

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

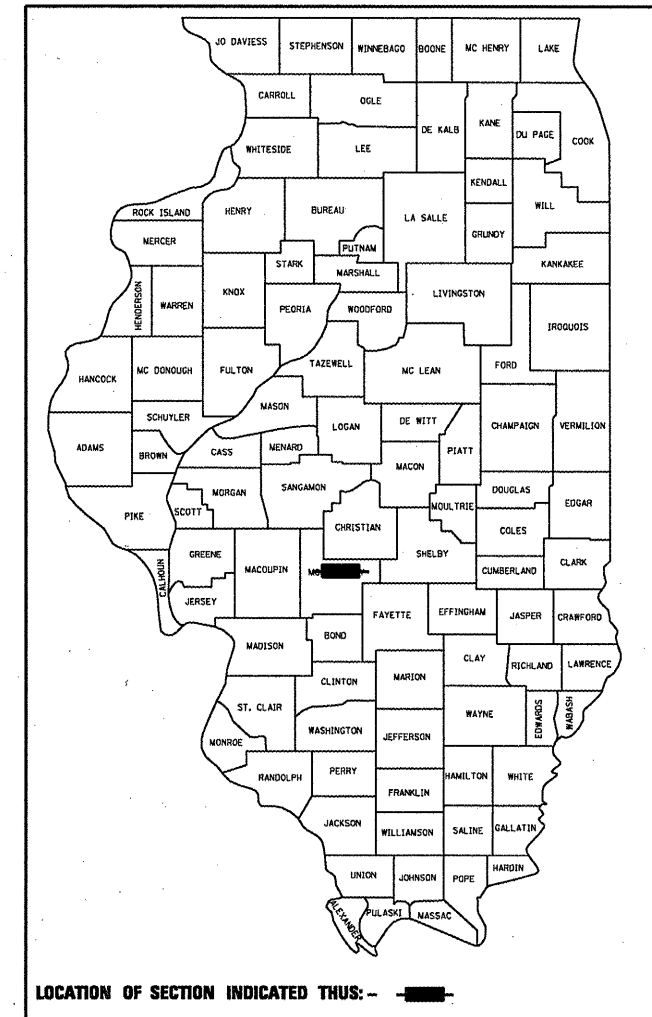
**PROPOSED
HIGHWAY PLANS**

FAP ROUTE 42 (IL 127)
SECTION (105BR)I-1

TYPE of IMPROVEMENT:
BRIDGE BEAM REPLACEMENT
MONTGOMERY COUNTY
C-96-045-09

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	(105BR)I-1	Montgomery	4	1
FED. ROAD DIST. NO.		ILLINOIS	CONTRACT NO. 72C64	

