

Benchmark: Chiseled "X" on northwest corner of concrete headwall, Elev. 644.96

Existing Structure: S.N. 098-0015 originally constructed in 1966 as SBI Route 88, Section 101 B-1. The width was doubled in 1972 as FA 403, Section 195-101 BY. Existing Structure is a combination PPC Deck Beam structure, Bk to Bk Abut 63.63' and Out to Out width 92'-0". The east third of the structure consists of 27" side by side deck beams. The west two-thirds consists of 33" deck beams spaced at ±6' centers supporting a 7" R.C. deck. Traffic to be maintained using stage construction.

No Salvage.

**LOADING HL-93**

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

**DESIGN SPECIFICATIONS**

2010 AASHTO LRFD Bridge Design Specifications with 2010 Interim (Bridge Structure)  
2002 AASHTO Standard Specification for Highway Bridges (Retaining Wall and Wingwalls)

**SEISMIC DATA**

Seismic Performance Zone (SPZ) = 1  
Design Spectral Acceleration at 1.0 sec. ( $S_{D1}$ ) = 0.087g  
Design Spectral Acceleration at 0.2 sec. ( $S_{D5}$ ) = 0.141g  
Soil Site Class = D

**DESIGN STRESSES**

**NEW CONSTRUCTION**

$f'_c = 3,500$  psi  
 $f_y = 60,000$  psi (Reinforcement)  
 $f_y = 50,000$  psi (M270 Grade 50W)

**EXISTING CONSTRUCTION**

$f'_c = 2,200$  psi  
 $f_y = 40,000$  psi (Reinforcement)

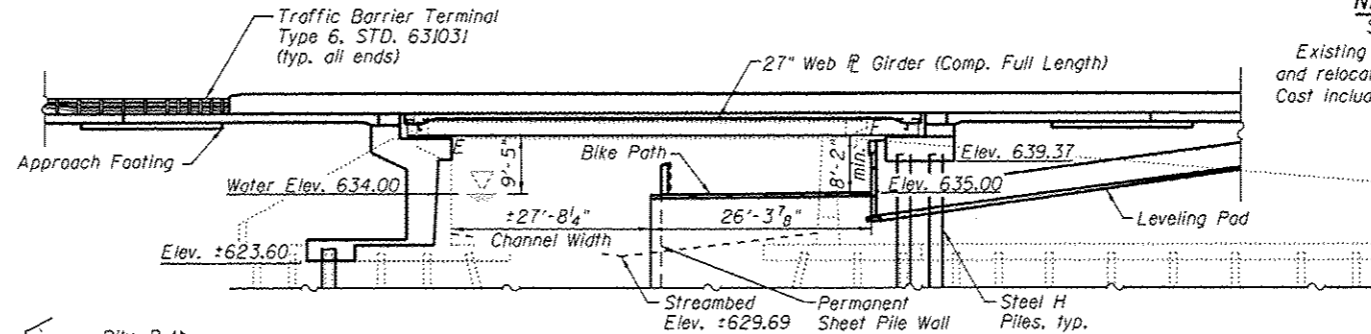
STATION 632+59.38  
RE-BUILT 201X BY  
STATE OF ILLINOIS  
F.A.P. RTE. 646 SEC.101 BR-3  
LOADING HL-93  
STRUCTURE NO. 098-0015

**NAME PLATE**

See Std. 515001  
Existing Name Plate shall be cleaned and relocated next to new Name Plate. Cast Included with Name Plates.

