

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

| ROUTE                      | DISTRICT & SECTION | COUNTY | TOTAL SHEETS |
|----------------------------|--------------------|--------|--------------|
| *                          | **                 | COOK   | 9            |
| ILLINOIS PROJECT           |                    |        |              |
| * ROUTE: F.A.I. 94 (I-94)  |                    |        |              |
| ** SECTION: 0606.2HB-I(82) |                    |        |              |
| P-91-284-82                |                    |        |              |

INDEX OF SHEETS

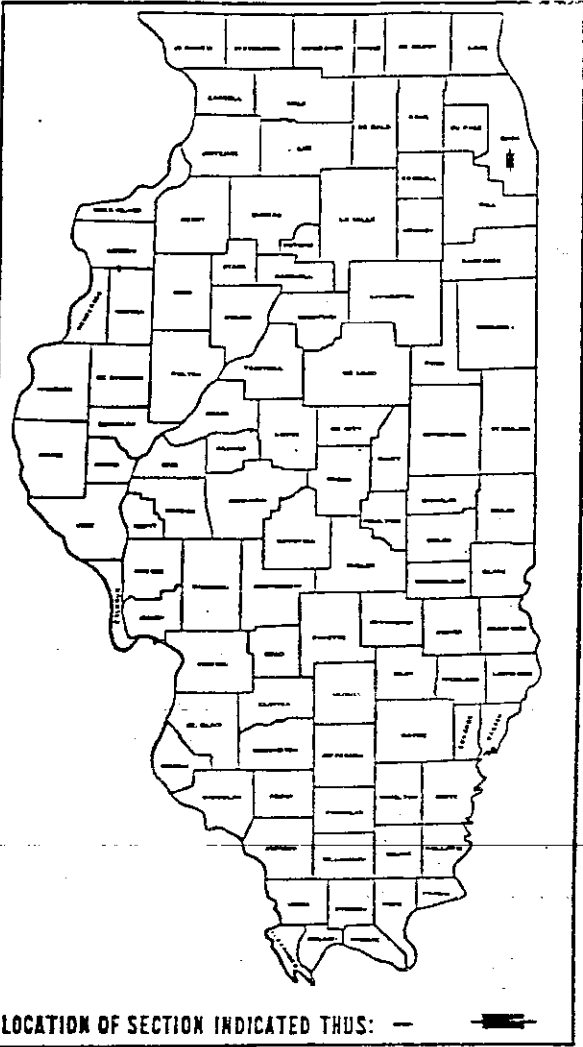
1. NO. 1 SUMMARY OF QUANTITIES  
2. BRIDGE ELEVATION - DECK FRAMING PLAN  
3. DETAILS OF NEW BEAM  
4. CONCRETE REMOVAL ; HANDRAIL REMOVAL  
5. INFORMATION DRAWINGS  
6. TRAFFIC CONTROL DRAWINGS - CROSS OVER-ATTENUATORS  
7. ONE LANE CLOSEURE STANDARD  
8. TWO LANE CLOSEURE STANDARD  
9. MODIFIED U-2 STANDARD

STANDARDS

2298-6 2299-9 2300-2 2314-4 2383-1

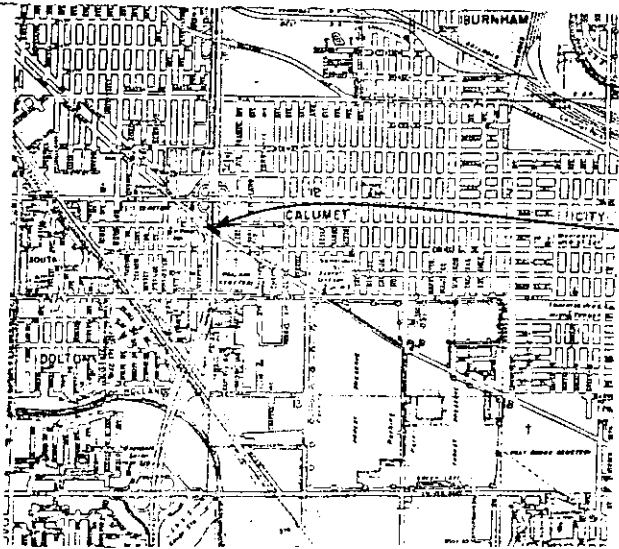
SCALES { PLAN  
PROFILE HOR.  
PROFILE VERT.  
CROSS-SECTIONS

ROUTE: F.A.I. 94 (I-94)  
SECTION: 0606.2HB-I(82)  
COOK COUNTY  
C-91-284-82  
BRIDGE NO. 016-1068



SUMMARY OF QUANTITIES\*

| NO. | ITEM                                                         | UNIT   | QUANTITY |
|-----|--------------------------------------------------------------|--------|----------|
| 4   | INCIDENTAL BITUMINOUS SURFACING                              | TDN    | 40       |
| 4   | CONCRETE REMOVAL                                             | CU YD  | 1.4      |
| 4   | CLASS X CONCRETE                                             | CU YD  | 1.4      |
| 4   | FURNISHING AND ERECTING STRUCTURAL STEEL                     | POUND  | 11,040   |
| 4   | REMOVING AND RE-ERECTING EXISTING RAILING                    | LIN FT | 17       |
| 2   | REMOVE AND RE-ERECT STEEL PLATE BEAM GUARD RAIL, DOUBLE RAIL | LIN FT | 550      |
| 7   | TRAFFIC CONTROL AND PROTECTION                               | L SUM  | 1        |
| 8   | MOBILIZATION                                                 | L SUM  | 1        |
| 1   | TEMPORARY IMPACT ATTENUATOR                                  | EACH   | 4        |
| 7   | INSTALL AND REMOVE TEMPORARY CONCRETE BARRIER                | UNIT   | 155      |
|     | TEMPORARY SLAB SUPPORT SYSTEM                                | L SUM  | 1        |



LOCATION OF IMPROVEMENT  
MICHIGAN CITY RD. over CALUMET EXPRESSWAY

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED: \_\_\_\_\_ 19\_\_\_\_

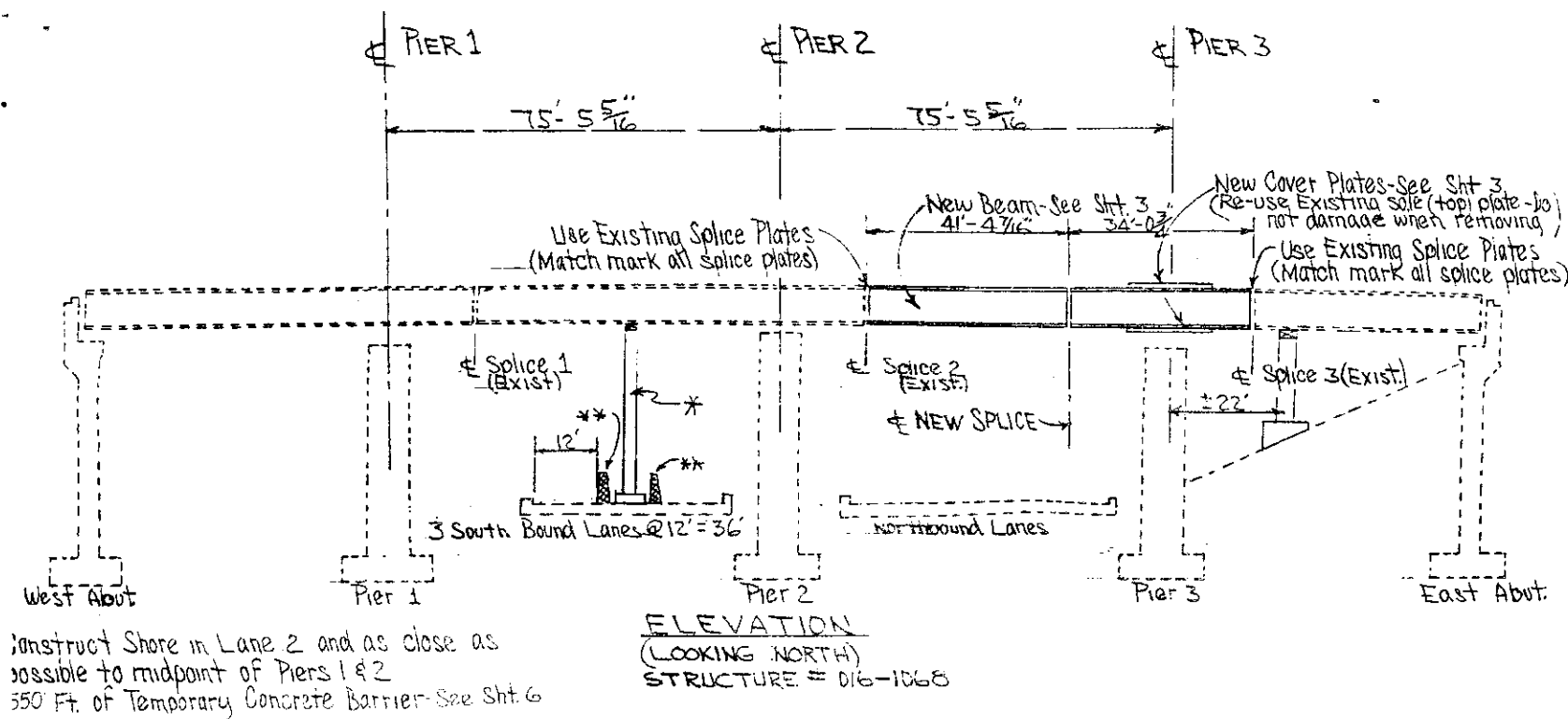
EXAMINED: Feb 3 1983 BY W.W. Ramey

PASSED: Feb 3 1983 BY Thomas R. Broughton

APPROVED: Feb 3 1983 BY W. J. Harrison

\* CONSTR. TYPE CODE - Y007

016-1068



### GENERAL NOTES:

It shall be the responsibility of the Contractor to verify all dimensions and conditions existing in the field prior to construction and ordering of materials.

All new Structural Steel shall conform to AASHTO Classification M-183

All new High Strength Bolts shall be AASHTO Classification M-164

Holes may be subpunched or subdrilled  $\frac{1}{16}$ "  $\phi$  and reamed  $\frac{1}{16}$ "  $\phi$  for  $\frac{7}{8}$ "  $\phi$  high strength bolts in the field when new beam is positioned

The Contractor shall provide a support system for the slab and sidewalk in the area of beam removal in order to maintain "as-built" slab profile. The support system shall be approved by the Engineer. See Special Provisions.

All new Structural Steel shall receive one(1) shop coat of red lead paint and two(2) field coats of paint to match the existing color. Damaged areas shall be spot-painted to match the existing color.

### PHASE WORK PROCEDURE

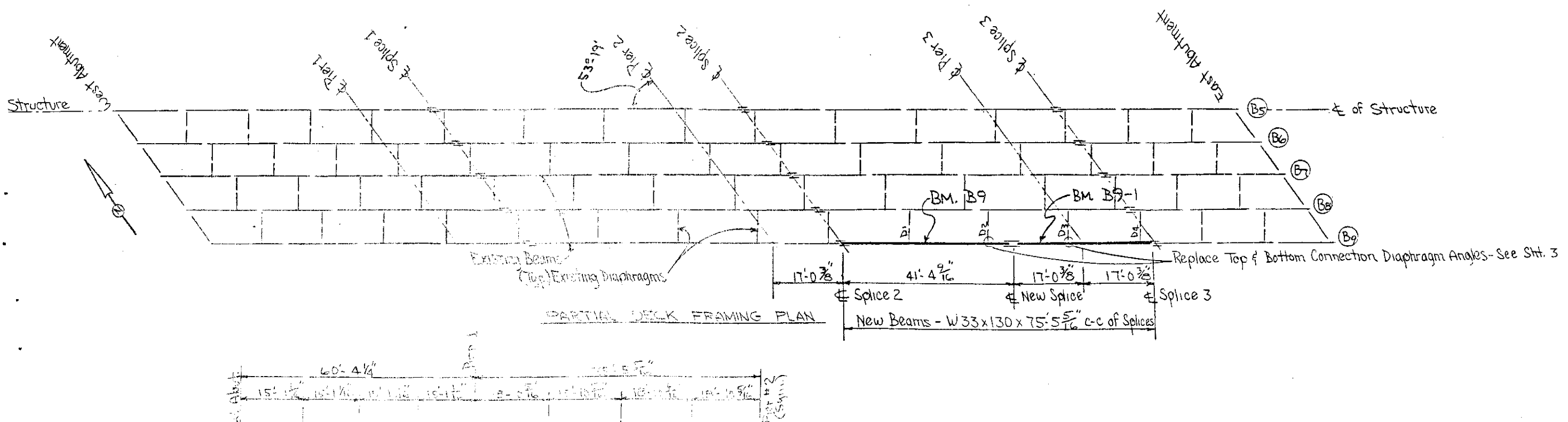
**PHASE I**-May be performed on Week-Day- See Special Provisions "Keeping the Expressway Open to Traffic" and "Protection of the Work."

- (a)-construct cross-overs on Calumet Expressway (b)-Close Lane 2 on Michigan City Road (c)-Construct shore between Pier 3 and East Abutment (d)-remove concrete over 3 splices-Remove Metal Railing

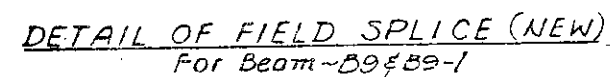
**PHASE II**-Work to be performed on Sunday-work may be started at day-break

- (a)-Erect shore in Lane 2, S.B. Calumet Expressway (b)-Close N.B. Calumet Expressway and divert traffic onto Lane 1 of S.B. Calumet Expressway Roadway utilizing Cross-overs (c)-Remove & replace steel beam-Repour concrete over 3 splices-Reset Railing

ALL TRAFFIC CONTROL COSTS NECESSARY FOR THIS PROJECT TO BE INCLUDED IN THE LUMP SUM PRICE FOR "TRAFFIC CONTROL AND PROTECTION"

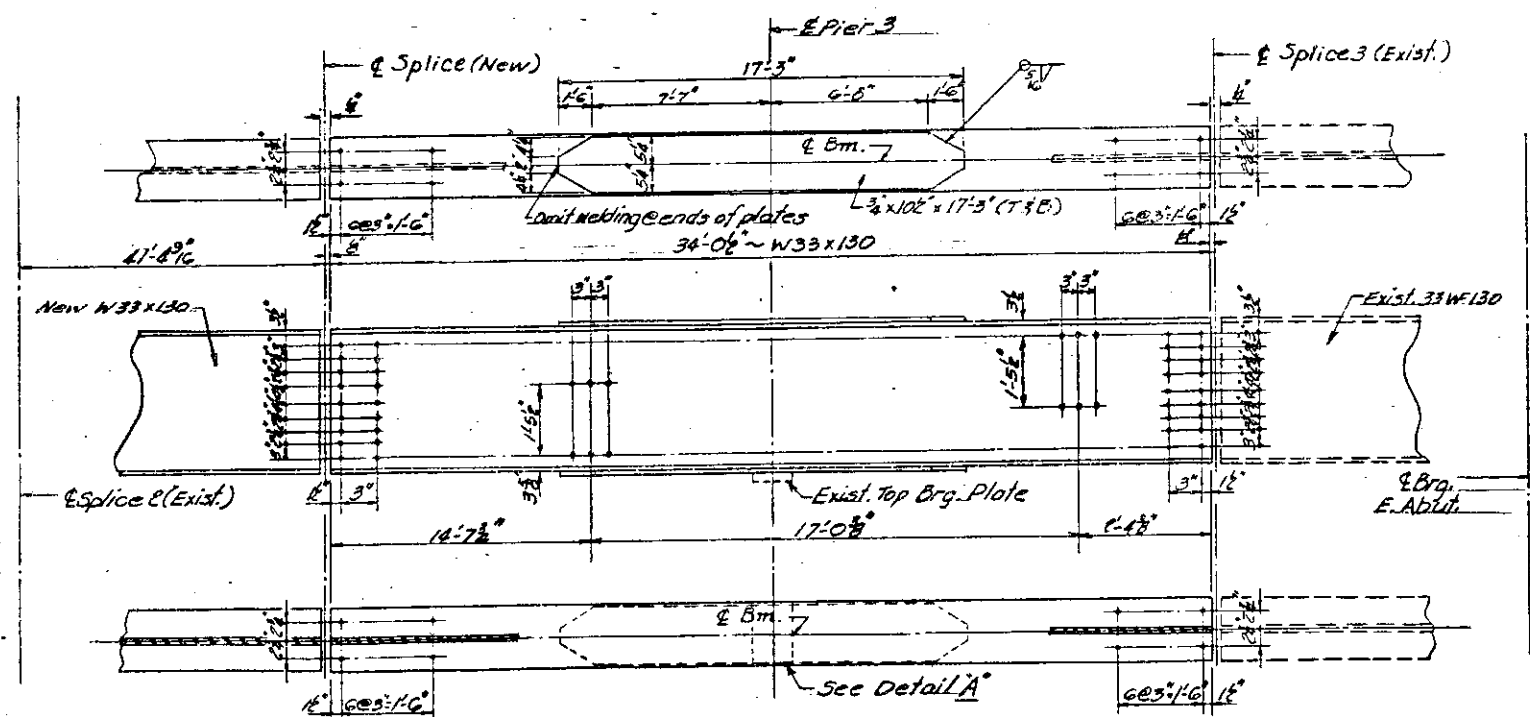


| ROUTE  | SECTION          | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------|------------------|--------|--------------|-----------|
| FAI 94 | 0606.2-HB-I (82) | COOK   | 9            | 3         |



The drawings show the reinforcement details for diaphragms. The top drawing is a plan view of a diaphragm wall, showing existing reinforcement (dashed lines) and new reinforcement (solid lines). The new reinforcement consists of 4 bars of size 16mm (4-16) and 4 bars of size 12mm (4-12). The existing reinforcement consists of 4 bars of size 12mm (4-12). The bottom drawing is a cross-section of a diaphragm wall, showing existing reinforcement (dashed lines) and new reinforcement (solid lines). The new reinforcement consists of 4 bars of size 16mm (4-16) and 4 bars of size 12mm (4-12). The existing reinforcement consists of 4 bars of size 12mm (4-12). The wall thickness is 1500mm.

