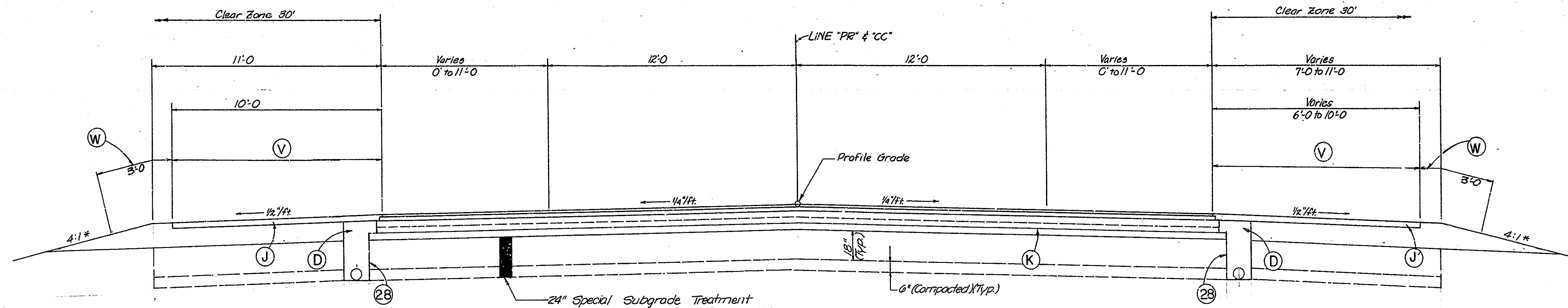
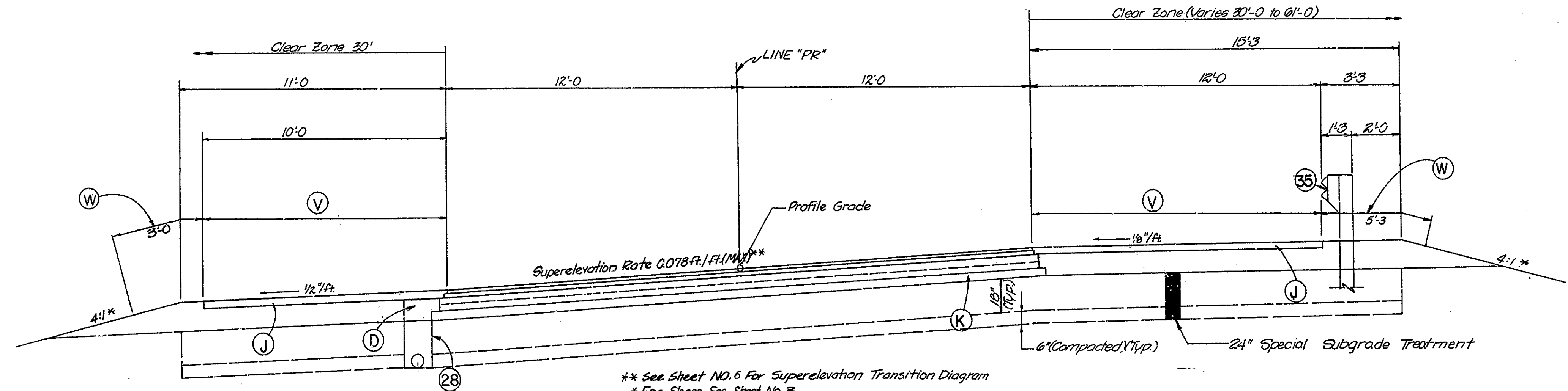


| FEDERAL ROAD DIVISION NO. | STATE | PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------------|-------|-----------|-------------|-----------|--------------|
| 5 | IND. | ST-042-90 | 1990 | 2 | 24 |



TANGENT SECTION
91+25.05 "PR" TO 93+40.00 "CC"



** See Sheet NO. 6 For Superelevation Transition Diagram
* For Slopes See Sheet No. 3

SUPERELEVATED SECTION
72+64.55 "CC" TO 91+25.05 "PR"

LEGEND

- (K) Full Depth Bituminous Pavement
110#/Syd. Bituminous Surface, MV on
220#/Syd. Bituminous Binder, MV on
660#/Syd. Bituminous Base, MV on
400#/Syd. Bituminous Base No. 5D, MV
- (J) Bituminous Shoulder
330#/Syd. Bituminous Base No. 5D on
9" Type 'O' Compacted Aggregate Base ** 53
- (V) Seal Coat No. 2
- (W) Seal Coat No. 5
- (35) Guardrail, Type 'Hs' or Type 'Bs'
- (D) Open Graded Bituminous Base No. 5
- (28) Underdrains- For Details See
Miscellaneous Std. Sht. 'MN'

NOTE:
The quantity, "Seed Mixture, Class CV", is to be used on all slopes 3:1 or steeper, or granular (cut or fill), or slopes highly susceptible to erosion (as directed by the Engineer.)

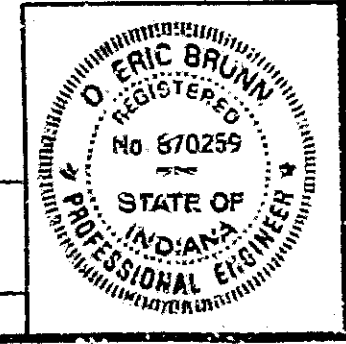
INDIANA DEPARTMENT OF HIGHWAYS
TYPICAL CROSS SECTIONS

PROJECT: ST-042-9(D)
CONTRACT NO:
BRIDGE FILE: 50-69-6851

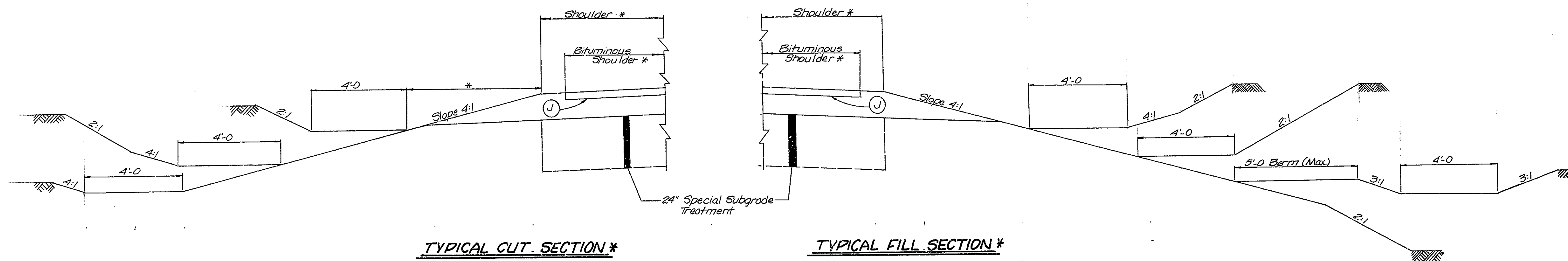
SCALE: 3/8" = 1'-0"

SUBMITTED FOR APPROVAL

D. Eric Brun



| FEDERAL ROAD DIVISION NO. | STATE | PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------------|-------|-------------|-------------|-----------|--------------|
| 5 | IND. | ST-042-9(D) | 1990 | 3 | 84 |



TYPICAL CUT SECTION *

TYPICAL FILL SECTION *

TYPICAL SECTION SHOULDER & DITCH CONSTRUCTION

LEGEND

- * Varies, See Cross Sections
- ⊙ Bituminous Shoulder
330 #/Gyd. Bituminous Base No. 5D on
9" Type 'O' Compacted Aggregate Base #53

NOTE:
The quantity, "Seed Mixture, Class CV", is to be used on all slopes 3:1 or steeper, or granular slopes (cut or fill), or slopes highly susceptible to erosion, as directed by the Engineer.

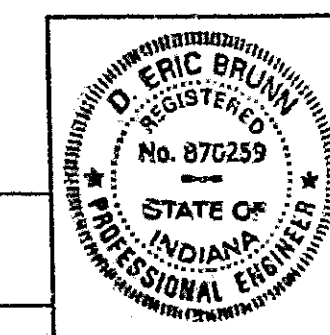
INDIANA DEPARTMENT OF HIGHWAYS
TYPICAL CROSS SECTIONS

SCALE: 1/2" = 1'-0"

PROJECT NO.: ST-042-9(D)
CONTRACT NO.:
BRIDGE FILE: 50-69-685I

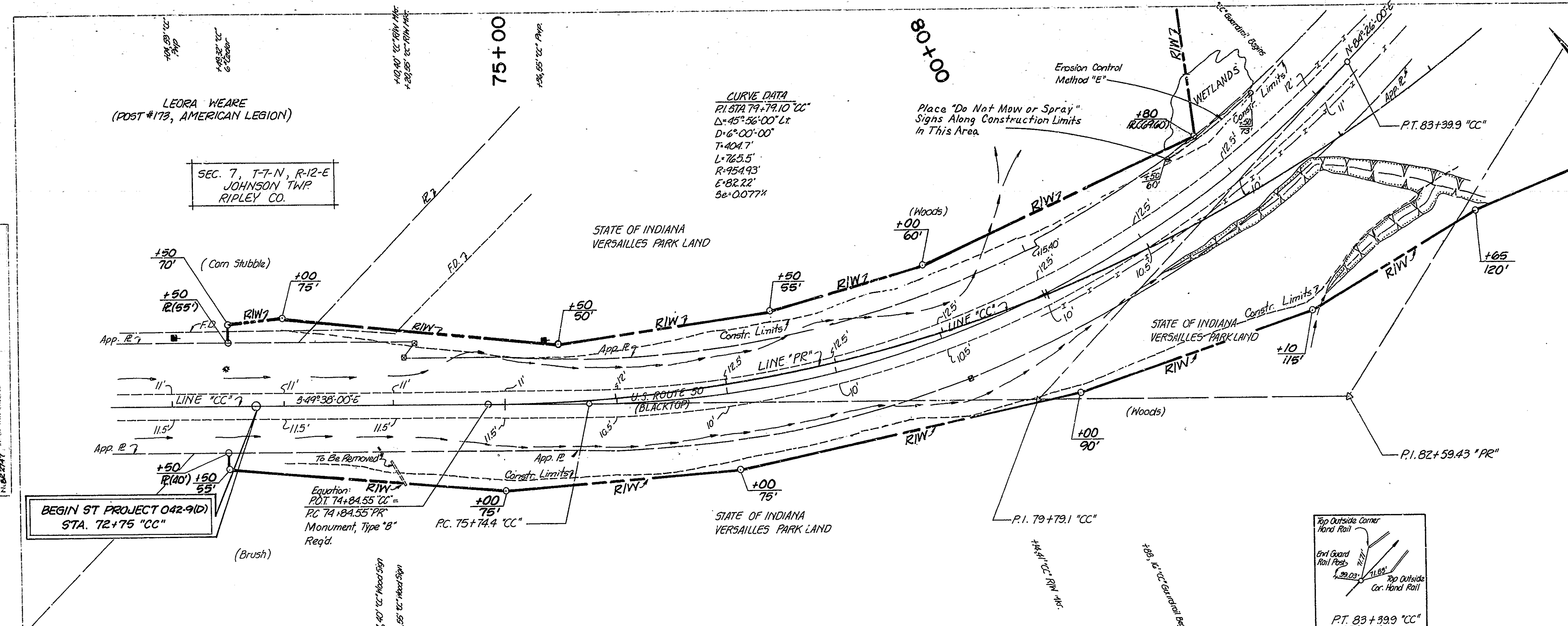
SUBMITTED FOR APPROVAL

D. Eric Burns



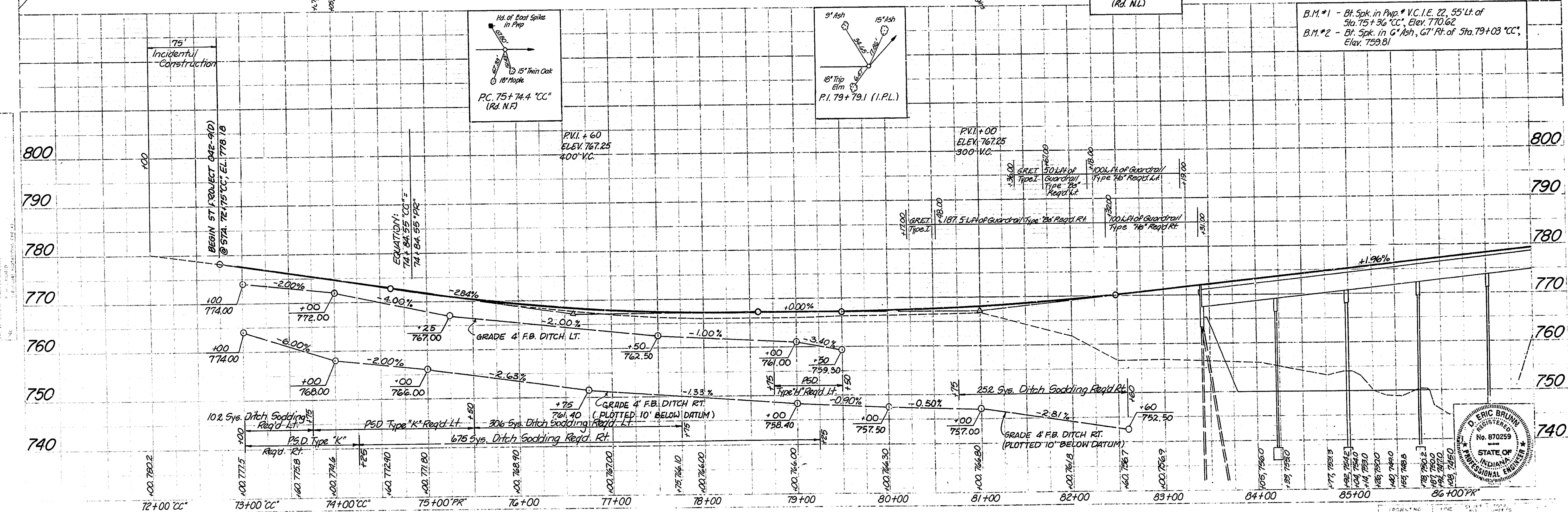
Loughery Creek

| FEDERAL ROAD DISTRICT NO. | STATE | PROJ. EST. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------------|-------|----------------|-------------|-----------|--------------|
| 5 | IND. | 57-042-9(10) | 1990 | 4 | 84 |



CURVE DATA
 P.I. STA 82+59.43 "PR"
 Δ=36°49'26" Lt
 D=4°00'00"
 T=774.88'
 L=1420.60'
 R=454.93'
 E=82.22'
 Se=0.0774

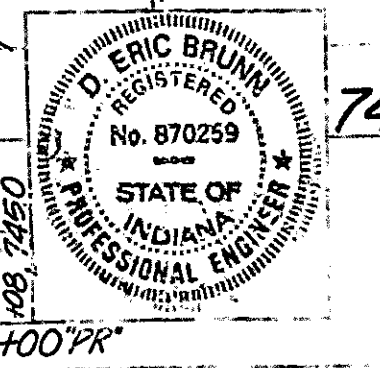
NOTES:
 ALL RIW TO BE AS SHOWN
 ALL RIW TO BE TAKEN FROM LINE "PR" UNLESS OTHERWISE NOTED.
 ALL EXISTING RIW MARKERS TO BE REMOVED
 ALL TOPOGRAPHY TAKEN FROM LINE "CC"
 AREAS BEYOND CONSTRUCTION LIMITS ARE NOT TO BE DISTURBED.



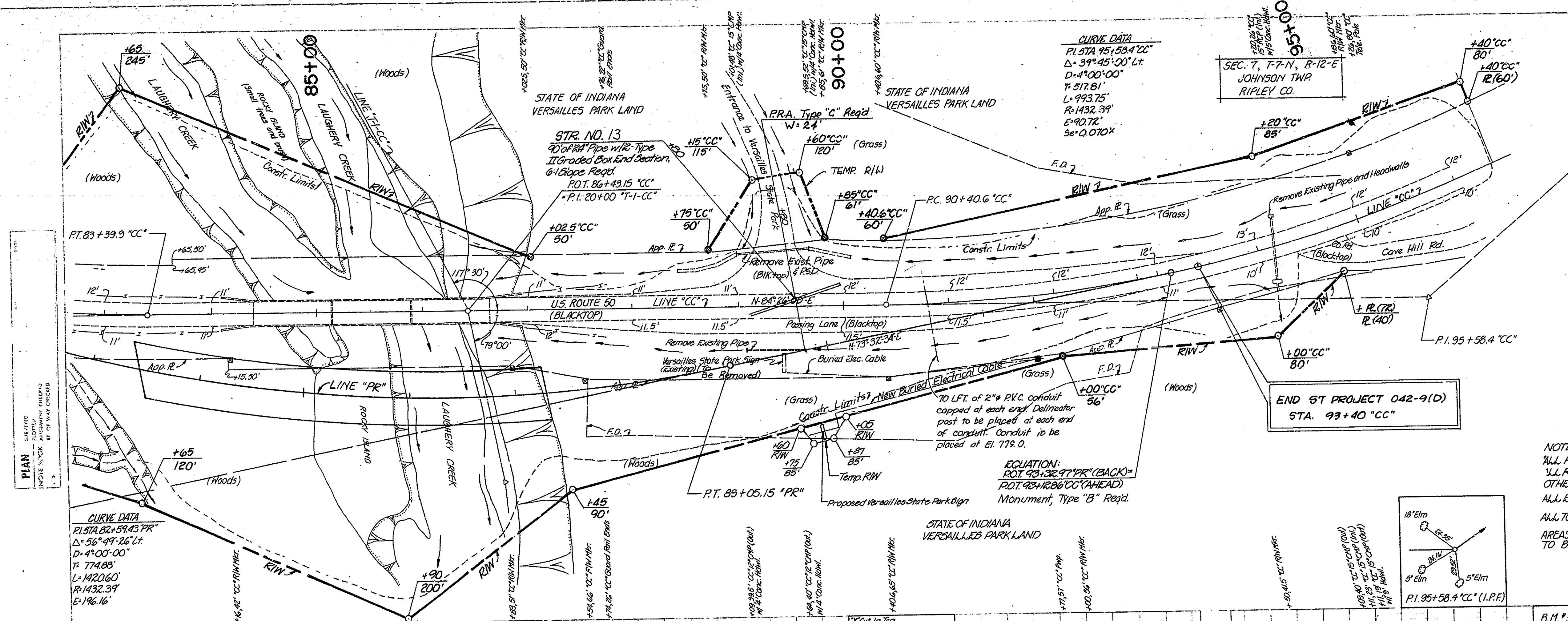
B.M.#1 - Bl. Spk. in Pwp. V.C.I.E. 22, 55' Lt. of Sta. 75+36 "CC", Elev. 770.62
 B.M.#2 - Bl. Spk. in G'Ash, 67' Rt. of Sta. 79+03 "CC", Elev. 759.81

2/15/85
 6/18/86
 TPOH
 R.S.
 PLAN
 SHEETS
 NOTE BOOK, ADJUSTMENT METHODS
 INDEX MAP, REVISIONS

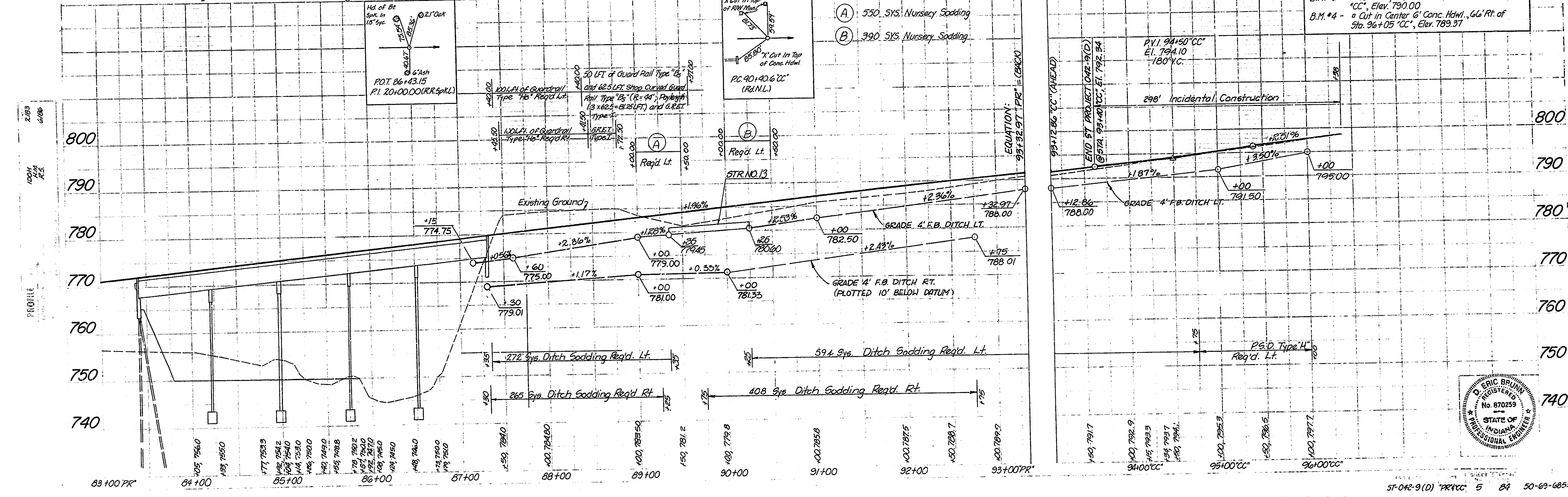
2/23/85
 6/28/86
 TPOH
 R.S.
 PROFILE
 SHEETS
 NOTE BOOK, ADJUSTMENT METHODS
 INDEX MAP, REVISIONS



| FEDERAL ROAD DISTRICT NO. | STATE | PROJECT NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------------|-------|-------------|-------------|-----------|--------------|
| 5 | IND. | ST-042-9(D) | 1990 | 5 | 84 |

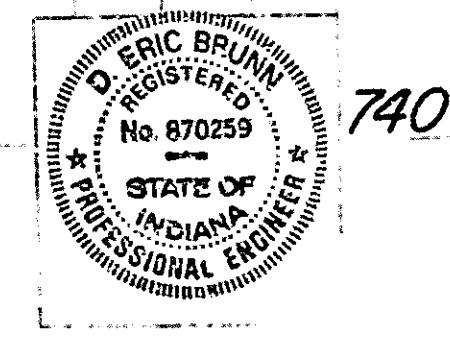


NOTES:
 ALL R/W TO BE AS SHOWN
 ALL R/W TO BE TAKEN FROM LINE "PR" UNLESS OTHERWISE NOTED
 ALL EXISTING R/W MARKERS TO BE REMOVED
 ALL TOPOGRAPHY IS TAKEN FROM LINE "CC"
 AREAS BEYOND CONSTRUCTION LIMITS ARE NOT TO BE DISTURBED.

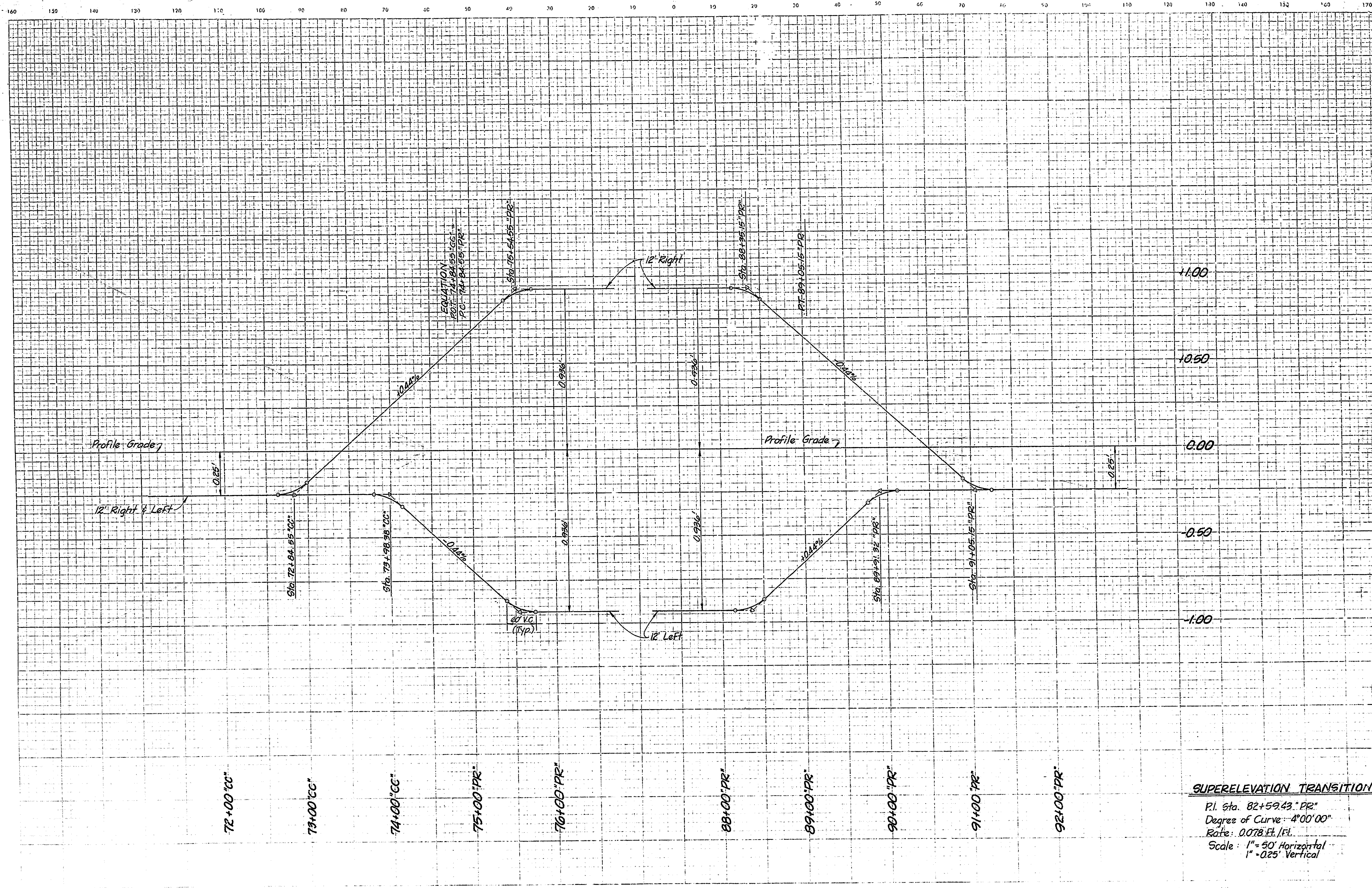


PLAN SHEETS
 DISTRICT CHIEF'S OFFICE
 STATE OF INDIANA
 RIPLEY CO. ENGINEERING DEPARTMENT

PROF. 1001
 2/83
 6/1986



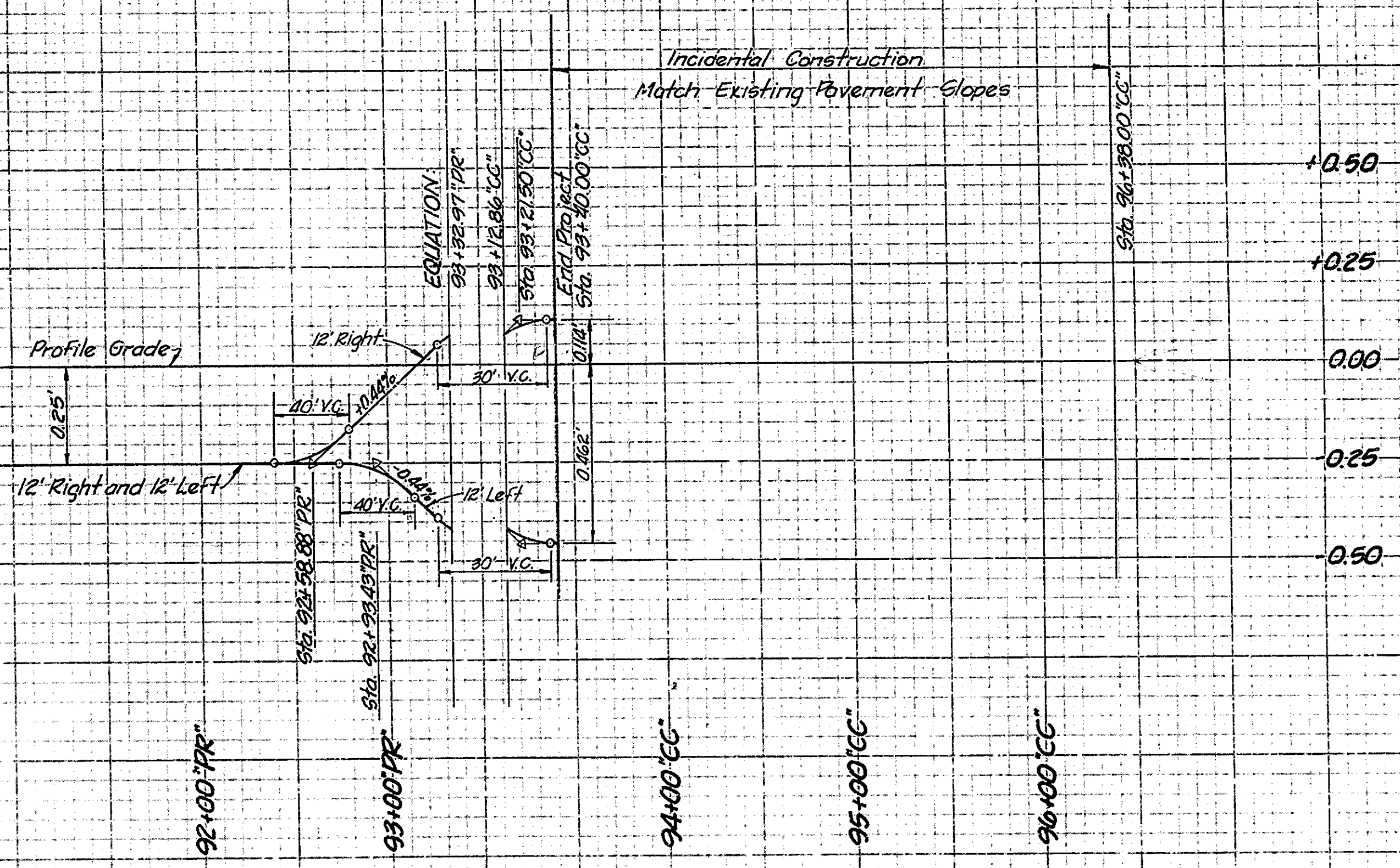
CUT CROSS SECTIONS FILL
Scale: 1" = 10 feet



SUPERELEVATION TRANSITION
 P.I. Sta. 82+59.43 "PR"
 Degree of Curve: 4°00'00"
 Rate: 0.078 Ft./Ft.
 Scale: 1" = 50' Horizontal
 1" = 0.25' Vertical

CUT CROSS SECTIONS FILL
Scale: 1 inch = 10 feet

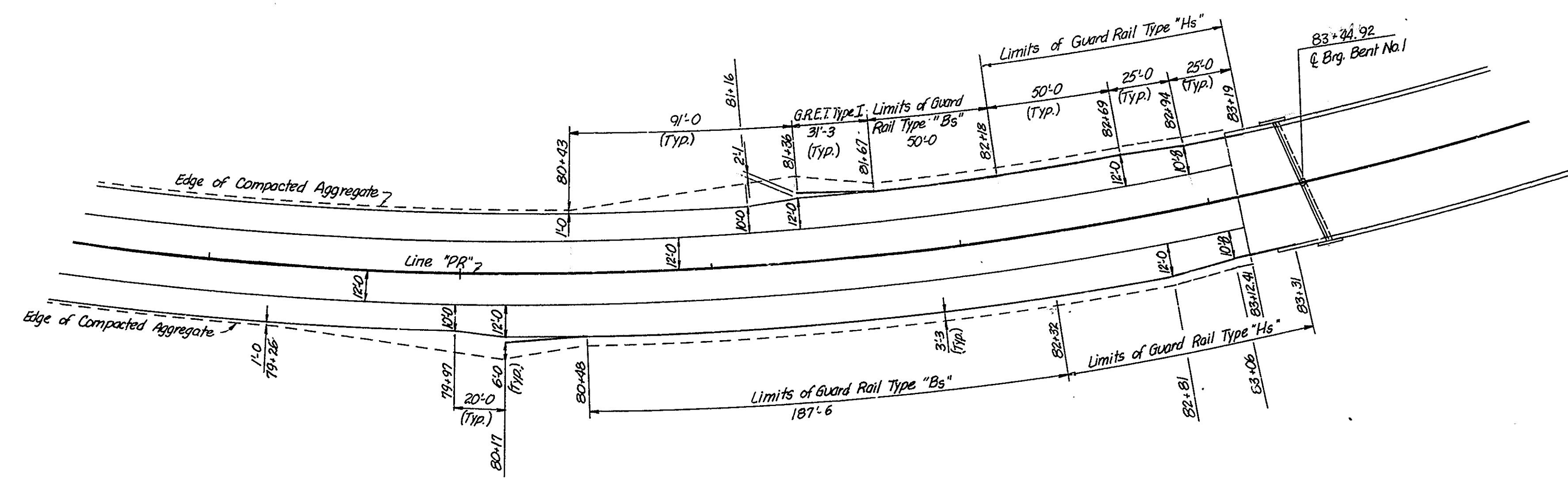
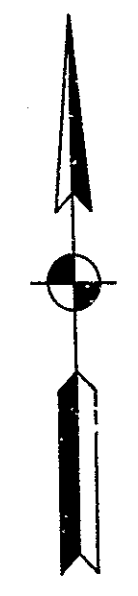
160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170



SUPERELEVATION TRANSITION
Existing Curve
P.I. 95+58.40 "CC"
Degree of Curve: 4°00'00"
Rate: 0.0095[#]/ft. Rt. Existing
0.0385[#]/ft. Lt. Existing
Scale: 1" = 50' Horizontal
1" = 0.25' Vertical

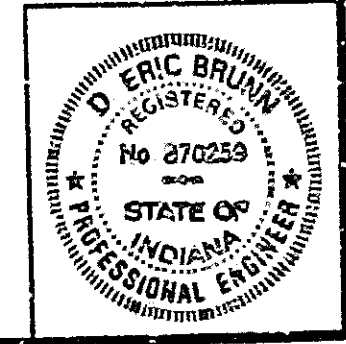
| FEDERAL ROAD REGION NO. | STATE | PROJECT NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|-------------------------|-------|-------------|-------------|-----------|--------------|
| 5 | IND. | 97-042-9(D) | 1990 | 8 | 84 |

80+00

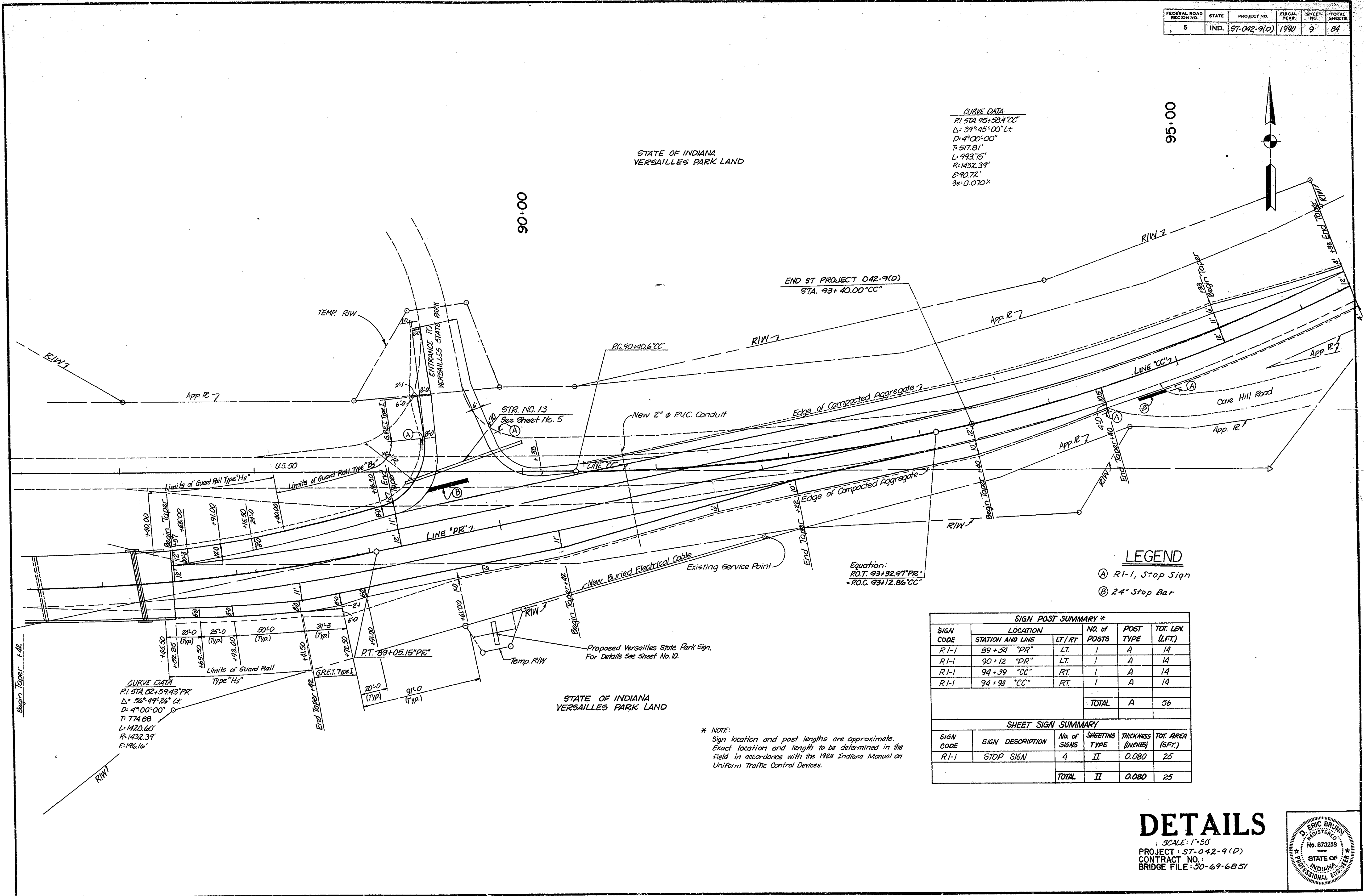


DETAILS

Scale: 1" = 30'-0"
 PROJECT: 97-042-9(D)
 CONTRACT NO.:
 BRIDGE FILE: 50-69-0351



| | | | | | |
|---------------------------|-------|-------------|-------------|-----------|--------------|
| FEDERAL ROAD DISTRICT NO. | STATE | PROJECT NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
| 5 | IND. | ST-042-9(D) | 1990 | 9 | 84 |



CURVE DATA
 P.I. STA 95+58.92 CC"
 $\Delta = 39^{\circ}45'00''$ Lt
 $D = 4^{\circ}00'00''$
 $T = 517.81'$
 $L = 993.75'$
 $R = 1432.39'$
 $E = 40.72'$
 $\theta = 0.0704$

STATE OF INDIANA
 VERSAILLES PARK LAND

END ST PROJECT 042-9(D)
 STA. 93+40.00 CC"

Equation:
 $P.O.T. 93+32.97 PR"$
 $+ P.O.C. 93+12.86 CC"$

LEGEND

- Ⓐ R-1, Stop Sign
- Ⓑ 24" Stop Bar

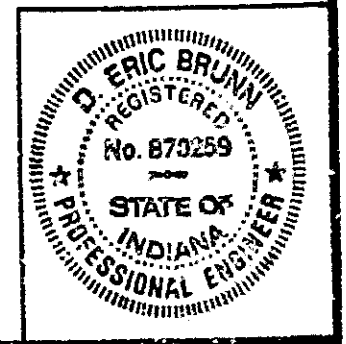
| SIGN POST SUMMARY * | | | | | |
|---------------------|------------------|-------|--------------|-----------|--------------------|
| SIGN CODE | LOCATION | | NO. of POSTS | POST TYPE | TOT. LEN. (L.F.T.) |
| | STATION AND LINE | LT/RT | | | |
| R-1 | 89+34 "PR" | LT. | 1 | A | 14 |
| R-1 | 90+12 "PR" | LT. | 1 | A | 14 |
| R-1 | 94+39 "CC" | RT. | 1 | A | 14 |
| R-1 | 94+93 "CC" | RT. | 1 | A | 14 |
| TOTAL | | | | A | 56 |

| SHEET SIGN SUMMARY | | | | |
|--------------------|------------------|--------------|---------------|--------------------|
| SIGN CODE | SIGN DESCRIPTION | No. of SIGNS | SHEETING TYPE | TOT. AREA (S.F.T.) |
| R-1 | STOP SIGN | 4 | II | 0.080 25 |
| TOTAL | | II | 0.080 | 25 |

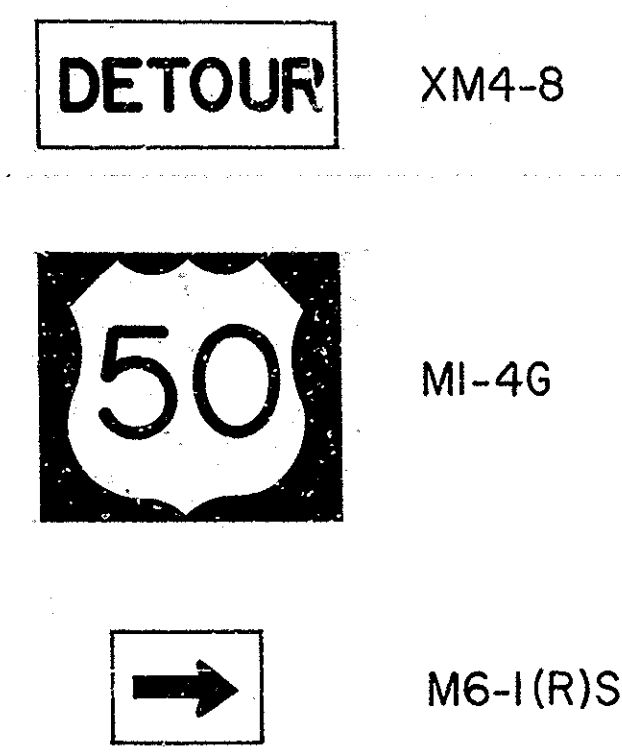
* NOTE:
 Sign location and post lengths are approximate.
 Exact location and length to be determined in the field in accordance with the 1988 Indiana Manual on Uniform Traffic Control Devices.

DETAILS

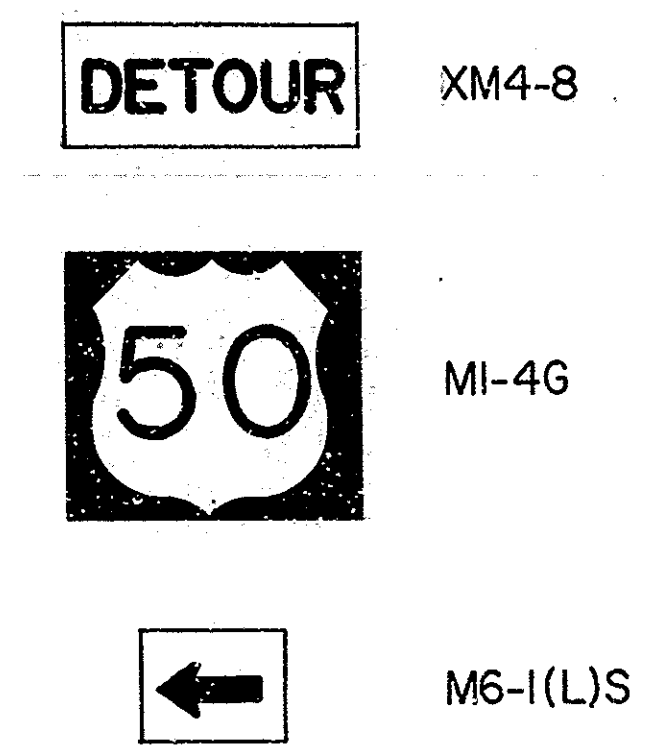
SCALE: 1"=50'
 PROJECT: ST-042-9(D)
 CONTRACT NO.:
 BRIDGE FILE: 50-69-6851



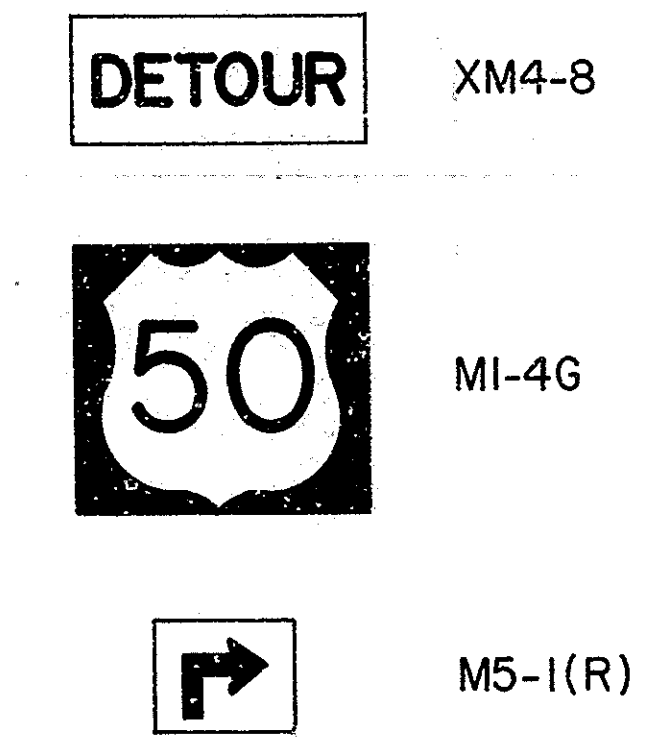
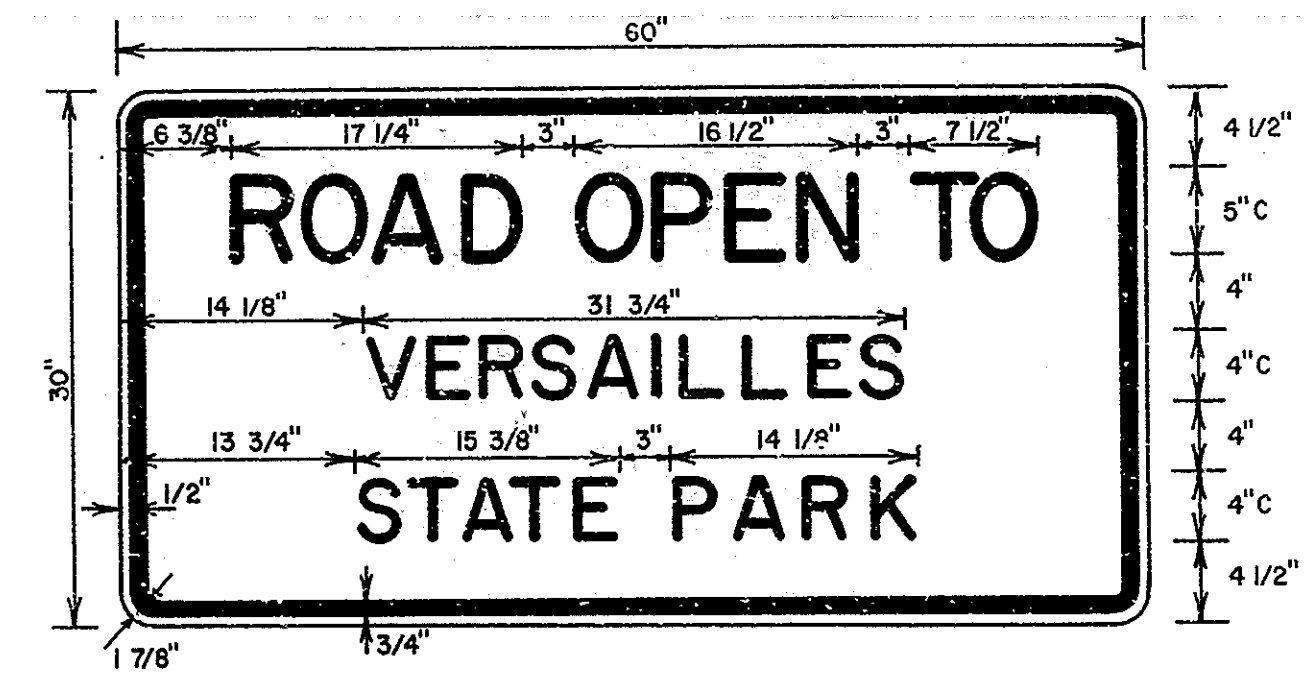
| FEDERAL ROAD REGION NO. | STATE | PROJECT NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|-------------------------|-------|--------------|-------------|-----------|--------------|
| 5 | IND. | ST-042-9 (D) | 1990 | 11 | 84 |



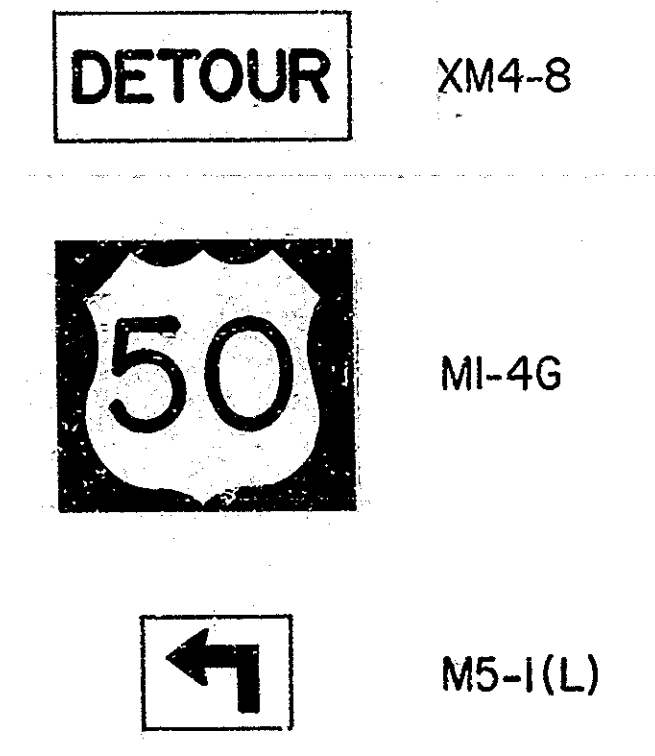
DETOUR ROUTE MARKER ASSEMBLY TYPE (A)



DETOUR ROUTE MARKER ASSEMBLY TYPE (B)



DETOUR ROUTE MARKER ASSEMBLY TYPE (C)



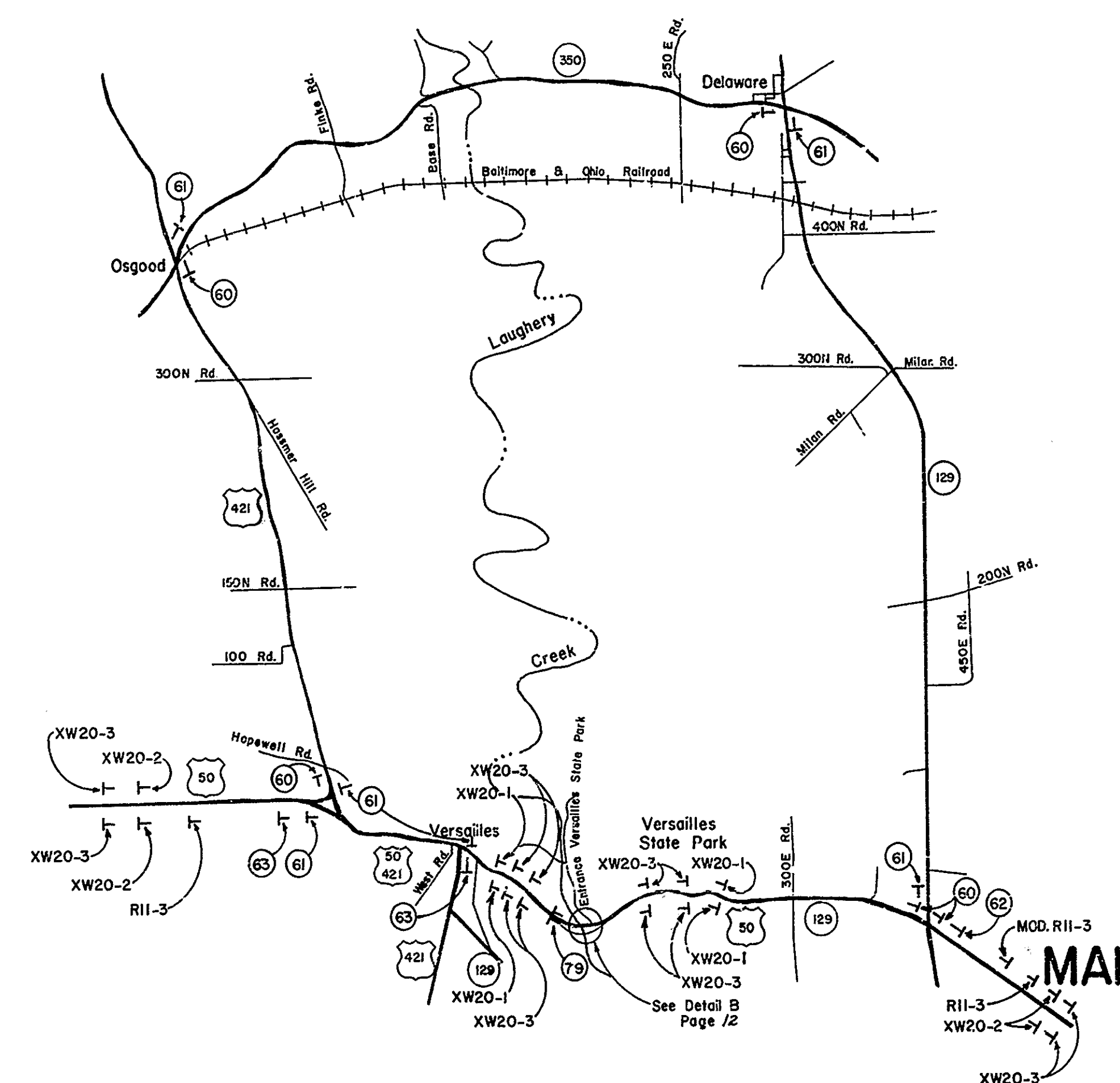
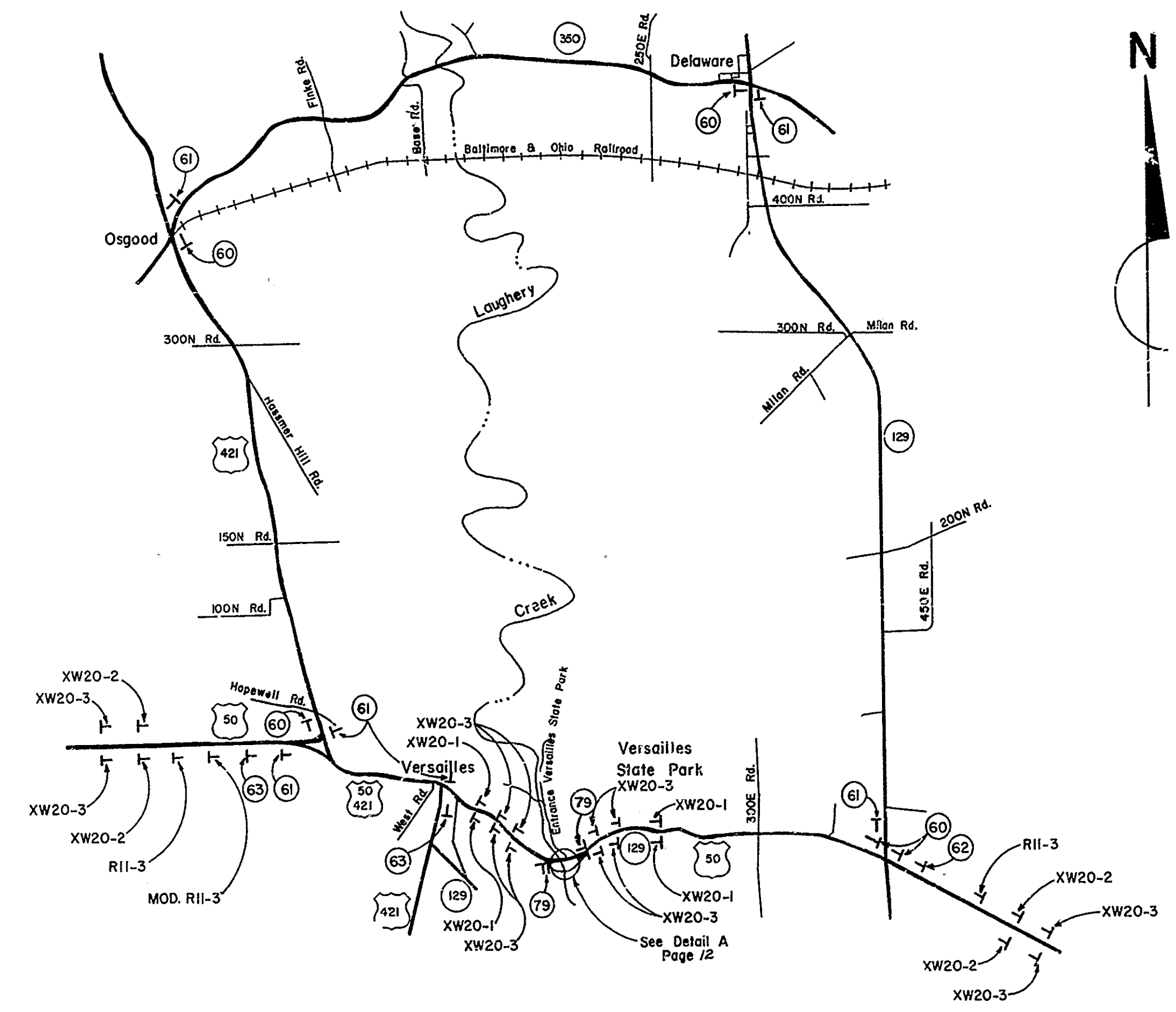
DETOUR ROUTE MARKER ASSEMBLY TYPE (D)

LEGEND

- (60) DETOUR ROUTE MARKER ASSEMBLY TYPE (A)
- (61) DETOUR ROUTE MARKER ASSEMBLY TYPE (B)
- (62) DETOUR ROUTE MARKER ASSEMBLY TYPE (C)
- (63) DETOUR ROUTE MARKER ASSEMBLY TYPE (D)
- (79) STANDARD BARRICADE TYPE III-A

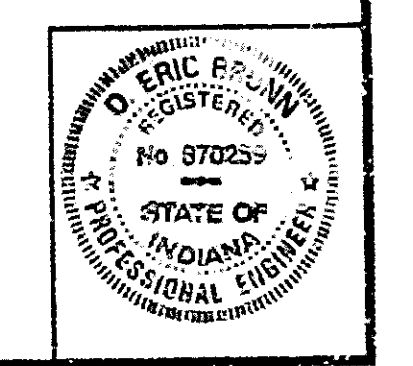
NOTE

1. MODIFIED R11-3 PAID AS CONSTRUCTION SIGN TYPE "A".
2. SEE STANDARD DETOUR SIGNS SHEET 1, FOR PLACEMENT OF CONSTRUCTION SIGNS.
3. ENTRANCE TO VERSAILLES STATE PARK TO REMAIN OPEN (SEE SPECIAL PROVISIONS).



