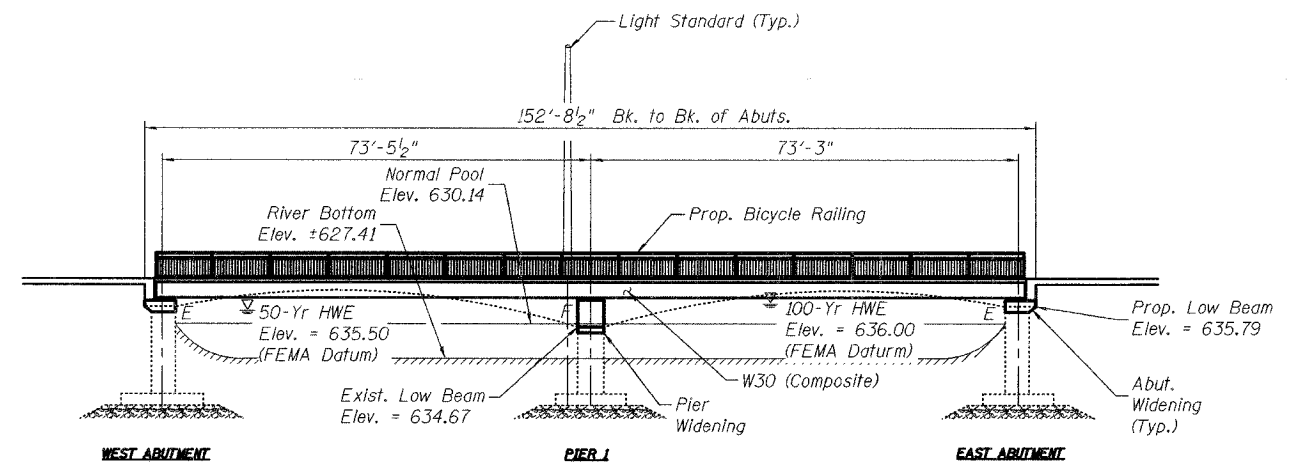


Benchmark:
Cut square on Southeast Wingwall (East Bridge)
Elev. = 639.88

Existing Structure:
No. 045-6008 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 2-continuous reinforced concrete T-Beam spans measuring 150'-2⁵/₈" back to back of abutments and 65'-11" out to out deck supported by one reinforced concrete pier and two reinforced concrete closed abutments founded on rock.

Salvage:
Reuse existing substructures.

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



- LEGEND**
- W— 12" Watermain (Abandoned)
 - G— 8" Gas Main (To be Abandoned by NICOR Prior to Construction)
 - E— (10)-5" PVC Electrical Conduits (Abandoned)

