

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 1441	00-00059-00-BR	KANE	154	72
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

Contract # 83869

HIGHWAY CLASSIFICATION

Wilson Street
Functional Class: Minor Arterial
ADT: 24,600 (2004); 34,000 (2030)
DHW: 3400
Design Speed: 30 m.p.h.
Posted Speed: 25 m.p.h.

LOADING HS20-44

DESIGN SPECIFICATIONS
AASHTO 17th Edition (2002)

DESIGN STRESSES

CONC. DECK SLAB f _c = 6000 psi (HPC) f _y = 60,000 psi (reinforcement) f _s = 270,000 psi (0.6" φ low relaxation)	REINFORCED CONCRETE f _c = 3500 psi f _y = 60,000 psi (reinforcement)
CONC. PIER f _c = 3500 psi f _y = 60,000 psi (reinforcement) f _s = 270,000 psi (0.6" φ low relaxation)	STRUCTURAL STEEL f _y = 50,000 psi

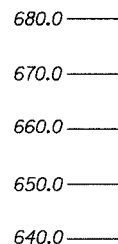
SEISMIC DATA

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

- B.M.#3 - Chiseled '+' on the sidewalk at the NW corner of Wilson Street and River Street Elev. 680.11

- Existing Structure- The existing structure, number 045-6050, is a three-span cast-in-place steel reinforced concrete filled spandrel arch built in 1911. The total length of the bridge back to back of abutments is 274'±. Individual spans measure 68'±, 88'± and 68'±. The out-to-out deck dimension is 62'-4"±. The abutments are steel reinforced concrete counterfort type and piers are steel reinforced concrete. The abutments and piers are supported on spread footings resting on bedrock. Traffic to be maintained utilizing staged construction.

- Salvage existing roadway lights, monument at NW corner of bridge and portions of the existing abutments.

