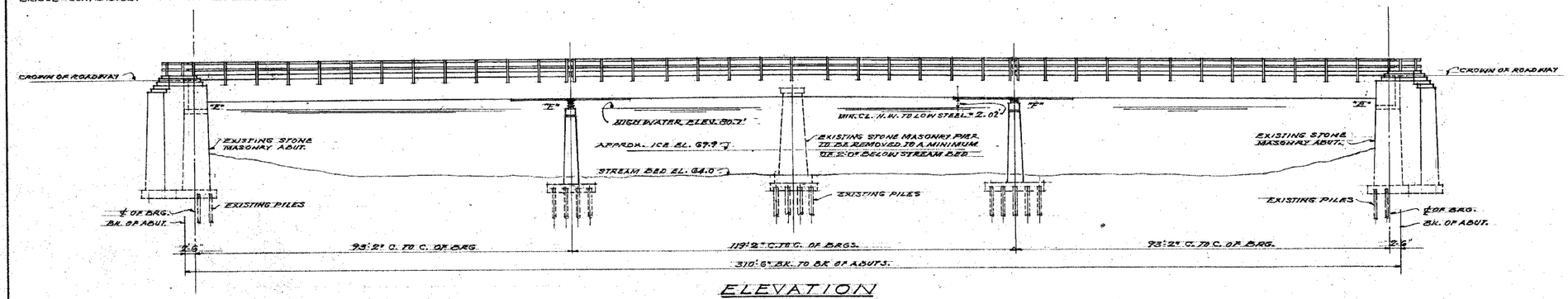
Contract 87240

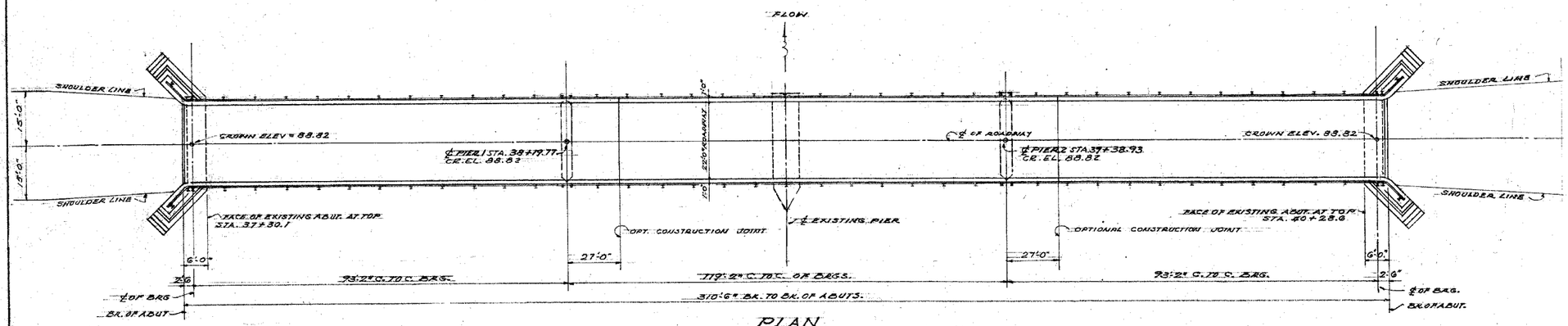
SHEET 80

B.M. S.W. CORNER BOTTOM OF CONCRETE STEP OF EAST ENTRANCE OF TAVERN L.36'. *ELEVATION 100. EXISTING STRUCTURE 2-150' PIN SPANS 16' RDY. STONE MASONRY ABUTMENTS & PIER. SEE SPECIAL PROVISIONS & DWGS. #(5) FOR REMOVAL BY BRIDGE CONTRACTOR.




## ELEVATION

SCALE 1" = 15'




## PLAN

SCALE 1" = 15'

## GENERAL NOTES

CLASS X CONCRETE SHALL BE USED THROUGHOUT EXCEPT IN PIERS. CLASS A CONCRETE SHALL BE USED IN PIERS. THE CONCRETE FLOOR SLAB SHALL BE POURED IN ONE CONTINUOUS OPERATION BETWEEN THE CONSTRUCTION JOINTS SHOWN AND SHALL BE FINISHED IN ACCORDANCE WITH ART. 51-18(b) OF THE STANDARD SPECIFICATIONS. NO ADDITIONAL CONSTRUCTION JOINTS WILL BE ALLOWED WITHOUT THE WRITTEN PERMISSION OF THE ENGINEER.

ALL CONNECTIONS, SHOP AND FIELD, WILL BE RIVETED EXCEPT AS NOTED. ALL RIVETS SHALL BE 3/4" ϕ IN 13/16" ϕ HOLES EXCEPT IN GIRDER FLANGE SPLICES WHICH SHALL BE 7/8" ϕ IN 15/16" ϕ HOLES. FOR GIRDER SPLICES SHALL BE SUBPUNCHED 11/16" ϕ AND REAMED TO CORRECT SIZE WITH GIRDERS ASSEMBLED FULL LENGTH IN THE SHOP IN THEIR CORRECT RELATIVE POSITIONS WITH OR WITHOUT CROSS FRAMES IN PLACE. GIRDERS SHALL BE LEFT ASSEMBLED FOR SHOP INSPECTION.

INSPECTION OF STRUCTURAL STEEL SHALL BE BY THE ILLINOIS DIVISION OF HIGHWAYS BEFORE PAINTING.

