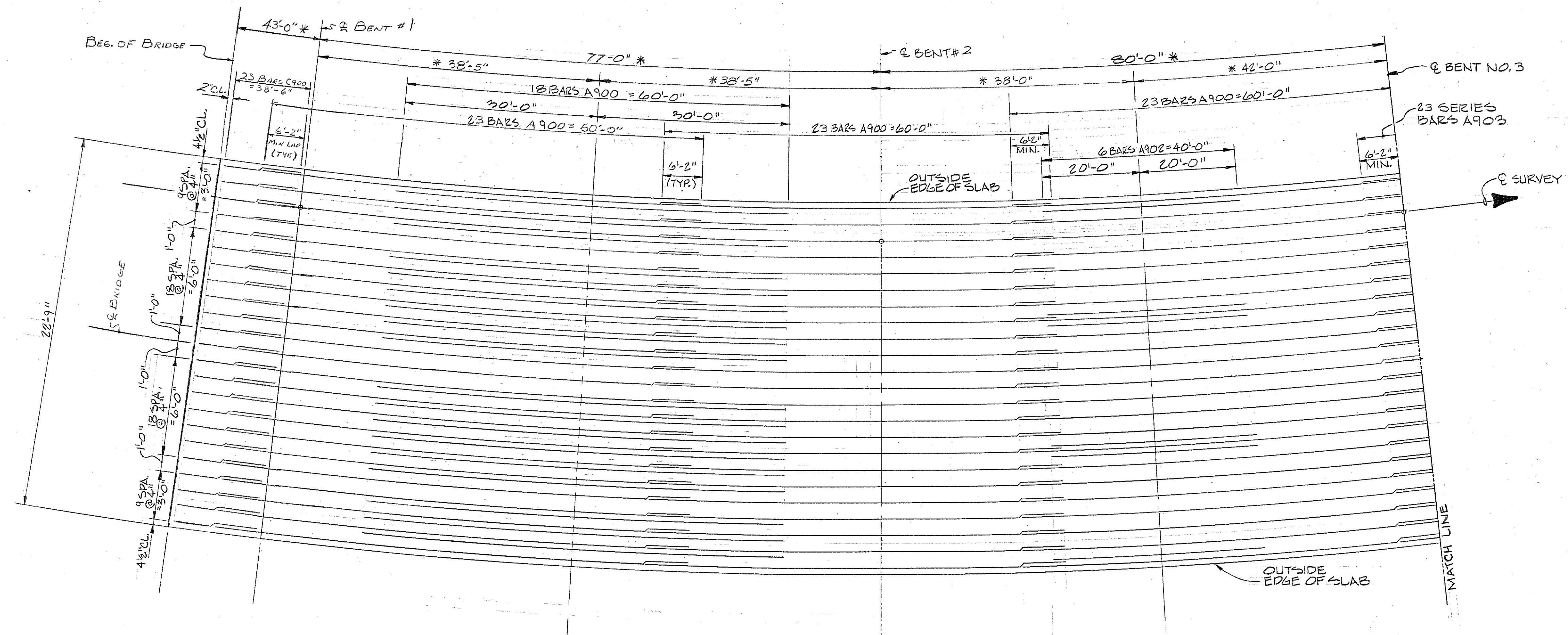
STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

SUPERSTRUCTURE DETAIL
 RAMP "E" OVER RAMP "D"
 AND INTERSTATE 440
 STATION 174+48.63
 DAVIDSON COUNTY
 1983

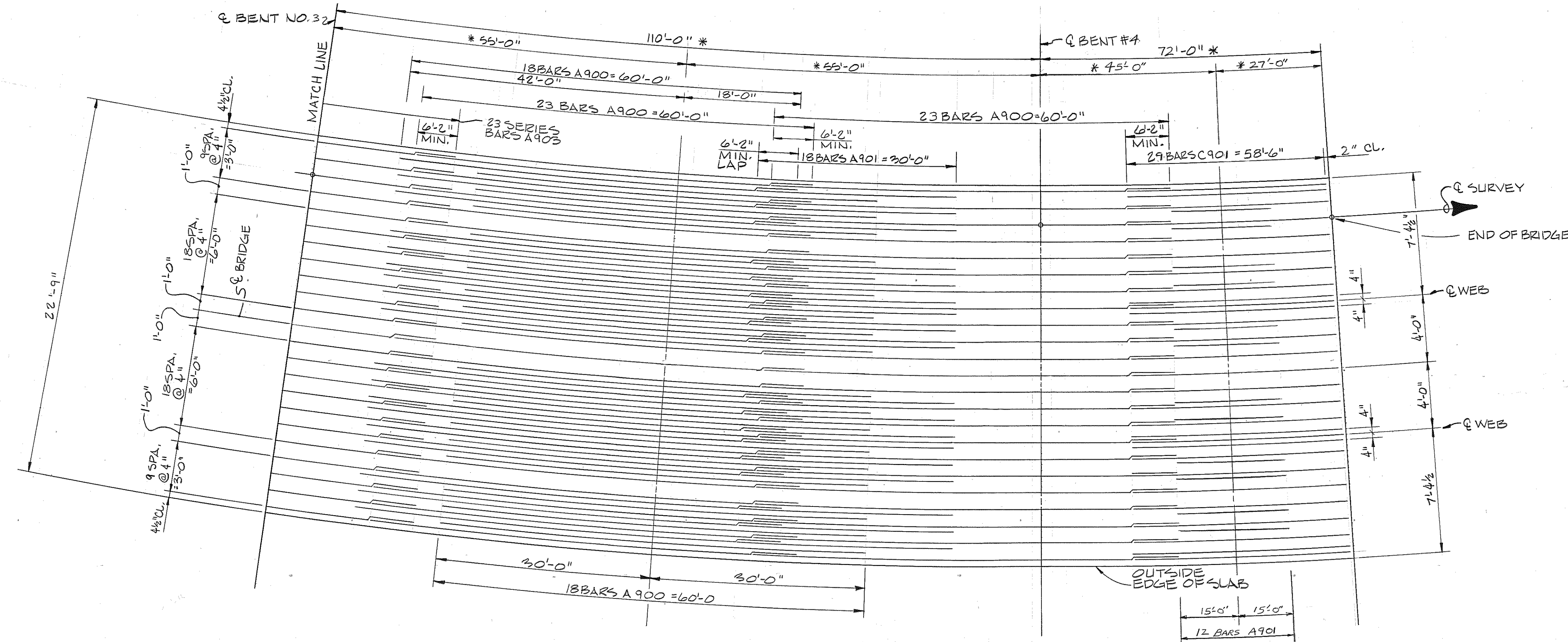
CORRECT *Colleen L. Fowell*
 ENGINEER OF STRUCTURES
 APPROVED *Lewis Evans*
 DIRECTOR OF HIGHWAYS

| PROJECT NO. | YEAR | SHEET NO. |
|-----------------|------|-----------|
| T-440-4 (53)226 | 1983 | |

| REVISIONS | | | |
|-----------|---------|--------|-------------------|
| NO. | DATE | BY | BRIEF DESCRIPTION |
| 1 | 2-8-83 | S.H. | GENERAL REVISIONS |
| 2 | 4-28-83 | C.N.K. | DESIGN CHANGE |
| | | | |
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* DENOTES : DIMENSION @ & SURVEY



