06-15-12 LETTING ITEM 151

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
681	(113C)I	LIVINGSTON	7	1
	ILLINOIS	CONTRACT NO. 66C31		

INDEX OF SHEETS

STANDARDS

000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001006	DECIMAL OF AN INCH AND OF A FOOT
701001-02	OFF-ROAD OPERATIONS 2L, 2W, MORE THAN 15' (4.5 m) AWAY
701006-03	OFF-ROAD OPERATIONS 2L, 2W, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
701201-04	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS ••e" 45 MPH
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701901-02	TRAFFIC CONTROL DEVICES

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

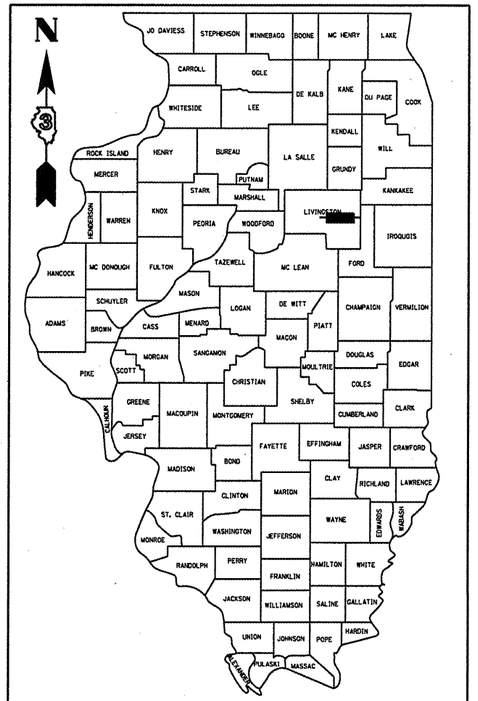
PROPOSED HIGHWAY PLANS

FAP 681 ROUTE (IL 116)
SECTION (113C)I

CULVERT REPAIR
CONSTRUCTING CONCRETE SLAB SUPPORT ON SN 053-2557
LIVINGSTON COUNTY

C-93-127-12

D-93-066-12

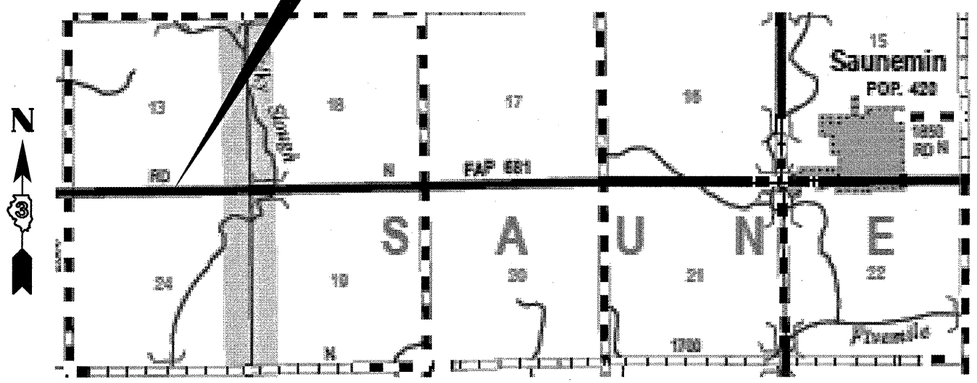


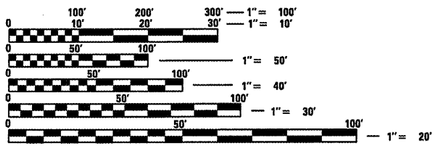
LOCATION OF SECTION INDICATED THUS: -

RURAL
MIN ARTERIAL NON-URB
FAP 681 (IL 116)
2011

ADT	1800
P.V.	89.44%
S.U.	2.78%
M.U.	7.78%

PROJECT LOCATION
SN 053-2557
STA 424+00





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

DISTRICT NO. (815)-434-6131

PROJECT ENGINEER: JOE KANNEL, P.E.
UNIT CHIEF: RON WOODSHANK
TOWNSHIP: OWEGO

CONTRACT NO. 66C31

GROSS LENGTH = 23 FT. = 0.004 MILE
NET LENGTH = 23 FT. = 0.004 MILE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED 4/6 20 12
Eric S. Thorkelson acting
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
May 11 20 12
John D. Baranzelli, P.E. acting
ENGINEER OF DESIGN AND ENVIRONMENT
May 11 20 12
William R. Frey acting
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

GENERAL NOTES

PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING PLANS ARE SUBJECT TO ROUTINE 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 THE SCOPE OF THE WORK. HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY FURNISHED BASED UPON THE UNIT BID PRICE FOR THE WORK.

