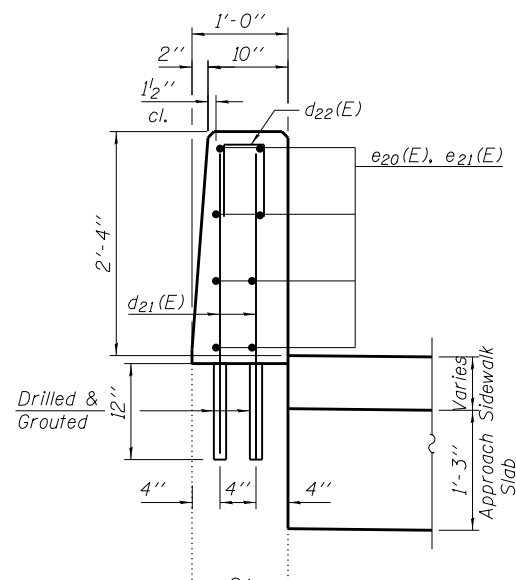
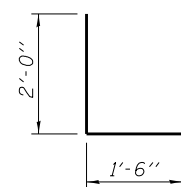


**FOUR WINGWALLS  
BILL OF MATERIAL**

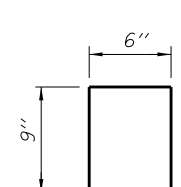
Bar	No.	Size	Length	Shape
d21(E)	344	#6	3'-2"	—
d22(E)	44	#4	2'-0"	□
d23(E)	6	#6	3'-6"	L
d24(E)	10	#6	8'-11"	U
e20(E)	16	#5	40'-8"	—
e21(E)	16	#5	39'-3"	—
e22(E)	8	#5	2'-10"	—
e23(E)	8	#5	2'-8"	—
Concrete Removal			Cu. Yds.	15
Reinforcement Bars, Epoxy Coated			Pound	3,240
Concrete Superstructure			Cu. Yds.	13.7
Structural Repair of Concrete (Depth equal to or less than 5")			Sq. Ft.	30
Epoxy Crack Injection			Ft.	6



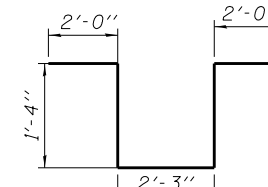
**SECTION THRU PARAPET**



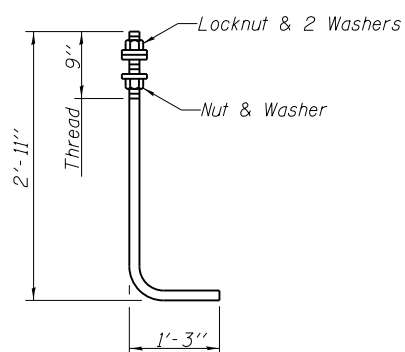
**BARS d23(E)**



**BAR d22(E)**

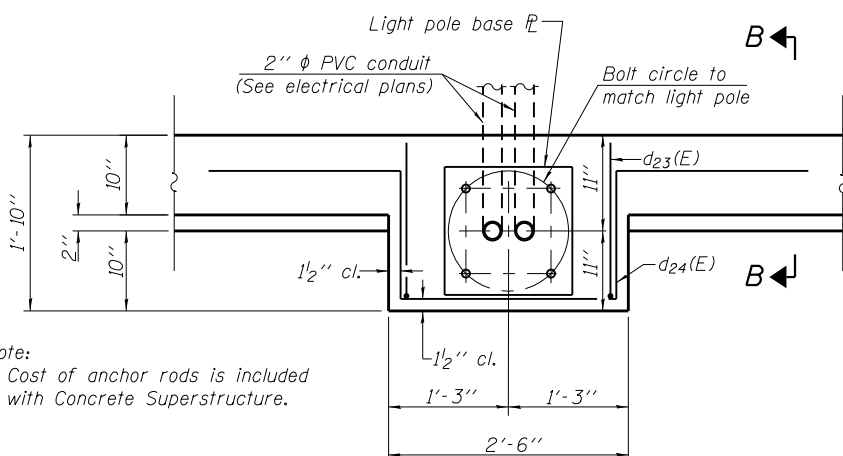


**BAR d24(E)**



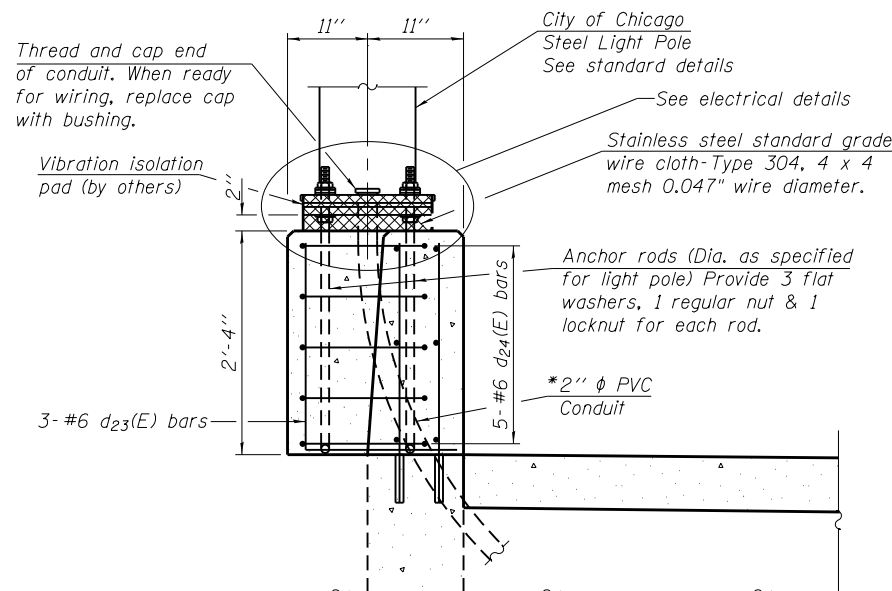
**ANCHOR ROD**

Diameter as specified for light poles.  
(ASTM F 1554 Grade 105)



**PLAN-LIGHT POLE BASE**

Note:  
Cost of anchor rods is included  
with Concrete Superstructure.



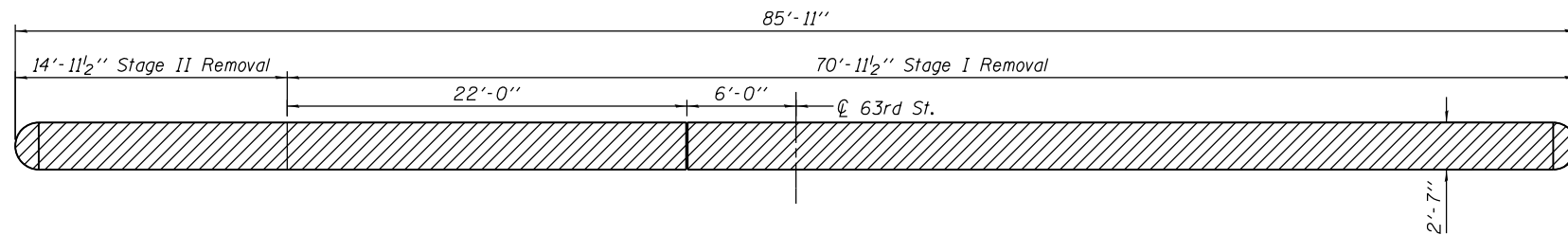
**SECTION B-B**

\*Chip concrete at top of existing wingwall to fit the conduit.

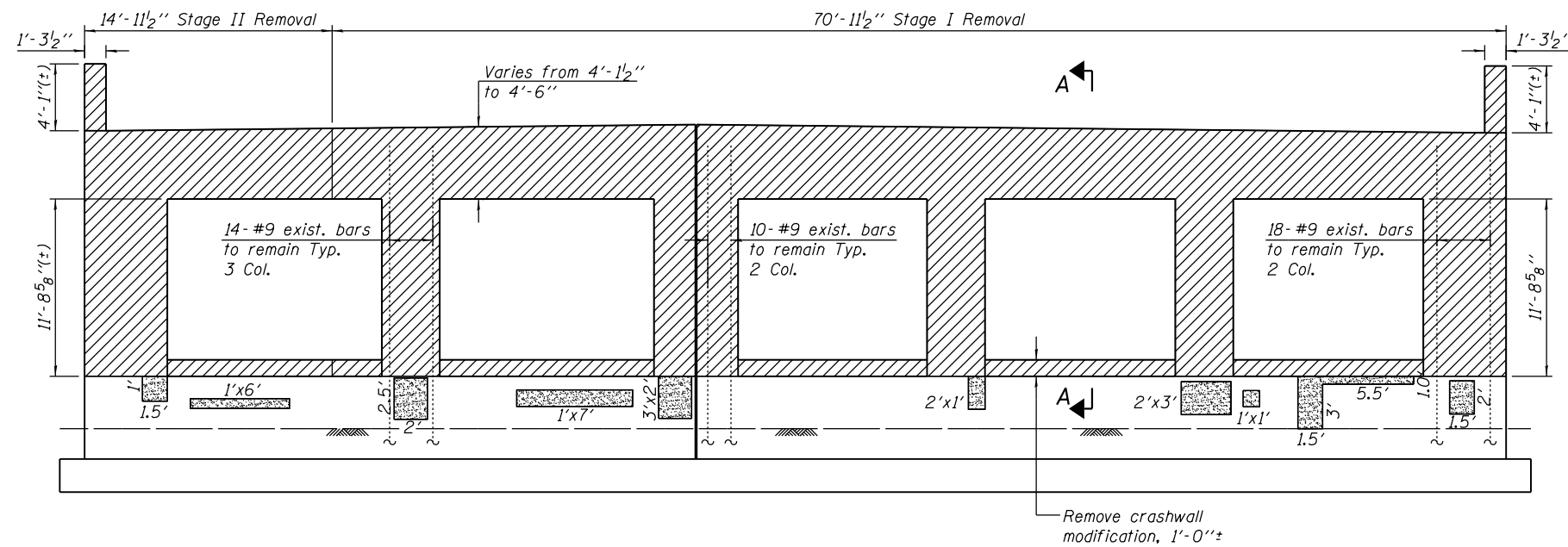
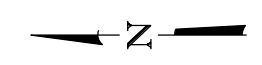
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	DATE - 3/31/2014	REVISED -

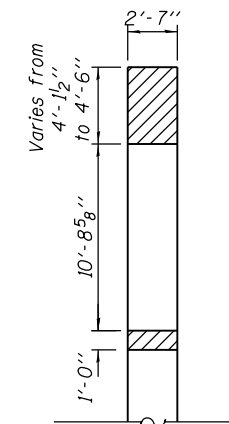
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1920-B	COOK	142	101
CONTRACT NO. 60J15				



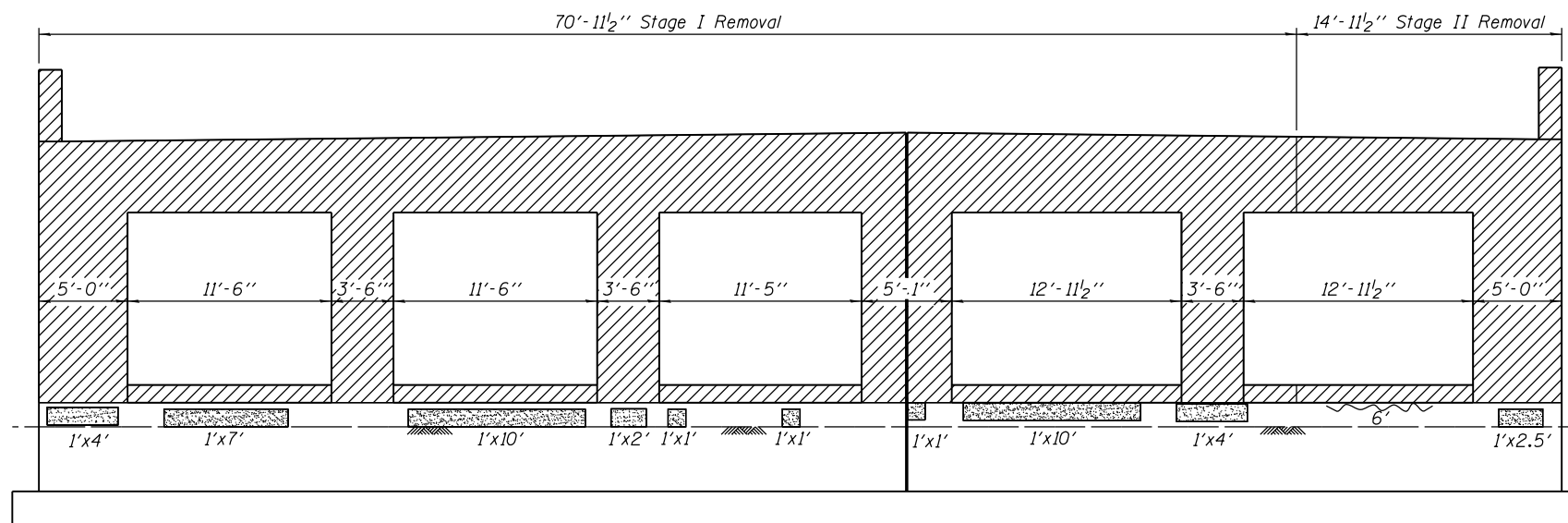
PIER 1 TOP PLAN



PIER 1 ELEVATION  
(Looking East)



SECTION A-A



PIER 1 ELEVATION  
(Looking West)

BILL OF MATERIAL

Item	Unit	Quantity
Concrete Removal	cu. yd.	66
Epoxy Crack Injection	ft.	6
Structural Repair of Concrete (Depth equal to or Less than 5")	sq. ft.	90

LEGEND

- Concrete Removal
- Structural Repair of Concrete (Depth Equal to or Less than 5")
- Epoxy Crack Injection

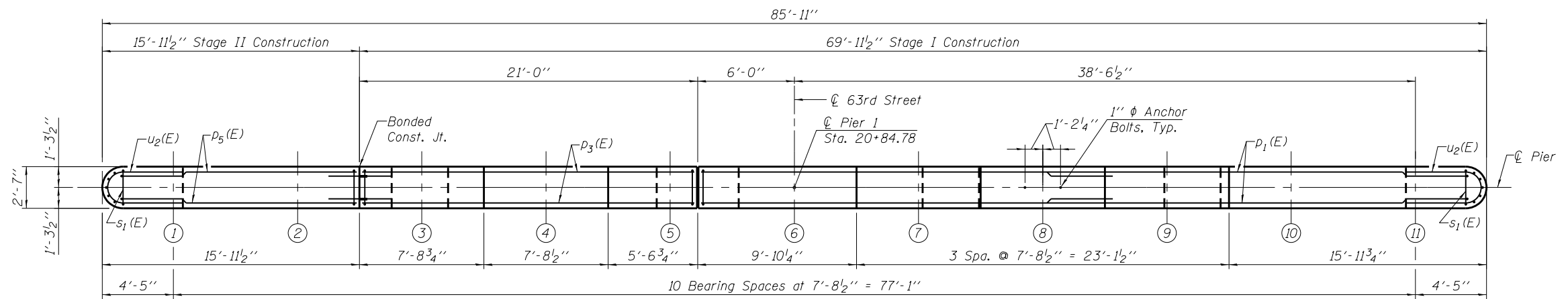
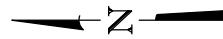
NOTES

1. Clean and reuse 8'-7" length of existing #9 vertical column bars at all columns. Cost included with Concrete Removal.

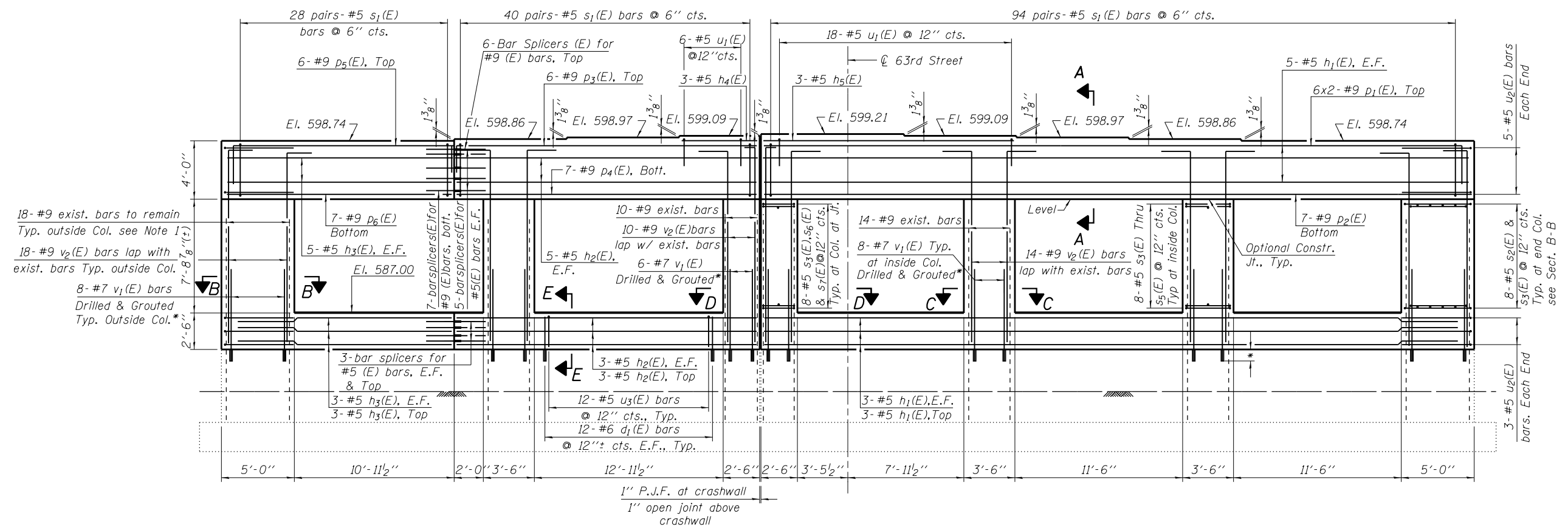
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1920-B	COOK	142	102
CONTRACT NO. 60J15				



**TOP PLAN**



**PIER 1 ELEVATION**

(Looking East)

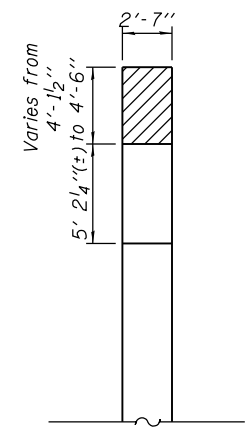
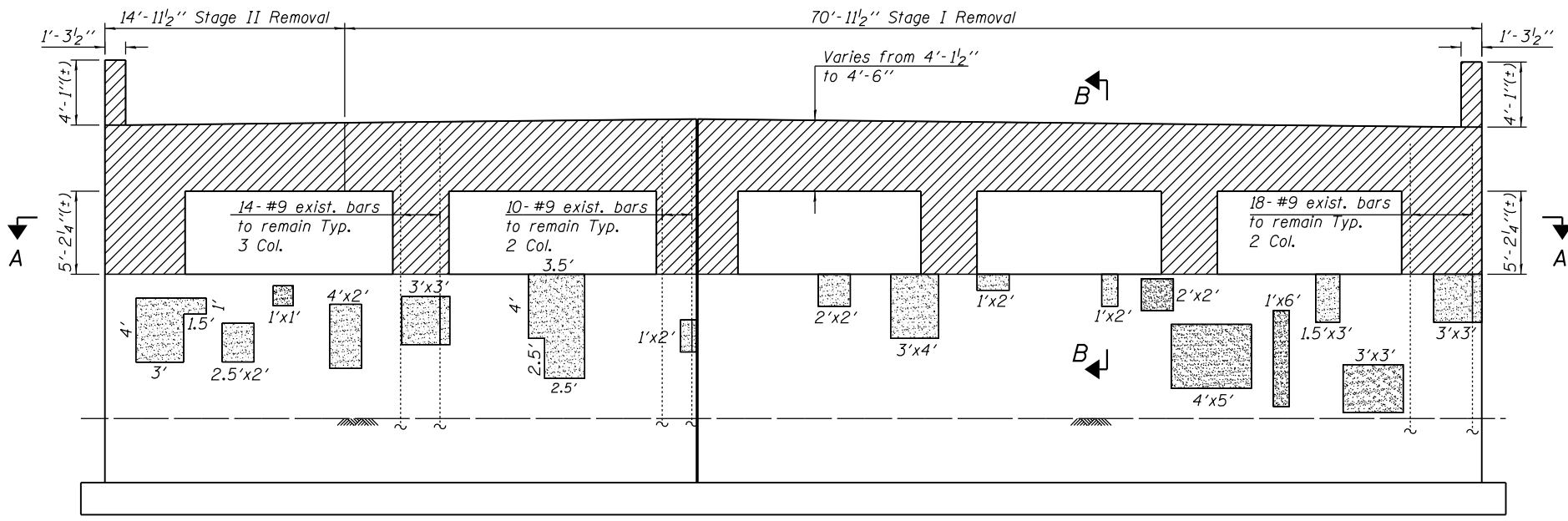
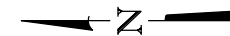
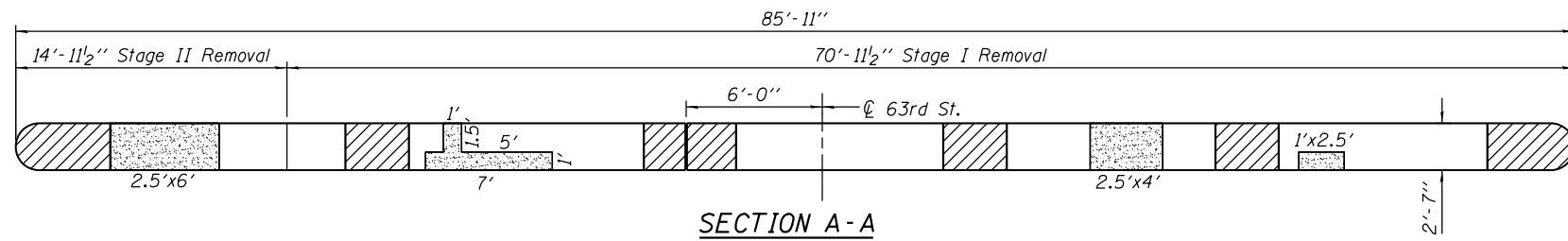
**NOTES**

1. Clean and reuse 8'-7" length of existing #9 vertical column bars at all columns. Cost included with Concrete Removal.
2. \*Epoxy grout v<sub>1</sub>(E) bars in 13" (min.) drilled holes according to Article 584 of the Standard Specifications.
3. See Sheets S46 and S47 for sections and Bill of Material.
4. Space reinforcement in cap to miss anchor bolts.
5. Pour steps monolithically with cap.

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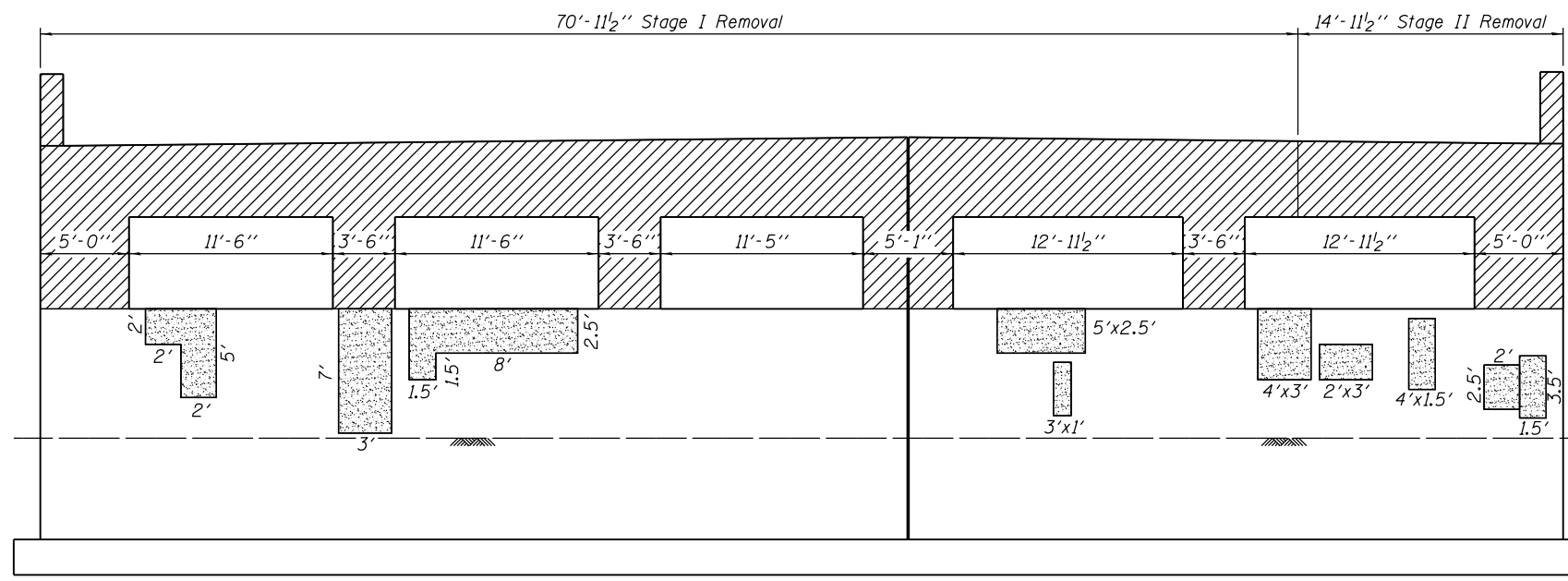
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PLOT DATE =	DATE - 3/31/2014	REVISED -

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1920-B	COOK	142	103
CONTRACT NO. 60J15				
ILLINOIS FED. AID PROJECT				



**PIER 2 ELEVATION**  
(Looking East)

**SECTION B-B**



**PIER 2 ELEVATION**  
(Looking West)

**BILL OF MATERIAL**

Item	Unit	Quantity
Concrete Removal	cu. yd.	48
Structural Repair of Concrete (Depth equal to or Less than 5")	sq. ft.	278

**LEGEND**

- Concrete Removal
- Structural Repair of Concrete (Depth Equal to or Less than 5")

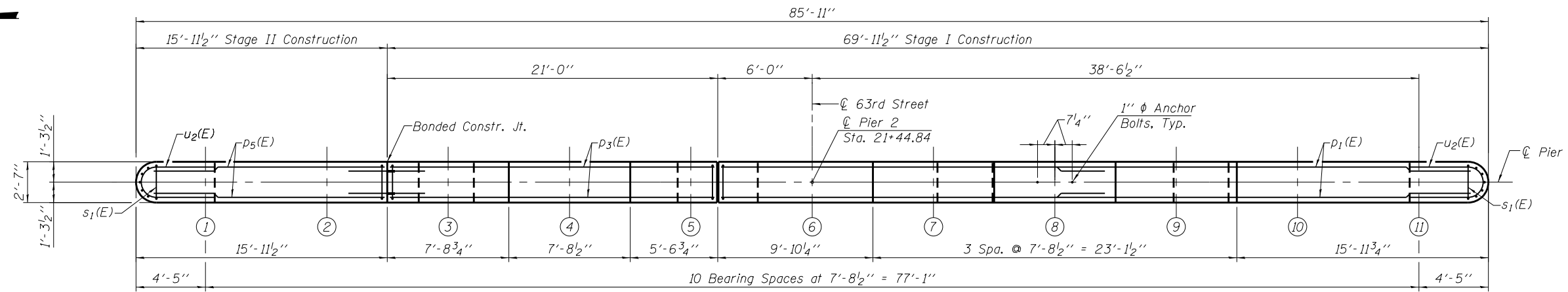
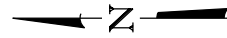
**NOTES**

1. Clean and reuse 8'-7" length of existing #9 vertical column bars at all columns. Cost included with Concrete Removal.

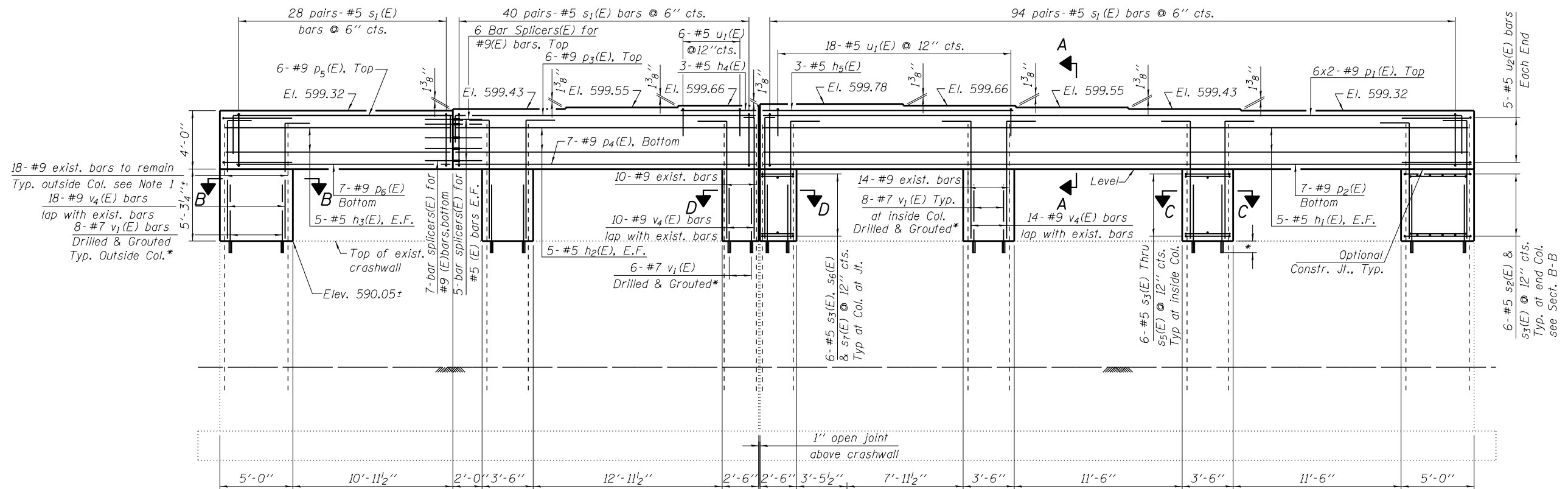
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1920-B	COOK	142	104
CONTRACT NO. 60J15				
ILLINOIS FED. AID PROJECT				



**TOP PLAN**



**PIER 2 ELEVATION**

(Looking East)

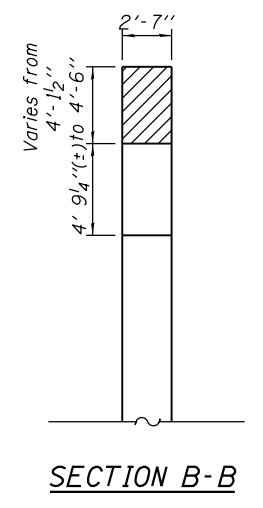
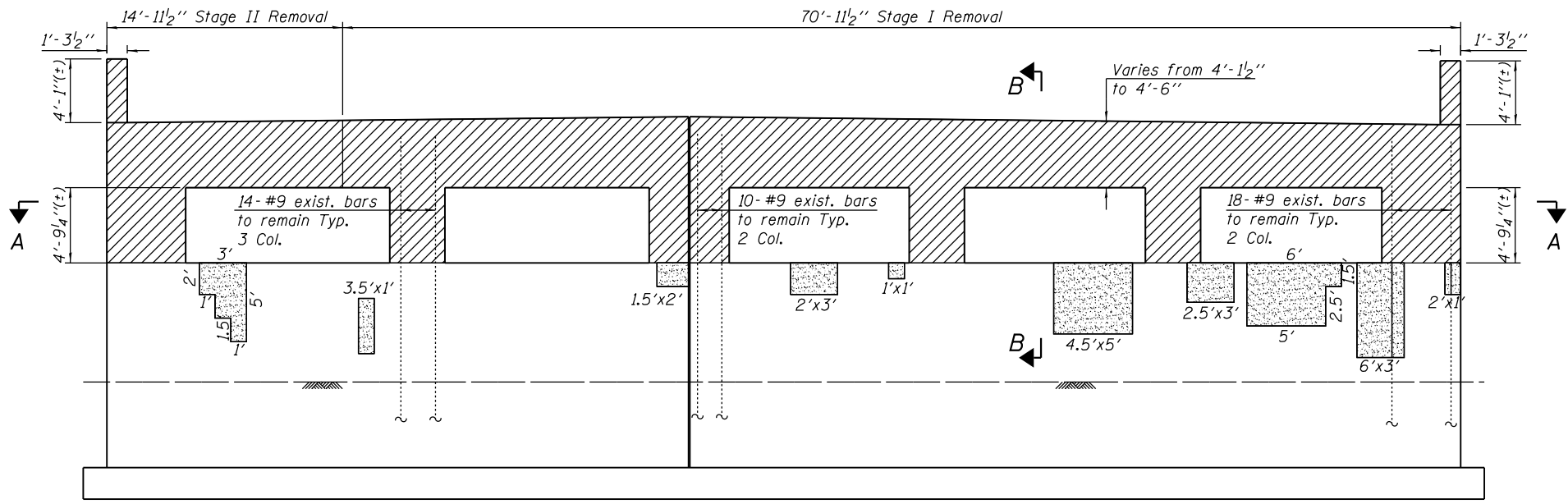
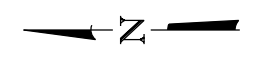
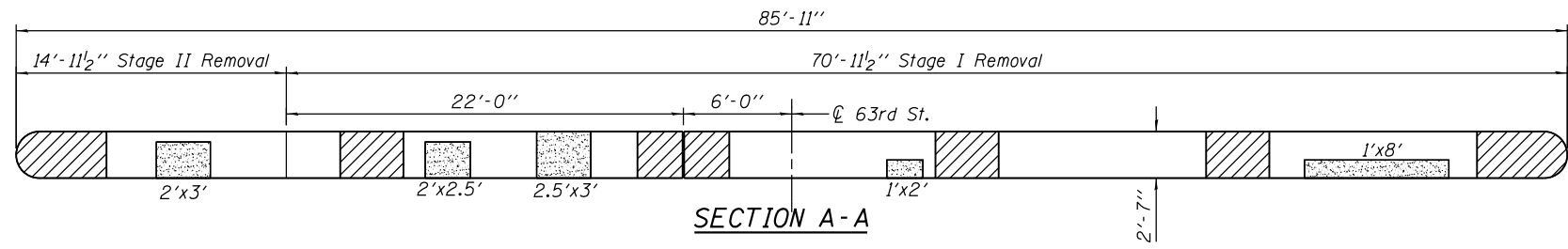
**NOTES**

1. Clean and reuse 8'-7" length of existing #9 vertical column bars at all columns. Cost included with Concrete Removal.
2. \*Epoxy grout v<sub>1</sub>(E) bars in 13" (min.) drilled holes according to Article 584 of the Standard Specifications.
3. See Sheets S46 and S47 for sections and Bill of Material.
4. Space reinforcement in cap to miss anchor bolts.
5. Pour steps monolithically with cap.

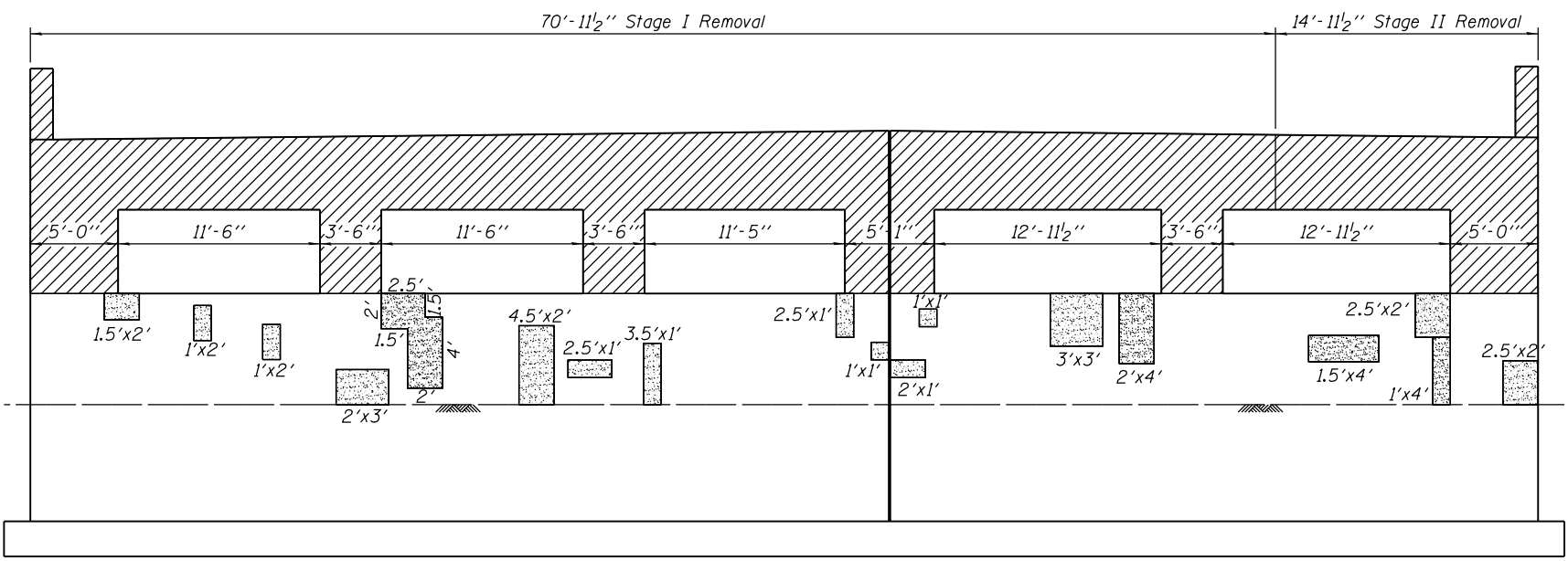
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	DATE - 3/31/2014	REVISED -

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1920-B	COOK	142	105
CONTRACT NO. 60J15				



**PIER 3 ELEVATION**  
(Looking East)



**PIER 3 ELEVATION**  
(Looking West)

**BILL OF MATERIAL**

Item	Unit	Quantity
Concrete Removal	cu. yd.	47
Structural Repair of Concrete (Depth Equal to or Less than 5")	sq. ft.	209

**LEGEND**

- Concrete Removal
- Structural Repair of Concrete (Depth Equal to or Less than 5")

**NOTES**

1. Clean and reuse 8'-7" length of existing #9 vertical column bars at all columns. Cost included with Concrete Removal.

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**GRAEF**  
8501 W. Higgins Road, Suite 280  
Chicago, Illinois 60631; (773) 399-0112

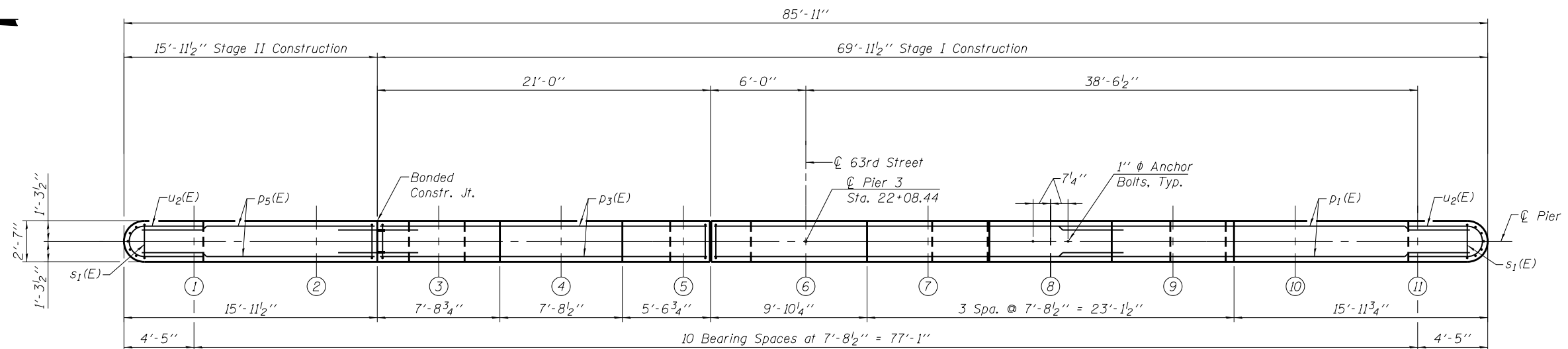
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DATE - 3/31/2014	REVISED -	

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

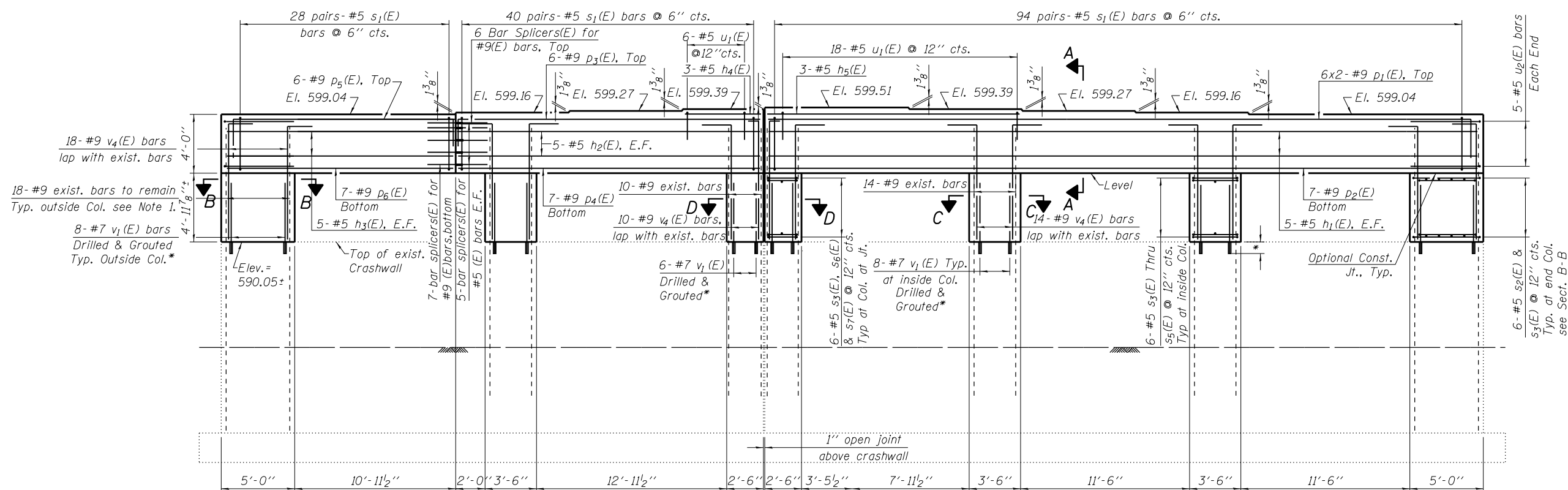
**PIER 3 REMOVAL & REPAIR**  
**STRUCTURE NO. 016-1149**

SHEET NO. S42 OF 50 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1920-B	COOK	142	106
				CONTRACT NO. 60J15
ILLINOIS FED. AID PROJECT				



**TOP PLAN**



**PIER 3 ELEVATION**

(Looking East)

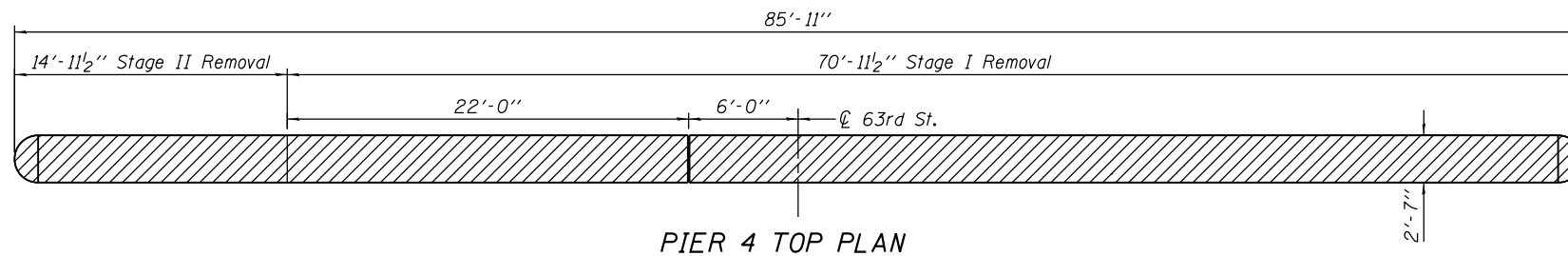
**NOTES**

1. Clean and reuse 8'-7" length of existing #9 vertical column bars at all columns. Cost included with Concrete Removal.
2. \*Epoxy grout v<sub>1</sub>(E) bars in 13" (min.) drilled holes according to Article 584 of the Standard Specifications.
3. See Sheets S46 and S47 for sections and Bill of Material.
4. Space reinforcement in cap to miss anchor bolts.
5. Pour steps monolithically with cap.

