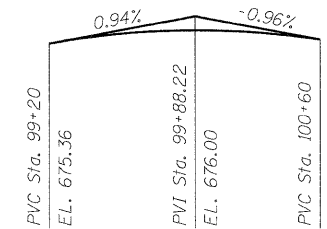


Benchmark : Benchmark #1 - cut "□" in top of northwest wingwall.
Assumed elevation = 675.14'

Existing Structure: S.N. 049-0059 built in 1929 and completely replaced in 1978 as a three span 17"x36" PPC Deck Beam bridge with 2" bituminous wearing surface on closed abutments and 2 piers on spread footings. The structure measures 114'-0 1/2" back to back abutments and 41'-0" out to out. Bridge was rehabilitated in 2002 with a new 4" concrete wearing surface. Traffic is to be maintained utilizing stage construction. One lane of alternating two-way traffic is to be maintained using traffic signals.

Salvage: None

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



PROFILE GRADE

LOADING HL-93

Allow 50 psf for future wearing surface

DESIGN SPECIFICATIONS

2007 AASHTO LRFD 4th Edition

DESIGN STRESSES

FIELD UNITS

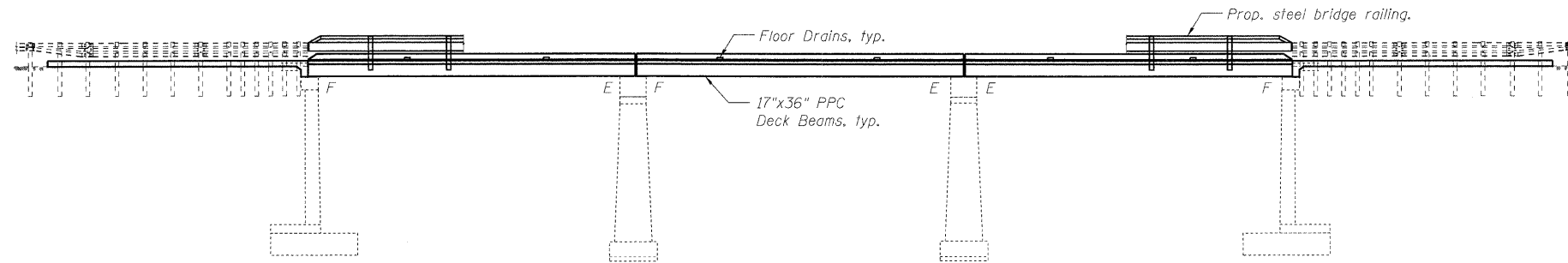
f'c = 3,500 psi
f'c = 5000 psi (Concrete Wearing Surface)
fy = 60000 psi (Reinforcement)

PRECAST PRESTRESSED UNITS

f'c = 6000 psi
f'ci = 5000 psi
f's = 270,000 psi (1/2" φ low lax. strands)
f'si = 201,900 psi (1/2" φ low lax. strands)

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock acceleration coefficient (A) = .04
Site Coefficient (S) = 1.2



