

Existing Structure: Two Span Precast Concrete Deck Beam Bridge on Closed Timber Abutments with Timber Wingwalls and Timber Pier. ±40'-0" Bk.-Bk. Abutments, ±22'-4" Out.-Out. Deck. Concrete Curbs with Steel Railings. ±0° Skew.

Benchmarks: BM#1 - 60d Nail & Washer in Power Pole
33' Rt. Sta. 6+65 El. 100.00 (Assumed)
BM#2 - 60d Nail & Washer in Power Pole
32' Rt. Sta. 11+32 El. 100.75

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336A	08-15131-00-BR	SHELBY	13	4
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 9558L	

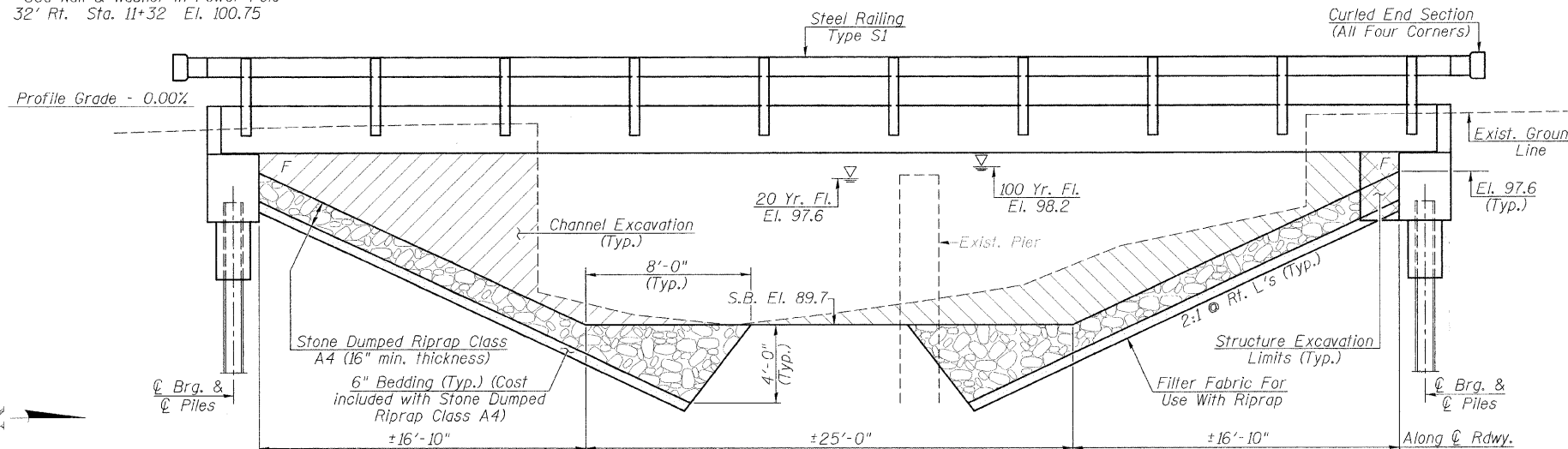
TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Channel Excavation	Cu. Yd.			255
Stone Dumped Riprap, Class A4	Ton			432
Filter Fabric	Sq. Yd.			548
Removal of Existing Structures	Each			1
Structure Excavation	Cu. Yd.		125	125
Concrete Structures	Cu. Yd.		30.4	30.4
Concrete Encasement	Cu. Yd.		2.8	2.8
Precast Prestressed Concrete Deck Beams (27" Depth)	Sq. Ft.	1502		1502
Reinforcement Bars	Pound		4030	4030
Steel Railing, Type S-1	Foot	128		128
Furnishing Steel Piles HP 12x53	Foot		348	348
Driving Piles	Foot		348	348
Test Pile Steel HP 12x53	Each		2	2
Name Plates	Each		1	1

