

RT. FAI 80

SEC. CO6-1B-1, 06-2B, 06-2HB-1, 06-3B, 06-4B)  
RS

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**  
**DIVISION OF HIGHWAYS**  
**PLANS FOR PROPOSED**  
**FEDERAL AID INTERSTATE HIGHWAY**

**FAI ROUTE 80**  
**SECTION (06-1B-1, 06-2B, 06-2HB-1, 06-3B, 06-4B)RS**  
**PROJECT 1R-80-1(112)37**  
**BUREAU COUNTY**

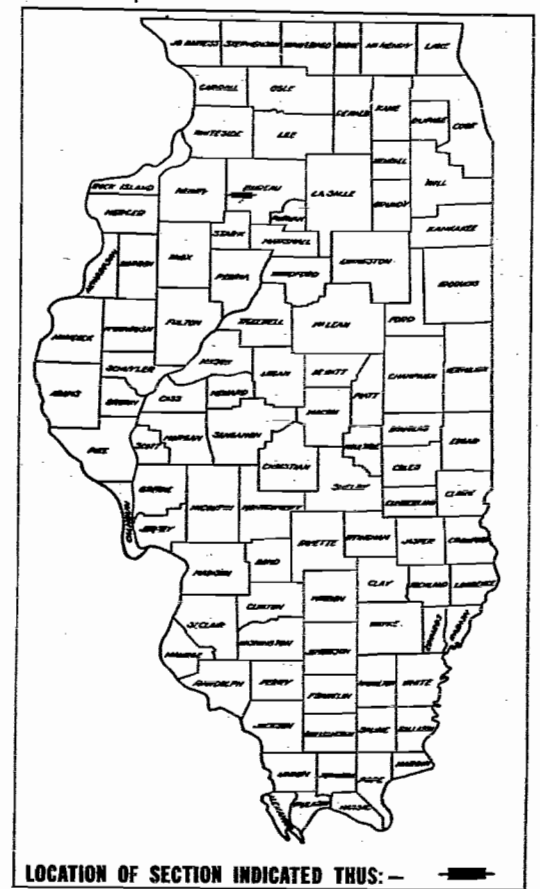
C92-002-83

INDEX OF SHEETS -  
SEE SHEET 2

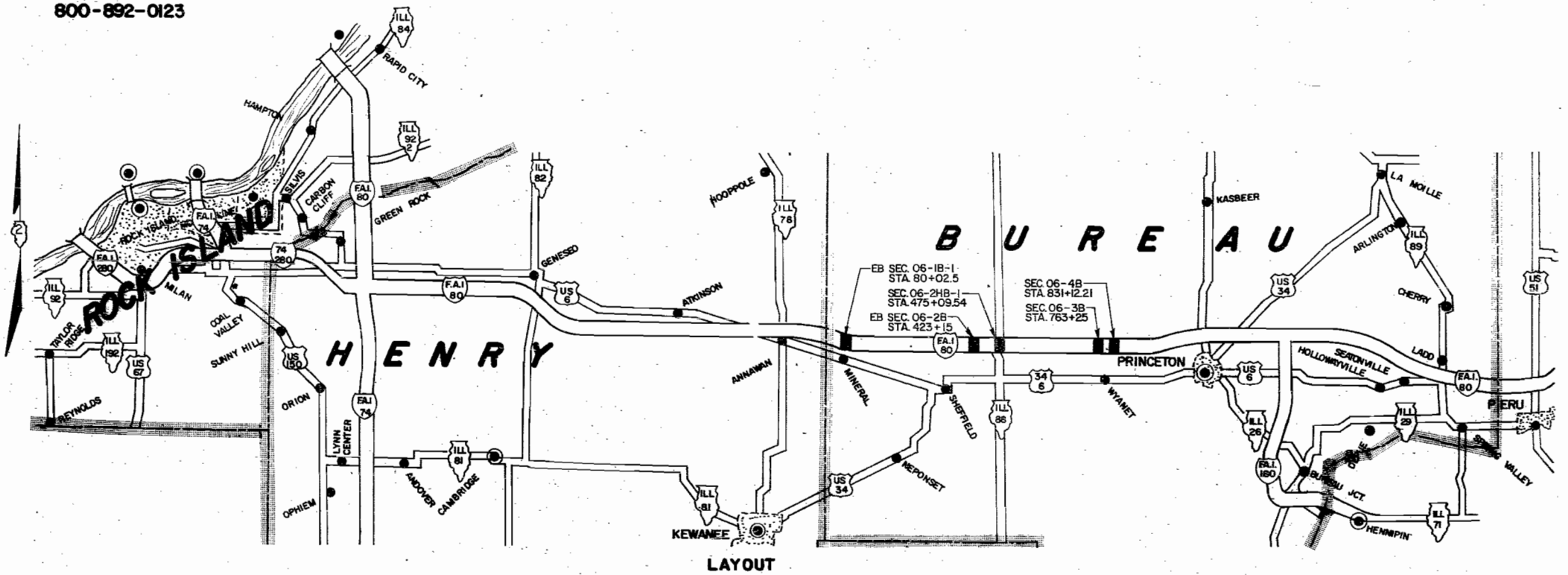
\* (06-1B-1, 06-2B, 06-2HB-1, 06-3B, 06-4B)RS

| FEDERAL AID ROUTE NO. | SEC. | COUNTY | TOTAL SHEETS | SHEET NO. |
|-----------------------|------|--------|--------------|-----------|
| FAI 80                | *    | BUREAU | 22           | 1         |

P92-016-82  
P92-021-82



CALL J.U.I.E.  
BEFORE YOU DIG  
800-892-0123



**NET LENGTH**

|                                   |
|-----------------------------------|
| 06-1B-1 = 73.5'                   |
| 06-2B = 109.0'                    |
| 06-2HB-1 = 270.3'                 |
| 06-3B = 226.3'                    |
| 06-4B = 452.8'                    |
| <b>TOTAL 1,131.9' = 0.214 MI.</b> |

STATE OF ILLINOIS  
DIVISION OF HIGHWAYS

SUBMITTED: Jan. 12 1983

EXAMINED: Feb. 10 1983

PASSED: Feb. 10 1983

APPROVED: Feb. 10 1983

DIRECTOR OF HIGHWAYS

DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION

APPROVED:

DIVISION ADMINISTRATOR

DATE:

CONTRACT NO. 35946

COUNTY BUREAU SECTION \* F. A. I. ROUTE 80  
\*(06-1B-1, 06-2B, 06-2HB-1, 06-3B, 06-4B)RS

\*(06-1B-1, 06-2B, 06-2HB-1, 06-3B, 06-4B)RS

| ROUTE NO.             | SEC. | COUNTY   | TOTAL SHEETS | SHEET NO. |
|-----------------------|------|----------|--------------|-----------|
| FAI 80                | *    | Bureau   | 22           | 2         |
| FED. ROAD DIST. NO. 7 |      | ILLINOIS | PROJECT      |           |

## GENERAL NOTES

The conduit attached to the median side of the fascia beam on all westbound bridges shall be removed and disposed of by the Contractor. It should be removed from where it leaves the ground to where it enters again. This work will not be paid for directly but will be considered incidental to the contract.

BITUMINOUS MATERIALS (PRIME COAT) AND AGGREGATE (PRIME COAT) shall be incidental to BITUMINOUS CONCRETE SURFACE COURSE, MIXTURE D, CLASS 1.

BACKFILL VOIDS BEHIND ABUTMENT REPAIRS WITH SAND. COST SHALL BE INCIDENTAL TO THE CONTRACT.

## INDEX OF SHEETS

| SHEET | TITLE  |
|-------|--|
| 1     | Cover Sheet                                    |
| 2     | General Notes and Index of Sheets              |
| 3     | Summary of Quantities and Schedules            |
| 4-5   | Bridge Repair Details (06-1B-1)                |
| 6-8   | Bridge Repair Details (06-2B)                  |
| 9-12  | Bridge Repair Details (06-2HB-1)               |
| 13-14 | Bridge Repair Details (06-3B)                  |
| 15-18 | Bridge Repair Details (06-4B)                  |
| 19    | Traffic Control Details for Bridge Deck Repair |
| 20    | Traffic Control and Protection, Special        |
| 21    | Preformed Joint Seal and Steel Expansion Guard |
| 22    | Floor Drain                                    |

| STANDARD NO. | TITLE  |
|--------------|--|
| 2298-6       | Typical Application of Traffic Control Devices |
| 2299-9       | Design of Traffic Control Devices              |
| 2300-2       | Flagger Traffic Control Sign                   |
| 2316-7       | Typical Application of Traffic Control Devices |
| 2383-1       | Temporary Concrete Barrier                     |

DISTRICT NO. 2 DIXON  
 DESIGNED \_\_\_\_\_  
 DRAWN \_\_\_\_\_ DATE \_\_\_\_\_  
 CHECKED \_\_\_\_\_ SCALE \_\_\_\_\_

# SUMMARY OF QUANTITIES

Y007

| CODE NO.          | ITEM   | UNIT   | TOTAL QUANTITY |
|-------------------|--|--------|----------------|
| 406013*           | BITUMINOUS CONCRETE SURFACE COURSE, MIXTURE D, CLASS I | TON    | 373            |
| 501024            | CONCRETE REMOVAL                                       | CU YD  | 207.2          |
| 504003            | CLASS X CONCRETE                                       | CU YD  | 208.1          |
| 507004            | FURNISHING AND ERECTING STRUCTURAL STEEL               | POUND  | 19,887         |
| 507005            | STUD SHEAR CONNECTORS                                  | EACH   | 332            |
| 512001            | REINFORCEMENT BARS                                     | POUND  | 6190           |
| 617013*           | BITUMINOUS CONCRETE SURFACE REMOVAL, SPECIAL           | SQ YD  | 4292           |
| 646004            | ENGINEER'S FIELD OFFICE, TYPE A                        | CAL MO | 6              |
| <del>748008</del> | TRAFFIC CONTROL AND PROTECTION, STANDARD 2316          | L SUR  | 1              |
| Z10180            | DECK SLAB REPAIR (FULL DEPTH)                          | SQ YD  | 27             |
| Z10181            | DECK SLAB REPAIR (PARTIAL DEPTH)                       | SQ YD  | 401            |
| Z10530            | WATERPROOFING MEMBRANE SYSTEM                          | SQ YD  | 4124           |
| X04748            | MOBILIZATION   | L SUR  | 1              |
| X50313            | PREFORMED JOINT SEAL 2 1/2"                            | LIN FT | 467            |
| X50314            | PREFORMED JOINT SEAL 4"                                | LIN FT | 138            |
| X50316            | ELASTOMERIC BEARING ASSEMBLY, TYPE II                  | EACH   | 12             |
| X61640            | TEMPORARY CONCRETE BARRIER                             | LIN FT | 1820           |
| X61641            | TEMPORARY CONCRETE BARRIER, TERMINAL SECTION           | EACH   | 8              |
| X61642            | RELOCATE TEMPORARY CONCRETE BARRIER                    | LIN FT | 4460           |
| X07974*           | DECK DRAIN REPLACEMENT                                 | EACH   | 120            |
| Z10527**          | TRAINEES   | HOOR   | 1000           |
| Z10517*           | TEMPORARY SLAB SUPPORT SYSTEM                          | L SUR  | 1              |
| 648018*           | TRAFFIC CONTROL AND PROTECTION SPECIAL                 | L SUR  | 1              |
| Z10259            | * SEE SPECIAL PROVISIONS<br>JACKING AND CRIBBING       | EACH   | 2              |

\*\* Y080

# SCHEDULES

## TEMPORARY CONCRETE BARRIER

| LOCATION                                 | LIN FT |
|--|--------|
| I-80 Bridge 06-3B                        |        |
| EB Sta. 760+20-764+30 (Lt. Lane Closure) | 410    |
| WB Sta. 762+20-766+30 (Lt. Lane Closure) | 410    |
| I-80 Bridge 06-4B                        |        |
| EB Sta. 828+03-833+03 (Rt. Lane Closure) | 500    |
| WB Sta. 829+21-834+21 (Rt. Lane Closure) | 500    |

## TEMPORARY CONCRETE BARRIER TERMINAL SECTION

| LOCATION          | EACH |
|-------------------|------|
| I-80 Bridge 06-3B | 4    |
| I-80 Bridge 06-4B | 4    |

## RELOCATE TEMPORARY CONCRETE BARRIER

| LOCATION                                 | LIN FT |
|--|--------|
| ILL 88 Bridge 06-2HB-1                   |        |
| NB Sta. 1430+03-1435+17                  | 514    |
| SB Sta. 1430+03-1435+17                  | 514    |
| FAI 80 Bridge 06-1B-1                    |        |
| EB Sta. 77+16-81+00 (Rt. Lane Closure)   | 394    |
| EB Sta. 77+16-81+00 (Lt. Lane Closure)   | 394    |
| FAI 80 Bridge 06-2B                      |        |
| EB Sta. 420+33-424+27 (Rt. Lane Closure) | 394    |
| EB Sta. 420+33-424+27 (Lt. Lane Closure) | 394    |
| FAI 80 Bridge 06-3B                      |        |
| EB Sta. 760+13-764+37 (Rt. Lane Closure) | 424    |
| WB Sta. 762+13-766+37 (Rt. Lane Closure) | 424    |
| FAI 80 Bridge 06-4B                      |        |
| EB Sta. 827+96-833+10 (Lt. Lane Closure) | 514    |
| WB Sta. 829+14-834+23 (Lt. Lane Closure) | 514    |

\*(06-1B-1,06-2B,06-2HB-1,06-3B,06-4B)RS

| ROUTE NO. | SEC. | COUNTY | TOTAL SHEETS | SHEET NO. |
|-----------|------|--------|--------------|-----------|
| FAI 80    | *    | BUREAU | 22           | 3         |

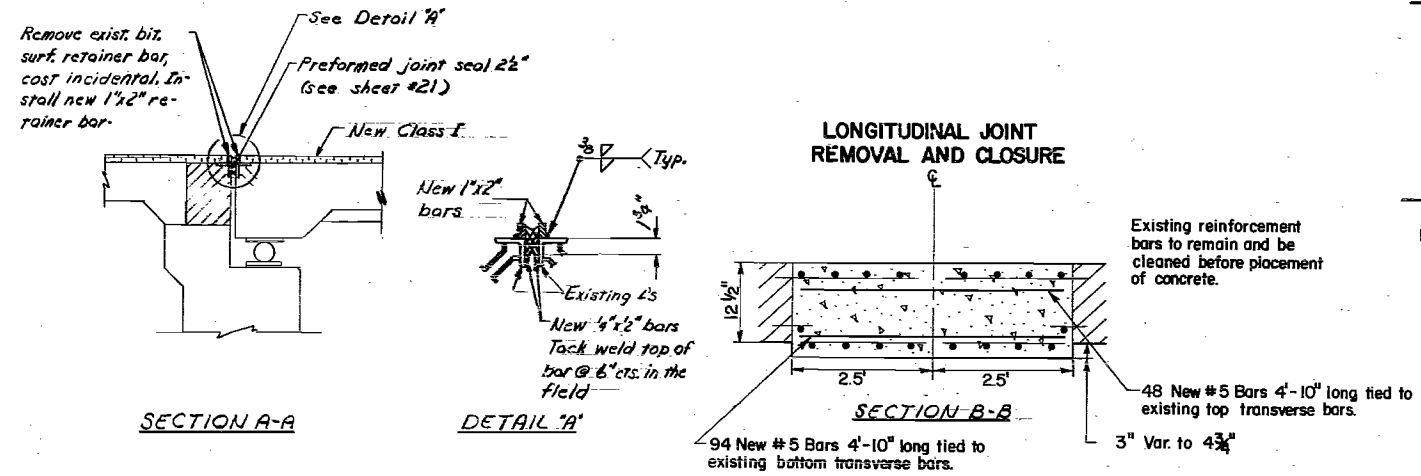
| REVIEWED                              |         |
|---------------------------------------|---------|
| <i>R.C. Davis</i>                     | 1-10-83 |
| DISTRICT ENGINEER OF DESIGN           | DATE    |
| <i>J.P. [Signature]</i>               | 1-10-83 |
| DISTRICT ENGINEER OF PLANNING         | DATE    |
| <i>[Signature]</i>                    | 1-10-83 |
| DISTRICT ENGINEER OF LAND ACQUISITION | DATE    |
| <i>[Signature]</i>                    | 1-10-83 |
| DISTRICT ENGINEER OF TRAFFIC          | DATE    |
| <i>[Signature]</i>                    | 1-10-83 |
| DISTRICT ENGINEER OF CONSTRUCTION     | DATE    |
| <i>Frank F. Schorba</i>               | 1-10-83 |
| DISTRICT ENGINEER OF MAINTENANCE      | DATE    |
| <i>[Signature]</i>                    | 1-10-83 |
| DISTRICT ENGINEER OF MATERIALS        | DATE    |

DISTRICT NO. 2 DIXON

DESIGNED \_\_\_\_\_ DATE \_\_\_\_\_  
 DRAWN \_\_\_\_\_ DATE \_\_\_\_\_  
 CHECKED \_\_\_\_\_ SCALE \_\_\_\_\_

(36-1B-1, 36-2B, 36-2HB-1, 36-3B, 36-4B) RS

| ROUTE NO.                                | SEC. | COUNTY | TOTAL SHEETS | SHEET NO. |
|--|------|--------|--------------|-----------|
| FAI 88                                   |      | BUREAU | 22           | 4         |
| FED. ROAD DIST. NO. 7   BUREAU   PROJECT |      |        |              |           |



**REINFORCEMENT BARS**

| LOCATION           | POUND |
|--------------------|-------|
| LONGITUDINAL JOINT | 715   |

**DECK SLAB REPAIR (PARTIAL DEPTH)**

| LOCATION  | SQ YD |
|-----------|-------|
| EB BRIDGE | 58.2  |

**PREFORMED JOINT SEAL 2 1/2"**

| LOCATION           | LIN FT |
|--------------------|--------|
| EB BRIDGE & ABUTS. | 82.8   |

**BITUMINOUS CONCRETE SURFACE REMOVAL (SPECIAL)**

| LOCATION  | SQ YD |
|-----------|-------|
| EB BRIDGE | 308.7 |

**WATERPROOFING MEMBRANE SYSTEM**

| LOCATION  | SQ YD |
|-----------|-------|
| EB BRIDGE | 308.7 |

**BITUMINOUS CONCRETE SURFACE COURSE, MIXTURE D, CLASS I**

| LOCATION  | TON  |
|-----------|------|
| EB BRIDGE | 25.9 |

**CLASS X CONCRETE**

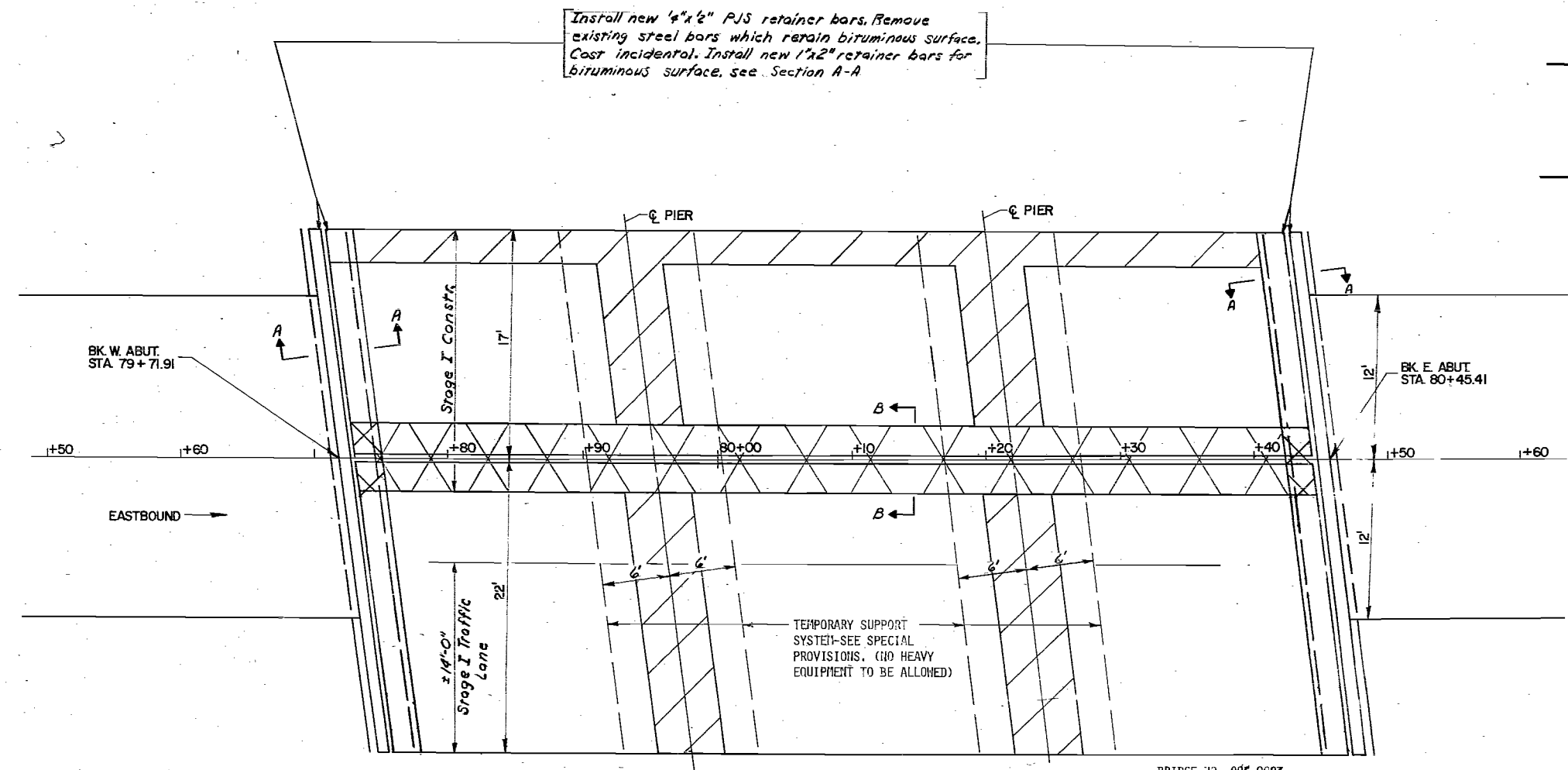
| LOCATION  | CU YD |
|-----------|-------|
| EB BRIDGE | 33.1  |

**CONCRETE REMOVAL**

| LOCATION  | CU YD |
|-----------|-------|
| EB BRIDGE | 32.9  |

**FURNISHING AND ERECTING STRUCTURAL STEEL**

| LOCATION               | POUND |
|------------------------|-------|
| Transverse Joint Steel | 1678  |



HATCHED AREAS = DECK SLAB REPAIR (PARTIAL DEPTH)  
 CROSS HATCHED AREAS = CONCRETE REMOVAL AND CLASS X CONCRETE REPLACEMENT