MAINTENANCE OF TRAFFIC DETAILS

SCALE: NONE
 PROJECT: - ST-042-9 (D)
 BRIDGE FILE: - 50-69-5851



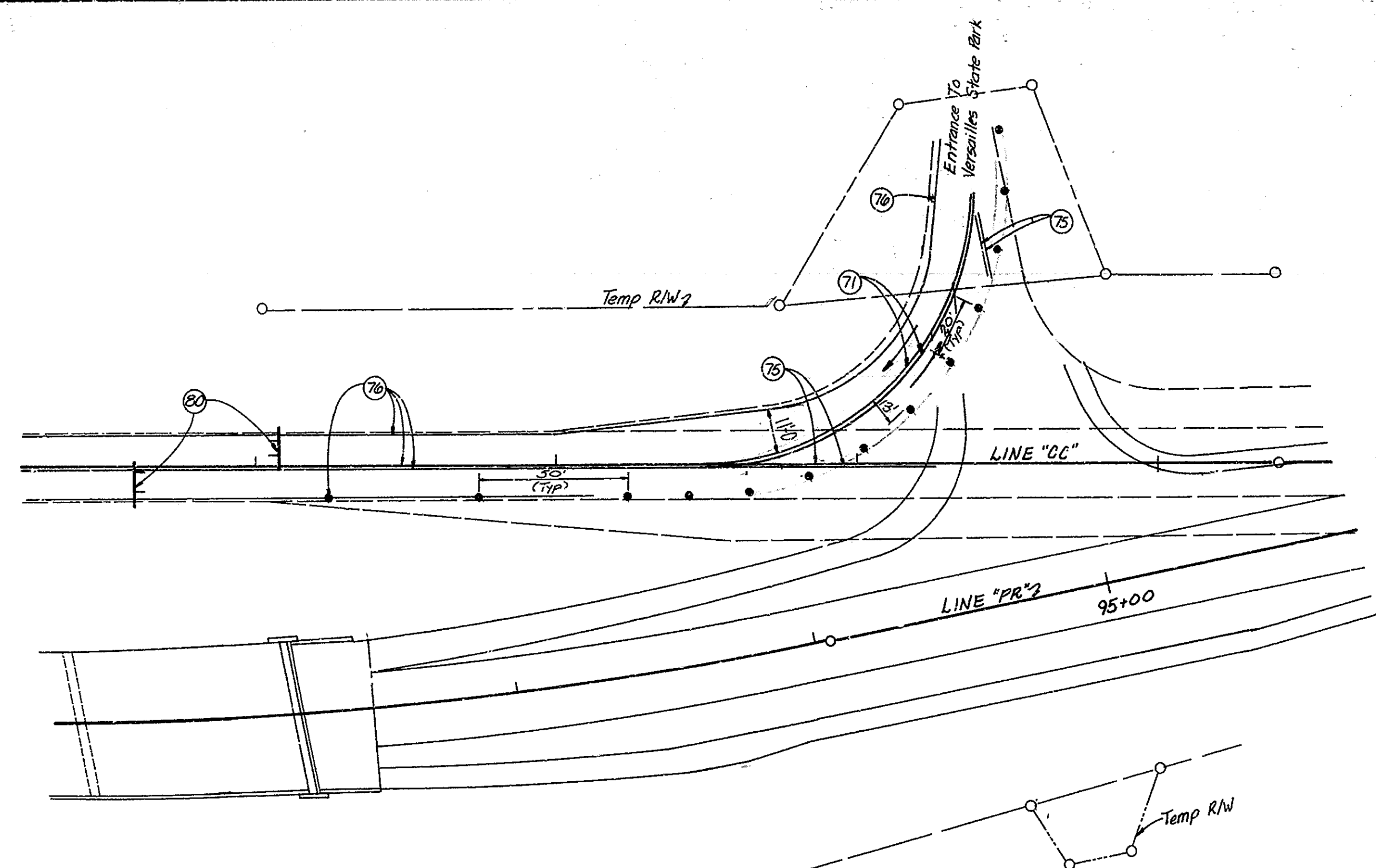
| FEDERAL ROAD DISTRICT NO. | STATE | PROJECT NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------------|-------|-------------|-------------|-----------|--------------|
| 5 | IND. | ST-042-9(D) | 1990 | 12 | 84 |

LEGEND

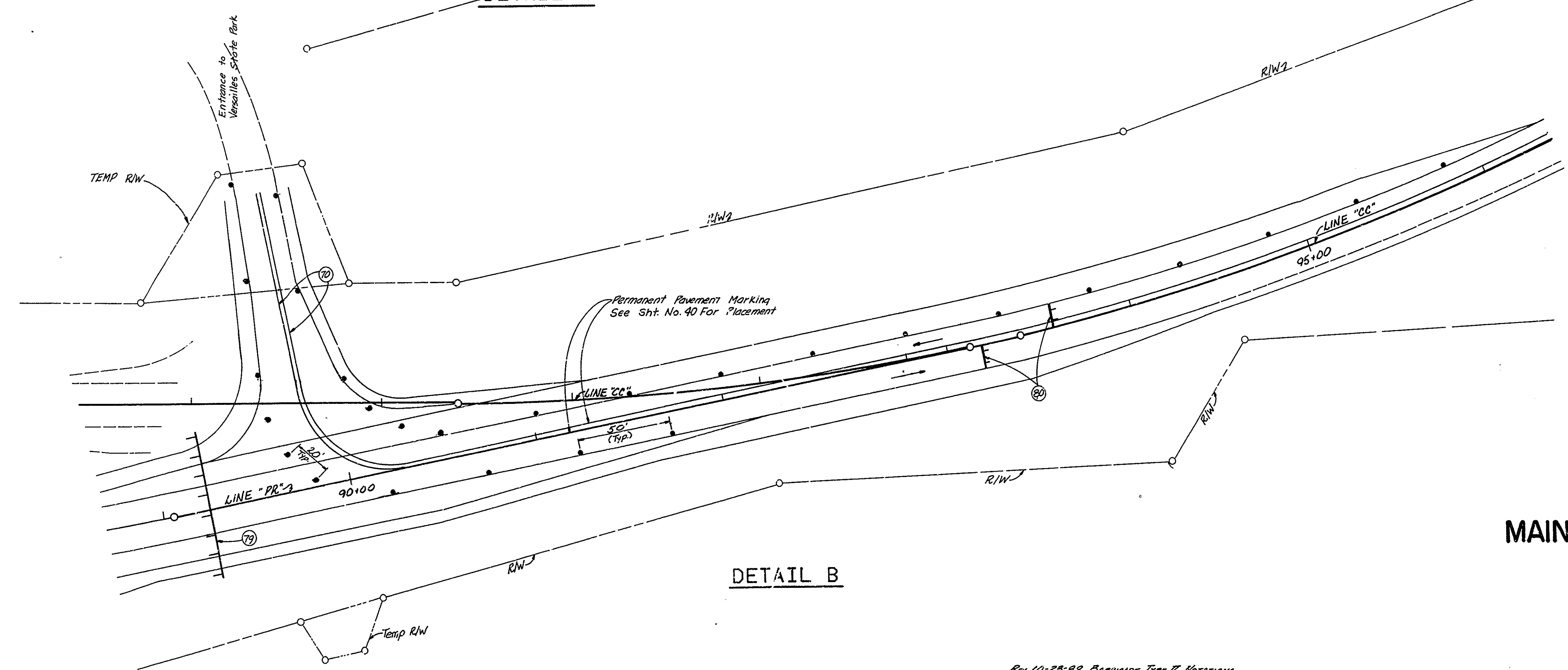
- ⑦① TEMPORARY PAVEMENT MARKING TYPE I, YELLOW, 4 INCH
- ⑦② TEMPORARY PAVEMENT MARKING TYPE II, YELLOW, 4 INCH
- ⑦⑤ EXISTING PAVEMENT MARKING TO BE REMOVED
- ⑦⑥ EXISTING PAVEMENT MARKING
- ⑦⑨ BARRICADE TYPE III-A
- ⑦⑩ BARRICADE TYPE III-B
- BARRICADE TYPE II
- DIRECTION OF TRAFFIC FLOW

NOTE

1. ENTRANCE TO VERSAILLES STATE PARK TO REMAIN OPEN (SEE SPECIAL PROVISIONS).
2. BARRICADE TYPE II WILL NOT BE PAID FOR DIRECTLY BUT BE INCLUDED IN THE ITEM "MAINTENANCE OF TRAFFIC".



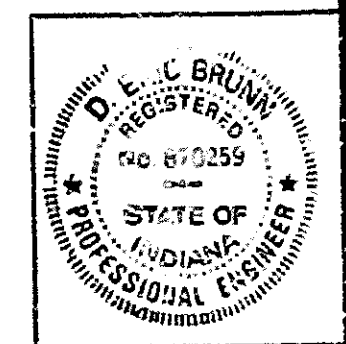
DETAIL A



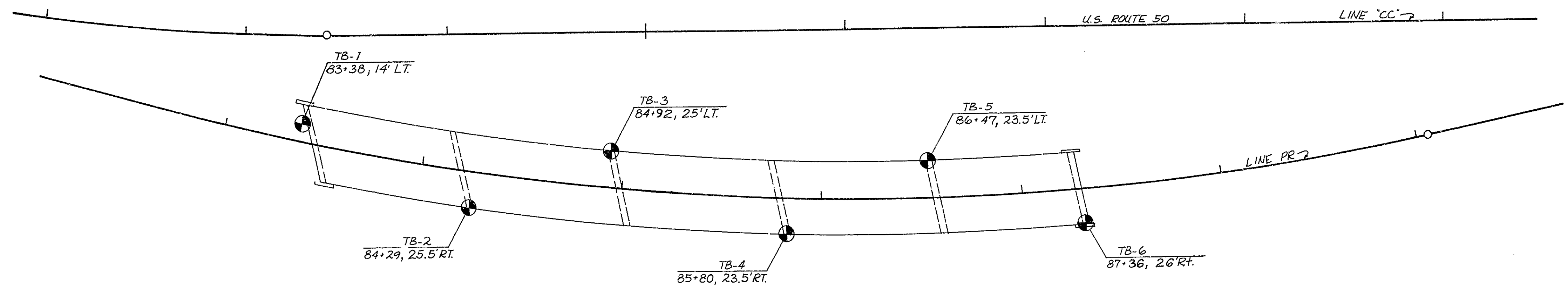
DETAIL B

**MAINTENANCE OF TRAFFIC
DETAILS**

SCALE: 1" = 30'
PROJECT: ST-042-9(D)
BRIDGE FILE: 50-69-6851



| FEDERAL ROAD DISTRICT | STATE | PROJECT NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|-----------------------|-------|-------------|-------------|-----------|--------------|
| 5 | IND. | 87-042-9(D) | 1990 | 14 | 84 |



PLAN
 SUBMITTED BY: [blank]
 CHECKED BY: [blank]
 DATE: [blank]

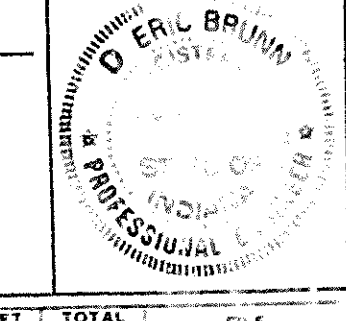
| TEST BORING NO. | T.B. NO. 1 | | | | | T.B. NO. 2 | | | | | T.B. NO. 3 | | | | | T.B. NO. 4 | | | | | T.B. NO. 5 | | | | | T.B. NO. | | | | |
|-----------------|------------|---------|-------|--|-------------|------------|-----------|---------|---|-------------|------------|---------|-------|--|-------------|------------|-----------|-------|--|---|------------|-----------|-------|-------|-------------|------------|--|----|-------|-------------|
| | 83+38 "PR" | | | | | 84+29 "PR" | | | | | 84+92 "PR" | | | | | 85+80 "PR" | | | | | 86+47 "PR" | | | | | | | | | |
| | STATION | 14' LT. | | | | STATION | 23.5' RT. | | | | STATION | 25' LT. | | | | STATION | 23.5' RT. | | | | STATION | 23.5' LT. | | | | STATION | | | | |
| GROUND ELEV. | 757.2 | | | | | 754.3 | | | | | 752.9 | | | | | 748.0 | | | | | 746.9 | | | | | | | | | |
| ELEV. | SAMPLE NO. | | N. | ELEV. | DESCRIPTION | SAMPLE NO. | | N. | ELEV. | DESCRIPTION | SAMPLE NO. | | N. | ELEV. | DESCRIPTION | SAMPLE NO. | | N. | ELEV. | DESCRIPTION | SAMPLE NO. | | N. | ELEV. | DESCRIPTION | SAMPLE NO. | | N. | ELEV. | DESCRIPTION |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 755 | ISS | -2- | 756.7 | DARK BROWN MOIST SOFT SILTY LOAM WITH TRACE OF ROOTS A-4 | ISS | 752.8 | 2-2-3 | 754.3 | BROWN MOIST SOFT SILTY LOAM WITH A TRACE OF ROOTS, SAND A-4 | ISS | 751.4 | 3-4-4 | 752.9 | BROWN MOIST MEDIUM STIFF TO STIFF SOFT SILTY LOAM WITH A TRACE OF ROOTS, SAND AND ORGANICS A-4 | | | | | | | | | | | | | | | | |
| | IASS | 755.7 | 2-21 | 754.7 | | 751.8 | | | | 750.4 | | | | | | | | | | | | | | | | | | | | |
| 750 | 2SS | 753.2 | 3-4-6 | | 2SS | 750.3 | 2-2-3 | 749.3 | | 2SS | 748.9 | -5- | 749.4 | | | | | | | | | | | | | | | | | |
| | 3SS | 752.2 | -1-2 | 751.2 | | 3SS | 747.8 | 6-11-14 | 749.3 | 2ASS | 748.9 | -5- | 747.9 | | | | | | | | | | | | | | | | | |
| | 3ASS | 750.7 | -3- | | 4SS | 748.2 | 3-8-5 | | 3SS | 746.4 | -11- | 746.9 | | | | | | | | | | | | | | | | | | |
| 745 | 4SS | 748.2 | | | 4SS | 745.7 | 4-5-6 | 745.2 | 4SS | 745.3 | 9-12-10 | | 4SS | 743.9 | 12-41-44 | ISS | 746.5 | 1-2-6 | 746.0 | DARK BROWN MOIST MEDIUM STIFF SILTY LOAM WITH A TRACE OF ROOTS AND GRAVEL | ISS | 745.4 | -12- | 744.9 | | | | | | |
| | 5SS | 744.7 | | | 5SS | 744.3 | | | 5SS | 742.9 | | 5SS | 742.1 | 19/60/3 | 2SS | 745.2 | 70/3 | 743.0 | GRAY DRY VERY SOFT WEATHERED SHALE WITH LIMESTONE LAYERS | 2SS | 743.9 | 70/0.5 | 741.4 | | | | | | | |
| | 6SS | 743.7 | 51-75 | 742.2 | 5SS | 743.1 | 9-11 | 743.3 | 6SS | 741.4 | 50/4 | | | | | | | | | | | | | | | | | | | |
| 740 | | | | | 6SS | 741.4 | 50/4 | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 735 | CI NX | 737.2 | RQD=0 | | CI NX | 735.8 | RQD=0 | | CI NX | 737.4 | RQD=0 | | CI NX | 738.0 | RQD=7 | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 730 | C2 NX | | RQD=8 | 732.2 | C2 NX | 733.8 | RQD=0 | | C2 NX | 734.4 | RQD=0 | | C2 NX | | RQD=8 | 733.0 | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 725 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 720 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

SOIL BORINGS

SCALES: HORIZ. 1"=30' VERT. 1"=5' DATE Sept. 15, 1989

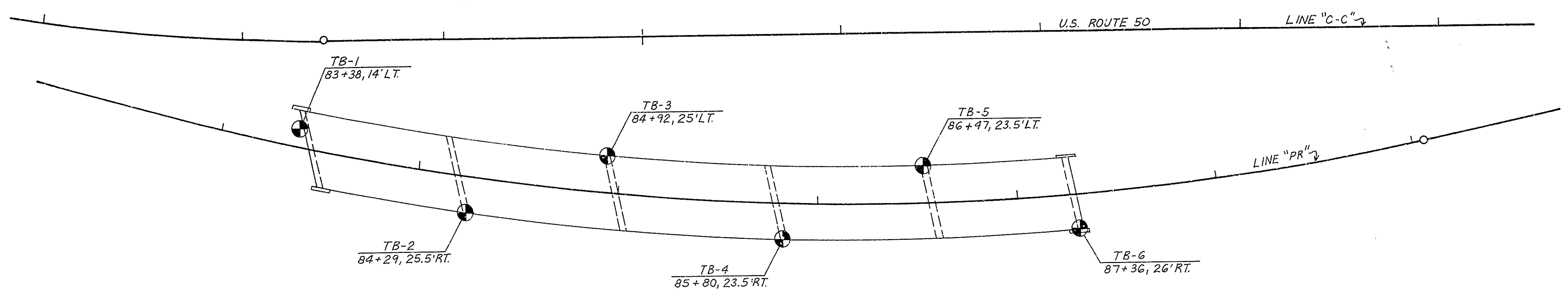
D. Eric Bunn

PROJECT: ST-042-9(D)
CONTRACT NO.
BRIDGE FILE: 50-69-6851



| PROJECT NO. | LINE | SHEET NO. | TOTAL SHEETS |
|-------------|------|-----------|--------------|
| 87-042-9(D) | "PR" | 14 | 84 |

Loughery Creek

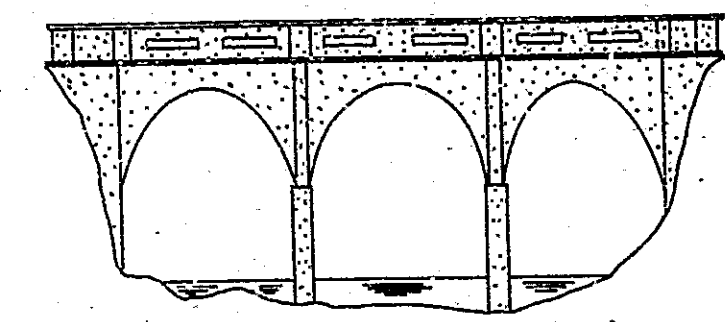
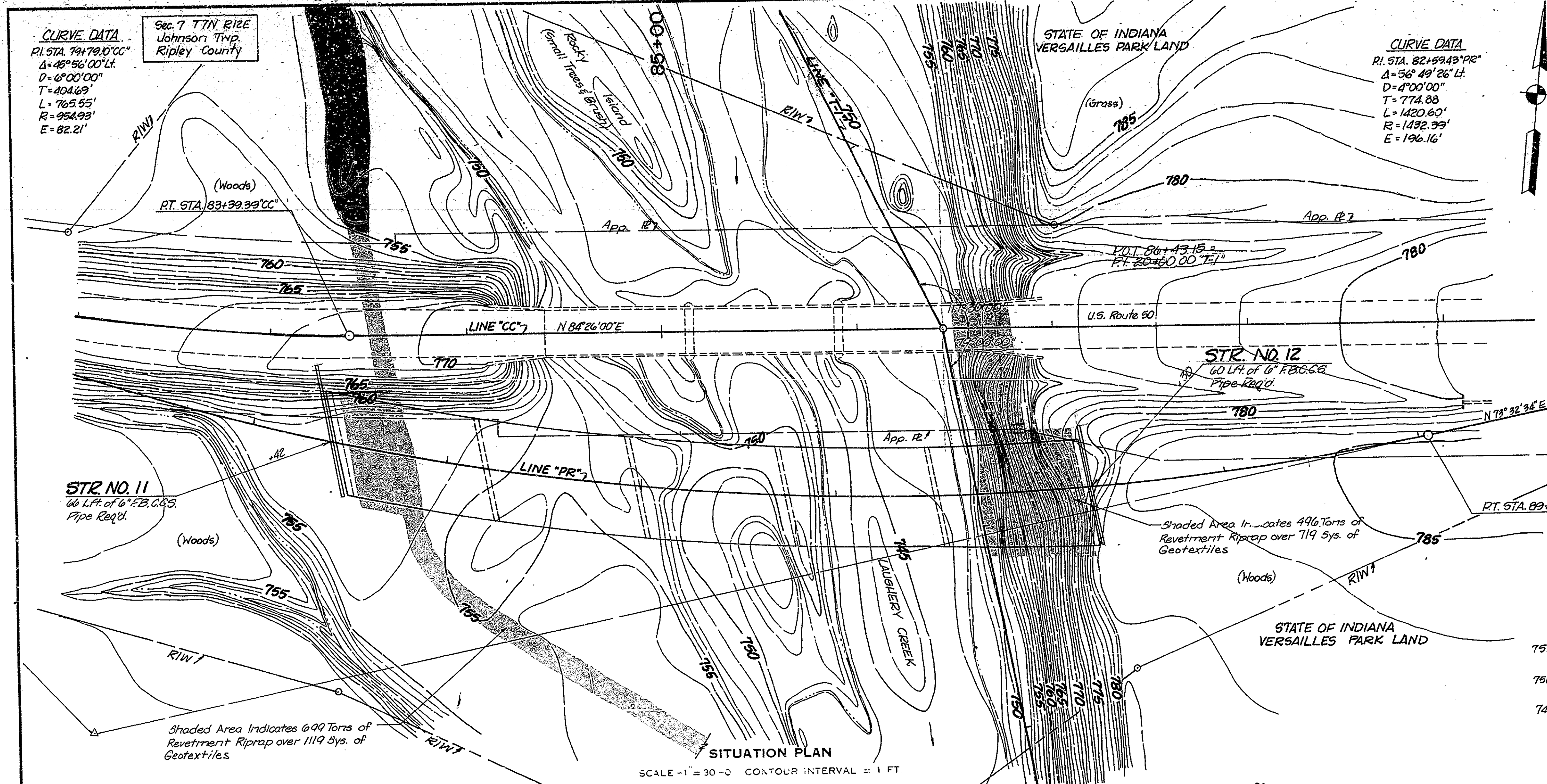


PLAN
CORRECTED
NOTE BOOK
BY: [Signature]

| TEST BORING NO. | T.B. NO. 6 | T.B. NO. | T.B. NO. | T.B. NO. | | | | | | | | | | |
|-----------------|--------------|----------|----------|-------------|-----|--------|----|-------|-------------|-----|-------|----|-------|-------------|
| STATION | 87 + 36 "PR" | | | | | | | | | | | | | |
| OFFSET | 26' RT. | | | | | | | | | | | | | |
| GROUND ELEV. | 783.8 | | | | | | | | | | | | | |
| SAMPLE | | SAMPLE | | SAMPLE | | SAMPLE | | | | | | | | |
| NO. | ELEV. | N. | ELEV. | DESCRIPTION | NO. | ELEV. | N. | ELEV. | DESCRIPTION | NO. | ELEV. | N. | ELEV. | DESCRIPTION |

| ELEV. | SAMPLE | | ELEV. | DESCRIPTION | SAMPLE | | ELEV. | DESCRIPTION | SAMPLE | | ELEV. | DESCRIPTION |
|-------|--------|-------|----------|---|--|-------|-------|-------------|-------------|-----|-------|-------------|
| | NO. | ELEV. | | | N. | ELEV. | | | DESCRIPTION | NO. | | |
| 785 | | | 783.8 | | | | | | | | | |
| | | | 783.3 | DARK BROWN MOIST SOFT SILTY LOAM WITH ROOTS | | | | | | | | |
| | JSS | -2- | | | | | | | | | | |
| | IASS | 782.3 | 3-4 | 781.3 | | | | | | | | |
| 780 | | | | BROWN MOIST MEDIUM STIFF SILTY LOAM WITH A TRACE OF ROOTS | | | | | | | | |
| | 2SS | 779.8 | 8-11-12 | | | | | | | | | |
| | 3SS | 777.3 | 7-9-11 | 776.3 | BROWN AND GRAY MOIST VERY STIFF SILTY CLAY LOAM | | | | | | | |
| 775 | | | | | | | | | | | | |
| | 4SS | | 11-23-36 | 774.8 | BROWN DRY VERY SOFT VERY HIGHLY WEATHERED SHALE WITH LIMESTONE LAYERS | | | | | | | |
| | 5SS | 773.8 | | | | | | | | | | |
| | | 773.0 | 11-60/3 | | | | | | | | | |
| | | 771.3 | | | | | | | | | | |
| 770 | | | | | | | | | | | | |
| | 6SS | 770.0 | 70/5 | 768.8 | GRAY DRY VERY SOFT HIGHLY WEATHERED SHALE WITH LIMESTONE LAYERS | | | | | | | |
| 765 | | | | | | | | | | | | |
| | C1NX | 763.8 | RQD=7 | | GRAY SHALE, SILTY, FISSILE WITH OCCASIONAL LIMESTONE LAYERS, SLIGHTLY WEATHERED SEAM FROM 22.4' TO 22.6'. LIMESTONE LAYERS TO 3" AVERAGE 2" MEDIUM HARD TO HARD WITH SOME HARD LIMY LAYERS, SHALE 88%, LIMESTONE 12% | | | | | | | |
| 760 | | | | | | | | | | | | |
| | C2NX | | RQD=7 | 758.8 | BORING COMPLETED AT ELEV. 758.8 | | | | | | | |
| 755 | | | | | | | | | | | | |
| 750 | | | | | | | | | | | | |

SOIL BORINGS
 SCALES: HORIZ. 1"=30' VERT. 1"=5'
 DATE: Apr. 15, 1989
 PROJECT NO. ST-042-9(D)
 CONTRACT NO.
 BRIDGE FILE 50-69-6851

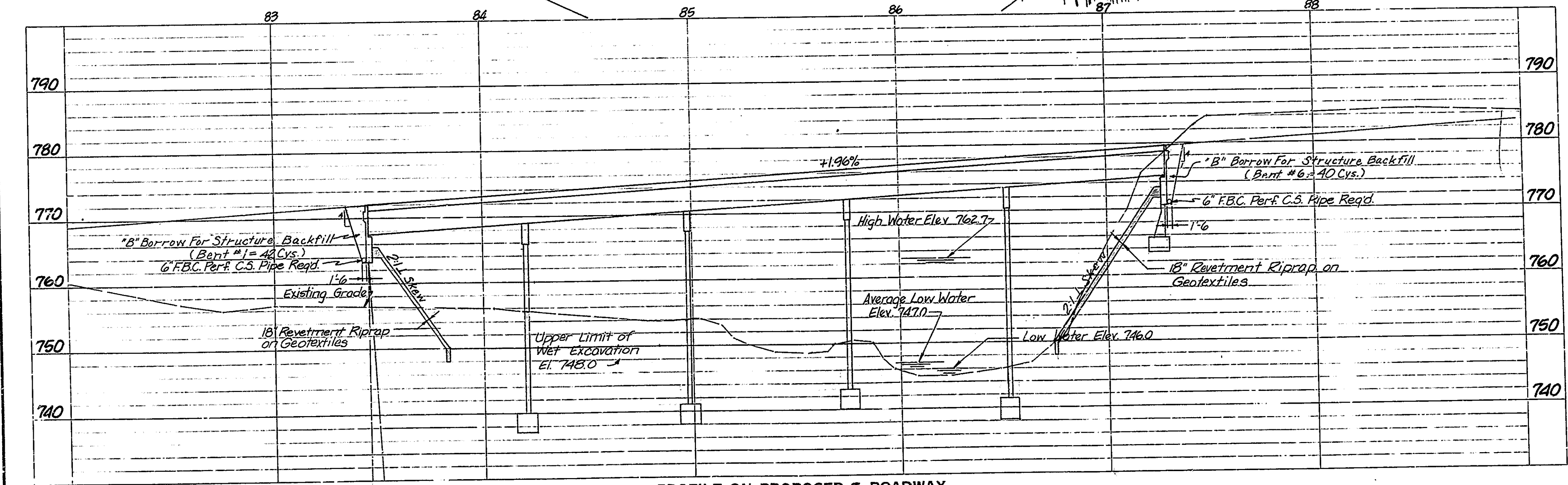
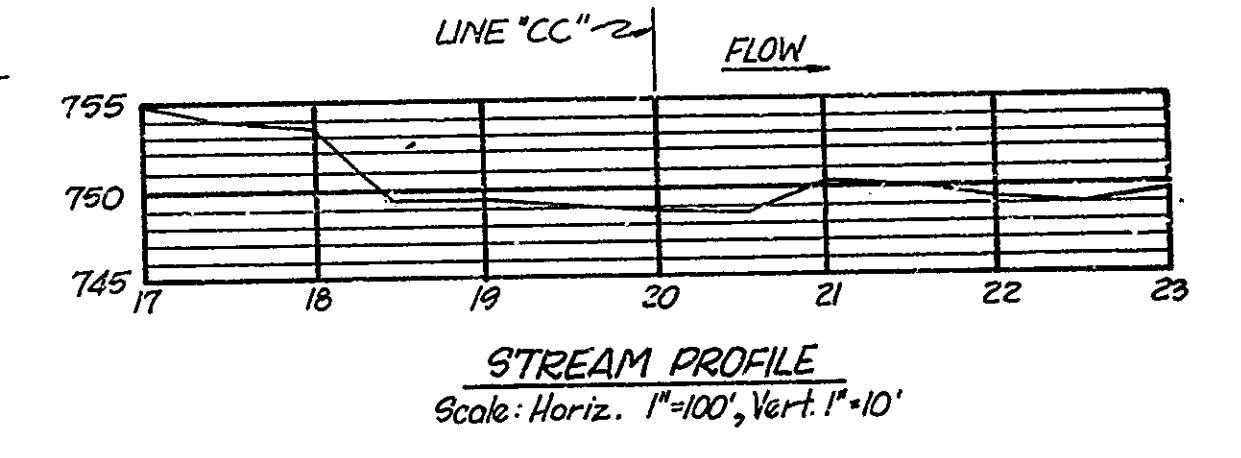


PRESENT STRUCTURE
 PRESENT STRUCTURE IS A REINFORCED CONCRETE ARCH WITH 3 SPANS AT 72'0" EACH. CLEAR ROADWAY IS 22'0" TO BE REMOVED

| EARTHWORK TABLE | |
|----------------------------------|-------------|
| Fill + 20 % | 15,875 Cys. |
| Common Excavation | 9,541 Cys. |
| Usable Waterway Excavation (70%) | 7,075 Cys. |
| Waste | 741 Cys. |
| Benching* | 1,594 Cys. |
| Total Waterway Excavation | 10,107 Cys. |
| Wet Excavation | 425 Cys. |
| Dry Excavation | 241 Cys. |
| Class "X" Excavation | 142 Cys. |

* (Estimate) No Direct Payment. Benchng Will NOT be Paid for as Common Excavation.

| PUBLIC UTILITIES | |
|--------------------------------------|--|
| Electric - Southern Indiana R.E.M.C. | |
| South Buckeye St. 100 Drawer A | |
| Osgood, Indiana 47037 | |
| Telephone - ConTel of Indiana | |
| 1233 West Tipton Street | |
| Seymour, Indiana 47274 | |
| No Gas, Water, or Sewer Lines | |



| HYDRAULIC DATA | |
|---|---------------|
| DRAINAGE AREA | 170 Sq. MILES |
| DESIGN FLOOD (Q ₁₀₀) | 31,000 CFS |
| HIGH WATER ELEVATION | 762.7 MSL |
| MEAN VELOCITY | 7.5 FPS |
| REQUIRED WATERWAY OPENING | 4130 SFT. |
| WATERWAY OPENING PROVIDED BELOW EL. 762.7 | 4283 SFT. |
| WATERWAY OPENING PROVIDED THROUGH EXIST. STR. | 3200 SFT. |
| MINIMUM LOW STRUCTURE ELEVATION | 765.7 FT. |

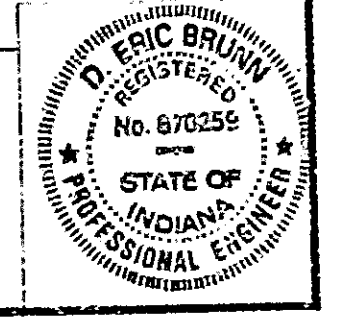
LAYOUT
 CONTINUOUS PRESTRESSED CONCRETE I-BEAM BRIDGE
 5 SPANS: 1 @ 76'-2", 3 @ 76'-11", 1 @ 76'-2"
 SKEW: 15° LEFT 45°-4 CLEAR ROADWAY
 OVER LAUGHERY CREEK ON U.S. ROUTE 50

INDIANA STATE HIGHWAY COMMISSION
 RIPLEY COUNTY

SCALE: AS NOTED DATE: **Sept. 15 1999**

SUBMITTED FOR APPROVAL: **D. Eric Bruner**

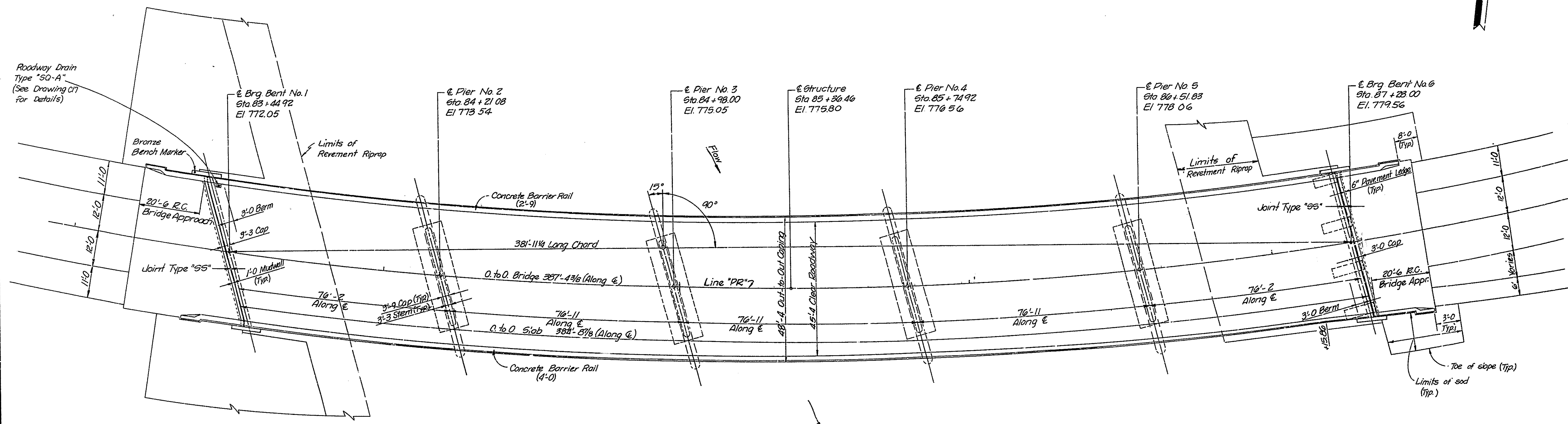
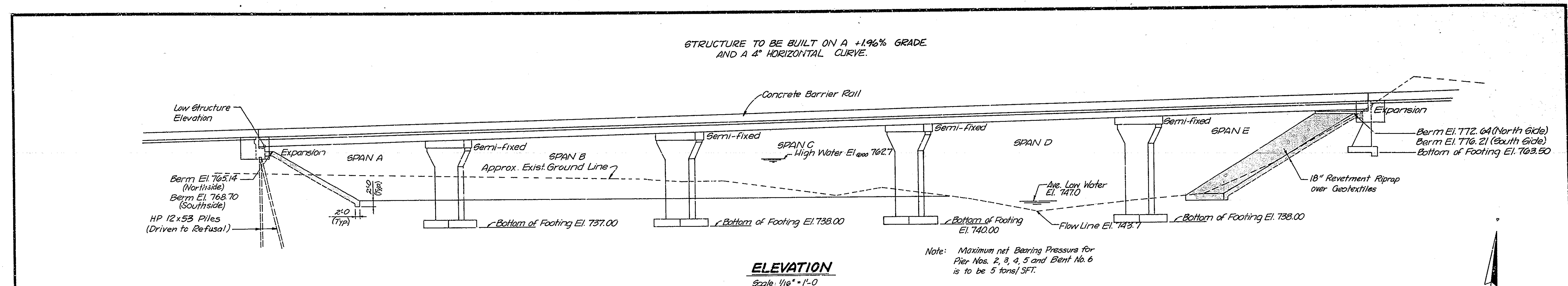
DRAWING: C₁ OF C₂₂ SHEET: 16 OF 84
 PROJECT: ST-024-9(D) STATION: -
 BRIDGE CONTRACT NO.
 BRIDGE FILE: 50-69-6851



U.S. Route 50 over Laughery Creek

DRAWN: **2/19/91 C.K.D. 82**
 DESIGNED: C.P.D.
 TPA. ED. C.P.D.

PROFILE ON PROPOSED ROADWAY
 SCALES: HORIZ. 1"=30'-0" VERT. 1"=10'-0"
 NOTE: FIELD NOTES, BOOK BR-2747



GENERAL PLAN

CONTINUOUS PRE-STRESSED I-BEAM BRIDGE
5 SPANS: 1 @ 76'-2", 3 @ 76'-11", and 1 @ 76'-2"
SKEW 15° LT 45'-4" CLEAR ROADWAY
OVER LAUGHERY CREEK ON U.S. ROUTE 50

INDIANA DEPARTMENT OF HIGHWAYS

SCALE: - As Shown DATE: **Dec. 15 1989**

DESIGNED: **RDS** CKD
DRAWN: **BLK & KCB** CKD
TRACED: CKD

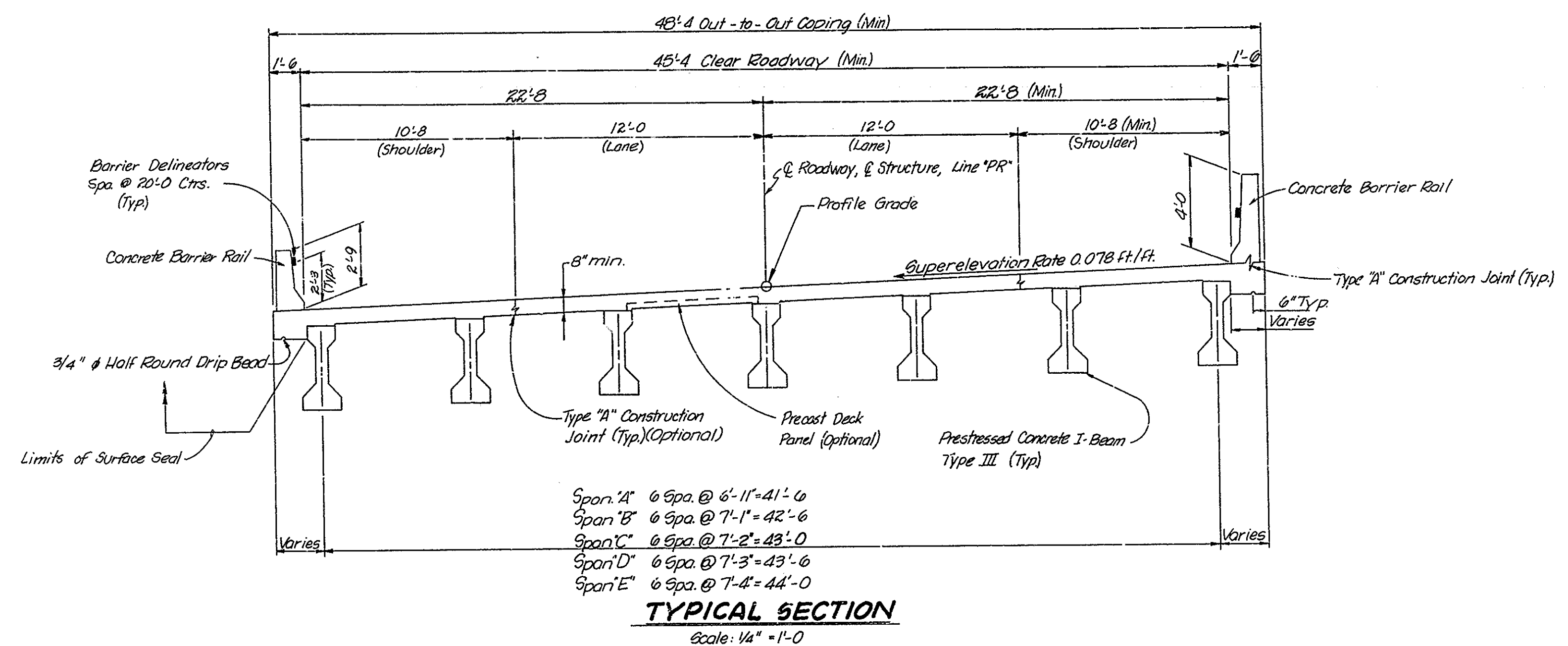
DRAWING: C2 of C24 SHEET: 17 OF 84
PROJECT: - 87-042-9(D) STATION: -
BRIDGE CONTRACT NO.
BRIDGE FILE: - 50-69-0851

D. Eric Brunny
REGISTERED PROFESSIONAL ENGINEER
No. 070259
STATE OF INDIANA

DESIGNED: **RDS** CKD
DRAWN: **BLK & KCB** CKD
TRACED: CKD

SF-22317

US Rte. 50 over Laughery Creek



GENERAL NOTES

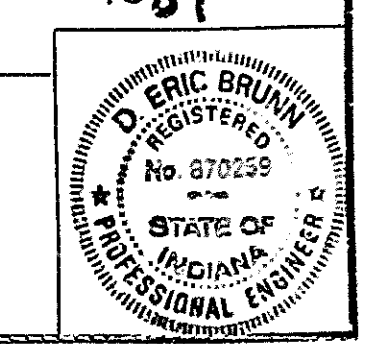
1. Depth of Footings to be extended if found necessary. See Article 206.11(c) of the Specifications.
2. Footings must extend a minimum of 6" into solid rock.
3. Reinforcing steel is not to be ordered until rock is uncovered.
4. Reinforcing Steel covering shall be 2 1/2" in top, and 1" minimum in bottom of the floor slab, 3" in footing (except bottom steel which shall be 4"), 1 1/2" for stirrups in caps, and 2" in all other parts unless otherwise noted.
5. Concrete in end bents, top of pier stem down to construction joint and in pier caps is to be Class "A".
6. Concrete in Footings and pier stems to construction joint is to be Class "B".
7. Concrete in Superstructure and Barrier Railing to be Class "C".
8. Continuous Concrete Pours shall be required between construction joints as shown in detail plans.
9. Chamfer exposed edges 1" unless noted.
10. Top of deck, face of deck coping, ends of deck at bents, underside of bridge deck from face of deck coping to face of exterior beam, bent seats, face of bent mudwalls, tops of pier caps, and all surfaces of concrete barrier railing are to be surface sealed. (Est. Quantity = 22,280 sq. ft.)
11. All barrier railing steel and steel in superstructure is to be epoxy-coated.
12. Construct 18" riprap at locations shown on layout.
13. Piles shall have minimum bearing value shown on detail drawings. Determine pile length by Article 701 of the specifications.
14. Tolerance in position of pile head 2" maximum.

| STANDARD DRAWINGS | | |
|-------------------|------|--|
| BRIDGE | ROAD | PURPOSE |
| B25 | | Barrier Rail Transition (Case I) |
| C1 | | Reinforcing Bar Notes, Method of Splicing, Steel II-Piles |
| C3 | | Type IA Joint, Construction Joint Type "A", Optional Railing Vertical Reinforcement Splice |
| C5 | | Prestressed Deck Panels |
| D | | Roadway Drain, Type "SD", Grate "A" |
| PB3 | | Prestressed Concrete T-Beam, Type III |
| PB10 | | Prestressed Beam Tolerances |
| PB11 | | Elastomeric Bearing Pads for Concrete Beams, Type 3 |
| S1 | | "B" Borrow for Structure Backfill |
| A | | Wire Fabric |
| MB | | Paved Side Ditch, Types "H" & "K" |
| ME5 | | Grated Box End Section, Ty. II, 6'-1, 24 in. |
| MI2 | | Public Road Approach, Type "C" |
| MN | | Underdrains, Pipe Backfill |
| MP | | Pipe Group "D" |
| MT3 | | Sign Details |
| GR2 | | Guardrail, Type "BS" and "HS" |
| GR4A | | Guardrail, Type "HS" |
| GR10 | | Guardrail End Treatment, Type I |
| 1, 2A, 3, 5 | | Detours |
| | | Detour Signs |

