

| INDEX         |                    |                                   |                    |                                       |                       |
|---------------|--------------------|-----------------------------------|--------------------|---------------------------------------|-----------------------|
| PROJECT       | STRUCTURE          | TYPE                              | SPAN               | OVER                                  | STATION               |
| FI-74-1(78)14 | I-74-14-2333A      | DECK OVERLAY                      | 82'-96'<br>96'-82' | NORFOLK & WESTERN RY. & DRY RUN CREEK | ± PIER #3<br>285 ± 33 |
| SHEET NO.     | SHEET DESIGNATION  | SUBJECT                           |                    |                                       | F.H.W.A. APPROVAL     |
| 1             |                    | INDEX B. TITLE SHEET              |                    |                                       |                       |
| 2             |                    | CROSSOVER DETAILS                 |                    |                                       |                       |
| 3             | D1 (I-74-14-2333R) | GENERAL PLAN                      |                    |                                       |                       |
| 4             | D2                 | TYPE C EXPANSION JOINT DETAILS    |                    |                                       |                       |
| 5             | D3                 | EXPANSION JOINT DETAILS & SUMMARY |                    |                                       |                       |
| 5A            | (I-74-14-4928R)    | GENERAL PLAN                      |                    |                                       |                       |
| 5B            |                    | JOINT DETAILS & SUMMARY           |                    |                                       |                       |

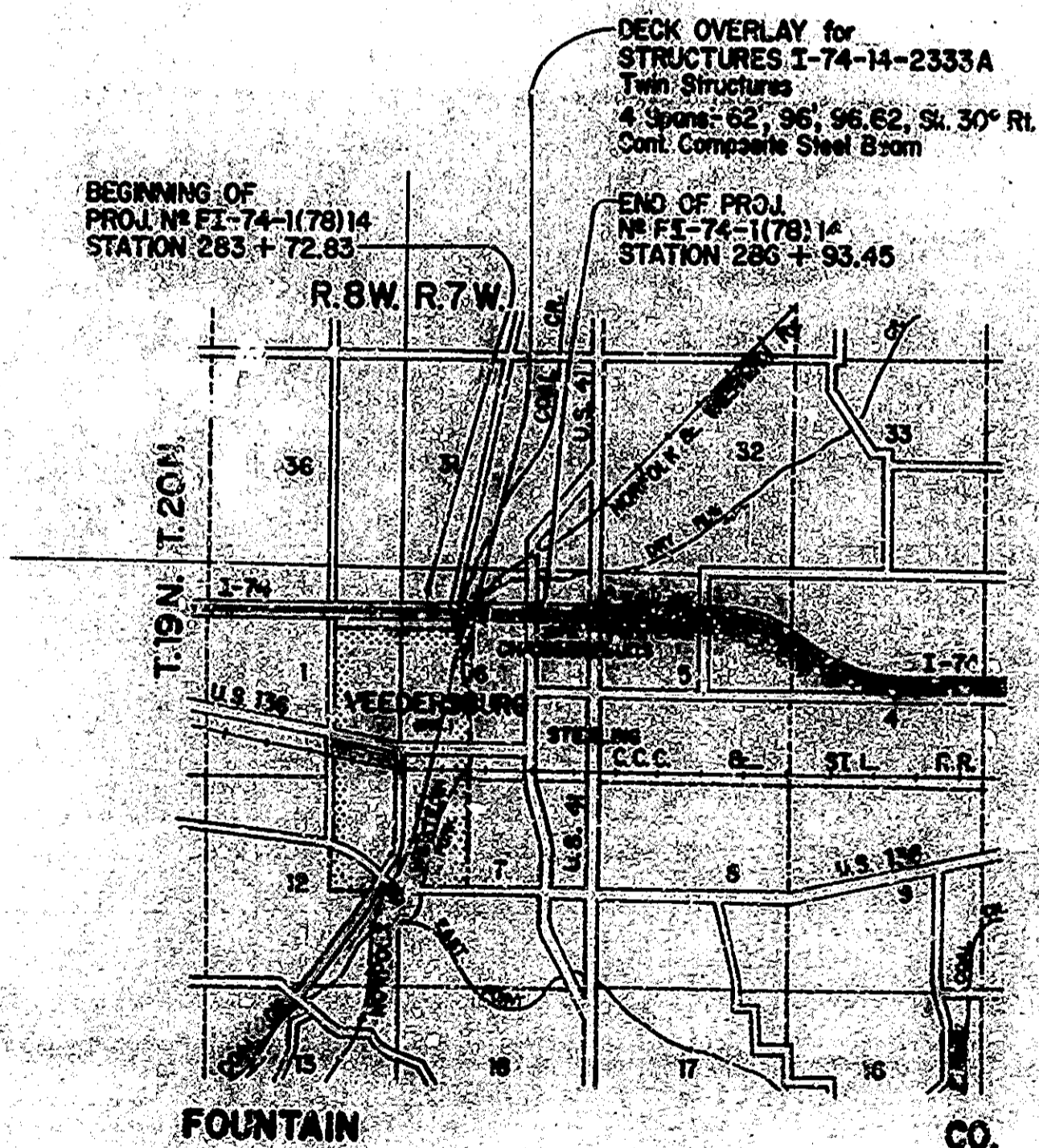
STATE OF INDIANA  
INDIANA STATE HIGHWAY COMMISSION

# BRIDGE PLANS FOR SPANS OVER 20 FEET ON INTERSTATE HIGHWAY 74 PROJECT NO. FI-74-1

(78) 14 PE.  
(78) 14 CONST.

BEGINNING AT A POINT ON INTERSTATE 74 (Line "A") APPROX. 2212.8' EAST OF THE WEST LINE OF SEC. 6 (Range Line) & EXTENDING EAST A DISTANCE OF APPROX. 320.6' TO A POINT ON INTERSTATE 74 APPROX. 225.2' EAST OF THE NORFOLK & WESTERN RY. & MAIN TRACK. ALL IN SEC. 6-T. 19 N.-R. 7 W., FOUNTAIN COUNTY.

BRIDGE LENGTH: 0.061 MI.  
ROADWAY LENGTH: 0.000 MI.  
TOTAL LENGTH: 0.061 MI.  
MAX. GRADE: 1.06 %



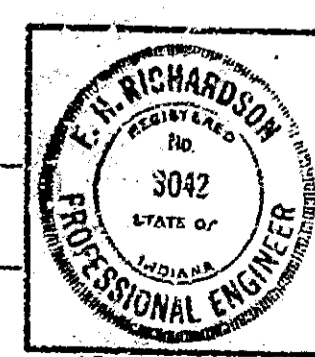
| BRIDGES OVER 20' SPAN |       |               |             |           |              |
|-----------------------|-------|---------------|-------------|-----------|--------------|
| FEDERAL ROAD DIST.    | STATE | PROJECT NO.   | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
| 4                     | IND.  | FI-74-1(78)14 | 1972        | 1         | 14           |

