

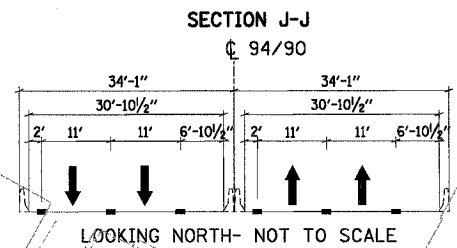
F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	101
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
62580				

**WHITE SOX PARKING**  
 CASH USE 35TH OR PERSHING  
 RESERVED USE 31ST

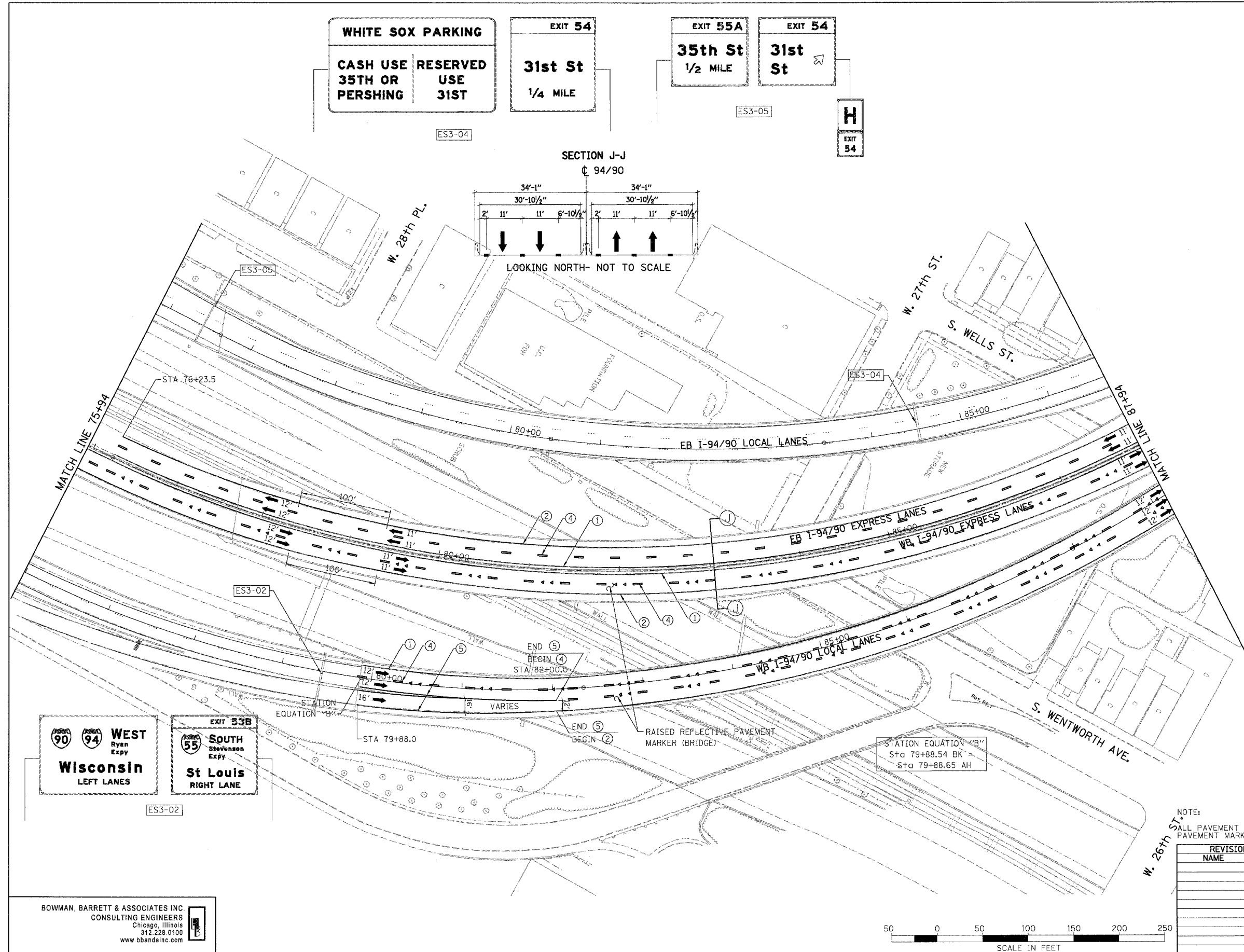
EXIT 54  
**31st St**  
 1/4 MILE

EXIT 55A  
**35th St**  
 1/2 MILE

EXIT 54  
**31st St**



- LEGEND**
- ① LINE 4" (YELLOW EDGE LINE)
  - ② LINE 4" (WHITE EDGE LINE)
  - ③ LINE 4" (SKIP DASH, 6' SKIP - 2' DASH, WHITE)
  - ④ LINE 5" (SKIP DASH, 30' SKIP - 10' DASH, WHITE)
  - ⑤ LINE 8" (WHITE LINE)
  - ⑥ LINE 8" (SKIP DASH, 12' SKIP - 3' DASH, WHITE)
  - ⑦ LINE 12" (DIAGONAL, 30' C-C)
  - ⑧ LINE 12" (DIAGONAL, 500' C-C)
  - ⑨ LETTERS AND SYMBOLS



**WEST**  
 Ryan Expy  
**Wisconsin**  
 LEFT LANES

EXIT 53B  
  
**SOUTH**  
 Stevenson Expy  
**St Louis**  
 RIGHT LANE

NOTE:  
 ALL PAVEMENT MARKINGS ON THIS SHEET WILL BE EPOXY PAVEMENT MARKING, UNLESS OTHERWISE NOTED.

REVISIONS	
NAME	DATE

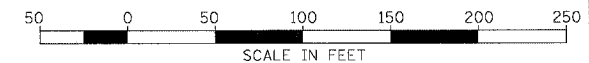
CPM-03

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
 NB DAN RYAN ELEVATED BRIDGE  
 REPAIR FROM 15TH TO 28TH STREETS  
 PROPOSED PAVEMENT MARKING PLAN  
 STA. 75+94 TO STA. 87+94

SCALE: 1"=50'  
 DATE: 7/22/2005

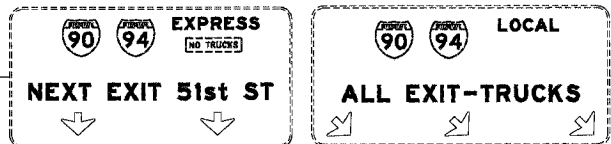
DRAWN BY: RA  
 CHECKED BY: RS

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 312.228.0100  
 www.bbainc.com



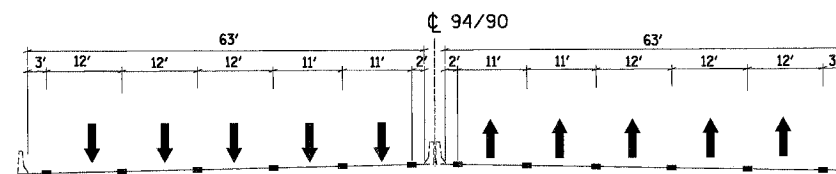
F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	102
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62580



ES4-02

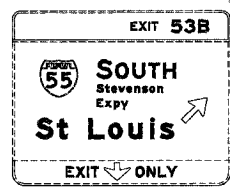
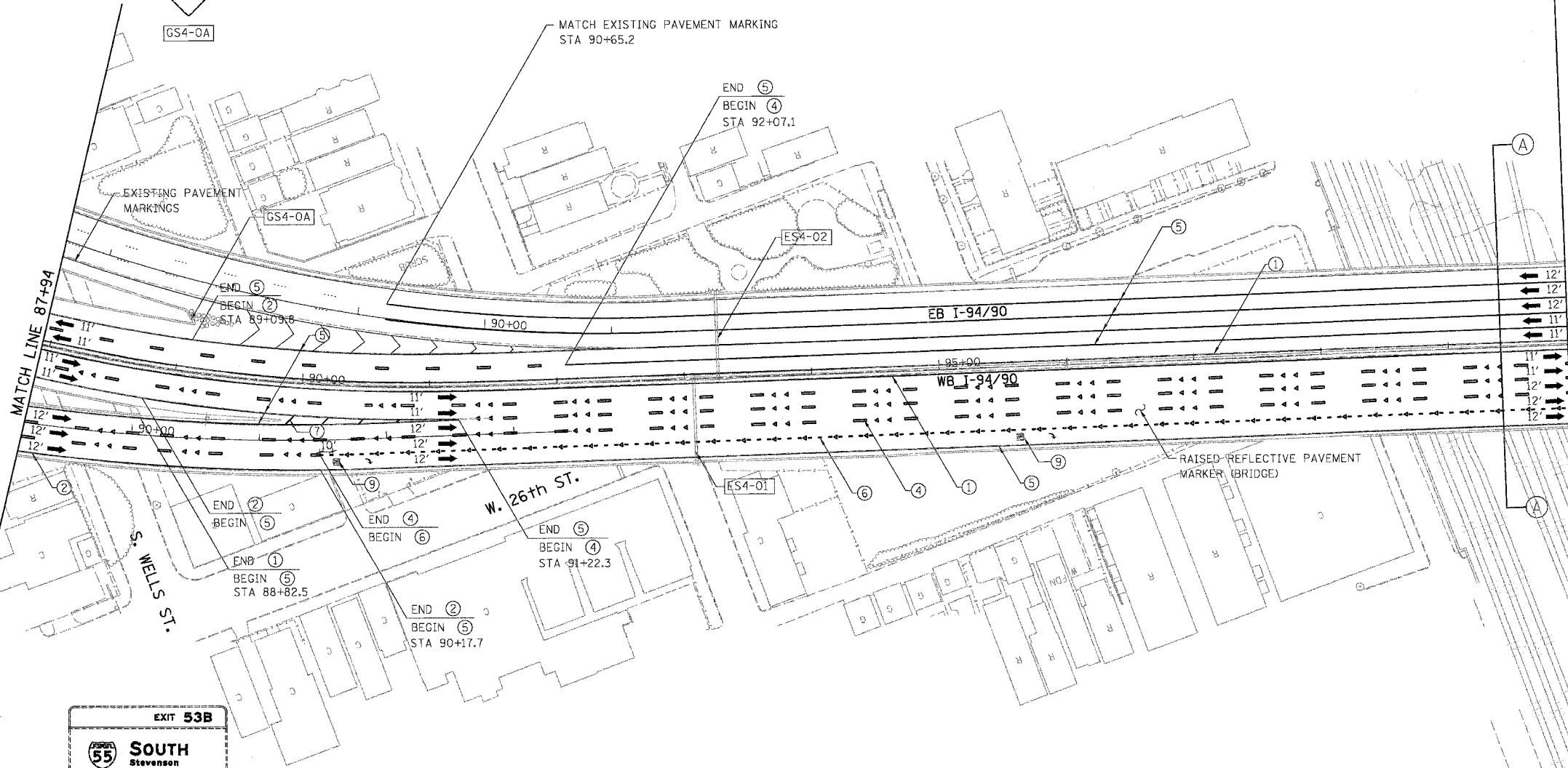
SECTION A-A



LOOKING NORTH - NOT TO SCALE

LEGEND

- ① LINE 4" (YELLOW EDGE LINE)
- ② LINE 4" (WHITE EDGE LINE)
- ③ LINE 4" (SKIP DASH, 6' SKIP - 2' DASH, WHITE)
- ④ LINE 5" (SKIP DASH, 30' SKIP - 10' DASH, WHITE)
- ⑤ LINE 8" (WHITE LINE)
- ⑥ LINE 8" (SKIP DASH, 12' SKIP - 3' DASH, WHITE)
- ⑦ LINE 12" (DIAGONAL, 30' C-C)
- ⑧ LINE 12" (DIAGONAL, 500' C-C)
- ⑨ LETTERS AND SYMBOLS

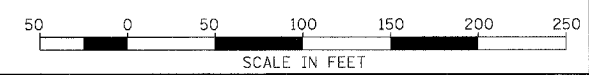


ES4-01

NOTE:  
ALL PAVEMENT MARKINGS ON THIS SHEET WILL BE EPOXY PAVEMENT MARKING, UNLESS OTHERWISE NOTED.

CPM-04

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REVISIONS	
NAME	DATE

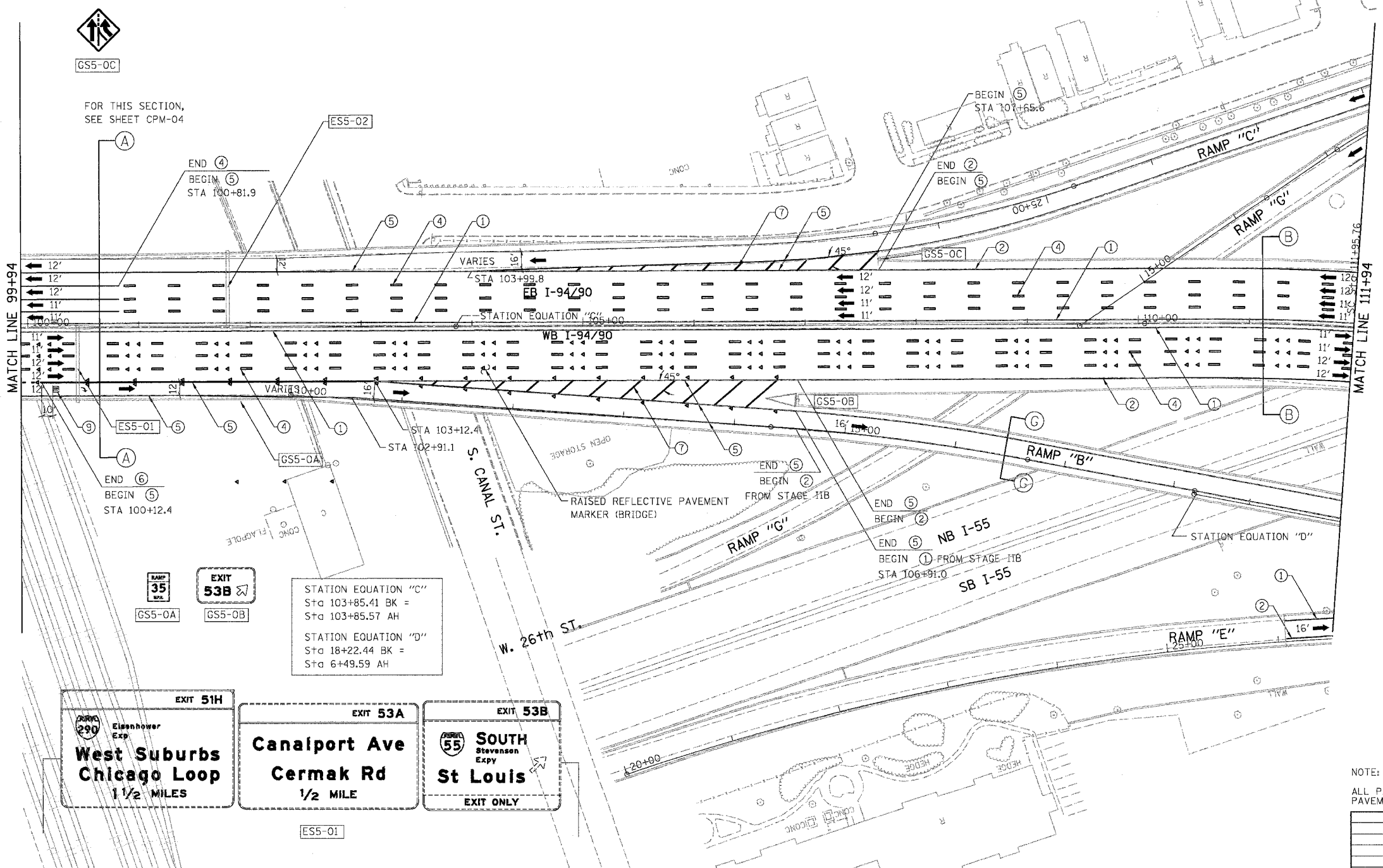
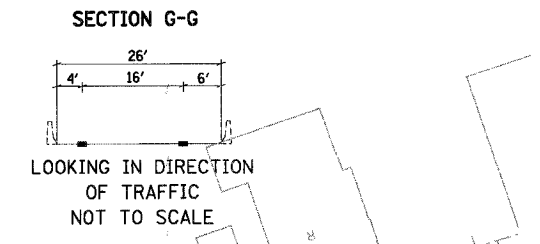
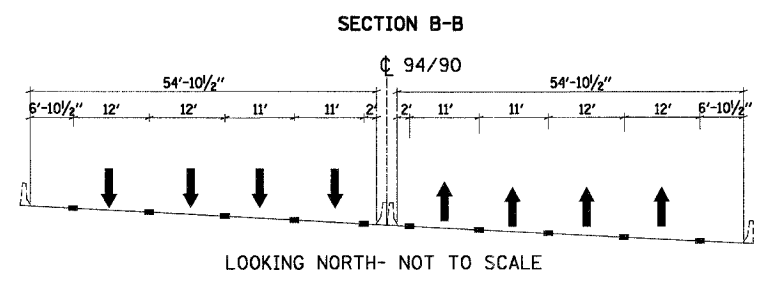
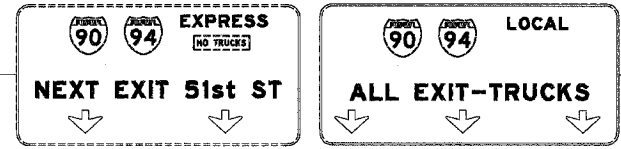
ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
PROPOSED PAVEMENT MARKING PLAN  
STA. 87+94 TO STA. 99+94

SCALE: 1"=50'  
DATE: 7/22/2005

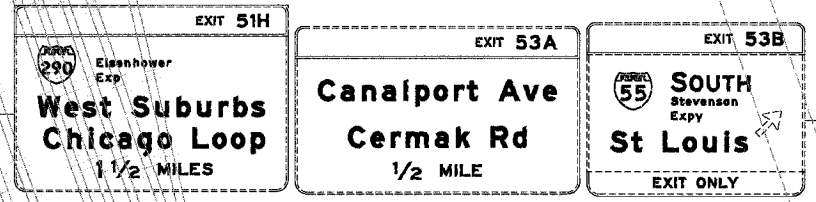
DRAWN BY: RA  
CHECKED BY: RS

3:28:46 PM 7/27/2005

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-02BF	COOK	419	103
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				



- LEGEND**
- ① LINE 4" (YELLOW EDGE LINE)
  - ② LINE 4" (WHITE EDGE LINE)
  - ③ LINE 4" (SKIP DASH, 6' SKIP - 2' DASH, WHITE)
  - ④ LINE 5" (SKIP DASH, 30' SKIP - 10' DASH, WHITE)
  - ⑤ LINE 8" (WHITE LINE)
  - ⑥ LINE 8" (SKIP DASH, 12' SKIP - 3' DASH, WHITE)
  - ⑦ LINE 12" (DIAGONAL, 30' C-C)
  - ⑧ LINE 12" (DIAGONAL, 500' C-C)
  - ⑨ LETTERS AND SYMBOLS



STATION EQUATION "C"  
Sta 103+85.41 BK =  
Sta 103+85.57 AH

STATION EQUATION "D"  
Sta 18+22.44 BK =  
Sta 6+49.59 AH

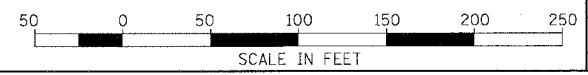
NOTE:  
ALL PAVEMENT MARKINGS ON THIS SHEET WILL BE EPOXY PAVEMENT MARKING, UNLESS OTHERWISE NOTED.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
PROPOSED PAVEMENT MARKING PLAN  
STA. 99+94 TO STA. 111+94

SCALE: 1"=50'  
DATE: 8/12/2005

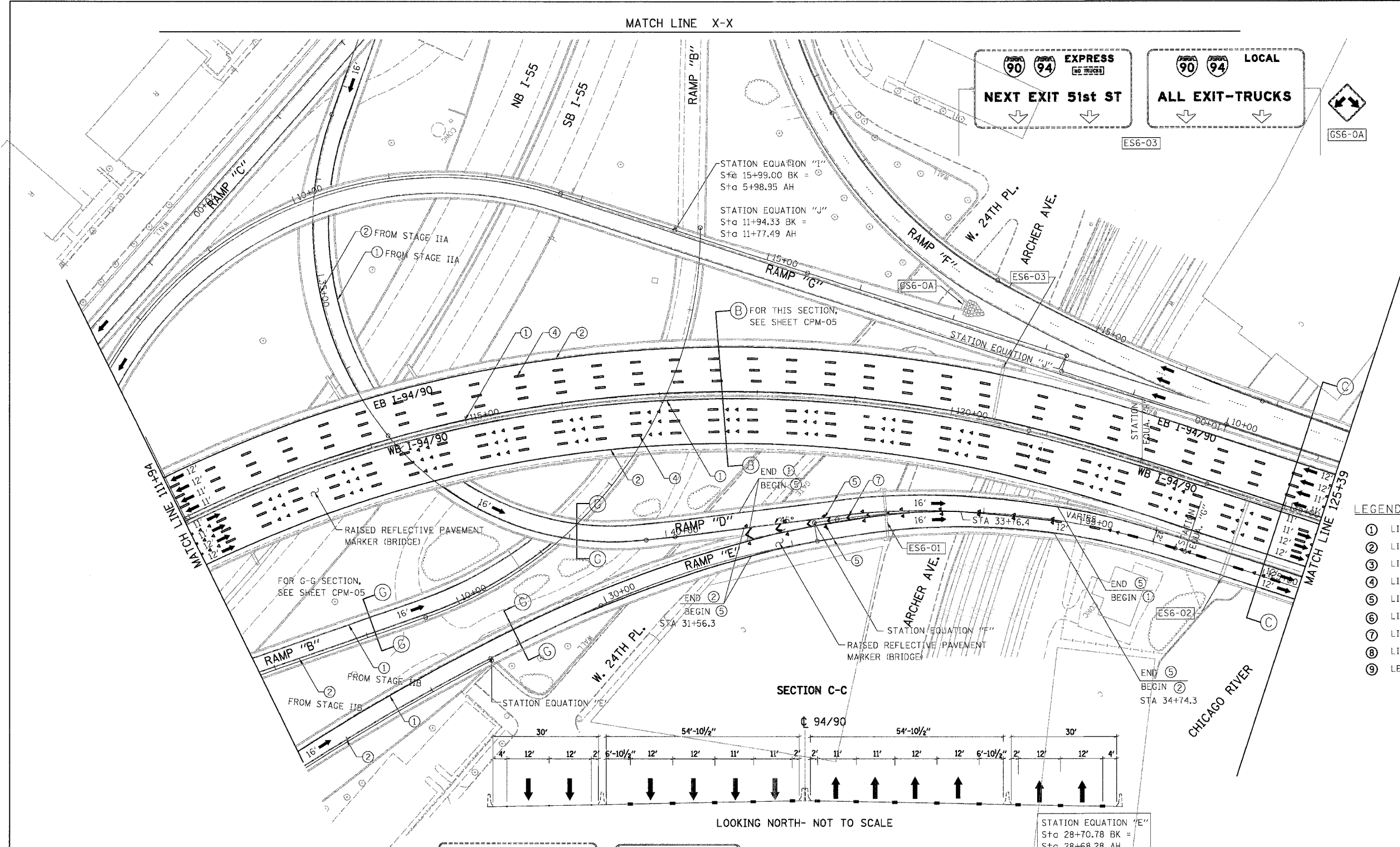
DRAWN BY: RA  
CHECKED BY: RS



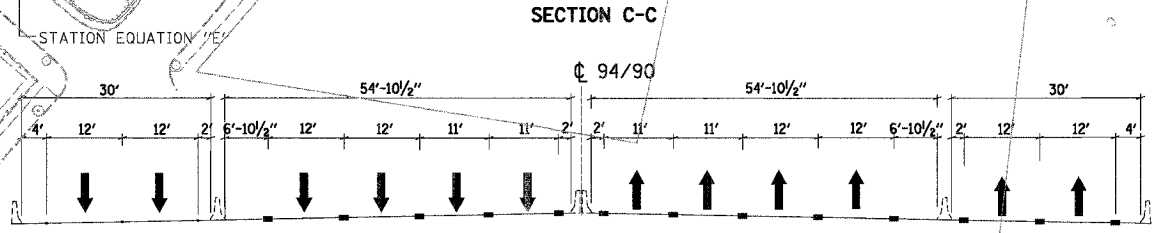
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8/11/2005 10:46:36 AM

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-02BF	COOK	419	104
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				



- LEGEND**
- ① LINE 4" (YELLOW EDGE LINE)
  - ② LINE 4" (WHITE EDGE LINE)
  - ③ LINE 4" (SKIP DASH, 6' SKIP - 2' DASH, WHITE)
  - ④ LINE 5" (SKIP DASH, 30' SKIP - 10' DASH, WHITE)
  - ⑤ LINE 8" (WHITE LINE)
  - ⑥ LINE 8" (SKIP DASH, 12' SKIP - 3' DASH, WHITE)
  - ⑦ LINE 12" (DIAGONAL, 30' C-C)
  - ⑧ LINE 12" (DIAGONAL, 500' C-C)
  - ⑨ LETTERS AND SYMBOLS



LOOKING NORTH- NOT TO SCALE

**EXIT 53A**  
**Canalport Ave**  
**Cermak Rd**  
 LEFT 1/4 MILE

**WEST**  
 Dan Ryan Expy  
**Wisconsin**

ES6-01

ES6-02

STATION EQUATION "E"  
 Sta 28+70.78 BK =  
 Sta 28+68.28 AH

STATION EQUATION "F"  
 Sta 32+25.87 BK =  
 Sta 32+25.87 AH

STATION EQUATION "G"  
 Sta 36+10.50 BK =  
 Sta 124+16.76 AH

STATION EQUATION "H"  
 Sta 15+99.00 BK =  
 Sta 5+98.95 AH

NOTE:  
 ALL PAVEMENT MARKINGS ON THIS SHEET WILL BE EPOXY PAVEMENT MARKING, UNLESS OTHERWISE NOTED.

CPM-06

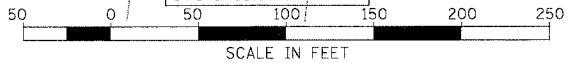
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**F.A.I. 94/90 (DAN RYAN EXPRESSWAY)**  
**NB DAN RYAN ELEVATED BRIDGE**  
**REPAIR FROM 15TH TO 28TH STREETS**  
**PROPOSED PAVEMENT MARKING PLAN**  
**STA. 111+94 TO STA. 125+39**

SCALE: 1"=50'  
 DATE: 7/22/2005

DRAWN BY: RA  
 CHECKED BY: RS

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7/22/2005 4:00:50 PM

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	105
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
62580				

MATCH LINE Y-Y

- LEGEND**
- ① LINE 4" (YELLOW EDGE LINE)
  - ② LINE 4" (WHITE EDGE LINE)
  - ③ LINE 4" (SKIP DASH, 6' SKIP - 2' DASH, WHITE)
  - ④ LINE 5" (SKIP DASH, 30' SKIP - 10' DASH, WHITE)
  - ⑤ LINE 8" (WHITE LINE)
  - ⑥ LINE 8" (SKIP DASH, 12' SKIP - 3' DASH, WHITE)
  - ⑦ LINE 12" (DIAGONAL, 30' C-C)
  - ⑧ LINE 12" (DIAGONAL, 500' C-C)
  - ⑨ LETTERS AND SYMBOLS

**EXIT 292B**

**EXIT 292A**

**EXIT ONLY**

**EXIT 292B**

**EXIT 292A**

**EXIT ONLY**

**EXIT 292B**

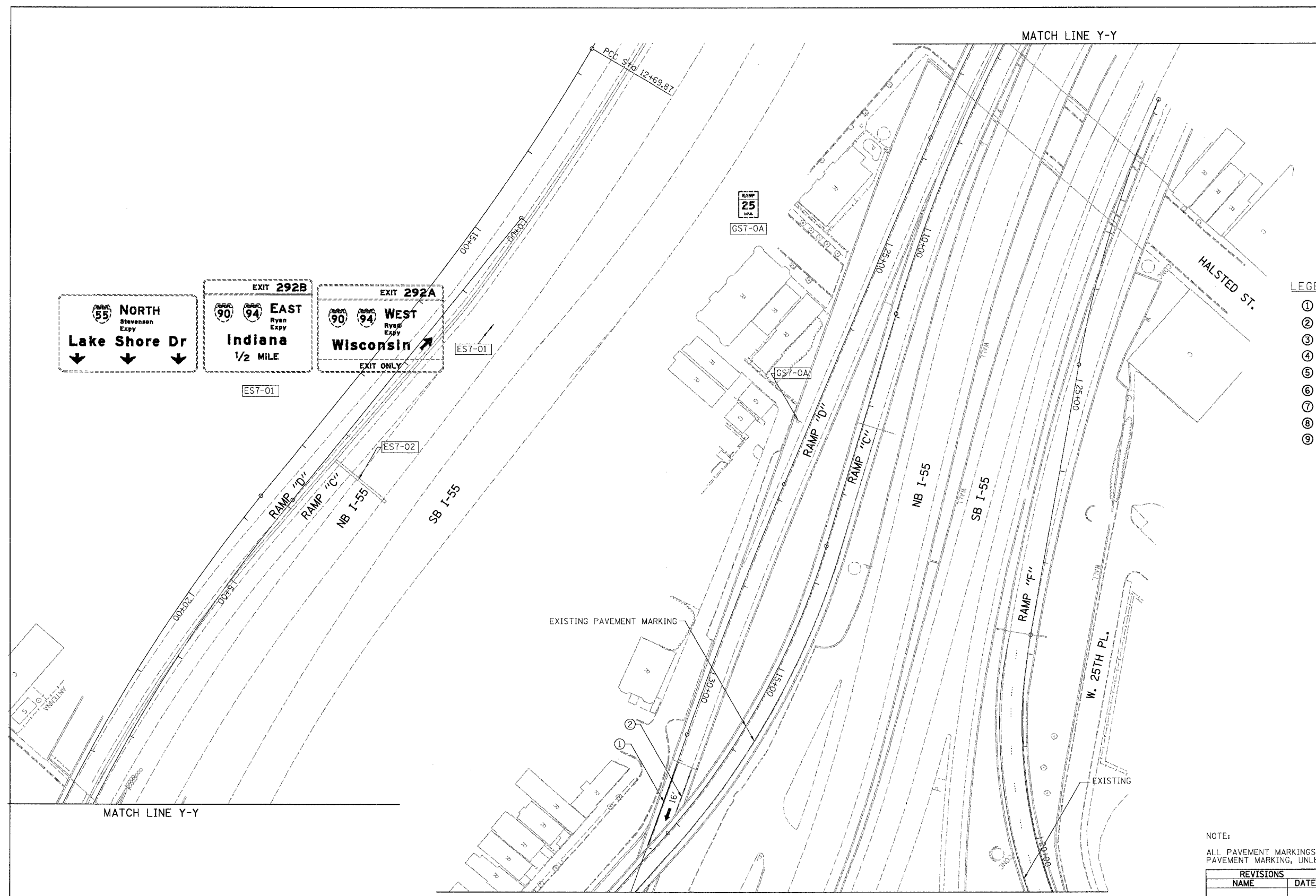
**EXIT 292A**

**EXIT ONLY**

**55 NORTH**  
Stevenson  
Expy  
**Lake Shore Dr**

**90 94 EAST**  
Ryan  
Expy  
**Indiana**  
1/2 MILE

**90 94 WEST**  
Ryan  
Expy  
**Wisconsin**



MATCH LINE Y-Y

MATCH LINE X-X

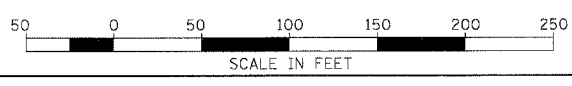
NOTE:  
ALL PAVEMENT MARKINGS ON THIS SHEET WILL BE EPOXY PAVEMENT MARKING, UNLESS OTHERWISE NOTED.

REVISIONS	NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
PROPOSED PAVEMENT MARKING PLAN  
STA. TO STA.

SCALE: 1"=50'  
DATE: 7/22/2005

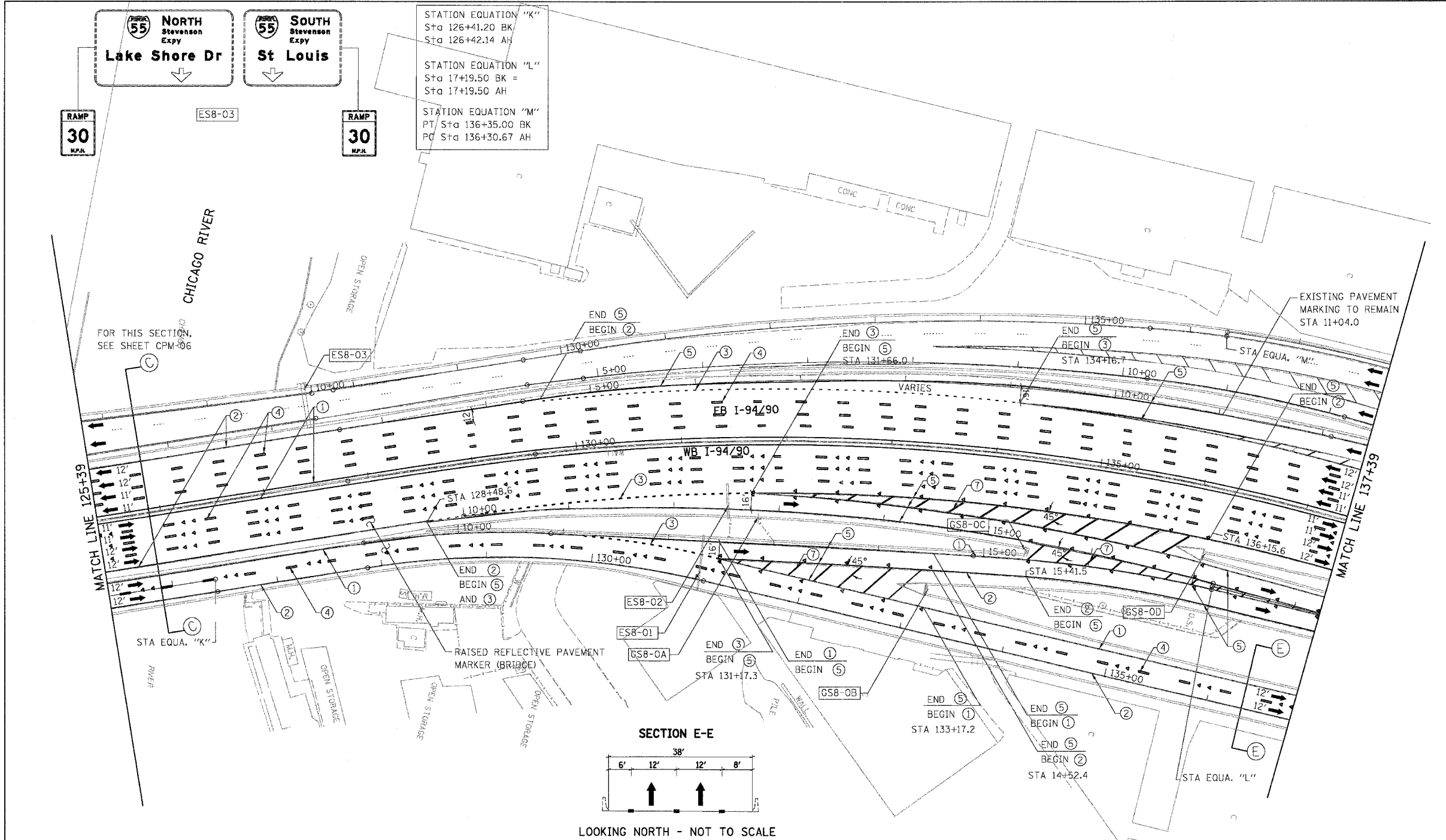
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CHECKED BY: RS



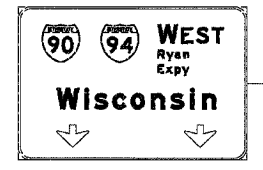
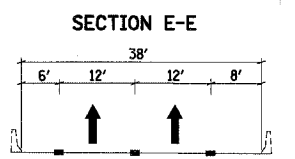
BOWMAN, BARRETT & ASSOCIATES INC  
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9/27/2005 9:46:18 AM

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	* 2003-028F	COOK	419	106
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				



- LEGEND**
- ① LINE 4" (YELLOW EDGE LINE)
  - ② LINE 4" (WHITE EDGE LINE)
  - ③ LINE 4" (SKIP DASH, 6' SKIP - 2' DASH, WHITE)
  - ④ LINE 5" (SKIP DASH, 30' SKIP - 10' DASH, WHITE)
  - ⑤ LINE 8" (WHITE LINE)
  - ⑥ LINE 8" (SKIP DASH, 12' SKIP - 3' DASH, WHITE)
  - ⑦ LINE 12" (DIAGONAL, 30' C-C)
  - ⑧ LINE 12" (DIAGONAL, 500' C-C)
  - ⑨ LETTERS AND SYMBOLS



NOTE:  
ALL PAVEMENT MARKINGS ON THIS SHEET WILL BE EPOXY PAVEMENT MARKING, UNLESS OTHERWISE NOTED.

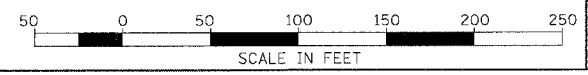
CPM-08

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**F.A.I. 94/90 (DAN RYAN EXPRESSWAY)**  
 NB DAN RYAN ELEVATED BRIDGE  
 REPAIR FROM 15TH TO 28TH STREETS  
 PROPOSED PAVEMENT MARKING PLAN  
 STA. 125+39 TO STA. 137+39

SCALE: 1"=50'  
 DATE: 8/12/2005

DRAWN BY: RA  
 CHECKED BY: RS



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8/11/2005 10:52:24 AM

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	107
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				



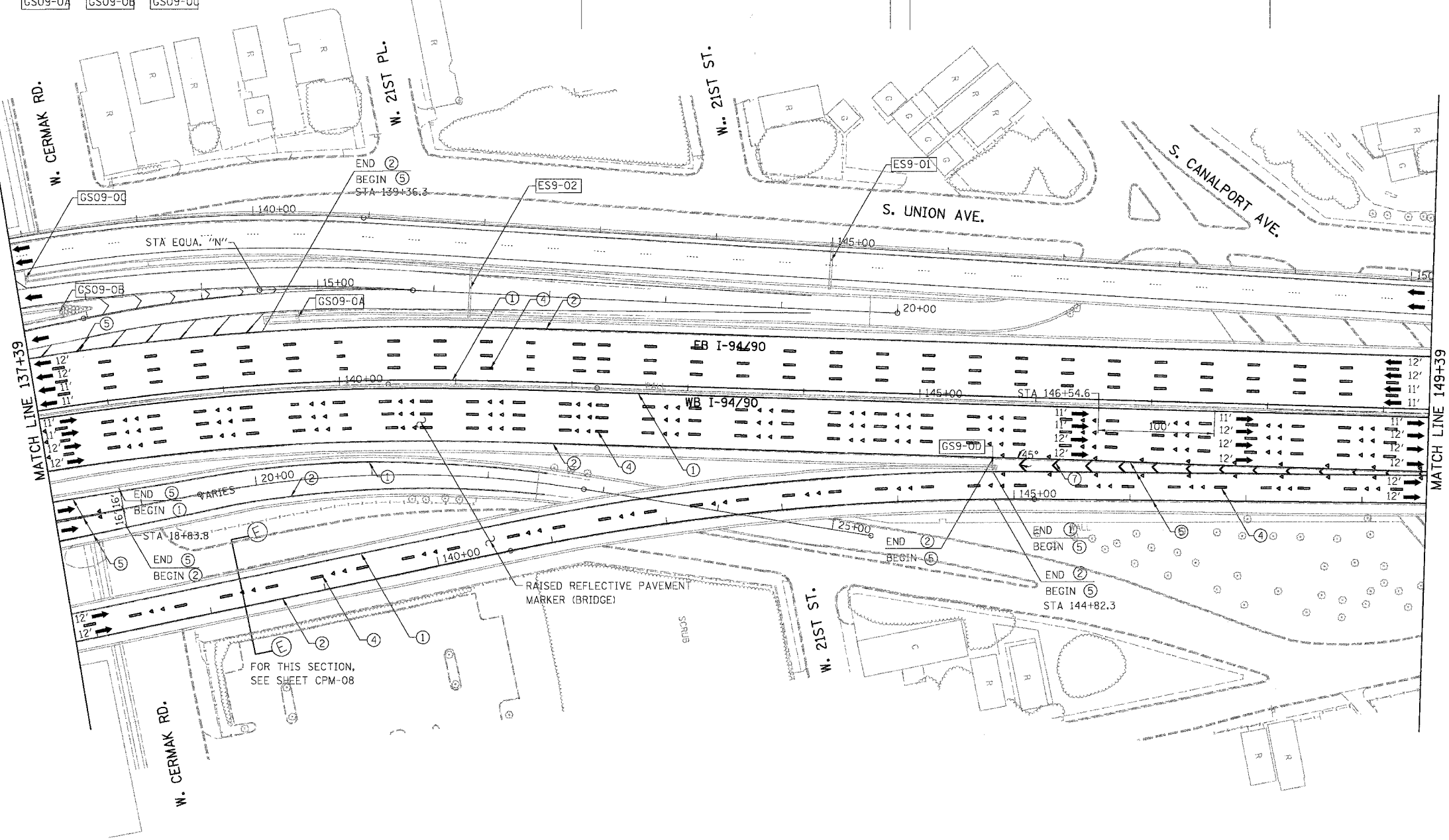
STATION EQUATION "N"  
 PT Sta 14+49.84 BK  
 PC Sta 14+49.84 AH

**NORTH Stevenson Expy**  
**Lake Shore Dr**

**SOUTH Stevenson Expy**  
**St Louis**

**EAST Ryan Expy**  
**Indiana**

**Stevenson Expy**  
**St Louis Lake Shore Dr**



- LEGEND**
- ① LINE 4" (YELLOW EDGE LINE)
  - ② LINE 4" (WHITE EDGE LINE)
  - ③ LINE 4" (SKIP DASH, 6' SKIP - 2' DASH, WHITE)
  - ④ LINE 5" (SKIP DASH, 30' SKIP - 10' DASH, WHITE)
  - ⑤ LINE 8" (WHITE LINE)
  - ⑥ LINE 8" (SKIP DASH, 12' SKIP - 3' DASH, WHITE)
  - ⑦ LINE 12" (DIAGONAL, 30° C-C)
  - ⑧ LINE 12" (DIAGONAL, 500° C-C)
  - ⑨ LETTERS AND SYMBOLS

NOTE:  
 ALL PAVEMENT MARKINGS ON THIS SHEET WILL BE EPOXY PAVEMENT MARKING, UNLESS OTHERWISE NOTED.

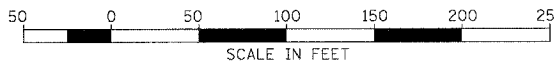
CPM-09

REVISIONS		DATE
NAME		

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
 NB DAN RYAN ELEVATED BRIDGE  
 REPAIR FROM 15TH TO 28TH STREETS  
 PROPOSED PAVEMENT MARKING PLAN  
 STA. 137+39 TO STA. 149+39

SCALE: 1"=50'  
 DATE: 7/22/2005

DRAWN BY: RA  
 CHECKED BY: RS



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 CONSULTING ENGINEERS  
 Chicago, Illinois  
 312.228.0100  
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GS9-0D

FOR THIS SECTION,  
 SEE SHEET CPM-08

RAISED REFLECTIVE PAVEMENT  
 MARKER (BRIDGE)

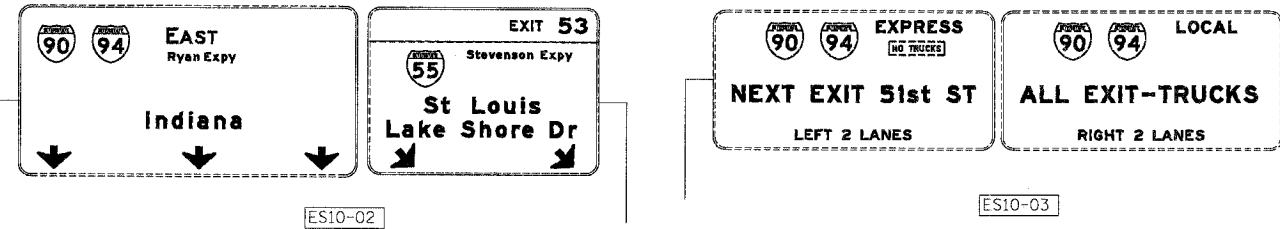
MATCH LINE 137+39

MATCH LINE 149+39

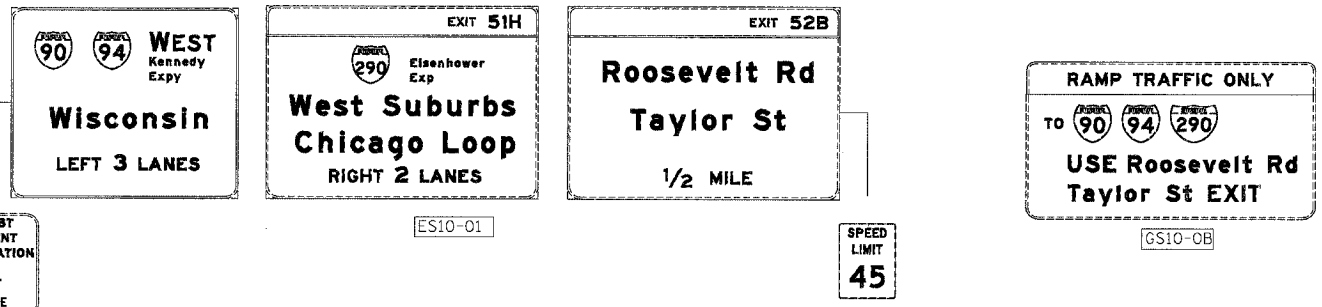
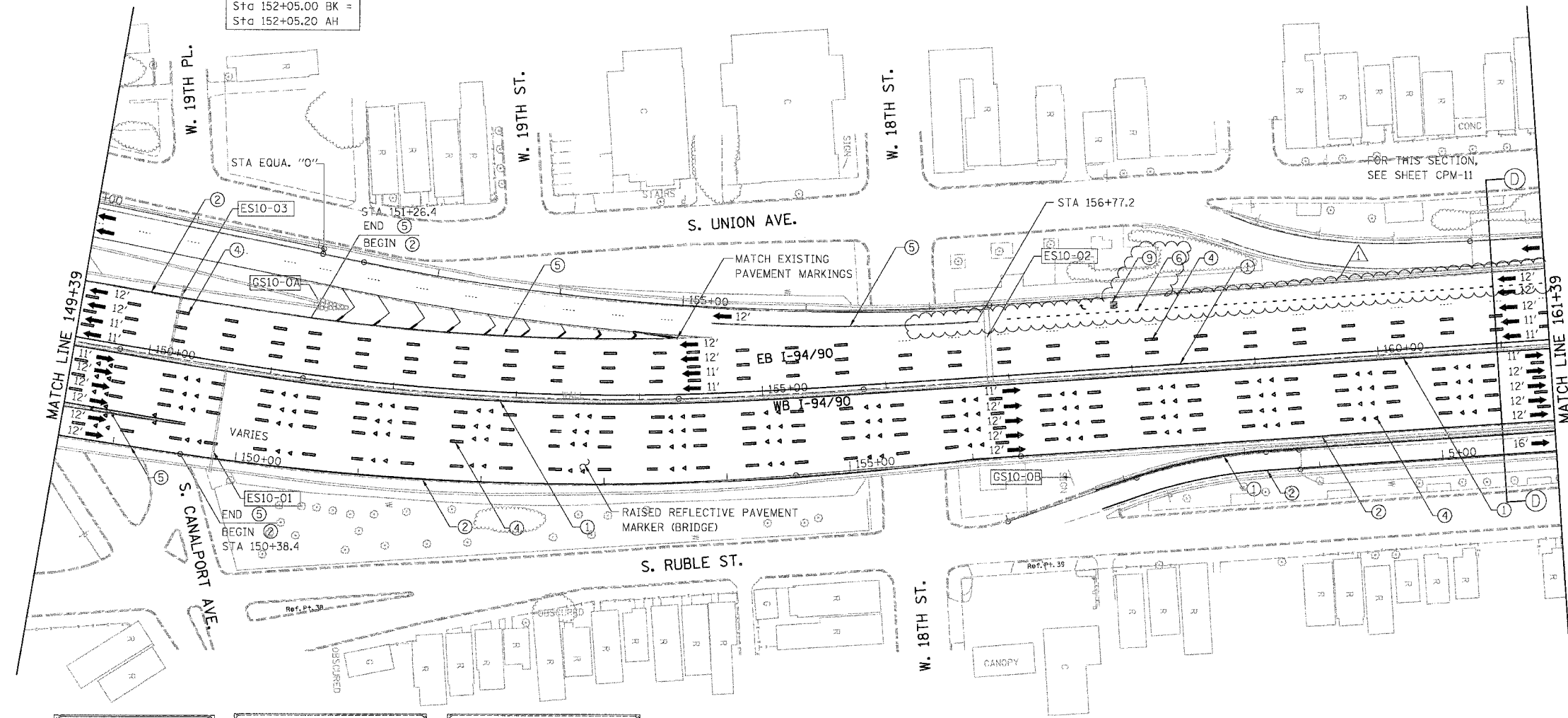
R:\BDD\PROJ\94\90\CPM\9490\_CPM107.DWG

3/3/06 PM 7/20/2005

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	108
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
62580				



- LEGEND**
- ① LINE 4" (YELLOW EDGE LINE)
  - ② LINE 4" (WHITE EDGE LINE)
  - ③ LINE 4" (SKIP DASH, 6' SKIP - 2' DASH, WHITE)
  - ④ LINE 5" (SKIP DASH, 30' SKIP - 10' DASH, WHITE)
  - ⑤ LINE 8" (WHITE LINE)
  - ⑥ LINE 8" (SKIP DASH, 12' SKIP - 3' DASH, WHITE)
  - ⑦ LINE 12" (DIAGONAL, 30' C-C)
  - ⑧ LINE 12" (DIAGONAL, 500' C-C)
  - ⑨ LETTERS AND SYMBOLS



POLK ST  
ACCIDENT  
INVESTIGATION  
SITE  
LEFT  
1 MILE

SPEED  
LIMIT  
45

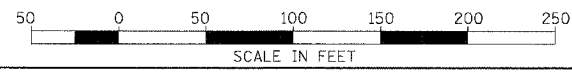
NOTE:  
ALL PAVEMENT MARKINGS ON THIS SHEET WILL BE EPOXY PAVEMENT MARKING, UNLESS OTHERWISE NOTED.

REVISIONS	
NAME	DATE
ADDENDUM 1	9/6/05

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
PROPOSED PAVEMENT MARKING PLAN  
STA. 149+39 TO STA. 161+39

SCALE: 1"=50'  
DATE: 8/12/2005

DRAWN BY: RA  
CHECKED BY: RS

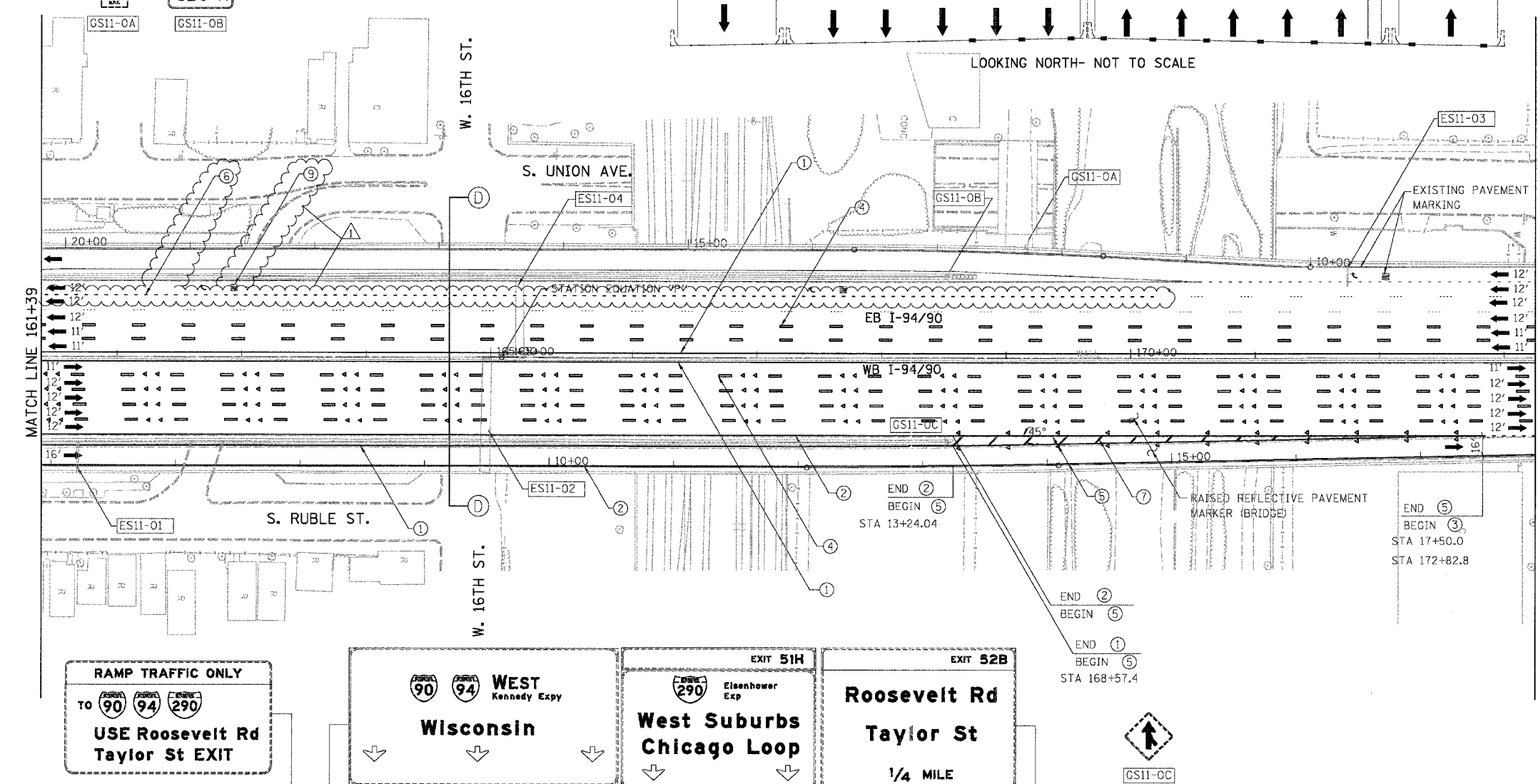
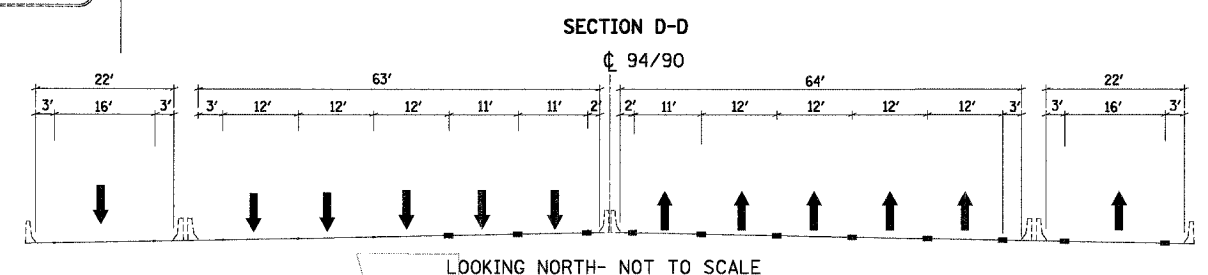
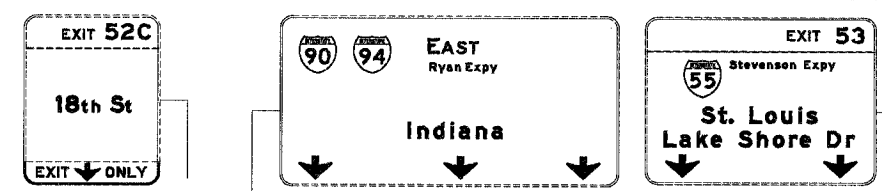


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9/2/2005 10:59:41 AM



F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	109
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
62580				



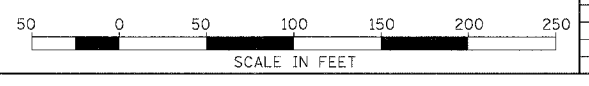
- LEGEND**
- ① LINE 4" (YELLOW EDGE LINE)
  - ② LINE 4" (WHITE EDGE LINE)
  - ③ LINE 4" (SKIP DASH, 6' SKIP - 2' DASH, WHITE)
  - ④ LINE 5" (SKIP DASH, 30' SKIP - 10' DASH, WHITE)
  - ⑤ LINE 8" (WHITE LINE)
  - ⑥ LINE 8" (SKIP DASH, 12' SKIP - 3' DASH, WHITE)
  - ⑦ LINE 12" (DIAGONAL, 30' C-C)
  - ⑧ LINE 12" (DIAGONAL, 500' C-C)
  - ⑨ LETTERS AND SYMBOLS

STATION EQUATION "P"  
Sta 165+08.65 BK =  
Sta 164+94.89 AH

NOTE:  
ALL PAVEMENT MARKINGS ON THIS SHEET WILL BE EPOXY PAVEMENT MARKING, UNLESS OTHERWISE NOTED.

REVISIONS	
NAME	DATE
ADDENDUM 1	9/6/05

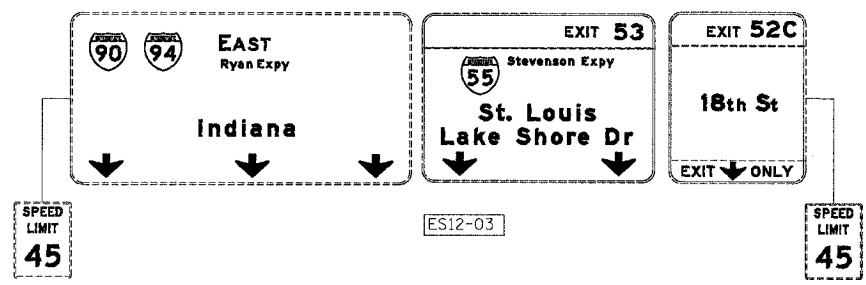
ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
PROPOSED PAVEMENT MARKING PLAN  
STA. 161+39 TO STA. 173+25  
SCALE: 1"=50'  
DATE: 8/12/2005  
DRAWN BY: RA  
CHECKED BY: RS



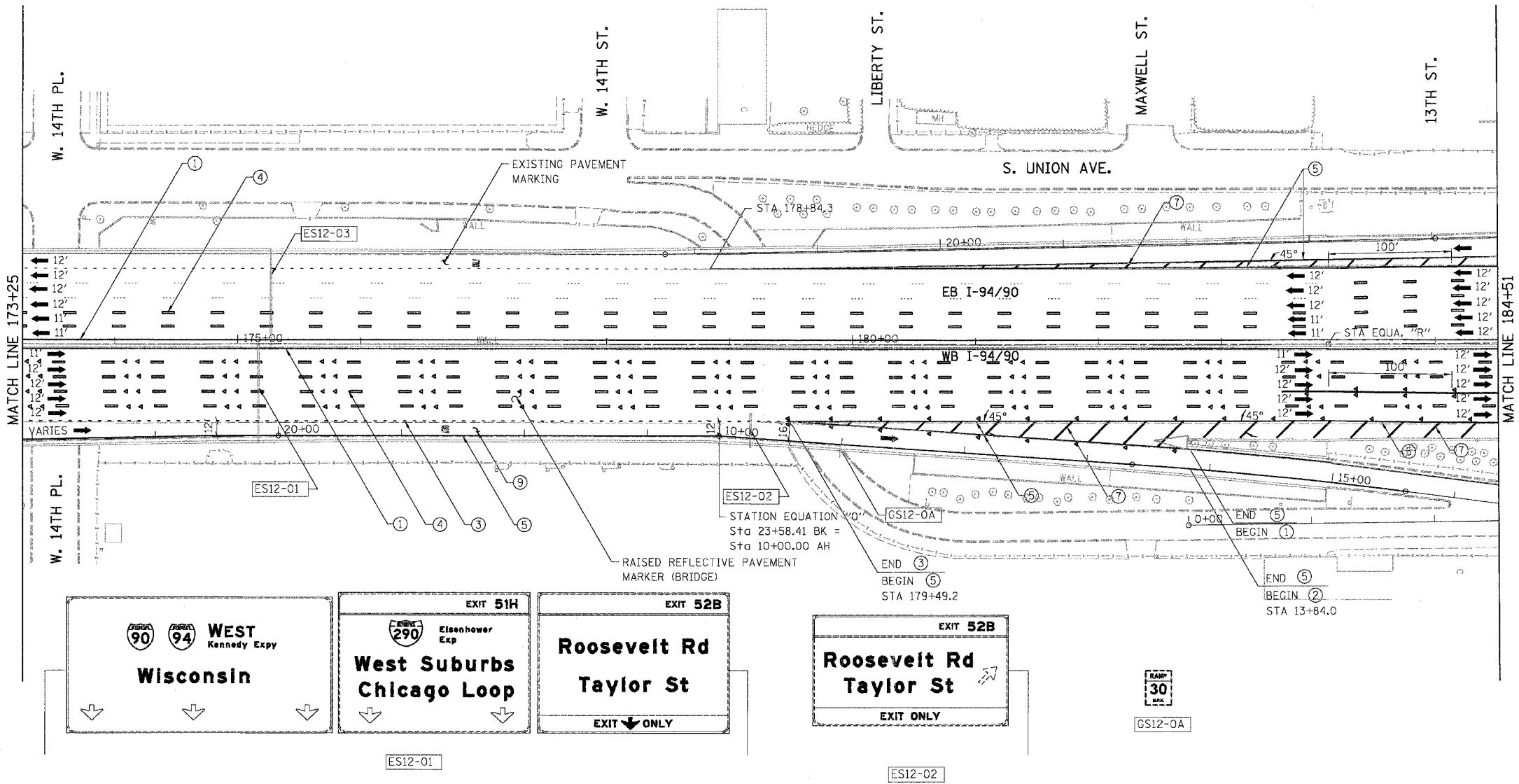
BOWMAN, BARRETT & ASSOCIATES INC.  
CONSULTING ENGINEERS  
Chicago, Illinois  
312.228.0100  
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11/6/05 08:30 AM

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	110
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				



STATION EQUATION "R"  
Sta 183+87.10 BK =  
Sta 183+13.36 AH



- LEGEND**
- ① LINE 4" (YELLOW EDGE LINE)
  - ② LINE 4" (WHITE EDGE LINE)
  - ③ LINE 4" (SKIP DASH, 6' SKIP - 2' DASH, WHITE)
  - ④ LINE 5" (SKIP DASH, 30' SKIP - 10' DASH, WHITE)
  - ⑤ LINE 8" (WHITE LINE)
  - ⑥ LINE 8" (SKIP DASH, 12' SKIP - 3' DASH, WHITE)
  - ⑦ LINE 12" (DIAGONAL, 30' C-C)
  - ⑧ LINE 12" (DIAGONAL, 500' C-C)
  - ⑨ LETTERS AND SYMBOLS

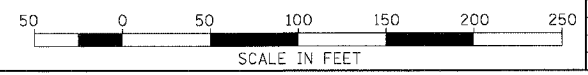
NOTE:  
ALL PAVEMENT MARKINGS ON THIS SHEET WILL BE EPOXY PAVEMENT MARKING, UNLESS OTHERWISE NOTED.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
PROPOSED PAVEMENT MARKING PLAN  
STA. 173+25 TO STA. 184+51

SCALE: 1"=50'  
DATE: 8/12/2005

DRAWN BY: RA  
CHECKED BY: RS



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8/11/2005 AM 10:20:05 AM

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	111
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
62580				

U.s. Cellular Field  
TOURIST INFO  
Turn Radio To  
1620 AM

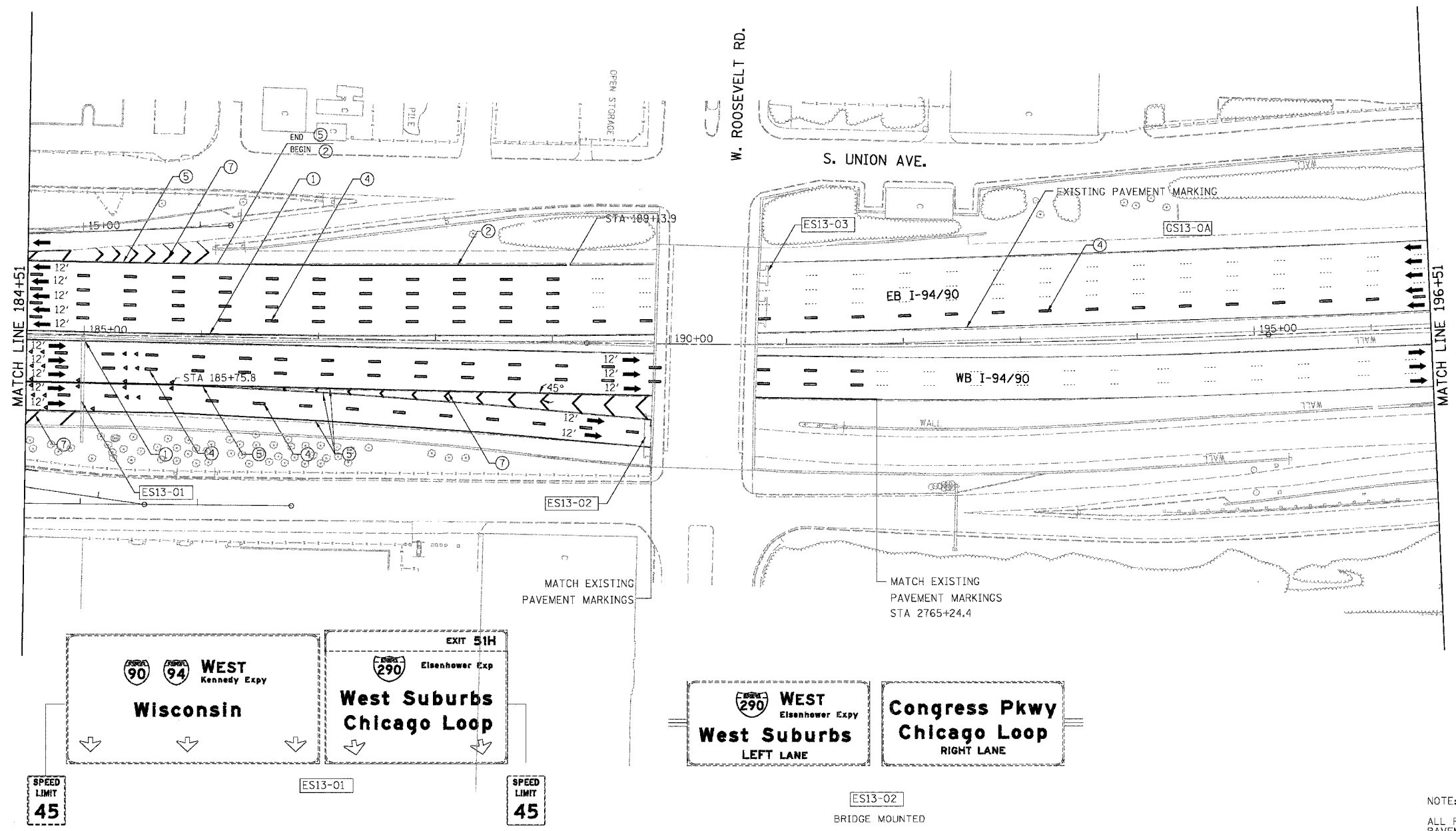
GS13-0A

EXIT 53  
Stevenson Expy  
St. Louis  
Lake Shore Dr  
1/2 MILE

EXIT 52C  
18th St  
3/4 MILE

ES13-03

BRIDGE MOUNTED



LEGEND

- ① LINE 4" (YELLOW EDGE LINE)
- ② LINE 4" (WHITE EDGE LINE)
- ③ LINE 4" (SKIP DASH, 6' SKIP - 2' DASH, WHITE)
- ④ LINE 5" (SKIP DASH, 30' SKIP - 10' DASH, WHITE)
- ⑤ LINE 8" (WHITE LINE)
- ⑥ LINE 8" (SKIP DASH, 12' SKIP - 3' DASH, WHITE)
- ⑦ LINE 12" (DIAGONAL, 30' C-C)
- ⑧ LINE 12" (DIAGONAL, 500' C-C)
- ⑨ LETTERS AND SYMBOLS

WEST Kennedy Expy  
Wisconsin

EXIT 51H  
Eisenhower Expy  
West Suburbs  
Chicago Loop

SPEED LIMIT  
45

ES13-01

SPEED LIMIT  
45

WEST Eisenhower Expy  
West Suburbs  
LEFT LANE

Congress Pkwy  
Chicago Loop  
RIGHT LANE

ES13-02

BRIDGE MOUNTED

NOTE:

ALL PAVEMENT MARKINGS ON THIS SHEET WILL BE EPOXY PAVEMENT MARKING, UNLESS OTHERWISE NOTED.

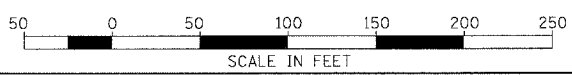
CPM-13

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
PROPOSED PAVEMENT MARKING PLAN  
STA. 184+51 TO STA. 196+51

SCALE: 1"=50'  
DATE: 7/22/2005

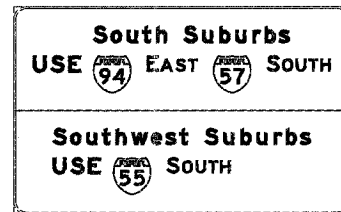
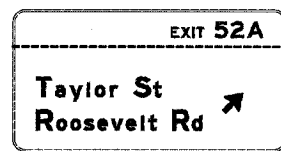
DRAWN BY: RA  
CHECKED BY: RS



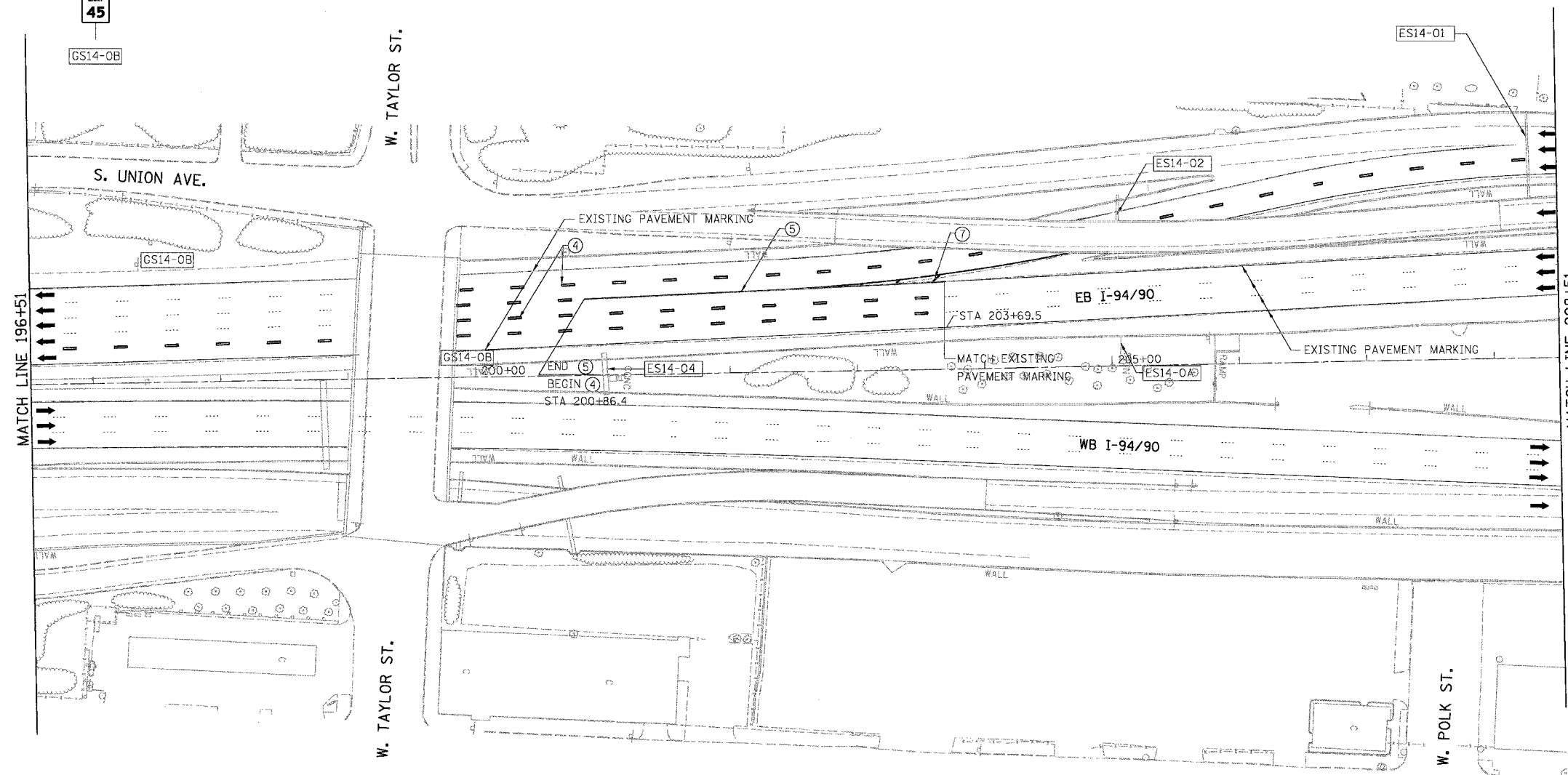
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CONSULTING ENGINEERS  
Chicago, Illinois  
312.228.0100  
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3/25/06 PM 7/21/2005

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	112
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				



SPEED LIMIT 45



LEGEND

- ① LINE 4" (YELLOW EDGE LINE)
- ② LINE 4" (WHITE EDGE LINE)
- ③ LINE 4" (SKIP DASH, 6' SKIP - 2' DASH, WHITE)
- ④ LINE 5" (SKIP DASH, 30' SKIP - 10' DASH, WHITE)
- ⑤ LINE 8" (WHITE LINE)
- ⑥ LINE 8" (SKIP DASH, 12' SKIP - 3' DASH, WHITE)
- ⑦ LINE 12" (DIAGONAL, 30' C-C)
- ⑧ LINE 12" (DIAGONAL, 500' C-C)
- ⑨ LETTERS AND SYMBOLS

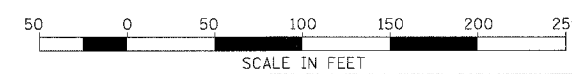
NOTE:

ALL PAVEMENT MARKINGS ON THIS SHEET WILL BE EPOXY PAVEMENT MARKING, UNLESS OTHERWISE NOTED.

