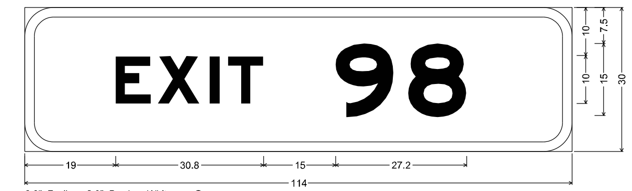
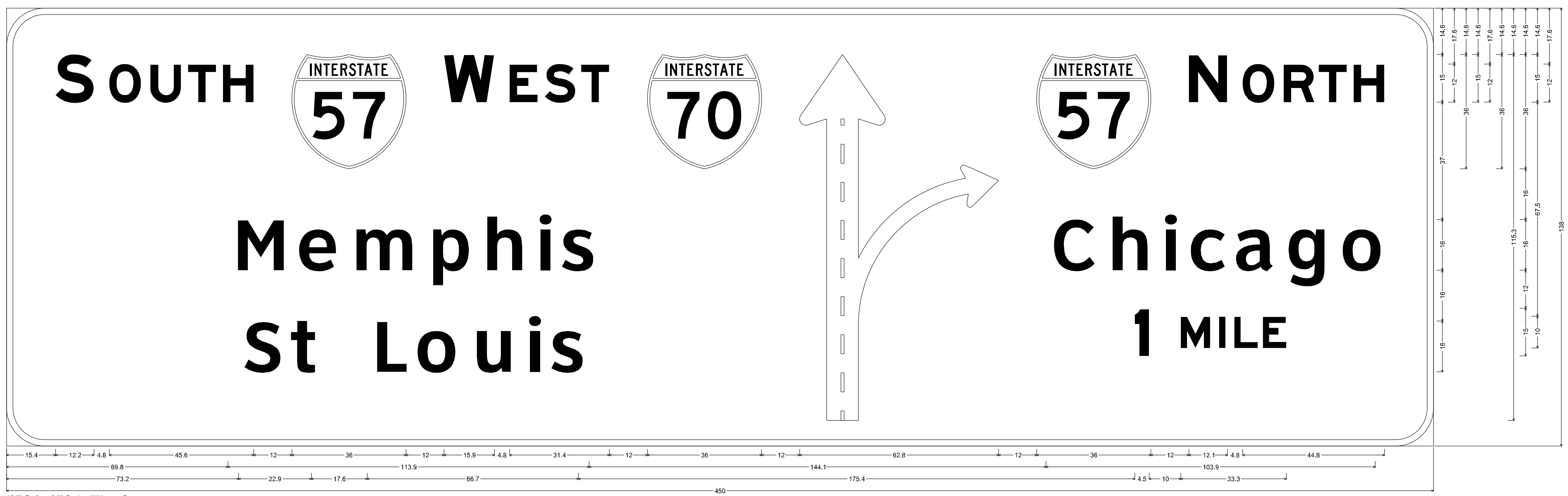
EXISTING SIGN TRUSS #10485
STA 2434+00 FAI ROUTE 70



6.0" Radius, 2.0" Border, White on Green;
[EXIT 98] E Mod 2K;
Table of widths and spaces.

	E		X		I		T		9		8	
19.0	7.4	1.4	8.7	2.1	2.0	1.8	7.4	14.9	12.2	3.0	12.1	22.0



12.0" Radius, 2.0" Border, White on Green;
[S OUTH] E Mod 2K; [W EST] E Mod 2K; [Memphis] ClearviewHwy-5-W; [St Louis] ClearviewHwy-5-W; Diagrammatic Arrow lane lines Black; [N ORTH] E Mod 2K; [Chicago] ClearviewHwy-5-W; [1 MILE] E Mod 2K;
Table of widths and spaces.

	S		O		U		T		H		57		W		E		S		T		70		↱		57		N		O		R		T		H	
15.4	12.2	4.8	10.0	2.9	9.7	2.2	8.9	2.1	9.8	12.0	36.0	12.0	15.9	4.8	8.8	2.2	9.7	1.8	8.9	12.0	36.0	12.0	62.8	12.0	36.0	12.0	12.1	4.8	10.1	2.9	9.7	1.3	8.9	2.2	9.7	15.4

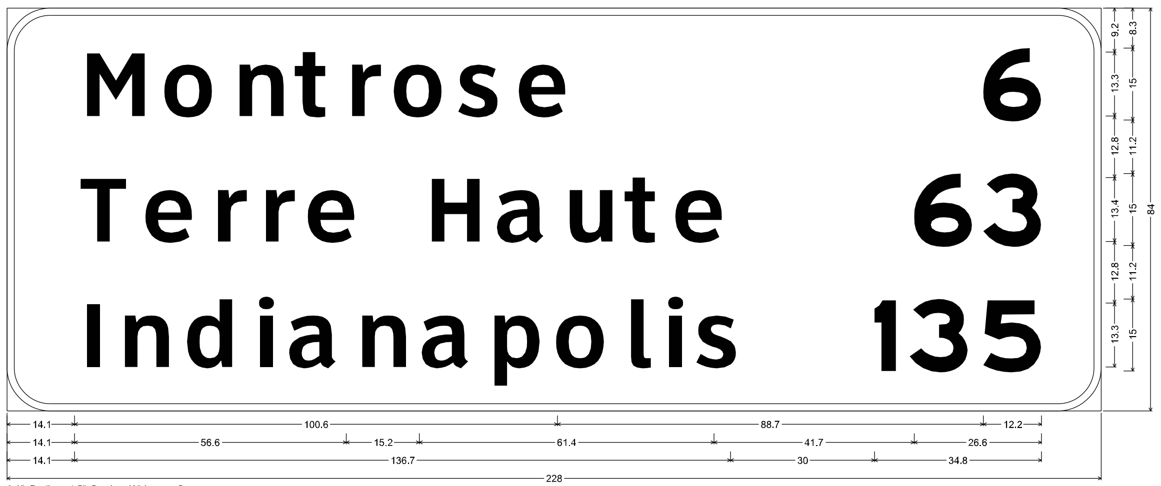
	M		e		m		p		h		i		s		C		h		i		c		a		g		o	
69.8	14.7	5.6	11.8	5.3	18.3	5.9	11.6	5.5	11.2	5.6	3.8	4.3	10.3	144.1	13.1	4.8	11.2	5.6	3.8	5.0	10.9	3.6	12.0	4.3	11.8	5.3	12.5	18.3

	S		t		L		o		u		i		s		1		M		I		L		E	
73.2	11.6	3.4	7.9	17.6	9.4	4.3	12.5	5.3	11.0	5.7	3.8	4.4	10.3	175.4	4.5	10.0	9.3	2.8	2.0	2.8	7.4	1.6	7.4	46.4

NOT TO SCALE

FILE NAME =	USER NAME = $USER$	DESIGNED - ESW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SIGN PANEL DETAILS, FAI ROUTE 57/70	F.A.I RTE. 57/70	SECTION (25-4)R
S:\Projects\403-00072_57-70\dgn\N TriLv\sign paneldetails.dgn		DRAWN - LEC	REVISED -			COUNTY EFFINGHAM	TOTAL SHEETS 1760 / SHEET NO. 401
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -			CONTRACT NO. 74295	
	PLOT DATE = $DATE$	DATE - 8-05-09	REVISED -		SCALE: 1"=50' / SHEET NO. 19 OF 58 SHEETS / STA. / TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT

SN011
SIGN ON EXISTING POSTS (2 I-BEAMS) #10451
STA 2434+00 FAI ROUTE 70



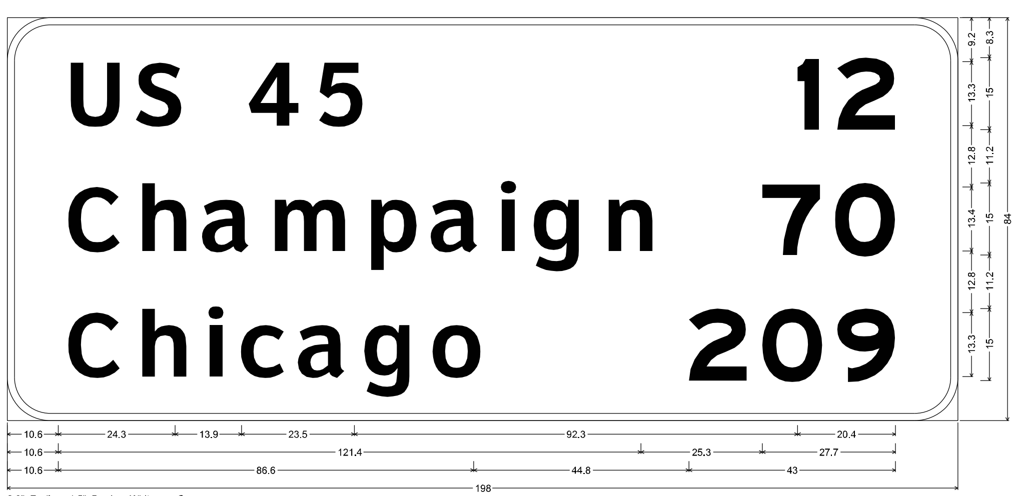
9.0" Radius, 1.5" Border, White on Green;
[Montrose] ClearviewHwy-5-W; [6] E Mod 2K [ ] ClearviewHwy-5-W; [Terre Haute] ClearviewHwy-5-W; [63] E Mod 2K [ ] ClearviewHwy-5-W; [Indianapolis] ClearviewHwy-5-W; [135] E Mod 2K [ ] ClearviewHwy-5-W;
Table of widths and spaces.

	M		o		n		t		r		o		s		e		6	
14.1	12.2	4.6	10.4	4.5	9.4	3.5	6.7	3.9	6.2	3.3	10.4	3.3	8.6	3.7	9.9	88.7	12.2	12.4

	T		e		r		r		e		H		a		u		t		e		6		3	
14.1	9.7	3.2	9.9	4.4	6.3	3.7	6.3	3.2	9.9	15.2	10.3	4.3	10.0	4.1	9.2	3.6	6.7	3.3	9.9	41.7	12.2	2.2	12.2	12.4

	I		n		d		i		a		n		a		p		o		l		i		s		1		3		5	
14.1	2.7	5.2	9.3	4.4	9.7	4.7	3.2	3.9	10.0	4.2	9.3	4.2	9.9	4.1	9.8	3.9	10.4	4.4	4.3	3.7	3.2	3.6	8.6	30.0	4.5	2.8	12.2	3.1	12.2	12.4

SN012
SIGN ON EXISTING POSTS (2 I-BEAMS) #10095
STA 5433+00 FAI ROUTE 57



9.0" Radius, 1.5" Border, White on Green;
[US 45] ClearviewHwy-5-W; [12] E Mod 2K [ ] ClearviewHwy-5-W; [Champaign] ClearviewHwy-5-W; [70] E Mod 2K [ ] ClearviewHwy-5-W; [Chicago] ClearviewHwy-5-W;
[209] E Mod 2K [ ] ClearviewHwy-5-W;
Table of widths and spaces.

	U		S		4		5		1		2	
10.6	10.4	4.2	9.7	13.9	10.5	3.7	9.3	92.3	4.5	3.8	12.1	13.0

	C		h		a		m		p		a		i		g		n		7		0	
10.6	10.9	4.0	9.4	4.1	10.0	4.1	15.2	4.9	9.7	3.7	10.0	3.9	3.1	4.2	9.8	5.0	9.4	25.3	12.1	3.0	12.6	13.0

	C		h		i		c		a		g		o		2		0		9	
10.6	10.9	4.0	9.4	4.6	3.2	4.1	9.2	3.0	9.9	3.6	9.8	4.5	10.4	44.8	12.1	3.2	12.6	3.0	12.1	13.0

SN013
EXISTING POSTS (2 I-BEAMS) #10112
STA 5486+30 FAI ROUTE 57

12.0" Radius, 2.0" Border, White on Green;
[EXIT 163] E Mod 2K; [Indianapolis] ClearviewHwy-5-W; [St Louis] ClearviewHwy-5-W; [2 MILES] E Mod 2K;
Table of widths and spaces.

	E		X		I		T		1		6		3	
76.8	7.4	1.4	8.7	2.1	2.0	1.8	7.4	15.0	4.5	3.6	12.1	2.3	12.1	76.8

	—	
2.0	230.0	2.0

93.0	48.0	93.0

	I		n		d		i		a		n		a		p		o		l		i		s	
14.5	4.0	7.8	14.0	6.6	14.6	7.1	4.7	5.9	14.9	6.3	14.1	6.2	14.9	6.2	14.6	5.9	15.5	6.7	6.5	5.5	4.7	5.5	12.8	14.5

	S		t		L		o		u		i		s	
50.0	14.6	4.2	9.9	22.0	11.8	5.3	15.6	6.7	13.7	7.2	4.7	5.4	12.9	50.0

	2		M		I		L		E		S	
79.9	12.2	18.8	9.3	2.8	2.0	2.8	7.4	1.6	7.4	1.8	8.1	79.9

NOT TO SCALE

FILE NAME =	USER NAME = $USER$	DESIGNED - ESW	REVISED -
S:\Projects\403-00072_57-70\dgn\N TriLv\sign paneldetails.dgn		DRAWN - LEC	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -
	PLOT DATE = $DATE$	DATE - 8-05-09	REVISED -

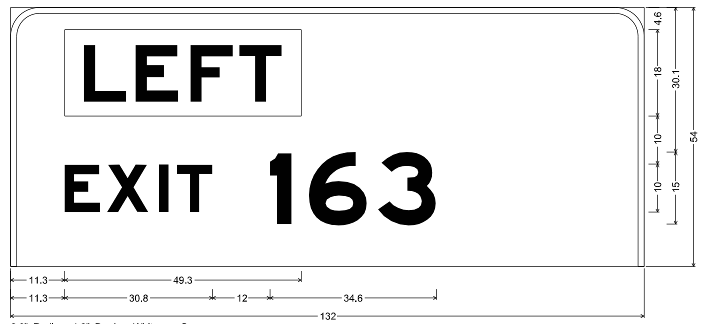
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGN PANEL DETAILS, FAI ROUTE 57/70

SCALE: 1"=50' | SHEET NO. 20 OF 58 SHEETS | STA. | TO STA.

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	402
		CONTRACT NO. 74295		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

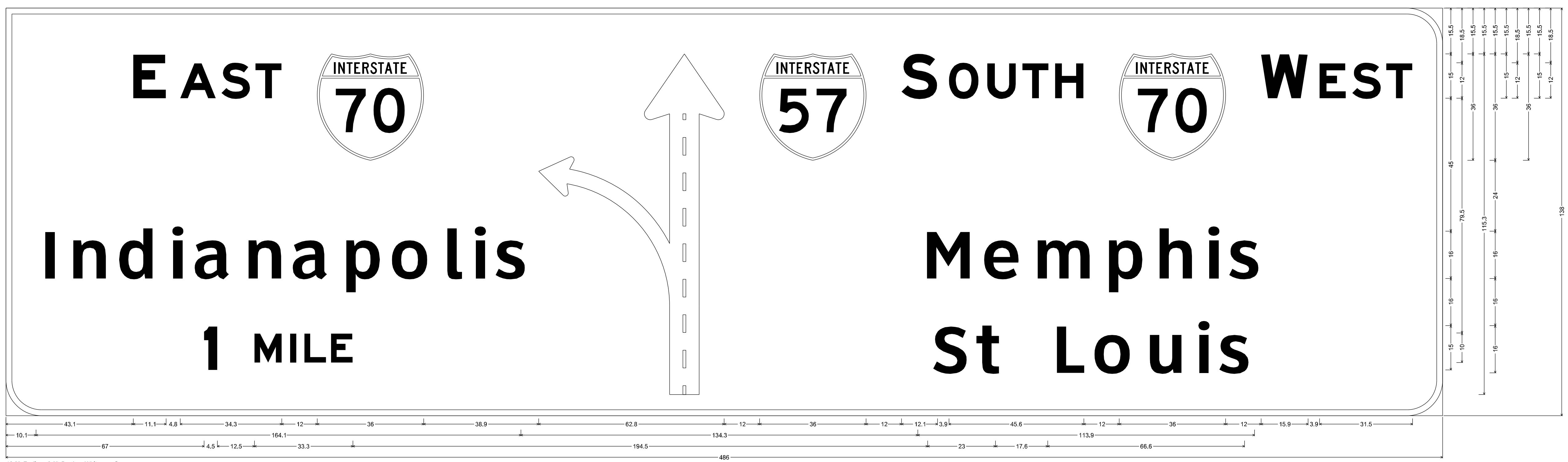
EXISTING SIGN TRUSS #10114
STA 5434+00 FAI ROUTE 57



6.0" Radius, 1.3" Border, White on Green;
Rectangle Yellow;
[EXIT 163] E Mod 2K;
Table of widths and spaces.

11.3	▭ 49.3	71.4

11.3	E 7.4	1.4	X 8.7	2.1	I 2.0	1.8	T 7.4	12.0	1 4.5	3.6	6 12.1	2.3	3 12.1	43.3



12.0" Radius, 2.0" Border, White on Green;
[E AST] E Mod 2K; [Indianapolis] ClearviewHwy-5-W; [1 MILE] E Mod 2K; Diagrammatic Arrow lane lines Black; [S OUTH] E Mod 2K; [W EST] E Mod 2K; [Memphis] ClearviewHwy-5-W; [St Louis] ClearviewHwy-5-W;
Table of widths and spaces.

43.1	E 11.1	4.8	A 12.1	1.8	S 9.7	1.8	T 8.9	12.0	(70) 36.0	38.9	↰ 62.8	12.0	(57) 36.0	12.0	S 12.1	3.9	O 10.1	2.9	U 9.7	2.2	T 8.8	2.2	H 9.7	12.0	(70) 36.0	12.0	W 15.9	3.9	E 8.9	2.2	S 9.7	1.8	T 8.9	10.1

10.1	I 3.3	6.2	n 11.2	5.3	d 11.6	5.7	i 3.8	4.7	a 12.0	5.0	n 11.2	5.0	a 11.9	5.0	p 11.7	4.7	o 12.4	5.4	l 5.1	4.5	i 3.8	4.3	s 10.3	134.3	M 14.7	5.5	e 11.9	5.3	m 18.3	5.8	p 11.7	5.4	h 11.2	5.6	i 3.8	4.4	s 10.3	63.6

67.0	1 4.5	12.5	M 9.3	2.8	I 2.0	2.8	L 7.4	1.6	E 7.4	194.5	S 11.7	3.3	t 8.0	17.6	L 9.4	4.3	o 12.4	5.4	u 11.0	5.7	i 3.8	4.3	s 10.3	67.0

NOT TO SCALE

FILE NAME = S:\Projects\403-00072_57-70\dgn\N TriLv\sign paneldetails.dgn	USER NAME = $USER$	DESIGNED - ESW	REVISED -
		DRAWN - LEC	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -
	PLOT DATE = $DATE$	DATE - 8-05-09	REVISED -

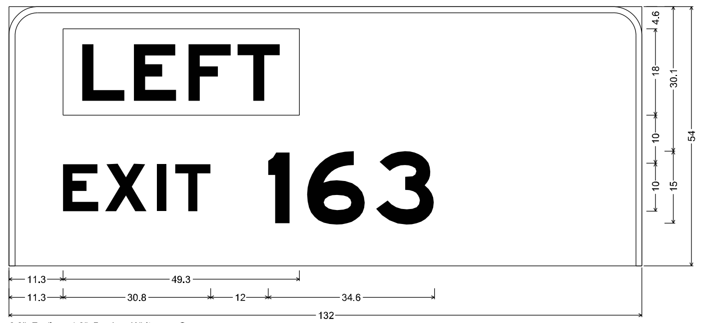
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGN PANEL DETAILS, FAI ROUTE 57/70

SCALE: 1"=50' | SHEET NO. 21 OF 58 SHEETS | STA. | TO STA.

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	403
		CONTRACT NO. 74295		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

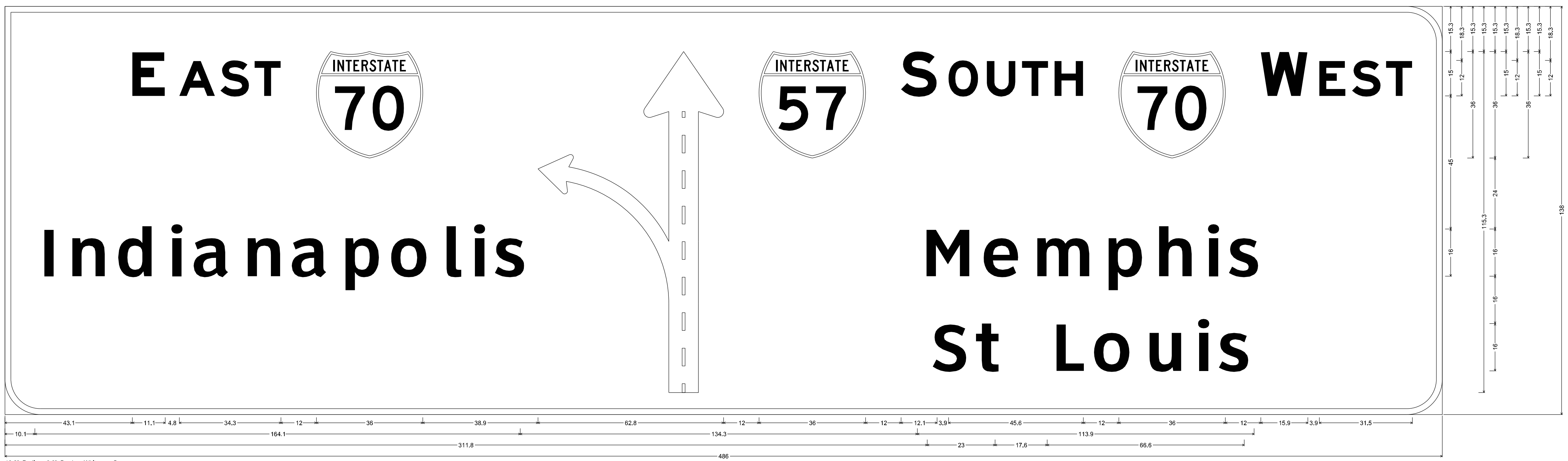
EXISTING SIGN TRUSS #10115
STA 5407+00 FAI ROUTE 57



6.0" Radius, 1.3" Border, White on Green;
Rectangle Yellow;
[EXIT 163] E Mod 2K;
Table of widths and spaces.

11.3	▭ 49.3	71.4

11.3	E 7.4	1.4	X 8.7	2.1	I 2.0	1.8	T 7.4	12.0	1 4.5	3.6	6 12.1	2.3	3 12.1	43.3



12.0" Radius, 2.0" Border, White on Green;
[E AST] E Mod 2K; [Indianapolis] ClearviewHwy-5-W; Diagrammatic Arrow lane lines Black; [S OUTH] E Mod 2K; [W EST] E Mod 2K; [Memphis] ClearviewHwy-5-W; [St Louis] ClearviewHwy-5-W;
Table of widths and spaces.

