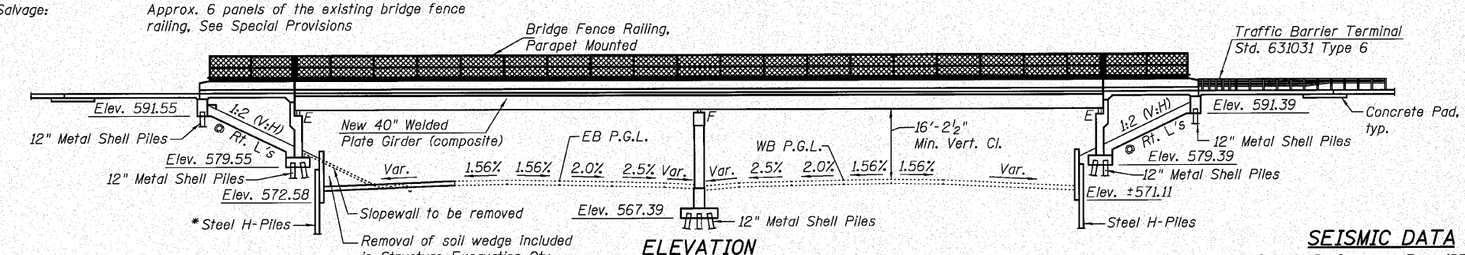
Benchmark: BM #2 Chiseled "□" on West side of mast arm signal foundation @ S.E. corner of IL 159 and Salem Place. Elev. 589.80 (NAVD 88)

Existing Structure: S.N. 082-0176 built as F.A.I. 64 Section 82-5HB-3 in 1972 and widened in 1998 as F.A.P. Rte. 600 Section 82-5K-1. Existing Structure is a two span reinforced concrete deck on continuous welded plate girders supported on sand filled vaulted abutments and pile supported multi-column pier. 231'-6" Bk.-Bk. Approach Bents, 98'-0" Out.-Out. Deck. Structure is to be widened on the West side and a retaining wall is to be constructed on the South side utilizing stage construction.

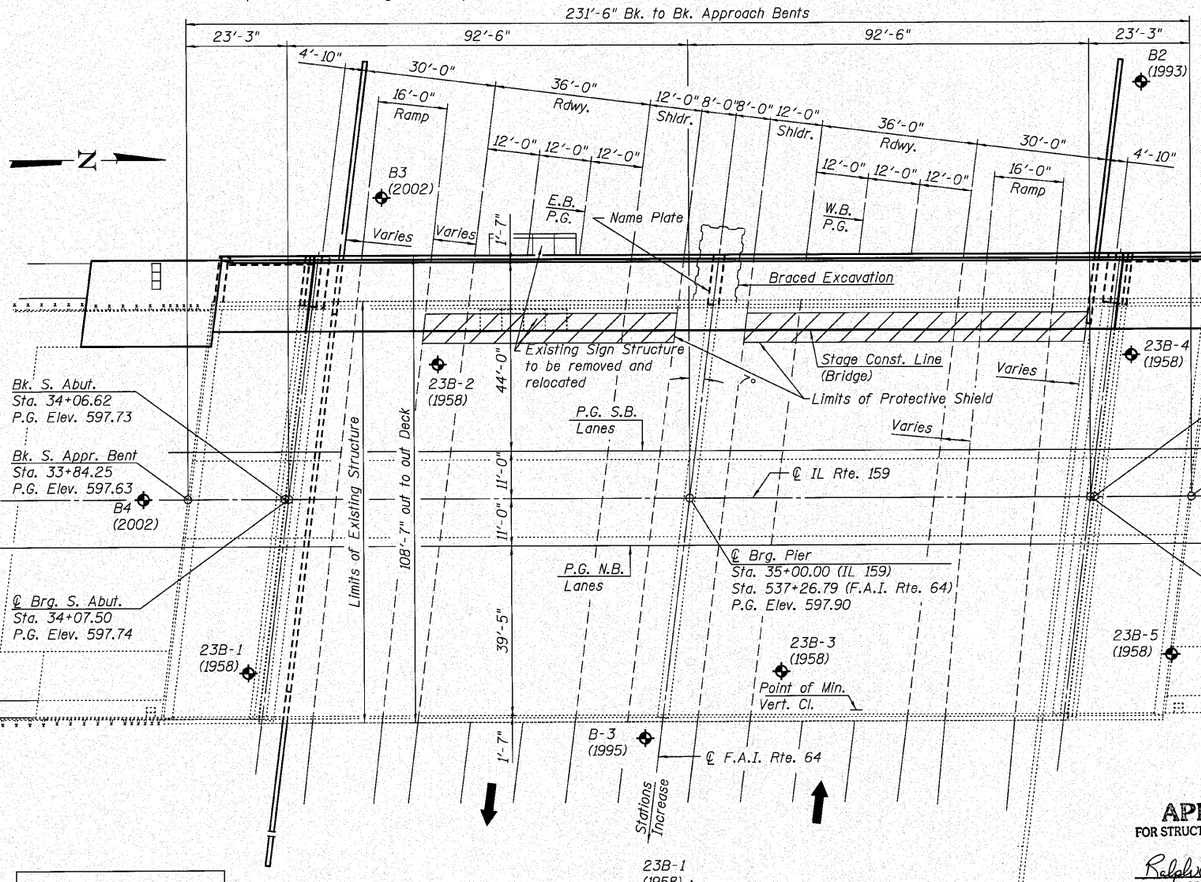
Salvage: Approx. 6 panels of the existing bridge fence railing, See Special Provisions