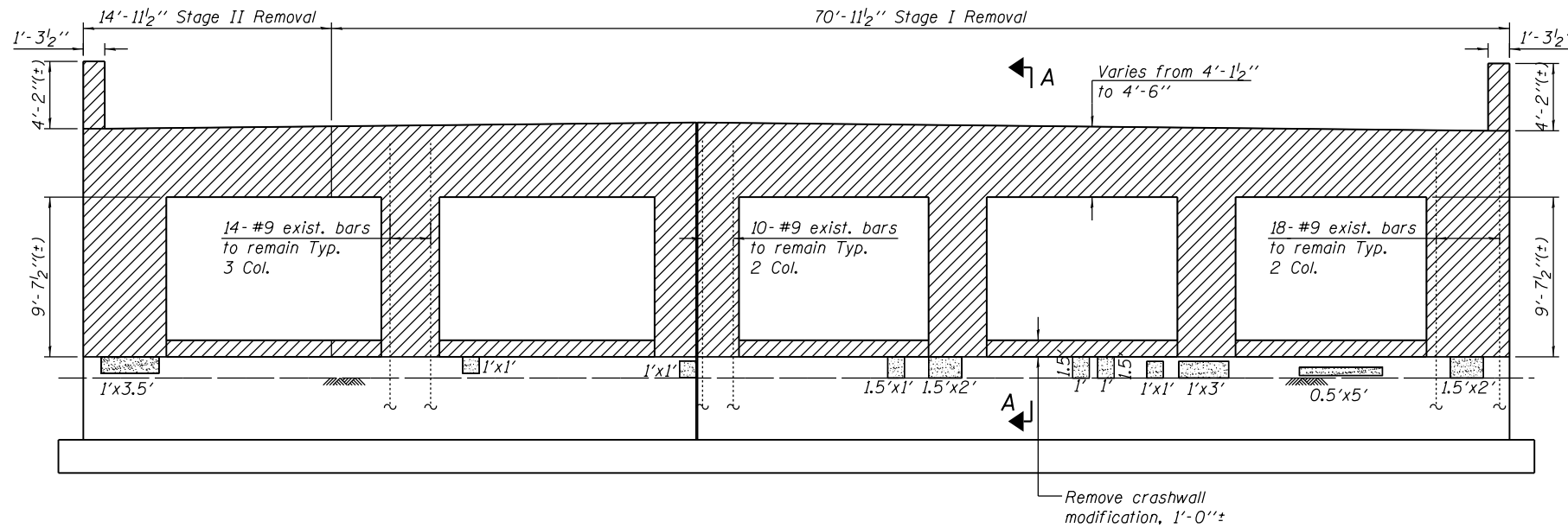
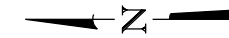
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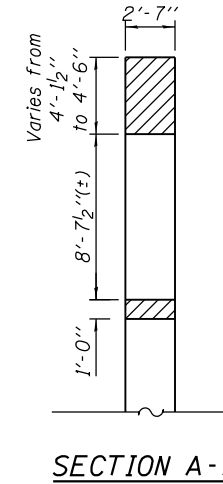
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1920-B	COOK	142	107
CONTRACT NO. 60J15				
ILLINOIS FED. AID PROJECT				



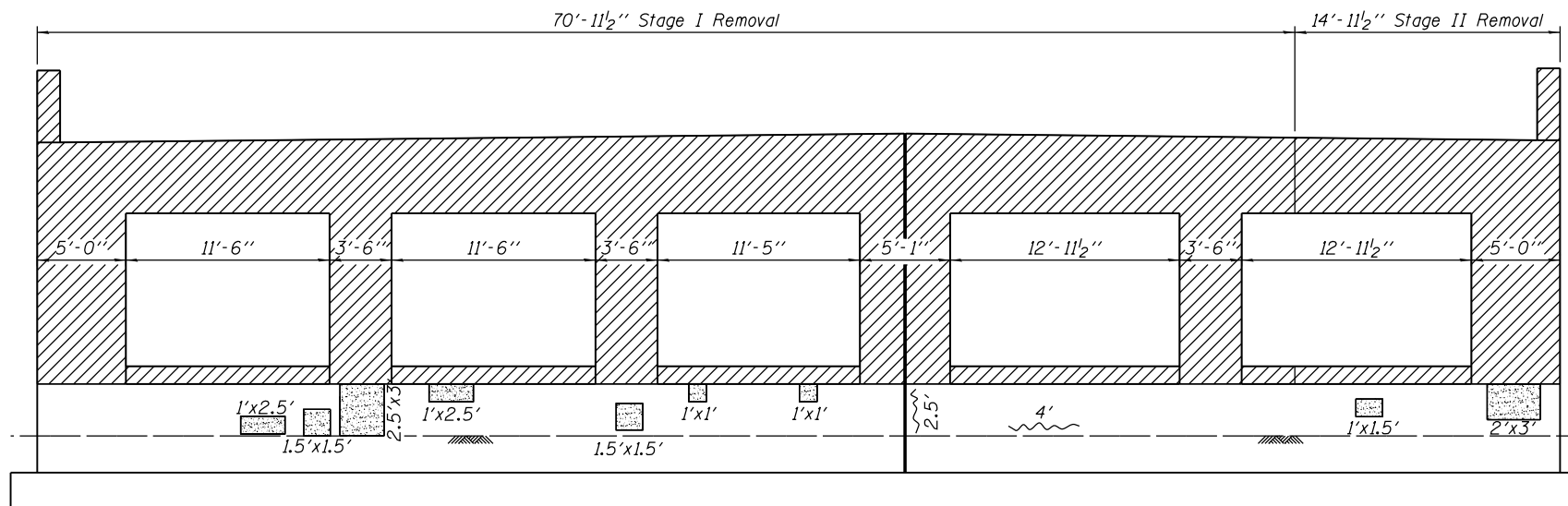
PIER 4 TOP PLAN



PIER 4 ELEVATION  
(Looking East)



SECTION A-A



PIER 4 ELEVATION  
(Looking West)

BILL OF MATERIAL

Item	Unit	Quantity
Concrete Removal	cu. yd.	63
Epoxy Crack Injection	ft.	7
Structural Repair of Concrete (Depth Equal to or Less than 5")	sq. ft.	49

LEGEND

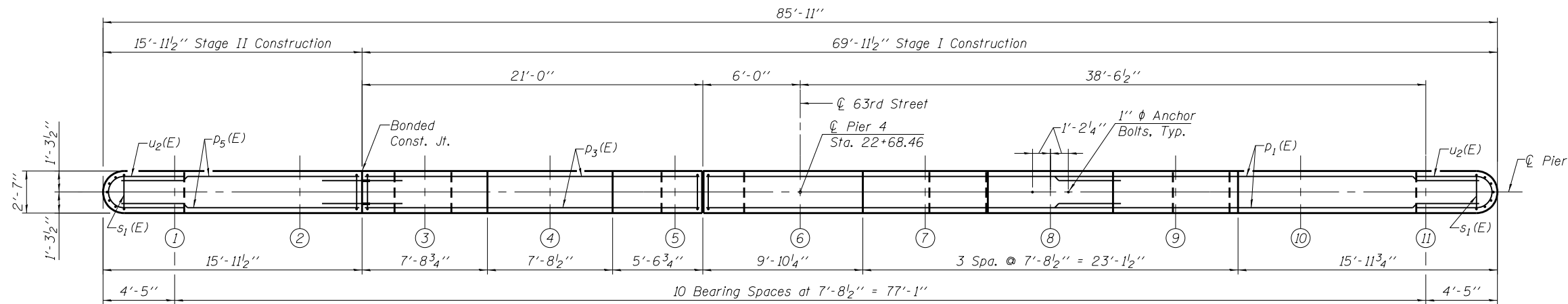
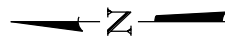
- Concrete Removal
- Structural Repair of Concrete (Depth Equal to or Less than 5")
- Epoxy Crack Injection

NOTES

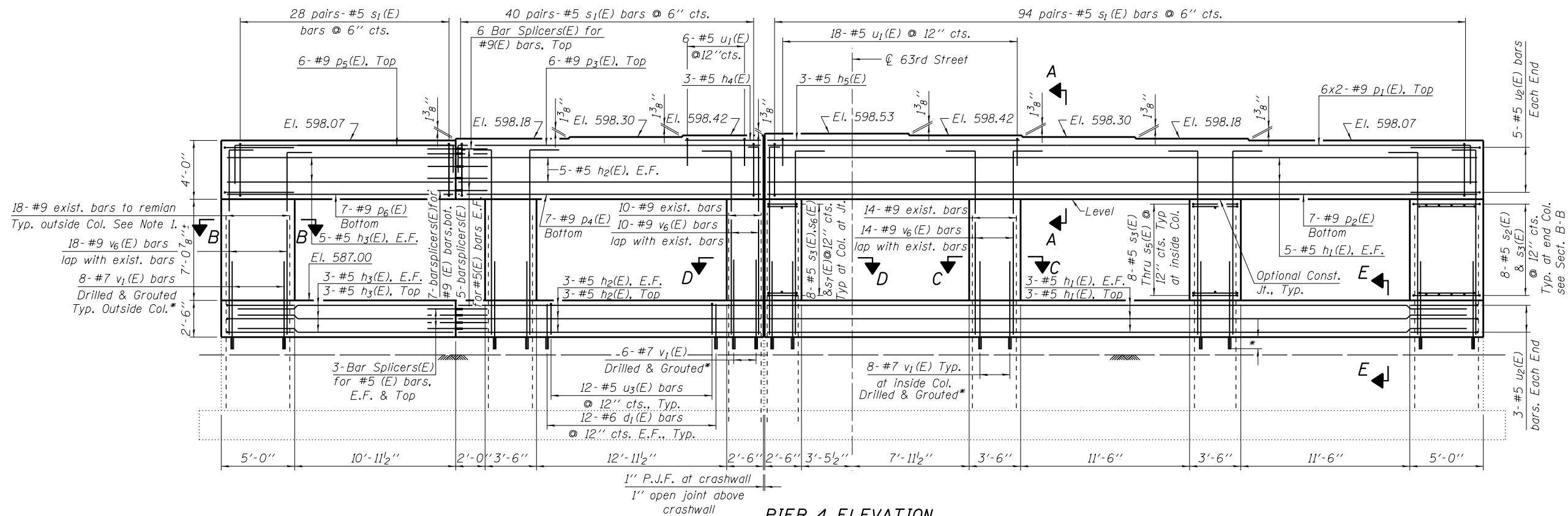
- Clean and reuse 8'-7" length of existing #9 vertical column bars at all columns. Cost included with Concrete Removal.

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**PIER 4 TOP PLAN**



**PIER 4 ELEVATION**

(Looking East)

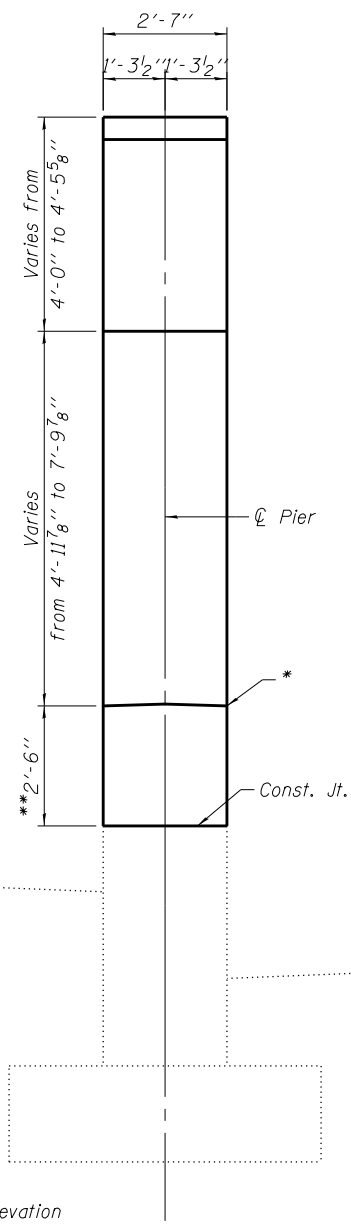
**NOTES**

1. Clean and reuse 8'-7" length of existing #9 vertical column bars at all columns. Cost included with Concrete Removal.
2. \*Epoxy grout v1(E) bars in 13" (min.) drilled holes according to Article 584 of the Standard Specifications.
3. See Sheets S46 and S47 for sections and Bill of Material.
4. Space reinforcement in cap to miss anchor bolts.
5. Pour steps monolithically with cap.

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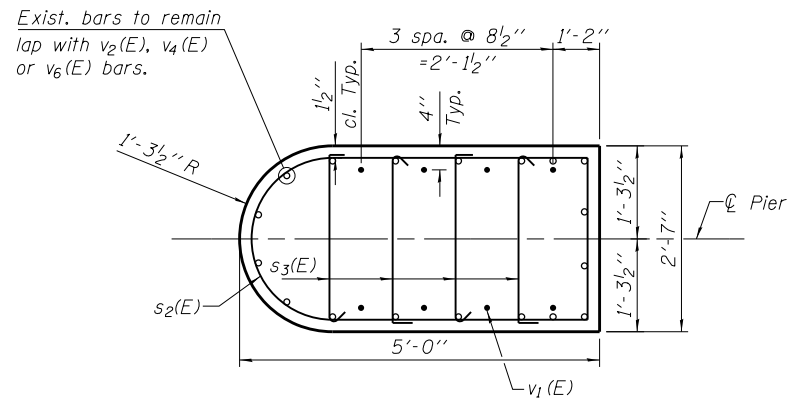
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94	1920-B	COOK	142	109
CONTRACT NO. 60J15				



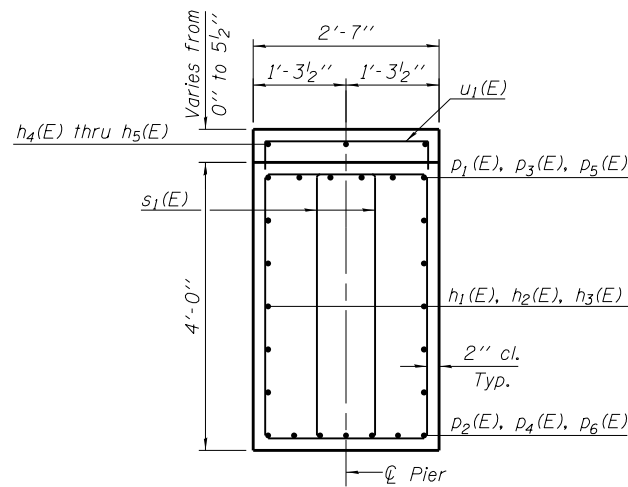
**END VIEW**

\* The Location of the elevation at the top of crashwall shown in the Pier Elevation view.

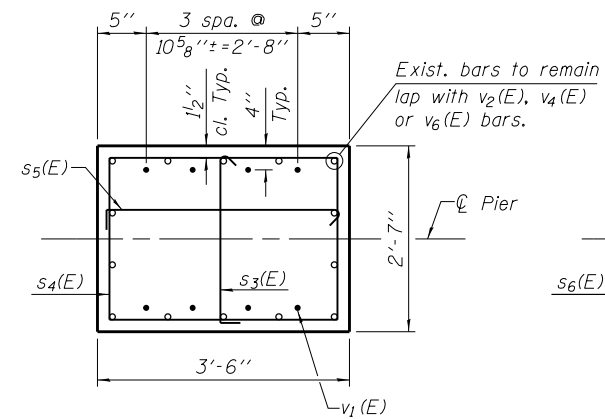
\*\*For Piers 1 & 4 only.



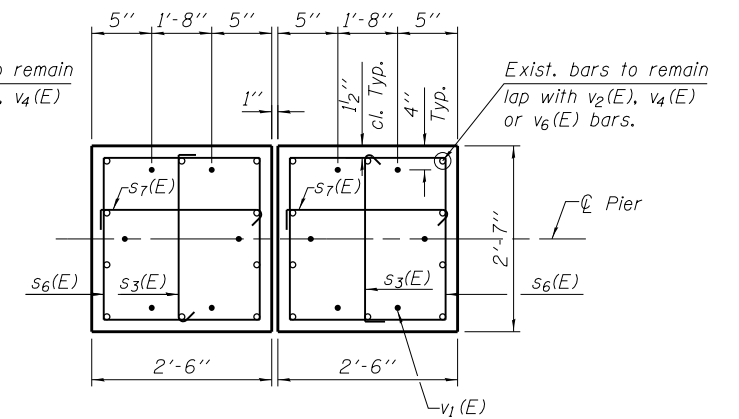
**SECTION B-B**



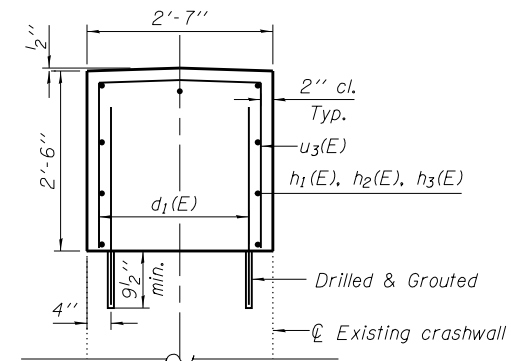
**SECTION A-A**



**SECTION C-C**



**SECTION D-D**

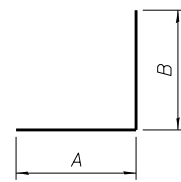


**SECTION E-E**

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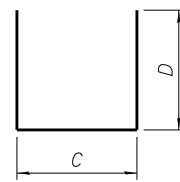
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94	1920-B	COOK	142	110
CONTRACT NO. 60J15				



**A & B DIMENSIONS**

Bar	A	B
p <sub>1</sub> (E)	29'-2"	1'-7"
v <sub>2</sub> (E)	11'-6"	1'-7"
v <sub>4</sub> (E)	8'-9"	1'-7"
v <sub>6</sub> (E)	10'-10"	1'-7"

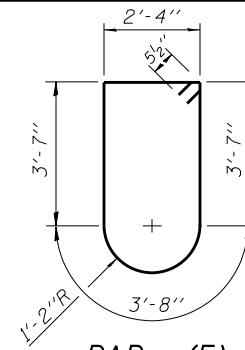
**BARS p<sub>1</sub>(E), v<sub>2</sub>(E), v<sub>4</sub>(E) & v<sub>6</sub>(E)**



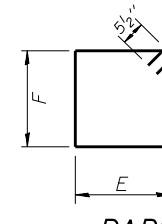
**C & D DIMENSIONS**

Bar	C	D
p <sub>3</sub> (E)	20'-8"	1'-7"
p <sub>5</sub> (E)	14'-5"	1'-7"
u <sub>1</sub> (E)	2'-3"	1'-11"
u <sub>3</sub> (E)	2'-3"	2'-3"

**BARS p<sub>3</sub>(E), p<sub>5</sub>(E), u<sub>1</sub>(E) & u<sub>3</sub>(E)**



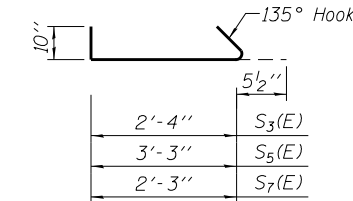
**BAR s<sub>2</sub>(E)**



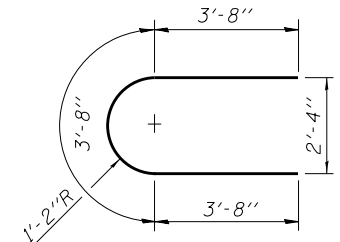
**BARS s<sub>1</sub>(E), s<sub>4</sub>(E) & s<sub>6</sub>(E)**

**E & F DIMENSIONS**

Bar	E	F
s <sub>1</sub> (E)	1'-6"	3'-8"
s <sub>4</sub> (E)	3'-3"	2'-4"
s <sub>6</sub> (E)	2'-3"	2'-4"



**BARS s<sub>3</sub>(E), s<sub>5</sub>(E) & s<sub>7</sub>(E)**



**BAR u<sub>2</sub>(E)**

**PIER 1  
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
d <sub>1</sub> (E)	120	#6	3'-1"	—
h <sub>1</sub> (E)	19	#5	47'-4"	—
h <sub>2</sub> (E)	19	#5	20'-8"	—
h <sub>3</sub> (E)	19	#5	14'-5"	—
h <sub>4</sub> (E)	3	#5	5'-2"	—
h <sub>5</sub> (E)	3	#5	17'-3"	—
p <sub>1</sub> (E)	12	#9	30'-9"	┌┐
p <sub>2</sub> (E)	7	#9	47'-3"	┌┐
p <sub>3</sub> (E)	6	#9	23'-10"	┌┐
p <sub>4</sub> (E)	7	#9	20'-8"	┌┐
p <sub>5</sub> (E)	6	#9	17'-7"	┌┐
p <sub>6</sub> (E)	7	#9	14'-5"	┌┐
s <sub>1</sub> (E)	324	#5	11'-3"	□
s <sub>2</sub> (E)	16	#5	14'-1"	○
s <sub>3</sub> (E)	104	#5	3'-8"	┌┐
s <sub>4</sub> (E)	24	#5	12'-1"	□
s <sub>5</sub> (E)	24	#5	4'-7"	┌┐
s <sub>6</sub> (E)	16	#5	10'-1"	□
s <sub>7</sub> (E)	16	#5	3'-7"	┌┐
u <sub>1</sub> (E)	24	#5	6'-1"	┌┐
u <sub>2</sub> (E)	16	#5	11'-0"	┌┐
u <sub>3</sub> (E)	60	#5	6'-9"	┌┐
v <sub>1</sub> (E)	52	#7	6'-3"	—
v <sub>2</sub> (E)	98	#9	13'-1"	┌┐
Concrete Structures			Cu. Yd.	71.8
Reinforcement Bars, Epoxy Coated			Pound	17,180
Concrete Sealer			Sq. Ft.	2,166

**PIER 2  
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h <sub>1</sub> (E)	10	#5	47'-4"	—
h <sub>2</sub> (E)	10	#5	20'-8"	—
h <sub>3</sub> (E)	10	#5	14'-5"	—
h <sub>4</sub> (E)	3	#5	5'-2"	—
h <sub>5</sub> (E)	3	#5	17'-3"	—
p <sub>1</sub> (E)	12	#9	30'-9"	┌┐
p <sub>2</sub> (E)	7	#9	47'-3"	┌┐
p <sub>3</sub> (E)	6	#9	23'-10"	┌┐
p <sub>4</sub> (E)	7	#9	20'-8"	┌┐
p <sub>5</sub> (E)	6	#9	17'-7"	┌┐
p <sub>6</sub> (E)	7	#9	14'-5"	┌┐
s <sub>1</sub> (E)	324	#5	11'-3"	□
s <sub>2</sub> (E)	12	#5	14'-1"	○
s <sub>3</sub> (E)	78	#5	3'-8"	┌┐
s <sub>4</sub> (E)	18	#5	12'-1"	□
s <sub>5</sub> (E)	18	#5	4'-7"	┌┐
s <sub>6</sub> (E)	12	#5	10'-1"	□
s <sub>7</sub> (E)	12	#5	3'-7"	┌┐
u <sub>1</sub> (E)	24	#5	6'-1"	┌┐
u <sub>2</sub> (E)	10	#5	11'-0"	┌┐
v <sub>1</sub> (E)	52	#7	6'-3"	—
v <sub>4</sub> (E)	98	#9	10'-4"	┌┐
Concrete Structures			Cu. Yd.	45.9
Reinforcement Bars, Epoxy Coated			Pound	14,120
Concrete Sealer			Sq. Ft.	1,371

**PIER 3  
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h <sub>1</sub> (E)	10	#5	47'-4"	—
h <sub>2</sub> (E)	10	#5	20'-8"	—
h <sub>3</sub> (E)	10	#5	14'-5"	—
h <sub>4</sub> (E)	3	#5	5'-2"	—
h <sub>5</sub> (E)	3	#5	17'-3"	—
p <sub>1</sub> (E)	12	#9	30'-9"	┌┐
p <sub>2</sub> (E)	7	#9	47'-3"	┌┐
p <sub>3</sub> (E)	6	#9	23'-10"	┌┐
p <sub>4</sub> (E)	7	#9	20'-8"	┌┐
p <sub>5</sub> (E)	6	#9	17'-7"	┌┐
p <sub>6</sub> (E)	7	#9	14'-5"	┌┐
s <sub>1</sub> (E)	324	#5	11'-3"	□
s <sub>2</sub> (E)	12	#5	14'-1"	○
s <sub>3</sub> (E)	78	#5	3'-8"	┌┐
s <sub>4</sub> (E)	18	#5	12'-1"	□
s <sub>5</sub> (E)	18	#5	4'-7"	┌┐
s <sub>6</sub> (E)	12	#5	10'-1"	□
s <sub>7</sub> (E)	12	#5	3'-7"	┌┐
u <sub>1</sub> (E)	24	#5	6'-1"	┌┐
u <sub>2</sub> (E)	10	#5	11'-0"	┌┐
v <sub>1</sub> (E)	52	#7	6'-3"	—
v <sub>4</sub> (E)	98	#9	10'-4"	┌┐
Concrete Structures			Cu. Yd.	45.3
Reinforcement Bars, Epoxy Coated			Pound	14,120
Concrete Sealer			Sq. Ft.	1,348

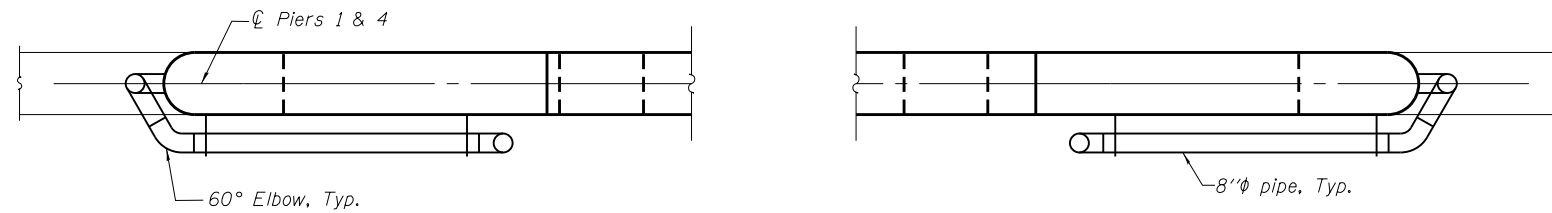
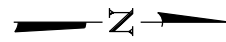
**PIER 4  
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
d <sub>1</sub> (E)	120	#6	3'-1"	—
h <sub>1</sub> (E)	19	#5	47'-4"	—
h <sub>2</sub> (E)	19	#5	20'-8"	—
h <sub>3</sub> (E)	19	#5	14'-5"	—
h <sub>4</sub> (E)	3	#5	5'-2"	—
h <sub>5</sub> (E)	3	#5	17'-3"	—
p <sub>1</sub> (E)	12	#9	30'-9"	┌┐
p <sub>2</sub> (E)	7	#9	47'-3"	┌┐
p <sub>3</sub> (E)	6	#9	23'-10"	┌┐
p <sub>4</sub> (E)	7	#9	20'-8"	┌┐
p <sub>5</sub> (E)	6	#9	17'-7"	┌┐
p <sub>6</sub> (E)	7	#9	14'-5"	┌┐
s <sub>1</sub> (E)	324	#5	11'-3"	□
s <sub>2</sub> (E)	16	#5	14'-1"	○
s <sub>3</sub> (E)	104	#5	3'-8"	┌┐
s <sub>4</sub> (E)	24	#5	12'-1"	□
s <sub>5</sub> (E)	24	#5	4'-7"	┌┐
s <sub>6</sub> (E)	16	#5	10'-1"	□
s <sub>7</sub> (E)	16	#5	3'-7"	┌┐
u <sub>1</sub> (E)	24	#5	6'-1"	┌┐
u <sub>2</sub> (E)	16	#5	11'-0"	┌┐
u <sub>3</sub> (E)	60	#5	6'-9"	┌┐
v <sub>1</sub> (E)	52	#7	6'-3"	—
v <sub>6</sub> (E)	98	#9	12'-5"	┌┐
Concrete Structures			Cu. Yd.	70.2
Reinforcement Bars, Epoxy Coated			Pound	16,960
Concrete Sealer			Sq. Ft.	2,112

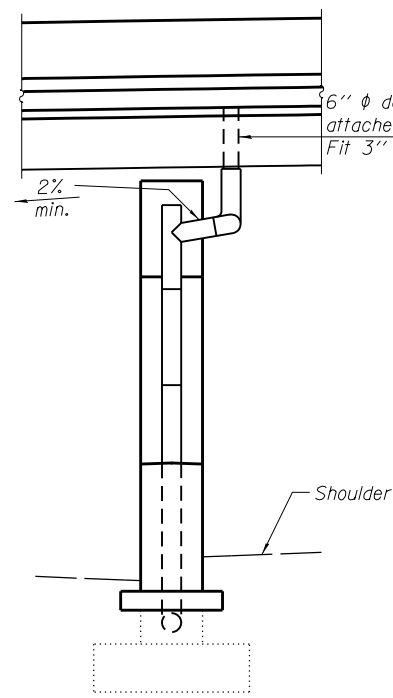
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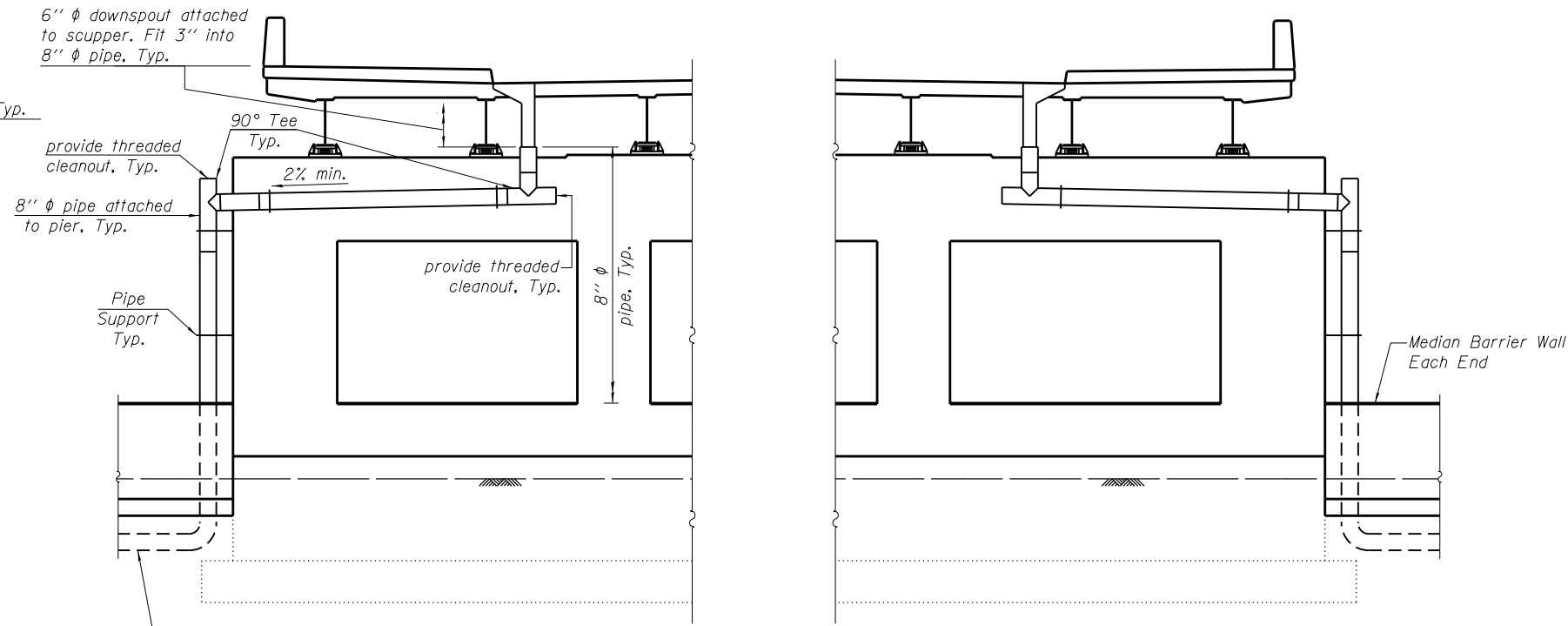
F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1920-B	COOK	142	111
CONTRACT NO. 60J15				
ILLINOIS FED. AID PROJECT				



**PARTIAL PIER PLAN VIEW**



**END VIEW**



**PARTIAL PIERS 1 & 4 ELEVATION**  
(Looking West)

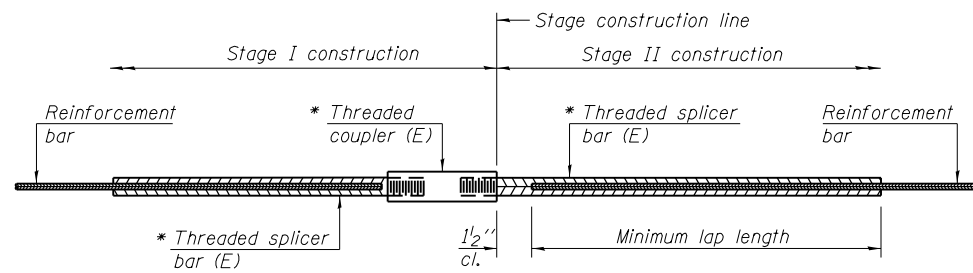
**BILL OF MATERIAL**

Item	Unit	Total
Drainage System	L. Sum	1

**NOTES**

- The pipe, fittings, pipe supports, inserts and bolts above the median barrier wall for the 4 locations shown are included in the pay item DRAINAGE SYSTEM. The 6" φ downspouts attached to scuppers are included with DRAINAGE SCUPPERS, DS-12.

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**STANDARD BAR SPLICER ASSEMBLY**

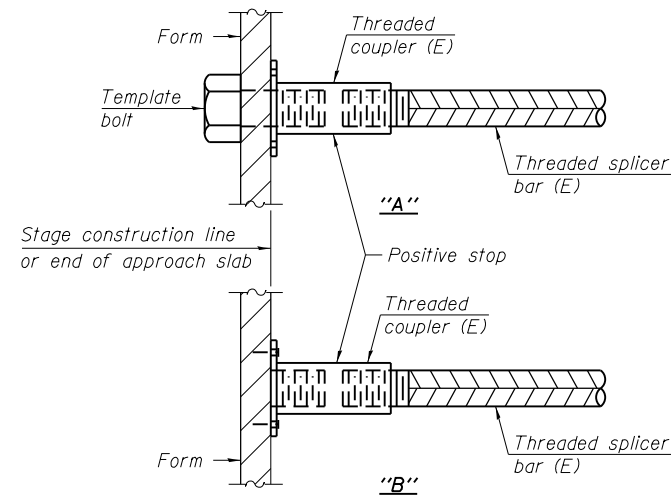
Minimum Lap Lengths						
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5	Table 6
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-7"	2'-11"
5	1'-9"	2'-5"	2'-7"	2'-11"	3'-3"	3'-8"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-10"	4'-5"
7	2'-9"	3'-10"	4'-2"	4'-8"	5'-2"	5'-10"
8	3'-8"	5'-1"	5'-5"	6'-2"	6'-9"	7'-8"
9	4'-7"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

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

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

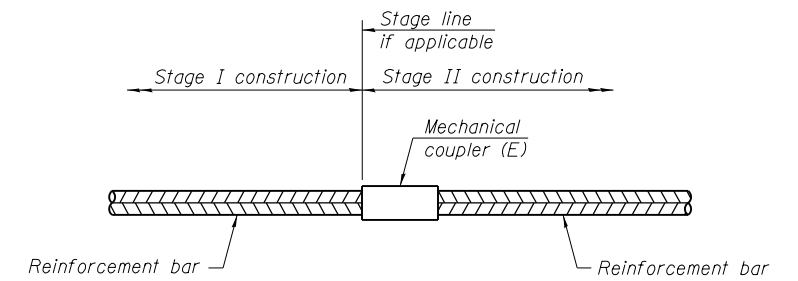
\* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length
Deck	#5	1,070	5
Approach Slab	#4	50	6
Approach Slab	#5	172	5
West Abutment	#5	19	6
East Abutment	#5	19	6
Pier 1 Cap, Top	#9	6	6
Pier 1 Cap, Bottom	#9	7	5
Pier 1 Cap, Side	#5	10	6
Pier 1 Crashwall	#5	9	6
Pier 2 Cap, Top	#9	6	6
Pier 2 Cap, Bottom	#9	7	5
Pier 2 Cap, Side	#5	10	6
Pier 3 Cap, Top	#9	6	6
Pier 3 Cap, Bottom	#9	7	5
Pier 3 Cap, Side	#5	10	6
Pier 4 Cap, Top	#9	6	6
Pier 4 Cap, Bottom	#9	7	5
Pier 4 Cap, Side	#5	10	6
Pier 4 Crashwall	#5	9	6



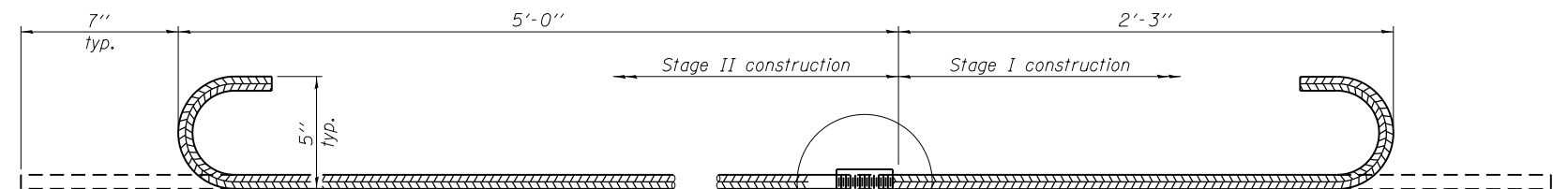
**INSTALLATION AND SETTING METHODS**

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



**STANDARD MECHANICAL SPLICER**

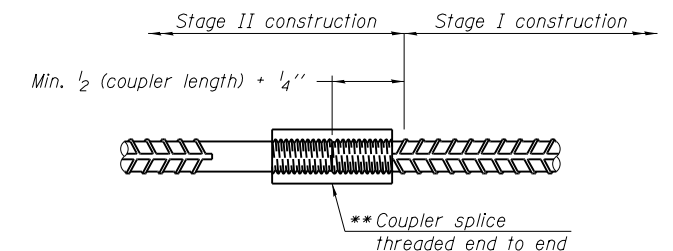
Location	Bar size	No. assemblies required



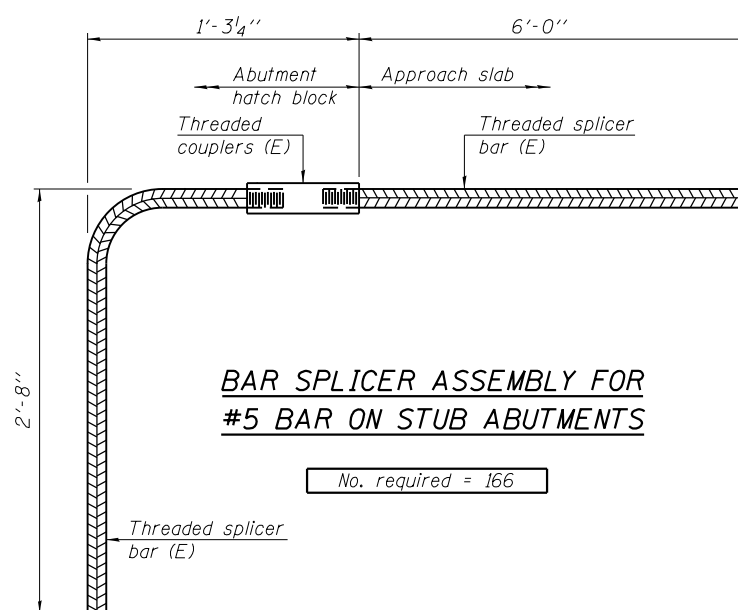
**#5 #6(E) BAR SPLICER ASSEMBLY FOR EDGE BEAMS AT STAGE CONSTRUCTION JOINT**

No. required = 6

\*\* The bar splicer assembly shall allow completion of the splice without turning of the hook bars. The stage II splice bar shall be threaded such that the entire coupler can be threaded onto the splice bar.



**DETAIL A**



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

No. required = 166

**NOTES**

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.  
 All reinforcement shall be lapped and tied to the splicer bars.  
 Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.  
 See approved list of bar splicer assemblies and mechanical splicers for alternatives.

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**GR&E**  
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 Chicago, Illinois 60631 (773) 399-0112

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	DATE - 3/31/2014	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**BAR SPLICER ASSEMBLY DETAILS  
 STRUCTURE NO. 016-1149**

SHEET NO. S49 OF 50 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1920-B	COOK	142	113
				CONTRACT NO. 60J15

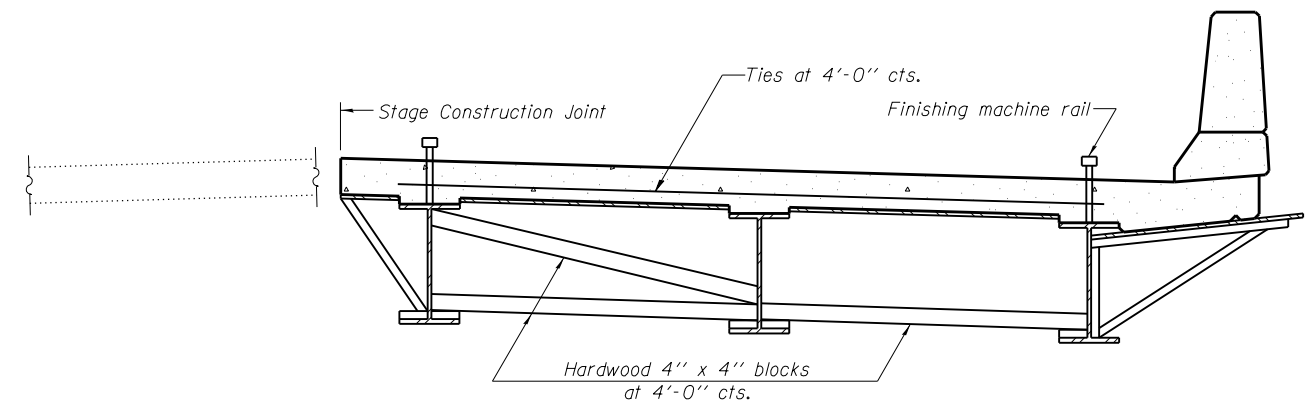
ILLINOIS FED. AID PROJECT

When cantilever forming brackets are used, the work shall be done according to Article 503.06(b) of the Standard Specifications, except as modified below and in the details shown on this sheet.

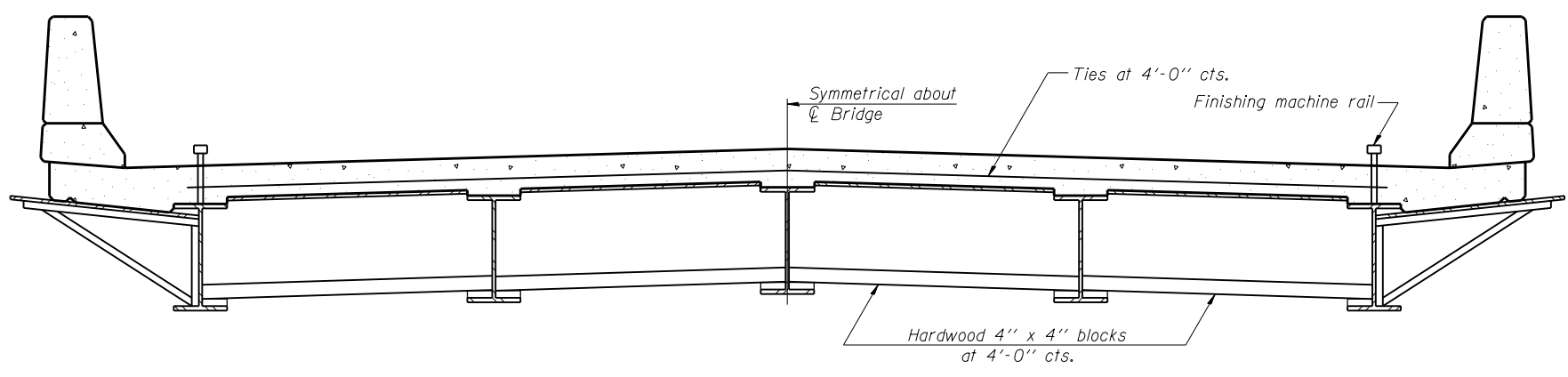
The finishing machine rails shall be placed on the top flange of the exterior beams.

The beams or girders, supporting cantilever forming brackets, shall be tied together at 4 foot intervals.

For Standard construction, or Stage Construction the Hardwood bracing materials shall be placed as shown between webs of beams in each bay.



**FORM BRACES FOR  
STAGE CONSTRUCTION**



**FORM BRACES FOR  
STANDARD CONSTRUCTION**

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**CANTILEVER FORMING BRACKETS FOR SUPERSTRUCTURE  
STRUCTURE NO. 016-1149**

SHEET NO. S50 OF 50 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1920-B	COOK	142	114
CONTRACT NO. 60J15				
ILLINOIS FED. AID PROJECT				

**INDEX OF SHEETS**

SHEET NO.

- 1 TITLE PAGE
- 2 GENERAL PLAN
- 3 EXCAVATION, FOUNDATION LAYOUT & DRAINAGE
- 4 EAST AND WEST ABUTMENTS
- 5 WINGWALLS
- 6 RETAINING WALLS
- 7 PIERS NO. 1 & 4
- 8 PIERS NO. 2 & 3
- 9 SUPERSTRUCTURE
- 10 SUPERSTRUCTURE-SECTION & DETAILS
- 11 BEAM DETAILS
- 12 HANDRAIL LAYOUT
- 13 HANDRAIL DETAILS
- 14 APPROACH SLAB
- 15 GENERAL PLAN-ALTERATION TO CTA STRUCTURE
- 16 GIRDER DETAILS-ALTERATION TO CTA STRUCTURE
- 17 FRAMING PLAN & DETAILS  
ALTERATION TO CTA STRUCTURE
- 18 FALSEWORK
- 19 TEST BORING LOGS & LAB DATA
- 20 FIELD OFFICE AND LABORATORY
- 21 FOUNDATION REMOVAL & PLUGGING  
EXISTING DRAINS & SEWERS
- BILL OF MATERIAL-PAVING  
STANDARD SYMBOLS
- NOSING DETAIL & MODIFIED TYPE 4 MEDIAN
- 22 BUILDING REMOVAL  
NAME PLATES
- 23 TYPICAL CROSS SECTIONS
- 24 STAGES OF CONSTRUCTION
- 25 PLAN & PROFILE
- 26-27 PAVEMENT DETAILS
- 28 PLAN & PROFILE OF PROPOSED  
EXCAVATION-GUARD FENCE LOCATION
- 29 DETAIL OF TEMPORARY BYPASS
- 30-31 ALIGNMENT AND TIES
- 32-36 CROSS SECTIONS
- 37 PAVEMENT FABRIC TYPE "A" & TYPE "B"  
LONGITUDINAL METAL JOINT  
ALLEY RETURN
- 38 P.C.C. DRIVEWAY PAVEMENT  
SECTION MARKER  
CONSTRUCTION OF PARKWAYS  
P.C.C. SIDEWALK CONSTRUCTION
- 39 CURB & GUTTERS ABUTTING EXISTING PAVEMENT
- 40 STANDARD BARRICADE  
WOOD GUARD FENCE  
CHAIN LINK FENCE TYPE III
- 41 EXISTING UTILITIES
- 42 PROPOSED DRAINAGE
- 43 TYPE A2 CATCH BASIN
- 44 CURB & GUTTER, FRAME & GRATE-TYPE 31, 32 & 34
- 45 CURB, CURB & GUTTER & PAVEMENT CONSTRUCTION  
ADJACENT TO CASTINGS  
TYPE 1 FRAME  
TYPE 5 FRAME
- 46 PRECAST TRANSITION  
UNDERDRAIN COLLECTOR  
FIELD JOINT
- 47 ELECTRICAL PLANS AND DETAILS
- 48 ELECTRICAL PLANS

STATE OF ILLINOIS  
COUNTY OF COOK  
DEPARTMENT OF HIGHWAYS

PLANS FOR PROPOSED  
FEDERAL AID HIGHWAY

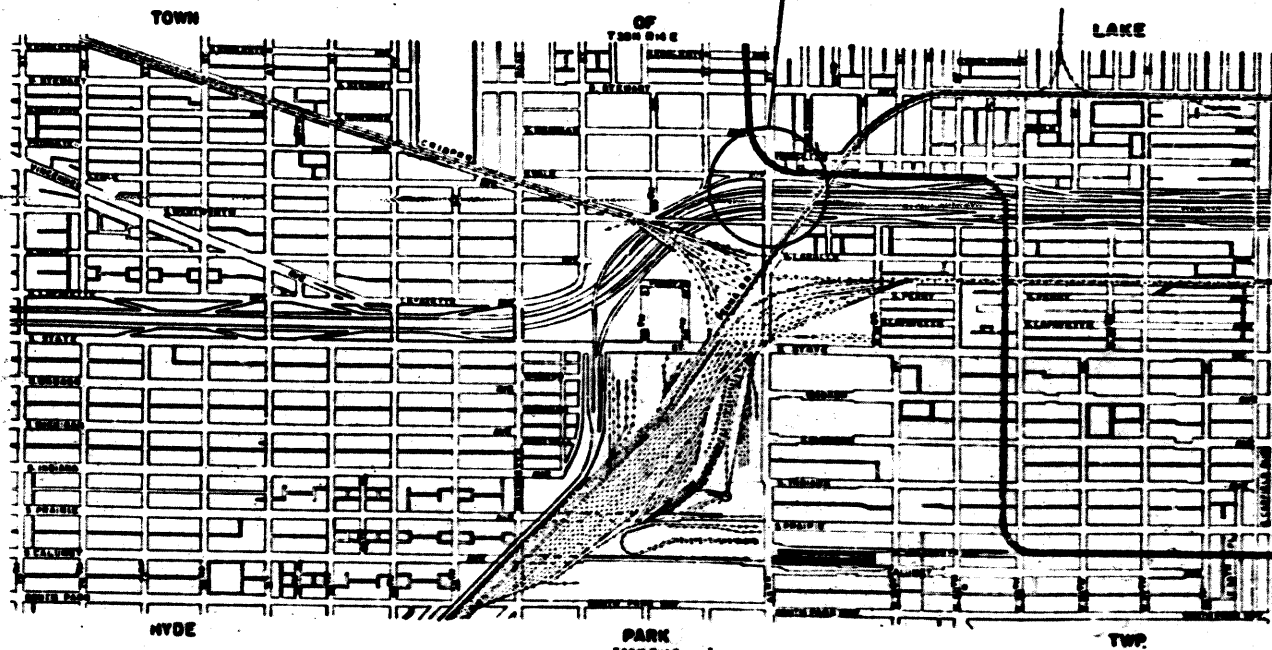
SCALES:  
PLAN 1" = 30' FT.  
PROFILE HOR. 1" = 30' FT.  
PROFILE VERT. 1" = 5' FT.  
CROSS SECTIONS 1" = 5' FT. VERT.  
CROSS SECTIONS 1" = 10' FT. HOR.