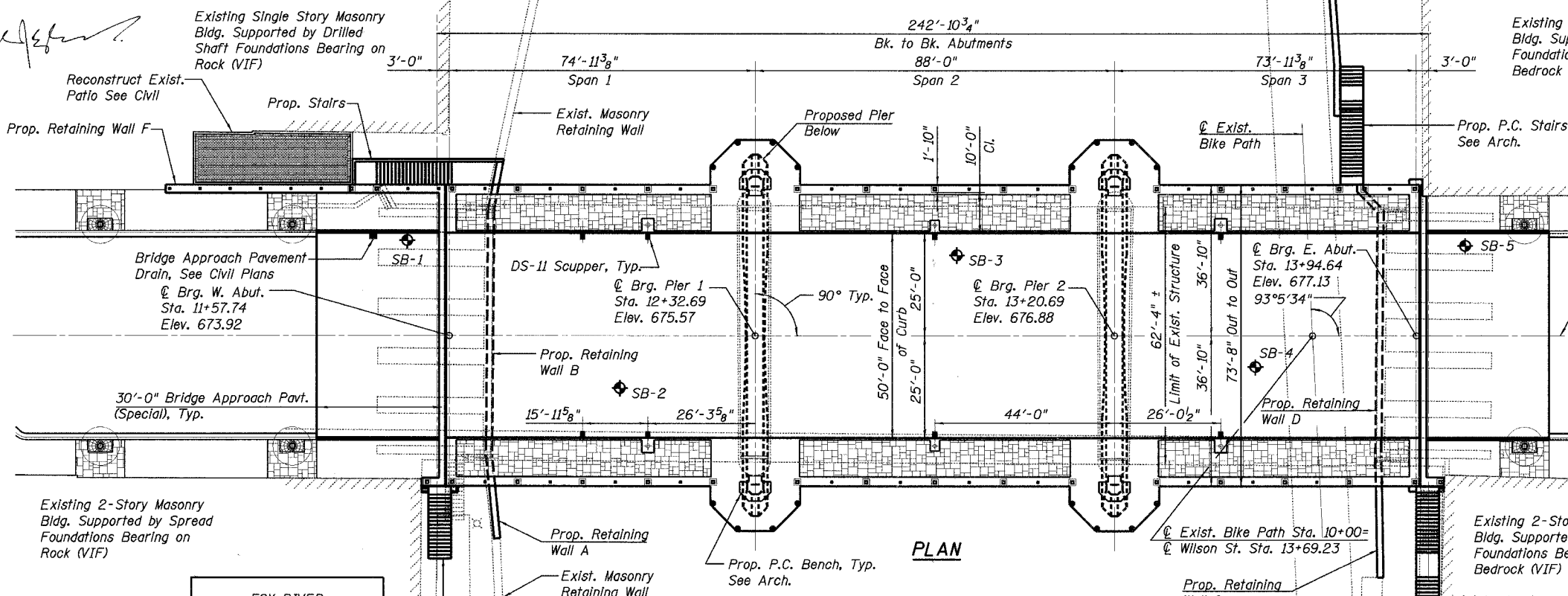


License Expires: 11/30/2006
Current Date: 9/28/2006

* 4" Chamfer Termination to Center of Pier (Typ.), See Arch.
** 4" Chamfer Termination to End of Deck Slab (Typ.), See Arch.



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 the structure and complies with requirements of the current "AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES"



Reconstruct Exist. Patio See Civil

Existing Single Story Masonry Bldg. Supported by Drilled Shaft Foundations Bearing on Rock (VIF)

Prop. Retaining Wall F

Prop. Stairs

Bridge Approach Pavement Drain, See Civil Plans

Center of Brg. W. Abut. Sta. 11+57.74 Elev. 673.92

30'-0" Bridge Approach Part. (Special), Typ.

Existing 2-Story Masonry Bldg. Supported by Spread Foundations Bearing on Rock (VIF)

Prop. Retaining Wall A

Prop. Retaining Wall B

Prop. Retaining Wall C

Prop. Retaining Wall D

Prop. Retaining Wall E

Prop. Retaining Wall F

Prop. P.C. Bench, Typ. See Arch.

Prop. P.C. Stairs See Arch.

Prop. P.C. Stairs See Arch.

Prop. P.C. Stairs See Arch.

Prop. P.C. Stairs See Arch.

Prop. P.C. Stairs See Arch.

WATERWAY INFORMATION

Drainage Area = 1629 sq. mi. Low Grade Elev. 672.9 @ Sta. 9+62

Flood	Freq. Yr.	Q	Opening Sq. Ft.	Nat. Head - Ft.	Headwater El.	Prop. Headwater El.
Design	10	8500	1674	661.3	0.2	0.1
Base	50	12500	2125	663.7	0.2	0.1
Overtopping	100	13500	2196	664.1	0.2	0.1
Max. Calc.	500	17630	2468	665.7	0.4	0.2

LEGEND

◆ Soil Boring, see Sheet No's. 122 and 123

Note: For Mounting See Sheet No. 83

NAME PLATE

See Std. 515001

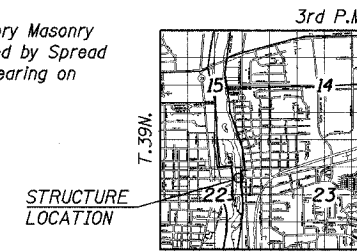
FOX RIVER
BUILT 2007 BY
CITY OF BATAVIA
KANE COUNTY
LOADING HS20
STR. NO. 045-6051

9/28/2006 4:02:01 PM

LOCHNER
H.W. LOCHNER, INC., CHICAGO, ILLINOIS

NOTES

1. For typical bridge cross section, see Sheet No. 74.
2. For existing and proposed utilities, see Civil Plans.
3. For Benchmark's, Alignment and Ties, see Sheet No. 13.



LOCATION SKETCH

STRUCTURE LOCATION

3rd P.M.
R.8.E.
P.C. Sta. 12+49.42 Elev. 676.04
P.I. Sta. 12+73.42 Elev. 676.72
P.T. Sta. 12+97.42 Elev. 676.80
+2.82%
+0.34%

PROPOSED PROFILE GRADE LINE

(Along Centerline of Wilson St.)

GENERAL PLAN & ELEVATION

WILSON ST OVER FOX RIVER

SECTION 00-00059-00-BR

KANE COUNTY

STRUCTURE NO. 045-6051