BOTTOM SLAB
PLAN OF MAIN REINFORCEMENT

DESIGNED BY S. HARDIE + C. N. KING DATE 11-82
 DRAWN BY TULL BENTON DATE 11-82
 SUPERVISED BY J. FIELDS A.M. SMITH DATE 11-82
 CHECKED BY C. N. KING DATE 8-84

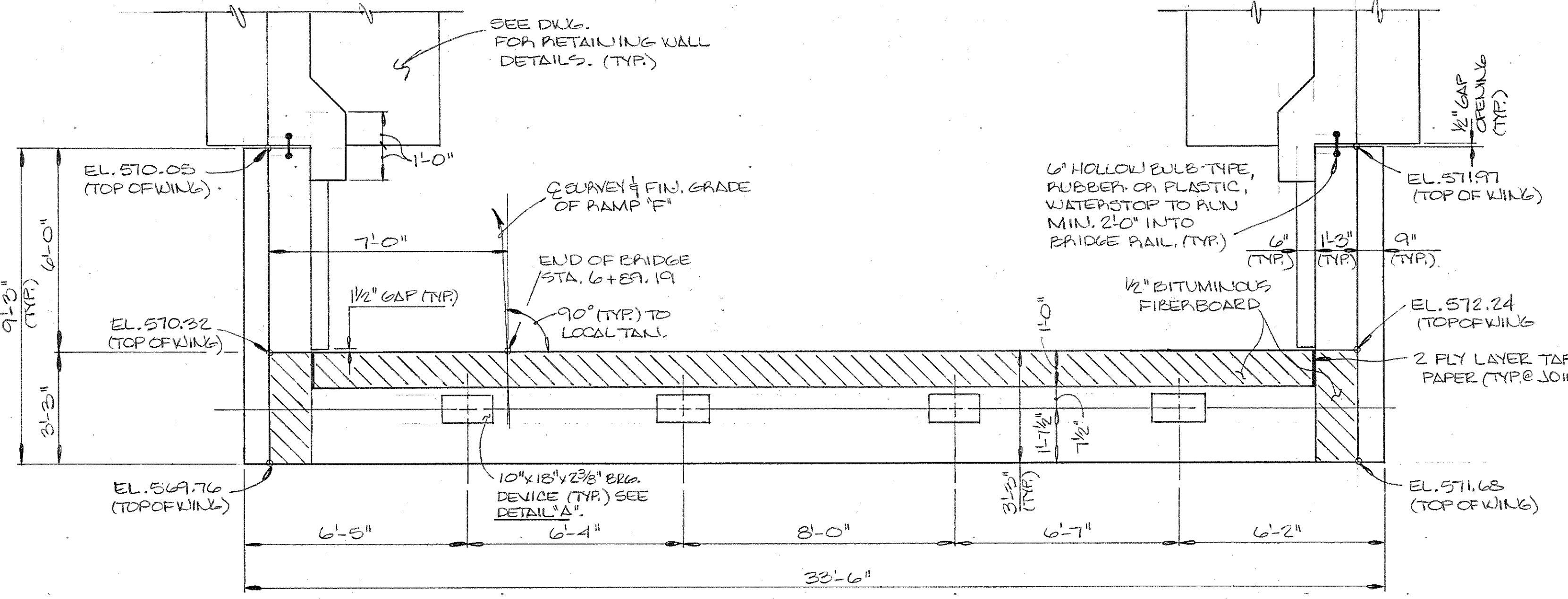
STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