43.1	E 11.1	4.8	A 12.1	1.8	S 9.7	1.8	T 8.9	12.0	[70] 36.0	38.9	[arrow] 62.8	12.0	[57] 36.0	12.0	S 12.1	3.9	O 10.1	2.9	U 9.7	2.2	T 8.8	2.2	H 9.7	12.0	[70] 36.0	12.0	W 15.9	3.9	E 8.9	2.2	S 9.7	1.8	T 8.9	10.1

10.1	I 3.3	6.2	n 11.2	5.3	d 11.6	5.7	i 3.8	4.7	a 12.0	5.0	n 11.2	5.0	a 11.9	5.0	p 11.7	4.7	o 12.4	5.4	l 5.1	4.5	i 3.8	4.3	s 10.3	134.3	M 14.7	5.5	e 11.9	5.3	m 18.3	5.8	p 11.7	5.4	h 11.2	5.6	i 3.8	4.4	s 10.3	63.6

311.8	S 11.7	3.3	t 8.0	17.6	L 9.4	4.3	o 12.4	5.4	u 11.0	5.7	i 3.8	4.3	s 10.3	67.0

NOT TO SCALE

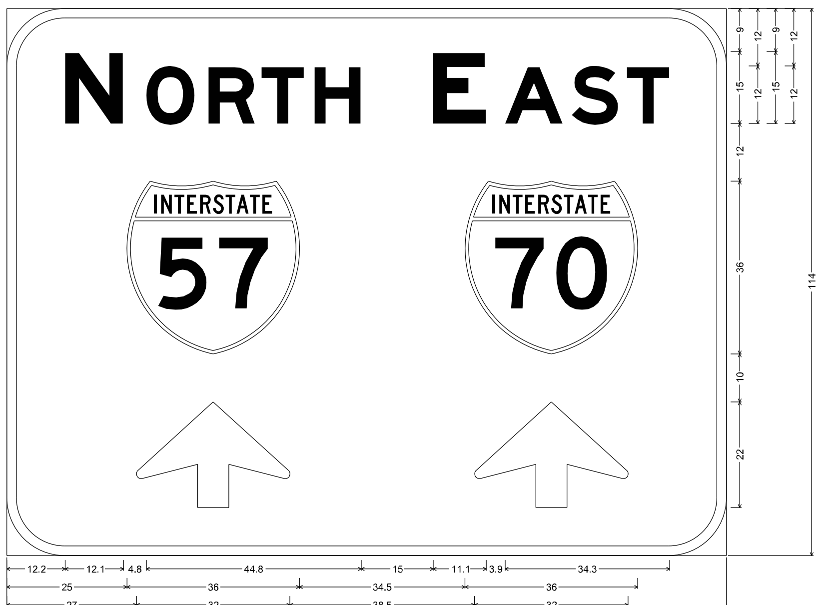
FILE NAME = S:\Projects\403-00072_57-70\dgn\N TriLv\sign paneldetails.dgn	USER NAME = $USER$	DESIGNED - ESW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		DRAWN - LEC	REVISED -	
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -	
	PLOT DATE = $DATE$	DATE - 8-05-09	REVISED -	

SIGN PANEL DETAILS, FAI ROUTE 57/70

SCALE: 1"=50' | SHEET NO. 22 OF 58 SHEETS | STA. | TO STA.

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	404
		CONTRACT NO. 74295		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

MAINTENANCE OF TRAFFIC SIGN PANEL - PRE-STAGE 2 (TEMP)
STA 2238+00 FAI ROUTE 57/70

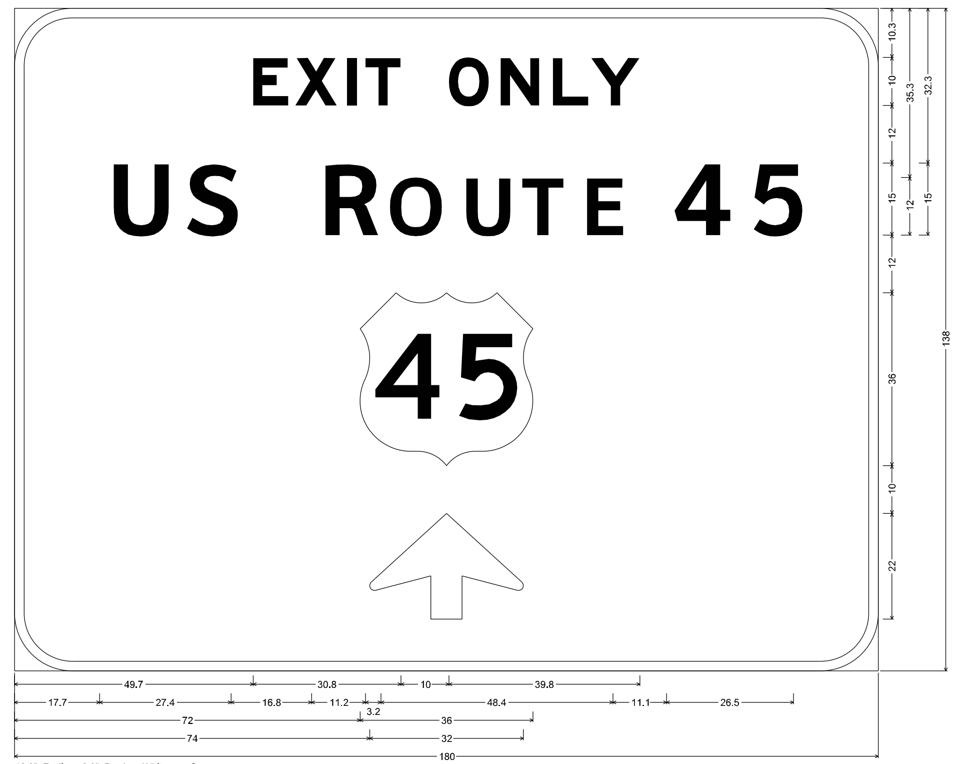


12.0" Radius, 2.0" Border, White on Orange;
[N ORTH] E Mod 2K; [E AST] E Mod 2K; Down Arrow 22.0" 90°; Down Arrow 22.0" 90°;
Table of widths and spaces.

	N		O		R		T		H		E		A		S		T	
12.2	12.1	4.8	10.1	2.9	9.7	1.3	8.9	2.2	9.7	15.0	11.1	3.9	12.1	1.8	9.7	1.8	8.9	11.8

	(I-57 shield)		(I-70 shield)	
25.0	36.0	34.5	36.0	18.5

	(arrow)		(arrow)	
27.0	32.0	38.5	32.0	20.5



12.0" Radius, 2.0" Border, White on Orange;
[EXIT ONLY] E Mod 2K; [US R OUTE 45] ClearviewHwy-5-W; Down Arrow 22.0" 90°;
Table of widths and spaces.

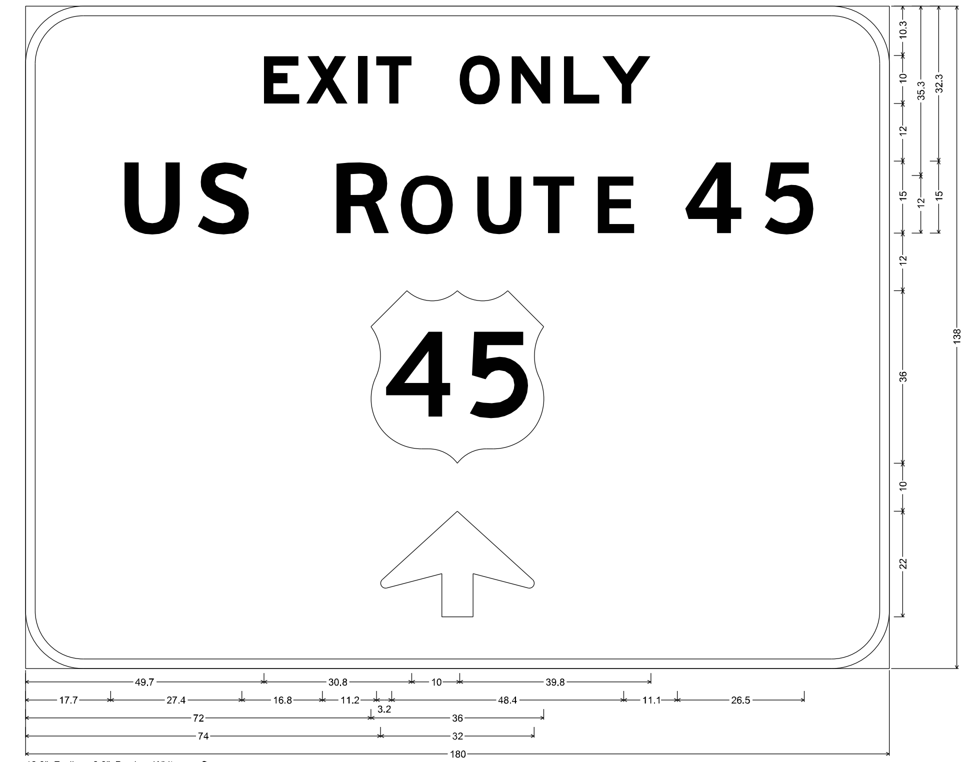
	E		X		I		T		O		N		L		Y	
49.7	7.4	1.4	8.7	2.1	2.0	1.8	7.4	10.0	8.4	2.4	8.1	2.8	7.4	0.6	10.1	49.7

	U		S		R		O		U		T		E		4		5	
17.7	11.7	4.8	10.9	16.8	11.2	3.2	11.2	4.3	9.3	3.6	8.7	3.5	7.8	11.1	11.9	4.2	10.4	17.7

	(US-45 shield)	
72.0	36.0	72.0

	(arrow)	
74.0	32.0	74.0

MAINTENANCE OF TRAFFIC SIGN PANEL - PRE-STAGE 2 (TEMP)
STA 2258+00 FAI ROUTE 57/70



12.0" Radius, 2.0" Border, White on Orange;
[EXIT ONLY] E Mod 2K; [US R OUTE 45] ClearviewHwy-5-W; Down Arrow 22.0" 90°;
Table of widths and spaces.

	E		X		I		T		O		N		L		Y	
49.7	7.4	1.4	8.7	2.1	2.0	1.8	7.4	10.0	8.4	2.4	8.1	2.8	7.4	0.6	10.1	49.7

	U		S		R		O		U		T		E		4		5	
17.7	11.7	4.8	10.9	16.8	11.2	3.2	11.2	4.3	9.3	3.6	8.7	3.5	7.8	11.1	11.9	4.2	10.4	17.7

	(US-45 shield)	
72.0	36.0	72.0

	(arrow)	
74.0	32.0	74.0

* SIGNS ON THIS SHEET TO BE USED
FOR MAINTAINENCE OF TRAFFIC

NOT TO SCALE

FILE NAME = S:\Projects\403-00072_57-70\dgn\N TriLv\sign paneldetails.dgn	USER NAME = $USER$	DESIGNED - ESW	REVISED -
		DRAWN - LEC	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -
	PLOT DATE = $DATE$	DATE - 8-05-09	REVISED -

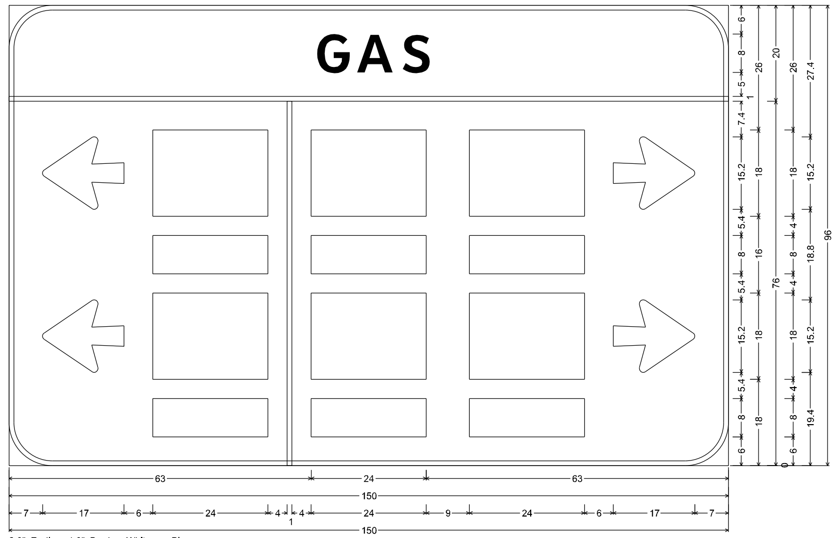
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGN PANEL DETAILS, FAI ROUTE 57/70

SCALE: 1"=50' | SHEET NO. 23 OF 58 SHEETS | STA. | TO STA.

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	405
		CONTRACT NO. 74295		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SN022 STA 22+50 (US45 RAMP B)



9.0" Radius, 1.0" Border, White on Blue;
[GAS] ClearviewHwy-5-W; Arrow 80 - 17.0" 180°; Rectangle Blue; Rectangle Blue; Arrow 80 - 17.0" 180°; Rectangle Blue; Rectangle Blue; Rectangle Blue; Rectangle Blue; Arrow 80 - 17.0" 0°; Rectangle Blue; Rectangle Blue; Rectangle Blue; Rectangle Blue; Arrow 80 - 17.0" 0°; Rectangle Blue; Rectangle Blue;
Table of widths and spaces.

	G		A		S	
63.0	7.0	2.0	7.5	1.6	5.9	63.0

-0.0	150.0	0.0

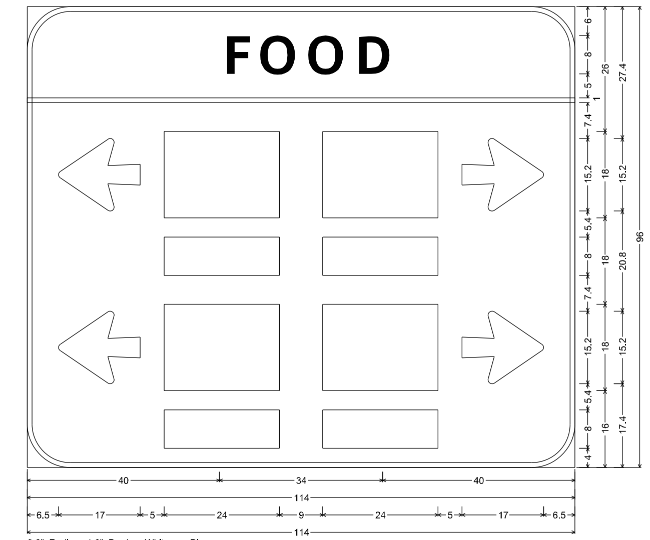
7.0	17.0	6.0	24.0	4.0	1.0	4.0	24.0	9.0	24.0	6.0	17.0	7.0

30.0	24.0	9.0	24.0	9.0	24.0	30.0

7.0	17.0	6.0	24.0	9.0	24.0	9.0	24.0	6.0	17.0	7.0

30.0	24.0	9.0	24.0	9.0	24.0	30.0

SN023 STA 20+50 (US45 RAMP B)



9.0" Radius, 1.0" Border, White on Blue;
[FOOD] ClearviewHwy-5-W; Arrow 80 - 17.0" 180°; Rectangle Blue; Rectangle Blue; Arrow 80 - 17.0" 0°; Rectangle Blue; Rectangle Blue; Arrow 80 - 17.0" 180°; Rectangle Blue; Rectangle Blue; Arrow 80 - 17.0" 0°; Rectangle Blue; Rectangle Blue;
Table of widths and spaces.

	F		O		O		D	
40.0	4.9	2.3	7.5	2.5	7.5	2.8	6.5	40.0

-0.0	114.0	0.0

6.5	17.0	5.0	24.0	9.0	24.0	5.0	17.0	6.5

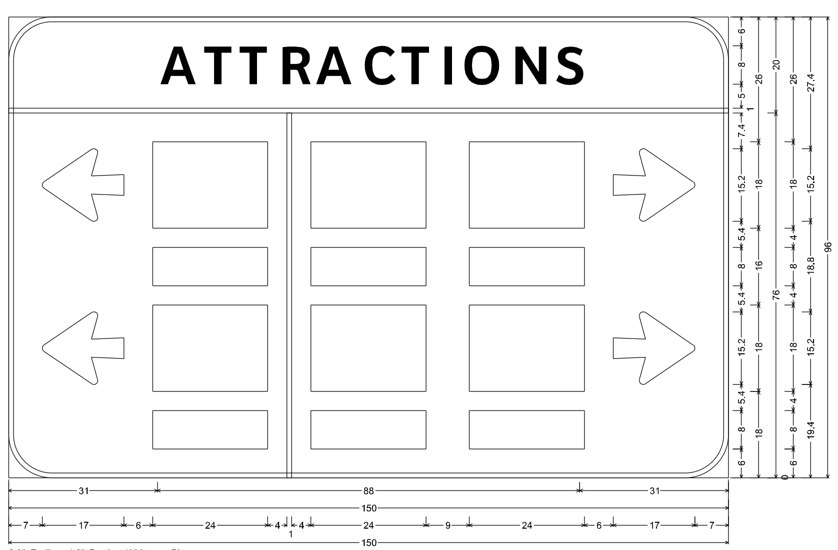
28.5	24.0	9.0	24.0	28.5

6.5	17.0	5.0	24.0	9.0	24.0	5.0	17.0	6.5

28.5	24.0	9.0	24.0	28.5

SN024

STA 18+50 (US45 RAMP B)



9.0" Radius, 1.0" Border, White on Blue;
[ATTRACTIONS] ClearviewHwy-5-W; Arrow 80 - 17.0" 180°; Rectangle Blue; Rectangle Blue; Arrow 80 - 17.0" 180°; Rectangle Blue; Rectangle Blue; Rectangle Blue; Rectangle Blue; Arrow 80 - 17.0" 0°; Rectangle Blue; Rectangle Blue; Rectangle Blue; Rectangle Blue; Arrow 80 - 17.0" 0°; Rectangle Blue; Rectangle Blue;
Table of widths and spaces.

	A		T		T		R		A		C		T		I		O		N		S	
31.0	7.5	1.5	5.8	1.6	5.8	2.3	6.1	1.9	7.5	1.9	6.6	1.6	5.9	2.3	1.6	2.8	7.5	2.8	6.6	2.6	5.8	31.0

-0.0	150.0	0.0

7.0	17.0	6.0	24.0	4.0	1.0	4.0	24.0	9.0	24.0	6.0	17.0	7.0

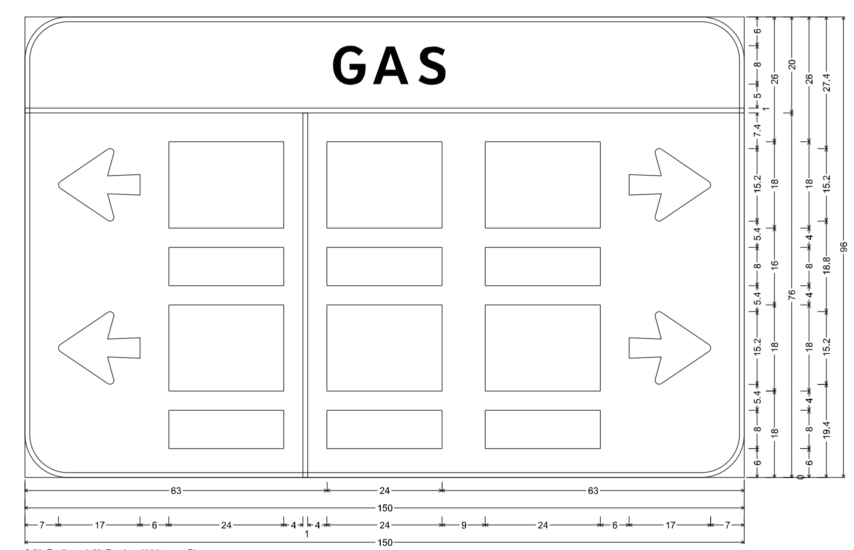
30.0	24.0	9.0	24.0	9.0	24.0	30.0

7.0	17.0	6.0	24.0	9.0	24.0	9.0	24.0	6.0	17.0	7.0

30.0	24.0	9.0	24.0	9.0	24.0	30.0

SN025

STA 25+50 (US45 RAMP C)



9.0" Radius, 1.0" Border, White on Blue;
[GAS] ClearviewHwy-5-W; Arrow 80 - 17.0" 180°; Rectangle Blue; Rectangle Blue; Arrow 80 - 17.0" 180°; Rectangle Blue; Rectangle Blue; Rectangle Blue; Rectangle Blue; Arrow 80 - 17.0" 0°; Rectangle Blue; Rectangle Blue; Rectangle Blue; Rectangle Blue; Arrow 80 - 17.0" 0°; Rectangle Blue; Rectangle Blue;
Table of widths and spaces.

	G		A		S	
63.0	7.0	2.0	7.5	1.6	5.9	63.0

-0.0	150.0	0.0

7.0	17.0	6.0	24.0	4.0	1.0	4.0	24.0	9.0	24.0	6.0	17.0	7.0

30.0	24.0	9.0	24.0	9.0	24.0	30.0

7.0	17.0	6.0	24.0	9.0	24.0	9.0	24.0	6.0	17.0	7.0

30.0	24.0	9.0	24.0	9.0	24.0	30.0

NOT TO SCALE

FILE NAME =	USER NAME = $USER$	DESIGNED - ESW	REVISED -
S:\Projects\403-00072_57-70\dgn\N TriLv\sign paneldetails.dgn		DRAWN - LEC	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -
	PLOT DATE = $DATE$	DATE - 8-05-09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

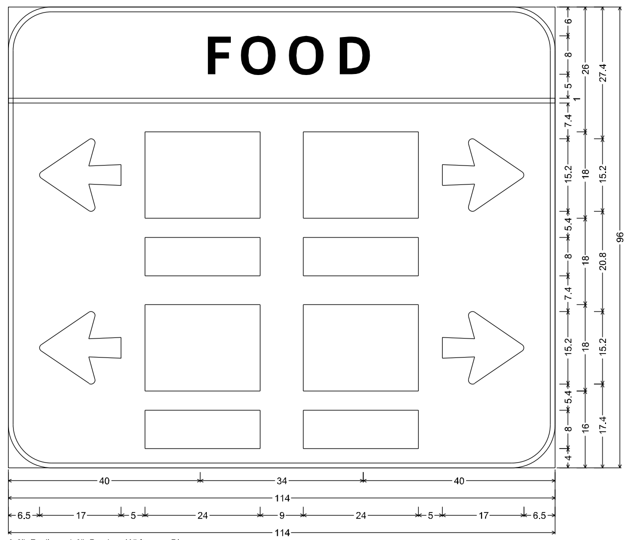
SIGN PANEL DETAILS, FAI ROUTE 57/70

SCALE: 1"=50' | SHEET NO. 24 OF 58 SHEETS | STA. | TO STA.

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	406
		CONTRACT NO. 74295		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SN014

STA 23+50 (US45 RAMP C)



9.0" Radius, 1.0" Border, White on Blue;
[FOOD] ClearviewHwy-5-W; Arrow 80 - 17.0" 180°; Rectangle Blue; Rectangle Blue; Arrow 80 - 17.0" 0°;
Rectangle Blue; Rectangle Blue; Arrow 80 - 17.0" 180°; Rectangle Blue; Rectangle Blue; Arrow 80 - 17.0" 0°;
Rectangle Blue; Rectangle Blue;
Table of widths and spaces.