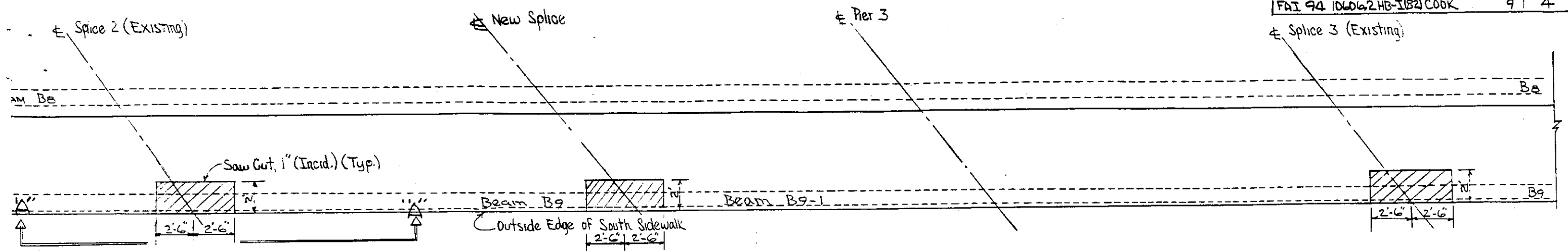
Schade and re-use  
existing Top Str. Plate.



BEAM-B9-1

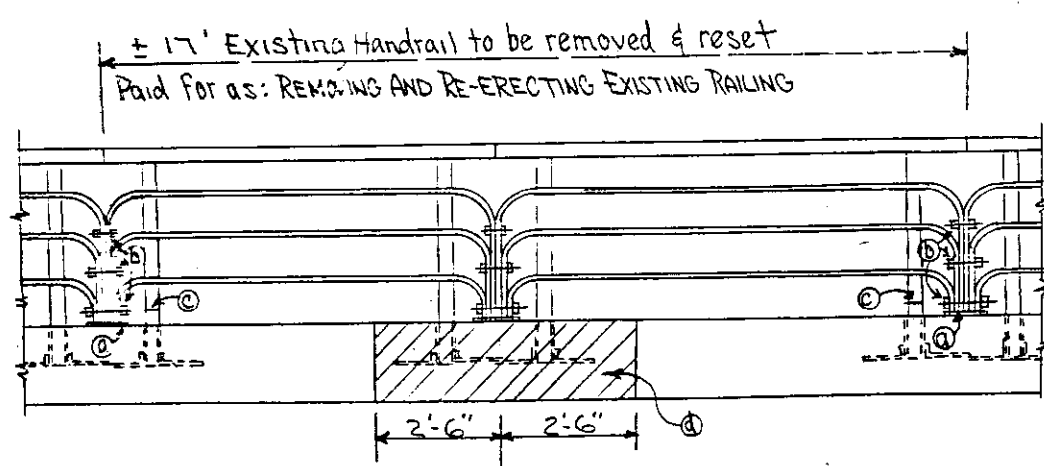
## BRIDGE REPAIRS

| ROUTE  | SECTION        | COUNTY | SHEETS | TOTAL SHEET NO. |
|--------|----------------|--------|--------|-----------------|
| FAI 94 | 106062HB-1(82) | COOK   | 9      | 4               |



**DETAILS OF CONCRETE REMOVAL**

NOTE: Hatched Areas in sidewalk to be removed & replaced with Class X Concrete. Cut Reinforcement Bars in the slab and sidewalk as required to splice beams. Use #5 reinforcement bars in rebuilding removed areas. Lap bars a min. of 15" each side of cut.

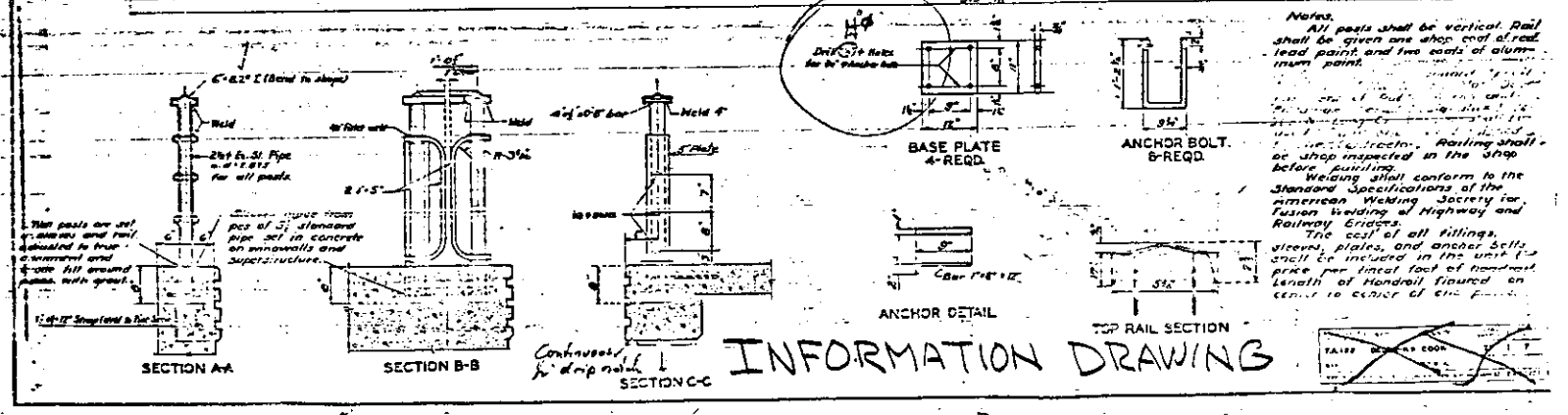
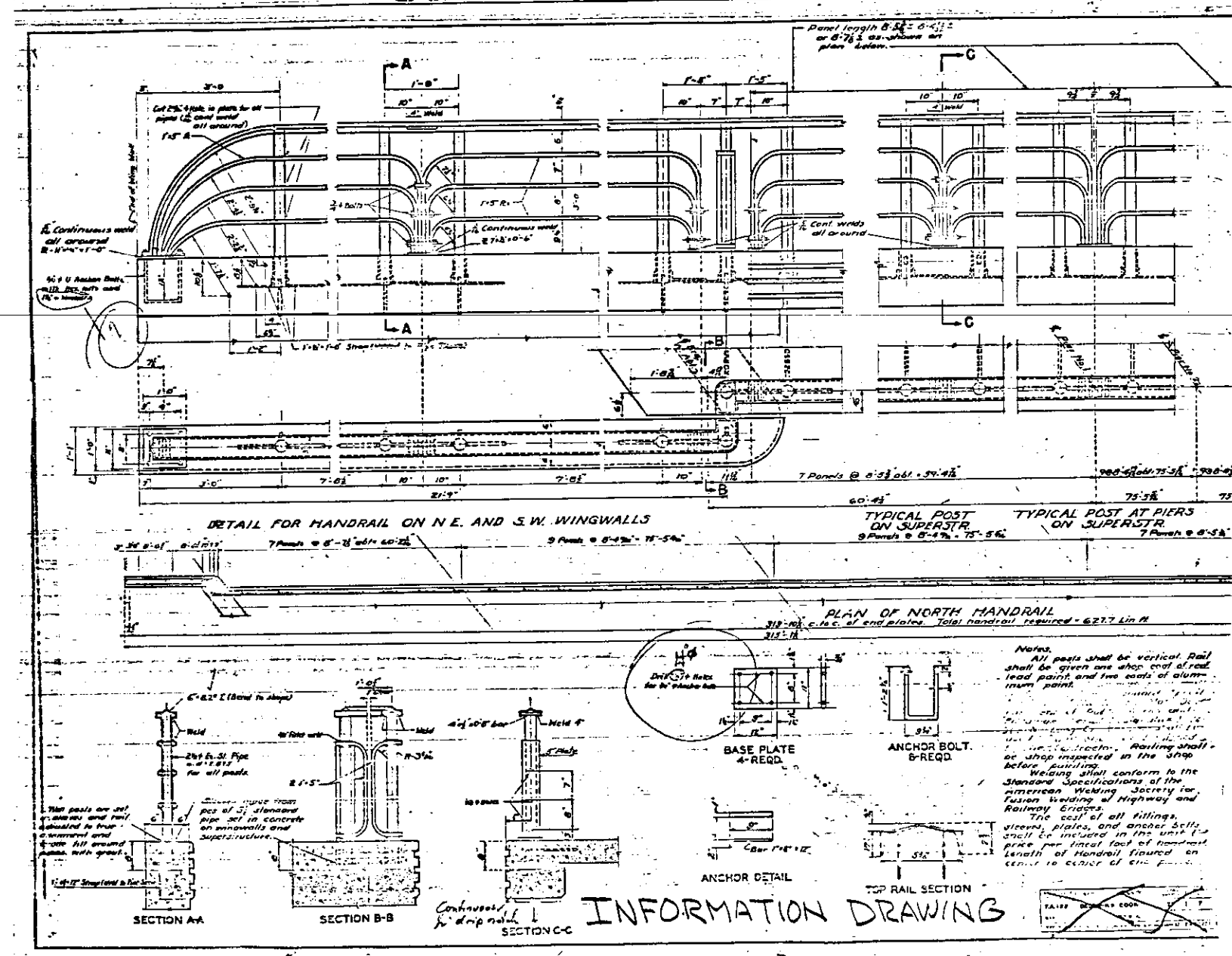
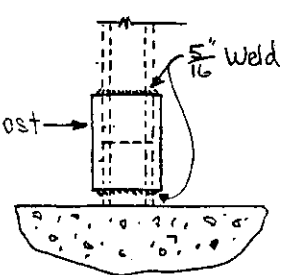


± 17' Existing Handrail to be removed & reset  
Paid for as: REMOVING AND RE-ERECTING EXISTING RAILING

**SECTION "A-A"**

**SUGGESTED HANDRAIL REMOVAL PROCEDURE**

Break all welds necessary for removal of railing.  
Remove all bolts necessary for removal of railing.  
Cut the 2 1/2" O.D. Pipe Post approximately 4" above sidewalk surface. NOTE: Provide 3" Pipe Sleeve (3" I.D.) when resetting pipe post.  
Remove concrete over beam splice. Pipe post anchoring device to remain intact.  
Reset Handrail Panels after new steel beam has been installed. Pour concrete.



**INFORMATION DRAWING**

# INDEX OF SHEETS

|         |    |                                                            |
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|         | 5  | SUPERSTRUCTURE-STRUCTURAL STEEL DETAILS                    |
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| 15      |    | TYPICAL CROSS SECTION; STANDARD 1744                       |
| 16 & 17 |    | CROSS SECTIONS                                             |
| 18      |    | FIELD OFFICE                                               |
| 19      |    | DETAIL OF APPROACH SLABS                                   |
|         |    | TYPICAL CROSS SECTION OF SLAG EMBANKMENT; STANDARD SYMBOLS |
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|         |    | STANDARD 2016 R                                            |
|         |    | STANDARD 1882                                              |
| 21      |    | STANDARD 1514                                              |
|         |    | STANDARD 1516                                              |
| 21A     |    | STANDARD 1766 R, 1790 S                                    |

## STATE OF ILLINOIS DEPARTMENT OF PUBLIC WORKS AND BUILDINGS DIVISION OF HIGHWAYS PLANS FOR PROPOSED FEDERAL AID HIGHWAY

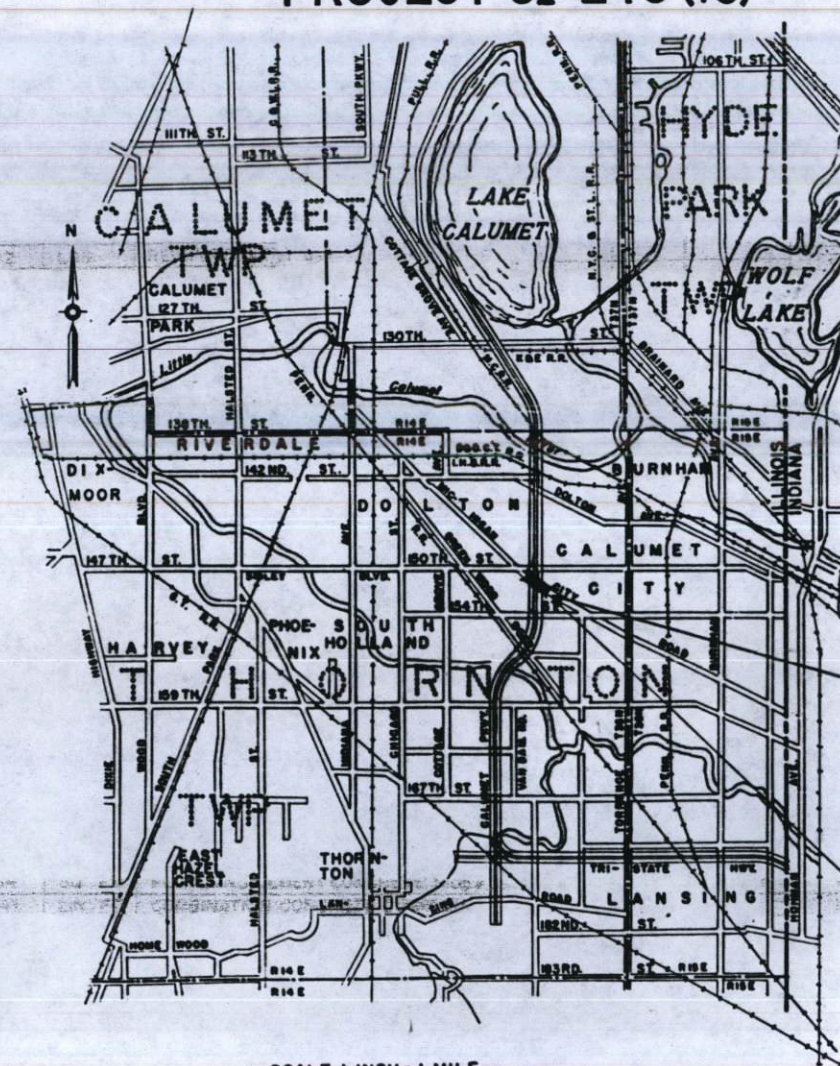
F. A. ROUTE 122 SEC. 0606.2-HB,-HF

### MICHIGAN CITY ROAD GRADE SEPARATION OVER CALUMET PARKWAY PROJECT UI-246 (10)

PLAN 1 INCH = 80 FT.  
PROFILE HOR. 1 INCH = 80 FT.  
PROFILE VERT. 1 INCH = 10 FT.  
CROSS-SECTIONS 1 INCH = 5 FT.

