

Existing Structure: S.N. 045-0007 built in 1959 as F.A. Route 6, Section 8R-HB-6 at Station 221+35.32. In 1986, sidewalks and deck at longitudinal bonded construction joints were removed and bridge was widened, expansion joints reconstructed, overlay placed, bearings replaced and substructure was rehabilitated and widened. In 1998, steel beams were repaired and pin and link plate was replaced. In 2002, deck was patched and sealed, and substructure repaired. Structure consists of a three span steel WF beam bridge with 147'-6" back-to-back abutments, varying out-to-out deck width from 74'-8" to 77'-9 1/4", multi-column piers on spread footings and pile supported abutments. Stage construction shall be utilized to maintain one lane of traffic in each direction at all times.

**SCOPE OF WORK**

1. Replace the preformed joint seals at abutments and hinge joints with Silicone Joint Sealer.
2. Repair deck slab.
3. Clean drains.

**INDEX OF SHEETS**

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

**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 of traffic details.

**DESIGN STRESSES**

**FIELD UNITS**

NEW CONSTRUCTION	EXISTING CONSTRUCTION (SUPER)
$f'_c = 3,500$ psi	$f'_c = 1,400$ psi
$f_y = 60,000$ psi (Reinforcement)	$f_s = 20,000$ psi (Reinforcement)

**LOADING HS 20**

(Original Construction)

**DESIGN SPECIFICATIONS**

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

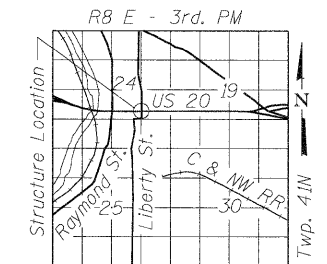
**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
Silicone Joint Sealer, 1"	Foot	152	-	152
Silicone Joint Sealer, 1 3/4"	Foot	77	-	77
Silicone Joint Sealer, 2 3/4"	Foot	74	-	74
Floor Drains to be Cleaned	Each	8	-	8
Deck Slab Repair (Partial)	Sq. Yd.	39.7	-	39.7
Protective Shield	Sq. Yd.	539	-	539



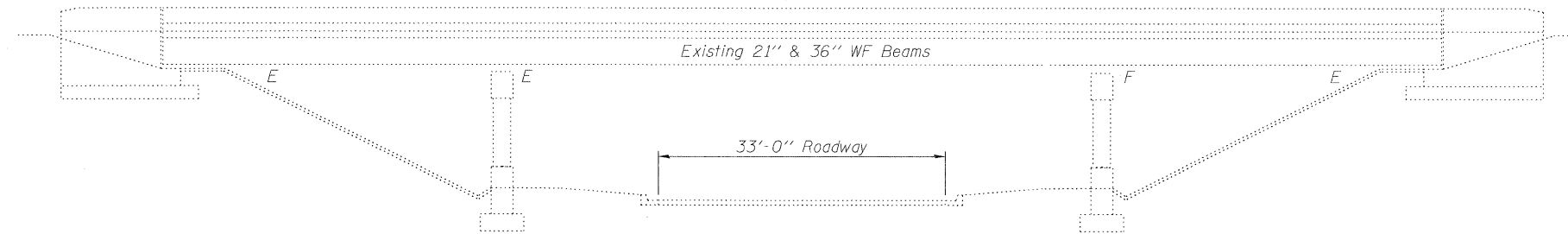
Michael T. Haley  
Licensed Structural Engineer  
State of Illinois No. 81-5991  
Expires 11/30/2012

