

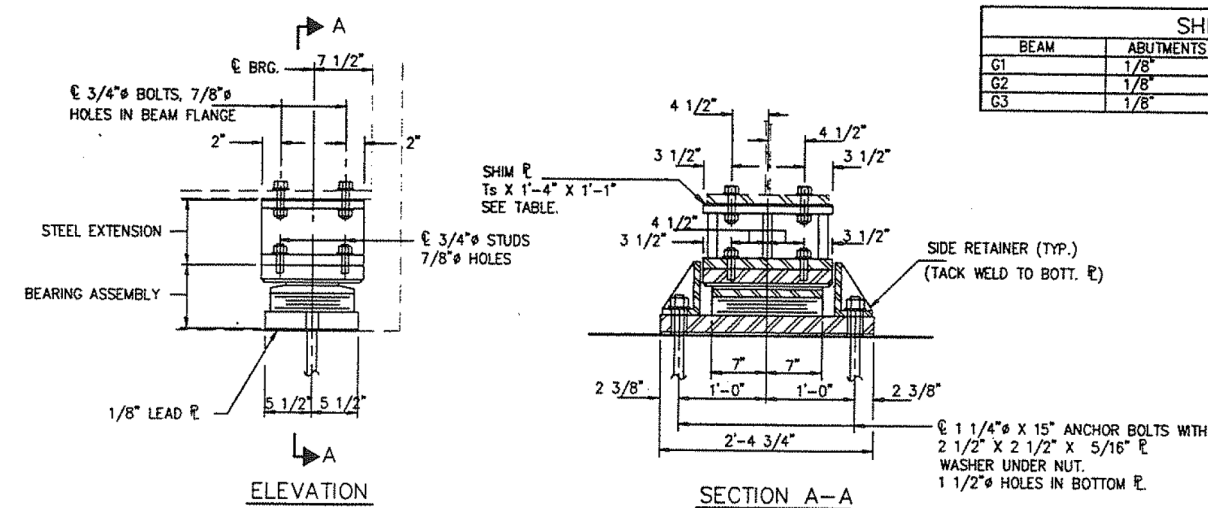
| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-----------|---------|--------|--------------|------------------|
| IL 171 | ** | COOK | 985 | 225 |
| | | | ILLINOIS | FED. AID PROJECT |

** SECTION 0707-613B (BR)

| SHIM P Ts | | | |
|-----------|-----------|---------------|--------------|
| BEAM | ABUTMENTS | PIER 4 EAST | PIER 23 EAST |
| G1 | 1/8" | 1/8" + 5/16" | 1/8" + 1/8" |
| G2 | 1/8" | 1/8" + 5/16" | 1/8" + 1/8" |
| G3 | 1/8" | 1/8" + 13/16" | 1/8" + 1/8" |

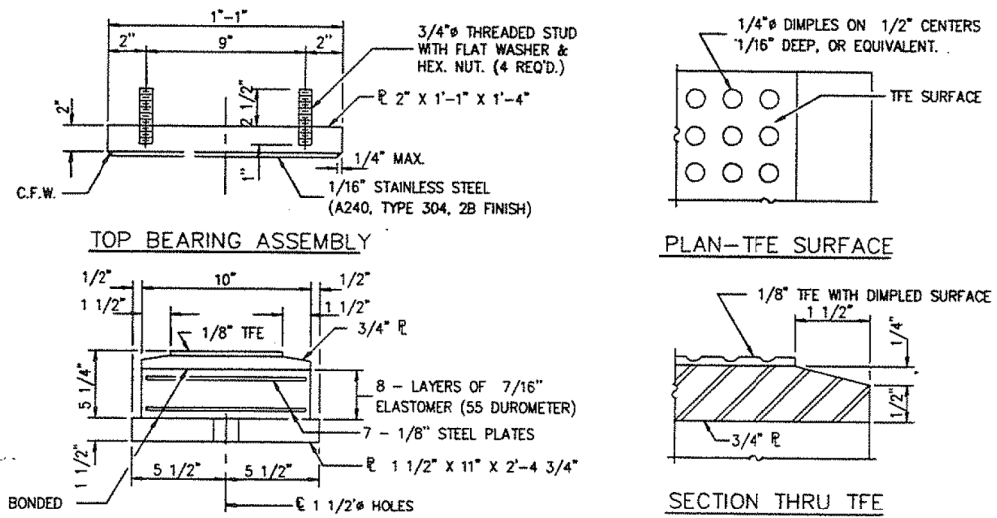
GIRDER REACTIONS

| | | |
|-----------|-----|-------|
| RL | (K) | 60.3 |
| RL | (K) | 51.6 |
| IMP. | (K) | 10.7 |
| R (TOTAL) | (K) | 122.6 |