#### SUMMARY OF QUANTITIES SECTION 0606.2-H-B

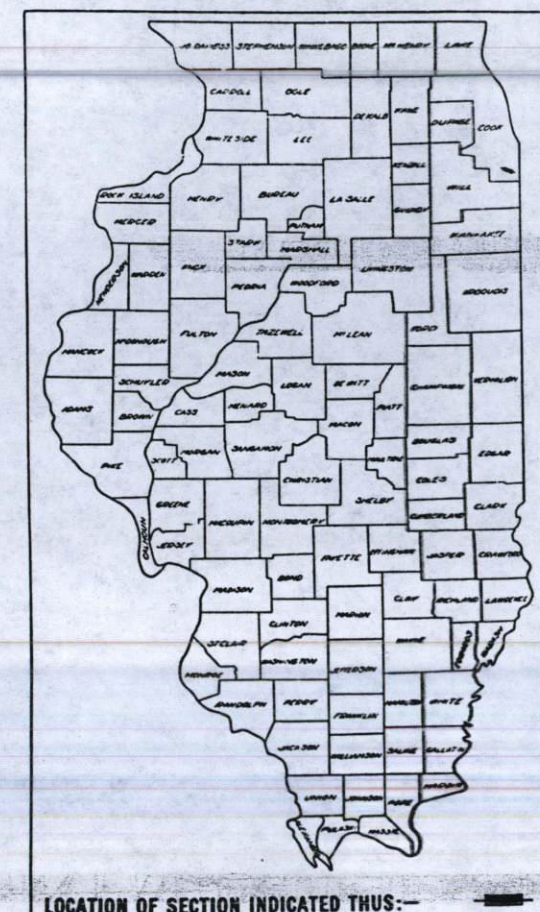
| QUANTITY | UNIT     | ITEMS                                         |
|----------|----------|-----------------------------------------------|
| 846.9    | CU. YDS. | CLASS "X" CONCRETE                            |
| 177012   | LBS.     | REINFORCEMENT BARS                            |
| 400120   | LBS.     | STRUCTURAL STEEL                              |
| 5        | EACH     | TEST PILES                                    |
| 5566     | LIN. FT. | FURNISHING TREATED PILES 20.1' TO 38'         |
| 13       | EACH     | FURNISHING & ERECTING ROW MARKERS             |
| 625      | LIN. FT. | METAL HANDRAIL                                |
| 1        | EACH     | NAME PLATE                                    |
| 680      | CU. YDS. | GRANULAR EMBANKMENT                           |
| 41       | CU. YDS. | GRANULAR BACKFILL                             |
| 95       | CU. YDS. | BROKEN STONE BACKFILL                         |
| 310      | SQ. YDS. | SLOPE PAVEMENT                                |
| 506      | CU. YDS. | EARTH EXCAVATION                              |
| 100      | CU. YDS. | ROCK EXCAVATION                               |
| 6        | CU. YDS. | TRENCH BACKFILL                               |
| 90       | LIN. FT. | 8" STORM SEWER TYPE 1                         |
| 6        | LIN. FT. | 8" STORM SEWER TYPE 2                         |
| 1030     | CU. YDS. | BORROW EXCAVATION                             |
| 30       | LIN. FT. | 6" CORRUGATED METAL PIPE                      |
| 214      | LIN. FT. | 6" PERFORATED CORRUGATED METAL PIPE           |
| 7        | EACH     | CATCH BASINS TYPE A TYPE 5 FRAME OPEN LID     |
| 1        | EACH     | MANHOLE TO BE ADJUSTED                        |
| 3570     | SQ. YDS. | PORTLAND CEMENT CONCRETE PAVEMENT 10"         |
| 365      | SQ. YDS. | PORTLAND CEMENT CONCRETE PAVEMENT 16"-10"-16" |
| 3731     | SQ. YDS. | PAVEMENT FABRIC                               |
| 434      | SQ. FT.  | PORTLAND CEMENT CONCRETE SIDEWALK 5"          |
| 1041     | LIN. FT. | COMBINATION CONCRETE CURB & GUTTER TYPE 6     |
| 146      | LIN. FT. | CONCRETE CURB TYPE 4                          |
| 34       | SQ. FT.  | LONGITUDINAL CURB EXPANSION JOINT             |
| 1663     | SQ. YDS. | SODDING                                       |
| 283      | CU. YDS. | TOP SOIL                                      |
| 025      | ACRE     | SEEDING                                       |
| 2604     | LIN. FT. | DRIVING TIMBER PILES 22' LONG                 |
| 1232     | LIN. FT. | DRIVING TIMBER PILES 25' LONG                 |
| 1650     | LIN. FT. | DRIVING TIMBER PILES 33' LONG                 |
| 400120   | LBS.     | STRUCTURAL STEEL                              |



SCALE 1 INCH = 1 MILE

SECTION 0606.2-HB includes the construction of an I-Beam bridge on Michigan City Road over Calumet Parkway in the Village of Dolton and Calumet City. 2 spans @ 60'-4" and 2 spans @ 75'-5" at Station 55+83.48, a point approximately 643.0 feet south of the NE corner of the SE 1/4 of Section 11 T 36N, R 14E, of the 3rd PM, with the exception of furnishing, fabricating, shop painting & delivery fab. Dolton of the Structural Steel. Also includes paved approaches.

SECTION 0606.2-HF includes furnishing, fabricating, shop painting & delivery fab. Dolton of the Structural Steel.



LOCATION OF SECTION INDICATED THUS: [Symbol]

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

SUBMITTED Dec 24 1947

EXAMINER C. H. Apple DISTRICT ENGINEER

PASSE 3-25-48 ROAD ENGINEER

APPROVED W. J. Burman CHIEF OF BUREAU

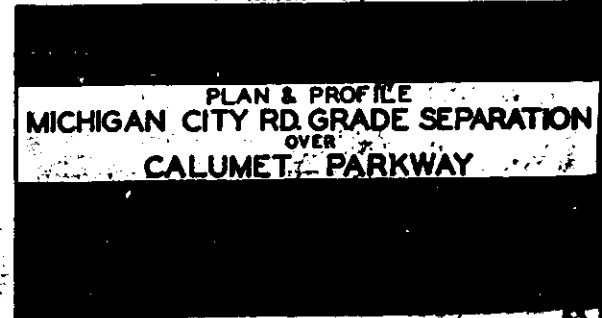
APPROVED W. J. Burman DISTRICT ENGINEER

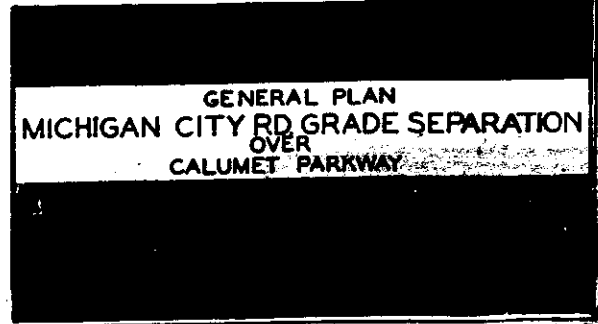
RECOMMENDED FOR APPROVAL DATE [ ]

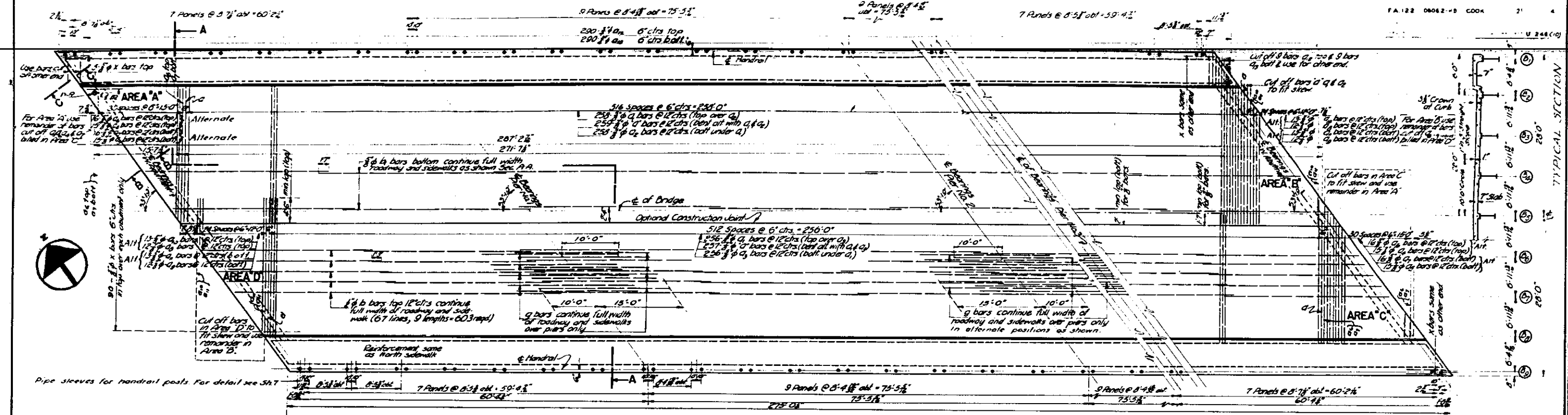
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PUBLIC ROADS ADMINISTRATION  
FEDERAL WORKS AGENCY

APPROVED DATE [ ]

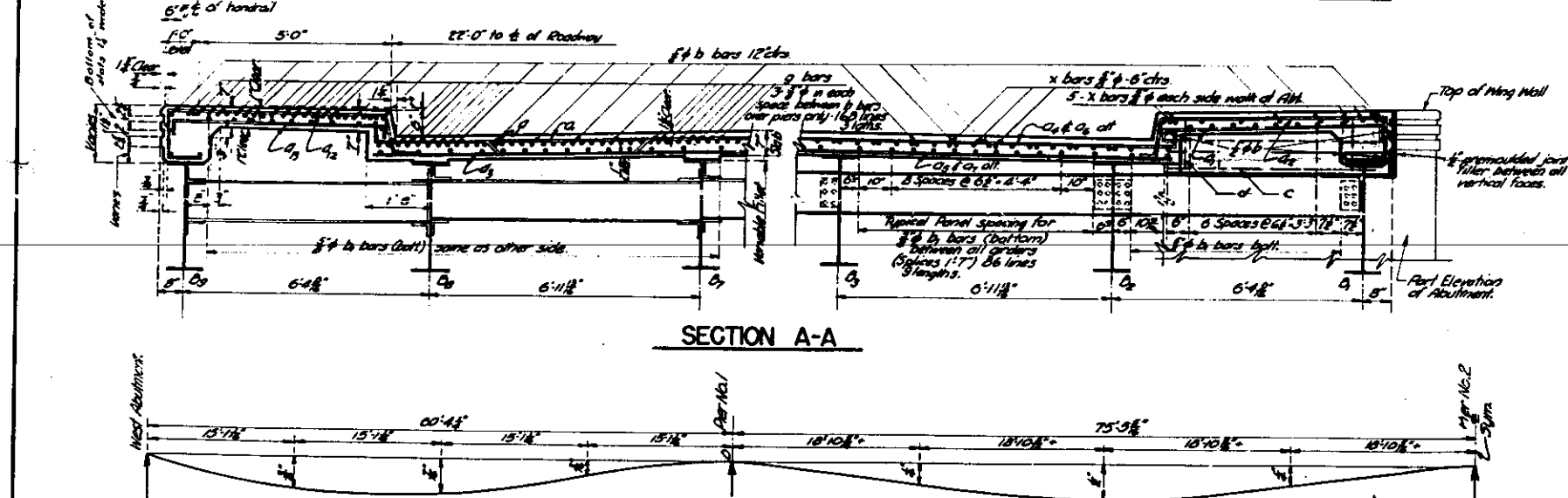
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PUBLIC ROADS ADMINISTRATION  
FEDERAL WORKS AGENCY



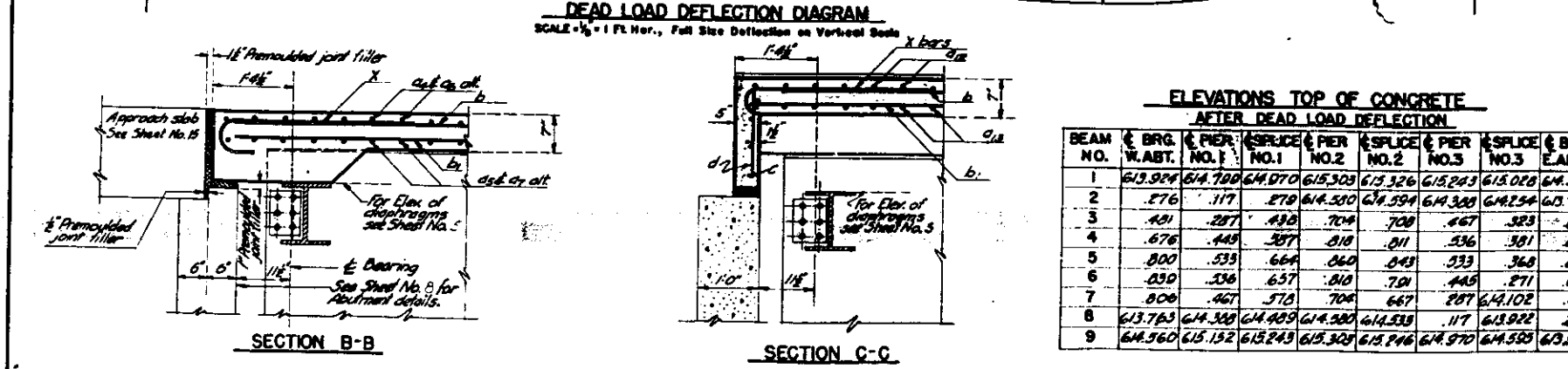




PLAN

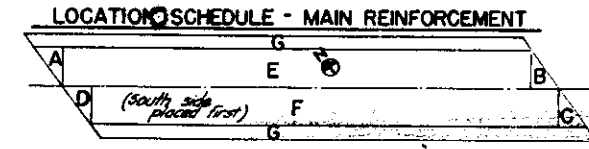


SECTION A-A



SECTION B-B

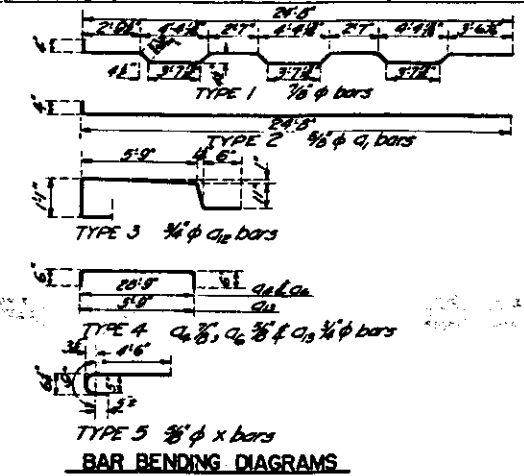
SECTION C-C



| AREA | TOP               | BOTTOM            | BENT              | REMARKS                                         |
|------|-------------------|-------------------|-------------------|-------------------------------------------------|
| A    | 12 bars @ 12" c/c | 12 bars @ 12" c/c | None              | Not included in bill. Use cut offs from Area C. |
| B    | 12 bars @ 12" c/c | 12 bars @ 12" c/c | None              | Not included in bill. Use cut offs from Area D. |
| C    | 12 bars @ 12" c/c | 12 bars @ 12" c/c | None              | Listed in bill long enough for Area C & D.      |
| D    | 12 bars @ 12" c/c | 12 bars @ 12" c/c | None              | Listed in bill long enough for Areas D & E.     |
| E    | 12 bars @ 12" c/c | 12 bars @ 12" c/c | 12 bars @ 12" c/c | Listed in bill.                                 |
| F    | 12 bars @ 12" c/c | 12 bars @ 12" c/c | 12 bars @ 12" c/c | Listed in bill.                                 |
| G    | 12 bars @ 12" c/c | 12 bars @ 12" c/c | None              |                                                 |