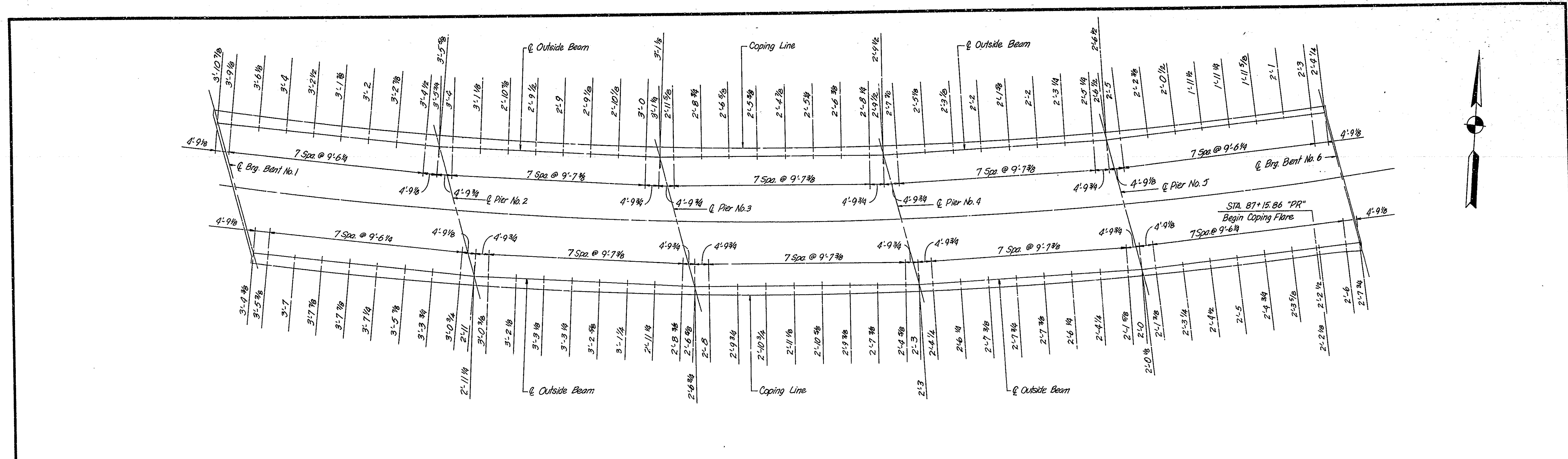
GENERAL PLAN
INDIANA DEPARTMENT OF HIGHWAYS

SCALE: - As Shown DATE: **Apr. 15 1984**
D. Eric Brunner

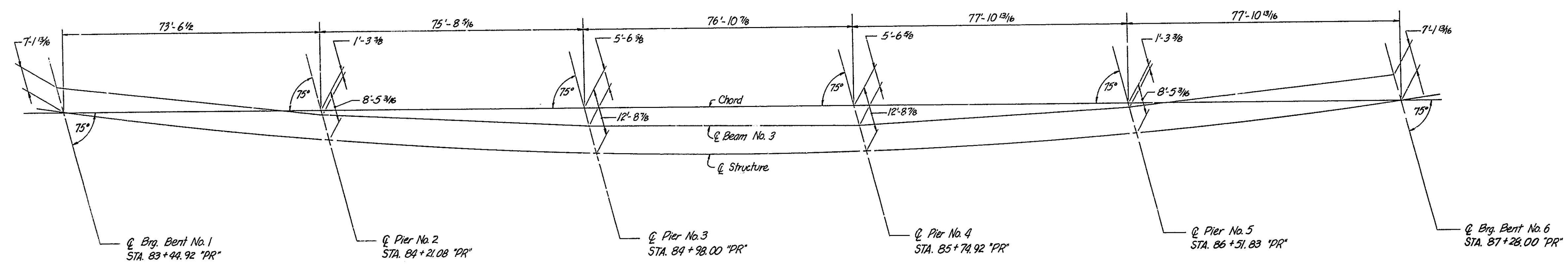
DRAWING: C3 of C24 SHEET: 18 OF 84
PROJECT: 67-042-9(10) STATION: -
BRIDGE CONTRACT NO.
BRIDGE FILE: 50-69-6851



DESIGNED: *EDS* C.K.D.
DRAWN: *KCB* C.K.D.
TRACED: C.K.D.
SF-22317



COPING OFFSETS



Curve Data
 P.I. STA. 82+59.43 "PR"
 $\Delta = 56^\circ 49' 26''$ Lt.
 $D = 4' 00'' 00''$
 $T = 774.88$
 $L = 1420.60'$
 $R = 1432.39'$
 $E = 196.16'$

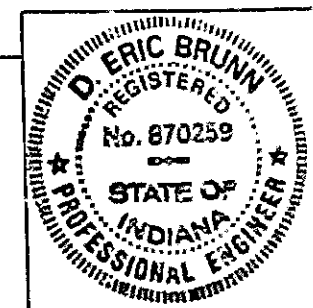
TIE-UP DIMENSIONS

**COPING OFFSETS & TIE-UP DIMENSIONS
 INDIANA DEPARTMENT OF HIGHWAYS**

SCALE: - 1/8" = 1'-0" DATE: **Sept. 15 1989**

D. Eric Bruner

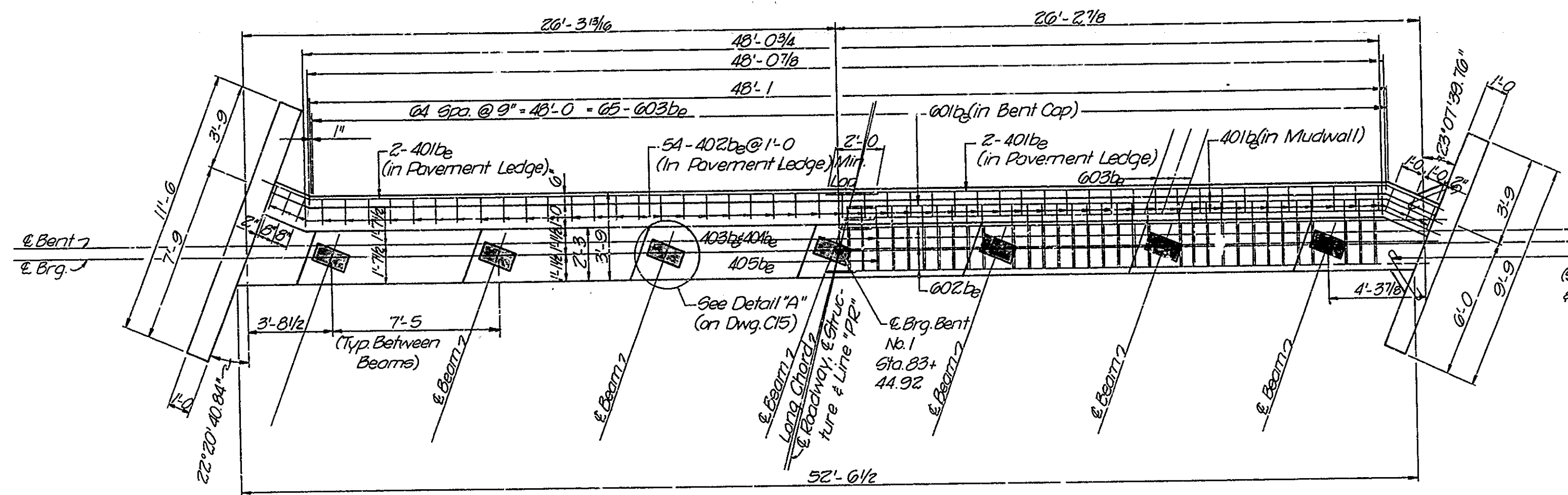
DRAWING: C4 OF C24 SHEET: 19 OF 84
 PROJECT: - ST-042-9(0) STATION: -
 BRIDGE CONTRACT NO.
 BRIDGE FILE: - 50-69-6851



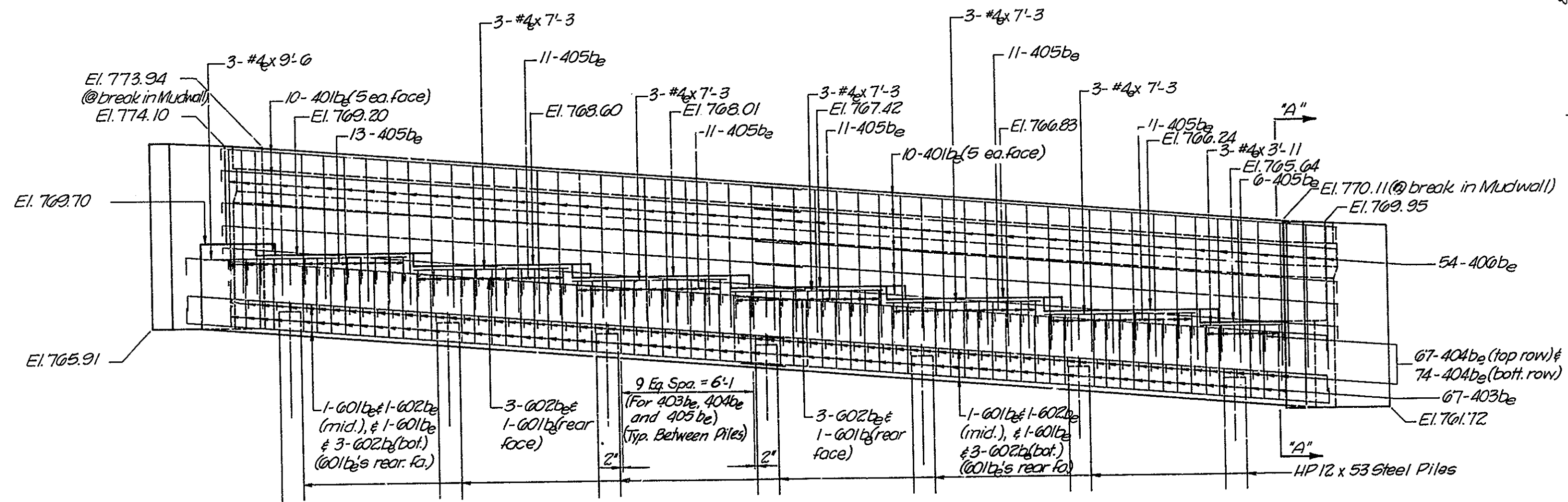
| | |
|----------|--------|
| DESIGNED | C.K.D. |
| DRAWN | C.K.D. |
| TRACED | C.K.D. |

SF-22317

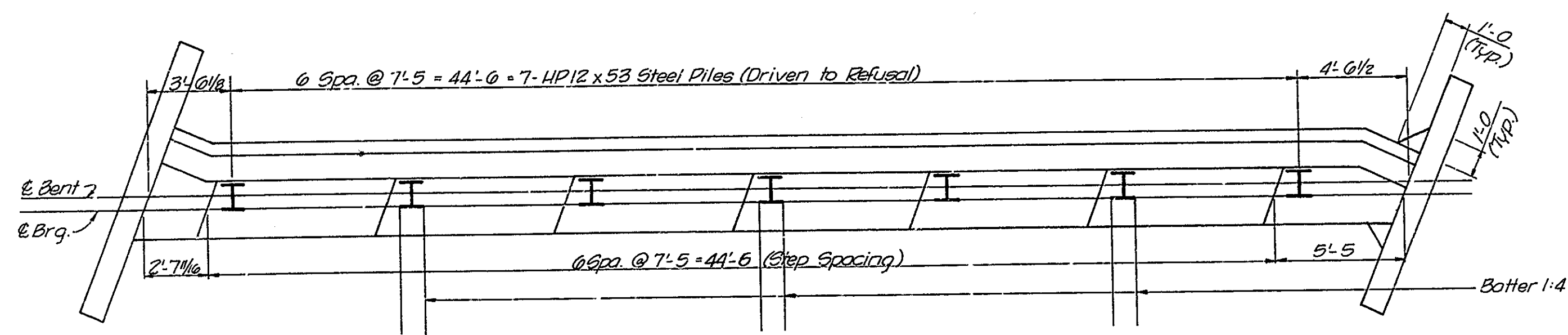
Loughery Creek



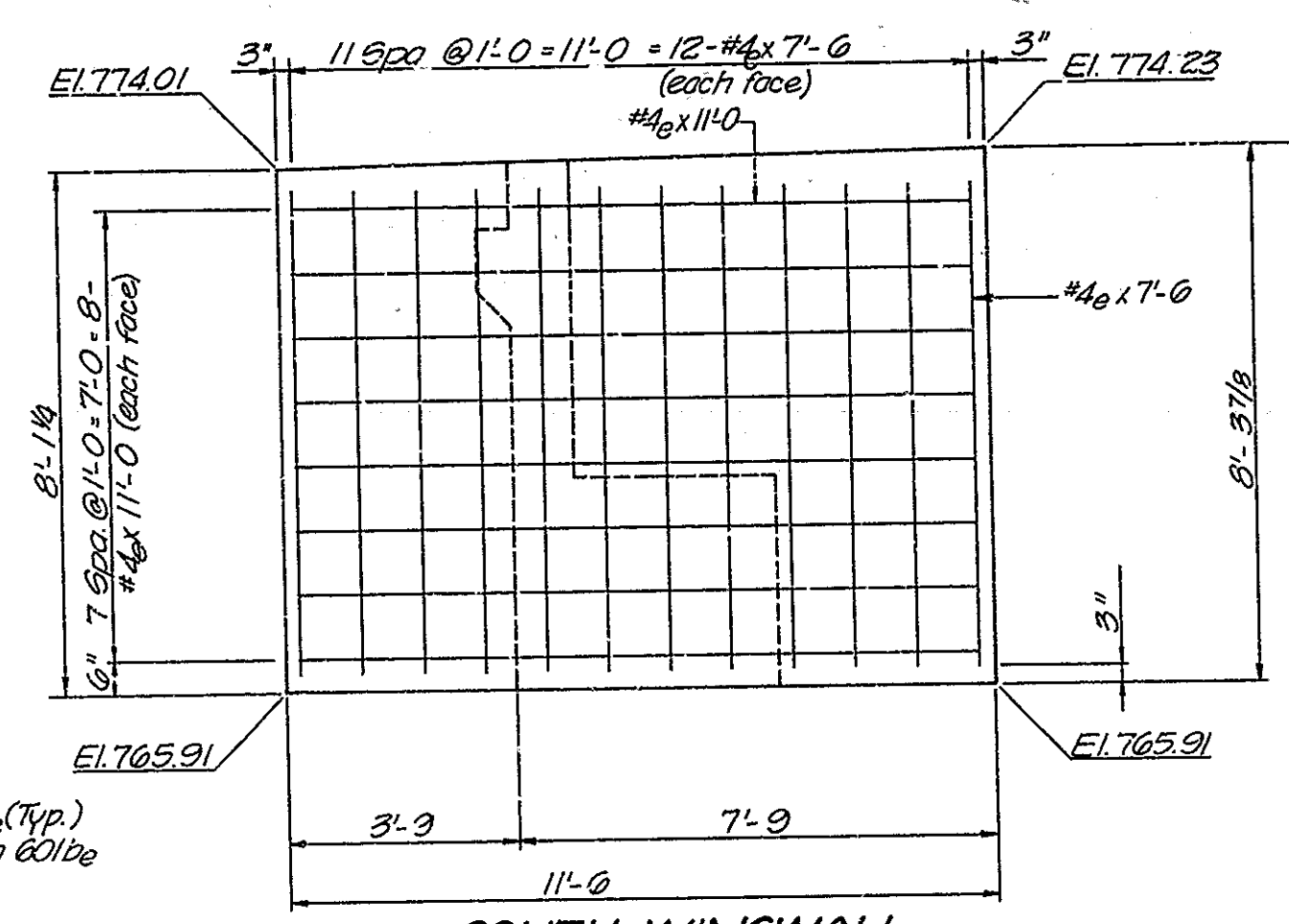
CAP PLAN
Scale: 1/4" = 1'-0"



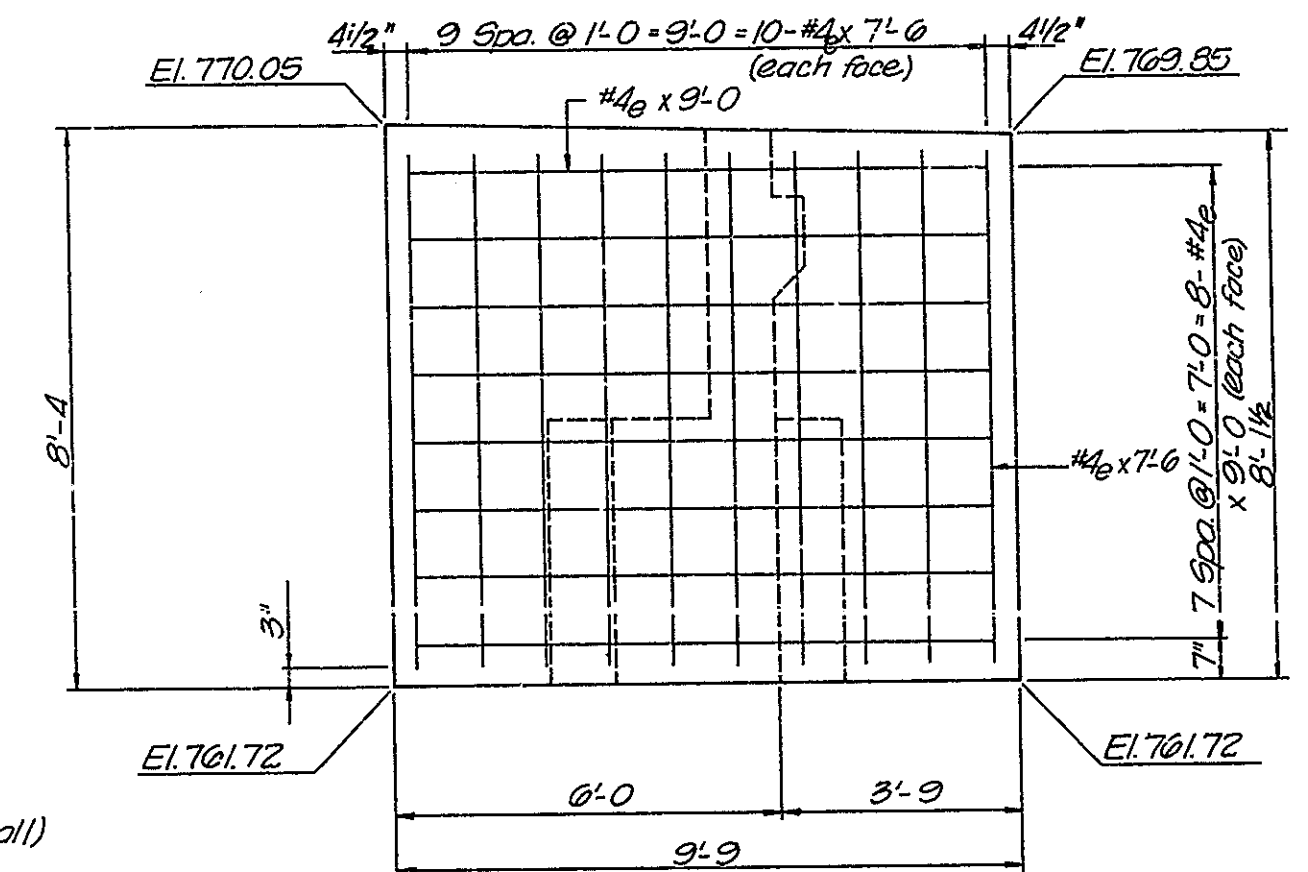
ELEVATION
Scale: 1/4" = 1'-0"



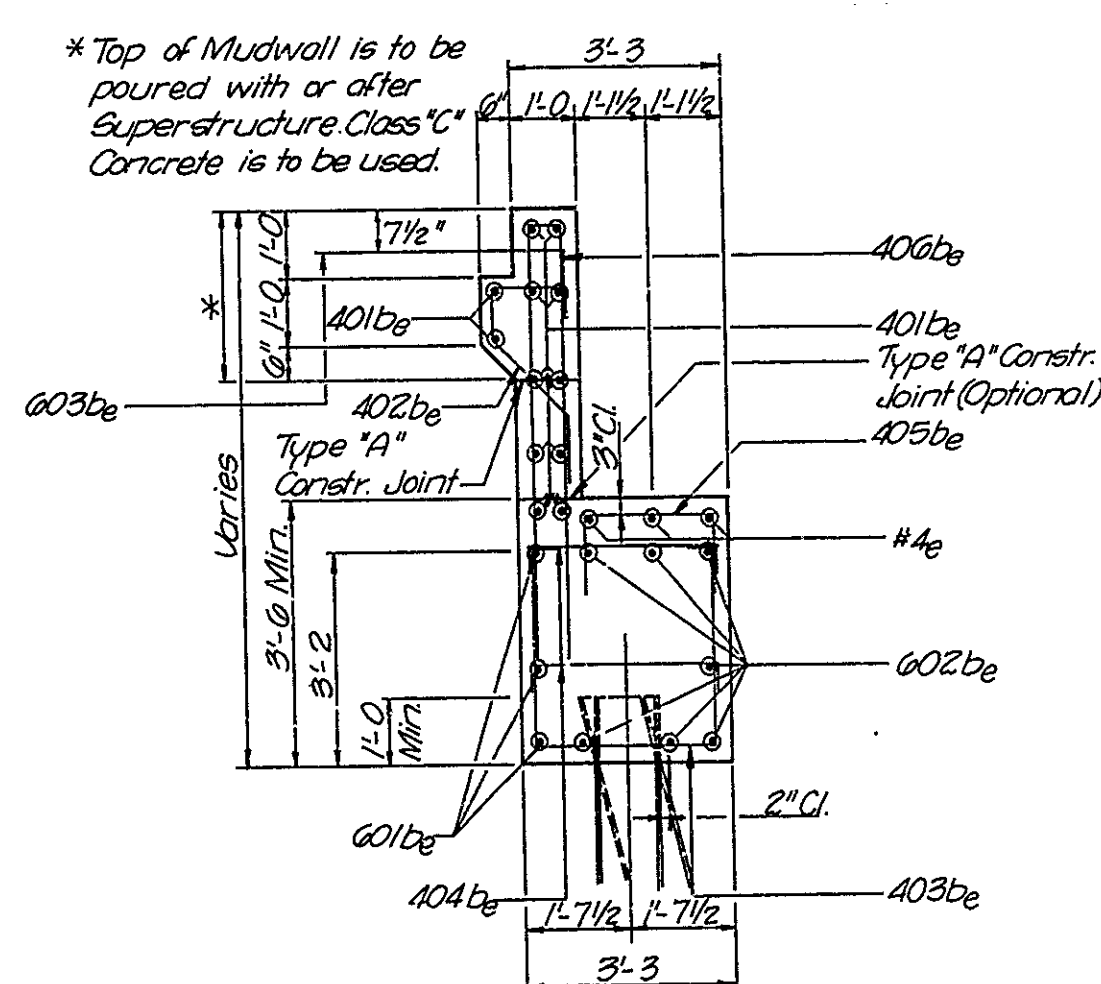
PILE PLAN and STEP DIMENSIONS
Scale: 1/4" = 1'-0"



SOUTH WINGWALL
Scale: 3/8" = 1'-0"



NORTH WINGWALL
Scale: 3/8" = 1'-0"



SECTION 'A-A'
Scale: 3/8" = 1'-0"

BILL OF MATERIALS

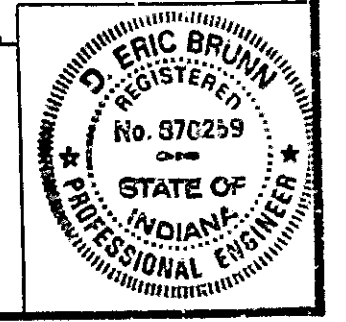
| SIZE or MK | QUANTITY | LENGTH | WEIGHT |
|---------------------------------|----------|---------|--------------|
| 601be | 6 | 28'-2" | |
| 602be | 14 | 28'-10" | |
| 603be | 65 | 4'-10" | |
| Total #6a | | | 1334# |
| 401be | 24 | 28'-0" | |
| 402be | 54 | 4'-8" | |
| 403be | 67 | 9'-7" | |
| 404be | 14 | 3'-6" | |
| 405be | 74 | 1'-4" | |
| 406be | 54 | 13'-4" | |
| 440be | 6 | 3'-6" | |
| #4a | 16 | 11'-0" | |
| #4a | 3 | 9'-6" | |
| #4a | 16 | 9'-0" | |
| #4a | 44 | 7'-6" | |
| #4a | 15 | 7'-3" | |
| #4a | 3 | 3'-11" | |
| Total #4a | | | 2608# |
| TOTAL EPOXY-COATED STEEL | | | 3342# |
| Concrete | | | |
| Class 'A' In Substructure | | | 31.3 CYB |
| Class 'C' In Superstructure | | | 62.0 CYB |
| Piles | | | |
| 7-HP12x53 Piles @ 26.0'(Avg) | | | 182 LFT. |
| Miscellaneous | | | |
| Surface Seal | | | 608 SF. |

NOTES:

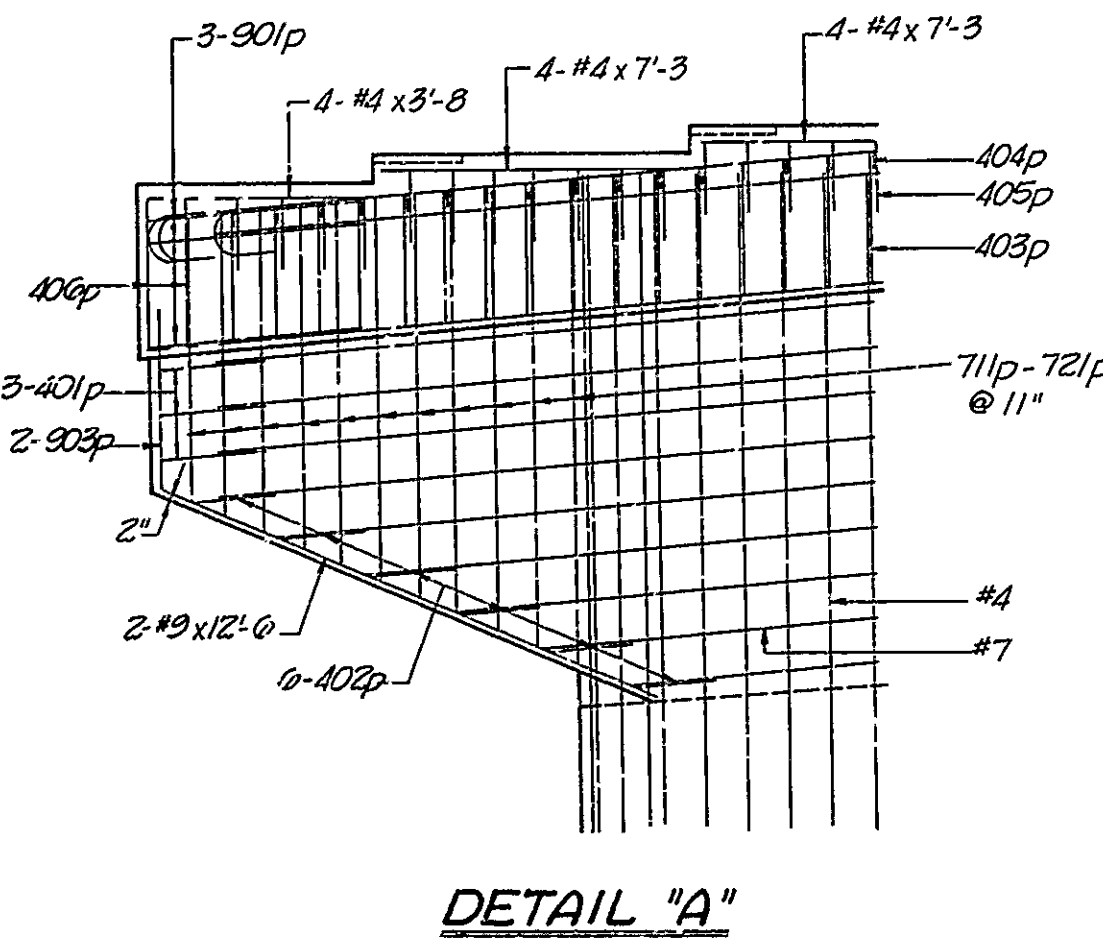
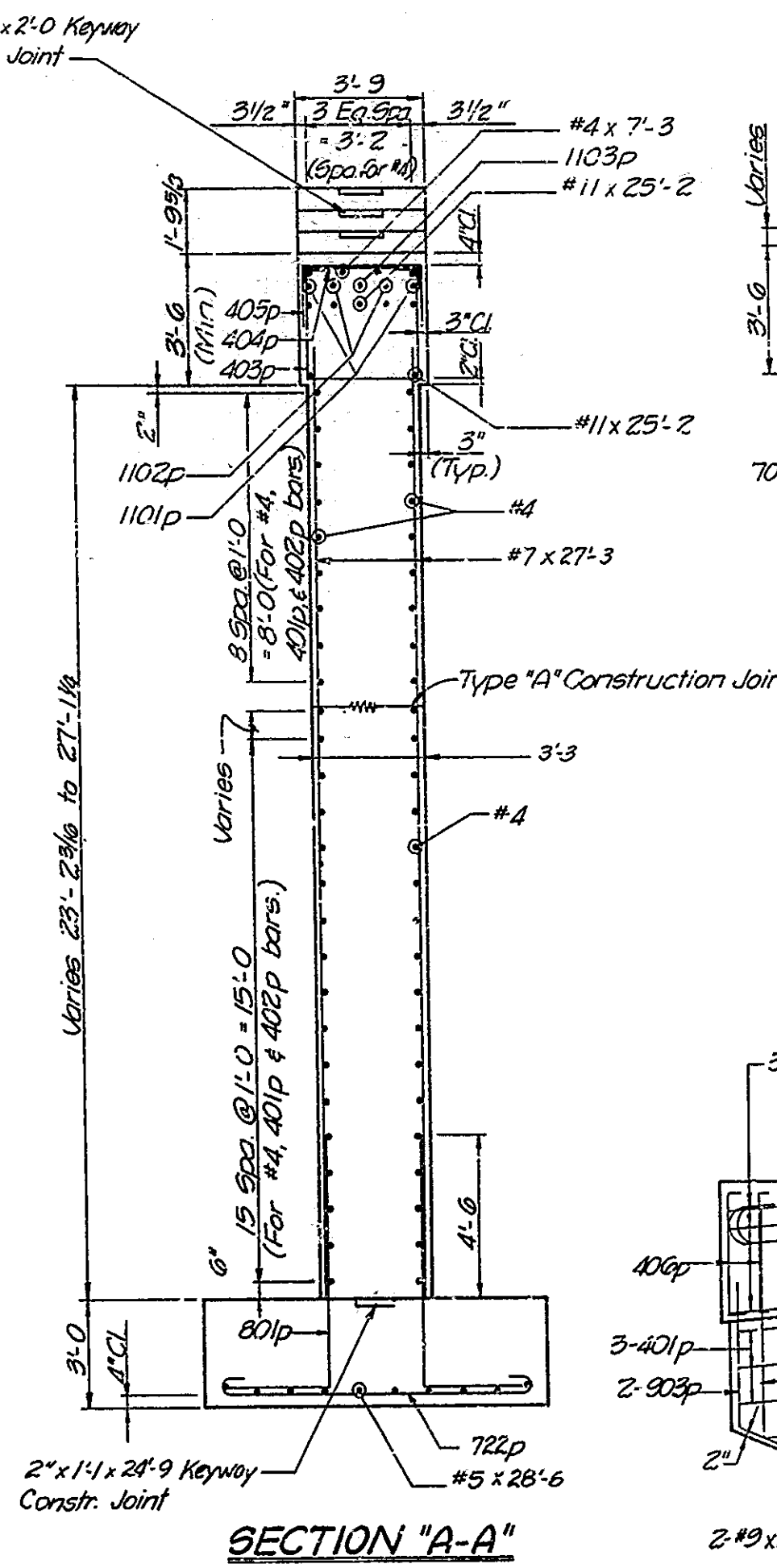
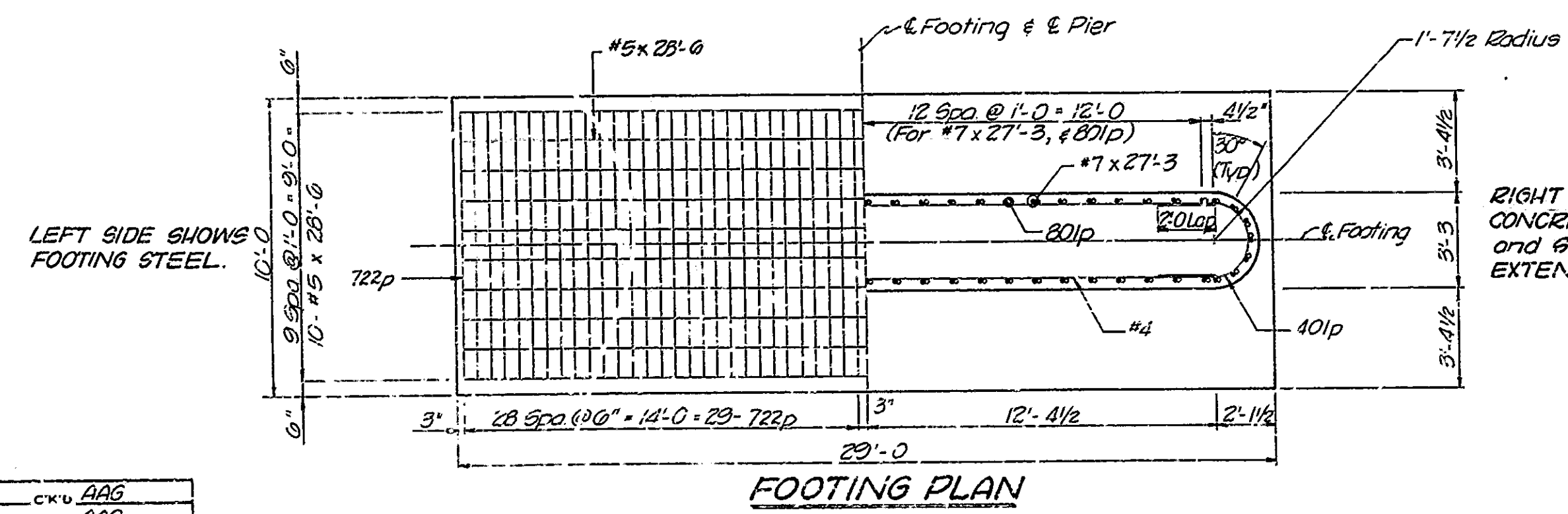
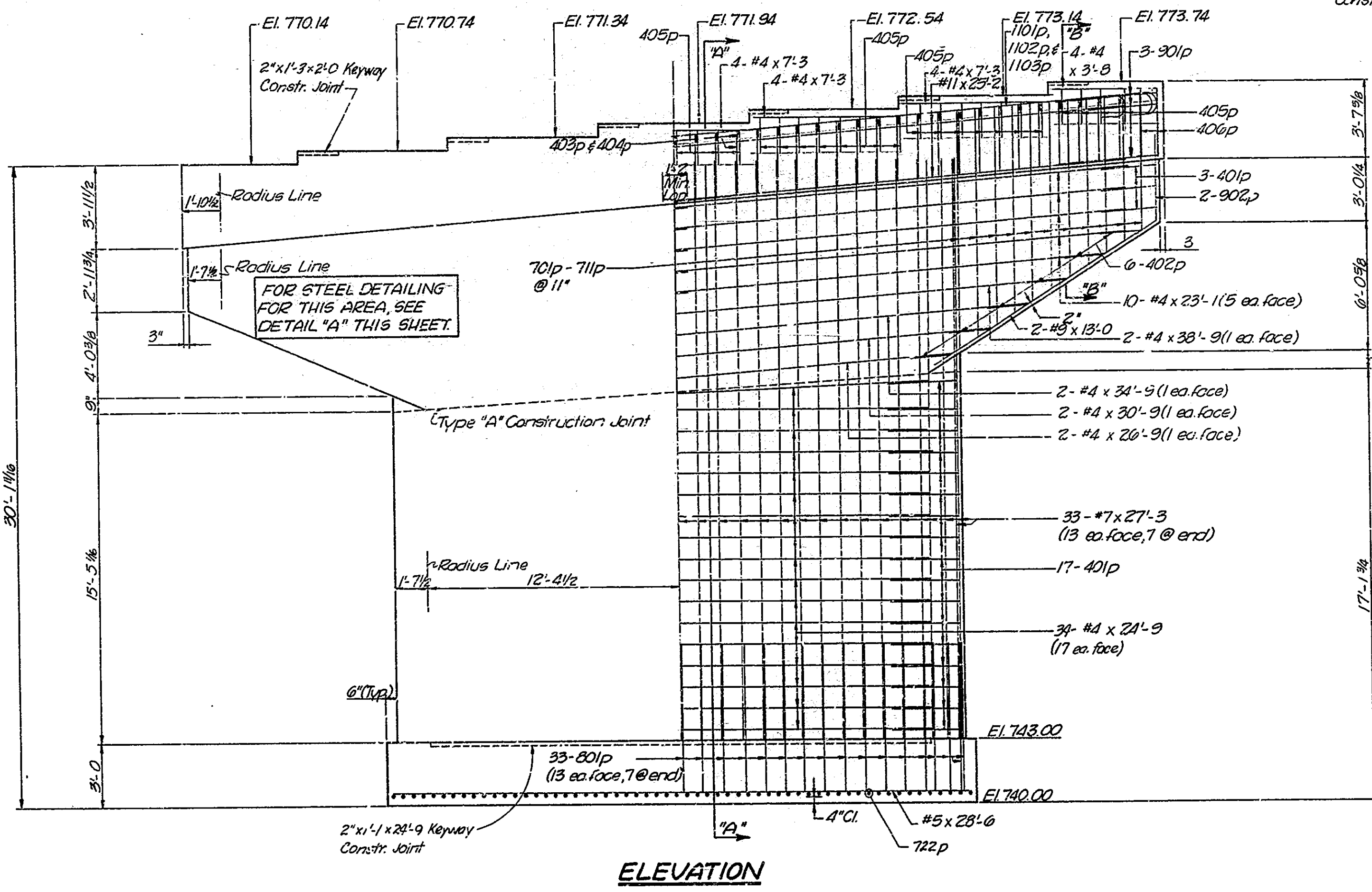
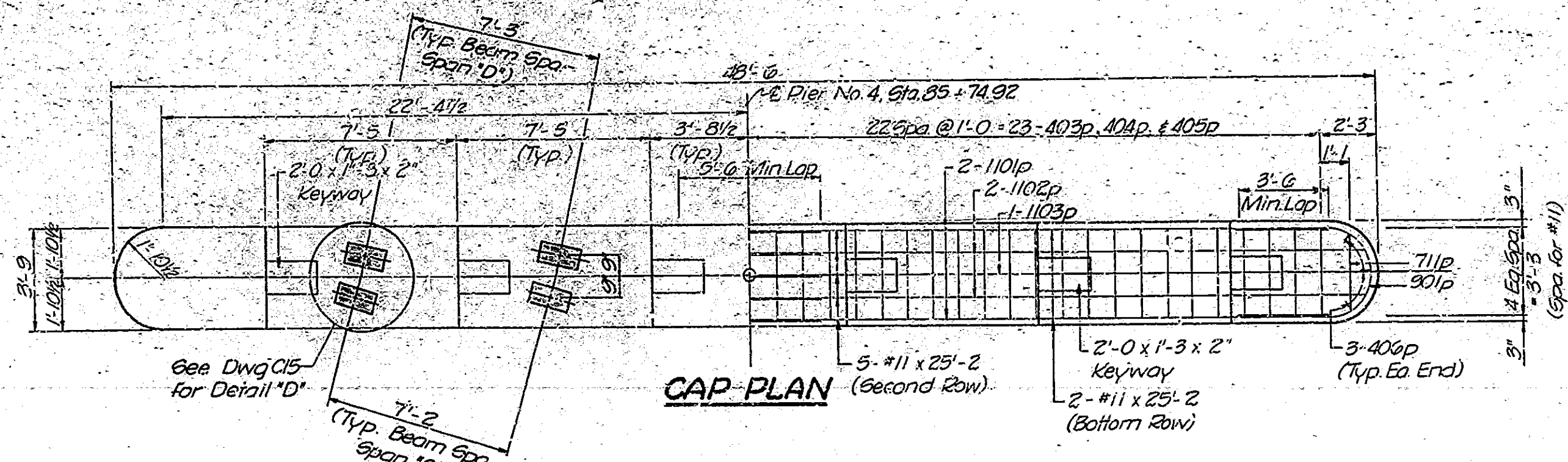
- See Dwg. C4, Tie-up Diagram, for relationship of beams to End Bent No. 1.
- See Bridge Standard C1 for Reinforcing Bar Notes.
- See Bridge Standard C3 for Type "A" Construction Joint.
- See Dwg. C3, for General Notes.
- See Dwg. C20 for Mk Bar Details.

SCALE: - As Shown
INDIANA DEPARTMENT OF HIGHWAYS
 DATE: **APR 15 1989**
 DRAWING: C5 OF C24 SHEET: 20 OF 84
 PROJECT: 57-042-9(D) STATION: -
 BRIDGE CONTRACT NO.
 BRIDGE FILE: 50-69-6851

DESIGNED: C.K.D.
 DRAWN: C.K.D.
 TRACED: C.K.D.
 SF-22317



Loughery Creek



BILL OF MATERIALS

| SIZE or MK | QUANTITY | LENGTH | WEIGHT |
|--------------------------------|----------|---------|---------------|
| 1101p | 4 | 26'-9" | |
| 1102p | 4 | 28'-7" | |
| 1103p | 2 | 22'-4" | |
| #11 | 14 | 25'-2" | |
| Total #11 | | | 3339# |
| 901p | 6 | 11'-10" | |
| 902p | 2 | 17'-0" | |
| 903p | 2 | 16'-6" | |
| #9 | 2 | 13'-0" | |
| #9 | 2 | 12'-6" | |
| Total #9 | | | 643# |
| 801p | 64 | 10'-2" | |
| Total #8 | | | 1738# |
| 701p | 1 | 26'-3" | |
| 702p | 1 | 25'-3" | |
| 703p | 1 | 24'-3" | |
| 704p | 1 | 23'-3" | |
| 705p | 1 | 22'-3" | |
| 706p | 1 | 21'-3" | |
| 707p | 1 | 20'-3" | |
| 708p | 1 | 19'-3" | |
| 709p | 1 | 18'-3" | |
| 710p | 1 | 17'-5" | |
| 711p | 2 | 16'-3" | |
| 712p | 1 | 17'-3" | |
| 713p | 1 | 18'-1" | |
| 714p | 1 | 19'-1" | |
| 715p | 1 | 19'-11" | |
| 716p | 1 | 20'-11" | |
| 717p | 1 | 21'-9" | |
| 718p | 1 | 22'-7" | |
| 719p | 1 | 23'-5" | |
| 720p | 1 | 24'-5" | |
| 721p | 1 | 25'-3" | |
| 722p | 58 | 10'-8" | |
| #7 | 64 | 27'-3" | |
| Total #7 | | | 5716# |
| #5 | 10 | 28'-6" | |
| Total #5 | | | 298# |
| 401p | 40 | 6'-6" | |
| 402p | 12 | 6'-11" | |
| 403p | 45 | 10'-0" | |
| 404p | 45 | 8'-0" | |
| 405p | 45 | 6'-7" | |
| 406p | 6 | 3'-11" | |
| #4 | 2 | 38'-9" | |
| #4 | 2 | 34'-9" | |
| #4 | 2 | 30'-9" | |
| #4 | 2 | 26'-9" | |
| #4 | 34 | 24'-9" | |
| #4 | 20 | 23'-1" | |
| #4 | 20 | 7'-3" | |
| #4 | 8 | 3'-8" | |
| Total #4 | | | 2026# |
| Total Reinforcing Steel | | | 13820# |
| Concrete | | | |
| Class 'B' In Footing | | | 32.2 CYS |
| Class 'B' Above Footing | | | 53.5 CYS |
| Class 'A' In Substructure | | | 67.4 CYS |
| Miscellaneous | | | |
| Surface Seal | | | 179 SF |

NOTES:

- See Dwg. C4, Tie-up Diagram, for relationship of beams to Pier No. 4.
- See Bridge Standard C1 for Reinforcing Bar Notes.
- See Dwg. C20 for MK Bar Details.
- See Dwg. C3 for General Notes.
- See Bridge Standard C3 for Type "A" Construction Joint.
- Reinforcing steel is spaced symmetrically about $\frac{1}{2}$ of Pier, except as shown in Detail "A".

PIER NO. 4 DETAILS
INDIANA DEPARTMENT OF HIGHWAYS

SCALE: -- 1/4" = 1'-0" DATE: **Apr 15 1989**

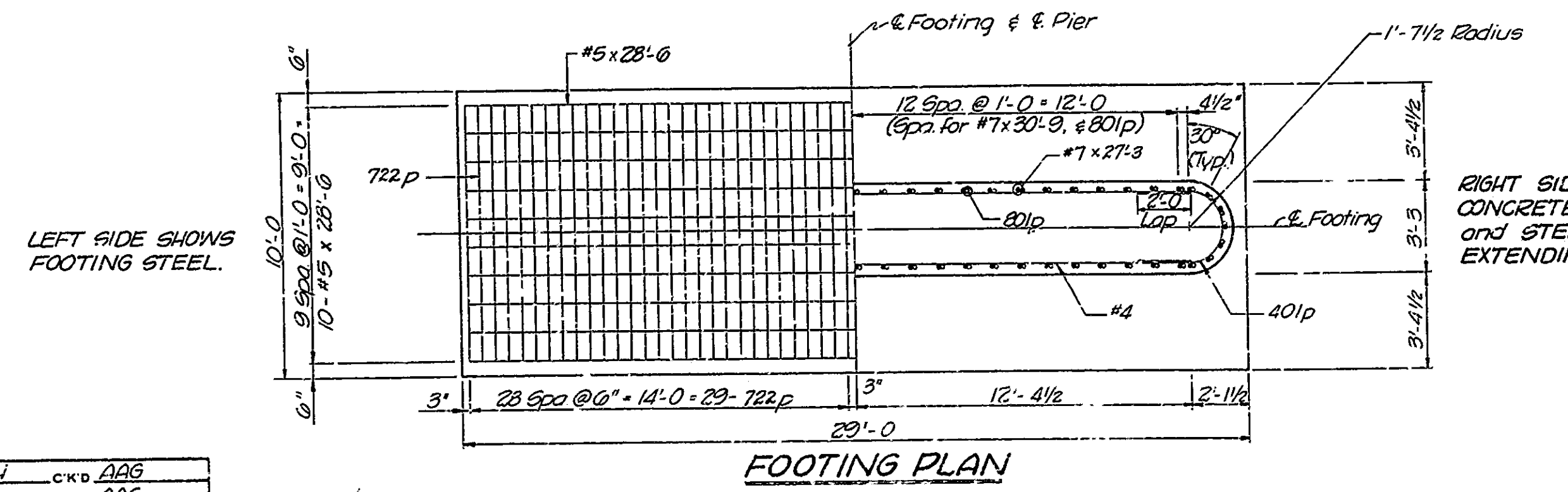
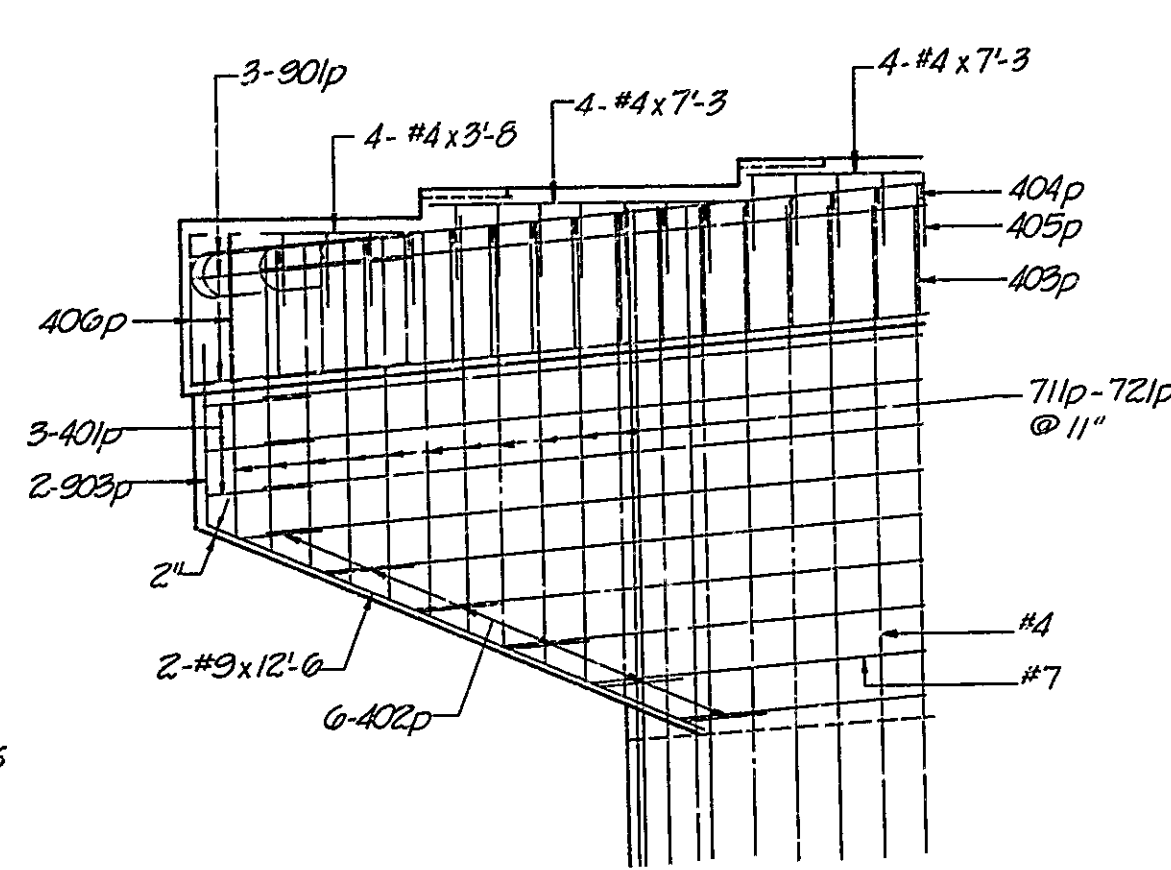
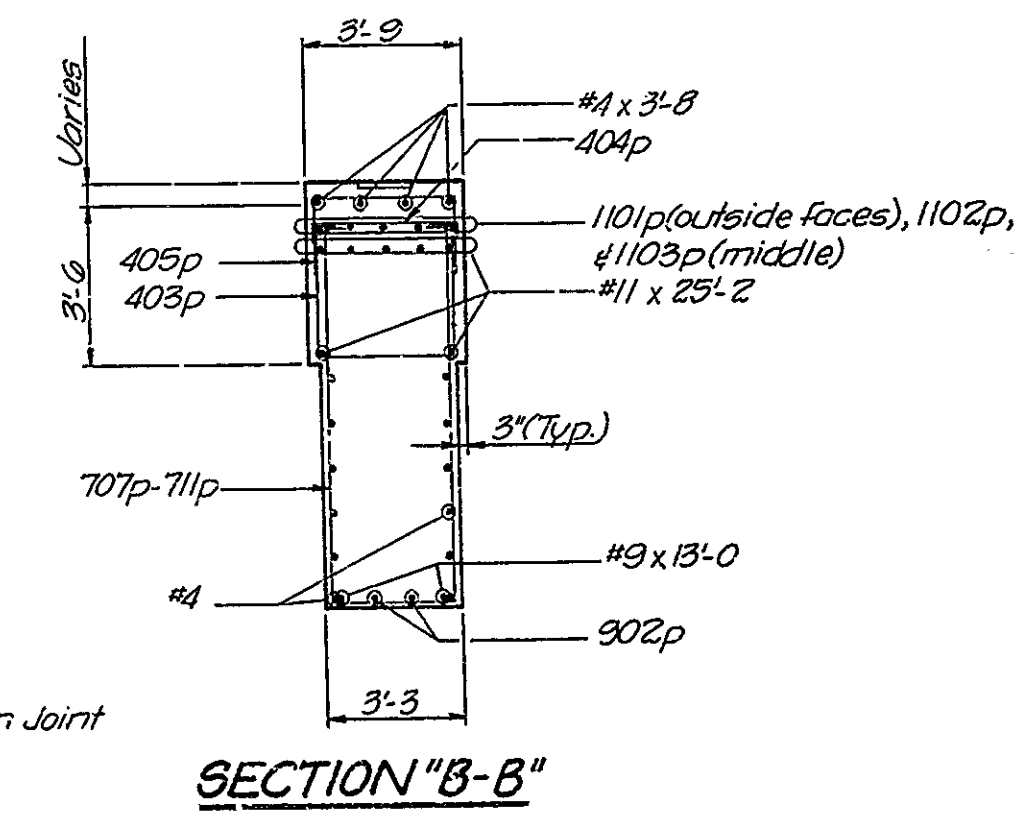
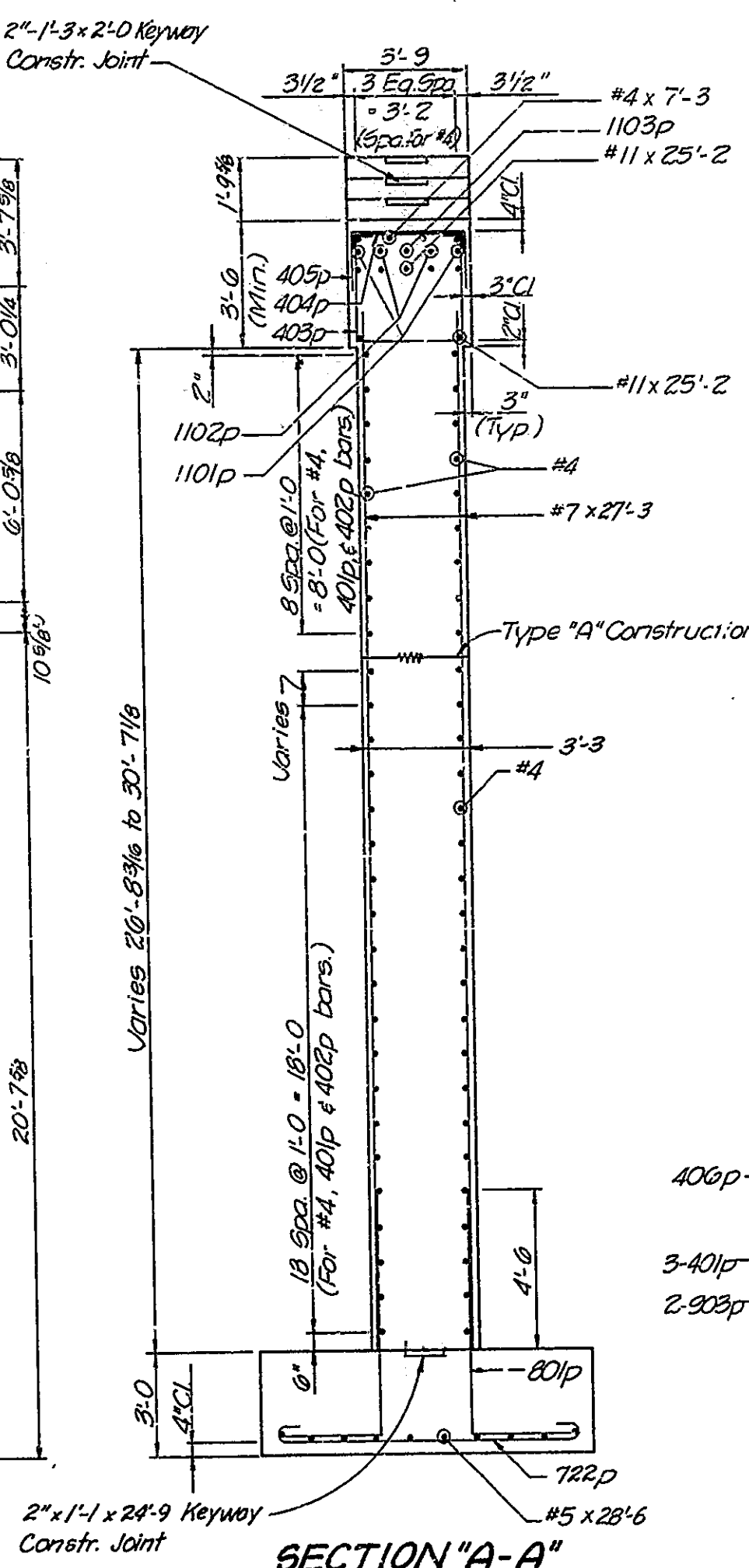
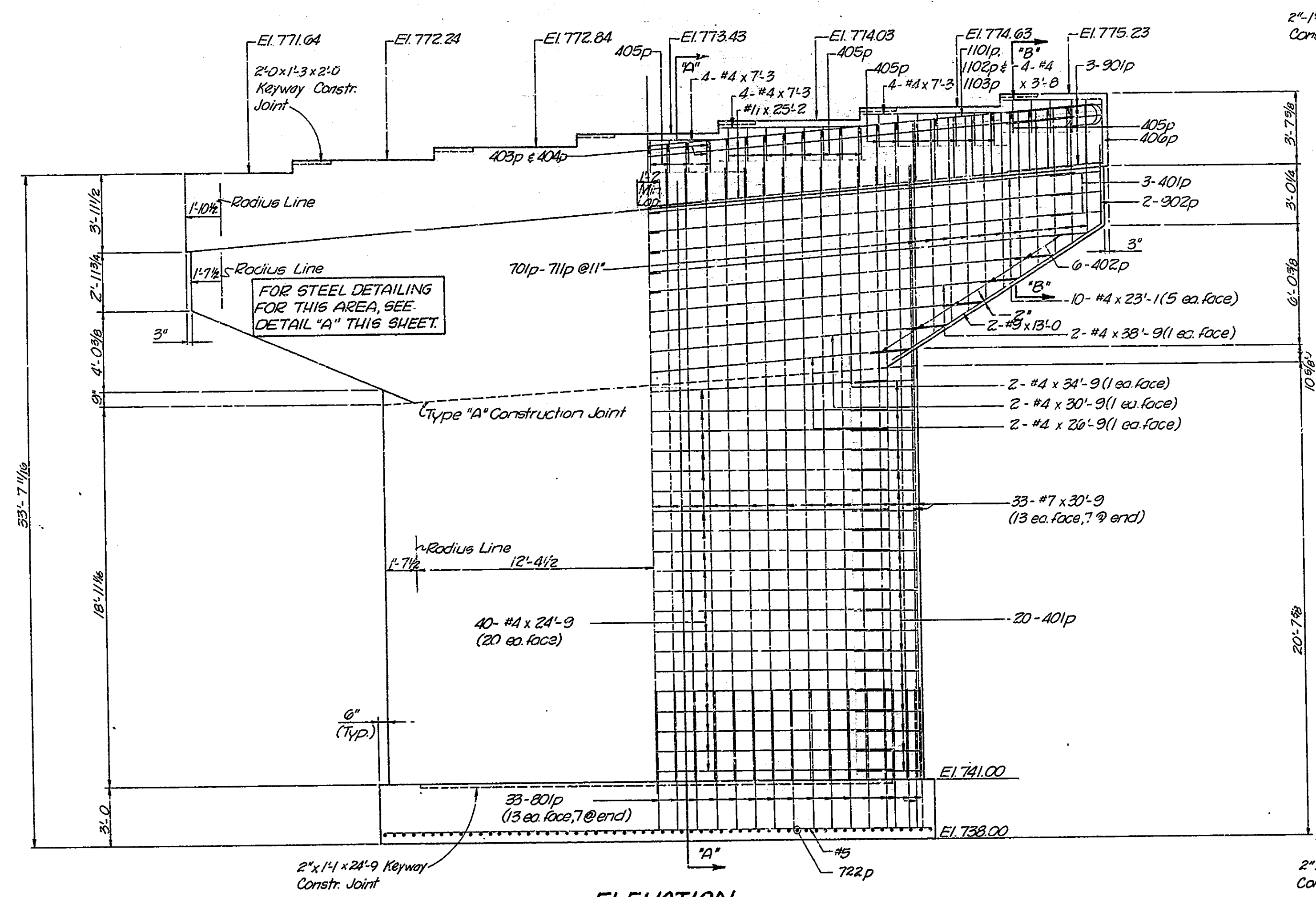
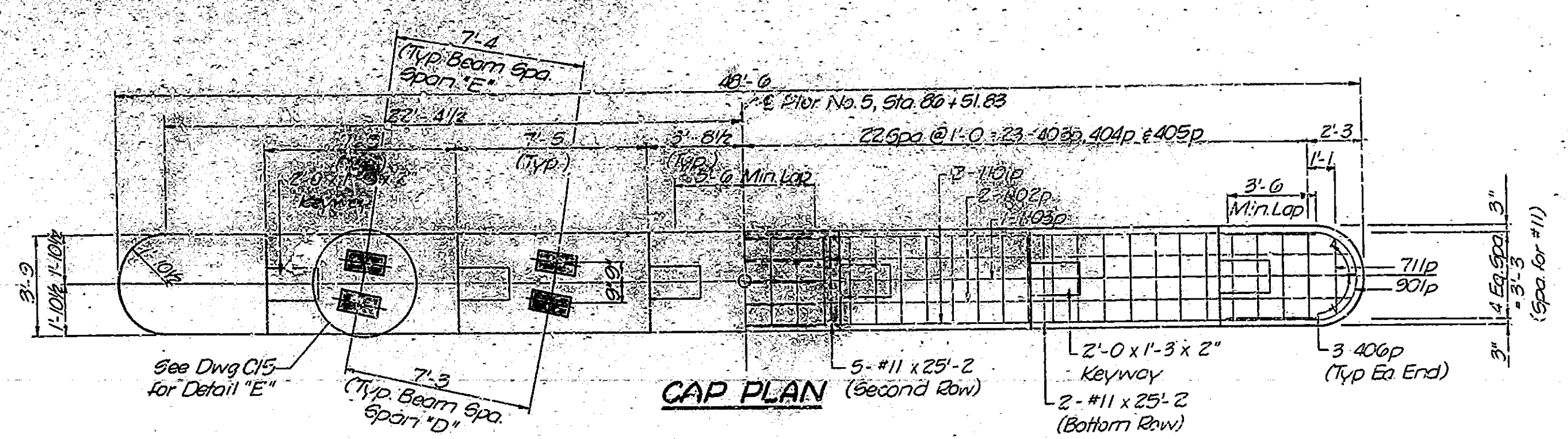
DRAWING: C8 OF C24 SHEET: 23 OF 84
PROJECT: ST-012-910 STATION: -
BRIDGE CONTRACT NO.
BRIDGE FILE: 50-69-6551