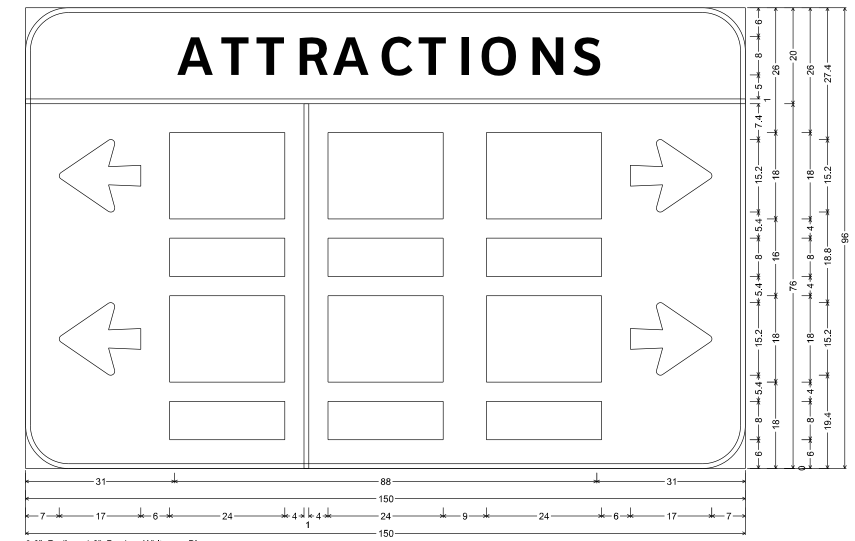
40.0	F 4.9	2.3	O 7.5	2.5	O 7.5	2.8	D 6.5	40.0

-0.0	— 114.0	0.0

6.5	⇦ 17.0	5.0	□ 24.0	9.0	□ 24.0	5.0	⇨ 17.0	6.5
28.5	▭ 24.0	9.0	▭ 24.0	28.5				
6.5	⇦ 17.0	5.0	□ 24.0	9.0	□ 24.0	5.0	⇨ 17.0	6.5
28.5	▭ 24.0	9.0	▭ 24.0	28.5				

SN015

STA 21+50 (US45 RAMP C)



9.0" Radius, 1.0" Border, White on Blue;
[ATTRACTIONS] ClearviewHwy-5-W; Arrow 80 - 17.0" 180°; Rectangle Blue; Rectangle Blue; Arrow 80 - 17.0" 180°; Rectangle Blue; Rectangle Blue;
Rectangle Blue; Rectangle Blue; Arrow 80 - 17.0" 0°; Rectangle Blue; Rectangle Blue; Rectangle Blue; Rectangle Blue; Arrow 80 - 17.0" 0°;
Rectangle Blue; Rectangle Blue;
Table of widths and spaces.

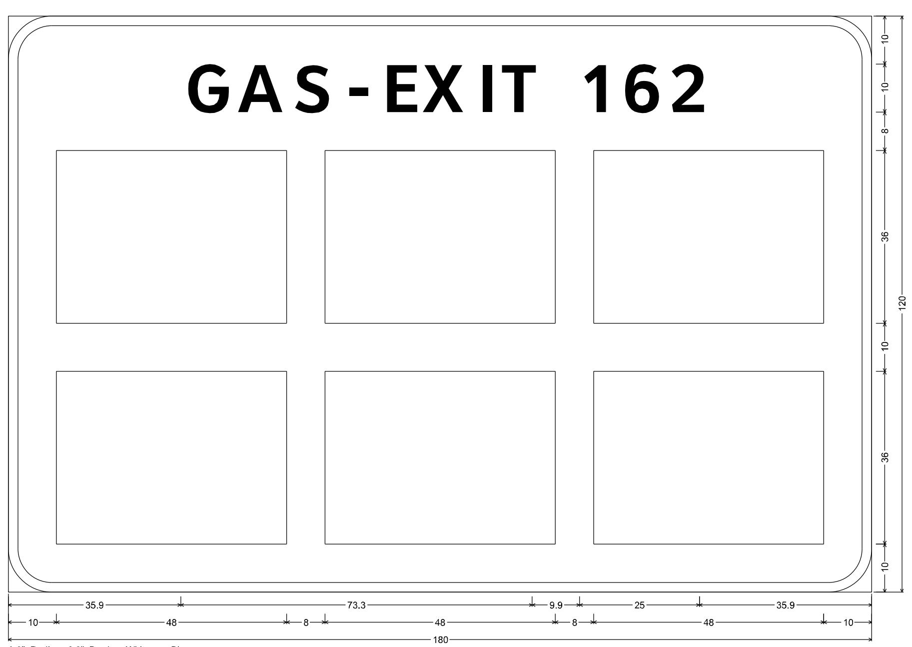
31.0	A 7.5	1.5	T 5.8	1.6	T 5.8	2.3	R 6.1	1.9	A 7.5	1.9	C 6.6	1.6	T 5.9	2.3	I 1.6	2.8	O 7.5	2.8	N 6.6	2.6	S 5.8	31.0

-0.0	— 150.0	0.0

7.0	⇦ 17.0	6.0	□ 24.0	4.0	| 1.0	4.0	□ 24.0	9.0	□ 24.0	6.0	⇨ 17.0	7.0
30.0	▭ 24.0	9.0	▭ 24.0	9.0	▭ 24.0	30.0						
7.0	⇦ 17.0	6.0	□ 24.0	9.0	□ 24.0	9.0	□ 24.0	6.0	⇨ 17.0	7.0		
30.0	▭ 24.0	9.0	▭ 24.0	9.0	▭ 24.0	30.0						

SN016

STA 2358+60 (N TRI-LEVEL ROADWAY A)



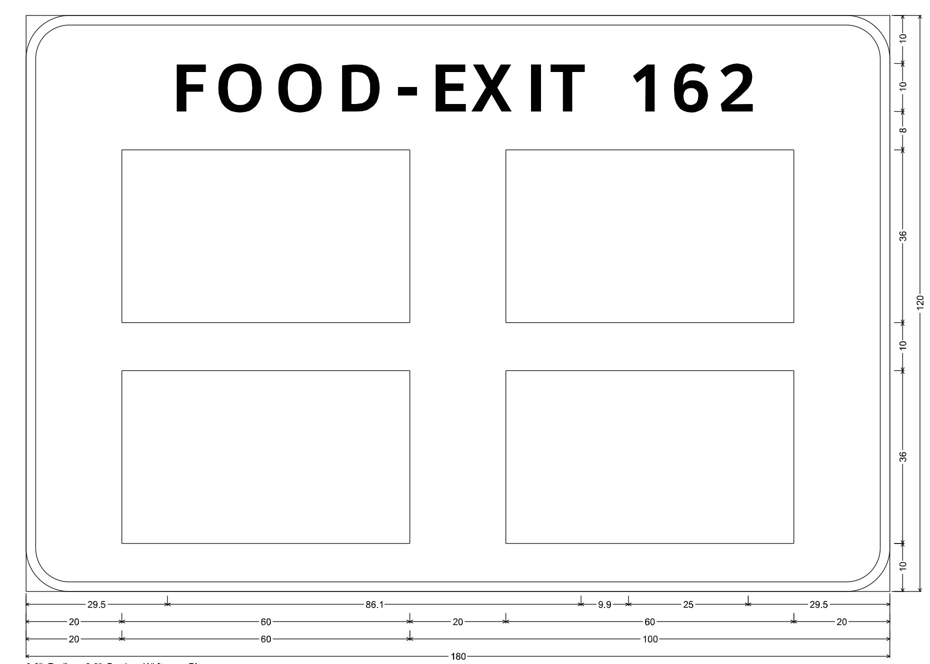
9.0" Radius, 2.0" Border, White on Blue;
[GAS-EXIT 162] ClearviewHwy-5-W; Rectangle Blue; Rectangle Blue; Rectangle Blue; Rectangle Blue; Rectangle Blue; Rectangle Blue;
Table of widths and spaces.

35.9	G 8.7	2.5	A 9.5	2.0	S 7.3	3.2	- 4.0	3.9	E 6.4	2.2	X 8.6	2.7	I 2.1	2.9	T 7.3	9.9	1 4.6	3.5	6 7.3	2.7	2 6.9	35.9		

10.0	□ 48.0	8.0	□ 48.0	8.0	□ 48.0	10.0
10.0	□ 48.0	8.0	□ 48.0	8.0	□ 48.0	10.0

SN017

STA 2365+38 (N TRI-LEVEL ROADWAY A)



9.0" Radius, 2.0" Border, White on Blue;
[FOOD-EXIT 162] ClearviewHwy-5-W; Rectangle Blue; Rectangle Blue; Rectangle Blue; Rectangle Blue;
Table of widths and spaces.

29.5	F 6.1	2.9	O 9.4	3.1	O 9.3	3.6	D 8.1	3.5	- 4.0	3.9	E 6.5	2.1	X 8.7	2.7	I 2.0	3.0	T 7.2	9.9	1 4.6	3.6	6 7.3	2.6	2 6.9	29.5

20.0	▭ 60.0	20.0	▭ 60.0	20.0
20.0	▭ 60.0	20.0	▭ 60.0	20.0

NOT TO SCALE

FILE NAME =	USER NAME = $USER$	DESIGNED - ESW	REVISED -
S:\Projects\403-00072_57-70\dgn\N TriLv\sign paneldetails.dgn		DRAWN - LEC	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -
	PLOT DATE = $DATE$	DATE - 8-05-09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

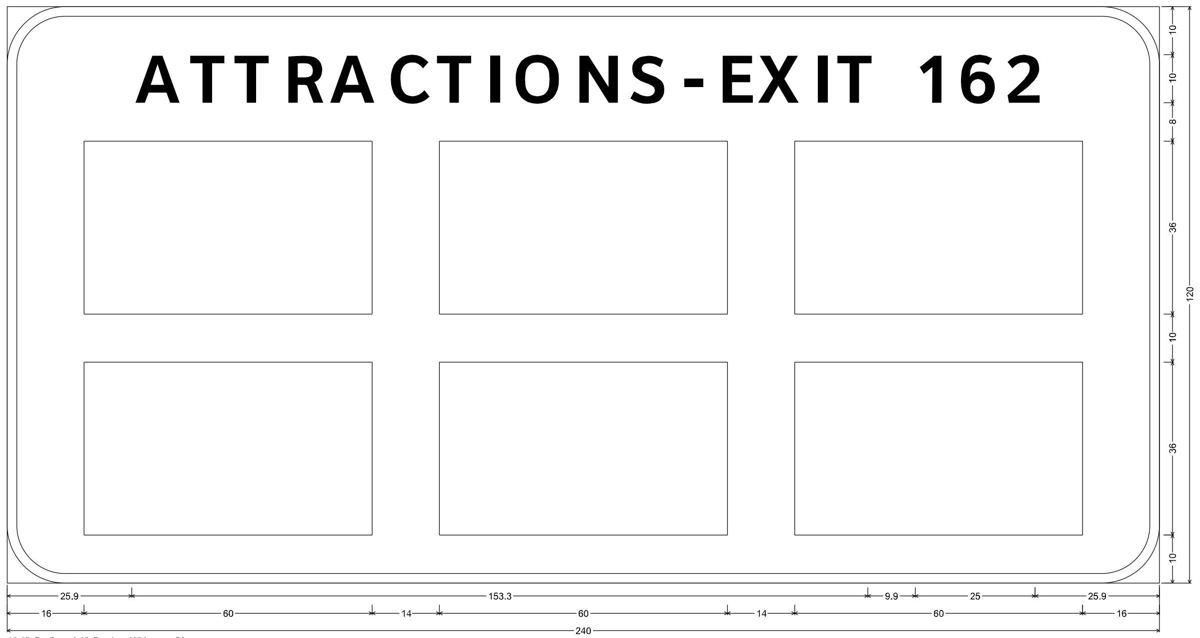
SIGN PANEL DETAILS, FAI ROUTE 57/70

SCALE: 1″=50′ | SHEET NO. 25 OF 58 SHEETS | STA. | TO STA.

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	407
		CONTRACT NO. 74295		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SN018

STA 2375+00 (N TRI-LEVEL ROADWAY A)



12.0" Radius, 2.0" Border, White on Blue;
[ATTRACTIONS-EXIT 162] ClearviewHwy-5-W; Rectangle Blue; Rectangle Blue; Rectangle Blue; Rectangle Blue; Rectangle Blue; Rectangle Blue;
Table of widths and spaces.

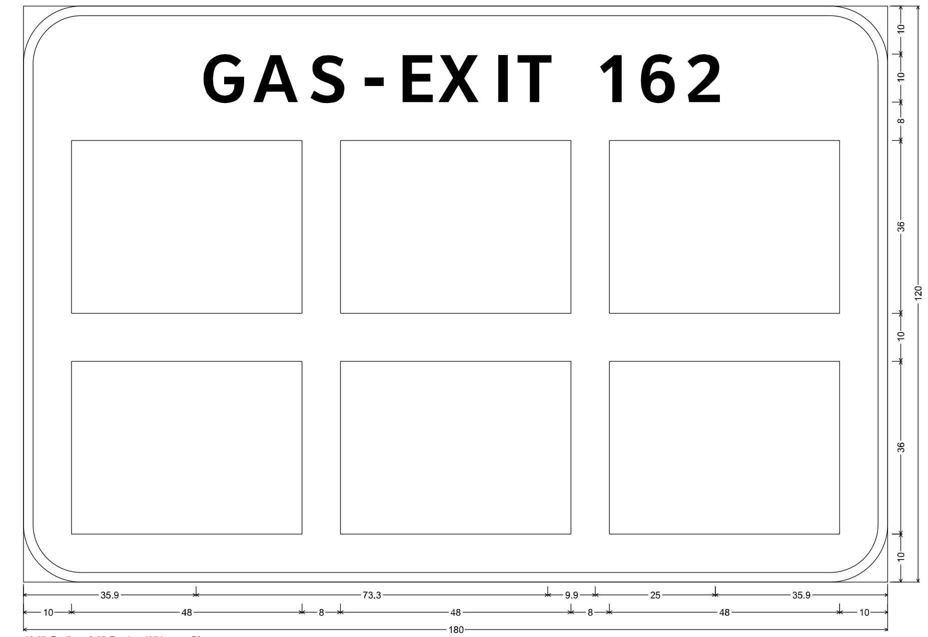
	A		T		T		R		A		C		T		I		O		N		S		-		E		X		I		T		1		6		2	
25.9	9.4	1.8	7.3	2.0	7.2	3.0	7.5	2.4	9.4	2.4	8.2	2.1	7.2	2.9	2.1	3.5	9.3	3.6	8.3	3.1	7.3	3.2	4.0	3.9	6.5	2.1	8.7	2.7	2.0	2.9	7.3	9.9	4.6	3.6	7.2	2.7	6.9	25.9

	□		□		□	
16.0	60.0	14.0	60.0	14.0	60.0	16.0

	□		□		□	
16.0	60.0	14.0	60.0	14.0	60.0	16.0

SN019

STA 5363+06 (N TRI-LEVEL ROADWAY C)



12.0" Radius, 2.0" Border, White on Blue;
[GAS-EXIT 162] ClearviewHwy-5-W; Rectangle Blue; Rectangle Blue; Rectangle Blue; Rectangle Blue; Rectangle Blue; Rectangle Blue;
Table of widths and spaces.

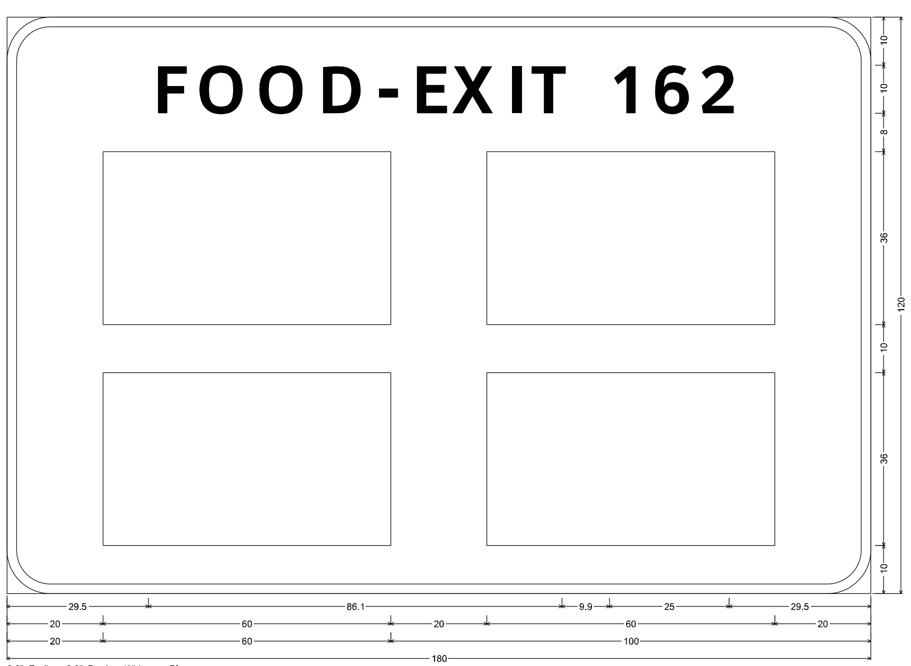
	G		A		S		-		E		X		I		T		1		6		2	
35.9	8.7	2.5	9.5	2.0	7.3	3.2	4.0	3.9	6.4	2.2	8.6	2.7	2.1	2.9	7.3	9.9	4.6	3.5	7.3	2.7	6.9	35.9

	□		□		□	
10.0	48.0	8.0	48.0	8.0	48.0	10.0

	□		□		□	
10.0	48.0	8.0	48.0	8.0	48.0	10.0

SN020

STA 5371+03 (N TRI-LEVEL ROADWAY C)



9.0" Radius, 2.0" Border, White on Blue;
[FOOD-EXIT 162] ClearviewHwy-5-W; Rectangle Blue; Rectangle Blue; Rectangle Blue; Rectangle Blue;
Table of widths and spaces.

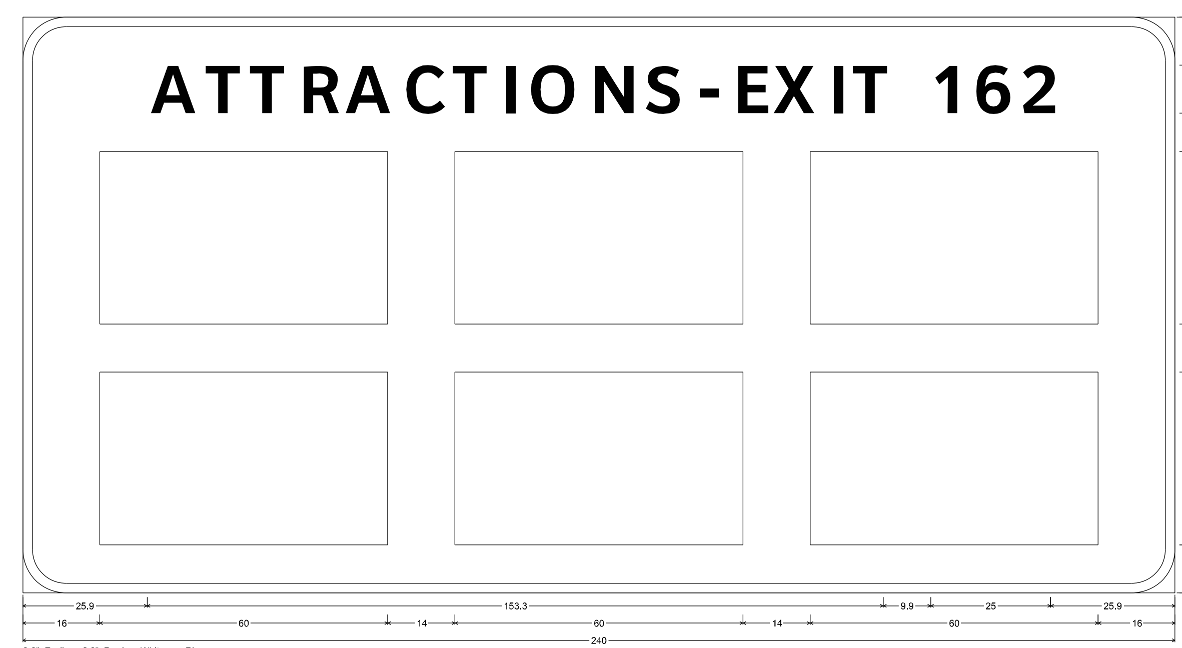
	F		O		O		D		-		E		X		I		T		1		6		2	
29.5	6.1	2.9	9.4	3.1	9.3	3.6	8.1	3.5	4.0	3.9	6.5	2.1	8.7	2.7	2.0	3.0	7.2	9.9	4.6	3.6	7.3	2.6	6.9	29.5

	□		□	
20.0	60.0	20.0	60.0	20.0

	□		□	
20.0	60.0	20.0	60.0	20.0

SN021

STA 5379+60 (N TRI-LEVEL ROADWAY C)



9.0" Radius, 2.0" Border, White on Blue;
[ATTRACTIONS-EXIT 162] ClearviewHwy-5-W; Rectangle Blue; Rectangle Blue; Rectangle Blue; Rectangle Blue; Rectangle Blue; Rectangle Blue;
Table of widths and spaces.

	A		T		T		R		A		C		T		I		O		N		S		-		E		X		I		T		1		6		2	
25.9	9.4	1.8	7.3	2.0	7.2	3.0	7.5	2.4	9.4	2.4	8.2	2.1	7.2	2.9	2.1	3.5	9.3	3.6	8.3	3.1	7.3	3.2	4.0	3.9	6.5	2.1	8.7	2.7	2.0	2.9	7.3	9.9	4.6	3.6	7.2	2.7	6.9	25.9

	□		□		□	
16.0	60.0	14.0	60.0	14.0	60.0	16.0

	□		□		□	
16.0	60.0	14.0	60.0	14.0	60.0	16.0

NOT TO SCALE

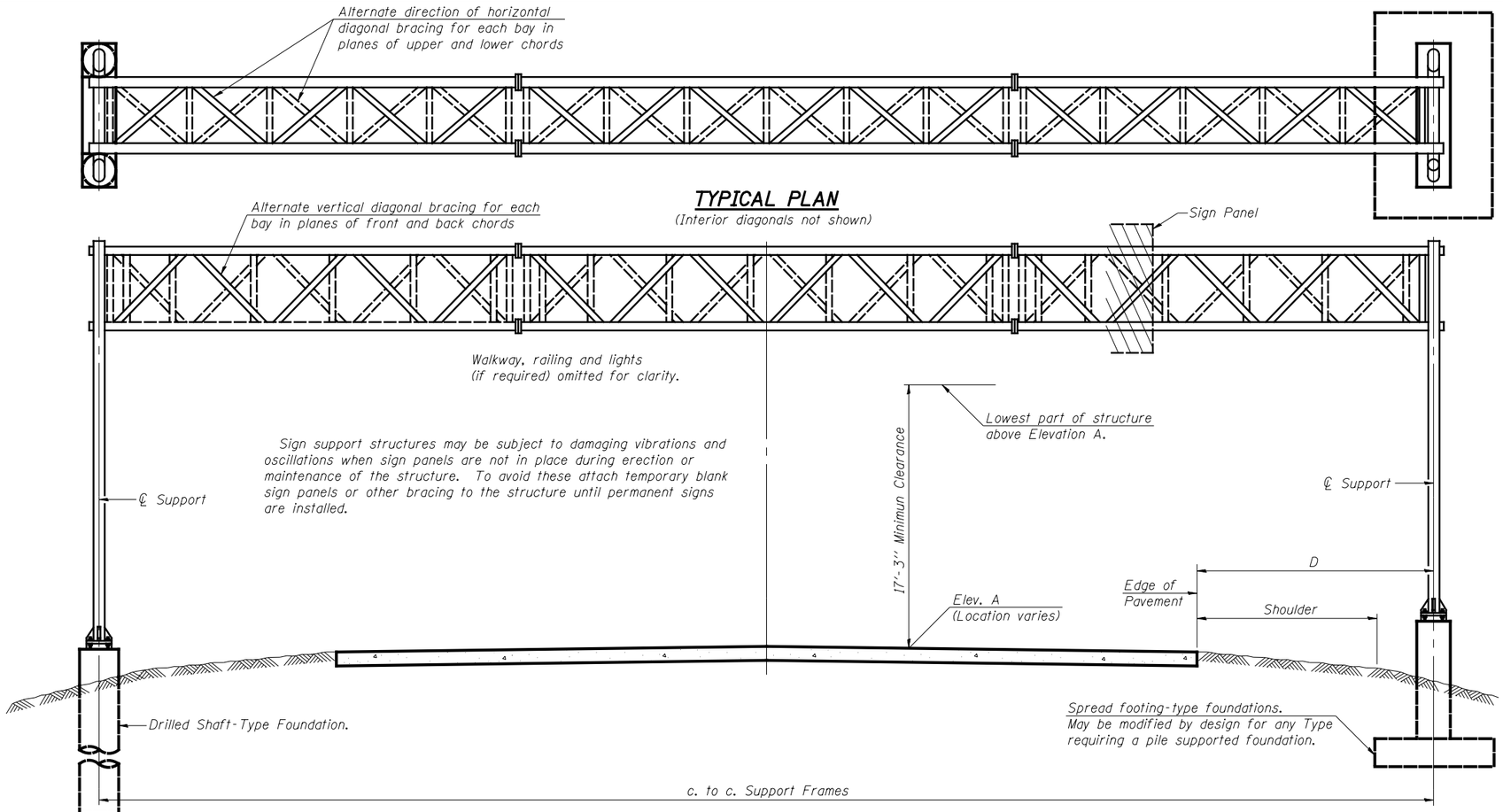
FILE NAME =	USER NAME = $USER$	DESIGNED - ESW	REVISED -
S:\Projects\403-00072_57-70\dgn\N TriLv\sign paneldetails.dgn		DRAWN - LEC	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -
	PLOT DATE = $DATE$	DATE - 8-05-09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGN PANEL DETAILS, FAI ROUTE 57/70

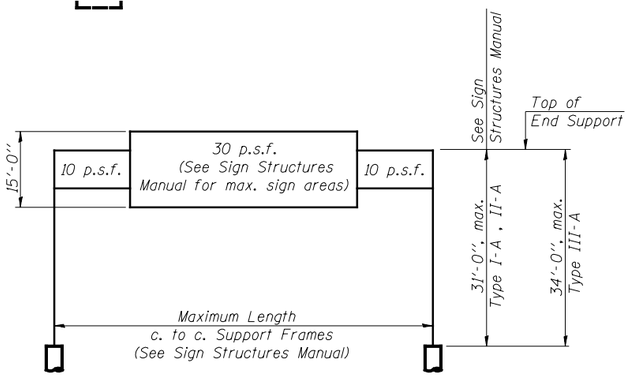
SCALE: 1"=50' | SHEET NO. 26 OF 58 SHEETS | STA. | TO STA.