CPM-14

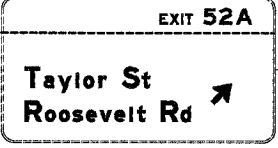
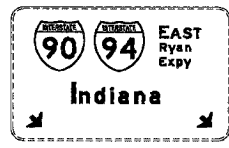
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
 NB DAN RYAN ELEVATED BRIDGE  
 REPAIR FROM 15TH TO 28TH STREETS  
 PROPOSED PAVEMENT MARKING PLAN  
 STA. 196+51 TO STA. 208+51  
 SCALE: 1"=50'  
 DATE: 7/22/2005  
 DRAWN BY: RA  
 CHECKED BY: RS



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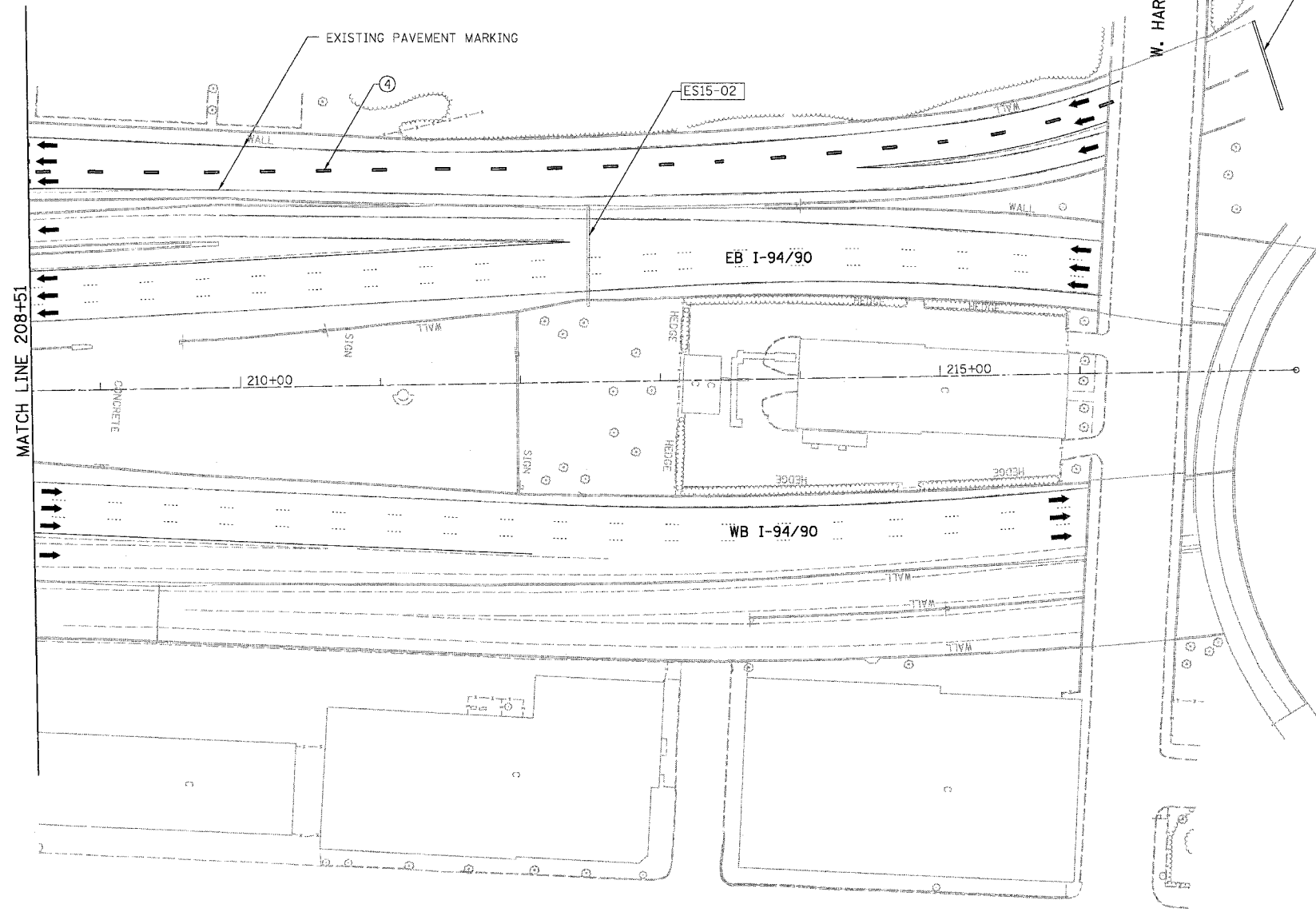
7/22/2005 3:35:44 PM



ES15-01

ES15-02

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	113
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				



W. HARRISON ST.

ES15-01

LEGEND

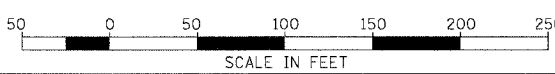
- ① LINE 4" (YELLOW EDGE LINE)
- ② LINE 4" (WHITE EDGE LINE)
- ③ LINE 4" (SKIP DASH, 6' SKIP - 2' DASH, WHITE)
- ④ LINE 5" (SKIP DASH, 30' SKIP - 10' DASH, WHITE)
- ⑤ LINE 8" (WHITE LINE)
- ⑥ LINE 8" (SKIP DASH, 12' SKIP - 3' DASH, WHITE)
- ⑦ LINE 12" (DIAGONAL, 30' C-C)
- ⑧ LINE 12" (DIAGONAL, 500' C-C)
- ⑨ LETTERS AND SYMBOLS

MATCH LINE 208+51

NOTE:  
ALL PAVEMENT MARKINGS ON THIS SHEET WILL BE EPOXY PAVEMENT MARKING, UNLESS OTHERWISE NOTED. CPM-15

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 94/90 (DAN RYAN EXPRESSWAY) NB DAN RYAN ELEVATED BRIDGE REPAIR FROM 15TH TO 28TH STREETS PROPOSED PAVEMENT MARKING PLAN STA. 208+51 TO STA.
NAME	DATE	

BOWMAN, BARRETT & ASSOCIATES INC.  
CONSULTING ENGINEERS  
Chicago, Illinois  
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7/21/2005 3:36:08 PM

62580

11/20/05 10:55:59 AM

**SIGN DETAIL**  
1:50

SIGN NUMBER	TS1-01
WIDTH x HGT.	16'-3" x 11'-0"
BORDER WIDTH	2"
CORNER RADIUS	9"
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective COLOR: Green
LEGENDBORDER	TYPE: Reflective COLOR: White/Pure White

SYMBOL	X	Y	WID	HGT
M1	12	83.3	36	36
M1	64	83.3	36	36
ARDOWN	81.3	10.3	32	22

Panel Style: guide\_exp\_advance\_base  
Dimensions are in inches, tenths

Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)							LENGTH	SERIESIZE		
E	x	p	r	o	s	s	71.4	EM		
111.9	123.8	136.6	147.9	155.5	165.7	175.7				
N	O	T	R	U	C	K	S	EM		
111.9	120.4	127	135	142.5	150.9	159.4	167.4	175.6	70.2	8
N	E	X	T	E	X	I	T	EM		
51.9	64.5	75.8	87.8	96.6	108.6	119.9	132.7	137.6	94.5	12
M	o	n	r	o	e	S	t	EM		
33.9	54.2	69.6	86	96.2	110.2	120.4	136.4	152.6	126.7	1612

**SIGN DETAIL**  
1:50

SIGN NUMBER	TS1-02
WIDTH x HGT.	13'-4" x 5'-4"
BORDER WIDTH	2"
CORNER RADIUS	9"
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective COLOR: Green
LEGENDBORDER	TYPE: Reflective COLOR: Red/Pure White

SYMBOL	X	Y	WID	HGT
M1	6	14	24	24
ARDOWN	69.2	4	24	16.5

Panel Style: guide\_exp\_advance\_base  
Dimensions are in inches, tenths

Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)							LENGTH	SERIESIZE						
W	i	s	c	o	n	s	i	n	75.4	EM				
40.2	53.2	57.9	66.5	75.2	84.9	94	103.4	109.2						
L	a	k	e	S	h	o	r	e	D	r	EM			
40.2	49.5	59.7	68.2	74.7	84.6	95.8	105.3	115	121.9	127.7	137.7	149.1	113.8	107.5

**SIGN DETAIL**  
1:50

SIGN NUMBER	TS16-07
WIDTH x HGT.	3'-12" x 1'-8"
BORDER WIDTH	0"
CORNER RADIUS	0"
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective COLOR: Green
LEGENDBORDER	TYPE: Reflective COLOR: White

SYMBOL	X	Y	WID	HGT

Panel Style: guide\_exp\_advance\_base  
Dimensions are in inches, tenths

Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)							LENGTH	SERIESIZE
L	E	F	T	EM				
3	14.3	25.6	36	41.8	12			

**SIGN DETAIL**  
1:50

SIGN NUMBER	TS16-06
WIDTH x HGT.	4'-10" x 1'-8"
BORDER WIDTH	0"
CORNER RADIUS	0"
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective COLOR: Green
LEGENDBORDER	TYPE: Reflective COLOR: White

SYMBOL	X	Y	WID	HGT

Panel Style: guide\_exp\_advance\_base  
Dimensions are in inches, tenths

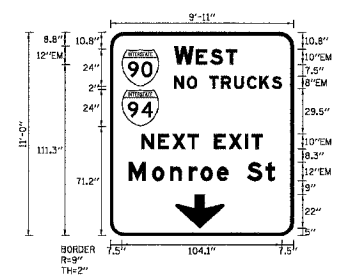
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)							LENGTH	SERIESIZE
R	I	G	H	T	EM			
3	15.7	21.1	33.7	45.8	51.6	12		

REVISIONS	
NAME	DATE
ADDENDUM 1	9/6/05

TIS01  
ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
TEMPORARY INFORMATION SIGNING  
SCALE: =NTS  
DATE: 8/12/2005  
DRAWN BY: RA  
CHECKED BY: RS

**SIGN DETAIL**  
1:50



SIGN NUMBER	TS1-03
WIDTH x HIGHT	9'-11" x 11'-4"
BORDER WIDTH	2"
CORNER RADIUS	9"
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective COLOR: Green
LEGEND/BORDER	TYPE: Reflective COLOR: White/Pure White

SYMBOL	X	Y	WID	HT
M1_1	7.5	97.2	24	24
M1_1	7.5	71.2	24	24
ARDOWN	42.8	6	32	22

Panel Style: guide\_exp\_advance\_base  
Dimensions are in inches tenths  
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)										LENGTH	SERIESIZE
W	R	S	T								EM
41.5	55.6	65	75.1							40.9	12,10
N	O	T	R	U	C	K	S				EM
41.5	49.9	56.5	64.5	72.1	80.5	88.9	97	105.1		70.2	8
N	E	X	T		E	X	I	T			EM
30.3	30.8	40.3	50.2	57.6	67.6	77	87.7	91.7		78.8	10
M	O	N	R	O	E	S	T				EM
12.1	27.2	38.8	51.1	58.7	69.3	77	88.9	101.1		95	12,9

**SIGN DETAIL**  
1:50



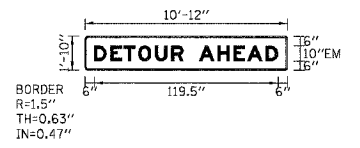
SIGN NUMBER	TS1-04
WIDTH x HIGHT	10'-11" x 11'-6"
BORDER WIDTH	2"
CORNER RADIUS	9"
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective COLOR: Green
LEGEND/BORDER	TYPE: Reflective COLOR: White/Pure White

SYMBOL	X	Y	WID	HT
M1_1	30.9	92.9	24	24
ARDOWN	49.8	10.2	32	22

Panel Style: guide\_exp\_advance\_base  
Dimensions are in inches tenths  
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)										LENGTH	SERIESIZE	
N	O	R	T	H							EM	
65.1	76.2	87	97.1	106.5						49.4	12,10	
L	a	k	e	S	h	o	r	e	D	r	EM	
8.6	18	28.2	36.7	43.1	53.1	64.2	73.8	83.4	89.8	96.2	106.2	117.5
2	2	n	d	S	t							EM
34.8	44.7	55.3	64.8	71.2	81.2	91.3				61.6	10,7.5	

**SIGN DETAIL**  
1:50



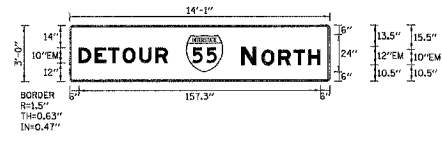
SIGN NUMBER	TS16-08
WIDTH x HIGHT	10'-12" x 1'-30"
BORDER WIDTH	0.63"
CORNER RADIUS	1.5"
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective COLOR: Orange
LEGEND/BORDER	TYPE: Reflective COLOR: Black

SYMBOL	X	Y	WID	HT
M1_1	75.8	6	24	24

Panel Style: construction\_guide.asd  
Dimensions are in inches tenths  
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)										LENGTH	SERIESIZE
D	E	T	O	U	R	A	H	E	A	D	EM
6	16.6	25.3	34.7	45.5	56.1	64	74	86.1	96.6	105.4	117.4

**SIGN DETAIL**  
1:50



SIGN NUMBER	TS16-09 & TS16-01
WIDTH x HIGHT	14'-1" x 3'-0"
BORDER WIDTH	0.63"
CORNER RADIUS	1.5"
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective COLOR: Orange
LEGEND/BORDER	TYPE: Reflective COLOR: Red/Black

SYMBOL	X	Y	WID	HT
M1_1	75.8	6	24	24

Panel Style: construction\_guide.asd  
Dimensions are in inches tenths  
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)										LENGTH	SERIESIZE
D	E	T	O	U	R					EM	
6	16.5	25.3	34.7	45.5	56					58.1	10
N	O	R	T	H						EM	
111.9	125.1	135.9	146.9	158.3						51.4	12,10

REVISIONS	
NAME	DATE

62580

#8650-000-01/10/11/12 SHEET 11662 JMM/10/07 SCS/MS/03/03

**SIGN DETAIL**  
1:50

**CLOSED USE LOCAL**

SIGN NUMBER	TS5-01 & TS4-01
WIDTH x HGHT.	14'-0" x 3'-4"
BORDER WIDTH	0
CORNER RADIUS	0
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective COLOR: Green
LEGEND/BORDER	TYPE: Reflective COLOR: White

SYMBOL	X	Y	WID	HT

Panel Style: guide\_exp\_advance\_basi  
Dimensions are in inches, tenths

Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)										LENGTH	SERIESIZE
C	L	O	S	E	D					57.8	10
55.2	65.2	74.7	85	95.5	104.9						
U	S	E		L	O	C	A	L		86.9	10
40.5	51.1	61.6	69	79	88.4	98.7	108.1	120.1			

**SIGN DETAIL**  
1:50

**OPEN**

SIGN NUMBER	TS9-02
WIDTH x HGHT.	4'-11" x 2'-6"
BORDER WIDTH	0
CORNER RADIUS	0
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective COLOR: Green
LEGEND/BORDER	TYPE: Reflective COLOR: White

SYMBOL	X	Y	WID	HT

Panel Style: guide\_exp\_advance\_basi  
Dimensions are in inches, tenths

Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)										LENGTH	SERIESIZE
O	P	E	N							38.8	10
10	30.9	31.4	40.8								

**SIGN DETAIL**  
1:50

**1**

SIGN NUMBER	TS10-04
WIDTH x HGHT.	1'-8" x 2'-0"
BORDER WIDTH	0
CORNER RADIUS	0
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective COLOR: Green
LEGEND/BORDER	TYPE: Reflective COLOR: White

SYMBOL	X	Y	WID	HT
ARDOWN	810	26.4	32	22

Panel Style: guide\_exp\_advance\_basi  
Dimensions are in inches, tenths

Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)										LENGTH	SERIESIZE
C	L	O	S	E	D					57.8	10
-17.3	-7.3	2.1	12.4	23	32.4						
O	P	E	N							38.8	10
690.5	701.5	712	721.4								
U	S	E		L	O	C	A	L		86.9	10
-32	-21.5	-19.9	-3.6	6.4	15.8	26.2	35.5	47.5			
1										4.4	15
7.8											

**SIGN DETAIL**  
1:50

**↓**

SIGN NUMBER	TS10-06
WIDTH x HGHT.	14'-0" x 2'-9"
BORDER WIDTH	0
CORNER RADIUS	0
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective COLOR: Green
LEGEND/BORDER	TYPE: Reflective COLOR: White

SYMBOL	X	Y	WID	HT
ARDOWN	68	2.9	32	22

Panel Style: guide\_exp\_advance\_basi  
Dimensions are in inches, tenths

Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)										LENGTH	SERIESIZE
C	L	O	S	E	D					57.8	10
-769.3	-749.3	-739.6	-739.5	-719	-709.6						
O	P	E	N							38.8	10
-61.3	-40.5	-30	-20.6								
U	S	E		L	O	C	A	L		86.9	10
-774	-763.5	-752.9	-745.6	-735.6	-726.1	-715.8	-706.5	-694.4			
1										4.4	15
-732.7											

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REVISIONS	
NAME	DATE
ADDENDUM 1	9/6/05

TIS03

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
TEMPORARY INFORMATION SIGNING

SCALE: -NTS  
DATE: 8/12/2005

DRAWN BY: RA  
CHECKED BY: RS

10/5549 AM 9/2/2005



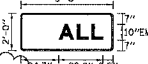
62580

10/56534 AM

SIGN DETAIL  
1:50

SIGN NUMBER	TS19-03
WIDTH x HGT.	5'-0" x 2'-0"
BORDER WIDTH	0
CORNER RADIUS	0
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective COLOR: Green
LEGEND/BORDER	TYPE: Reflective COLOR: White

SYMBOL	X	Y	WID	HT



Panel Style: guide\_exp\_advance\_basi  
Dimensions are in inches/teenths

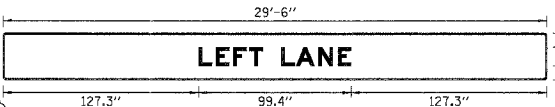
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)											LENGTH	SERIESIZE
A	L	L									EM	
24.7	36.8	46.2									28.8	10

SIGN DETAIL  
1:50

SIGN NUMBER	TS11-01, TS12-01 & TS13-01
WIDTH x HGT.	29'-6" x 2'-6"
BORDER WIDTH	0
CORNER RADIUS	0
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective COLOR: Green
LEGEND/BORDER	TYPE: Reflective COLOR: White

SYMBOL	X	Y	WID	HT



Panel Style: guide\_exp\_advance\_basi  
Dimensions are in inches/teenths

Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)											LENGTH	SERIESIZE
L	E	F	T	L	A	N	E				EM	
127.3	138.6	149.9	160.3	168.1	181.1	190.8	205.3	217.9			99.4	12

SIGN DETAIL  
1:50

SIGN NUMBER	TS27-01 & TS12-02
WIDTH x HGT.	18'-0" x 2'-6"
BORDER WIDTH	0
CORNER RADIUS	0
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective COLOR: Green
LEGEND/BORDER	TYPE: Reflective COLOR: White

SYMBOL	X	Y	WID	HT



Panel Style: guide\_exp\_advance\_basi  
Dimensions are in inches/teenths

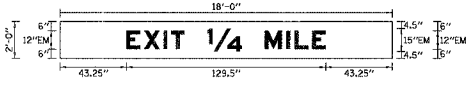
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)											LENGTH	SERIESIZE
R	I	G	H	T	L	A	N	E			EM	
53.4	66.1	71.5	84.2	96.2	105	117	126.6	141.1	153.8		109.2	12

SIGN DETAIL  
1:50

SIGN NUMBER	TS12-03
WIDTH x HGT.	18'-0" x 2'-0"
BORDER WIDTH	0
CORNER RADIUS	0
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective COLOR: Green
LEGEND/BORDER	TYPE: Reflective COLOR: White

SYMBOL	X	Y	WID	HT



Panel Style: guide\_exp\_advance\_basi  
Dimensions are in inches/teenths

Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)											LENGTH	SERIESIZE
E	X	I	T	1	M	I	L	E			EM	
43.2	54.5	67.3	72.2	96	133.1	147.2	162.7	164			129.5	12,15

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REVISIONS		
NAME	DATE	
ADDENDUM 1	9/6/05	

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
TEMPORARY INFORMATION SIGNING

SCALE: =NTS  
DATE: 8/12/2005

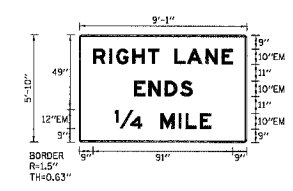
DRAWN BY: RA  
CHECKED BY: RS

10/56534 AM

62580

10557402 AM 9/27/2005

**SIGN DETAIL**  
1:50



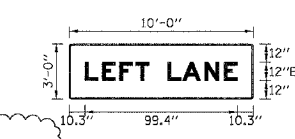
SIGN NUMBER	TS14-01
WIDTH x HGT.	9'-1" x 5'-10"
BORDER WIDTH	0.63"
CORNER RADIUS	1.5"
MOUNTING	Ground
BACKGROUND	TYPE: Reflective COLOR: White
LEGEND/BORDER	TYPE: Reflective COLOR: Black

SYMBOL	X	Y	WID	HT

Panel Style: guide\_exp\_advance\_b.asi  
Dimensions are in inches/tenths  
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)											LENGTH	SERIESIZE	
R	I	G	H	T		L	A	N	E			EM	
0	19.6	24.1	34.6	44.7	52	62	70	82.1	92.6			91	10
E	N	D	S									EM	
35.7	45.1	55.7	65.7									88.2	10
M	I	L	E									EM	
23.4	53	64.5	69.3	78.7								62.6	12,10

**SIGN DETAIL**  
1:50



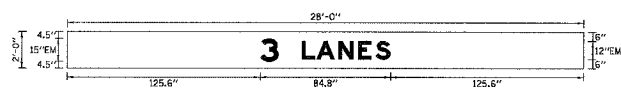
SIGN NUMBER	name
WIDTH x HGT.	10'-0" x 3'-0"
BORDER WIDTH	0
CORNER RADIUS	0
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective COLOR: Green
LEGEND/BORDER	TYPE: Reflective COLOR: White

SYMBOL	X	Y	WID	HT

Panel Style: guide\_exp\_advance\_b.asi  
Dimensions are in inches/tenths  
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)											LENGTH	SERIESIZE	
L	E	F	T		L	A	N	E			EM		
10.3	21.6	32.9	43.3	62.1	64.1	73.8	88.3	100.9			EM		
												98.4	12

**SIGN DETAIL**  
1:50



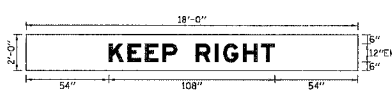
SIGN NUMBER	TS11-04, TS10-07
WIDTH x HGT.	28'-0" x 4'-5"
BORDER WIDTH	0"
CORNER RADIUS	0"
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective COLOR: Green
LEGEND/BORDER	TYPE: Reflective COLOR: White

SYMBOL	X	Y	WID	HT

Panel Style: guide\_exp\_advance\_b.asi  
Dimensions are in inches/tenths  
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)											LENGTH	SERIESIZE	
3	L	A	N	E	S						EM		
125.6	152.6	182.2	178.7	189.3	200.6						EM		
												84.5	15,12

**SIGN DETAIL**  
1:50



SIGN NUMBER	TS11-03
WIDTH x HGT.	18'-0" x 2'-0"
BORDER WIDTH	0"
CORNER RADIUS	0"
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective COLOR: Green
LEGEND/BORDER	TYPE: Reflective COLOR: White

SYMBOL	X	Y	WID	HT

Panel Style: guide\_exp\_advance\_b.asi  
Dimensions are in inches/tenths  
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)											LENGTH	SERIESIZE	
K	E	E	P		R	I	G	H	T		EM		
54	66.2	77.5	88.8	98.4	110.4	123	128.5	141.1	153.2		EM		
												108	12

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ADDENDUM 1	9/6/05

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
TEMPORARY INFORMATION SIGNING

SCALE: =NTS  
DATE: 8/12/2005

DRAWN BY: RA  
CHECKED BY: RS

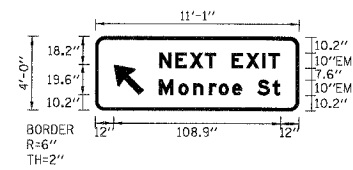
TIS05

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	119
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62580

11-660-0000(VIN)US(SHEET)5680\_0107\_Signage.dwg 10/27/05

**SIGN DETAIL**  
1:50



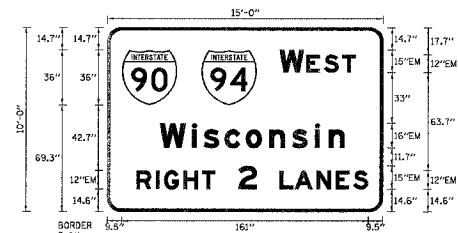
SIGN NUMBER	TS17-01
WIDTH x HIGHT.	11'-1" x 4'-0"
BORDER WIDTH	2"
CORNER RADIUS	6"
MOUNTING	Ground
BACKGROUND	TYPE: Reflective COLOR: Green
LEGEND/BORDER	TYPE: Reflective COLOR: White/Pure White

SYMBOL	X	Y	WID	HGT
ARMED	12	10.2	16	25.2

Panel Style: guide\_exp\_advance\_b.ssi  
Dimensions are in inches, tenths Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)										LENGTH	SERIES/SIZE
N	E	X	T	E	X	I	T				EM
41.7	52.3	61.6	71.6	79	89	98.4	109.1	113.1		78.7	10
M	o	n	r	o	e	S	t				EM
41.7	54.4	64	74.2	80.6	89.4	95.8	105.8	115.9		79.2	107.5

**SIGN DETAIL**  
1:50



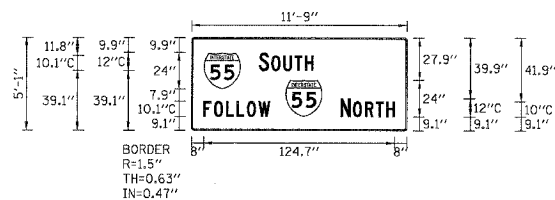
SIGN NUMBER	TS17-02
WIDTH x HIGHT.	15'-0" x 10'-0"
BORDER WIDTH	2"
CORNER RADIUS	9"
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective COLOR: Green
LEGEND/BORDER	TYPE: Reflective COLOR: White/Pure White

SYMBOL	X	Y	WID	HGT
M_1	9.5	69.3	36	36
M_1	61.5	69.3	36	36

Panel Style: guide\_exp\_advance\_b.ssi  
Dimensions are in inches, tenths Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)										LENGTH	SERIES/SIZE	
W	E	S	T								EM	
112.5	130.1	141.4	158.4							49.5	15,12	
W	i	a	c	o	n	s	i	s			EM	
34.4	55.4	63	76.6	90.5	106	120.7	135.7	144.9		120.8	1612	
R	I	G	H	T	2	L	A	N	E	S		EM
19.1	31.8	37.2	49.8	61.9	85.7	112.7	123.3	136.8	149.4	160.7	101.4	12,15

**SIGN DETAIL**  
1:50



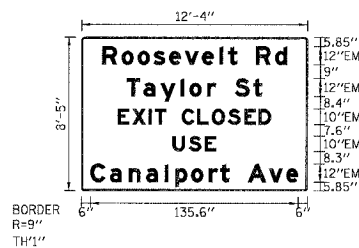
SIGN NUMBER	TS17-05
WIDTH x HIGHT.	11'-9" x 5'-1"
BORDER WIDTH	0.63"
CORNER RADIUS	1.5"
MOUNTING	Ground
BACKGROUND	TYPE: Reflective COLOR: Orange
LEGEND/BORDER	TYPE: Reflective COLOR: Red/Black

SYMBOL	X	Y	WID	HGT
M_1	8	27.1	24	24
M_1	61.4	9.1	24	24

Panel Style: construction\_guide.ssi  
Dimensions are in inches, tenths Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)										LENGTH	SERIES/SIZE
S	O	U	T	H							C
43.9	52.1	60.1	67.3	74.1						35.6	12,10.1
F	O	L	L	O	W						C
8	14.5	22.7	29.5	36.3	43.7					43.3	10.1
N	O	R	T	H							C
97.4	105.6	113.4	120.6	127.3						35.3	12,10

**SIGN DETAIL**  
1:50



SIGN NUMBER	TS21-01 & TS19-01
WIDTH x HIGHT.	12'-4" x 6'-0"
BORDER WIDTH	1"
CORNER RADIUS	9"
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective COLOR: Green
LEGEND/BORDER	TYPE: Reflective COLOR: White

SYMBOL	X	Y	WID	HGT
M_1				

Panel Style: guide\_exp\_advance\_b.ssi  
Dimensions are in inches, tenths Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)										LENGTH	SERIES/SIZE			
R	o	o	s	e	v	e	l	t	R	d		EM		
13.5	26.2	36.7	46.9	57.2	67.4	78.7	90.1	95.7	101.8	113.8	126.5	120.7	129	
T	a	y	l	o	r	S	t						EM	
29.5	40.6	51.5	64.8	70.6	82.1	88	100	112.1				88.7	129	
E	X	I	T	C	L	O	S	E	D				FM	
23.7	33.2	43.9	48	55.4	65.6	75.7	85.2	95.6	106.3	115.9		100.3	10	
U	S	E											EM	
69.6	70.1	80.7										28.4	10	
C	a	n	a	l	p	o	r	t	A	v	e		EM	
6	18.8	31	42.4	54.6	61.4	71.8	83.3	90.7	96.7	108.7	122.6	133.9	135.6	129

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NAME	DATE
ADDENDUM 1	9/6/05

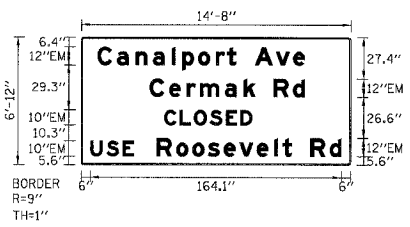
TIS06  
ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
TEMPORARY INFORMATION SIGNING  
SCALE: -NTS  
DATE: 8/12/2005  
DRAWN BY: RA  
CHECKED BY: RS



62580

I:\6600\94\90\121\SHEET\62580.DWG

SIGN DETAIL  
1:50



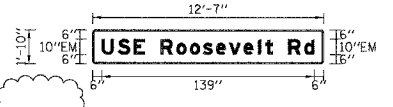
SIGN NUMBER	TS94-01
WIDTH x HGHT.	14'-8" x 27'-4"
BORDER WIDTH	1"
CORNER RADIUS	0"
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective COLOR: Green
LEGEND BORDER	TYPE: Reflective COLOR: White

SYMBOL	X	Y	WID	HT

Panel Style: guide\_exp\_advance\_basi  
Dimensions are in inches tenths  
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)		LENGTH	SERIESIZE
C	10.4	135.6	EM
a	23.2		
a	35.4		
a	46.8		
i	59		
p	69.9		
o	76.2		
r	87.8		
t	95.1		
A	101.2		
v	113.2		
e	127.1		
R	138.3		
d	144.6		
C	156.8		
L	168.8		
O	177.4		
S	193.8		
E	113.7		
D	125.7		
C	138.3		
L	144.6		
O	156.8		
S	168.8		
E	177.4		
D	193.8		
U	54.2		
S	64.2		
E	73.6		
R	84		
O	94.5		
O	103.9		
S	113.7		
E	125.7		
V	138.3		
E	144.6		
L	156.8		
T	168.8		
R	177.4		
D	193.8		

SIGN DETAIL  
1:50



SIGN NUMBER	TS98-01 & TS98-02
WIDTH x HGHT.	12'-7" x 13'-9"
BORDER WIDTH	0"
CORNER RADIUS	0"
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective COLOR: Green
LEGEND BORDER	TYPE: Reflective COLOR: White

SYMBOL	X	Y	WID	HT

Panel Style: guide\_exp\_advance\_basi  
Dimensions are in inches tenths  
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)		LENGTH	SERIESIZE
U	6	139	EM
S	16.6		
E	27.1		
R	44.4		
O	55		
O	63.8		
S	72.3		
E	80.9		
V	89.4		
E	98.8		
J	108.3		
L	113		
R	118		
D	128		
R	138.6		

SIGN DETAIL  
1:50



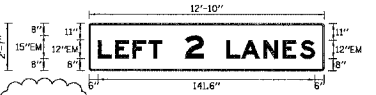
SIGN NUMBER	TS42-01
WIDTH x HGHT.	2'-8" x 2'-5"
BORDER WIDTH	0"
CORNER RADIUS	0"
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective COLOR: Green
LEGEND BORDER	TYPE: Reflective COLOR: White

SYMBOL	X	Y	WID	HT
ARMED	4.5	4.5	18.8	29.6

Panel Style: guide\_exp\_advance\_basi  
Dimensions are in inches tenths  
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)		LENGTH	SERIESIZE

SIGN DETAIL  
1:50



SIGN NUMBER	TS16-02
WIDTH x HGHT.	12'-10" x 14'-6"
BORDER WIDTH	0"
CORNER RADIUS	0"
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective COLOR: Green
LEGEND BORDER	TYPE: Reflective COLOR: White

SYMBOL	X	Y	WID	HT

Panel Style: guide\_exp\_advance\_basi  
Dimensions are in inches tenths  
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)		LENGTH	SERIESIZE
L	6	141.7	EM
E	17.3		
F	28.5		
T	39		
2	62.8		
L	89.6		
A	99.4		
N	113.9		
E	126.5		
S	137.8		

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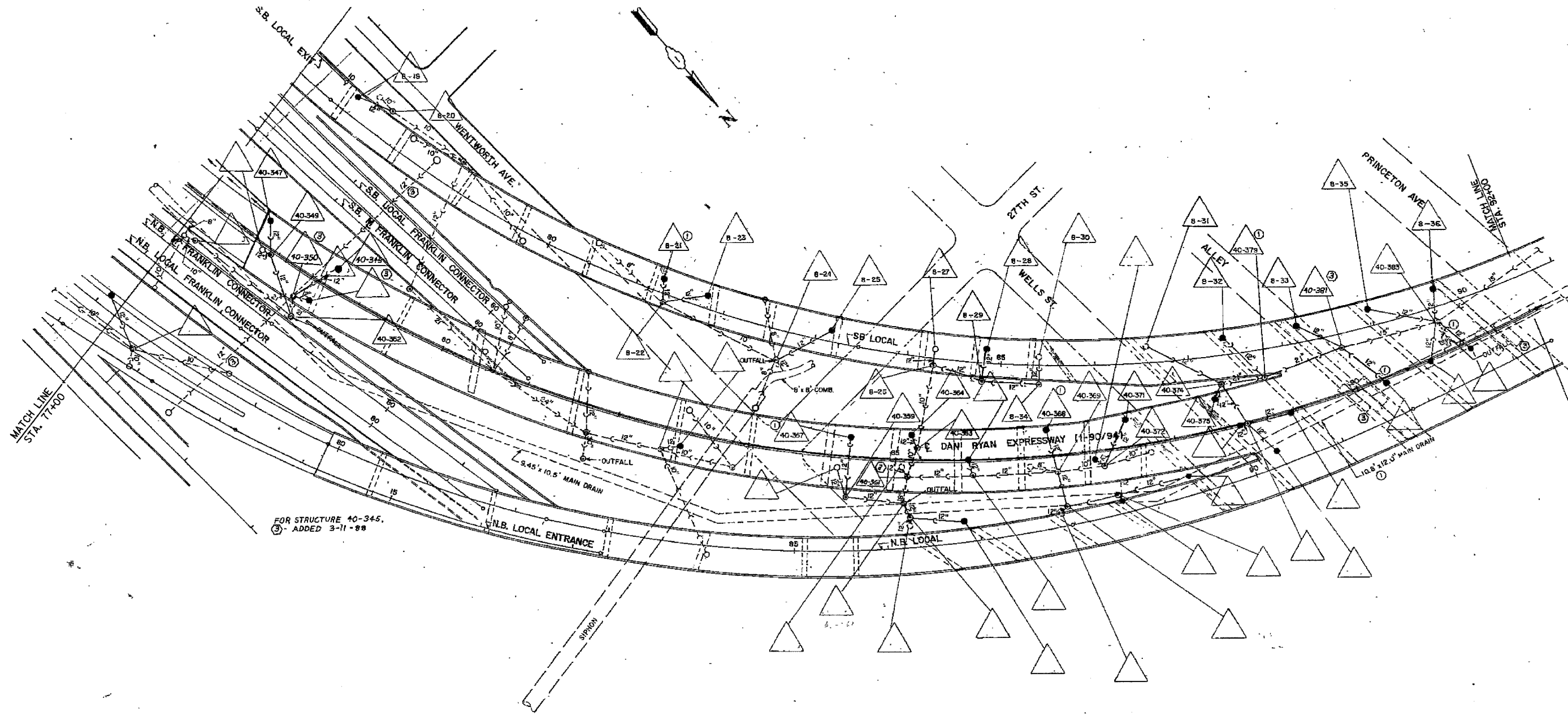
ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
TEMPORARY INFORMATION SIGNING

SCALE: =NTS  
DATE: 8/12/2005

DRAWN BY: RA  
CHECKED BY: RS

TIS08  
10/27/05 AM

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-02BF	COOK	419	122
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				



FOR INFORMATION ONLY

NOTE:  
 Information from 1988-89 As-Builts to show probable location of existing catch basins collecting bridge drainage. Field verify location with Engineer. Clean all catch basins receiving drainage from NB viaduct.

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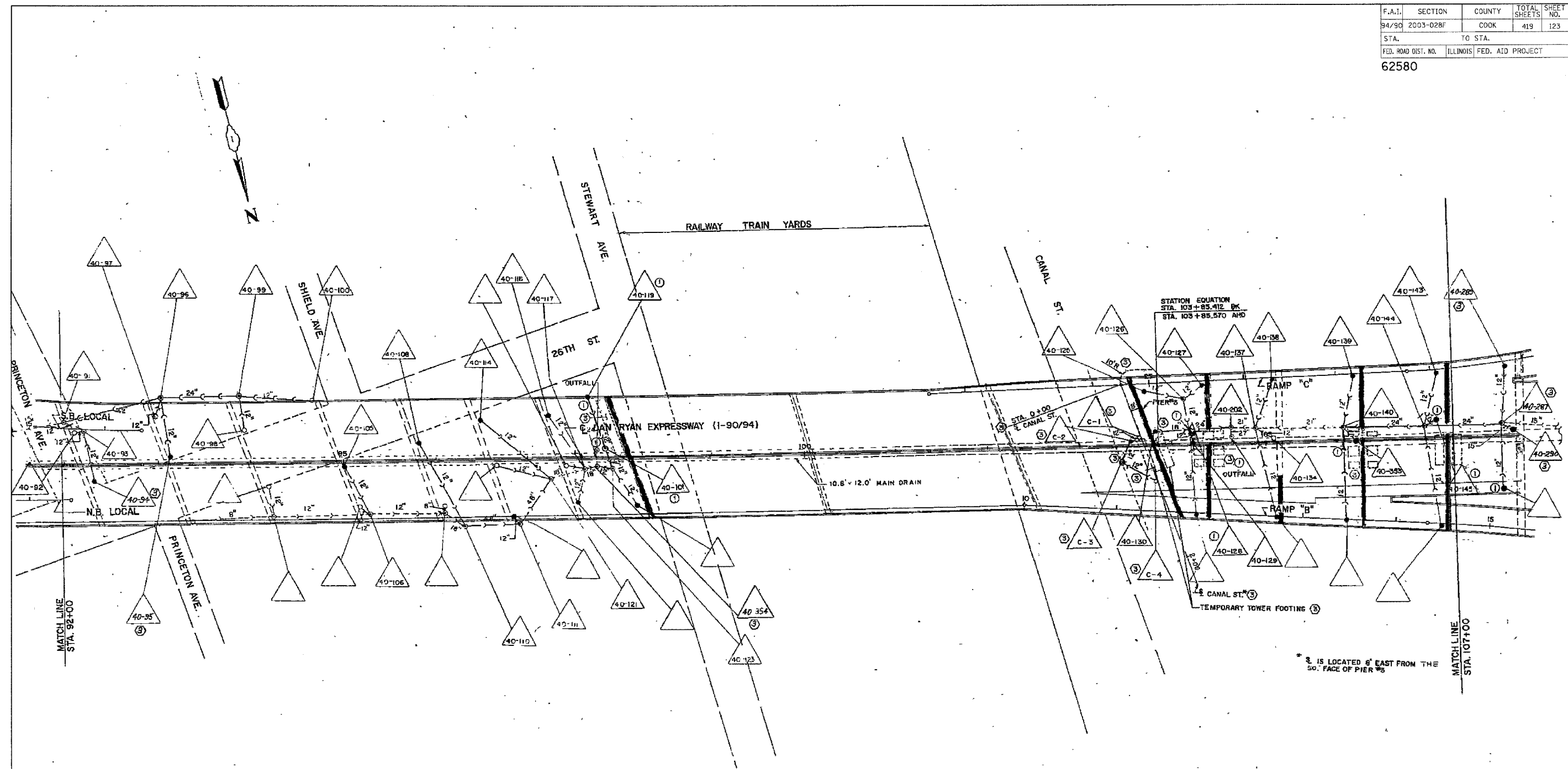
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
 NB DAN RYAN ELEVATED BRIDGE  
 REPAIR FROM 15TH TO 28TH STREETS  
 EXISTING DRAINAGE SYSTEM  
 DETAILS

SCALE: NTS  
 DATE: 7/22/2005

DRAWN BY: BDC  
 CHECKED BY: BLU

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	123
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				



\* 3 IS LOCATED 6' EAST FROM THE SO. FACE OF PIER #5

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FOR INFORMATION ONLY

NOTE:  
Information from 1988-89 As-Builts to show probable location of existing catch basins collecting bridge drainage. Field verify location with Engineer. Clean all catch basins receiving drainage from NB viaduct.

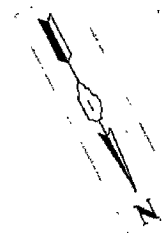
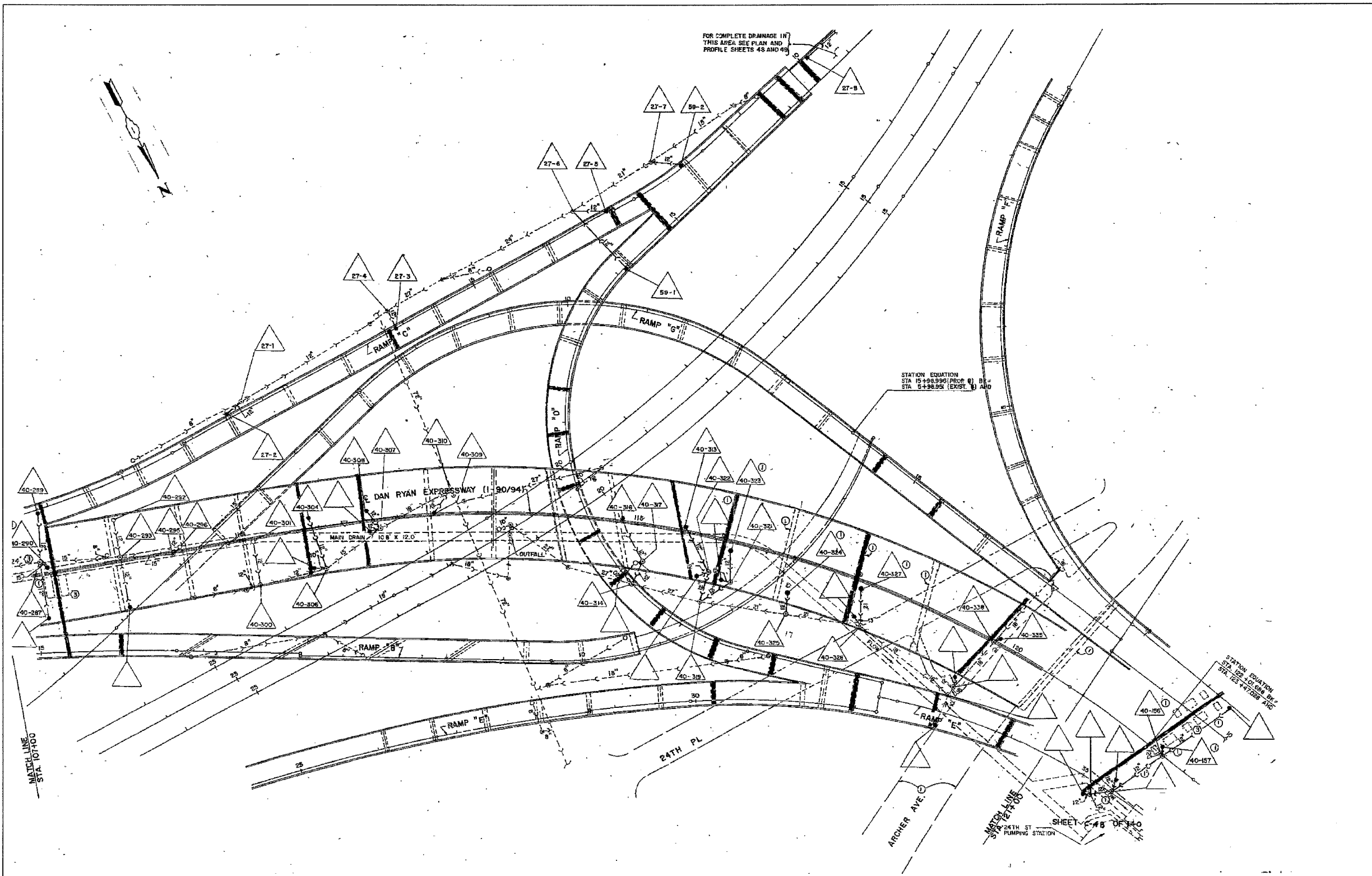
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
EXISTING DRAINAGE SYSTEM  
DETAILS

SCALE: NTS  
DATE: 7/22/2005

DRAWN BY: BDC  
CHECKED BY: BLU

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	124
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				



FOR COMPLETE DRAINAGE IN THIS AREA SEE PLAN AND PROFILE SHEETS 48 AND 49

STATION EQUATION  
STA 15+98.996 (PROP. B) BR -  
STA 5+38.95 (EXIST. B) AND

STATION EQUATION  
STA 12+10.000 (BR -)  
STA 12+47.000 (ARC)

MATCH LINE  
STA. 10+100

MATCH LINE  
STA. 12+100  
PUMPING STATION

SHEET 48 OF 140

FOR INFORMATION ONLY

NOTE:  
Information from 1988-89 As-Builts to show probable location of existing catch basins collecting bridge drainage. Field verify location with Engineer. Clean all catch basins receiving drainage from NB viaduct.

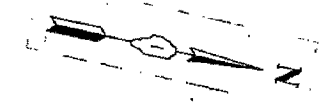
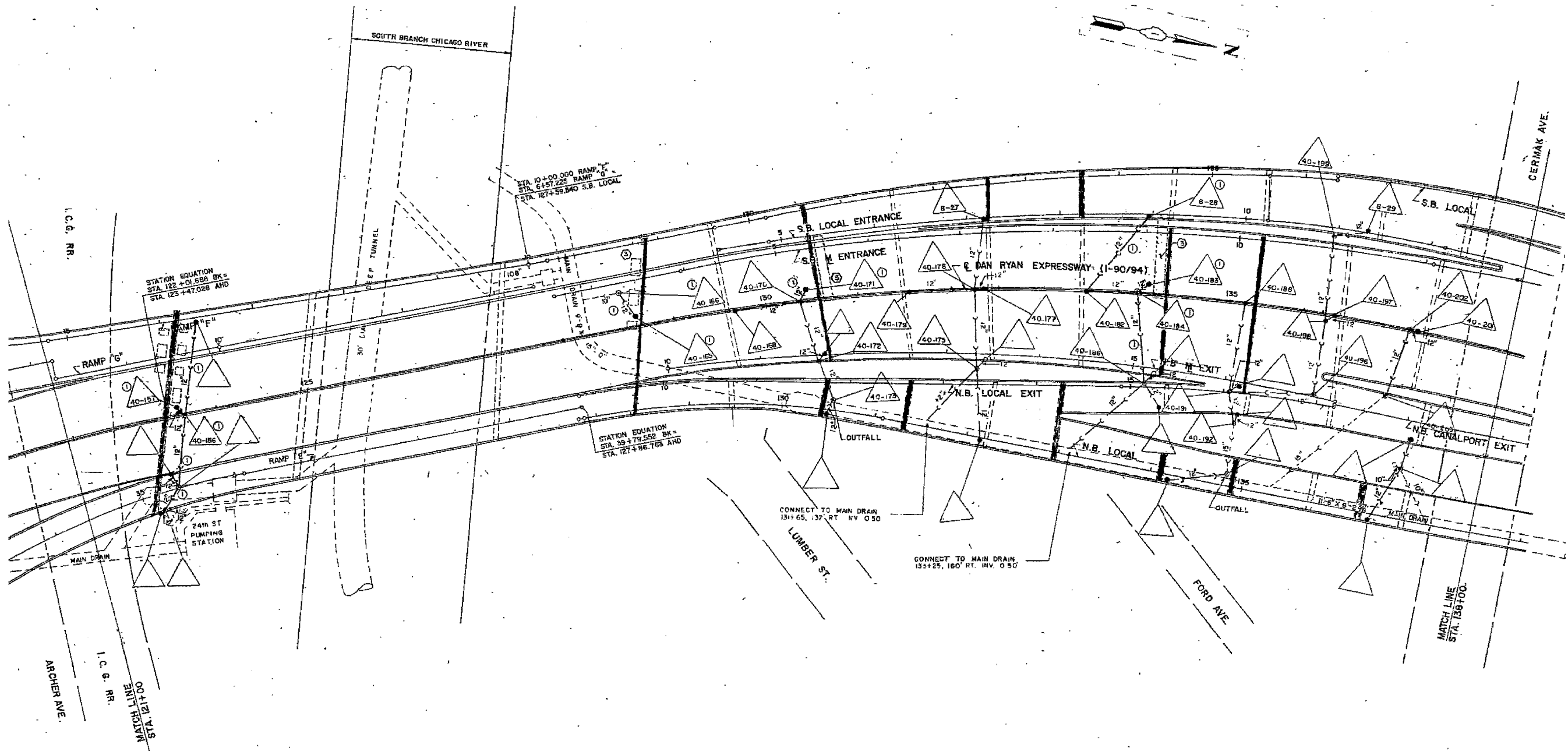
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NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
EXISTING DRAINAGE SYSTEM  
DETAILS  
SCALE: NTS  
DATE: 7/22/2005  
DRAWN BY: BDC  
CHECKED BY: BLU



F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	125
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				



FOR INFORMATION ONLY

NOTE:  
 Information from 1988-89 As-Builts to show probable location of existing catch basins collecting bridge drainage. Field verify location with Engineer. Clean all catch basins receiving drainage from NB viaduct.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
 NB DAN RYAN ELEVATED BRIDGE  
 REPAIR FROM 15TH TO 28TH STREETS  
 EXISTING DRAINAGE SYSTEM  
 DETAILS

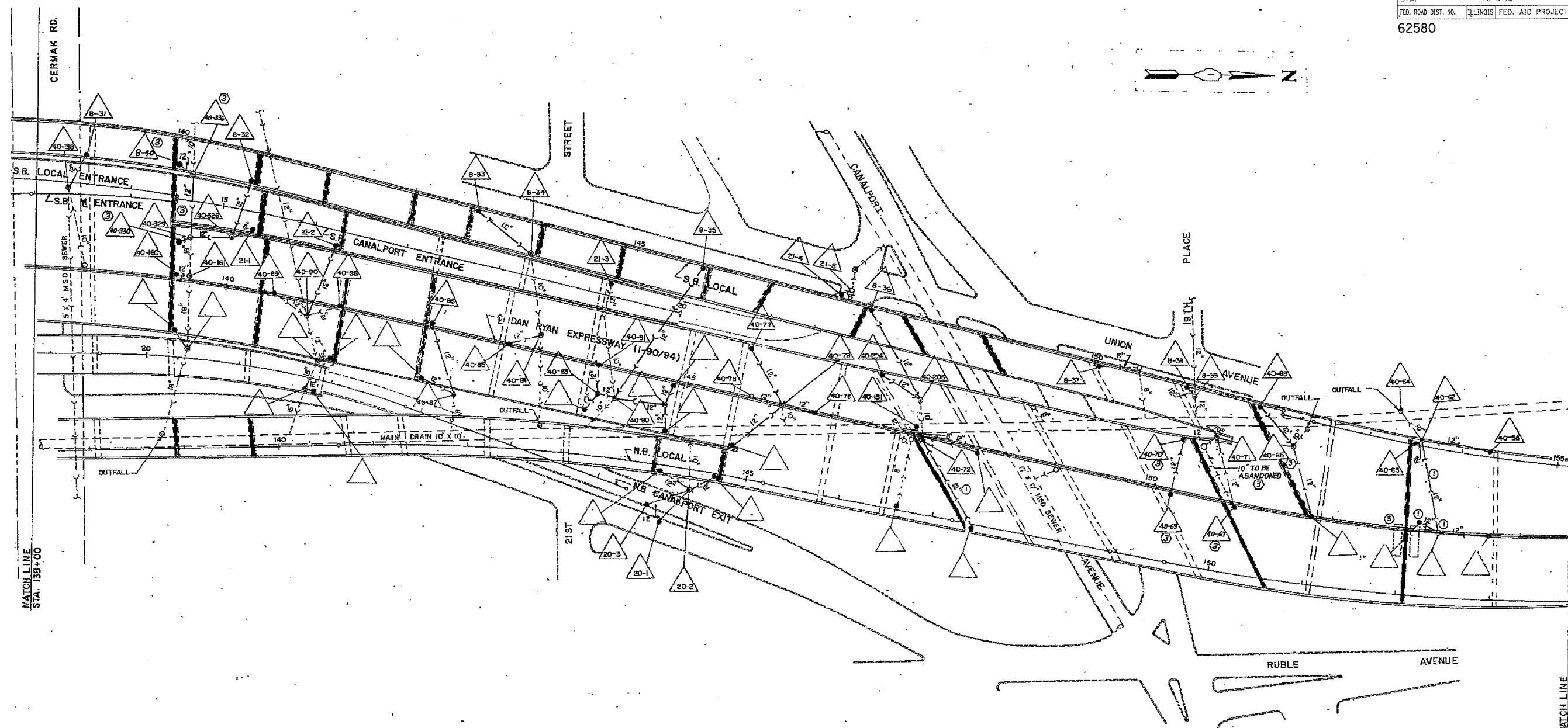
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 DATE: 7/22/2005

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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	126
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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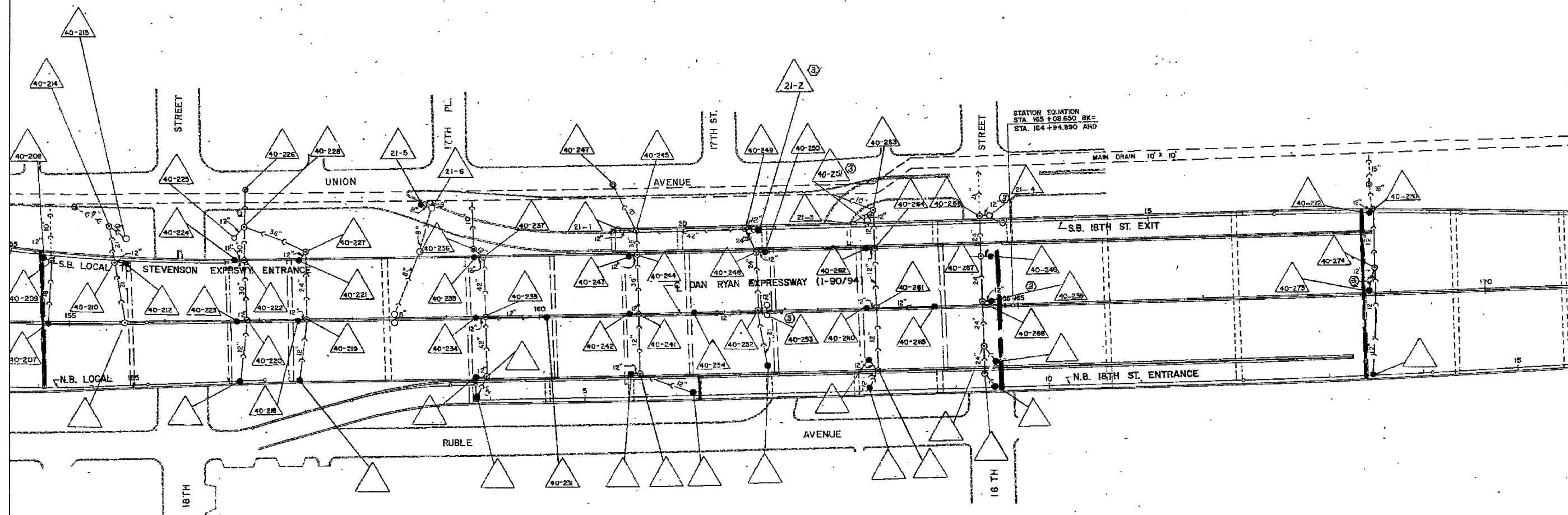
NOTE:  
Information from 1988-89 As-Builts to show probable location of existing catch basins collecting bridge drainage. Field verify location with Engineer. Clean all catch basins receiving drainage from NB viaduct.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
EXISTING DRAINAGE SYSTEM  
DETAILS  
SCALE: NTS  
DATE: 7/22/2005  
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CHECKED BY: BLU

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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	127
STA. TO STA.		FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT		
		62580		



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NOTE:  
Information from 1988-89 As-Builts to show probable location of existing catch basins collecting bridge drainage. Field verify location with Engineer. Clean all catch basins receiving drainage from NB viaduct.

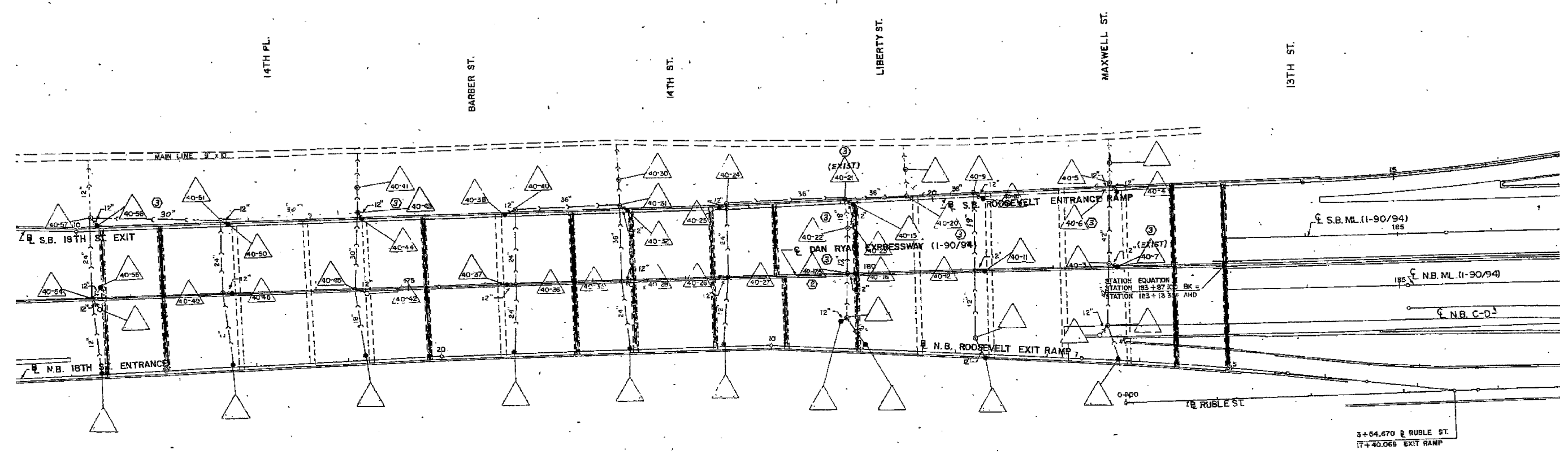
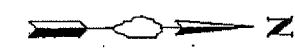
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
EXISTING DRAINAGE SYSTEM  
DETAILS

SCALE: NTS  
DATE: 7/22/2005

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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	128
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
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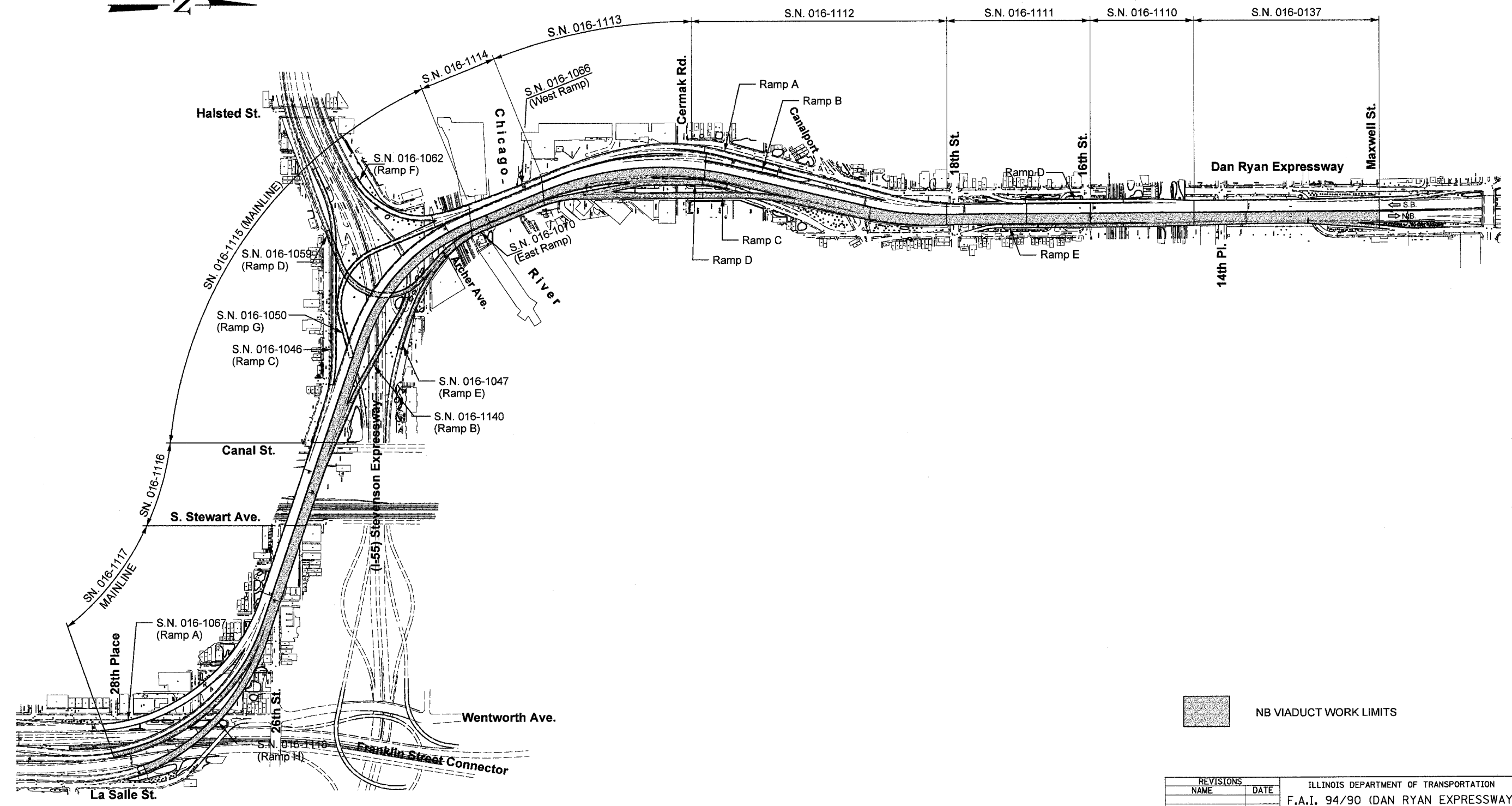
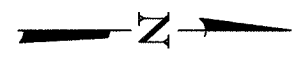
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
EXISTING DRAINAGE SYSTEM  
DETAILS

SCALE: NTS  
DATE: 7/22/2005

DRAWN BY: BDC  
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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	129
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
62580				



 NB VIADUCT WORK LIMITS

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 94/90 (DAN RYAN EXPRESSWAY) NB DAN RYAN ELEVATED BRIDGE REPAIR FROM 15TH TO 28TH STREETS VIADUCT KEY PLAN
NAME	DATE	

SCALE: 1"=300'  
DATE: 7/22/2005

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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	130
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62580

### STRUCTURAL GENERAL NOTES

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

As built plan information is provided For Information Only. Key dimensions have been clarified. Inclusion of these sheets does not relieve the contractor of any responsibility for verifying such dimensions as indicated in the note above. These plans are available from the Department as specified in the Special Provisions for existing plans.

Traffic is to be maintained during construction, see Roadway Plans for Stage Construction Details.

All new fasteners shall be high strength bolts. Holes shall be  $\frac{1}{16}$ " dia. for  $\frac{3}{4}$ " dia. bolts, unless otherwise noted, holes shall be  $\frac{1}{8}$ " dia. for  $\frac{1}{2}$ " dia. bolts, unless otherwise noted.

All new structural steel shall conform to AASHTO Classification M-270 Gr. 36, except for the new bearing plate steel and finger plates which shall be Gr. 50.

Roadway expansion guards shall be assembled in the proper position with the ends in place and shall be left assembled for shop inspection.

The roadway expansion plates shall be flame cut as provided in Article 505.04(k) of the Standard Specifications.

Joint openings shall be adjusted according to Article 503.10(c) of the Standard Specifications when the deck is poured at an ambient temperature other than 50°F.

Expansion joint plates and attached bars shall be shop painted with the inorganic zinc rich primer.

Field welding of construction accessories will not be permitted to beams or girders.

Reinforcement bars shall conform to the requirements of ASSHTO M31 or M322 Gr. 60.

Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost included with "Concrete Removal".

The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

Calculated weight of Structural Steel used for item "Erecting Structural Steel" = 210,630 Lbs. and itemized as follows: S.N. 016-1110 = 64,360 Lbs.  
S.N. 016-1111 = 51,450 Lbs.  
S.N. 016-1113 = 62,650 Lbs.  
S.N. 016-1117 = 32,260 Lbs.

Prior to pouring the new concrete deck, all loose rust, loose mill scale, and other loose potentially detrimental foreign material shall be removed from the surfaces of the beams or girders in contact with concrete. The cost of this work will be included in the pay item covering removal of the existing concrete. All heavy rust and other tightly adhered potentially detrimental foreign matter shall also be removed from the surfaces of the beams or girders in contact with concrete. Tightly adhered paint may remain unless otherwise noted. This removal shall be accomplished by methods that will not damage the steel. The cost of this work will be paid for according to Article 109.04.

All construction joints shall be bonded.

The joints are to be removed in stages. Before starting the removal, the Contractor is required to submit to the Engineer for approval his staging plans and method of removal.

The Contractor shall exercise care during the removal of the existing joints to ensure that the slab, beams & diaphragms integrity will not be detrimentally impacted. The Contractor shall repair any damage(s) to the slab, beams & diaphragms caused by his operation as directed by the Engineer at no additional cost to the Department.

The Contractor shall exercise extra care during the cleaning of the existing downspouts not to damage the pipes. The contractor shall repair any damage(s) caused by his operation as directed by the Engineer at no additional cost to the Department.

The Contractor shall provide a Protective Shield under the deck for the Full Deck Slab repairs as per direction of the Engineer and as shown on the plans.

The Contractor is required to reconnect new FPJ Troughs to the existing drainage system. It has been estimated that 5 feet of drain pipe will require removal and replacement. This includes any required connections. The quantity for the 7 finger plate joint locations has been included in the quantity of "Bridge Drainage System Repairs".

The Contractor may have to remove the Name Plate(s) that interfere with the parapet removal for the joint reconstruction. The Contractor shall reinstall the Name Plate(s) as directed by the Engineer. The cost of removal and reinstallation of the Name Plate(s) shall be included in the cost for "Concrete Removal" and "Concrete Superstructure".

For location of Detector Loops see General Plan & Elevation Sheets. The Detector Loop locations indicated are approximate. The Contractor shall verify the exact locations and shall reference the Traffic System Center Sheets for the work required for the Detector Loops.

Protective coat shall be applied only to the new concrete provided for the reconstruction of the joints (top of deck slab, top and traffic face of parapet).

### DESIGN DATA

Design Specifications: 2002 AASHTO  
Design Loading: HS20

### DESIGN STRESSES

$f'c = 3500$  psi  
 $f_y = 60,000$  (Reinforcement)

### MIN BAR LAPS

#5 : 2'-2"  
#6 : 2'-7"  
#7 : 3'-6"

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REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 94/90 (DAN RYAN EXPRESSWAY) NB DAN RYAN ELEVATED BRIDGE REPAIR FROM 15TH TO 28TH STREETS STRUCTURAL GENERAL NOTES
NAME	DATE	
		SCALE: N/A DATE: 10/14/2005 DRAWN BY: BDC CHECKED BY: BLU

10/14/2005

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	131
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				

**TOTAL BILL OF MATERIALS**

ITEM DESCRIPTION	UNIT	QUANTITY	SN 016-0137	SN 016-1047	SN 016-1059	SN 016-1070	SN 016-1110	SN 016-1111	SN 016-1112	SN 016-1113	SN 016-1114	SN 016-1115	SN 016-1116	SN 016-1117	SN 016-1118	SN 016-1140
CONCRETE REMOVAL	CU YD	1,158.00	109.5	39.5	31	-	57.5	50.8	200	147.8	13.6	165.4	16.4	209.5	84.8	32.2
CONCRETE SUPERSTRUCTURE	CU YD	1,289.00	120.5	45	35	-	66.1	59	225.4	169.6	15.4	185	19	214	96	39
BRIDGE DECK GROOVING	SQ YD	97,841	10,695	2,420	2,069	1,614	6,248	7,957	16,595	14,115	3,012	12,176	4,065	10,207	4,566	2,102
PROTECTIVE COAT	SQ YD	3,340	292	176	107	-	76	74	655	409	42	455	55	622	272	105
ERECTING STRUCTURAL STEEL	L SUM	1	-	-	-	-	0.30	0.25	-	0.30	-	-	-	0.15	-	-
REINFORCEMENT BARS, EPOXY COATED	POUND	180,010	21,120	8,050	5,410	-	3,700	2,230	41,460	21,820	2,610	22,110	2,800	29,740	13,440	5,520
CATCH BASINS TO BE CLEANED	EACH	147	14	3	1	-	8	22	27	18	3	24	-	23	4	-
MODULAR GLARE SCREEN SYSTEM	FOOT	50	-	-	-	-	-	-	50	-	-	-	-	-	-	-
SILICONE JOINT SEALER, 1"	FOOT	70	-	42	-	-	28	-	-	-	-	-	-	-	-	-
MECHANICAL SPLICER	EACH	958	-	-	-	-	312	262	-	254	-	-	-	130	-	-
CLEANING BRIDGE SCUPPERS AND DOWNSPOUTS	EACH	245	21	3	3	4	19	23	39	17	10	31	16	34	21	4
BRIDGE JOINT SYSTEM (EXPANSION), 1"	FOOT	414.9	97.7	54	-	-	-	-	-	-	-	-	82.2	100.6	53.4	27
BRIDGE JOINT SYSTEM (EXPANSION), 1-5/8"	FOOT	1,550.40	-	-	27.2	-	23	-	313.7	244.3	-	346.3	-	464.6	131.3	-
BRIDGE JOINT SYSTEM (FIXED)	FOOT	584.4	-	88.9	-	-	23	69.1	175.3	117.1	-	-	-	32.1	51.8	27.1
STRIP SEAL EXPANSION JOINT ASSEMBLY	FOOT	3,109	427.2	133.8	147.2	-	23	46	707.9	451.2	93.7	425.4	-	327.3	195.7	130.6
BAR SPLICERS	EACH	1,354	120	36	-	-	48	48	362	252	36	254	23	175	-	-
BRIDGE DECK MICROSILICA CONCRETE OVERLAY, 2 1/4"	SQ YD	98,764	10,700	2,475	2,140	1,729	6,440	8,120	16,525	14,290	3,090	12,210	4,145	10,140	4,565	2,195
BRIDGE DECK HYDRO-SCARIFICATION, 1/2"	SQ YD	98,764	10,700	2,475	2,140	1,729	6,440	8,120	16,525	14,290	3,090	12,210	4,145	10,140	4,565	2,195
DECK SLAB REPAIR (FULL DEPTH, TYPE I)	SQ YD	140	7.5	7.5	7.5	7.5	7.5	7.5	15	7.5	12.5	25	7.5	12.5	7.5	7.5
PROTECTIVE SHIELD	SQ YD	39,910	1,371	733	672	907	4,451	2,064	3,656	4,976	1,540	6,328	4,427	4,274	3,574	937
ADJUSTING DRAINAGE SCUPPERS, TYPE A	EACH	107	10	2	-	-	8	11	26	3	-	8	8	27	2	2
ADJUSTING DRAINAGE SCUPPERS, TYPE B	EACH	26	-	-	-	-	-	-	1	2	10	3	-	7	3	-
ADJUSTING DRAINAGE SCUPPERS, TYPE C	EACH	109	11	1	-	4	11	12	12	12	-	20	8	-	16	2
ERECTING FABRIC REINFORCED ELASTOMERIC TROUGH	FOOT	487	-	-	-	-	155	131	-	133	-	-	-	68	-	-

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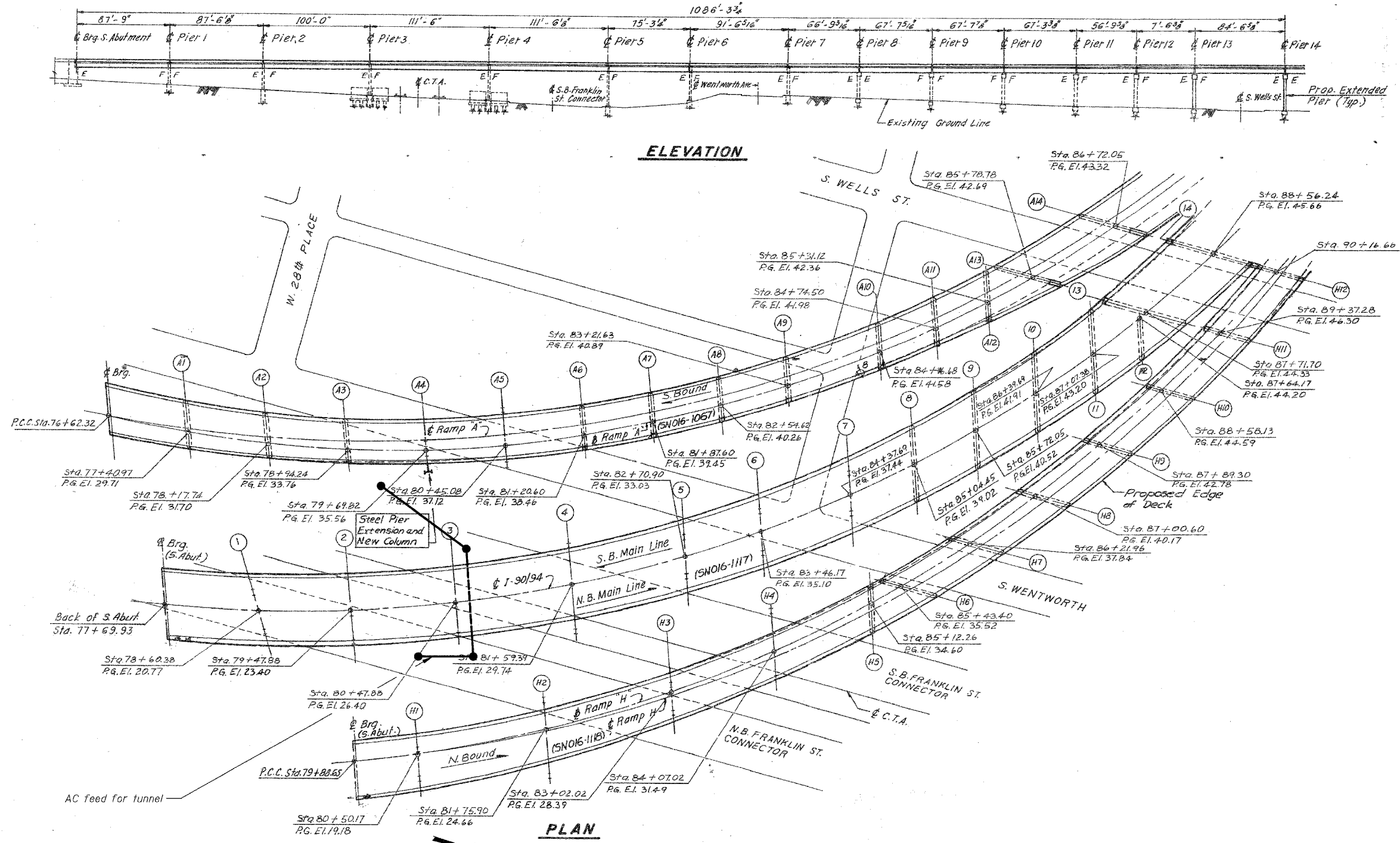
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
STRUCTURAL  
TOTAL BILL OF MATERIALS  
SCALE: N/A  
DATE: 10/14/2005  
DRAWN BY: BDC  
CHECKED BY: BLU

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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	132
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				

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**Notes:**

This sheet created from original 1988-89 reconstruction as-builts. These are provided for general reference to structure number, span lengths, etc. Work Items for this contract are identified on the partial deck plans, framing plans and detail sheets that follow.

The Indicated Locations for the Detector Loops are approximate. The Contractor shall verify the exact locations and shall reference to Traffic System Drawings and Specifications for the work required for these Detector Loops.

An AC feed for the CTA's tunnel is shown above. The Contractor shall take all necessary safety precautions and exercise extra care not to damage the AC feed. The Contractor shall coordinate his work for the safety precautions according to CTA's regulations.

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**LEGEND**  
 □ Detector Loop

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
 NB DAN RYAN ELEVATED BRIDGE  
 REPAIR FROM 15TH TO 28TH STREETS  
 GENERAL PLAN AND ELEVATION  
 SN 016-1117, SN 016-1118

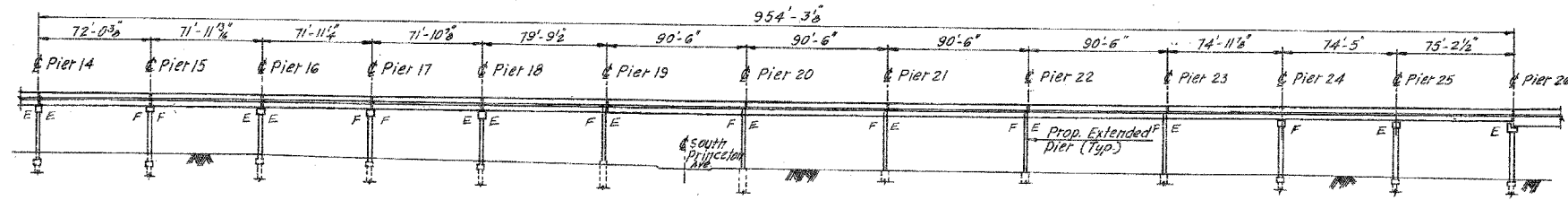
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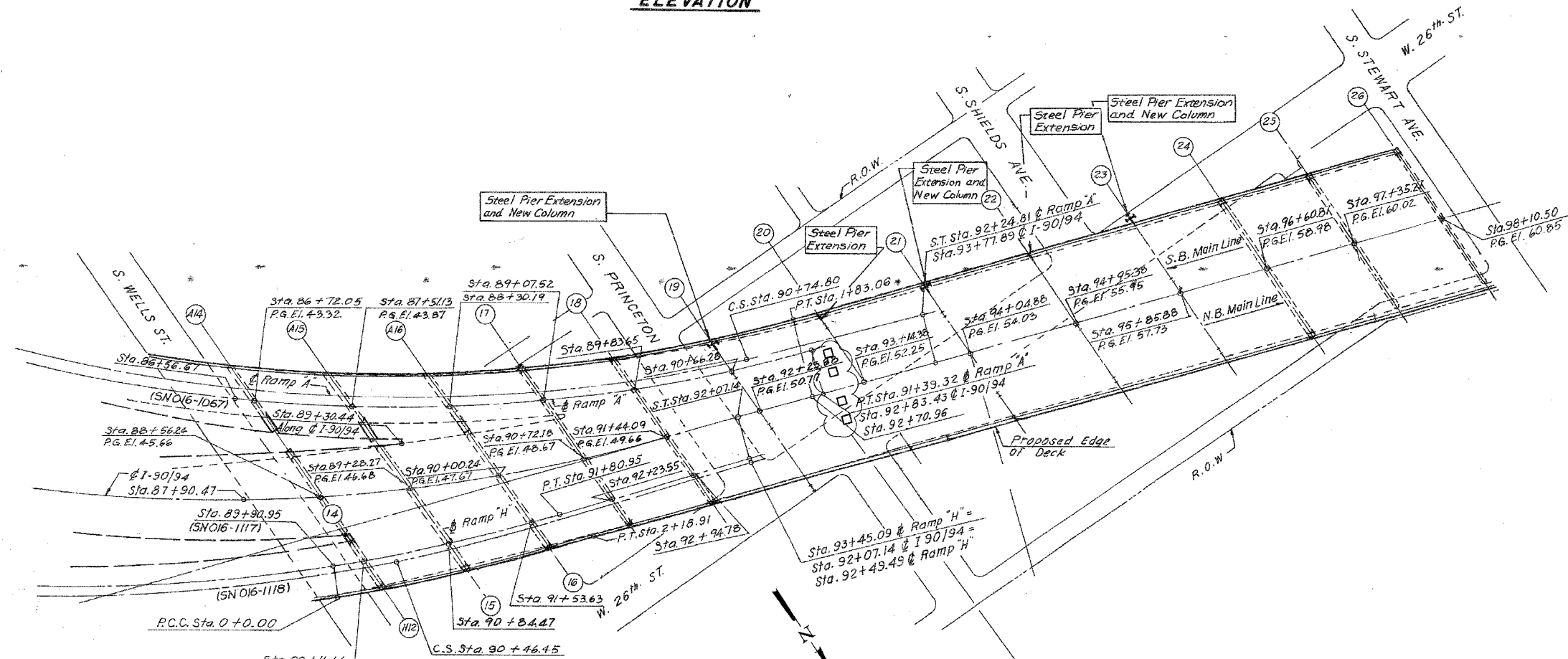
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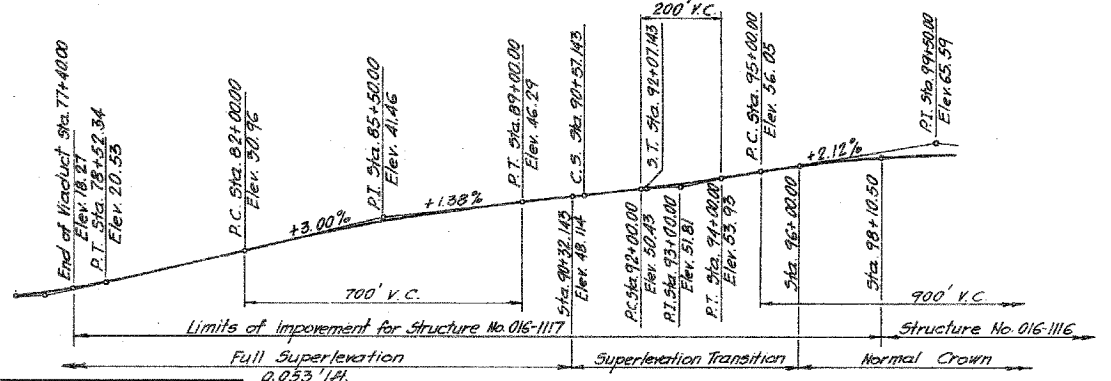
F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
84/90	2003-028F	COOK	419	133
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				



**ELEVATION**



**PLAN**



**MAINLINE PROFILE GRADE**

For Notes and Legend see sheet 132.

