

PROPOSED HIGHWAY PLANS

FAI ROUTE 57 (I-57)
SECTION 38(6B,6B-1)IR
BRIDGE REPAIR

S.N. 038-0155 (SB) & S.N. 038-0156 (NB) – NORTH BRANCH
S.N. 038-0153 (SB) & S.N. 038-0154 (NB) – SOUTH BRANCH
OVER SPRING CREEK 2.4 & 3.1 MILES RESPECTIVELY
SOUTH OF ONARGA
IROQUOIS COUNTY

C-93-124-15

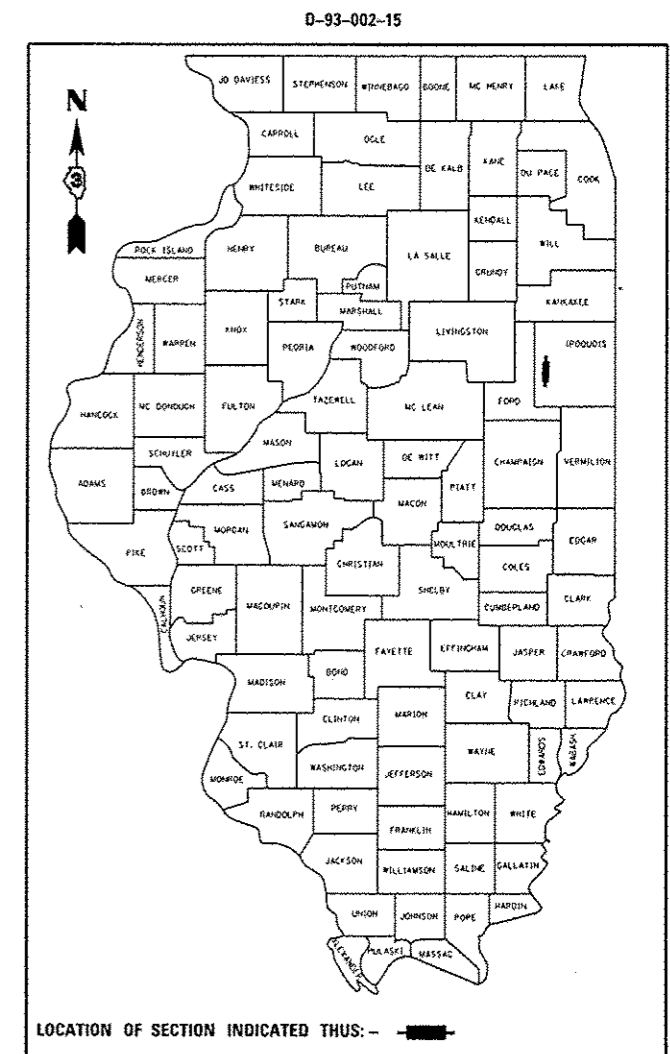
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	38(6B,6B-1)IR	IRROQUOIS	41	1
ILLINOIS			CONTRACT NO. 66E92	

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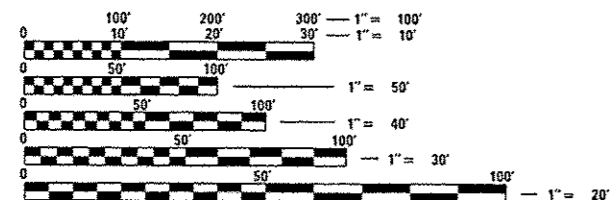
STANDARDS

- | | |
|-----------|---|
| 000001-06 | STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS |
| 001001-02 | AREAS OF REINFORCEMENT BARS |
| 001006 | DECIMAL OF AN INCH AND OF A FOOT |
| 280001-07 | TEMPORARY EROSION CONTROL SYSTEMS |
| 420401-11 | BRIDGE APPROACH PAVEMENT CONNECTOR |
| 482006-03 | HMA SHOULDER ADJACENT TO RIGID PAVEMENT |
| 642001-02 | SHOULDER RUMBLE STRIPS, 16 In. |
| 701101-04 | OFF-ROAD OPERATIONS MULTILANE, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE |
| 701106-02 | OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' (4.5 m) AWAY |
| 701426-07 | LANE CLOSURE, MULTILANE INTERMITTENT OR MOVING OPERATION, FOR SPEEDS ≥ 45 MPH |
| 701428 | TRAFFIC CONTROL SETUP AND REMOVAL FREEWAY/EXPRESSWAY |
| 701901-04 | TRAFFIC CONTROL DEVICES |
| 704001-07 | TEMPORARY CONCRETE BARRIER |



PROJECT LOCATION
STRUCTURE NO. 038-0155 (SB)
STRUCTURE NO. 038-0156 (NB)
STATION 928 + 50.00

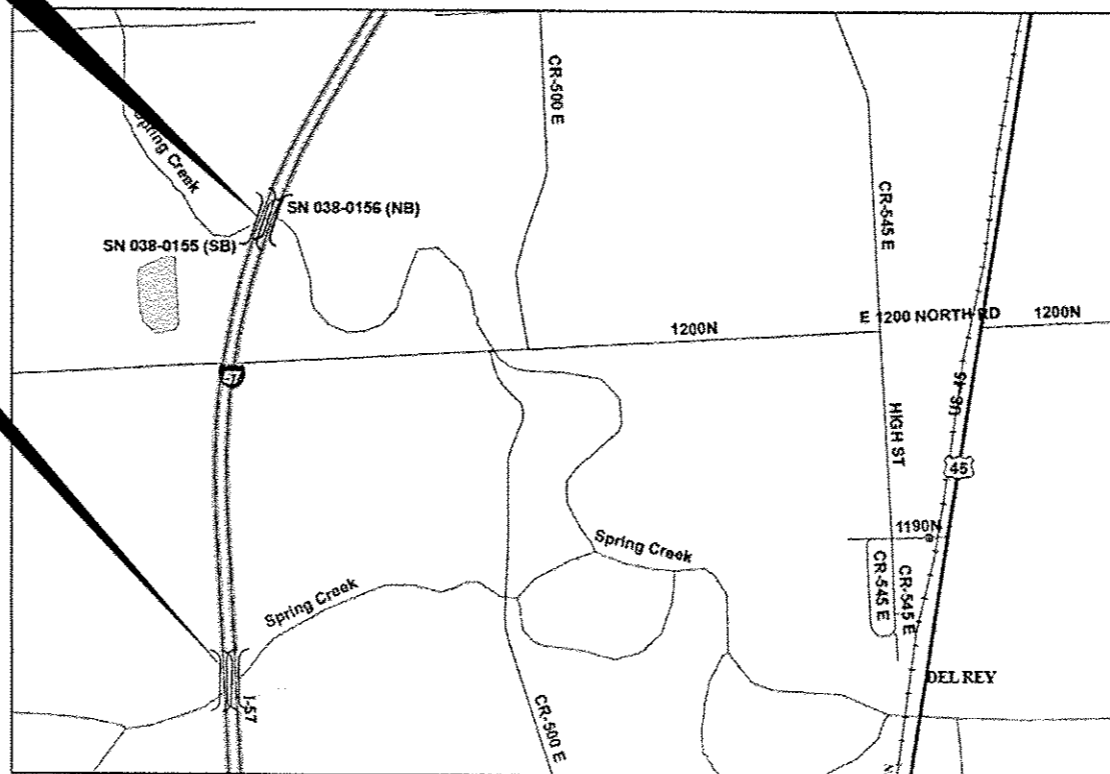
PROJECT LOCATION
STRUCTURE NO. 038-0153 (SB)
STRUCTURE NO. 038-0154 (NB)
STATION 963 + 62.50



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 JOE KANNEL P.E.
UNIT CHIEF RON WOODSHANK
TOWNSHIP ONARGA
CONTRACT NO. 66E92



LOCATION MAP

POINT LOCATION
SN 038-0153 & SN 038-0154 - M.M. 277.04
SN 038-0155 & SN 038-0156 - M.M. 280.13

RURAL INTERSTATE FAI 57 (I-57) 2013

ADT	14600
P.V.	60.27%
S.U.	7.88%
M.U.	31.85%

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED *Dec. 22nd 2015*
Paul C. [Signature]
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

Jan 29 2016
Margeen M. Addis P.E.
ENGINEER OF DESIGN AND ENVIRONMENT

Jan 29 2016
Omer Osman P.E.
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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OF THE STATE OF ILLINOIS**

GENERAL NOTES

THE THICKNESS OF HMA SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE HMA IS PLACED.

THE ENGINEER WILL BE THE SOLE JUDGE CONCERNING CURING TIME FOR THE VARIOUS HMA LIFTS.

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

ALL EXCAVATED MATERIAL, WHICH INCLUDES DIGGING OR GRADING OF ANY SOIL OR FILL MATERIAL, WITH THE EXCEPTION OF AGGREGATE FILLS, MUST BE INCORPORATED WITHIN THE IDOT RIGHT OF WAY DUE TO ENVIRONMENTAL DOCUMENTATION REQUIREMENTS.

ON EXISTING SHOULDERS WHICH MAY BE SUPERELEVATED, THE NEW HMA PAVEMENT SHALL BE BUILT WITH THE SAME SUPERELEVATION UNLESS NEW SUPERELEVATION RATES ARE GIVEN ON THE PLANS.

ABANDONED UNDERGROUND UTILITIES THAT CONFLICT WITH CONSTRUCTION SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT OF WAY ACCORDING TO ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT WILL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUBNUMBER SHOWN IN THE LIST OF STANDARDS OR THE COPY INCLUDED IN THESE PLANS.

THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED IN CALCULATING PLAN QUANTITIES:

GRANULAR MATERIALS	2.05	TONS / CU YD
HMA RESURFACING	112	LBS / SQ YD / IN
SHORT TERM PAVEMENT MARKING	10	FT /100 FT OF APPLICATION

THE CONTRACTOR SHALL CONTACT JULIE AT LEAST 48 HOURS PRIOR TO EXCAVATION TO DETERMINE WHICH UTILITIES ARE IN THE AREA.

COMMITMENTS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DISTRICT THREE
AS BUILT INFORMATION

SUPERVISING CONSTRUCTION FIELD ENGINEER

RESIDENT ENGINEER / TECHNICIAN

START & END DATES
OF CONSTRUCTION:

INSPECTORS:

DATE: December 23, 2015

PREPARED BY: Dan Beaulieu
DISTRICT STUDIES & PLANS ENGINEER

EXAMINED BY: Walter K. Johnson
DISTRICT CONSTRUCTION ENGINEER

Walter Phillips
DISTRICT MATERIALS ENGINEER

James A. Wheeler
DISTRICT OPERATIONS ENGINEER

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	3816B,6B-11R	ILLINOIS	41	2
CONTRACT NO. 66E92				
ILLINOIS FED. AID PROJECT				

FILE NAME :	USER NAME :	DESIGNED :	REVISED :
p:\11\08+EBID\INTEG-11\inos.gov\PI\DOT\Documents\DOT Offices\District 3\Projects\036-DRAWING\0366E\RW\shtrdetails.dgn	woodshankr1	RW	-
PLOT SCALE :	CHECKED :	DATE :	REVISED :
100,0000' / in.	EP	12/7/2015	-
PLOT DATE :	DATE :	REVISED :	-
12/22/2015	12/7/2015	-	-

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

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE			
				CONT. MAINT. 100% STATE	CONT. MAINT. 100% STATE	CONT. MAINT. 100% STATE	CONT. MAINT. 100% STATE
				BRIDGE	BRIDGE	BRIDGE	BRIDGE
				0014	0014	0014	0014
				S.N. 038-0153 (SB)	S.N. 038-0154 (NB)	S.N. 038-0155 (SB)	S.N. 038-0156 (NB)
20700220	POROUS GRANULAR EMBANKMENT	CU YD	14.8	14.8			
48101200	AGGREGATE SHOULDERS, TYPE B	TON	100	25	25	25	25
50102400	CONCRETE REMOVAL	CU YD	403	96.8	96.8	104.7	104.7
50104650	SLOPE WALL REMOVAL	SQ YD	222			222	
50200100	STRUCTURE EXCAVATION	CU YD	14.8	14.8			
50300100	FLOOR DRAINS	EACH	26	6	6	7	7
50300225	CONCRETE STRUCTURES	CU YD	11.1	3.4	3.3	2.2	2.2
50300255	CONCRETE SUPERSTRUCTURE	CU YD	366.9	90.9	90.9	92.6	92.5
50300300	PROTECTIVE COAT	SQ YD	961	215.5	215.5	265	265
50400405	PRECAST PRESTRESSED CONCRETE DECK BEAMS (21" DEPTH)	SQ FT	1159	579.5	579.5		
50400505	PRECAST PRESTRESSED CONCRETE DECK BEAMS (27" DEPTH)	SQ FT	1483			741.5	741.5
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	71840	18105	18105	17815	17815
50800515	BAR SPLICERS	EACH	182	47	47	44	44
50800530	MECHANICAL SPLICERS	EACH	2504	544	544	708	708
51100300	SLOPE WALL 6 INCH	SQ YD	222			222	

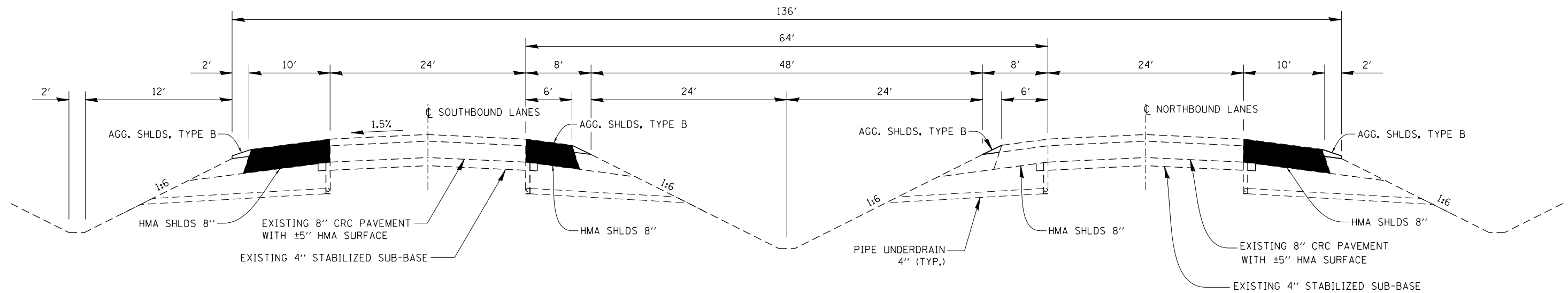
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE			
				CONT. MAINT. 100% STATE BRIDGE	CONT. MAINT. 100% STATE BRIDGE	CONT. MAINT. 100% STATE BRIDGE	CONT. MAINT. 100% STATE BRIDGE
				0014	0014	0014	0014
				S.N. 038-0153 (SB)	S.N. 038-0154 (NB)	S.N. 038-0155 (SB)	S.N. 038-0156 (NB)
52000110	PREFORMED JOINT STRIP SEAL	FOOT	344	88	88	84	84
60100074	SHOULDER REMOVAL AND REPLACEMENT 8"	FOOT	3516	879	879	879	879
64200116	SHOULDER RUMBLE STRIPS, 16 INCH	FOOT	3676	919	919	919	919
67100100	MOBILIZATION	LSUM	1	0.5		0.5	
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	6618	1635	1635	1674	1674
70400100	TEMPORARY CONCRETE BARRIER	FOOT	1616	389	389	419	419
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	1616	389	389	419	419
70600250	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	EACH	4	1	1	1	1
70600350	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3	EACH	4	1	1	1	1
* 78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	4600	1120	1120	1180	1180
* 78009006	MODIFIED URETHANE PAVEMENT MARKING - LINE 6"	FOOT	1996	495	495	503	503
78300100	PAVEMENT MARKING REMOVAL	SQ FT	2516	617	617	641	641
X0326243	SEDIMENT CONTROL, SILT CURTAIN	LSUM	1	0.25	0.25	0.25	0.25
X0326649	LINEAR DELINEATOR PANELS, 6 INCH	EACH	24	6	6	6	6

* SPECIALTY ITEM

FILE NAME =	USER NAME = woodshankr1	DESIGNED - RW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
p:\11\084EB10\INTEG\Illinois.gov\PIDOT\Documents\100T Offices\District 3\Projects\0366\DRAWN\0366\RW\ht-details.dgn	DRAWN	REVISION	57			3816B,6B-11R	IRROQUOIS	41	4	
Default	PLOT SCALE = 100.0000' / 1"	CHECKED - EP	REVISION			SCALE:	SHEET 2 OF 3 SHEETS	STA.	TO STA.	CONTRACT NO. 66E92
	PLOT DATE = 12/23/2015	DATE - 12/7/2015	REVISION			[ILLINOIS] FED. AID PROJECT				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE			
				CONT. MAINT. 100% STATE	CONT. MAINT. 100% STATE	CONT. MAINT. 100% STATE	CONT. MAINT. 100% STATE
				BRIDGE	BRIDGE	BRIDGE	BRIDGE
				0014	0014	0014	0014
				S. N. 038-0153 (SB)	S. N. 038-0154 (NB)	S. N. 038-0155 (SB)	S. N. 038-0156 (NB)
X7010208	TRAFFIC CONTROL AND PROTECTION, STANDARD 701402 (SPECIAL)	EACH	2		1		1
X7010410	SPEED DISPLAY TRAILER	CAL MO	7		3.5		3.5
Z0030850	TEMPORARY INFORMATION SIGNING	SO FT	84		42		42

3



TYPICAL SECTION

STA. 924+00 - 930+77 (SB)
 STA. 932+70 - 926+23 (NB)
 STA. 960+00 - 965+59 (SB)
 STA. 967+25 - 961+68 (NB)

HMA MIXTURE REQUIREMENT TABLE		
LOCATION(S):	HMA SHOULDER	
	1ST LIFT (6")	2ND LIFT (2")
MIXTURE USE(S):	BINDER	SURFACE
BINDER GRADE (PG):	PG64-22	PG64-22
DESIGN AIR VOIDS:	4.0% @ N70	4.0% @ N70
MIXTURE COMPOSITION: (MIXTURE GRADATION)	IL 19.0	IL 9.5
FRICTION AGGREGATE:		C
MIXTURE WEIGHT:	112 LB/SY/IN	112 LB/SY/IN
QUALITY MANAGEMENT PROGRAM:	QC/QA	QC/QA
SUBLOT SIZE:	N/A	N/A
DENSITY TEST METHOD:	CORES	CORES

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Default	PLOT DATE = 12/23/2015	DATE - 12/7/2015	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TYPICAL SECTION

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	38(6B,6B-1)IR	IROQUOIS	41	6
			CONTRACT NO. 66E92	
ILLINOIS FED. AID PROJECT				

LOCATION				SHOULDER REMOVAL AND REPLACEMENT	SHOULDER RUMBLE STRIPS 16 INCH	AGGREGATE SHOULDER	
STA.	- STA.	LT/RT	LENGTH	WIDTH	SQ YD	FEET	TON
S.N. 038-0155 (SB)							
924+30	- 927+60	RT	330	10	367	330	9
925+78	- 927+60	LT	182	6	121	182	5
929+40	- 932+10	RT	270	10	300	270	7
929+40	- 930+77	LT	137	6	91	137	4
SUBTOTAL					879	919	25
S.N. 038-0156 (NB)							
926+23	- 927+60	RT	137	6	91	137	4
924+90	- 927+60	LT	270	10	300	270	7
929+40	- 931+22	RT	182	6	121	182	5
929+40	- 932+70	LT	330	10	367	330	9
SUBTOTAL					879	919	25
S.N. 038-0153 (SB)							
960+00	- 963+30	RT	330	10	367	330	9
961+40	- 963+22	LT	182	6	121	182	5
964+30	- 967+00	RT	270	10	300	270	7
964+22	- 965+59	LT	137	6	91	137	4
SUBTOTAL					879	919	25
S.N. 038-0154 (NB)							
961+68	- 963+05	RT	137	6	91	137	4
960+25	- 962+95	LT	270	10	300	270	7
964+03	- 965+85	RT	182	6	121	182	5
963+95	- 967+25	LT	330	10	367	330	9
SUBTOTAL					879	919	25
TOTAL					3516	3676	100

LENGTHS MEASURED ALONG EDGE OF PAVEMENT

LOCATION			APPROACH SLAB REMOVAL	BRIDGE APPROACH PAVEMENT	BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)
STA.	- STA.	LT/RT	SQ YD	SQ YD	SQ YD
S.N. 038-0153 (SB)					
964+26	- 964+58	RT	40		
		LT	45		
964+26	- 964+50	RT		34	
		LT		29	
964+50	- 964+58	RT			11
		LT			11
TOTAL			85	63	22

LENGTHS MEASURED ALONG CENTERLINE OF ROADWAY

LOCATION	PAVEMENT MARKING REMOVAL	WORK ZONE PAVEMENT MARKING REMOVAL	MODIFIED URETHANE PAVEMENT MARKING LINE 4"		MODIFIED URETHANE PAVEMENT MARKING LINE 6"
			YELLOW	WHITE	WHITE
	SQ FT	SQ FT	FOOT		FOOT
SN: 038-0153					
STAGE I	478	885			
STAGE II	139	750	420	700	495
SUBTOTAL	617	1635	420	700	495
SN: 038-0154					
STAGE I	478	885			
STAGE II	139	750	420	700	495
SUBTOTAL	617	1635	420	700	495
SN: 038-0155					
STAGE I	492	904			
STAGE II	149	770	450	730	503
SUBTOTAL	641	1674	450	730	503
SN: 038-0156					
STAGE I	492	904			
STAGE II	149	770	450	730	503
SUBTOTAL	641	1674	450	730	503
TOTAL	2516	6618	1180		1006

LOCATION	TEMPORARY CONCRETE BARRIER	IMPACT ATTENUATORS TEMPORARY NON-REDIRECTIVE TEST LEVEL 3	RELOCATE TEMPORARY CONCRETE BARRIER	IMPACT ATTENUATORS RELOCATE NON-REDIRECTIVE TEST LEVEL 3
SN: 038-0153				
STAGE I	389	1		
STAGE II			389	1
SUBTOTAL	389	1	389	1
SN: 038-0154				
STAGE I	389	1		
STAGE II			389	1
SUBTOTAL	389	1	389	1
SN: 038-0155				
STAGE I	419	1		
STAGE II			419	1
SUBTOTAL	419	1	419	1
SN: 038-0156				
STAGE I	419	1		
STAGE II			419	1
SUBTOTAL	419	1	419	1
TOTAL	1616	4	1616	4

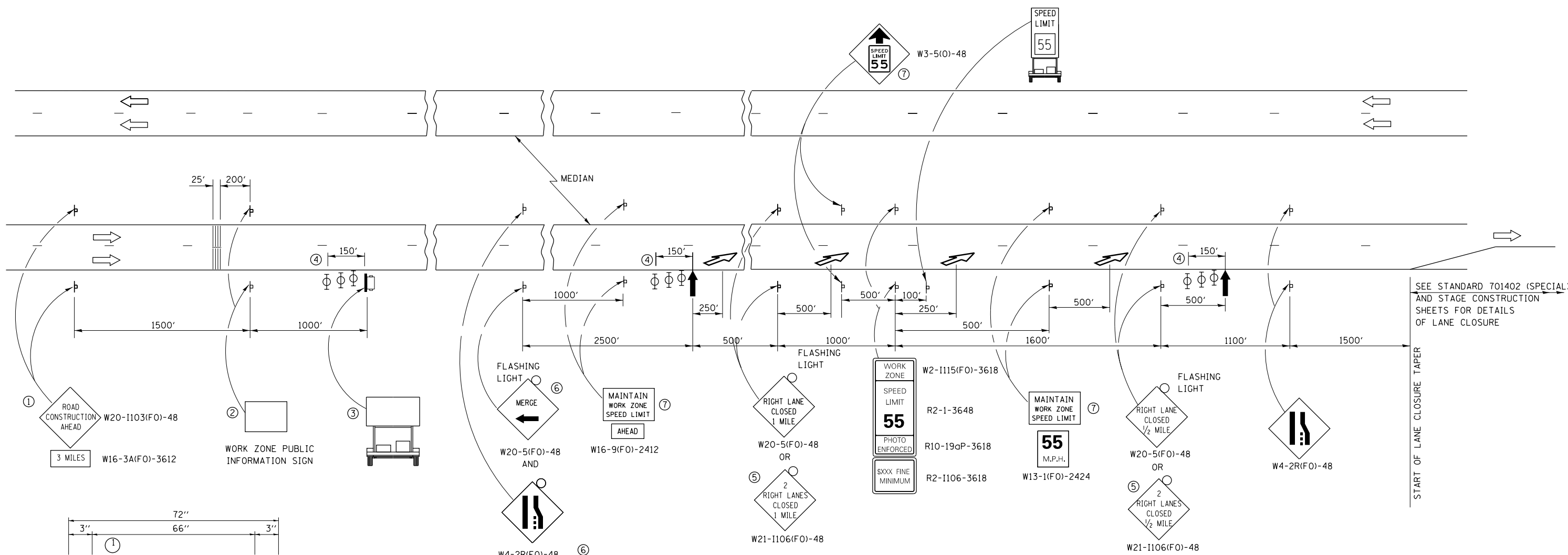
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Default	PLOT SCALE = 100.0000' / in.	DATE - 12/7/2015	REVISED -
	PLOT DATE = 12/23/2015		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULES

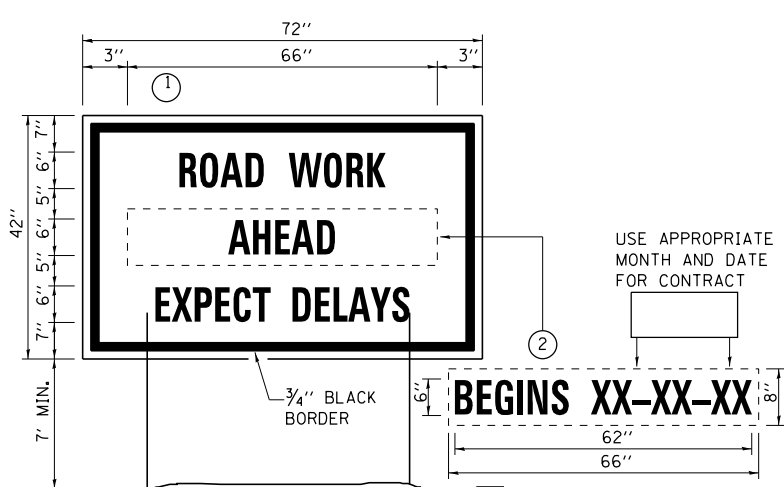
SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	38(6B,6B-1)IR	IROQUOIS	41	7
			CONTRACT NO. 66E92	
ILLINOIS FED. AID PROJECT				



SEE STANDARD 701402 (SPECIAL) AND STAGE CONSTRUCTION SHEETS FOR DETAILS OF LANE CLOSURE

START OF LANE CLOSURE TAPER

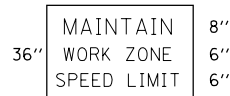


TEMPORARY INFORMATION SIGNING

- NOTES:**
1. USE 6" D BLACK LETTERING ON FLOURESENT ORANGE BACKGROUND.
 2. ERECT SIGNS AT LOCATIONS IN ADVANCE OF THE "ROAD CONSTRUCTION AHEAD" SIGNS AS DIRECTED BY THE ENGINEER.
 3. ERECT SIGN ① WITH INSTALLED PANEL ② A MINIMUM OF ONE WEEK PRIOR TO THE START OF THE LANE CLOSURE.
 4. REMOVE PANEL ② ON THAT DATE.
 5. SEE SPECIAL PROVISION "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
 6. WILL BE PAID FOR PER SQ FT AS "TEMPORARY INFORMATION SIGNING". EACH SIGN = 21 SQ FT AND THE DATE PANEL ② WILL NOT BE MEASURED SEPARATELY FOR PAYMENT.

- ① THE ROAD CONSTRUCTION AHEAD SIGN SHALL BE LOCATED 3 MILES IN ADVANCE OF THE PROJECT LIMITS.
- ② THE MESSAGE AND SIZE OF THE WORK ZONE PUBLIC INFORMATION SIGN SHALL BE AS SPECIFIED BY THE DEPARTMENT.
- ③ TO BE PLACED IN THE MEDIAN WHEN FEASIBLE. THE MESSAGE BOARD SHALL BE USED TO DISPLAY STATUS OF LANES WITHIN THE PROJECT. THE PRIMARY MESSAGES SHALL BE:
"RIGHT LANE CLOSED" / " x MILES AHEAD"
"LEFT LANE CLOSED" / " x MILES AHEAD"
"ALL LANES OPEN"
- ④ THREE, TYPE II BARRICADES, DRUMS, OR VERTICAL BARRICADES AT 50' CENTERS.
- ⑤ THIS SIGN SHALL BE USED WHEN 2 LANES ARE CLOSED.
- ⑥ WHEN THE LEFT LANE IS CLOSED, SWITCH THESE TWO SIGNS AND THE DIRECTION OF THE MERGE ARROW.
- ⑦ THIS SIGN SHALL ONLY BE USED IF THE EXISTING SPEED LIMIT IS GREATER THAN 65 MPH.

⑦ 48"x36" FLUORESCENT ORANGE SIGN WITH BLACK LETTERS.



- ARROW BOARD
- PORTABLE CHANGEABLE MESSAGE SIGN
- SIGN
- TYPE II BARRICADE, DRUM, OR VERTICAL BARRICADE WITH MONODIRECTIONAL FLASHING LIGHT
- LANE DROP ARROW - SEE STANDARD 780001
- TEMPORARY RUMBLE STRIPS
- SPEED DISPLAY TRAILER

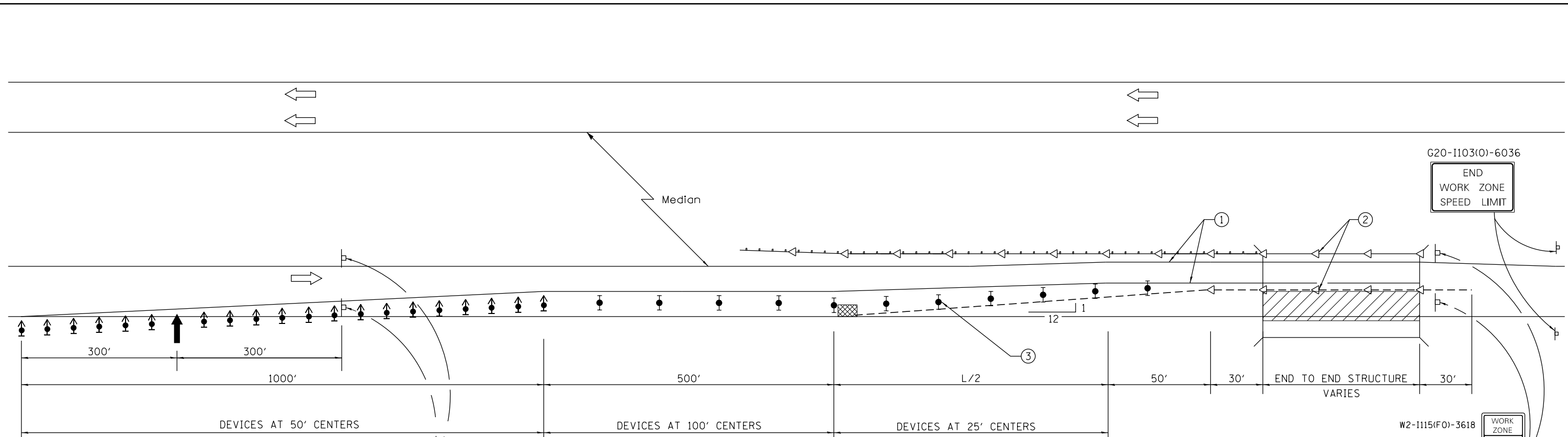
GENERAL NOTE:

THIS STANDARD IS USED WHERE AT ANY TIME A LANE IS CLOSED ON A FREEWAY/EXPRESSWAY.

WHEN THE LEFT LANE IS CLOSED, LEFT LANE CLOSED SIGNS SHALL BE SUBSTITUTED FOR THE RIGHT LANE CLOSED SIGNS.

THE FIRST TWO SIGNS AND THE MESSAGE BOARD ARE STATIONARY. THE OTHER SIGNS AND ARROWBOARDS SHALL BE MOVED AS NECESSARY TO MAINTAIN THE REQUIRED DISTANCE FROM THE START OF THE LANE CLOSURE TAPER(S).

SEE SPECIAL PROVISIONS.



SEE STANDARD 701400 (SPECIAL)
FOR APPROACH START OF LANE
CLOSURE TAPER

SYMBOLS

- ARROW BOARD
- WORK AREA
- SIGN
- TRAFFIC CONTROL DRUM WITH STEADY BURN MONODIRECTIONAL LIGHT
- TEMPORARY CONCRETE BARRIER
- MONODIRECTIONAL BARRIER WALL/GUARDRAIL MARKER
- IMPACT ATTENUATOR
- DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT

- ① TEMPORARY PAVEMENT MARKING TAPE OR EXISTING PAVEMENT MARKING SHALL BE PLACED THROUGHOUT THE TAPER AND ALONGSIDE THE WORK AREA. THE RIGHT EDGE LINE SHALL BE WHITE AND THE LEFT EDGE LINE SHALL BE YELLOW.
 - ② BARRIER WALL/GUARDRAIL MARKERS AT 25'. MARKERS ON RIGHT SHALL BE CRYSTAL AND MARKERS ON LEFT SHALL BE AMBER. COST INCLUDED WITH TEMPORARY CONCRETE BARRIER.
 - ③ EXCEPT AS SHOWN TRAFFIC CONTROL DRUMS SHALL BE USED IN LANE CLOSURES.
- AT THE OPTION OF THE CONTRACTOR, IN PLACE LANE CLOSURE MAY BE EXTENDED TO THE NEXT WORK ZONE WITH TRAFFIC CONTROL DRUMS, SUBJECT TO THE APPROVAL OF THE RESIDENT ENGINEER. COST INCLUDED WITH TRAFFIC CONTROL AND PROTECTION STANDARD.

GENERAL NOTES

THIS STANDARD IS USED WHERE AT ANY TIME ANY VEHICLE, EQUIPMENT, WORKERS OR THEIR ACTIVITIES WILL ENCROACH ON THE PAVEMENT OR ON THE SHOULDER WITHIN 24 INCHES OF THE EDGE OF PAVEMENT FOR DAYLIGHT OPERATION EXCEEDING ONE DAY AND WHERE TEMPORARY CONCRETE BARRIER IS UTILIZED.

THIS STANDARD MUST BE USED IN COMBINATION WITH STANDARD 701400 (SPECIAL).

WHEN WORK IS BEING PERFORMED IN THE LEFT LANE, THE SET UP WOULD BE A MIRROR IMAGE TO WHAT IS SHOWN.

FLAGGER, FLAGGER SIGNS AND SPEED LIMIT SIGNS SHALL BE REQUIRED WHENEVER TEMPORARY CONCRETE BARRIER IS NOT IN PLACE. WHEN TEMPORARY CONCRETE BARRIER IS IN PLACE, THE FLAGGER SIGNS SHALL BE REMOVED OR COVERED AND THE FLAGGER NOT REQUIRED.

TEMPORARY CONCRETE BARRIER SHALL BE ACCORDING TO STANDARD 704001.