FOR STABILIZATION, ALL TYPE III BARRICADES SHALL REQUIRE A MINIMUM OF FOUR SAND BAGS PER BARRICADE.

ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUBNUMBER LISTED ON THE INDEX OF SHEETS OR THE COPY OF THE STANDARD INCLUDED IN THESE PLANS.

COMMITMENTS:

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DISTRICT THREE

PREPARED BY: 4-6-12
DISTRICT STUDIES & PLANS ENGINEER

DATE:

EXAMINED BY:
DISTRICT CONSTRUCTION ENGINEER

DISTRICT MATERIALS ENGINEER

DISTRICT OPERATIONS ENGINEER

FILE NAME = c:\pw_work\pwidot\patelyj\d0382378\D366031-sht-ALL SHEETS.dgn	USER NAME = patelyj	DESIGNED - RON WOODSHANK	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL NOTES	F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 100.0000 ' / in.	DRAWN - RON WOODSHANK	REVISED -			681	(113C)1	LIVINGSTON	7	2
	PLOT DATE = 4/5/2012	CHECKED -	REVISED -		SCALE: SHEET NO. 1 OF 1 SHEETS STA. TO STA.			CONTRACT NO. 66C31		
		DATE -	REVISED -					ILLINOIS FED. AID PROJECT		

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE STATE FUNDS 100% STATE ROADWAY 0040 RURAL
44000179	HOT-MIX ASPHALT SURFACE REMOVAL, 7 1/2"	SQ YD	30	30
50300255	CONCRETE SUPERSTRUCTURE	CU YD	6.2	6.2
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	2260	2260
50800515	BAR SPLICERS	EACH	36	36
67100100	MOBILIZATION	L SUM	1	1
70100100	TRAFFIC CONTROL AND PROTECTION, STANDARD 701316	EACH	1	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1
70100455	TRAFFIC CONTROL AND PROTECTION, STANDARD 701206	L SUM	1	1
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1
* 78005110	EPOXY PAVEMENT MARKING - LINE 4"	FOOT	22	22
* 78005130	EPOXY PAVEMENT MARKING - LINE 6"	FOOT	10	10