F. A. INTERSTATE ROUTE-94-PROJECT BU-94-3(55)56  
63RD STREET GRADE SEPARATION  
OVER  
SOUTH ROUTE EXPRESSWAY  
SECTION 066-1920-C.F.

FOR INFORMATION ONLY

LENGTH OF STRUCTURE - 306.34 FT. (0.0500) MI.  
LENGTH OF ROADWAY - 911.08 FT. (0.1726) MI.  
LENGTH OF CONTRACT - 1212.02 FT. (0.2295) MI.  
LENGTH ALONG EXPRESSWAY - 6.00 FT. (0.00) MI.

SECTION 066-1920-C.F. INCLUDES THE CONSTRUCTION OF A PRECAST  
PRESTRESSED CONCRETE BOX GIRDER BRIDGE, 5 SIMPLE SPANS AT  
57' 11 1/2", 58' 10", 62' 7-3/8", 58' 11", 56' 7-5/8"  
ON 63RD STREET OVER SOUTH ROUTE EXPRESSWAY IN THE CITY OF CHICAGO,  
LAKE TOWNSHIP AT STATION 249+67.11 ON SOUTH ROUTE EXPRESSWAY, A  
POINT APPROXIMATELY 220 FEET WEST OF THE INTERSECTION OF  
WENTWORTH AVENUE & 63RD STREET.



FRED

**SUMMARY OF QUANTITIES**

QUANTITY	UNIT	ITEM
1,922.1	CU. YDS.	CLASS "B" CONCRETE
292.300		
26		
52		
28		
20		
120,000		
809		
450		
2,825		
2		
650		
650		
2,190		
2,000		
52,963		
427		
2,850		
4		
2		
20		
2,890		
20		
599		
2,202		
192		
0,750		
130		
104		
104		
1,561		
11		
419		
709		
631		
9		
465		
395		
506		
740		
105		
15	SO. YDS.	C' SHED STONE BASE COURSE, TYPE 1
636	SO. YDS.	PAVEMENT REPLACEMENT - SURFACE COURSE
0.2	S. FT. S. M.	PAVEMENT REPLACEMENT - ENTIRE
2	EACH	MISCELLANEOUS TIMBER
22	IN. DIAM.	SECTION MARKERS
46	IN. DIAM.	TREE REMOVAL SPECIAL (6 IN. TO 15 IN. DIAM.)
15	CU. YDS.	TREE REMOVAL SPECIAL (OVER 15 IN. DIAM.)
0.01	ACRES	TOP SOIL
830	SO. YDS.	COMPLETE SEEDING
0.02	TONS	SODDING
8	UNITS	FERTILIZER NUTRIENTS
7	EACH	SUPPLEMENTAL WATERING
8	EACH	FILLING EXISTING INLETS
2	EACH	FILLING EXISTING CATCH BASINS
3	EACH	PLUGGING EXISTING DRAINS & SEWERS (OVER 12 IN.)
3	EACH	CATCH BASINS TO BE ADJUSTED
8	EACH	MANHOLES TO BE ADJUSTED

RETURN THIS PLAN  
TO MAINTENANCE  
ROOM 706  
DRAWER

9

1	EACH	MANHOLES, TYPE A, 4" DIA. WITH TYPE 1 FRAME, CLOSED LID
8	EACH	MANHOLES TYPE A, 8" DIA. WITH TYPE 5 FRAME, CLOSED LID
19	EACH	CATCH BASINS TYPE A-2, 4" DIA. WITH TYPE 5 FRAME, OPEN LID
10	EACH	CATCH BASINS, TYPE A-2, 4" DIA. WITH TYPE 31 FRAME & GRATE
5	EACH	CATCH BASINS, TYPE A-2, 4" DIA. WITH TYPE 31 FRAME & GRATE
6	EACH	INLETS TYPE A WITH TYPE 5 FRAME, OPEN LID
5	EACH	CAST IRON FRAME, TYPE 5, INCLUDING CLOSED LID
12	EACH	PLUGGING EXISTING DRAINS & SEWERS (12" OR LESS)
806	CU. YDS.	TRENCH BACKFILL
22	LIN. FT.	STORM SEWER, TYPE 2 (R.C.P. CLASS III) 10 IN.
983	LIN. FT.	STORM SEWER, TYPE 2 (R.C.P. CLASS III) 12 IN.
6	LIN. FT.	STORM SEWER, TYPE 2 (R.C.P. CLASS III) 24 IN.
96	LIN. FT.	STORM SEWER, TYPE 1 (ASTM C200-57T) 8 IN.
201	LIN. FT.	STORM SEWER, TYPE 1 (ASTM C200-57T) 8 IN.
3	LIN. FT.	STORM SEWER, TYPE 2 (ASTM C200-57T) 12 IN.
130	LIN. FT.	STORM SEWER, TYPE 2 (ASTM C200-57T) 15 IN.
654	LIN. FT.	STORM SEWER, TYPE 2 (ASTM C200-57T) 24 IN.
28	LIN. FT.	STORM SEWER, TYPE 3 (ASTM C200-57T) 24 IN.
220	LIN. FT.	CAST IRON PIPE (B & S, CLASS 150) 6 IN.
150	LIN. FT.	2 INCH GALVANIZED STEEL CONDUIT, DIRECT BURIED
730	LIN. FT.	2 INCH GALVANIZED STEEL CONDUIT IN STRUCTURE
520	LIN. FT.	2 1/2 IN. GALVANIZED STEEL CONDUIT DIRECT BURIED
1800	LIN. FT.	3 1/2 IN. ASBESTOS CEMENT CONDUITS IN SIDEWALK SLAB
520	LIN. FT.	4-2 1/2 IN. ASBESTOS CEMENT CONDUITS, ENCASED
220	LIN. FT.	6-3 1/2 IN. ASBESTOS CEMENT CONDUITS, ENCASED
30	LIN. FT.	1-4 IN. FIBRE CONDUIT, ENCASED
8	EACH	CAST IRON JUNCTION BOX - 6" x 6" x 6"
9	EACH	FOUNDATION FOR BALLAST HOUSING BASE LIGHT STANDARD
9	EACH	FOUNDATION FOR ANCHOR BASE LIGHT STANDARD
3	EACH	FOUNDATION FOR CONTROLLER CABINET
1	EACH	MANHOLE
1	EACH	MANHOLE - STANDARD
8	EACH	MANHOLE - SPECIAL
8	EACH	8" SQUARE JUNCTION BOX - 24" x 12" x 10"
40	CU. YDS.	TRENCHING AND BACKFILLING
	LIMP. SUM.	FALSE WORK

COUNTY OF COOK  
DEPARTMENT OF HIGHWAYS

APPROVED: *March 16, 1960*  
*W. J. Payne*

APPROVED: *March 17, 1960*  
*George J. Stark*  
CHIEF ENGINEER

APPROVED: *March 17, 1960*  
*William J. ...*  
SUPERVISOR

STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS  
DIVISION OF HIGHWAYS

APPROVED: \_\_\_\_\_

APPROVED: \_\_\_\_\_

DEPARTMENT OF COMMERCE  
BUREAU OF PUBLIC ROADS

APPROVED: \_\_\_\_\_

DIVISION ENGINEER

CONTRACT NO. 60J15  
SHEET NO. 115 OF 142

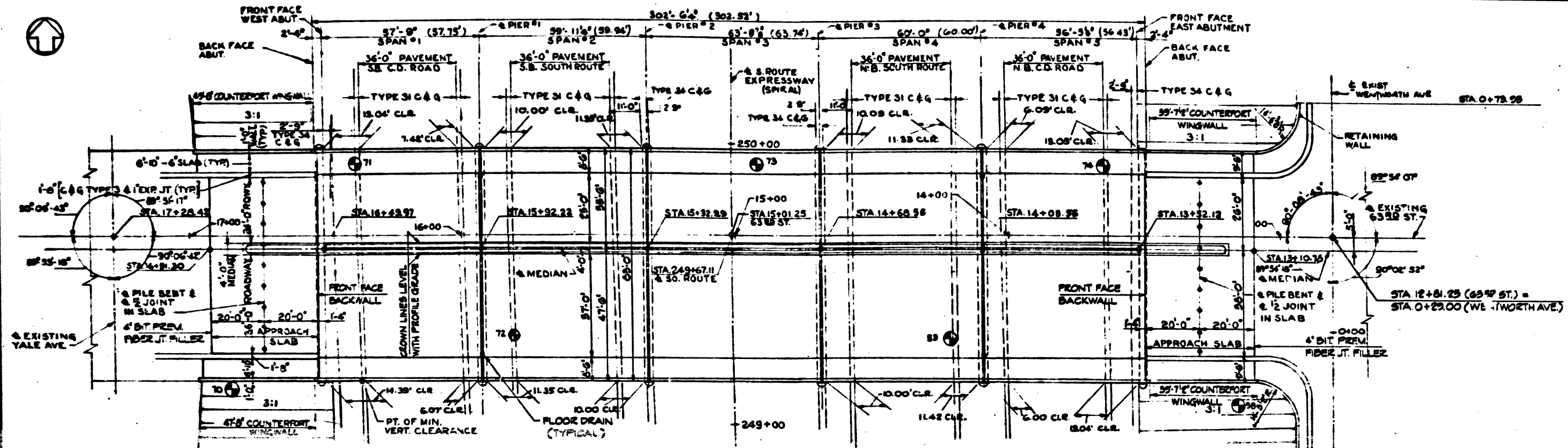
DE LEUW, CATHEN & COMPANY  
CONSULTING ENGINEERS  
CHICAGO ILLINOIS

APPROVED  
JUL 12 1960 19

Dept. of Public Works & Buildings  
*E. A. Rosenstone*  
Director

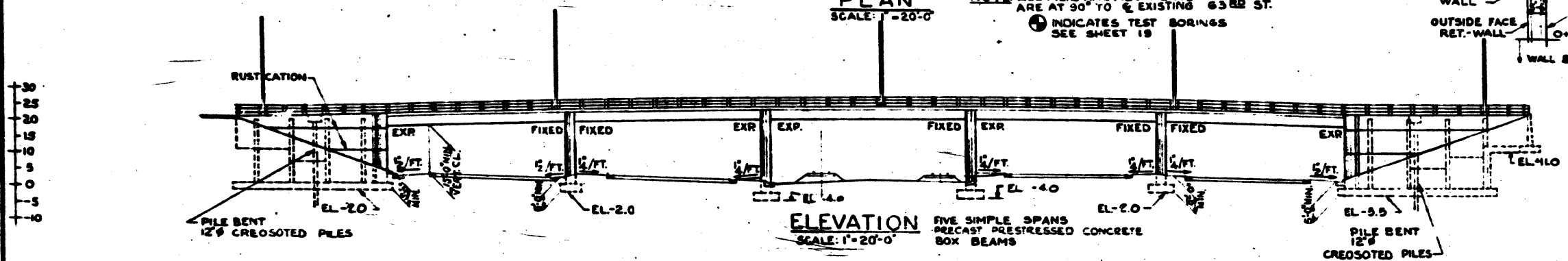
PLANS APPROVED  
BY STATE DIVISION OF HIGHWAYS

Dist. # 10 Copy



**PLAN**  
SCALE: 1"=20'-0"

NOTE: ALL PIERS AND ABUTMENTS ARE AT 90° TO EXISTING 63RD ST.  
⊙ INDICATES TEST BORINGS SEE SHEET 19



**ELEVATION**  
SCALE: 1"=20'-0"

FIVE SIMPLE SPANS PRECAST PRESTRESSED CONCRETE BOX BEAMS

**GENERAL NOTES**

**DESIGN SPECIFICATIONS:**  
AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIALS STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 7TH EDITION, DATED 1957. BUREAU OF PUBLIC ROADS PUBLICATION "CRITERIA FOR PRESTRESSED CONCRETE GIRDER BRIDGES", DATED 1958 AND ACI-ASCE JOINT COMMITTEE 323 REPORT "TENTATIVE RECOMMENDATIONS FOR PRESTRESSED CONCRETE".

**DESIGN LOADING:**  
A.A.S.H.O. H20-44

**FOUNDATIONS:**  
SEE TEST BORING AND LAB DATA SHEET FOR ALLOWABLE FOOTING PRESSURES.

**CONSTRUCTION SPECIFICATIONS:**  
STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, STATE OF ILLINOIS, DEPARTMENT OF PUBLIC WORKS AND BUILDINGS, DIVISION OF HIGHWAYS, DATED JANUARY 2, 1958.

**CONCRETE:**

**REINFORCED CONCRETE**

f'c 3,500 P.S.I. ULTIMATE STRENGTH IN 14 DAYS

f'c 1,400 P.S.I. CONCRETE WITHOUT EARTH PRESSURE (SUPERSTRUCTURE)

f'c 800 P.S.I. CONCRETE WITH EARTH PRESSURE

• 75 P.S.I. MAX-SHEAR IN FOOTINGS (SUBSTRUCTURE)

n 10

**PRESTRESSED CONCRETE**

f'c 5,000 P.S.I. ULTIMATE STRENGTH AT 10 DAYS

PRESTRESSING STEEL 3/8" DIA. 7-WIRE STRESS-RELIEVED STRANDS - MINIMUM TENSILE STRENGTH 250,000 P.S.I.

ALL CAST IN PLACE CONCRETE SHALL BE CLASS X.

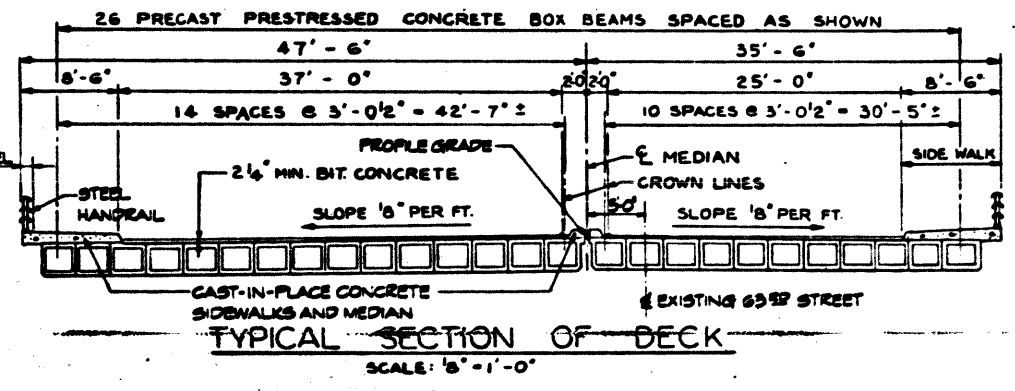
**GENERAL NOTES (CONT'D.)**

**REINFORCEMENT:**

BILLET STEEL CONCRETE REINFORCEMENT BARS, INTERMEDIATE GRADE A.S.T.M. DESIGNATION A 15, OR AXLE STEEL CONCRETE REINFORCEMENT BARS, A.S.T.M. DESIGNATION A 190 SHALL BE USED. ALL BARS SHALL BE DEFORMED TYPE IN ACCORDANCE WITH DESIGNATION A 305.

ALLOWABLE TENSILE UNIT STRESS -  $f_s$  20,000 P.S.I.

BAR BENDING, PLACING, CLEARANCES, ETC., UNLESS OTHERWISE SHOWN, SHALL BE IN ACCORDANCE WITH SECTION 59 OF THE STANDARD SPECIFICATIONS.



**TYPICAL SECTION OF DECK**  
SCALE: 1/8"=1'-0"

**FOR INFORMATION ONLY**

CONTRACT NO. 60J15  
SHEET NO. 116 OF 142

REVISIONS		
DATE	BY	DESCRIPTION

**DEPARTMENT OF HIGHWAYS**  
COOK COUNTY, ILLINOIS

PROJECT: BUI-94-3155156  
SCALE: AS SHOWN

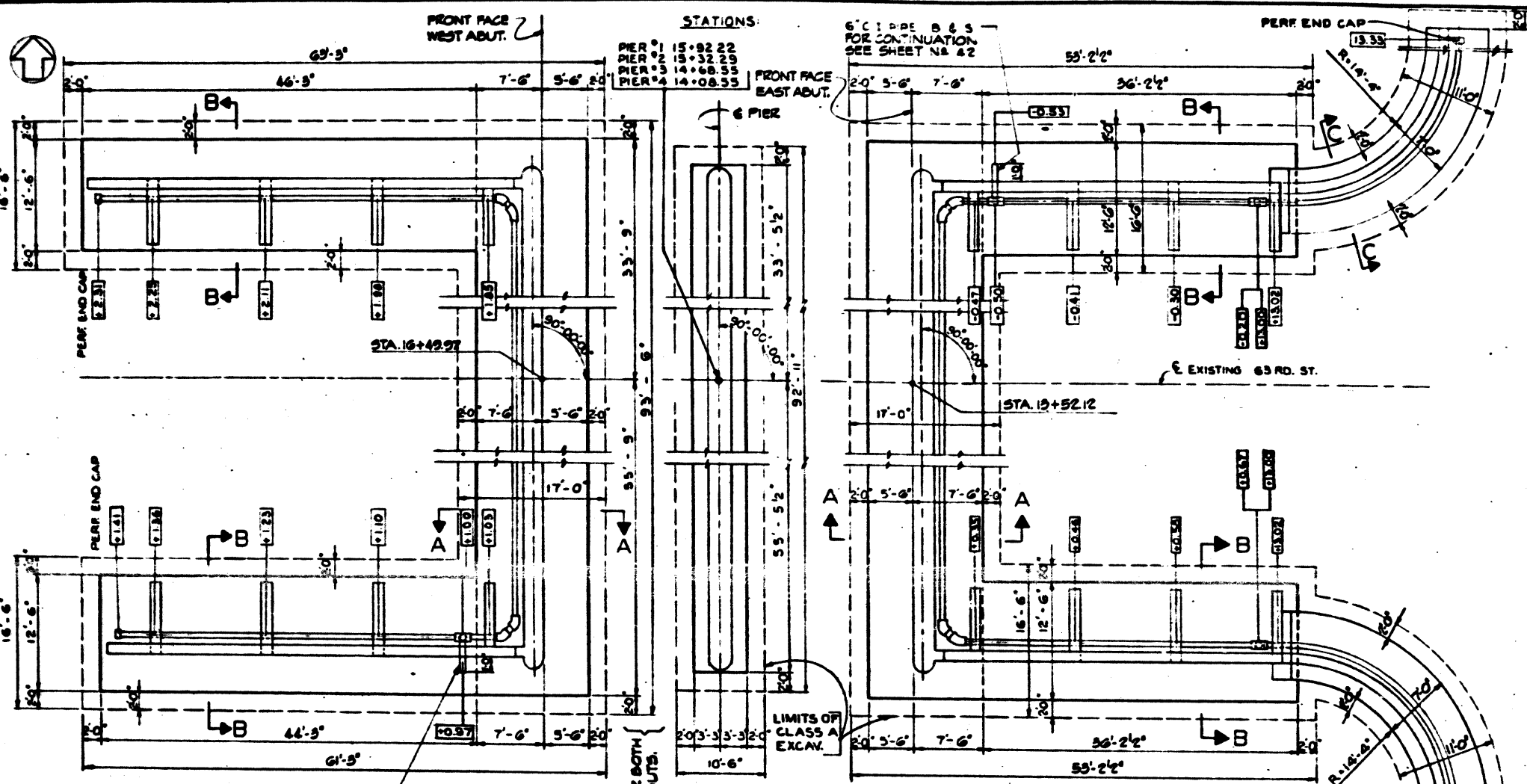
**GENERAL PLAN**  
63RD STREET GRADE SEPARATION  
OVER  
SOUTH ROUTE EXPRESSWAY

COMPUTED: F.M.C. PROJECT: BUI-94-3155156  
DRAWN: L.R. SCALE: AS SHOWN  
CHECKED: F.M.C. APPROVED: [Signature]

APPROVED: [Signature] F.A.I. County Highway Sheet No. Total Sheets Drawing No.  
94 066-1920-CF 2 48 S-1

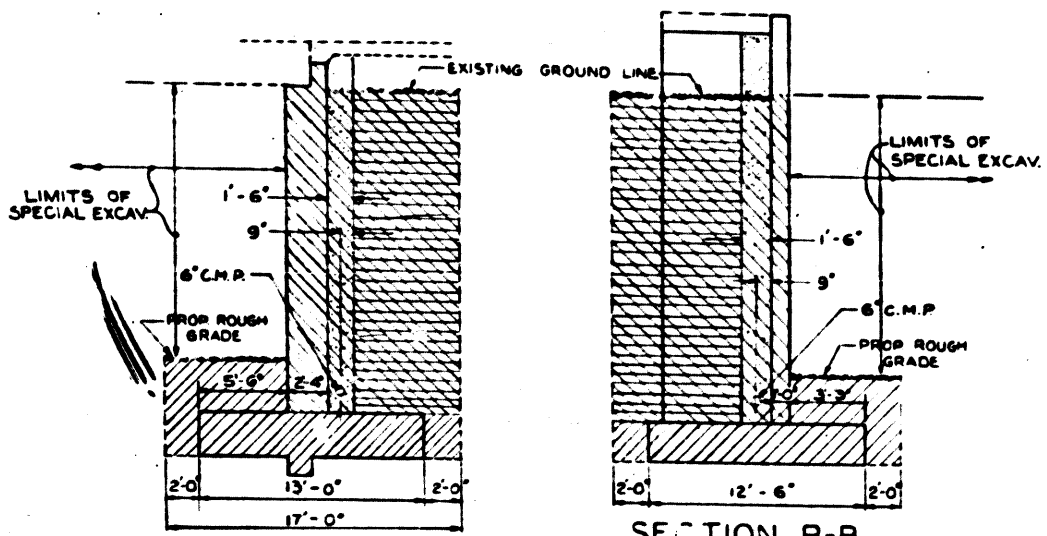
BE LEUW, CATHNER & COMPANY  
CONSULTING ENGINEERS





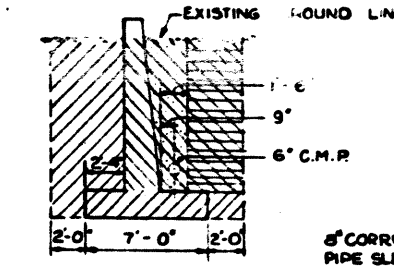
**PLAN**  
SCALE: 3/16" = 1'-0"

**NOTE:**  
PIPE INVERT ELEVATIONS SHOWN THIS WAY

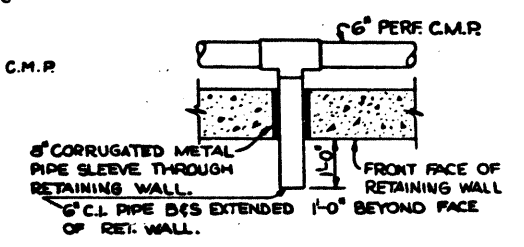


**SECTION A-A**  
TYPICAL AT ABUTMENT  
SCALE: 3/16" = 1'-0"

**SECTION B-B**  
TYPICAL WINGWALLS  
SCALE: 3/16" = 1'-0"



**SECTION C-C**  
TYPICAL RETAINING WALL  
SCALE: 3/16" = 1'-0"

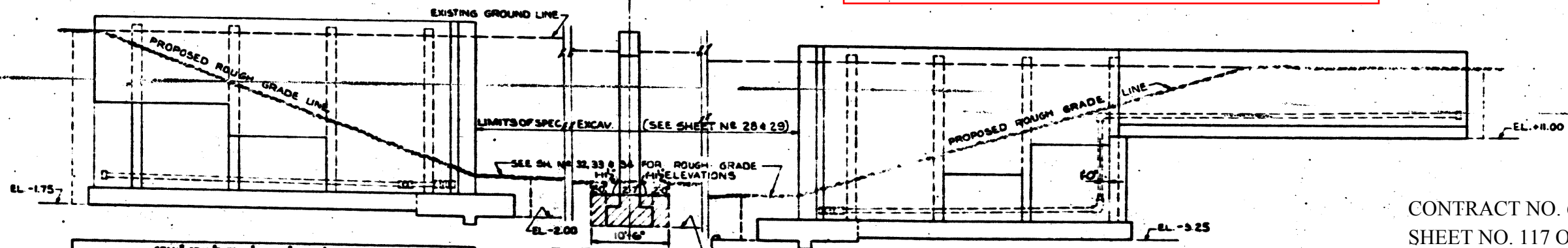


**UNDERDRAIN OUTLET DETAIL**  
SCALE: 1/2" = 1'-0"

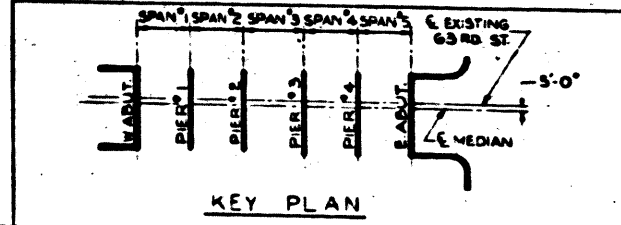
- CLASS A EXCAVATION
- CLASS A EXCAV. (MODIFIED)
- SAND OR GRAVEL EMBANKMENT
- POROUS GRANULAR EMBANKMENT

**NOTES:**  
CLASS A EXCAVATION FOR STRUCTURES (MODIFIED) SHALL CONFORM TO SECTION 50 OF THE STANDARD SPECIFICATIONS EXCEPT AS INDICATED ON THE PLANS; BACKFILL WILL BE SELECTED AND PAID FOR SEPARATELY.  
EXCESS EXCAVATED MATERIAL WILL BE DISPOSED OF IN ACCORDANCE WITH ARTICLE 50.11 OF THE STANDARD SPECIFICATION.  
ALL HORIZONTAL PIPE TO BE 6" PERFORATED CORRUGATED METAL PIPE UNLESS NOTED.  
VERTICAL PIPE (RISERS) TO BE 6" CORRUGATED METAL PIPE (NOT PERFORATED).  
COST OF FURNISHING AND INSTALLING END CAPS, 8" CORRUGATED METAL PIPE SLEEVES, 6" CAST IRON (B & S) STD PIPE AND ALL FITTINGS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE PER LIN. FT. FOR CORRUGATED METAL PIPE, 6 IN.

FOR INFORMATION ONLY



**ELEVATION**  
SCALE: 3/8" = 1'-0"



**KEY PLAN**

**ELEVATIONS:**  
PIER #1 -2.00  
PIER #2 -4.00  
PIER #3 -4.00  
PIER #4 -2.00

BILL OF MATERIAL		
ITEM	UNIT	QUANT.
CLASS A EXCAVATION FOR STRUCTURES	CU. YDS.	2190
CLASS A EXCAVATION FOR STRUCTURES (MODIFIED)	CU. YDS.	2880
SAND OR GRAVEL EMBANKMENT	TONS	2850
POROUS GRANULAR EMBANKMENT	CU. YDS.	427
CORRUGATED METAL PIPE, 6 IN.	LIN. FT.	450

REVISIONS		
DATE	BY	DESCRIPTION

CONTRACT NO. 60J15  
SHEET NO. 117 OF 142

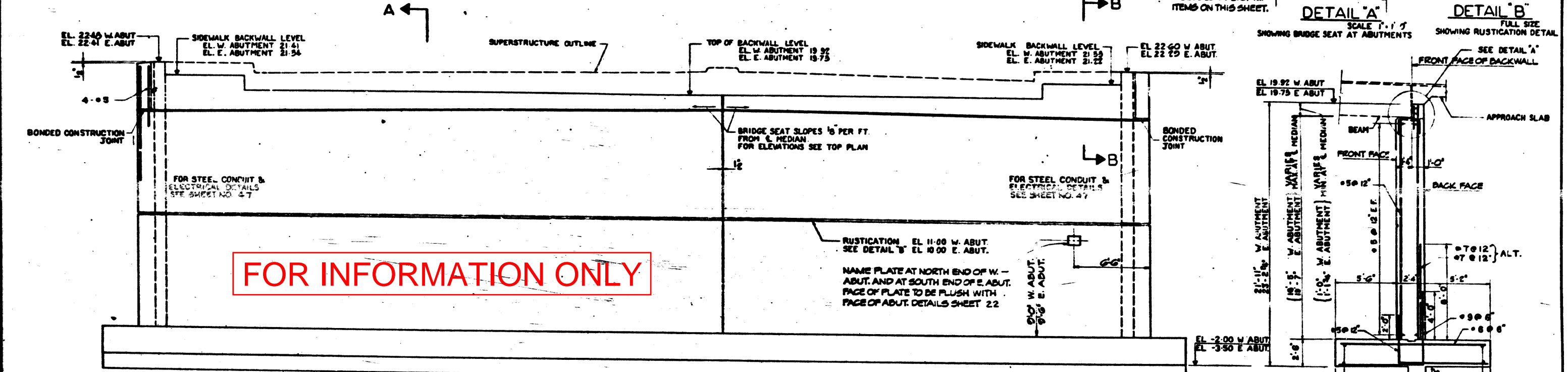
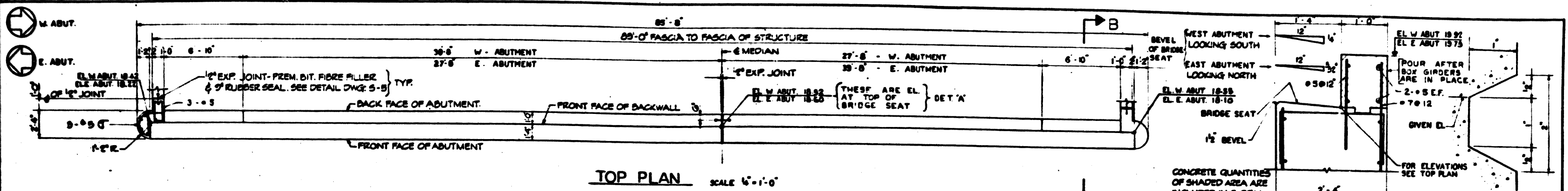
**DEPARTMENT OF HIGHWAYS**  
COOK COUNTY, ILLINOIS

**EXCAVATION, FOUNDATION LAYOUT & DRAINAGE**  
**63RD STREET GRADE SEPARATION**  
**OVER**  
**SOUTH ROUTE EXPRESSWAY**

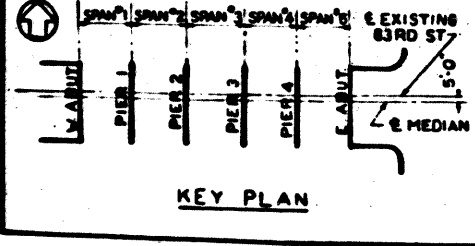
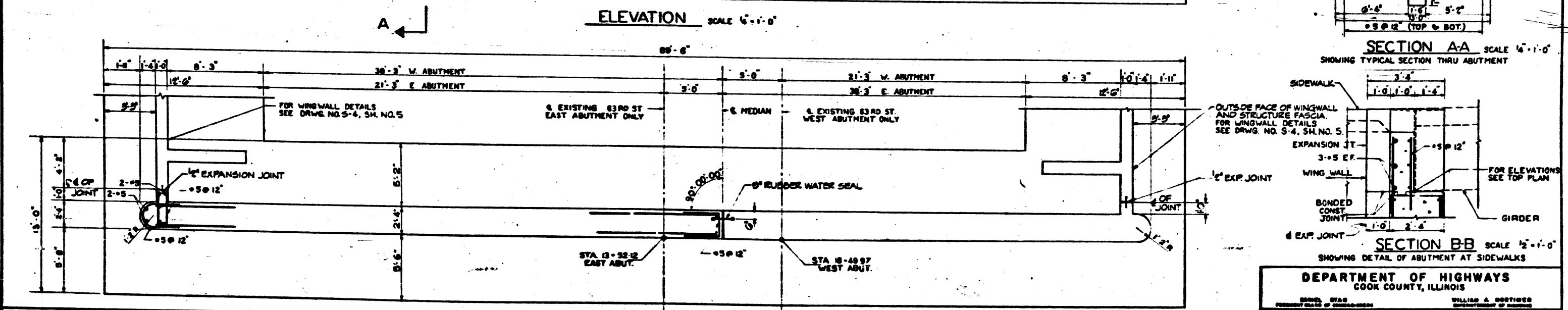
COMPUTED: E. M. C. PROJECT: BUI-94-3(5)156  
DRAWN: M. Y. SCALE: AS SHOWN  
CHECKED: E. M. C. APPROVED: [Signature]

APPROVED: [Signature] P.A.I. COUNTY Highway Sheet No. Total Sheets Drawing No.  
94 066-1920-CF 3 48 S-2

BE LEUW, CATHEN & COMPANY  
CONSULTING ENGINEERS



**FOR INFORMATION ONLY**



**BILL OF MATERIALS - ABUTMENTS & W. WALLS**

ITEM	UNIT	QUANTITY
CLASS "X" CONCRETE	CU YDS	914.2
REINFORCEMENT BARS	LBS	122,700
NAME PLATES	EACH	2

**NOTES**

FOR WING WALL DETAILS SEE DRWG. NO. 5-4, SH. 5

FOR DRAINAGE AND EXCAVATION DETAILS SEE DRWG. NO. 5-2, SH. 3

FOR DETAILS OF STEEL CONDUIT & ELECTRICAL DETAILS SEE SHEET NO. 47

CONTRACT NO. 60J15  
SHEET NO. 118 OF 142

**REVISIONS**

DATE	BY	DESCRIPTION

**DEPARTMENT OF HIGHWAYS**  
COOK COUNTY, ILLINOIS

BRUCE W. BARNETT  
PERMANENT CHIEF OF ENGINEERS

WILLIAM A. BOSTRINE  
SUPERVISOR OF HIGHWAYS

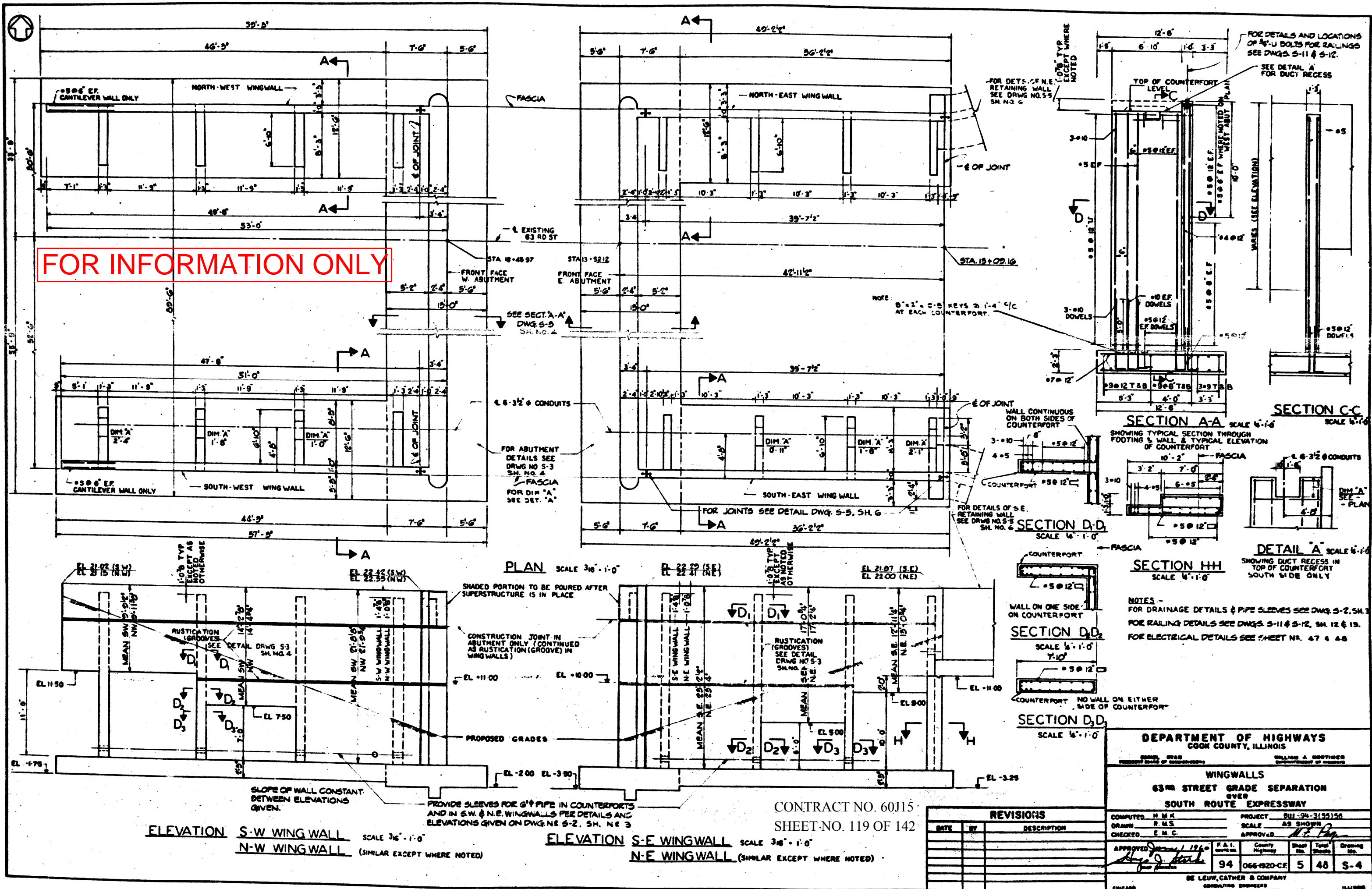
**EAST & WEST ABUTMENTS**  
**63RD STREET GRADE SEPARATION**  
OVER  
**SOUTH ROUTE EXPRESSWAY**

COMPUTED S.G.  
DRAWN R.M.S.  
CHECKED E.M.C.

PROJECT BUI-94-3155156  
SCALE AS SHOWN  
APPROVED *[Signature]*

APPROVED *[Signature]* F.A.I. 1/18/60  
COUNTY HIGHWAY 94  
SHEET No. 4  
TOTAL SHEETS 48  
DRAWING No. S-3

DE LEUW, CATNER & COMPANY  
CONSULTING ENGINEERS  
CHICAGO, ILLINOIS



**FOR INFORMATION ONLY**

PLAN SCALE 3/16" = 1'-0"

SHADED PORTION TO BE POURED AFTER SUPERSTRUCTURE IS IN PLACE.