D-96-045-09



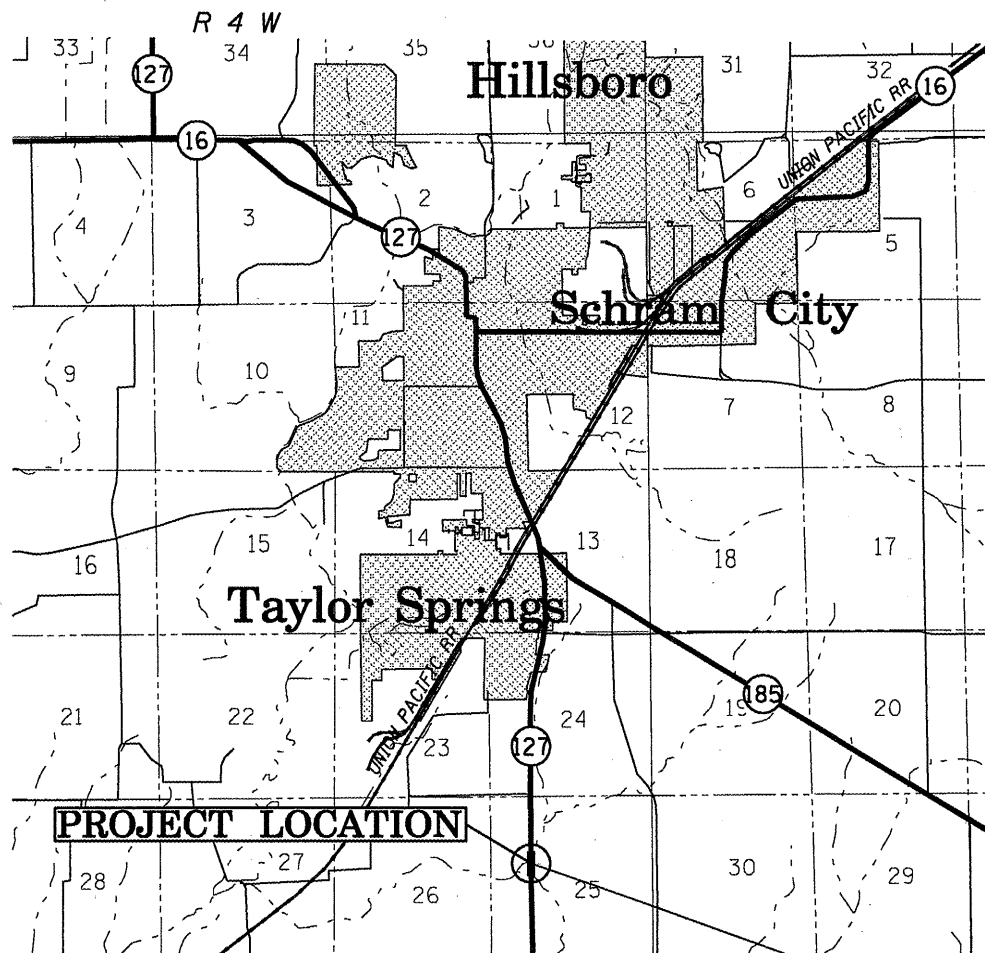
FOR INDEX OF SHEETS, SEE SHEET NO. 2

HIGHWAY CLASSIFICATION

BRIDGE BEAM REPLACEMENT - OVER MILLER CREEK
1.8 Mi. S. of IL 185

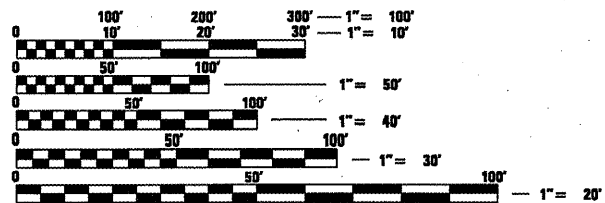
A.D.T. - 2,750 (2007) PV = 84.0%
A.D.T. - 3,356 (2027) SU = 11.0%
DESIGN SPEED - 55 mph MU = 5.0%
POSTED SPEED - 55 mph

CLASSIFICATION: MINOR ARTERIAL (NON-URBAN)



R 4 W
GROSS LENGTH = 41'-6" = 0.00 MILE
NET LENGTH = 41'-6" = 0.00 MILE

S.N. 068-0022 (EXIST.)
OVER MILLER CREEK



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

PROJECT ENGINEER: SAL MADONIA (217) 782-4716
PROJECT MANAGER: RENE CABRERA (217) 557-9062
TECHNICIAN: JONATHAN COX
CONTRACT NO. 72C64

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED JANUARY 15 2009
Rene Cabrera
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

March 27, 2009
Charles J. Ingersoll
ENGINEER OF DESIGN AND ENVIRONMENT

March 27, 2009
Christine M. Reed
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

**PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS**

INDEX OF SHEETS

GENERAL NOTES

① PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING STRUCTURE HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NOMINAL 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 OR A CHANGE IN THE SCOPE OF THE WORK. HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE FOR THE WORK.

② ANY REFERENCE TO A STANDARD IN THE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION, AS INDICATED BY THE SUB-NUMBER LISTED IN THE INDEX OF SHEETS, OR THE COPY OF THE STANDARD INCLUDED IN THE PLANS.

③ THE FOLLOWING IS THE ESTIMATED QUANTITY OF STRUCTURAL STEEL REQUIRED:

19,240 POUNDS

IT IS UP TO THE CONTRACTOR TO VERIFY THE QUANTITY. ALL STRUCTURAL STEEL WILL BE PAID FOR AS FURNISHING & ERECTING STRUCTURAL STEEL. (L SUM)

INDEX OF SHEETS

- 1 COVER SHEET
- 2 INDEX OF SHEETS
- 3 SUMMARY OF QUANTITIES
- 4 MILLER CREEK BRIDGE BEAM DETAIL SHEET

STANDARDS

- 000001-05 STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
- 701001-02 OFF ROAD OPERATIONS 2L, 2W, MORE THAN 4.5M (15') AWAY
- 701006-03 OFF ROAD OPERATIONS 2L, 2W, 4.5M (15') TO 600MM (24") FROM PAVEMENT EDGE
- 701301-03 LANE CLOSURE 2L, 2W, SHORT TIME OPERATIONS
- 701901-01 TRAFFIC CONTROL DEVICES