* SPECIALITY ITEMS

FILE NAME = c:\pw_work\pwidot\patelyj\d0382378\D366131-sht-ALL SHEETS.dgn	USER NAME = patelyj	DESIGNED - RON WOODSHANK	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY				
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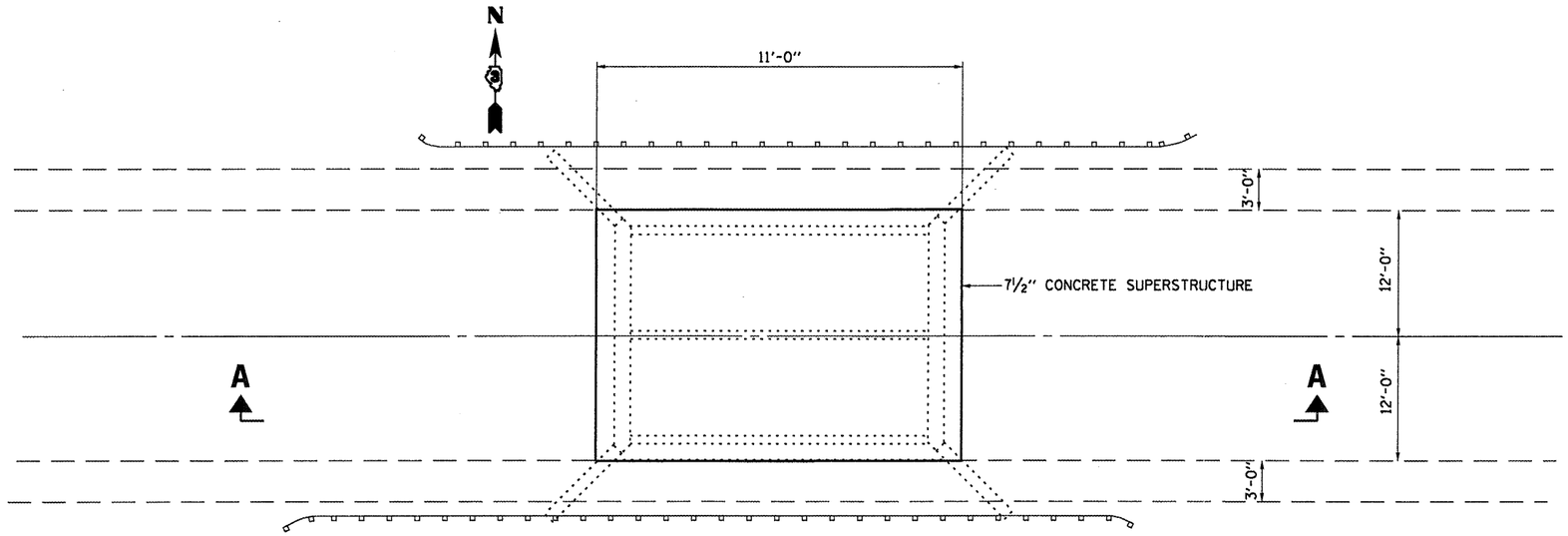
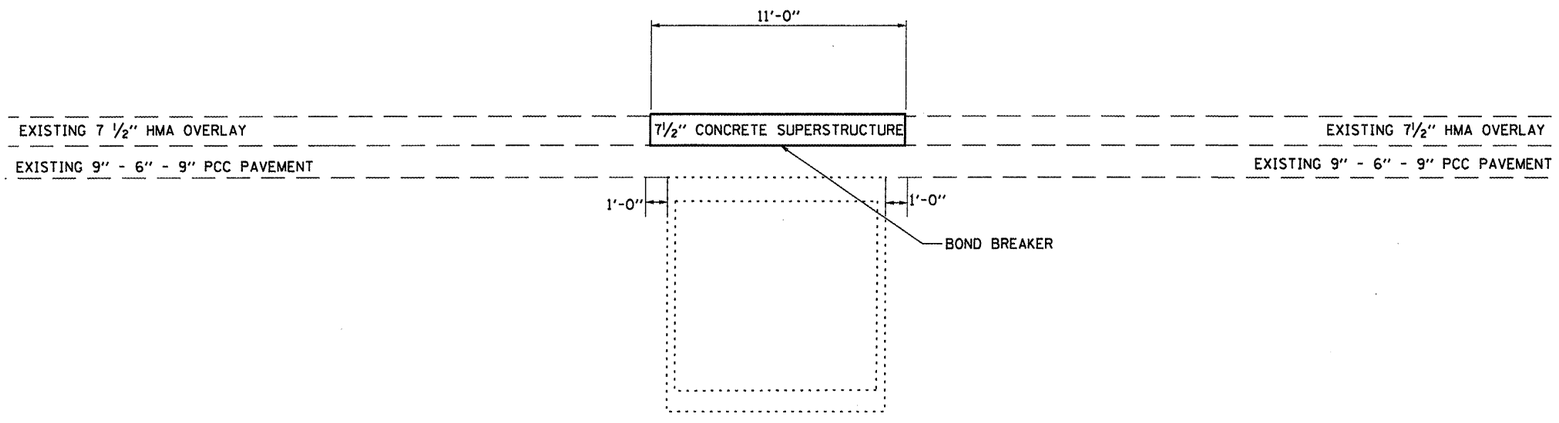
	PLOT DATE = 4/5/2012	CHECKED -	REVISED -		SCALE:	SHEET 1 OF 1 SHEETS	STA.	TO STA.	
		DATE -	REVISED -						

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
681	(113C)I	LIVINGSTON	7	3
		CONTRACT NO. 66C31		
	ILLINOIS FED. AID PROJECT			