CONSTRUCTION JOINT IN ABUTMENT ONLY (CONTINUED AS RUSTICATION (GROOVE) IN WING WALLS)

PROVIDE SLEEVES FOR 6" PIPE IN COUNTERFORTS AND IN S.W. & N.E. WING WALLS PER DETAILS AND ELEVATIONS GIVEN ON DWG. NO. S-2, SH. NO. 3

ELEVATION S-W WING WALL SCALE 3/16" = 1'-0"  
N-W WING WALL (SIMILAR EXCEPT WHERE NOTED)

ELEVATION S-E WING WALL SCALE 3/16" = 1'-0"  
N-E WING WALL (SIMILAR EXCEPT WHERE NOTED)

CONTRACT NO. 60J15  
SHEET NO. 119 OF 142

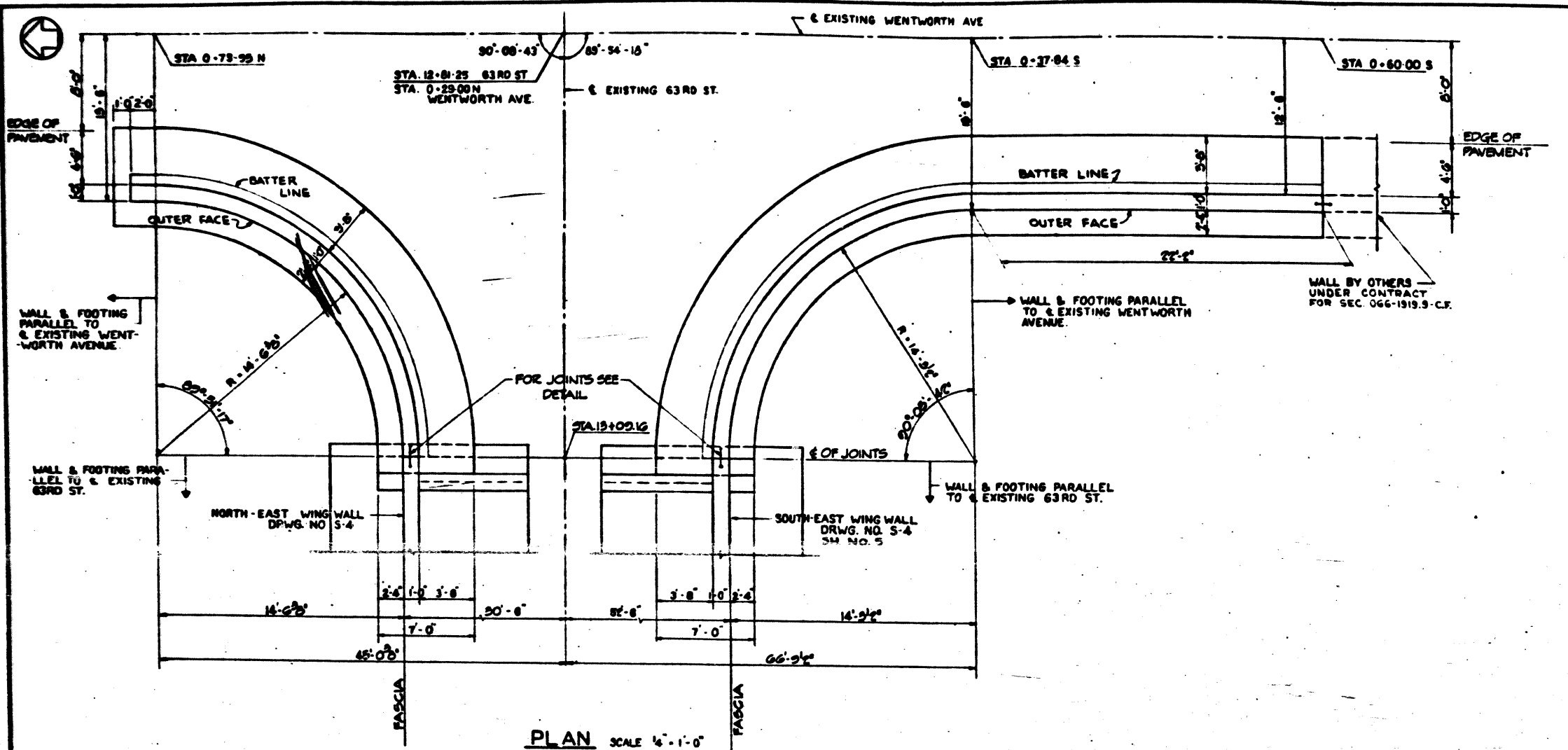
REVISIONS	
DATE	DESCRIPTION

**DEPARTMENT OF HIGHWAYS**  
COOK COUNTY, ILLINOIS

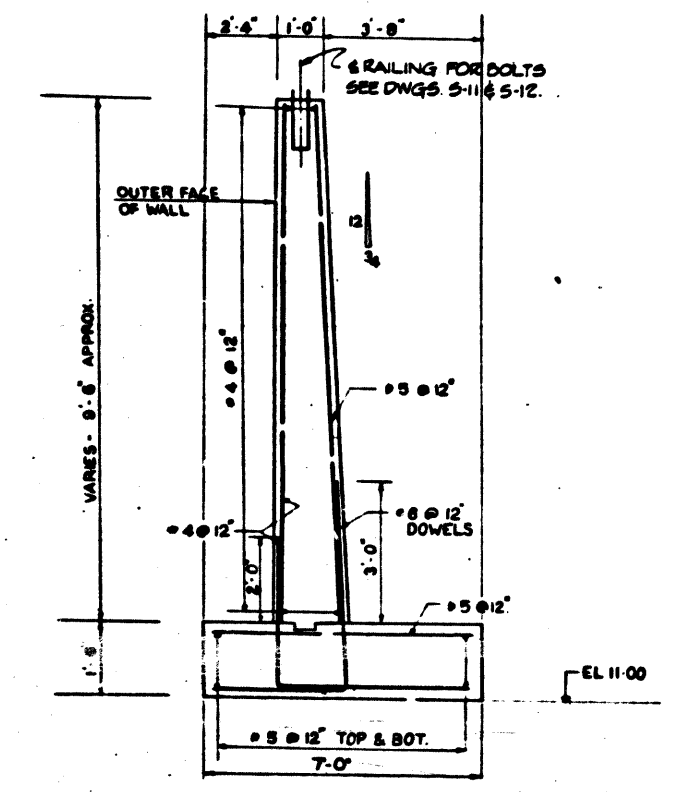
WING WALLS  
63RD STREET GRADE SEPARATION  
OVER  
SOUTH ROUTE EXPRESSWAY

COMPUTED: H.M.K. PROJECT: ILL-94-3(55)156  
DRAWN: R.M.S. SCALE: AS SHOWN  
CHECKED: E.M.C. APPROVED: *[Signature]*

APPROVED: *[Signature]* 1960  
F.A.I. COUNTY Highway 94 066-1920-CF 5 48 S-4  
BE LEUP, CATNER & COMPANY  
CONSULTING ENGINEERS



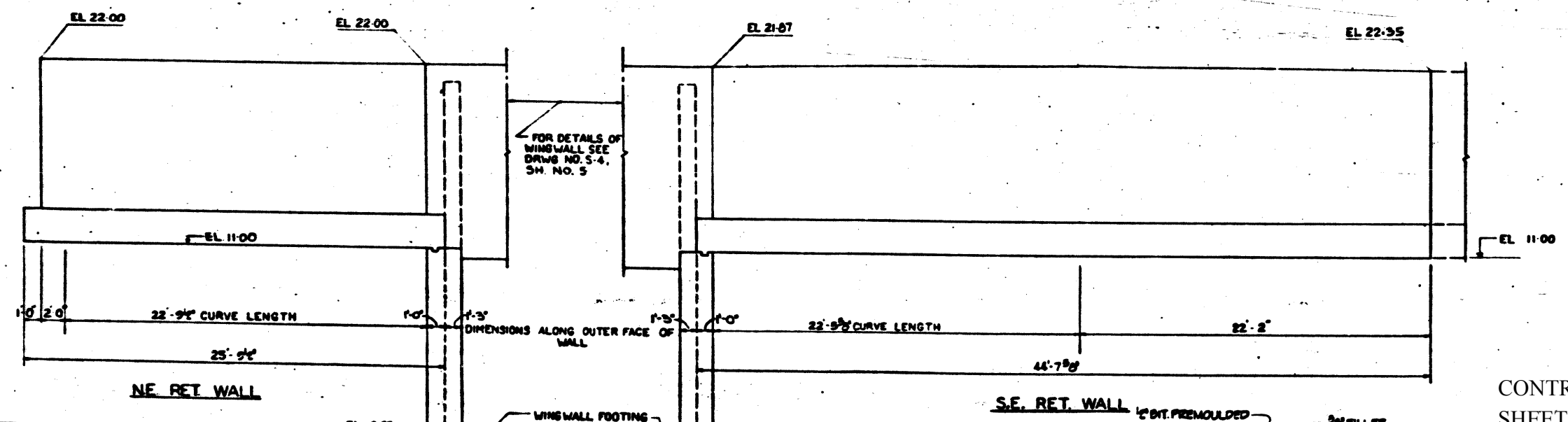
PLAN SCALE 1/4" = 1'-0"



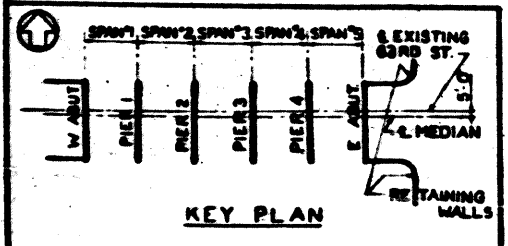
TYP SECTION THRU RETAINING WALL SCALE 1/2" = 1'-0"

NOTES  
 FOR RAILING DETAILS SEE DRWG NOS S-11 & S-12, SH. 12 & 13  
 FOR DRAINAGE DETAILS SEE DRWG NO S-2, SH. NO. 3  
 FOR DETAILS OF CHAIN LINK FENCE SEE SHEET NO. 40  
 FOR ELECTRICAL DETAILS SEE SHEET NOS 47 & 48

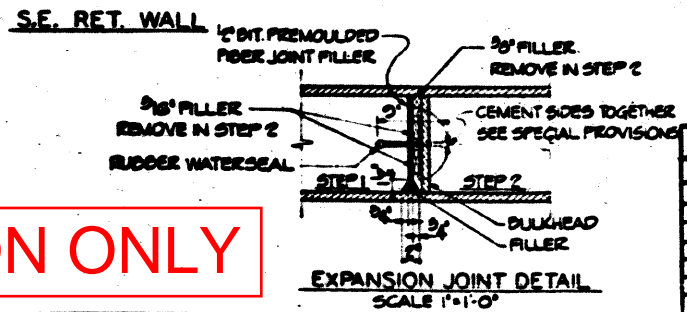
BILL OF MATERIALS - RETAINING WALLS		
ITEM	UNIT	QUANTITY
CLASS "X" CONCRETE	CU YD	59.4
REINFORCEMENT BARS	LBS	4500



ELEVATION SCALE 1/4" = 1'-0"



KEY PLAN



EXPANSION JOINT DETAIL SCALE 1" = 1'-0"

CONTRACT NO. 60J15  
 SHEET NO. 120 OF 142

REVISIONS		
DATE	BY	DESCRIPTION

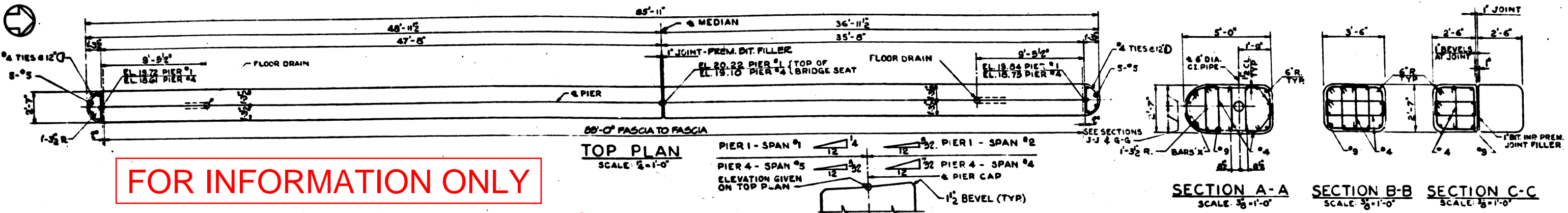
DEPARTMENT OF HIGHWAYS  
 COOK COUNTY, ILLINOIS

RETAINING WALLS  
 63RD STREET GRADE SEPARATION  
 OVER  
 SOUTH ROUTE EXPRESSWAY

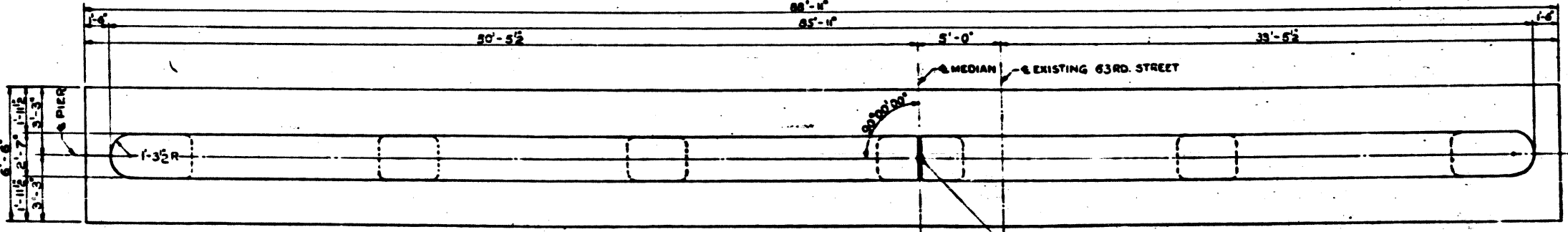
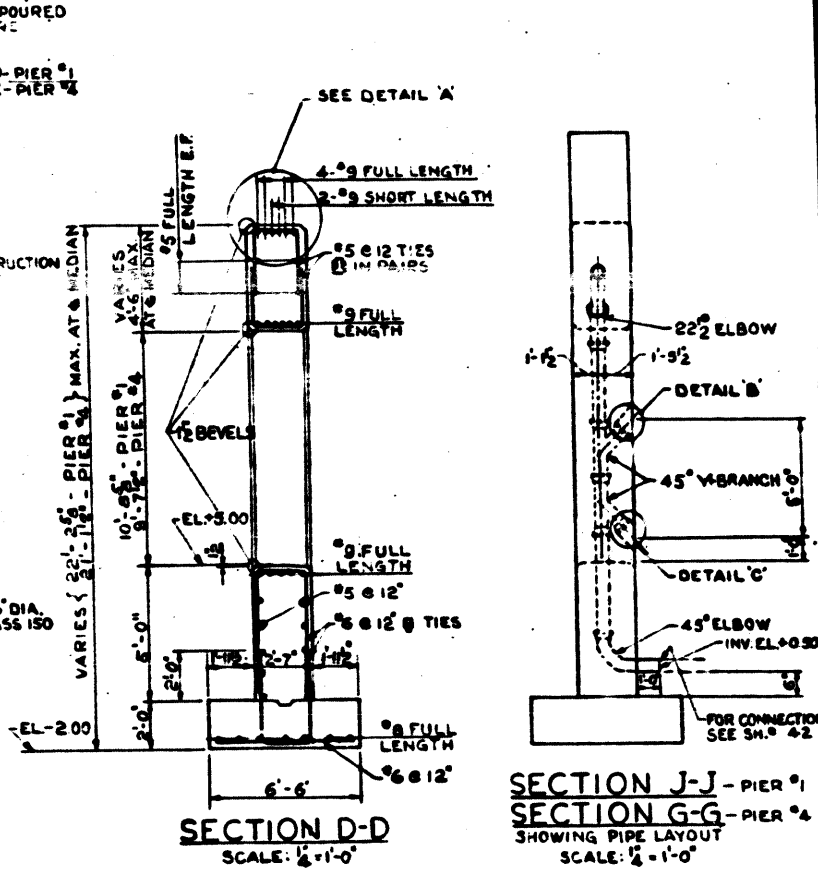
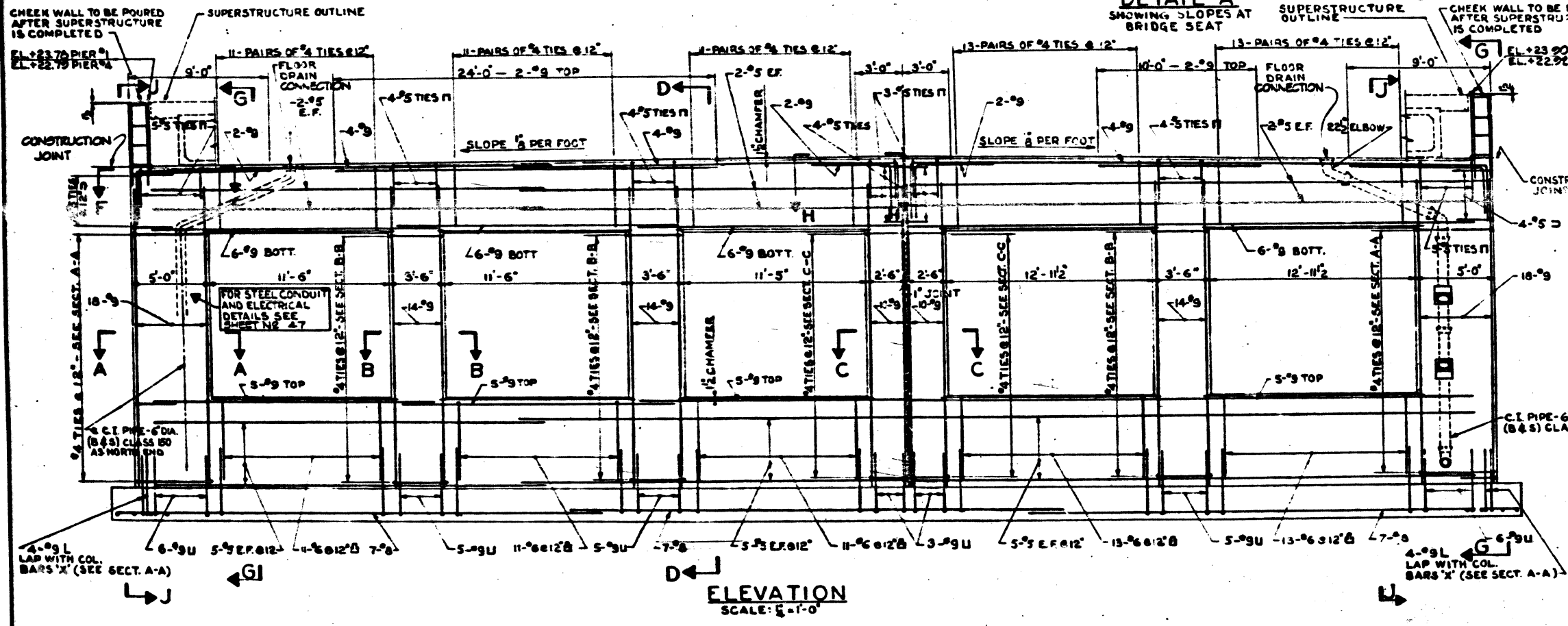
COMPUTED H.M.K. PROJECT 311-94-3(55)56  
 DRAWN R.M.S. SCALE AS SHOWN  
 CHECKED E.M.C. APPROVED *[Signature]*

APPROVED *[Signature]* 94 P.E. COUNTY Highway 94 066-1920-CF 6 48 S-5  
 DE LEUW, CATHNER & COMPANY CONSULTING ENGINEERS CHICAGO ILLINOIS

FOR INFORMATION ONLY

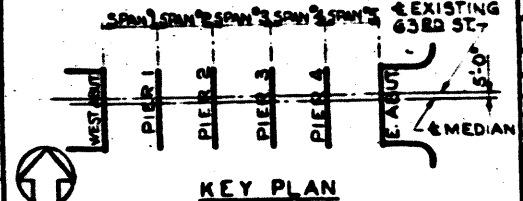


FOR INFORMATION ONLY



**BILL OF MATERIAL**

ITEM	UNIT	PIER #1	PIER #2
CLASS 'X' CONCRETE	CUYDS	144.9	142.2
REINFORCEMENT BARS	LBS	22,200	21,600
CAST IRON PIPE 6" DIA. CLASS 150	LN. FT	48	44



**NOTES:**  
FOR ELECTRICAL DETAILS SEE SHEET NO. 47 & 48

**REVISIONS**

DATE	BY	DESCRIPTION

**DEPARTMENT OF HIGHWAYS**  
COOK COUNTY, ILLINOIS

**PIERS NO 1 & 4**  
63RD STREET GRADE SEPARATION  
OVER  
SOUTH ROUTE EXPRESSWAY

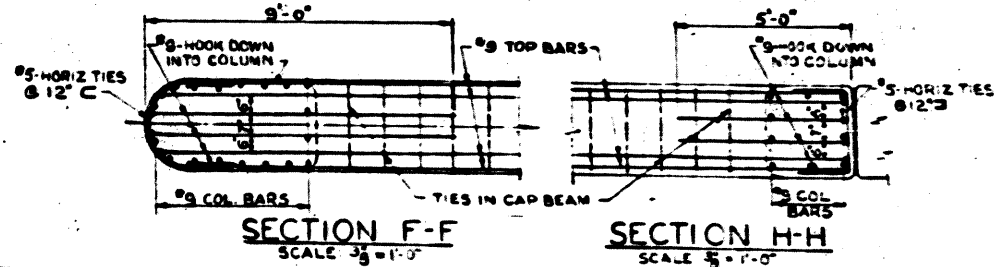
CONTRACT NO. 60J15  
SHEET NO. 121 OF 142

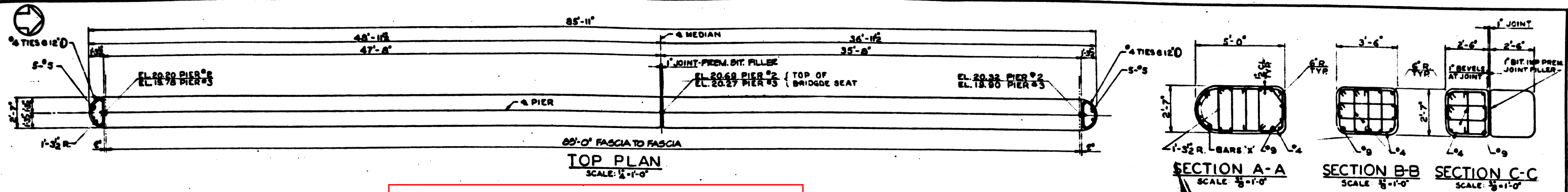
COMPUTED S.G.  
DRAWN L.R.  
CHECKED E.M.C.

PROJECT BUL-94-3155.156  
SCALE AS SHOWN  
APPROVED [Signature]

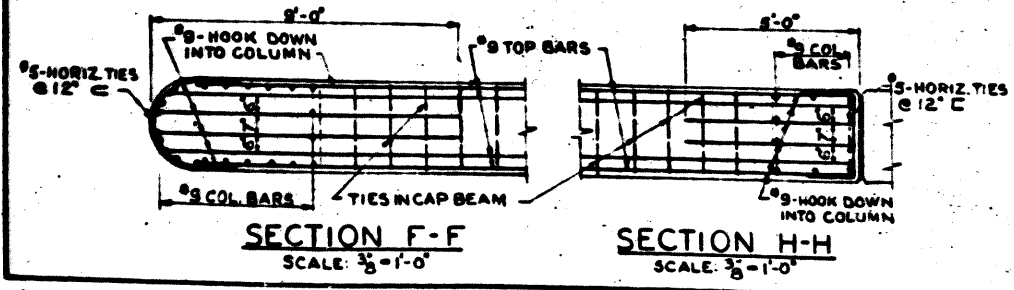
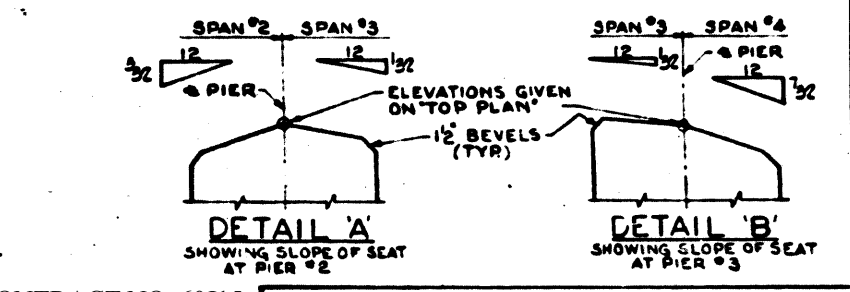
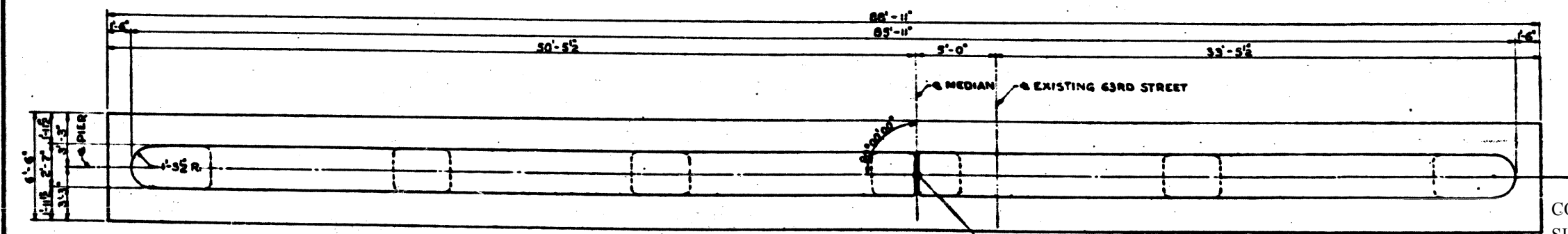
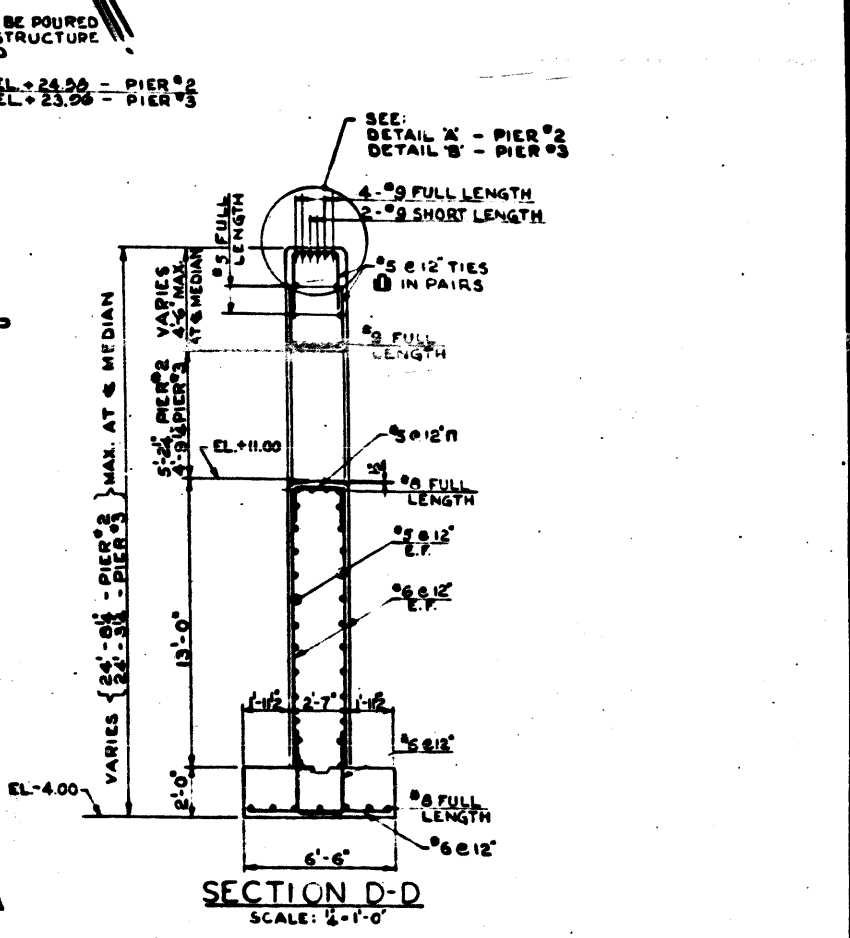
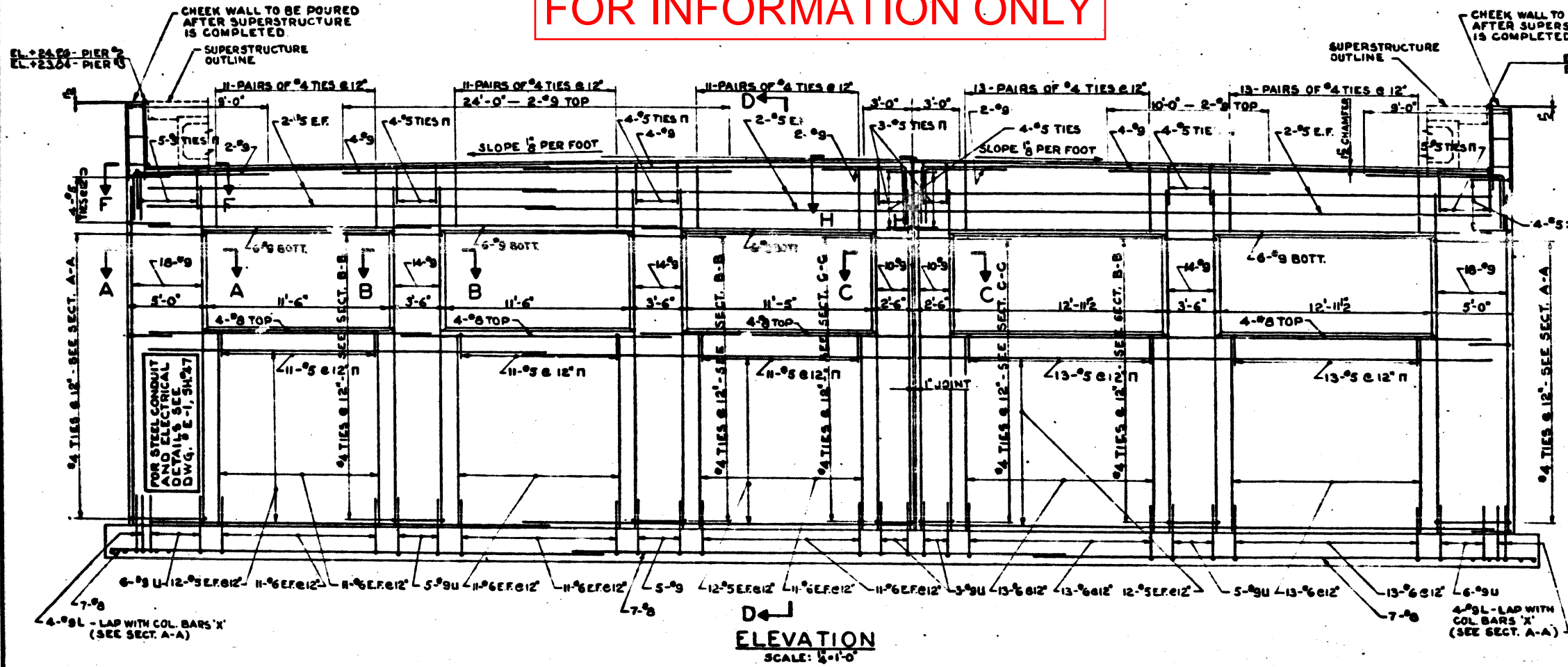
F.A.I. COUNTY HIGHWAY SHEET No. Tota Sheets Drawing No.  
94 066-1920-CF 7 48 S-6

DE LEUW, CATHNER & COMPANY  
CONSULTING ENGINEERS



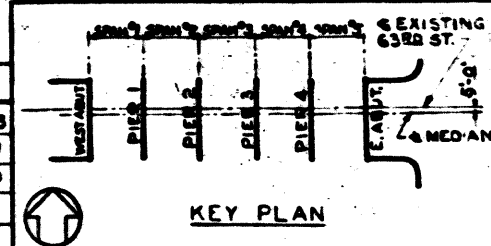


FOR INFORMATION ONLY



**FOOTING PLAN** SCALE: 1/8"=1'-0"

BILL OF MATERIAL				
ITEM	UNIT	PIER #2	PIER #3	
CLASS X CONCRETE	CU YDS	197.0	196.0	
REINFORCEMENT BARS	LEBS	24,700	24,700	



CONTRACT NO. 60J15  
SHEET NO. 122 OF 142

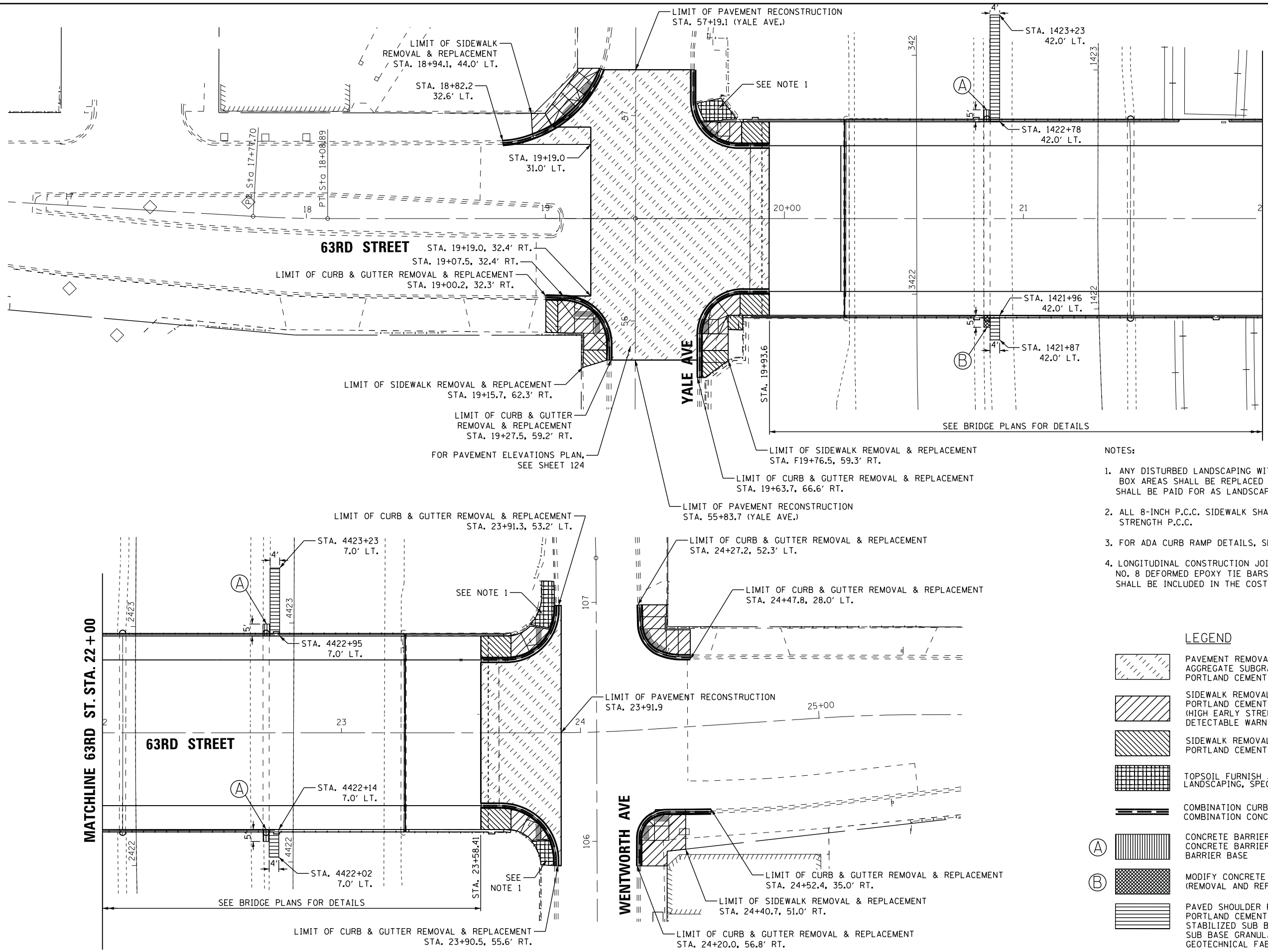
REVISIONS		
DATE	BY	DESCRIPTION

**DEPARTMENT OF HIGHWAYS**  
COOK COUNTY, ILLINOIS

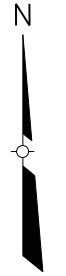
**PIERS #2 & 3**  
**63RD STREET GRADE SEPARATION**  
**SOUTH ROUTE EXPRESSWAY**

COMPUTED S.G.	PROJECT 941-94-3(55)25
DRAWN L.R.	SCALE AS SHOWN
CHECKED E.M.G.	APPROVED <i>[Signature]</i>
APPROVED <i>[Signature]</i>	F.A.I. 94
	County Highway
	Sheet No. 8
	Total Sheets 48
	Drawing No. S-7

DE LEUW, CATHY & COMPANY  
CONSULTING ENGINEERS



MATCHLINE 63RD ST. STA. 22 + 00



**NOTES:**

1. ANY DISTURBED LANDSCAPING WITHIN THE PLANTER BOX AREAS SHALL BE REPLACED IN KIND. THIS WORK SHALL BE PAID FOR AS LANDSCAPING (SPECIAL).
2. ALL 8-INCH P.C.C. SIDEWALK SHALL BE HIGH EARLY STRENGTH P.C.C.
3. FOR ADA CURB RAMP DETAILS, SEE SHEETS 125-128.
4. LONGITUDINAL CONSTRUCTION JOINT. DRILL AND GROUT NO. 8 DEFORMED EPOXY TIE BARS 30" LONG AT 24" C-C SHALL BE INCLUDED IN THE COST OF THE PCC SHOULDER.

**LEGEND**

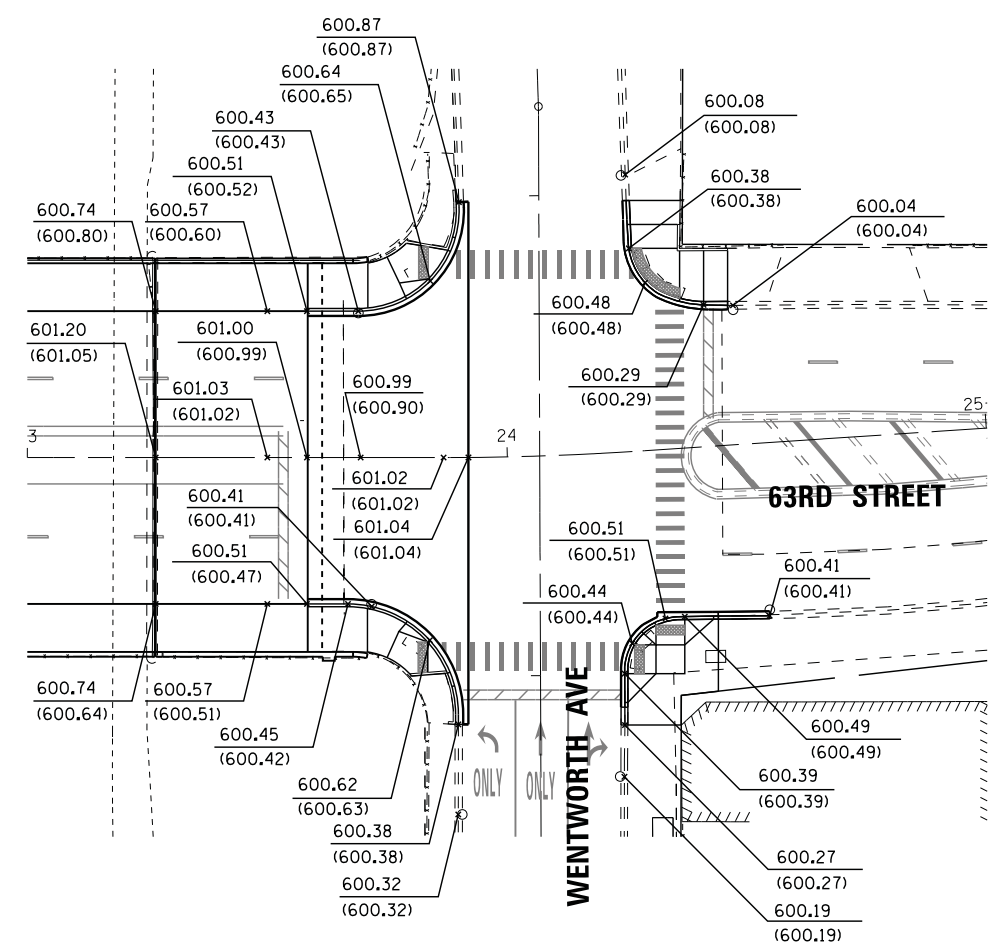
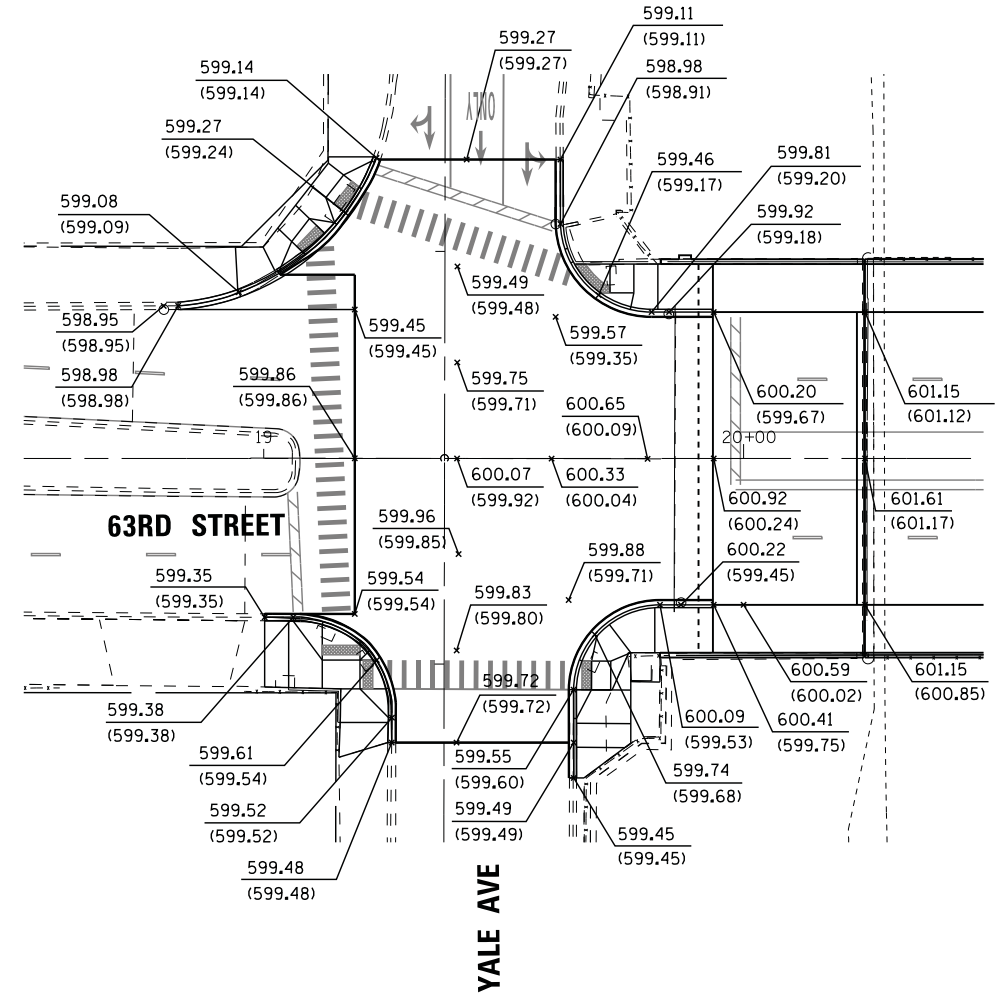
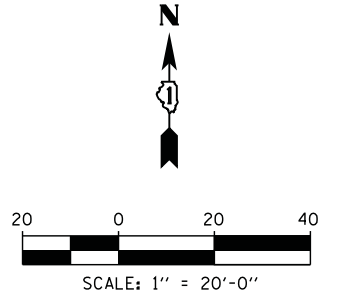
- PAVEMENT REMOVAL
- AGGREGATE SUBGRADE IMPROVEMENT, 12"
- PORTLAND CEMENT CONCRETE PAVEMENT 10" (JOINTED)
- SIDEWALK REMOVAL
- PORTLAND CEMENT CONCRETE SIDEWALK 8 INCH (HIGH EARLY STRENGTH) DETECTABLE WARNINGS
- SIDEWALK REMOVAL
- PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH
- TOPSOIL FURNISH AND PLACE, 4" LANDSCAPING, SPECIAL
- COMBINATION CURB AND GUTTER REMOVAL
- COMBINATION CONCRETE CURB AND GUTTER, TYPE B-V.12
- CONCRETE BARRIER REMOVAL
- CONCRETE BARRIER TRANSITION
- BARRIER BASE
- MODIFY CONCRETE BARRIER AND RETAINING WALL (REMOVAL AND REPLACEMENT)
- PAVED SHOULDER REMOVAL (DAN RYAN) SEE NOTE 4
- PORTLAND CEMENT CONCRETE SHOULDERS, 14"
- STABILIZED SUB BASE 6"
- SUB BASE GRANULAR MATERIAL, TYPE B-24"
- GEOTECHNICAL FABRIC FOR GROUND STABILIZATION

FILE NAME =	USER NAME = *USER*	DESIGNED - KMM	REVISED -
ct:\pwwork\dlz\ccooney\dms19784\63RESTORE.dgn		DRAWN - LV	REVISED -
PLOT SCALE = *SCALE*		CHECKED - JDH	REVISED -
PLOT DATE = 3/27/2014		DATE - 03-31-2014	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

<b>RESTORATION PLAN</b>			
<b>63RD ST &amp; YALE AVE, 63RD ST &amp; WENTWORTH AVE</b>			
SCALE: 1"=20'	SHEET NO.	OF SHEETS	STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1920-B	COOK	142	123
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60J15	



NOTES:

1. FOR ADA CURB RAMP DETAILS, SEE SHEETS 125-128.
2. FOR PAVEMENT ELEVATIONS ON BRIDGE DECK SEE BRIDGE PLANS, SHEETS 65-122.

LEGEND


- 600.32** PROPOSED PAVEMENT ELEVATION
- (600.32) EXISTING PAVEMENT ELEVATION
- CATCH BASIN

FILE NAME = c:\pwork\dlz\ccooney\dms19784\63PVMTElev.dgn	USER NAME = *USER*	DESIGNED - KMM	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PAVEMENT ELEVATIONS PLAN</b>			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = *SCALE*	DRAWN - LV	REVISED -		<b>63RD ST &amp; YALE AVE, 63RD ST &amp; WENTWORTH AVE</b>			94	1920-B	COOK	142	124
	PLOT DATE = 3/27/2014	CHECKED - JDH	REVISED -		SCALE: 1"=20'	SHEET NO.	OF SHEETS	STA.	TO STA.	CONTRACT NO. 60J15		
		DATE - 03-31-2014	REVISED -		ILLINOIS FED. AID PROJECT							

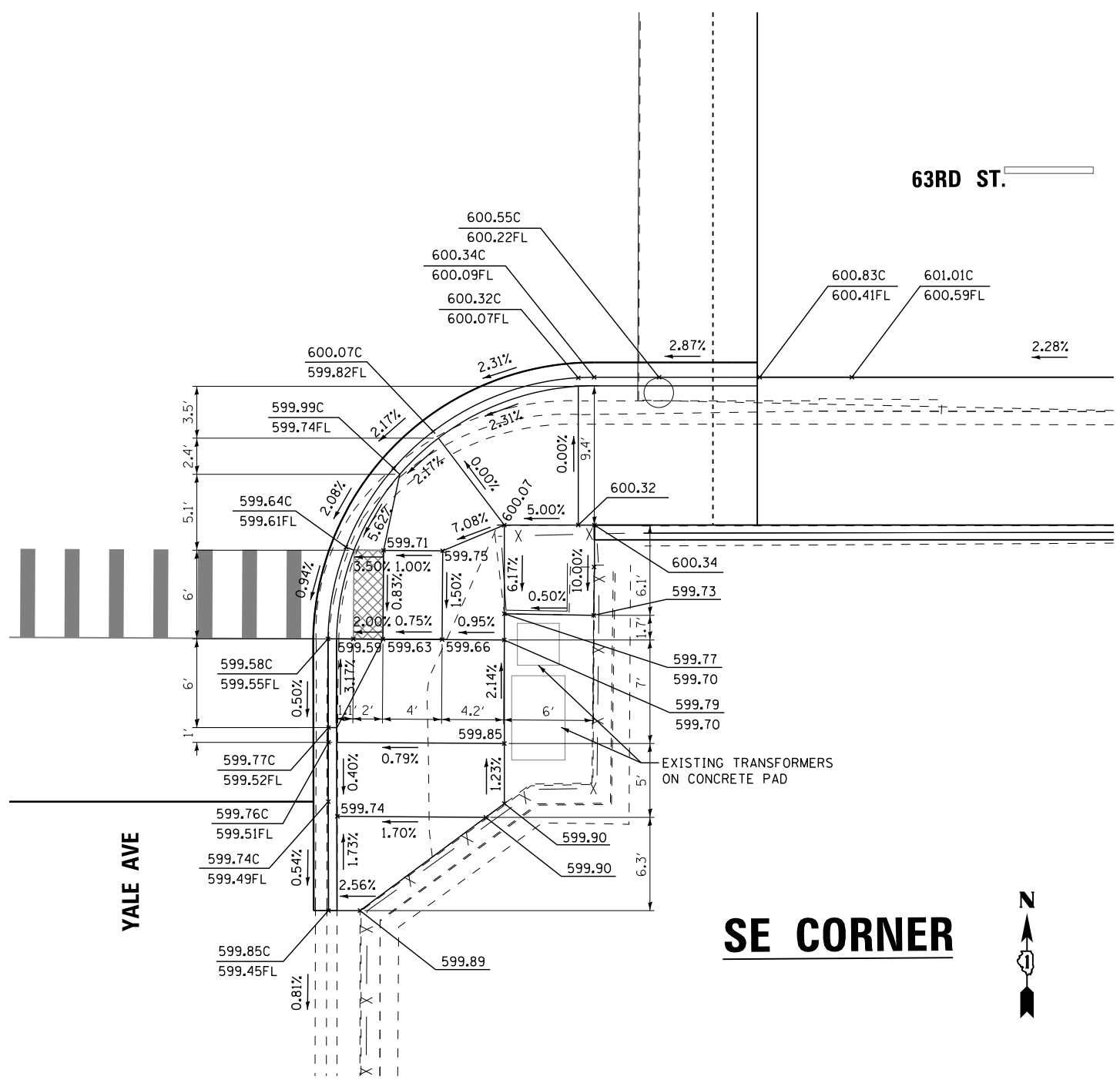
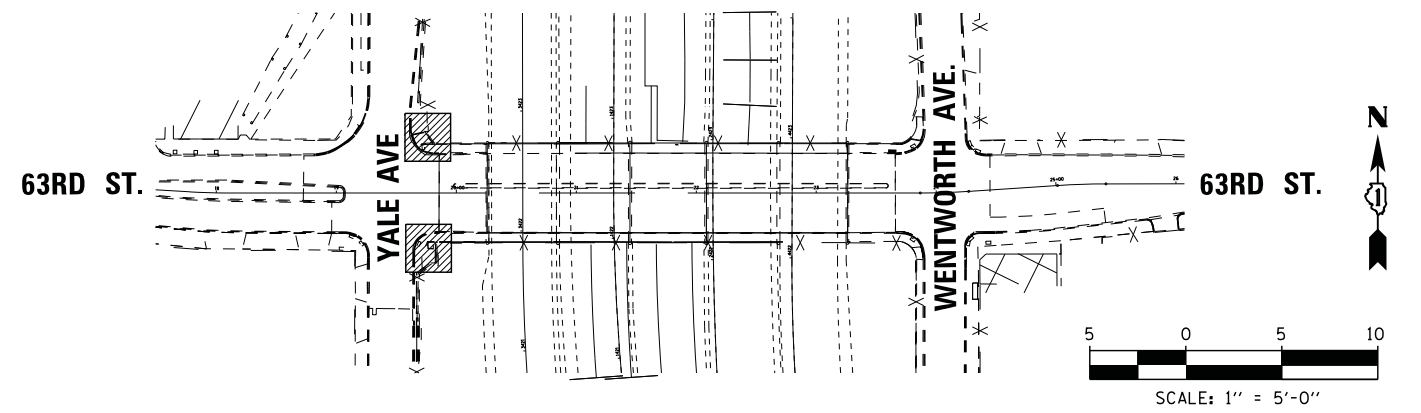
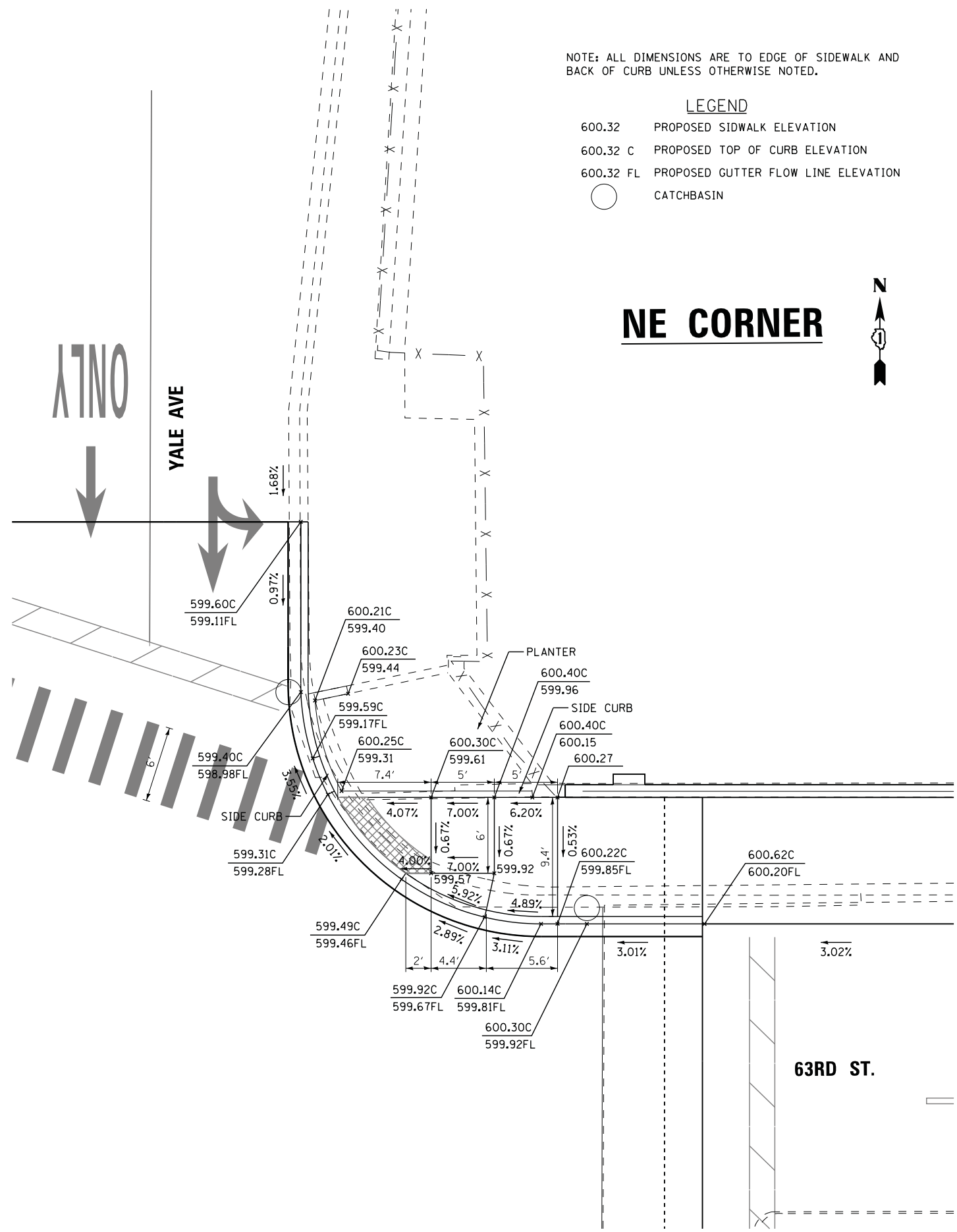




NOTE: ALL DIMENSIONS ARE TO EDGE OF SIDEWALK AND BACK OF CURB UNLESS OTHERWISE NOTED.

