

Existing Structure: S.N. 045-0005 built in 1960 as F.A. Route 6, Section 8R-HB4 at Station 207+52.06. In 1986, bridge was widened, expansion joints reconstructed, bearings replaced and substructure was rehabilitated and widened. In 2001, deck was patched and overlay was placed. Structure consists of a three span steel WF beam bridge with 139'-0" back-to-back abutments, varying out-to-out deck width from 78'-6³/₄" to 87'-8", multi-column piers and spill thru abutments supported on spread footings. Stage construction shall be utilized to maintain one lane of traffic in each direction at all times.

GENERAL NOTES

Plan dimensions 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.

See Roadway Plans for maintenance at traffic details.

SCOPE OF WORK

1. Replace the preformed joint seals at the abutments with Silicone Joint Sealer.
2. Repair deck slab.
3. Repair substructure utilizing temporary shoring and cribbing.

DESIGN STRESSES

FIELD UNITS

NEW CONSTRUCTION	EXISTING CONSTRUCTION
$f'c = 3,500 \text{ psi}$	$f'c = 1,400 \text{ psi}$
$f_y = 60,000 \text{ psi (Reinforcement)}$	$f_s = 24,000 \text{ psi (Reinforcement)}$
	$f_s = 18,000 \text{ psi (Structural Steel)}$

INDEX OF SHEETS

1. General Plan and Elevation
2. Stage Construction Details
3. Superstructure Repair
4. Substructure Repair

LOADING HS-20

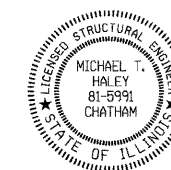
(Original Construction)

DESIGN SPECIFICATIONS

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

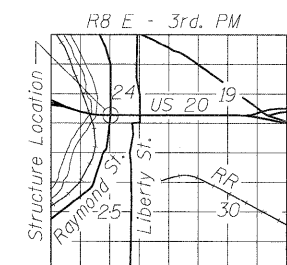
TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Silicone Joint Sealer, 1 ³ / ₄ "	Foot	87	-	87
Silicone Joint Sealer, 2 ³ / ₄ "	Foot	78	-	78
Floor Drains to be Cleaned	Each	8	-	8
Structural Repair of Concrete (Depth equal to or less than 5 in.)	Sq. Ft.	-	27	27
Deck Slab Repair (Partial)	Sq. Yd.	21.7	-	21.7
Temporary Shoring and Cribbing	Each	-	1	1
Protective Shield	Sq. Yd.	600	-	600



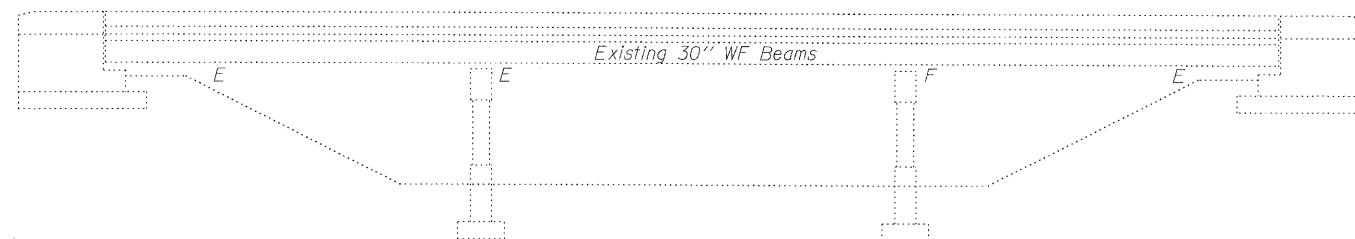
Michael T. Haley
Licensed Structural Engineer
State of Illinois No. 81-5991
Expires 11/30/2012

