

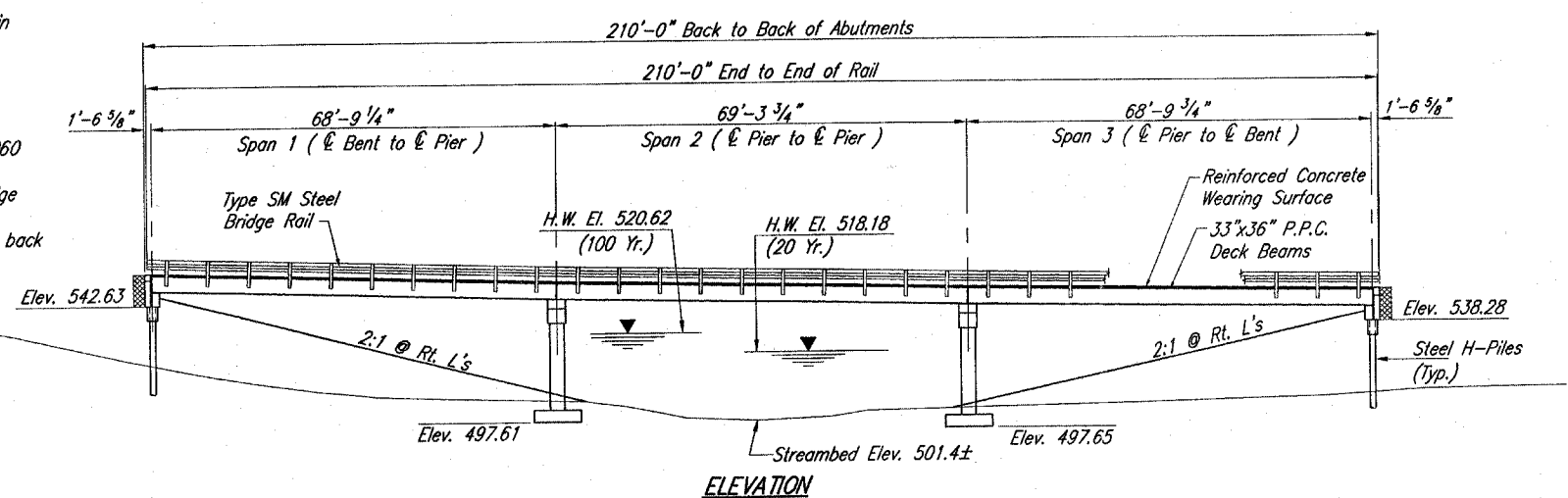
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 389	93-00049-00-BR	PEORIA	99	24
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT	BRS-0389(104)	
CONTRACT NO. 89323				

Sheet 1 of 8

B.M. #3 - 60d nail in power pole at entrance to abandoned farm 6610 Lancaster Road. Elev. = 538.46

B.M. #4 - Chiseled square in top of abutment wing wall (NE end of bridge) Elev. = 528.91

Existing Structure: #072-3060  
The existing structure is a three-span steel girder bridge with a concrete deck. The structure measures 115'-0" back to back of abutments and 23'-0" out to out of deck.

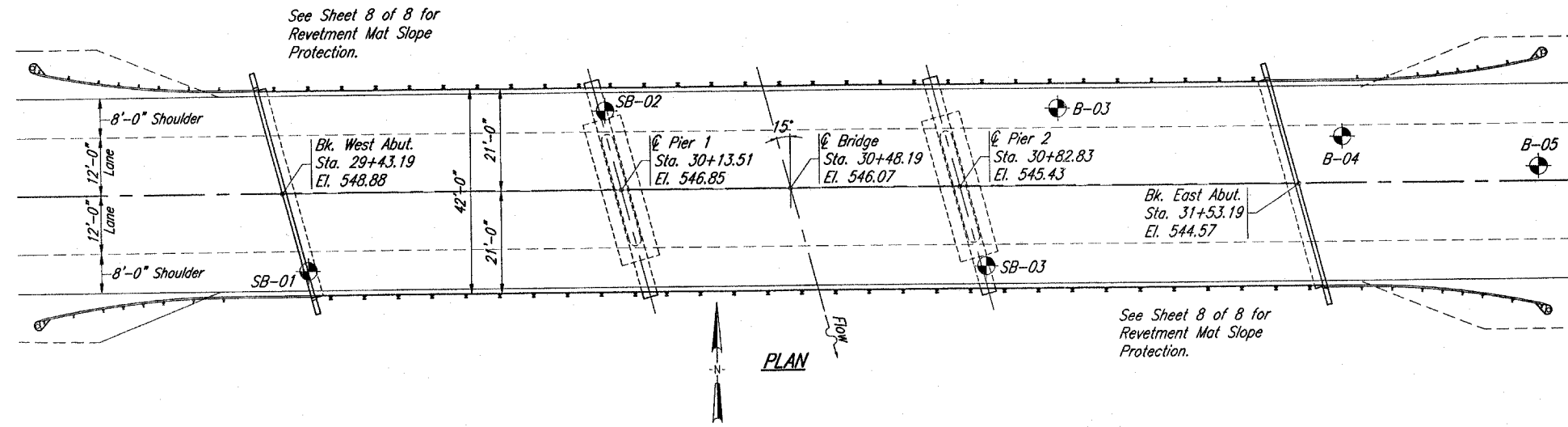


**GENERAL NOTES**

1. Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). See Special Provisions.
2. Reinforcement bars designated (E) shall be epoxy coated.
3. Concrete Sealer shall be applied to the designated areas of the abutments and piers.
4. Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
5. The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.
6. The Contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at substructures specified or approved by the Engineer before ordering the remainder of piles.
7. The Contractor shall obtain a construction permit from the Illinois Department of Natural Resources (IDNR), Office of Water Resources for any temporary construction activity placed in the water except cofferdams. This shall include the placement of material for run-arounds, causeways, etc. Any permit application by the Contractor shall refer to the IDNR permit number as shown in the contract plans.

