

B.M. R.R. Spike In A.P. 55 RT. STA. 817+00  
 Elev. 352.41  
 Existing Structure: 1 Span R.C.D.G. (14'0" Clear)  
 12'0" R/W. R.C. Closed Abut. Year built 1928  
 as Section 11B S.B.I. For 116 Pope County  
 Superstructure to be removed, and  
 replaced a portion at a time by  
 Contractor utilizing stage construction  
 as shown. (Exist Sta. No. 016-0088)

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

|          |           |           |         |
|----------|-----------|-----------|---------|
| Scale    | 1" = 10'  | Sheet No. | 8       |
| Project  | FA RT 885 | Section   | 111BR-2 |
| Contract | 78033     | County    | POPE    |

GENERAL NOTES:

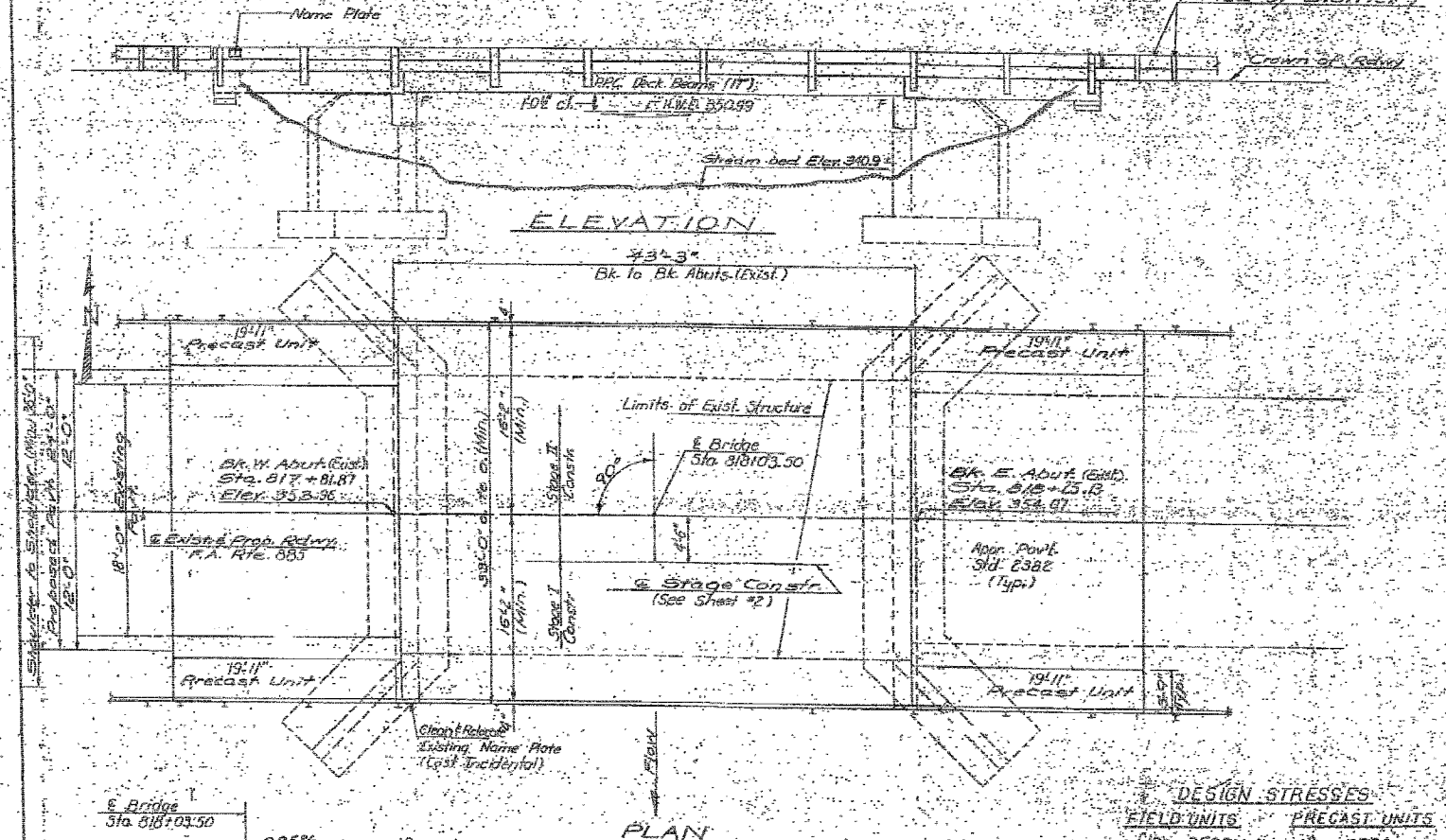
Plan dimensions and details relating to existing structure have been taken from existing plans and are subject to normal construction variations. It shall be the contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the contractor will be paid for the quantity actually furnished at the unit price bid for the work.

The top surface of the beams shall be finished in accordance with Article 500.06 of the Standard Specifications, except that the surface shall not be roughened by brooming. The finished surface shall be free of depressions or high spots with sharp corners, and the top edge of keys shall be rounded or chamfered a minimum of 1/2".

Reinforcement bars shall conform to the requirements of AASHTO M-31 or M-53, Grade 60.

Limits of Waterproofing Membrane System and Class I shall be treated beyond each end of deck beams and out to out of deck beams. Shoulder transition to wingwall shall be sloped with broken concrete. Cost incidental.