**INDEX OF SHEETS**

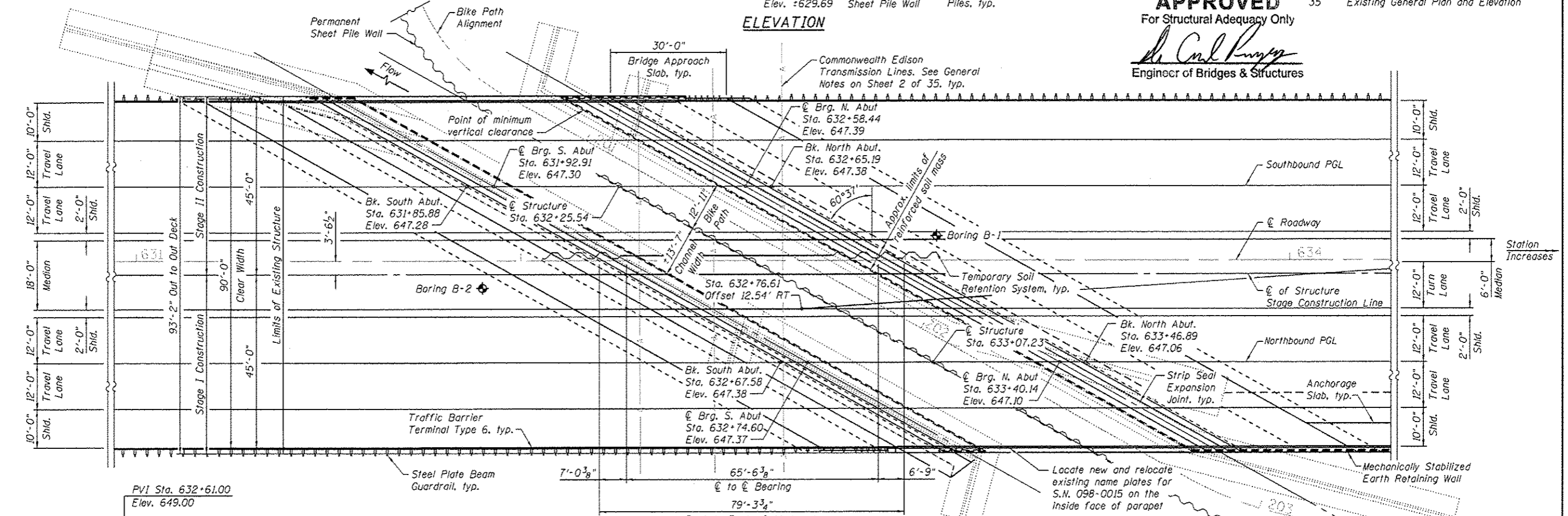
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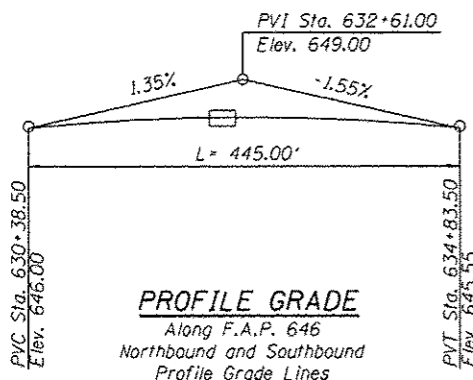
**ELEVATION**

**APPROVED**  
For Structural Adequacy Only

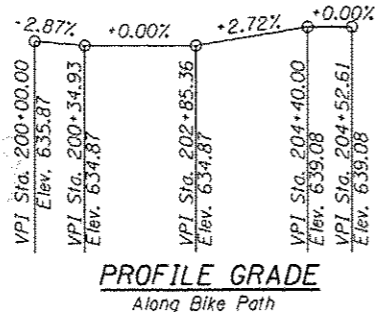
*Anthony J. Standish*  
Engineer of Bridges & Structures



**PLAN**



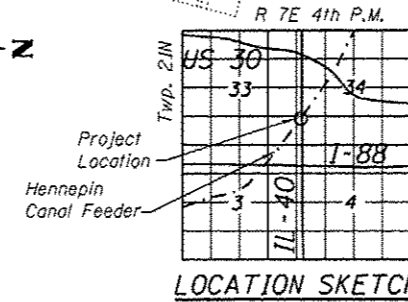
**PROFILE GRADE**  
Along F.A.P. 646  
Northbound and Southbound  
Profile Grade Lines



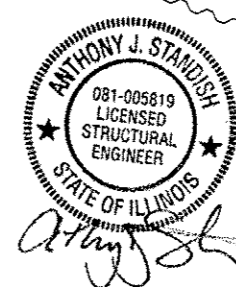
**PROFILE GRADE**  
Along Bike Path

**WATERWAY INFORMATION**

Flow is controlled. Waterway opening has been determined by recreational requirements.



**LOCATION SKETCH**



**GENERAL PLAN AND ELEVATION**  
F.A.P. 646 (IL-40) OVER  
HENNEPIN CANAL FEEDER  
SECTION 101 BR-3  
WHITESIDE COUNTY  
STATION 632+59.38  
STRUCTURE NO. 098-0015

	1170 SOUTH HOUBOLT ROAD JOLIET, ILLINOIS 60431 (815) 744-4200	USER NAME = dennisw	DESIGNED - MJD	REVISED	<b>STATE OF ILLINOIS</b> DEPARTMENT OF TRANSPORTATION	<b>GENERAL PLAN AND ELEVATION</b> STRUCTURE NO. 098-0015 SHEET NO. 1 OF 35 SHEETS	F.A.P. RTE. 646	SECTION 101 BR-3	COUNTY WHITESIDE	TOTAL SHEETS 130	SHEET NO. 60
	PLOT SCALE = PLOT DATE = 8/15/2014	CHECKED - RRD	REVISIONS	CONTRACT NO. 64C17			(ILLINOIS) FED. AID PROJECT				