

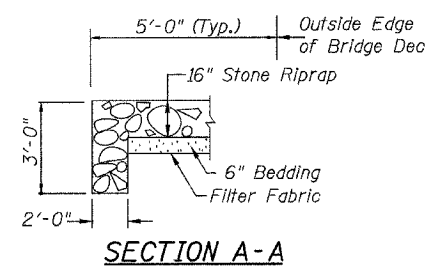
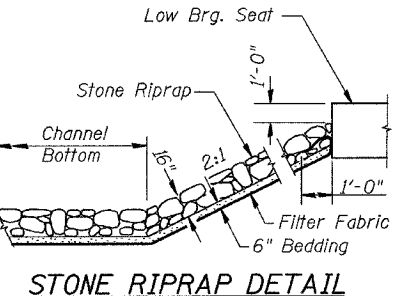
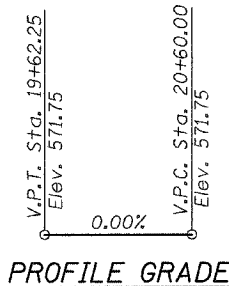
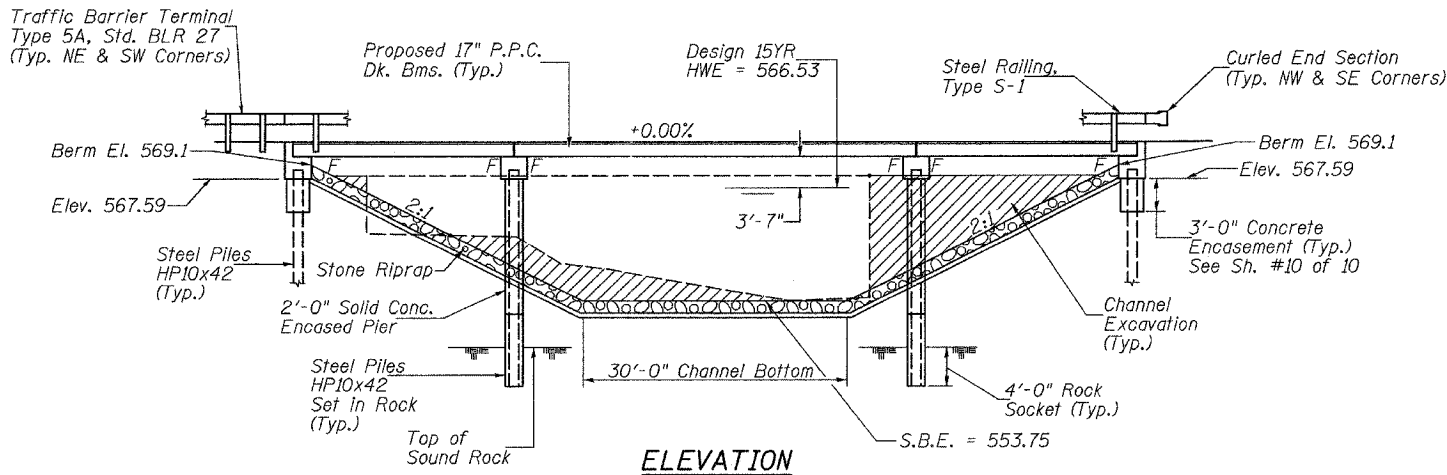
B.M.: RR Spike in 12" Tree,
Sta. 17+75, 38' Rt.
Elev. 570.46

Mag Nail in Top of CMP
Sta. 22+22, 25' Lt.
Elev. 573.32

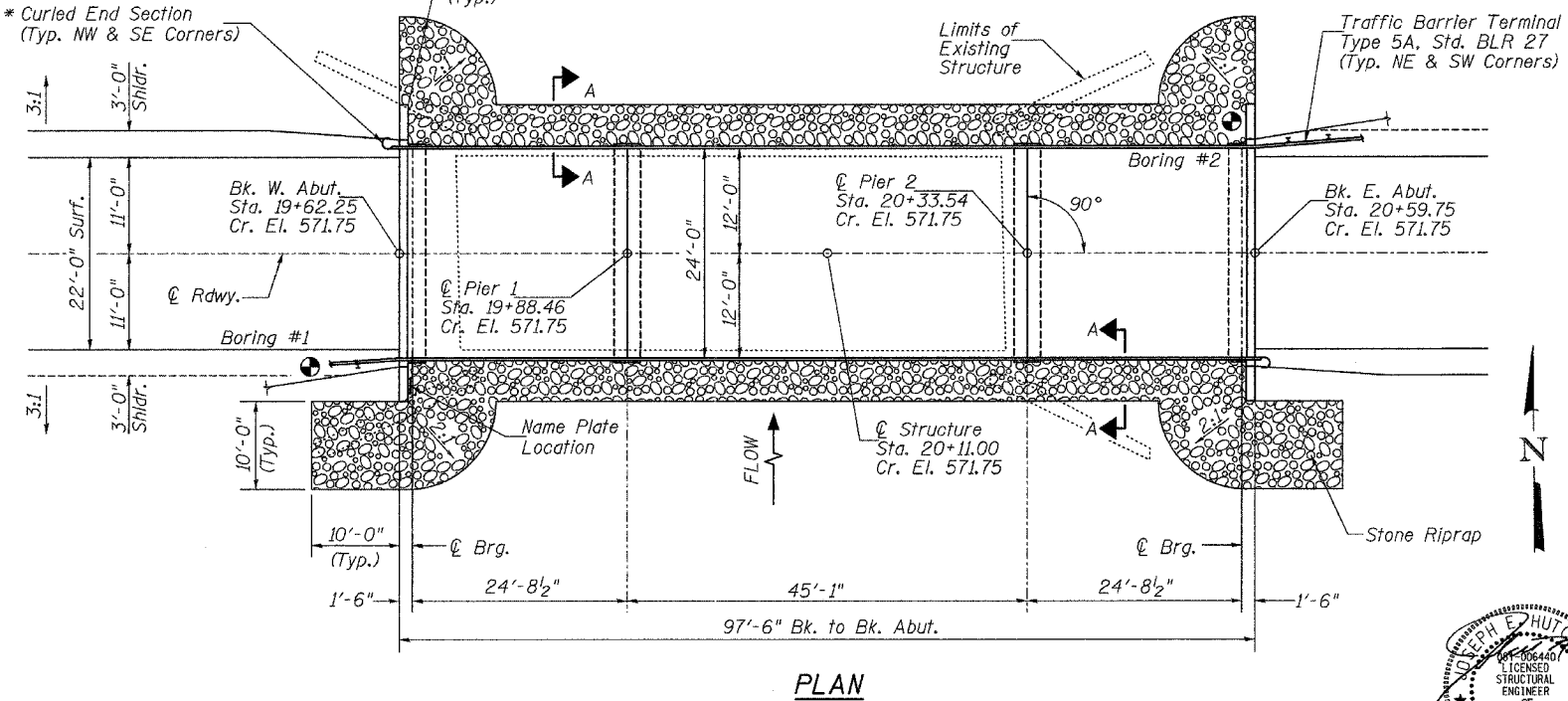
Existing Structure:
Single span reinforced concrete deck on steel stringers superstructure supported on concrete closed abutments. The structure is ±62.5' back to back of abutments, ±24.5' out to out of deck and is not skewed.
Str. No. 005-3002