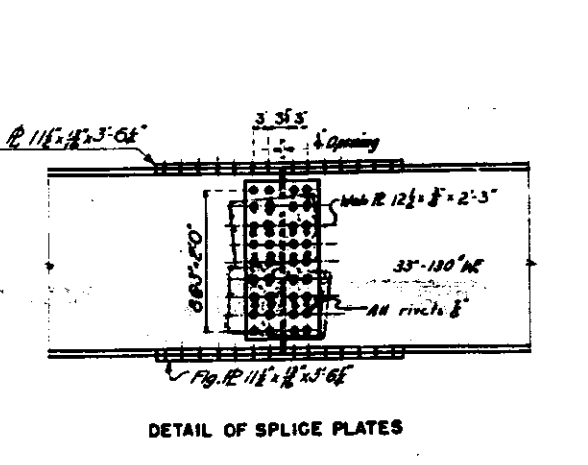
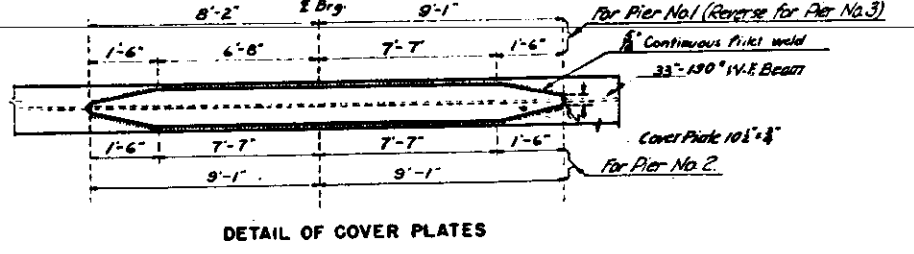
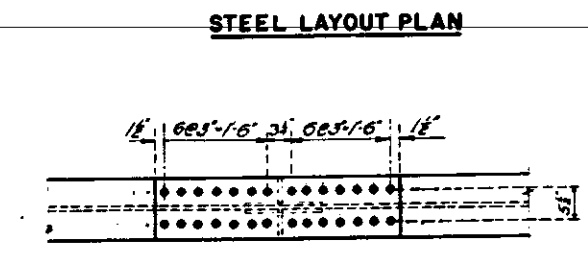
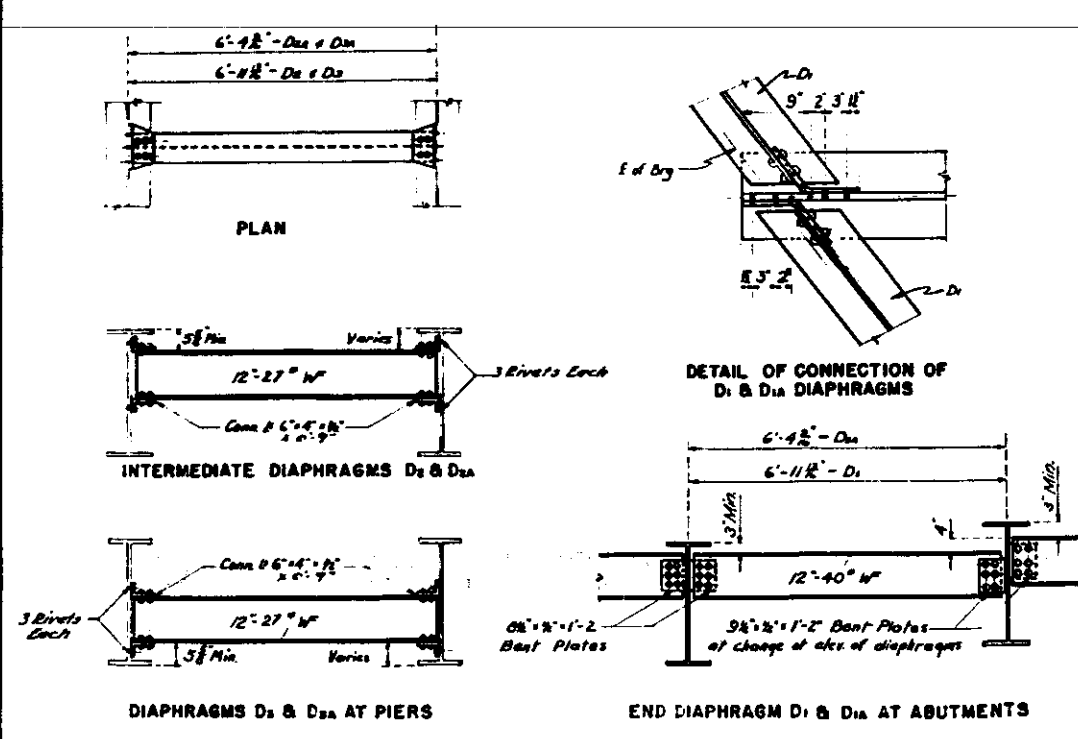
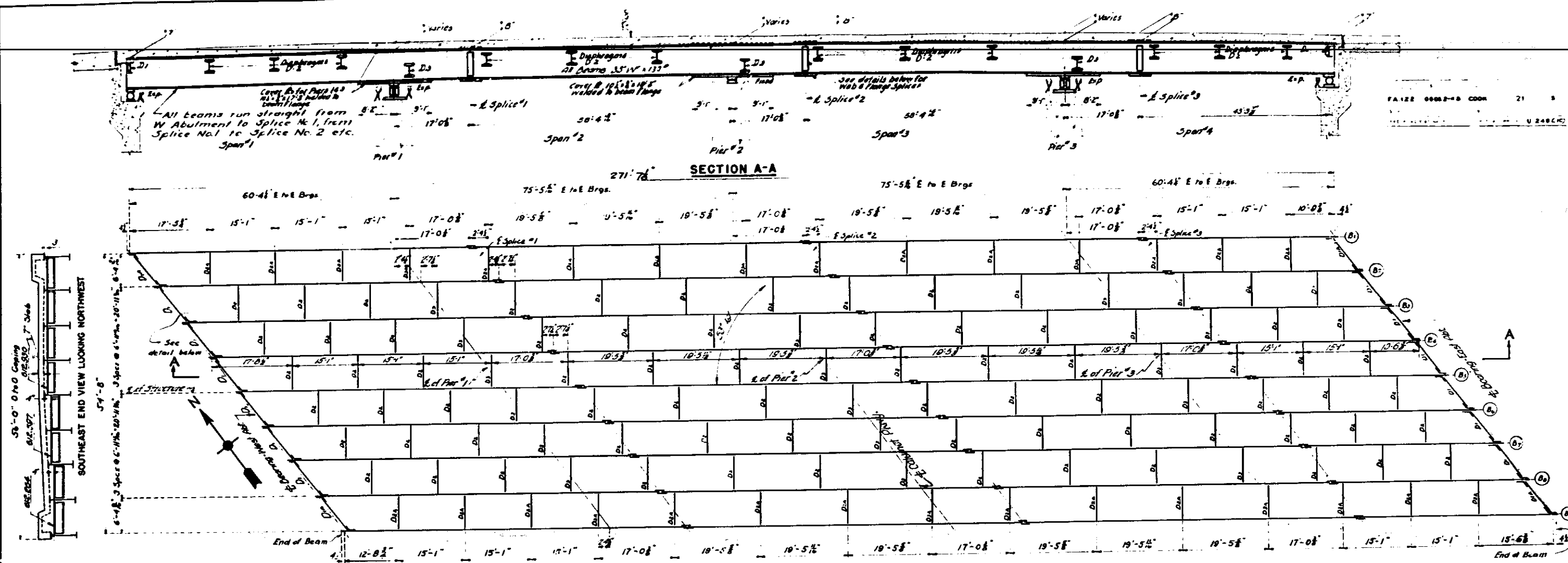
| Bar | No. | Size | Length | Type     |
|-----|-----|------|--------|----------|
| A   | 516 | #4   | 25'-0" | 1        |
| B   | 514 | #4   | 25'-0" | 2        |
| C   | 258 | #4   | 25'-0" | Straight |
| D   | 256 | #4   | 25'-0" | 4        |
| E   | 15  | #4   | 25'-0" | Straight |
| F   | 15  | #4   | 25'-0" | 4        |
| G   | 16  | #4   | 25'-0" | Straight |
| H   | 16  | #4   | 25'-0" | 4        |
| I   | 12  | #4   | 25'-0" | Straight |
| J   | 12  | #4   | 25'-0" | 4        |
| K   | 13  | #4   | 25'-0" | Straight |
| L   | 13  | #4   | 25'-0" | 4        |
| M   | 580 | #4   | 25'-0" | 3        |
| N   | 580 | #4   | 25'-0" | 4        |
| O   | 200 | #4   | 25'-0" | 5        |
| P   | 603 | #4   | 25'-0" | Straight |
| Q   | 774 | #4   | 25'-0" | 4        |
| R   | 504 | #4   | 25'-0" | 4        |
| S   | 12  | #4   | 25'-0" | 4        |
| T   | 0   | #4   | 25'-0" | 4        |

Class X Concrete 2175, 3945  
Reinforcement Bars Lbs. 112055.  
Structural Steel Lbs. 386280  
Welded Steel Handrail Lbs. 6227



Note: Class X Concrete shall be used throughout.

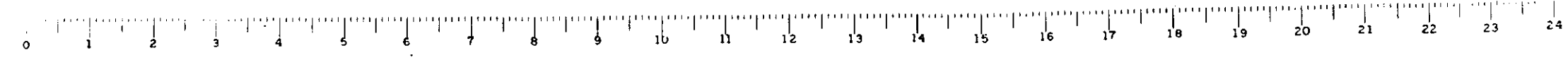
SUPERSTRUCTURE CONCRETE DETAILS  
MICHIGAN CITY RD. GRADE SEPARATION  
OVER  
CALUMET PARKWAY

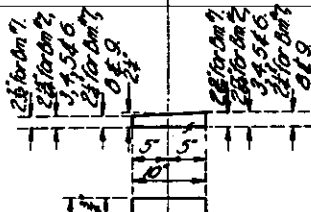
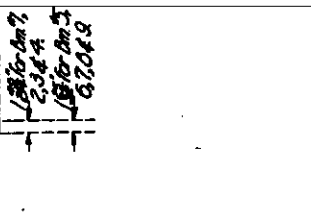
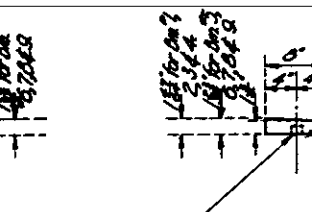
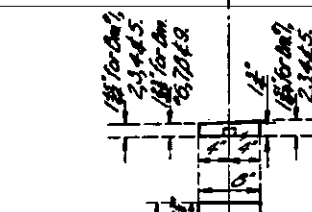
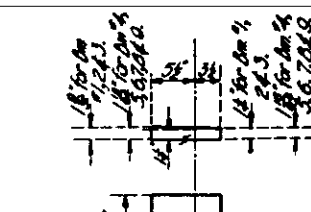
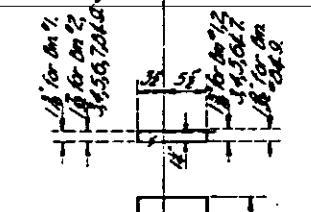
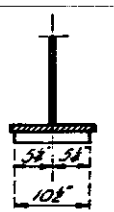
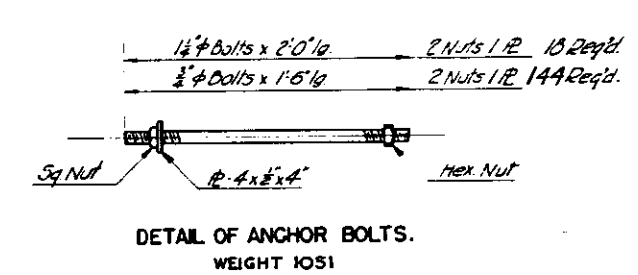
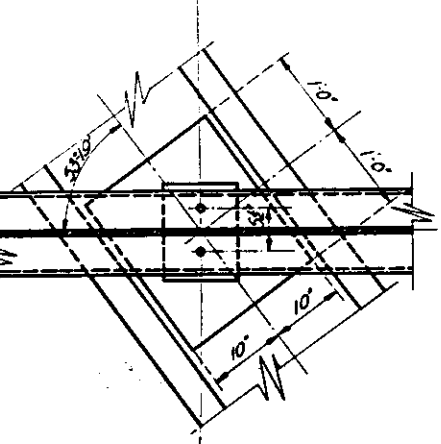
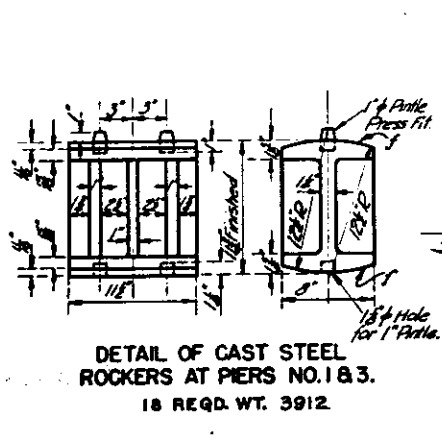
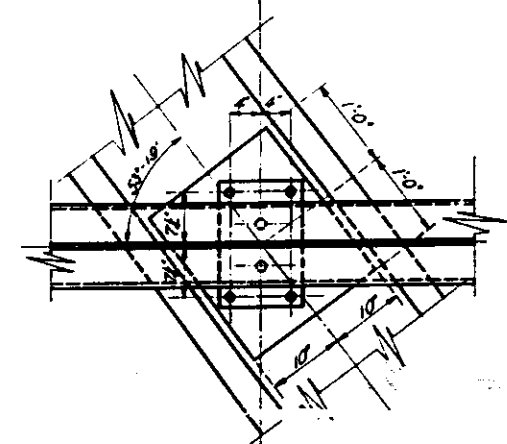
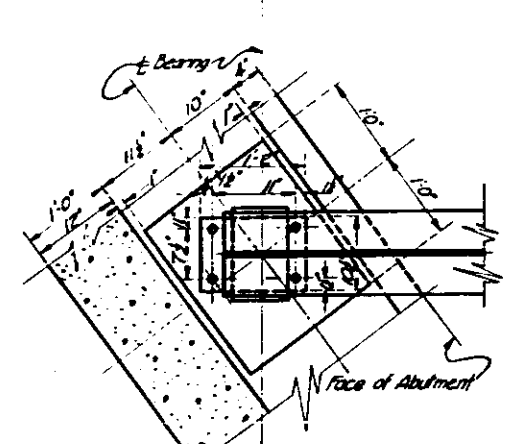
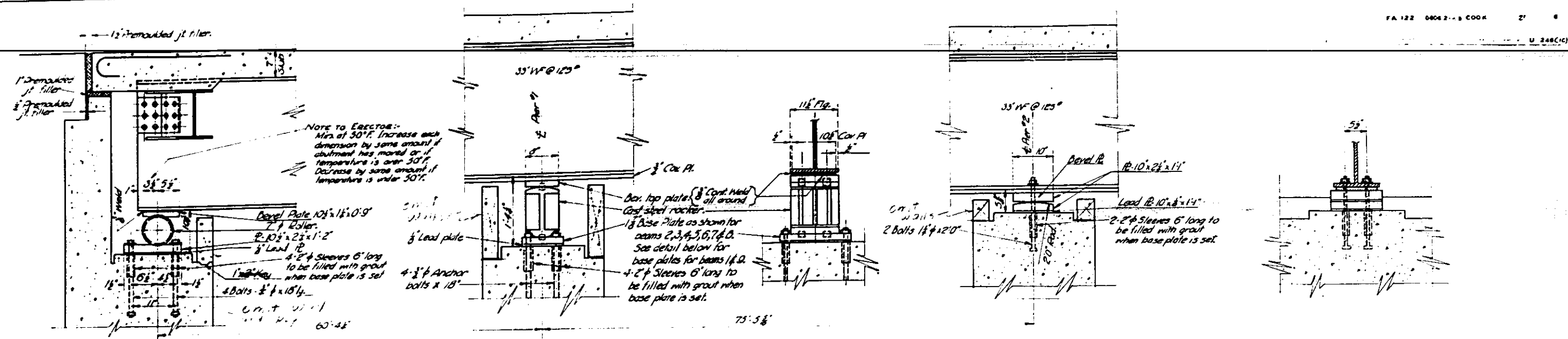


| Beam No. | TOP OF BEAM ELEVATIONS |          |            |          |            |          |            |                 |  |  |
|----------|------------------------|----------|------------|----------|------------|----------|------------|-----------------|--|--|
|          | ± Drg. W. Abut.        | ± Pier 1 | ± Splice 1 | ± Pier 2 | ± Splice 2 | ± Pier 3 | ± Splice 3 | ± Drg. E. Abut. |  |  |
| 1        | 612.608                | 613.359  | 613.571    | 613.946  | 613.927    | 613.696  | 613.620    | 613.244         |  |  |
| 2        | 608                    | 410      | 612        | 436      | 327        | 604      | 520        | 400             |  |  |
| 3        | 589                    | 579      | 772        | 900      | 614.041    | 743      | 657        | 223             |  |  |
| 4        | 613.083                | 733      | 920        | 614.096  | 145        | 612      | 715        | 235             |  |  |
| 5        | 216                    | 625      | 997        | 156      | 177        | 609      | 701        | 216             |  |  |
| 6        | 253                    | 623      | 990        | 154      | 124        | 721      | 604        | 083             |  |  |
| 7        | 223                    | 760      | 911        | 613.920  | 001        | 563      | 637        | 612.000         |  |  |
| 8        | 180                    | 601      | 622        | 656      | 613.066    | 323      | 250        | 682             |  |  |
| 9        | 244                    | 712      | 644        | 646      | 647        | 342      | 195        | 600             |  |  |

Note:  
H-20 Loading and distribution (10 ft. traffic lanes)  
used in design.

