

Existing Structure:  
 Structure No. 016-1033 was built in 1928 as S.A. 5A, Section 3014-15D. In 1981, under FAU 1324 Section 1979-003 BR, the superstructure was replaced and widened. In 2002, the neoprene expansion joint was replaced with silicone joint sealer and polymer concrete nosing. Existing structure is a single span reinforced concrete slab bridge on closed abutments, 33'-0" bk. to bk. abutments, 68'-0" out to out deck with a left ahead skew of 45°. Stage construction shall be utilized to maintain traffic during construction.

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

SCOPE OF WORK

1. Remove and replace silicone joint sealer and polymer concrete at expansion joint at west abutment
2. Remove and replace median
3. Repair deck slab and approach slab
4. Repair abutment concrete
5. Scarify 1/2" deck surface and Place new overlay on deck and approaches
6. Apply Protective Coat to new deck surface and median
7. Apply Concrete Sealer to inside and top faces of sidewalk and Parapets

INDEX OF SHEETS

1. General Plan and Elevation
2. Stage Construction Details
3. Temporary Concrete Barrier for Stage Construction
4. Concrete Removal and Repair
5. Abutment Repair

GENERAL NOTES

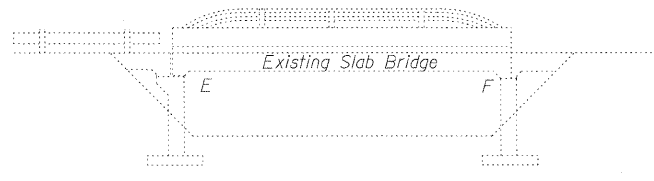
Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.

Reinforcement bars designated (E) shall be epoxy coated.

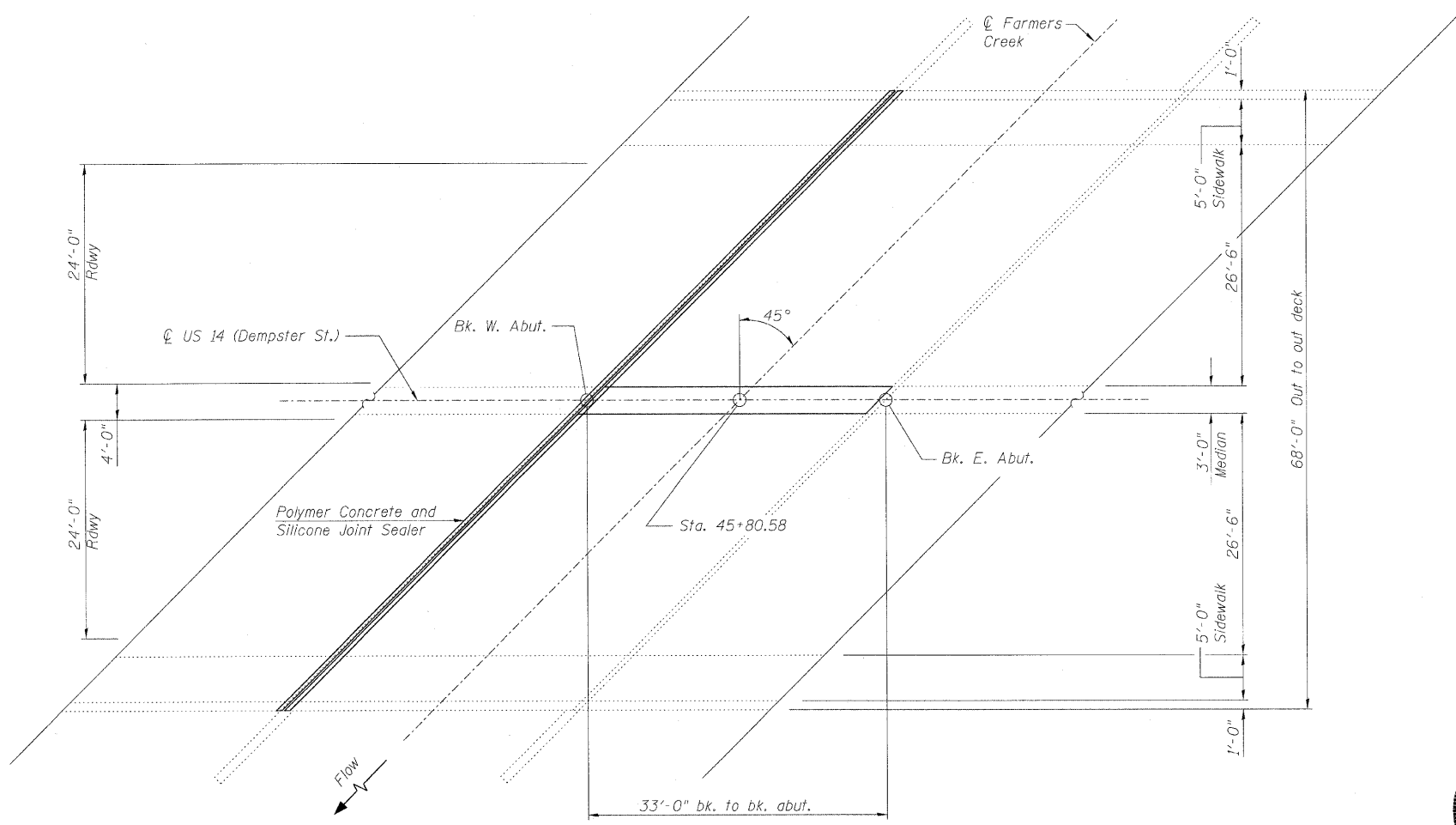
Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall 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.

