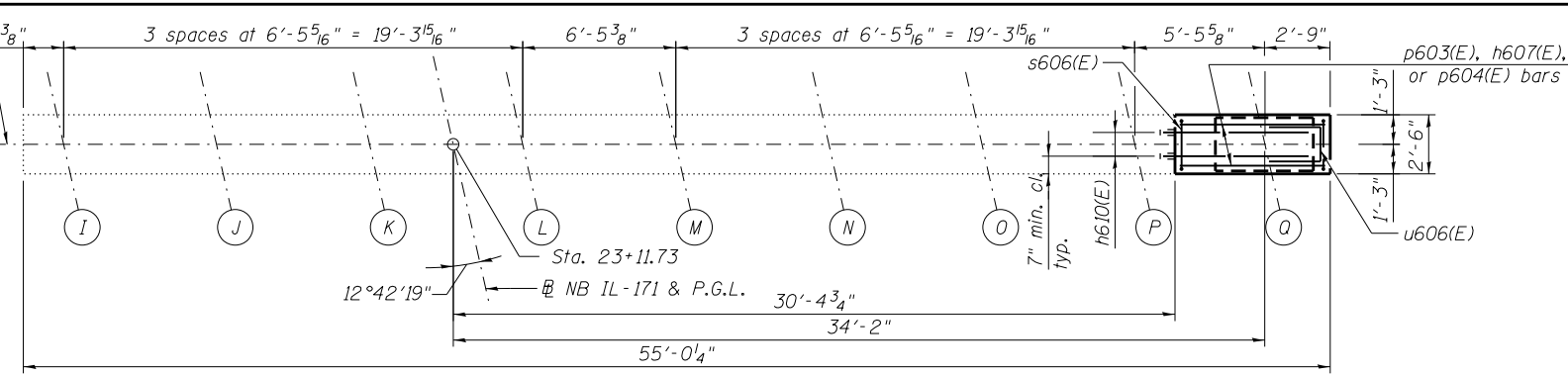
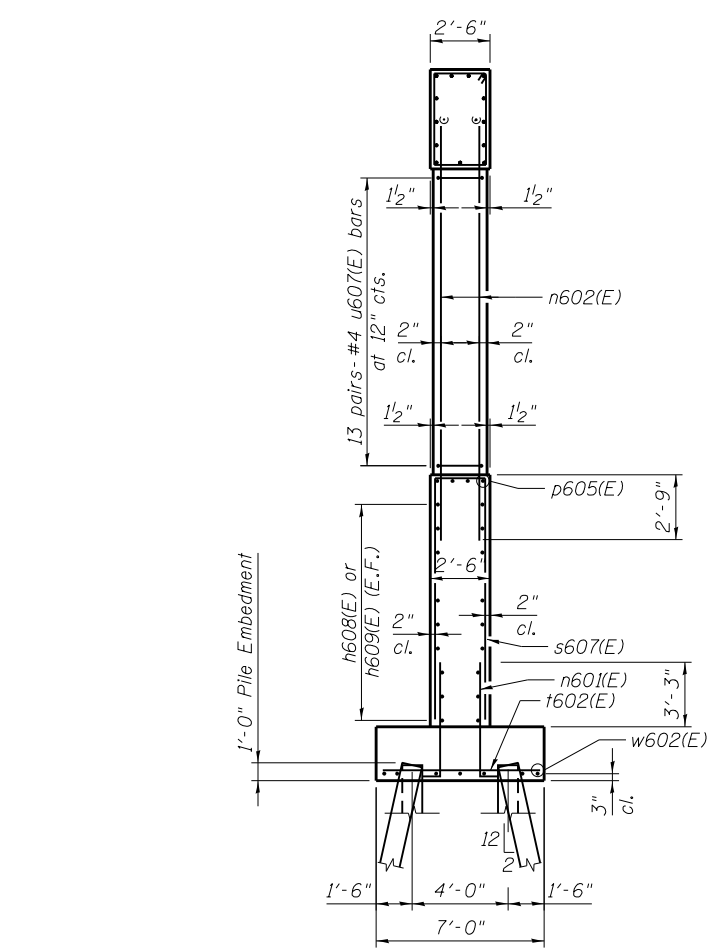


SECTION B-B

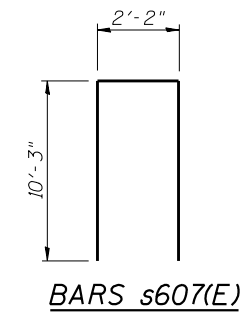
SECTION C-C



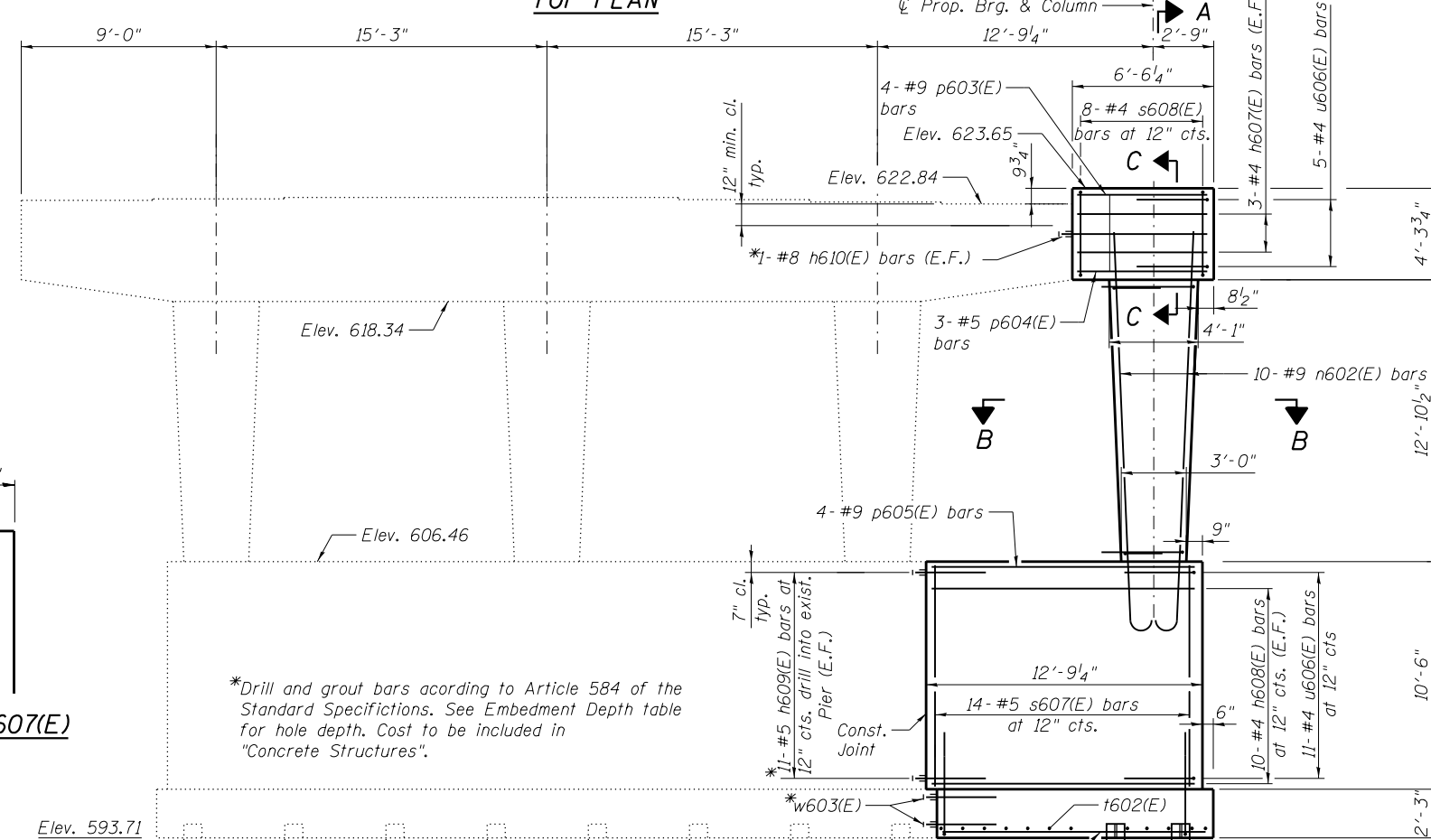
TOP PLAN



SECTION A-A



BARS s607(E)



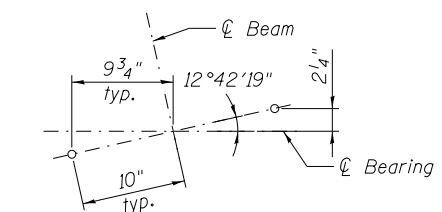
EMBEDMENT DEPTH

ELEVATION (Looking North)

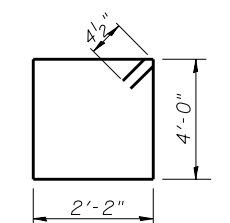
Bar Size	Embedment
#5	8"
#8	13"

BILL OF MATERIAL

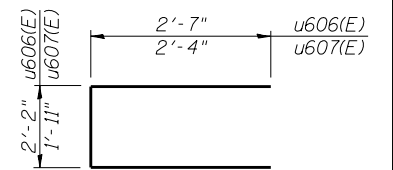
Bar	No.	Size	Length	Shape
h607(E)	6	#4	6'-3"	—
h608(E)	20	#4	12'-6"	—
h609(E)	22	#5	4'-0"	—
h610(E)	2	#8	3'-0"	—
n601(E)	24	#5	6'-3"	—
n602(E)	10	#9	18'-11"	—
p603(E)	4	#9	6'-3"	—
p604(E)	3	#5	6'-3"	—
p605(E)	4	#9	12'-6"	—
s607(E)	14	#5	22'-8"	—
s608(E)	8	#4	13'-1"	—
t602(E)	14	#7	6'-8"	—
u606(E)	16	#4	7'-4"	—
u607(E)	26	#4	6'-7"	—
w602(E)	7	#6	12'-6"	—
w603(E)	14	#5	4'-0"	—
Structure Excavation	Cu. Yd.		47	
Concrete Structures	Cu. Yd.		26.4	
Reinforcement Bars, Epoxy Coated	Pound		2,350	
Furnishing Steel Piles HP12x53	Foot		102	
Driving Piles	Foot		102	
Test Pile Steel HP12x53	Each		1	
Pile Shoes	Each		4	
Cleaning Bridge Seats	Sq. Ft.		122	



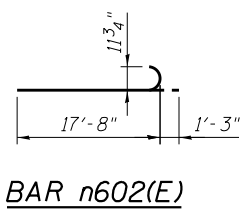
ANCHOR BOLT DETAIL



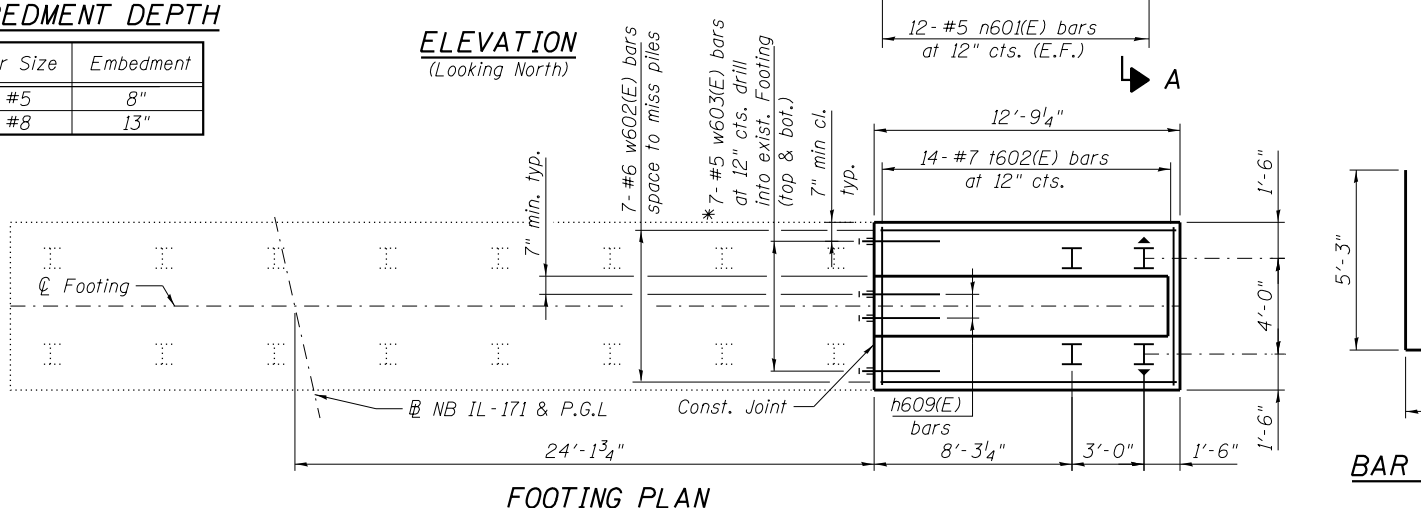
BAR s608(E)



BARS u606(E) & u607(E)



BAR n602(E)



FOOTING PLAN

Notes:  
Space reinforcement in cap to miss anchor bolts.  
For details of piles, see sheet SG34.

PILE DATA

Type: HP12x53 with Pile Shoes  
Nominal Required Bearing: 261 kips  
Allowable Resistance Available: 87 kips  
Estimated Length: 34'  
Number of Production Piles: 3  
Number of Test Piles: 1



USER NAME = Lin20\_Nick  
FILE NAME = #FILEABREV#  
PLOT SCALE =  
PLOT DATE = 6/18/2015

DESIGNED - BDC  
CHECKED - LMS  
DRAWN - RMH  
CHECKED - LMS

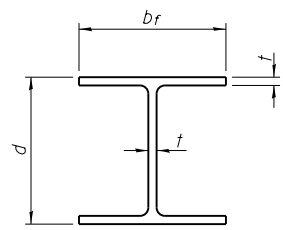
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REVISED  
REVISED  
REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PIER 2 WIDENING  
STRUCTURE NO. 016-0489

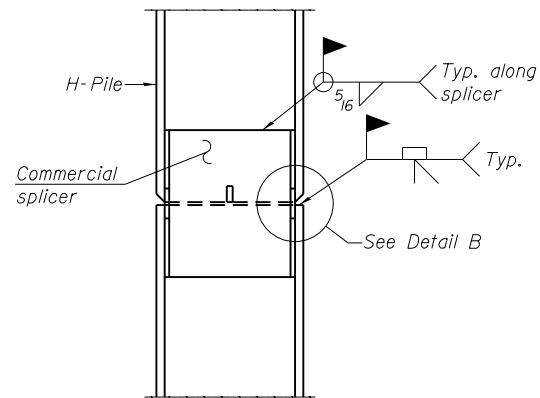
SHEET NO. SG33 OF SG38 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
373	2013-037B-R	COOK	787	701
CONTRACT NO. 60W75			ILLINOIS FED. AID PROJECT	

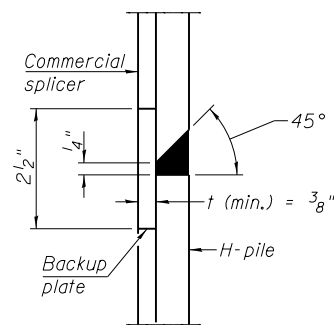


**STEEL PILE TABLE**

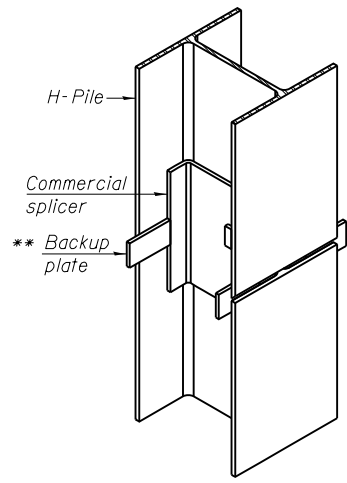
Designation	Depth d	Flange width br	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	13/16"	30"
x102	14"	14 3/4"	1/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	1/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"
x53	11 3/4"	12"	7/16"	24"
HP 10x57	10"	10 1/4"	9/16"	24"
x42	9 3/4"	10 1/8"	7/16"	24"
HP 8x36	8"	8 1/8"	7/16"	18"



**ELEVATION**

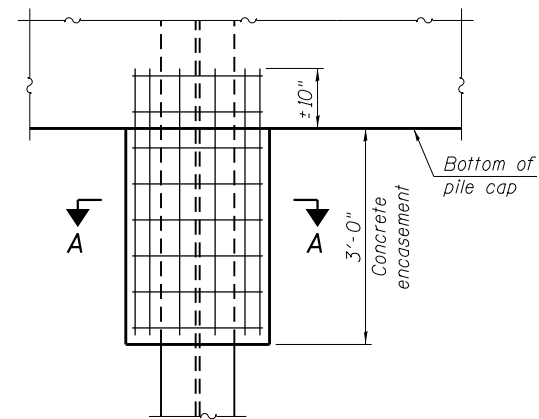


**DETAIL "B"**



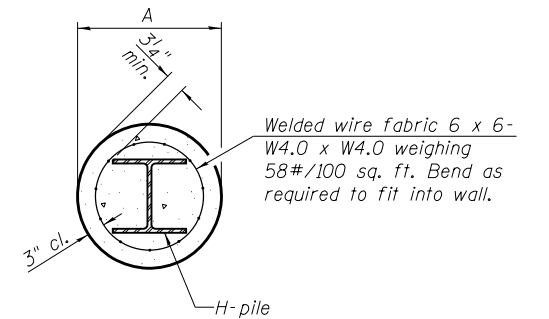
**ISOMETRIC VIEW**

**WELDED COMMERCIAL SPLICE**



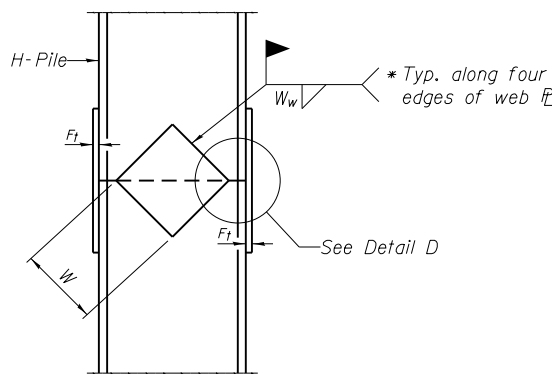
**ELEVATION**

**PILE ENCASEMENT**

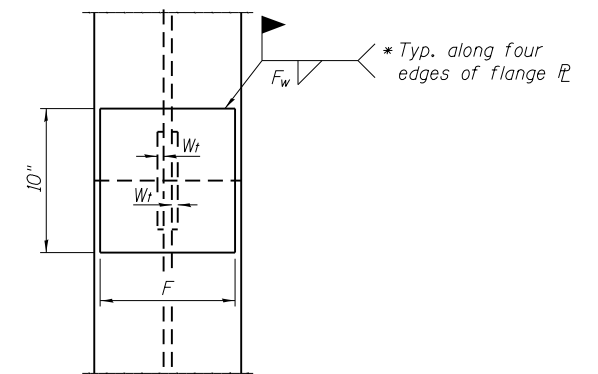


**SECTION A-A**

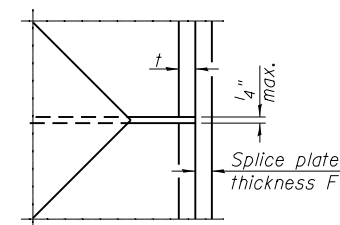
Note:  
Forms for encasement may be omitted when soil conditions permit.



**ELEVATION**



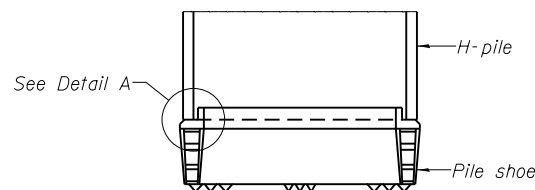
**END VIEW**



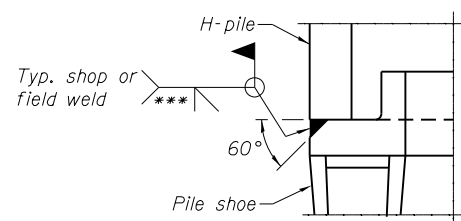
**DETAIL D**

**WELDED PLATE FIELD SPLICE**

Designation	F	Ft	Fw	W	Wt	Ww
HP 14x117	12 1/2"	1"	7/8"	7 3/4"	5/8"	1/2"
x102	12 1/2"	7/8"	3/4"	7 3/4"	5/8"	1/2"
x89	12 1/2"	3/4"	1/16"	7 3/4"	5/8"	1/2"
x73	12 1/2"	5/8"	9/16"	7 3/4"	5/8"	1/2"
HP 12x84	10"	7/8"	1/16"	6 1/2"	5/8"	1/2"
x74	10"	7/8"	1/16"	6 1/2"	5/8"	1/2"
x63	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
x53	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
HP 10x57	8"	3/4"	9/16"	5 1/4"	1/2"	3/8"
x42	8"	5/8"	9/16"	5 1/4"	1/2"	3/8"
HP 8x36	7"	5/8"	7/16"	4 1/4"	1/2"	3/8"

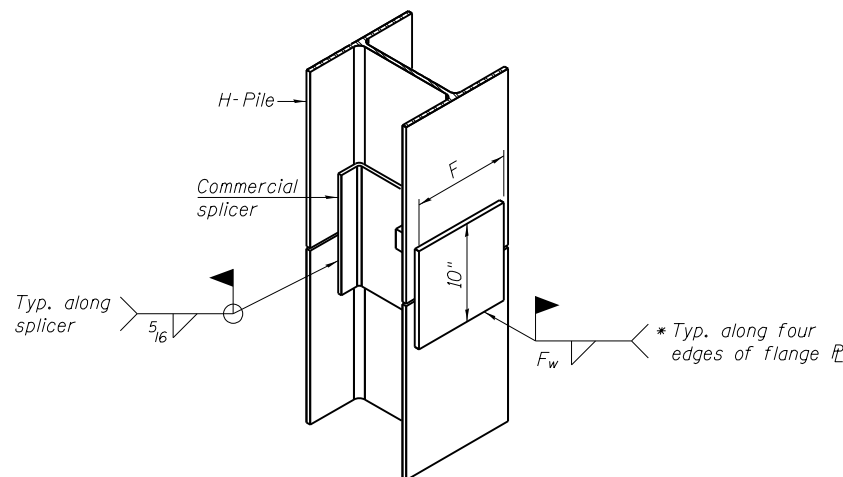


**ELEVATION**



**DETAIL A**

**H-PILE SHOE ATTACHMENT**



**ISOMETRIC VIEW**

**WELDED COMMERCIAL SPLICE ALTERNATE**

- \* Interrupt welds 1/4" from end of web and/or each flange.
- \*\* Remove portions of backup plates that extend outside the flanges.
- \*\*\* Weld size per pile shoe manufacturer (5/16" min.).

Note:  
The steel H-piles shall be according to AASHTO M270 Grade 50.

F-HP 1-27-12



USER NAME = Lin20\_Nick  
FILE NAME = #FILEABREV#  
PLOT SCALE =  
PLOT DATE = 6/18/2015

DESIGNED - BDC  
CHECKED - LMS  
DRAWN - RMH  
CHECKED - LMS

REVISED  
REVISED  
REVISED  
REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

HP PILE DETAILS  
STRUCTURE NO. 016-0489

SHEET NO. SG34 OF SG38 SHEETS

F.A.P. R.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
373	2013-037B-R	COOK	787	702
				CONTRACT NO. 60W75

ILLINOIS FED. AID PROJECT



GSI Job No. 10025

### SOIL BORING LOG

Page 1 of 3

Date 12/24/12

ROUTE FAP 373 (IL 171) DESCRIPTION IL Route 171 from 47th St. to 55th St. LOGGED BY RP

SECTION 2013-037B-R LOCATION NW 1/4, SEC. 13, TWP. T38N, RNG. R12E, 3<sup>rd</sup> PM

COUNTY Cook DRILLING METHOD HSA/MUD ROTARY HAMMER TYPE CME Automatic

STRUCT. NO. 016-0489  
Station \_\_\_\_\_

BORING NO. SB-66  
Station 21+49  
Offset 60.00ft Right  
Ground Surface Elev. 626.20 ft

Surface Water Elev. n/a ft  
Stream Bed Elev. n/a ft

Groundwater Elev.:  
First Encounter Dry to 10.0' ft  
Upon Completion n/a ft  
After Hrs. \_\_\_\_\_

DEPTH (ft)	BLOW COUNT (blows/ft)	UCS (tsf)	MOISTURE (%)
0			
3			
4	7		
6			
623.20			
4			
6	1.3	18	
8	B		
10			
8	0.9	25	
10	B		
12	2.7	20	
14	B		
10			
11	0.9	18	
15	B		
6			
8	1.1	18	
9	B		
3			
6	1.0	23	
7	B		
4			
8	3.0	22	
9	P		

DEPTH (ft)	DESCRIPTION	DEPTH (ft)	BLOW COUNT (blows/ft)	UCS (tsf)	MOISTURE (%)
0	12.0" CONCRETE	0			
625.20		3			
	CRUSHED STONE-medium dense (Fill)	4	7		
		6			
623.20		4			
	CLAY LOAM-dark brown & gray-medium stiff to hard (Fill)	6	1.3	18	
		8	B		
		10			
		8	0.9	25	
		10	B		
		12	2.7	20	
		14	B		
		10			
		11	0.9	18	
		15	B		
		6			
		8	1.1	18	
		9	B		
		3			
		6	1.0	23	
		7	B		
		4			
		8	3.0	22	
		9	P		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
BBS, from 137 (Rev. 8-99)



GSI Job No. 10025

### SOIL BORING LOG

Page 2 of 3

Date 12/24/12

ROUTE FAP 373 (IL 171) DESCRIPTION IL Route 171 from 47th St. to 55th St. LOGGED BY RP

SECTION 2013-037B-R LOCATION NW 1/4, SEC. 13, TWP. T38N, RNG. R12E, 3<sup>rd</sup> PM

COUNTY Cook DRILLING METHOD HSA/MUD ROTARY HAMMER TYPE CME Automatic

STRUCT. NO. 016-0489  
Station \_\_\_\_\_

BORING NO. SB-66  
Station 21+49  
Offset 60.00ft Right  
Ground Surface Elev. 626.20 ft

Surface Water Elev. n/a ft  
Stream Bed Elev. n/a ft

Groundwater Elev.:  
First Encounter Dry to 10.0' ft  
Upon Completion n/a ft  
After Hrs. \_\_\_\_\_

DEPTH (ft)	BLOW COUNT (blows/ft)	UCS (tsf)	MOISTURE (%)
0			
3			
4	1.2	21	
4	B		
6			
6			
7	0.8	20	
9	B		
10			
15	4.5	23	
17	P		
12			
16	1.1	22	
21	B		
3			
6	6.5	14	
9	B		
4			
8	4.5	11	
10	P		
6			
9	4.5	15	
12	P		

DEPTH (ft)	DESCRIPTION	DEPTH (ft)	BLOW COUNT (blows/ft)	UCS (tsf)	MOISTURE (%)
0	CLAY LOAM-dark brown & gray-medium stiff to hard (Fill) (continued)	0			
		3			
		5	1.2	21	
		4	B		
		6			
		6			
		7	0.8	20	
		9	B		
		10			
		15	4.5	23	
		17	P		
		12			
		16	1.1	22	
		21	B		
		3			
		6	6.5	14	
		9	B		
		4			
		8	4.5	11	
		10	P		
		6			
		9	4.5	15	
		12	P		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
BBS, from 137 (Rev. 8-99)



GSI Job No. 10025

### SOIL BORING LOG

Page 3 of 3

Date 12/24/12

ROUTE FAP 373 (IL 171) DESCRIPTION IL Route 171 from 47th St. to 55th St. LOGGED BY RP

SECTION 2013-037B-R LOCATION NW 1/4, SEC. 13, TWP. T38N, RNG. R12E, 3<sup>rd</sup> PM

COUNTY Cook DRILLING METHOD HSA/MUD ROTARY HAMMER TYPE CME Automatic

STRUCT. NO. 016-0489  
Station \_\_\_\_\_

BORING NO. SB-66  
Station 21+49  
Offset 60.00ft Right  
Ground Surface Elev. 626.20 ft

Surface Water Elev. n/a ft  
Stream Bed Elev. n/a ft

Groundwater Elev.:  
First Encounter Dry to 10.0' ft  
Upon Completion n/a ft  
After Hrs. \_\_\_\_\_

DEPTH (ft)	DESCRIPTION	DEPTH (ft)	BLOW COUNT (blows/ft)	UCS (tsf)	MOISTURE (%)
0	Drillers Observation: Weathered & fractured rock. (continued)	0			
		5			
		9	3.7	18	
		11	B		
		10			
		15	4.5	23	
		17	P		
		12			
		16	1.1	22	
		21	B		
		3			
		6	6.5	14	
		9	B		
		4			
		8	4.5	11	
		10	P		
		6			
		9	4.5	15	
		12	P		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
BBS, from 137 (Rev. 8-99)

(Sheet 1 of 4)



USER NAME = Lin20\_Nick  
FILE NAME = #FILE#REV#  
PLOT SCALE =  
PLOT DATE = 6/18/2015

DESIGNED - BDC  
CHECKED - RGB  
DRAWN - RMH  
CHECKED - LMS

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REVISED  
REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

BORING LOGS  
STRUCTURE NO. 016-0489

SHEET NO. SG35 OF SG38 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
373	2013-037B-R	COOK	787	703
			CONTRACT NO. 60W75	

ILLINOIS FED. AID PROJECT



GSI Job No. 10025

### SOIL BORING LOG

Page 1 of 2

Date 12/24/12

ROUTE FAP 373 (IL 171) DESCRIPTION IL Route 171 from 47th St. to 55th St. LOGGED BY JZ

SECTION 2013-037B-R LOCATION NW 1/4, SEC. 13, TWP. T38N, RNG. R12E, 3<sup>rd</sup> PM

COUNTY Cook DRILLING METHOD MUD ROTARY HAMMER TYPE CME Automatic

STRUCT. NO. 016-0489  
Station \_\_\_\_\_

BORING NO. SB-67  
Station 22+31  
Offset 58.90ft Right  
Ground Surface Elev. 627.10 ft

DEPTH (ft)	BULGE (ft)	UCS (tsf)	MOISTURE (%)	DESCRIPTION	DEPTH (ft)	BULGE (ft)	UCS (tsf)	MOISTURE (%)
0				8.0" CONCRETE BRIDGE DECK				
0.5				VOID	8			
1					10	1.8		21
1.5					13	P		
2					4			
2.5					5	1.0		19
3					7	B		
3.5					5			
4					14	2.0		15
4.5					9	P		
5					8			
5.5					13	1.8		18
6					15	B		
6.5					8			
7					13	1.8		18
7.5					15	B		
8					14			
8.5		3.8	16	CLAY LOAM-brown & gray-stiff to very stiff (Fill)	9	1.8		22
9		P			11	P		
9.5					7	1.8		14
10					10	P		
10.5					11			
11					13	1.5		18
11.5					15	B		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
BBS, from 137 (Rev. 8-99)



GSI Job No. 10025

### SOIL BORING LOG

Page 2 of 2

Date 12/24/12

ROUTE FAP 373 (IL 171) DESCRIPTION IL Route 171 from 47th St. to 55th St. LOGGED BY JZ

SECTION 2013-037B-R LOCATION NW 1/4, SEC. 13, TWP. T38N, RNG. R12E, 3<sup>rd</sup> PM

COUNTY Cook DRILLING METHOD MUD ROTARY HAMMER TYPE CME Automatic

STRUCT. NO. 016-0489  
Station \_\_\_\_\_

BORING NO. SB-67  
Station 22+31  
Offset 58.90ft Right  
Ground Surface Elev. 627.10 ft

DEPTH (ft)	BULGE (ft)	UCS (tsf)	MOISTURE (%)	DESCRIPTION	DEPTH (ft)	BULGE (ft)	UCS (tsf)	MOISTURE (%)
0				CLAY LOAM-brown & gray-stiff to very stiff (Fill) (continued)				
8					27			
8.5					39	3.3		14
9					40	B		
9.5					8			
10					9	1.5		23
10.5					12	P		
11					5			
11.5					14	2.0		15
12					9	P		
12.5					8			
13					13	1.8		18
13.5					15	B		
14					8			
14.5					13	1.8		18
15					15	B		
15.5					19			
16					28	5.4		13
16.5					35	B		
17					19			
17.5					28	5.4		13
18					35	B		
18.5					28			
19					39	4.5		10
19.5					50/2"	P		
20					28			
20.5					39	4.5		10
21					50/2"	P		
21.5					28			
22					39	4.5		10
22.5					50/2"	P		
23					29			
23.5					43	4.6		15
24					50/3"	B		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
BBS, from 137 (Rev. 8-99)

(Sheet 2 of 4)



USER NAME = Lin20\_Nick  
FILE NAME = #FILE#REV#  
PLOT SCALE =  
PLOT DATE = 6/18/2015

DESIGNED - BDC  
CHECKED - RGB  
DRAWN - RMH  
CHECKED - LMS

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REVISED  
REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

BORING LOGS  
STRUCTURE NO. 016-0489

SHEET NO. 373 OF 373 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
373	2013-037B-R	COOK	787	704
CONTRACT NO. 60W75			ILLINOIS FED. AID PROJECT	





SOIL BORING LOG

GSJ Job No. 10025 Page 1 of 3 Date 3/28/13

ROUTE FAP 373 (IL 171) DESCRIPTION IL Route 171 from 47th St. to 55th St. LOGGED BY KD
SECTION 2013-037B-R LOCATION NW 1/4, SEC. 13, TWP. T38N, RNG. R12E, 3rd PM
COUNTY Cook DRILLING METHOD MUD ROTARY HAMMER TYPE CME Automatic

Table with columns for DEPTH (ft), BLOW (ft/6"), UCS (tsf), and Moisture (%). Includes descriptions of soil layers and groundwater elevations.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, from 137 (Rev. 8-99)



SOIL BORING LOG

GSJ Job No. 10025 Page 2 of 3 Date 3/28/13

ROUTE FAP 373 (IL 171) DESCRIPTION IL Route 171 from 47th St. to 55th St. LOGGED BY KD
SECTION 2013-037B-R LOCATION NW 1/4, SEC. 13, TWP. T38N, RNG. R12E, 3rd PM
COUNTY Cook DRILLING METHOD MUD ROTARY HAMMER TYPE CME Automatic

Table with columns for DEPTH (ft), BLOW (ft/6"), UCS (tsf), and Moisture (%). Includes descriptions of soil layers and groundwater elevations.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, from 137 (Rev. 8-99)



SOIL BORING LOG

GSJ Job No. 10025 Page 3 of 3 Date 3/28/13

ROUTE FAP 373 (IL 171) DESCRIPTION IL Route 171 from 47th St. to 55th St. LOGGED BY KD
SECTION 2013-037B-R LOCATION NW 1/4, SEC. 13, TWP. T38N, RNG. R12E, 3rd PM
COUNTY Cook DRILLING METHOD MUD ROTARY HAMMER TYPE CME Automatic

Table with columns for DEPTH (ft), BLOW (ft/6"), UCS (tsf), and Moisture (%). Includes descriptions of soil layers and groundwater elevations.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, from 137 (Rev. 8-99)



USER NAME = Lin20\_Nick
FILE NAME = #FILEABREV#
PLOT SCALE =
PLOT DATE = 6/18/2015

DESIGNED - BDC
CHECKED - RGB
DRAWN - RMH
CHECKED - LMS

REVISED
REVISED
REVISED
REVISED

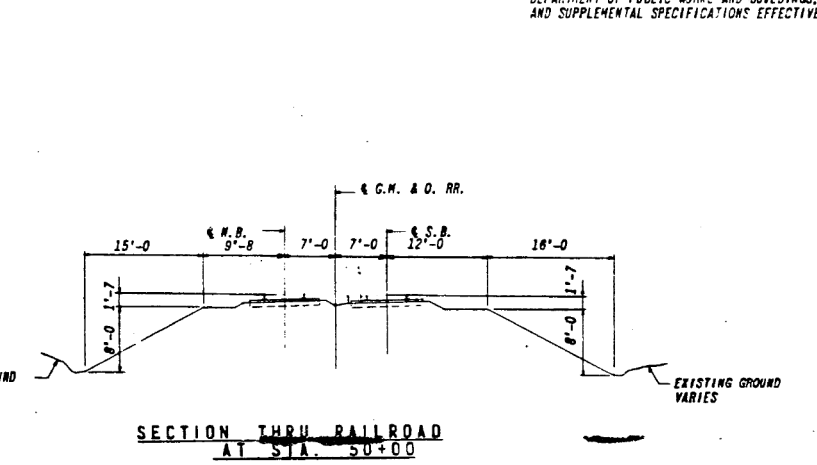
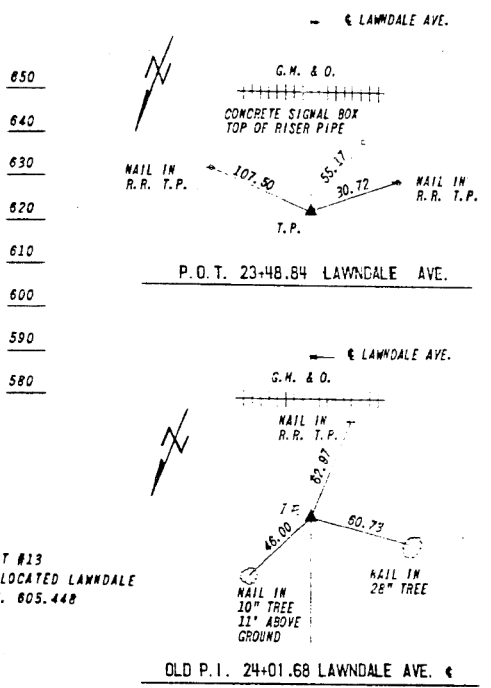
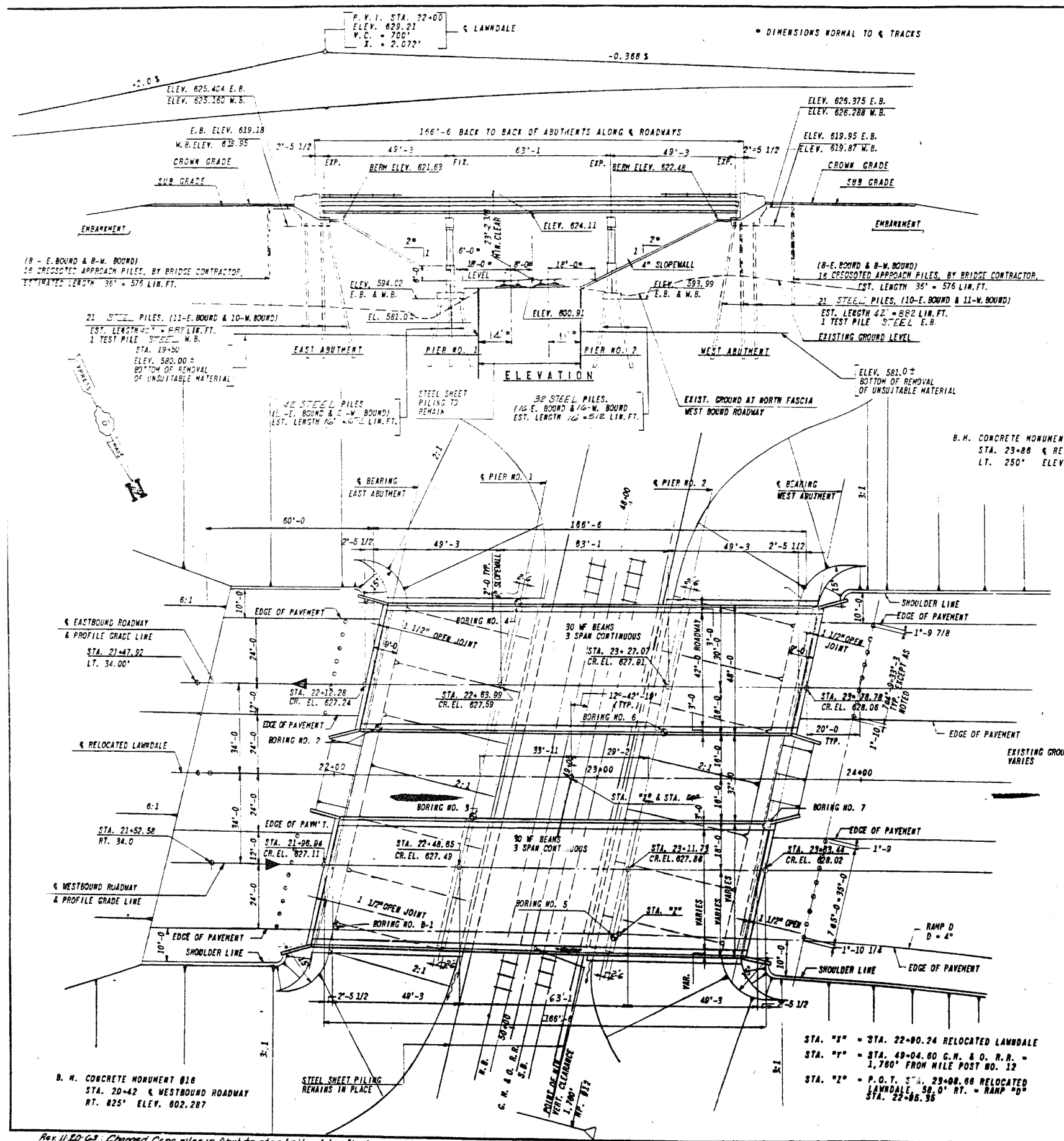
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

BORING LOGS
STRUCTURE NO. 016-0489
SHEET NO. SG37 OF SG38 SHEETS

Table with columns for F.A.P. RTE., SECTION, COUNTY, TOTAL SHEETS, SHEET NO., CONTRACT NO.



F.A. RTE.	SECTION	EXPRESSWAYS	TOTAL SHEETS	SHEET NO.
133	0707-617 VB	SOUTHWEST	56	29
STA.	TO STA.			
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJ. - 15 36302				



FOR INFORMATION ONLY

ILLINOIS DIVISION OF HIGHWAYS.	
SOUTHWEST EXPRESSWAY	
F.A. RT. 133	
LAWDALE AVE. STRUCTURE OVER	
G.M. & O. RAILROAD	
SECTION 0707-617VB	
GENERAL PLAN	
DESIGNED ST.	SCALE: HORIZ. 1"=20'
REVIEWED CWV	VERT. DATE 8-21-63
DRAWN BY E.G.	
CHECKED BY L.D.B.	

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING PLAN INFORMATION (1 OF 14)  
STRUCTURE NO. 016-0489  
SHEET NO. SGX1 OF SGX14 SHEETS

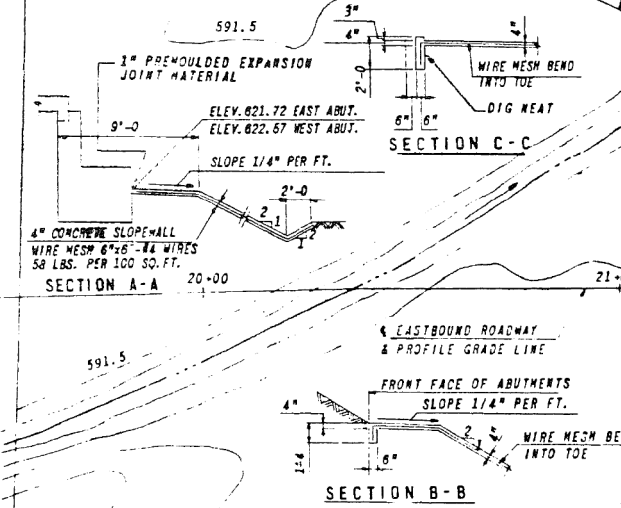
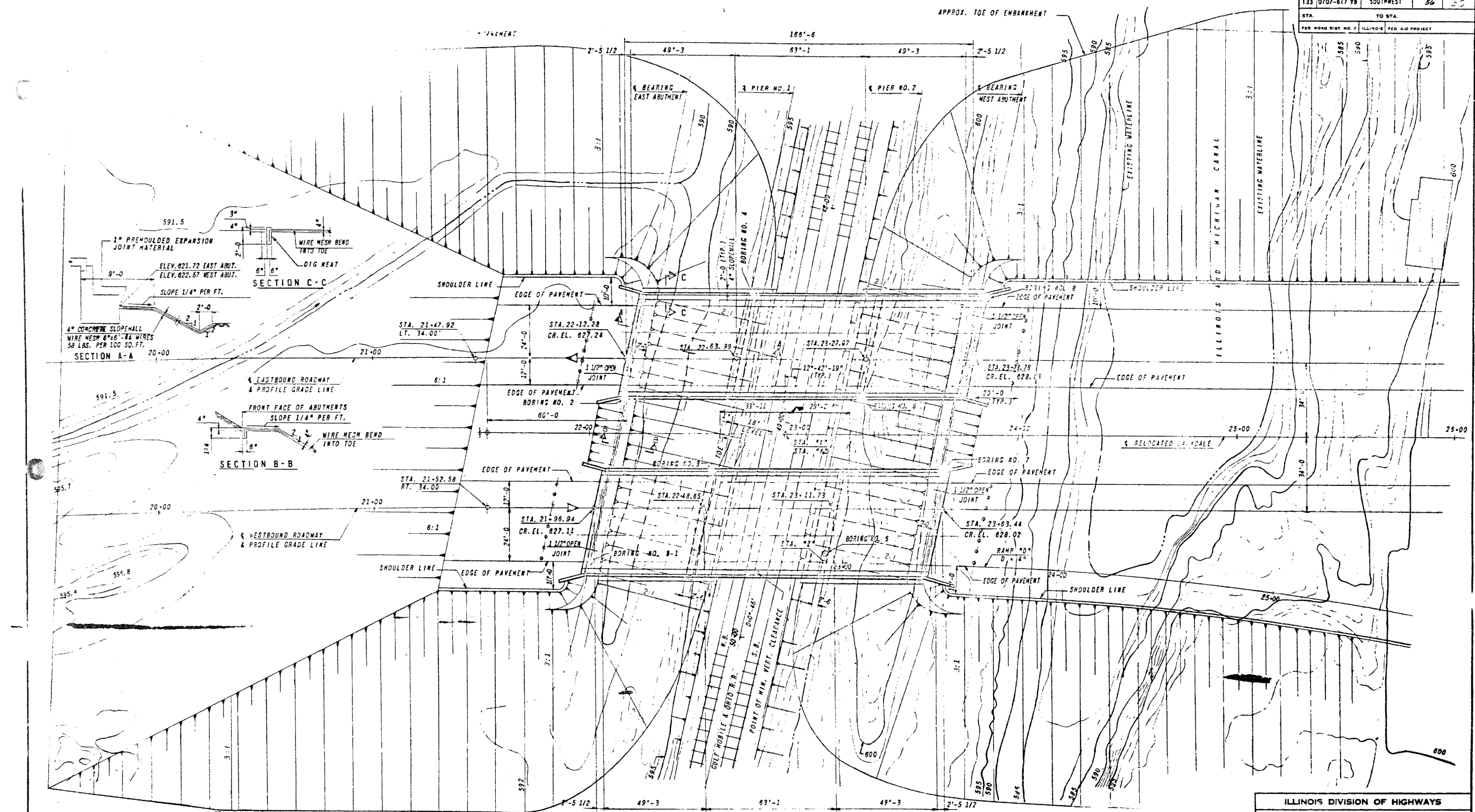
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
373	2013-037B-R	COOK	787	707
				CONTRACT NO. 60W75
ILLINOIS FED. AID PROJECT				

LIN ENGINEERING, LTD.  
Consulting Engineers  
Westmont, Illinois

USER NAME = Lin20_Nick	DESIGNED - BDC	REVISED
FILE NAME = #FILE#REV#	CHECKED - RGB	REVISED
PLOT SCALE =	DRAWN - RMH	REVISED
PLOT DATE = 6/18/2015	CHECKED - LMS	REVISED

Rev. 11-20-63: Changed Conc piles in Abut to steel piles & lin. Ft. changed from 200' to 164' - Changed Creo. piles in piers to steel piles. Lin. Ft. changed from 146' to 672 lin. Ft. & lin. Ft. in pier #2 changed from 1128 to 512 lin. Ft.

F.A. SITE	SECTION	EXPRESSWAYS	TOTAL SHEETS	SHEET NO.
133	0707-617 VB	SOUTHWEST	56	32
STA.	TO STA.			
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				



STA. \*1\* = STA. 22+90.24 RELOCATED LAWDALE  
 STA. \*1\* = STA. 49+04.00 G.M. & O. R.R. = 1,760' FROM MILE POST NO. 12  
 STA. \*2\* = P.O.T. STA. 23+08.66 RELOCATED LAWDALE 58.0' RT.

FOR INFORMATION ONLY

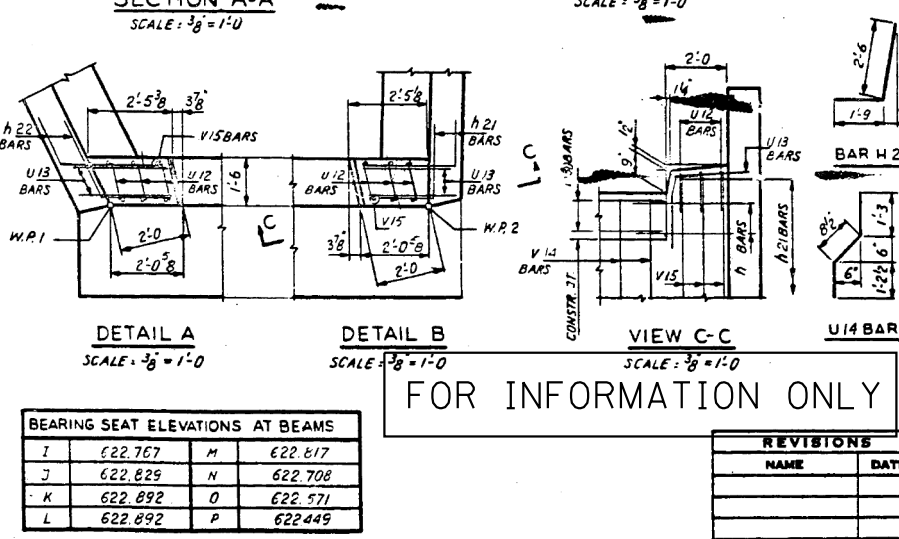
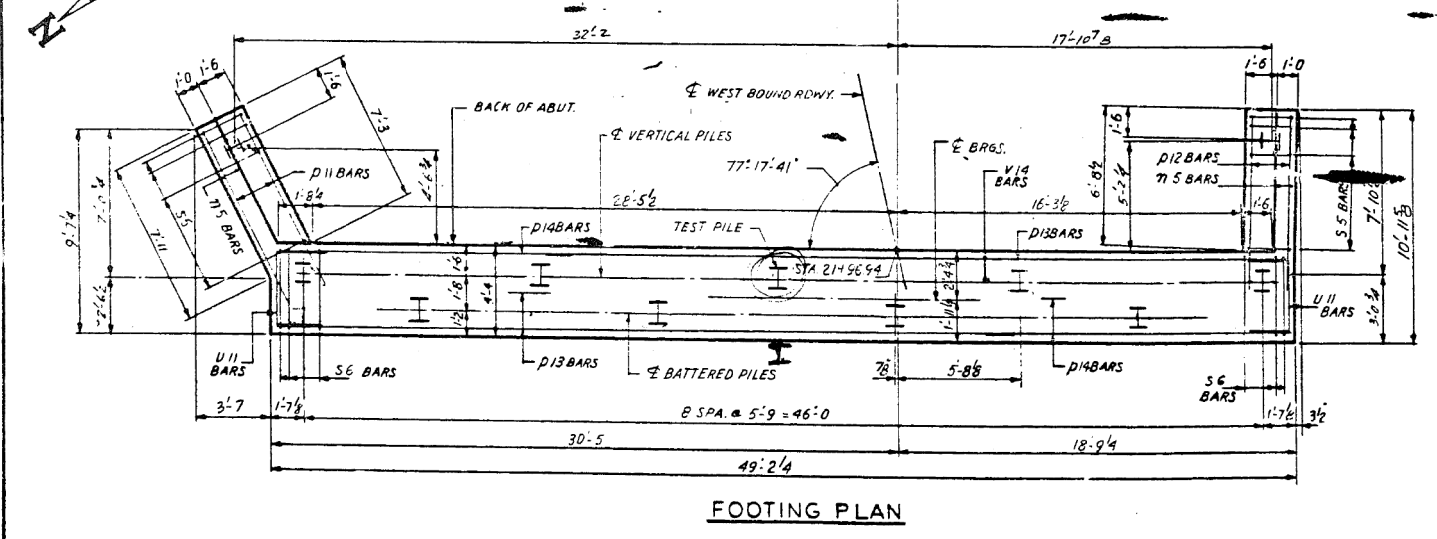
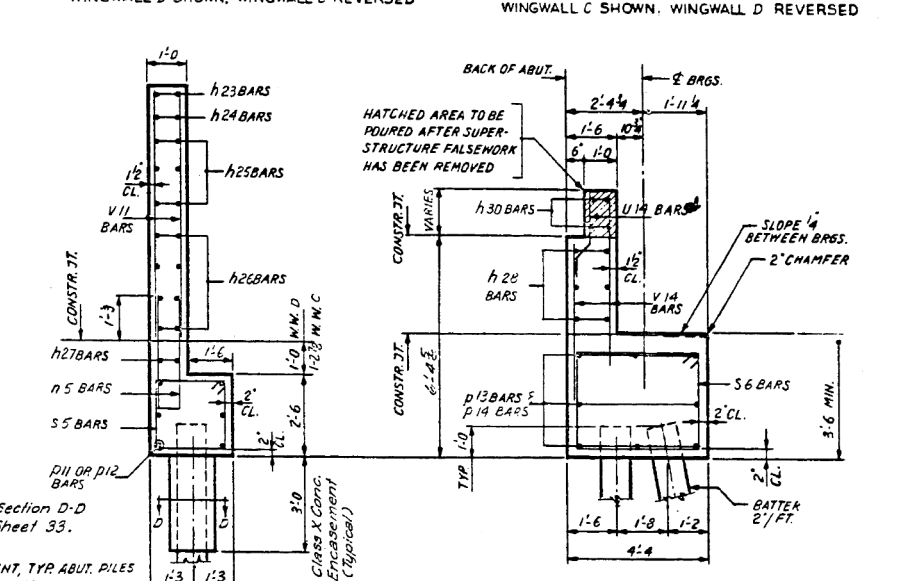
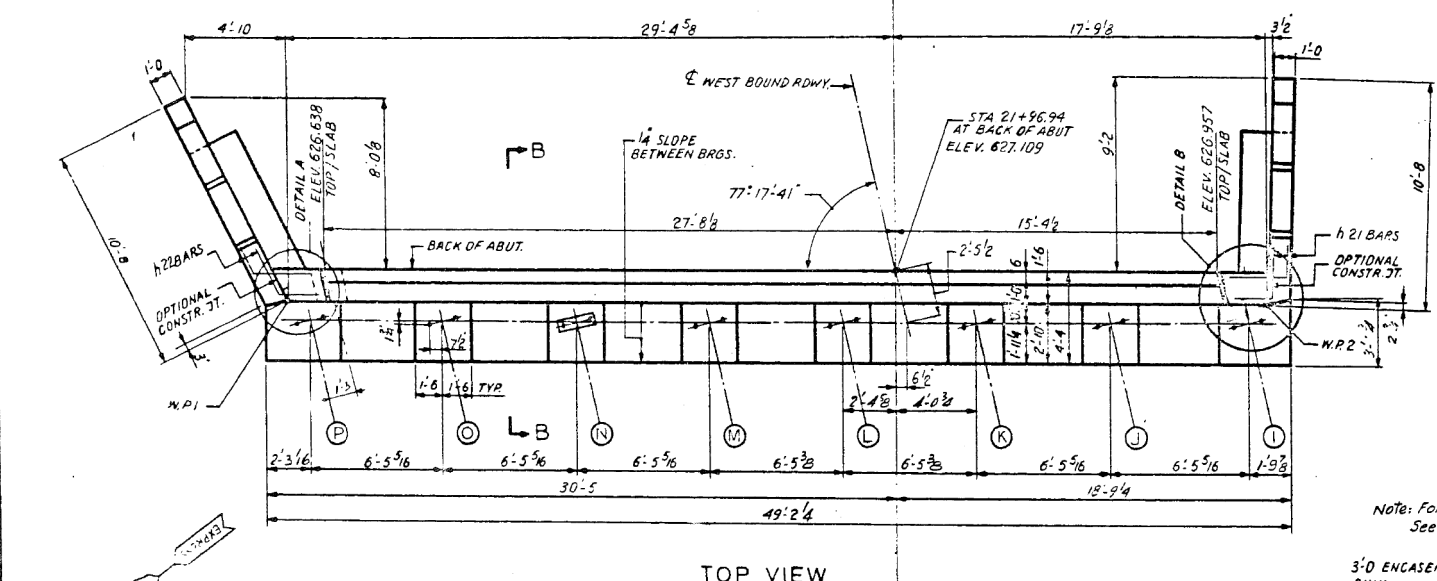
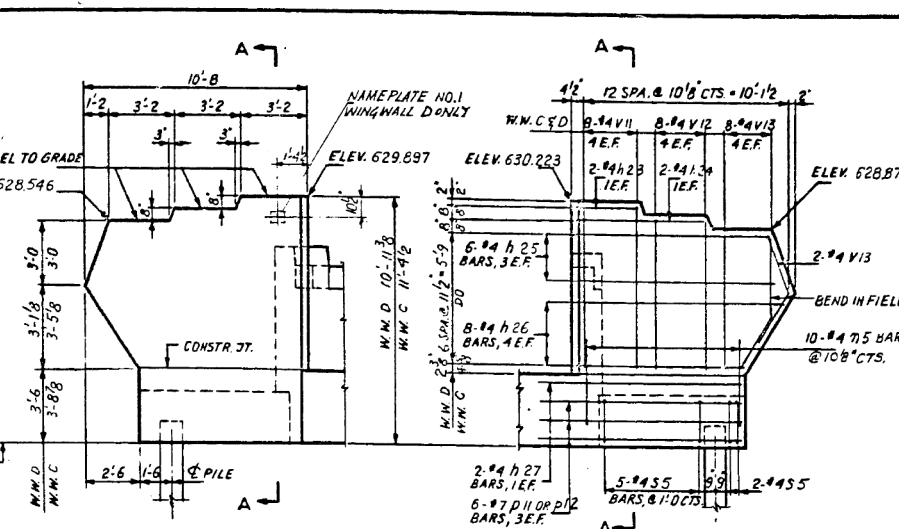
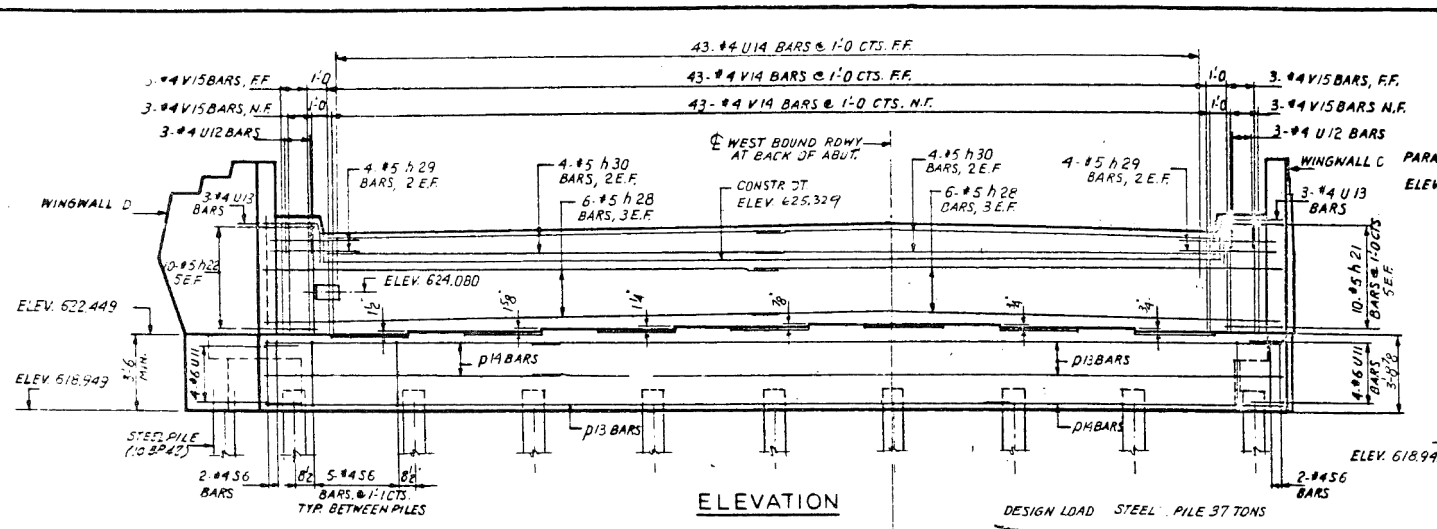
4" SLOPEWALL QUANTITIES			
EAST ABUTMENT	4" SLOPEWALL	SQ. YD.	910
	CLASS A EXCAVATION	CU. YD.	12
WEST ABUTMENT	4" SLOPEWALL	SQ. YD.	943
	CLASS A EXCAVATION	CU. YD.	27

REVISIONS	
NAME	DATE
DESIGNED ST.	
REVIEWED CWW	

ILLINOIS DIVISION OF HIGHWAYS  
 SOUTHWEST EXPRESSWAY  
 F.A. RT. 133  
 LAWDALE AVE. STRUCTURE OVER  
 S.M. & O. RAILROAD  
 SECTION 0707-617VB  
 LIMIT OF EMBANKMENTS  
 SCALE: HORIZ. 1" = 20'  
 VERT. DATE 8-21-63  
 DRAWN BY F.C.  
 CHECKED BY

F.A. R.T.	SECTION	EXPRESSWAY	TOTAL SHEETS	SHEET NO.
133	0707-617VB	SOUTHWEST	56	34
STA.		TO STA.		
10+00		10+00		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				

BILL OF REINFORCEMENT				
BAR NO.	SIZE	LENGTH	SHAPE	
h21	10	5	4'-3"	
h22	10	5	4'-6"	
h23	4	4	2'-8"	
h24	4	4	5'-10"	
h25	12	4	9'-0"	
h26	16	4	10'-2"	
h27	4	4	8'-0"	
h28	12	5	25'-3"	
h29	8	5	3'-0"	
h30	8	5	22'-0"	
p11	6	7	8'-9"	
p12	6	7	8'-3"	
p13	8	7	36'-0"	
p14	8	7	14'-5"	
u11	8	6	8'-11"	
u12	6	4	4'-3"	
u13	6	4	5'-0"	
u14	43	4	3'-2"	
s5	14	4	9'-5"	
s6	44	4	15'-1"	
v11	16	4	7'-3"	
v12	16	4	6'-7"	
v13	27	4	5'-11"	
v14	86	4	5'-3"	
v15	12	4	6'-0"	
EAST ABUTMENT W.B.		QUANTITIES		
CLASS X CONCRETE	CU. YDS.	47.8		
REINFORCING BARS	LBS.	3,330		
STEEL PILES	LIN. FT.	420		
TEST PILE STEEL	EACH	1		



BEARING SEAT ELEVATIONS AT BEAMS			
I	622.767	M	622.617
J	622.829	N	622.708
K	622.892	O	622.571
L	622.892	P	622.449

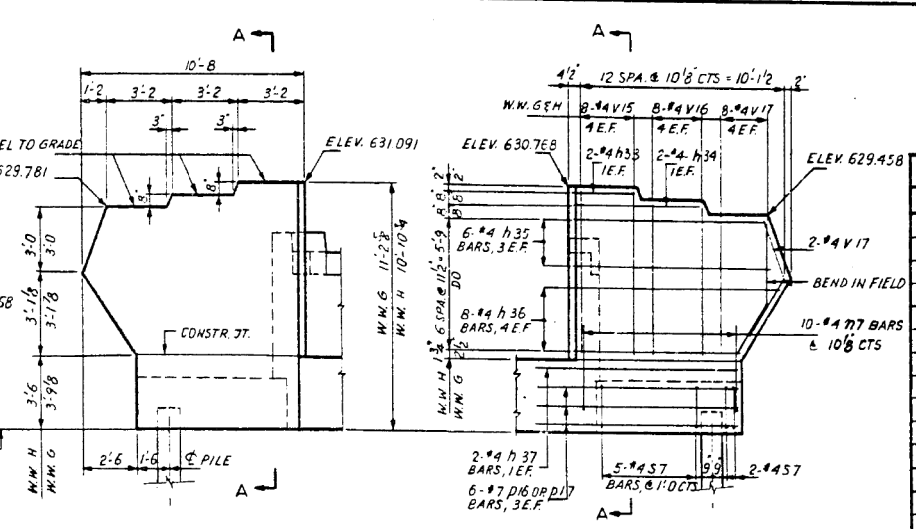
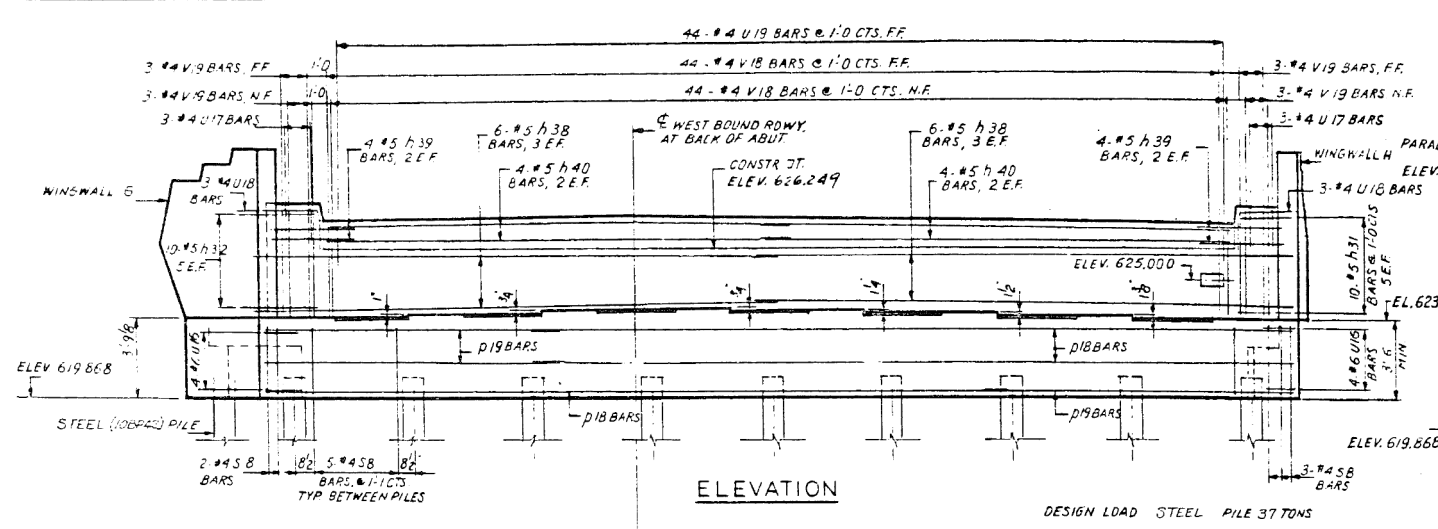
FOR INFORMATION ONLY

REVISIONS	
NAME	DATE
DESIGNED ST.	
REVIEWED C.W.	

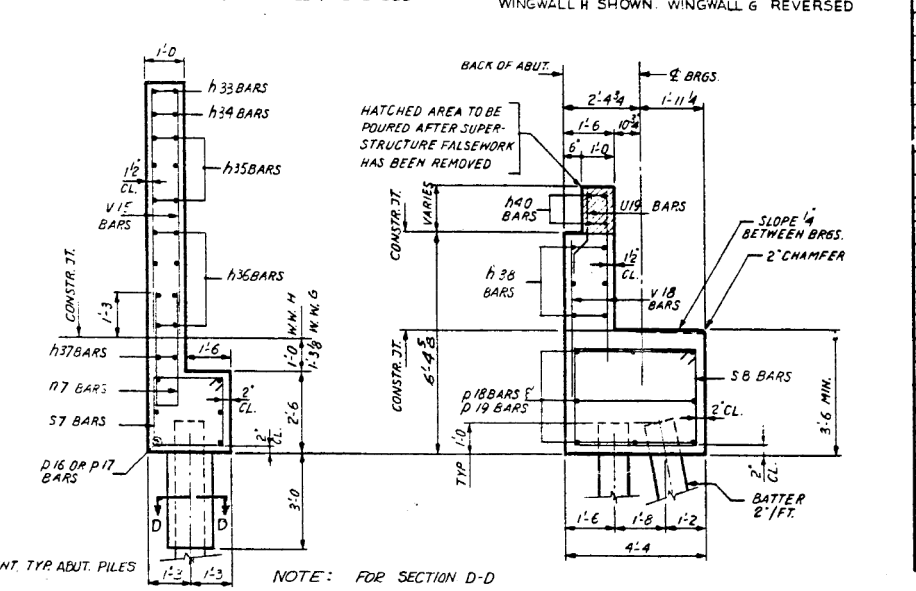
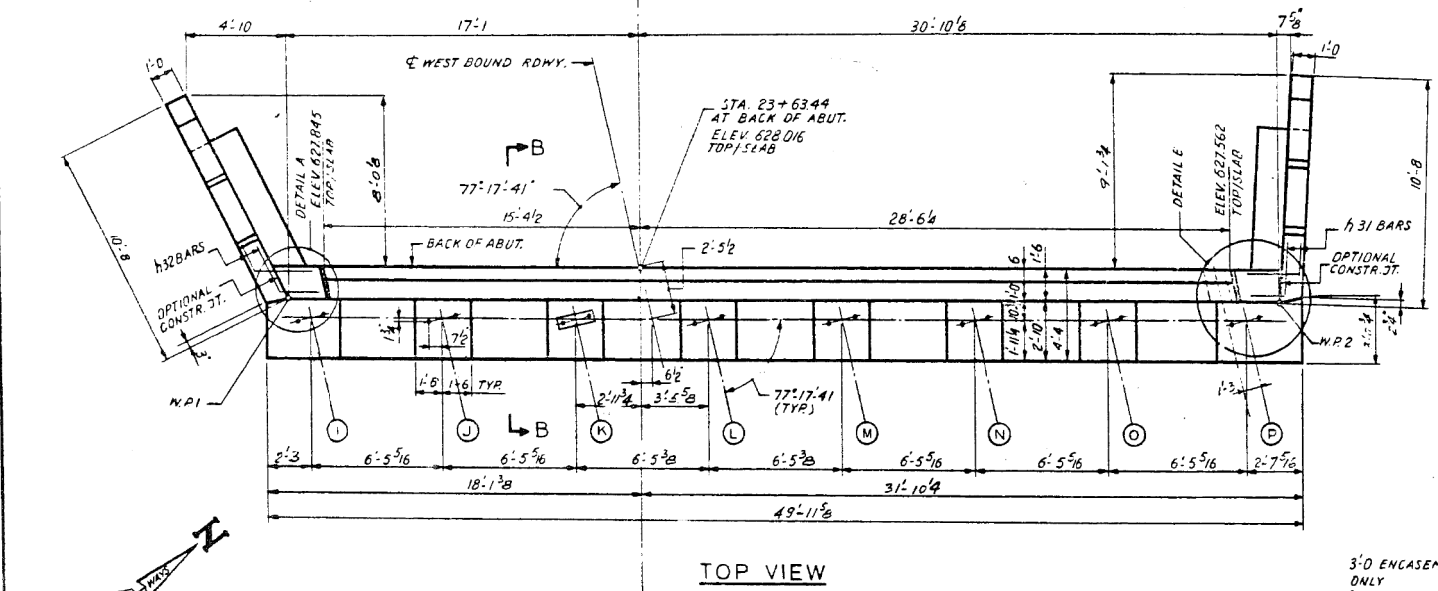
ILLINOIS DIVISION OF HIGHWAYS  
SOUTHWEST EXPRESSWAY  
F.A. RT. 133  
LAWDALE AVE. STRUCTURE OVER  
G. M. & O. RAILROAD  
SECTION 0707-617VB  
EAST ABUTMENT WEST BOUND  
SCALE: HORIZ. 4"=1'-0"  
DATE: 8-21-23 EXCEPT AS NOTED  
DRAWN BY J.W.  
CHECKED BY L.D.B.

Rev 11-19-62: Conc. piles changed to Steel piles. Lin ft. changed from 500 to 420.

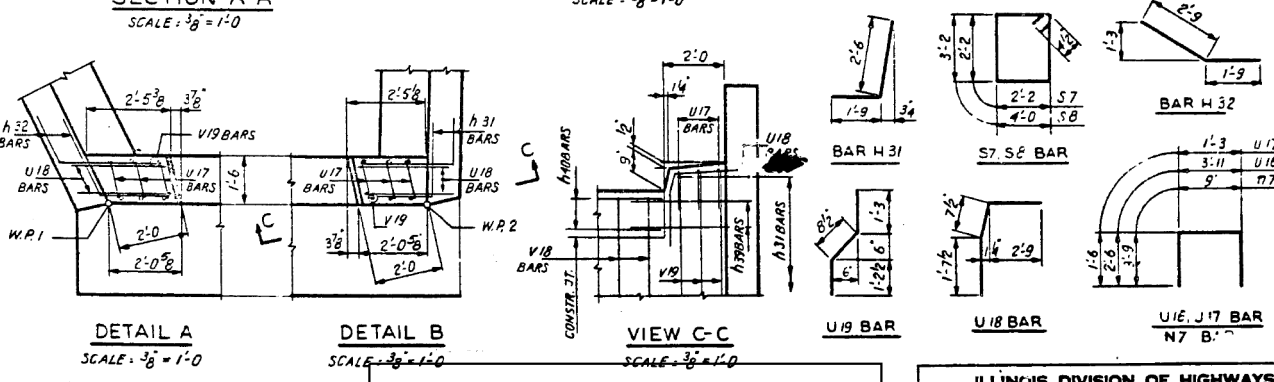
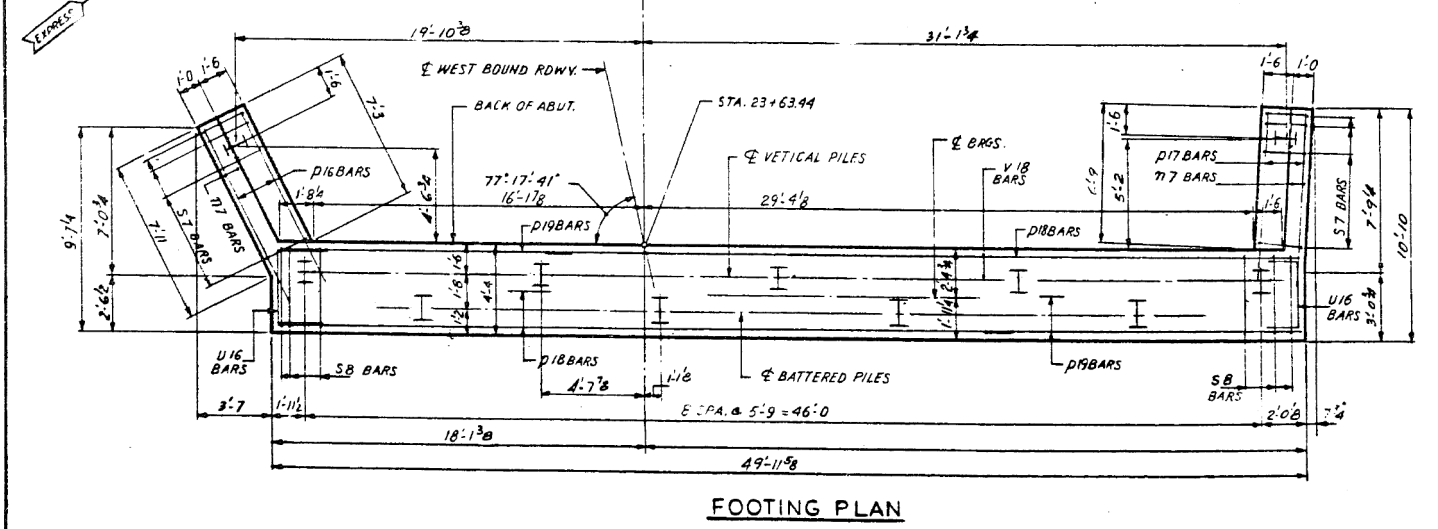
SECTION	EXPRESSWAYS	TOTAL SHEETS	SHEET NO.
133	0707-617VB	56	36
STA. TO STA.		FED. ROAD DIST. NO. 1	
SOUTHWEST		ILLINOIS	



BAR NO.	SIZE	LENGTH	SHAPE
h 31	10	5	4'-3"
h 32	10	5	4'-6"
h 33	4	1	2'-8"
h 34	4	4	5'-10"
h 35	12	4	9'-0"
h 36	16	4	10'-2"
h 37	4	4	8'-0"
h 38	12	5	2'-7"
h 39	8	5	3'-0"
h 40	8	5	22'-5"
n 7	20	4	8'-3"
p 16	6	7	8'-9"
p 17	6	7	8'-3"
p 18	8	7	36'-0"
p 19	8	7	15'-2"
u 16	8	6	8'-11"
u 17	6	4	4'-3"
u 18	6	4	5'-0"
u 19	44	4	3'-2"
s 7	14	4	9'-5"
s 8	45	4	15'-1"
v 15	16	4	7'-3"
v 16	16	4	6'-7"
v 17	20	4	5'-11"
v 18	88	4	5'-3"
v 19	12	4	6'-0"



WEST ABUTMENT W.B.	QUANTITIES
CLASS X CONCRETE	CU 48.5
REINFORCING BARS	LB 70
STEEL (10B#42) PILES	LIN FT. 462



BEARING SEAT ELEVATIONS AT BEAMS			
I	623.635	M	623.709
J	623.714	N	623.607
K	623.773	O	623.478
L	623.773	P	623.368

FOR INFORMATION ONLY

REVISIONS	
NAME	DATE
DESIGNED ST.	
REVIEWED C.W.W.	