Loughery Creek

DESIGNED: DDH C.K.D. AAG
DRAWN: KCB C.K.D. AAG
TRACED: C.K.D.

SF-22317



NOTES:
 1. See Dwg C4, Tie-up Diagram, for relationship of beams to Pier No. 5.
 2. See Bridge Standard G1 for Reinforcing Bar Notes.
 3. See Dwg C20 for M. Bar Details.
 4. See Dwg. C3 for General Notes.
 5. See Bridge Standard C3 for Type 'A' Construction Joint.
 6. Reinforcing Steel is spaced symmetrically about the C. of Pier, except as shown in Detail 'A'.

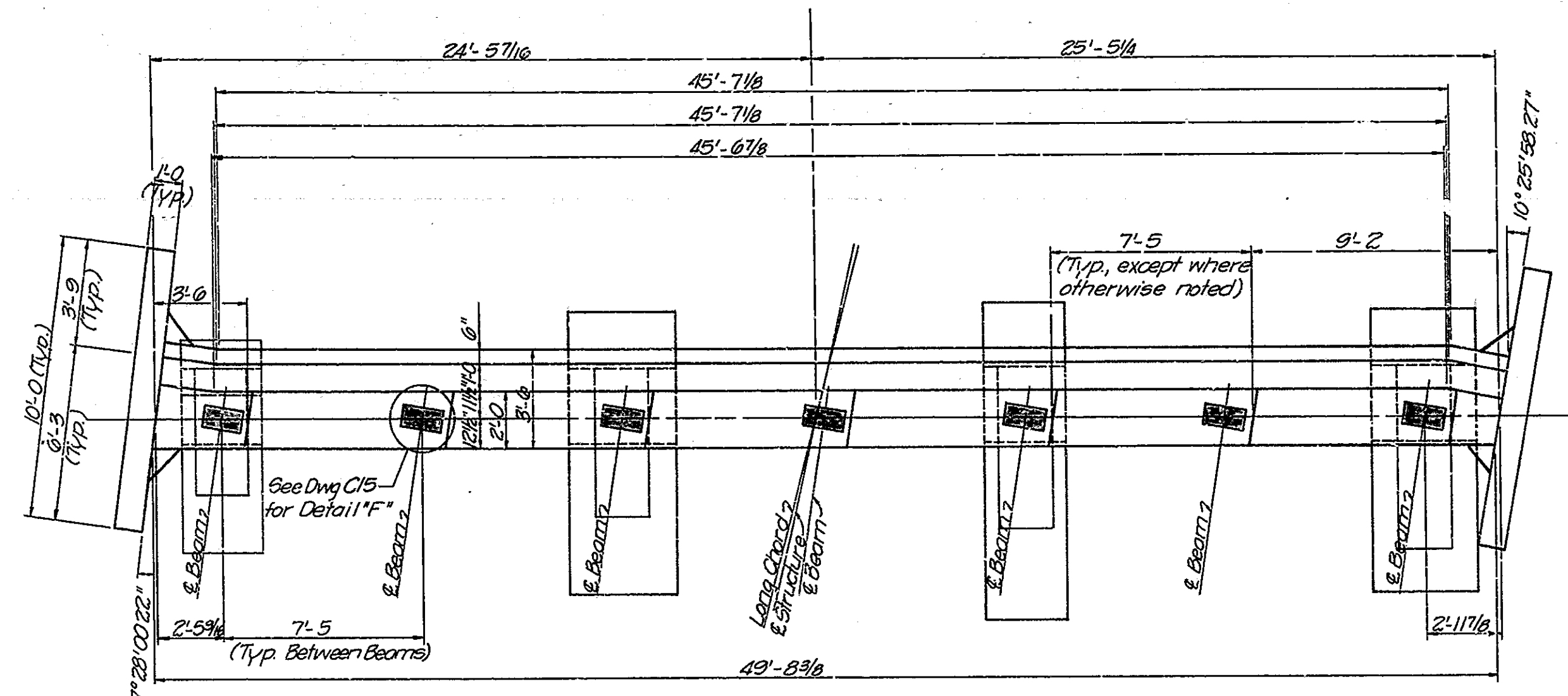
| SIZE or M.C. | QUANTITY | LENGTH | WEIGHT |
|--------------------------------|----------|---------|----------------|
| 1101p | 4 | 26'-9" | |
| 1102p | 4 | 28'-1" | |
| 1103p | 2 | 28'-4" | |
| #11 | 14 | 25'-2" | |
| Total # 11 | | | 3339 # |
| 901p | 6 | 11'-10" | |
| 902p | 2 | 17'-0" | |
| 903p | 2 | 16'-6" | |
| #9 | 2 | 13'-0" | |
| #9 | 2 | 12'-6" | |
| Total # 9 | | | 693 # |
| 801p | 64 | 10'-2" | |
| Total # 8 | | | 1738 # |
| 701p | 1 | 26'-3" | |
| 702p | 1 | 25'-3" | |
| 703p | 1 | 24'-3" | |
| 704p | 1 | 23'-3" | |
| 705p | 1 | 22'-3" | |
| 706p | 1 | 21'-3" | |
| 707p | 1 | 20'-3" | |
| 708p | 1 | 19'-3" | |
| 709p | 1 | 18'-3" | |
| 710p | 1 | 17'-3" | |
| 711p | 2 | 16'-3" | |
| 712p | 1 | 17'-3" | |
| 713p | 1 | 18'-1" | |
| 714p | 1 | 19'-1" | |
| 715p | 1 | 19'-11" | |
| 716p | 1 | 20'-11" | |
| 717p | 1 | 21'-9" | |
| 718p | 1 | 22'-7" | |
| 719p | 1 | 23'-5" | |
| 720p | 1 | 24'-5" | |
| 721p | 1 | 25'-3" | |
| 722p | 58 | 10'-8" | |
| #7 | 64 | 30'-9" | |
| Total # 7 | | | 6234 # |
| #5 | 10 | 28'-6" | |
| Total # 5 | | | 298 # |
| 401p | 46 | 6'-6" | |
| 402p | 12 | 6'-11" | |
| 403p | 45 | 10'-0" | |
| 404p | 45 | 4'-0" | |
| 405p | 45 | 6'-7" | |
| 406p | 6 | 3'-11" | |
| #4 | 2 | 38'-9" | |
| #4 | 2 | 34'-9" | |
| #4 | 2 | 30'-9" | |
| #4 | 2 | 26'-9" | |
| #4 | 40 | 24'-9" | |
| #4 | 20 | 23'-1" | |
| #4 | 20 | 7'-3" | |
| #4 | 3 | 3'-8" | |
| Total # 4 | | | 2151 # |
| Total Reinforcing Steel | | | 14403 # |
| Concrete | | | |
| Class 'B' in Footing | | | 32.2 C.Y.S. |
| Class 'B' Above Footing | | | 630 C.Y.S. |
| Class 'A' in Substructure | | | 674 C.Y.S. |
| Miscellaneous | | | |
| Surface Seal | | | 179 S.F. |

PIER NO. 5 DETAILS
 INDIANA DEPARTMENT OF HIGHWAYS

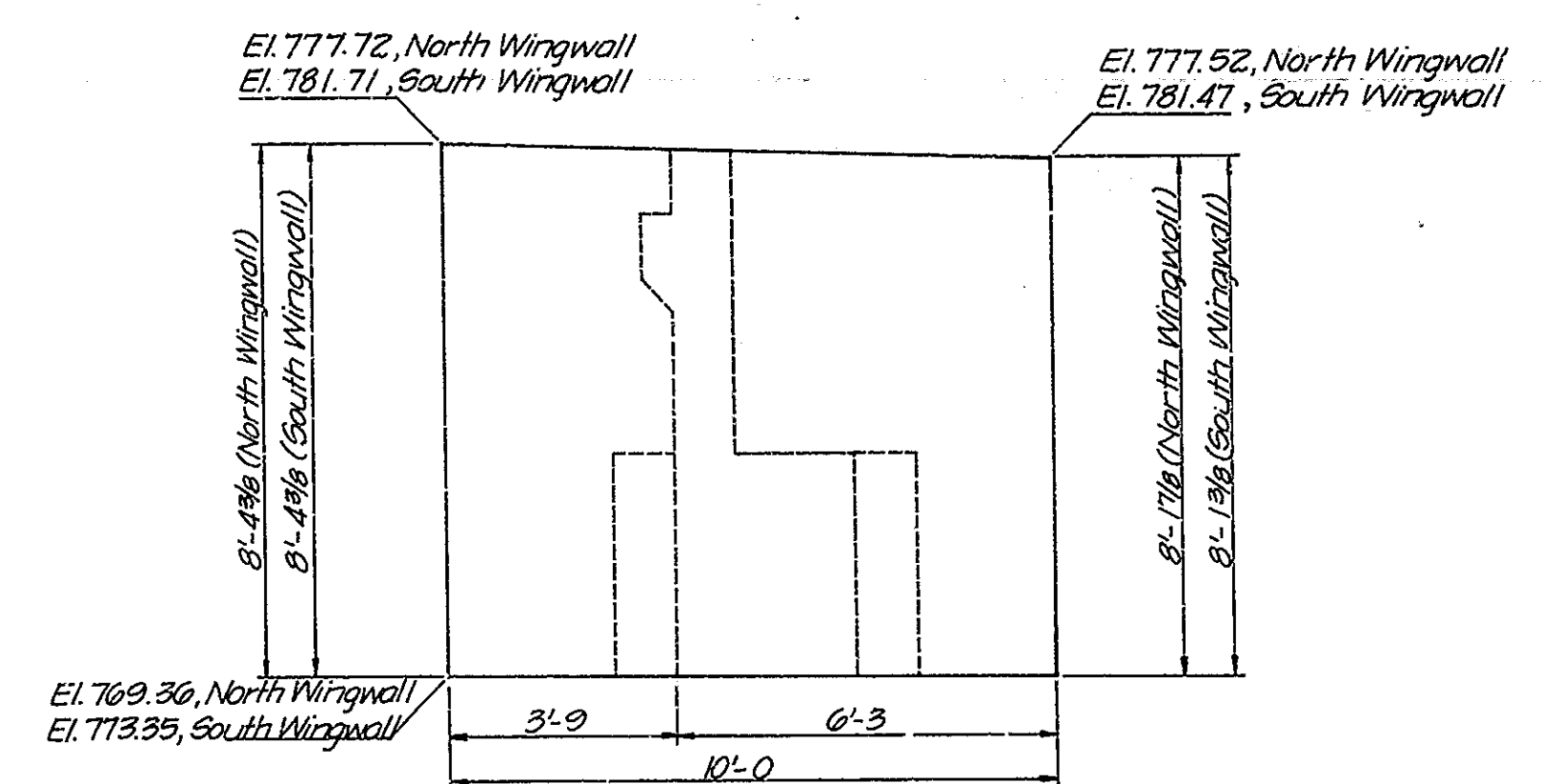
SCALE: - 1/4" = 1'-0"
 DATE: Sept. 15 1989
 DRAWING: C9 OF C24 SHEET: 24 OF 84
 PROJECT: 57-042-9(D) STATION: -
 BRIDGE CONTRACT NO.
 BRIDGE FILE: 50-69-6851
 Loughery Creek



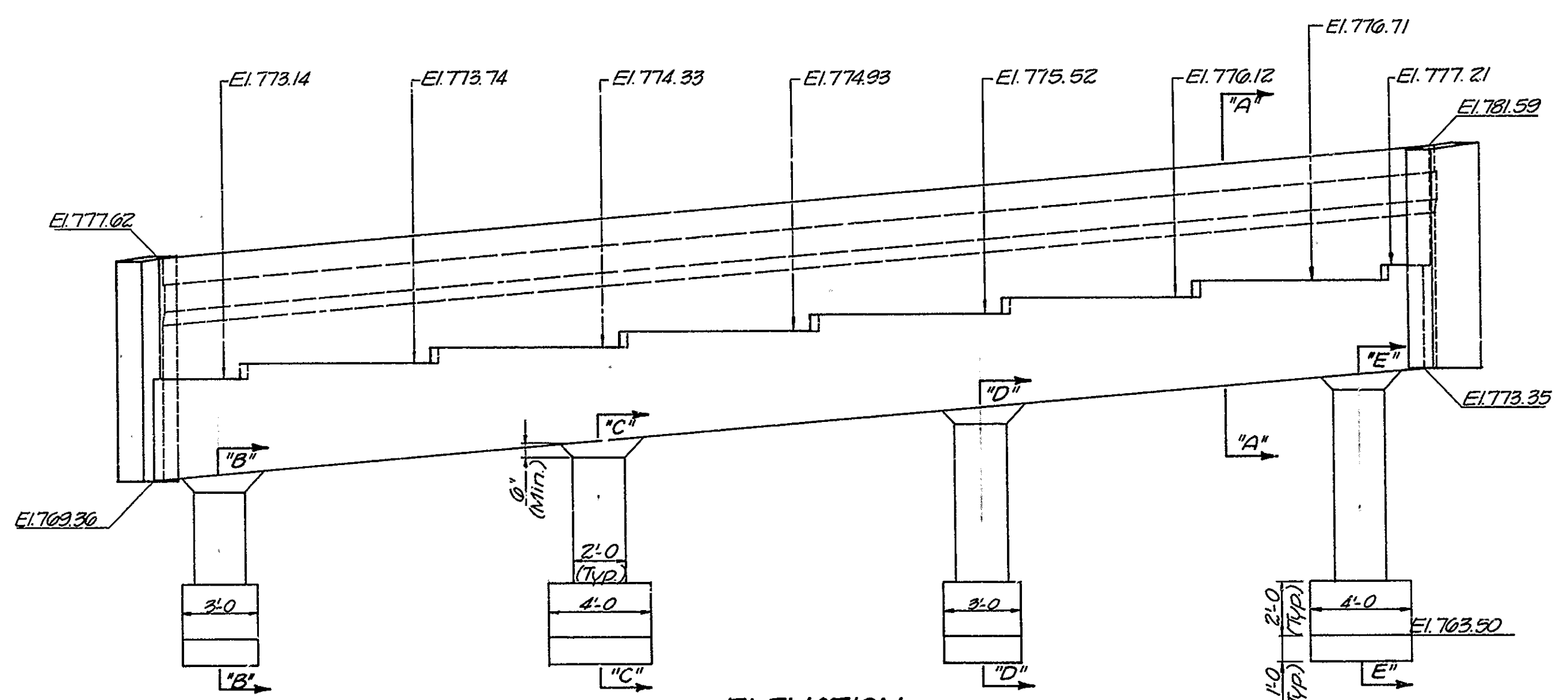
DESIGNED: DDH C.K.D. AAG
 DRAWN: KCB C.K.D. AAG
 TRACED: C.K.D.



PLAN
Scale: 1/4" = 1'-0"

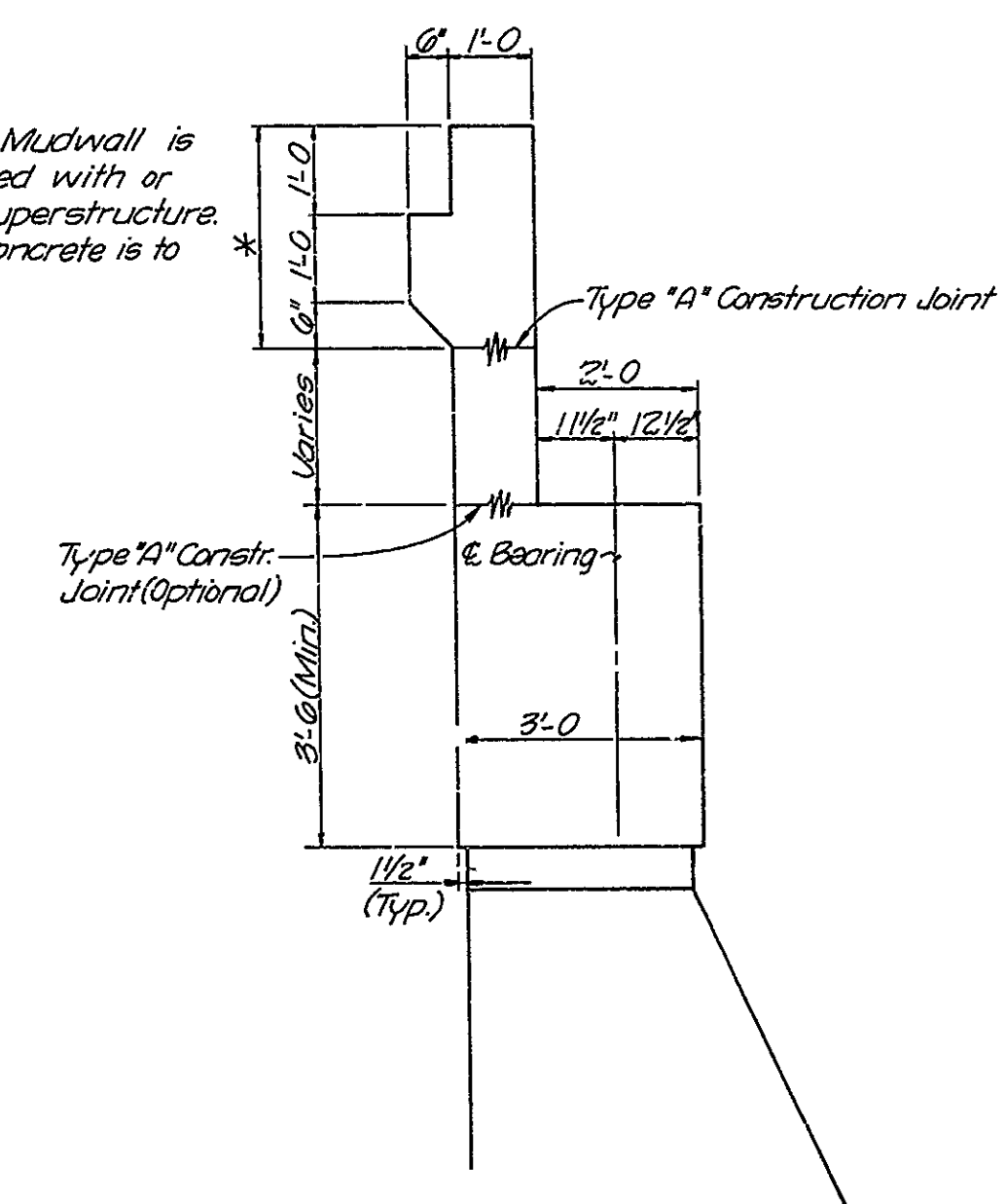


WINGWALL DETAIL
Scale: 3/8" = 1'-0"



ELEVATION
Scale: 1/4" = 1'-0"

* Top part of Mudwall is to be poured with or after the Superstructure. Class "C" Concrete is to be used.



SECTION "A-A"
Scale: 1/2" = 1'-0"

- Notes:
1. See Dwg. C4, Tie-up Diagram, for relationship of beams to End Bent No. 6.
 2. See Bridge Standard C1 for Reinforcing Bar Notes.
 3. See Bridge Standard C3 for Type "A" Construction Joint.
 4. See Dwg. C3 for General Notes.
 5. See Dwg. C20 for M. Bar Details.
 6. See Dwg. C11 & C12 for Reinforcement Details, and Details of Counterforts.
 7. See Dwg. C11 for Bill of Materials.

**CONCRETE DIMENSIONS & ELEVATIONS
END BENT NO. 6
INDIANA DEPARTMENT OF HIGHWAYS**

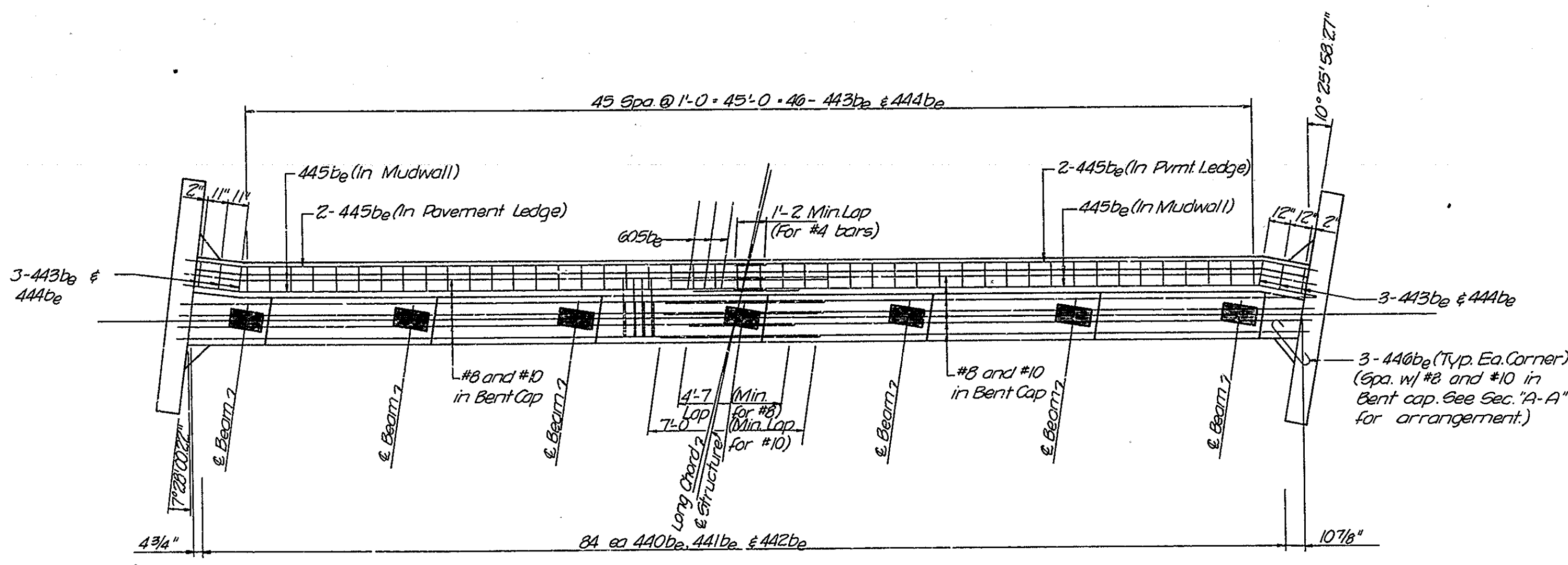
SCALE: - AS SHOWN DATE: **Sept. 15 1989**

DESIGNED: **DDH** C.K.D.
DRAWN: **KCB** C.K.D.
TRACED: C.K.D.
PROJECT: - 87-042-9(D) STATION: -
BRIDGE CONTRACT NO.
BRIDGE FILE: - 50-09-0851

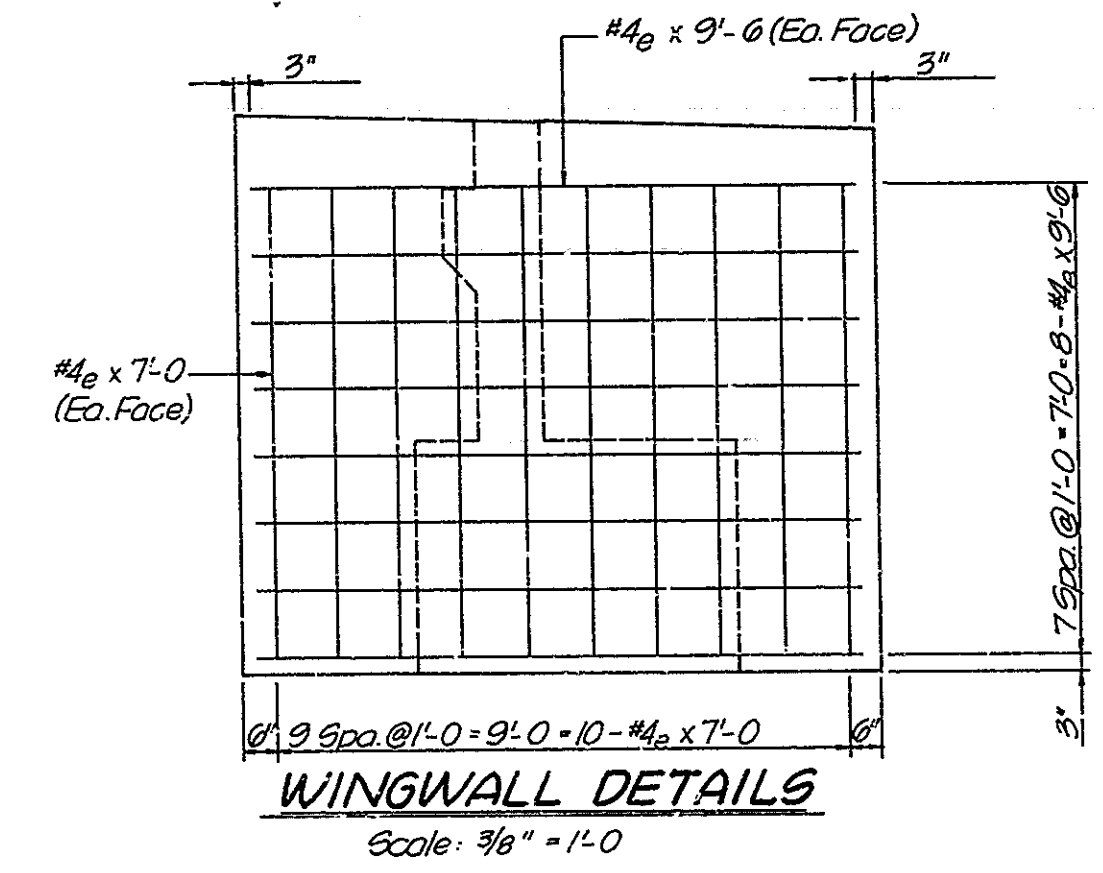
D. Eric Bruning



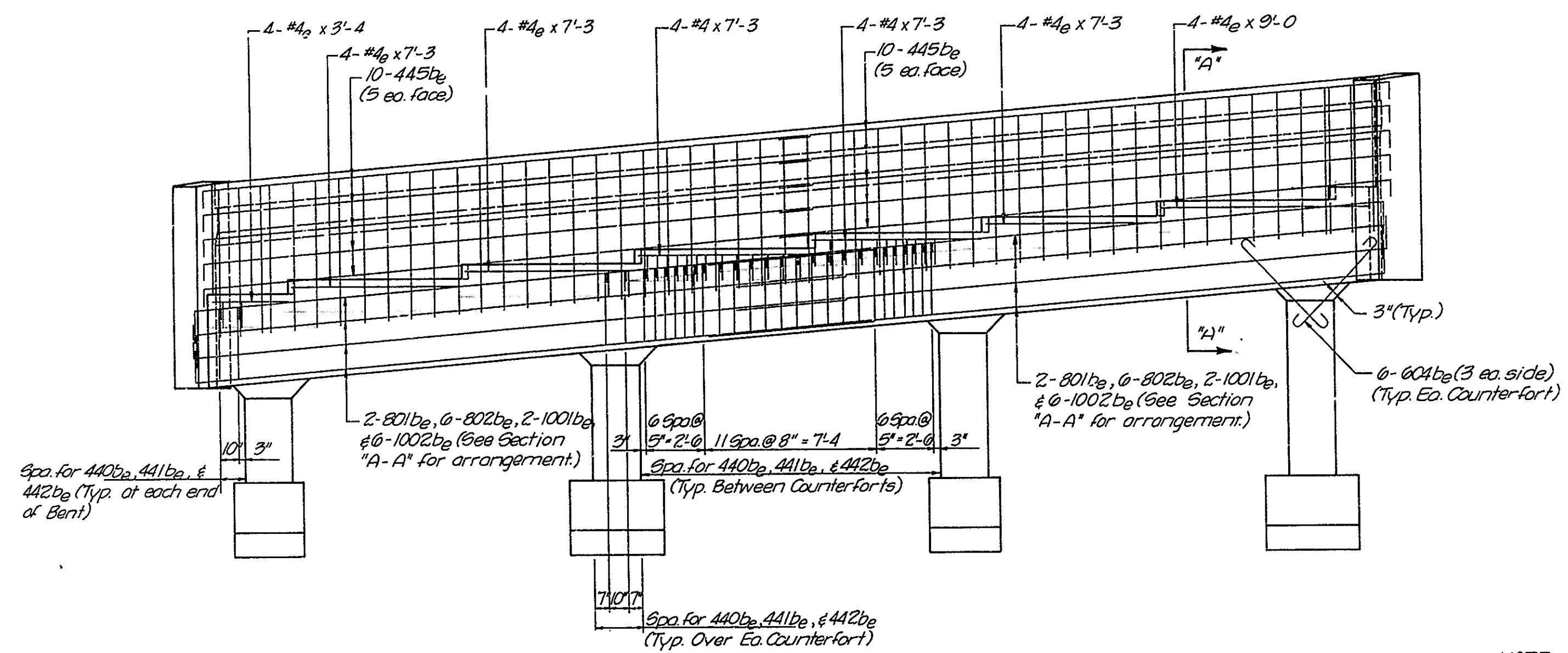
DESIGNED: **DDH** C.K.D.
DRAWN: **KCB** C.K.D.
TRACED: C.K.D.
SF-22317



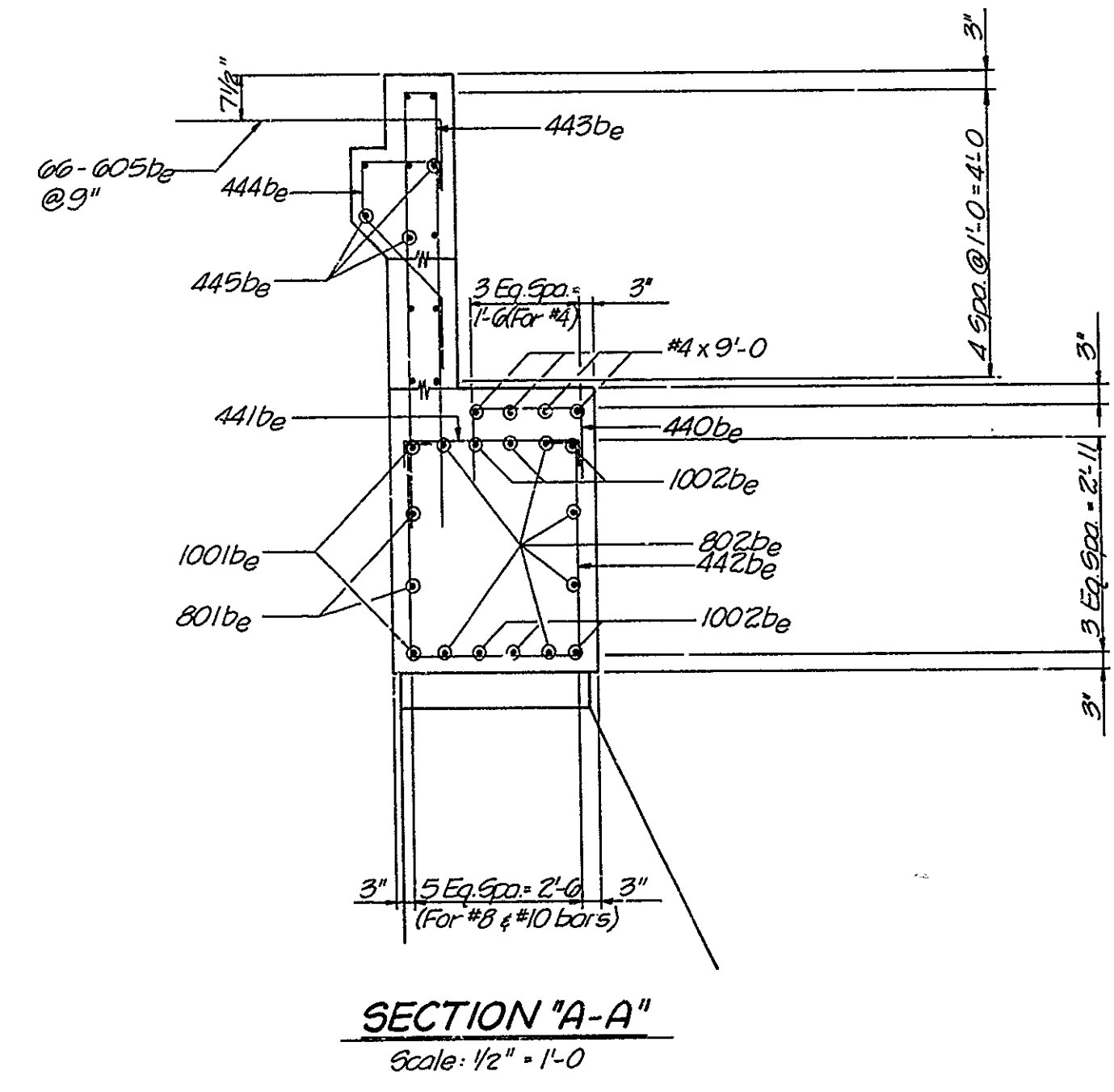
CAP PLAN
Scale: 1/4" = 1'-0"



WINGWALL DETAILS
Scale: 3/8" = 1'-0"



ELEVATION
Scale: 1/4" = 1'-0"



SECTION "A-A"
Scale: 1/2" = 1'-0"

NOTE:
See Dwg. C10 for additional notes.

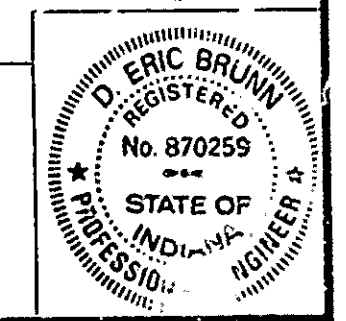
BILL OF MATERIALS

| SIZE or No. | QUANTITY | LENGTH | WEIGHT |
|---|----------|--------|--------|
| 1001be | 4 | 30'-6 | |
| 1002be | 12 | 30'-11 | |
| Total #10e | | | 2125# |
| 801be | 4 | 28'-11 | |
| 802be | 12 | 29'-2 | |
| Total #8e | | | 1244# |
| 725be | 6 | 10'-3 | |
| 726be | 6 | 11'-6 | |
| 729be | 6 | 12'-7 | |
| 731be | 6 | 13'-10 | |
| #7e | 2 | 10'-10 | |
| #7e | 2 | 9'-7 | |
| #7e | 2 | 8'-6 | |
| #7e | 2 | 7'-3 | |
| Total #7e | | | 739# |
| 601be | 24 | 6'-4 | |
| 605be | 66 | 4'-10 | |
| Total #6e | | | 708# |
| 410be | 14 | 5'-9 | |
| 411be | 2 | 2'-10 | |
| 412be | 1 | 4'-4 | |
| 413be | 1 | 5'-10 | |
| 414be | 1 | 7'-4 | |
| 415be | 3 | 8'-0 | |
| 417be | 3 | 10'-0 | |
| 418be | 2 | 4'-2 | |
| 419be | 2 | 2'-3 | |
| 420be | 1 | 4'-0 | |
| 421be | 1 | 5'-8 | |
| 422be | 1 | 7'-2 | |
| 423be | 1 | 8'-10 | |
| 424be | 3 | 11'-0 | |
| 425be | 2 | 5'-0 | |
| 426be | 2 | 6'-8 | |
| 427be | 2 | 8'-2 | |
| 428be | 2 | 9'-10 | |
| 429be | 2 | 5'-2 | |
| 430be | 2 | 3'-2 | |
| 431be | 1 | 11'-4 | |
| 432be | 3 | 13'-0 | |
| 437be | 2 | 6'-0 | |
| 438be | 2 | 4'-7 | |
| 439be | 2 | 2'-9 | |
| 440be | 84 | 3'-7 | |
| 441be | 84 | 3'-3 | |
| 442be | 84 | 9'-1 | |
| 443be | 52 | 12'-6 | |
| 444be | 52 | 4'-10 | |
| 445be | 24 | 28'-7 | |
| 446be | 12 | 3'-6 | |
| #4e | 32 | 9'-6 | |
| #4e | 4 | 9'-0 | |
| #4e | 20 | 7'-3 | |
| #4e | 40 | 7'-0 | |
| #4e | 4 | 3'-4 | |
| Total #4e | | | 2957# |
| TOTAL EPOXY-COATED STEEL | | | 7173# |
| 803be | 10 | 12'-7 | |
| Total #8 | | | 336# |
| 726be | 8 | 8'-8 | |
| 727be | 20 | 11'-2 | |
| Total #7 | | | 599# |
| 416be | 18 | 4'-1 | |
| #4 | 50 | 3'-6 | |
| #4 | 48 | 2'-6 | |
| Total #4 | | | 247# |
| TOTAL PLAIN STEEL | | | 1182# |
| CONCRETE | | | |
| Class "A" Concrete in Cap 309 CY'S | | | |
| Class "B" Concrete Above Footing 7.2 CY'S | | | |
| Class "B" Concrete in Footings 11.0 CY'S | | | |
| Class "C" Concrete in Superstructure 5.8 CY'S | | | |
| MISCELLANEOUS | | | |
| Surface Seal 402 SFT | | | |

**STEEL DETAILING
END BENT NO. 6
INDIANA DEPARTMENT OF HIGHWAYS**

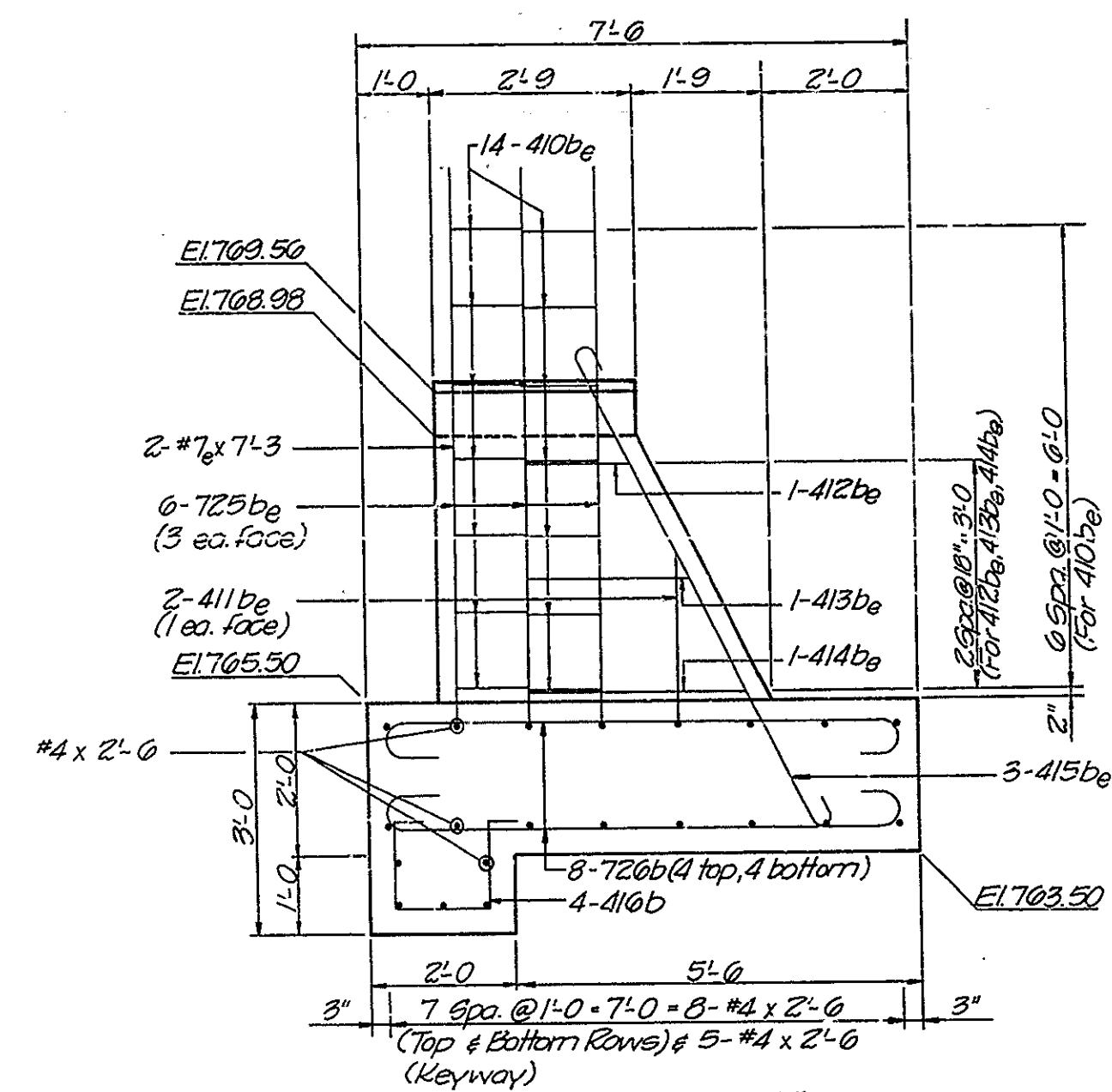
SCALE: - AS SHOWN DATE: **Sept. 15 1984**