SUPERSTRUCTURE DETAIL
 RAMP "F" OVER RAMP "D"
 AND INTERSTATE 440
 STATION 174+48.63
 DAVIDSON, COUNTY
 1983

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

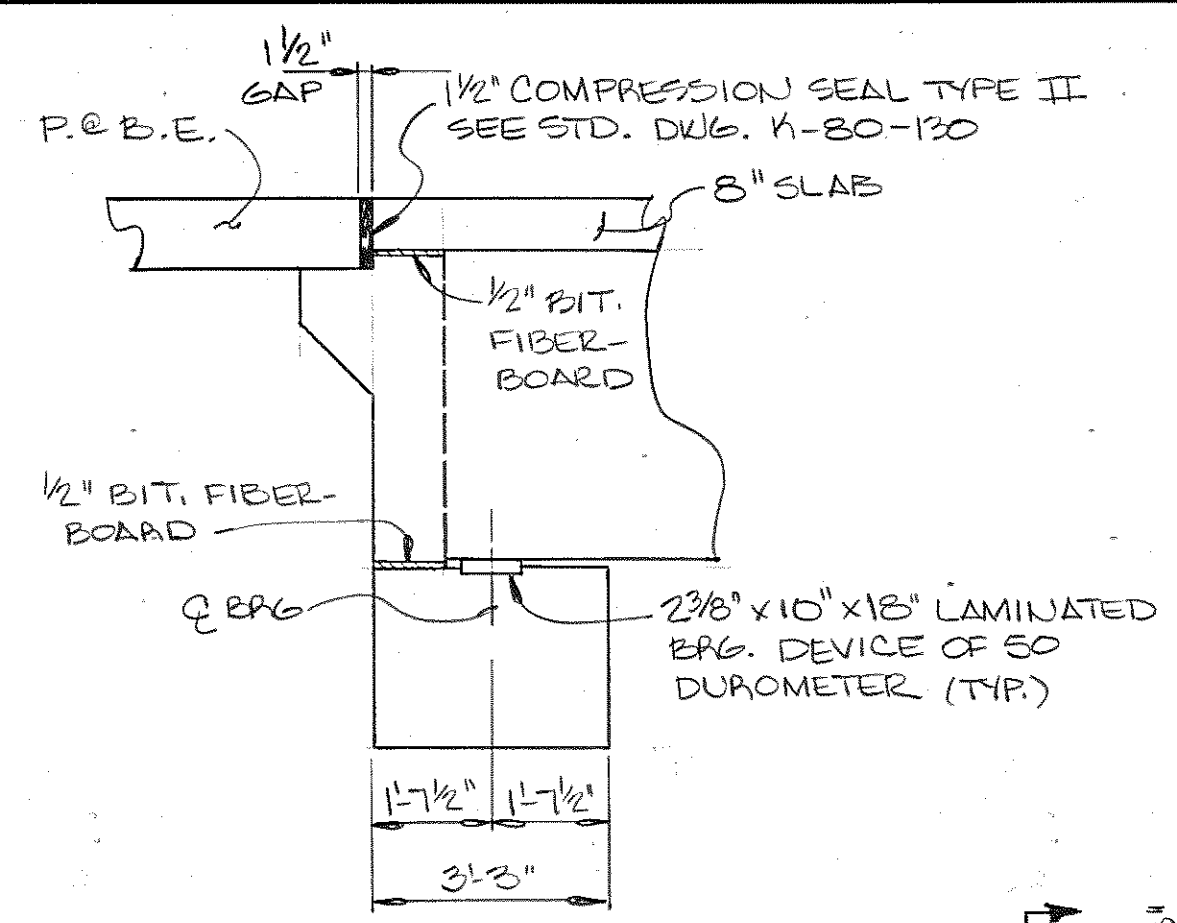
| PROJECT NO. | YEAR | SHEET NO. |
|-----------------|------|-----------|
| I-440-4 (53)266 | 1983 | |

| REVISIONS | | | |
|-----------|---------|-----|-------------------|
| NO. | DATE | BY | BRIEF DESCRIPTION |
| 1 | 4/26/85 | CLK | NEW DWG. ADJT. #2 |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

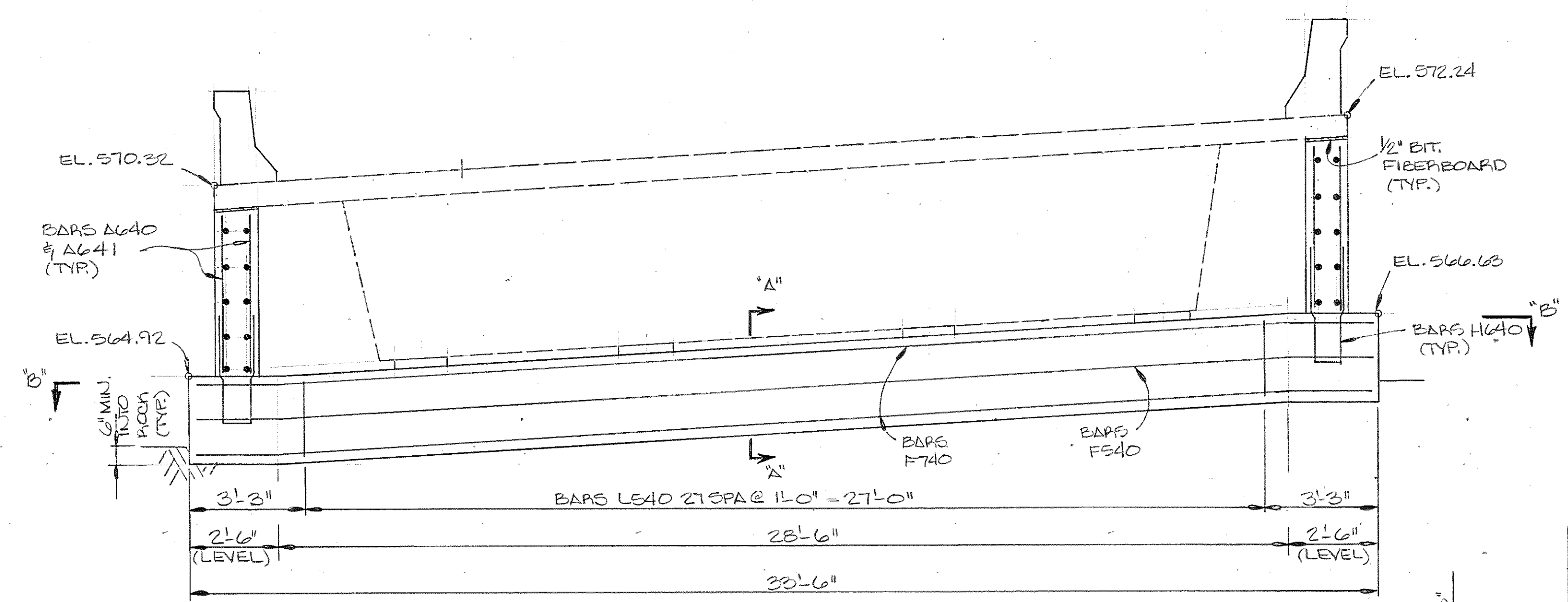
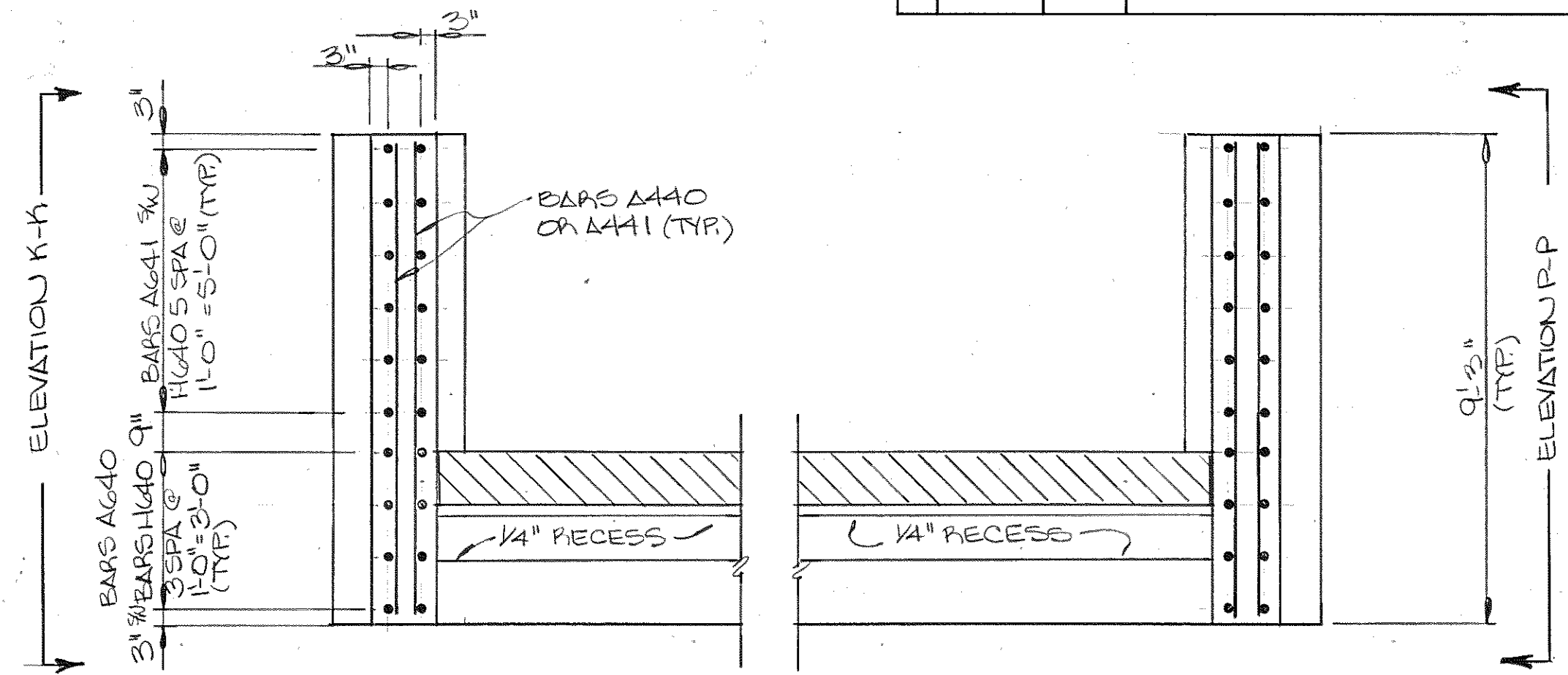