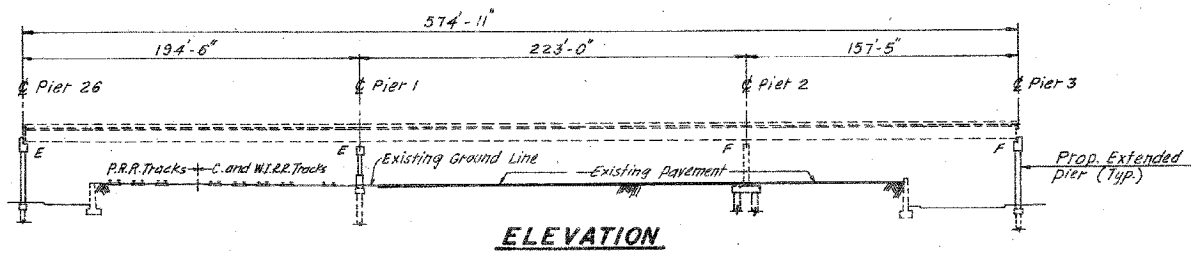
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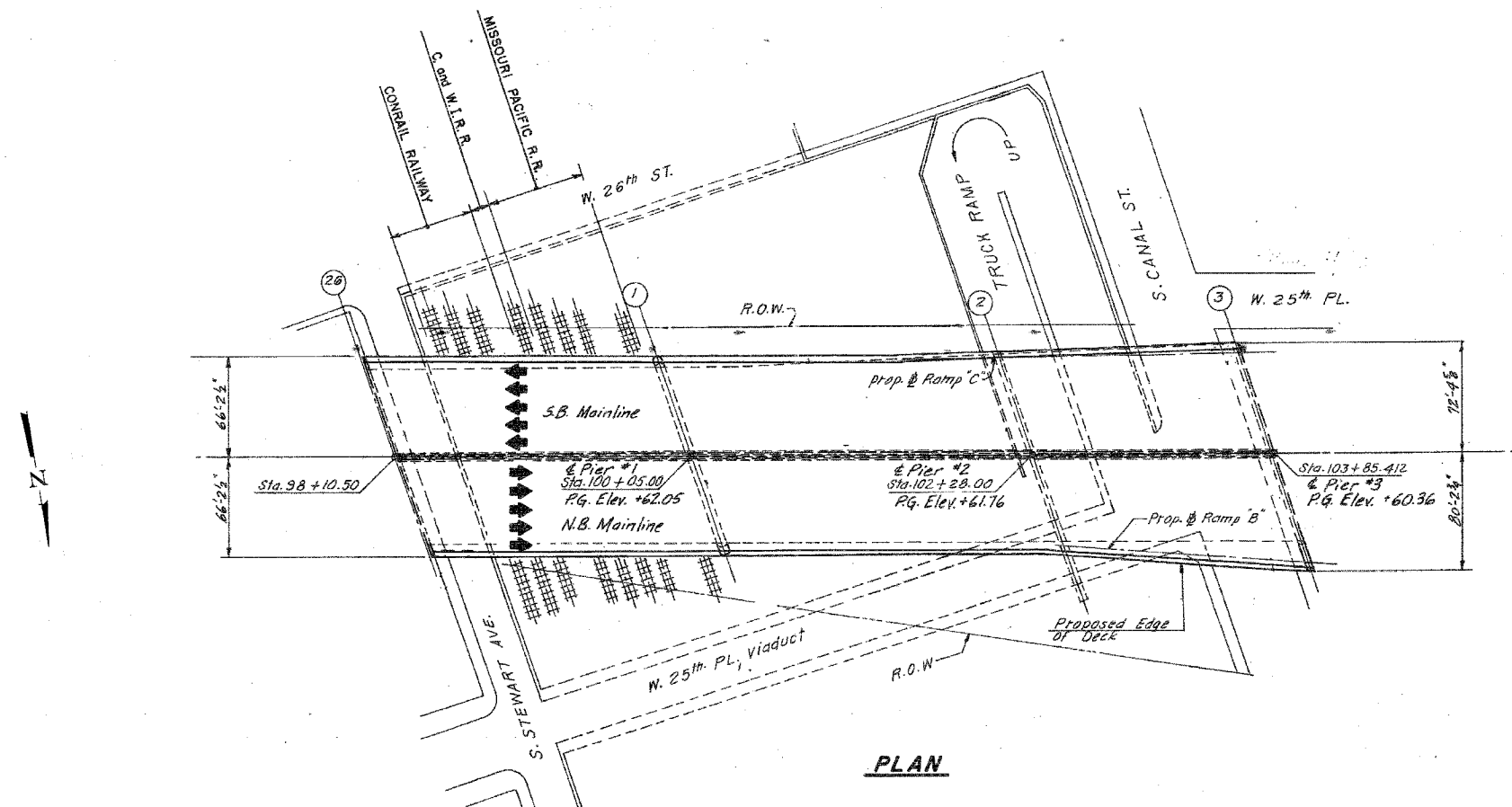
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F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
GENERAL PLAN AND ELEVATION  
SN 016-1117, SN 016-1118 (CONT.)  
SCALE: NTS  
DATE: 7/22/2005  
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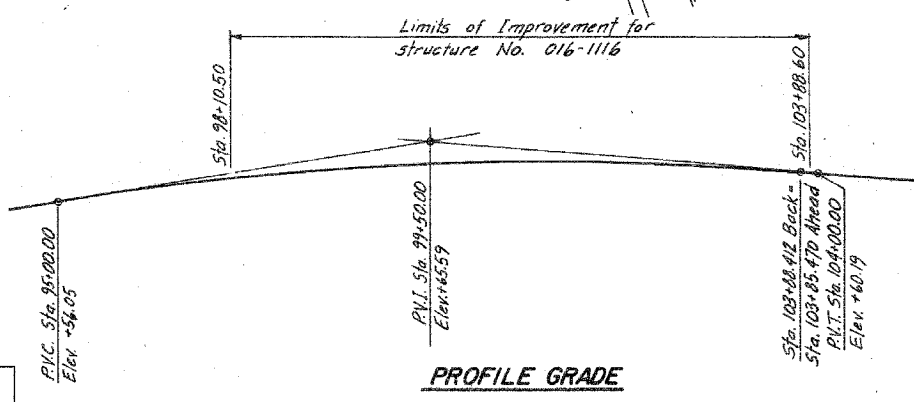
F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	134
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				



**ELEVATION**



**PLAN**



**PROFILE GRADE**

For Notes and Legend see sheet 132.

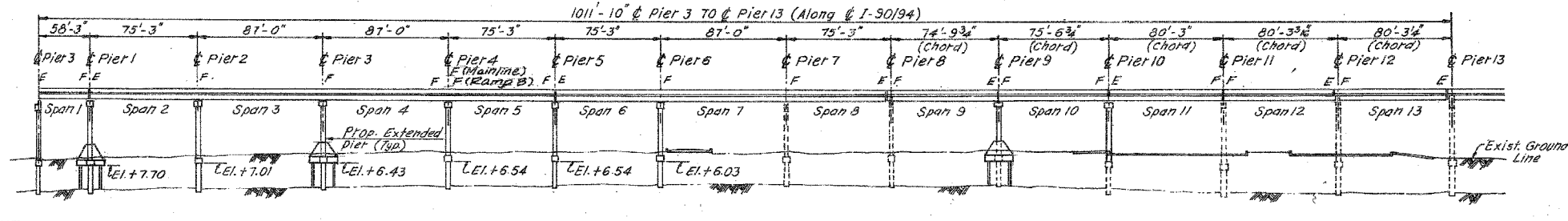
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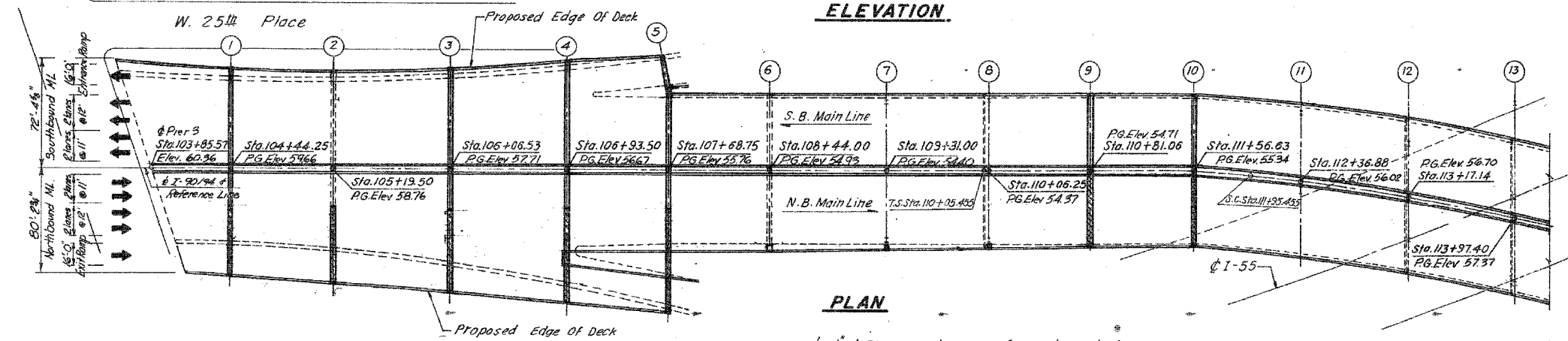
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F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
GENERAL PLAN AND ELEVATION  
SN 016-1116  
SCALE: NTS  
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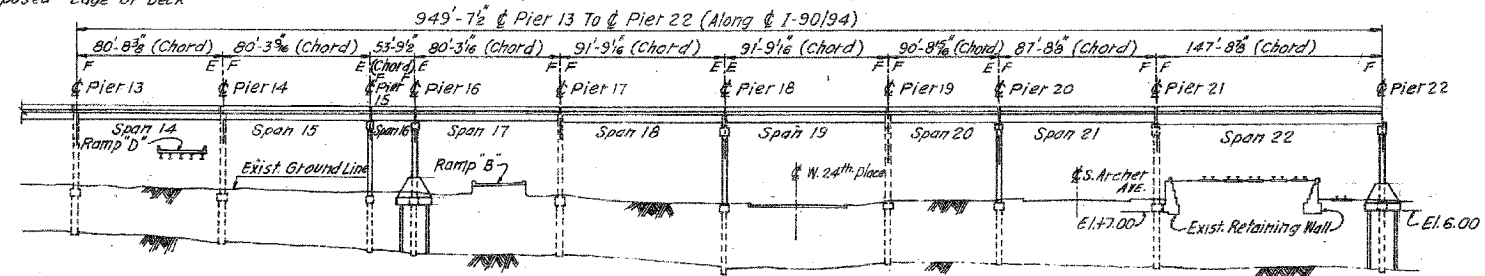
F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
84/90	2003-028F	COOK	419	135
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
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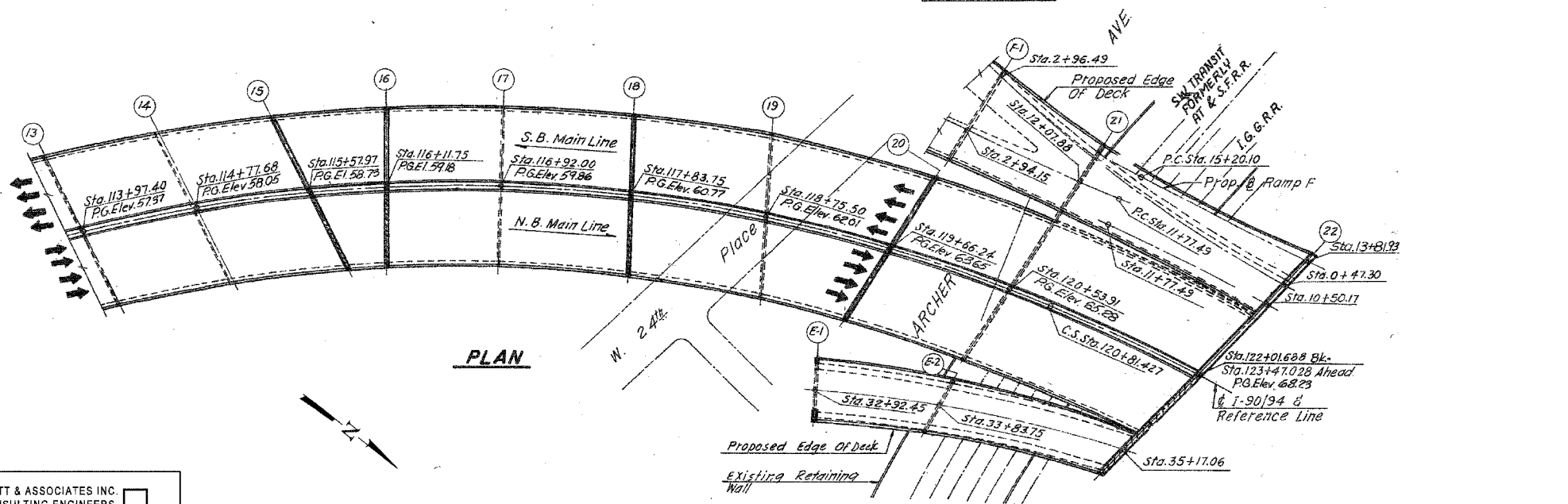
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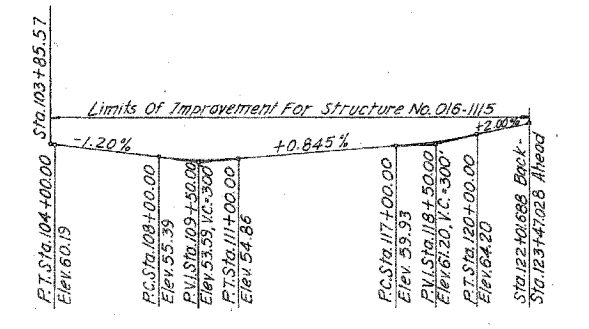
**PLAN**



**ELEVATION**



**PLAN**



**PROFILE GRADE**  
DAN RYAN EXPRESSWAY (I-90/94)

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For Notes and Legend see sheet 132.

REVISIONS	NAME	DATE

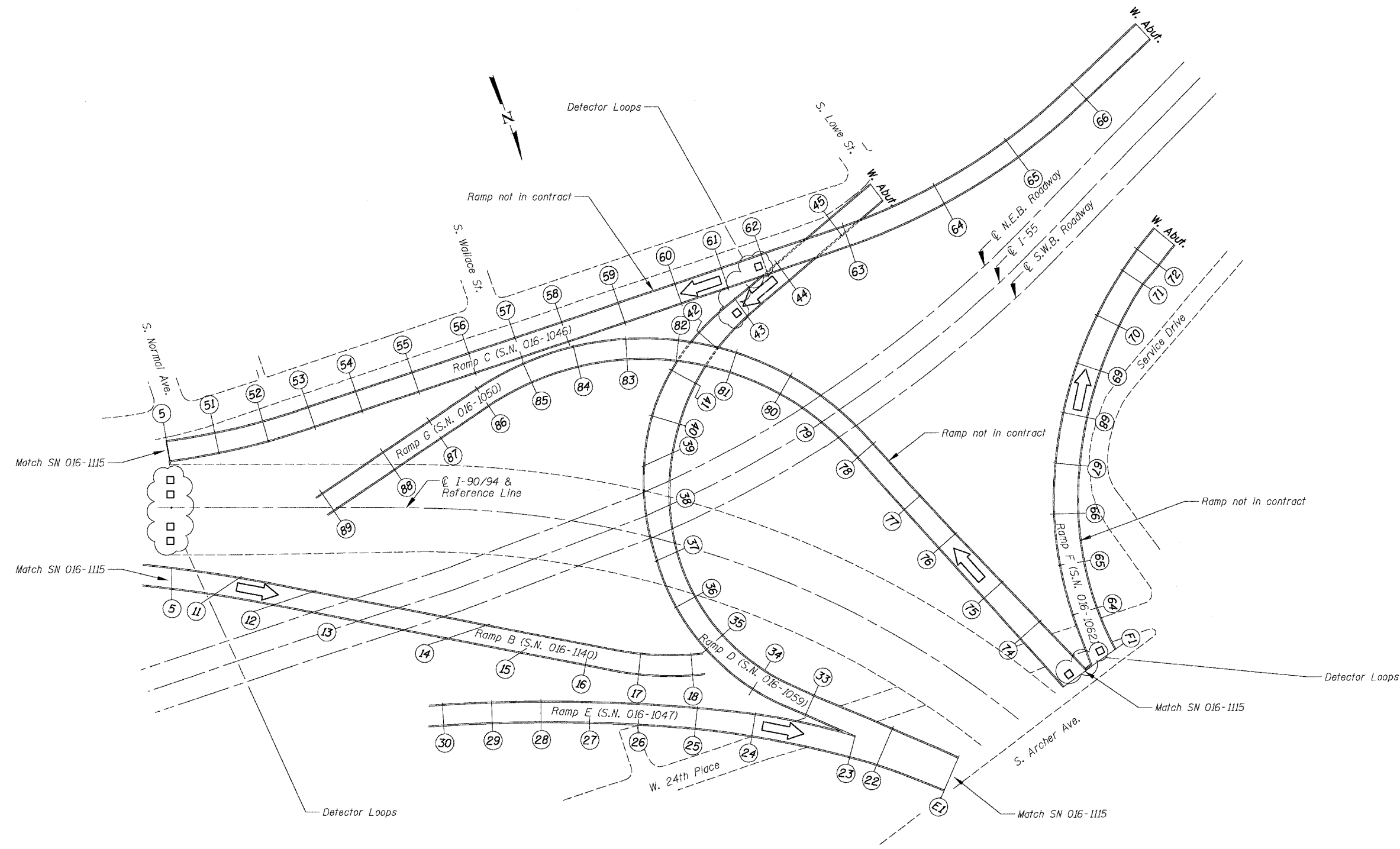
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F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
GENERAL PLAN AND ELEVATION  
SN 016-1115

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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	136
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				



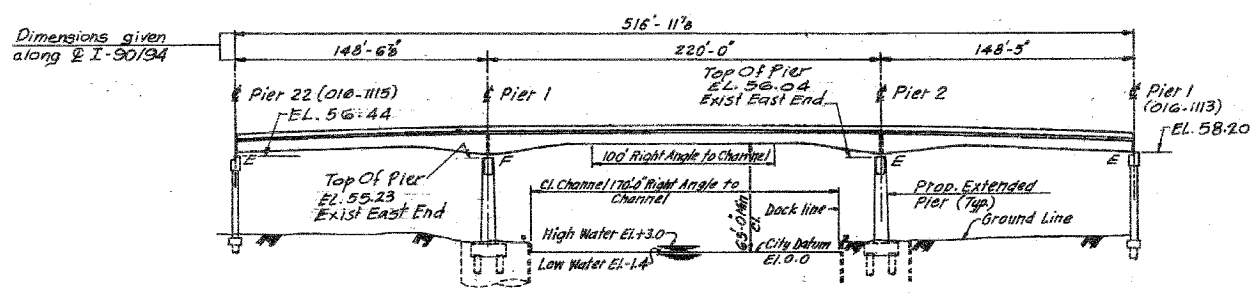
BOWMAN, BARRETT & ASSOCIATES INC  
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Chicago, Illinois  
312.228.0100  
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For Notes and Legend see sheet 132.

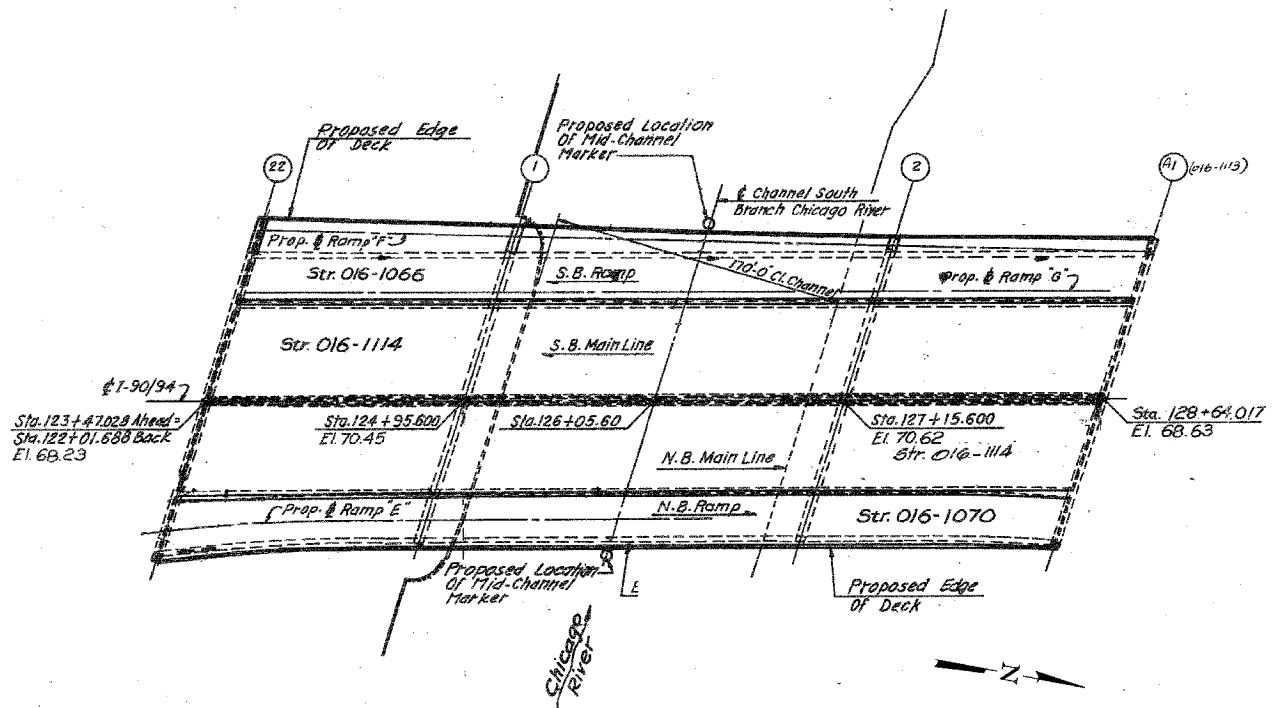
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
GENERAL PLAN AND ELEVATION  
SN 016-1047, SN 016-1059, SN 016-1140  
SCALE: NTS  
DATE: 7/22/2005  
DRAWN BY: BDC  
CHECKED BY: BLU

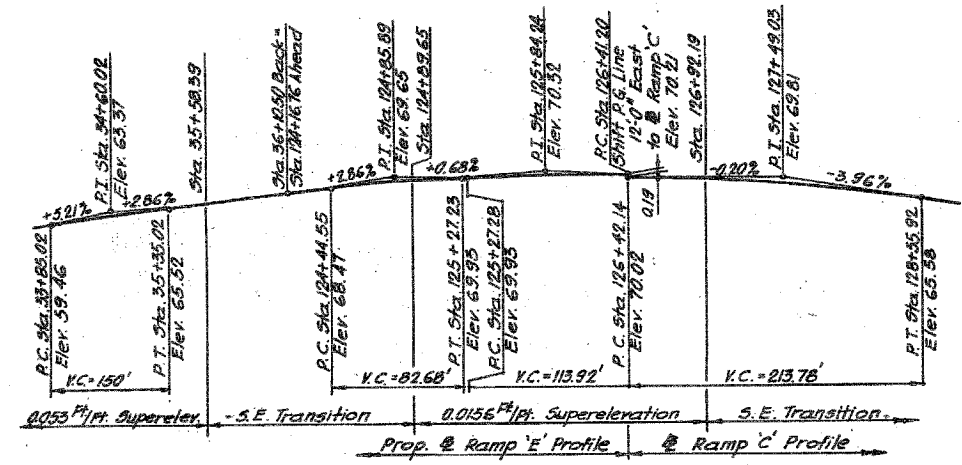
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STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				



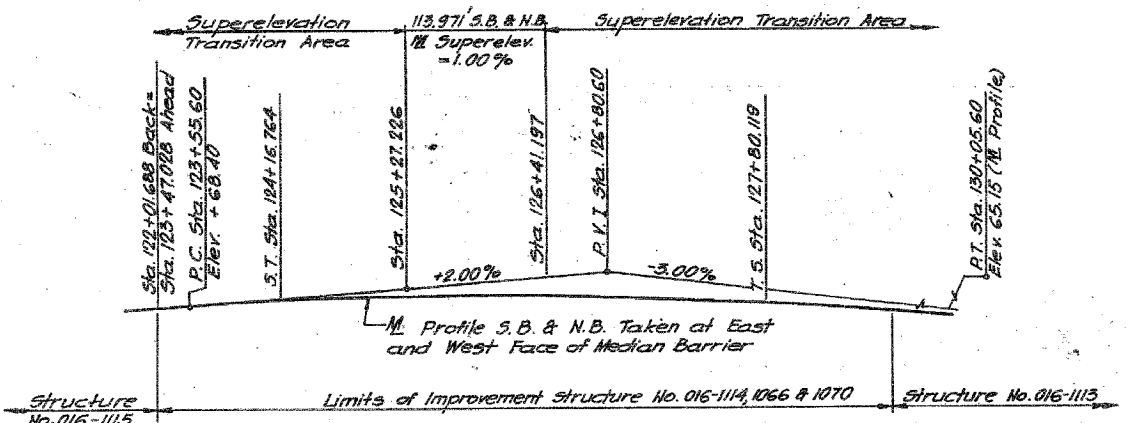
**ELEVATION**



**PLAN**



**RAMP 'E' & RAMP 'C'**



**PROFILE - S.B. & N.B.**

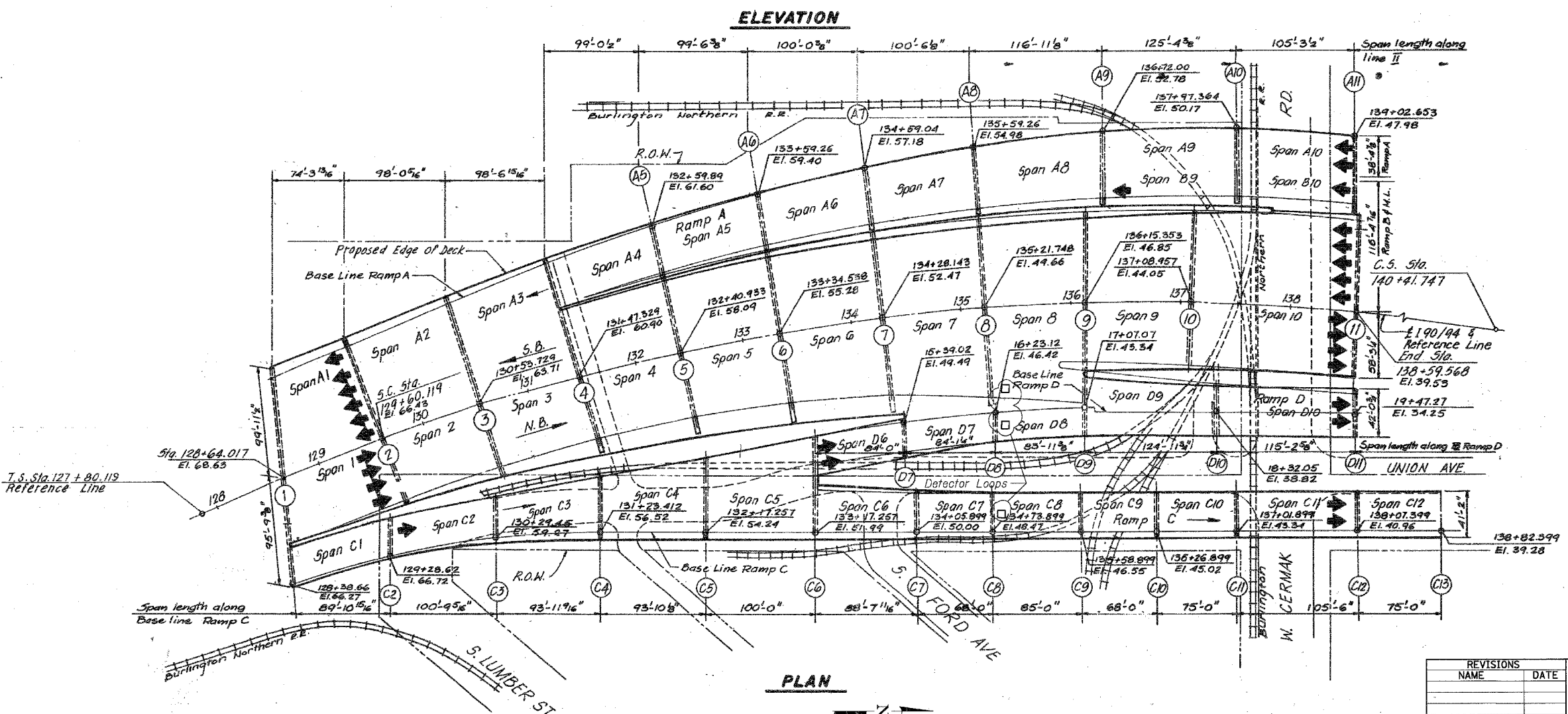
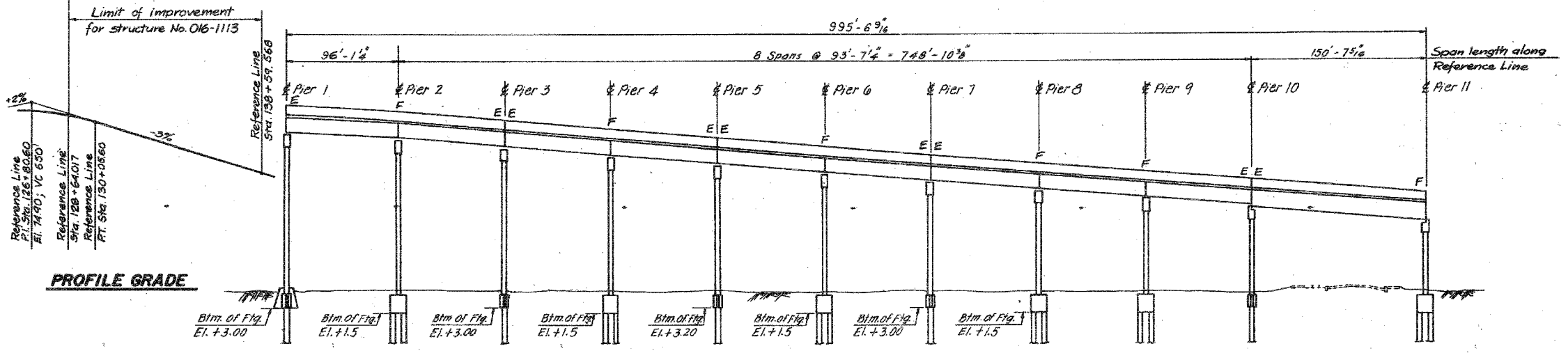
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
 NB DAN RYAN ELEVATED BRIDGE  
 REPAIR FROM 15TH TO 28TH STREETS  
 GENERAL PLAN AND ELEVATION  
 SN 016-1114, SN 016-1070  
 SCALE: NTS  
 DATE: 7/22/2005  
 DRAWN BY: BDC  
 CHECKED BY: BLU

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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	138
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				



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For Notes and Legend see sheet 132.

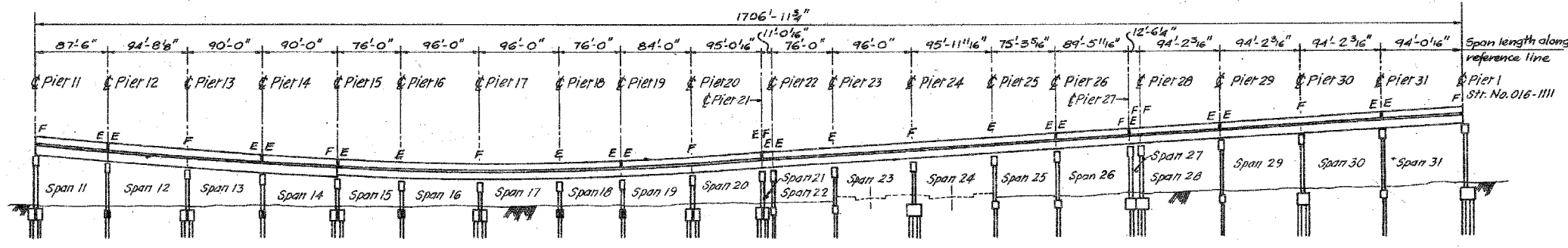
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NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
GENERAL PLAN AND ELEVATION  
SN 016-1113

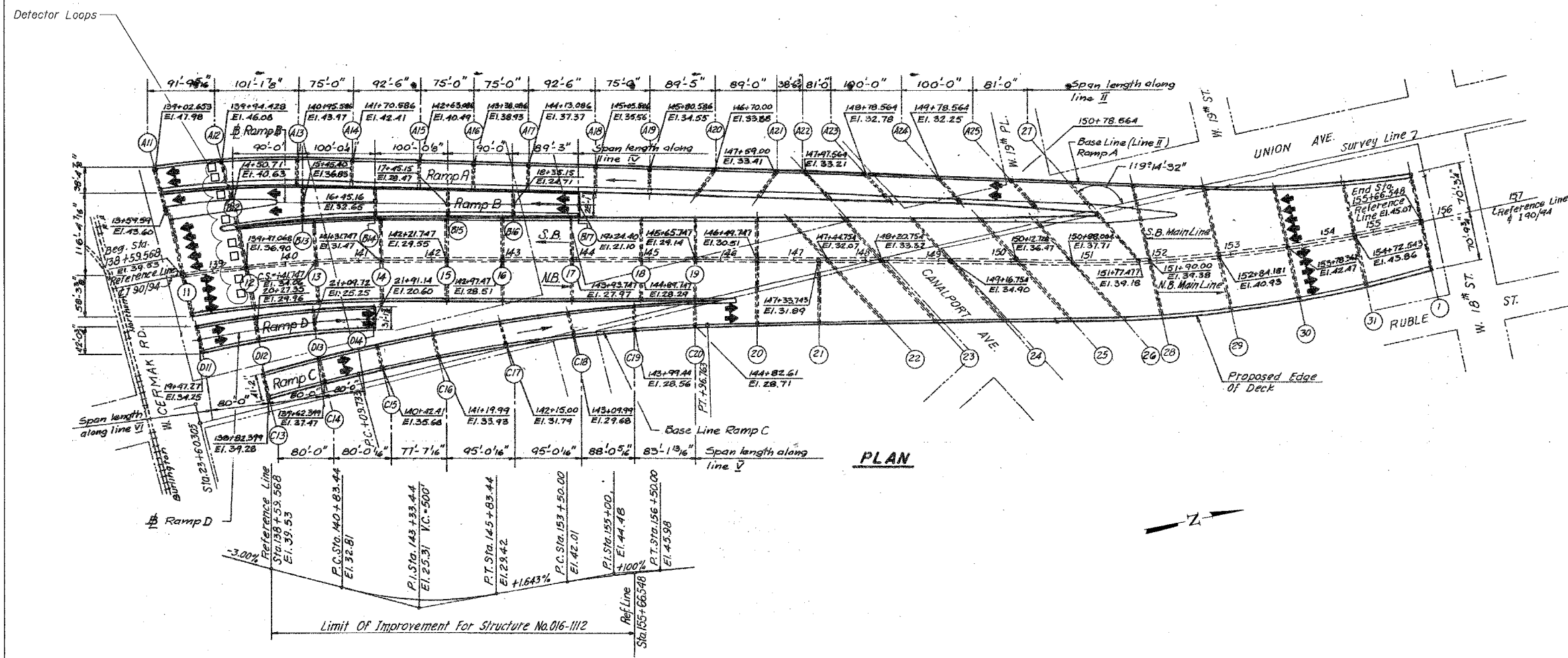
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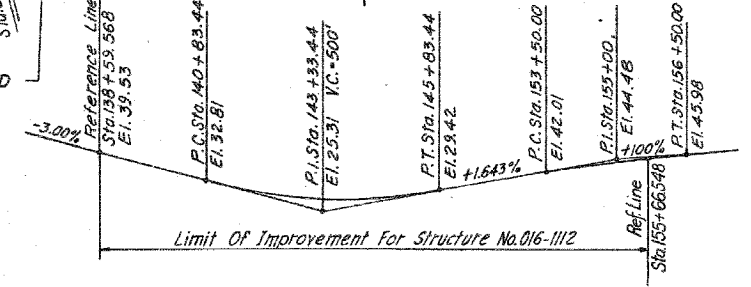
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84/90	2003-028F	COOK	419	139
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				



**ELEVATION**



**PLAN**



**PROFILE GRADE**

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For Notes and Legend see sheet 132.

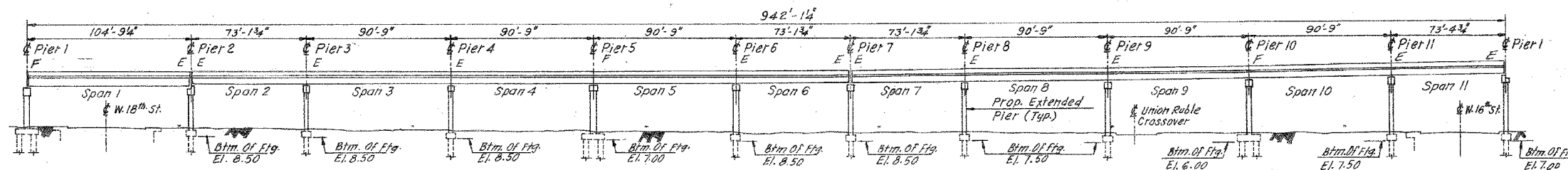
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NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
GENERAL PLAN AND ELEVATION  
SN 016-1112

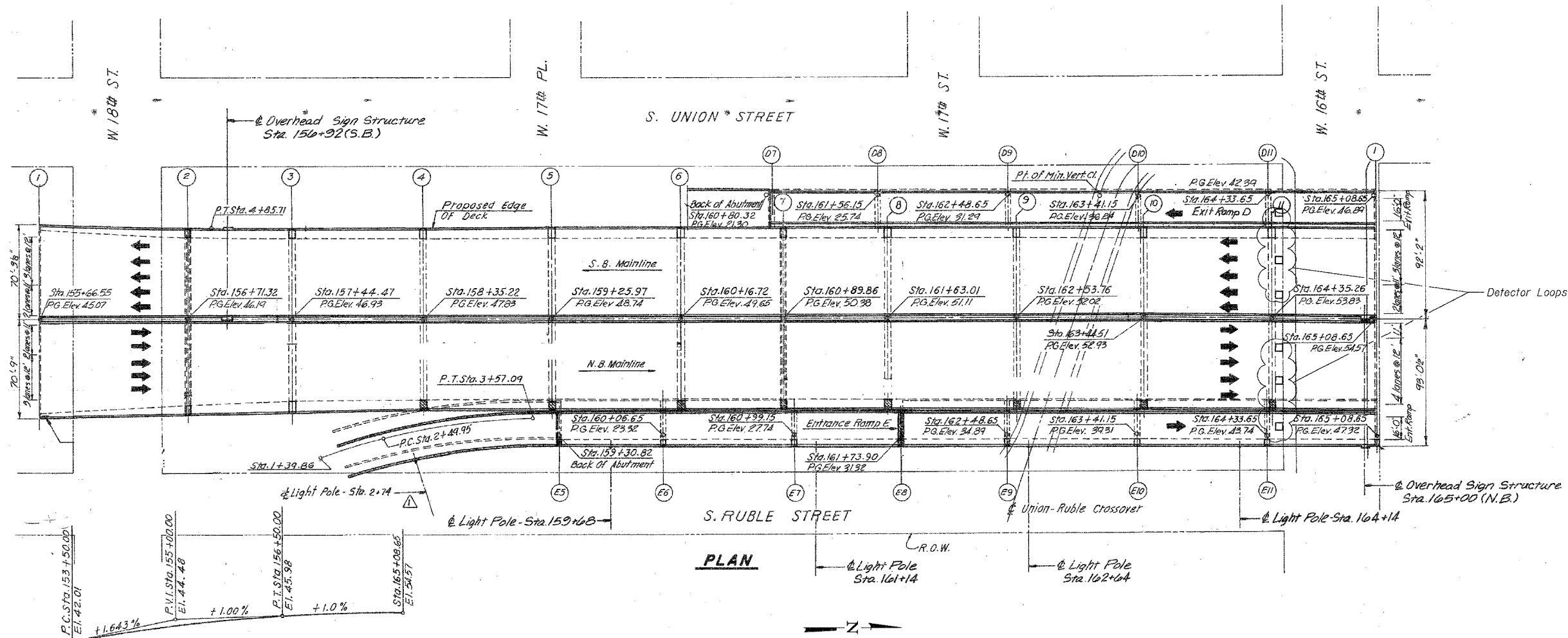
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DATE: 7/22/2005

DRAWN BY: BDC  
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STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				

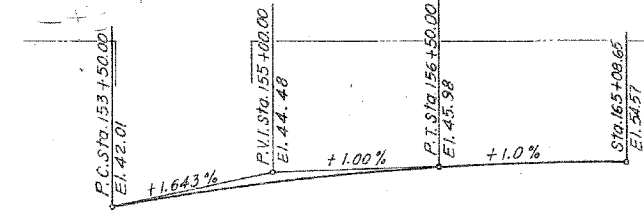


**ELEVATION**



**PLAN**

**PROFILE GRADE**



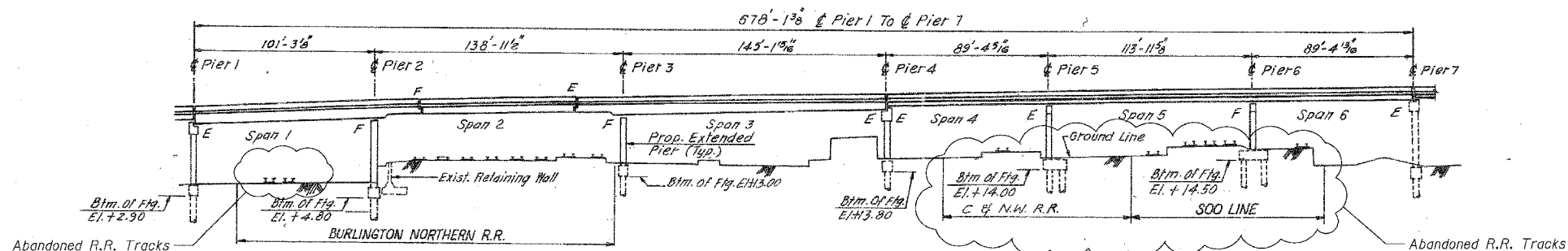
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NAME	DATE	
		SCALE: NTS
		DATE: 7/22/2005
		DRAWN BY: BDC
		CHECKED BY: BLU

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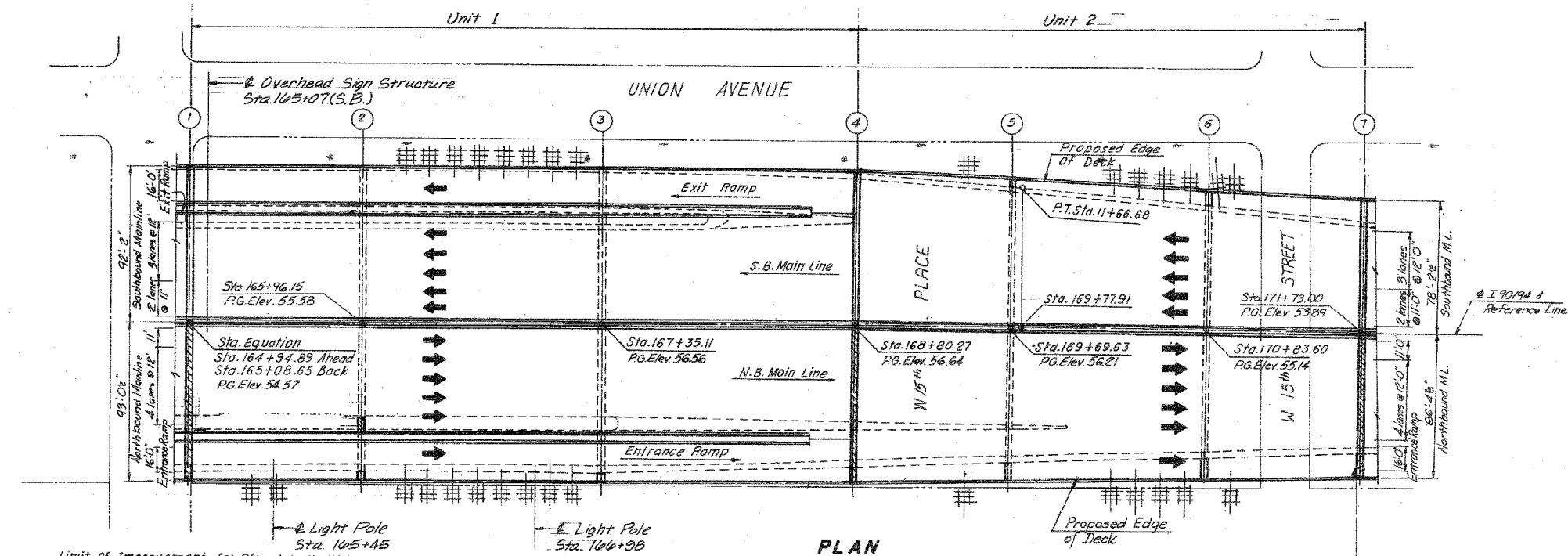
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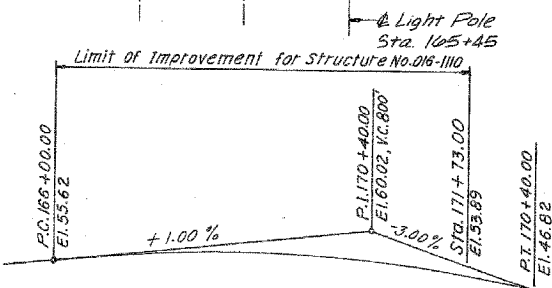
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STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				



**ELEVATION**



**PLAN**



**PROFILE GRADE**  
DAN RYAN EXPRESSWAY (I-90/94)

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For Notes and Legend see sheet 132.

REVISIONS		DATE
NAME		

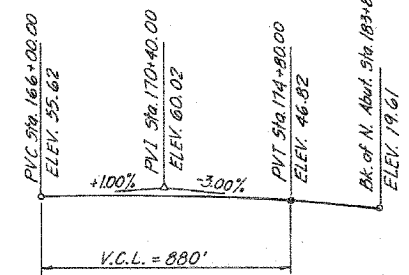
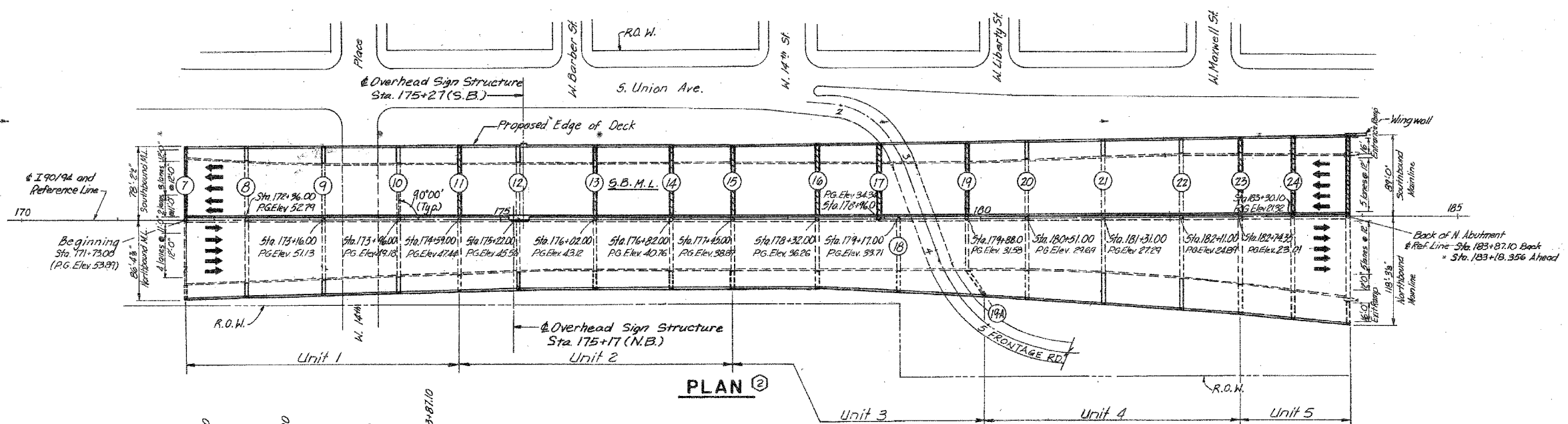
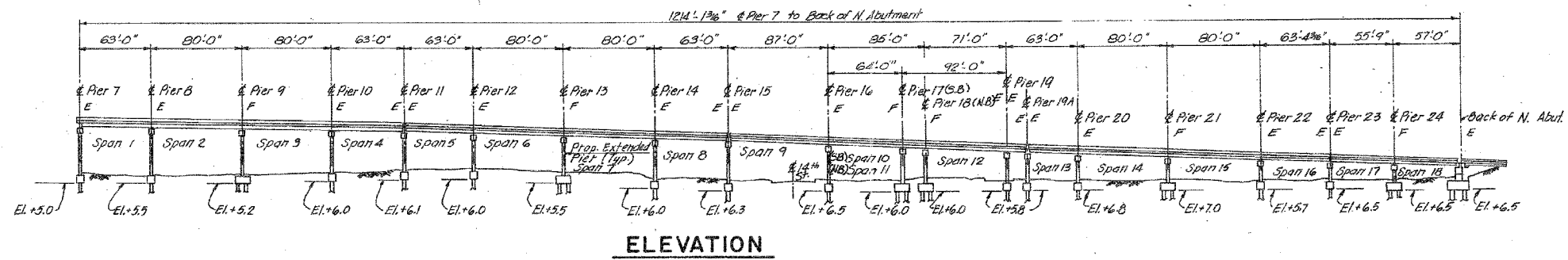
ILLINOIS DEPARTMENT OF TRANSPORTATION  
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NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
GENERAL PLAN AND ELEVATION  
SN 016-1110

SCALE: NTS  
DATE: 7/22/2005

DRAWN BY: BDC  
CHECKED BY: BLU

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	142
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62580



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**F.A.I. 94/90 (DAN RYAN EXPRESSWAY)**  
**NB DAN RYAN ELEVATED BRIDGE**  
**REPAIR FROM 15TH TO 28TH STREETS**  
**GENERAL PLAN AND ELEVATION**  
**SN 016-0137**

SCALE: NTS  
DATE: 7/22/2005

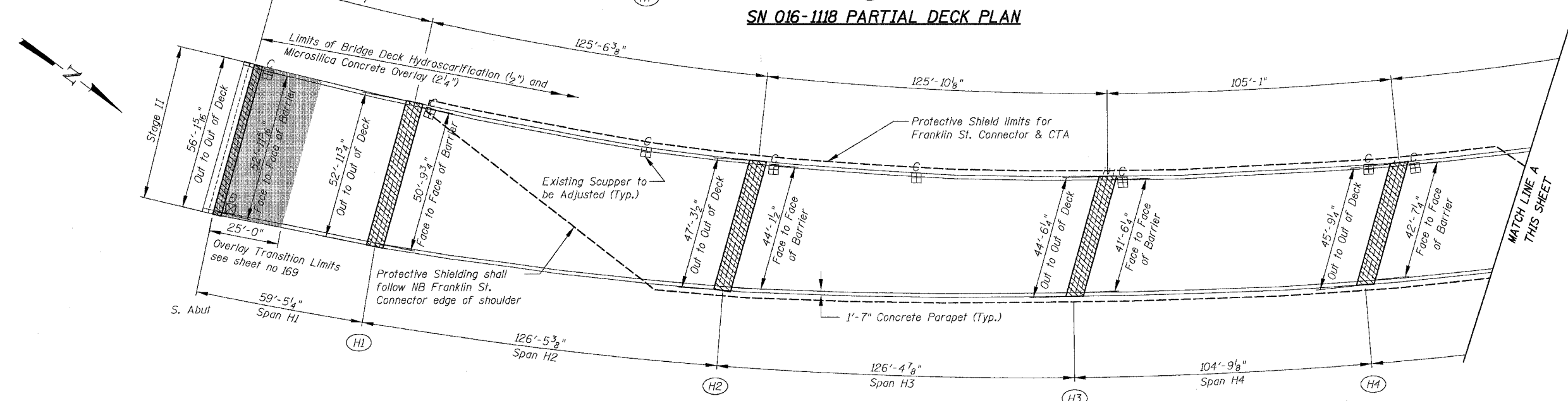
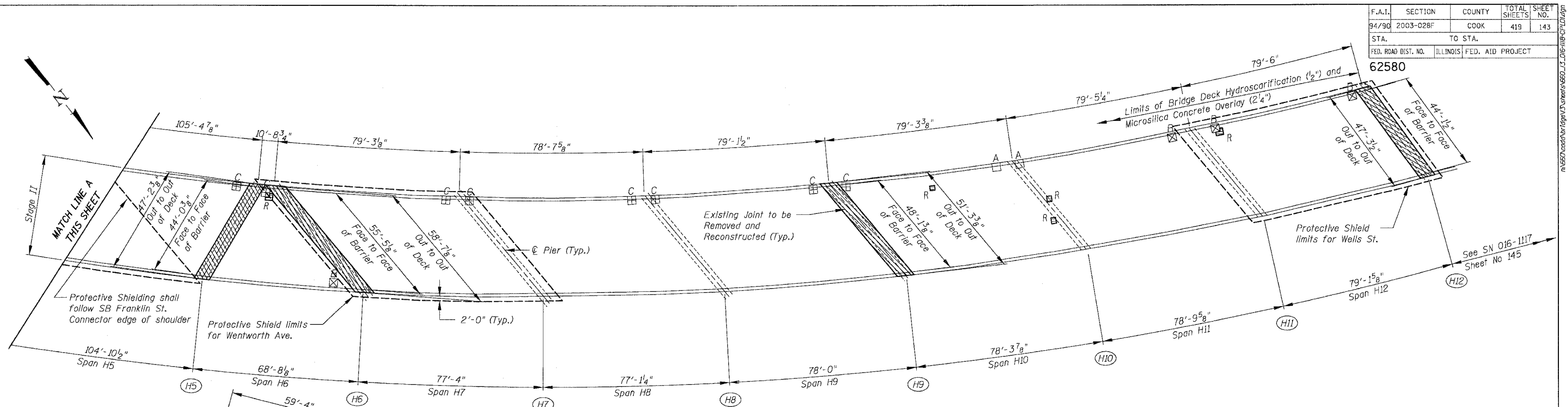
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For Notes and Legend see sheet 132.

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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	143
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



**LEGEND**

- Overlay Transition Limits
- Protective Shield Limits
- Limits of Stage I
- Pier Number
- Concrete Removal / Joint Reconstruction
- Deck Slab Repair Partial Depth
- Deck Slab Repair Full Depth
- Scupper - Type A
- Scupper - Type B
- Scupper - Type C
- Scupper - Special

**Notes:**

The limits of the deck slab repair partial depth are shown for information only as per special provision. The additional volume of Overlay required to fill all depressions below the specified thickness will be paid for at the contractor's actual material cost for Microsilica Concrete per square yard plus 15 percent.

An estimated quantity of 140 sy is shown in the table of "Total Bill of Material" for "Deck Slab Repair (Full Depth Type 1)". The exact quantity will be measured in the field as directed by the Engineer after Hydroscarification has been completed.

The limits of Hydroscarification and Microsilica Concrete Overlay does not include the concrete removal area (shown as hatched on the plans), nor 4' on each side of the Finger Plate Joint locations.

Parapet repairs are shown at approximate locations. The Contractor, as directed by the Engineer, shall visually inspect and determine the location(s) and the extent of the parapet concrete damages. The cost for the repairs shall be included in the cost of "Concrete Removal" and "Concrete Superstructure".

All dimensions are given along  $\phi$  of Pier unless noted otherwise.

Limits of Protective Shield shown graphically for clarity. Shielding shall be provided from  $\phi$  pier to  $\phi$  pier over spans shown out to out of deck, unless noted otherwise. Full shielding shall be provided over streets, railroads and waterways for Hydroscarification operations. Protective Shield shall be provided for any full depth slab repairs.

The Contractor shall exercise care during the removal of the concrete parapet for the joint reconstruction not to damage any parapet mounted junction boxes that may interfere with the removal. The Contractor shall repair any damages at no additional cost to the Department.

For stages of work, plan, cross sections and TCB, see MOT plans. Alignment shown was derived from as built plans for contractors reference and should not be used for dimensional purposes.

For existing and proposed joint details see sheets 160 & 161.

For existing joint sections see sheet 162.

For proposed joint sections see sheet 163.

For existing and proposed joint plans see sheets 164 to 166.

For Scupper adjustment details see sheet 307 & 308.

For Hydroscarification and Microsilica Concrete Overlay details see sheet 169.

For Finger Plate Joint details see sheets 179 to 235.

For Pier and Abutment Skew Angles see sheets 160 & 161.

For Silicone Joint Sealer details see sheet 170A.

For Closure Wall details see sheet 168.

For Parapet Concrete repair, see Detail "B" sheet 170A.

REVISIONS	
NAME	DATE

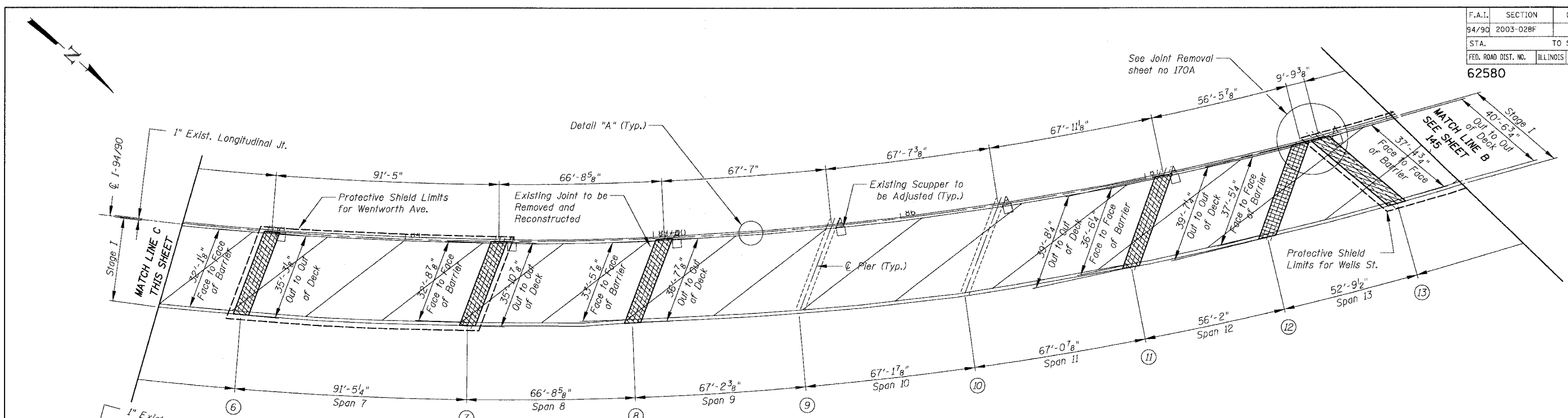
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
 NB DAN RYAN ELEVATED BRIDGE  
 REPAIR FROM 15TH TO 28TH STREETS  
 PARTIAL DECK PLAN  
 SN 016-1118 (RAMP H)

SCALE: 1"=20'  
 DATE: 8/12/2005

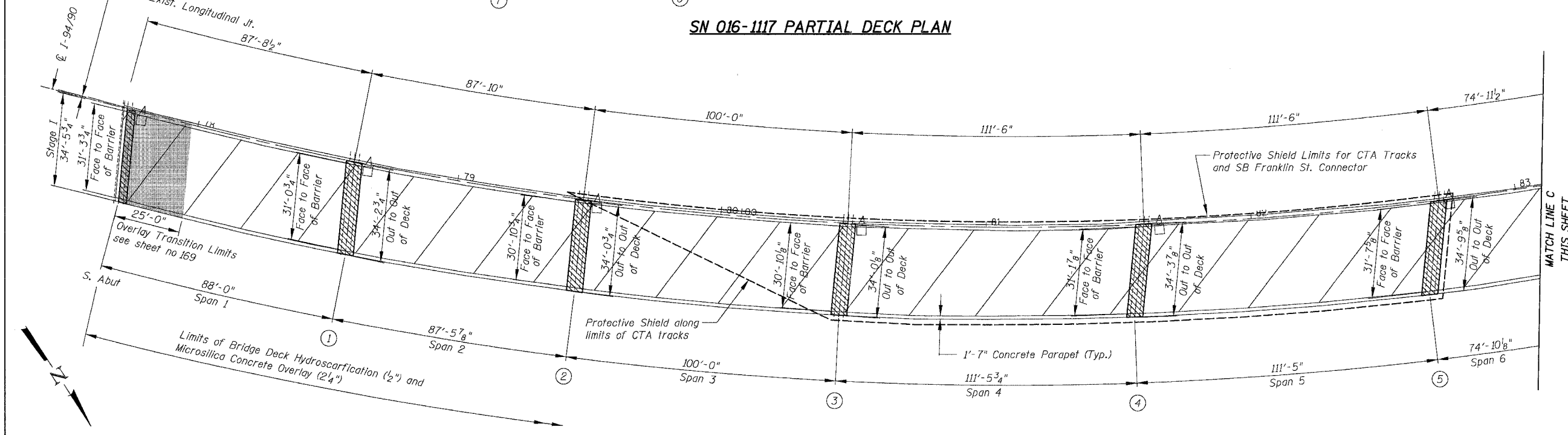
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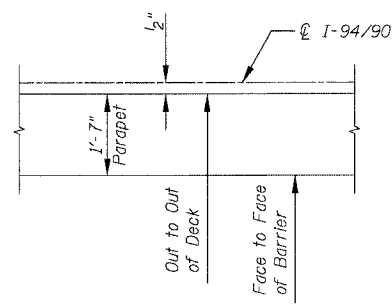
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STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				



**SN 016-1117 PARTIAL DECK PLAN**



**SN 016-1117 PARTIAL DECK PLAN**



**DETAIL "A" (TYP)**

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
 NB DAN RYAN ELEVATED BRIDGE  
 REPAIR FROM 15TH TO 28TH STREETS  
 PARTIAL DECK PLAN  
 SN 016-1117

SCALE: 1"=20'  
 DATE: 8/12/2005

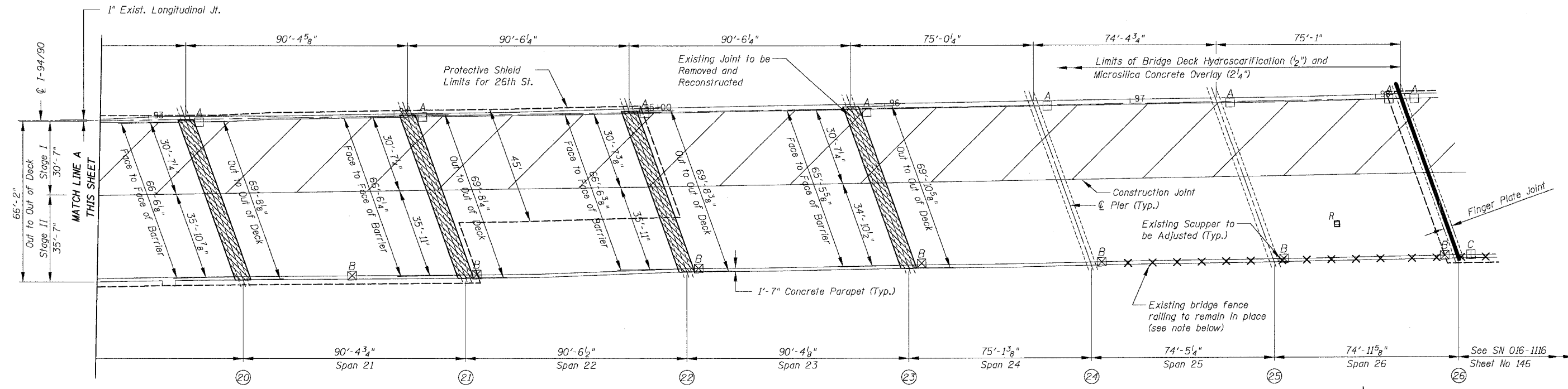
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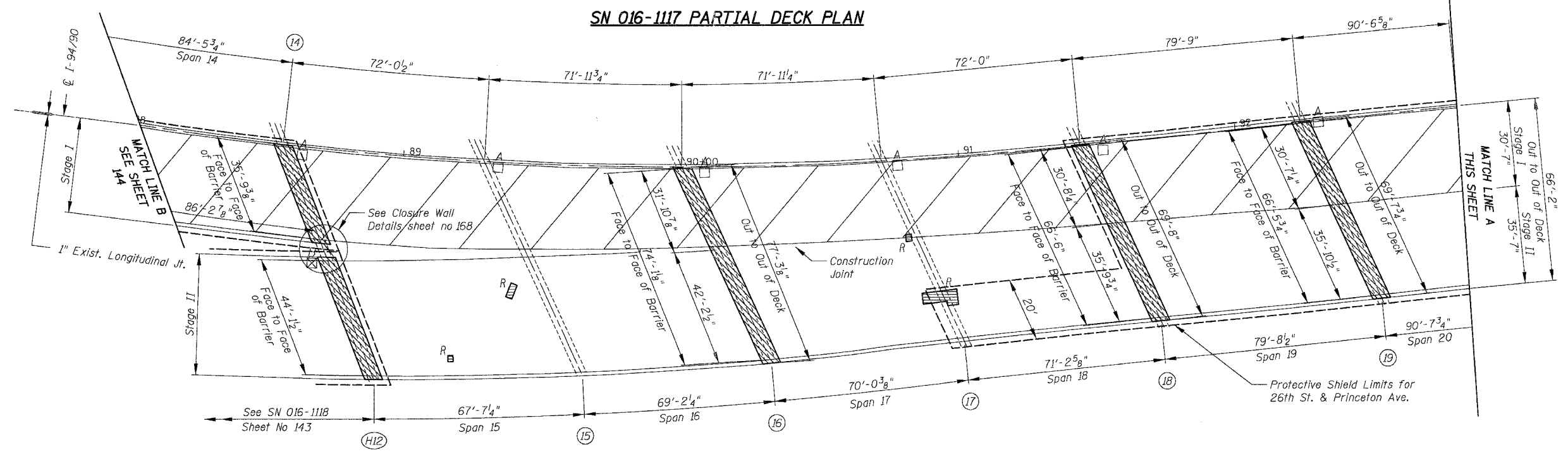
For Notes and Legend See Sheet 143

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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	145
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				



**SN 016-1117 PARTIAL DECK PLAN**



**SN 016-1117 PARTIAL DECK PLAN**

**Notes:**  
 The bridge fence railing located on top of the parapet shown at the approximate location above shall be removed and reinstalled (posts and railing) as required for the partial removal of the barrier for the joint reconstruction. The Contractor shall verify the exact location of the bridge fence railing. The work required for the removal and reinstallation of the bridge fence railing will not be paid separately but shall be included in the pay item for "Concrete Removal" and "Concrete Superstructure".  
 For additional Notes and Legend See Sheet 143

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REVISIONS	
NAME	DATE

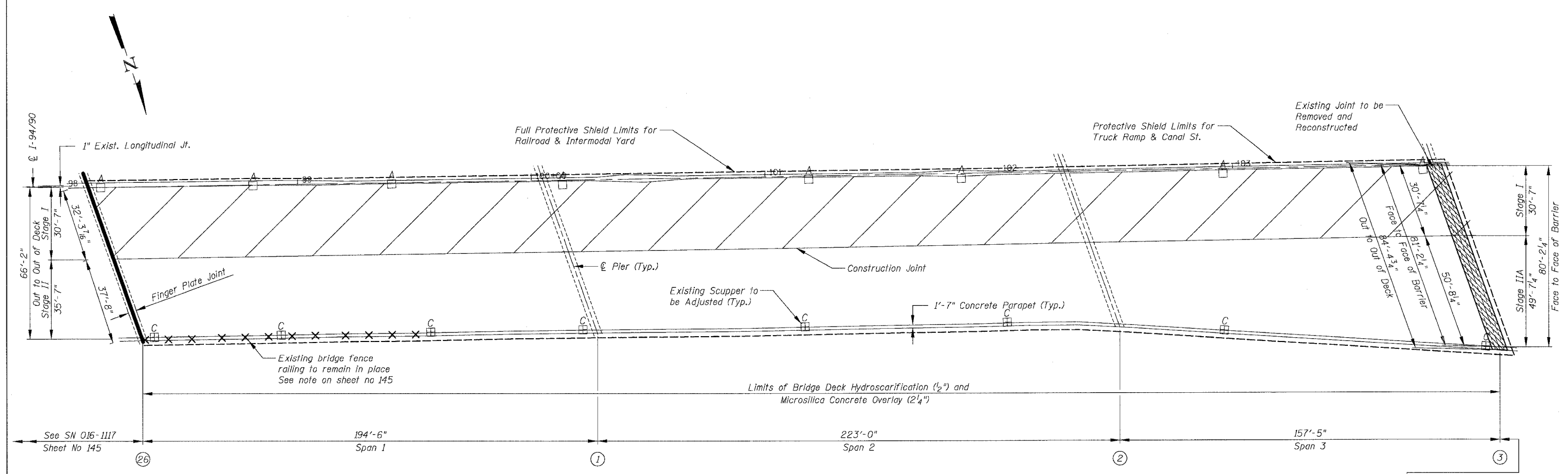
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
 NB DAN RYAN ELEVATED BRIDGE  
 REPAIR FROM 15TH TO 28TH STREETS  
 PARTIAL DECK PLAN  
 SN 016-1117

SCALE: 1"=20'  
 DATE: 8/12/2005

DRAWN BY: BDC  
 CHECKED BY: BLU

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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	146
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				



**SN 016-1116 PARTIAL DECK PLAN**

See SN 016-1115  
Sheet No 147

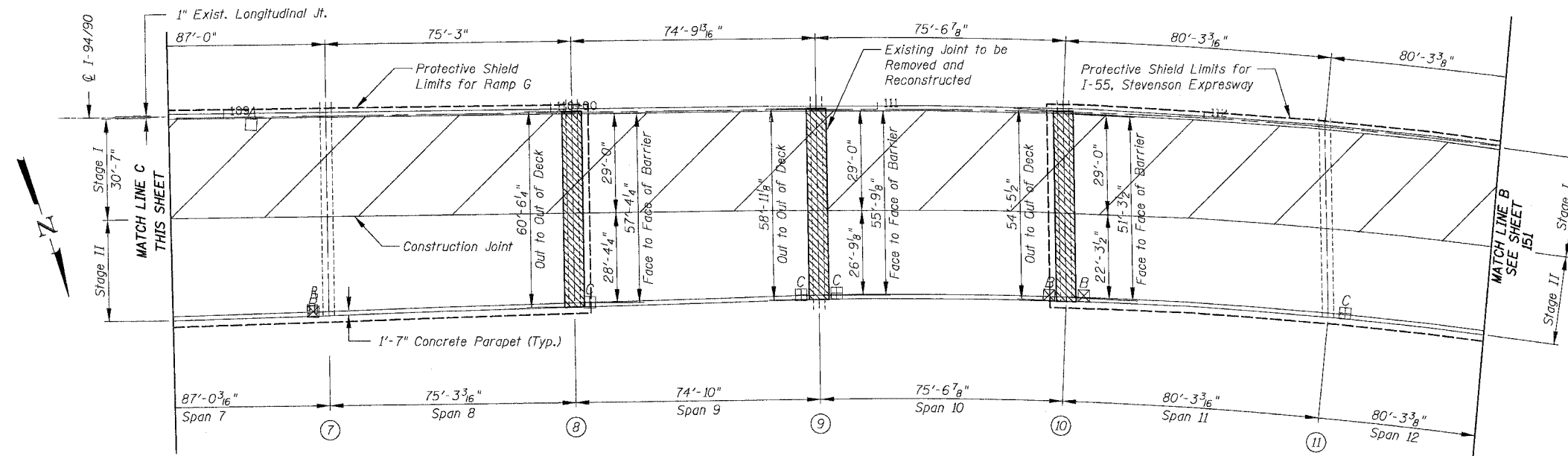
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312.228.0100  
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For Notes and Legend See Sheet 143

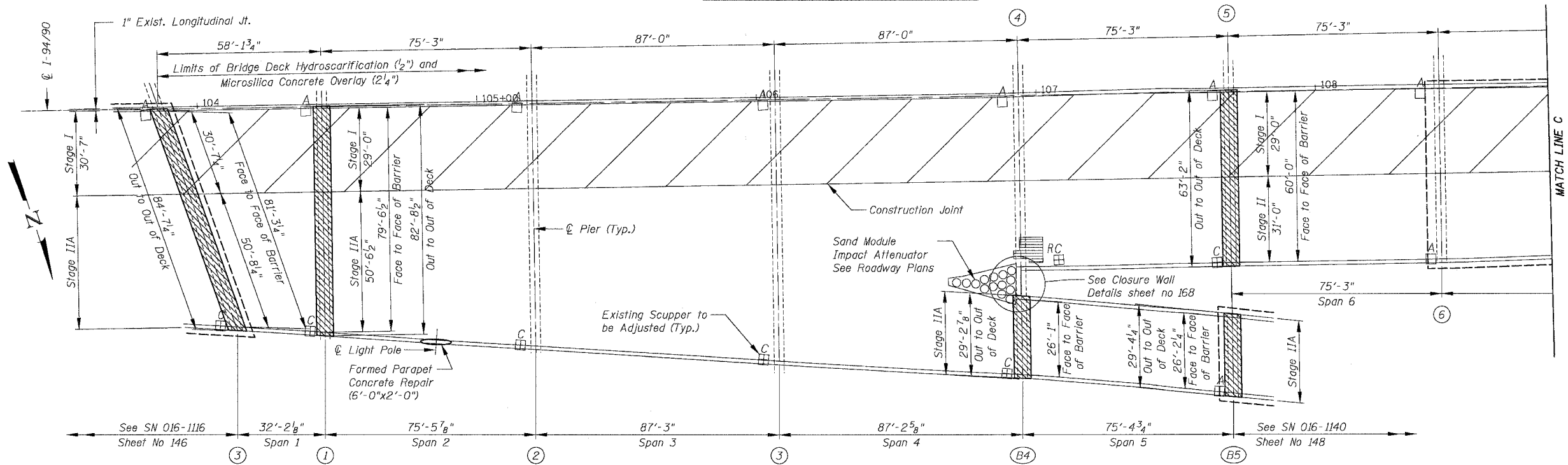
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NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
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REPAIR FROM 15TH TO 28TH STREETS  
PARTIAL DECK PLAN  
SN 016-1116  
SCALE: 1"=20'  
DATE: 8/12/2005  
DRAWN BY: BDC  
CHECKED BY: BLU

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SN 016-1115 PARTIAL DECK PLAN



SN 016-1115 PARTIAL DECK PLAN

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Notes:  
The cost for formed parapet concrete repair will be included in the cost of "Formed Concrete Repair (Depth Greater than 5")"  
For Additional Notes and Legend See Sheet 143

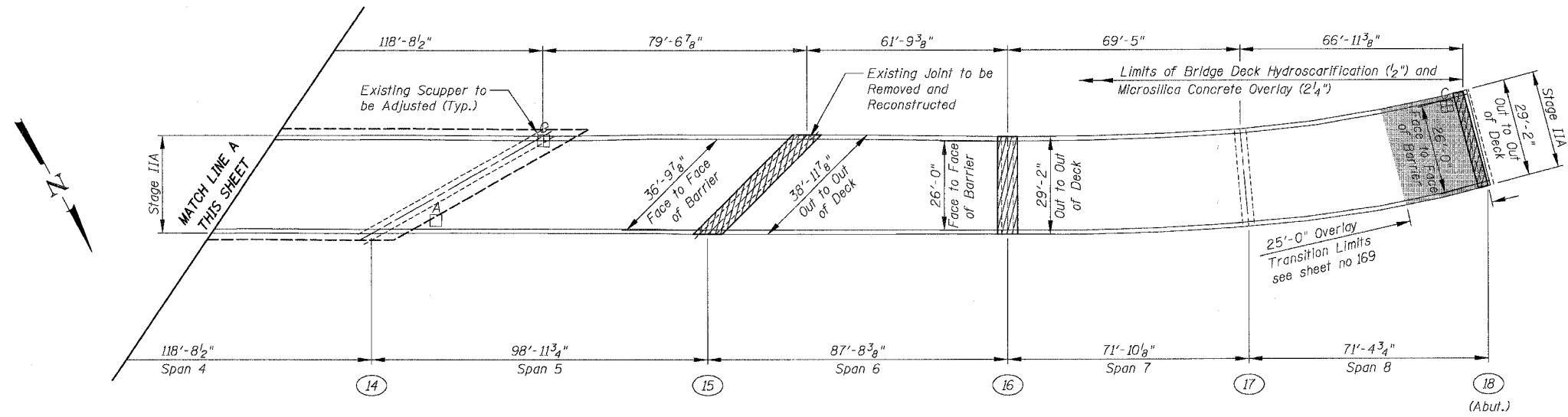
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
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PARTIAL DECK PLAN  
SN 016-1115