DRAWING: C11 of C24 SHEET: 26 OF 84
PROJECT: - ST-042-9(D) STATION: -
BRIDGE CONTRACT NO.
BRIDGE FILE: - 50-89-0851

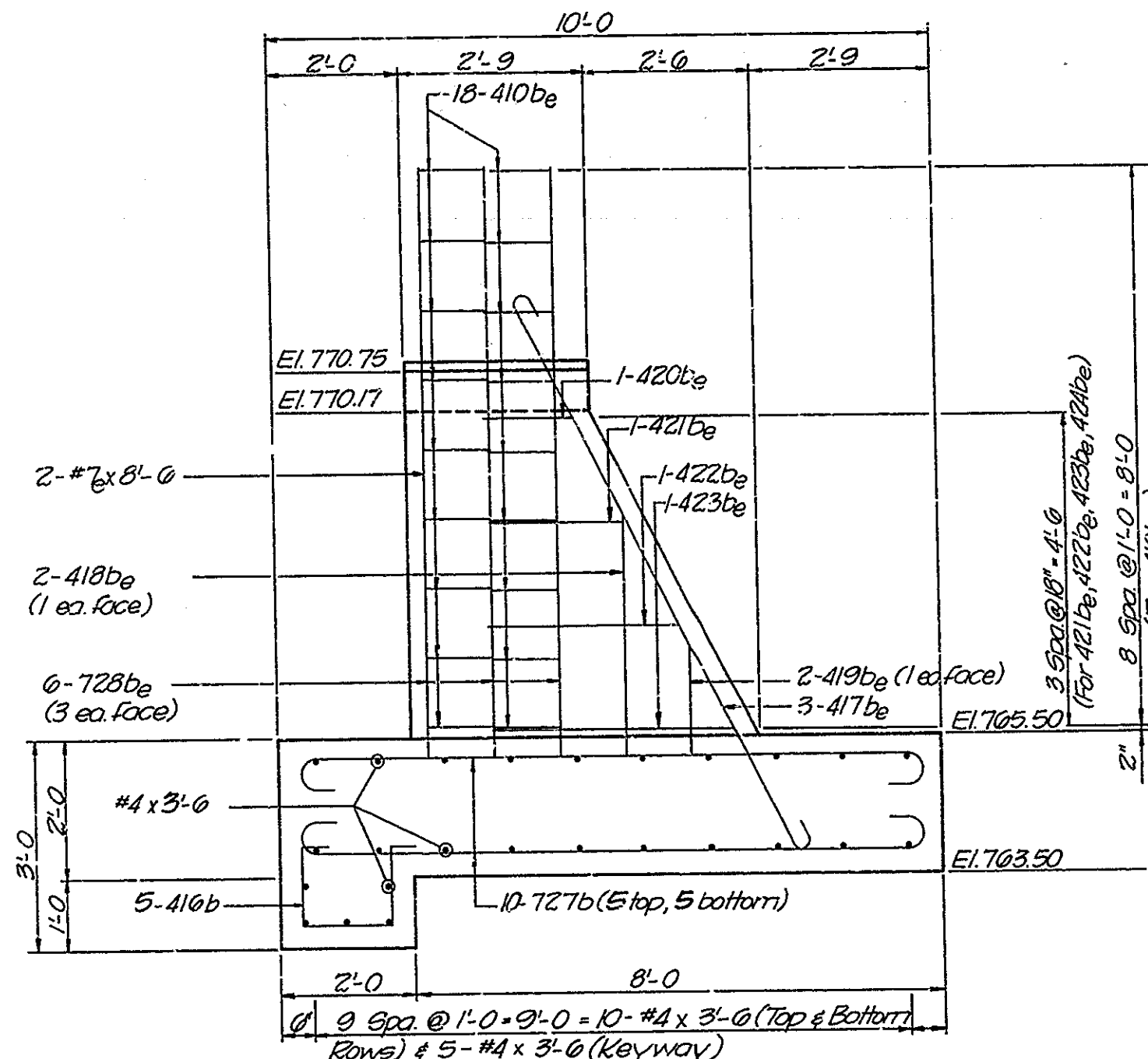


DESIGNED: C.K.D.
DRAWN: C.K.D.
TRACED: C.K.D.
SF-22317

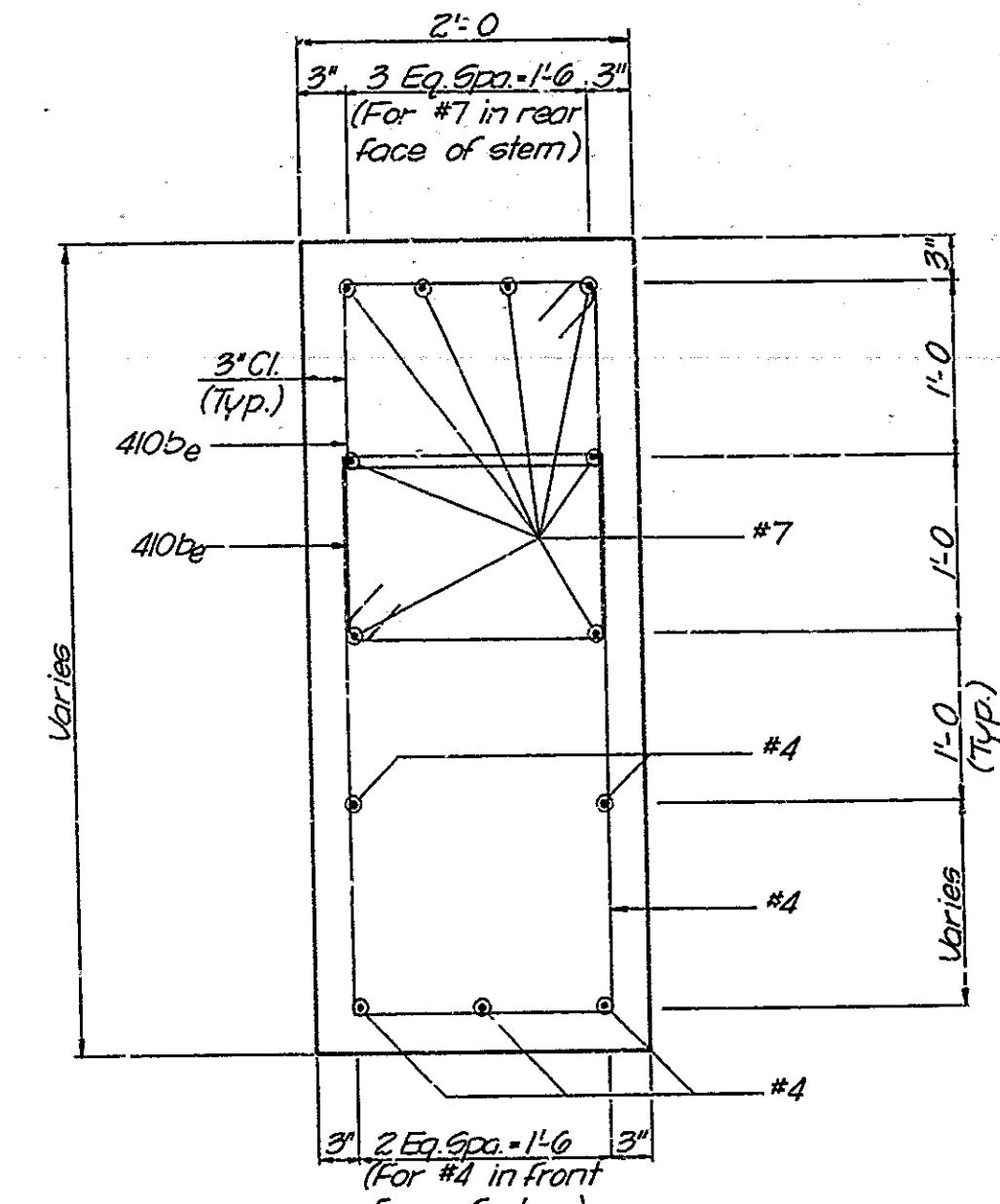
Laughery Creek



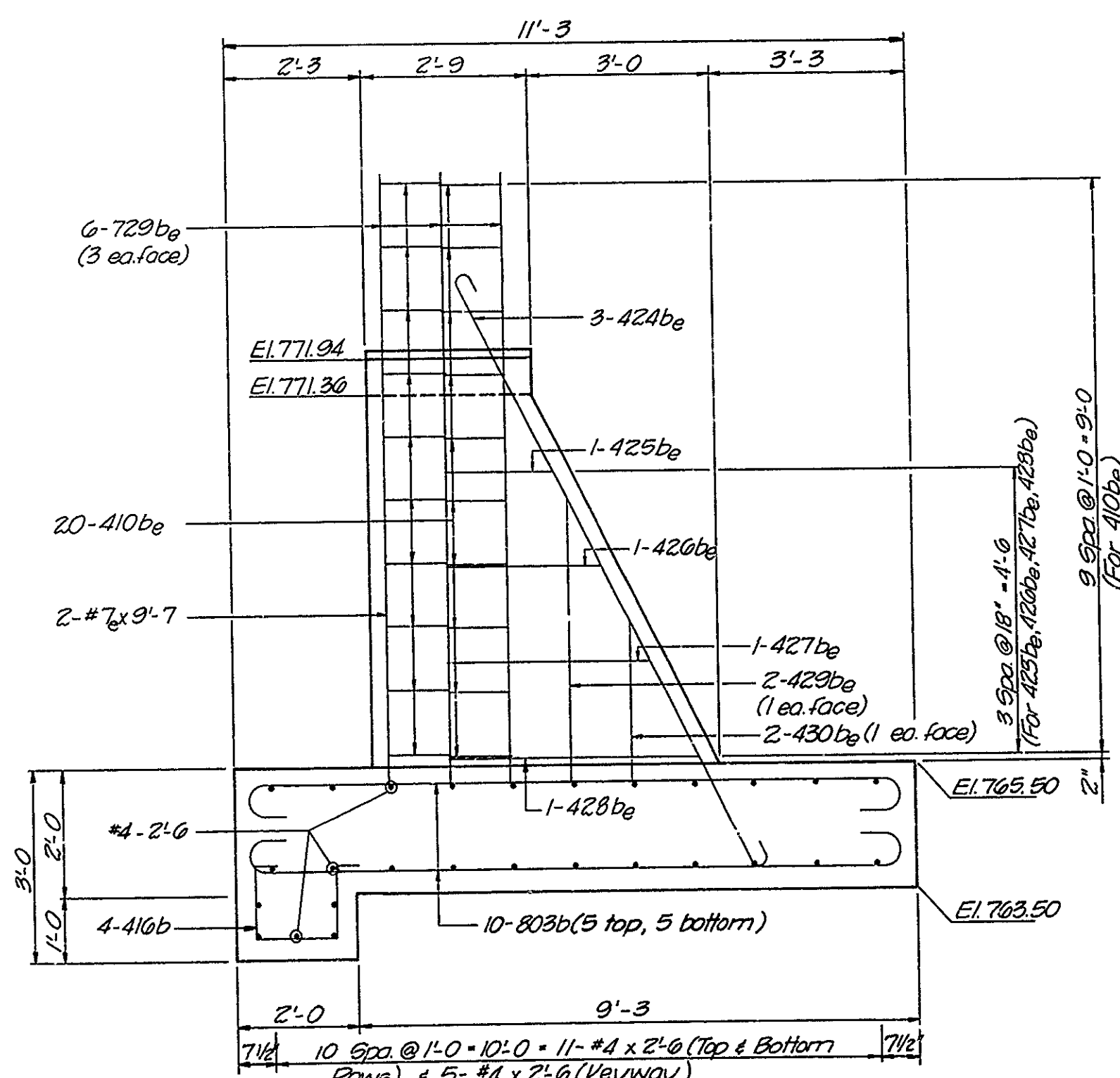
SECTION "B-B"
Scale: 1/2" = 1'-0"



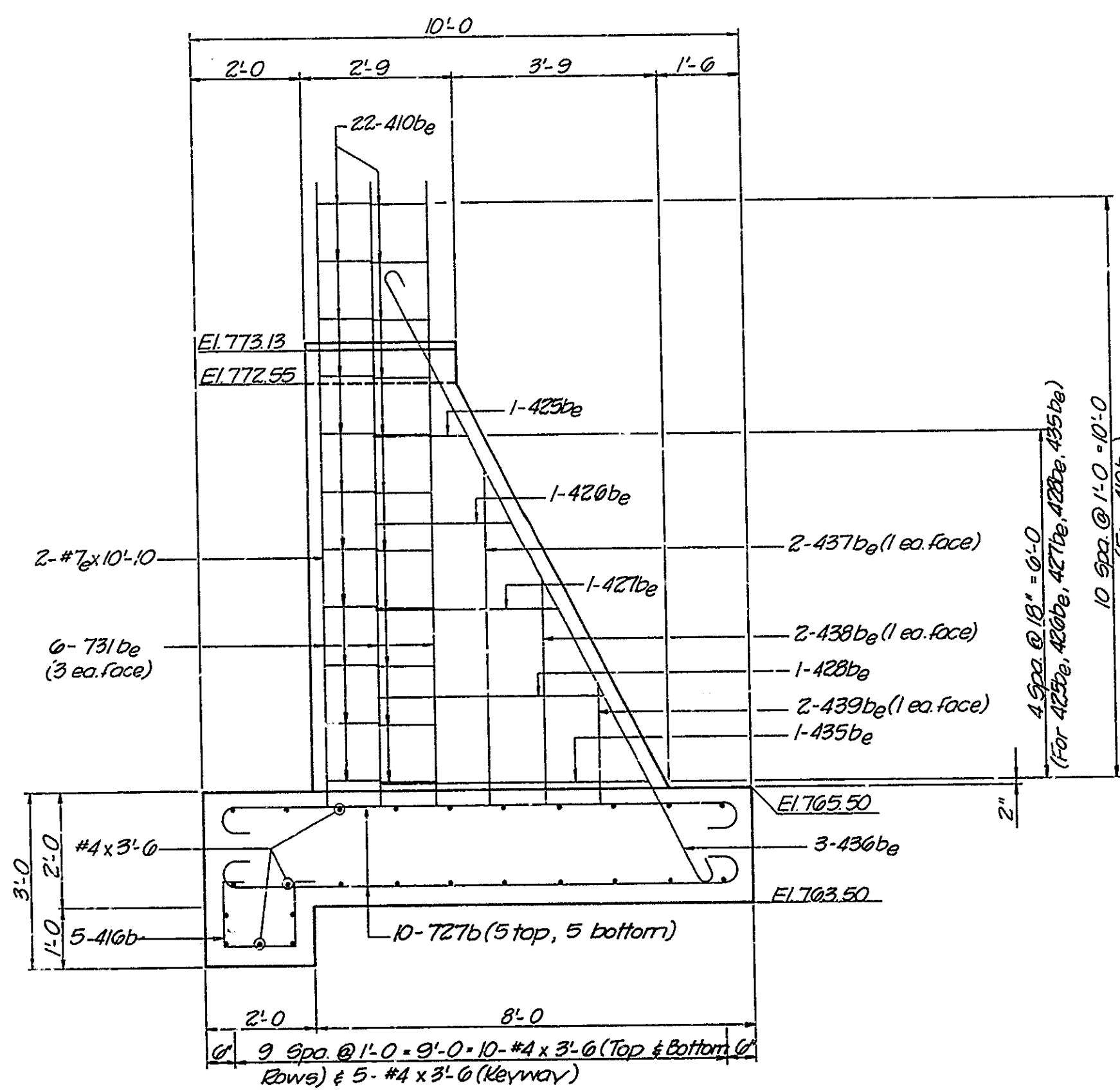
SECTION "C-C"
Scale: 1/2" = 1'-0"



TYPICAL SECTION THRU COUNTERFORT STEM
Scale: 1" = 1'-0"



SECTION "D-D"
Scale: 1/2" = 1'-0"



SECTION "E-E"
Scale: 1/2" = 1'-0"

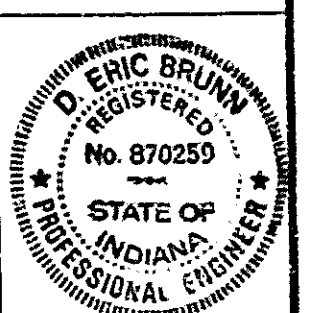
NOTE:
See Dwg. C10 for additional notes.

COUNTERFORT DETAILS
END BENT NO. 0
INDIANA DEPARTMENT OF HIGHWAYS

SCALE: AS SHOWN

DATE: **Dec. 15 1989**
D. P. Brunner

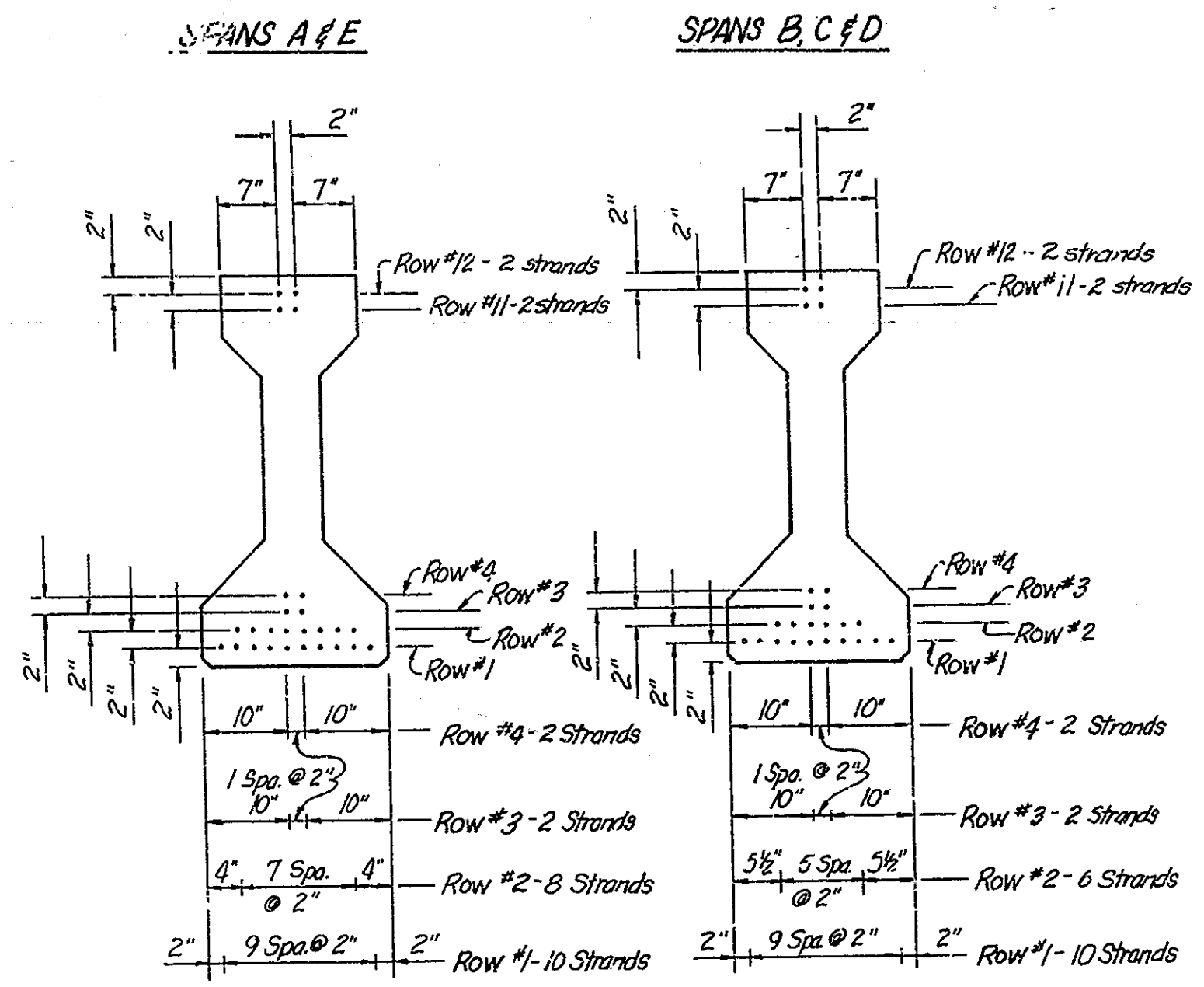
DRAWING: C12 OF C14 SHEET: 27 OF 34
PROJECT: 67-042-9(D) STATION: -
BRIDGE CONTRACT NO.
BRIDGE FILE: 50-69-6851



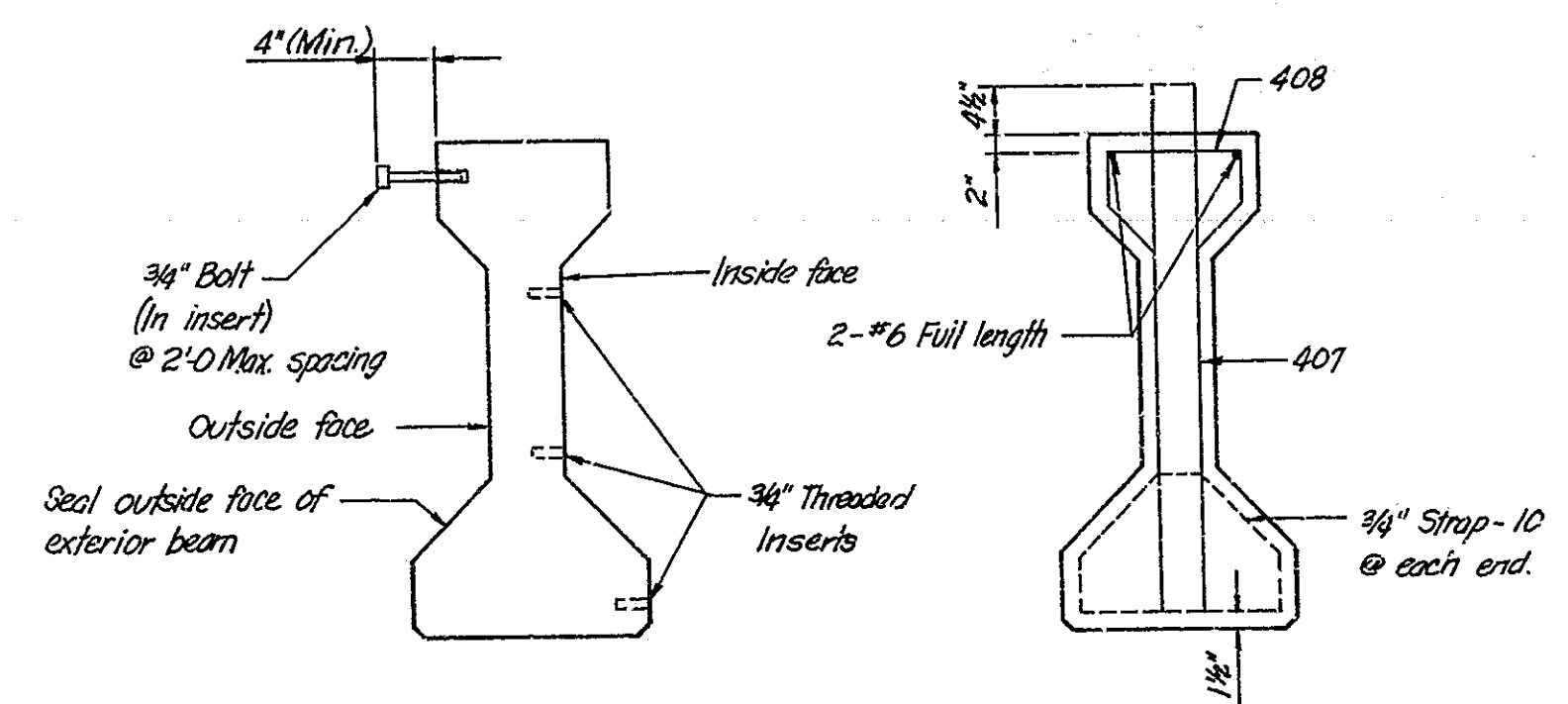
DESIGNED: DDH C.K.D.
DRAWN: KCB C.K.D.
TRACED: C.K.D.

SF-22317

Loughery Creek



TYPICAL MIDSPAN SECTION
Scale: 3/4"=1'-0"



TYPICAL EXTERIOR BEAM
Scale: 3/4"=1'-0"

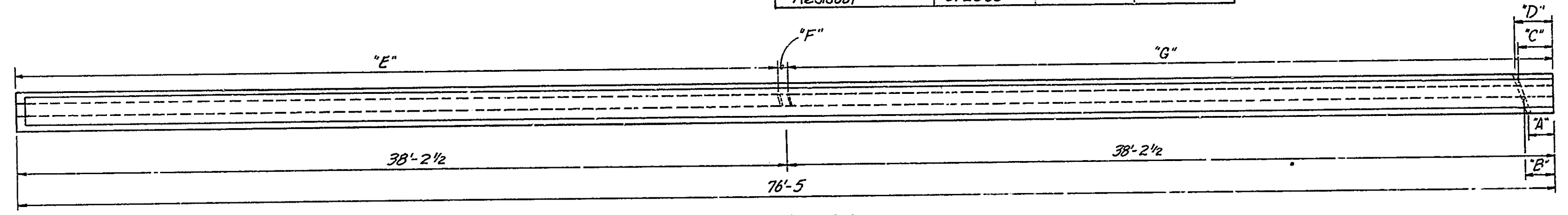
STIRRUP DETAIL
Scale: 3/4"=1'-0"

TYPICAL SECTION
Scale: 3/4"=1'-0"

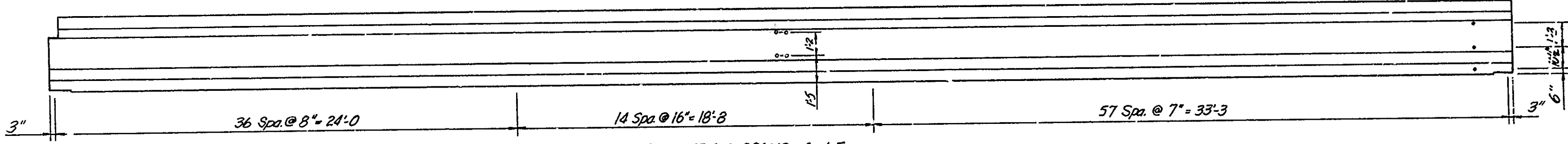
DESIGN DATA
Concrete Strength f'_{ci} = 4,000 P.S.I.
Concrete Strength f'_c = 5,000 P.S.I.
Initial Pull Per Strand = 33,817 LBS.

| G BEAM CAMBER (in) | | | |
|--------------------|------------|------------|---------|
| | SPAN A & E | SPAN B & D | SPAN C |
| Initial | 1.4326 | 1.2880 | 1.2891 |
| Slab & Diaphragm | -1.1371 | -1.1602 | -1.1602 |
| Residual | 0.2866 | 0.1277 | 0.1288 |

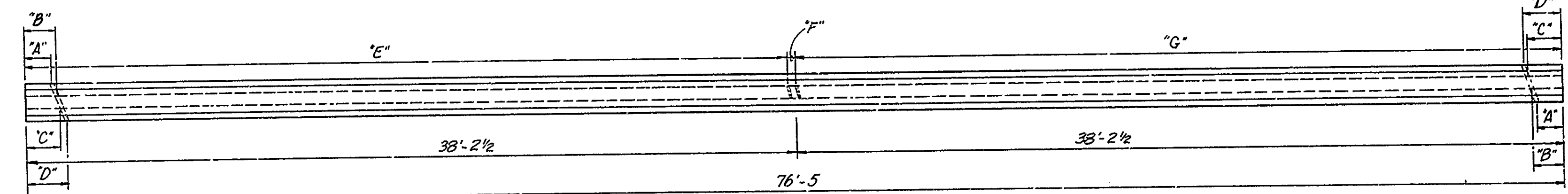
- NOTES:
- The beams shall be cast a minimum of 15 days before the deck is poured.
 - See Bridge Standard C1 for reinforcing bar notes.
 - See Bridge Standard Sheet PB3 for General Notes, Design Data, Stirrup Details, Dimensions, and details of Type III Prestressed Concrete I-Beams.
 - See Bridge Standard Sheet PB10 for tolerances and fabrication of prestressed beams.
 - See Bridge Standard Sheet PB11 for details of Type III Elastomeric Bearing Pad.
 - Sealer, required on the top of all beams and the outside face of exterior beams, shall be applied by the beam manufacturer in the shop. Do not rub.
 - The cost of Elastomeric Bearing Pads, Polystyrene, 3/4" threaded inserts, 3/4" hex bolts, 3/4" threaded dowels and Prestressed Concrete I-Beams (including all beam steel) is included under the bid item "Concrete Structural Members".
 - Prestressing steel shall be special 1/2" (Area = 0.167 in.²) Lo-Lox strands with a minimum tensile strength of 270,000 P.S.I.
 - Reinforcing steel shall be A.S.T.M. A615, Grade 40.
 - The lump sum bid price for "Concrete Structural Members" shall include the material and labor for the manufacturer, transportation, and erection of the Prestressed Concrete I-Beams including Elastomeric Bearing Pads, bearing plates, special ends, dowel holes, threaded inserts, threaded tie rods, hex bolts, handling hooks and sealer.



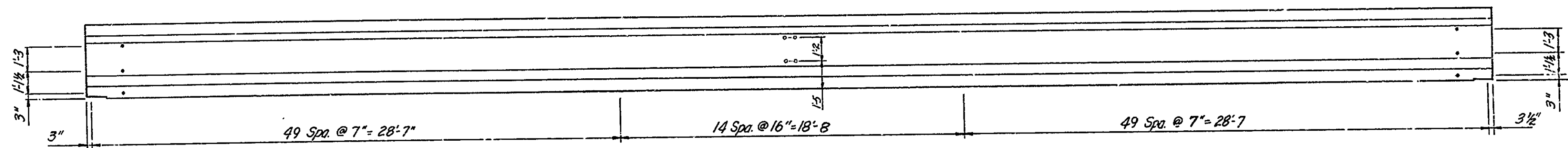
PLAN SPANS A & E
Scale: 1/4"=1'-0"



ELEVATION SPANS A & E
Scale: 1/4"=1'-0"

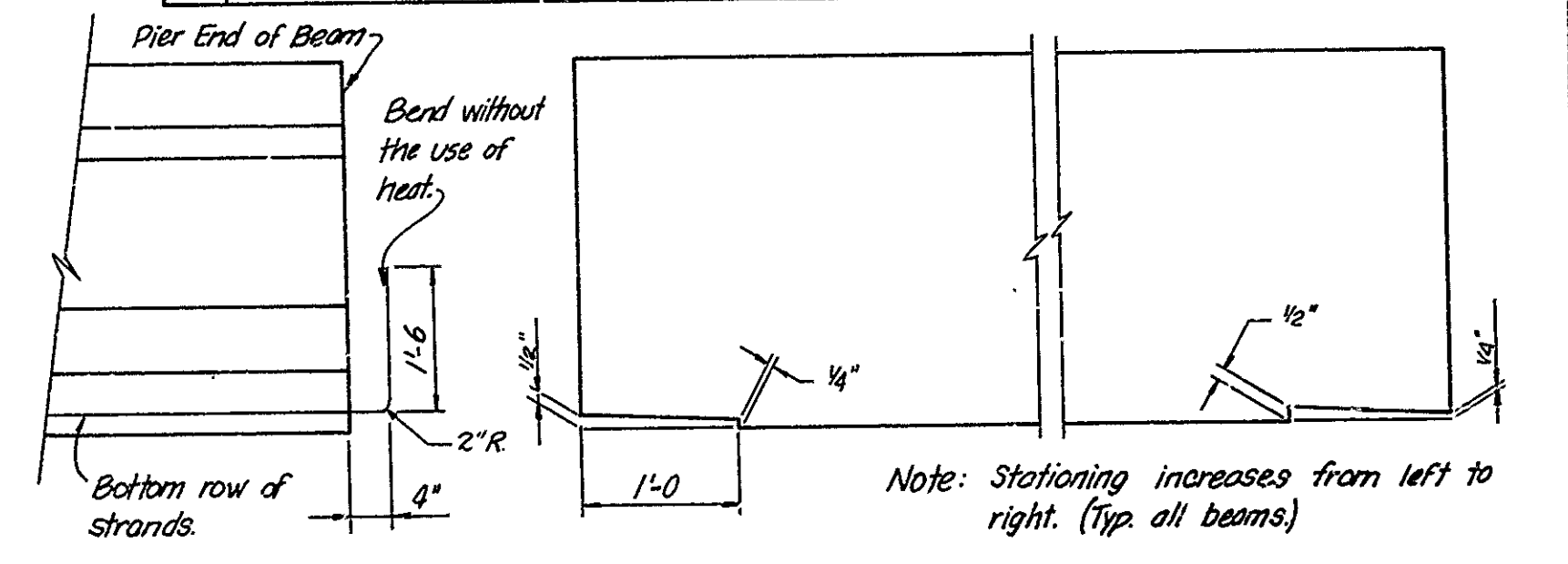


PLAN SPANS B, C & D
Scale: 1/4"=1'-0"



ELEVATION SPANS B, C & D
Scale: 1/4"=1'-0"

| INSERT LOCATION | | | | | |
|-----------------|-------------|-------------|------------|-------------|-------------|
| | SPAN A | SPAN B | SPAN C | SPAN D | SPAN E |
| A" | 1'-3" | 1'-3 1/4" | 1'-3 1/2" | 1'-3 3/4" | 1'-4" |
| B" | 1'-5 3/4" | 1'-5 1/2" | 1'-5 1/4" | 1'-5 1/4" | 1'-5 1/4" |
| C" | 1'-8 1/4" | 1'-7 3/4" | 1'-7 1/4" | 1'-6 3/4" | 1'-6 1/4" |
| D" | 1'-11" | 1'-10" | 1'-9" | 1'-8 1/4" | 1'-7 1/2" |
| E" | 38'-1 1/2" | 38'-1" | 38'-0 7/8" | 38'-0 5/8" | 38'-0 1/2" |
| F" | 5 3/8" | 5 1/4" | 5 1/8" | 5 1/8" | 5" |
| G" | 37'-10 1/2" | 37'-10 3/4" | 37'-11" | 37'-11 1/4" | 37'-11 1/2" |



BAR BENDING DETAIL
No Scale

ELEVATION VIEW BEAM NOTCH DETAIL
No Scale

BEAM DETAILS

INDIANA DEPARTMENT OF HIGHWAYS

SCALE: - As Noted

DATE: **Sept. 15 1989**
D. Eric Brunner

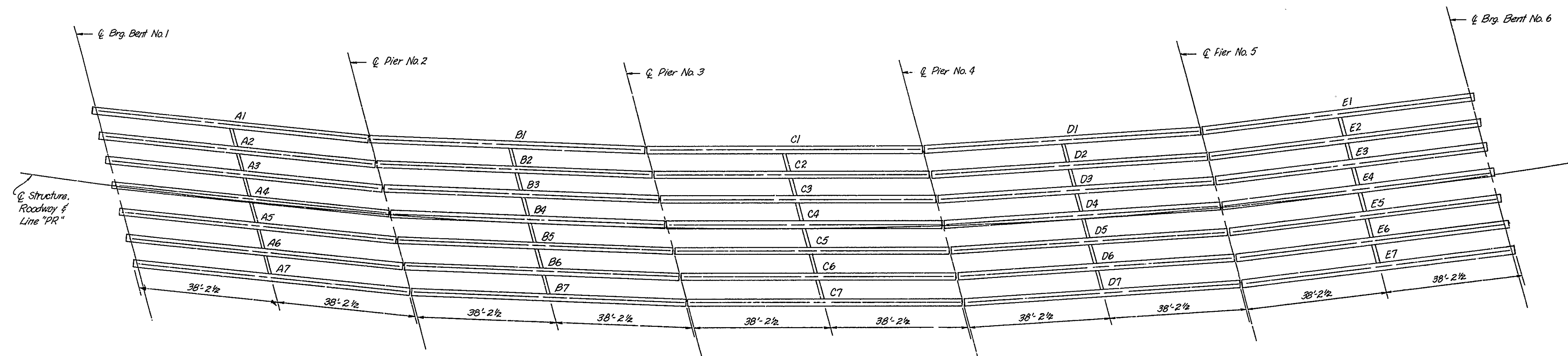
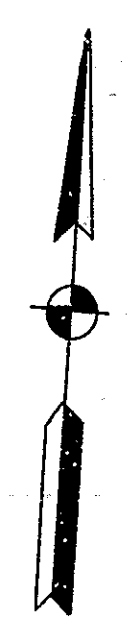
DRAWING: C13 OF C24 SHEET: 28 OF 84
PROJECT: ST-042-9(D) STATION: -
BRIDGE CONTRACT NO.
BRIDGE FILE: 50-69-6851



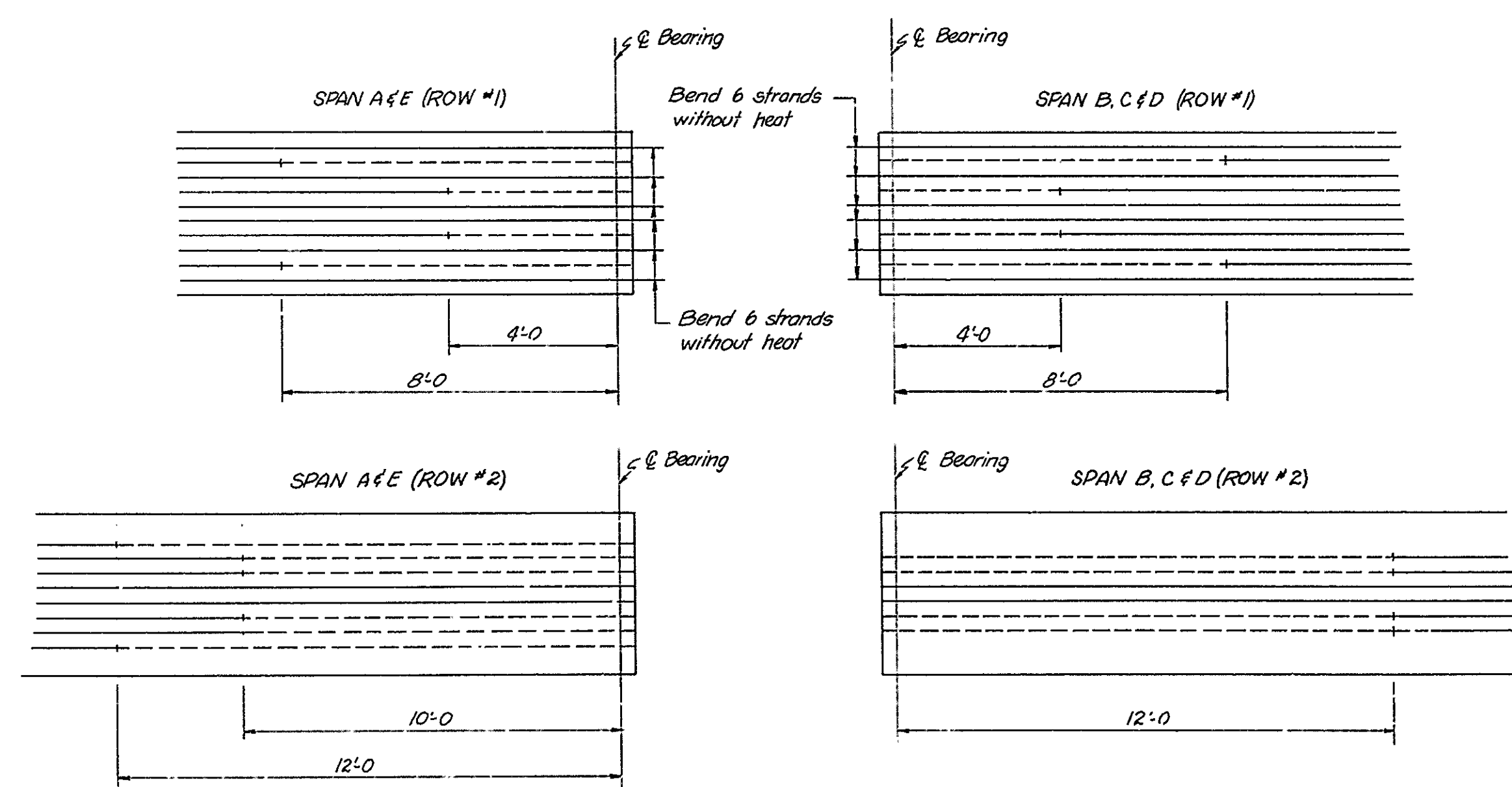
DESIGNED: C.K.D.
DRAWN: C.K.D.
TRACED: C.K.D.
SF-22317

REV. 10-23-89 Note #3

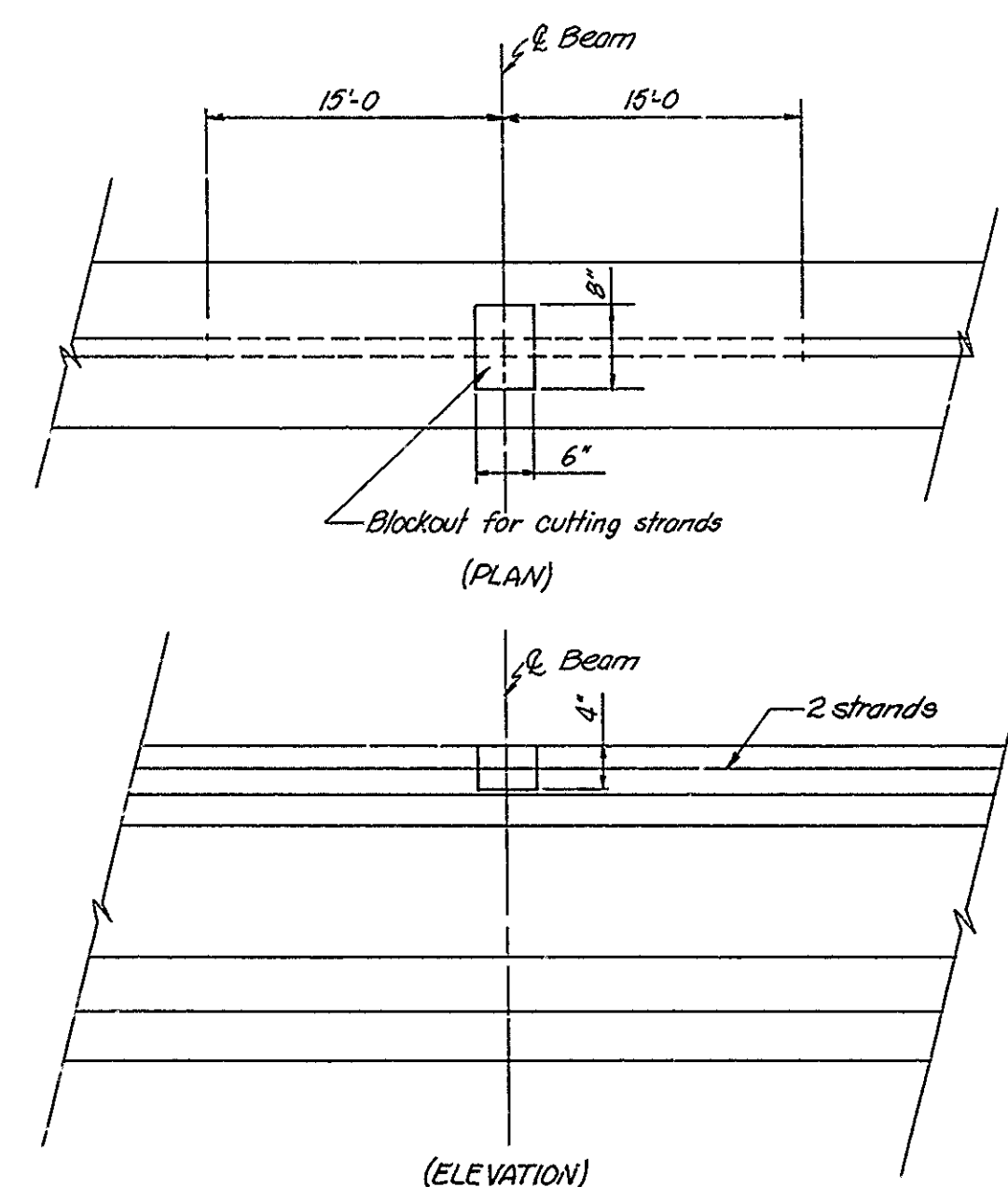
Loughery Creek



BEAM FRAMING PLAN
Scale: 1/16" = 1'-0"



BOND BREAK DIAGRAMS
No Scale



TOP STRAND BLOCKOUT DETAIL
No Scale

- NOTES:
- 1) Top Prestressing Steel to be cut before transporting beams to construction site. Beam fabricator to determine order of detensioning strands.
 - 2) All dashed lines represent bond broken strands.

BEAM DETAILS AND FRAMING PLAN

INDIANA DEPARTMENT OF HIGHWAYS

SCALE:--

DATE: **Sept. 15 1989**

D. Eric Brunn

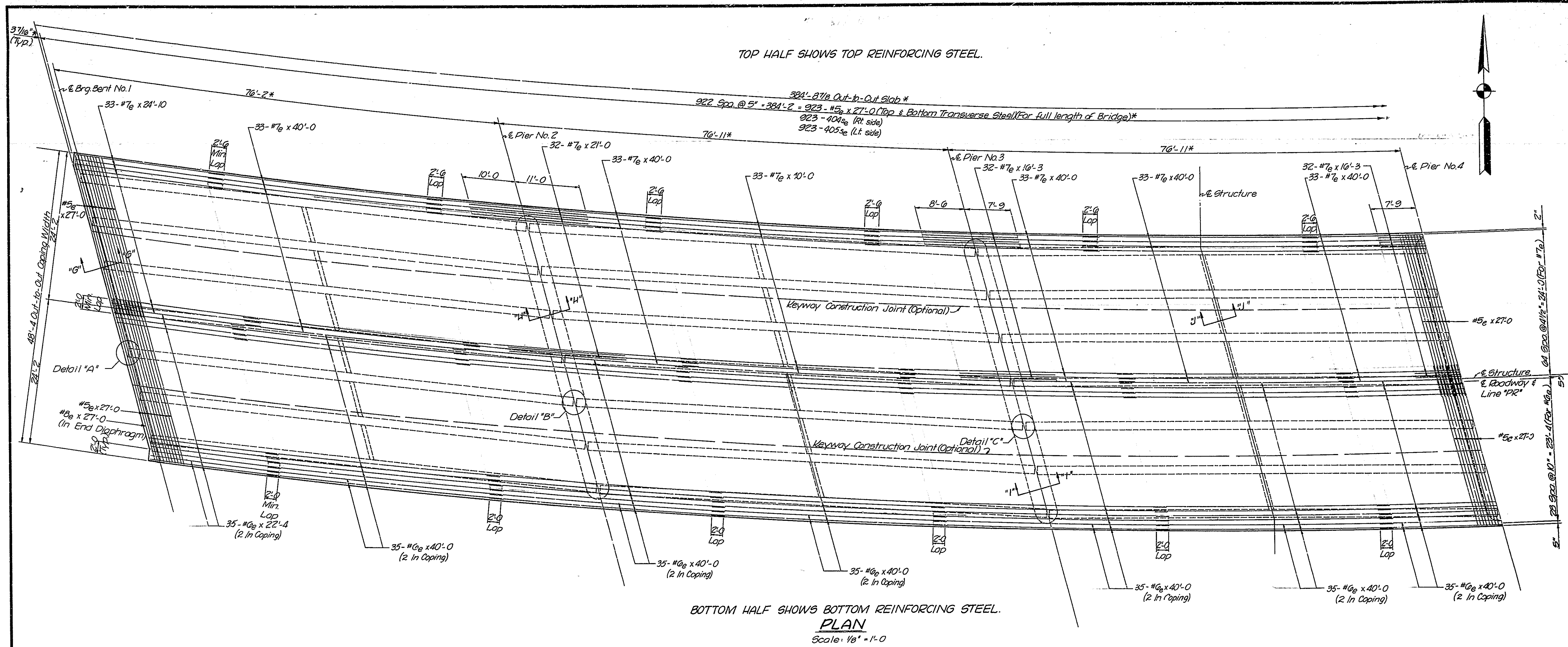
DRAWING: C4 OF C21 SHEET: 29 OF 84
PROJECT: - SF-042-9(D) STATION:--
BRIDGE CONTRACT NO.
BRIDGE FILE: - 30-69-6851



DESIGNED: C.K.D.
DRAWN: C.K.D.
TRACED: C.K.D.

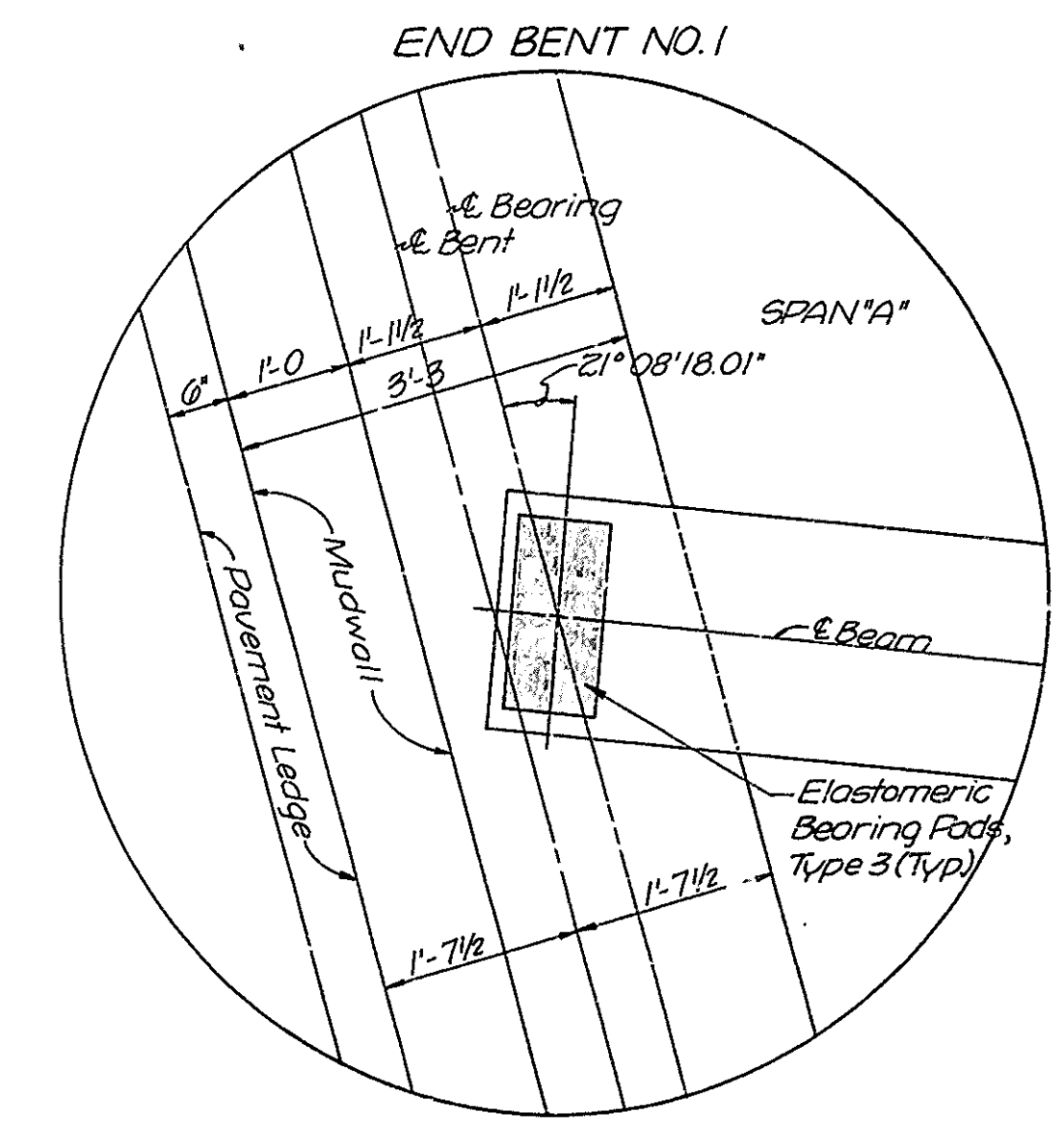
SF-22317

Laughery Creek



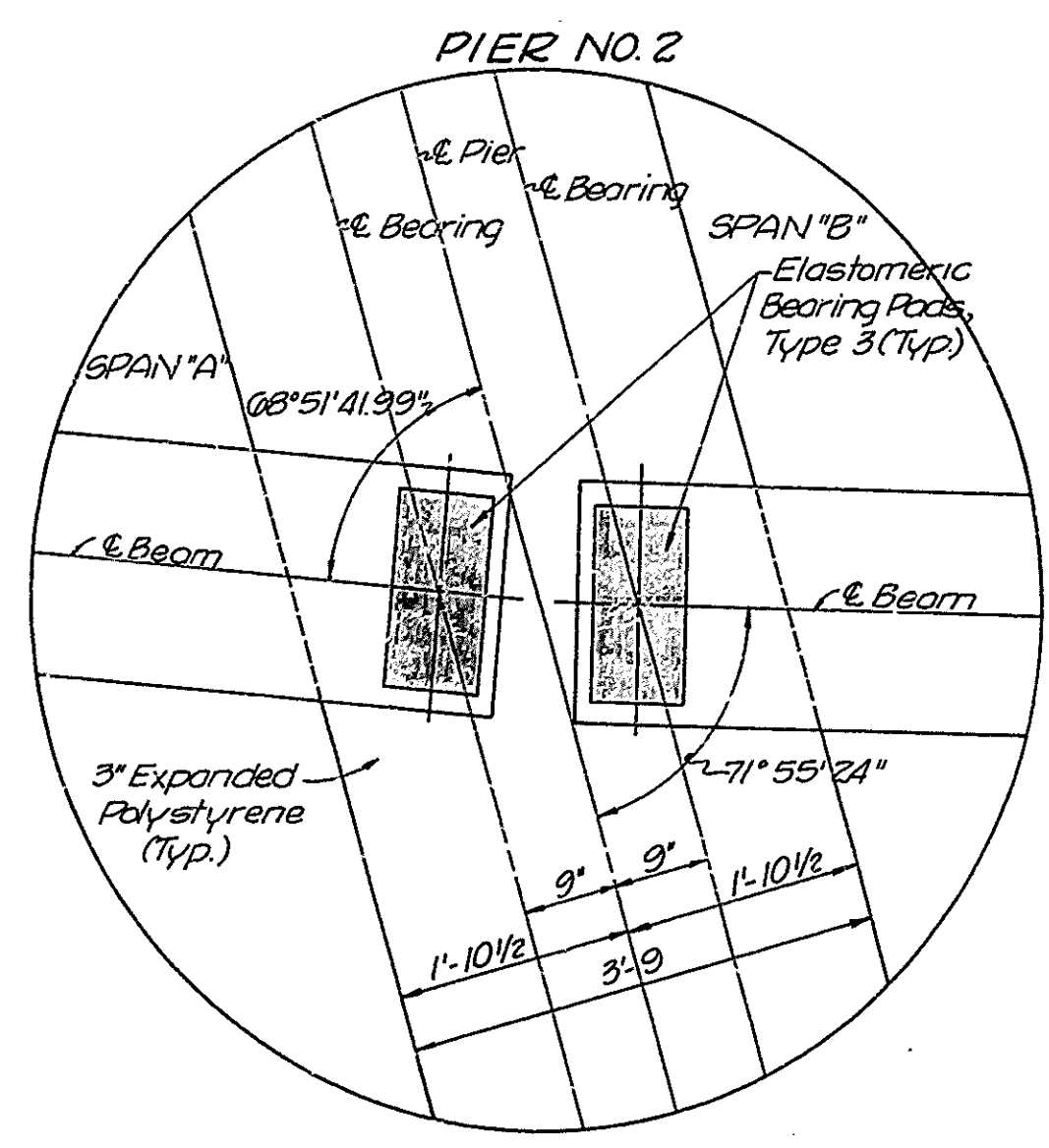
* Dimensioned Along Centerline

NOTE:
See Dwg. C18 for Sections "5-5", "4-4",
"I-I", and "J-J".

