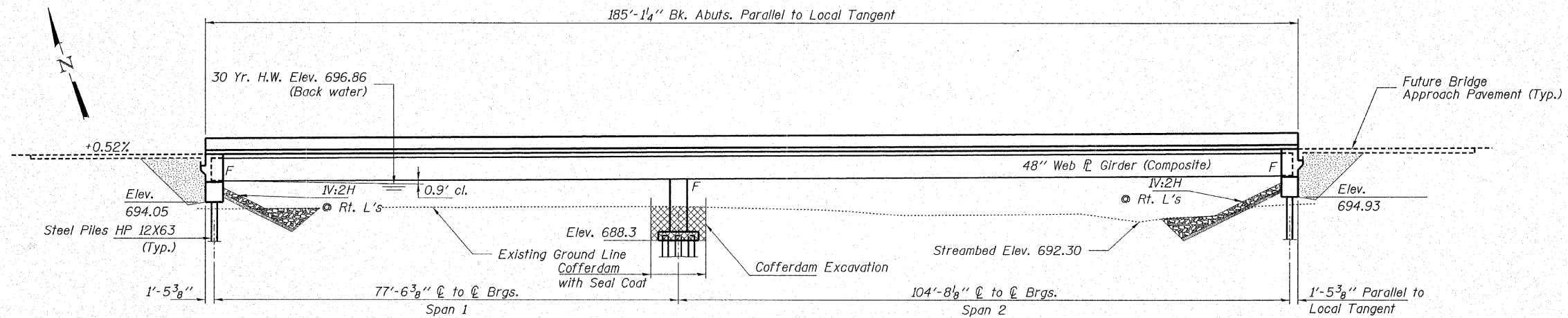


Bench Mark: 16 (TMB 65) "Bench Tie" (yellow) set in north face of 36" tree, 25'± east of the east bank of the Fox River, south of RR bridge and at the back of Midwest Ground Covers Property (MGC property). Elev. 693.886

Existing Structure: None

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.U. 361	06-00214-08-BR	KANE	50	33
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
			CONTRACT NO. 83978 Sheet 1 of 18 E.B.	

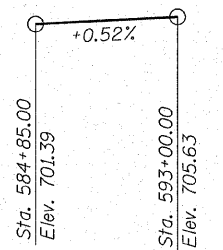


ELEVATION

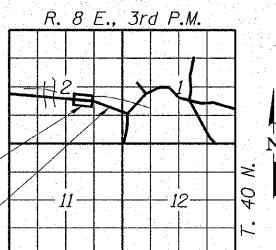
- INDEX OF STRUCTURE SHEETS**
1. General Plan & Elevation
 2. General Notes, Details & Total Bill of Material - Eastbound Bridge
 - 3.-4. Top of Slab Elevations
 5. Superstructure
 - 6.-8. Superstructure Details
 9. Structural Steel
 10. Structural Steel Details
 11. West Abutment
 12. East Abutment
 13. Pier
 14. Bar Splicers
 15. Steel H Pile Details
 - 16.-18. Borings

BREWSTER CREEK
BUILT 200... BY
KANE COUNTY
SEC. 06-00214-08-BR
F.A.U. ROUTE 361 / NEW STEARNS ROAD
F.A. PROJ. BRM-000
STR. NO. 045-3167 LOADING HS 20

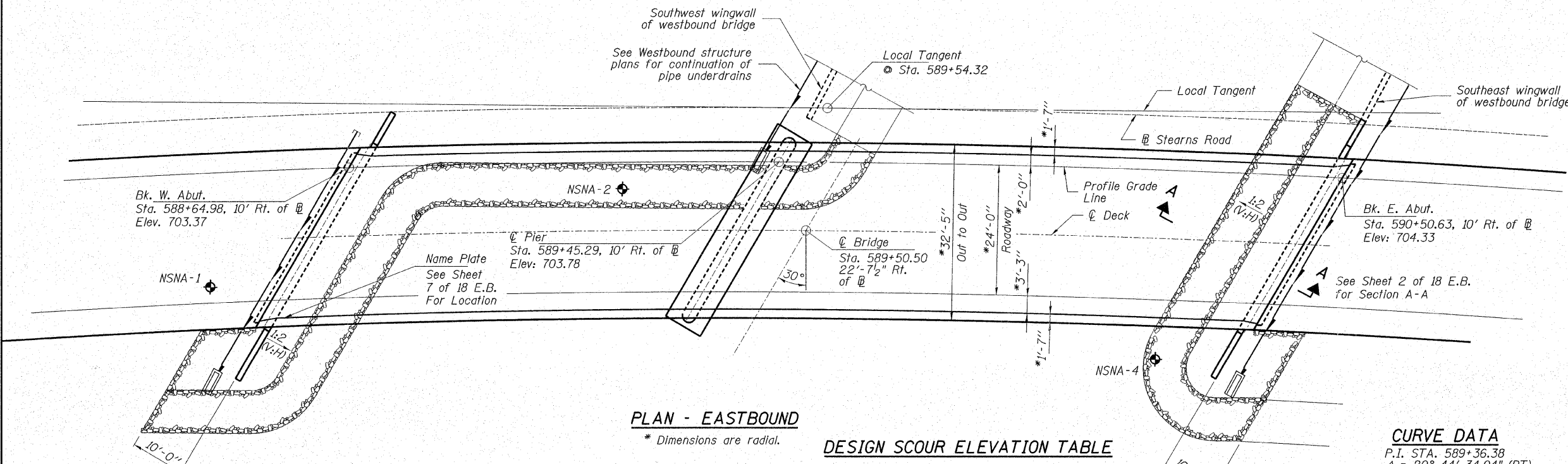
NAME PLATE
See Std. 515001



PROFILE GRADE
(New Stearns Road)



LOCATION SKETCH



PLAN - EASTBOUND

* Dimensions are radial.

DESIGN SCOUR ELEVATION TABLE

	W. Abut.	Pier	E. Abut.
Design Scour Elevation (ft.)	687.77	689.89	687.56

CURVE DATA

P.I. STA. 589+36.38
Δ = 20° 44' 34.04" (RT)
D = 2° 36' 15.67"
T = 402.64'
R = 2,200.00'
L = 796.46'
E = 36.54'
P.C. STA. 585+33.74
P.T. STA. 593+30.20
S.E. = 0.028'/'

LOADING HS 20-44

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

DESIGN SPECIFICATIONS

2002 AASHTO and applicable Interims.

DESIGN STRESSES

f'c = 3,500 p.s.i.
fy = 60,000 p.s.i. (Reinforcement)
fy = 50,000 p.s.i. (Structural Steel) (M270 GR. 50 W)

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.037g
Site Coefficient (S) = 1.0

WATERWAY INFORMATION

Drainage Area = 2.106 Sq. Mi.		Low Grade Elev. 702.7 @ Sta. 556+00							
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Natural Head - Ft.		Headwater El.		
			Exist.	Prop.	H.W.E. Exist.	Prop.		Exist.	Prop.
Design	10	80	N/A	205.8/323.1	696.29	N/A	0.01	N/A	696.30
	30	100	N/A	261.5/450.5	696.86	N/A	0.02	N/A	696.88
	50	116	N/A	315.8/539.9	697.40	N/A	0.01	N/A	697.41
Base	100	134	N/A	364.7/585.3	697.82	N/A	0.02	N/A	697.84
Overtopping	>500	376	N/A	427.3/621.8	N/A	N/A	N/A	N/A	702.70
Max. Calc.	500	179	N/A	425.8/621.8	698.62	N/A	0.02	N/A	698.64

Note:

Waterway Information Table provided by Christopher B. Burke Engineering, LTD. 07/16/07

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 "AASHTO Standard Specifications for Highway Bridges".

JEFFREY L. BANE
081-5011
SPRINGFIELD, IL
ILLINOIS STRUCTURAL NO. 081-5011

Expires 11-30-08

HAMPTON, LENZINI & RENWICK, INC.
CIVIL & STRUCTURAL ENGINEERS
LAND SURVEYORS

3085 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62703
(217) 546-3400

ELGIN • SPRINGFIELD

PROJECT NUMBER: 12-05-0077-1 DATE: 09/20/07
DESIGNED: T.P.L. CHECKED: J.L.B. DRAWN: P.J.L.

GENERAL PLAN AND ELEVATION
SECTION 06-00214-08-BR
F.A.U. ROUTE 361 / NEW STEARNS ROAD
OVER THE NORTH ARM OF BREWSTER CREEK
KANE COUNTY
STRUCTURE NO. 045-3167 (E.B.) / STATION 590+50.50