

Bench Mark : BM 303 "□" Cut Center of A.R.L. Headwall, Sta. 1024+90, 43' Rt. Centerline, SW Quadrant of Granger & Wilmoth. Elev. 362.00

Existing Structure : Existing abutments from railroad bridge over Harrisburg ditch on abandoned New York Central tracks to be removed by Contractor. Existing structure consists of timber piles, horizontal timbers, timber wing walls, and timber backwalls. No railroad superstructure exists. Approximate center of existing structure at Sta. 1013+46.50. No salvage. No traffic staging required.

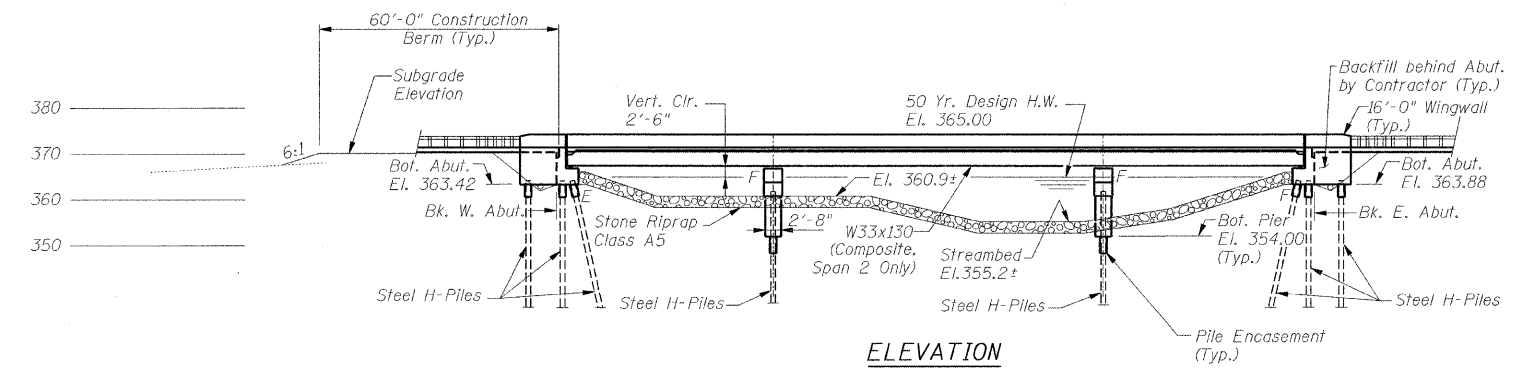
S1 of S27

ROUTE No.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 331	(8X-1)B	SALINE CO.	220	118
STA.		TO STA.		
F.H.W.A. REGION		ILLINOIS	PROJECT	

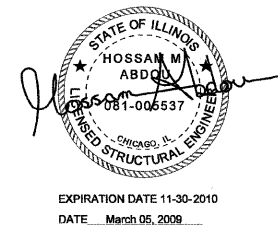
Contract # 78058

WATERWAY INFORMATION

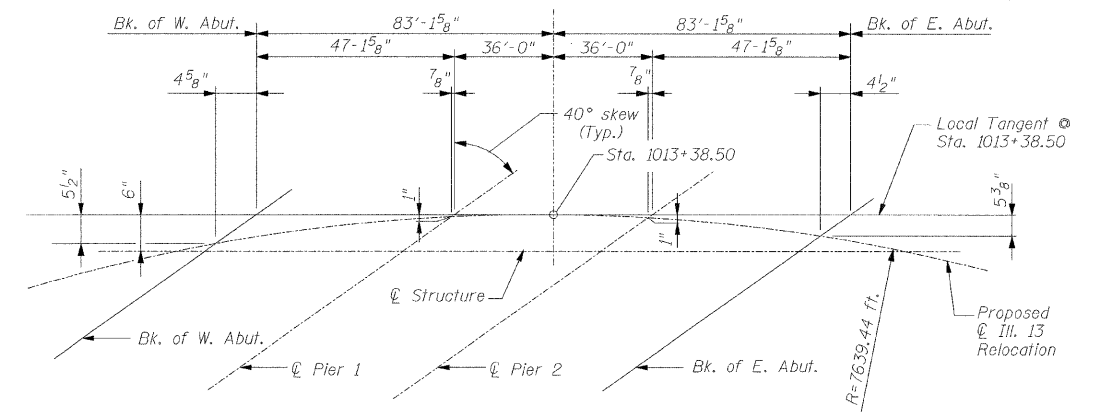
Drainage Area = 2.80 sq. mi.		Existing Low Grade Elev. = 367.50		Proposed Low Grade Elev. = 367.40							
Flood	Frequency (year)	Discharge, Q		Waterway Opening (sq ft)		Head (ft)		Headwater Elev (ft)			
		Exist. (cfs)	Prop. (cfs)	Exist.	Prop.	Natural H.W.E.	Exist.	Prop.	Exist.	Prop.	Prop. Model
Design	50	1820	1820	345	1242	366.7	0.00	0.00	366.7	366.7	364.1
Base	100	2144	2144	345	1242	367.6	0.00	0.00	367.6	367.6	364.4
Overtopping	---	---	---	---	---	---	---	---	---	---	---
Maximum	500	2988	2988	345	1242	369.8	0.00	0.00	369.8	369.8	365.1