**BILL OF MATERIAL**

ITEM	UNIT	SUPER.	SUB.	TOTAL
Removal of Existing Structures	Each	-	-	1
Concrete Structures	Cu.Yd.	-	307.9	307.9
Reinforcement Bars, Epoxy Coated	Lb.	12760	49260	62020
Steel Railings, Type SM	Foot	420	-	420
Precast, Prestressed Concrete Deck Beams (33" Depth)	Sq.Ft.	8725.5	-	8725.5
Name Plates	Each	-	1	1
Furnishing Steel Piles HP 12x53	Foot	-	456	456
Driving Piles	Foot	-	456	456
Test Piles, Steel HP 12x53	Each	-	2	2
Structure Excavation	Cu.Yd.	-	424	424
Concrete Encasement	Cu.Yd.	-	4.9	4.9
Underwater Structure Excav. Protection Loc'n. 1 (Pier 1)	Each	-	1	1
Underwater Structure Excav. Protection Loc'n. 2 (Pier 2)	Each	-	1	1
Fabric Formed Concrete Revetment Mat	Sq.Yd.	-	4404	4404
Concrete Sealer	Sq.Ft.	-	2174	2174
Bridge Deck Grooving	Sq.Yd.	932	-	932
Protective Coat	Sq.Yd.	980	-	980
Concrete Wearing Surface, 5"	Sq.Yd.	970.0	-	970.0
Pile Shoes	Each	-	14	14
Rock Excavation for Structures	Cu.Yd.	-	26.4	26.4



**WATERWAY INFORMATION**

Drainage Area = 9.6 Sq.Mi.		Low Grade Elev. 544.61		At Sta. 31+53.42		
Flood	Freq.	Q	Opening Sq.Ft	Natural H.W.E.	Head-Ft.	Headwater El.
	Yr.	C.F.S.	Exist. Prop.	H.W.E.	Exist. Prop.	Exist. Prop.
Design	20	1780	400 1079	518.18	- 0.5	- 518.68
Base	100	2607	537 1327	520.62	- 1.0	- 521.62

**DESIGN STRESSES**

Super:  $f'_c = 5,000$  p.s.i.  
 $f'_{ci} = 4,000$  p.s.i.  
 $f'_s = 270,000$  p.s.i. ( $1/2$ " Strand)  
 $f'_{si} = 201,960$  p.s.i. ( $1/2$ " Strand)  
 $f_y = 60,000$  p.s.i.  
 Sub:  $f'_c = 3,500$  p.s.i.  
 $f_y = 60,000$  p.s.i.

**LOADING HS20**

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

**SEISMIC DATA**

Seismic Performance Category (SPC) = A  
 Bedrock Acceleration Coefficient (A) = 0.04g  
 Site Coefficient = 1.0

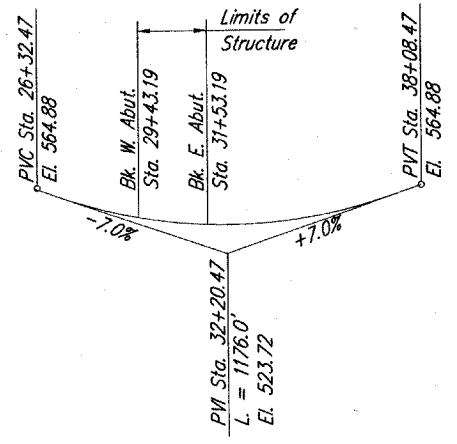
**DESIGN SPECIFICATIONS**

2002 (17th Edition) AASHTO Standard Specifications for Highway Bridges

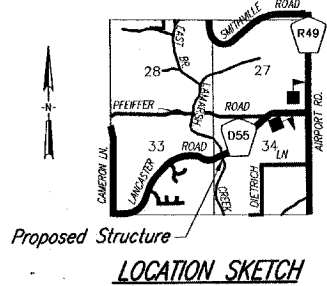
**LETTERING FOR NAME PLATE**

Locate Name plate on Southeast Corner of Bridge (See Standard 515001-02)

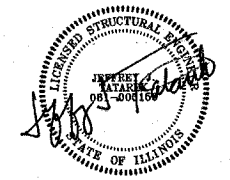
BRANCH OF LA MARSH CREEK  
 BUILT 200 BY  
 PEORIA COUNTY  
 SEC. 93-00049-00-BR  
 LOADING HS20  
 STR. NO. 072-3144



**PROPOSED PROFILE GRADE**



**LOCATION SKETCH**



SIGNATURE  
 1/15/07  
 DATE  
 LIC. EXP. DATE: 11/30/09

"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."

REVISION

DATE

HANSON  
 Hanson Professional Services Inc.  
 2900 W. Willow Knolls Road  
 Peoria, Illinois 61614-1129

GENERAL PLAN AND ELEVATION

LANCASTER RD. OVER LAMARSH CREEK  
 STRUCTURE NO. 072-3145  
 PEORIA COUNTY, ILLINOIS

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24 of 99 sheets

APR 05, 2007 7:04 PM CAL  
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