ILLINOIS DIVISION OF HIGHWAYS  
SOUTHWEST EXPRESSWAY  
F.A. RT. 133  
LAWDALE AVE. STRUCTURE OVER  
G.M. & O. RAILROAD  
SECTION 0707-617VB  
WEST ABUTMENT WEST BOUND  
SCALE: HORIZ. 4"=1'-0" DRAWN BY J.W.  
VERT. EXCEPT AS NOTED DATE 8-27-63 CHECKED BY L.D.S.

Revised piles from concrete to steel H (10B#42), quantity changed from 350 lin. ft. (concrete) to 462 lin. ft. (steel) 11-19-63 L.D.W.



USER NAME = Lin20.Nick  
FILE NAME = #FILE#REV#  
PLOT SCALE =  
PLOT DATE = 6/18/2015

DESIGNED - BDC  
CHECKED - RGB  
DRAWN - RMH  
CHECKED - LMS

REVISED  
REVISED  
REVISED  
REVISED

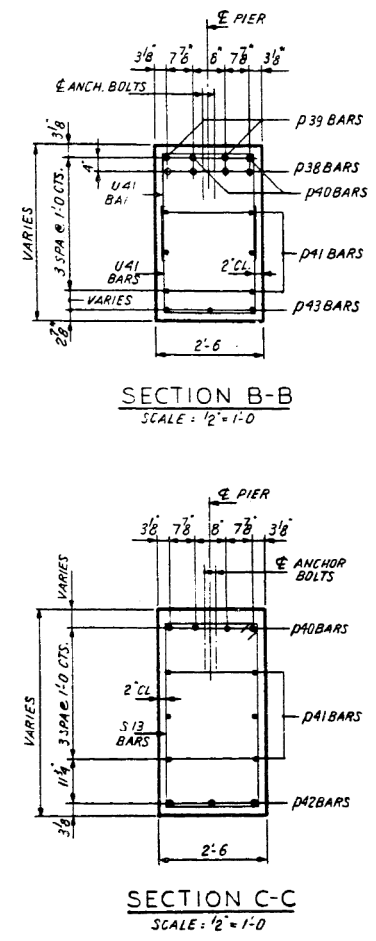
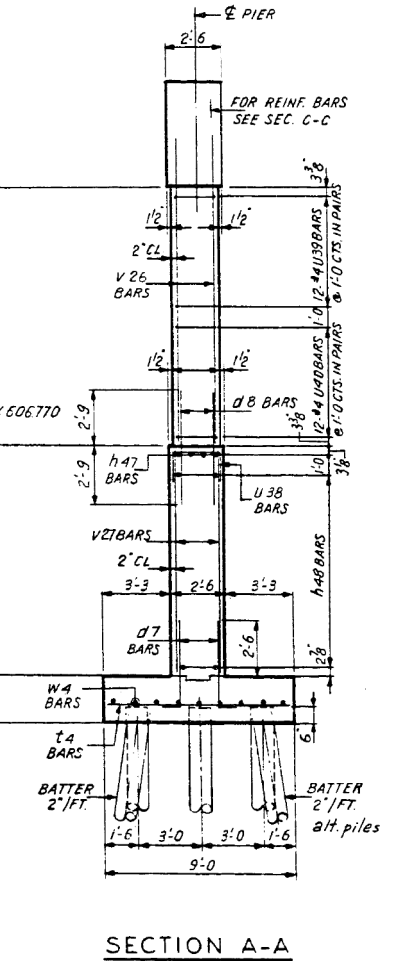
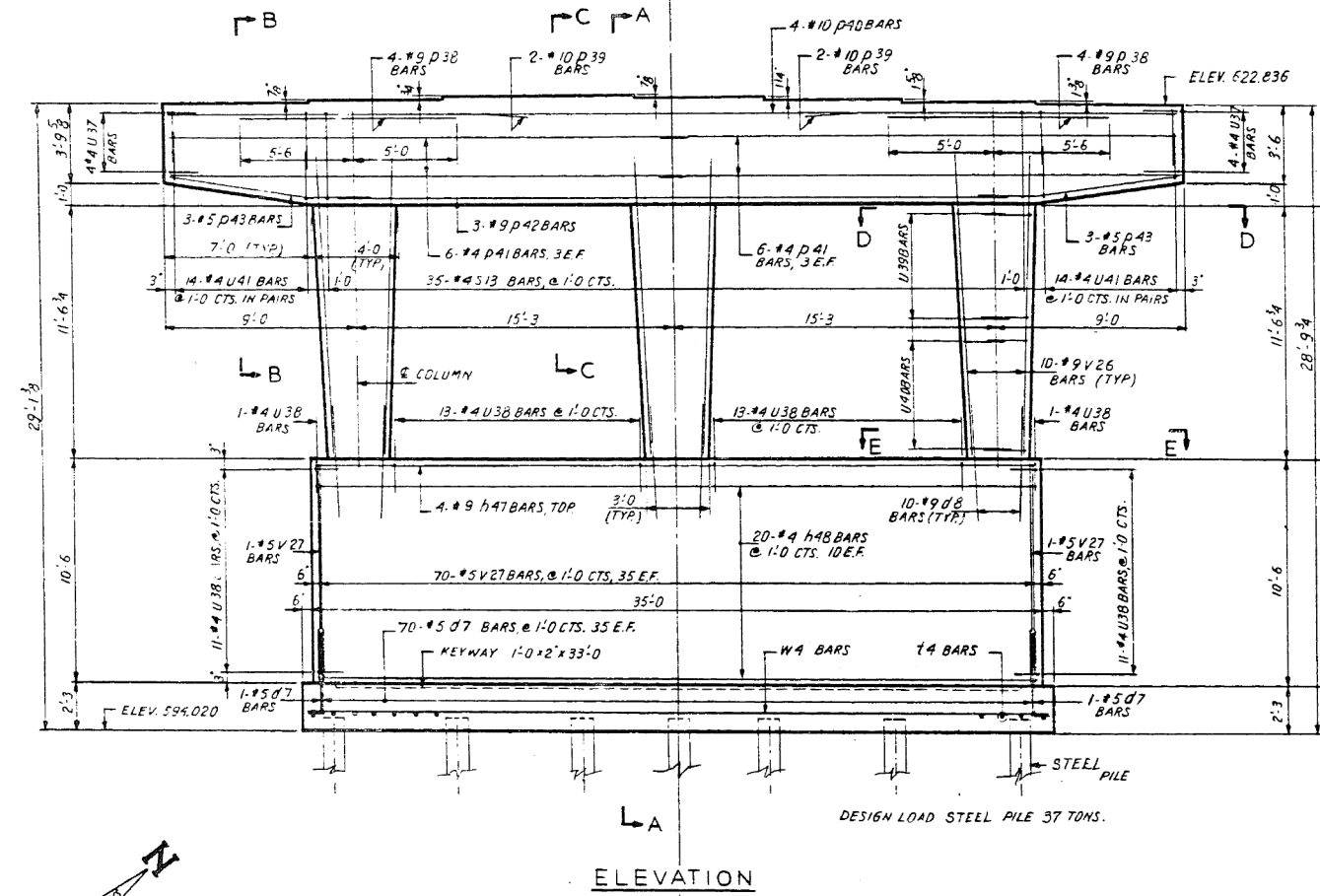
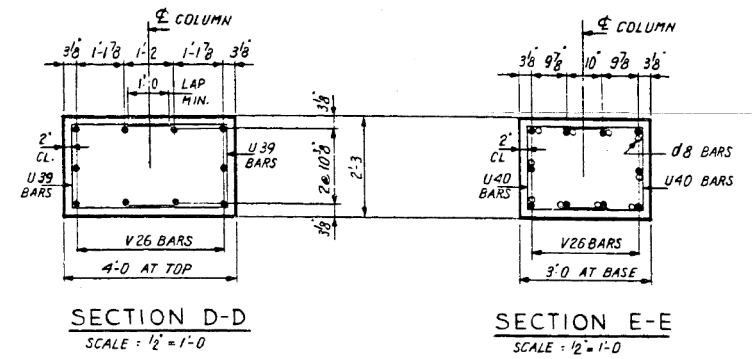
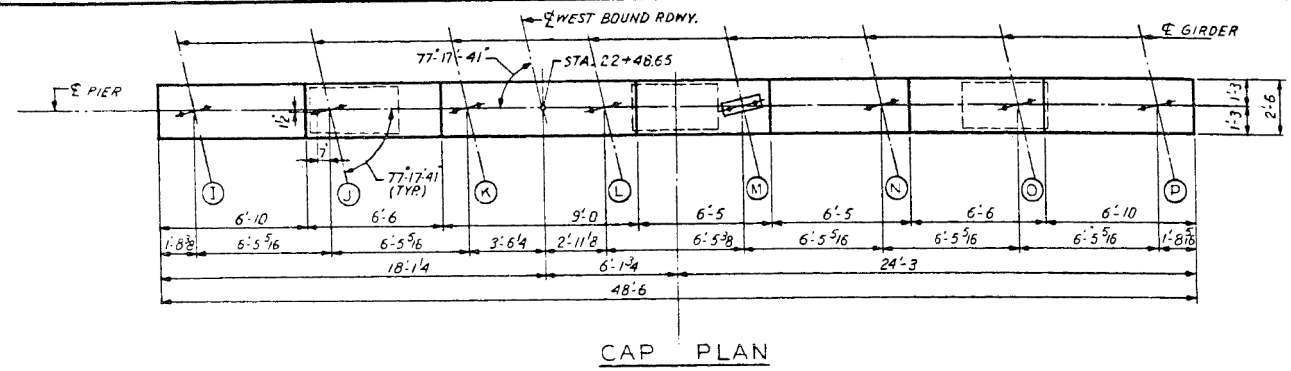
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING PLAN INFORMATION (4 OF 14)  
STRUCTURE NO. 016-0489  
SHEET NO. SGX4 OF SGX14 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
373	2013-037B-R	COOK	787	710
CONTRACT NO. 60W75			ILLINOIS FED. AID PROJECT	



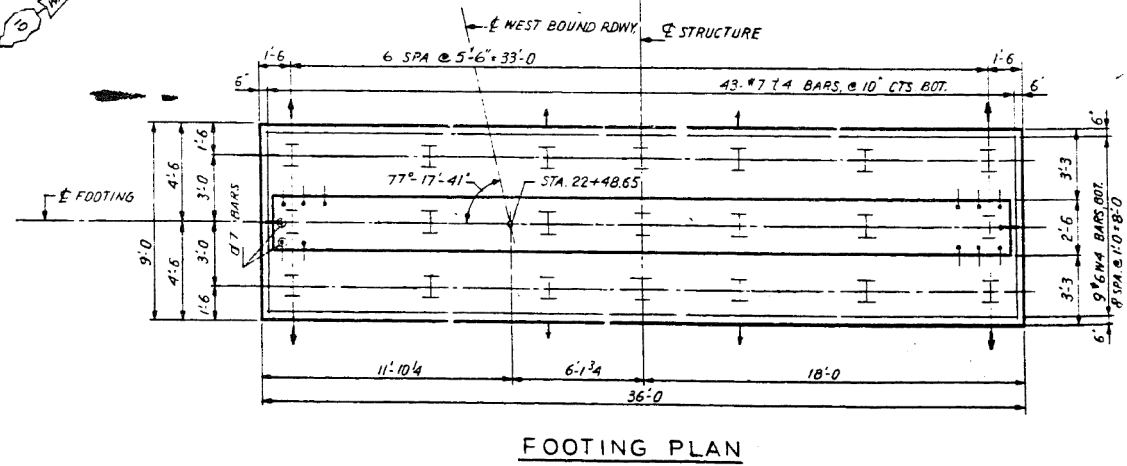
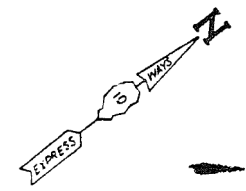
F.A. R.T.	SECTION	EXPRESSWAYS	TOTAL SHEETS	SHEET NO.
133	0707-617VB	SOUTHWEST	54	38
STA.	TO STA.			
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



BILL OF REINFORCEMENT				
BAR NO.	SIZE	LENGTH	SHAPE	
d7	72	5	5'-0	—
d8	30	9	5'-6	—
h47	4	9	34'-8	—
n48	20	4	34'-8	—
p38	8	9	10'-6	—
p39	4	10	17'-9	—
p40	4	10	32'-7	—
p41	12	4	24'-7	—
p42	3	9	32'-6	—
p43	6	5	9'-4	—
s13	35	4	13'-5	—
t4	43	7	8'-8	—
u37	8	4	4'-1	—
u38	50	4	4'-2	—
u39	36	4	6'-7	—
u40	36	4	6'-1	—
u41	28	4	7'-4	—
v26	30	9	14'-4	—
v27	72	5	10'-2	—
w4	9	6	35'-8	—

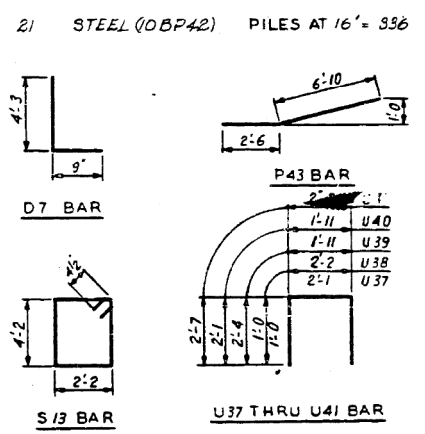
  

PIER NO. I.W.B.	QUANTITIES
CLASS X CONCRETE	CUYDS. 92.0
REINFORCEMENT BARS	LBS. 7,900
STEEL (10BP42) PILES	LIN. FT. 336



BEARING SEAT ELEVATIONS AT BEAMS			
I	623.140	M	623.193
J	623.202	N	623.086
K	623.265	O	622.951
L	623.265	P	622.836

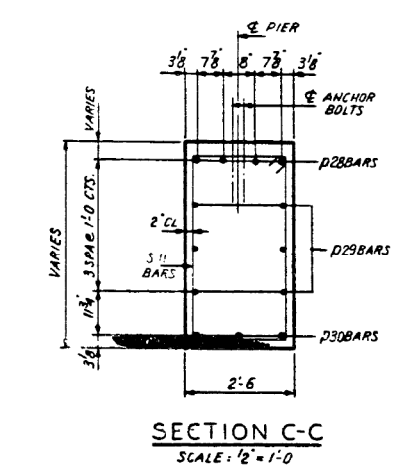
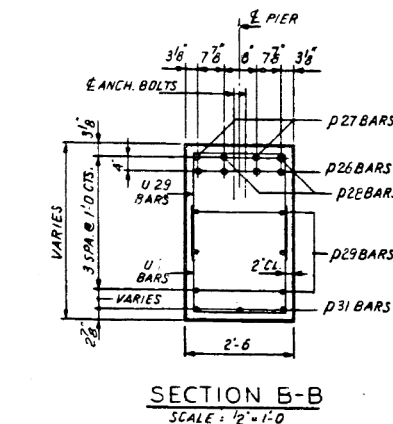
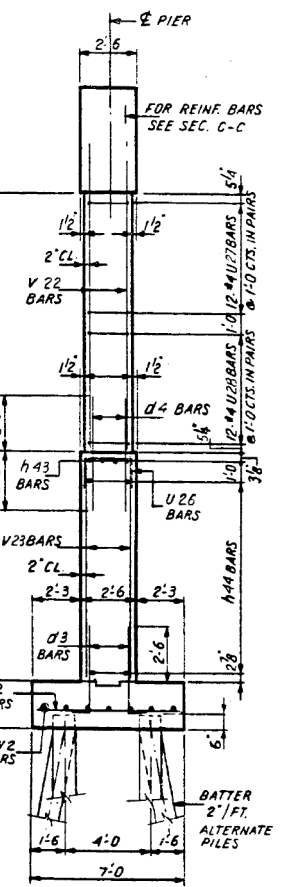
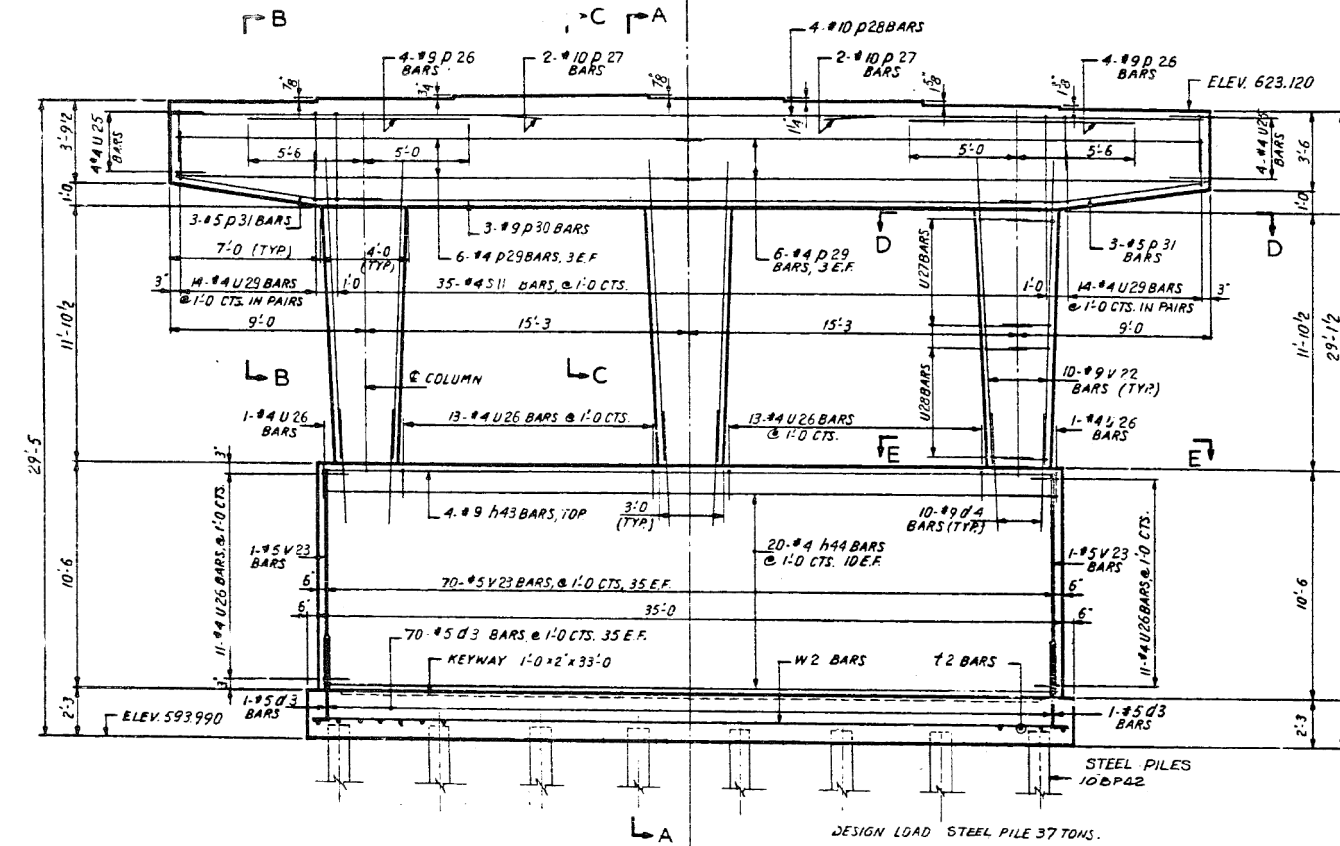
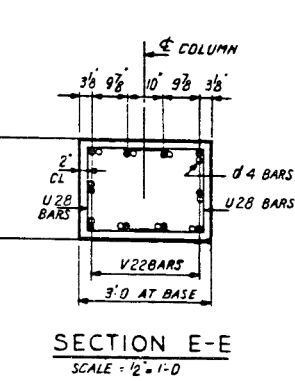
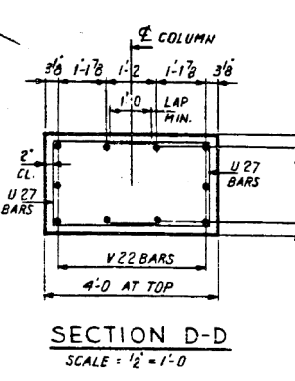
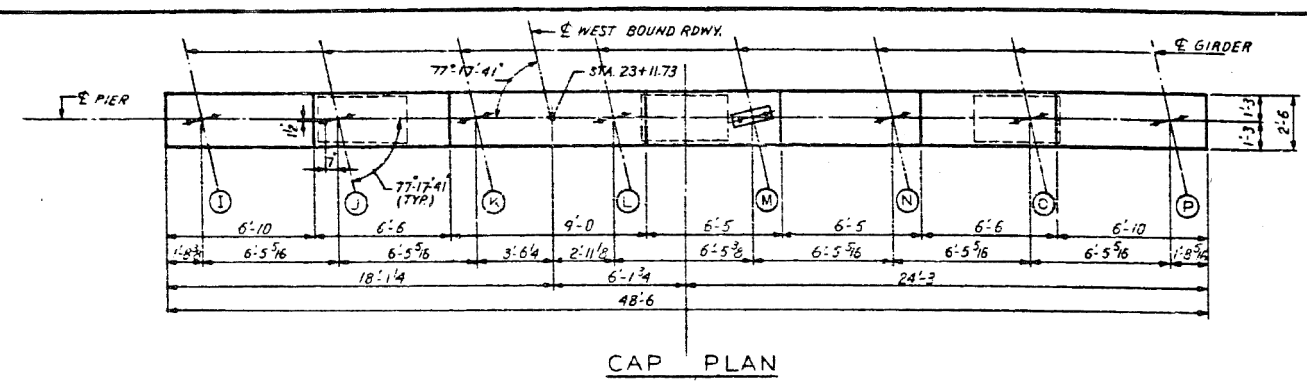
FOR INFORMATION ONLY



**ILLINOIS DIVISION OF HIGHWAYS**  
**SOUTHWEST EXPRESSWAY**  
 F.A. RT. 133  
 LAWNDALE AVE. STRUCTURE OVER  
 G. M. & O. RAILROAD  
 SECTION 0707-617VB  
 PIER NO.1 WEST BOUND  
 SCALE: HORIZ. 1/4" = 1'-0" EXCEPT VERT. AS NOTED  
 DATE 6-21-63 DRAWN BY J.W. CHECKED BY L.O.B.

REVISIONS	
NAME	DATE
DESIGNED PK-ST	
REVIEWED CWV	

F.A. RTE.	SECTION	EXPRESSWAY	TOTAL SHEETS	SHEET NO.
133	0707-617VB	SOUTHWEST	64	40
STA.	TO STA.			
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



BILL OF REINFORCEMENT				
BAR NO.	SIZE	LENGTH	SHAPE	
d3	72	5	5'-0"	
d4	30	9	3'-6"	
h43	4	9	34'-8"	
h44	20	4	34'-8"	
p26	8	9	10'-6"	
p27	4	10	17'-9"	
p28	4	10	32'-7"	
p29	12	4	24'-7"	
p30	3	9	32'-6"	
p31	6	5	9'-4"	
s11	35	4	13'-5"	
t2	36	6	6'-8"	
u25	8	4	4'-1"	
u26	50	4	4'-2"	
u27	36	4	6'-7"	
u28	36	4	6'-1"	
u29	28	4	7'-4"	
v22	30	9	14'-8"	
v23	72	5	10'-2"	
w2	7	6	35'-8"	

PIER NO.2 W.B. QUANTITIES		
CLASS X CONCRETE	CU.YDS.	66.2
REINFORCEMENT BARS	LBS.	7,540
STEEL (10BP42) PILES	LIN.FT.	256

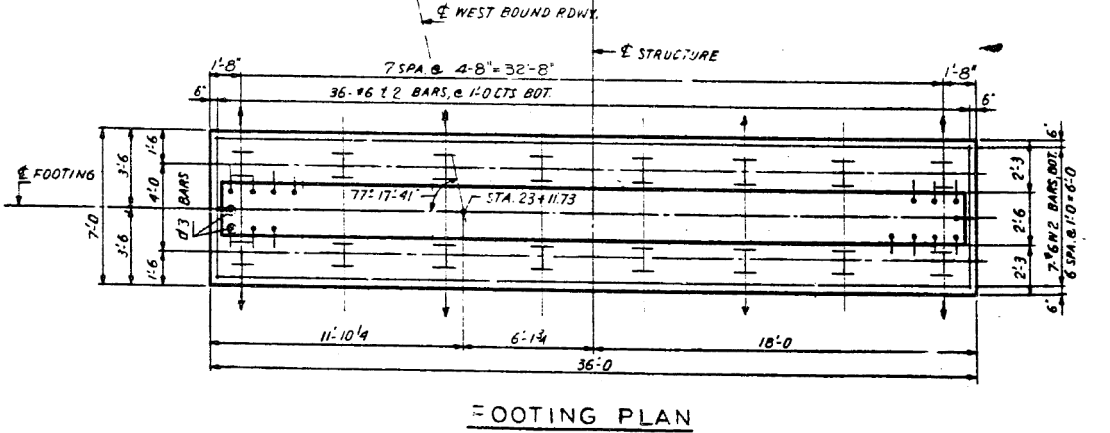
16 STEEL (10BP42) PILES AT 16'-256'

ELEVATION

SECTION A-A

SECTION C-C

FOR INFORMATION ONLY



FOOTING PLAN

BEARING SEAT ELEVATIONS AT BEAMS			
I	623.404	M	623.468
J	623.474	N	623.364
K	623.537	O	623.232
L	623.537	P	623.120

Revised piles from Cret. timb. to steel H(10BP42), quantity changed from 552 lin.ft. (timb) to 256 lin.ft. (steel) 11-20-63 L.D.W.

REVISIONS	
NAME	DATE

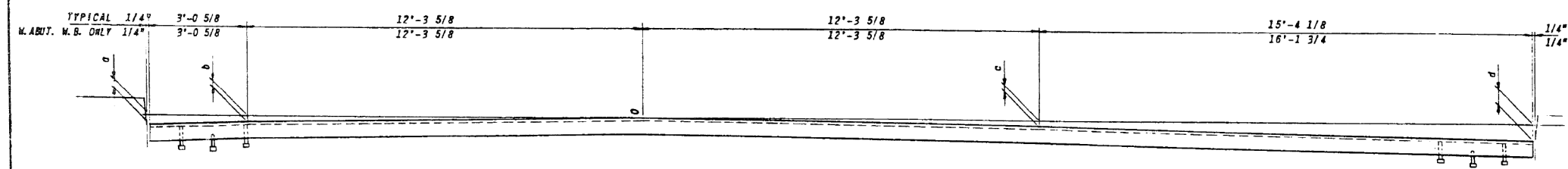
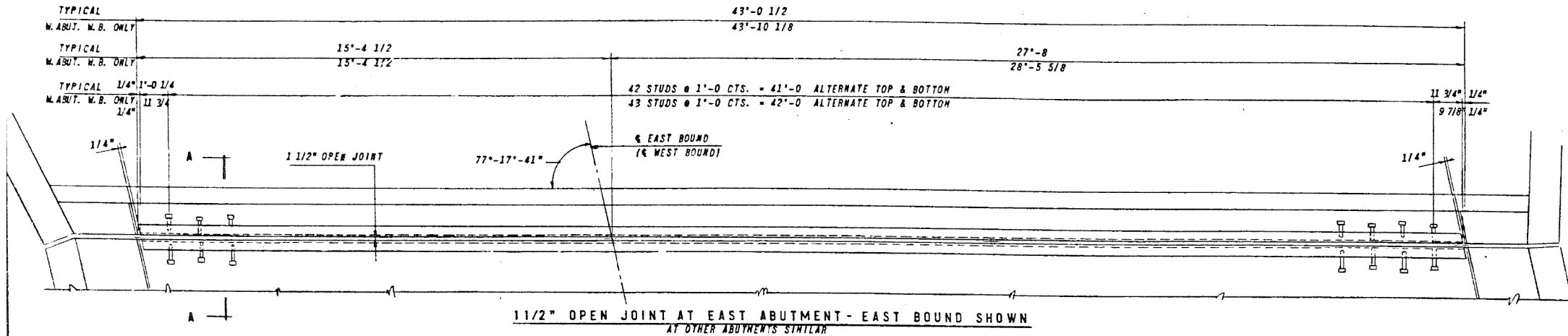
ILLINOIS DIVISION OF HIGHWAYS  
SOUTHWEST EXPRESSWAY

F.A. RT. 133  
LAWDALE AVE. STRUCTURE OVER  
G. M. & O. RAILROAD  
SECTION 0707-617VB  
PIER NO.2 WEST BOUND

SCALE: HORIZ. 4"=1'-0" EXCEPT DRAWN BY J.W.  
VERT. AS NOTED  
DATE 8-21-53 CHECKED BY L.D.B.



F.A. RT.	SECTION	EXPRESSWAY	TOTAL SHEETS	SHEET NO.
133	0707-617VB	SOUTHWEST	56	41
BYA.		TO STA.		
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT		



LOCATION	a	b	c	d
EAST ABUT. E.B.	2 1/2"	1 11/16"	1 3/16"	4 1/2"
WEST ABUT. E.B.	2 1/4"	1 1/2"	1 3/8"	4 7/8"
EAST ABUT. W.B.	1 13/16"	1 3/16"	1 11/16"	5 5/8"
WEST ABUT. W.B.	2 1/16"	1 3/8"	1 1/2"	5 7/16"

LOCATION	A	B	C	D	E	F	G	H
EAST ABUT.	-	-	-	-	5/8"	7/16"	5/16"	-
PIER NO. 1	-	-	-	-	5/8"	1/2"	3/8"	-
PIER NO. 2	-	-	-	-	11/16"	9/16"	1/2"	3/16"
WEST ABUT.	-	-	-	-	3/4"	5/8"	9/16"	5/16"

LOCATION	I	J	K	L	N	O	P
EAST ABUT.	1/8"	3/16"	1/8"	-	-	-	-
PIER NO. 1	-	3/16"	1/8"	-	-	-	-
PIER NO. 2	-	1/8"	-	-	-	-	-
WEST ABUT.	-	-	-	-	-	-	-

LOCATION	A	B	C	D	E	F	G	H
EAST ABUT.	3"	3"	3"	3"	3 5/8"	3 1/2"	3 3/8"	3"
PIER NO. 1	2 3/8"	2 3/8"	2 3/8"	2 3/8"	3"	2 7/8"	2 3/4"	2 3/8"
PIER NO. 2	3 3/8"	3 3/8"	3 3/8"	3 3/8"	4"	4"	3 7/8"	3 5/8"
WEST ABUT.	3"	3"	3"	3"	3 3/4"	3 5/8"	3 5/8"	3 3/8"

LOCATION	I	J	K	L	N	O	P
EAST ABUT.	3 1/8"	3 1/4"	3 1/8"	3"	3"	3"	3"
PIER NO. 1	2 3/8"	2 5/8"	2 1/2"	2 3/8"	2 3/8"	2 3/8"	2 3/8"
PIER NO. 2	3 3/8"	3 1/2"	3 3/8"	3 3/8"	3 3/8"	3 3/8"	3 3/8"
WEST ABUT.	3"	3"	3"	3"	3"	3"	3"

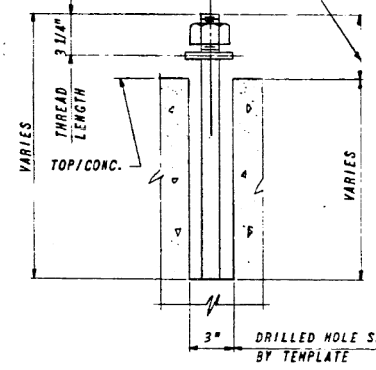
**BLOCKING DIAGRAM**

7/16" HOLES AT 12" CTS. FOR 3/8" BOLTS. ALL BOLTS SHALL BE BURNED, SAVED OR CLIPPED OFF FLUSH WITH BACK OF ANGLES AFTER FORMS ARE REMOVED

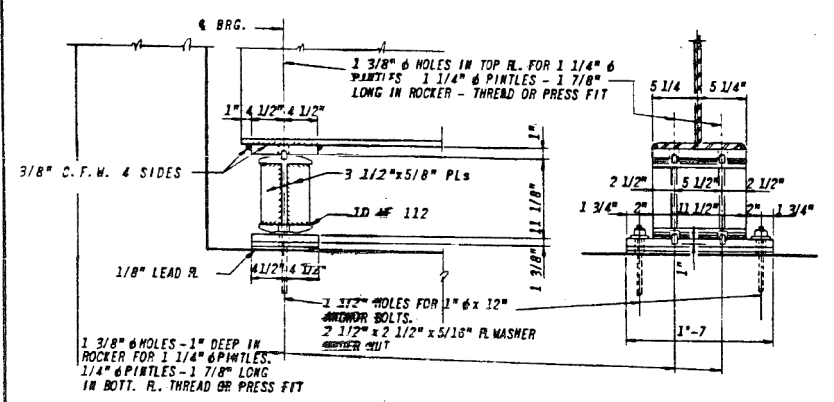
OPEN JOINT AT 50' ± 1 1/2" 7/16" VENT HOLES @ 1'-0 CTS.

3/4" x 8" x 2" CR 1020 STL GRANULAR OR SOLID FLUX FILLED STUDS AUTOMATICALLY END WELDED (ALTERNATE AT 1'-0 CTS.

FOR PROJECTION SEE TABLE ON THIS SHEET

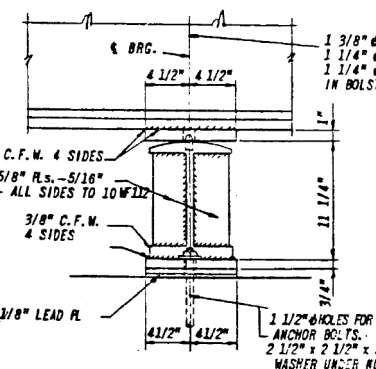


ANCHOR BOLT

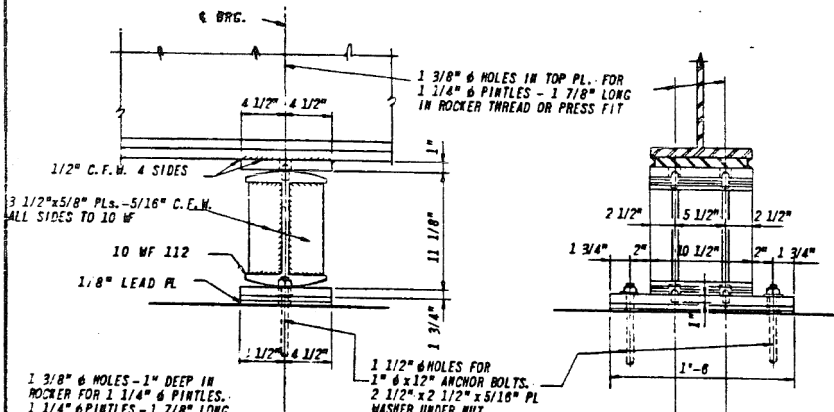


EXPANSION BEARING DETAIL AT ABUTMENTS 32 - REQ'D.

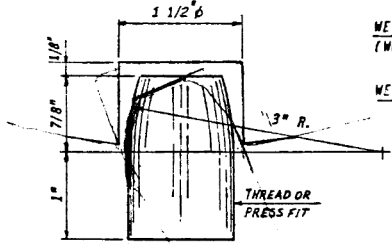
**SECTION A-A**



FIXED BEARING DETAIL AT PIER NO. 1 16 - REQ'D.



EXPANSION BEARING DETAIL AT PIER NO. 2 18 - REQ'D.



PINTLE DETAIL

WEIGHT OF BEARING DEVICES (Weight of Shim Plates Included) 15,750 LBS.

WEIGHT OF 1 1/2" OPEN JOINT DEVICES 4,760 LBS.

FOR INFORMATION ONLY

**ILLINOIS DIVISION OF HIGHWAYS**  
**SOUTHWEST EXPRESSWAY**

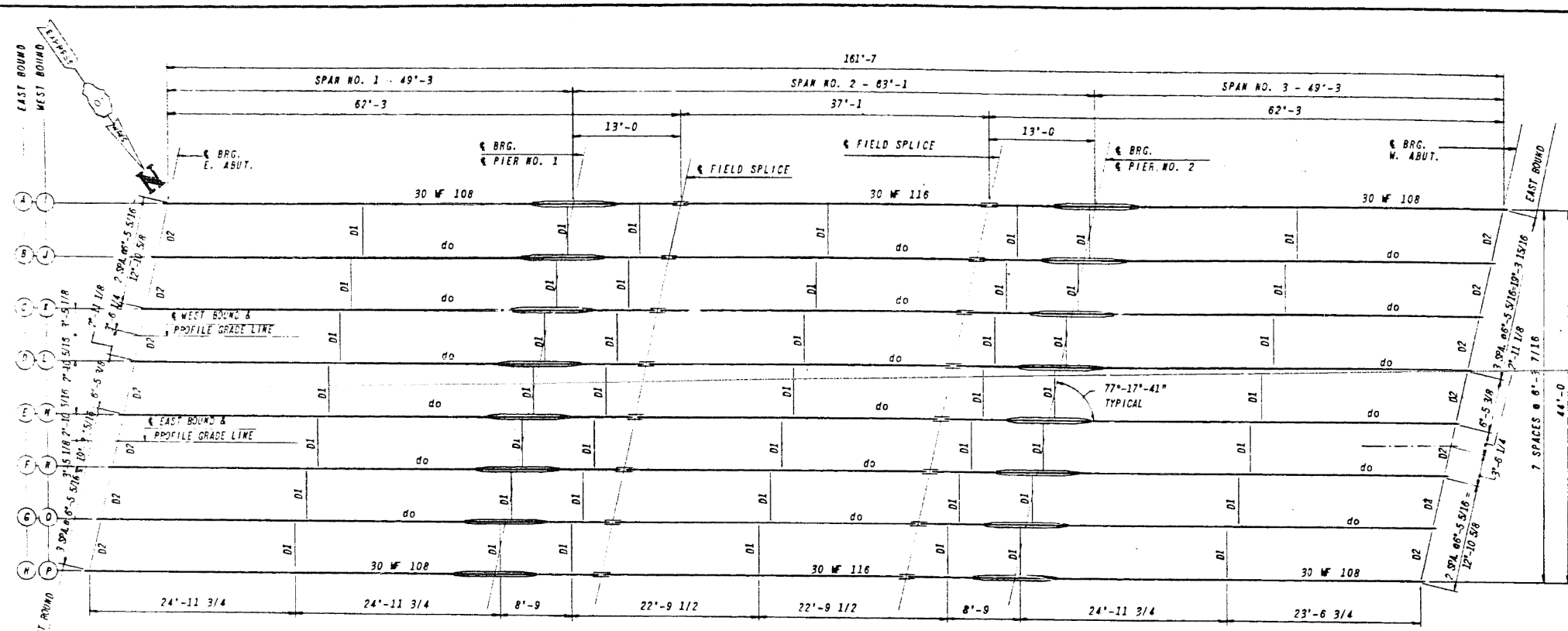
F.A. RT. 133  
LAWDALE AVE. STRUCTURE OVER  
G.M. & O. RAILROAD  
SECTION 0707-617VB  
BEARING DEVICES

NAME	DATE
DESIGNED ST.PX.	
REVIEWED C.W.V.	

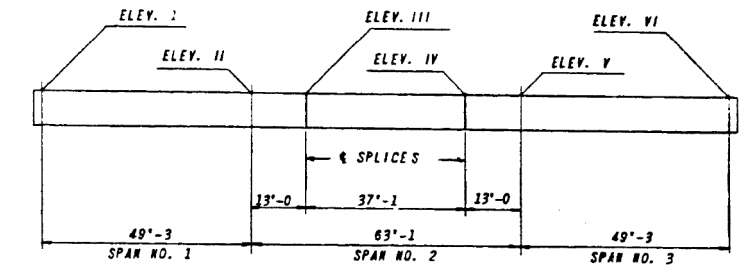
SCALE: HORIZ. DATE: 6-21-63  
DRAWN BY J.S.  
CHECKED BY L.D.B.

47 10

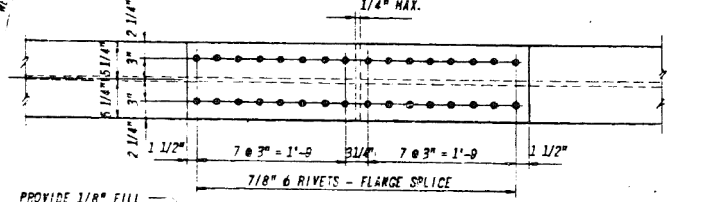
F.A. RTE.	SECTION	EXPRESSWAYS	TOTAL SHEETS	SHEET NO.
133	0707-617VB	SOUTHWEST	56	42
STA.		TO STA.		
FED. ROAD DIST. NO. 7 ALLIANCE FED. AID PROJECT				



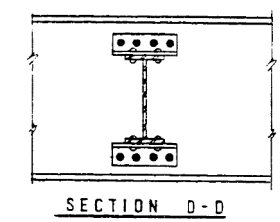
ELEVATION TOP OF STEEL (FLANGE) 30 WF 108						
POINT	I	II	III	IV	V	VI
STRINGER A	626.304	626.629	626.690	626.865	626.926	627.065
" B	626.399	626.727	626.789	626.965	627.027	627.166
" C	626.514	626.844	626.906	627.085	627.147	627.291
" D	626.600	626.933	626.998	627.176	627.239	627.385
" E	626.652	626.987	627.051	627.233	627.297	627.445
" F	626.636	626.973	627.037	627.221	627.285	627.436
" G	626.562	626.902	626.967	627.152	627.217	627.370
" H	626.468	626.810	626.878	627.063	627.129	627.284
" I	626.395	626.751	626.820	627.018	627.087	627.256
" J	626.467	626.825	626.895	627.084	627.154	627.335
" K	626.518	626.879	626.949	627.150	627.220	627.394
" L	626.512	626.875	626.946	627.149	627.220	627.396
" M	626.438	626.803	626.875	627.079	627.151	627.329
" N	626.329	626.696	626.768	626.975	627.047	627.228
" O	626.191	626.561	626.634	626.842	626.915	627.098
STRINGER P	626.070	626.446	626.520	626.729	626.803	626.988



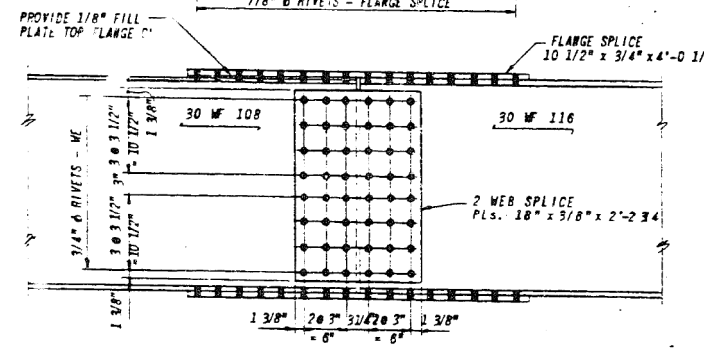
NOTE: ELEVATIONS FOR FABRICATION USE ONLY, DOES NOT INCLUDE DEFLECTIONS.



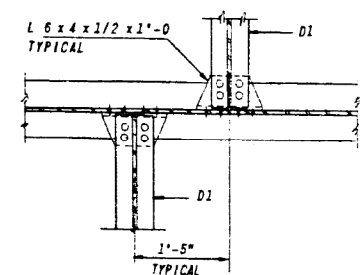
FRAMING PLAN



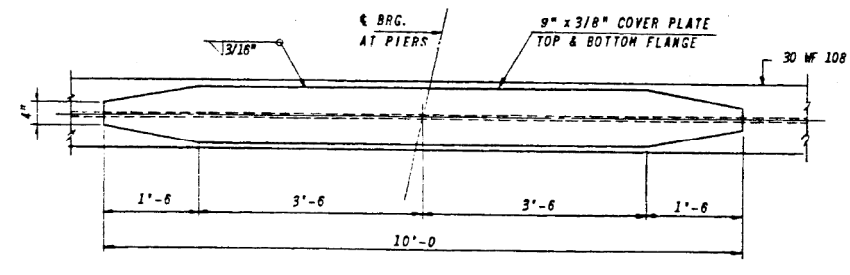
SECTION D-D



BEAM SPLICE DETAIL

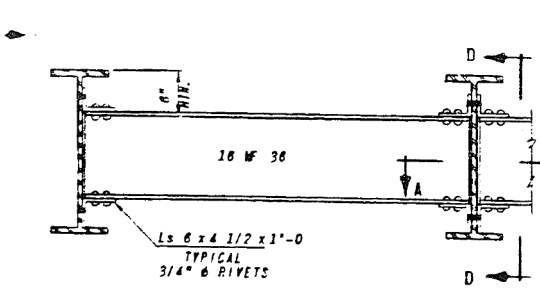


SECTION A-A

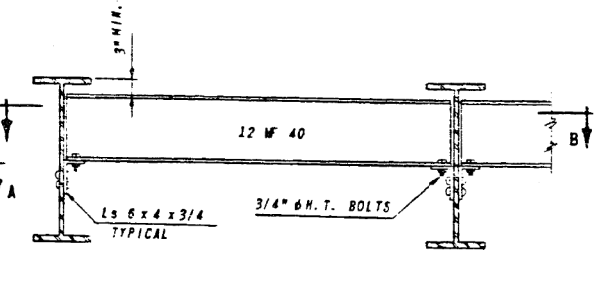


COVER PLATE DETAIL  
64 REQUIRED - 2 BRIDGES

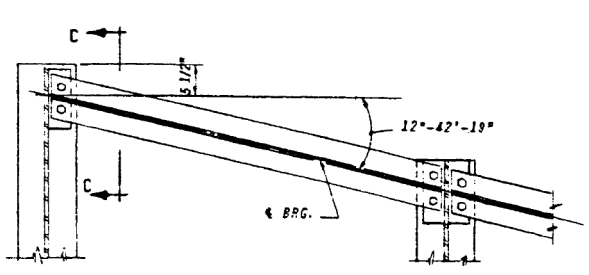
WEIGHT OF FRAMING STEEL . . . . .	347,910 LBS.
WEIGHT OF 1 1/2" OPEN JOINT DEVICES . . . . .	4,760 LBS.
WEIGHT OF BEARING DEVICES . . . . .	15,750 LBS.
FURNISHING AND ERECTING STRUCTURAL STEEL . . . . .	367,820 LBS.



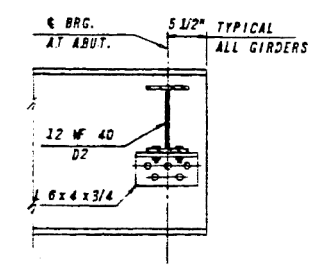
DIAPHRAGM D1  
98 REQUIRED - 2 BRIDGES



DIAPHRAGM D2  
28 REQUIRED - 2 BRIDGES



SECTION B-B



SECTION C-C

FOR INFORMATION ONLY

REVISIONS		ILLINOIS DIVISION OF HIGHWAYS	
NAME	DATE	SOUTHWEST EXPRESSWAY	
		F.A. RT. 133	
		LAWDALE AVE. STRUCTURE OVER	
		G.M. & O. RAILROAD	
		SECTION 0707-617VB	
		FRAMING PLAN & STRUCT. STEEL DETAILS	
DESIGNED ST. BY		SCALE: HORIZ.	DRAWN BY J.S.
REVIEWED C.W.W.		VERT. DATE 8-27-63	CHECKED BY L.D.B.



USER NAME = Lin20\_Nick  
FILE NAME = #FILE#REV#  
PLOT SCALE =  
PLOT DATE = 6/18/2015

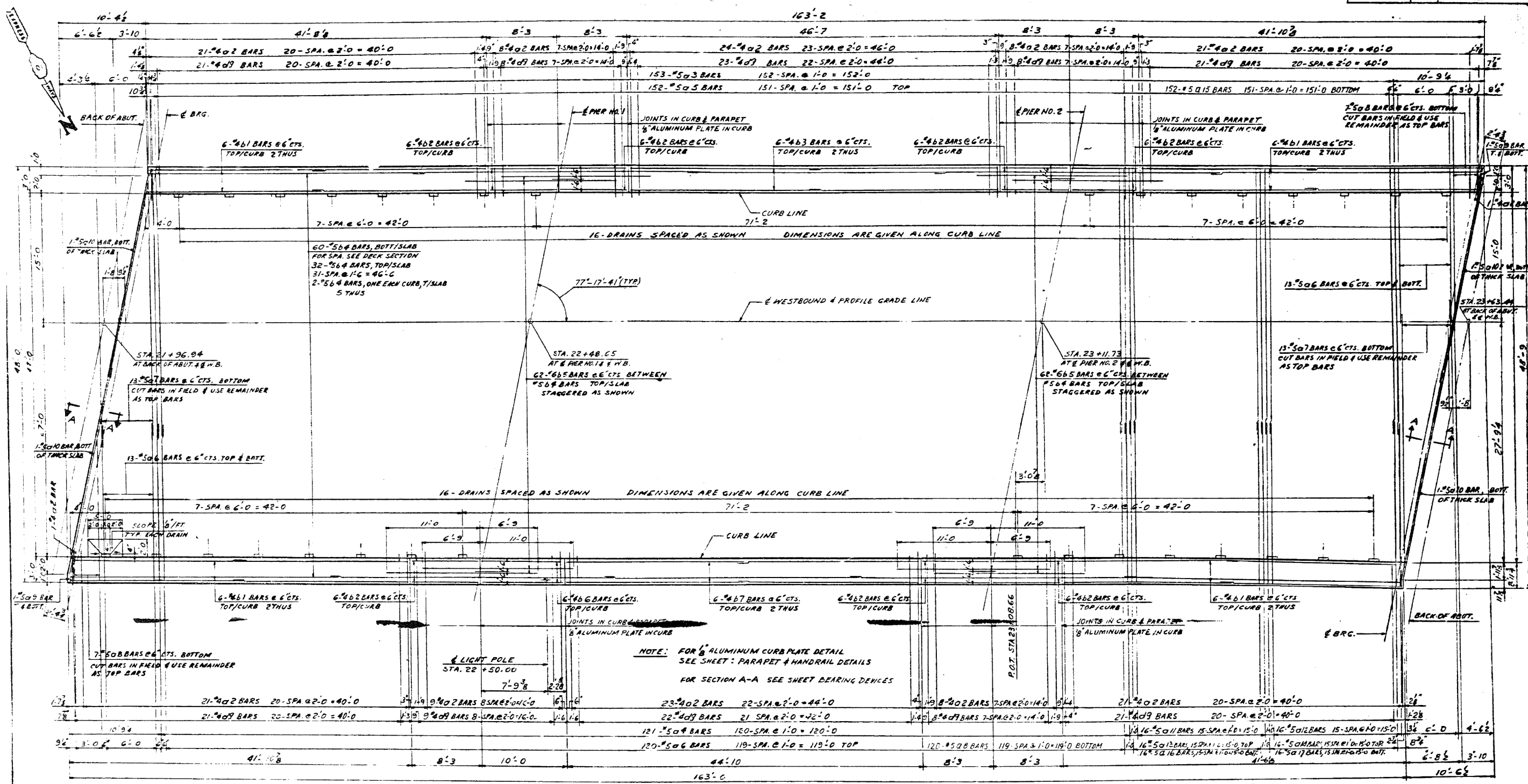
DESIGNED - BDC	REVISED
CHECKED - RGB	REVISED
DRAWN - RMH	REVISED
CHECKED - LMS	REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING PLAN INFORMATION (8 OF 14)  
STRUCTURE NO. 016-0489

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
373	2013-037B-R	COOK	787	714
				CONTRACT NO. 60W75
ILLINOIS FED. AID PROJECT				

TA SITE	SECTION	EXPRESSWAYS	TOTAL SHEETS	SHEET NO.
133	0707-617VB	SOUTHWEST	56	46
BTA		TO STA.		
FED. ROAD DIST. NO. 1		ALIGNMENT	FED. AID PROJECT	



DECK PLAN SPAN NO.1 THRU NO.3 WESTBOUND

FOR INFORMATION ONLY

REVISIONS	
NAME	DATE
DESIGNED ST.	
REVIEWED C.W.W.	

ILLINOIS DIVISION OF HIGHWAYS  
SOUTHWEST EXPRESSWAY  
FA. RT. 133  
LAWDALE AVE. STRUCTURE OVER  
G.M. & O RAILROAD  
SECTION 0707-617 VB  
DECK PLAN SPAN NO.1 THRU NO.3 W.B.  
SCALE: HORIZ. 1" = 1'-0" VERT. 1" = 1'-0"  
DATE: 6-21-15 DRAWN BY: E.M. CHECKED BY: L.D.B.

**Lin Engineering, Ltd.**  
Consulting Engineers  
Westmont, Illinois

USER NAME = Lin20\_Nick  
FILE NAME = #FILE#REV#  
PLOT SCALE =  
PLOT DATE = 6/18/2015

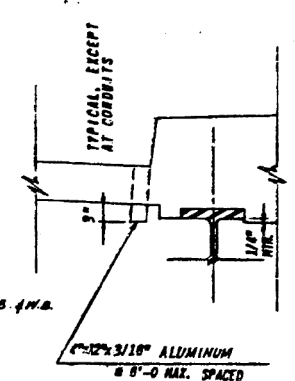
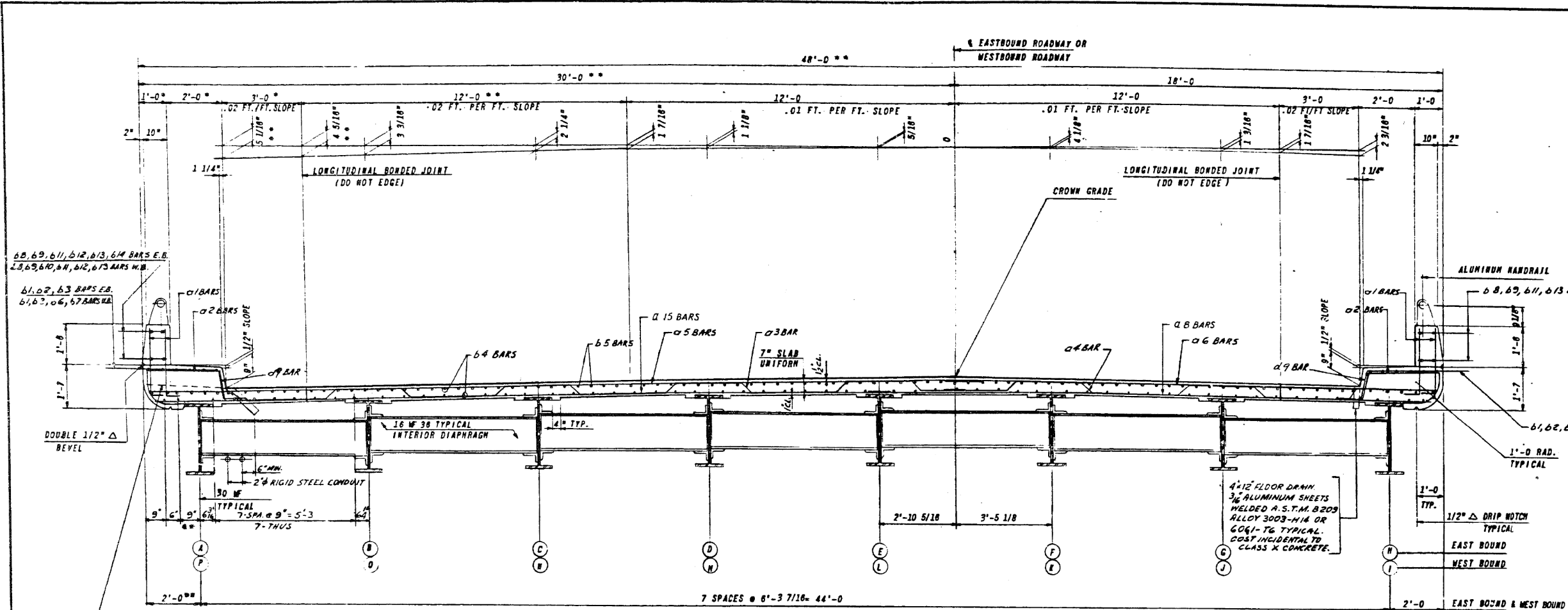
DESIGNED - BDC	REVISED
CHECKED - RGB	REVISED
DRAWN - RMH	REVISED
CHECKED - LMS	REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING PLAN INFORMATION (9 OF 14)  
STRUCTURE NO. 016-0489  
SHEET NO. SGX9 OF SGX14 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
373	2013-037B-R	COOK	787	715
CONTRACT NO. 60W75				ILLINOIS FED. AID PROJECT

F.A. R.T.E.	SECTION	EXPRESSWAYS	TOTAL SHEETS	SHEET NO.
133	0707-617 VB	SOUTHWEST	66	47
STA.	TO STA.			
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				



BOTTOM OF 1/8" ALUMINUM PLATE TO TOP OF CURB FOR LOCATIONS SEE FLOOR PLANS FOR DETAIL SEE SHEET: PARAPET & HANDRAIL DETAILS

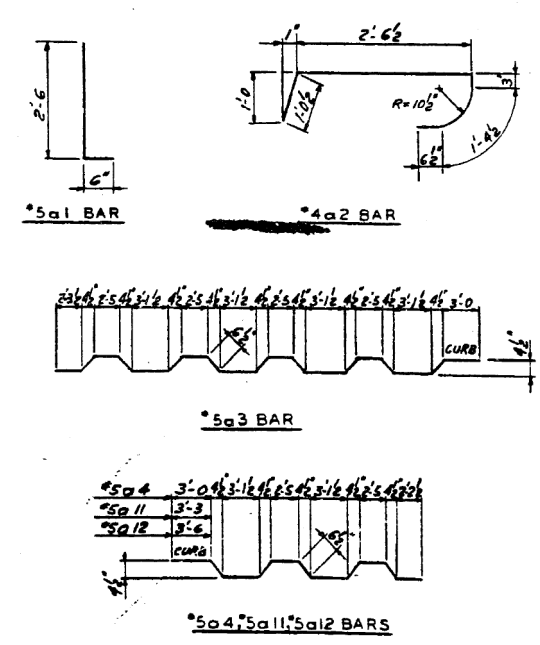
TYPICAL DECK SECTION - EAST BOUND STRUCTURE AS SHOWN LOOKING UPSTATION WEST BOUND STRUCTURE SIMILAR, LOOKING DOWN STATION

\* NORMAL TO EDGE OF PAVEMENT D = 3" RAMP "D" AT WEST BOUND (SPAN NO. 3)  
 \*\* VARIES AT WEST BOUND (SPAN NO. 3)

BILL OF REINFORCEMENT				
BAR NO.	SIZE	LENGTH	SHAPE	
a16	16	5	21'-3"	
a17	4/16	5	3'-0"	
a18	1/4	4	5'-9"	
a19	1/3	5	32'-4"	
a20	1/4	5	19'-0"	
a21	1/2	5	30'-10"	
a22	1/2	5	18'-2"	
a23	2/6	5	32'-6"	
a24	1/4	5	20'-9"	
a25	4	5	4'-0"	
a26	4	5	24'-7"	
a27	16	5	19'-3"	
a28	16	5	19'-6"	
a29	16	5	18'-5"	
a30	16	5	18'-8"	
a31	1/2	5	30'-0"	
b1	4/8	4	21'-5"	
b2	4/8	4	7'-11"	
b3	1/2	4	23'-8"	
b4	4/70	5	33'-6"	
b5	1/2	6	17'-9"	
b6	6	4	9'-8"	
b7	1/2	4	22'-9"	
b8	3/2	5	13'-9"	
b9	2/8	5	8'-0"	
b10	4	5	9'-9"	
b11	1/6	5	13'-6"	
b12	4	5	13'-3"	
b13	2/8	5	15'-3"	
b14	4	5	4'-6"	
a9	1/2	4	1'-1"	

BILL OF REINFORCEMENT				
BAR NO.	SIZE	LENGTH	SHAPE	
a1	4/19	5	3'-0"	
a2	1/4	4	5'-9"	
a3	1/3	5	32'-4"	
a4	1/4	5	19'-0"	
a5	1/2	5	30'-10"	
a6	1/2	5	18'-2"	
a7	2/6	5	32'-6"	
a8	1/4	5	20'-9"	
a9	4	5	4'-0"	
a10	4	5	24'-7"	
a11	16	5	19'-3"	
a12	16	5	19'-6"	
a13	16	5	18'-5"	
a14	16	5	18'-8"	
a15	1/2	5	30'-0"	
b1	4/8	4	21'-5"	
b2	4/8	4	7'-11"	
b3	1/2	4	23'-8"	
b4	4/70	5	33'-6"	
b5	1/2	6	17'-9"	
b6	6	4	9'-8"	
b7	1/2	4	22'-9"	
b8	3/2	5	13'-9"	
b9	2/8	5	8'-0"	
b10	4	5	9'-9"	
b11	1/6	5	13'-6"	
b12	4	5	13'-3"	
b13	2/8	5	15'-3"	
b14	4	5	4'-6"	
a9	1/2	4	1'-1"	

DECK QUANTITIES			
REINFORCEMENT	LBS.	49,760	
CLASS X CONCRETE	CU. YDS.	217.5	
PROTECTIVE COAT	SQ. YDS.	1,120	



FOR INFORMATION ONLY

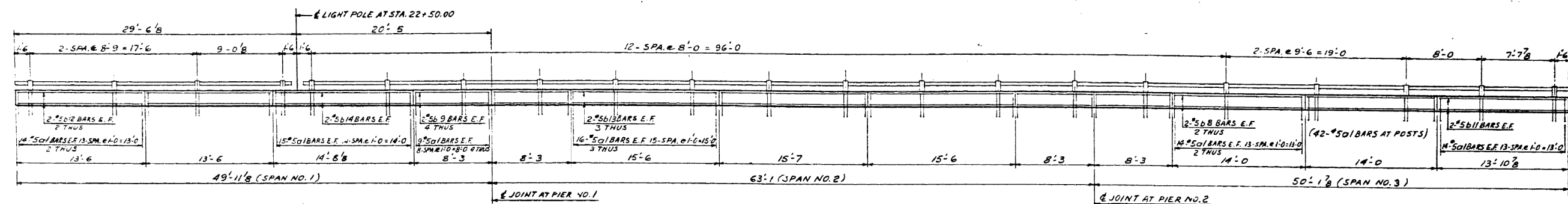
DECK QUANTITIES		
REINFORCEMENT	LBS.	50,780
CLASS X CONCRETE	CU. YDS.	217.8
PROTECTIVE COAT	SQ. YDS.	1,130

REVISIONS	
NAME	DATE
DESIGNED ST.	
REVIEWED CWW	

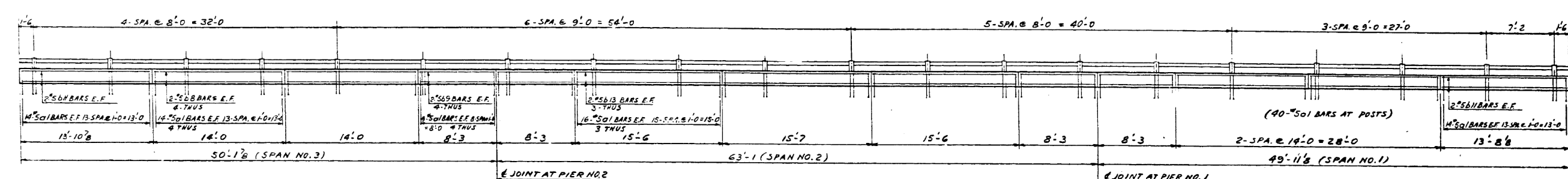
ILLINOIS DIVISION OF HIGHWAYS  
 SOUTHWEST EXPRESSWAY  
 F.A. RT. 135  
 LAWNDALE AVE. STRUCTURE OVER  
 G. M. & O. RAILRO. J  
 SECTION 0707-617VB  
 DECK SECTION

SCALE: HORIZ. VERT. DATE 8-21-63  
 DESIGNED BY E.G.  
 CHECKED BY L.O.B.

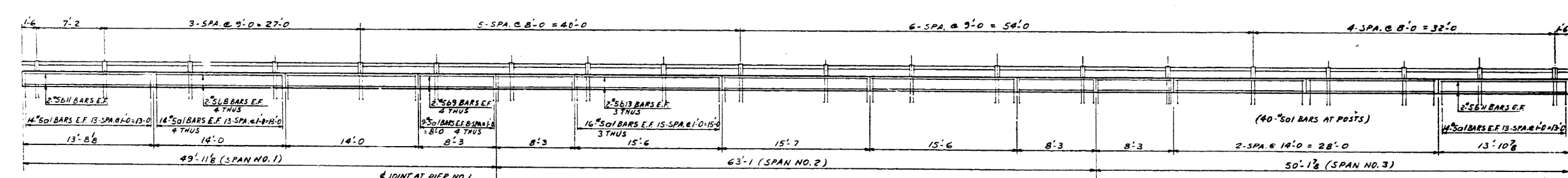
P.A. RT.	SECTION	EXPRESSWAY	TOTAL SHEETS	SHEET NO.
133	0707-617VB	S.WTH WEST	56	48
STA.	TO STA.			
FED. ROAD DIST. NO. 7				
ILLINOIS FED. AID PROJECT				



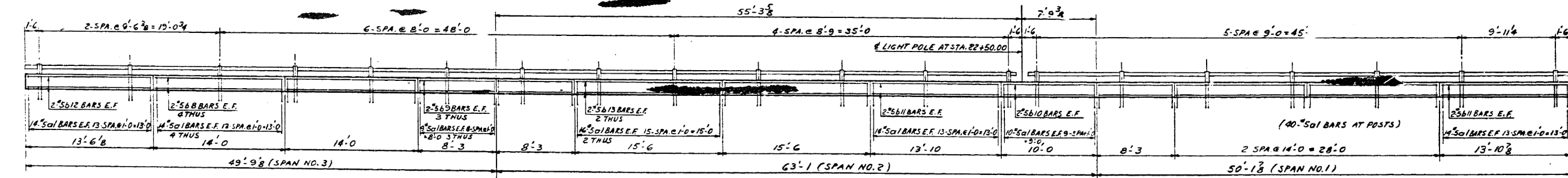
SOUTH PARAPET & HANDRAIL - SPAN NO.1 THRU SPAN NO.3 EASTBOUND - LOOKING SOUTH



NORTH PARAPET & HANDRAIL - SPAN NO.1 THRU SPAN NO.3 EASTBOUND - LOOKING NORTH



SOUTH PARAPET & HANDRAIL - SPAN NO.1 THRU SPAN NO.3 WESTBOUND - LOOKING SOUTH



NORTH PARAPET & HANDRAIL - SPAN NO.1 THRU SPAN NO.3 WESTBOUND - LOOKING NORTH

TOTAL ALUMINUM HANDRAIL 653 LIN. FT.

FOR INFORMATION ONLY

NOTE: LONGITUDINAL DIMENSIONS ARE ALONG INSIDE FACE OF PARAPET.

REVISIONS	
NAME	DATE
DESIGNED ST	
REVIEWED CW	

ILLINOIS DIVISION OF HIGHWAYS	
SOUTHWEST EXPRESSWAY	
FA. RT. 133	
LAWDALE AVE STRUCTURE OVER	
G.M.&O RAILROAD	
SECTION 0707-617 VB	
PARAPET & HANDRAIL ELEVATION	
SCALE: HORIZ.	DRAWN BY E.M.
DATE 8-21-63	CHECKED BY L.D.B.

F.A. RTE.	SECTION	EXPRESSWAYS	TOTAL SHEETS	SHEET NO.
133	0707-617VB	SOUTHWEST	56	51
STA.	TO STA.			
FED. ROAD DIST. NO. 7	ELLINGH	FED. AID PROJECT		

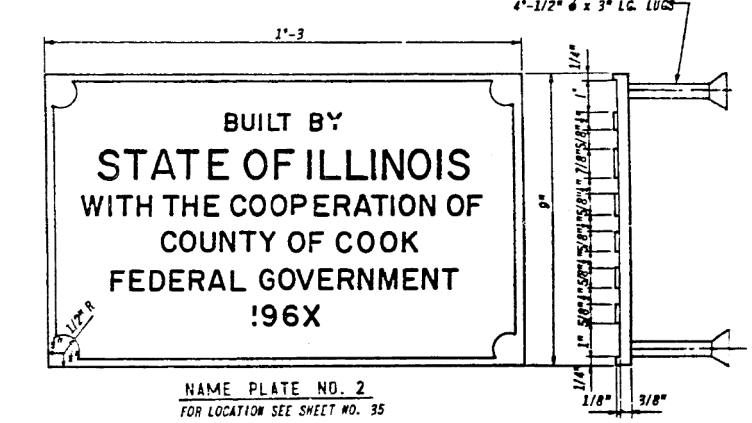
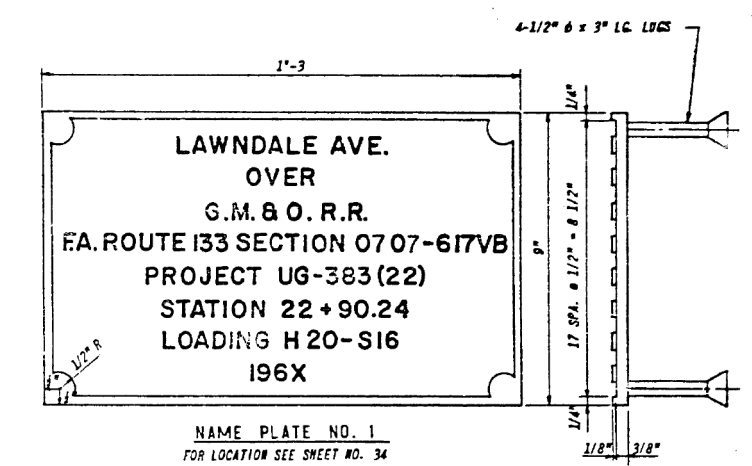
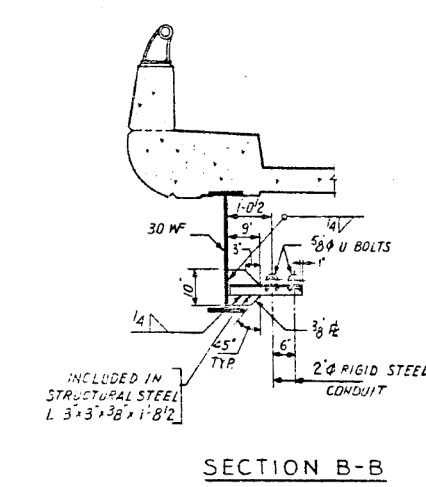
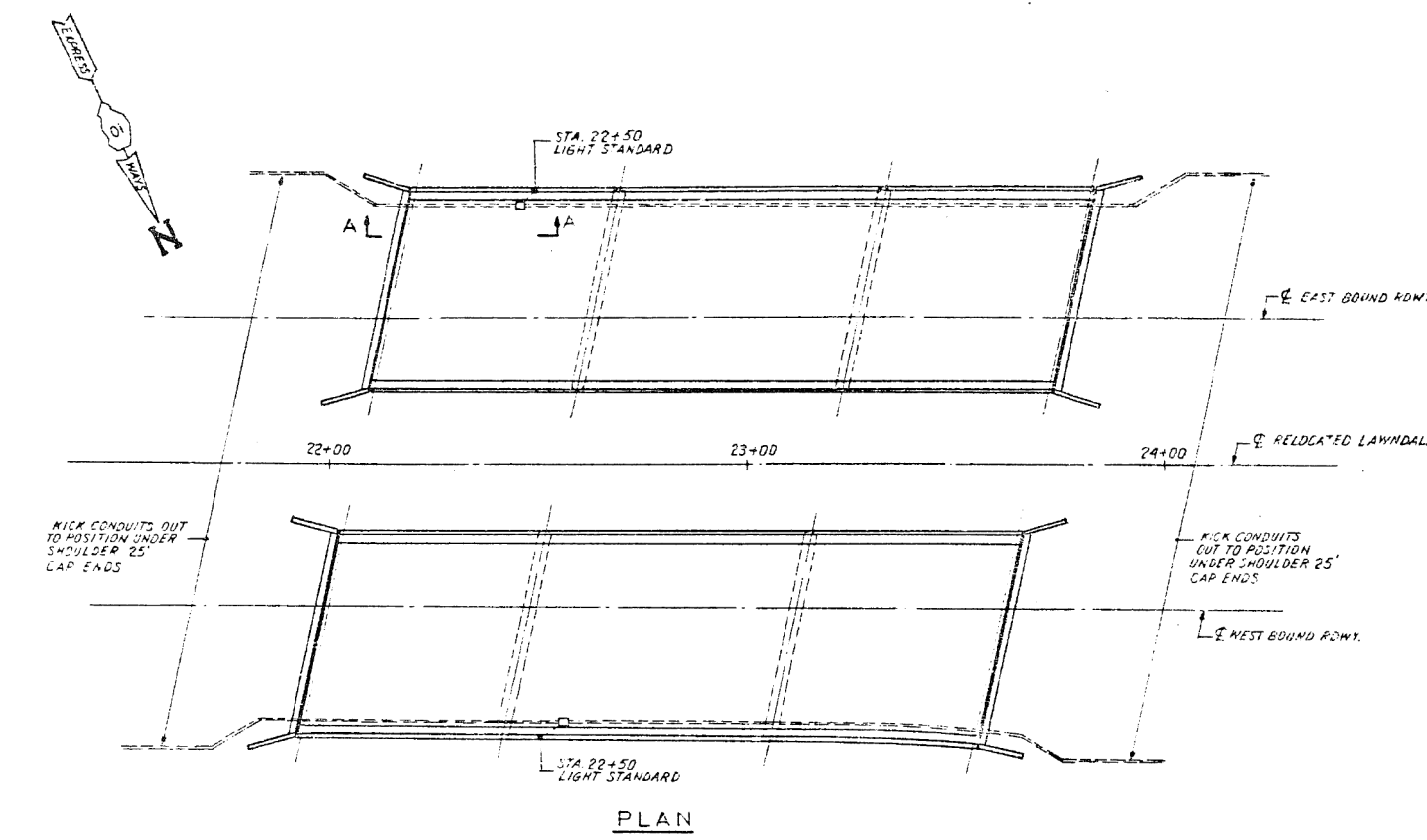
**NOTES:**

PLATES SHALL BE FURNISHED AND INSTALLED AS SPECIFIED IN SECTION 61 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED JANUARY 2, 1958 AND AS SHOWN ON THE PLANS.