PLAN
(LOOKING FORWARD ON SURVEY)

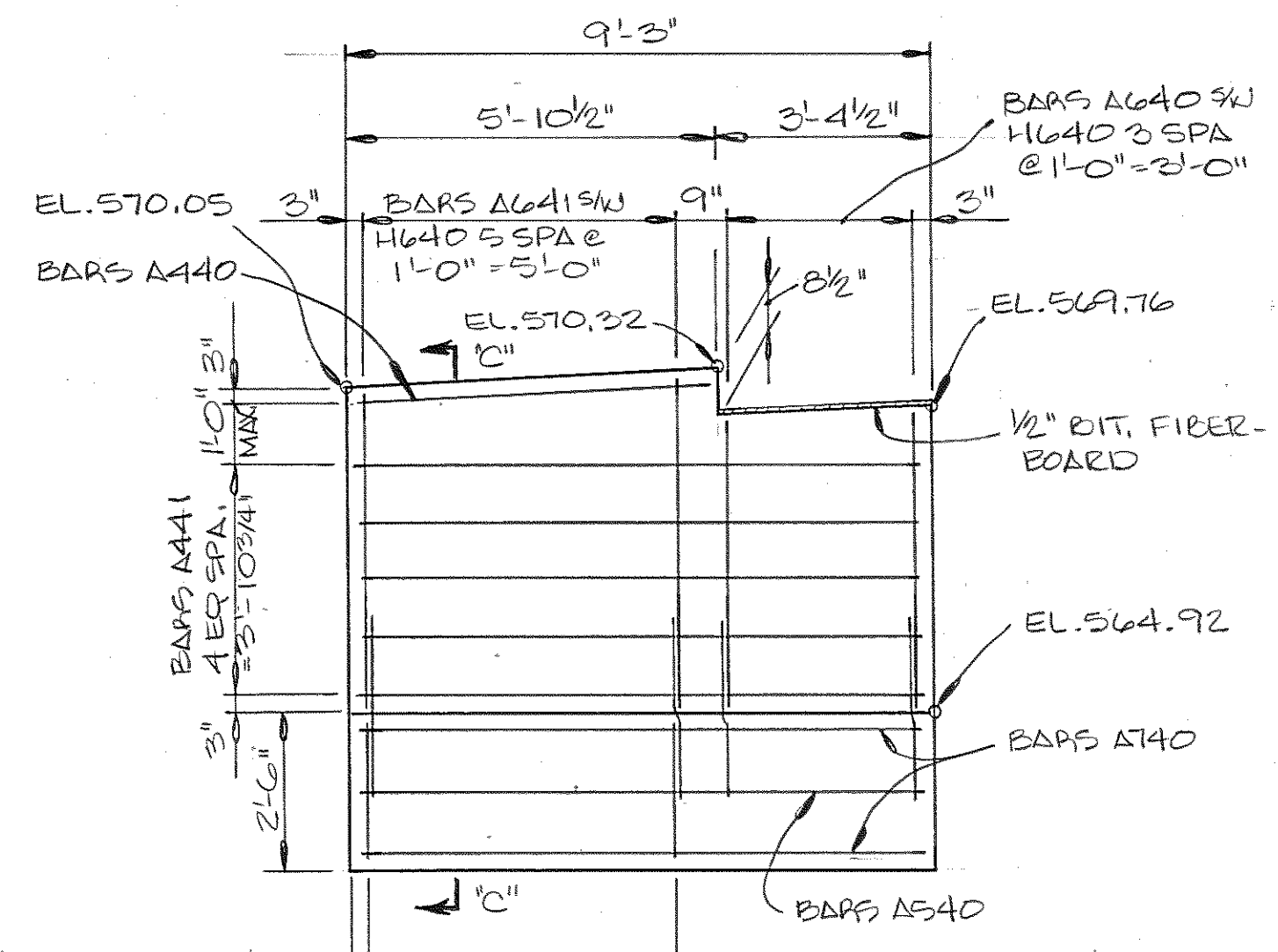
NOTE: WING WALLS TO CONFORM TO HORIZONTAL CURVE OF RAMP "F".
 NOTE: OUTSIDE EDGE OF SLAB AND BRIDGE RAIL TO CONFORM TO HORIZONTAL CURVE.
 NOTE: WHEN POURING WING WALLS, PROVISIONS SHALL BE MADE FOR SETTING REINFORCING STEEL FOR PARAPET. FOR DETAILS OF PARAPET SEE STD. DWG. NO. M-28-1.
 NOTE: COST OF BRIDGE RAIL IS TO BE INCLUDED IN THE COST OF BRIDGE RAIL SYSTEM.



