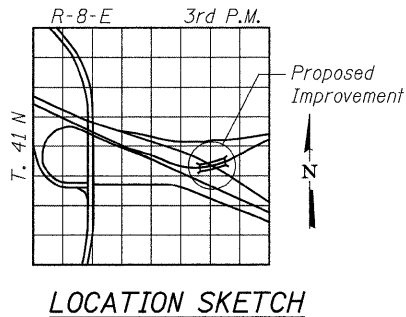
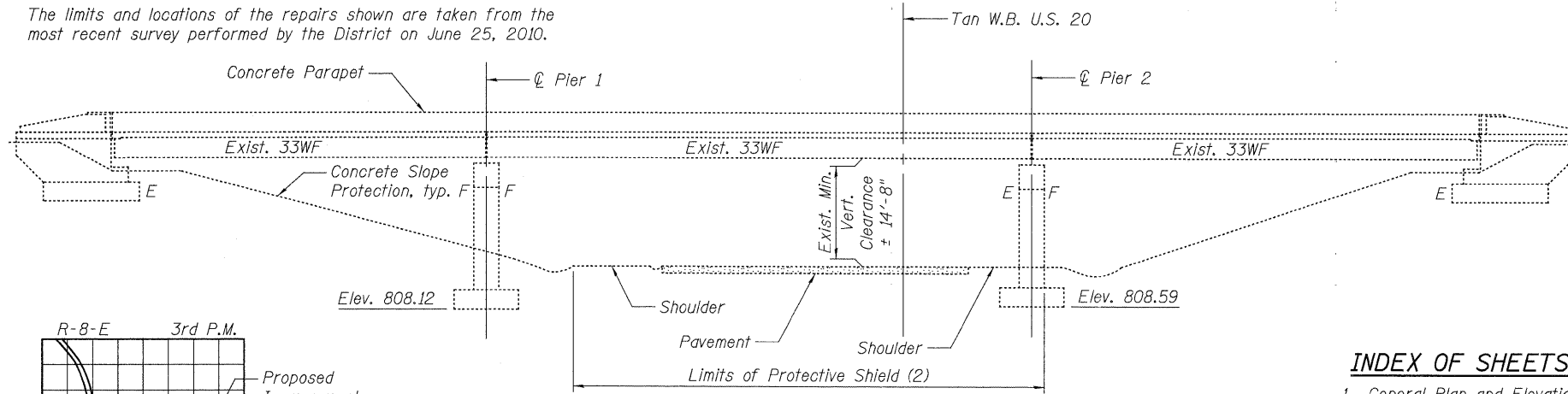


**NOTE**

The limits and locations of the repairs shown are taken from the most recent survey performed by the District on June 25, 2010.



**LOADING HS20-44**  
(Existing Construction)  
**DESIGN SPECIFICATIONS**

2002 Standard Specifications for Highway Bridges 17th Edition

**DESIGN STRESSES**

**STEEL**

$f_y = 36,000 \text{ psi (M270 Grade 36)}$

**FIELD UNITS**

**(NEW CONSTRUCTION)**

$f'_c = 3,500 \text{ psi}$

$f_y = 60,000 \text{ psi (Reinforcement)}$

**ELEVATION**



I hereby certify that these plans were prepared by me or under my direct personal supervision and that I am a duly licensed structural engineer under the laws of the State of Illinois.

*Robert J. Loehr* DATE: **3-31-11**  
Robert J. Loehr S.E. #3992  
LICENSE EXP. 11-30-2012

**INDEX OF SHEETS**

1. General Plan and Elevation
2. Typical Sections
3. Substructure Repairs
4. Expansion Joint Removal
5. Expansion Joint Repair
6. Preformed Joint Strip Seal
7. Bearing Details
8. Bearing & Fabricated Steel Extension Details

**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.

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

Reinforcement bars designated (E) shall be epoxy coated.

Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.