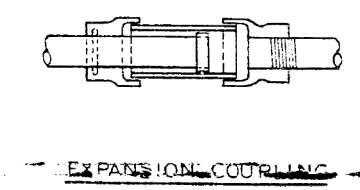
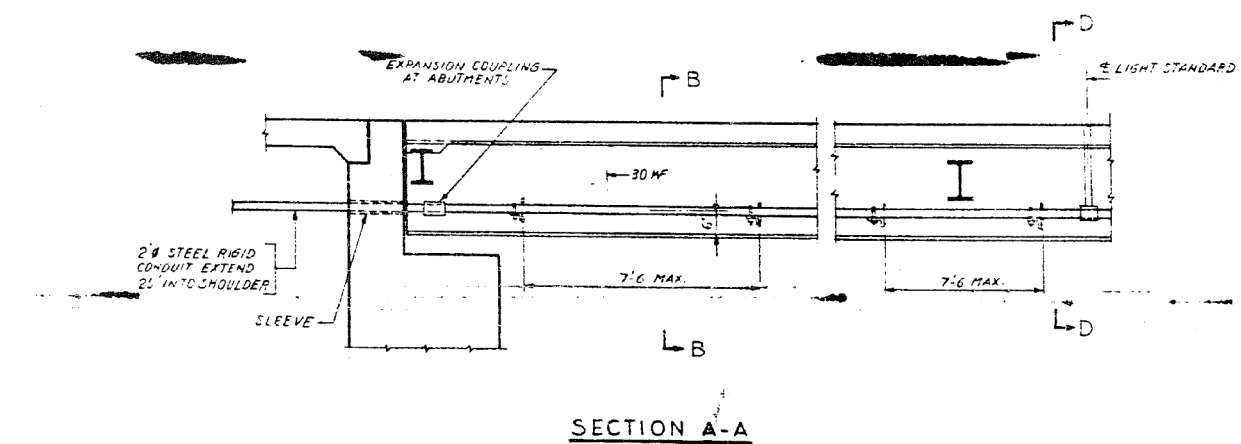
DETAILED PLANS OF PLATE AND LETTERING WILL BE FURNISHED TO THE CONTRACTOR AFTER CONTRACT IS AWARDED.

MATERIAL - BEST QUALITY BRASS OR BRONZE BORDER AND LETTERS RAISED 1/8" SQUARE CUT AND NOT TAPERED, TOP SURFACE POLISHED.

THE NAME PLATE SHALL BE EMBEDDED IN THE CONCRETE SO THAT THE FACE OF THE NAME PLATE IS FLUSH WITH THE SURFACE OF THE CONCRETE.



ITEM	UNIT	QUANTITY
CONDUIT IN TRENCH 2" DIA. GALV. STEEL	LIN. FT.	200
CONDUIT ATTACHED TO STRUCTURE 1 1/2" GALV. STEEL	LIN. FT.	5
CONDUIT ATTACHED TO STRUCTURE 2" GALV. STEEL	LIN. FT.	660
CONDUIT IN CONCRETE 1 1/2" DIA. GALV. STEEL	LIN. FT.	10
CONDUIT IN TRENCH 2" DIA. GALV. STEEL	LIN. FT.	10
TRENCH & BACKFILL	LIN. FT.	100



**NOTES:**

SEE LIGHT STANDARD BASE DETAILS ON SHEET 'PARAPET AND HANDRAIL DETAILS'.

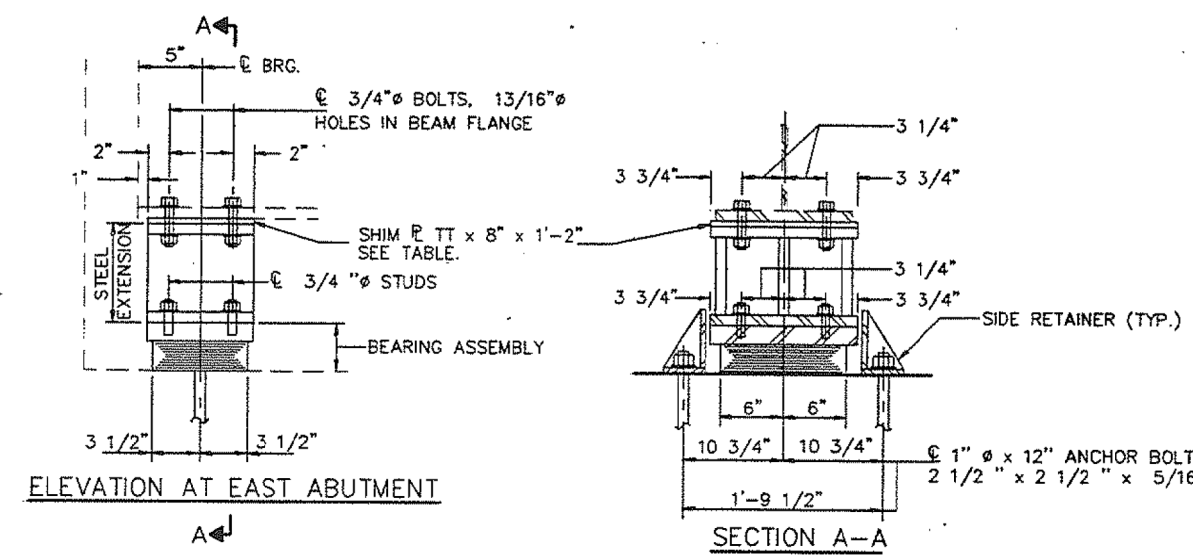
PRICE PER UNIT FOOT OF CONDUIT SHALL INCLUDE ALL COUPLINGS, ELBOWS, FITTINGS ETC. NECESSARY TO COMPLETE INSTALLATION.

FOR SECTION D-D SEE SHEET 'PARAPET AND HANDRAIL DETAILS'.

FOR INFORMATION ONLY

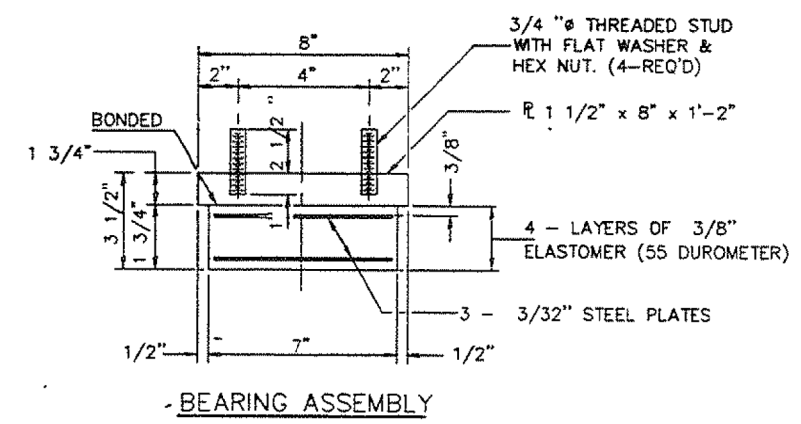
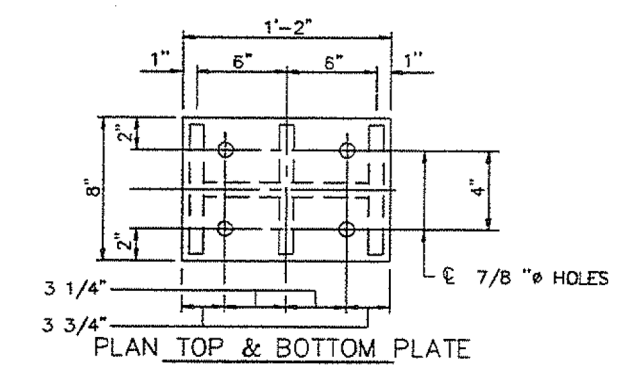
REVISIONS		ILLINOIS DIVISION OF HIGHWAYS	
NAME	DATE	SOUTHWEST EXPRESSWAY	
		F.A. RT. 133	
		LAWDALE AVE. STRUCTURE OVER	
		G.M. & O. RAILROAD	
		SECTION 0707-617VB	
		ELECTRICAL DETAILS	
DESIGNED S.T.		SCALE: HORIZ. VERT.	DRAWN BY J.W.
REVIEWED C.A.W.		DATE 8-27-63	CHECKED BY L.D.B.





STRINGER	TT
E	1/8" + 5/8"
F	1/8" + 7/16"
G	1/8" + 5/16"
I	1/8" + 1/8"
J	1/8" + 3/16"
K	1/8" + 1/8"
ALL OTHERS	1/8"

RP	(K)	18.7
RL	(K)	36.0
IMPACT	(K)	10.3
R (TOTAL)	(K)	65.0



NOTES: DIAPHRAGM REMOVAL AND REPLACEMENT MAY BE REQUIRED TO FACILITATE DRILLING HOLES IN THE BOTTOM FLANGE FOR BEARING ATTACHMENT. COST IS INCIDENTAL TO "FURNISHING AND ERECTING STRUCTURAL STEEL".

NEW STEEL EXTENSIONS, SIDE RETAINERS, LEAD PLATES, SHIM PLATES, CONNECTION BOLTS AND ANCHOR BOLTS ARE INCLUDED IN "FURNISHING AND ERECTING STRUCTURAL STEEL".

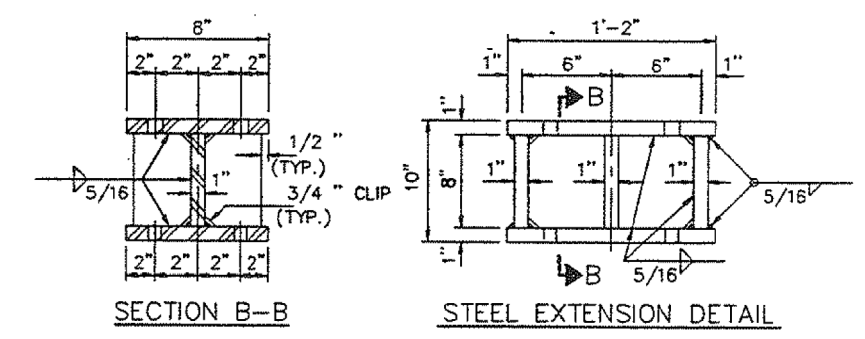
SEE SHEET 18 FOR ANCHOR BOLT INSTALLATION.

BEFORE INSTALLING THE NEW BEARING, THE TOP PLATE OF THE EXISTING BEARING ASSEMBLY SHALL BE REMOVED FROM THE BOTTOM FLANGE USING THE AIR-ARC METHOD. GRIND SMOOTH ALL WELD MATERIAL REMAINING ON THE BOTTOM FLANGE. BURN EXISTING ANCHOR BOLTS FLUSH WITH EXISTING CONCRETE SURFACE. GRIND EXISTING ANCHOR BOLT SMOOTH AND SEAL WITH EPOXY. COST IS INCIDENTAL TO FURNISHING AND ERECTING STRUCTURAL STEEL.

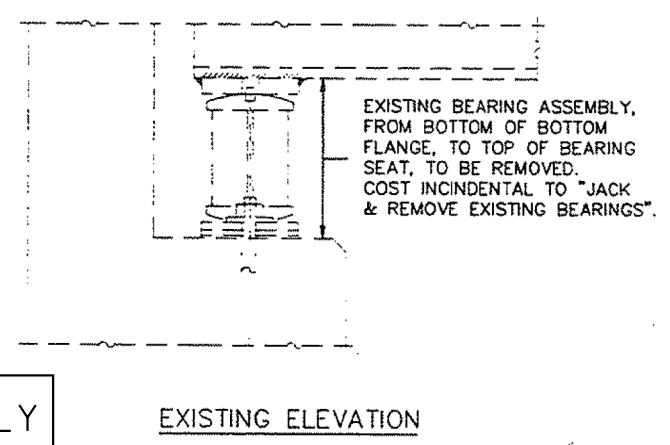
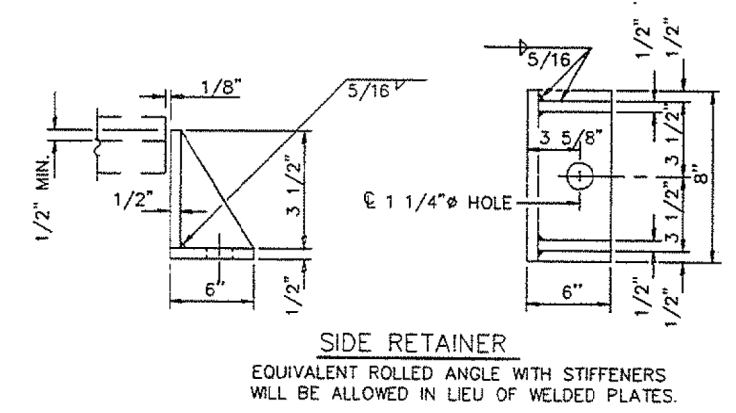
TRAFFIC SHALL BE REMOVED FROM THE PORTION OF THE STRUCTURE TO BE JACKED PRIOR TO COMMENCING JACKING OPERATIONS. TRAFFIC SHALL BE KEPT OFF THAT PORTION OF THE STRUCTURE DURING THE ENTIRE BEARING REPLACEMENT OPERATION. DIFFERENTIAL JACKING HEIGHT NOT TO EXCEED 1/8" TRANSVERSELY BETWEEN ADJACENT BEAMS OR 1/4" LONGITUDINALLY BETWEEN ADJACENT SUPPORTS.

PRIOR TO ORDERING ANY MATERIAL, THE CONTRACTOR SHALL VERIFY IN THE FIELD ALL BEARING HEIGHT AND SHIM DIMENSIONS.

SEE SUPERSTRUCTURE OVERLAY & REPAIR PLANS FOR BEAM LOCATIONS.



NOTE: SHIM PLATES SHALL NOT BE PLACED UNDER BEARING ASSEMBLY.



ITEM	UNIT	TOTAL
ELASTOMERIC BEARING ASSEMBLY TYPE I	EACH	16
JACK & REMOVE EXISTING BEARINGS	EACH	16
FURNISH & ERECT STRUCTURAL STEEL	LBS	2900
BRIDGE SEAT SEALER	SQ FT	278

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**EAST ABUTMENTS**  
**TYPE I BEARINGS**  
 BRIDGE REPAIRS  
 1ST AVE (IL 171) S.N. 016-0488 & 016-0489  
 OVER G.M. & O. RAILROAD  
 F.A.U. RT. 1505 SECTION 0707-617 VB (BR)  
 COOK CO. IL  
 STA. 22+90.24

FOR INFORMATION ONLY

12/03/93 09:52:32 A.M. 46817P.DWG

EXAMINED \_\_\_\_\_  
 PASSED \_\_\_\_\_  
 APPROVED \_\_\_\_\_

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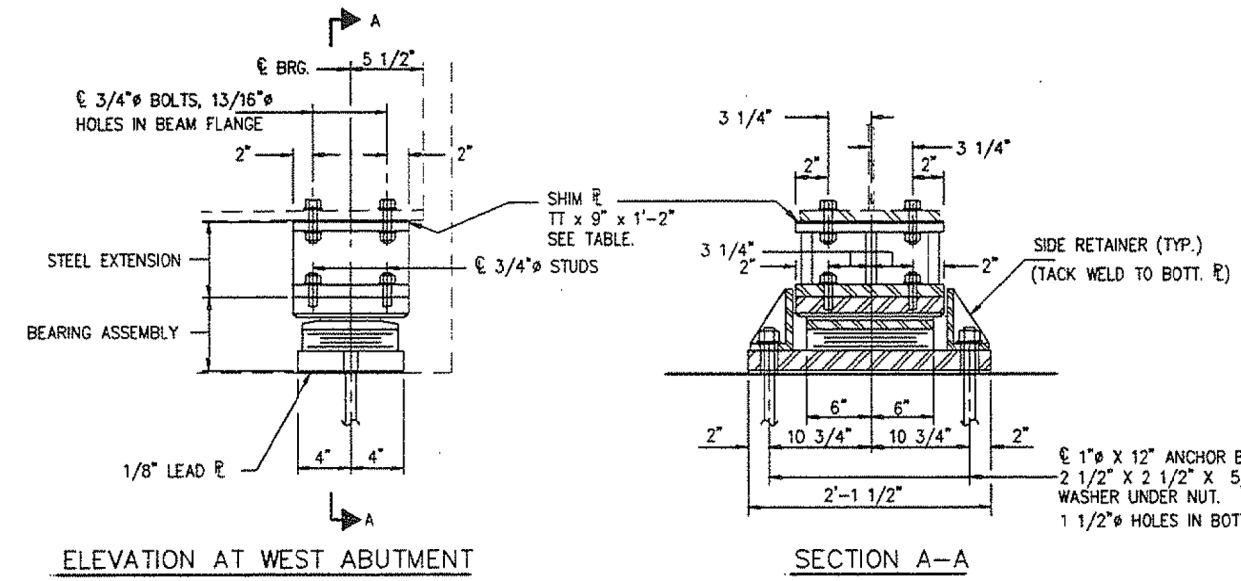
\*\* SECTION 0707-617 VB (BR)

NOTES: DIAPHRAGM REMOVAL AND REPLACEMENT MAY BE REQUIRED TO FACILITATE DRILLING HOLES IN THE BOTTOM FLANGE FOR BEARING ATTACHMENT. COST IS INCIDENTAL TO "FURNISHING AND ERECTING STRUCTURAL STEEL".  
 NEW STEEL EXTENSIONS, SIDE RETAINERS, LEAD PLATES, CONNECTION BOLTS AND ANCHOR BOLTS ARE INCLUDED IN "FURNISHING AND ERECTING STRUCTURAL STEEL".  
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TRAFFIC SHALL BE REMOVED FROM THE PORTION OF THE STRUCTURE TO BE JACKED OFF PRIOR TO COMMENCING JACKING OPERATIONS. TRAFFIC SHALL BE KEPT OFF THAT PORTION OF THE STRUCTURE DURING THE ENTIRE BEARING REPLACEMENT OPERATION. DIFFERENTIAL JACKING HEIGHT NOT TO EXCEED 1/8" TRANSVERSELY BETWEEN ADJACENT BEAMS OR 1/4" LONGITUDINALLY BETWEEN ADJACENT SUPPORTS.

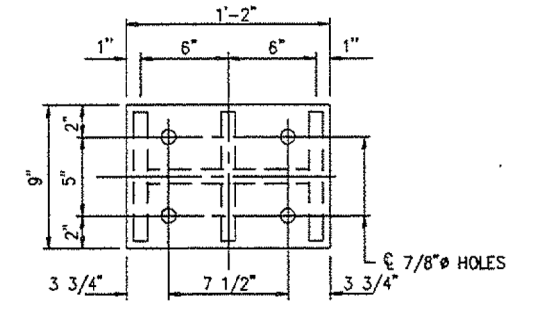
PRIOR TO ORDERING ANY MATERIAL, THE CONTRACTOR SHALL VERIFY IN THE FIELD ALL BEARING HEIGHT AND SHIM DIMENSIONS. SEE SUPERSTRUCTURE OVERLAY & REPAIR PLANS FOR BEAM LOCATIONS.



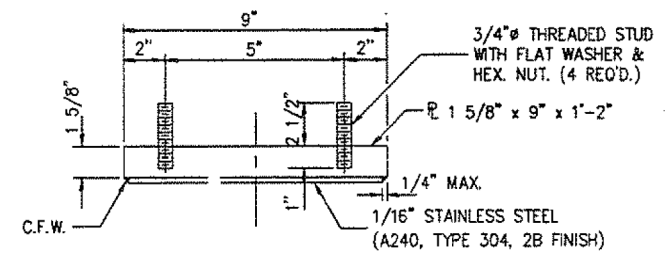
ELEVATION AT WEST ABUTMENT

SECTION A-A

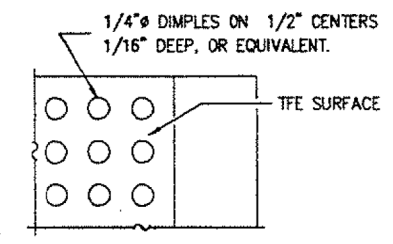
TYPE II TFE ELASTOMERIC EXP. BRG.



PLAN TOP & BOTTOM PLATES

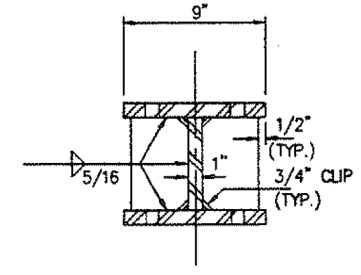


TOP BEARING ASSEMBLY

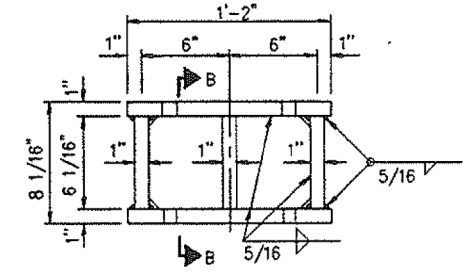


PLAN-TFE SURFACE

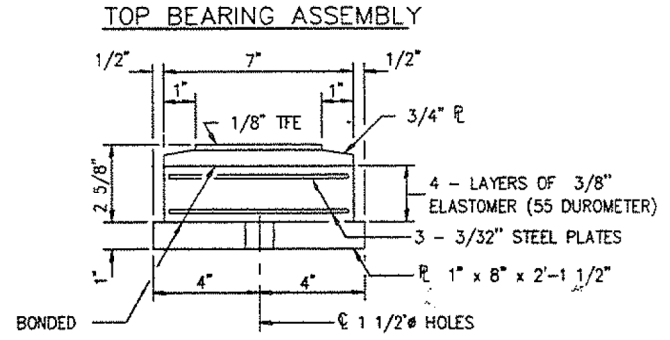
STRINGER	TT
E	1/8" + 3/4"
F	1/8" + 5/8"
G	1/8" + 9/16"
H	1/8" + 5/16"
ALL OTHERS	1/8"



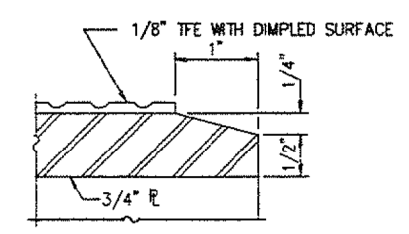
SECTION B-B



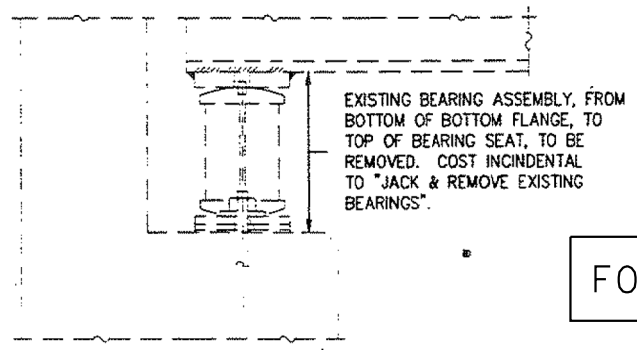
STEEL EXTENSION DETAIL



BOTTOM BEARING ASSEMBLY



SECTION THRU TFE



EXISTING ELEVATION

EXISTING BEARING ASSEMBLY, FROM BOTTOM OF BOTTOM FLANGE, TO TOP OF BEARING SEAT, TO BE REMOVED. COST INCIDENTAL TO "JACK & REMOVE EXISTING BEARINGS".

FOR INFORMATION ONLY

BEAM REACTIONS

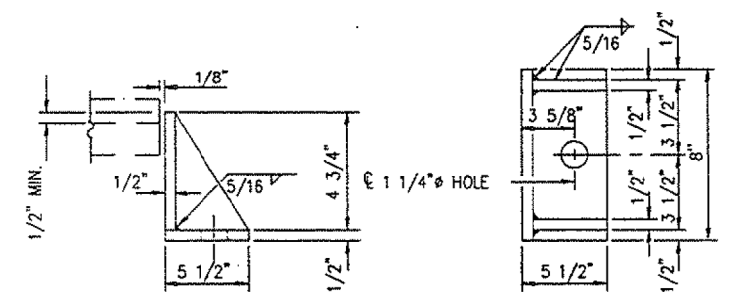
R <sub>V</sub>	(K)	18.7
R <sub>L</sub>	(K)	36.0
IMP.	(K)	10.3
R (TOTAL)	(K)	65.0

BILL OF MATERIAL

ITEM	UNIT	TOTAL
ELASTOMERIC BEARING ASSEMBLY TYPE II	EACH	16
JACK & REMOVE EXISTING BEARINGS	EACH	16
FURNISH & ERECT STRUCTURAL STEEL	LBS	3080
BRIDGE SEAT SEALER	SQ FT	281

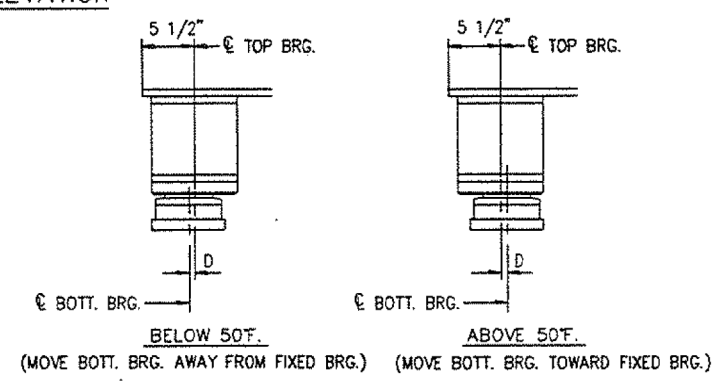
NOTE: THE 1/8" TFE SHEET SHALL BE BONDED DIRECTLY TO THE TOP STEEL PLATE WITH A TWO-COMPONENT, MEDIUM VISCOSITY EPOXY RESIN, CONFORMING TO THE REQUIREMENTS OF THE FEDERAL SPECIFICATION MMM-A-134, TYPE I. THE BOND AGENT SHALL BE APPLIED ON THE FULL AREA OF THE CONTACT SURFACES.

BONDING OF 1/8" TFE SHEET DURING VULCANIZING PROCESS WILL BE PERMITTED PROVIDED THE PROCESS AND METHOD OF ADJUSTING ASSEMBLY HEIGHT IS APPROVED BY THE ENGINEER.



SIDE RETAINER

EQUIVALENT ROLLED ANGLE WITH STIFFENERS WILL BE ALLOWED IN LIEU OF WELDED PLATES.



SETTING ANCHOR BOLTS AT EXP. BRG.

D = 1/8" PER EACH 100' OF EXPANSION FOR EVERY 15' TEMP. CHANGE FROM THE NORMAL TEMP. OF 50F.

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**WEST ABUTMENTS**  
**TYPE II BEARINGS**  
 BRIDGE REPAIRS  
 1ST AVE (IL 171) S.N. 016-0488 & 016-0489  
 OVER G.M. & O. RAILROAD  
 F.A.U. RT. 1505 SECTION 0707-617 VB (BR)  
 COOK CO. IL  
 STA. 22+90.24

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EXAMINED  
 PASSED  
 APPROVED

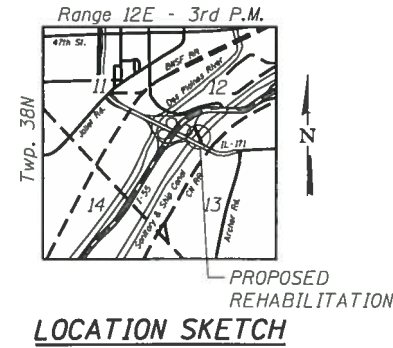


**Existing Structure:**

The structure consists of five composite spans, with simple beam end spans (1 and 5) and continuous plate girder interior spans (2 through 4), with a 7-inch reinforced concrete deck and a 2 1/4-inch concrete overlay. The original structure was built in 1981. In 1998, structural concrete repairs were performed on Piers 1 and 4. In 2001, bearings were replaced, partial-depth and full-depth deck repairs performed, structural concrete repairs at piers and abutments, expansion joints were removed and replaced, bituminous concrete overlay was removed, performed bridge deck hydroscarification and latex concrete overlay, outside edges of fascia girders and ends of interior girders were cleaned and painted.

Bridge shall be closed during construction. A detour shall be utilized to maintain traffic.

No salvage



**DESIGN SPECIFICATIONS**

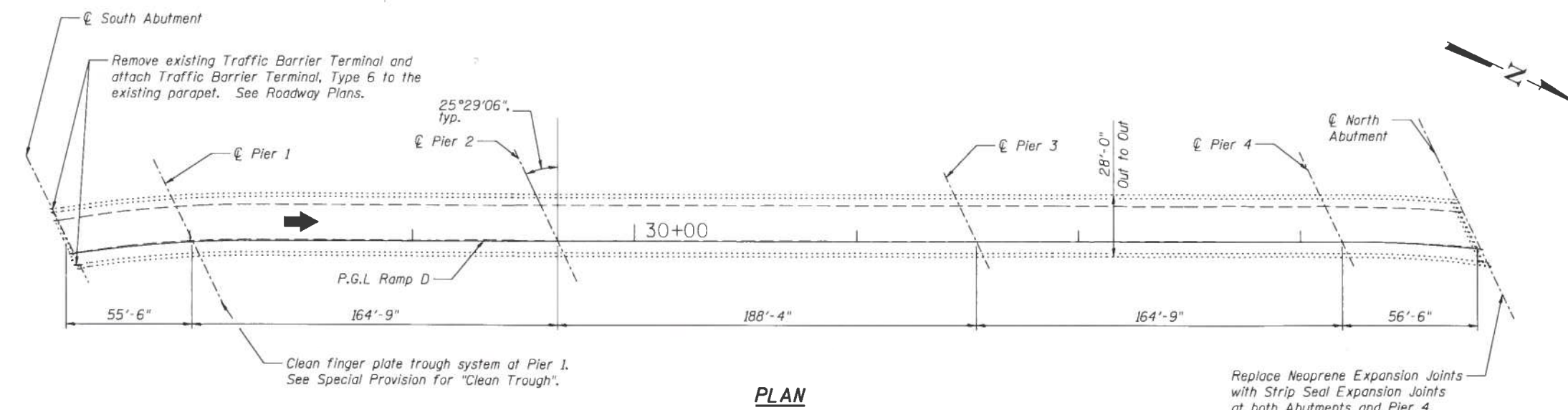
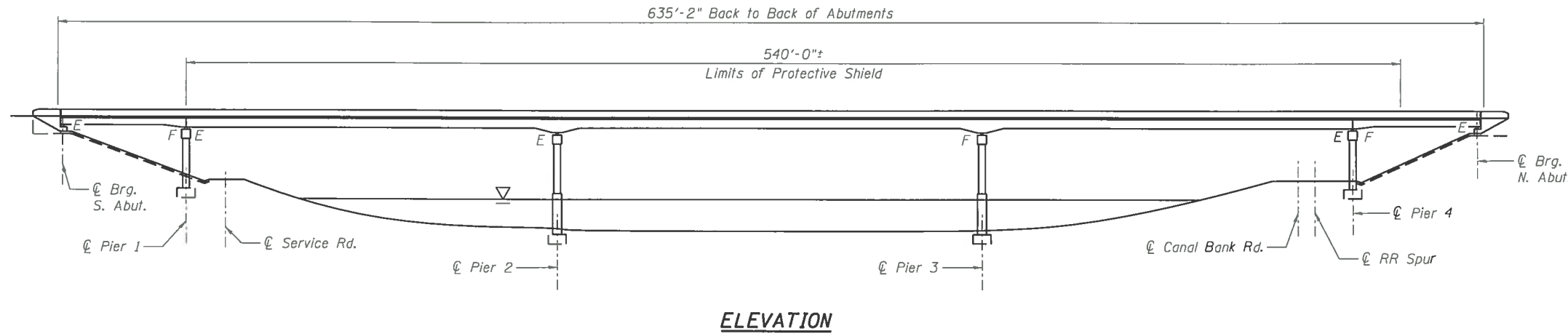
2002 AASHTO Standard Specifications for Highway Bridges, 17th Edition

**DESIGN STRESSES**

$f'_c = 3,500$  psi  
 $f_y = 60,000$  psi (Reinforcement)  
 $f_y = 36,000$  psi (existing structural steel)  
 $f_y = 36,000$  psi (proposed structural steel repair)

**SCOPE OF WORK**

1. Replace neoprene expansion joints with strip seal expansion joints.
2. Clean finger plate trough system at Pier 1.
3. Replace buckled lateral bracing angle in Span 4 (L4x4x1/4) and add girder web plating at two locations.
4. Structural repairs of concrete at the parapets, piers, and abutments.
5. Remove and replace the traffic barrier terminals at the south end of the bridge.
6. Repair bridge deck. Clean and seal bridge deck, approach slabs and parapets.
7. Repair timber fenders at Piers 2 and 3.
8. Remove and dispose of existing electrical conduit and junction boxes attached to the girders and/or piers.



**GENERAL PLAN AND ELEVATION**  
**RAMP D OVER SANITARY & SHIP CANAL**  
**"PUBLIC WATER"**  
**FAP 373 - SECTION 2013-037B-R**  
**COOK COUNTY**  
**STATION 30+60.01**  
**STRUCTURE NO. 016-2408**

**benesch**  
 engineers · scientists · planners

Alfred Benesch & Company  
 205 North Michigan Avenue, Suite 2400  
 Chicago, Illinois 60601  
 312-565-0450 Job No. 10083

FILE NAME : 016-2408-60W75-001-gpe.dgn	USER NAME : jsurber	DESIGNED - CMK	REVISÉ -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	F.A.P. RTE. 373	SECTION 2013-037B-R	COUNTY COOK	TOTAL SHEETS 787	SHEET NO. 721
PLDT SCALE :	DRAWN - CMK	REVISÉ -			SHEET NO. SH1 OF SH15 SHEETS		ILLINOIS FED. AID PROJECT		
PLDT DATE : 6/15/2015	CHECKED - JAW	REVISÉ -							

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**GENERAL NOTES**

- Reinforcement bars designated (E) shall be epoxy coated.
- Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
- Protective Coat shall be applied to the entire top surface of the deck and approach slabs and the tops and inside vertical faces of all parapets. All surfaces to be sealed shall be cleaned thoroughly prior to sealer application.
- Joint openings shall be adjusted according to Article 520.04 of the Std. Specs. when the deck is poured at an ambient temperature other than 50°F.
- All structural steel shall be AASHTO M270 Grade 36 unless otherwise noted.
- No field welding is permitted except as specified in the contract documents.
- Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with the concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will be included in the pay item covering removal of existing concrete.
- Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts (in painted areas and ASTM A325 Type 3 in unpainted areas). Bolts  $\frac{3}{4}$ "  $\phi$ , holes  $\frac{13}{16}$ ", unless otherwise noted.
- The Contractor shall exercise care during removal of existing joints to ensure that the slab, beams and diaphragms' integrity will not be detrimentally impacted. The Contractor shall repair any damage(s) to the slab, beams and diaphragms caused by his operation as directed by the Engineer at no additional cost to the Department.
- The existing structural steel coating contains lead. The Contractor shall take all precautions to deal with the presence of lead on this project.
- The Inorganic Zinc Rich Primer/Acrylic/Acrylic Paint System shall be used for shop and field painting of new structural steel. Only Inorganic Zinc Rich Primer shall be applied to the new structural steel in the shop under this contract and is included in the respective steel pay items. The intermediate and top coats shall be applied under a separate painting contract.
- Existing structural steel that will be in contact with new structural steel shall be cleaned and painted prior to erection as required by the Special Provision "Cleaning and Painting Contact Surface Areas of Existing Steel Structures".

**INDEX OF SHEETS**

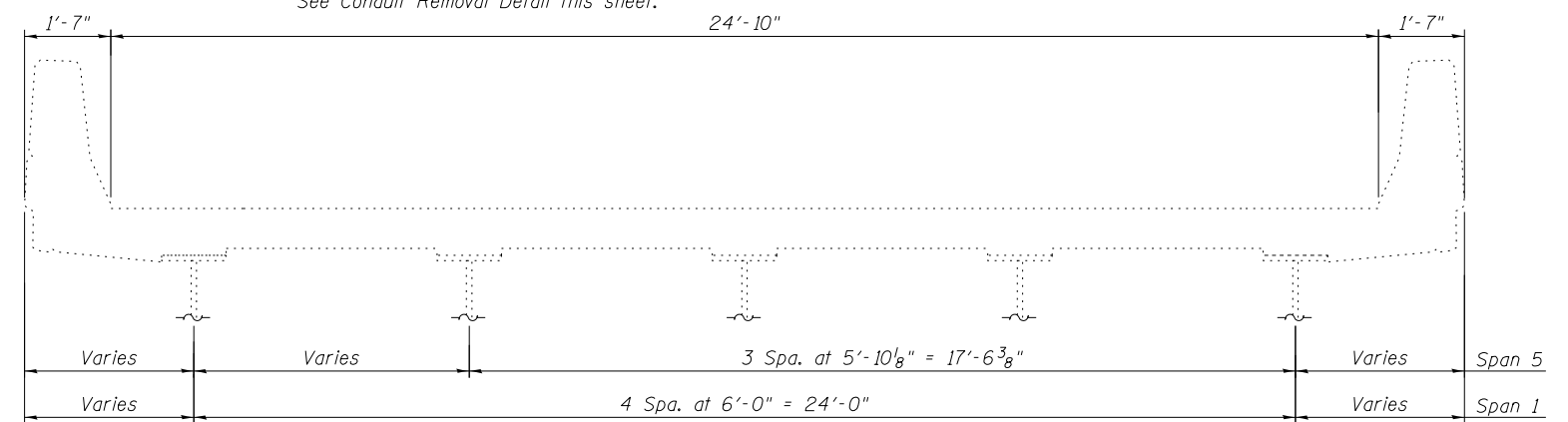
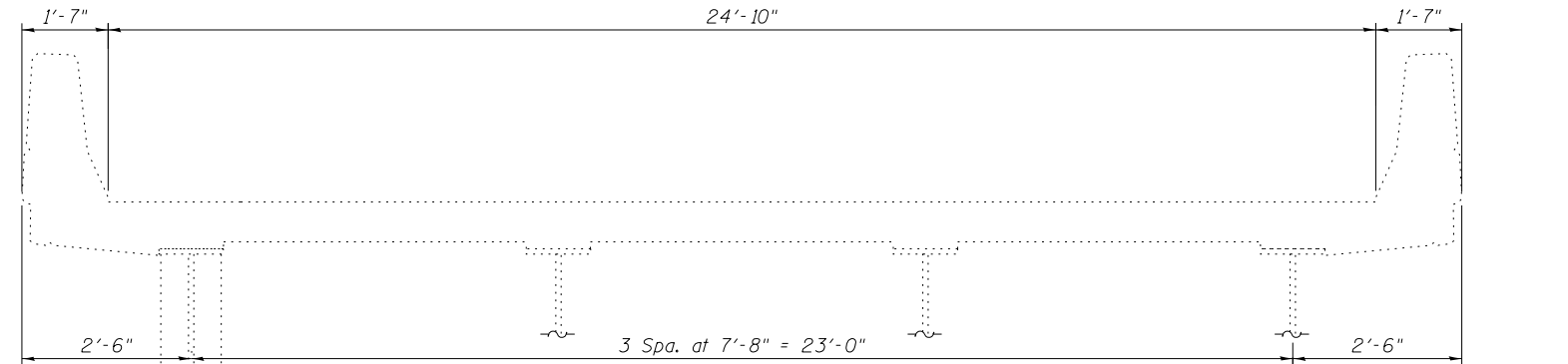
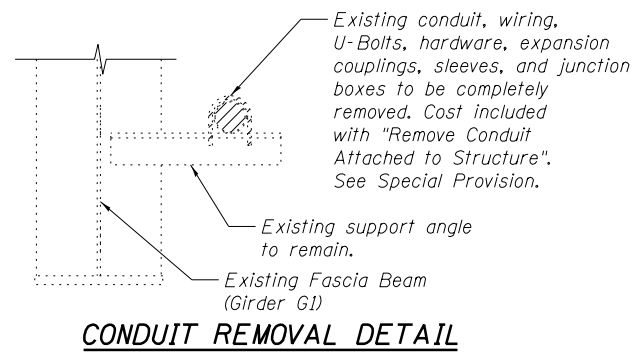
- SH1 General Plan and Elevation
- SH2 General Notes, Bill of Material and Index of Sheets
- SH3 Deck Repair Details
- SH4 Parapet Repairs
- SH5 Expansion Joint Repairs - Abutments
- SH6 Expansion Joint Details - Abutments
- SH7 Expansion Joint Repairs - Pier 4
- SH8 Expansion Joint Details - Pier 4
- SH9 Preformed Joint Strip Seal
- SH10 Framing Plan
- SH11 Structural Steel Repair Details
- SH12 Substructure Repairs - Abutments
- SH13 Substructure Repairs - Piers 1 & 2
- SH14 Substructure Repairs - Piers 3 & 4
- SH15 Fender System Repair Details

For existing bridge plans, see Sheets SHX1 thru SHX7, immediately following Sheet SH15.

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	Cu Yd	15.1		15.1
Protective Shield	Sq Yd	1,680		1,680
Concrete Superstructure	Cu Yd	15.1		15.1
Protective Coat	Sq Yd	2,342		2,342
Furnishing and Erecting Structural Steel	Pound	60		60
Reinforcement Bars, Epoxy Coated	Pound	2,430		2,430
* Preformed Joint Strip Seal	Foot	92.0		92.0
Remove Conduit Attached to Structure	Foot	518	50	568
Fender System	L Sum		0.25	0.25
Clean Trough	Each	1		1
Structural Steel Repair	Pound	190		190
** Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)	Sq Ft	52	341	393
** Structural Repair of Concrete (Depth Greater Than 5 Inches)	Sq Ft	16	69	85
** Deck Slab Repair (Full Depth, Type I)	Sq Yd	19.3		19.3
** Deck Slab Repair (Full Depth, Type II)	Sq Yd	44.4		44.4
** Deck Slab Repair (Partial)	Sq Yd	12.4		12.4
*** Selective Clearing	Unit		2	2
Temporary Shoring and Cribbing	Each		2	2

- \* Includes cost of Removal and Disposal of Existing Joint Seals.
- \*\* Quantity includes a contingency (above the amounts shown in the bills of material) to account for uncertainties associated with the condition of the existing substructure and the age of the original inspection (2008-9). Actual repair areas will be determined by the Engineer in the field.
- \*\*\* The quantity for this work is estimated. The intent for this work is to remove accumulations of rubbish, vegetation, etc., on the existing slopewalls.



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205 North Michigan Avenue, Suite 2400  
Chicago, Illinois 60601  
312-565-0450 Job No. 10093

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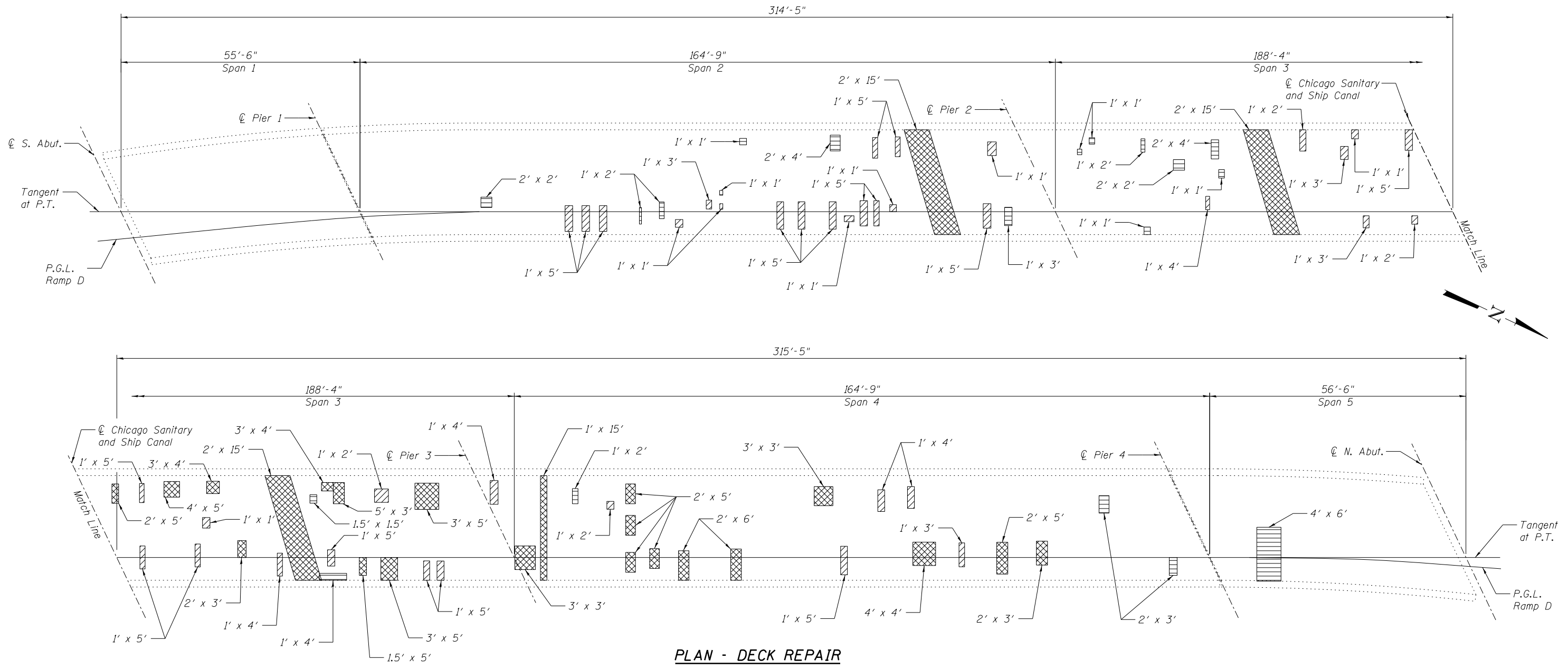
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**GENERAL NOTES, BILL OF MATERIAL AND INDEX OF SHEETS**  
**STRUCTURE NO. 016-2408**

SHEET NO. SH2 OF SH15 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
373	2013-037B-R	COOK	787	722
CONTRACT NO. 60W75			ILLINOIS FED. AID PROJECT	

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**PLAN - DECK REPAIR**

**BILL OF MATERIAL**

SYMBOL	ITEM	UNIT	QUANTITY
	Deck Slab Repair (Partial)	Sq. Yd.	9.9
	Deck Slab Repair (Full Depth, Type I)	Sq. Yd.	15.4
	Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	35.5

**NOTES:**

1. See Special Provision for "Deck Slab Repair".
2. Protective Shield required for deck slab and/or parapet repairs shall be installed according to Article 501.03 of the Standard Specifications. See Sheet SH1 for limits of Protective Shield.

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205 North Michigan Avenue, Suite 2400  
Chicago, Illinois 60601  
312-565-0450 Job No. 10093

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	PLOT DATE = 6/15/2015	DRAWN - CMK	REVISED -
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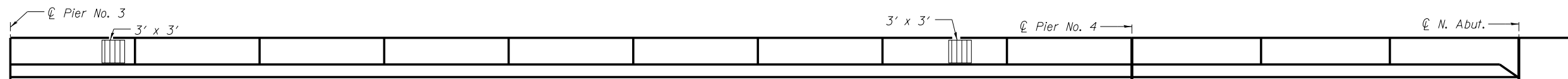
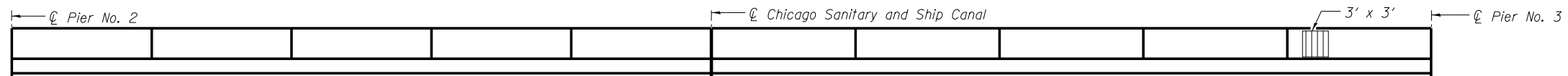
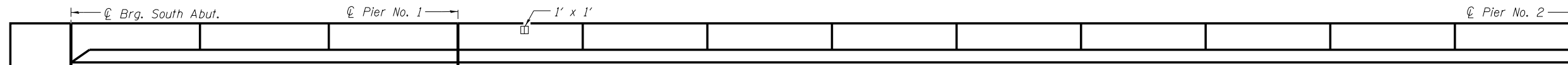
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DECK REPAIR DETAILS  
STRUCTURE NO. 016-2408**

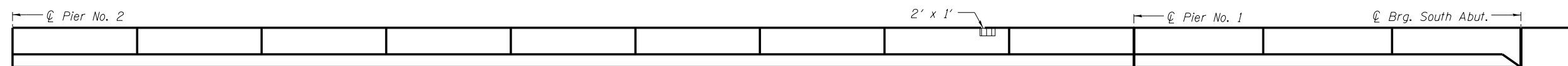
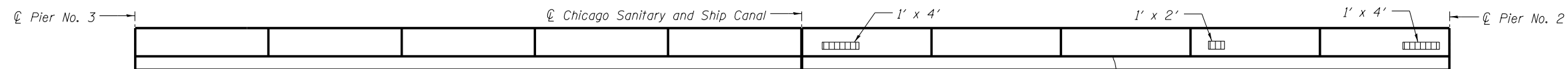
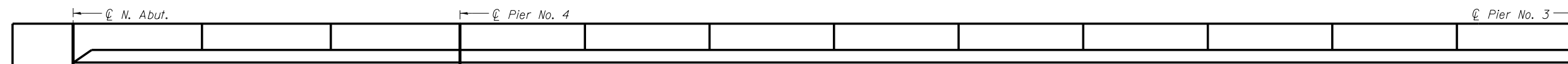
SHEET NO. SH3 OF SH15 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
373	2013-037B-R	COOK	787	723
CONTRACT NO. 60W75				
ILLINOIS FED. AID PROJECT				

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**INSIDE FACE OF WEST PARAPET**



**INSIDE FACE OF EAST PARAPET**

**BILL OF MATERIAL**

SYMBOL	ITEM	UNIT	QUANTITY
	Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)	Sq. Ft.	40

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312-565-0450 Job No. 10093

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PARAPET REPAIRS  
STRUCTURE NO. 016-2408**

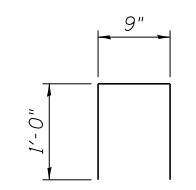
SHEET NO. SH4 OF SH15 SHEETS

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ILLINOIS FED. AID PROJECT				

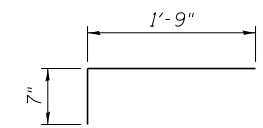
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**TWO ABUTMENTS  
BILL OF MATERIAL**

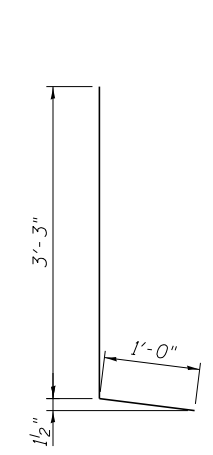
Bar	No.	Size	Length	Shape
a(E)	16	#6	30'-6"	—
d(E)	14	#4	4'-3"	L
d1(E)	14	#5	4'-4"	L
h(E)	8	#5	30'-6"	—
u(E)	56	#5	2'-9"	n
x(E)	52	#6	2'-4"	┐
Concrete Removal			Cu. Yd.	9.8
Concrete Superstructure			Cu. Yd.	9.8
Reinforcement Bars, Epoxy Coated			Pound	1,440



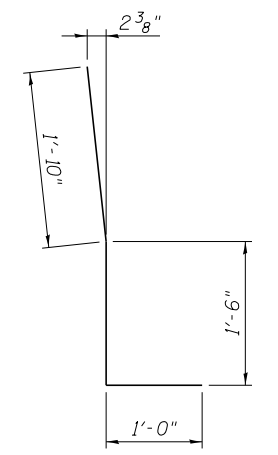
**BAR u(E)**



**BAR x(E)**



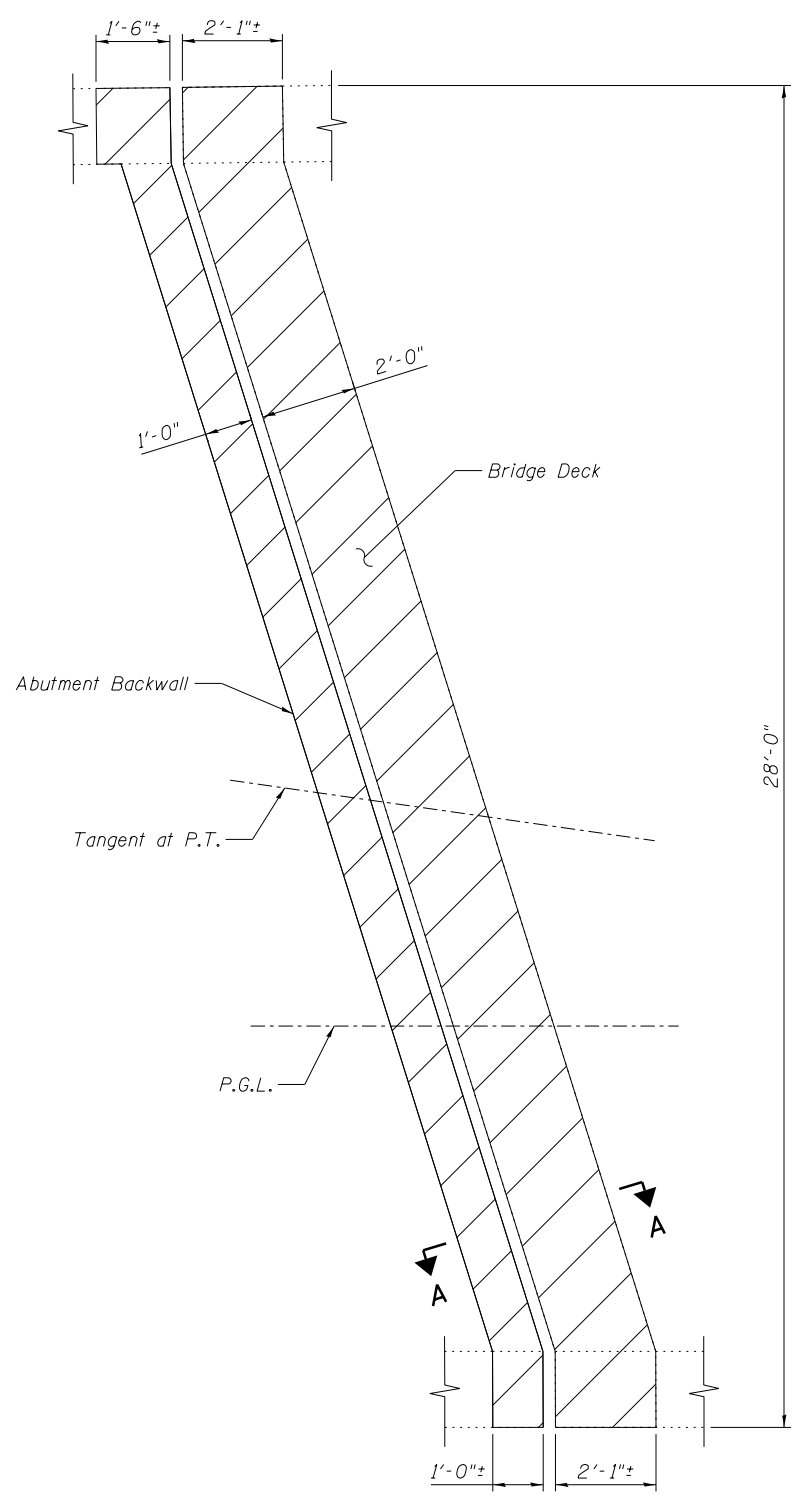
**BAR d(E)**



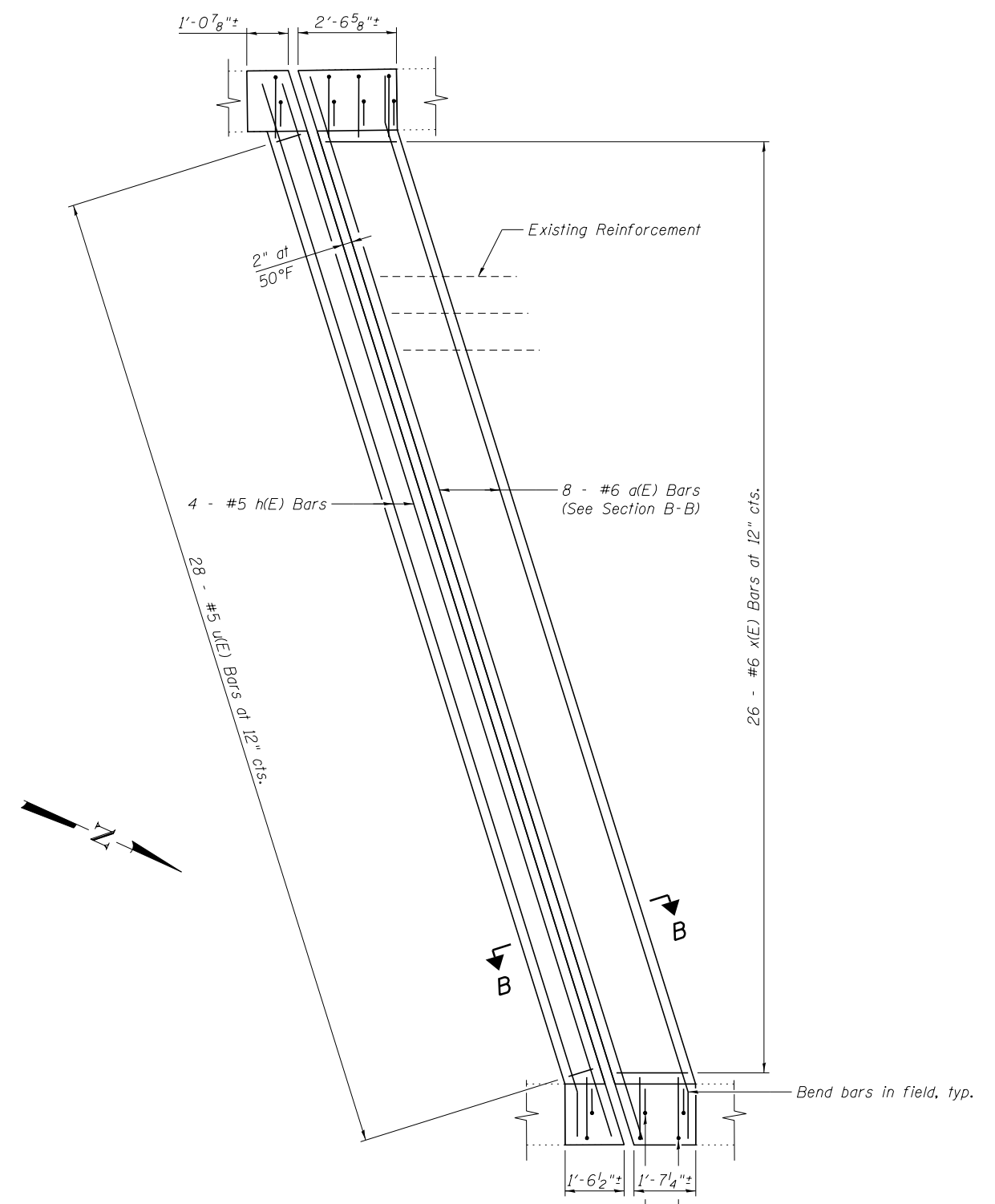
**BAR d1(E)**

**NOTES:**

- I.F. denotes Inside Face  
O.F. denotes Outside Face  
E.E. denotes Each End  
E.S. denotes Each Side
- Hatched areas indicate Concrete Removal.
- Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with "Concrete Removal".
- Work this sheet with Sheet SH6.



**PLAN - CONCRETE REMOVAL  
AT SOUTH ABUTMENT**  
(North Abutment Similar)



**PLAN - CONCRETE REPLACEMENT  
AT SOUTH ABUTMENT**  
(North Abutment Similar)

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FILE NAME =	USER NAME = jsurber	DESIGNED - CMK	REVISED -
016-2408-60W75-005-ExpJtRepairAbut.dgn	PLOT SCALE =	CHECKED - JAW	REVISED -
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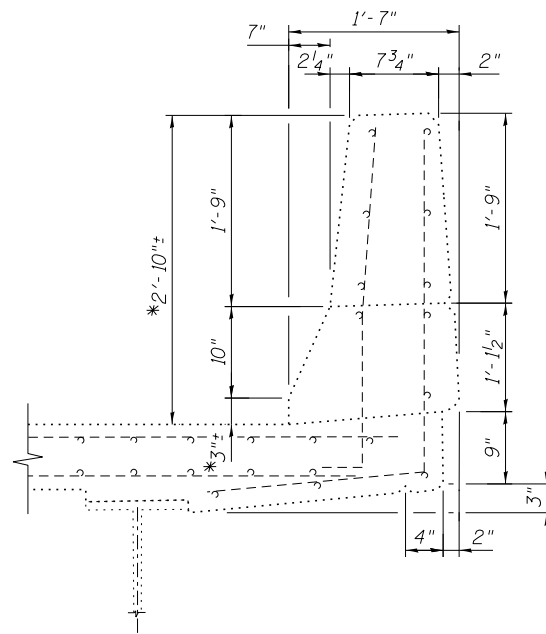
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**EXPANSION JOINT REPAIRS - ABUTMENTS  
STRUCTURE NO. 016-2408**

SHEET NO. SH5 OF SH15 SHEETS

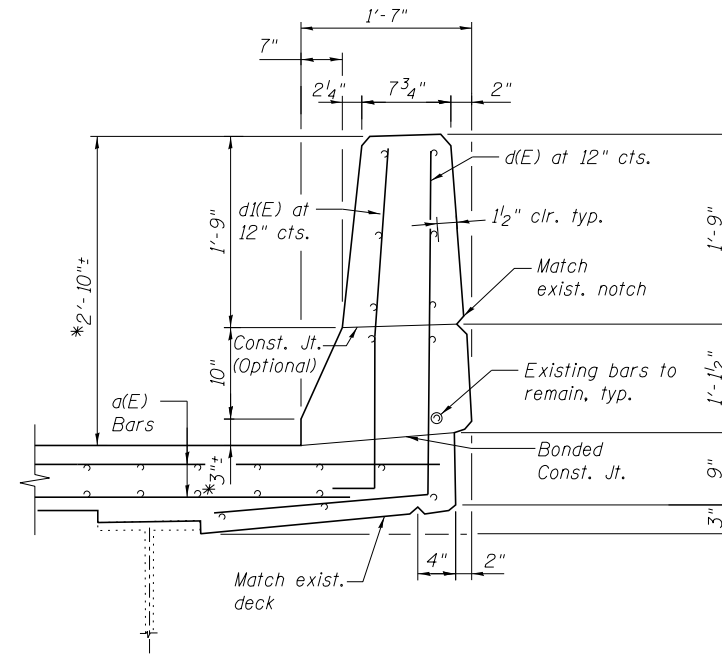
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373	2013-037B-R	COOK	787	725
CONTRACT NO. 60W75			ILLINOIS FED. AID PROJECT	

Y:\chicago\100005\10093\Eng\_Docs\_Phase\_1\1\SN\_016-2408\_NB\_1st\_Ave\_to\_NB\_Ramp\_over\_Canal\Final\Plans\016-2408-60W75-005-ExpJtRepairAbut.dgn 4:51:28 PM 6/15/2015

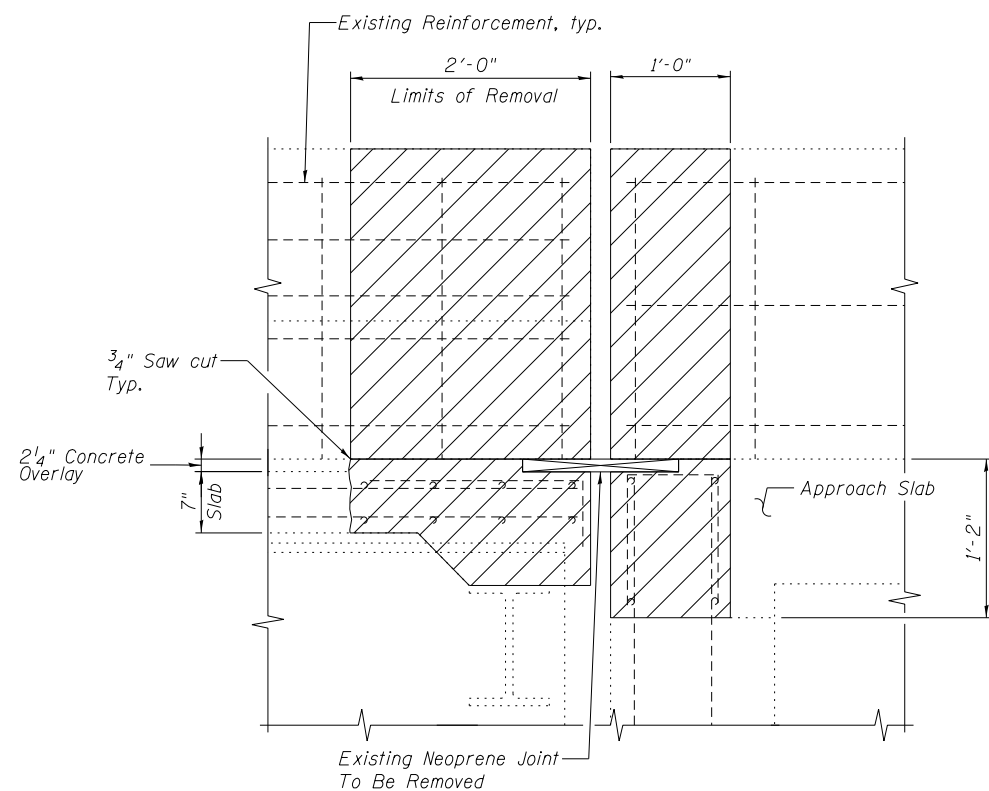


**SECTION - EXISTING PARAPET  
AT S. ABUTMENT**  
(N. Abutment Similar)

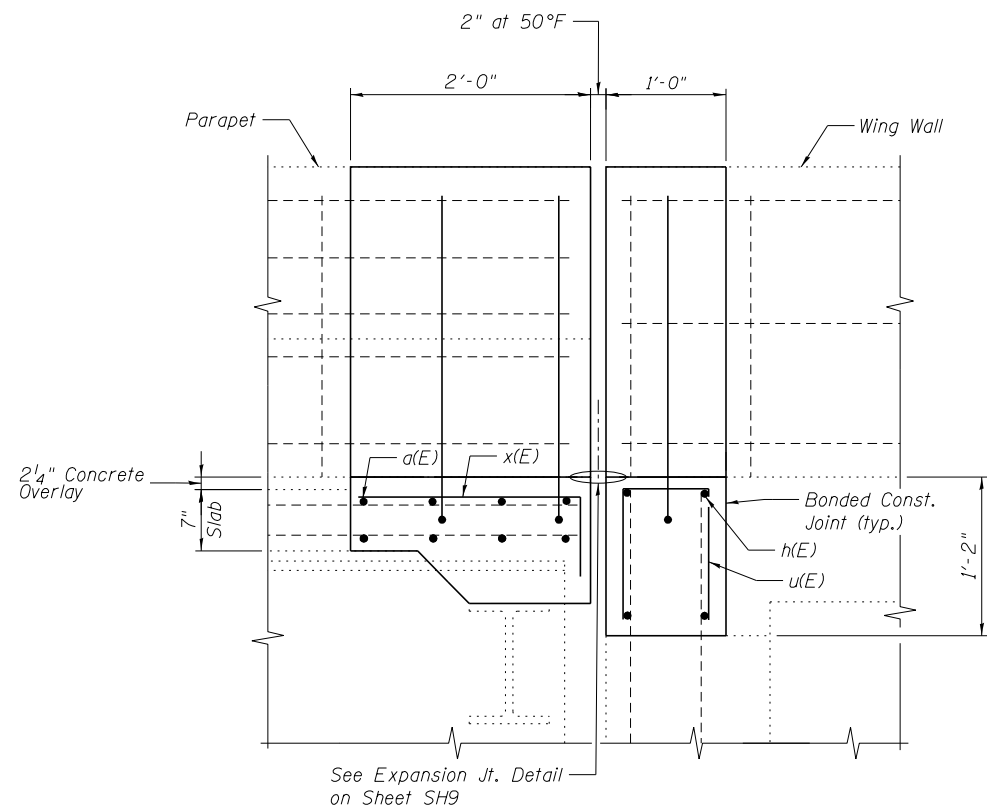
\*Match existing



**SECTION - PROPOSED PARAPET  
AT S. ABUTMENT**  
(N. Abutment Similar)



**SECTION A-A**



**SECTION B-B**

**NOTES:**

1. Work this sheet with Sheet SH5.
2. Removal and disposal of the existing expansion joints will not be paid for separately, but shall be included with the cost of "Concrete Removal".
3. Existing reinforcement bars extending into the concrete removal area shall be blast-cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be repaired or replaced with an approved bar splicer or anchorage system. Cost included with "Concrete Removal".
4. If existing name plate falls within the limits of Concrete Removal, it shall be removed and reinstalled in its original location in accordance with IDOT Std. 515001. Cost included with "Concrete Removal".

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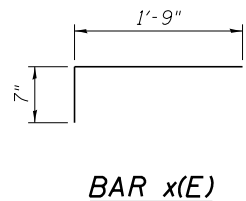
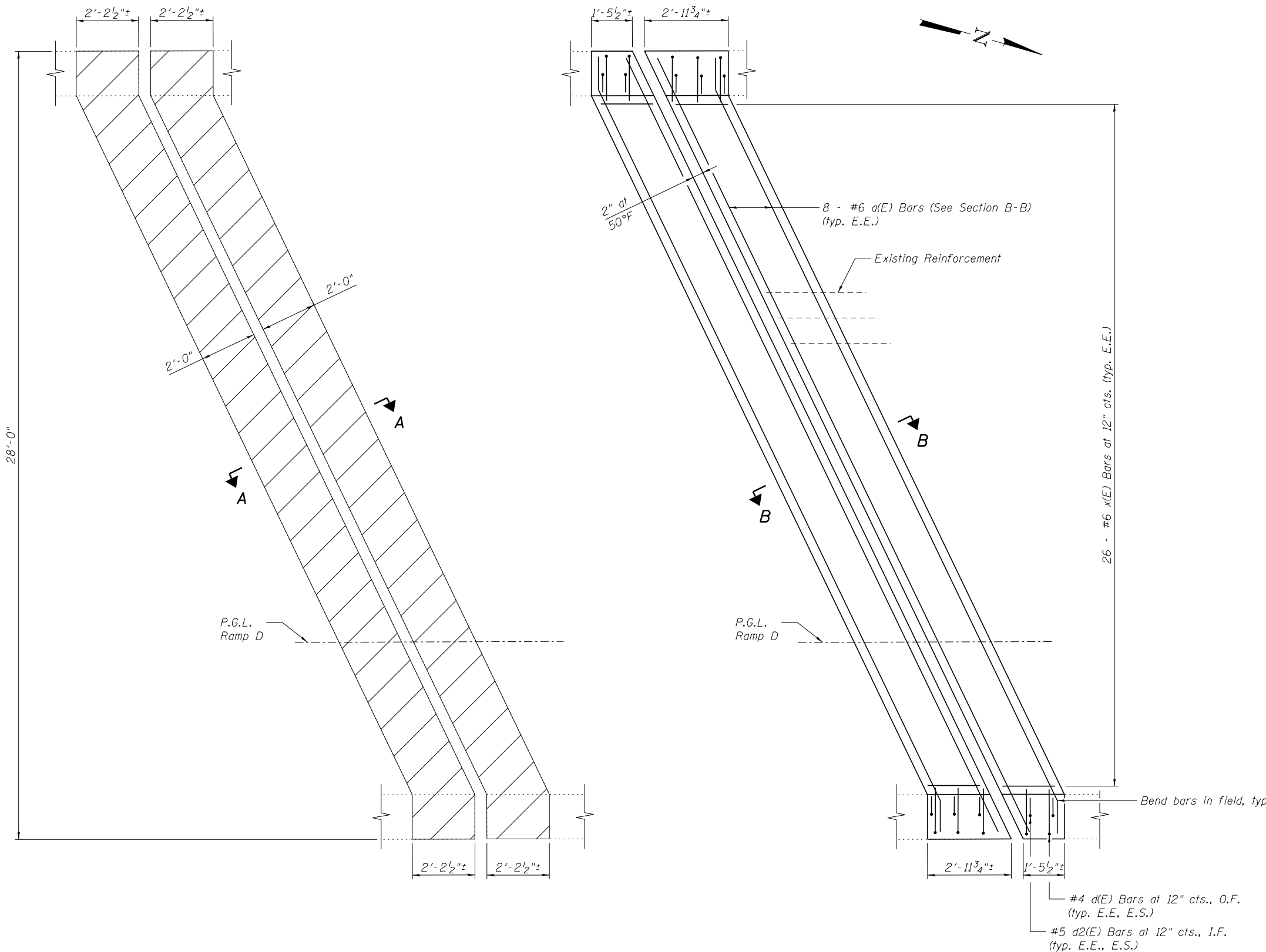
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**EXPANSION JOINT DETAILS - ABUTMENTS  
STRUCTURE NO. 016-2408**

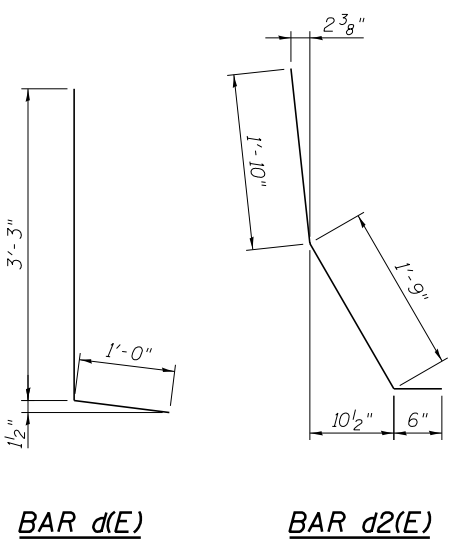
SHEET NO. SH6 OF SH15 SHEETS

F.A.P. RTÉ.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
373	2013-037B-R	COOK	787	726
CONTRACT NO. 60W75				
ILLINOIS FED. AID PROJECT				



**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a(E)	16	#6	30'-6"	—
d(E)	10	#4	4'-3"	L
d2(E)	10	#5	4'-1"	U
x(E)	52	#6	2'-4"	└
Concrete Removal		Cu. Yd.	5.3	
Concrete Superstructure		Cu. Yd.	5.3	
Reinforcement Bars, Epoxy Coated		Pound	990	



**PLAN - CONCRETE REMOVAL  
AT PIER 4**

**PLAN - CONCRETE REPLACEMENT  
AT PIER 4**

- NOTES:**
- I.F. denotes Inside Face  
O.F. denotes Outside Face  
E.E. denotes Each End  
E.S. denotes Each Side
  - Hatched areas indicate Concrete Removal.
  - Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with "Concrete Removal".
  - Work this sheet with Sheet SH8.