| INDEX CONTINUED<br>STANDARD DRAWINGS |                                |   |  |                   |                          |
|--------------------------------------|--------------------------------|---|--|-------------------|--------------------------|
| SHEET NO.                            | SHEET DESIGNATION              | SUBJECT   |  | F.H.W.A. APPROVAL | ADOPTED "A" REVISION "B" |
|                                      | BRIDGE STD. BR1                | ALUMINUM BRIDGE RAILING                         |  |                   |                          |
|                                      | BRIDGE STD. BR2                | ALUMINUM BRIDGE RAILING DETAILS                 |  |                   |                          |
|                                      | BRIDGE STD. BR3                | STEEL BRIDGE RAILING                            |  |                   |                          |
|                                      | BRIDGE STD. BR4                | STEEL BRIDGE RAILING DETAILS                    |  |                   |                          |
|                                      | BRIDGE STD. C1                 | MISCELLANEOUS DETAILS                           |  |                   |                          |
|                                      | BRIDGE STD. C2                 | MISCELLANEOUS DETAILS                           |  |                   |                          |
|                                      | BRIDGE STD. C3                 | MISCELLANEOUS DETAILS                           |  |                   |                          |
|                                      | BRIDGE STD. D                  | CASTING DETAILS ROADWAY DRAINS                  |  |                   |                          |
|                                      | BRIDGE STD. PB                 | PRESTRESSED CONCRETE TYPE I-BEAMS               |  |                   |                          |
|                                      | BRIDGE STD. PB                 | PRESTRESSED CONCRETE TYPE I-BEAMS               |  |                   |                          |
|                                      | BRIDGE STD. PB                 | PRESTRESSED BOX BEAMS                           |  |                   |                          |
|                                      | BRIDGE STD. PB                 | PRESTRESSED COMPOSITE BOX BEAMS WIDE            |  |                   |                          |
|                                      | BRIDGE STD. PB                 | PRESTRESSED COMPOSITE BOX BEAMS WIDE            |  |                   |                          |
|                                      | BRIDGE STD. PB10               | TOLERANCES FOR FABRICATION OF PRESTRESSED BEAMS |  |                   |                          |
|                                      | BRIDGE STD. PB11               | ELASTOMERIC BEARING PAD DETAILS                 |  |                   |                          |
|                                      | BRIDGE STD.                    |   |  |                   |                          |
|                                      | BRIDGE STD.                    |   |  |                   |                          |
|                                      | BRIDGE STD. R2A                | BRIDGE LIGHTING DETAILS                         |  |                   |                          |
|                                      | BRIDGE STD. S1                 | MISCELLANEOUS DETAILS                           |  |                   |                          |
|                                      | BRIDGE STD. SH1                | STEEL SHOE DETAILS                              |  |                   |                          |
|                                      | BRIDGE STD. TSHEET A           | STANDARD TEMPORARY BRIDGE                       |  |                   |                          |
|                                      | BRIDGE STD. TSHEET B           | STANDARD TEMPORARY BRIDGE                       |  |                   |                          |
|                                      | BRIDGE STD.                    |   |  |                   |                          |
|                                      | BRIDGE STD.                    |   |  |                   |                          |
|                                      | ROAD STD. SHEET ACK            | STANDARD CONT. REINF. CONC. PAVEMENT            |  |                   |                          |
|                                      | ROAD STD. SHEET B2C            | STANDARD CONT. REINF. CONC. PAVEMENT            |  |                   |                          |
|                                      | ROAD STD. SHEET C2C            | STANDARD CONT. REINF. CONC. PAVEMENT            |  |                   |                          |
| 6                                    | ROAD STD. SHEET A              | STANDARD PAVEMENT JOINTS                        |  |                   | R-1-3-72                 |
|                                      | ROAD STD. SHEET MA             | MISCELLANEOUS STANDARDS                         |  |                   |                          |
|                                      | ROAD STD. SHEET MA             | MISCELLANEOUS STANDARDS                         |  |                   |                          |
|                                      | ROAD STD. SHEET MB2            | MISCELLANEOUS STANDARDS                         |  |                   |                          |
|                                      | ROAD STD. SHEET                | MISCELLANEOUS STANDARDS                         |  |                   |                          |
|                                      | ROAD STD. SHEET MC             | MISCELLANEOUS STANDARDS                         |  |                   |                          |
|                                      | ROAD STD. SHEET MC1            | MISCELLANEOUS STANDARDS                         |  |                   |                          |
|                                      | ROAD STD. SHEET MD             | MISCELLANEOUS STANDARDS                         |  |                   |                          |
|                                      | ROAD STD. SHEET MD             | MISCELLANEOUS STANDARDS                         |  |                   |                          |
|                                      | ROAD STD. SHEET ME             | MISCELLANEOUS STANDARDS                         |  |                   |                          |
| 7                                    | ROAD STD. SHEET ME2            | MISCELLANEOUS STANDARDS                         |  | II-5-69           | R-10-1-69                |
|                                      | ROAD STD. SHEET                | MISCELLANEOUS STANDARDS                         |  |                   |                          |
|                                      | ROAD STD. SHEET MH             | MISCELLANEOUS STANDARDS                         |  |                   |                          |
|                                      | ROAD STD. SHEET MH             | MISCELLANEOUS STANDARDS                         |  |                   |                          |
|                                      | ROAD STD. SHEET MI             | MISCELLANEOUS STANDARDS                         |  |                   |                          |
|                                      | ROAD STD. SHEET                | MISCELLANEOUS STANDARDS                         |  |                   |                          |
|                                      | ROAD STD. SHEET                | MISCELLANEOUS STANDARDS                         |  |                   |                          |
|                                      | ROAD STD. SHEET MN             | MISCELLANEOUS STANDARDS                         |  |                   |                          |
|                                      | ROAD STD. SHEET                | MISCELLANEOUS STANDARDS                         |  |                   |                          |
|                                      | ROAD STD. SHEET MP             | MISCELLANEOUS STANDARDS                         |  |                   |                          |
|                                      | ROAD STD. SHEET                | MISCELLANEOUS STANDARDS                         |  |                   |                          |
|                                      | ROAD STD. SHEET MQ             | MISCELLANEOUS STANDARDS                         |  |                   |                          |
|                                      | ROAD STD. SHEET MR             | MISCELLANEOUS STANDARDS                         |  |                   |                          |
|                                      | ROAD STD. SHEET                | MISCELLANEOUS STANDARDS                         |  |                   |                          |
|                                      | ROAD STD.                      | STANDARD REINF. CONC. BOX CULVERTS              |  |                   |                          |
|                                      | ROAD STD.                      | STANDARD REINF. CONC. CULVERTS                  |  |                   |                          |
|                                      | ROAD STD.                      |   |  |                   |                          |
|                                      | ROAD STD. SHEET GR             | GUARD RAIL CLASS                                |  |                   |                          |
|                                      | ROAD STD. SHEET GR4            | GUARD RAIL CLASS GA OR GST                      |  |                   |                          |
|                                      | ROAD STD. SHEET GR4            | ALUMINUM GUARD RAIL DETAILS                     |  |                   |                          |
|                                      | ROAD STD. SHEET GR5            | STEEL TUBE GUARD RAIL DETAILS                   |  |                   |                          |
|                                      | ROAD STD. SHEET GR             | GUARD RAIL FINISHED ENDS                        |  |                   |                          |
|                                      | ROAD STD.                      |   |  |                   |                          |
|                                      | ROAD STD.                      |   |  |                   |                          |
|                                      | ROAD STD.                      | STANDARDS FOR CLEAR ELEVATION                   |  |                   |                          |
| 9                                    | ROAD STD. SHEET 2 DETOUR SIGNS | STANDARD DETOUR SIGNS                           |  |                   | A-1-1-71                 |
| 10                                   | ROAD STD. SHEET 3 DETOUR SIGNS | STANDARD DETOUR SIGNS                           |  |                   | A-2-1-71                 |
| 11                                   | ROAD STD. SHEET 4 DETOUR SIGNS | STANDARD DETOUR SIGNS                           |  |                   | A-3-1-71                 |
| 12                                   | ROAD STD. SHEET 5 DETOUR SIGNS | STANDARD DETOUR SIGNS                           |  |                   | A-4-1-71                 |
| 13                                   | ROAD STD. SHEET 6 DETOUR SIGNS | STANDARD DETOUR SIGNS                           |  |                   | A-5-1-71                 |
| 14                                   | ROAD STD. SHEET 7              | CONSTRUCTION IDENTIFICATION SIGNS               |  | 9-7-71            | R-7-1-71                 |

| TRAFFIC DATA            |  |                         |
|-------------------------|--|-------------------------|
| A.D.T. (1970)           |  | 7,300 V.P.D.            |
| A.D.T. (1980 PROJECTED) |  | 15,940 V.P.D.           |
| D.V.V. (1980 PROJECTED) |  | V.P.D.                  |
| TRUCKS                  |  | DIR. 7% MAX. 22% V.P.D. |
| DESIGN SPEED            |  | 70 M.P.H.               |
| ACCESS CONTROL          |  | NONE                    |

APPROVED *[Signature]*  
6-20-72  
CHIEF HIGHWAY ENGINEER

FEDERAL HIGHWAY ADMINISTRATION  
DEPARTMENT OF TRANSPORTATION  
APPROVED: \_\_\_\_\_  
DIVISION ENGINEER DATE



RECOMMENDED FOR APPROVAL 6/19/72  
*[Signature]*  
CHIEF OF ROAD DESIGN, INDIANA STATE HIGHWAY COMMISSION

| REVISIONS |                    |           |
|-----------|--------------------|-----------|
| DATE      | DESCRIPTION        | SHEET NO. |
| 5-18-72   | 1, Sheet 5A-5B ADD |           |

INDIANA STATE HIGHWAY COMMISSION  
STANDARD SPECIFICATIONS DATED 1971  
TO BE USED WITH THESE PLANS.

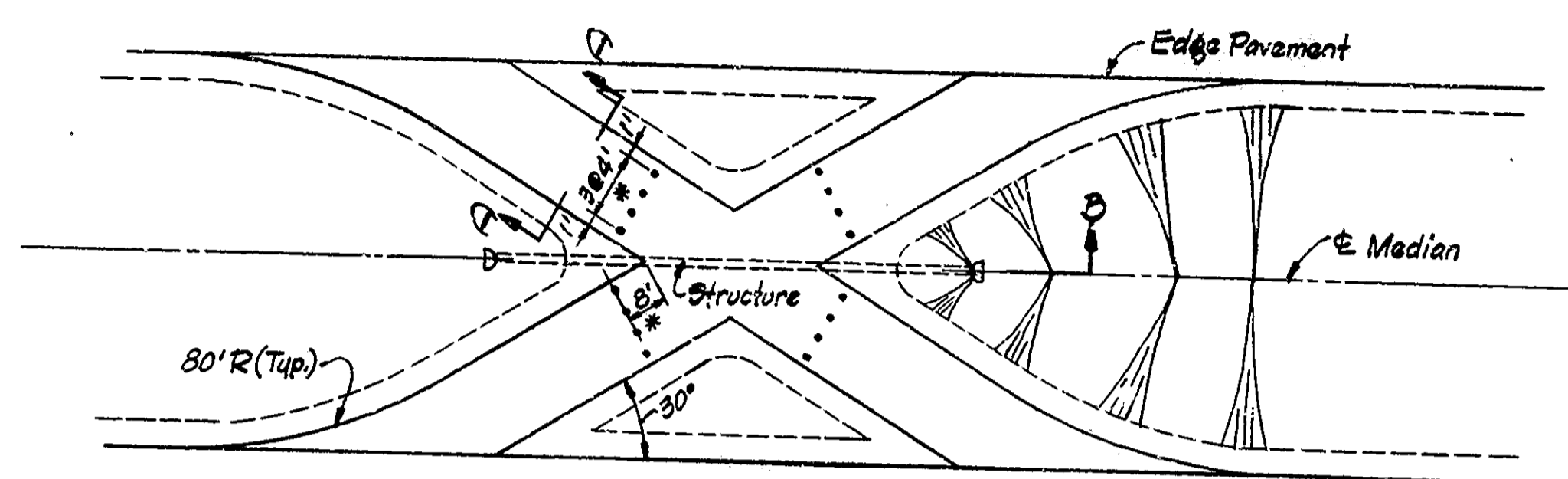
BRIDGE FILE: I-74-14-2333A



| BRIDGES OVER 20' SPAN |       |                 |             |           |              |
|-----------------------|-------|-----------------|-------------|-----------|--------------|
| PUB. ROAD RES. NO.    | STATE | PROJECT NO.     | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
| 4                     | IND.  | F-1-74-1 (70)14 | 1972        | 2         | 14           |