CALCULATE L AS FOLLOWS:

FORMULA
 $L = (W)(S)$

45 MPH OR MORE

W = WIDTH OF OFFSET
IN FEET

S = NORMAL POSTED
SPEED

G20-1103(O)-6036

END WORK ZONE SPEED LIMIT

W2-1115(F0)-3618

R2-1-3648

R10-19aP-3618

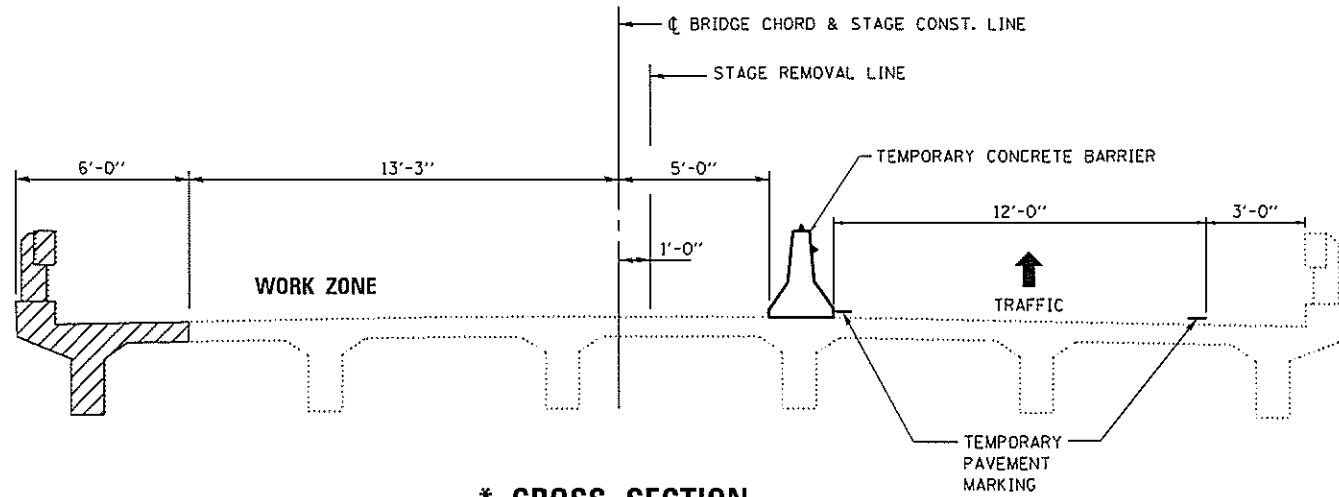
R2-1106-3618

WORK ZONE SPEED LIMIT 55

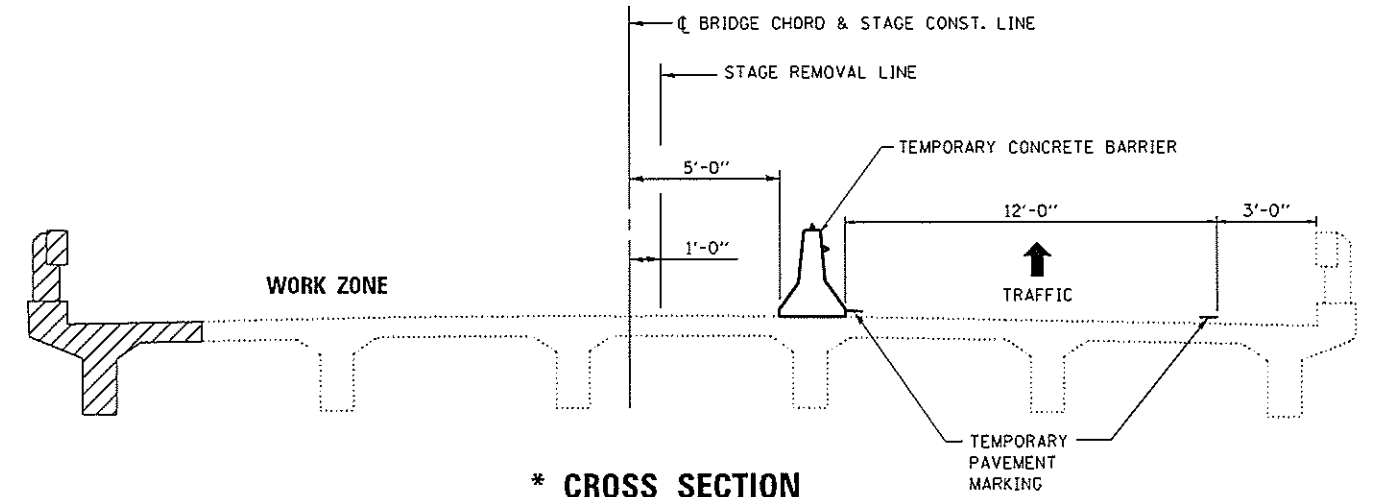
PHOTO ENFORCED

XXXX FINE MINIMUM

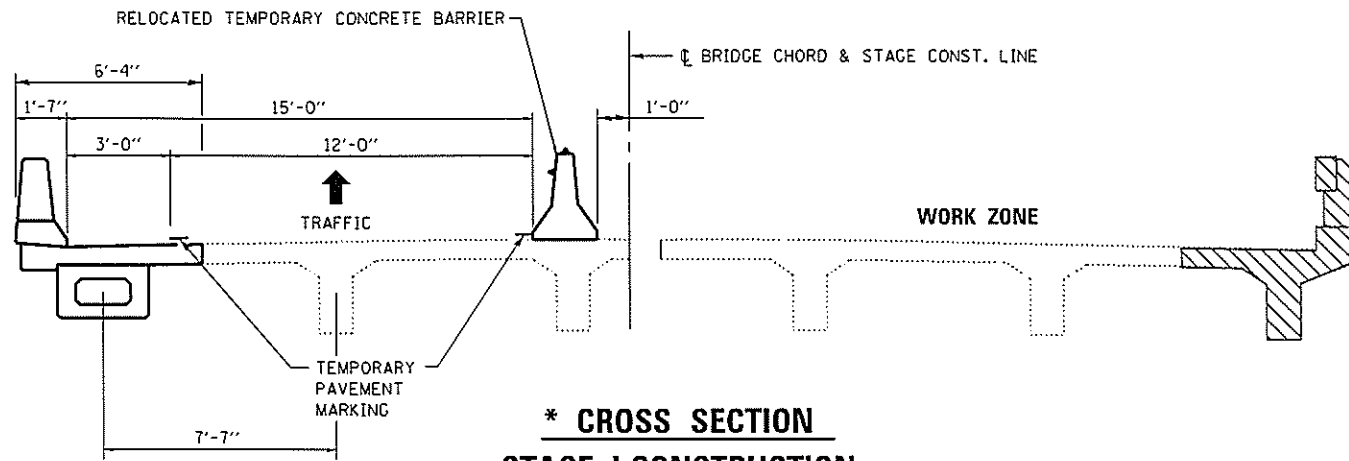
FILE NAME =	USER NAME = woodshankr1	DESIGNED - RW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	LANE CLOSURE, FREEWAY/EXPRESSWAY STANDARD 701402 (SPECIAL)	F.A.I. RTE. 57	SECTION 38(6B,6B-1)IR	COUNTY IROQUOIS	TOTAL SHEETS 41	SHEET NO. 9
	PLOT SCALE = 100.0000' / in.	CHECKED - EP	REVISED -			SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.	CONTRACT NO. 66E92		ILLINOIS FED. AID PROJECT	
Default	PLOT DATE = 12/22/2015	DATE - 12/7/2015	REVISED -							



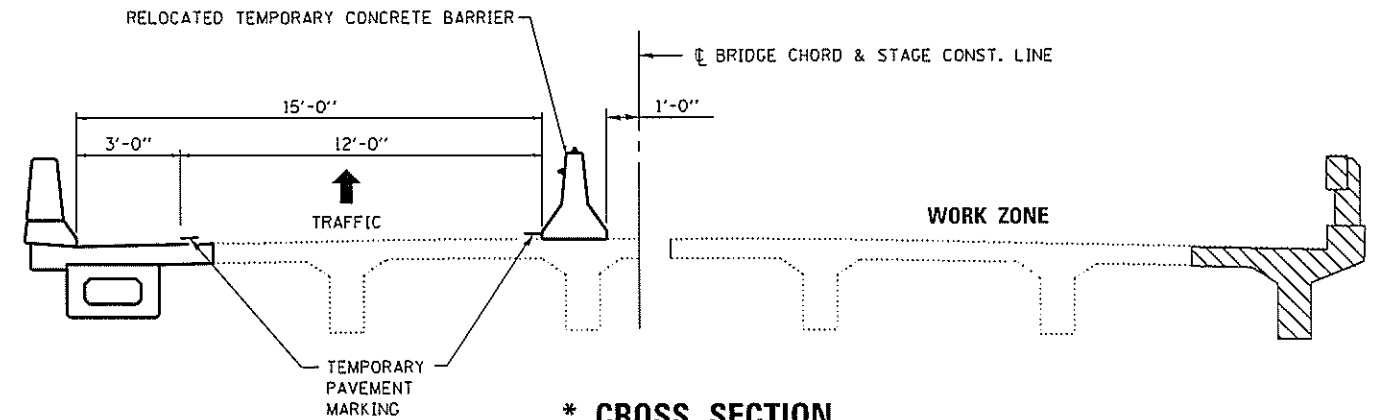
*** CROSS SECTION
STAGE I REMOVAL
STRUCTURE NO. 038-0155 (SB)**



*** CROSS SECTION
STAGE I REMOVAL
STRUCTURE NO. 038-0156 (NB)**

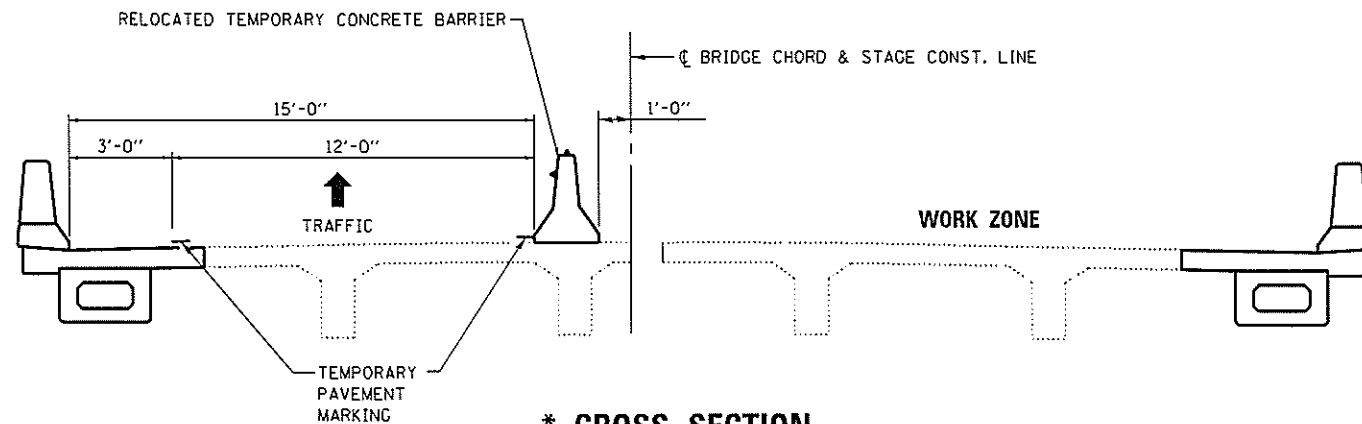


*** CROSS SECTION
STAGE I CONSTRUCTION
STRUCTURE NO. 038-0155 (SB)**

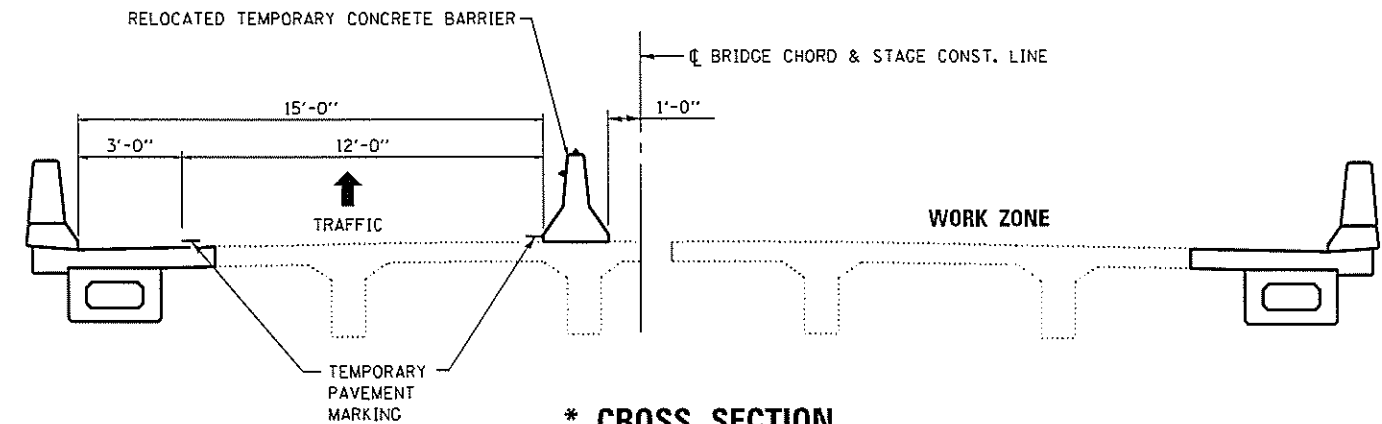


*** CROSS SECTION
STAGE I CONSTRUCTION
STRUCTURE NO. 038-0156 (NB)**

*** LOOKING IN THE DIRECTION OF TRAFFIC**
HATCHED AREAS INDICATE CONCRETE REMOVAL.



*** CROSS SECTION.
STAGE II CONSTRUCTION
STRUCTURE NO. 038-0155 (SB)**



*** CROSS SECTION
STAGE II CONSTRUCTION
STRUCTURE NO. 038-0156 (NB)**

DESIGNED *ATH*
CHECKED *CCC*
DRAWN *baliva*
CHECKED *ATH CCC*

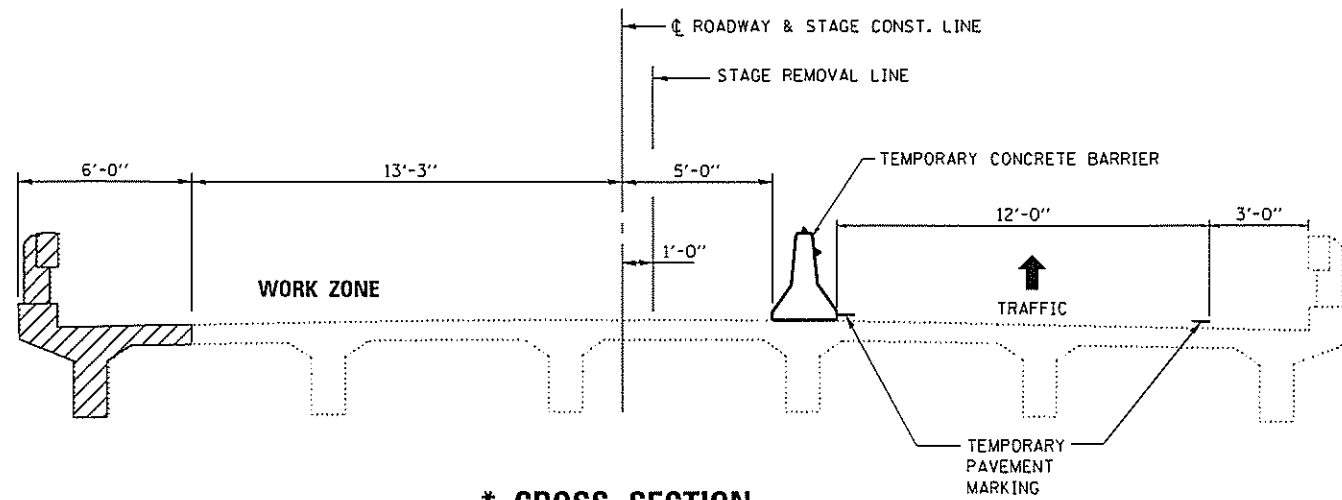
PASSED
[Signature]
ACTING ENGINEER OF BRIDGES AND STRUCTURES

DATE - JANUARY 29, 2016
REVISED
REVISED

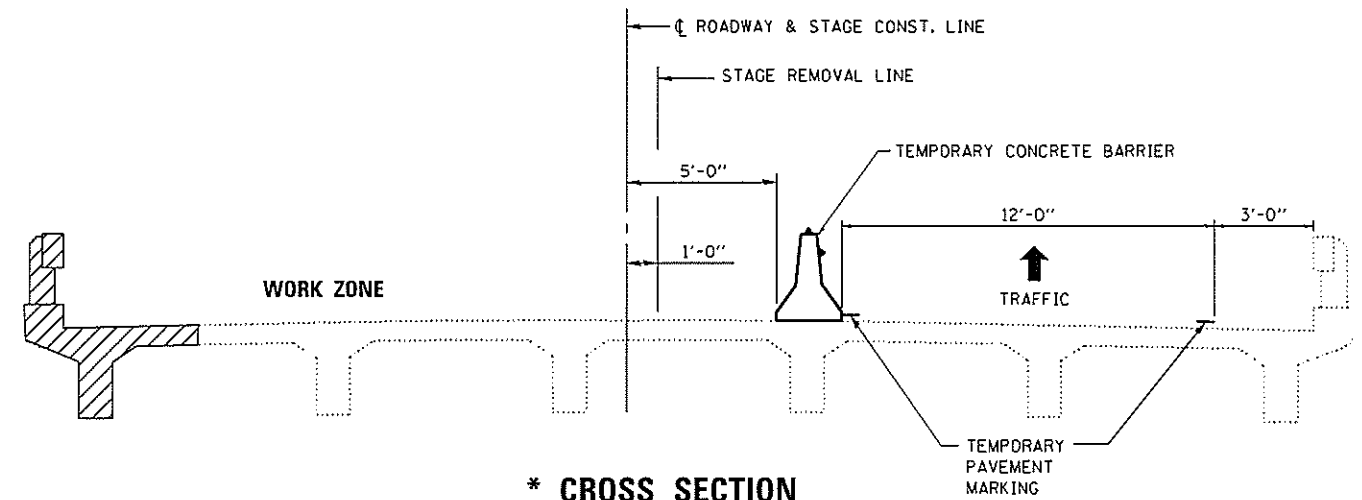
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGES OF CONSTRUCTION
SN 038-0155 & 038-0156
SHEET 1 OF 1 SHEETS

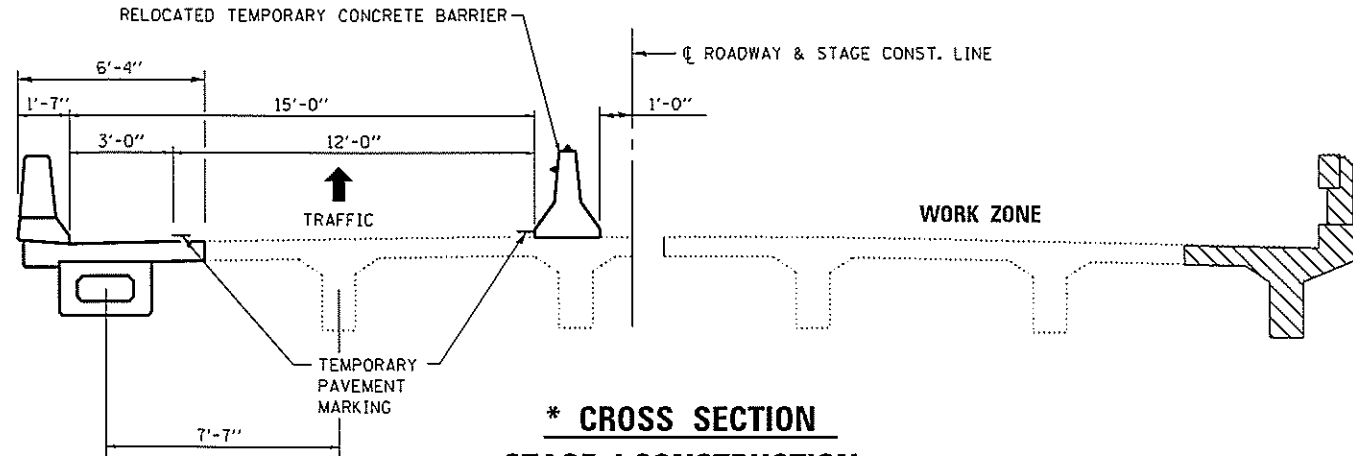
F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	3816B.68-11R	IROQUOIS	41	10
				CONTRACT NO. 66E92
ILLINOIS FED. AID PROJECT				



*** CROSS SECTION
STAGE I REMOVAL
STRUCTURE NO. 038-0153 (SB)**

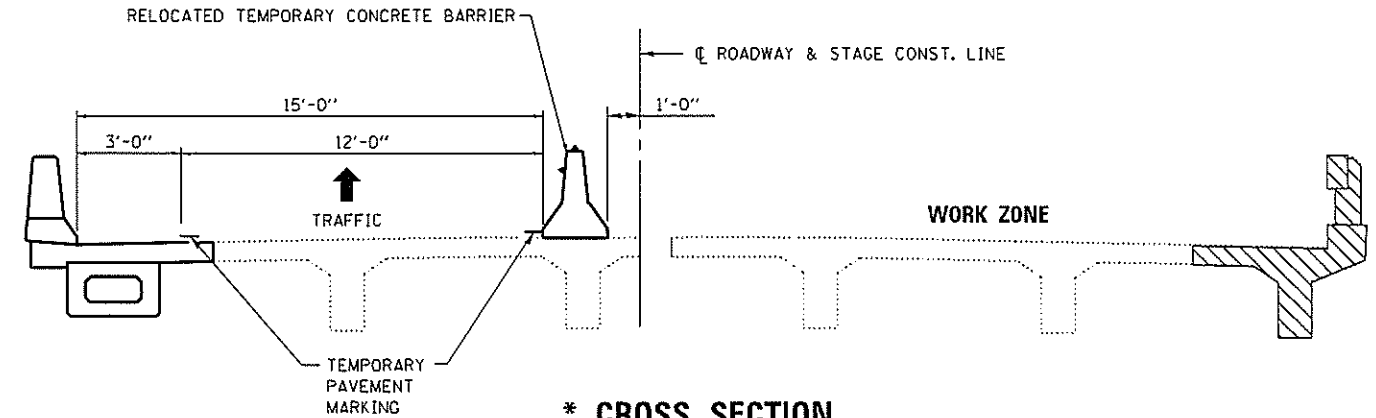


*** CROSS SECTION
STAGE I REMOVAL
STRUCTURE NO. 038-0154 (NB)**

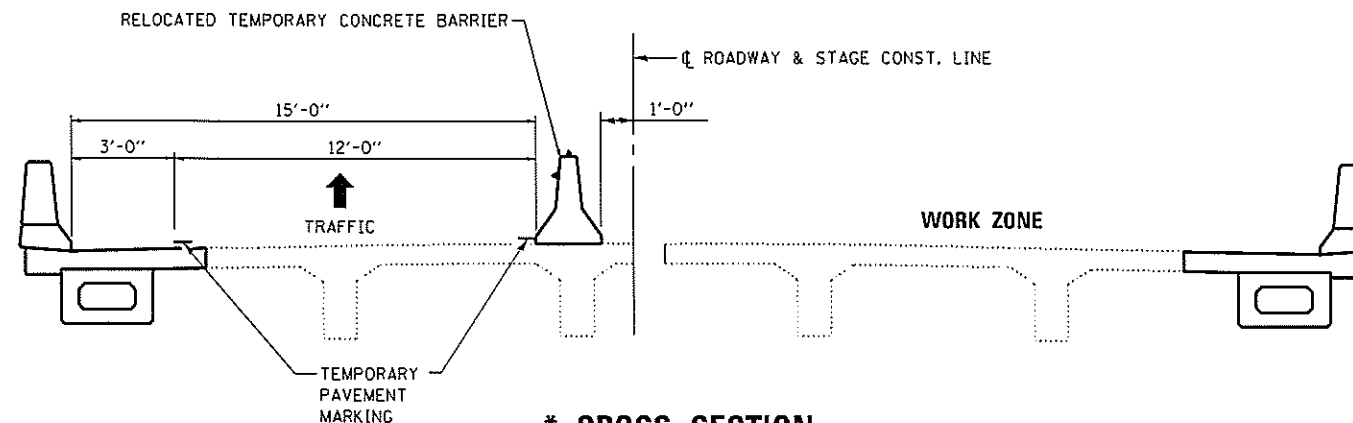


*** CROSS SECTION
STAGE I CONSTRUCTION
STRUCTURE NO. 038-0153 (SB)**

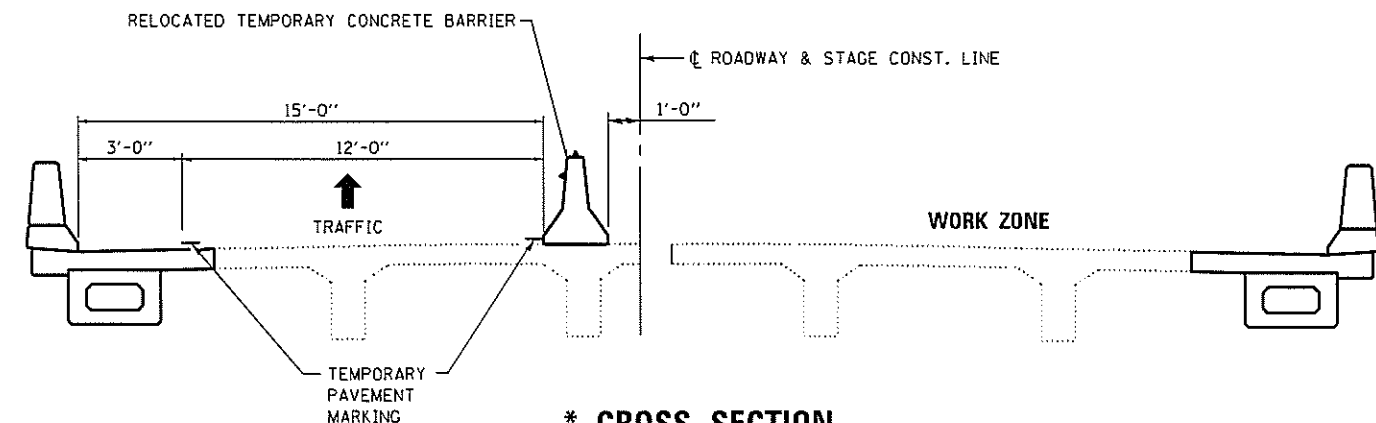
*** LOOKING IN THE DIRECTION OF TRAFFIC**
HATCHED AREAS INDICATE CONCRETE REMOVAL.



*** CROSS SECTION
STAGE I CONSTRUCTION
STRUCTURE NO. 038-0154 (NB)**



*** CROSS SECTION.
STAGE II CONSTRUCTION
STRUCTURE NO. 038-0153 (SB)**



*** CROSS SECTION
STAGE II CONSTRUCTION
STRUCTURE NO. 038-0154 (NB)**

DESIGNED	ATH
CHECKED	CCC
DRAWN	baliva
CHECKED	ATH CCC

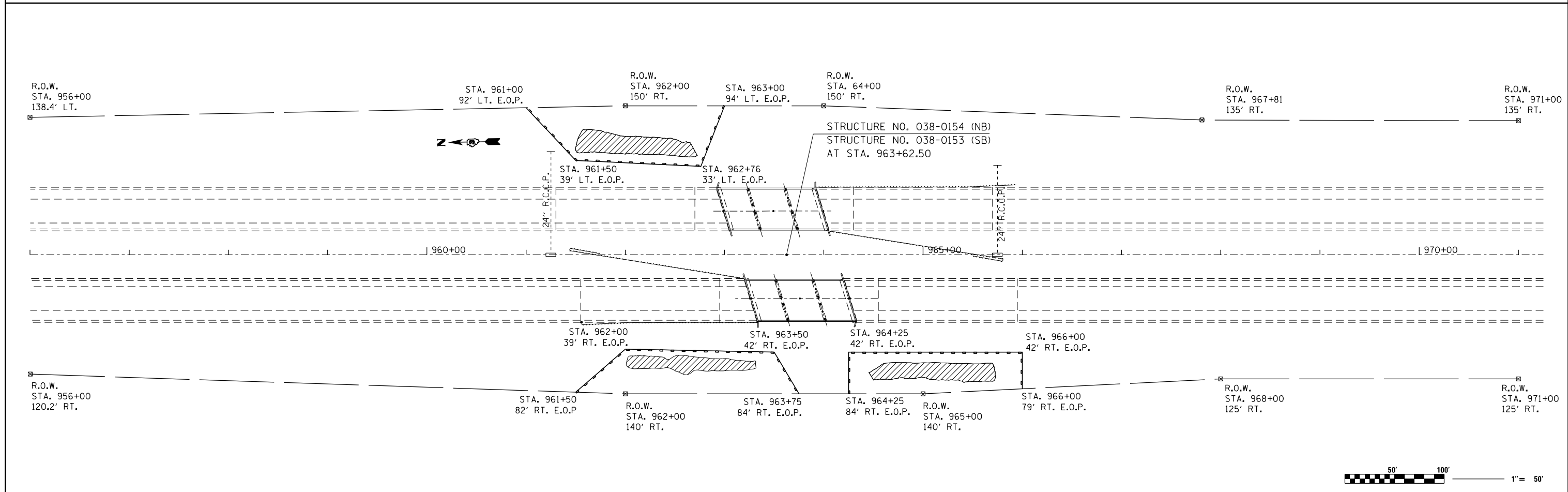
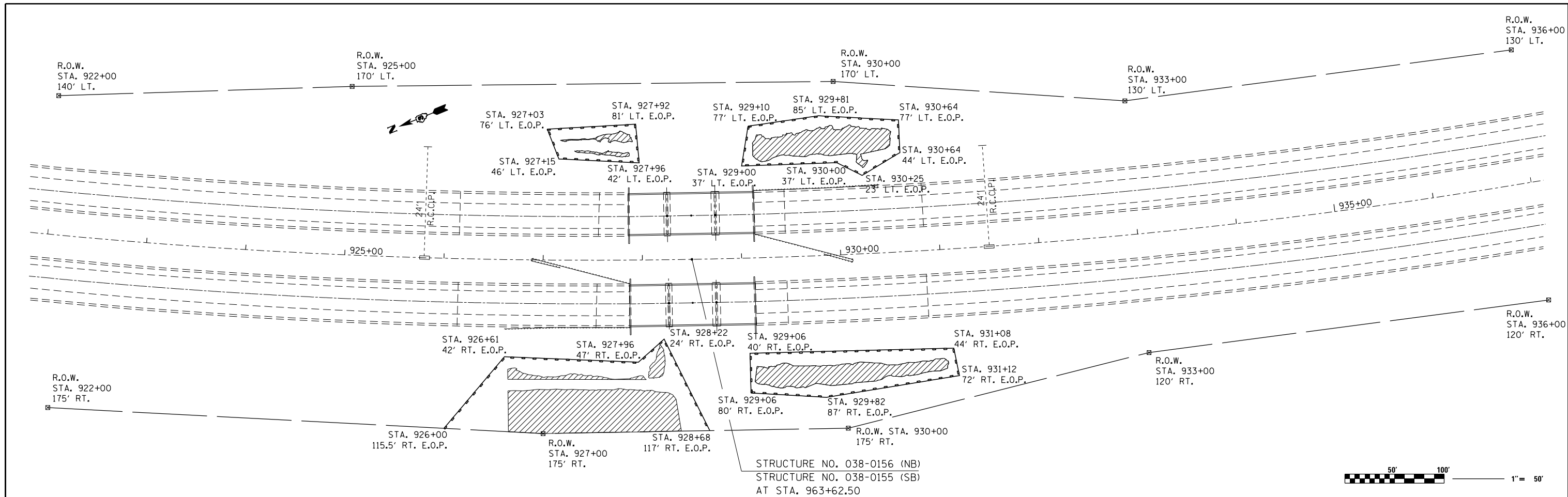
PASSED	<i>A. Carl Perry</i> ACTING ENGINEER OF BRIDGES AND STRUCTURES
--------	---

DATE	JANUARY 29, 2016
REVISED	
REVISED	

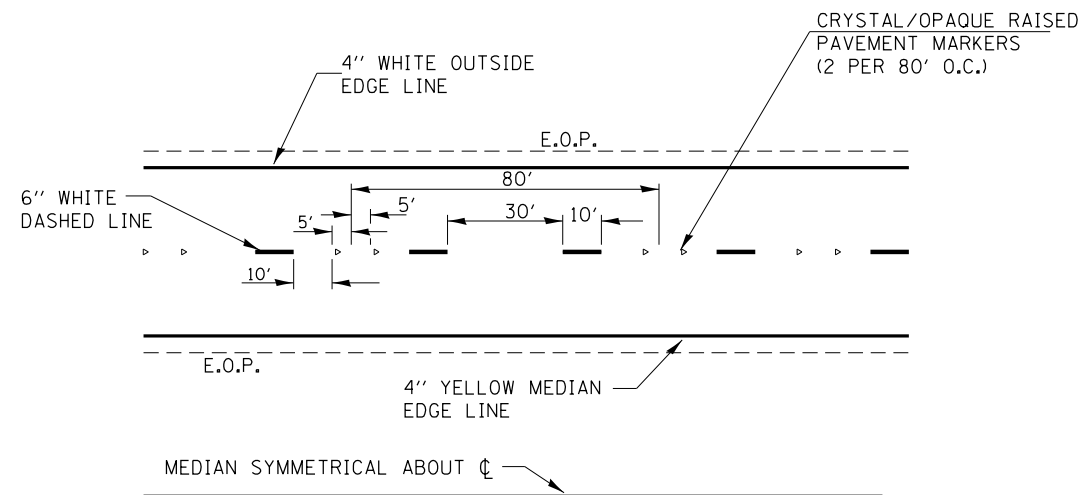
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGES OF CONSTRUCTION
SN 038-0153 AND 038-0154
SHEET 1 OF 1 SHEETS

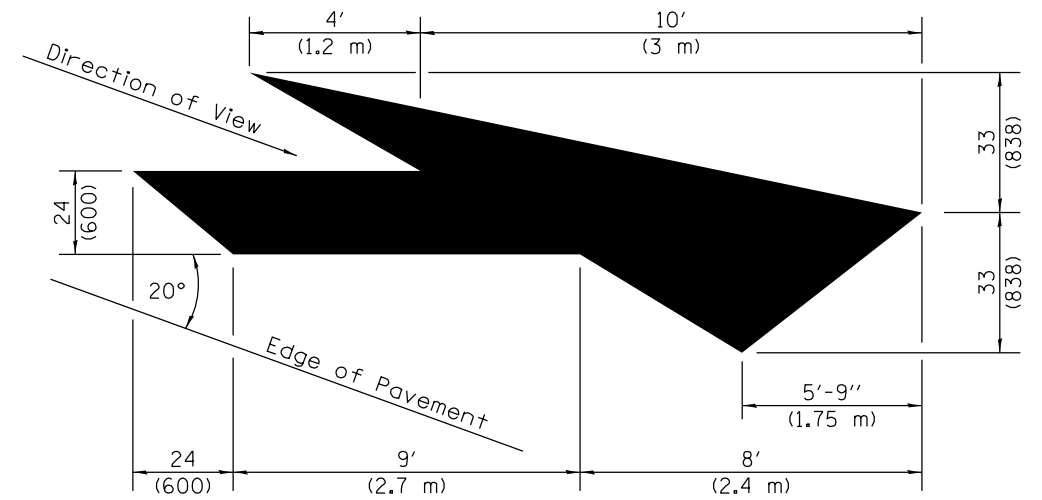
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	38(68,68-1)IR	IRROUDIS	41	11
			CONTRACT NO. 66E92	
ILLINOIS FED. AID PROJECT				



FILE NAME =	USER NAME = woodshankr1	DESIGNED - RW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SILT FILTER FENCE FOR WETLAND PROTECTION	F.A.I. REE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
pw:\IL\084EBIDINTEG.illinois.gov\PWIDOT\Documents\IDOT Offices\District 3\Projects\0366EDRAWING\0366E\Sheet-details.dgn	PLOT SCALE = 100.0000' / in.	CHECKED - EP	REVISED -			57	38(6B,6B-1)IR	IROQUOIS	41	12	
Default	PLOT DATE = 12/22/2015	DATE - 12/7/2015	REVISED -			SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.		CONTRACT NO. 66E92			
						ILLINOIS FED. AID PROJECT					

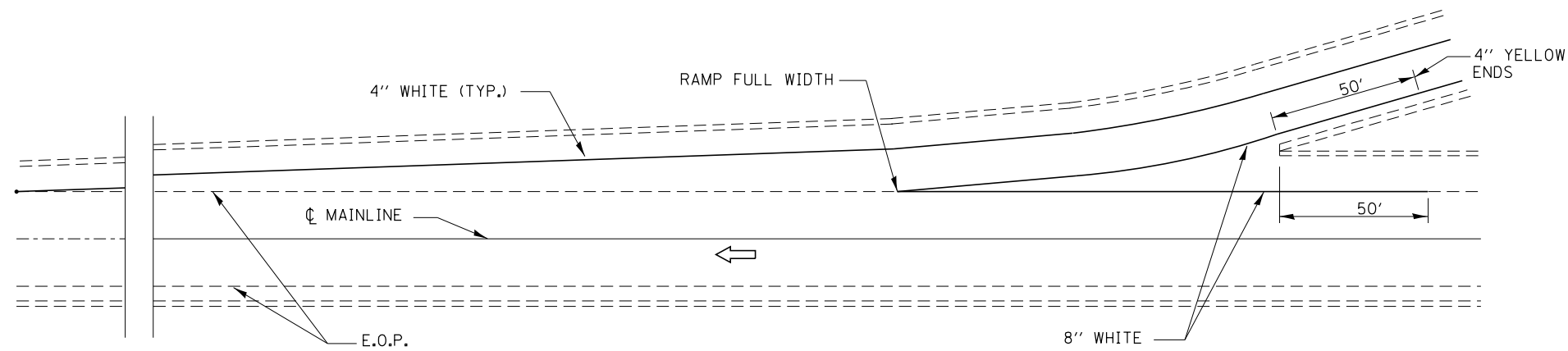


TYPICAL PAVEMENT MARKINGS

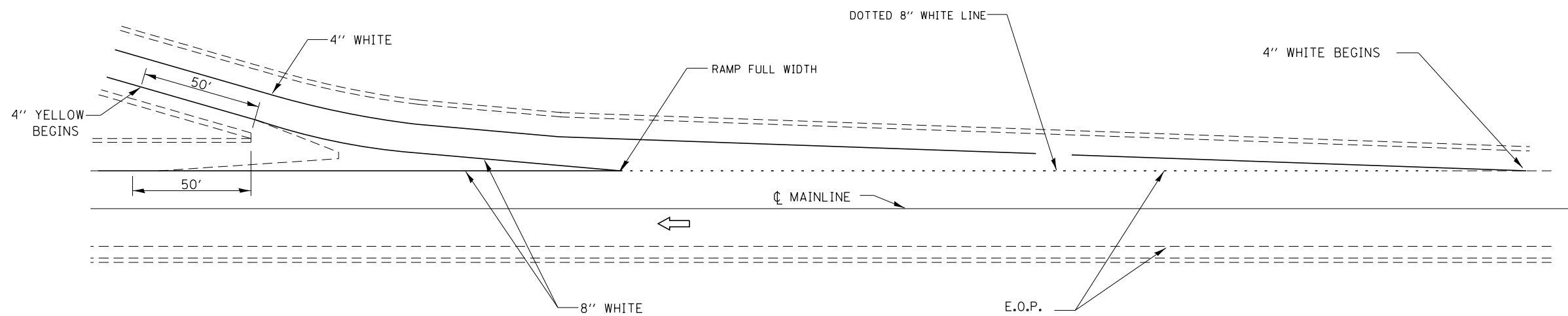


LANE DROP ARROW

Right lane drop arrow shown.
Use mirror image for left lane.

