

Existing Structure: S.N. 016-0373 built in 1964 as F.A. Route 61, Section 531-3HB at Station 329+18.98. Structure consists of four span continuous wide flange beam bridge with a 13°24'15" right ahead skew, 205'-0" back-to-back abutments along local tangent, varying deck width of 70'-0 1/4" to 75'-0 3/8", multi-column piers, and pile bent abutments. In 1971, the deck was patched and a bituminous overlay was placed on the structure. In 1991, the expansion joints and parapets were reconstructed, along with deck patching and overlay replacement with microsilica concrete. In 2000, the abutment bearings were replaced with elastomeric.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

Plan dimension and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.

See Roadway plans for maintenance of traffic details.

INDEX OF SHEETS

1. General Plan and Elevation
2. Deck Slab Repair
3. Abutment Repair
4. Pier 1 Repair
5. Pier 2 Repair
6. Pier 3 Repair
7. Slopewall Repair

SCOPE OF WORK

1. Repair Deck Slab
2. Apply Concrete Sealer to top of deck surface and top and inside vertical face of parapets
3. Replace P.J.S. at Expansion Joint with Silicone Joint Sealer
4. Clean and Reseal Relief Joints
5. Repair Substructure Concrete
6. Repair Slopewall Concrete

DESIGN STRESSES

FIELD UNITS (New Const.)

$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)

FIELD UNITS (Existing)

$f_c = 1,400$ psi (Superstructure & Substructure)
 $f_s = 20,000$ psi (Reinforcement & Structural Steel)

LOADING HS 20-44

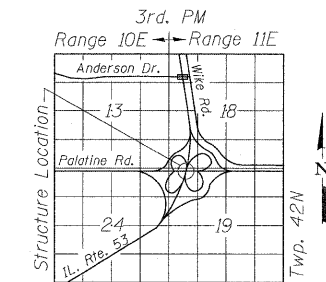
(Original Construction)

DESIGN SPECIFICATIONS

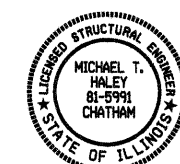
(New Construction)
2002 AASHTO "Standard Specifications for Highway Bridges"

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Slope Wall Removal	Sq. Yd.		179	179
Protective Shield	Sq. Yd.	927		927
Slope Wall 4 inch	Sq. Yd.		179	179
Concrete Sealer	Sq. Ft.	15880		15880
Silicone Joint Sealer, 3"	Foot	145		145
Structural Repair of Concrete (Depth greater than 5 in.)	Sq. Ft.		46	46
Structural Repair of Concrete (Depth less than or equal to 5 in.)	Sq. Ft.		322	322
Approach Slab Repair (Partial Depth)	Sq. Yd.	12.3		12.3
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	10.6		10.6
Temporary Shoring and Cribbing	Each		1	1
Clean and Reseal Relief Joint	Foot	168		168

