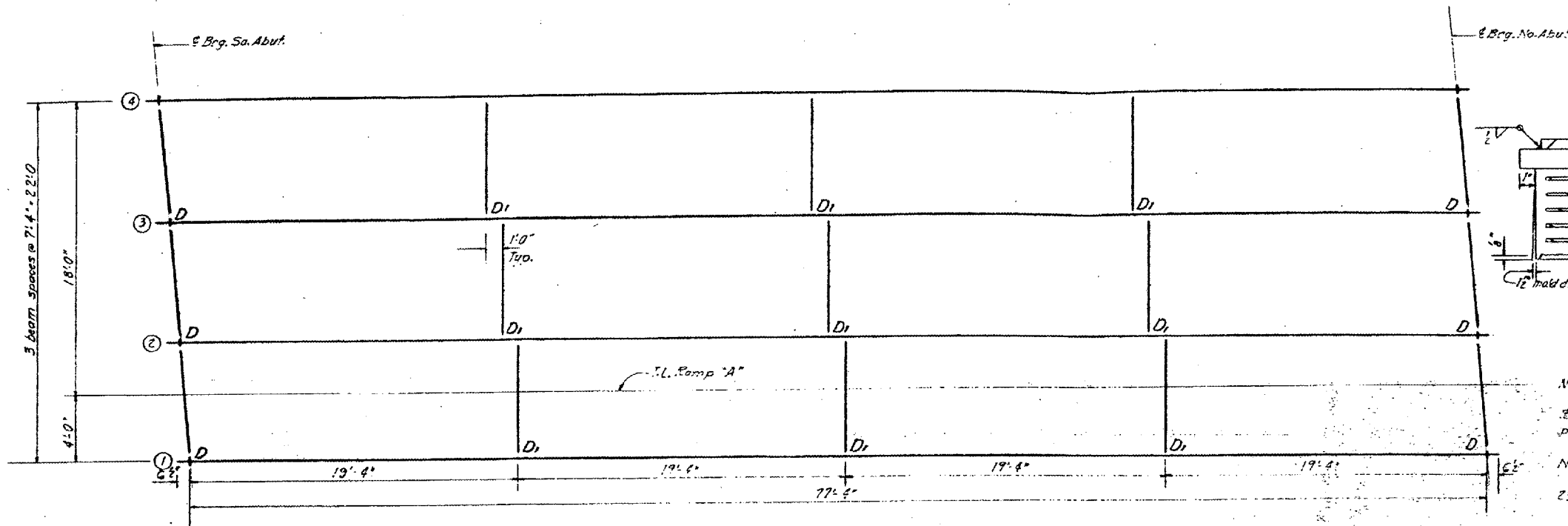


STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

| | | | | | |
|--------------|----------|--------|--------|-----|----|
| PROJECT NO. | 24 | LA 183 | MASSAC | 117 | 43 |
| SHEET NO. | 56 OF 58 | | | | |
| TOTAL SHEETS | 8 SHEETS | | | | |

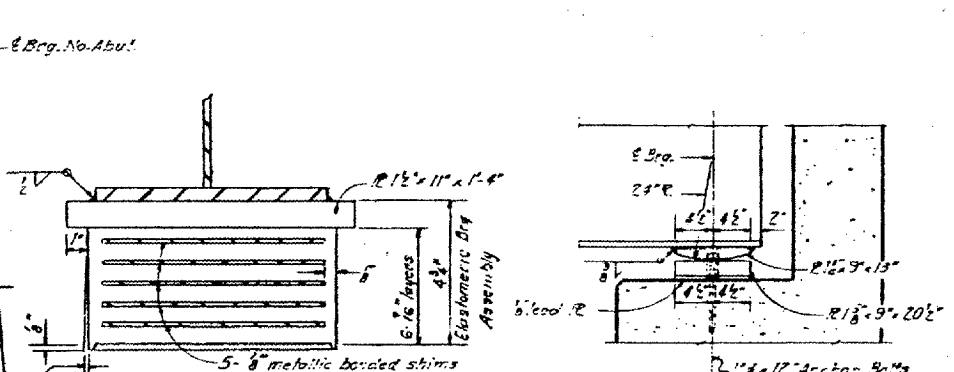


FRAMING PLAN

TOP OF WEB ELEVATIONS

| LOC. | GIRD. | 1 | 2 | 3 | 4 |
|-----------|-------|--------|--------|--------|--------|
| So. Abut. | | 350.81 | 350.93 | 351.06 | 351.18 |
| No. Abut. | | 349.74 | 349.86 | 349.98 | 350.10 |

I_s and S_s are the moment of inertia and section modulus of the steel section.
 I_c and S_c are the moment of inertia and section modulus of the composite section used in computing f_s .
 V_R is the maximum $t +$ impact shear range in span used to determine shear connector spacing.

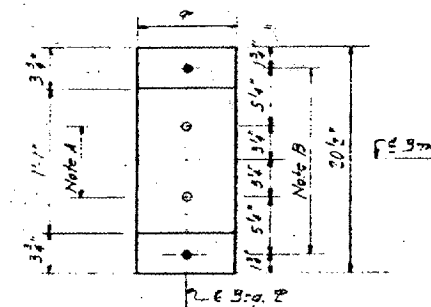


SOUTH ABUTMENT
 Elastomeric Brg. Assembly
 (Cost incidental)

Note A:
 1/2" holes 1" dia in top flange for 1/2" pinholes. Thread or dress pinholes in bolt flange.

Note B:
 1/2" hole for 1" x 12" anchor bolts. 2 1/2" x 2 1/2" x 3/16" washer under nut.