BRIDGE NO. 006-0003

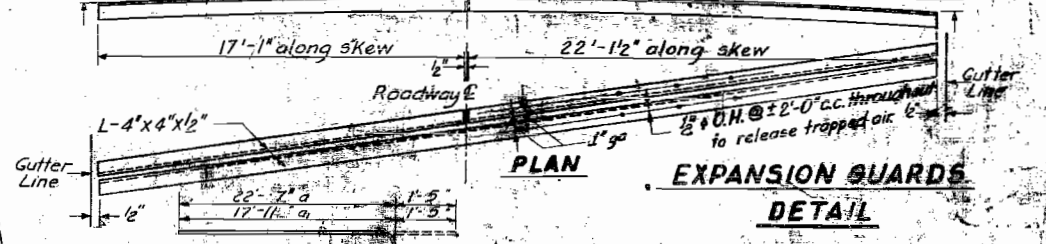
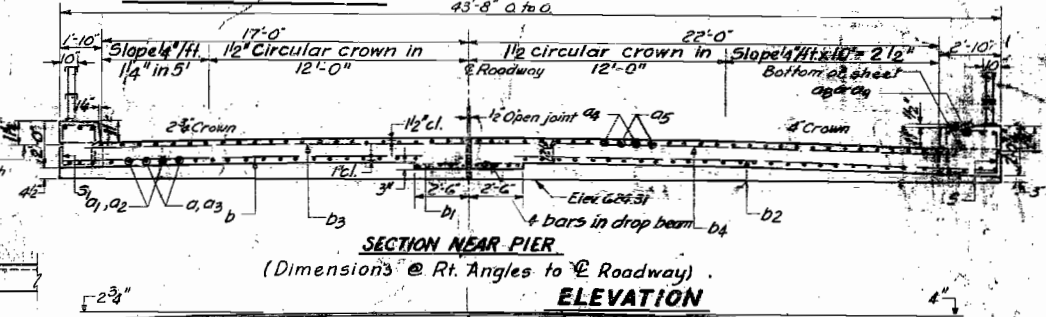
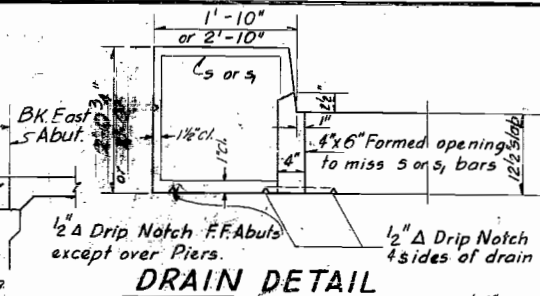
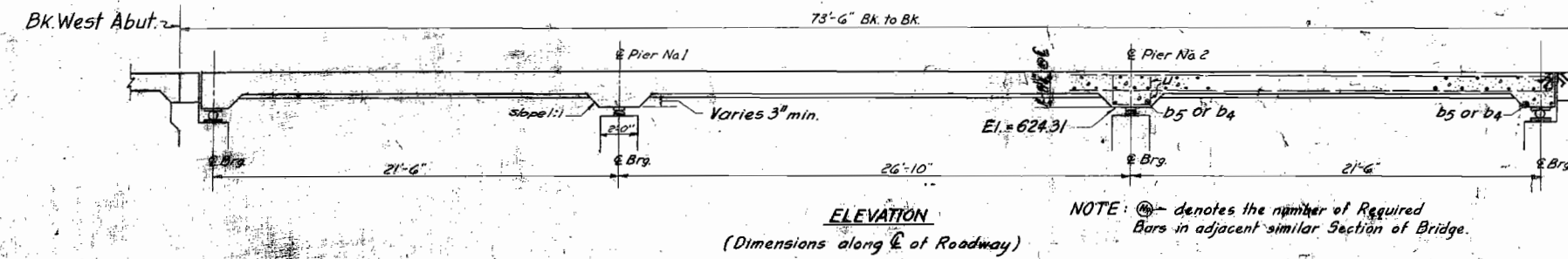
SECTION 36-1B-1  
 STATION 80+02.5  
 I-30 OVER SOUTH DITCH

DISTRICT NO. 2 DIXON  
 DESIGNED \_\_\_\_\_ DATE \_\_\_\_\_  
 DRAWN \_\_\_\_\_ SCALE \_\_\_\_\_  
 CHECKED \_\_\_\_\_

Revised 1-25-83

STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

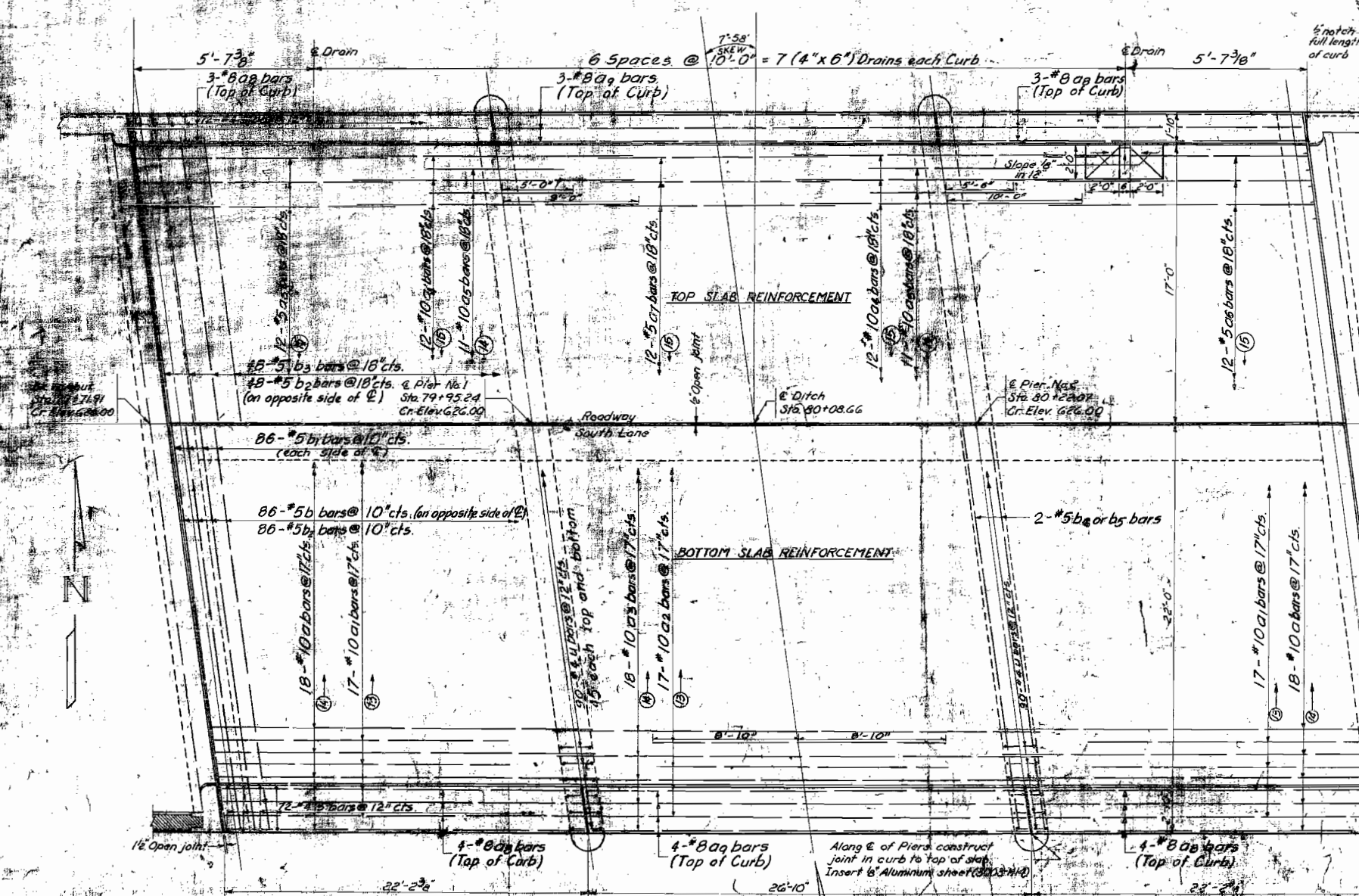
| ROUTE NO.             | SECTION | COUNTY   | TOTAL SHEETS     | SHEET NO. |
|-----------------------|---------|----------|------------------|-----------|
| U.S. 80               | *       | Bureau   | 22               | 5         |
| I.L. ROAD DIST. NO. 7 |         | ILLINOIS | PER. AND PROJECT |           |



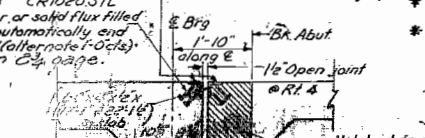
**BILL OF MATERIAL**  
(Ord. Prices)

| BAR                | NO. | SIZE    | LENGTH | SHAPE |
|--------------------|-----|---------|--------|-------|
| D                  | 64  | #10     | 24'-8" |       |
| Dj                 | 60  | #10     | 19'-4" |       |
| D2                 | 30  | #10     | 17'-8" |       |
| D3                 | 32  | #10     | 29'-0" |       |
| D4                 | 54  | #10     | 19'-0" |       |
| D5                 | 50  | #10     | 10'-8" |       |
| D6                 | 54  | #5      | 13'-0" |       |
| D7                 | 27  | #5      | 11'-0" |       |
| D8                 | 14  | #8      | 22'-0" |       |
| D9                 | 7   | #8      | 26'-6" |       |
| D                  | 86  | #5      | 17'-0" |       |
| Dj                 | 172 | #5      | 2'-3"  |       |
| D2                 | 134 | #5      | 23'-0" |       |
| D3                 | 48  | #5      | 18'-0" |       |
| D4                 | 8   | #5      | 18'-9" |       |
| D5                 | 8   | #5      | 24'-9" |       |
| S                  | 72  | #4      | 8'-11" |       |
| Sj                 | 72  | #4      | 6'-8"  |       |
| U                  | 180 | #4      | 3'-6"  |       |
| Class X Concrete   |     | Cu Yds. | 144.5  |       |
| Reinforcement Bars |     | Lb.     | 34,500 |       |
| Structural Steel   |     | Lb.     | 1,110  |       |

\* Includes Expansion Guard on Deck only.



1/6" holes @ 12" cts. for 3/8" bolts. All bolts shall be burned, sawed or chipped off flush with back of angles after forms are removed. Set on 2" case.



Matched area shall not be poured until expansion guard has been removed. Quantity included as part of Substructure Quantities.

FOR INFORMATION ONLY  
SUPERSTRUCTURE  
PART 80  
BUREAU OF HIGHWAYS

DESIGNED BY: L. B. Winn  
CHECKED BY: G. S. Smith  
DATE: 10/15/1960

DEAD LOAD DEFLECTION

\*( 06-1B-1,06-2B,06-2HB-1,06-3B,06-4B)RS

| ROUTE NO.             | SEC. | COUNTY   | TOTAL SHEETS | SHEET NO. |
|-----------------------|------|----------|--------------|-----------|
| FA180                 | *    | BUREAU   | 22           | 6         |
| FED. ROAD DIST. NO. 7 |      | ILLINOIS | PROJECT      |           |

**DECK SLAB REPAIR (PARTIAL DEPTH)**

| LOCATION                 | SQ YD |
|--------------------------|-------|
| EB Bridge                | 18.9  |
| Sta. 423+72.5 - 424+02.5 | 80.0  |

**WATERPROOFING MEMBRANE SYSTEM**

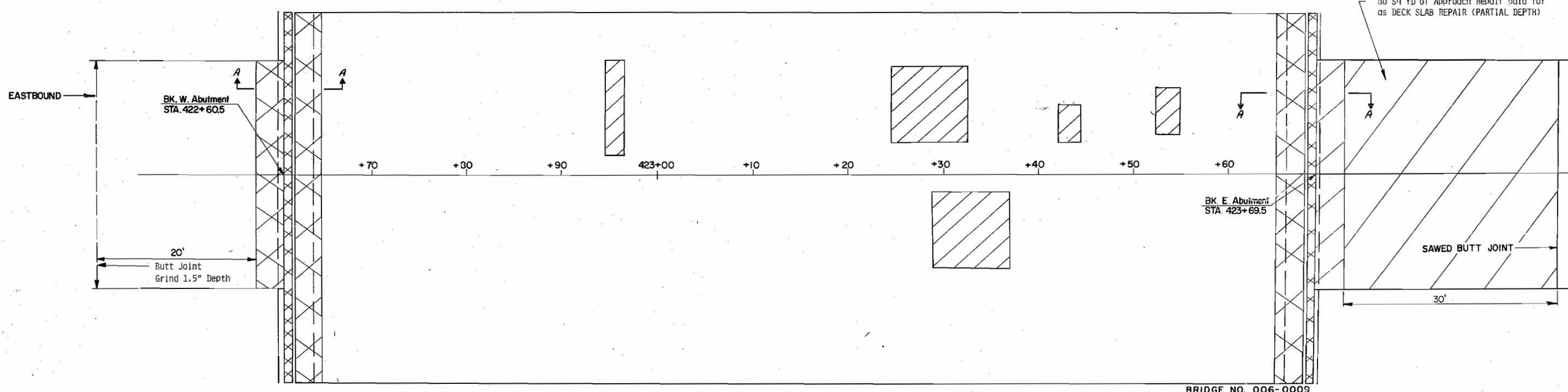
| LOCATION  | SQ YD |
|-----------|-------|
| EB Bridge | 462.6 |

**BITUMINOUS CONCRETE SURFACE REMOVAL (SPECIAL)**

| LOCATION   | SQ YD |
|------------|-------|
| EB Bridge  | 462.6 |
| Approaches | 141.3 |

**BITUMINOUS CONCRETE SURFACE COURSE, MIXTURE D, CLASS I**

| LOCATION   | TON  |
|------------|------|
| EB Bridges | 56.0 |
| Approaches | 164  |



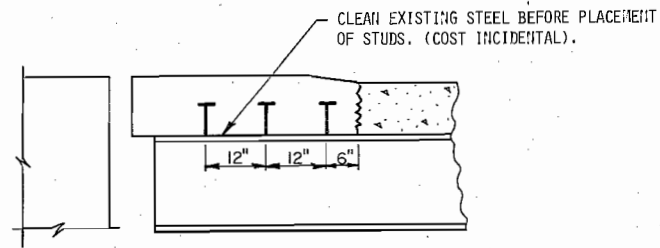
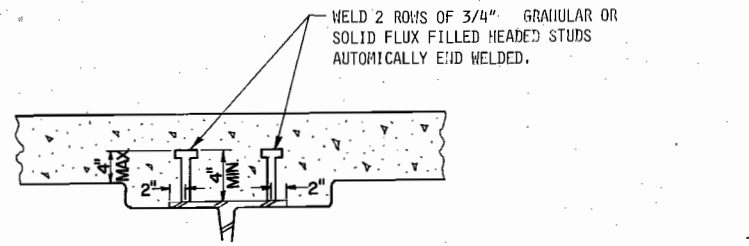
Hatched area indicates deck slab repair (partial depth).  
 Cross hatched area indicates concrete removal & concrete replacement.  
 See sheet #7 for Sec. A-A.

SECTION 06-2B  
 STA. 423+15  
 180 OVER DRAINAGE DITCH  
 DISTRICT NO. 2 DIXON  
 DESIGNED \_\_\_\_\_  
 DRAWN \_\_\_\_\_ DATE \_\_\_\_\_  
 CHECKED \_\_\_\_\_ SCALE \_\_\_\_\_

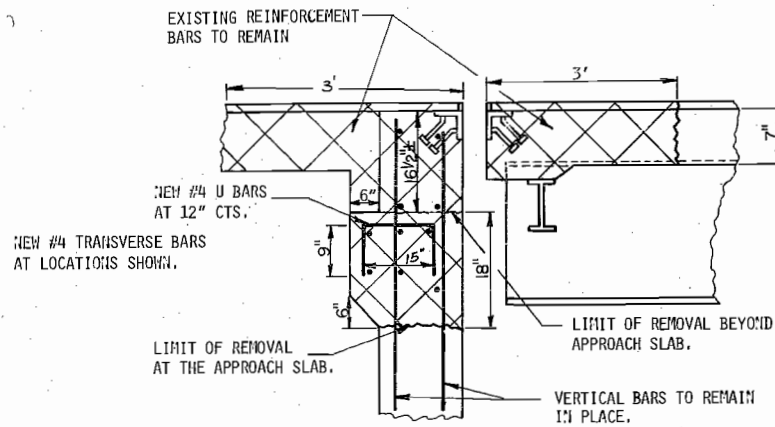
# BRIDGE DETAILS

BRIDGE NO. 006-0009

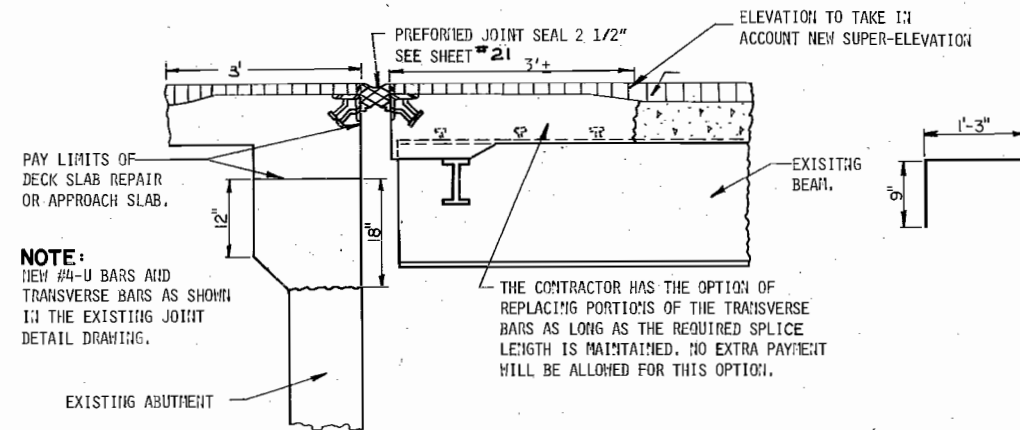
| * (06-1B, 06-2B, 06-2HB-1, 06-3B, 06-4B) RS |      |        |              |           |
|---|------|--------|--------------|-----------|
| ROUTE NO.                                   | SEC. | COUNTY | TOTAL SHEETS | SHEET NO. |
| FAI 80                                      | *    | BUREAU | 22           | 7         |
| FED. ROAD DIST. NO. 7 ILLINOIS              |      |        | PROJECT      |           |



**STUD SHEAR CONNECTORS**

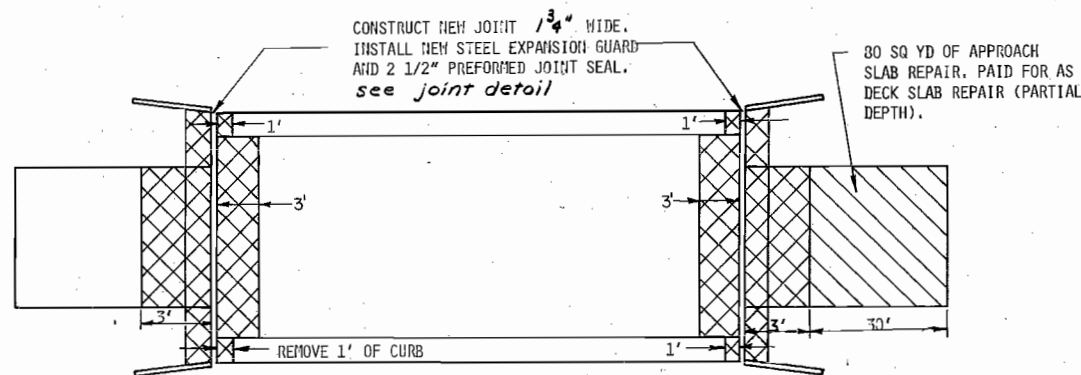


**EXISTING JOINT DETAIL**  
(REMOVAL DETAILS)



**NEW JOINT DETAIL**  
SECTION A-A

**NOTE:** EXISTING REINFORCEMENT BARS IN THE AREAS WHERE CONCRETE HAS BEEN REMOVED SHALL BE CLEANED BEFORE PLACEMENT OF NEW CONCRETE. (COST INCIDENTAL)



**PLAN VIEW**

**CONCRETE REMOVAL**

| LOCATION  | CU YD |
|-----------|-------|
| EB BRIDGE | 18.1  |

**CLASS X CONCRETE**

| LOCATION  | CU YD |
|-----------|-------|
| EB BRIDGE | 19    |

**PREFORMED JOINT SEAL 2 1/2"**

| LOCATION  | LINE FT |
|-----------|---------|
| EB BRIDGE | 82      |

**DECK DRAIN REPLACEMENT**

| LOCATION  | EACH |
|-----------|------|
| EB BRIDGE | 17   |

**STUD SHEAR CONNECTORS**

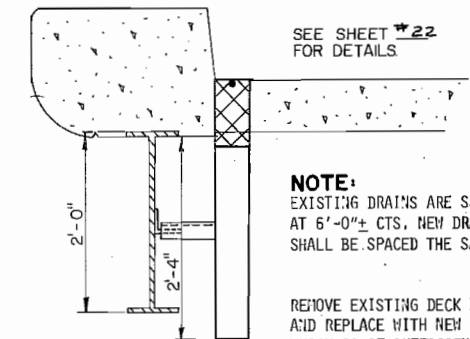
| LOCATION             | EACH |
|----------------------|------|
| AT TRANSVERSE JOINTS | 68   |

**REINFORCEMENT BARS**

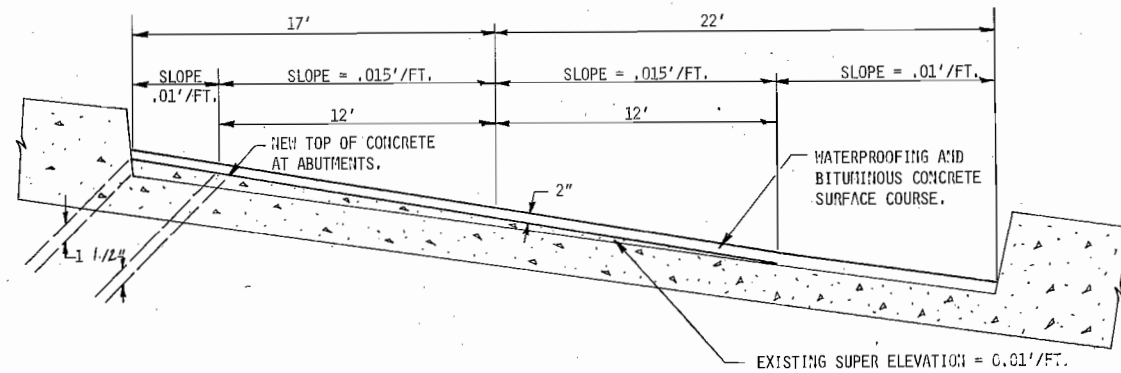
| LOCATION  | POUND |
|-----------|-------|
| EB BRIDGE | 490   |

**FURNISH & ERECT STRUCTURAL STEEL**

| LOCATION                        | POUND |
|---------------------------------|-------|
| STEEL EXPANSION GUARDS (EB BR.) | 3307  |



