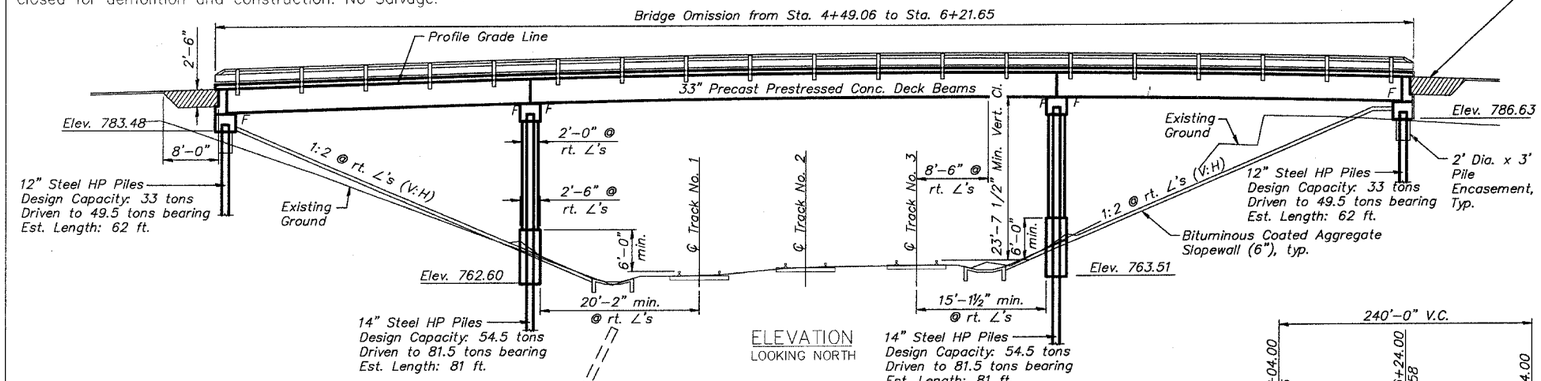
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. S01
M.S. 1090	*	BUREAU COUNTY	27	19	OF SHEETS 9
* SECTION 01-00008-00-BR		ILLINOIS	FED. AID PROJECT		

BENCHMARKS: "M" in Mueller on Fire Hydrant, Sta. 4+56, 67' Left, Elev. 785.32
Head of R.R. Spike in Power Pole, Sta. 3+12, 22' Left, Elev. 787.00

EXISTING STRUCTURE: S.N. 006-9942; Built in 1916; Six span bridge is 124 ft long with five timber approach spans which vary from 12 ft to 16.5 ft long and a 48.5 ft steel Pratt pony truss. Timber deck is 17.5 ft wide. Foundations consist of timber piles and steel frames on concrete footings. Structure will be closed for demolition and construction. No Salvage.