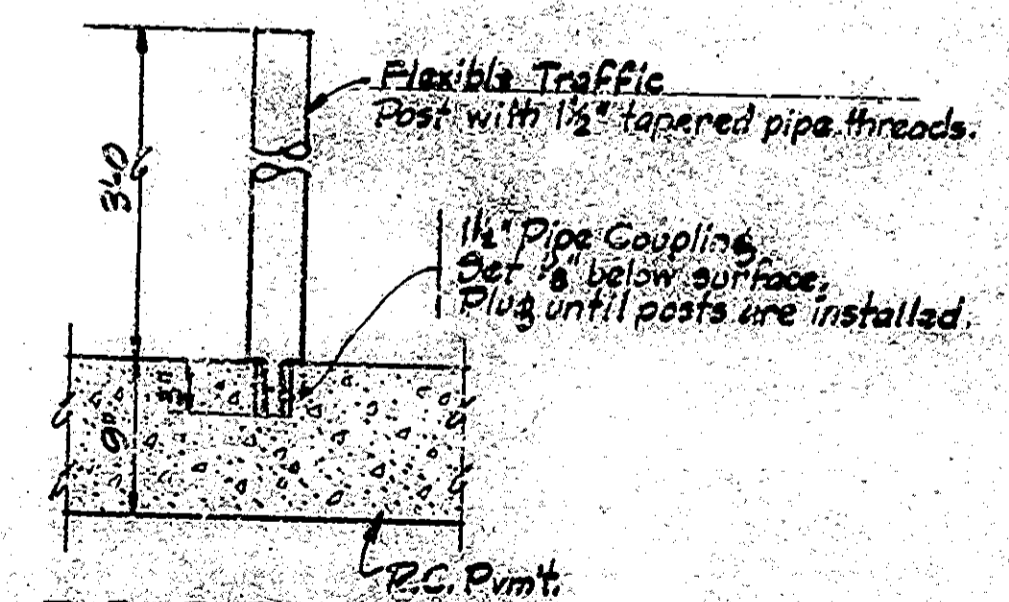
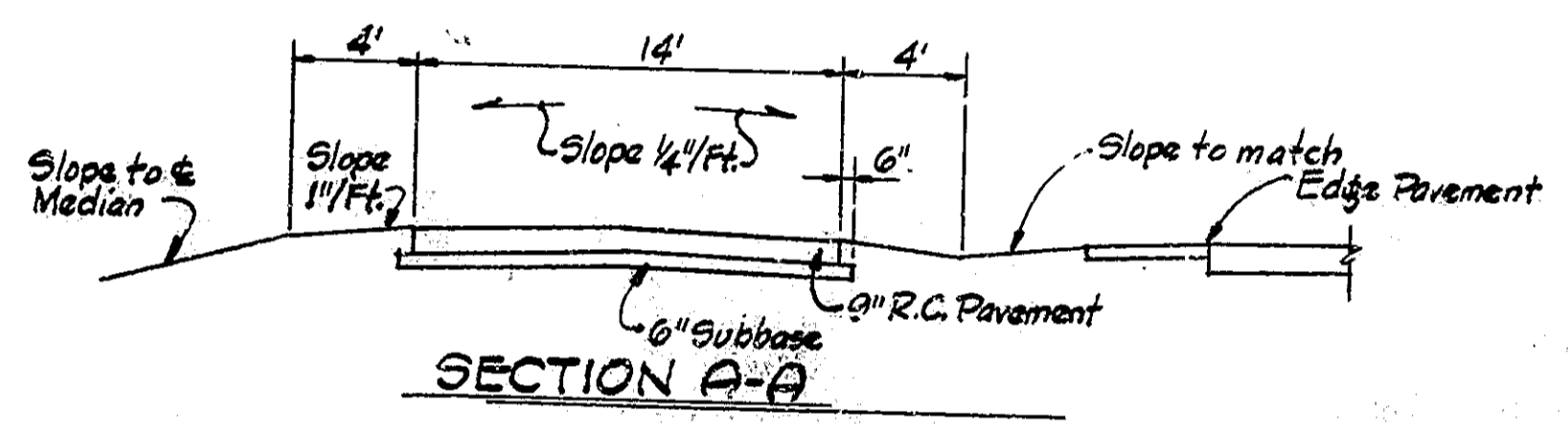
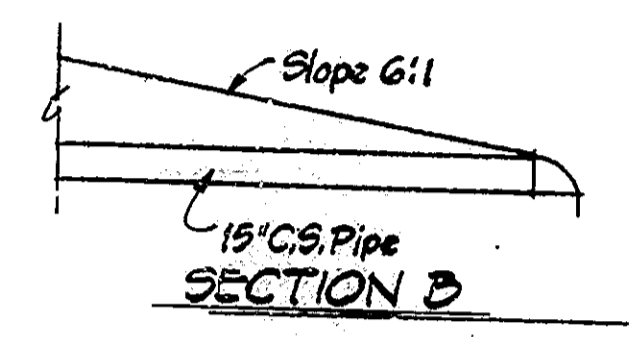
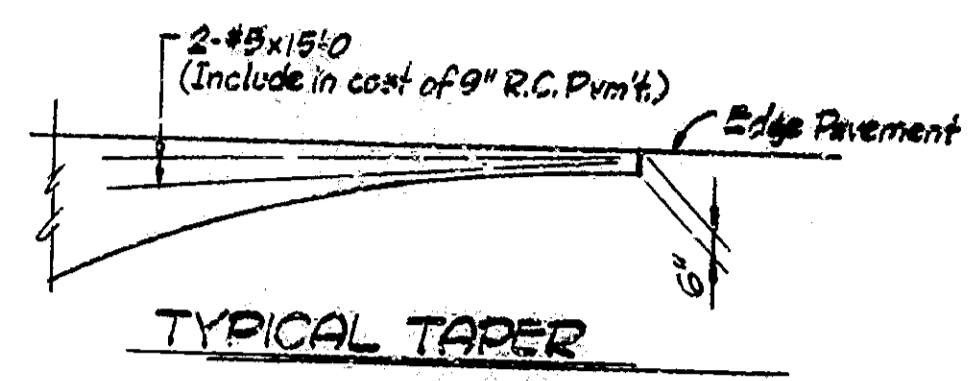
**SUMMARY FOR TWO CROSSOVERS**

| Description                     | Unit     | Quantity |
|---------------------------------|----------|----------|
| Maintain Traffic                | L.S.     | 1        |
| 9" R.C. Pavement                | Sys.     | 730      |
| Subbase                         | Cys.     | 130      |
| Construction Joints Type D1     | Lin. Ft. | 164      |
| Construction Signs Type A       | Each     | 12       |
| Construction Signs Type B       | Each     | 16       |
| Temporary Pavement Marking Tape | Lin. Ft. | 6800     |
| Flexible Traffic Post           | Each     | 32       |
| Borrow                          | Cys.     | 600      |
| Common Excavation               | Cys.     | 60       |
| Mulched Seeding                 | Sq. Yds. | 2000     |
| 15" C.S. Pipe 16 Ga.            | Lin. Ft. | 160      |
| 15" Pipe End Sections           | Each     | 4        |



\* Location of flexible Traffic Post Assemblies (16 req'd. per crossover)

STRUCTURE: 80' Lin. Ft. 15" C.S. Pipe 16 Ga. & 2-15" Pipe End Sections.  
 Note: Structure may be eliminated if directed by the Engineer.



Note: An alternate approved method of removable post attachment may be used.

