

Bench Mark: B.M. 101 - Elev. 355.142. A chiseled square on the S.E. wingwall of S.N. 030-0008, located at Sta. 803+89.8, 17.2 ft. left.

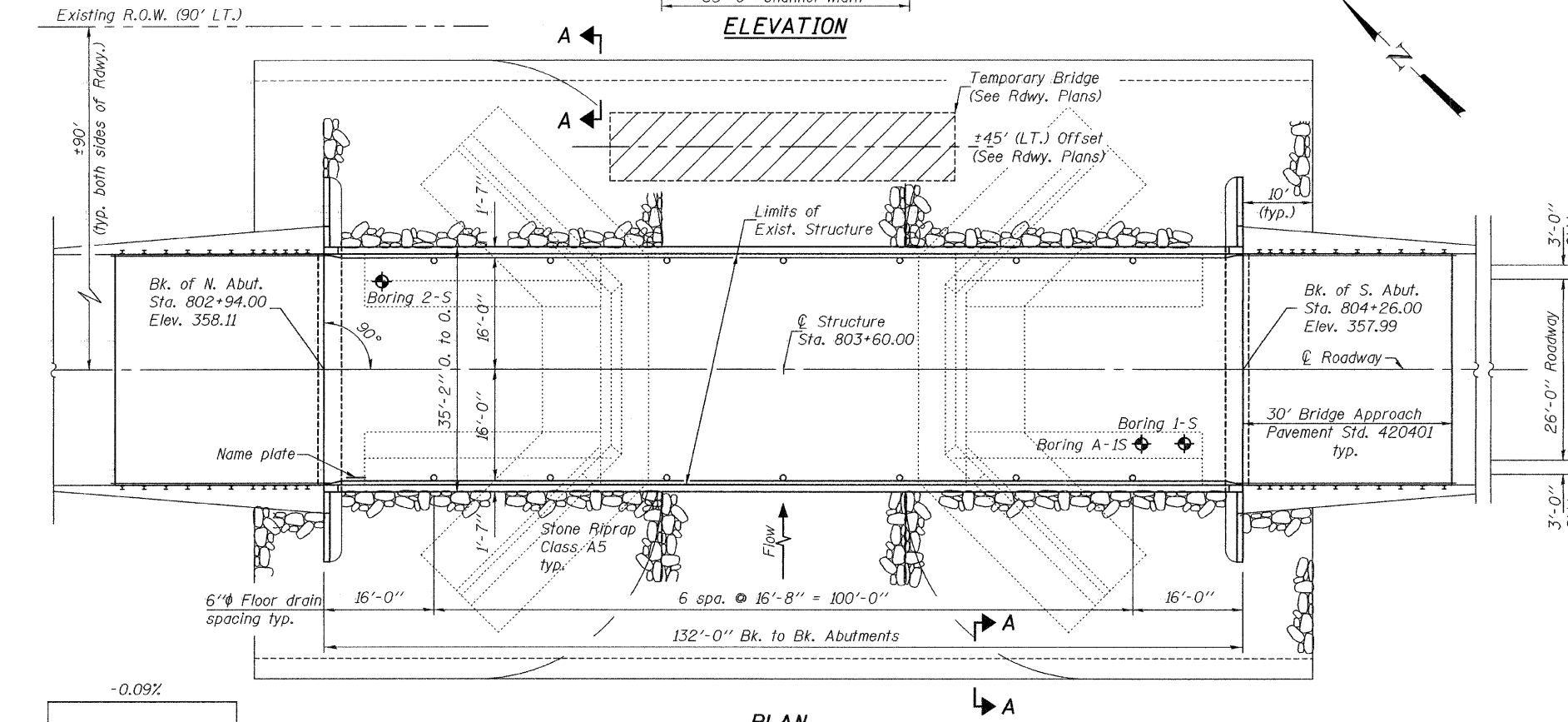
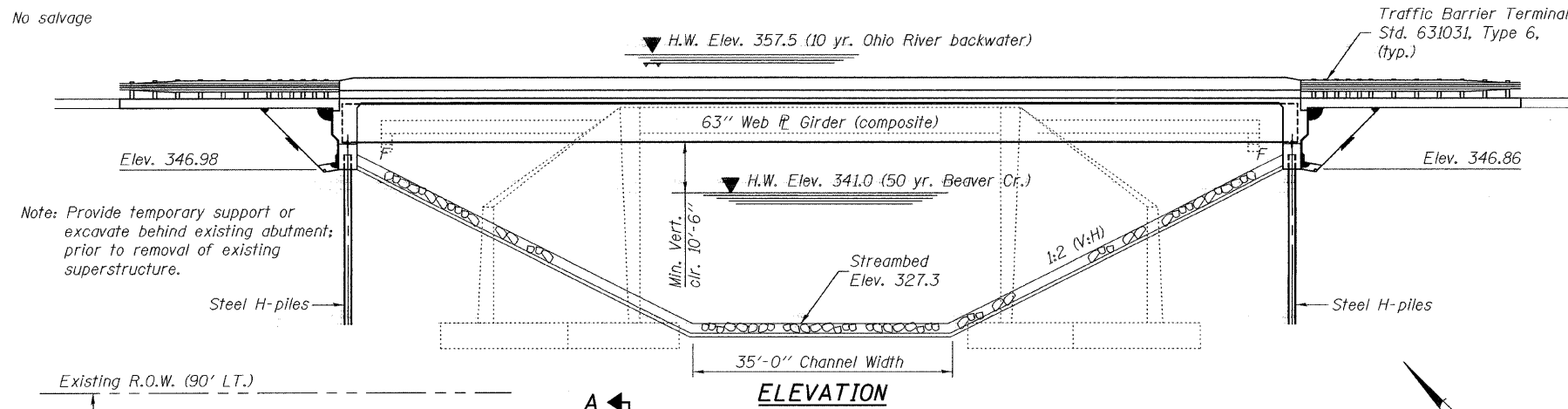
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 1
FAP 782	114B-2	GALLATIN	62	19	18 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-			