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	408
		CONTRACT NO. 74295		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



TYPICAL PLAN

(Interior diagonals not shown)



DESIGN WIND LOADING DIAGRAM

Parameters shown are basis for I.D.O.T. Standards and Sign Manual Tables. Installations not within dimensional limits shown require special analysis for all components.

TYPICAL ELEVATION

(Looking at Face of Signs**)

Elev. A = Elevation at point of minimum clearance to sign, walkway support or truss.

Structure Number	Station	Design Truss Type	c. to c. Supports	Elev. A	Dim. D	Height of Tallest Sign	Total Sign Area
7S025I057R162.0	2290+50	I-A	86'-0"	631.54	18'-0"	15'-0"	576.25 SF
7S025I057R162.7	2326+30	I-A	74'-0"	601.69	18'-0"	11'-6"	373.75 SF
7S025I057R163.4	2351+00	I-A	84'-0"	603.66	18'-0"	10'-0"	275.00 SF
7S025I070L098.6	2387+00	I-A	77'-0"	608.47	18'-0"	11'-0"	381.50 SF
7S025I070L099.1	2412+00	I-A	60'-0"	606.09	18'-0"	11'-6"	455.00 SF

**Looking upstation for structures with signs both sides.

* If M270 Gr. 50W (M222) steel is proposed, chemistry for plate to be used shall first be approved by the Engineer as suitable for galvanizing and welding.

GENERAL NOTES

DESIGN: AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals. ("AASHTO Specifications")

CONSTRUCTION: Current (at time of letting) Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Supplemental Specifications and Special Provisions. ("Standard Specifications")

LOADING: 90 M.P.H. WIND VELOCITY

WALKWAY LOADING: Dead load plus 500 lbs. concentrated live load.

DESIGN STRESSES:
Field Units
f'c = 3,500 p.s.i.
fy = 60,000 p.s.i. (reinforcement)

WELDING: All welds to be continuous unless otherwise shown. All welding to be done in accordance with current AWS D1.1 and D1.2 Structural Welding Codes (Steel and Aluminum) and the Standard Specificiations.

MATERIALS: Aluminum Alloys as shown throughout plans. All Structural Steel Pipe shall be ASTM A53 Grade B or A500 Grade B or C. If A500 pipe is substituted for A53, then the outside diameter shall be as detailed and wall thickness greater than or equal to A53. All Structural Steel Plates and Shapes shall conform to AASHTO M270 Gr. 36, Gr. 50 or Gr. 50W*. Stainless steel for shims, sleeves and handhole covers shall be ASTM A240, Type 302 or 304, or another alloy suitable for exterior exposure and acceptable to the Engineer.
The steel pipe and stiffening ribs at the base plate for the column shall have a minimum longitudinal Charpy V-Notch (CVN) energy of 15 lb.-ft. at 40° F. (Zone 2) before galvanizing.

FASTENERS FOR ALUMINUM TRUSSES: All bolts noted as "high strength" must satisfy the requirements of AASHTO M164 (ASTM A325), or approved alternate, and must have matching lock nuts. Threaded studs for splices (if Members interfere) must satisfy the requirements of ASTM A449, ASTM A193, Grade B7, or approved alternate, and must have matching lock nuts. Bolts and lock nuts not required to be high strength must satisfy the requirements of ASTM A307. All bolts and lock nuts must be hot dip galvanized per AASHTO M232. The lock nuts must have nylon or steel inserts. A stainless steel flat washer conforming to ASTM A240 Type 302 or 304, is required under both head and nut or under both nuts where threaded studs are used. High strength bolt installation shall conform to Article 505.04 (f) (2)d of the IDOT Standard Specifications for Road and Bridge Construction. Rotational capacity ("ROCAP") testing of bolts will not be required.

U-BOLTS AND EYEBOLTS: U-Bolts and Eyebolts must be produced from ASTM A276 Type 304, 304L, 316 or 316L, Condition A, cold finished stainless steel, or an equivalent material acceptable to the Engineer. All nuts for U-Bolts and Eyebolts must be lock nuts equivalent to ASTM A307 with nylon or steel inserts and hot dip galvanized per AASHTO M232. A stainless steel flat washer conforming to ASTM A240, Type 302 or 304, is required under each U-Bolt and Eyebolt lock nut.

GALVANIZING: All Steel Grating, Plates, Shapes and Pipe shall be Hot Dip Galvanized after fabrication in accordance with AASHTO M111. Painting is not permitted.

ANCHOR RODS: Shall conform to ASTM F1554 Gr. 105.

CONCRETE SURFACES: All concrete surfaces above an elevation 6" below the lowest final ground line at each foundation shall be cleaned and coated with Bridge Seat Sealer in accordance with the Standard Specifications.

REINFORCEMENT BARS: Reinforcement Bars designated (E) shall be epoxy coated in accordance with the Standard Specifications.

FOUNDATIONS: The contract unit price for Concrete Foundations and Drilled Shaft Concrete Foundations shall include reinforcement bars complete in place.

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
OVERHEAD SIGN STRUCTURE SPAN TYPE I-A	Foot	381'-0"
OVERHEAD SIGN STRUCTURE SPAN TYPE II-A	Foot	
OVERHEAD SIGN STRUCTURE SPAN TYPE III-A	Foot	
OVERHEAD SIGN STRUCTURE WALKWAY TYPE A	Foot	232'-0"
CONCRETE FOUNDATIONS	Cu. Yds.	19.6
DRILLED SHAFT CONCRETE FOUNDATIONS	Cu. Yds.	95.7

OS-A-1 6-1-12

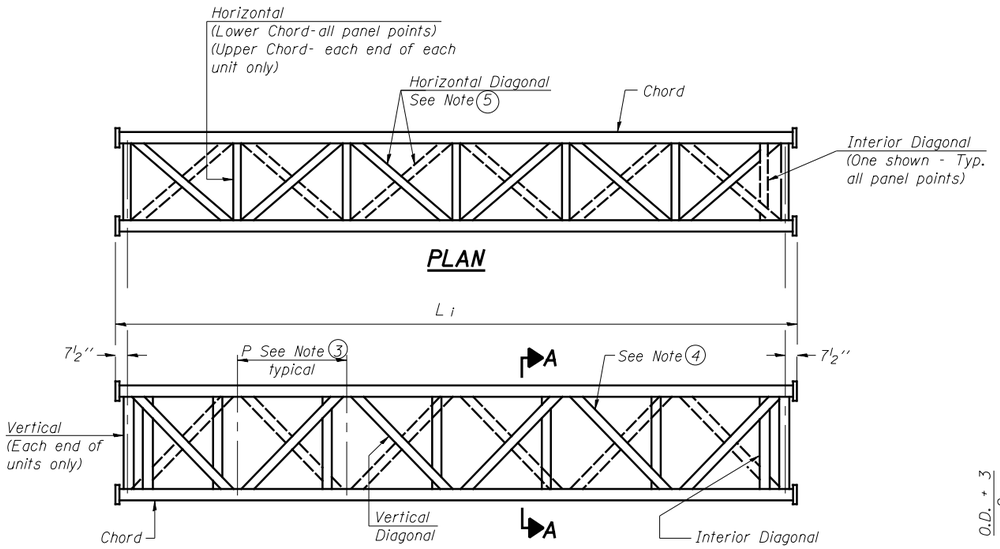
FILE NAME =	USER NAME =	DESIGNED - ESW	REVISED -
		CHECKED - JWS	REVISED -
	PLOT SCALE =	DRAWN - PDB	REVISED -
	PLOT DATE =	CHECKED - BRM	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES - GENERAL PLAN & ELEVATION - ALUMINUM TRUSS & STEEL SUPPORTS

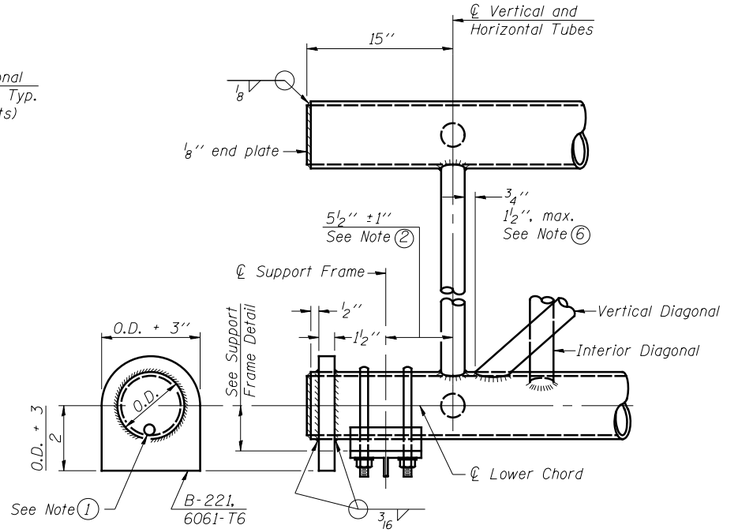
SHEET NO. 22 OF 53 SHEETS

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	409
		CONTRACT NO. 74295		
		ILLINOIS FED. AID PROJECT		

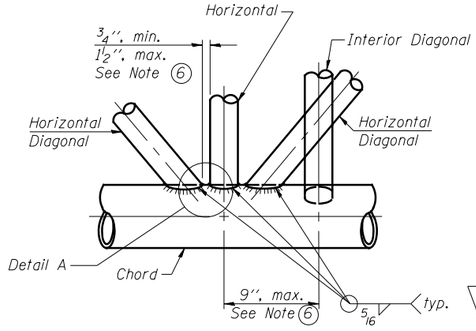


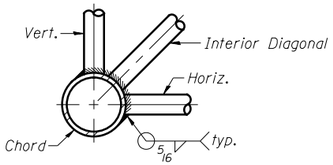
ELEVATION
TYPICAL INTERIOR UNIT

Even number of panels/interior unit required.

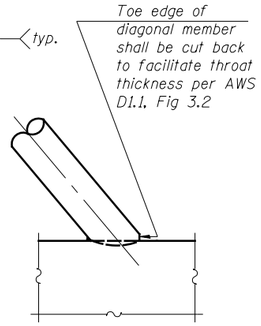


SUPPORT END DETAIL FOR EXTERIOR UNIT

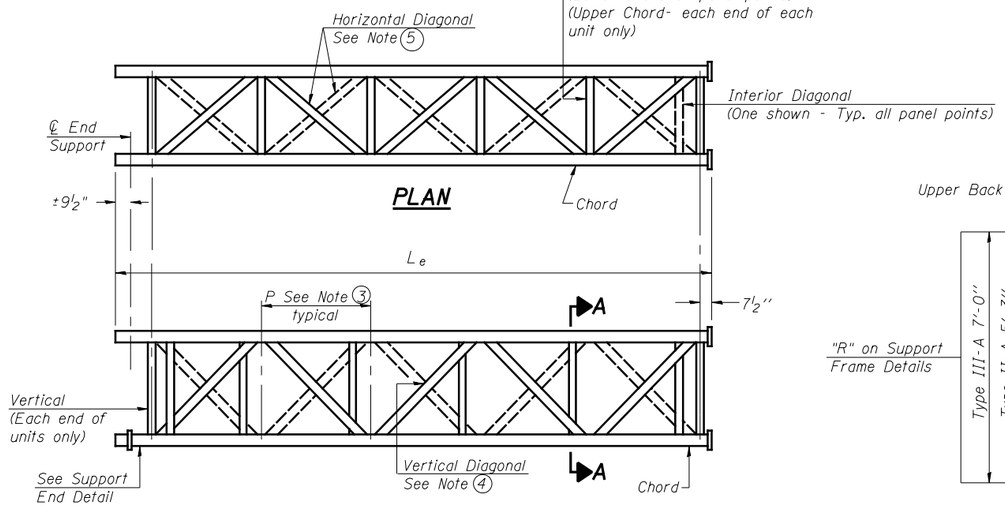




TYPICAL JOINT DETAILS

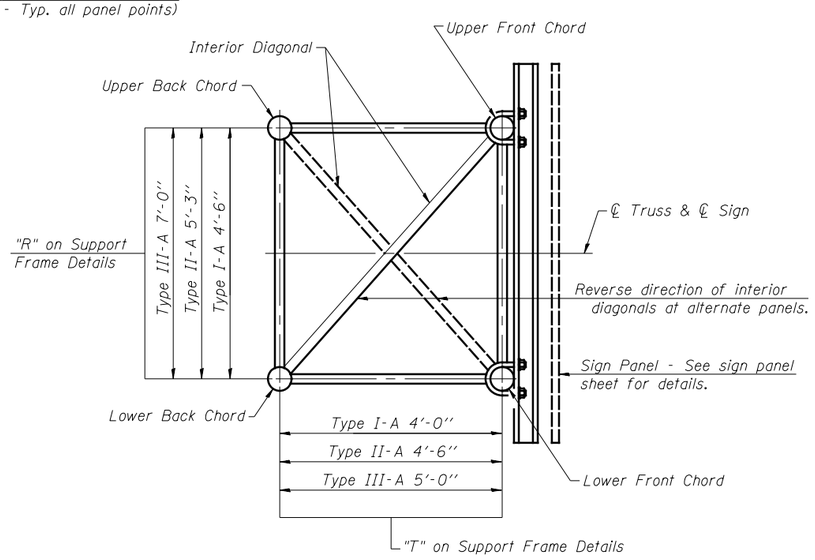


DETAIL A



ELEVATION
TYPICAL EXTERIOR UNIT

Even or odd number of panels/exterior units allowed.



SECTION A-A

1. Contractor may alternatively use standard aluminum drive-fit cap to close end. ½" ϕ drain hole in end plate/drive-fit cap. (Typ. at ends of all chords)
2. 5½" end dimension may vary by ±1" to provide uniform panel spacing (P).
3. Panel spacing (P) shall be uniform for entire truss and between 4'-0" and 5'-0" for Type I-A or 4'-0" and 5'-6" for Types II-A and III-A.
4. Vertical Diagonals in front and back face shall alternate.
5. Hidden lines show wind bracing alternates direction between planes of top and bottom chords.
6. All diagonals shall be detailed for minimum offset from the panel point based on the following: Offset shall be such as to provide a ¾" minimum to 1½" maximum clearance between any diagonal and any horizontal or vertical member, and to provide clearance for U-bolt connections of signs or walkway brackets.

OS-A-2 6-1-12

FILE NAME =	USER NAME =	DESIGNED - ESW	REVISED -
		CHECKED - JWS	REVISED -
	PLOT SCALE =	DRAWN - PDB	REVISED -
	PLOT DATE =	CHECKED - BRM	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

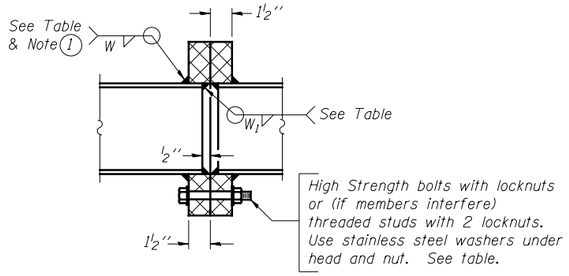
OVERHEAD SIGN STRUCTURES – ALUMINUM TRUSS
DETAILS FOR TRUSS TYPES I-A, II-A AND III-A

SHEET NO. 23 OF 53 SHEETS

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	410
		CONTRACT NO. 74295		
	ILLINOIS FED. AID PROJECT			

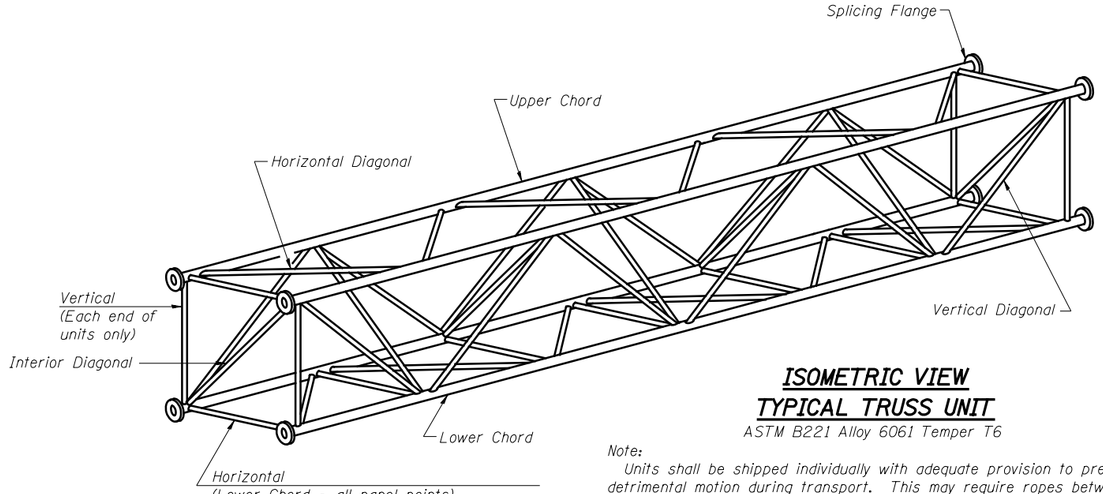
TRUSS UNIT TABLE

Structure Number	Station	Design Truss Type	Exterior Units (2)			Interior Unit				Upper & Lower Chord		Verticals; Horizontals; Vertical, Horizontal, and Interior Diagonals		Camber at Midspan	Splicing Flange					
			No. Panels per Unit	Unit Lgth.(L_e)	Panel Lgth.(P)	No. Req'd.	No. Panels per Unit	Unit Lgth.(L_I)	Panel Lgth.(P)	O.D.	Wall	O.D.	Wall		Bolts		Weld Sizes		A	B
															No./Splice	Dia.	W	W_1		
7S025I057R162.0	2290+50	I-A	6	29'-4 1/2"	4'-7"	1	6	28'-9"	4'-7"	5"	5/16"	2 1/2"	5/16"	2.55"	6	7/8"	5/16"	1/4"	8 3/4"	11 3/4"
7S025I057R162.7	2326+30	I-A	8	37-10 1/2"	4'-6"	0	-	-	-	5"	5/16"	2 1/2"	5/16"	1.95"	6	7/8"	5/16"	1/4"	8 3/4"	11 3/4"
7S025I057R163.4	2351+00	I-A	6	28'-9"	4'-5 3/4"	1	6	28'-1 1/2"	4'-5 3/4"	5"	5/16"	2 1/2"	5/16"	2.45"	6	7/8"	5/16"	1/4"	8 3/4"	11 3/4"
7S025I070L098.6	2387+00	I-A	8	39'-2 1/2"	4'-8"	0	-	-	-	5"	5/16"	2 1/2"	5/16"	2.10"	6	7/8"	5/16"	1/4"	8 3/4"	11 3/4"
7S025I070L099.1	2412+00	I-A	6	30'-10 1/2"	4'-10"	0	-	-	-	5"	1/4"	2 1/2"	1/4"	1.25"	6	7/8"	5/16"	1/4"	8 3/4"	11 3/4"



SECTION B-B

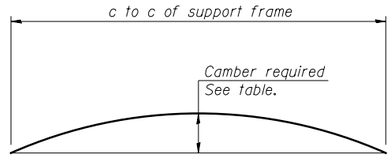
(1) Splicing Flanges shall be attached to each truss unit with the truss shop assembled to camber shown. Truss units shall be in proper alignment and flange surfaces shall be shop bolted into full contact before welding. Sufficient external welds or tacks shall be made to secure flanges until remaining welds are made after disassembly. Adjacent flanges shall be "match marked" to insure proper field assembly.



ISOMETRIC VIEW
TYPICAL TRUSS UNIT

ASTM B221 Alloy 6061 Temper T6

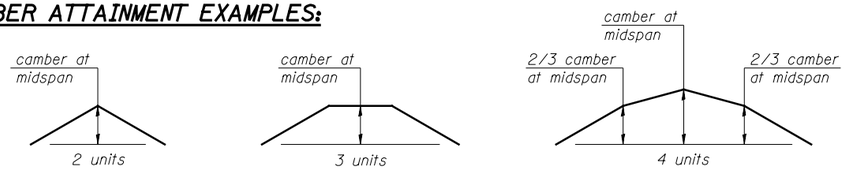
Note:
Units shall be shipped individually with adequate provision to prevent detrimental motion during transport. This may require ropes between horizontals and diagonals or energy dissipating (elastic) ties to the vehicle. The Contractor is responsible for maintaining the configuration and protection of the units.



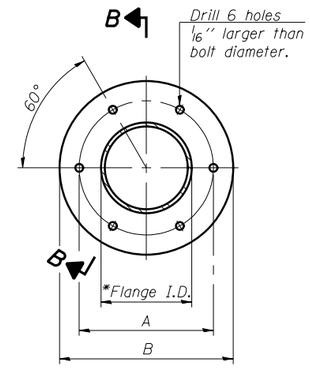
CAMBER DIAGRAM

Camber curve shown is theoretical. Actual camber attained by slope changes at splices between units.