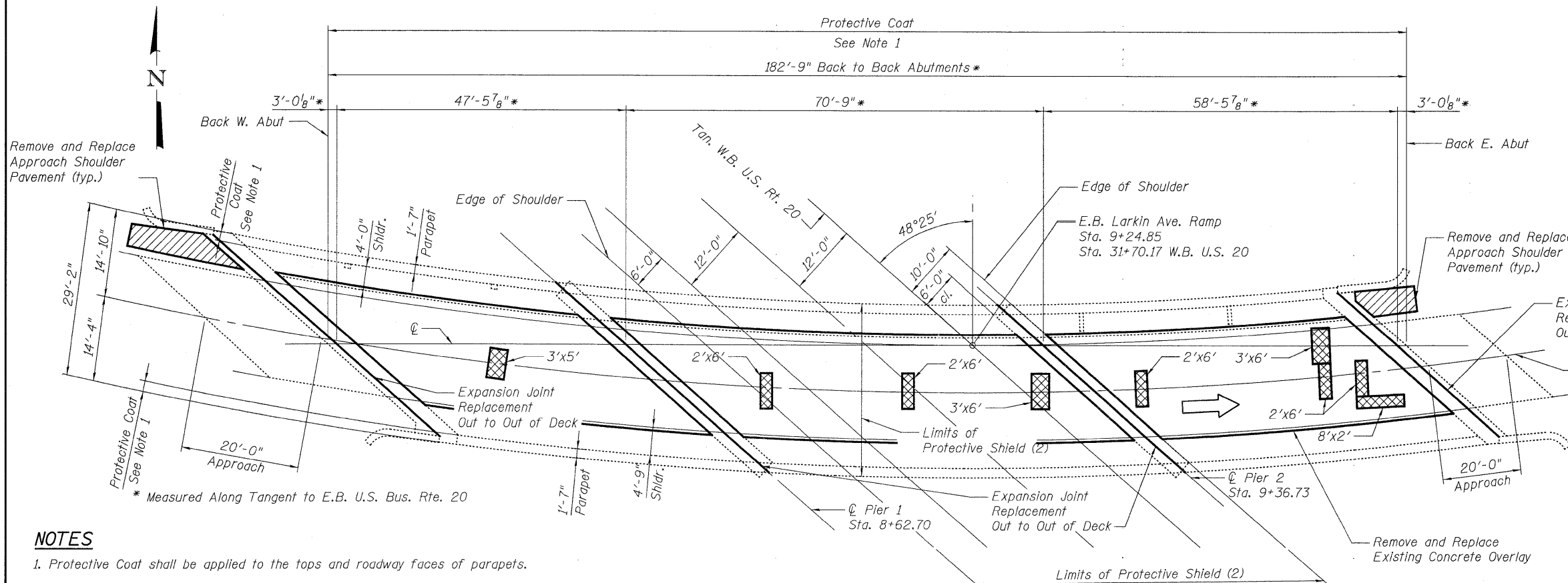
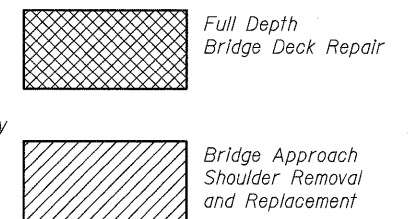
Joint openings shall be adjusted according to Article 520.04 of the Std. Specs. when the deck is poured at an ambient temperature other than 50° F.

Bridge shall be closed to traffic during repairs.

**TOTAL BILL OF MATERIAL**

Item	Unit	Total
Protective Coat	Sq. Yd.	150
P.C. Concrete Bridge Approach	Sq. Yd.	20
Shoulder Pavement	Sq. Yd.	20
Concrete Removal	Cu. Yd.	32.0
Protective Shield	Sq. Yd.	196
Concrete Superstructure	Cu. Yd.	32.0
Furnishing and Erecting Structural Steel	Pound	2700
Reinforcement Bars, Epoxy Coated	Pound	4340
Preformed Joint Strip Seal	Foot	189
Elastomeric Bearing Assembly, Type I	Each	15
Anchor Bolts, 1"	Each	30
Bridge Deck Thin Polymer Overlay 3/8"	Sq. Yd.	530
Bridge Deck Fly Ash or GGBF Slag Concrete Overlay, 2 1/4"	Sq. Yd.	362
Cleaning and Painting Bearings	Each	15
Bridge Approach Shoulder Removal	Sq. Yd.	20
Jack and Remove Existing Bearings	Each	15
Concrete Bridge Deck Scarification 3/8"	Sq. Yd.	530
Bridge Deck Scarification 2 1/4"	Sq. Yd.	362
Structural Repair of Concrete (Depth Equal to or Less Than 5 inches)	Sq. Ft.	401
Structural Repair of Concrete (Depth Greater Than 5 inches)	Sq. Ft.	99
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	15
Temporary Shoring and Cribbing	Each	5

**LEGEND**



**PLAN**

**NOTES**

1. Protective Coat shall be applied to the tops and roadway faces of parapets.
2. Protective Shield to be included for payment shall only extend from edge of shoulder to edge of shoulder of roadway below and out to out of bridge. Anything beyond these limits will not be paid for.

**GENERAL PLAN AND ELEVATION**  
**E.B. LARKIN AVE. RAMP OVER WB US 20**  
**SEC. 8R-HR-1(82)**  
**KANE COUNTY**  
**STATION 31+70.17**  
**STRUCTURE NO. 045-0008**

**ABNA**  
DESIGN FIRM REG. 184.002117  
9901 S. Western Ave.  
Chicago, IL 60643  
Ph. 773-881-4788  
F: 773.239.3728

DESIGNED -	TBS
CHECKED -	RJL
DRAWN -	JJE
CHECKED -	TBS

REVISED -	
REVISED -	
REVISED -	
REVISED -	

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**E.B. LARKIN AVE. RAMP**  
**OVER W.B. U.S. 20**  
SHEET NO. 1 OF 8 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
426	8R-HR-1(82)	KANE	124	101
STA. TO STA.		CONTRACT NO. 60M46		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		