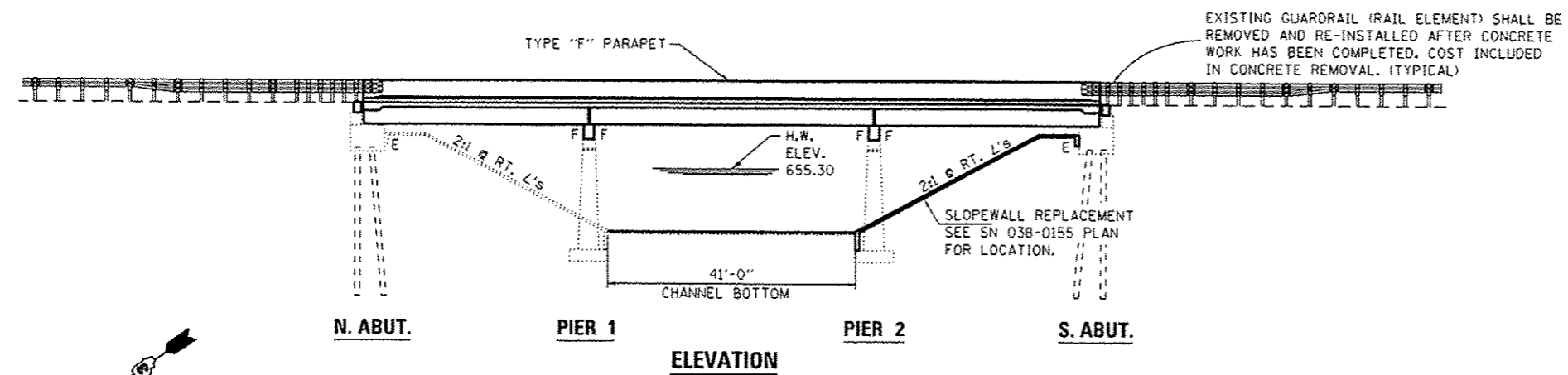


TYPICAL PAVEMENT MARKING FOR ENTRANCE RAMP TERMINALS



TYPICAL PAVEMENT MARKINGS FOR EXIT RAMP TERMINALS

FILE NAME =	USER NAME = woodshankr1	DESIGNED - RW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PAVEMENT MARKINGS			F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw:\IL\084EBIDINTEG.illinois.gov\PIDOT\Documents\IDOT Offices\District 3\Projects\0366\B366E\B366E.dgn	PLOT SCALE = 100.0000' / 1in.	CHECKED - EP	REVISED -					57	38(6B,6B-1)IR	IROQUOIS	41	13
Default	PLOT DATE = 12/22/2015	DATE - 12/7/2015	REVISED -		SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.			CONTRACT NO. 66E92				
ILLINOIS FED. AID PROJECT												



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 WORK; HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT BID PRICE FOR THE WORK.

ALL STRUCTURAL STEEL SHALL CONFORM TO AASHTO CLASSIFICATION M-270 GR 36, UNLESS OTHERWISE NOTED.

THE DECK SHALL HAVE ITS FINAL FINISH TINED ACCORDING TO ARTICLE 420.09(a)(1) OF THE STANDARD SPECIFICATIONS, COST INCLUDED WITH CONCRETE SUPERSTRUCTURES.

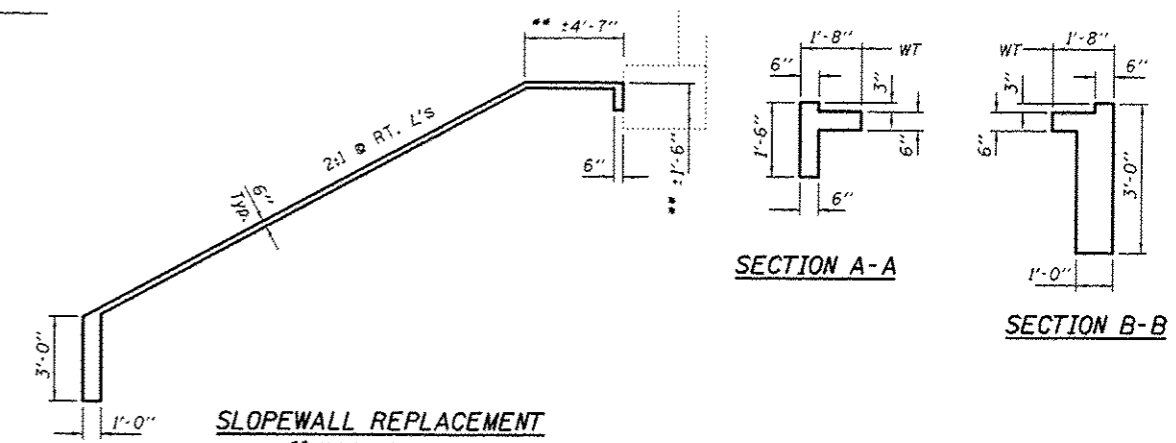
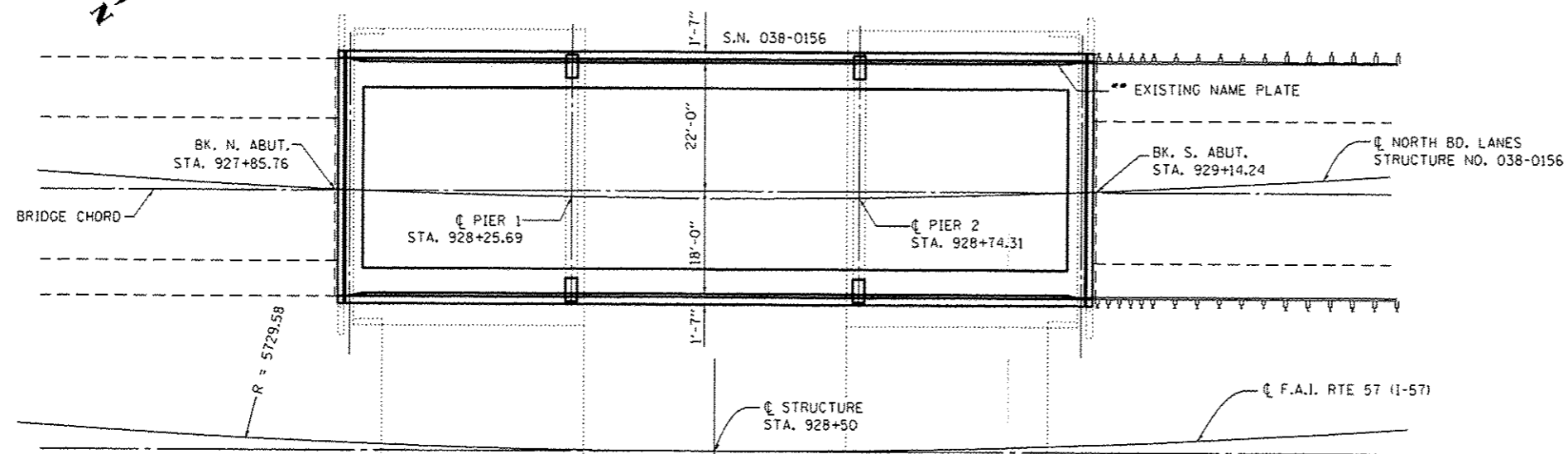
REINFORCEMENT BARS DESIGNATED (E) SHALL BE EPOXY COATED.

THE CONTRACTOR SHALL MAKE ALLOWANCE FOR THE DEFLECTION OF FORMS, SHRINKAGE AND SETTLEMENT OF FALSEWORK.

EXISTING REINFORCEMENT BARS EXTENDING INTO THE REMOVAL AREA SHALL BE CLEANED, STRAIGHTENED AND INCORPORATED INTO THE 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 OPENING SHALL BE ADJUSTED ACCORDING TO ARTICLE 520.04 OF THE STANDARD SPECIFICATIONS WHEN THE DECK IS POURED AT AN AMBIENT TEMPERATURE OTHER THAN 50° F.

WHILE THE NEED FOR A TEMPORARY SUPPORT SYSTEM FOR THE SECTION OF THE DECK AND INTERIOR BEAMS TO REMAIN IS NOT EXPECTED IT IS THE CONTRACTORS STRUCTURAL ENGINEER RESPONSIBILITY TO DETERMINE ITS NEED IF ADDITIONAL CONSTRUCTION LOADS ARE APPLIED TO THAT SECTION OF THE DECK.



**TWO SUPERSTRUCTURES
TOTAL BILL OF MATERIAL**

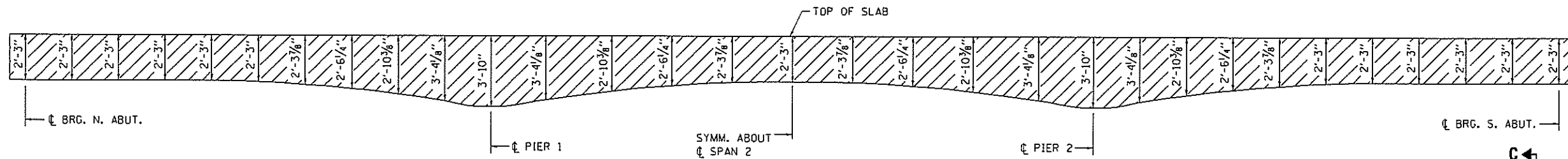
ITEM	UNIT	QUANTITY
CONCRETE REMOVAL	CU. YD.	209.4
CONCRETE SUPERSTRUCTURE	CU. YD.	185.1
PRECAST PRESTRESSED CONCRETE DECK BEAMS (27" DEPTH)	SO. FT.	1483
REINFORCEMENT BARS EPOXY COATED	POUND	35630
BAR SPLICERS	EACH	88
MECHANICAL SPLICERS	EACH	1416
PREFORMED JOINT STRIP SEAL	FOOT	168
PROTECTIVE COAT	SQ. YD.	530
CONCRETE STRUCTURES	CU. YD.	4.4
FLOOR DRAINS	EACH	14
SLOPEWALL REMOVAL	SQ. YD.	222
SLOPEWALL 6"	SQ. YD.	222

* TO BE USED ON ALL NEW PLACED CONCRETE.

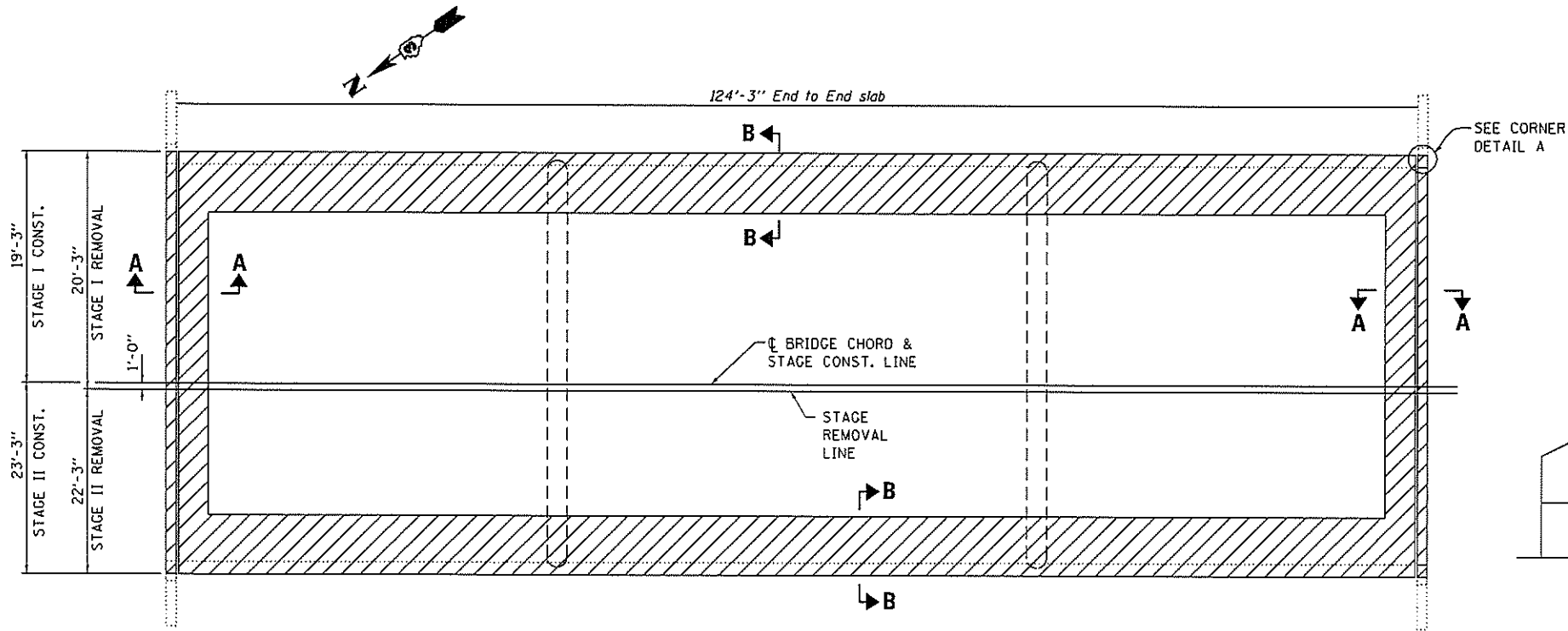


Expires 4/30/16

**REMOVE, STORE AND REINSTALL EXISTING NAME PLATE. COST INCLUDED WITH CONCRETE SUPERSTRUCTURE.

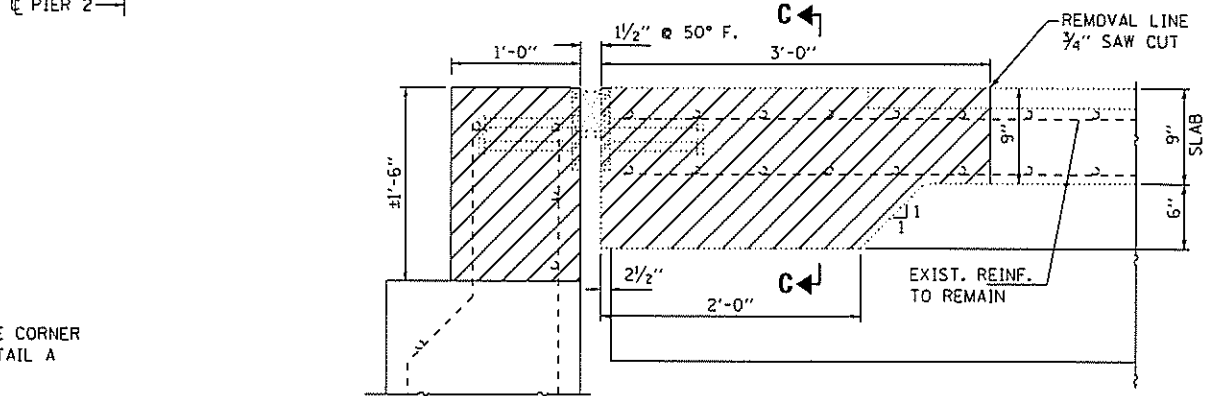


GIRDER ORDINATES (ALL GIRDERS)

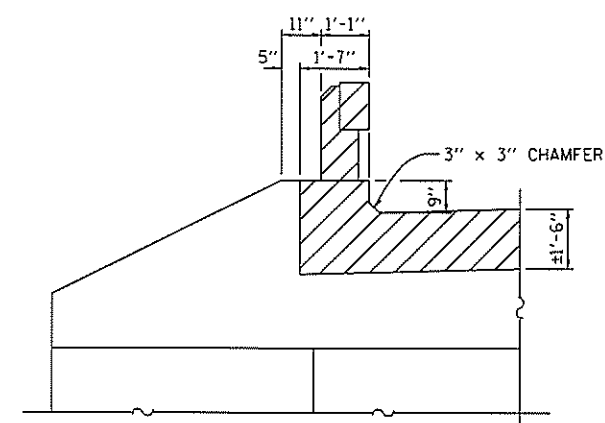


PLAN

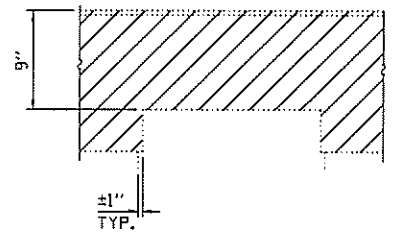
SOUTHBOUND STRUCTURE (038-0155) SHOWN
NORTHBOUND STRUCTURE (038-0156) SIMILAR
THRU 180 DEG. ROTATION ABOUT CENTERLINE OF FAI 57



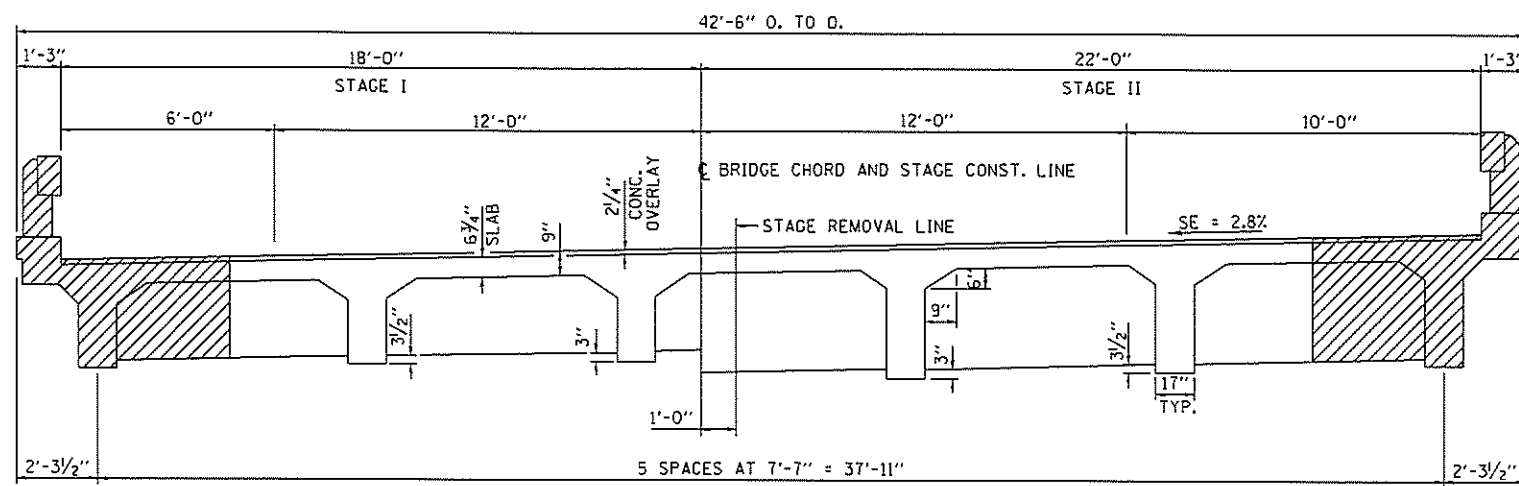
SECTION A-A
DIMENSIONS AT RT. L's



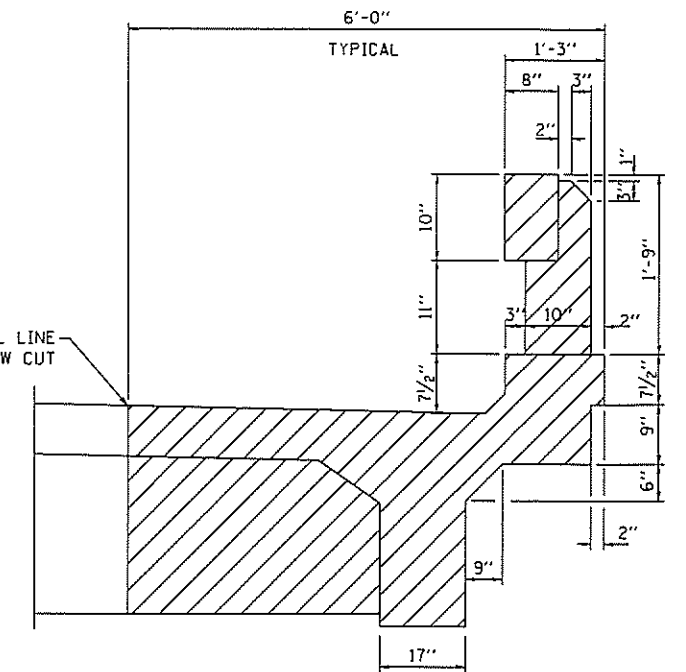
CORNER DETAIL A
(TYPICAL)



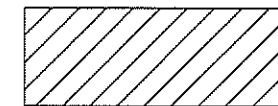
SECTION C-C AT BEAM ENDS
(INTERIOR BEAMS)



CROSS SECTION



SECTION B-B



CONCRETE REMOVAL

DESIGNED	ATH
CHECKED	CCC
DRAWN	baliva
CHECKED	ATH CCC

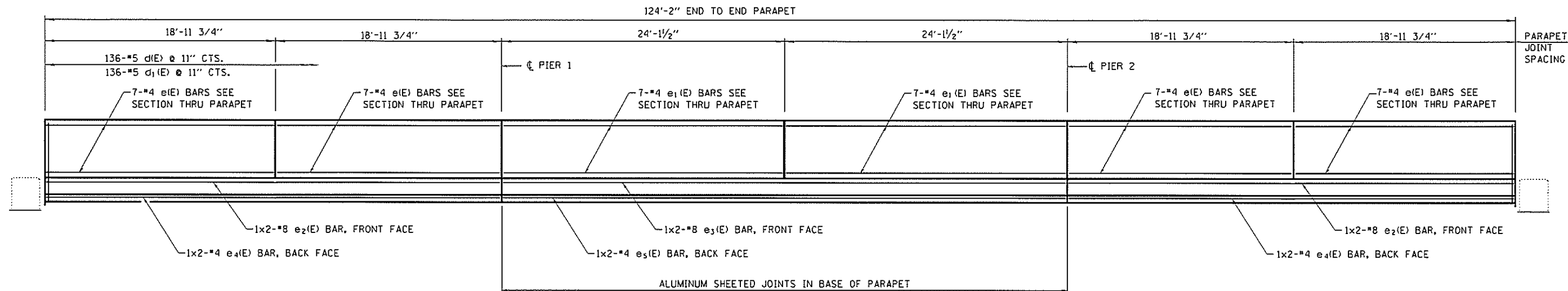
PASSED		DATE	JANUARY 29, 2016
		REVISED	
		REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

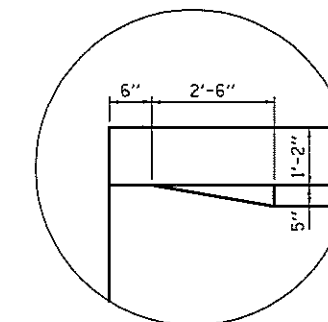
CONCRETE REMOVAL DETAILS FOR
SN 038-0155 AND 038-0156

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	3816B, 6B-11R	IROUOUI5	41	15
				CONTRACT NO. 66E92
ILLINOIS FED. AID PROJECT				

SHEET 2 OF 12 SHEETS



ELEVATION OF PARAPET



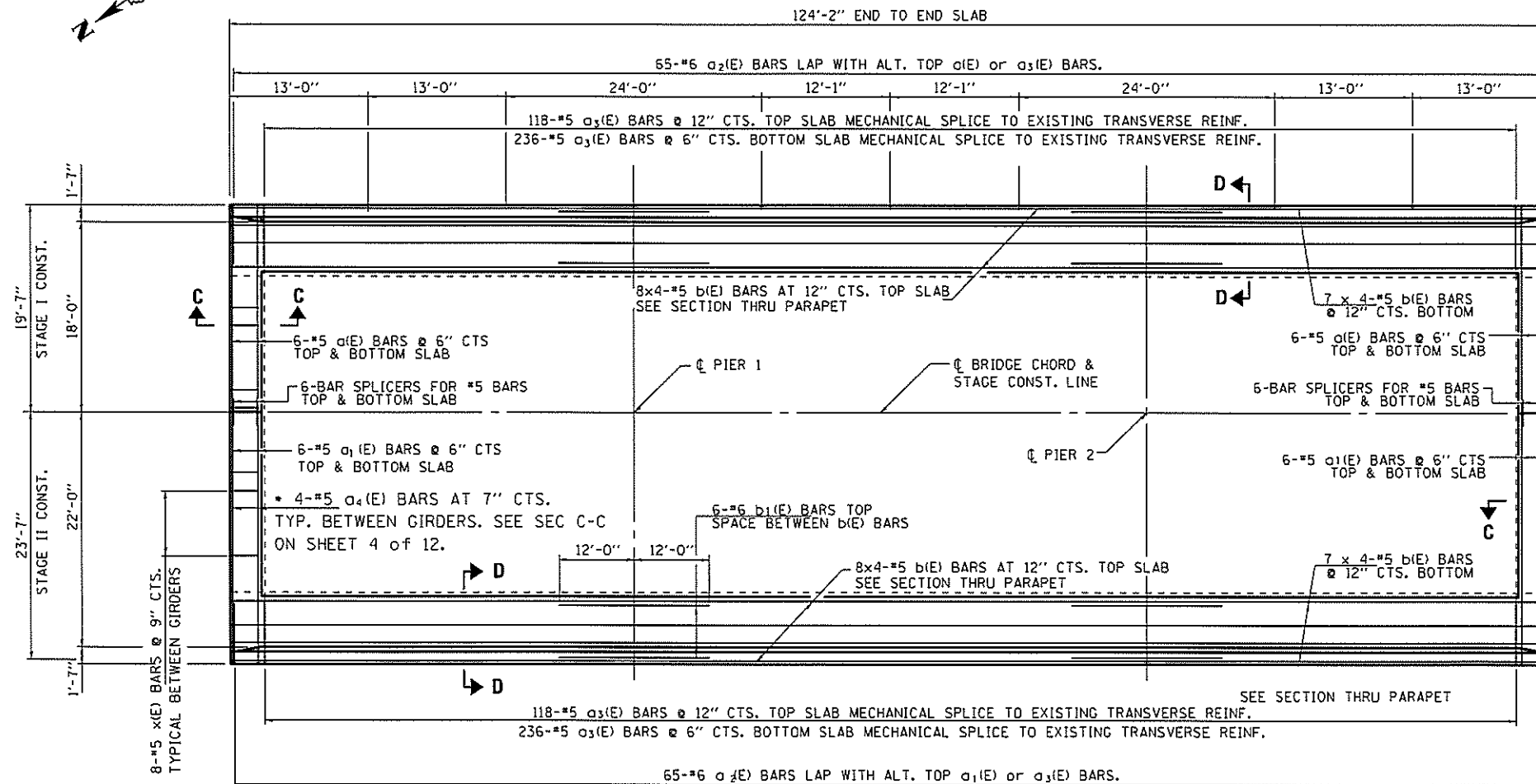
MINIMUM BAR LAP

- #4 BAR = 2'-8"
- #5 BAR = 3'-6"
- #8 BAR = 5'-11"

DRAIN SPACING
EAST SIDE OF DECK ONLY

FOR SEC. C-C SEE SHEET 4 OF 12.
FOR SEC. D-D SEE SHEET 5 OF 12.

CORNER DETAIL (TYPICAL)



**PLAN
SHOWING DECK REINFORCEMENT**

SOUTHBOUND STRUCTURE (038-0155) SHOWN
NORTHBOUND STRUCTURE (038-0156) SIMILAR
THRU 180 DEG. ROTATION ABOUT CENTERLINE OF FAI 57

- CUT #4(E) BARS TO FIT AT END BAYS
- 4-#5 BAR SPLICERS AT STAGE LINE.
- CUT #4(E) TO FIT AT STAGE I AND DISCARD
REMAINDER OF BAR. ATTACH SPLICER ONLY
DURING STAGE II AND CUT TO FIT.

**TWO SUPERSTRUCTURES
BILL OF MATERIAL**

BAR	NO.	SIZE	LENGTH	SHAPE
a1(E)	48	#5	19'-4"	
a1(E)	48	#5	23'-4"	
a2(E)	260	#6	4'-0"	
a3(E)	1416	#5	5'-6"	
a4(E)	80	#5	6'-0"	
b1(E)	240	#5	33'-8"	
b1(E)	48	#5	24'-0"	
d1(E)	544	#5	5'-7"	
d1(E)	544	#5	6'-8"	
e1(E)	112	#4	18'-9"	
e1(E)	56	#4	23'-10"	
e2(E)	16	#8	22'-0"	
e3(E)	8	#8	27'-3"	
e4(E)	16	#4	20'-3"	
e5(E)	8	#4	25'-6"	
h1(E)	24	#6	19'-4"	
h1(E)	24	#6	23'-4"	
u1(E)	168	#4	2'-11"	
x1(E)	160	#5	4'-9"	
CONCRETE REMOVAL				209.4
CONCRETE SUPERSTRUCTURE				185.1
REINFORCEMENT BARS				35380
EPOXY COATED				
BAR SPLICERS				88
MECHANICAL SPLICERS				1416
PREFORMED JOINT STRIP SEAL				168

DESIGNED ATH
CHECKED CCC
DRAWN ballva
CHECKED ATH CCC

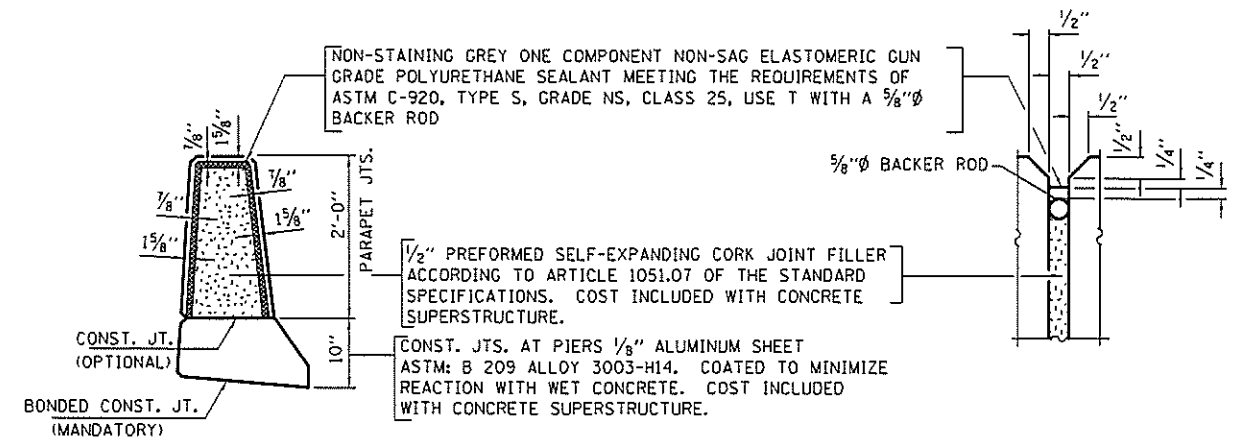
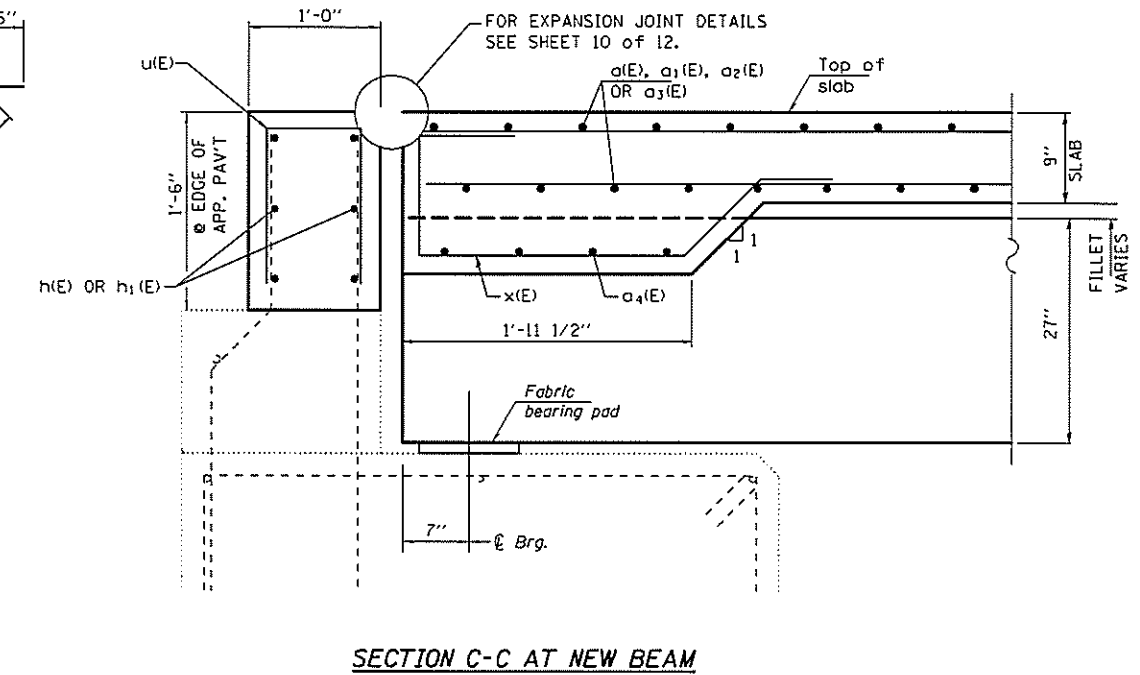
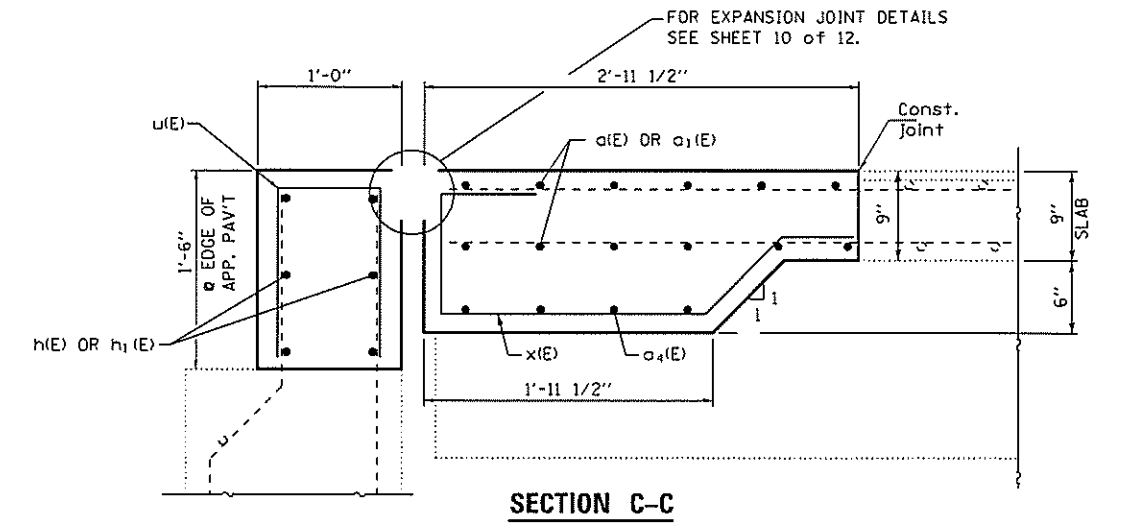
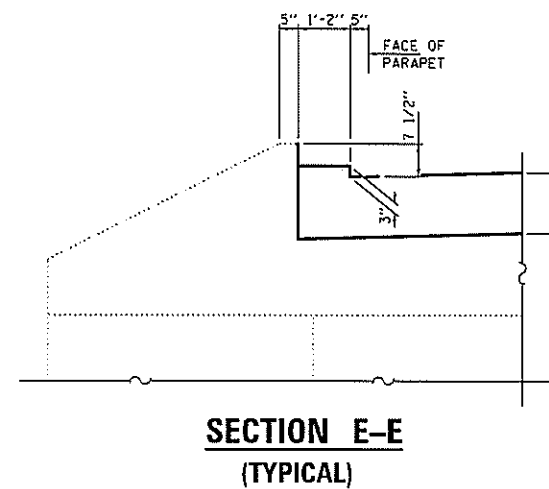
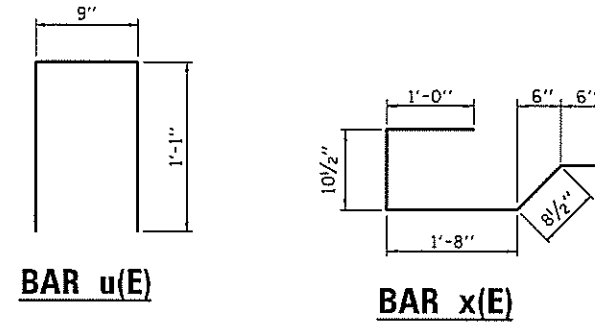
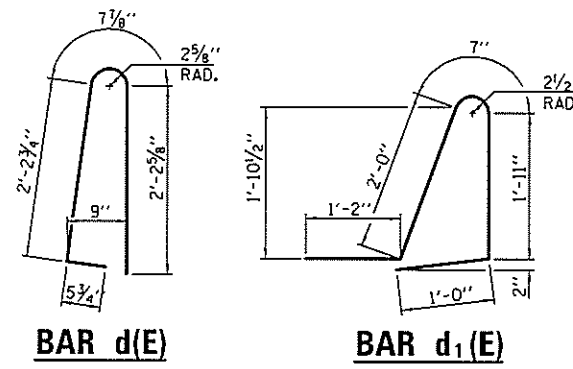
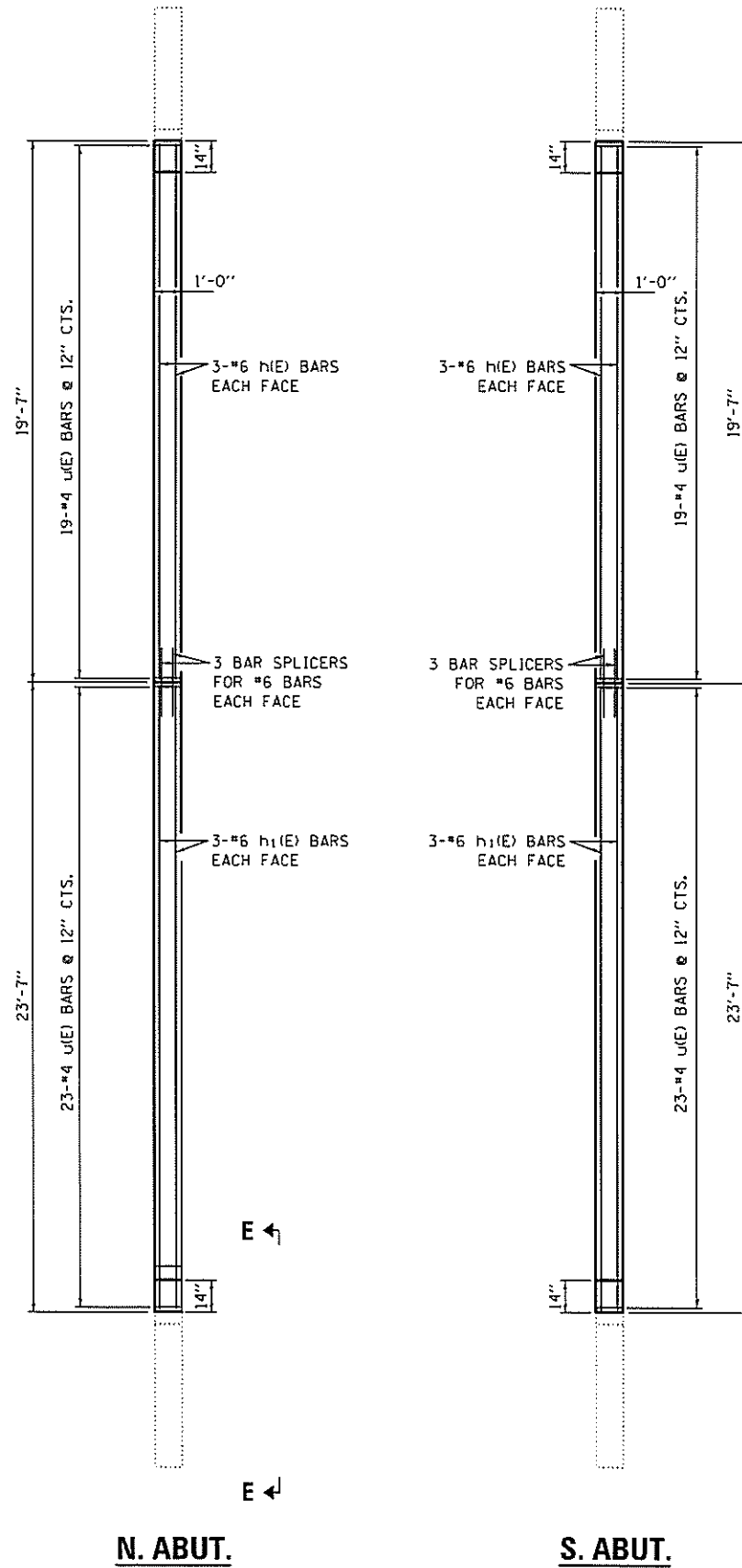
DATE - JANUARY 29, 2016
PASSED *[Signature]*
ACTING ENGINEER OF BRIDGES AND STRUCTURES