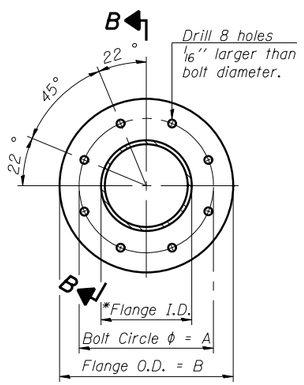
CAMBER ATTAINMENT EXAMPLES:



Camber shown is for fabrication only, measured with truss fully supported. (No-load condition)



TRUSS TYPES I-A, II-A, & III-A



TRUSS TYPES II-A & III-A

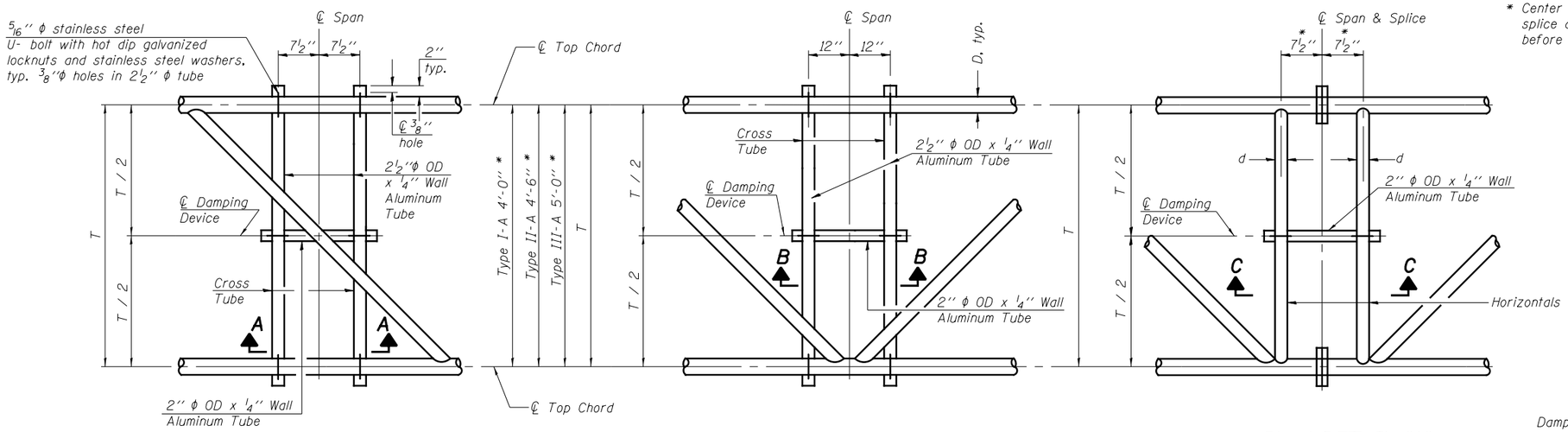
SPLICING FLANGES

ASTM B221, Alloy 6061-T6
or ASTM B209, Alloy 6061-T651
*To fit O.D. of Chord with maximum gap of 1/16".

OS4-A-2 6-1-12

FILE NAME =	USER NAME =	DESIGNED - ESW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	OVERHEAD SIGN STRUCTURES – ALUMINUM TRUSS DETAILS FOR TRUSS TYPES I-A, II-A AND III-A
		CHECKED - JWS	REVISED -		
	PLOT SCALE =	DRAWN - PDB	REVISED -		
	PLOT DATE =	CHECKED - BRM	REVISED -		SHEET NO. 24 OF 53 SHEETS

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	411
		CONTRACT NO. 74295		
	ILLINOIS	FED. AID PROJECT		



* Center of horizontal to center of splice dimension may vary. Verify before drilling holes in mounting tube.

PLAN DETAIL "A"
℄ Span between Panel Points

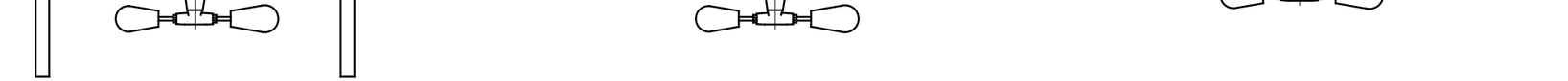
PLAN DETAIL "B"
℄ Span at Panel Point

PLAN DETAIL "C"
℄ Span at ℄ Chord Splice

NOTES

Damper: One damper per truss. (31 lbs. minimum Stockbridge-Type Aluminum - 29'' minimum between ends of weights) Cost included in Overhead Sign Structure...

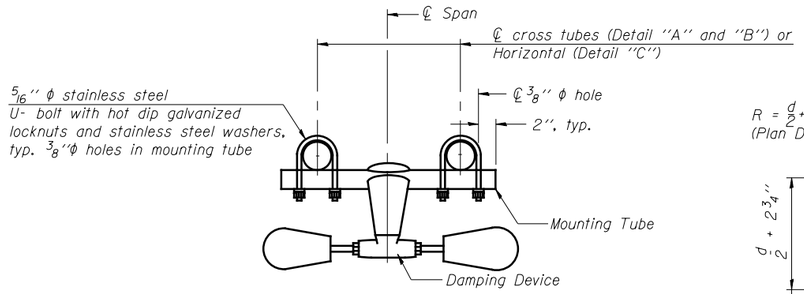
Materials: Materials: Aluminum tubes shall be ASTM B221 alloy 6061 temper T6. Cost included in Overhead Sign Structure...



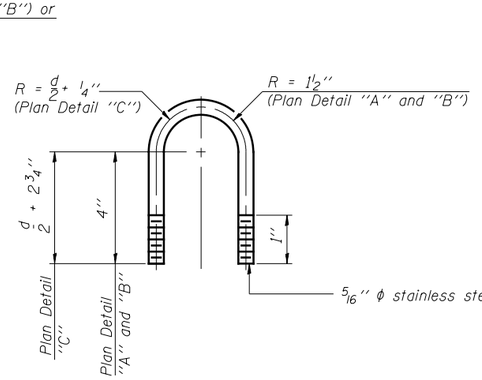
SECTION A-A

SECTION B-B

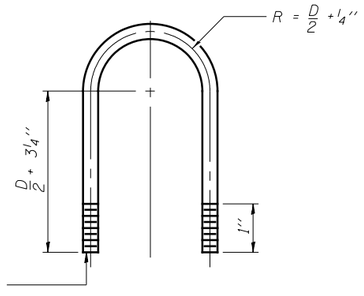
SECTION C-C



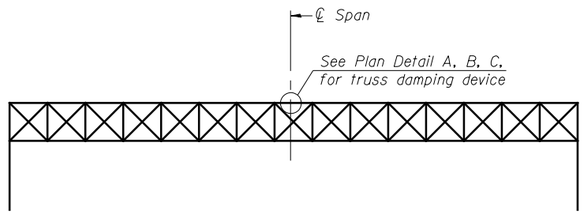
TRUSS DAMPING DEVICE CONNECTION DETAIL
(Typical)



DAMPING DEVICE MOUNTING TUBE U-BOLT DETAIL
(Typical)



TOP CHORD TO CROSS TUBE U-BOLT DETAIL
(Typical - Detail ''A'' and ''B'')



ELEVATION
Aluminum Overhead Sign Truss

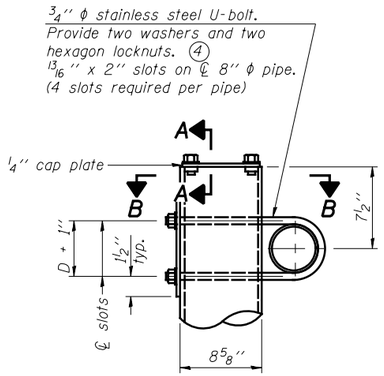
OS-A-D 6-1-12

FILE NAME =	USER NAME =	DESIGNED - ESW	REVISED -
		CHECKED - JWS	REVISED -
	PLOT SCALE =	DRAWN - PDB	REVISED -
	PLOT DATE =	CHECKED - BRM	REVISED -

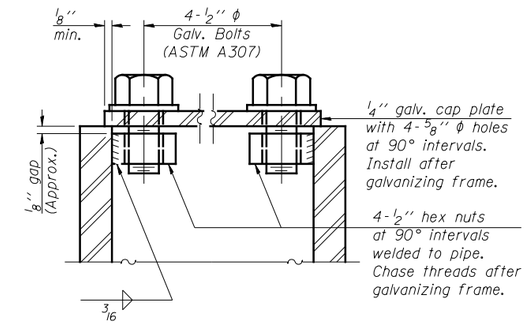
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURE
DAMPING DEVICE
SHEET NO. 25 OF 53 SHEETS

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	412
		CONTRACT NO. 74295		
	ILLINOIS FED. AID PROJECT			

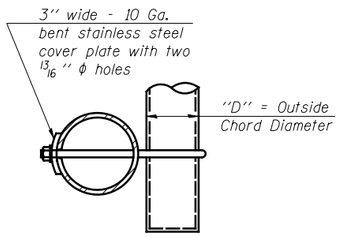


DETAIL A

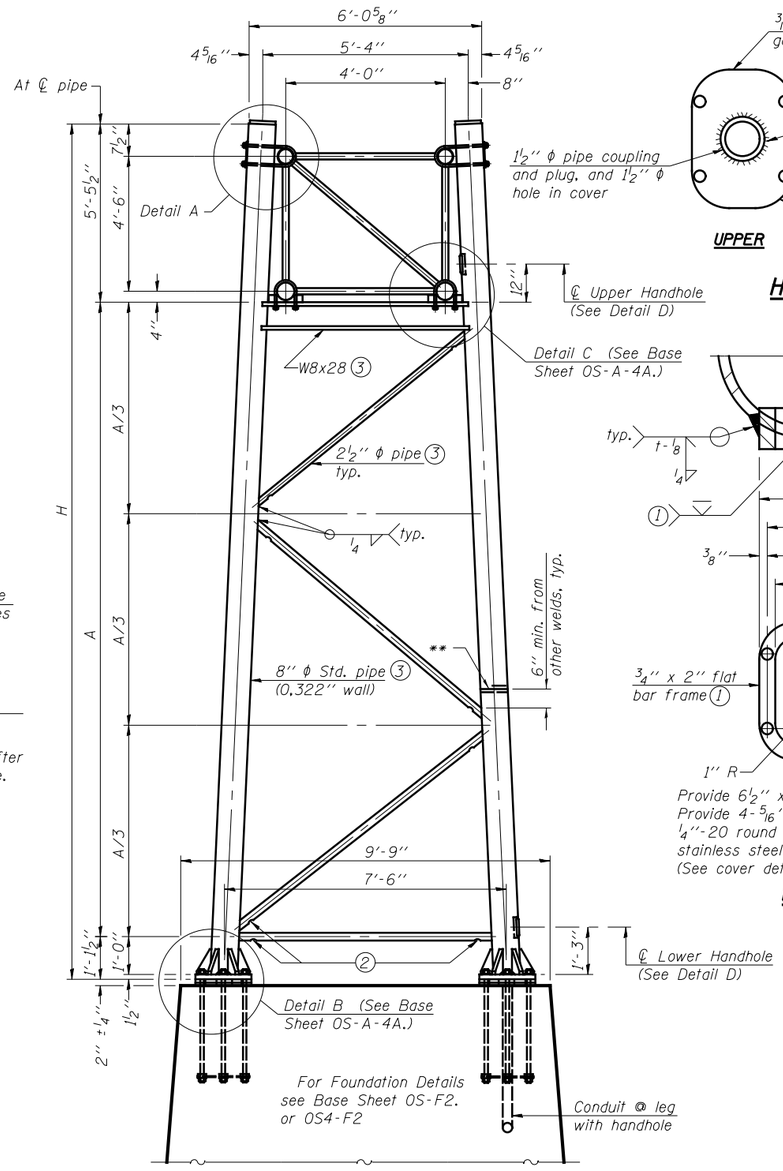


SECTION A-A

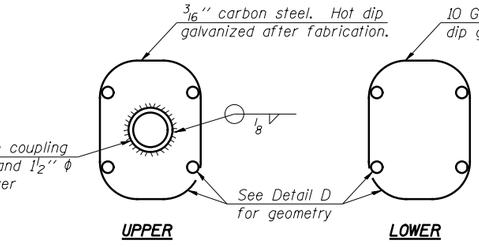
As an alternate to bolts, may use galvanized drive-fit caps installed after galvanizing frame.



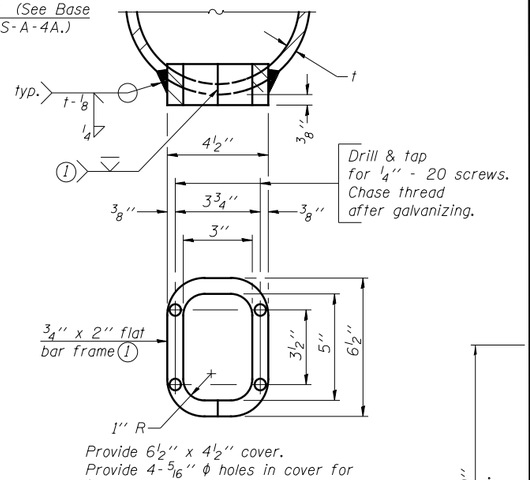
SECTION B-B



SIDE ELEVATION

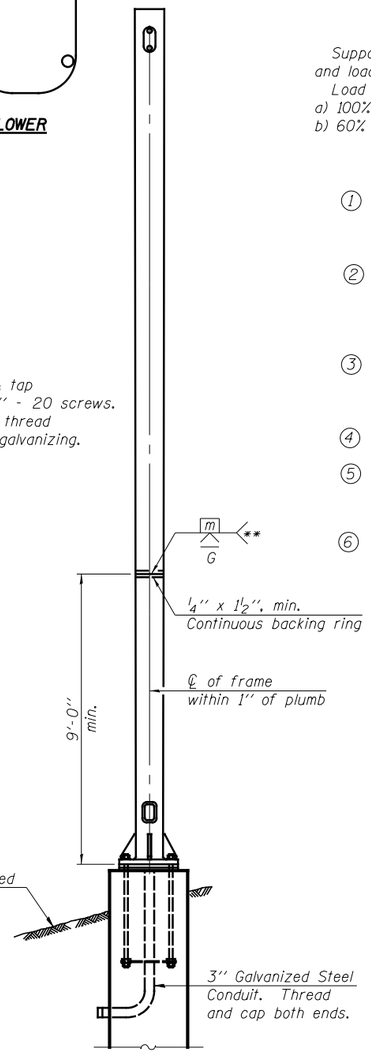


HANDHOLE COVERS



Provide 6 1/2'' x 4 1/2'' cover.
Provide 4-5/16'' ϕ holes in cover for 1/4''-20 round head hot dip galvanized or stainless steel machine screws.
(See cover details)

DETAIL D



END ELEVATION

Support Design Loads: See Base Sheet OS-A-1 for design and loading criteria.
Load combinations checked include deadload plus:
a) 100% wind normal to sign, 20% parallel to sign
b) 60% wind normal to sign, 30% parallel to sign

(1) In lieu of fabricated handhole frame as shown, may cut from 2'' plate (rolling direction vertical). All cut faces to be ground to ANSI Roughness of 500 μin or less.

(2) Galvanizing vent holes of adequate size shall be provided on underside at each end of bracing pipes. Alternately, holes may be provided in wall of pipe column. All vent holes shall be drilled and de-burred, typ.

(3) Steel pipe, plate, carbon steel handhole covers and rolled sections shall be hot dip galvanized after fabrication. Painting is not permitted. See Base Sheet OS-A-1.

(4) See General Notes for fasteners.

(5) Dimensions shown are based on selection criteria in the Sign Structures Manual. Nonstandard applications must have dimensions verified or amended as appropriate.

(6) "H" based on 15'-0'' or actual sign height, whichever is greater.

8'' ϕ PIPE TRUSS SUPPORT FRAME

** One butt welded joint is allowed only on one post per support frame. If used, weld procedure must be pre-approved by Engineer and joint shall receive 100% RT or UT (tension criteria) at Contractor's expense.

Structure Number	Station	Support Left	Support Right	H (6)	A
7S025I057R162.7	2326+30		✓	27'-5"	20'-10"
7S025I057R162.7	2326+30	✓		26'-5"	19'-10"
7S025I070L099.1	2412+00		✓	27'-11"	21'-4"
7S025I070L099.1	2412+00	✓		27'-5"	20'-10"

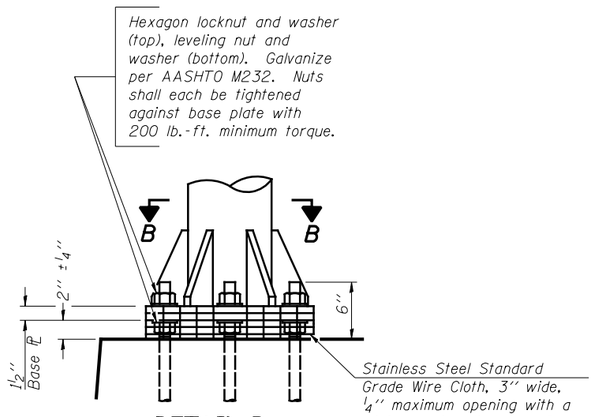
OS-A-4 6-1-12

FILE NAME =	USER NAME =	DESIGNED - ESW	REVISED -
		CHECKED - JWS	REVISED -
	PLOT SCALE =	DRAWN - PDB	REVISED -
	PLOT DATE =	CHECKED - BRM	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

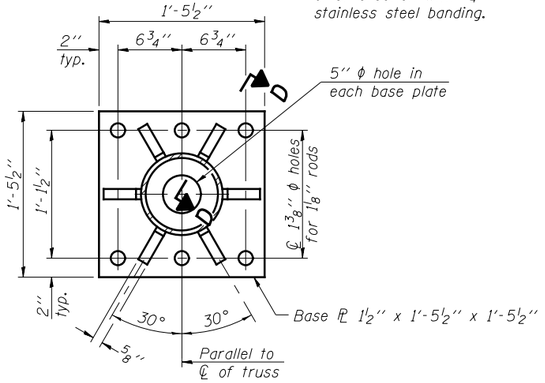
OVERHEAD SIGN STRUCTURES
SUPPORT FRAME FOR TYPE I-A ALUMINUM TRUSS
SHEET NO. 26 OF 53 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	413
		CONTRACT NO. 74295		
	ILLINOIS	FED. AID PROJECT		

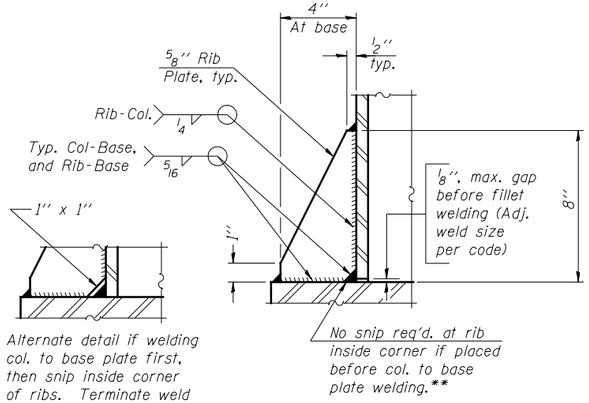


DETAIL B

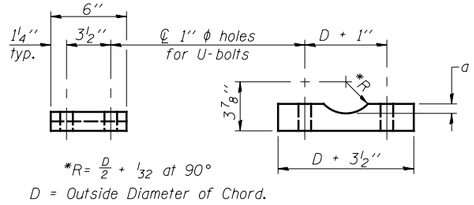
Ribs shall be cut to fit slope of pipe.



SECTION B-B



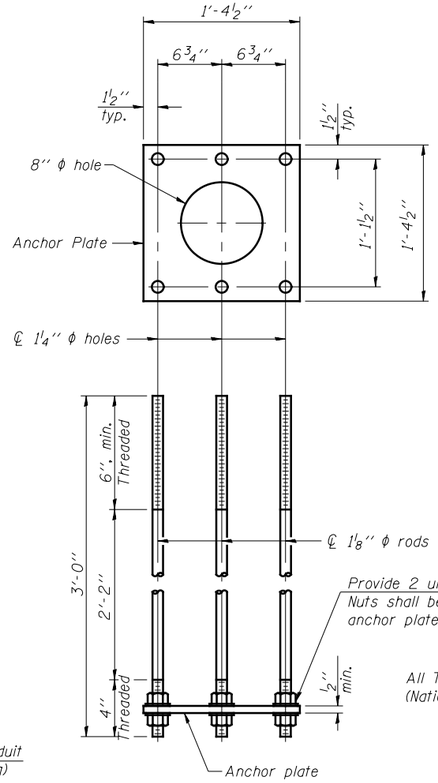
SECTION D-D



SADDLE SHIM DETAIL

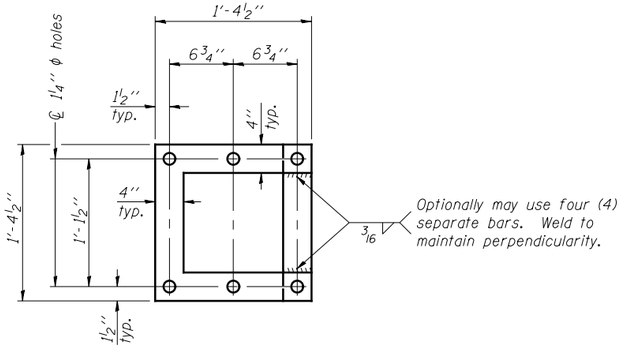
ASTM B26 Alloy 356-F
or
ASTM B209 Alloy 6061-T651
(4 required per sign truss)

Truss Chord Nominal Dia.	a
5''	3/4''
5 1/2''	13/16''
6''	7/8''
6 1/2''	15/16''

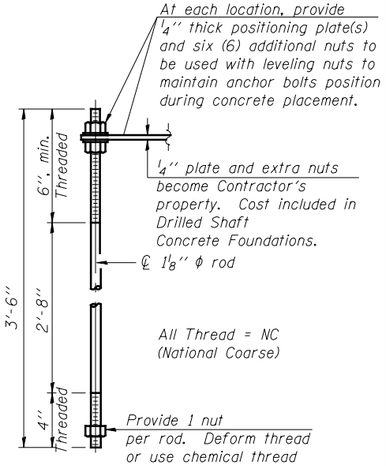


ANCHOR ROD DETAIL

Spread Footing Foundation



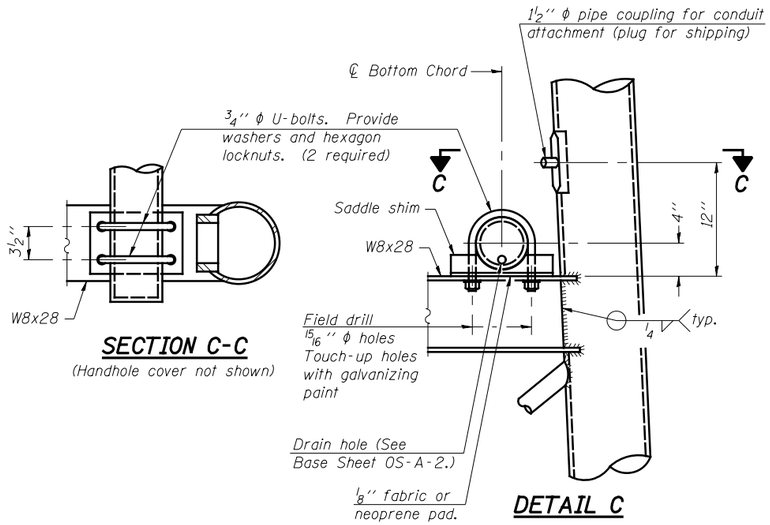
POSITIONING PLATE(S)



ANCHOR ROD DETAIL

Drilled Shaft Foundation

Anchor rods shall conform to ASTM F1554 Grade 105. Galvanize upper 12'' minimum per AASHTO M232. No welding shall be permitted on rods.