ELEVATION



PLAN AT NO. ABUT.

PINTLE

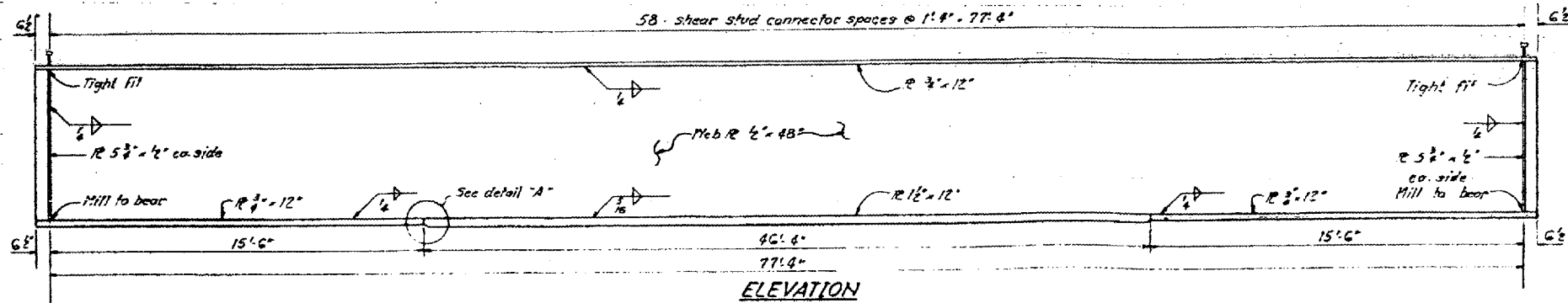


INTERIOR GIRDER MOMENT TABLE
 23.5 Span

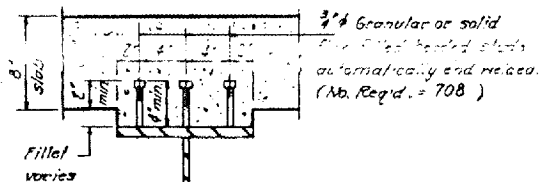
| | |
|--------------------------|-------|
| I_s (in ⁴) | 13977 |
| I_c (in ⁴) | 56232 |
| S_s (in ³) | 918 |
| S_c (in ³) | 1342 |
| ϕ (k/ft) | .73 |
| M_E (k) | 675 |
| $f_s \phi$ (k/ft) | 8.8 |
| S_E (k) | 502 |
| $M_{S \phi}$ (k) | 375 |
| M_E (k) | 747 |
| M_{imp} (k) | 187 |
| Total (k) | 1307 |
| $f_s \phi$ (k/ft) | 11.70 |
| f_s Total (k/ft) | 20.50 |
| V_R (k) | 52.8 |

INTERIOR GIRDER REACTION TABLE

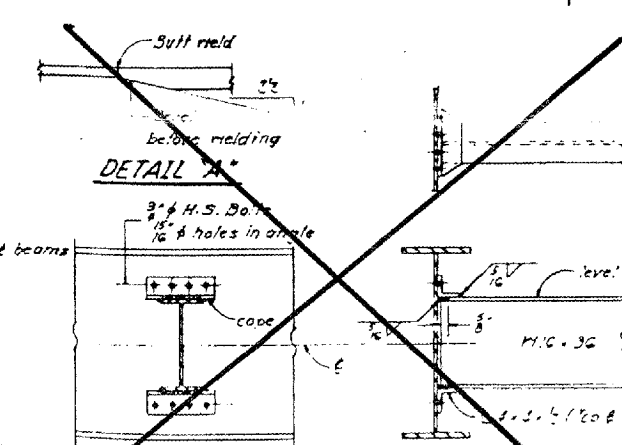
| | |
|---------------|-------|
| R_E (k) | 55.8 |
| R_k (k) | 42.2 |
| Imp. (k) | 10.6 |
| R Total (k) | 108.6 |



ELEVATION



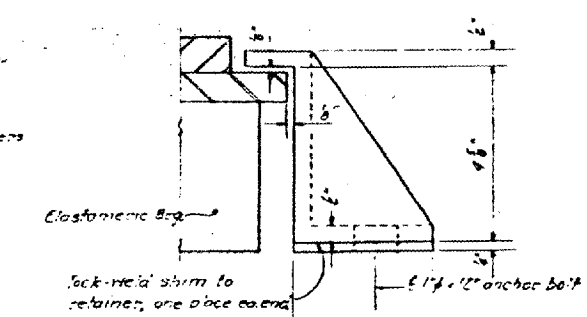
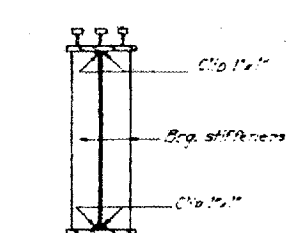
SHEAR STUD



DIAPHRAGM - D

DIAPHRAGM - D1

END VIEW



SIDE RETAINER DETAILS

Note:
 The main load carrying member components subject to the Superimposed Requirements for Notch Toughness zone 2 are the flanges and webs of the steel girders.

DESIGNED: [Signature]
 CHECKED: Robert K. [Signature]
 DRAWN: [Signature]
 CHECKED: RKL

EXAMINED: [Signature] MARCH 15 1976
 PASSED: [Signature]
 APPROVED: [Signature]

8" x 4.5" Bolts
 1/2" holes
 Hardened washers shall be placed over holes in bent flange.

FOR INFORMATION ONLY:
 BRIDGE NO. 14 STRUCTURE 064-0037