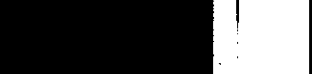
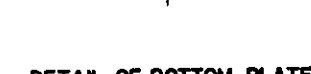
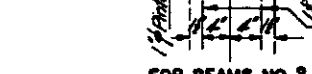
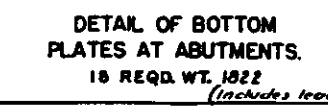
STRUCTURAL STEEL DETAILS  
MICHIGAN CITY GRADE SEPARATION  
OVER  
CALUMET PARKWAY

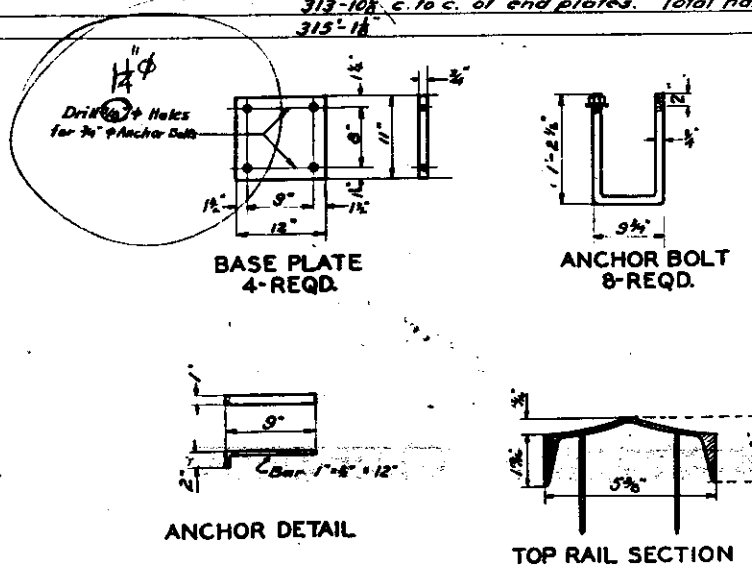
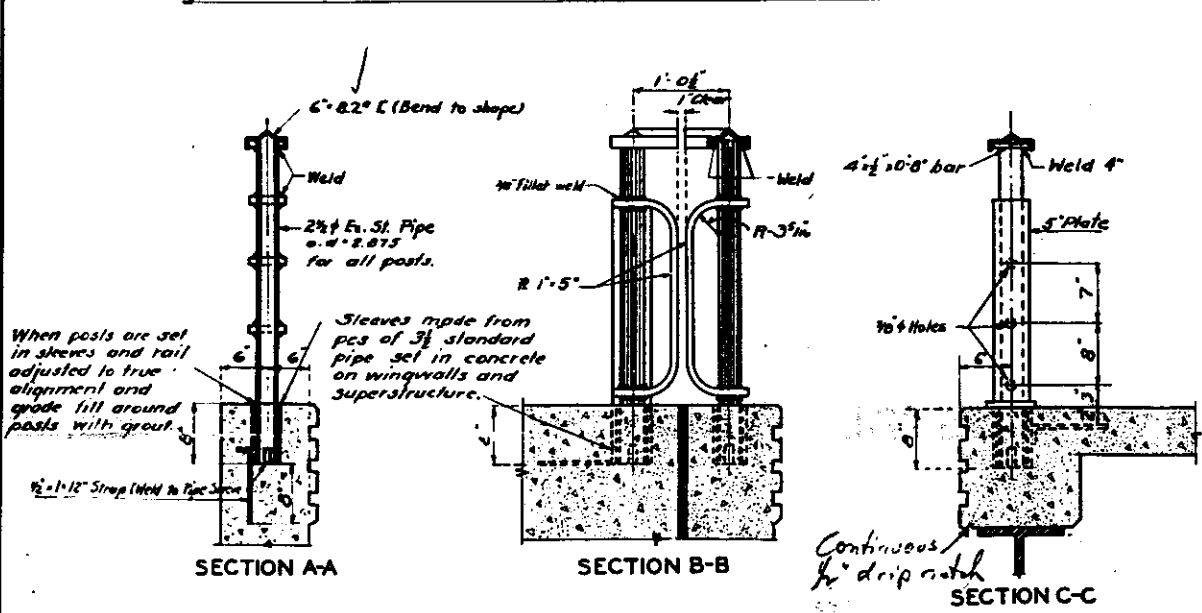
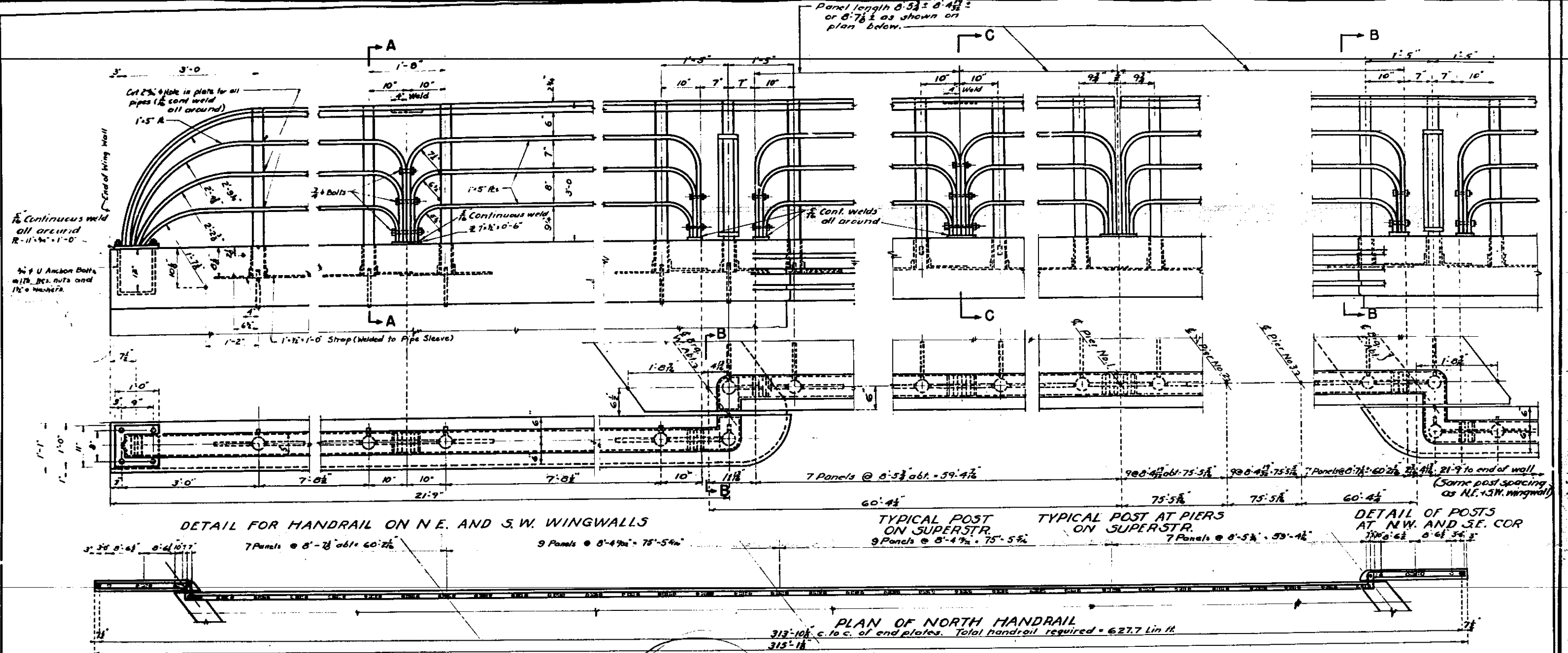




Notes:  
Rollers shall be turned down from a solid bar. For all plates in contact with the rollers the edges adjacent to the collars shall be cut square or finished.  
Weight of lead plates under bearing plates is included in weight of structural steel. Payment for same will be made at Contract Unit Price for Structural Steel.  
Estimated weight of rollers, plates and anchor bolts are to be included in weight of Structural Steel.  
The surface of all plates in contact with rollers or rockers shall be finished in accordance with A-1.5.6.24 of the Standard Specifications.

ROCKERS, ROLLERS & BEARING PLATES  
MICHIGAN CITY RD. GRADE SEPARATION  
OVER  
CALUMET PARKWAY





**Notes.**  
 All posts shall be vertical. Rail shall be given one shop coat of red lead paint, and two coats of aluminum paint.  
 Railing shall be shop inspected in the shop before painting.  
 Welding shall conform to the Standard Specifications of the American Welding Society for Fusion Welding of Highway and Railway Bridges.  
 The cost of all fillings, sleeves, plates, and anchor bolts shall be included in the unit bid price per linear foot of handrail. Length of Handrail figured on center to center of end plates.

**HANDRAIL DETAILS**  
**MICHIGAN CITY RD. GRADE SEPARATION**  
**OVER**  
**CALUMET PARKWAY**

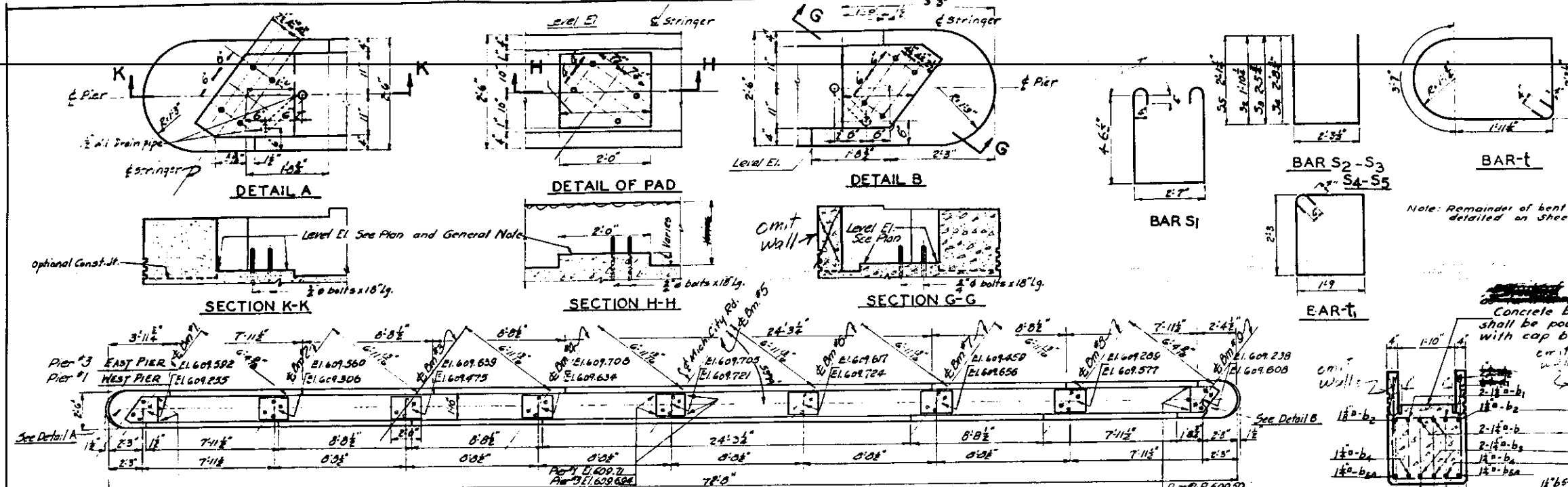
|                                                                                                          |           |        |               |            |
|----------------------------------------------------------------------------------------------------------|-----------|--------|---------------|------------|
| DATE: 1-1-50                                                                                             | SEC:      | COUNT: | TOTAL SHEETS: | SHEET NO.: |
| 1-1-50                                                                                                   | 0000-2-HB | COOR   | 21            | 7          |
| PREPARED BY: [Signature]<br>CHECKED BY: [Signature]<br>DESIGNED BY: [Signature]<br>DRAWN BY: [Signature] |           |        |               |            |



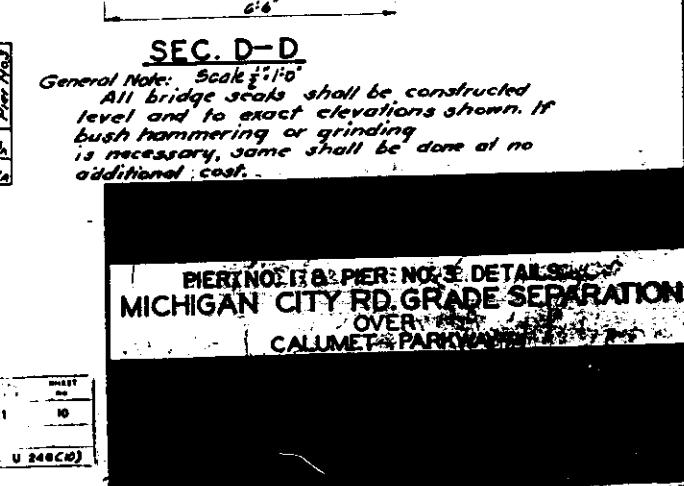
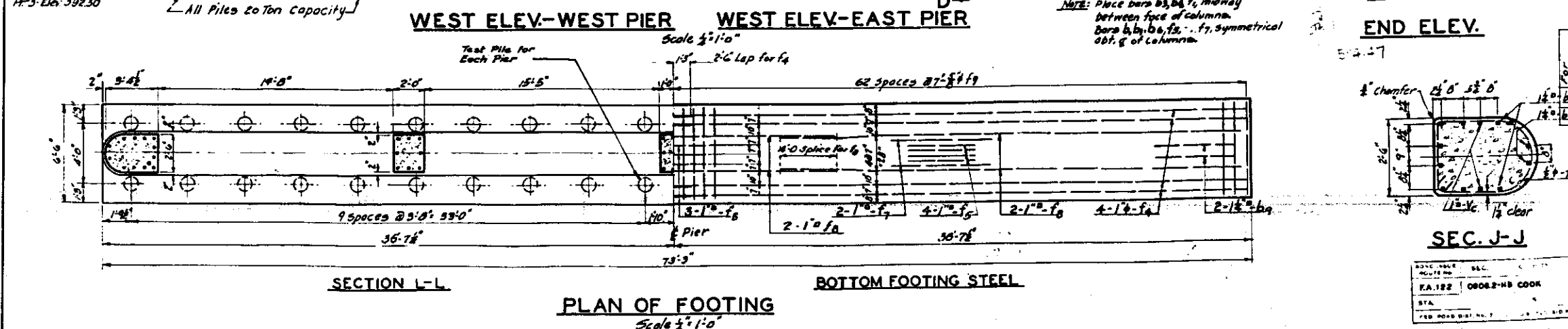
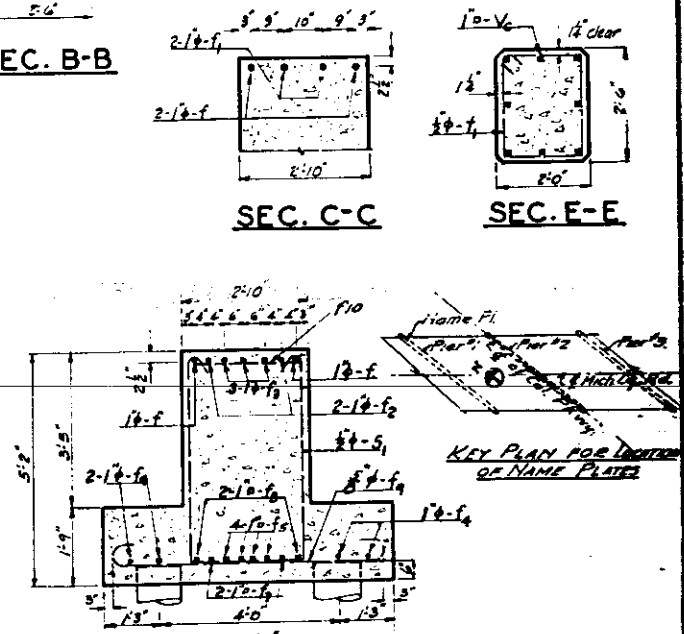
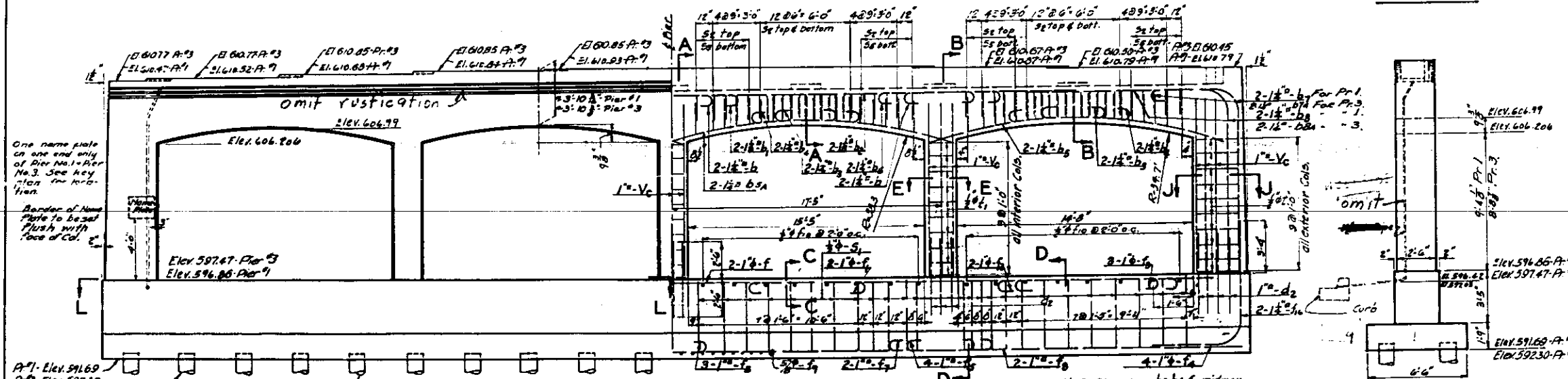


