

Benchmarks: BM #1 Sta. 0+53, 30' Rt. RR Spike in Power Pole, Elev. = 446.75
 BM #2 Chiseled "□" in S.E. Wing Abandoned RR Bridge, Elev. = 452.01

Existing Structure: S.N. 085-3081, Originally built in 1935 as section 6-B-MFT. The original structure consisted of a two-span reinforced concrete deck with steel WF beams on closed timber abutments and a timber pile bent pier. The back to back abutment length is 62'-0" and out to out deck width is 23'-0".

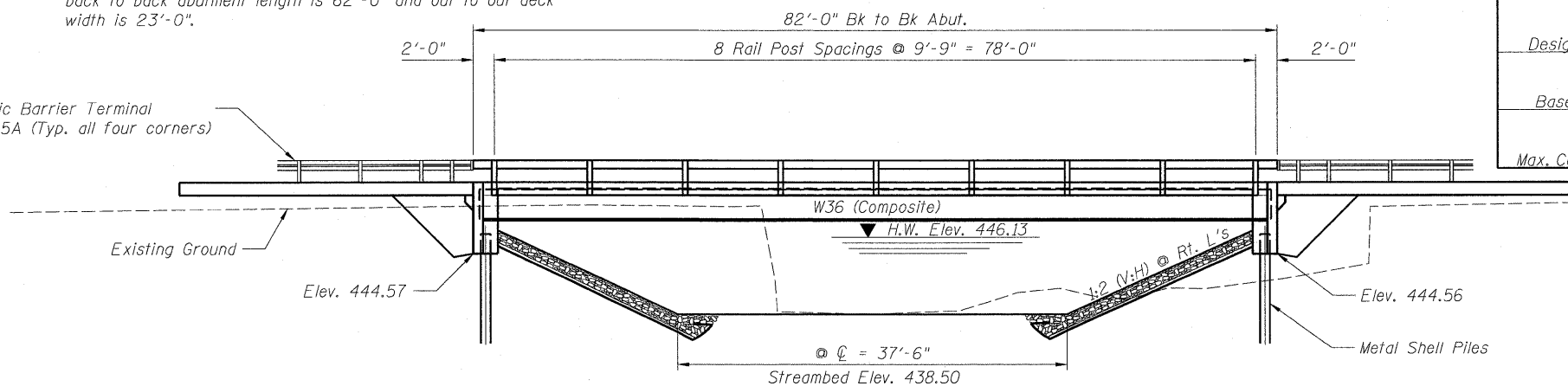
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

