

Benchmark:
Cut square on Northwest Wingwall (West Bridge)
Elev. = 639.93

Existing Structure:
No. 045-6009 built in 1949 under Sec. 14B-CS, S.A.R. 24 Ext. (Kane County Sec. 118-B M.F.T.) and widened in 1976. The Superstructure consists of 4-continuous reinforced concrete T-Beam spans measuring 302'-8 7/8" back to back of abutments and 65'-11" out to out deck supported by three reinforced concrete piers and two reinforced concrete closed abutments founded on rock.

Salvage:
Reuse existing substructures.

Staging:
One lane of traffic in each direction to be maintained during construction utilizing staged construction.

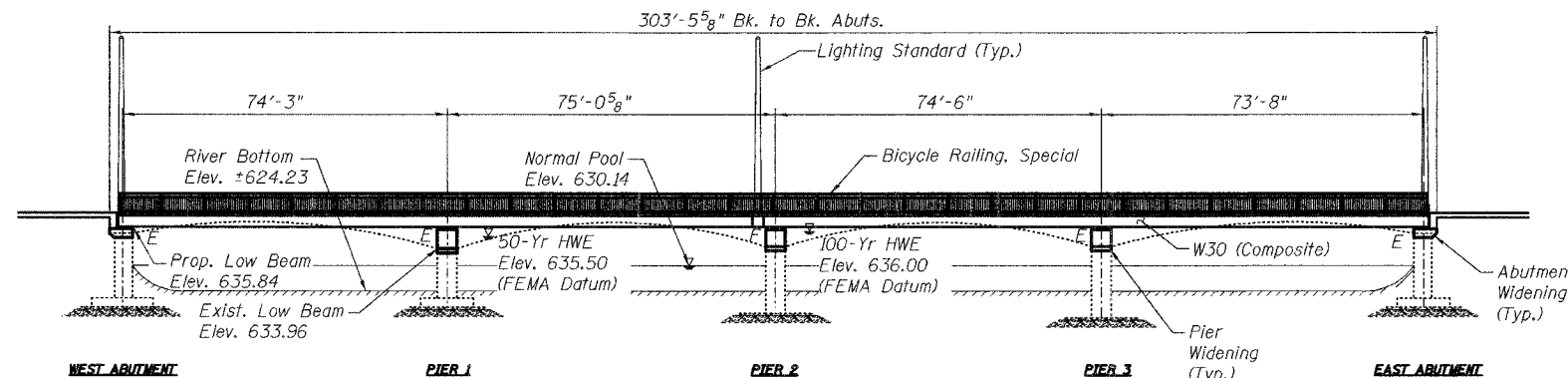
LEGEND:

 12" Cast Iron Watermain (Abandoned)
 8" Gas Main (To be Abandoned by NICOR Prior to Construction)
 (10)-5" PVC Electrical Conduits (Abandoned)

ROUTE NO.	SECTION	COUNTY	DISTRICT	SHEET NO.
FAU 1517	03-00247-00-BR	KANE	121	42
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
1				