- LEGEND**
- 600.32 PROPOSED SIDEWALK ELEVATION
  - 600.32 C PROPOSED TOP OF CURB ELEVATION
  - 600.32 FL PROPOSED GUTTER FLOW LINE ELEVATION
  -  CATCHBASIN

**NE CORNER**



**SE CORNER**



FILE NAME =	USER NAME = *USER*	DESIGNED - KMM	REVISED -
ct:\pwork\dlz\ccooney\dms19784\63rdSt\02.dgn		DRAWN - LV	REVISED -
PLOT SCALE = *SCALE*		CHECKED - JDH	REVISED -
PLOT DATE = 3/27/2014		DATE - 03-31-2014	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

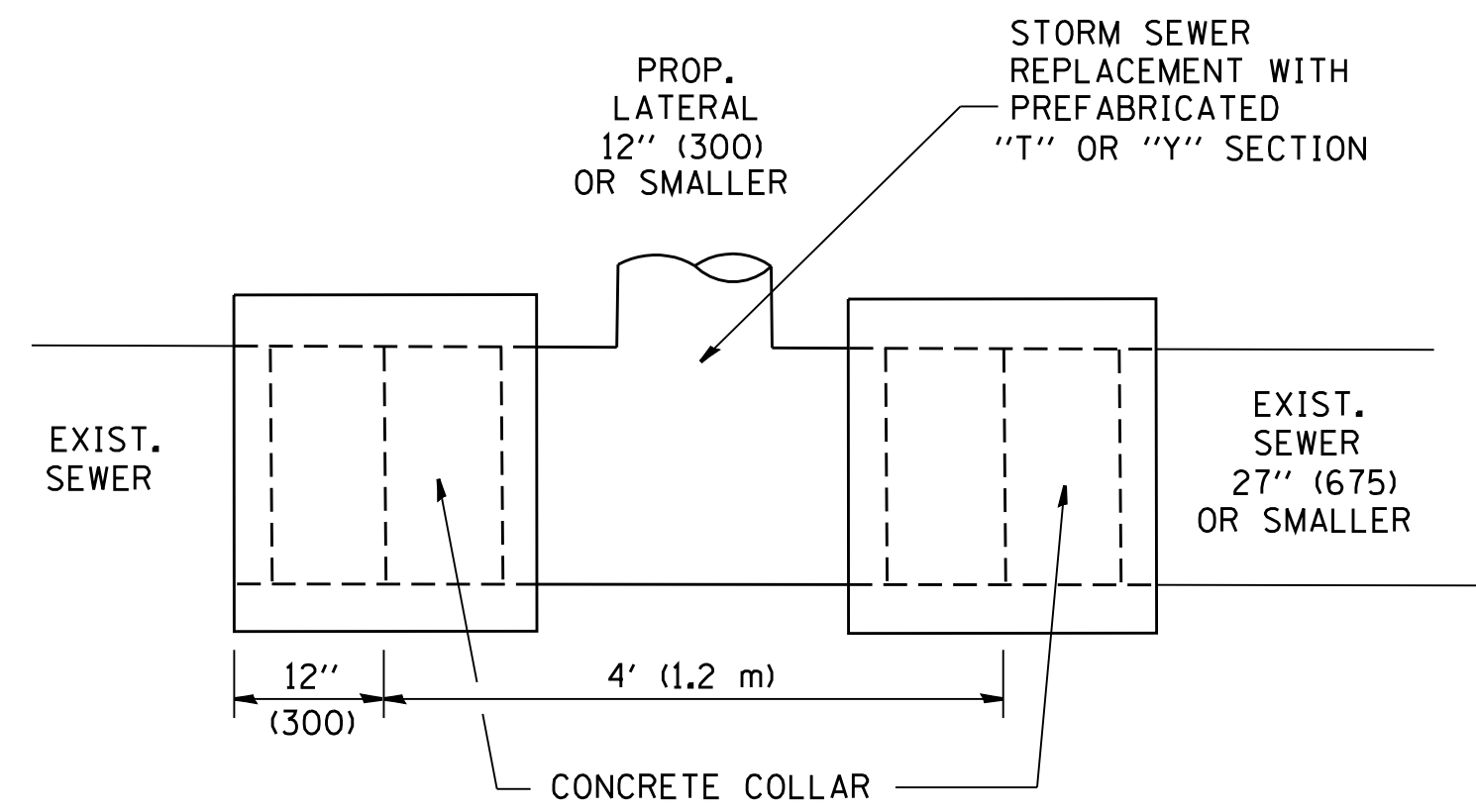
CURB RAMP DETAILS  
 63RD ST. AT YALE AVE

SCALE: 1"=5'	SHEET NO.	OF SHEETS	STA.	TO STA.
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1920-B	COOK	142	126
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60J15	

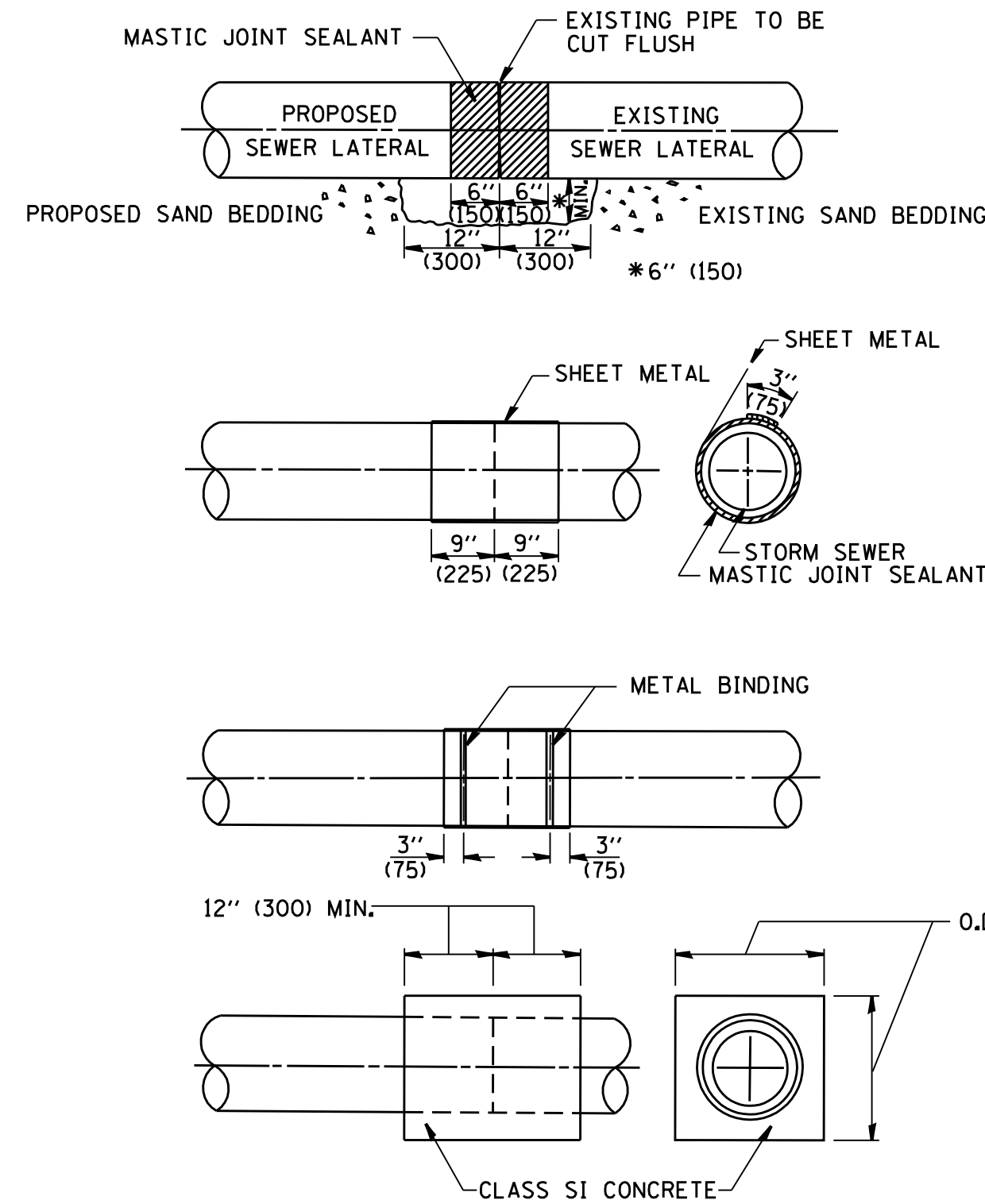






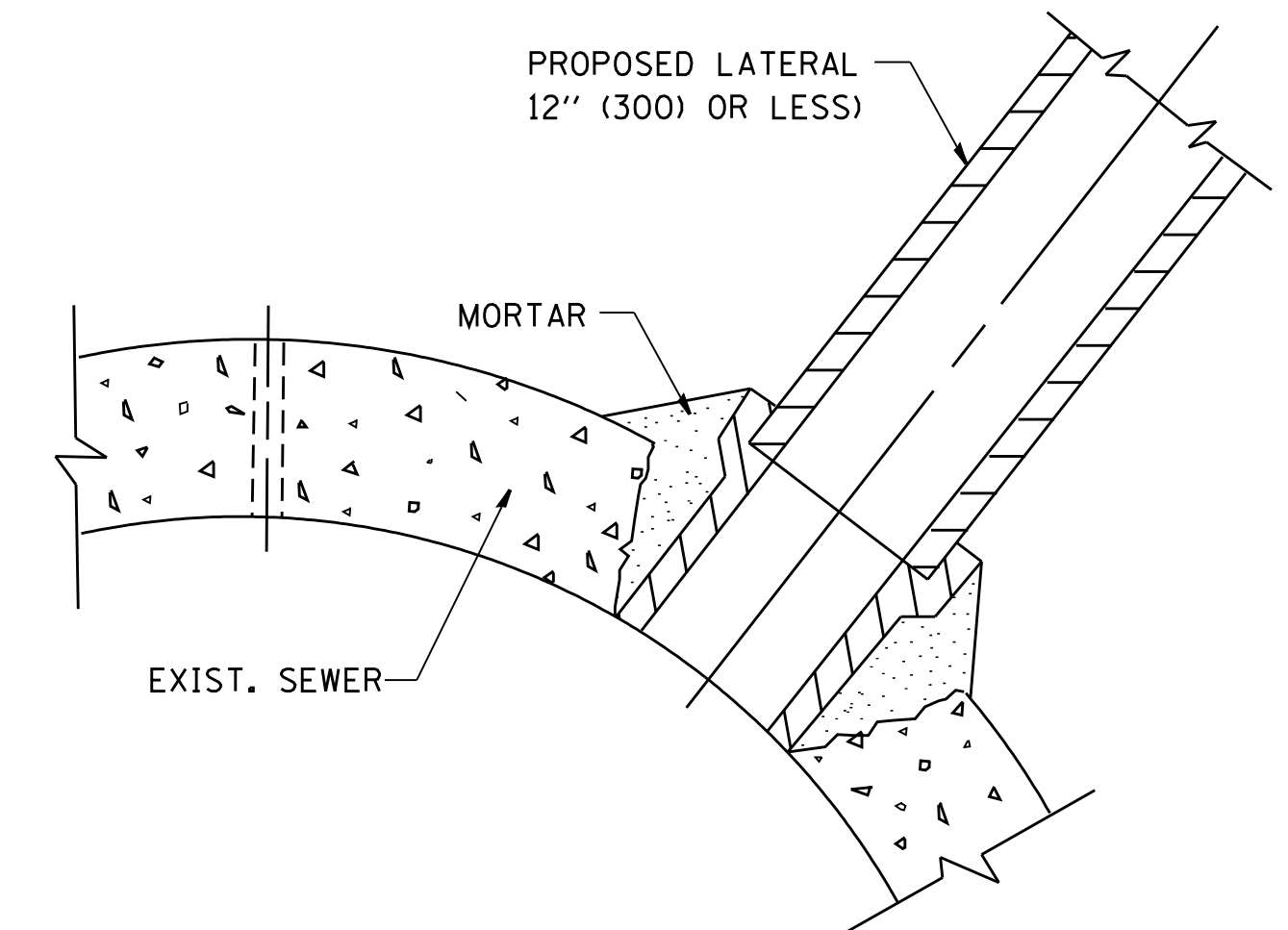
DETAIL "A"

LATERAL CONNECTION TO EXISTING SEWER OF 27" (675) OR SMALLER



DETAIL "B"

CLASS SI CONCRETE COLLAR



DETAIL "C"

PROPOSED LATERAL CONNECTION TO EXISTING SEWER OF 30" (750) OR LARGER

CONSTRUCTION SEQUENCE

1. CUT THE EXISTING END OF THE PIPE SO AS TO PRESENT A FLUSH BUTT JOINT. BRUSH AND CLEAN ALL PIPES.
2. APPLY THE MASTIC JOINT SEALANT TO THE FIRST 6" (150) OF EACH PIPE.
3. BUTT THE PIPES TOGETHER LEAVING A MINIMUM OF 12" x 6" (300 x 150) DEEP EXCAVATION UNDER AND AROUND EACH PIPE END.
4. CUT A PIECE OF SHEET METAL GAGE NO. 19 1.1 (0.0418) 18" (450) WIDE BY THE OUTSIDE CIRCUMFERENCE OF THE PIPE PLUS 3" (75) LONG.
5. WRAP THE SHEET METAL AROUND THE PIPES, 9" (225) ON EACH SIDE OF THE JOINT, STARTING AT THE TOP OF THE PIPE.
6. LAP THE SHEET METAL AT LEAST 3" (75) AT THE TOP OF THE PIPE AND PLACE THE MASTIC JOINT SEALANT BETWEEN THE LAP.
7. PLACE TWO METAL BANDS AROUND THE SHEET METAL AND TIGHTEN.
8. WIPE OFF ANY EXCESS MASTIC JOINT SEALANT THAT OOOZES OUT FROM BETWEEN THE SHEET METAL AND THE PIPES.
9. PLACE CLASS SI CONCRETE AROUND THE JOINT.

NOTES

MATERIAL

MATERIAL USED FOR THE TEE OR WYE SECTION SHALL BE COMPATIBLE WITH THE EXISTING STORM SEWER OR THE PROPOSED STORM SEWER.

CONSTRUCTION METHODS

- THIS WORK SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE APPLICABLE PORTIONS OF SECTION 550 OF THE STANDARD SPECIFICATIONS.
- CONNECTION TO AN EXISTING STORM SEWER SHALL BE BY EITHER OF THE FOLLOWING METHODS:
  - PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 27" (675) OR SMALLER SEE DETAIL "A" AND "B".
  - PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 30" (750) OR LARGER SEE DETAIL "C".

IF THE EXISTING SEWER PIPE IS CRACKED, BROKEN OR OTHERWISE DAMAGED BY THE CONTRACTOR IN MAKING THE CIRCULAR OPENING, THE CONTRACTOR SHALL REPLACE THAT SECTION OF PIPE WITH PIPE EQUAL AND SIMILAR IN ALL RESPECTS TO THE PIPE IN THE EXISTING SEWER, IN A CAREFUL WORKMANLIKE MANNER, WITHOUT EXTRA COMPENSATION.

GENERAL

CARE MUST BE TAKEN TO PREVENT DEBRIS FROM ENTERING THE SEWER. ALL DEBRIS WHICH ENTERS THE SEWER MUST BE REMOVED. THE SEWER MUST BE LEFT CLEAN AND UNOBSTRUCTED UPON COMPLETION OF THE CONTRACT.

CARE MUST BE TAKEN TO PREVENT ANY PART OF THE NEW PIPE CONNECTION FROM PROJECTING INTO THE EXISTING SEWER.

BASIS OF PAYMENT

TEE OR WYE CONNECTIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR STORM SEWER TEE OR WYE OF THE TYPE AND SIZE SPECIFIED IN THE PLANS. THIS PRICE SHALL INCLUDE ALL EXCAVATION OF THE TRENCH, REMOVAL OF THE EXISTING STORM SEWER, FURNISHING AND INSTALLING THE SPECIFIED TEE OR WYE SECTION, FURNISHING AND INSTALLING THE REQUIRED CONCRETE COLLAR, AND ALL OTHER MATERIAL NECESSARY TO COMPLETE THIS WORK AS SHOWN AND SPECIFIED.

REMOVAL AND REINSTALLATION OF EXISTING STORM SEWER ADJACENT TO THE PROPOSED TEE OR WYE SECTION, FOR THE PURPOSE OF FACILITATING THE INSTALLATION OF THE TEE OR WYE SECTION, WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE WORK.

TRENCH BACKFILL, EXCAVATION IN ROCK AND REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIAL BELOW PLAN BEDDING GRADE WILL BE PAID FOR SEPARATELY.

CONCRETE COLLAR FOR CONNECTING A PROPOSED STORM SEWER TO AN EXISTING STORM SEWER WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE PROPOSED STORM SEWER.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

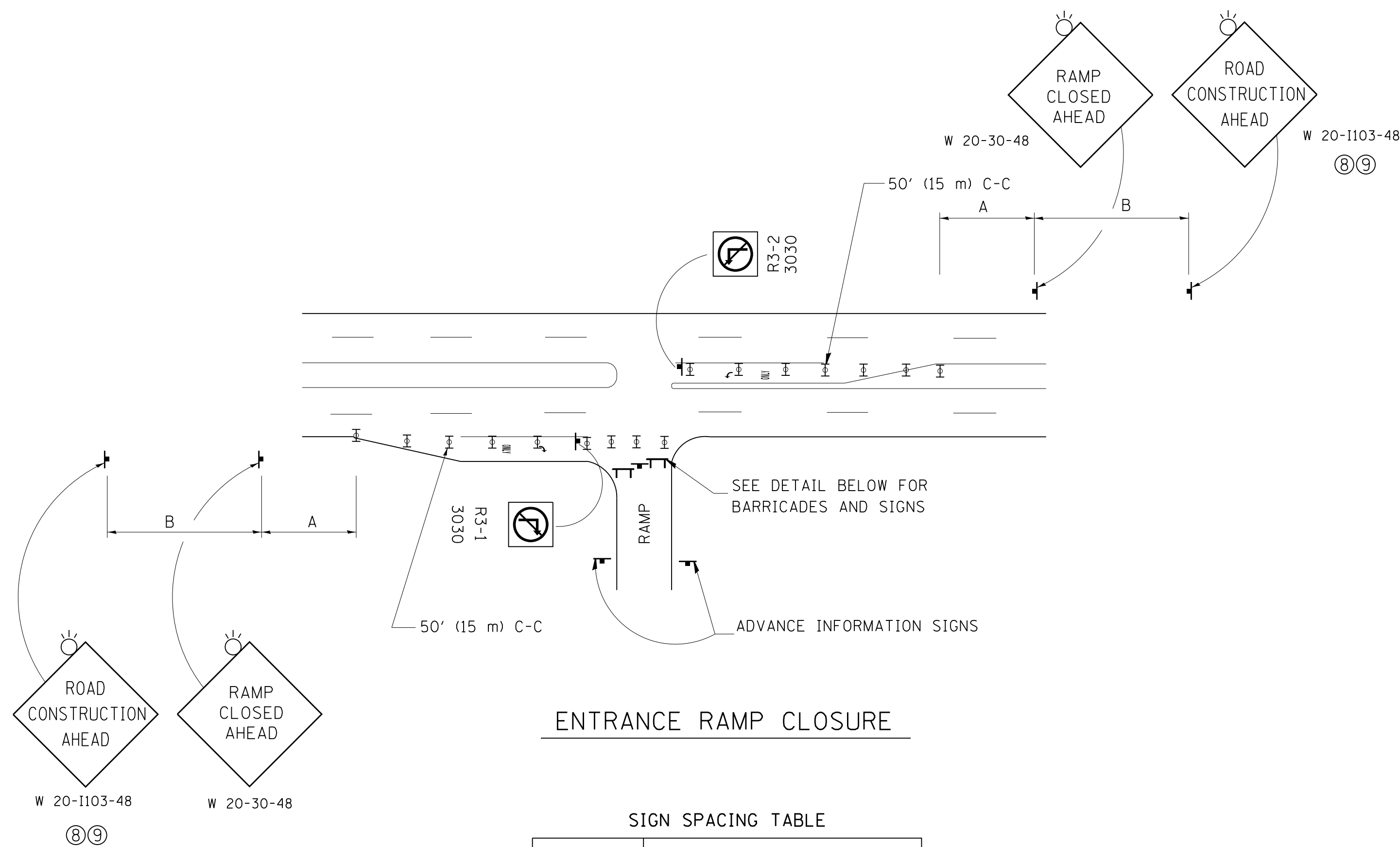
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		DRAWN -	REVISED - R. SHAH 09-09-94
	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - R. SHAH 10-25-94
	PLOT DATE = 1/4/2008	DATE - 07-25-90	REVISED - R. SHAH 06-12-96

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DETAIL OF STORM SEWER  
CONNECTION TO EXISTING SEWER

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1920-B	COOK	142	129
BD500-01 (BD-7)			CONTRACT NO. 60J15	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

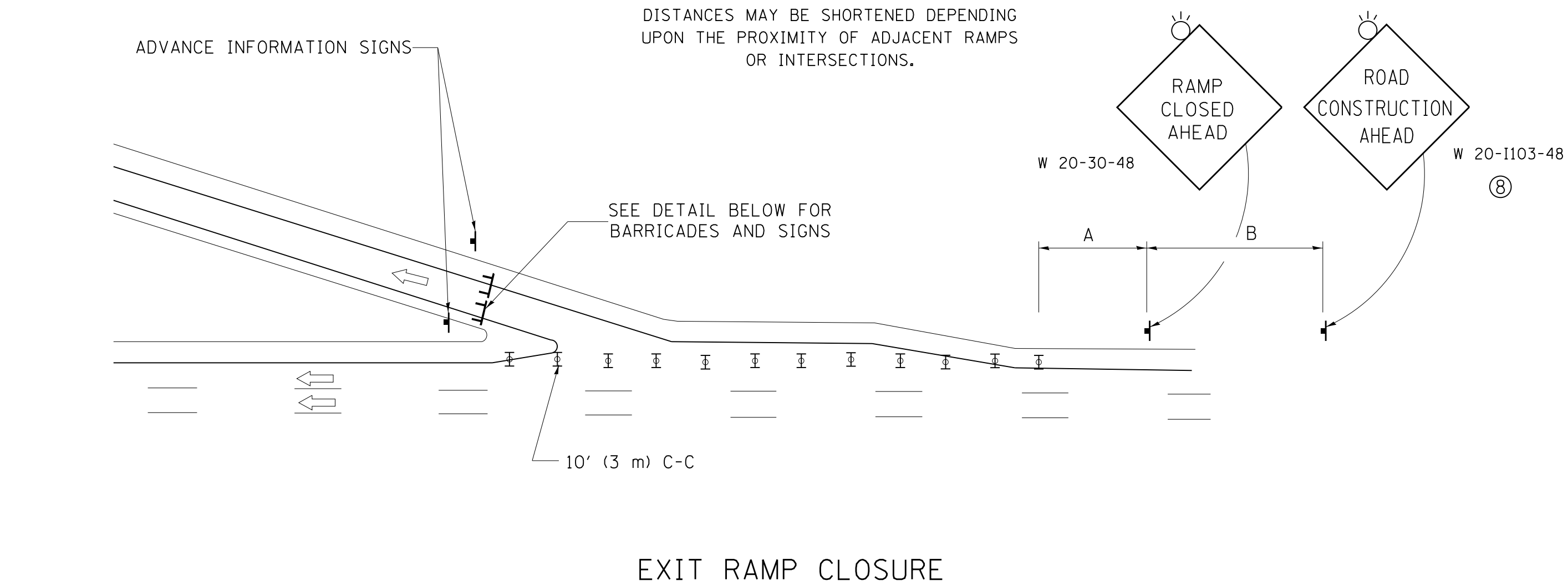


**ENTRANCE RAMP CLOSURE**

**SIGN SPACING TABLE**

FACILITY	DISTANCE BETWEEN SIGNS	
	A	B
EXPRESSWAY >24 HOURS	1000' (300 m)	1500' (450 m)
EXPRESSWAY <24 HOURS	500' (150 m)	500' (150 m)
ARTERIAL 55 MPH	500' (150 m)	500' (150 m)
ARTERIAL 50-45 MPH	350' (100 m)	350' (100 m)
ARTERIAL <45 MPH	200' (60 m)	200' (60 m)

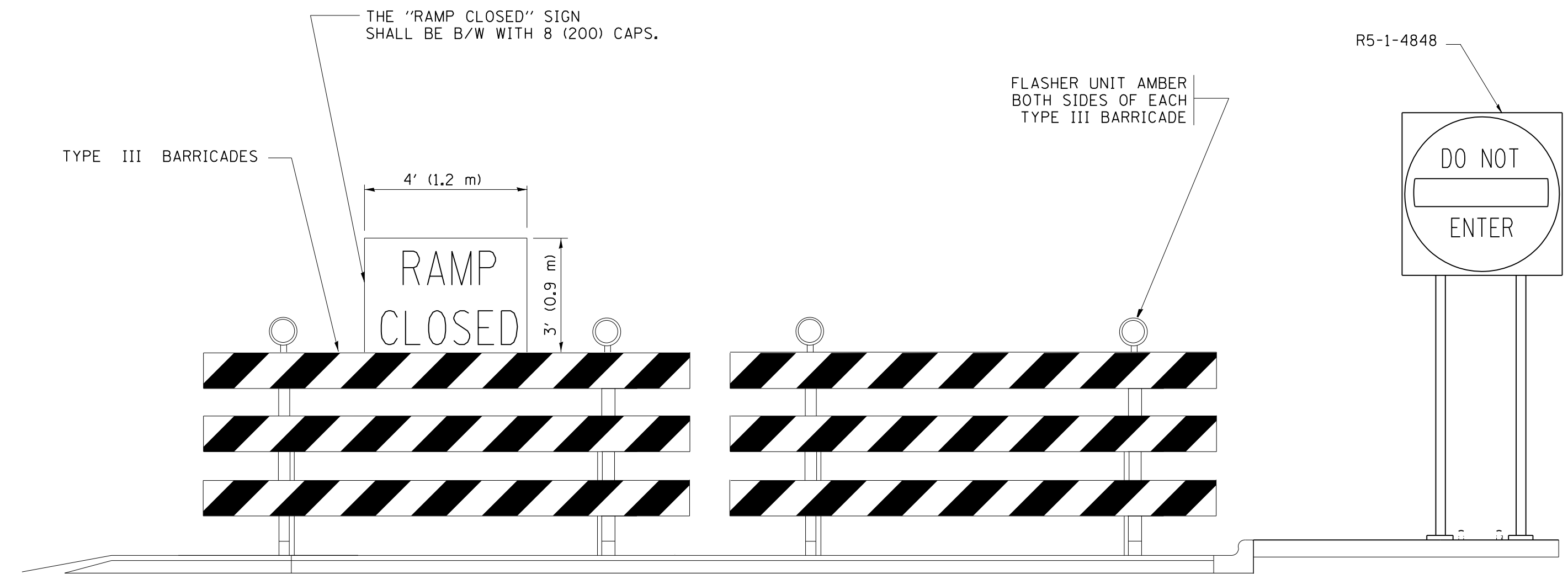
DISTANCES MAY BE SHORTENED DEPENDING UPON THE PROXIMITY OF ADJACENT RAMPS OR INTERSECTIONS.



**EXIT RAMP CLOSURE**

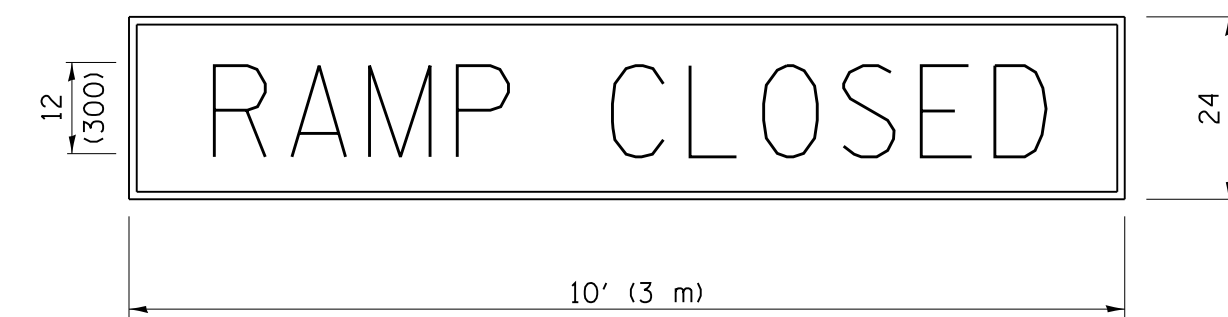
**SYMBOLS**

- ⊥ TYPE II BARRICADE OR DRUM WITH STEADY BURN MONO-DIRECTIONAL LIGHT
- ⊥ TYPE III BARRICADE WITH 2 FLASHING LIGHTS



**DETAIL FOR REQUIRED BARRICADES & SIGNS**

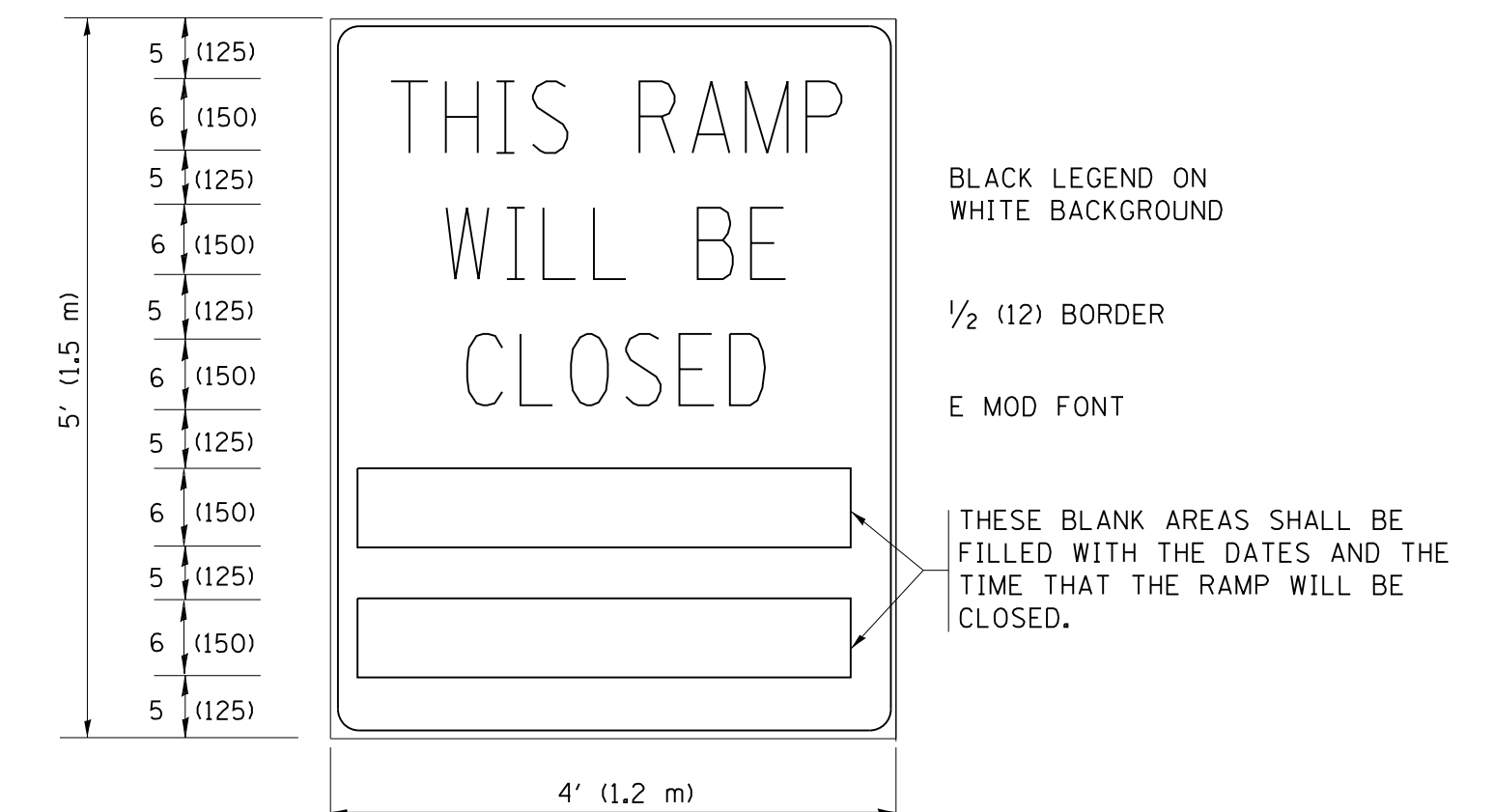
**RAMP CLOSURE ADVANCE WARNING SIGN**



BLACK LEGEND ON ORANGE BACKGROUND MOUNTED DIAGONALLY  
E MOD FONT  
1 (25) BORDER

THESE SIGNS ARE REQUIRED ON ALL THE EXIT GUIDE SIGNS FOR EXIT RAMPS THAT WILL BE CLOSED FOR MORE THAN FOUR (4) CONSECUTIVE DAYS.

**RAMP CLOSURE ADVANCE INFORMATION SIGN**



THESE SIGNS ARE REQUIRED ON BOTH SIDES OF THE RAMP, MINIMUM OF 1 WEEK IN ADVANCE OF THE CLOSURE.

THESE SIGNS SHALL BE FABRICATED AND PAID FOR ACCORDING TO THE TEMPORARY INFORMATION SIGNING SPECIAL PROVISION

**GENERAL NOTES:**

- ① CONES MAY BE SUBSTITUTED FOR DRUMS OR TYPE II BARRICADES DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (700) HIGH.
- ② STEADY BURN LIGHTS WILL NOT BE REQUIRED FOR DAY OPERATIONS.
- ③ A FLAGGER SHALL BE POSITIONED AT EACH CLOSED RAMP THAT IS OPEN TO CONSTRUCTION VEHICLES, PRECEDED BY A W20-7 FLAGGER WARNING SIGN.
- ④ ALL ROUTE MARKERS AND TRAILBLAZER ASSEMBLIES WHICH DIRECT MOTORISTS TO A CLOSED ENTRANCE RAMP SHALL BE COVERED WHEN THE RAMP IS CLOSED FOR MORE THAN FOUR (4) DAYS.
- ⑤ THE SIGNING AND BARRICADING WHICH IS REQUIRED BY THIS DETAIL SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS).
- ⑥ AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL RAMP CLOSURES.
- ⑦ THE RAMP CLOSURE ADVANCE INFORMATION SIGNS SHALL BE ERECTED IF THE CLOSURE TIME EXCEEDS TWENTY-FOUR (24) HOURS. ADDITIONAL ADVANCE WARNING SIGNS ON EXIT GUIDE SIGNING WILL BE REQUIRED FOR EXIT RAMP CLOSURES THAT EXCEED FOUR (4) DAYS IN LENGTH
- ⑧ ROAD CONSTRUCTION AHEAD SIGNS MAY BE OMITTED WHEN THIS DETAIL IS USED IN CONJUNCTION WITH OTHER TRAFFIC CONTROL THAT ALREADY INCLUDES A ROAD CONSTRUCTION AHEAD SIGN.
- ⑨ ARTERIAL ROAD CONSTRUCTION AHEAD SIGNS SHALL BE INSTALLED ON THE LEFT SIDE OF TRAFFIC IF THE MEDIAN IS MORE THAN 10 FT WIDE.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME =	USER NAME = footemj	DESIGNED - DWS	REVISED - JAF 02-06
et:\pwork\pwork\dot\footemj\d0108315\tc08.dgn		DRAWN -	REVISED - SPB 01-07
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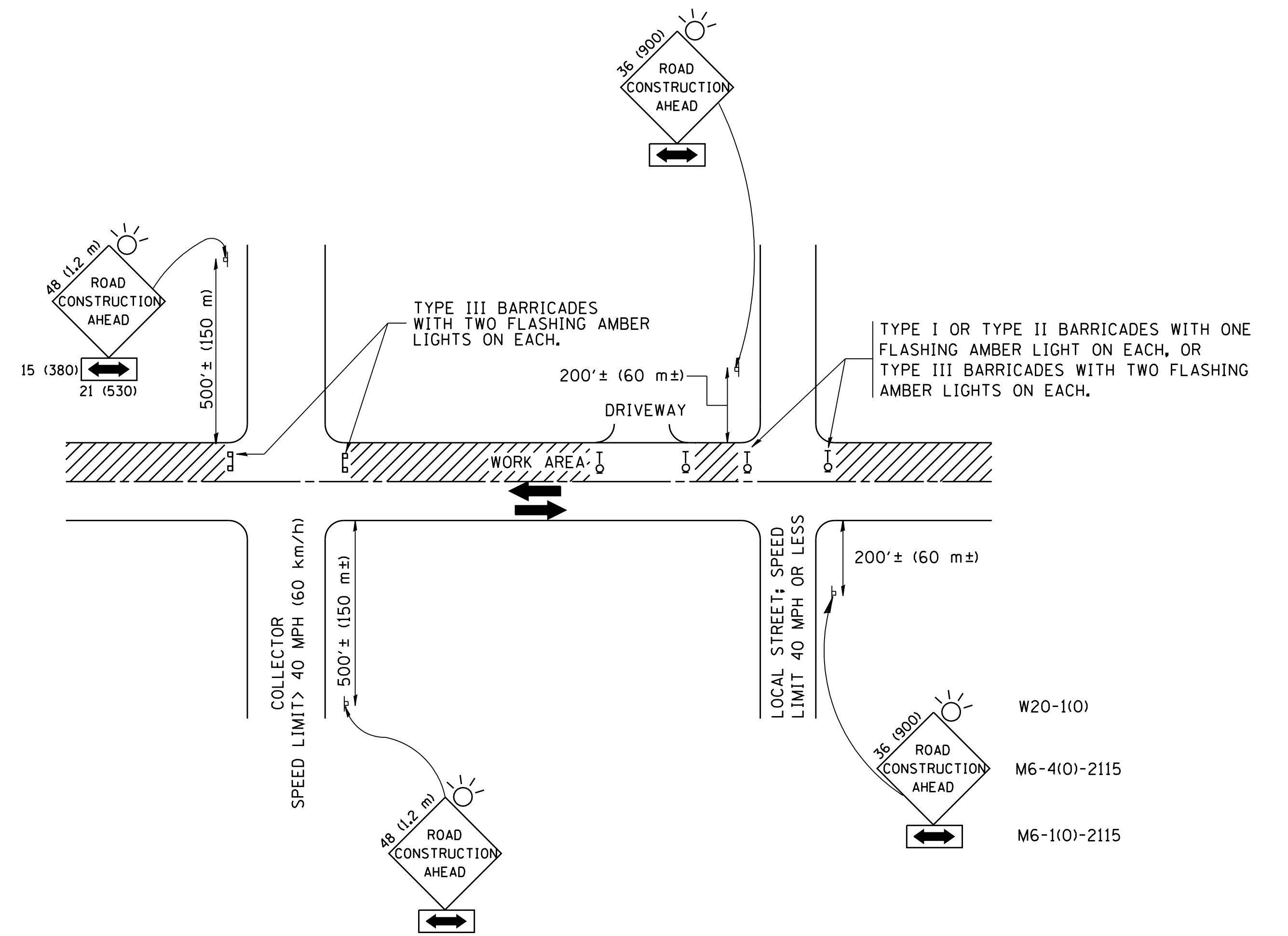
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ENTRANCE AND EXIT RAMP  
CLOSURE DETAILS**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1920-B	COOK	142	130
TC-08		CONTRACT NO.	60J15	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				





TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
  1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
    - a) ONE **ROAD CONSTRUCTION AHEAD** SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
    - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
  2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
    - a) ONE **ROAD CONSTRUCTION AHEAD** SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
    - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
  3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:
 

USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.

  - C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
  - D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

All dimensions are in millimeters (inches) unless otherwise shown.