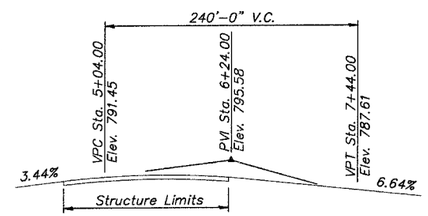


ELEVATION
LOOKING NORTH

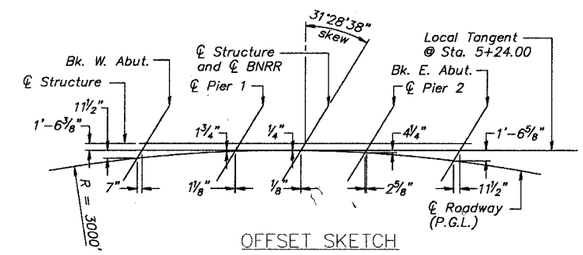
TOP OF RAIL ELEVATIONS
BURLINGTON NORTHERN RAILROAD

Track No. 1				Track No. 2				Track No. 3			
East Rail		West Rail		East Rail		West Rail		East Rail		West Rail	
Station	Elev.	Station	Elev.	Station	Elev.	Station	Elev.	Station	Elev.	Station	Elev.
10+07.45	764.73	10+07.41	764.85	10+07.25	765.88	10+07.25	766.07	10+07.00	766.19	10+06.21	766.39
10+84.40	764.52	10+84.25	764.68	10+81.17	765.58	10+81.30	765.79	10+85.07	765.90	10+85.05	766.11
11+38.32	764.29	11+38.33	764.45	11+38.15	765.36	11+38.24	765.58	11+38.21	765.69	11+37.89	765.92
11+79.90	764.15	11+81.64	764.31	11+81.36	765.22	11+81.55	765.43	11+81.50	765.52	11+81.49	765.76
12+31.79	763.95	12+30.42	764.10	12+29.56	765.05	12+29.44	765.26	12+28.90	765.25	12+28.81	765.51
12+50.84	763.86	12+50.41	764.03	12+49.72	764.97	12+49.46	765.18	12+48.73	765.24	12+48.06	765.49
12+93.92	763.82	12+93.91	763.96	12+93.47	764.81	12+93.91	765.01	12+93.90	765.12	12+94.05	765.34
13+38.72	763.72	13+38.68	763.81	13+38.45	764.67	13+38.28	764.86	13+38.08	765.04	13+38.16	765.26
13+83.11	763.59	13+83.11	763.76	13+83.23	764.52	13+83.48	764.73	13+83.49	764.92	13+83.49	765.15
14+34.79	763.49	14+34.75	763.60	14+34.75	764.38	14+34.55	764.59	14+34.52	764.78	14+34.58	764.99
14+84.57	763.36	14+84.33	763.45	14+84.19	764.25	14+84.16	764.46	14+84.05	764.66	14+83.82	764.88
15+35.38	763.15	15+35.38	763.29	15+35.26	764.14	15+35.42	764.36	15+35.30	764.57	15+35.41	764.78

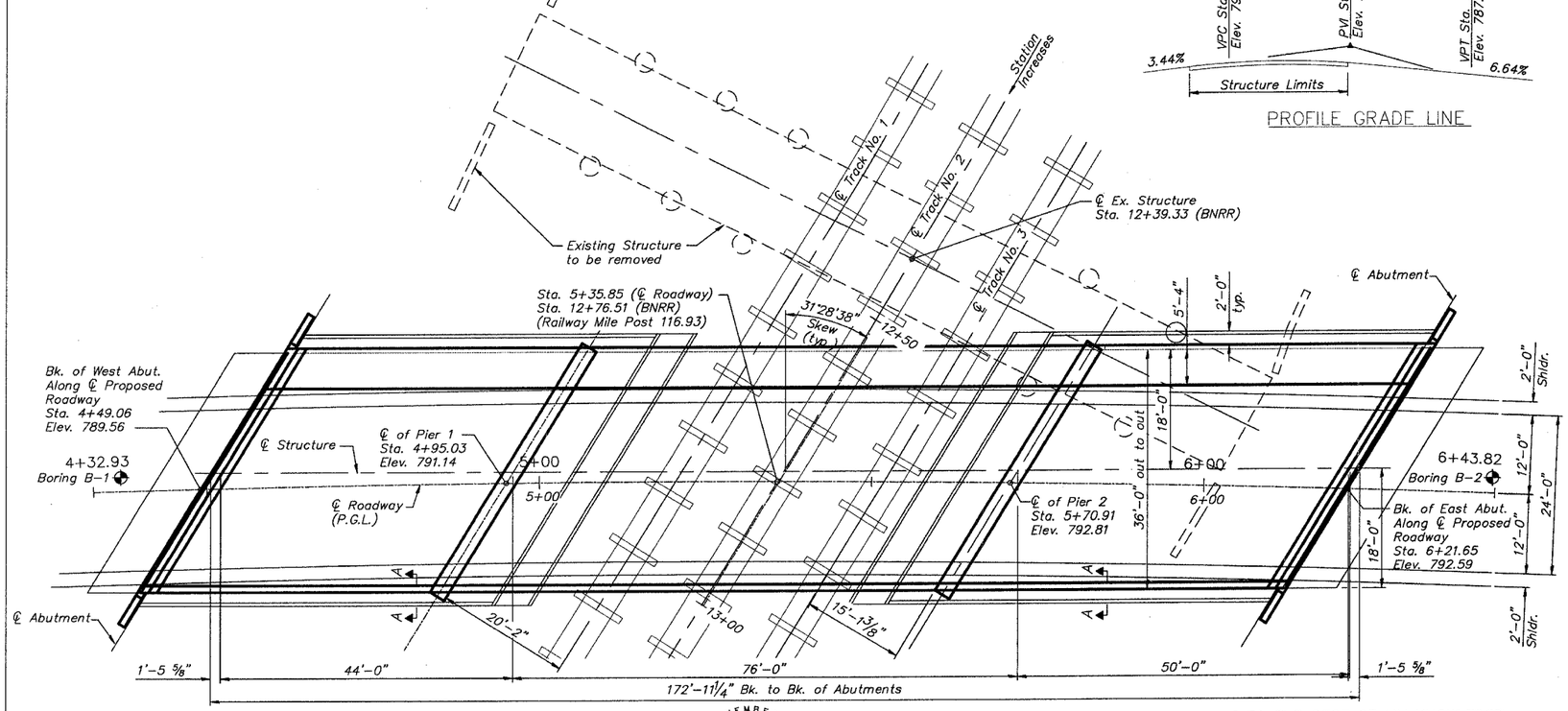
(Railway Mile Post 116.92 = Sta. 12+39.33)