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE RECONSTRUCTION DETAILS
SN 038-0155 AND 038-0156

SHEET 3 OF 12 SHEETS

F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	3816B, 68-111R	IROQUOIS	41	16
ILLINOIS FED. AID PROJECT			CONTRACT NO. 66E92	



PARAPET JOINT DETAILS

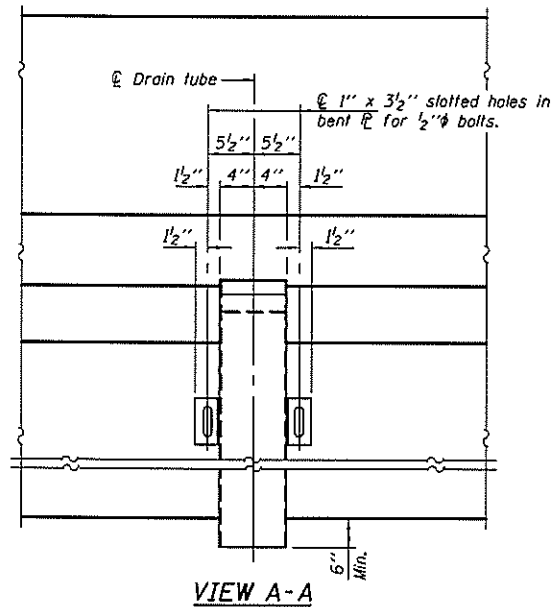
DESIGNED *ATH*
 CHECKED *CCC*
 DRAWN *baliva*
 CHECKED *ATH CCC*

DATE - JANUARY 29, 2016
 PASSED *[Signature]*
 ACTING ENGINEER OF BRIDGES AND STRUCTURES

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

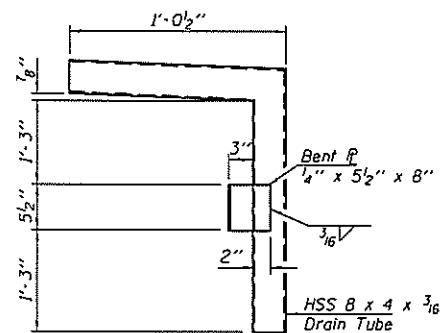
CONCRETE PARAPET SLIPFORMING OPTION
 SN 038-0155 AND 038-0156

F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	3816B, 6B-11R	IROQUOIS	41	17
				CONTRACT NO. 66E92

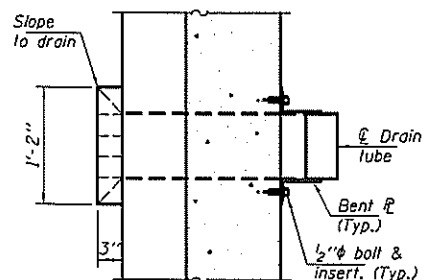


VIEW A-A

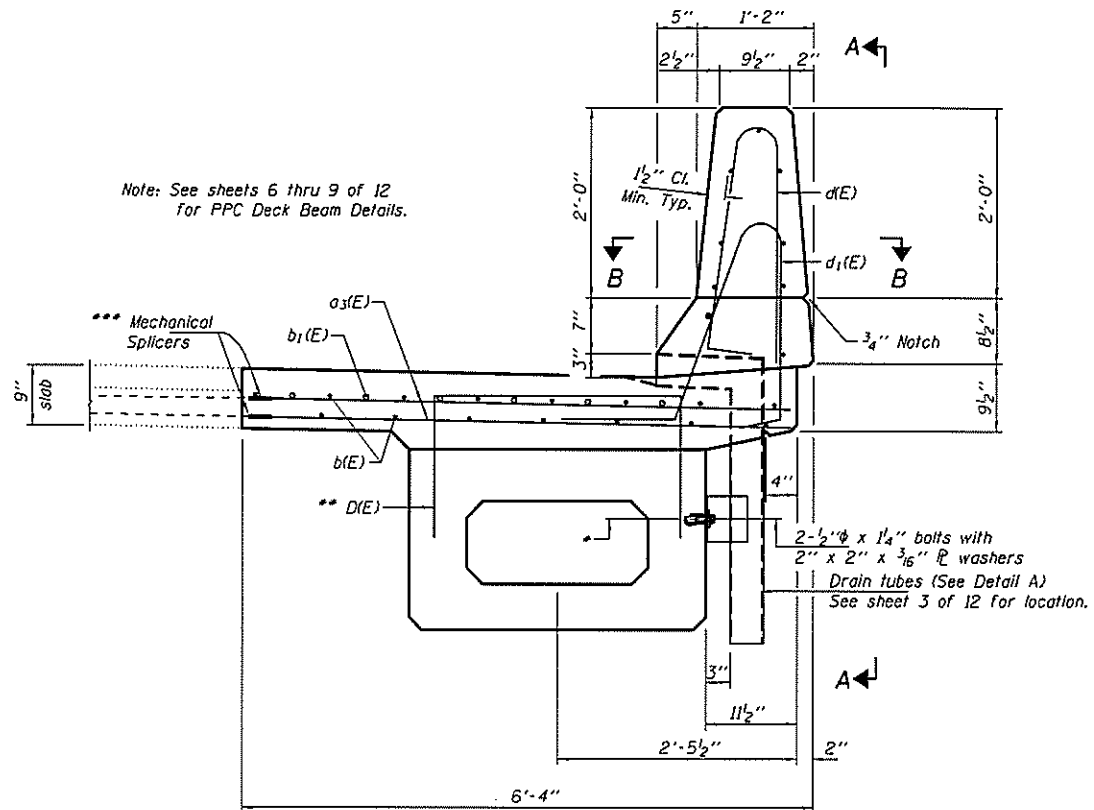
Note:
All drain tubes and accessories shall be galvanized according to AASHTO M111 or M232, (as applicable).
The cost of the drain tube assemblies and everything necessary for their installation is included with Floor Drains.



DETAIL A

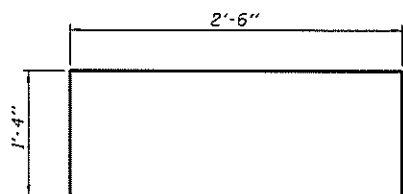


SECTION B-B

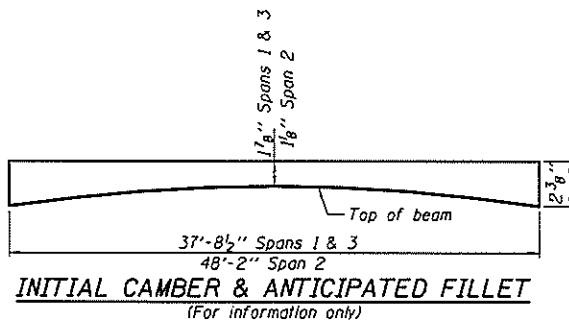


SECTION D-D

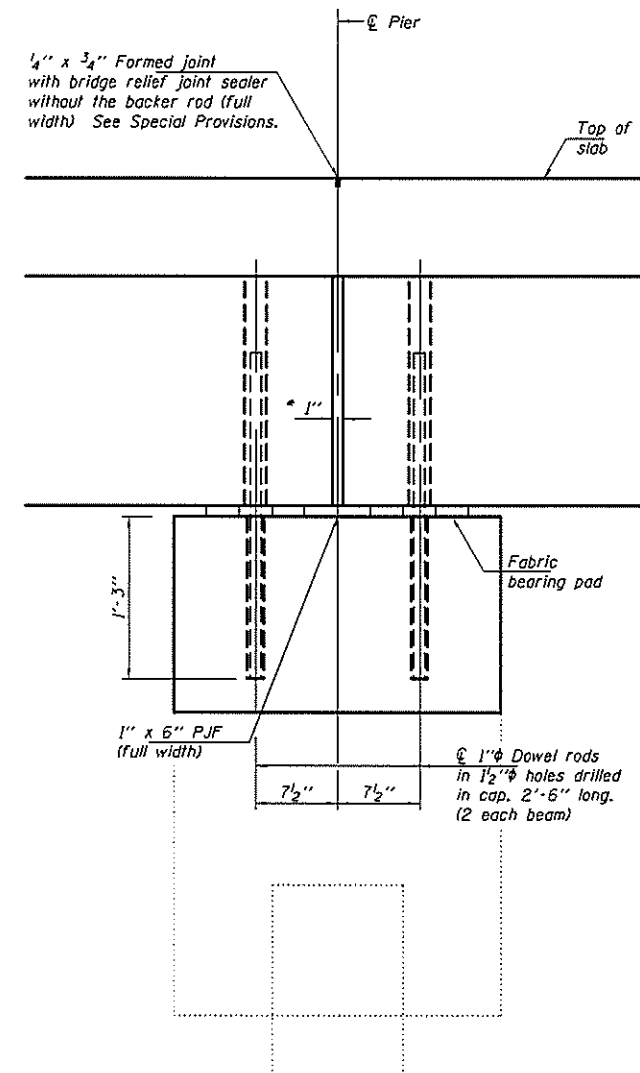
- * Loop Ferrule inserts for 1/2" φ bolts. Place at center of beam depth.
- ** Place #4 D(E) bars at 9" cts. in fascia beam. D(E) bar included in cost of beam.
- *** Cut existing reinforcement 6" from removal line to facilitate installation of Mechanical Splicers.



BAR D(E)



INITIAL CAMBER & ANTICIPATED FILLET
(For information only)



SECTION THRU PIER
(Dimensions are of Rt. L's)
Reinforcement not shown for clarity

DESIGNED ATH
CHECKED CCC
DRAWN ballva
CHECKED ATH CCC

PASSED

Carl Perry
ACTING ENGINEER OF BRIDGES AND STRUCTURES

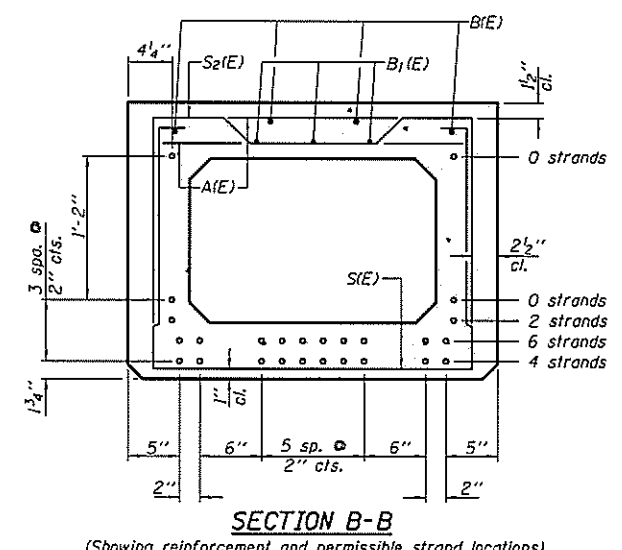
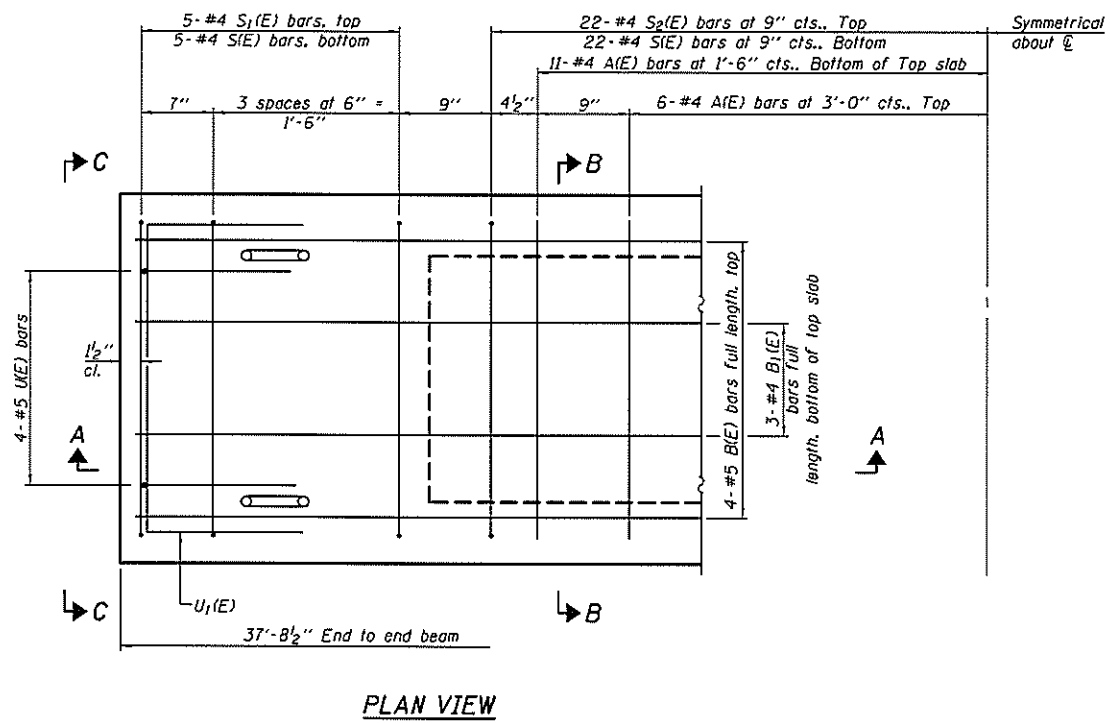
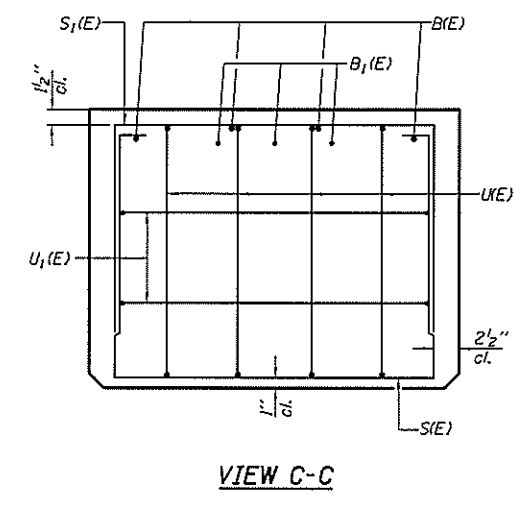
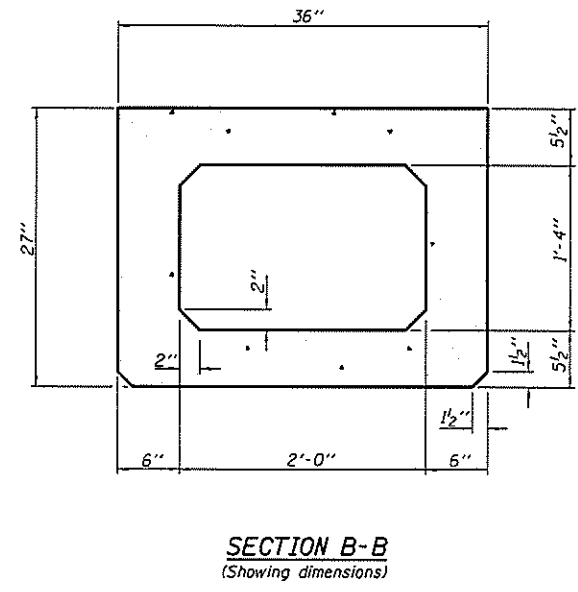
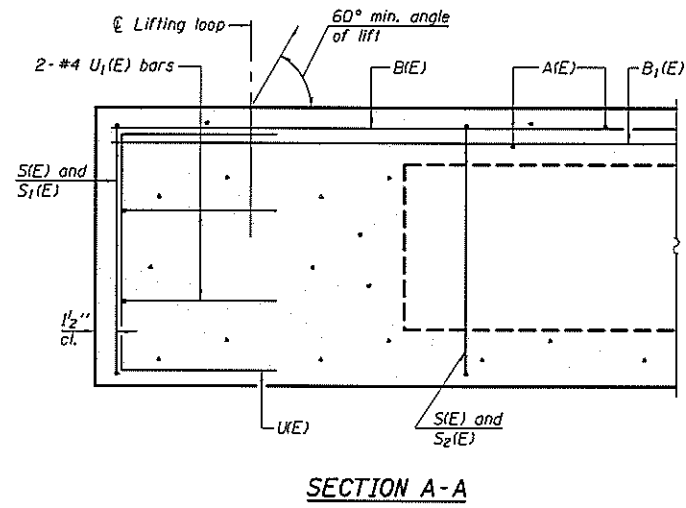
DATE - JANUARY 29, 2016
REVISED
REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE RECONSTRUCTION DETAILS
SN 038-0155 AND 038-0156

SHEET 5 OF 12 SHEETS

F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	3816B,6B-11R	IROQUOIS	41	18
CONTRACT NO. 66E92			ILLINOIS FED. AID PROJECT	



BAR LIST
ONE BEAM ONLY
(For information only)

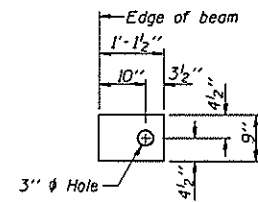
Bar	No.	Size	Length	Shape
A1(E)	34	#4	2'-7"	—
B1(E)	4	#5	37'-4"	—
B1(E)	3	#4	37'-4"	—
S1(E)	54	#4	7'-5"	⌊
S1(E)	10	#4	5'-11"	⌊
S2(E)	44	#4	6'-2"	⌊
U1(E)	8	#5	4'-6"	⌊
U1(E)	4	#4	5'-0"	⌊

Note: See sheet 7 of 12 for additional details and Bill of Material.

MINIMUM BAR LAP
#4 bar = 1'-11"
#5 bar = 2'-6"

PD-2736-0 6-8-15

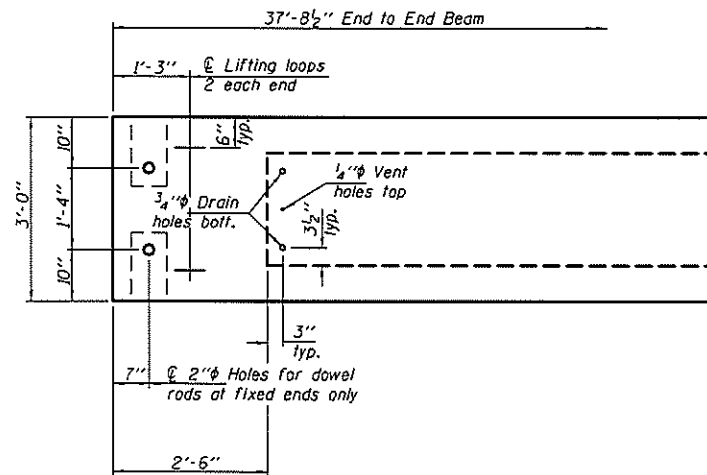
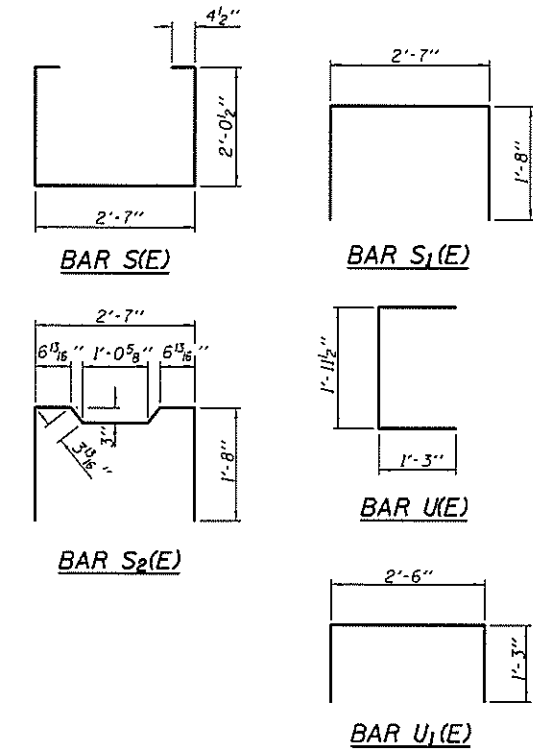
DESIGNED ATH	DATE - JANUARY 29, 2016	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	27" x 36" PPC DECK BEAM SPANS 1 & 3 SN 038-0155 & 038-0156		F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED CCC	REVIS				57	3816B,68-11R	IROQUOIS	41	19
DRAWN baliva	REVIS				CONTRACT NO. 66E92				
CHECKED ATH CCC	REVIS				ILLINOIS FED. AID PROJECT				



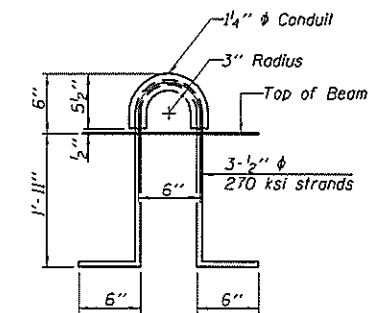
FABRIC BEARING PAD

FIXED

Notes:
 All bearing pads shall be 1" thick.
 Omit holes when using expansion bearings.
 Expansion bearing pad shall be bonded to the substructure.



PLAN VIEW



LIFTING LOOP DETAIL

BILL OF MATERIAL

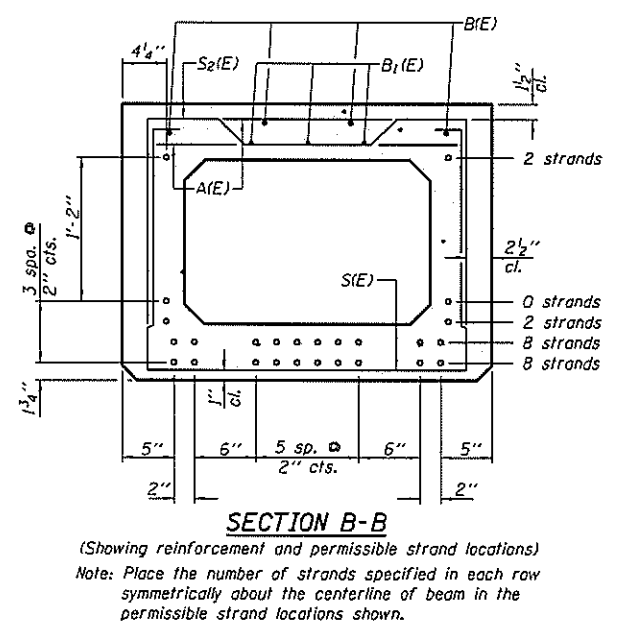
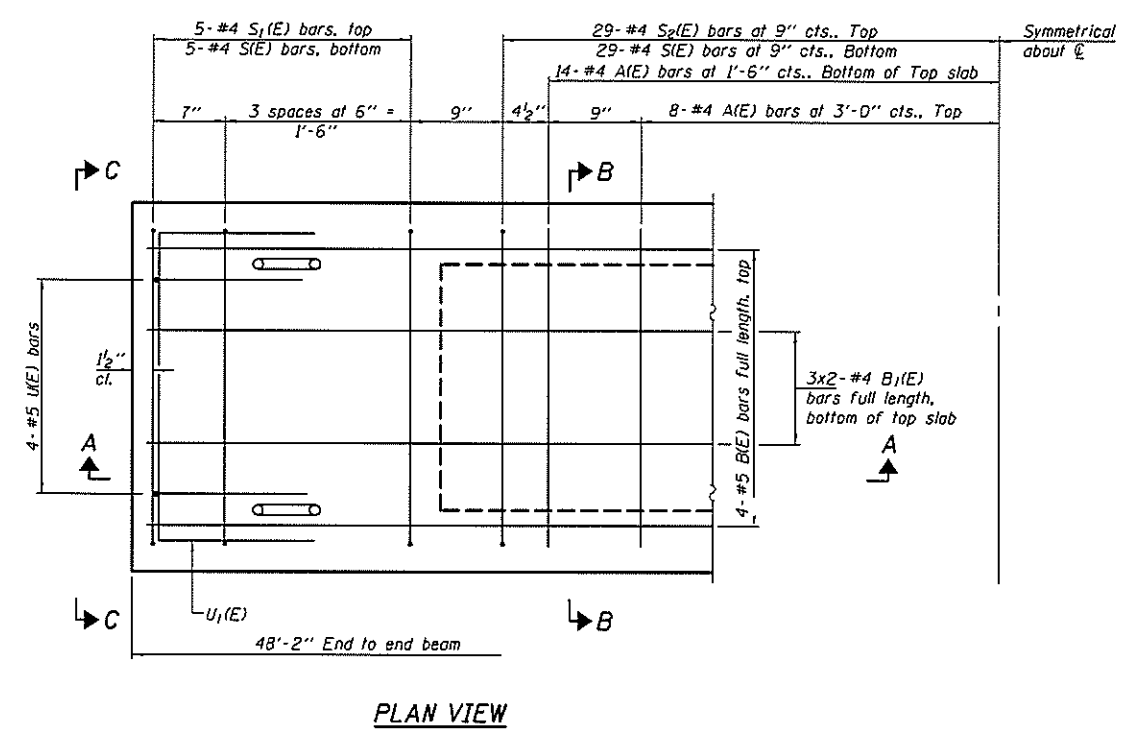
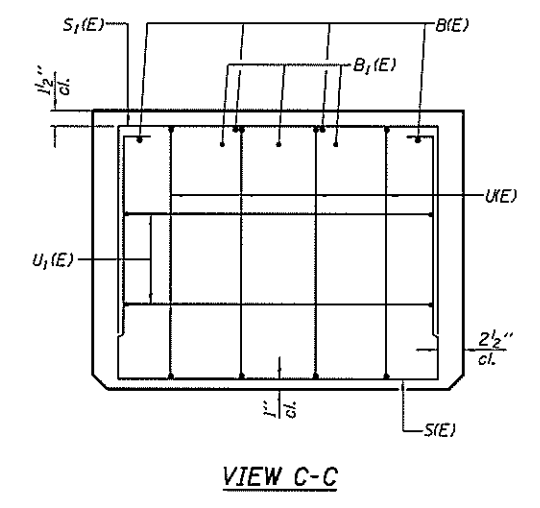
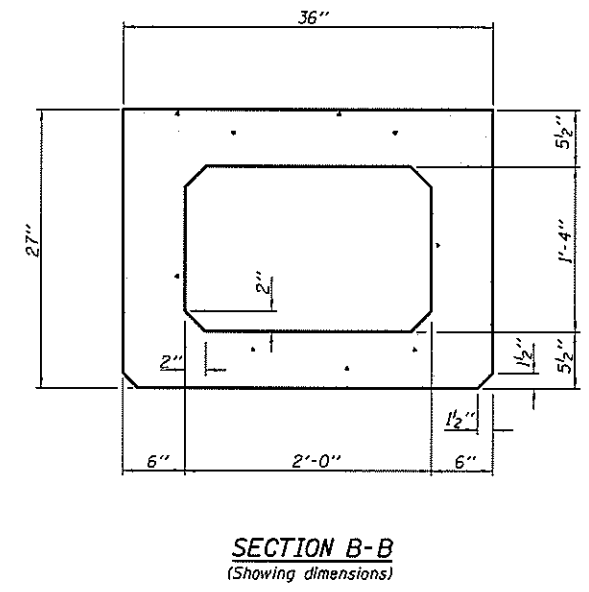
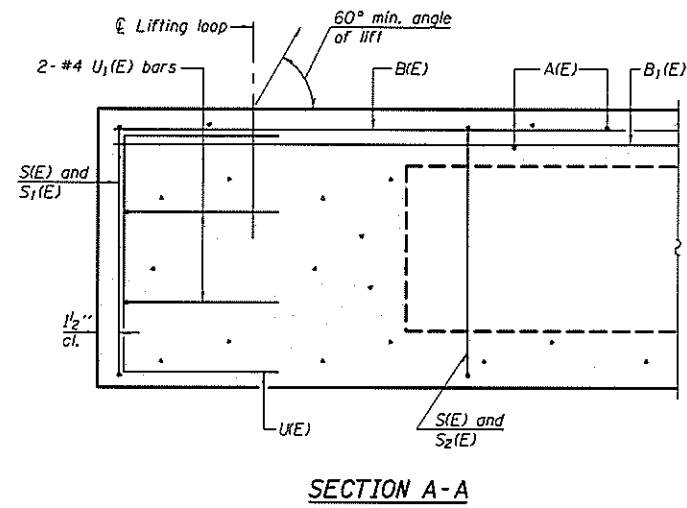
Precast Prestressed Conc. Deck Bms. (27" depth)	Sq. Ft.	905
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NOTES

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in. The 1" rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly is in place.
 Reinforcement bars shall conform to ASTM A 706, Grade 60. (See Special Provisions). Two 1/2" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.
 A minimum 2 1/2" diameter lifting pin shall be used to engage the lifting loops during handling. Corrosion Inhibitor, per Article 1020.05(b)(12) and 1021.06 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.
 Compressive strength of prestressed concrete, f'c, shall be 6000 psi.
 Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi.

PD-2736-0D 6-8-15

DESIGNED ATH	DATE - JANUARY 29, 2016	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	27" x 36" PPC DECK BEAM DETAILS SPANS 1 & 3		F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED CCC	REVISED		SN 038-0155 & 038-0156		57	3816B,68-11R	IROQUOIS	41	20
DRAWN balliva	REVISED		SHEET 7 OF 12 SHEETS		CONTRACT NO. 66E92				
CHECKED ATH CCC	REVISED		ILLINOIS FED. AID PROJECT						



BAR LIST
ONE BEAM ONLY
(For information only)

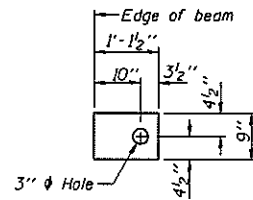
Bar	No.	Size	Length	Shape
A(E)	44	#4	2'-7"	—
B(E)	4	#5	47'-10"	—
B1(E)	6	#4	24'-11"	—
S(E)	68	#4	7'-5"	⌌
S1(E)	10	#4	5'-11"	⌌
S2(E)	58	#4	6'-2"	⌌
U(E)	8	#5	4'-6"	⌌
U1(E)	4	#4	5'-0"	⌌

Note: See sheet 9 of 12 for additional details and Bill of Material.

MINIMUM BAR LAP
#4 bar = 1'-11"
#5 bar = 2'-6"

PD-2736-0 6-8-15

DESIGNED ATH	DATE - JANUARY 29, 2016	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	27" x 36" PPC DECK BEAM SPAN 2 SN 038-0155 & 038-0156	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
CHECKED CCC	REVIS			57	38GB,68-11R	IRODOIS	41	21	
DRAWN baliva	REVIS			SHEET 8 OF 12 SHEETS		CONTRACT NO. 66E92			
CHECKED ATH CCC	REVIS			ILLINOIS FED. AID PROJECT					

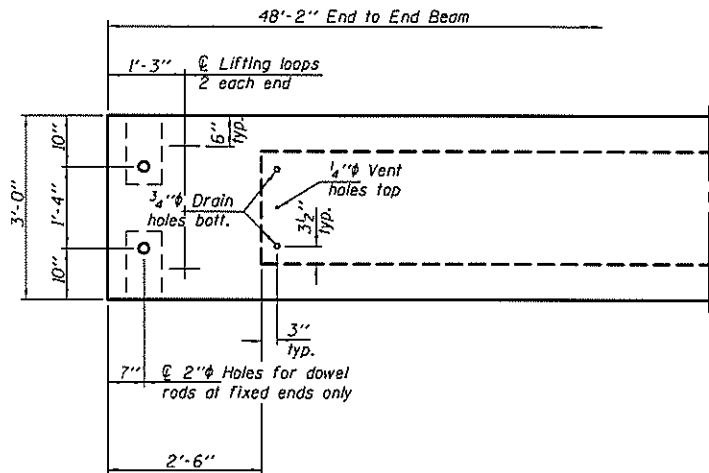


FABRIC BEARING PAD

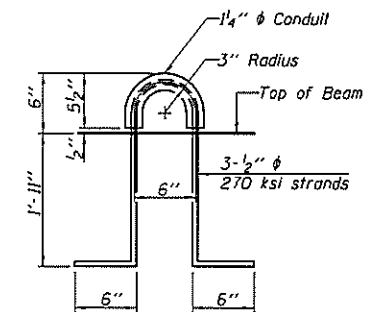
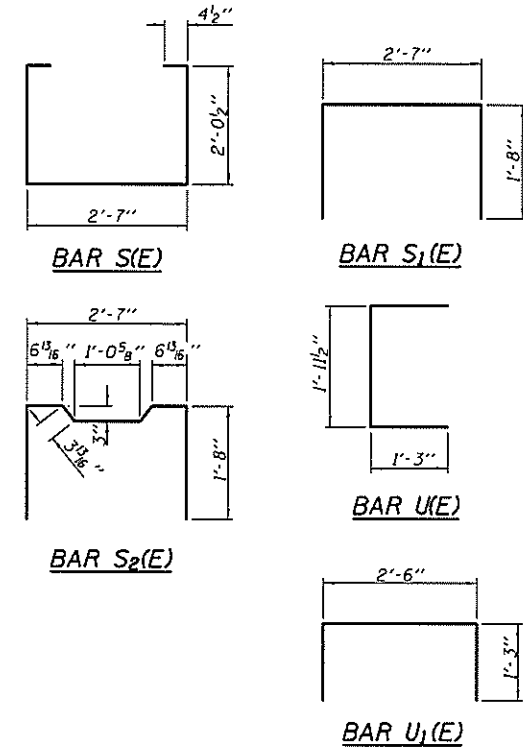
FIXED

Notes:

- All bearing pads shall be 1" thick.
- Omit holes when using expansion bearings.
- Expansion bearing pad shall be bonded to the substructure.