FILE NAME = W:\diststd\22x34\tc10.dgn	USER NAME = gaglonebt	DESIGNED - LHA	REVISED - J. OBERLE 10-18-95
		DRAWN -	REVISED - A. HOUSEH 03-06-96
	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 1/4/2008	DATE - 06-89	REVISED - T. RAMMACHER 01-06-00

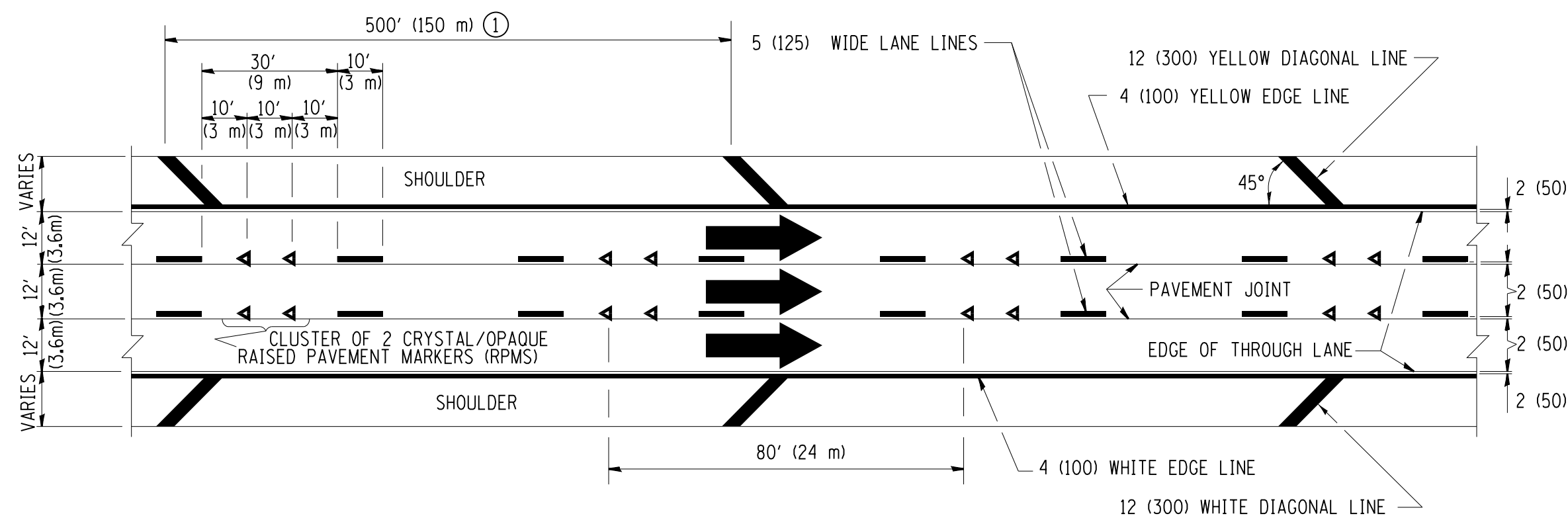
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND PROTECTION FOR  
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1920-B	COOK	142	132
<b>TC-10</b>		CONTRACT NO. 60J15		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

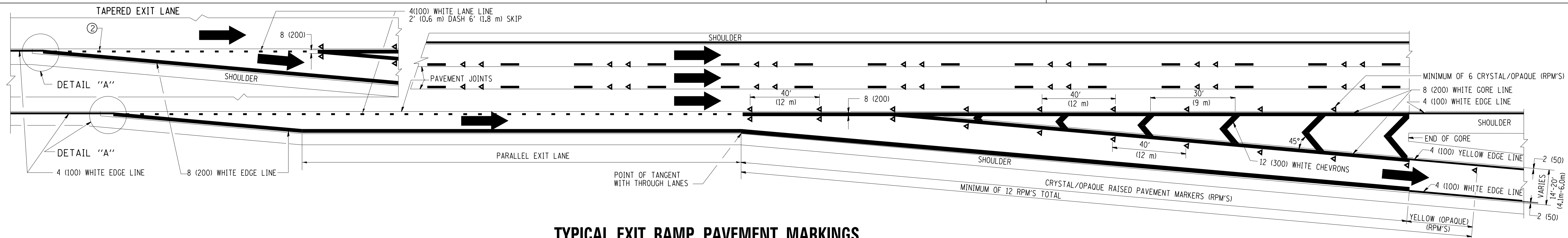




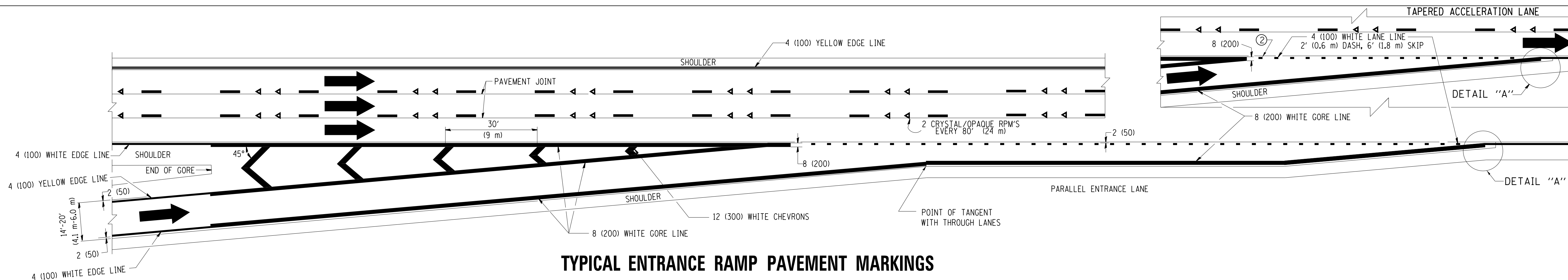
**TYPICAL EDGE LINES & LANE LINES**

**PAVEMENT MARKING MATERIALS**

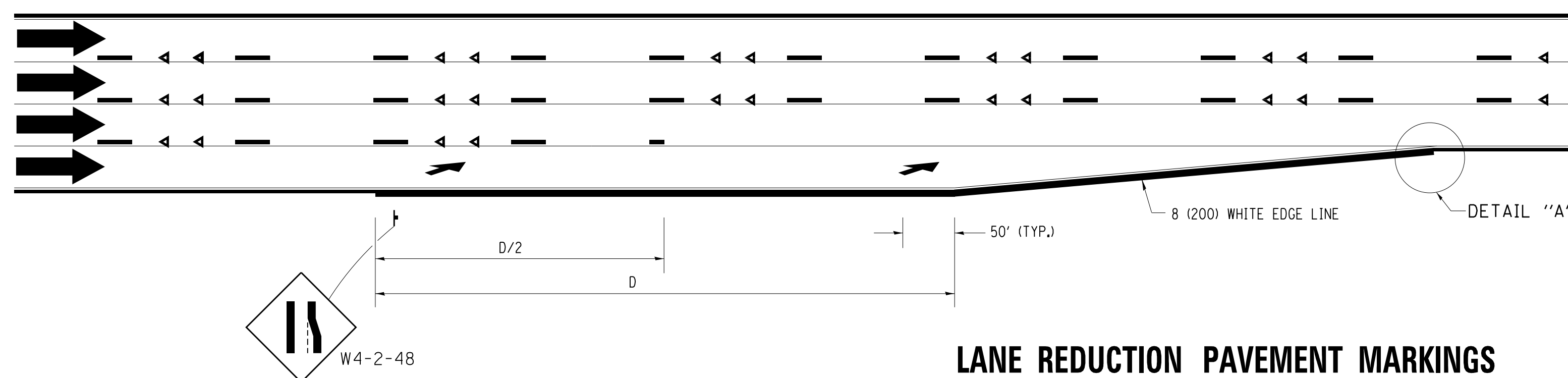
1. THERMO PLASTIC PAVEMENT MARKING LINE SHALL BE USED FOR THE EDGE LINES, GORE LINES, AND DIAGONAL LINES ON BITUMINOUS PAVEMENT ONLY.
2. PREFORMED PLASTIC TYPE B PAVEMENT MARKING LINE; INLaid OR GROOVED IN SHALL BE USED FOR ALL LANE LINES ON HMA PAVEMENT PROJECTS.
3. POLYUREA PAVEMENT MARKING SHALL BE USED FOR ALL MARKINGS ON PCC PROJECTS.



**TYPICAL EXIT RAMP PAVEMENT MARKINGS**

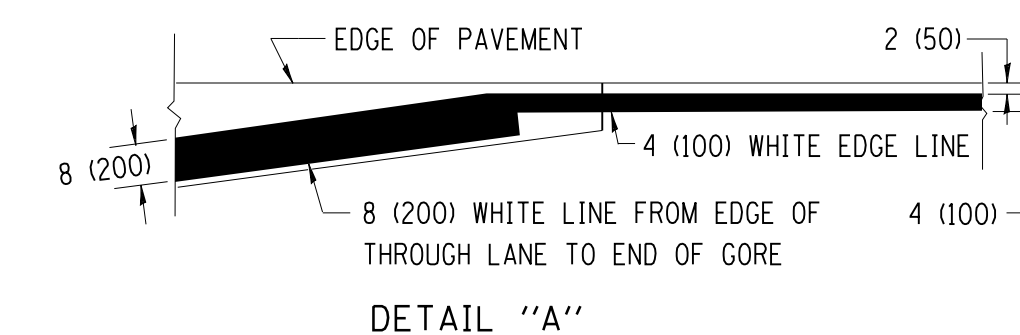


**TYPICAL ENTRANCE RAMP PAVEMENT MARKINGS**



**LANE REDUCTION PAVEMENT MARKINGS**

POSTED SPEED LIMIT	D DISTANCE
45 MPH	750' (230 m)
55 MPH	950' (290 m)
65 MPH	1200' (365 m)



**NOTES:**

- ① THE DIAGONAL LINES SHALL BE SPACED AT 40' (12 m) C-C ACROSS ALL STRUCTURES WHICH ARE 500' (150 m) OR LESS IN LENGTH. THE DIAGONAL LINES ARE NOT REQUIRED ON SHOULDERS WHICH ARE 6' (1.8 m) OR LESS IN WIDTH.
- ② 4" (2' DASH, 6' SKIP) MARKING ON TAPERED ENTRANCE AND EXIT RAMP SHALL BE OMITTED ON TANGENT SECTIONS.

FILE NAME =  
 USER NAME = footemj  
 DESIGNED - D.W.S.  
 DRAWN -  
 PLOT SCALE = 50.000' / in.  
 CHECKED -  
 PLOT DATE = 7/8/2013

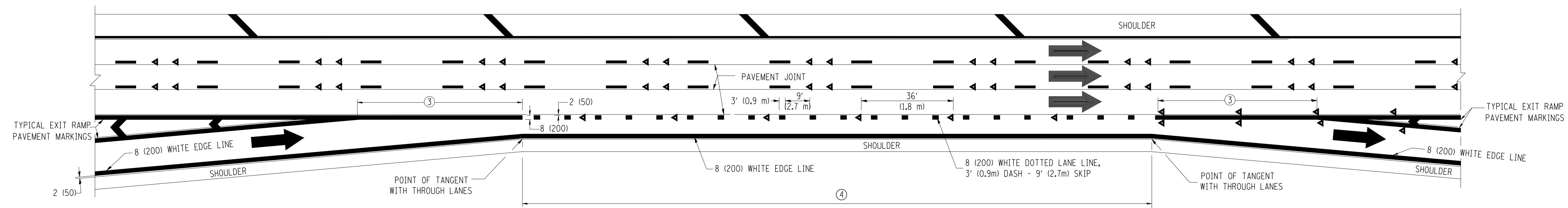
DESIGNED - D.W.S.  
 DRAWN -  
 CHECKED -  
 DATE - 01-90  
 REVISED - J.A.F. 02-06  
 REVISED - S.P.B. 01-07  
 REVISED - S.P.B. 01-10  
 REVISED - M.D. 05-13

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

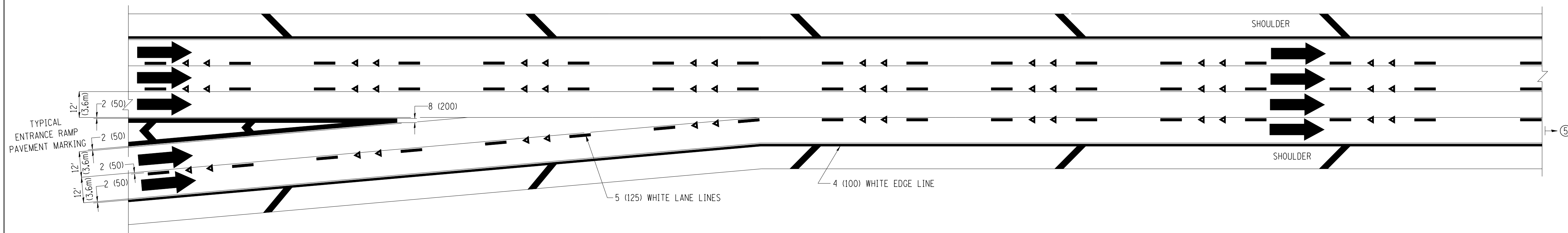
**MULTI-LANE FREEWAY  
 PAVEMENT MARKING DETAILS**

SCALE: NONE SHEET NO. 1 OF 2 SHEETS STA. TO STA.

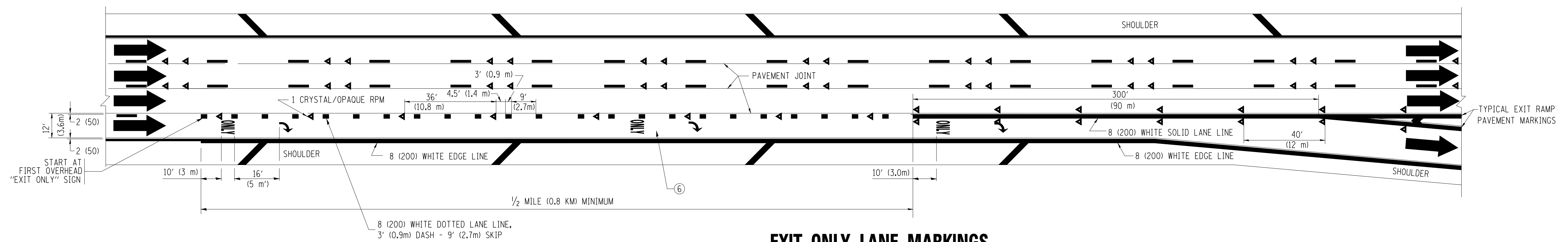
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1920-B	COOK	142	133
TC-12			CONTRACT NO.	60J15
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



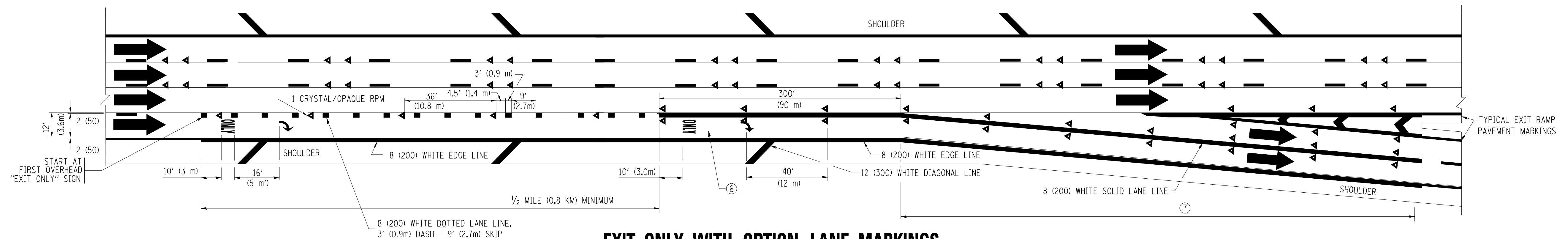
**AUXILIARY LANE MARKINGS**



**TWO LANE ENTRANCE RAMP WITH MERGE MARKINGS**



**EXIT ONLY LANE MARKINGS**



**EXIT ONLY WITH OPTION LANE MARKINGS**

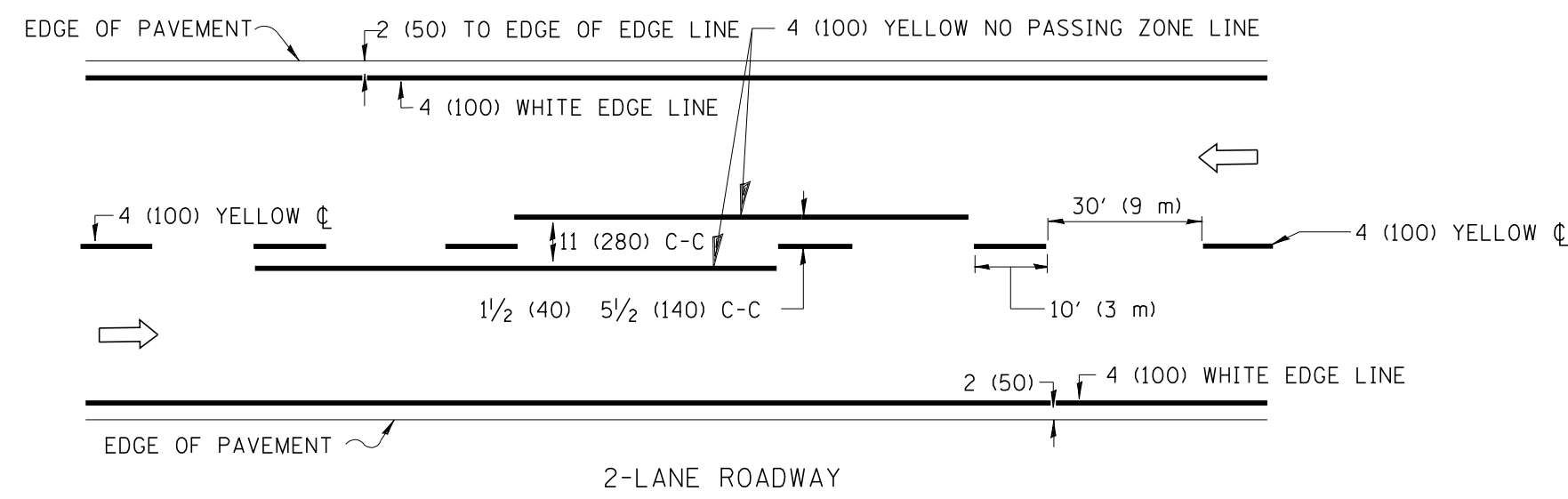
- NOTES
- ③ OMIT WHEN LENGTH OF AUXILIARY LANE IS LESS THAN 500' (150 m).
  - ④ 8-INCH WIDE DOTTED LANE LINE MARKINGS SHALL BE USED WHEN THE LENGTH OF THE AUXILIARY LANE IS 2 MILES OR LESS.
  - ⑤ FOR TWO-LANE ENTRANCE RAMP, IF RIGHT LANE ENDS, USE TYPICAL ENTRANCE RAMP PAVEMENT MARKINGS.
  - ⑥ ONLY AND ARROWS EQUALLY SPACED, 500' (150 m) MAXIMUM SPACING. FULL SIZE LETTERS AND ARROW SHALL BE USED.
  - ⑦ CONTINUE 8" SOLID LANE LINE THROUGH EXIT TO END OF PAVED GORE.

FILE NAME =	USER NAME = lqyaa	DESIGNED - D.W.S.	REVISED - D.W.S. 07-96
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	PLOT DATE = 1/22/2010	DATE - 01-90	REVISED - S.P.B. 01-10

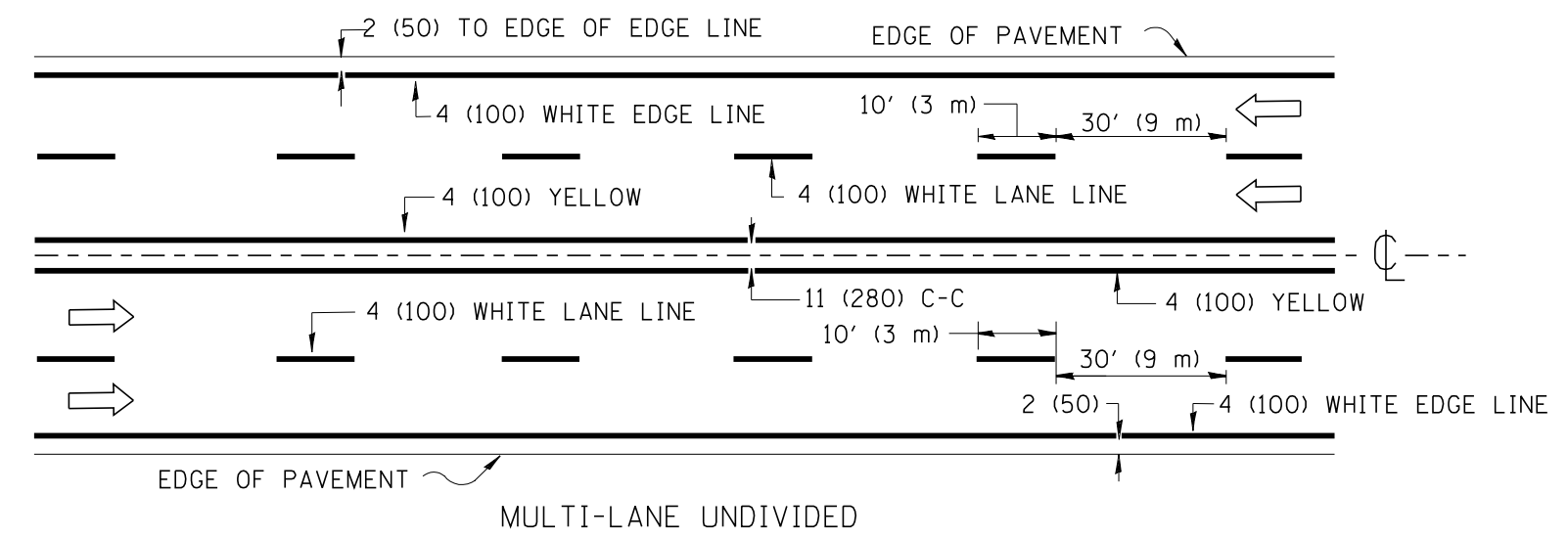
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>MULTI-LANE FREEWAY PAVEMENT MARKING DETAILS</b>			
SCALE: NONE	SHEET NO. 2 OF 2 SHEETS	STA.	TO STA.

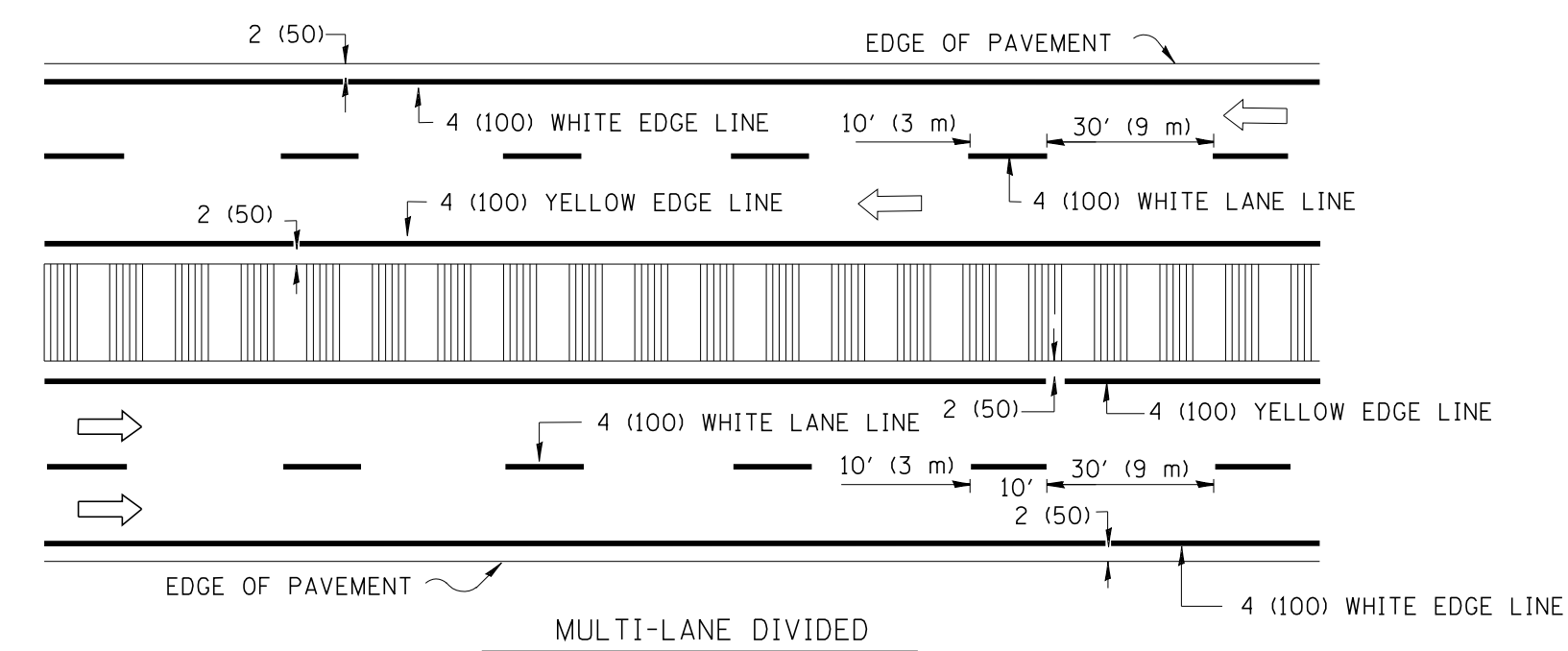
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1920-B	COOK	142	134
<b>TC-12</b>			CONTRACT NO.	60J15
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



2-LANE ROADWAY



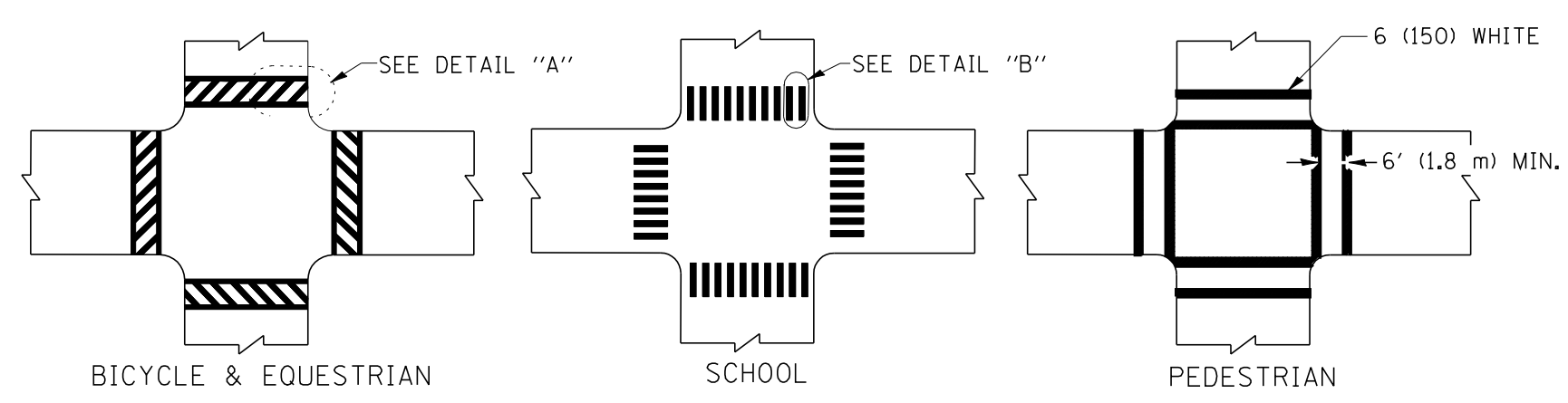
MULTI-LANE UNDIVIDED



MULTI-LANE DIVIDED WITH MOUNTABLE MEDIAN

NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

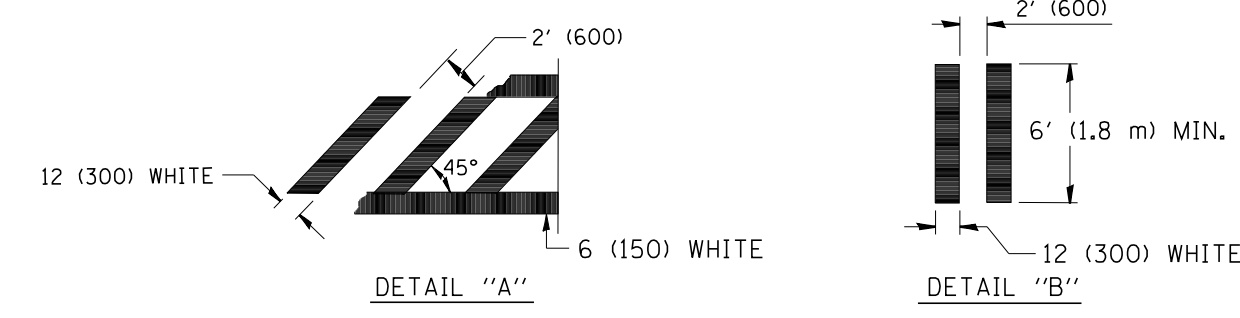
TYPICAL LANE AND EDGE LINE MARKING



BICYCLE & EQUESTRIAN

SCHOOL

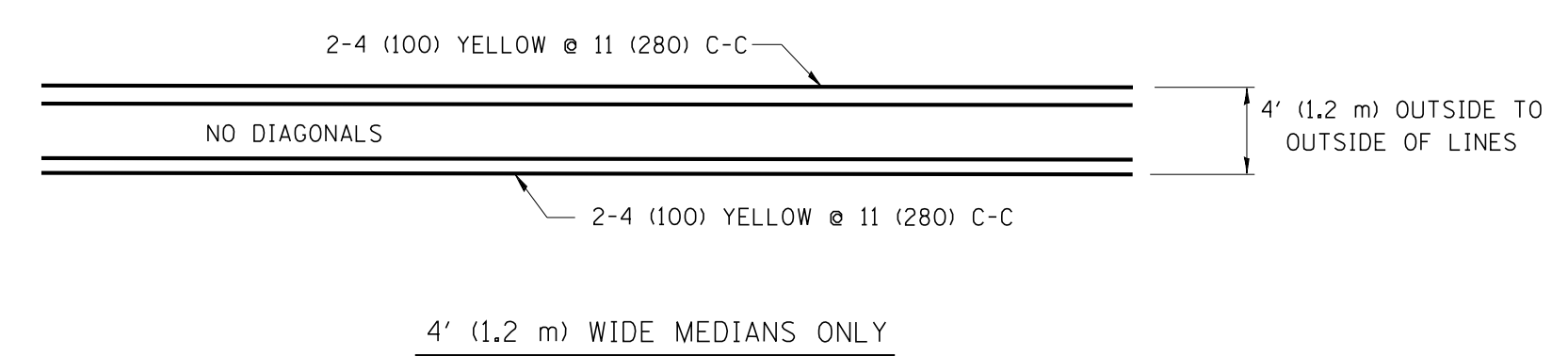
PEDESTRIAN



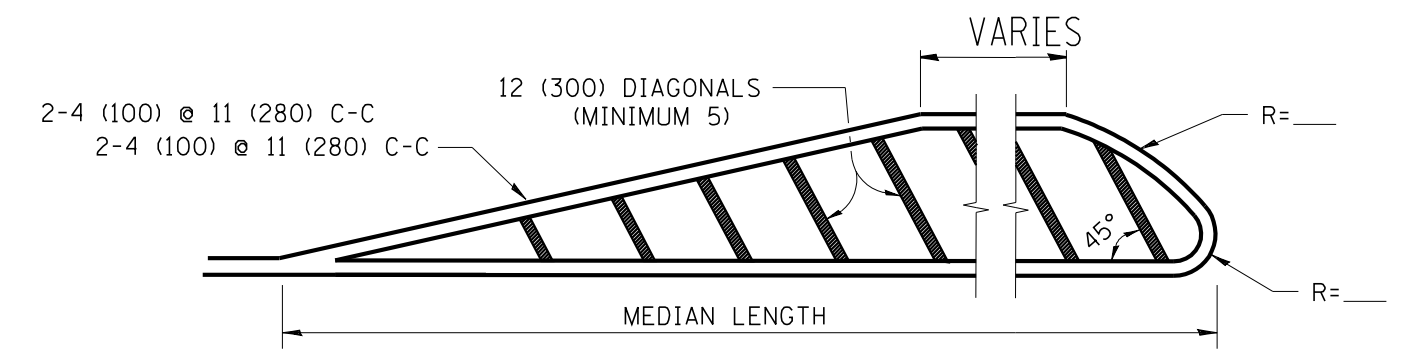
DETAIL "A"

DETAIL "B"

TYPICAL CROSSWALK MARKING



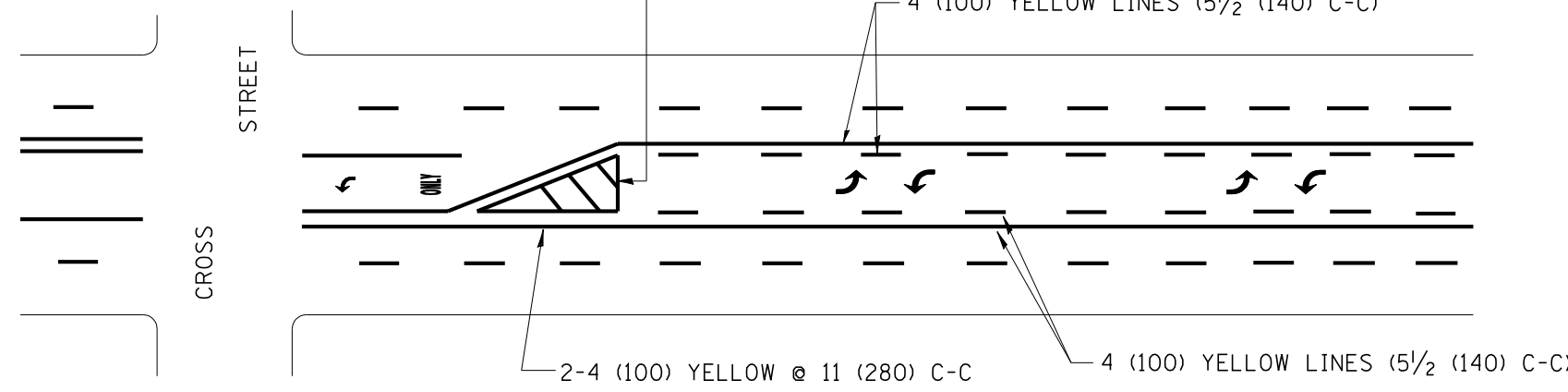
4' (1.2 m) WIDE MEDIANS ONLY



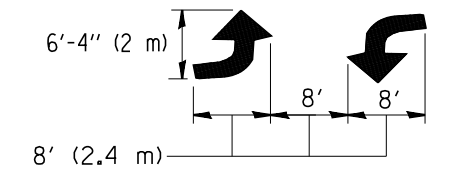
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))  
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)  
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE

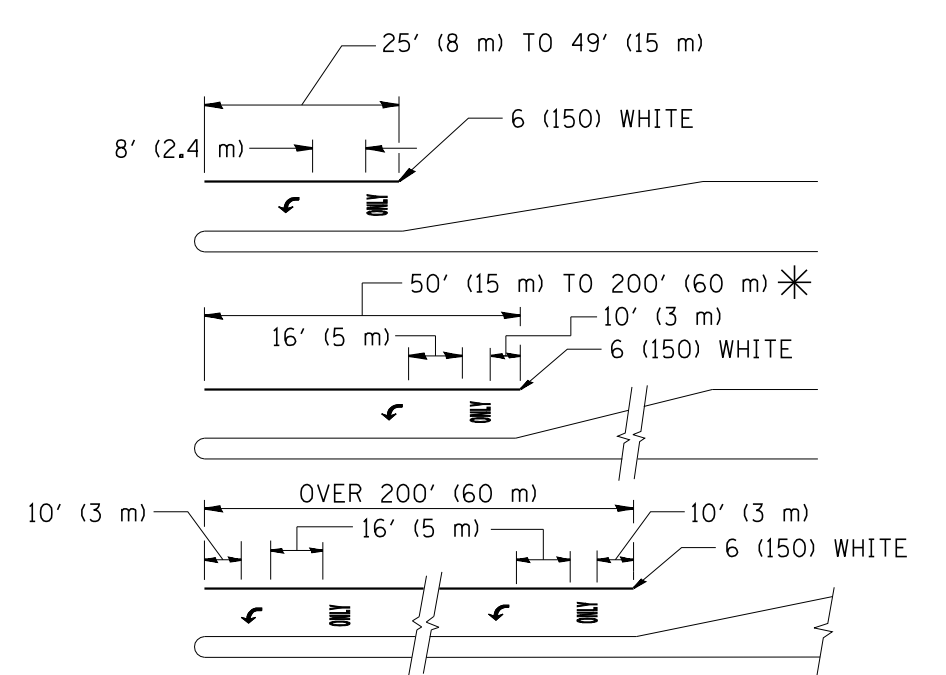


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

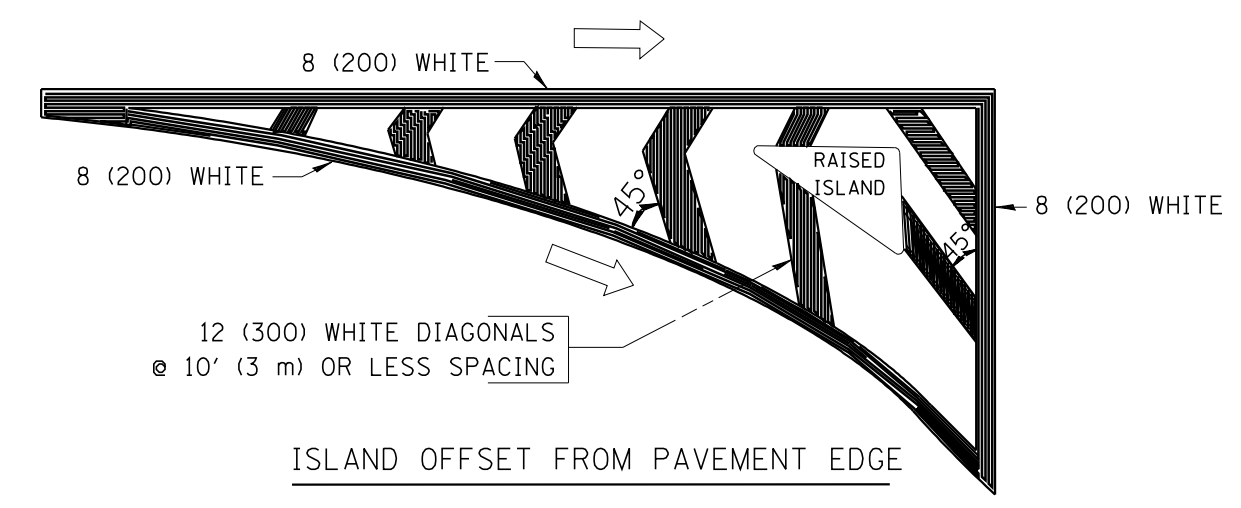


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  
AREA = 15.6 SQ. FT. (1.5 m<sup>2</sup>) ONLY AREA = 20.8 SQ. FT. (1.9 m<sup>2</sup>)

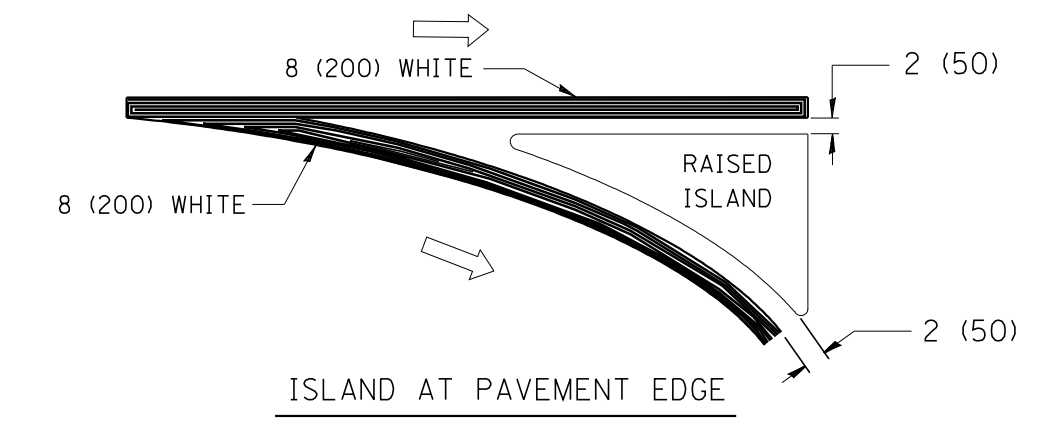
\* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



ISLAND OFFSET FROM PAVEMENT EDGE



ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION	4 (100)	SOLID	YELLOW	5/2 (140) C-C FROM SKIP-DASH CENTERLINE
NO PASSING ZONE LINES: FOR BOTH DIRECTIONS	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION	SKIP-DASH AND SOLID	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE
	8' (2.4m) LEFT ARROW	IN PAIRS	WHITE	SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" 15 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m <sup>2</sup> ) EACH "X"=54.0 SQ. FT. (5.0 m <sup>2</sup> )
SHOULDER DIAGONALS	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

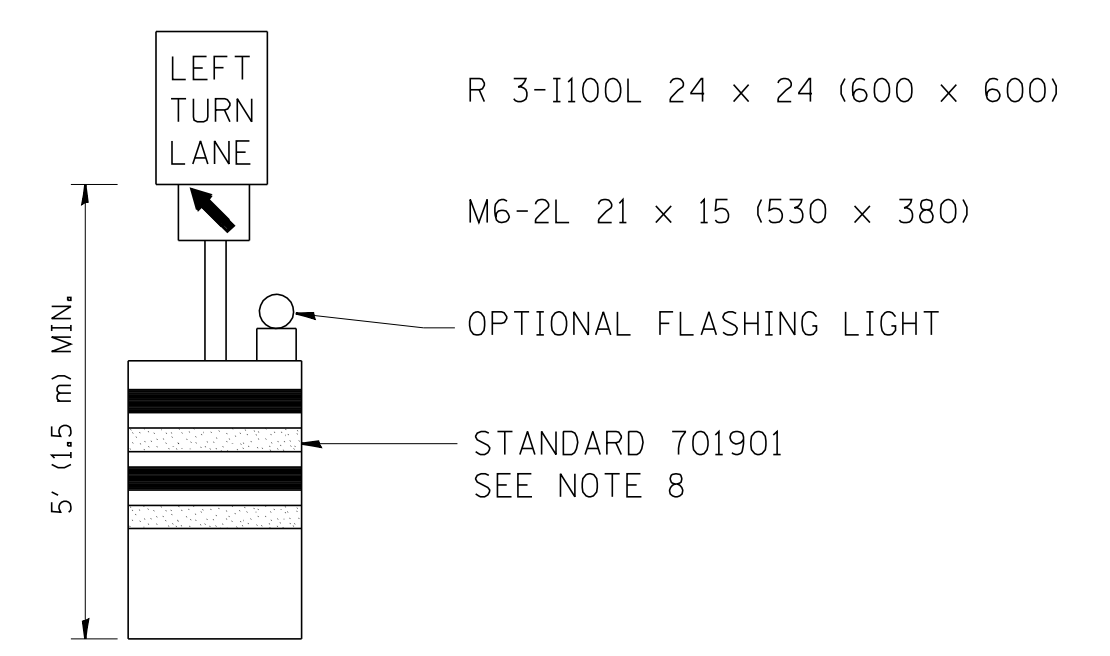
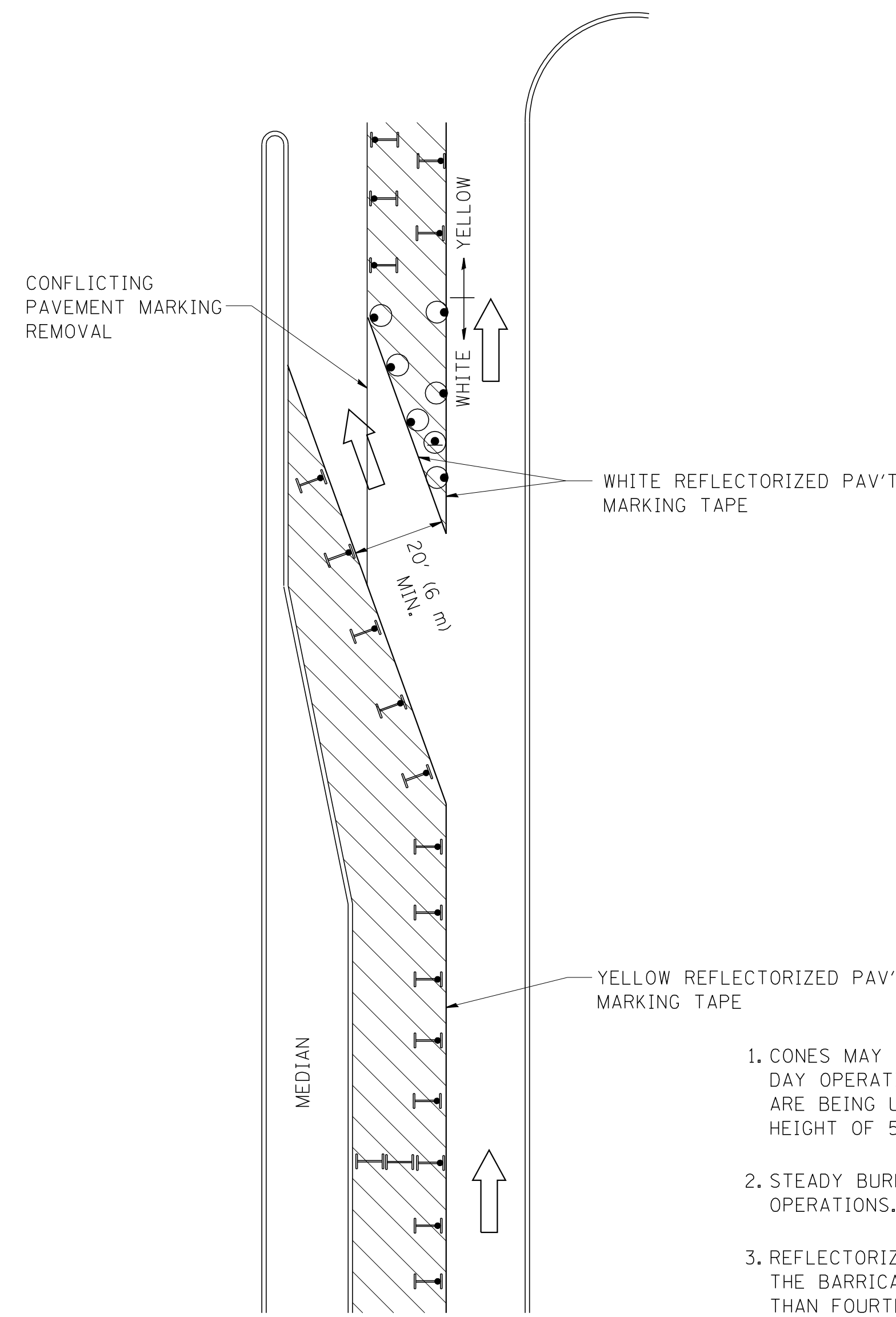
All dimensions are in inches (millimeters) unless otherwise shown.

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	PLOT DATE = 9/9/2009	CHECKED -	REVISED -
		DATE - 03-19-90	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE			
TYPICAL PAVEMENT MARKINGS			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A. RTE. 94	SECTION 1920-B	COUNTY COOK	TOTAL SHEETS 142	SHEET NO. 135
TC-13		CONTRACT NO. 60J15		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

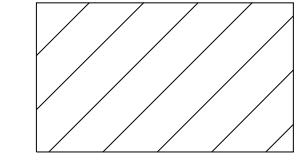
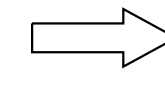
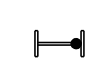


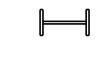


**GENERAL NOTES**

1. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT. WHEN CONES ARE BEING USED, THE "LEFT TURN LANE" SIGN MAY BE SKID MOUNTED AT A MINIMUM HEIGHT OF 5' (1.5 m).
2. STEADY BURNING LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
3. REFLECTORIZED TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE BARRICADED AREA OF EACH TURN BAY WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS.
4. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-100 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
5. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
6. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS.
7. FORM OPER 725 IS REQUIRED.
8. IF A DRUM OR TYPE II BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 REQUIREMENTS IS NOT AVAILABLE, THE SIGNS SHALL BE MOUNTED, ABOVE THE BARRICADES, ON SEPARATE SIGNS SUPPORTS THAT MEET NCHRP 350 PREQUIREMENTS.
9. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

All dimensions are in inches (millimeters) unless otherwise shown.