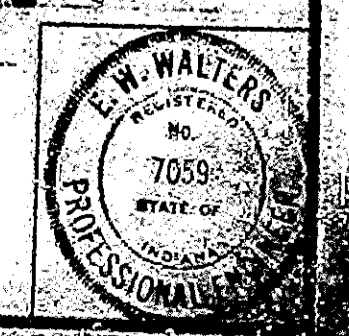
|          |     |     |
|----------|-----|-----|
| DESIGNED | WBO | CKD |
| DRAWN    | DCB | CKD |
| TRACED   |     | CKD |

**CROSSOVER DETAILS MISCELLANEOUS DETAILS INDIANA STATE HIGHWAY COMMISSION**

SCALE: NONE DATE: MAY 18, 1972

RECOMMENDED FOR APPROVAL: E. W. Walters

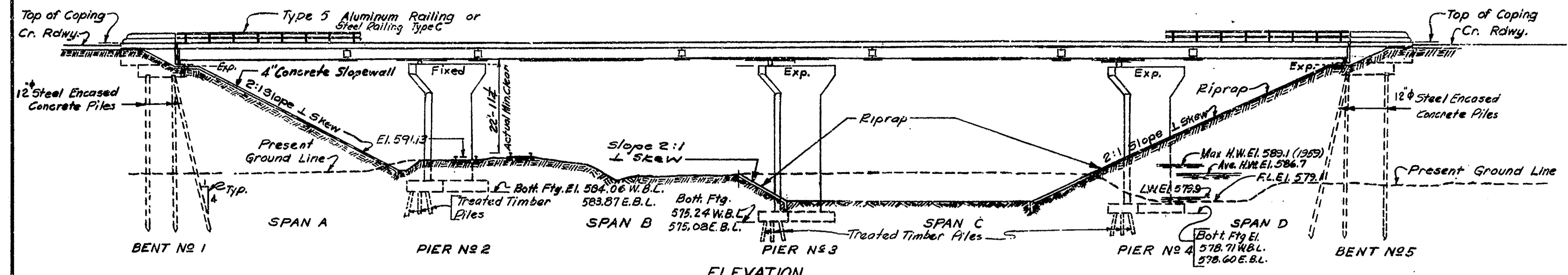
DRAWING OF PROJECT: F-1-74-1 (70)14 CONTRACT NO. B-925 BRIDGE FILE: L-74-1-2000A



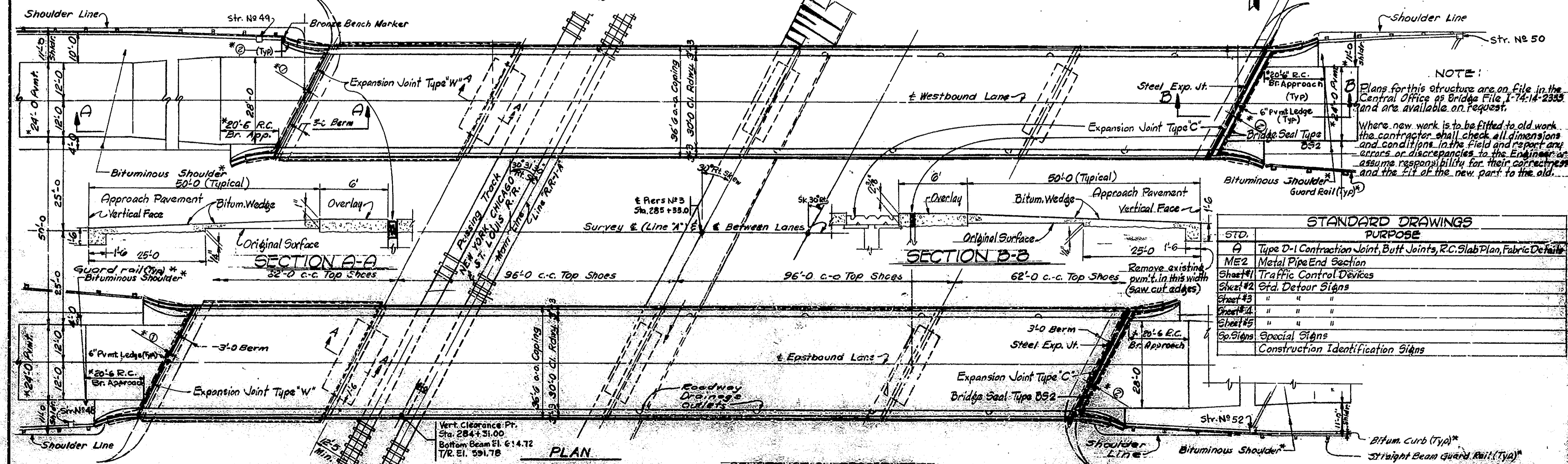


| BRIDGES OVER 20' SPAN |                |             |           |
|-----------------------|----------------|-------------|-----------|
| STATE                 | PROJECT NO.    | FISCAL YEAR | SHEET NO. |
| IND.                  | F-1-74-1(18)14 | 1972        | 3         |
|                       | (78)14         |             | 14        |

**- NOTE -**  
 The hand chipping and clearing of deteriorated deck areas shall be as directed by the Engineer. It is the intent of these plans that all such deteriorated concrete be removed and should there be any doubt as to the quality of the concrete the removal shall continue until PERFECTLY SOUND concrete is exposed.



**ELEVATION**  
 SCALE: 1/8" = 1'-0"



**PLAN**

**CONSTRUCTION PROCEDURE**

1. Build crossovers at locations as directed by the Engineer. Install temporary pavement stripe tape, close westbound structure and divert traffic to eastbound lanes.
2. Remove existing patching and all unsound concrete from the bridge floor, scarify the entire bridge floor and portions of the approach pavement, remove scarified dust, clean the exposed reinforcing and remove concrete.
3. Sandblast and clean entire deck, curbs and walks.
4. Seal faces and top of walks with a penetrating epoxy sealer.
5. Place modified portland cement concrete in areas requiring patching up to adjacent scarified surface and finish with rough surface.
6. An overlay of modified portland cement concrete is to be placed over the entire roadway surface and portions of the approach slab as shown on the plans. Black out areas shown on plans for the new expansion joints and form 1/2 inch wide for the preformed joint seals, place the overlay to one inch above the original concrete surface except where wedging is required as shown on plans at expansion joints.
7. Grout existing armored joints. Drill the bridge and slab angles at two foot centers to accept a pressure fit grease filling and apply an epoxy adhesive under pressure to seal and fill voids under and behind angles. Include in cost of Expansion Joint Type W.
8. Install expansion joints and preformed joint seals at locations shown on plans. Saw cut opening for preformed joint seals to 1 inch width. Fill in remaining blocked out areas at expansion joints with overlay material. Cure overlay as specified in the Special Provisions.
9. Build bituminous shoulder to each end of the structure to match the new surface.
10. Install new temporary pavement stripe tape, close eastbound structure and divert traffic to westbound lanes.
11. Repeat steps 1 through 10 for eastbound lanes.
12. Open to traffic.

Note: The numbers do not necessarily indicate the sequence of operations. Pneumatic hammer 50 lbs. max. weight to be used for removals.

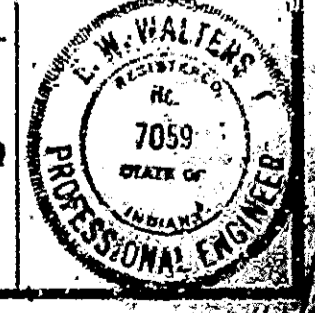
| STD.      | PURPOSE   |
|-----------|---|
| A         | Type D-1 Contraction Joint, Butt Joints, R.C. Slab Plan, Fabric Details |
| ME2       | Metal Pipe End Section  |
| Sheet #1  | Traffic Control Devices   |
| Sheet #2  | Std. Detour Signs   |
| Sheet #3  | " " " "   |
| Sheet #4  | " " " "   |
| Sheet #5  | " " " "   |
| Sp. Signs | Special Signs   |
|           | Construction Identification Signs                                       |

**GENERAL PLAN**  
 CONTINUOUS COMPOSITE STEEL BEAM BRIDGE  
 4 SPANS - 62'-0" - 96'-0" - 96'-0" - 62'-0"  
 30'-0" ROADWAY + 2'-2'-0" WALKS SKEW 30° RT.  
 OVER N.Y.C. & ST.L. RR. & DRY RUN CREEK  
 ON INTERSTATE ROUTE NO 74  
 STATE HIGHWAY DEPARTMENT OF INDIANA  
 FOUNTAIN COUNTY