PLAN



SECTION A–A

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		DRAWN - RON WOODSHANK	REVISED -
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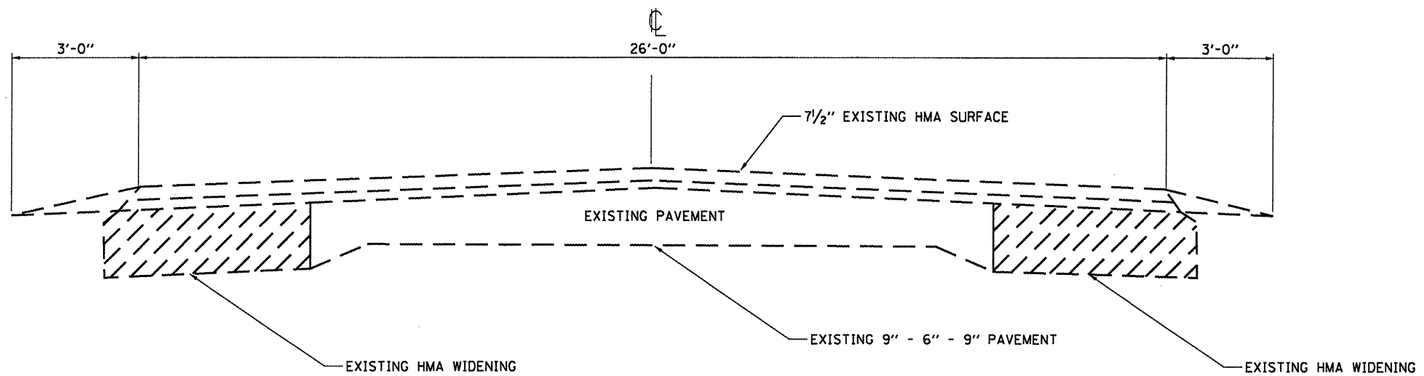
	PLOT DATE = 4/5/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY DETAILS

SCALE: | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
681	(113C)I	LIVINGSTON	7	4
		CONTRACT NO. 66C31		
	ILLINOIS FED. AID PROJECT			



TYPICAL SECTION

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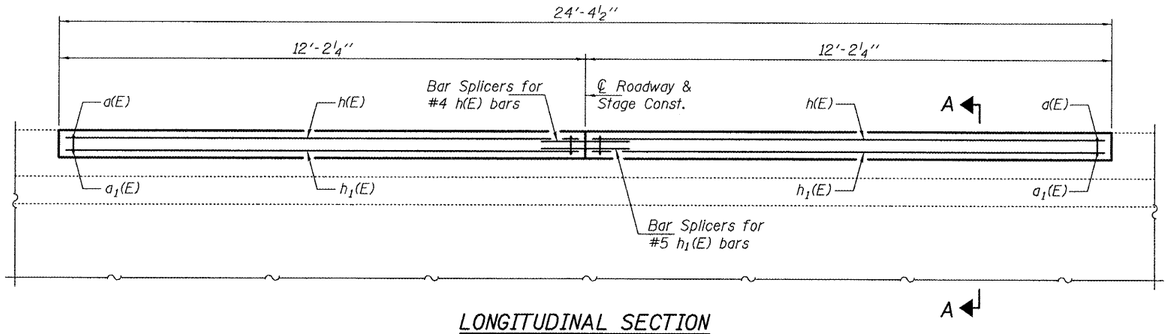
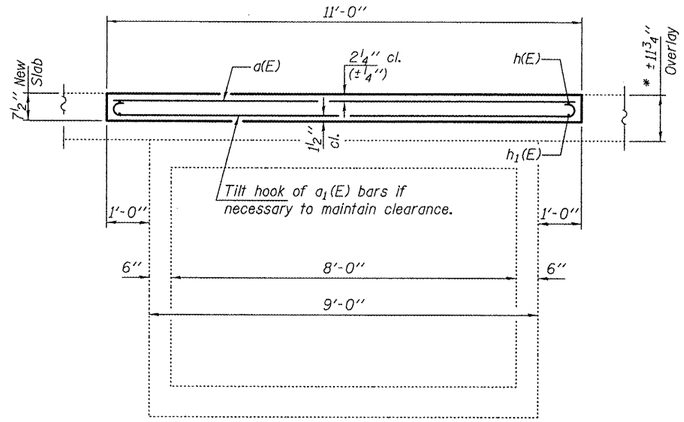
	PLOT SCALE = 100.0000 ' / in.	DRAWN - RON WOODSHANK	REVISED -						681	(113C)1	LIVINGSTON	7	5
	PLOT DATE = 4/5/2012	CHECKED -	REVISED -								CONTRACT NO. 66C31		
		DATE -	REVISED -		SCALE:	SHEET 1 OF 1 SHEETS	STA.	TO STA.			ILLINOIS FED. AID PROJECT		