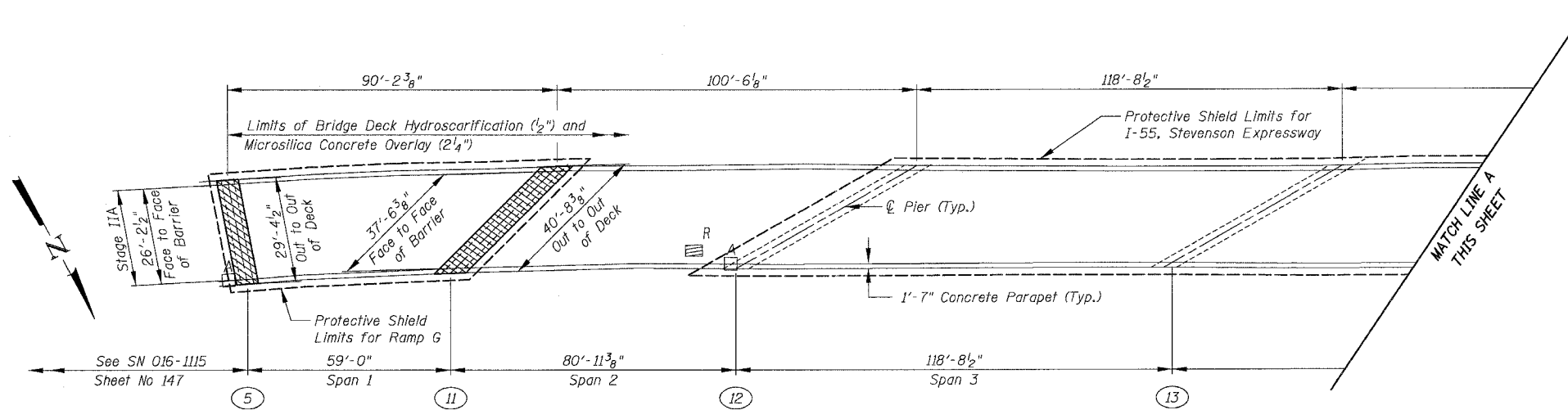
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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	148
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				



SN 016-1140 PARTIAL DECK PLAN



SN 016-1140 PARTIAL DECK PLAN

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For Notes and Legend See Sheet 143

REVISIONS	
NAME	DATE

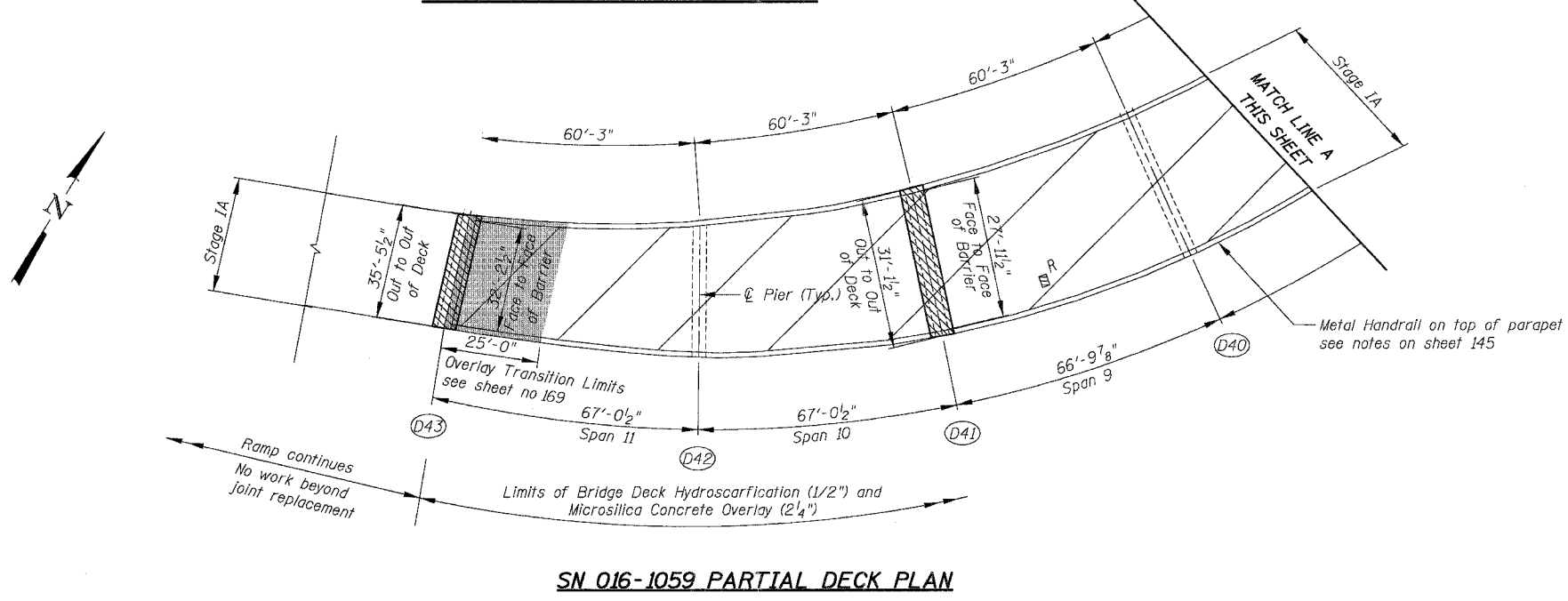
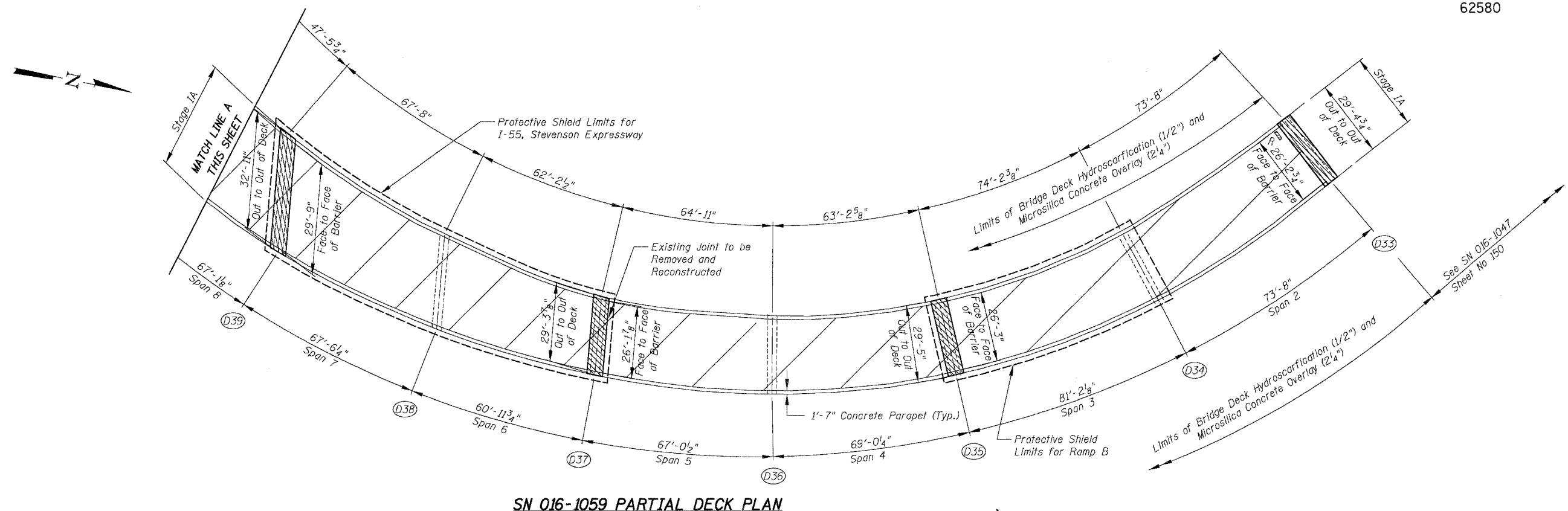
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 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
 NB DAN RYAN ELEVATED BRIDGE  
 REPAIR FROM 15TH TO 28TH STREETS  
 PARTIAL DECK PLAN  
 SN 016-1140 (RAMP B)

SCALE: 1"=20'  
 DATE: 8/12/2005  
 DRAWN BY: BDC  
 CHECKED BY: BLU

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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	149
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				



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For Notes and Legend See Sheet 143

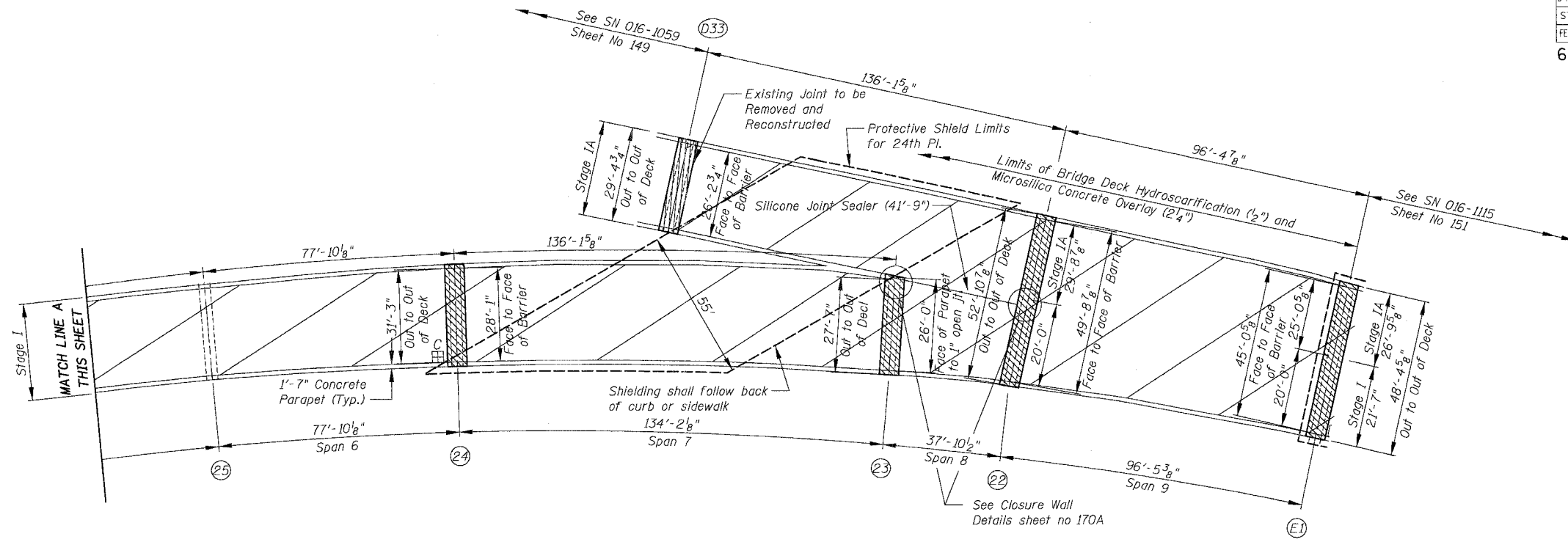
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
PARTIAL DECK PLAN  
SN 016-1059 (RAMP D)

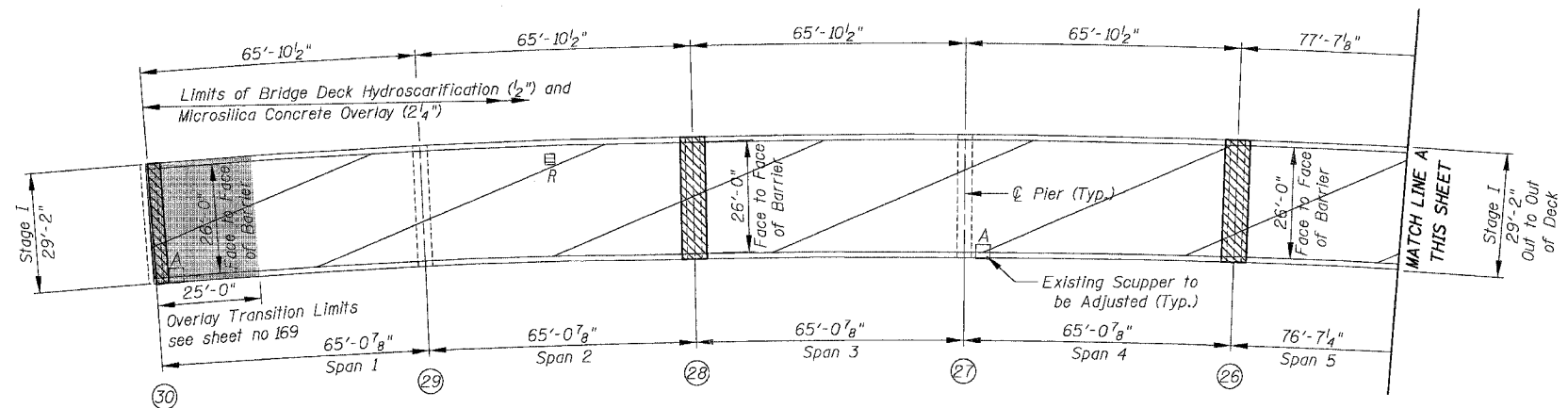
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STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
62580				



**SN 016-1047 PARTIAL DECK PLAN**



**SN 016-1047 PARTIAL DECK PLAN**

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For Notes and Legend See Sheet 143

REVISIONS	
NAME	DATE

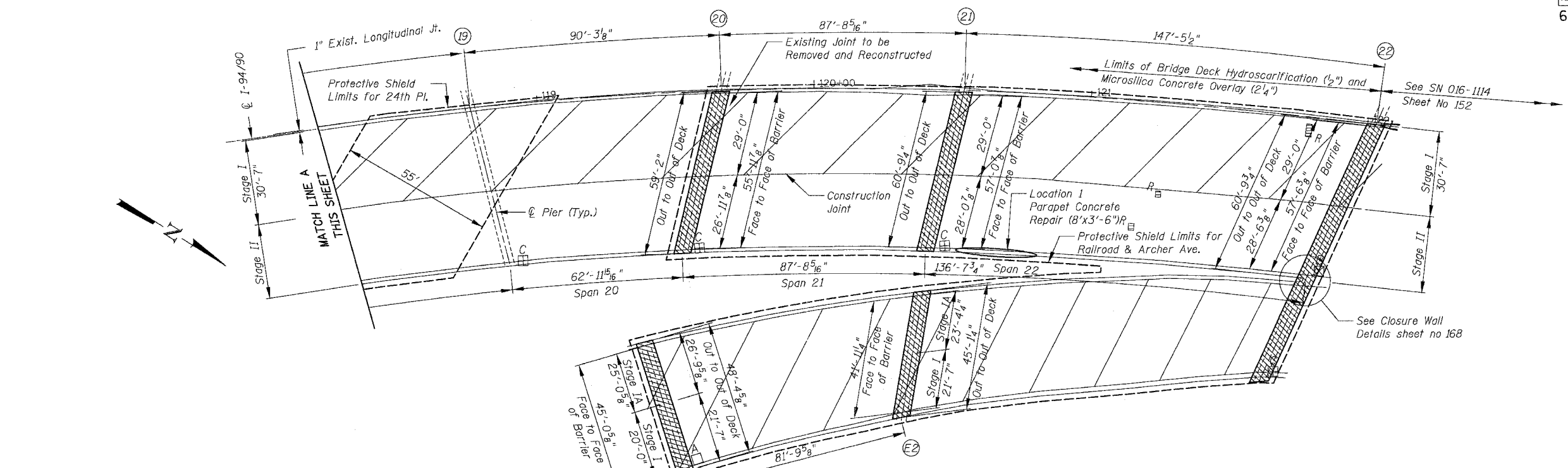
ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
PARTIAL DECK PLAN  
SN 016-1047 (RAMP E)

SCALE: 1"=20'  
DATE: 8/12/2005

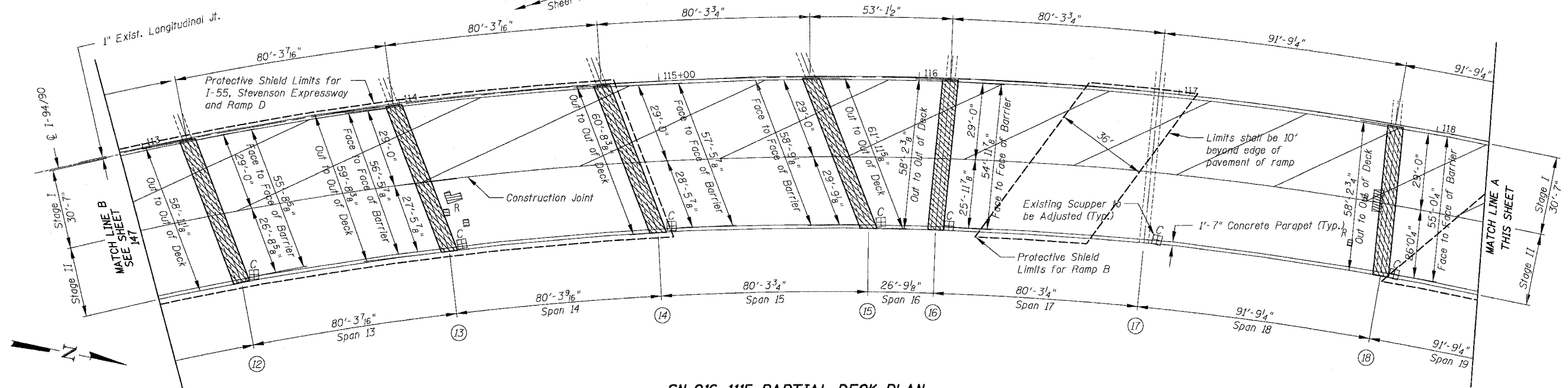
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CHECKED BY: BLU

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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	151
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
62580				



**SN 016-1115 PARTIAL DECK PLAN**



**SN 016-1115 PARTIAL DECK PLAN**

BOWMAN, BARRETT & ASSOCIATES INC.  
 CONSULTING ENGINEERS  
 Chicago, Illinois  
 312.228.0100  
 www.bbainc.com

Notes:  
 For parapet concrete repair see sheet 170A  
 For Additional Notes and Legend See Sheet 143

REVISIONS	
NAME	DATE

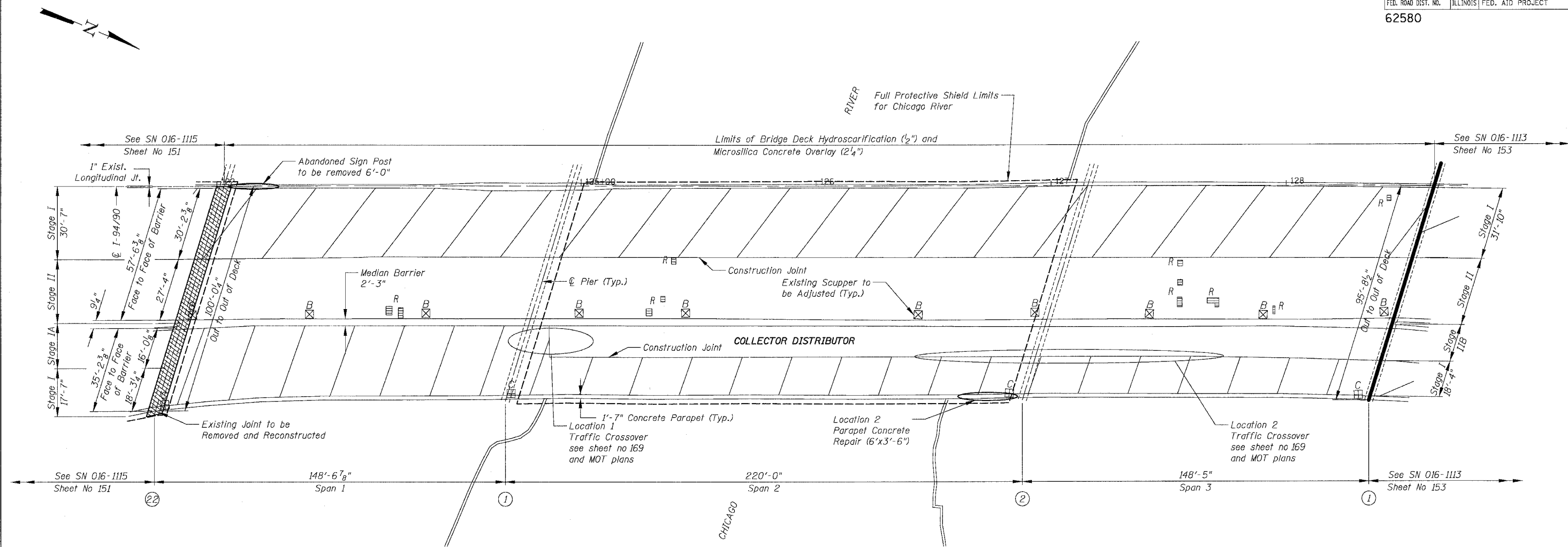
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
 NB DAN RYAN ELEVATED BRIDGE  
 REPAIR FROM 15TH TO 28TH STREETS  
 PARTIAL DECK PLAN  
 SN 016-1115

SCALE: 1"=20'  
 DATE: 8/12/2005

DRAWN BY: BDC  
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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	152
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				



**SN 016-1114 & SN 016-1070 PARTIAL DECK PLAN**

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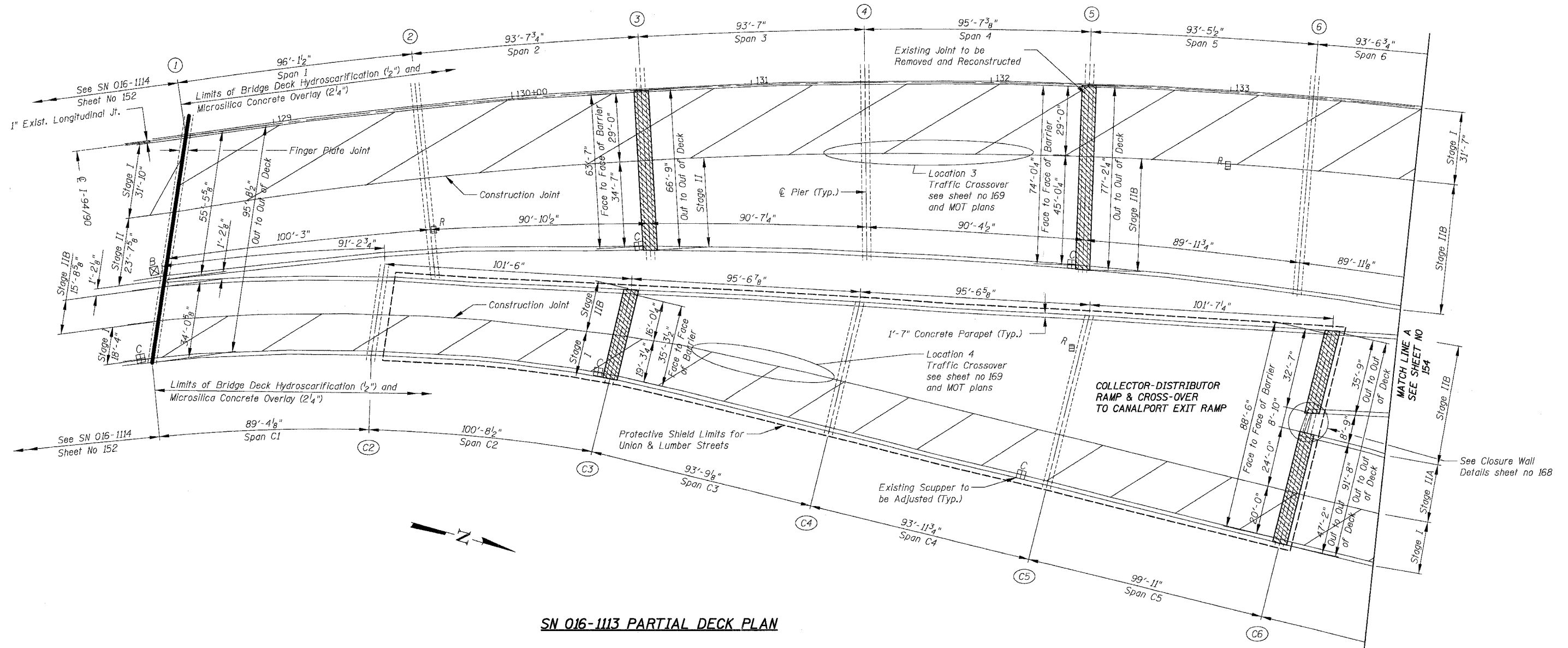
Notes:  
The cost for removal of the abandoned sign post shall be included in the cost for "Concrete Removal"  
For parapet concrete repair see sheet 170A  
For additional Notes and Legend See Sheet 143

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
PARTIAL DECK PLAN  
SN 016-1114 & 016-1070  
SCALE: 1"=20'  
DATE: 8/12/2005  
DRAWN BY: BDC  
CHECKED BY: BLU

10/25/2005 8/11/2005

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-02BF	COOK	419	153
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				



SN 016-1113 PARTIAL DECK PLAN

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For Notes and Legend See Sheet 143

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
PARTIAL DECK PLAN  
SN 016-1113

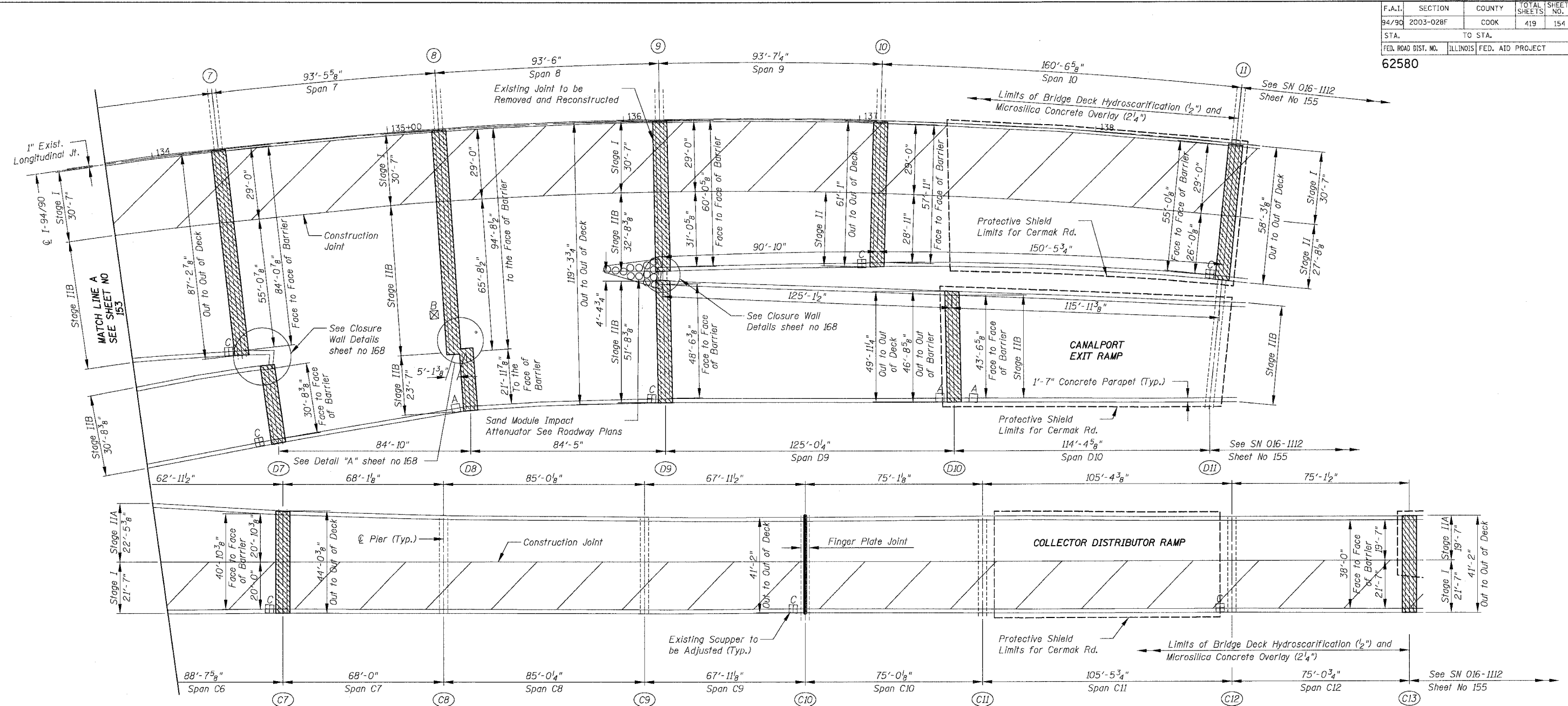
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DATE: 8/12/2005

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CHECKED BY: BLU

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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	154
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

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SN 016-1113 PARTIAL DECK PLAN

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For Notes and Legend See Sheet 134

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
PARTIAL DECK PLAN  
SN 016-1113

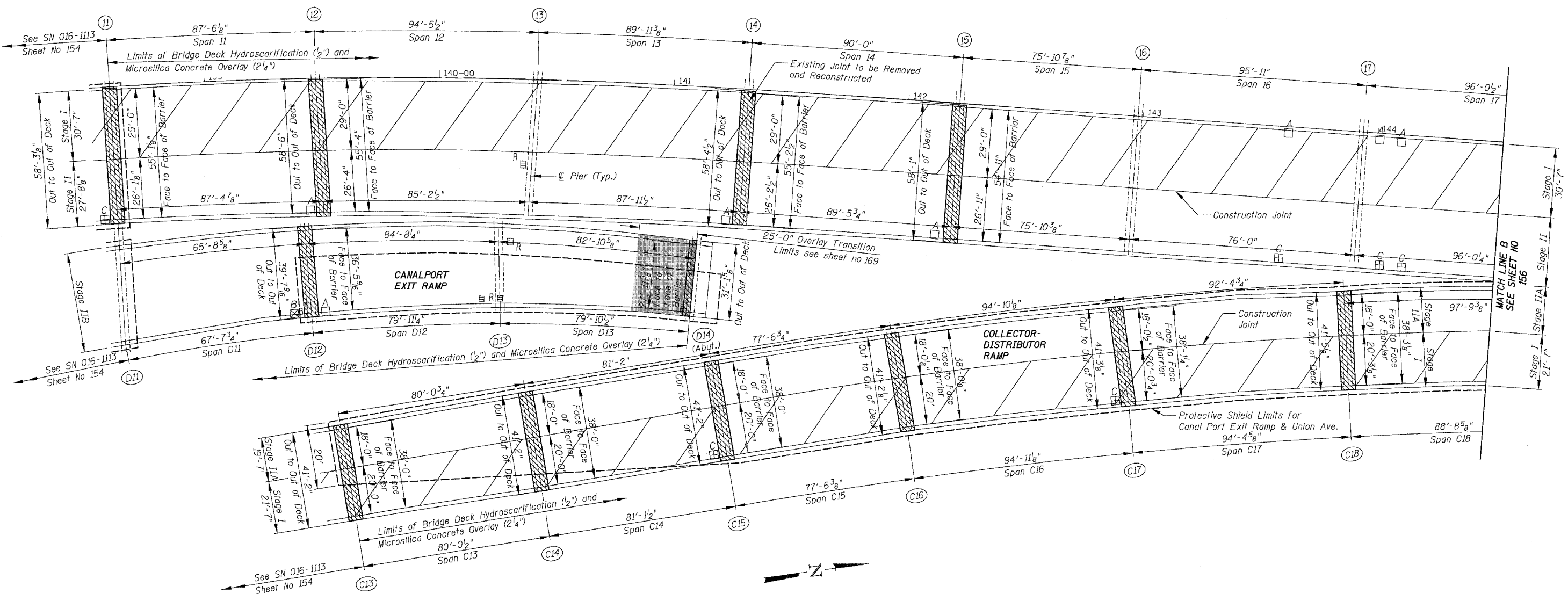
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DATE: 8/12/2005

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CHECKED BY: BLU

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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	155
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62580



SN 016-1112 PARTIAL DECK PLAN

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For Notes and Legend See Sheet 143

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
PARTIAL DECK PLAN  
SN 016-1112

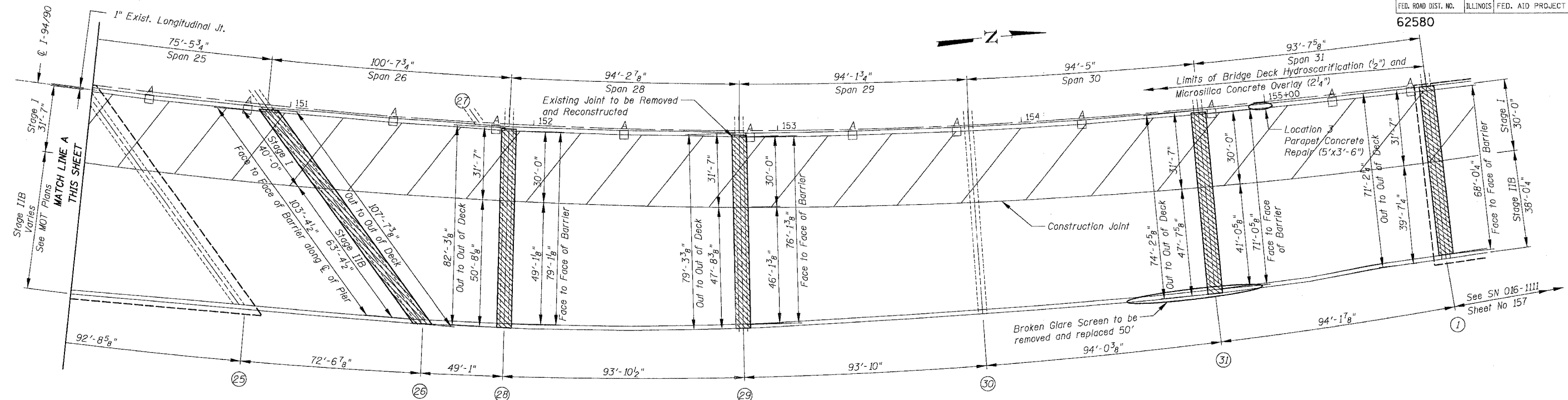
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DATE: 8/12/2005

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CHECKED BY: BLU

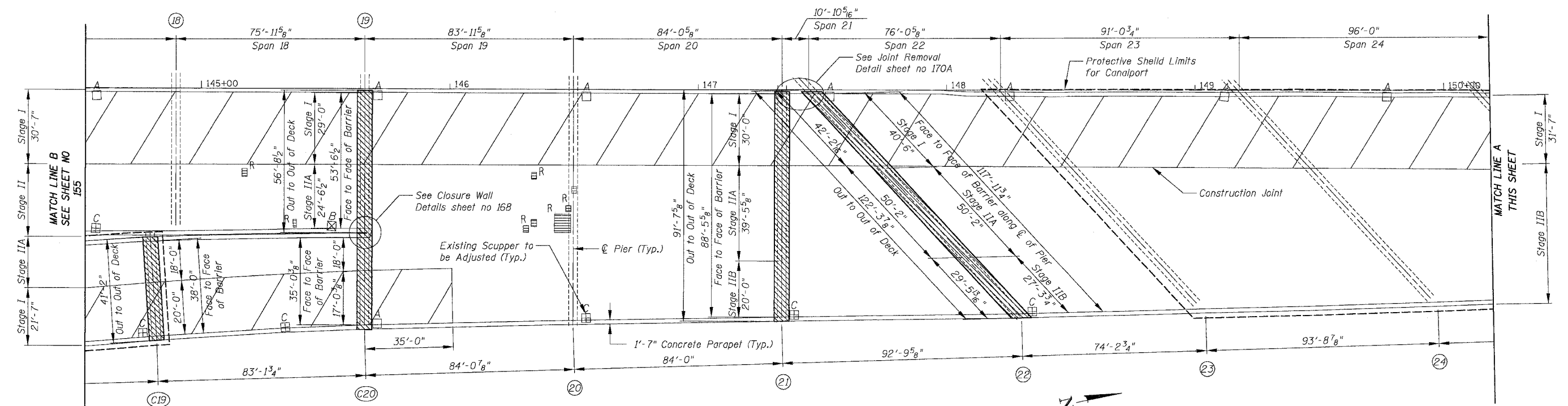
16650\road\bridge\us\shelms\660\_13\_016-1112-CP102.dgn 8/11/2005 10:59:30 AM

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	156
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

62580



SN 016-1112 PARTIAL DECK PLAN



SN 016-1112 PARTIAL DECK PLAN

An estimated length of 50' is provided for removal and replacement of the existing Modular Glare Screen System. The Contractor and the Engineer shall take exact field measurements of the existing Glare Screen that needs to be replaced. The cost of the removal and replacement shall be included in the cost per foot for "Modular Glare Screen System".  
 For parapet concrete repair see sheet 170A  
 For Additional Notes and Legend See Sheet 143

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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
 NB DAN RYAN ELEVATED BRIDGE  
 REPAIR FROM 15TH TO 28TH STREETS  
 PARTIAL DECK PLAN  
 SN 016-1112

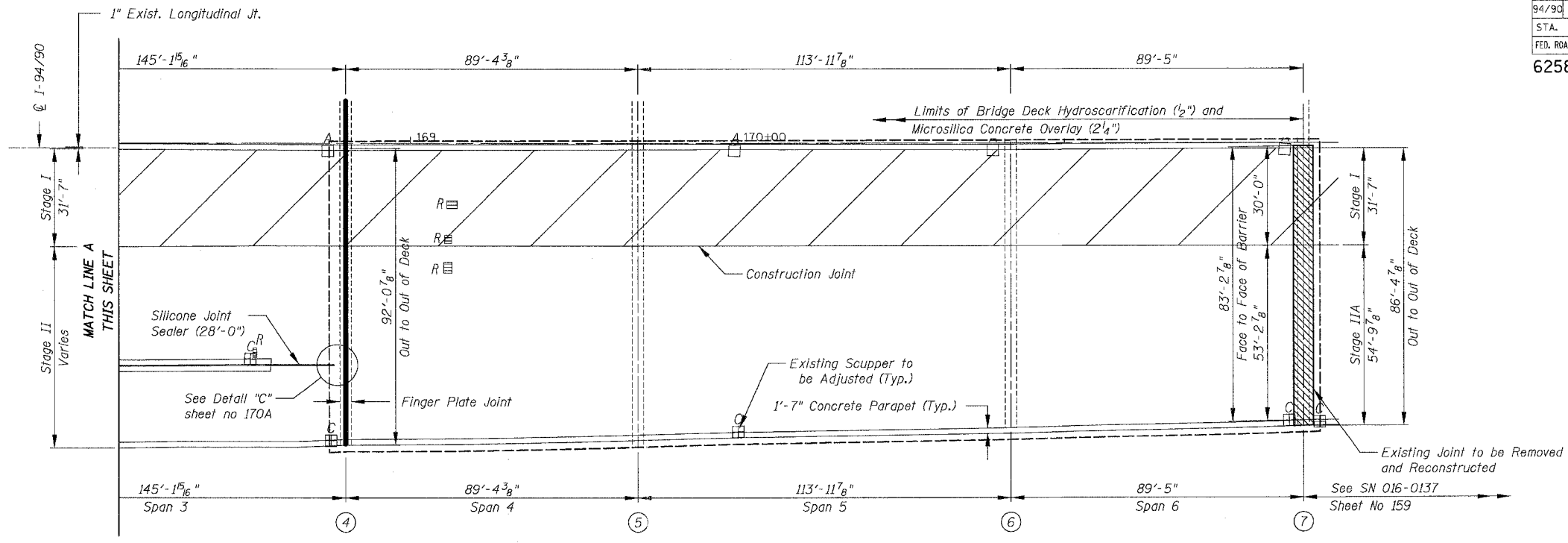
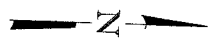
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 DATE: 8/12/2005  
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 CHECKED BY: BLU

8/11/2005 10:25:32 AM

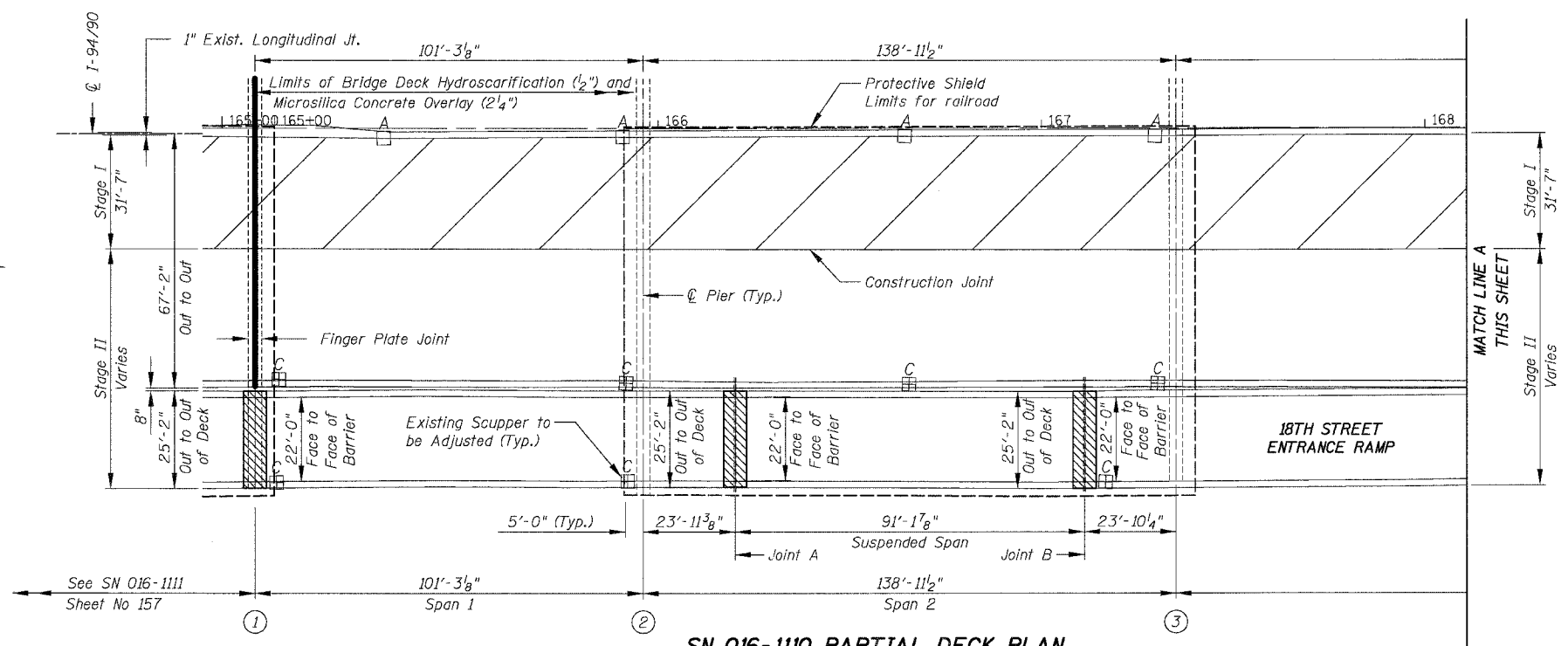




F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	158
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				



**SN 016-1110 PARTIAL DECK PLAN**



**SN 016-1110 PARTIAL DECK PLAN**

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For Notes and Legend See Sheet 143

REVISIONS	
NAME	DATE

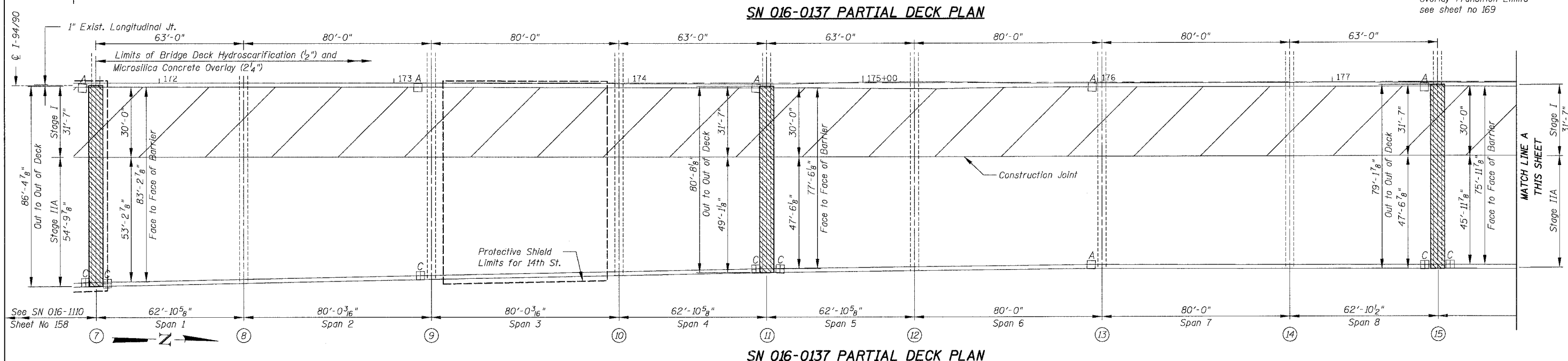
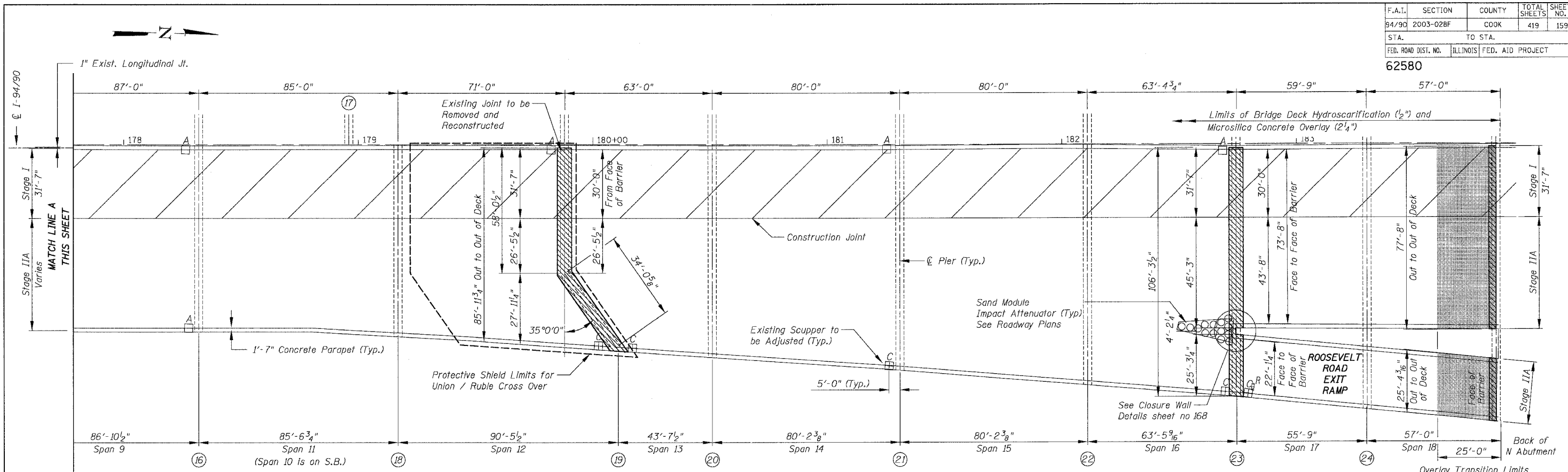
ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
PARTIAL DECK PLAN  
SN 016-1110

SCALE: 1"=20'  
DATE: 8/12/2005

DRAWN BY: BDC  
CHECKED BY: BLU

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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-02BF	COOK	419	159
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
62580				



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For Notes and Legend See Sheet 143

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
PARTIAL DECK PLAN  
SN 016-0137

SCALE: 1"=20'  
DATE: 8/12/2005  
DRAWN BY: BDC  
CHECKED BY: BLU

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**LOCATION & DESIGNATION OF JOINTS**

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	160
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62580

STRUCTURE NUMBER (SN)	PIER	DESIGNATION 1 CROSS SECTIONS THRU JOINTS		EXISTING JOINT		LENGTH CONTR. TO EXP. (ft)	SKEW ANGLE (°)	PROPOSED JOINT		LENGTH OF JOINT FACE TO FACE OF PARAPET	DESIGNATION 2 STAGED AND NON STAGED CONSTRUCTION
		EXISTING	PROPOSED	TYPE	SIZE			TYPE	"A"		
		016-0137	7	6	1			Neoprene	4"		
	11	6	1	Neoprene	4"	286'-0"	0°0'0"	①	2 <sup>1</sup> / <sub>2</sub> "	77'-6 <sup>1</sup> / <sub>8</sub> "	F
	15	6	1	Neoprene	4"	315'-0"	0°0'0"	①	2 <sup>1</sup> / <sub>2</sub> "	75'-11 <sup>1</sup> / <sub>8</sub> "	F
	19	6	1	Neoprene	4"	214'-0"	0°0'0"	①	2 <sup>1</sup> / <sub>2</sub> "	90'-2 <sup>1</sup> / <sub>4</sub> "	F,E
	23	5	7	Neoprene	2 <sup>1</sup> / <sub>2</sub> "	199'-0"	0°0'0"	①	2 <sup>1</sup> / <sub>2</sub> "	95'-9 <sup>1</sup> / <sub>8</sub> "	F
	N. Abut.	3	5	PJS	2 <sup>1</sup> / <sub>2</sub> "	57'-0"	0°0'0"	③	1 <sup>3</sup> / <sub>4</sub> "	96'-8 <sup>3</sup> / <sub>8</sub> "	F
016-1110	1 (Ramp)	6	1	Neoprene	4"	269'-0"	0°0'0"	①	2 <sup>1</sup> / <sub>2</sub> "	22'-0"	A
	1 (Mainline)	FPJ	-	Finger Plate	4 <sup>1</sup> / <sub>2</sub> "	404'-0"	0°0'0"	-	-	-	-
	Span 2 - Joint 'A'	8	6	PJS	2 <sup>1</sup> / <sub>2</sub> "	FIXED	0°0'0"	②	1"	22'-0"	A
	Span 2 - Joint 'B'	9	6	Neoprene	2"	92'-0"	0°0'0"	④	2 <sup>3</sup> / <sub>4</sub> "	22'-0"	A
	4	FPJ	-	Finger Plate	4 <sup>1</sup> / <sub>2</sub> "	348'-4"	0°0'0"	-	-	-	-
016-1111	1	1	1	PJS	2 <sup>1</sup> / <sub>2</sub> "	FIXED	0°0'0"	②	1"	68'-0 <sup>1</sup> / <sub>4</sub> "	F
	2	FPJ	-	Finger Plate	4 <sup>1</sup> / <sub>2</sub> "	359'-4"	0°0'0"	-	-	-	-
	7	FPJ	-	Finger Plate	4 <sup>1</sup> / <sub>2</sub> "	418'-5"	0°0'0"	-	-	-	-
	E5 Abut.	6	3	Neoprene	2"	168'-4"	0°0'0"	①	2 <sup>1</sup> / <sub>2</sub> "	22'-0"	C
	E8	6	1	Neoprene	2 <sup>1</sup> / <sub>2</sub> "	242'-0"	0°0'0"	①	2 <sup>1</sup> / <sub>2</sub> "	22'-0"	C
016-1112	11	6	1	PJS	2 <sup>1</sup> / <sub>2</sub> "	FIXED	0°0'0"	②	1"	55'-1 <sup>1</sup> / <sub>8</sub> "	F
	12	6	1	Neoprene	2 <sup>1</sup> / <sub>2</sub> "	182'-2"	2°40'12"	①	2 <sup>1</sup> / <sub>2</sub> "	55'-4"	D
	14	6	1	Neoprene	2 <sup>1</sup> / <sub>2</sub> "	180'-0"	0°30'0"	①	2 <sup>1</sup> / <sub>2</sub> "	55'-2 <sup>1</sup> / <sub>8</sub> "	D
	15	6	1	Neoprene	4"	172'-0"	0°10'12"	①	2 <sup>1</sup> / <sub>2</sub> "	54'-11"	D
	19	6	1	Neoprene	4"	256'-0"	0°0'0"	①	2 <sup>1</sup> / <sub>2</sub> "	53'-6 <sup>1</sup> / <sub>2</sub> "	F
	21	1	1	PJS	4"	84'-0"	0°0'0"	④	2 <sup>3</sup> / <sub>4</sub> "	88'-5 <sup>1</sup> / <sub>8</sub> "	F
	22	6	1	Neoprene	4"	183'-0"	42°55'48"	①	2 <sup>1</sup> / <sub>2</sub> "	117'-11 <sup>3</sup> / <sub>4</sub> "	I
	26	6	1	Neoprene	4"	273'-3"	41°25'48"	①	2 <sup>1</sup> / <sub>2</sub> "	103'-4 <sup>1</sup> / <sub>2</sub> "	I
	28	1	1	PJS	2 <sup>1</sup> / <sub>2</sub> "	FIXED	1°33'0"	②	1"	79'-1 <sup>1</sup> / <sub>8</sub> "	D
	29	6	1	Neoprene	2 <sup>1</sup> / <sub>2</sub> "	188'-4"	1°24'0"	①	2 <sup>1</sup> / <sub>2</sub> "	76'-1 <sup>3</sup> / <sub>8</sub> "	D
	31	6	1	Neoprene	2 <sup>1</sup> / <sub>2</sub> "	188'-2"	0°0'0"	①	2 <sup>1</sup> / <sub>2</sub> "	71'-0 <sup>3</sup> / <sub>8</sub> "	F
	C13	6	1	Neoprene	2"	155'-0"	0°0'0"	①	2 <sup>1</sup> / <sub>2</sub> "	38'-0"	F
	C14	1	1	PJS	2 <sup>1</sup> / <sub>2</sub> "	80'-0"	0°0'0"	④	2 <sup>3</sup> / <sub>4</sub> "	38'-0"	F
	C15	4b	4	PJS	2 <sup>1</sup> / <sub>2</sub> "	78'-0"	0°0'0"	④	2 <sup>3</sup> / <sub>4</sub> "	38'-0"	F
	C16	7	4	PJS	4"	95'-0"	1°34'48"	④	2 <sup>3</sup> / <sub>4</sub> "	38'-0 <sup>1</sup> / <sub>8</sub> "	E
	C17	4b	4	PJS	2 <sup>1</sup> / <sub>2</sub> "	FIXED	2°15'0"	②	1"	38'-1 <sup>1</sup> / <sub>4</sub> "	E
	C18	4b	4	PJS	4"	95'-0"	0°0'0"	④	2 <sup>3</sup> / <sub>4</sub> "	38'-3 <sup>1</sup> / <sub>8</sub> "	F
	C19	1	1	PJS	4"	88'-0"	0°43'12"	④	2 <sup>3</sup> / <sub>4</sub> "	38'-0"	E
	C20	6	1	Neoprene	4"	168'-0"	2°7'48"	①	2 <sup>1</sup> / <sub>2</sub> "	35'-0 <sup>3</sup> / <sub>16</sub> "	D
	D12	1	1	Neoprene	2 <sup>1</sup> / <sub>2</sub> "	160'-0"	0°0'0"	①	2 <sup>1</sup> / <sub>2</sub> "	36'-5 <sup>1</sup> / <sub>16</sub> "	C
	D14 Abut.	2	3	PJS	2 <sup>1</sup> / <sub>2</sub> "	80'-0"	0°0'0"	④	2 <sup>3</sup> / <sub>4</sub> "	27'-11 <sup>3</sup> / <sub>8</sub> "	C
016-1113	1	FPJ	-	Finger Plate	4 <sup>1</sup> / <sub>2</sub> "	464'-6"	16°22'48"	-	-	-	-
	3	6	1	Neoprene	2 <sup>1</sup> / <sub>2</sub> "	187'-2"	0°0'0"	①	2 <sup>1</sup> / <sub>2</sub> "	63'-7"	F
	5	6	1	Neoprene	2 <sup>1</sup> / <sub>2</sub> "	187'-2"	0°0'0"	①	2 <sup>1</sup> / <sub>2</sub> "	74'-0 <sup>1</sup> / <sub>4</sub> "	F
	7	6	1	Neoprene	2 <sup>1</sup> / <sub>2</sub> "	187'-2"	0°0'0"	①	2 <sup>1</sup> / <sub>2</sub> "	84'-0 <sup>1</sup> / <sub>8</sub> "	F
	8	6	1	PJS	4"	93'-7"	0°0'0"	④	2 <sup>3</sup> / <sub>4</sub> "	94'-8 <sup>1</sup> / <sub>8</sub> "	F
	9	1	1	PJS	2 <sup>1</sup> / <sub>2</sub> "	FIXED	0°0'0"	②	1"	60'-0 <sup>5</sup> / <sub>8</sub> "	F
	10	6	1	Neoprene	4"	245'-2"	0°0'0"	①	2 <sup>1</sup> / <sub>2</sub> "	57'-11"	F
	11	1	1	PJS	2 <sup>1</sup> / <sub>2</sub> "	FIXED	0°0'0"	②	1"	55'-0 <sup>1</sup> / <sub>8</sub> "	F
	C3	6	1	Neoprene	2 <sup>1</sup> / <sub>2</sub> "	241'-8"	3°40'12"	①	2 <sup>1</sup> / <sub>2</sub> "	35'-3 <sup>1</sup> / <sub>2</sub> "	D
	C6	1	1	PJS	2 <sup>1</sup> / <sub>2</sub> "	146'-11"	0°0'0"	①	2 <sup>1</sup> / <sub>2</sub> "	88'-6"	F
	C7	6	1	Neoprene	2"	156'-7"	0°0'0"	①	2 <sup>1</sup> / <sub>2</sub> "	40'-10 <sup>3</sup> / <sub>8</sub> "	F
	C10	FPJ	-	Finger Plate	4 <sup>1</sup> / <sub>2</sub> "	333'-6"	0°0'0"	-	-	-	-
	D7	6	1	Neoprene	2 <sup>1</sup> / <sub>2</sub> "	84'-0"	2°1'48"	④	2 <sup>3</sup> / <sub>4</sub> "	30'-8 <sup>3</sup> / <sub>8</sub> "	E
	D8	1	1	PJS	4"	84'-0"	2°33'0"	④	2 <sup>3</sup> / <sub>4</sub> "	21'-11 <sup>1</sup> / <sub>8</sub> "	A
	D9	1	1	PJS	2 <sup>1</sup> / <sub>2</sub> "	125'-0"	1°18'0"	④	2 <sup>3</sup> / <sub>4</sub> "	48'-6 <sup>3</sup> / <sub>8</sub> "	A
	D10	6	1	Neoprene	4"	115'-2"	1°18'0"	④	2 <sup>3</sup> / <sub>4</sub> "	43'-6 <sup>3</sup> / <sub>8</sub> "	A
016-1114	22	6	1	Neoprene	4"	148'-7"	15°49'12"	①	2 <sup>1</sup> / <sub>2</sub> "	92'-8 <sup>3</sup> / <sub>4</sub> "	D
016-1115	1	6	1	Neoprene	4"	162'-4"	0°0'0"	①	2 <sup>1</sup> / <sub>2</sub> "	79'-6 <sup>1</sup> / <sub>2</sub> "	F
	5	6	1	Neoprene	4"	281'-0"	0°0'0"	①	2 <sup>1</sup> / <sub>2</sub> "	60'-0"	F
	8	4b	4	PJS	2 <sup>1</sup> / <sub>2</sub> "	118'-9"	0°0'0"	④	2 <sup>3</sup> / <sub>4</sub> "	57'-4 <sup>1</sup> / <sub>4</sub> "	F
	9	6	1	Neoprene	2"	150'-4 <sup>1</sup> / <sub>2</sub> "	0°43'12"	①	2 <sup>1</sup> / <sub>2</sub> "	55'-9 <sup>1</sup> / <sub>8</sub> "	E
	10	1	1	PJS	4"	80'-3"	2°48'0"	④	2 <sup>3</sup> / <sub>4</sub> "	54'-5 <sup>1</sup> / <sub>2</sub> "	E
	12	4b	4	PJS	4"	80'-3"	9°40'12"	④	2 <sup>3</sup> / <sub>4</sub> "	55'-8 <sup>1</sup> / <sub>8</sub> "	E
	13	7	4	Neoprene	2"	80'-3 <sup>1</sup> / <sub>2</sub> "	13°22'12"	④	2 <sup>3</sup> / <sub>4</sub> "	56'-5 <sup>1</sup> / <sub>8</sub> "	E
	14	7	4	Neoprene	2"	80'-3 <sup>1</sup> / <sub>2</sub> "	16°58'12"	④	2 <sup>3</sup> / <sub>4</sub> "	57'-5 <sup>1</sup> / <sub>8</sub> "	E
	15	6	1	Neoprene	2"	80'-3"	20°39'0"	④	2 <sup>3</sup> / <sub>4</sub> "	58'-9 <sup>1</sup> / <sub>8</sub> "	E
	16	6	1	Neoprene	2 <sup>1</sup> / <sub>2</sub> "	134'-0"	3°37'12"	①	2 <sup>1</sup> / <sub>2</sub> "	54'-11 <sup>1</sup> / <sub>8</sub> "	D
	18	6	1	Neoprene	2 <sup>1</sup> / <sub>2</sub> "	183'-6"	4°7'48"	①	2 <sup>1</sup> / <sub>2</sub> "	55'-0 <sup>1</sup> / <sub>8</sub> "	D
	20	6	1	Neoprene	2 <sup>1</sup> / <sub>2</sub> "	178'-5"	15°27'0"	①	2 <sup>1</sup> / <sub>2</sub> "	57'-0 <sup>1</sup> / <sub>8</sub> "	D
	21	1	1	PJS	2 <sup>1</sup> / <sub>2</sub> "	147'-9"	11°45'0"	①	2 <sup>1</sup> / <sub>2</sub> "	55'-11 <sup>1</sup> / <sub>8</sub> "	D
016-1116	3	7	4	Neoprene	4"	58'-3"	18°36'0"	③	1 <sup>3</sup> / <sub>4</sub> "	81'-2 <sup>1</sup> / <sub>8</sub> "	E

- ① Strip Seal Expansion Joint Assembly
- ② Bridge Joint System (Fixed)
- ③ Bridge Joint System (Expansion), 1"
- ④ Bridge Joint System (Expansion), 1<sup>5</sup>/<sub>8</sub>"

Notes:  
 Dimension "A" indicates joint opening at 50°F  
 Joints indicated as "Strip Seal Expansion Joint Assembly" shall be strip seal only.  
 For existing and proposed sections thru joints for Designation 1, see sheets 162 and 163.  
 For existing and proposed plans for Designation 2, staged and non-staged construction, see sheets 164 to 166.  
 The dimensions for the length of the joints are given from face to face of parapet.  
 For exact dimensions of the joints per stage see Partial Plan Sheets 143 to 159.  
 For dimensions of Finger Plate Joints see Plan Detail Sheets 179 to 235.

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REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
 NB DAN RYAN ELEVATED BRIDGE  
 REPAIR FROM 15TH TO 28TH STREETS  
 LOCATION AND DESIGNATION OF JOINTS 1  
 SCALE: N/A  
 DATE: 8/12/2005  
 DRAWN BY: BDC  
 CHECKED BY: BLU

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 8/11/2005  
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LOCATION & DESIGNATION OF JOINTS

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	161
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
62580				

STRUCTURE NUMBER (SN)	LOCATION PIER	DESIGNATION 1 CROSS SECTIONS THRU JOINTS		EXISTING JOINT		LENGTH CONTR. TO EXP. (ft)	SKEW ANGLE (°)	PROPOSED JOINT		LENGTH OF JOINT FACE TO FACE OF PARAPET	DESIGNATION 2 STAGED AND NON STAGED CONSTRUCTION	
		EXISTING	PROPOSED	TYPE	SIZE			TYPE	"A"			
016-1117	S. Abut.	2	3	PJS	4"	88'-0"	9°39'0"	④	2 3/4"	31'-3 3/4"	B	
	1	4a	2	PJS	2 1/2"	FIXED	5°43'12"	②	1"	31'-0 3/4"	B	
	2	4b	4	PJS	4"	87'-6"	1°46'12"	④	2 3/4"	30'-10 3/4"	B	
	3	4b	4	PJS	4"	100'-0"	2°43'48"	④	2 3/4"	30'-10 9/16"	A	
	4	4b	4	PJS	4"	111'-6"	7°45'0"	④	2 3/4"	31'-1 7/8"	A	
	5	4b	4	PJS	4"	111'-6"	12°46'12"	④	2 3/4"	31'-7 5/8"	A	
	6	7	4	Neoprene	2"	75'-0"	16°9'0"	③	1 3/4"	32'-1 1/8"	A	
	7	7	4	Neoprene	2"	90'-6"	20°16'12"	④	2 3/4"	32'-8 7/8"	A	
	8	6	1	Neoprene	2 1/2"	169'-0"	23°16'12"	①	2 1/2"	33'-5 1/8"	A	
	11	6	1	Neoprene	2"	102'-0"	31°18'0"	①	2 1/2"	36'-6 1/4"	G	
	12	6	1	Neoprene	2"	57'-0"	33°52'12"	①	2 1/2"	37'-5 1/4"	G	
	13	6	1	Neoprene	2"	7'-6"	34°55'12"	①	2 1/2"	37'-4 3/4"	H	
	14	6	1	Neoprene	2 1/2"	157'-0"	27°34'48"	①	2 1/2"	35'-9 3/8"	B	
	16	6	1	Neoprene	2"	144'-0"	24°37'12"	①	2 1/2"	74'-1 1/8"	E	
	18	6	1	Neoprene	2"	152'-0"	19°10'12"	①	2 1/2"	66'-6"	E	
	19	7	4	Neoprene	2"	90'-6"	18°42'0"	④	2 3/4"	66'-5 3/4"	E	
	20	7	4	Neoprene	2"	90'-6"	18°42'0"	④	2 3/4"	66'-6 1/8"	E	
	21	7	4	Neoprene	2"	90'-6"	18°42'0"	④	2 3/4"	66'-6 1/4"	E	
	22	7	4	Neoprene	2"	90'-6"	18°42'0"	④	2 3/4"	66'-6 3/8"	E	
	23	7	4	Neoprene	2"	75'-0"	18°42'0"	③	1 3/4"	66'-5 5/8"	E	
	26	FPJ	-	-	Finger Plate	4 1/2"	800'-0"	18°42'0"	-	-	-	-
	016-1118 (RAMP H)	S. Abut.	2	3	PJS	2 1/2"	59'-3"	1°49'12"	③	1 3/4"	52'-11 5/16"	A
		H1	4a	2	PJS	2 1/2"	FIXED	3°13'48"	②	1"	50'-9 3/4"	A
		H2	4b	4	PJS	4"	125'-6"	9°6'0"	④	2 3/4"	44'-1 1/2"	A
		H3	4b	4	PJS	4"	125'-6"	15°57'0"	④	2 3/4"	41'-6 1/4"	A
		H4	7	4	Neoprene	2"	104'-3"	20°34'12"	④	2 3/4"	42'-7 1/4"	A
H5		6	1	Neoprene	2 1/2"	146'-6"	25°3'0"	①	2 1/2"	44'-0 3/8"	A	
H6		6	1	Neoprene	2"	118'-0"	44°51'0"	①	2 1/2"	55'-5 1/8"	H	
H9		6	1	Neoprene	4"	235'-6"	34°21'0"	①	2 1/2"	48'-1 3/8"	H	
H12		6	1	Neoprene	2"	189'-9"	21°43'12"	①	2 1/2"	44'-1 1/2"	B	
016-1059 (RAMP D)		D33	6	1	Neoprene	2 1/2"	113'-8"	6°10'48"	④	2 3/4"	26'-2 3/4"	B
		D35	6	1	Neoprene	2"	148'-0"	0°0'0"	①	2 1/2"	26'-0"	C
		D37	6	1	Neoprene	2"	129'-6"	9°4'12"	①	2 1/2"	26'-1 1/8"	B
	D39	6	1	Neoprene	2"	125'-2"	34°0'0"	①	2 1/2"	29'-9"	H	
	D41	1	1	PJS	4"	126'-6"	1°55'12"	①	2 1/2"	27'-11 1/2"	B	
	D43	6	1	Neoprene	2"	137'-10"	5°58'12"	①	2 1/2"	32'-2 1/2"	A	
016-1140 (RAMP B)	B4	1	1	PJS	2 1/2"	FIXED	7°1'48"	②	1"	26'-1"	B	
	B5	6	1	Neoprene	4"	228'-1"	7°1'48"	①	2 1/2"	26'-2 1/4"	H	
	B11	6	1	Neoprene	4"	203'-11"	47°16'12"	①	2 1/2"	37'-6 3/8"	A	
	B15	6	1	Neoprene	4"	210'-5"	45°0'0"	①	2 1/2"	36'-9 9/16"	A	
	B16	1	1	PJS	4"	156'-8"	0°0'0"	③	1 3/4"	26'-0"	C	
	B18 Abut.	1	3	PJS	2 1/2"	71'-9"	0°0'0"	③	1 3/4"	26'-0"	C	
	016-1047 (RAMP E)	E30 Abut.	1	3	PJS	2 1/2"	66'-9"	0°0'0"	③	1 3/4"	26'-0"	C
E28		1	1	PJS	2 1/2"	130'-6"	0°0'0"	①	2 1/2"	26'-0"	C	
E26		1	1	PJS	2 1/2"	141'-10"	0°0'0"	①	2 1/2"	26'-0"	C	
E24		6	1	Neoprene	2"	211'-8"	0°28'12"	①	2 1/2"	28'-1"	B	
E23		1	1	Neoprene	2 1/2"	38'-8"	0°10'12"	③	1 3/4"	26'-0"	B	
E22		1	1	PJS	4"	321'-7"	4°40'48"	①	2 1/2"	49'-8 7/8"	D	
E1		1	1	PJS	4"	FIXED	0°31'12"	②	1"	45'-0 5/8"	D	
E2		1	1	PJS	2 1/2"	FIXED	21°39'0"	②	1"	41'-11 1/4"	D	

- ① Strip Seal Expansion Joint Assembly
- ② Bridge Joint System (Fixed)
- ③ Bridge Joint System (Expansion), 1"
- ④ Bridge Joint System (Expansion), 1 1/2"

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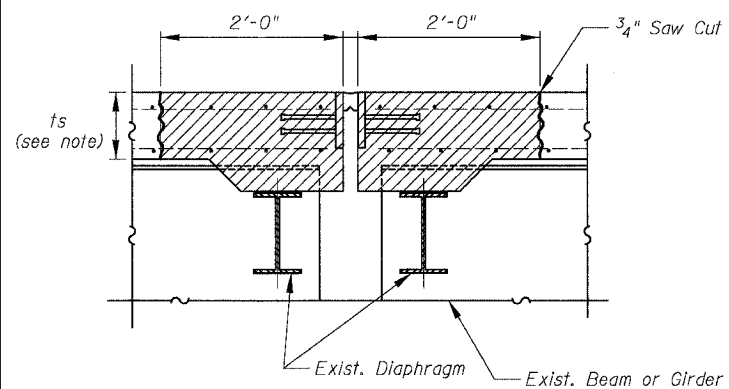
REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 94/90 (DAN RYAN EXPRESSWAY) NB DAN RYAN ELEVATED BRIDGE REPAIR FROM 15TH TO 28TH STREETS LOCATION AND DESIGNATION OF JOINTS 2
NAME	DATE	
		SCALE: N/A DATE: 8/12/2005
		DRAWN BY: BDC CHECKED BY: BLU

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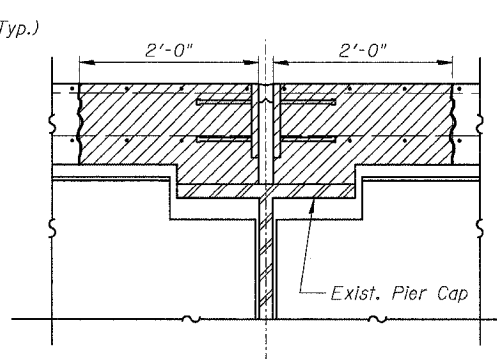
F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	162
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				

**EXISTING  
PREFORMED JOINT SEALS**

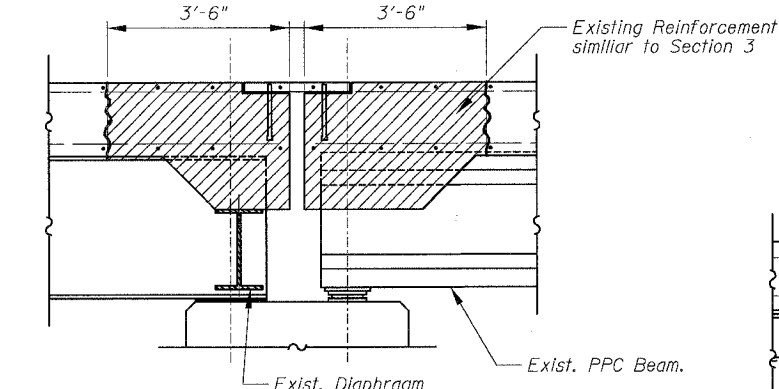
**EXISTING  
NEOPRENE EXPANSION JOINTS**



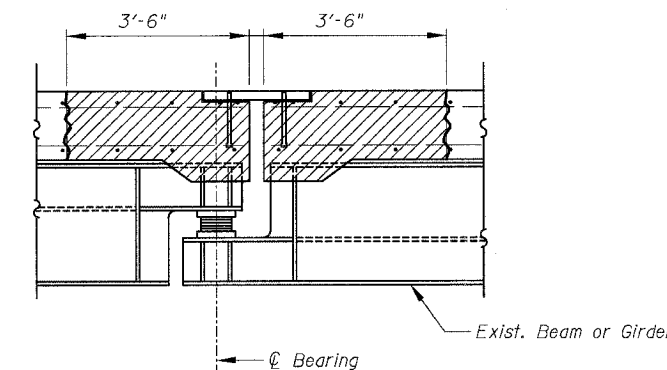
① SECTION AT PIER



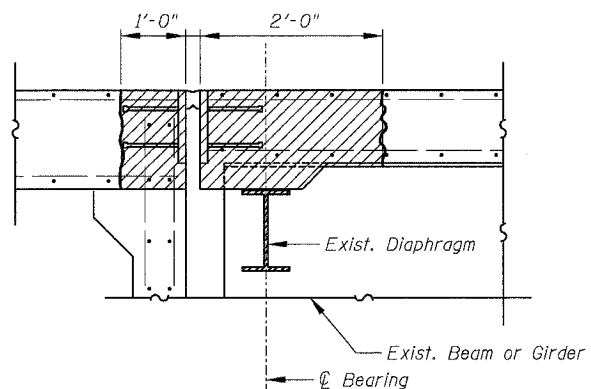
④a SECTION AT STEEL PIER CAP



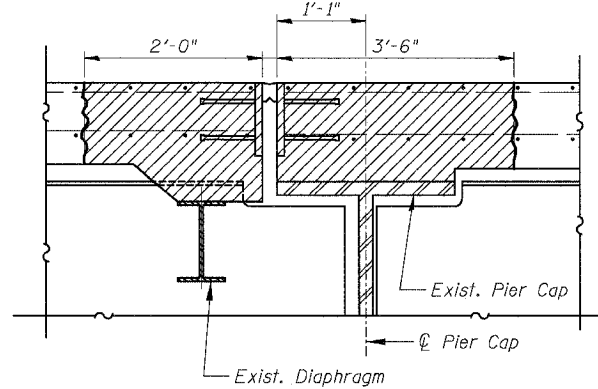
⑤ SECTION AT PIER



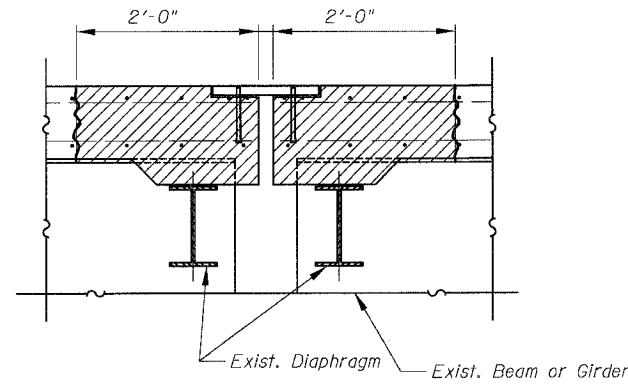
⑨ SECTION AT SUSPENDED SPAN



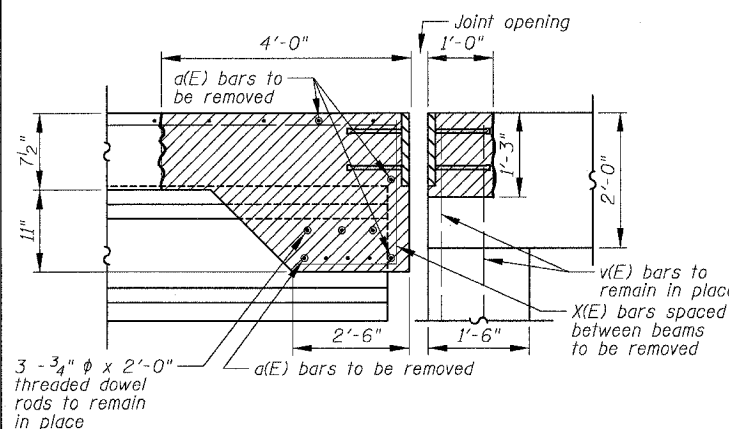
② SECTION AT ABUTMENT



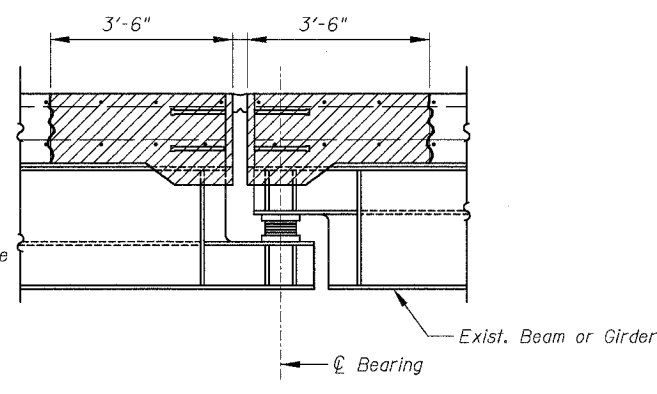
④b SECTION AT STEEL PIER CAP



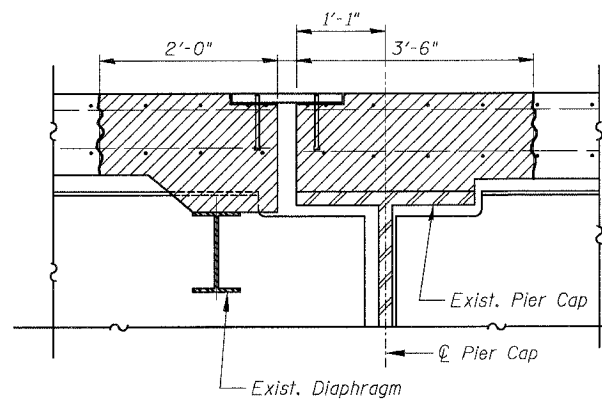
⑥ SECTION AT PIER



③ SECTION AT ABUTMENT



⑧ SECTION AT SUSPENDED SPAN



⑦ SECTION AT STEEL PIER CAP

**Notes:**

The cost for the 3/4" Saw Cut at the top of slab will be included in the cost of "Concrete Removal"

See table "Location & Designation of Joints" on sheets 160 and 161 for location and designation of joints.