SCALE: AS NOTED  
 MAY 18, 1972

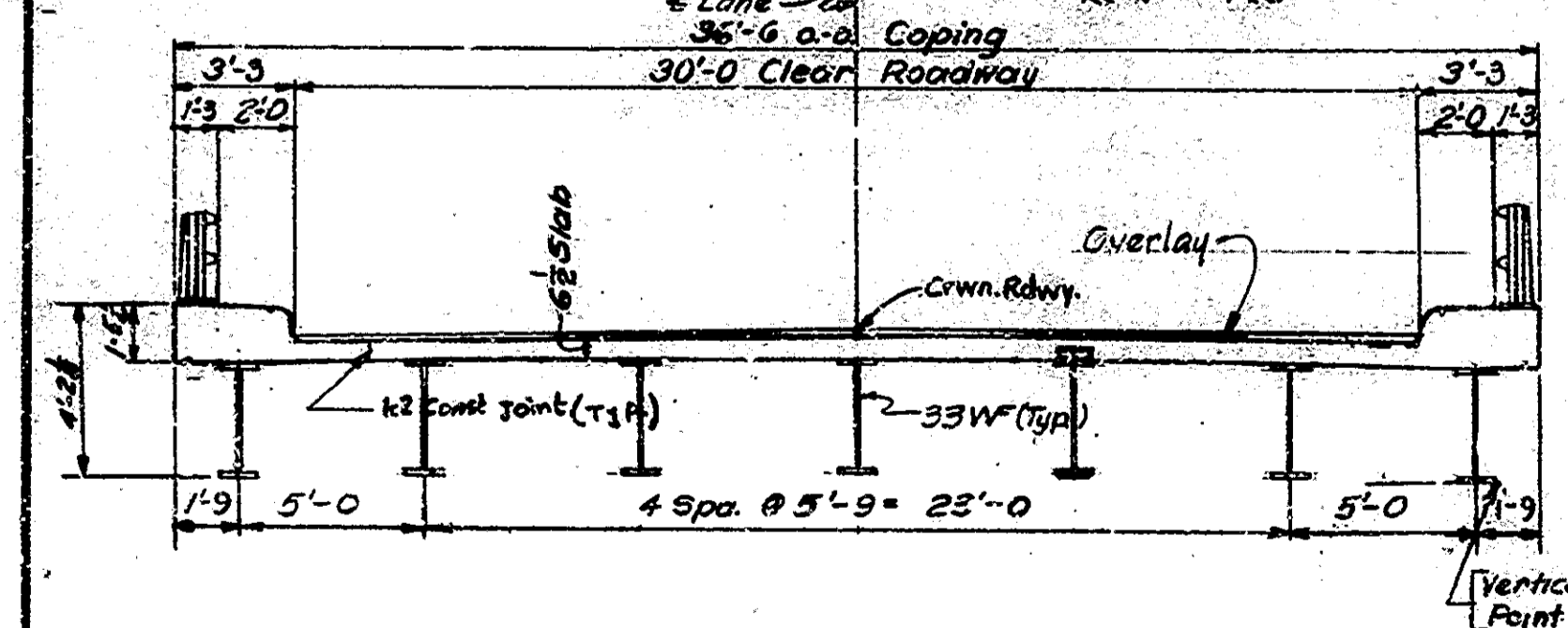
RECOMMENDED FOR APPROVAL: *E.W. Walker*  
 ASSISTANT CHIEF ENGINEER

DRAWING: D1 OF 3  
 PROJECT: F-1-74-1(18)14 STATION 285+33.0  
 BRIDGE CONTRACT NO. B-9104 # Piers No 3  
 BRIDGE FILE: 1-74-14-2333A



DESIGNED: CKD  
 DRAWN: W.T.M. 2/6/72 CKD L.M. 6-28-64  
 TRACED: CKD

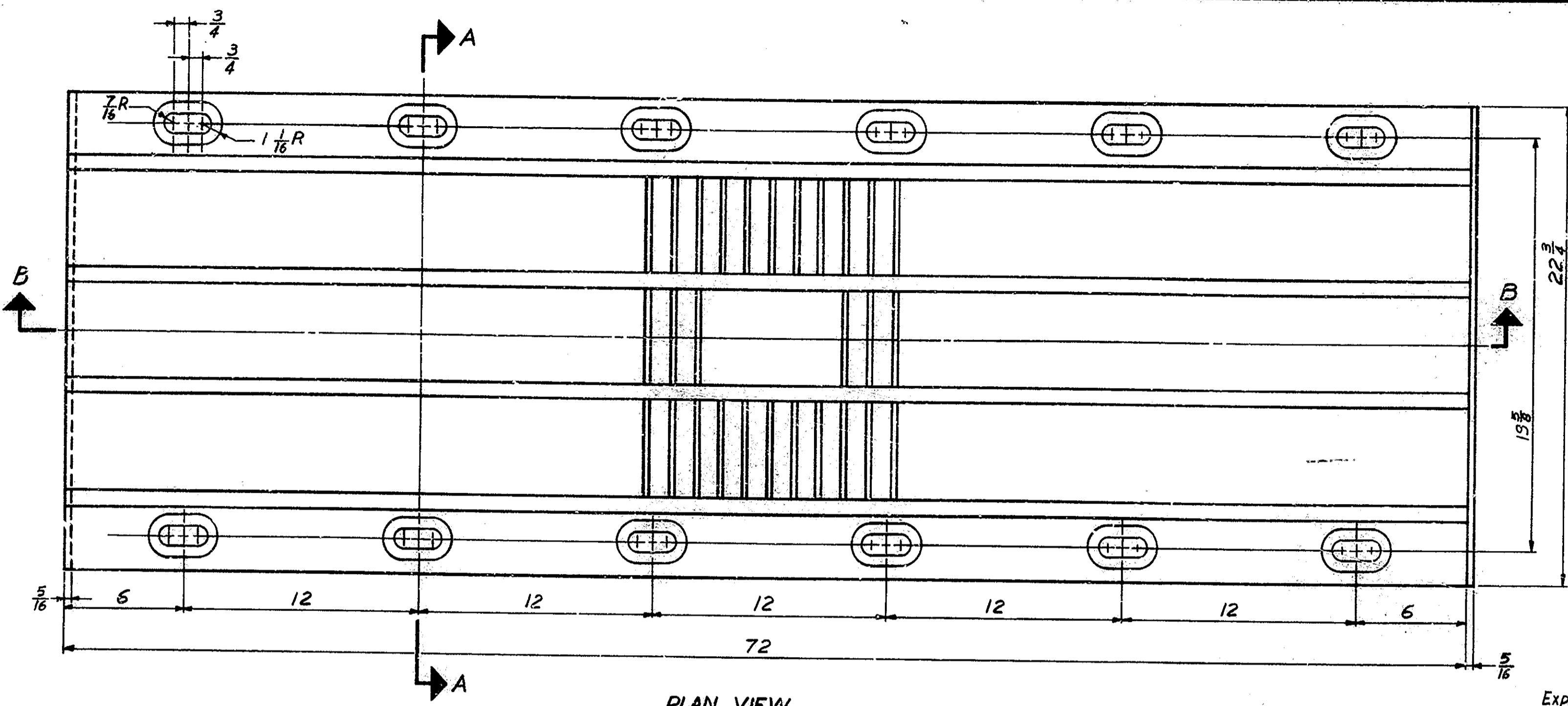
**SECTION I TO 1/4 LANE**  
 Scale: 1/4" = 1'-0"