NOTES: DIAPHRAGM REMOVAL AND REPLACEMENT MAY BE REQUIRED TO FACILITATE DRILLING HOLES IN THE BOTTOM FLANGE FOR BEARING ATTACHMENT. COST IS INCIDENTAL TO "FURNISHING AND ERECTING STRUCTURAL STEEL".
 NEW STEEL EXTENSIONS, SIDE RETAINERS, LEAD PLATES, CONNECTION BOLTS AND ANCHOR BOLTS ARE INCLUDED IN "FURNISHING AND ERECTING STRUCTURAL STEEL".
 SEE SHEET 18 OF 20 FOR ANCHOR BOLT INSTALLATION.
 BEFORE INSTALLING THE NEW BEARING, THE TOP PLATE OF THE EXISTING BEARING ASSEMBLY SHALL BE REMOVED FROM THE BOTTOM FLANGE USING THE AIR-ARC METHOD. GRIND SMOOTH ALL WELD MATERIAL REMAINING ON THE BOTTOM FLANGE. BURN EXISTING ANCHOR BOLTS FLUSH WITH EXISTING CONCRETE SURFACE. GRIND EXISTING ANCHOR BOLT SMOOTH AND SEAL WITH EPOXY. COST IS INCIDENTAL TO FURNISHING AND ERECTING STRUCTURAL STEEL.
 TRAFFIC SHALL BE REMOVED FROM THE PORTION OF THE STRUCTURE TO BE JACKED PRIOR TO COMMENCING JACKING OPERATIONS. TRAFFIC SHALL BE KEPT OFF THAT PORTION OF THE STRUCTURE DURING THE ENTIRE BEARING REPLACEMENT OPERATION. DIFFERENTIAL JACKING HEIGHT NOT TO EXCEED 1/8" TRANSVERSELY BETWEEN ADJACENT BEAMS OR 1/4" LONGITUDINALLY BETWEEN ADJACENT SUPPORTS.
 PRIOR TO ORDERING ANY MATERIAL, THE CONTRACTOR SHALL VERIFY IN THE FIELD ALL BEARING HEIGHT AND SHIM DIMENSIONS.
 SEE SUPERSTRUCTURE OVERLAY & REPAIR PLANS FOR BEAM LOCATIONS.

TYPE II TFE ELASTOMERIC EXP. BRG.

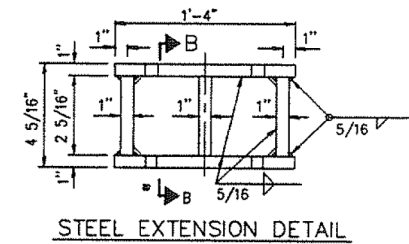
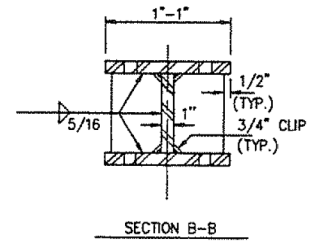
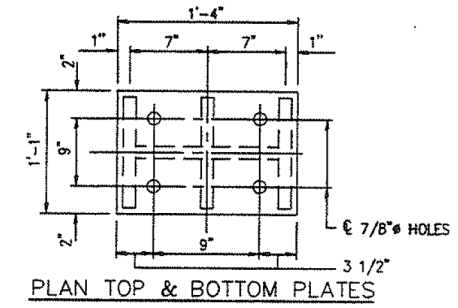
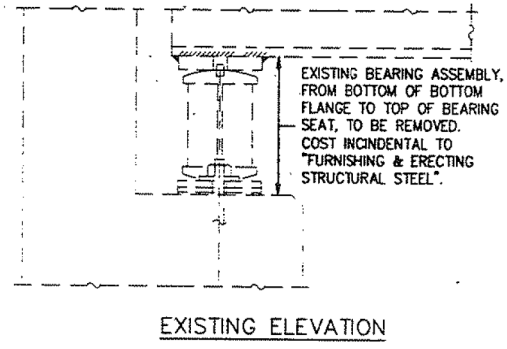


TOP BEARING ASSEMBLY
 3/4" THREADED STUD WITH FLAT WASHER & HEX. NUT. (4 REQ'D.)
 1/16" STAINLESS STEEL (A240, TYPE 304, 2B FINISH)
 1/4" MAX.
 C.F.W.