3-24-2011  
Date

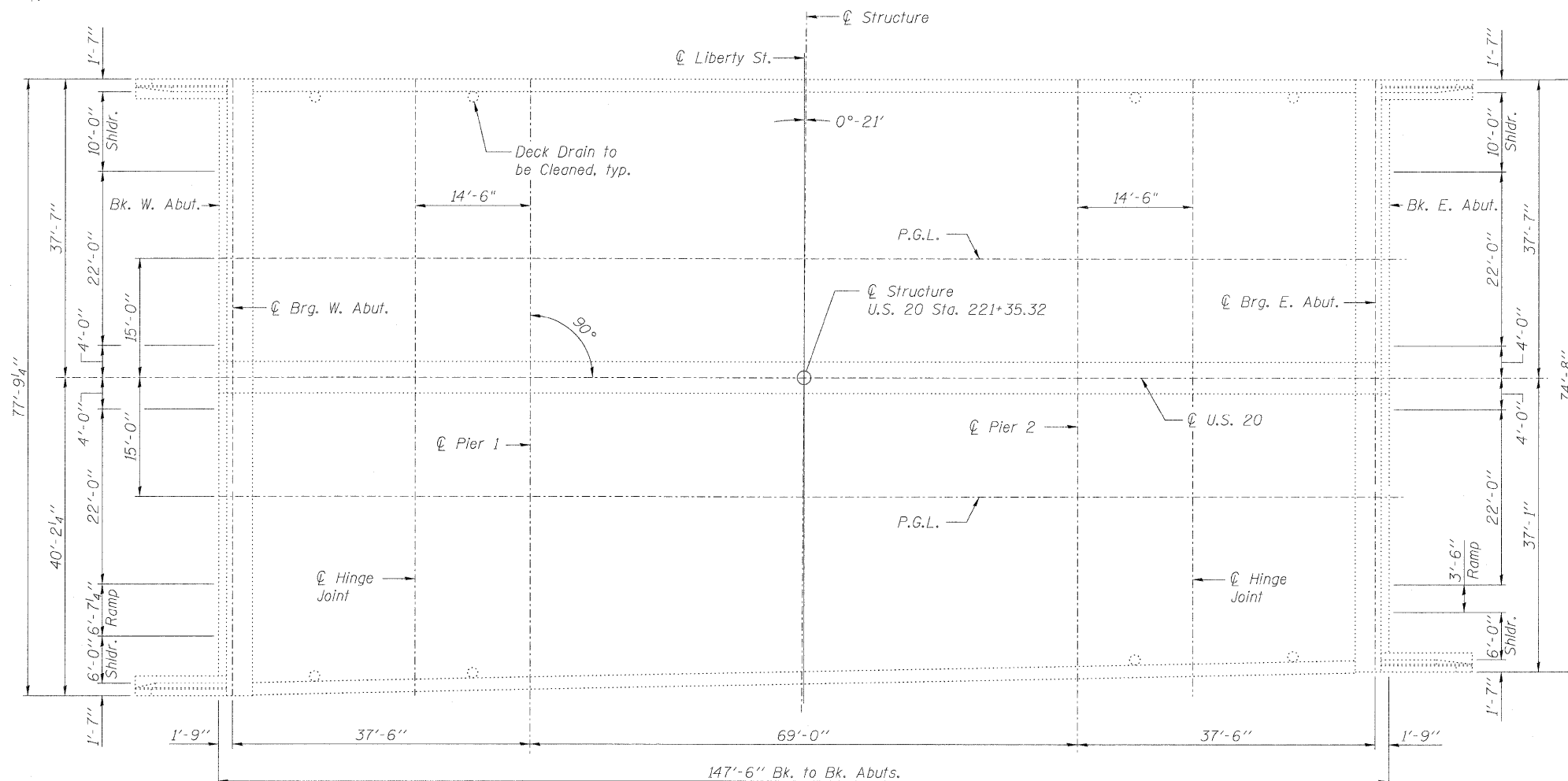


LOCATION SKETCH

**GENERAL PLAN AND ELEVATION**  
**US 20 OVER IL 25 (LIBERTY STREET)**  
**FAP RTE 345 - SECTION 8R-1-RS-4**  
**KANE COUNTY**  
**STATION 221+35.32**  
**STRUCTURE NO. 045-0007**



**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. 045-0007**

SHEET NO. 1 OF 3 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	8R-1-RS-4	KANE	124	87
CONTRACT NO. 60M46			ILLINOIS FED. AID PROJECT	