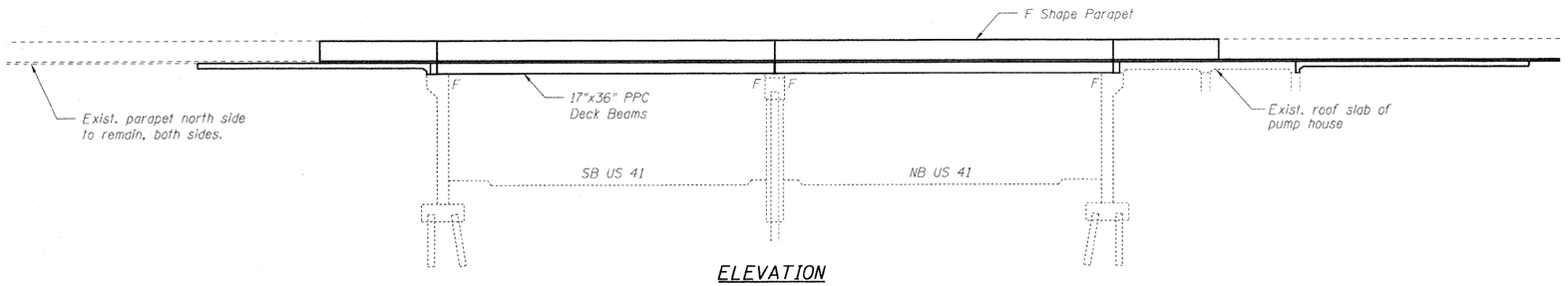
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Benchmark: Benchmark #1 - cut "□" in top of northwest quadrant of IL 176 & US 41. Assumed Elevation = 100.00'

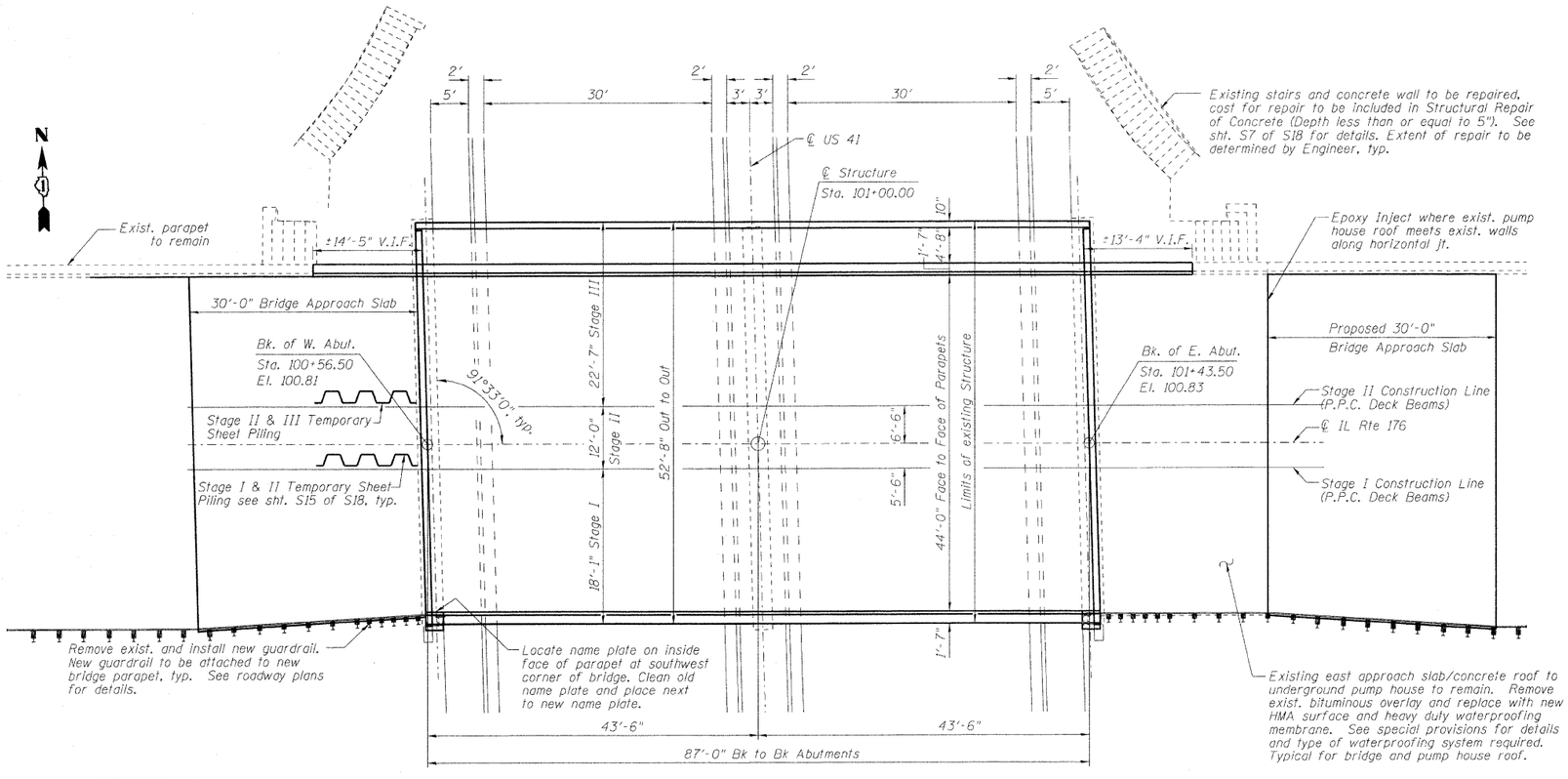
Benchmark #2 - Northeast corner of block in southwest quadrant of IL 176 & US 41 between IL 176 and bikepath. Elevation = 103.43'