Contract No. 98887

Existing Structure: S.N. 030-0008 Built in 1933 as S.B.I. Route 140, Section 114-A at Station 803+60 as a reinforced concrete T-beam bridge, 52'-6" Bk. to Bk. closed abutments supported on untreated timber piles. Bridge widening in 1980 with PPC deck beams (exterior), and bituminous wearing surface. Existing bridge to be removed and replaced. Traffic maintained utilizing temporary runaround bridge.

No salvage

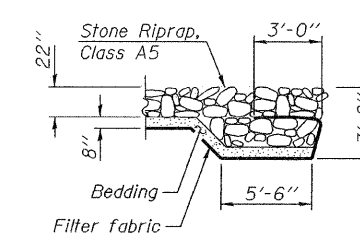


STATION 803+60.00  
BUILT 20 BY  
STATE OF ILLINOIS  
F.A.P. RTE. 782 SEC. 114B-2  
LOADING HL93  
STRUCTURE NO. 030-0024

NAME PLATE  
See Std. 515001

INDEX OF SHEETS

- 1 General Plan & Elevation
- 2 General Data
- 3-5 Top of Slab Elevations
- 6 Top of North Approach Pavement Elevations
- 7 Top of South Approach Pavement Elevations
- 8 Superstructure
- 9 Superstructure Details
- 10 Diaphragm Details
- 11 Structural Steel
- 12 Bearing Details
- 13 North Abutment
- 14 South Abutment
- 15 Bar Splicer Assembly Details
- 16 Steel H Pile Details
- 17-18 Boring Logs



SECTION A-A

LOADING HL 93

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

DESIGN SPECIFICATIONS

2007 LRFD Bridge Design Specifications, 4th. Edition

DESIGN STRESSES

- $f'_c = 3,500$  psi
- $f_y = 60,000$  psi (reinforcement)
- $f_y = 50,000$  psi (structural steel) (M 270, Grade 50)
- $f_y = 36,000$  psi (structural steel) (M 270, Grade 36)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 2  
Bedrock Acceleration Coefficient (A) = 17%g  
Site Coefficient (S) = 1.0

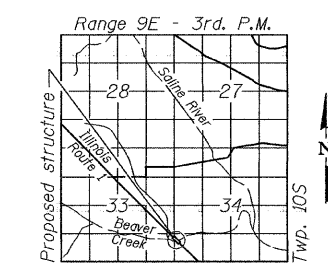
Design Scour Elevation (feet)	N. Abutment	S. Abutment
	346.9	346.8

WATERWAY INFORMATION

Exist. Low Grade Elev. 357.32 @ Sta. 804+00  
Prop. Low Grade Elev. 357.95 @ Sta. 804+50

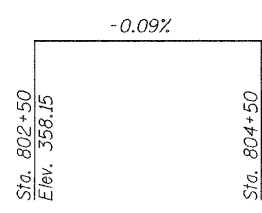
Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.		Head - Ft.		Headwater El.	
		Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	Exist.	Prop.
10±	2970	1168.6	1999.1	357.5	0.1	0.1	357.6	357.6	357.6
50	4480	1168.6	1999.1	357.5	0.2	0.1	357.7	357.6	357.6
100	5140	1168.6	1999.1	357.5	0.3	0.1	357.8	357.6	357.6
500	6690	1168.6	1999.1	357.5	0.5	0.2	358.0	357.7	357.7

10-Yr. Velocity thru Exist. Bridge = 2.5 fps; 10-Yr. Velocity thru Prop. Bridge = 1.5 fps  
Note: 10 year Ohio River backwater used in table.



LOCATION SKETCH

GENERAL PLAN & ELEVATION  
ILLINOIS ROUTE 1 OVER  
BEAVER CREEK  
F.A.P. ROUTE 782 - SECTION 114B-2  
GALLATIN COUNTY  
STATION 803+60.00  
STRUCTURE NO. 030-0024



PROFILE GRADE  
(along C.Roadway)

DESIGNED	<i>Stacy Johnson</i>
CHECKED	<i>Deanna J. Coletta</i>
DRAWN	<i>h.t. duong</i>
CHECKED	<i>ccc/DHC</i>

EXAMINED	<i>James J. Anderson</i>	July 21, 2008
PASSED	<i>Ralph E. Johnson</i>	ENGINEER OF BRIDGES AND STRUCTURES



EXPIRES 11-30-2008