PLAN VIEW



LIFTING LOOP DETAIL

BILL OF MATERIAL

Precast Prestressed Conc. Deck Bms. (27" depth)	Sq. Ft.	578
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NOTES

- Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in.
- The 1" diameter rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly is in place.
- Reinforcement bars shall conform to ASTM A 706, Grade 60. (See Special Provisions).
- Two 1/8" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.
- A minimum 2 1/2" diameter lifting pin shall be used to engage the lifting loops during handling.
- Corrosion Inhibitor, per Article 1020.05(b)(12) and 1021.06 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.
- Compressive strength of prestressed concrete, f'c, shall be 6000 psi.
- Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi.

PD-2736-OD 6-8-15

DESIGNED	ATH
CHECKED	CCC
DRAWN	baliva
CHECKED	ATH CCC

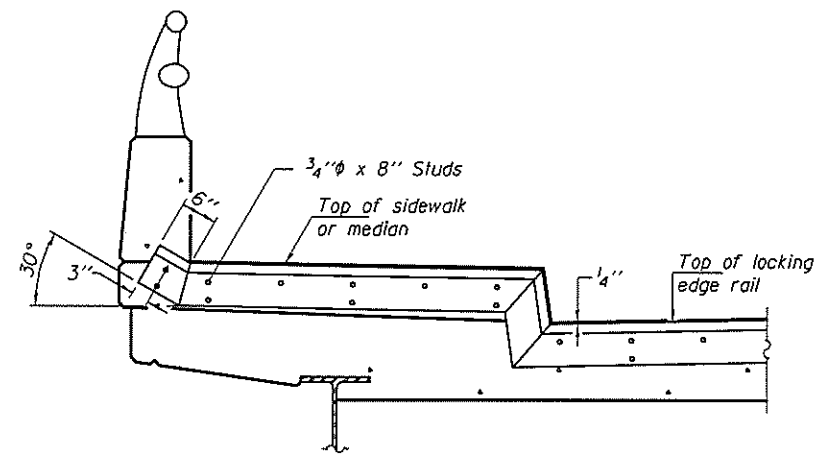
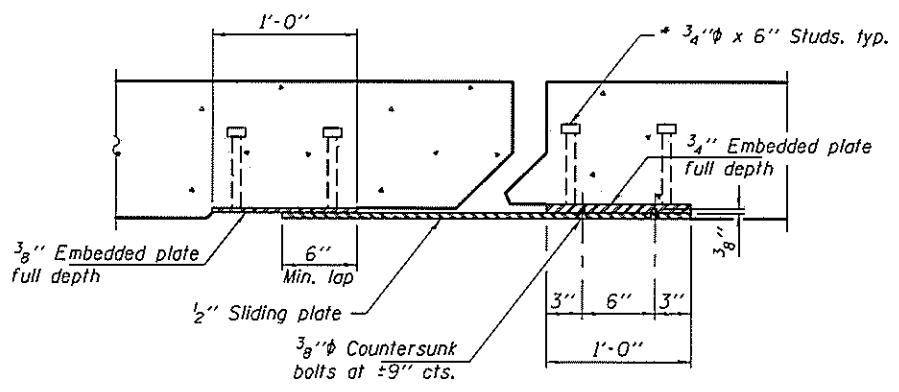
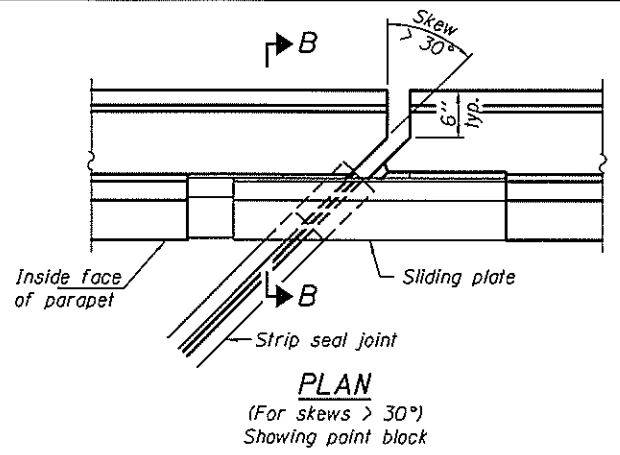
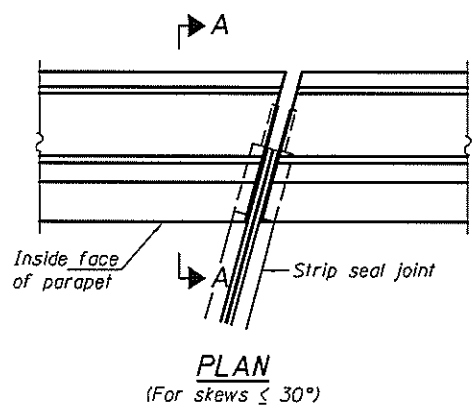
PASSED	<i>[Signature]</i> ACTING ENGINEER OF BRIDGES AND STRUCTURES	DATE - JANUARY 29, 2016	REVISED
			REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

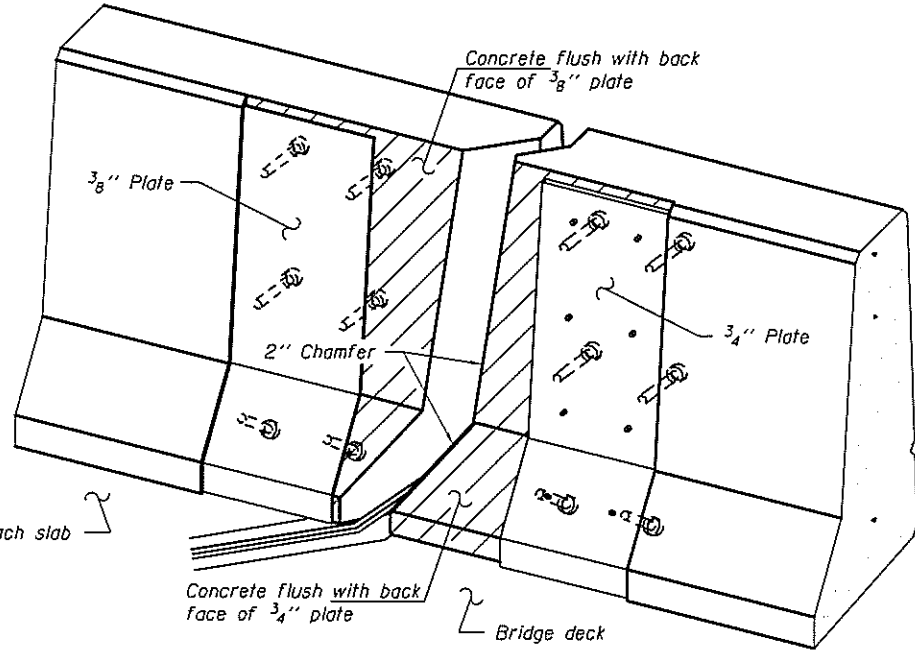
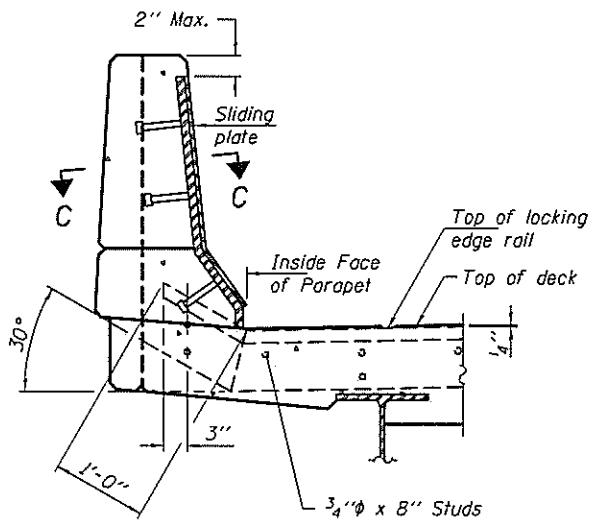
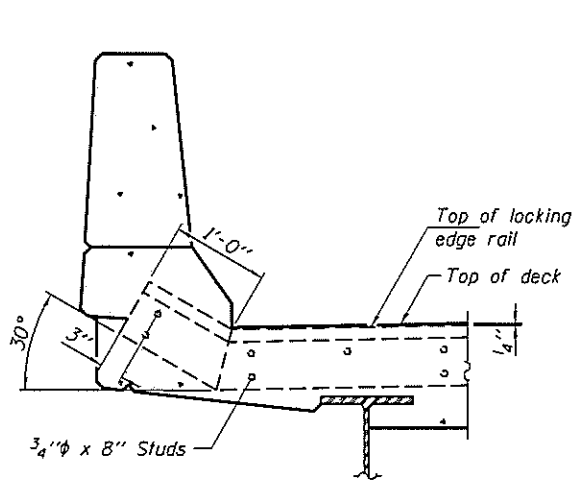
27" x 36" PPC DECK BEAM DETAILS SPAN 2
SN 038-0155 & 038-0156

SHEET 9 OF 12 SHEETS

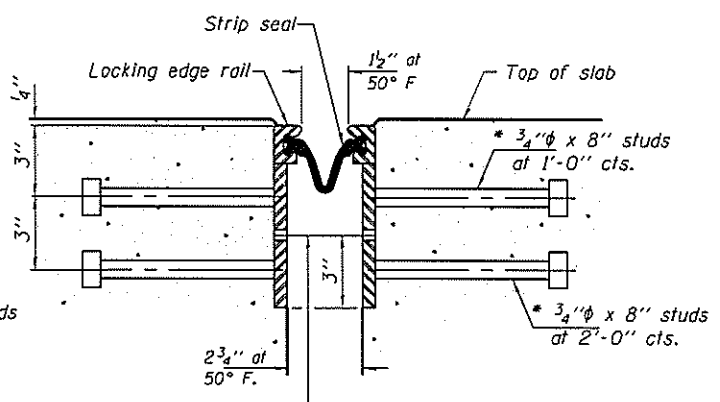
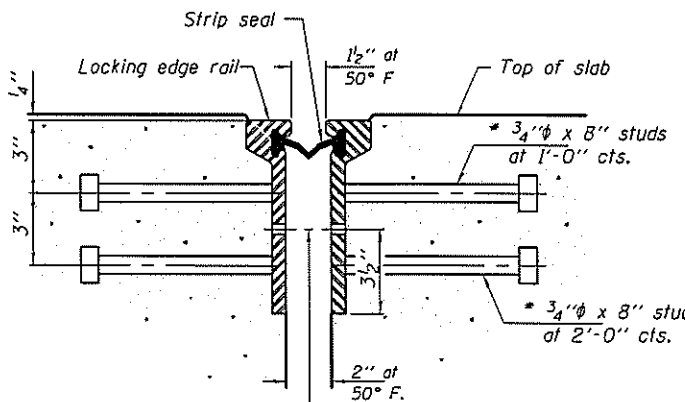
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	3816B,6B-11JR	ILLINOIS	41	22
				CONTRACT NO. 66E92
ILLINOIS FED. AID PROJECT				



TYPICAL END TREATMENT AT SIDEWALK OR MEDIAN
Shorter plates with a single row of studs at 12" cts. may be necessary on medians which are shallower than 9". See manufacturer's recommendation.

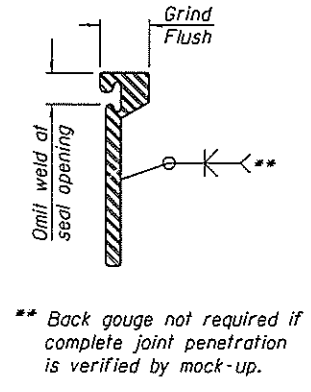
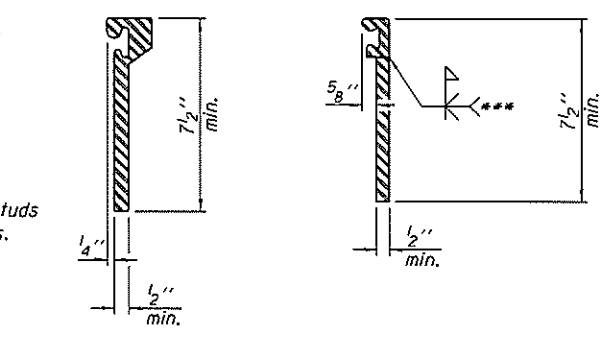


Notes:
The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.
The Locking Edge Rails depicted are conceptual only, except for the minimum dimensions shown. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities.
The manufacturer's recommended installation methods shall be followed.
The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.
All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications. Maximum space between rail segments shall be 3/16", sealed with a suitable sealant. Joints in rails within 10 ft. of curbs shall be welded.
Parapet plates and anchorage studs for skews $> 30^\circ$ included in the cost of Prefabricated Joint Strip Seal.



7/16" holes at 4'-0" cts. for 3/8" bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

7/16" holes at 4'-0" cts. for 3/8" bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.



** Back gouge not required if complete joint penetration is verified by mock-up.

TWO SUPERSTRUCTURES BILL OF MATERIAL

Item	Unit	Total
Prefabricated Joint Strip Seal	Foot	168

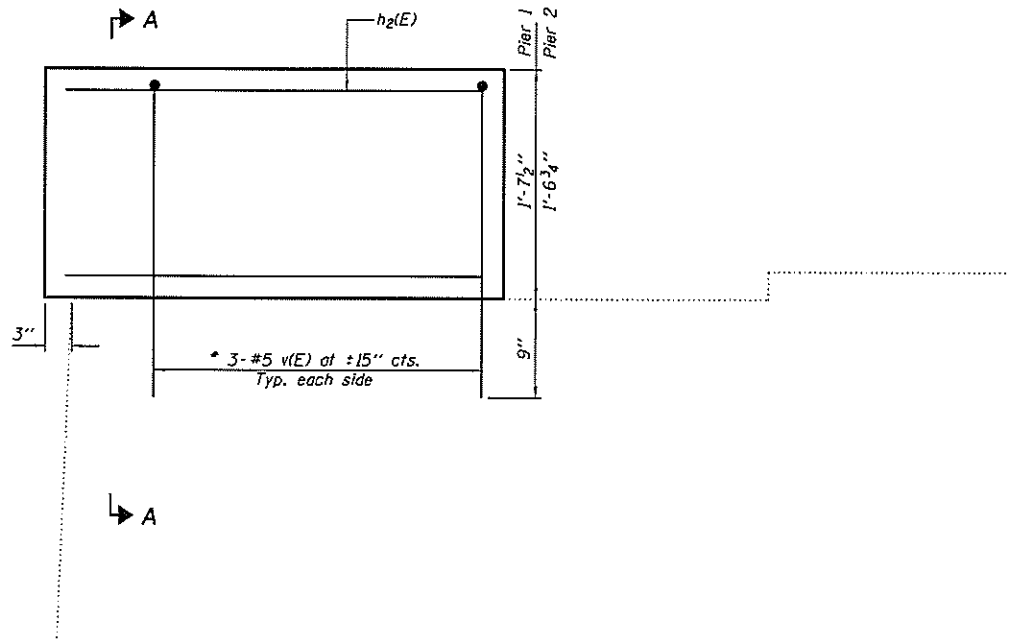
The inside of the locking edge rail groove shall be free of weld residue.
Rolled rail shown, welded rail similar.

LOCKING EDGE RAILS

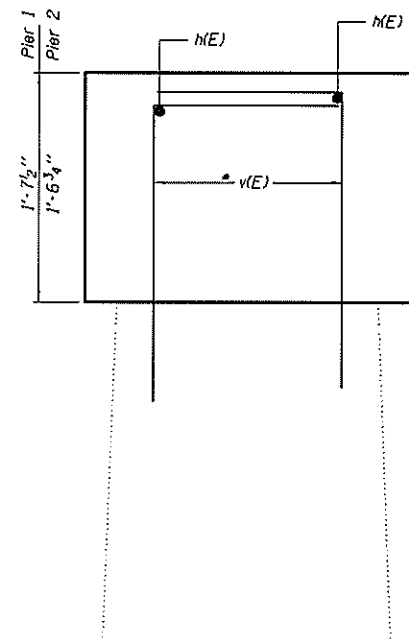
EJ-SSJ

1-27-12

* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.

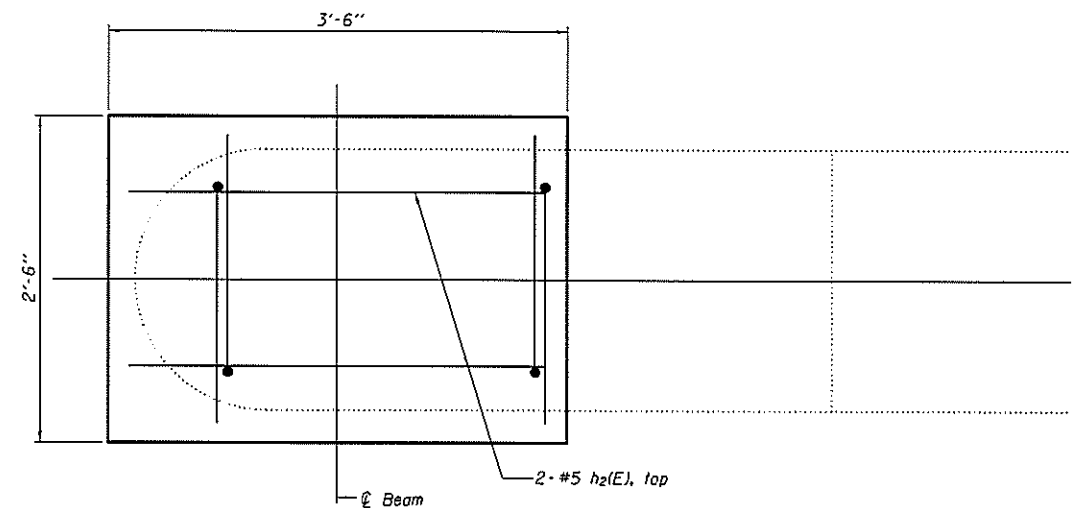


ELEVATION

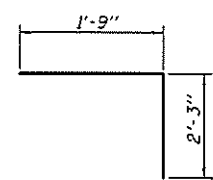


SECTION A-A

* Epoxy grout v(E) bars in 9" min. holes according to Article 584 of the Standard Specifications.



PLAN



BAR v(E)

**BILL OF MATERIAL
2 BRIDGES**

Bar	No.	Size	Length	Shape
h ₂ (E)	16	#5	3'-2"	—
v(E)	48	#5	4'-0"	⌒
Concrete Structures			Cu. Yd.	4.4
Reinforcement Bars, Epoxy Coated			Pound	250

DESIGNED *ATH*
 CHECKED *CCC*
 DRAWN *baliva*
 CHECKED *ATH CCC*

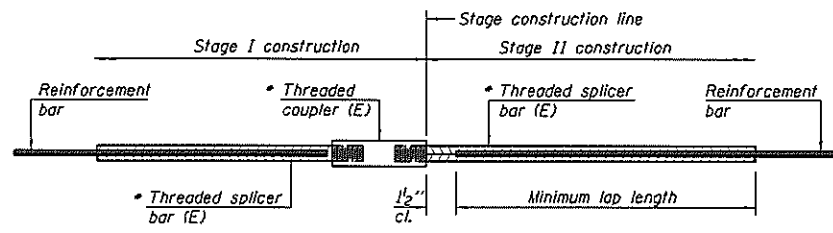
DATE - JANUARY 29, 2016
 PASSED *[Signature]*
 ACTING ENGINEER OF BRIDGES AND STRUCTURES

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PIER EXTENSION DETAILS
 SN 038-0155 & 038-0156
 SHEET 11 OF 12 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	3816B,6B-11R	IROQUOIS	41	24

CONTRACT NO. 66E92
 ILLINOIS FED. AID PROJECT



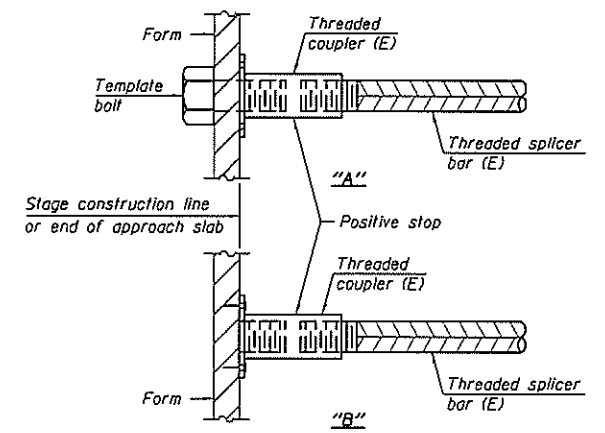
STANDARD BAR SPLICER ASSEMBLY

Threaded splicer bar length = min. lap length + 1 1/2" + thread length

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

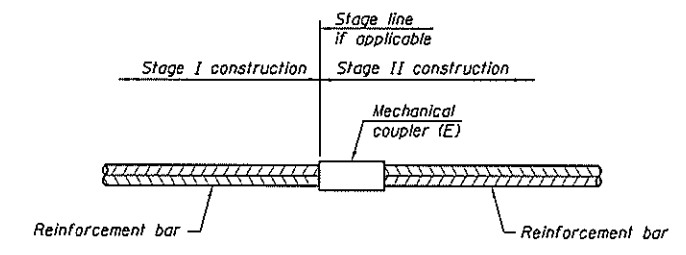
**TWO SUPERSTRUCTURES
BILL OF MATERIAL**

Location	Bar size	No. assemblies required	Minimum lap length
N. ABUT. DECK	#5	32	3'-2"
N. ABUT. BLOCK OUT	#6	12	3'-7"
S. ABUT. DECK	#5	32	3'-2"
S. ABUT. BLOCK OUT	#6	12	3'-7"



INSTALLATION AND SETTING METHODS

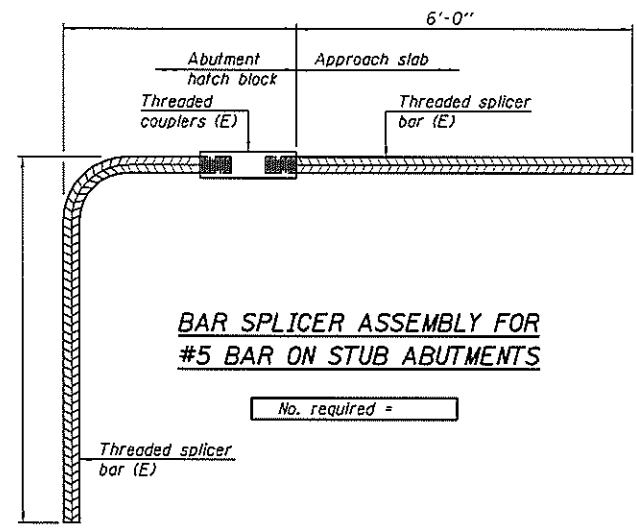
"A" : Set bar splicer assembly by means of a template ball.
 "B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
 (E) : Indicates epoxy coating.



STANDARD MECHANICAL SPLICER

**TWO SUPERSTRUCTURES
BILL OF MATERIAL**

Location	Bar size	No. assemblies required
DECK, STAGE I	#5	708
DECK, STAGE II	#5	708



**BAR SPLICER ASSEMBLY FOR
#5 BAR ON STUB ABUTMENTS**

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 6-8-15

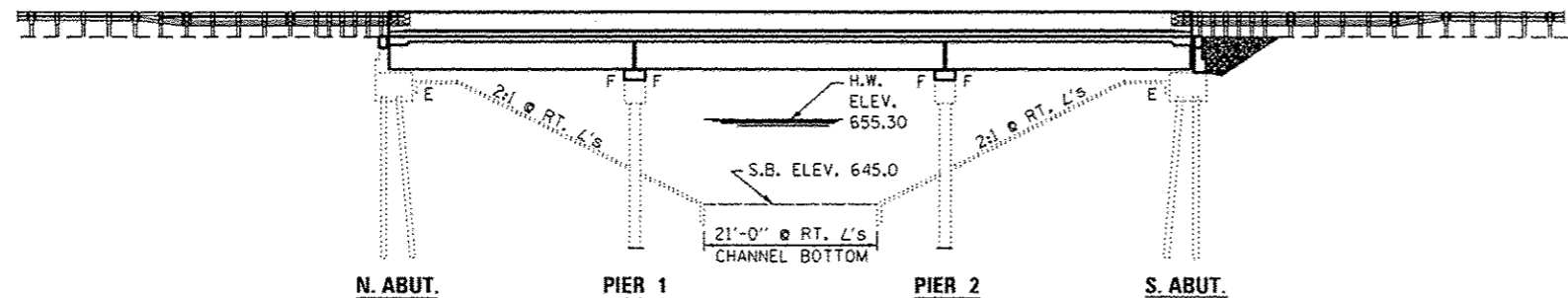
DESIGNED ATH
 CHECKED CCC
 DRAWN baliva
 CHECKED ATH CCC

DATE - JANUARY 29, 2016
 PASSED *[Signature]*
 ACTING ENGINEER OF BRIDGES AND STRUCTURES

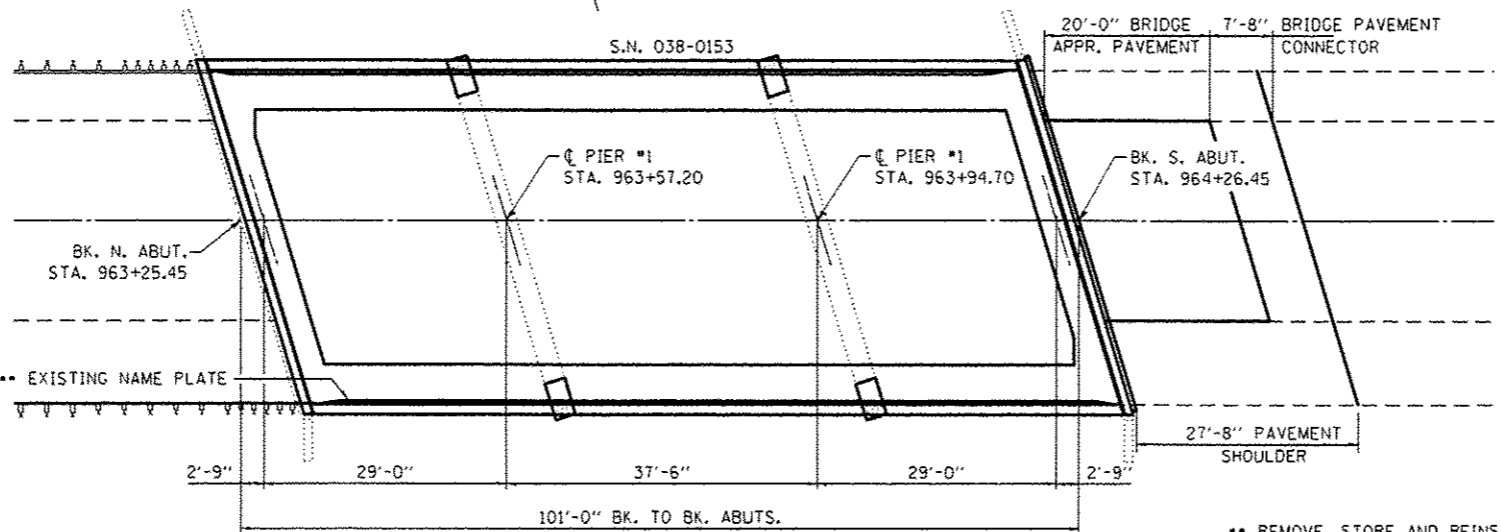
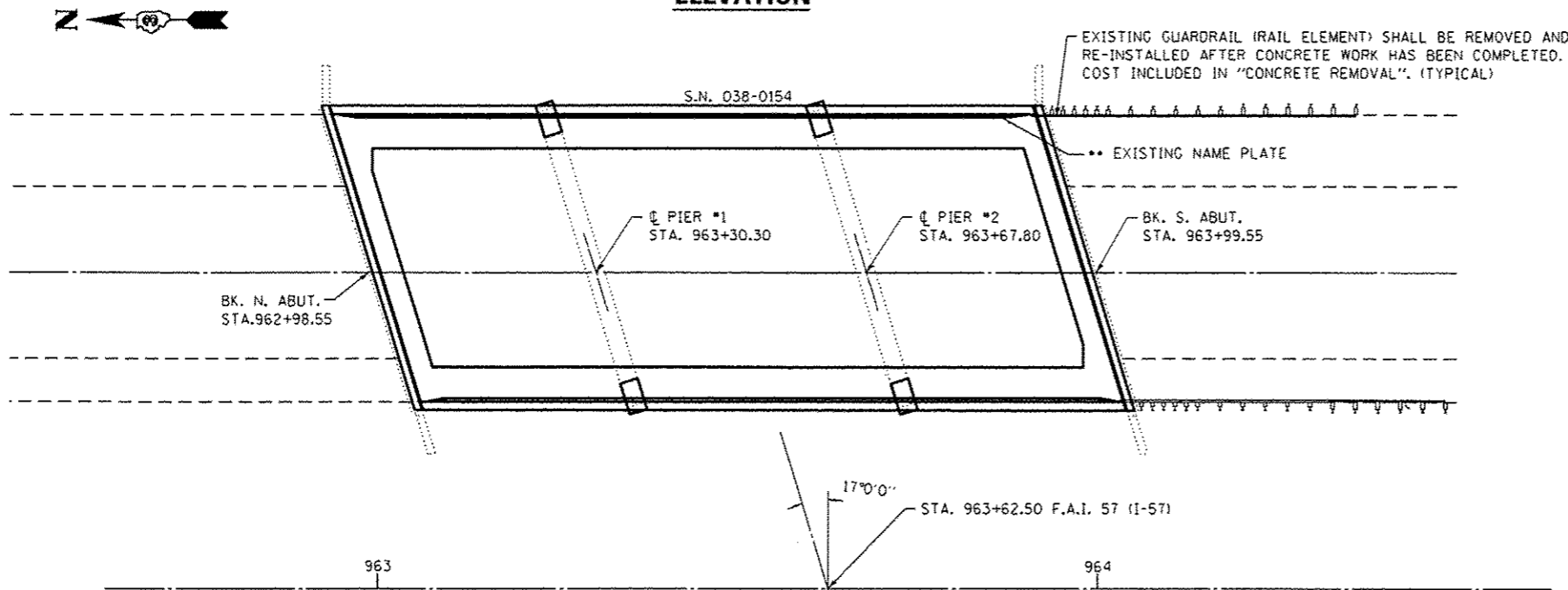
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

MECHANICAL SPLICER ASSEMBLY DETAILS
 SN 038-0155 & 038-0156

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	3816B,68-111R	IRROUOIS	41	25
				CONTRACT NO. 66E92
ILLINOIS FED. AID PROJECT				



ELEVATION



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 WORK; HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT BID PRICE FOR THE WORK.

ALL STRUCTURAL STEEL SHALL CONFORM TO AASHTO CLASSIFICATION M-270 GR 36, UNLESS OTHERWISE NOTED.

THE DECK SHALL HAVE ITS FINAL FINISH TINED ACCORDING TO ARTICLE 420.09(0)(1) OF THE STANDARD SPECIFICATIONS. COST INCLUDED WITH CONCRETE SUPERSTRUCTURES.

REINFORCEMENT BARS DESIGNATED (E) SHALL BE EPOXY COATED.

THE CONTRACTOR SHALL MAKE ALLOWANCE FOR THE DEFLECTION OF FORMS, SHRINKAGE AND SETTLEMENT OF FALSEWORK.

EXISTING REINFORCEMENT BARS EXTENDING INTO THE REMOVAL AREA SHALL BE CLEANED, STRAIGHTENED AND INCORPORATED INTO THE 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 OPENING SHALL BE ADJUSTED ACCORDING TO ARTICLE 520.04 OF THE STANDARD SPECIFICATIONS WHEN THE DECK IS POURED AT AN AMBIENT TEMPERATURE OTHER THAN 50° F.

WHILE THE NEED FOR A TEMPORARY SUPPORT SYSTEM FOR THE SECTION OF THE DECK AND INTERIOR BEAMS TO REMAIN IS NOT EXPECTED IT IS THE CONTRACTOR'S STRUCTURAL ENGINEER RESPONSIBILITY TO DETERMINE ITS NEED IF ADDITIONAL CONSTRUCTION LOADS ARE APPLIED TO THAT SECTION OF THE DECK.