# REINFORCEMENT BAR SCHEDULE EAST & WEST PIERS

| MARK | SIZE | LENGTH | TYPE | LOCATION         | NO. |
|------|------|--------|------|------------------|-----|
| 1    | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 2    | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 3    | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 4    | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 5    | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 6    | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 7    | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 8    | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 9    | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 10   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 11   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 12   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 13   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 14   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 15   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 16   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 17   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 18   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 19   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 20   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 21   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 22   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 23   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 24   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 25   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 26   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 27   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 28   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 29   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 30   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 31   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 32   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 33   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 34   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 35   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 36   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 37   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 38   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 39   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 40   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 41   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 42   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 43   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 44   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 45   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 46   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 47   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 48   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 49   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 50   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 51   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 52   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 53   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 54   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 55   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 56   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 57   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 58   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 59   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 60   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 61   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 62   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 63   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 64   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 65   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 66   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 67   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 68   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 69   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 70   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 71   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 72   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 73   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 74   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 75   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 76   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 77   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 78   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 79   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 80   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 81   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 82   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 83   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 84   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 85   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 86   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 87   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 88   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 89   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 90   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 91   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 92   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 93   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 94   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 95   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 96   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 97   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 98   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 99   | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |
| 100  | 1/2" | 10'-0" | Str. | Long. Top of Cap | 2   |

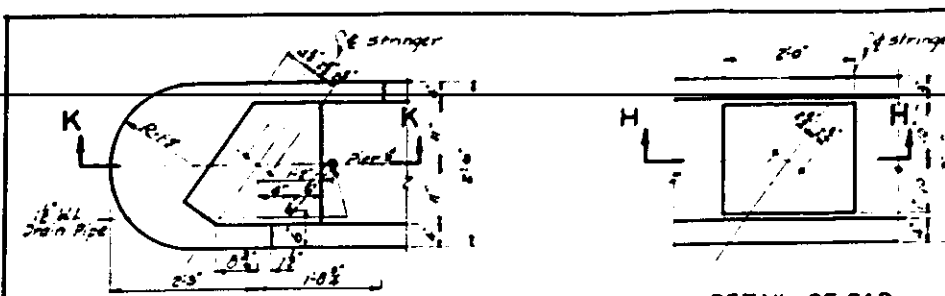


PLAN OF EAST & WEST PIER CAP  
(PIER NO. 3 = EAST PIER) Scale 1/4" = 1'-0" (PIER NO. 1 = WEST PIER)

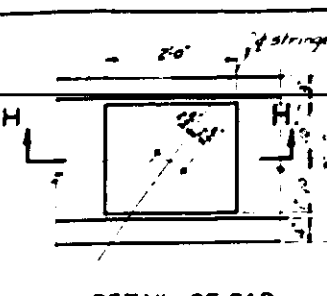


PIER NO. 1 & PIER NO. 3 DETAILS  
MICHIGAN CITY RD. GRADE SEPARATION  
OVER  
CALUMET PARKWAY

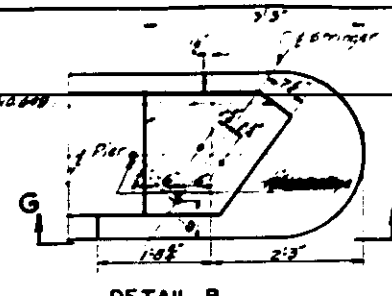
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| BY       | 21 | NO |
| CHECKED  | 21 | NO |
| APPROVED | 21 | NO |



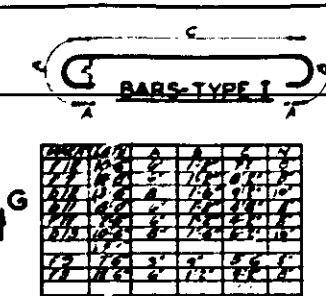
DETAIL A



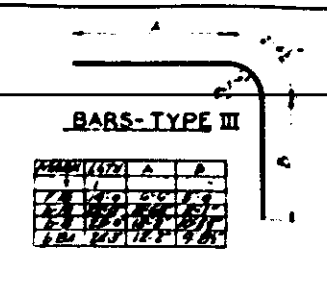
DETAIL OF PAD



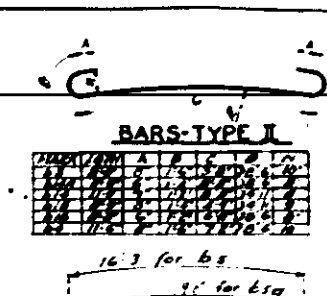
DETAIL B



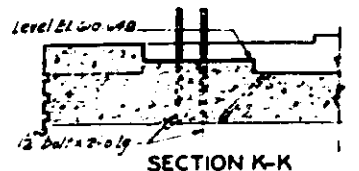
BARS-TYPE I



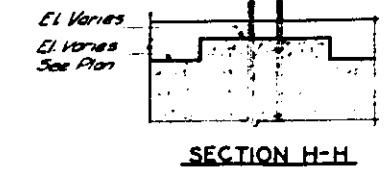
BARS-TYPE III



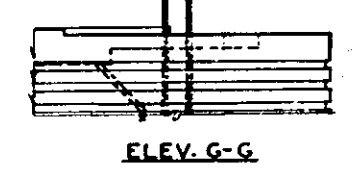
BARS-TYPE J



SECTION K-K



SECTION H-H



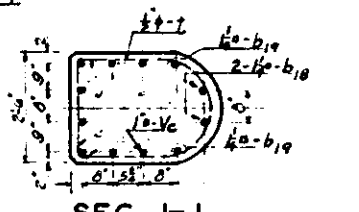
ELEV. G-G

| Bar | Length | Area | Weight |
|-----|--------|------|--------|
| 1   | 1.00   | 0.01 | 0.01   |
| 2   | 1.00   | 0.01 | 0.01   |
| 3   | 1.00   | 0.01 | 0.01   |
| 4   | 1.00   | 0.01 | 0.01   |
| 5   | 1.00   | 0.01 | 0.01   |
| 6   | 1.00   | 0.01 | 0.01   |
| 7   | 1.00   | 0.01 | 0.01   |
| 8   | 1.00   | 0.01 | 0.01   |
| 9   | 1.00   | 0.01 | 0.01   |
| 10  | 1.00   | 0.01 | 0.01   |
| 11  | 1.00   | 0.01 | 0.01   |
| 12  | 1.00   | 0.01 | 0.01   |
| 13  | 1.00   | 0.01 | 0.01   |
| 14  | 1.00   | 0.01 | 0.01   |
| 15  | 1.00   | 0.01 | 0.01   |
| 16  | 1.00   | 0.01 | 0.01   |
| 17  | 1.00   | 0.01 | 0.01   |
| 18  | 1.00   | 0.01 | 0.01   |
| 19  | 1.00   | 0.01 | 0.01   |
| 20  | 1.00   | 0.01 | 0.01   |
| 21  | 1.00   | 0.01 | 0.01   |
| 22  | 1.00   | 0.01 | 0.01   |
| 23  | 1.00   | 0.01 | 0.01   |
| 24  | 1.00   | 0.01 | 0.01   |
| 25  | 1.00   | 0.01 | 0.01   |
| 26  | 1.00   | 0.01 | 0.01   |
| 27  | 1.00   | 0.01 | 0.01   |
| 28  | 1.00   | 0.01 | 0.01   |
| 29  | 1.00   | 0.01 | 0.01   |
| 30  | 1.00   | 0.01 | 0.01   |
| 31  | 1.00   | 0.01 | 0.01   |
| 32  | 1.00   | 0.01 | 0.01   |
| 33  | 1.00   | 0.01 | 0.01   |
| 34  | 1.00   | 0.01 | 0.01   |
| 35  | 1.00   | 0.01 | 0.01   |
| 36  | 1.00   | 0.01 | 0.01   |
| 37  | 1.00   | 0.01 | 0.01   |
| 38  | 1.00   | 0.01 | 0.01   |
| 39  | 1.00   | 0.01 | 0.01   |
| 40  | 1.00   | 0.01 | 0.01   |
| 41  | 1.00   | 0.01 | 0.01   |
| 42  | 1.00   | 0.01 | 0.01   |
| 43  | 1.00   | 0.01 | 0.01   |
| 44  | 1.00   | 0.01 | 0.01   |
| 45  | 1.00   | 0.01 | 0.01   |
| 46  | 1.00   | 0.01 | 0.01   |
| 47  | 1.00   | 0.01 | 0.01   |
| 48  | 1.00   | 0.01 | 0.01   |
| 49  | 1.00   | 0.01 | 0.01   |
| 50  | 1.00   | 0.01 | 0.01   |
| 51  | 1.00   | 0.01 | 0.01   |
| 52  | 1.00   | 0.01 | 0.01   |
| 53  | 1.00   | 0.01 | 0.01   |
| 54  | 1.00   | 0.01 | 0.01   |
| 55  | 1.00   | 0.01 | 0.01   |
| 56  | 1.00   | 0.01 | 0.01   |
| 57  | 1.00   | 0.01 | 0.01   |
| 58  | 1.00   | 0.01 | 0.01   |
| 59  | 1.00   | 0.01 | 0.01   |
| 60  | 1.00   | 0.01 | 0.01   |
| 61  | 1.00   | 0.01 | 0.01   |
| 62  | 1.00   | 0.01 | 0.01   |
| 63  | 1.00   | 0.01 | 0.01   |
| 64  | 1.00   | 0.01 | 0.01   |
| 65  | 1.00   | 0.01 | 0.01   |
| 66  | 1.00   | 0.01 | 0.01   |
| 67  | 1.00   | 0.01 | 0.01   |
| 68  | 1.00   | 0.01 | 0.01   |
| 69  | 1.00   | 0.01 | 0.01   |
| 70  | 1.00   | 0.01 | 0.01   |
| 71  | 1.00   | 0.01 | 0.01   |
| 72  | 1.00   | 0.01 | 0.01   |
| 73  | 1.00   | 0.01 | 0.01   |
| 74  | 1.00   | 0.01 | 0.01   |
| 75  | 1.00   | 0.01 | 0.01   |
| 76  | 1.00   | 0.01 | 0.01   |
| 77  | 1.00   | 0.01 | 0.01   |
| 78  | 1.00   | 0.01 | 0.01   |
| 79  | 1.00   | 0.01 | 0.01   |
| 80  | 1.00   | 0.01 | 0.01   |
| 81  | 1.00   | 0.01 | 0.01   |
| 82  | 1.00   | 0.01 | 0.01   |
| 83  | 1.00   | 0.01 | 0.01   |
| 84  | 1.00   | 0.01 | 0.01   |
| 85  | 1.00   | 0.01 | 0.01   |
| 86  | 1.00   | 0.01 | 0.01   |
| 87  | 1.00   | 0.01 | 0.01   |
| 88  | 1.00   | 0.01 | 0.01   |
| 89  | 1.00   | 0.01 | 0.01   |
| 90  | 1.00   | 0.01 | 0.01   |
| 91  | 1.00   | 0.01 | 0.01   |
| 92  | 1.00   | 0.01 | 0.01   |
| 93  | 1.00   | 0.01 | 0.01   |
| 94  | 1.00   | 0.01 | 0.01   |
| 95  | 1.00   | 0.01 | 0.01   |
| 96  | 1.00   | 0.01 | 0.01   |
| 97  | 1.00   | 0.01 | 0.01   |
| 98  | 1.00   | 0.01 | 0.01   |
| 99  | 1.00   | 0.01 | 0.01   |
| 100 | 1.00   | 0.01 | 0.01   |

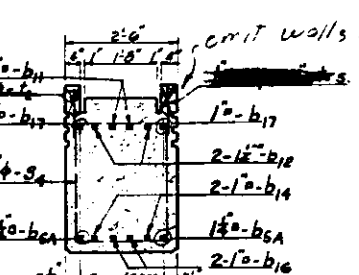
BARS b7 & b18

BARS b5 & b5A

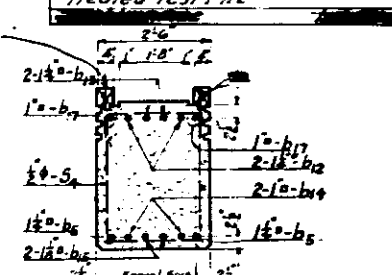
Note: Remainder of bent bars detailed on Sheet No. 10



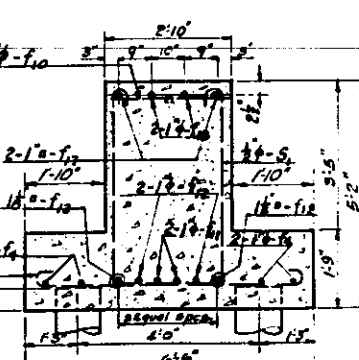
SEC. J-J



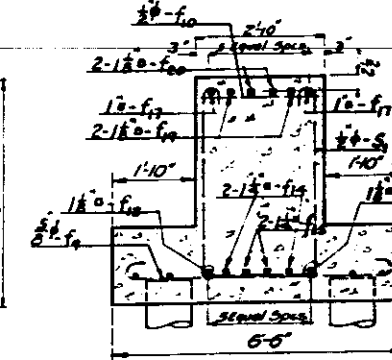
SEC. A-A



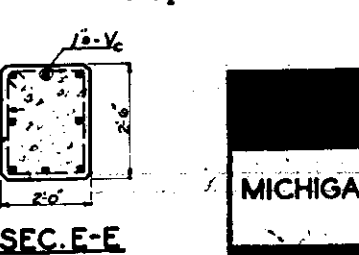
SEC. B-B



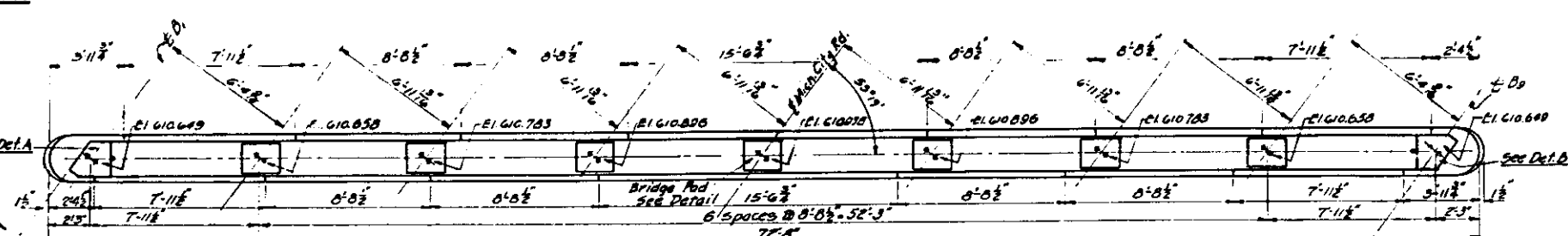
SEC. C-C



SEC. D-D

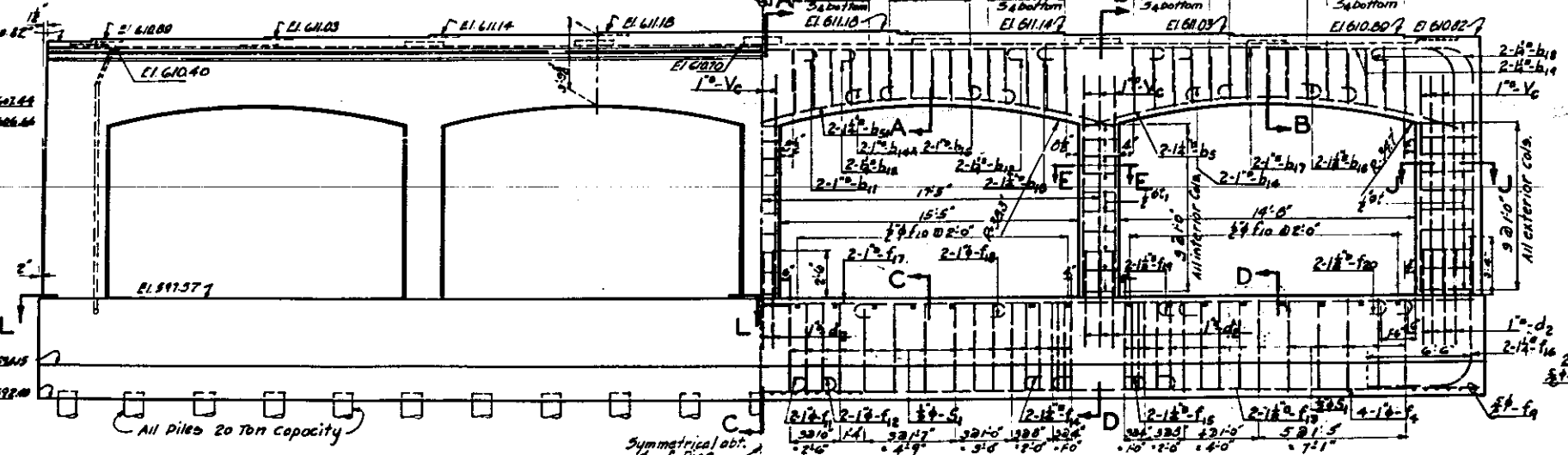


SEC. E-E



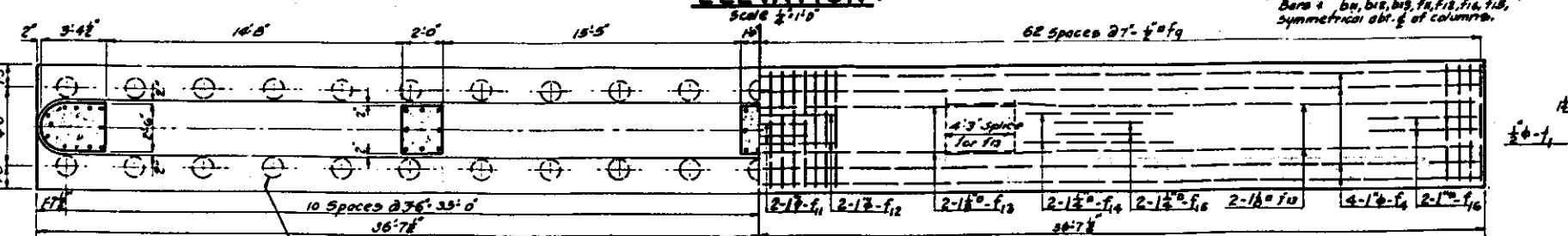
PLAN OF PIER NO. 2

Scale 1/2" = 1'-0"