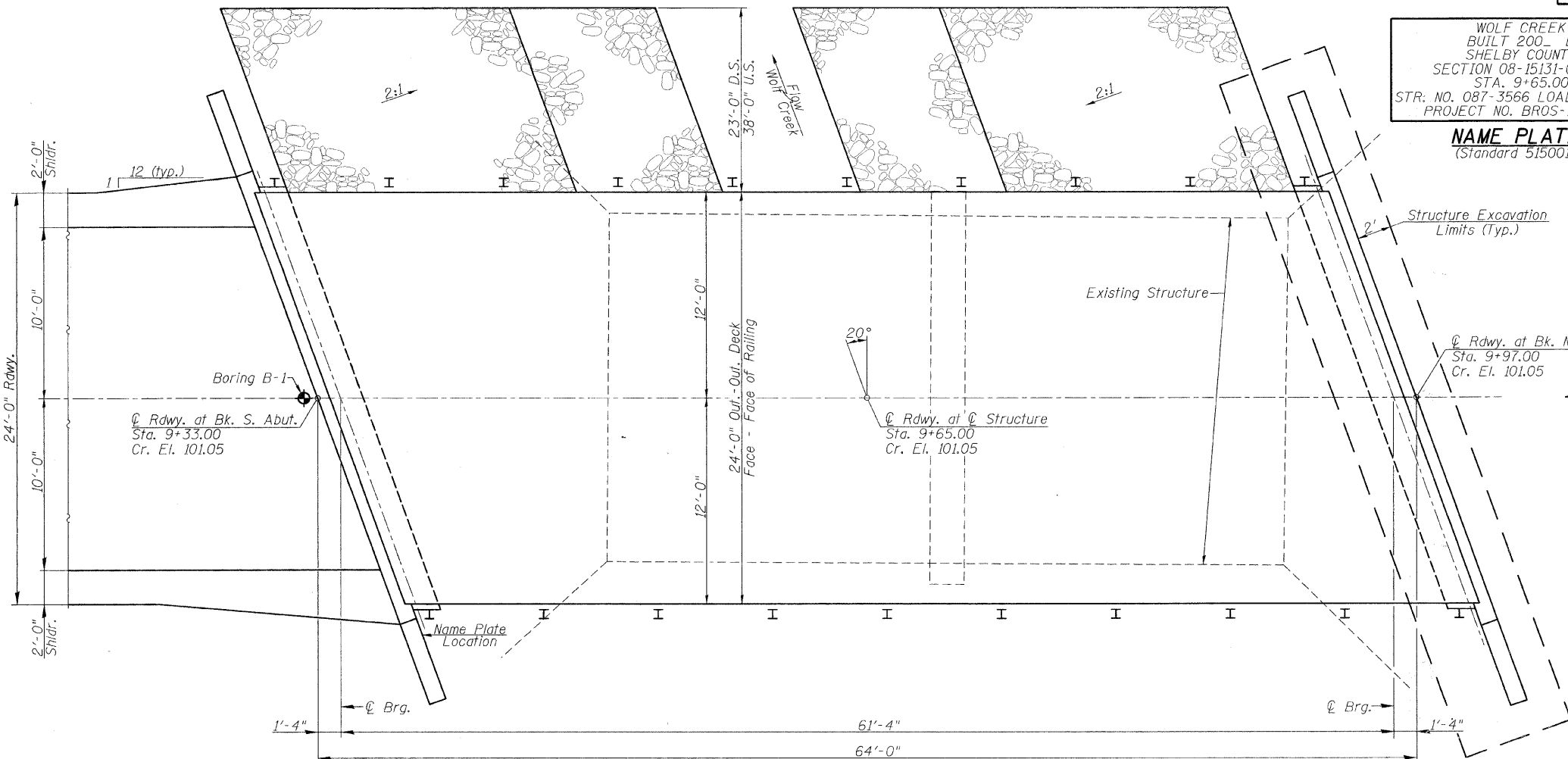
WATERWAY INFORMATION

Drainage Area = 5.19 Sq. Mi. Low Grade Elev. = 98.05 @ Sta. 6+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	20	1001	214	293	97.6	0.3	0.0	97.9	97.6
Base	100	1498	238	326	98.2	0.7	0.3	98.9	98.5
Exist. Overtop.	16	975							
Prop. Overtop.	47	1315							
Max. Calc.	500	1988	267	366	98.7	0.7	0.7	99.4	99.4



ELEVATION



PLAN

WOLF CREEK
BUILT 200... BY
SHELBY COUNTY
SECTION 08-15131-00-BR
STA. 9+65.00
STR. NO. 087-3566 LOADING HL-93
PROJECT NO. BROS-173()

NAME PLATE
(Standard 515001)

LOADING HL-93
Allow 50#/sq. ft. for future wearing surface.
DESIGN SPECIFICATIONS
2007 AASHTO LRFD Bridge Design Specifications, with 2008 Interims

DESIGN STRESSES

FIELD UNITS

f'c = 3500 psi
fy = 60000 psi (Reinforcement)

PRECAST PRESTRESSED UNITS

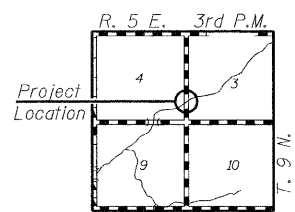
f'c = 6000 psi
f'ci = 5000 psi
fpu = 270000 psi (1/2" low lax strands)
fpbt = 201960 psi (1/2" low lax strands)

GENERAL NOTES

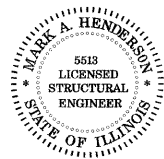
See Proposal for Boring Data.
Reinforcement bars shall conform to the requirements of ASTM A706, Grade 60. See Special Provisions.
The layout of the riprap slopewall may be varied to suit ground conditions in the field as determined by the Engineer.
The contractor shall drive one test pile in a permanent location at both abutments as directed by the Engineer in the field prior to ordering the remainder of piles.

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 "A.A.S.H.T.O. LRFD Bridge Design Specifications."

Mark A. Henderson 3/26/09
Expiration Date 11/30/2010



LOCATION MAP



FILE NAME =	USER NAME = #JUSER#	DESIGNED - F.L.L.	REVISED -	<p>Allen Henderson & Associates, Inc. Civil and Structural Engineers Springfield, IL 62703 Phone: (217)544-8033 IL Design Firm No. 184-001907</p>	<p>GENERAL PLAN & ELEVATION</p> <p>SCALE: NONE SHEET NO. 4 OF 13 SHEETS STA. 6+25.00 TO STA. 11+50.00</p>	T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
#FILE#	PLOT SCALE = #SCALE#	DRAWN - M.J.S.	REVISED -			336A	08-15131-00-BR	SHELBY	13	4
	PLOT DATE = #DATE#	CHECKED - M.A.H.	REVISED -			CONTRACT NO. _____				
		DATE	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				