EXAMINED Jan 14 20 09

W.R.J.
PROGRAM IMPLEMENTATION ENGINEER

EXAMINED Jan 14 20 09

W.R.J.
PROGRAM DEVELOPMENT ENGINEER
DISTRICT SIX

EXAMINED Jan 13 20 09

Bonnie J. Haas
OPERATIONS ENGINEER

COMMITMENTS

(NONE)

ILLINOIS DEPARTMENT OF TRANSPORTATION
SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	100% STATE SFTY-2A
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	19,240	19,240
67100100	MOBILIZATION	L SUM	1	1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

** Contractor is to verify beam length prior to ordering material. Other sections meeting the section modulus requirements shown may be allowed subject to approval by the Bureau of Bridges and Structures. Maximum Girder depth = 36". No additional payment will be allowed if the Contractor chooses a heavier steel section than the one specified in the plans. (Min. $S_x = 299 \text{ in.}^3$)

GENERAL NOTES

All structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted.

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.

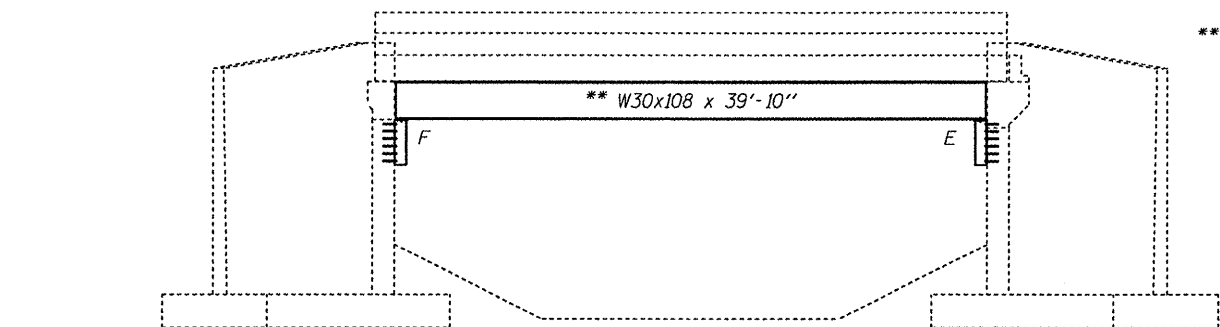
The contractor is advised that the existing PPC Deck Beams are in a deteriorated condition with reduced load carrying capacity. It is the contractor's responsibility to account for the condition of the beams when developing construction procedures.

See Section 584 of the Standard Specifications for Epoxy Grouting of Threaded Rods; Minimum embedment 9".