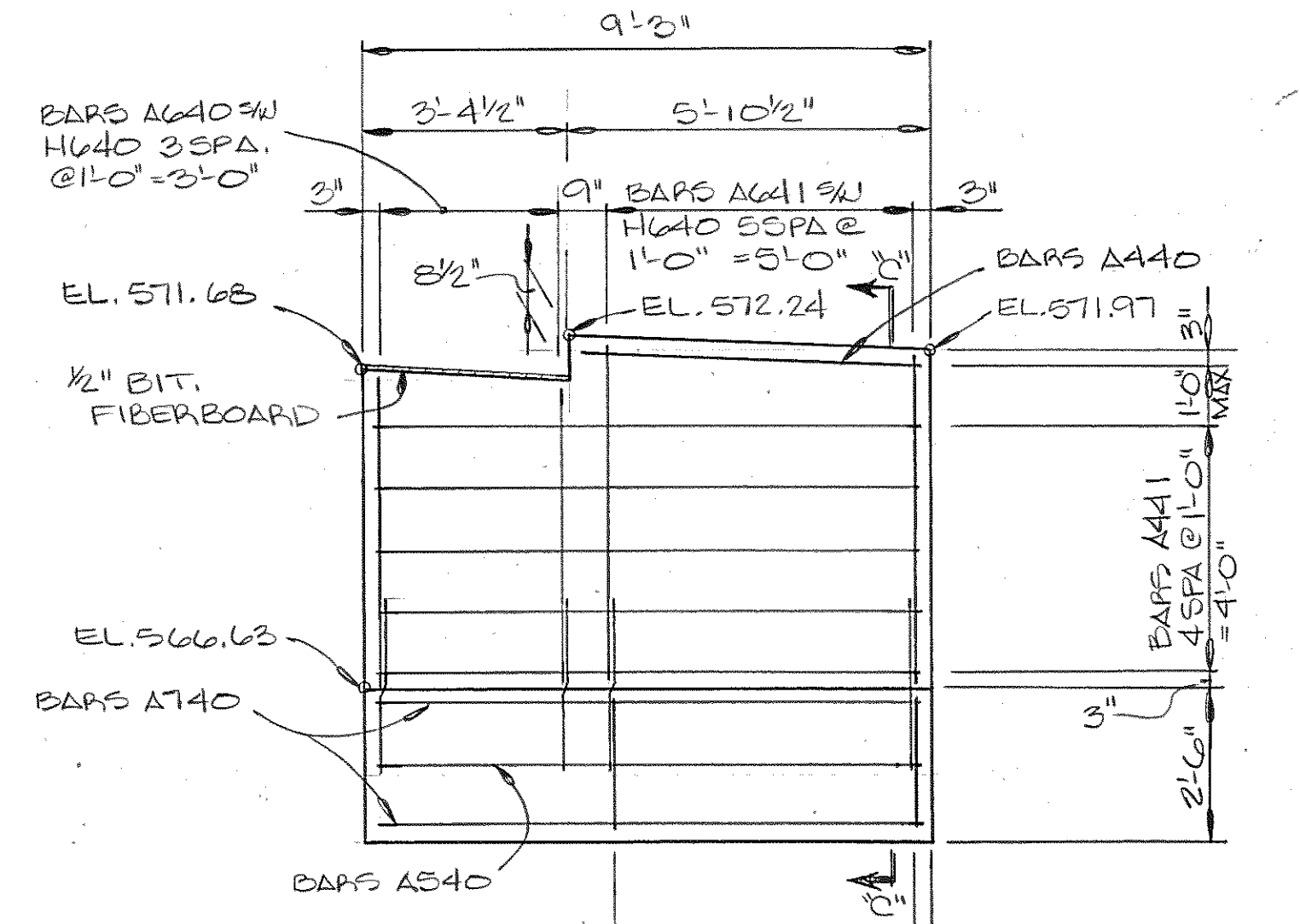
SECTION B-B



ELEVATION

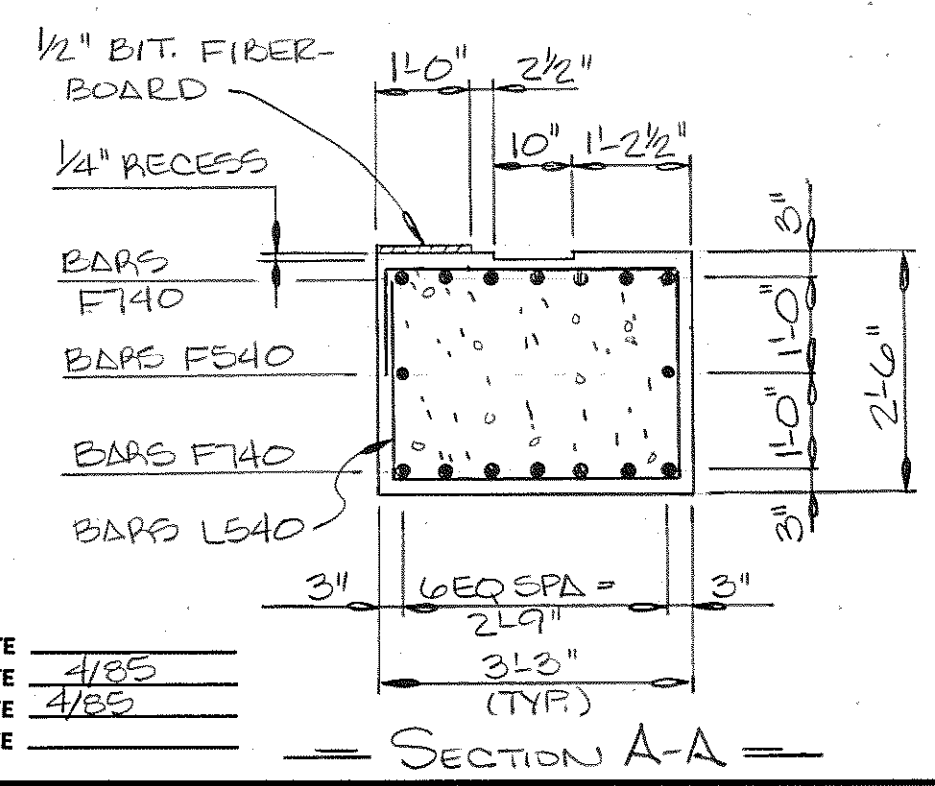


ELEVATION K-K

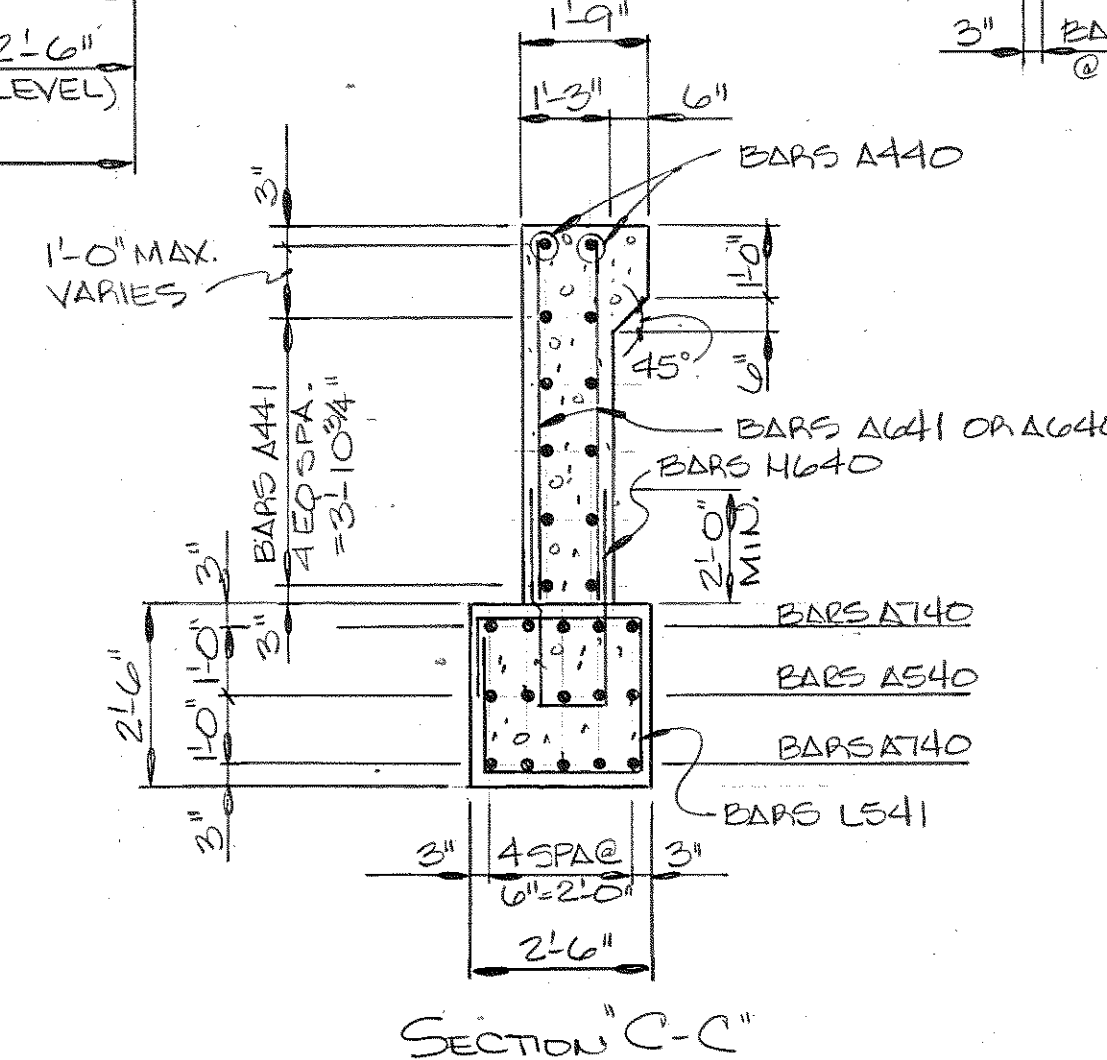


