

BENCHMARK:
Spike in Power Pole Sta. 9+18.00, Rt.
Elevation = 100.00

EXISTING STRUCTURE (SN 048-3208):
Single Span Concrete Channel Beam Bridge on
Concrete Abutments with Timber Piles.
22'-10" O. to O. Deck. 26'-0" Bk.-Bk. Abutments.

Traffic is to be detoured during construction.
No Salvage.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 251	08-04126-00-BR	KNOX	4	10
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

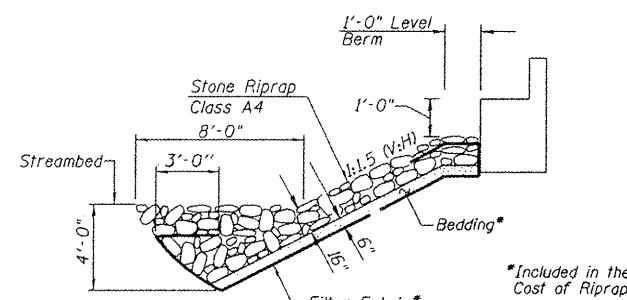
Contract 89544

GENERAL NOTES

Layout of Riprap Slopes may be varied in the field to suit ground conditions as directed by the Engineer.
See Proposal for Boring Data.
Reinforcement Bars shall conform to the requirements of ASTM A 706, Grade 60 (See Special Provisions).
The Contractor shall drive one Metal Shell Test Pile in a permanent location at the West Abutment as directed by the Engineer before ordering the remainder of piles.
Excavation required for abutment construction shall be included in Concrete Structures. No additional compensation will be provided for Structure Excavation.
Channel Excavation shall be included in the cost of Stone Riprap, Class A4.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Removal of Existing Structures	Each			1
P.P.C Deck Beams (27" Depth)	Sq. Ft.	1560		1560
Concrete Structures	Cu. Yd.		20.2	20.2
Reinforcement Bars, Epoxy Coated	Pound		2520	2520
Furnishing Metal Shell Piles 12" x 0.250"	Foot		414	414
Driving Piles	Foot		414	414
Test Pile Metal Shells	Each		1	1
Stone Riprap, Class A4	Sq. Yd.		209	209
Name Plates	Each		1	1
Steel Railing, Type S1	Foot	130		130
Portland Cement Mortar Fairing Course	Foot	455		455
Waterproofing Membrane System	Sq. Yd.	173		173
Hot-Mix Asphalt Surface Course, Mixture C, N50	Ton	21		21

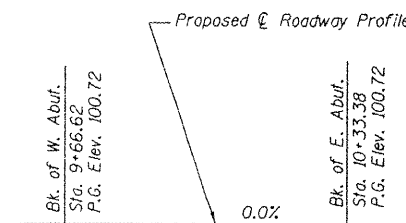


STONE RIPRAP DETAIL

SWAB RUN CREEK
BUILT 200, BY
KNOX COUNTY
SECTION 08-04126-00-BR
T.R. 251 STA. 10+00.00
STR. NO. 048-3396 LOADING HL-93

NAME PLATE

(See Std. 515001)



PROFILE T.R. 251

DESIGN SPECIFICATIONS

2007 AASHTO LRFD with 2008 Interim

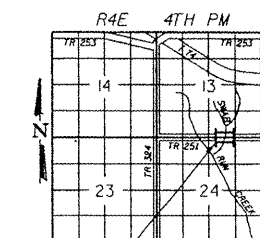
LOADING HL-93

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

DESIGN STRESSES

FIELD UNITS
f'c = 3,500 p.s.i.
f'y = 60,000 p.s.i.
n = 9

PPC UNITS
f'ci = 5,000 p.s.i.
f'c = 6,000 p.s.i.
f's = 270,000 p.s.i.
f'si = 201,960 p.s.i.



Proposed Structure

LOCATION SKETCH

WATERWAY INFORMATION

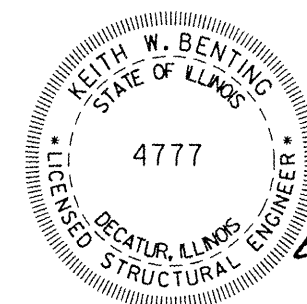
Drainage Area = 5.27 Sq. Mi. Existing Low Grade Elev. 100.62 @ Sta. 10+00.00
Proposed Low Grade Elev. 100.70 @ Sta. 10+00.00

