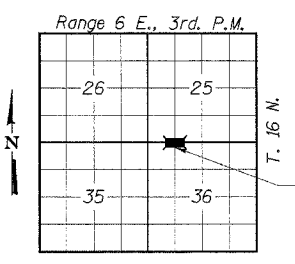


ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
C.H. 16	04-00209-01-BR	PIATT	18	4

ILLINOIS
CONTRACT NO. 91339
Sheet 1 of 15



LOCATION PLAN

INDEX OF SHEETS

1. General Plan & Elevation
2. General Notes & Bill of Material
- 3.-5. Top of Slab Elevations
6. Superstructure
- 7.-8. Expansion Joint Details
9. Steel Railing, Type S-1
10. Structural Steel
- 11.-12. Bearing Details
13. Anchor Bolt Details
- 14.-15. Abutment Details

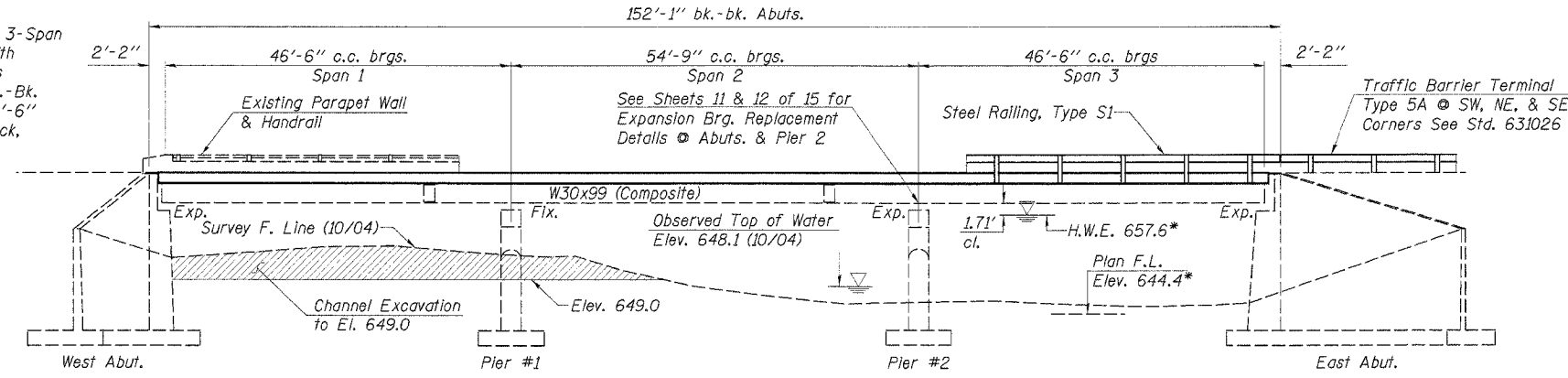
PROPOSED REHABILITATION WORK

1. Remove concrete deck and bridge railings with care to avoid damage to existing steel framing. No debris from deck removal operations will be allowed to fall into the waterway.
2. With deck removed, existing expansion bearings at the abutments and east pier shall be removed. Existing beams shall be jacked and shored during bearing removal and replacement with elastomeric bearings and steel bearing extension assemblies. Existing bearing seats shall be cleaned before installation of new bearings. Any bearing seat cracks, 1/8" or greater in width, shall be sealed by epoxy injection.
3. Install stud shear connectors on steel beams after suitable scaffolding or deck forming has been placed.
4. Perform concrete removal operations at abutments for wall modifications required for expansion joint installation and widened deck.
5. Construct new bridge deck, install new expansion joints, and erect steel bridge and approach railing.
6. Within the limits of existing R.O.W., excavate and remove silt buildup along the west bank of the bridge opening. Re-shaped areas shall be seeded.
7. Construct approach roadway tapers from abutments to existing roadway (To be done by Piatt County Highway Department.)