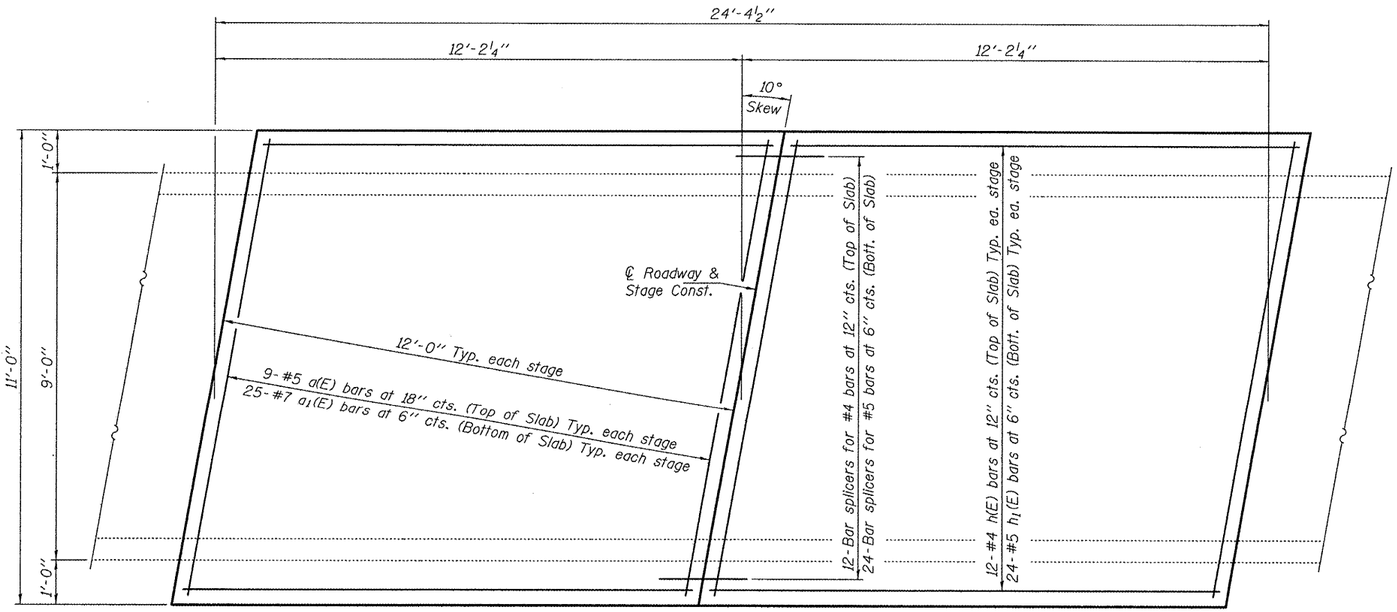


LONGITUDINAL SECTION



SECTION A-A

N



PLAN

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.

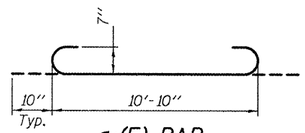
Reinforcement bars designated (E) shall be epoxy coated.

The slab surface shall have its final finish tined according to Article 420.09(e)(1) of the Standard Specifications. Cost included with Concrete Superstructures.

* Remove 7½" of existing HMA overlay and replace with 7½" concrete slab as shown. Slope to match roadway. Cost of removal included with Hot-Mix Asphalt Surface Removal.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	18	#5	10'-10"	
a1(E)	50	#7	12'-6"	
h(E)	24	#4	11'-10"	
h1(E)	48	#5	11'-10"	
Bar Splicers			Each	36
Hot-Mix Asphalt Surface Removal			Sq. Yds.	29.8
Reinforcement Bars, Epoxy Coated			Pound	2260
Concrete Superstructure			Cu. Yds.	6.2



a1(E) BAR

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi

fy = 60,000 psi (Reinf.)

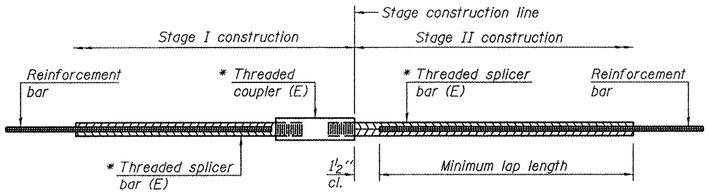
LICENSED STRUCTURAL ENGINEER
DAVID CARL PUZEY
081-005470
SPRINGFIELD ILLINOIS
STATE OF ILLINOIS

Expires: November 30, 2012

DESIGNED -	EXAMINED	DATE - MAY 8, 2012	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
CHECKED - Victor H. Velcic			
DRAWN - Kyle M. Steffen	PASSED	ACTING ENGINEER OF STRUCTURAL SERVICES	
CHECKED - VHV		ACTING ENGINEER OF BRIDGES AND STRUCTURES	