Existing reinforcement extending into removal areas shall be cleaned, straightened and incorporated into the new construction. Cost is included with "Concrete Removal".

Removal of the existing neoprene and preformed joints, including joint seals, steel plates and anchorage hardware shall be included in the cost of "Concrete Removal".

Extreme care shall be taken not to damage the existing beams or diaphragms during concrete removal. Damage will require repair at the Contractor's expense.

Thickness of slab is 7 1/2", except for Span 22 of Structure 016-1112 which has a slab thickness of 8 1/2".

Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system at no additional cost to the Department.

All dimensions shown are at right angle to the centerline of the Piers or Abutments.

**LEGEND**

Concrete Removal

⑧ Joint Designator

ts Thickness of Slab

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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
TYPICAL SECTIONS  
EXISTING JOINTS

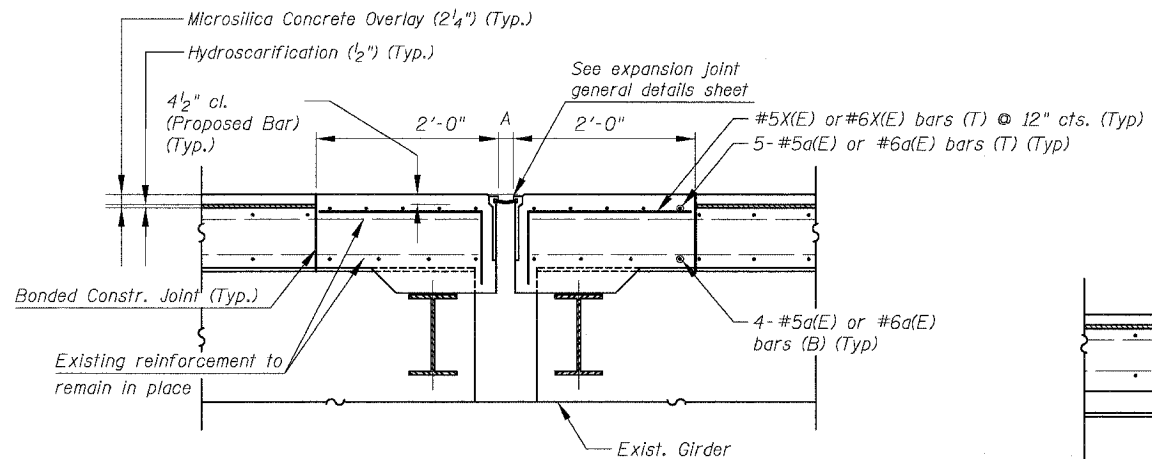
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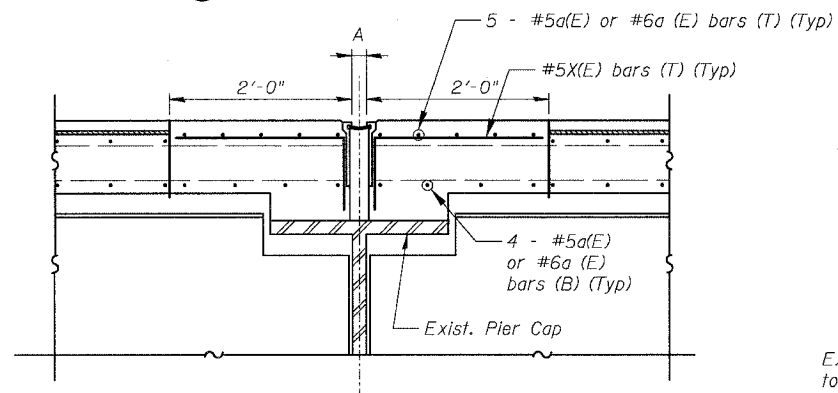
F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	163
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
62580				

### PROPOSED JOINTS

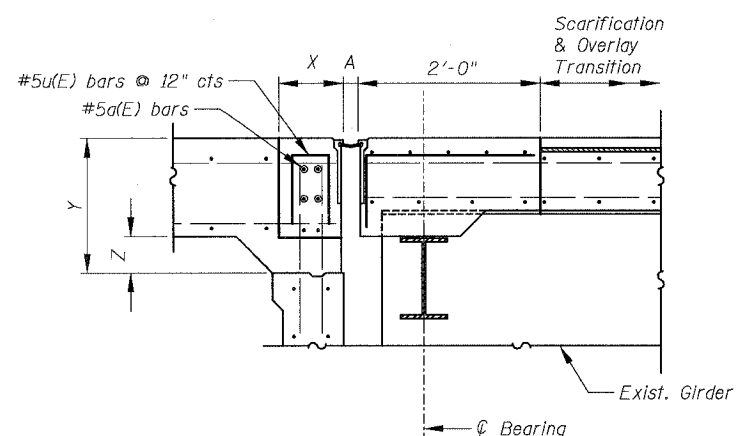
(Only Strip Seal types shown)



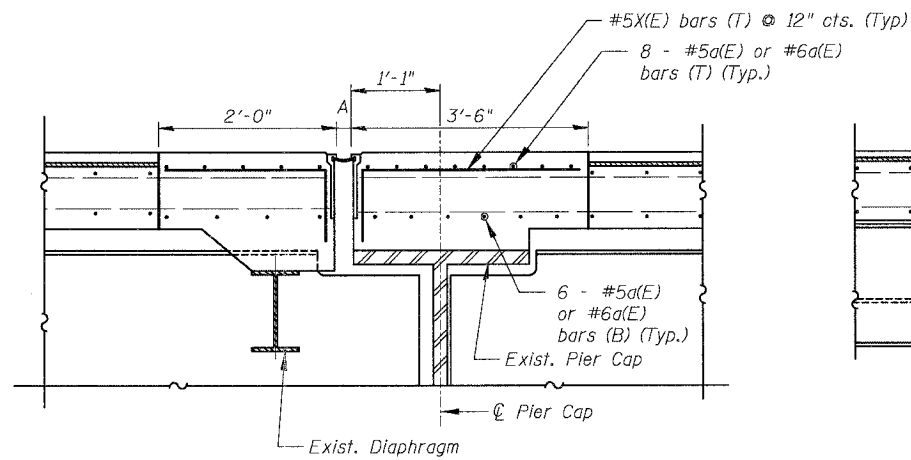
① SECTION AT PIER



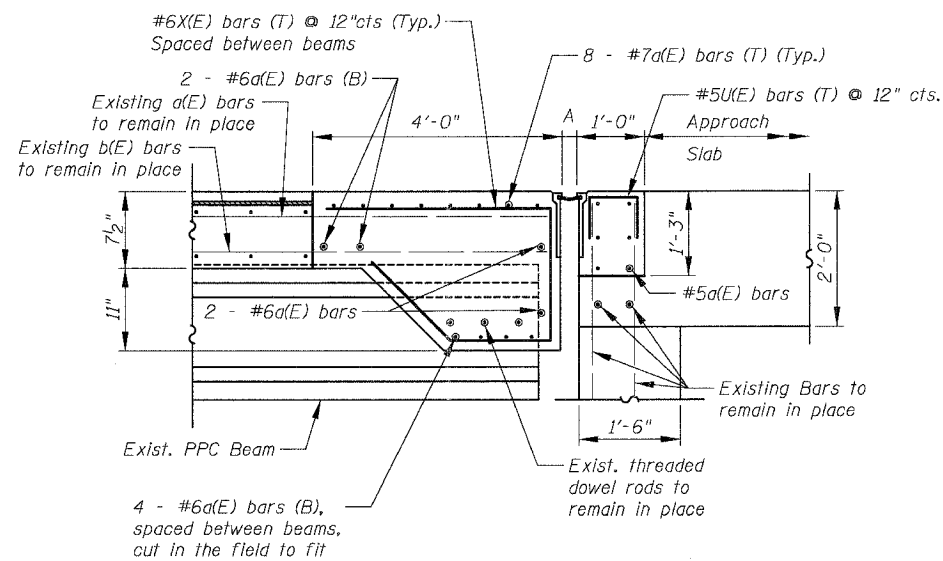
② SECTION AT STEEL PIER CAP



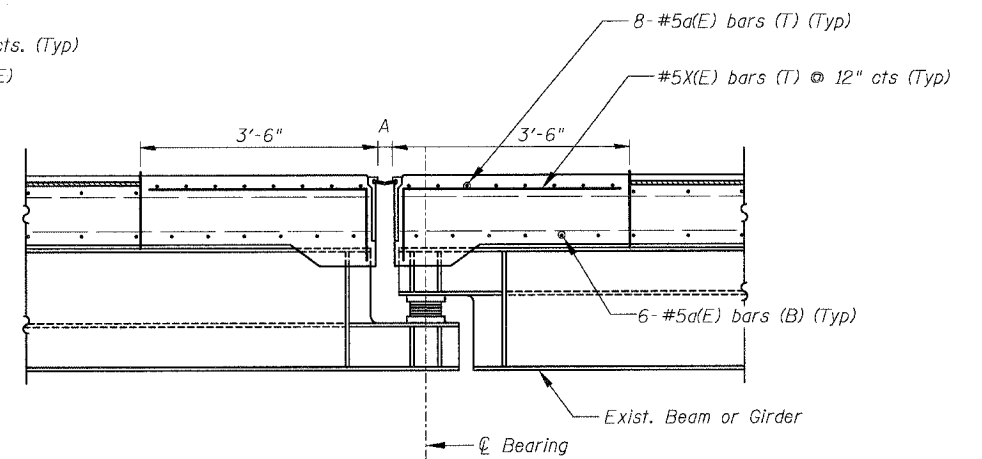
③ SECTION AT ABUTMENT



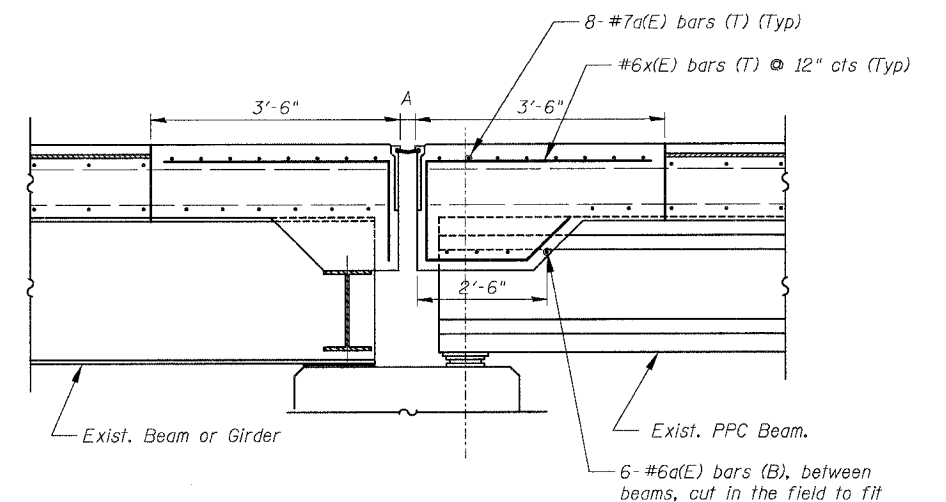
④ SECTION AT STEEL PIER CAP



⑤ SECTION AT ABUTMENT



⑥ SECTION AT SUSPENDED SPAN



⑦ SECTION AT PIER

#### ABBREVIATIONS

T - Top  
B - Bottom

STRUCTURE	PIER	X	Y	Z
016-1111	E5 / Abut.	1'-0"	1'-6"	0"
016-1112	D14 / Abut.	1'-0"	1'-3"	0"
016-1140	B18 / Abut.	1'-3 3/8"	1'-6"	11 1/2"
016-1047	E30 / Abut.	1'-3 3/8"	1'-6"	11 1/2"
016-1117	S. Abut.	1'-3"	1'-1"	0"
016-1118	S. Abut.	1'-3"	1'-1"	0"

#### Notes:

For bar designations, number of bars and bar lengths see sheets 171 to 178.  
For joint size and location see sheets 160 and 161.  
Existing Reinforcement Bars shown are to be cleaned, straightened and incorporated into new construction.  
All joints between new and old concrete shall be bonded construction joints.  
Reinforcement bars designated (E) shall be epoxy coated.  
For Scarification and Overlay Transition Detail, see sheet no 169.  
All dimensions shown are at right angle to the  $\phi$  of the Piers or Abutments

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
TYPICAL SECTIONS  
PROPOSED JOINTS

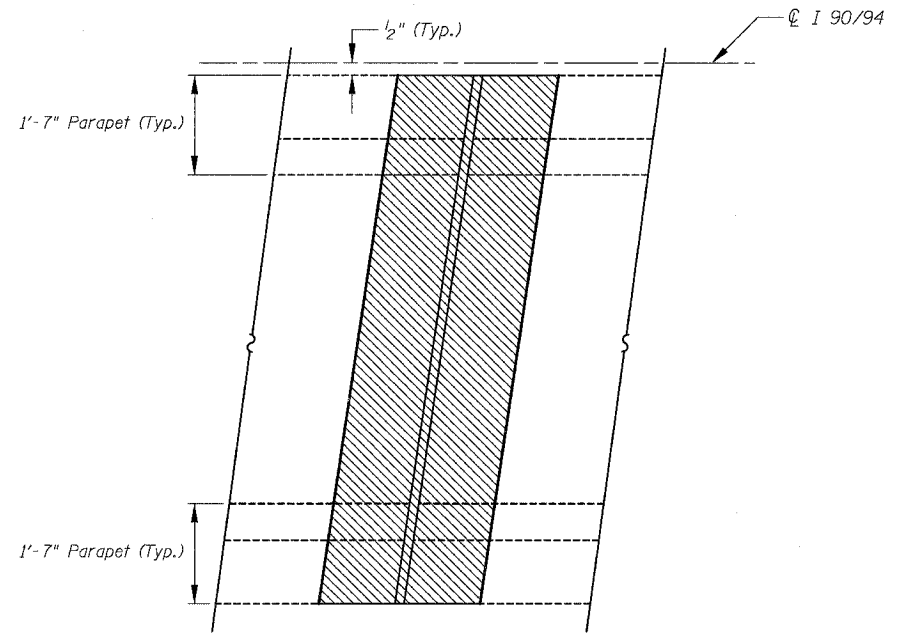
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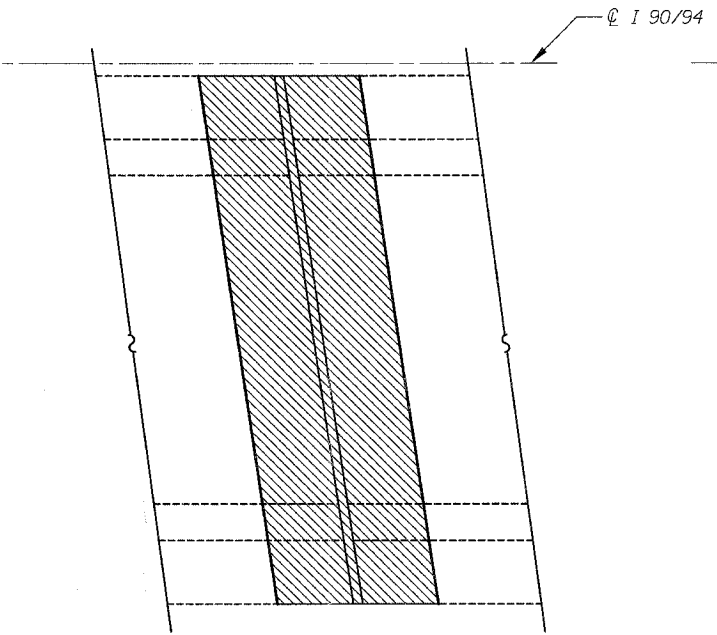


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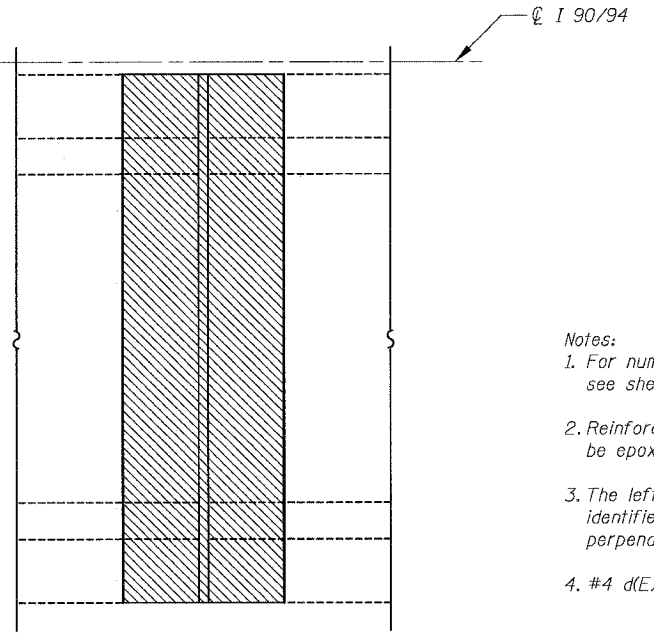
F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	164
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
62580				



**EXISTING PARTIAL PLAN (SKEWED LEFT FORWARD)**

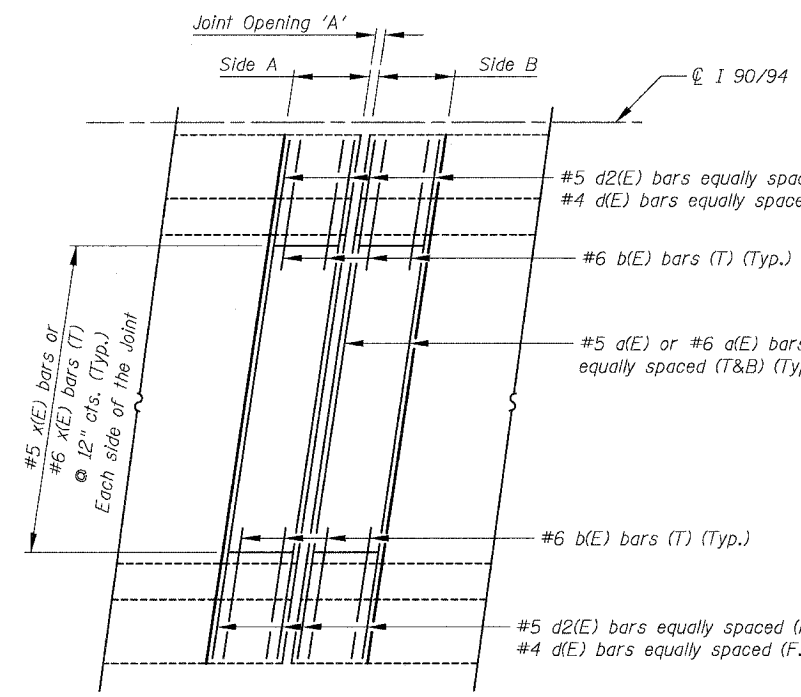


**EXISTING PARTIAL PLAN (SKEWED RIGHT FORWARD)**

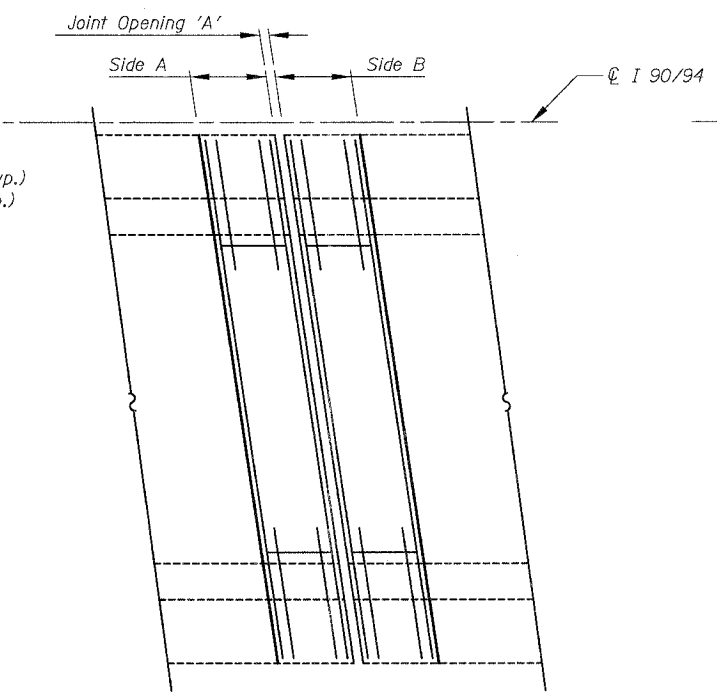


**EXISTING PARTIAL PLAN (NO SKEW)**

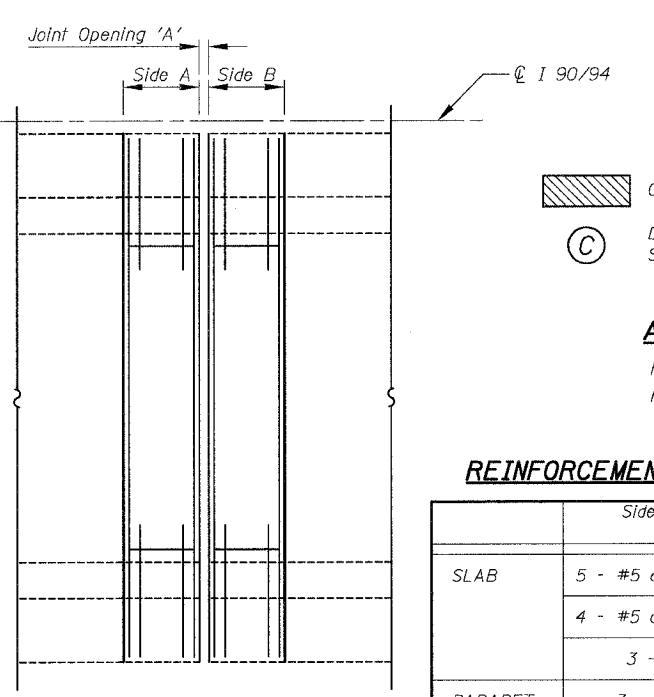
- Notes:
- For number of bars required per joint see sheets 171 to 177 for "Bar Details".
  - Reinforcement bars designated (E) shall be epoxy coated.
  - The left forward and right forward are identified as per skew angle from the perpendicular line to the CL of the roadway.
  - #4 d(E) Denotes #4 d1(E), #4 d3(E), #4 d4(E), #4 d5(E), #4 d6(E), #4 d7(E), #4 d8(E), etc.
  - Bend bars in the field as required.
  - Joint Opening 'A' is measured perpendicular to the joint.



**(A) PROPOSED PARTIAL PLAN (NON-STAGED CONSTRUCTION) (SKEWED LEFT FORWARD)**



**(B) PROPOSED PARTIAL PLAN (NON-STAGED CONSTRUCTION) (SKEWED RIGHT FORWARD)**



**(C) PROPOSED PARTIAL PLAN (NON-STAGED CONSTRUCTION) (NO SKEW)**

- LEGEND**
- Concrete Removal / Joint Reconstruction
  - Designation 2 Staged and Non-Staged Construction

- ABBREVIATION**
- N.F. Near Face
  - F.F. Far Face

**REINFORCEMENT BARS LOCATION**

	Side A or Side B (2'-0")	Side A or Side B (3'-6" or 4'-0")
SLAB	5 - #5 d(E) or #6 d(E) (T)	8 - #5 d(E) or #6 d(E) (T)
	4 - #5 d(E) or #6 d(E) (B)	6 - #5 d(E) or #6 d(E) (B)
	3 - #6 b(E) (T)	3 - #6 b(E) (T)
PARAPET	3 - #4 d(E) (F.F.)	5 - #4 d(E) (F.F.)
	3 - #5 d2(E) (N.F.)	5 - #5 d2(E) (N.F.)

REVISIONS	DATE
NAME	

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
 NB DAN RYAN ELEVATED BRIDGE  
 REPAIR FROM 15TH TO 28TH STREETS  
 TYPICAL PARTIAL PLAN  
 AT NON-STAGED ROADWAYS

SCALE: NTS  
 DATE: 8/12/2005

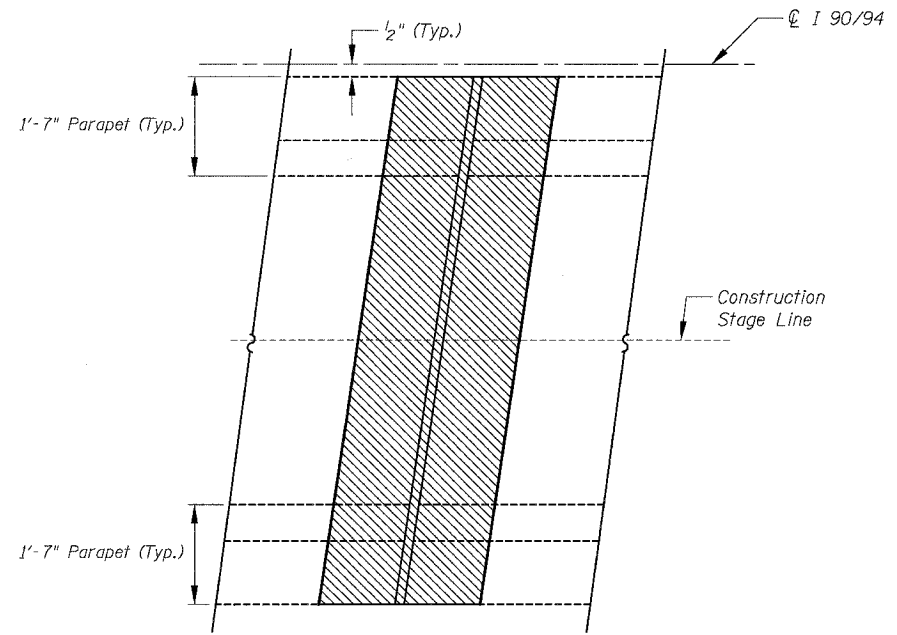
DRAWN BY: BDC  
 CHECKED BY: BLU

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 CONSULTING ENGINEERS  
 Chicago, Illinois  
 312.228.0100  
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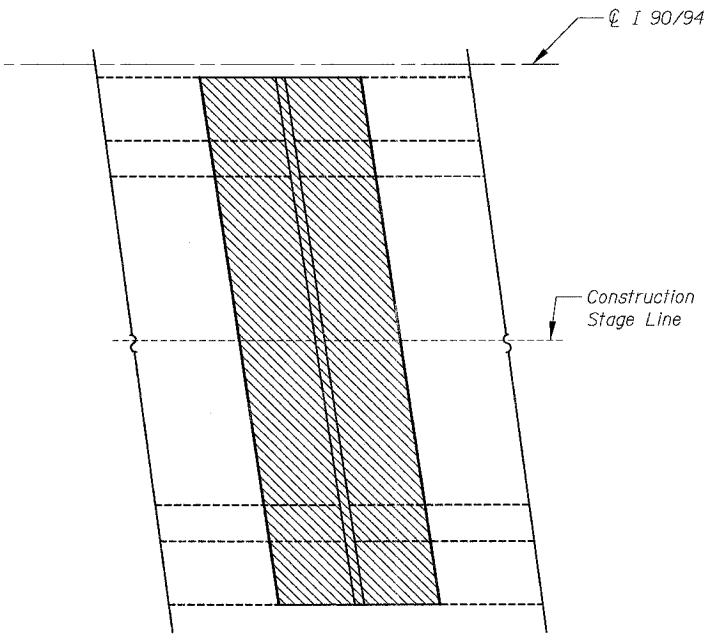
11/15/2005 11:54:42 AM



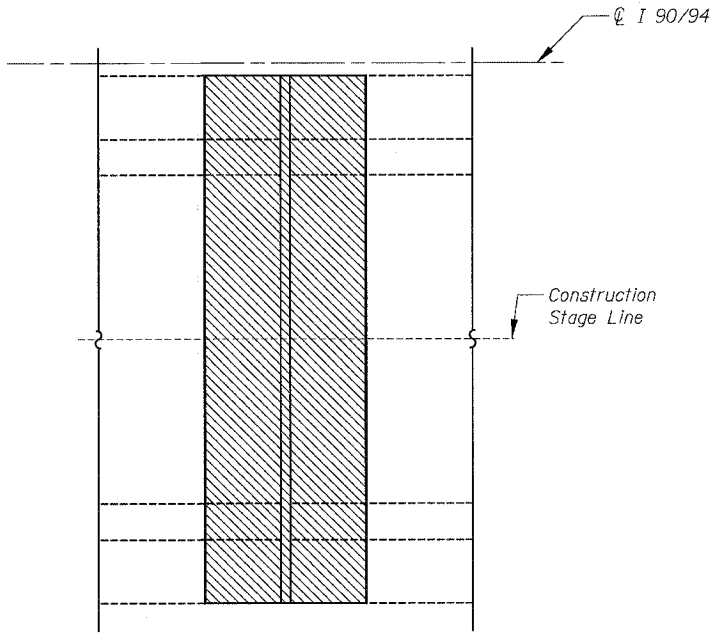
F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	165
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				



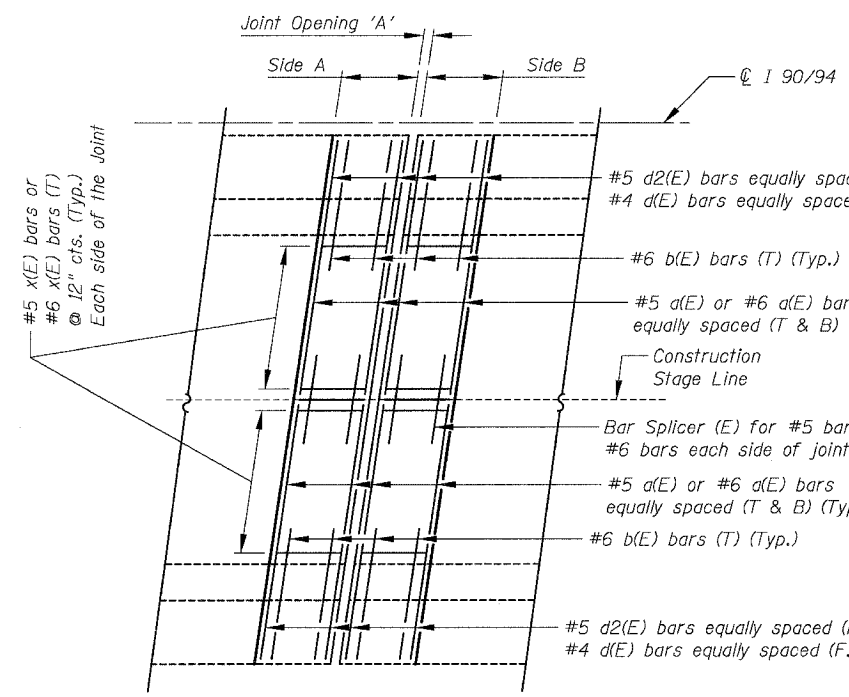
**EXISTING PARTIAL PLAN  
(SKEWED LEFT FORWARD)**



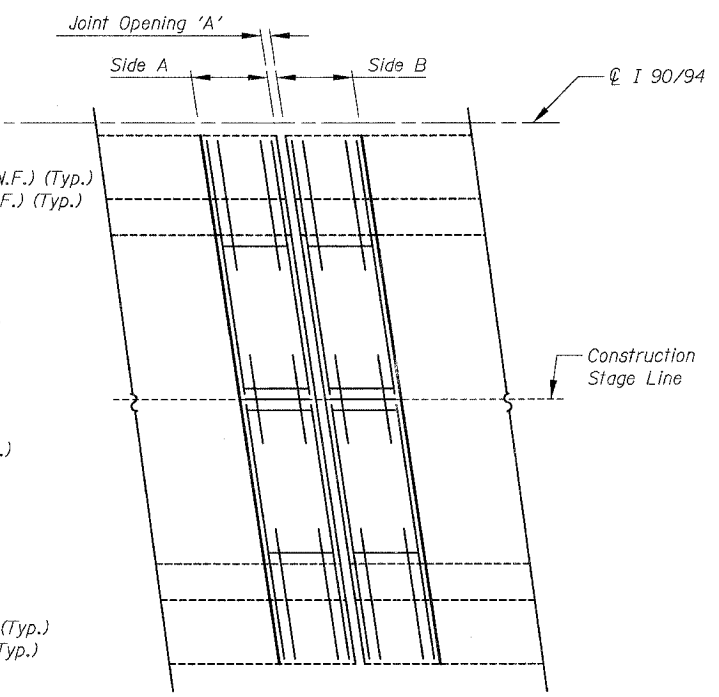
**EXISTING PARTIAL PLAN  
(SKEWED RIGHT FORWARD)**



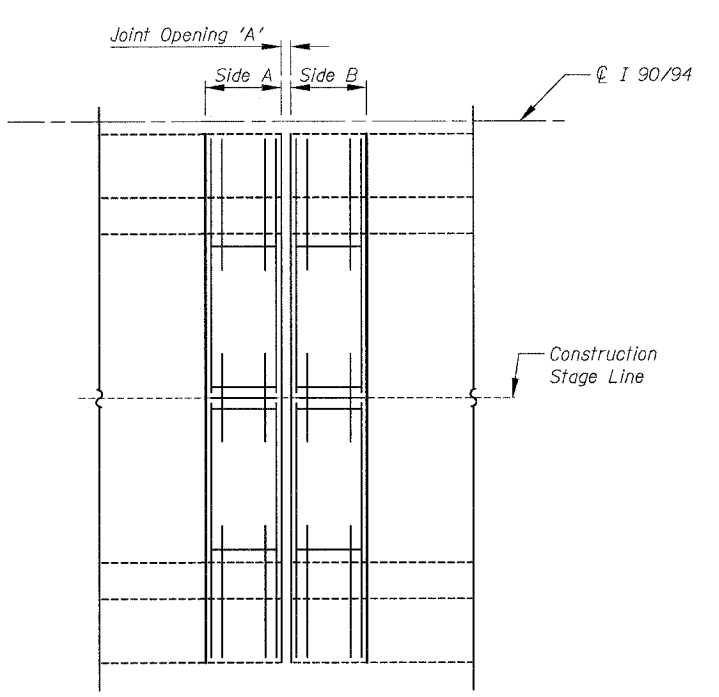
**EXISTING PARTIAL PLAN  
(NO SKEW)**



**(D) PROPOSED PARTIAL PLAN  
(STAGED CONSTRUCTION)  
(SKEWED LEFT FORWARD)**



**(E) PROPOSED PARTIAL PLAN  
(STAGED CONSTRUCTION)  
(SKEWED RIGHT FORWARD)**



**(F) PROPOSED PARTIAL PLAN  
(STAGED CONSTRUCTION)  
(NO SKEW)**

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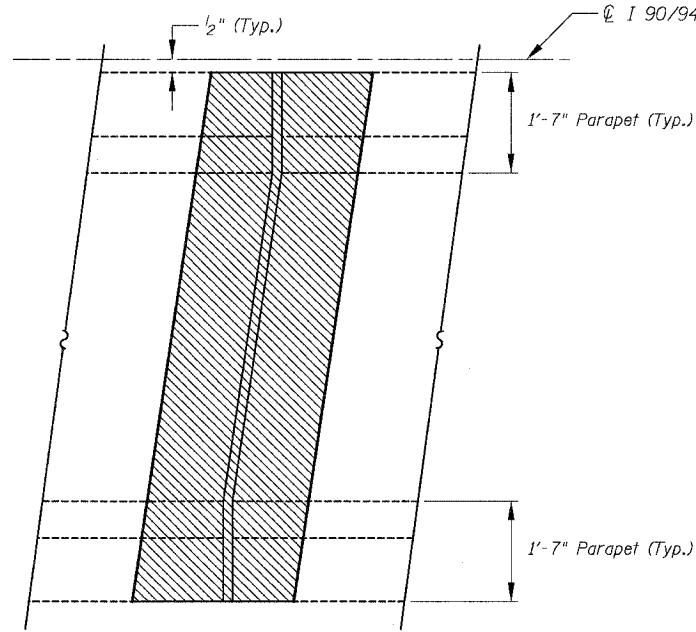
For Notes, Legend, Abbreviations and Reinforcement Bar Locations see sheet 164

REVISIONS	NAME	DATE

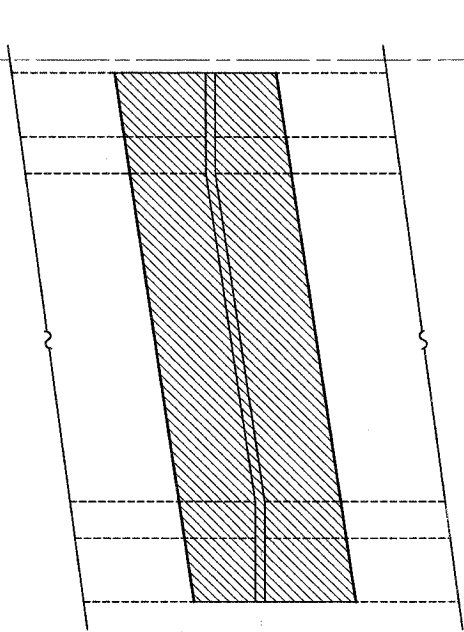
ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
TYPICAL PARTIAL PLAN  
AT STAGED ROADWAYS  
SCALE: NTS  
DATE: 8/12/2005  
DRAWN BY: BDC  
CHECKED BY: BLU

11/5/4/2 AM 8/11/2005

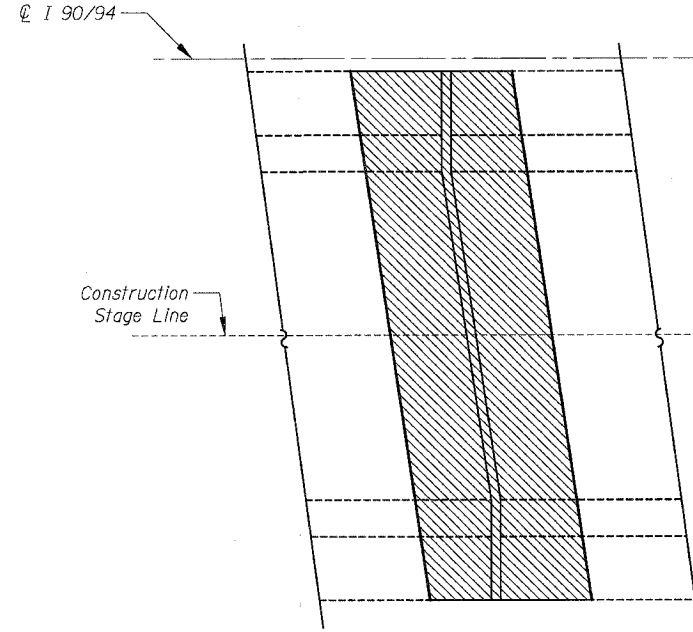
F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	166
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				



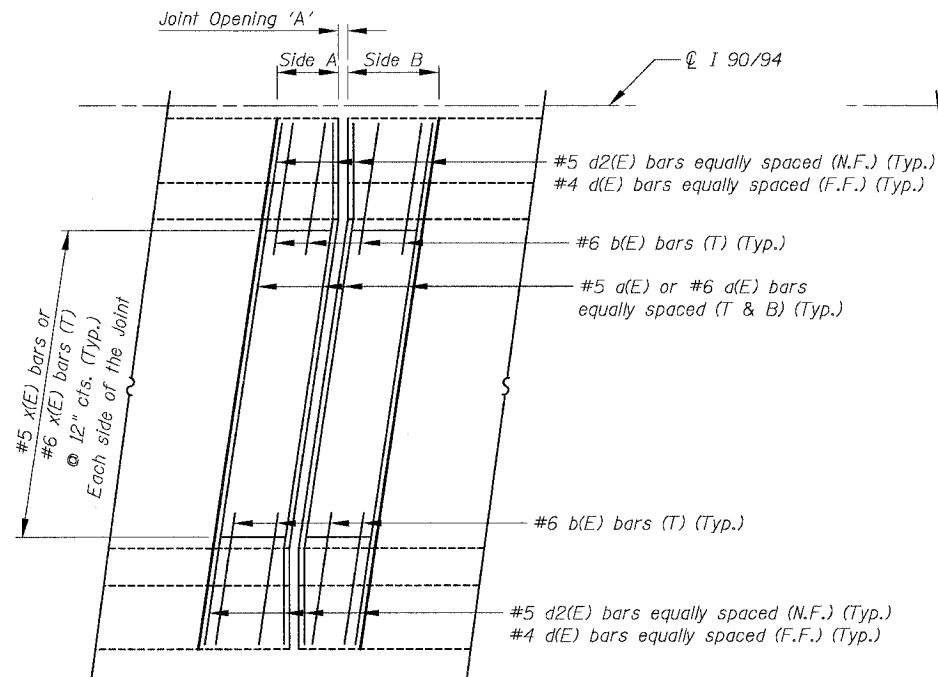
**EXISTING PARTIAL PLAN  
(SKEWED LEFT FORWARD)**



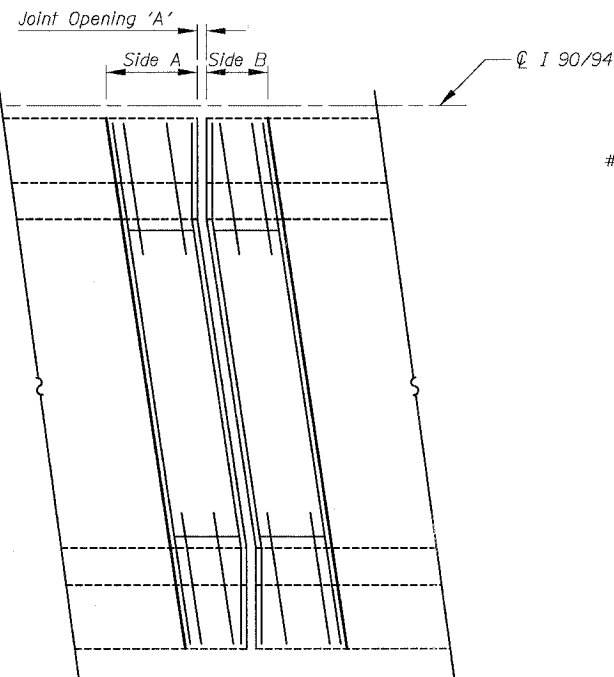
**EXISTING PARTIAL PLAN  
(SKEWED RIGHT FORWARD)**



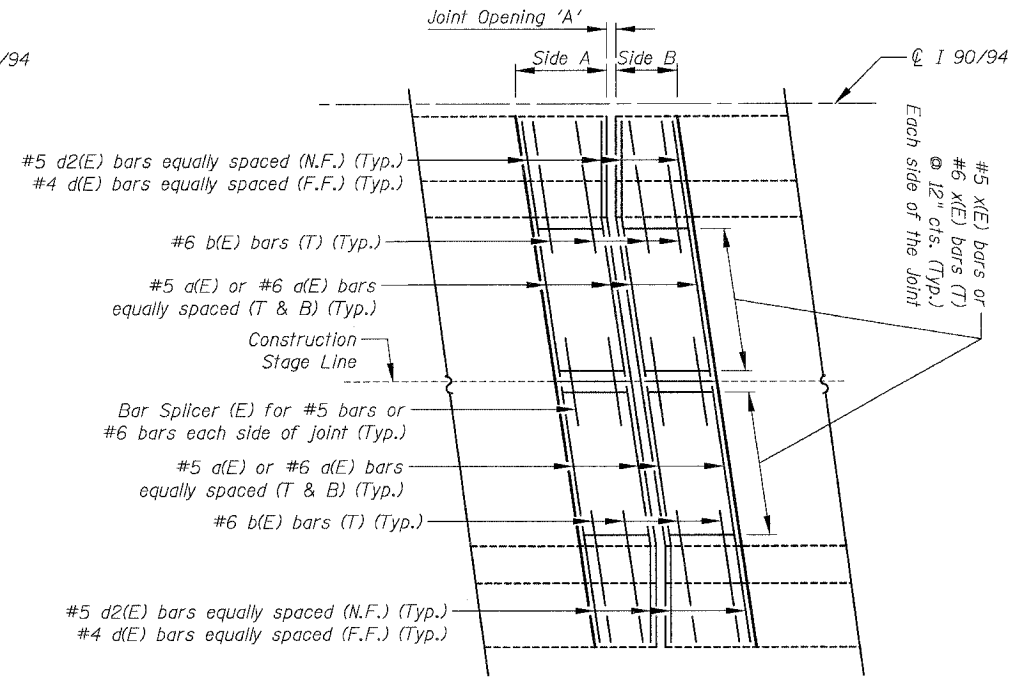
**EXISTING PARTIAL PLAN  
(SKEWED RIGHT FORWARD)**



**(G) PROPOSED PARTIAL PLAN  
(NON-STAGED CONSTRUCTION)  
(SKEWED LEFT FORWARD > 30°-0'-0")  
(Strip Seal Joints)**



**(H) PROPOSED PARTIAL PLAN  
(NON-STAGED CONSTRUCTION)  
(SKEWED RIGHT FORWARD > 30°-0'-0")  
(Strip Seal Joints)**



**(I) PROPOSED PARTIAL PLAN  
(STAGED CONSTRUCTION)  
(SKEWED RIGHT FORWARD > 30°-0'-0")  
(Strip Seal Joints)**

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For Notes, Legend, Abbreviations and Reinforcement Bar Locations see sheet 164

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
TYPICAL PARTIAL PLAN AT STAGED  
AND NON STAGED ROADWAYS

SCALE: NTS  
DATE: 8/12/2005

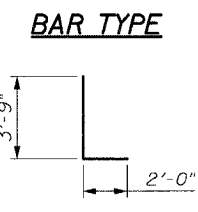
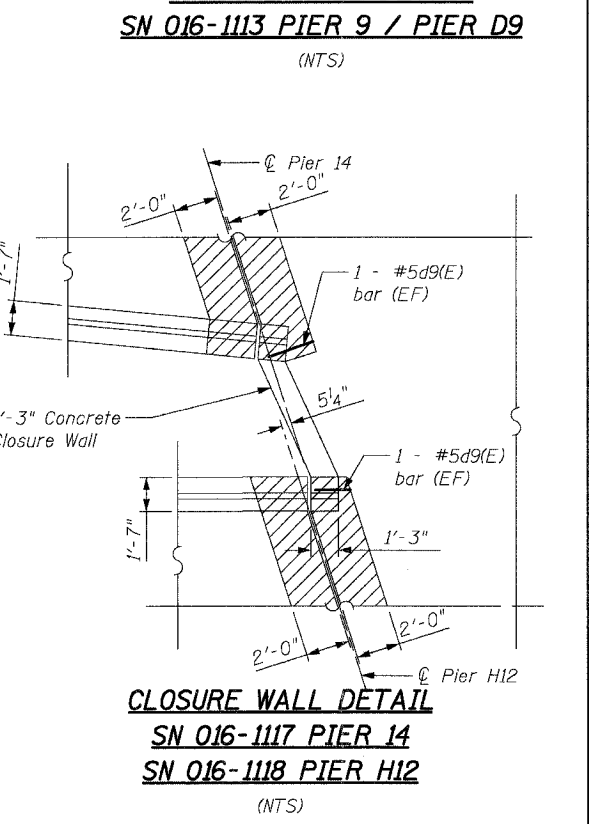
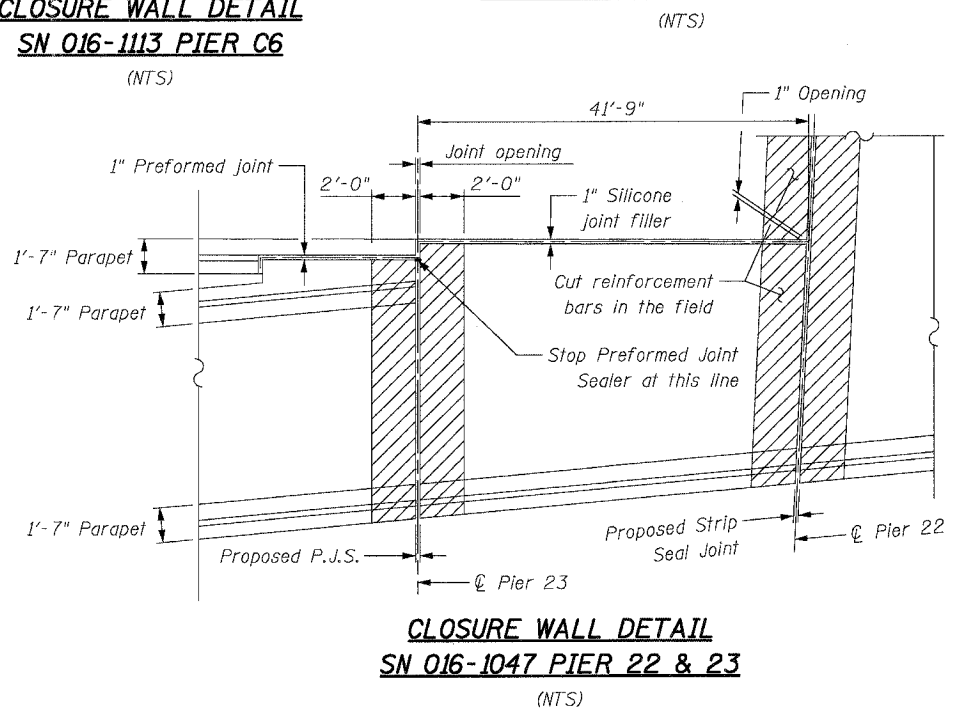
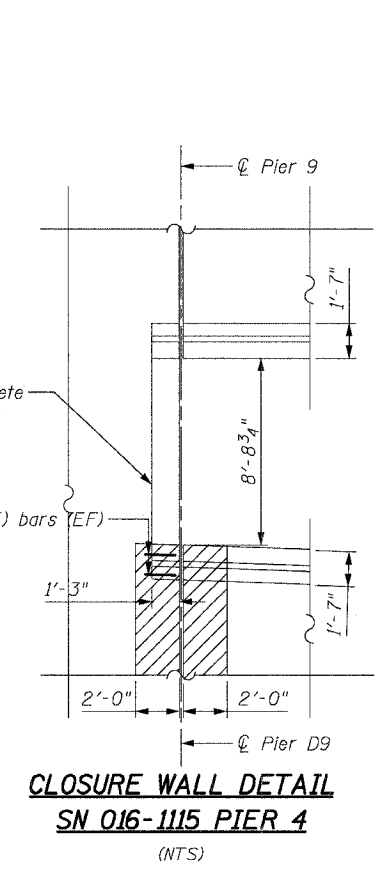
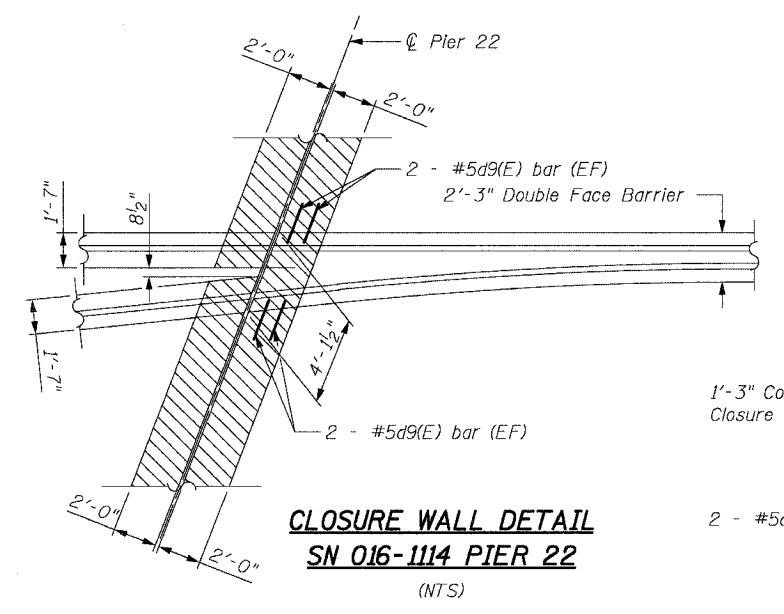
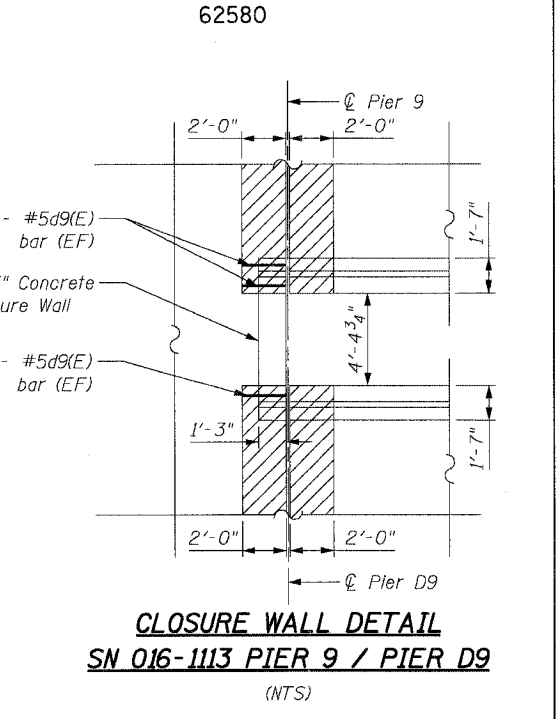
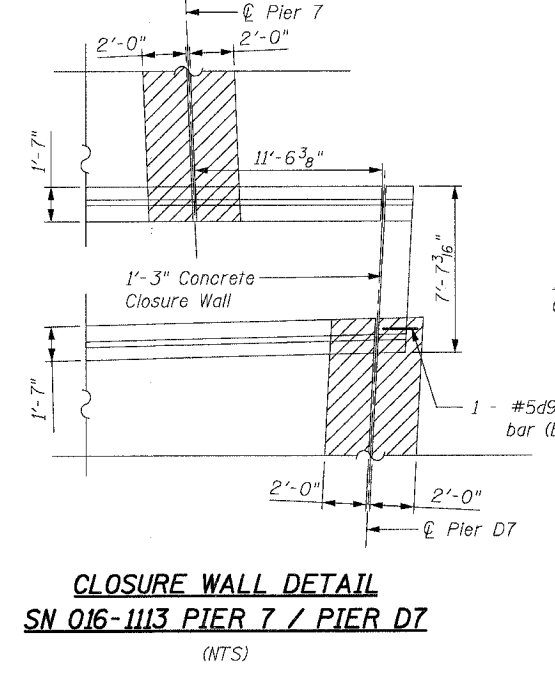
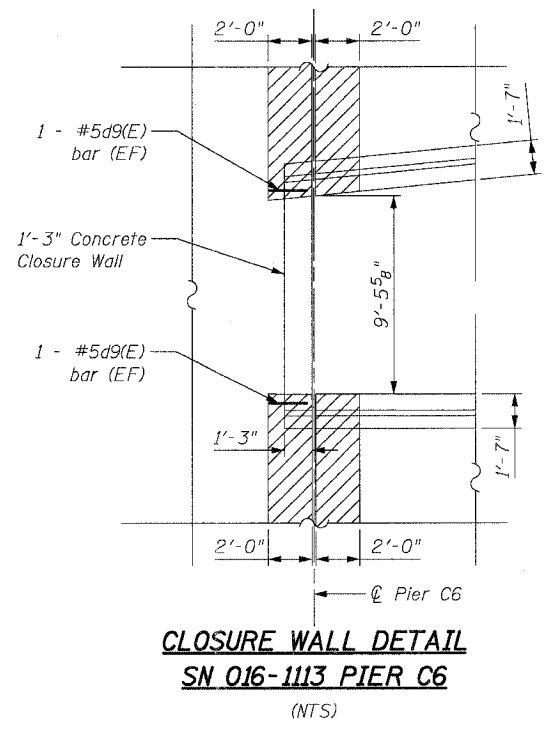
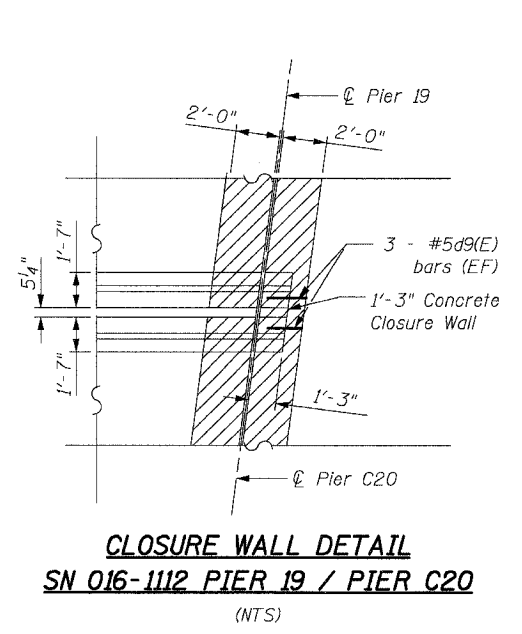
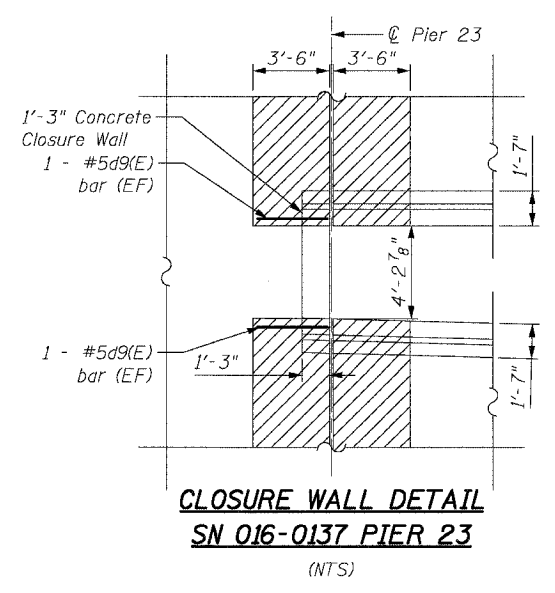
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CHECKED BY: BLU

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\* Pg 167 is DELETED \*

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-028F	COOK	419	168
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

62580



(Cut d9 bar in the field to fit the Closure Wall)

**JOINT REMOVAL BILL OF MATERIALS**

ITEM DESCRIPTION	UNIT	QUANTITY	016-0137	016-1112	016-1113	016-1115	016-1117	016-1118
Reinforcement Bars Epoxy Coated	POUND	180	20	30	50	40	20	20

STRUCTURE	PIER	MARK	NUMBER	SIZE	LENGTH	SHAPE
016-0137	23	d9	4	#5(E)	5'-9"	L
016-1112	19/C20	d9	6	#5(E)	5'-9"	L
016-1113	9/D9	d9	4	#5(E)	5'-9"	L
	7/D7	d9	2	#5(E)	5'-9"	L
	C6	d9	4	#5(E)	5'-9"	L
016-1114	22	d9	4	#5(E)	5'-9"	L
016-1115	4	d9	4	#5(E)	5'-9"	L
016-1117	14	d9	4	#5(E)	5'-9"	L
016-1118	H12	d9	4	#5(E)	5'-9"	L

Note:  
For locations of closure walls see Partial Deck Plans

REVISIONS	NAME	DATE

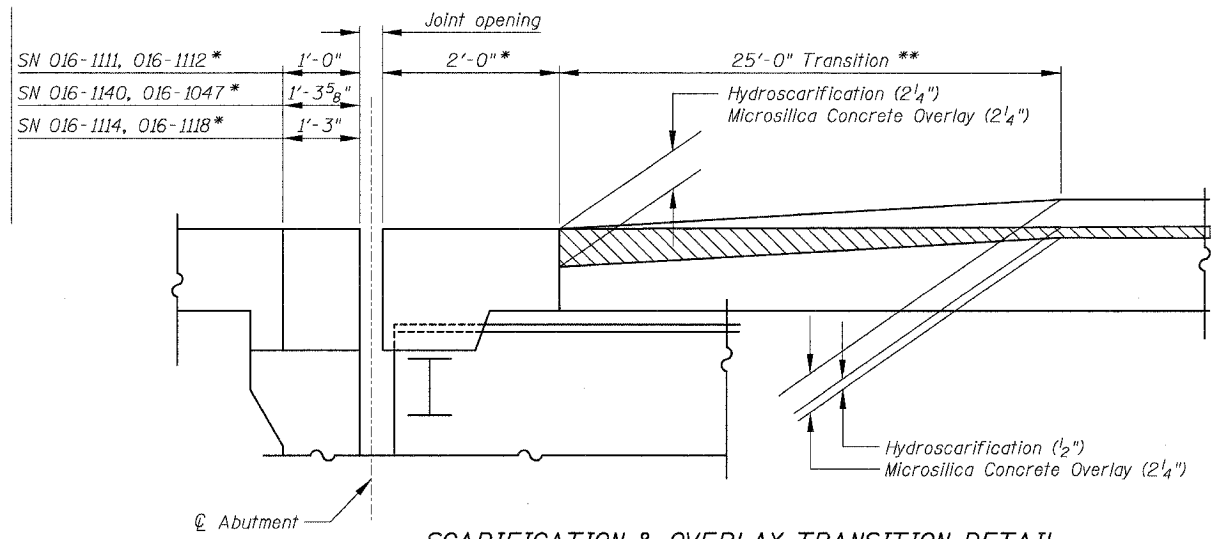
ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
CLOSURE WALL  
GENERAL DETAILS

SCALE: NTS  
DATE: 8/12/2005  
DRAWN BY: BDC  
CHECKED BY: BLU

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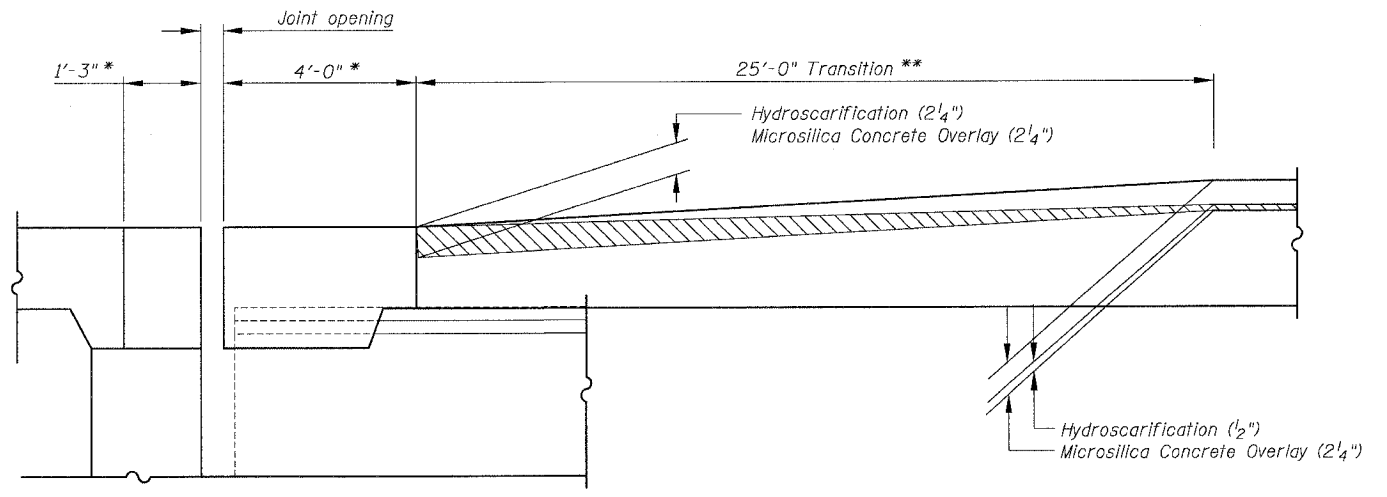
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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62580				



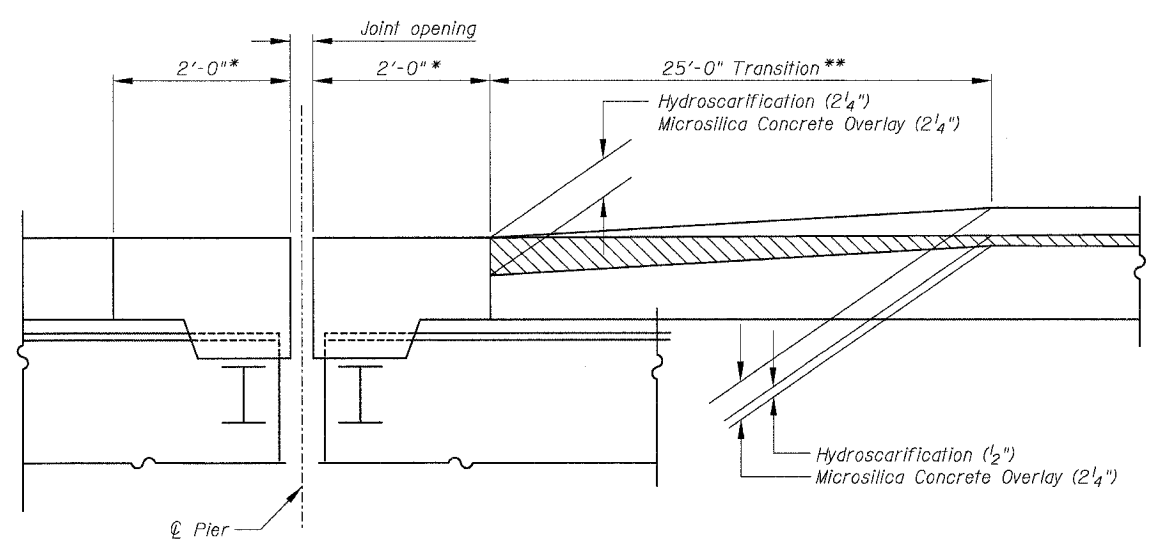
**SCARIFICATION & OVERLAY TRANSITION DETAIL**

- SN 016-1111 E5 / Abut.
- SN 016-1112 D14 / Abut.
- SN 016-1140 B18 / Abut.
- SN 016-1047 E30 / Abut.
- SN 016-1117 S. Abut.
- SN 016-1118 S. Abut.



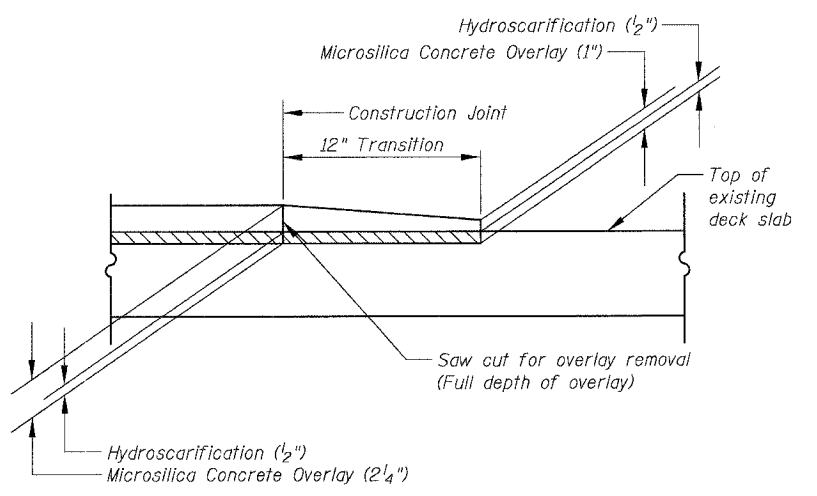
**SCARIFICATION & OVERLAY TRANSITION DETAIL**

SN 016-0137 N. Abut.



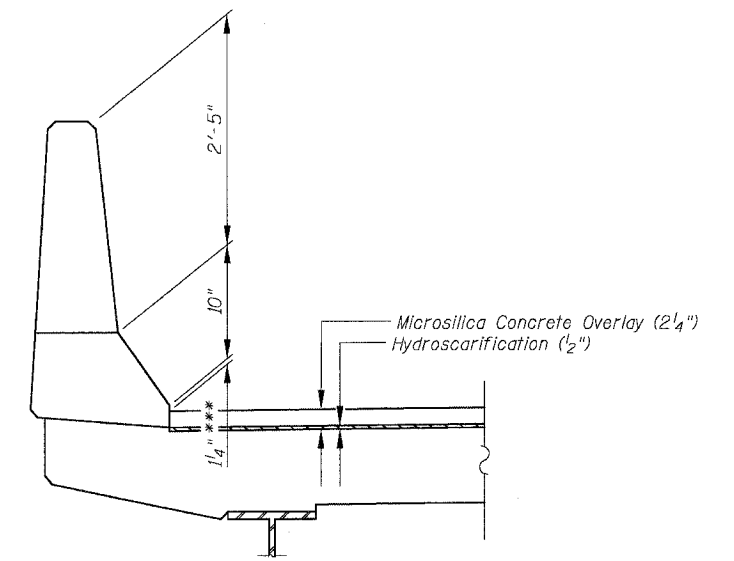
**SCARIFICATION & OVERLAY TRANSITION DETAIL**

SN 016-1059 Pier 43



**SCARIFICATION & OVERLAY TRANSITION DETAIL AT TRAFFIC CROSSOVER**

Location	Sheet Number
1 & 2	152
3 & 4	153
5	157



**SCARIFICATION & OVERLAY DETAIL AT PARAPET (Typ.)**

Notes:  
 Microsilica Concrete Overlay shall be used for the transition for traffic crossover locations as shown on the Partial Deck Plans and MOT Plans. When the Contractor proceeds to the next stage of the construction and the transition is no longer required the Contractor shall remove the overlay by saw cut full depth and hydroscarify.  
 The cost of the overlay for the transition, materials and installation shall be included in the cost for "Microsilica Concrete Overlay (2 1/4)".  
 The cost of the saw cut full depth and the removal of the overlay shall be included in the cost for "Bridge Deck Hydroscarification (1/2)".  
 \* Construct new concrete at joints to same lines and grades as existing at these locations.  
 \*\* Cost of increased hydroscarification depth over length of transition shall be included with "Bridge Deck Hydroscarification (1/2)".  
 \*\*\* Contractor shall increase scarification thickness or reduce overlay thickness as directed by the Engineer to ensure this is never less than 0".

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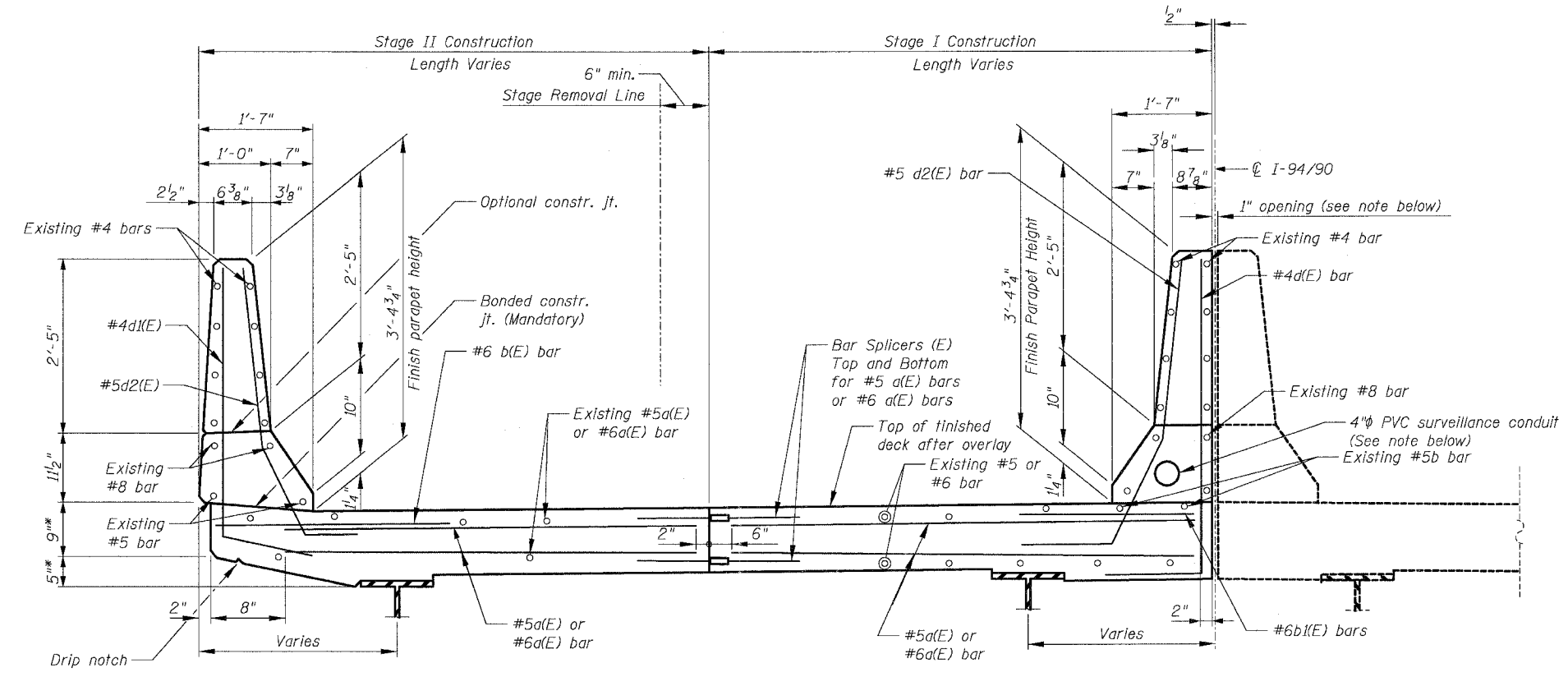
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
 NB DAN RYAN ELEVATED BRIDGE  
 REPAIR FROM 15TH TO 28TH STREETS  
 SCARIFICATION & OVERLAY  
 TRANSITION DETAILS

SCALE: NTS  
 DATE: 8/12/2005

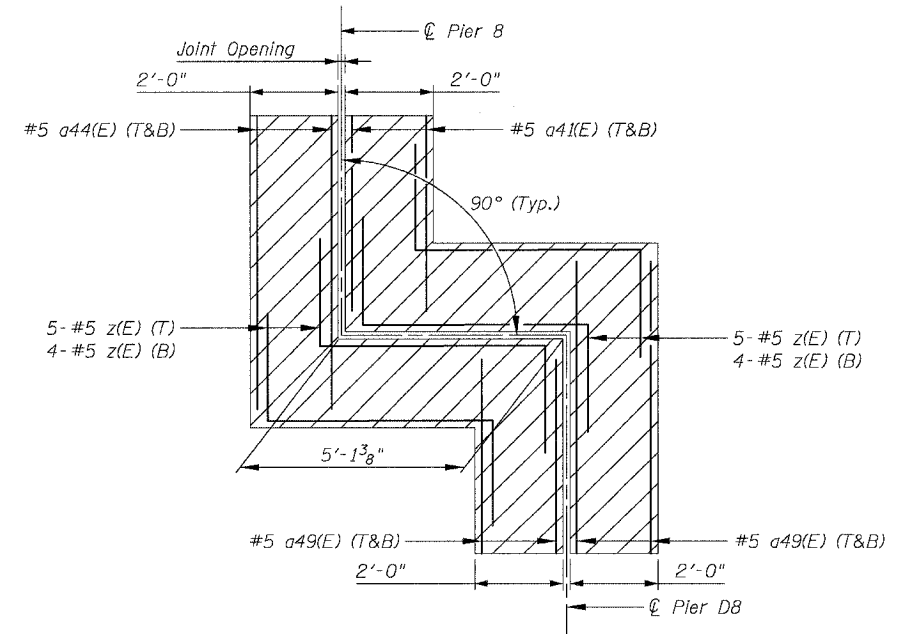
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\* Match Existing

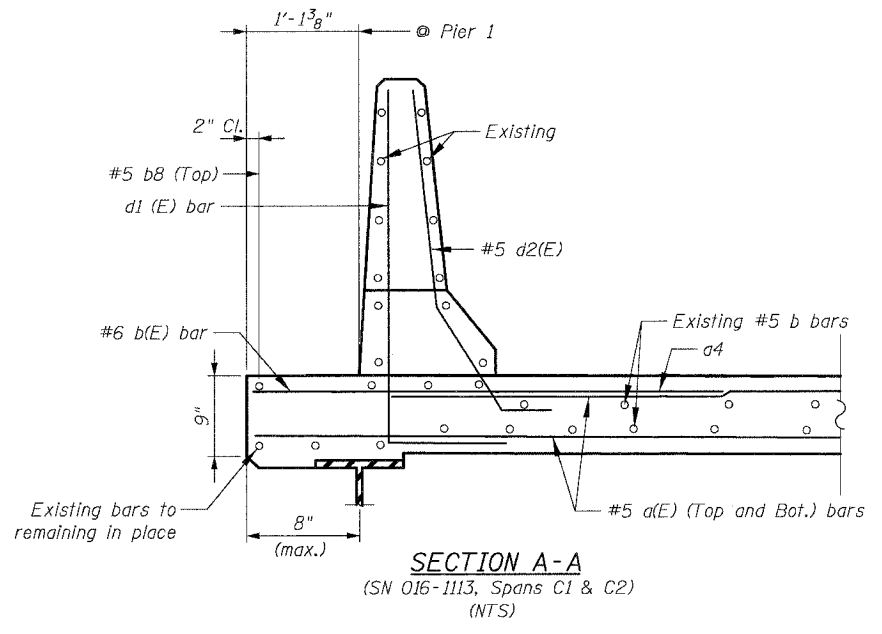
**CROSS SECTION ALONG JOINT RECONSTRUCTION**  
(TYP)  
(NTS)



**DETAIL "A"**  
(SN 016-1113, Joint detail at Piers 8 & D8)

**REINFORCEMENT FOR DETAIL "A" BAR SCHEDULE**

STRUCTURE NUMBER	PIER	BAR	NO.	SIZE	LENGTH	SHAPE
016-1113	8 D8	z(E)	18	#5	12'-1"	L



**SECTION A-A**  
(SN 016-1113, Spans C1 & C2)  
(NTS)

**BILL OF MATERIAL**

ITEM DESCRIPTION	UNIT	QUANTITY
REINFORCEMENT BARS EPOXY COATED	POUND	230

**Notes:**

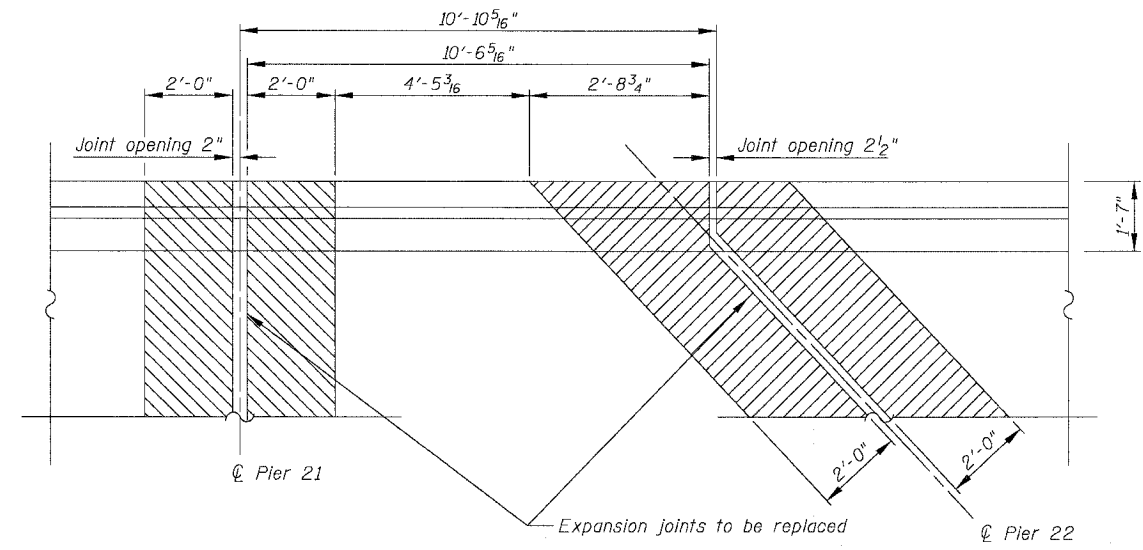
- Existing longitudinal reinforcement in slab and barriers shall be cleaned, straightened and incorporated into new construction.
- Bend #4d1 bars over fascia girder to clear the top flange as needed.
- 4"  $\phi$  PVC Surveillance conduit to remain Contractor shall take care not to damage existing conduit. Any damaged conduit shall be repaired or replaced by the Contractor to the satisfaction of the Engineer at no additional cost to the Department
- Remove existing rails, posts and anchors as required for the partial removal of barriers for the joint reconstruction. Reinstall anchors and rail posts. Cost included with "Concrete Superstructure".
- Longitudinal joint between barriers will be sealed by others in a future contract.