Salvage: Structural Steel, Bridge Rail

Road to be closed to traffic during construction.



* Terminal Marker-Direct Applied to be placed on Curled End Sections in accordance with Std. 635006



**LITTLE MISSOURI CREEK
BUILT 200_ BY
BROWN COUNTY
SEC. 05-00064-00-BR
C.H. 2 STATION 20+11.00
F.A. PROJ. BRS-1582(106)
STR. NO. 005-3003 LOADING HS20-44**

NAME PLATE
Locate Name Plate at S.W. Wingwall Corner of Bridge (See Std. 515001)

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Channel Excavation	CU YD		535	535
① Riprap, Special	TON		345	345
Filter Fabric	SQ YD		440	440
① Removal of Existing Structures	EACH			1
Structure Excavation	CU YD		95	95
Concrete Structures	CU YD		86.0	86.0
① Precast Prestressed Concrete Deck Beams (17" Depth)	SQ FT	2,292		2,292
① Reinforcement Bars	POUND		7,470	7,470
Steel Railing, Type S1	FOOT	195		195
Furnishing Steel Piles HP10x42	FOOT		444	444
Driving Piles	FOOT		132	132
Test Pile Steel HP10x42	EACH		2	2
Pile Shoes	EACH		8	8
① Setting Piles in Rock	EACH		12	12
Concrete Encasement	CU YD		11.2	11.2
Name Plates	EACH			1
① Underwater Structure Excavation Protection-Location 1 (Pier #1)	EACH		1	1
① Underwater Structure Excavation Protection-Location 2 (Pier #2)	EACH		1	1

① See Special Provisions

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 Specification for Highway Bridges.
This design complies with all requirements of the current AASHTO Guide Specifications for Seismic Design of highway bridges.

Joseph P. Hutcheson 5/14/2008
Illinois Structural No. 6440
Expires 11/30/2008

WATERWAY INFORMATION

Drainage Area = 13.3 Sq. Mi. Low Grade Elev. = 571.75 @ Sta. 20+11.00

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	15	3,035	518	675	566.53	0.22	0.00	566.75	566.53
Base	100	5,196	593	777	567.82	0.93	0.19	568.75	568.01

Construction of this project complies with IDNR, Office of Water Resources Statewide Permit No. 2

DESIGN SPECIFICATIONS

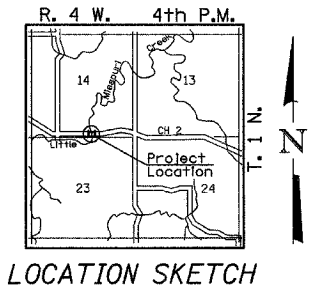
2002 AASHTO & Interlms

DESIGN STRESSES

(FIELD UNITS) (PRECAST PRESTRESSED UNITS)
f'_c = 3,500 p.s.i. f'_c = 6,000 p.s.i.
fy = 60,000 p.s.i. (Rein.) f'_{ci} = 5,000 p.s.i.
f'_s = 270,000 p.s.i. (1/2" Strands)
f'_{sl} = 201,960 p.s.i. (1/2" Strands)

LOADING HS20-44

Allow 50#/sq. ft. for future wearing surface.



**GENERAL PLAN & ELEVATION
COUNTY HIGHWAY 2 OVER
LITTLE MISSOURI CREEK
SECTION 05-00064-00-BR
BROWN COUNTY
STR. NO. 005-3003
STATION 20+11.00**

DESIGNED	J.E.H.
CHECKED	B.A.N.
DRAWN	C.E.T.
CHECKED	J.E.H.