**DECK DRAIN REPLACEMENT**



**DECK SECTION NEAR ABUTMENTS**

SECTION 06-2B  
STATION 423+15  
I-30 OVER DRAINAGE DITCH

DISTRICT NO. 2 DIXON

DESIGNED  
DRAWN  
CHECKED

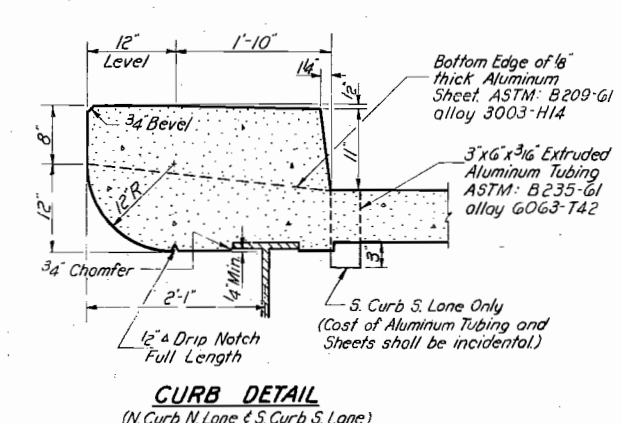
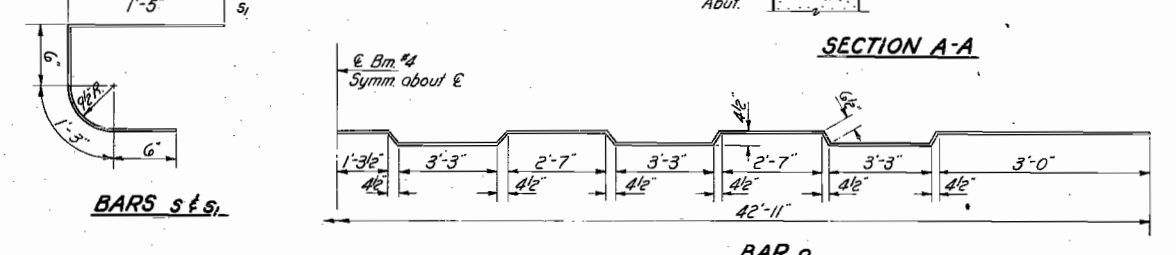
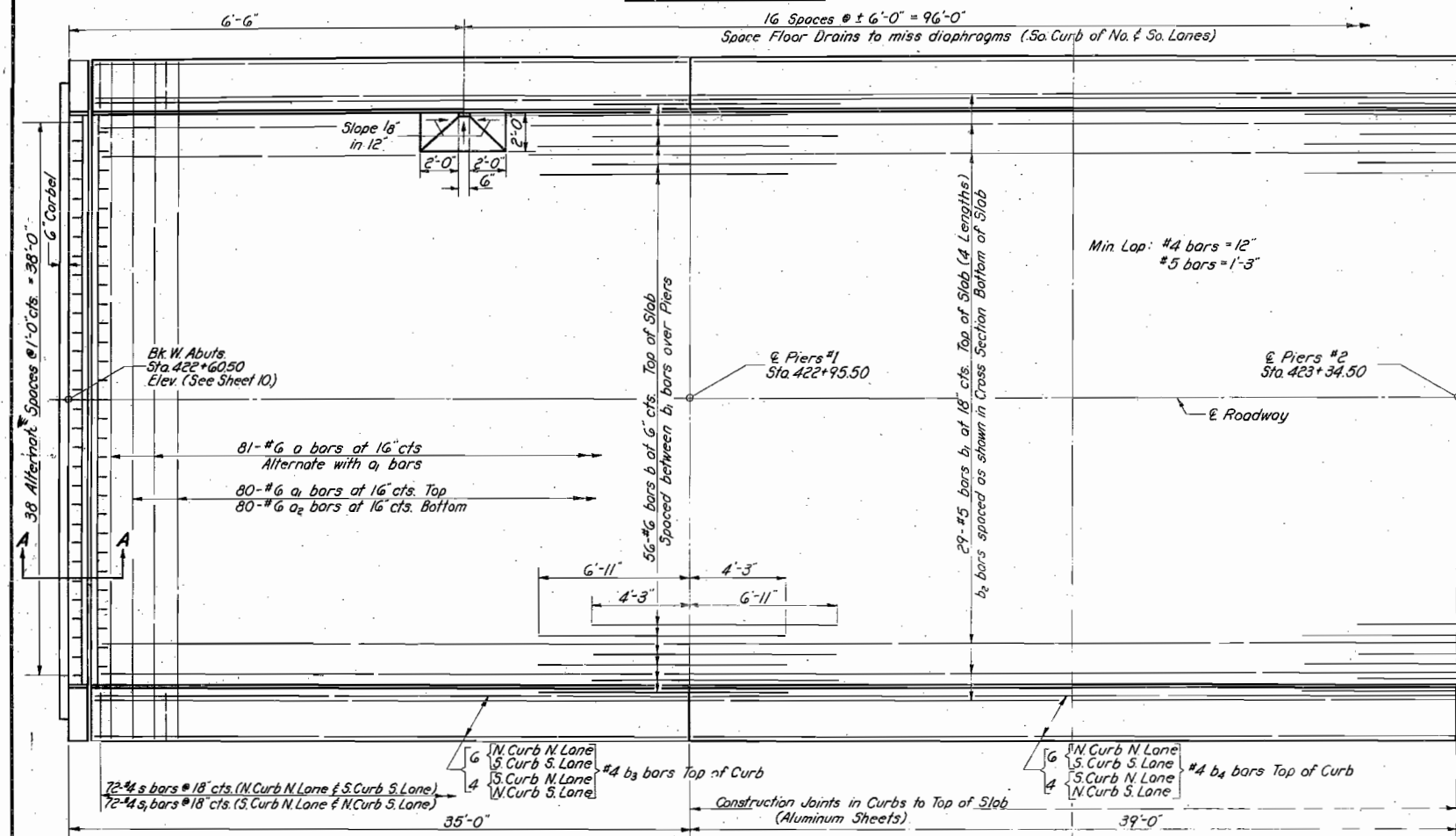
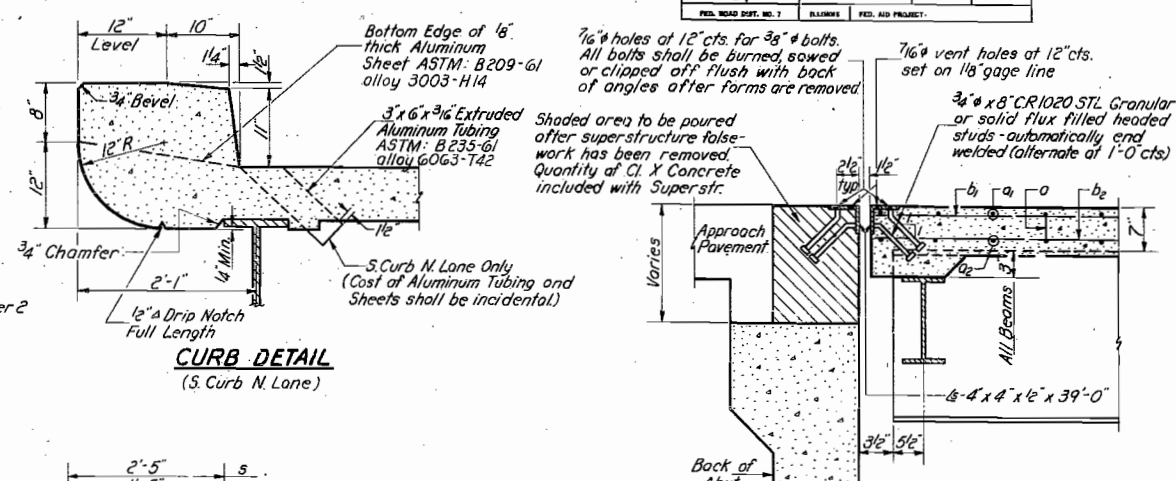
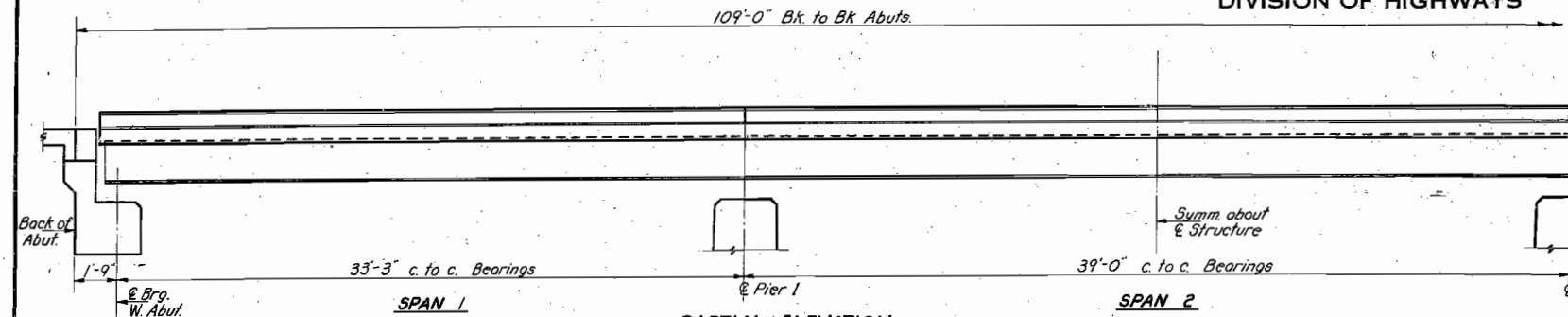
DATE  
SCALE



STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

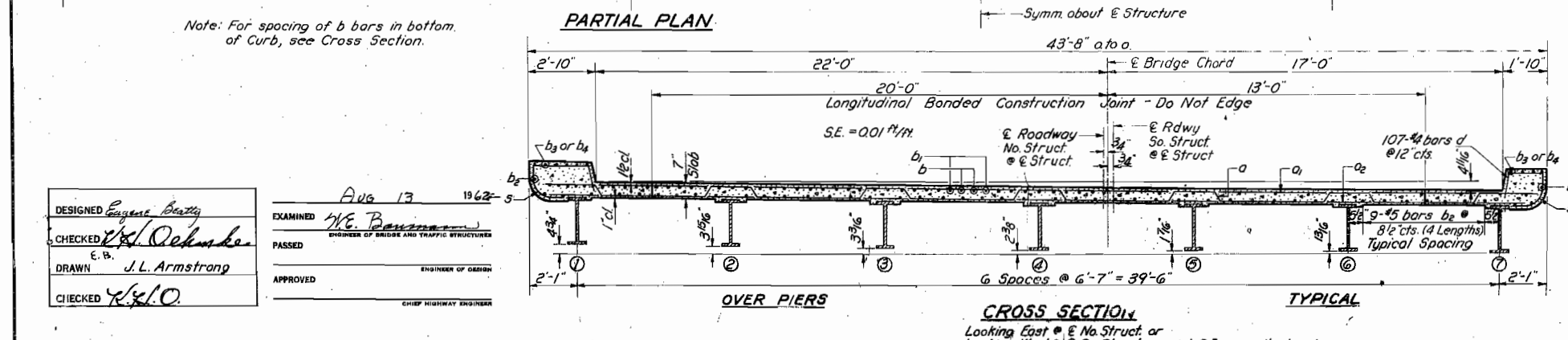
\*106-1B-1.06-2B.06-2HB-1.06-3B.06-4BRS

| MONTH  | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------|---------|--------|--------------|-----------|
| 8-1-80 | *       | Bureau | 22           | 8         |



SEC. 06-2B  
TWO STRUCTURES  
BILL OF MATERIAL

| Bar                | No. | Size  | Length  | Shape |
|--------------------|-----|-------|---------|-------|
| a                  | 162 | #6    | 44'-11" |       |
| a <sub>1</sub>     | 160 | #6    | 43'-0"  |       |
| a <sub>2</sub>     | 160 | #6    | 41'-10" |       |
| b                  | 224 | #6    | 11'-2"  |       |
| b <sub>1</sub>     | 232 | #5    | 27'-5"  |       |
| b <sub>2</sub>     | 480 | #5    | 27'-5"  |       |
| b <sub>3</sub>     | 80  | #4    | 17'-5"  |       |
| b <sub>4</sub>     | 40  | #4    | 19'-10" |       |
| d                  | 428 | #4    | 1'-3"   |       |
| s                  | 144 | #4    | 4'-8"   |       |
| s <sub>1</sub>     | 144 | #4    | 3'-8"   |       |
| Class X Concrete   |     | Cu Yd | 248.4   |       |
| Reinforcement Bars |     | Lb.   | 58,040  |       |
| Struct Steel       |     | Lb.   | 168,170 |       |
| Name Plates        |     | Each  | 2       |       |



**METHOD OF DETERMINING FILLET HEIGHT "f"**  
After all Structural Steel has been erected elevations of the top of the flanges of the beams shall be taken at the stations shown on Sheet #10. These elevations subtracted from the Modified Slab Elevations shown on Sheet #10, minus floor thickness equal the fillet heights above top of beams.

**DESIGN STRESSES**  
f<sub>s</sub> = 20,000 psi. Structural Steel  
f<sub>s</sub> = 20,000 psi. Reinforcement  
f<sub>c</sub> = 1,400 psi. Superstructure  
f<sub>c</sub> = 1,400 psi. Substructure  
n = 10

For Information Only  
**SUPERSTRUCTURE**  
**NORTH & SOUTH LANES**  
**DRAINAGE DITCH**  
**F.A.I. RT. 80 SEC. 06-2 B.**  
**BUREAU COUNTY**  
**STA. 423+15**

DESIGNED *Eugene Beatty*

CHECKED *J. L. Ochske*

DRAWN *J. L. Armstrong*

CHECKED *K. L. O.*

EXAMINED *W. E. Baumman*

PASSED

APPROVED

Aug 13 1962

ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES

ENGINEER OF DESIGN

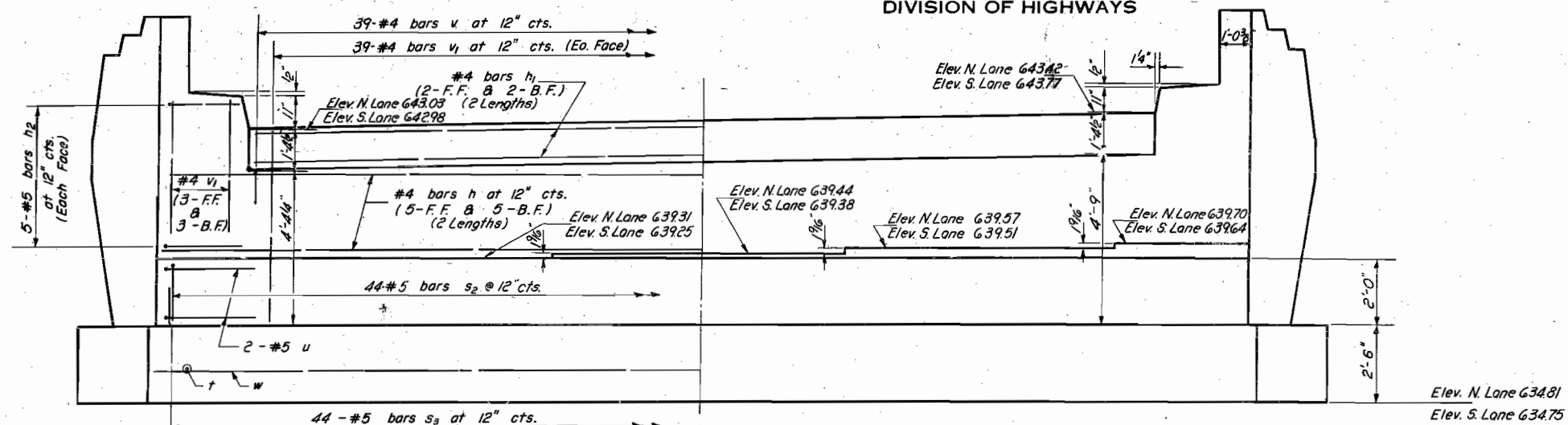
CHIEF HIGHWAY ENGINEER

Rev. 1-25-63 WLP Revised Function of Inspector to Form 1870 to Comm. 1963

STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

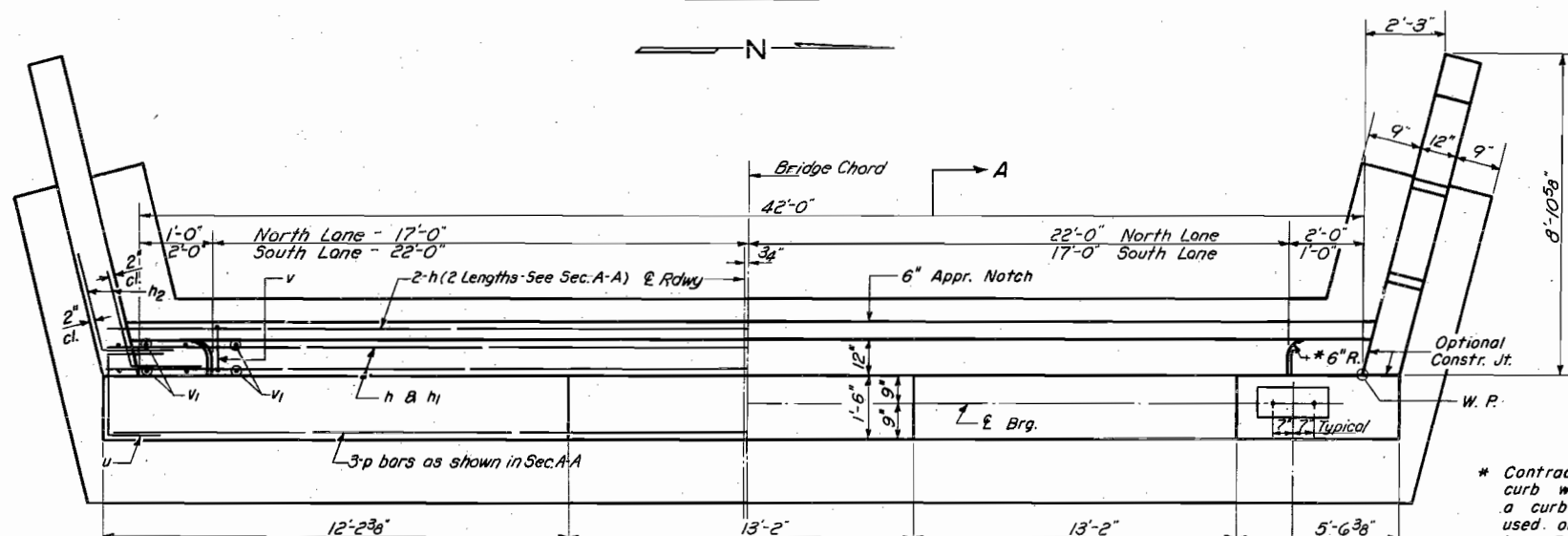
|                            |         |        |              |           |
|----------------------------|---------|--------|--------------|-----------|
| ROUTE NO.                  | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 1-180                      | *       | Bureau | 22           | 8A        |
| FED. ROAD DIST. NO. 1      |         |        |              |           |
| BILLING: FED. AID PROJECT: |         |        |              |           |

(10-1B-1, 04-2B, 04-2HB-1, 04-3B, 04-4B) R5



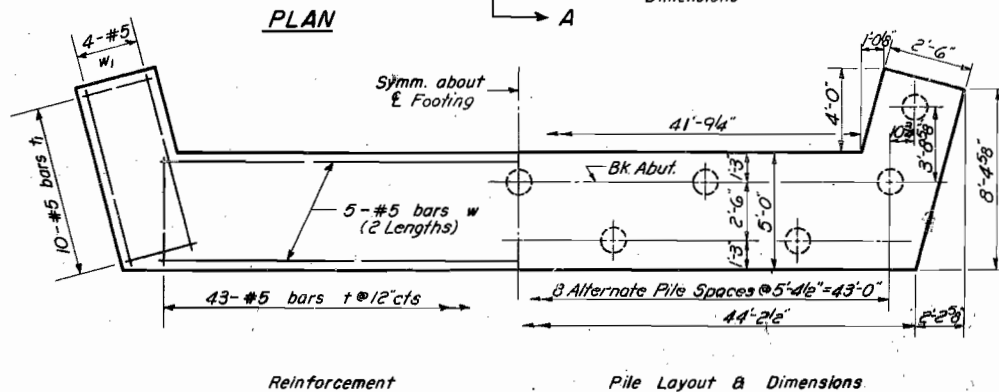
Reinforcement Dimensions

**ELEVATION**



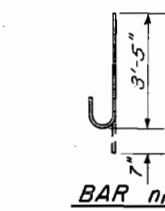
Reinforcement Dimensions

**PLAN**

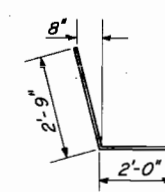


Reinforcement Pile Layout & Dimensions

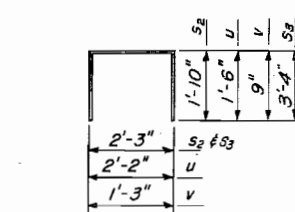
**FOOTING PLAN**



BAR n1



BAR h2



BARS s2, s3, u & v

**TWO ABUTMENTS  
BAR LIST**

| Bar | No. | Size | Length  | Shape |
|-----|-----|------|---------|-------|
| h   | 48  | #4   | 22'-5"  | —     |
| h1  | 16  | #4   | 19'-10" | —     |
| h2  | 40  | #5   | 4'-9"   | L     |
| n1  | 40  | #5   | 4'-0"   | U     |
| p   | 12  | #7   | 22'-9"  | —     |
| s2  | 88  | #5   | 5'-11"  | □     |
| s3  | 88  | #5   | 8'-11"  | □     |
| t   | 86  | #5   | 4'-8"   | —     |
| t1  | 40  | #5   | 2'-2"   | —     |
| u   | 8   | #5   | 5'-2"   | □     |
| v   | 78  | #4   | 2'-9"   | □     |
| v1  | 180 | #4   | 5'-4"   | —     |
| w   | 20  | #5   | 22'-0"  | —     |
| w1  | 16  | #5   | 9'-9"   | —     |

**TWO ABUTMENTS  
BILL OF MATERIAL**

| Item                  | Unit     | Quantity |
|-----------------------|----------|----------|
| Class X Concrete      | Cu. Yds. | 83.1     |
| Reinforcement Bars    | Lbs.     | 5880     |
| Concrete Piles        | Lin. Ft. | 840      |
| Test Piles (Concrete) | Each     | 1        |

Note: Bill of Material includes Reinforcement and Class X Concrete for Four End Posts.

For Information Only

**WEST ABUTMENTS  
NORTH & SOUTH LANES  
DRAINAGE DITCH  
F.A.I. RT. 80 SEC. 06-2B  
BUREAU COUNTY  
STA. 423+15**

For Details of End Post & Sec. A-A See Sheet No. 7

DESIGNED *Ernest Beatty*  
CHECKED *K.H. Osburne*  
DRAWN *W. A. Sausaman*  
CHECKED *K.H. Osburne*

EXAMINED *W.C. Baumann*  
PASSED  
APPROVED

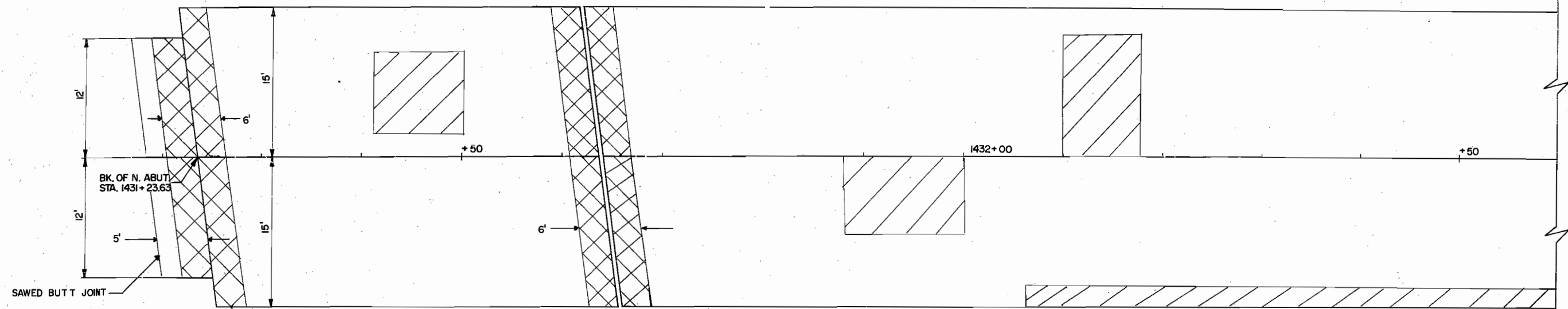
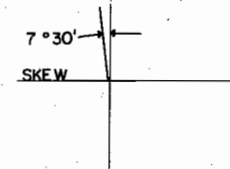
AUG 13 1962  
ENGINEER OF BRIDGES AND TRAFFIC STRUCTURES  
ENGINEER OF DESIGN  
CHIEF HIGHWAY ENGINEER

**PILE DATA**

Type - Concrete  
Capacity - 25 Ton Min.  
Est. Length - 40 Feet  
No. Req'd. - 22  
(Including 1 Test Pile)

\* (06-1B-1, 06-2B, 06-2HB-1, 06-3B, 06-4B)RS

| ROUTE NO.             | SEC. | COUNTY   | TOTAL SHEETS | SHEET NO. |
|-----------------------|------|----------|--------------|-----------|
| FAI-80                | *    | BUREAU   | 22           | 9         |
| FED. ROAD DIST. NO. 7 |      | ILLINOIS |              | PROJECT   |