Existing Structure: S.N. 049-0131 built in 1976 as a two span 17"x36" PPC Deck Beam bridge with 2" bituminous wearing surface on closed abutments and one pier on spread footings on piles. The structure measures 87'-0" back to back abutments and 52'-8" out to out. Bridge was rehabilitated in 2006 with partial beam replacement.
Traffic is to be maintained utilizing stage construction. One lane for each direction will be provided.

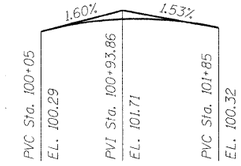
Salvage: None



ELEVATION



PLAN



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
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)

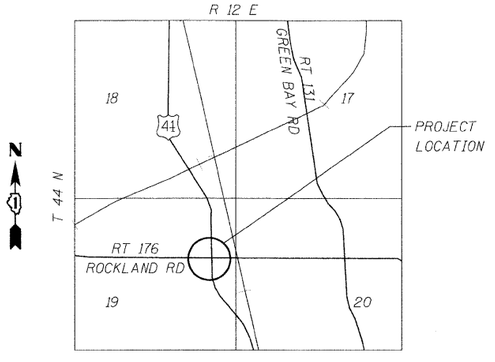
SEISMIC DATA

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

STATION 101+00.00
REBUILT 20__ __ BY
STATE OF ILLINOIS
F.A.U. ROUTE 1238 SEC 125SB-1-R
LOADING HL-93
STRUCTURE NO. 049-0131

NAME PLATE

See Std. 515001



LOCATION SKETCH

STATE OF ILLINOIS
WILLIAM A. ESS
081-005150
LICENSED STRUCTURAL ENGINEER

Expires 11/30/10

GENERAL PLAN AND ELEVATION
IL RTE 176 OVER US 41
F.A.U. RT. 1238
SECTION 125SB-1-R
LAKE COUNTY
STA. 101+00.00
STRUCTURE NO. 049-0131

DESIGNED -	SLV
CHECKED -	MJM
DRAWN -	SLV
CHECKED -	MJM

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

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Ralph E Anderson (TJD)
ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO. S1 OF S18 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	1238	125SB-1-R	LAKE	38	14
	D-91-045-08		CONTRACT NO. 60D57		
	FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		