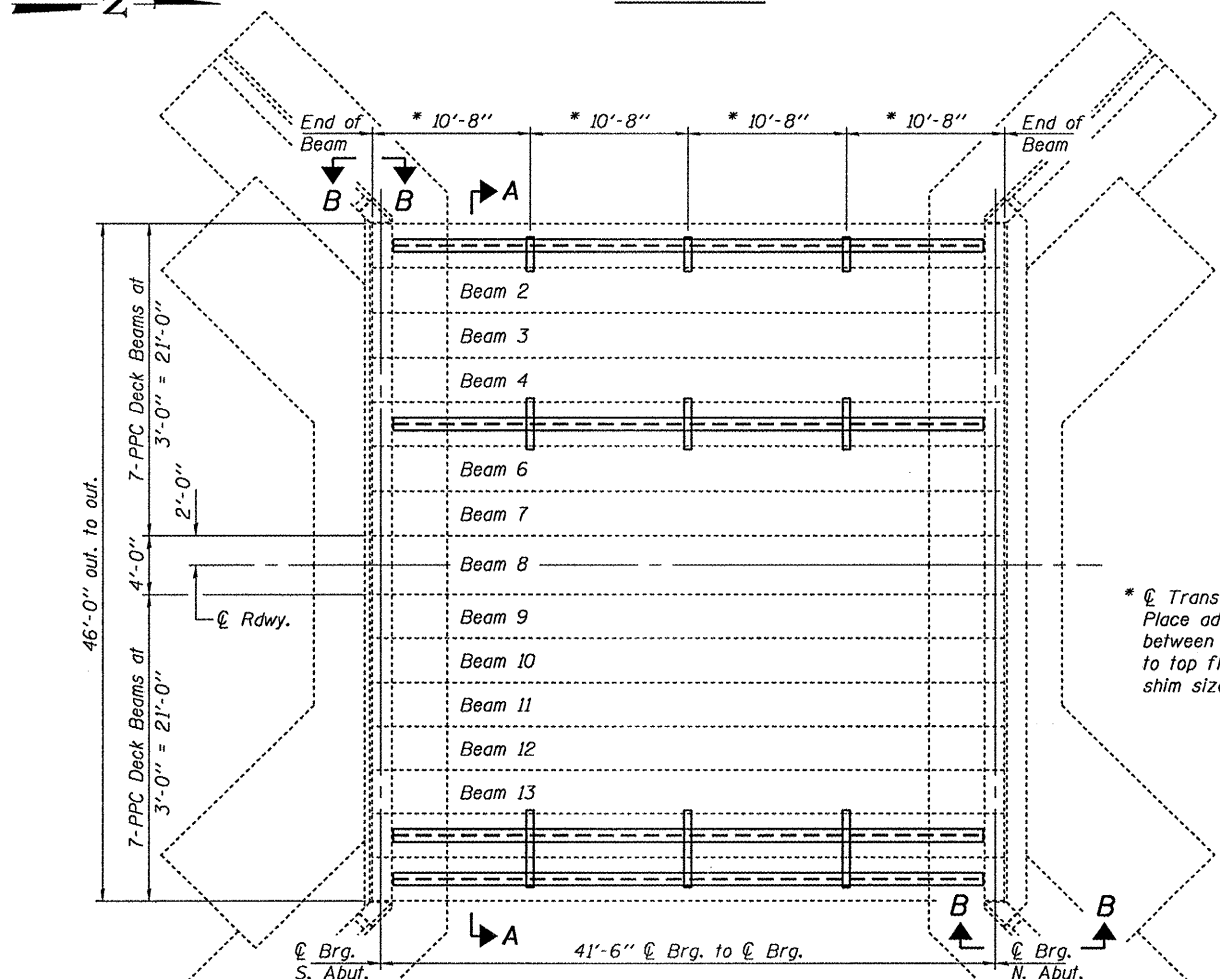
If the contractor's procedure for placement of beams involves placement of cranes or other heavy equipment on the bridge, a detailed procedure shall be submitted to the Engineer for approval. The procedure shall include calculations, prepared and sealed by an Illinois Licensed Structural Engineer, verifying that the equipment and procedure used will not overstress the existing beams. To distribute load to multiple beams and protect the existing surface, in all cases a double layer mat of heavy timbers shall be used at all times under crane tracks or wheels and any outriggers in the down position. If necessary, shims shall be used under the crane mat to ensure uniform contact with the underlying beams.

The cost of epoxy grouting threaded rods on the pier cap, abutments and beams shall be included with Furnishing and Erecting Structural Steel.

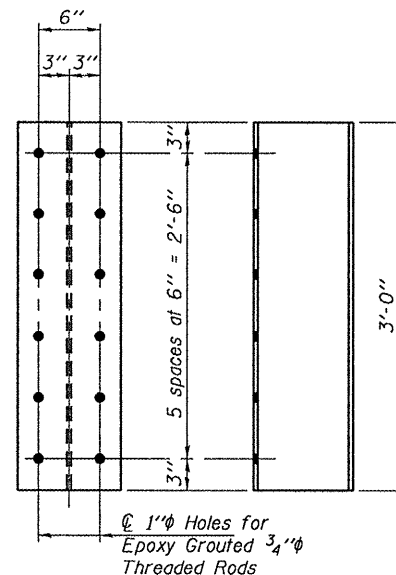
The Contractor has the option of using used steel. See Special Provisions..