SHEET NO. SW-1
SW-30 SHEETS

CONTRACT #83867



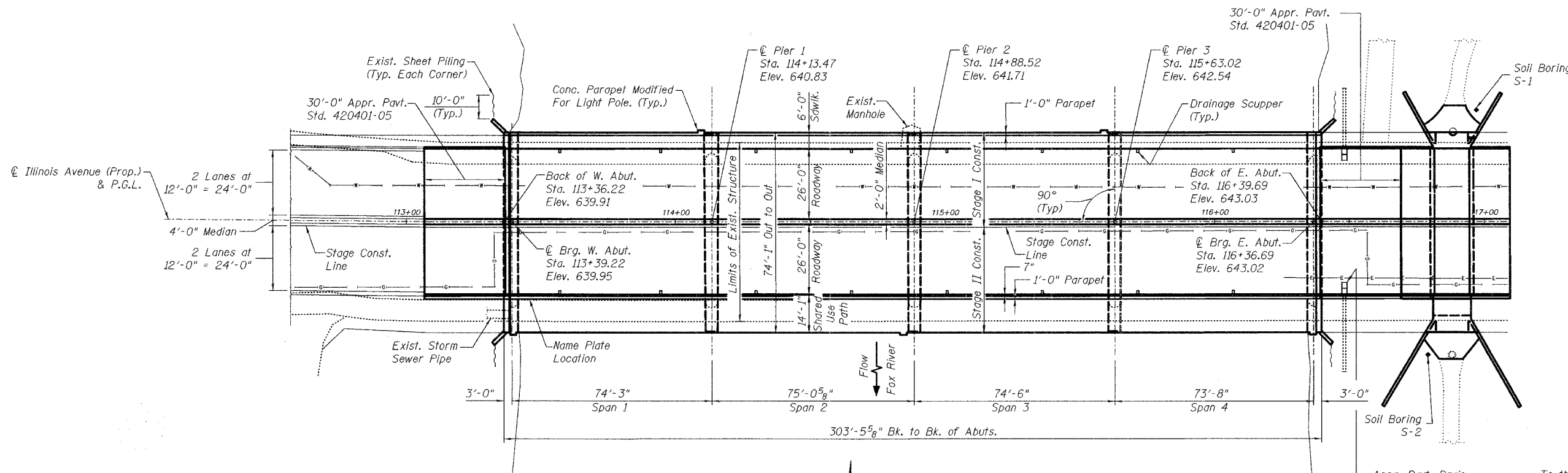
ELEVATION

DESIGN SPECIFICATIONS
2002 AASHTO Standard Specifications - 17th Ed.

LOADING HS20-44
Allow 50#/sq. ft. for future wearing surface.

DESIGN STRESSES
FIELD UNITS
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Gr. 50 Structural Steel)

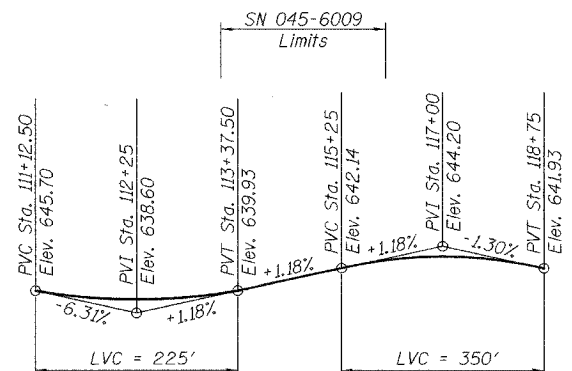
SEISMIC DATA
Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 4Zg
Site Coefficient (S) = 1.0



PLAN

FOX RIVER
BUILT 2007 BY
CITY OF AURORA
SEC 03-00247-00-BR
STATION 114+87.96
STR. NO. 045-6009
LOADING HS20

NAME PLATE
See Std. 515001-02

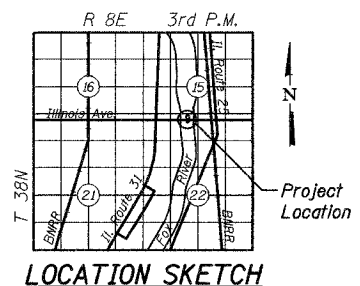


PROFILE GRADE
(Along Illinois Av.)

WATERWAY INFORMATION

Drainage Area = 1,705 Sq. Mi. Low Grade Elev. 639.52 @ Sta. - 121+74.61

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	50	8,400	3,159.16	3,178.16	635.50	0	0	635.50	635.50
Base	100	9,180	3,285.84	3,318.92	636.00	0	0	636.00	636.00
Overtopping									
Max. Calc.	500								



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".

Andrew E. Underwager 8-3-06
 Andrew E. Underwager Date
 Licensed Structural Engineer
 License Expires November 30, 2006

DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

REVISIONS	
NAME	DATE

CITY OF AURORA
 GENERAL PLAN AND ELEVATION
 ILLINOIS AVENUE
 OVER THE FOX RIVER
 SECTION NO. 03-00247-00-BR
 KANE COUNTY
 STRUCTURE NO. 045-6009
 DATE 1-28-2006

COMPANY NAME, ACCOUNT NUMBER, PROJECT CONTACT, PROJECT NUMBER, SHEET NUMBER, DATE