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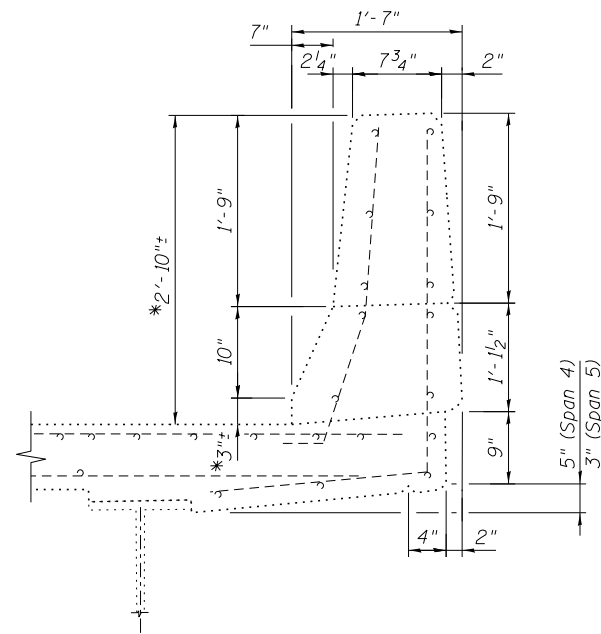
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**EXPANSION JOINT REPAIRS - PIER 4  
STRUCTURE NO. 016-2408**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
373	2013-037B-R	COOK	787	727
CONTRACT NO. 60W75				
ILLINOIS FED. AID PROJECT				

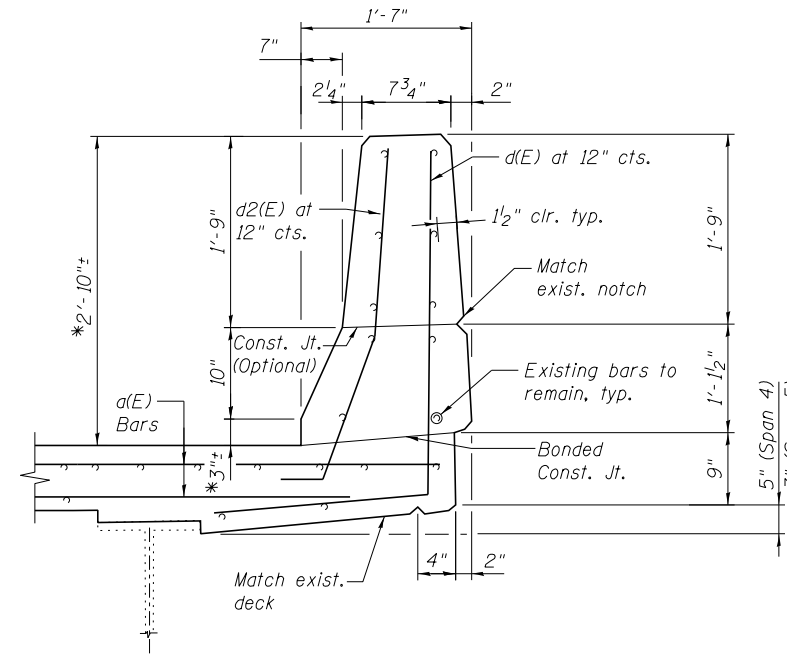
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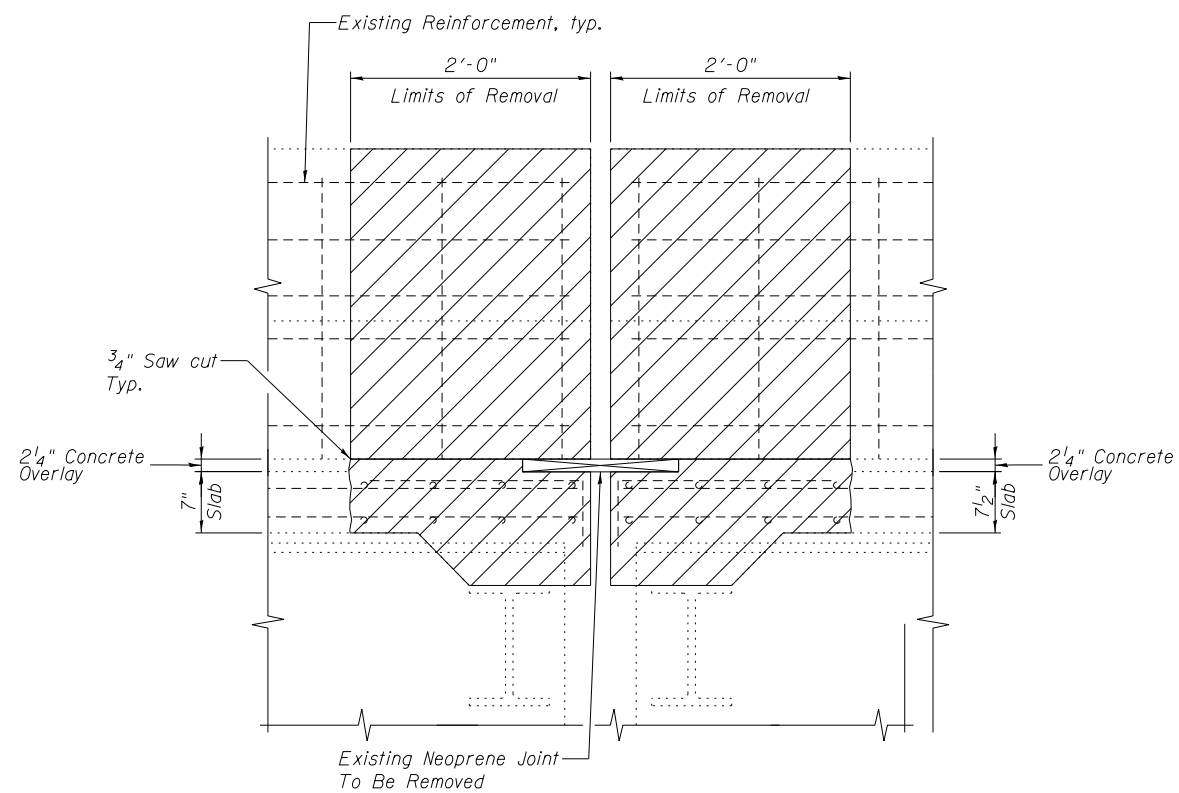


**SECTION - EXISTING PARAPET  
AT PIER 4**

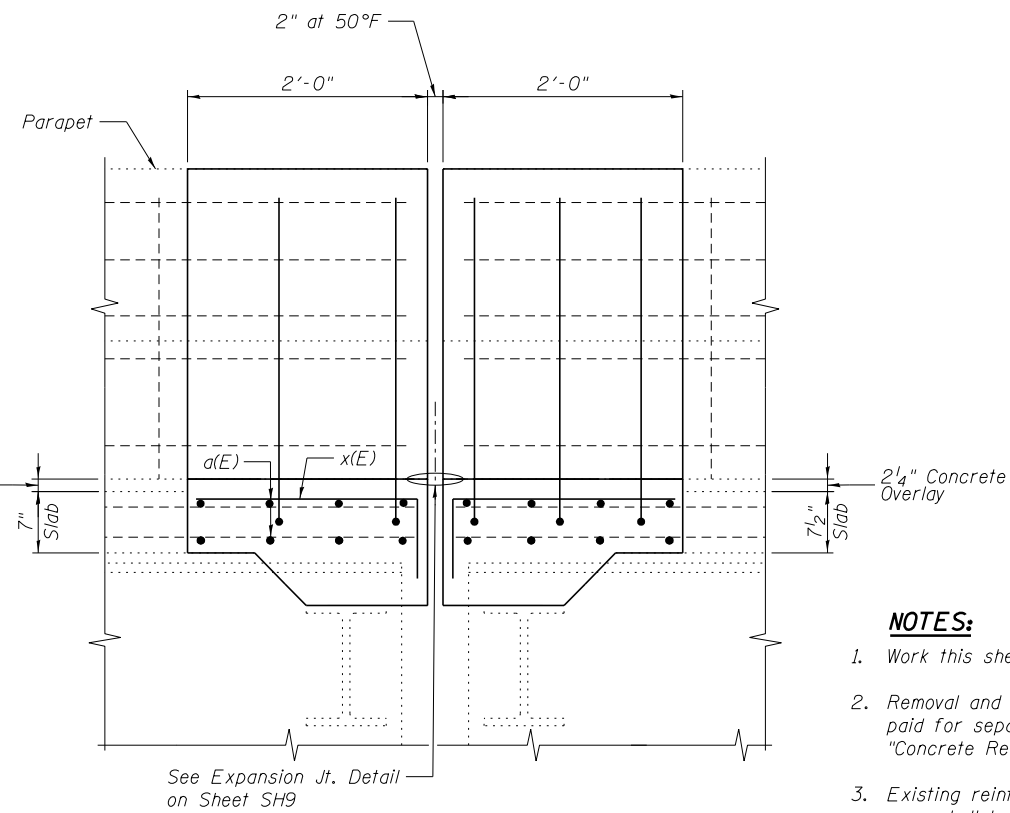
\*Match existing



**SECTION - PROPOSED PARAPET  
AT PIER 4**



**SECTION A-A**



**SECTION B-B**

**NOTES:**

1. Work this sheet with Sheet SH7.
2. Removal and disposal of the existing expansion joints will not be paid for separately, but shall be included with the cost of "Concrete Removal".
3. Existing reinforcement bars extending into the concrete removal area shall be blast-cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be repaired or replaced with an approved bar splicer or anchorage system. Cost included with "Concrete Removal".

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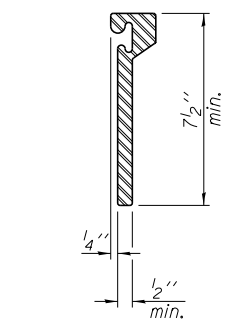
**EXPANSION JOINT DETAILS - PIER 4  
STRUCTURE NO. 016-2408**

SHEET NO. SH8 OF SH15 SHEETS

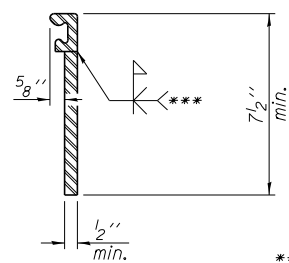
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373	2013-037B-R	COOK	787	728
CONTRACT NO. 60W75				

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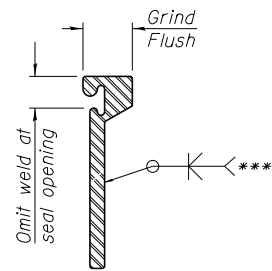




**ROLLED  
EXTRUDED RAIL**



**WELDED RAIL**

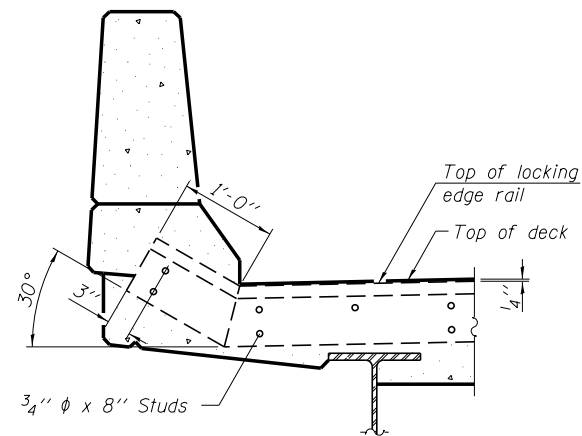


\*\*\* Back gouge not required if complete joint penetration is verified by mock-up.

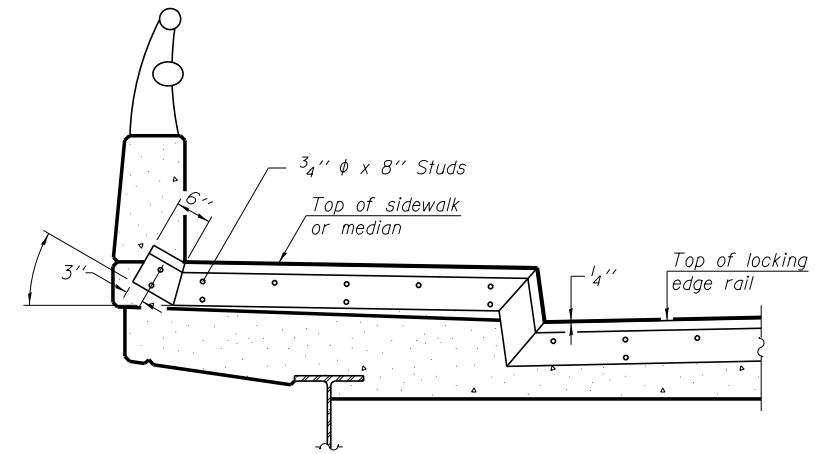
**LOCKING EDGE  
RAIL SPLICE**

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

**LOCKING EDGE RAILS**

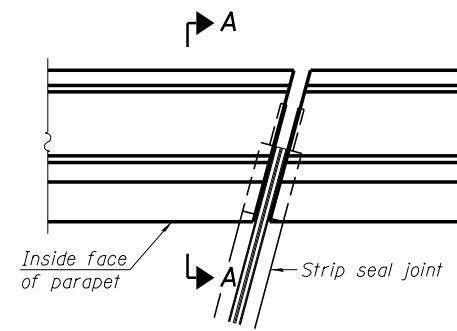


**SECTION A-A**



**TYPICAL END TREATMENT  
AT SIDEWALK OR MEDIAN**

Shorter plates with a single row of studs at 12 inches cts. may be necessary on medians which are shallower than 9 inches. See manufacturer's recommendation.



**PLAN**  
(For skews ≤ 30°)

**Notes:**

The strip seal shall be made continuous and shall have a minimum thickness of 1/4 inch. The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

The Locking Edge Rails depicted are conceptual only, except for the minimum dimensions shown. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities.

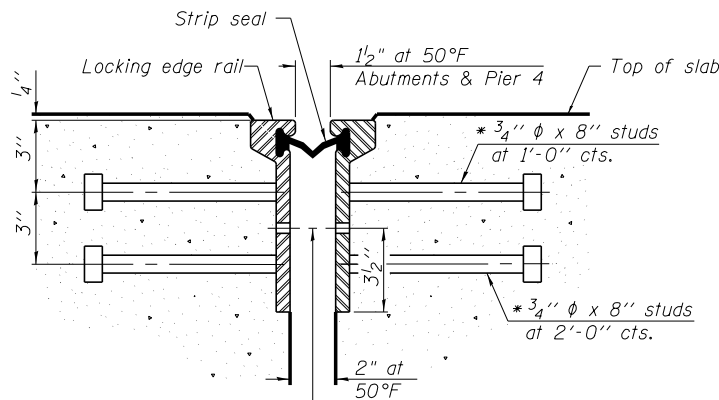
The manufacturer's recommended installation methods shall be followed.

The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.

All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

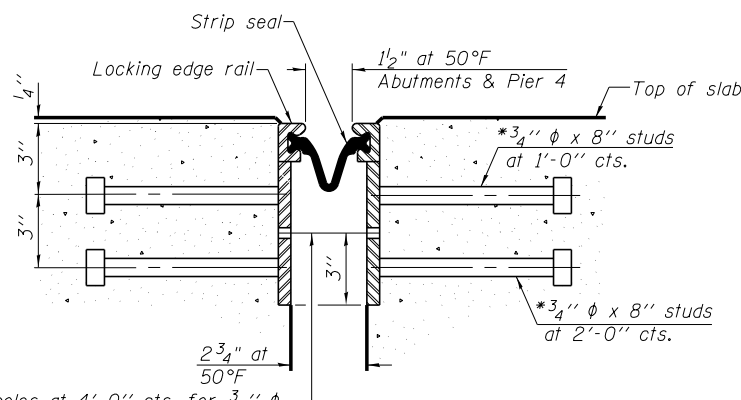
Maximum space between rail segments shall be 3/16 inch, sealed with a suitable sealant. Joints in rails within 10 feet of curbs shall be welded.

Parapet plates and anchorage studs for skews > 30 degrees included in the cost of Preformed Joint Strip Seal.



**SECTION THRU  
ROLLED RAIL JOINT**

7/16 inch diameter holes at 4 foot centers for 3/8 inch diameter bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.



**SECTION THRU  
WELDED RAIL JOINT**

7/16 inch diameter holes at 4 foot centers for 3/8 inch diameter bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

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

**BILL OF MATERIAL**

Item	Unit	Total
Preformed Joint Strip Seal	Foot	92.0

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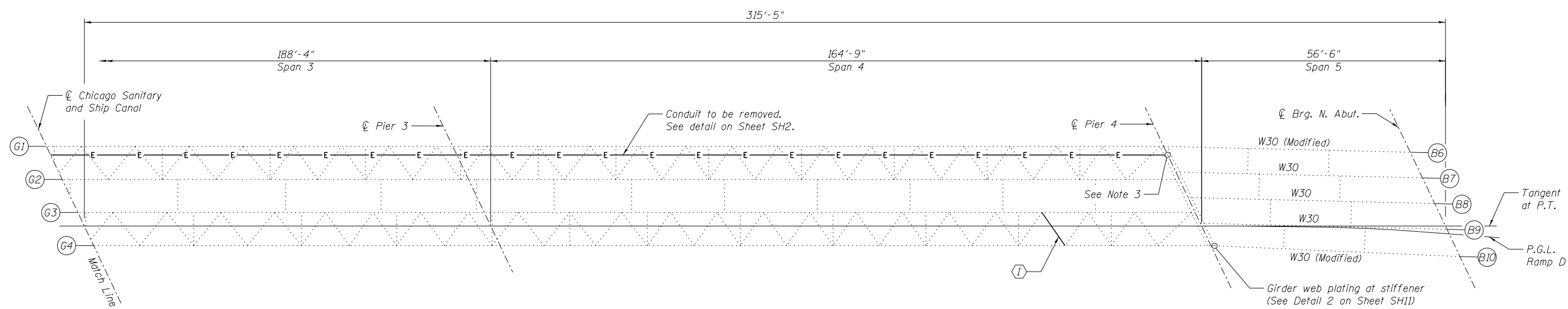
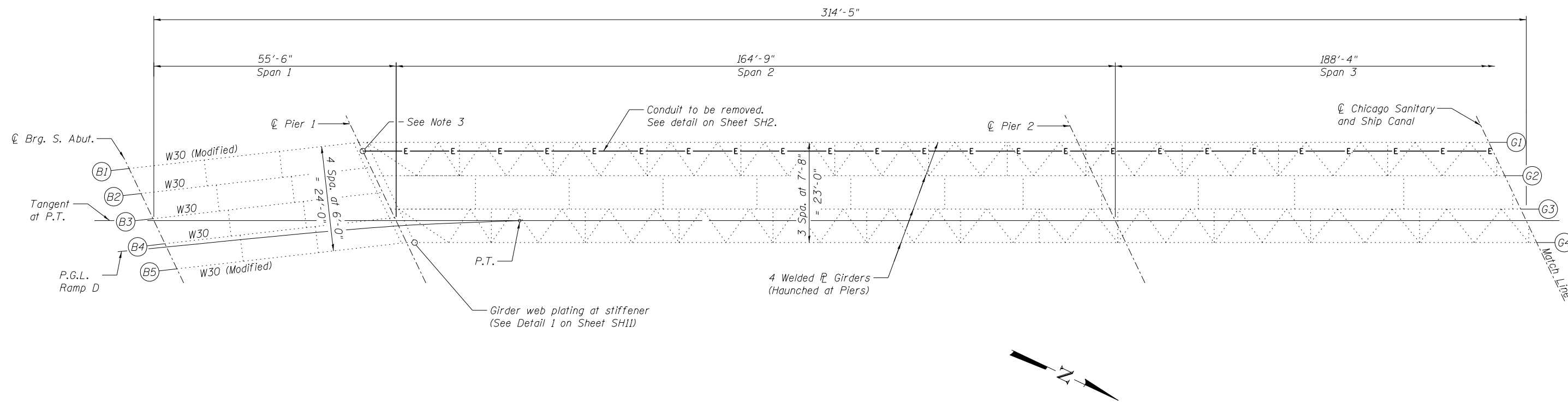
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PLOT SCALE =			
PLOT DATE = 6/15/2015			

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PREFORMED JOINT STRIP SEAL  
STRUCTURE NO. 016-2408**

SHEET NO. SH9 OF SH15 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
373	2013-037B-R	COOK	787	729
CONTRACT NO. 60W75				
ILLINOIS FED. AID PROJECT				



**BILL OF MATERIAL**

ITEM	UNIT	TOTAL
Furnishing and Erecting Structural Steel	Pound	60
Structural Steel Repair	Pound	190
Remove Conduit Attached to Structure	Foot	568

**FRAMING PLAN**

① Remove buckled lateral bracing angle and replace in kind (L4x4x $\frac{1}{4}$ ) (See Sheet SHX7 - For Information Only)

**NOTES:**

- The girder web plating at stiffener repairs are paid for as "Structural Steel Repair". See Special Provision.
- The lateral bracing angle replacement is paid for as "Furnishing and Erecting Structural Steel".
- The vertical run of conduit and all hardware, junction boxes, etc. along Piers 1 & 4 that extends to the ground shall be removed to a minimum 1 foot below grade. Cost included with "Remove Conduit Attached to Structure".

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FILE NAME =	USER NAME = jsurber	DESIGNED - CMK	REVISED -
		CHECKED - JAW	REVISED -
016-2408-60W75-010-framing plan.dgn	PLOT SCALE =	DRAWN - CMK	REVISED -
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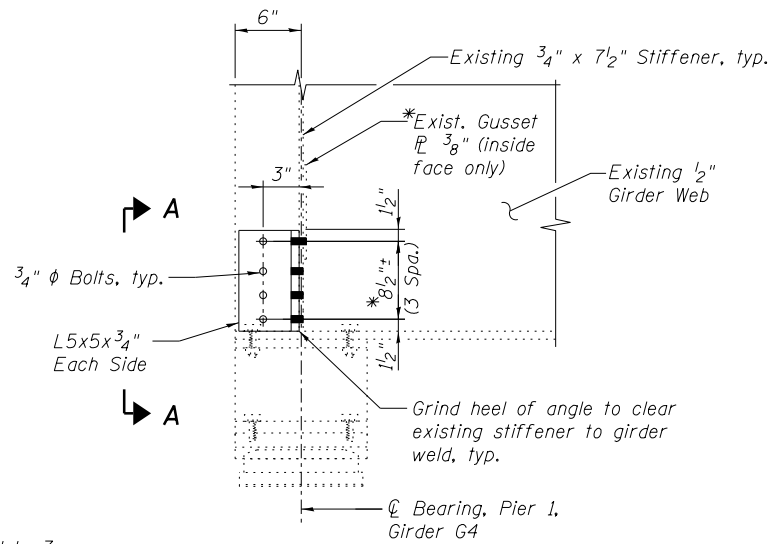
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**FRAMING PLAN  
STRUCTURE NO. 016-2408**

SHEET NO. SH10 OF SH15 SHEETS

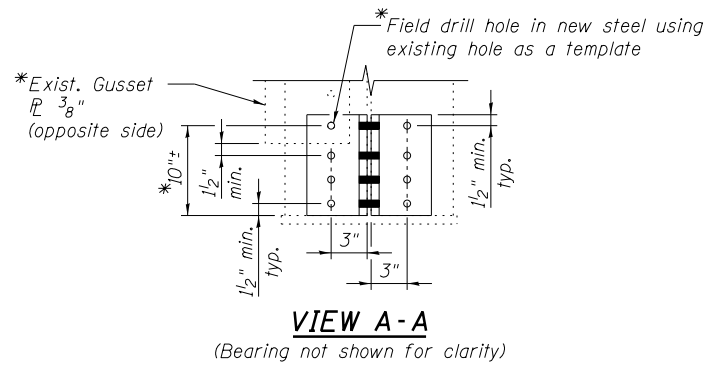
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373	2013-037B-R	COOK	787	730
CONTRACT NO. 60W75				
ILLINOIS FED. AID PROJECT				

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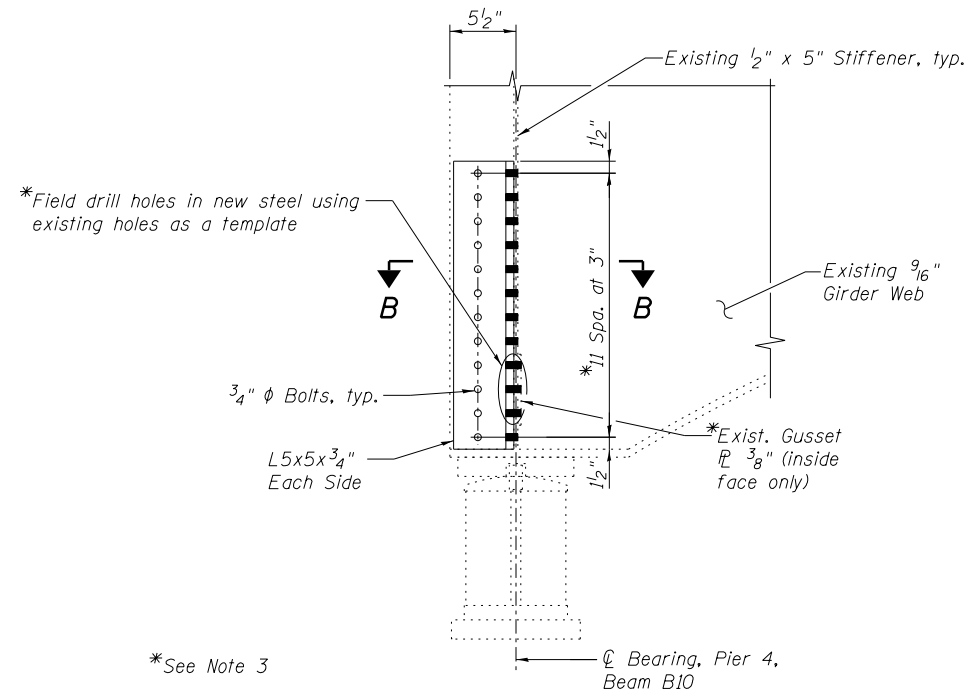


\*See Note 3

**DETAIL 1**

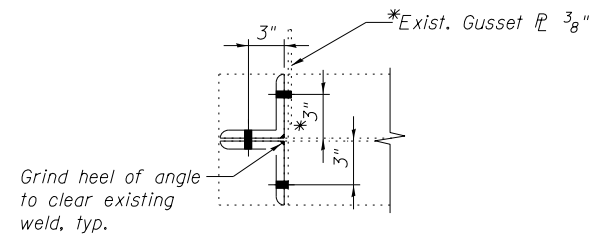


**VIEW A-A**  
(Bearing not shown for clarity)



\*See Note 3

**DETAIL 2**



**SECTION B-B**

**NOTES:**

1. The structural steel repairs are paid for as "Structural Steel Repair". See Special Provision.
2. Fasteners shall be high strength bolts. Bolts 3/4"  $\phi$ , open holes 13/16"  $\phi$  unless otherwise noted. New holes in existing members are to be field drilled using holes in new members as a template.
3. The Contractor shall verify existing dimensions and locations of the gusset plates and existing hole sizes and make any necessary adjustments to the bolt spacing and angle sizes prior to construction or ordering of materials. Cost included with "Structural Steel Repair".
4. Cost of field drilling included with "Structural Steel Repair".



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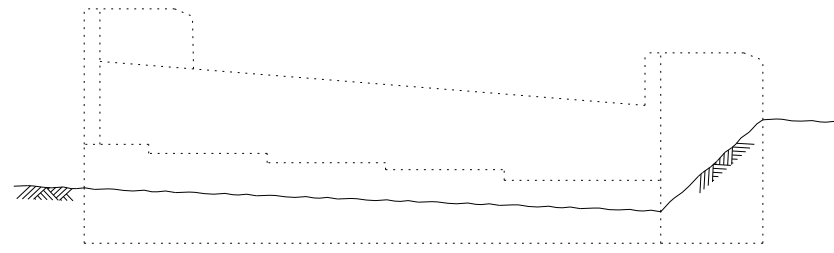
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**STRUCTURAL STEEL REPAIR DETAILS  
STRUCTURE NO. 016-2408**

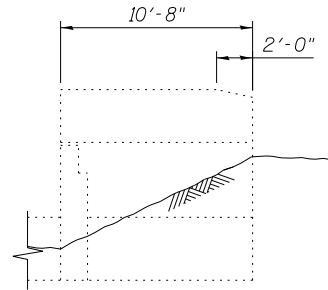
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
373	2013-037B-R	COOK	787	731
CONTRACT NO. 60W75				
ILLINOIS FED. AID PROJECT				

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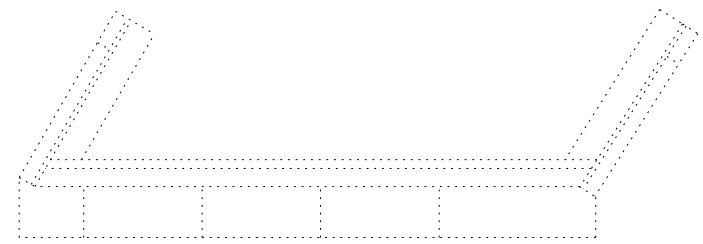
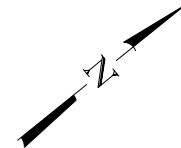
ELEVATION



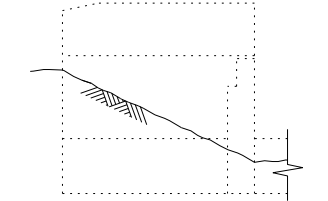
EAST WINGWALL ELEVATION

**BILL OF MATERIAL**

SYMBOL	ITEM	UNIT	QUANTITY
	Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)	Sq. Ft.	12

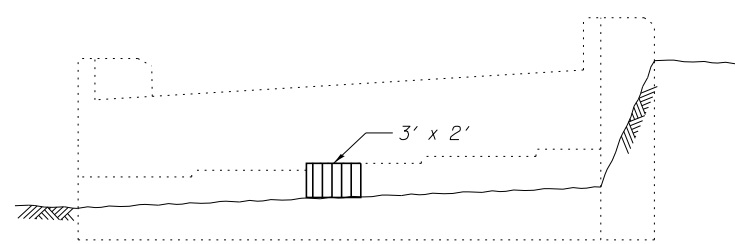


PLAN

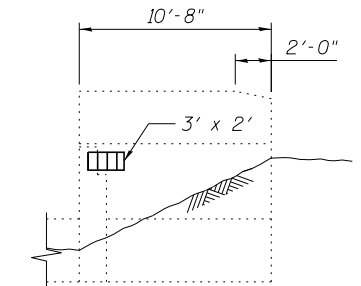


WEST WINGWALL ELEVATION

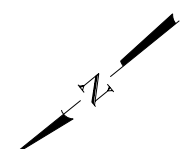
NORTH ABUTMENT



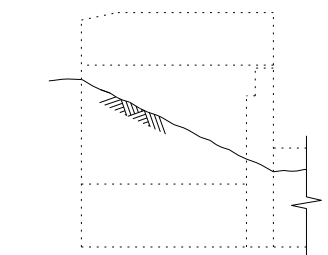
ELEVATION



EAST WINGWALL ELEVATION



PLAN



WEST WINGWALL ELEVATION

SOUTH ABUTMENT



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DEPARTMENT OF TRANSPORTATION**

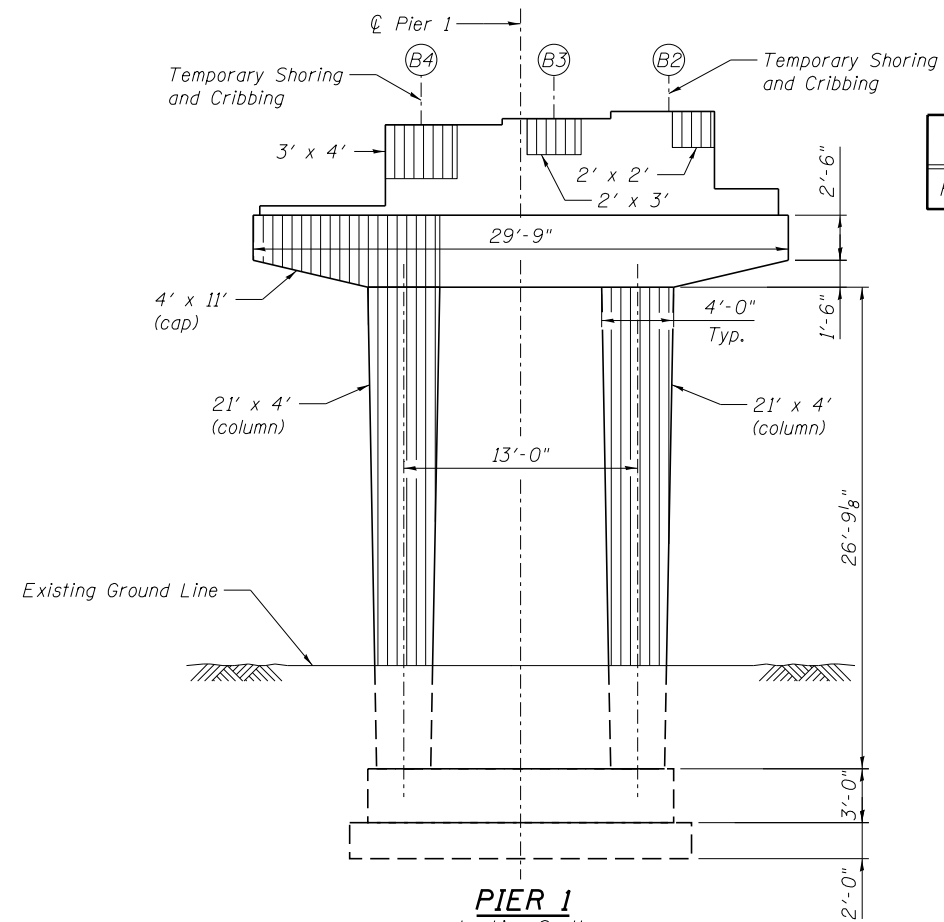
**SUBSTRUCTURE REPAIRS – ABUTMENTS  
STRUCTURE NO. 016-2408**

SHEET NO. SH12 OF SH15 SHEETS

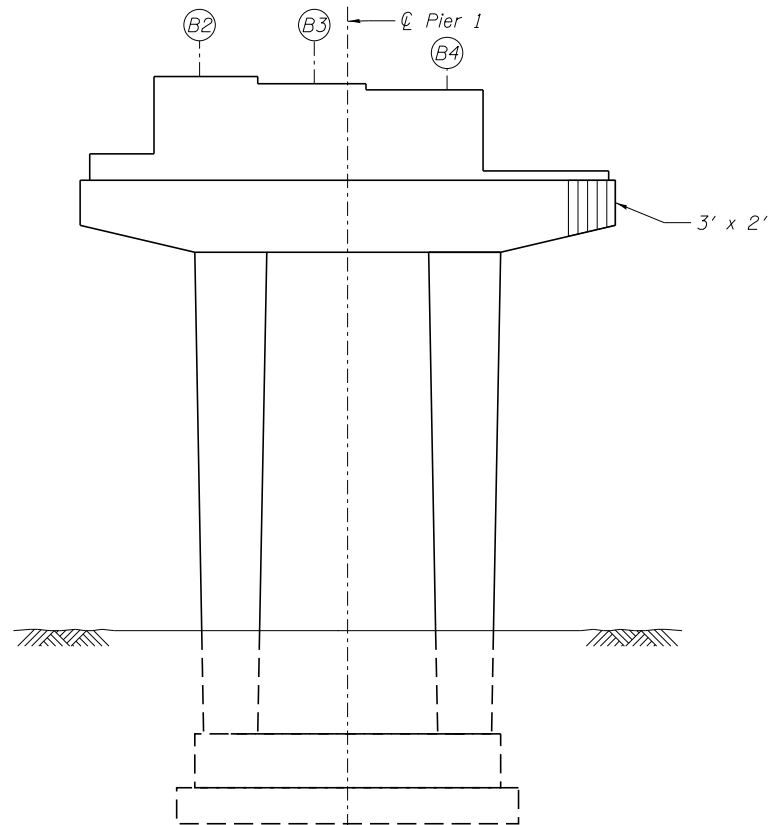
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373	2013-037B-R	COOK	787	732
CONTRACT NO. 60W75				

ILLINOIS FED. AID PROJECT

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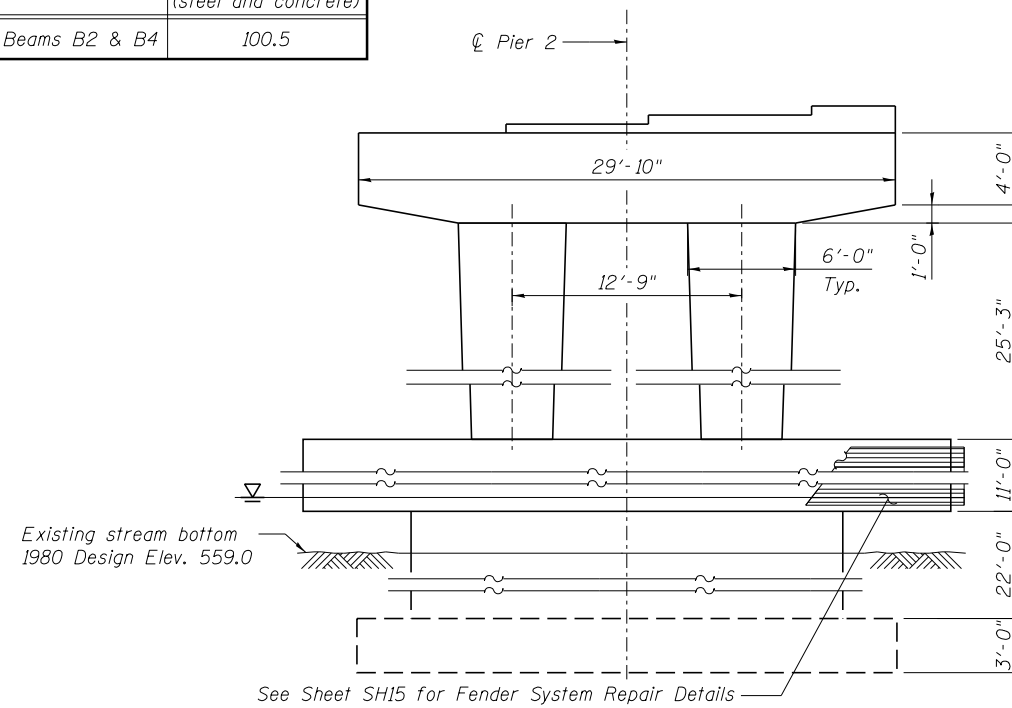
**PIER 1**  
Looking South



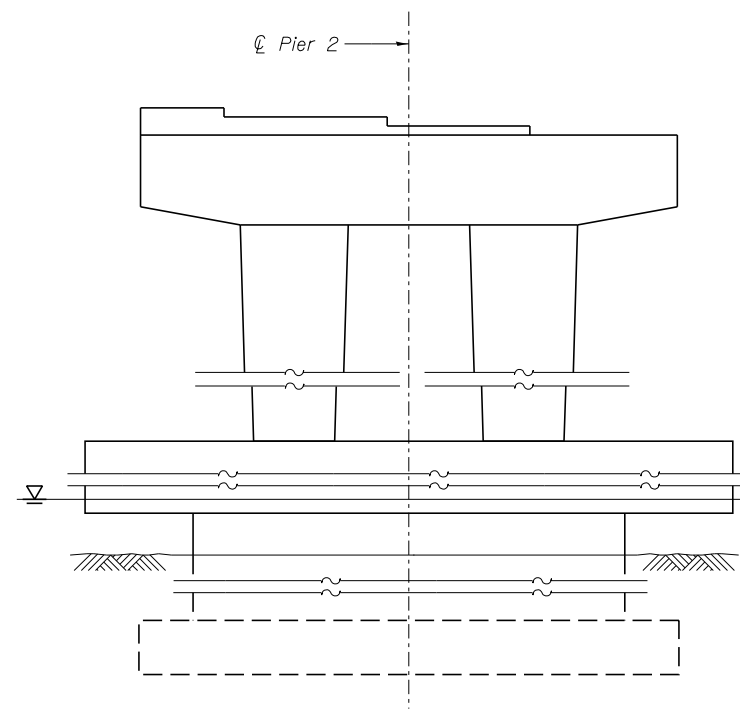
**PIER 1**  
Looking North

**UNFACTORED BEAM REACTIONS (KIPS)**

LOCATION	DEAD LOAD (steel and concrete)
Pier 1 - Beams B2 & B4	100.5



**PIER 2**  
Looking South



**PIER 2**  
Looking North

**BILL OF MATERIAL**

SYMBOL	ITEM	UNIT	QUANTITY
	Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)	Sq. Ft.	240
	Temporary Shoring and Cribbing	Each	2

**NOTES:**

1. Actual quantities of repairs shall be approved by the Engineer.
2. If Temporary Shoring and Cribbing is required to perform a concrete repair, shoring and repair shall be done with no live load on the bridge.
3. All concrete repairs at Pier 1 shall be done with no live load on the bridge.

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312-565-0450 Job No. 10093

FILE NAME =	USER NAME = jsurber	DESIGNED - CMK	REVISED -
		CHECKED - JAW	REVISED -
016-2408-60W75-013-piers1&2.dgn	PLOT SCALE =	DRAWN - CMK	REVISED -
	PLOT DATE = 6/15/2015	CHECKED - JAW	REVISED -

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

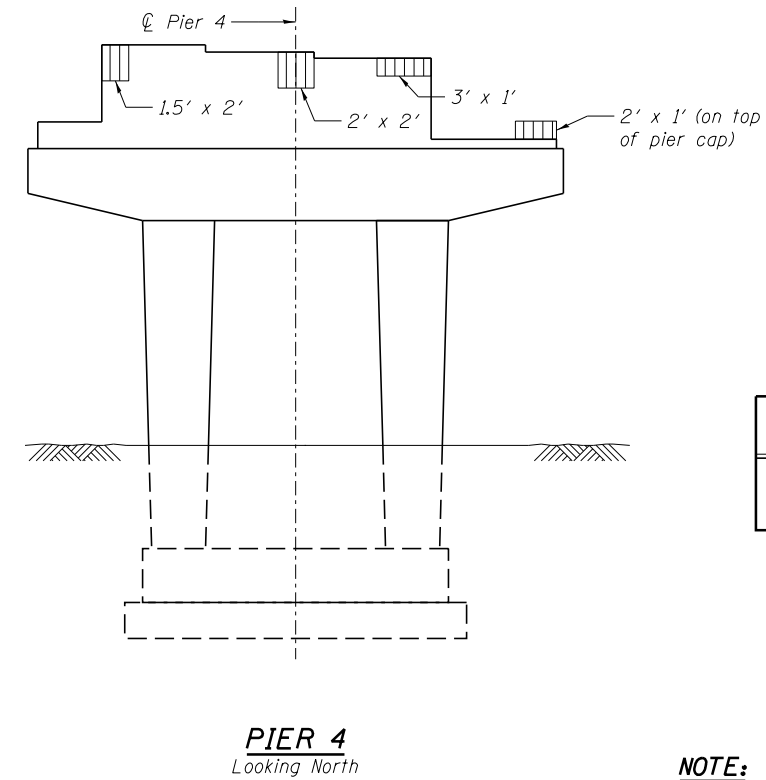
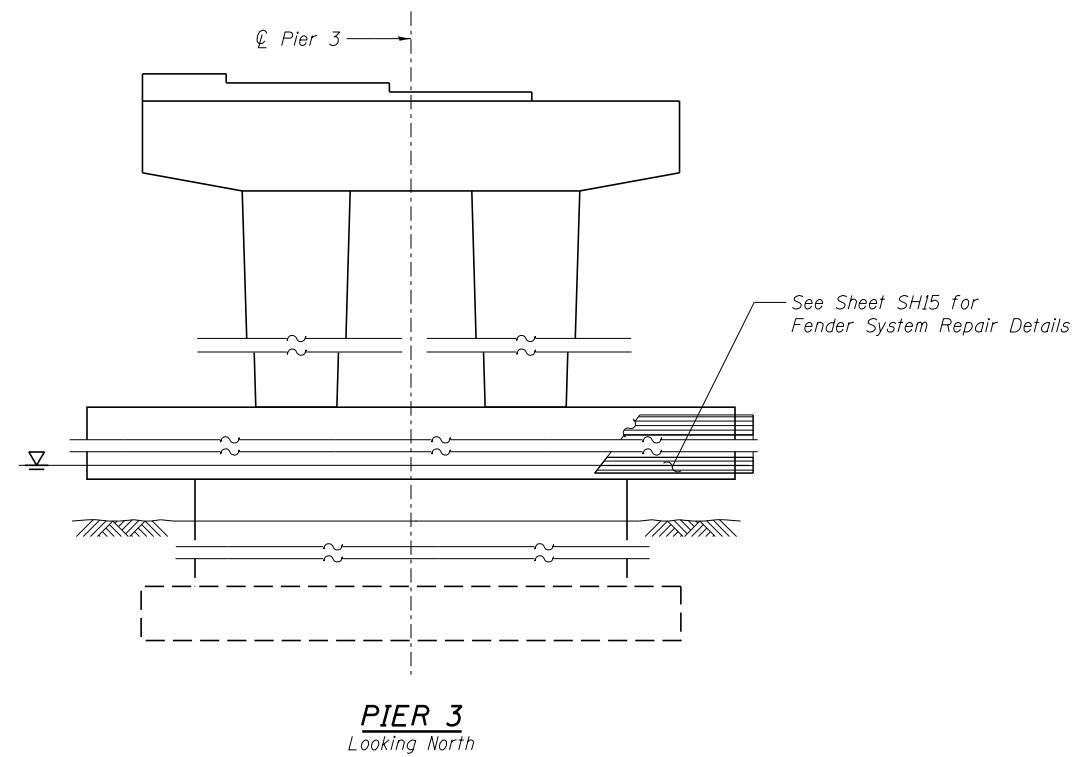
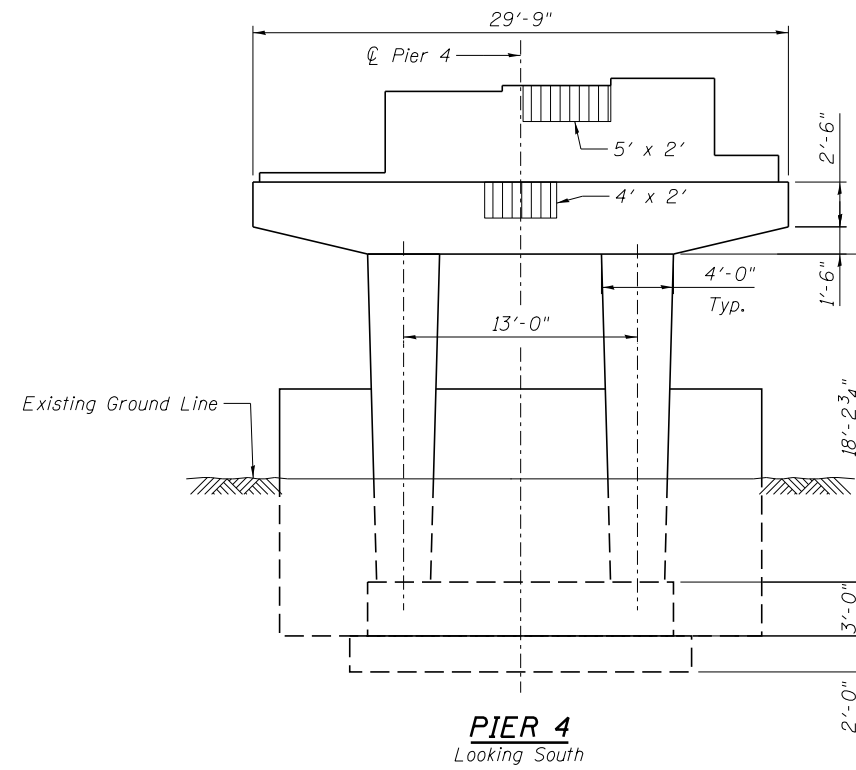
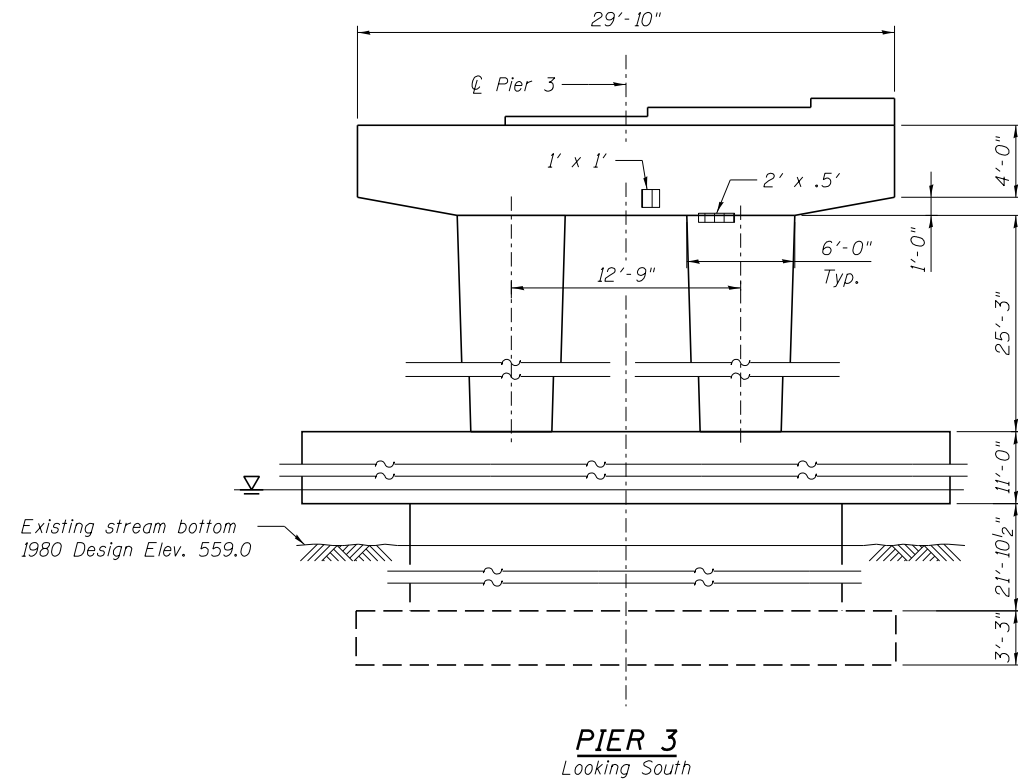
**SUBSTRUCTURE REPAIRS - PIERS 1 & 2**  
**STRUCTURE NO. 016-2408**

SHEET NO. SH13 OF SH15 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
373	2013-037B-R	COOK	787	733
CONTRACT NO. 60W75				

ILLINOIS FED. AID PROJECT

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**BILL OF MATERIAL**

SYMBOL	ITEM	UNIT	QUANTITY
▨	Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)	Sq. Ft.	32

**NOTE:**

Actual quantities of repairs shall be approved by the Engineer.

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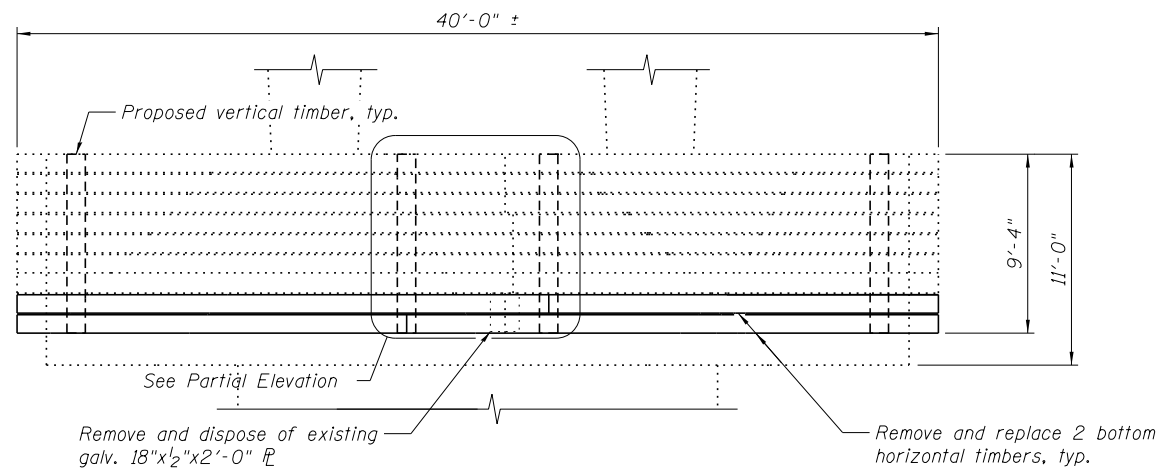
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		DRAWN - CMK	REVISED -
		CHECKED - JAW	REVISED -
016-2408-60W75-014-piers3&4.dgn	PLOT DATE = 6/15/2015		

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

**SUBSTRUCTURE REPAIRS - PIERS 3 & 4**  
**STRUCTURE NO. 016-2408**

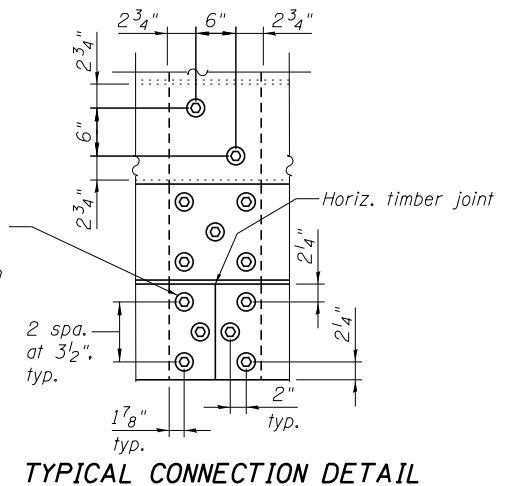
SHEET NO. SH14 OF SH15 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
373	2013-037B-R	COOK	787	734
CONTRACT NO. 60W75				
ILLINOIS FED. AID PROJECT				

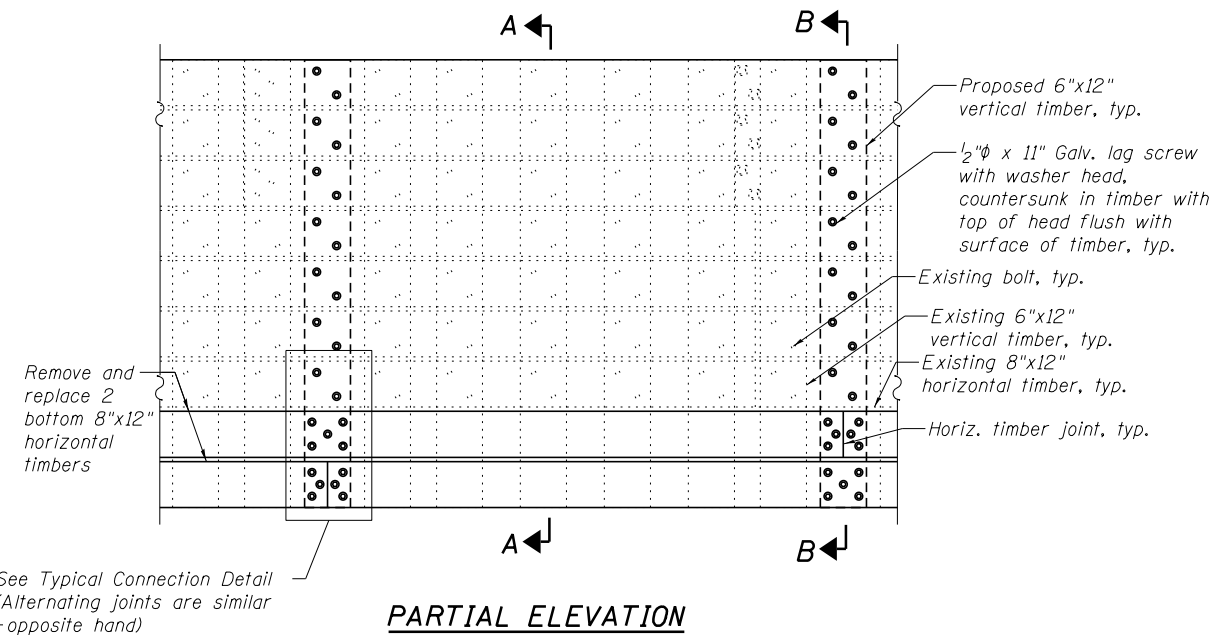


**FENDER SYSTEM ELEVATION**

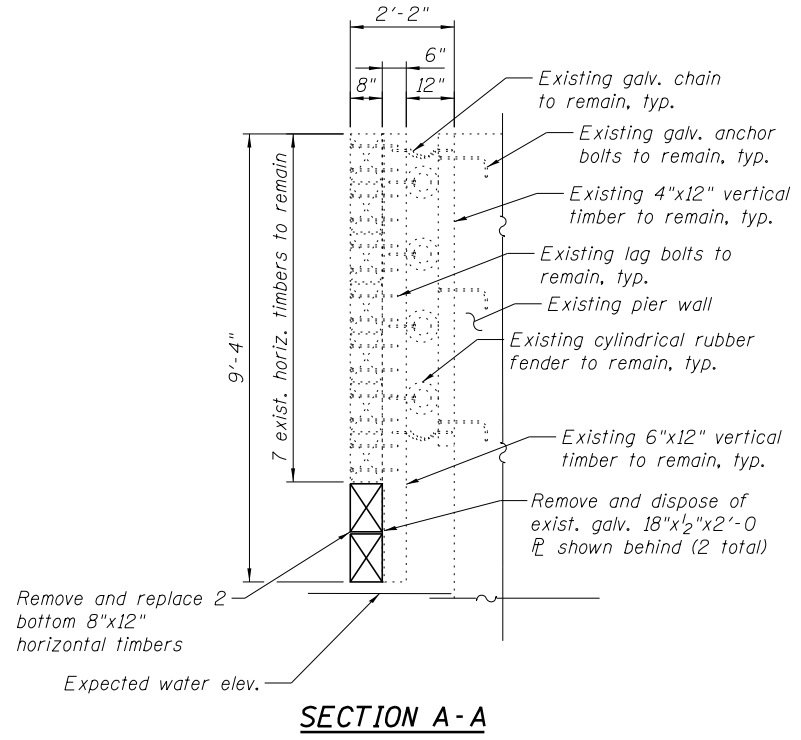
Pier 2 - Looking South  
Pier 3 - Looking North



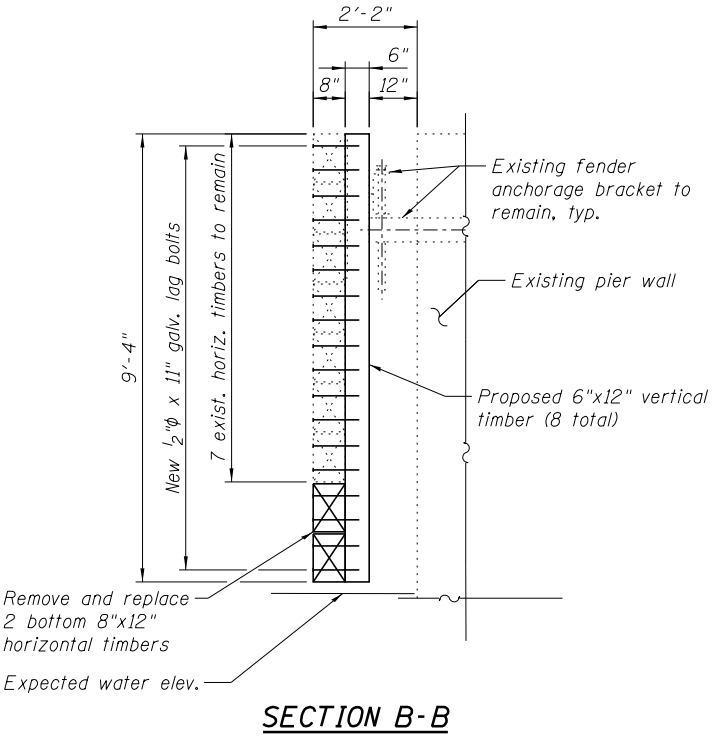
**TYPICAL CONNECTION DETAIL**



**PARTIAL ELEVATION**



**SECTION A-A**



**SECTION B-B**

**NOTES:**

- Any portions of the existing fender system exposed by removal of existing timbers shall be protected using temporary bumpers or other means as approved by the Engineer for the duration of the exposure. See Special Provision for "Fender System" for more information.
- All existing dimensions shall be measured and verified in the field prior to ordering of the timbers.
- Proposed timbers shall be creosoted Dense Structural 65 Grade Southern Yellow Pine conforming to the "Grading Rules for Southern Pine Lumber of the Southern Pine Inspection Bureau". See Special Provision for "Fender System" for more information.
- Lag screws shall be ASTM A307 Grade A and shall be hot dipped galvanized according to AASHTO M 232, Class C.
- Horizontal timbers shall be continuous over at least one proposed vertical timber (i.e. the horizontal timbers shall be connected to a minimum of 3 different proposed vertical timbers).
- Cost of furnishing all labor, tools, equipment, materials and incidentals necessary to remove, install or reattach all components of the fender system as detailed shall be included with "Fender System". See Special Provision.

**BILL OF MATERIAL**

ITEM	UNIT	TOTAL
Fender System	L Sum	0.25

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FILE NAME =	USER NAME = jsurber	DESIGNED - TJJ	REVISED -
016-2408-60W75-015.Fender_System_Repair.dgn	PLOT SCALE =	CHECKED - KJN	REVISED -
	PLOT DATE = 6/15/2015	DRAWN - TJJ/RMG	REVISED -
		CHECKED - KJN	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

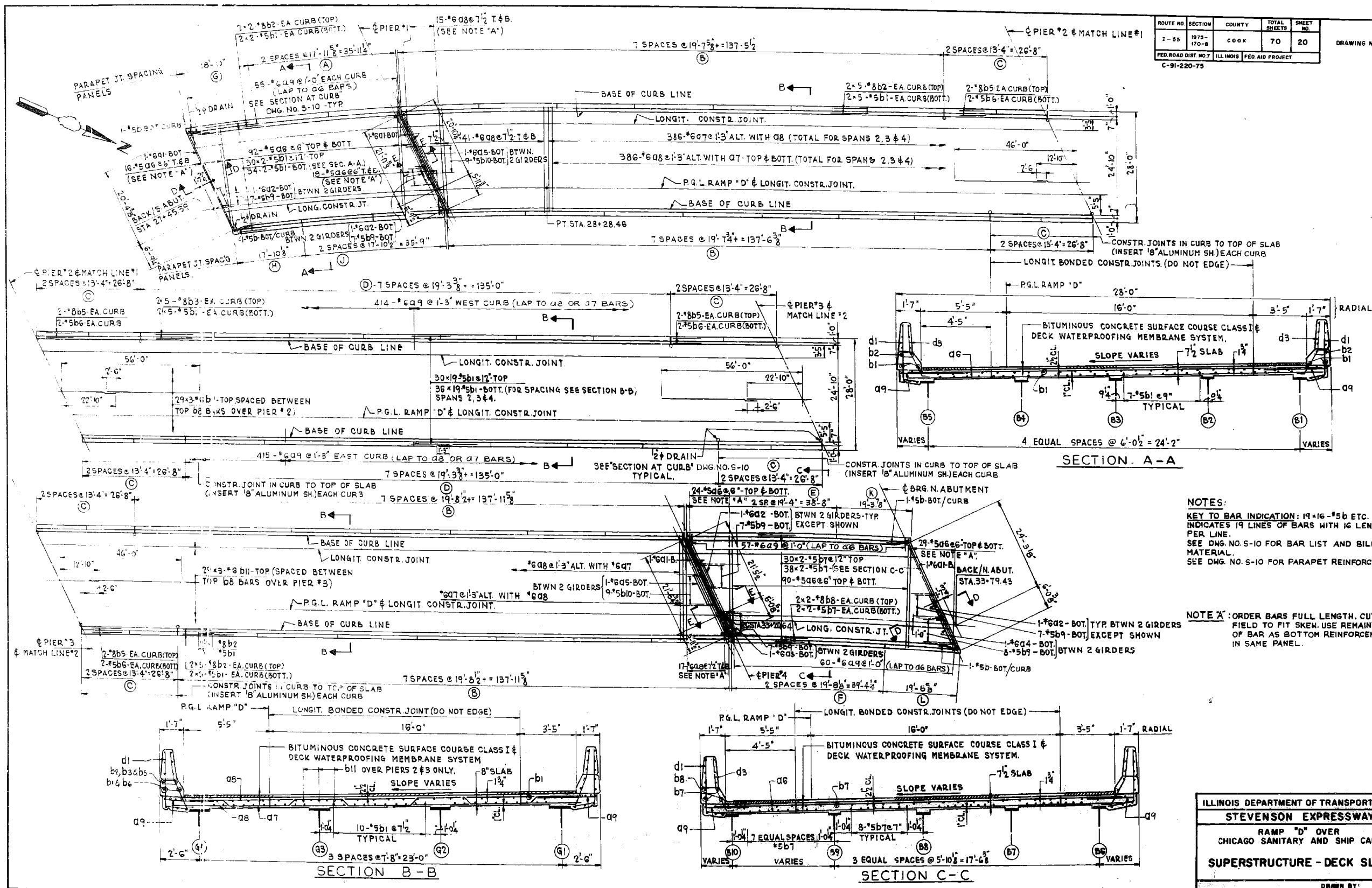
**FENDER SYSTEM REPAIR DETAILS  
STRUCTURE NO. 016-2408**

SHEET NO. SH15 OF SH15 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
373	2013-037B-R	COOK	787	735
CONTRACT NO. 60W75				
ILLINOIS FED. AID PROJECT				

X:\1000005\100093\Eng\_Docs\_Phase\_1\1\SN\_016\_2408\_NB\_1st\_Ave\_to\_NB\_Ramp\_cover\_Canal\Final\Plans\016-2408-60W75-015\_Fender\_System\_Repair.dgn 4:51:34 PM 6/15/2015

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1-55	1975-170-B	COOK	70	20
DRAWING NO. S-9				
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT C-91-220-75				



**NOTES:**  
**KEY TO BAR INDICATION:** 19-16-#5B ETC. INDICATES 19 LINES OF BARS WITH 16 LENGTHS PER LINE. SEE DWG. NO. S-10 FOR BAR LIST AND BILL OF MATERIAL. SEE DWG. NO. S-10 FOR PARAPET REINFORCEMENT.

**NOTE A:** ORDER BARS FULL LENGTH. CUT IN FIELD TO FIT SKEW. USE REMAINDER OF BAR AS BOTTOM REINFORCEMENT IN SAME PANEL.

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**STEVENSON EXPRESSWAY**  
 RAMP "D" OVER CHICAGO SANITARY AND SHIP CANAL  
**SUPERSTRUCTURE - DECK SLAB**  
 DATE: JUNE 1977  
 DRAWN BY: A.B.  
 CHECKED BY: W.Y.H.

FOR INFORMATION ONLY

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FILE NAME =	USER NAME =	DESIGNED -	REVISIONS
016-2408-60W75-016-Existing Deck.dgn	jsurber	CMK	
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		JAW	
		DRAWN -	REVISIONS
		CMK	
		CHECKED -	REVISIONS
		JAW	
		PLOT DATE =	
		6/15/2015	

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

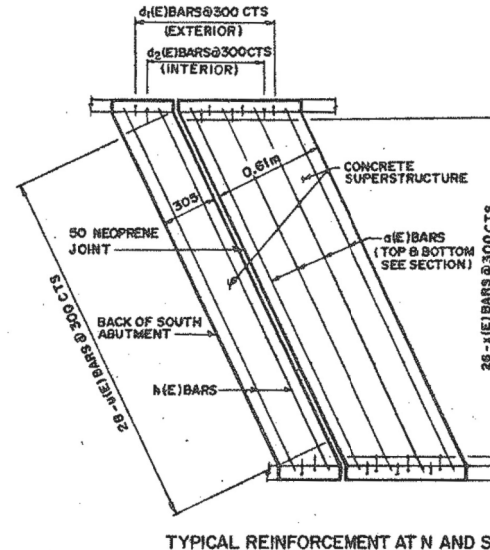
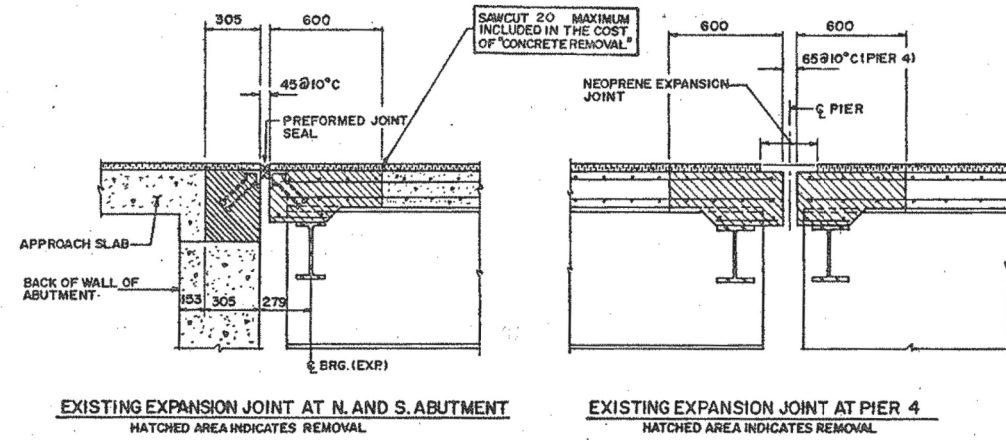
EXISTING PLAN INFORMATION 1 OF 7  
 STRUCTURE NO. 016-2408  
 SHEET NO. SHX1 OF SHX7 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
373	2013-037B-R	COOK	787	736
CONTRACT NO. 60W75				
ILLINOIS FED. AID PROJECT				

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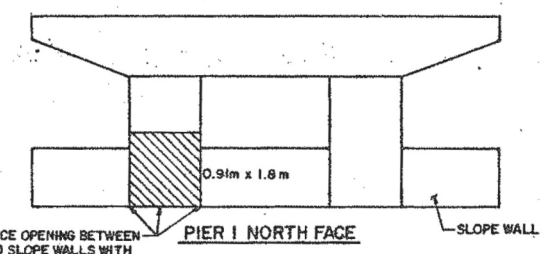
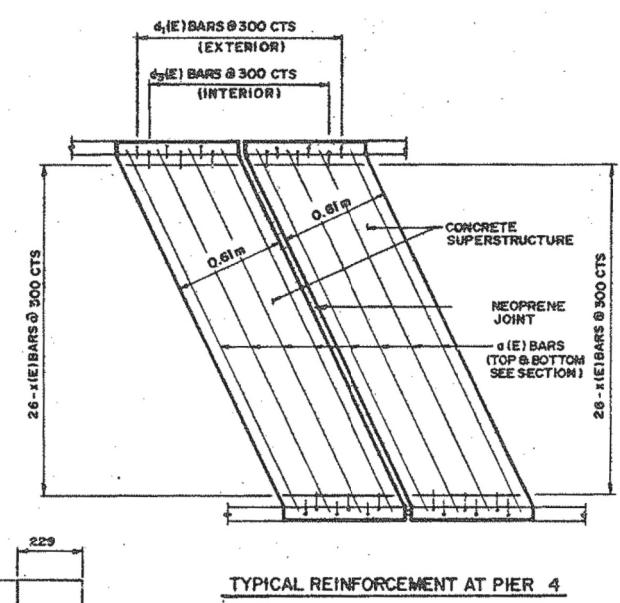
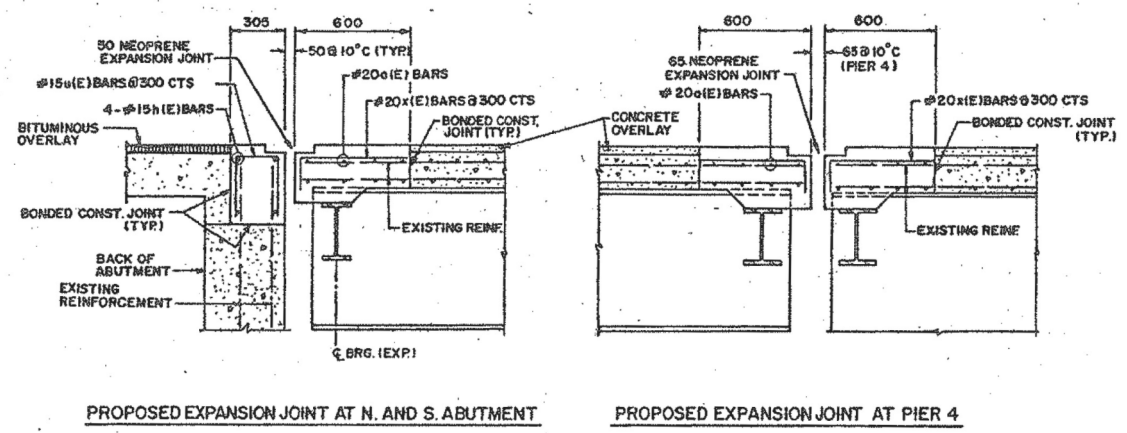


F.I. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	*	COOK	578	207
STA.		TO STA.		
FED. ROAD DIST. NO. 1		FED. AID PROJECT		
* (0404-640, ETC, 0711.21RS-1)				



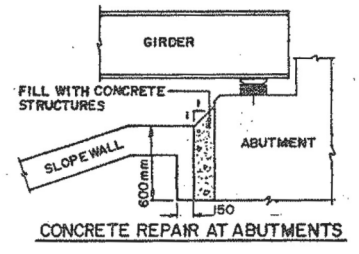
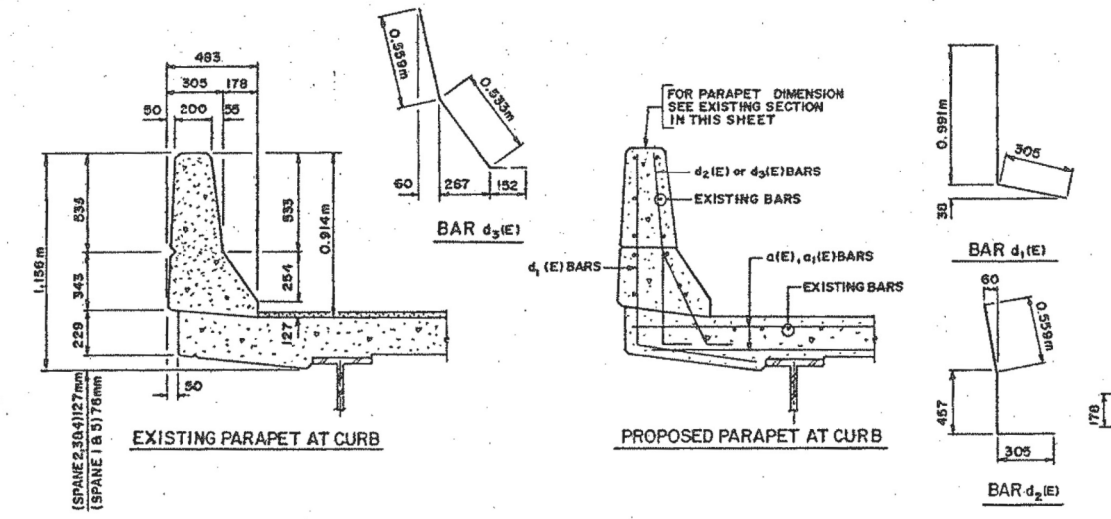
**BILL OF MATERIAL**

BAR	NO.	SIZE	LENGTH	SHAPE
a (E)	24	#20	9.965m	—
d <sub>1</sub> (E)	28	#10	1.296m	L
d <sub>2</sub> (E)	16	#15	1.321m	L
d <sub>3</sub> (E)	12	#15	1.244m	L
h (E)	8	#15	9.965m	—
x (E)	104	#20	0.711m	Γ
u (E)	56	#15	0.839m	□
REINFORCEMENT BARS (EPOXY COATED)			Kgs	1210
CONCRETE SUPERSTRUCTURE			CU. M.	11.5
CONCRETE REMOVAL			CU. M.	11.5
NEOPRENE EXPANSION JOINT 50 mm			M	20
NEOPRENE EXPANSION JOINT 65 mm			M	10
FORMED CONCRETE REPAIR (≤125)			SQ. M.	2
CONCRETE STRUCTURES			CU. M.	1.5



**LEGEND:**  
 FORMED CONCRETE REPAIR (≤125)

**NOTE:**  
 THE ENGINEER SHOULD MARK THE LOCATIONS OF THE ACTUAL REPAIR WORK IN THE AS-BUILT PLANS



**REVISIONS**

NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 NORTH BOUND ILLINOIS ROUTE 171  
 TO EAST BOUND I-55 RAMP  
 OVER CHICAGO SANITARY AND SHIP CANAL  
 EXPANSION JOINT AND ABUTMENT DETAILS  
 SCALE: VERT. S.N.016-2408  
 HORIZ.  
 DATE: DRAWN BY MVT  
 CHECKED BY TMS

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 312-565-0450 Job No. 10093

FILE NAME	USER NAME	DESIGNED	CHECKED	REVISIONS
016-2408-60W75-017-Existing Joints.dgn	jsurber	CMK	JAW	-
		CMK	JAW	-
		JAW	JAW	-

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

EXISTING PLAN INFORMATION 2 OF 7  
 STRUCTURE NO. 016-2408

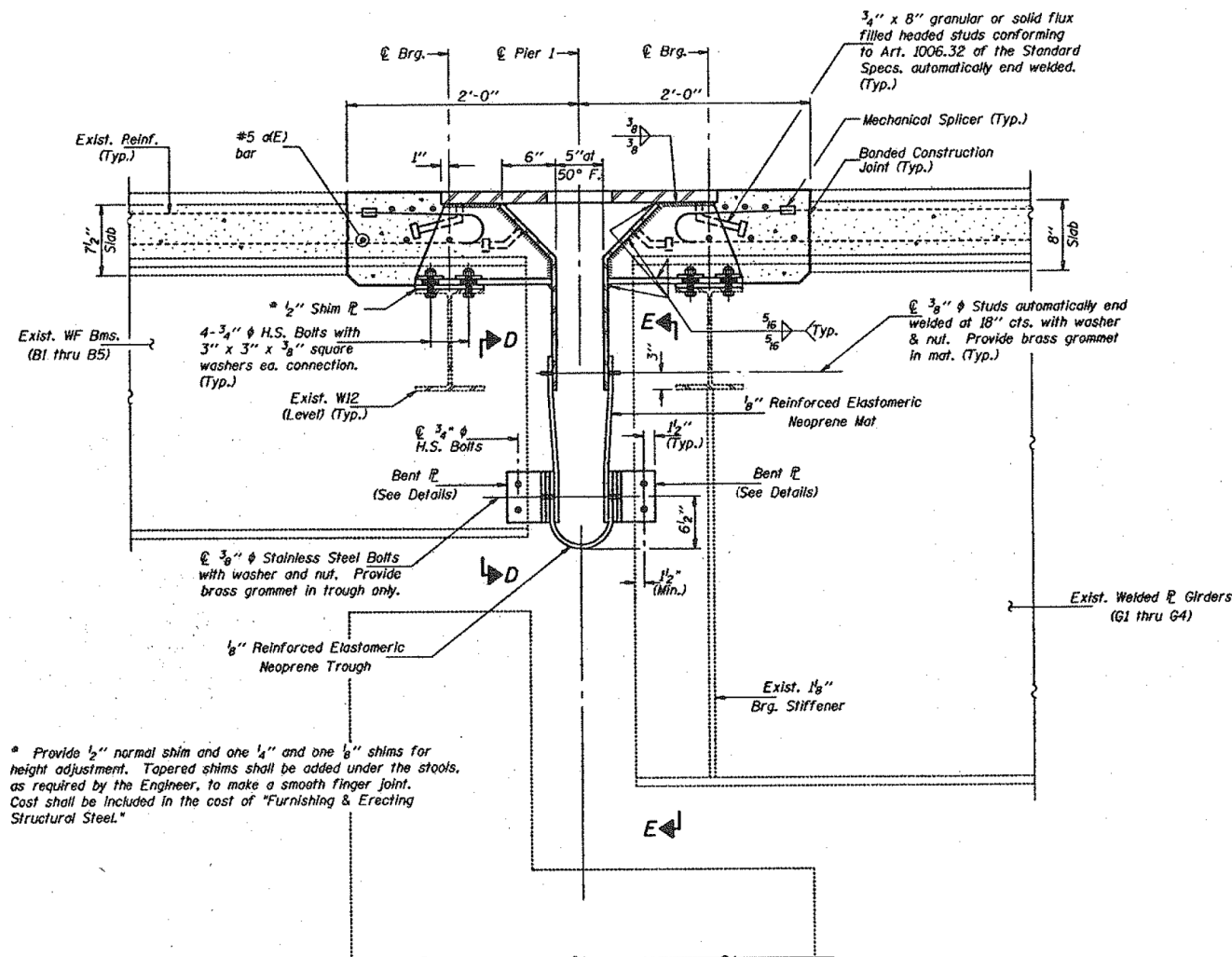
SHEET NO. SHX2 OF SHX7 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
373	2013-037B-R	COOK	787	737
CONTRACT NO. 60W75				
ILLINOIS FED. AID PROJECT				

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

Sheet S6 of S12

DATE	SECTION	COUNTY	JEER	NO.	SHEET NO.
F.A.I. 55	1975-170-B	COOK	578	211	8 SHEETS



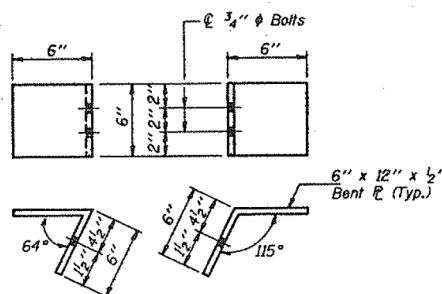
\* Provide 1/2" normal shim and one 1/4" and one 1/8" shims for height adjustment. Tapered shims shall be added under the stools, as required by the Engineer, to make a smooth finger joint. Cost shall be included in the cost of "Furnishing & Erecting Structural Steel."