TOTAL BILL OF MATERIAL

| ITEM  | UNIT    | SUPER | SUB | TOTAL |
|---|---------|-------|-----|-------|
| Bituminous Materials (Prime Coat)                                 | Gallon  | 186   | -   | 186   |
| Leveling Binder (Machine Method), N70, 3/4"                       | Tons    | 39    | -   | 39    |
| Polymerized Hot-Mix Asphalt Surface Course, Mix "F", N90, 1 3/4"  | Tons    | 91    | -   | 91    |
| Protective Coat   | Sq. Yd. | 195   | -   | 195   |
| Hot-Mix Asphalt Surface Removal, 3/4"                             | Sq. Yd. | 1112  | -   | 1112  |
| Concrete Removal  | Cu. Yd. | 2.7   | -   | 2.7   |
| Concrete Superstructure   | Cu. Yd. | 2.7   | -   | 2.7   |
| Bridge Deck Grooving  | Sq. Yd. | 170   | -   | 170   |
| Reinforcement Bars, Epoxy Coated                                  | Pound   | 390   | -   | 390   |
| Concrete Sealer   | Sq. Ft. | 555   | -   | 555   |
| Bridge Deck Hydro-Scarification 1/2"                              | Sq. Yd. | 184   | -   | 184   |
| Deck Slab Repair (Full Depth, Type I)                             | Sq. Yd. | 1.3   | -   | 1.3   |
| Deck Slab Repair (Full Depth, Type II)                            | Sq. Yd. | 16.3  | -   | 16.3  |
| Polymer Concrete  | Cu. Ft. | 23.4  | -   | 23.4  |
| Silicone Joint Sealer, 2 1/2"                                     | Foot    | 97    | -   | 97    |
| Bridge Deck Latex Concrete Overlay, 2 1/4"                        | Sq. Yd. | 184   | -   | 184   |
| Structural Repair of Concrete (Depth Greater Than 5 in.)          | Sq. Ft. | -     | 42  | 42    |
| Structural Repair of Concrete (Depth Equal To or Less Than 5 in.) | Sq. Ft. | -     | 38  | 38    |



ELEVATION



PLAN

DESIGN SPECIFICATIONS

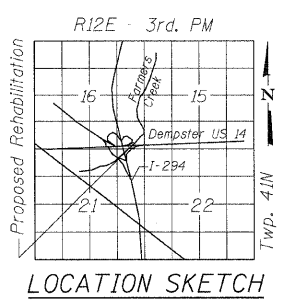
(New Construction)  
 2002 AASHTO "Standard Specifications for Highway Bridges"

DESIGN STRESSES

FIELD UNITS  
 Existing Construction  
 f'c = 3,500 psi (Deck Slab)  
 fy = 60,000 psi (Reinforcement in Superstructure)  
 New Construction  
 f'c = 3,500 psi  
 fy = 60,000 psi (Reinforcement)

LOADING HS 20-44

(Original Construction For Superstructure only)



Michael T. Haley 1/27/10  
 Date  
 Michael T. Haley  
 Licensed Structural Engineer  
 State of Illinois No. 81-5991  
 Expires 11/30/2010

GENERAL PLAN AND ELEVATION  
 US 14 (DEMPSTER ST.) OVER FARMERS CREEK  
 F.A.U. RTE. 1324 SECTION 3014-1  
 COOK COUNTY  
 STATION 45+80.58  
 STRUCTURE NO. 016-1033

|   |             |                    |                |             |   |             |
|---|-------------|--------------------|----------------|-------------|---|-------------|
| <br>LIN ENGINEERING LTD.<br>Consulting Engineers<br>Chatham, Illinois | SHEET NO. 1 | F.A.U. RTE. 1324   | SECTION 3014-1 | COUNTY COOK | TOTAL SHEETS 19                               | SHEET NO. 9 |
|   | 5 SHEETS    | CONTRACT NO. 60J40 |                |             | FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT |             |