GENERAL PLAN & ELEVATION
ILLINOIS 116 OVER STREAM
SN 053-2557
SHEET NO. 1 OF 2 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
681	(113C)1	LIVINGSTON	7	6
		CONTRACT NO. 66C31		
		ILLINOIS FED. AID PROJECT		



STANDARD BAR SPLICER ASSEMBLY

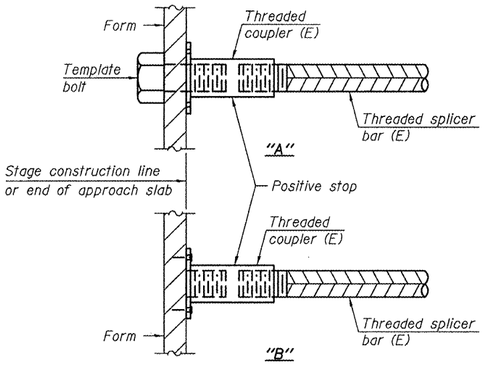
Minimum Lap Lengths						
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5	Table 6
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-7"	2'-11"
5	1'-9"	2'-5"	2'-7"	2'-11"	3'-3"	3'-8"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-10"	4'-5"
7	2'-9"	3'-10"	4'-2"	4'-8"	5'-2"	5'-10"
8	3'-8"	5'-1"	5'-5"	6'-2"	6'-9"	7'-8"
9	4'-7"	6'-5"	6'-10"	7'-9"	8'-7"	9'-8"

Table 1: Black bar, 0.8 Class C
Table 2: Black bar, Top bar lap, 0.8 Class C
Table 3: Epoxy bar, 0.8 Class C
Table 4: Epoxy bar, Top bar lap, 0.8 Class C
Table 5: Epoxy bar, Class C
Table 6: Epoxy bar, Top bar top, Class C

Threaded splicer bar length = min. lap length + 1½" + thread length

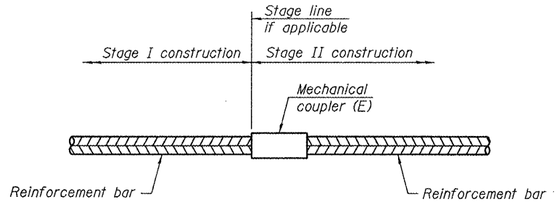
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length
Top of Slab	#4	12	3
Bottom of Slab	#5	24	3



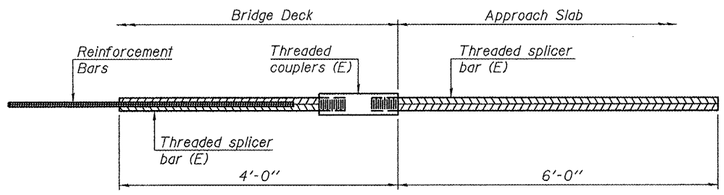
INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
(E) : Indicates epoxy coating.



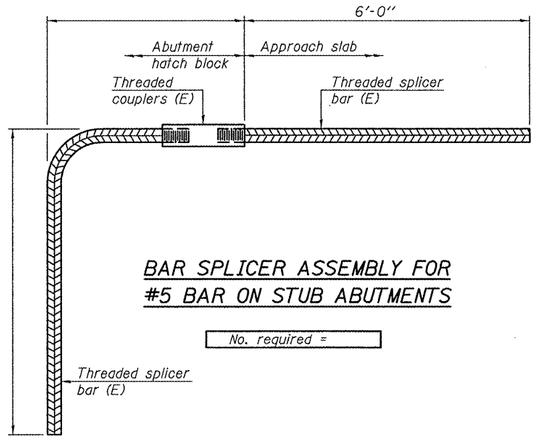
STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

No. required =



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required =

NOTES

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.

All reinforcement shall be lapped and tied to the splicer bars.

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.

See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BSD-1 1-27-12

DESIGNED - DAB	EXAMINED	ACTING ENGINEER OF STRUCTURAL SERVICES	DATE - MAY 8, 2012	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS SN 053-2557	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED - VHV	PASSED	ACTING ENGINEER OF BRIDGES AND STRUCTURES			SHEET NO. 2 OF 2 SHEETS	681	(113C)I	LIVINGSTON	7	7
DRAWN - Kyle M. Steffen								CONTRACT NO. 66C31		
CHECKED - DAB VHV								ILLINOIS FED. AID PROJECT		