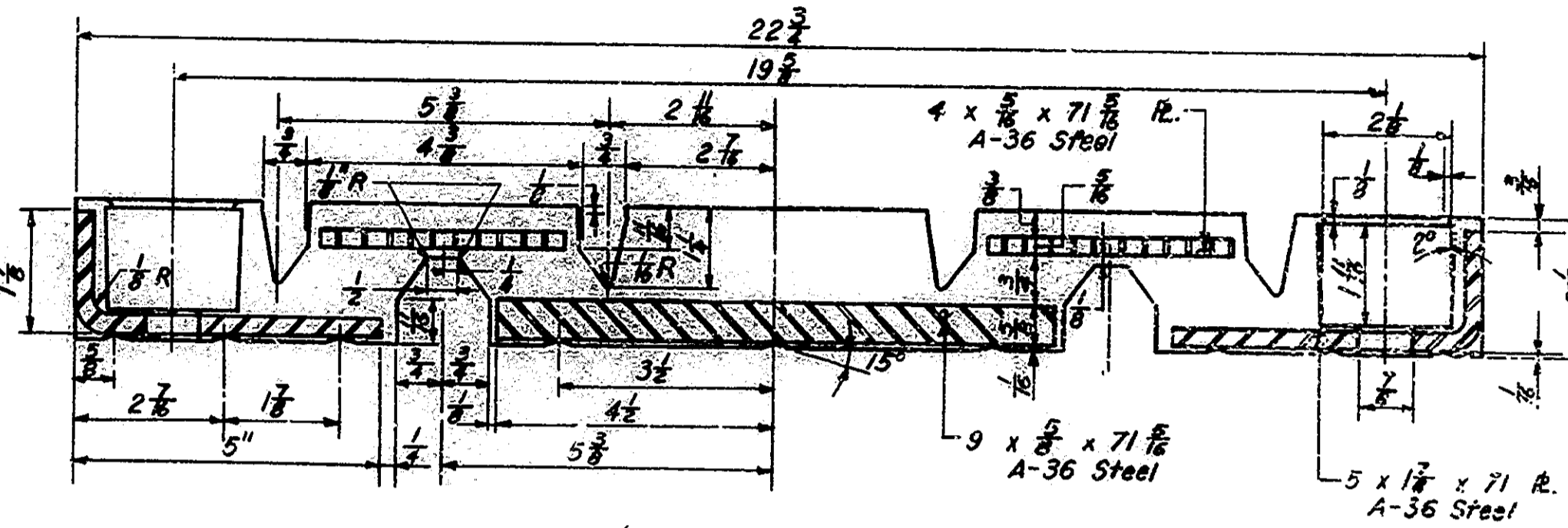


BRIDGES OVER 20' SPAN

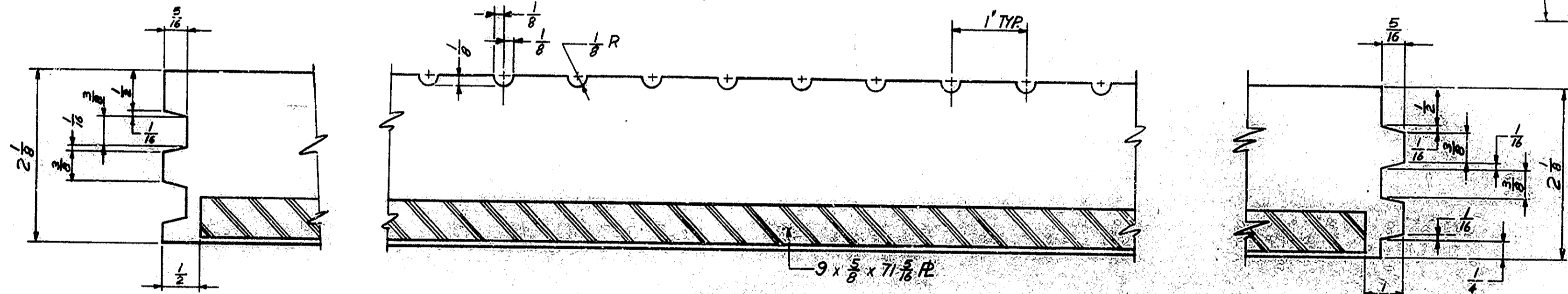
| PUB. ROAD DIST. NO. | STATE | PROJECT NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-------------|-------------|-----------|--------------|
| 4                   | IND.  | 1741 (78)14 | 1972        | 4         | 14           |



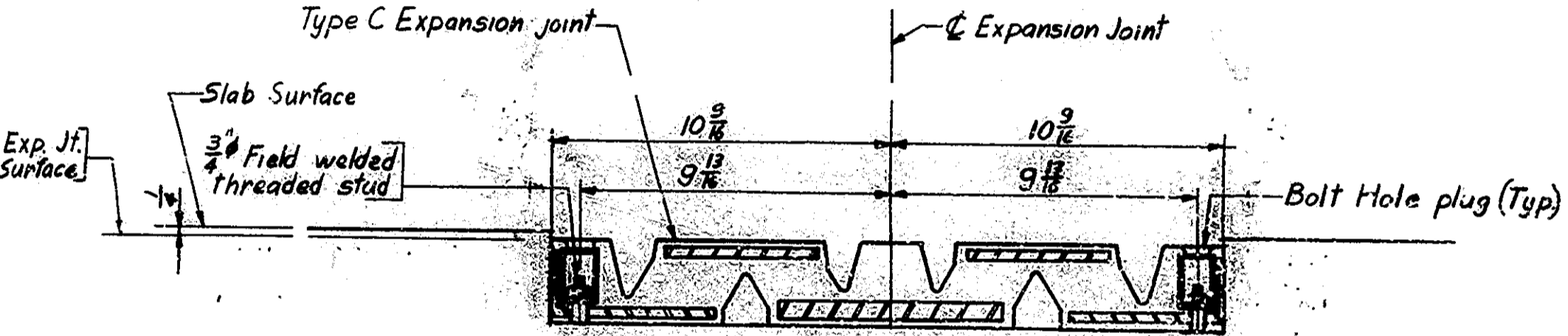
PLAN VIEW  
Scale 1/4" = 1'



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



SECTION B-B  
Scale 1" = 1'



NOTES

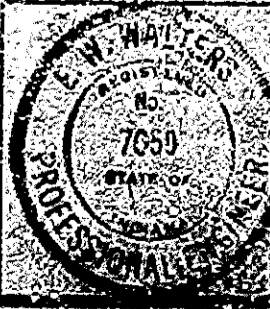
Refer to Special Provisions for physical properties of materials and construction methods.  
The cost of threaded studs, bolt hole plugs and all material needed to install the expansion joints shall be included in cost of expansion joint type C.  
Tighten nuts on 3/4" threaded studs to 85 ft/lbs torque.  
All Bolt Holes to be plugged with proper Bolt Hole Plugs as supplied by the manufacturer.

TYPE C EXPANSION JOINT DETAILS  
INDIANA STATE HIGHWAY COMMISSION

SCALE: AS NOTED DATE: MAY 16, 1972

RECOMMENDED FOR APPROVAL: *E. W. Walters*  
ACCIDENT ENGINEER OF STATE ROAD

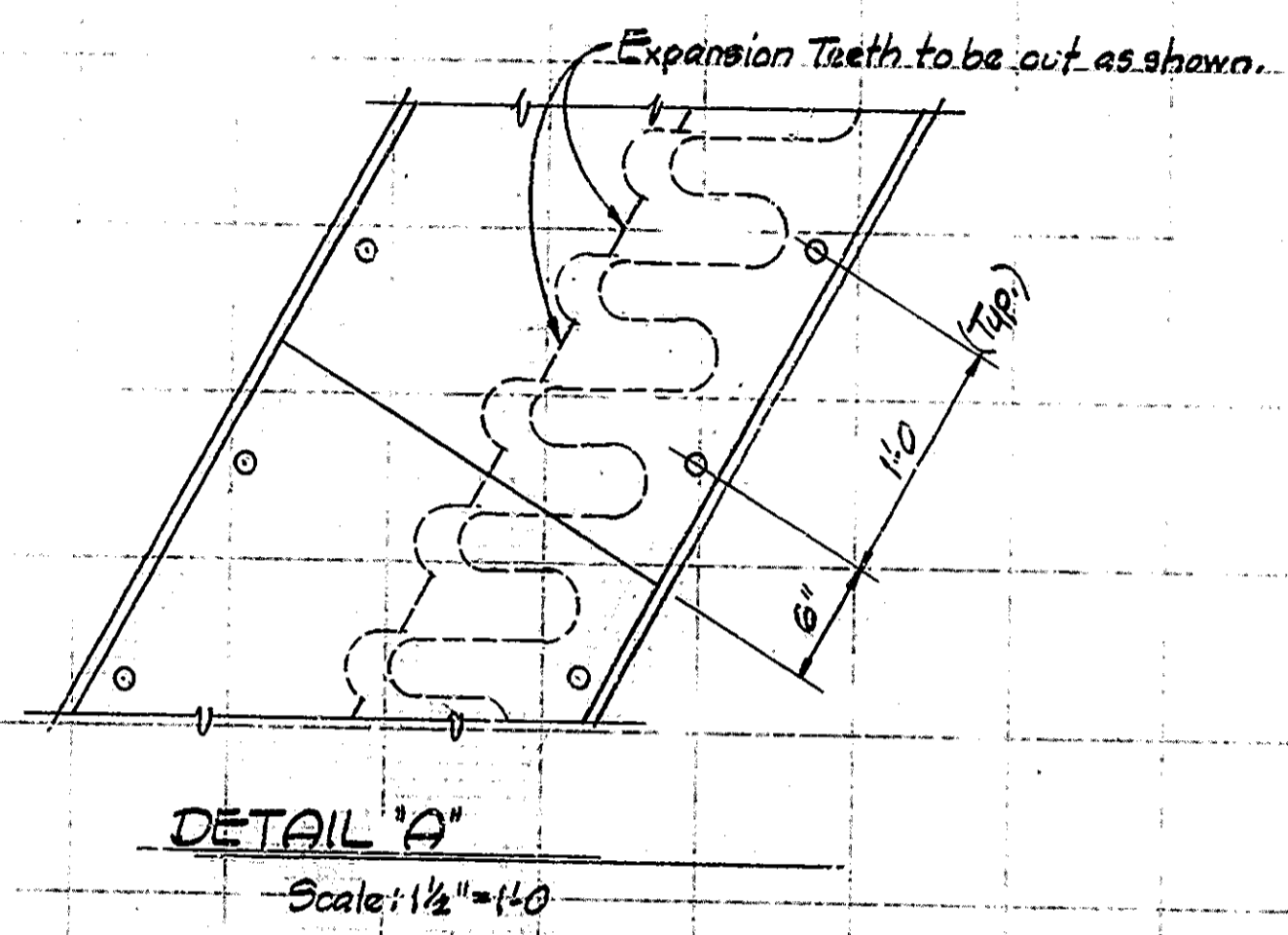
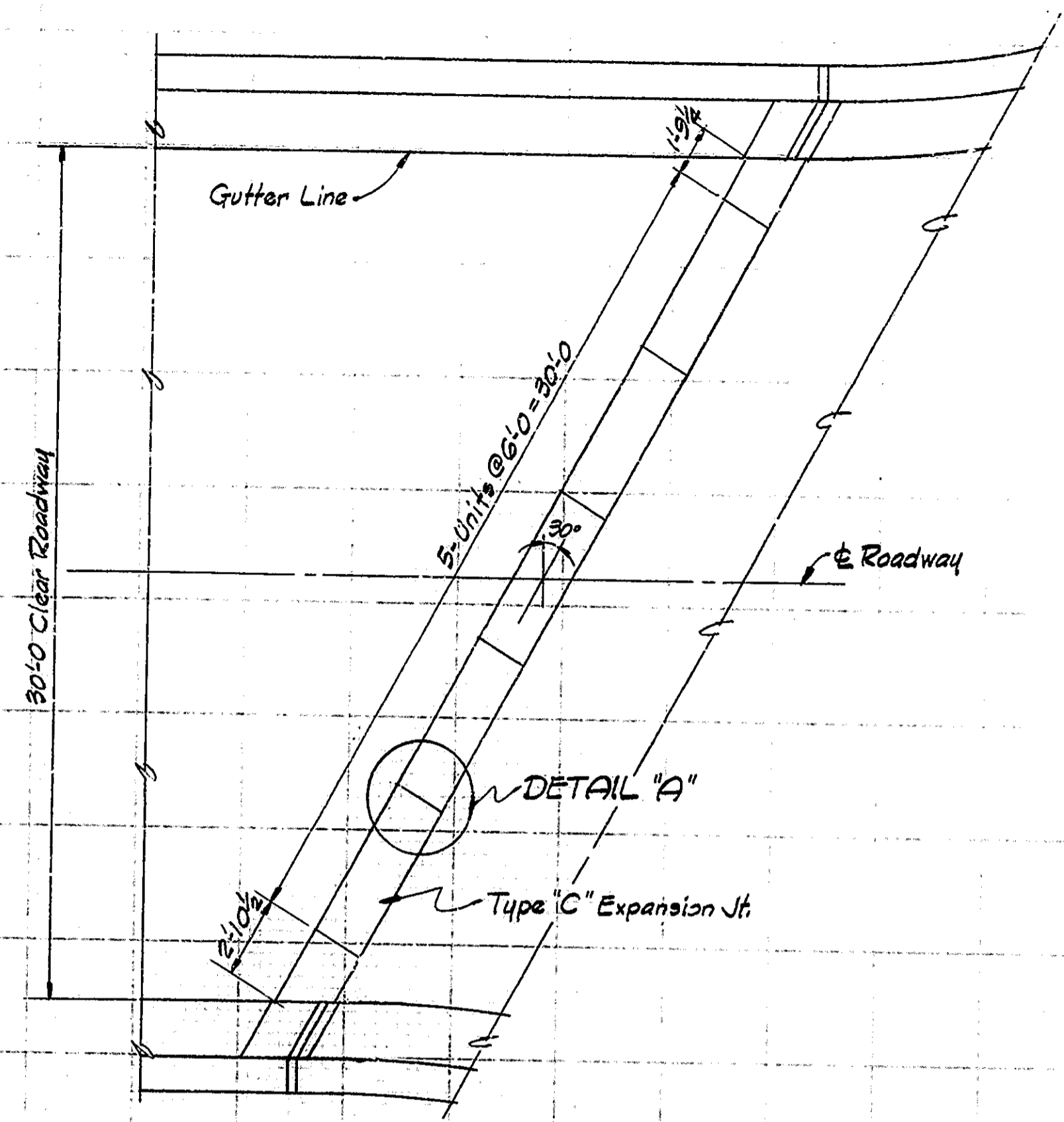
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PROJECT: P-1741(78)14  
CONTRACT NO. B-9104  
BRIDGE FILE: 17414-2352A