ELEVATION P-P

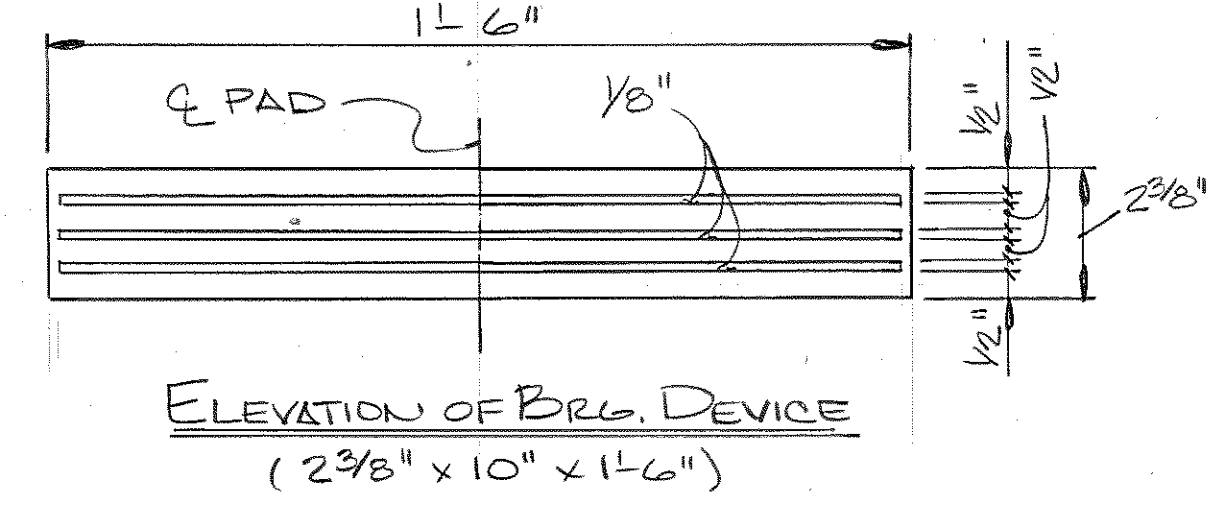
| CLASS "A" CONCRETE | REINFORCING STEEL LBS. |
|--------------------|------------------------|
| 18.4 | 2332 |



