

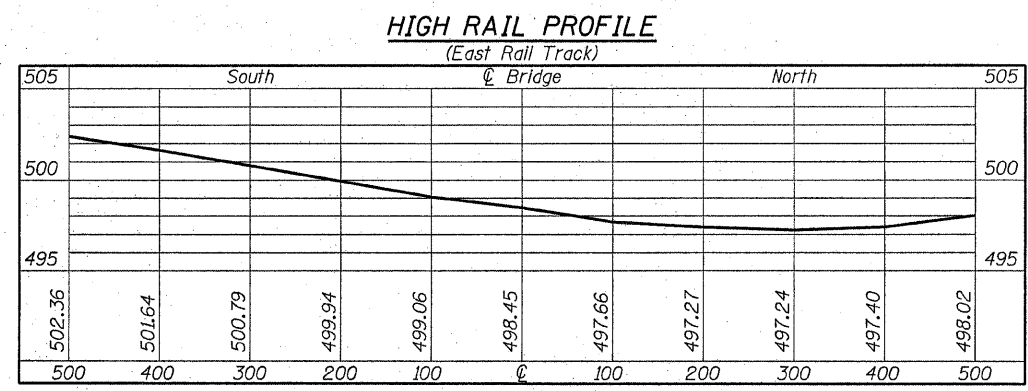
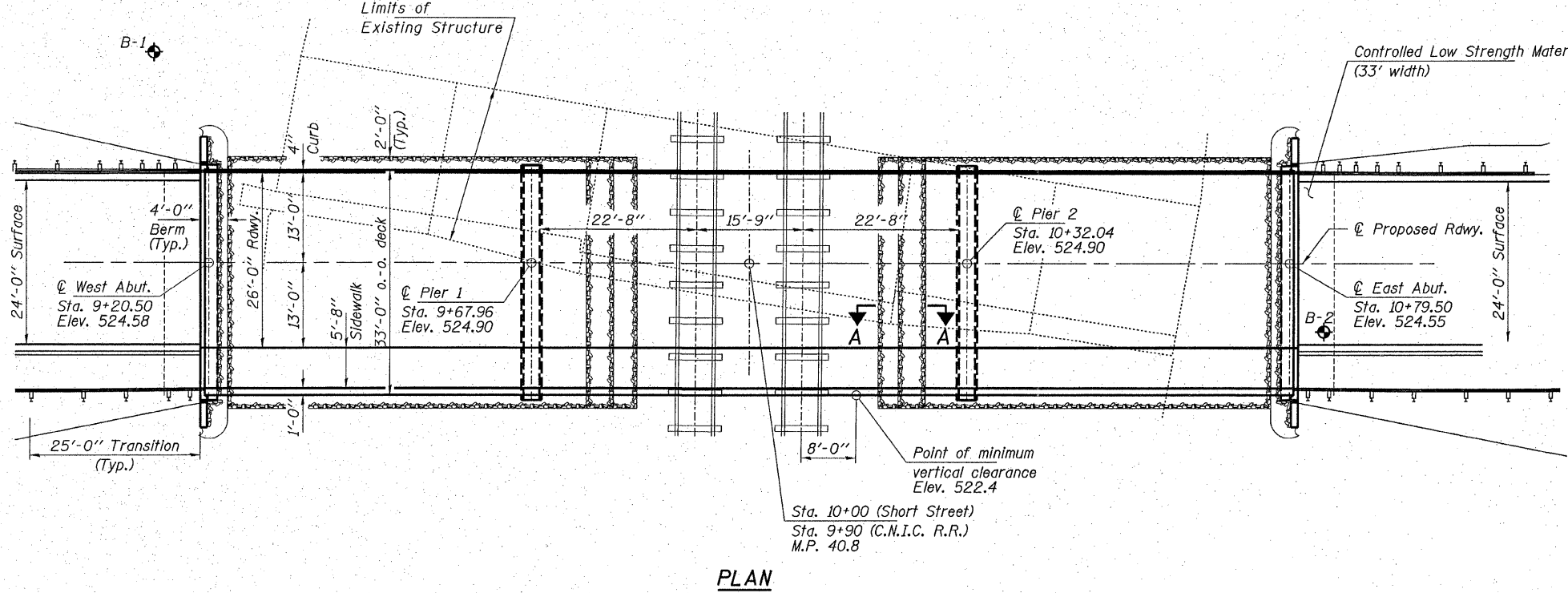
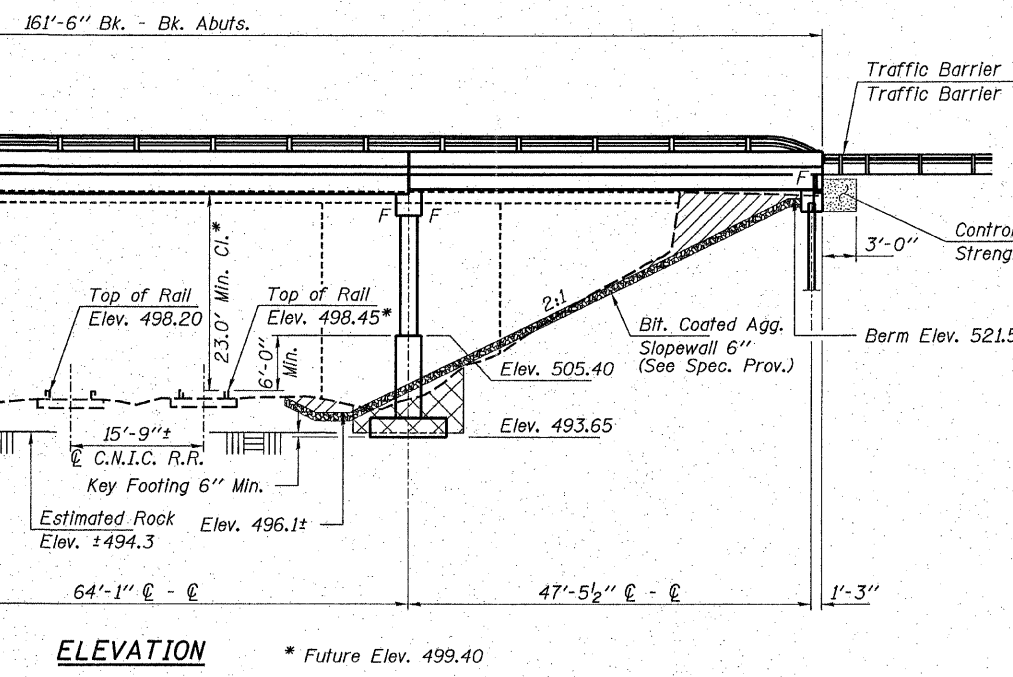
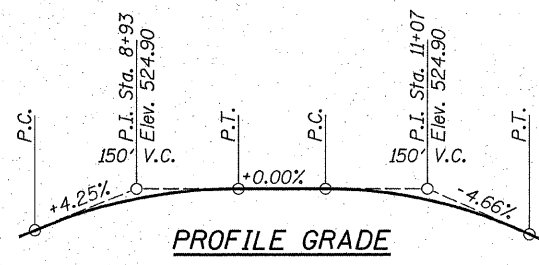
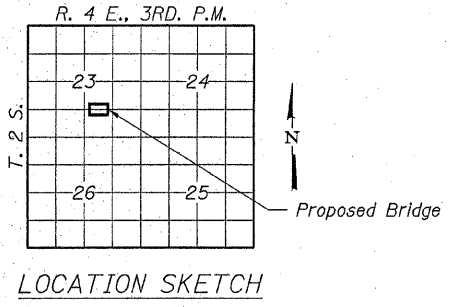
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
M.S. 2700	05-00186-00-BR 06-00001-00-BR	JEFFERSON	31	20
FED. ROAD DIST. NO.		ILLINOIS	CONTRACT NO. 99297	