Flood	Freq. Yr.	Q	Opening C.F.S.	Sq. Ft. Exist.	Sq. Ft. Prop.	Nat. H.W.E.	Head-Ft. Exist.	Head-Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
Design	15	1250	181	195	90.90	0.74	0.64	91.64	91.54	
Base	100	2070	262	282	92.97	0.97	0.84	93.94	93.81	
Overtopping										
Max. Calc.	500	2780	326	350	94.42	1.13	0.98	95.55	95.40	

Low Beam Elev. (Prop.) = 98.03

DATE: July 21, 2009
Keith W. Bunting
KEITH W. BUNTING
ILL. STRUCTURAL NO. 4777

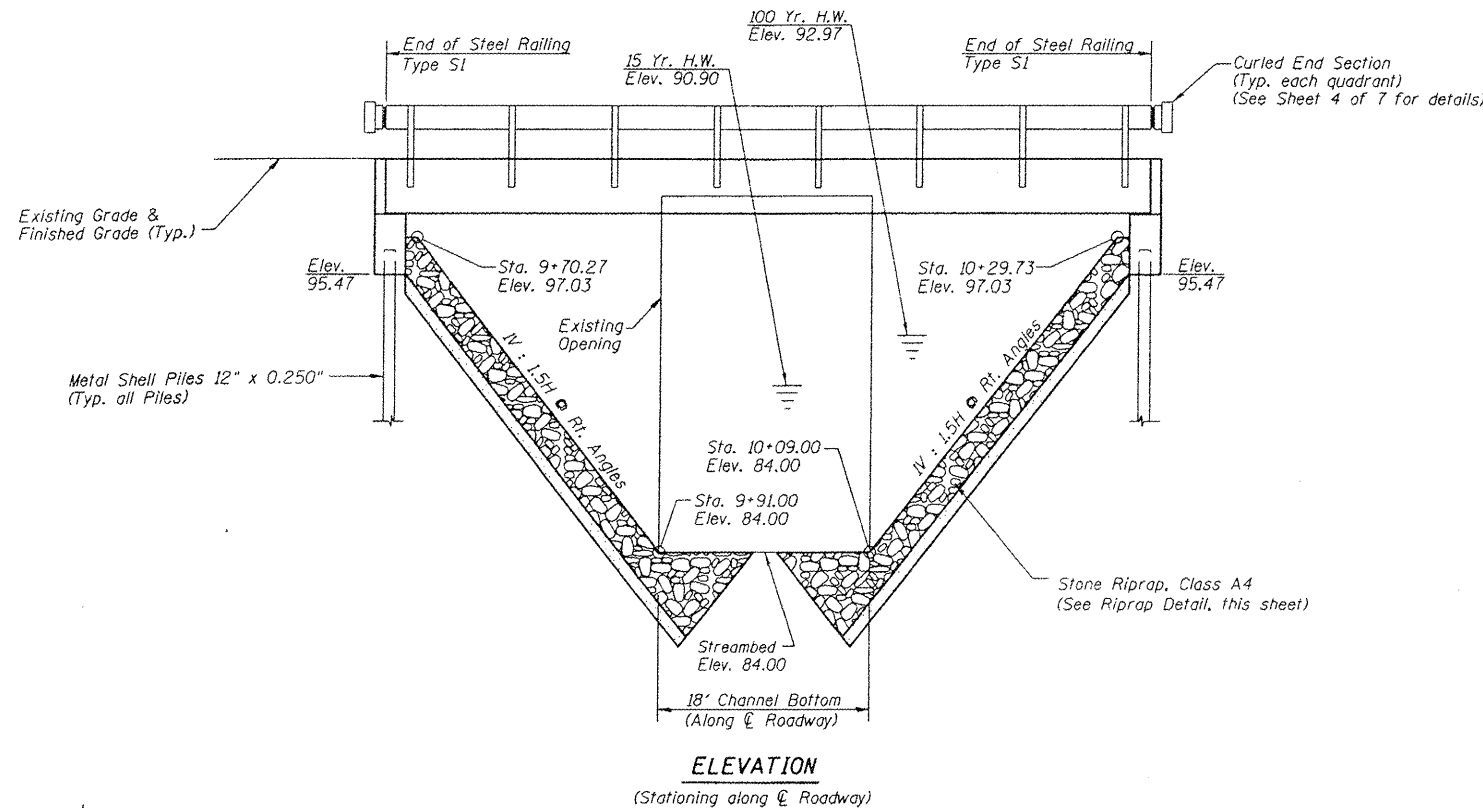
"I CERTIFY THAT TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, THIS BRIDGE DESIGN IS STRUCTURALLY ADEQUATE FOR THE DESIGN LOADING SHOWN ON THE PLANS. THE DESIGN IS AN ECONOMICAL ONE FOR THE STYLE OF STRUCTURE AND COMPLIES WITH REQUIREMENTS OF THE CURRENT AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES."