REVISIONS	
NAME	DATE

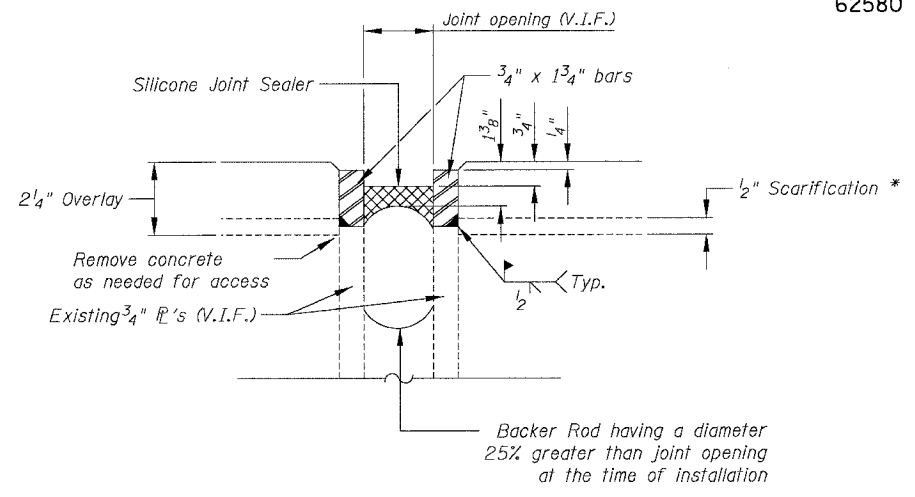
ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
TYPICAL DECK SLAB  
CROSS SECTIONS

SCALE: NTS  
DATE: 8/12/2005

DRAWN BY: BDC  
CHECKED BY: BLU

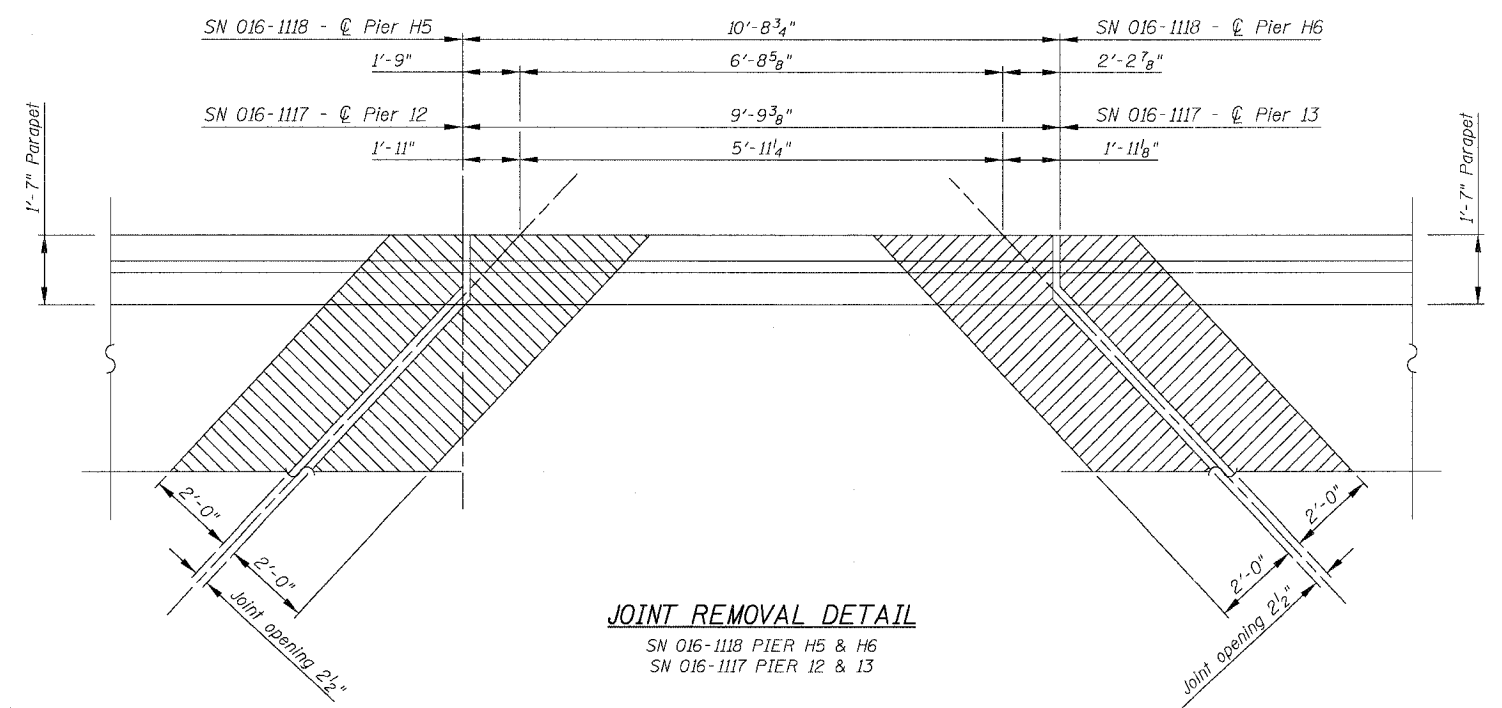


**JOINT REMOVAL DETAIL**  
SN 016-1112 PIER 21 & PIER 22

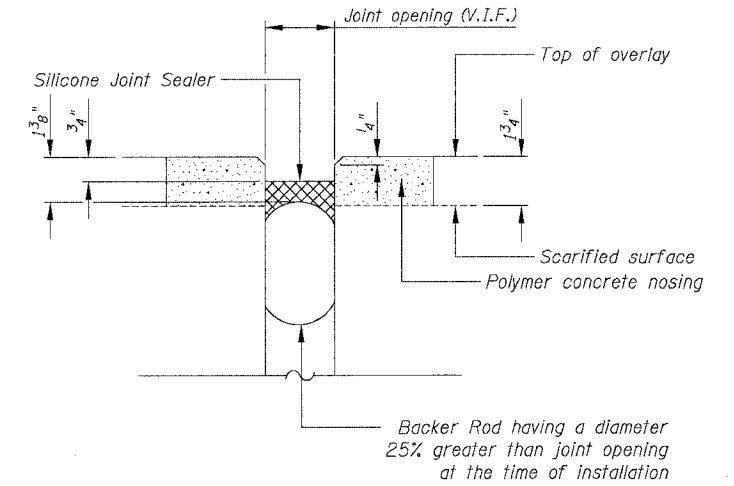


**SILICONE JOINT SEALER DETAIL**

\* Care shall be taken not to damage existing  $\bar{r}$ 's during Hydroscarification.  
V.I.F. = Verify in field  
If existing joint does not have steel plates see alternate Silicone Joint Sealer Detail.  
Cost of existing joint removal included with "Hydroscarification ( $1/2$ )".



**JOINT REMOVAL DETAIL**  
SN 016-1118 PIER H5 & H6  
SN 016-1117 PIER 12 & 13

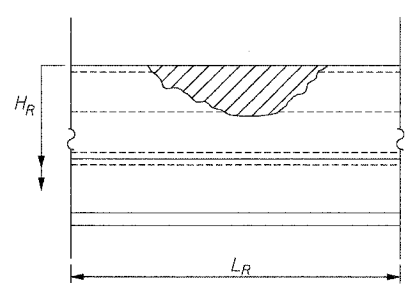


**ALTERNATE SILICONE JOINT SEALER DETAIL**

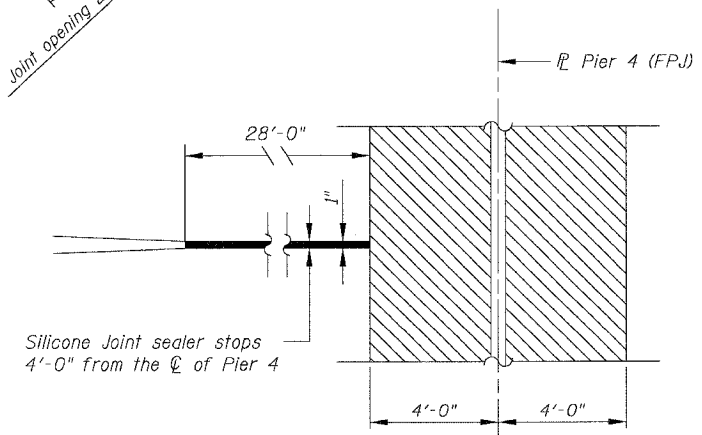
Note:  
For locations of silicone joint sealer see sheets 150 and 158.

**PARAPET REPAIR DIMENSIONS AND BILL OF MATERIALS**

	016-1115 LOCATION 1	016-1114 LOCATION 2	016-1112 LOCATION 3
$L_R$	8'-0"	6'-0"	5'-0"
$H_R$	3'-6"	3'-6"	3'-6"
Concrete Removal Cu. Yd.	1.1	0.82	0.70
Concrete Superstructure Cu. Yd.	1.1	0.82	0.70



**PARAPET REPAIRS - DETAIL "B"**  
(Front face of Parapet)



**SILICONE JOINT SEALER - DETAIL "C"**

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
PARAPET REPAIR, SILICONE JOINT SEALER  
& JOINT REMOVAL DETAILS  
SCALE: NTS  
DATE: 8/12/2005  
DRAWN BY: BDC  
CHECKED BY: BLU

**SN 016-0137 SLAB - BAR DETAILS**

LOCATION	BAR		SIZE	LENGTH		NUMBER/STAGES				BAR		SIZE	LENGTH		NUMBER/STAGES												
	STAGE I	STAGE IIA		STAGE I	STAGE IIA	STAGE I	STAGE IIA	SIDE	ASIDE	B	SIDE		ASIDE	B	STAGE I	STAGE IIA	SIDE	ASIDE	B	SIDE	ASIDE	B					
																							STAGE I	STAGE IIA	STAGE I	STAGE IIA	STAGE I
PIER 7	a1	a2	#5(E)	30' 11"	28' 0"	9	9	18	18	X1	X1	#5(E)	2' 3"	2' 3"	31	31	55	55	b1	b1	#6(E)	4' 0"	4' 0"	3	3	3	3
PIER 11	a1	a9	#5(E)	30' 11"	25' 1"	9	9	18	18	X1	X1	#5(E)	2' 3"	2' 3"	31	31	50	50	b1	b1	#6(E)	4' 0"	4' 0"	3	3	3	3
PIER 15	a1	a3	#5(E)	30' 11"	24' 3"	9	9	18	18	X1	X1	#5(E)	2' 3"	2' 3"	31	31	48	48	b1	b1	#6(E)	4' 0"	4' 0"	3	3	3	3
PIER 19	a1	a10	#5(E)	30' 11"	26' 3"	9	9	9	9	X1	X1	#5(E)	2' 3"	2' 3"	31	31	27	27	b1	b1	#6(E)	4' 0"	4' 0"	3	3	3	3
	-	a4	#6(E)	-	20' 9"	-	-	-	-	X2	X2	#6(E)	-	2' 8"	-	-	34	34	-	-	-	-	-	-	-	-	
	-	a5	#6(E)	-	19' 5"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
PIER 23	a1	a6	#5(E)	30' 11"	23' 3"	14	-	28	-	X4	X4	#5(E)	3' 9"	3' 9"	31	-	44	-	b1	b1	#6(E)	4' 0"	4' 0"	5	5	10	10
	a113	a116	#7(E)	30' 11"	24' 3"	-	-	16	-	X6	X6	#6(E)	6' 8"	6' 8"	-	-	31	-	44	-	-	-	-	-	-	-	
	a114	a117	#6(E)	30' 11"	24' 3"	-	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	-	a119	#7(E)	-	25' 0"	-	-	-	-	X6	X6	#6(E)	-	6' 8"	-	-	-	-	26	-	b1	#6(E)	-	4' 0"	-	5	5
	-	a120	#6(E)	-	25' 0"	-	-	-	-	X4	X4	#5(E)	-	3' 9"	-	-	-	-	26	-	-	-	-	-	-	-	-
	-	a121	#5(E)	-	25' 0"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N. ABUT.	a113	a116	#7(E)	30' 11"	24' 3"	8	-	16	-	X6	X6	#6(E)	6' 8"	6' 8"	32	-	73	-	b1	b1	#6(E)	4' 0"	4' 0"	5	2	5	2
	a114	a117	#6(E)	30' 11"	24' 3"	8	-	12	-	-	-	-	-	-	-	-	-	-	-	u	-	#5(E)	1' 11"	-	-	32	-
	a115	a118	#5(E)	30' 10"	23' 8"	-	-	6	-	-	-	-	-	-	-	-	-	-	-	u	-	#5(E)	1' 11"	-	-	32	-
- RAMP	-	a119	#7(E)	-	25' 0"	-	-	8	-	-	-	-	-	-	-	-	-	-	-	u	-	#5(E)	1' 11"	-	-	32	-
	-	a120	#6(E)	-	25' 0"	-	-	6	-	-	-	-	-	-	-	-	-	-	-	u	-	#5(E)	1' 11"	-	-	32	-
	-	a121	#5(E)	-	25' 0"	-	-	6	-	-	-	-	-	-	-	-	-	-	-	u	-	#5(E)	1' 11"	-	-	32	-

**SN 016-0137 PARAPET- BAR DETAILS**

LOCATION	BAR		SIZE	LENGTH		NUMBER/STAGES				BAR		SIZE	LENGTH		NUMBER/STAGES												
	STAGE I	STAGE IIA		STAGE I	STAGE IIA	SIDE	ASIDE	B	SIDE	ASIDE	B		STAGE I	STAGE IIA	SIDE	ASIDE	B	SIDE	ASIDE	B							
																					STAGE I	STAGE IIA	STAGE I	STAGE IIA			
PIER 7	d1	d1	#4(E)	5' 10"	5' 10"	3	3	3	3	d2	d2	#5(E)	4' 7"	4' 7"	3	3	3	3	-	-	-	-	-	-	-	-	
PIER 11	d1	d1	#4(E)	5' 10"	5' 10"	3	3	3	3	d2	d2	#5(E)	4' 7"	4' 7"	3	3	3	3	-	-	-	-	-	-	-	-	-
PIER 15	d1	d1	#4(E)	5' 10"	5' 10"	3	3	3	3	d2	d2	#5(E)	4' 7"	4' 7"	3	3	3	3	-	-	-	-	-	-	-	-	-
PIER 19	d1	d1	#4(E)	5' 10"	5' 10"	3	3	3	3	d2	d2	#5(E)	4' 7"	4' 7"	3	3	3	3	-	-	-	-	-	-	-	-	-
PIER 23	d1	d1	#4(E)	5' 10"	5' 10"	5	5	5	5	d2	d2	#5(E)	4' 7"	4' 7"	5	5	5	5	-	-	-	-	-	-	-	-	-
- RAMP	-	d1	#4(E)	5' 10"	5' 10"	-	-	10	10	-	-	d2	#5(E)	4' 7"	4' 7"	-	-	10	10	-	-	-	-	-	-	-	-
N. ABUT.	d1	d1	#4(E)	5' 10"	5' 10"	5	2	5	2	d2	d2	#5(E)	4' 7"	4' 7"	5	2	5	2	-	-	-	-	-	-	-	-	-
- RAMP	d1	d1	#4(E)	5' 10"	5' 10"	10	4	10	4	d2	d2	#5(E)	4' 7"	4' 7"	10	4	10	4	-	-	-	-	-	-	-	-	-

**SN 016-1112 SLAB - BAR DETAILS**

LOCATION	BAR		SIZE	LENGTH		NUMBER/STAGES				BAR		SIZE	LENGTH		NUMBER/STAGES																								
	STAGE I	STAGE IIA		STAGE I	STAGE IIA	SIDE	ASIDE	B	SIDE	ASIDE	B		STAGE I	STAGE IIA	SIDE	ASIDE	B	SIDE	ASIDE	B																			
																					STAGE I	STAGE IIA	STAGE I	STAGE IIA															
PIER 11	a51	a14	#5(E)	29' 11"	26' 8"	-	-	9	9	9	9	-	-	-	-	-	-	-	-	X1	X1	-	-	#5(E)	2' 3"	2' 3"	-	-	31	31	27	27	-	-	-	-			
PIER 12	a51	a15	#5(E)	29' 11"	26' 11"	-	-	9	9	9	9	-	-	-	-	-	-	-	-	-	X1	X1	-	-	#5(E)	2' 3"	2' 3"	-	-	31	31	27	27	-	-	-	-		
PIER 14	a51	a16	#5(E)	29' 11"	26' 9"	-	-	9	9	9	9	-	-	-	-	-	-	-	-	-	X1	X1	-	-	#5(E)	2' 3"	2' 3"	-	-	31	31	29	29	-	-	-	-		
PIER 15	a51	a17	#5(E)	29' 11"	26' 6"	-	-	9	9	9	9	-	-	-	-	-	-	-	-	-	X1	X1	-	-	#5(E)	2' 3"	2' 3"	-	-	31	31	27	27	-	-	-	-		
PIER 19	a51	-	a19	#5(E)	29' 11"	-	25' 1"	-	9	9	-	9	-	-	-	-	-	-	-	-	X1	-	X1	-	#5(E)	2' 3"	-	2' 3"	-	31	53	-	-	48	44	-	-	-	-
	-	-	a20	#5(E)	20' 9"	-	18' 7"	-	9	9	-	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	-	-	a21	#5(E)	-	-	23' 5"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
PIER 21	a51	-	a22	a23	#5(E)	29' 11"	-	39' 6"	20' 3"	9	9	-	9	9	9	X1	-	X1	X1	#5(E)	2' 3"	-	2' 3"	2' 3"	31	31	-	-	40	40	21	21	-	-	-	-	-	-	
PIER 22	a24	-	a26	a27	#6(E)	41' 6"	-	26' 3"	28' 9"	5	5	-	18	18	5	X3	-	X3	X3	#6(E)	3' 0"	-	3' 0"	3' 0"	41	41	-	-	51	51	29	29	-	-	-	-	-	-	
	a25	-	-	a28	#6(E)	41' 1"	-	-	28' 10"	4	4	-	-	4	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
PIER 26	a29	-	-	a31	#6(E)	40' 11"	-	-	33' 3"	5	5	-	-	10	10	X3	-	-	X3	#6(E)	3' 0"	-	-	3' 0"	40	40	-	-	-	-	-	-	62	62	-	-	-	-	
	a30	-	-	a32	#6(E)	40' 5"	-	-	32' 9"	4	4	-	-	8	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
PIER 28	a1	-	-	a33	#5(E)	30' 11"	-	-	25' 11"	9	9	-	-	18	18	X1	-	-	X1	#5(E)	2' 3"	-	-	2' 3"	31	31	-	-	-	-	-	-	50	50	-	-	-	-	
PIER 29	a1	-	-	a34	#5(E)	30' 11"	-	-	24' 11"	9	9	-	-	18	18	X1	-	-	X1	#5(E)	2' 3"	-	-	2' 3"	31	31	-	-	-	-	-	-	50	50	-	-	-	-	
PIER 31	a1	-	-	a34	#5(E)	30' 11"	-	-	24' 11"	9	9	-	-	18	18	X1	-	-	X1	#5(E)	2' 3"	-	-	2' 3"	31	31	-	-	-	-	-	-	43	43	-	-	-	-	
PIER C13	a35	-	a36	-	#6(E)	20' 5"	-	18' 7"	-	9	9	-	-	9	9	-	-	-	-	X1	-	X1	-	#6(E)	2' 3"	-	2' 3"	-	21	21	-	-	19	19	-	-	-	-	
PIER C14	a35	-	a36	-	#6(E)	20' 5"	-	18' 7"	-	9	9	-	-	9	9	-	-	-	-	X1	-	X1	-	#6(E)	2' 3"	-	2' 3"	-	21	21	-	-	19	19	-	-	-	-	
PIER C15	a35	-	a36	-	#6(E)	20' 5"	-	18' 7"	-	9	14	-	-	9	14	-	-	-	-	X1	-	X1	-	#6(E)	2' 3"	-	2' 3"	-	20	-	-	-	19	-	-	-	-	-	
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X5	-	X5	-	#6(E)	3' 9"	-	3' 9"	-	-	20	-	-	-	19	-	-	-	-	-
PIER C16	a35	-	a36	-	#6(E)	20' 5"	-	18' 7"	-	9	14	-	-	9	14	-	-	-	-	X1	-	X1	-	#6(E)	2' 3"	-	2' 3"	-	20	-	-	-	19	-	-	-	-	-	
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X5	-	X5	-	#6(E)	3' 9"	-	3' 9"	-	-	20	-	-	-	19	-	-	-	-	-
PIER C17	a35	-	a37	-	#6(E)	20' 5"	-	18' 8"	-	9	14	-	-	9	14	-	-	-	-	X1	-	X1	-	#6(E)	2' 3"	-	2' 3"	-	20	20	-	-	20	20	-	-	-	-	
PIER C18	a35	-	a11	-	#6(E)	20' 5"	-	18' 10"	-	9	14	-	-	9	14	-	-	-	-	X1	-	X1	-	#6(E)	2' 3"	-	2' 3"	-	20	-	-	-	19	-	-	-	-	-	
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X5	-	X5	-	#6(E)	3' 9"	-	3' 9"	-	-	20	-	-	-	19	-	-	-	-	-
PIER C19	a35	-	a36	-	#6(E)	20' 5"	-	18' 7"	-	9	9	-	-	9	9	-	-	-	-	X1	-	X1	-	#6(E)	2' 3"	-	2' 3"	-	21	21	-	-	19	19	-	-	-	-	
PIER C20	a35	-	a36	-	#6(E)	17' 7"	-	18																															

62580

**SN 016-1112 SLAB - BAR DETAILS**

LOCATION	BAR				SIZE	LENGTH				NUMBER/STAGES							
	STAGE I	STAGE II	STAGE IIA	STAGE IIB		STAGE I	STAGE II	STAGE IIA	STAGE IIB	STAGE I		STAGE II		STAGE IIA		STAGE IIB	
										SIDE	ASIDE	SIDE	ASIDE	SIDE	ASIDE	SIDE	ASIDE
PIER 11	b1	b1	-	-	#6(E)	4' 0"	4' 0"	-	-	3	3	3	3	-	-	-	-
PIER 12	b1	b1	-	-	#6(E)	4' 0"	4' 0"	-	-	3	3	3	3	-	-	-	-
PIER 14	b1	b1	-	-	#6(E)	4' 0"	4' 0"	-	-	3	3	3	3	-	-	-	-
PIER 15	b1	b1	-	-	#6(E)	4' 0"	4' 0"	-	-	3	3	3	3	-	-	-	-
PIER 19	b1	-	b1	-	#6(E)	4' 0"	-	4' 0"	-	3	3	-	-	3	3	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PIER 21	b1	-	-	b1	#6(E)	4' 0"	-	-	4' 0"	3	3	-	-	-	-	3	3
PIER 22	b1	-	-	b1	#6(E)	4' 0"	-	-	4' 0"	3	3	-	-	-	-	3	3
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PIER 26	b1	-	-	b1	#6(E)	4' 0"	-	-	4' 0"	3	3	-	-	-	-	3	3
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PIER 28	b1	-	-	b1	#6(E)	4' 0"	-	-	4' 0"	3	3	-	-	-	-	3	3
PIER 29	b1	-	-	b1	#6(E)	4' 0"	-	-	4' 0"	3	3	-	-	-	-	3	3
PIER 31	b1	-	-	b1	#6(E)	4' 0"	-	-	4' 0"	3	3	-	-	-	-	3	3
PIER C13	b1	-	b1	-	#6(E)	4' 0"	-	4' 0"	-	3	3	-	-	3	3	-	-
PIER C14	b1	-	b1	-	#6(E)	4' 0"	-	4' 0"	-	3	3	-	-	3	3	-	-
PIER C15	b1	-	b1	-	#6(E)	4' 0"	-	4' 0"	-	3	5	-	-	3	5	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PIER C16	b1	-	b1	-	#6(E)	4' 0"	-	4' 0"	-	3	5	-	-	3	5	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PIER C17	b1	-	b1	-	#6(E)	4' 0"	-	4' 0"	-	3	3	-	-	3	3	-	-
PIER C18	b1	-	b1	-	#6(E)	4' 0"	-	4' 0"	-	3	3	-	-	3	3	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PIER C19	b1	-	b1	-	#6(E)	4' 0"	-	4' 0"	-	3	3	-	-	3	3	-	-
PIER C20	b1	-	b1	-	#6(E)	4' 0"	-	4' 0"	-	4	4	-	-	-	-	-	-
-	-	-	b1	-	#6(E)	-	-	4' 0"	-	-	-	-	-	-	4	-	-
PIER D12	-	-	-	b1	#6(E)	-	-	-	4' 0"	-	-	-	-	-	-	3	3
D14 ABUT	-	-	-	b1	#6(E)	-	-	-	4' 0"	-	-	-	-	-	-	2	5

**SN 016-1112 PARAPET- BAR DETAILS**

LOCATION	BAR				SIZE	LENGTH				NUMBER/STAGES								BAR				SIZE	LENGTH				NUMBER/STAGES							
	STAGE I	STAGE II	STAGE IIA	STAGE IIB		STAGE I	STAGE II	STAGE IIA	STAGE IIB	STAGE I		STAGE II		STAGE IIA		STAGE IIB		STAGE I	STAGE II	STAGE IIA	STAGE IIB		STAGE I		STAGE II		STAGE IIA		STAGE IIB					
										SIDE	ASIDE	SIDE	ASIDE	SIDE	ASIDE	SIDE	ASIDE	SIDE	ASIDE	SIDE	ASIDE	SIDE	ASIDE	SIDE	ASIDE	SIDE	ASIDE	SIDE	ASIDE	SIDE	ASIDE			
PIER 11	d1(E)	d3(E)	-	-	#4(E)	5' 10"	6' 10"	-	-	3	3	3	3	-	-	-	-	d2	d2	-	-	#5(E)	4' 7"	4' 7"	-	-	3	3	3	3	-	-		
PIER 12	d1(E)	d1(E)	-	-	#4(E)	5' 10"	5' 10"	-	-	3	3	3	3	-	-	-	-	d2	d2	-	-	#5(E)	4' 7"	4' 7"	-	-	3	3	3	3	-	-		
PIER 14	d1(E)	d1(E)	-	-	#4(E)	5' 10"	5' 10"	-	-	3	3	3	3	-	-	-	-	d2	d2	-	-	#5(E)	4' 7"	4' 7"	-	-	3	3	3	3	-	-		
PIER 15	d1(E)	d1(E)	-	-	#4(E)	5' 10"	5' 10"	-	-	3	3	3	3	-	-	-	-	d2	d2	-	-	#5(E)	4' 7"	4' 7"	-	-	3	3	3	3	-	-		
PIER 19	d1(E)	-	d1(E)	-	#4(E)	5' 10"	-	5' 10"	-	3	6	-	-	6	-	-	-	d2	-	d2	-	#5(E)	4' 7"	-	4' 7"	-	3	6	-	-	6	-	-	
PIER 21	d1(E)	-	-	d4(E)	#4(E)	5' 10"	-	-	6' 4"	3	3	-	-	-	-	3	3	d2	-	-	d2	#5(E)	4' 7"	-	-	4' 7"	3	3	-	-	-	3	3	
PIER 22	d1(E)	-	-	d4(E)	#4(E)	5' 10"	-	-	6' 4"	3	3	-	-	-	-	3	3	d2	-	-	d2	#5(E)	4' 7"	-	-	4' 7"	3	3	-	-	-	3	3	
PIER 26	d1(E)	-	-	d4(E)	#4(E)	5' 10"	-	-	6' 4"	3	3	-	-	-	-	3	3	d2	-	-	d2	#5(E)	4' 7"	-	-	4' 7"	3	3	-	-	-	3	3	
PIER 28	d1(E)	-	-	d1(E)	#4(E)	5' 10"	-	-	5' 10"	3	3	-	-	-	-	3	3	d2	-	-	d2	#5(E)	4' 7"	-	-	4' 7"	3	3	-	-	-	3	3	
PIER 29	d1(E)	-	-	d4(E)	#4(E)	5' 10"	-	-	6' 4"	3	3	-	-	-	-	3	3	d2	-	-	d2	#5(E)	4' 7"	-	-	4' 7"	3	3	-	-	-	3	3	
PIER 31	d1(E)	-	-	d4(E)	#4(E)	5' 10"	-	-	6' 4"	3	3	-	-	-	-	3	3	d2	-	-	d2	#5(E)	4' 7"	-	-	4' 7"	3	3	-	-	-	3	3	
PIER C13	d4(E)	-	d4(E)	-	#4(E)	6' 4"	-	-	6' 4"	4	4	-	-	4	4	-	-	d2	-	d2	-	#5(E)	4' 7"	-	4' 7"	-	4	4	-	-	4	4	-	-
PIER C14	d4(E)	-	d4(E)	-	#4(E)	6' 4"	-	-	6' 4"	4	4	-	-	4	4	-	-	d2	-	d2	-	#5(E)	4' 7"	-	4' 7"	-	4	4	-	-	4	4	-	-
PIER C15	d1(E)	-	d1(E)	-	#5(E)	4' 7"	-	-	4' 7"	3	3	-	-	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	d4(E)	-	d4(E)	-	#4(E)	6' 4"	-	-	6' 4"	3	3	-	-	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
PIER C16	d1(E)	-	d1(E)	-	#5(E)	4' 7"	-	-	4' 7"	3	3	-	-	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	d4(E)	-	d4(E)	-	#4(E)	6' 4"	-	-	6' 4"	3	3	-	-	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
PIER C17	d3(E)	-	d3(E)	-	#4(E)	6' 10"	-	-	6' 10"	3	3	-	-	3	3	-	-	d2	-	d2	-	#5(E)	4' 7"	-	4' 7"	-	3	3	-	-	3	3	-	-
PIER C18	d1(E)	-	d1(E)	-	#4(E)	5' 10"	-	-	5' 10"	3	3	-	-	3	3	-	-	d2	-	d2	-	#5(E)	4' 7"	-	4' 7"	-	3	3	-	-	3	3	-	-
PIER C19	d4(E)	-	d4(E)	-	#4(E)	6' 4"	-	-	6' 4"	3	3	-	-	3	3	-	-	d2	-	d2	-	#5(E)	4' 7"	-	4' 7"	-	3	3	-	-	3	3	-	-
PIER C20	-	-	d1(E)	-	#4(E)	-	-	5' 10"	-	-	-	-	-	4	-	-	-	d2	-	d2	-	#5(E)	4' 7"	-	4' 7"	-	3	-	-	3	-	-	-	
-	d4(E)	-	d4(E)	-	#4(E)	6' 4"	-	-	6' 4"	3	3	-	-	3	-	-	-	-	-	-	-	#5(E)	4' 7"	-	4' 7"	-	-	-	-	4	-	-	-	
PIER D12	-	-	-	d1(E)	#4(E)	-	-	-	5' 10"	-	-	-	-	-	-	-	-	-	-	-	-	d2	#5(E)	-	-	-	4' 7"	-	-	-	-	6	6	
D14 ABUT	-	-	-	d1(E)	#4(E)	-	-	-	5' 10"	-	-	-	-	-	-	-	-	-	-	-	-	d2	#5(E)	-	-	-	4' 7"	-	-	-	-	2	5	

BOWMAN, BARRETT & ASSOCIATES INC.  
CONSULTING ENGINEERS  
Chicago, Illinois  
312.228.0100  
www.bbainc.com

Notes:  
1. The number of d(E) bars shown indicate the total number of bars required.  
2. Refer to table "BAR d(E) DETAILS" for specifics. 1x5 indicates 1 length of bar and 5 total bars is required (T or B).

REVISIONS	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
BAR DETAILS  
SN 016-1112  
SCALE: N/A  
DATE: 8/12/2005  
DRAWN BY: CS  
CHECKED BY: BLU

11/5/4/5 AM 8/11/2005



**SN 016-1113 SLAB - BAR DETAILS**

LOCATION	BAR				SIZE	LENGTH				NUMBER/STAGES				BAR				SIZE	LENGTH				NUMBER/STAGES																
	STAGE I	STAGE II	STAGE IIA	STAGE IIB		STAGE I	STAGE II	STAGE IIA	STAGE IIB	STAGE I	STAGE II	STAGE IIA	STAGE IIB	STAGE I	STAGE II	STAGE IIA	STAGE IIB		STAGE I	STAGE II	STAGE IIA	STAGE IIB	STAGE I	STAGE II	STAGE IIA	STAGE IIB													
																											SIDE	ASIDE	B	SIDE	ASIDE	B	SIDE	ASIDE	B	SIDE	ASIDE	B	
PIER 3	a1	a38	-	-	#5(E)	30' 11"	34' 2"	-	-	9	9	9	9	-	-	-	-	X1	X1	-	-	#5(E)	2' 3"	2' 3"	-	-	30	30	35	35	-	-	-	-	49	49			
PIER 5	a51	-	-	a39	#5(E)	29' 11"	-	-	24' 6"	9	9	-	-	-	-	18	18	X1	-	-	X1	#5(E)	2' 3"	-	-	2' 3"	30	30	-	-	-	-	-	-	57	57			
PIER 7	a51	-	-	a40	#5(E)	29' 11"	-	-	29' 7"	9	9	-	-	-	-	18	18	X1	-	-	X1	#5(E)	2' 3"	-	-	2' 3"	30	30	-	-	-	-	-	-	66	66			
PIER 8	a51	-	-	a41	#5(E)	29' 11"	-	-	34' 0"	9	9	-	-	-	-	18	18	X1	-	-	X1	#5(E)	2' 3"	-	-	2' 3"	30	30	-	-	-	-	-	-	58	32			
PIER 9	a51	-	-	a42	#5(E)	29' 11"	-	-	31' 7"	9	9	-	-	-	-	9	9	-	-	X1	-	-	X1	#5(E)	2' 3"	-	-	2' 3"	30	30	-	-	-	-	-	-	-	-	
PIER 10	a51	a51	-	-	#5(E)	29' 11"	29' 11"	-	-	9	9	9	9	-	-	-	-	X1	X1	-	-	#5(E)	2' 3"	2' 3"	-	-	30	30	30	30	-	-	-	-	-	-	-	-	
PIER 11	a51	a43	-	-	#5(E)	29' 11"	26' 8"	-	-	9	9	9	9	-	-	-	-	X1	X1	-	-	#5(E)	2' 3"	2' 3"	-	-	30	30	28	28	-	-	-	-	-	-	-	-	
PIER C3	a35	-	-	a36	#5(E)	20' 5"	-	-	16' 1"	9	9	-	-	-	-	9	9	-	-	X1	-	-	X1	#5(E)	2' 3"	-	-	2' 3"	21	21	-	-	-	-	-	-	19	19	
PIER C6	a35	-	a44	-	#5(E)	20' 5"	-	24' 9"	-	9	9	-	-	9	9	-	-	X1	-	X1	-	-	#5(E)	2' 3"	-	2' 3"	-	21	21	-	-	24	24	-	-	-	-	36	36
PIER C7	a35	-	a47	-	#5(E)	20' 5"	-	35' 1"	-	9	9	-	-	9	9	-	-	X1	-	X1	-	-	#5(E)	2' 3"	-	2' 3"	-	21	21	-	-	23	23	-	-	-	-	-	-
PIER D7	-	-	-	a48	#5(E)	-	-	-	32' 8"	-	-	-	-	-	-	9	9	-	-	X1	-	-	#5(E)	-	-	-	2' 3"	-	-	-	-	-	-	-	-	31	31		
PIER D8	-	-	-	a49	#5(E)	-	-	-	22' 9"	-	-	-	-	-	-	9	9	-	-	X1	-	-	#5(E)	-	-	-	2' 3"	-	-	-	-	-	-	-	-	23	23		
PIER D9	-	-	-	a42	#5(E)	-	-	-	26' 4"	-	-	-	-	-	-	18	18	-	-	X1	-	-	#5(E)	-	-	-	2' 3"	-	-	-	-	-	-	-	-	27	27		
PIER D10	-	-	-	a52	#5(E)	-	-	-	48' 9"	-	-	-	-	-	-	9	9	-	-	X1	-	-	#5(E)	-	-	-	2' 3"	-	-	-	-	-	-	-	-	44	44		

**SN 016-1113 SLAB - BAR DETAILS**

LOCATION	BAR				SIZE	LENGTH				NUMBER/STAGES																													
	STAGE I	STAGE II	STAGE IIA	STAGE IIB		STAGE I	STAGE II	STAGE IIA	STAGE IIB	STAGE I	STAGE II	STAGE IIA	STAGE IIB																										
														SIDE	ASIDE	B	SIDE	ASIDE	B	SIDE	ASIDE	B																	
PIER 3	b1	b1	-	-	#6(E)	4' 0"	4' 0"	-	-	3	3	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PIER 5	b1	-	-	b1	#6(E)	4' 0"	-	-	4' 0"	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PIER 7	b1	-	-	b1	#6(E)	4' 0"	-	-	4' 0"	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PIER 8	b1	-	-	-	#6(E)	4' 0"	-	-	-	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PIER 9	b1	-	-	b1	#6(E)	4' 0"	-	-	4' 0"	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
PIER 10	b1	b1	-	-	#6(E)	4' 0"	4' 0"	-	-	3	3	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PIER 11	b1	b1	-	-	#6(E)	4' 0"	4' 0"	-	-	3	3	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PIER C3	b1	-	-	b1	#6(E)	4' 0"	-	-	4' 0"	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
PIER C6	b1	-	-	b1	#6(E)	4' 0"	-	-	4' 0"	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
PIER C7	b1	-	-	b1	#6(E)	4' 0"	-	-	4' 0"	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
PIER D7	-	-	-	b1	#6(E)	-	-	-	4' 0"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PIER D8	-	-	-	b1	#6(E)	-	-	-	4' 0"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PIER D9	-	-	-	b1	#6(E)	-	-	-	4' 0"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PIER D10	-	-	-	b1	#6(E)	-	-	-	4' 0"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**SN 016-1113 PARAPET - BAR DETAILS**

LOCATION	BAR				SIZE	LENGTH				NUMBER/STAGES				BAR				SIZE	LENGTH				NUMBER/STAGES																		
	STAGE I	STAGE II	STAGE IIA	STAGE IIB		STAGE I	STAGE II	STAGE IIA	STAGE IIB	STAGE I	STAGE II	STAGE IIA	STAGE IIB	STAGE I	STAGE II	STAGE IIA	STAGE IIB		STAGE I	STAGE II	STAGE IIA	STAGE IIB	STAGE I	STAGE II	STAGE IIA	STAGE IIB															
																											SIDE	ASIDE	B	SIDE	ASIDE	B	SIDE	ASIDE	B	SIDE	ASIDE	B			
PIER 3	d1	d1	-	-	#4(E)	5' 10"	5' 10"	-	-	3	3	3	3	-	-	-	-	d2	-	d2	-	-	#5(E)	4' 7"	-	4' 7"	-	3	3	-	-	3	3	-	-	-	-	-	-	-	-
PIER 5	d1	-	-	d1	#4(E)	5' 10"	-	-	5' 10"	3	3	-	-	-	-	3	3	d2	-	d2	-	-	#5(E)	4' 7"	-	4' 7"	-	3	3	-	-	3	3	-	-	-	-	-	-	-	-
PIER 7	d1	-	-	d1	#4(E)	5' 10"	-	-	5' 10"	3	3	-	-	-	-	3	3	d2	-	d2	-	-	#5(E)	4' 7"	-	4' 7"	-	3	3	-	-	3	3	-	-	-	-	-	-	-	-
PIER 8	d1	-	-	-	#4(E)	5' 10"	-	-	-	3	3	-	-	-	-	-	-	d2	-	-	-	-	#5(E)	4' 7"	-	-	-	3	3	-	-	-	-	-	-	-	-	-	-	-	-
PIER 9	d1	-	-	d1	#4(E)	5' 10"	-	-	5' 10"	3	3	-	-	-	-	6	3	d2	-	-	d2	-	-	#5(E)	4' 7"	-	4' 7"	-	3	3	-	-	-	-	-	-	-	-	-	-	-
PIER 10	d1	d1	-	-	#4(E)	5' 10"	5' 10"	-	-	3	3	3	3	-	-	-	-	d2	d2	-	-	-	-	#5(E)	4' 7"	4' 7"	-	-	3	3	3	3	-	-	-	-	-	-	-	-	-
PIER 11	d1	d1	-	-	#4(E)	5' 10"	5' 10"	-	-	3	3	3	3	-	-	-	-	d2	d2	-	-	-	-	#5(E)	4' 7"	4' 7"	-	-	3	3	3	3	-	-	-	-	-	-	-	-	-
PIER C3	d1	-	-	d1	#4(E)	5' 10"	-	-	5' 10"	3	3	-	-	-	-	3	3	d2	-	-	d2	-	-	#5(E)	4' 7"	-	4' 7"	-	3	3	-	-	-	-	-	-	-	-	-	-	-
PIER C6	d1	-	-	d1	#4(E)	5' 10"	-	-	5' 10"	3	3	-	-	-	-	3	6	d2	-	-	d2	-	-	#5(E)	4' 7"	-	4' 7"	-	3	3	-	-	-	-	-	-	-	-	-	-	-
PIER C7	d1	-	-	d1	#4(E)	5' 10"	-	-	5' 10"	-	-	-	-	-	-	-	-	d2	-	d2	-	-	#5(E)	4' 7"	-	4' 7"	-	3	3	-	-	-	-	-	-	-	-	-	-	-	-
PIER D7	-	-	-	d1	#4(E)	-	-	-	5' 10"	-	-	-	-	-	-	6	3	-	-	-	-	d2	#5(E)	-	-	4' 7"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PIER D8	-	-	-	d1	#4(E)	-	-	-	5' 10"	-	-	-	-	-	-	4	-	-	-	-	-	d2	#5(E)	-	-	4' 7"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PIER D9	-	-	-	d1	#4(E)	-	-	-	5' 10"	-	-	-	-	-	-	3	3	-	-	-	-	d2	#5(E)	-	-	4' 7"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PIER D10	-	-	-	d1	#4(E)	-	-	-	5' 10"	-	-	-	-	-	-	4	-	-	-	-	-	d2	#5(E)	-	-	4' 7"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

BOWMAN, BARRETT & ASSOCIATES INC.  
CONSULTING ENGINEERS  
Chicago, Illinois  
312.228.0100  
www.bbainc.com

Notes:  
1. The number of a(E) bars shown indicate the total number of bars required.  
2. Refer to table "BAR a(E) DETAILS" for specifics. 1x5 indicates 1 length of bar and 5 total bars is required (T or B).

**BAR a(E) DETAILS**

NUMBER OF a BARS SHOWN IN TABLE	9	18
INDICATES	1x5 (T)	2x5 (T)
	1x4 (B)	2x4 (B)

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I.

### SN 016-1114 SLAB - BAR DETAILS

LOCATION	BAR			SIZE	LENGTH			NUMBER/STAGES						BAR			SIZE	LENGTH			NUMBER/STAGES						BAR			SIZE	LENGTH			NUMBER/STAGES								
	STAGE I	STAGE IA	STAGE II		STAGE I	STAGE IA	STAGE II	STAGE I		STAGE IA		STAGE II		STAGE I	STAGE IA	STAGE II		STAGE I	STAGE IA	STAGE II	STAGE I		STAGE IA		STAGE II		STAGE I	STAGE IA	STAGE II		STAGE I	STAGE IA	STAGE II	STAGE I		STAGE IA		STAGE II				
								SIDE	ASIDE	B	SIDE	ASIDE	B	SIDE	ASIDE	B		STAGE I	STAGE IA	STAGE II	STAGE I	STAGE IA	STAGE II	STAGE I	STAGE IA	STAGE II	STAGE I	STAGE IA	STAGE II		STAGE I	STAGE IA	STAGE II	STAGE I	STAGE IA	STAGE II						
PIER 22	a123	a125	-	#5(E)	18' 10"	16' 7"	-	9	9	9	9	-	-	-	X1	X1	-	#5(E)	2' 3"	2' 3"	-	19	19	16	16	-	-	-	b1	b1	-	#6(E)	4' 0"	4' 0"	-	3	3	3	3	-	-	-
	a51	-	a68	#5(E)	29' 11"	-	29' 3"	9	9	-	-	9	9	-	X1	-	X1	#5(E)	2' 3"	-	2' 3"	31	31	-	-	30	30	-	b1	-	b1	#6(E)	4' 0"	-	4' 0"	3	3	-	-	3	3	

### SN 016-1114 PARAPET- BAR DETAILS

LOCATION	BAR			SIZE	LENGTH			NUMBER/STAGES						BAR			SIZE	LENGTH			NUMBER/STAGES																	
	STAGE I	STAGE IA	STAGE II		STAGE I	STAGE IA	STAGE II	STAGE I		STAGE IA		STAGE II		STAGE I	STAGE IA	STAGE II		STAGE I	STAGE IA	STAGE II	STAGE I		STAGE IA		STAGE II													
								SIDE	ASIDE	B	SIDE	ASIDE	B	SIDE	ASIDE	B		STAGE I	STAGE IA	STAGE II	STAGE I	STAGE IA	STAGE II	STAGE I	STAGE IA	STAGE II												
PIER 22	d1	d1	-	#4(E)	5' 10"	5' 6"	-	3	3	3	3	-	-	-	d2	d2	-	#5(E)	4' 7"	4' 7"	-	3	3	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-
	d1	-	d1	#4(E)	5' 10"	-	5' 10"	3	3	-	-	3	3	-	d2	-	d2	#5(E)	4' 7"	-	4' 7"	3	3	-	-	3	3	-	-	-	-	-	-	-	-	-	-	-
	-	-	d1	#4(E)	-	-	5' 10"	-	-	-	-	-	-	-	d2	-	d2	#5(E)	-	-	4' 7"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

### SN 016-1115 SLAB - BAR DETAILS

LOCATION	BAR			SIZE	LENGTH			NUMBER/STAGES						BAR			SIZE	LENGTH			NUMBER/STAGES						BAR			SIZE	LENGTH			NUMBER/STAGES							
	STAGE I	STAGE IA	STAGE IIA		STAGE I	STAGE IA	STAGE IIA	STAGE I		STAGE IA		STAGE IIA		STAGE I	STAGE IA	STAGE IIA		STAGE I	STAGE IA	STAGE IIA	STAGE I	STAGE IA	STAGE IIA	STAGE I	STAGE IA	STAGE IIA	STAGE I	STAGE IA	STAGE IIA		STAGE I	STAGE IA	STAGE IIA	STAGE I	STAGE IA	STAGE IIA					
								SIDE	ASIDE	B	SIDE	ASIDE	B	SIDE	ASIDE	B		STAGE I	STAGE IA	STAGE IIA	STAGE I	STAGE IA	STAGE IIA	STAGE I	STAGE IA	STAGE IIA	STAGE I	STAGE IA	STAGE IIA		STAGE I	STAGE IA	STAGE IIA	STAGE I	STAGE IA	STAGE IIA					
PIER 1	a51	-	a53	#5(E)	29' 11"	-	26' 8"	9	9	-	-	18	18	-	X1	-	X1	#5(E)	2' 3"	-	2' 3"	31	31	-	-	26	26	-	b1	-	b1	#6(E)	4' 0"	-	4' 0"	3	3	-	-	3	3
PIER 5	a51	a54	-	#5(E)	29' 11"	28' 11"	-	9	9	9	9	-	-	-	X1	X1	-	#5(E)	2' 3"	2' 3"	-	31	31	31	31	-	-	-	b1	b1	-	#6(E)	4' 0"	4' 0"	-	3	3	3	3	-	-
PIER 8	a51	a57	-	#5(E)	29' 11"	28' 9"	-	9	14	9	14	-	-	-	X1	X1	-	#5(E)	2' 3"	2' 3"	-	31	-	29	-	-	-	-	b1	b1	-	#6(E)	4' 0"	4' 0"	-	3	5	3	5	-	-
PIER 9	a51	a58	-	#5(E)	29' 11"	27' 4"	-	9	9	9	9	-	-	-	X1	X1	-	#5(E)	2' 3"	2' 3"	-	31	31	28	28	-	-	-	b1	b1	-	#6(E)	4' 0"	4' 0"	-	3	3	3	3	-	-
PIER 10	a51	a59	-	#5(E)	29' 11"	22' 10"	-	9	9	9	9	-	-	-	X1	X1	-	#5(E)	2' 3"	2' 3"	-	31	31	24	24	-	-	-	b1	b1	-	#6(E)	4' 0"	4' 0"	-	3	3	3	3	-	-
PIER 12	a51	a60	-	#5(E)	29' 11"	27' 3"	-	9	14	9	14	-	-	-	X1	X1	-	#5(E)	2' 3"	2' 3"	-	31	-	29	-	-	-	-	b1	b1	-	#6(E)	4' 0"	4' 0"	-	3	5	3	5	-	-
PIER 13	a51	a61	-	#5(E)	29' 11"	28' 1"	-	9	14	9	14	-	-	-	X4	X4	-	#5(E)	3' 9"	3' 9"	-	31	-	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
PIER 14	a51	a62	-	#5(E)	29' 11"	29' 1"	-	9	14	9	9	-	-	-	X4	X4	-	#5(E)	3' 9"	3' 9"	-	31	-	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
PIER 15	a51	a63	-	#5(E)	29' 11"	30' 4"	-	9	9	9	9	-	-	-	X1	X1	-	#5(E)	2' 3"	2' 3"	-	31	31	28	28	-	-	-	b1	b1	-	#6(E)	4' 0"	4' 0"	-	3	3	3	3	-	-
PIER 16	a51	a64	-	#5(E)	29' 11"	26' 6"	-	9	9	9	9	-	-	-	X1	X1	-	#5(E)	2' 3"	2' 3"	-	31	31	28	28	-	-	-	b1	b1	-	#6(E)	4' 0"	4' 0"	-	3	3	3	3	-	-
PIER 18	a51	a65	-	#5(E)	29' 11"	26' 7"	-	9	9	9	9	-	-	-	X1	X1	-	#5(E)	2' 3"	2' 3"	-	31	31	27	27	-	-	-	b1	b1	-	#6(E)	4' 0"	4' 0"	-	3	3	3	3	-	-
PIER 20	a51	a66	-	#5(E)	29' 11"	27' 6"	-	9	9	9	9	-	-	-	X1	X1	-	#5(E)	2' 3"	2' 3"	-	31	31	29	29	-	-	-	b1	b1	-	#6(E)	4' 0"	4' 0"	-	3	3	3	3	-	-
PIER 21	a51	a67	-	#5(E)	29' 11"	28' 6"	-	9	9	9	9	-	-	-	X1	X1	-	#5(E)	2' 3"	2' 3"	-	31	31	28	28	-	-	-	b1	b1	-	#6(E)	4' 0"	4' 0"	-	3	3	3	3	-	-

### SN 016-1115 PARAPET- BAR DETAILS

LOCATION	BAR			SIZE	LENGTH			NUMBER/STAGES						BAR			SIZE	LENGTH			NUMBER/STAGES																
	STAGE I	STAGE IA	STAGE IIA		STAGE I	STAGE IA	STAGE IIA	STAGE I		STAGE IA		STAGE IIA		STAGE I	STAGE IA	STAGE IIA		STAGE I	STAGE IA	STAGE IIA	STAGE I	STAGE IA	STAGE IIA	STAGE I	STAGE IA	STAGE IIA											
								SIDE	ASIDE	B	SIDE	ASIDE	B	SIDE	ASIDE	B		STAGE I	STAGE IA	STAGE IIA	STAGE I	STAGE IA	STAGE IIA	STAGE I	STAGE IA	STAGE IIA											
PIER 1	d1	-	d1	#4(E)	5' 10"	-	5' 10"	3	3	-	-	3	3	-	d2	-	d2	#5(E)	4' 7"	-	4' 7"	3	3	-	-	3	3	-	-	-	-	-	-	-	-	-	-
PIER 5	d1	d1	-	#4(E)	5' 10"	5' 10"	-	3	3	3	3	-	-	-	d2	d2	-	#5(E)	4' 7"	4' 7"	-	3	3	3	3	-	-	-	-	-	-	-	-	-	-	-	-
PIER 8	d1	d1	-	#4(E)	5' 10"	5' 10"	-	3	5	3	5	-	-	-	d2	d2	-	#5(E)	4' 7"	4' 7"	-	3	5	3	5	-	-	-	-	-	-	-	-	-	-	-	-
PIER 9	d1	d1	-	#4(E)	5' 10"	5' 10"	-	3	3	3	3	-	-	-	d2	d2	-	#5(E)	4' 7"	4' 7"	-	3	3	3	3	-	-	-	-	-	-	-	-	-	-	-	-
PIER 10	d1	d1	-	#4(E)	5' 10"	5' 10"	-	3	3	3	3	-	-	-	d2	d2	-	#5(E)	4' 7"	4' 7"	-	3	3	3	3	-	-	-	-	-	-	-	-	-	-	-	-
PIER 12	d1	d1	-	#4(E)	5' 10"	5' 10"	-	3	5	3	5	-	-	-	d2	d2	-	#5(E)	4' 7"	4' 7"	-	3	5	3	5	-	-	-	-	-	-	-	-	-	-	-	-
PIER 13	d1	d1	-	#4(E)	5' 10"	5' 10"	-	3	5	3	5	-	-	-	d2	d2	-	#5(E)	4' 7"	4' 7"	-	3	5	3	5	-	-	-	-	-	-	-	-	-	-	-	-
PIER 14	d1	d1	-	#4(E)	5' 10"	5' 10"	-	3	5	3	5	-	-	-	d2	d2	-	#5(E)	4' 7"	4' 7"	-	3	5	3	5	-	-	-	-	-	-	-	-	-	-	-	-
PIER 15	d1	d1	-	#4(E)	5' 10"	5' 10"	-	3	3	3	3	-	-	-	d2	d2	-	#5(E)	4' 7"	4' 7"	-	3	3	3	3	-	-	-	-	-	-	-	-	-	-	-	-
PIER 16	d1	d1	-	#4(E)	5' 10"	5' 10"	-	3	3	3	3	-	-	-	d2	d2	-	#5(E)	4' 7"	4' 7"	-	3	3	3	3	-	-	-	-	-	-	-	-	-	-	-	-
PIER 18	d1	d1	-	#4(E)	5' 10"	5' 10"	-	3	3	3	3	-	-	-	d2	d2	-	#5(E)	4' 7"	4' 7"	-	3	3	3	3	-	-	-	-	-	-	-	-	-	-	-	-
PIER 20	d1	d1	-	#4(E)	5' 10"	5' 10"	-	3	3	3	3	-	-	-	d2	d2	-	#5(E)	4' 7"	4' 7"	-	3	3	3	3	-	-	-	-	-	-	-	-	-	-	-	-
PIER 21	d1	d1	-	#4(E)	5' 10"	5' 10"	-	3	3	3	3	-	-	-	d2	d2	-	#5(E)	4' 7"	4' 7"	-	3	3	3	3	-	-	-	-	-	-	-	-	-	-	-	-

### SN 016-1116 SLAB - BAR DETAILS

LOCATION	BAR			SIZE	LENGTH			NUMBER/STAGES						BAR			SIZE	LENGTH			NUMBER/STAGES					
	STAGE I	STAGE IA	STAGE IIA																							

62580

**SN 016-1117 SLAB - BAR DETAILS**

LOCATION	BAR		SIZE	LENGTH		NUMBER/STAGES				BAR		SIZE	LENGTH		NUMBER/STAGES				BAR		SIZE	LENGTH		NUMBER/STAGES							
	STAGE I	STAGE II		STAGE I	STAGE II	STAGE I		STAGE II		STAGE I	STAGE II		STAGE I	STAGE II	STAGE I	STAGE II	STAGE I		STAGE II			STAGE I	STAGE II	STAGE I	STAGE II	STAGE I	STAGE II	STAGE I		STAGE II	
						SIDE	ASIDE B	SIDE	ASIDE B								SIDE	ASIDE B	SIDE	ASIDE B								SIDE	ASIDE B	SIDE	ASIDE B
S. ABUT.	d69	-	#5(E)	33' 8"	-	6	9	-	-	-	-	X1	-	#5(E)	2' 3"	-	32	-	-	-	-	b1	-	#6(E)	4' 0"	-	4	3	-	-	
PIER 1	a70	-	#5(E)	33' 5"	-	9	9	-	-	-	-	X1	-	#5(E)	2' 3"	-	33	33	-	-	-	-	b1	-	#6(E)	4' 0"	-	6	6	-	-
PIER 2	a71	-	#5(E)	33' 2"	-	9	14	-	-	-	-	X1	-	#5(E)	2' 3"	-	33	-	-	-	-	-	b1	-	#6(E)	4' 0"	-	6	6	-	-
PIER 3	a71	-	#5(E)	33' 2"	-	9	14	-	-	-	-	X1	-	#5(E)	2' 3"	-	33	-	-	-	-	-	b1	-	#6(E)	4' 0"	-	6	6	-	-
PIER 4	a72	-	#5(E)	33' 6"	-	9	14	-	-	-	-	X1	-	#5(E)	2' 3"	-	34	-	-	-	-	-	b1	-	#6(E)	4' 0"	-	6	6	-	-
PIER 5	a73	-	#5(E)	34' 0"	-	9	14	-	-	-	-	X1	-	#5(E)	2' 3"	-	34	-	-	-	-	-	b1	-	#6(E)	4' 0"	-	6	6	-	-
PIER 6	a74	-	#5(E)	34' 5"	-	9	14	-	-	-	-	X1	-	#5(E)	2' 3"	-	35	-	-	-	-	-	b1	-	#6(E)	4' 0"	-	6	10	-	-
PIER 7	a75	-	#5(E)	35' 0"	-	9	14	-	-	-	-	X1	-	#5(E)	2' 3"	-	35	-	-	-	-	-	b1	-	#6(E)	4' 0"	-	6	10	-	-
PIER 8	a76	-	#5(E)	35' 10"	-	9	9	-	-	-	-	X1	-	#5(E)	2' 3"	-	36	36	-	-	-	-	b1	-	#6(E)	4' 0"	-	6	6	-	-
PIER 11	a77	-	#5(E)	38' 10"	-	9	9	-	-	-	-	X1	-	#5(E)	2' 3"	-	39	39	-	-	-	-	b1	-	#6(E)	4' 0"	-	6	6	-	-
PIER 12	a78	-	#5(E)	39' 9"	-	9	9	-	-	-	-	X1	-	#5(E)	2' 3"	-	40	40	-	-	-	-	b1	-	#6(E)	4' 0"	-	6	6	-	-
PIER 13	a78	-	#5(E)	39' 9"	-	9	9	-	-	-	-	X1	-	#5(E)	2' 3"	-	40	40	-	-	-	-	b1	-	#6(E)	4' 0"	-	6	6	-	-
PIER 14	a80	-	#5(E)	38' 1"	-	9	9	-	-	-	-	X1	-	#5(E)	2' 3"	-	38	38	-	-	-	-	b1	-	#6(E)	4' 0"	-	6	6	-	-
PIER 16	a81	a82	#5(E)	32' 11"	42' 6"	9	9	9	9	9	9	X1	X1	#5(E)	2' 3"	2' 3"	33	33	40	40	40	40	b1	b1	#6(E)	4' 0"	4' 0"	3	3	3	3
PIER 18	a83	a84	#5(E)	31' 7"	36' 5"	9	9	9	9	9	9	X1	X1	#5(E)	2' 3"	2' 3"	30	30	39	39	39	39	b1	b1	#6(E)	4' 0"	4' 0"	3	3	3	3
PIER 19	a83	a84	#5(E)	31' 7"	36' 5"	9	14	9	14	9	14	X1	X1	#5(E)	2' 3"	2' 3"	30	40	40	40	40	40	b1	b1	#6(E)	4' 0"	4' 0"	3	5	3	5
PIER 20	a83	a84	#5(E)	31' 7"	36' 5"	9	14	9	14	9	14	X1	X1	#5(E)	2' 3"	2' 3"	30	40	40	40	40	40	b1	b1	#6(E)	4' 0"	4' 0"	3	5	3	5
PIER 21	a83	a84	#5(E)	31' 7"	36' 5"	9	14	9	14	9	14	X1	X1	#5(E)	2' 3"	2' 3"	30	40	40	40	40	40	b1	b1	#6(E)	4' 0"	4' 0"	3	5	3	5
PIER 22	a83	a84	#5(E)	31' 7"	36' 5"	9	14	9	14	9	14	X1	X1	#5(E)	2' 3"	2' 3"	30	40	40	40	40	40	b1	b1	#6(E)	4' 0"	4' 0"	3	5	3	5
PIER 23	a83	a84	#5(E)	31' 7"	36' 5"	9	14	9	14	9	14	X1	X1	#5(E)	2' 3"	2' 3"	30	40	40	40	40	40	b1	b1	#6(E)	4' 0"	4' 0"	3	5	3	5

**SN 016-1117 PARAPET - BAR DETAILS**

LOCATION	BAR		SIZE	LENGTH		NUMBER/STAGES				BAR		SIZE	LENGTH		NUMBER/STAGES							
	STAGE I	STAGE II		STAGE I	STAGE II	STAGE I		STAGE II		STAGE I	STAGE II		STAGE I	STAGE II	STAGE I	STAGE II	STAGE I		STAGE II			
						SIDE	ASIDE B	SIDE	ASIDE B								SIDE	ASIDE B	SIDE	ASIDE B		
S. ABUT.	d5	-	#4(E)	5' 2"	-	4	6	-	-	-	-	d2	-	#5(E)	4' 7"	-	4	6	-	-	-	-
PIER 1	d5	-	#4(E)	5' 2"	-	6	6	-	-	-	-	d2	-	#5(E)	4' 7"	-	6	6	-	-	-	-
PIER 2	d5	-	#4(E)	5' 2"	-	6	10	-	-	-	-	d2	-	#5(E)	4' 7"	-	6	10	-	-	-	-
PIER 3	d5	-	#4(E)	5' 2"	-	6	10	-	-	-	-	d2	-	#5(E)	4' 7"	-	6	10	-	-	-	-
PIER 4	d5	-	#4(E)	5' 2"	-	6	10	-	-	-	-	d2	-	#5(E)	4' 7"	-	6	10	-	-	-	-
PIER 5	d5	-	#4(E)	5' 2"	-	6	10	-	-	-	-	d2	-	#5(E)	4' 7"	-	6	10	-	-	-	-
PIER 6	d5	-	#4(E)	5' 2"	-	6	10	-	-	-	-	d2	-	#5(E)	4' 7"	-	6	10	-	-	-	-
PIER 7	d5	-	#4(E)	5' 2"	-	6	10	-	-	-	-	d2	-	#5(E)	4' 7"	-	6	10	-	-	-	-
PIER 8	d5	-	#4(E)	5' 2"	-	6	6	-	-	-	-	d2	-	#5(E)	4' 7"	-	6	6	-	-	-	-
PIER 11	d5	-	#4(E)	5' 2"	-	6	6	-	-	-	-	d2	-	#5(E)	4' 7"	-	6	6	-	-	-	-
PIER 12	d5	-	#4(E)	5' 2"	-	6	6	-	-	-	-	d2	-	#5(E)	4' 7"	-	6	6	-	-	-	-
PIER 13	d5	-	#4(E)	5' 2"	-	6	6	-	-	-	-	d2	-	#5(E)	4' 7"	-	6	6	-	-	-	-
PIER 14	d1	-	#4(E)	5' 10"	-	2	-	-	-	-	-	d2	-	#5(E)	4' 7"	-	6	6	-	-	-	-
PIER 16	d6	d6	#4(E)	4' 10"	4' 10"	3	3	3	3	3	3	d2	d2	#5(E)	4' 7"	4' 7"	3	3	3	3	3	3
PIER 18	d6	d6	#4(E)	4' 10"	4' 10"	3	3	3	3	3	3	d2	d2	#5(E)	4' 7"	4' 7"	3	3	3	3	3	3
PIER 19	d6	d6	#4(E)	4' 10"	4' 10"	3	5	3	5	3	5	d2	d2	#5(E)	4' 7"	4' 7"	3	5	3	5	3	5
PIER 20	d6	d6	#4(E)	4' 10"	4' 10"	3	5	3	5	3	5	d2	d2	#5(E)	4' 7"	4' 7"	3	5	3	5	3	5
PIER 21	d6	d6	#4(E)	4' 10"	4' 10"	3	5	3	5	3	5	d2	d2	#5(E)	4' 7"	4' 7"	3	5	3	5	3	5
PIER 22	d6	d6	#4(E)	4' 10"	4' 10"	3	5	3	5	3	5	d2	d2	#5(E)	4' 7"	4' 7"	3	5	3	5	3	5
PIER 23	d6	d6	#4(E)	4' 10"	4' 10"	3	5	3	5	3	5	d2	d2	#5(E)	4' 7"	4' 7"	3	5	3	5	3	5

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Notes:  
1. The number of d(E) bars shown indicate the total number of bars required.  
2. Refer to table "BAR d(E) DETAILS" for specifics. 1x5 indicates 1 length of bar and 5 total bars is required (T or B).

**BAR d(E) DETAILS**

NUMBER OF d BARS SHOWN IN TABLE	9	14
INDICATES	1x5 (T) 1x4 (B)	1x8 (T) 1x6 (B)

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
BAR DETAILS  
SN 016-1117

SCALE: N/A  
DATE: 8/12/2005  
DRAWN BY: CS  
CHECKED BY: BLU

165446 AM 8/11/2005



62580

**SN 016-1140 SLAB - BAR DETAILS**

LOCATION	BAR	SIZE	LENGTH		NUMBER/STAGES		BAR	SIZE	LENGTH		NUMBER/STAGES		BAR	SIZE	LENGTH		NUMBER/STAGES	
			STAGE IIA	STAGE IIA	STAGE IIA	STAGE IIA			STAGE IIA	STAGE IIA	STAGE IIA	STAGE IIA			STAGE IIA	STAGE IIA		
PIER B4	a111	#5(E)	28' 3"	9	-	-	X1	#5(E)	2' 3"	28	28	-	-	b1	#6(E)	4' 0"	5	10
	a112	#5(E)	27' 11"	-	9	-	-	-	-	-	-	-	-	-	-	-	-	-
PIER B5	a103	#5(E)	28' 0"	9	9	-	X1	#5(E)	2' 3"	32	32	-	-	b1	#6(E)	4' 0"	6	6
PIER B11	a104	#5(E)	39' 4"	9	9	-	X1	#5(E)	2' 8"	40	40	-	-	b1	#6(E)	4' 0"	6	6
PIER B15	a105	#5(E)	38' 8"	9	9	-	X2	#5(E)	2' 8"	40	40	-	-	b1	#6(E)	4' 0"	6	6
PIER B16	a106	#5(E)	27' 10"	9	9	-	X1	#5(E)	2' 3"	29	29	-	-	b1	#6(E)	4' 0"	6	6
B18 ABUT	a106	#5(E)	27' 10"	9	6	-	X1	#5(E)	2' 3"	29	-	-	-	b1	#6(E)	4' 0"	4	10
	-	-	-	-	-	-	u2	#5(E)	2' 2"	-	29	-	-	-	-	-	-	-

**SN 016-1140 PARAPET- BAR DETAILS**

LOCATION	BAR	SIZE	LENGTH		NUMBER/STAGES		BAR	SIZE	LENGTH		NUMBER/STAGES	
			STAGE IIA	STAGE IIA	STAGE IIA	STAGE IIA			STAGE IIA	STAGE IIA	STAGE IIA	STAGE IIA
PIER B4	d1	#4(E)	5' 10"	3	6	-	d2	#5(E)	4' 7"	2	-	-
	d1	#4(E)	5' 10"	2	-	-	-	-	-	-	-	-
	d9	#5(E)	5' 6"	4	-	-	-	-	-	-	-	-
PIER B5	d1	#5(E)	5' 10"	6	6	-	d2	#5(E)	4' 7"	6	6	-
PIER B11	d1	#5(E)	5' 10"	6	6	-	d2	#5(E)	4' 7"	6	6	-
PIER B15	d1	#5(E)	5' 10"	6	6	-	d2	#5(E)	4' 7"	6	6	-
PIER B16	d1	#5(E)	5' 10"	6	6	-	d2	#5(E)	4' 7"	6	6	-
B18 ABUT	d1	#5(E)	5' 10"	4	10	-	d2	#5(E)	4' 7"	4	10	-

**SN 016-1047 SLAB - BAR DETAILS**

LOCATION	BAR	SIZE	LENGTH		NUMBER/STAGES				BAR	SIZE	LENGTH		NUMBER/STAGES														
			STAGE I	STAGE IA	STAGE I	STAGE IA	STAGE I	STAGE IA			STAGE I	STAGE IA	STAGE I	STAGE IA	STAGE I	STAGE IA											
PIER E30	a106	#5(E)	27' 10"	-	9	9	-	-	X1	#5(E)	2' 3"	-	29	29	-	-	b1	#6(E)	4' 0"	-	6	6	-	-			
PIER E28	a106	#5(E)	27' 10"	-	9	9	-	-	X1	#5(E)	2' 3"	-	29	29	-	-	b1	#6(E)	4' 0"	-	6	6	-	-			
PIER E26	a106	#5(E)	27' 10"	-	9	9	-	-	X1	#5(E)	2' 3"	-	29	29	-	-	b1	#6(E)	4' 0"	-	6	6	-	-			
PIER E24	a107	#5(E)	29' 11"	-	9	9	-	-	X1	#5(E)	2' 3"	-	32	32	-	-	b1	#6(E)	4' 0"	-	6	6	-	-			
PIER E23	a108	#5(E)	26' 11"	-	9	9	-	-	X1	#5(E)	2' 3"	-	27	27	-	-	b1	#6(E)	4' 0"	-	6	6	-	-			
PIER E22	a35	a122	#5(E)	20' 5"	29' 5"	9	9	9	9	X1	X1	#5(E)	2' 3"	2' 3"	21	21	29	29	b1	b1	#6(E)	4' 0"	4' 0"	3	3	3	3
PIER E1	a35	a109	#5(E)	20' 5"	25' 9"	9	9	9	9	X1	X1	#5(E)	2' 3"	2' 3"	21	21	25	25	b1	b1	#6(E)	4' 0"	4' 0"	3	3	3	3
PIER E2	a35	a110	#5(E)	20' 5"	22' 4"	9	9	9	9	X1	X1	#5(E)	2' 3"	2' 3"	21	21	31	31	b1	b1	#6(E)	4' 0"	4' 0"	3	3	3	3

**SN 016-1047 PARAPET- BAR DETAILS**

LOCATION	BAR	SIZE	LENGTH		NUMBER/STAGES				BAR	SIZE	LENGTH		NUMBER/STAGES					
			STAGE I	STAGE IA	STAGE I	STAGE IA	STAGE I	STAGE IA			STAGE I	STAGE IA	STAGE I	STAGE IA	STAGE I	STAGE IA		
PIER E30	d1	#4(E)	5' 10"	-	6	6	-	-	d2	#5(E)	4' 7"	-	6	6	-	-	-	-
PIER E28	d1	#4(E)	5' 10"	-	6	6	-	-	d2	#5(E)	4' 7"	-	6	6	-	-	-	-
PIER E26	d1	#4(E)	5' 10"	-	6	6	-	-	d2	#5(E)	4' 7"	-	6	6	-	-	-	-
PIER E24	d1	#4(E)	5' 10"	-	6	6	-	-	d2	#5(E)	4' 7"	-	6	6	-	-	-	-
PIER E23	d1	#4(E)	5' 10"	-	6	6	-	-	d2	#5(E)	4' 7"	-	6	6	-	-	-	-
	dB	#4(E)	3' 0"	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-
PIER E22	d1	d1	#4(E)	5' 10"	5' 10"	3	3	3	3	d2	d2	#5(E)	4' 7"	4' 7"	3	3	3	3
PIER E1	d1	d1	#4(E)	5' 10"	5' 10"	3	3	3	3	d2	d2	#5(E)	4' 7"	4' 7"	3	3	3	3
PIER E2	d1	d1	#4(E)	5' 10"	5' 10"	3	3	3	3	d2	d2	#5(E)	4' 7"	4' 7"	3	3	3	3

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Notes:  
1. The number of a(E) bars shown indicate the total number of bars required.  
2. Refer to table "BAR a(E) DETAILS" for specifics. 1x5 indicates 1 length of bar and 5 total bars is required (T or B).