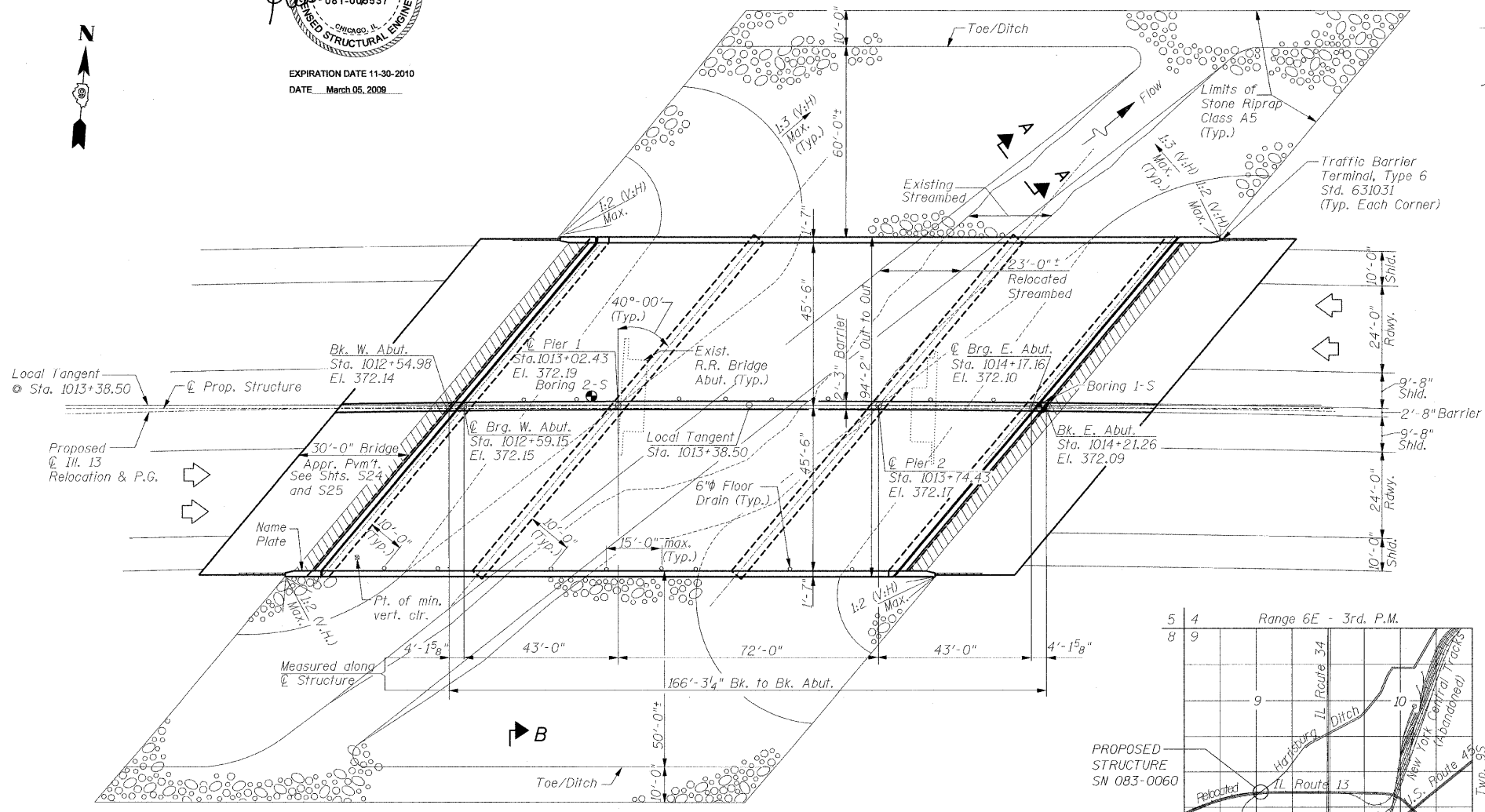
ELEVATION



APPROVED FOR STRUCTURAL ADEQUACY ONLY
Ralph E. Adams
 ENGINEER OF BRIDGES AND STRUCTURES



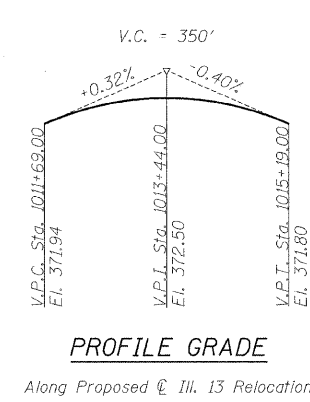
OFFSET SKETCH
(Not to Scale)



PLAN

NOTES:

1. For Sections A-A & B-B see Sheet S2.



PROFILE GRADE

LOADING HS20-44

Allow 50 lb/ft² for future wearing surface.

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications for Highway Bridges, 17th Edition.

DESIGN STRESSES

FIELD UNITS
 f' c = 3,500 psi
 f y = 60,000 psi (Reinf.)
 f y = 36,000 psi (Structural Steel AASHTO M 270 Gr. 36)
 f y = 50,000 psi (Structural Steel AASHTO M 270 Gr. 50)

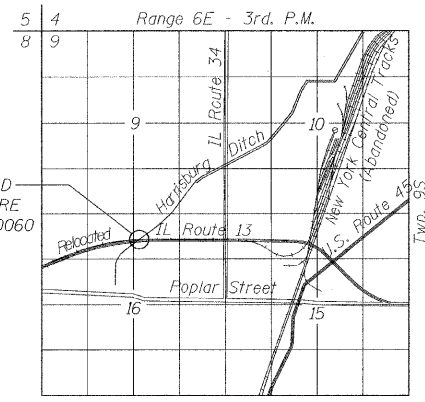
NOTE:
 Due to mine subsidence, the structural steel is designed for a maximum of 0.8 Fy.

SEISMIC DATA

Seismic Performance Category (SPC) = B
 Bedrock Acceleration Coefficient (A) = 0.11g
 Site Coefficient (S) = 1.2

CURVE DATA

Δ = 40°53'34.37" (Rt.)
 D = 0°45'00.00"
 T = 2848.13 ft.
 L = 5452.38 ft.
 E = 513.65 ft.
 R = 7639.44 ft.
 PC = Sta. 964+76.35
 PT = Sta. 1019+28.73
 PI = Sta. 993+24.48
 SE = 0.026 ft/ft



LOCATION SKETCH

DESIGNED	EJB
CHECKED	MRB
DRAWN	LM
CHECKED	HMA

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 alfred benesch & company
 Engineers • Surveyors • Planners
 205 North Michigan Avenue, Suite 2400
 Chicago, Illinois 60601
 312-565-0450

ILLINOIS DEPARTMENT OF TRANSPORTATION
 RELOCATED ILLINOIS ROUTE 13 OVER
 HARRISBURG DITCH
 F.A.P. 331 SECTION (8X-1)B
 GENERAL PLAN AND ELEVATION

SN: 083-0060
 SALINE CO., IL.
 STA. 1013+38.50
 DATE: FEB 4, 2009