ELEVATION

Scale 1/2" = 1'-0"



PLAN OF FOOTING

Scale 1/2" = 1'-0"

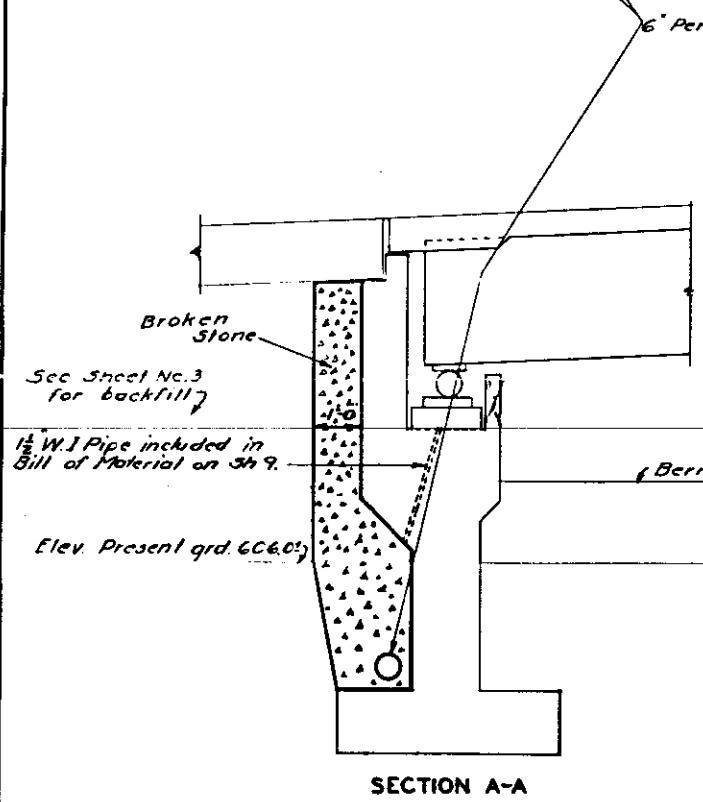
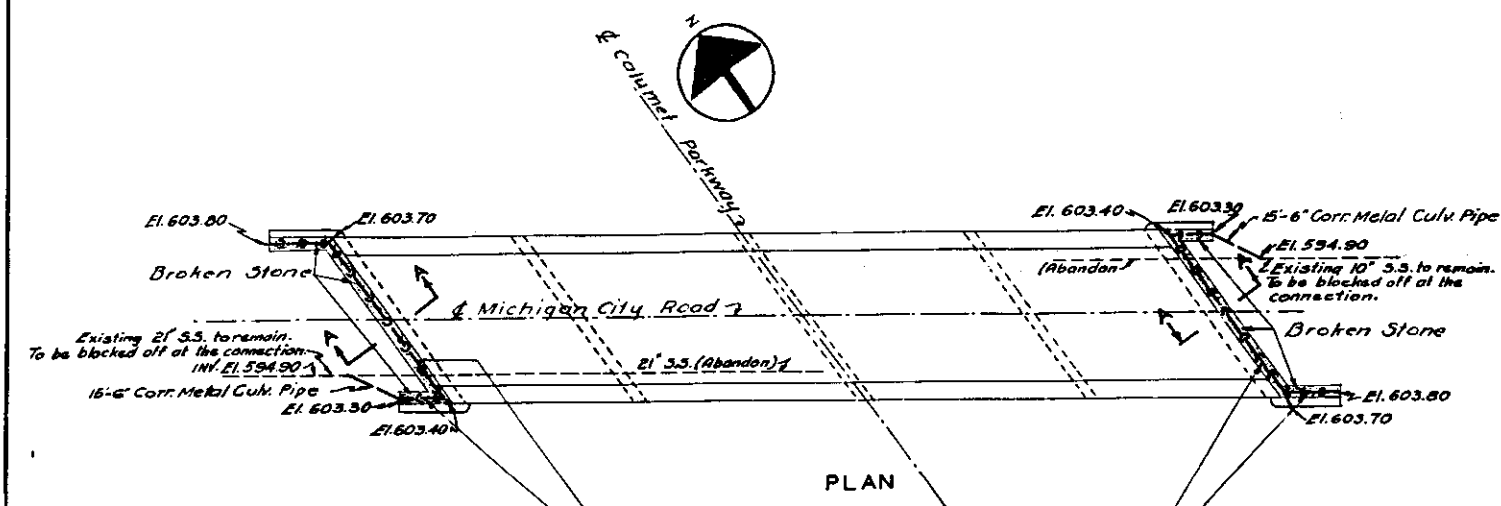
BOTTOM FOOTING STEEL

SECTION L-L

TEST PILE SHALL BE DRIVEN AS PART OF PILE GROUP OF PIER NO. 2, AS DIRECTED BY ENG'R.

NO. 2 PIER  
MICHIGAN CITY RD. GRADE SEPARATION  
OVER  
CALUMET PARKWAY

|                        |           |                            |                |           |
|------------------------|-----------|----------------------------|----------------|-----------|
| DO-510000<br>ROUTE No. | SEC.      | COUNTY                     | TOTAL<br>MILES | DATE<br>M |
| FA.122                 | 0000.2-NS | COOK                       | 21             | 11        |
| STA.                   |           | TO STA.                    |                |           |
| FED ROAD DIST. No. 7   |           | FED AID PROJECT NO. 246(C) |                |           |



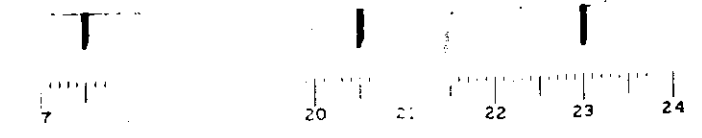
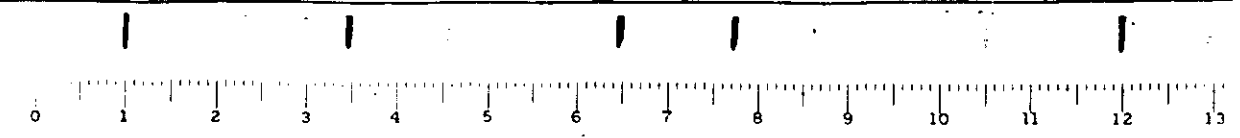
**Note:**  
 All corrugated metal pipe and fittings shall be 16 ga metal. The cost of fittings, bolts etc. shall be included in the Contract Unit Price per lineal foot of 6" Corrugated Metal Culv. Pipe. All material shall conform to the specifications covering metal pipe culverts.

**BILL OF MATERIAL**

|                                             |              |
|---------------------------------------------|--------------|
| 6" Perforated Corrugated Metal culvert Pipe | 214 Lin. Ft. |
| Broken Stone                                | 95 Cu. Yds.  |
| 6" Corrugated Metal Culvert Pipe            | 30 Lin. Ft.  |

**DRAINAGE PLAN**

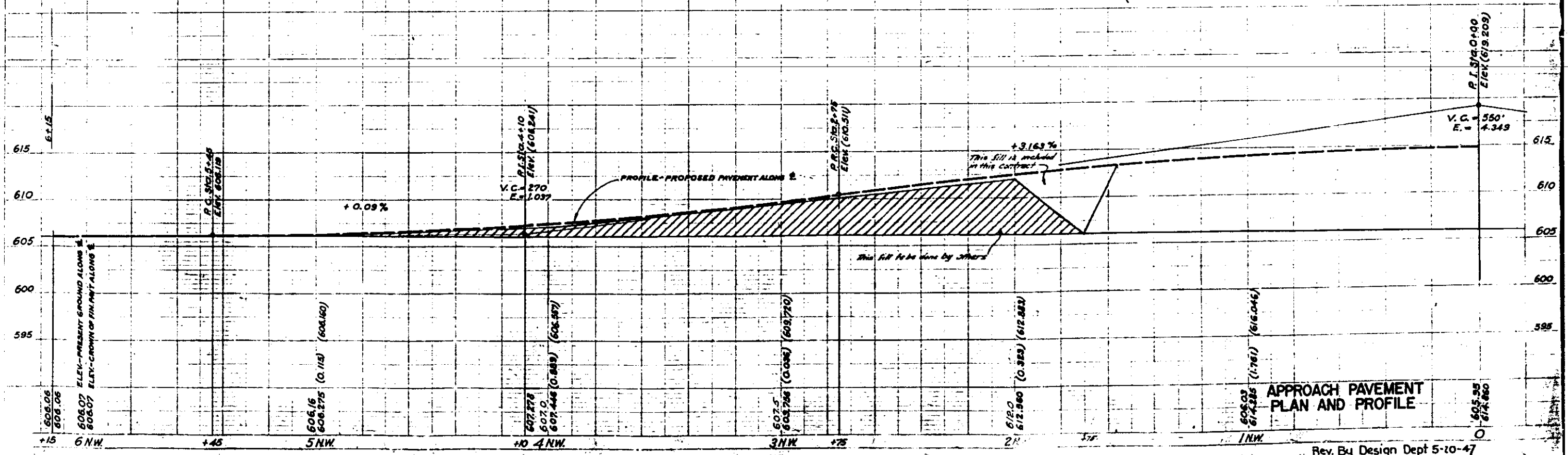
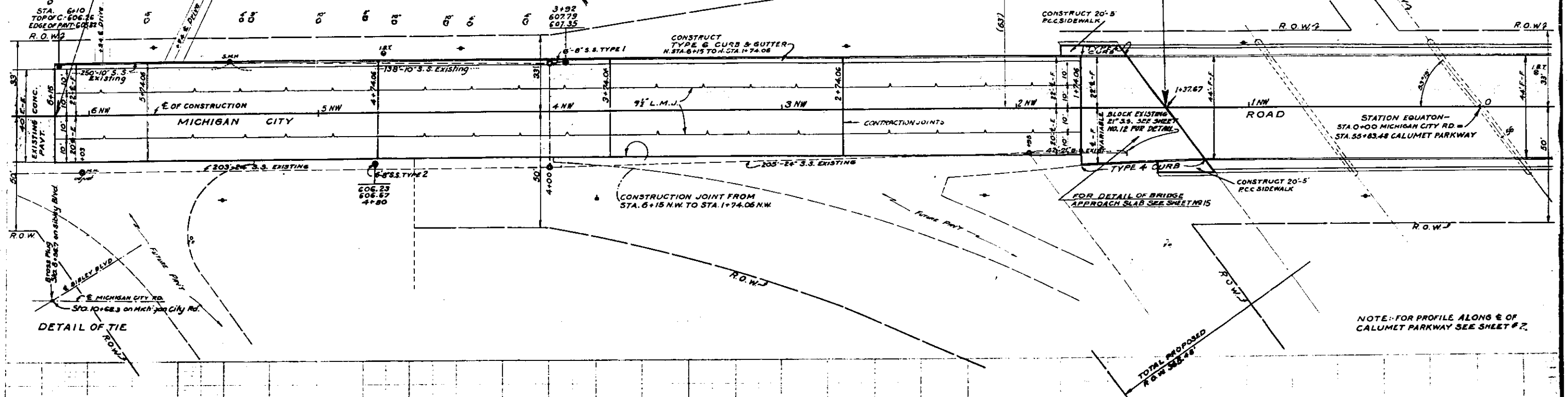
**DRAINAGE PLAN  
 MICHIGAN CITY RD GRADE SEPARATION  
 OVER  
 CALUMET PARKWAY**



VILLAGE OF DOLTON  
THORNTON TOWNSHIP

CONTRACT  
BEGINS AT STA. 6+15 N.W.

OMISSION IN PAVEMENT  
STA. 1+37.67 N.W. TO STA. 1+37.67 S.E.



APPROACH PAVEMENT  
PLAN AND PROFILE

Rev. By Design Dept 5-10-47

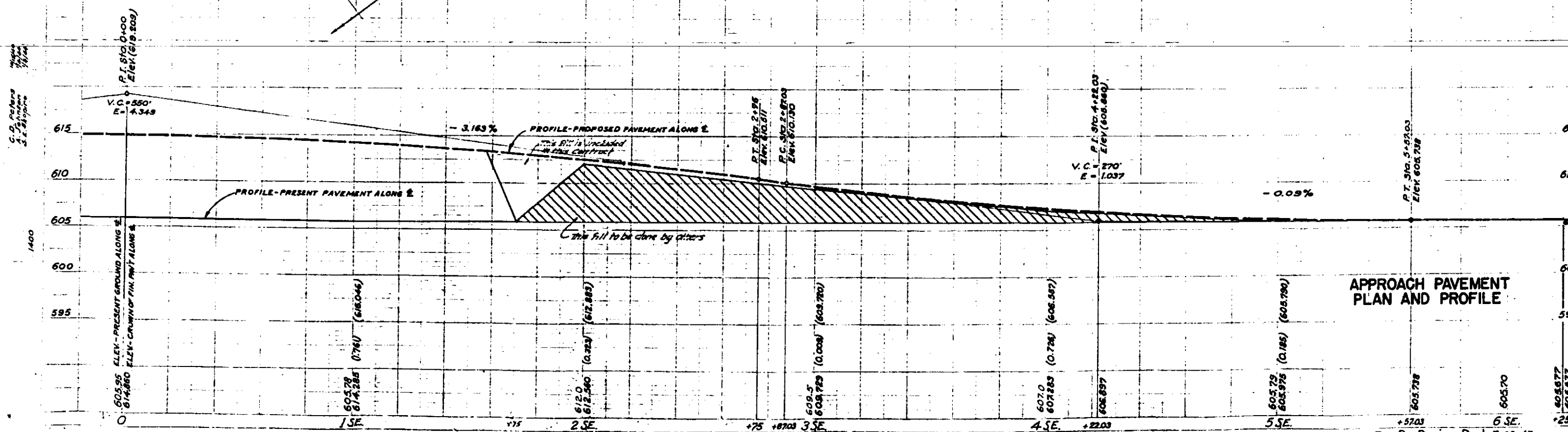
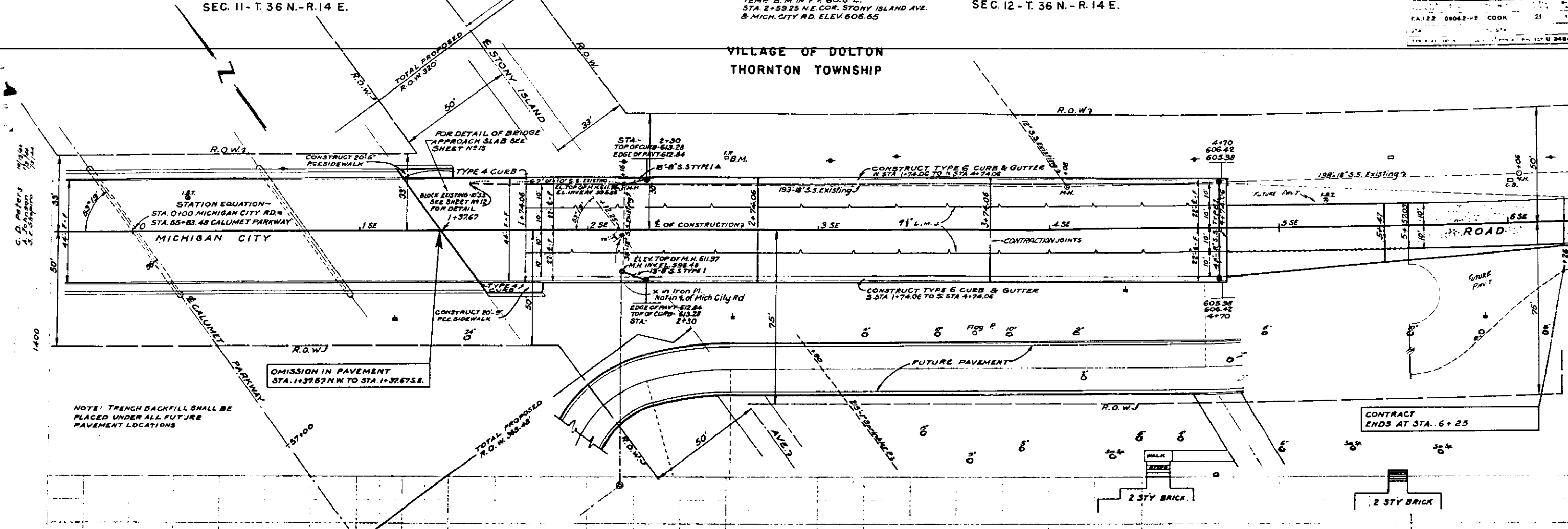
SEC. II - T. 36 N. - R. 14 E.