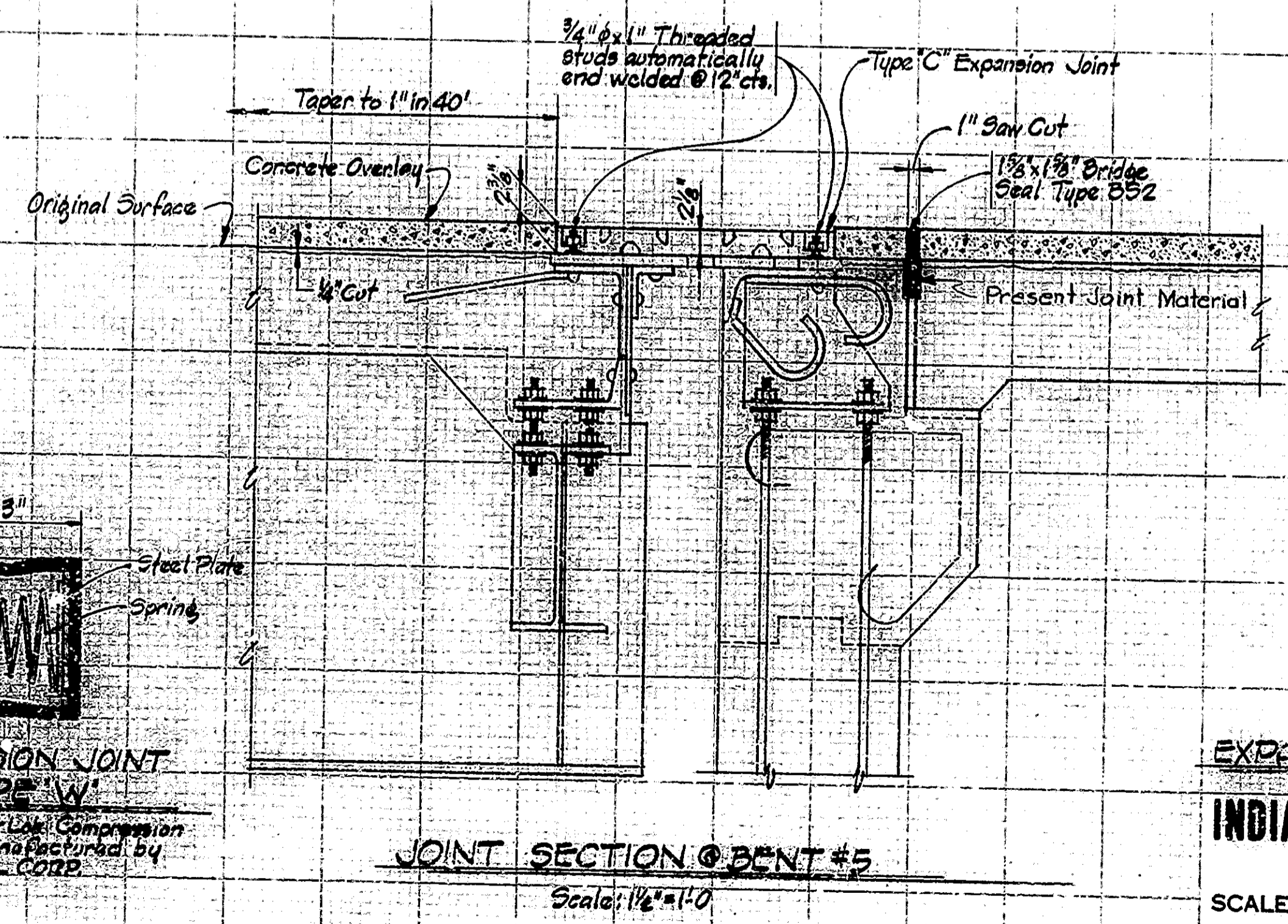
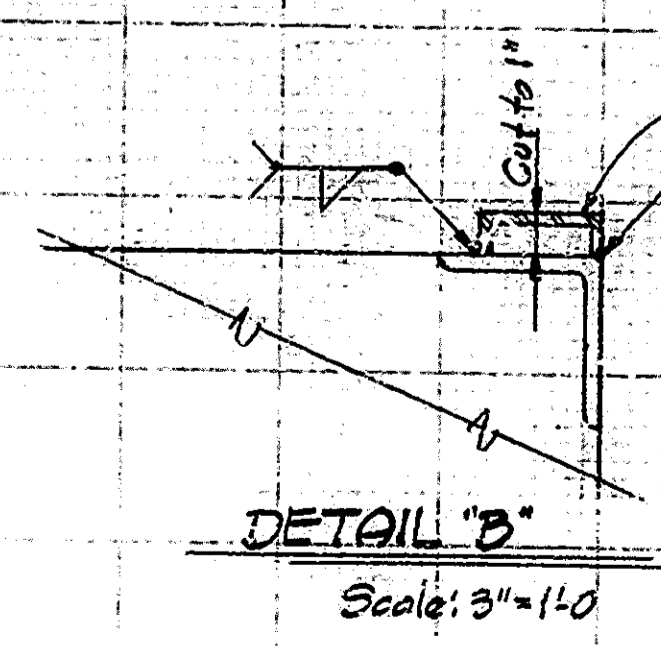
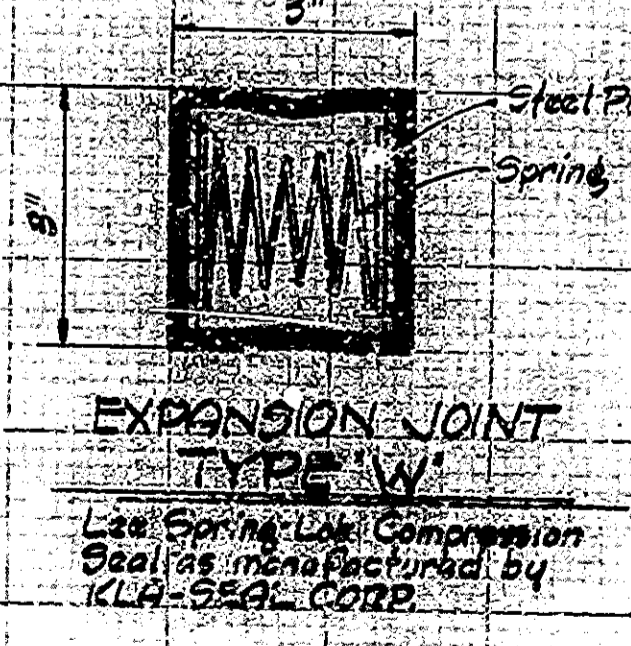
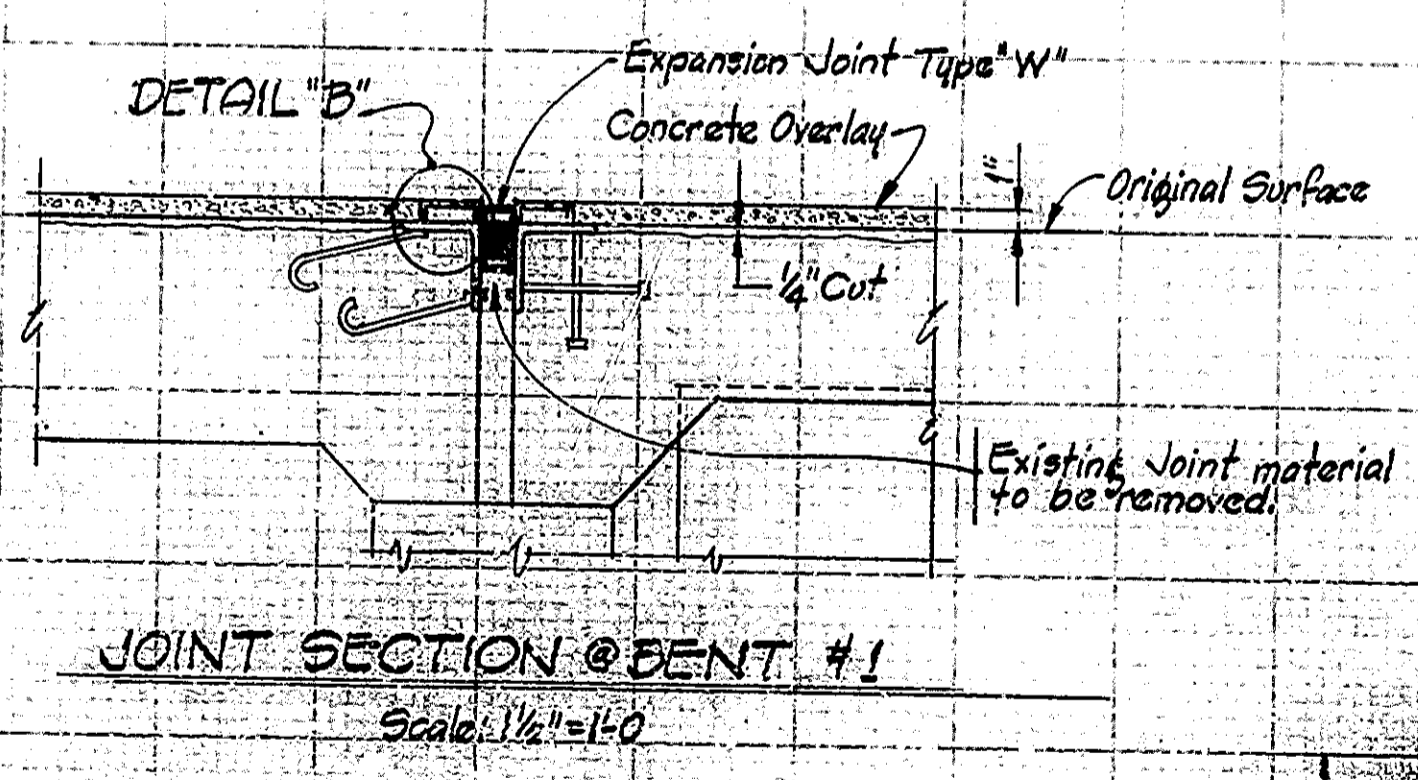
|          |     |
|----------|-----|
| DESIGNED | CKD |
| DRAWN    | CKD |
| TRACED   | CKD |