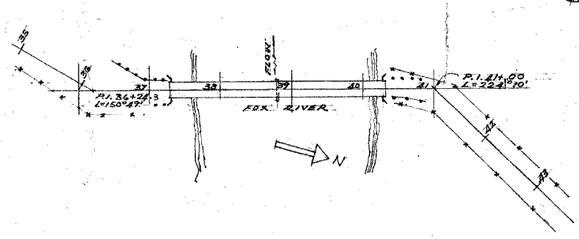
ALL ROCKERS, ROLLERS, BEARING PLATES, SHIM PLATES, LEAD PLATES AND ANCHOR BOLTS SHALL BE FINISHED AND SET IN ACCORDANCE WITH ART. 55.4 (m) AND 55.8 (f) OF THE STANDARD SPECIFICATIONS AND ARE INCLUDED FOR PAYMENT AS STRUCTURAL STEEL. ESTIMATED WEIGHT = 7930 LBS. ANCHOR BOLTS SHALL BE SET BEFORE RIVETING CROSS FRAMES OVER PIERS AND ABUTMENTS.

STRUCTURAL STEEL SHALL RECEIVE ONE SHOP COAT OF RED LEAD PAINT AND TWO FIELD COATS OF ALUMINUM PAINT. ALL PAINT SHALL BE FURNISHED AND APPLIED BY THE CONTRACTORS.

THE CONTRACTOR SHALL DRIVE TIMBER TEST PILES AS DIRECTED BY THE ENGINEER BEFORE ORDERING REMAINDER OF PILES. TEST PILES MAY BE DRIVEN AT THE LOCATIONS OF PERMANENT PILES.

## TOTAL BILL OF MATERIAL

| ITEM | UNIT | SUPER. | SUB. | 70-B-MFT. | 70-F-MFT. |
|---|---|---|---|---|---|
| CLASS X CONCRETE | CU. YDS. | 178.8 | 63.0 | 241.8 | |
| CLASS A CONCRETE | CU. YDS. | | 164.3 | 164.3 | |
| SEAL COAT CONCRETE | CU. YDS. | | 156.8 | 156.8 | |
| | | | | | |
| REINFORCEMENT BARS | LBS. | 45960 | 16100 | 62060 | |
| STRUCTURAL STEEL | LBS. | 328065 | | 328065 | 328065 |
| NAME PLATE | EACH | 1 | | 1 | |
| COFFERDAM - PIER 1 | EACH | | 1 | 1 | |
| COFFERDAM - PIER 2 | EACH | | 1 | 1 | |
| COFFERDAM EXCAVATION | CU. YDS. | | 345 | 345 | |
| | | | | | |
| FURNISHING UNTREATED TIMBER PILES (26') | LIN. FT. | | 1720 | 1720 | |
| | | | | | |
| DRIVING TIMBER PILES | LIN. FT. | | 1720 | 1720 | |
| TIMBER TEST PILES | EACH | | 2 | 2 | |
| METAL SHOES | EACH | | 86 | 86 | |
| | | | | | |
| REMOVAL OF EXISTING STRUCTURE | EACH | | | 1 | |




## PLAN AT EXISTING BRIDGE

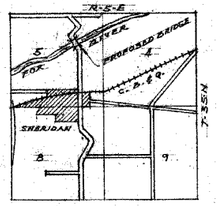
STATION 38+79.35
BUILT 1953 BY
LASALLE COUNTY
SECTION 70-B-F-M.F.T.
LOADING H20

SEE ILLINOIS STD. 2113

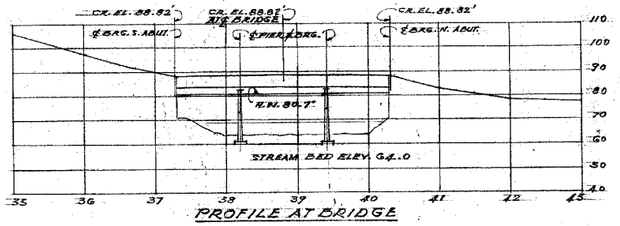
## LETTERING ON NAME PLATE

## WATERWAY DATA

DRAINAGE AREA = 1,401,600 ACRES
PRESENT OPENING = 4,383 SQ. FEET
PROPOSED OPENING = 4,399 SQ. FEET




## LOCATION PLAN




## PROFILE AT BRIDGE

## DESIGN STRESSES

$f_c$ = 1200 #/□" SUPERSTRUCTURE
$f_c$ = 800 #/□" SUBSTRUCTURE
$f_s$ = 18000 #/□" STRUCTURAL STEEL
$f_s$ = 20000 #/□" REINFORCING STEEL
n = 10
LOADING H20-44

APPROVED: COUNTY SUPERINTENDENT OF HIGHWAYS

EXAMINED: BRIDGE ENGINEER

PASSED: ENGINEER OF DESIGN

APPROVED: CHIEF HIGHWAY ENGINEER

ALFRED BENESCH & ASSOCIATES CONSULTING ENGINEERS
30 EAST ADAMS STREET CHICAGO - ILLINOIS

# PLAN & ELEVATION
# NORTH SHERIDAN BRIDGE
# OVER FOX RIVER
# S.A. RTE. 23 SECTION 70-B-M.F.T.
# LASALLE COUNTY
# STA. 38+79.35