A Calcium Nitrate Corrosion Inhibitor, as covered in the Special Provisions, shall be used in the concrete for precast prestressed concrete deck beams.



STATION 818+03.50  
 REBUILT 198 BY  
 STATE OF ILLINOIS  
 FA RT 885 SEC. 111B-DR-2  
 PROJECT ON PAGES 15)  
 LOADING H520  
 \*STA. NO.

\*Structure Number to be supplied by District.

NAME PLATE  
 (See Sld. 2113)

TOTAL BILL OF MATERIAL

| Item                                                | Unit     | Sup  | Sub | Total |
|-----------------------------------------------------|----------|------|-----|-------|
| Bituminous Concrete Surface Course, Class 1         | Sq. Yds. | 19   |     | 19    |
| Removal of Existing Superstructures                 | 2000     | 1    |     | 1     |
| Concrete Removal                                    | Cu. Yds. | 11   |     | 11    |
| Temporary Bridge Rail                               | Lm. Ft.  | 83   |     | 83    |
| Class I Concrete                                    | Cu. Yds. | 16.0 |     | 17.5  |
| Precast Concrete Bridge Sills                       | Sq. Ft.  | 299  |     | 299   |
| Precast Prestressed Concrete Deck Beams (11' Depth) | Sq. Ft.  | 1402 |     | 1402  |
| Steel Reinforcing Bars S12                          | Lm. Ft.  | 166  |     | 166   |
| Reinforcing Bars S12                                | Lm. Ft.  | 2090 |     | 2090  |
| Waterproofing Membrane System                       | Sq. Yds. | 117  |     | 117   |
| Portland Cement Mortar Finishing Course             | Lm. Ft.  | 431  |     | 431   |
| Nitrate Plates                                      | Each     |      |     | 1     |

DESIGN STRESSES  
 FIELD UNITS PRECAST UNITS  
 Fc = 3500 psi Fc = 4500 psi  
 Fy = 60,000 psi (Rein) Fy = 1200 psi  
 Fc = 20,000 psi

PRECAST PRESTRESSED UNITS  
 Fc = 5000 psi  
 Fc = 4900 psi  
 Fy = 270,000 psi (6 strands)  
 Fy = 189,000 psi (6 strands)  
 Design Specifications 1977 AASHTO  
 1978 thru 1982 Interim Specifications  
 as applicable  
 Allow 23.1 sq. ft. for future bearing surf.  
 LOADING H520-44 (New Const.)

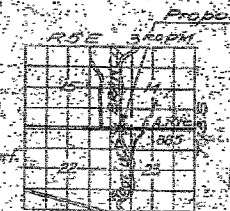
WATERWAY INFORMATION

|               |             |                 |                      |
|---------------|-------------|-----------------|----------------------|
| Drainage Area | 338 Sq. Mi. | Low Grade Elev. | 352.90 @ Sta. 812+00 |
| Flood         | 100 Yrs.    | Q               | 3253                 |
|               |             | Opening         | 320                  |
|               |             | Net             | 336                  |
|               |             | Head            | 2.94                 |
|               |             | Height          | 2.85                 |
|               |             | Headwater       | 353.74               |
|               |             | Prop. Eval.     | 353.74               |
| Base          | 100         | 3773            | 320                  |
|               |             | 348             | 336.30               |
|               |             | 2.49            | 2.85                 |
|               |             | 353.79          | 353.15               |
| Overlapping   | 20          | 2354            | 316                  |
|               |             | 317             | 350.50               |
|               |             | 2.00            | 2.65                 |
|               |             | 352.50          | 353.15               |
| Max Calc.     | 500         |                 |                      |

The approach roadway is designed for an overlapping frequency of 20 yrs.

PROPOSED GRADE F.A.R.T.E. 885

DESIGNED BY: J.M. [Signature]  
 CHECKED BY: R. Doty [Signature]  
 DRAWN BY: R. Doty [Signature]  
 APPROVED BY: [Signature]



PROPOSED IMPROVEMENT  
 R.O.E. 5000  
 GENERAL PLAN & ELEVATION  
 PROJECT  
 FA RT 885 OVER FOOT LICK BRANCH  
 FA RT 885 (S.B.I. RTE 116) SEC. 111B-DR-2  
 POPE COUNTY  
 STA. 818+03.50



FOR INFORMATION ONLY

|             |                      |                 |           |                              |                                  |                 |                 |             |                 |              |
|-------------|----------------------|-----------------|-----------|------------------------------|----------------------------------|-----------------|-----------------|-------------|-----------------|--------------|
| FILE NAME = | USER NAME = #USER#   | DESIGNED - JHM  | REVISED - | STATE OF ILLINOIS            | EXISTING STRUCTURE PLANS         | F.A.P. RTE. 885 | SECTION 111BR-2 | COUNTY POPE | TOTAL SHEETS 69 | SHEET NO. 60 |
| #FILE#      | PLOT SCALE = #SCALE# | DRAWN - AEC     | REVISED - | DEPARTMENT OF TRANSPORTATION | SCALE:                           | 885             | 111BR-2         | POPE        | 69              | 60           |
|             | PLOT DATE = #DATE#   | CHECKED - JMH   | REVISED - |                              | SHEET NO. OF SHEETS STA. TO STA. |                 |                 |             |                 |              |
|             |                      | DATE - 03/18/08 | REVISED - |                              |                                  |                 |                 |             |                 |              |