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

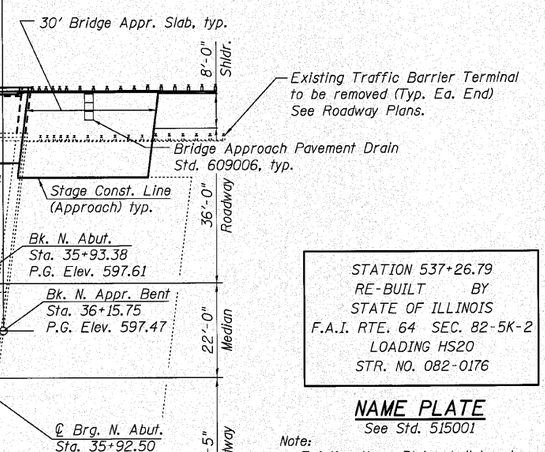


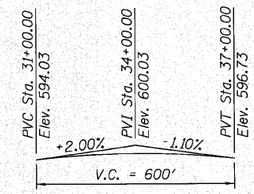
ELEVATION
(Looking West thru Proposed Widening)

* Space to miss existing battered piles.

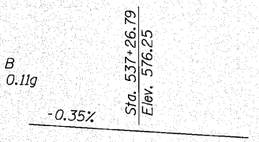


PLAN





PROFILE GRADE IL 159
Profile adjusted for Datum difference and existing overlay



PROFILE GRADE F.A.I. 64

SEISMIC DATA
Seismic Performance Zone (SPC) = B
Bedrock Acceleration Coefficient (A) = 0.11g
Site Coefficient (S) = 1.0

Note:
Elevations based on existing plan information adjusted to NAVD 88. Subtract 0.33 feet from existing plans to get NAVD 88 elevations.

INDEX OF SHEETS

1. General Plan and Elevation
2. General Data and Details
3. Stage Construction Details
4. Temporary Concrete Barrier for Stage Construction
5. Top of Approach & Vaulted Slab Elevations
6. Top of Slab Elevations
7. Approach Slabs
8. Vaulted Slabs
9. Bar Splicer Assembly Details
10. Superstructure
11. Superstructure Details
12. Bridge Fence Railing Parapet Mounted
13. Framing Plan and Girder Details
14. Structural Steel and Bearing Details
15. Bridge Mounted Sign Structure
16. South Abutment
17. North Abutment
18. Pier
19. Metal Shell Pile Details
20. South Retaining Wall
21. South Retaining Wall Details
22. North Retaining Wall
23. North Retaining Wall Details
24. Soldier Pile Wall Details
25. H-Piles Details
26. Concrete Removal
27.-34. Boring Logs

DESIGN SPECIFICATIONS
2002 AASHTO Standard Specifications for Highway Bridges

LOADING HS 20-44
Future wearing surface not allowed.

DESIGN STRESSES

FIELD UNITS

ORIGINAL CONSTRUCTION
fc = 1,200 psi (Deck Slab Spans 2 and 3)
fc = 1,400 psi (Deck Slab Spans 1 and 4, Substructure)
fs = 20,000 psi (Structural Steel A-36)
fs = 20,000 psi (Reinforcement)
v = 75 psi (Footings)

1996 REHABILITATION
f'c = 3,500 psi
fy = 36,000 psi (Structural Steel)
fy = 60,000 psi (Reinforcement)

NEW CONSTRUCTION
f'c = 3,500 psi (Concrete)
f'c = 4,000 psi (Grout)
fy = 60,000 psi (Reinforcement)
fy = 36,000 psi (AASHTO M270 Grade 36)
fy = 270 ksi (0.6" ϕ Strands)

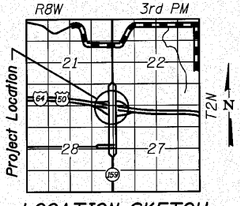
STATION 537+26.79
RE-BUILT BY
STATE OF ILLINOIS
F.A.I. RTE. 64 SEC. 82-5K-2
LOADING HS20
STR. NO. 082-0176

NAME PLATE
See Std. 515001

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

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Ralph E. Anderson (TJZ)
ENGINEER OF BRIDGES AND STRUCTURES
9-26-10

STATE OF ILLINOIS
SCOTT D. SANFORD
081-005468
SPRINGFIELD
STRUCTURAL ENGINEER
Expires: 11/30/2010



LOCATION SKETCH

GENERAL PLAN AND ELEVATION
IL 159 OVER I-64
F.A.I. RTE. 64 - SEC. 82-5K-2
ST. CLAIR COUNTY
STATION 537+26.79
STRUCTURE NO. 082-0176

DESIGNED - TJZ	SHEET NO. 1	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS / SHEET NO.
CHECKED - CWC	34 SHEETS	64	82-5K-2	ST. CLAIR	162 / 84
DRAWN - DLH				CONTRACT NO. 76D59	
CHECKED - CWC, SDS				ILLINOIS FED. AID PROJECT	

WHKS & CO. ENGINEERING
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(217) 483-9457
DESIGN FIRM #184001036