**BAR a(E) DETAILS**

NUMBER OF a BARS SHOWN IN TABLE	9
INDICATES	1x5 (T) 1x4 (B)

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)  
NB DAN RYAN ELEVATED BRIDGE  
REPAIR FROM 15TH TO 28TH STREETS  
BAR DETAILS  
SN 016-1140 & 016-1047  
SCALE: N/A  
DATE: 8/12/2005  
DRAWN BY: CS  
CHECKED BY: BLU

11/5/07 AM

**STRUCTURE NUMBER 016-0137  
BAR SCHEDULE & BILL OF MATERIAL**

BAR NO.	SIZE	LENGTH	SHAPE
a1	86 #5(E)	30' 11"	—
a2	36 #5(E)	28' 0"	—
a3	36 #5(E)	24' 3"	—
a4	18 #6(E)	20' 9"	—
a5	18 #6(E)	19' 5"	—
a6	28 #5(E)	23' 3"	—
a9	36 #5(E)	25' 1"	—
a10	18 #5(E)	26' 3"	—
a113	16 #7(E)	30' 11"	—
a114	14 #6(E)	30' 10"	—
a115	6 #5(E)	30' 10"	—
a116	32 #7(E)	24' 3"	—
a117	24 #6(E)	24' 3"	—
a118	12 #5(E)	23' 8"	—
a119	16 #7(E)	25' 0"	—
a120	12 #6(E)	25' 0"	—
a121	20 #5(E)	25' 0"	—
b1	102 #6(E)	4' 0"	—
d1	130 #5(E)	5' 10"	—
d2	130 #6(E)	4' 7"	—
u	160 #6(E)	1' 11"	—
X1	608 #5(E)	2' 3"	—
X2	68 #4(E)	2' 8"	—
X4	101 #5(E)	3' 9"	—
X6	206 #6(E)	6' 8"	—
Concrete Removal (Cu. Yds.) 109.5			
Concrete			
Superstructure (Cu. Yds.) 120.5			
Reinforcement Bars, Epoxy Coated (Pound) 21,120			

**STRUCTURE NUMBER 016-1110  
BAR SCHEDULE & BILL OF MATERIAL**

BAR NO.	SIZE	LENGTH	SHAPE
a12	18 #5(E)	23' 6"	—
a13	56 #5(E)	23' 5"	—
b1	46 #6(E)	4' 0"	—
d1	52 #4(E)	5' 10"	—
d2	52 #5(E)	4' 7"	—
X1	52 #5(E)	2' 3"	—
X6	104 #6(E)	6' 8"	—
Concrete Removal (Cu. Yds.) 17.2			
Concrete			
Superstructure (Cu. Yds.) 19.3			
Reinforcement Bars, Epoxy Coated (Pound) 3,700			

**STRUCTURE NUMBER 016-1111  
BAR SCHEDULE & BILL OF MATERIAL**

BAR NO.	SIZE	LENGTH	SHAPE
a13	51 #5(E)	23' 6"	—
b1	38 #6(E)	4' 0"	—
d1	38 #4(E)	5' 10"	—
d2	38 #5(E)	4' 7"	—
u	26 #5(E)	1' 11"	—
X1	156 #5(E)	2' 3"	—
Concrete Removal (Cu. Yds.) 18.8			
Concrete			
Superstructure (Cu. Yds.) 21.2			
Reinforcement Bars, Epoxy Coated (Pound) 2,230			

**STRUCTURE NUMBER 016-1112  
BAR SCHEDULE & BILL OF MATERIAL**

BAR NO.	SIZE	LENGTH	SHAPE
a1	54 #5(E)	30' 11"	—
a11	23 #6(E)	18' 10"	—
a14	18 #5(E)	26' 8"	—
a15	18 #5(E)	26' 11"	—
a16	18 #5(E)	26' 9"	—
a17	18 #5(E)	26' 6"	—
a18	18 #5(E)	20' 9"	—
a19	9 #5(E)	25' 1"	—
a20	18 #5(E)	18' 7"	—
a21	9 #5(E)	23' 5"	—
a22	18 #5(E)	39' 6"	—
a23	18 #5(E)	20' 3"	—
a24	10 #6(E)	41' 6"	—
a25	8 #6(E)	40' 1"	—
a26	36 #6(E)	26' 3"	—
a27	10 #6(E)	28' 9"	—
a28	8 #6(E)	20' 10"	—
a29	10 #6(E)	40' 11"	—
a30	8 #6(E)	40' 5"	—
a31	20 #6(E)	33' 3"	—
a32	16 #6(E)	32' 9"	—
a33	36 #5(E)	25' 11"	—
a34	72 #5(E)	24' 11"	—
a35	164 #6(E)	20' 5"	—
a36	109 #6(E)	18' 7"	—
a37	56 #6(E)	18' 8"	—
a51	108 #5(E)	29' 11"	—
b1	249 #6(E)	4' 0"	—
d1	158 #4(E)	5' 10"	—
d2	232 #5(E)	4' 7"	—
d3	18 #4(E)	6' 10"	—
d4	104 #4(E)	6' 4"	—
X1	1881 #6(E)	2' 3"	—
X3	446 #6(E)	3' 0"	—
X5	117 #6(E)	3' 9"	—
Concrete Removal (Cu. Yds.) 199.3			
Concrete			
Superstructure (Cu. Yds.) 224.5			
Reinforcement Bars, Epoxy Coated (Pound) 41,430			

**STRUCTURE NUMBER 016-1113  
BAR SCHEDULE & BILL OF MATERIAL**

BAR NO.	SIZE	LENGTH	SHAPE
a1	18 #5(E)	30' 11"	—
a35	54 #5(E)	20' 5"	—
a36	18 #5(E)	16' 1"	—
a38	18 #5(E)	34' 2"	—
a39	36 #5(E)	24' 6"	—
a40	36 #5(E)	29' 7"	—
a41	36 #5(E)	34' 0"	—
a42	45 #5(E)	31' 7"	—
a43	18 #5(E)	26' 8"	—
a44	18 #5(E)	24' 9"	—
a45	18 #5(E)	35' 1"	—
a47	18 #5(E)	21' 10"	—
a48	18 #5(E)	32' 8"	—
a49	18 #5(E)	22' 9"	—
a51	126 #5(E)	29' 11"	—
a52	18 #5(E)	48' 9"	—
b1	152 #6(E)	4' 0"	—
d1	168 #4(E)	5' 10"	—
d2	163 #5(E)	4' 7"	—
X1	1620 #5(E)	2' 3"	—
Concrete Removal (Cu. Yds.) 116.3			
Concrete			
Superstructure (Cu. Yds.) 133.3			
Reinforcement Bars, Epoxy Coated (Pound) 21,540			

**STRUCTURE NUMBER 016-1114  
BAR SCHEDULE & BILL OF MATERIAL**

BAR NO.	SIZE	LENGTH	SHAPE
a51	18 #5(E)	29' 11"	—
a68	18 #5(E)	29' 3"	—
a123	18 #5(E)	18' 10"	—
a125	18 #5(E)	16' 7"	—
b1	24 #6(E)	4' 0"	—
d1	27 #4(E)	5' 10"	—
d2	27 #5(E)	4' 7"	—
X1	192 #5(E)	2' 3"	—
Concrete Removal (Cu. Yds.) 12.7			
Concrete			
Superstructure (Cu. Yds.) 14.5			
Reinforcement Bars, Epoxy Coated (Pound) 2,610			

**STRUCTURE NUMBER 016-1115  
BAR SCHEDULE & BILL OF MATERIAL**

BAR NO.	SIZE	LENGTH	SHAPE
a51	254 #5(E)	29' 11"	—
a53	36 #5(E)	26' 8"	—
a54	18 #5(E)	28' 11"	—
a57	23 #5(E)	28' 9"	—
a58	18 #5(E)	27' 4"	—
a59	18 #5(E)	22' 10"	—
a60	23 #5(E)	27' 3"	—
a61	23 #5(E)	28' 1"	—
a62	18 #5(E)	29' 1"	—
a63	18 #5(E)	30' 4"	—
a64	18 #5(E)	26' 6"	—
a65	18 #5(E)	26' 7"	—
a66	18 #5(E)	27' 6"	—
a67	18 #5(E)	28' 7"	—
b1	172 #6(E)	4' 0"	—
d1	172 #4(E)	5' 10"	—
d2	172 #5(E)	4' 7"	—
X1	1328 #5(E)	2' 3"	—
X4	212 #5(E)	3' 9"	—
Concrete Removal (Cu. Yds.) 163.2			
Concrete			
Superstructure (Cu. Yds.) 182.6			
Reinforcement Bars, Epoxy Coated (Pound) 22,070			

**STRUCTURE NUMBER 016-1116  
BAR SCHEDULE & BILL OF MATERIAL**

BAR NO.	SIZE	LENGTH	SHAPE
a51	23 #5(E)	29' 11"	—
a67	46 #5(E)	27' 6"	—
b1	16 #6(E)	4' 0"	—
d1	16 #4(E)	5' 10"	—
d2	16 #5(E)	4' 7"	—
X1	84 #5(E)	2' 3"	—
X4	84 #5(E)	3' 9"	—
Concrete Removal (Cu. Yds.) 16.4			
Concrete			
Superstructure (Cu. Yds.) 19.0			
Reinforcement Bars, Epoxy Coated (Pound) 2,800			

**STRUCTURE NUMBER 016-1117  
BAR SCHEDULE & BILL OF MATERIAL**

BAR NO.	SIZE	LENGTH	SHAPE
a69	15 #5(E)	33' 8"	—
a70	18 #5(E)	33' 5"	—
a71	46 #5(E)	33' 2"	—
a72	23 #5(E)	33' 6"	—
a73	23 #5(E)	34' 0"	—
a110	23 #5(E)	34' 5"	—
a75	23 #5(E)	35' 0"	—
a76	18 #5(E)	35' 10"	—
a77	18 #5(E)	38' 10"	—
a78	36 #5(E)	39' 9"	—
a80	18 #5(E)	38' 1"	—
a81	18 #5(E)	32' 11"	—
a82	18 #5(E)	42' 6"	—
a83	133 #5(E)	31' 7"	—
a84	133 #5(E)	36' 5"	—
b1	263 #6(E)	4' 0"	—
d1	2 #4(E)	5' 10"	—
d2	284 #5(E)	4' 7"	—
d5	178 #4(E)	5' 2"	—
d6	104 #4(E)	4' 10"	—
u	32 #5(E)	1' 11"	—
X1	1322 #5(E)	2' 3"	—
X4	554 #5(E)	3' 9"	—
Concrete Removal (Cu. Yds.) 194.2			
Concrete			
Superstructure (Cu. Yds.) 214.0			
Reinforcement Bars, Epoxy Coated (Pound) 29,720			

**STRUCTURE NUMBER 016-1118  
BAR SCHEDULE & BILL OF MATERIAL**

BAR NO.	SIZE	LENGTH	SHAPE
a87	40 #5(E)	28' 7"	—
a88	36 #5(E)	27' 5"	—
a89	46 #5(E)	24' 1"	—
a90	46 #5(E)	22' 8"	—
a91	46 #5(E)	23' 4"	—
a92	36 #5(E)	24' 0"	—
a93	36 #5(E)	23' 2"	—
a94	36 #5(E)	26' 1"	—
a95	36 #5(E)	24' 1"	—
b1	115 #6(E)	4' 0"	—
d1	2 #4(E)	5' 10"	—
d2	124 #5(E)	4' 7"	—
d3	6 #4(E)	6' 10"	—
d4	28 #4(E)	6' 4"	—
d6	14 #4(E)	4' 10"	—
d7	42 #4(E)	8' 7"	—
d8	24 #4(E)	5' 8"	—
u	57 #5(E)	1' 11"	—
X1	632 #5(E)	2' 3"	—
X4	195 #5(E)	3' 9"	—
Concrete Removal (Cu. Yds.) 84.8			
Concrete			
Superstructure (Cu. Yds.) 96.0			
Reinforcement Bars, Epoxy Coated (Pound) 13,420			

**STRUCTURE NUMBER 016-1047  
BAR SCHEDULE & BILL OF MATERIAL**

BAR NO.	SIZE	LENGTH	SHAPE
a35	54 #5(E)	20' 5"	—
a106	54 #5(E)	27' 10"	—
a107	18 #5(E)	29' 11"	—
a108	18 #5(E)	26' 11"	—
a109	18 #5(E)	25' 9"	—
a110	18 #5(E)	22' 4"	—
a122	18 #5(E)	29' 5"	—
b1	96 #6(E)	4' 0"	—
d1	96 #4(E)	5' 10"	—
d2	96 #5(E)	4' 7"	—
d8	6 #4(E)	3' 0"	—
X1	588 #5(E)	2' 3"	—
Concrete Removal (Cu. Yds.) 39.5			
Concrete			
Superstructure (Cu. Yds.) 45.0			
Reinforcement Bars, Epoxy Coated (Pound) 8,050			

**STRUCTURE NUMBER 016-1059  
BAR SCHEDULE & BILL OF MATERIAL**

BAR NO.	SIZE	LENGTH	SHAPE
a96	18 #5(E)	28' 1"	—
a97	18 #5(E)	28' 0"	—
a98	18 #5(E)	27' 10"	—
a99	18 #5(E)	31' 7"	—
a100	18 #5(E)	29' 10"	—
a101	18 #5(E)	36' 1/2"	—
b1	72 #6(E)	4' 0"	—
d1	72 #4(E)	5' 10"	—
d2	72 #5(E)	4' 7"	—
X1	306 #5(E)	2' 3"	—
X2	80 #5(E)	2' 8"	—
Concrete Removal (Cu. Yds.) 31.0			
Concrete			
Superstructure (Cu. Yds.) 34.8			
Reinforcement Bars, Epoxy Coated (Pound) 5,410			

**STRUCTURE NUMBER 016-1140  
BAR SCHEDULE & BILL OF MATERIAL**

BAR NO.	SIZE	LENGTH	SHAPE
a103	18 #5(E)	28' 0"	—
a104	18 #5(E)	39' 4"	—
a105	18 #5(E)	38' 8"	—
a106	33 #5(E)	27' 10"	—
a111	9 #5(E)	28' 3"	—
a112	9 #5(E)	27' 11"	—
b1	77 #6(E)	4' 0"	—
d1	73 #4(E)	5' 10"	—
d2	64 #5(E)	4' 7"	—
d9	4 #5(E)	5' 6"	—
u2	29 #5(E)	2' 2"	—
X1	287 #5(E)	2' 3"	—
X2	80 #5(E)	2' 8"	—
Concrete Removal (Cu. Yds.) 32.3			
Concrete			
Superstructure (Cu. Yds.) 39.0			
Reinforcement Bars, Epoxy Coated (Pound) 5,520			

**BENT BAR DETAILS**

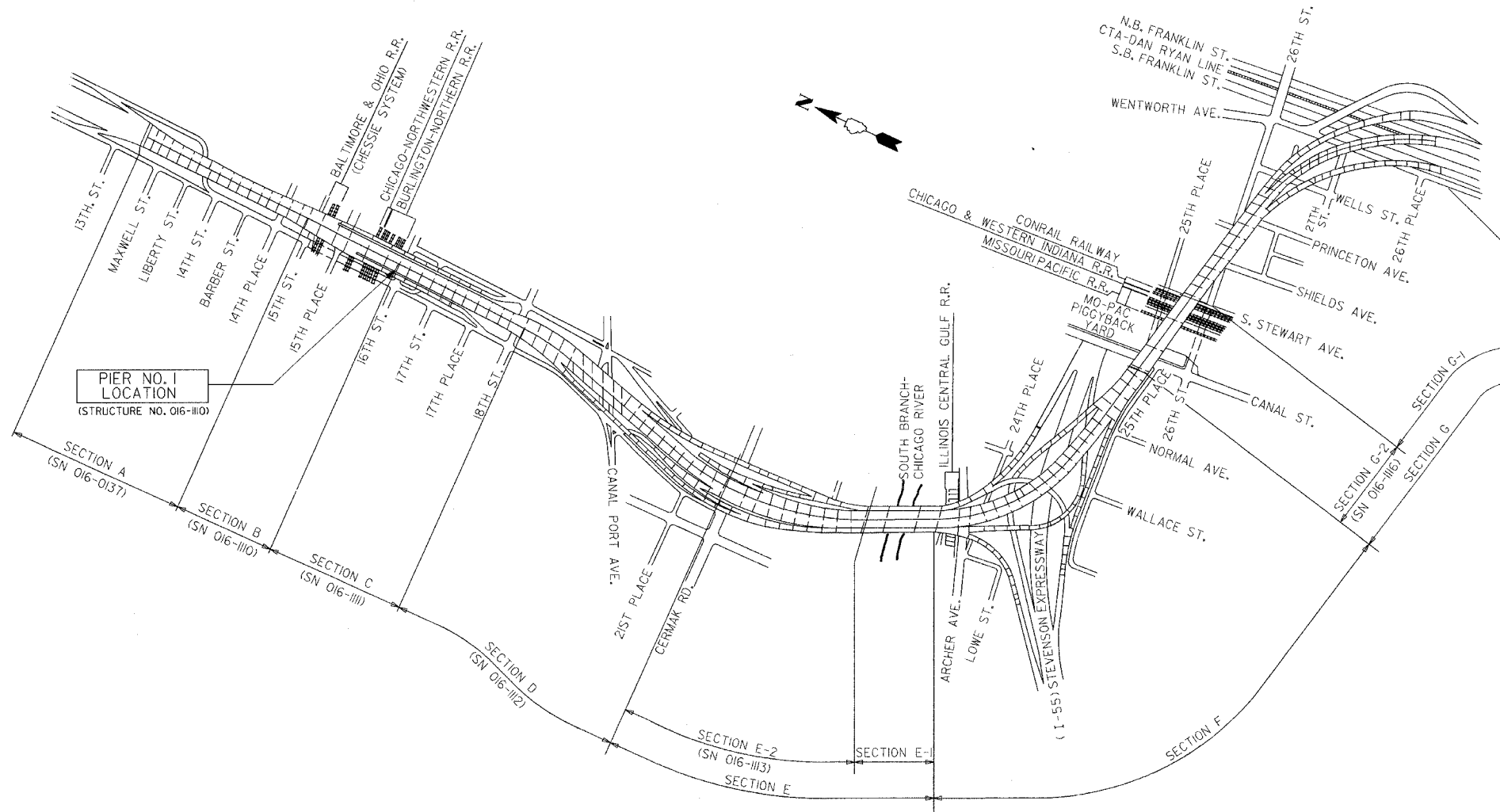
MARK	a	b	c	d
X1(E)	1' 8"	0' 7"		
X2(E)	1' 8"	1' 0"		
X3(E)	2' 5"	0' 7"		
X4(E)	3' 11"	0' 7"		
X5(E)	3' 2"	0' 7"		
X6(E)	3' 6"	0' 7"	2' 0"	0' 7"
d1(E)	3' 10"	2' 0"		
d3(E)	3' 10"	3' 0"		
d4(E)	3' 10"	2' 6"		
d5(E)	3' 10"	1' 4"		
d6(E)	3' 10"	1' 2"		
d7(E)	3' 10"	4' 9"		
d8(E)	3' 10"	1' 10"		
d9(E)	3' 10"	1' 11"		
d2(E)	2' 6"	1' 2"	0' 8"	0' 3"
u(E)	0' 7"	0' 9"	0' 7"	
u2(E)	0' 7"	1' 0"	0' 7"	

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 90/94	*	COOK	419	179
FEDERAL DIST. NO.	ILLINOIS	PROJECT		

Sheet No 1  
of 8 Sheets

\* 2005-008F  
CONTRACT #62580



**KEY PLAN**  
DAN RYAN EXPRESSWAY (I-90/I-94) VIADUCT  
COOK COUNTY, ILLINOIS

**GENERAL NOTES**

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

The slab is to be removed in stages. Before starting the concrete removal, the Contractor is required to submit to the Engineer for approval his staging plans and method of removal.

Prior to pouring the new concrete deck, all loose rust, loose mill scale, and other loose potentially detrimental foreign material shall be removed from the surfaces of the beams or girders in contact with concrete. The cost of this work will be included in the pay item covering removal of the existing concrete. All heavy rust and other tightly adhered potentially detrimental foreign matter shall also be removed from the surfaces of the beams or girders in contact with concrete. Tightly adhered paint may remain unless otherwise noted. This removal shall be accomplished by methods that will not damage the steel. The cost of this work will be paid for according to Article 109.04 of the Standard Specifications.

Field welding of construction accessories will not be permitted to beams or girders.

Tapered shims shall be added under the stools as required by the Engineer to make a smooth finger joint.

The finger plates shall be flame cut as provided in Article 505.04(k) of the Standard Specifications

Finger plate expansion joints shall be assembled in the proper position with the ends in place and shall be left assembled for shop inspection.

Joint openings shall be adjusted according to Article 503.10(c) of the Standard Specifications when the deck is poured at an ambient temperature other than 50°F

Fasteners shall be high strength bolts. Bolts 3/4"  $\phi$ , open holes 13/16"  $\phi$  unless otherwise noted.

Reinforcement bars shall conform to the requirements of AASHTO M-31 or M-322 Grade 60.

Existing structural steel that will be in contact with new structural steel shall be cleaned and painted prior to erection as required by the Special Provision "Cleaning and Painting Contact Surface Areas of Existing Steel Structures".

The existing structural steel coating contains lead. The Contractor should take appropriate precautions to deal with the presence of lead on this project.

All construction joints shall be bonded.

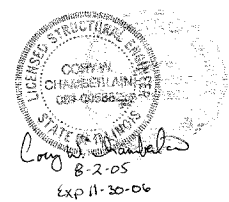
Traffic to be maintained during construction, see Roadway Plans for Stage Construction Details.

Existing design and fabrication plans are available upon request.

All structural steel shall be AASHTO M270 Grade 50 unless noted otherwise. Calculated weight = 26,210 lbs.

**DESIGN STRESSES**  
f'c = 3500 psi  
fy = 60,000 psi (Reinf)  
fy = 50,000 psi (M270 Grade 50)

BILL OF MATERIAL		
ITEM	UNIT	TOTAL
Concrete Removal	Cu Yd	17.3
Concrete Superstructure	Cu Yd	20.1
Erecting Structural Steel	L.S.	0.10
Reinforcement Bars, Epoxy Coated	Pound	2450
Mechanical Splice	Each	132
Bar Splicer	Each	24
Erecting Fabric Reinforced Elastomeric Trough	Foot	65



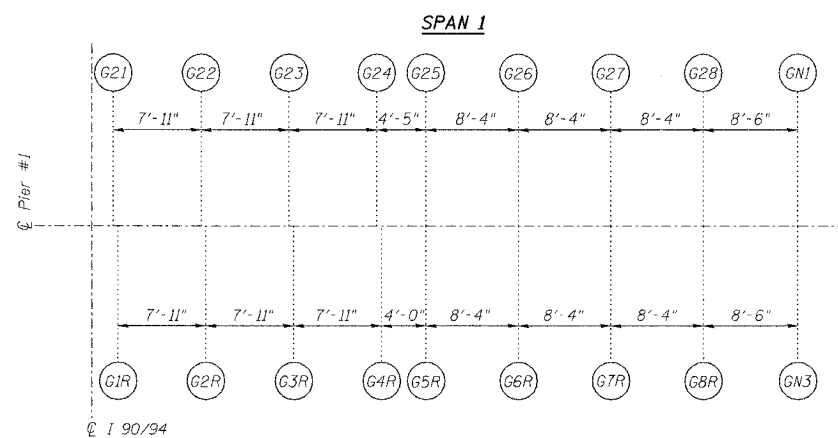
PIER NO. 1 KEY PLAN		
REVISIONS	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS	DRAWN BY DATE RLK 5/03
1	FAI RTE 90/94	CHECKED BY DATE SDS 5/03
2	DAN RYAN EXPRESSWAY	BOOK NUMBER
3	SN 016-1110 (NORTHBOUND)	PROJECT NO.
4	SEC 2005-008F	COOK COUNTY
5		4222-3
6		SHEET NO.
7		
8		
9		
10		

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 90/94	.	COOK	419	180
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

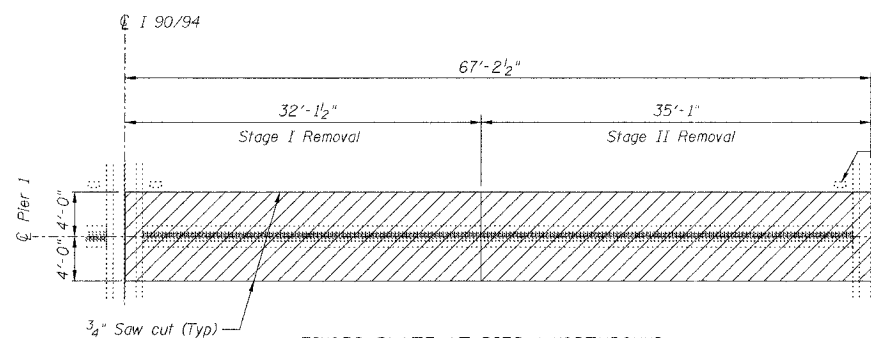
Sheet No 2  
of 8 Sheets

• 2005-008F  
CONTRACT #62580



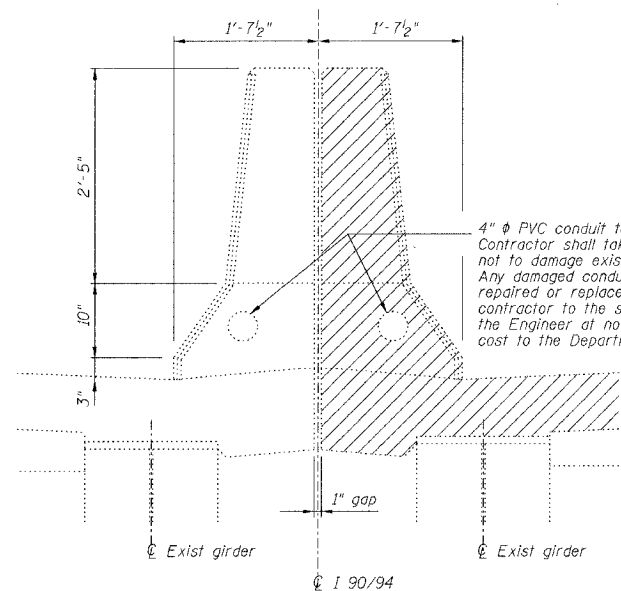
Note:  
All dimensions on girder layout  
are given along centerline of bearing.

SPAN II  
(SN 016-1111)  
GIRDER LAYOUT AT PIER 1

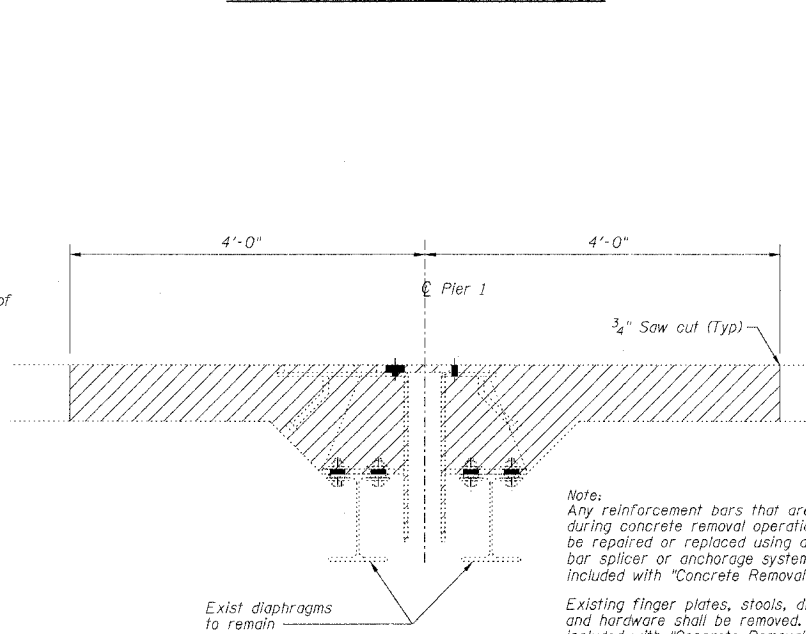


Existing drainage scupper (Typ)  
Scupper and scupper reinforcement  
bars to remain in place

FINGER PLATE AT PIER 1 NORTHBOUND  
JOINT REMOVAL PLAN AT PIER 1

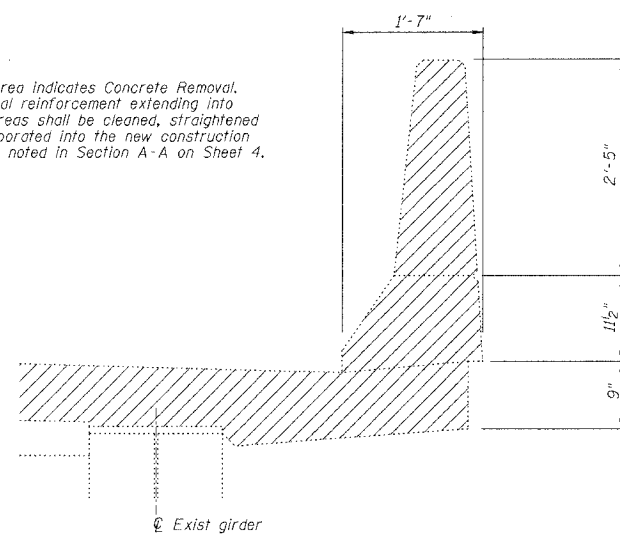


DETAIL AT EXISTING MEDIAN PARAPET



SECTION AT EXISTING FINGER PLATE AT PIER 1

Note:  
Hatched area indicates Concrete Removal.  
Longitudinal reinforcement extending into  
removal areas shall be cleaned, straightened  
and incorporated into the new construction  
except as noted in Section A-A on Sheet 4.



DETAIL AT EXISTING OUTSIDE PARAPET

PIER NO. 1

FINGER PLATE EXPANSION JOINT REMOVAL DETAILS

REVISIONS		STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS		DRAWN BY FLK	DATE 5/03
1	DATE	INITIALS		CHECKED BY SDS	DATE 5/03
2				BOOK NUMBER	
3				PROJECT NO.	4222-3
4				SHEET NO.	
5					
6					
7					
8					
9					
10					

CHASTAIN & ASSOCIATES  
CONSULTING ENGINEERS  
8609 W. BRYAN MAWRE AVENUE  
SUITE 204  
CHICAGO, ILLINOIS 60681  
312-734-0050  
FAX 312-734-0055

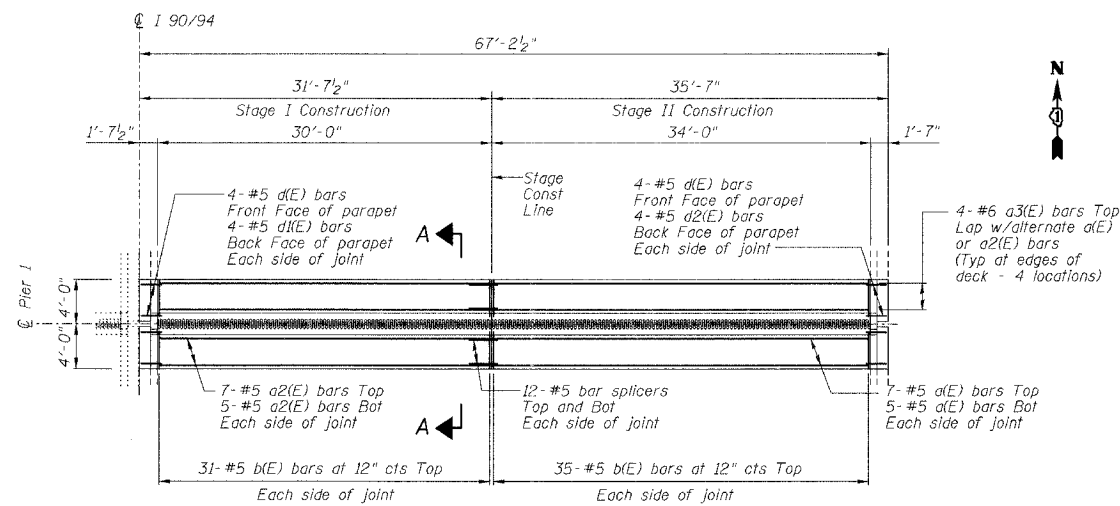


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 90/94		COOK	419	184
FED. ROAD DIST. NO.	LANDS	PROJECT		

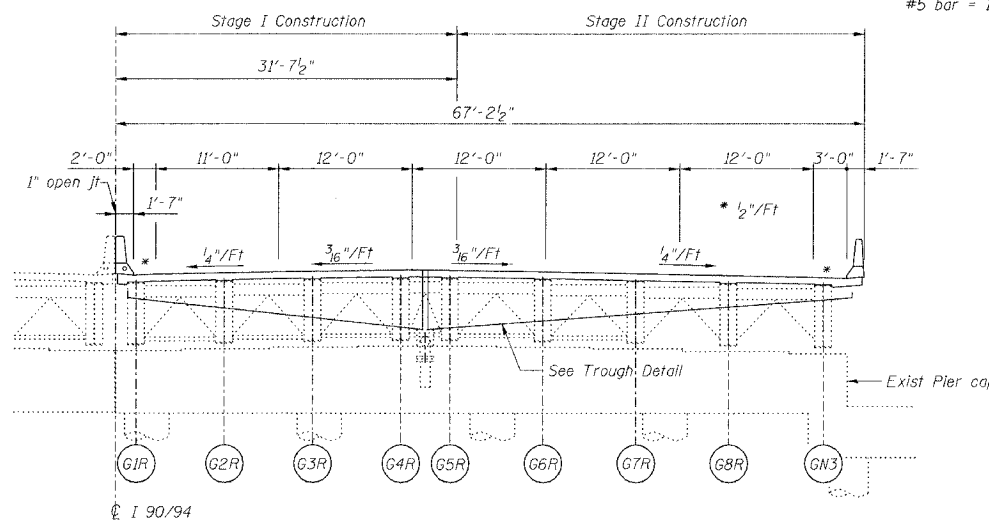
Sheet No 3  
of 8 Sheets

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CONTRACT #62580

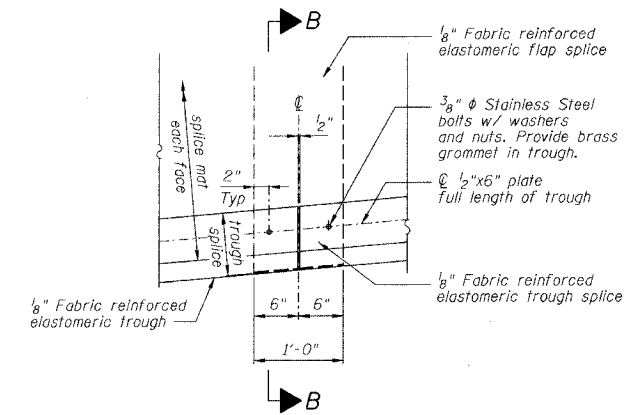


FINGER PLATE AT PIER 1 NORTHBOUND  
JOINT RECONSTRUCTION PLAN AT PIER 1

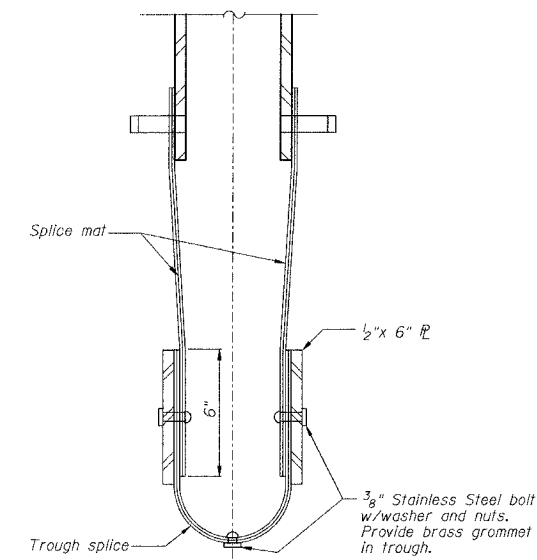
MIN BAR LAP  
#5 bar = 1'-8"



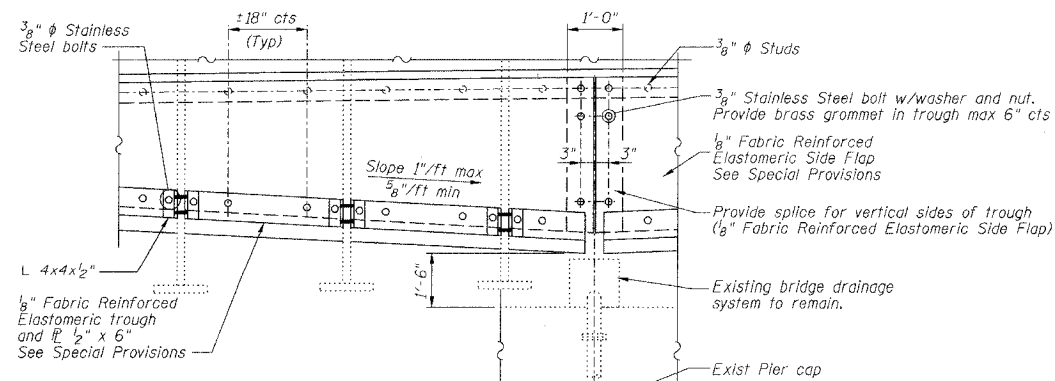
PIER 1 NORTHBOUND  
ELEVATION AT PIER 1 (LOOKING NORTH)



TROUGH SPLICE DETAIL



SECTION B-B



TROUGH DETAIL

NOTES  
For Section A-A see Sheet 4 of 8.

REVISIONS		STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS		DRAWN BY DATE RLK 5/03
1				CHECKED BY DATE SDS 5/03
2				BOOK NUMBER
3				PROJECT NO.
4				4222-3
5				SHEET NO.
6				
7				
8				
9				
10				

PIER NO. 1

FINGER PLATE EXPANSION JOINT DETAILS

FAI RTE 90/94 DAN RYAN EXPRESSWAY  
SW 016-1110 (NORTHBOUND)  
SEC 2005-008F COOK COUNTY

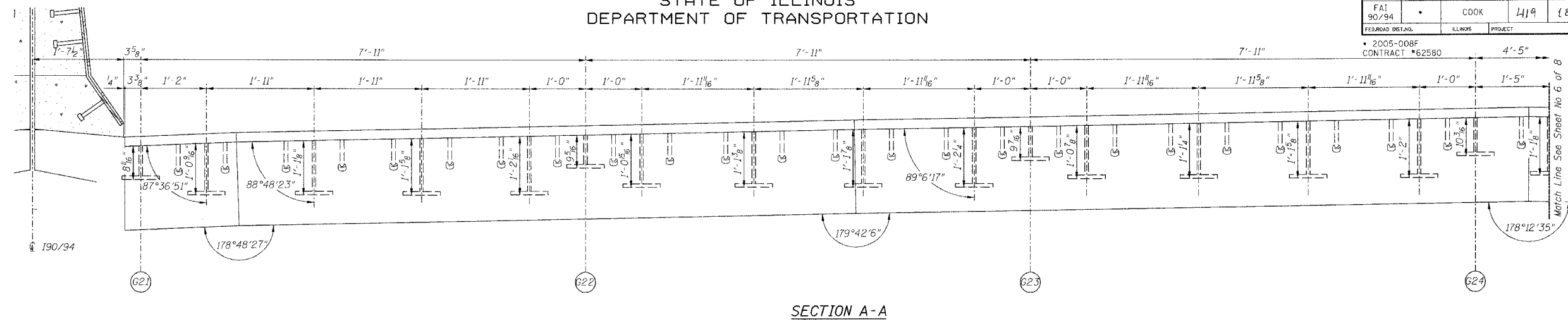
HOMER L. CHASTAIN & ASSOCIATES  
CONSULTING ENGINEERS  
8609 W. BRYAN MAWRE AVENUE  
SUITE 204  
CHICAGO, ILLINOIS 60631  
312-714-0060  
FAX 312-714-0065



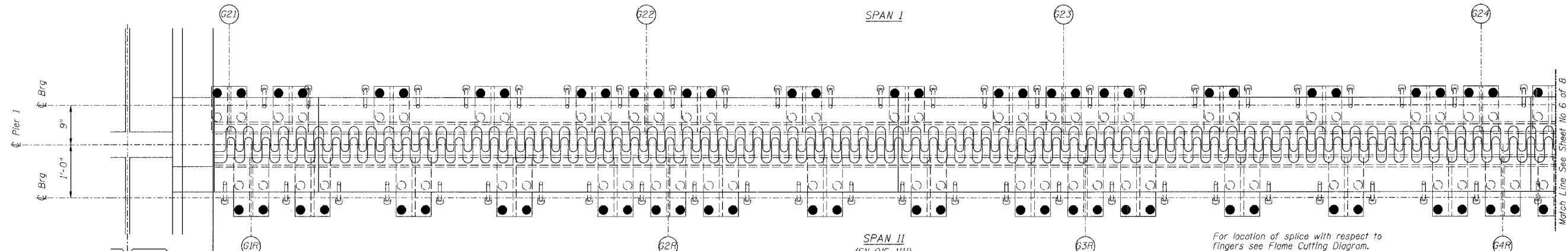
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 90/94		COOK	419	183
FED. ROAD DIST. NO.	ILLINOIS PROJECT			
	2005-008F CONTRACT #62580			

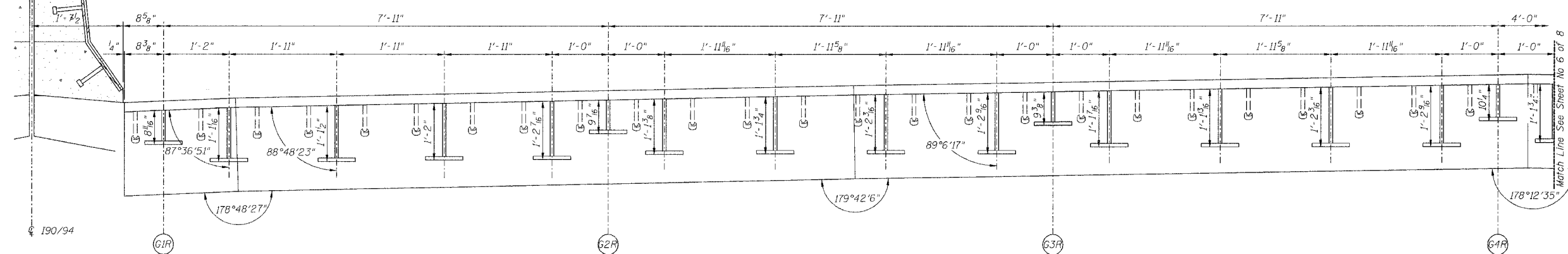
Sheet No 5  
of 8 Sheets



SECTION A-A



PLAN OF FINGER PLATE AT PIER 1 (NORTHBOUND)



SECTION B-B

PIER NO. 1

REVISIONS			STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS		DRAWN BY DATE RLK 5/03
1			FAI RTE 90/94	DAN RYAN EXPRESSWAY	CHECKED BY DATE SDS 5/03
2			SN 016-1110 (NORTHBOUND)		BOOK NUMBER
3			SEC 2005-008F	COOK COUNTY	PROJECT NO. 4222-3
4					SHEET NO.
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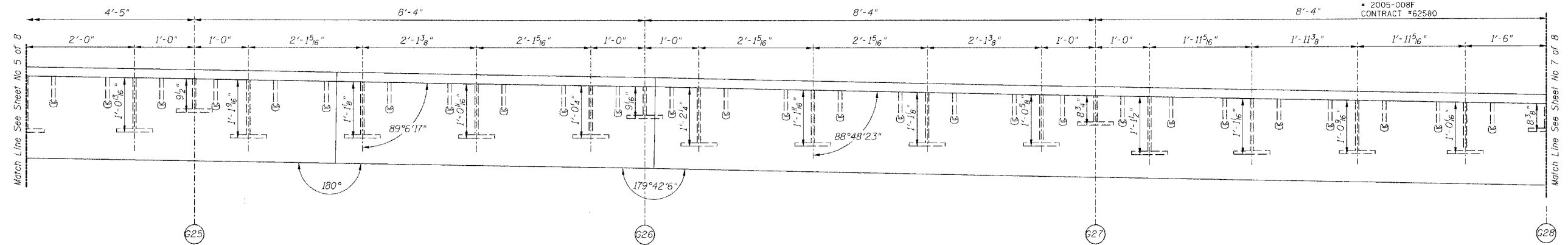
Note:  
For optional splice detail see  
flame cutting diagram on Sheet No. 4

**CHASTAIN & ASSOCIATES**  
CONSULTING ENGINEERS  
8600 W. BERTH MARSH AVENUE  
SUITE 204  
CHICAGO, ILLINOIS 60631  
312-744-0050  
FAX 312-744-0050

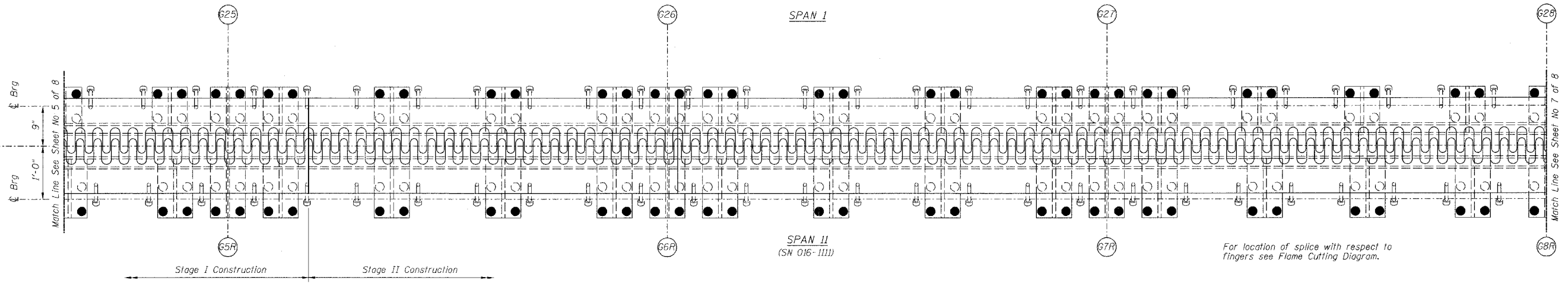
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DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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FED. ROAD DIST. NO.	ILLINOIS	PROJECT		
		* 2005-008F CONTRACT #62580		

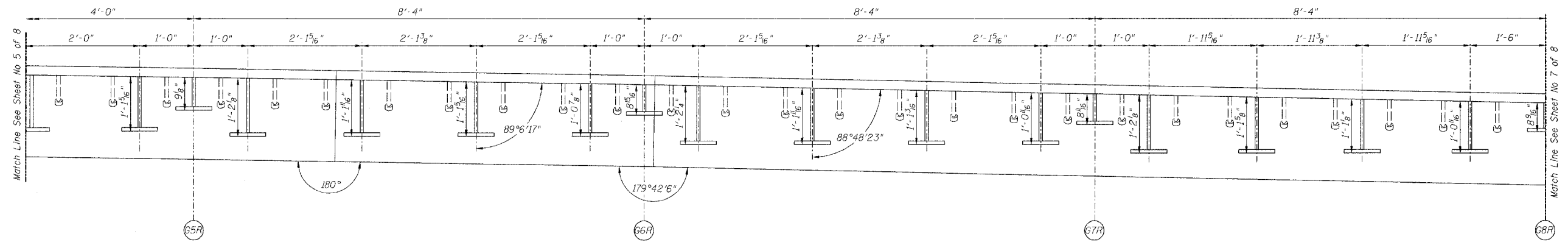
Sheet No 6  
of 8 Sheets



SECTION A-A



PLAN OF FINGER PLATE AT PIER 1 (NORTHBOUND)



SECTION B-B

PIER NO. 1

REVISIONS			STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS		DRAWN BY DATE RLK 5/03
NO.	DATE	INITIALS	FAI RTE 90/94	DAN RYAN EXPRESSWAY	CHECKED BY DATE SDS 5/03
1			SN 016-1110 (NORTHBOUND)	COOK COUNTY	BOOK NUMBER
2			SEC 2005-008F		PROJECT NO. 4222-3
3					SHEET NO.
4					
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Note:  
For optional splice detail see  
flame cutting diagram on Sheet No. 4

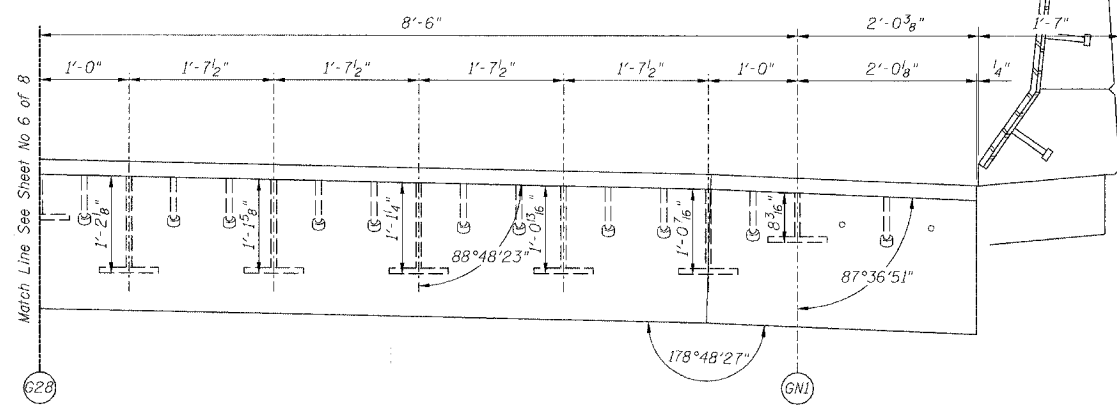
**CHASTAIN & ASSOCIATES**  
CONSULTING ENGINEERS  
8620 W. BURNHAM AVENUE  
SUITE 204  
CHICAGO, ILLINOIS 60631  
312-744-0050  
FAX 312-744-0055

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

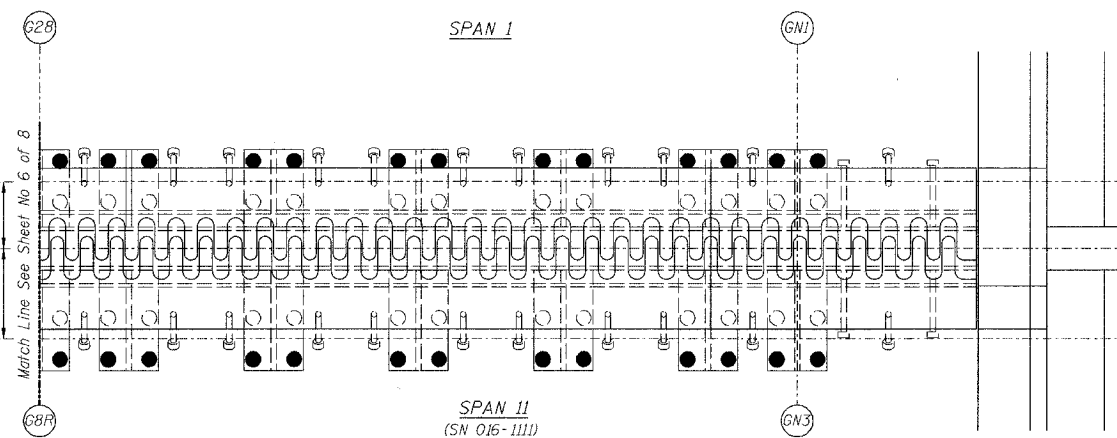
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FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

Sheet No 7  
of 8 Sheets

\* 2005-008F  
CONTRACT #62580

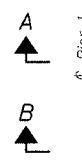
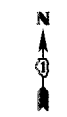


SECTION A-A



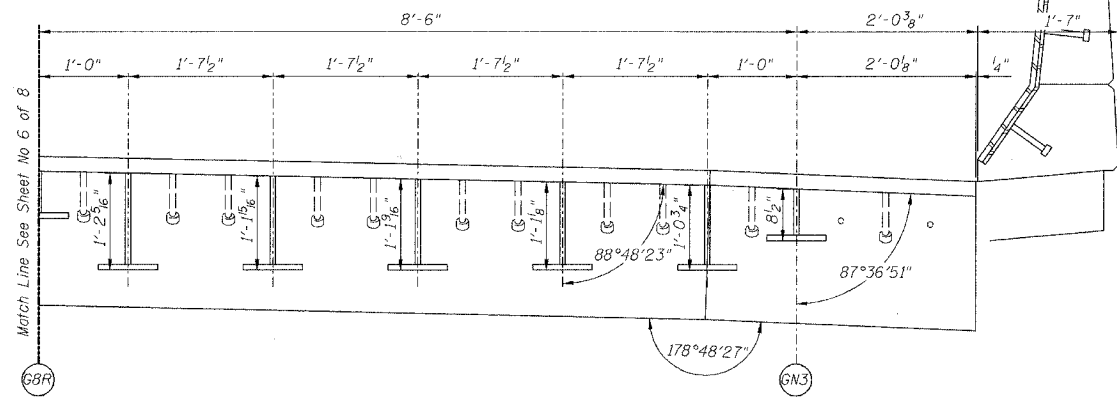
SPAN I

SPAN II  
(SN 016-1111)



For location of splice with respect to fingers see Flame Cutting Diagram.

PLAN OF FINGER PLATE AT PIER 1 (NORTHBOUND)



SECTION B-B

PIER NO. 1

FINGER PLATE PLAN AND ELEVATION DETAILS

REVISIONS			STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS		DRAWN BY DATE RLK 5/03
NO.	DATE	INITIALS	FAI RTE 90/94 DAN RYAN EXPRESSWAY SN 016-1110 (NORTHBOUND)		CHECKED BY DATE SDS 5/03
1			SEC 2005-008F COOK COUNTY		BOOK NUMBER
2					PROJECT No.
3					4222-3
4					SHEET No.
5					
6					
7					
8					
9					
10					

Note:  
For optional splice detail see  
flame cutting diagram on Sheet No. 4

**CHASTAIN & ASSOCIATES**  
CONSULTING ENGINEERS  
8600 W. BERTH MARSH AVENUE  
SUITER 304  
CHICAGO, ILLINOIS 60631  
312-754-0000  
FAX 312-754-0000

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 90/94	*	COOK	419	186
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		
2005-008F				

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of 8 Sheets

\* 2005-008F  
CONTRACT #62580

**NOTES**

Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.

Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.

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

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.

Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

- ① Minimum Capacity =  $1.25 \times f_y \times A_f$   
(Tension in kips)
- ② Minimum \*Pull-out Strength =  $1.25 \times f_{s,allow} \times A_f$   
(Tension in kips)

Where  $f_y$  = Yield strength of lapped reinforcement bars in ksi.

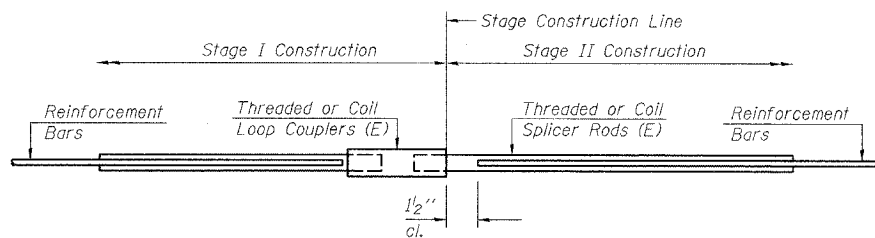
$f_{s,allow}$  = Allowable tensile stress in lapped reinforcement bars in ksi (Service Load)

$A_f$  = Tensile stress area of lapped reinforcement bars.

\* = 28 day concrete

BAR SPLICER ASSEMBLIES			
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#5	2'-0"	23.0	9.2
#6	2'-7"	33.1	13.3
#7	3'-5"	45.1	18.0
#8	4'-6"	58.9	23.6

Bar splicer assemblies shall be according to Section 508 of the Standard Specifications, except as noted. The furnishing and installation of bar splicer assemblies will be measured and paid for at the contract unit price each for "BAR SPLICERS."



**SPLICER DETAIL**

Bar Size	No. Assemblies Required	Location
#5	24	At Stage Construction Line in N.B. Deck

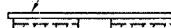
The diameter of this part is equal or larger than the diameter of bar spliced.

**ROLLED THREAD DOWEL BAR**



**\*\* ONE PIECE**

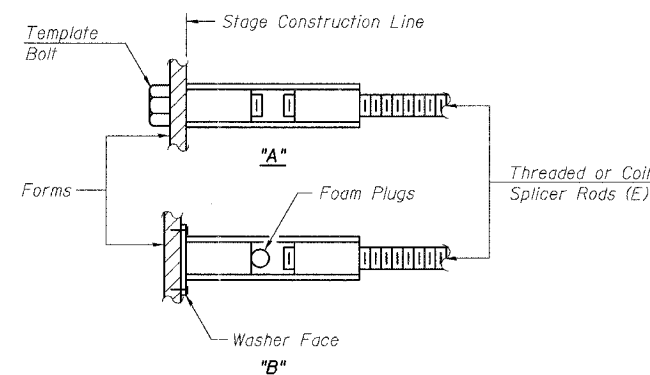
Wire Connector



**WELDED SECTIONS**

**BAR SPLICER ASSEMBLY ALTERNATIVES**

\*\* Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.

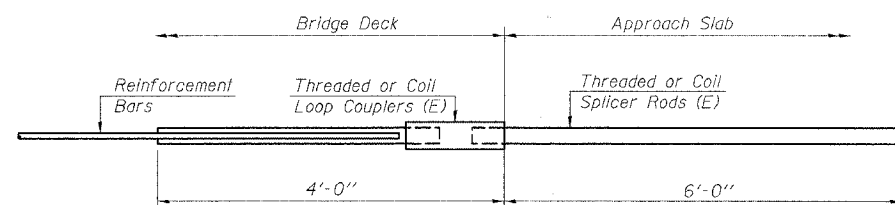


**INSTALLATION AND SETTING METHODS**

"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.



**INTEGRAL ABUTMENT  
BAR SPLICER ASSEMBLY DETAIL  
FOR #5 BAR**

Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 9.2 kips - tension
No. Required =

BSD-1 4-30-99

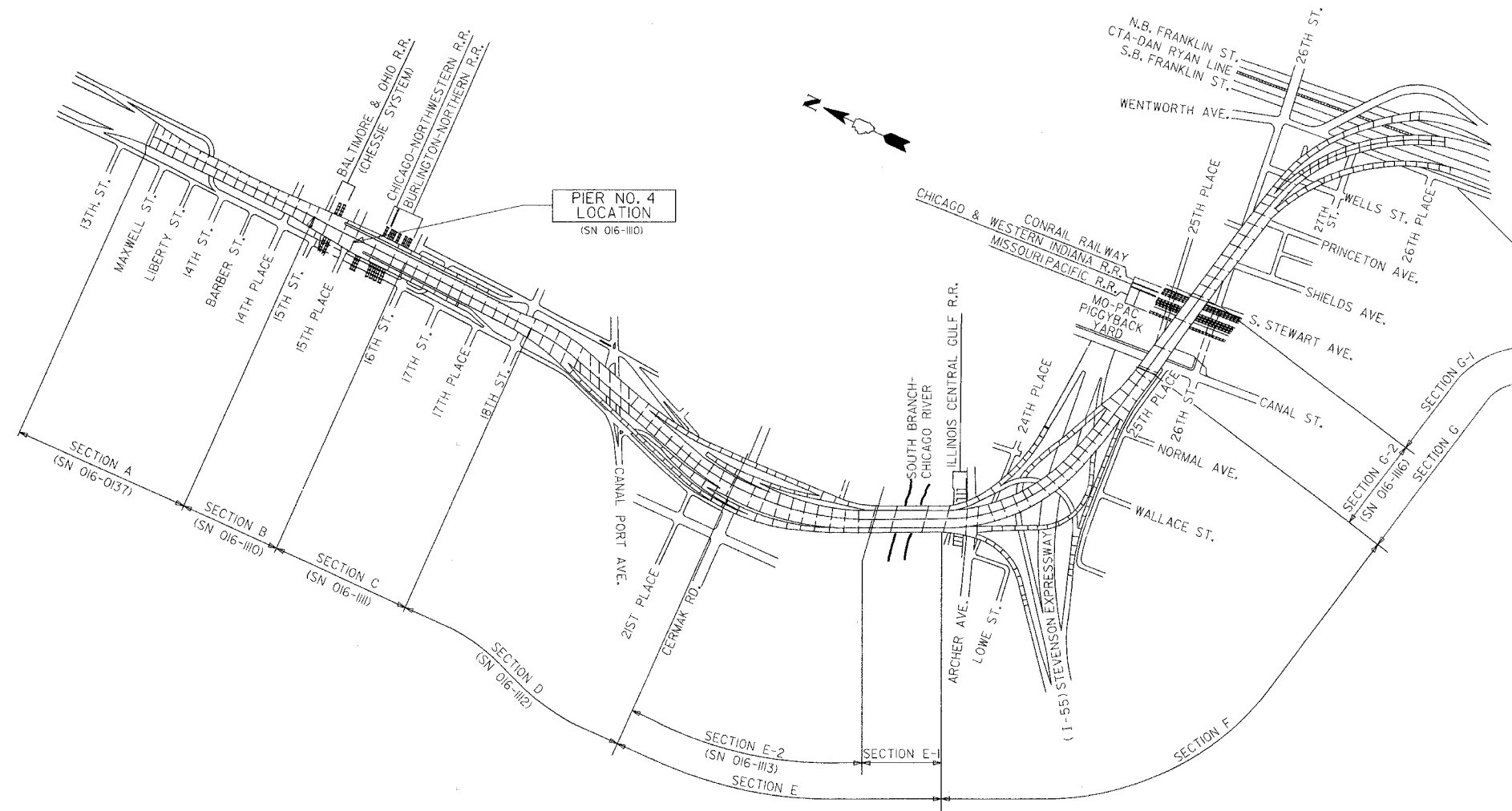
PIER NO. 1

REVISIONS			STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS		DRAWN BY DATE RLK 5/03
1			FAI RTE 90/94 DAN RYAN EXPRESSWAY		CHECKED BY DATE SDS 5/03
2			SN 016-1110 (NORTHBOUND)		BOOK NUMBER
3			SEC 2005-008F COOK COUNTY		PROJECT NO. 4222-3
4			HOMER L. CHASTAIN & ASSOCIATES		SHEET NO.
5			8600 W. BRYN MAWR AVENUE SUITE 304 CHICAGO, ILLINOIS 60631 812-714-0060 FAX 812-714-0065		

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 90/94		COOK	429	187
FEDERAL DIST. NO.		ILLINOIS PROJECT		
2005-008F		CONTRACT #62580		

Sheet No 1  
of 8 Sheets



**KEY PLAN**  
DAN RYAN EXPRESSWAY (I-90/I-94) VIADUCT  
COOK COUNTY, ILLINOIS

**DESIGN STRESSES**

$f'_c = 3500$  psi  
 $f_y = 60,000$  psi (Reinforcement)  
 $f_y = 50,000$  psi (M270 Grade 50)

BILL OF MATERIAL		
ITEM	UNIT	TOTAL
Concrete Removal	Cu Yd	23.0
Concrete Superstructure	Cu Yd	26.7
Erecting Structural Steel	L.S.	0.14
Reinforcement Bars, Epoxy Coated	Pound	3320
Mechanical Splice	Each	180
Bar Splicer	Each	24
Erecting Fabric Reinforced Elastomeric Trough	Foot	90

**GENERAL NOTES**

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

The slab is to be removed in stages. Before starting the concrete removal, the Contractor is required to submit to the Engineer for approval his staging plans and method of removal.

Prior to pouring the new concrete deck, all loose rust, loose mill scale, and other loose potentially detrimental foreign material shall be removed from the surfaces of the beams or girders in contact with concrete. The cost of this work will be included in the pay item covering removal of the existing concrete. All heavy rust and other tightly adhered potentially detrimental foreign matter shall also be removed from the surfaces of the beams or girders in contact with concrete. Tightly adhered paint may remain unless otherwise noted. This removal shall be accomplished by methods that will not damage the steel. The cost of this work will be paid for according to Article 109.04 of the Standard Specifications.

Field welding of construction accessories will not be permitted to beams or girders.

Tapered shims shall be added under the stools as required by the Engineer to make a smooth finger joint.

The finger plates shall be flame cut as provided in Article 505.04(k) of the Standard Specifications

Finger plate expansion joints shall be assembled in the proper position with the ends in place and shall be left assembled for shop inspection.

Joint openings shall be adjusted according to Article 503.10(c) of the Standard Specifications when the deck is poured at an ambient temperature other than 50°F

Fasteners shall be high strength bolts. Bolts  $\frac{3}{4}$ "  $\phi$ , open holes  $\frac{1}{16}$ "  $\phi$  unless otherwise noted.

Reinforcement bars shall conform to the requirements of AASHTO M-31 or M-322 Grade 60.

Existing structural steel that will be in contact with new structural steel shall be cleaned and painted prior to erection as required by the Special Provision "Cleaning and Painting Contact Surface Areas of Existing Steel Structures".

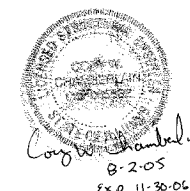
The existing structural steel coating contains lead. The Contractor should take appropriate precautions to deal with the presence of lead on this project.

All construction joints shall be bonded.

Traffic to be maintained during construction, see Roadway Plans for Stage Construction Details.

Existing design and fabrication plans are available upon request.

All structural steel shall be AASHTO M270 Grade 50 unless noted otherwise. Calculated weight = 38,150 lbs.



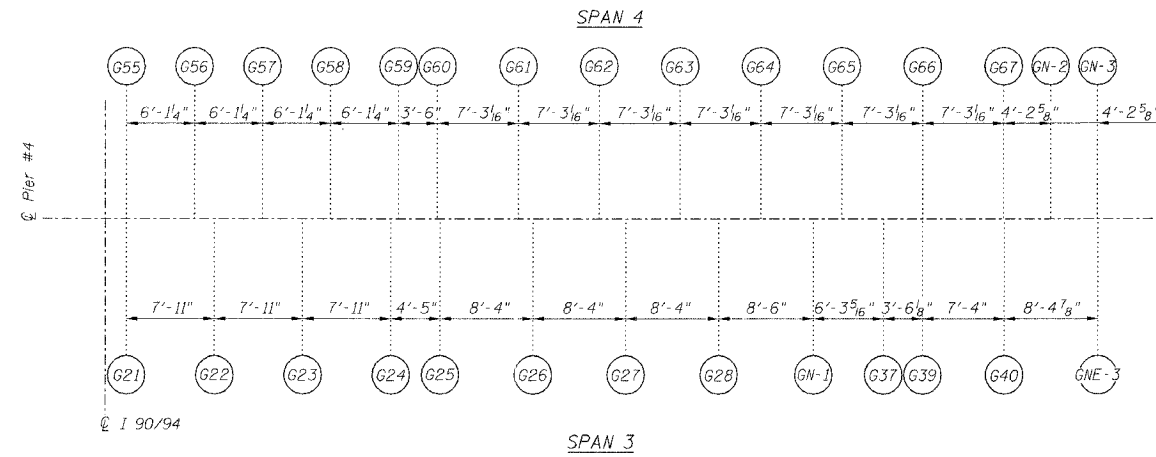
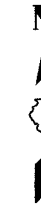
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NO.	DATE	INITIALS	RLK	5/03
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STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS		PROJECT No. <b>4222-3</b>
FAI RTE 90/94	DAN RYAN EXPRESSWAY	
SN 016-1110 (NORTHBOUND)		
SEC 2005-008F	COOK COUNTY	
<b>CHASTAIN &amp; ASSOCIATES</b> CONSULTING ENGINEERS 6800 W. BERRY MANOR AVENUE SUITE 204 CHICAGO, ILLINOIS 60631 312-734-0280 FAX 312-734-0285		SHEET No.

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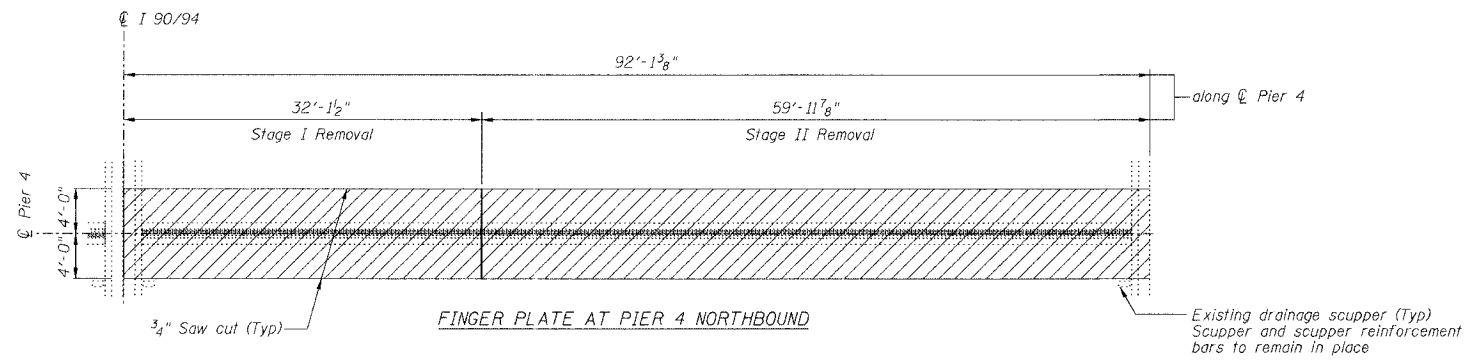
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FAI 90/94		COOK	419	188
FED. ROAD DIST. NO.		ILLINOIS	PROJECT	
• 2005-008F CONTRACT #62580				

Sheet No 2  
of 8 Sheets

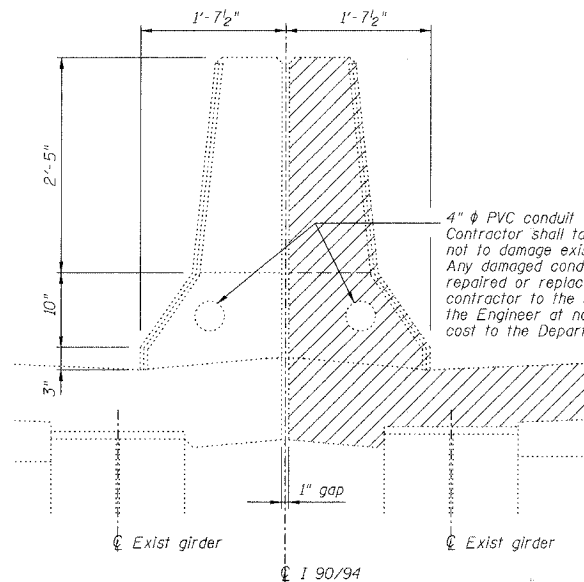


Note:  
All dimensions on girder layout  
are given along centerline of bearing.

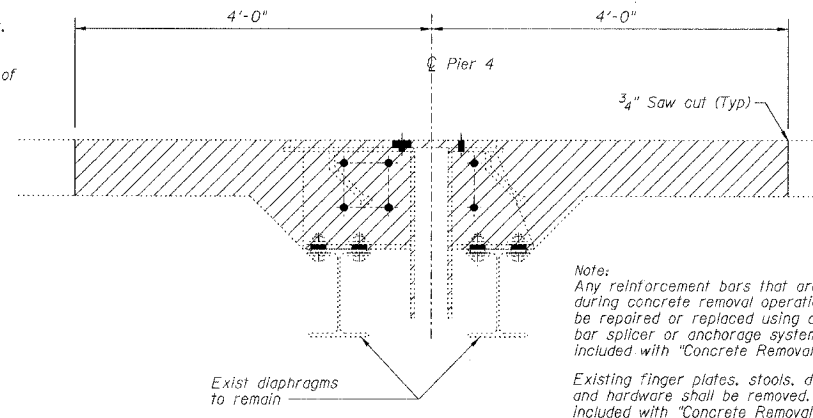
GIRDER LAYOUT AT PIER 4



JOINT REMOVAL PLAN AT PIER 4

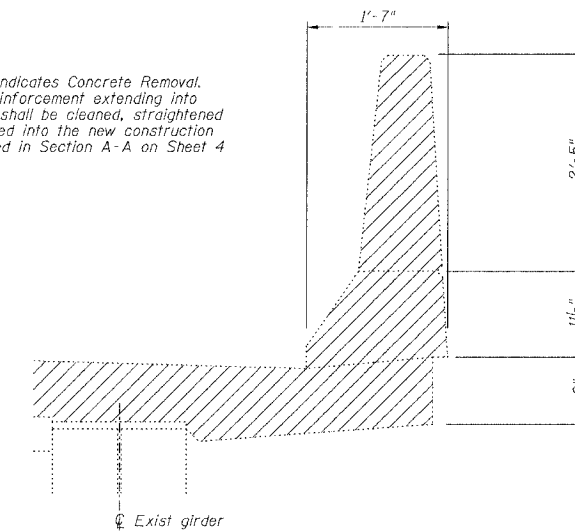


DETAIL AT EXISTING MEDIAN PARAPET



SECTION AT EXISTING FINGER PLATE AT PIER 4

Note:  
Hatched area indicates Concrete Removal.  
Longitudinal reinforcement extending into  
removal areas shall be cleaned, straightened  
and incorporated into the new construction  
except as noted in Section A-A on Sheet 4



DETAIL AT EXISTING OUTSIDE PARAPET

PIER NO. 4

REVISIONS			STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS		DRAWN BY DATE RLK 5/03
1					CHECKED BY DATE SDS 5/03
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FAI RTE 90/94	DAN RYAN EXPRESSWAY	PROJECT NO.
SN 016-1110 (NORTHBOUND)	COOK COUNTY	4222-3
SEC. 2005-008F		SHEET NO.

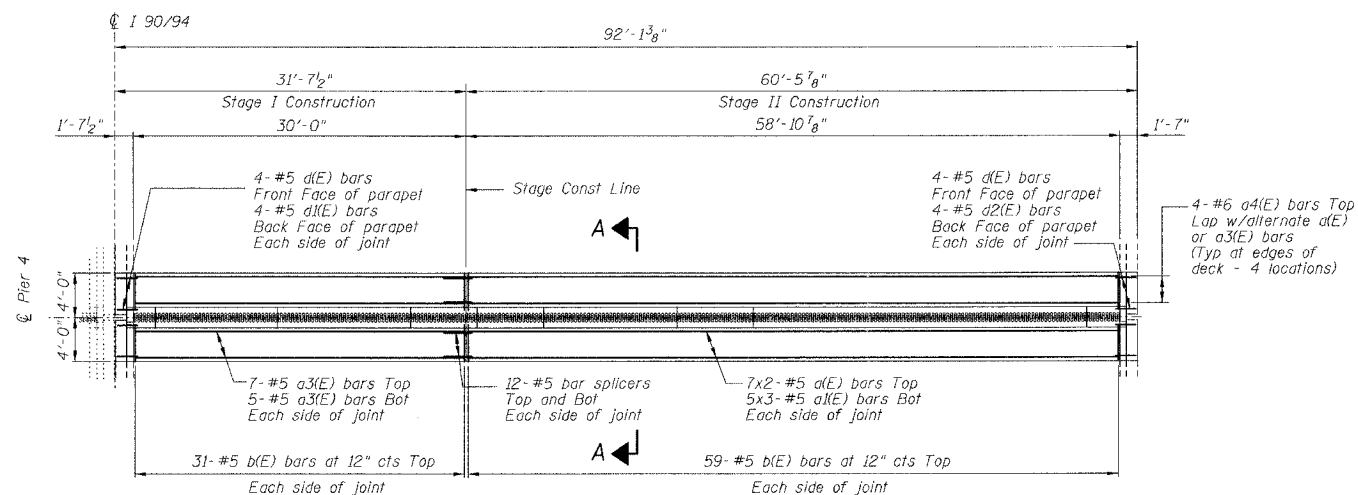
<b>CHASTAIN &amp; ASSOCIATES</b> CONSULTING ENGINEERS	8600 W. BRYN MAWR AVENUE SUITE 204 CHICAGO, ILLINOIS 60631 312-714-0080 FAX 312-714-0055
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DEPARTMENT OF TRANSPORTATION

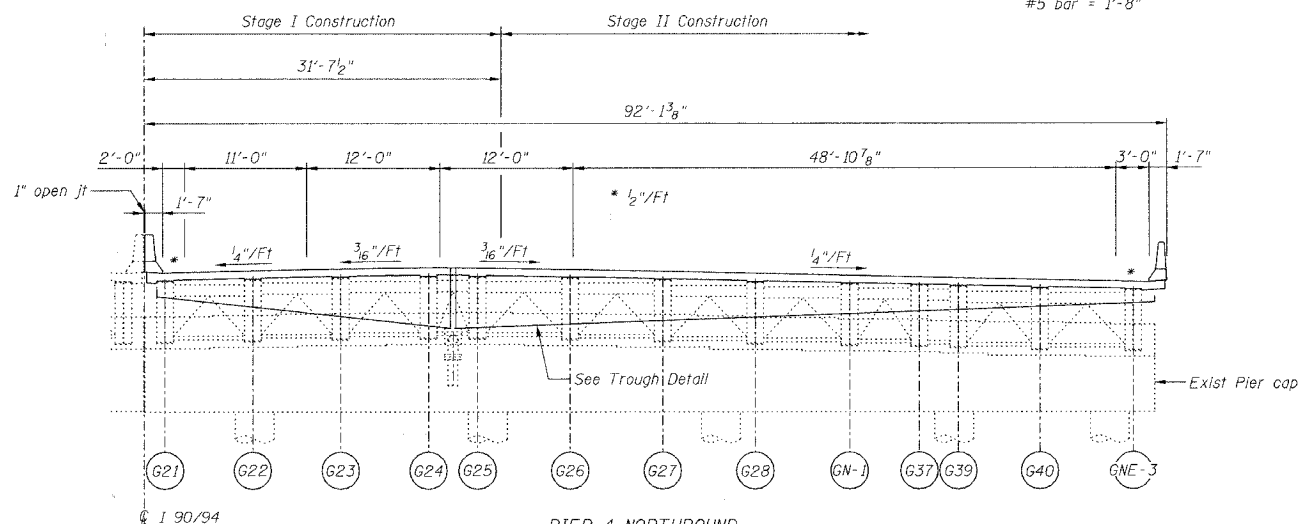
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FAI 90/94		COOK	419	187
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		
* 2005-008F CONTRACT #62580				

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of 8 Sheets

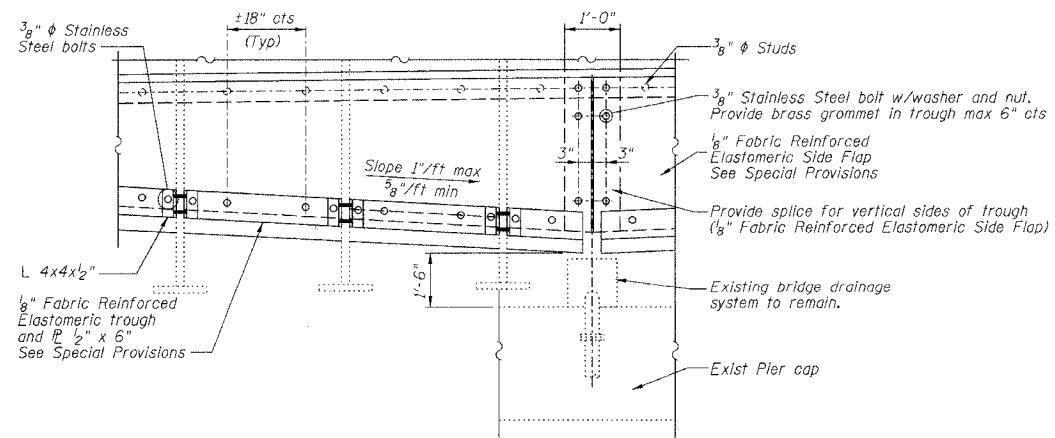


FINGER PLATE AT PIER 4 NORTHBOUND  
JOINT RECONSTRUCTION PLAN AT PIER 4  
(Dimensions along  $\hat{C}$  Pier)

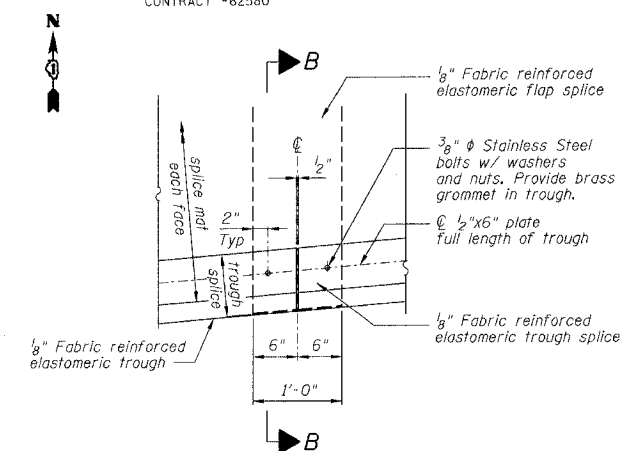
MIN BAR LAP  
#5 bar = 1'-8"



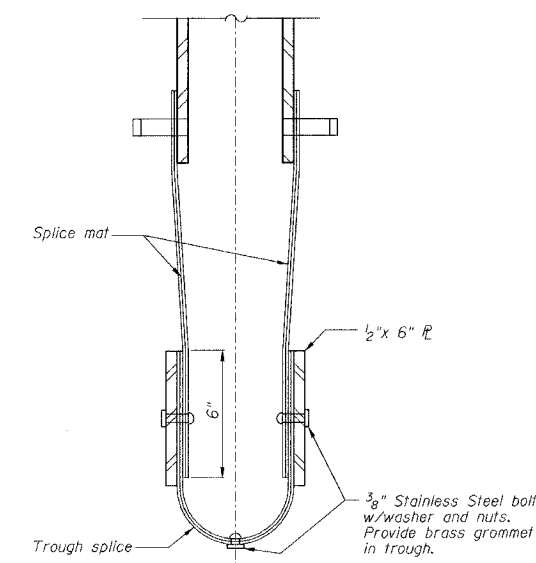
PIER 4 NORTHBOUND  
ELEVATION AT PIER 4 (LOOKING NORTH)  
(Dimensions along  $\hat{C}$  Pier)



TROUGH DETAIL



TROUGH SPLICE DETAIL



SECTION B-B

NOTES

Bars indicated thus 4x2-#5 etc indicates 4 lines of bars with 2 lengths per line.  
For Section A-A see Sheet 4 of 8.