WATERWAY INFORMATION

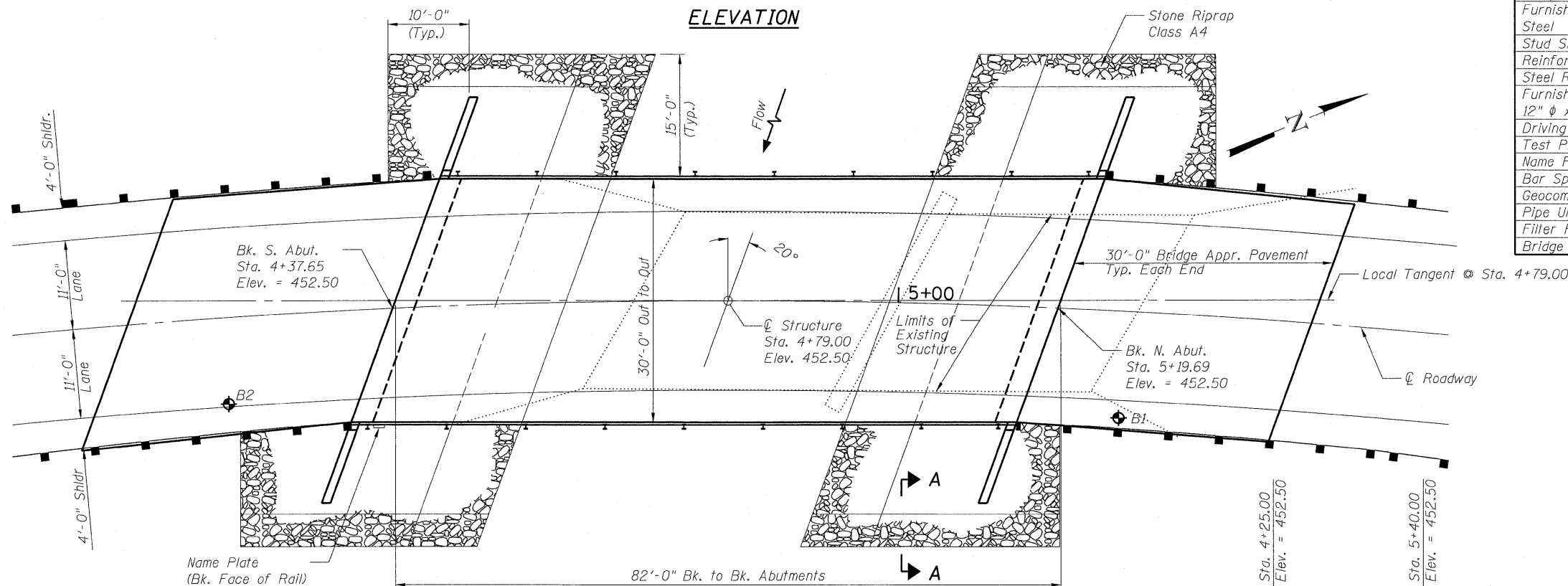
Design	Freq. Year	Discharge (cfs)	Opening (sq ft)		Head - (ft.)			Headwater Elevation		
			Exist.	Prop.	Exist.	Prop.	Exist.	Prop.		
30	Bridge	1806	1806	329.7	402.6	446.13	0.34	0.28	446.47	446.41
		0	0	0.0	0.0					
		2302.5	2302.5	332.2	410.8					
100	Base	179.5	179.5	104.5	104.5	446.25	0.59	0.47	446.84	446.72
		2482	2482	436.7	515.3					
		3035.4	3035.4	344.6	425.9					
Max. Calc.	500	394.6	394.6	187.0	187.0					
		3430	3430	531.6	612.9	446.47	1.18	0.90	447.65	447.37

No Salvage

Traffic Barrier Terminal
 Type 5A (Typ. all four corners)



ELEVATION



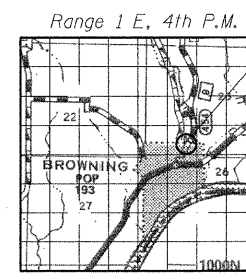
PLAN

Note: See sheet 2 of 17 for section A-A.

DESIGN SCOUR ELEVATION	N & S Abut. 444.56
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PROFILE GRADE

(Along ϕ Roadway)



LOCATION SKETCH

Range 1 E, 4th P.M.

Proposed Structure

GENERAL PLAN AND ELEVATION

F.A.S. ROUTE 454 OVER
 DUTCHMAN'S CREEK
 SECTION 04-00070-00-BR
 SCHUYLER COUNTY
 STATION 4+79.00
 S.N. 085-3055

LOADING HL-93

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

DESIGN SPECIFICATIONS

2007 AASHTO LRFD Bridge Design Specifications with 2008 Interims

DESIGN STRESSES

FIELD UNITS

$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)
 $f_y = 50,000$ psi (M270 Grade 50 Structural Steel)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
 Bedrock Acceleration Coefficient (A) = 0.046g
 Site Coefficient (S) = 1.0



DESIGNED	NI EWINSKI
CHECKED	TRELLO
DRAWN	VERENSKI
CHECKED	TRELLO



Expires: 11/30/10

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 A.A.S.H.T.O. L.R.F.D. Bridge Design Specifications.

Michael J. Trello
 Signed

7/13/09
 Dated

NAME PLATE

See Std. 515001

DUTCHMAN'S CREEK
 BUILT 20 BY
 SCHUYLER COUNTY
 SECTION 04-00070-00-BR
 F.A.S. RTE 454 STATION 4+79.00
 S.N. 085-3055
 LOADING HL-93

SHEET NO. 1	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
17 SHEETS	454	04-00070-00-BR	SCHUYLER	30	9
			CONTRACT NO. 93499		
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT					