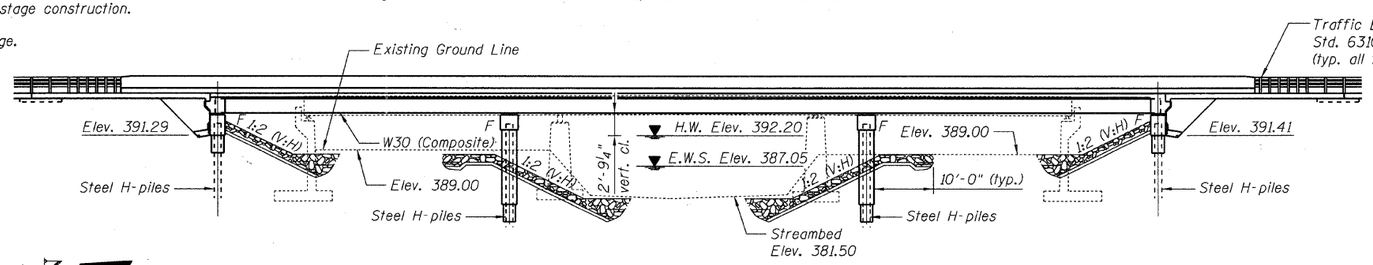
Bench Mark: #214 Square cut on the top of the N.E. wingwall Sta. 372+85 @ 15.0 feet left. Elevation: 399.066

Existing Structure: S.N. 028-0035 was originally built in 1921 (Section 12) and widened/reconstructed in 1951 (Section 12B-Y). The existing structure is a three-span T-beam bridge on closed abutments and solid wall piers. The structure is 131'-0" back-to-back of abutments with an out-to-out width of 34'-1". The existing structure is to be removed and replaced. Traffic is to be maintained utilizing stage construction.

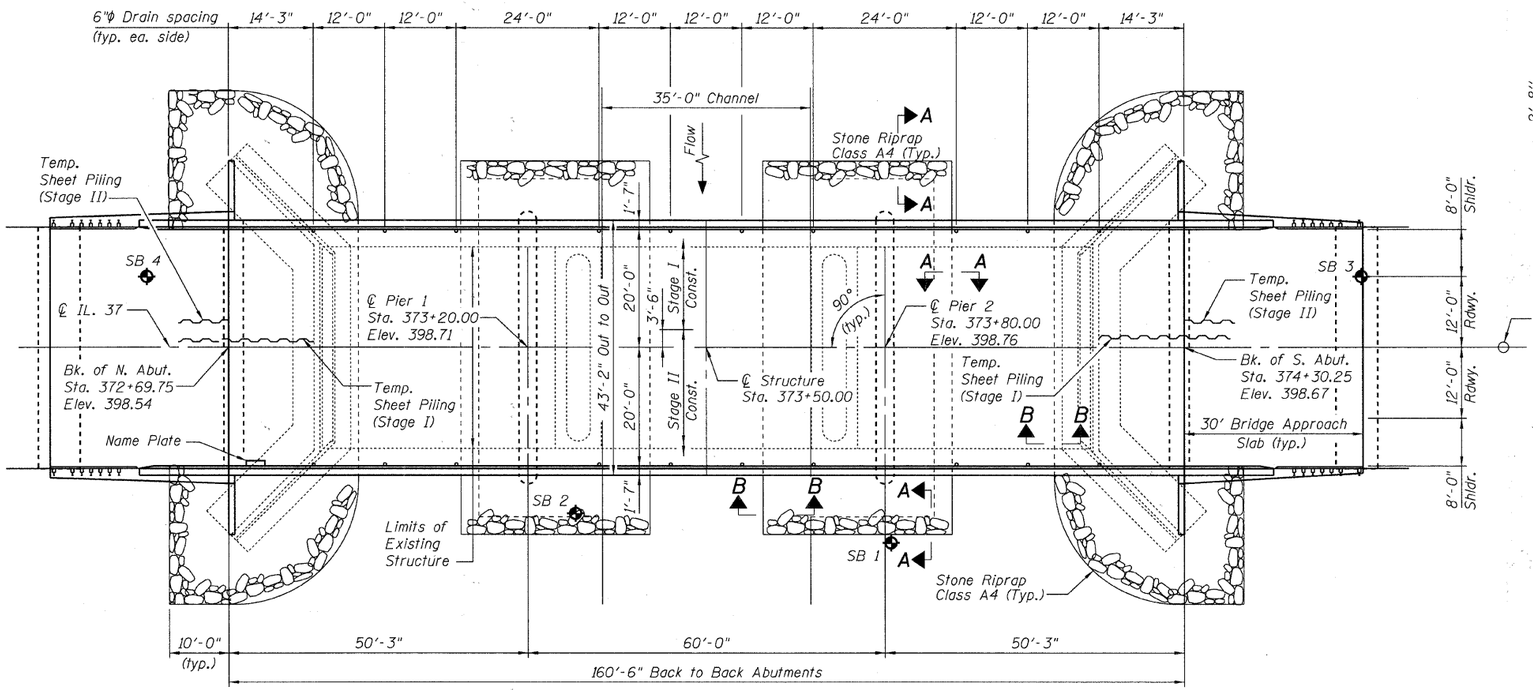
No Salvage.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