PROFILE GRADE LINE



OFFSET SKETCH



PLAN

CURVE DATA
Δ = 11°18'50.44"
D = 1°54'35.50"
T = 297.17'
L = 592.40'
E = 14.68'
R = 3000'
S.E. = 0.00%
P.C. = Sta. 2+50.00
P.T. = Sta. 8+42.40
P.I. = Sta. 5+46.20

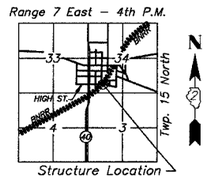
HIGHWAY CLASSIFICATION
High Street
ADT: 450 (2026)
Functional Class: Local Road
Design Speed: 30 mph
Posted Speed: 30 mph

DESIGN SPECIFICATIONS
2002 AASHTO Standard Specifications

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

DESIGN STRESSES
FIELD UNITS
f'c = 3500 psi
fy = 60,000 psi (reinforcement)
PRECAST PRESTRESSED UNITS
f'c = 5,000 psi
f'ci = 4,000 psi
f's = 270,000 psi (1/2" Low lax. strands)
fsi = 201,960 psi (1/2" Low lax. strands)

SEISMIC DATA
Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.039
Site Coefficient (S) = 1



Structure Location

LOCATION SKETCH

DESIGNED BY:	JTT
CHECKED BY:	
DRAWN BY:	CJP
CHECKED BY:	JTT

HIGH STREET OVER BNSF RAILWAY
BUILT 2006 BY
BUREAU COUNTY
SECTION 01-00008-00-BR
STATION 5+36.1
STR. NO. 006-6600 LOADING HS 20-44

LETTERING FOR NAME PLATE
SEE STD. 515001

MEMBER ONE CALL SYSTEM INTERNATIONAL

CALL J.U.L.I.E. BEFORE YOU DIG
1-800-892-0123
TOLL FREE

JEFFREY T. TORMEY
081-00000
REGISTERED STRUCTURAL ENGINEER
ILLINOIS

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".

McCLURE ENGINEERING ASSOCIATES, INC.
1138 COLUMBUS STREET OTTAWA, ILLINOIS 61350
PHONE (815) 433-2080 FAX (815) 433-5930
DESIGN FIRM LICENSE: ILLINOIS #184-000816
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REVISIONS	
NAME	DATE

GENERAL PLAN & ELEVATION
HIGH STREET OVER
BNSF RAILWAY
BUREAU COUNTY
SECTION 01-00008-00-BR
STATION 5+36.11
STRUCTURE NO. 006-6600