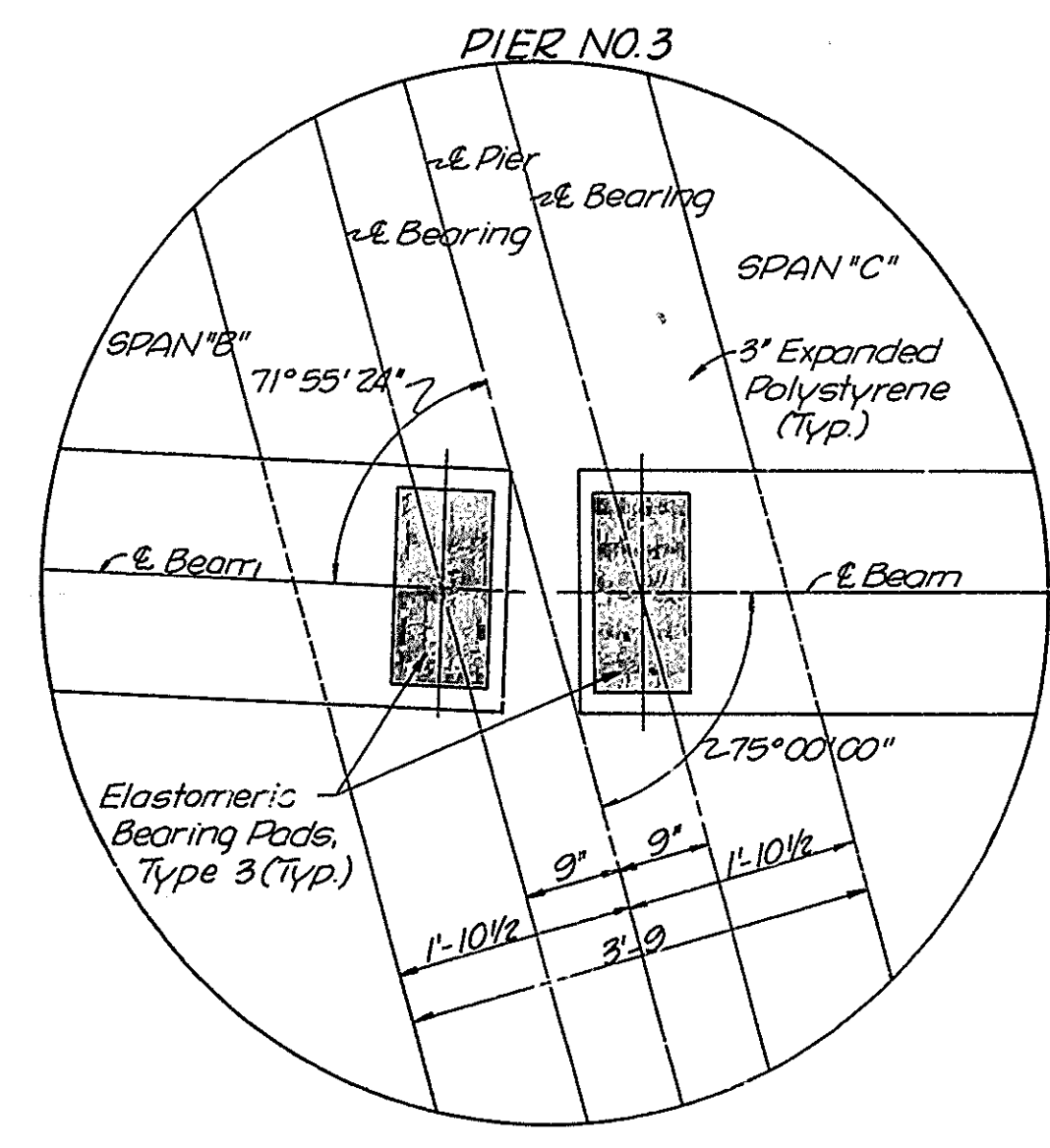


DESIGNED: C.K.D.
DRAWN: C.K.D.
TRACED: C.K.D.

DETAIL "A"
Scale: 3/4" = 1'-0"
SF-22317



DETAIL "B"
Scale: 3/4" = 1'-0"



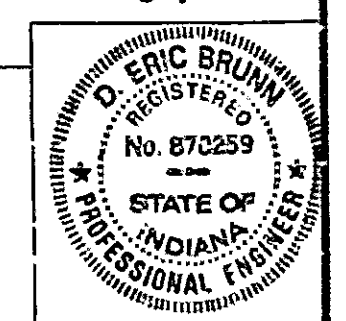
DETAIL "C"
Scale: 3/4" = 1'-0"

**SPANS A, B & C
SUPERSTRUCTURE
INDIANA DEPARTMENT OF HIGHWAYS**

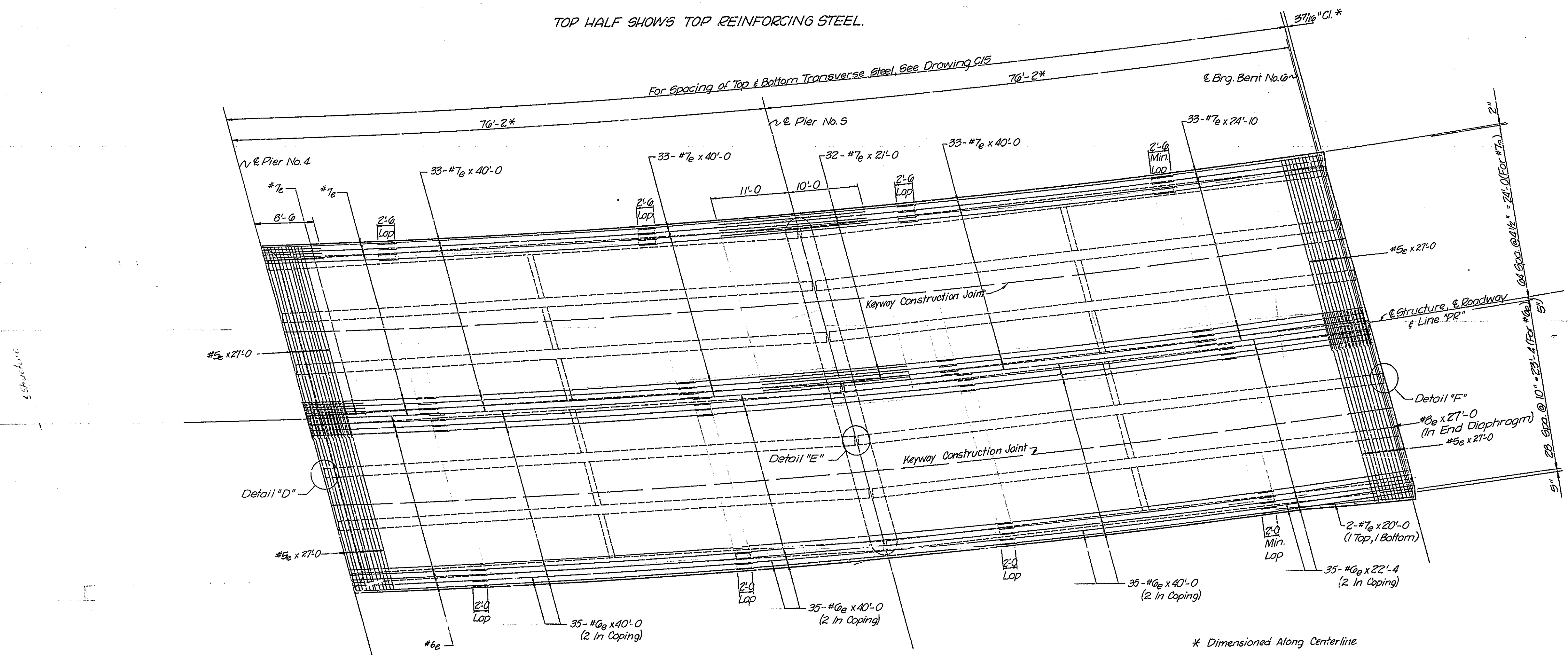
SCALE: - As Shown

DATE: **Sept. 15 1989**
D. Eric Bruner

DRAWING: C15 OF C24 SHEET: 30 OF 84
PROJECT: - SF-042-9(D) STATION: -
BRIDGE CONTRACT NO.
BRIDGE FILE: - 50-69-6851

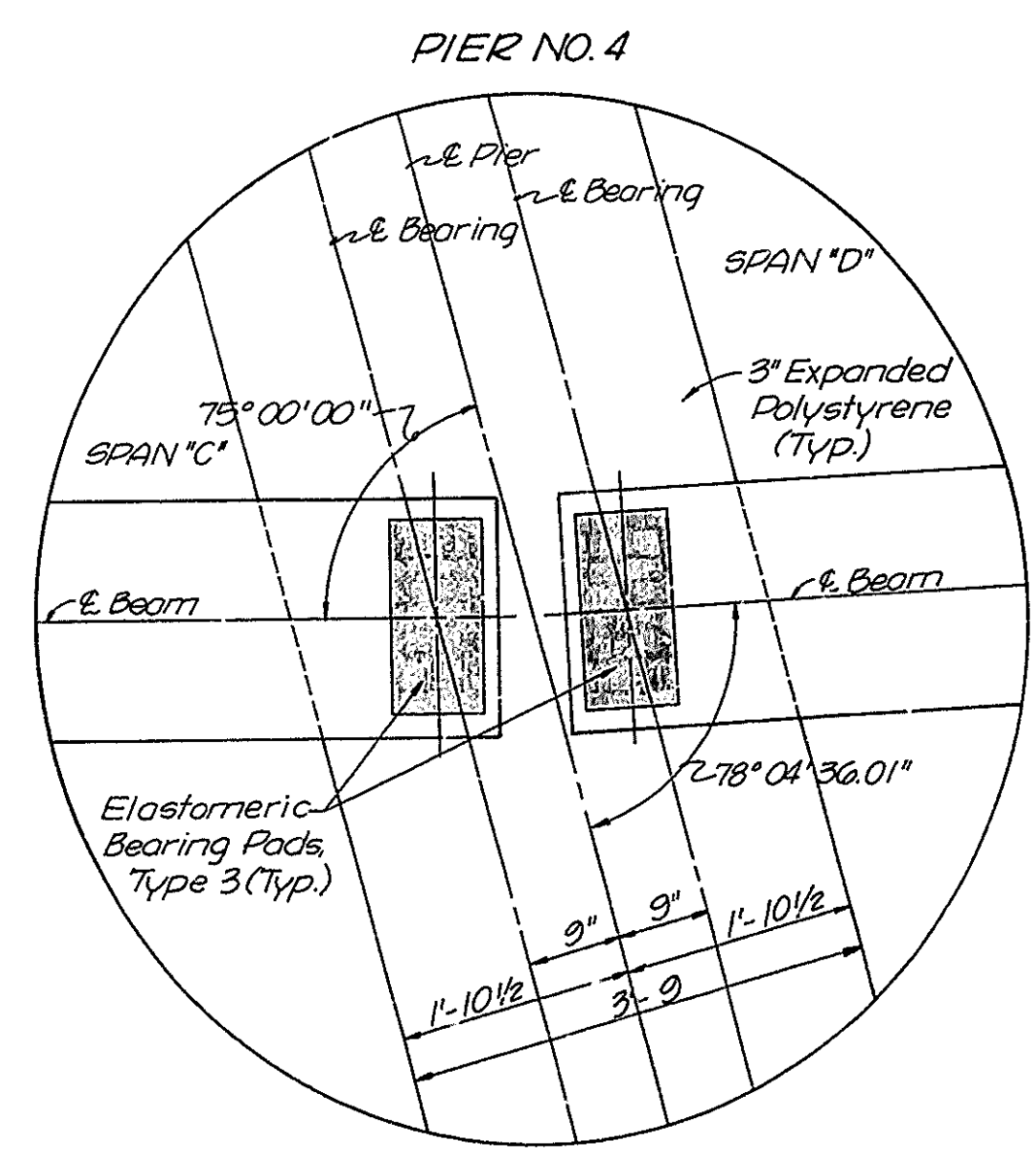


TOP HALF SHOWS TOP REINFORCING STEEL.

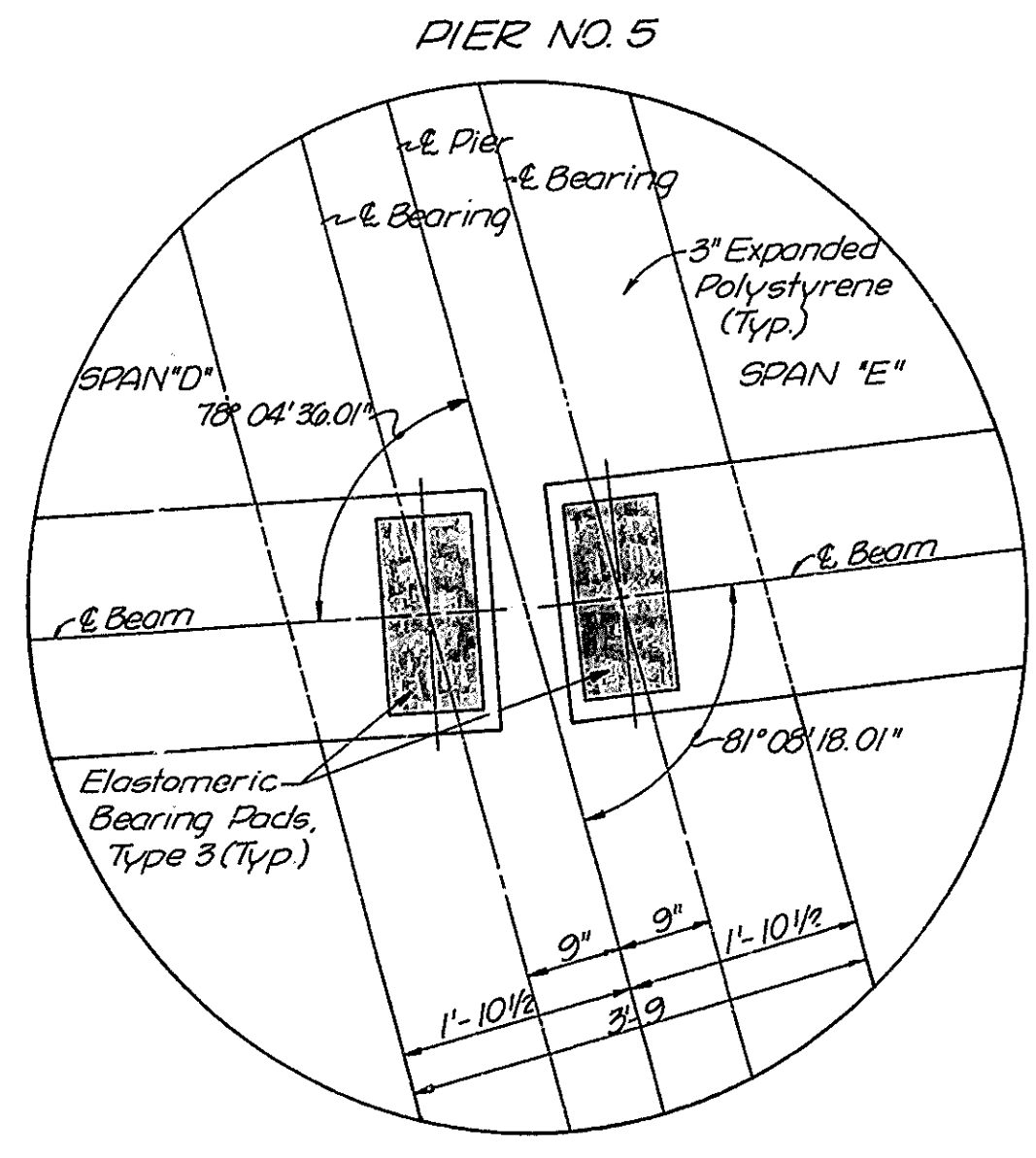


BOTTOM HALF SHOWS BOTTOM REINFORCING STEEL.

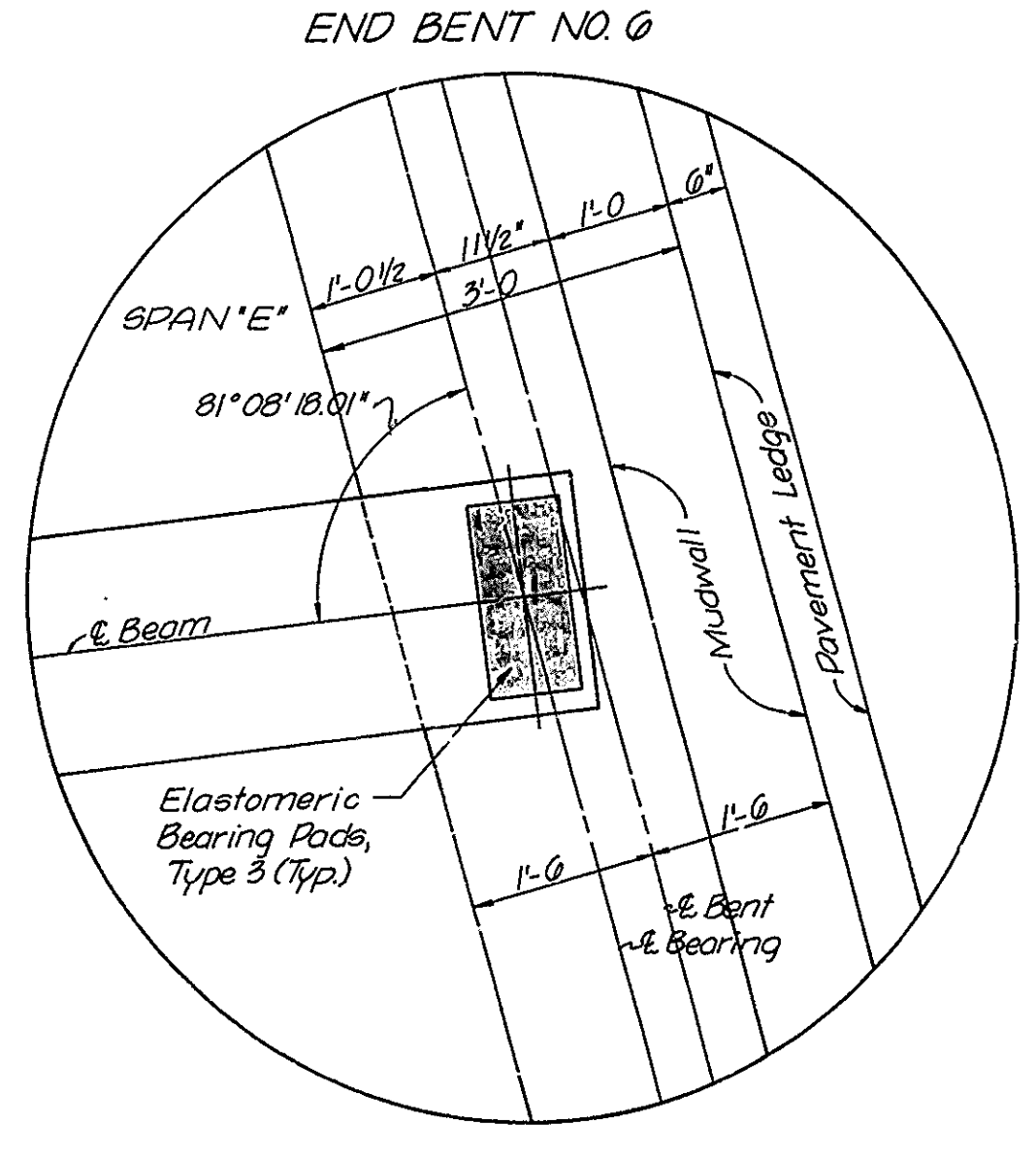
PLAN
Scale: 1/8" = 1'-0"



DETAIL "D"
Scale: 3/4" = 1'-0"
SF-22317



DETAIL "E"
Scale: 3/4" = 1'-0"



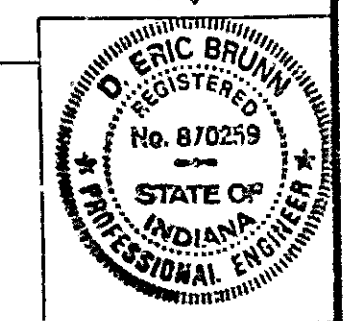
DETAIL "F"
Scale: 3/4" = 1'-0"

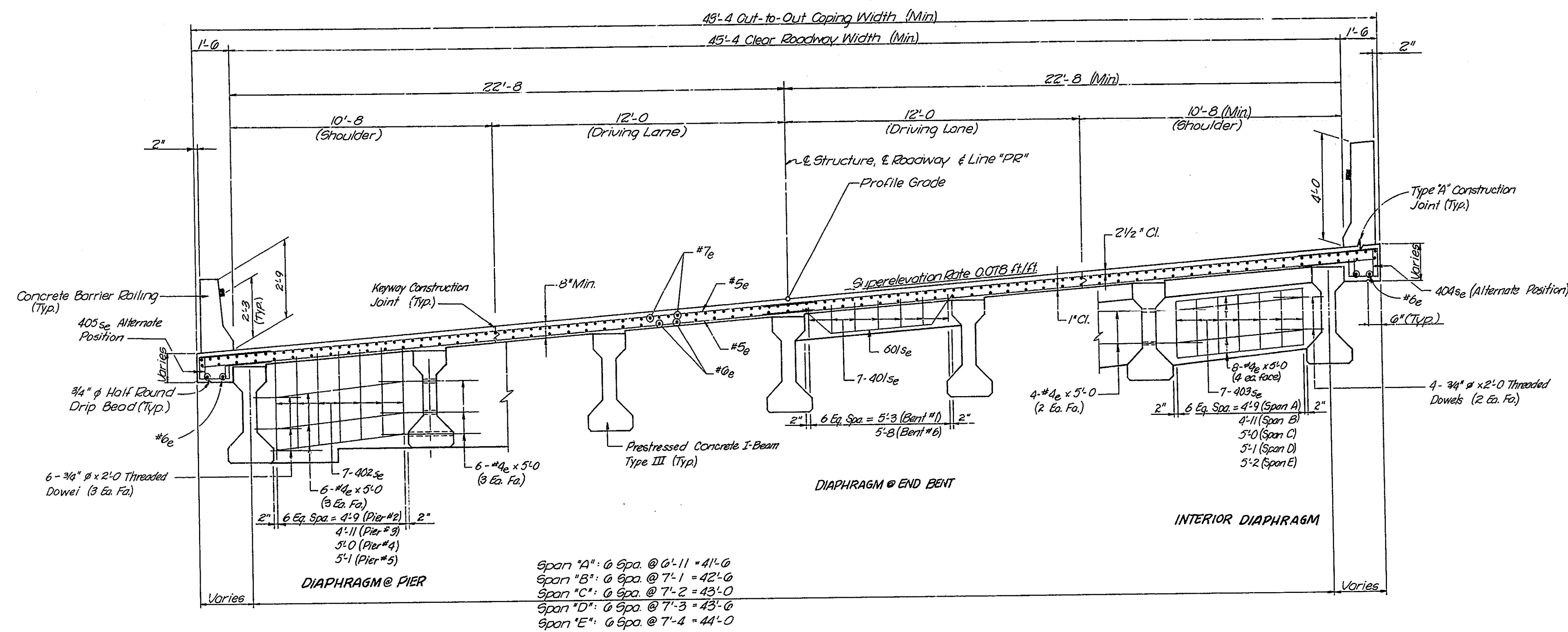
| | |
|----------|-----|
| DESIGNED | CKD |
| DRAWN | CKD |
| TRACED | CKD |

SPANS D & E
SUPERSTRUCTURE
INDIANA DEPARTMENT OF HIGHWAYS

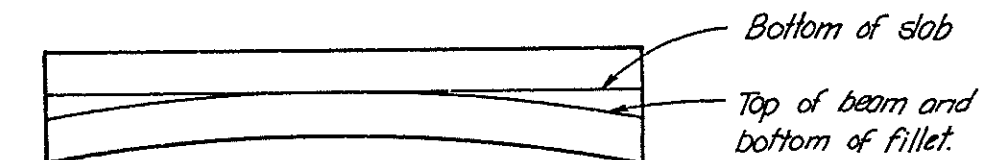
SCALE: - As Shown DATE: Sept. 15 1989

DRAWING: C16 OF C24 SHEET: 31 OF 84
PROJECT: - ST-042-9(D) STATION: -
BRIDGE CONTRACT NO.
BRIDGE FILE: - 50-69-6851





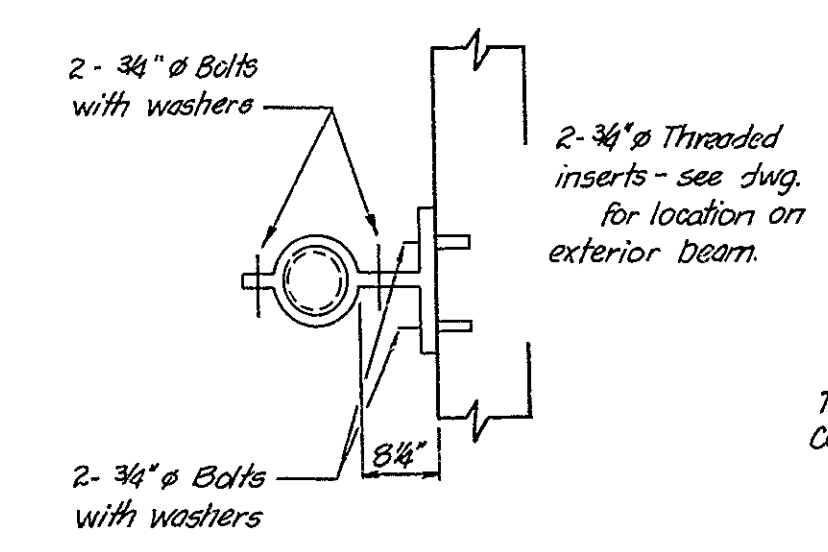
TYPICAL SECTION ALONG RADIAL LINE
Scale: 3/8" = 1'-0"



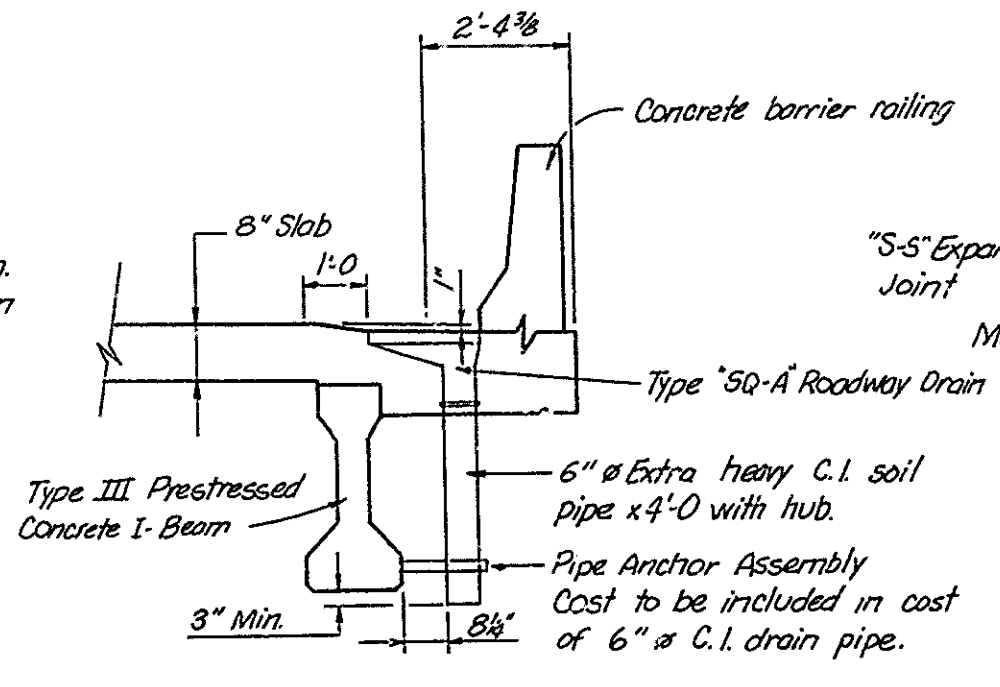
BRIDGE SEAT ELEVATION
No Scale

Bridge seat elevations were calculated using camber and dead load deflections of slab (residual beam camber) with top of beam at bottom of slab elevation and at the centerline of span. Actual cambers which are greater than design cambers will be compensated for by permitting the top of beam to extend into the slab (maximum of 1 in.).

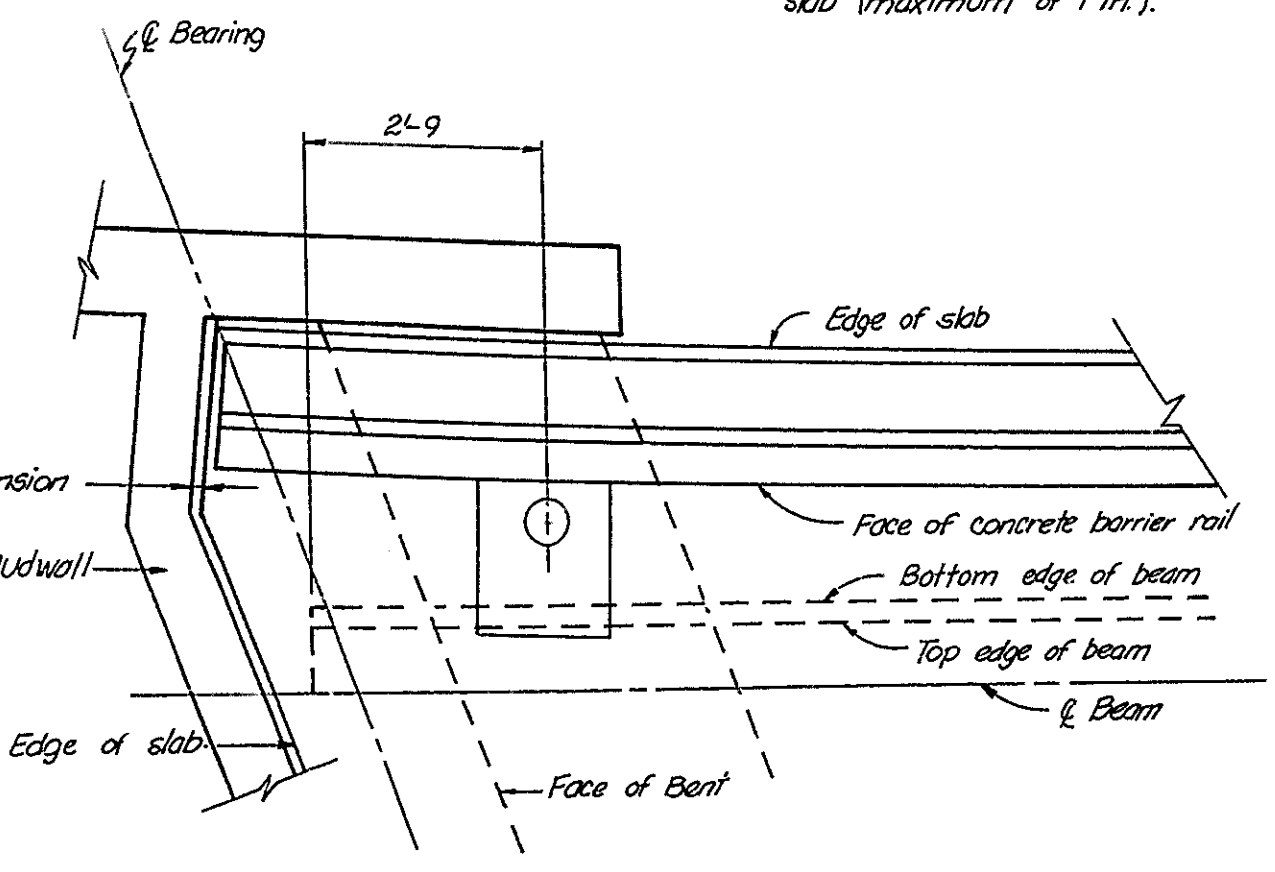
NOTE:
Either permanent metal deck forms or precast concrete check panels may be substituted for removable forms at this structure.



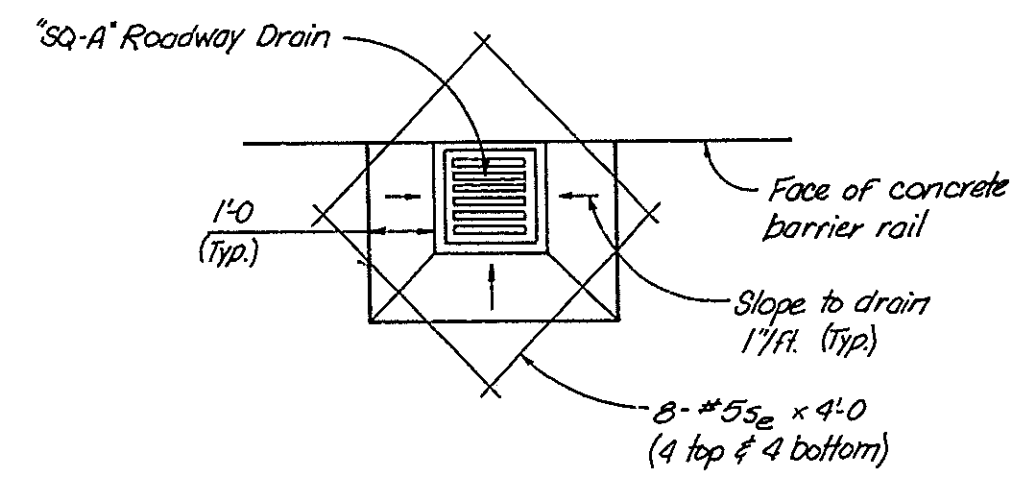
PIPE ANCHOR DETAILS
No Scale



ROADWAY DRAIN ELEVATION
No Scale



DRAIN LOCATION DETAIL
No Scale



ROADWAY DRAIN PLAN
Scale: 3/8" = 1'-0"

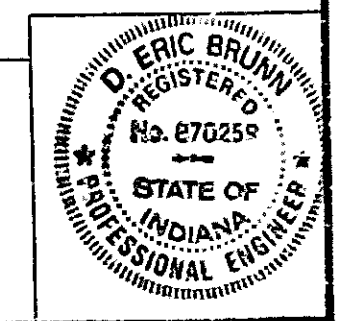
| BILL OF MATERIALS (SUPERSTRUCTURE) | | | |
|---|----------|---------|-----------|
| SIZE (MM) | Quantity | Length | Weight |
| #8 _a | 4 | 27'-0" | |
| #8 _b | 28 | 1'-10" | |
| Total #8 | | | 426# |
| #7 _e | 585 | 40'-0" | |
| #7 _e | 130 | 24'-10" | |
| #7 _e | 128 | 21'-0" | |
| #7 _e | 2 | 20'-0" | |
| #7 _e | 128 | 16'-3" | |
| Total #7 _e | | | 64256# |
| 60 _{1se} | 8 | 26'-4" | |
| #6 _e | 621 | 40'-0" | |
| #6 _a | 138 | 22'-4" | |
| Total #6 | | | 42256# |
| #5 _e | 3092 | 27'-0" | |
| #5 _e | 8 | 4'-0" | |
| Total #5 | | | 104,004# |
| 40 _{1se} | 84 | 4'-11" | |
| 40 _{2se} | 168 | 11'-10" | |
| 40 _{3se} | 210 | 6'-5" | |
| 40 _{4se} | 923 | 7'-10" | |
| 40 _{5se} | 923 | 7'-8" | |
| #4 _e | 604 | 5'-0" | |
| Total #4 | | | 14,079# |
| TOTAL EPOXY-COATED STEEL | | | 225,021# |
| CONCRETE (CLASS "C") | | | |
| Pour No. 1 Lt. | | | 27.2 CY |
| Pour No. 1 Rt. | | | 47.0 CY |
| Pour No. 2 Lt. | | | 28.9 CY |
| Pour No. 2 Rt. | | | 25.2 CY |
| Pour No. 3 Lt. | | | 43.4 CY |
| Pour No. 3 Rt. | | | 26.3 CY |
| Pour No. 4 Lt. | | | 24.8 CY |
| Pour No. 4 Rt. | | | 43.4 CY |
| Pour No. 5 Lt. | | | 25.1 CY |
| Pour No. 5 Rt. | | | 25.7 CY |
| Pour No. 6 | | | 46.8 CY |
| Interior Diaphragms | | | 14.3 CY |
| Total Class "C" Concrete | | | 603.8 CY |
| MISCELLANEOUS | | | |
| Surface Seal | | | 202.50 SF |
| Barrier Delineators | | | 42 EA. |
| 1 - C.I. Roadway Drain Type "SO-A" | | | |
| | | | 192 # |
| 1 - C.I. Drain Pipe x 4'-0" with Hub | | | |
| | | | 77 # |

SUPERSTRUCTURE DETAILS
INDIANA DEPARTMENT OF HIGHWAYS

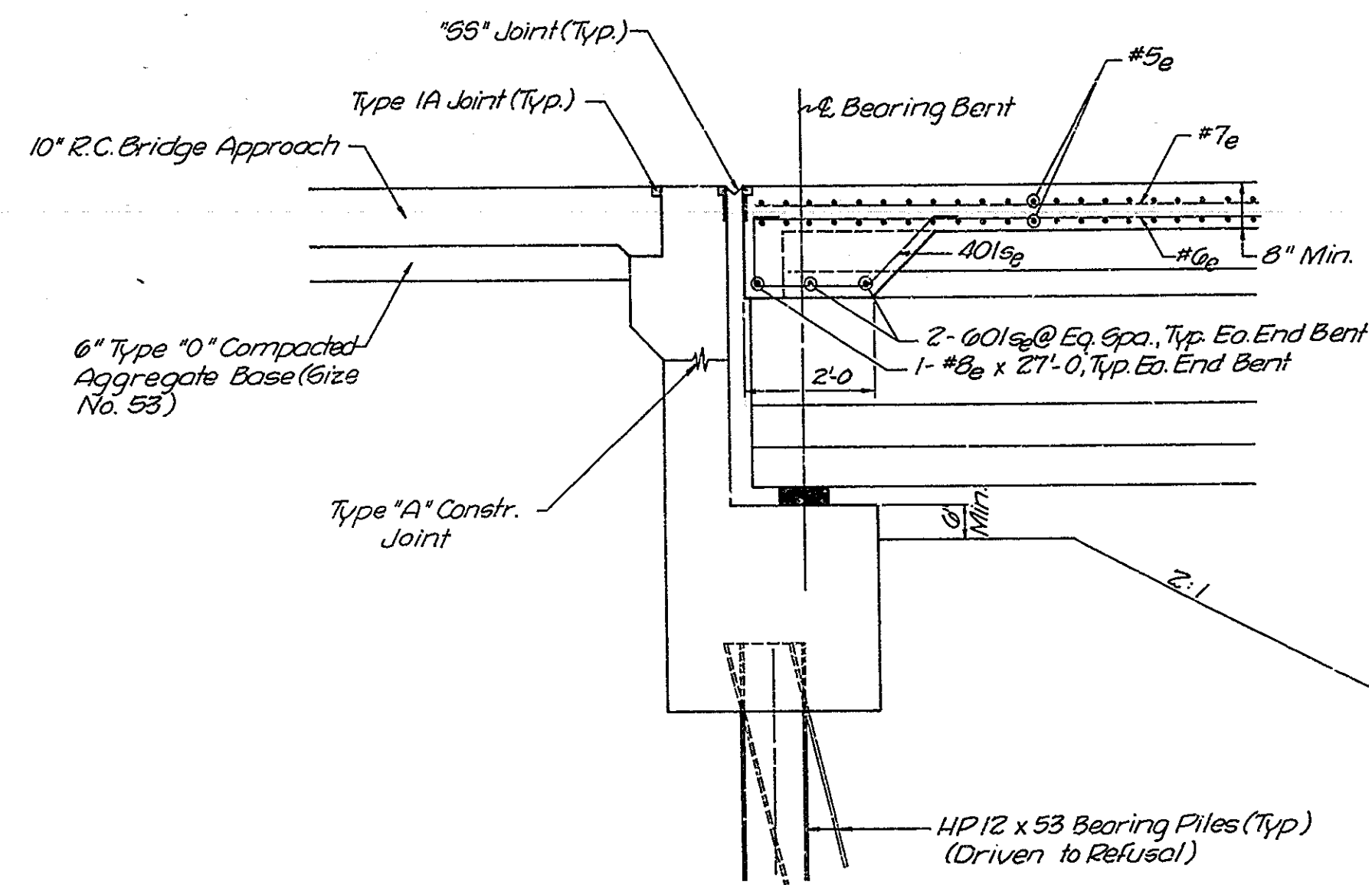
SCALE: - As Noted DATE: **Sept. 15** 19**89**

DESIGNED: C.K.D.
DRAWN: C.K.D.
TRACED: C.K.D.
SF-22317

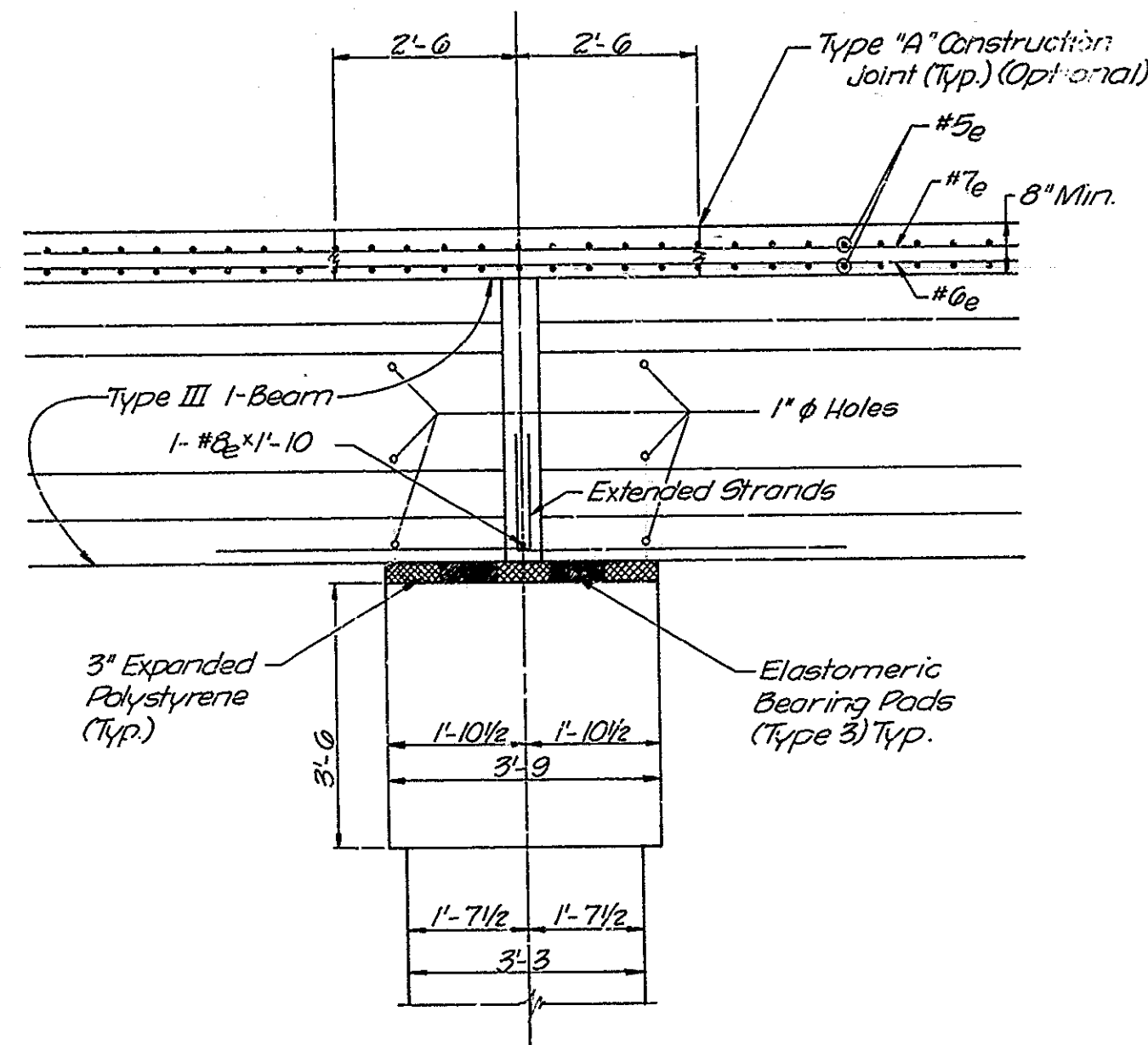
D. Eric Sumner



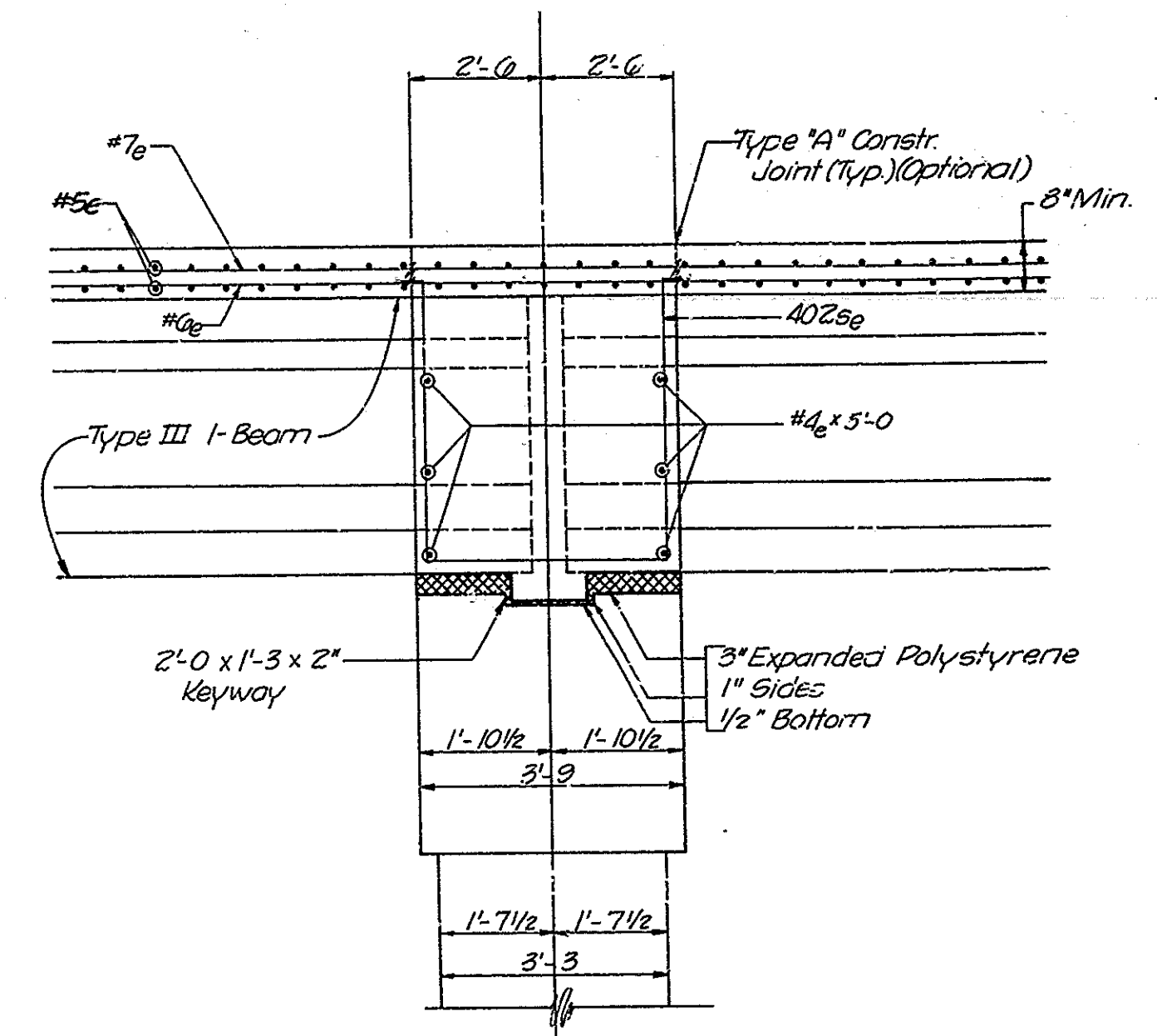
DRAWING: C17 OF C24 SHEET: 32 OF 84
PROJECT: - ST-042-9(0) STATION: -
BRIDGE CONTRACT NO.
BRIDGE FILE: - 50-69-6851



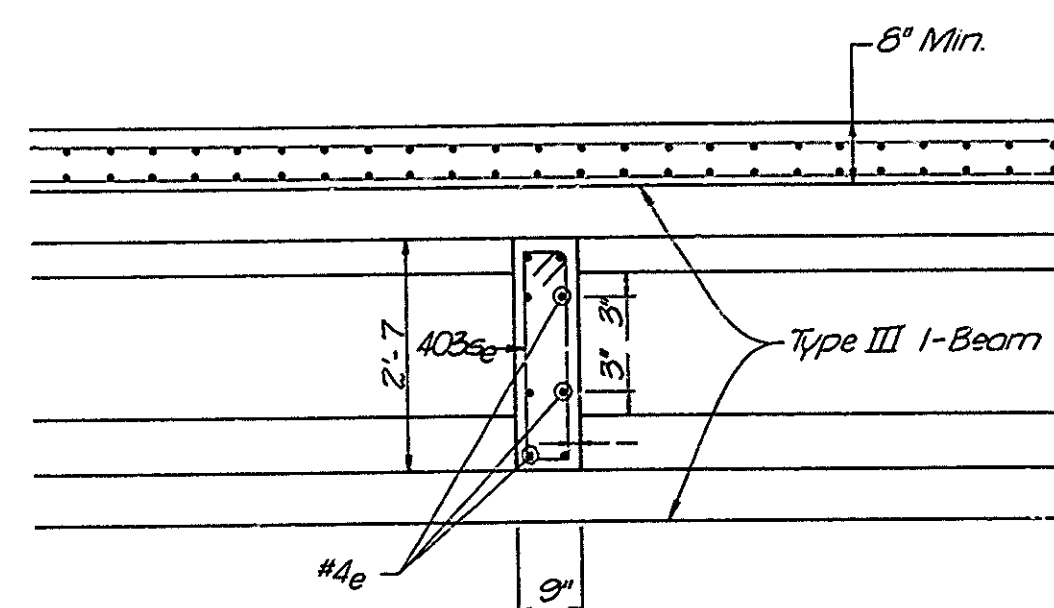
SECTION "G-G"
Scale: 1/2" = 1'-0"



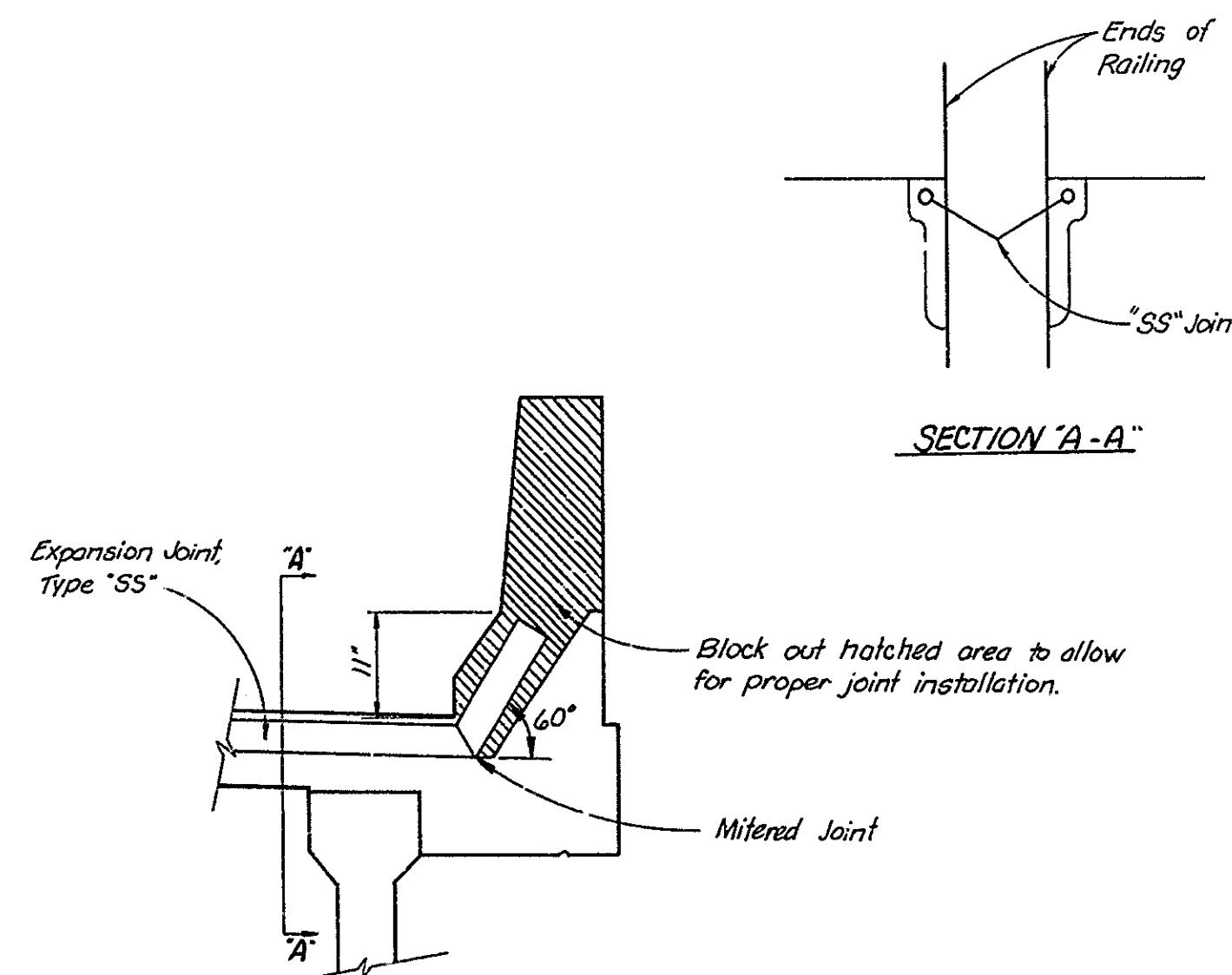
SECTION "H-H"
Scale: 1/2" = 1'-0"



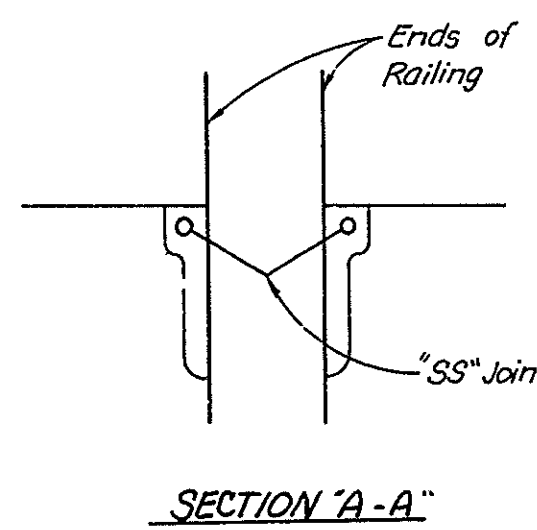
SECTION "I-I"
Scale: 1/2" = 1'-0"



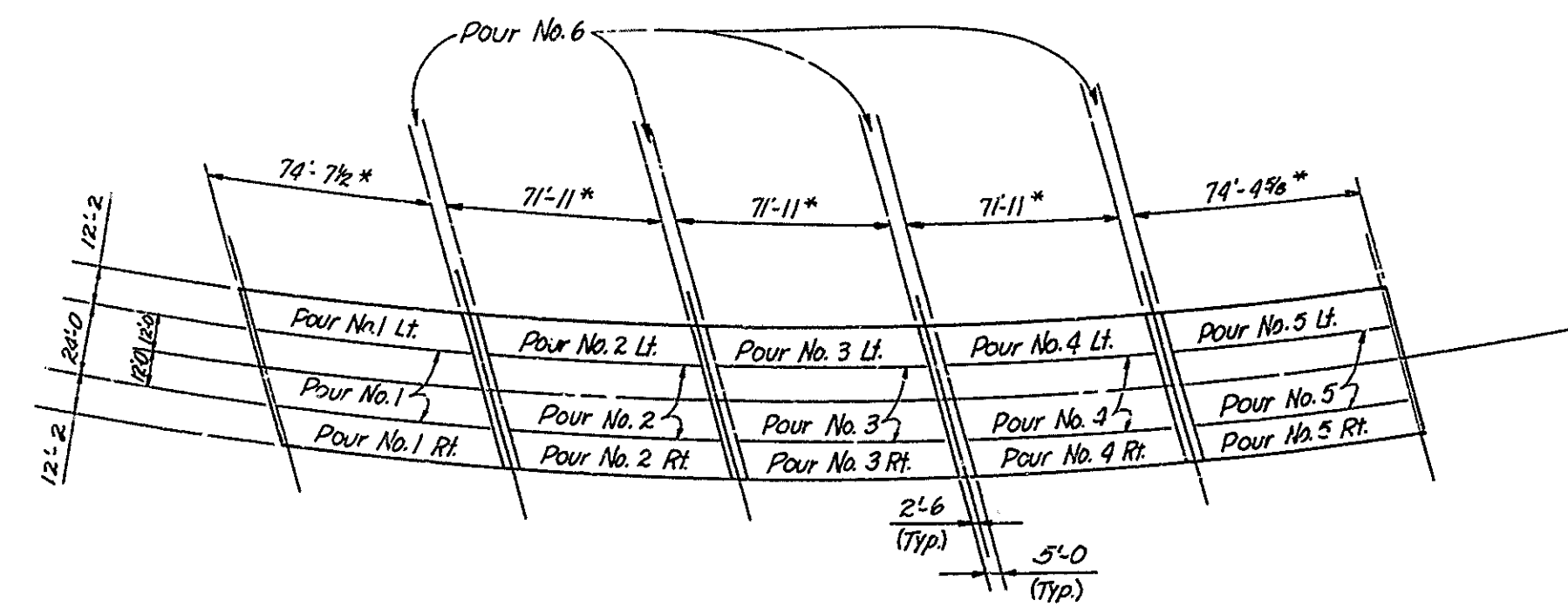
SECTION "J-J"
Scale: 1/2" = 1'-0"



**TYPICAL SECTION
EXPANSION JOINT CLASS 5-5**
Not to Scale



SECTION "A-A"



POUR DIAGRAM

Not to Scale

Pour numbers indicate sequence of pours.
Pours over interior supports to be made last.
Interior diaphragms to be poured first. Any
other sequence subject to the approval of
the engineer.