SECTION C-C

(Handhole cover not shown)

DETAIL C

TYPE I-A TRUSS
8'' ϕ PIPE SUPPORT FRAME DETAILS

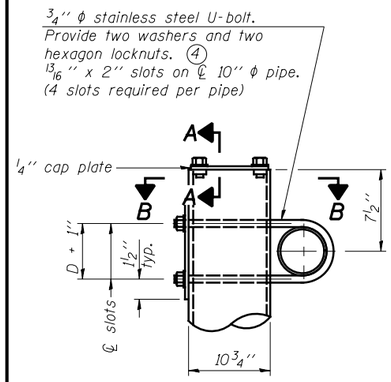
OS-A-4A 6-1-12

FILE NAME =	USER NAME =	DESIGNED - ESW	REVISED -
		CHECKED - JWS	REVISED -
	PLOT SCALE =	DRAWN - PSB	REVISED -
	PLOT DATE =	CHECKED - BRM	REVISED -

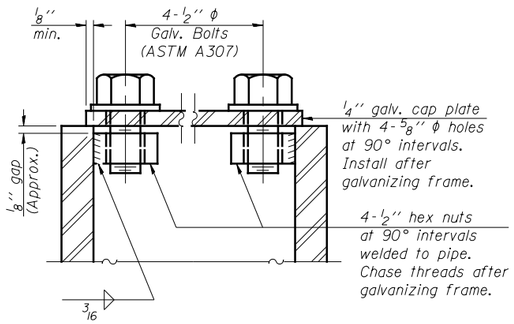
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES
SUPPORT FRAME DETAILS – ALUMINUM TRUSS
SHEET NO. 27 OF 53 SHEETS

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	414
		CONTRACT NO. 74295		
	ILLINOIS FED. AID PROJECT			

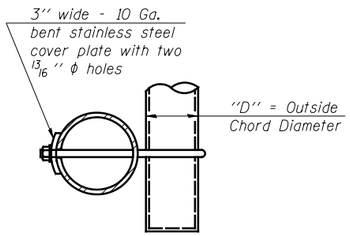


DETAIL A

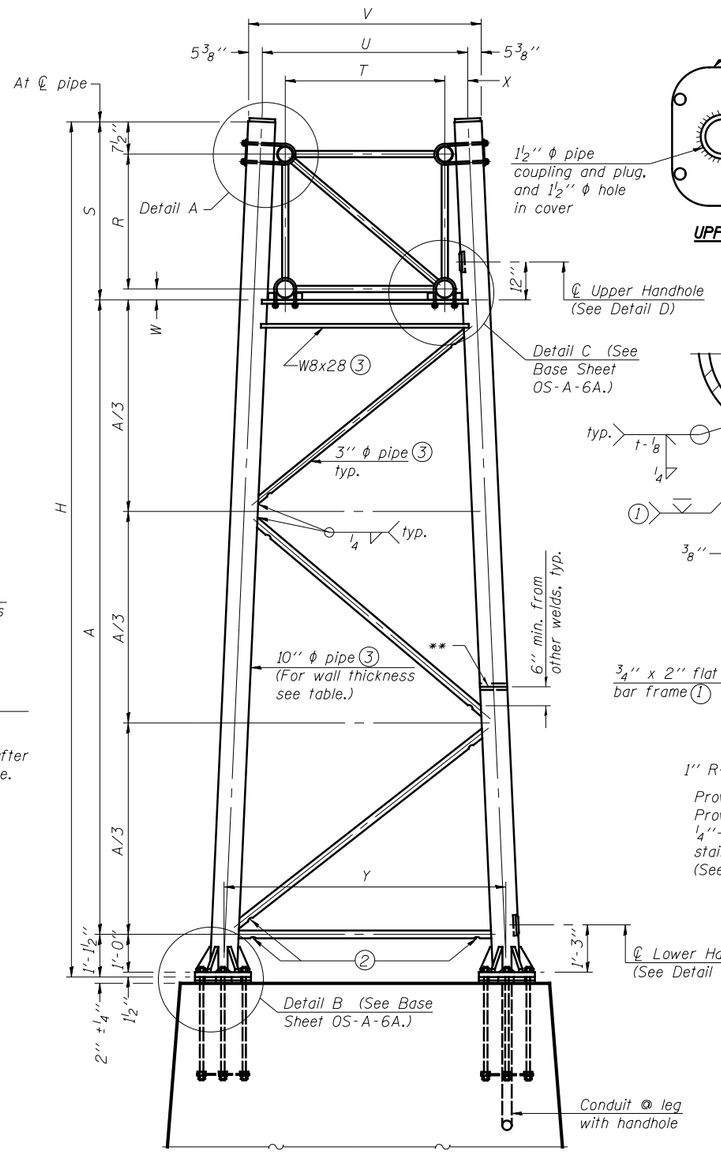


SECTION A-A

As an alternate to bolts, may use galvanized drive-fit caps installed after galvanizing frame.

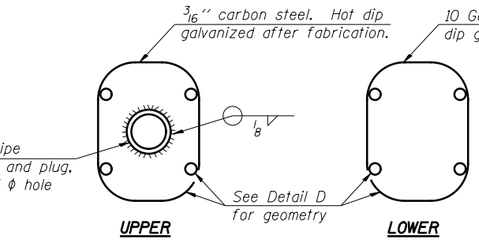


SECTION B-B

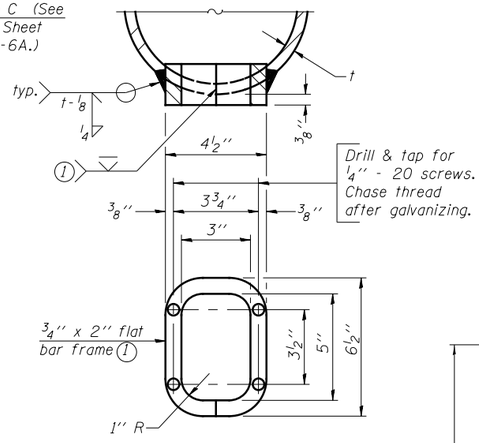


For Foundation Details, see base sheet OS-F3 (Spread Footing) or OS4-F3 (Drilled Shaft).

SIDE ELEVATION

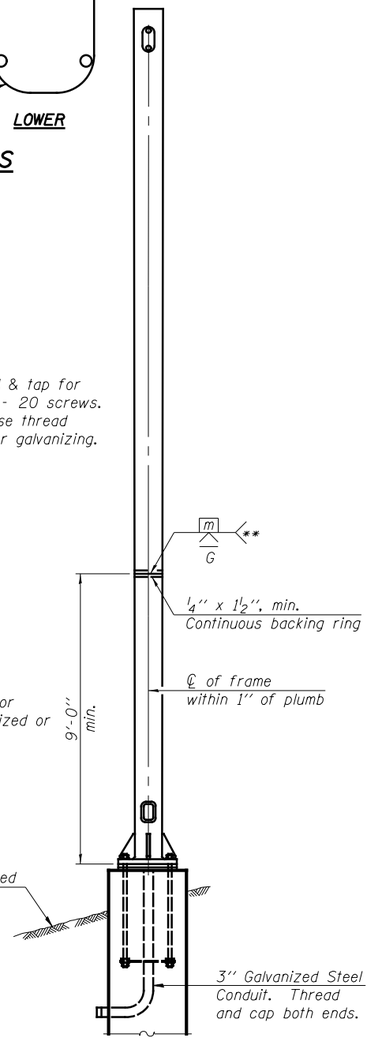


HANDHOLE COVERS



Provide 6 1/2'' x 4 1/2'' cover.
Provide 4-5/16'' ϕ holes in cover for 1/4''-20 round head hot dip galvanized or stainless steel machine screws.
(See cover details)

DETAIL D



END ELEVATION

Support Design Loads: See Base Sheet OS-A-1 for design and loading criteria.
Load combinations checked include deadload plus:
a) 100% wind normal to sign, 20% parallel to sign
b) 60% wind normal to sign, 30% parallel to sign

(1) In lieu of fabricated handhole frame as shown, may cut from 2'' plate (rolling direction vertical). All cut faces to be ground to ANSI Roughness of 500 μin or less.

(2) Galvanizing vent holes of adequate size shall be provided on underside at each end of bracing pipes. Alternately, holes may be provided in wall of pipe column. All vent holes shall be drilled and de-burred, typ.

(3) Steel pipe, plate, carbon steel handhole covers and rolled sections shall be hot dip galvanized after fabrication. Painting is not permitted. See Base Sheet OS-A-1.

(4) See General Notes for fasteners.

(5) Dimensions shown are based on selection criteria in the Sign Structures Manual. Nonstandard applications must have dimensions verified or amended as appropriate.

(6) "H" based on 15'-0'' or actual sign height, whichever is greater.

Truss Type	Dimensions							
	R	S	T	U	V	W	X	Y
I-A	4'-6''	5'-5 1/2''	4'-0''	5'-6''	6'-4 3/4''	4''	9''	8'-3''
II-A (5)	5'-3''	6'-3 1/4''	4'-6''	6'-1''	6'-11 3/4''	4 3/4''	9 1/2''	8'-3''

10'' ϕ PIPE TRUSS SUPPORT FRAME

** One butt welded joint is allowed only on one post per support frame. If used, weld procedure must be pre-approved by Engineer and joint shall receive 100% RT or UT (tension criteria) at Contractor's expense.

Structure Number	Station	Support		Truss Type	Pipe Wall Thickness	H (6)	A
		Left	Right				
7S025I057R162.0	2290+50		✓	I-A	0.279	28'-4"	21'-9"
7S025I057R162.0	2290+50	✓		I-A	0.279	26'-4"	19'-9"
7S025I057R163.4	2351+00	✓		I-A	0.279	28'-5"	21'-10"
7S025I057R163.4	2351+00		✓	I-A	0.279	27'-5"	20'-10"
7S025I070L098.6	2387+00	✓		I-A	0.279	29'-1"	22'-6"
7S025I070L098.6	2387+00		✓	I-A	0.279	27'-9"	21'-3"

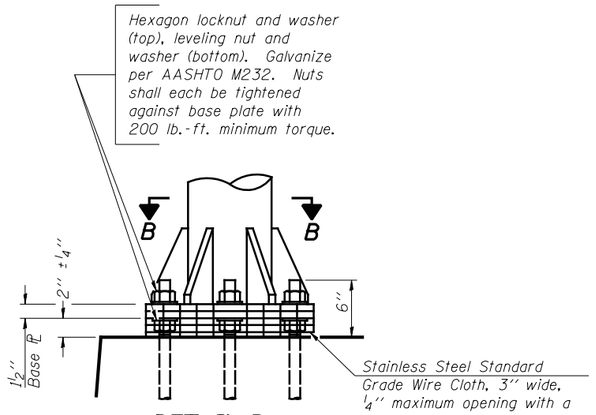
OS-A-6 6-1-12

FILE NAME =	USER NAME =	DESIGNED - ESW	REVISED -
		CHECKED - JWS	REVISED -
	PLOT SCALE =	DRAWN - PDB	REVISED -
	PLOT DATE =	CHECKED - BRM	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

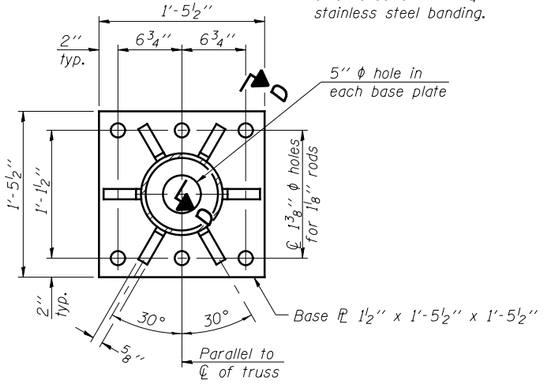
OVERHEAD SIGN STRUCTURES
SUPPORT FRAME FOR ALUMINUM TRUSS
SHEET NO. 28 OF 53 SHEETS

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	415
		CONTRACT NO. 74295		
	ILLINOIS FED. AID PROJECT			

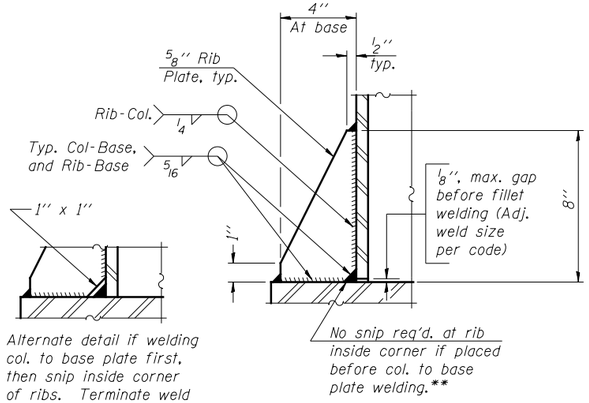


DETAIL B

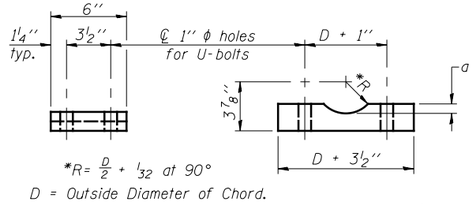
Ribs shall be cut to fit slope of pipe.



SECTION B-B



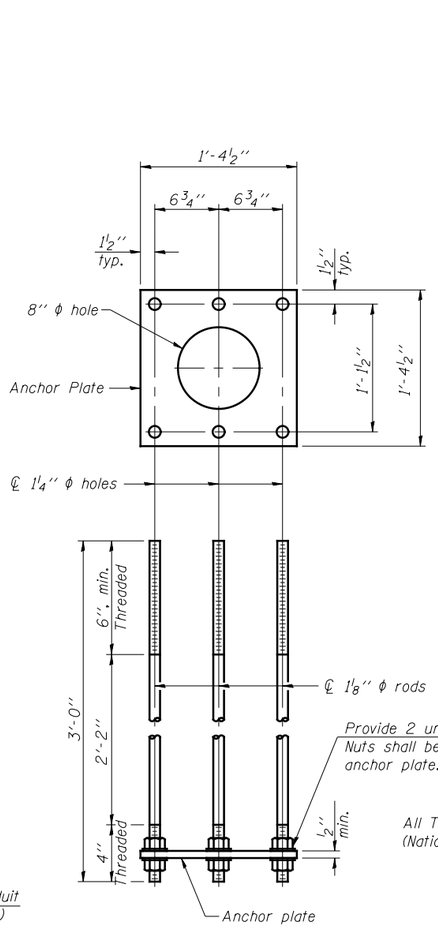
SECTION D-D



SADDLE SHIM DETAIL

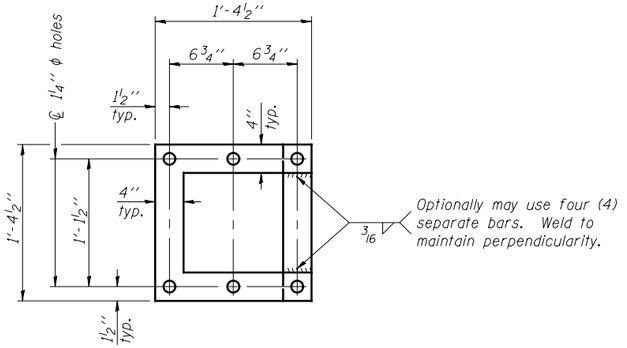
ASTM B26 Alloy 356-F
or
ASTM B209 Alloy 6061-T651
(4 required per sign truss)

Truss Chord Nominal Dia.	a
5''	3/4''
5 1/2''	13/16''
6''	7/8''
6 1/2''	15/16''

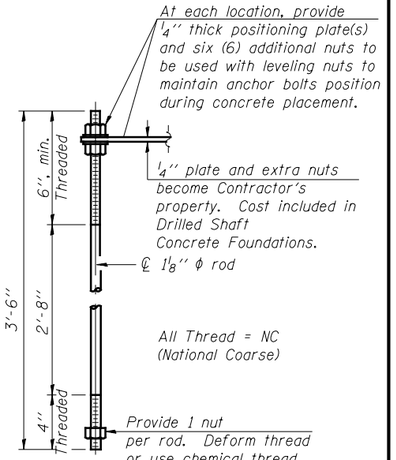


ANCHOR ROD DETAIL

Spread Footing Foundation



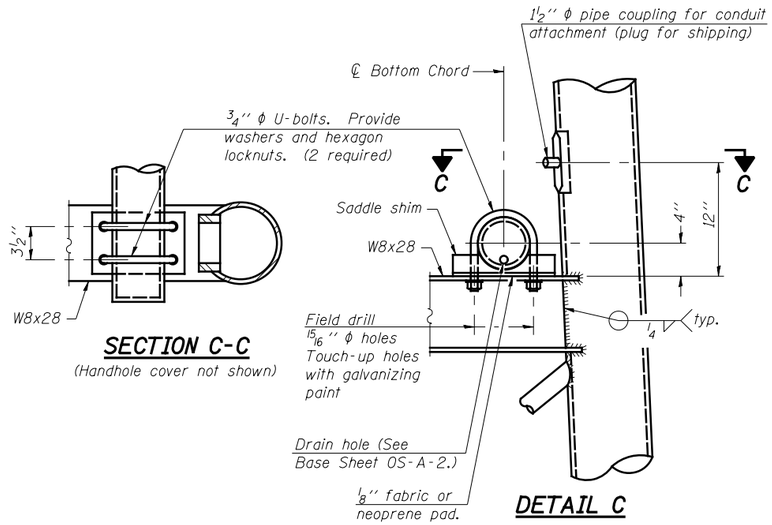
POSITIONING PLATE(S)



ANCHOR ROD DETAIL

Drilled Shaft Foundation

Anchor rods shall conform to ASTM F1554 Grade 105. Galvanize upper 12'' minimum per AASHTO M232. No welding shall be permitted on rods.



SECTION C-C

(Handhole cover not shown)

DETAIL C

TYPE I-A TRUSS
8'' ϕ PIPE SUPPORT FRAME DETAILS

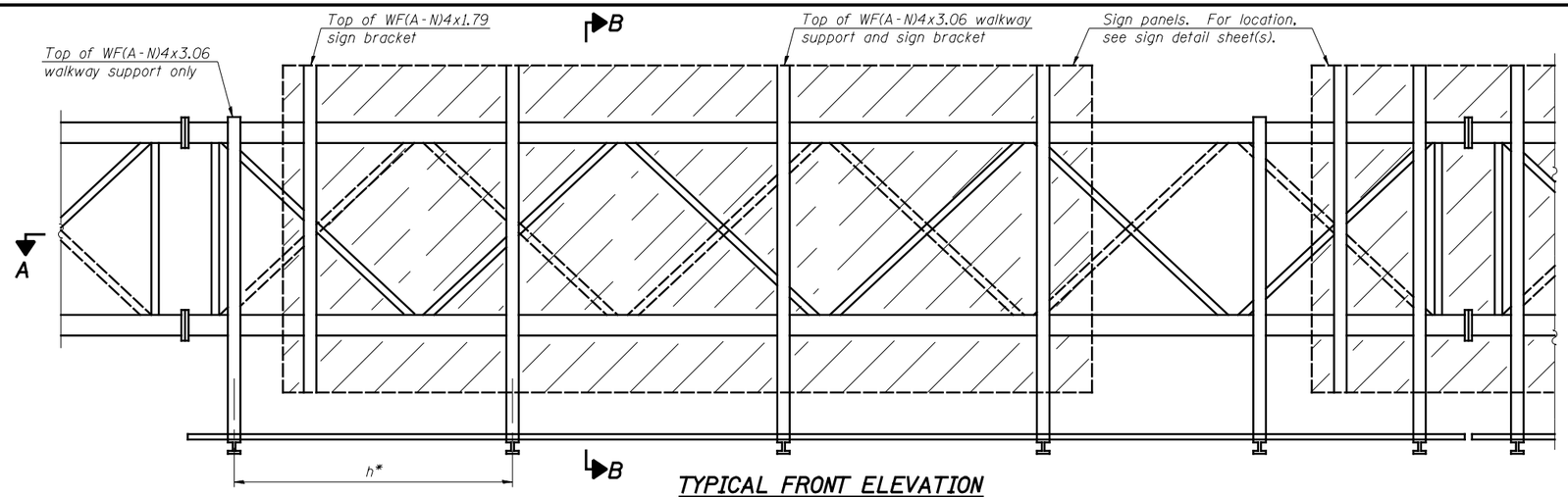
OS-A-4A 6-1-12

FILE NAME =	USER NAME =	DESIGNED - ESW	REVISED -
		CHECKED - JWS	REVISED -
	PLOT SCALE =	DRAWN - PDB	REVISED -
	PLOT DATE =	CHECKED - BRM	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

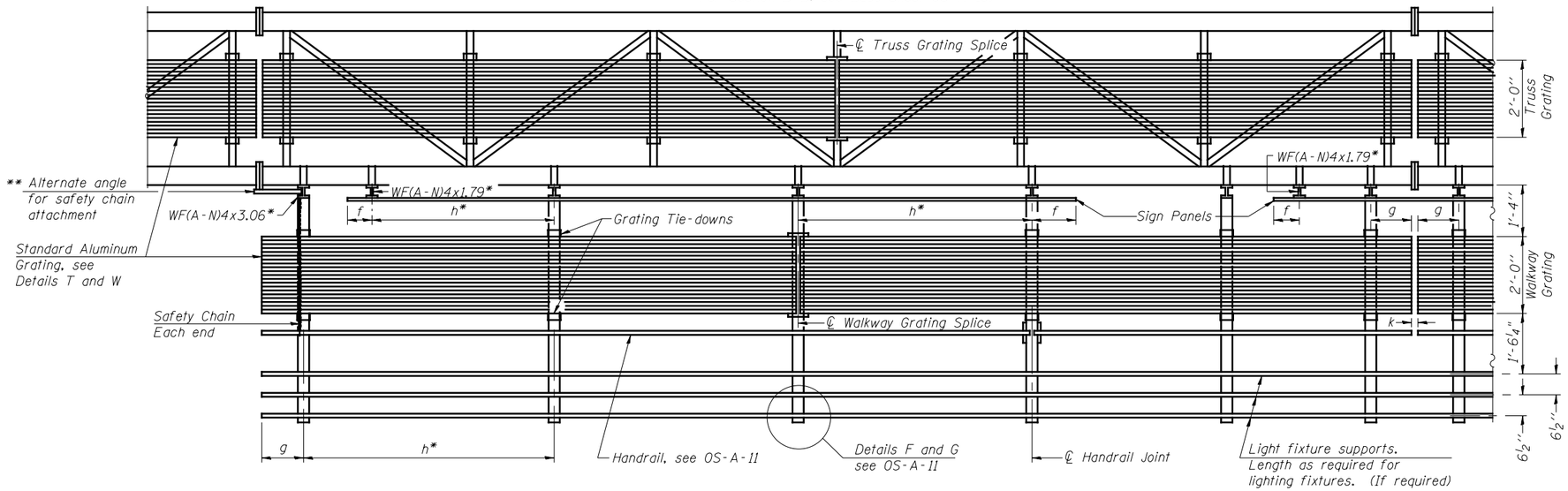
OVERHEAD SIGN STRUCTURES
SUPPORT FRAME DETAILS – ALUMINUM TRUSS
SHEET NO. 29 OF 53 SHEETS

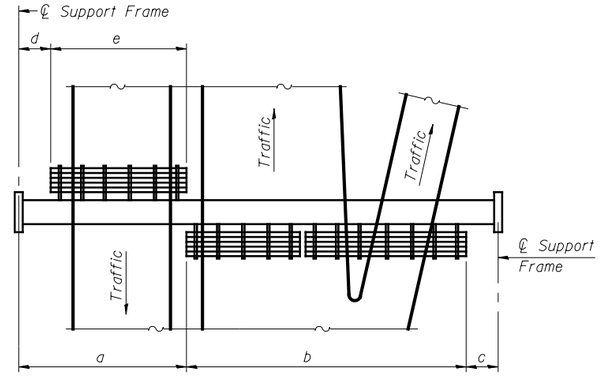
F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	416
		CONTRACT NO. 74295		
	ILLINOIS FED. AID PROJECT			



TYPICAL FRONT ELEVATION

With lights and handrail omitted for clarity.
For Section B-B, see Base Sheet OS-A-10.