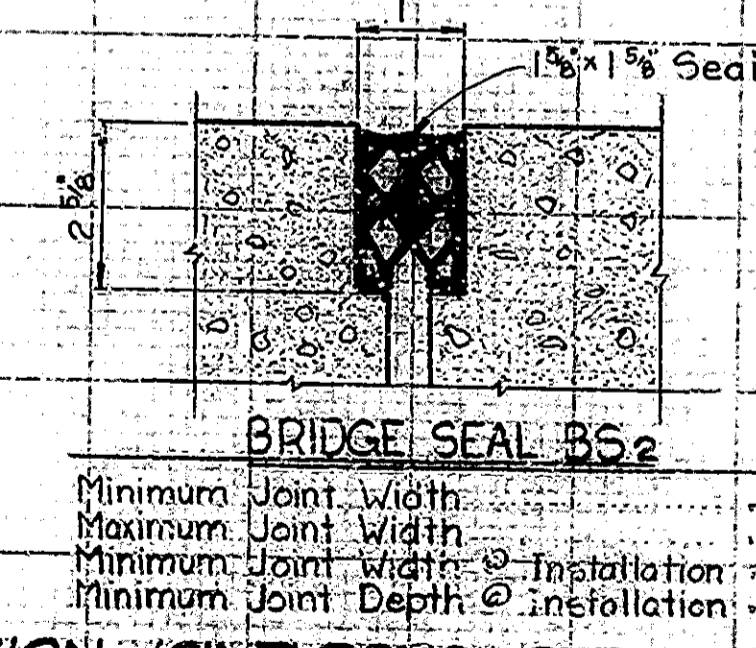
| BRIDGES OVER 20' SPAN |       |                  |        |        |
|-----------------------|-------|------------------|--------|--------|
| PUR. ROAD             | STATE | PROJECT          | FISCAL | TOTAL  |
| NO.                   |       | NO.              | YEAR   | SHEETS |
| 4                     | IND.  | F-74-1<br>(78)14 | 1972   | 5      |
|                       |       |                  |        | 14     |



| SUMMARY                                      |          |          |
|--|----------|----------|
| DESCRIPTION                                  | UNIT     | QUANTITY |
| Common Excavation                            | Cys.     | 60       |
| Borrow                                       | Cys.     | 600      |
| Concrete Pavement Reinf. Cement (9")         | Sys.     | 730      |
| Subbase                                      | Cys.     | 130      |
| Construction Signs (Type A)                  | Each     | 12       |
| Construction Signs (Type B)                  | Each     | 16       |
| Mulched Seeding                              | Sys.     | 2600     |
| Concrete Scarifying                          | Sys.     | 2500     |
| Removal of Scarifying Dust                   | Lump Sum | 1        |
| Concrete Sawing                              | Lin. Ft. | 3000     |
| Handchipping and Cleaning                    | Sys.     | 380      |
| Sandblasting and Cleaning                    | Sys.     | 2190     |
| Modified Portland Cement Concrete (Patching) | Cys.     | 13       |
| Modified Portland Cement Concrete Overlay    | Cys.     | 91       |
| Finishing and Curing                         | Sys.     | 2190     |
| Maintaining Traffic                          | Lump Sum | 1        |
| Contraction Joints Type D-1                  | Lin. Ft. | 164      |
| Temp. Pvm't Marking Tapes                    | Lin. Ft. | 6800     |
| Flexible Traffic Post                        | Each     | 32       |
| 18" C.S. Pipe 16 Ga.                         | Lin. Ft. | 160      |
| 18" Pipe End Section                         | Each     | 4        |
| Surface Sealer                               | Sq. Ft.  | 3520     |
| Expansion Joint Type "C"                     | Lin. Ft. | 70       |
| Joint Type "D-2"                             | Lin. Ft. | 70       |
| Bituminous Mixture for Approaches            | Tons     | 60       |
| Bituminous Material for Tack Coat            | Tons     | 0.1      |
| Pavement Removal                             | Sys.     | 19       |

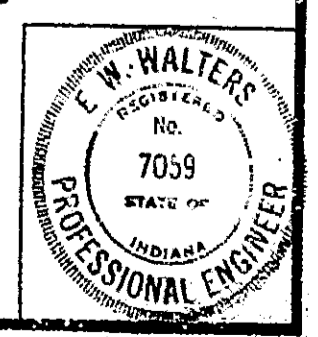


Note: Steel Toothed Joint to be painted before the Type "C" Joint is installed. (Include in cost of Type "C" Joint)



**EXPANSION JOINT DETAILS AND SUMMARY**  
**INDIANA STATE HIGHWAY COMMISSION**

SCALE: As Noted  
DATE: MAY 18, 1972  
RECOMMENDED FOR APPROVAL: E.W. Walters  
DRAWING: D3 OF 3  
PROJECT: F-74-1(78)14  
CONTRACT NO. B-9104  
BRIDGE FILE: I-74-14-2333A



DESIGNED: CKD  
DRAWN: DDB 5/72 CKD  
TRACED: CKD

I-74-14-2333A