

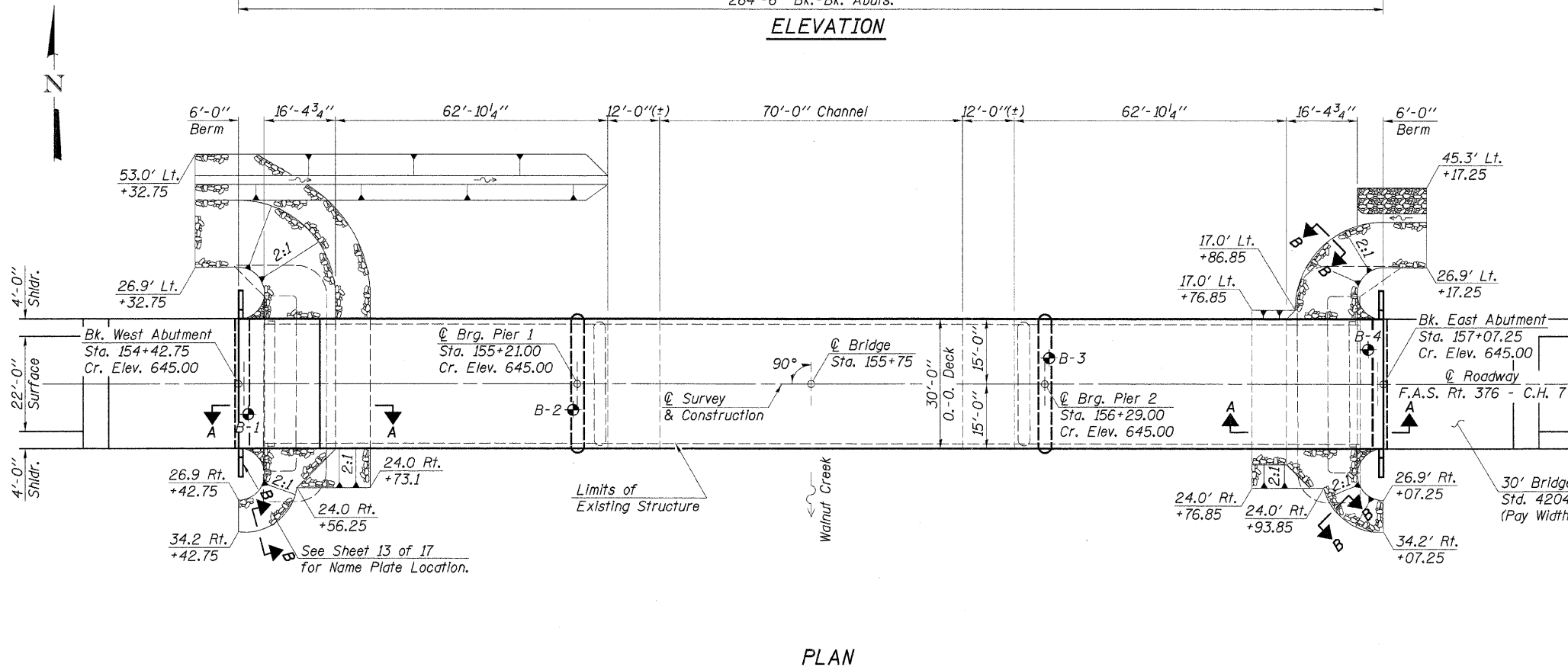
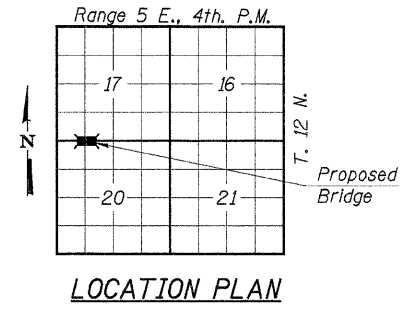
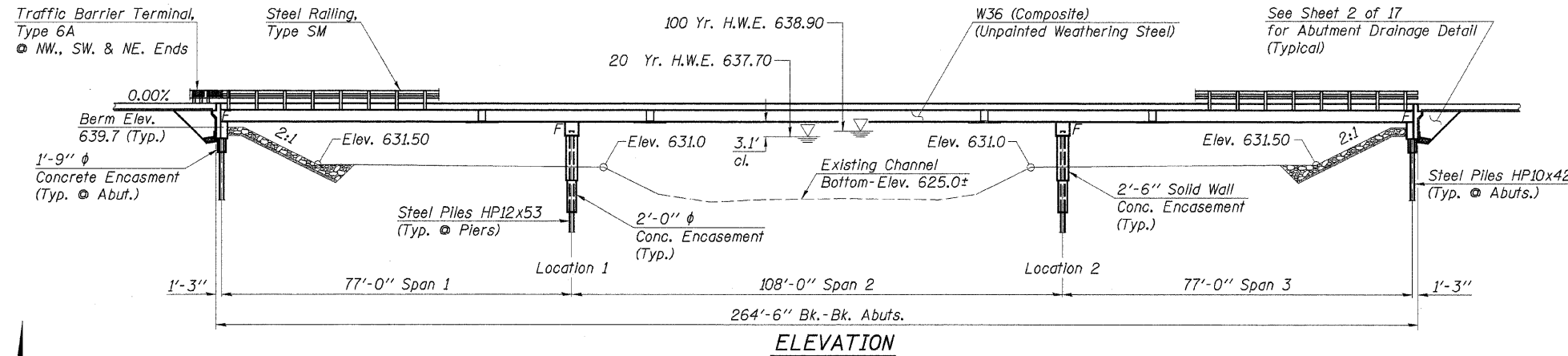
**Existing Structure No. 088-3107**