PLAN
WALKWAY AND HANDRAIL SKETCH

(Road plan beneath truss varies)

BRACKET TABLE

WF(A-N)4x1.79 or WF(A-N)4x3.06 ASTM B308, Alloy 6061-T6		
Sign Width		Number Brackets Required
Greater Than	Less Than or Equal To	
	8'-0"	2
8'-0"	14'-0"	3
14'-0"	20'-0"	4
20'-0"	26'-0"	5
26'-0"	32'-0"	6

Notes:

* Space walkway brackets WF(A-N)4x3.06 and sign brackets WF(A-N)4x1.79 for efficiency and within limits shown:

f = 12" maximum, 4" minimum (End of sign to ℄ of nearest bracket)
g = 12" maximum, 4" minimum (End of walkway grating to ℄ of nearest support bracket)
h = 6'-0" maximum (℄ to ℄ sign and/or walkway support brackets, WF(A-N)4x1.79 or WF(A-N)4x3.06)
k = 2" maximum gap between adjacent walkway grating sections and handrail ends

** If walkway bracket at safety chain location is behind sign, add angle to bracket, see Alternate Safety Chain Attachment on Base Sheet OS-A-11.

For Details T and W, Section B-B and Grating Splice Details see Base Sheet OS-A-10.
For Handrail Details see Base Sheet OS-A-11.

SECTION A-A

Handrail and walkway shall span a minimum of three brackets between splices and/or gap joints.
Place all sign and walkway brackets as close to panel points as practical.
Handrail joints, grating, and light support splices placed as needed.

Structure Number	Station	a	b	c	d	e	Walkway Grating and Handrail Lengths
7S025I057R162.0	2290+50	16'-0"	57'-0"	13'-0"	-	-	57'-0"
7S025I057R162.7	2326+30	17'-6"	41'-0"	15'-6"	-	-	41'-0"
7S025I057R163.4	2351+00	18'-0"	52'-0"	14'-0"	-	-	52'-0"
7S025I070L098.6	2387+00	18'-0"	41'-0"	18'-0"	-	-	41'-0"
7S025I070L099.1	2412+00	9'-6"	41'-0"	9'-6"	-	-	41'-0"

Truss grating to facilitate inspection shall run full length (center to center of support frames) ±12" on overhead trusses. Cost of truss grating is included in "Overhead Sign Structure".

Walkway and Truss Grating width dimensions are nominal and may vary ±½" based on available standard widths.

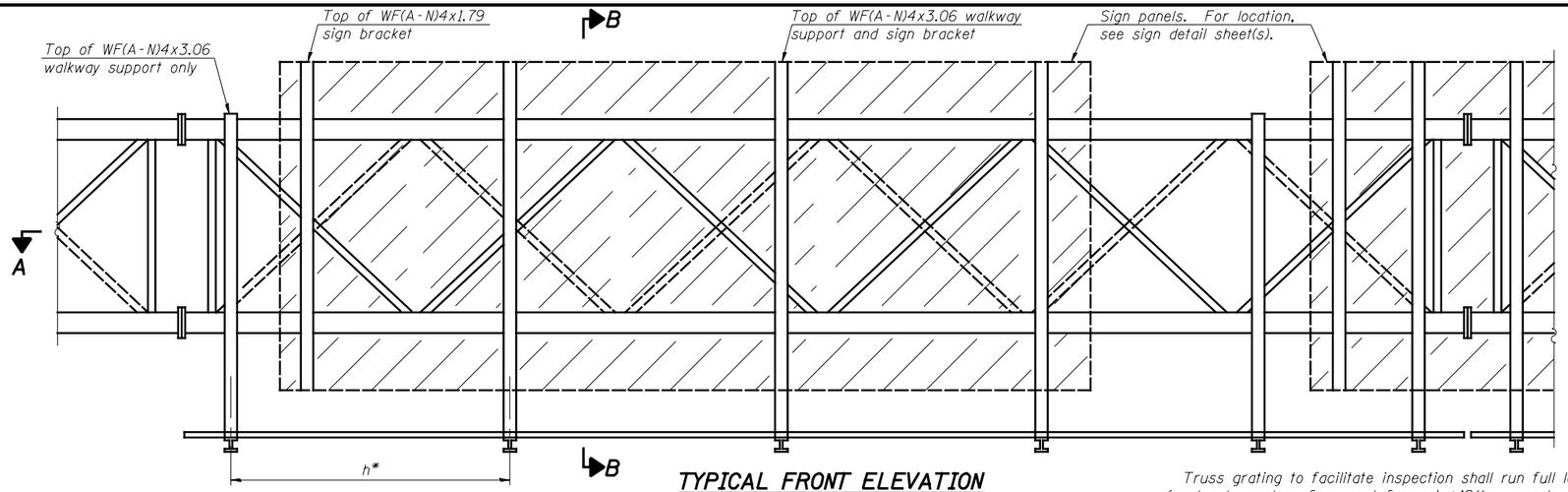
OS-A-9 6-1-12

FILE NAME =	USER NAME =	DESIGNED - ESW	REVISED -
		CHECKED - JWS	REVISED -
	PLOT SCALE =	DRAWN - PDB	REVISED -
	PLOT DATE =	CHECKED - BRM	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES
ALUMINUM WALKWAY DETAILS
SHEET NO. 30 OF 53 SHEETS

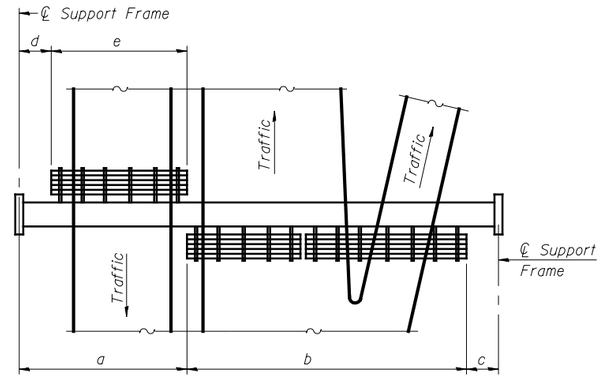
F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	417
		CONTRACT NO. 74295		
	ILLINOIS FED. AID PROJECT			



TYPICAL FRONT ELEVATION

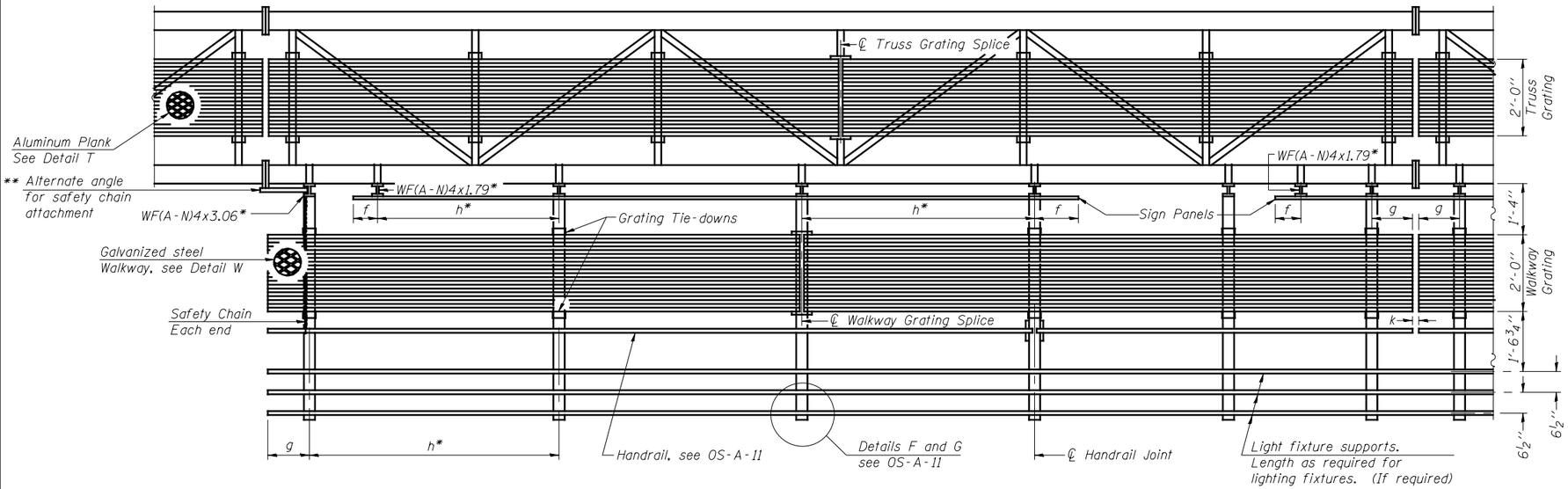
With lights and handrail omitted for clarity.
For Section B-B, see Base Sheet OS-A-10.

Truss grating to facilitate inspection shall run full length (center to center of support frames) ±12" on overhead trusses. Cost of truss grating is included in "Overhead Sign Structure".



PLAN
WALKWAY AND HANDRAIL SKETCH

(Road plan beneath truss varies)



SECTION A-A

Handrail and walkway shall span a minimum of three brackets between splices and/or gap joints.
Place all sign and walkway brackets as close to panel points as practical.
Handrail joints, grating, and light support splices placed as needed.

BRACKET TABLE

WF(A-N)4x1.79 or WF(A-N)4x3.06
ASTM B308, Alloy 6061-T6

Sign Width		Number Brackets Required
Greater Than	Less Than or Equal To	
	8'-0"	2
8'-0"	14'-0"	3
14'-0"	20'-0"	4
20'-0"	26'-0"	5
26'-0"	32'-0"	6

Notes:
* Space walkway brackets WF(A-N)4x3.06 and sign brackets WF(A-N)4x1.79 for efficiency and within limits shown:

f = 12" maximum, 4" minimum (End of sign to ℄ of nearest bracket)
g = 12" maximum, 4" minimum (End of walkway grating to ℄ of nearest support bracket)
h = 6'-0" maximum (℄ to ℄ sign and/or walkway support brackets, WF(A-N)4x1.79 or WF(A-N)4x3.06)
k = 2" maximum gap between adjacent walkway grating sections and handrail ends

** If walkway bracket at safety chain location is behind sign, add angle to bracket, see Alternate Safety Chain Attachment on Base Sheet OS-A-11.

For Details T and W, Section B-B and Grating Splice Details see Base Sheet OS-A-10.
For handrail details see base sheet OS-A-11.

Note:
Details shown are considered equal alternatives to the Aluminum Walkway on Base Sheet OS-A-9, and may be substituted by Contractor at no change in contract cost.

Walkway and Truss Grating width dimensions are nominal and may vary ±½" based on available standard widths.

Structure Number	Station	a	b	c	d	e	Walkway Grating and Handrail Lengths
7S025I057R162.0	2290+50	16'-0"	57'-0"	13'-0"	-	-	57'-0"
7S025I057R162.7	2326+30	17'-6"	41'-0"	15'-6"	-	-	41'-0"
7S025I057R163.4	2351+00	18'-0"	52'-0"	14'-0"	-	-	52'-0"
7S025I070L098.6	2387+00	18'-0"	41'-0"	18'-0"	-	-	41'-0"
7S025I070L099.1	2412+00	9'-6"	41'-0"	9'-6"	-	-	41'-0"

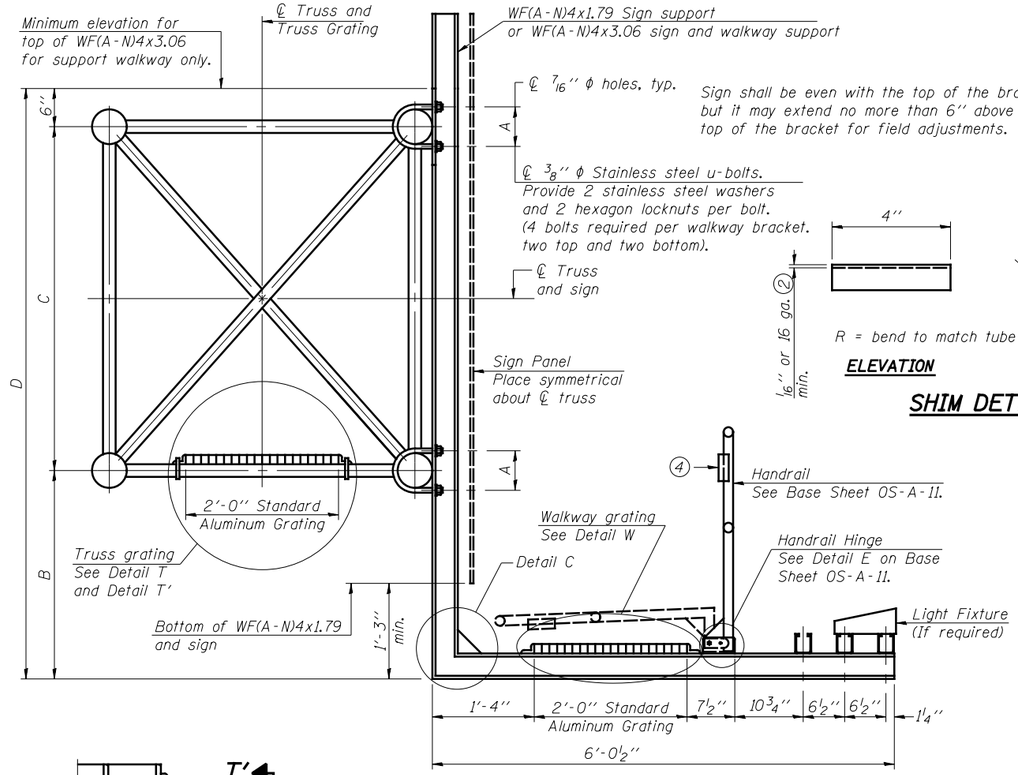
OS-A-9S 6-1-12

FILE NAME =	USER NAME =	DESIGNED - ESW	REVISED -
		CHECKED - JWS	REVISED -
	PLOT SCALE =	DRAWN - PDB	REVISED -
	PLOT DATE =	CHECKED - BRM	REVISED -

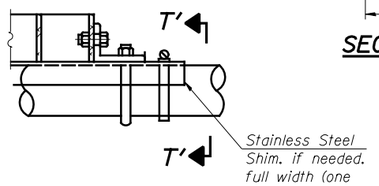
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES
ALTERNATE WALKWAY DETAILS
SHEET NO. 31 OF 53 SHEETS

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	418
		CONTRACT NO. 74295		
	ILLINOIS FED. AID PROJECT			



SECTION B-B



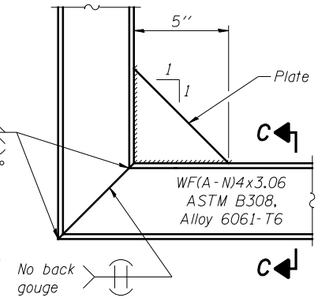
DETAIL T'

(Truss grating splice)

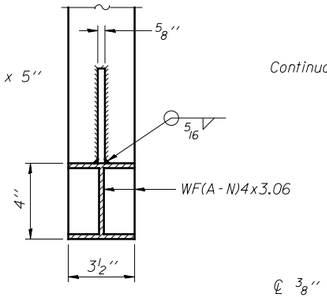
Details not shown same as Detail T. Alternate materials may be used subject to the Engineer's review and approval.

ELEVATION END VIEW

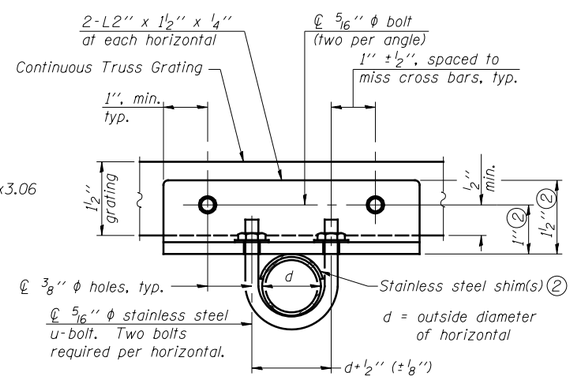
SHIM DETAIL



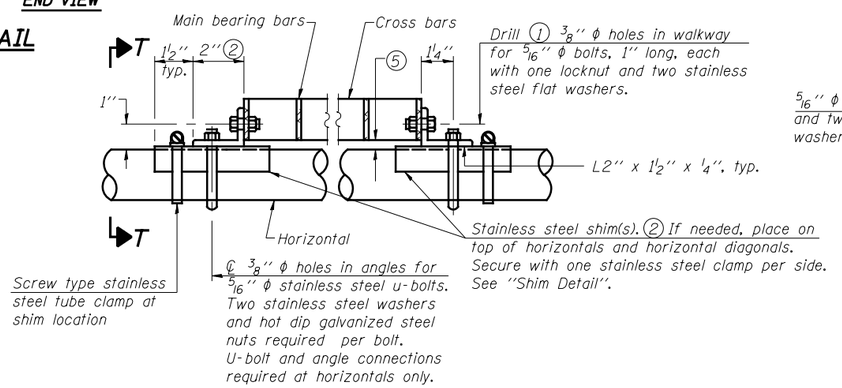
DETAIL C



SECTION C-C

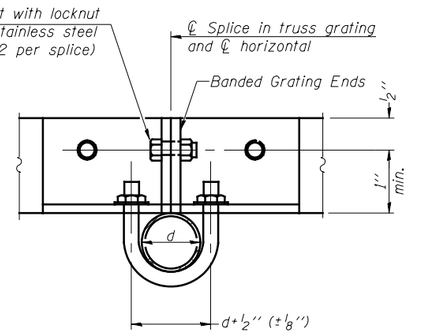


SECTION T-T

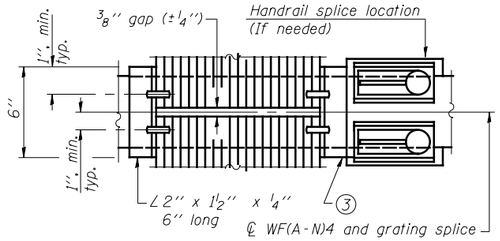


DETAIL T

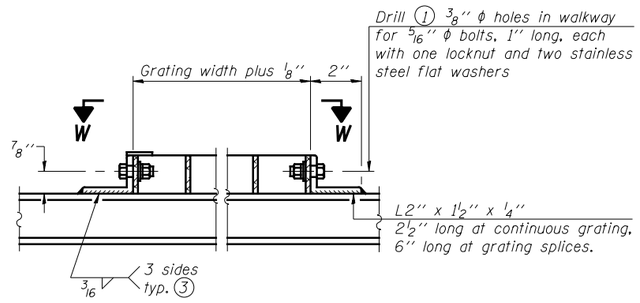
(Continuous Truss grating)



SECTION T'-T'

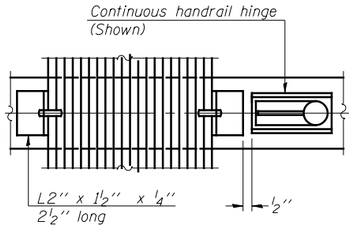


(AT WALKWAY GRATING SPLICE)



DETAIL W

(Walkway grating)



(CONTINUOUS WALKWAY GRATING)

SECTION W-W

SPECIFICATIONS FOR STANDARD ALUMINUM GRATING

Main Bearing Bars shall be 3/16" x 1½" on 1 3/16" centers and conform to ASTM B221 Alloy 6061-T6.

Cross bars shall be 3/16" x 1½" on 4" centers and conform to ASTM B221 Alloy 6063-T5 or 6061-T6.

OR

Aluminum Grating with modified "t" sections for main bearing bars shall meet the following requirements:

Main bars shall conform to ASTM B221 Alloy 6061-T6 and have a minimum section modulus equal to 0.0705 in.^{3} per bar, a depth of 1½", spaced on 1 3/16" centers.

Cross bars shall conform to ASTM B221 Alloy 6063-T5 or T-42 and spaced on 4" centers.

Structure Number	Station	A	(6) B	C	(6) D
7S025I057R162.0	2290+50	5½"	6'-6"	4'-6"	11'-6"
7S025I057R162.7	2326+30	5½"	4'-9"	4'-6"	9'-9"
7S025I057R163.4	2351+00	5½"	4'-0"	4'-6"	9'-0"
7S025I070L098.6	2387+00	5½"	4'-6"	4'-6"	9'-6"
7S025I070L099.1	2412+00	5½"	4'-9"	4'-6"	9'-9"

(1) Drilling holes in grating may be done in shop or field, based on Contractor's preference and subject to accurate alignment.

(2) Stainless steel shims shall be placed as shown in Detail T if needed to compensate for alignment variations between horizontal and diagonal pipes beyond adjustment provided by angles. Thicker shims may be used subject to shims performing properly.

(3) If Handrail Joint present, weld angle to WF(A-N)4 and ¼" extension bars. (See Base Sheet OS-A-11.)

(4) ℄ ⅛" x ½" x 2" welded to handrail posts to protect locations that contact grating.

(5) Tube to grating gap may vary from 0 to ½", max. to align walkway, allow for camber, etc.

(6) Based on actual height of tallest sign given on OS-A-1.

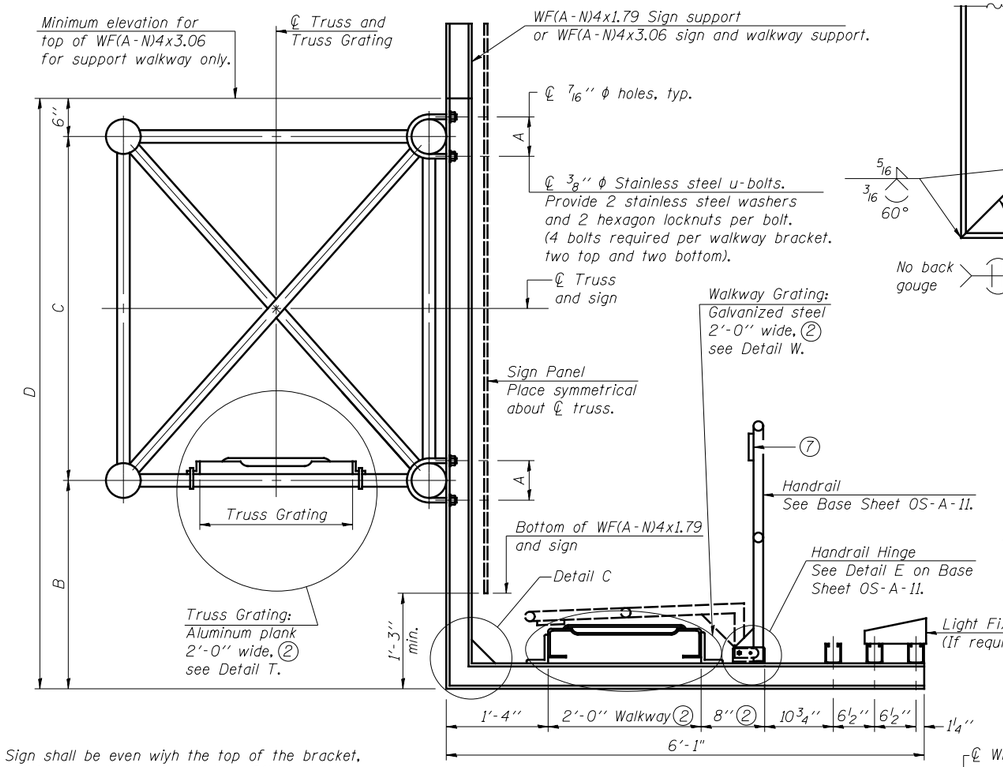
OS-A-10 6-1-12

FILE NAME =	USER NAME =	DESIGNED - ESW	REVISED -
		CHECKED - JWS	REVISED -
	PLOT SCALE =	DRAWN - PDB	REVISED -
	PLOT DATE =	CHECKED - BRM	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

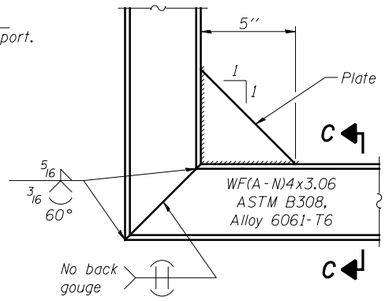
OVERHEAD SIGN STRUCTURES
ALUMINUM WALKWAY DETAILS
SHEET NO. 32 OF 53 SHEETS

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	419
		CONTRACT NO. 74295		
	ILLINOIS	FED. AID PROJECT		

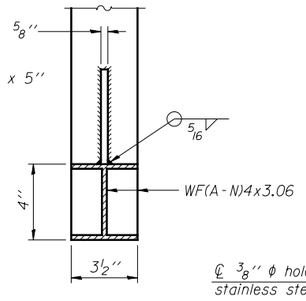


Sign shall be even wiyh the top of the bracket, but it may extend no more than 6" above the top of the bracket for field adjustments.