SUPERSTRUCTURE DETAILS

INDIANA DEPARTMENT OF HIGHWAYS

SCALE: - As Shown

DATE: **Sept. 15 1984**
D. Eric Brumm

DRAWING: C1B OF C2I SHEET: 33 OF 84
PROJECT: ST-042-9(D) BRIDGE CONTRACT NO.
BRIDGE FILE: - 50-69-689

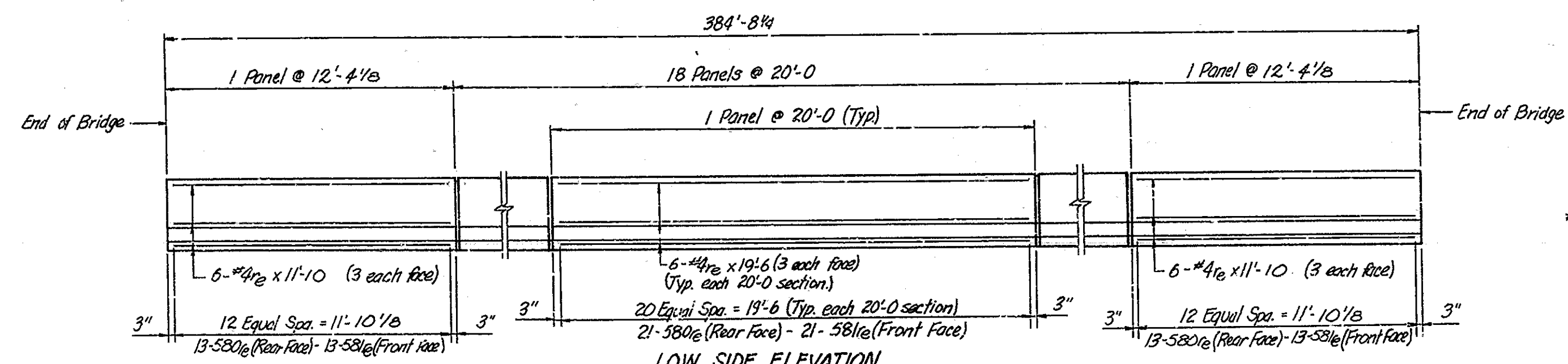


DESIGNED: C.K.D.
DRAWN: C.K.D.
TRACED: C.K.D.

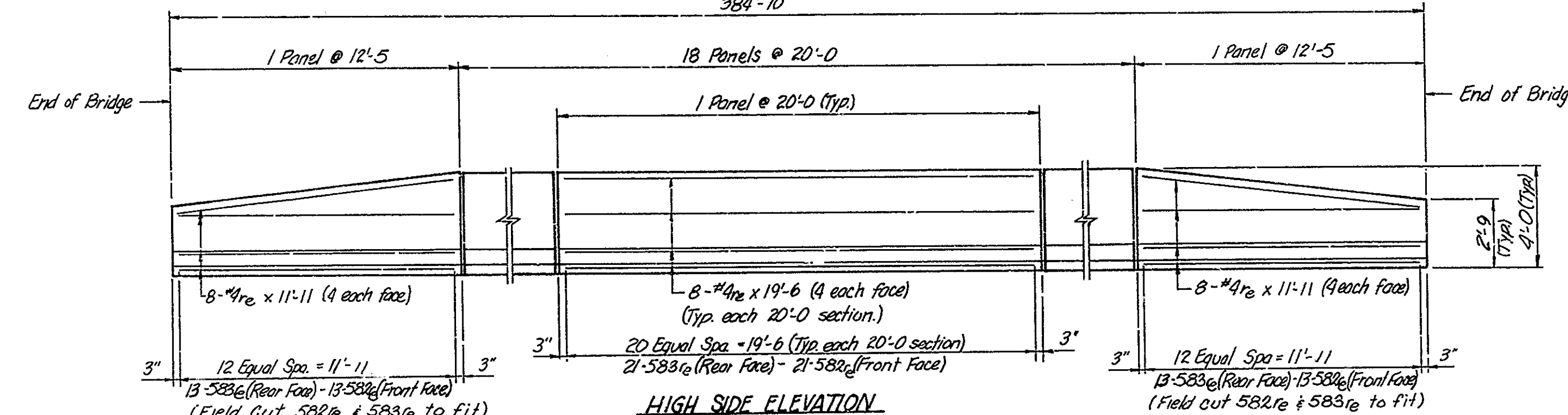
SF-22317

Rev. 10-23-89 Block Out for Joint Installation

Loughery Creek



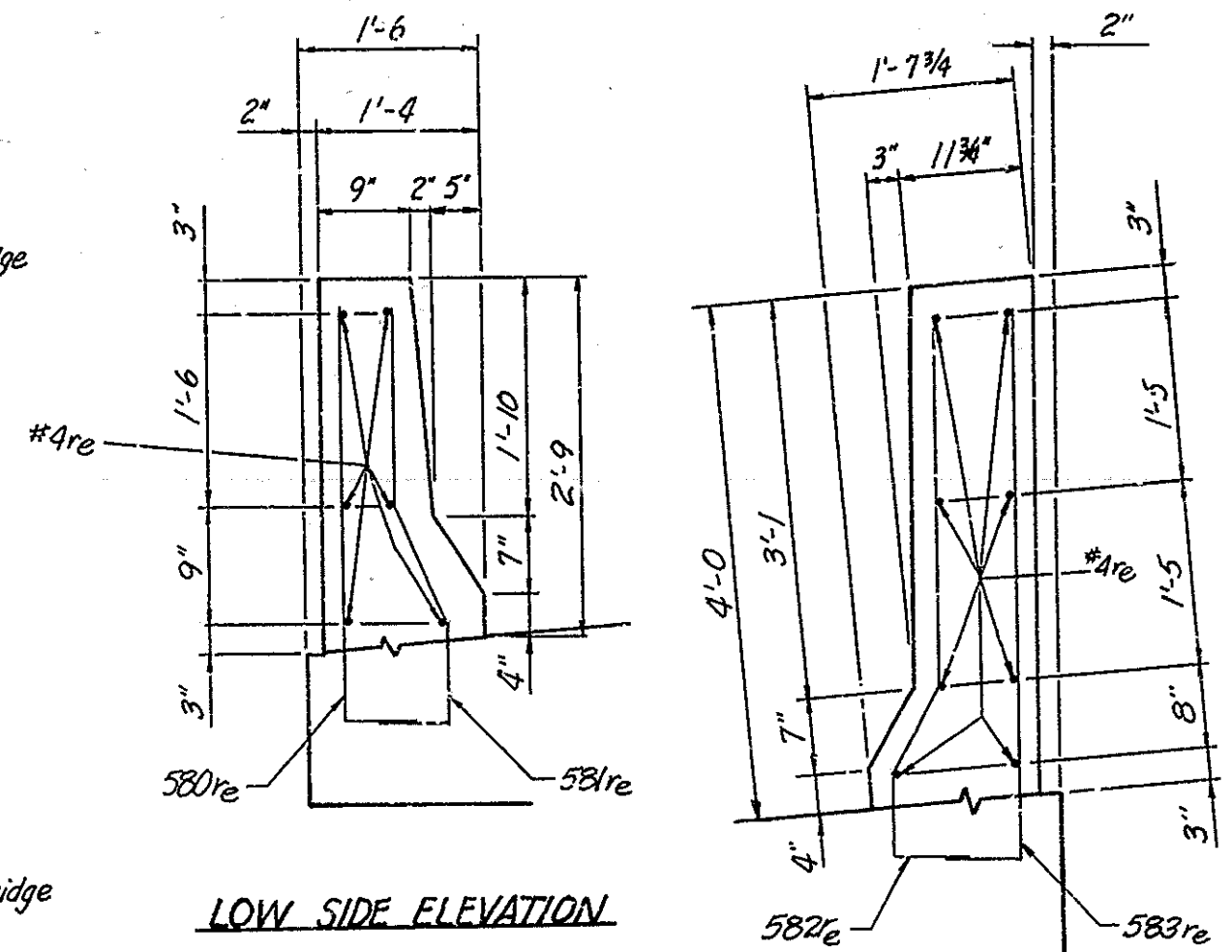
LOW SIDE ELEVATION



HIGH SIDE ELEVATION

BARRIER RAIL

Scale: 1/4"=1'-0"

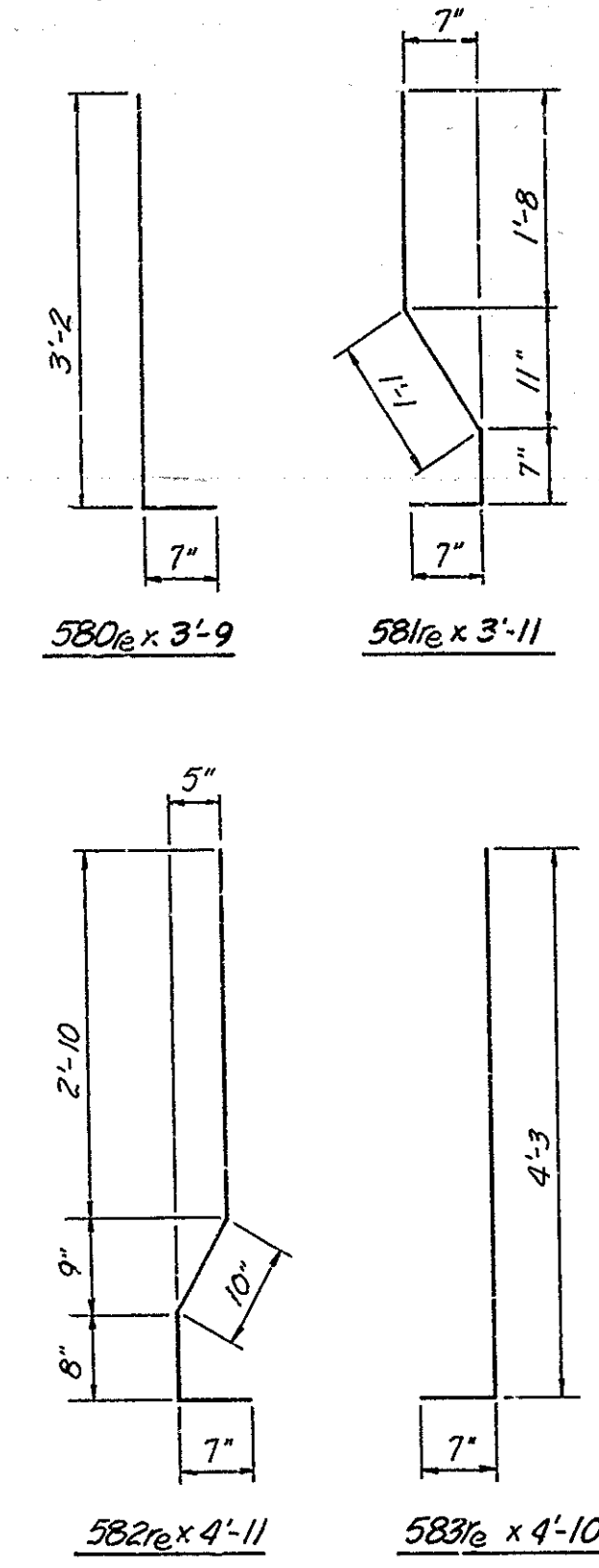


LOW SIDE ELEVATION

HIGH SIDE ELEVATION

TYPICAL SECTION CONCRETE BARRIER

Scale: 3/4"=1'-0"



| BILL of MATERIAL | | | |
|---------------------------------------|----------|--------|----------|
| SIZE or MK | QUANTITY | LENGTH | WEIGHT |
| 580re | 404 | 3'-9 | |
| 581re | 404 | 3'-11 | |
| 582re | 404 | 4'-11 | |
| 583re | 404 | 4'-10 | |
| Total #5re | | | 7939# |
| #4re | 252 | 19'-6 | |
| #4re | 16 | 11'-11 | |
| #4re | 12 | 11'-10 | |
| Total #4re | | | 3506# |
| TOTAL EPOXY-COATED STEEL | | | 10844# |
| CONCRETE CLASS "C" IN BARRIER RAILING | | | |
| Low Side Barrier Rail | | | |
| High Side - End Panels | | | |
| - Interior Panels | | | |
| TOTAL CLASS "C" | | | 96.2 CYS |
| MISCELLANEOUS | | | |
| Surface Seal - Barrier Rail | | | 3935 SFT |
| - Barrier Rail | | | |
| Transition | | | 544 SFT |
| TOTAL SURFACE SEAL | | | 6479 SFT |

Note: For optional splice in Vertical Railing Reinforcing Steel see Bridge Standard Sheet C3.

DESIGNED: C.K.D.
 DRAWN: C.K.D.
 TRACED: C.K.D.

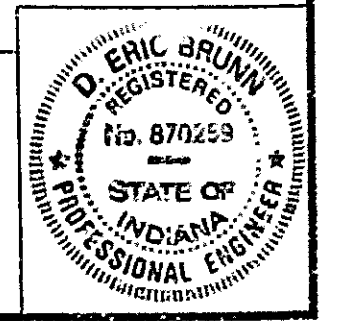
SF-22317

SCALE: - As Noted

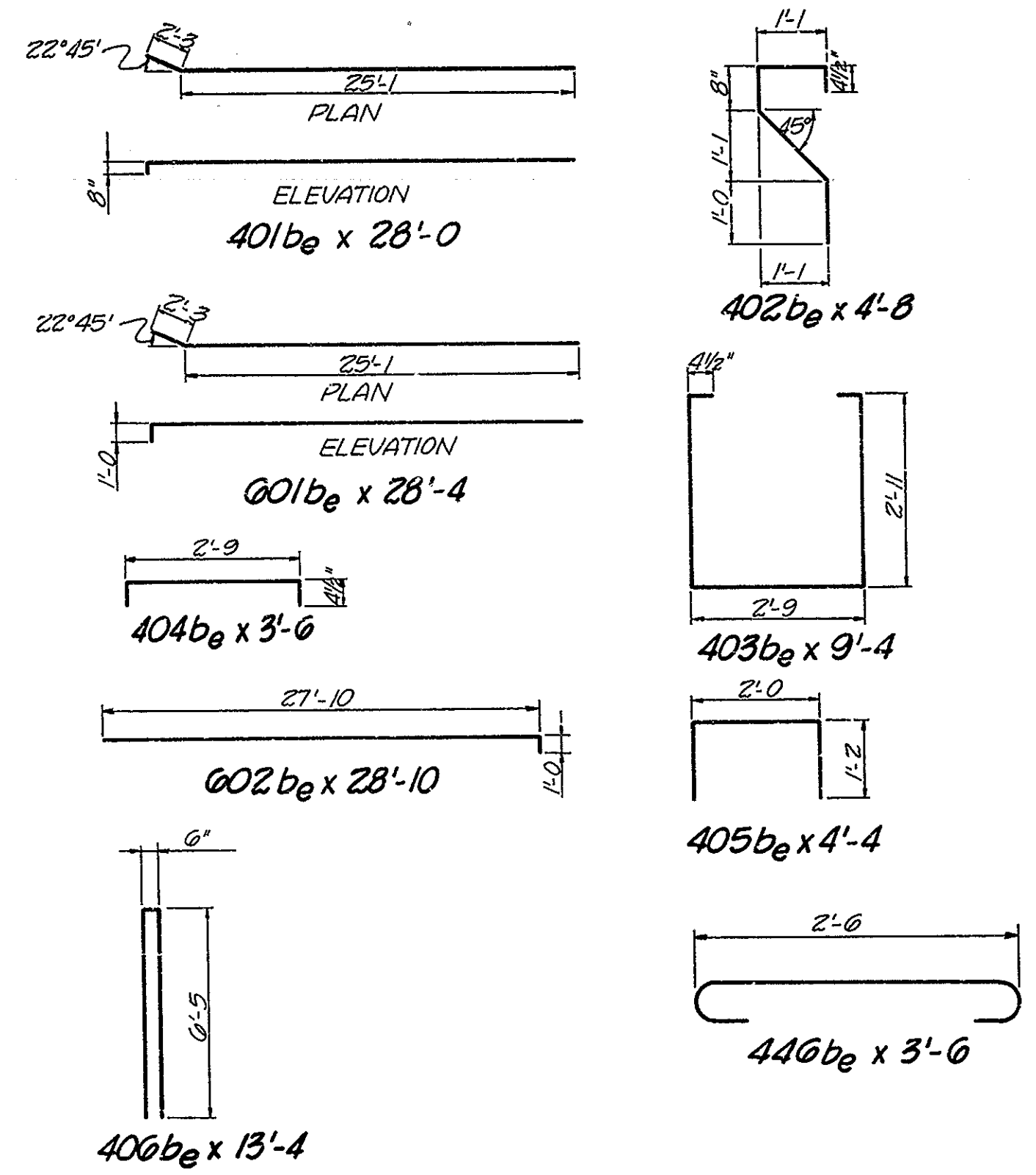
DATE: Sept. 15 1989

D. Eric Brunner

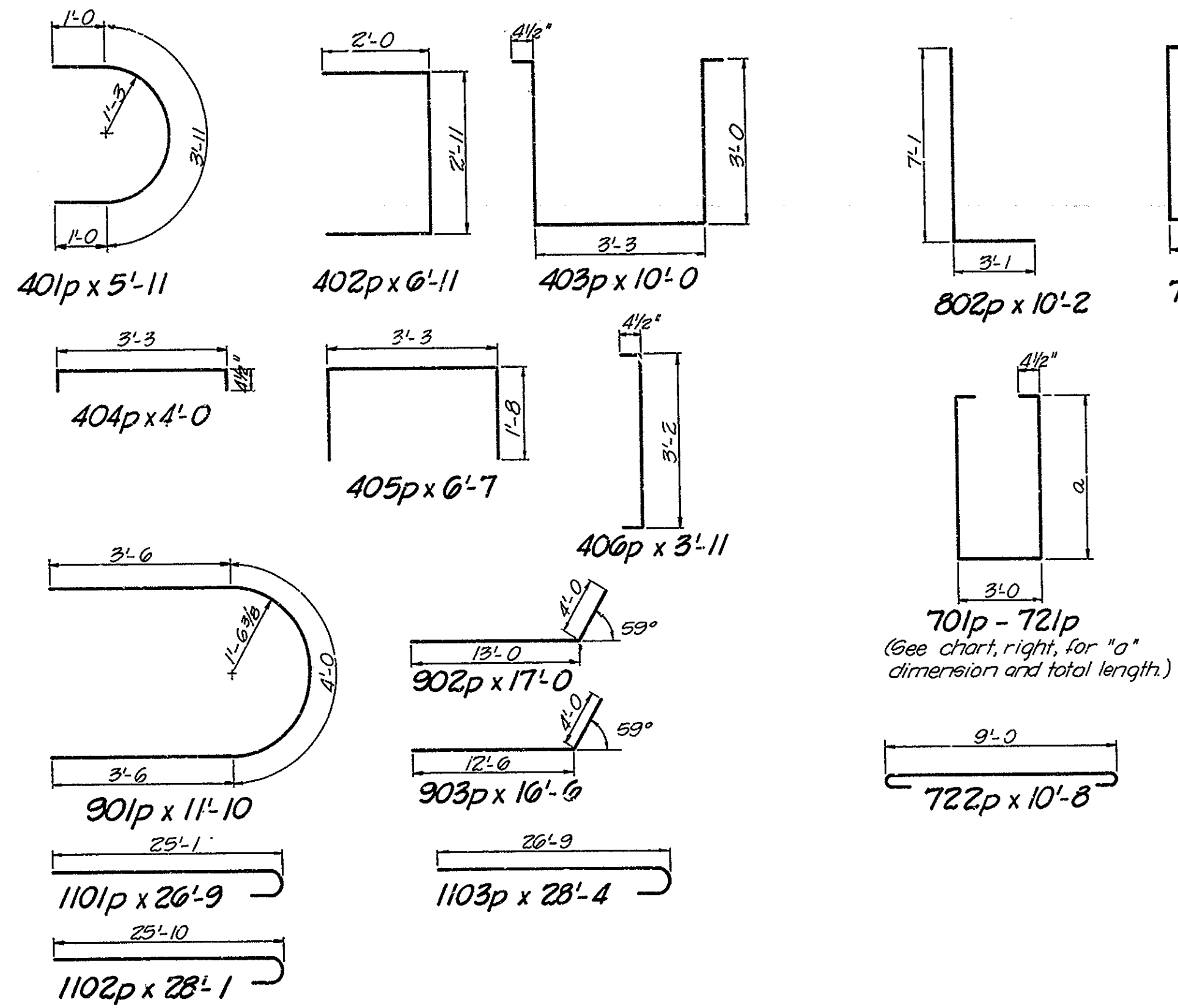
DRAWING: C19 OF C24 SHEET: 34 OF 84
 PROJECT: 37-042-9(D) STATION: --
 BRIDGE CONTRACT NO.
 BRIDGE FILE: 50-69-6851



Loughery Creek

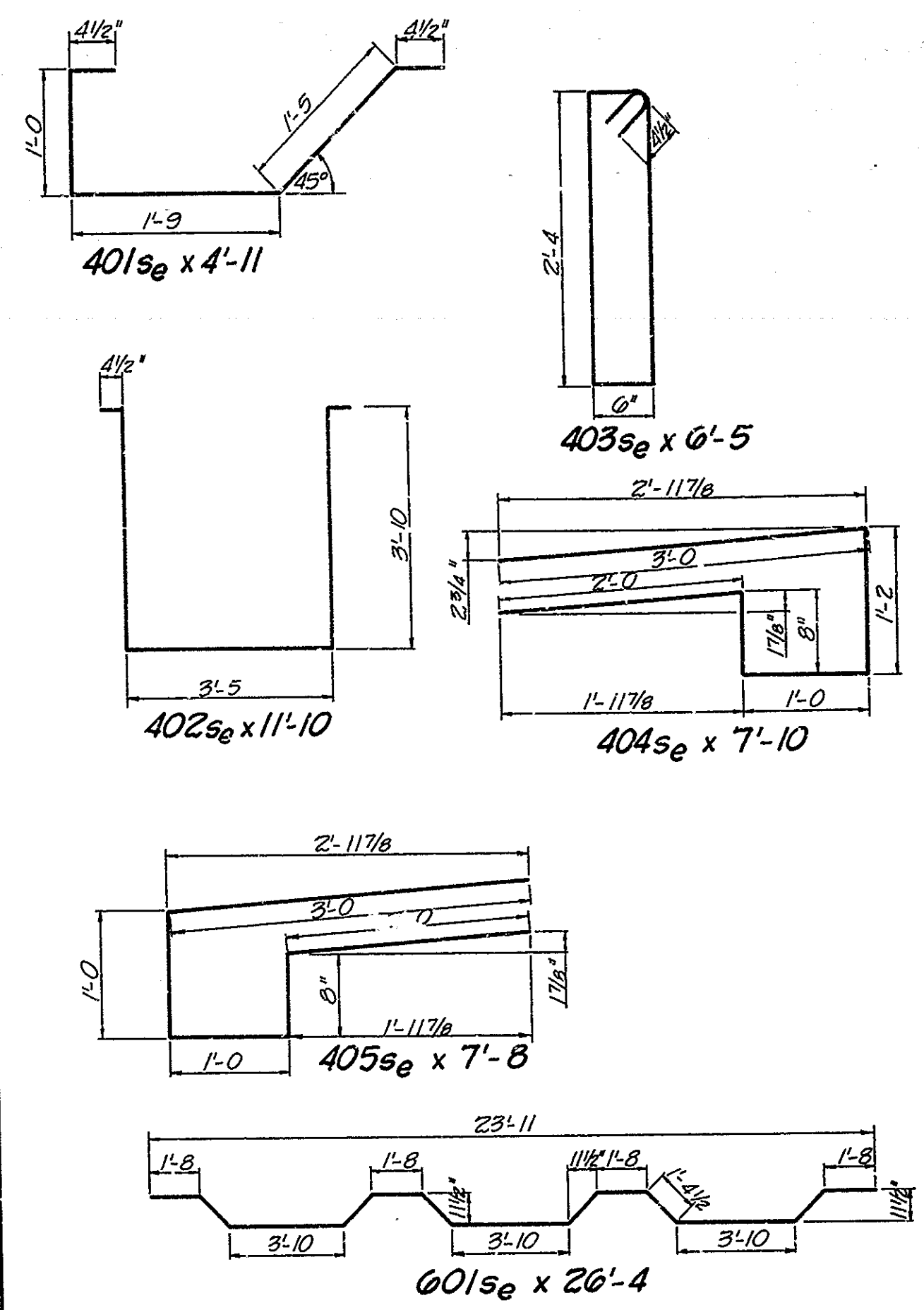


MK BARS FOR END BENT NO.1

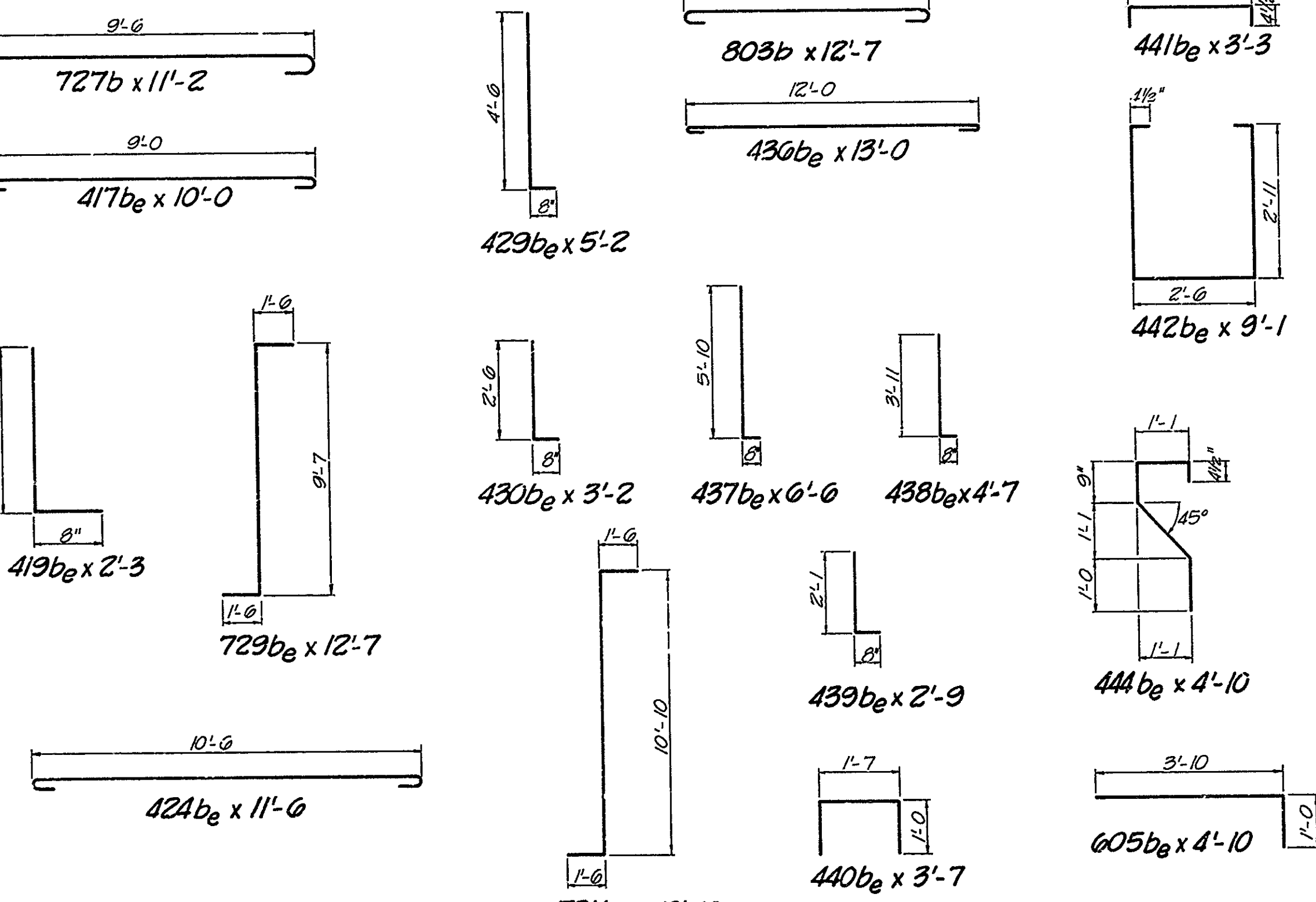
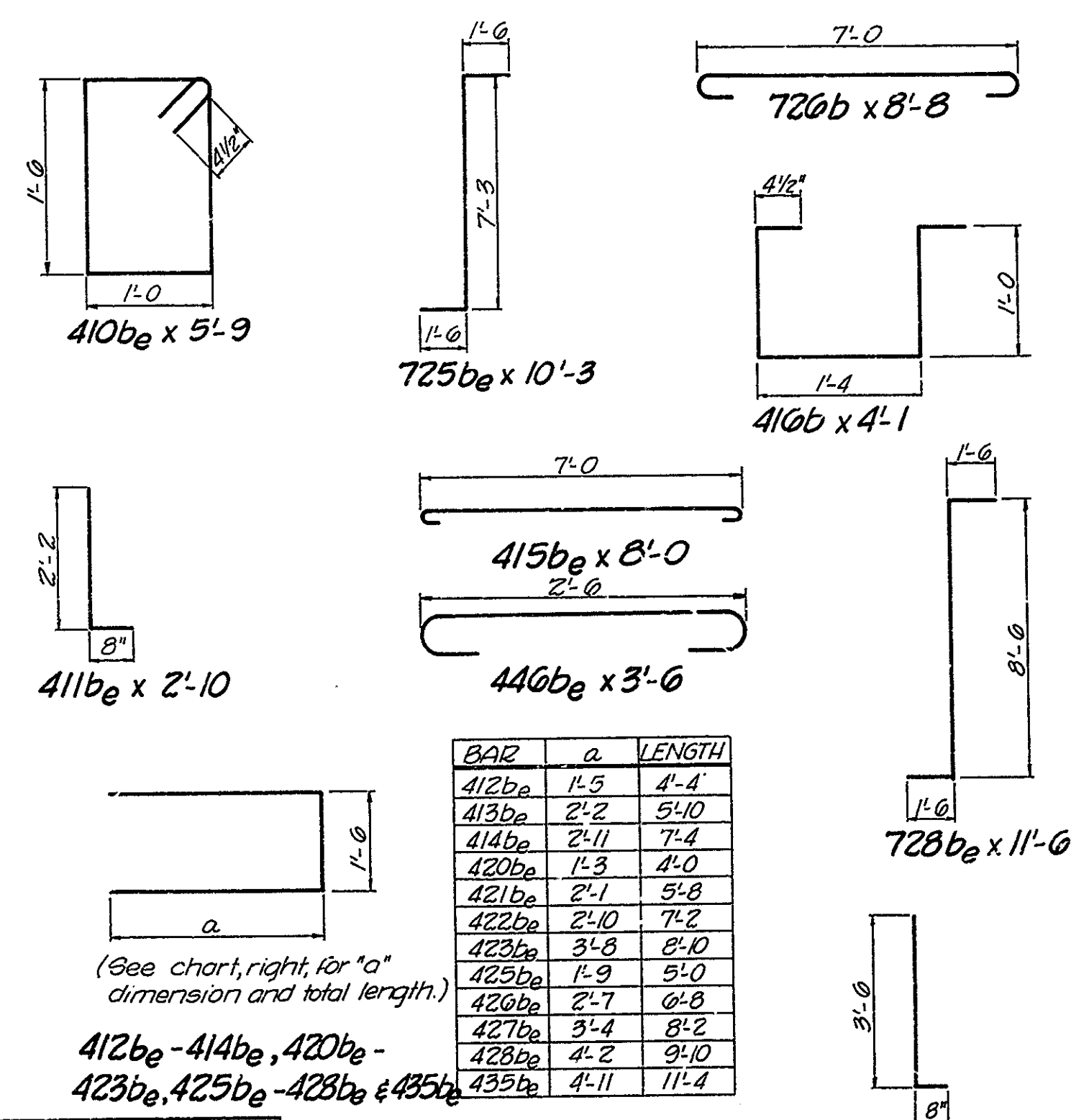


MK BARS FOR PIERS NO.2 - NO.5

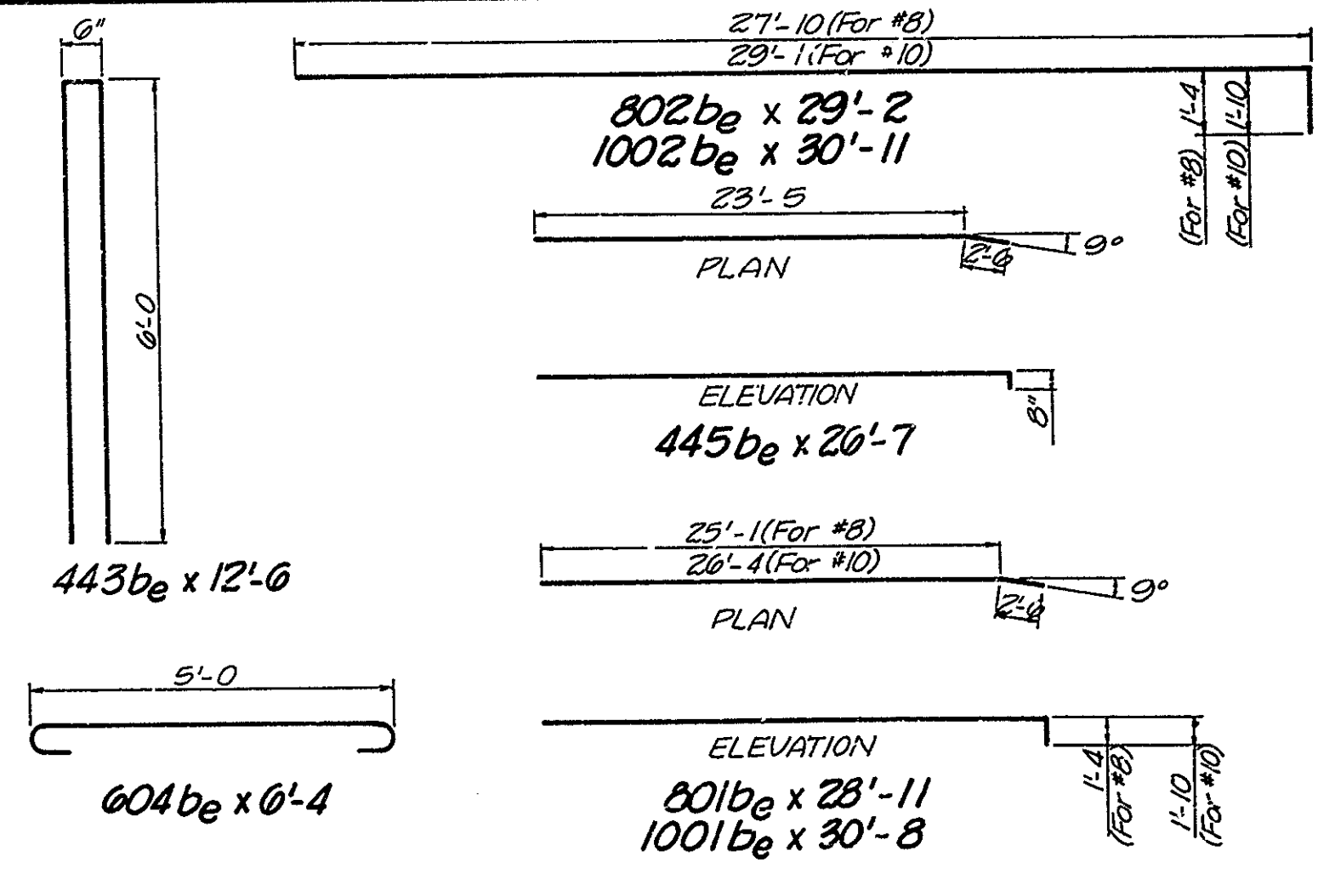
| BAR | a | LENGTH |
|------|-------|--------|
| 701p | 11'-3 | 26'-3 |
| 702p | 10'-9 | 25'-3 |
| 703p | 10'-3 | 24'-3 |
| 704p | 9'-9 | 23'-3 |
| 705p | 9'-3 | 22'-3 |
| 706p | 8'-9 | 21'-3 |
| 707p | 8'-3 | 20'-3 |
| 708p | 7'-9 | 19'-3 |
| 709p | 7'-3 | 18'-3 |
| 710p | 6'-10 | 17'-5 |
| 712p | 6'-9 | 17'-3 |
| 713p | 7'-2 | 18'-1 |
| 714p | 7'-8 | 19'-1 |
| 715p | 8'-1 | 19'-11 |
| 716p | 8'-7 | 20'-11 |
| 717p | 9'-0 | 21'-9 |
| 718p | 9'-5 | 22'-7 |
| 719p | 9'-10 | 23'-5 |
| 720p | 10'-4 | 24'-5 |
| 721p | 10'-9 | 25'-3 |



MK BARS FOR SUPERSTRUCTURE



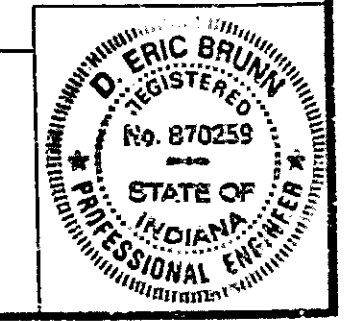
MK BARS FOR END BENT NO.6



MK BAR DETAILS
INDIANA DEPARTMENT OF HIGHWAYS

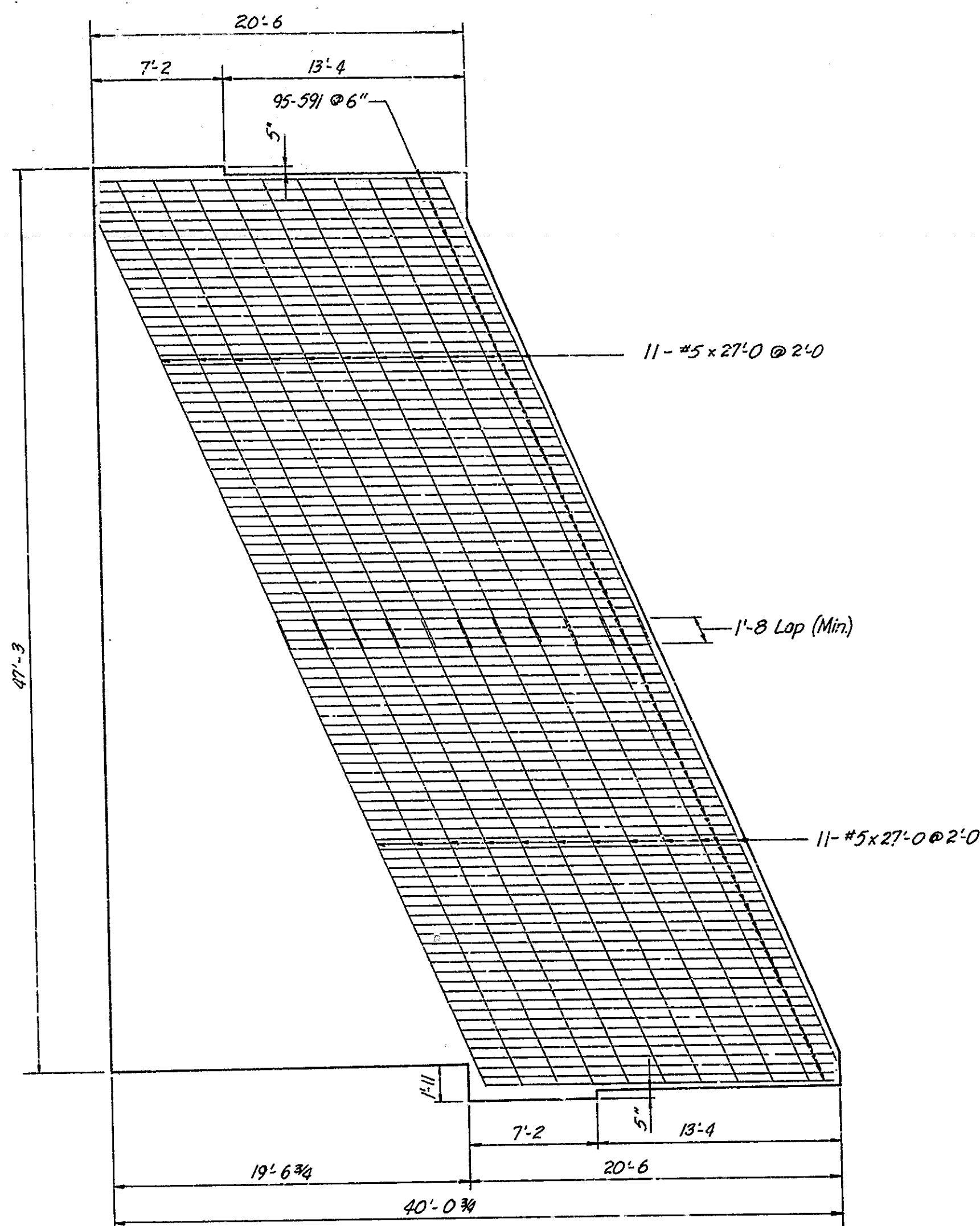
SCALE: - NOT TO SCALE DATE: Sept. 15 1989

DRAWING: C20 OF C24 SHEET: 35 OF 84
PROJECT: - 67-042-9(1) STATION: -
BRIDGE CONTRACT NO.
BRIDGE FILE: - 50-03-0851

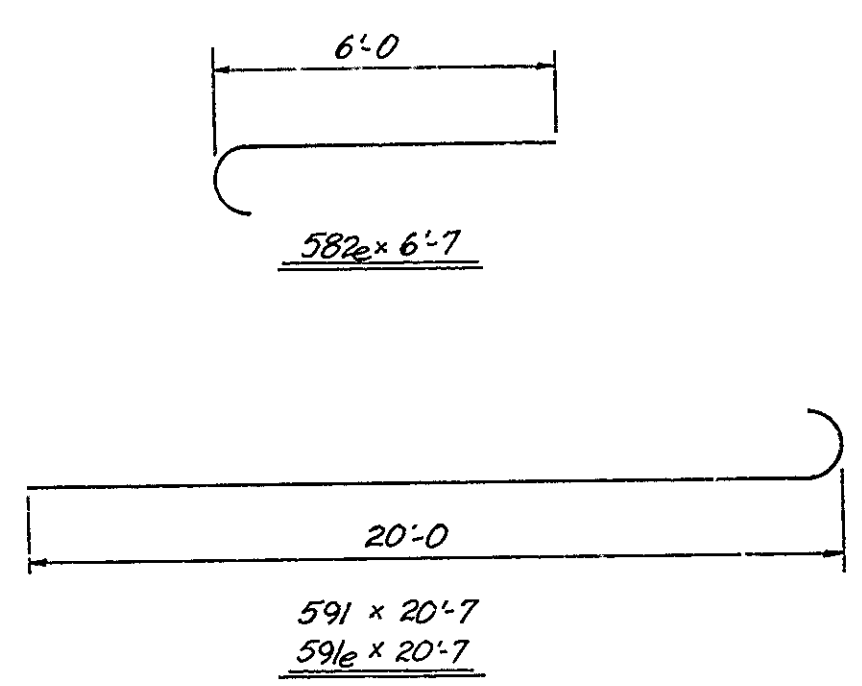


DESIGNED: DDH CK'D
DRAWN: CKD
TRACED: CK'D

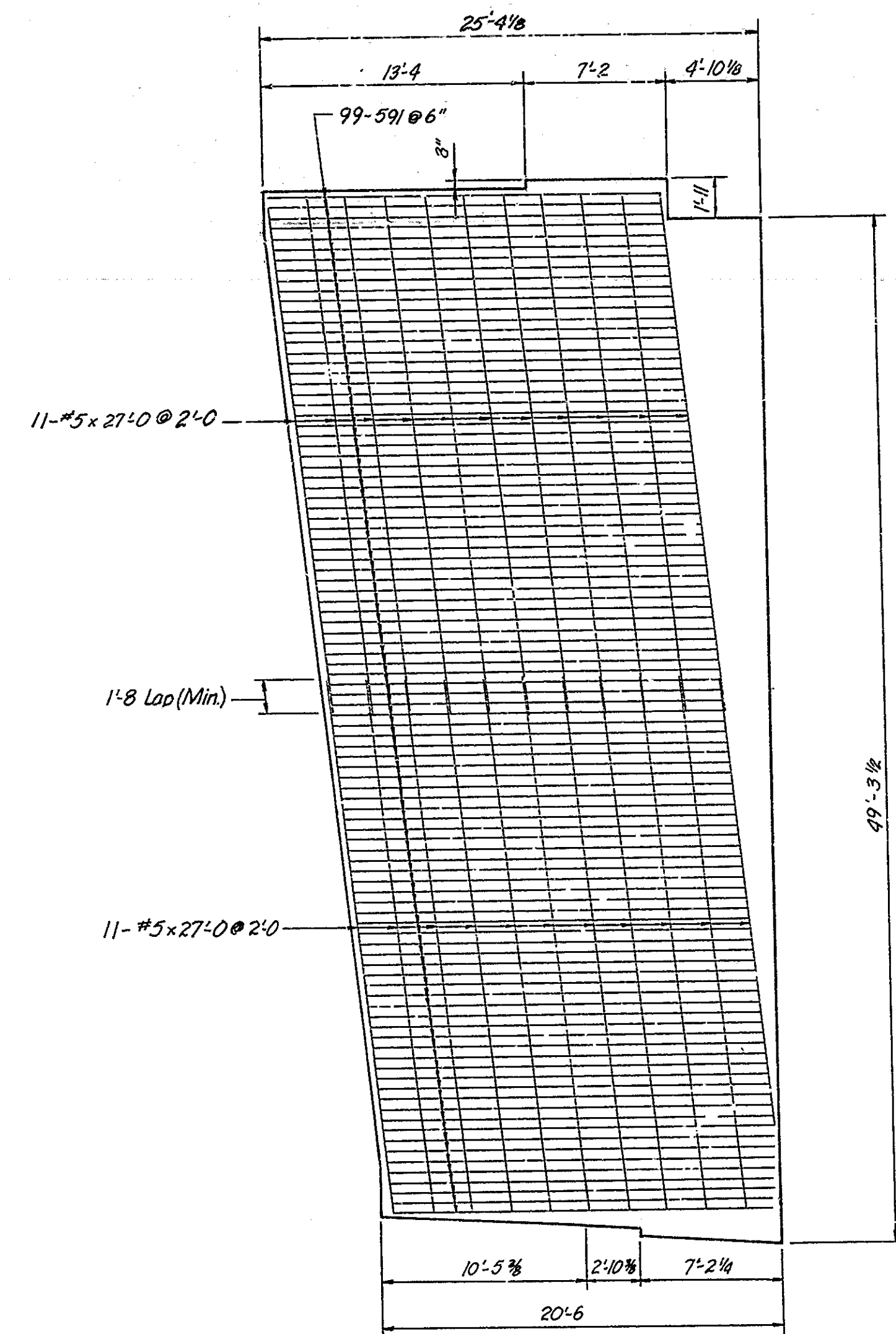
SF-22317



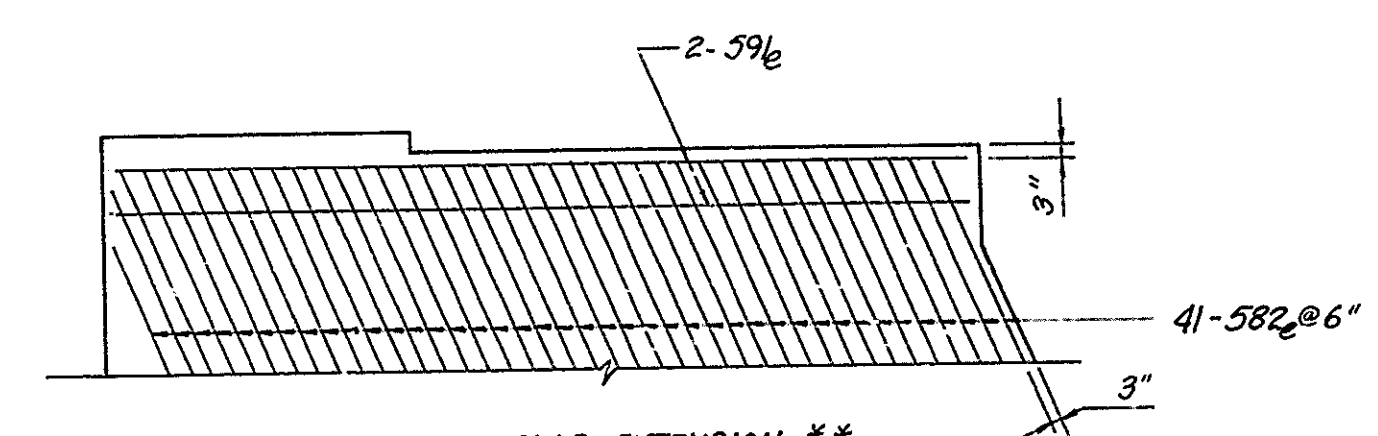
WEST R.C. APPROACH PLAN *
Scale: 3/16" = 1'-0"



