Bench Mark: Brass disk on top of existing southeast wingwall. Station 1013+70.11, 17.63′ right. Elevation 652.397.

Existing Structure: S.N. 010-0137, originally built in 1928 as SBI Route 49, Section 119-B. In 1975, the superstructure was replaced, the substructure was widened and one new pier was constructed as F.A. Route 199, Section 119BR.
The existing structure is a six simple span PPC deck beam bridge measuring 329′-0″ back to back of abutments and 33′-0″ out to out of deck.
The existing structure is to be removed and replaced. Traffic will be detoured.

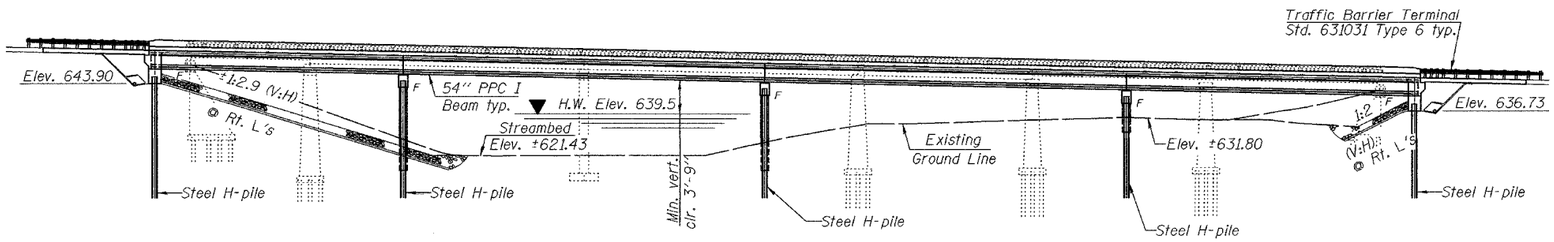
No salvage

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

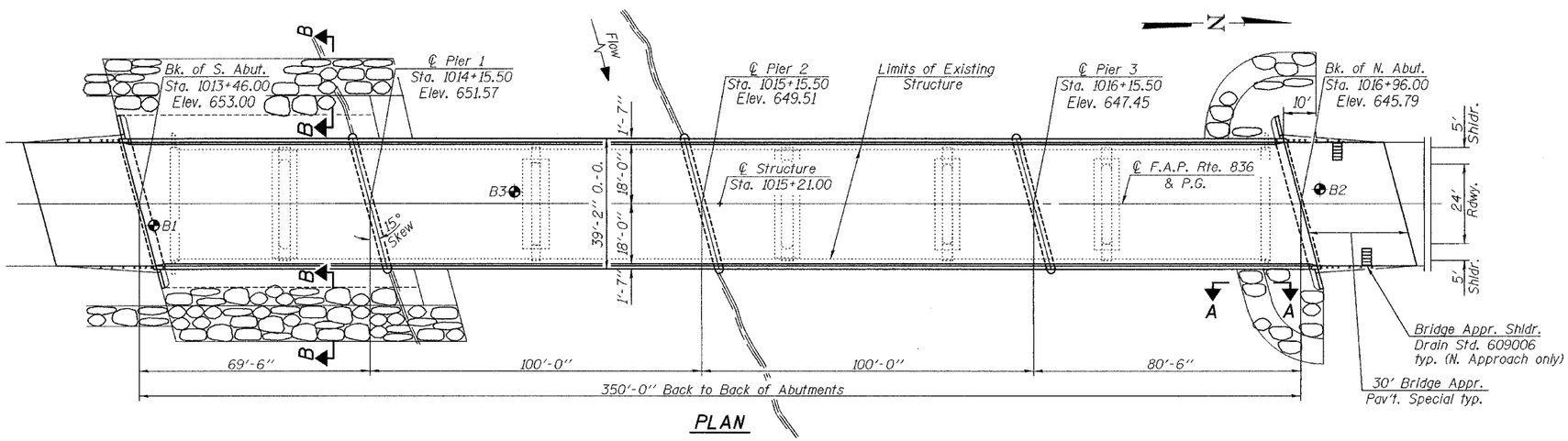
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 836	(119BR) BR	CHAMPAIGN		12
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 1
21 SHEET

Contract #70355



ELEVATION



PLAN

GENERAL NOTES

Reinforcement bars shall conform to the requirements of AASHTO M31 or M322 Grade 60.

Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.

The Contractor shall drive three test pile in a permanent locations at North Abutment, South Abutments and Pier Two as directed by the Engineer before ordering the remainder of piles

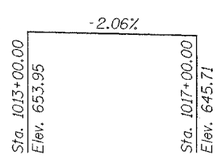
All construction joints shall be bonded.

INDEX OF SHEETS

1. General Plan and Elevation
2. General Data
3.-4. Top of Slab Elevations
5.-7. Superstructure
8. Diaphragm Details
9. Framing Plan
10.-12. Beam Details
13. Anchor Bolt Details
14.-15. Abutments
16.-18. Piers
19. Bar Splicers
20.-21. Soil Boring Logs

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment	Cu. Yd.		253	253
Stone Riprap, Class A4	Sq. Yd.		1097	1097
Filter Fabric for use with Riprap	Sq. Yd.		1097	1097
Removal of Existing Structures	Each			1
Structure Excavation	Cu. Yd.		528	528
Driving Steel Piles	Foot		3456	3456
Concrete Structures	Cu. Yd.		224.2	224.2
Concrete Superstructure	Cu. Yd.	490		490
Protective Coat	Sq. Yd.	1693		1693
Furnishing and Erecting Precast Prestressed Concrete I-Beams 54"	Foot	2084		2084
Reinforcement Bars, Epoxy Coated	Pound	105,140	20,300	125,440
Furnishing Steel Piles HP 12 x 63	Foot		3456	3456
Test Piles Steel HP 12 x 63	Each		3	3
Name Plates	Each	1		1
Bar Splicers	Each	72		72
Underwater Structure Excavation Protection-Location 1	Each		1	1
Underwater Structure Excavation Protection-Location 2	Each		1	1
Underwater Structure Excavation Protection-Location 3	Each		1	1
Diamond Grinding (Bridge Section)	Sq. Yd.	1500		1500



PROFILE GRADE
(along ℄ roadway)

STATION 1015+21.00
BUILT 200 BY
STATE OF ILLINOIS
F.A.P. RT. 836 SEC. (119BR)BR
LOADING HS20
STR. NO. 010-0280

NAME PLATE
See Std. 515001

LOADING HS20-44
Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS
2002 AASHTO

DESIGN STRESSES

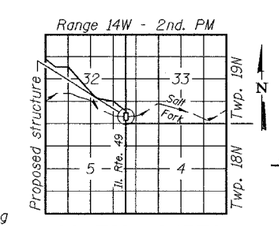
FIELD UNITS

f'_c = 3,500 psi
f_y = 60,000 psi (reinforcement)

PRECAST PRESTRESSED UNITS

f'_c = 6,000 psi
f'_{ci} = 5,000 psi
f'_s = 270,000 psi (½″φ low lax. strands)
f_{si} = 201,960 psi (½″φ low lax strands)

SEISMIC DATA
Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 4.8g
Site Coefficient (S) = 1.2



LOCATION SKETCH

WATERWAY INFORMATION

Exist. Low Grade Elev. 641.4 ft. @ Sta. 1022+00
Drainage Area = 340.0 mi.^{2} Prop. Low Grade Elev. 641.4 ft. @ Sta. 1022+00

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	7880	2119	2545	636.9	0.6	0.5	637.5	637.4
Design	50	12300	2707	3320	639.5	0.8	0.7	640.3	640.2
Base	100	14400	2960	3645	640.5	0.9	0.8	641.4	641.3
$Overtop_{exist}$	100	14400	2960		640.5	0.9		641.4	
$Overtop_{prop}$	120	14600		3668	640.6		0.8		641.4

DESIGNED [signature]
CHECKED [signature]
DRAWN R. Sommer
CHECKED [signature]

December 1 2004
EXAMINED [signature] ENGINEER OF BRIDGE DESIGN
PASSED [signature] ENGINEER OF BRIDGES AND STRUCTURES

STATE OF ILLINOIS RALPH E. ANDERSON 081-004625 SPRINGFIELD LICENSED STRUCTURAL ENGINEER

EXPIRES 11-30-2006

GENERAL PLAN
IL. ROUTE 49 OVER
SALT FORK CREEK
F.A.P. ROUTE 836-SECTION (119BR)BR
CHAMPAIGN COUNTY
STATION 1015+21.00
STRUCTURE NO. 010-0280

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