**LEGEND**

-  WORK AREA
-  LANE OPEN TO TRAFFIC
-  TYPE I OR II BARRICADE WITH STEADY BURN LIGHT
-  DRUM WITH STEADY BURN LIGHT
-  DRUM WITH SIGN (WITH OPTIONAL FLASHING LIGHT) SEE DETAIL
-  TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

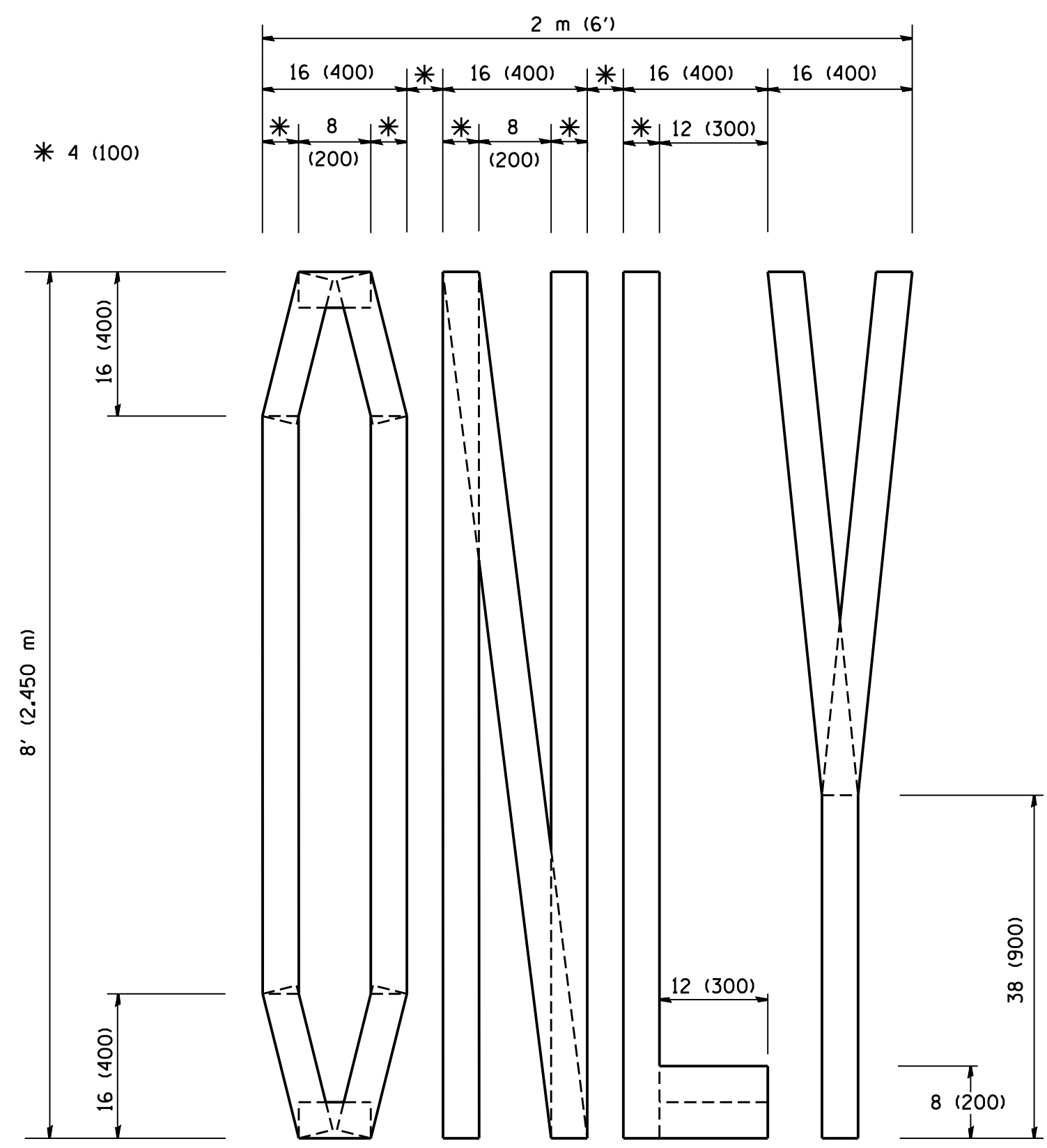
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		REVISED - A. HOUSEH 10-12-96	REVISED -
		REVISED -T, RAMMACHER 01-06-00	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

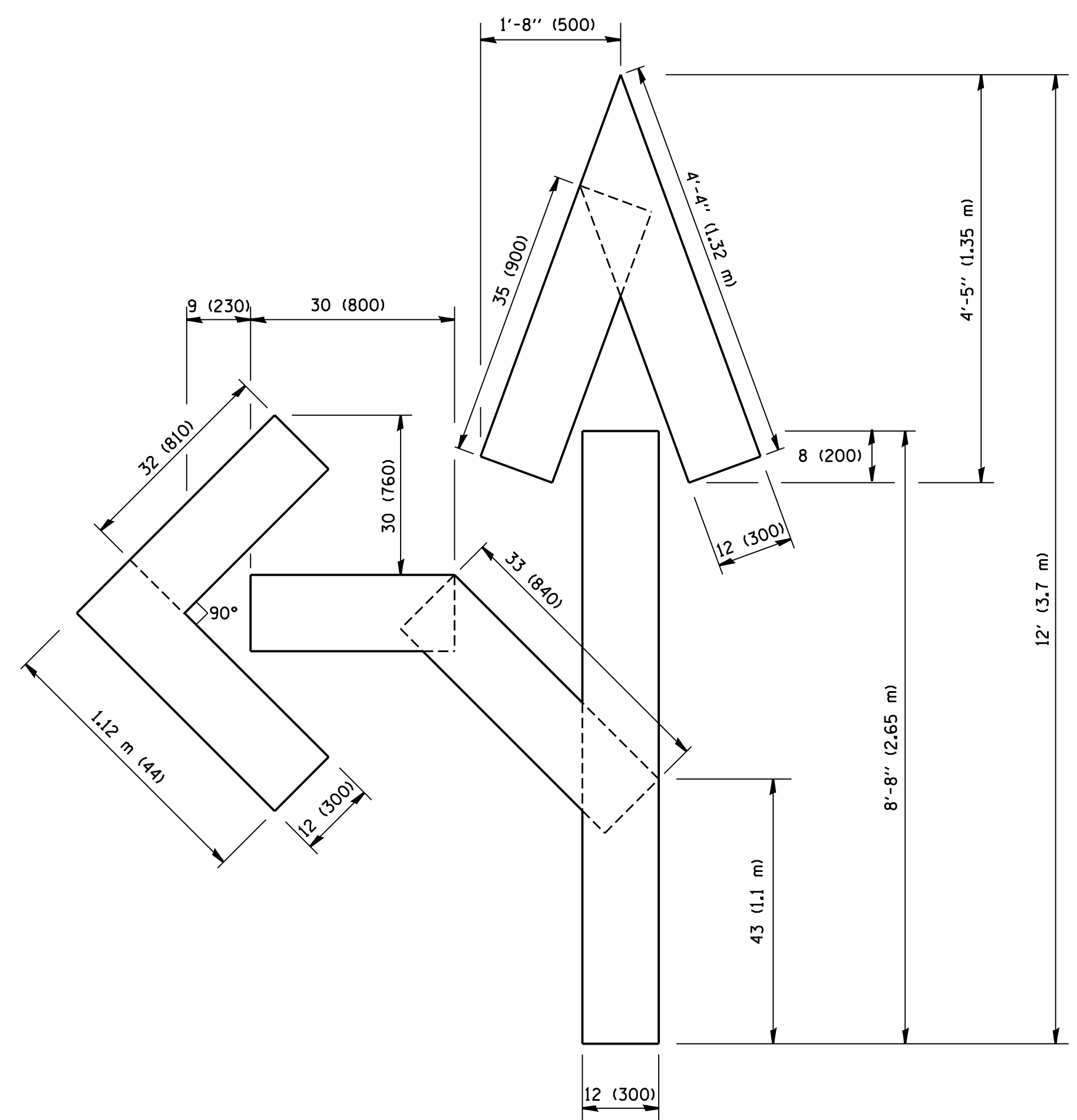
**TRAFFIC CONTROL AND PROTECTION AT TURN BAYS  
(TO REMAIN OPEN TO TRAFFIC)**

SCALE: NONE    SHEET NO. 1 OF 1 SHEETS    STA.    TO STA.

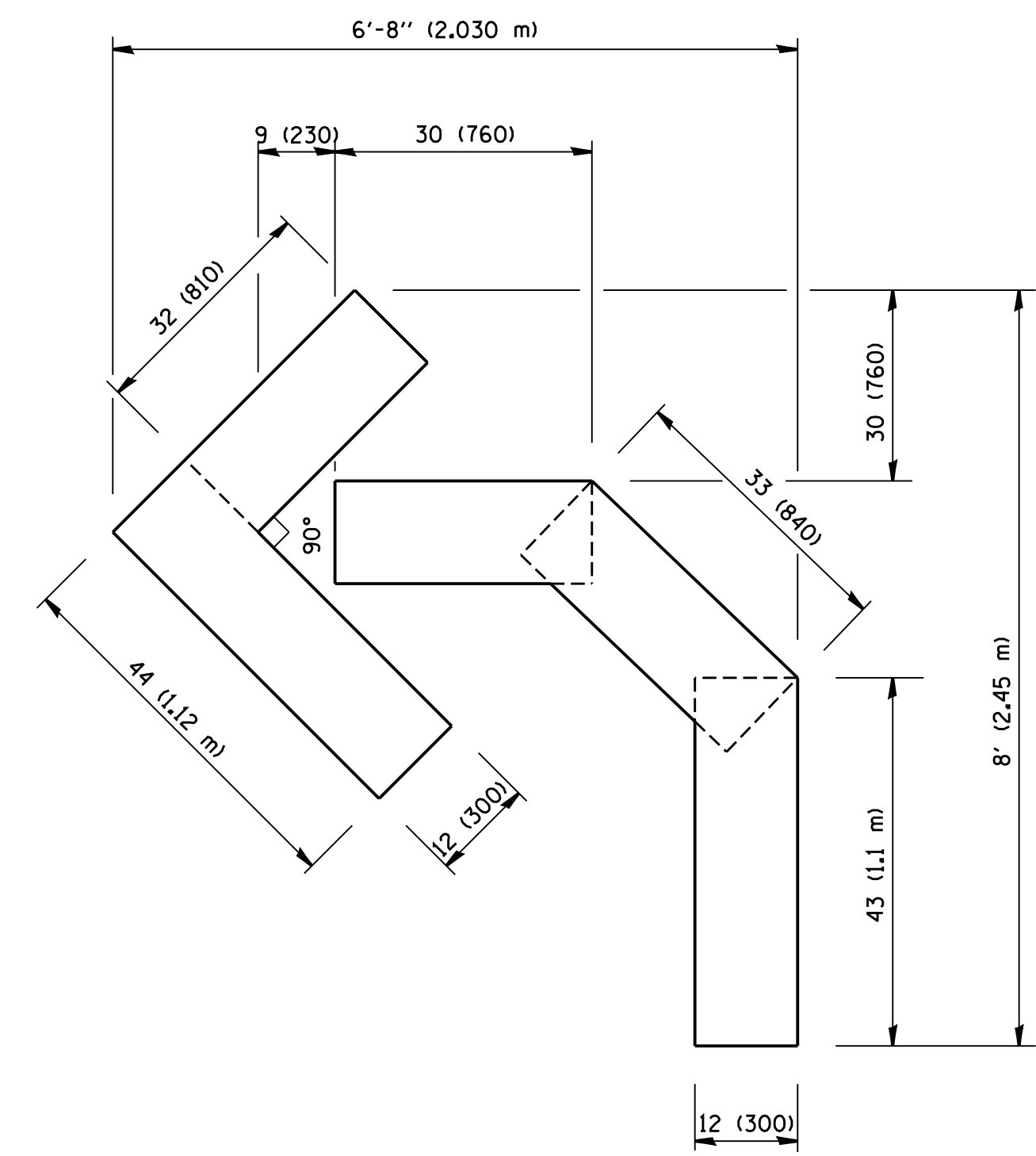
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1920-B	COOK	142	136
<b>TC-14</b>		CONTRACT NO.	60J15	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



QUANTITY  
 4 (100) LINE = 64.1 ft. (19.7 m)  
 21.1 sq. ft. (1.97 sq. m)



QUANTITY  
 4 (100) LINE = 82.5 ft. (25.3 m)  
 27.5 sq. ft. (2.53 sq. m)



QUANTITY  
 4 (100) LINE = 45.5 ft. (13.9 m)  
 15.2 sq. ft. (1.39 sq. m)

All dimensions are in inches (millimeters) unless otherwise shown.

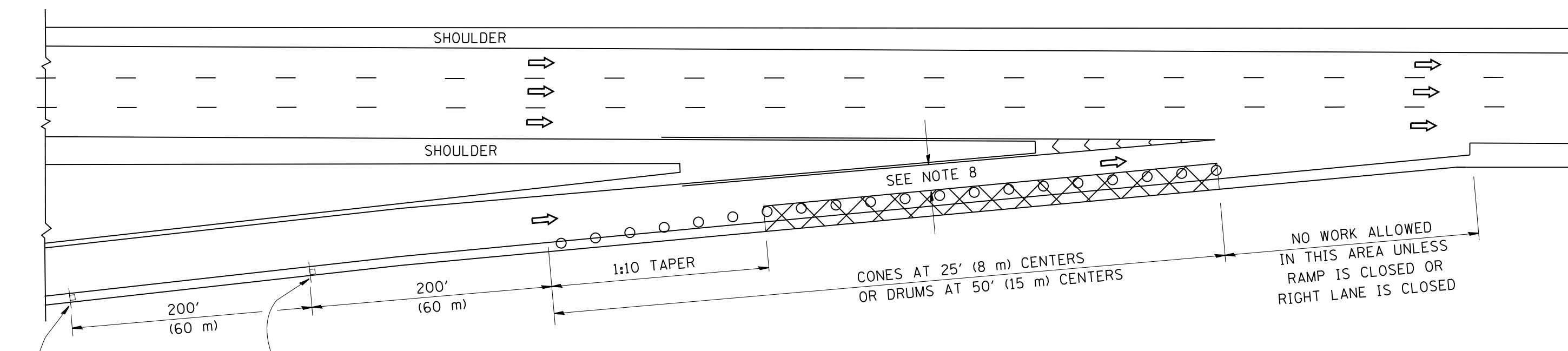
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	PLOT DATE = 1/4/2008	DATE - 09-18-94	REVISED -E. GOMEZ 08-28-00

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

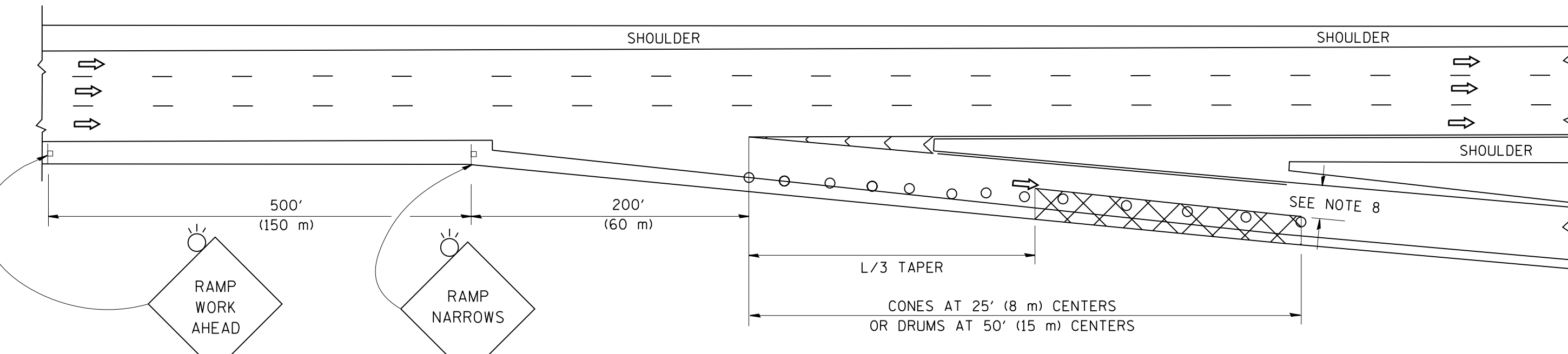
PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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TC-16			CONTRACT NO.	60J15
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

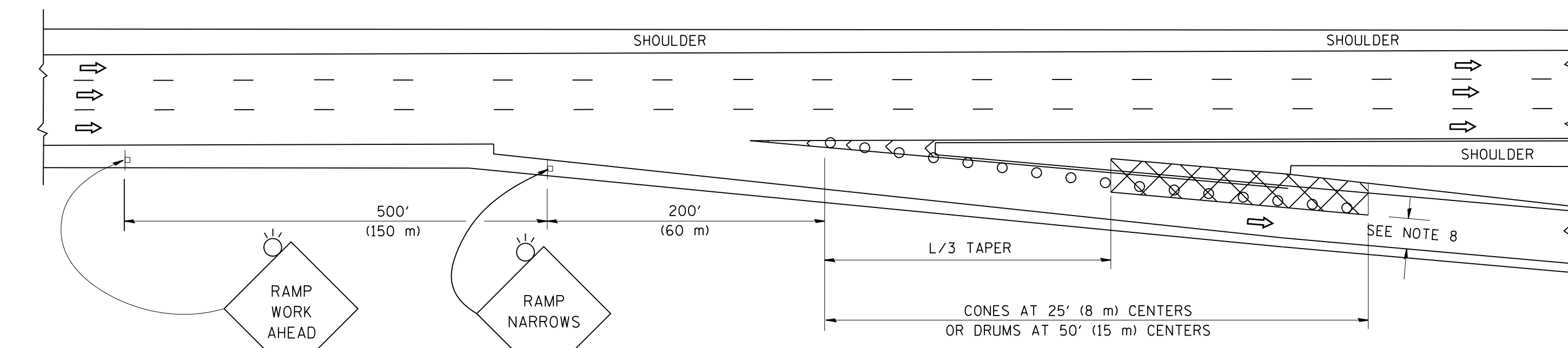
PARTIAL RAMP CLOSURE DETAILS



TYPICAL ENTRANCE RAMP



TYPICAL EXIT RAMP



TYPICAL EXIT RAMP

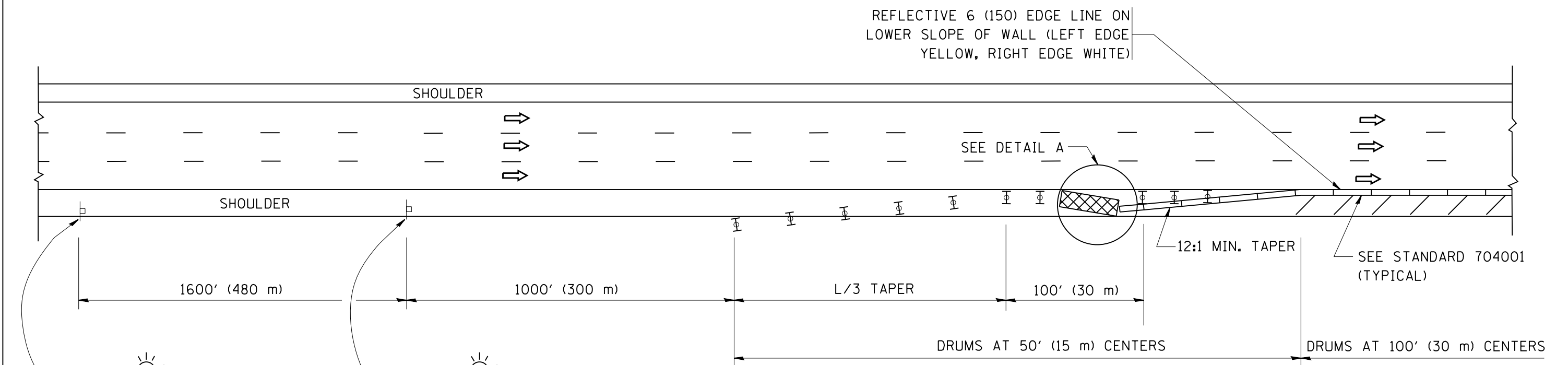
SYMBOLS

- ACTIVE WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH CONTROL SIGN
- TYPE II BARRICADE OR DRUM WITH STEADY BURN MONO-DIRECTIONAL LIGHT
- CONE, DRUM OR BARRICADE
- IMPACT ATTENUATOR OF TYPE AND TEST LEVEL SPECIFIED

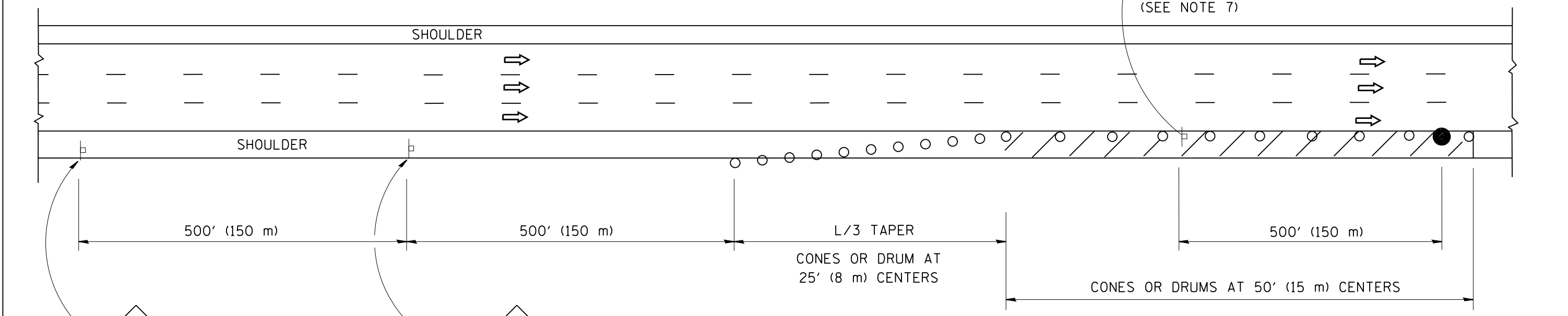
GENERAL NOTES

1. THE "L" DISTANCE EQUALS:  
 SPEED LIMIT FORMULAS  
 45 mph (80 km/h) METRIC ENGLISH  
 OR GREATER:  $L=0.65(W)(S)$   $L=(W)(S)$   
 W = WIDTH OF OFFSET IN FEET (METERS)  
 S = NORMAL POSTED SPEED MPH (KM/H)
2. PLASTIC DRUMS WITH HIGH PERFORMANCE REFLECTIVE SHEETING AND STEADY BURNING LIGHTS ARE REQUIRED FOR ALL NIGHTTIME CLOSURES.
3. ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
4. FLASHING LIGHTS SHALL BE USED DURING THE HOURS OF DARKNESS AND SHALL BE INSTALLED ABOVE THE FIRST TWO SETS OF SIGNS.
5. THE IMPACT ATTENUATOR, TEMPORARY IS NOT REQUIRED WHEN THE TEMPORARY CONCRETE BARRIER WALL IS PROTECTED BY OR IS TIED INTO THE EXISTING GUARDRAIL. IF OFFSET IS LESS THAN 5 FEET USE NARROW USE TYPE DEVICE TO MEET NCHRP350/MASH.
6. AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL FREEWAY CLOSURES.
7. THE FLAGGER AND FLAGGER SIGN ARE REQUIRED AT THE ABOVE WORK SITES WHEN:
  - a. FOUR OR MORE WORK VEHICLES ENTER THE TRAFFIC LANES IN A ONE HOUR PERIOD.
  - b. THE WORK ACTIVITY REQUIRES FREQUENT ENCROACHMENT INTO THE LANE OPEN TO TRAFFIC.
 THE FLAGGER SHALL BE STATIONED APPROXIMATELY 100' (30 m) TO 200' (60 m) IN ADVANCE OF THE WORKERS.
8. 12" MIN. WIDTH TANGENT SECTION  
 16" MIN. WIDTH CURVE SECTION.

SHOULDER CLOSURE DETAILS

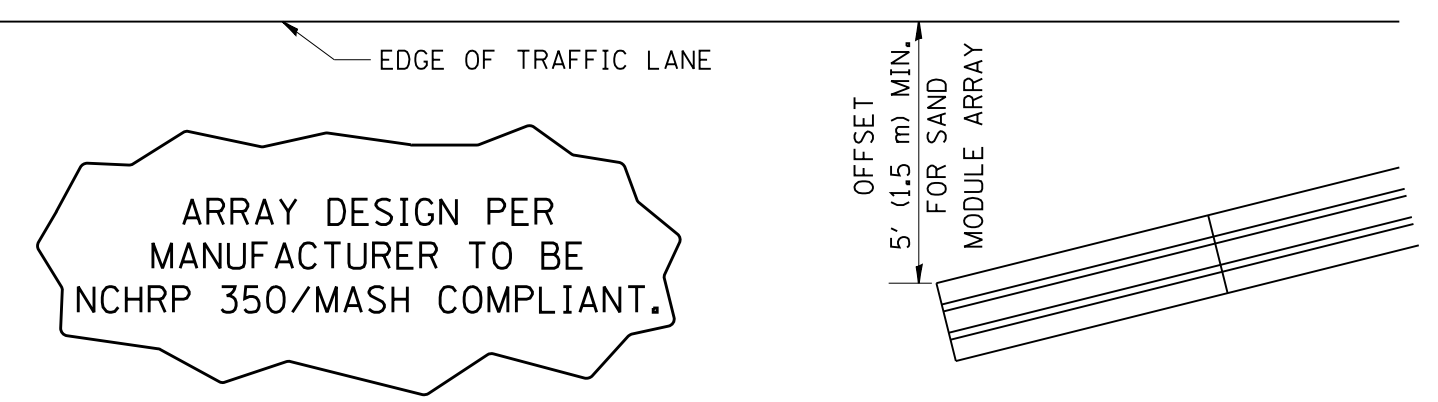


PERMANENT SHOULDER CLOSURE



DAYTIME SHOULDER CLOSURE

THIS DETAIL IS USED WHERE:  
 1. VEHICLES, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCROACH IN AN AREA CLOSER THAN 15' (4.5 m) TO THE EDGE OF PAVEMENT FOR A PERIOD IN EXCESS OF 15 MINUTES.

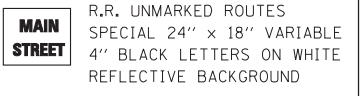
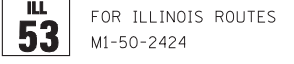
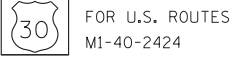


DETAIL "A"  
 IMPACT ATTENUATOR, TEMPORARY  
 (SEE NOTE 5)

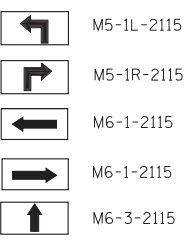
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME =	USER NAME = footemj	DESIGNED -	REVISED - J.A.F. 12-06	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES</b>	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ct:\pw_work\pwork\footemj\d0108315\1717.dgn	DRAWN - D.W.S.	REVISED - S.P.B. 01-07	94			1920-B	COOK	142	138	
PLOT SCALE = 50.0000' / 1"	CHECKED -	REVISED - S.P.B. 12-09	<b>TC-17</b>			CONTRACT NO.	60J15			
PLOT DATE = 7/1/2013	DATE - 11-96	REVISED - M.D. 06-13	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT							
				SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.			

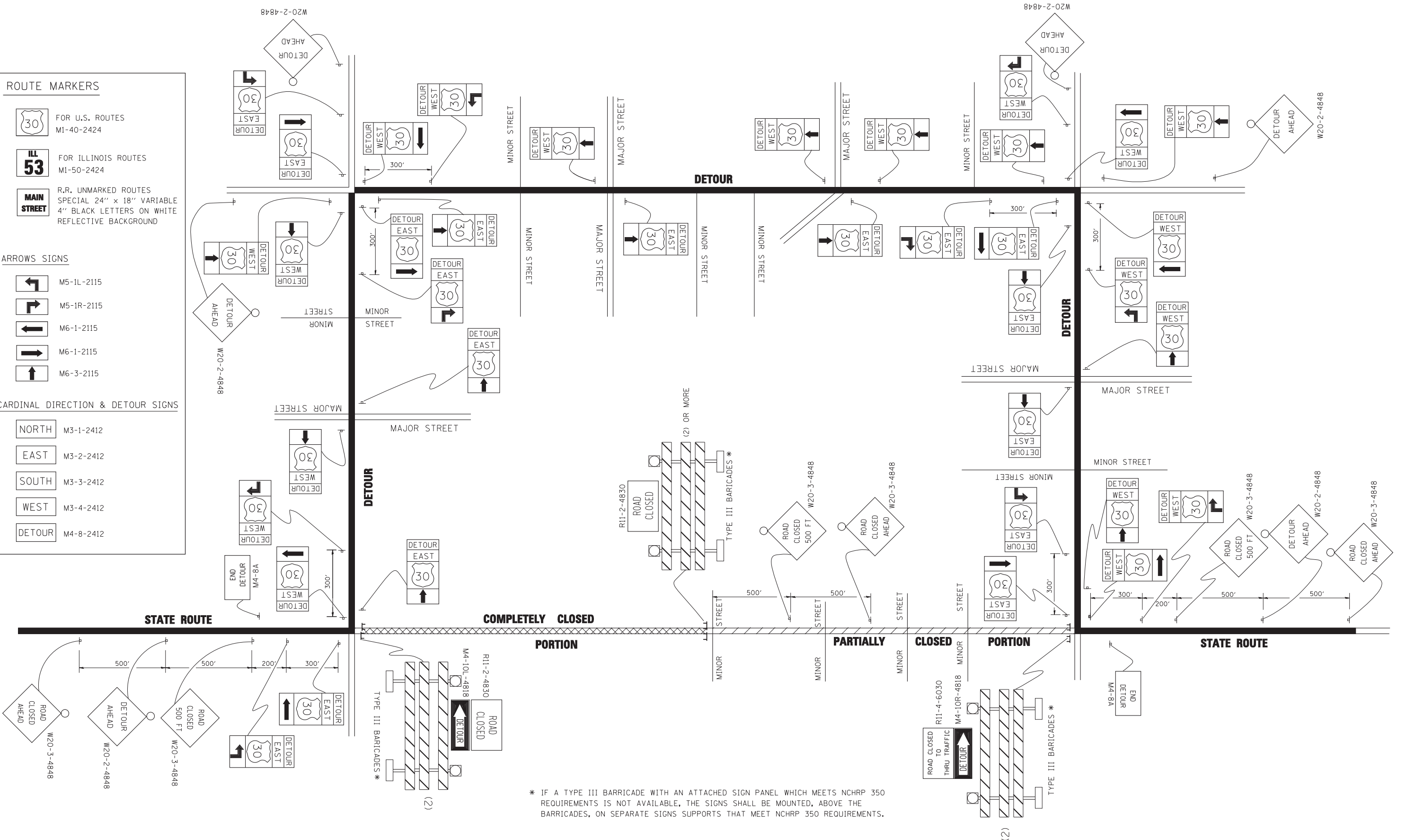
**ROUTE MARKERS**



**ARROWS SIGNS**



**CARDINAL DIRECTION & DETOUR SIGNS**



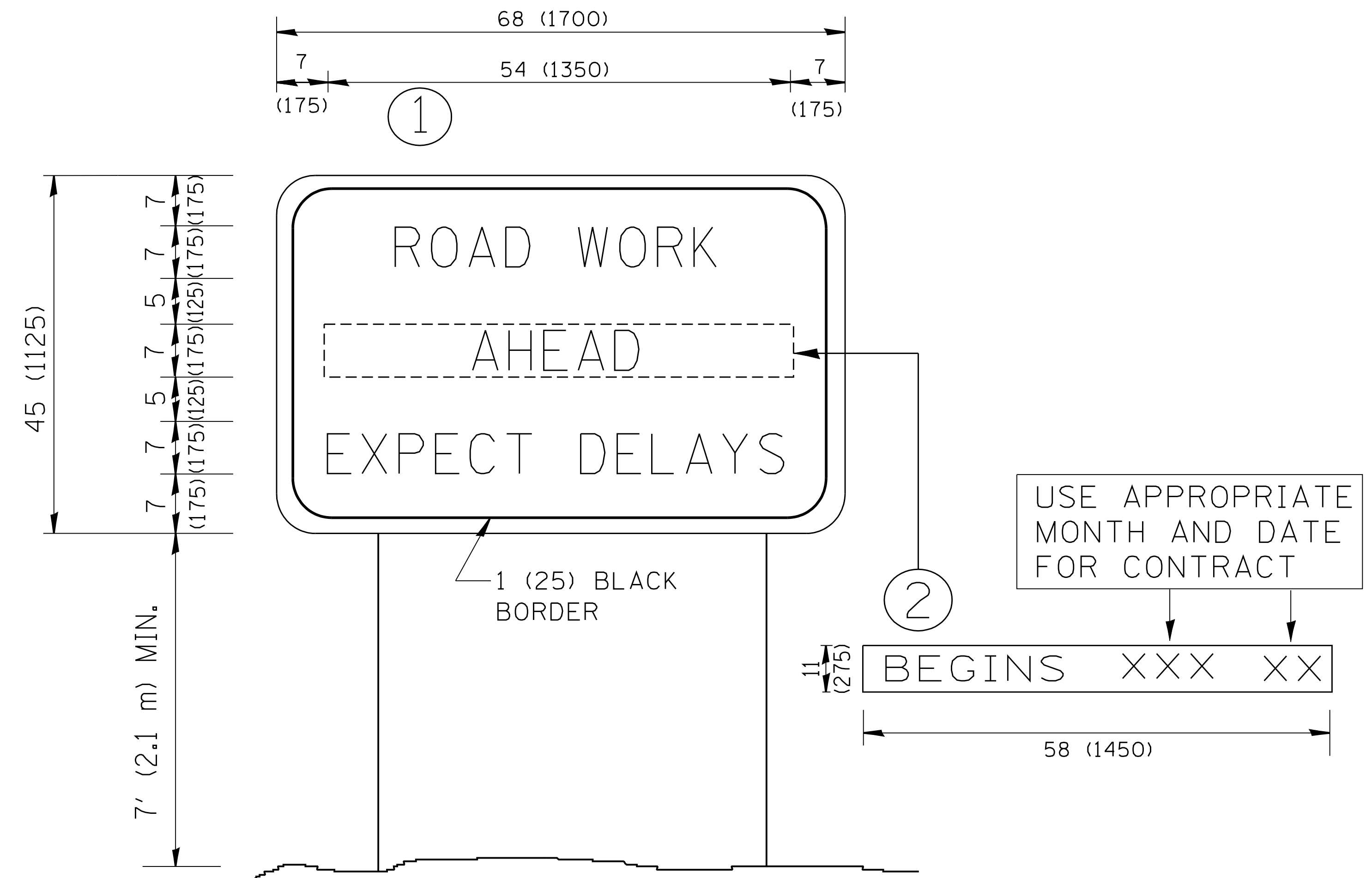
\* IF A TYPE III BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 REQUIREMENTS IS NOT AVAILABLE, THE SIGNS SHALL BE MOUNTED, ABOVE THE BARRICADES, ON SEPARATE SIGNS SUPPORTS THAT MEET NCHRP 350 REQUIREMENTS.

FILE NAME =	USER NAME = drivakosgn	DESIGNED -	REVISED - 10-18-02
ct:\pw\work\PWIDOT\DRIVAKOSGN\d0108315\st21.dgn		DRAWN -	REVISED - R. BORO 09-14-09
		CHECKED -	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>DETOUR SIGNING FOR CLOSING STATE HIGHWAYS</b>			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	<b>TC-21</b>		142	138A
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO.	



**NOTES:**

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME = W:\diststd\22x34\tc22.dgn	USER NAME = gaglianobt	DESIGNED - DRAWN -	REVISED - REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

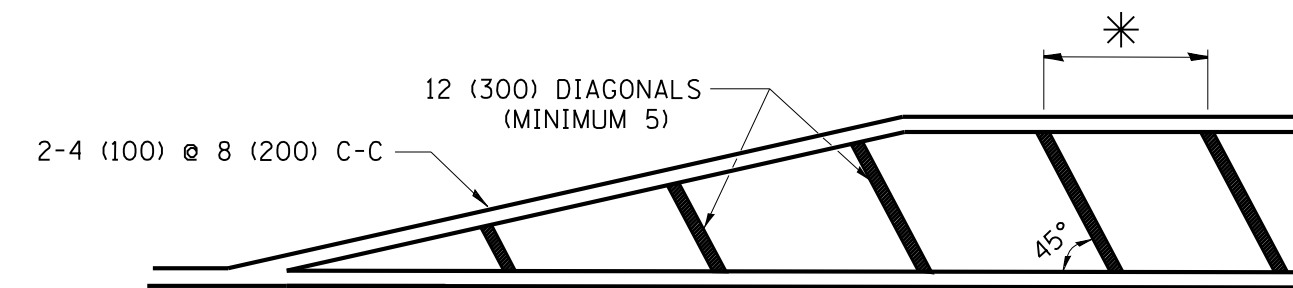
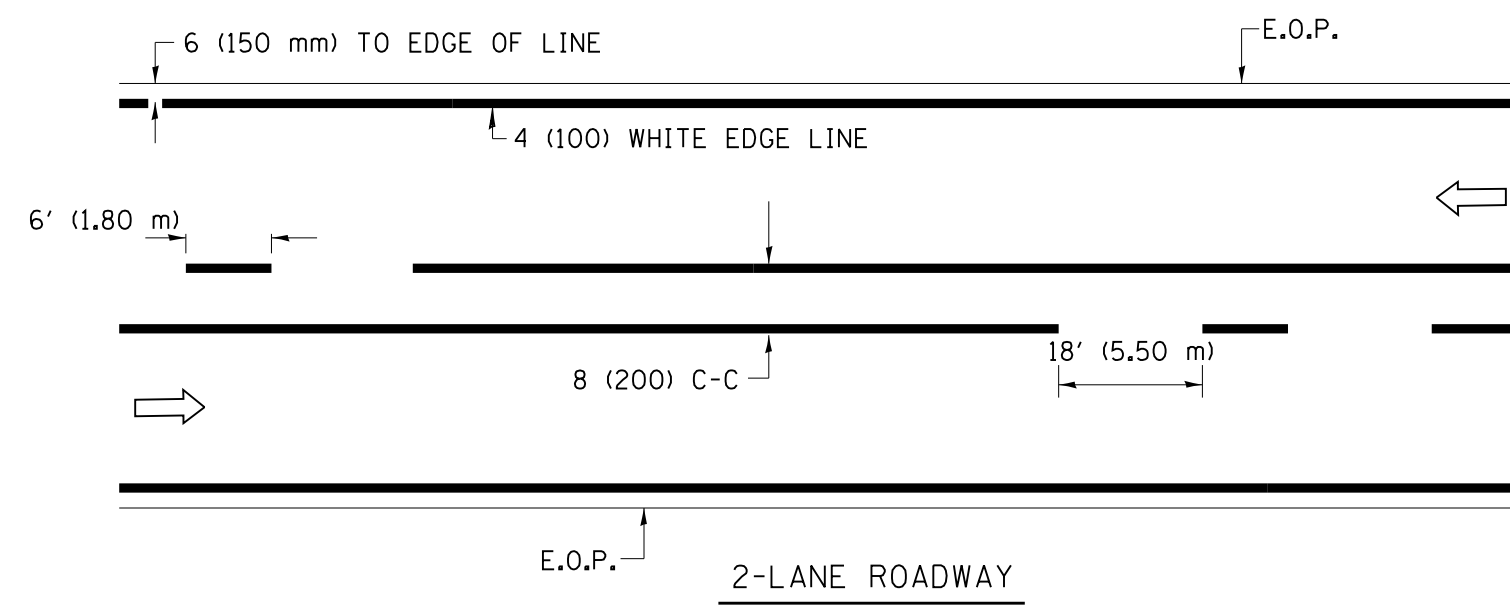
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ARTERIAL ROAD  
INFORMATION SIGN**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A. RTE. 94	SECTION 1920-B	COUNTY COOK	TOTAL SHEETS 142	SHEET NO. 139
TC-22		CONTRACT NO. 60J15		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

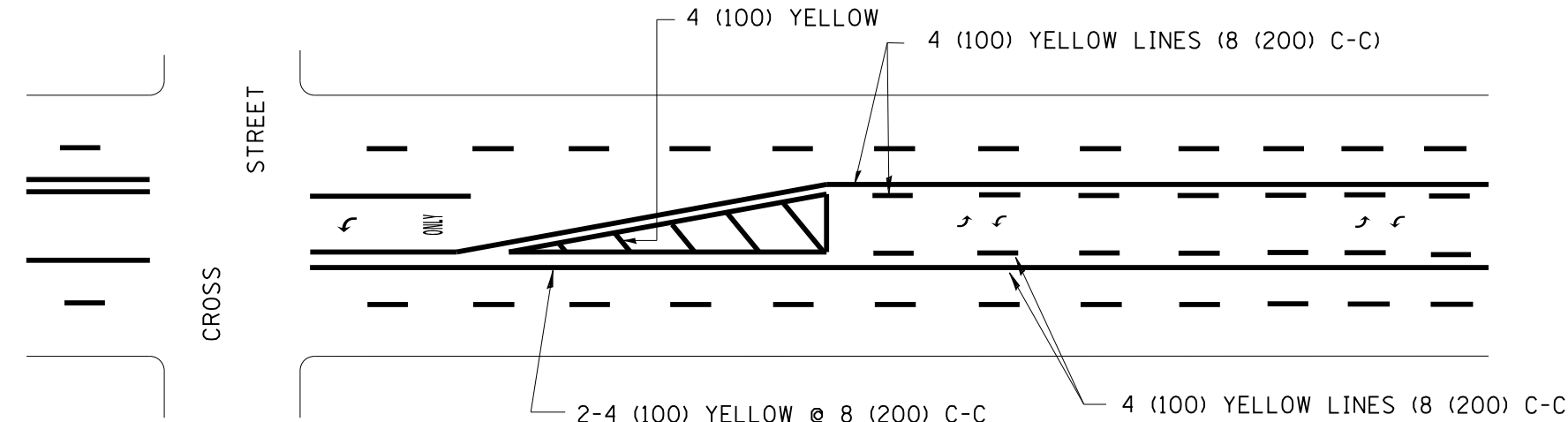




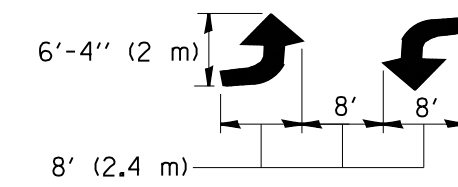
\* FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

\* DIAGONAL LINE SPACING: 20' (6.1 m) C-C

**PAINTED MEDIANS**

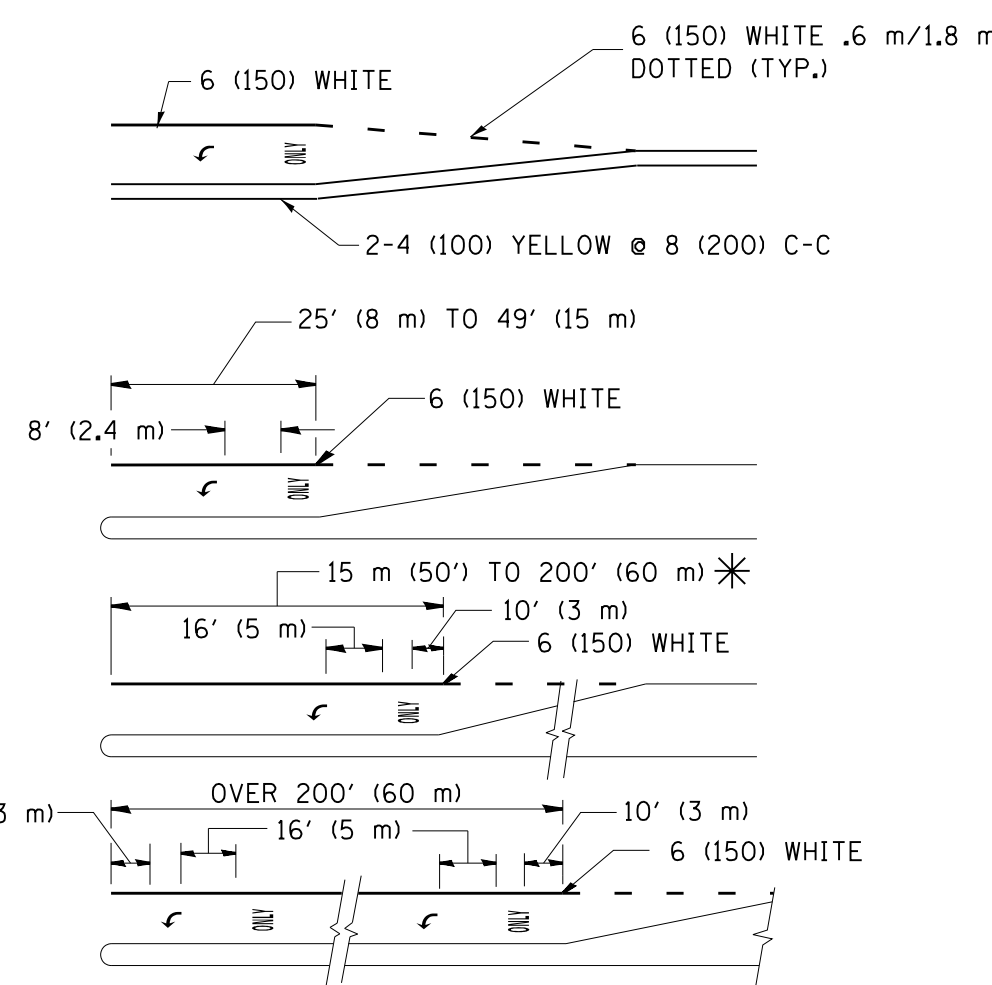


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



**MEDIAN WITH TWO-WAY LEFT TURN LANE**

**TYPICAL PAINTED MEDIAN MARKING**

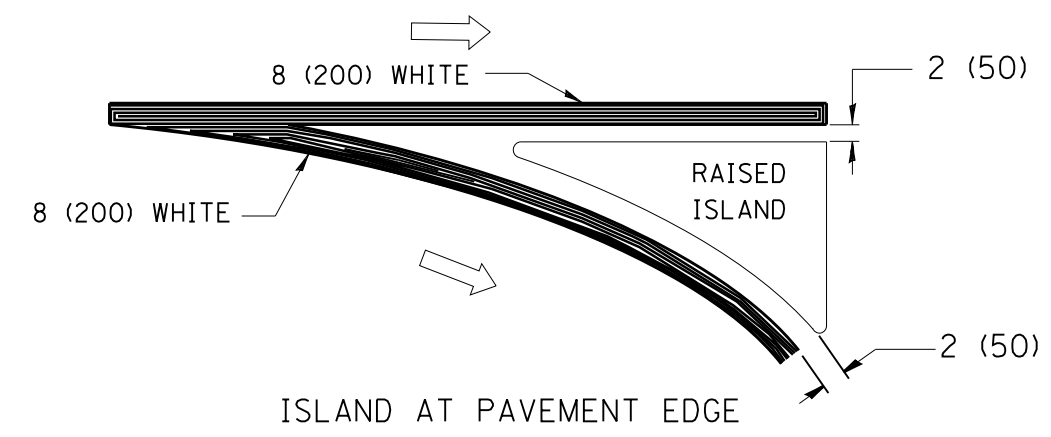
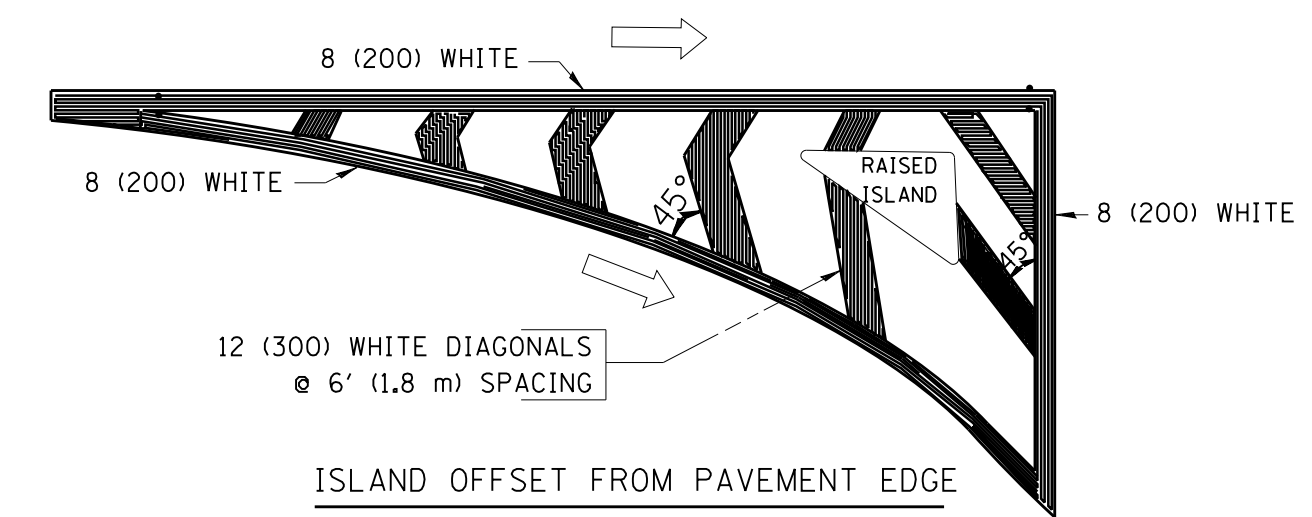