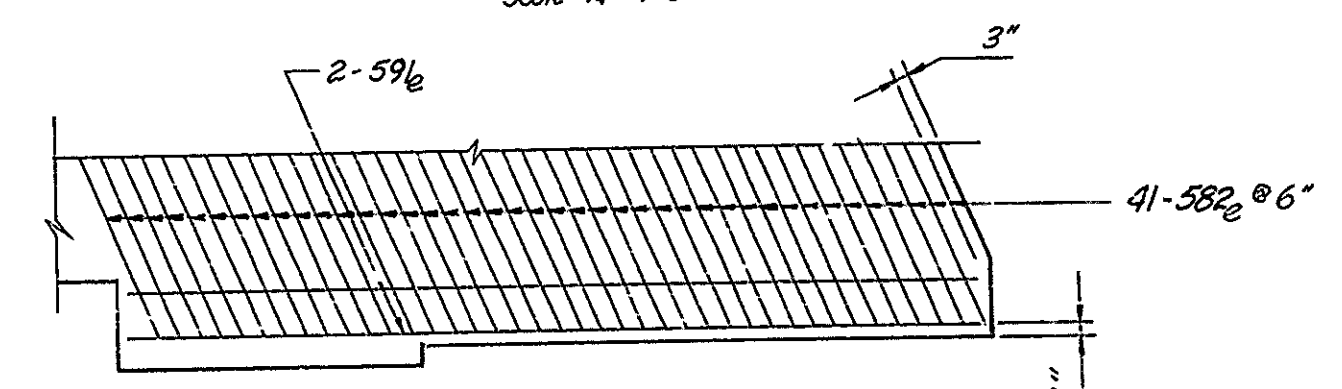
* = Bottom Steel
** = Top Steel



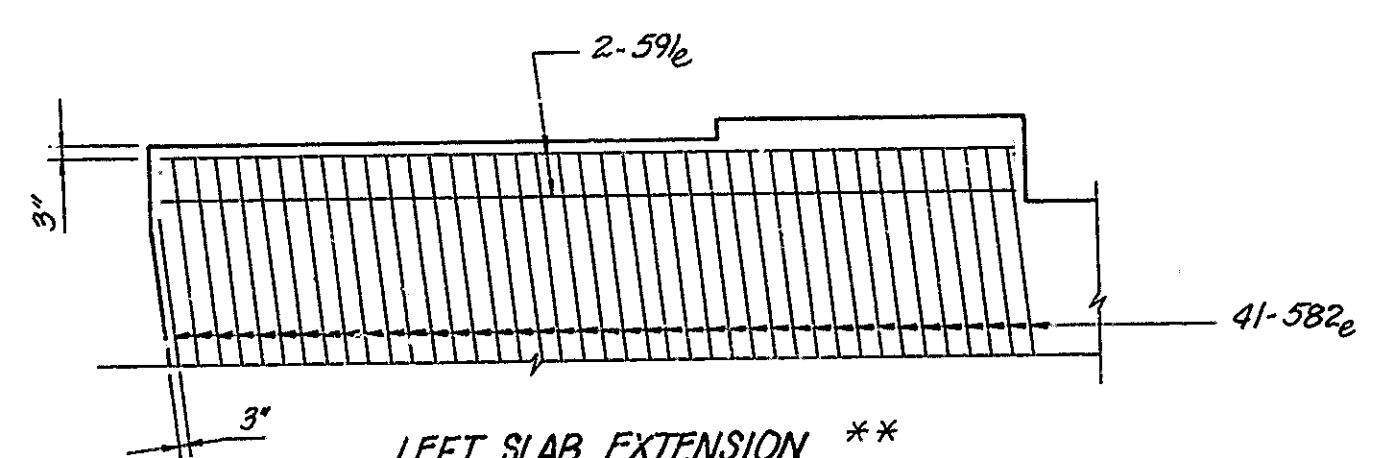
EAST R.C. APPROACH PLAN *
Scale: 3/16" = 1'-0"



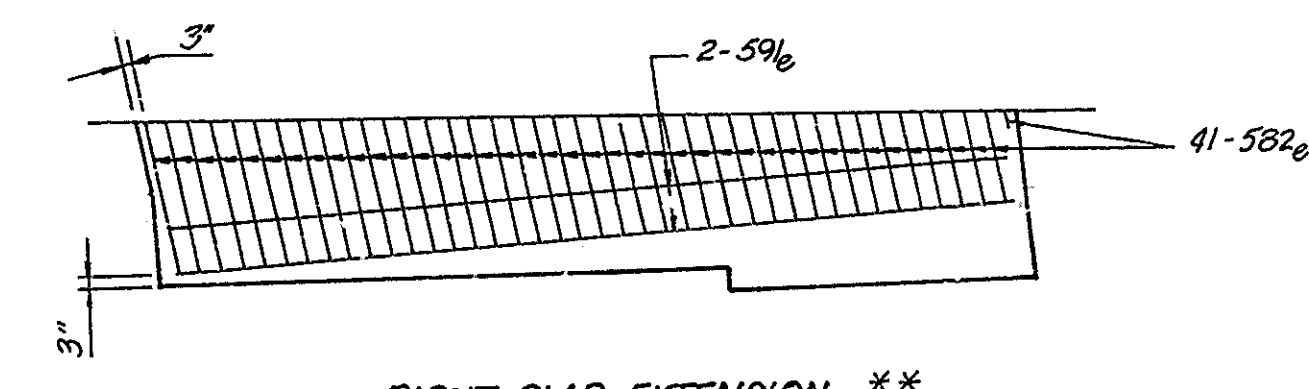
LEFT SLAB EXTENSION **
Scale: 1/4" = 1'-0"



RIGHT SLAB EXTENSION **
Scale: 1/4" = 1'-0"



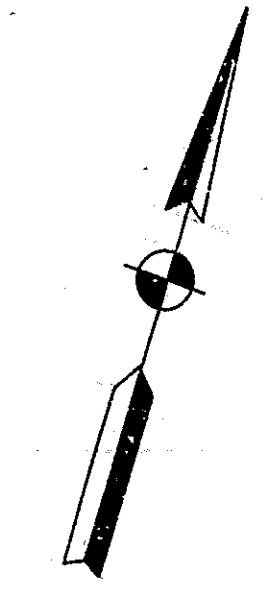
LEFT SLAB EXTENSION **
Scale: 1/4" = 1'-0"



RIGHT SLAB EXTENSION **
Scale: 1/4" = 1'-0"

BILL of MATERIALS

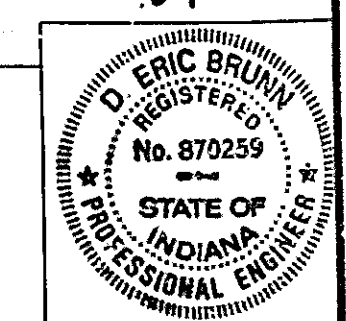
| SIZE OF IRK | QUANTITY | LENGTH | WEIGHT |
|---------------------------------|----------|--------|---------------|
| 582 _{ae} | 162 | 6'-7" | |
| 591 _{ae} | 8 | 20'-7" | |
| Total #5 _{ae} | | | 1298 # |
| TOTAL EPOXY-COATED STEEL | | | 1298 # |
| 591 _g | 194 | 20'-7" | |
| #50 | 44 | 27'-0" | |
| Total #5 _g | | | 5403 # |
| TOTAL PLAIN STEEL | | | 5403 # |



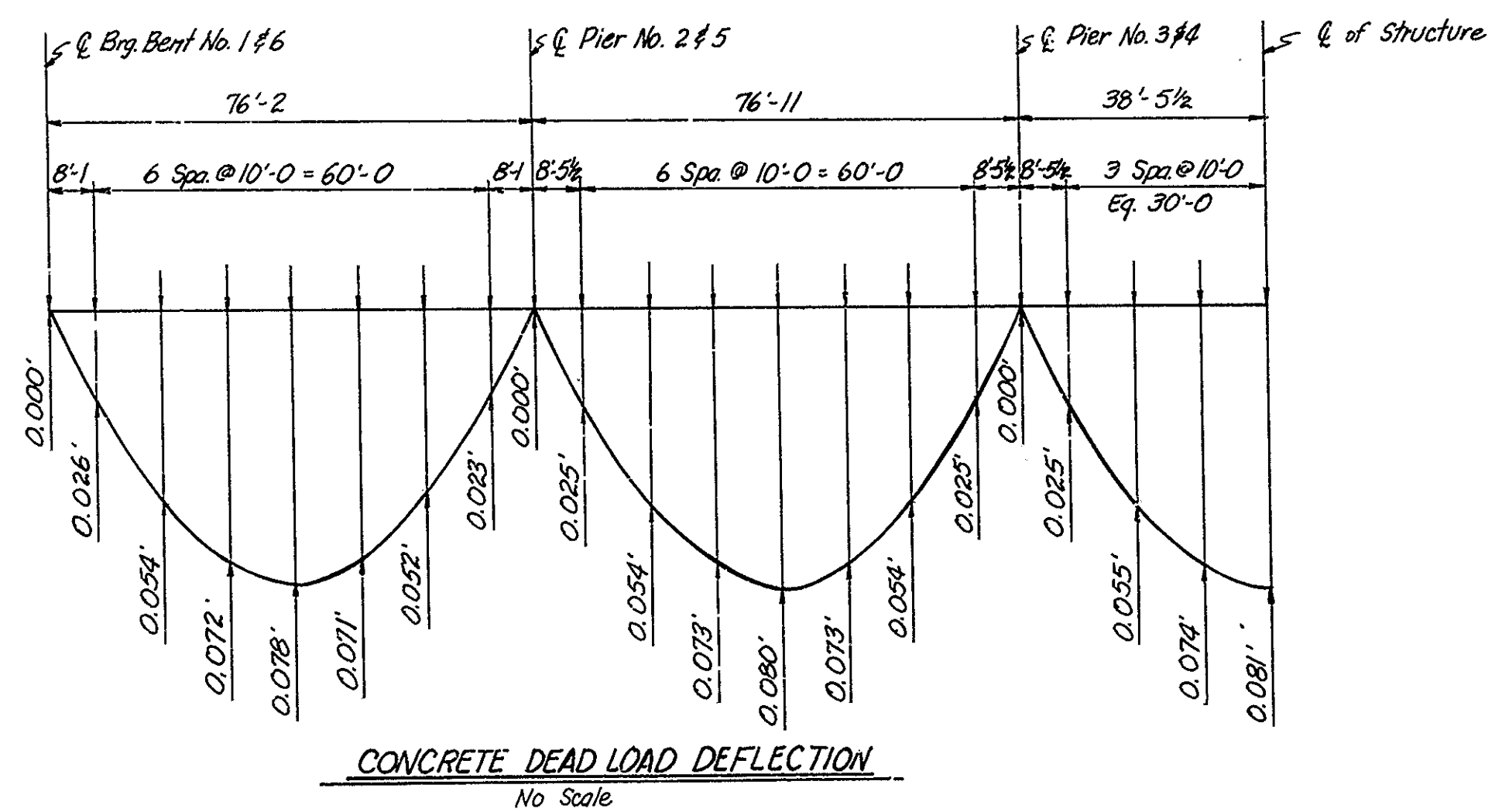
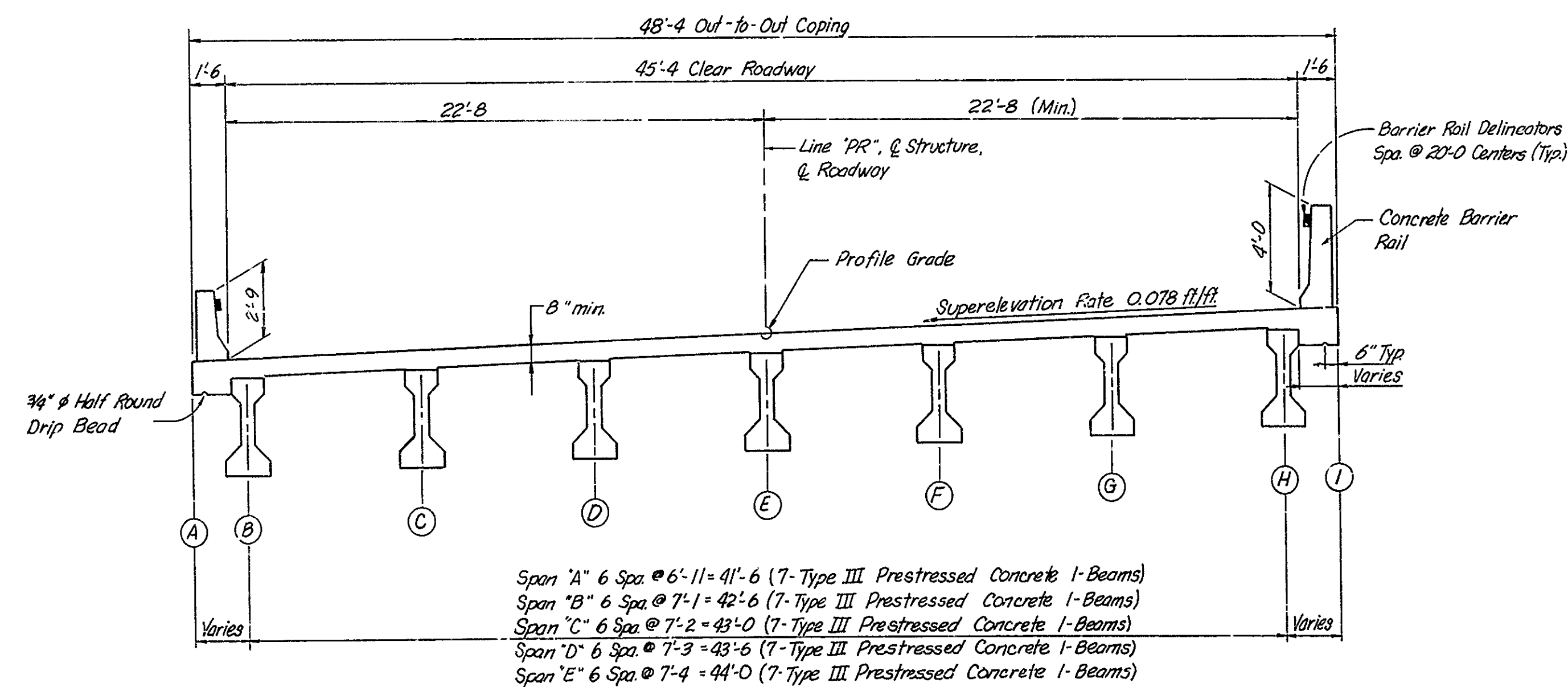
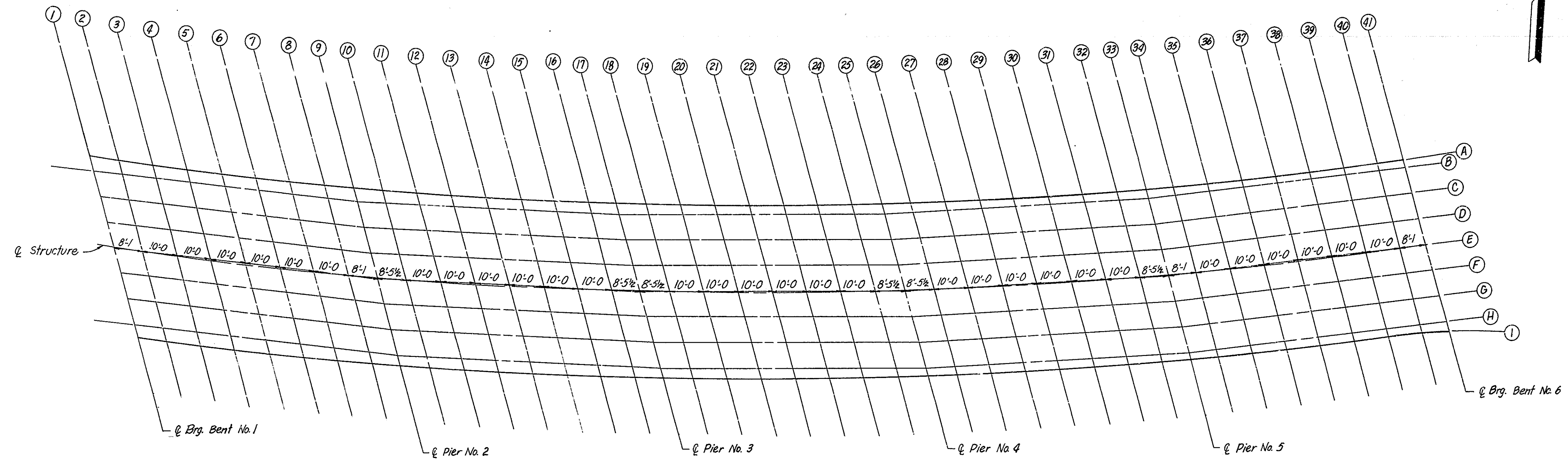
DESIGNED: C.K.D.
DRAWN: C.K.D.
TRACED: C.K.D.

SF-22317

R.C. BRIDGE APPROACH DETAILS
INDIANA DEPARTMENT OF HIGHWAYS
SCALE:—
DATE: Sept. 15 1989
D. Eric Bunn
DRAWING: C21 OF C21 SHEET: 36 OF 34
PROJECT: 87-042-9(D) STATION:—
BRIDGE CONTRACT NO.
BRIDGE FILE: 50-69-6851



Loughery Creek



SCREED NOTE

After the beams are set, take elevations of all screed points on top of beams. Enter these elevations in the table. Subtract these elevations from the tabulated elevations and use the resulting dimensions as the heights for setting screed forms above these points. These dimensions remain constant regardless of how much or in what order the concrete is poured. DO NOT SET SCREED FORMS BY LEVELING. No concrete in the floor shall be poured until the above operations are completed. Screed elevations as shown in the table include an allowance for Concrete Dead Load Deflection.

INDIANA DEPARTMENT OF HIGHWAYS

SCALE: - As Noted

DATE: Sept. 15 1984
D. Eric Bunn

DRAWING: C&Z OF C&Z SHEET: 37 OF 84
 PROJECT: ST-042-9(D) STATION: -
 BRIDGE CONTRACT NO.
 BRIDGE FILE: - 50-69-6851

ERIC BUNN
 REGISTERED
 No. 870259
 STATE OF INDIANA
 PROFESSIONAL ENGINEER

DESIGNED: C.K.D.
 DRAWN: C.K.D.
 TRACED: C.K.D.

SF-22317

| SCREED ELEVATIONS | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------|---------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--|
| POINT | | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) | (16) | (17) | (18) | (19) | (20) | (21) | (22) | (23) | (24) | (25) | |
| A | ELEVATION-TOP OF SCREED | 769.970 | 770.160 | 770.390 | 770.605 | 770.810 | 771.005 | 771.185 | 771.355 | 771.495 | 771.690 | 771.915 | 772.135 | 772.345 | 772.535 | 772.715 | 772.885 | 773.030 | 773.225 | 773.455 | 773.670 | 773.880 | 774.070 | 774.250 | 774.420 | 774.585 | |
| | ELEVATION-TOP OF BEAM | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | DISTANCE-TOP OF BEAM TO TOP OF SCREED | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B | ELEVATION-TOP OF SCREED | 770.310 | 770.475 | 770.685 | 770.885 | 771.085 | 771.265 | 771.460 | 771.630 | 771.790 | 771.965 | 772.170 | 772.375 | 772.575 | 772.765 | 772.955 | 773.135 | 773.290 | 773.485 | 773.675 | 773.880 | 774.080 | 774.270 | 774.460 | 774.640 | 774.795 | |
| | ELEVATION-TOP OF BEAM | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | DISTANCE-TOP OF BEAM TO TOP OF SCREED | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C | ELEVATION-TOP OF SCREED | 770.900 | 771.065 | 771.275 | 771.480 | 771.675 | 771.865 | 772.050 | 772.220 | 772.385 | 772.555 | 772.765 | 772.970 | 773.170 | 773.365 | 773.550 | 773.730 | 773.885 | 774.060 | 774.275 | 774.480 | 774.680 | 774.870 | 775.055 | 775.235 | 775.395 | |
| | ELEVATION-TOP OF BEAM | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | DISTANCE-TOP OF BEAM TO TOP OF SCREED | | | | | | | | | | | | | | | | | | | | | | | | | | |
| D | ELEVATION-TOP OF SCREED | 771.490 | 771.655 | 771.865 | 772.070 | 772.270 | 772.460 | 772.645 | 772.815 | 772.980 | 773.150 | 773.360 | 773.570 | 773.770 | 773.960 | 774.145 | 774.325 | 774.485 | 774.660 | 774.870 | 775.075 | 775.275 | 775.485 | 775.655 | 775.835 | 775.990 | |
| | ELEVATION-TOP OF BEAM | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | DISTANCE-TOP OF BEAM TO TOP OF SCREED | | | | | | | | | | | | | | | | | | | | | | | | | | |
| E | ELEVATION-TOP OF SCREED | 772.080 | 772.250 | 772.455 | 772.660 | 772.860 | 773.055 | 773.240 | 773.405 | 773.575 | 773.745 | 773.955 | 774.165 | 774.365 | 774.555 | 774.740 | 774.920 | 775.080 | 775.255 | 775.465 | 775.670 | 775.870 | 776.065 | 776.250 | 776.430 | 776.585 | |
| | ELEVATION-TOP OF BEAM | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | DISTANCE-TOP OF BEAM TO TOP OF SCREED | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F | ELEVATION-TOP OF SCREED | 772.670 | 772.840 | 773.050 | 773.275 | 773.455 | 773.645 | 773.830 | 774.000 | 774.165 | 774.340 | 774.550 | 774.755 | 774.960 | 775.150 | 775.335 | 775.520 | 775.675 | 775.850 | 776.060 | 776.270 | 776.470 | 776.660 | 776.845 | 777.025 | 777.185 | |
| | ELEVATION-TOP OF BEAM | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | DISTANCE-TOP OF BEAM TO TOP OF SCREED | | | | | | | | | | | | | | | | | | | | | | | | | | |
| G | ELEVATION-TOP OF SCREED | 773.260 | 773.430 | 773.640 | 773.845 | 774.045 | 774.240 | 774.425 | 774.590 | 774.760 | 774.935 | 775.145 | 775.355 | 775.555 | 775.745 | 775.930 | 776.115 | 776.270 | 776.445 | 776.660 | 776.865 | 777.065 | 777.255 | 777.440 | 777.625 | 777.780 | |
| | ELEVATION-TOP OF BEAM | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | DISTANCE-TOP OF BEAM TO TOP OF SCREED | | | | | | | | | | | | | | | | | | | | | | | | | | |
| H | ELEVATION-TOP OF SCREED | 773.850 | 774.020 | 774.230 | 774.435 | 774.635 | 774.830 | 775.015 | 775.185 | 775.355 | 775.530 | 775.740 | 775.945 | 776.150 | 776.340 | 776.525 | 776.710 | 776.865 | 777.045 | 777.255 | 777.460 | 777.660 | 777.850 | 778.040 | 778.220 | 778.375 | |
| | ELEVATION-TOP OF BEAM | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | DISTANCE-TOP OF BEAM TO TOP OF SCREED | | | | | | | | | | | | | | | | | | | | | | | | | | |
| I | ELEVATION-TOP OF SCREED | 774.140 | 774.320 | 774.540 | 774.750 | 774.950 | 775.135 | 775.305 | 775.470 | 775.600 | 775.790 | 776.010 | 776.225 | 776.420 | 776.605 | 776.780 | 776.945 | 777.080 | 777.270 | 777.490 | 777.705 | 777.905 | 778.090 | 778.260 | 778.425 | 778.580 | |
| | ELEVATION-TOP OF BEAM | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | DISTANCE-TOP OF BEAM TO TOP OF SCREED | | | | | | | | | | | | | | | | | | | | | | | | | | |

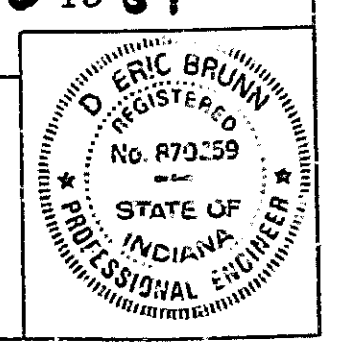
| SCREED ELEVATIONS | | | | | | | | | | | | | | | | | | |
|-------------------|---------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--|
| POINT | | (26) | (27) | (28) | (29) | (30) | (31) | (32) | (33) | (34) | (35) | (36) | (37) | (38) | (39) | (40) | (41) | |
| A | ELEVATION-TOP OF SCREED | 774.760 | 774.990 | 775.210 | 775.415 | 775.605 | 775.785 | 775.955 | 776.100 | 776.285 | 776.515 | 776.735 | 776.940 | 777.135 | 777.315 | 777.485 | 777.620 | |
| | ELEVATION-TOP OF BEAM | | | | | | | | | | | | | | | | | |
| | DISTANCE-TOP OF BEAM TO TOP OF SCREED | | | | | | | | | | | | | | | | | |
| B | ELEVATION-TOP OF SCREED | 774.970 | 775.185 | 775.390 | 775.590 | 775.785 | 775.970 | 776.150 | 776.305 | 776.475 | 776.690 | 776.890 | 777.100 | 777.295 | 777.480 | 777.660 | 777.810 | |
| | ELEVATION-TOP OF BEAM | | | | | | | | | | | | | | | | | |
| | DISTANCE-TOP OF BEAM TO TOP OF SCREED | | | | | | | | | | | | | | | | | |
| C | ELEVATION-TOP OF SCREED | 775.570 | 775.780 | 775.985 | 776.190 | 776.380 | 776.565 | 776.745 | 776.905 | 777.070 | 777.285 | 777.495 | 777.695 | 777.885 | 778.070 | 778.255 | 778.400 | |
| | ELEVATION-TOP OF BEAM | | | | | | | | | | | | | | | | | |
| | DISTANCE-TOP OF BEAM TO TOP OF SCREED | | | | | | | | | | | | | | | | | |
| D | ELEVATION-TOP OF SCREED | 776.165 | 776.375 | 776.585 | 776.785 | 776.975 | 777.160 | 777.345 | 777.500 | 777.665 | 777.880 | 778.085 | 778.285 | 778.480 | 778.665 | 778.845 | 778.995 | |
| | ELEVATION-TOP OF BEAM | | | | | | | | | | | | | | | | | |
| | DISTANCE-TOP OF BEAM TO TOP OF SCREED | | | | | | | | | | | | | | | | | |
| E | ELEVATION-TOP OF SCREED | 776.765 | 776.975 | 777.180 | 777.380 | 777.575 | 777.755 | 777.940 | 778.095 | 778.265 | 778.475 | 778.680 | 778.880 | 779.075 | 779.260 | 779.440 | 779.585 | |
| | ELEVATION-TOP OF BEAM | | | | | | | | | | | | | | | | | |
| | DISTANCE-TOP OF BEAM TO TOP OF SCREED | | | | | | | | | | | | | | | | | |
| F | ELEVATION-TOP OF SCREED | 777.360 | 777.570 | 777.775 | 777.975 | 778.170 | 778.355 | 778.535 | 778.690 | 778.850 | 779.070 | 779.276 | 779.475 | 779.670 | 779.855 | 780.035 | 780.180 | |
| | ELEVATION-TOP OF BEAM | | | | | | | | | | | | | | | | | |
| | DISTANCE-TOP OF BEAM TO TOP OF SCREED | | | | | | | | | | | | | | | | | |
| G | ELEVATION-TOP OF SCREED | 777.955 | 778.165 | 778.375 | 778.575 | 778.765 | 778.950 | 779.130 | 779.285 | 779.450 | 779.665 | 779.870 | 780.070 | 780.260 | 780.445 | 780.625 | 780.770 | |
| | ELEVATION-TOP OF BEAM | | | | | | | | | | | | | | | | | |
| | DISTANCE-TOP OF BEAM TO TOP OF SCREED | | | | | | | | | | | | | | | | | |
| H | ELEVATION-TOP OF SCREED | 778.550 | 778.760 | 778.970 | 779.170 | 779.360 | 779.545 | 779.725 | 779.880 | 780.050 | 780.260 | 780.465 | 780.665 | 780.855 | 781.040 | 781.220 | 781.365 | |
| | ELEVATION-TOP OF BEAM | | | | | | | | | | | | | | | | | |
| | DISTANCE-TOP OF BEAM TO TOP OF SCREED | | | | | | | | | | | | | | | | | |
| I | ELEVATION-TOP OF SCREED | 778.750 | 778.975 | 779.185 | 779.385 | 779.570 | 779.745 | 779.905 | 780.045 | 780.225 | 780.445 | 780.660 | 780.860 | 781.045 | 781.220 | 781.415 | 781.580 | |
| | ELEVATION-TOP OF BEAM | | | | | | | | | | | | | | | | | |
| | DISTANCE-TOP OF BEAM TO TOP OF SCREED | | | | | | | | | | | | | | | | | |

SCREED SHEET

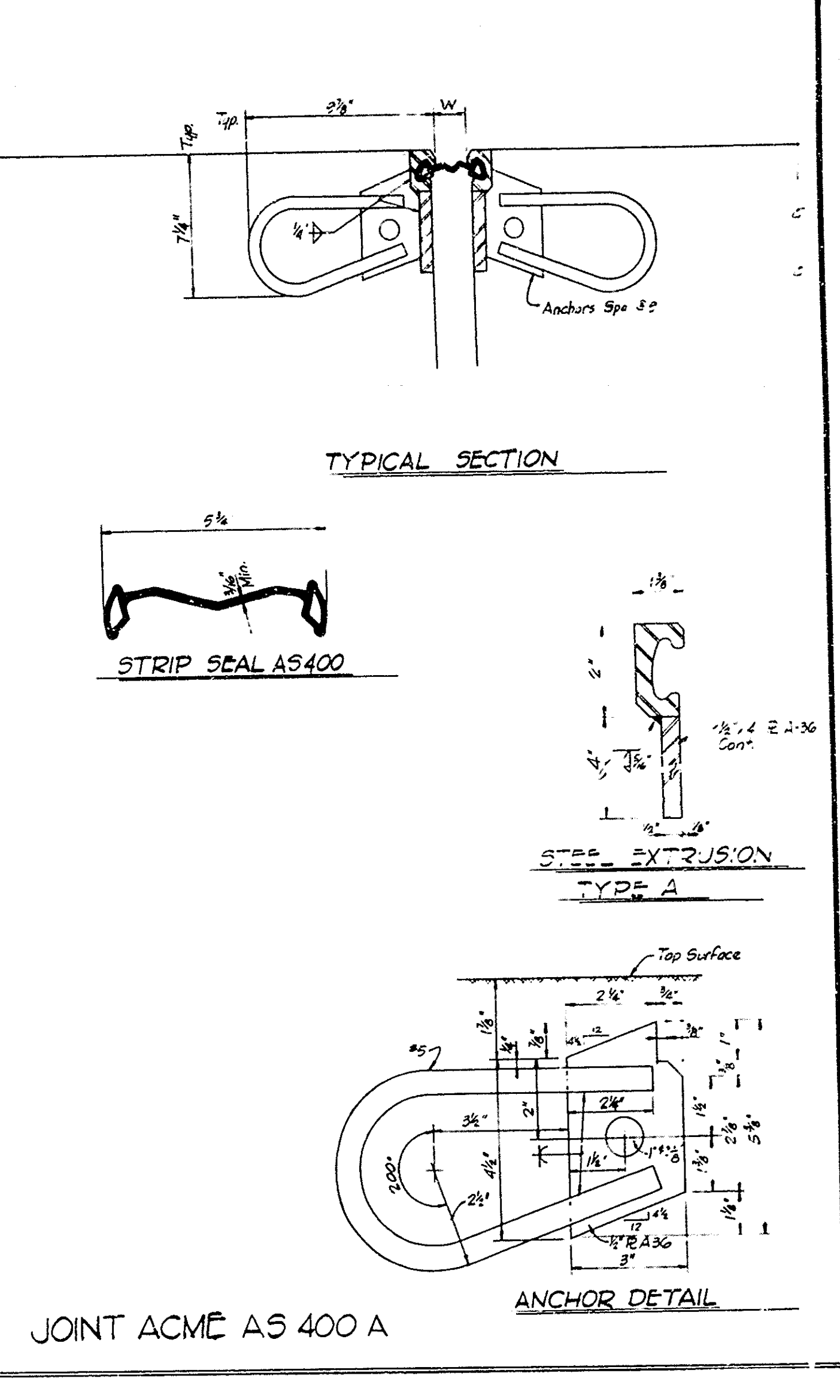
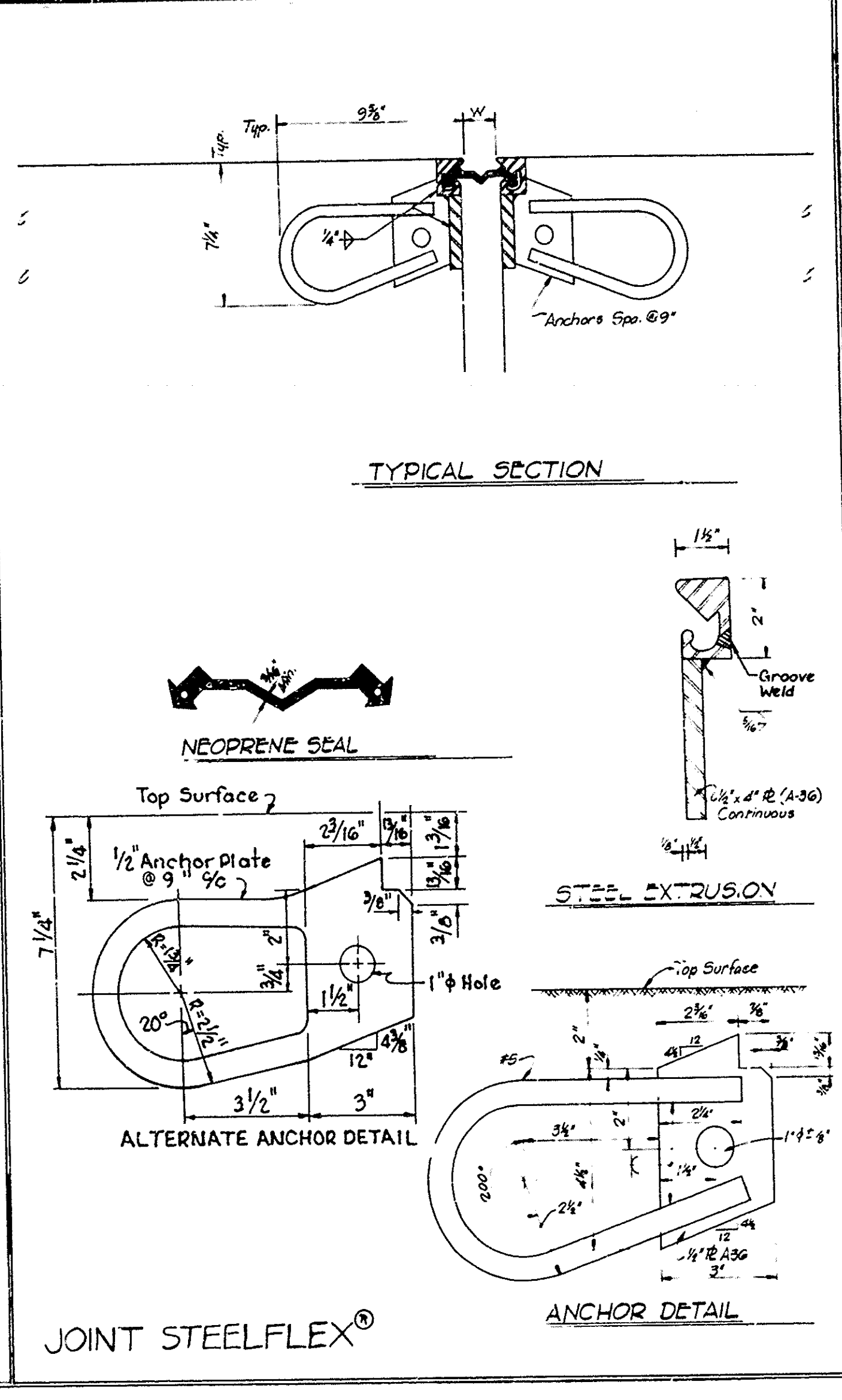
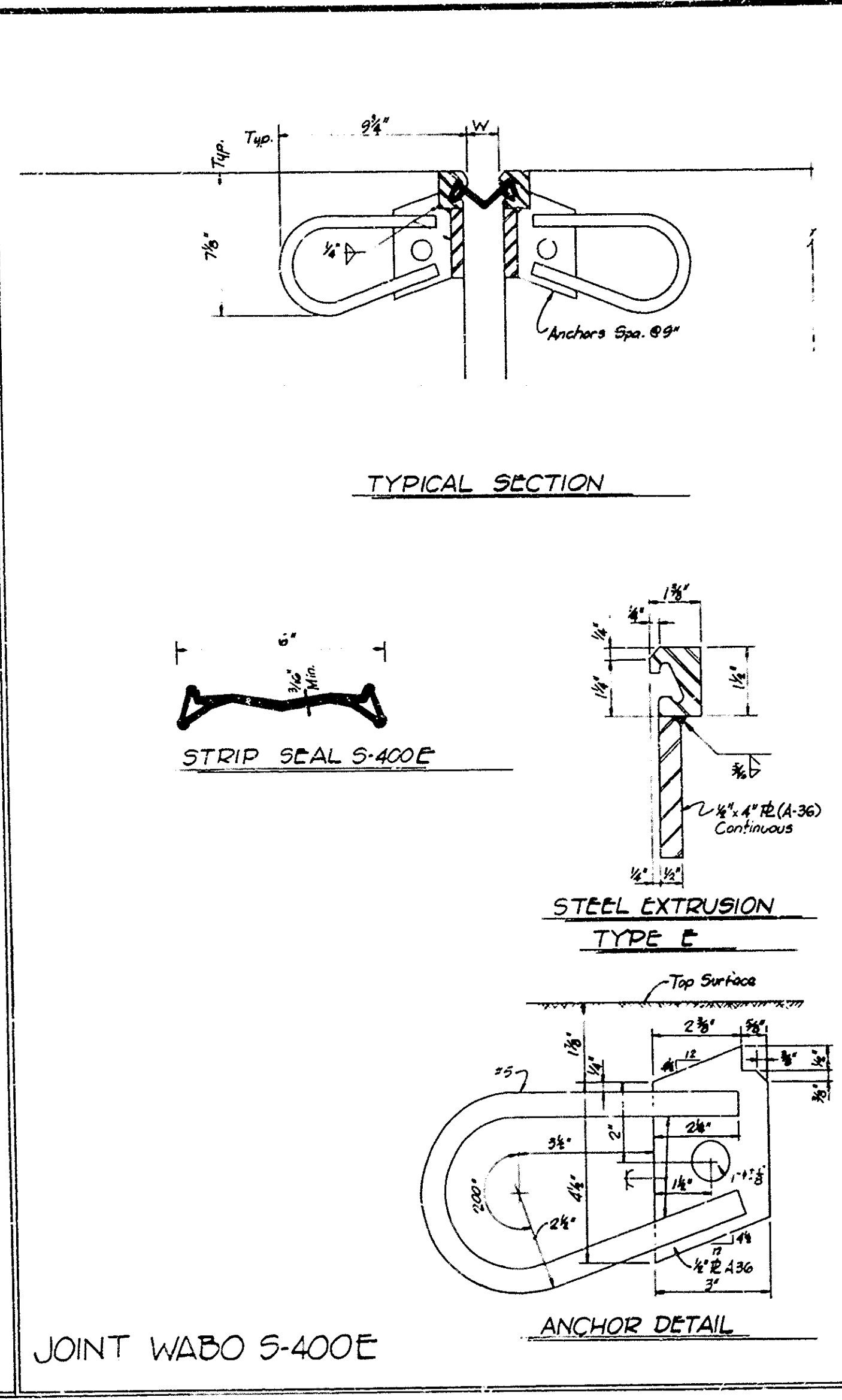
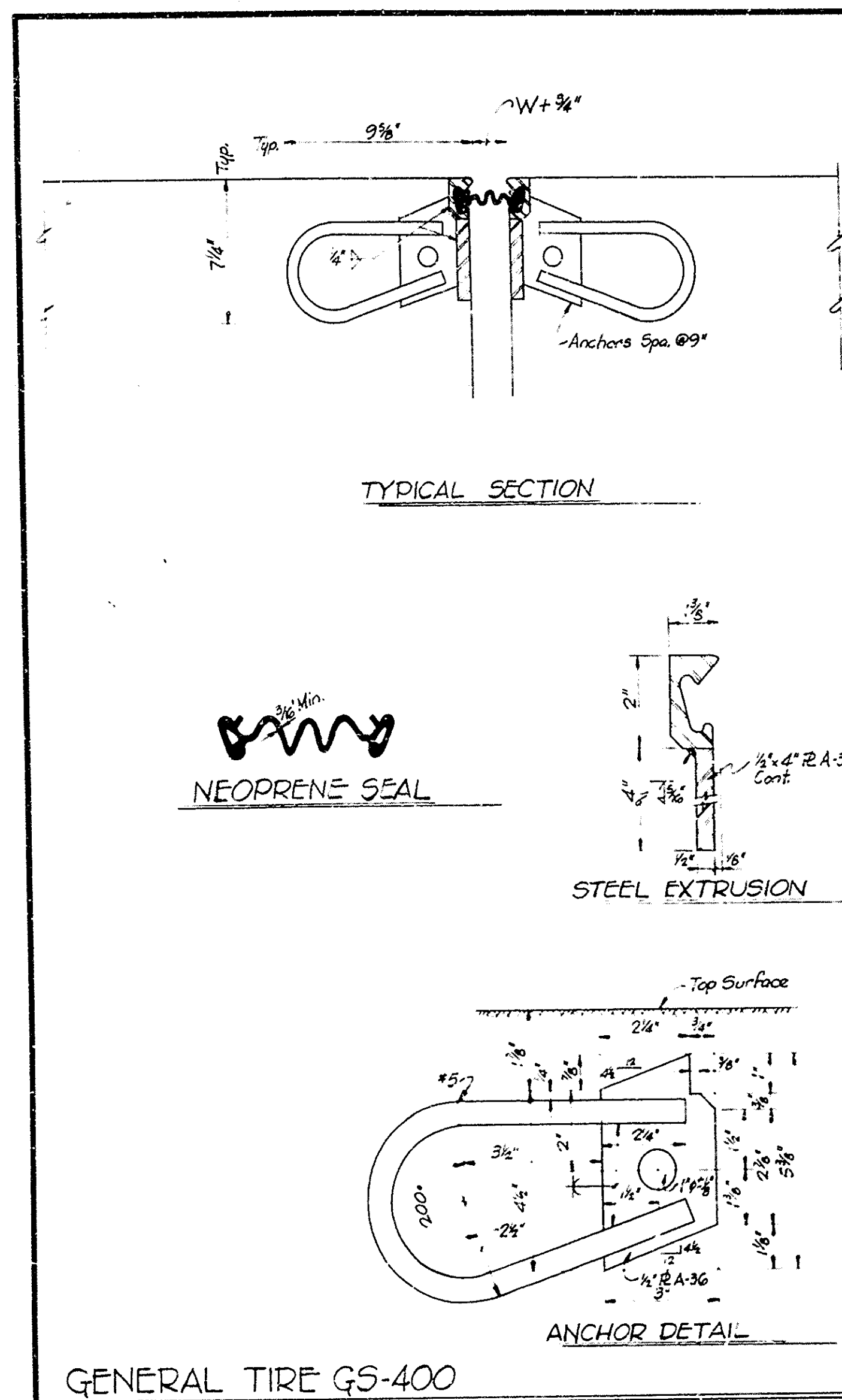
INDIANA DEPARTMENT OF HIGHWAYS

SCALE: - DATE: - *Sept. 15 1989*
D. Eric Brumm

DRAWING: - C23 of C24 SHEET - 38 of 84
 PROJECT: - 57-042-9(D) STATION: -
 BRIDGE CONTRACT NO.
 BRIDGE FILE: - 50-69-685/



DESIGNED *ODH* C'KD *AAS*
 DRAWN *KB/TYS* C'KD
 TRACED C'KD



NOTES

SEE THE SPECIAL PROVISIONS FOR PROPERTIES OF MATERIALS.

THE STRIP SEAL GLAND SHALL BE SIZED TO ACCOMMODATE AT LEAST FOUR (4) INCHES OF MOVEMENT.

THE STRIP SEAL GLAND SHALL BE INSTALLED IN AN EXTRUDED MOUNTING UNIT.

THE COST OF EXTRUSIONS, ELASTOMERIC SEAL ELEMENTS, SEALANTS, ADHESIVE, CEMENT GROUT, ANCHOR SYSTEM AND INSTALLATION OF JOINT SHALL BE INCLUDED IN THE COST OF EXPANSION JOINT.

THE PROFILE OF THE JOINT IS TO CONFORM TO THE ROADWAY CROSS SECTION.

THE SEAL ELEMENT SHALL BE MOULDED AND FURNISHED IN A CONTINUOUS LENGTH EQUAL TO THAT REQUIRED FOR THE JOINT.

AT CHANGES IN DIRECTION (AT CURBS, MEDIAN BARRIERS, ETC) THE SECTIONS OF JOINT ARE TO BE CUT TO THE BEVEL REQUIRED TO PRODUCE THE SAME CROSS SECTION ON EACH PIECE BEING JOINED.

THE ANCHOR ASSEMBLY IS TO BE SHOP FABRICATED AND DELIVERED TO THE JOB SITE AS A COMPLETE CONTINUOUS UNIT FOR JOINT LENGTHS UP TO 44 FEET. JOINTS ABOVE LENGTHS OF 44 FEET OR JOINTS USED WITH STAGE CONSTRUCTION SHALL BE FIELD WELDED WITH ENDS TO BE SHOP PREPARED.

ALL WORK, BOTH SHOP & FIELD, SHALL BE IN ACCORDANCE WITH 7103.

ALL EXPOSED STRUCTURAL STEEL SURFACES WILL BE PAINTED IN ACCORDANCE WITH IDOH STANDARD SPECIFICATIONS.

THE CONTRACTOR SHALL SUBMIT 3 COPIES OF SHOP DRAWINGS FOR ALL JOINTS INVOLVING CURBS OR OTHER SPECIAL FEATURES.

| Ambient Temperature | DIMENSION "W" | | |
|---------------------|------------------|-------------|-------------|
| | Expansion Length | | |
| | 100' - 200' | 200' - 300' | 300' - 400' |
| 120° | 2 1/8" | 1 5/8" | 1 1/2" |
| 100° | 2 7/8" | 1 3/4" | 1 1/4" |
| 80° | 2 1/2" | 2 3/8" | 1 3/4" |
| 60° | 3" | 2 5/8" | 2 1/4" |
| 40° | 3 1/4" | 3 1/8" | 2 5/8" |
| 20° | 3 3/4" | 3 1/2" | 3 1/8" |
| 0° | 3 7/8" | 3 3/4" | 4" |

NOTE: EXTRUSIONS WITH HEIGHTS BETWEEN 1 1/2" AND 2" MAY BE SUBSTITUTED FOR THOSE SHOWN. IF SUCH A SUBSTITUTION IS MADE, THE NOTCH IN THE ANCHOR PLATE AND THE STRIP SEAL GLAND SHALL BE MODIFIED ACCORDINGLY AND IN CONFORMANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

NOTE: JOINT ONFLEX 40SF MAY BE USED IN LIEU OF JOINTS SHOWN ABOVE.

NOTE: JOINT STEELFLEX EXTRUSION MAY BE FABRICATED FROM TWO HOT ROLLED SHAPES JOINED WITH A FULL PENETRATION GROOVE WELD.

EXPANSION JOINTS CLASS S-5
INDIANA DEPARTMENT OF HIGHWAYS

SCALE: NONE

DATE: Sept. 15, 1984

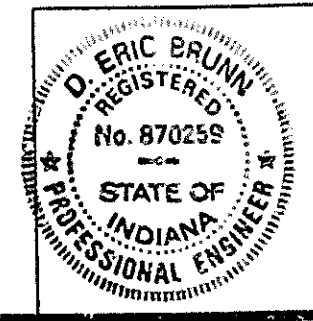
D. Eric Brunn

DRAWING: C24 OF C24 SHEET: 39 OF 84

PROJECT: ST-042-9(D)

CONTRACT NO.

BRIDGE FILE: 50-69-6851



DESIGNED: C.K.D.
 DRAWN: *DAS* 2/24/82 C.K.D.
 TRACED: C.K.D.

3-18-87-Steelflex A.H. Anchor Detail
 Revised 7/1/82-Notes, 6/21/83, 2/29/84-Notes, 4/10/85 Notes, 9/2/86-Steelflex Joint & Notes

Loughery Creek

UNDERDRAIN TABLE

| | | | | | |
|---------------------------|-------|-------------|-------------|-----------|--------------|
| FEDERAL ROAD DISTRICT NO. | STATE | PROJECT NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
| 5 | IND. | SFO42-9(1) | 1990 | 41 | 89 |

| REMARKS | OUTLET | | | | | | | | | | REMARKS | STATION | 6" GROUP "K" PIPE FEET | STATION | 6" GROUP "K" PIPE FEET | REMARKS | |
|--------------------|--------------------------|--------------------------------------|----------------------|----------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|------------------------|----------------------|----------------------|------------------------|----------------------|------------------------|----------------------|----------------------|
| | CONNECT TO STRUCTURE No. | OUTLET THRU SHOULDER DELINIATOR POST | SODDING | 6" NON PERE FBCCS PIPE (18 GAGE) | TEES | | WYE | BENDS | AT STATION | 6" GROUP "K" PIPE FEET | | | | | | | |
| | | | | | EACH | EACH | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | 6" to 6" |
| Lt. | 1 | 2 | 20 | 1 | | | | 74+00.125 | 1025 | 125 | 74+00.125 | 1 | .22 | 2 | 1 | Lt. | |
| <i>Speed grade</i> | <i>310.74+50.725</i> | <i>310.74+00.725</i> | <i>310.74+50.725</i> | <i>310.74+00.725</i> | <i>310.74+50.725</i> | <i>310.74+00.725</i> | <i>310.74+50.725</i> | <i>310.74+00.725</i> | <i>310.74+50.725</i> | <i>310.74+00.725</i> | <i>310.74+50.725</i> | <i>310.74+00.725</i> | <i>310.74+50.725</i> | <i>310.74+00.725</i> | <i>310.74+50.725</i> | <i>310.74+00.725</i> | <i>310.74+50.725</i> |
| Lt. | 1 | 2 | 26 | | | | | 87+30.725 | 610 | 26 | 87+30.725 | 1 | .58 | 2 | 1 | Lt. | |
| <i>Subtotal</i> | <i>2</i> | <i>4</i> | <i>46</i> | <i>1</i> | | | | | <i>1</i> | <i>1635</i> | <i>485</i> | <i>2</i> | <i>80</i> | <i>4</i> | <i>2</i> | <i>Subtotal</i> | |