PIER NO. 4

REVISIONS			STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS		DRAWN BY RLK	DATE 5/03
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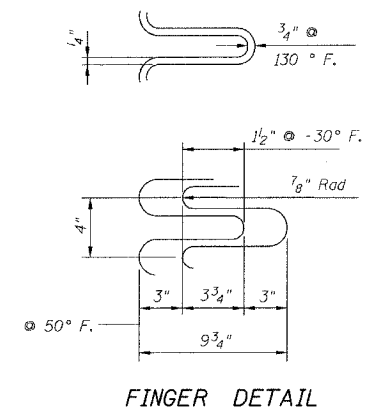
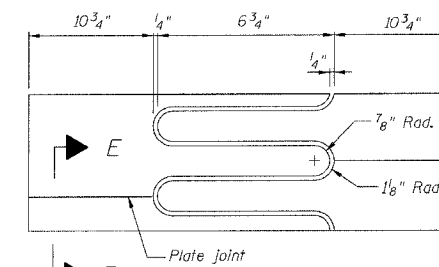
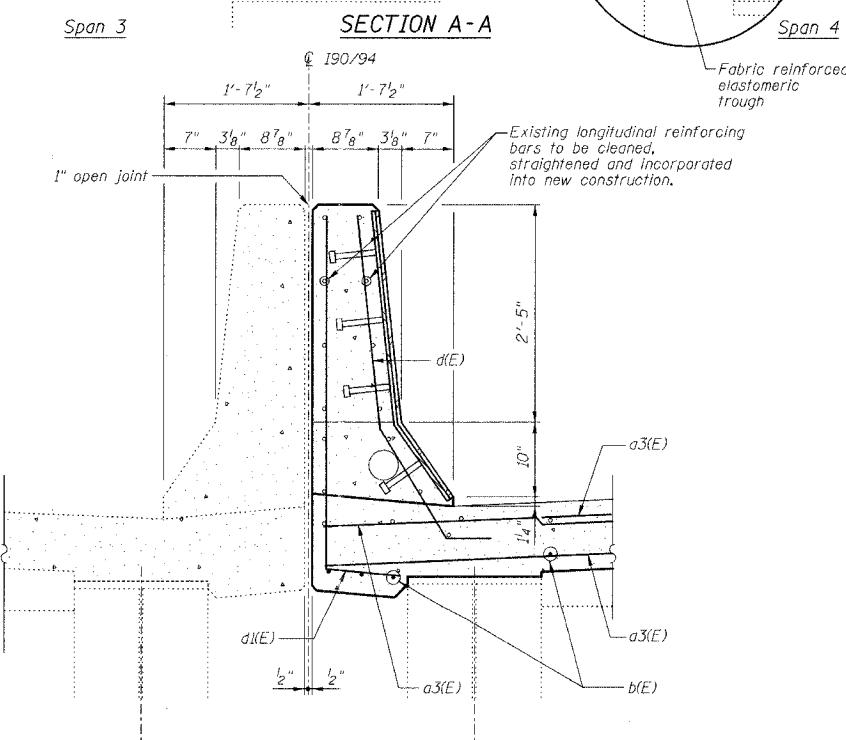
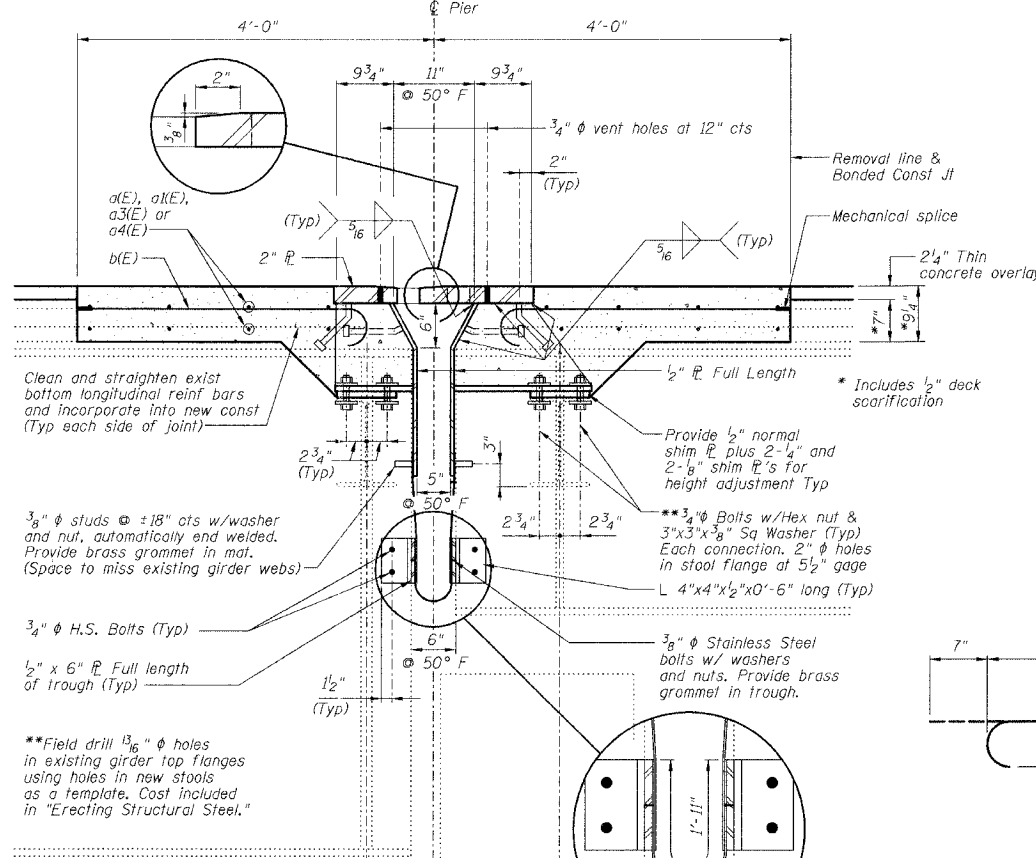
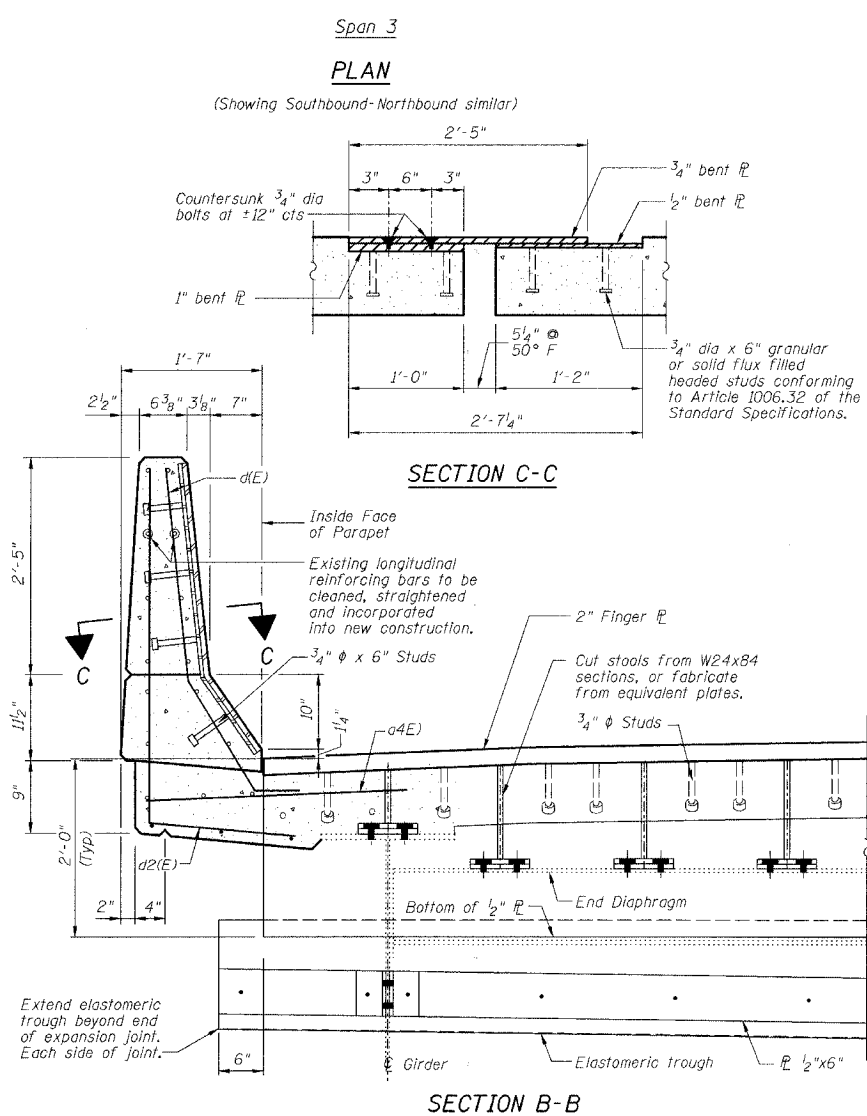
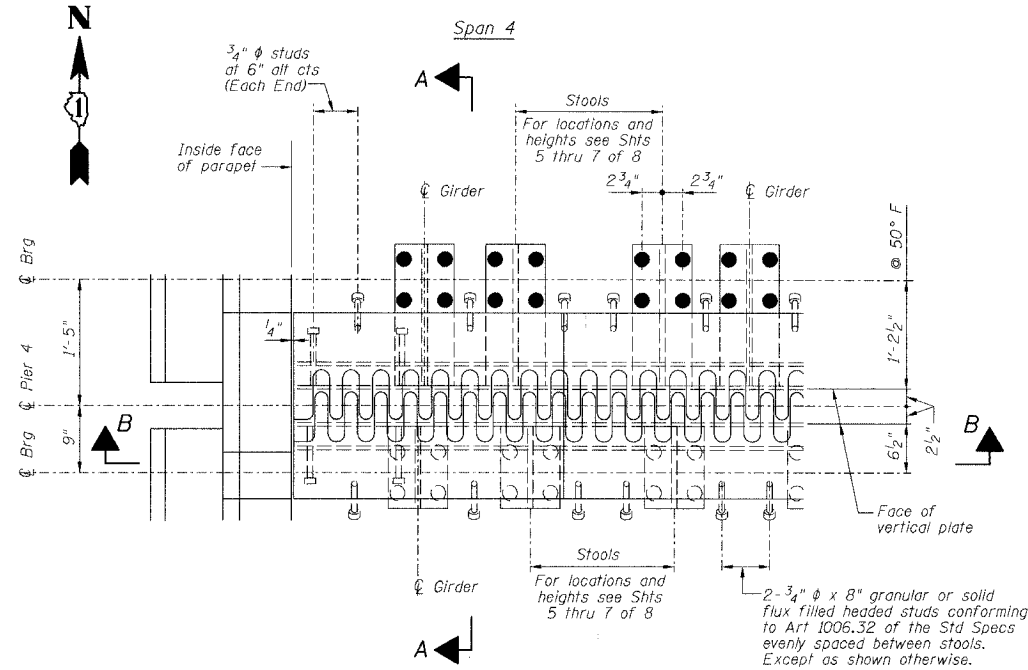
FAI RTE 90/94	DAN RYAN EXPRESSWAY	PROJECT No.	4222-3
SEC 2005-008F	SN 016-1110 (NORTHBOUND)	COOK COUNTY	SHEET No.

HOMER L. CHASTAIN & ASSOCIATES CONSULTING ENGINEERS  
6600 W. BIRN, MAWEE AVENUE, SUITE 204, CHICAGO, ILLINOIS 60631, 312-714-0088, FAX 312-714-0088

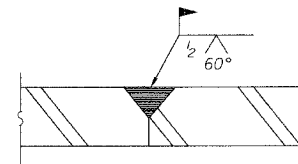
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 90/94		COOK	419	190
FED. ROAD DIST. NO.		ILLINOIS PROJECT		
2005-008F		CONTRACT #62580		

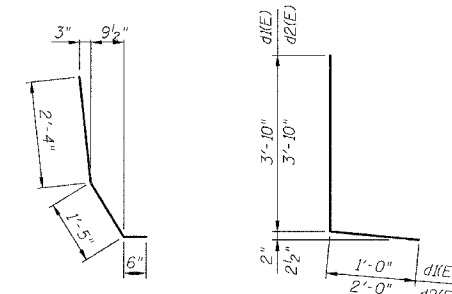
Sheet No 4  
of 8 Sheets



**FLAME CUTTING DIAGRAM**  
(Proposed Finger PL - Cut from 2" x 2'-4 1/2" PL)



**BAR b(E)**



**BAR d(E)**

**BARS d1(E) & d2(E)**

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a(E)	28	#5	30'-9"	—
a1(E)	30	#5	21'-0"	—
a3(E)	24	#5	31'-0"	—
a4(E)	16	#6	4'-6"	—
b(E)	180	#5	3'-10"	—
d(E)	16	#5	4'-3"	—
d1(E)	8	#5	4'-10"	—
d2(E)	8	#5	5'-10"	—
Reinforcement Bars, Epoxy Coated		Pound	3320	
Concrete Removal		Cu Yd	23.0	
Concrete Superstructure		Cu Yd	26.7	
Bar Splicers		Each	24	
Mechanical Splice		Each	180	

Reinforcing bars designated (E) shall be epoxy coated.  
Bars indicated thus 1x2-#5 etc indicates 1 line of bars with 2 lengths per line.

**NOTES**

- The Contractor shall bolt the Stools of the Fingerplate Joint Assembly to the top of existing End Cross Frames and to the top of the existing girders, as shown in Section A-A of this drawing.
- Stainless steel bolts, washers and nuts shall meet the requirements of ASTM A193.
- The installation of all necessary hardware, stainless steel bolts, studs and washers, plates and angles shall be included with "Erecting Structural Steel".
- Expansion Length = 348.5'

**PIER NO. 4**

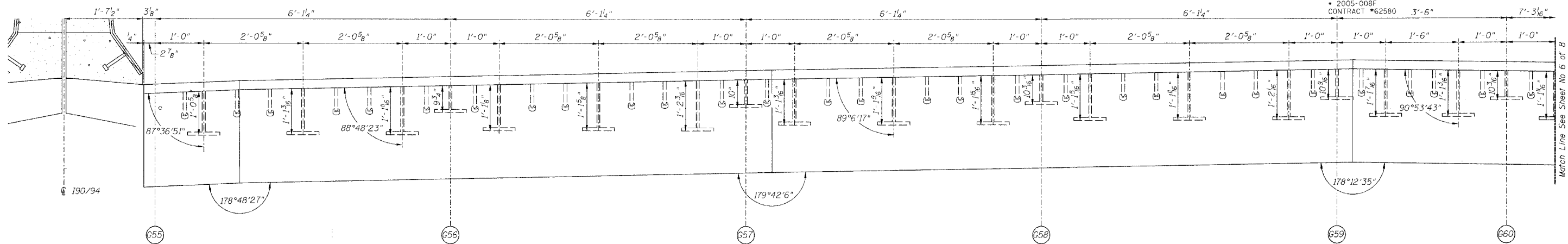
**FINGER PLATE EXPANSION JOINT DETAILS**

REVISIONS	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS	DRAWN BY DATE RLK 5/03
NO. DATE INITIALS	FAI RTE 90/94 DAN RYAN EXPRESSWAY	CHECKED BY DATE SDS 5/03
1	SN 016-1110 (NORTHBOUND)	BOOK NUMBER
2	SEC 2005-008F COOK COUNTY	PROJECT NO. 4222-3
3	HOMER L. CHASTAIN & ASSOCIATES	SHEET NO.
4	8600 W. BRYN MAWR AVENUE RIVER 204 CHICAGO, ILLINOIS 60611 312-714-0000 FAX: 312-714-0066	

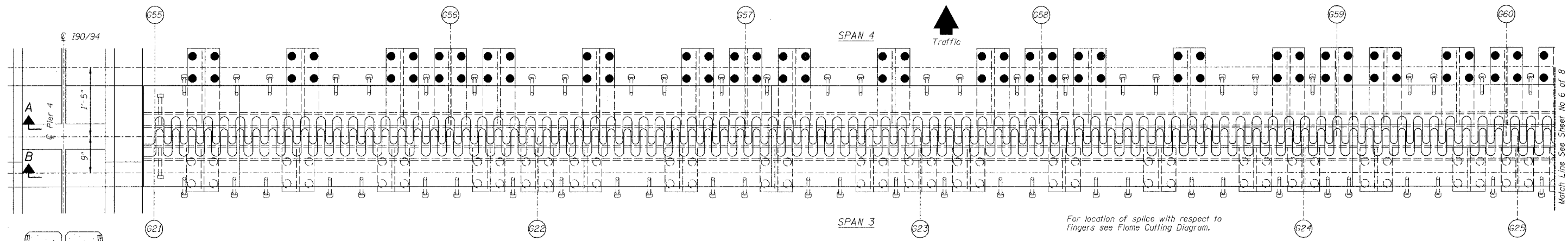
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 90/94		COOK	419	191
FED. ROAD DIST. NO.	ILLINOIS PROJECT			
2005-008F	CONTRACT #62580			

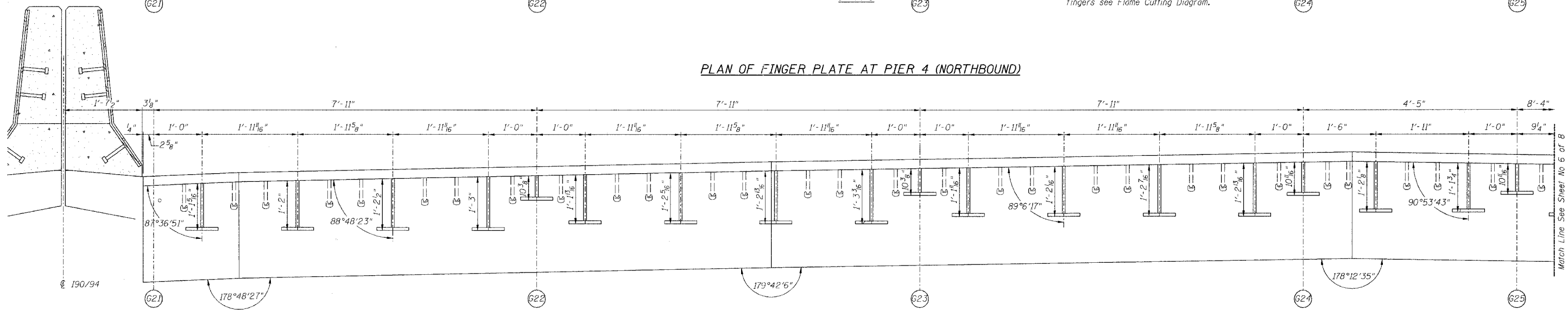
Sheet No 5  
of 8 Sheets



SECTION A-A



PLAN OF FINGER PLATE AT PIER 4 (NORTHBOUND)



SECTION B-B

PIER NO. 4

FINGER PLATE PLAN AND ELEVATION DETAILS

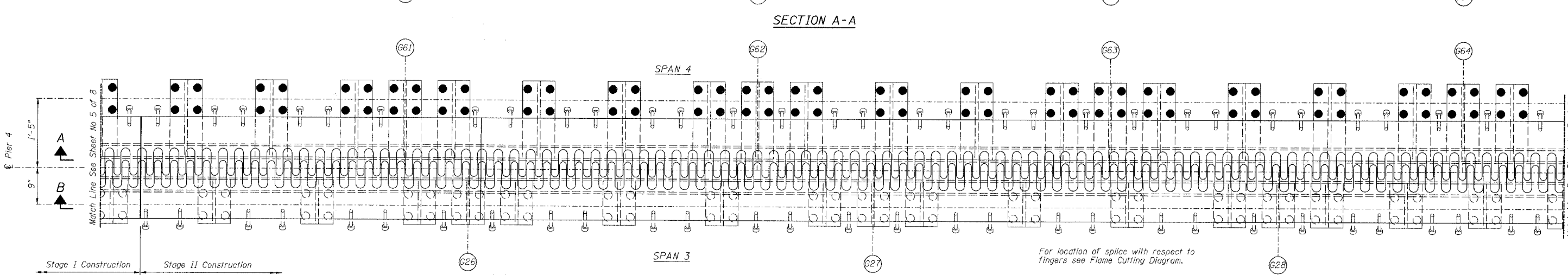
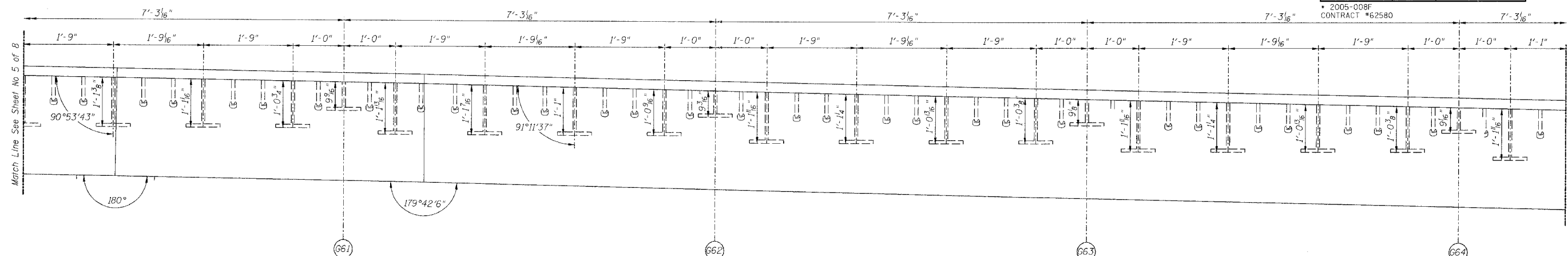
REVISIONS No. DATE INITIALS			STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS		DRAWN BY RLK	DATE 5/03
FAI RTE 90/94 SEC 2005-008F			DAN RYAN EXPRESSWAY SH 016-1110 (NORTHBOUND) COOK COUNTY		CHECKED BY SDS	DATE 5/03
HOMER L. CHASTAIN & ASSOCIATES CONSULTING ENGINEERS			8800 W. BIRN MEADOW AVENUE SUITE 204 CHICAGO, ILLINOIS 60618 312-714-0080 FAX 312-714-0086		PROJECT NO. 4222-3	SHEET NO.

Note:  
For optional splice detail see  
flame cutting diagram on Sheet No. 4  
All dimensions, except stool heights  
are given along centerline of bearing.

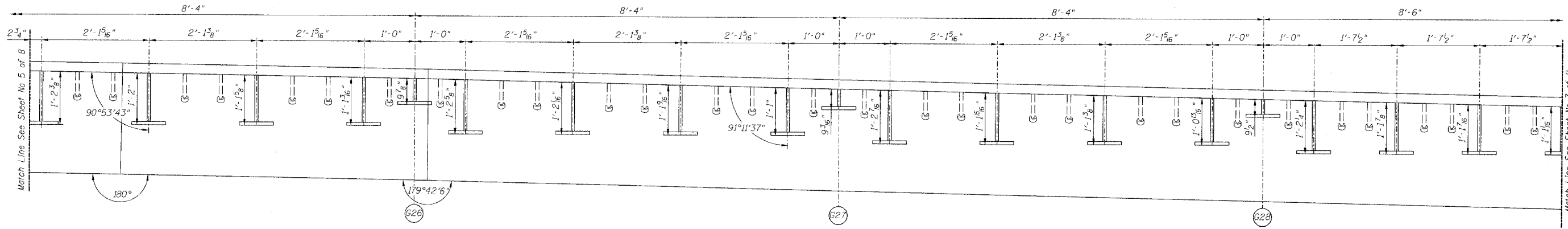
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 90/94		COOK	419	192
FERRAD DIST. NO.	ALRNO	PROJECT		
2005-008F				

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PLAN OF FINGER PLATE AT PIER 4 (NORTHBOUND)



PIER NO. 4

FINGER PLATE PLAN AND ELEVATION DETAILS

REVISIONS	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS	DRAWN BY DATE RLK 5/03
1	FAI RTE 90/94	CHECKED BY DATE SDS 5/03
2	DAN RYAN EXPRESSWAY	BOOK NUMBER
3	SN 016-1110 (NORTHBOUND)	PROJECT NO.
4	SEC 2005-008F	COOK COUNTY
5		4222-3
6		SHEET NO.
7		
8		
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Note:  
For optional splice detail see  
flame cutting diagram on Sheet No. 4  
All dimensions, except stool heights  
are given along centerline of bearing.

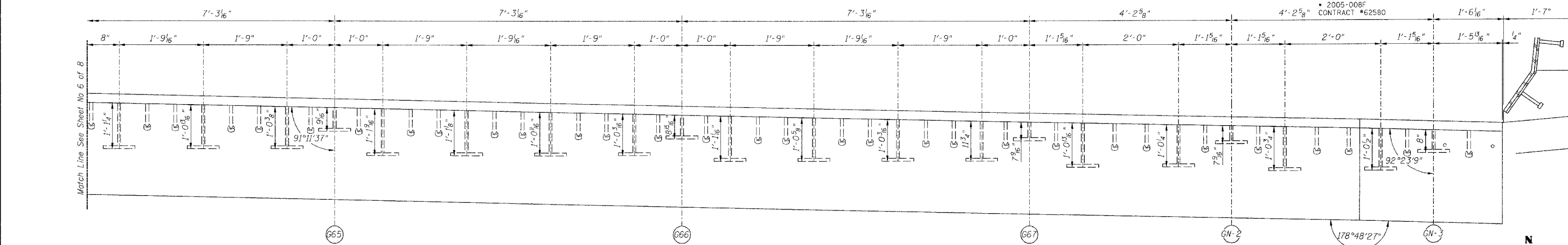
**CHASTAIN & ASSOCIATES**  
CONSULTING ENGINEERS

6000 W. BRYN MAWR AVENUE  
SUITE 204  
CHICAGO, ILLINOIS 60631  
312-714-6000  
FAX 312-714-0955

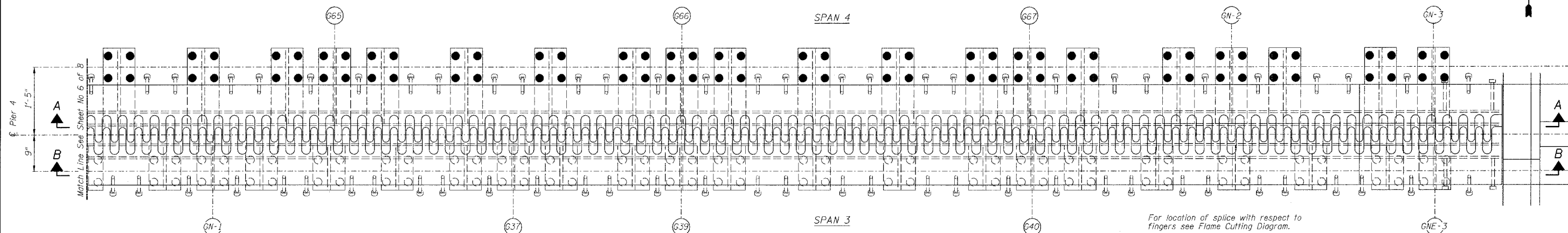
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 90/94		COOK	419	193
FED. ROAD DIST. NO.	ILLINOIS PROJECT			
2005-008F	CONTRACT #62580			

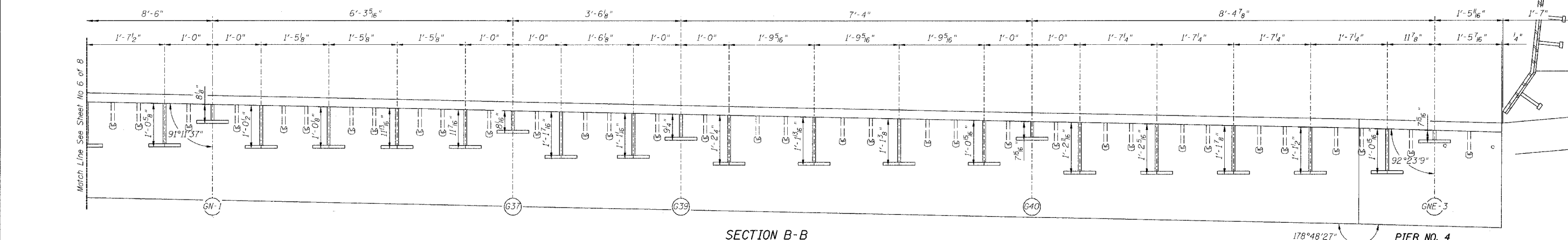
Sheet No 7  
of 8 Sheets



SECTION A-A



PLAN OF FINGER PLATE AT PIER 4 (NORTHBOUND)



SECTION B-B

Note:  
For optional splice detail see  
Flame cutting diagram on Sheet No. 4  
All dimensions, except stool heights  
are given along centerline of bearing.

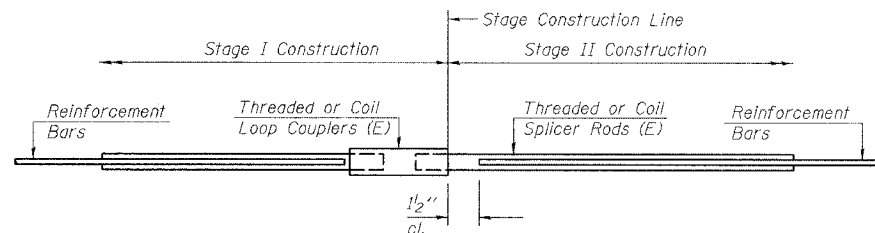
REVISIONS		DRAWN BY		DATE	
1		RLK		5/03	
2		SDS		5/03	
3					
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STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS		PROJECT NO. <b>4222-3</b>
FAI RTE 90/94	DAN RYAN EXPRESSWAY	
SN 016-1110 (NORTHBOUND)		
SEC 2005-008F	COOK COUNTY	
<b>CHASTAIN &amp; ASSOCIATES</b> CONSULTING ENGINEERS 8900 W. BERTY MAW AVENUE SUITE 204 CHICAGO, ILLINOIS 60631 312-754-0050 FAX 312-754-0050		SHEET NO.

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO. FAI 90/94	SECTION •	COUNTY COOK	TOTAL SHEETS 419	SHEET NO. 194
FEDERAL DIST. NO. • 2005-008F		ILLINOIS PROJECT		
CONTRACT #62580				

Sheet No 8  
of 8 Sheets



**SPLICER DETAIL**

Bar Size	No. Assemblies Required	Location
#5	24	At Stage Construction Line in N.B. Deck

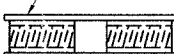
The diameter of this part is the same as the diameter of the bar spliced.

**ROLLED THREAD DOWEL BAR**



**\*\* ONE PIECE**

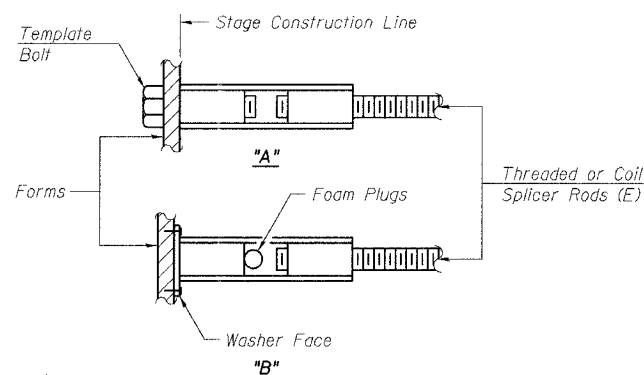
Wire Connector



**WELDED SECTIONS**

**BAR SPLICER ASSEMBLY ALTERNATIVES**

\*\* Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.



**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.

**NOTES**

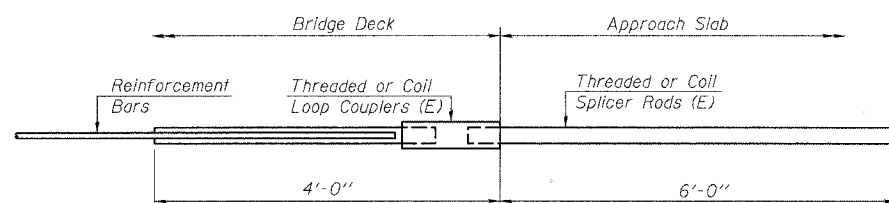
Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.  
Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.  
All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.  
Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.  
Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

- ① Minimum Capacity =  $1.25 \times f_y \times A_t$   
(Tension in kips)
- ② Minimum \*Pull-out Strength =  $1.25 \times f_{s_{allow}} \times A_t$   
(Tension in kips)

Where  $f_y$  = Yield strength of lapped reinforcement bars in ksi.  
 $f_{s_{allow}}$  = Allowable tensile stress in lapped reinforcement bars in ksi (Service Load)  
 $A_t$  = Tensile stress area of lapped reinforcement bars.  
\* = 28 day concrete

Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#5	2'-0"	23.0	9.2
#6	2'-7"	33.1	13.3
#7	3'-5"	45.1	18.0
#8	4'-6"	58.9	23.6

Bar splicer assemblies shall be according to Section 508 of the Standard Specifications, except as noted. The furnishing and installation of bar splicer assemblies will be measured and paid for at the contract unit price each for "BAR SPLICERS."



**INTEGRAL ABUTMENT  
BAR SPLICER ASSEMBLY DETAIL  
FOR #5 BAR**

Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 9.2 kips - tension
No. Required =

PIER NO. 4

REVISIONS			STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS		DATE
1					5/03
2					
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FAI RTE 90/94	DAN RYAN EXPRESSWAY	PROJECT NO. 4222-3
SN 016-1110 (NORTHBOUND)	COOK COUNTY	SHEET NO.
SEC 2005-008F		

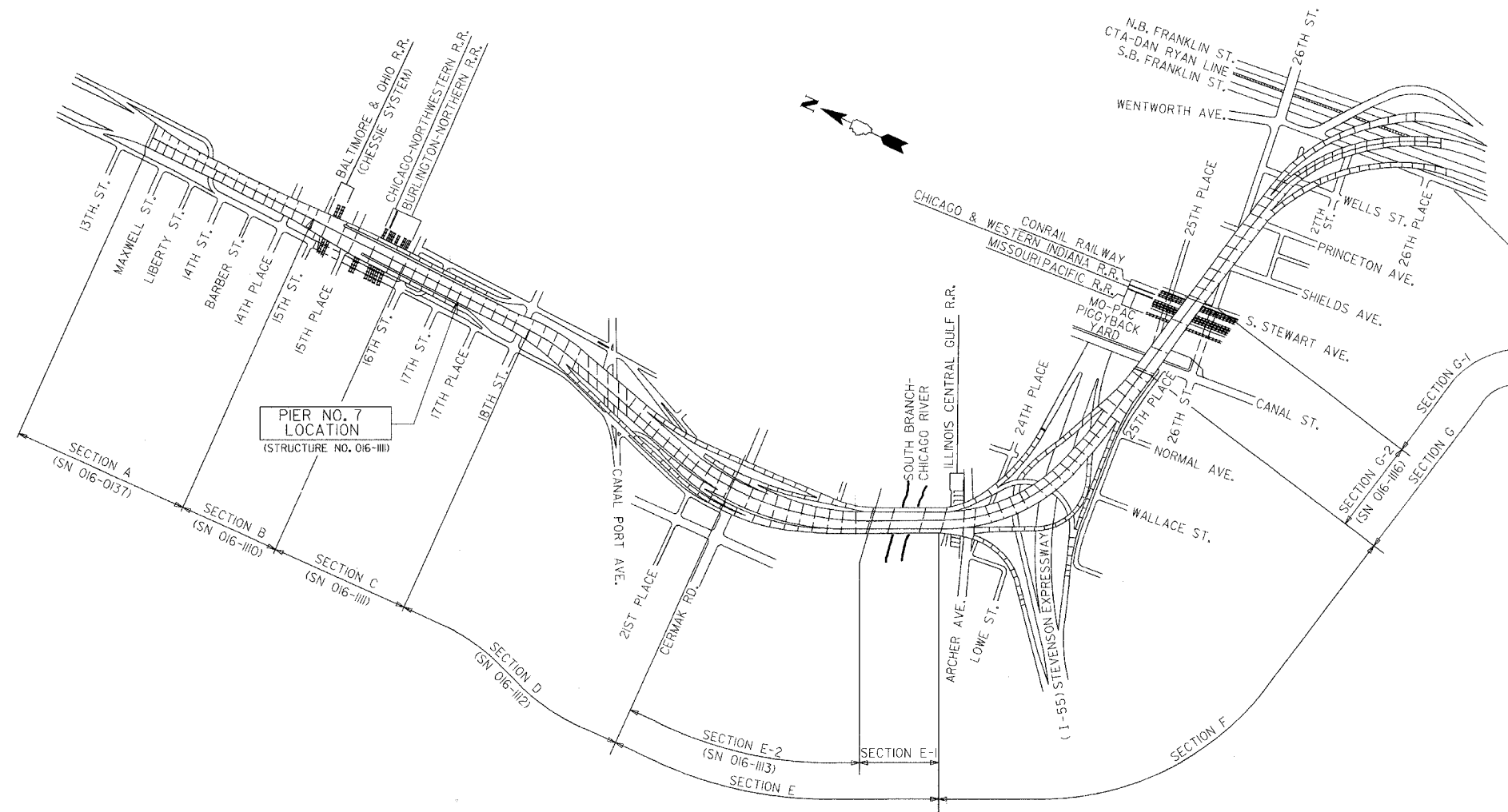
<b>CHASTAIN &amp; ASSOCIATES</b> CONSULTING ENGINEERS	8600 W. BRYN MAWR AVENUE SUITE 204 CHICAGO, ILLINOIS 60611 312-714-0000 FAX 312-714-0000
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BSD-1 4-30-99

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 90/94	*	COOK	419	195
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		
2005-008F				

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of 8 Sheets



PIER NO. 7  
LOCATION  
(STRUCTURE NO. 016-1111)

**KEY PLAN**  
DAN RYAN EXPRESSWAY (I-90/I-94) VIADUCT  
COOK COUNTY, ILLINOIS

**GENERAL NOTES**

- Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price for the work.
- The slab is to be removed in stages. Before starting the concrete removal, the Contractor is required to submit to the Engineer for approval his staging plans and method of removal.
- Prior to pouring the new concrete deck, all loose rust, loose mill scale, and other loose potentially detrimental foreign material shall be removed from the surfaces of the beams or girders in contact with concrete. The cost of this work will be included in the pay item covering removal of the existing concrete. All heavy rust and other tightly adhered potentially detrimental foreign matter shall also be removed from the surfaces of the beams or girders in contact with concrete. Tightly adhered paint may remain unless otherwise noted. This removal shall be accomplished by methods that will not damage the steel. The cost of this work will be paid for according to Article 109.04 of the Standard Specifications.
- Field welding of construction accessories will not be permitted to beams or girders.
- Tapered shims shall be added under the stools as required by the Engineer to make a smooth finger joint.
- The finger plates shall be flame cut as provided in Article 505.04(k) of the Standard Specifications
- Finger plate expansion joints shall be assembled in the proper position with the ends in place and shall be left assembled for shop inspection.
- Joint openings shall be adjusted according to Article 503.10(c) of the Standard Specifications when the deck is poured at an ambient temperature other than 50°F
- Fasteners shall be high strength bolts. Bolts 3/4" φ, open holes 9/16" φ unless otherwise noted.
- Reinforcement bars shall conform to the requirements of AASHTO M-31 or M-322 Grade 60.
- Existing structural steel that will be in contact with new structural steel shall be cleaned and painted prior to erection as required by the Special Provision "Cleaning and Painting Contact Surface Areas of Existing Steel Structures".
- The existing structural steel coating contains lead. The Contractor should take appropriate precautions to deal with the presence of lead on this project.
- All construction joints shall be bonded.
- Traffic to be maintained during construction, see Roadway Plans for Stage Construction Details.
- Existing design and fabrication plans are available upon request.
- All structural steel shall be AASHTO M270 Grade 50 unless noted otherwise. Calculated weight = 25,910 lbs.

**DESIGN STRESSES**

f'c = 3500 psi  
fy = 60,000 psi (Reinf)  
fy = 50,000 psi (M270 Grade 50)

BILL OF MATERIAL		
ITEM	UNIT	TOTAL
Concrete Removal	Cu Yd	17.3
Concrete Superstructure	Cu Yd	20.1
Erecting Structural Steel	L.S.	0.10
Reinforcement Bars, Epoxy Coated	Pound	2460
Mechanical Splice	Each	132
Bar Splicer	Each	24
Erecting Fabric Reinforced Elastomeric Trough	Foot	65

**PIER NO. 7**

**KEY PLAN**

REVISIONS NO. DATE INITIALS		STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS		DRAWN BY DATE RLK 5/03
FAI RTE 90/94 DAN RYAN EXPRESSWAY SN 016-1111 (NORTHBOUND) SEC 2005-008F COOK COUNTY		PROJECT NO. 4222-3		CHECKED BY DATE SDS 5/03
HOMER L. CHASTAIN & ASSOCIATES CONSULTING ENGINEERS		8809 W. BRYAN MAJOR AVENUE SUITE 204 CHICAGO, ILLINOIS 60618 312-714-0050 FAX 312-714-0050		SHEET NO.

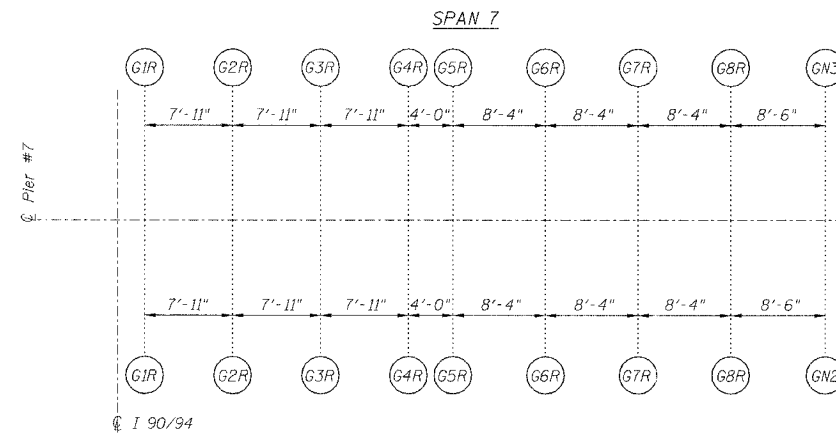


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

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FA1		COOK	419	196
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

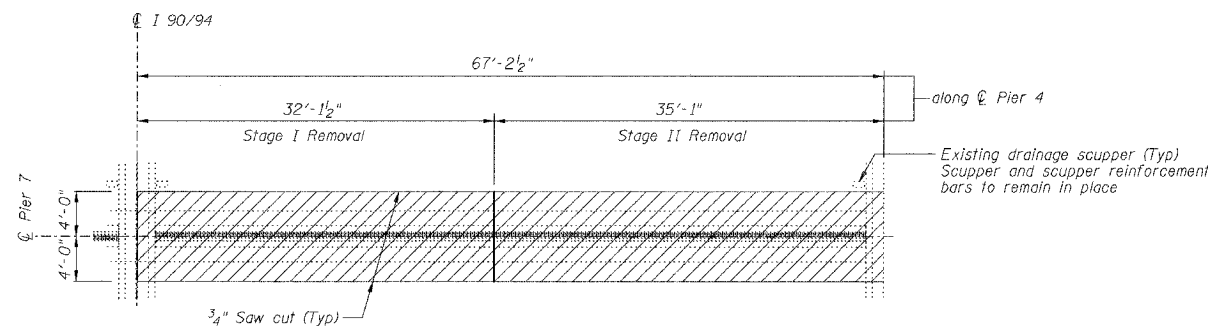
Sheet No 2  
of 8 Sheets

\* 2005-008F  
CONTRACT #62580



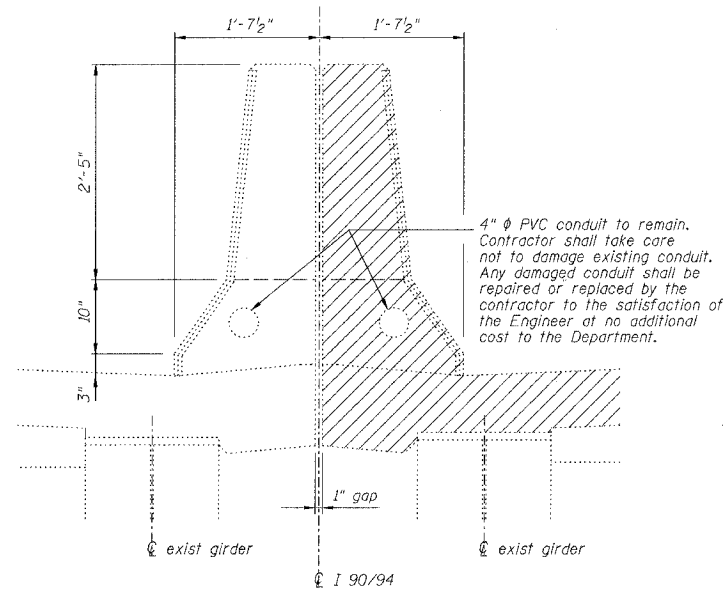
Note:  
All dimensions on girder layout  
are given along centerline of bearing.

SPAN 6  
**GIRDER LAYOUT AT PIER 7**

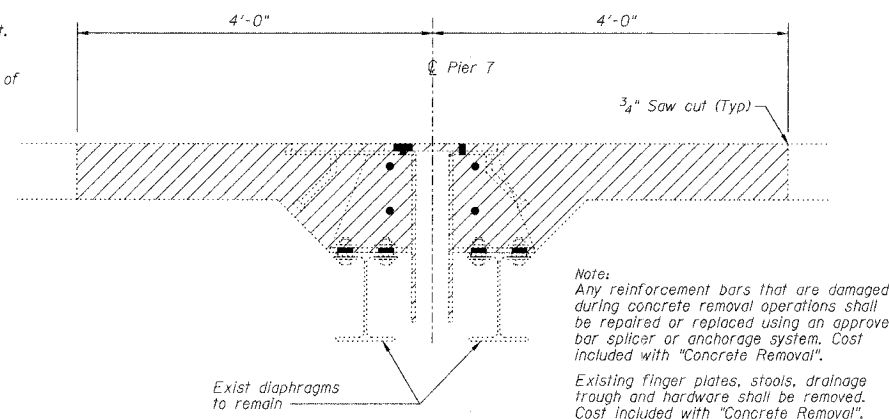


**FINGER PLATE AT PIER 7 NORTHBOUND  
JOINT REMOVAL PLAN AT PIER 7**

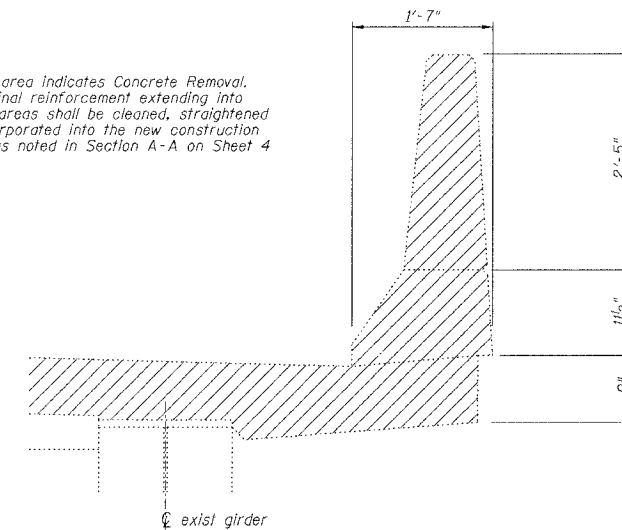
Note:  
Hatched area indicates Concrete Removal.  
Longitudinal reinforcement extending into  
removal areas shall be cleaned, straightened  
and incorporated into the new construction  
except as noted in Section A-A on Sheet 4



**DETAIL AT EXISTING MEDIAN PARAPET**



**SECTION AT EXISTING FINGER PLATE AT PIER 7**



**DETAIL AT EXISTING OUTSIDE PARAPET**

**PIER NO. 7**

**FINGER PLATE EXPANSION JOINT REMOVAL DETAILS**

REVISIONS		STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS		DRAWN BY RLK	DATE 5/03
1				CHECKED BY SDS	DATE 5/03
2				BOOK NUMBER	
3		FAI RTE 90/94 DAN RYAN EXPRESSWAY		PROJECT No. 4222-3	
4		SN 016-1111 (NORTHBOUND)		SHEET No.	
5		SEC 2005-008F COOK COUNTY			
6					
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HOMER L.  
**CHASTAIN & ASSOCIATES**  
CONSULTING ENGINEERS  
8800 W. BERRY MAWLE AVENUE  
SUITE 304  
CHICAGO, ILLINOIS 60611  
312-714-0000  
FAX 312-714-0006

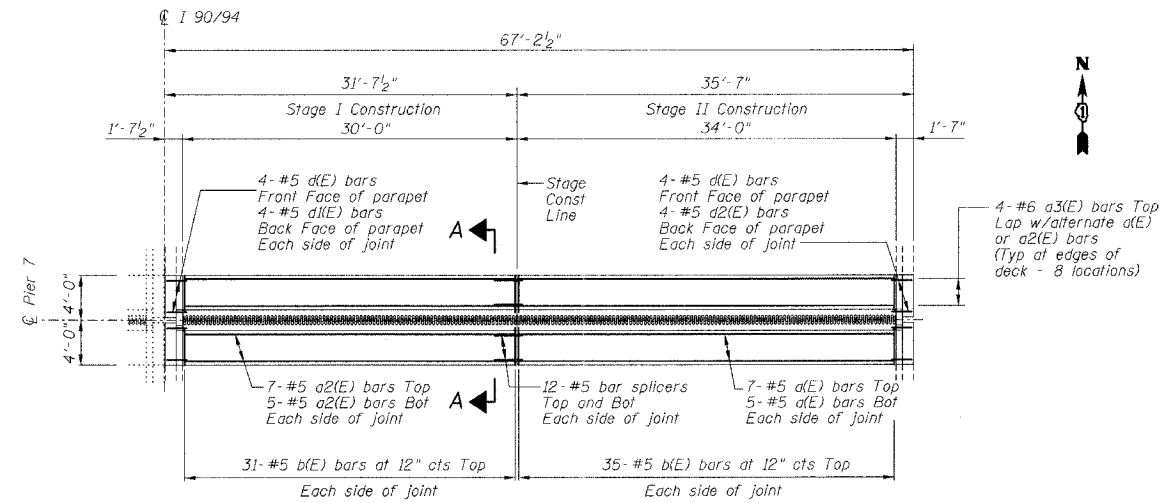


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

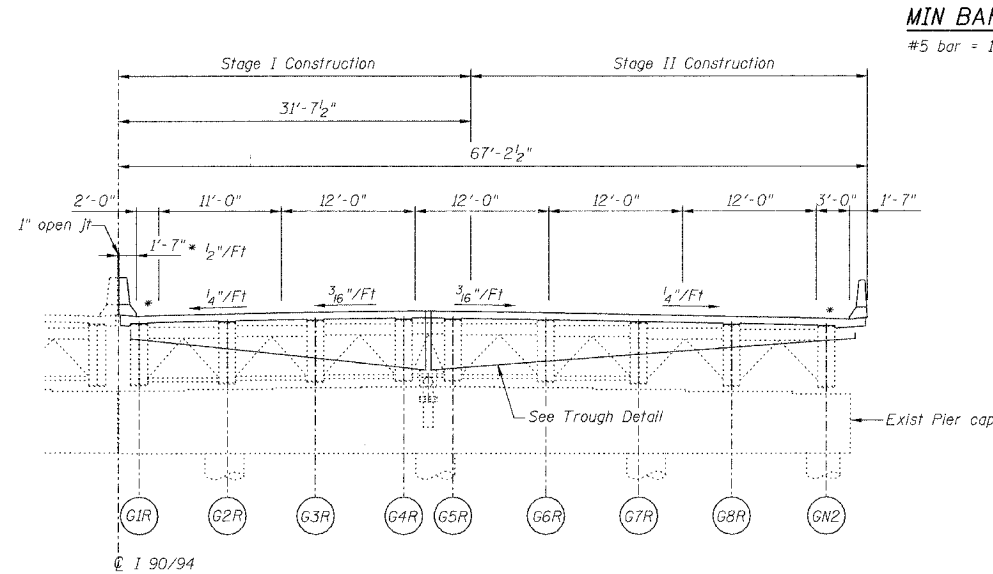
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 90/94		COOK	419	177
FEDERAL DIST.	ILLINOIS	PROJECT		

Sheet No 3  
of 8 Sheets

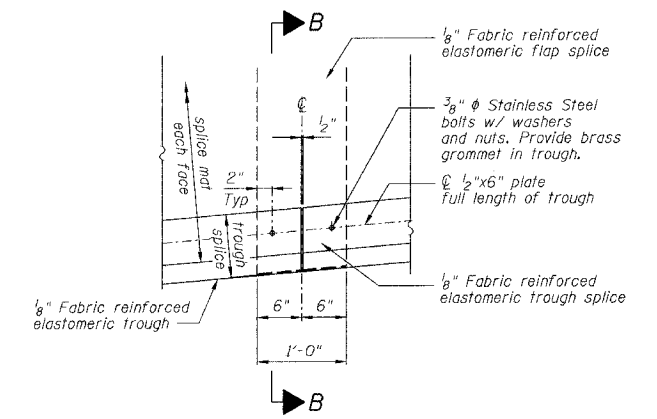
• 2005-008F  
CONTRACT #62580



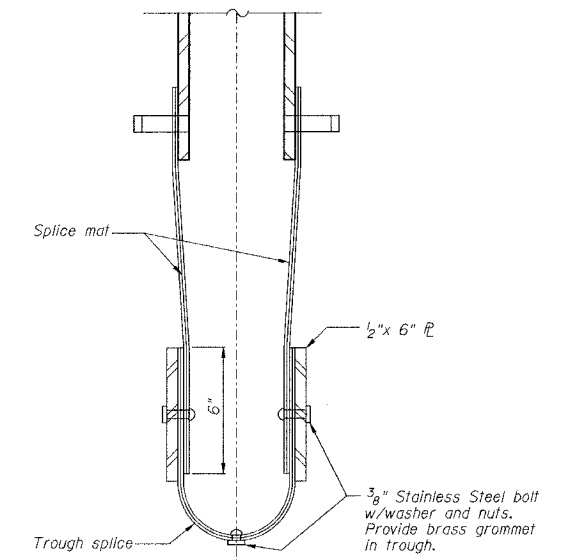
FINGER PLATE AT PIER 7 NORTHBOUND  
JOINT RECONSTRUCTION PLAN AT PIER 7



PIER 7 NORTHBOUND  
ELEVATION AT PIER 7 (LOOKING NORTH)

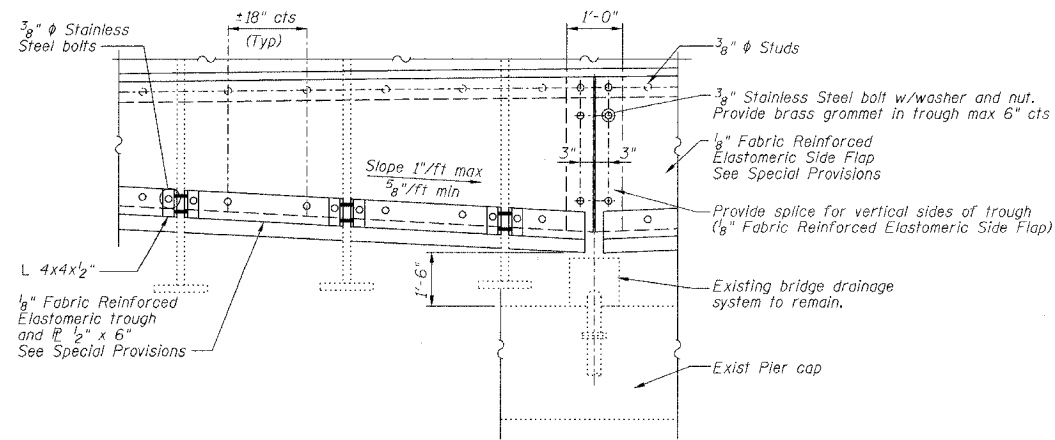


TROUGH SPLICE DETAIL



SECTION B-B

MIN BAR LAP  
#5 bar = 1'-8"



TROUGH DETAIL

NOTES

For Section A-A see Sheet 4 of 8.

PIER NO. 7

FINGER PLATE EXPANSION JOINT DETAILS

REVISIONS	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS	DRAWN BY DATE RLK 5/03
NO. DATE INITIALS	FAI RTE 90/94 DAN RYAN EXPRESSWAY	CHECKED BY DATE SDS 5/03
1	SN 016-1111 (NORTHBOUND)	BOOK NUMBER
2	SEC 2005-008F COOK COUNTY	PROJECT NO. 4222-3
3		SHEET NO.
4		
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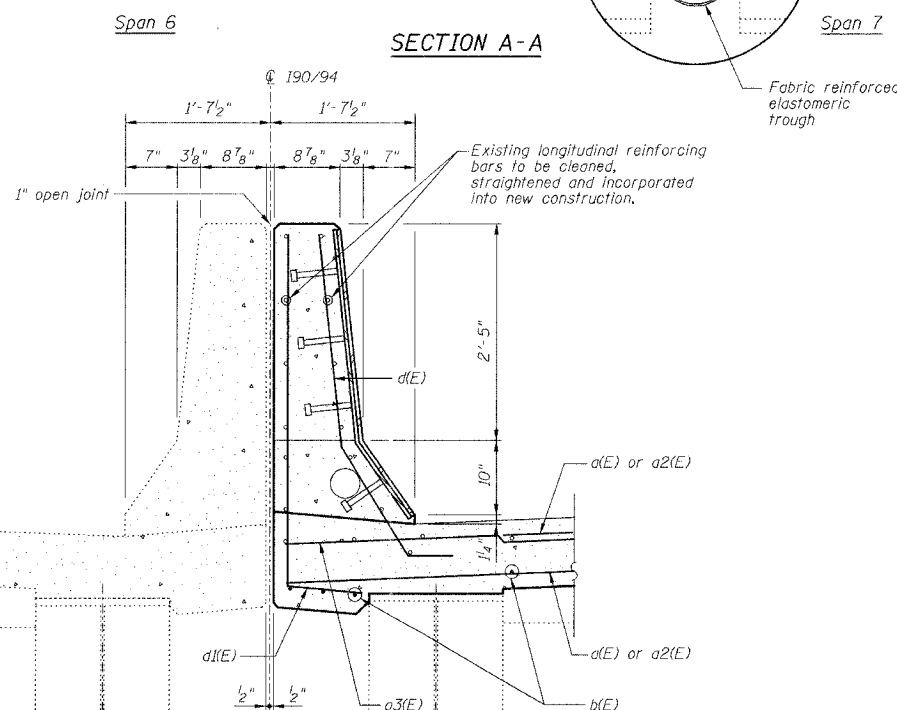
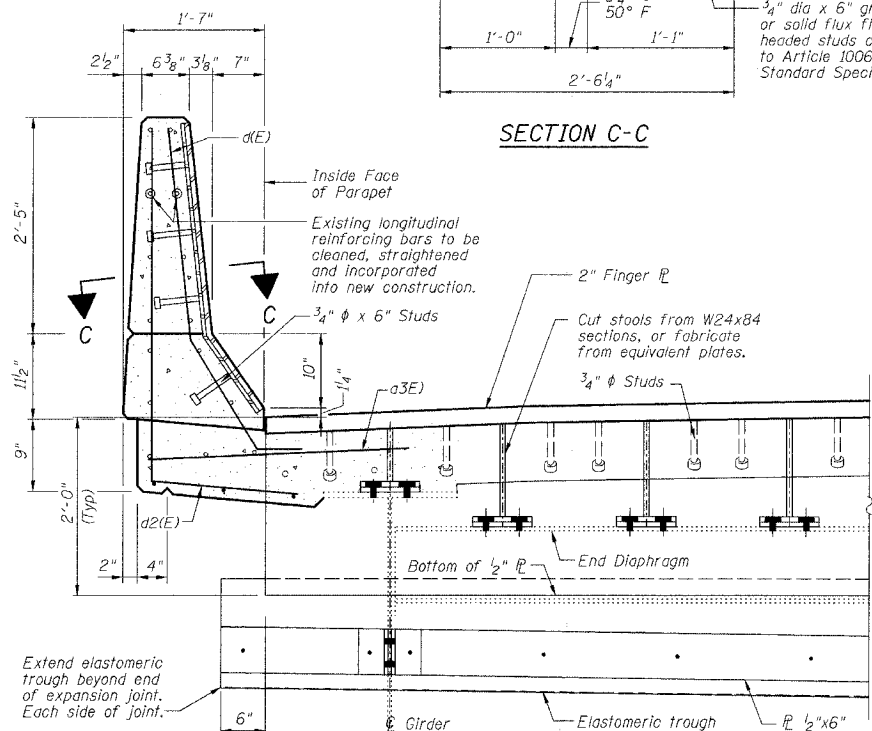
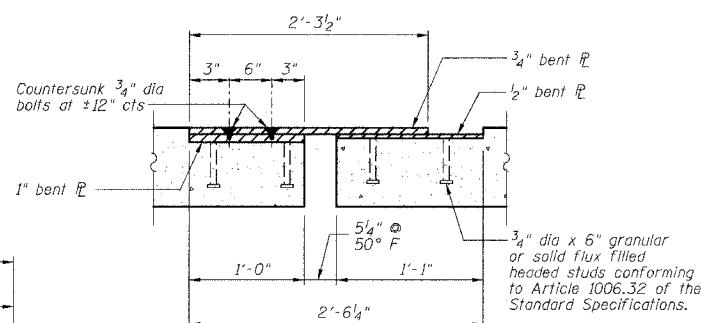
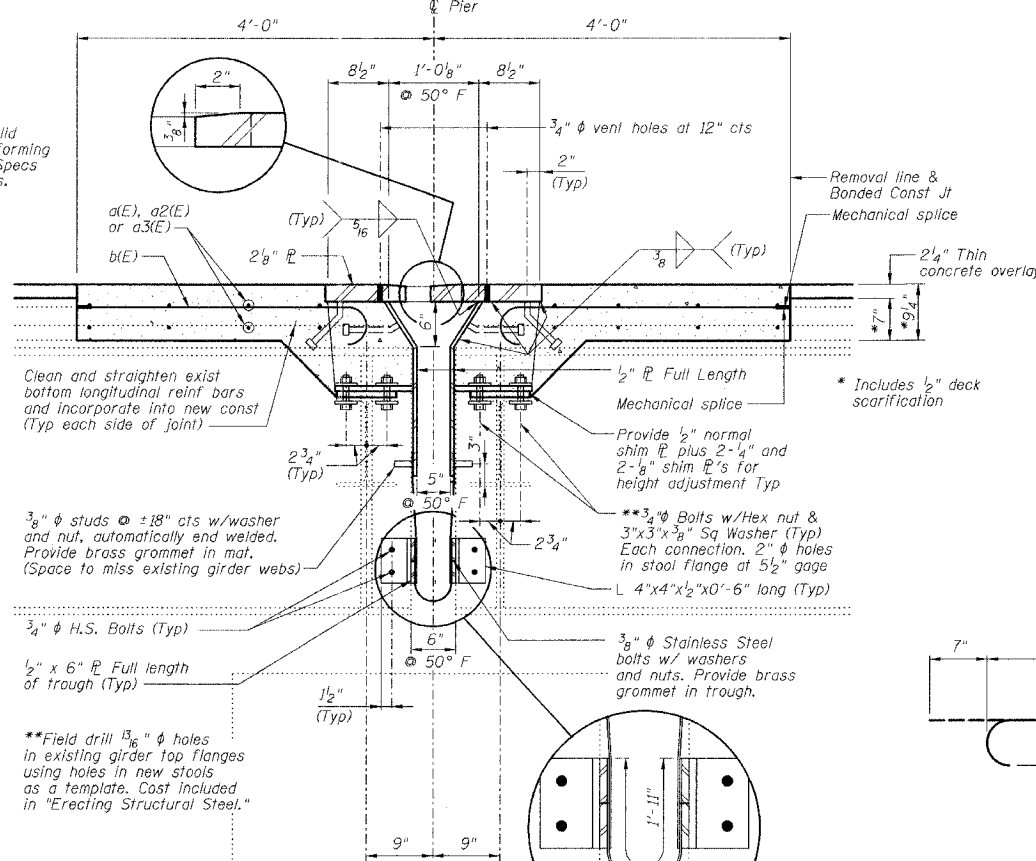
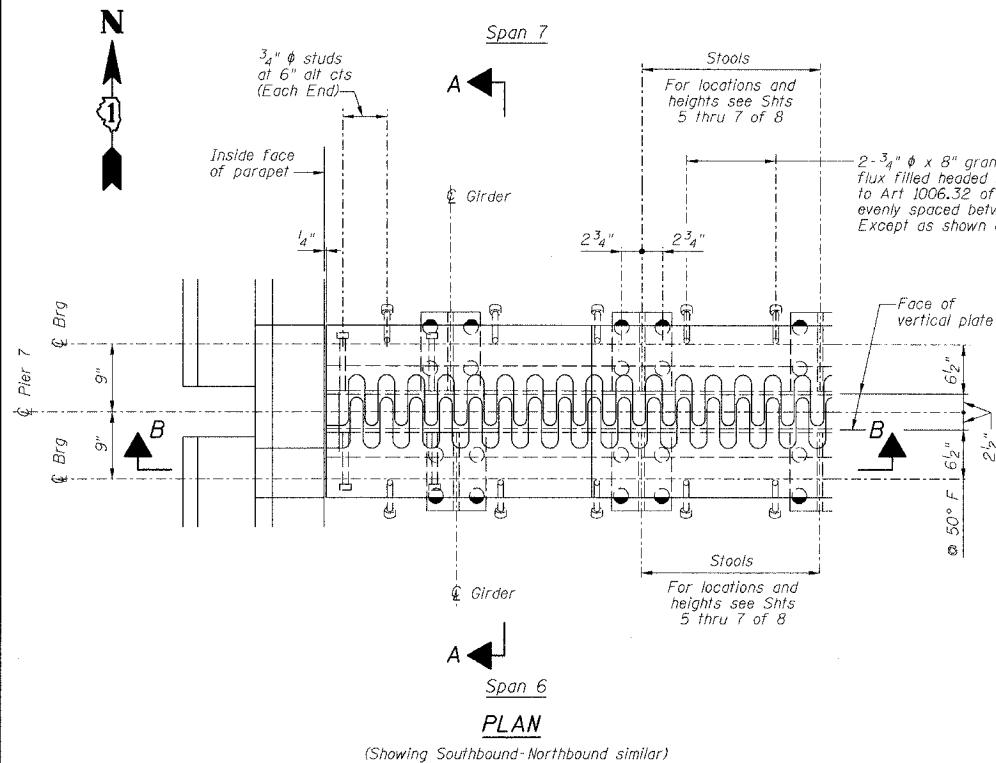
CHASTAIN & ASSOCIATES  
CONSULTING ENGINEERS  
8000 W. BURN MAWRE AVENUE  
SUITE 204  
CHICAGO, ILLINOIS 60631  
312-734-0000  
FAX 312-734-0005

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 90/94		COOK	419	118
FEDERAL DIST. NO.		ILLINOIS PROJECT		

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of 8 Sheets

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CONTRACT #62580



**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape	
a(E)	24	#5	35'-0"	—	
a2(E)	24	#5	31'-0"	—	
a3(E)	16	#6	4'-6"	—	
b(E)	132	#5	3'-10"	—	
d(E)	16	#5	4'-3"	—	
d1(E)	8	#5	5'-2"	—	
d2(E)	8	#5	5'-10"	—	
Reinforcement Bars, Epoxy Coated				Pound	2460
Concrete Removal				Cu Yd	17.3
Concrete Superstructure				Cu Yd	20.1
Bar Splicers				Each	24
Mechanical Splice				Each	132

Reinforcing bars designated (E) shall be epoxy coated.

**NOTES**

- The Contractor shall bolt the Stools of the Fingerplate Joint Assembly to the top of existing End Cross Frames and to the top of the existing girders, as shown in Section A-A of this drawing.
- Stainless steel bolts, washers and nuts shall meet the requirements of ASTM A193.
- The installation of all necessary hardware, stainless steel bolts, studs and washers, plates and angles shall be included with "Erecting Structural Steel".
- Expansion Length = 418.6'

**PIER NO. 7**

**FINGER PLATE EXPANSION JOINT DETAILS**

REVISIONS			STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS		DRAWN BY DATE RLK 5/03
No.	DATE	INITIALS	FAI RTE 90/94	DAN RYAN EXPRESSWAY	CHECKED BY DATE SDS 5/03
1			SEC 2005-008F	SN 016-1111 (NORTHBOUND)	BOOK NUMBER
2				COOK COUNTY	PROJECT NO. 4222-3
3					SHEET NO.
4					
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CHASTAIN & ASSOCIATES  
CONSULTING ENGINEERS

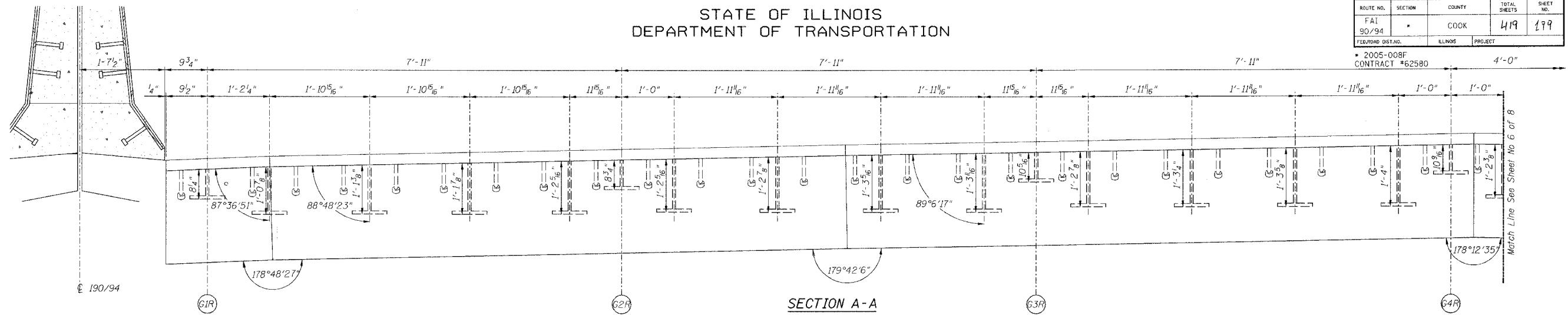
8600 W. BRYN MAWR AVENUE  
SUITE 204  
CHICAGO, ILLINOIS 60618  
312-714-0080  
FAX: 312-714-0085

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 90/94	*	COOK	419	199
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

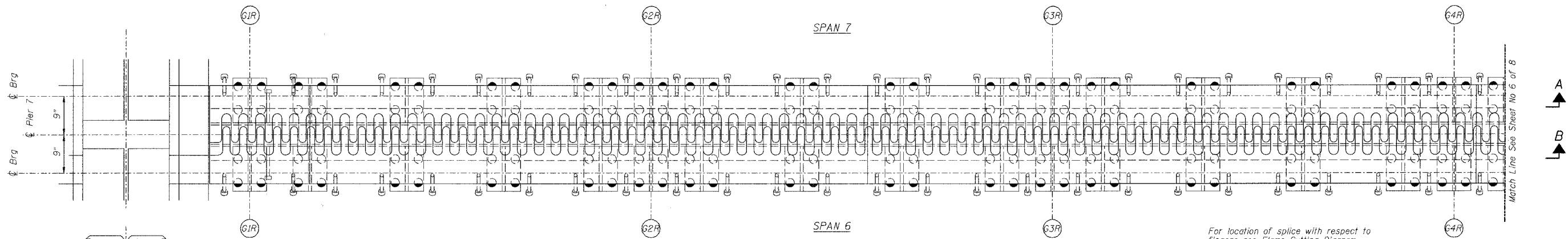
Sheet No. 5  
of 8 Sheets

\* 2005-008F  
CONTRACT #62580



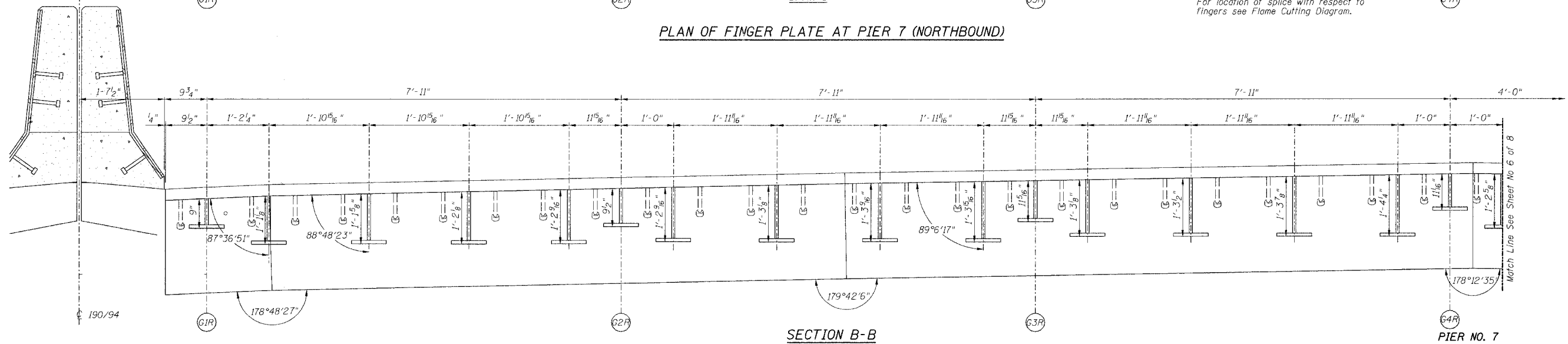
SECTION A-A

SPAN 7



PLAN OF FINGER PLATE AT PIER 7 (NORTHBOUND)

SPAN 6



SECTION B-B

PIER NO. 7

Note:  
For optional splice detail see  
Flame cutting diagram on Sheet No. 4

FINGER PLATE PLAN AND ELEVATION DETAILS

REVISIONS		STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS	DRAWN BY DATE
No.	DATE		INITIALS
1			CHECKED BY DATE
2			SDS 5/03
3			BOOK NUMBER
4			
5			
6			
7			
8			
9			
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FAI RTE 90/94 DAN RYAN EXPRESSWAY  
SN 016-1111 (NORTHBOUND)  
SEC 2005-008F COOK COUNTY

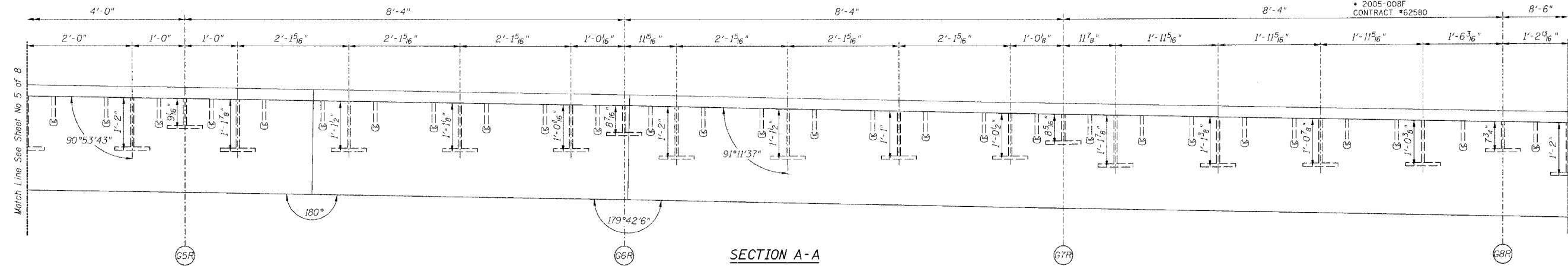
HOMER L.  
**CHASTAIN & ASSOCIATES**  
CONSULTING ENGINEERS  
8000 W. BIRNY MAWBE AVENUE  
SUITE 204  
CHICAGO, ILLINOIS 60651  
812-714-0060  
FAX: 312-714-0065

PROJECT No.  
**4222-3**  
SHEET No.

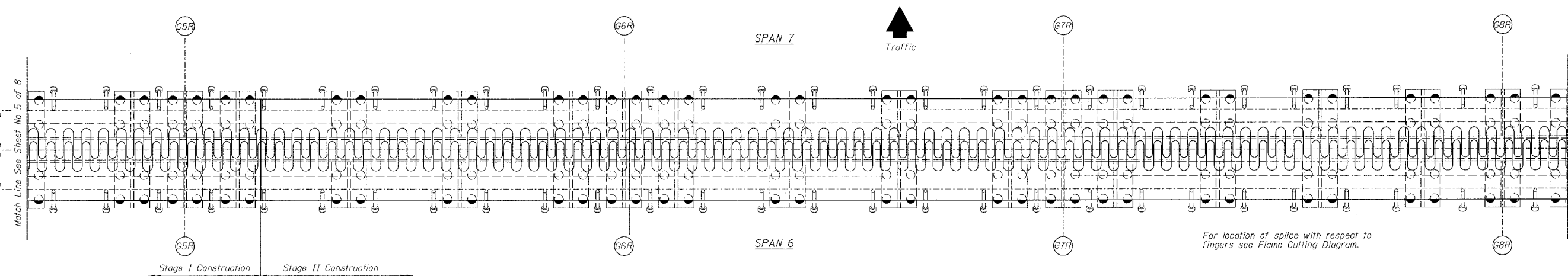
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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FED. ROAD DIST. NO.	LINE	PROJECT		
2005-008F				
CONTRACT #62580				

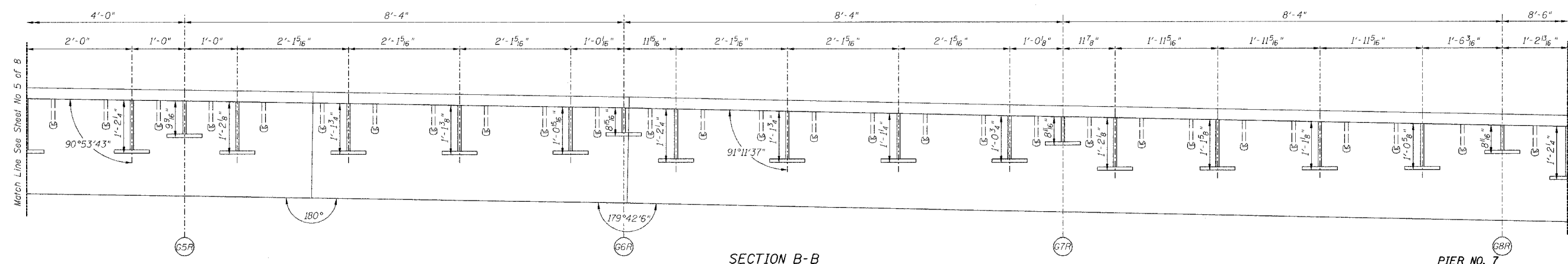
Sheet No 6  
of 8 Sheets



SECTION A-A



PLAN OF FINGER PLATE AT PIER 7 (NORTHBOUND)



SECTION B-B

PIER NO. 7

For location of splice with respect to fingers see Flame Cutting Diagram.

Note:  
For optional splice detail see  
flame cutting diagram on Sheet No. 4

REVISIONS			FINGER PLATE PLAN AND ELEVATION DETAILS	
No.	DATE	INITIALS		
1				
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STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS		DRAWN BY DATE RLK 5/03
FAI RTE 90/94 DAN RYAN EXPRESSWAY		CHECKED BY DATE SDS 5/03
SN 016-1111 (NORTHBOUND)		BOOK NUMBER
SEC 2005-008F COOK COUNTY		PROJECT No. 4222-3
		SHEET No.