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. AREA = 15.8 SQ. FT. (1.47 m<sup>2</sup>) ONLY AREA = 22.9 SQ. FT. (2.13 m<sup>2</sup>)

\* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

**TYPICAL LEFT (OR RIGHT) TURN LANE**

**TYPICAL TURN LANE MARKING**

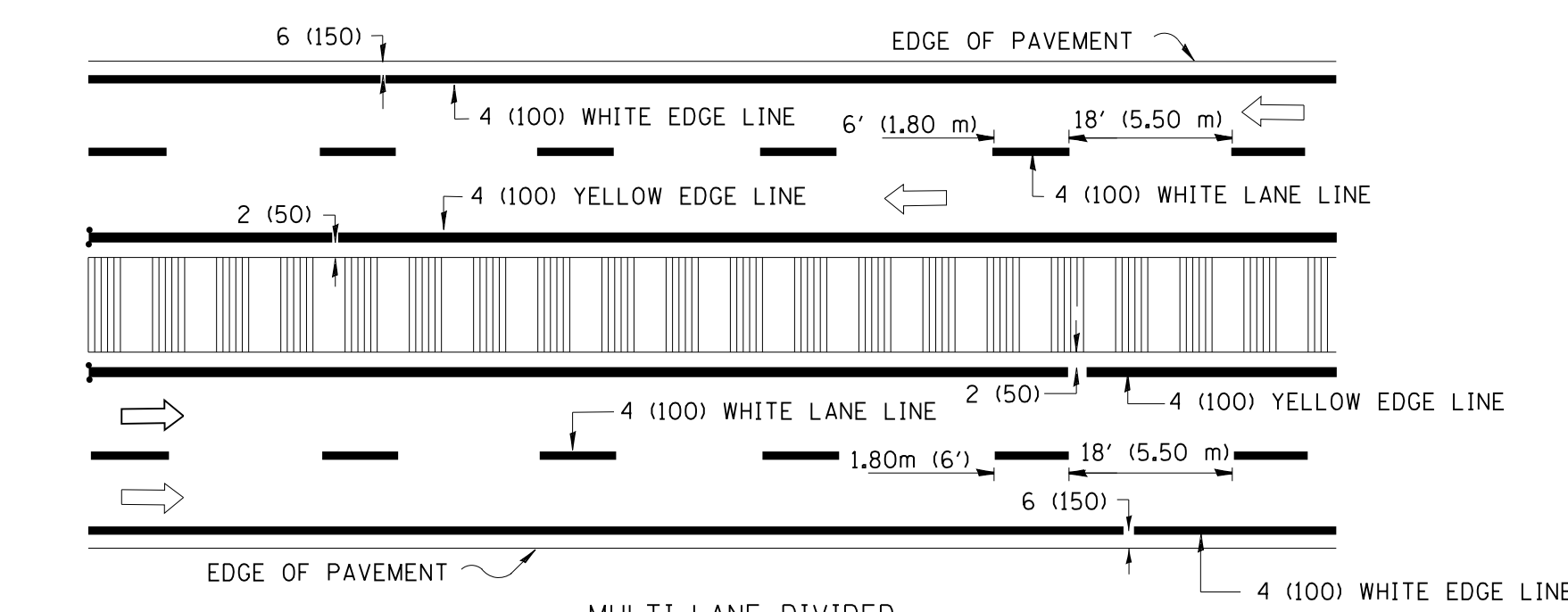
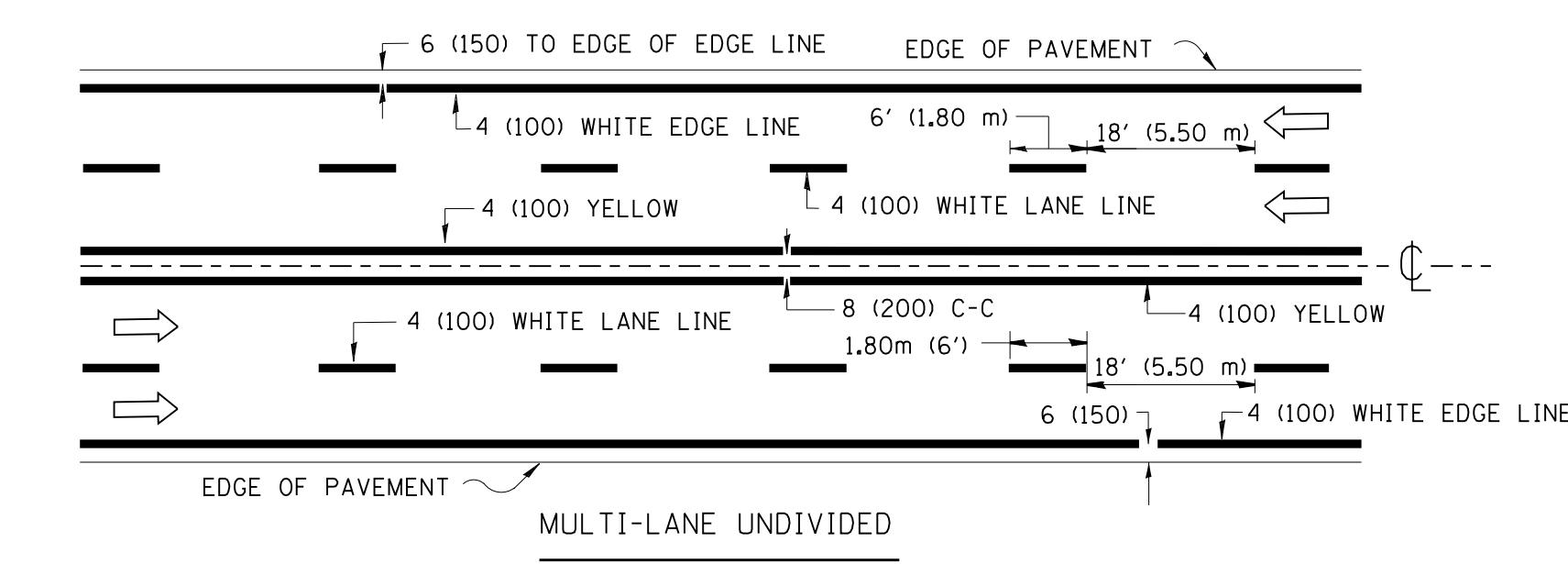


**TYPICAL ISLAND MARKING**

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	6' (1.80 m) LINE WITH 18' (5.50 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	8 (200) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	8 (200) C-C
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	6' (1.80 m) LINE WITH 18' (5.50 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4 m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4 m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	6' (1.8 m) LINE WITH 18' (5.50 m) SPACE FOR SKIP-DASH; 8 (200) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL & PEDESTRIAN)	12 (300) @ 45° 24 (600) @ 90°	SOLID SOLID	WHITE WHITE	2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45°	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	8 (200) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 20' (6.1 m) (LESS THAN 30 MPH (50 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33m <sup>2</sup> ) EACH "X"=54.0 SQ. FT. (5.0 m <sup>2</sup> )

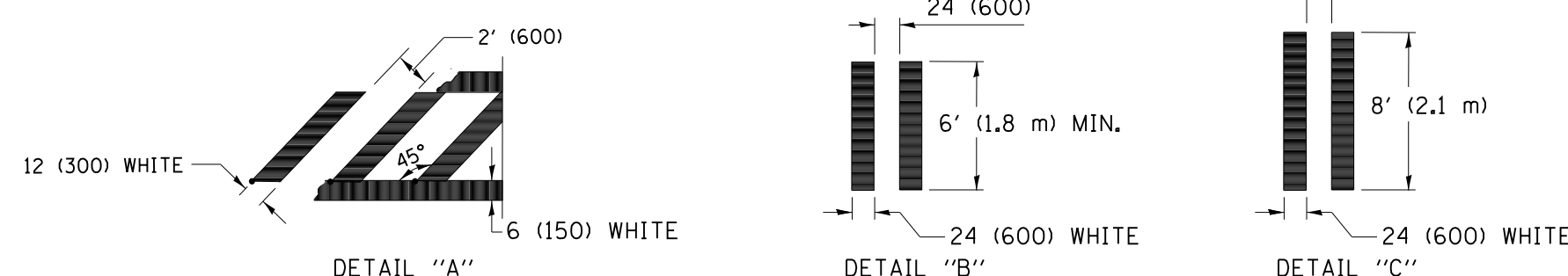
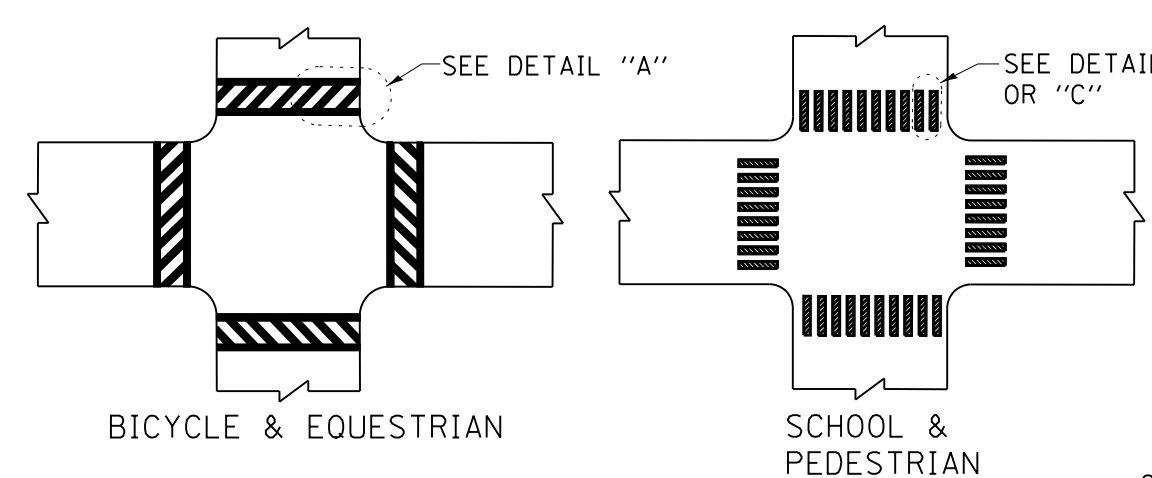
FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STREET MARKING STANDARDS, PRINTED BY CITY OF CHICAGO, DEPARTMENT OF TRANSPORTATION, BUREAU OF TRAFFIC.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.



NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

**TYPICAL LANE AND EDGE LINE MARKING**



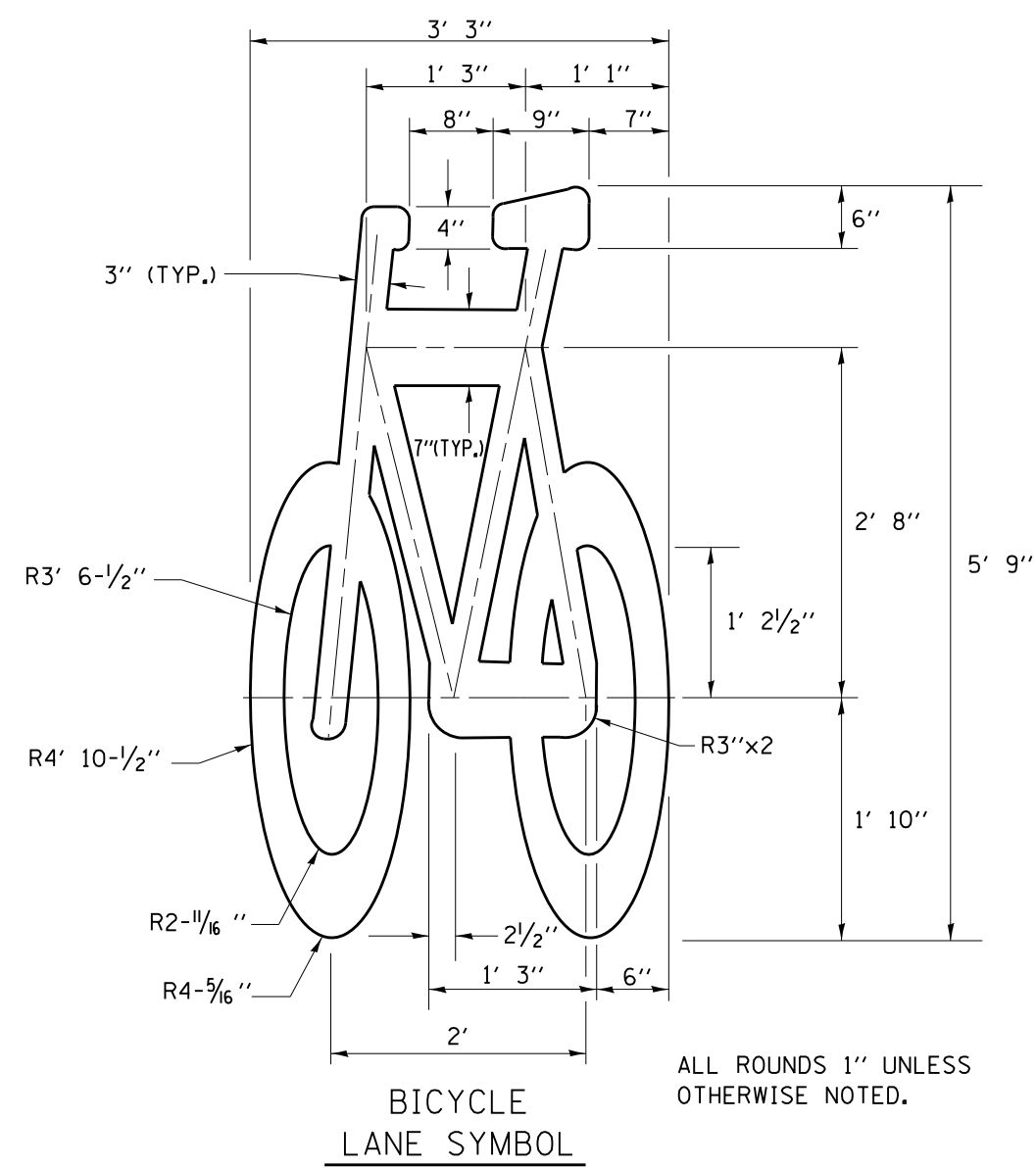
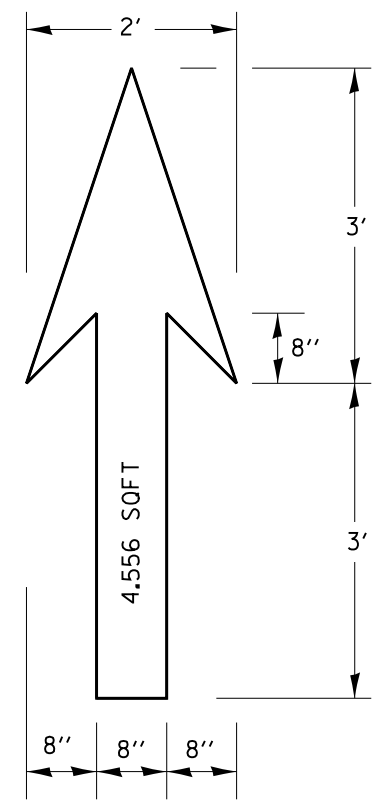
**TYPICAL CROSSWALK MARKING**

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	PLOT SCALE = 50.000 1/16"	CHECKED -	REVISED -
	PLOT DATE = 3/1/2012	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>CITY OF CHICAGO TYPICAL PAVEMENT MARKINGS</b>			
SCALE: NONE	SHEET NO. 1 OF 3 SHEETS	STA.	TO STA.

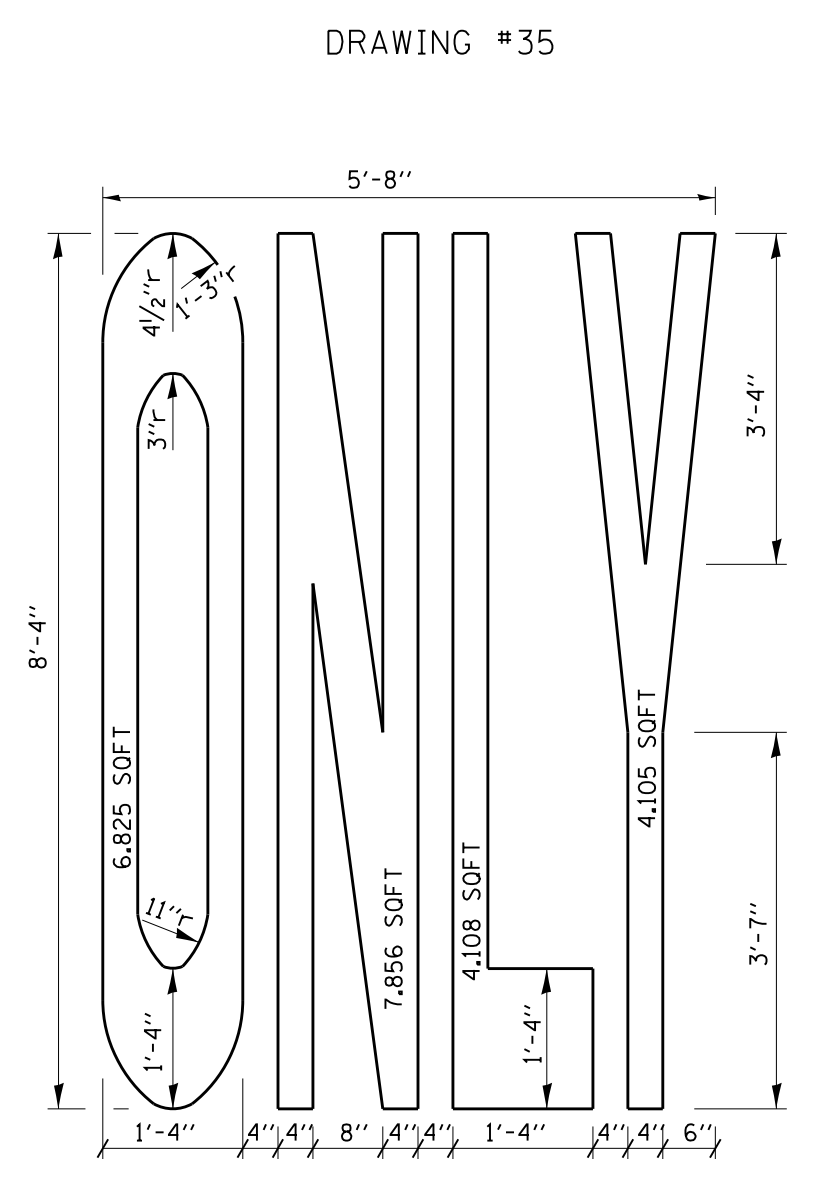
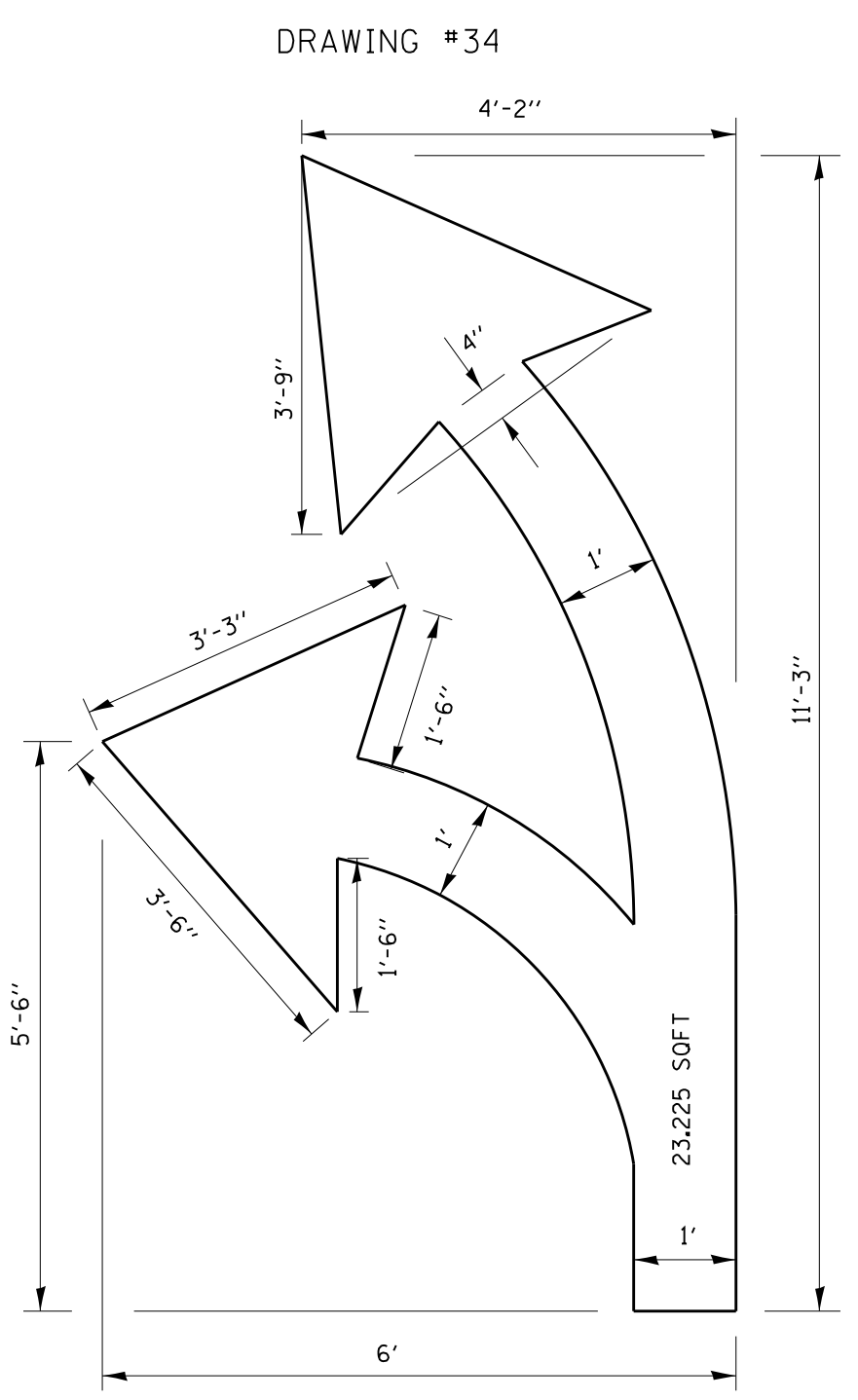
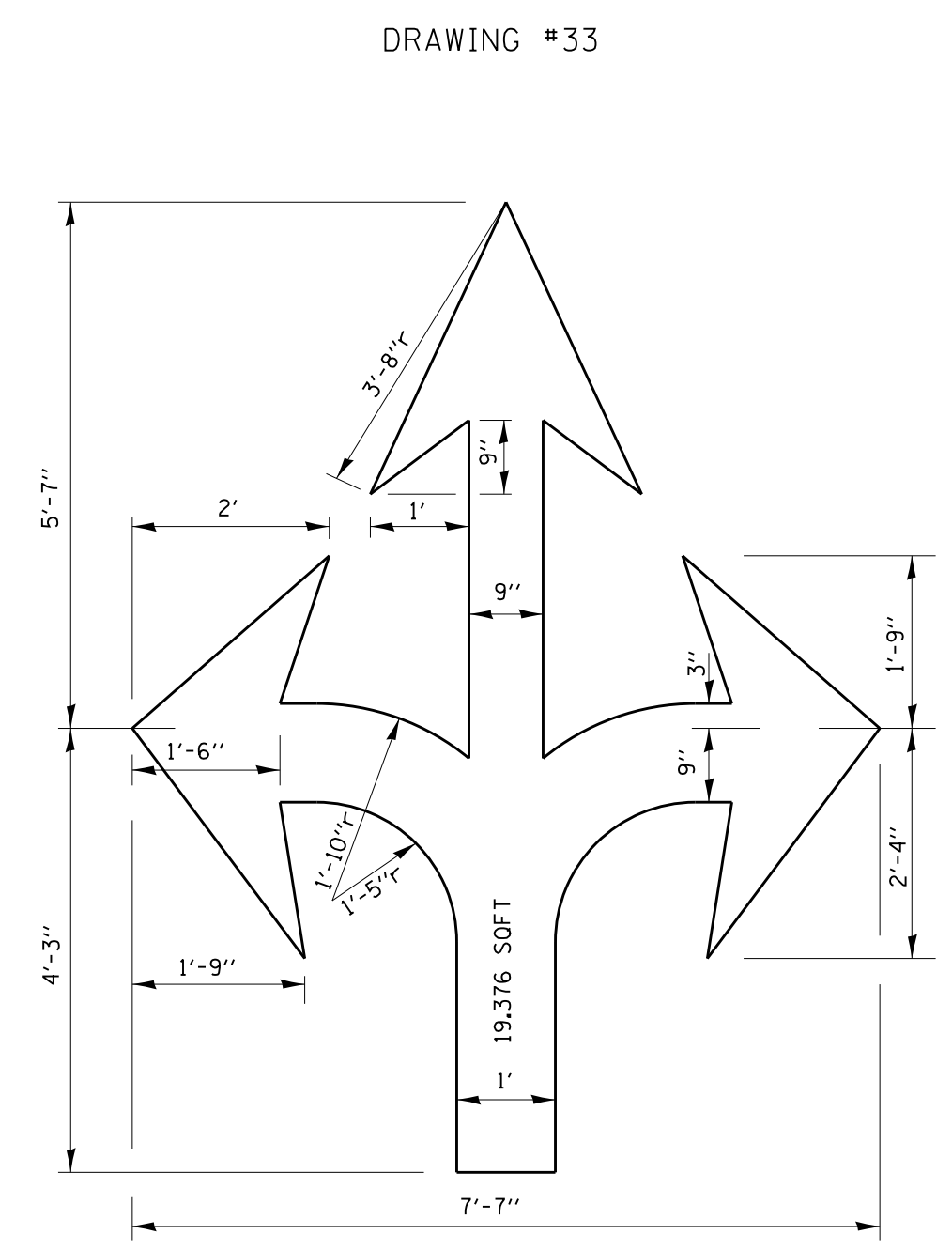
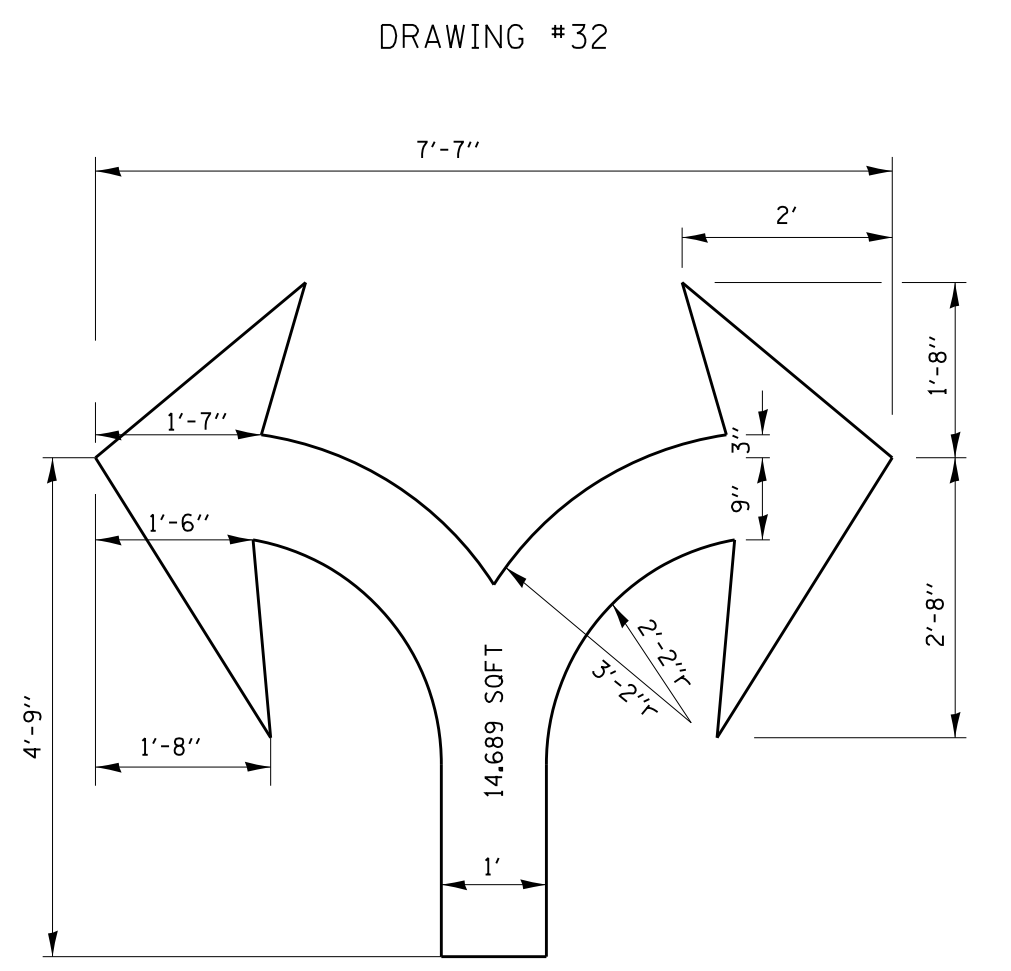
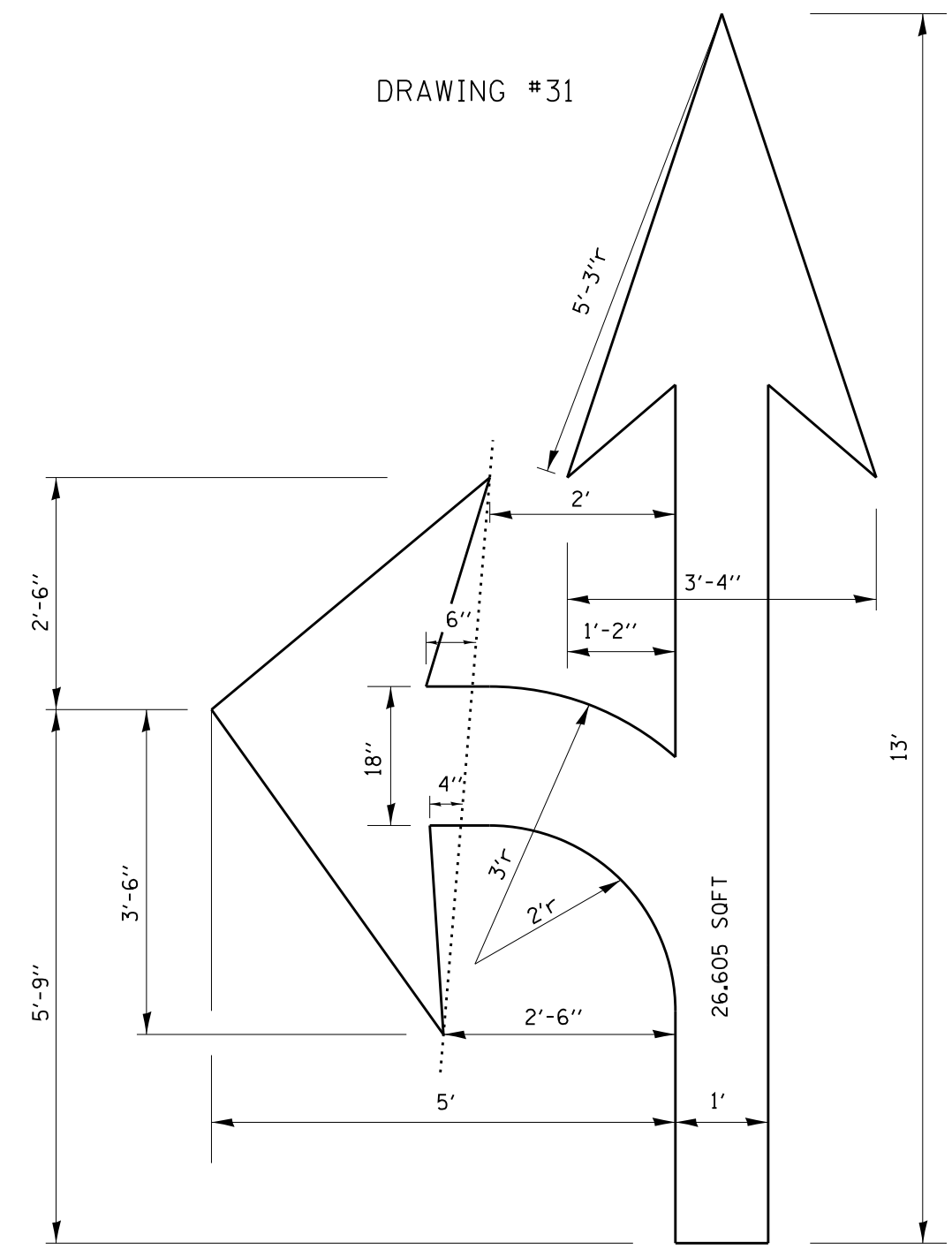
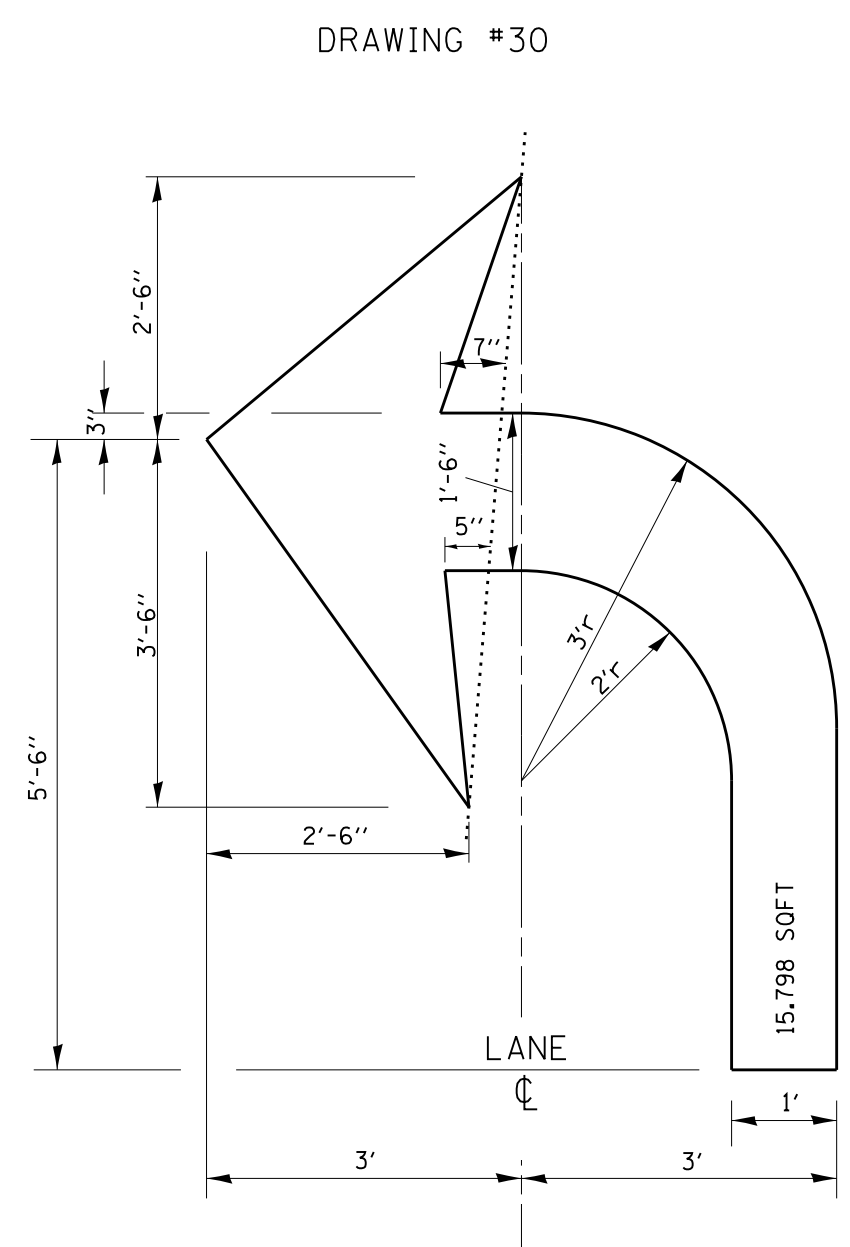
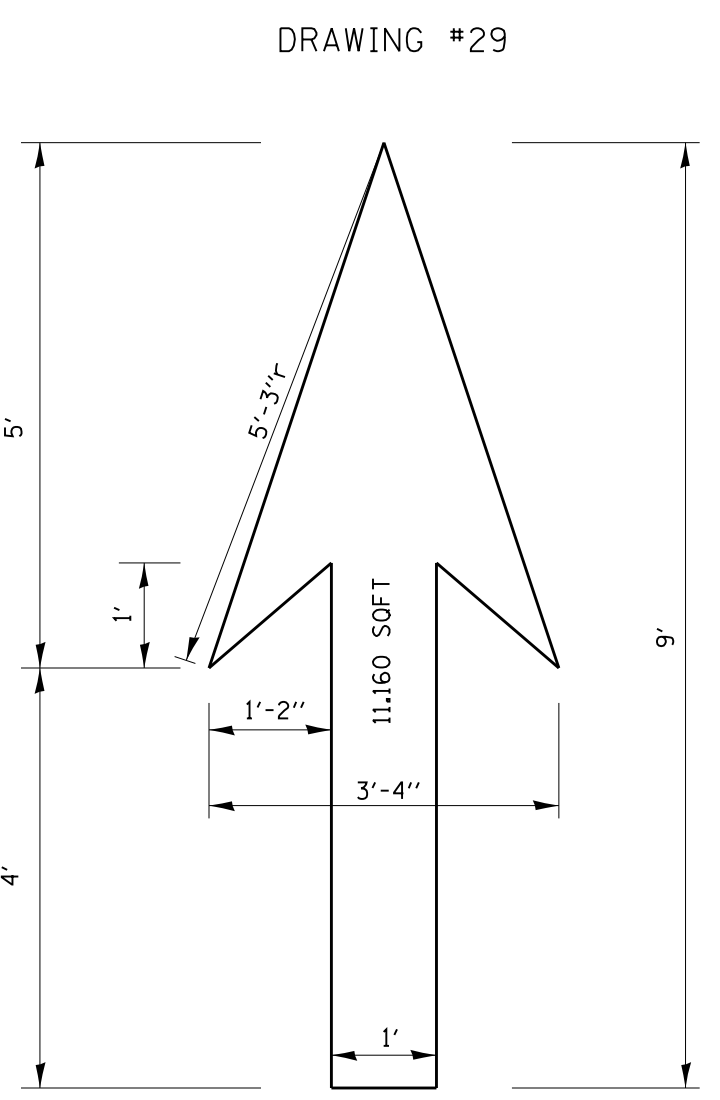
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1920-B	COOK	142	140
<b>TC-24</b>		CONTRACT NO.	60J15	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



ALL ROUNDS 1" UNLESS OTHERWISE NOTED.

- NOTE:**
- FOR BIKE LANE SYMBOLS ONLY, USE PRE-FORMED THERMOPLASTIC WITH A MINIMUM THICKNESS OF 90 MILS, MINIMUM SKID RESISTANCE VALUE OF 60 BPN, & A MINIMUM INDEX OF REFRACTION OF 1.50.
  - THE RESIDENT ENGINEER SHALL CONTACT MR. BEN GOMBERG AT 312-744-8093 AT LEAST ONE CALENDAR WEEK PRIOR TO INSTALLING BIKE LANE SYMBOLS.

TYPICAL BIKE LANE SYMBOLS  
DRAWING #28



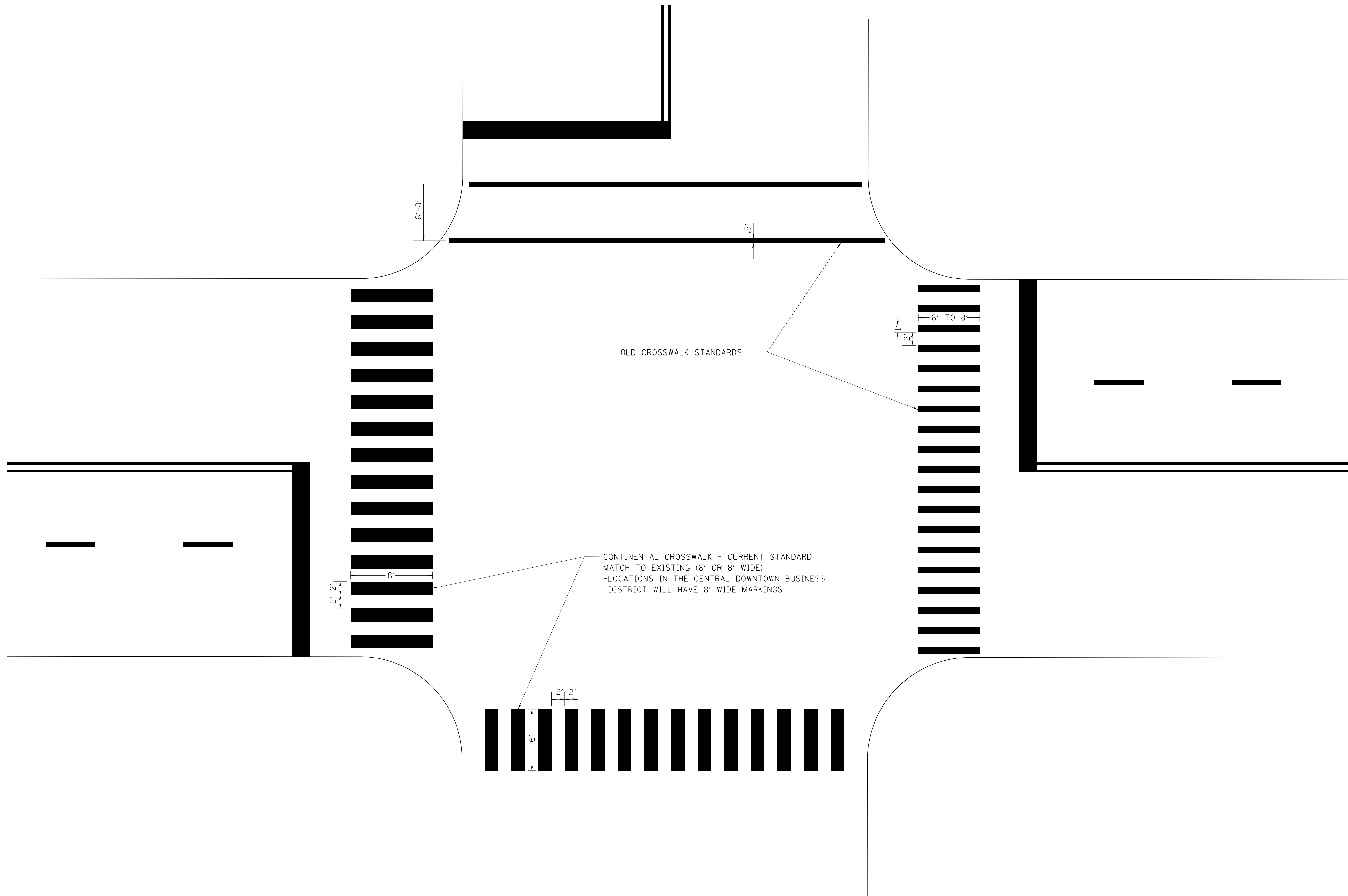
**NOTE:** ALL MARKINGS SHALL BE SOLID WHITE UNLESS OTHERWISE NOTED IN THE PLANS

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et:\pwork\pwork\drivakosgn\d0108315\te24.dgn		DRAWN -	REVISED - K. ENG 02-28-12
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CITY OF CHICAGO			
TYPICAL PAVEMENT MARKINGS			
SCALE: NONE	SHEET NO. 2 OF 3 SHEETS	STA.	TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1920-B	COOK	142	141
TC-24		CONTRACT NO.	60J15	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



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	PLOT DATE = 3/29/2012	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**CITY OF CHICAGO  
TYPICAL PAVEMENT MARKINGS**

SCALE: NONE      SHEET NO. 3 OF 3 SHEETS      STA.      TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1920-B	COOK	142	142
<b>TC-24</b>		CONTRACT NO.	60J15	
FED. ROAD DIST. NO. 1   ILLINOIS FED. AID PROJECT				