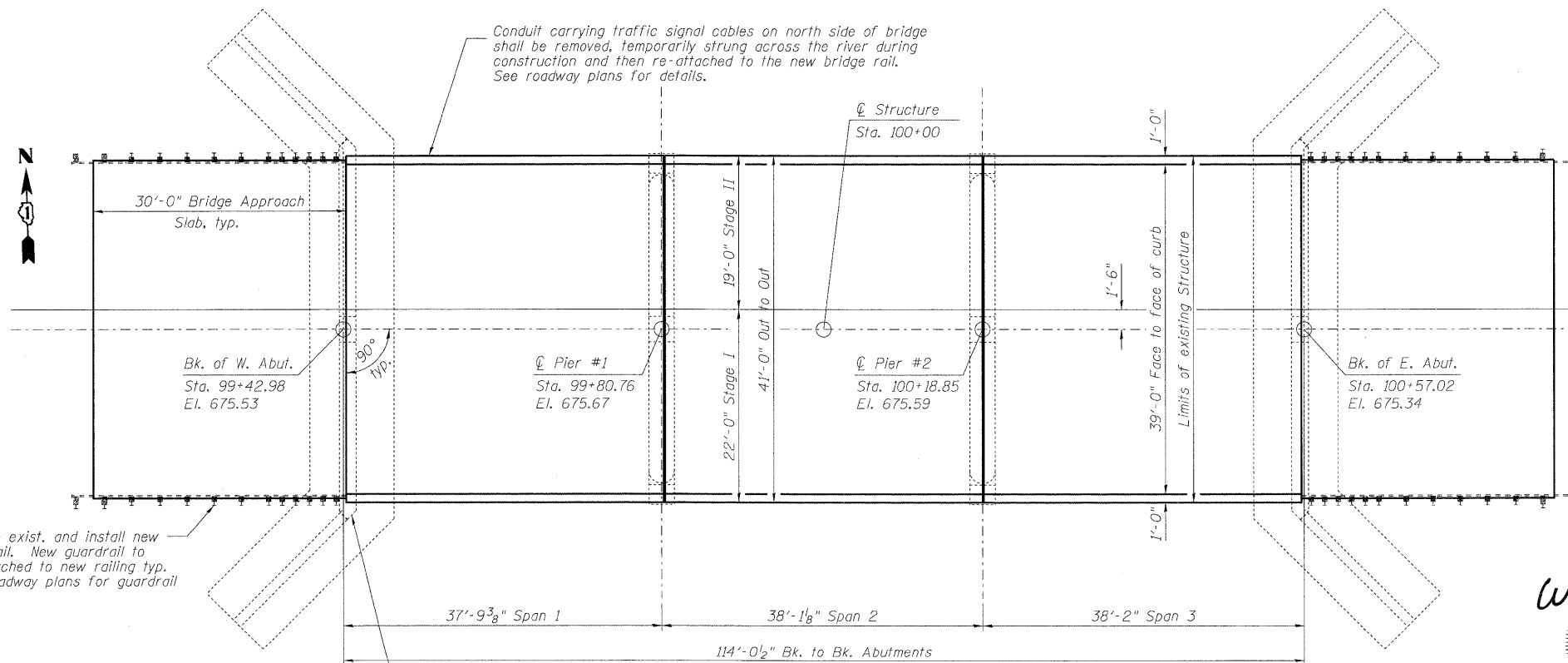
ELEVATION

STATION 100+00.00
REBUILT 20_ _ BY
STATE OF ILLINOIS
F.A.P. ROUTE 303 SEC 136 B-1
LOADING HL-93
STRUCTURE NO. 049-0059

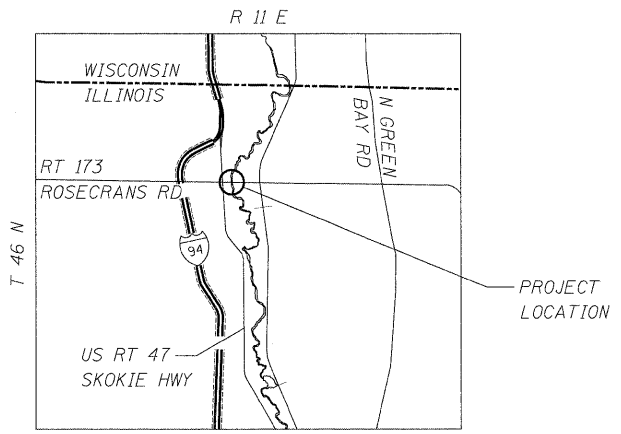
NAME PLATE

See Std. 515001

NOTE:
Existing Name Plate shall be cleaned and relocated next to new Name Plate.
Cost included with Name Plates.



PLAN



LOCATION SKETCH

Remove exist. and install new guardrail. New guardrail to be attached to new railing typ. See roadway plans for guardrail details.

Locate name plate on outside face of wingwall at southwest corner of bridge.

WHEELER
STATE OF ILLINOIS
081-005150
EX. 11/30/10

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

GENERAL PLAN AND ELEVATION
IL 173 OVER DES PLAINES RIVER

F.A.P. RT. 303
SECTION 136 B-1
LAKE COUNTY
STA. 100+00.00

STRUCTURE NO. 049-0059

DESIGNED	-	SLV
CHECKED	-	DJB
DRAWN	-	SLV
CHECKED	-	DJB

LONGCO, INC.
CONSULTING ENGINEERS
1560 WALL ST, SUITE 222
NAPERVILLE, ILLINOIS 60563 PH: (630) 577-9100

SHEET NO. S1	F.A.P. RTE. 303	SECTION 136 B-1	COUNTY LAKE	TOTAL SHEETS 43	SHEET NO. 16
OF S20 SHEETS	D-91-290-09		CONTRACT NO. 60F93		
FED. ROAD DIST. NO. _ ILLINOIS FED. AID PROJECT					