

B.M. 1 60p Nail in Power Pole
Sta. 103+93, 38' Rt.
Elev. 191.97

Existing Structure is a three span
precast concrete deck beam bridge on
wooden piles.

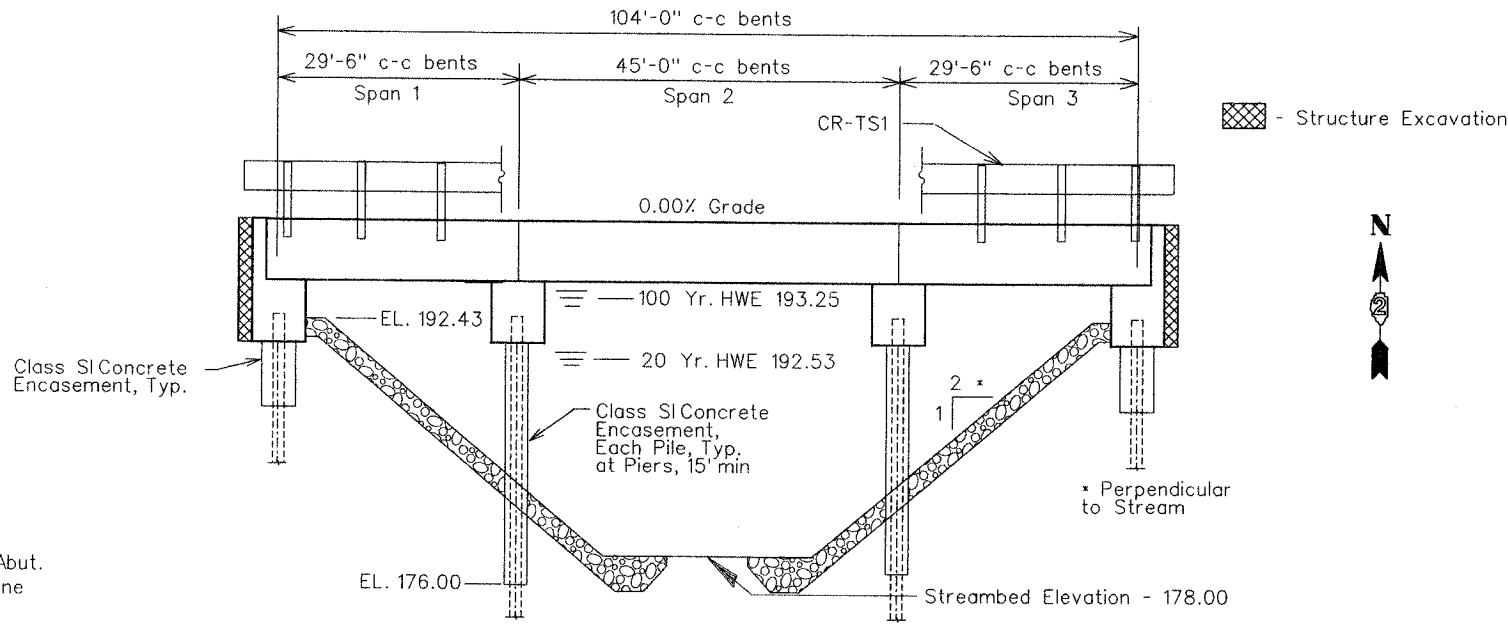
Any salvageable material shall
become the property of the Henry
County Highway Department

PILE DATA - (2 ABUTS)

Type : Steel HP 10x42
Nominal Req'd Bearing : 180 kips
Allowable Resistance Available : 60 kips
Est. Length : 73 Ft West Abut, 78 East Abut.
Number Req. : 8 (Includes 2 Test Piles, one
at each abutment)

PILE DATA - (2 PIERS)

Type : Steel HP 10x42
Nominal Req'd Bearing : 228 kips
Allowable Resistance Available : 76 kips
Est. Length : 73 Ft West Pier, 78 Ft East Pier
Number Req. : 12

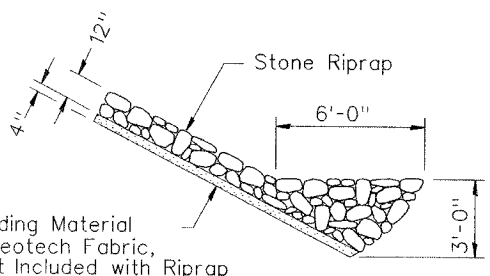
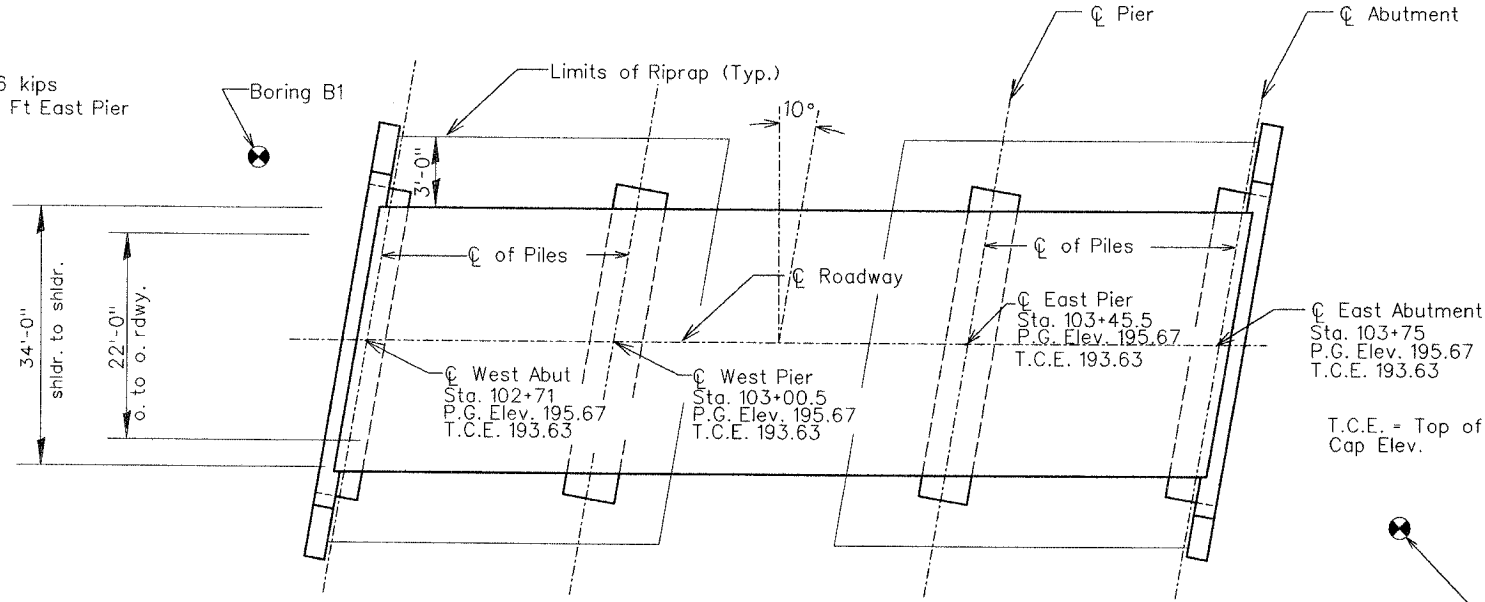