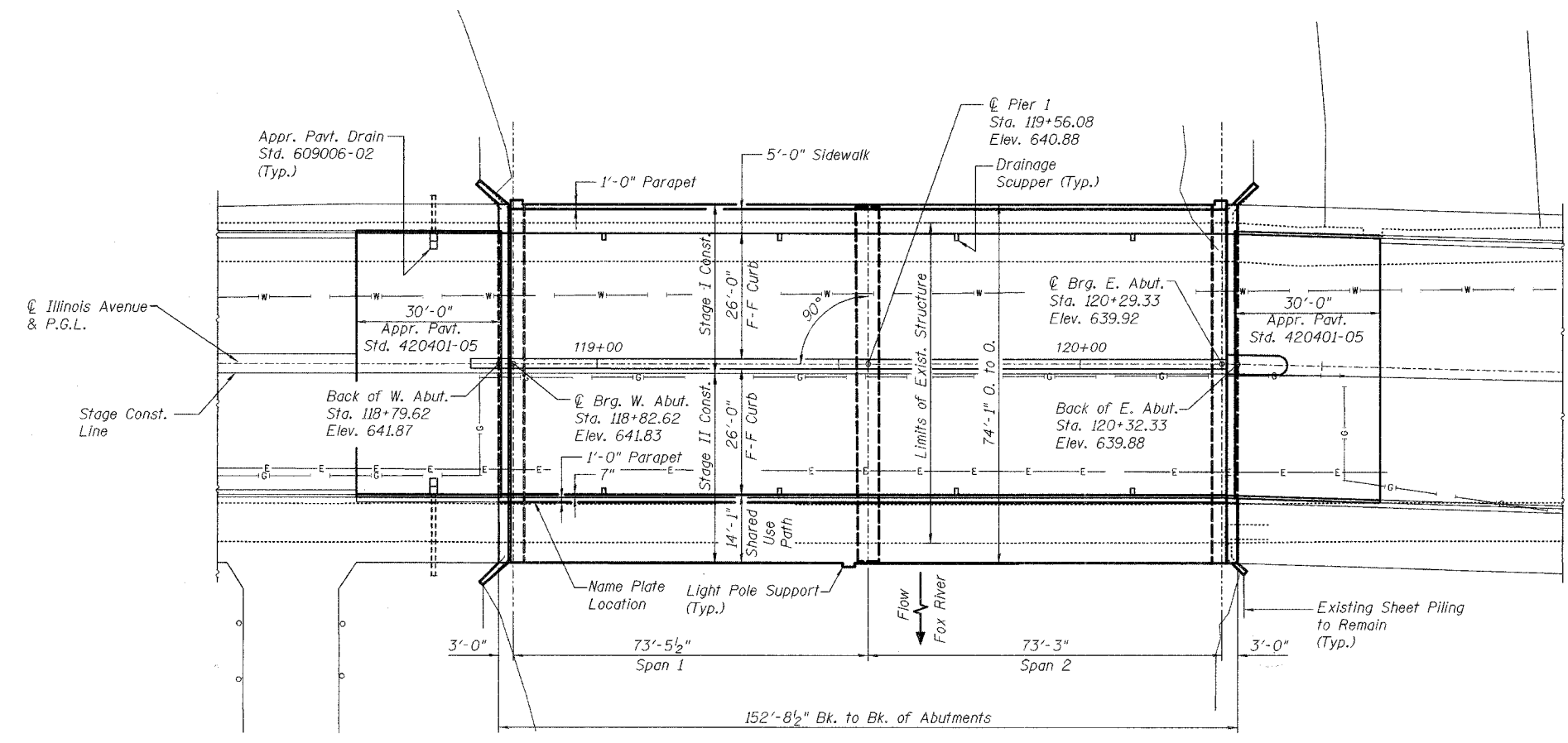
DESIGN SPECIFICATIONS
2002 AASHTO Standard Specifications - 17th Ed.

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

DESIGN STRESSES

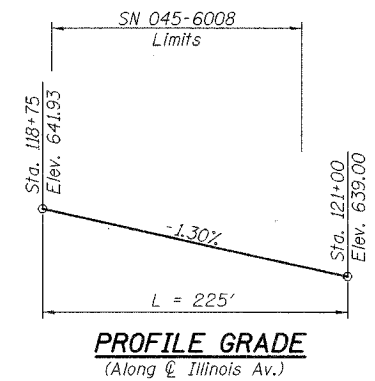
FIELD UNITS
f'c = 3,500 psi
fy = 60,000 psi (reinforcement)
fy = 50,000 psi (M270 Gr. 50 Structural Steel)

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



FOX RIVER
BUILT 2007 BY
CITY OF AURORA
SEC 03-00247-00-BR
STATION 119+55.97
STR. NO. 045-6008
LOADING HS20

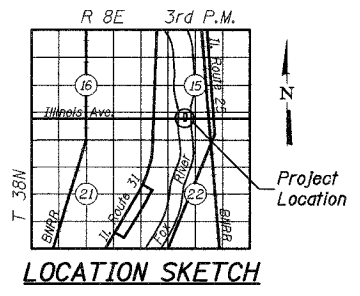
NAME PLATE
See Std. 515001-02



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	8,600	3,159.16	3,178.16	635.50	0	0	635.50	635.50
Base	100	9,420	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
Date
Andrew E. Underwager
Licensed Structural Engineer
License Expires November 30, 2006

DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

REVISIONS	
NAME	DATE

CITY OF AURORA

GENERAL PLAN & ELEVATION
OVER THE FOX RIVER
SECTION NO. 03-00247-00-BR
KANE COUNTY
STRUCTURE NO. 045-6008

DATE 7-28-2006