C.N./I.C. RAILROAD  
BUILT 200\_ BY  
JEFFERSON COUNTY  
SEC. 05-00186-00-BR  
VILLAGE OF BLUFORD  
SEC. 06-00001-00-BR  
STR. NO. 041-9931 LOADING HS 20

**NAME PLATE**  
See Std. 515001

**GENERAL NOTES**

Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.  
Excavation required to construct the Abutments shall be included in the cost of Concrete Structures. No additional compensation will be allowed for Structure Excavation.  
The Contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at West Abutment or approved by the Engineer before ordering the remainder of piles.  
Reinforcement bars shall conform to the requirements of ASTM A706 Gr 60 (IL Modified). See Special Provisions.  
Contractor shall provide 1 1/2:1 maximum excavated slope from bottom of the pier footing to the existing ground surface.  
See sheet 31 for Borings.



**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
Rock Excavation	Cu. Yd.		15	15
Bituminous Coated Aggregate Slopewall, 6"	Sq. Yd.			481
Structure Excavation	Cu. Yd.		120	120
Concrete Structures	Cu. Yd.		175.0	175.0
Concrete Superstructure	Cu. Yd.	44.6		44.6
Concrete Encasement	Cu. Yd.		2.6	2.6
Precast Prestressed Concrete Deck Beams (21" Depth)	Sq. Ft.	3,168		3,168
Precast Prestressed Concrete Deck Beams (27" Depth)	Sq. Ft.	2,112		2,112
Protective Coat	Sq. Yd.	100		100
Stud Shear Connectors	Each		20	20
Reinforcement Bars	Pound		40,940	40,940
Reinforcement Bars, Epoxy Coated	Pound	4,320		4,320
Aluminum Railing, Type L	Foot	160		160
Steel Bridge Rail, Type SM	Foot	165		165
Steel Piles HP10x42	Foot		230	230
Test Pile Steel HP10x42	Each		1	1
Name Plates	Each		1	1
Controlled Low Strength Material	Cu. Yd.		37	37

**DESIGN STRESSES**

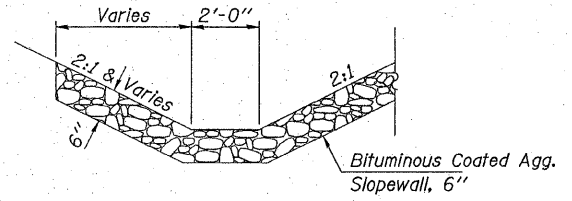
FIELD UNITS

f'c = 3,500 psi  
fy = 60,000 psi (Reinf.)

PRECAST PRESTRESSED UNITS

f'c = 5,000 psi  
f'ci = 4,000 psi  
f's = 270,000 psi (1/2" low lax. strands)  
f'si = 201,960 psi (1/2" low lax. strands)  
fy = 60,000 psi (Reinf.)

Loading HS 20-44  
Design Specifications: 2002 AASHTO & all applicable Interims.  
50#/Sq. Ft. included in dead load for future wearing surface.



**SECTION A-A**

**SEISMIC DATA**

Seismic Performance Category (SPC) = B  
Bedrock Acceleration Coefficient (A) = 0.10g  
Site Coefficient (S) = 1.0

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".

Steven W. Megginson 3-22-07  
ILLINOIS STRUCTURAL NO. 081-6064



Expires 11-30-08

**HAMPTON, LENZINI & RENWICK, INC.**  
CIVIL & STRUCTURAL ENGINEERS  
LAND SURVEYORS

**ELGIN • SPRINGFIELD**

3085 STEVENSON DRIVE, SUITE 201  
SPRINGFIELD, ILLINOIS 62703  
(217) 546-3400

PROJECT NUMBER: 12-49-0005-1 DATE: 03/21/07  
DESIGNED: R.J.F. CHECKED: S.W.M. DRAWN: D.B.

**GENERAL PLAN AND ELEVATION**

SECTIONS 05-00186-00-BR / 06-00001-00-BR  
VILLAGE OF BLUFORD  
JEFFERSON COUNTY  
STRUCTURE NO. 041-9931 / STATION 10+00