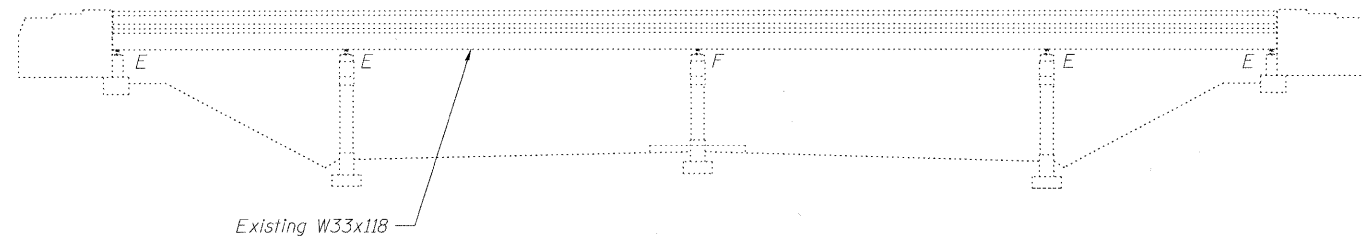


LOCATION SKETCH

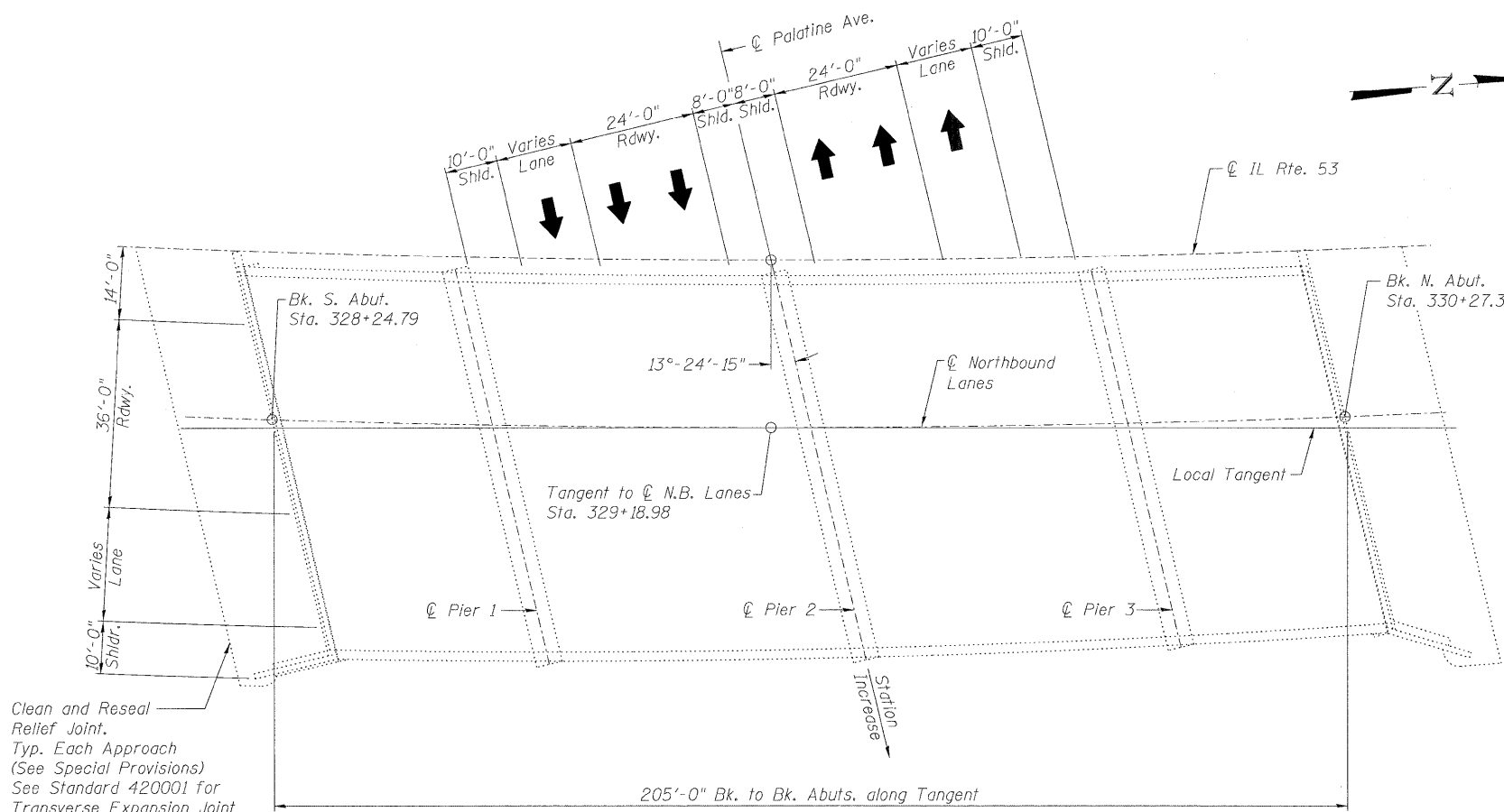


Michael J. Haley 2/8/10
Date
Michael T. Haley
Licensed Structural Engineer
State of Illinois No. 81-5991
Expires 11/30/2010

GENERAL PLAN AND ELEVATION
NB IL ROUTE 53 OVER PALATINE ROAD
F.A.P. 342 SEC (531-3.1,0305-302K)RS-5
COOK COUNTY
STATION 329+18.98
STRUCTURE NO. 016-0373



ELEVATION



PLAN

Clean and Reseal Relief Joint.
Typ. Each Approach
(See Special Provisions)
See Standard 420001 for Transverse Expansion Joint

	SHEET NO. 1	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	7 SHEETS	290	(531-3.1,0305-302K)RS-5	COOK	314	169
Designed By: KHH Date: 12/2009		Checked By: MTH File: 016-0373.dgn		CONTRACT NO. 60138		
		FED. ROAD DIST. NO. ILLINOIS		FED. AID PROJECT		