

Bench Mark: Chiseled "□" top of SW Wingwall, Sta. 485+83.96, 19.01' Rt. - Elev. 633.43

Existing Structure: S.N. 043-0007 built in 1966 as F.A. Route 6 (S.B.I. Rte. 5), Section 45-B. The existing structure consists of a 3 span concrete reinforced deck on continuous WF steel beams supported by 2 reinforced concrete stub abutments founded on steel piles and 2 reinforced concrete single hammerhead piers founded on spread footings. Bridge deck was repaired in 1971, 1993, and 2001. Structural steel was repainted in 1987. Riprap was placed around pier 2 in 2000. 209'-3" back-to-back abutments and 35'-8" out-to-out deck. Concrete deck to be removed and replaced using staged construction.

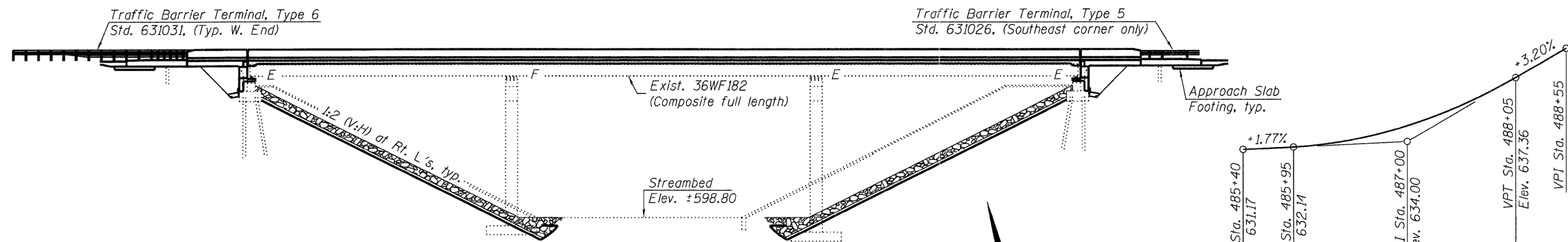
No Salvage

SCOPE OF WORK

1. Remove and replace existing concrete deck.
2. Make new deck composite full length.
3. Remove and replace existing abutment backwalls and wingwalls.
4. Replace steel rocker bearings at abutments w/ elastomeric bearings.
5. Clean, paint and reuse fixed and expansion bearings at the piers.
6. Remove and replace end diaphragms at both abutments.
7. Remove existing concrete slopewall and replace with riprap.
8. Clean and paint existing structural steel.

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25. East Abutment
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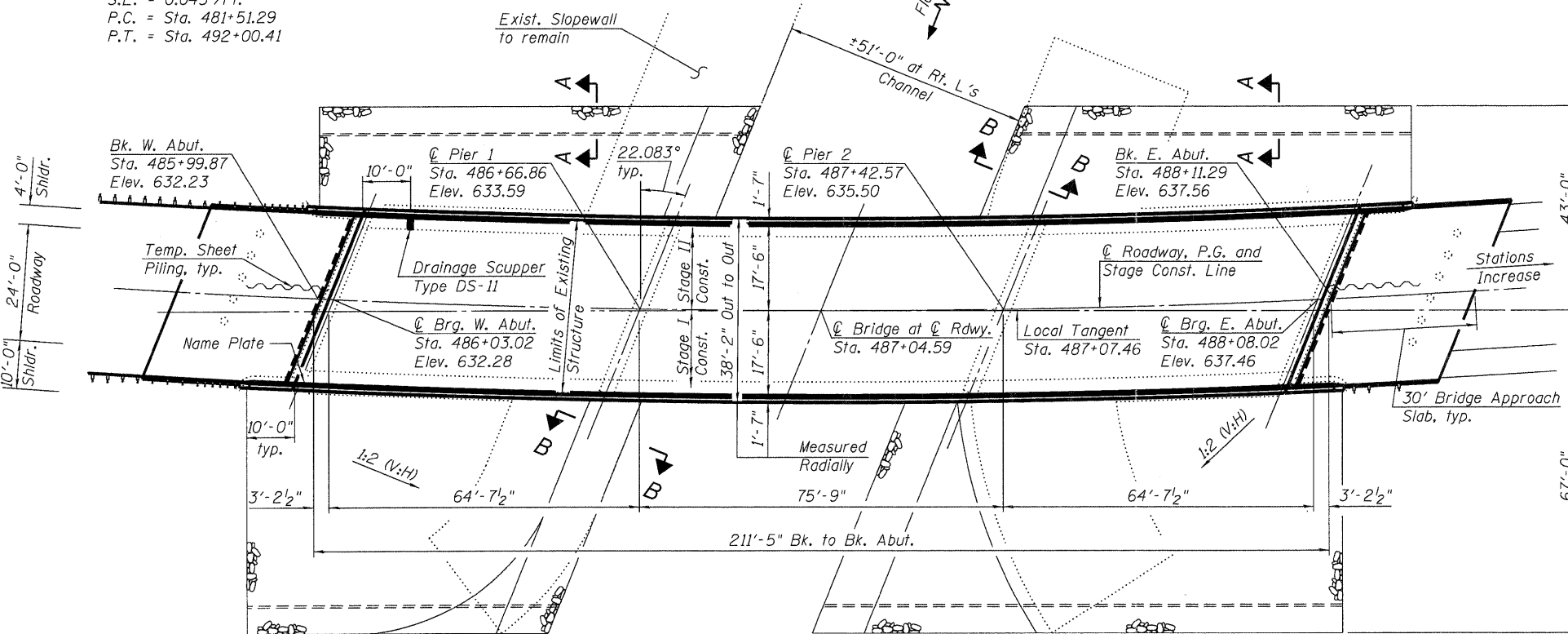