3-24-2011
Date

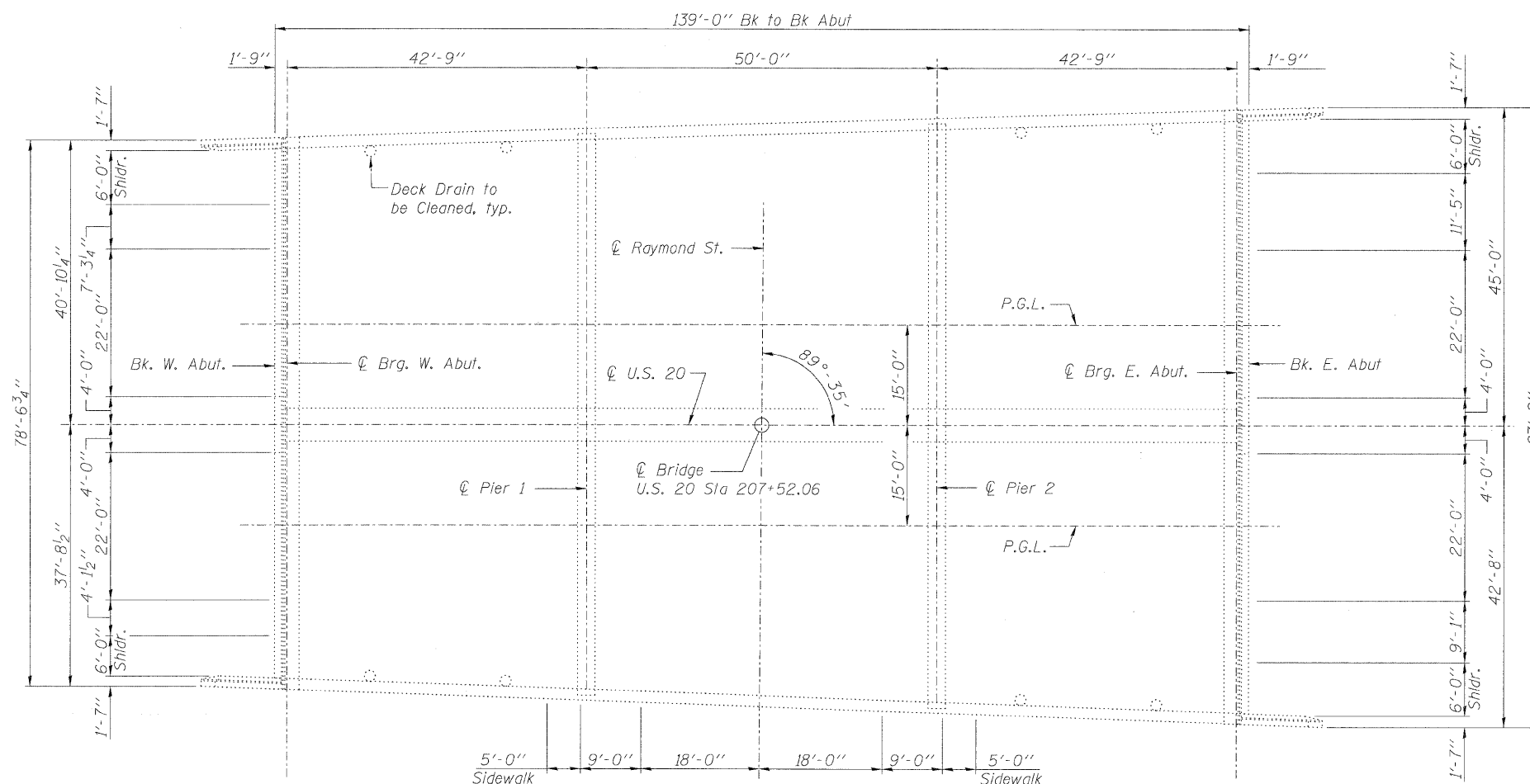


LOCATION SKETCH

GENERAL PLAN AND ELEVATION
US 20 OVER RAYMOND STREET
FAP RTE 345 - SECTION 8R-1-RS-4
KANE COUNTY
STATION 207+52.06
STRUCTURE NO. 045-0005



ELEVATION



PLAN



USER NAME =	DESIGNED - TBP	REVISED -
FILE NAME =	CHECKED - ADB	REVISED -
PLOT SCALE =	DRAWN - AJF	REVISED -
PLOT DATE =	CHECKED - MTH	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
STRUCTURE NO. 045-0005

SHEET NO. 1 OF 4 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	8R-1-RS-4	KANE	124	80
			CONTRACT NO. 60M46	
ILLINOIS FED. AID PROJECT				