SECTION C-C

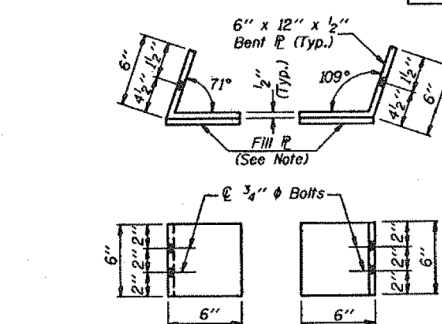
(See Sheet 5 of 8 for Views D-D & E-E.)

DESIGNED	C.M.E.
CHECKED	V.H.V.
DRAWN	r.b. carbonell
CHECKED	C.M.E. V.H.V.

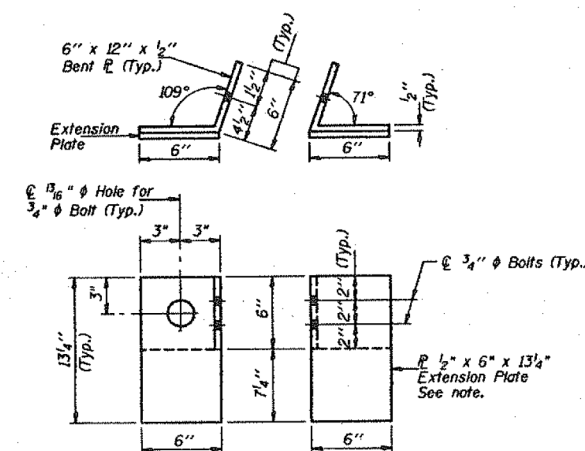
JULY 28, 1999  
EXAMINED *John A. Morris*  
PASSED  
ENGINEER OF STRUCTURAL SERVICES



BENT PLATE DETAILS FOR GIRDERS G1, G2, G3 & G4



BENT PLATE DETAILS FOR BMS. B1, B2, B3 & B5



BENT PLATE DETAILS FOR BM. B4

Notes:  
The bent plate for Beam B4 shall be a bent plate similar to the bent plates of Beams B1, B2, B3 and B5. A straight plate shall be attached to the bent plate at B4 and extend down and attach to the 6" trough plate. This plate shall be 13 1/4" and shall extend from the top of the bent plate.  
The bolt holes for the connection of the bent plates to the web shall have the same end-of-beam distance for all beams. At Beams B1, B2, B3 and B5 an additional fill plate shall be added to the bent plate to fill the difference due to the extension plate at Bm. B4. Stools to be fabricated from 3/4" plates, 2" holes in stool flanges, 3" x 3" x 3/16" square washers. 4-3/4" H.S. Bolts each connection 8" stool bottom flange.

JOINT DETAILS AT PIER 1  
F.A.I. 55 (STEVENSON EXPRESSWAY)  
SECTION 1975-170-B  
COOK COUNTY  
S.N. 016-2408

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312-565-0450 Job No. 10093

FILE NAME =	USER NAME = jsurber	DESIGNED - CMK	REVISED -
016-2408-60W75-018-Existing trough1.dgn	PLOT SCALE =	CHECKED - JAW	REVISED -
	PLOT DATE = 6/15/2015	DRAWN - CMK	REVISED -
		CHECKED - JAW	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING PLAN INFORMATION 3 OF 7  
STRUCTURE NO. 016-2408

SHEET NO. SHX3 OF SHX7 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
373	2013-037B-R	COOK	787	738
CONTRACT NO. 60W75				

ILLINOIS FED. AID PROJECT

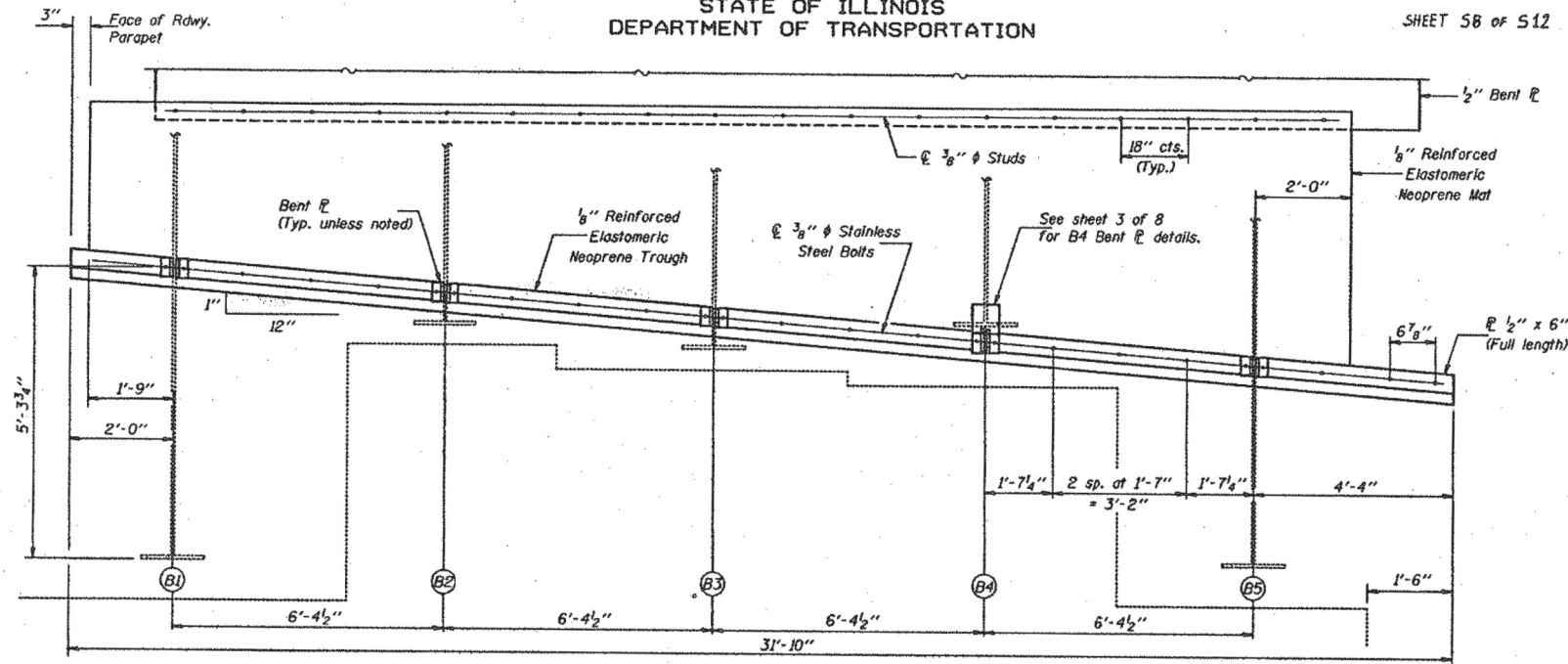
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

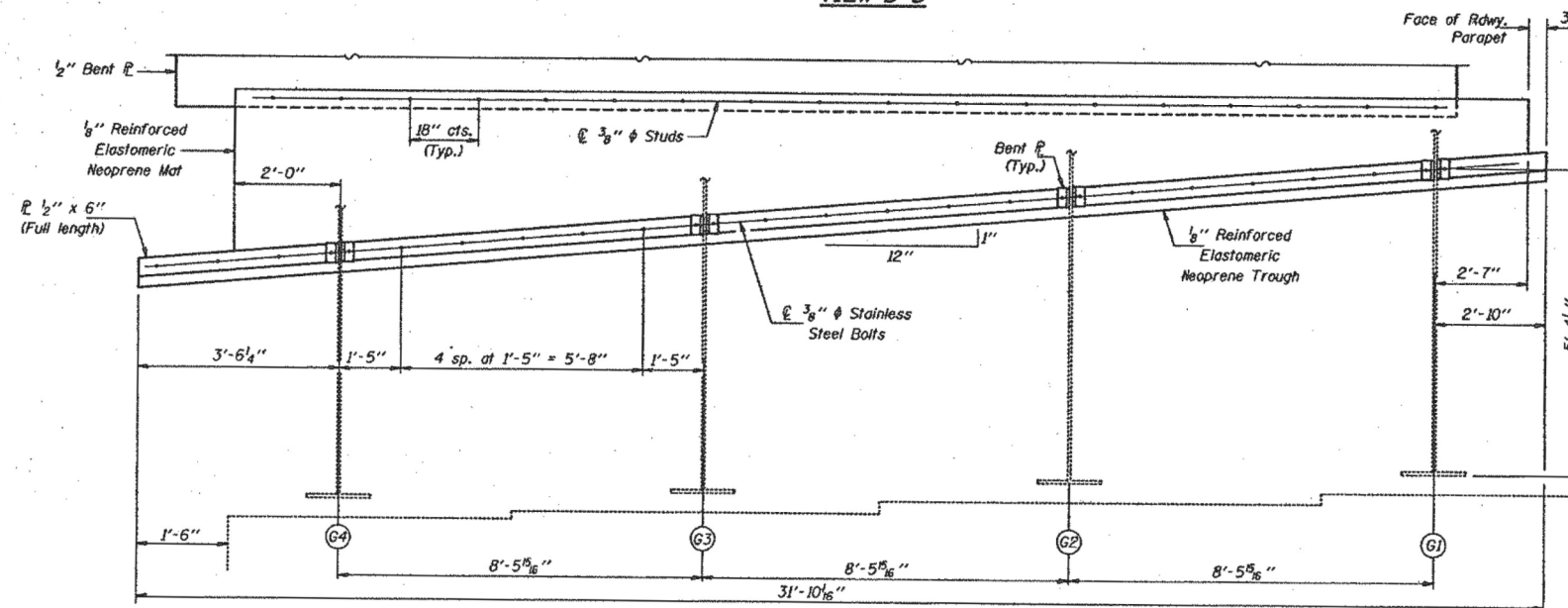
SHEET 58 OF 512

ADDITIONAL SHEETS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 55	1975-170-B	COOK	578	213
DATE	ISSUED	BY	PROJECT	

SHEET NO. 5  
8 SHEETS



VIEW D-D



VIEW E-E

DESIGNED	C.M.E.	JULY 28, 1999
CHECKED	V.H.V.	EXAMINED <i>John A. Morris</i> ENGINEER OF STRUCTURAL SERVICES
DRAWN	r.b. carbonell	PASSED
CHECKED	C.M.E. V.H.V.	ENGINEER OF BRIDGES AND STRUCTURES

TROUGH DETAILS AT PIER 1  
F.A.I. 55 (STEVENSON EXPRESSWAY)  
SECTION 1975-170-B  
COOK COUNTY  
S.N. 016-2408

FOR INFORMATION ONLY



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Chicago, Illinois 60601  
312-565-0450 Job No. 10093

FILE NAME =  
016-2408-60W75-019-Existing trough2.dgn

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DESIGNED - CMK  
CHECKED - JAW  
DRAWN - CMK  
CHECKED - JAW  
PLOT SCALE =  
PLOT DATE = 6/15/2015

DESIGNED - CMK  
CHECKED - JAW  
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REVISED -  
REVISED -  
REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

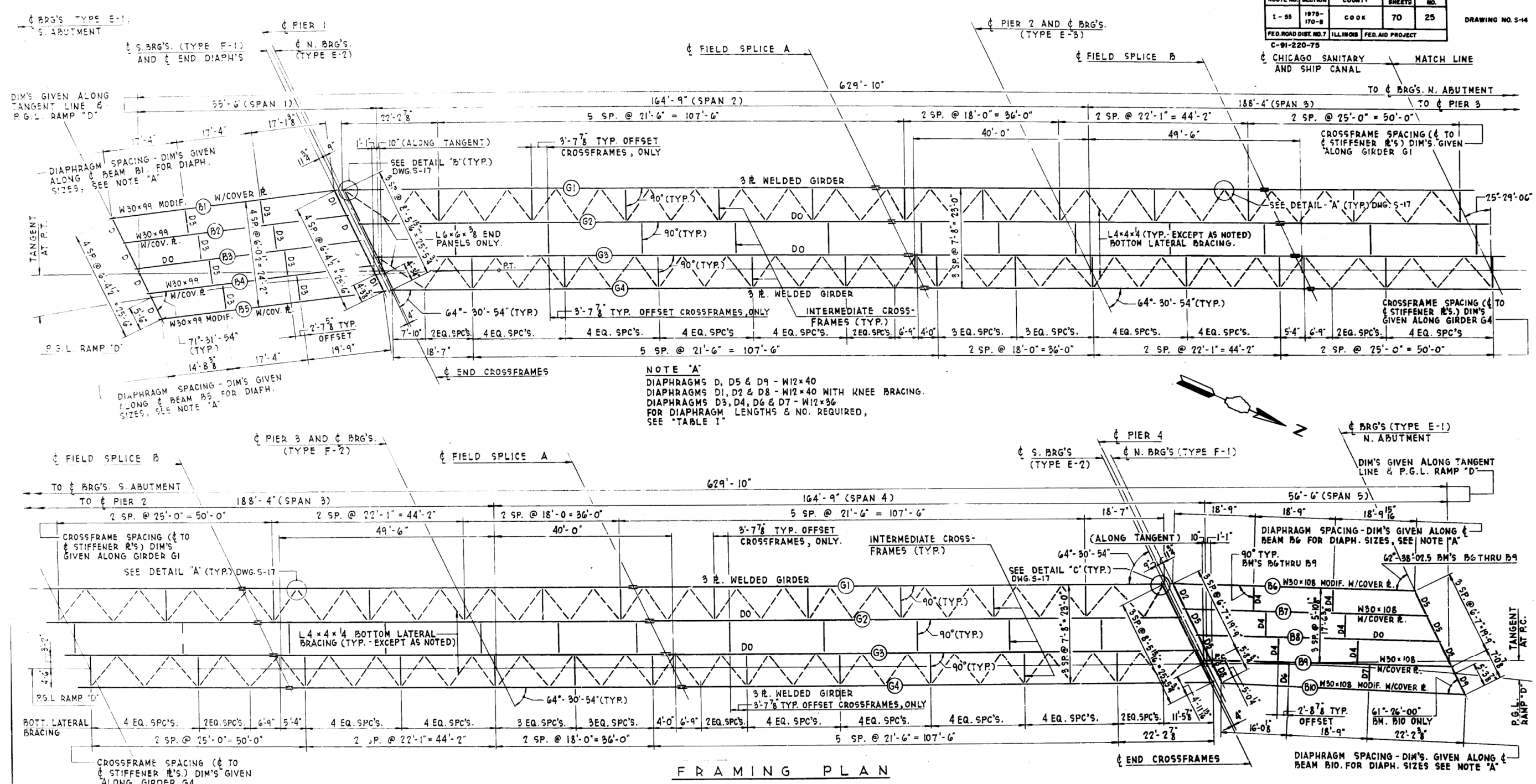
EXISTING PLAN INFORMATION 4 OF 7  
STRUCTURE NO. 016-2408

SHEET NO. SHX4 OF SHX7 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
373	2013-037B-R	COOK	787	739
CONTRACT NO. 60W75				
ILLINOIS FED. AID PROJECT				

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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1-95	1975-170-B	COOK	70	25
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	
C-91-220-75		CHICAGO SANITARY AND SHIP CANAL		



**NOTE "A"**  
 DIAPHRAGMS D, D5 & D9 - W12x40  
 DIAPHRAGMS D1, D2 & D8 - W12x40 WITH KNEE BRACING.  
 DIAPHRAGMS D3, D4, D6 & D7 - W12x36  
 FOR DIAPHRAGM LENGTHS & NO. REQUIRED, SEE "TABLE I"

**FRAMING PLAN**

DIAPH.	LENGTH*	NO. REQ'D.	DIAPH.	LENGTH*	NO. REQ'D.
D	6'-4 1/2"	6	D5	6'-7"	5
D1	6'-4 1/2"	2	D6	5'-5 1/2"	1
D2	6'-7"	1	D7	5'-9 3/4"	1
D3	6'-0 1/2"	8	D8	5'-8 3/4"	1
D4	5'-10 3/8"	6	D9	7'-0 3/8"	1

\*LENGTH GIVEN IS  $\phi$  TO  $\phi$  BEAMS ON THE HORIZONTAL.

**NOTES:**  
 FOR GIRDER DETAILS, SEE DWG. S-15  
 FOR CROSSFRAME AND W/ BEAM DETAILS, SEE DWG. S-16  
 FOR DIAPHRAGM DETAILS SEE DWG. S-17  
 FOR TABLES OF MOMENTS, SHEARS, REACTIONS AND PROPERTIES, SEE DWG. S-17  
 FOR ELECTRICAL BRACKETS SEE DWG. E-2

FOR INFORMATION ONLY

ITEM	UNIT	QUANTITY
FURNISHING AND ERECTING STRUCTURAL STEEL.	LUMP SUM	1
STUD SHEAR CONNECTORS	EACH	4056

THE CALCULATED WEIGHT OF STRUCTURAL STEEL INCLUDING BEARINGS, EXPANSION GUARD ASSEMBLIES AND ELECTRICAL BRACKETS = 223,870 LBS

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**STEVENSON EXPRESSWAY**  
 RAMP "D" OVER CHICAGO SANITARY AND SHIP CANAL  
**FRAMING PLAN**  
 DATE: JUNE 1977  
 DRAWN BY: [Signature]  
 CHECKED BY: [Signature]

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 Chicago, Illinois 60601  
 312-565-0450 Job No. 10093

FILE NAME =	USER NAME = jsurber	DESIGNED - CMK	REVISED -
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STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

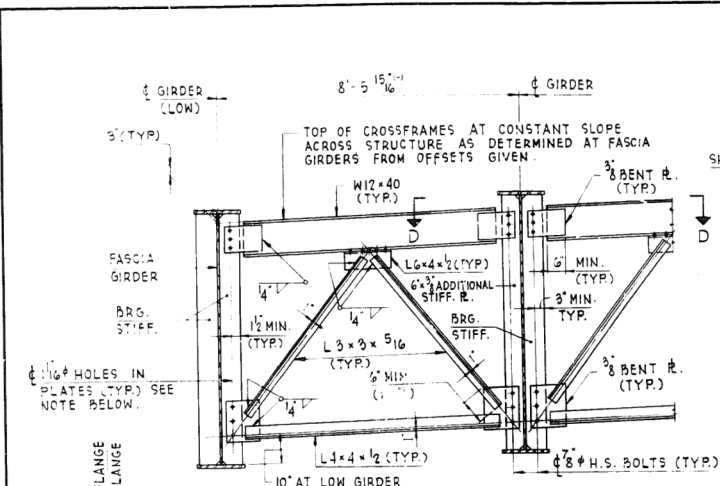
EXISTING PLAN INFORMATION 5 OF 7  
 STRUCTURE NO. 016-2408  
 SHEET NO. SHX5 OF SHX7 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
373	2013-037B-R	COOK	787	740
				CONTRACT NO. 60W75
ILLINOIS FED. AID PROJECT				

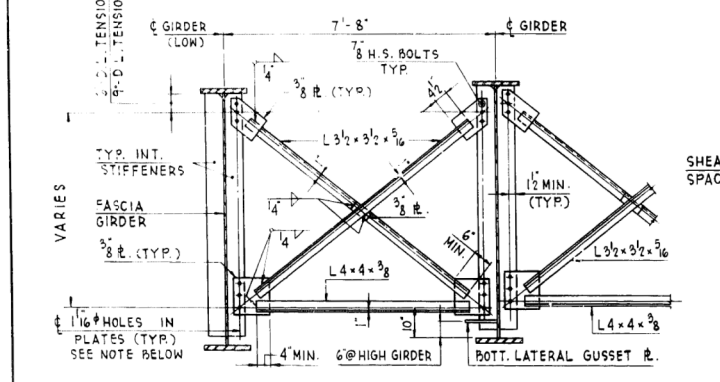
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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-55	1975-170-B	COOK	70	27
FED. ROAD DIST. NO. ILLINOIS		FED. AID PROJECT		
C-91-220-75				

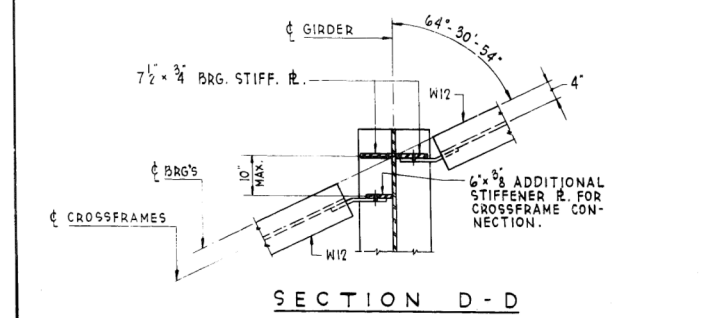
DRAWING NO. S-16



END CROSSFRAME DETAIL

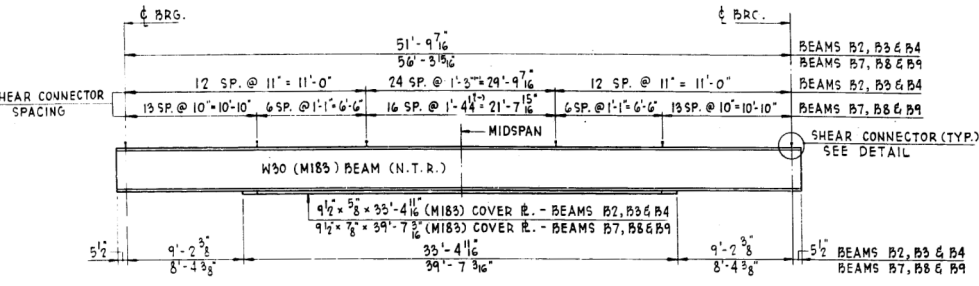


INTERMEDIATE CROSSFRAME DETAIL

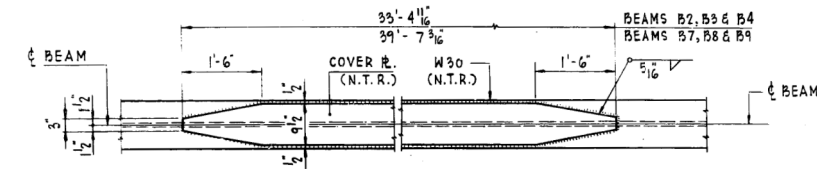


SECTION D-D

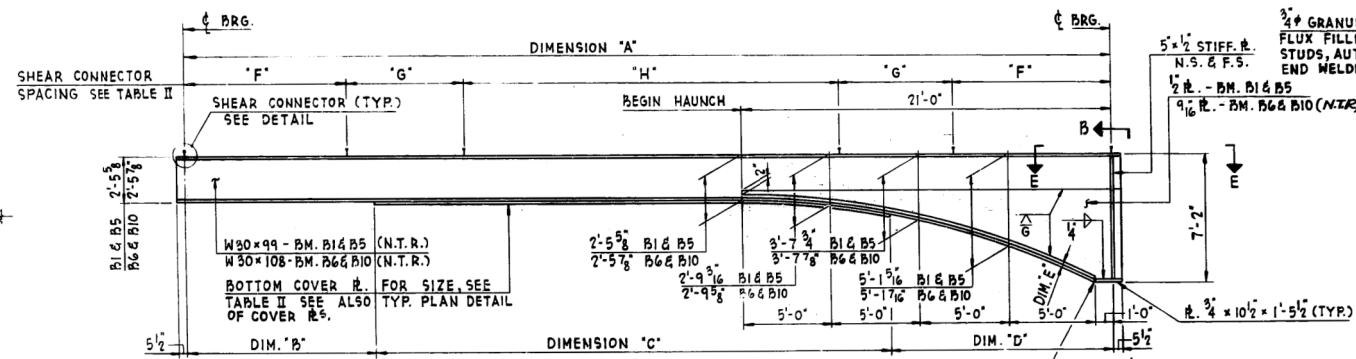
NOTE:  
HARDENED WASHERS SHALL BE REQUIRED OVER 1/16" HOLES IN PLATES.



TYPICAL INTERIOR BEAM ELEVATION SPANS 1 AND 5



TYP. PLAN DETAIL OF COVER PLATES



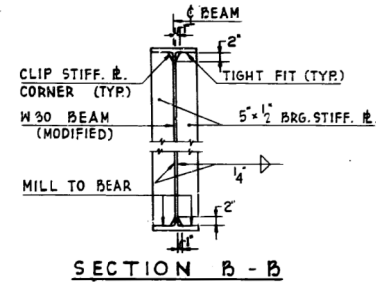
TYPICAL FASCIA BEAM ELEVATION SPANS 1 & 5

SPAN	BEAM	DIMENSIONS*				SHEAR CONNECTOR SPACING			COVER PLATE SIZE	
		"A"	"B"	"C"	"D"	"E"	"F"	"G"		"H"
1	B1	51'-9 1/2"	9'-2 3/8"	33'-4 1/2"	9'-2 3/8"	1 3/4"	6 SP. @ 11"	6 SP. @ 11"	24 SP. @ 1'-3 3/4"	9 1/2" x 5 1/2"
1	B5	51'-9 1/2"	9'-2 3/8"	33'-4 1/2"	9'-2 3/8"	1 3/4"	6 SP. @ 11"	6 SP. @ 11"	24 SP. @ 1'-3 3/4"	9 1/2" x 5 1/2"
5	B6	56'-3 3/8"	8'-4 3/8"	39'-7 3/8"	8'-4 3/8"	1 3/4"	13 SP. @ 10"	6 SP. @ 11"	16 SP. @ 1'-4 1/4"	9 1/2" x 7 1/2"
5	B10	56'-3 3/8"	8'-4 3/8"	39'-7 3/8"	8'-4 3/8"	1 3/4"	13 SP. @ 10"	6 SP. @ 11"	16 SP. @ 1'-4 1/4"	9 1/2" x 7 1/2"

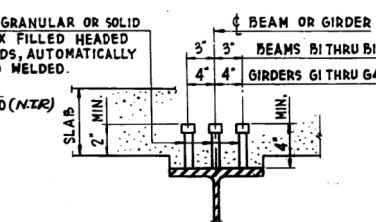
\* DIMENSIONS GIVEN ALONG BEAM.

NOTES:  
N.T.R. DENOTES NOTCH TOUGHNESS REQUIREMENTS.  
THE MAIN LOAD CARRYING MEMBERS SUBJECT TO SUPPLEMENTAL REQUIREMENTS FOR NOTCH TOUGHNESS ARE THE W SHAPE BEAMS AND COVER PLATES.

LOCATION BEAM	SPAN 1		SPAN 5	
	BRG'S. S. ABUT.	BRG'S. PIER 1	LOCATION BEAM	BRG'S. PIER 4 N. ABUT.
B1	627.11	627.55	B6	621.50 619.51
B2	626.72	627.22	B7	620.04 618.00
B3	626.33	626.93	B8	620.60 618.49
B4	625.95	626.65	B9	620.16 617.95
B5	625.58	626.43	B10	619.81 617.36

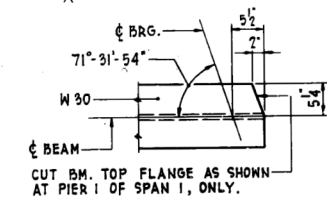


SECTION B-B



SHEAR CONNECTOR DETAIL

BEAM OR GIRDER	NO. REQUIRED PER BEAM OR GIRDER
B1 THRU B5	147
B6 THRU B10	165
G1 THRU G4	624



SECTION E-E (SPAN 1 ONLY)

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**STEVENSON EXPRESSWAY**  
 RAMP "D" OVER CHICAGO SANITARY AND SHIP CANAL  
**BEAM AND CROSS FRAME DETAILS**  
 DATE: JUNE 1977  
 DRAWN BY: [Signature]  
 CHECKED BY: [Signature]

FOR INFORMATION ONLY

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 Alfred Benesch & Company  
 205 North Michigan Avenue, Suite 2400  
 Chicago, Illinois 60601  
 312-565-0450 Job No. 10093

FILE NAME =	USER NAME = jsurber	DESIGNED - CMK	REVISED -
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	PLOT DATE = 6/15/2015	DRAWN - CMK	REVISED -
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STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

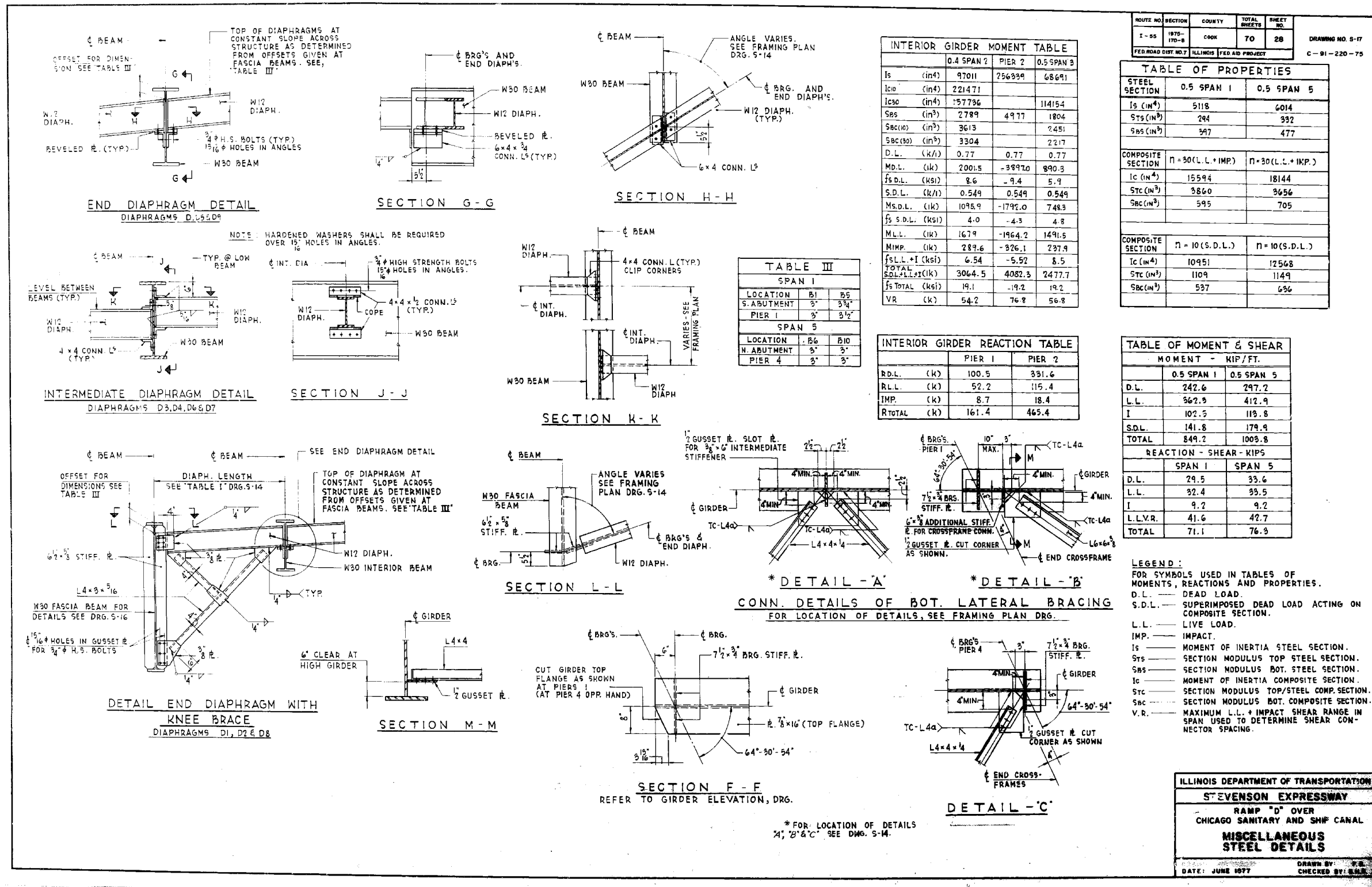
EXISTING PLAN INFORMATION 6 OF 7  
 STRUCTURE NO. 016-2408

SHEET NO. SHX6 OF SHX7 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
373	2013-037B-R	COOK	787	741
CONTRACT NO. 60W75				
ILLINOIS FED. AID PROJECT				

Y:\chicago\100005\100093\Eng\_Docs\Phase II\SN\_016\_2408\_NB\_1st\_Ave\_to\_NB\_Ramp\_over\_Canal\Final\Plans\016-2408-60W75-021-Existing steel details.i.dgn 4:52:14 PM 6/15/2015





ILLINOIS DEPARTMENT OF TRANSPORTATION  
ST EVENSON EXPRESSWAY  
RAMP "D" OVER  
CHICAGO SANITARY AND SHIP CANAL  
MISCELLANEOUS  
STEEL DETAILS  
DATE: JUNE 1977  
DRAWN BY: T.B.  
CHECKED BY: S.M.

FOR INFORMATION ONLY

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		DRAWN - CMK	REVISED -
		CHECKED - JAW	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING PLAN INFORMATION 7 OF 7  
STRUCTURE NO. 016-2408

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
373	2013-037B-R	COOK	787	742
CONTRACT NO. 60W75				
ILLINOIS FED. AID PROJECT				

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**GENERAL NOTES**

- Contractor shall coordinate with Railroad Company before working adjacent to Spur.
- Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
- Any damage to existing elements or structures to remain as a result of construction operations shall be repaired or replaced at the Contractor's expense.

**INDEX OF SHEETS**

- SJ1 General Plan and Elevation
- SJ2 Wall Elevation - Segment 1
- SJ3 Wall Elevation - Segment 2
- SJ4 Wall Elevation - Segment 3
- SJ5 Wall Elevation - Segment 4
- SJ6 Wall Elevation - Segment 5

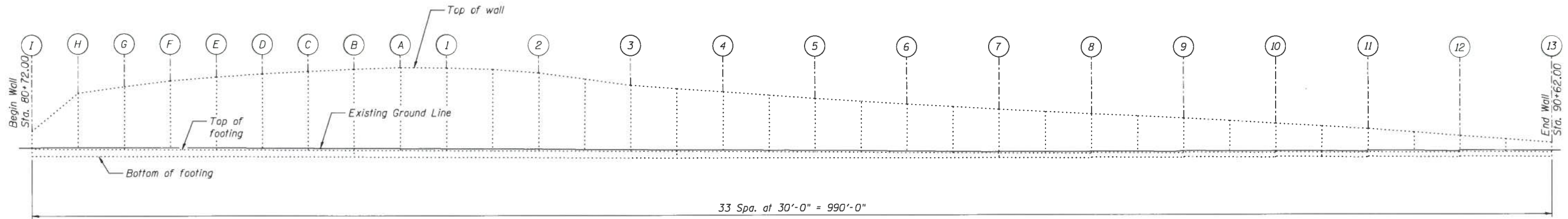
**SCOPE OF WORK**

- Tree and brush removal as directed by the Engineer.
- Wall repair including structural concrete repair and epoxy crack sealing.

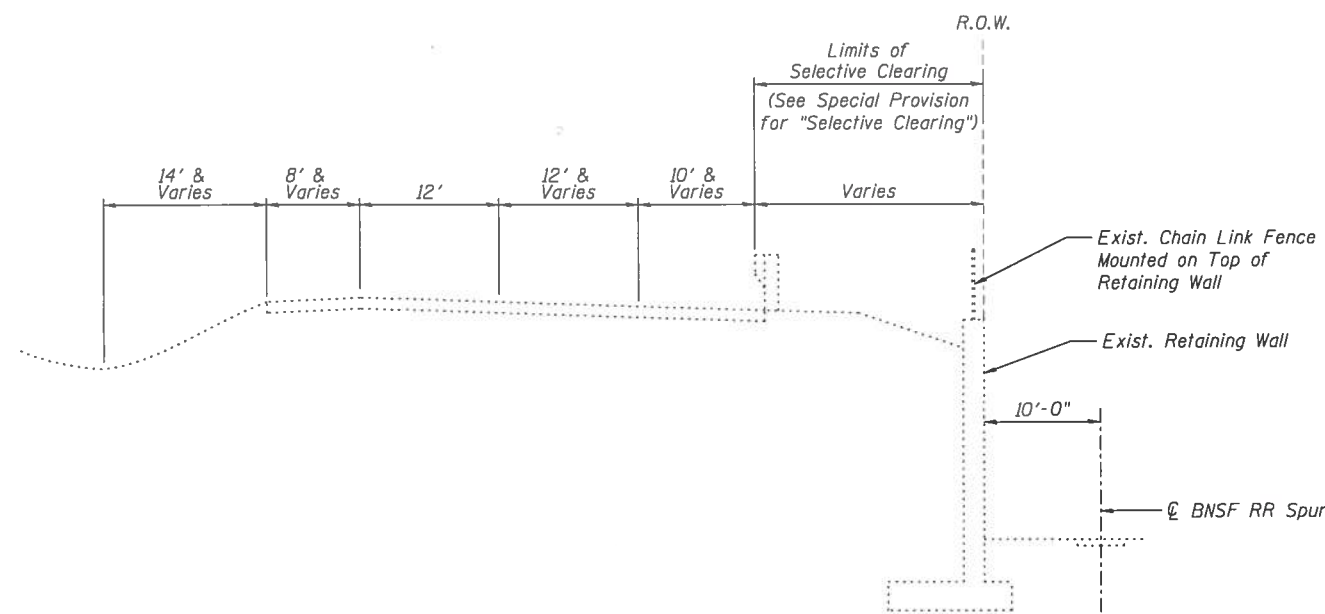
**BILL OF MATERIAL**

ITEM	UNIT	TOTAL
* Tree Removal (6 to 15 Units Diameter)	Unit	10
* Tree Removal (Over 15 Units Diameter)	Unit	5
Epoxy Crack Injection	Foot	536
** Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)	Sq Ft	9
Selective Clearing	Unit	20

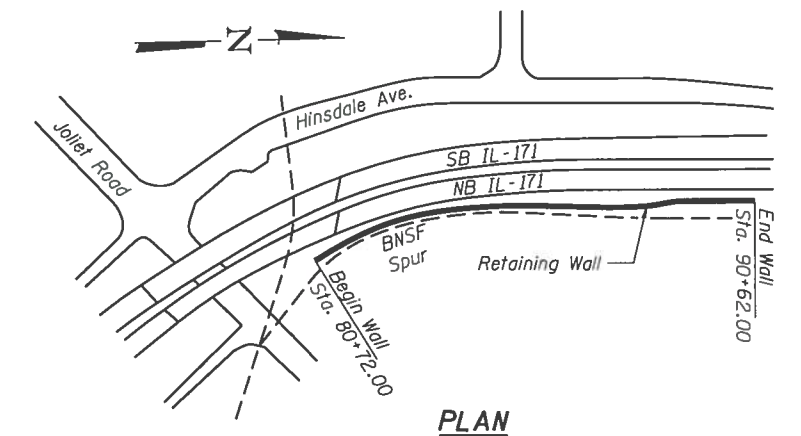
\* Tree removal shall be as directed by the Engineer. The intent is to remove any trees that may compromise the long term performance of the retaining wall. Therefore, any tree identified for removal shall be pulled or grubbed in such a manner as to insure complete removal.  
 \*\* See Special Provision for "Structural Repair of Concrete".



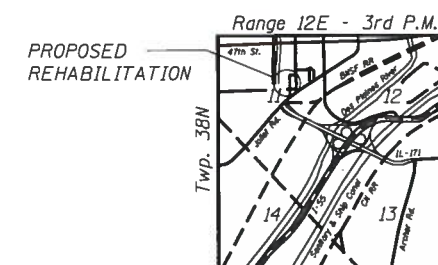
**ELEVATION**



**GENERAL CROSS SECTION**  
(Looking West)



**PLAN**



**LOCATION SKETCH**

**GENERAL PLAN AND ELEVATION  
 RETAINING WALL AT NB IL-171  
 BETWEEN JOLIET ROAD AND 50th STREET  
 FAP 372 - SECTION 2013-037B-R  
 COOK COUNTY  
 STRUCTURE NO. 016-0671**

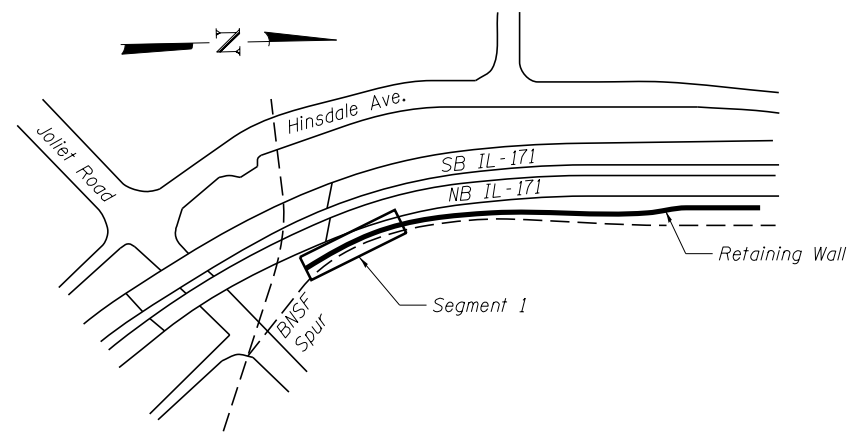
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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

SHEET NO. SJ1 OF SJ6 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2013-037B-R	COOK	787	743
			CONTRACT NO. 60W75	
ILLINOIS FED. AID PROJECT				



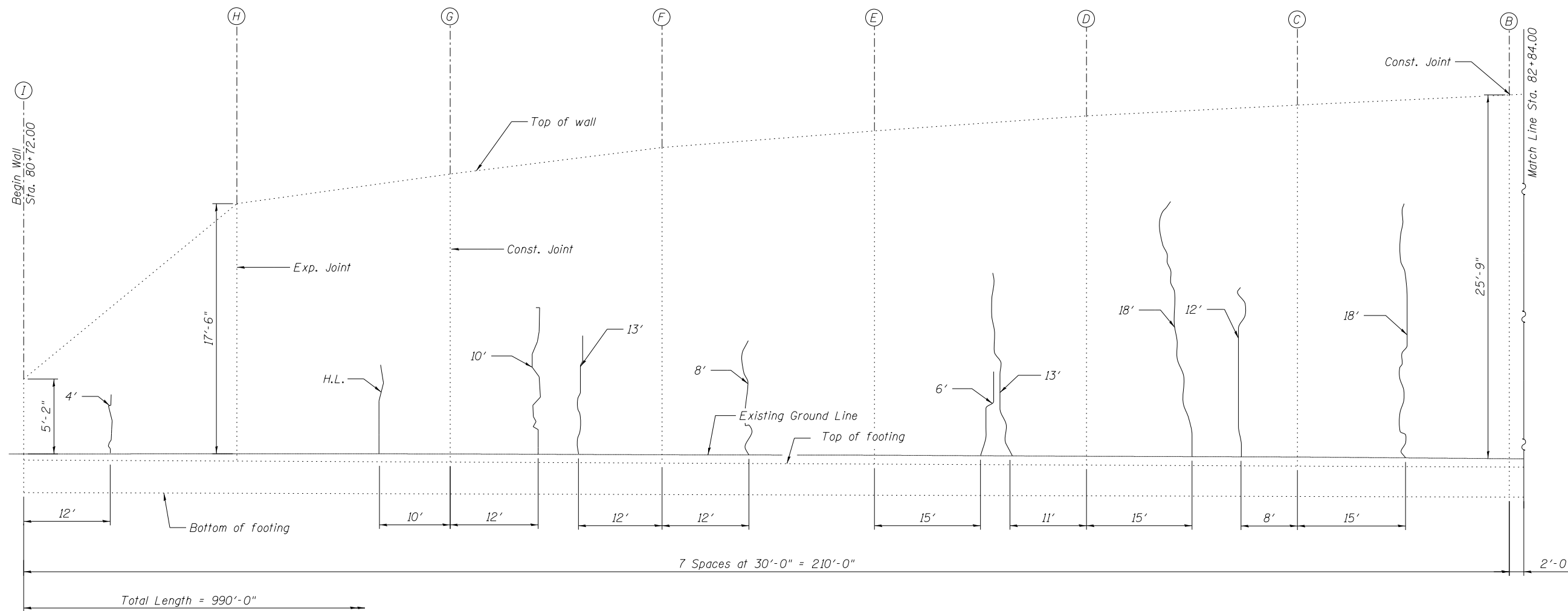
**LOCATION MAP**

**LEGEND**

- Length Crack to be repaired (Length = Est. Repair Length)
- Spalled Concrete

**BILL OF MATERIAL**

SYMBOL	ITEM	UNIT	QUANTITY
	Epoxy Crack Injection	Foot	102



**RETAINING WALL ELEVATION - SEGMENT 1**

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

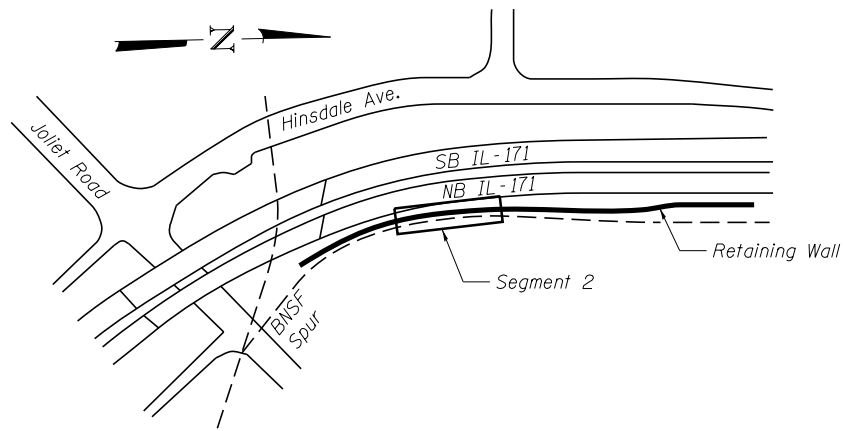
**WALL ELEVATION - SEGMENT 1  
STRUCTURE NO. 016-0671**

SHEET NO. SJ2 OF SJ6 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2013-037B-R	COOK	787	744
CONTRACT NO. 60W75			ILLINOIS FED. AID PROJECT	

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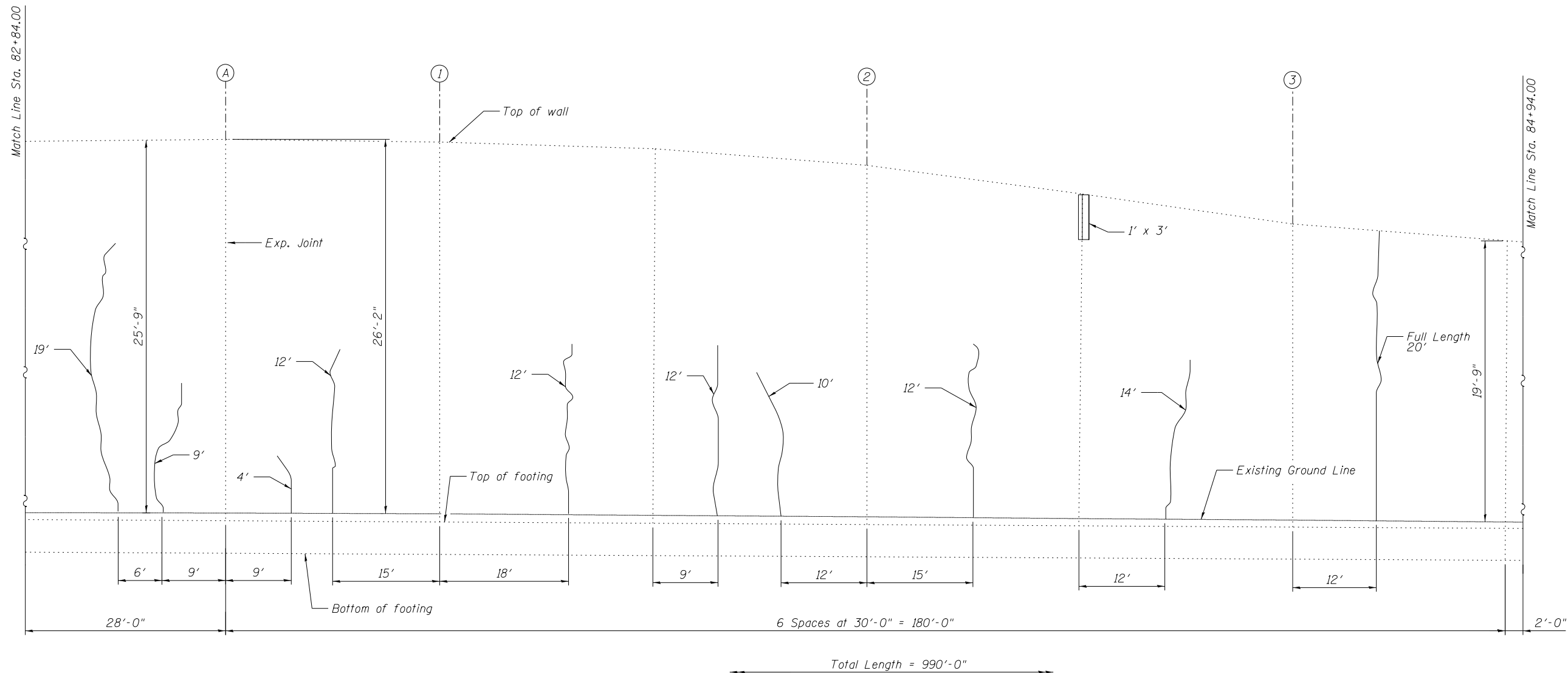
**LOCATION MAP**

**LEGEND**

- Length Crack to be repaired (Length = Est. Repair Length)
- Spalled Concrete

**BILL OF MATERIAL**

SYMBOL	ITEM	UNIT	QUANTITY
	Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)	Sq. Ft.	3
	Epoxy Crack Injection	Foot	124



**RETAINING WALL ELEVATION - SEGMENT 2**

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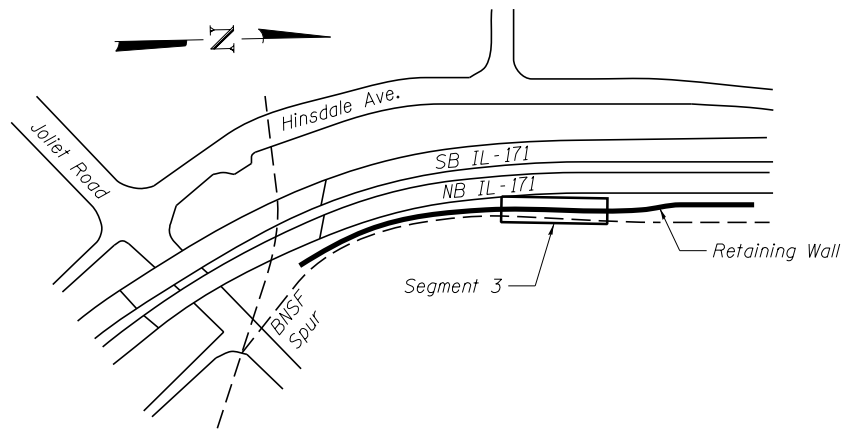
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**WALL ELEVATION - SEGMENT 2  
STRUCTURE NO. 016-0671**

SHEET NO. SJ3 OF SJ6 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2013-037B-R	COOK	787	745
CONTRACT NO. 60W75			ILLINOIS FED. AID PROJECT	

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**LOCATION MAP**

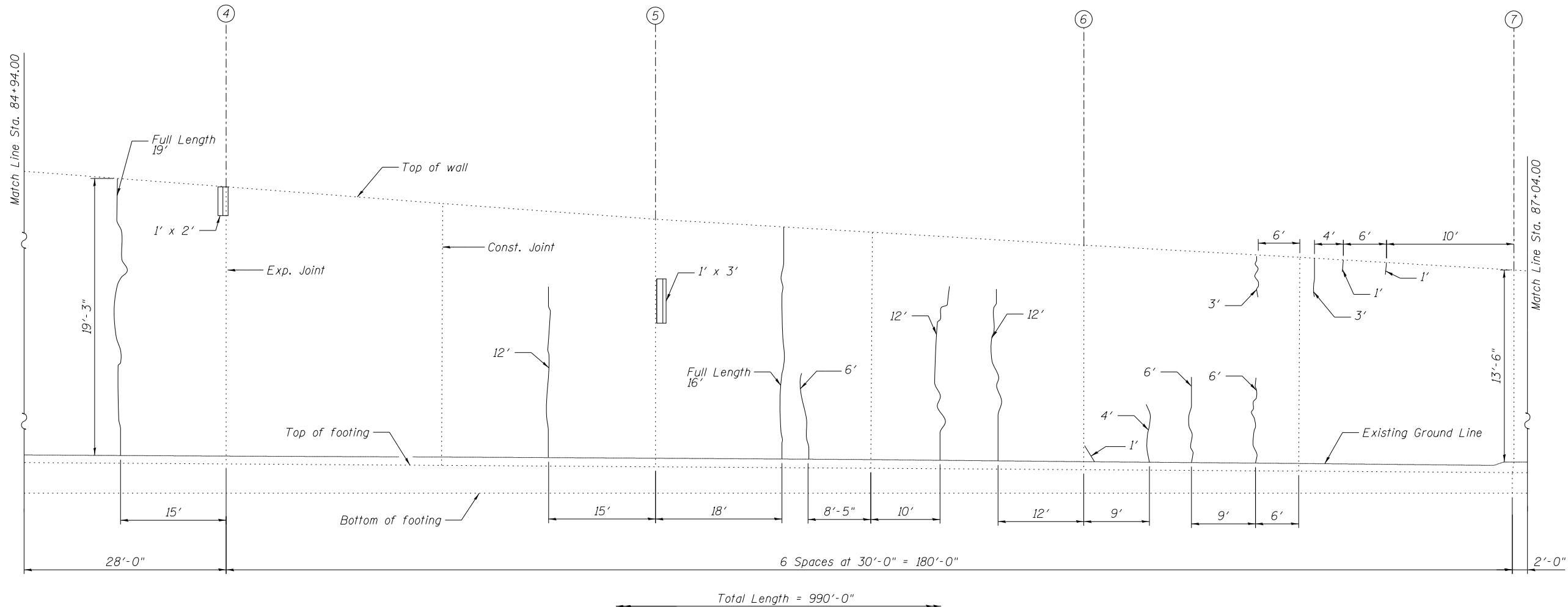
**LEGEND**

Length Crack to be repaired (Length = Est. Repair Length)

Spalled Concrete

**BILL OF MATERIAL**

SYMBOL	ITEM	UNIT	QUANTITY
	Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)	Sq. Ft.	5
	Epoxy Crack Injection	Foot	102



**RETAINING WALL ELEVATION - SEGMENT 3**

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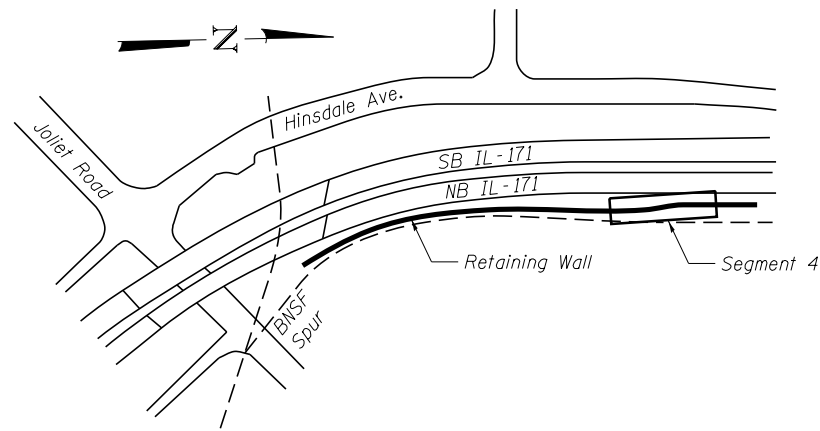
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**WALL ELEVATION - SEGMENT 3  
STRUCTURE NO. 016-0671**

SHEET NO. SJ4 OF SJ6 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2013-037B-R	COOK	787	746
CONTRACT NO. 60W75			ILLINOIS FED. AID PROJECT	

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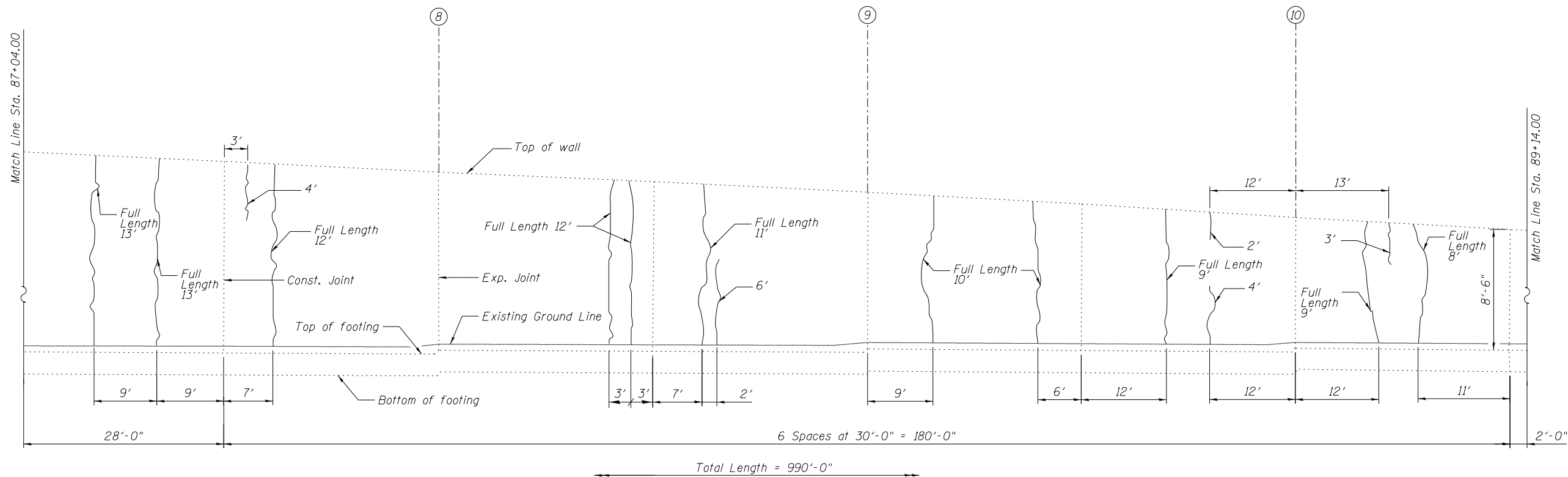
**LOCATION MAP**

**LEGEND**

- Length Crack to be repaired (Length = Est. Repair Length)
- Spalled Concrete

**BILL OF MATERIAL**

SYMBOL	ITEM	UNIT	QUANTITY
	Epoxy Crack Injection	Foot	138



**RETAINING WALL ELEVATION - SEGMENT 4**

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016-0671-60W75-005-WallElevation4.dgn	PLOT SCALE =	DRAWN - CMK	REVISED -
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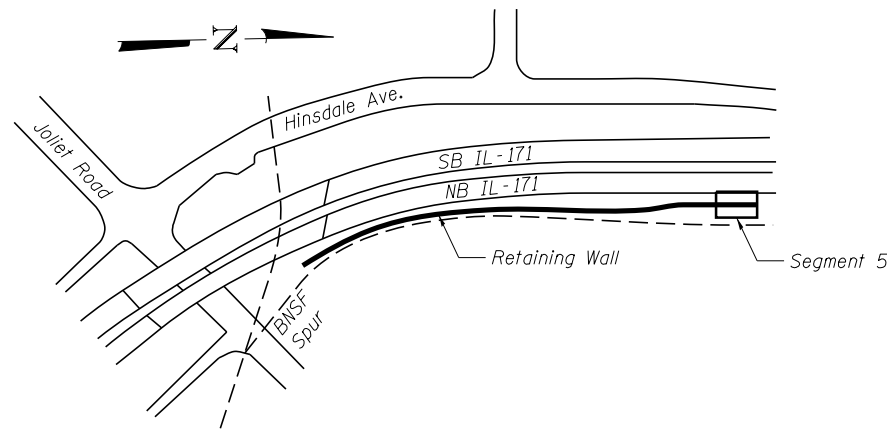
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**WALL ELEVATION - SEGMENT 4  
STRUCTURE NO. 016-0671**

SHEET NO. SJ5 OF SJ6 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2013-037B-R	COOK	787	747
CONTRACT NO. 60W75			ILLINOIS FED. AID PROJECT	

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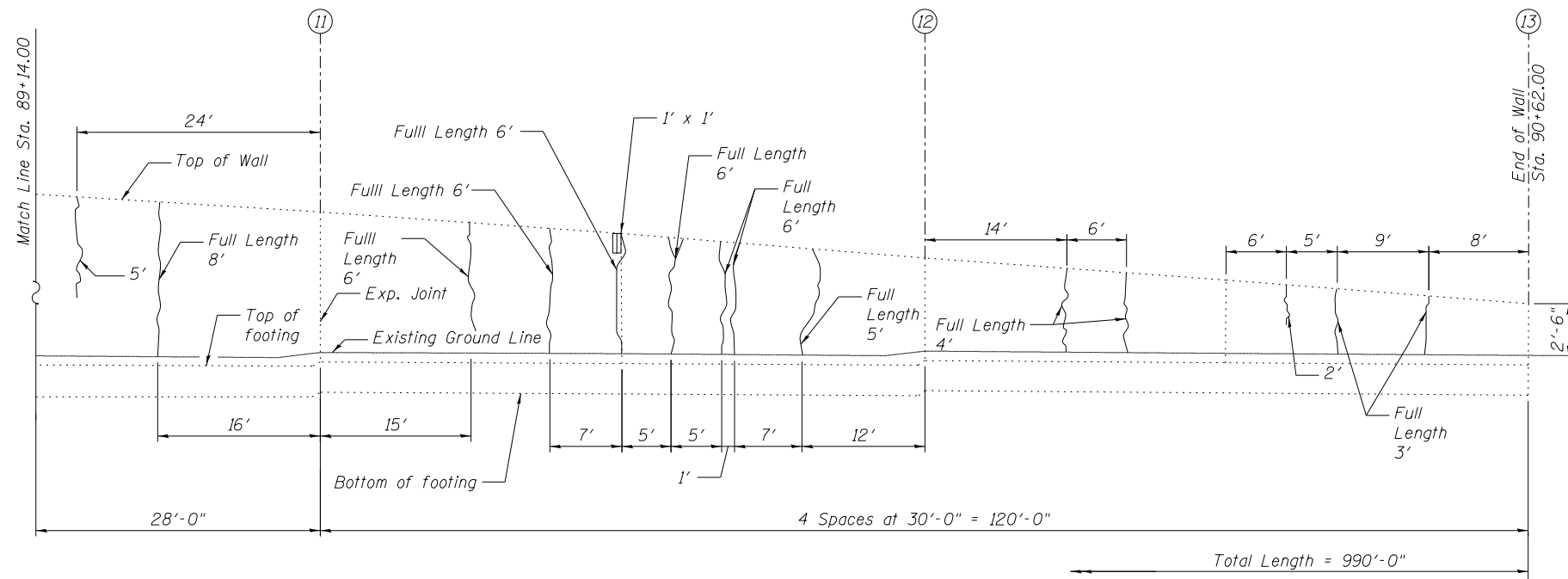
**LOCATION MAP**

**LEGEND**

- Length Crack to be repaired (Length = Est. Repair Length)
- Spalled Concrete

**BILL OF MATERIAL**

SYMBOL	ITEM	UNIT	QUANTITY
	Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)	Sq. Ft.	1
	Epoxy Crack Injection	Foot	70



**RETAINING WALL ELEVATION - SEGMENT 5**

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FILE NAME =	USER NAME = jsurber	DESIGNED - CMK	REVISED -
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**WALL ELEVATION - SEGMENT 5  
STRUCTURE NO. 016-0671**

SHEET NO. SJ6 OF SJ6 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2013-037B-R	COOK	787	748
CONTRACT NO. 60W75				

ILLINOIS FED. AID PROJECT

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**GENERAL NOTES**

- Contractor shall coordinate with Railroad Company before working adjacent to Spur.
- Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
- Any damage to existing elements or structures to remain as a result of construction operations shall be repaired or replaced at the Contractor's expense.

**INDEX OF SHEETS**

- SK1 General Plan and Elevation
- SK2 Wall Elevation

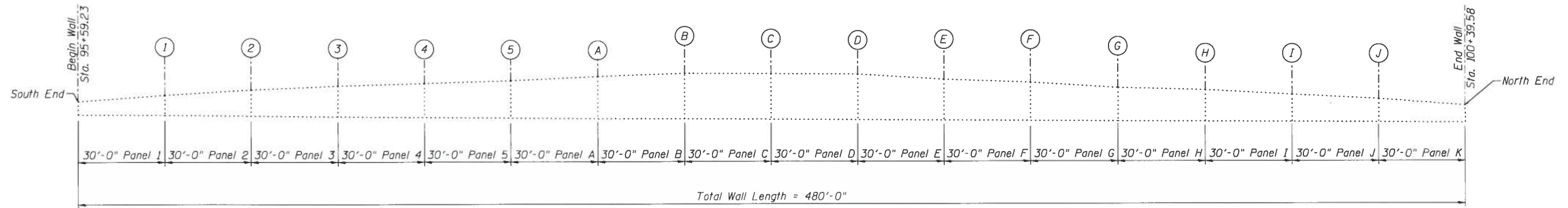
**SCOPE OF WORK**

- Tree and brush removal as directed by the Engineer.
- Wall repair including structural concrete repair and epoxy crack sealing.
- Concrete Gutter to be cleaned. Cost included in "Selective Clearing".
- Replacement of concrete gutter as directed by the Engineer.

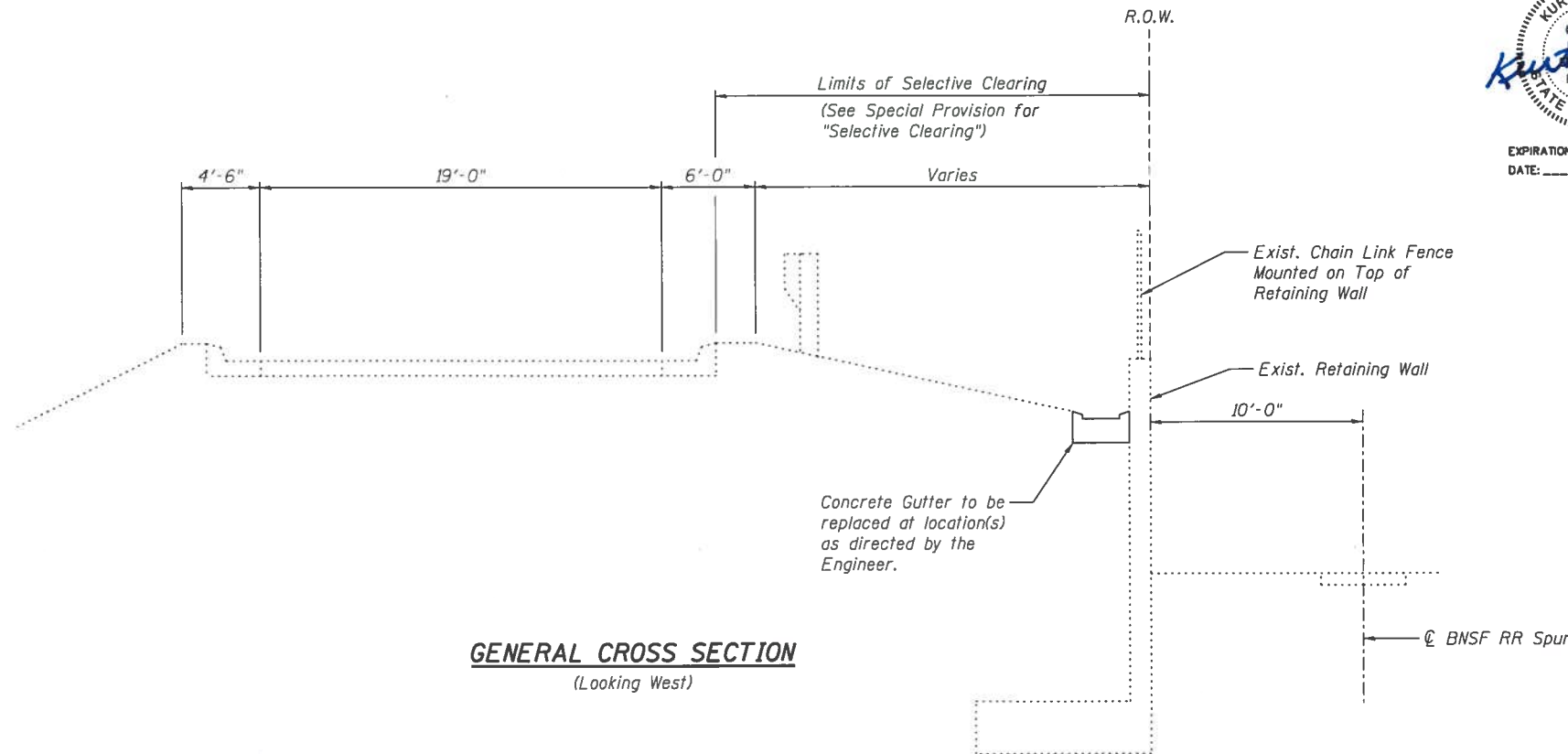
**BILL OF MATERIAL**

ITEM	UNIT	TOTAL
* Tree Removal (6 to 15 Units Diameter)	Unit	5
** Gutter Removal	Foot	50
Epoxy Crack Injection	Foot	39
** Concrete Gutter, Type A	Foot	50
*** Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)	Sq Ft	3
Selective Clearing	Unit	10

- \* Tree removal shall be as directed by the Engineer. The intent is to remove any trees that may compromise the long term performance of the retaining wall. Therefore, any tree identified for removal shall be pulled or grubbed in such a manner as to insure complete removal.
- \*\* Limits of Gutter Removal and Concrete Gutter, Type A as directed by the Engineer. New Concrete Gutter to match existing gutter.
- \*\*\* See Special Provision for "Structural Repair of Concrete".

