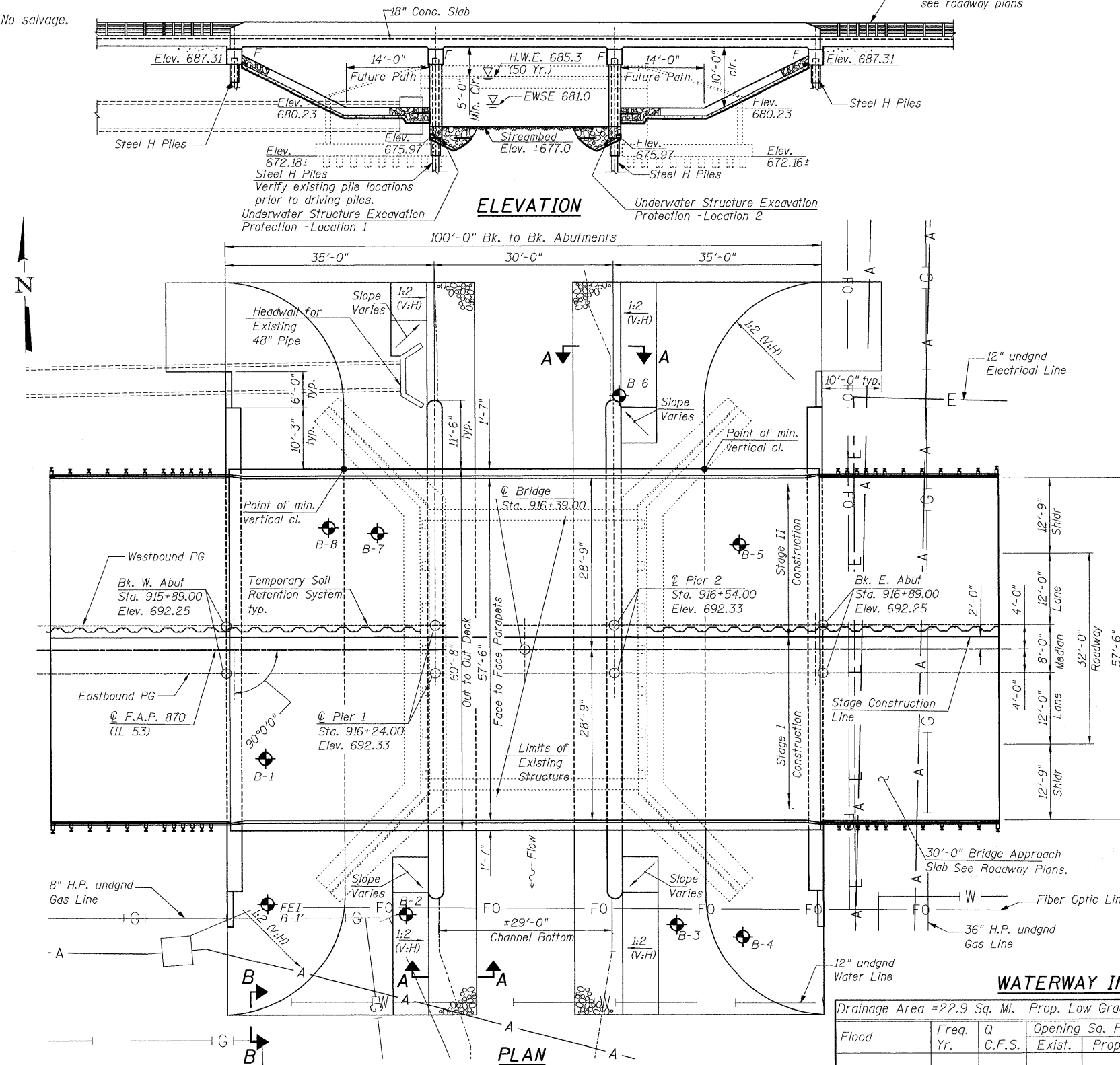


Benchmark: Mag Nail set in N. shoulder of W. bridge approach left of Sta. 916+18.20, Elev. 687.24

Existing Structure: SN 022-0077 was built in 1934 as S.B.I. Rte. 53, Section 533-X. Structure consists of a single span reinforced concrete T-beam superstructure with closed abutments on timber piles. The bridge is 38'-0" back-to-back abutments and 47'-0" out-to-out deck. Structure is to be removed and replaced using staged construction to maintain one lane of traffic during Stage I. Stage II will maintain two lanes of traffic.