Sta. 155+75 - 3-Span Continuous Steel Wide Flange Beam Bridge with Bituminous Surfaced Concrete Deck on Spill-Through Column Abutments and Solid Wall Piers founded on timber pile supported footings. 253'-6" Bk.-Bk. Abuts., 27'-4" O.-O. Deck, 0° Skew.

**B.M. Descriptions**

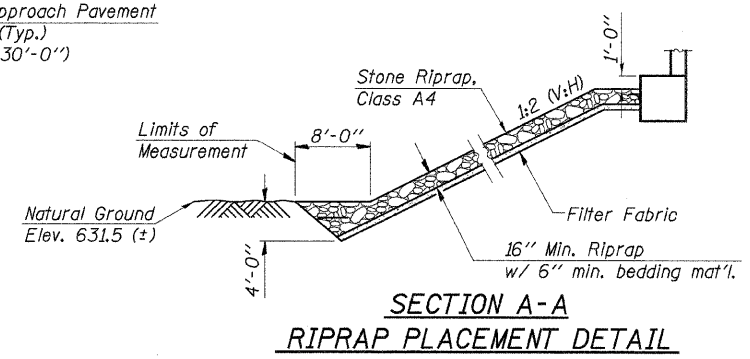
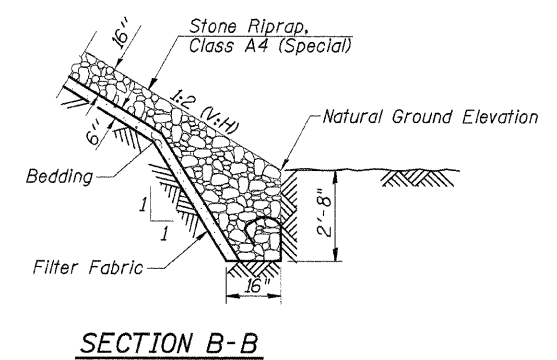
B.M. #3 - Chiseled "□" NW. Corner Wing Elev. 644.00

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
C.H. 7	03-00147	STARK	25	5
F.A.S. 376	-01-BR			
ROAD DIST.	ILLINOIS	FED. AID PROJECT		
			Sheet 1 of 17	CONTRACT NO. 89452



**INDEX OF SHEETS**

- General Plan and Elevation
- General Notes and Bill of Materials
- 5. Top of Slab Elevations
- 7. Superstructure
- 8. Steel Railing, Type SM
- 10. Structural Steel
- Bearing Details
- Anchor Bolt Details
- Abutments
- 16. Piers
- Bar Splicers



**Construction Permits:**  
The requirements of the IDNR - Office of Water Resources have been fulfilled in accordance with Statewide Permit No. 2.

**WATERWAY INFORMATION**

Drainage Area	159.43 Sq. Mi.
Existing Opening (20 Yr.)	1816 Sq. Ft.
Required Opening (20 Yr.)	2043 Sq. Ft.
Proposed Opening (20 Yr.)	2043 Sq. Ft.
Design Discharge (20 Yr.)	6527 C.F.S.
Created Head (20 Yr.)	0.3 Ft.
100 Year Discharge	9469 C.F.S.
100 Yr. Created Head	0.5 Ft.

**SEISMIC DATA**

Seismic Performance Category (SPC) = A  
Bedrock Acceleration Coefficient (A) = 0.038g  
Site Coefficient (S) = 1.0

**DESIGN STRESSES**

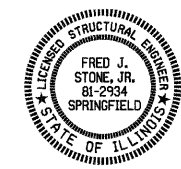
$f'_c = 3,500$  p.s.i. (Sub. & Super)  
 $f_y = 60,000$  p.s.i. (Reinf. Bars -- Field Units)  
 $f_y = 50,000$  p.s.i. AASHTO M270 GR 50W (Structural Steel)

**DESIGN SPECIFICATIONS**  
2002 AASHTO

**LOADING HS 20-44**  
25#/Sq. Ft. included in dead load for future wearing surface.

"I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current 'AASHTO Standard Specifications for Highway Bridges'."

Fred Stone Jr. (1-4-08)  
ILLINOIS STRUCTURAL NO. 2934 (Expires 11/30/08)



DESIGNED	A.R.K.
CHECKED	F.J.S. & S.F.M.
DRAWN	S.A.P.
CHECKED	A.R.K. & F.J.S.

**GENERAL PLAN & ELEVATION**

SECTION 03-00147-01-BR  
COUNTY HIGHWAY 7  
STARK COUNTY  
STATION 155+75

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ENGINEERING AND SCIENCE CONSULTANTS  
FREEPORT, IL ROCKFORD, IL ROCKFORD, IL SPRINGFIELD, IL

JOB NO.: 46808  
FILE: 46808PE.DGN  
DATE: 01/02/08