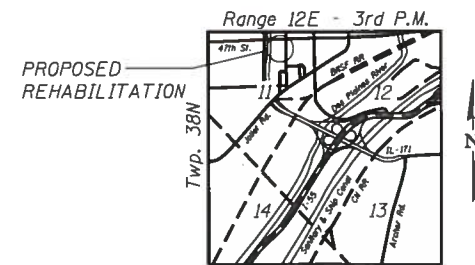
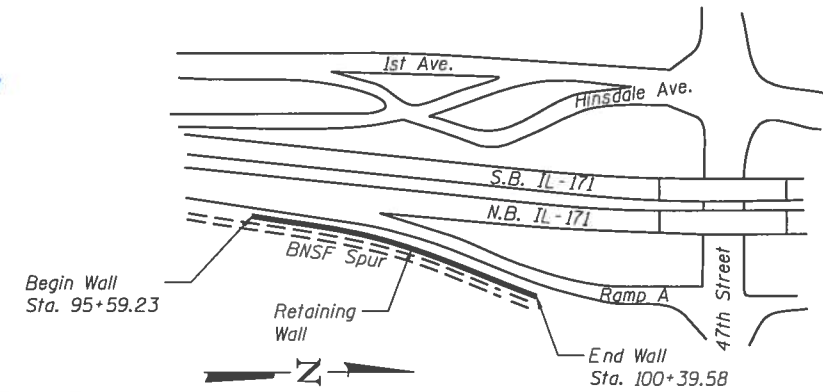


**ELEVATION**



**GENERAL CROSS SECTION**

(Looking West)



**LOCATION SKETCH**

**GENERAL PLAN AND ELEVATION  
RETAINING WALL AT NB IL-171  
SOUTH OF 47th STREET  
FAP 372 - SEC. 2013-037B-R  
COOK COUNTY  
STRUCTURE NO. 016-1197**

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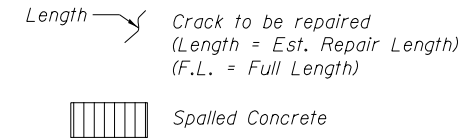
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

SHEET NO. SK1 OF SK2 SHEETS

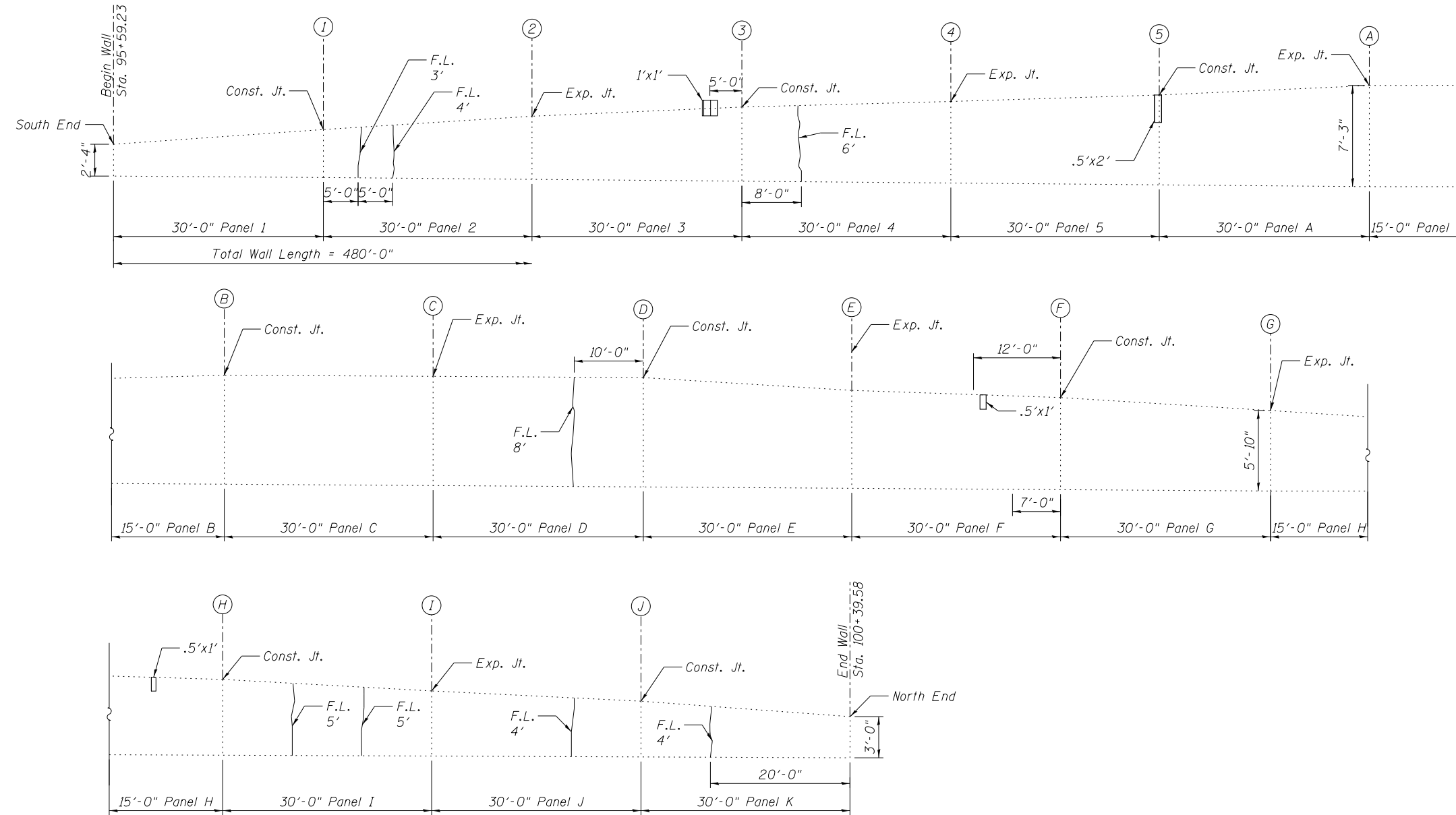
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2013-037B-R	COOK	787	749
CONTRACT NO. 60W75			ILLINOIS FED. AID PROJECT	

**LEGEND**



**BILL OF MATERIAL**

SYMBOL	ITEM	UNIT	QUANTITY
	Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)	Sq. Ft.	3
	Epoxy Crack Injection	Foot	39



**RETAINING WALL ELEVATION**

**benesch**  
engineers · scientists · planners

Alfred Benesch & Company  
205 North Michigan Avenue, Suite 2400  
Chicago, Illinois 60601  
312-565-0450 Job No. 10093

FILE NAME =	USER NAME = jsurber	DESIGNED - CMK	REVISED -
		CHECKED - JAW	REVISED -
		DRAWN - CMK	REVISED -
		CHECKED - JAW	REVISED -
016-1197-60W75-002-WallElevations.dgn	PLOT SCALE =		
	PLOT DATE = 6/8/2015		

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

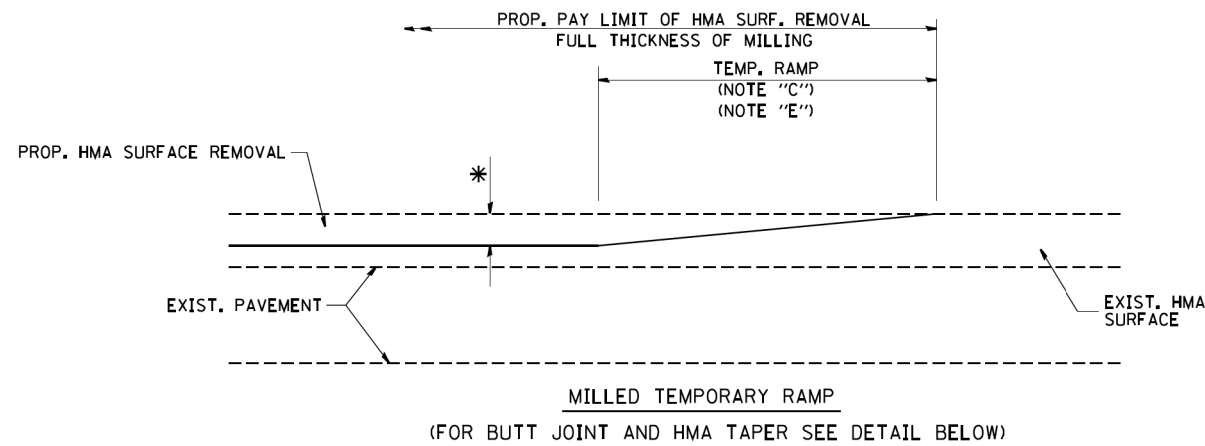
**WALL ELEVATION  
STRUCTURE NO. 016-1197**

SHEET NO. SK2 OF SK2 SHEETS

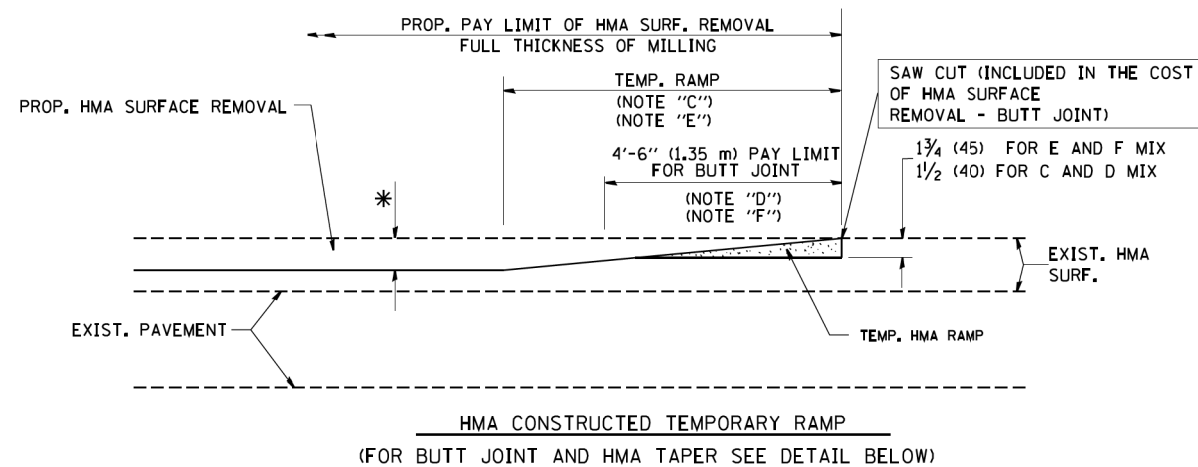
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2013-037B-R	COOK	787	750
CONTRACT NO. 60W75			ILLINOIS FED. AID PROJECT	

Y:\chicago\100005\10093\Eng\_Docs\_Phase\_1\1197\_Ret\_Wall\_NB\_1st\_Ave\_South\_of\_47th\_St\Final\Plans\016-1197-60W75-002-WallElevations.dgn 9:39:54 AM 6/8/2015



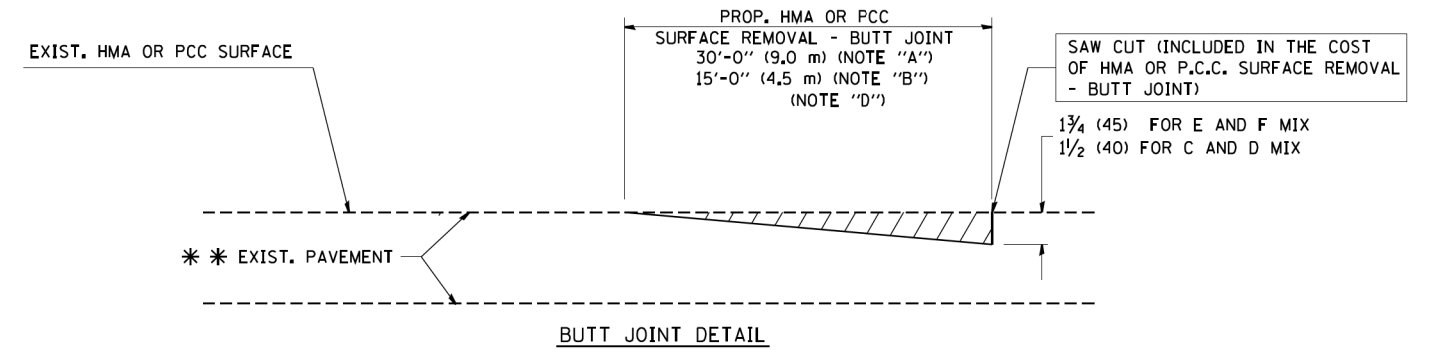


**OPTION 1**

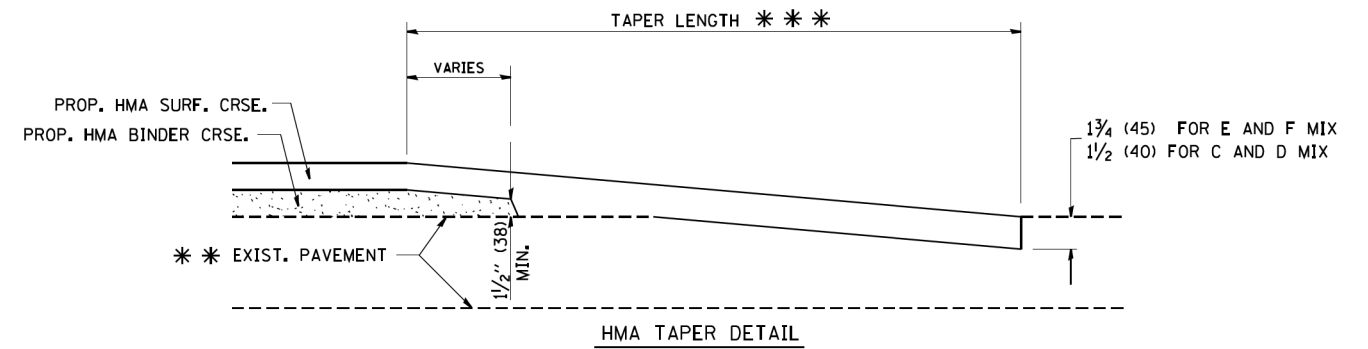


**OPTION 2**

**TYPICAL TEMPORARY RAMP**



**BUTT JOINT DETAIL**



**HMA TAPER DETAIL**

**TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY**

\*\*\* PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

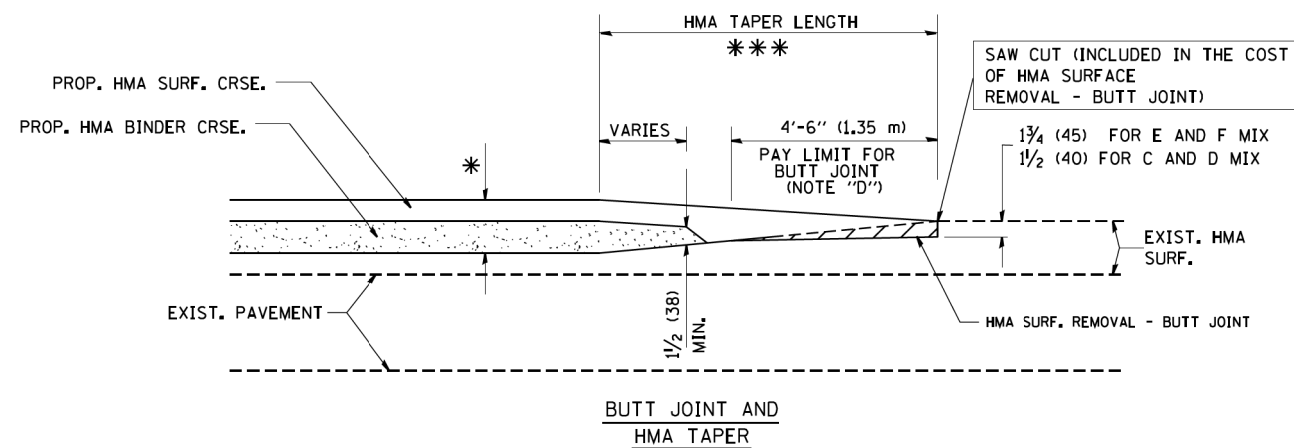
**NOTES**

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
  - B: MINOR SIDE ROADS.
  - C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
  - D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
  - E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
  - F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT
  - G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
- \* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- \*\*\* 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")  
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

**BASIS OF PAYMENT:**

THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT".

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



**TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING**

FILE NAME = W:\diststd\22x34\bd32.dgn	USER NAME = gegl1enobt	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94
		DRAWN -	REVISED - A. ABBAS 03-21-97
	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED - M. GOMEZ 04-06-01
	PLOT DATE = 1/4/2008	DATE - 06-13-90	REVISED - R. BORO 01-01-07

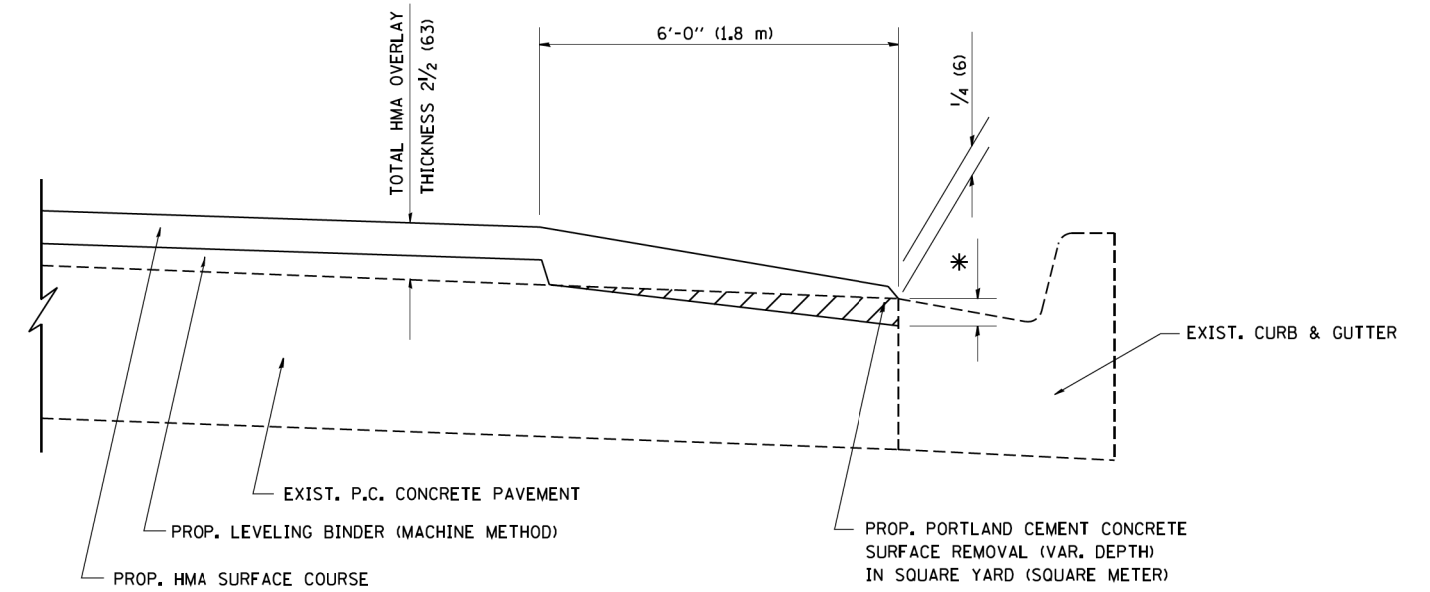
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**BUTT JOINT AND  
HMA TAPER DETAILS**

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

F.A.P. RTE. 372/373	SECTION 2013-037B-R	COUNTY COOK	TOTAL SHEETS 787	SHEET NO. 752
BD400-05 BD32		CONTRACT NO. 60W75		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				





HMA TAPER AT  
EDGE OF P.C.C PAVEMENT

HMA SURFACE		LEVELING BINDER		* MILLING AT GUTTER FLAG
MIX	THICKNESS	THICKNESS		
C OR D	1 1/2 (38)	1 (25)		1/4 (33)
F	1 3/4 (44)	3/4 (19)		1/2 (38)

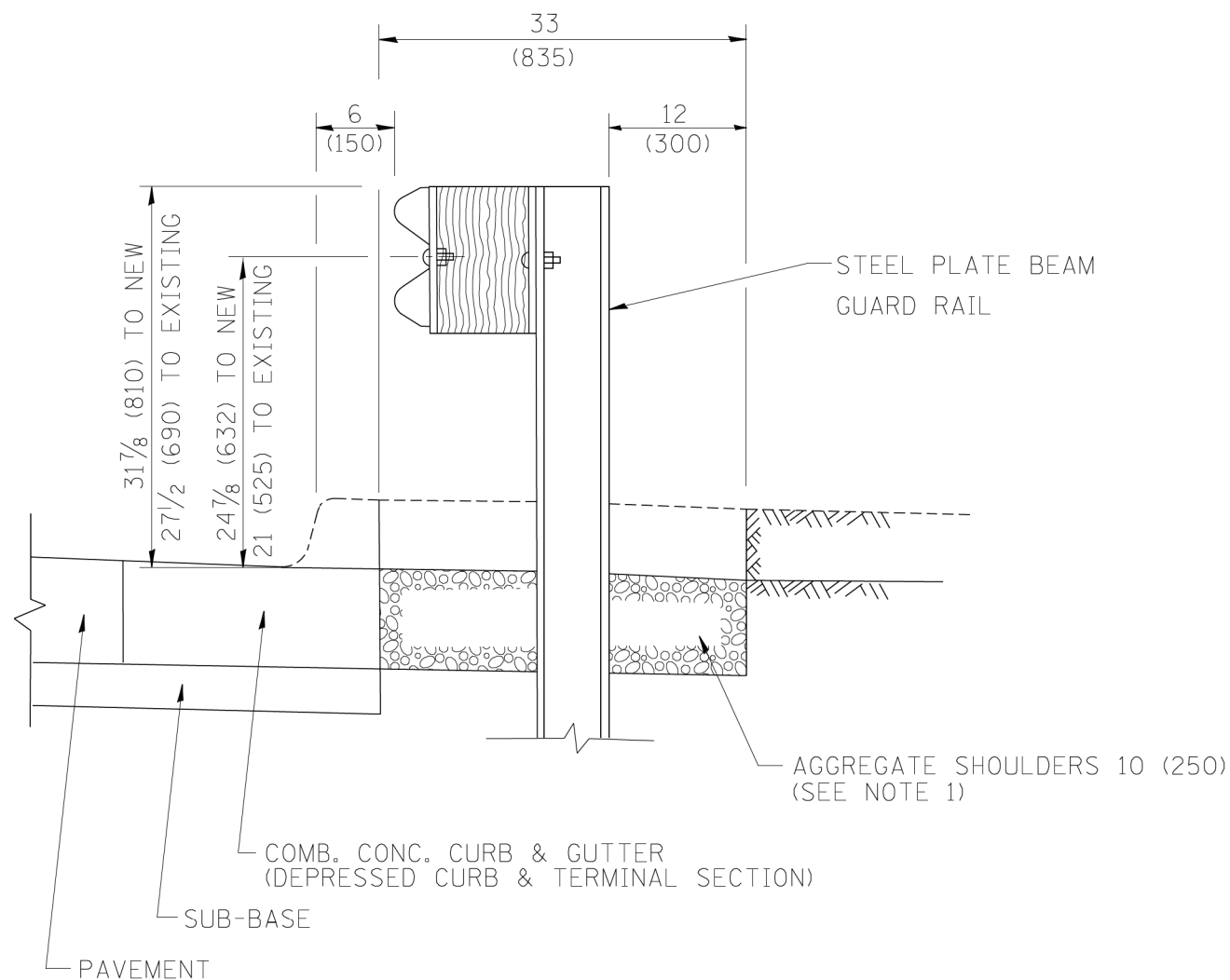
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

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		DRAWN - JIS	REVISED - A. ABBAS 05-05-99
	PLOT SCALE = 50.0000' / IN.	CHECKED - A. ABBAS	REVISED - E. GOMEZ 12-21-00
	PLOT DATE = 1/4/2008	DATE - 09-10-94	REVISED - R. BORO 01-01-07

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>HMA TAPER AT EDGE OF P.C.C PAVEMENT</b>			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

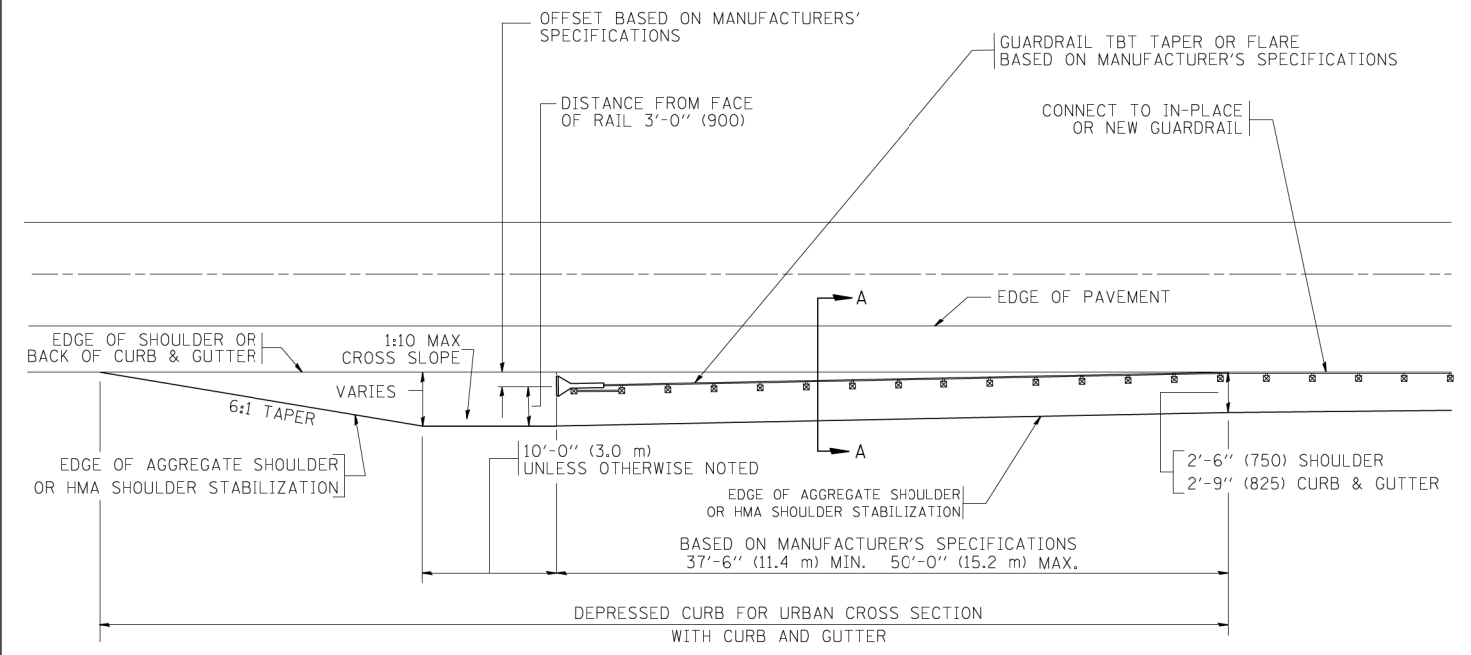
F.A.P. RTE. 372/373	SECTION 2013-037B-R	COUNTY COOK	TOTAL SHEETS 787	SHEET NO. 753
BD400-06 (BD33)		CONTRACT NO. 60W75		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



SECTION A-A

- NOTES:
1. THE AGGREGATE SHOULDER, 10" OR HMA SHOULDER, 6" (IF REQUIRED) SHALL EXTEND UNDER THE TRAFFIC BARRIER TERMINAL.
  2. "EXISTING" GUARDRAIL REFERS TO CONNECTING TERMINAL SECTION TO GUARD RAILING PRIOR TO THE MIDWEST GUARDRAIL SYSTEM.
  3. THE CONTRACTOR SHALL VERIFY THE TYPE/HEIGHT OF GUARDRAIL IN-PLACE BEFORE ORDERING THE NEW TERMINAL SECTION. COST INCLUDED WITH THE COST OF THE TERMINAL. THE TERMINAL SECTION HEIGHT TO BE PLACED MUST MATCH THE HEIGHT OF THE IN-PLACE GUARDRAIL.

DETAILS FOR STEEL PLATE BEAM  
GUARD RAIL ADJACENT TO CURB AND GUTTER  
 [FOR ROADWAY SPEED 35 MPH (60 kmh) TO 45 MPH (70 kmh)]



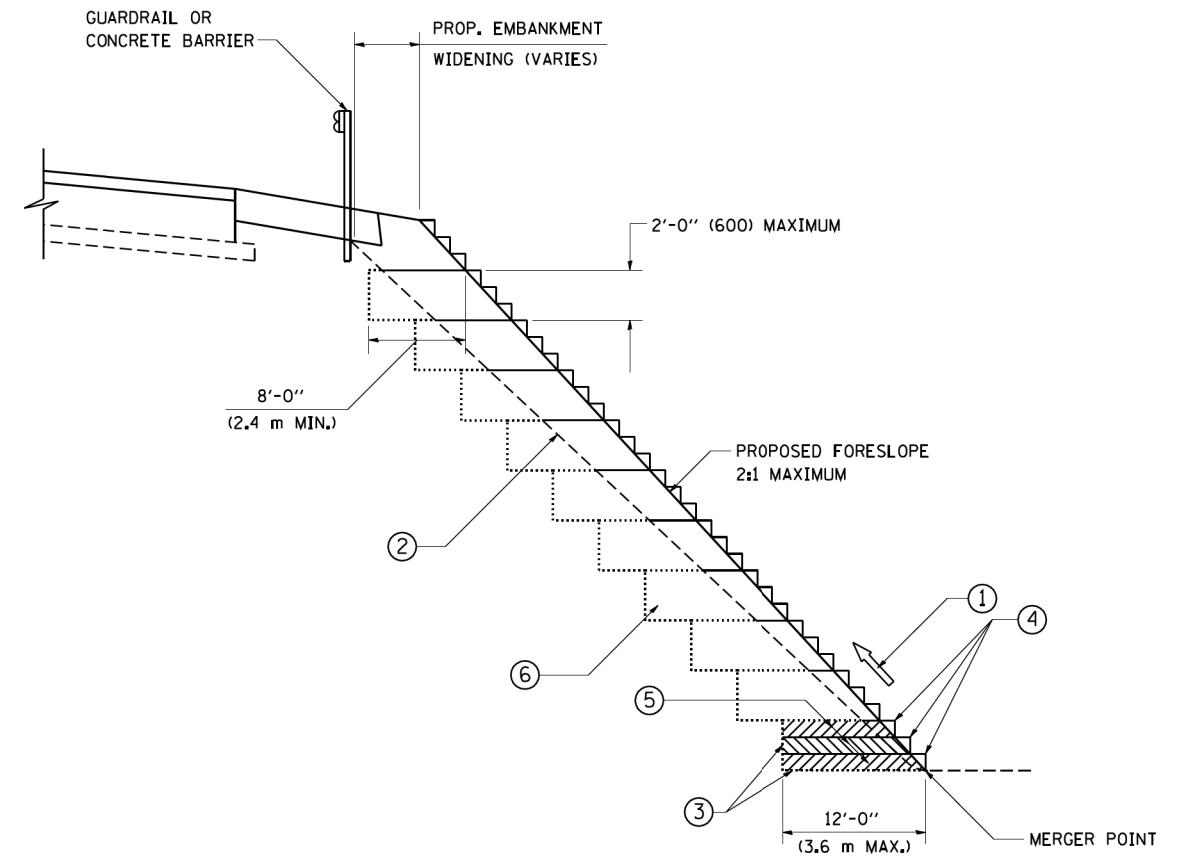
DEPRESSED CURB AND GUTTER AND  
SHOULDER TREATMENT AT TBT TY. 1 SPL.

BASIS OF PAYMENT: HMA SHOULDERS 6 (150) (IF REQUIRED) WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SHOULDERS 6" (150 mm)".

STEEL PLATE BEAM GUARD RAIL AND TRAFFIC BARRIER TERMINAL, OF THE TYPE SPECIFIED WILL BE PAID FOR SEPARATELY.

TBT = TRAFFIC BARRIER TERMINAL  
 ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME =	USER NAME = drivakosgn	DESIGNED - M. DE YONG	REVISED - E. GOMEZ 08-28-00	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>DETAILS FOR DEPRESSED CURB &amp; GUTTER AND</b> <b>SHOULDER TREATMENT AT TBT TY 1 SPL.</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ci:\pw\work\PW1001\DRIVAKOSGN\0108315\be34.dgn	DRAWN -	REVISED - R. BORO 01-01-07	372/373			2013-037B-R	COOK	787	754	
PLOT SCALE = 49.9999 / IN.	CHECKED -	REVISED - R. BORO 12-08-2008	<b>BD600-10 (BD 34)</b>			CONTRACT NO. 60W75				
PLOT DATE = 9/21/2009	DATE - 09-22-90	REVISED - R. BORO 09-14-2009	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT							



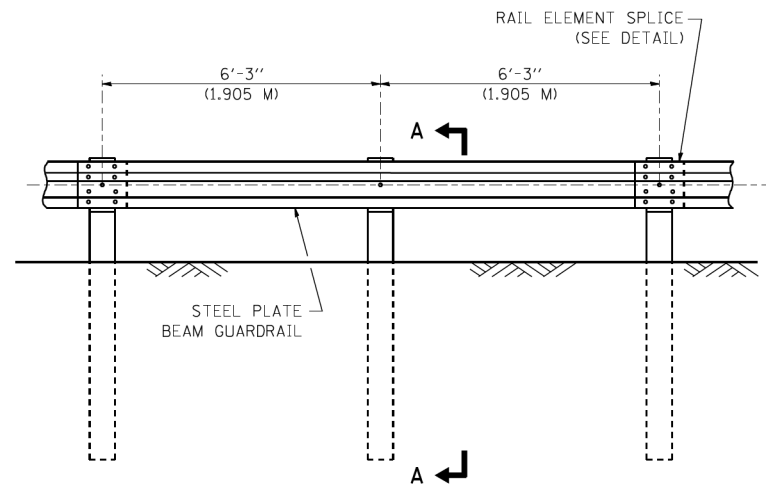
**TYPICAL BENCHING DETAIL  
FOR EMBANKMENT**

**NOTES:**

- ① CONSTRUCT SUCCEEDING BENCH CUTS AND EMBANKMENT PLACEMENT AND COMPACTION FROM BOTTOM TO TOP IN STAIRSTEP FASHION.
- ② EXISTING FORESLOPE PREPARED IN ACCORDANCE WITH ARTICLE 205.03 OF THE STANDARD SPECIFICATIONS.
- ③ BENCH CUT EXISTING SLOPE TYPICAL FOR EACH STEP.
- ④ TRIM TO FINAL SLOPE.
- ⑤ EQUAL 8-INCH (200) LIFTS OF EMBANKMENT COMPACTED IN ACCORDANCE WITH ARTICLE 205.05 OF THE STANDARD SPECIFICATIONS.
- ⑥ EXCAVATION OF BENCH CUTS WITHIN EXISTING EMBANKMENT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC METER OR CUBIC YARD FOR "EARTH EXCAVATION". THIS PRICE WILL INCLUDE ALL LABOR AND MATERIAL, NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- ⑦ SLOPES SHALL BE BENCHED ACCORDING TO THIS DETAIL WHEN THE SLOPE IS STEEPER THAN 4:1 AND THE HEIGHT IS GREATER THAN 5' (1.5 m).

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

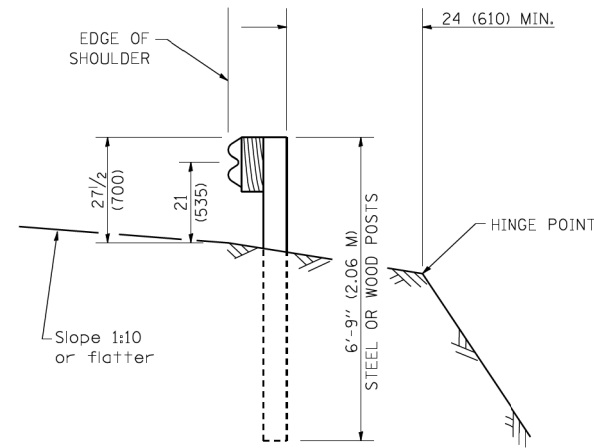
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	PLOT SCALE = 50.0000' / IN.	CHECKED - S.E.B.	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	<b>BD-51</b>		CONTRACT NO. 60W75
	PLOT DATE = 1/4/2008	DATE - 06-16-04	REVISED -		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT						



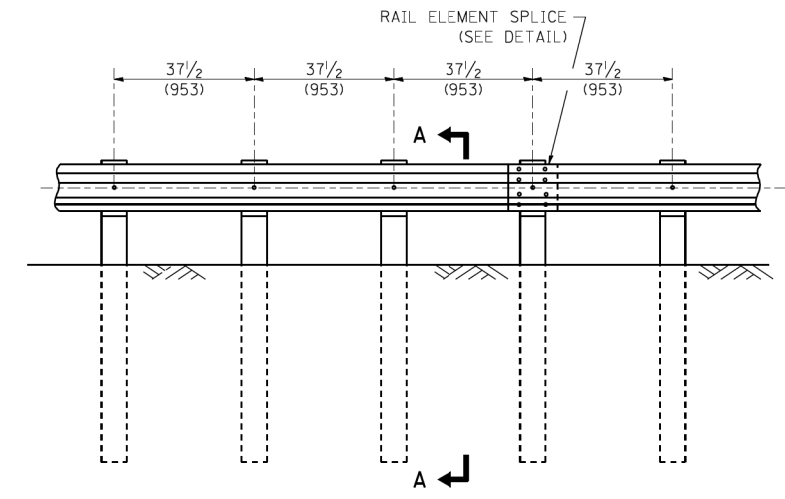
ELEVATION

**TYPE A**

6'-3" (1.905 M) TYPICAL POST SPACING



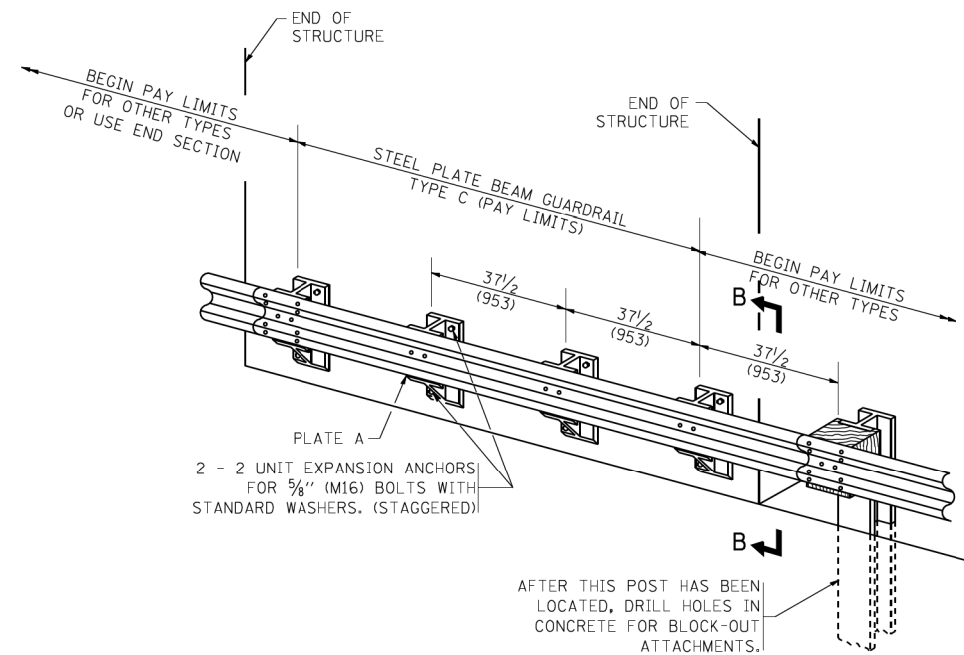
SECTION A-A



ELEVATION

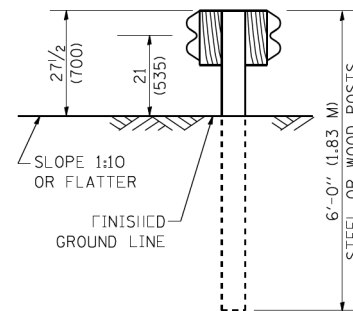
**TYPE A**

37 1/2 (953) CLOSED POST SPACING

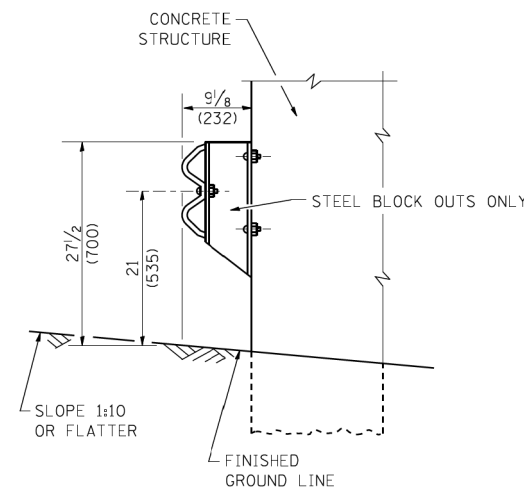


**TYPE C**

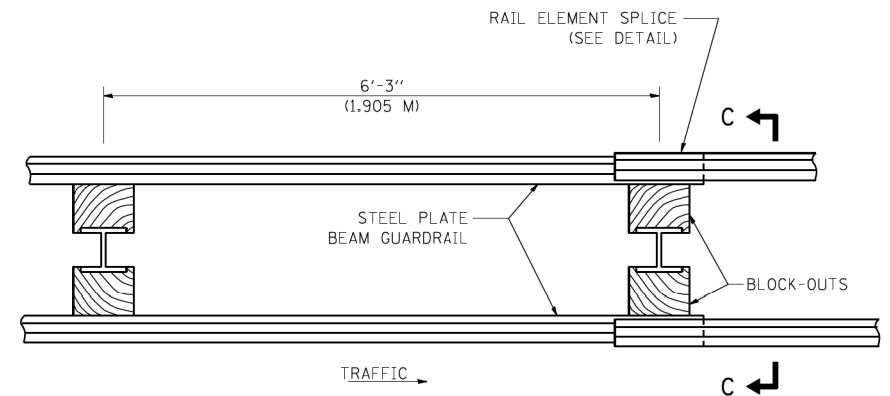
37 1/2 (953) BLOCK-OUT SPACING



SECTION C-C



SECTION B-B



PLAN

**TYPE D**

DOUBLE STEEL PLATE BEAM GUARDRAIL  
6'-3" (1.905 M) TYPICAL POST SPACING

**GENERAL NOTES**

ALL SLOPE RATIOS ARE EXPRESSED AS UNITS OF VERTICAL DISPLACEMENT TO UNITS OF HORIZONTAL DISPLACEMENT (V:H).

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

THE EXISTING STEEL POSTS MAY BE DRILLED TO MATCH THE BOLT PATTERN SHOWN HEREIN FOR THE WOOD BLOCK-OUT, OR A NEW STEEL POST SHALL BE PROVIDED.

THIS DETAIL IS APPLICABLE TO THE GUARDRAIL SYSTEM USED PRIOR TO JANUARY 1, 2007. FOR DETAILS ON THE MIDWEST GUARDRAIL SYSTEM, SEE STANDARD 630001.

FILE NAME = W:\diststd\22x34\bm21.dgn

USER NAME = gegl@nabt  
PLOT SCALE = 50.0000' / IN.  
PLOT DATE = 1/4/2008

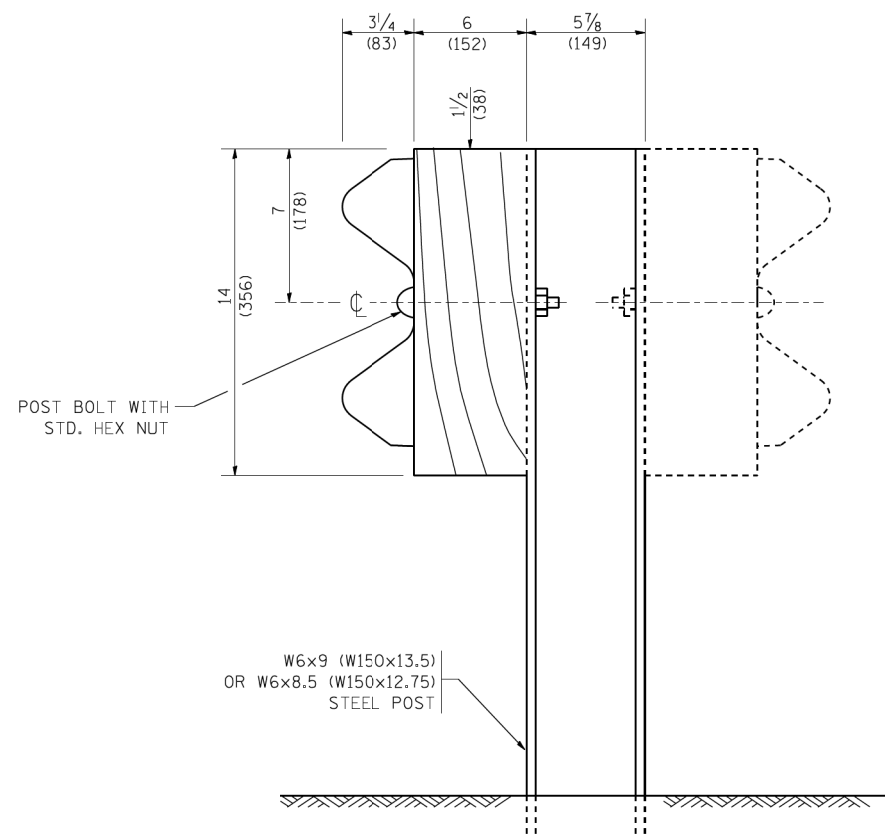
DESIGNED -	REVISED - 10-31-06
DRAWN -	REVISED -
CHECKED -	REVISED -
DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

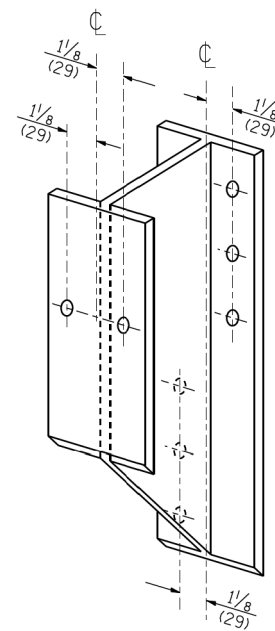
**REMOVE AND REERECT  
STEEL PLATE BEAM GUARDRAIL**

SCALE: NONE SHEET NO. 1 OF 4 SHEETS STA. TO STA.

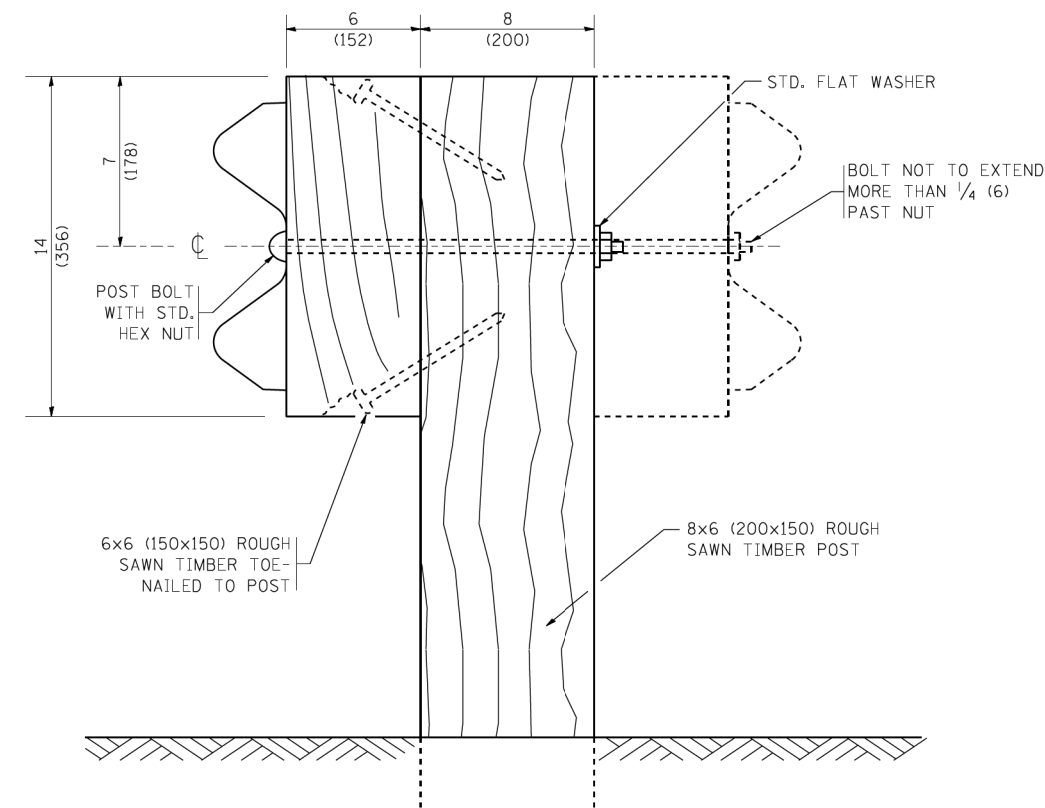
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372/373	2013-037B-R	COOK	787	756
<b>BM-21</b>		CONTRACT NO. 60W75		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



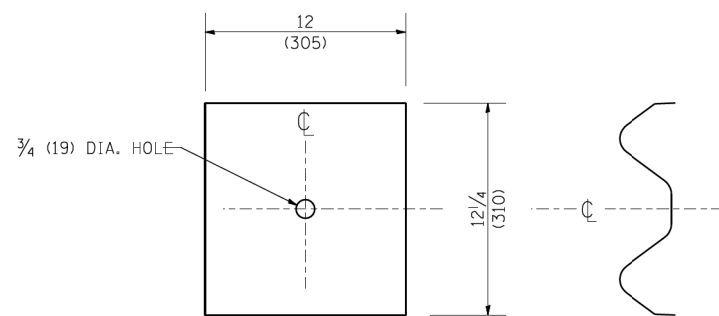
**STEEL POST CONSTRUCTION**



**STEEL BLOCK-OUT DETAIL**



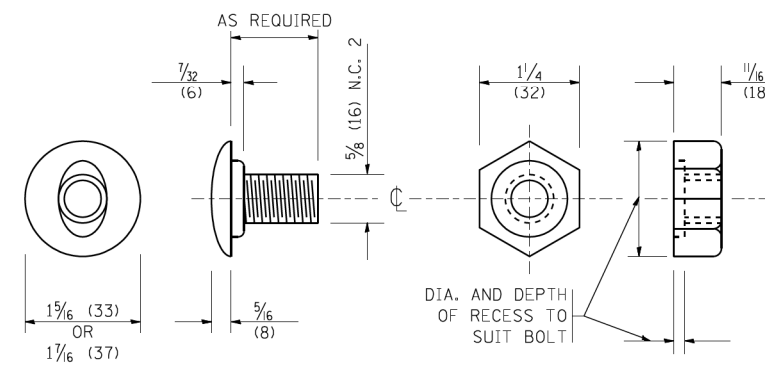
**WOOD POST CONSTRUCTION**



**NOTE:**

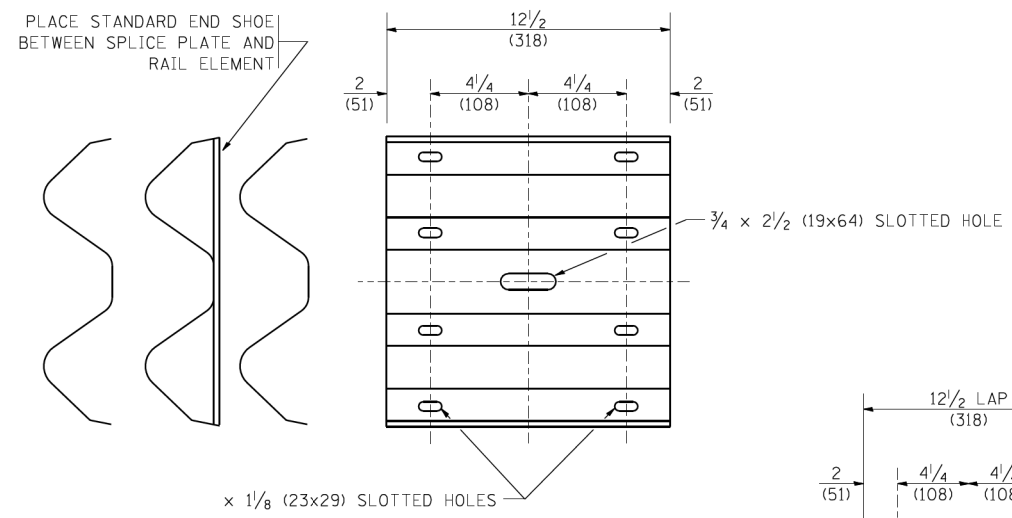
PLATE A SHALL BE PLACED BETWEEN RAIL ELEMENT AND BLOCK-OUT AT NON-SPLICE MOUNTING POINTS ONLY WHEN STEEL BLOCK-OUTS ARE USED.

**PLATE A**

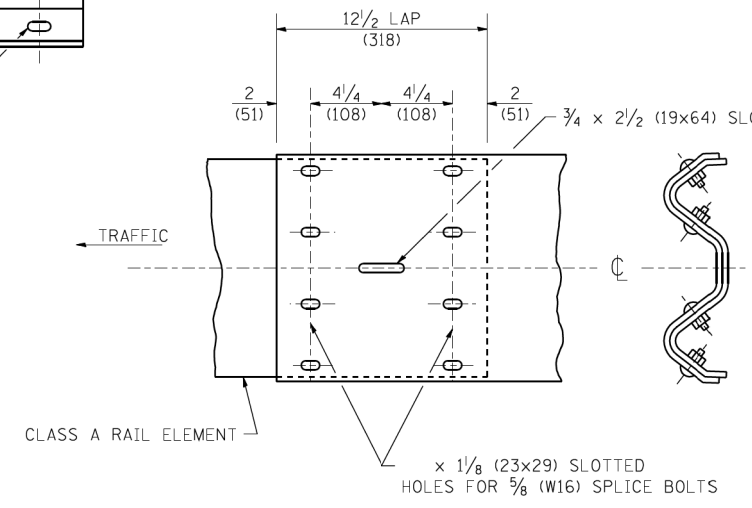


**POST OR SPLICE BOLT & NUT**

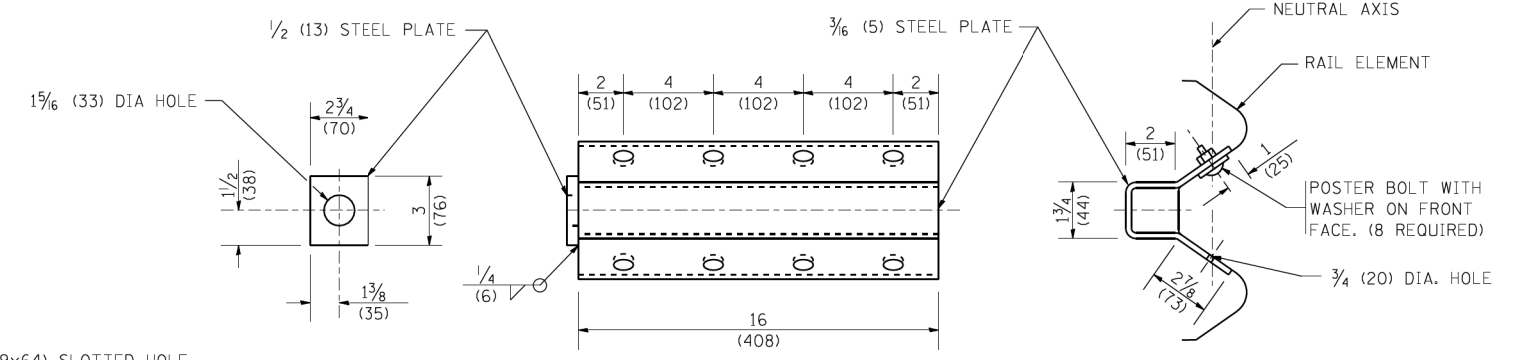
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PLOT SCALE = 50.0000' / IN. PLOT DATE = 1/4/2008	CHECKED - DATE -	<b>SCALE: NONE</b>			SHEET NO. 2 OF 4 SHEETS	STA. TO STA.	<b>CONTRACT NO. 60W75</b>		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT		



**SPLICE PLATE**



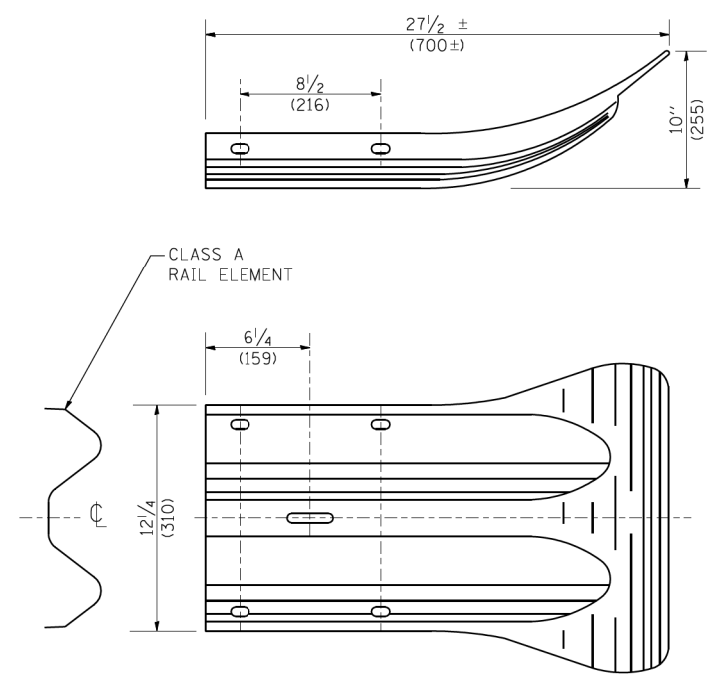
**RAIL ELEMENT SPLICE**



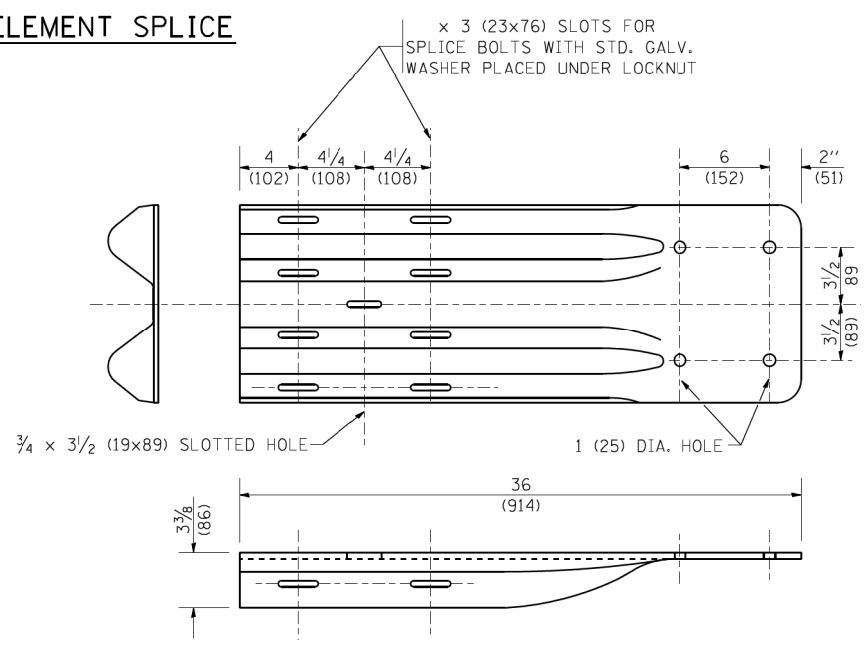
**NOTE:**

ANCHOR PLATE T SHALL BE USED TO ATTACH CABLE ASSEMBLY TO GUARDRAIL WHEN REQUIRED ON TRAFFIC BARRIER TERMINALS.

**ANCHORE PLATE T DETAILS**



**END SECTION**



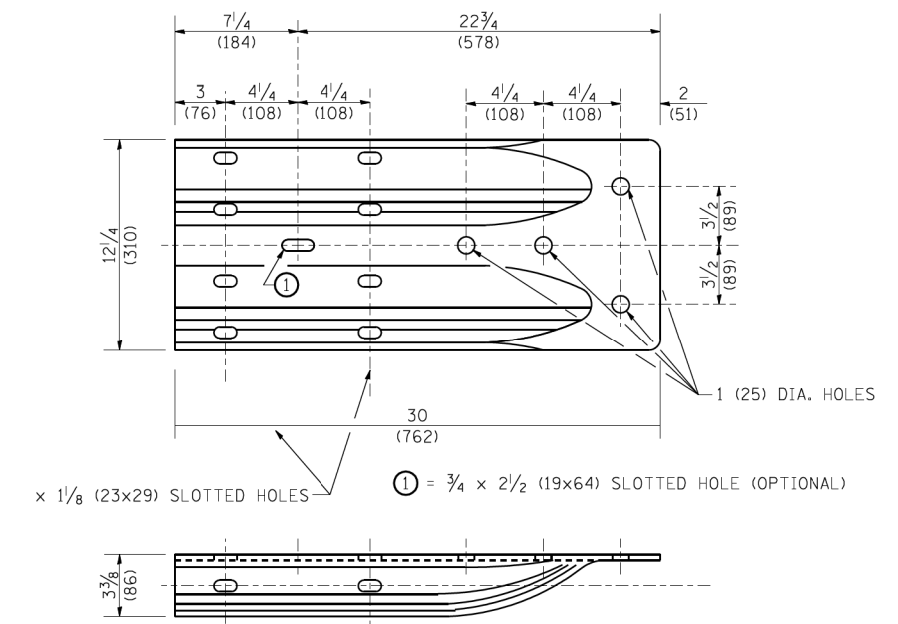
**END SHOE**

**NOTE:**

WHEN END SHOE IS ATTACHED TO A BRIDGE PARAPET WHICH HAS AN EXPANSION JOINT, THE BOLTS SHALL BE PROVIDED WITH A LOCKNUT OR DOUBLE NUT AND SHALL BE TIGHTENED ONLY TO A POINT THAT WILL ALLOW GUARDRAIL MOVEMENT.

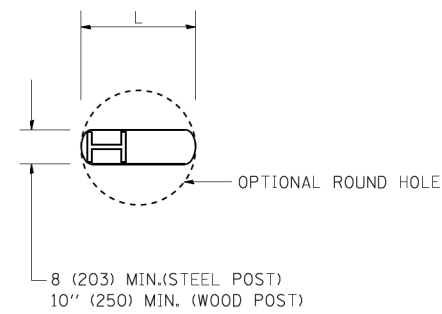
THE STANDARD END SHOE SHALL BE ATTACHED TO THE CONCRETE WITH PRE-DRILLED OR SELF-DRILLING ANCHOR BOLTS. THE ANCHOR CONE SHALL BE SET FLUSH WITH THE SURFACE OF THE CONCRETE.

EXTERNALLY THREADED STUDS PROTRUDING FROM THE SURFACE OF THE CONCRETE WILL NOT BE PERMITTED.

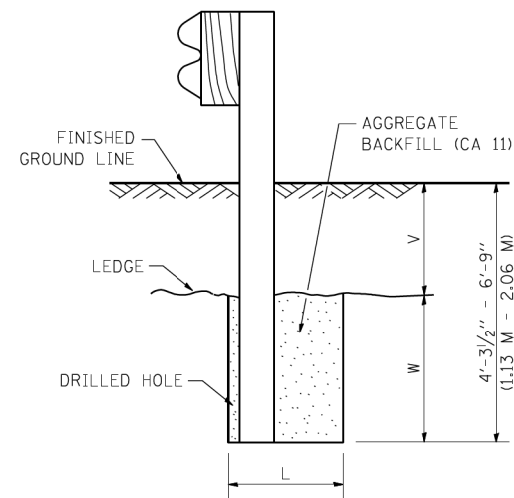


**ALTERNATE END SHOE**

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PLOT SCALE = 50.0000' / IN.	PLOT DATE = 1/4/2008	CHECKED - DATE -	REVISOR -		SCALE: NONE	SHEET NO. 3 OF 4 SHEETS	STA. TO STA.	<b>BM-21</b>		CONTRACT NO. 60W75	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT											



**PLAN**

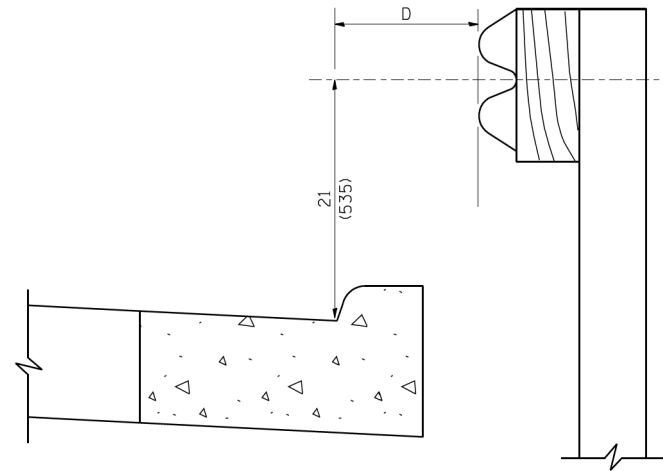


**NOTE:**

LEDGE LINE IS TOP OF ROCK LEDGE OR HARD SLAG FILL.

**ELEVATION**

**FOOTING FOR POST WHEN IMPERVIOUS MATERIAL IS ENCOUNTERED**



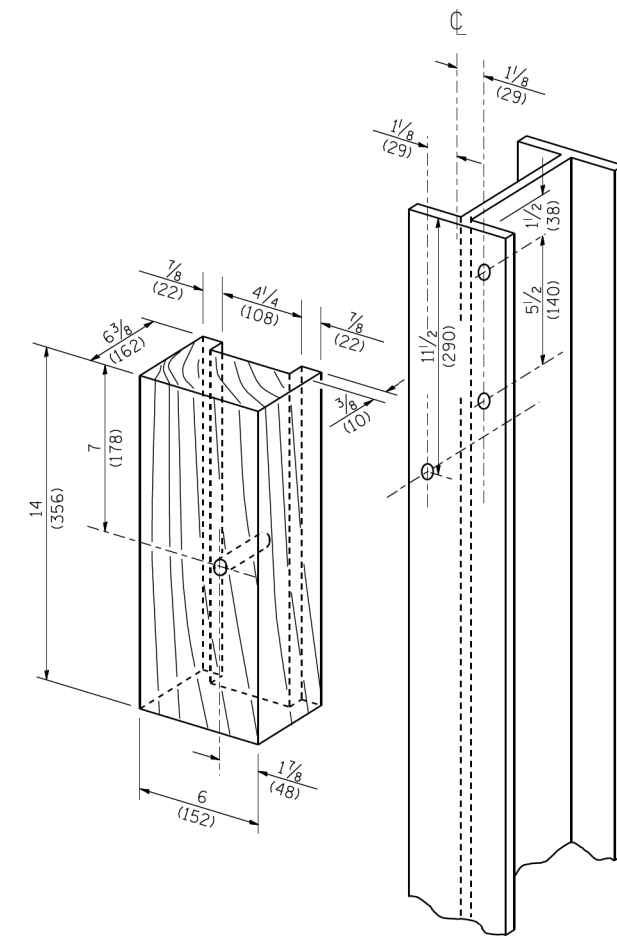
**NOTE:**

IF IT IS NECESSARY FOR D TO BE MORE THAN 12 (300) AND LESS THAN 10'-0" (3.0 M) TYPE M-2 (M-5) CURB AND GUTTER (STD. 606001) SHALL BE USED IN FRONT OF AND IN ADVANCE OF THE GUARDRAIL.

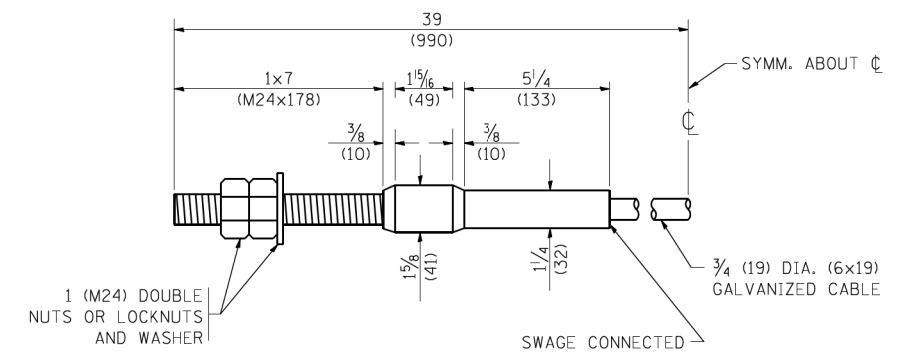
**GUARDRAIL PLACED BEHIND CURB**

(D = 0 DESIRABLE TO 12 (300) MAXIMUM)

V	W	L	
		STEEL POST	WOOD POST
0 - 18 (0 - 460)	24 (610)	21 (530)	23 (580)
>18 - 41.5 (> 460 - 825)	12 (305)	8 (203)	10 (250)
>41.5 - 53.5 (> 825 - 1.13 M)	12 - 0 (350 - 0)	8 (203)	10 (250)



**WOOD BLOCK-OUT AND STEEL POST DETAILS**

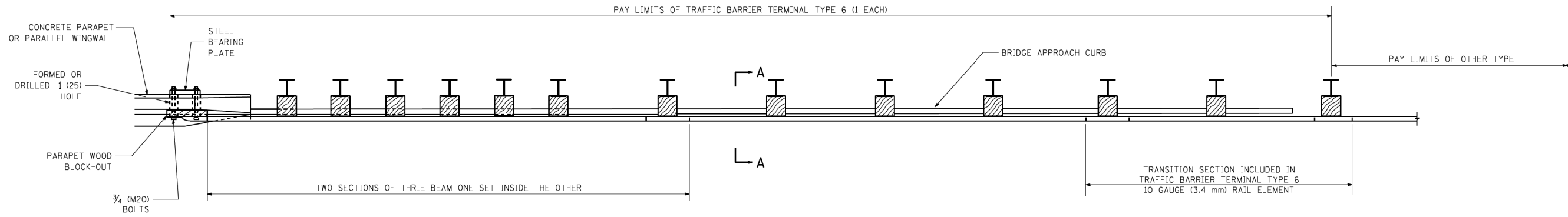


**CABLE ASSEMBLY**

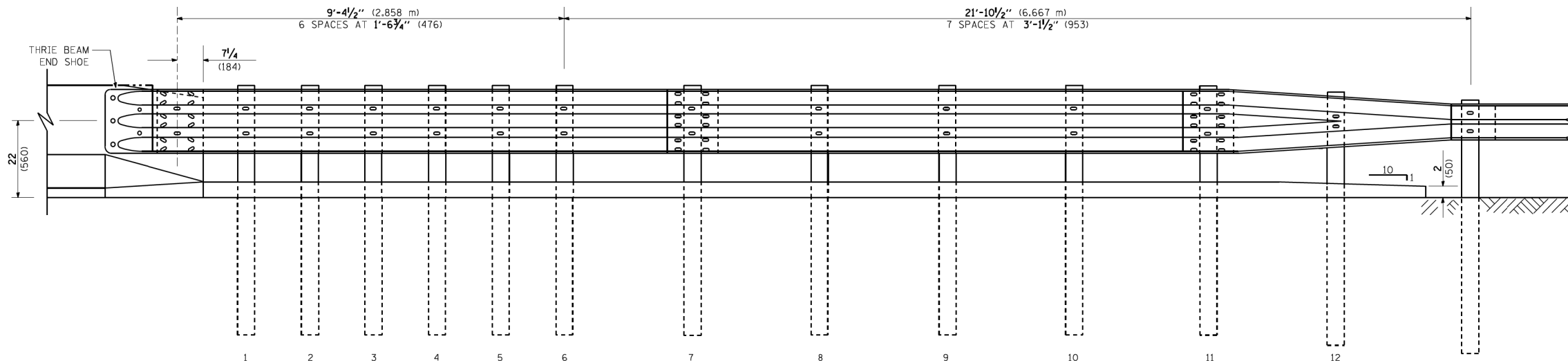
(40,000 LBS (18,100 KG) MIN. BREAKING STRENGTH)  
TIGHTEN TO TAUT TENSION

**PARAPET OR WINGWALL**

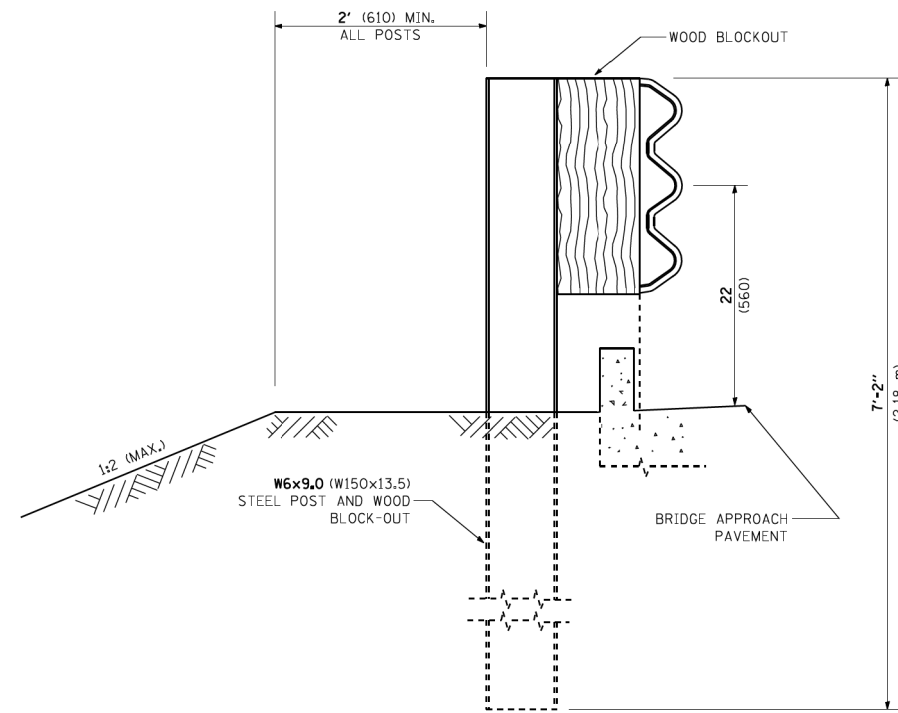
PAY LIMITS OF TRAFFIC BARRIER TERMINAL TYPE 6 (1 EACH)



**PLAN**



**ELEVATION**



**SECTION A-A**

**GENERAL NOTES**

- TO BE USED WHEN CONNECTING TO EXISTING GUARD RAILING PRIOR TO THE MIDWEST GUARDRAIL SYSTEM.
- SEE STANDARD 630001 FOR DETAILS OF GUARDRAIL NOT SHOWN.
- THRIE BEAM RAIL SHALL BE BOLTED TO BLOCK-OUT AT ALL POSTS.
- SEE STANDARD 420401 FOR DETAILS OF BRIDGE APPROACH PAVEMENT.
- ALL SLOPE RATIOS ARE EXPRESSED AS UNITS OF VERTICAL DISPLACEMENT TO UNITS OF HORIZONTAL DISPLACEMENT (V:H).
- ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME = c:\Projects\diststd2007\bm22.dgn

USER NAME = bauerdl  
 PLOT SCALE = 50.0000' / IN.  
 PLOT DATE = 2/21/2008

DESIGNED -	REVISED - STATE STANDARD;
DRAWN -	631031-05 - 02/19/2008
CHECKED -	REVISED -
DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**TYPE 6 TERMINAL  
 FOR USE WITH 21" HIGH SPBGR**

SCALE: NONE SHEET NO. 1 OF 3 SHEETS STA. TO STA.

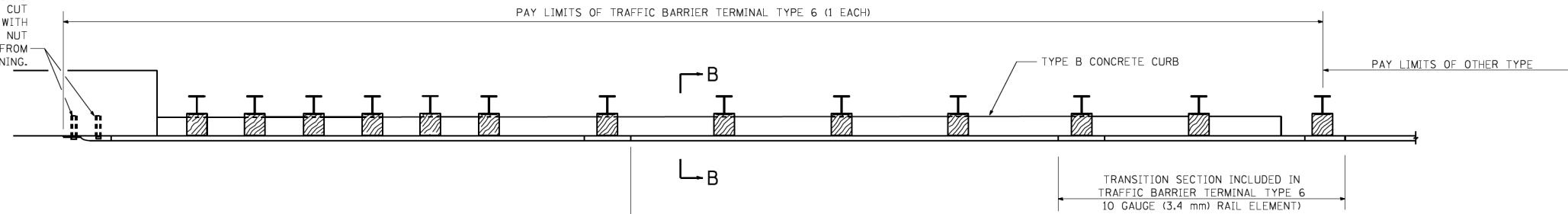
F.A.P. RTE. 372/373	SECTION 2013-037B-R	COUNTY COOK	TOTAL SHEETS 787	SHEET NO. 760
<b>BM 22</b>		CONTRACT NO. 60W75		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



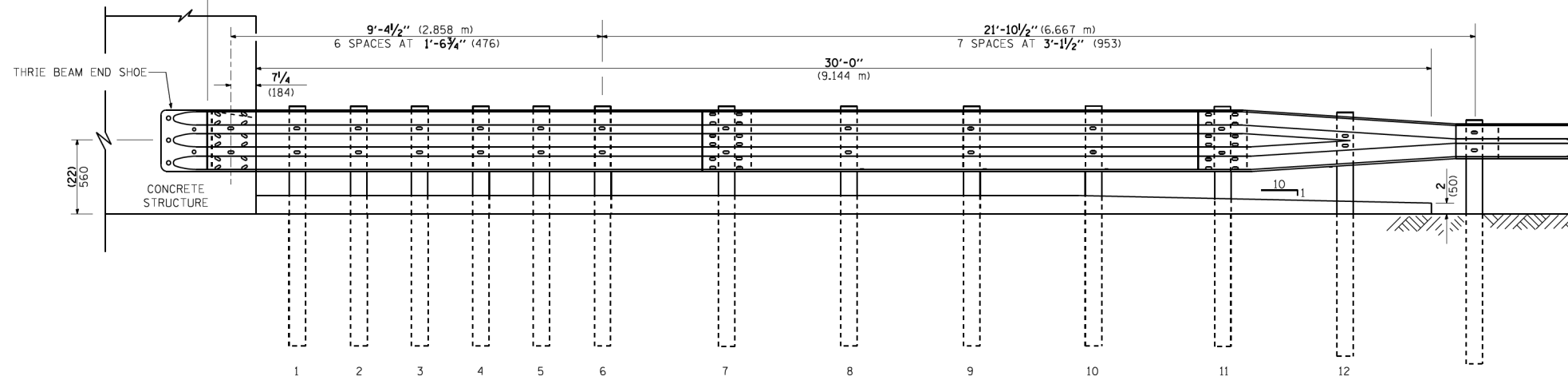
**OTHER CONCRETE STRUCTURE**

5 EPOXY GROUTED  $\frac{3}{4}$ " (M20) ANCHOR BOLTS WITH STANDARD WASHERS. AFTER TIGHTENING, CUT THE ANCHOR BOLTS FLUSH WITH NUTS, AND DAMAGE THE NUT TO PREVENT IT FROM LOOSENING.