**BITUMINOUS SURFACE REMOVAL (SPECIAL)**

| LOCATION      | SQ. YD. |
|---------------|---------|
| ENTIRE BRIDGE | 924.2   |

**WATERPROOFING MEMBRANE SYSTEM**

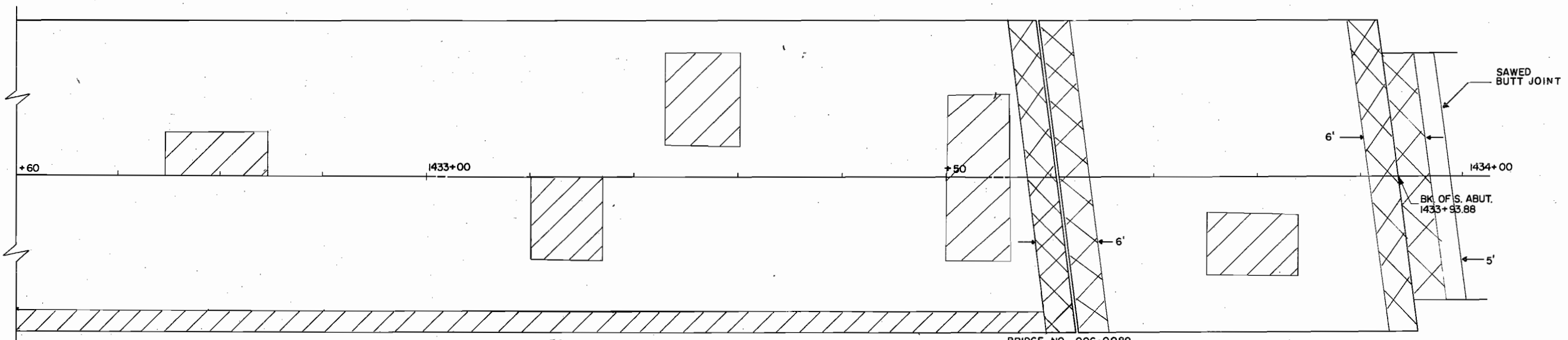
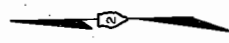
| LOCATION      | SQ. YD. |
|---------------|---------|
| ENTIRE BRIDGE | 897.5   |

**BITUMINOUS CONCRETE SURFACE COURSE MIXTURE D, CLASS 1**

| LOCATION      | TON  |
|---------------|------|
| ENTIRE BRIDGE | 65.1 |

**DECK SLAB REPAIR (PARTIAL DEPTH)**

| LOCATION      | SQ. YD. |
|---------------|---------|
| ENTIRE BRIDGE | 97.9    |



**LEGEND**

- = CONCRETE REMOVAL REPLACED WITH CLASS "X" CONCRETE
- = DECK SLAB REPAIR (PARTIAL DEPTH)

BRIDGE NO. 006-0089

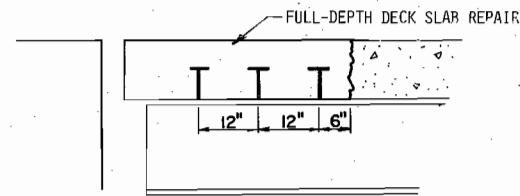
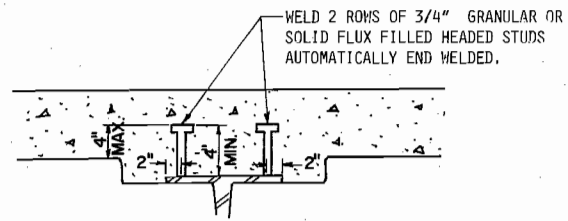
SECTION 06-2HB-1  
STA. 475+09.54  
ILL. 88 BRIDGE OVER FAI-80  
DISTRICT NO. 2 DIXON  
DESIGNED  
DRAWN Tim Clayton DATE 12/82  
CHECKED SCALE 1" = 5'

# BRIDGE DETAILS

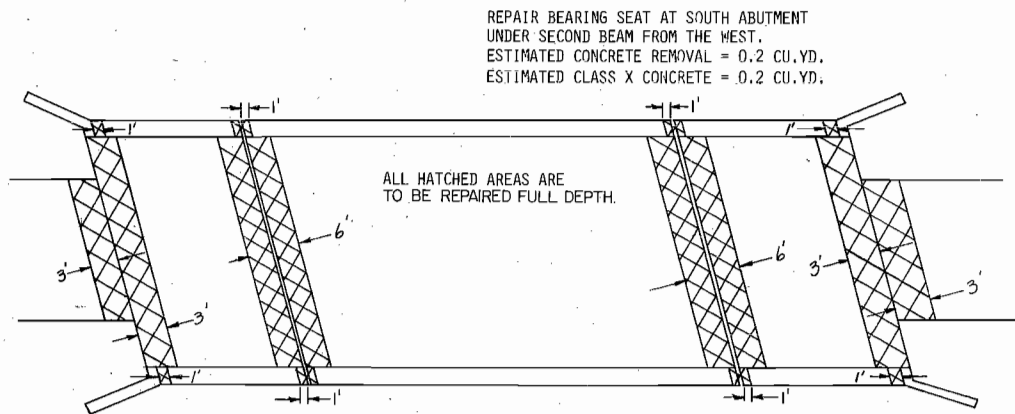
## BRIDGE NO. 006-0089

\* (06-1B-1, 06-2, 06-2HB-1, 06-3B, 06-4B) RS

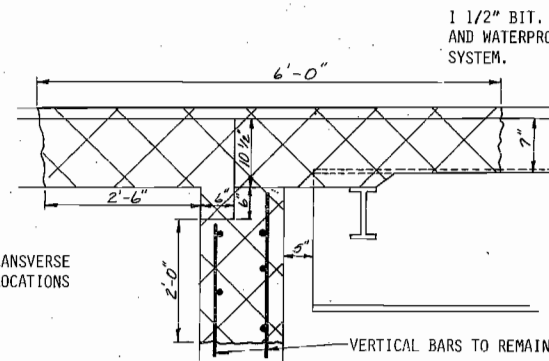
| ROUTE NO.             | SEC. | COUNTY   | TOTAL SHEETS | SHEET NO. |
|-----------------------|------|----------|--------------|-----------|
| FAI 80                | *    | BUREAU   | 22           | 10        |
| FED. ROAD DIST. NO. 7 |      | ILLINOIS | PROJECT      |           |



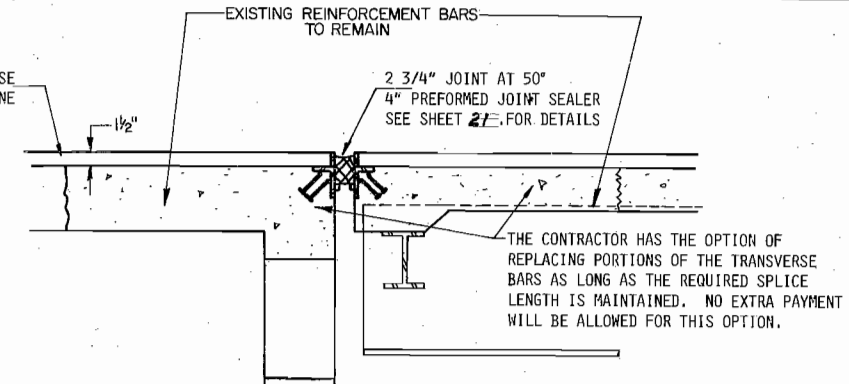
### STUD SHEAR CONNECTORS



IT WILL BE NECESSARY TO REMOVE & REPLACE THE GUARD RAIL TERMINALS FASTENED TO THE BRIDGE TO ALLOW WORK AT THE ENDS OF THE BRIDGE

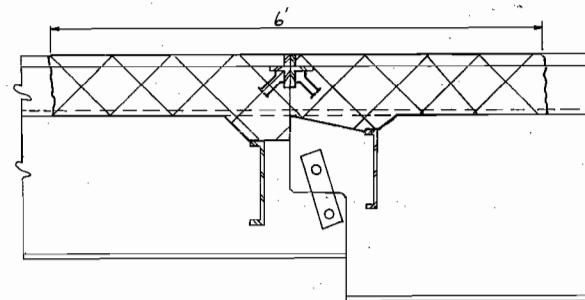


### EXISTING ABUTMENT DETAILS

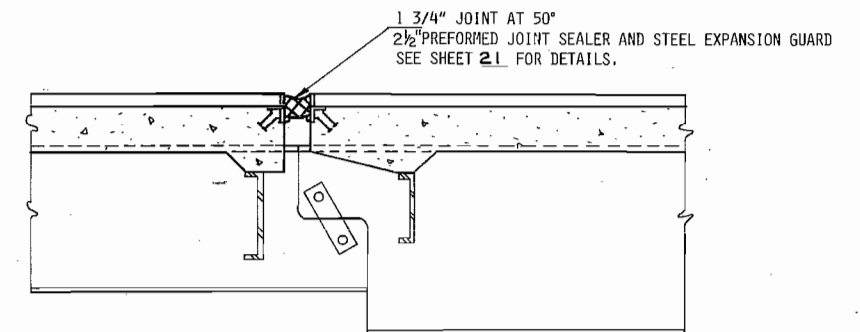


### NEW ABUTMENT DETAILS (N. & S. ABUTTS.)

AT APPROACH SLAB



### EXISTING JOINT DETAILS AT LINKS



### NEW JOINT DETAILS AT LINKS

#### DECK DRAIN REPLACEMENT

| LOCATION      | EACH |
|---------------|------|
| ENTIRE BRIDGE | 15   |

#### CLASS X CONCRETE

| LOCATION      | CU. YD. |
|---------------|---------|
| ENTIRE BRIDGE | 28      |

#### PREFORMED JOINT SEAL 2 1/2"

| LOCATION          | LIN. FT. |
|-------------------|----------|
| N. JOINT AT LINKS | 32.3     |
| S. JOINT AT LINKS | 32.3     |
| TOTAL             | 64.6     |

#### STUD SHEAR CONNECTORS

| LOCATION            | EACH |
|---------------------|------|
| AT ABUTMENTS        | 48   |
| AT EXPANSION JOINTS | 96   |

#### CONCRETE REMOVAL

| LOCATION      | CU. YD. |
|---------------|---------|
| ENTIRE BRIDGE | 28.8    |

#### PREFORMED JOINT SEAL 4"

| LOCATION    | LIN. FT. |
|-------------|----------|
| N. ABUTMENT | 32.3     |
| S. ABUTMENT | 32.3     |
| TOTAL       | 64.6     |

#### JACKING & CRIBBING (see Special Provisions)

| LOCATION     | EACH |
|--------------|------|
| AT ABUTMENTS | 2    |

#### REINFORCEMENT BARS

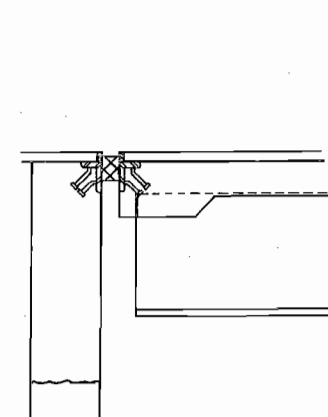
| LOCATION      | POUND |
|---------------|-------|
| ENTIRE BRIDGE | 247   |

#### FURNISHING AND ERECTING STRUCTURAL STEEL

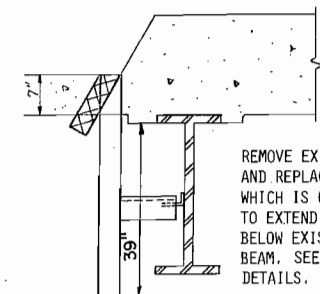
| LOCATION            | POUND |
|---------------------|-------|
| JOINTS AT LINKS     | 2,363 |
| JOINTS AT ABUTMENTS | 2,775 |
| PEDESTALS           | 1,196 |
| TOTAL               | 6,334 |

#### ELASTOMERIC BEARING ASSEMBLY, TYPE II

| LOCATION      | EACH |
|---------------|------|
| ENTIRE BRIDGE | 12   |



### NEW ABUTMENT DETAILS AT SHOULDERS BEYOND APPROACH SLAB



### DECK DRAIN REPLACEMENT

REMOVE EXISTING DECK DRAINS AND REPLACE WITH NEW DRAIN WHICH IS OF SUFFICIENT LENGTH TO EXTEND BETWEEN 3" & 4" BELOW EXISTING STEEL BRIDGE BEAM. SEE SHEET #22 FOR DETAILS.

SECTION 06-2HB-1  
STA. 475+09.54  
ILL. 88 OVER 1-80

DISTRICT NO. 2 DIXON

DESIGNED RD

DRAWN VAV

CHECKED

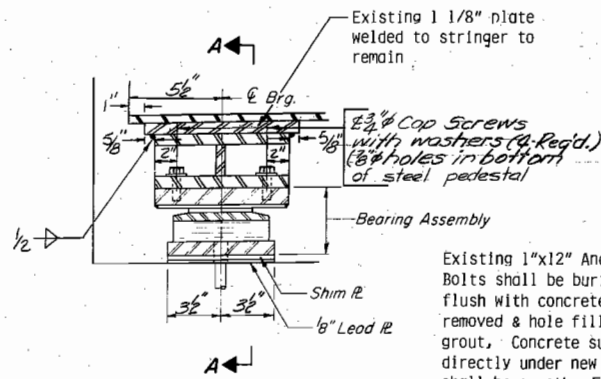
DATE 9-80

SCALE VARIES

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

\* (06-1B-1.06-2B.06-2HB-1.06-3B.06-4BIRS)

| ROUTE NO.             | SECTION | COUNTY   | TOTAL SHEETS     | SHEET NO. |
|-----------------------|---------|----------|------------------|-----------|
| FAI 80                | *       | BUREAU   | 22               | 11        |
| FED. ROAD DIST. NO. 1 |         | ILLINOIS | FED. AID PROJECT |           |

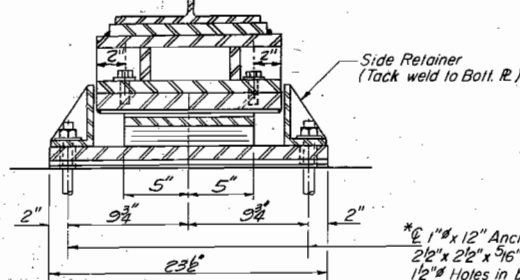


SECTION AT ABUT.

Contractor shall check dimensions in field to determine the shim plate thickness and fabricate accordingly. Cost incidental.

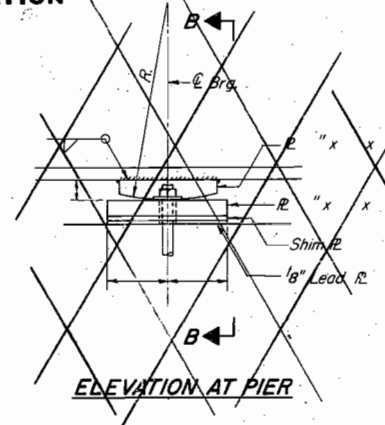
Existing 1"x12" Anchor Bolts shall be buried off flush with concrete or removed & hole filled with grout. Concrete surface directly under new bearing shall be smooth. Furnishing and installing anchor bolts and attachment bolts to pedestals shall be paid for as ELASTOMERIC BEARING ASSEMBLY, TYPE II

TYPE II TFE ELASTOMERIC EXP. BRG. (N. & S. ABUTS.)



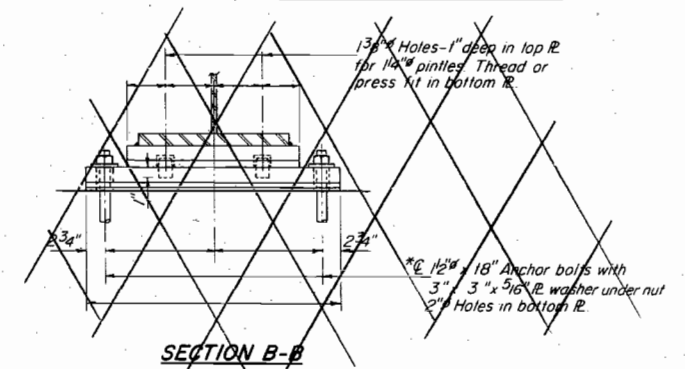
SECTION A-A

\* 1" x 12" Anchor bolts with 2 1/2" x 2 1/2" x 5/16" R. washer under nut. 1/2" Holes in bottom R.



ELEVATION AT PIER

~~FIXED BEARING~~

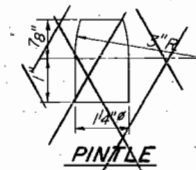


SECTION B-B

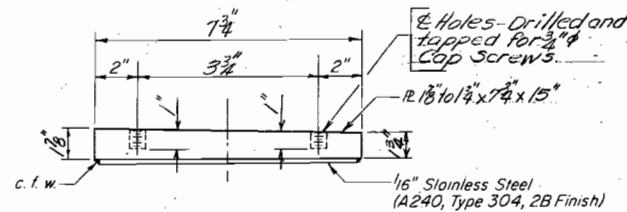
1 3/8" Holes - 1" deep in top R. for 1/4" pintles. Thread or press fit in bottom R.

\* 1 1/2" x 18" Anchor bolts with 3" x 3" x 5/16" R. washer under nut. 2" Holes in bottom R.

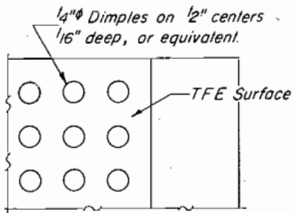
Note: After girders have been erected holes of expansion bearings shall be drilled and anchor bolts grouted in place. Anchor bolts at fixed bearings may be built into the masonry.



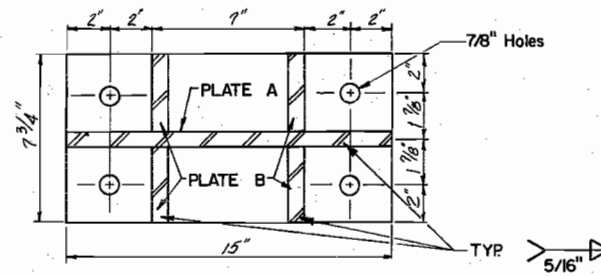
PINTLE



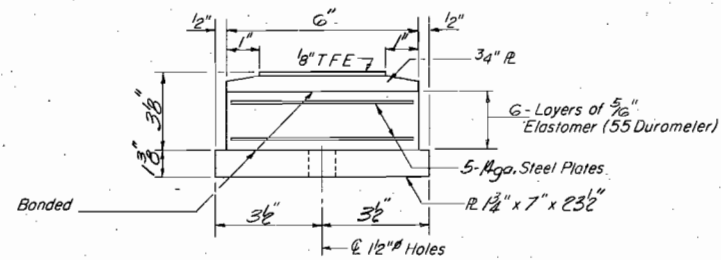
TOP BEARING ASSEMBLY



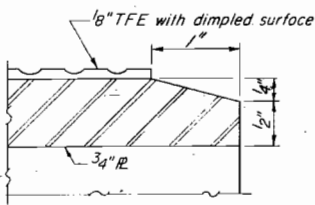
PLAN-TFE SURFACE



STEEL PEDESTAL DETAILS



BOTTOM BEARING ASSEMBLY



SECTION THRU TFE

Note: The 6" TFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.

Bonding of 6" TFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.

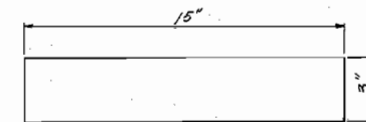


PLATE A - 3/4"

1 - Req'd. Per Pedestal

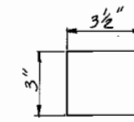
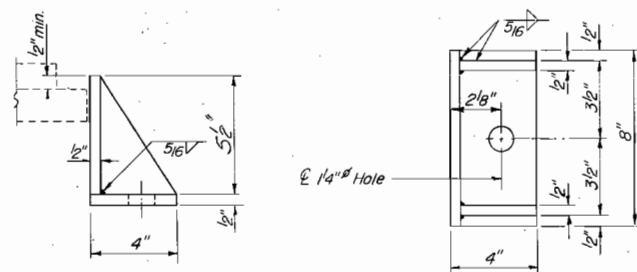
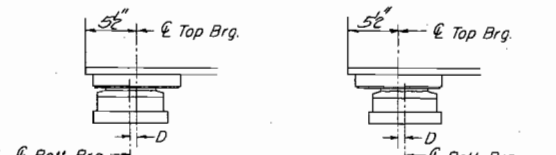


PLATE B - 3/4"

4 - Req'd. Per Pedestal



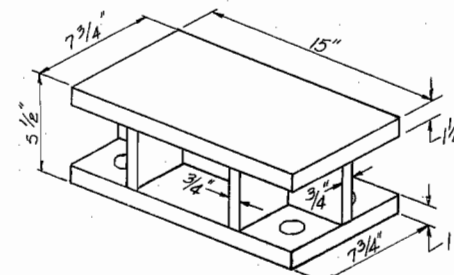
SIDE RETAINER



BELOW 50°F (Move bolt brg. away from fixed brg.) ABOVE 50°F (Move bolt brg. toward fixed brg.)

SETTING ANCHOR BOLTS AT EXP. BRG.