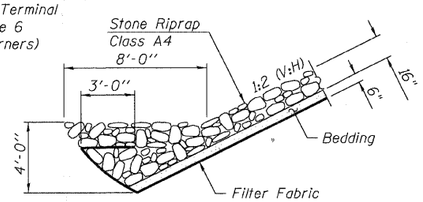


N

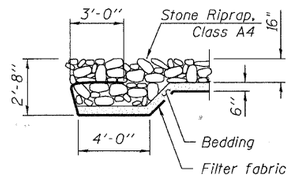
ELEVATION



PLAN



SECTION B-B



SECTION A-A

INDEX OF SHEETS

CURVE DATA

P.I. Sta. = 379+00.70
Δ = 15° 55' 09" (RT)
D = 2° 00' 48"
R = 2,845.96'
T = 397.93'
L = 790.73'
E = 27.68'
S.E. TRANS. =
NORMAL CROWN AT STA. 374+30.25
2.0% AT P.C. STA. 375+02.77
P.C. Sta. = 375+02.77
P.T. Sta. = 382+93.50

LOADING HL-93

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

DESIGN SPECIFICATIONS

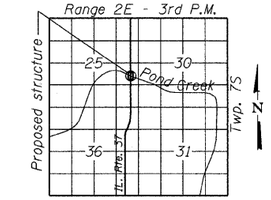
2007 AASHTO LRFD Bridge Design Specifications with 2008 Interims

DESIGN STRESSES

f'_c = 3,500 psi
f_y = 60,000 psi (reinforcement)
f_y = 36,000 psi (M270 Grade 36 structural steel)
f_y = 50,000 psi (M270 Grade 50 structural steel)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 2
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.251 g
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.691 g
Soil Site Class = C



LOCATION SKETCH

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Ralph E Anderson (TSD)
ENGINEER OF BRIDGES AND STRUCTURES

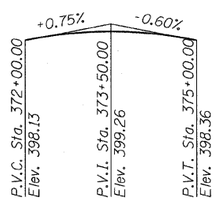
DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (feet)	N. Abut.	Pier 1	Pier 2	S. Abut.
	388.22	373.78	374.30	388.35

WATERWAY INFORMATION

Drainage Area = 33.00 sq. mi.
Existing Low Grade Elev. 394.01 @ Sta. 368+00
Proposed Low Grade Elev. 394.11 @ Sta. 368+00

Flood		Freq. Yr.	Q. C.F.S. Exist.	Q. C.F.S. Prop.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	Main Structure	10	2266	2348	533.5	677.1	391.3	0.8	0.4	392.1	391.7
	Overflow		894	812	164.2	188.9					
	Total		3160	3160	697.7	866.0					
Design	Main Structure	50	3406	3443	639.7	800.6	392.2	1.0	0.5	393.2	392.7
	Overflow		1124	1087	185.8	210.5					
	Total		4530	4530	825.5	1011.1					
Base	Main Structure	100	3939	3985	687.0	856.0	392.6	1.2	0.6	393.8	393.2
	Overflow		1161	1115	192.0	216.0					
	Total		5100	5100	879.0	1072.0					
Overtopping	Main Structure	500	5204	5236	769.9	953.8	393.3	1.3	0.8	394.6	394.1
	Overflow		1216	1184	192.0	216.0					
	Total		6420	6420	961.9	1169.8					



PROFILE GRADE

(IL. Rte. 37)

STATION 373+50.00
BUILT 20__ BY
STATE OF ILLINOIS
F.A.U. RT. 9481 SEC. 12B1-1
LOADING HL93
STRUCTURE NO. 028-0078

NAME PLATE

See Std. 515001

DESIGNED RLM
CHECKED AMS
DRAWN AEC
CHECKED RLM
09/25/09

MODJESKI and MASTERS
Consulting Engineers
SINCE 1893

DAVID W. PETERMEIER
081-005642
LICENSED STRUCTURAL ENGINEER OF ILLINOIS

David W. Petermeier 9/25/09

DAVID W. PETERMEIER
EDWARDSVILLE, ILLINOIS
ILLINOIS LICENSED STRUCTURAL ENGINEER NO. 081-005642
EXPIRES NOV. 30, 2010

GENERAL PLAN AND ELEVATION
ILLINOIS ROUTE 37 OVER POND CREEK
F.A.U. ROUTE 9481 SEC. 12B1-1
FRANKLIN COUNTY
STATION 373+50.00
SN 028-0078

SHEET NO. 1	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
29 SHEETS	9481	12B1-1	FRANKLIN	304	127
		SN 028-0078	CONTRACT NO. 98823		
	FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		