**TWO SUPERSTRUCTURES
TOTAL BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
CONCRETE REMOVAL	CU. YD.	193.6
CONCRETE SUPERSTRUCTURE	CU. YD.	181.8
PRECAST PRESTRESSED CONCRETE DECK BEAMS (21" DEPTH)	SQ. FT.	1159
REINFORCEMENT BARS EPOXY COATED	POUND	36210
BAR SPLICERS	EACH	94
MECHANICAL SPLICERS	EACH	1088
PREFORMED JOINT STRIP SEAL	FOOT	176
PROTECTIVE COAT	SQ. YD.	431
CONCRETE STRUCTURES	CU. YD.	6.7
POROUS GRANULAR EMBANKMENT	CU. YD.	14.8
STRUCTURE EXCAVATION	CU. YD.	14.8
FLOOR DRAINS	EACH	12

• TO BE USED ON ALL NEW PLACED CONCRETE



DESIGNED - *Adrian J. Holloway*
 CHECKED - *[Signature]*
 DRAWN - *to liva*
 CHECKED - *ATH OCC*

PASSED *[Signature]*
 ACTING ENGINEER OF BRIDGES AND STRUCTURES

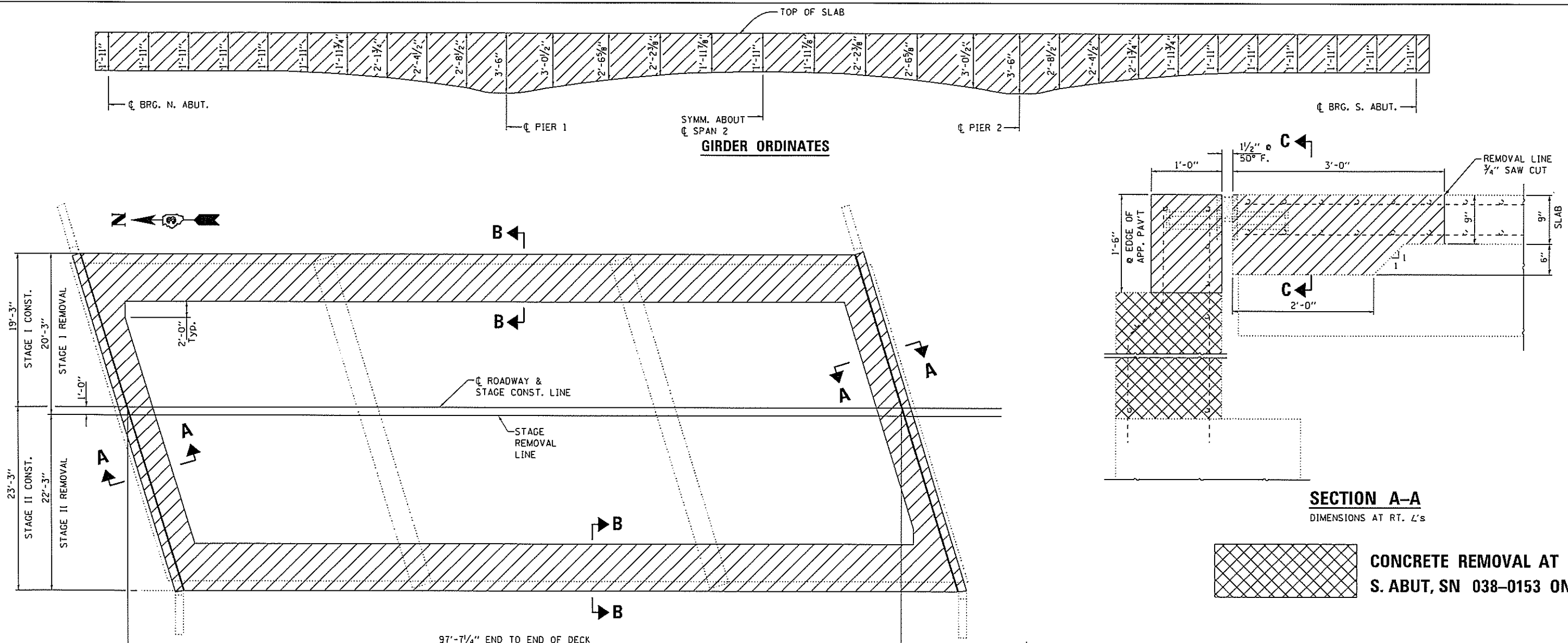
DATE - JANUARY 29, 2016
 REVISED
 REVISED

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

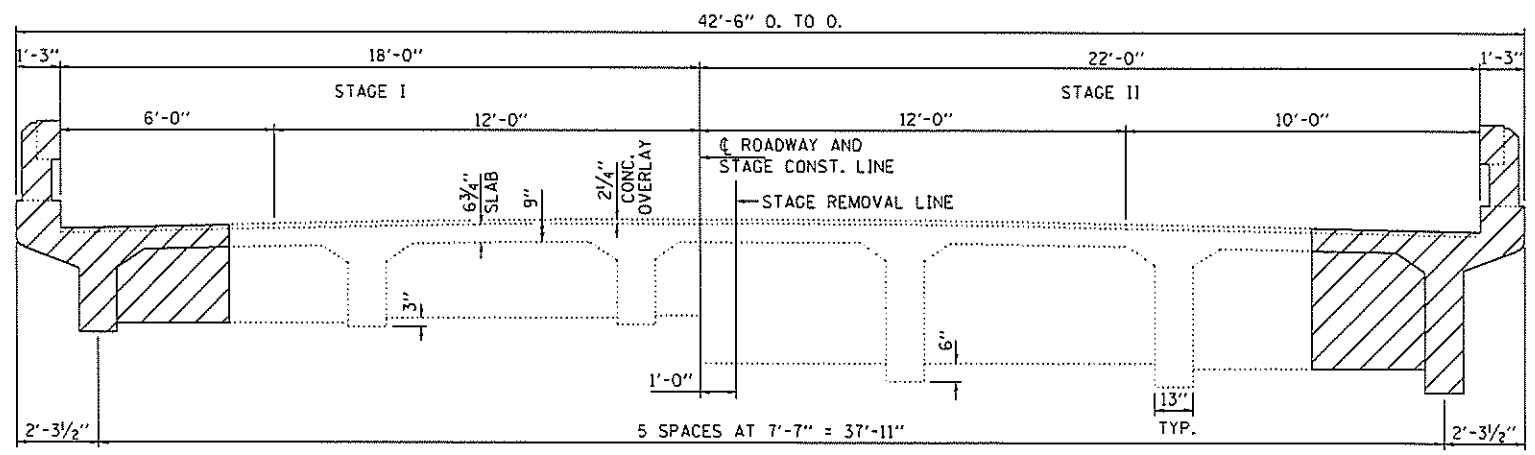
GENERAL PLAN AND ELEVATION
 SN 038-0153 AND 038-0154

SHEET 1 OF 16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	38(6B,6B-1)R	IRROQUOIS	41	26
			CONTRACT NO. 66E92	
ILLINOIS FED. AID PROJECT				

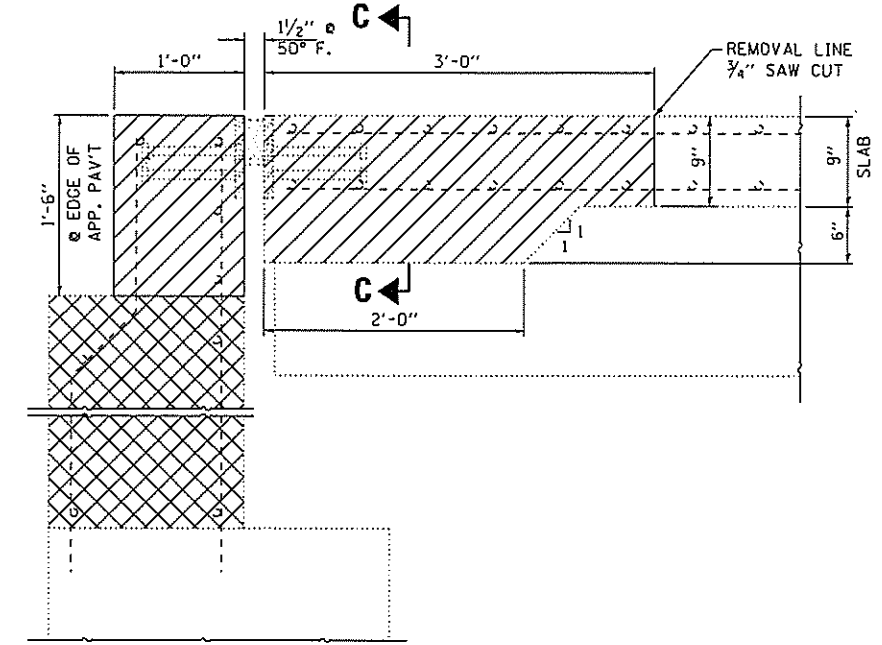


PLAN
SOUTHBOUND PLAN SHOWN
NORTHBOUND SIMILAR THRU 180 DEG. ROTATION ABOUT CENTERLINE OF FAI 57



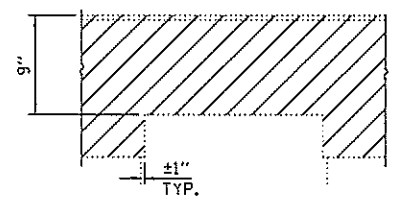
CROSS SECTION

TOP OF SLAB
SYMM. ABOUT
GIRDER ORDINATES

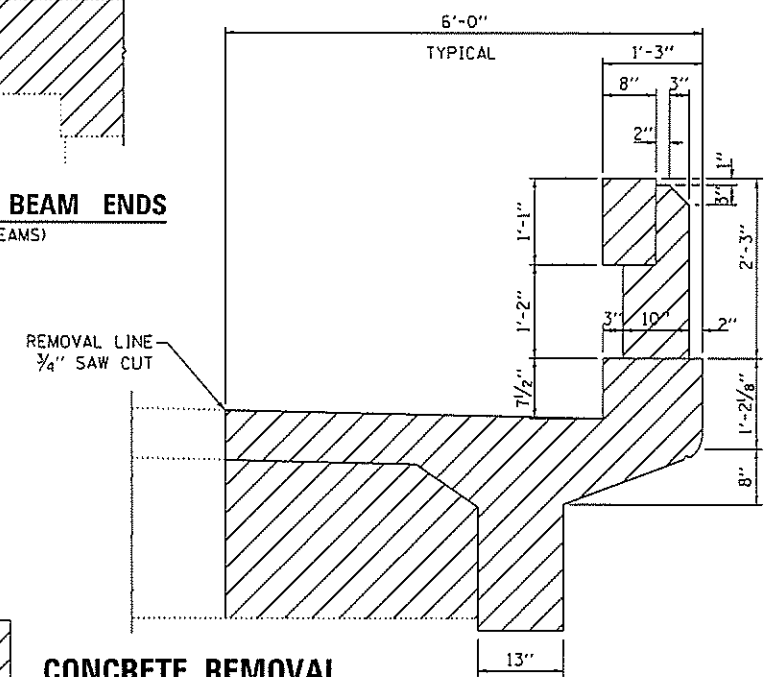


SECTION A-A
DIMENSIONS AT RT. L's

CONCRETE REMOVAL AT S. ABUT, SN 038-0153 ONLY



SECTION C-C AT BEAM ENDS
(INTERIOR BEAMS)



CONCRETE REMOVAL

SECTION B-B

DESIGNED <i>ATH</i>	DATE - JANUARY 29, 2016
CHECKED <i>CCC</i>	REVISED
DRAWN <i>baliva</i>	REVISED
CHECKED <i>ATH CCC</i>	

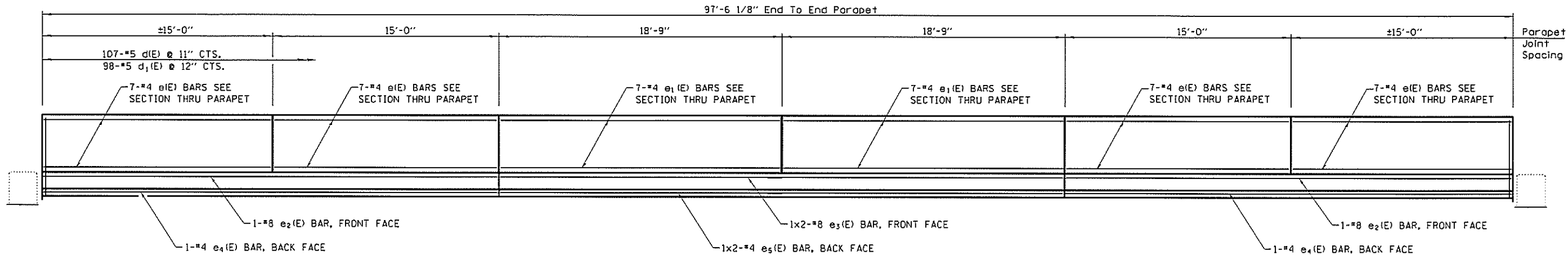
PASSED
ACTING ENGINEER OF BRIDGES AND STRUCTURES

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONCRETE REMOVAL DETAILS FOR
SN 038-0153 AND 038-0154

SHEET 2 OF 16 SHEETS

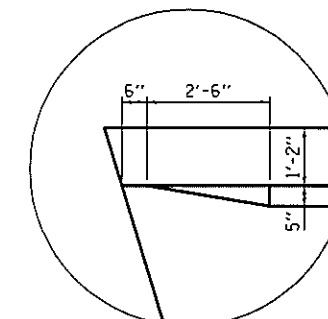
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	38(GB,GB-1)R	ILLINOIS	41	27
				CONTRACT NO. 66E92
ILLINOIS FED. AID PROJECT				



ELEVATION OF PARAPET

MINIMUM BAR LAP

- #4 BAR = 2'-8"
- #5 BAR = 3'-6"
- #8 BAR = 5'-11"



FOR SEC. C-C SEE SHEET 4 OF 16.
FOR SEC. D-D SEE SHEET 5 OF 16.

CORNER DETAIL (TYPICAL)

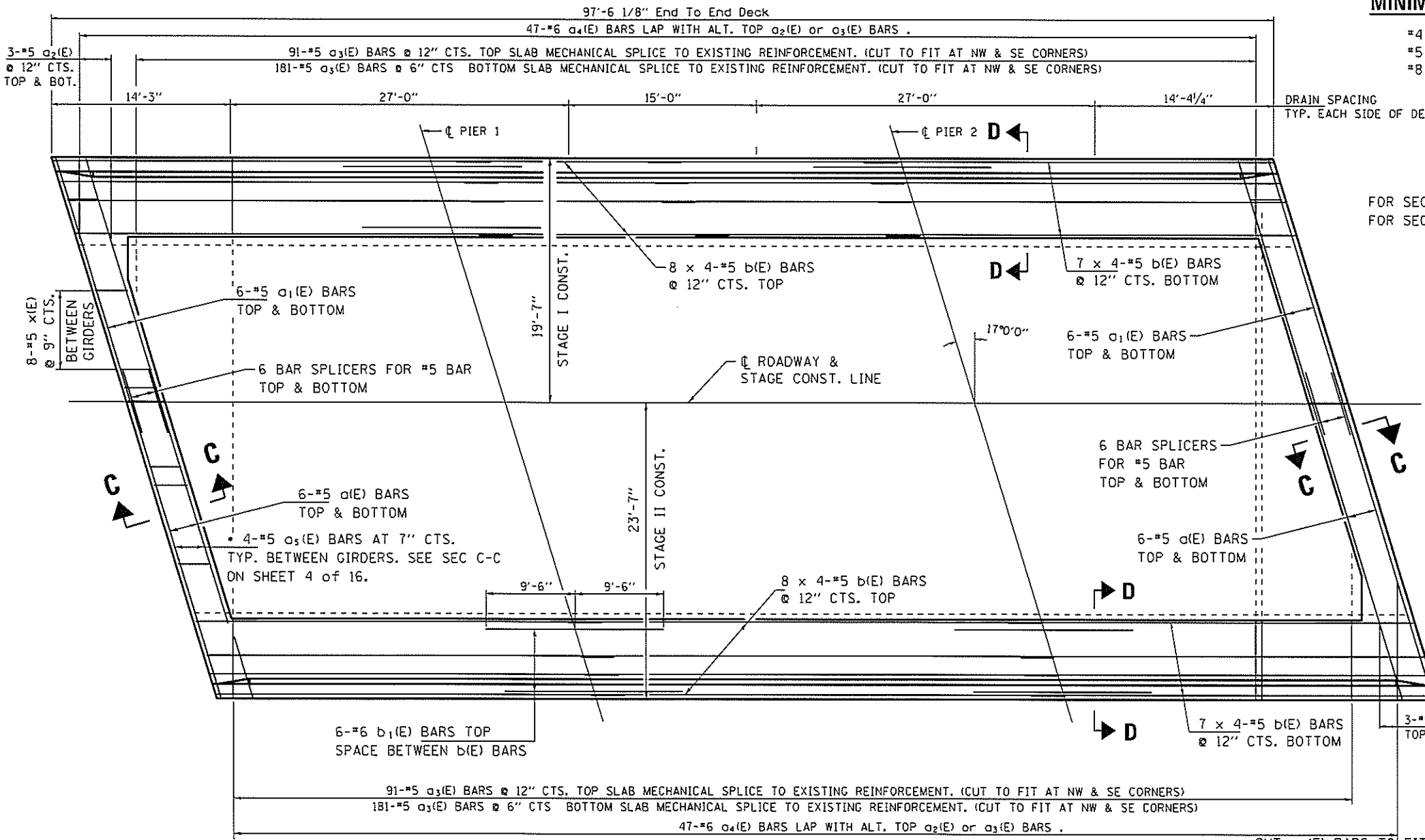
TWO SUPERSTRUCTURES

BILL OF MATERIAL

(EXCEPT S. ABUTMENT OF SN 038-0153)

BAR	NO.	SIZE	LENGTH	SHAPE
a1(E)	48	#5	24'-4"	
a1(E)	48	#5	20'-2"	
a2(E)	24	#5	9'-0"	
a3(E)	1088	#5	5'-6"	
a4(E)	188	#6	4'-0"	
a5(E)	80	#5	6'-3"	
b(E)	240	#5	27'-0"	
b1(E)	48	#6	19'-0"	
d(E)	428	#5	5'-7"	
d1(E)	392	#5	6'-8"	
e(E)	112	#4	14'-8"	
e1(E)	56	#4	18'-5"	
e2(E)	8	#8	29'-9"	
e3(E)	8	#8	21'-7"	
e4(E)	8	#4	29'-9"	
e5(E)	8	#4	19'-11"	
h(E)	18	#6	24'-4"	
h1(E)	18	#6	19'-11"	
u(E)	129	#4	2'-11"	
x(E)	160	#5	4'-9"	
CONCRETE REMOVAL			CU. YD.	164.3
CONCRETE SUPERSTRUCTURE			CU. YD.	152.5
REINFORCEMENT BARS EPOXY COATED			POUND	29080
BAR SPLICERS			EACH	82
MECHANICAL SPLICERS			EACH	1088

BARS INDICATED THUS 7 X 4-#5 ETC. INDICATES 7 LINES OF BARS WITH 4 LENGTHS PER LINE.



PLAN SHOWING DECK REINFORCEMENT

SOUTHBOUND PLAN SHOWN
NORTHBOUND SIMILAR THRU 180 DEG. ROTATION ABOUT CENTERLINE OF FAI 57

* CUT a5(E) BARS TO FIT AT END BAYS
4-#5 BAR SPLICERS AT STAGE I LINE.
CUT a5(E) TO FIT AT STAGE I AND DISCARD
REMAINDER OF BAR, ATTACH SPLICER ONLY
DURING STAGE II AND CUT TO FIT.

DESIGNED ATH
CHECKED CCC
DRAWN ballva
CHECKED ATH CCC

PASSED
ACTING ENGINEER OF BRIDGES AND STRUCTURES

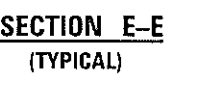
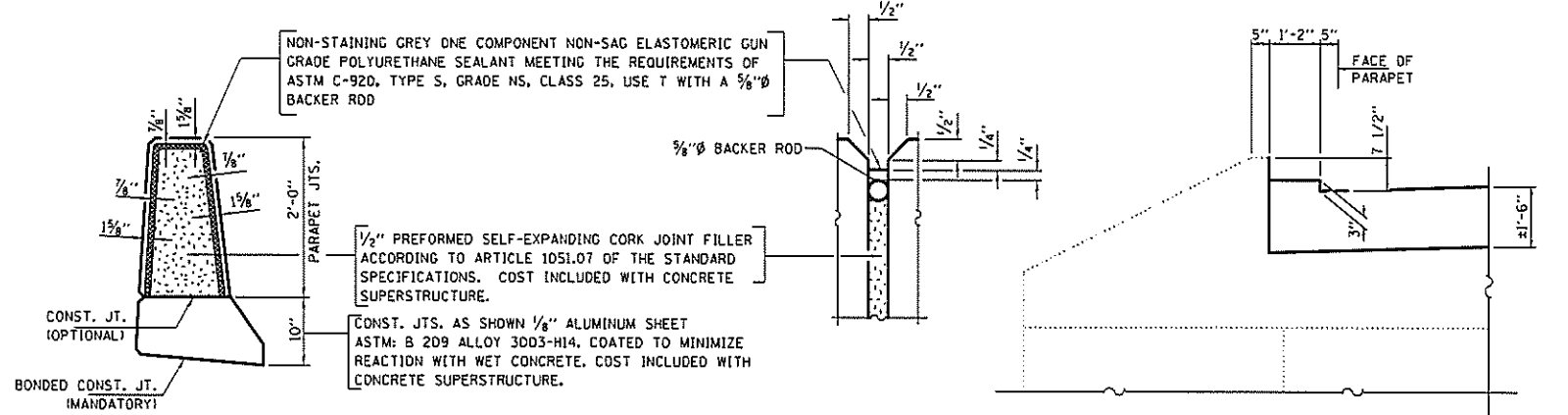
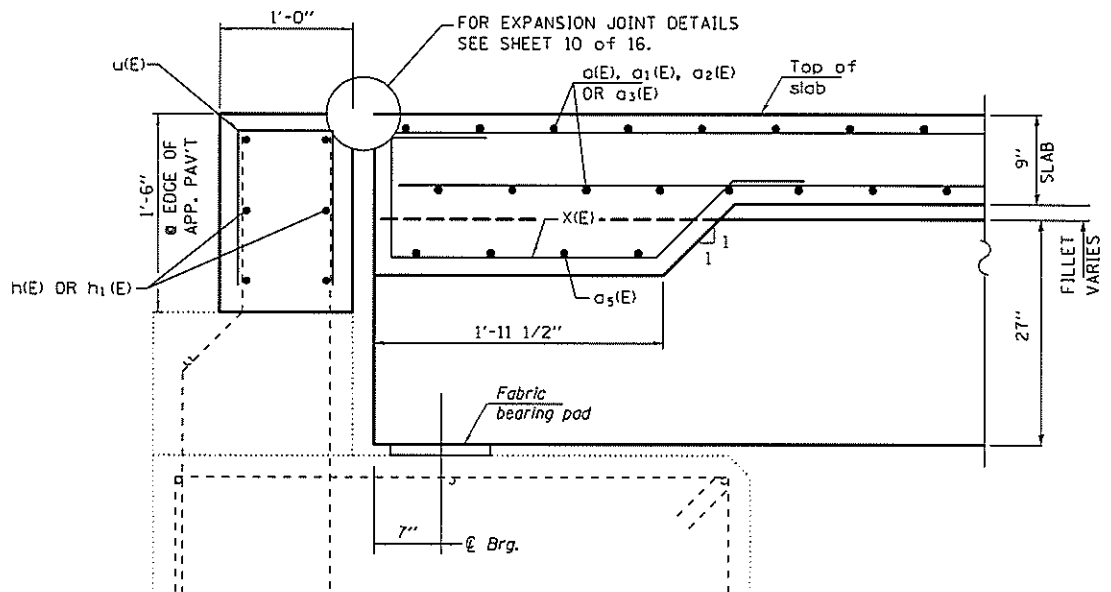
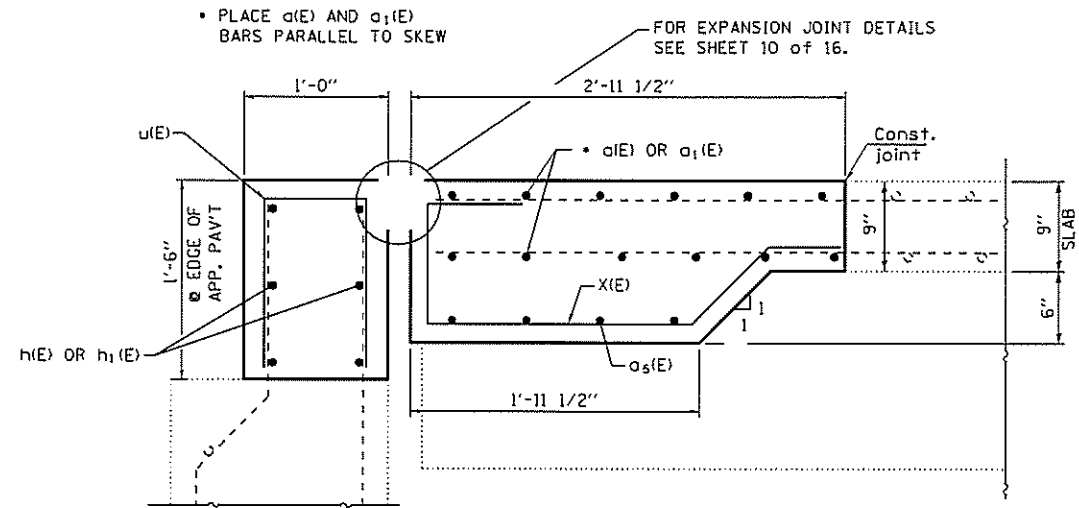
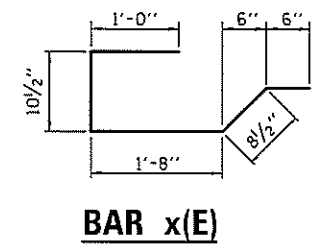
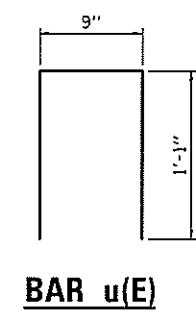
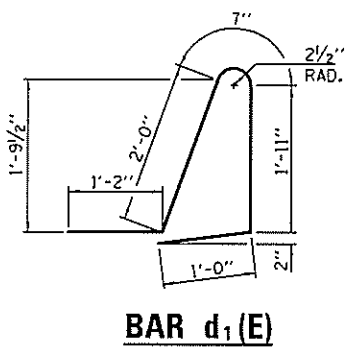
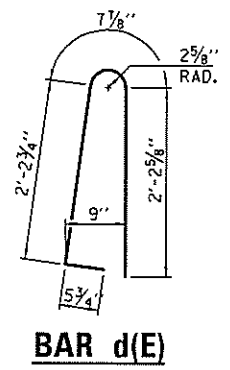
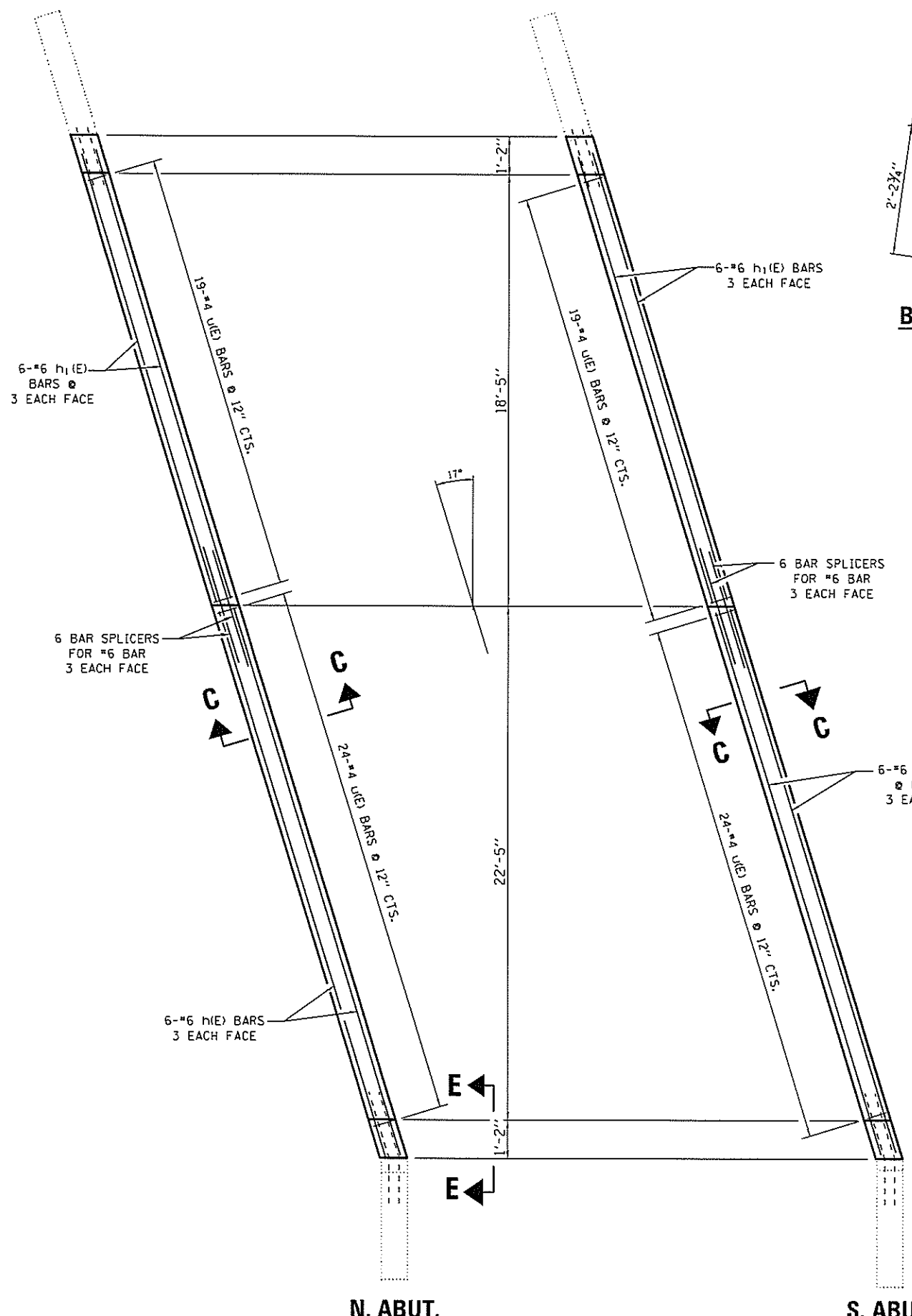
DATE - JANUARY 29, 2016
REVISED
REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE RECONSTRUCTION DETAILS
SN 038-0153 AND 038-0154

SHEET 3 OF 16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	38168,68-11R	ILLINOIS	41	28
				CONTRACT NO. 66E92
ILLINOIS FED. AID PROJECT				



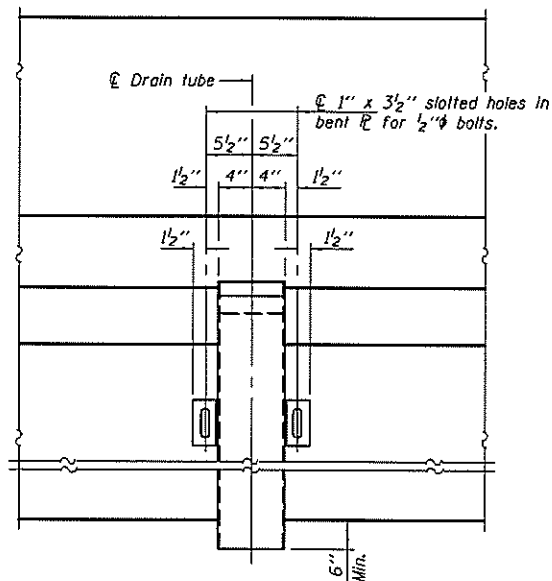
DESIGNED ATH
 CHECKED CCC
 DRAWN baliva
 CHECKED ATH CCC

DATE - JANUARY 29, 2016
 PASSED *A. Carl Perry*
 ACTING ENGINEER OF BRIDGES AND STRUCTURES

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

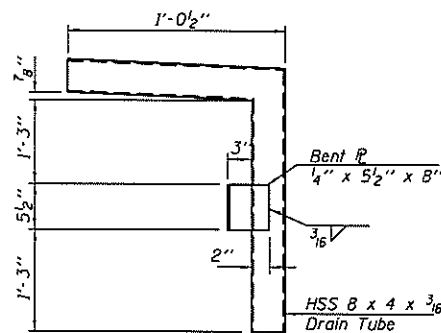
SUPERSTRUCTURE RECONSTRUCTION DETAILS
 SN 038-0153 AND 038-0154
 SHEET 4 OF 16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	3816B,6B-11R	IROQUOIS	41	29
				CONTRACT NO. 66E92

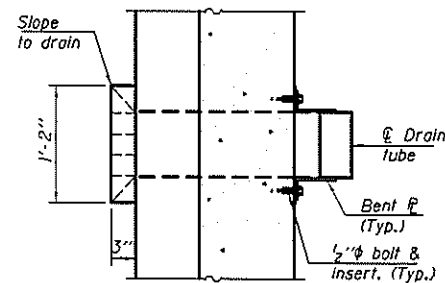


VIEW A-A

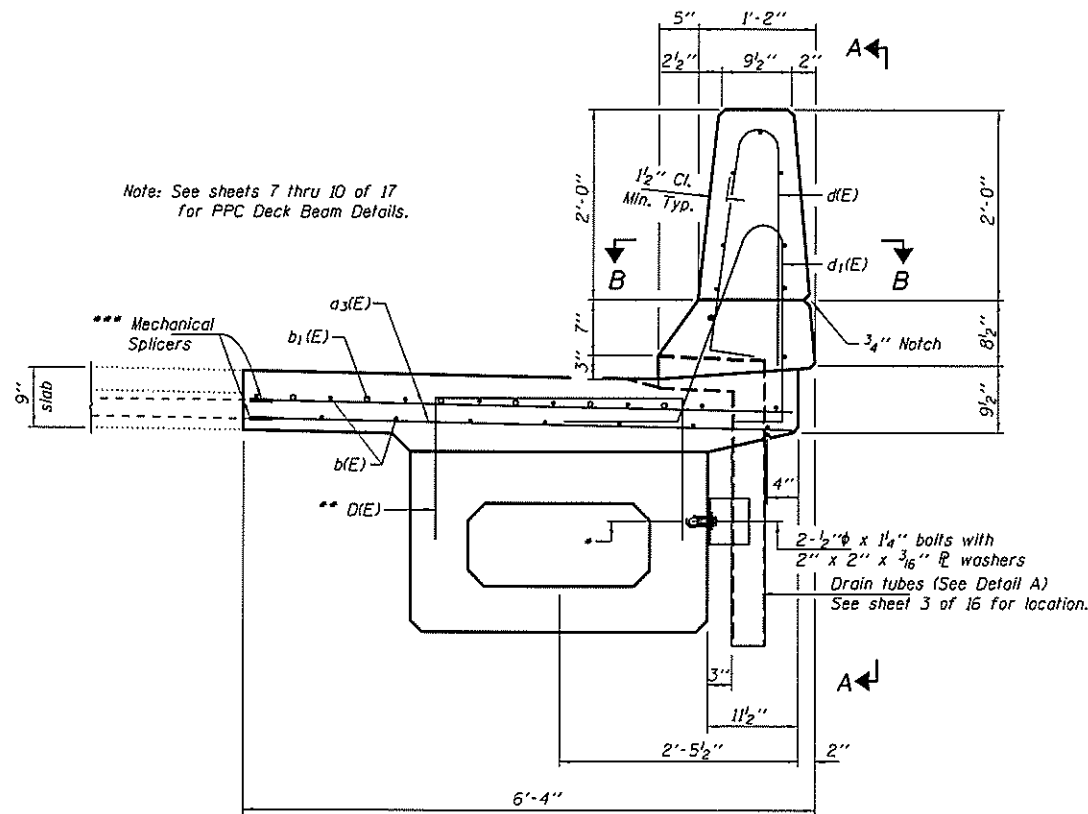
Note:
All drain tubes and accessories shall be galvanized according to AASHTO M111 or M232, (as applicable).
The cost of the drain tube assemblies and everything necessary for their installation is included with Floor Drains.



DETAIL A

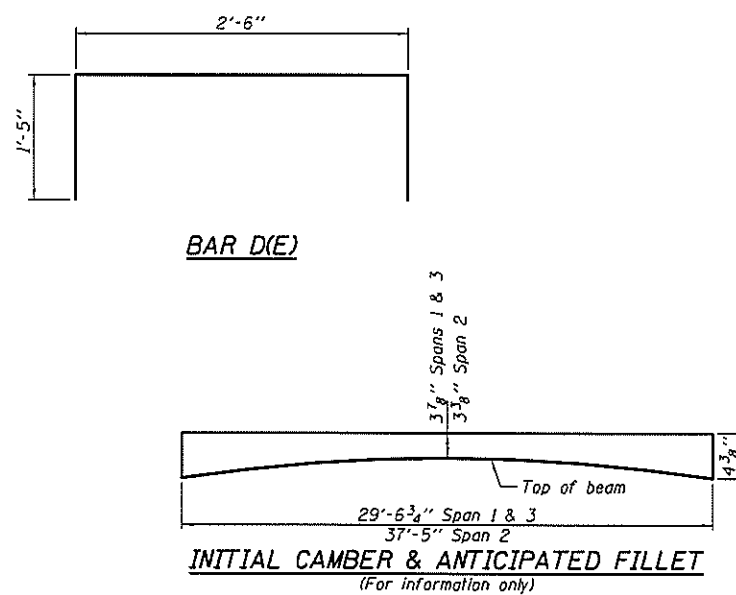


SECTION B-B

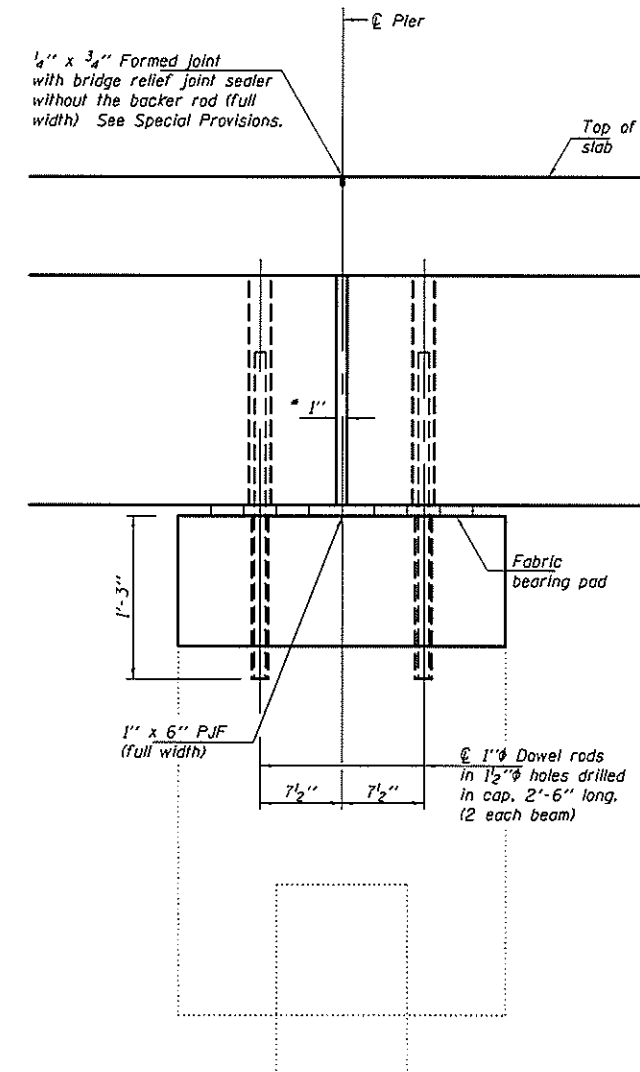


SECTION D-D

- * Loop Ferrule Inserts for 1/2 inch bolts. Place at center of beam depth.
- ** Place #4 D1E bars at 9 inch cts. in fascia beam. D1E bar included in cost of beam.
- *** Cut existing reinforcement 6 inch from removal line to facilitate installation of Mechanical Splicers.



INITIAL CAMBER & ANTICIPATED FILLET
(For information only)



SECTION THRU PIER

(Dimensions are at Rt. L's)
Reinforcement not shown for clarity

DESIGNED	ATH
CHECKED	CCC
DRAWN	baliva
CHECKED	ATH CCC

PASSED	<i>[Signature]</i> ACTING ENGINEER OF BRIDGES AND STRUCTURES
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DATE	JANUARY 29, 2016
REVISED	
REVISED	

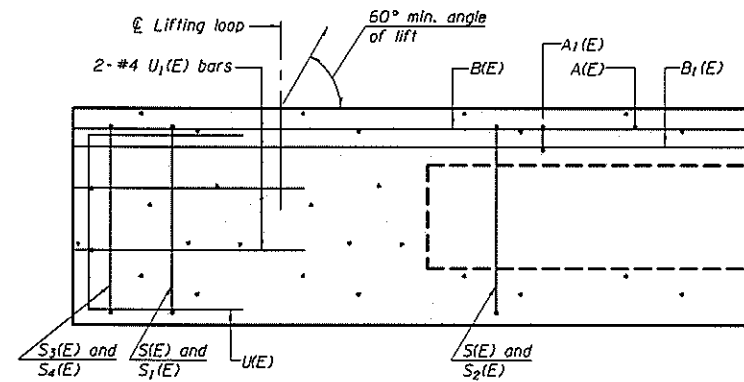
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE RECONSTRUCTION DETAILS
SN 038-0153 AND 038-0154

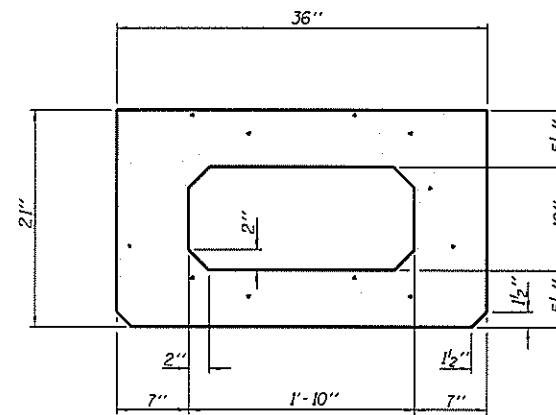
SHEET 5 OF 16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	38(68,68-1)R	TROQUOIS	41	30
			CONTRACT NO. 66E92	

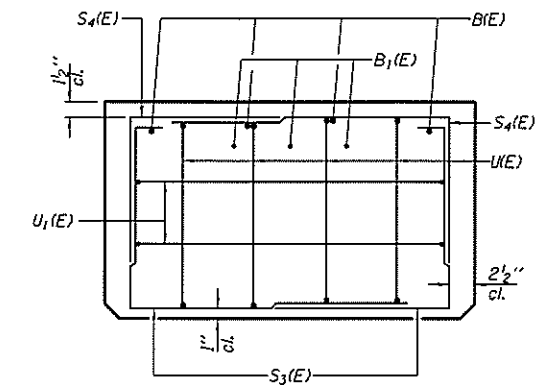
ILLINOIS FED. AID PROJECT



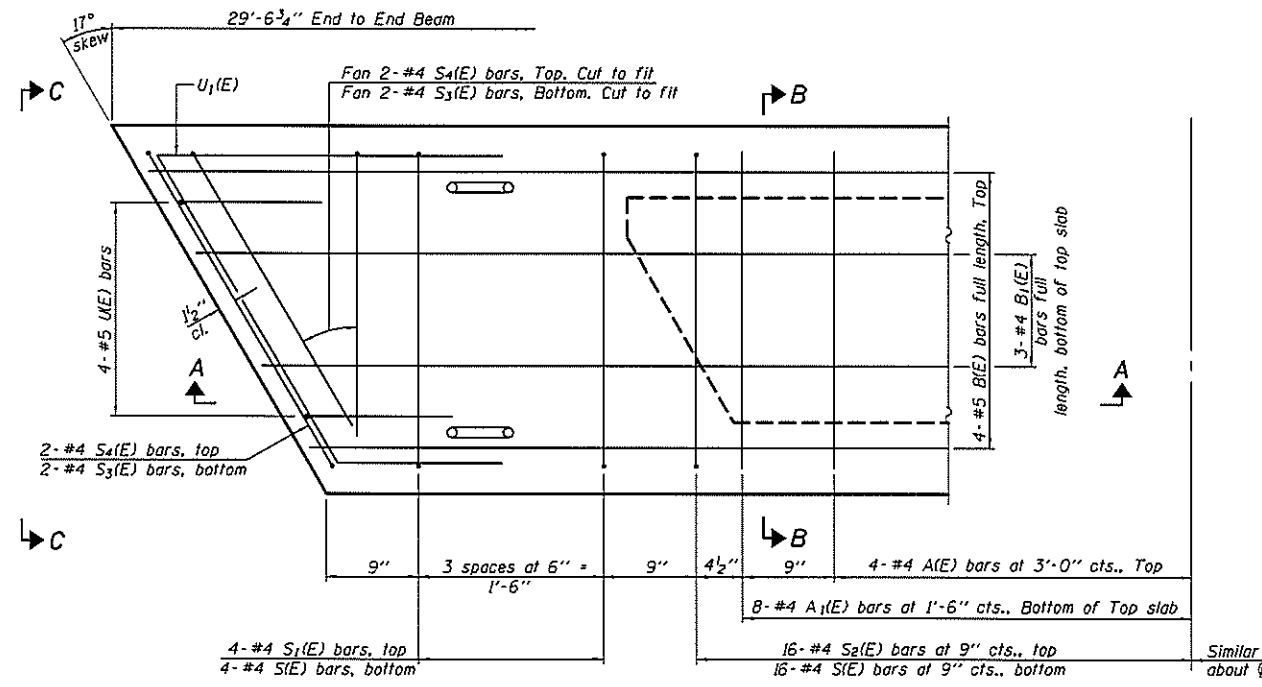
SECTION A-A



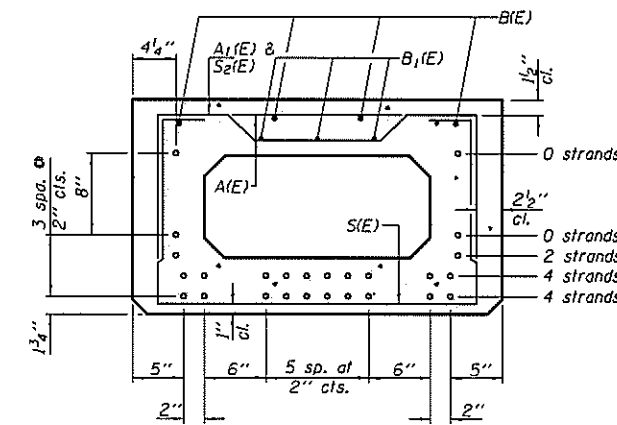
SECTION B-B
(Showing dimensions)



VIEW C-C



PLAN VIEW



SECTION B-B
(Showing reinforcement and permissible strand locations)

Note: Place the number of strands specified in each row symmetrically about the centerline of beam in the permissible strand locations shown.

BAR LIST
ONE BEAM ONLY
(For information only)

Bar	No.	Size	Length	Shape
A(E)	8	#4	2'-7"	—
A1(E)	16	#4	2'-10"	—
B(E)	4	#5	29'-3"	—
B1(E)	3	#4	29'-3"	—
S(E)	40	#4	6'-5"	□
S1(E)	8	#4	4'-11"	□
S2(E)	32	#4	5'-2"	□
S3(E)	4	#4	4'-8"	□
S4(E)	4	#4	3'-11"	□
U1(E)	8	#5	4'-0"	□
U1(E)	4	#4	6'-0"	□

Note: See sheet 7 of 16 for additional details and Bill of Material.

MINIMUM BAR LAP

#4 bar = 1'-11"
#5 bar = 2'-6"

PD-2136-R

6-8-15

DESIGNED ATH
CHECKED CCC
DRAWN baliva
CHECKED ATH CCC

PASSED
ACTING ENGINEER OF BRIDGES AND STRUCTURES

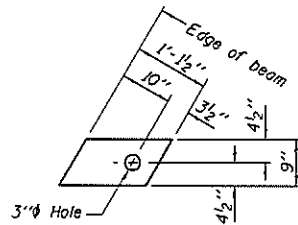
DATE - JANUARY 29, 2016
REVISED
REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

21" x 36" PPC DECK BEAM SPANS 1 & 3
SN 038-0153 AND 038-0154

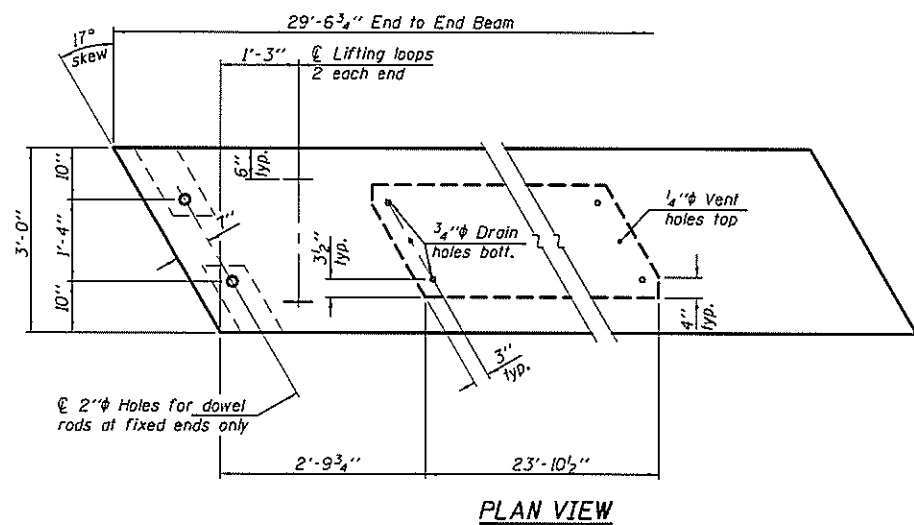
SHEET 6 OF 16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	3B(6B,6B-1)R	ILLINOIS	41	31
CONTRACT NO. 66E92			ILLINOIS FED. AID PROJECT	

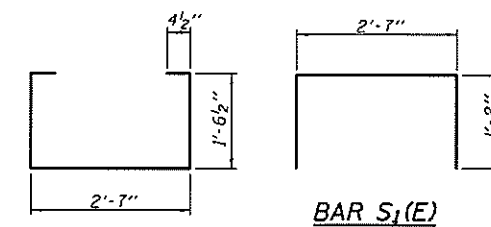


FABRIC BEARING PAD

Notes:
FIXED
 All bearing pads shall be 1" thick.
 Omit holes when using expansion bearings.
 Expansion bearing pad shall be bonded to the substructure.

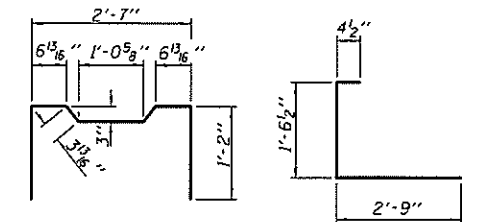


PLAN VIEW



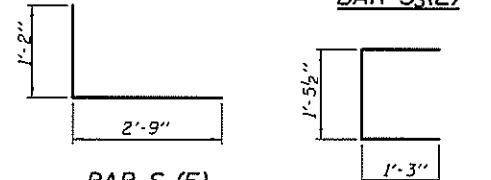
BAR S(E)

BAR S₁(E)



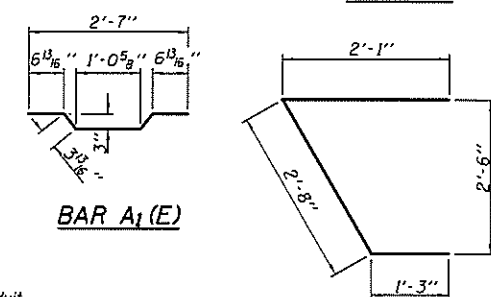
BAR S₂(E)

BAR S₃(E)



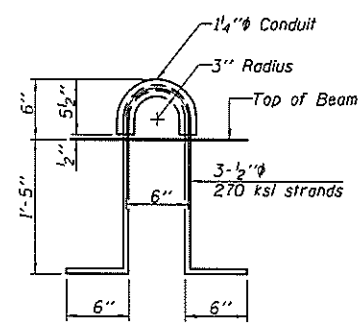
BAR S₄(E)

BAR S₅(E)



BAR A₁(E)

BAR U₁(E)



LIFTING LOOP DETAIL

NOTES

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in. Reinforcement bars shall conform to ASTM A 705, Grade 60. (See Special Provisions). Two 1/2" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location. A minimum 2 1/2" diameter lifting pin shall be used to engage the lifting loops during handling. Corrosion Inhibitor, per Article 1020.05(b)(12) and 1021.06 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams. Compressive strength of prestressed concrete, f'c, shall be 6000 psi. Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi.

BILL OF MATERIAL

Precast Prestressed Conc. Deck Bms. (21" depth)	Sq. Ft.	710
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PD-2136-RD 7-1-10

DESIGNED	ATH
CHECKED	CCC
DRAWN	baliva
CHECKED	ATH CCC

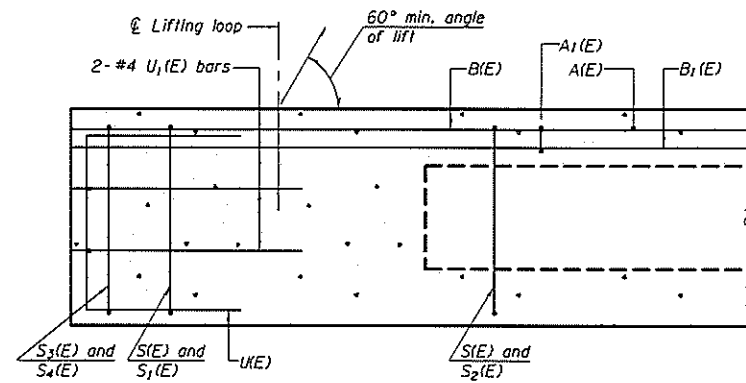
DATE	JANUARY 29, 2016
PASSED	<i>[Signature]</i> ACTING ENGINEER OF BRIDGES AND STRUCTURES
REVISED	
REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

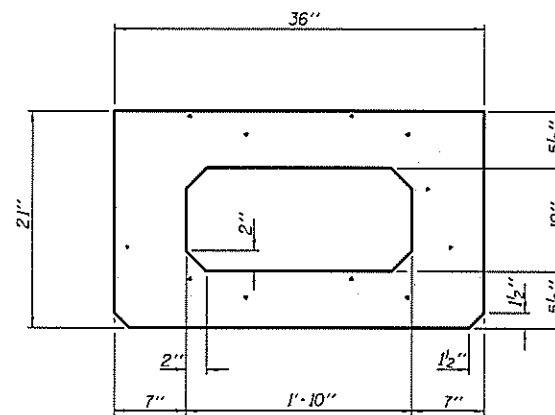
21" x 36" PPC DECK BEAM DETAILS SPANS 1 & 3
SN 038-0153 AND 038-0154

SHEET 7 OF 16 SHEETS

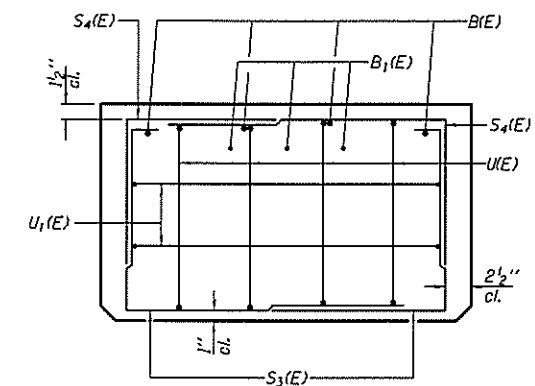
F.A.T. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	38(68,68-1)IR	ILLINOIS	41	32
CONTRACT NO. 66E92			ILLINOIS FED. AID PROJECT	



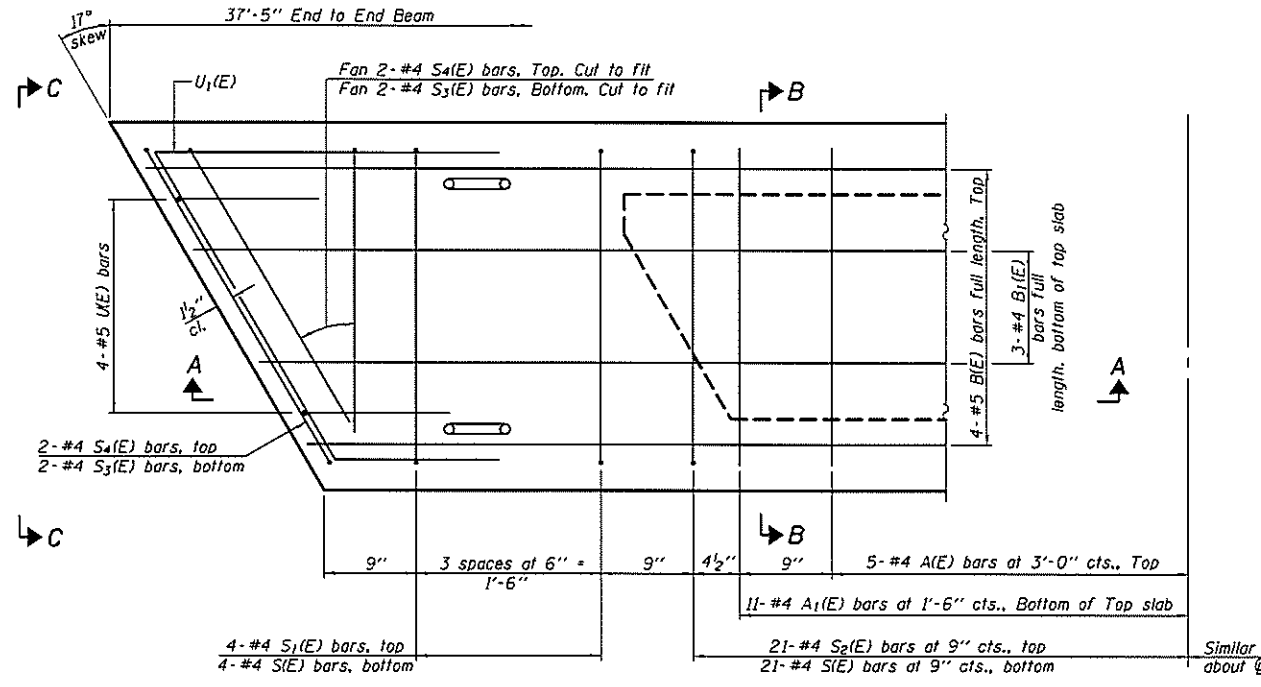
SECTION A-A



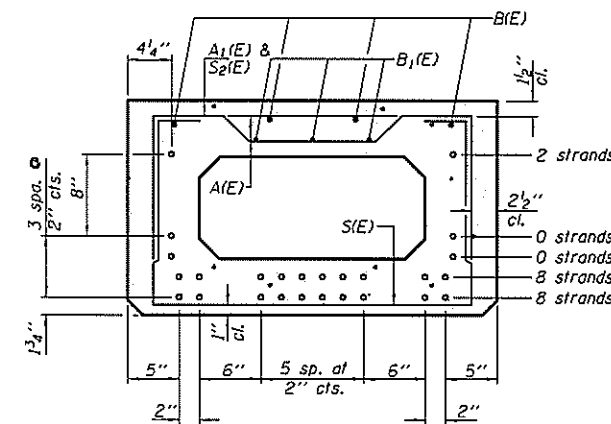
SECTION B-B
(Showing dimensions)



VIEW C-C



PLAN VIEW



SECTION B-B
(Showing reinforcement and permissible strand locations)

Note: Place the number of strands specified in each row symmetrically about the centerline of beam in the permissible strand locations shown.

BAR LIST
ONE BEAM ONLY
(For information only)

Bar	No.	Size	Length	Shape
A(E)	10	#4	2'-7"	—
A1(E)	22	#4	2'-10"	—
B(E)	4	#5	37'-0"	—
B1(E)	3	#4	37'-0"	—
S(E)	50	#4	6'-5"	□
S1(E)	8	#4	4'-11"	□
S2(E)	42	#4	5'-2"	□
S3(E)	4	#4	4'-8"	□
S4(E)	4	#4	3'-11"	□
U(E)	8	#5	4'-0"	□
U1(E)	4	#4	6'-0"	□

Note: See sheet 9 of 16 for additional details and Bill of Material.

MINIMUM BAR LAP

#4 bar = 1'-11"
#5 bar = 2'-6"

PD-2136-R 6-8-15

DESIGNED ATH
CHECKED CCC
DRAWN baliva
CHECKED ATH CCC

PASSED
ACTING ENGINEER OF BRIDGES AND STRUCTURES

DATE - JANUARY 29, 2016
REVISED
REVISED

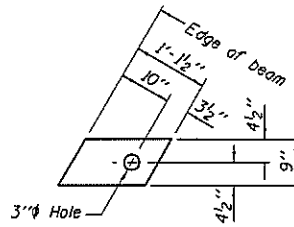
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

21" x 36" PPC DECK BEAM SPAN 2
SN 038-0153 AND 038-0154

SHEET 8 OF 16 SHEETS

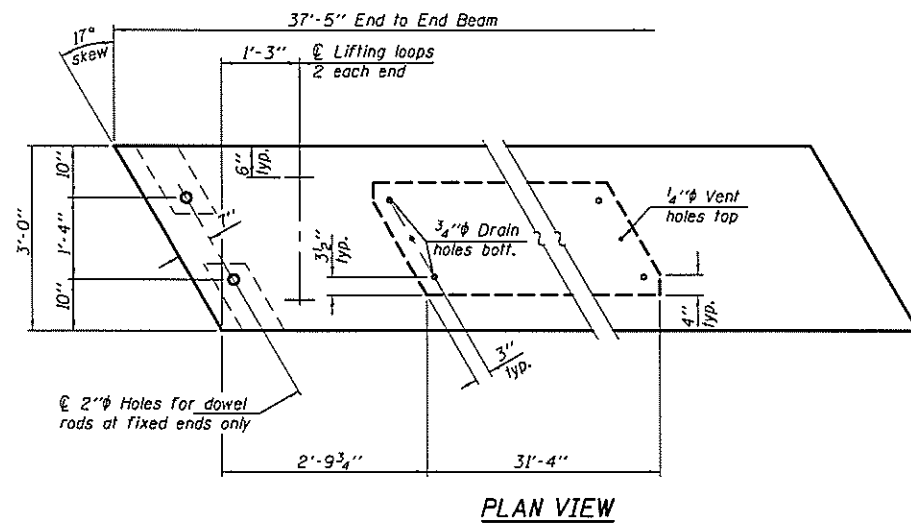
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	38(6B,6B-1)R	IRRODUIS	41	33

CONTRACT NO. 66E92
ILLINOIS FED. AID PROJECT

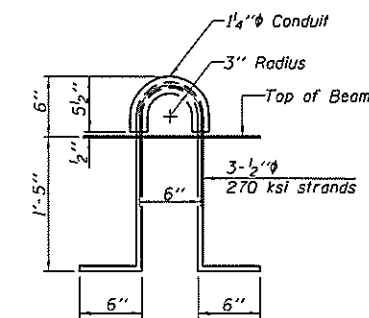
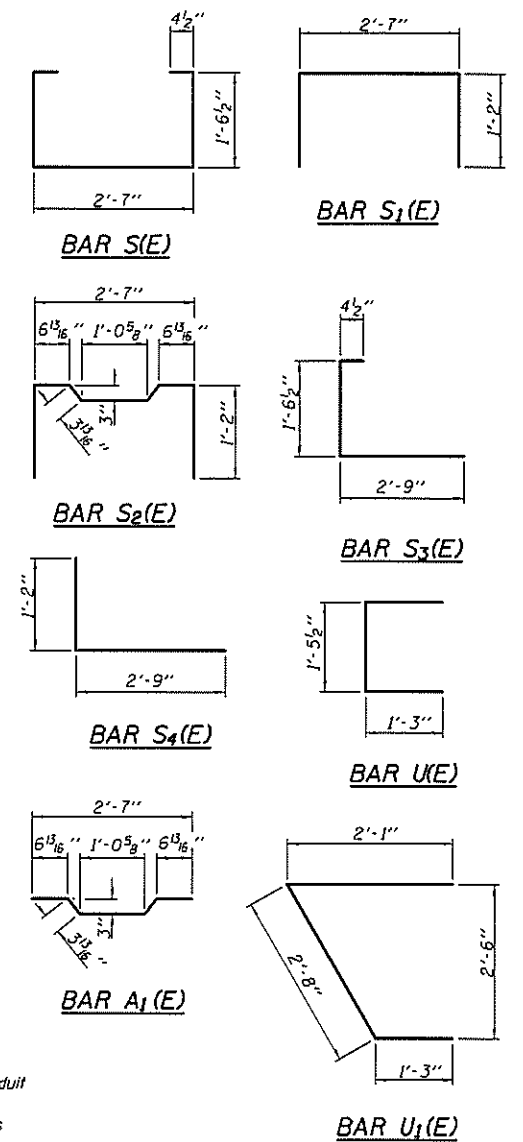


FABRIC BEARING PAD

Notes:
FIXED
 All bearing pads shall be 1" thick.
 Omit holes when using expansion bearings.
 Expansion bearing pad shall be bonded to the substructure.



PLAN VIEW



LIFTING LOOP DETAIL

NOTES

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in. Reinforcement bars shall conform to ASTM A 706, Grade 60. (See Special Provisions). Two 1/2" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location. A minimum 2 1/2" lifting pin shall be used to engage the lifting loops during handling. Corrosion Inhibitor, per Article 1020.05(b)(12) and 1021.06 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams. Compressive strength of prestressed concrete, f'c, shall be 6000 psi. Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi.

BILL OF MATERIAL

Precast Prestressed Conc. Deck Bms. (21" Depth)	Sq. Ft.	449
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PD-2136-RD 7-1-10

DESIGNED	ATH
CHECKED	CCC
DRAWN	baliva
CHECKED	ATH CCC

PASSED	<i>D. Gal</i> ACTING ENGINEER OF BRIDGES AND STRUCTURES
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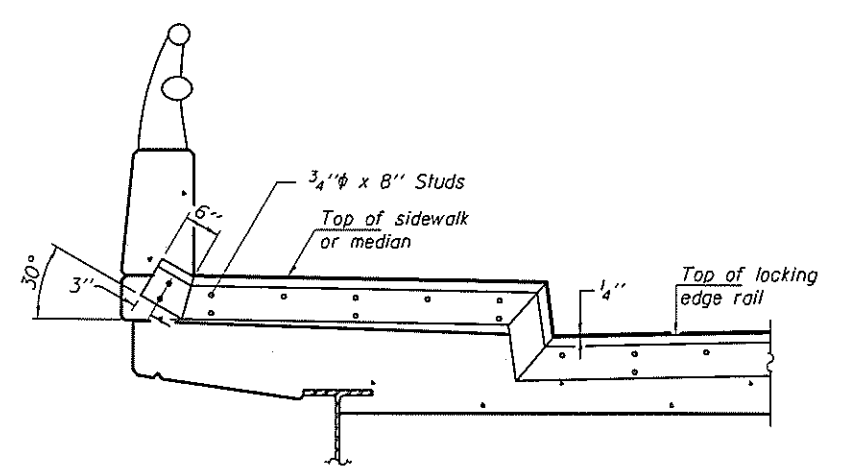
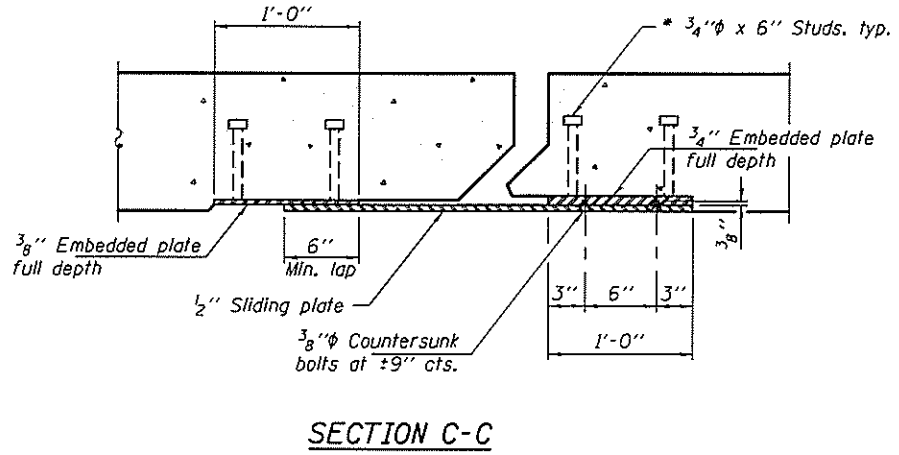
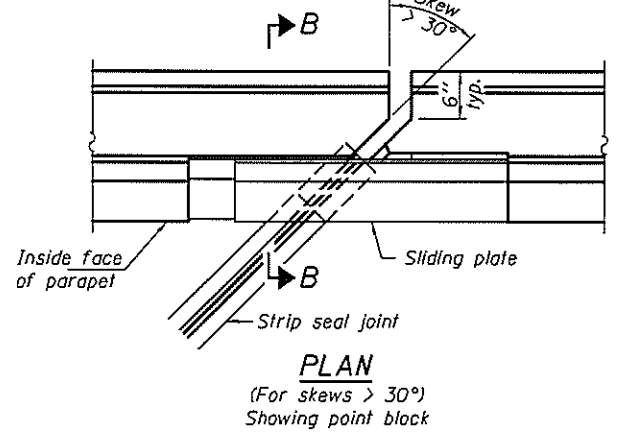
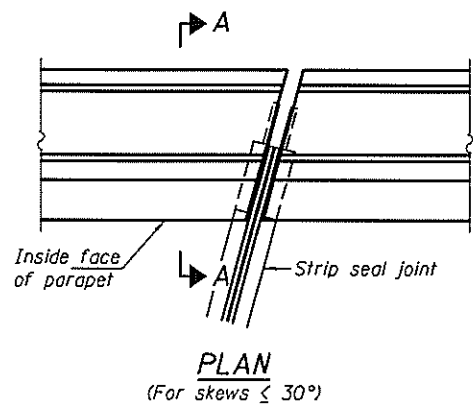
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

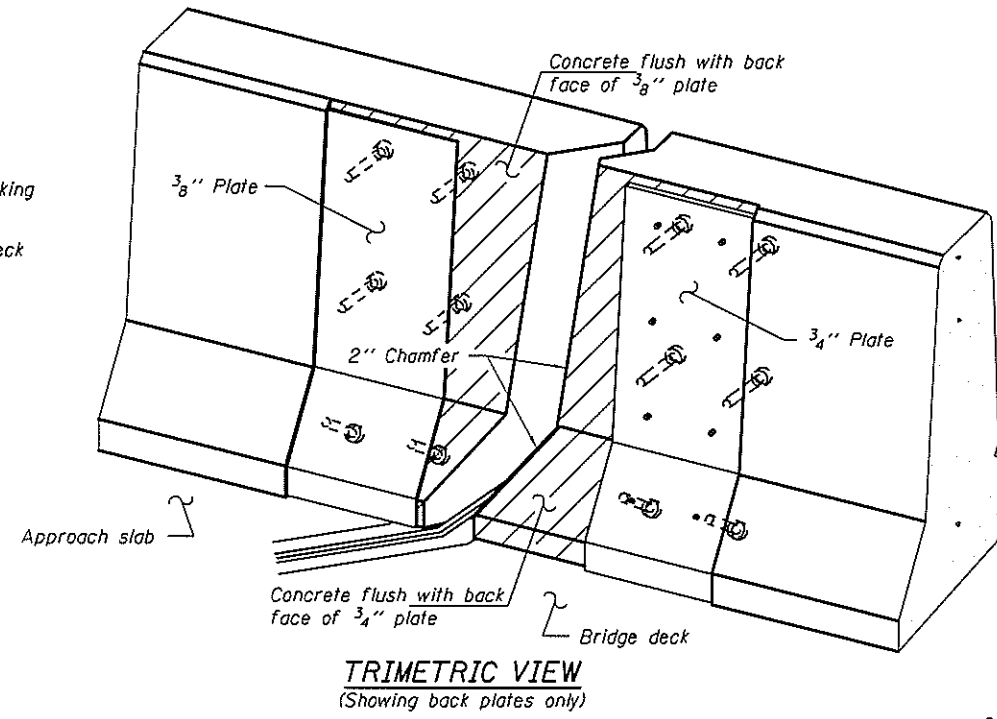
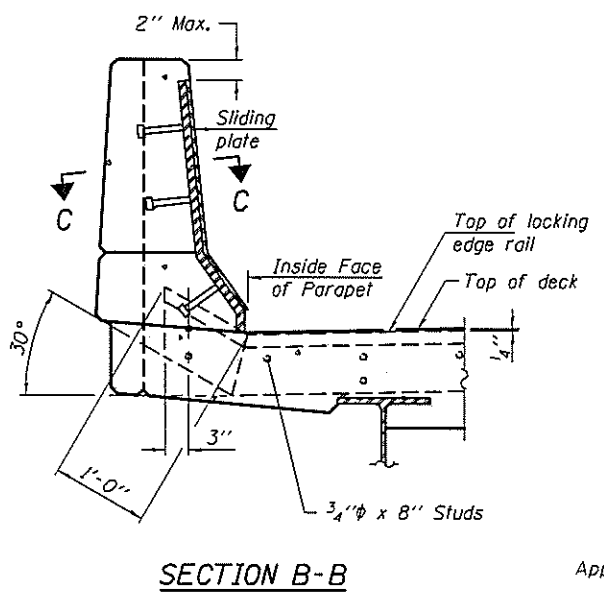
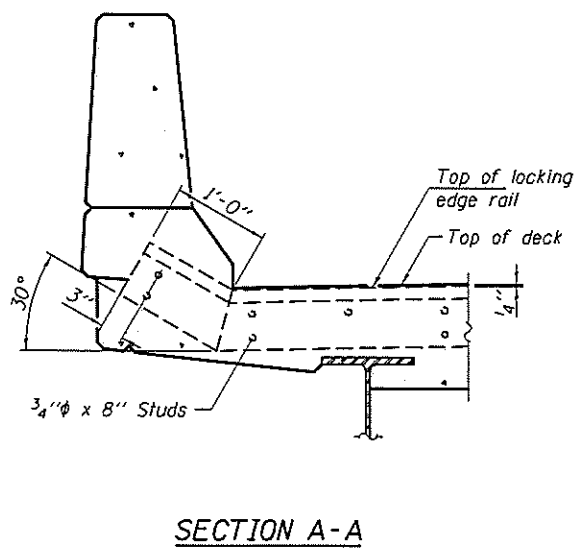
21" x 36" PPC DECK BEAM DETAILS SPAN 2
SN 038-0153 AND 038-0154

SHEET 9 OF 16 SHEETS

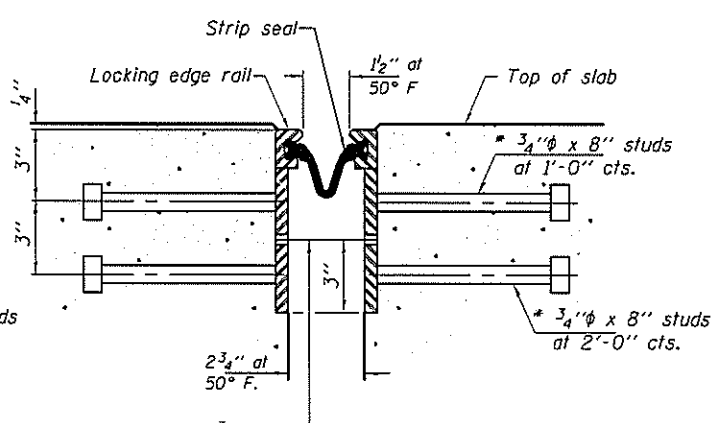
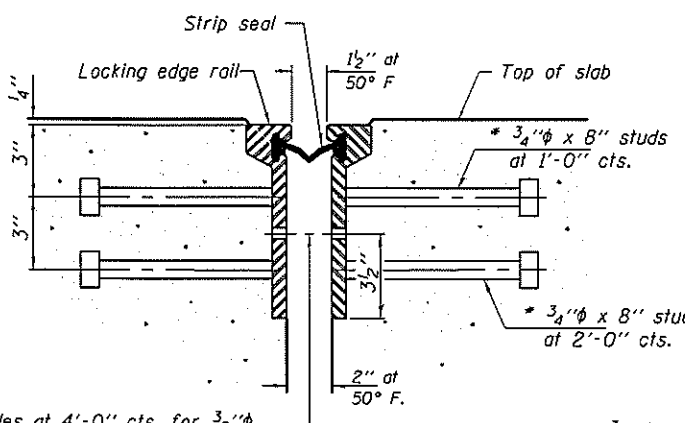
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	38168.68-11R	ILLINOIS	41	34
				CONTRACT NO. 66E92
ILLINOIS FED. AID PROJECT				



TYPICAL END TREATMENT AT SIDEWALK OR MEDIAN
Shorter plates with a single row of studs at 12" cts. may be necessary on medians which are shallower than 9". See manufacturer's recommendation.

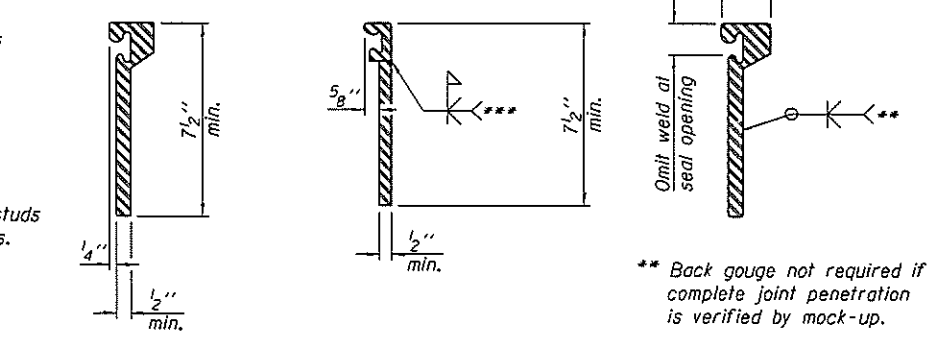


Notes:
The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.
The Locking Edge Rails depicted are conceptual only, except for the minimum dimensions shown. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities.
The manufacturer's recommended installation methods shall be followed.
The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.
All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.
Maximum space between rail segments shall be 3/16", sealed with a suitable sealant. Joints in rails within 10 ft. of curbs shall be welded.
Parapet plates and anchorage studs for skews $> 30^\circ$ included in the cost of Preformed Joint Strip Seal.



7/16" ϕ holes at 4'-0" cts. for 3/8" ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

7/16" ϕ holes at 4'-0" cts. for 3/8" ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.



** Back gouge not required if complete joint penetration is verified by mock-up.

TWO SUPERSTRUCTURES BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	176

The inside of the locking edge rail groove shall be free of weld residue.
Rolled rail shown, welded rail similar.

LOCKING EDGE RAILS

EJ-SSJ

1-27-12

DESIGNED ATH
CHECKED CCC
DRAWN baliva
CHECKED ATH CCC

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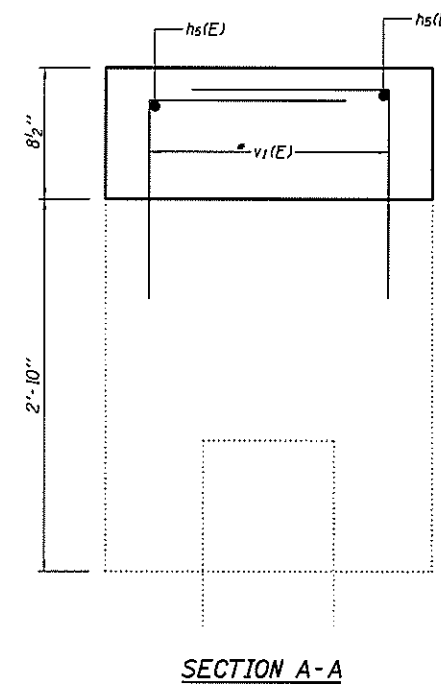
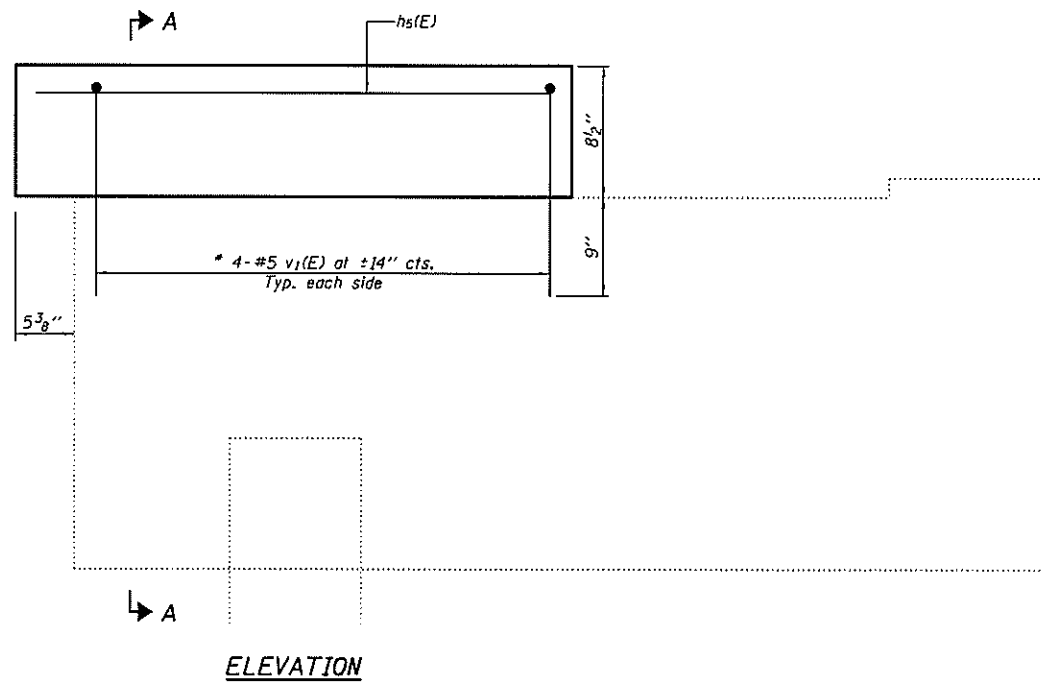
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL FOR
SN 038-0153 & 038-0154

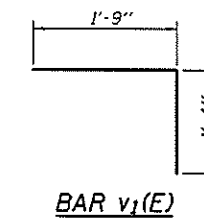
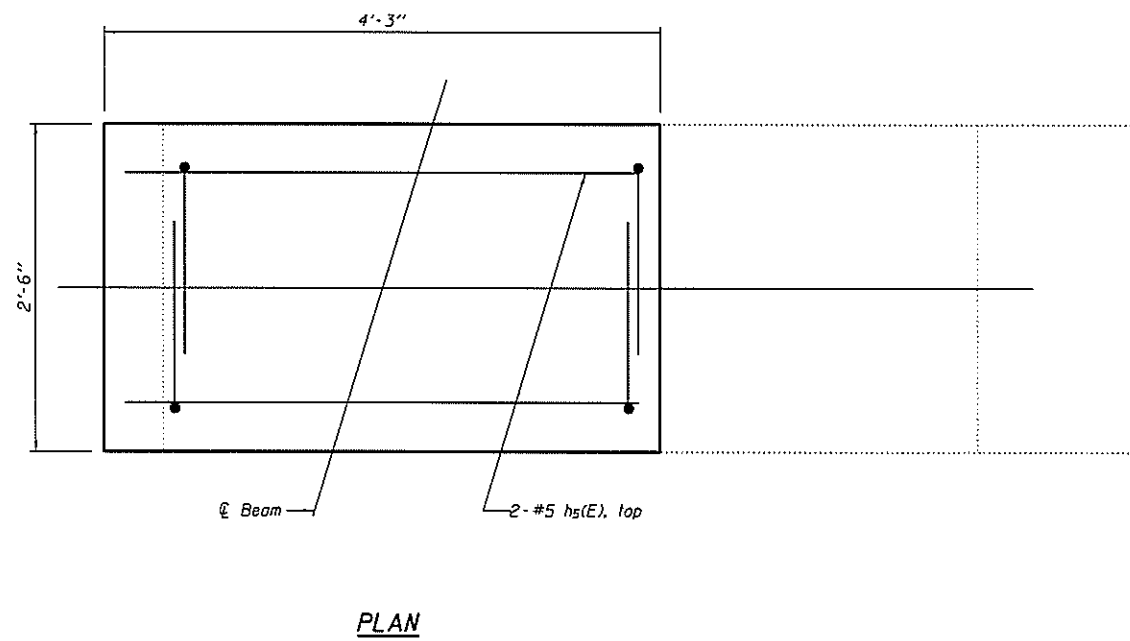
SHEET 10 OF 16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	3B/6B, 6B-1/1R	ILLINOIS	41	35

CONTRACT NO. 66E92
ILLINOIS FED. AID PROJECT



▪ Epoxy grout v(E) bars in 9" min. holes according to Article 584 of the Standard Specifications.



**BILL OF MATERIAL
2 BRIDGES**

Bar	No.	Size	Length	Shape	
h ₅ (E)	16	#5	3'-11"	—	
v ₁ (E)	64	#5	3'-1"	┌	
Concrete Structures				Cu. Yd.	2.2
Reinforcement Bars,				Pound	270
Epoxy Coated					

DESIGNED *ATH*
 CHECKED *CCC*
 DRAWN *baliva*
 CHECKED *ATH CCC*

PASSED

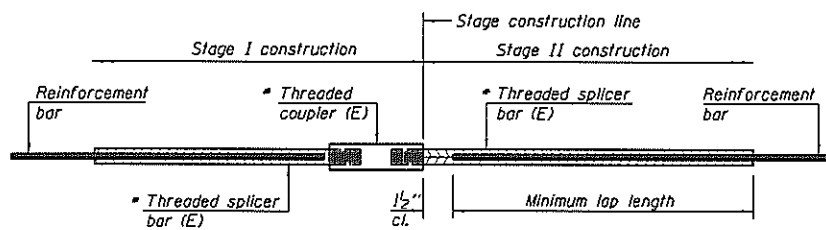
 ACTING ENGINEER OF BRIDGES AND STRUCTURES

DATE - JANUARY 29, 2016
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PIER EXTENSION DETAILS
 SN 038-0153 AND 038-0154
 SHEET 11 OF 16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	38/6B,6B-1/IR	IRDDUOIS	41	36
				CONTRACT NO. 66E92
(ILLINOIS) FED. AID PROJECT				



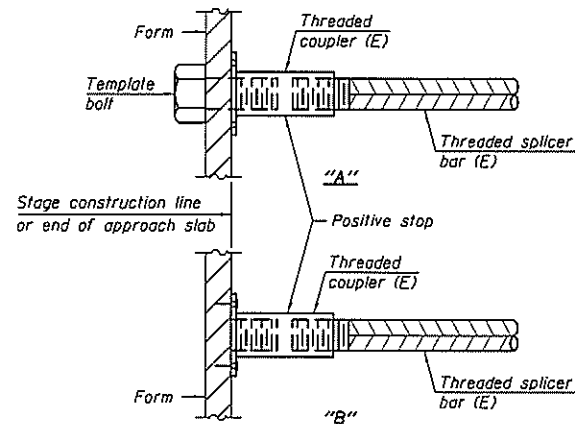
STANDARD BAR SPLICER ASSEMBLY

Threaded splicer bar length = min. lap length + 1/2" + thread length

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

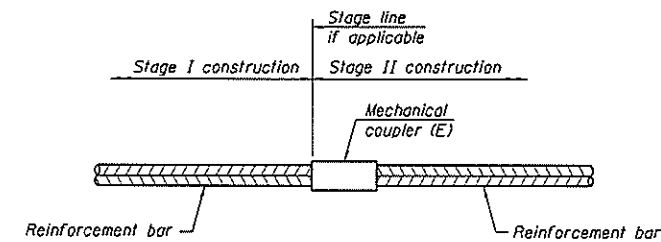
**TWO SUPERSTRUCTURES
BILL OF MATERIAL**

Location	Bar size	No. assemblies required	Minimum lap length
N. ABUT. DECK	#5	32	3'-2"
N. ABUT. BLOCK OUT	#6	12	3'-7"
S. ABUT. DECK	#5	32	3'-2"
S. ABUT. N. B. BLOCK OUT	#6	6	3'-7"
S. ABUT. S. B. BACKWALL	#6	12	3'-7"



INSTALLATION AND SETTING METHODS

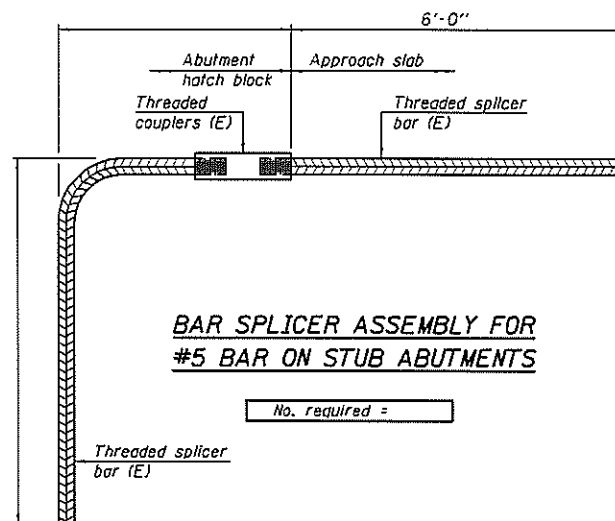
"A" : Set bar splicer assembly by means of a template bolt.
 "B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
 (E) : Indicates epoxy coating.



STANDARD MECHANICAL SPLICER

**TWO SUPERSTRUCTURES
BILL OF MATERIAL**

Location	Bar size	No. assemblies required
DECK, STAGE I	#5	512
DECK, STAGE II	#5	512



**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 6-8-15

DESIGNED ATH
 CHECKED CCC
 DRAWN baliva
 CHECKED ATH CCC

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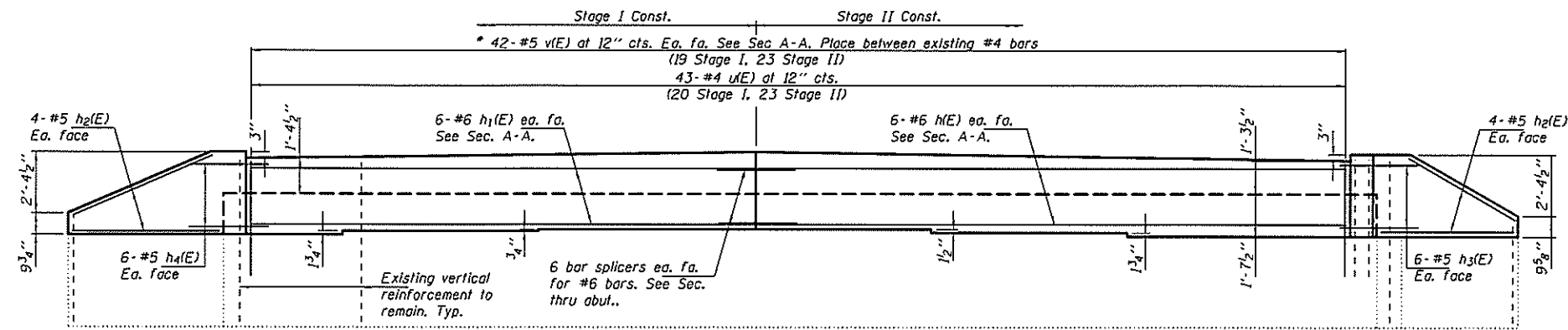
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

BARMECHANICAL SPLICER ASSEMBLY DETAILS
 SN 038-0153 & 038-0154

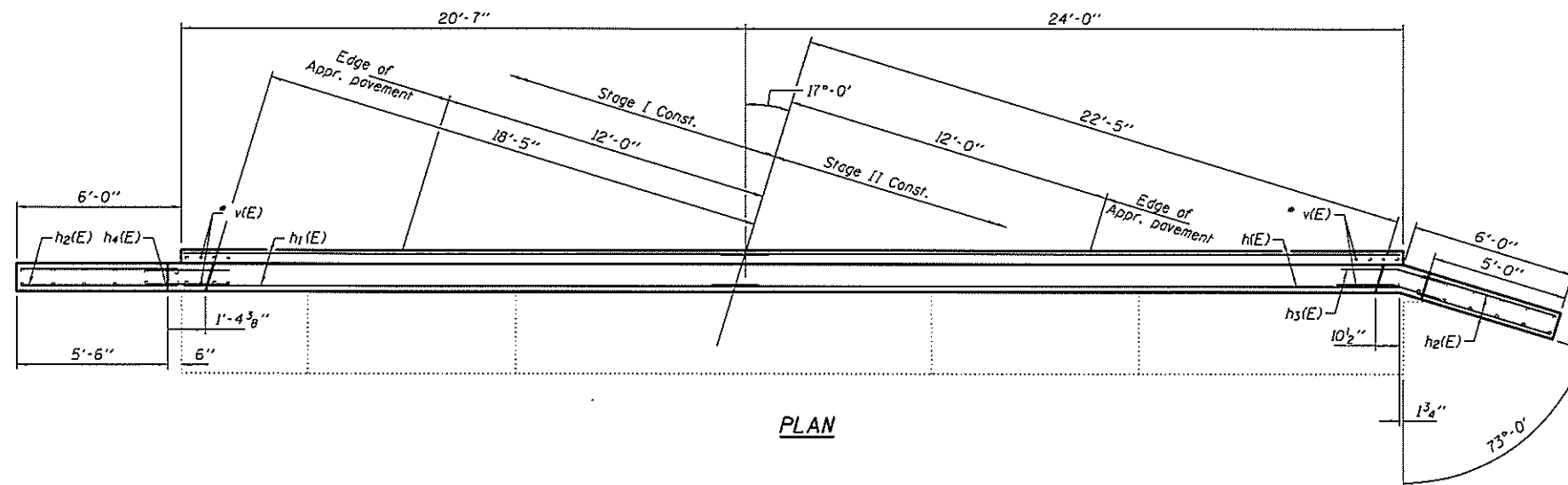
SHEET 12 OF 16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	3B15B,6B-11JR	IRROUDOIS	41	37

CONTRACT NO. 66E92
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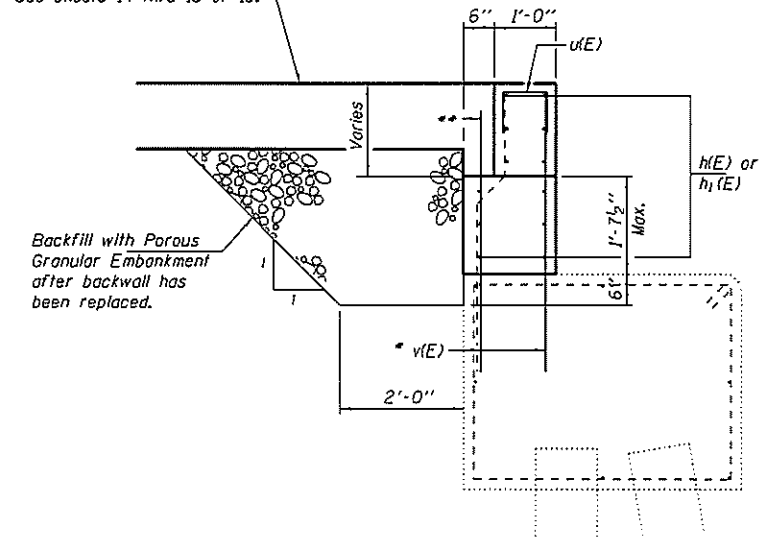


ELEVATION
(Looking South)



PLAN

Approach slab replacement.
See sheets 14 thru 16 of 16.



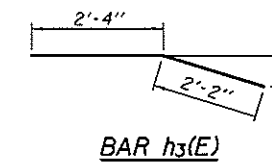
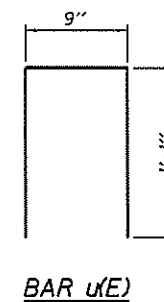
SECTION A-A
(Dimensions are at Rt. L's)

- * Epoxy grout v(E) bars in 9" min. holes according to Article 584 of the Standard Specifications.
- ** Extend bar as shown within 24' approach pavement. Cut to fit within backwall elsewhere.

BILL OF MATERIAL
SN 038-0153 S. ABUT.

Bar	No.	Size	Length	Shape
h(E)	12	#5	24'-4"	—
h ₁ (E)	12	#5	19'-11"	—
h ₂ (E)	8	#5	5'-9"	—
h ₃ (E)	12	#5	4'-6"	—
h ₄ (E)	12	#5	4'-6"	—
u(E)	43	#4	2'-11"	□
v(E)	84	#5	3'-6"	—
Bar Splicers				Each 12
Structure Excavation			Cu. Yd. 14.8	
Porous Granular Embankment			Cu. Yd. 14.8	
Concrete Removal			Cu. Yd. 7.1	
Concrete Superstructure			Cu. Yd. 7.1	
Reinforcement Bars, Epoxy Coated			Lbs. 1350	

Reinforcement bars designated (E) shall be epoxy coated.



DESIGNED ATH
CHECKED CCC
DRAWN baliva
CHECKED ATH CCC

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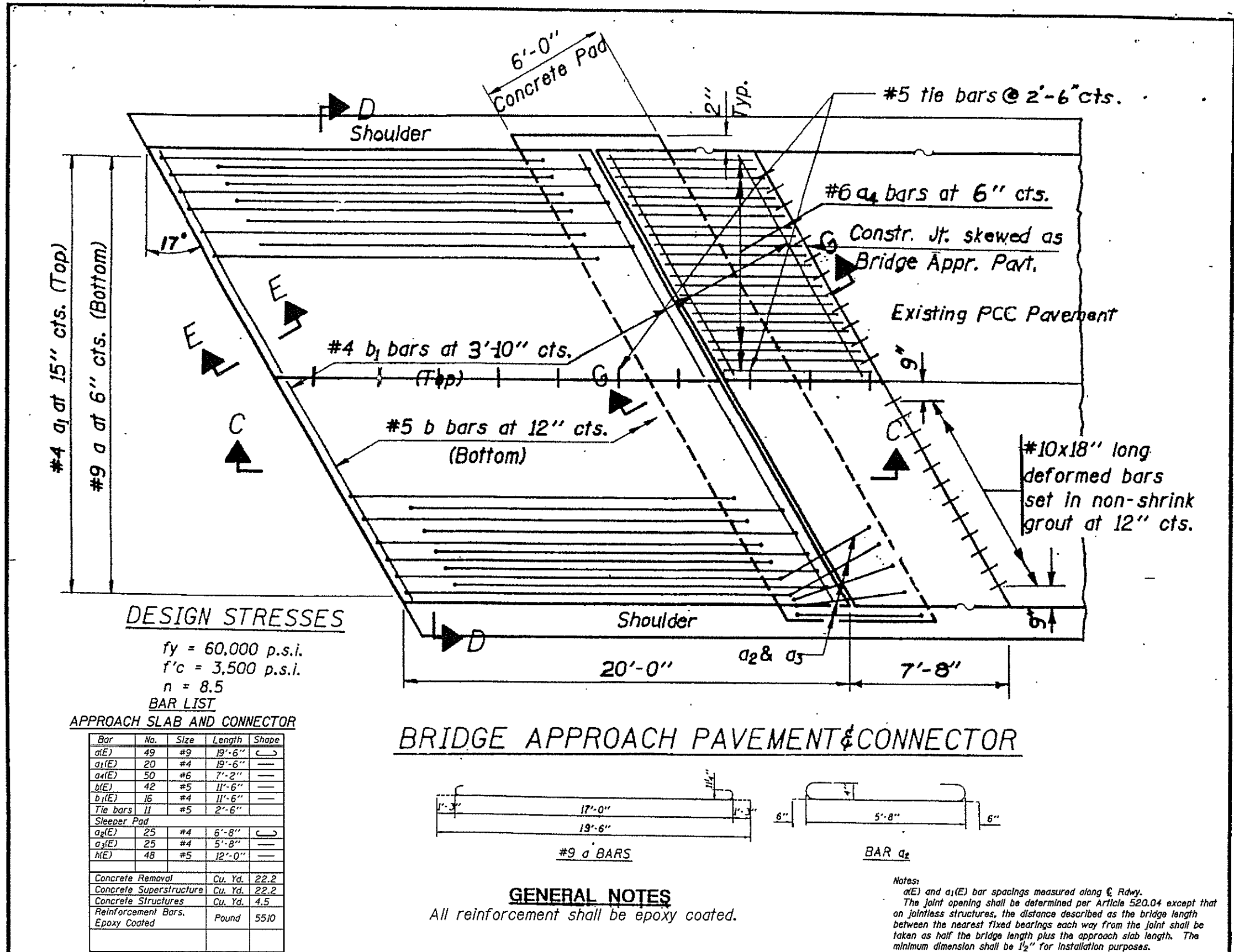
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DEPARTMENT OF TRANSPORTATION

SOUTH ABUTMENT REPAIR DETAILS
SN 038-0153
SHEET NO. 13 OF 16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	3816B,6B-11R	ILLINOIS	41	38

CONTRACT NO. 66E92
ILLINOIS FED. AID PROJECT

BRIDGE APPROACH PAVEMENT & CONNECTOR DETAILS



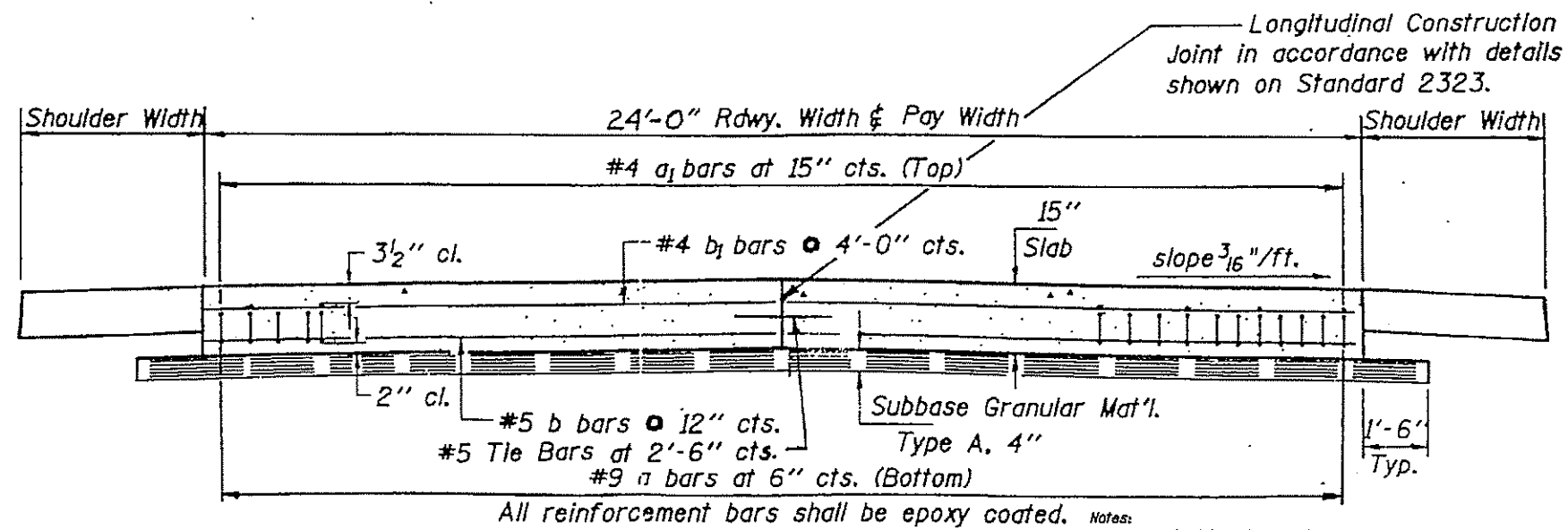
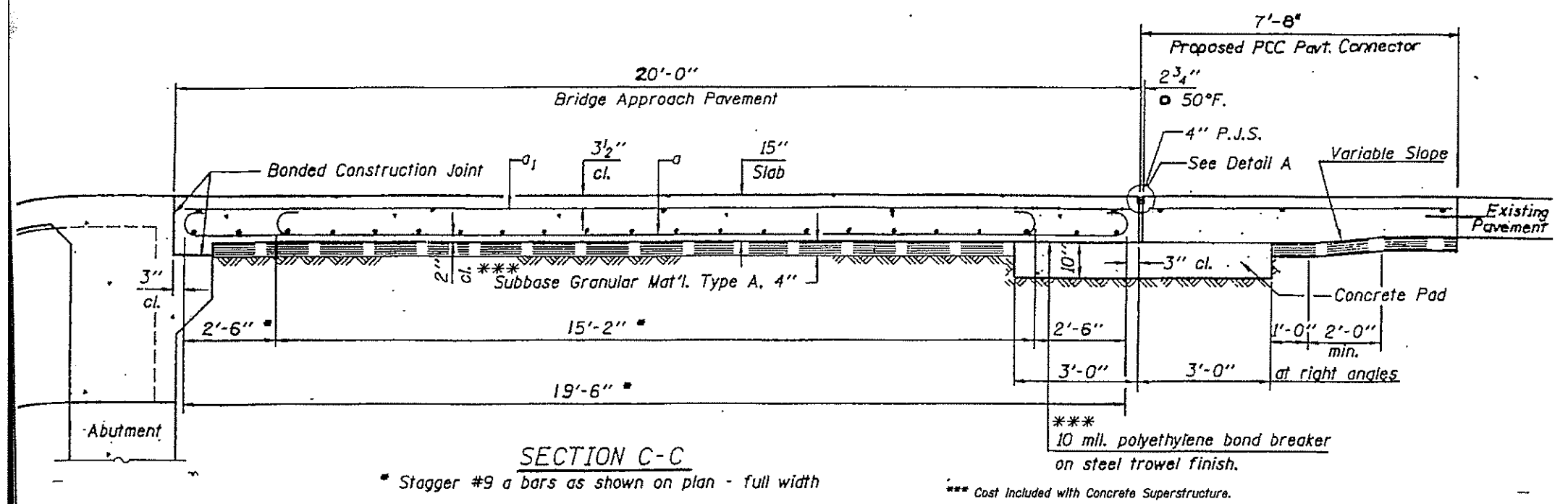
DESIGNED ATH
 CHECKED CCC
 DRAWN baliva
 CHECKED ATH CCC

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SOUTH APPROACH REPLACEMENT DETAILS
 SN 038-0153
 SHEET NO. 14 OF 16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	3816B.6B-11R	IRDOUOIS	41	39
CONTRACT NO. 66E92			ILLINOIS FED. AID PROJECT	



Notes:
 Approach slab and parapet concrete shall be paid for as Concrete Superstructure.
 Approach footing concrete shall be paid for as Concrete Structures.
 Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
 For (E) bar details, see sheet 14 of 17.
 The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
 Cost of excavation for approach footing included with Concrete Structures.
 For Granular Backfill for Structures and drainage treatment details, see sheet 14 of 17.

DESIGNED ATH
 CHECKED CCC
 DRAWN baliva
 CHECKED ATH CCC

PASSED

A. Carl Perry
 ACTING ENGINEER OF BRIDGES AND STRUCTURES

DATE - JANUARY 29, 2016

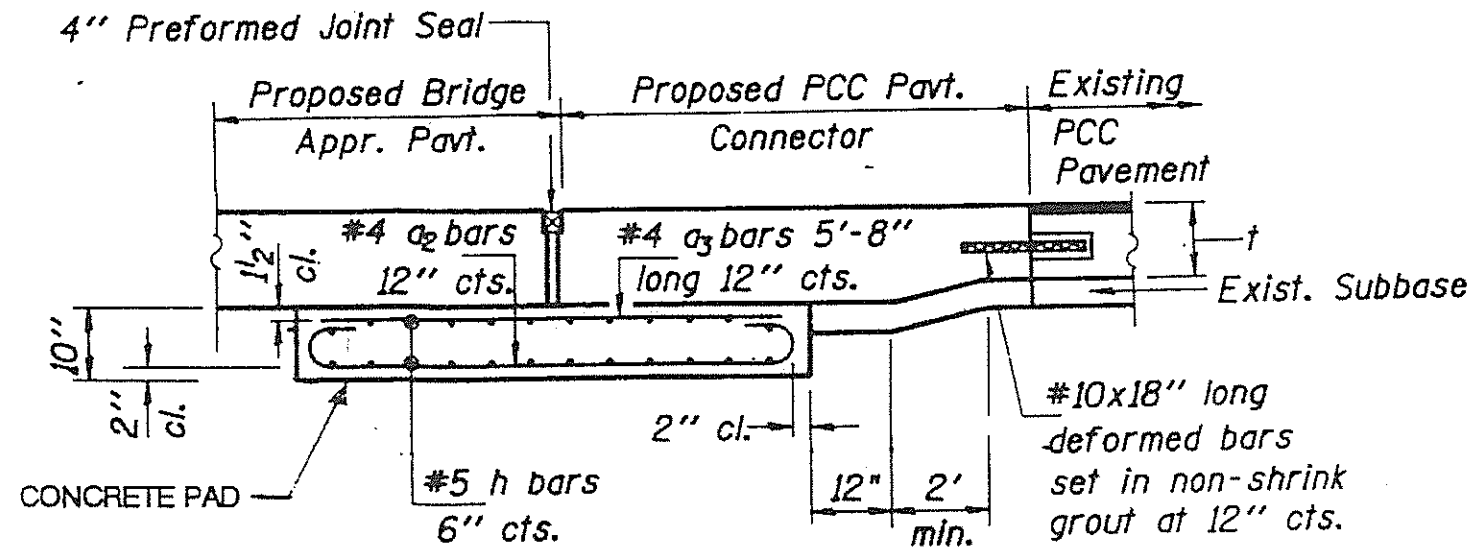
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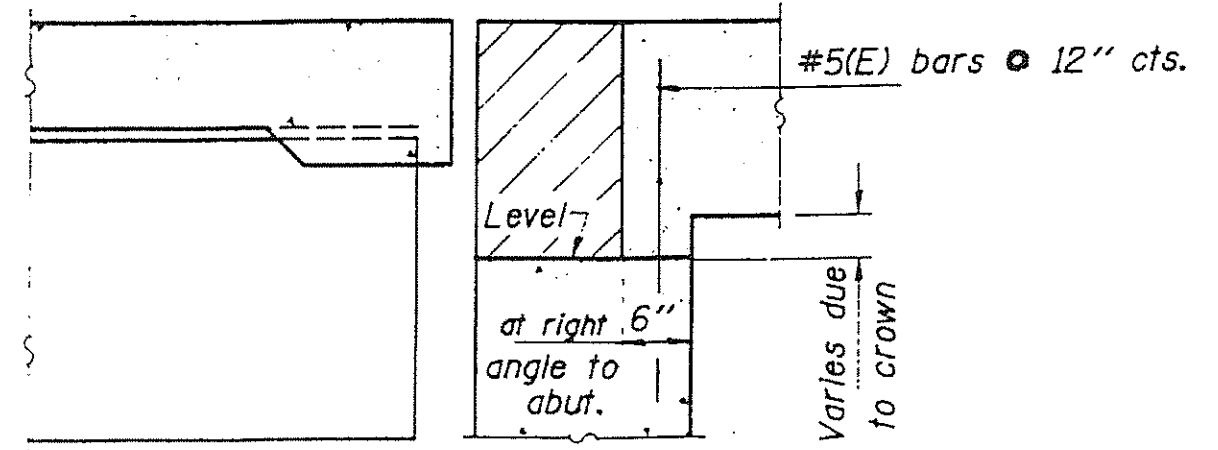
SOUTH APPROACH REPLACEMENT DETAILS
 SN 038-0153

SHEET NO. 15 OF 16 SHEETS

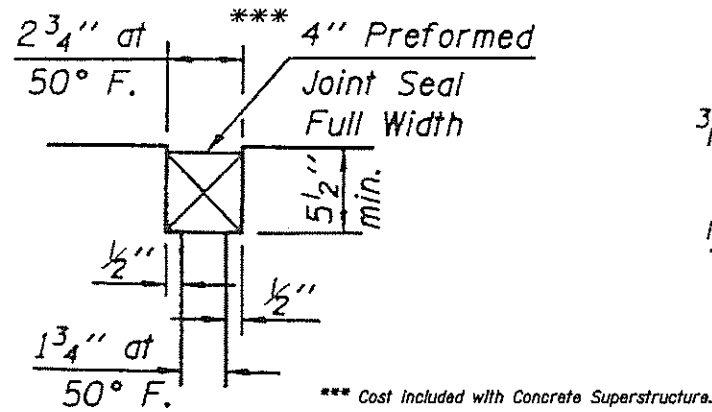
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	3816B,6B-11R	IRROUOIS	41	40
CONTRACT NO. 66E92				
[ILLINOIS] FED. AID PROJECT				



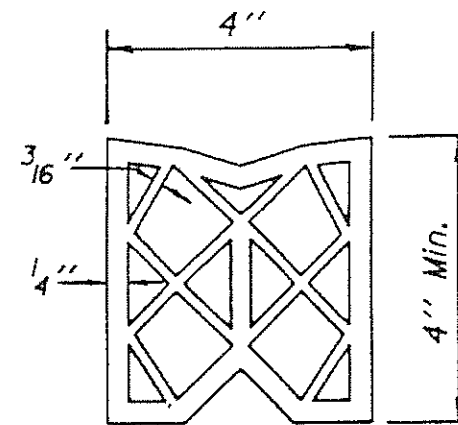
SECTION G-G - RIGID PAVEMENT



SECTION E-E



DETAIL A



PREFORMED JOINT SEAL (4")

DESIGNED ATH
 CHECKED CCC
 DRAWN baliva
 CHECKED ATH CCC

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SOUTH APPROACH REPLACEMENT DETAILS
 SN 038-0153

SHEET NO. 16 OF 16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	3B(GB.6B-1)JR	IRROUDOIS	41	41
			CONTRACT NO. 66E92	
ILLINOIS FED. AID PROJECT				