D = 1/8" per each 100° of expansion for every 15° temp. change from the normal temp. of 50°F



STEEL PEDESTAL

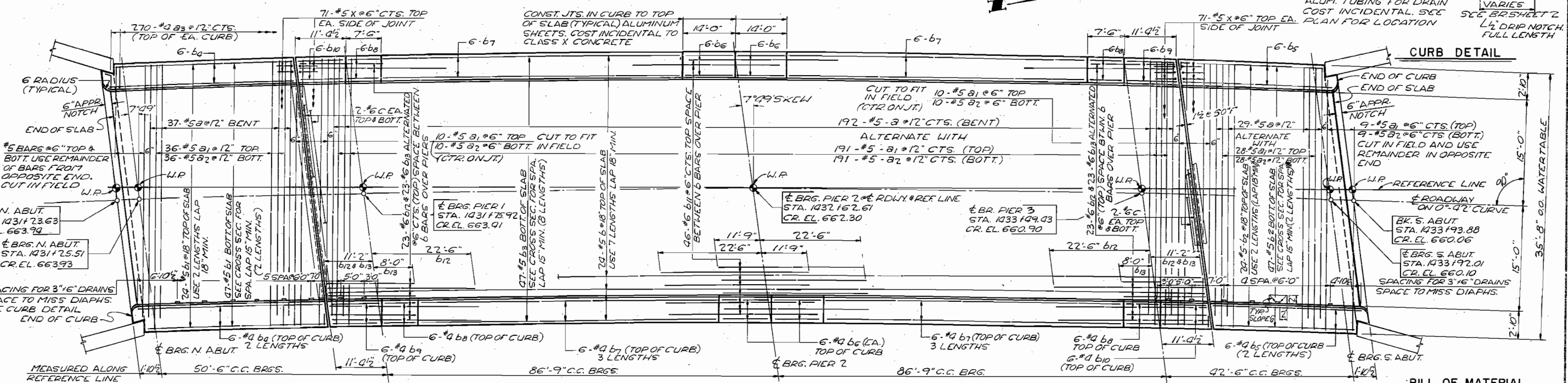
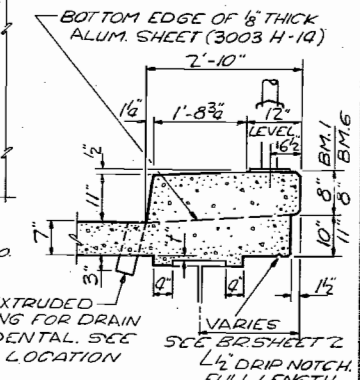
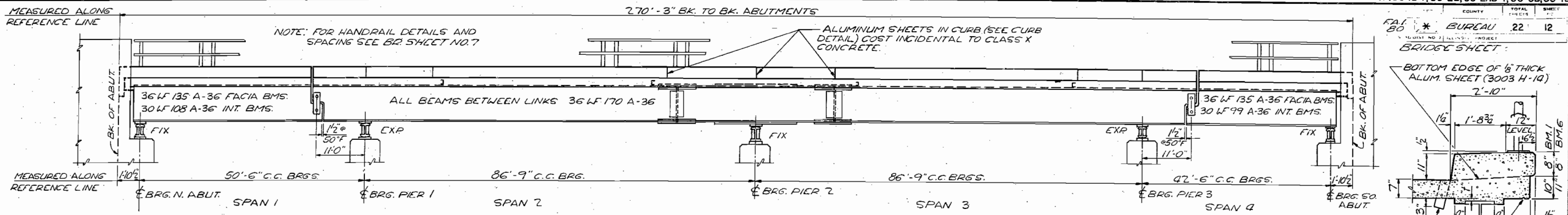
No. Required = 12 -- Paid for as FURNISH & ERECT STRUCTURAL STEEL  
Total weight of 12 pedestals = 1196 pounds

|            |   |
|------------|---|
| DESIGNED   | 19  |
| CHECKED    | ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES |
| DRAWN ENR. | ENGINEER OF DESIGN                        |
| CHECKED    | DIRECTOR OF HIGHWAYS                      |

NORTH & SOUTH ABUTMENTS  
TYPE II ELASTOMERIC BEARING  
& STEEL PEDESTALS

BRIDGE No. 006-0089  
FAI RT. 80 SEC. 06-2HB-1  
BUREAU COUNTY  
STA. 475+09.54

BRIDGE SHEET



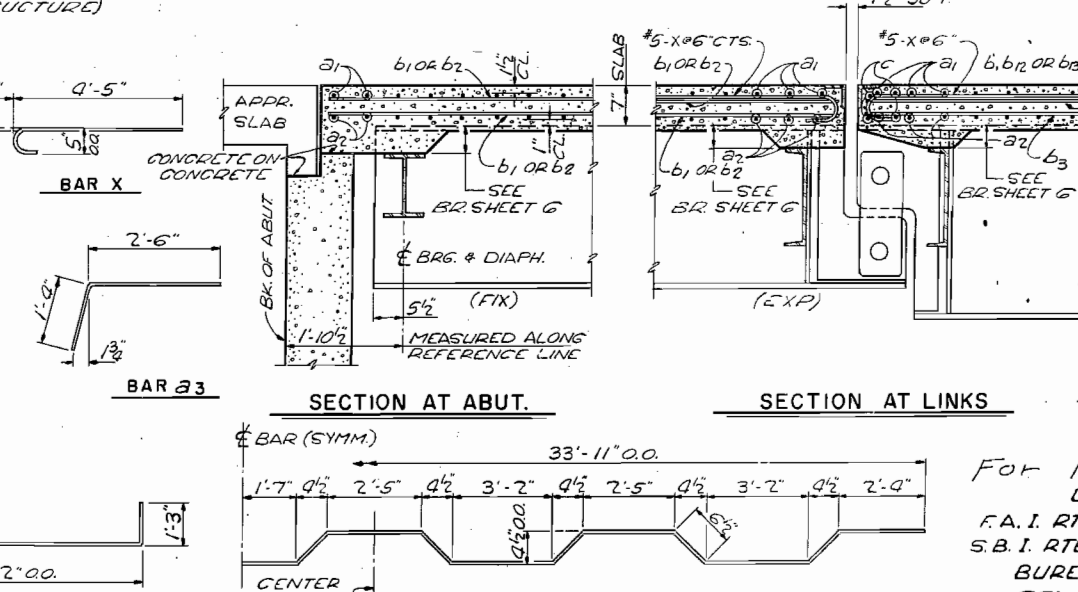
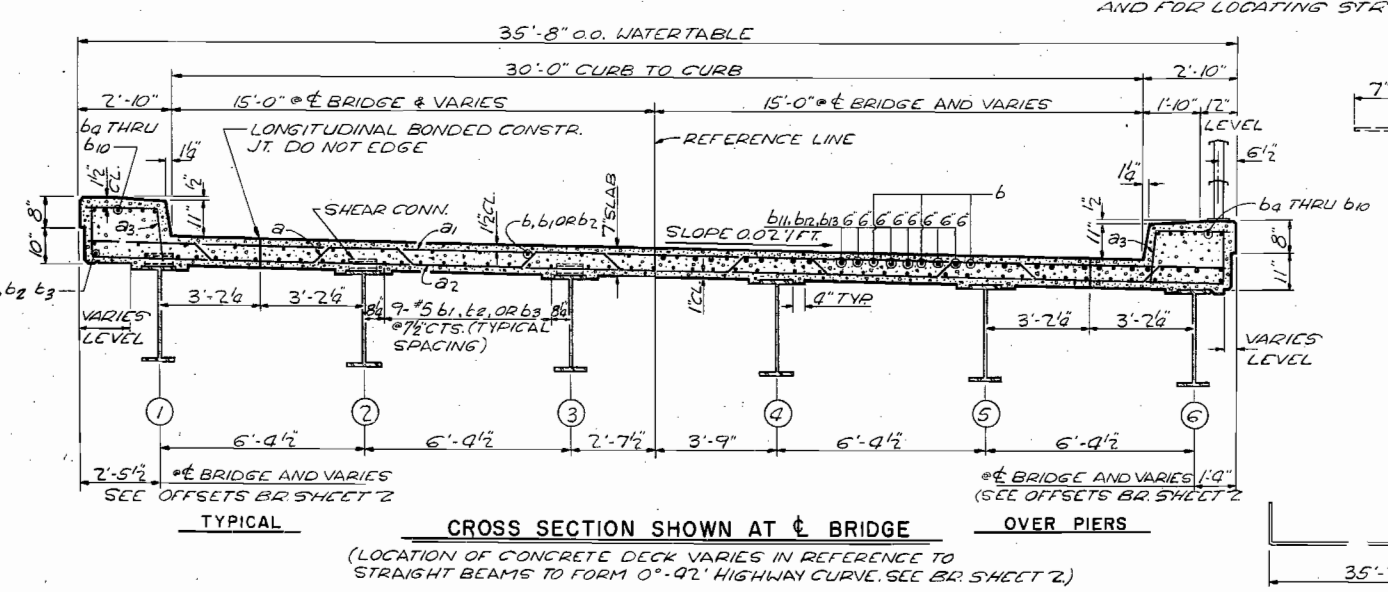
PLAN OF DECK

(SEE BR. SHEET 2 FOR WATERTABLE OFFSETS, FILLET INFORMATION AND FOR LOCATING STRUCTURE)

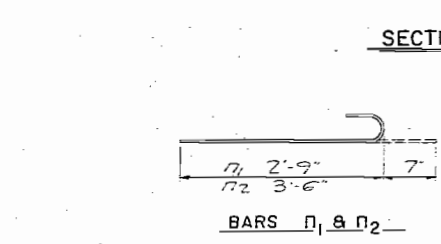
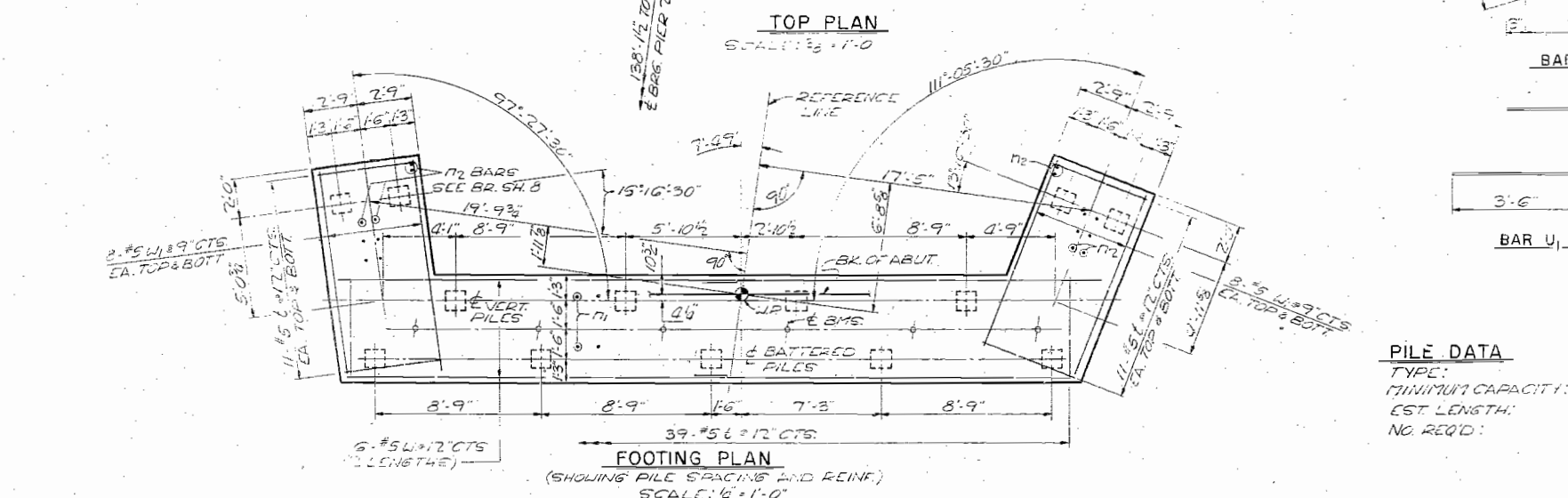
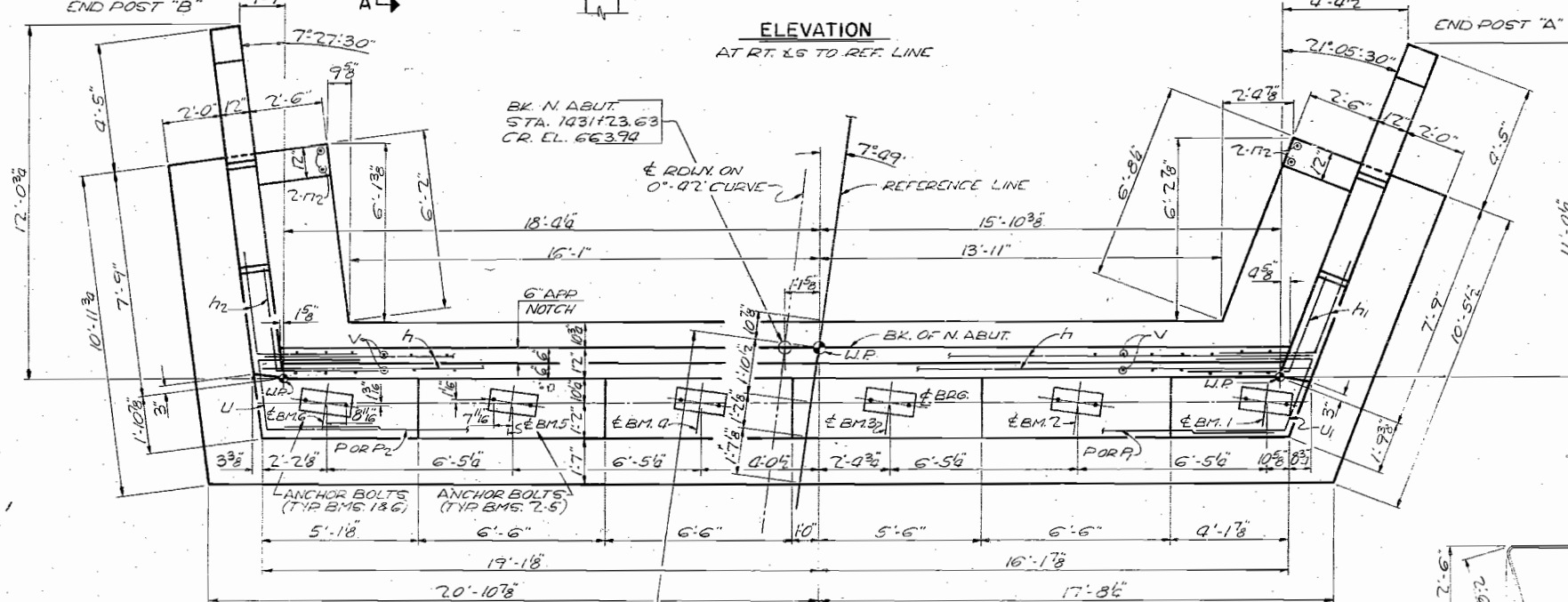
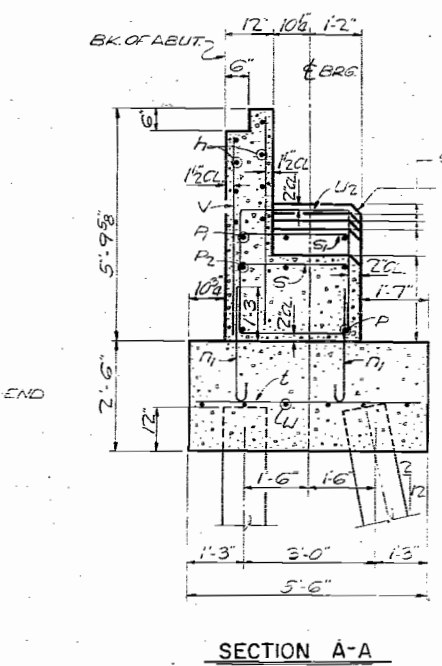
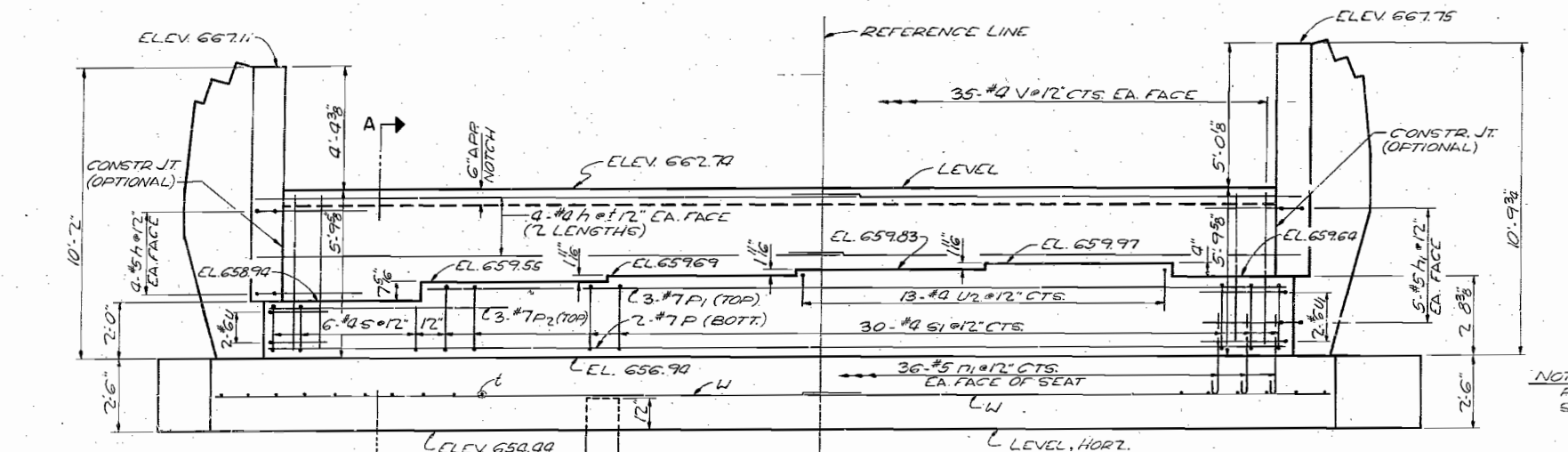
BILL OF MATERIAL

| BAR | NO. | SIZE | LENGTH | SHAPE |
|-----|-----|------|--------|-------|
| a   | 258 | #5   | 35'-7" |       |
| a1  | 284 | #5   | 35'-2" |       |
| a2  | 284 | #5   | 37'-8" |       |
| a3  | 540 | #4   | 3'-10" |       |
| b   | 168 | #5   | 29'-0" |       |
| b1  | 142 | #5   | 21'-0" |       |
| b2  | 142 | #5   | 17'-0" |       |
| b3  | 376 | #5   | 25'-9" |       |
| b4  | 24  | #4   | 20'-9" |       |
| b5  | 24  | #4   | 16'-9" |       |
| b6  | 24  | #4   | 15'-9" |       |
| b7  | 72  | #4   | 22'-6" |       |
| b8  | 24  | #4   | 7'-3"  |       |
| b9  | 12  | #4   | 11'-0" |       |
| b10 | 12  | #4   | 10'-9" |       |
| b11 | 46  | #6   | 34'-3" |       |
| b12 | 46  | #6   | 33'-8" |       |
| b13 | 46  | #6   | 19'-2" |       |
| c   | 8   | #6   | 35'-3" |       |
| x   | 284 | #5   | 5'-0"  | C     |

CLASS X CONCRETE CU.YDS. 274.5  
 REINFORCEMENT BARS LBS. 63,550  
 STRUCTURAL STEEL LBS. 30,840



For Information Only  
 BRIDGE No. 006-0089  
 DECK DETAILS  
 F.A.I. RTE. 80 - SEC. 06-2 HB-1  
 S.B.I. RTE. 88 OVER F.A.I. RTE. 80  
 BUREAU COUNTY, ILLINOIS  
 STA. 475+09.54 F.A.I. 80



BAR LIST

| BAR NO.        | SIZE | LENGTH | SHAPE |
|----------------|------|--------|-------|
| h <sub>1</sub> | #5   | 5'-6"  | L     |
| h <sub>2</sub> | #5   | 7'-6"  | L     |
| U              | #5   | 7'-6"  | U     |
| U <sub>1</sub> | #5   | 4'-1"  | U     |
| P <sub>1</sub> | #5   | 3'-2"  | P     |
| P <sub>2</sub> | #5   | 4'-1"  | P     |
| S              | #5   | 3'-2"  | S     |
| L              | #5   | 4'-1"  | L     |

BILL OF MATERIAL

| ITEM               | UNIT    | QUANT. |
|--------------------|---------|--------|
| CURBS & CONCRETE   | C.YS.   | 22.8   |
| REINFORCEMENT BARS | LB.     | 332.8  |
| CONCRETE PILES     | LN. FT. | 213.8  |

NOTE: BILL OF MATERIAL INCLUDES REINFORCEMENT BARS AND CURBS & CONCRETE FOR END ABUTT.

PILE DATA  
 TYPE: CONCRETE  
 MINIMUM CAPACITY: 30 TONS  
 EST. LENGTH: 43 FT.  
 NO. REQ'D: 13

For Information Only  
 NORTH SCHEDULED  
 STA. 143+00 TO 143+50  
 STA. 143+50 OVER PAVEMENT TO  
 BUREAU SURVEY  
 STA. 143+50 TO 143+50

**BITUMINOUS CONCRETE SURFACE COURSE, MIXTURE D, CLASS 1**

| LOCATION  | TON  |
|-----------|------|
| WB BRIDGE | 40.4 |
| EB BRIDGE | 40.4 |

**FURNISH & ERECT STRUCTURAL STEEL**

| LOCATION  | POUND |
|-----------|-------|
| WB BRIDGE | 1115  |
| EB BRIDGE | 1115  |

**PREFORMED JOINT SEAL 2 1/2"**

| LOCATION  | LIN FT |
|-----------|--------|
| WB BRIDGE | 82     |
| EB BRIDGE | 32     |

**CONCRETE REMOVAL**

| LOCATION                       | CU YD |
|--------------------------------|-------|
| WB BRIDGE (LONGITUDINAL JOINT) | 37.5  |
| EB BRIDGE (LONGITUDINAL JOINT) | 37.5  |

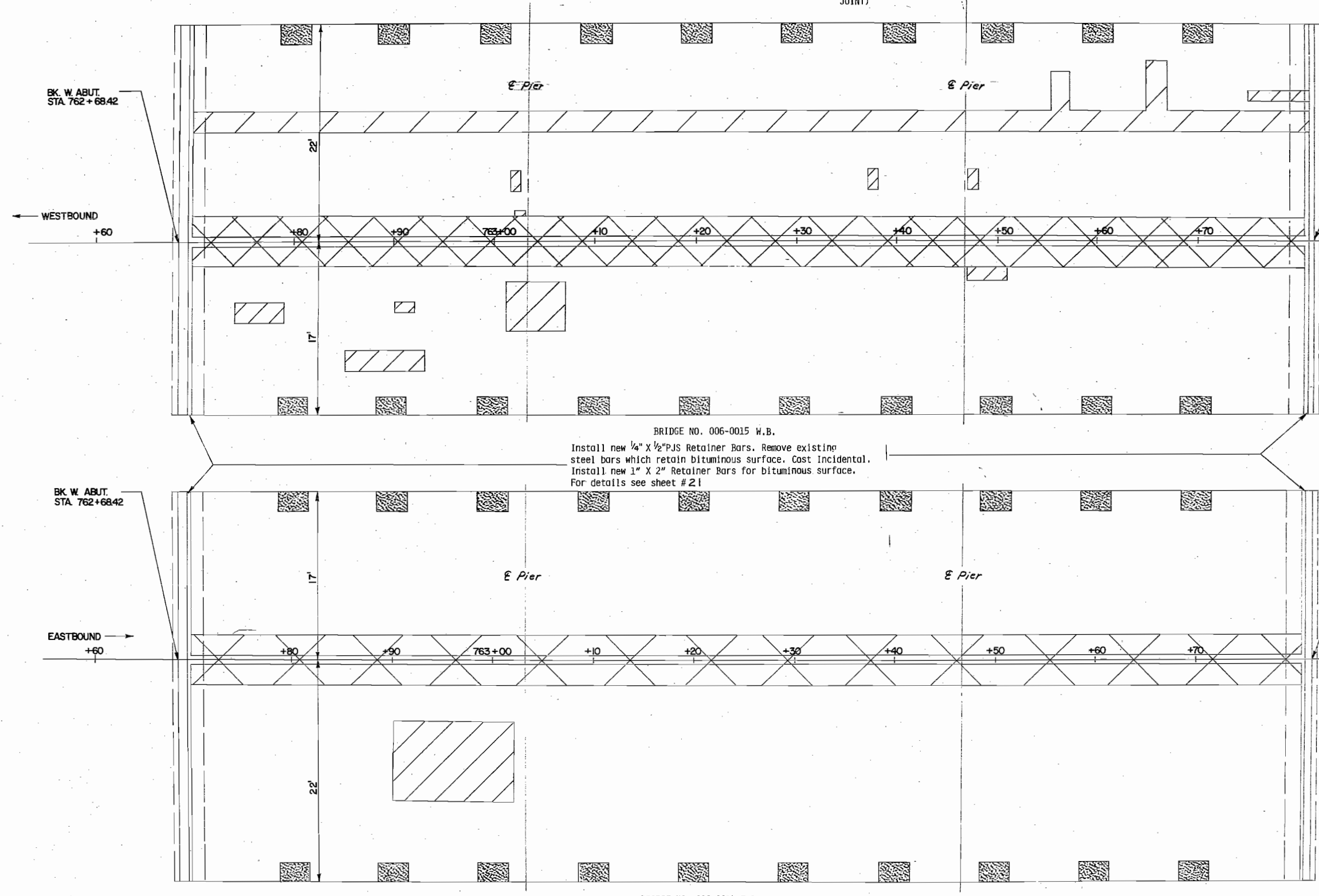
**CLASS X CONCRETE**

| LOCATION                    | CU YD |
|-----------------------------|-------|
| WB BR. (LONGITUDINAL JOINT) | 37.8  |
| EB BR. (LONGITUDINAL JOINT) | 37.8  |

**REINFORCEMENT BARS**

| LOCATION                       | POUND |
|--------------------------------|-------|
| WB BRIDGE (LONGITUDINAL JOINT) | 1444  |
| EB BRIDGE (LONGITUDINAL JOINT) | 1444  |

| ROUTE NO. | SEC. | COUNTY | TOTAL SHEETS | SHEET NO. |
|-----------|------|--------|--------------|-----------|
| FAI 80    | *    | BUREAU | 22           | 13        |



**DECK SLAB REPAIR (FULL DEPTH)**

| LOCATION  | SQ YD |
|-----------|-------|
| WB BRIDGE | 13.3  |
| EB BRIDGE | 13.3  |

**DECK SLAB REPAIR (PARTIAL DEPTH)**

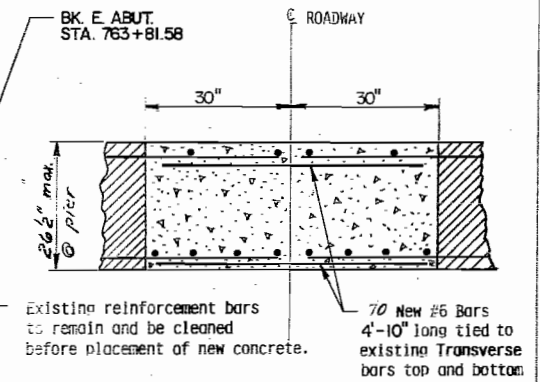
| LOCATION  | SQ YD |
|-----------|-------|
| WB BRIDGE | 40.3  |
| EB BRIDGE | 10.7  |

**WATERPROOFING MEMBRANE SYSTEM**

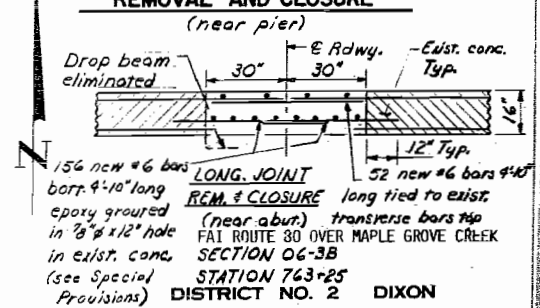
| LOCATION  | SQ YD |
|-----------|-------|
| WB BRIDGE | 480.6 |
| EB BRIDGE | 480.6 |

**BITUMINOUS CONCRETE SURFACE REMOVAL (SPECIAL)**

| LOCATION  | SQ YD |
|-----------|-------|
| WB BRIDGE | 480.6 |
| EB BRIDGE | 480.6 |



**LONGITUDINAL JOINT REMOVAL AND CLOSURE (near pier)**



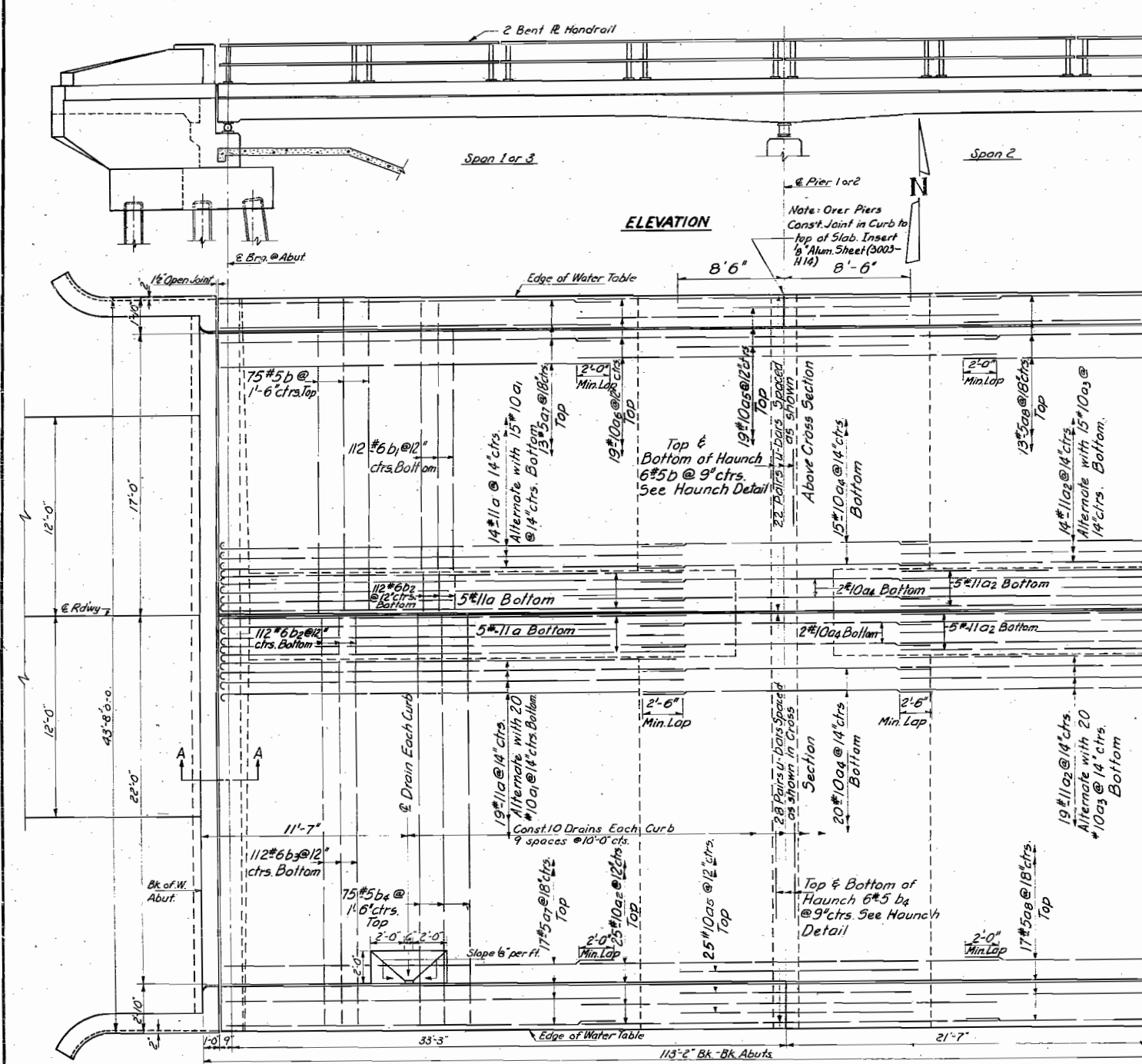
HATCHED AREAS = ESTIMATED DECK SLAB REPAIR (PARTIAL DEPTH)  
 CROSS HATCHED AREAS = CONCRETE REMOVAL & CLASS X C. CONCRETE REPLACEMENT  
 SHADED AREAS = DECK SLAB REPAIR (FULL DEPTH AROUND DECK DRAHTS)

DESIGNED \_\_\_\_\_ DATE \_\_\_\_\_  
 DRAWN \_\_\_\_\_ SCALE \_\_\_\_\_  
 CHECKED \_\_\_\_\_



STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

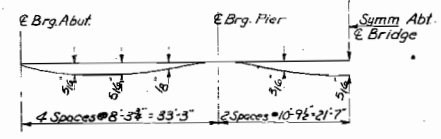
| ROUTE NO.             | SECTION | COUNTY   | TOTAL SHEETS | SHEET NO.         |
|-----------------------|---------|----------|--------------|-------------------|
| F.A.I. 80             | *       | BUREAU   | 22           | 14                |
| FED. ROAD DIST. NO. 7 |         | ILLINOIS |              | PER. AND PROJECTS |



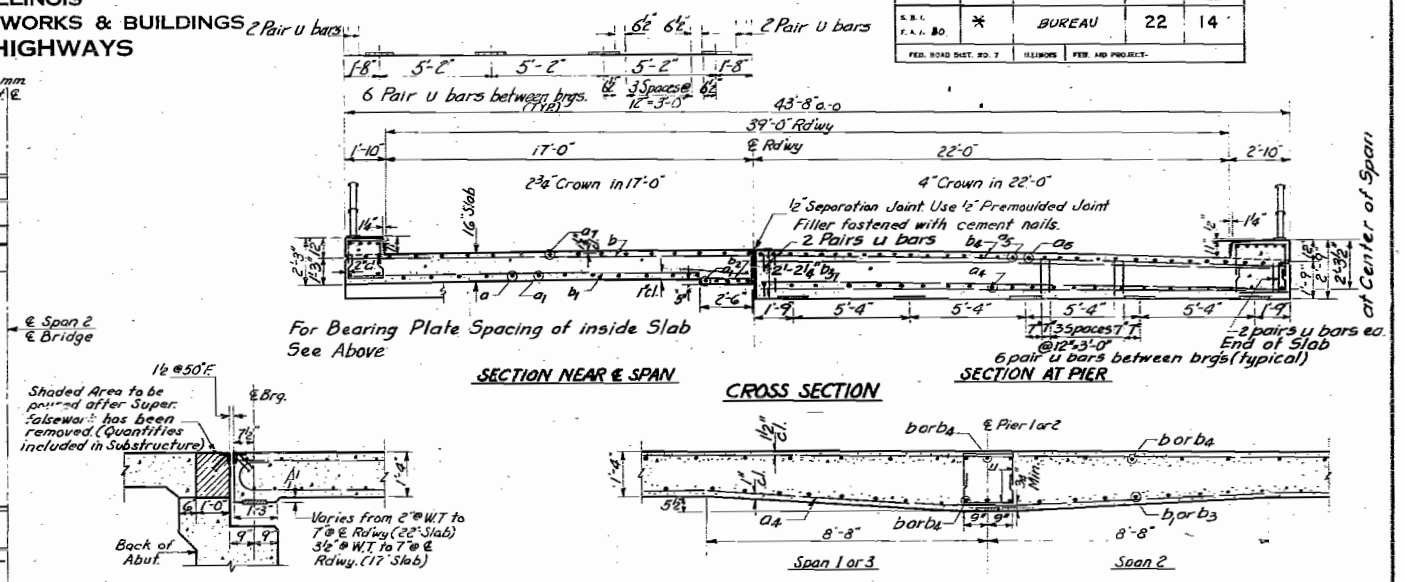
ELEVATION



PLAN  
SHOWING DIMENSIONS  
& REINFORCEMENT OF SLAB



DEAD LOAD DEFLECTION DIAGRAM



SECTION NEAR & SPAN

CROSS SECTION

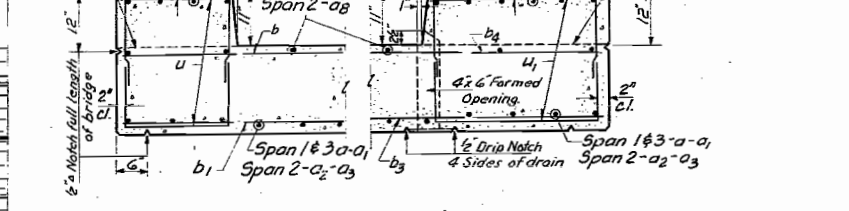


SECTION A-A



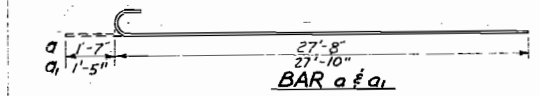
HAUNCH DETAIL  
(@ curb line)

Note:  
Bottom of 1/8" Alum. Sheet (3003-H14)  
4 #8a9 or a10 bars @ 6" ctrs  
No steel to pass thru joints  
6 #8a9 or a10 bars @ 6" ctrs  
No steel to pass thru joints  
Note:  
Bottom of 1/8" Alum. Sheet (3003-H14)



SECTION THRU CURBS  
SHOWING REIN. & DIMENSIONS

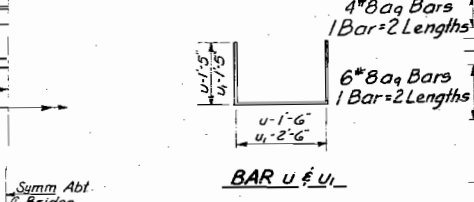
Cost of aluminum sheet shall be incidental.



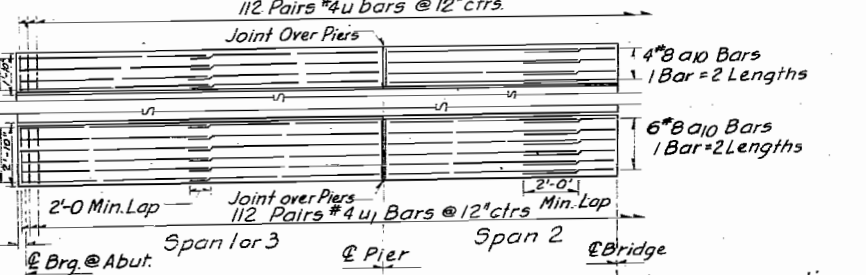
BAR a1



BAR a3



BAR u1



REINFORCEMENT IN TOP OF CURBS

BILL OF MATERIAL (1 BRIDGE)

| BAR | NO. | SIZE | LENGTH | SHAPE |
|-----|-----|------|--------|-------|
| a   | 86  | #11  | 29'-3" | C     |
| a1  | 70  | #10  | 29'-3" | C     |
| a2  | 43  | #11  | 29'-6" | C     |
| a3  | 35  | #10  | 29'-6" | C     |
| a4  | 78  | #10  | 18'-6" | C     |
| a5  | 88  | #10  | 17'-0" | C     |
| a6  | 88  | #10  | 33'-0" | C     |
| a7  | 60  | #5   | 18'-3" | C     |
| a8  | 30  | #5   | 16'-3" | C     |
| a9  | 40  | #8   | 17'-6" | C     |
| a10 | 20  | #8   | 27'-6" | C     |
| b   | 87  | #5   | 18'-6" | C     |
| b1  | 112 | #6   | 16'-0" | C     |
| b2  | 224 | #6   | 2'-3"  | C     |
| b3  | 112 | #6   | 22'-0" | C     |
| b4  | 87  | #5   | 24'-6" | C     |
| u   | 424 | #4   | 4'-4"  | C     |
| u1  | 224 | #4   | 5'-4"  | C     |

|                    |          |        |
|--------------------|----------|--------|
| Class X Concrete   | Cu. Yds. | 284.1  |
| Reinforcement Bars | Lbs.     | 76,560 |
| Structural Steel   | Lbs.     | 16050  |

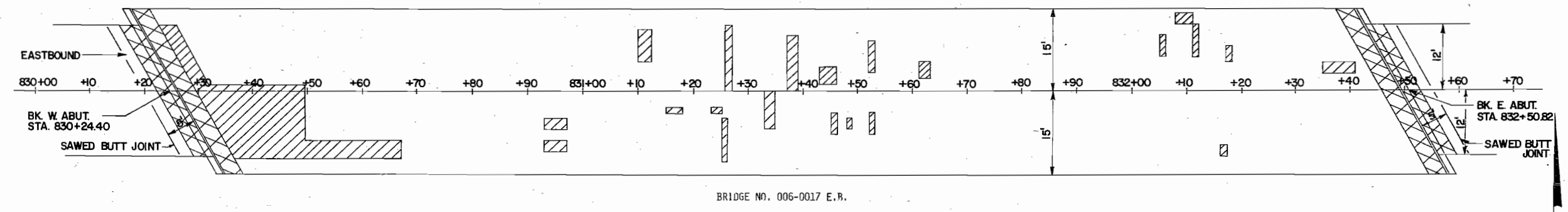
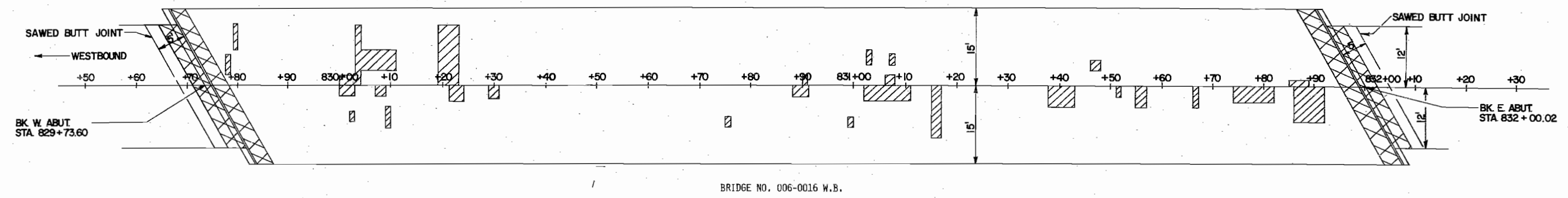
DESIGNED Wm. C. Keene  
CHECKED Floyd H. Jacobs  
DRAWN Gabor Popp  
CHECKED F.H.J.

EXAMINED AUG. 12 19 59  
PASSED  
APPROVED R.K. [Signature]

For Information Only  
SUPERSTRUCTURE  
MAPLE GROVE CREEK  
FAI RT. 80 SEC. 6-3B  
BUREAU COUNTY  
STA. 763+25

\* (06-1B-1, 06-2B, 06-2HB-1, 06-3B, 06-4B)RS

| ROUTE NO.             | SEC. | COUNTY   | TOTAL SHEETS | SHEET NO. |
|-----------------------|------|----------|--------------|-----------|
| FAI 80                | *    | BUREAU   | 22           | 15        |
| FED. ROAD DIST. NO. 7 |      | ILLINOIS | PROJECT      |           |



HATCHED AREAS = ESTIMATED DECK SLAB REPAIR (PARTIAL DEPTH)  
 CROSS HATCHED AREAS = CONCRETE REMOVAL & CLASS X REPLACEMENT (SEE SHEET #16)

**BITUMINOUS CONCRETE SURFACE COURSE, MIXTURE D, CLASS I**

| LOCATION    | TON  |
|-------------|------|
| E.B. BRIDGE | 64.5 |
| W.B. BRIDGE | 64.5 |

**BITUMINOUS CONCRETE SURFACE REMOVAL (SPECIAL)**

| LOCATION    | SQ. YD. |
|-------------|---------|
| E.B. BRIDGE | 747.2   |
| W.B. BRIDGE | 747.2   |

**WATERPROOFING MEMBRANE SYSTEM**

| LOCATION    | SQ. YD. |
|-------------|---------|
| E.B. BRIDGE | 747.2   |
| W.B. BRIDGE | 747.2   |

**DECK SLAB REPAIR (PARTIAL DEPTH)**

| LOCATION    | SQ. YD. |
|-------------|---------|
| E.B. BRIDGE | 57.2    |
| W.B. BRIDGE | 37.8    |

SECTION 06-4B, 4F  
 STA. 831 +12.21  
 FAI 80 OVER W. BRANCH BUREAU CREEK

DISTRICT NO. 2 DIXON  
 DESIGNED  
 DRAWN DATE  
 CHECKED SCALE

# BRIDGE DETAILS

BR. NO. 006-0016 & 006-0017

\*(06-1B-1, 06-2B, 06-2HB-1, 06-3B, 06-4B)RS

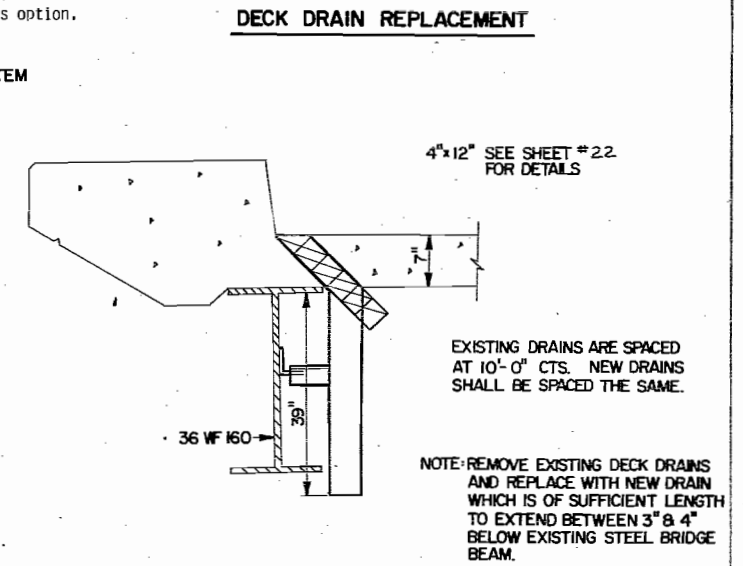
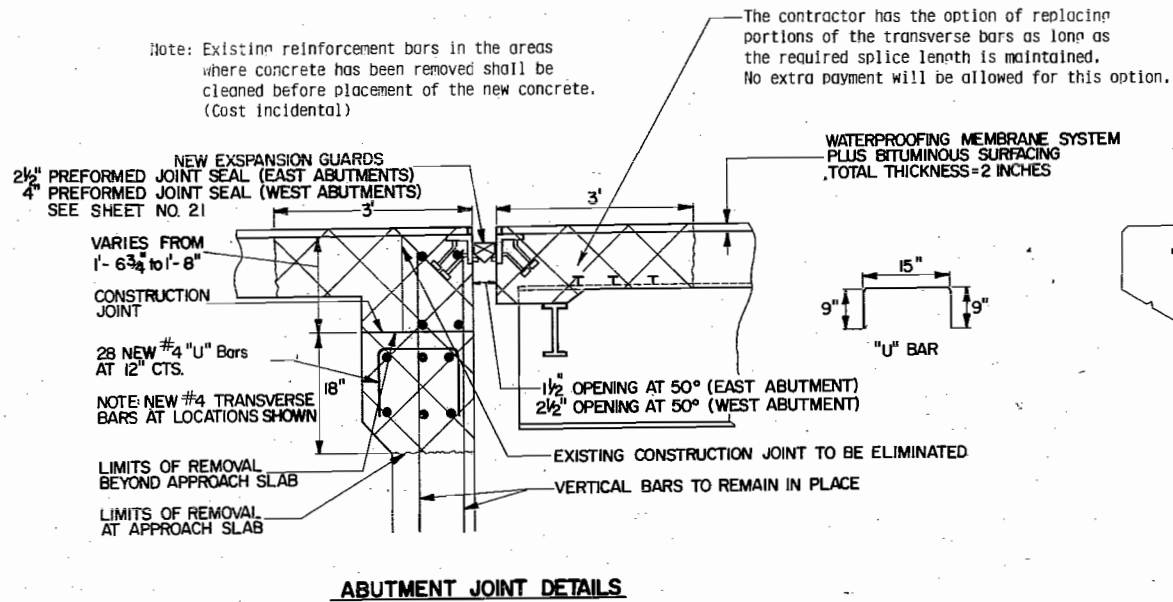
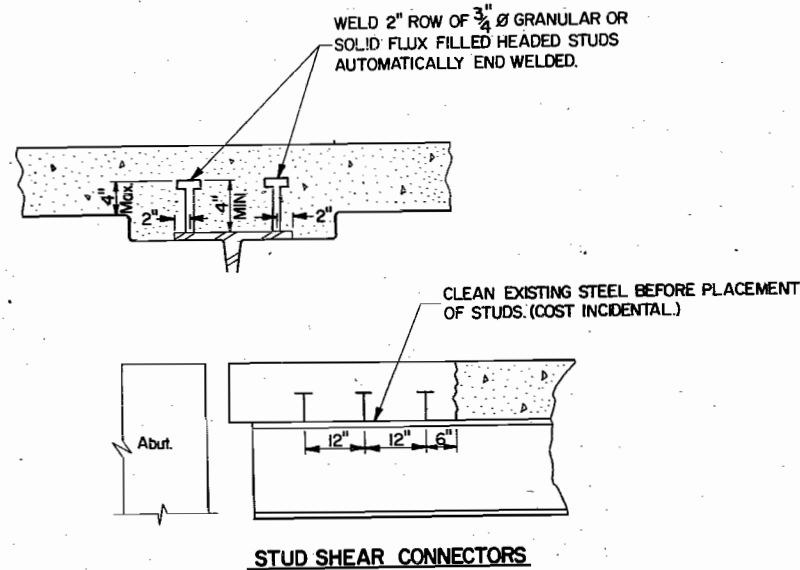
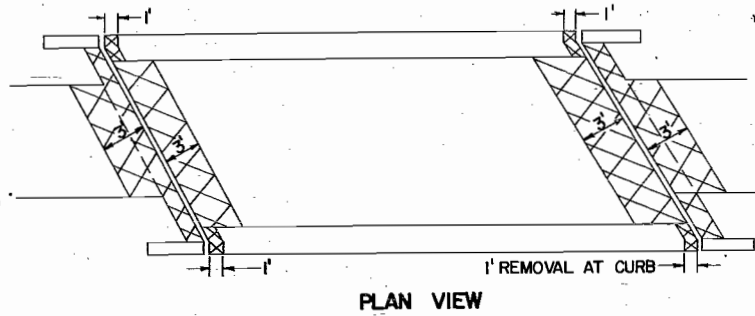
| ROUTE NO.             | SECTION | COUNTY           | TOTAL SHEETS | SHEET NO. |
|-----------------------|---------|------------------|--------------|-----------|
| FAI 80                | *       | BUREAU           | 22           | 16        |
| FED. ROAD DIST. NO. 7 |         | ILLINOIS PROJECT |              |           |

| REINFORCEMENT BARS |       |
|--------------------|-------|
| LOCATION           | POUND |
| EB BRIDGE          | 640   |
| WB BRIDGE          | 640   |

| STUD SHEAR CONNECTORS |      |
|-----------------------|------|
| LOCATION              | EACH |
| EB BRIDGE             | 60   |
| WB BRIDGE             | 60   |

| PREFORMED JOINT SEAL 2 1/2" |         |
|-----------------------------|---------|
| LOCATION                    | LN. FT. |
| EB BRIDGE E. ABUTMENT       | 36.5    |
| WB BRIDGE E. ABUTMENT       | 36.5    |

| PREFORMED JOINT SEAL 4" |         |
|-------------------------|---------|
| LOCATION                | LN. FT. |
| EB BRIDGE W. ABUTMENT   | 36.5    |
| WB BRIDGE W. ABUTMENT   | 36.5    |



| FURNISH AND ERECT STRUCTURAL STEEL |       |
|------------------------------------|-------|
| LOCATION                           | POUND |
| WB BRIDGE (EXPANSION GUARDS)       | 3169  |
| EB BRIDGE (EXPANSION GUARDS)       | 3169  |

| CONCRETE REMOVAL |         |
|------------------|---------|
| LOCATION         | CU. YD. |
| EB BRIDGE        | 26.2    |
| WB BRIDGE        | 26.2    |

| CLASS X CONCRETE |         |
|------------------|---------|
| LOCATION         | CU. YD. |
| EB BRIDGE        | 26.2    |
| WB BRIDGE        | 26.2    |

| DECK DRAIN REPLACEMENT |      |
|------------------------|------|
| LOCATION               | EACH |
| EB BRIDGE              | 44   |
| WB BRIDGE              | 44   |

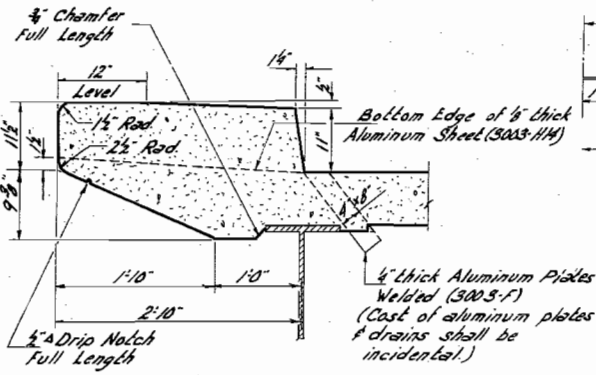
SECTION-06-4B, 4F  
STATION 831 + 12.21  
FAI 80 OVER W. BRANCH BUREAU CREEK.