Pre Stage I repairs require bituminous surface removal and resurfacing

No salvage.



ELEVATION

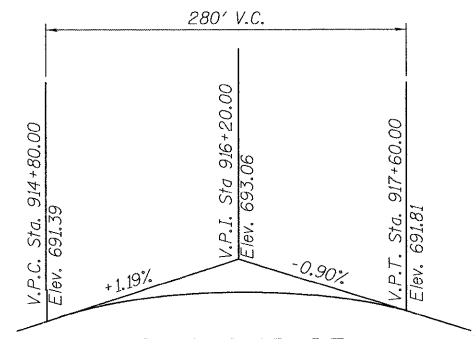
PLAN

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	W. Abut.	Pier 1	Pier 2	E. Abut.
	687.31	672.76	672.76	687.31

Drainage Area = 22.9 Sq. Mi. Prop. Low Grade Elevation: 688.4 ft. @ Sta. 922+00

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Head - Ft.		Headwater El.		
			Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	
Design	10	1200	199	325	684.4	0.5	0.1	684.9	684.5
Base	50	1710	199	390	685.3	0.7	0.1	686.0	685.4
Max. Calc.	100	1940	199	420	685.7	0.8	0.1	686.5	685.8
	500	2470	199	474	686.4	1.0	0.1	687.4	686.5



PROFILE GRADE

(4' Offset from C Roadway)

STATION 916+39
 BUILT 200_ BY
 STATE OF ILLINOIS
 F.A.P. RT. 870 SEC. 533-X-B-R-1
 LOADING HL-93
 STR. NO. 022-0181

NAME PLATE

See Std. 515001

INDEX OF SHEETS

- 001 General Plan and Elevation
- 002 General Data
- 003 Stage Construction Details
- 004 Stage Construction Details
- 005 Temporary Concrete Barrier for Staged Construction
- 006 Top of Slab Elevations
- 007 Top of Slab Elevations
- 008 Top of West Approach Slab Elevations
- 009 Top of East Approach Slab Elevations
- 010 Superstructure
- 011 Superstructure Details
- 012 Bridge Railing Details
- 013 West Abutment
- 014 East Abutment
- 015 Pier 1
- 016 Pier 2
- 017 Pile Details
- 018 Bar Splicer Assembly Details
- 019 Soil Boring Logs
- 020 Soil Boring Logs
- 021 Soil Boring Logs
- 022 Soil Boring Logs
- 023 Soil Boring Logs
- 024 Soil Boring Logs
- 025 Existing Bridge Plans
- 026 Existing Bridge Plans

LOADING HL-93

Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS

2007 AASHTO LRFD Bridge Design Specifications

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
 fy = 60,000 psi (Reinforcement)

SEISMIC DATA

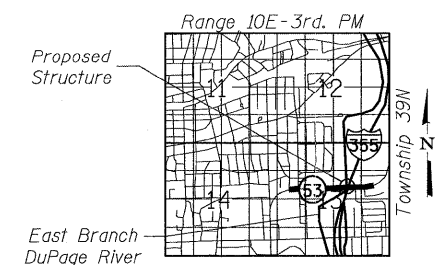
Seismic Performance Zone (SPZ) = 1
 Bedrock Acceleration Coefficient (A) = 3.8%g
 Site Coefficient (S) = 1.0

APPROVED
 FOR STRUCTURAL ADEQUACY ONLY

Ralph E. Anderson
 ENGINEER OF BRIDGES AND STRUCTURES



SIGNED 11-24-2008
 EXPIRES: 11-30-2008



LOCATION SKETCH

STR-1 OF 26



DESIGNED - LJH	REVISED -
DRAWN - FJD	REVISED -
CHECKED - JSS	REVISED -
DATE - 10/15/08	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. ROUTE 870 (ILLINOIS 53) OVER EAST BRANCH DUPAGE RIVER			
GENERAL PLAN AND ELEVATION			
SCALE:	SHEET NO.	OF SHEETS	STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS NO.	SHEET NO.
870	533-X-B-R-1	DuPAGE	87	38
CONTRACT NO. 60B95				
FED. ROAD DIST. NO. - [ILLINOIS] FED. AID PROJECT				

FILE NAME = P:\2002\0220019\024\Cadd\Structural\SN022-0181.F.in\Sheet\02200181-60B95-001-0PE.dgn