PROFILE GRADE
(Along & Roadway)

CURVE DATA

$\Delta = 26^{\circ}19'04''$ (L.I.)
 $D = 2^{\circ}30'31''$
 $T = 533.98'$
 $L = 1,049.11'$
 $E = 61.59'$
 $R = 2,283.99'$
 $S.E. = 0.045'/ft.$
 $P.C. = Sta. 481+51.29$
 $P.T. = Sta. 492+00.41$

ELEVATION



PLAN

LOADING HS20-44
 Allow 25#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS

2002 AASHTO

DESIGN STRESSES

FIELD UNITS (New Construction)

$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (reinforcement)
 $f_y = 36,000$ psi (structural steel)

FIELD UNITS (Existing Construction)

$f'_c = 3,500$ psi
 $f_y = 40,000$ psi (reinforcement)
 $f_y = 36,000$ psi (structural steel)

SEISMIC DATA

Seismic Performance Category (SPC) = A
 Horizontal Bedrock Acceleration Coefficient (A) = 0.030g
 Site Coefficient (S) = 1.5

STATION 487+04.59
 REBUILT 20 BY
 STATE OF ILLINOIS
 F.A.P. RT. 301 SEC. 45B
 LOADING HS20-44
 STR. NO. 043-0007

NAME PLATE

See Std. 515001

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

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 $f_y = 36,000$ psi (structural steel)

FIELD UNITS (Existing Construction)

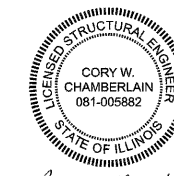
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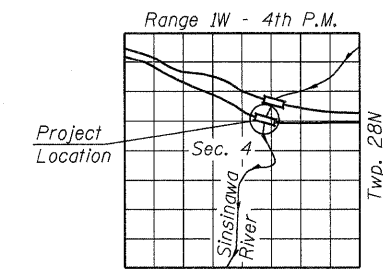
Seismic Performance Category (SPC) = A
 Horizontal Bedrock Acceleration Coefficient (A) = 0.030g
 Site Coefficient (S) = 1.5

APPROVED
 FOR STRUCTURAL ADEQUACY ONLY

J. Carl Puzey (TDP)
 ENGINEER OF BRIDGES AND STRUCTURES



Cory W. Chamberlain 12-1-11
 Expires: 11/30/2012



LOCATION SKETCH

GENERAL PLAN & ELEVATION
U.S. ROUTE 20 EB OVER
SINSINAWA RIVER
F.A.P. ROUTE 301 - SEC. 45B
JO DAVIESS COUNTY
STATION 487+04.59
STRUCTURE NO. 043-0007

USER NAME = dheber1ing	DESIGNED - BRD	REVISD -		7018 KINGSMILL CT. SPRINGFIELD, IL (217) 483-9457 DESIGN FIRM #184001036	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL PLAN AND ELEVATION STRUCTURE NO. 043-0007	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FILE NAME = 0430007-64C94.dgn	CHECKED - CWC/SDS	REVISD -					301	(43B, 44B, 44HB, 45B)D	JO DAVIESS	309	162
PLOT DATE = 12/6/2011	DRAWN - DLH	REVISD -					CONTRACT NO. 64C94				
PLOT TIME = 10:20:50 AM	CHECKED - BRD	REVISD -					ILLINOIS FED. AID PROJECT				