DISTRICT NO. 2 DIXON  
DESIGNED  
DRAWN Tim Clayton DATE 10/22/82  
CHECKED SCALE

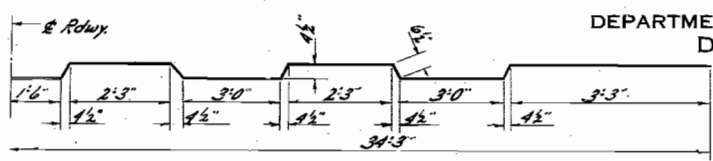
STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

\* At 50°F Normal Temp.

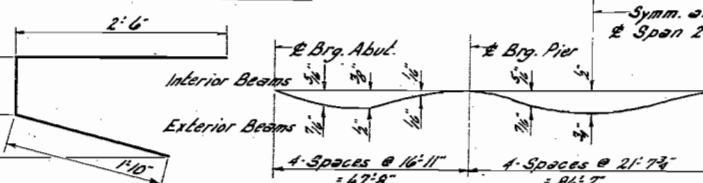
| ROUTE NO.             | SECTION | COUNTY   | TOTAL SHEETS | SHEET NO.        |
|-----------------------|---------|----------|--------------|------------------|
| F.A. 1 80             | *       | BUREAU   | 22           | 17               |
| FED. ROAD DIST. NO. 3 |         | MAINTEN. |              | FED. NO. PROJECT |



**CURB DETAIL**



**BAR @**



**DEAD LOAD DEFLECTION DIAGRAM**

**BAR S**

1/2" holes @ 12" cts. for 3/4" bolts. All bolts shall be burned, sawed or clipped off flush with back of angles after forms are removed.

1/2" Varil holes @ 12" cts.

5/8" x 8" x 2" CR 1020 STL Granular or solid flux filled headed studs - automatically end welded. (alternate @ 18" cts.)

1/2" x 1/2" N.B.C. @ 2' cts.

1/2" x 1/2" N.B.C. @ 2' cts.

1/2" x 1/2" N.B.C. @ 2' cts.

1/2" x 1/2" N.B.C. @ 2' cts.

1/2" x 1/2" N.B.C. @ 2' cts.

1/2" x 1/2" N.B.C. @ 2' cts.

1/2" x 1/2" N.B.C. @ 2' cts.

1/2" x 1/2" N.B.C. @ 2' cts.

1/2" x 1/2" N.B.C. @ 2' cts.

1/2" x 1/2" N.B.C. @ 2' cts.

1/2" x 1/2" N.B.C. @ 2' cts.

1/2" x 1/2" N.B.C. @ 2' cts.

1/2" x 1/2" N.B.C. @ 2' cts.

1/2" x 1/2" N.B.C. @ 2' cts.

1/2" x 1/2" N.B.C. @ 2' cts.

1/2" x 1/2" N.B.C. @ 2' cts.

1/2" x 1/2" N.B.C. @ 2' cts.

1/2" x 1/2" N.B.C. @ 2' cts.

1/2" x 1/2" N.B.C. @ 2' cts.

1/2" x 1/2" N.B.C. @ 2' cts.

1/2" x 1/2" N.B.C. @ 2' cts.

1/2" x 1/2" N.B.C. @ 2' cts.

1/2" x 1/2" N.B.C. @ 2' cts.

1/2" x 1/2" N.B.C. @ 2' cts.

1/2" x 1/2" N.B.C. @ 2' cts.

1/2" x 1/2" N.B.C. @ 2' cts.

1/2" x 1/2" N.B.C. @ 2' cts.

1/2" x 1/2" N.B.C. @ 2' cts.

1/2" x 1/2" N.B.C. @ 2' cts.

1/2" x 1/2" N.B.C. @ 2' cts.

1/2" x 1/2" N.B.C. @ 2' cts.

1/2" x 1/2" N.B.C. @ 2' cts.

1/2" x 1/2" N.B.C. @ 2' cts.

1/2" x 1/2" N.B.C. @ 2' cts.

1/2" x 1/2" N.B.C. @ 2' cts.

1/2" x 1/2" N.B.C. @ 2' cts.

1/2" x 1/2" N.B.C. @ 2' cts.

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1/2" x 1/2" N.B.C. @ 2' cts.

1/2" x 1/2" N.B.C. @ 2' cts.

1/2" x 1/2" N.B.C. @ 2' cts.

1/2" x 1/2" N.B.C. @ 2' cts.

1/2" x 1/2" N.B.C. @ 2' cts.

1/2" x 1/2" N.B.C. @ 2' cts.

1/2" x 1/2" N.B.C. @ 2' cts.

1/2" x 1/2" N.B.C. @ 2' cts.

1/2" x 1/2" N.B.C. @ 2' cts.

1/2" x 1/2" N.B.C. @ 2' cts.

1/2" x 1/2" N.B.C. @ 2' cts.

1/2" x 1/2" N.B.C. @ 2' cts.

1/2" x 1/2" N.B.C. @ 2' cts.

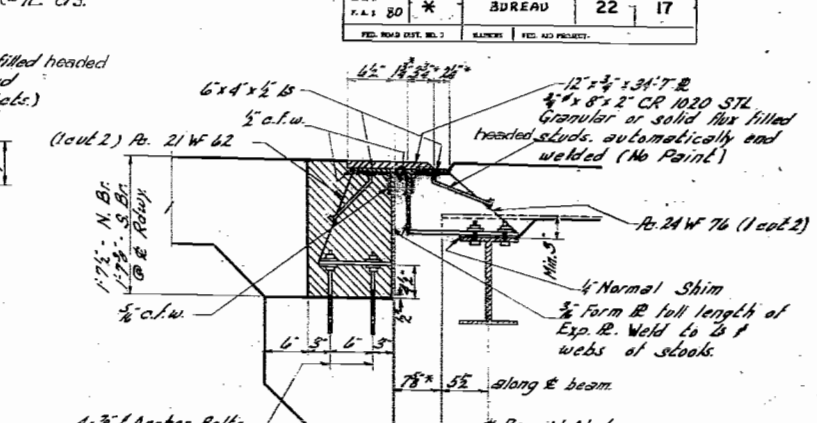
1/2" x 1/2" N.B.C. @ 2' cts.

1/2" x 1/2" N.B.C. @ 2' cts.

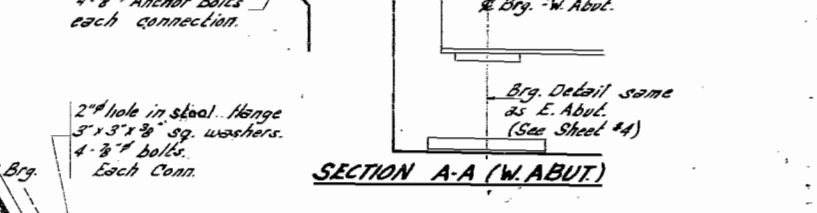
1/2" x 1/2" N.B.C. @ 2' cts.

1/2" x 1/2" N.B.C. @ 2' cts.

1/2" x 1/2" N.B.C. @ 2' cts.



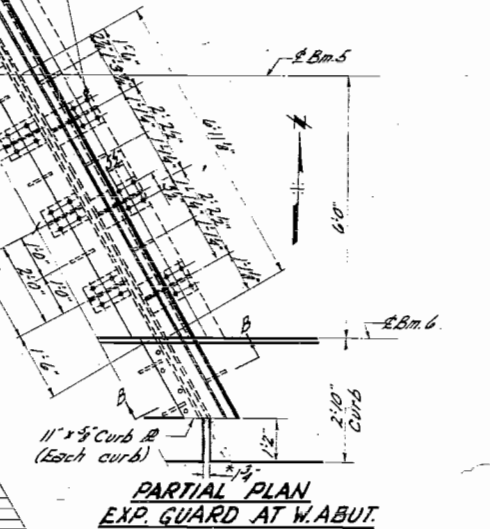
**SECTION A-A (E. ABUT.)**



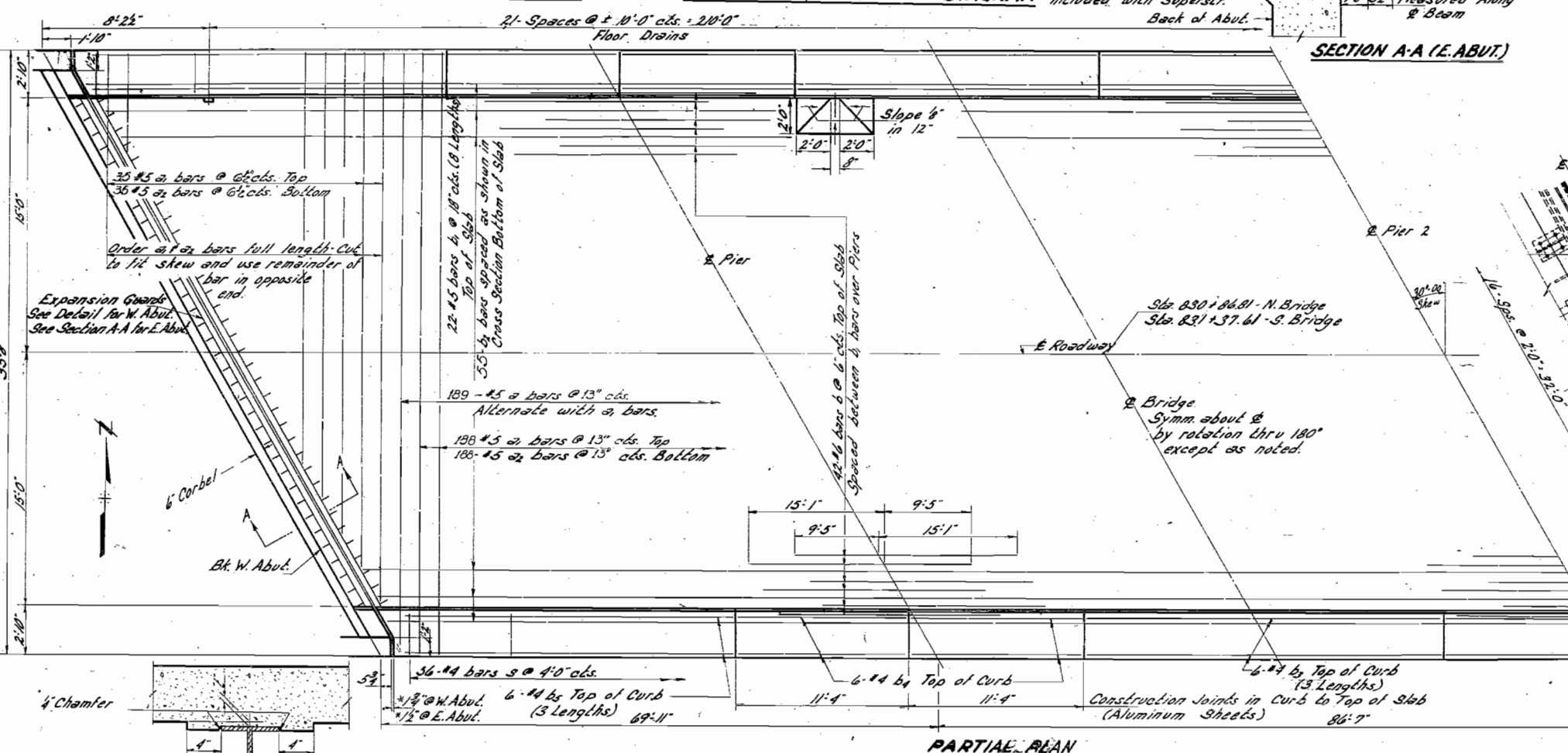
**SECTION A-A (W. ABUT.)**

**2 BRIDGES  
BILL OF MATERIAL**

| Bar No.            | Size | Length | Shape         |
|--------------------|------|--------|---------------|
| a                  | 37B  | 25     | 35' 11"       |
| a                  | 446  | 45     | 34' 0"        |
| a2                 | 446  | 45     | 33' 0"        |
| b                  | 168  | 46     | 24' 6"        |
| b                  | 352  | 45     | 29' 0"        |
| b2                 | 10GE | 44     | 25' 0"        |
| b2                 | 72   | 44     | 22' 0"        |
| b4                 | 94   | 44     | 11' 0"        |
| b5                 | 144  | 44     | 19' 9"        |
| s                  | 224  | 44     | 5' 5"         |
| d                  | 892  | 44     | 10'           |
| Class X Concrete   |      |        | Cu. Yds. 4403 |
| Reinforcement Bars |      |        | Lbs. 85440    |
| Structural Steel   |      |        | Lbs. 524,300  |



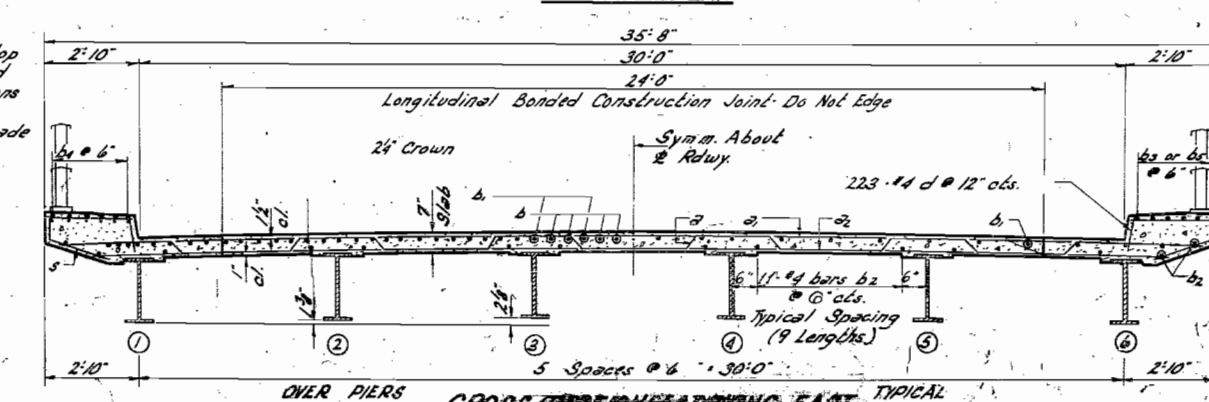
**PARTIAL PLAN  
EXP. GUARD AT W. ABUT.  
TYPICAL**



**PARTIAL PLAN**

**METHOD OF DETERMINING FILLET HEIGHT "L"**  
After all Structural Steel has been erected elevations of the top flanges of the beams shall be taken at intervals not to exceed 10 FE. From these elevations subtract the increment of deflections for these points, determined from the D.L. Deflection Diagram. The elevations so obtained subtracted from the theoretical grade elevations, minus floor thickness, equals the fillet heights above top of beam.

|          |            |          |             |
|----------|------------|----------|-------------|
| DESIGNED | J. Engler  | EXAMINED | W. Beermann |
| CHECKED  | Confaberal | PASSED   | Ed. H. ...  |
| DRAWN    | P. Lawler  | APPROVED | R. B. ...   |
| CHECKED  | Confaberal |          |             |



**CROSS SECTION THROUGH EAST OVER PIERS**

**DESIGN STRESSES**  
15,000 p.s.i. Structural Steel  
22,000 p.s.i. Reinforcement  
10,000 p.s.i. Substructure  
10,000 p.s.i. Superstructure

For Information Only  
**NO. 7 SO. BRIDGES**  
**SUBSTRUCTURE**  
**W. BRANCH BUREN CREEK STRADDLE**  
F.A.T.R. 80  
BUREAU COUNTY  
STA. 831+18.71

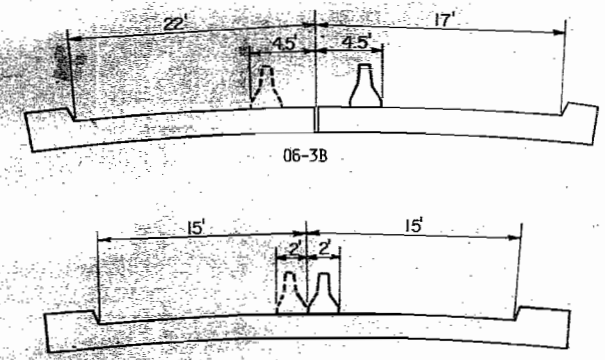
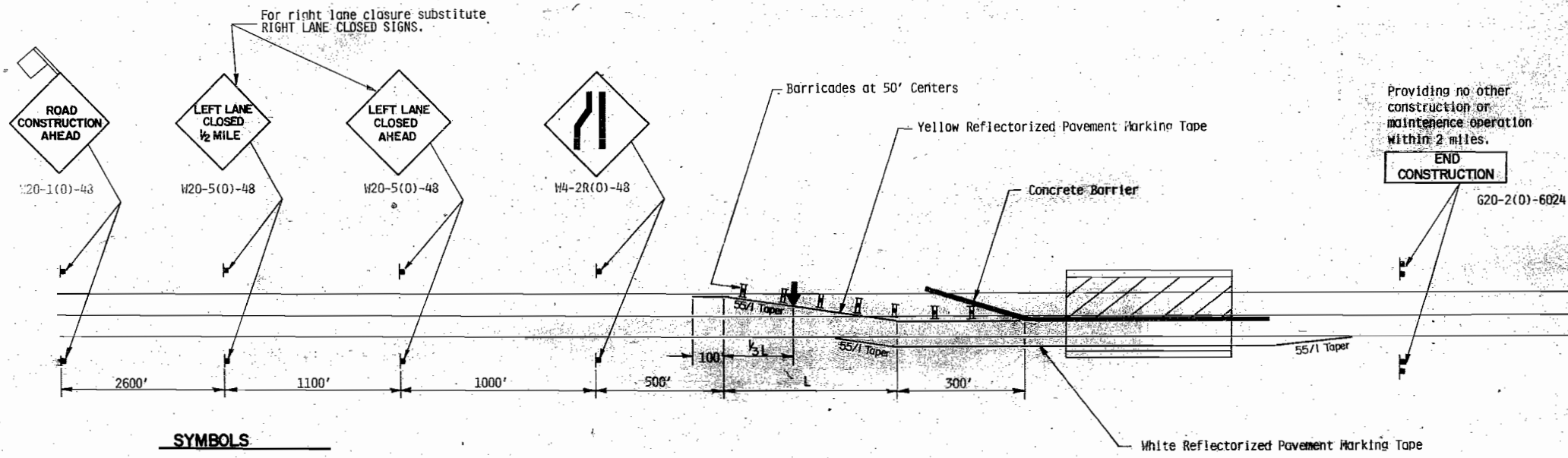
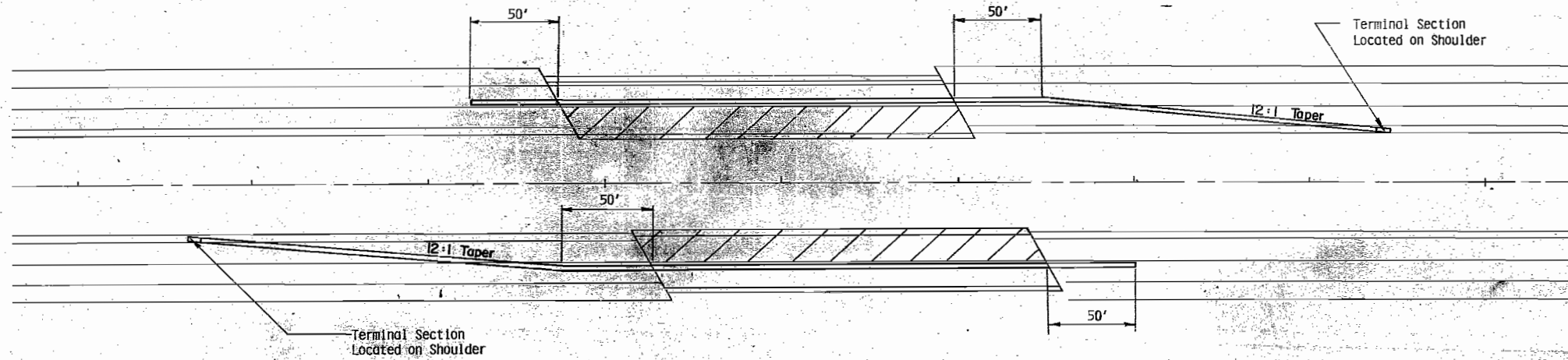
Revised 5/16/11 - In PARTIAL PLAN reduce slab steel to meet T3(8) Spec. Location. In BILL OF MATERIAL changed number of # 8 bars from 872 to 578, #3 bar from 330 to 446 and #4 bar from 330 to 446. Quantity of Rein. Bars changed from 42,350 lbs. to 85,440 lbs. In SECTION A-A and B-B reduce top flange steel to meet T3(8) Spec. Location. In BILL OF MATERIAL changed number of # 8 bars from 872 to 578, #3 bar from 330 to 446 and #4 bar from 330 to 446. Quantity of Rein. Bars changed from 42,350 lbs. to 85,440 lbs.



# TRAFFIC CONTROL DETAILS FOR BRIDGE DECK REPAIR

\*106-1B-1, 06-2B, 06-2HB-1, 06-3B, 06-4B\*

| ROUTE NO.                              | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--|---------|--------|--------------|-----------|
| FAI-80 #                               |         | BUREAU | 22           | 19        |
| FED. ROAD DIST. NO. 7 ILLINOIS PROJECT |         |        |              |           |



TYPICAL BARRIER LOCATION

**SYMBOLS**

- Work Area
- Arrow Board
- Sign on portable or permanent support
- Barricade or drum with steady burning light
- 18" x 18" (Minimum) orange flag

Applicable portions of Standard 2316 shall apply. The flagger will not be required.

This work will be paid for at the contract unit price for TRAFFIC CONTROL AND PROTECTION STANDARD 2316. TEMPORARY CONCRETE BARRIER, RELocate TEMPORARY CONCRETE BARRIER, AND TEMPORARY CONCRETE BARRIER TERMINAL SECTION.