SECTION A-A



SECTION C-C



ELEVATION OF BRG. DEVICE
(2 3/8" x 10" x 1'-6")

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

ABUTMENT NO. 2
 RAMP "F" OVER RAMP "D" AND
 INTERSTATE 440,
 STATION 174+48.63
 DAVIDSON COUNTY
 1983

CORRECT *Calvin L. Howard*
 ENGINEER OF STRUCTURES
 APPROVED *James E. ...*
 DIRECTOR OF HIGHWAYS

DESIGNED BY C.N. KING DATE
 DRAWN BY V. PHILLIPS DATE 4/85
 SUPERVISED BY J. FIELDS & J. PRINCE DATE 4/85
 CHECKED BY DATE

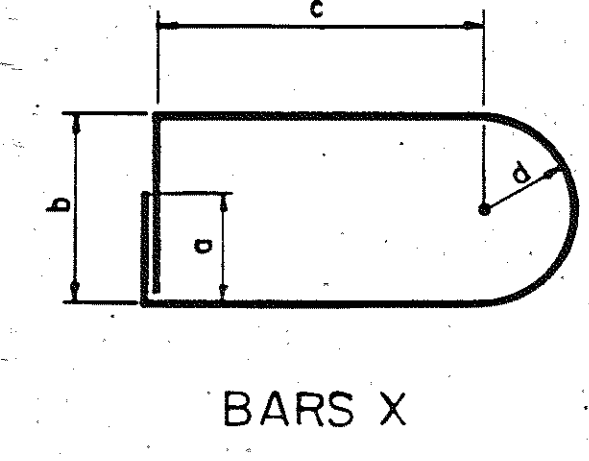
BILL OF STEEL 

CONST. No.
19014-3111-44

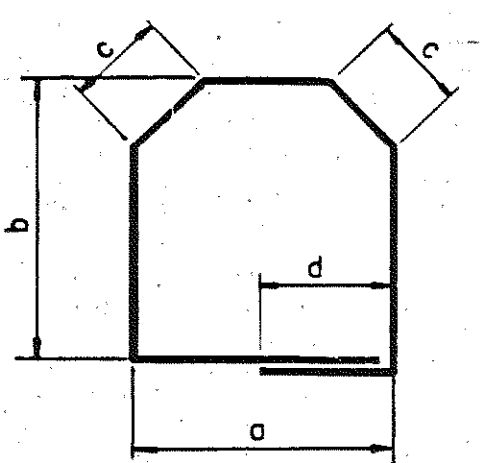
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| 3 | TN | T-440-463(206) | 1983 | | |