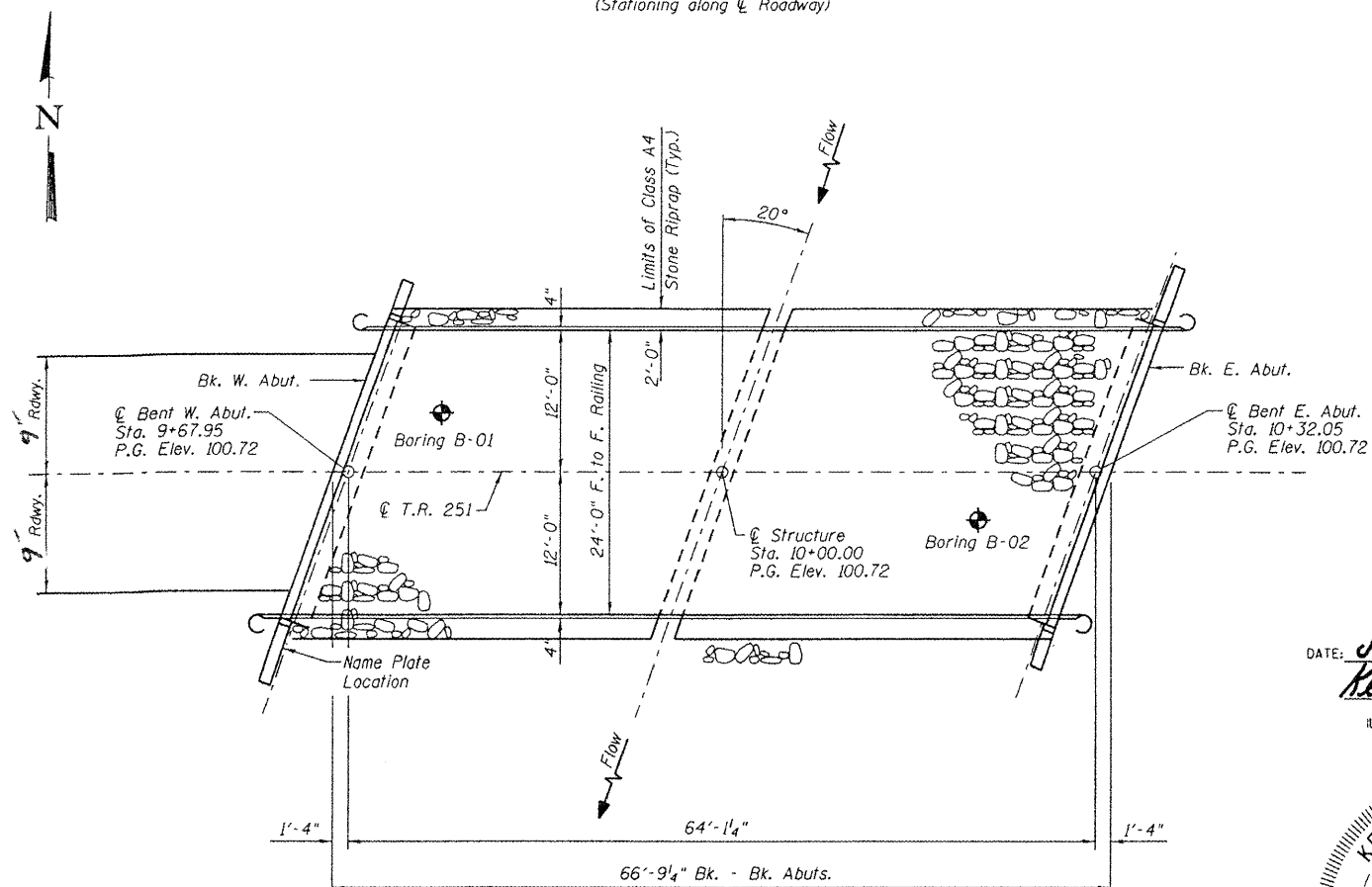
Exp. 11/30/2010

GENERAL PLAN AND ELEVATION

Date	Designed MJJ	T.R. 251 OVER SWAB RUN CREEK SECTION 08-04126-00-BR KNOX COUNTY STA. 10+00.00 PROP. STR. NO. 048-3396	Sheet No.
Revisions	Drawn BKN		1
	Checked MJJ		
	Approved KWB		
			of 7
Prepared by:	URS 345 East Ash Avenue Decatur, IL 62526		URS Job No. 36432412



ELEVATION
(Stationing along \varnothing Roadway)



PLAN