TEMP. B.M. IN F.P. 60.8' L.  
STA. 2+59.25 N.E. COR. STONY ISLAND AVE.  
& MICH. CITY RD. ELEV. 606.65

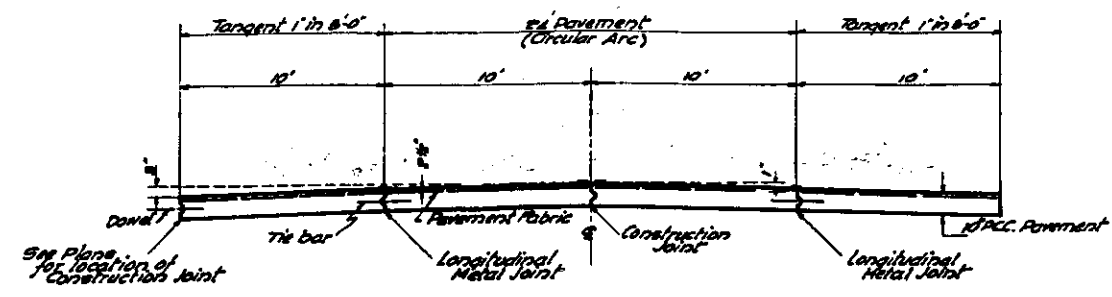
SEC. 12 - T. 36 N. - R. 14 E.

FA 122 08062-18 COOK 21 14  
DATE: 5-20-47  
BY: [Signature]  
CHECKED: [Signature]  
APPROVED: [Signature]

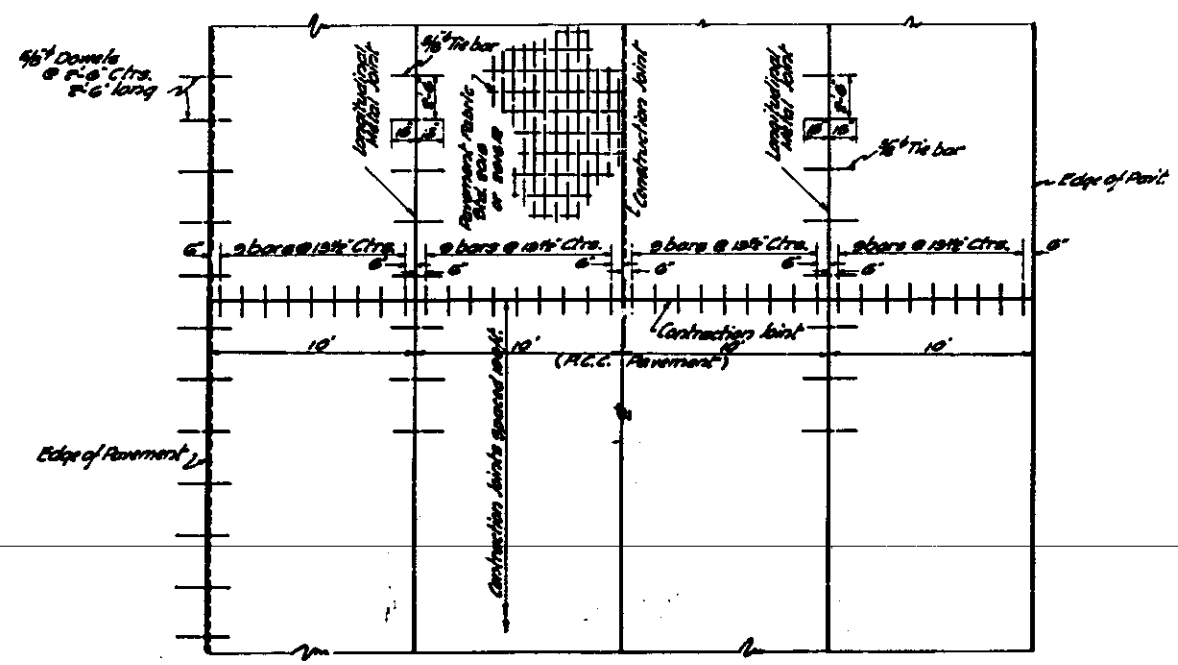
# VILLAGE OF DOLTON THORNTON TOWNSHIP



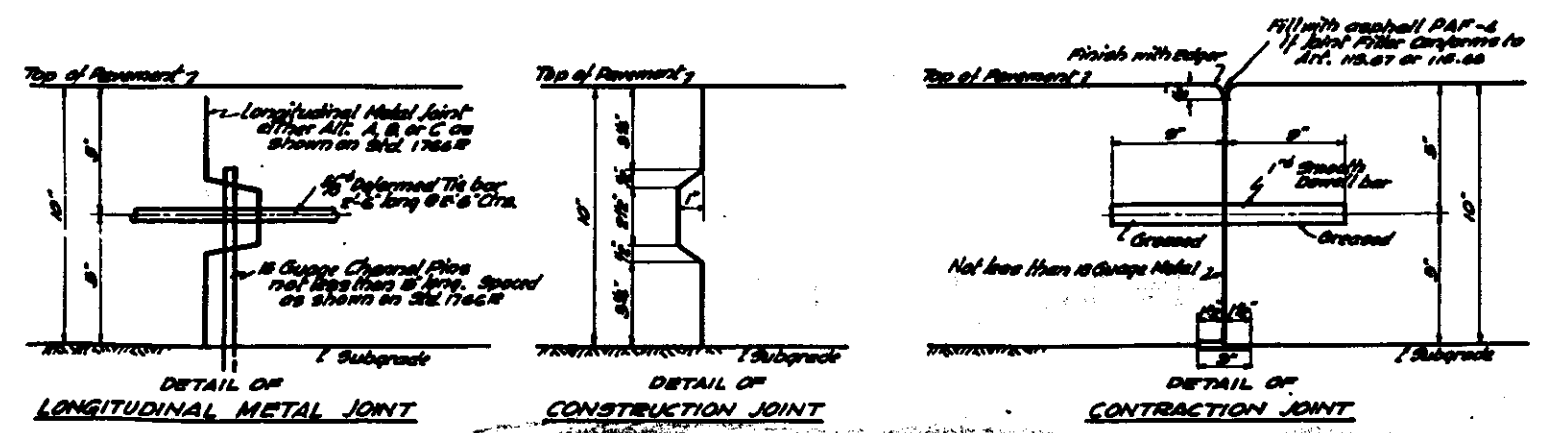
Rev. By Design Dept. 5-20-47



TYPICAL CROSS SECTION  
 APPROACH PAVEMENT



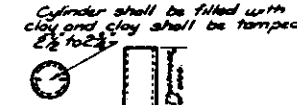
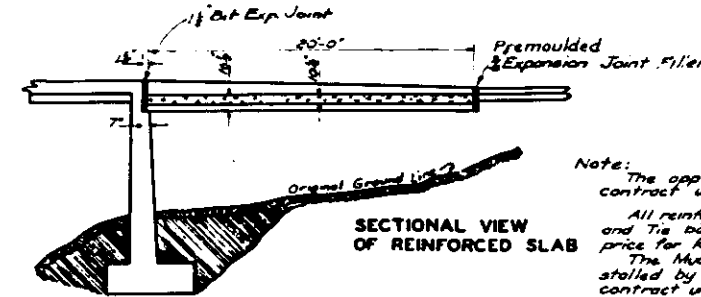
PLAN



TYPICAL CROSS-SECTION  
 APPROACH PAVEMENT

# DEPARTMENT OF HIGHWAYS

| PROJECT NO. | SECTION   | COUNTY | SHEET NO. | TOTAL SHEETS |
|-------------|-----------|--------|-----------|--------------|
| EA 122      | 0606.2 HB | COOK   | 21        | 19           |

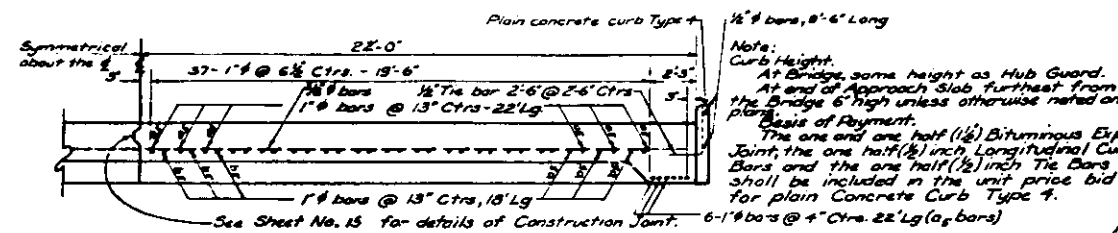


**DETAIL OF MUD JACK CYLINDER**

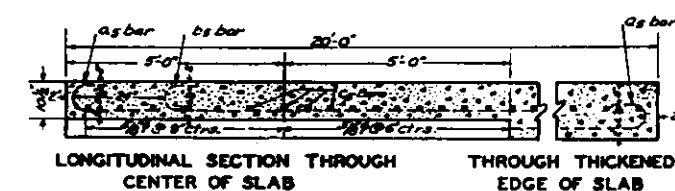
Note: The approach slabs shall be paid for at the contract unit price for R.C.C. Pavt (16 1/2-10 1/2-16 1/2).

All reinforcement bars except the longitudinal Curb and Tie bars shall be paid for at the Contract Unit price for Reinforcement Bars.

The Mud Jack Cylinders shall be furnished and installed by the paving contractor and included in the contract unit price for R.C.C. Pavt (16 1/2-10 1/2-16 1/2).

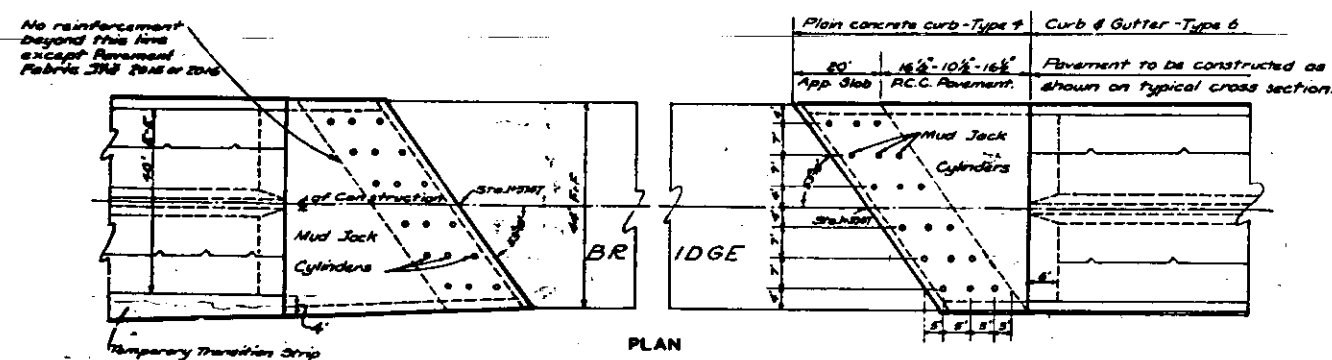


SECTIONAL VIEW OF CONCRETE SLAB



LONGITUDINAL SECTION THROUGH CENTER OF SLAB

THROUGH THICKENED EDGE OF SLAB



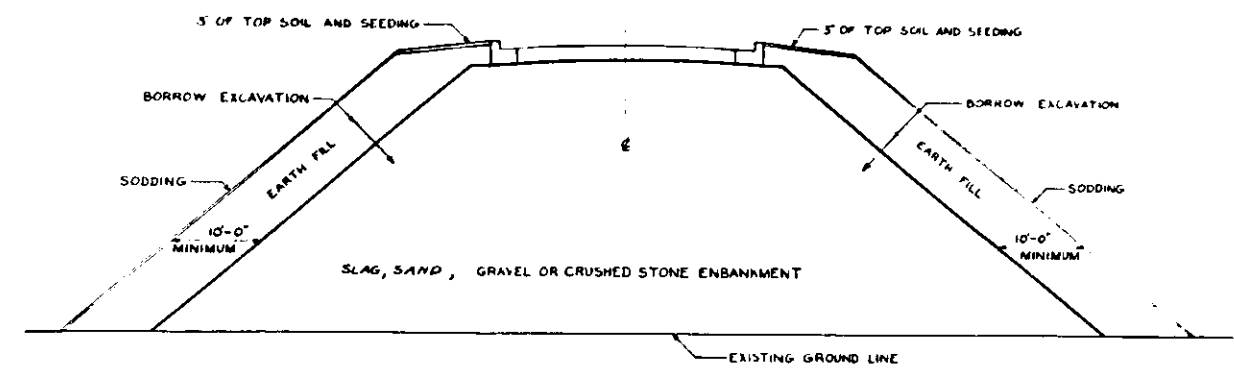
| Bar No. | Size          | Length |
|---------|---------------|--------|
| 100     | 1" x 22'-0"   |        |
| 72      | 1" x 18'-0"   |        |
| 92      | 3/8" x 28'-6" |        |

Reinforcement bars in 2 approach slabs = 1477 lbs.

Portland Cement Concrete 16 1/2-10 1/2-16 1/2 = 36.5

Pavement Fabric 3/16 inch 20x20

DETAIL OF APPROACH SLAB



TYPICAL CROSS SECTION

TYPICAL CROSS SECTION SHOWING THE METHOD OF PLACING GRAVEL OR CRUSHED STONE ENBANKMENT

Cook Co. Sec 0606.2 HB

## STANDARD SYMBOLS

THESE SYMBOLS AND ABBREVIATIONS ARE USED THROUGHOUT THESE PLANS UNLESS OTHERWISE NOTED

- |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>STATE LINE</li> <li>COUNTY LINE</li> <li>SECTION, TOWNSHIP OR GRANT LINE</li> <li>CITY OR VILLAGE LIMITS</li> <li>RAILROAD, OR UTILITY TRACKS</li> <li>PROPOSED PROFILE</li> <li>SECTION CORNER</li> <li>FENCE (BARBED WIRE)</li> <li>FENCE (NO DISTINCTION)</li> <li>R.O.W. OR PROPERTY LINE</li> <li>GUARD POST</li> <li>GUARD RAIL</li> <li>CENTER LINE OF CONSTRUCTION</li> <li>MARSH</li> <li>STREAM</li> <li>TREES (WITH SIZE)</li> <li>HEDGE</li> <li>TRAVELED WAY</li> <li>CONTRACTION JOINT</li> <li>LONGITUDINAL METAL JOINT</li> <li>CONSTRUCTION JOINT</li> <li>DITCH CHECK</li> <li>DIRECTION OF FLOW</li> <li>SUMMIT</li> <li>BALANCE POINT</li> <li>EXISTING INLET, ADJUST (A) RECONSTRUCT (R)</li> <li>INLET TO BE CONSTRUCTED</li> <li>INLET TO BE FILLED</li> <li>EXISTING CATCH BASIN, ADJUST (A) RECONSTRUCT (R)</li> <li>CATCH BASIN TO BE CONSTRUCTED</li> <li>CATCH BASIN TO BE FILLED</li> <li>EXISTING MANHOLE, ADJUST (A) RECONSTRUCT (R)</li> <li>MANHOLE TO BE CONSTRUCTED</li> <li>MANHOLE TO BE FILLED</li> </ul> | <ul style="list-style-type: none"> <li>VALVE VAULT, (V) METER VAULT, (M) HAND HOLE, (H)</li> <li>RAVINE METER VAULT</li> <li>FIRE HYDRANT</li> <li>LIGHT STANDARD</li> <li>TRAFFIC SIGNAL</li> <li>TRAFFIC SIGN</li> <li>BUFFALO BOX (GAS OR WATER SHUT-OFF)</li> <li>TROLLEY POLE</li> <li>TELEPHONE OR TELEGRAPH POLE</li> <li>POWER LINE POLE</li> <li>ELEVATION OF POINT INDICATED</li> <li>A-TYPE 48-DIAMETER, IC-TYPE OF FRAME AND LID</li> <li>EXAMPLE SHOWN CONSTRUCT 48 TYPE A MANHOLE WITH TYPE I FRAME AND CLOSED LID. (P-OPEN LID)</li> <li>STORM SEWER LENGTH AND SIZE TYPE</li> <li>PIPE CULVERT LENGTH AND SIZE TYPE</li> <li>HEADWALL STANDARD NUMBER CU YDS. CLASS "X" CONCRETE LBS. REINFORCING STEEL</li> <li>MONOLITHIC CONCRETE CULVERT DESIGN NUMBER CU YDS. CLASS "X" CONCRETE LBS. REINFORCING STEEL</li> <li>PIPE UNDERDRAIN LENGTH AND SIZE</li> </ul> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Cook Co. Sec 0606.2 HB