| SUPERSTRUCTURE (EPOXY) | | | | | | SUPERSTRUCTURE | | | | | | ABUTMENT NO. 1 (EPOXY) | | | | | | ABUTMENT NO. 1 (REGULAR) | | | | | | ABUTMENT NO. 2 (REGULAR) | | | | | | | |
|------------------------|---------------|------|-----------|---|----------|----------------|---------------|------|-----------|--|--------|------------------------|-----------------------|------|-----------|--------------------|--------|--------------------------|-------------|------|-----------|------------------------------|--------|--------------------------|----------|------|-----------|--------------------|--------|--|--|
| BAR | LOCATION | SIZE | NO. REQ'D | BENDING DIMENSIONS | LENGTH | BAR | LOCATION | SIZE | NO. REQ'D | BENDING DIMENSIONS | LENGTH | BAR | LOCATION | SIZE | NO. REQ'D | BENDING DIMENSIONS | LENGTH | BAR | LOCATION | SIZE | NO. REQ'D | BENDING DIMENSIONS | LENGTH | BAR | LOCATION | SIZE | NO. REQ'D | BENDING DIMENSIONS | LENGTH | | |
| | | | | a b c d | | | | | | a b c d | | | | | | a b c d | | | | | | | | | | | | | | | |
| A500E | TOP SLAB | 5 | 288 | | 30'-0" | A40D | WEBS | 4 | 560 | | 30'-0" | | | | | | | | | | | | | | | | | | | | |
| A501E | TOP SLAB | 5 | 1 | DIM. "A" VARIES FROM 43'-3" TO 51'-6" IN INC. OF 2 3/4" (37 BARS) | | A505 | BOT. SLAB | 5 | 548 | | 22'-5" | L543E | ABUT. BEAM | 5 | 63 | 2'-2" 1'-0" 6'-8" | 18'-8" | | | | | | | | | | | | | | |
| A502E | TOP SLAB | 5 | 1 | DIM. "A" VARIES FROM 20'-0" TO 29'-0" IN INC. OF 3" (37 BARS) | | A506 | DIAPHRAGM | 5 | 8 | DIM. "A" VARIES FROM 22'-10" TO 23'-10" IN INC. OF 3" (5 BARS) | | | | | | | | | | | | | | | | | | | | | |
| A503E | TOP SLAB | 5 | 1 | DIM. "A" VARIES FROM 21'-6" TO 32'-0" IN INC. OF 3 1/2" (37 BARS) | | A511 | DIAPHRAGM | 5 | 23 | | 31'-8" | | | | | | | | | | | | | | | | | | | | |
| A504E | TOP SLAB | 5 | 1 | DIM. "A" VARIES FROM 40'-6" TO 48'-0" IN INC. OF 2 1/2" (37 BARS) | | A513 | INTER. DIAPH. | 5 | 10 | DIM. "A" VARIES FROM 22'-8" TO 24'-0" IN INC. OF 4" (5 BARS) | | A447 | LT. WING (N.S.) | 4 | 14 | | 4'-9" | A440 | ABUT. WINGS | 4 | 6 | | 5'-6" | | | | | | | | |
| A505E | TOP SLAB | 5 | 1 | DIM. "A" VARIES FROM 39'-9" TO 44'-3" IN INC. OF 1 1/2" (37 BARS) | | A513 | INTER. DIAPH. | 5 | 10 | DIM. "A" VARIES FROM 22'-8" TO 24'-0" IN INC. OF 4" (5 BARS) | | A448 | LT. + RT. WING (N.S.) | 4 | 14 | | 15'-8" | A441 | ABUT. WINGS | 4 | 20 | | 8'-11" | | | | | | | | |
| A506E | TOP SLAB | 6 | 1499 | | 1554'-0" | A900 | BOT. SLAB | 9 | 169 | | 60'-0" | A544 | WING BEAM | 5 | 10 | | 15'-8" | A540 | ABUT. BEAM | 5 | 4 | | 8'-11" | | | | | | | | |
| A1000E | TOP SLAB | 10 | 120 | | 60'-0" | A901 | " | 9 | 18 | | 30'-0" | A642 | J. WING (F.S.) | 6 | 14 | | 4'-9" | A640 | ABUT. WINGS | 6 | 16 | | 4'-5" | | | | | | | | |
| A1001E | " | 10 | 124 | | 30'-0" | A902 | " | 9 | 6 | | 40'-0" | A643 | LT. + RT. WING (F.S.) | 6 | 12 | | 15'-8" | A641 | ABUT. WINGS | 6 | 24 | | 5'-2" | | | | | | | | |
| A1002E | TOP SLAB | 10 | 1 | DIM. "A" VARIES FROM 25'-6" TO 60'-0" IN INC. OF 1'-6" (23 BARS) | | A903 | " | 9 | 1 | DIM. "A" VARIES FROM 27'-0" TO 60'-0" IN INC. OF 1'-6" (23 BARS) | | A740 | ABUT. BEAM | 7 | 9 | | 33'-2" | A740 | ABUT. BEAM | 7 | 10 | | 8'-11" | | | | | | | | |
| A1003E | TOP SLAB | 10 | 1 | DIM. "A" VARIES FROM 25'-6" TO 60'-0" IN INC. OF 1'-6" (23 BARS) | | A1002 | DIAPHRAGM | 16 | 44 | | 24'-5" | A743 | WING BEAM | 7 | 18 | | 15'-8" | | | | | | | | | | | | | | |
| C400E | WEBS | 4 | 2060 | 3'-8" | 4'-4" | C400 | WEBS | 4 | 2060 | 3'-8" | 4'-4" | L540 | BEAM & WINGS | 5 | 62 | 2'-2" 1'-0" 2'-2" | 9'-6" | H640 | ABUT. WINGS | 6 | 20 | 9" 3'-4" | 7'-4" | | | | | | | | |
| C500E | INTER. DIAPH. | 5 | 240 | 3'-10" | 4'-8" | C500 | INTER. DIAPH. | 5 | 240 | 3'-10" | 4'-8" | | | | | | | L540 | ABUT. BEAM | 5 | 28 | 2'-11" 1'-0" 2'-2" | 11'-0" | | | | | | | | |
| C1000E | TOP SLAB | 10 | 48 | 54'-10" 3'-3" | 60'-0" | CD401 | WEBS | 4 | 2060 | 3'-9" 8" 1 1/2" | 4'-5" | | | | | | | F540 | ABUT. BEAM | 5 | 2 | 2'-4" 28'-6" 2'-4" 1'-8 1/2" | 33'-2" | | | | | | | | |
| C900E | BOT. SLAB | 9 | 23 | 38'-5" | 40'-0" | C901 | " | 9 | 29 | 58'-5" | 60'-0" | | | | | | | F740 | ABUT. BEAM | 7 | 14 | 2'-4" 28'-6" 2'-4" 1'-8 1/2" | 33'-2" | | | | | | | | |
| H500E | END DIAPH. | 5 | 28 | 5'-0" 10" | 6'-7" | H501 | " | 5 | 28 | 1'-8" 10" | 3'-3" | | | | | | | | | | | | | | | | | | | | |
| H502E | " | 5 | 28 | 3'-2" 10" | 4'-9" | | | | | | | | | | | | | | | | | | | | | | | | | | |

| REVISIONS | | | |
|-----------|---------|-----|-------------------|
| NO. | DATE | BY | BRIEF DESCRIPTION |
| 1 | 2-8-83 | SH | GEN. REV. |
| 2 | 4-26-85 | CNK | DESIGN CHANGE |



BARS X

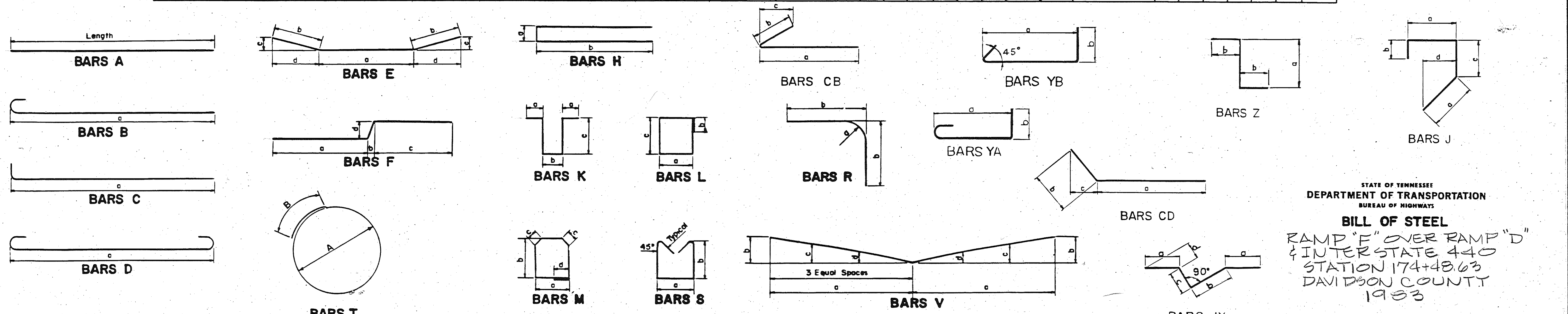


BARS M

REINFORCING STEEL CODE

| TYPE | SIZE | SERIES |
|------|------|--------|
| A | 5 | 06 |

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



DESIGNED BY: S. HARDIE DATE: 11/82
 DRAWN BY: [Signature] DATE: 2/83
 SUPERVISED BY: EDDY SMITH DATE: 12/82
 CHECKED BY: C.N. KING DATE: 8/84

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

BILL OF STEEL

RAMP "F" OVER RAMP "D"
 & INTERSTATE 440
 STATION 174+48.63
 DAVIDSON COUNTY
 1983

CORRECT: *Chellon L. Lovell*
 ENGINEER OF STRUCTURES

APPROVED: *Louis Evans*
 DIRECTOR OF HIGHWAYS

M-119-36