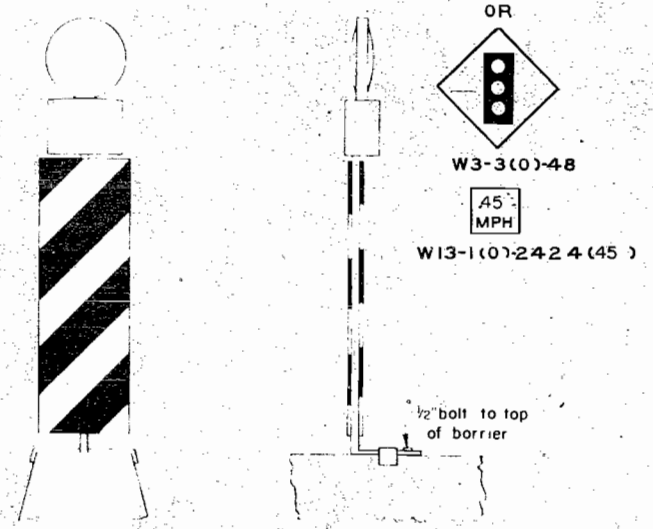
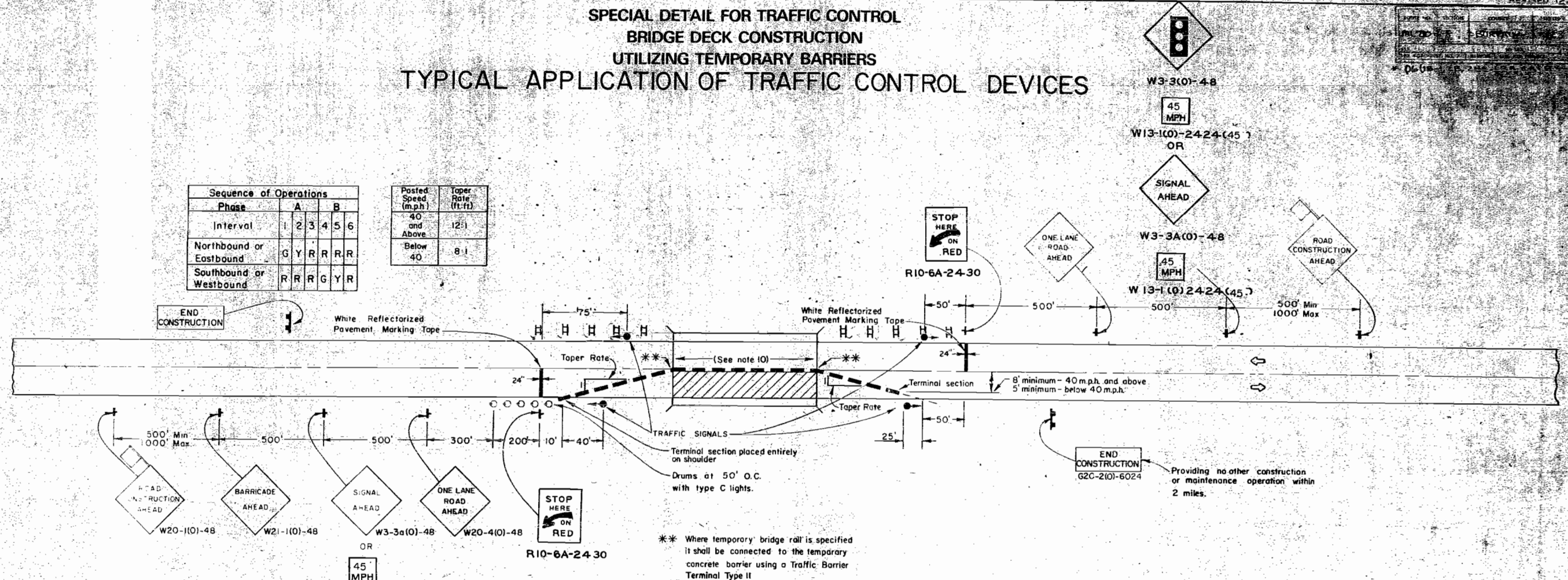
DISTRICT NO. 2 DIXON

DESIGNED  
 DRAWN  
 CHECKED  
 DATE  
 SCALE

# SPECIAL DETAIL FOR TRAFFIC CONTROL BRIDGE DECK CONSTRUCTION UTILIZING TEMPORARY BARRIERS TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES

| Sequence of Operations  |   |   |   |   |   |   |
|-------------------------|---|---|---|---|---|---|
| Phase                   | A |   |   | B |   |   |
| Interval                | 1 | 2 | 3 | 4 | 5 | 6 |
| Northbound or Eastbound | G | Y | R | R | R | R |
| Southbound or Westbound | R | R | R | G | Y | R |

| Posted Speed (m.p.h.) | Taper Rate (ft-ft) |
|-----------------------|--------------------|
| 40 and Above          | 12:1               |
| Below 40              | 8:1                |



**DETAIL A**  
suggested mounting detail.

### GENERAL NOTES

- The Engineer must be notified at least 72 hours prior to placing the temporary signals in operation so that arrangements can be made to inspect the installation and set the timing of the signals. The Contractor must furnish timing cycle gears of 60, 65, 70, 80, 90, 100, and 110 seconds for the controller.
- At any time that the signals are not operating the signal head shall be hooded and the SIGNAL AHEAD sign covered or removed.
- The left signal head shall normally be mounted at a height of 10 feet above the road surface measured to the bottom of the signal head. The right head shall normally be mounted at height of 14 feet above the road surface. Baffle plates will be required on all signals.
- All lenses shall be 12 inch nominal diameter. The right signal head shall be aimed so the centers of the light beams of the indications are directed toward a point in the center of the approach lane 500 feet in advance of the signal. The left indication shall be aimed at a point in the center of the approach lane 100 feet in advance of the stop line.
- Bidirectional steady burning lights and double vertical panels shall be mounted on the TAPERED CONCRETE BARRIER AT 20 FOOT CENTERS AND ON THE BRIDGE RAIL OR PORTION OF BARRIER ON THE BRIDGE AT 50' CENTERS (3 MINIMUM). DETAIL 'A' ILLUSTRATES A SUGGESTED MOUNTING. OTHER METHODS OF MOUNTING MAY BE USED UPON APPROVAL OF THE ENGINEER.
- All signs shall be post mounted if the closure time exceeds four days.
- High intensity flashing lights shall be used on each approach in advance of the work area during hours of darkness and installed above the first two signs in each series.
- Longitudinal dimensions may be adjusted slightly to fit field conditions.
- All vehicles, equipment, men and their activities are restricted at all times to one side of the pavement unless otherwise authorized by the Engineer.
- Temporary Bridge Rail shall be used across the bridge when specified in the plans.
- Form BT 725 is required.
- THE ADVISORY SAFE SPEED (NOT TO EXCEED 45 M.P.H.) SHALL BE DETERMINED AT THE SITE AND APPROVED BY THE ENGINEER.
- DOUBLE VERTICAL PANELS SHALL BE POST MOUNTED ON THE OPEN SIDE OF THE STRUCTURE AT 20 FOOT CENTERS FOR 100 FEET IN ADVANCE OF THE STRUCTURE DURING STAGE I CONSTRUCTION WHERE GUARDRAIL IS NOT PRESENT. THE VERTICAL PANEL AND ITS MOUNTING SHALL BE IN ACCORDANCE WITH STANDARD 2299 EXCEPT THAT THE VERTICAL CLEARANCE FROM THE EDGE OF PAVEMENT TO THE BOTTOM OF THE VERTICAL PANEL SHALL BE 36".
- THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER LUMP SUM FOR TRAFFIC CONTROL AND PROTECTION, SPECIAL TEMPORARY CONCRETE BARRIER, RELOCATE TEMPORARY CONCRETE BARRIER, & TEMPORARY CONCRETE BARRIER TERMINAL SECTION.

### SYMBOLS

- Work Area
- 18 in. by 18 in. (minimum) orange flag
- Sign on portable or permanent support
- Drum with steady burning light
- Temporary concrete barrier
- Traffic signal
- DOUBLE VERTICAL PANEL (POST MOUNTED)

TWO-LANE, TWO WAY TRAFFIC,  
ONE LANE CLOSURE ON A BRIDGE  
DECK DAY OR NIGHT OPERATIONS

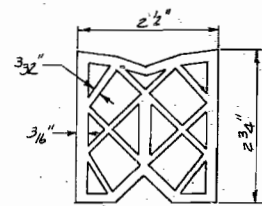
Where, at any time, any vehicle,  
equipment, men or their activities will  
encroach on one lane of a bridge deck  
and traffic signals are required.

# PREFORMED JOINT SEAL AND STEEL EXPANSION GUARD

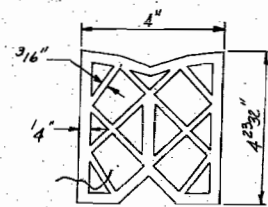
\*(06-1B-1, 06-2B, 06-2HB-1, 06-3B, 06-4B)RS

| ROUTE NO. | SEC. | COUNTY | TOTAL SHEETS | SHEET NO. |
|-----------|------|--------|--------------|-----------|
| FAI 80    | *    | BUREAU | 22           | 21        |

FED. ROAD DIST. NO. 7 ILLINOIS PROJECT

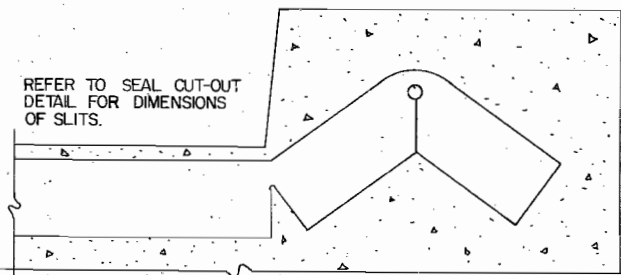
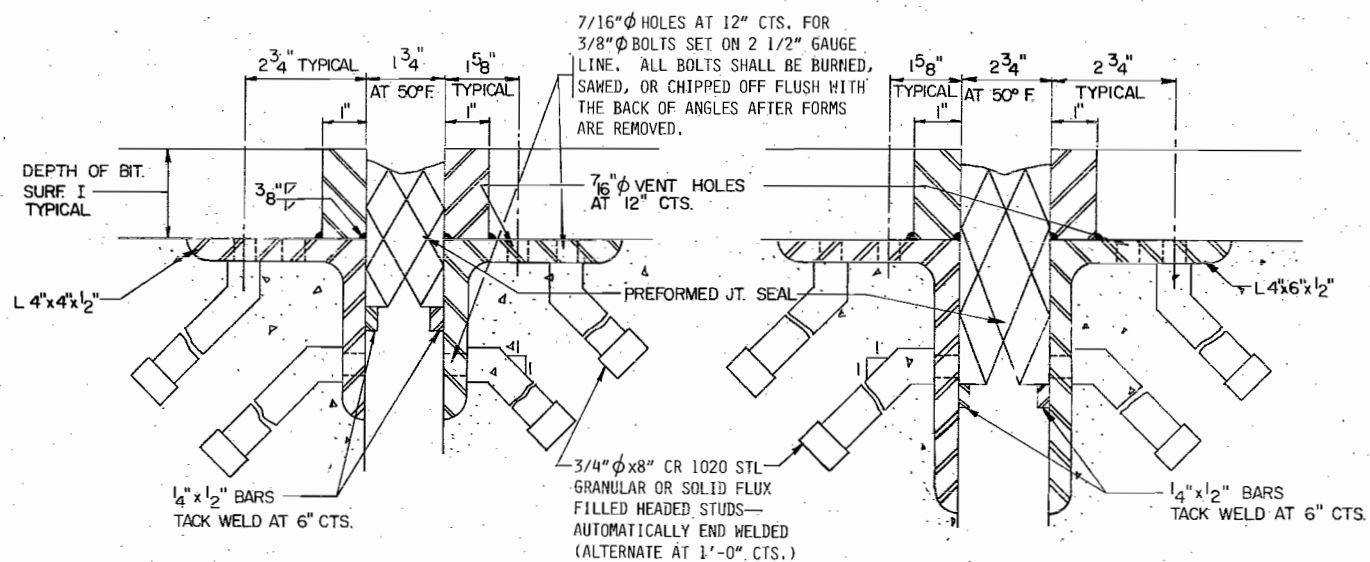


2 1/2" PREFORMED JOINT SEAL



4" PREFORMED JOINT SEAL

(For Bridge No. 006-0089)

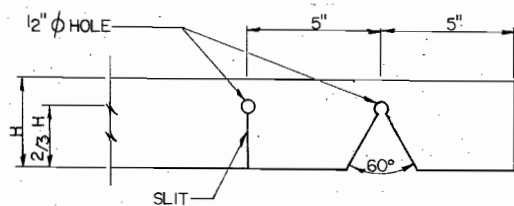


TYPICAL END OF SEAL TREATMENT

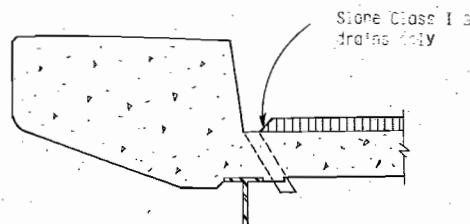
**BASIS OF PAYMENT:**

THE PREFORMED JOINT SEAL SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER LINEAL FOOT FOR PREFORMED JOINT SEAL OF THE SIZE SPECIFIED.

THE STEEL EXPANSION GUARD FABRICATION AND INSTALLATION SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER POUND FOR FURNISHING AND ERECTING STRUCTURAL STEEL.

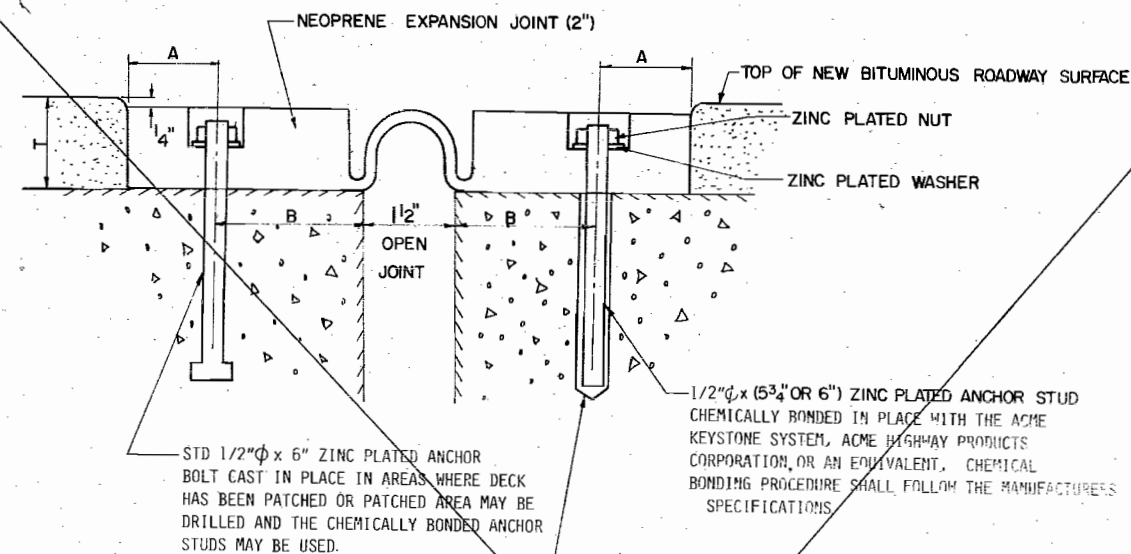


SEAL CUT-OUT



CURB SECTION

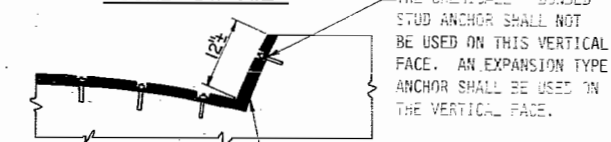
# NEOPRENE EXPANSION JOINT (2")



**TRANSVERSE JOINT NOTES**

AT THE TRANSVERSE JOINTS, THE ANCHOR LOCATIONS WILL SOMETIMES BE OVER STEEL EXPANSION GUARDS. AT THESE LOCATIONS A SHORT 1/2" ZINC PLATED STUD SHALL BE USED AND SHALL BE WELDED TO THE STEEL EXPANSION GUARD. ALSO THE STEEL RETAINING BARS WELDED ABOVE THE EXISTING EXPANSION GUARDS SHALL BE REMOVED AND THE OLD PREFORMED JOINT SEALER SHALL BE REMOVED. THIS WORK SHALL BE INCIDENTAL TO NEOPRENE EXPANSION JOINT (2").

**CURB DETAIL**



SUFFICIENT CONCRETE MUST BE REMOVED FROM THE VERTICAL FACE OF THE CURB FOR THE NEOPRENE EXPANSION JOINT. COST OF THIS CONCRETE REMOVAL SHALL BE INCIDENTAL TO NEOPRENE EXPANSION JOINT (2").

**ALTERNATE NEOPRENE EXPANSION JOINTS (2")**

**MODEL**

TRANSFLEX MODEL 200A  
FEL-SPAN, MODEL T-30  
SET JOINT SEAL 1 5/8" AT 50° F  
WABO ELASTODAM, TYPE 300

**SUPPLIER**

GENERAL TIRE CO.  
FEL-PRO BUILDING PRODUCTS, INC.  
WATSON BOHMAN ASSOC. INC.

**DIMENSIONS**

T = 1 13/16", A = 1 1/8", B = 3 5/16"  
T = 1 3/4", A = 1 1/4", B = 2 3/16"  
T = 1 3/4", A = 1 1/4", B = 2 3/16"

DISTRICT NO. 2 DIXON

DESIGNED KO

DRAWN VAY

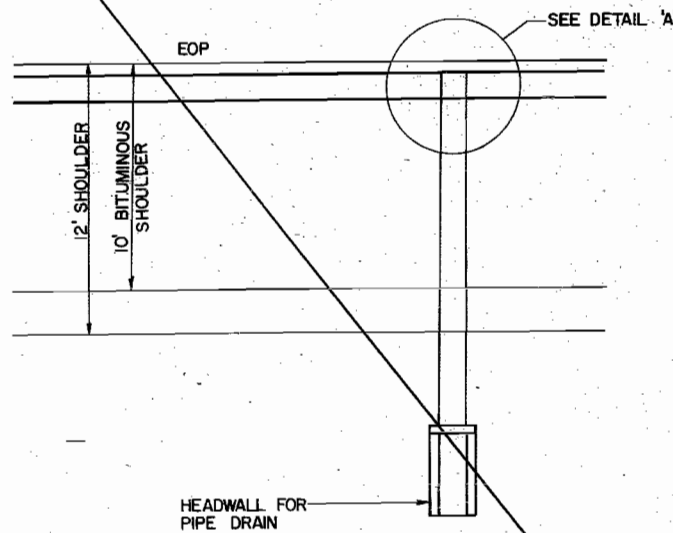
CHECKED

DATE 8-82

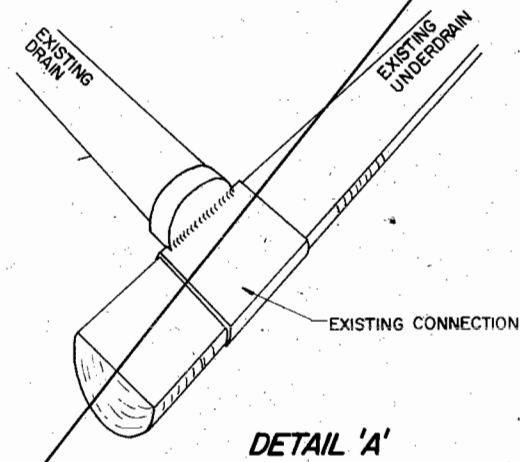
SCALE VARIES



# UNDERDRAIN OUTLET REPAIR



PLAN VIEW



DETAIL 'A'

## GENERAL NOTES

THE WORK SHALL CONSIST OF THE WORK AS LISTED BELOW.

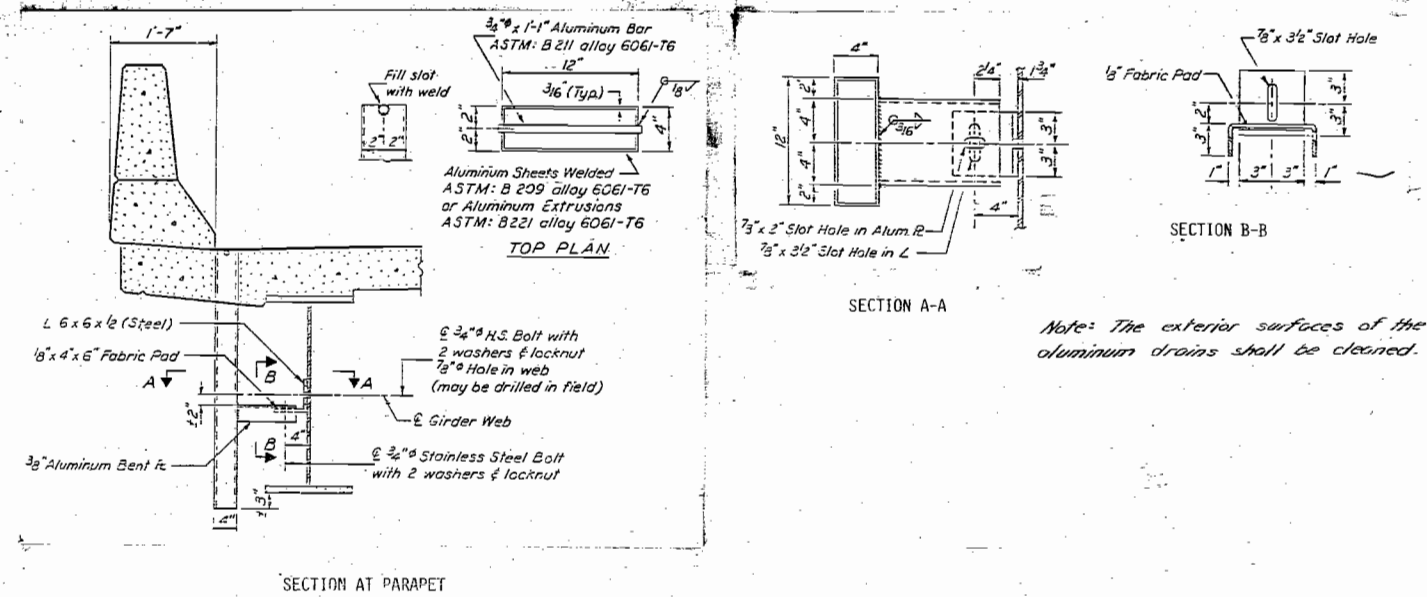
1. EXCAVATE IN THE EXISTING SHOULDER TO UNCOVER THE OUTLET CONNECTION SO THAT A 4"-6" LAYER OF CONCRETE WILL SURROUND THE EXISTING CONNECTION (TOP AND BOTTOM)
2. POUR CONCRETE AND BACKFILL. THEN PLACE 8" OF ASPHALT TO MATCH EXISTING SHOULDER.
3. AFTER CONCRETE HAS SET, CLEAN OUT THE OUTLET DRAIN HYDRAULICALLY OR OTHER METHOD THAT WILL OBTAIN THE DESIRED RESULTS.
4. SINCE THIS WORK WILL REQUIRE REMOVAL OF THE EXISTING RODENT SCREEN, A NEW RODENT SHIELD AS SHOWN ON STANDARD 2362 SHALL BE INSTALLED.

THE LABOR AND MATERIALS REQUIRED TO COMPLETE THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE "EACH" FOR UNDERDRAIN OUTLET REPAIR.

# FLOOR DRAINS

\*(06-1B-1,06-2B,06-2HB-1,06-3B,06-4B)RS

| ROUTE NO.                              | SEC. | COUNTY | TOTAL SHEETS | SHEET NO. |
|--|------|--------|--------------|-----------|
| FAI 80                                 | *    | BUREAU | 22           | 22        |
| FED. ROAD DIST. NO. 7 ILLINOIS PROJECT |      |        |              |           |



Note: The exterior surfaces of the aluminum drains shall be cleaned.

DISTRICT NO. 2 DIXON  
 DESIGNED LWS  
 DRAWN VAY  
 CHECKED  
 DATE 8-82  
 SCALE VARIES