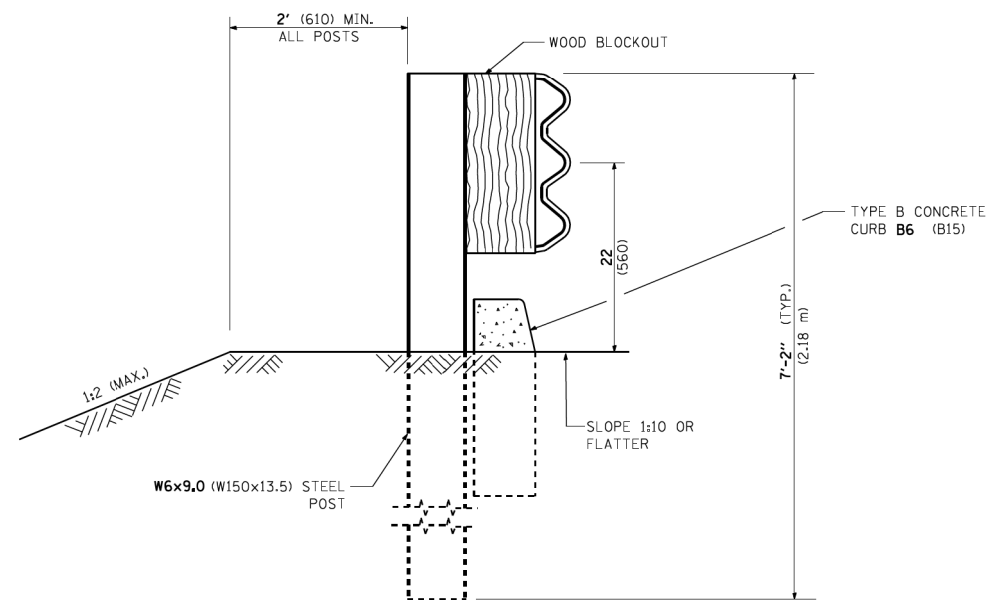
PAY LIMITS OF TRAFFIC BARRIER TERMINAL TYPE 6 (1 EACH)



**PLAN**



**ELEVATION**



**SECTION B-B**

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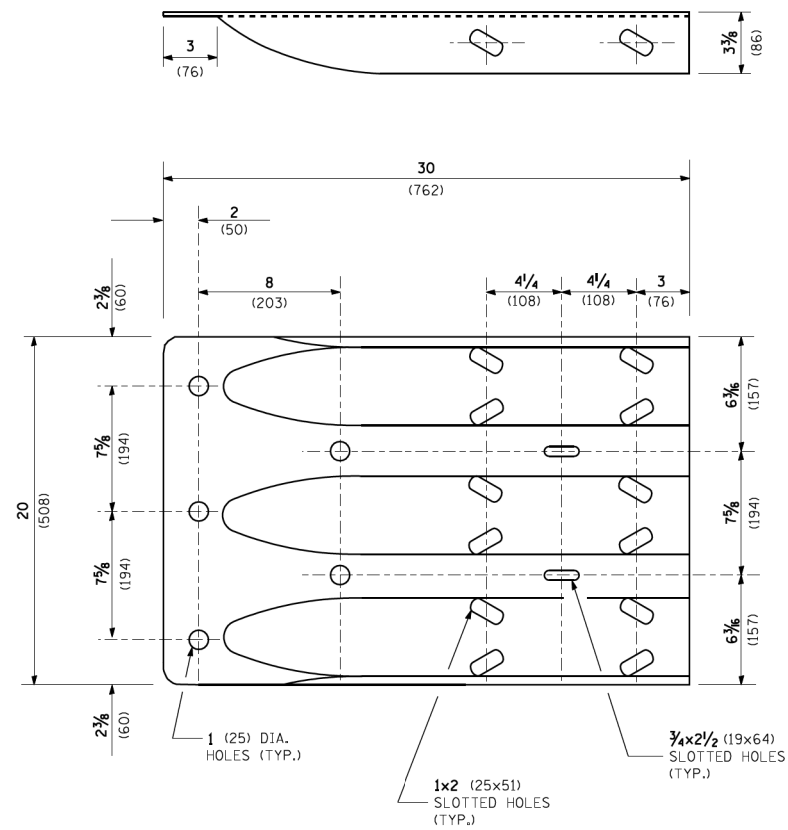
DESIGNED -	REVISED - STATE STANDARD:
DRAWN -	631031-05 - 02/19/2008
CHECKED -	REVISED -
DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

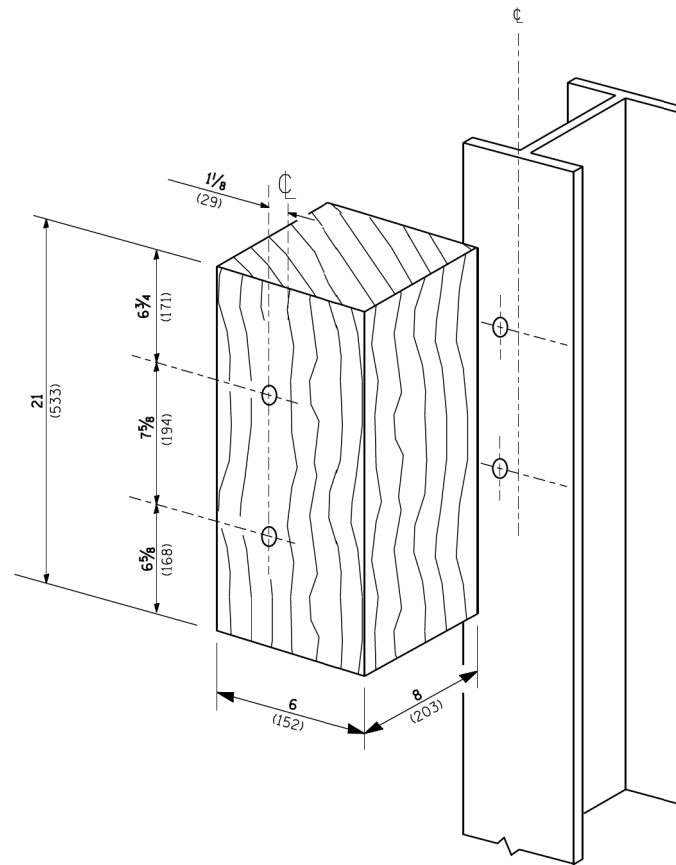
**TYPE 6 TERMINAL  
 FOR USE WITH 21" HIGH SPBGR**

SCALE: NONE SHEET NO. 2 OF 3 SHEETS STA. TO STA.

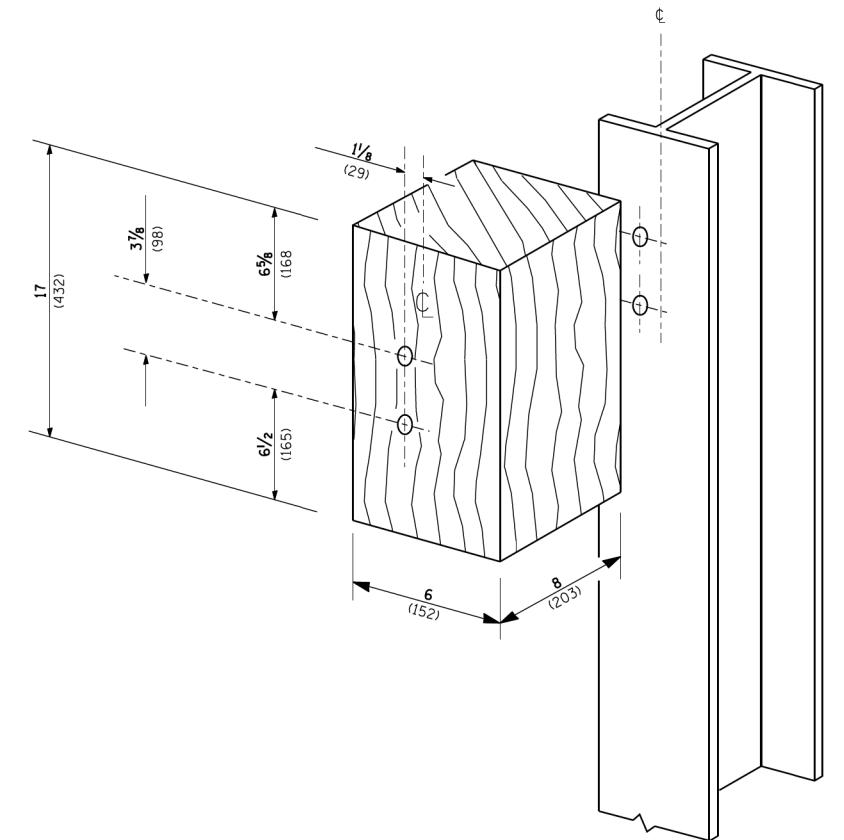
F.A.P. RTE. 372/373	SECTION 2013-037B-R	COUNTY COOK	TOTAL SHEETS 787	SHEET NO. 761
<b>BM 22</b>		CONTRACT NO. 60W75		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



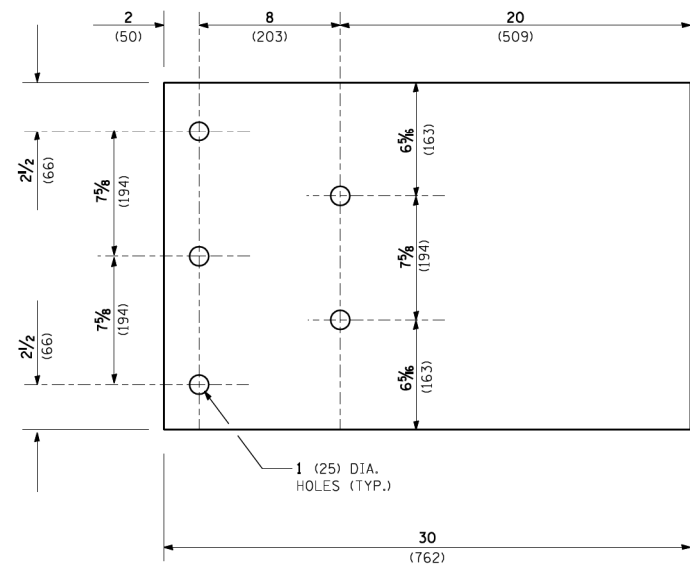
THRIE BEAM END SHOE DETAIL



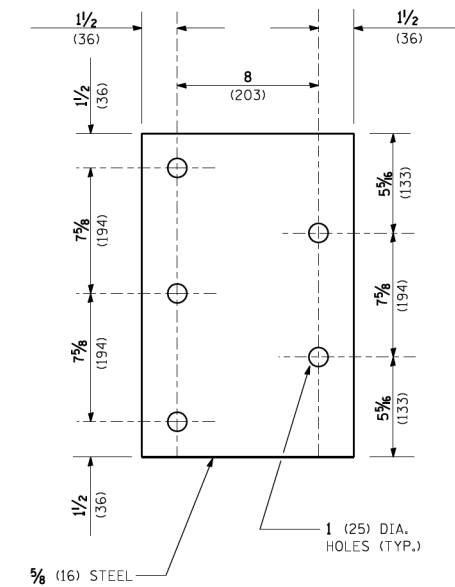
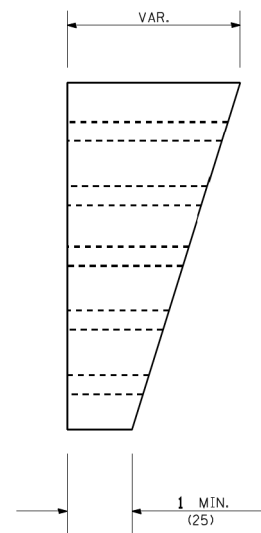
POSTS 1-11 WOOD BLOCKOUT DETAIL



POST 12 WOOD BLOCKOUT DETAIL



PARAPET WOOD BLOCK-OUT DETAIL



PARAPET STEEL BEARING PLATE DETAIL

(5 EACH INDIVIDUAL 5x5x3/8 (125x125x16) STEEL PLATES WITH CENTERED 1 (25) HOLES MAY BE SUBSTITUTED FOR THE PLATE SHOWN.)

FILE NAME = c:\Projects\diststd2007\bm22.dgn

USER NAME = bauerdl  
 PLOT SCALE = 50.0000' / IN.  
 PLOT DATE = 2/21/2008

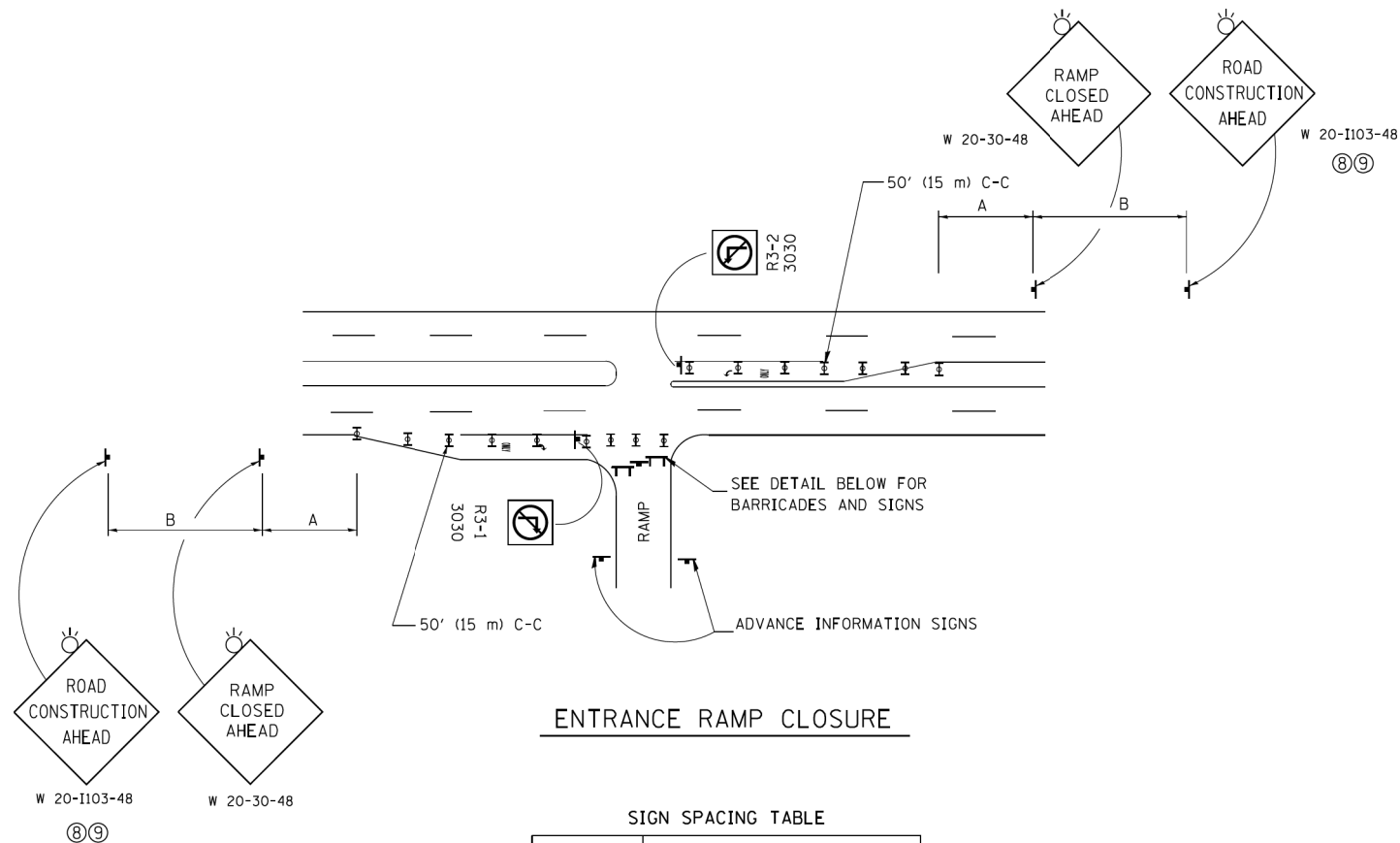
DESIGNED -	STATE STANDARD:
DRAWN -	631031-05 - 02/19/2008
CHECKED -	REVISD -
DATE -	REVISD -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

TYPE 6 TERMINAL  
 FOR USE WITH 21" HIGH SPBGR

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372/373	2013-037B-R	COOK	787	762
BM 22		CONTRACT NO. 60W75		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

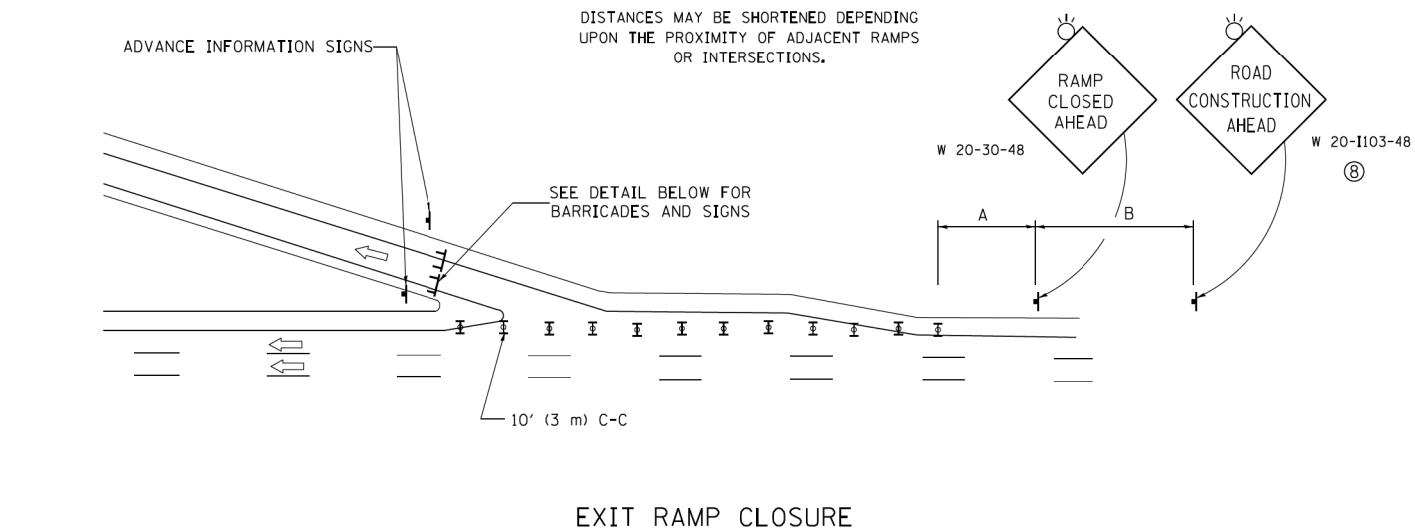


**ENTRANCE RAMP CLOSURE**

**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)

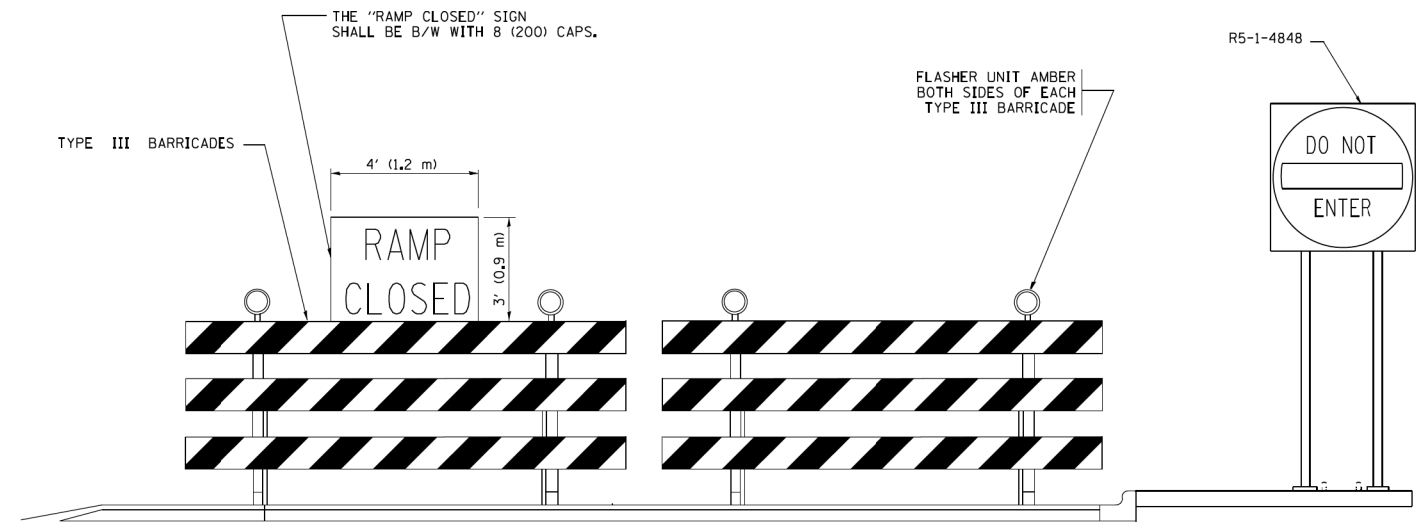
DISTANCES MAY BE SHORTENED DEPENDING UPON THE PROXIMITY OF ADJACENT RAMPS OR INTERSECTIONS.



**EXIT RAMP CLOSURE**

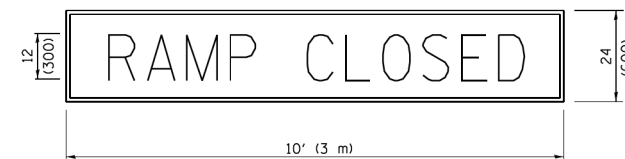
**SYMBOLS**

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



**DETAIL FOR REQUIRED BARRICADES & SIGNS**

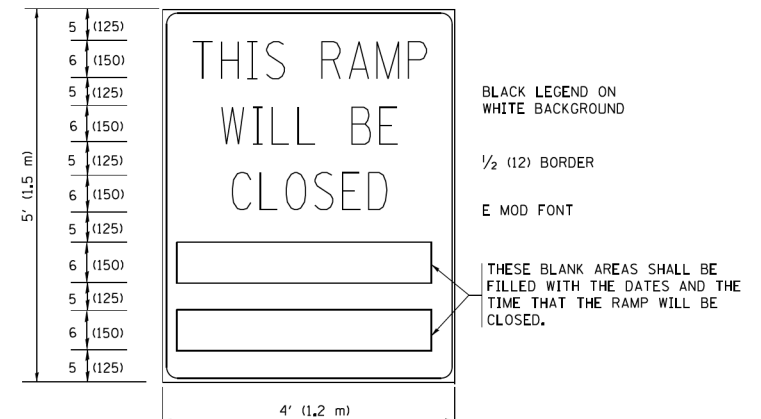
**RAMP CLOSURE ADVANCE WARNING SIGN**



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**



BLACK LEGEND ON WHITE BACKGROUND

1/2 (12) BORDER

E MOD FONT

THESE BLANK AREAS SHALL BE FILLED WITH THE DATES AND THE TIME THAT THE RAMP WILL BE CLOSED.

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
ca:\pwork\pwork\footemj\d0108315\td08.sgn		DRAWN -	REVISED - SPB 01-07
	PLOT SCALE = 50.000' / in.	CHECKED -	REVISED - SPB 12-09
	PLOT DATE = 7/8/2013	DATE - 02-83	REVISED - MD 06-13

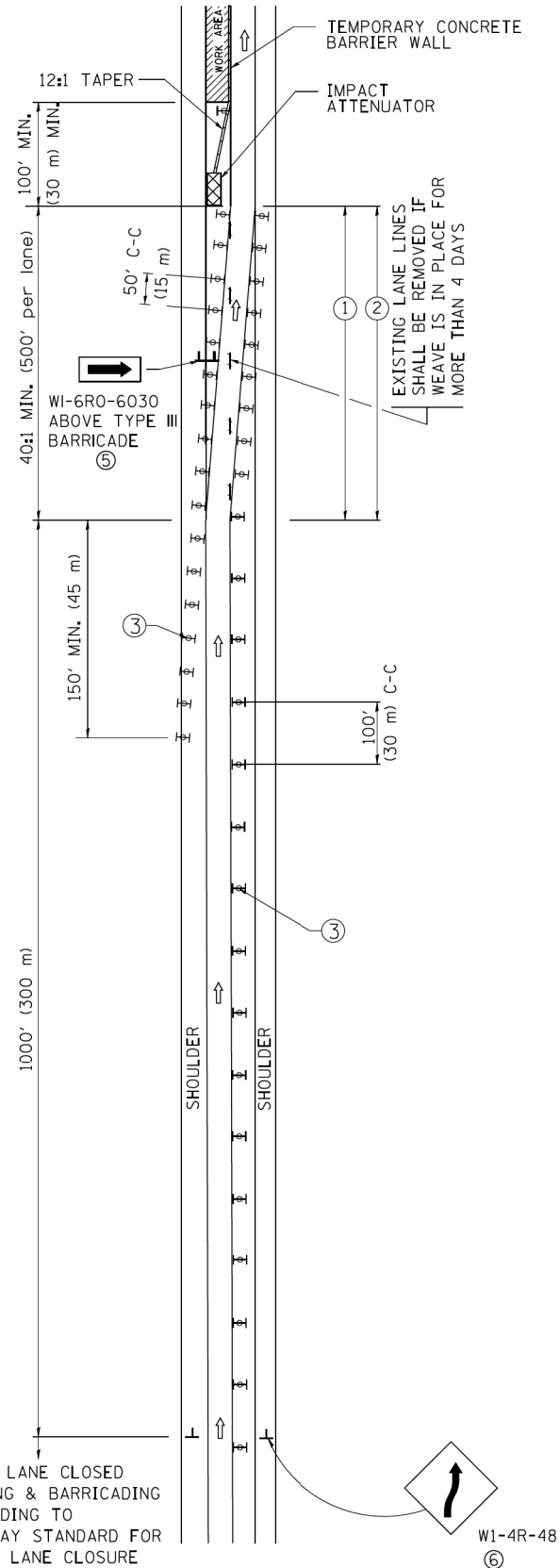
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ENTRANCE AND EXIT RAMP  
CLOSURE DETAILS**

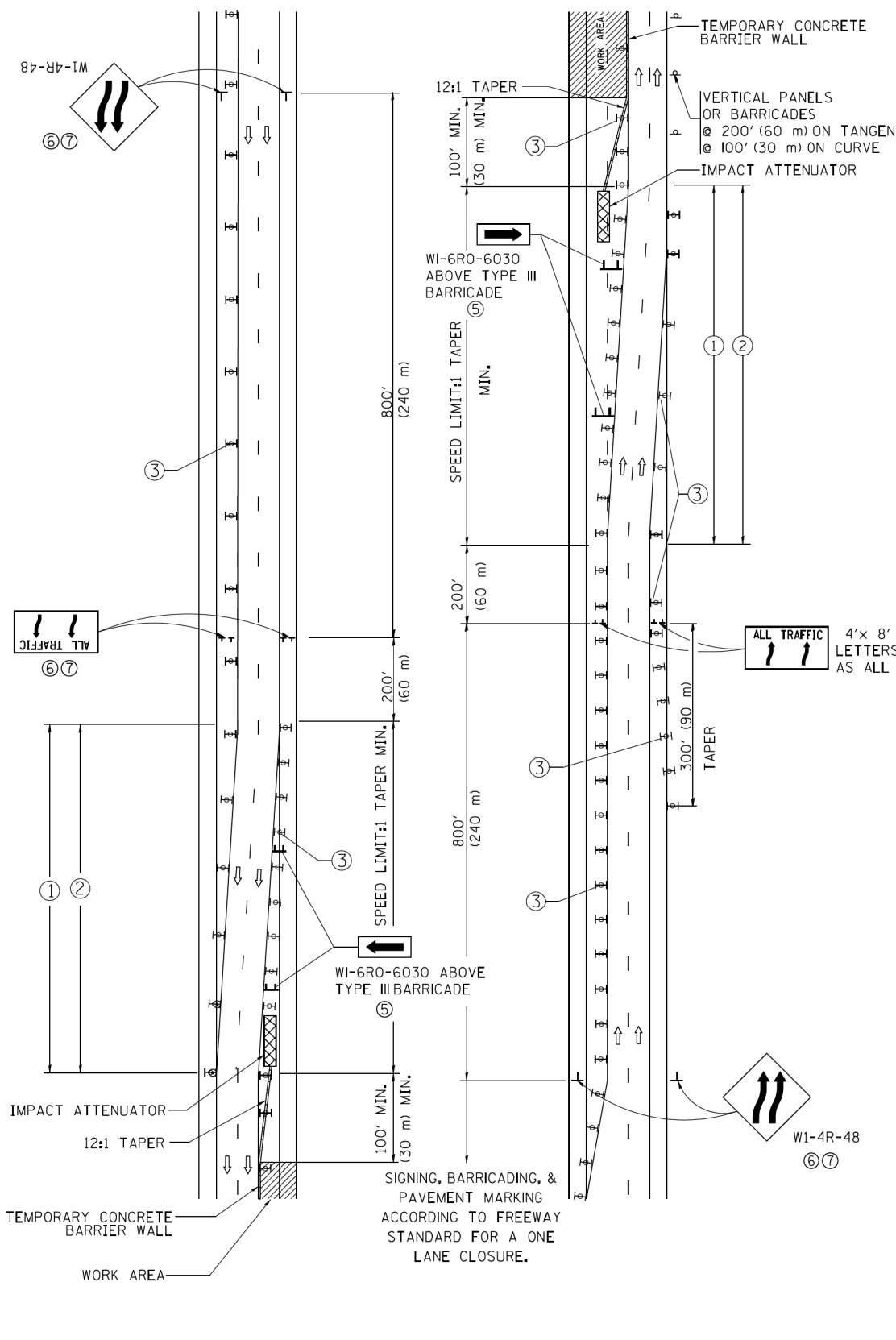
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372/373	2013-037B-R	COOK	787	763
TC-08		CONTRACT NO. 60W75		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

# SINGLE LANE WEAVE



# MULTI-LANE WEAVE



### GENERAL NOTES

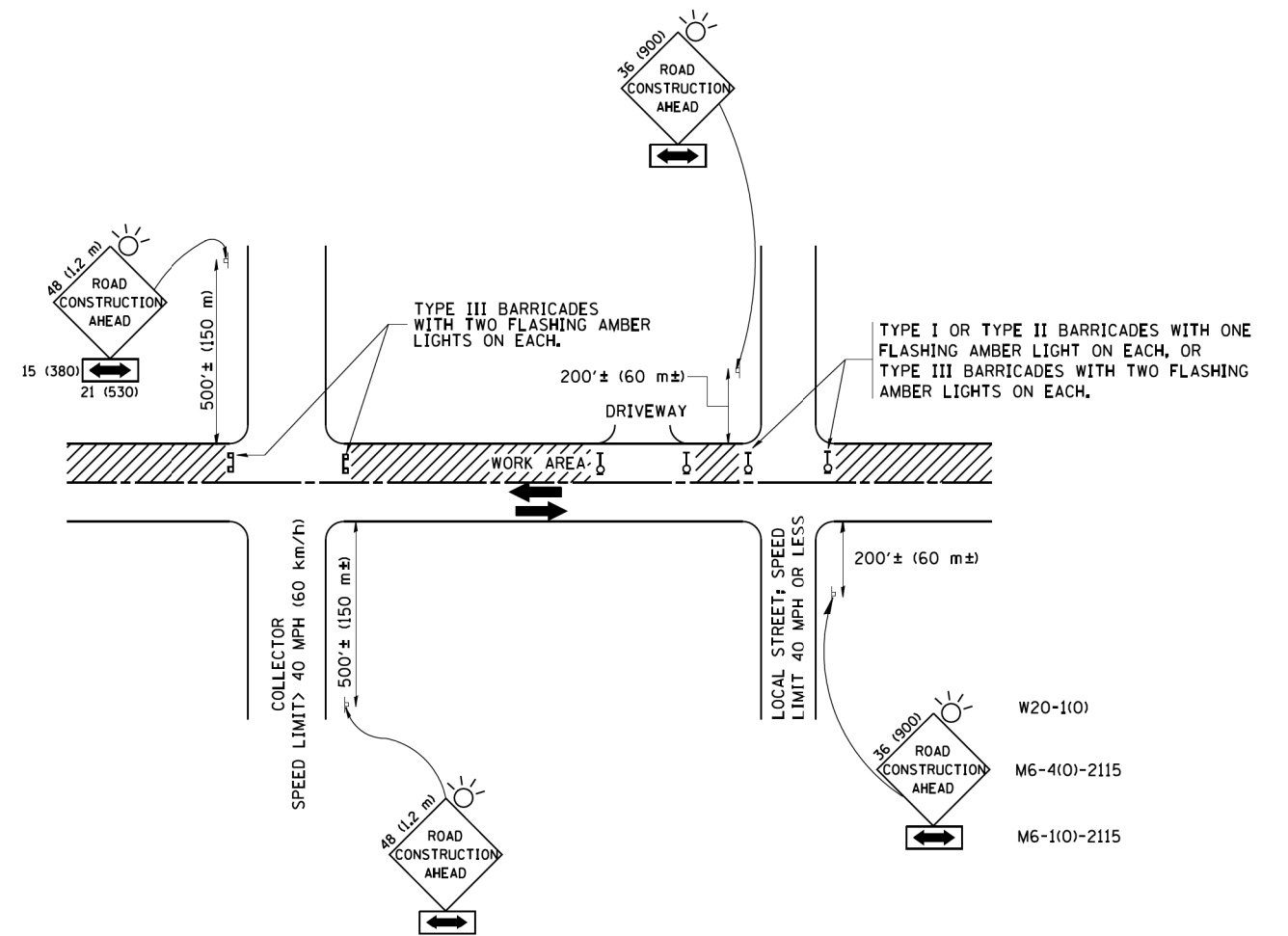
- ① EXISTING CONFLICTING PAVEMENT MARKING LINES SHALL BE REMOVED. PAVEMENT MARKING REMOVAL SHALL NOT BE REQUIRED FOR SINGLE LANE WEAVES UNDER 4 DAYS IN DURATION.
- ② CONTINUOUS REFLECTIVE TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE TAPER AND FOR 300' (90 m) ALONG SIDE THE WORK AREA WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS. THE LEFT EDGE LINE SHALL BE YELLOW AND THE RIGHT EDGE LINE SHALL BE WHITE. FOR MULTI-LANE WEAVES LANE LINES SHALL BE 5 INCH, 10'-30' (3 m-9 m) SKIP DASH, WHITE.
- ③ PLASTIC DRUMS WITH STEADY BURN LIGHTS AT 50' (15 m) C-C SPACING IN TAPERS AND 100' (30 m) C-C SPACING IN TANGENTS.
- ④ ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
- ⑤ TYPE III BARRICADES MAY BE OMITTED FOR SINGLE-LANE WEAVES UNDER 24-HOURS IN DURATION. W1-6 SIGNS WILL STILL BE REQUIRED. IF THE WIDTH OF OFFSET IS LESS THAN 6' THEN THE TYPE III BARRICADE WITH ATTACHED ARROW SIGN PANEL CAN BE ELIMINATED IN THE TAPER AREAS.
- ⑥ WHEN THE LENGTH OF THE SHIFTED SEGMENT (DISTANCE BETWEEN WEAVE POINTS) IS LESS THAN 1500', DOUBLE REVERSE CURVE SIGNS (W24-1) SHOULD BE USED INSTEAD OF THE REVERSE CURVE (W1-4) SIGNS. ARROWS ON THE 4'X8' "ALL TRAFFIC" SIGNS SHALL BE THE SAME SHAPE.
- ⑦ THE NUMBER OF ARROWS ON THESE SIGNS SHALL MATCH THE NUMBER OF LANES OPEN TO TRAFFIC.

### SYMBOLS

- DIRECTION OF TRAFFIC
- WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- TYPE II BARRICADE OR DRUM WITH MONO-DIRECTIONAL STEADY BURNING LIGHT
- TEMPORARY CONCRETE BARRIER WALL
- IMPACT ATTENUATOR
- W1-4R-48
- W24-1-48

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME =	USER NAME = footemj	DESIGNED - DWS	REVISED - JAF 02-06	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC CONTROL DETAILS FOR FREEWAY SINGLE &amp; MULTI-LANE WEAVE</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ca:\pw-work\pwwork\footemj\d0108315\td09.dgn	DRAWN -	REVISED - SPB 01-07	372/373			2013-037B-R	COOK	787	764	
PLOT SCALE = 50.000' / in.	CHECKED -	REVISED - SPB 12-09	<b>TC-09</b>			<b>CONTRACT NO. 60W75</b>				
PLOT DATE = 7/1/2013	DATE - 02-87	REVISED - MD 06-13	SCALE: NONE			SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	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.

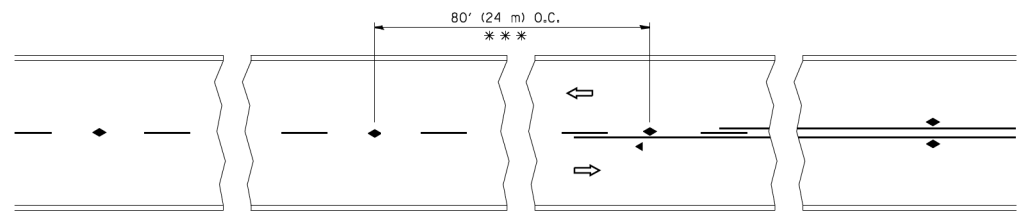
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		DRAWN -	REVISED - A. HOUSEH 03-06-96
	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 1/4/2008	DATE - 06-89	REVISED - T. RAMMACHER 01-06-00

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

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

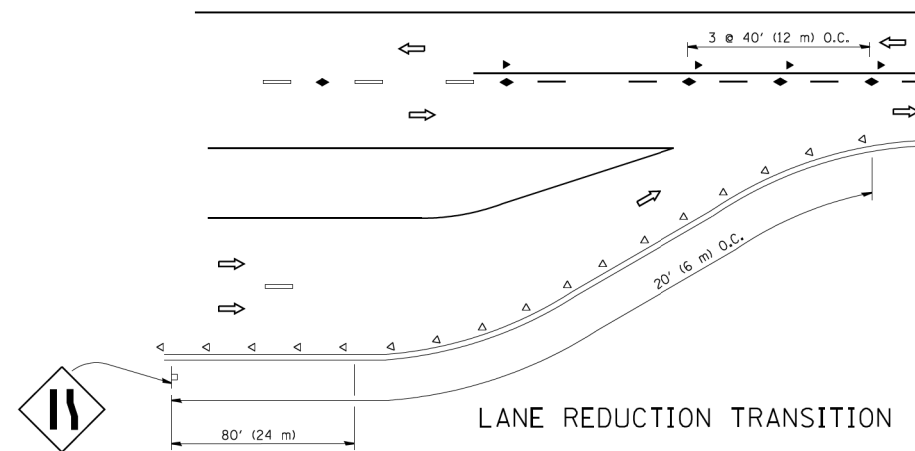
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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TC-10		CONTRACT NO. 60W75		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

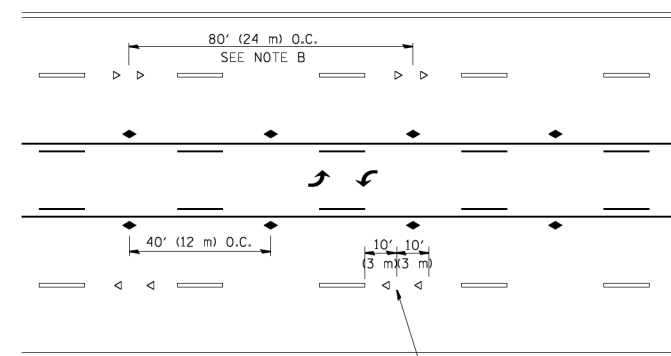


\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

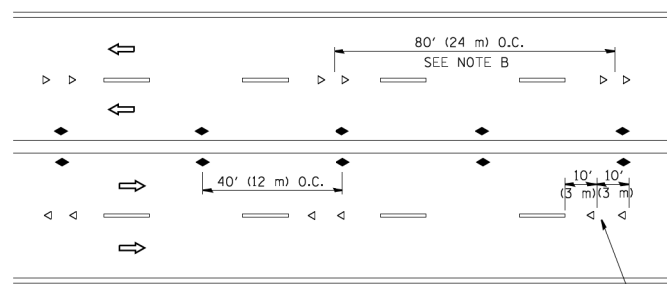
TWO-LANE/TWO-WAY



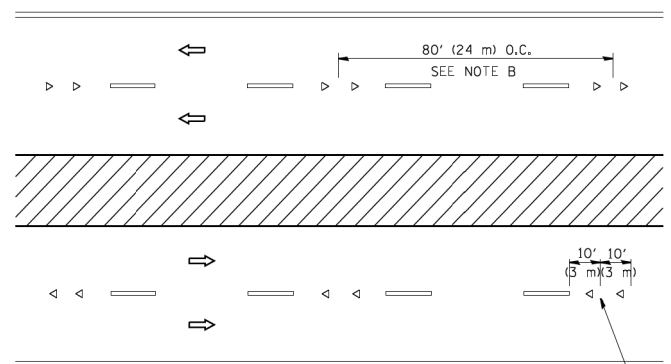
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

SYMBOLS

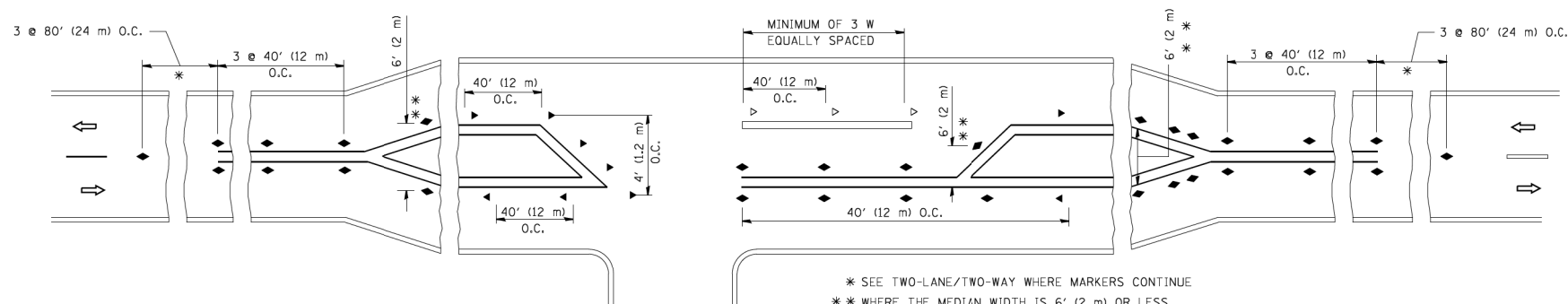
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.
- B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.

DESIGN NOTES

1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHALL BE INCLUDED IN THE PLANS WHEN STANDARD SPECIFICATIONS ARE NOT BEING USED.
4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.

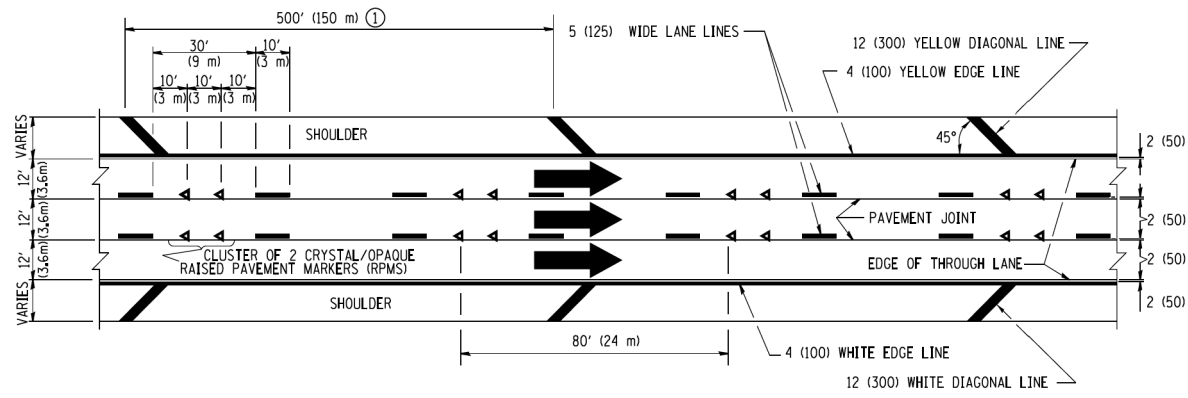


LEFT TURN

\* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE  
 \*\* WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS USE TWO-WAY MARKERS.

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

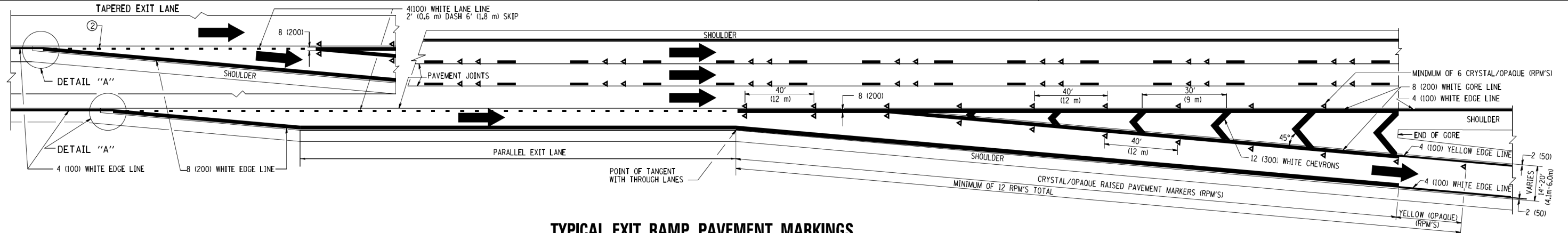
FILE NAME =	USER NAME = lryso	DESIGNED -	REVISED - T. RAMMACHER 09-19-94	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ca:\pwork\pwork\lryso\d0108315\tcl1.dgn		DRAWN -	REVISED - T. RAMMACHER 03-12-99		372/373	2013-037B-R	COOK	787	766			
PLOT SCALE = 50.000' / IN.		CHECKED -	REVISED - T. RAMMACHER 01-06-00		<b>TC-11</b>			<b>CONTRACT NO. 60W75</b>				
PLOT DATE = 3/2/2011		DATE -	REVISED - C. JUCIUS 09-09-09		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



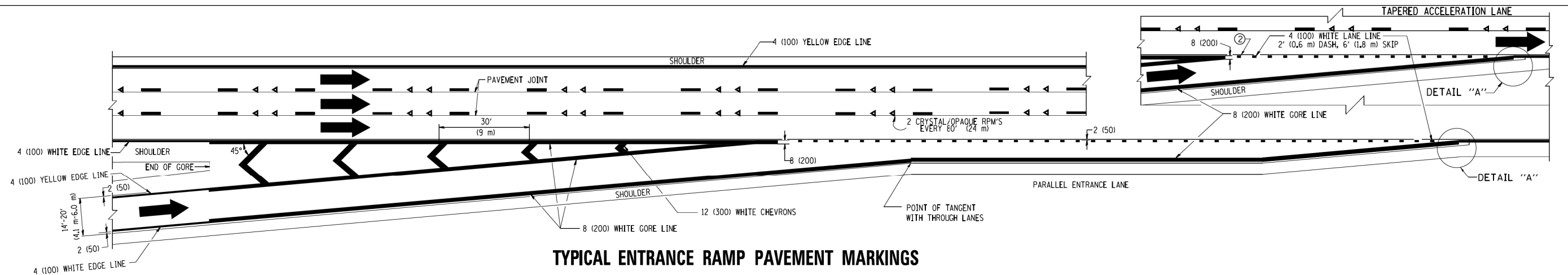
**TYPICAL EDGE LINES & LANE LINES**

**PAVEMENT MARKING MATERIALS**

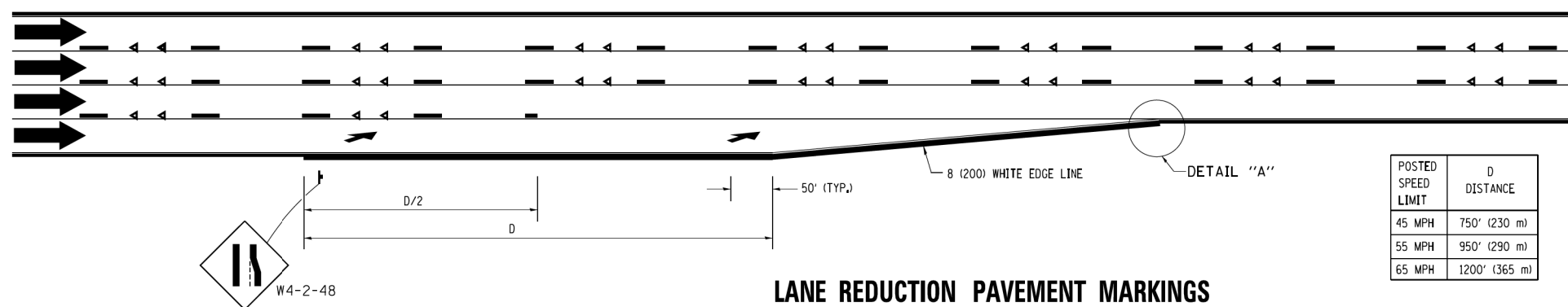
1. THERMO PLASTIC PAVEMENT MARKING LINE SHALL BE USED FOR THE EDGE LINES, GORE LINES, AND DIAGONAL LINES ON BITUMINOUS PAVEMENT ONLY.
2. PREFORMED PLASTIC TYPE B PAVEMENT MARKING LINE; INLaid OR GROOVED IN SHALL BE USED FOR ALL LANE LINES ON HMA PAVEMENT PROJECTS.
3. POLYUREA PAVEMENT MARKING SHALL BE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



**TYPICAL EXIT RAMP PAVEMENT MARKINGS**

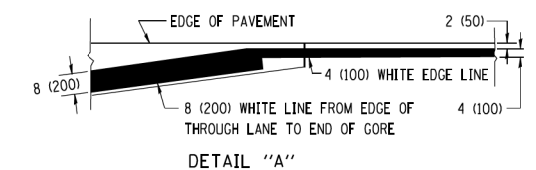


**TYPICAL ENTRANCE RAMP PAVEMENT MARKINGS**



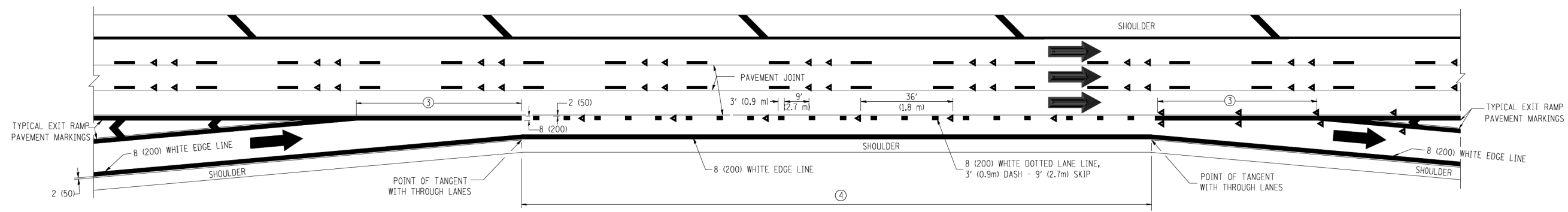
**LANE REDUCTION PAVEMENT MARKINGS**

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

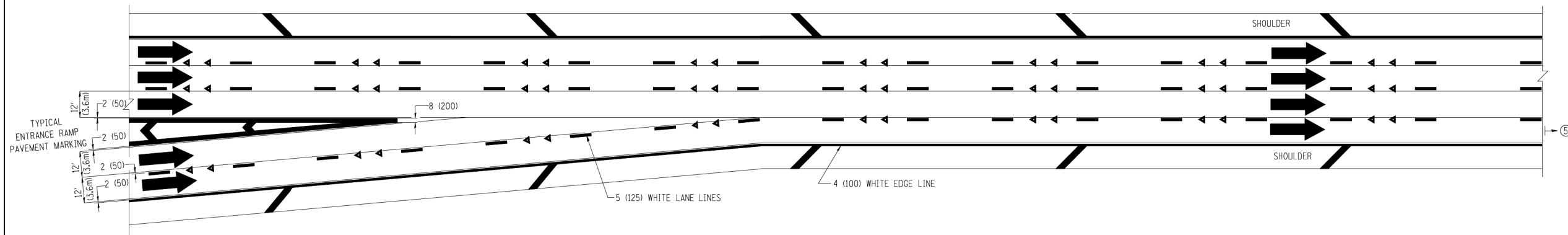


**NOTES:**

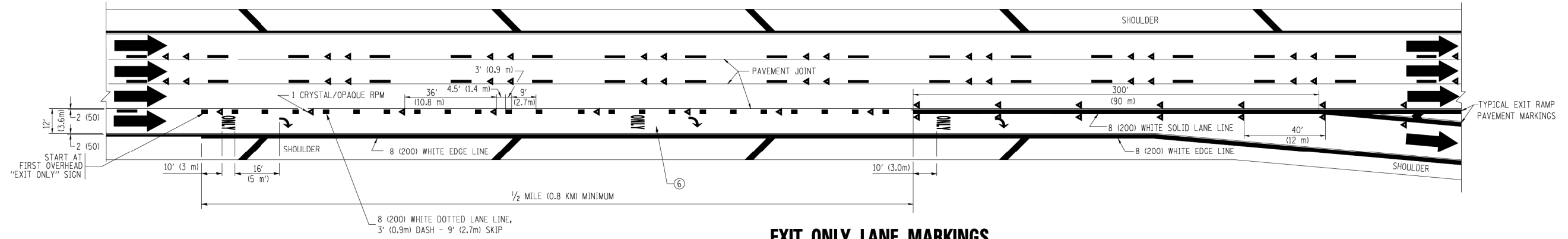
- ① THE DIAGONAL LINES SHALL BE SPACED AT 40' (12 m) C-C ACROSS ALL STRUCTURES WHICH ARE 500' (150 m) OR LESS IN LENGTH. THE DIAGONAL LINES ARE NOT REQUIRED ON SHOULDERS WHICH ARE 6' (1.8 m) OR LESS IN WIDTH.
- ② 4" (2' DASH, 6' SKIP) MARKING ON TAPERED ENTRANCE AND EXIT RAMP SHALL BE OMITTED ON TANGENT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



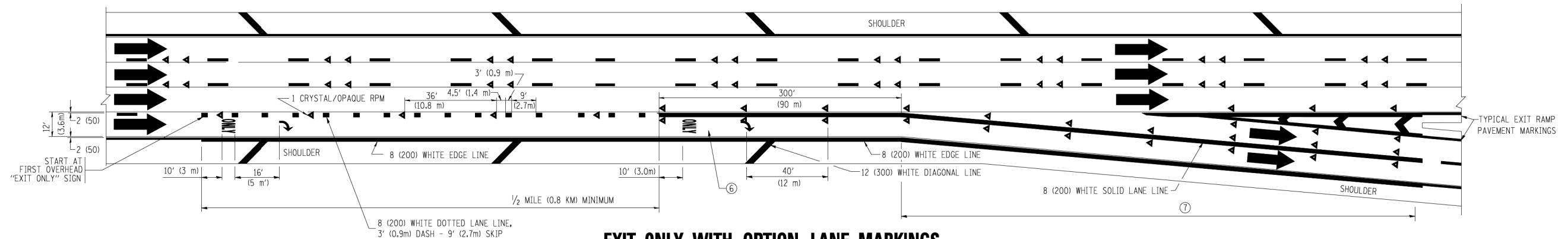
**AUXILIARY LANE MARKINGS**



**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.

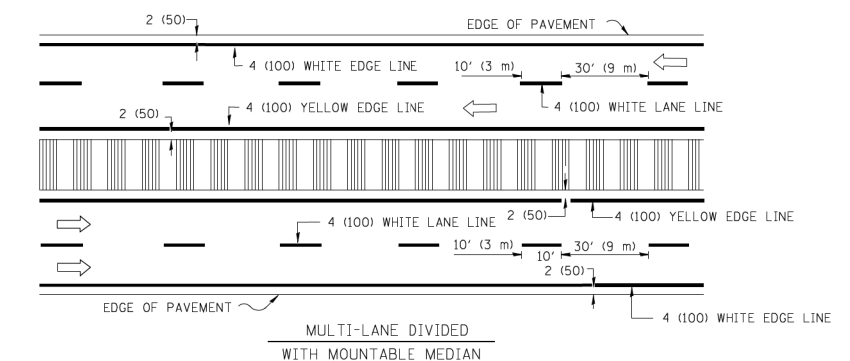
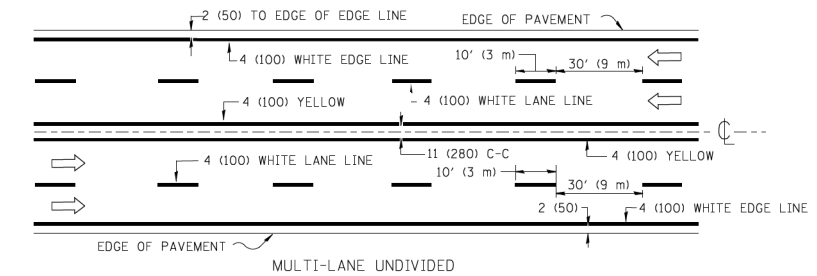
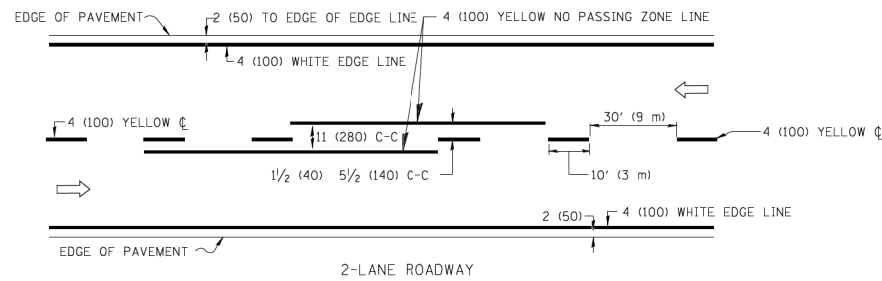
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	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED - S.P.B. 01-07
	PLOT DATE = 1/22/2010	DATE - 01-90	REVISED - S.P.B. 01-10

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

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

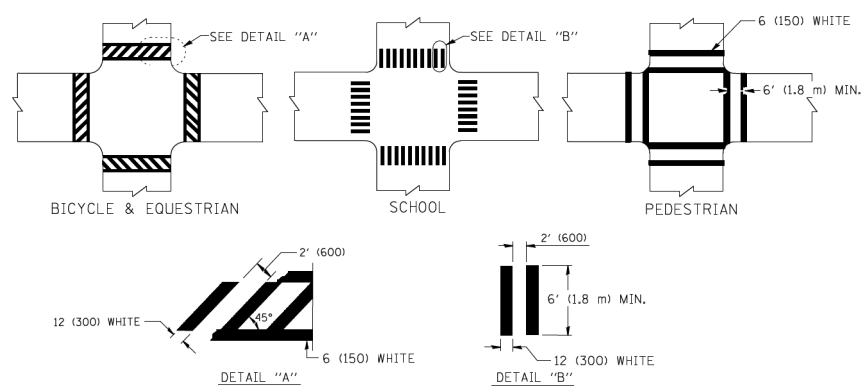
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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TC-12		CONTRACT NO. 60W75		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



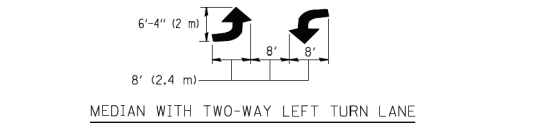
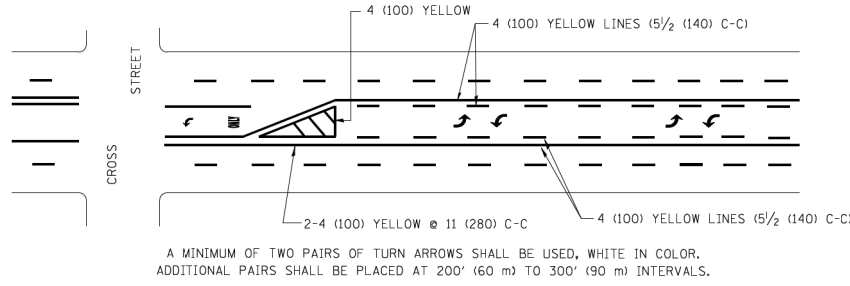
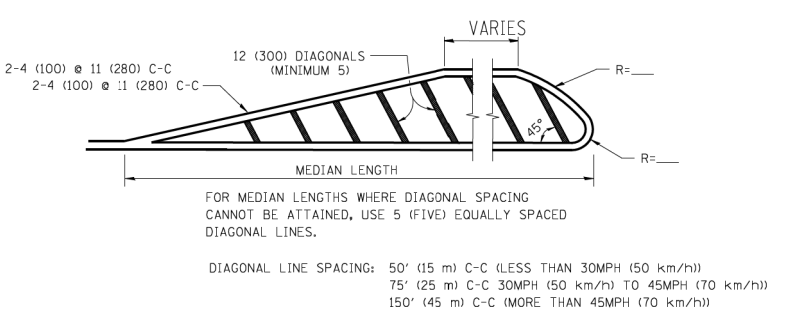
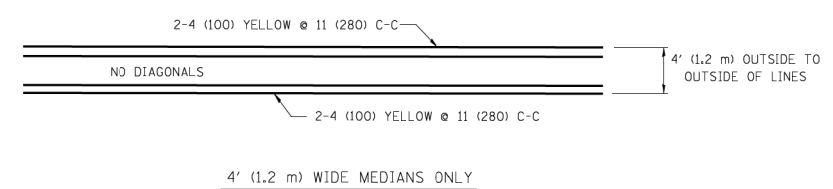


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

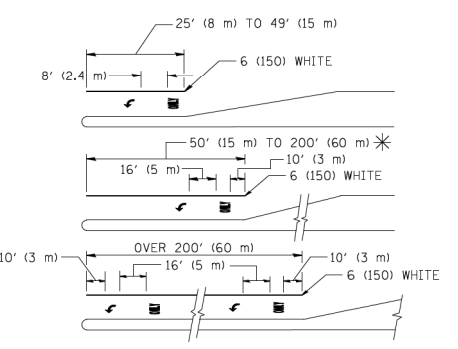
**TYPICAL LANE AND EDGE LINE MARKING**



**TYPICAL CROSSWALK MARKING**



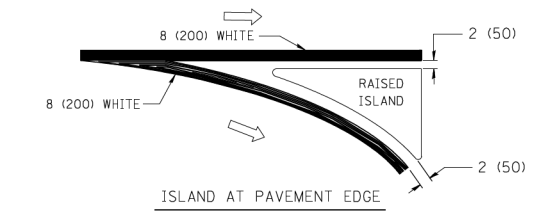
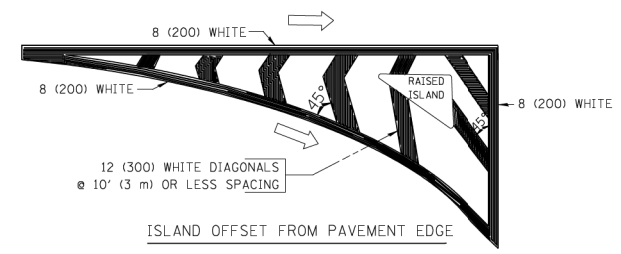
**TYPICAL PAINTED MEDIAN MARKING**



FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  
 \* 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	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 FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5/2 (140) C-C FROM SKIP-DASH CENTERLINE 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 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE 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" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 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.

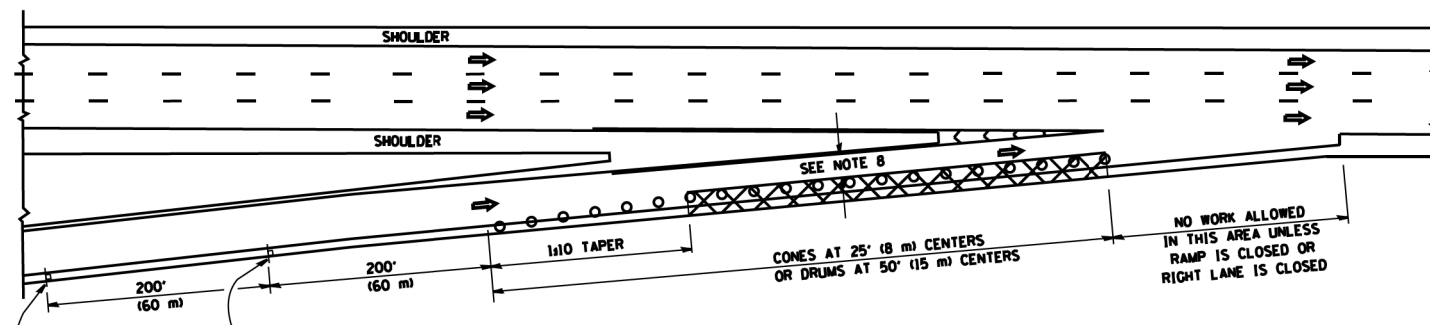
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	PLOT DATE = 9/9/2009	DATE - 03-19-90	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

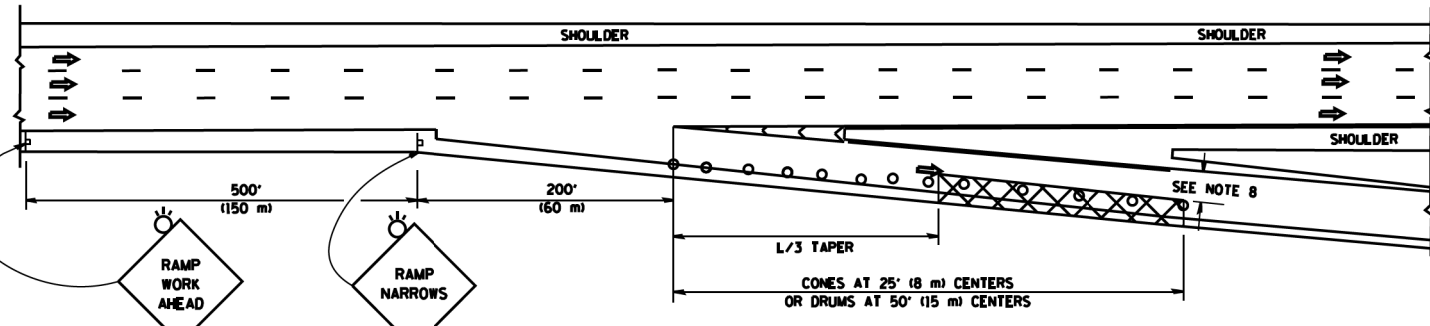
<b>DISTRICT ONE</b>		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
<b>TYPICAL PAVEMENT MARKINGS</b>		372/373	2013-037B-R	COOK	787	769
SCALE: NONE		SHEET NO. 1 OF 1 SHEETS		STA.	TO STA.	
		<b>TC-13</b>		CONTRACT NO. 60W75		
FED. ROAD DIST. NO. 1 ILLINOIS/FED. AID PROJECT						

**PARTIAL RAMP CLOSURE DETAILS**

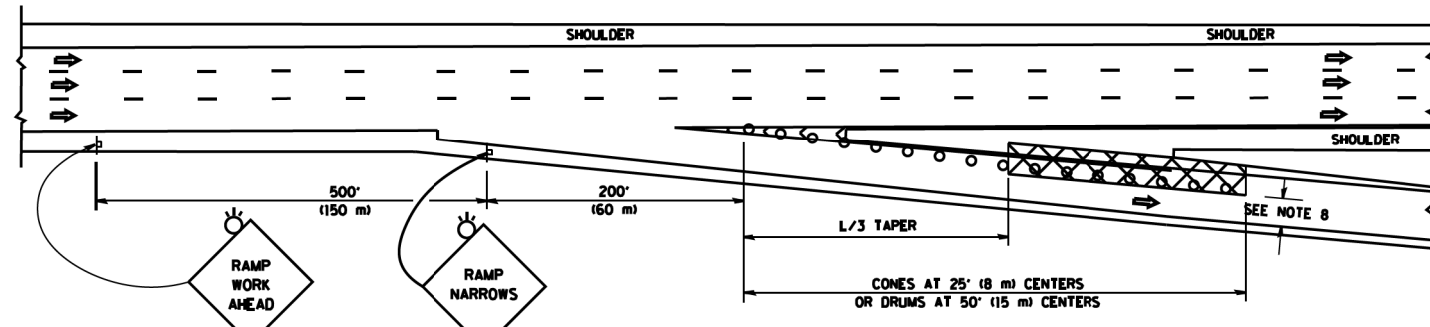
**SHOULDER CLOSURE DETAILS**



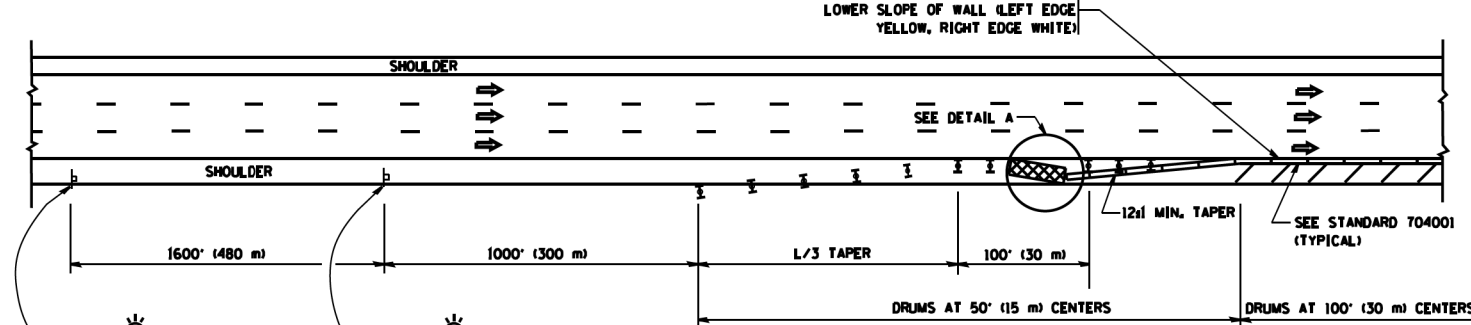
**TYPICAL ENTRANCE RAMP**



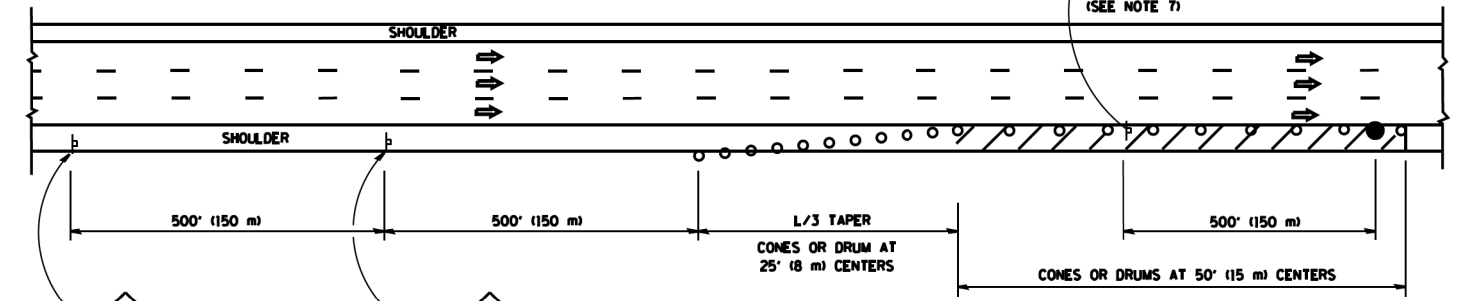
**TYPICAL EXIT RAMP**



**TYPICAL EXIT RAMP**

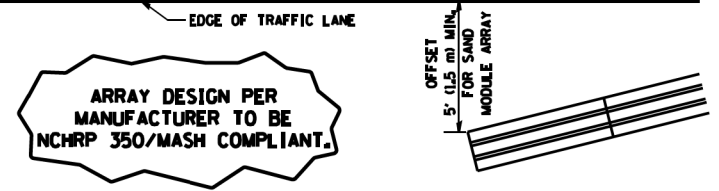


**PERMANENT SHOULDER CLOSURE**



**DAYTIME SHOULDER CLOSURE**

THIS DETAIL IS USED WHERE:  
 1. VEHICLES, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCR OACH 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)**

**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:
 

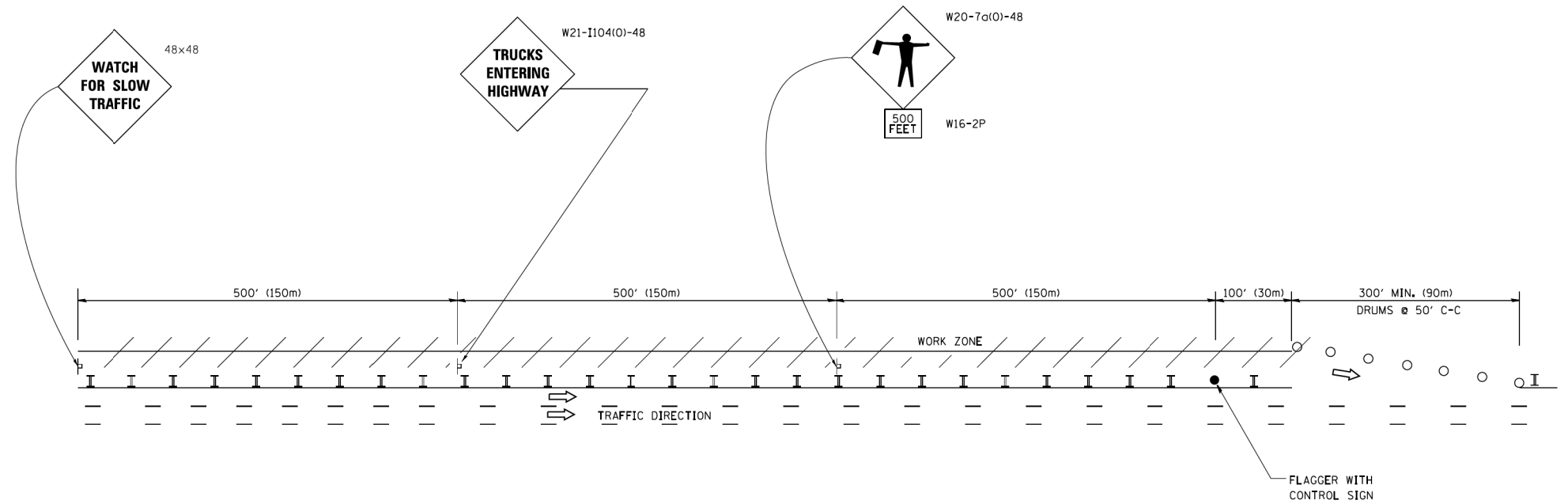
SPEED LIMIT	FORMULAS
45 mph (80 km/h) OR GREATER	METRIC ENGLISH L=0.65(WNS) L=(WNS)
W = WIDTH OF OFFSET IN FEET (METERS) S = NORMAL POSTED SPEED MPH (KM/H)	
2. PLASTIC DRUMS WITH HIGH PERFORMANCE REFLECTIVE SHEETING AND STEADY BURNING LIGHTS ARE REQUIRED FOR ALL NIGHTIME CLOSURES.
3. ALL SIGNS SHALL 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 ENCR OACHMENT 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.