ELEVATION



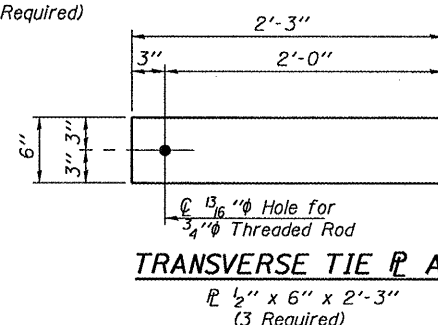
PLAN



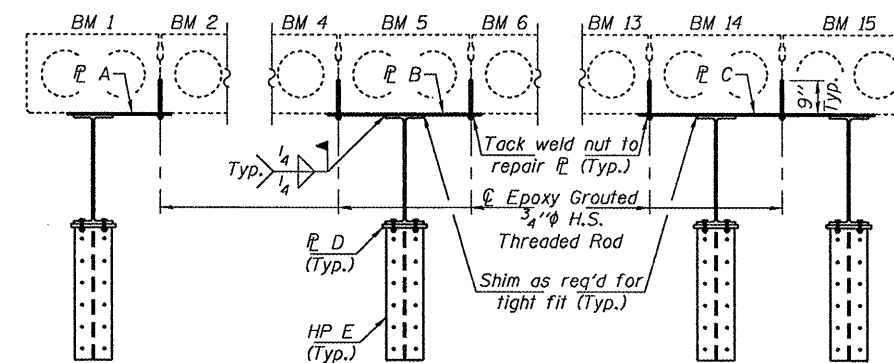
SECTION B-B

HP E
HP10x42 x 3'-0"
(8 Required)

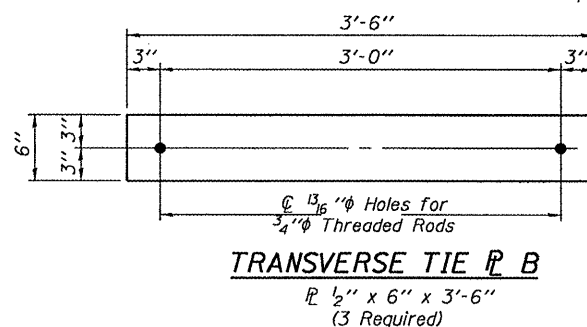
* \varnothing Transverse tie \varnothing 's (3 per span). Place additional shims at midpoints between tie \varnothing 's. Securely weld shims to top flange of support beam. Minimum shim size is 6" x flange width.



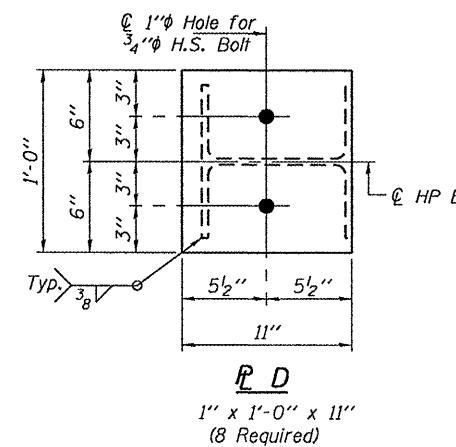
TRANSVERSE TIE R A
 \varnothing 1/2" x 6" x 2'-3"
(3 Required)



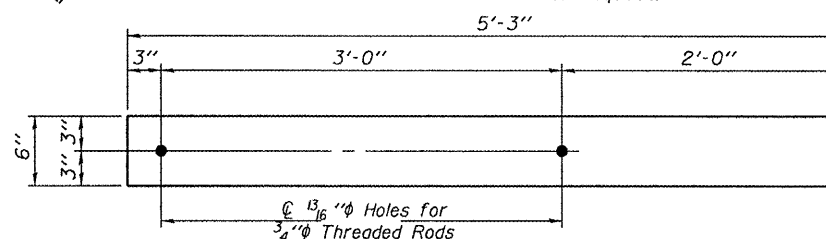
SECTION A-A



TRANSVERSE TIE R B
 \varnothing 1/2" x 6" x 3'-6"
(3 Required)



R D
1" x 1'-0" x 11"
(8 Required)



TRANSVERSE TIE R C
 \varnothing 1/2" x 6" x 5'-3"
(3 Required)

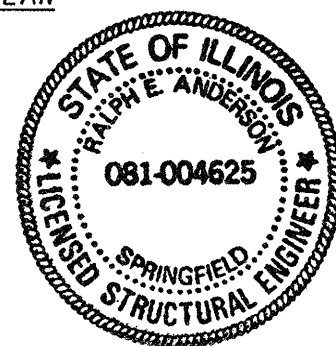
TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Furnishing and Erecting Structural Steel	Pound	19,240

PLAN & ELEVATION
IL ROUTE 127 OVER
MILLER CREEK
SN 068-0022

DESIGNED	<i>[Signature]</i>
CHECKED	<i>[Signature]</i>
DRAWN	Kyle M. Steffen
CHECKED	<i>[Signature]</i>

MARCH 18, 2009	
EXAMINED	<i>[Signature]</i>
PASSED	<i>[Signature]</i>



Expires: November 30, 2010

SHEET NO. 1	F.A.P. RTE. 42	SECTION (105BR)I-1	COUNTY MONTGOMERY	TOTAL SHEETS 4	SHEET NO. 4
1 SHEETS	CONTRACT NO. 72C64		ILLINOIS FED. AID PROJECT		