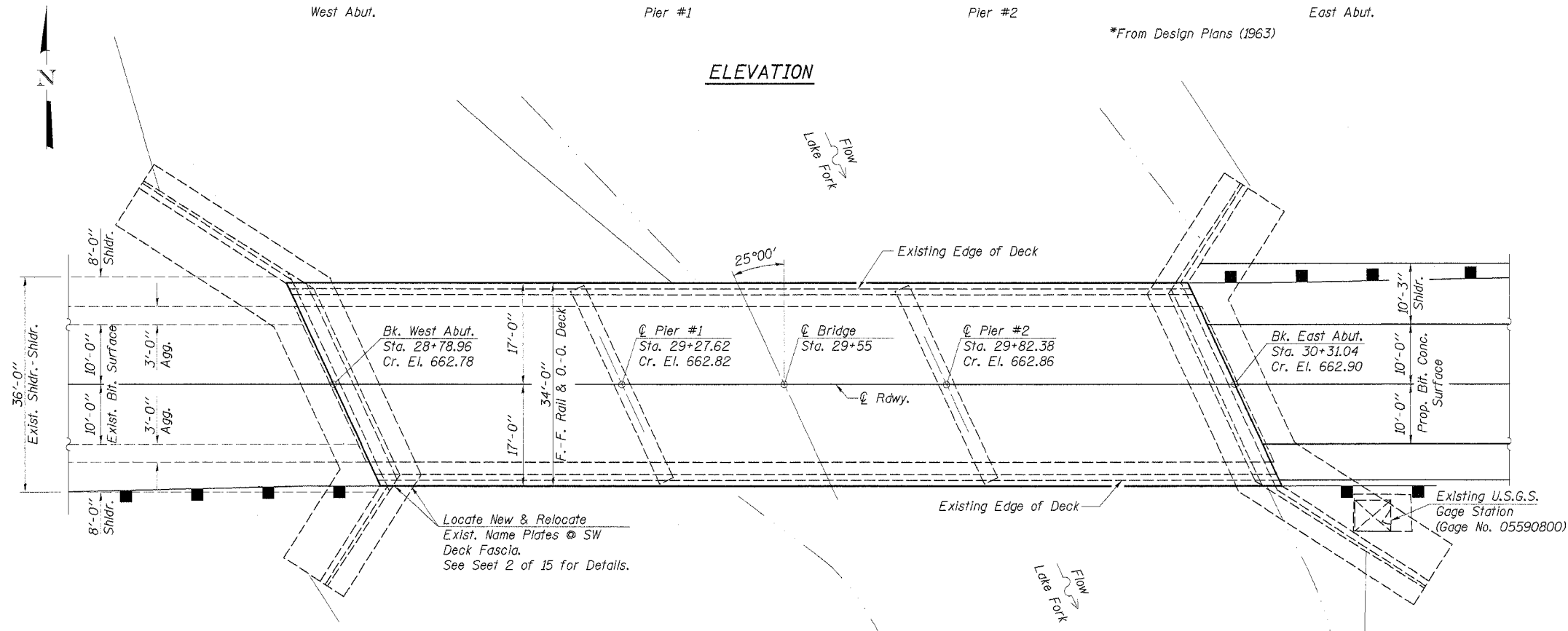
BM #1 - Chiseled "□" on SW Corner
Wing = Elev. 663.27

BM #2 - Chiseled "□" on NE Corner
Wing = Elev. 663.40

Exist. Structure: S.M. 074-0034, Built 1963, 3-Span Continuous Steel Wide-Flange Beam bridge with C.I.P. Concrete Deck, R.C. Hammerhead Piers and Closed Concrete Abutments. 152'-1" Bk.-Bk. Abutments. 3-Spans @ 46'-6", 54'-9", 46'-6" c.c. Brgs., 26'-0" Roadway, 32'-0" o.o. Deck, Skew = 25° Rt.



ELEVATION



PLAN

LOADING HS20-44

Allow 25#/sq. ft. for Future Wearing Surface

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.049
Site Coefficient (s) = 1.0

DESIGN STRESSES

EXISTING CONSTRUCTION

$f_c = 1,000$ p.s.i. (Abuts.)
 $f_c = 1,400$ p.s.i. (Super & Piers)
 $f_s = 20,000$ p.s.i. (Reinf.)
 $f_s = 20,000$ p.s.i. (AASHTO M270 GR36 Structural Steel)

PROPOSED CONSTRUCTION

$f_s = 3,500$ p.s.i. (Sub & Super)
 $f_y = 60,000$ p.s.i. (Reinf.)
 $f_y = 36,000$ p.s.i. (AASHTO M270 GR36 - Structural Steel Existing & New)

$v = 75$ p.s.i. (Footings)
 $n = 10$
Max soil pressure = 2.1 Ton/Sq. Ft.

"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 J. Stone, Jr. (7-4-05)

ILLINOIS STRUCTURAL NO. 2934 (Expires 11/30/06)



DESIGN SPECIFICATIONS

2002 AASHTO

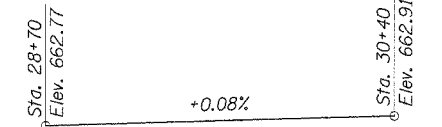
WATERWAY INFORMATION

*-From Design Plans (1963)

*Drainage Area.....	149.0 Sq. Mi.
*Design H.W. Elev. (25 Yr.).....	657.6
*Reqd Opening (25 Yr.).....	1700 Sq. Ft.
*Proposed Opening (25 Yr.).....	1654 Sq. Ft.
Present Opening (Below Elev. 657.6).....	1037 Sq. Ft.
Proposed Opening (Below Elev. 657.6).....	1257 Sq. Ft.
Proposed Opening (Below Elev. 659.39 - Low Steel).....	1491 Sq. Ft.

REHABILITATION PROJECT

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



PROPOSED PROFILE GRADE

GENERAL PLAN & ELEVATION

C.H. 16 OVER LAKE FORK
SECTION 04-00209-01-BR
PIATT COUNTY
STATION 29+55

4440 ASH GROVE SPRINGFIELD, IL 62711 (217) 793-8600 oasinc@famvid.com	OZYURT AND STONE, INC. CONSULTING ENGINEERS	JOB NO.: 0418 FILE: 04189PE.DGN DATE: 05-23-05
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