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

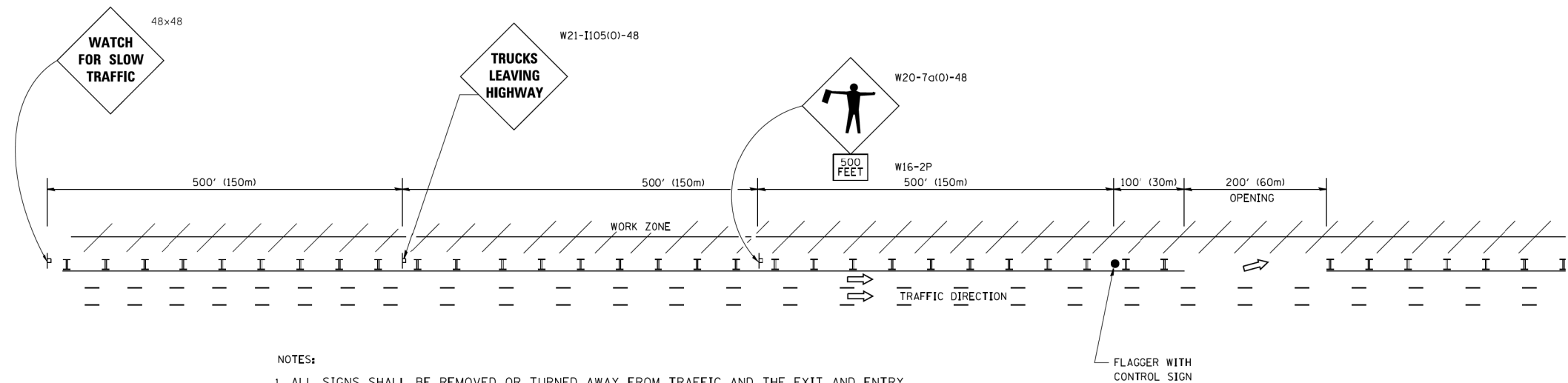
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PLOT SCALE = 100.0000' / 1" =		CHECKED -	REVISED - S.P.B. 12-09		TC-17							
PLOT DATE = 4/17/2014		DATE - 11-96	REVISED - M.D. 06-13		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1	ILLINOIS FED. AID PROJECT	CONTRACT NO. 60W75		

SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS

WORK ZONE EXIT OPENING



WORK ZONE ENTRY OPENING




NOTES:


1. ALL SIGNS SHALL BE REMOVED OR TURNED AWAY FROM TRAFFIC AND THE EXIT AND ENTRY OPENINGS SHALL BE CLOSED WHEN THE FLAGGING OPERATION CEASES. NON OPERATING EQUIPMENT SHALL COMPLY WITH ARTICLE 701.11
2. WORK ZONE OPENINGS SHALL BE A MINIMUM OF ONE HALF MILE APART AND A MINIMUM OF ONE QUARTER MILE FROM ALL ENTRANCE AND EXIT RAMPS.
3. EXITING THE WORK ZONE AT ANY PLACE OTHER THAN AT A WORK ZONE EXIT OPENING WILL BE PROHIBITED.
4. ALL VEHICLES SHALL ENTER THE WORK ZONE AT ENTRY OPENINGS, USING THEIR TURN SIGNALS TO WARN MOTORISTS
5. FLAGGERS SHALL NOT STOP TRAFFIC OR DIRECT TRAFFIC INTO AN ADJACENT LANE.


ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME =	USER NAME = footemj	DESIGNED -	REVISED - J.A.F. 02-06	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>FREEWAY/EXPRESSWAY SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS ON FREEWAYS/EXPRESSWAYS</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ct:\pwork\pwork\footemj\d0108315\tcl8.dgn		DRAWN -	REVISED - S.P.B. 01-07			372/373	2013-037B-R	COOK	787	771
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		DATE -	REVISED - M.D. 06-13			SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1






**ROUTE MARKERS**

 FOR U.S. ROUTES  
M1-40-2424






 FOR ILLINOIS ROUTES  
M1-50-2424

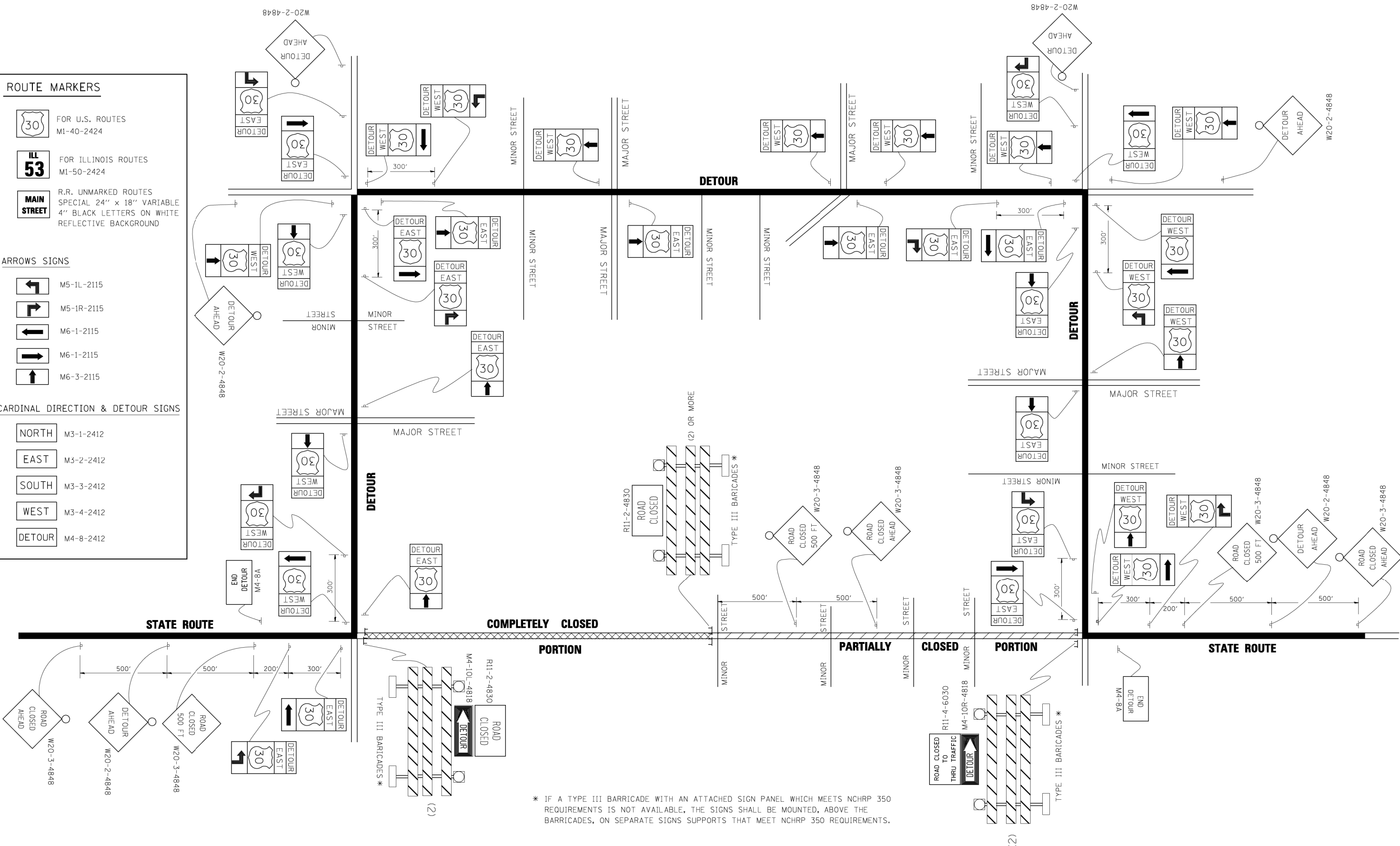
 R.R. UNMARKED ROUTES  
SPECIAL 24" x 18" VARIABLE  
4" BLACK LETTERS ON WHITE  
REFLECTIVE BACKGROUND

**ARROWS SIGNS**

-  M5-1L-2115
-  M5-1R-2115
-  M6-1-2115
-  M6-2-2115
-  M6-3-2115

**CARDINAL DIRECTION & DETOUR SIGNS**

-  NORTH M3-1-2412
-  EAST M3-2-2412
-  SOUTH M3-3-2412
-  WEST M3-4-2412
-  DETOUR M4-8-2412



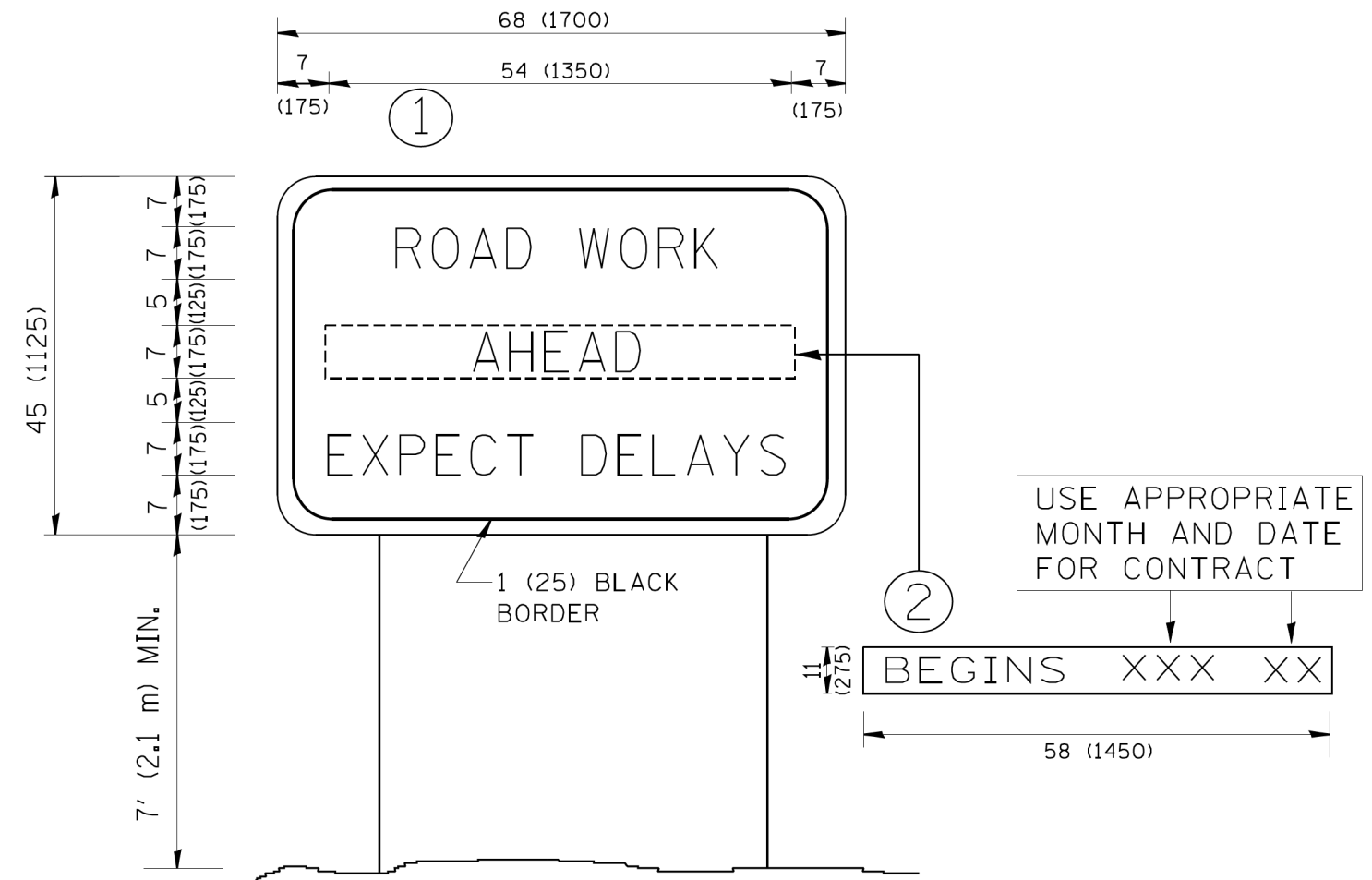
\* IF A TYPE III BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 REQUIREMENTS IS NOT AVAILABLE, THE SIGNS SHALL BE MOUNTED, ABOVE THE BARRICADES, ON SEPARATE SIGNS SUPPORTS THAT MEET NCHRP 350 REQUIREMENTS.

FILE NAME =	USER NAME = d-ivakosgn	DESIGNED -	REVISED - 10-18-02
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		CHECKED -	REVISED -
		DATE - 9/14/2009	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.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372/373	2013-037B-R	COOK	787	772
<b>TC-21</b>		CONTRACT NO. 60W75		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



**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 = gegl1enobt	DESIGNED - DRAWN -	REVISED - R. MIRS 09-15-97
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - R. MIRS 12-11-97
	PLOT DATE = 1/4/2008	DATE -	REVISED - T. RAMMACHER 02-02-99
			REVISED - C. JUCIUS 01-31-07

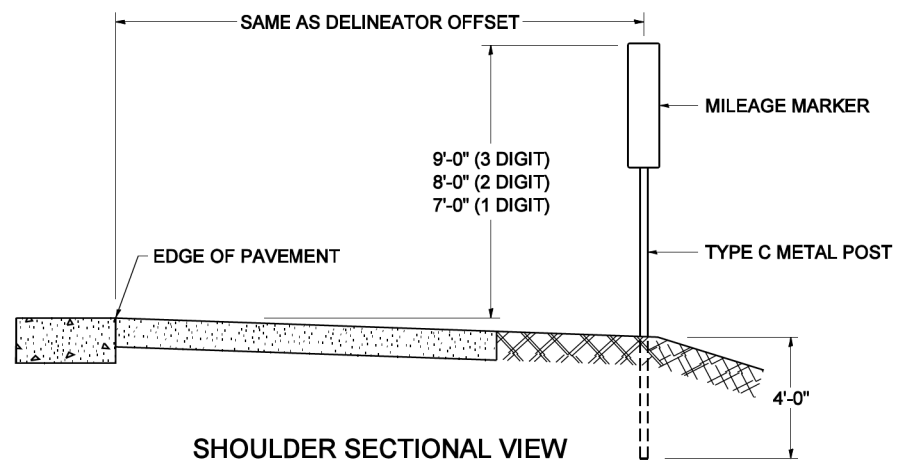
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ARTERIAL ROAD  
INFORMATION SIGN**

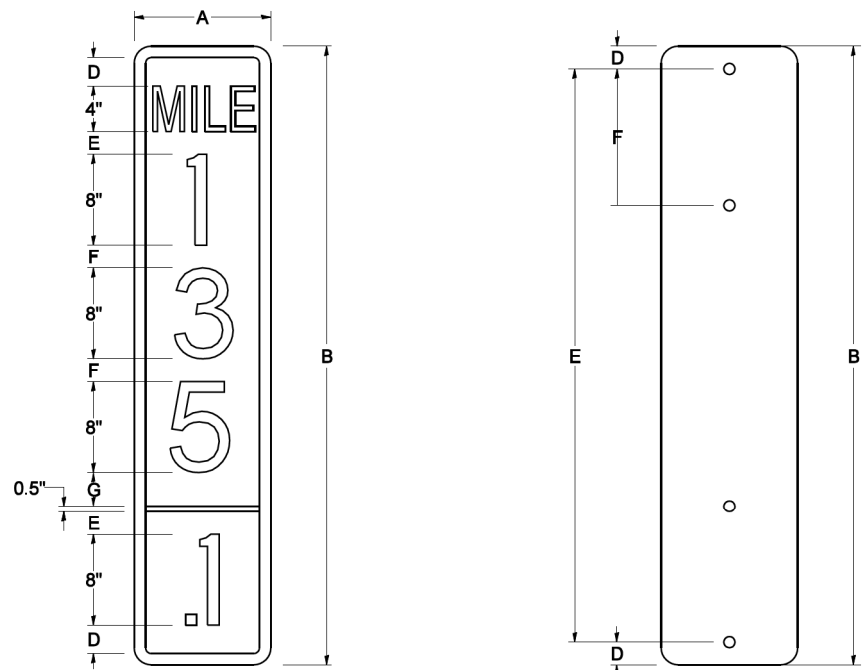
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F.A.P. RTE. 372/373	SECTION 2013-037B-R	COUNTY COOK	TOTAL SHEETS 787	SHEET NO. 773
TC-22		CONTRACT NO. 60W75		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

### STANDARD DESIGN FOR MILE POST



SHOULDER SECTIONAL VIEW

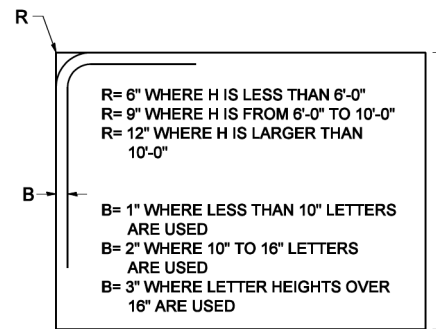


SIGN SIZE	DIMENSIONS							
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12 x 36	12.0	36.0	1.5	2.0	2.0	2.0	1.5	2
12 x 48	12.0	48.0	1.5	2.5	2.0	2.0	2.5	3

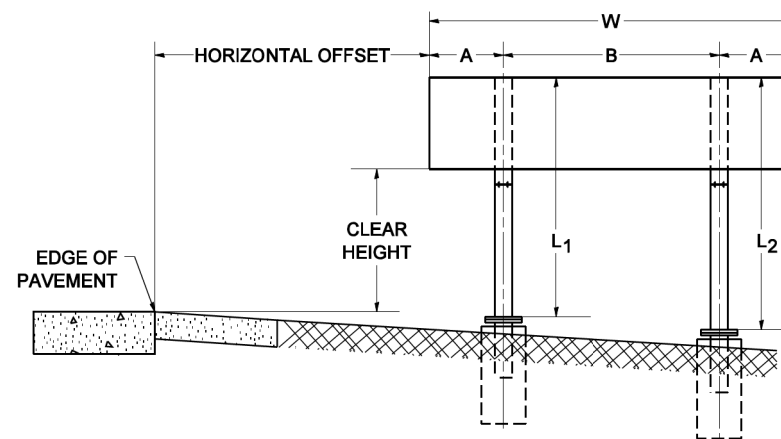
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B9-1236	12.0	36.0	1.5	2.0	32.0	12.0
B9-1248	12.0	48.0	1.5	2.0	44.0	12.0

SIGN SIZE	SERIES					BORDER	BLANK STD.
	LINES						
	1	2	3	4	5		
12 x 24	4C	8D	4C	N/A	N/A	0.5	B9-1224
12 x 36	4C	8D	8D	4C	N/A	0.5	B9-1236
12 x 48	4C	8D	8D	8D	4C	0.5	B9-1248

### BORDER AND RADIUS LAYOUT



### MAJOR GUIDE SIGN LAYOUT

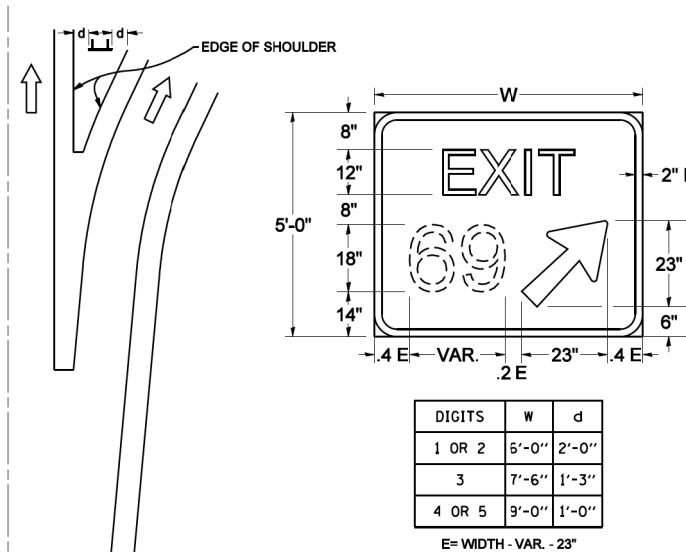


NUMBER OF STEEL SUPPORTS	A	B
2	.2 W	.6 W
3	.15 W	.35 W
4	.125 W	.25 W
5	.1 W	.2 W

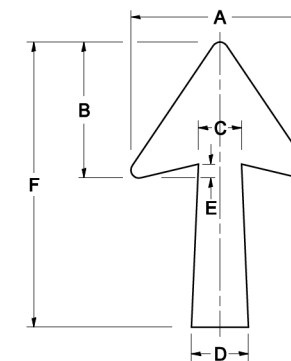
"L1" IS THE LENGTH OF SUPPORT, NOT INCLUDING THE STUB PROJECTION, CLOSEST TO THE EDGE OF THE PAVEMENT.

"A" IS THE DISTANCE FROM THE SIGN EDGE TO THE CENTERLINE OF THE NEAREST SUPPORT. "B" IS THE DISTANCE BETWEEN CENTERLINES OF SUPPORTS.

### GORE SIGNS

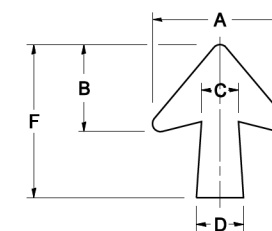


### STANDARD ARROWS FOR INTERSTATE GUIDE SIGNS



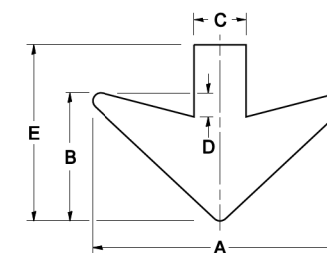
ARROW SYMBOL	A	B	C	D	E	F	R
24 1/4 x 15 1/8	15 1/8	11 1/8	3 3/4	5	1 1/8	24 1/4	5/8
29 1/4 x 18 1/4	18 1/4	14	4 1/2	6	1 1/2	29 1/4	3/4
35 1/8 x 22 1/4	22 1/4	17	5 3/8	7 1/8	1 3/4	35 1/8	1
18 1/4 x 11 1/4	11 1/4	8 3/4	3 1/8	3 3/8		18 1/4	

NOTE: D & F ARE RECOMMENDED DIMENSIONS. TAPER SHOULD BE HELD CONSTANT FOR LONGER OR SHORTER SHAFT LENGTHS

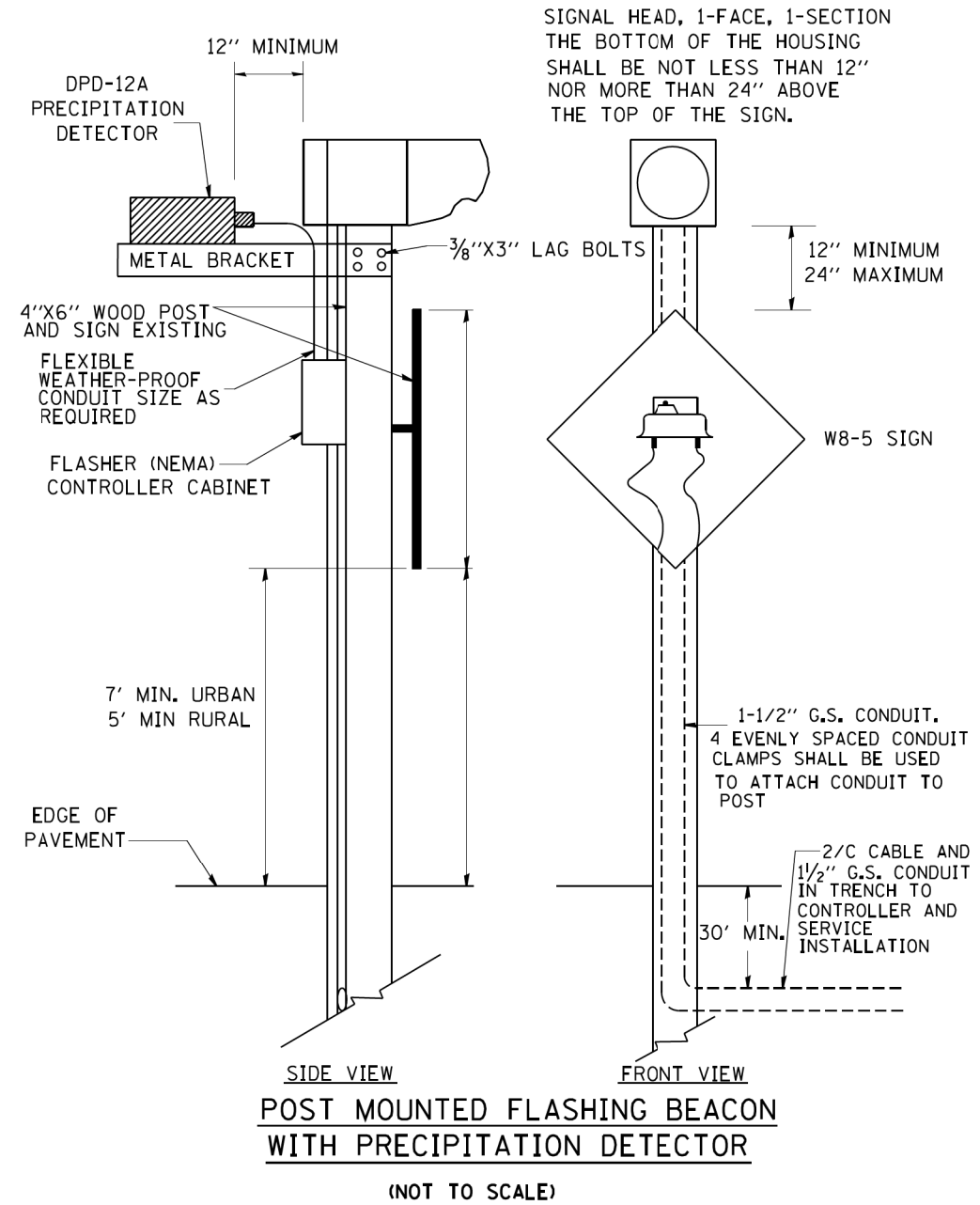


ARROW SYMBOL	A	B	C	D	E	F	R
17 1/4 x 14 1/4	14 1/4	9 3/8	3 3/8	4 1/2	5/8	17 1/4	3/4
20 1/4 x 17 1/4	17 1/4	11 3/4	4 3/8	5 5/8	1 1/2	20 1/4	
25 x 21 1/8	21 1/8	14 1/4	5	6 3/4	1 3/4	25	1
9 3/8 x 8 1/8	8 1/8	5 1/8	2 1/8	2 1/8		9 3/8	1/2

### DOWN ARROWS



ARROW SYMBOL	A	B	C	D	E	R
16 1/2 x 24	24	12	5	1 1/2	16 1/2	3/4
22 x 32	32	16	6 1/2	3	22	1

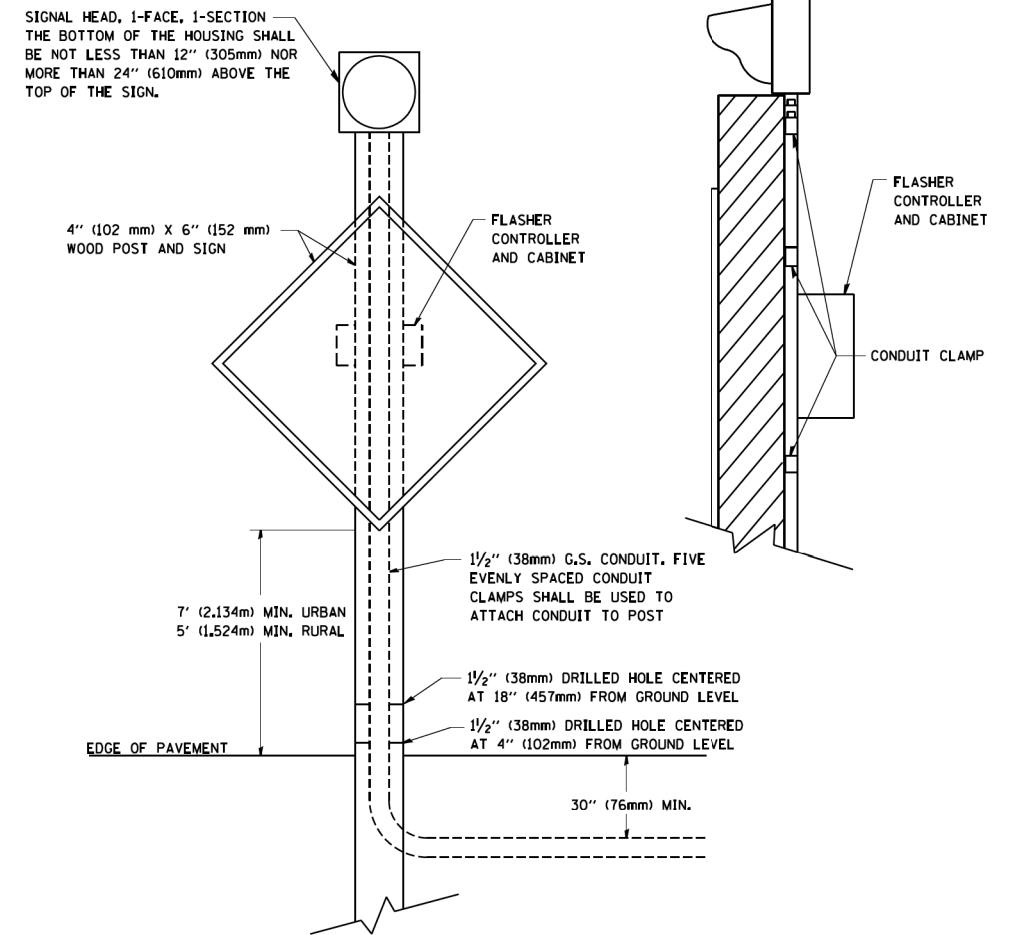


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		DRAWN -	REVISED -
	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED -
	PLOT DATE = 1/4/2008	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>POST MOUNTED FLASHING BEACON WITH PRECIPITATION DETECTOR</b>			
SCALE: NONE	SHEET NO. 1 OF 3 SHEETS	STA.	TO STA.

F.A.P. RTE. 372/373	SECTION 2013-037B-R	COUNTY COOK	TOTAL SHEETS 787	SHEET NO. 775
TS-04		CONTRACT NO. 60W75		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



POST MOUNTED FLASHING BEACON  
WITH CONTROLLER AND CABINET

FILE NAME = W:\diststd\22x34\ts04.dgn	USER NAME = gegl1enobt	DESIGNED -	REVISED - 01-01-07
		DRAWN -	REVISED -
	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED -
	PLOT DATE = 1/4/2008	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

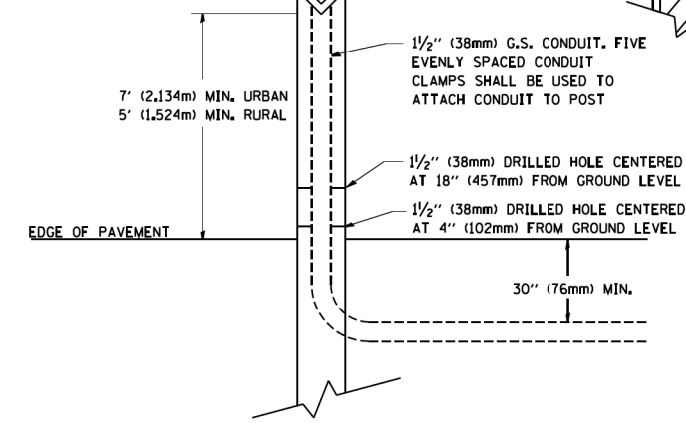
POST MOUNTED FLASHING BEACON WITH CONTROLLER AND CABINET			
SCALE: NONE	SHEET NO. 2	OF 3 SHEETS	STA. TO STA.

F.A.P. RTE. 372/373	SECTION 2013-037B-R	COUNTY COOK	TOTAL SHEETS 787	SHEET NO. 776
TS-04		CONTRACT NO. 60W75		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



SIGNAL HEAD, 1-FACE, 1-SECTION  
 THE BOTTOM OF THE HOUSING SHALL  
 BE NOT LESS THAN 12" (305mm) NOR  
 MORE THAN 24" (610mm) ABOVE THE  
 TOP OF THE SIGN.

4" (102 mm) X 6" (152 mm)  
 WOOD POST AND SIGN



POST MOUNTED FLASHING BEACON

FILE NAME = W:\diststd\22x34\ts04.dgn	USER NAME = gegl1enobt	DESIGNED -	REVISED - 01-01-07
		DRAWN -	REVISED -
	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED -
	PLOT DATE = 1/4/2008	DATE -	REVISED -

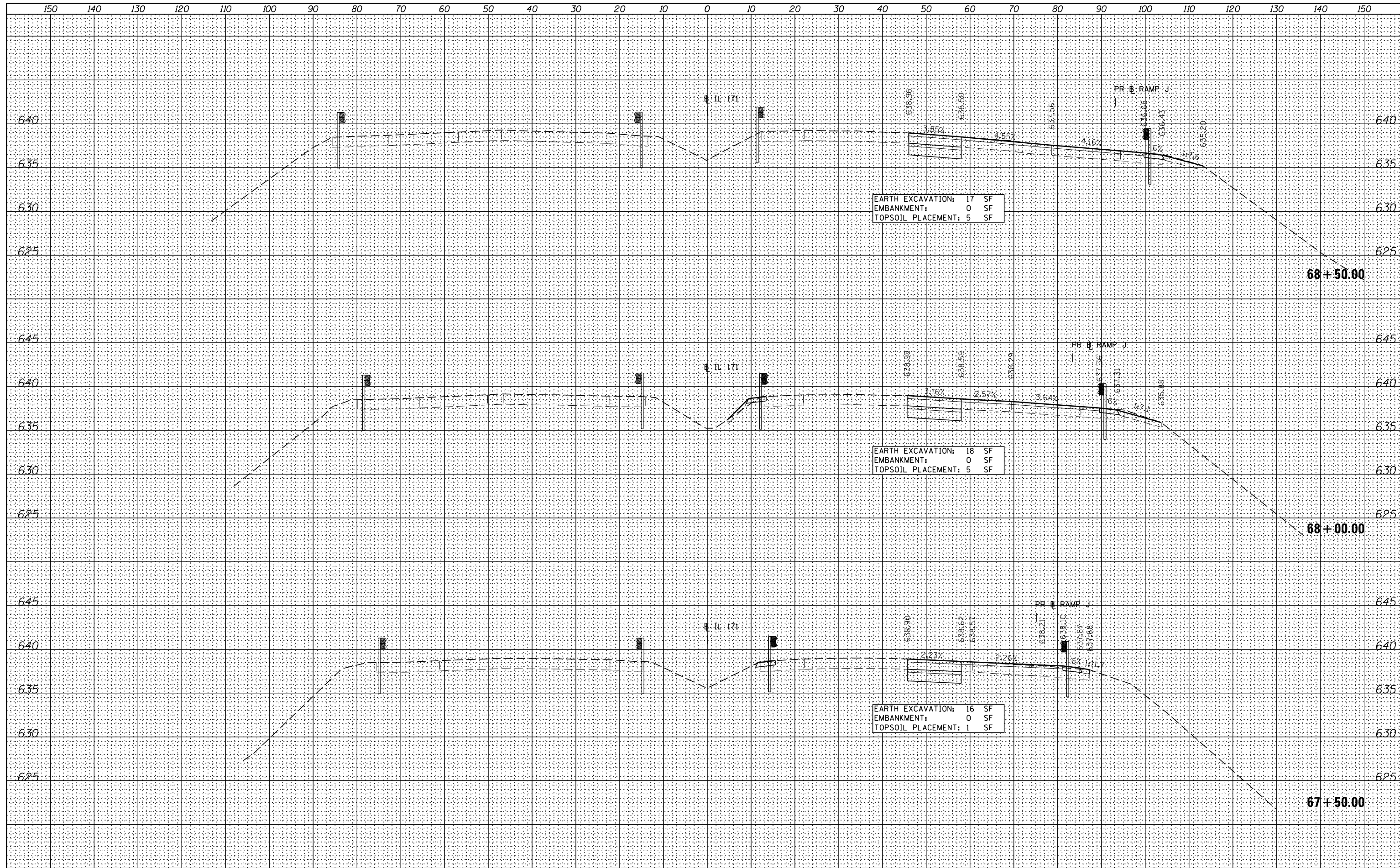
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

POST MOUNTED FLASHING BEACON			
SCALE: NONE	SHEET NO. 3 OF 3 SHEETS	STA.	TO STA.

F.A.P. RTE. 372/373	SECTION 2013-037B-R	COUNTY COOK	TOTAL SHEETS 787	SHEET NO. 777
TS-04		CONTRACT NO. 60W75		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

DATE	BY
SURVEYED	PLOTTED
TEMPLATE	AREAS CHECKED
NOTE BOOK	AREAS CHECKED
NO.	

DATE	BY
SURVEYED	PLOTTED
TEMPLATE	AREAS CHECKED
NOTE BOOK	AREAS CHECKED
NO.	



FILE NAME =	DESIGNED - SEW	REVISED -
...\\D160W75-shft-xssht-pr-widen.dgn	DRAWN - TMB	REVISED -
USER NAME = jma_jewski	CHECKED - JMM	REVISED -
PLOT DATE = 6/17/2015	DATE - 6/12/2015	REVISED -



**STATE OF ILLINOIS  
DIVISION OF TRANSPORTATION**

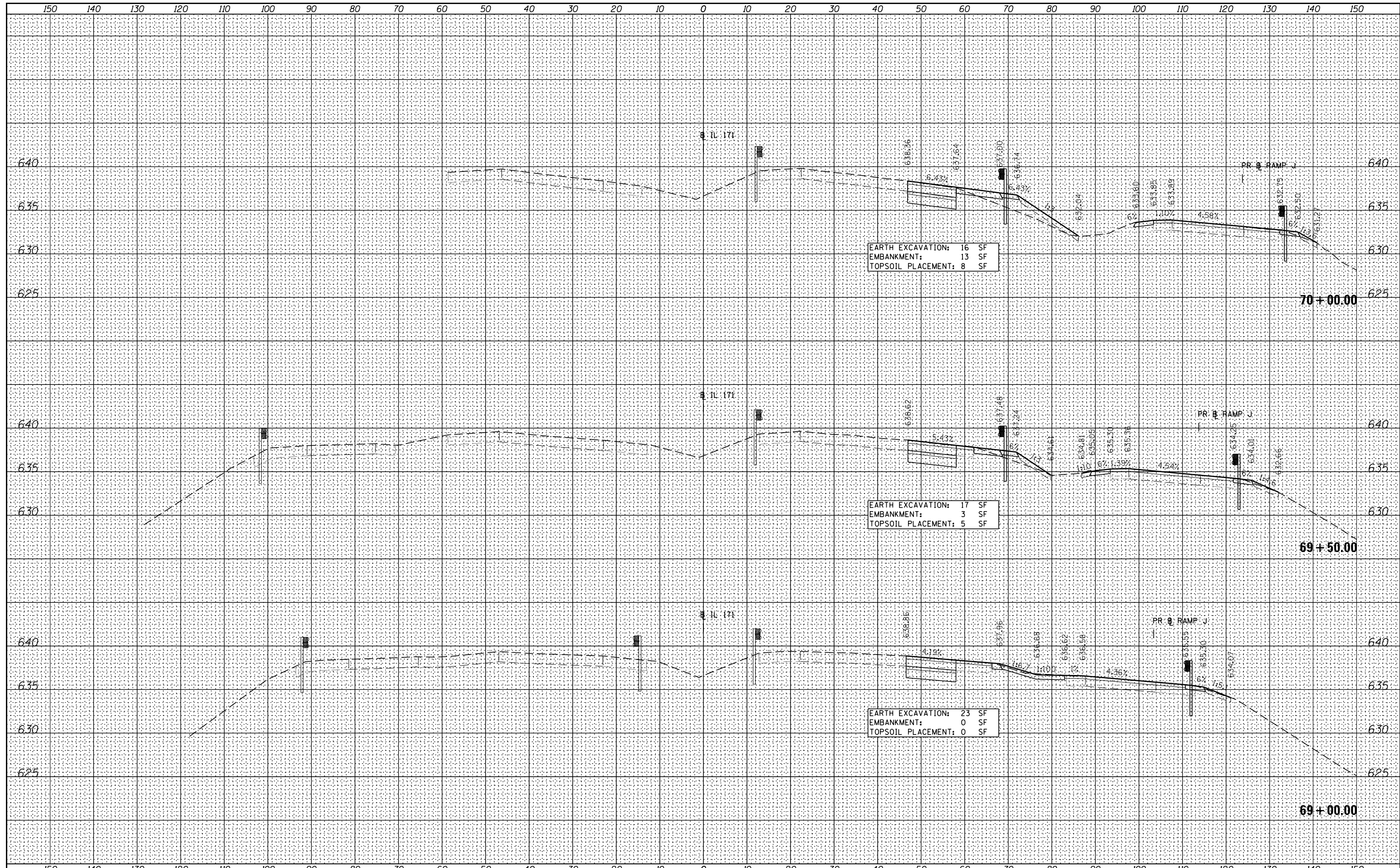
**IL 171 WIDENING  
CROSS SECTIONS**

SCALE: SHEET NO. 1 OF 7 SHEETS STA. 67+50.00 TO STA. 68+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372/373	2013-037B-R	COOK	787	778
CONTRACT NO. 60W75			ILLINOIS FED. AID PROJECT	

DATE	
BY	
FINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED

DATE	
BY	
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED



FILE NAME =	DESIGNED - SEW	REVISED -
...\\D160W75-shft-xssht-prwidn.dgn	DRAWN - TMB	REVISED -
USER NAME = jma_jewski	CHECKED - JMM	REVISED -
PLOT DATE = 6/17/2015	DATE - 6/12/2015	REVISED -



**STATE OF ILLINOIS  
DIVISION OF TRANSPORTATION**

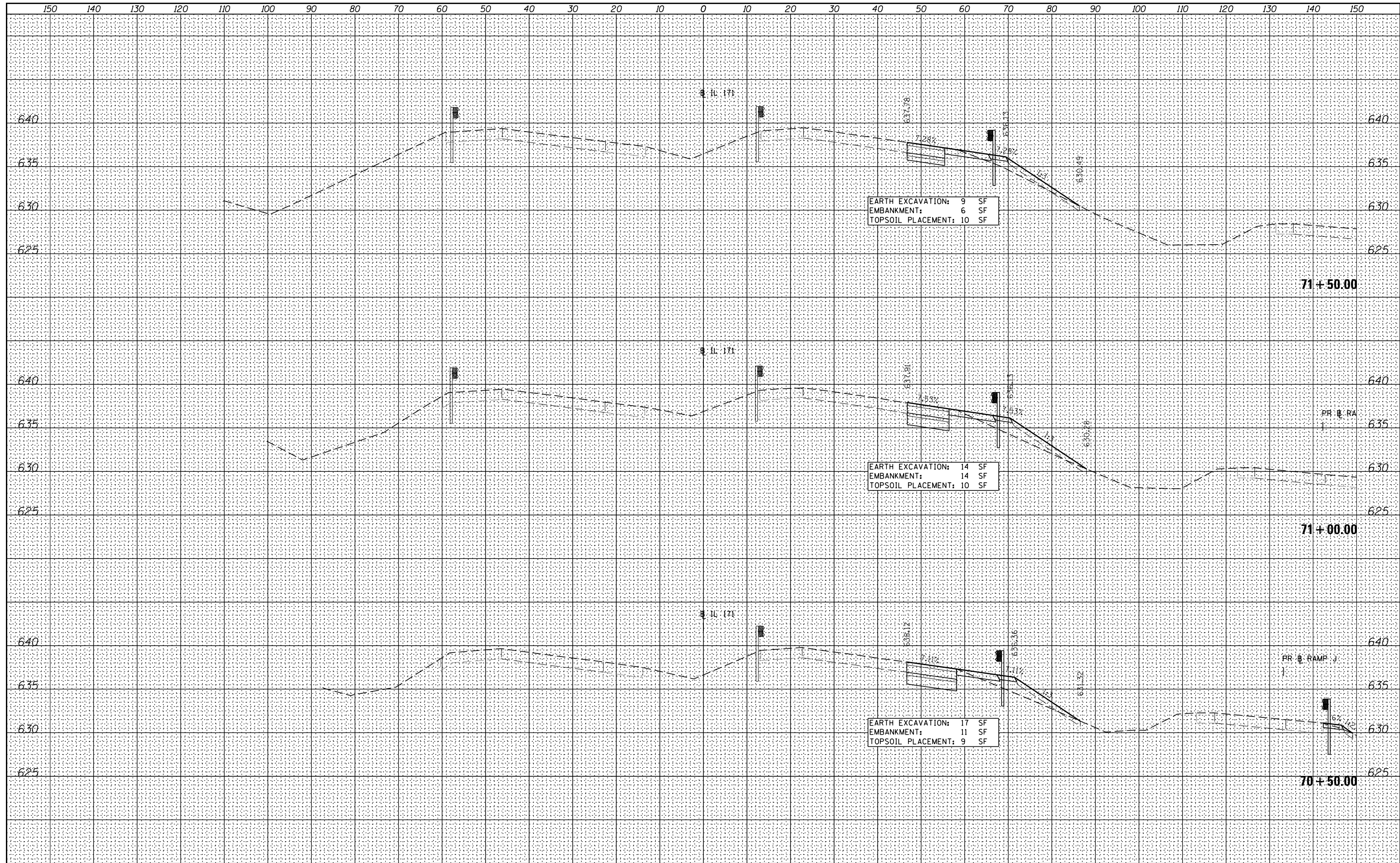
**IL 171 WIDENING  
CROSS SECTIONS**

SCALE: SHEET NO. 2 OF 7 SHEETS STA. 69+00.00 TO STA. 70+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372/373	2013-037B-R	COOK	787	779
CONTRACT NO. 60W75				
ILLINOIS FED. AID PROJECT				

FINAL SURVEY NO.	DATE
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS CHECKED	

ORIGINAL SURVEY NO.	DATE
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS CHECKED	



FILE NAME =	DESIGNED - SEW	REVISED -
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USER NAME = jmajewski	CHECKED - JMM	REVISED -
PLOT DATE = 6/17/2015	DATE - 6/12/2015	REVISED -



**STATE OF ILLINOIS  
DIVISION OF TRANSPORTATION**

**IL 171 WIDENING  
CROSS SECTIONS**

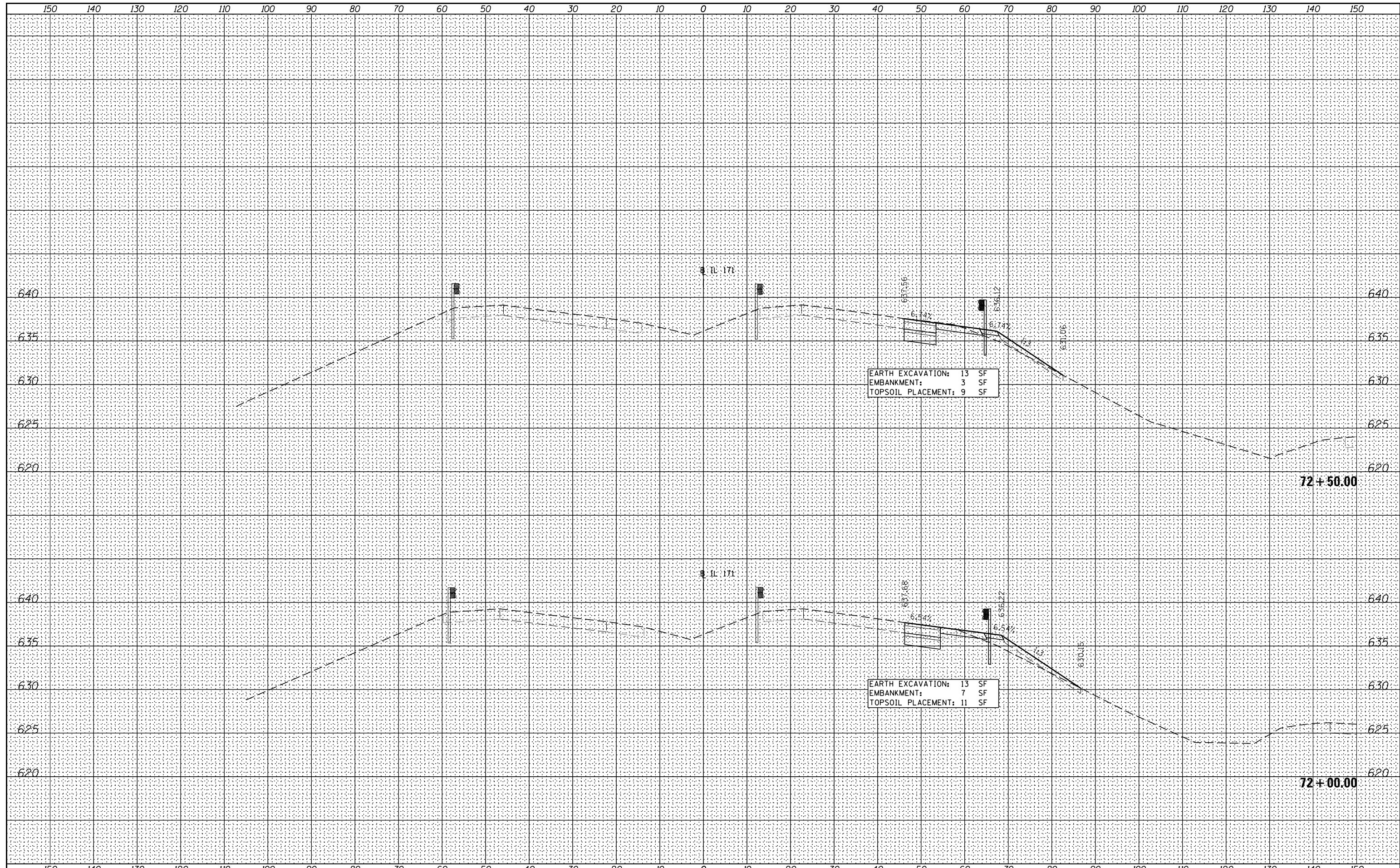
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372/373	2013-037B-R	COOK	787	780
CONTRACT NO. 60W75				

SCALE:      SHEET NO. 3 OF 7 SHEETS      STA. 70+50.00 TO STA. 71+50.00

ILLINOIS FED. AID PROJECT

DATE	
BY	
FINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED

DATE	
BY	
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED



FILE NAME =	DESIGNED - SEW	REVISED -
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USER NAME = jma_jewski	CHECKED - JMM	REVISED -
PLOT DATE = 6/17/2015	DATE - 6/12/2015	REVISED -



**STATE OF ILLINOIS  
DIVISION OF TRANSPORTATION**

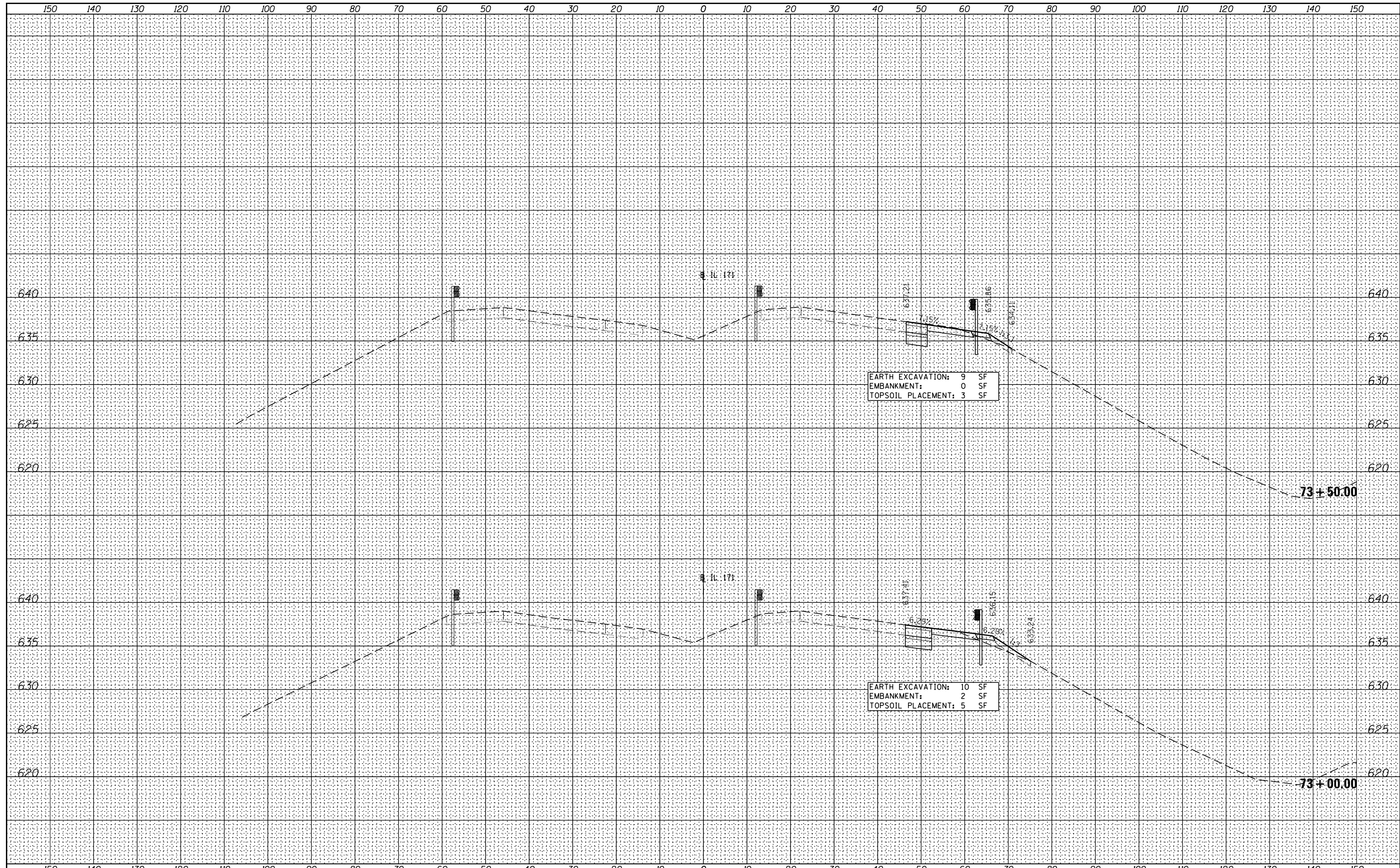
**IL 171 WIDENING  
CROSS SECTIONS**

SCALE: SHEET NO. 4 OF 7 SHEETS STA. 72+00.00 TO STA. 72+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372/373	2013-037B-R	COOK	787	781
CONTRACT NO. 60W75				
ILLINOIS FED. AID PROJECT				

DATE	
BY	
FINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED

DATE	
BY	
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED



FILE NAME =	DESIGNED - SEW	REVISED -
...\\D160W75-shr-xssht-pr-widn.dgn	DRAWN - TMB	REVISED -
USER NAME = jma_jewski	CHECKED - JMM	REVISED -
PLOT DATE = 6/17/2015	DATE - 6/12/2015	REVISED -



**STATE OF ILLINOIS  
DIVISION OF TRANSPORTATION**

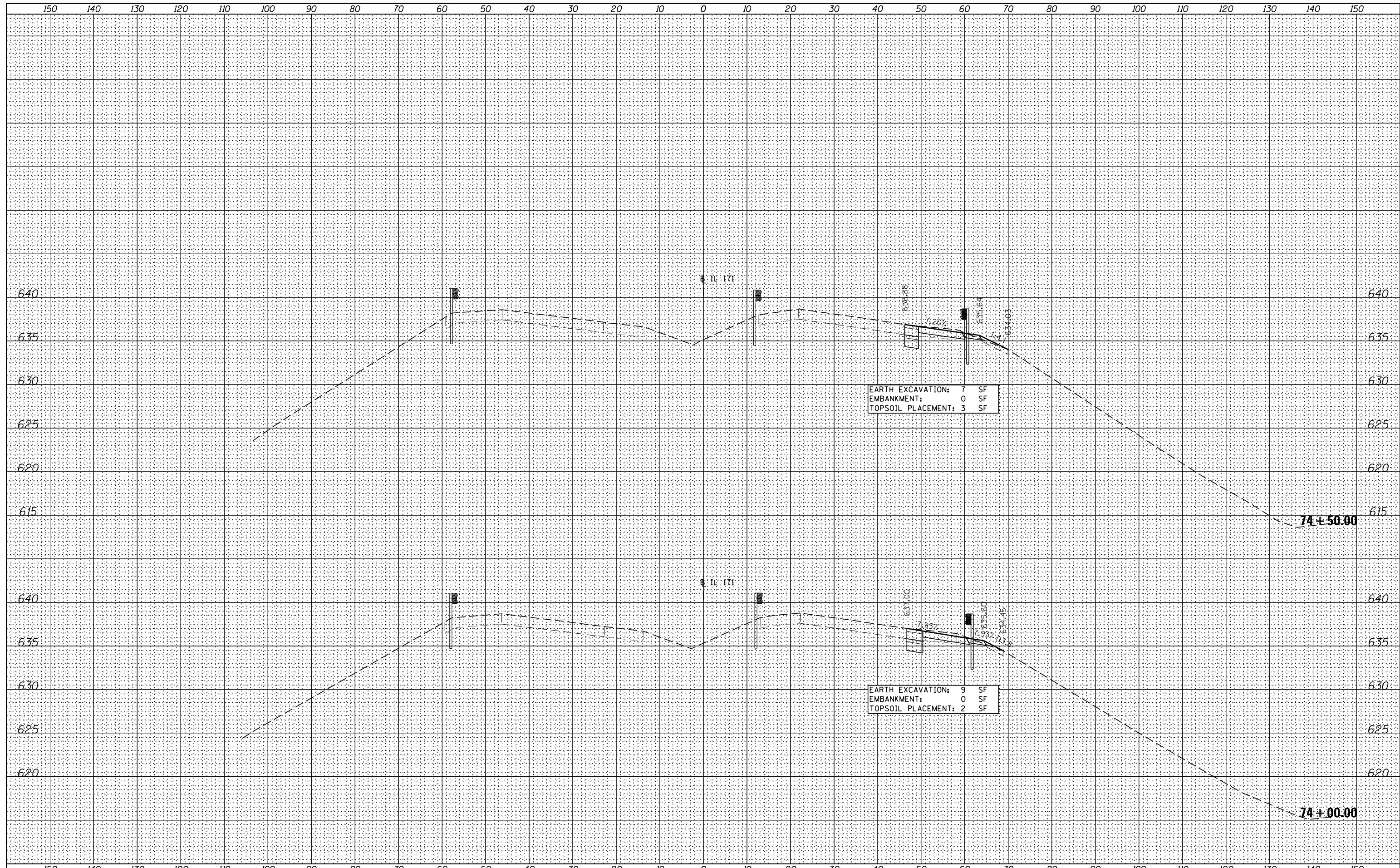
**IL 171 WIDENING  
CROSS SECTIONS**

SCALE: SHEET NO. 5 OF 7 SHEETS STA. 73+00.00 TO STA. 73+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372/373	2013-037B-R	COOK	787	782
CONTRACT NO. 60W75				
ILLINOIS FED. AID PROJECT				

DATE	BY
SURVEYED	PLOTTED
NOTE BOOK	AREAS CHECKED
NO.	

DATE	BY
SURVEYED	PLOTTED
NOTE BOOK	AREAS CHECKED
NO.	



FILE NAME =	DESIGNED - SEW	REVISED -
...\\D160W75-shit-xssht-pr-widen.dgn	DRAWN - TMB	REVISED -
USER NAME = jma_jewski	CHECKED - JMM	REVISED -
PLOT DATE = 6/17/2015	DATE - 6/12/2015	REVISED -



STATE OF ILLINOIS  
DIVISION OF TRANSPORTATION

IL 171 WIDENING  
CROSS SECTIONS

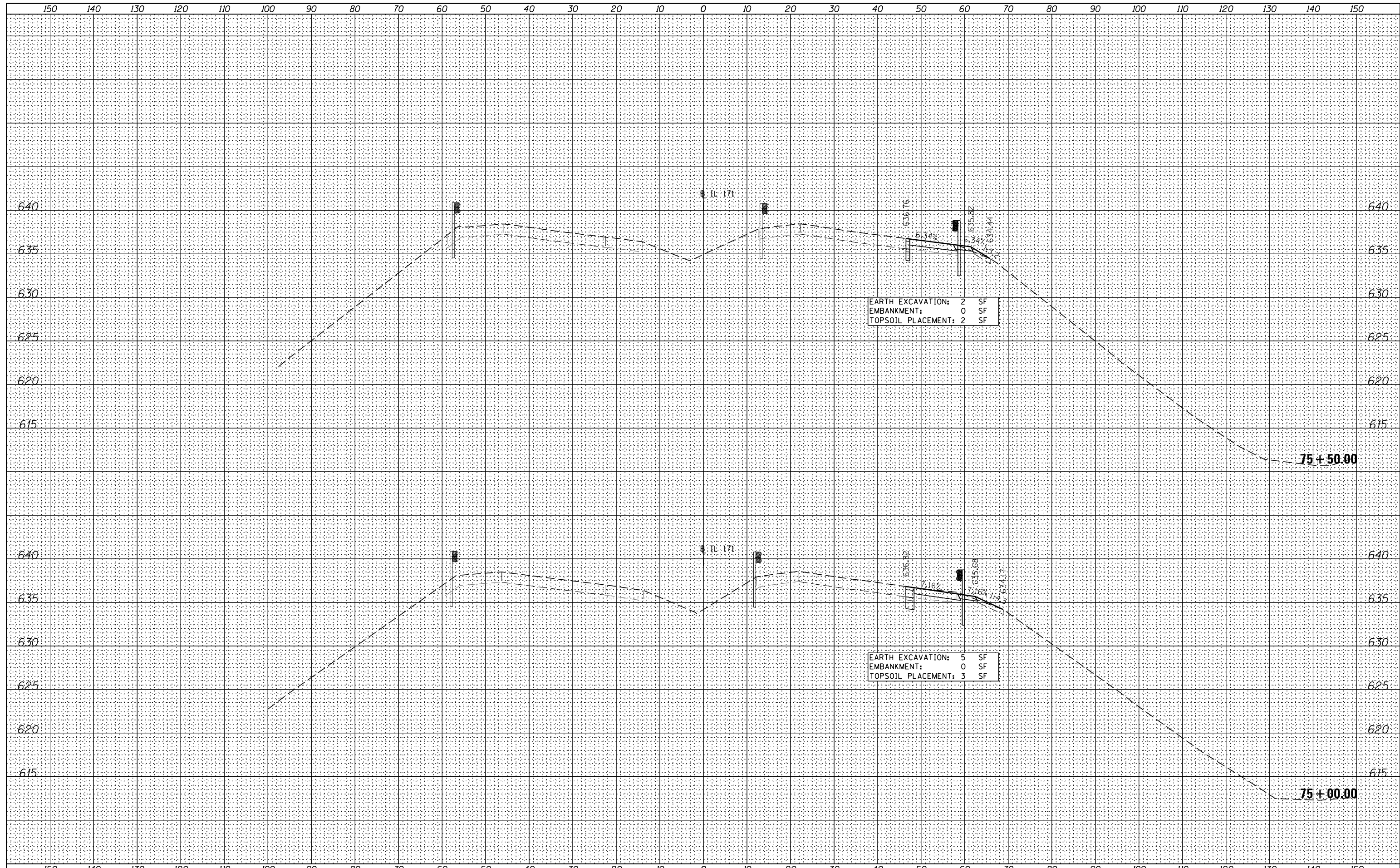
SCALE: SHEET NO. 6 OF 7 SHEETS STA. 74+00.00 TO STA. 74+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372/373	2013-037B-R	COOK	787	783
CONTRACT NO. 60W75			ILLINOIS FED. AID PROJECT	



DATE	
BY	
FINAL SURVEY NO.	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS CHECKED	

DATE	
BY	
ORIGINAL SURVEY NO.	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS CHECKED	



FILE NAME =	DESIGNED - SEW	REVISED -
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USER NAME = jma_jewski	CHECKED - JMM	REVISED -
PLOT DATE = 6/17/2015	DATE - 6/12/2015	REVISED -



**STATE OF ILLINOIS  
DIVISION OF TRANSPORTATION**

**IL 171 WIDENING  
CROSS SECTIONS**

SCALE: SHEET NO. 7 OF 7 SHEETS STA. 75+00.00 TO STA. 75+50.00

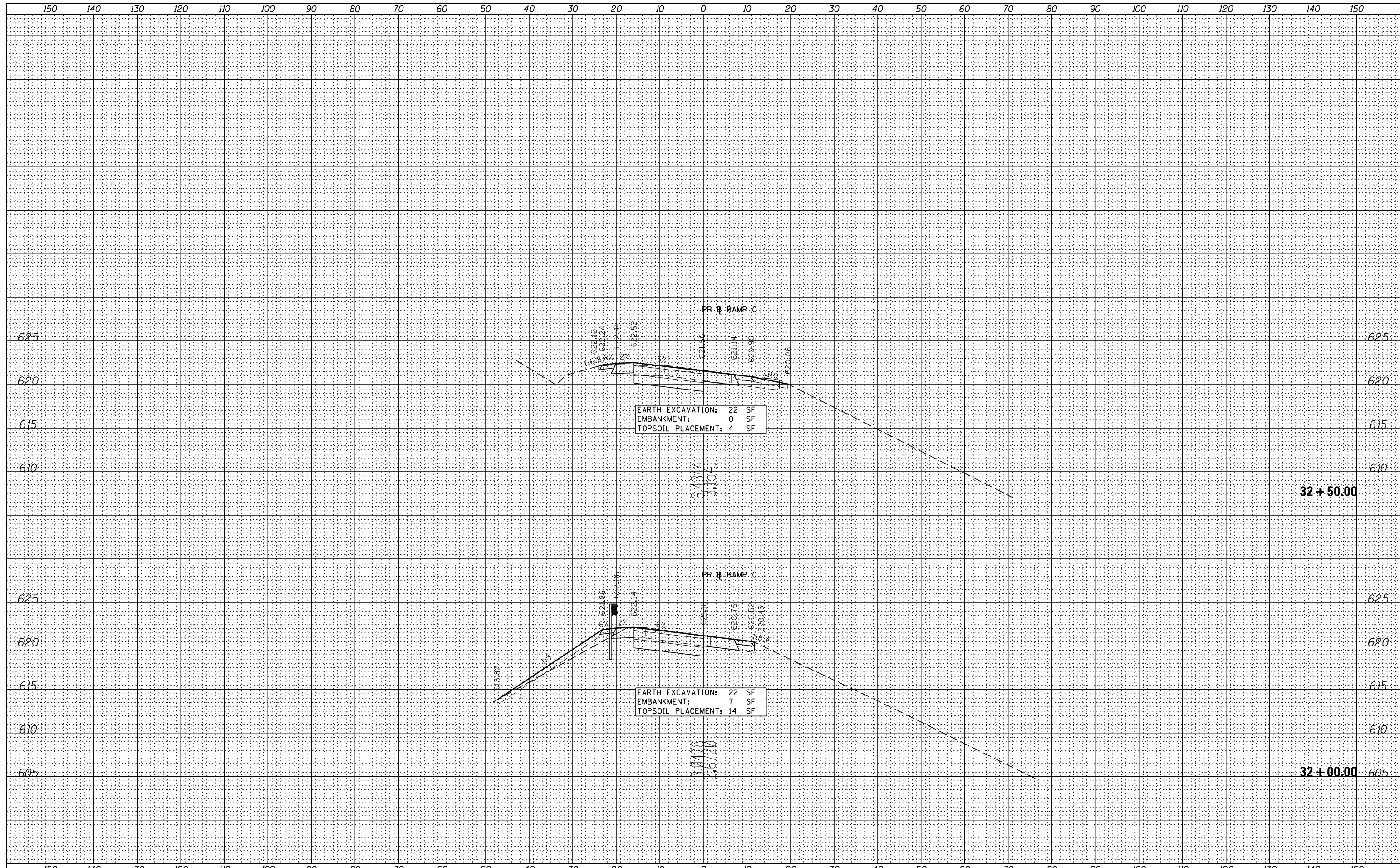
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372/373	2013-037B-R	COOK	787	784
CONTRACT NO. 60W75				

ILLINOIS FED. AID PROJECT



DATE	
BY	
FINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED

DATE	
BY	
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED



FILE NAME =	DESIGNED - SEW	REVISED -
...\\D160W75-sh-t-xssht-pr-rampc.dgn	DRAWN - TMB	REVISED -
USER NAME = jma_jewski	CHECKED - JMM	REVISED -
PLOT DATE = 6/17/2015	DATE - 6/12/2015	REVISED -



STATE OF ILLINOIS  
DIVISION OF TRANSPORTATION

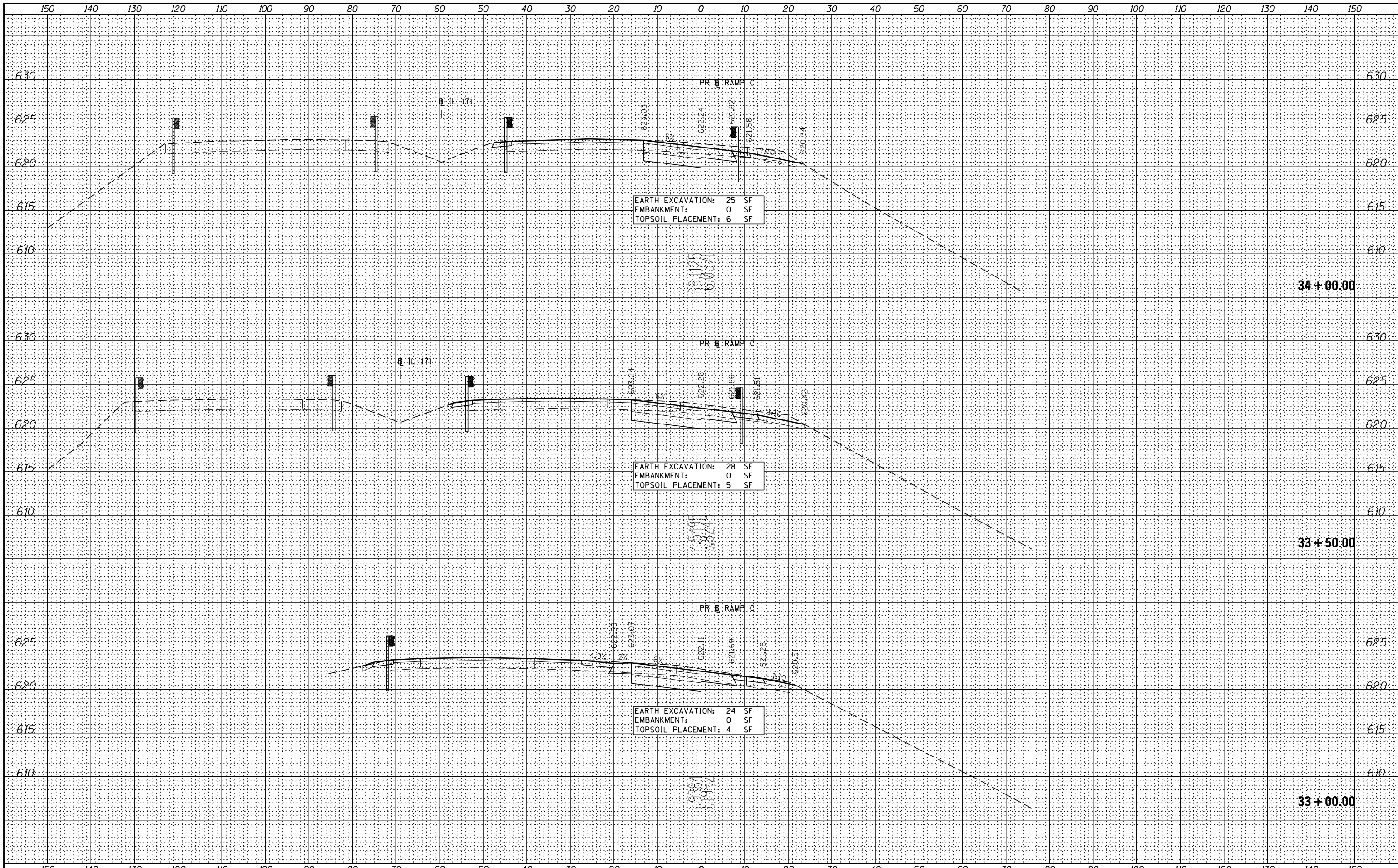
RAMP C  
CROSS SECTIONS

SCALE: SHEET NO. 1 OF 3 SHEETS STA. 32+00.00 TO STA. 32+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372/373	2013-037B-R	COOK	787	785
CONTRACT NO. 60W75				
ILLINOIS FED. AID PROJECT				

BY	DATE

BY	DATE



FILE NAME =	DESIGNED - SEW	REVISED -
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USER NAME = jmajewski	CHECKED - JMM	REVISED -
PLOT DATE = 6/17/2015	DATE - 6/12/2015	REVISED -



**STATE OF ILLINOIS**  
**DIVISION OF TRANSPORTATION**

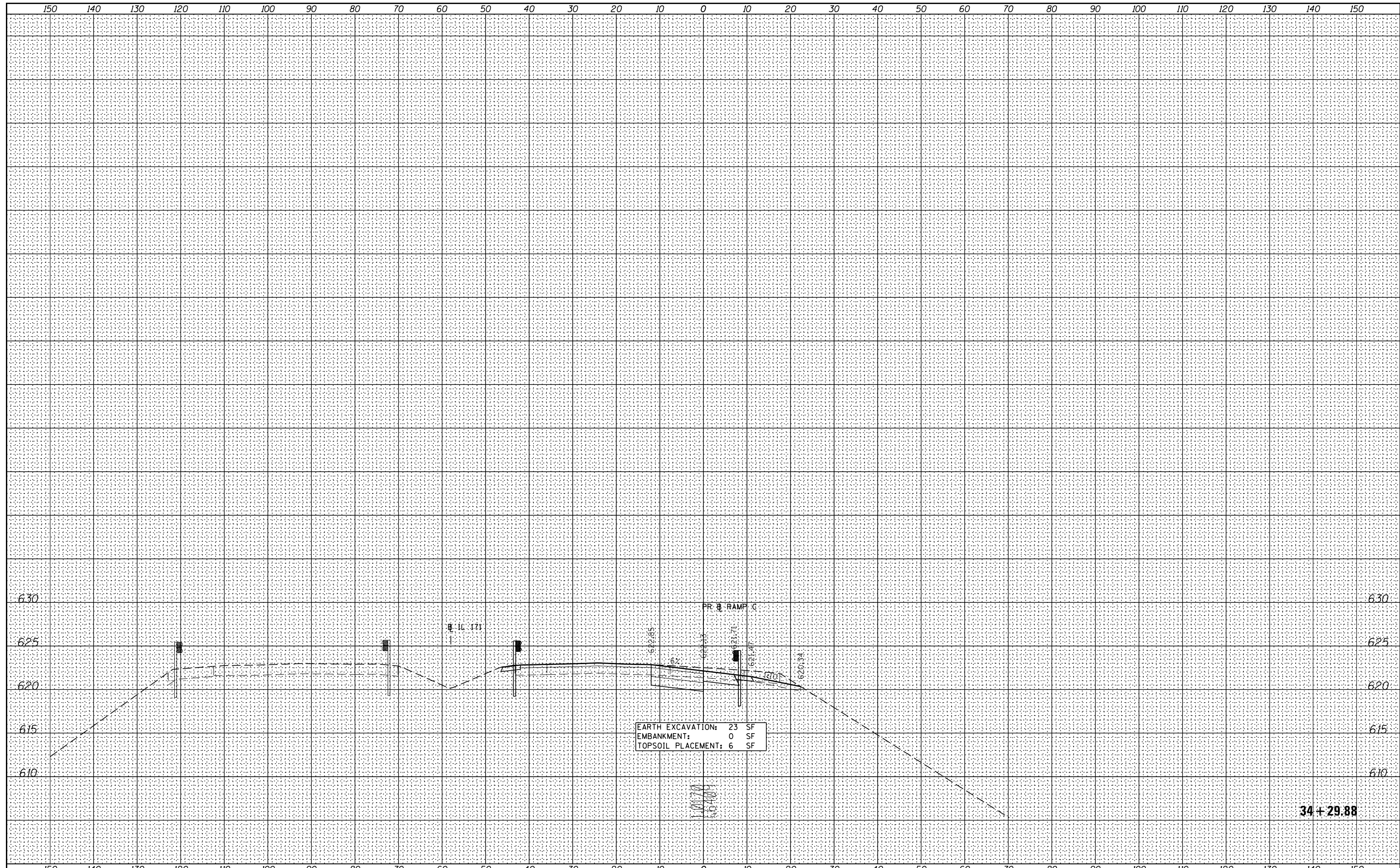
**RAMP C**  
**CROSS SECTIONS**

SCALE: SHEET NO. 2 OF 3 SHEETS STA. 33+00.00 TO STA. 34+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372/373	2013-037B-R	COOK	787	786
CONTRACT NO. 60W75			ILLINOIS FED. AID PROJECT	

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS CHECKED	
FINAL SURVEY NOTE BOOK NO.	

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS CHECKED	
ORIGINAL SURVEY NOTE BOOK NO.	



FILE NAME =	DESIGNED - SEW	REVISED -
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USER NAME = jma_jewski	CHECKED - JMM	REVISED -
PLOT DATE = 6/17/2015	DATE - 6/12/2015	REVISED -



STATE OF ILLINOIS  
DIVISION OF TRANSPORTATION

RAMP C  
CROSS SECTIONS

SCALE: SHEET NO. 3 OF 3 SHEETS STA. 34+29.88 TO STA. 34+29.88

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372/373	2013-037B-R	COOK	787	787
CONTRACT NO. 60W75			ILLINOIS FED. AID PROJECT	