GENERAL NOTES

- Class MS or SI Concrete shall be used in the Piers and Abutments.
- Boring Data is shown only as a guide to bidders in estimating soil conditions which may be encountered during construction.
- Masonry material salvaged from the existing structure shall not be reused and shall be disposed of off site by the Contractor.
- Reinforcement bars shall conform to the requirements of AASHTO M-31, M-42, or M-53, Grade 60.
- Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
- The embankment configuration shown shall be the minimum embankment that must be constructed prior to construction of the abutments.
- The contractor shall drive 2 test piles in a permanent location, one at each abutment as directed by the Engineer before ordering the remainder of piles.
- All construction joints shall be bonded.
- A Calcium Nitrate Corrosion inhibitor, as covered in the Special Provisions, shall be used in the concrete for precast prestressed concrete deck beams.
- The abutments shall not be backfilled until the deck beams are in place and dowelpins have been grouted and cured.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Removal of Existing Structure	Each			1
Stone Dumped Riprap, Class A4	Sq. Yd.		280	280
Waterproofing Membrane System	Sq. Yd.	326.6		326.6
P.P. Conc. Deck Beam 21"	Sq.Ft.	2940		2940
Furnishing Steel Piles, HP 10x42	Foot		1359	1359
Driving Piles	Foot		1359	1359
Test Piles Steel HP 10x42	Each		2	2
Concrete Structures	Cu.Yd.		36.6	36.6
Reinforcement Bars	Pound		3800	3800
Structure Excavation	Cu.Yd.		142	142
Name Plate	Each		1	1
Steel Railing, Type S-1	Foot	210		210
Pile Shoes	Each		20	20
Class SI Concrete Encasement	Cu. Yd		19.2	19.2
Portland Cement Mortar Fairing Course	Foot	630		630

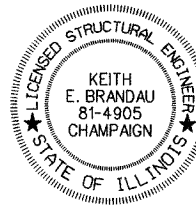


STONE RIPRAP ANCHOR DETAIL

DESIGN SPECIFICATIONS

2002 AASHTO, W/ Applicable Interims
HS20-44 Loading Load Factor Design

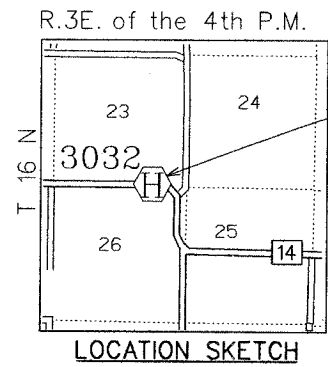
I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for this style of structure and complies with the requirements of the current AASHTO Standard Specifications for highway bridges.



Keith E. Brandau Date
Illinois Structural No. 4905
License Expires 11/30/2008

WATERWAY INFORMATION

Drainage Area = 26.9 Sq. Miles		Low Grade Elev. 195.51 @ Sta. 105+50									
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Natural H.W.E.		Head - Ft.		Headwater El.		
			Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	
Design	20	3905	457	682	192.53		1.19	0.29	193.72	192.82	
Base	100	5718	457	738	193.25		2.83	0.71	196.08	193.96	



LOCATION SKETCH

NAME PLATE

See Std. CN

STATION 103+23 SPRING CREEK
BUILT 2007
SEC. 01-00130-00-BR
HENRY COUNTY
LOADING HS20-44
STR. NO. 037-3349

GENERAL PLAN & ELEVATION

SECTION 01-00130-00-BR

HENRY COUNTY

STR. NO. 037-3349

PROJECT TITLE: HENRY COUNTY BRIDGE
SECTION 01-00130-00-BR (FAS 238)
SHEET TITLE: GENERAL PLAN & ELEVATION

Sodemann and Associates, Inc.
340 NORTH STREET
CHAMPAIGN, ILLINOIS 61824-0557
TEL 217 352-7888 FAX 217 352-7922
ENGINEERING / ANALYSIS / MANAGEMENT

DATE: 03.01.07
SHEET: 4 OF 14 SHEETS