PLAN-TFE SURFACE
 1/4" DIMPLES ON 1/2" CENTERS 1/16" DEEP, OR EQUIVALENT.
 TFE SURFACE

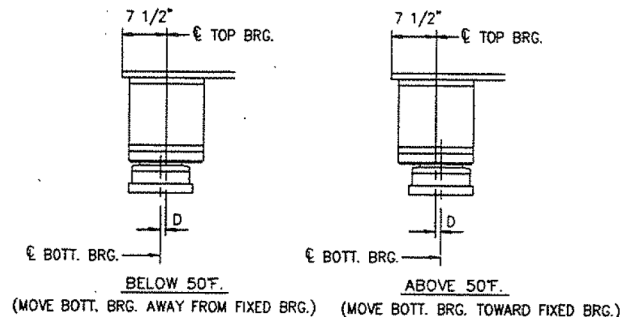
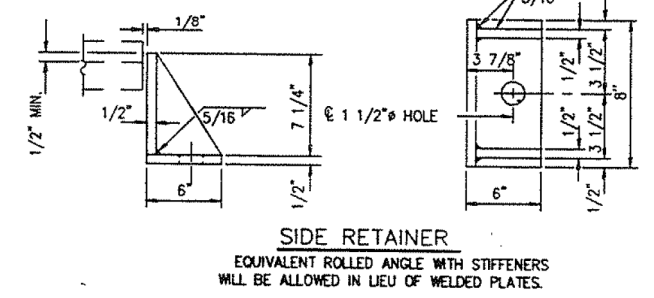
SECTION THRU TFE
 1/8" TFE WITH DIMPLED SURFACE
 7/8" STEEL PLATES
 3/4" R

BOTTOM BEARING ASSEMBLY
 8 - LAYERS OF 7/16" ELASTOMER (55 DUROMETER)
 7 - 7/8" STEEL PLATES
 1 1/2" x 11" x 2-4 3/4"
 1 1/2" HOLES
 BONDED



BILL OF MATERIAL

| ITEM | UNIT | TOTAL |
|--------------------------------------|------|-------|
| ELASTOMERIC BEARING ASSEMBLY TYPE II | EACH | 20 |
| JACK & REMOVE EXISTING BEARINGS | EACH | 20 |
| FURNISH & ERECT STRUCTURAL STEEL | LBS | 4940 |



SETTING ANCHOR BOLTS AT EXP. BRG.
 D = 1/8" PER EACH 100' OF EXPANSION FOR EVERY 15' TEMP. CHANGE FROM THE NORMAL TEMP. OF 50F.

12/20/03 11:47:27 AM 483192.DWG

| | |
|----------|------------------------------------|
| EXAMINED | DESIGNER OF BRIDGE DESIGN |
| PASSED | DESIGNER OF BRIDGES AND STRUCTURES |
| APPROVED | DIRECTOR OF HIGHWAYS |

ILLINOIS DEPARTMENT OF TRANSPORTATION
EAST ABUTMENTS & PIERS 4 & 23
TYPE II BEARINGS
 BRIDGE REPAIRS
 1ST AVE (IL 171) S.N. 016-0483 & 016-0985
 OVER DES PLAINES RIVER
 F.A.U. RT. 1505 SECTION 0707-613B (BR)
 COOK CO. IL
 STA. 50+80.00

| | | | |
|------------------------|----------------------|----------------|-----------|
| FILE NAME = | USER NAME = tjenicke | DESIGNED - FSM | REVISED - |
| | | CHECKED - RMM | REVISED - |
| | | DRAWN - FSM | REVISED - |
| | | CHECKED - RMM | REVISED - |
| PLOT SCALE = | | | |
| PLOT DATE = 12/20/2013 | | | |

FOR INFORMATION ONLY

| F.A.P. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|-------------|--------|--------------|--------------------|
| 372 | 2013-038B-R | COOK | 821 | 543 |
| | | | | CONTRACT NO. 60J16 |
| ILLINOIS FED. AID PROJECT | | | | |

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