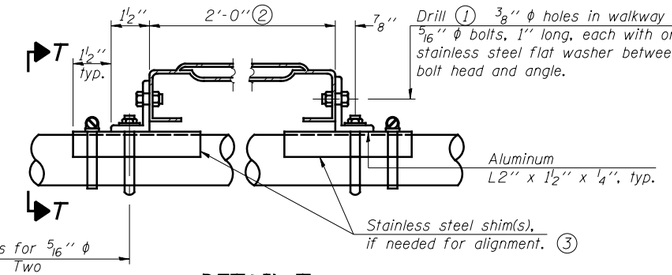
SECTION B-B



DETAIL C



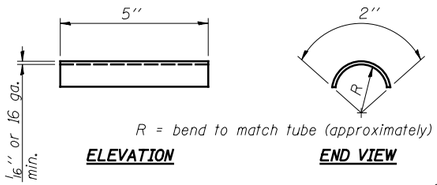
SECTION C-C



℄ 3/8" ϕ holes in angles for 5/16" ϕ stainless steel u-bolts. Two stainless steel washers and hot dip galvanized steel nuts required per bolt. U-bolt and angle connections required at horizontals only.

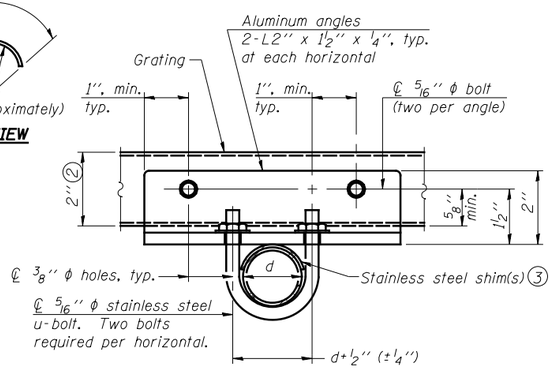
DETAIL T

(Truss grating at horizontal)



ELEVATION END VIEW

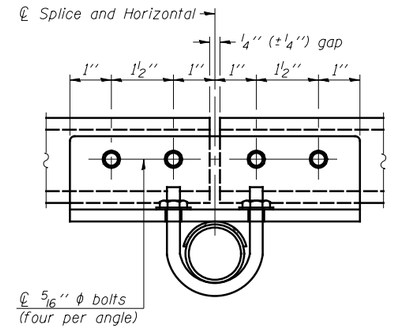
SHIM DETAIL



SECTION T-T

(Truss Grating Continuous)

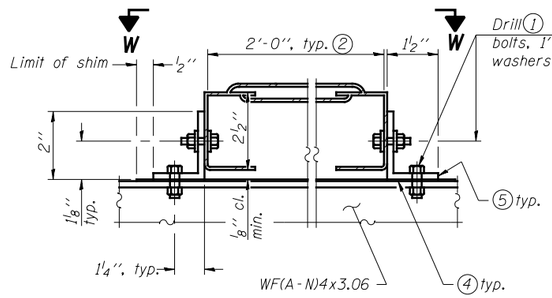
d = outside diameter of horizontal



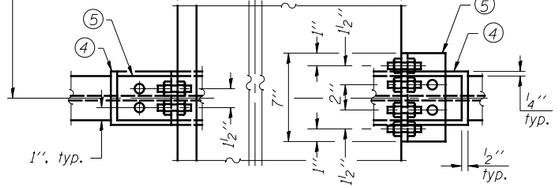
SECTION T-T

(Truss Grating Splice)

Alternate splice details and locations may be used subject to the Engineer's review and approval.



DETAIL W
GALVANIZED STEEL WALKWAY GRATING



WALKWAY GRATING CONTINUOUS AT WALKWAY GRATING SPLICE

SECTION W-W

(1) Drilling holes in grating may be done in shop or field, based on Contractor's preference and subject to accurate alignment.

(2) Perforated or expanded metal grating providing a skid resistant (non-serrated) surface and capable of supporting a 500 pound concentrated load with a 6'-0" clear span. Walkway and truss grating dimensions are nominal and may vary (width ±1/2", depth ±1/2") based on available standard sizes. Cut ends of grating shall be free of burrs or hazardous projections and coated with zinc-rich primer or equivalent.

(3) Stainless steel shims shall be placed under angles at horizontals and horizontal diagonals if needed to compensate for alignment variations and differences in horizontal diagonal pipe sizes beyond adjustment provided by angles. Secure with one stainless steel clamp per location, see "Shim Detail". Thicker shim plates may be used when needed subject to shims performing properly.

(4) 1/16" (or 16 ga.) x 2 1/2" x 4" stainless steel shim adhered to top of WF(A-N)4x3.06 beneath each galvanized angle. Adhesives for shims shall be suitable for materials joined and full exposure conditions.

(5) Galvanized steel L2" x 2" x 1/4", 3 1/2" long with continuous grating, 7" long at grating splice.

(6) Details shown are considered equal alternatives to the Aluminum Walkway on Base Sheet OS-A-10 and may be substituted by Contractor at no change in contract cost.

(7) PL 1/8" x 1/2" x 2" welded to handrail posts to protect locations that contact grating.

(8) Based on actual height of tallest sign given on OS-A-1.

Structure Number	Station	A	(8) B	C	(8) D
7S025I057R162.0	2290+50	5 1/2"	6'-6"	4'-6"	11'-6"
7S025I057R162.7	2326+30	5 1/2"	4'-9"	4'-6"	9'-9"
7S025I057R163.4	2351+00	5 1/2"	4'-0"	4'-6"	9'-0"
7S025I070L098.6	2387+00	5 1/2"	4'-6"	4'-6"	9'-6"
7S025I070L099.1	2412+00	5 1/2"	4'-9"	4'-6"	9'-9"

ALUMINUM TRUSS GRATING

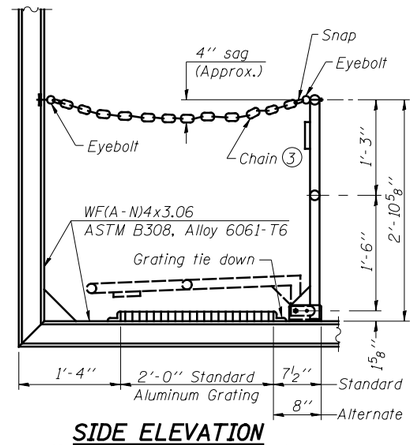
OS-A-10S 6-1-12

FILE NAME =	USER NAME =	DESIGNED - ESW	REVISED -
		CHECKED - JWS	REVISED -
	PLOT SCALE =	DRAWN - PDB	REVISED -
	PLOT DATE =	CHECKED - BRM	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

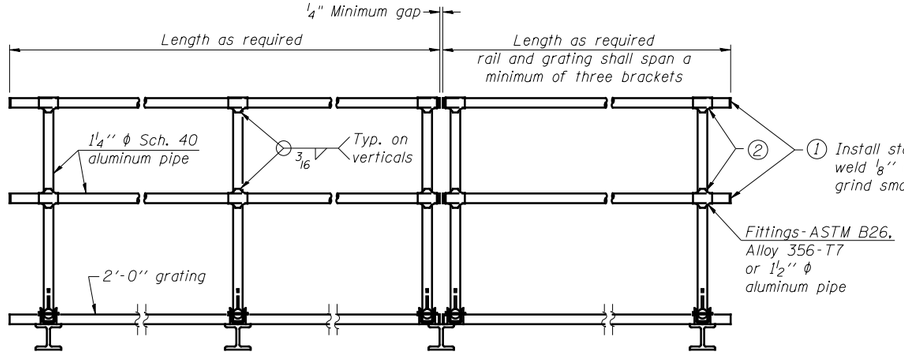
OVERHEAD SIGN STRUCTURES
ALTERNATE WALKWAY DETAILS
SHEET NO. 33 OF 53 SHEETS

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	420
		CONTRACT NO. 74295		
	ILLINOIS FED. AID PROJECT			



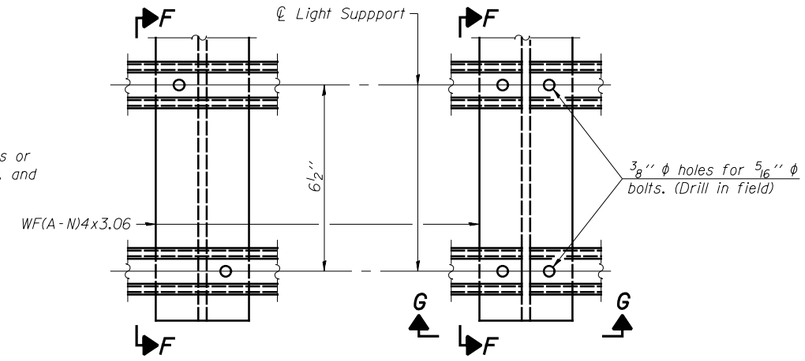
SIDE ELEVATION

(Showing safety chain w/o sign)



FRONT ELEVATION

(2) Horizontal handrail member shall be continuous thru fitting. Provide 7/16" ϕ hole in fitting for 3/8" ϕ bolt. Field drill 7/16" ϕ hole in horizontal rail member. Provide locknut and two stainless steel washers for bolt. (Use 5/16" eyebolts in 7/16"ϕ holes on top rail at ends only.)

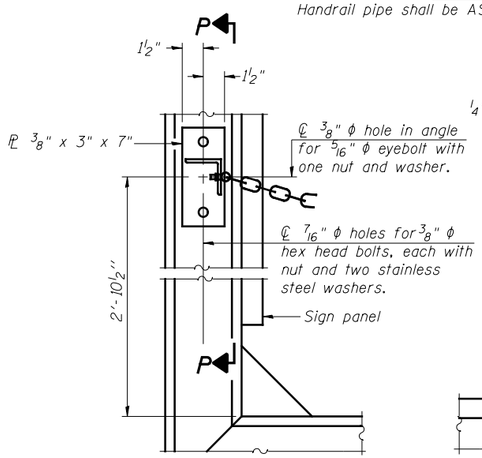


DETAIL F

DETAIL G

HANDRAIL DETAILS

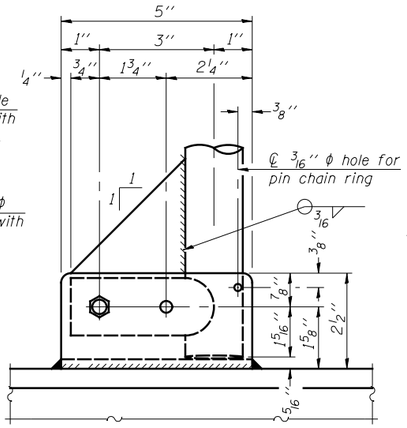
Handrail pipe shall be ASTM B241 or B429, Alloy 6063-T6 or Alloy 6061-T6.



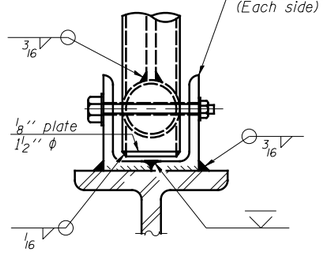
ALTERNATE SAFETY CHAIN ATTACHMENT

(With Sign Present)

Items not shown same as "Side Elevation" of "Handrail Details"

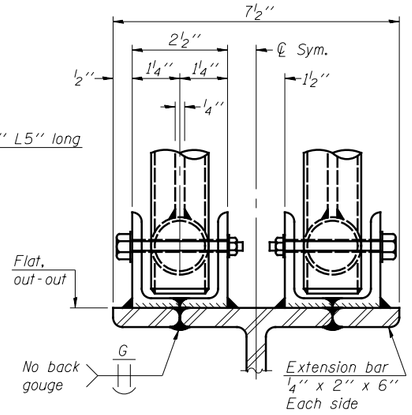


SIDE ELEVATION

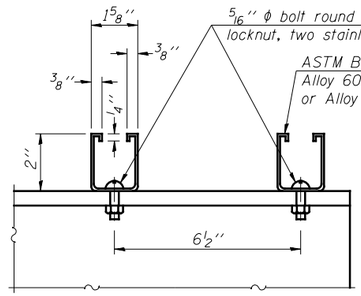


FRONT ELEVATION

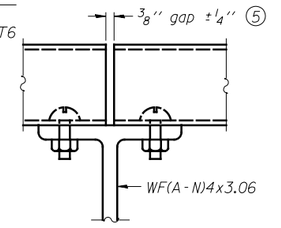
See "Elevation" at right for dimensions.



ELEVATION AT HANDRAIL JOINT (4)



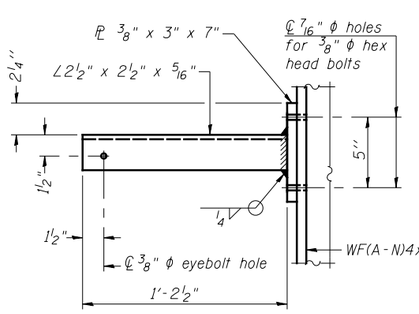
SECTION F-F



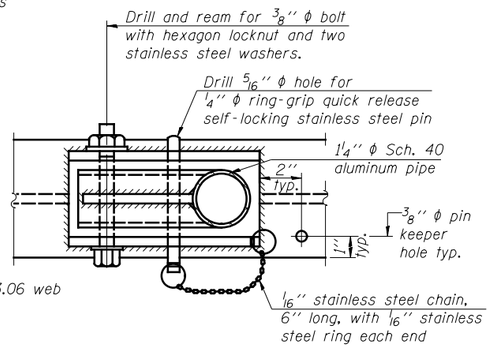
SECTION G-G

LIGHTING FIXTURE MOUNTS (IF REQUIRED)

(5) Field cut ends of light support channels shall be free of burrs or hazardous projections and coated with zinc-rich primer or equivalent.

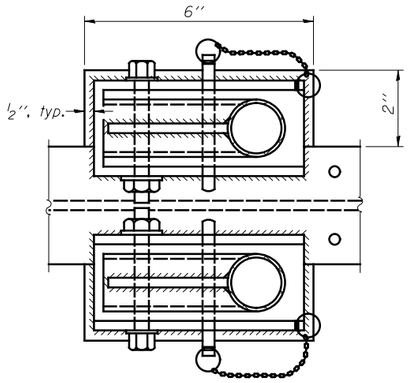


SECTION P-P



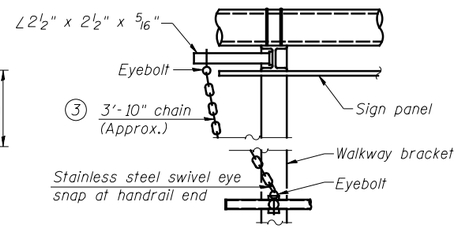
PLAN

DETAIL E HANDRAIL HINGE



PLAN AT HANDRAIL JOINT

Details not shown same as "PLAN"

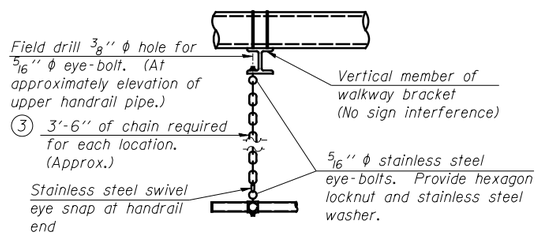


ALTERNATE SAFETY CHAIN ATTACHMENT

Details not shown similar to "Safety Chain" Details
(Walkway omitted for clarity)

(3) 3/16" Type 304L stainless steel chain, approximately 12 links per foot.

(4) Extrusions may be used in lieu of the details shown, with approval of the Engineer.



SAFETY CHAIN

One required for each end of each walkway.

OS-A-11 6-1-12

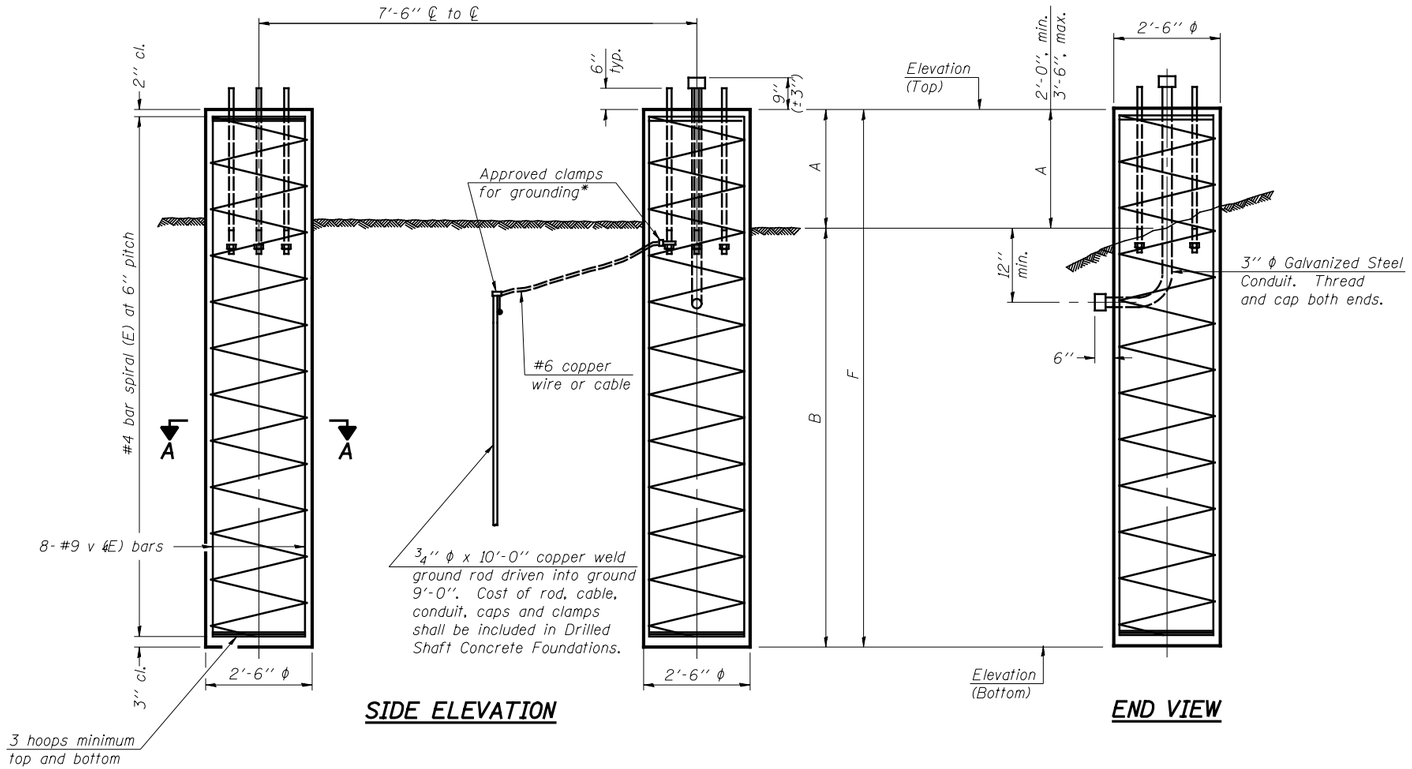
FILE NAME =	USER NAME =	DESIGNED - ESW	REVISED -
		CHECKED - JWS	REVISED -
	PLOT SCALE =	DRAWN - PDB	REVISED -
	PLOT DATE =	CHECKED - BRM	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES
ALUMINUM HANDRAIL DETAILS

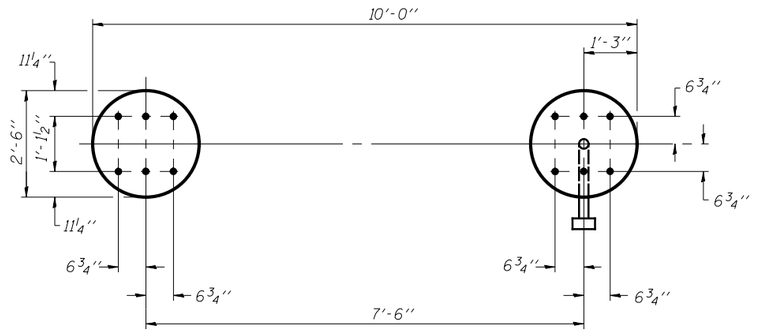
SHEET NO. 34 OF 53 SHEETS

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	421
		CONTRACT NO. 74295		
	ILLINOIS FED. AID PROJECT			



SIDE ELEVATION

END VIEW



PLAN

For anchor rod size and placement, see Support Frame Detail Sheet.

* Anchor rod shall be ground or filed to bright metal at clamp and cable connection location.

BAR LIST - EACH FOUNDATION

Bar	Number	Size	Length	Shape
v4(E)	16	#9	F less 5"	——
#4 bar spiral (E) - see Side Elevation				

NOTES:

The foundation dimensions shown are based on the presence of mostly cohesive soils with an average Unconfined Compressive Strength (Qu) of at least 1.25 tsf, which must be determined by previous soil investigations at the jobsite. When other conditions are indicated, the boring data will be included in the plans and the foundation dimensions shown will be the result of site specific designs.

If the conditions encountered are different than those indicated, the Contractor shall notify the Engineer to determine if the foundation dimensions need to be modified. If dimensions "B" or "F" are revised by more than 12" by the Contractor, "as-built" plans shall be prepared and submitted to the District Bureau of Operations for future reference.

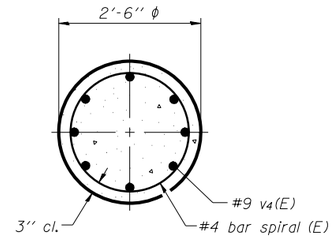
No sonotubes or decomposable forms shall be used below the lower conduit entrance.

Permanent metal forms or other shielding may not be left in place below that elevation without the Engineer's written permission.

Concrete shall be placed monolithically, without construction joints.

Backfill shall be placed per Article 502 of Standard Specification and prior to erection of support column.

A normal surface finish followed by a Bridge Seat Sealer application will be required on concrete surfaces above the lowest elevation 6" below finished ground line. Cost included in Drilled Shaft Concrete Foundation.



SECTION A-A

DETAILS FOR 8" ϕ SUPPORT FRAME TYPE I-A TRUSS

Structure Number	Station		Left Foundation				Right Foundation					Class DS Concrete (Cu. Yds.)
		Elevation Top	Elevation Bottom	A	B	F	Elevation Top	Elevation Bottom	A	B	F	
7S025I057R162.7	2326+30	-	-	-	-	-	603.03	585.53	3'-0"	14'-6"	17'-6"	6.4
7S025I070L099.1	2412+00	607.43	590.93	3'-0"	13'-6"	16'-6"	606.93	590.43	3'-0"	13'-6"	16'-6"	12.0

OS4-F2

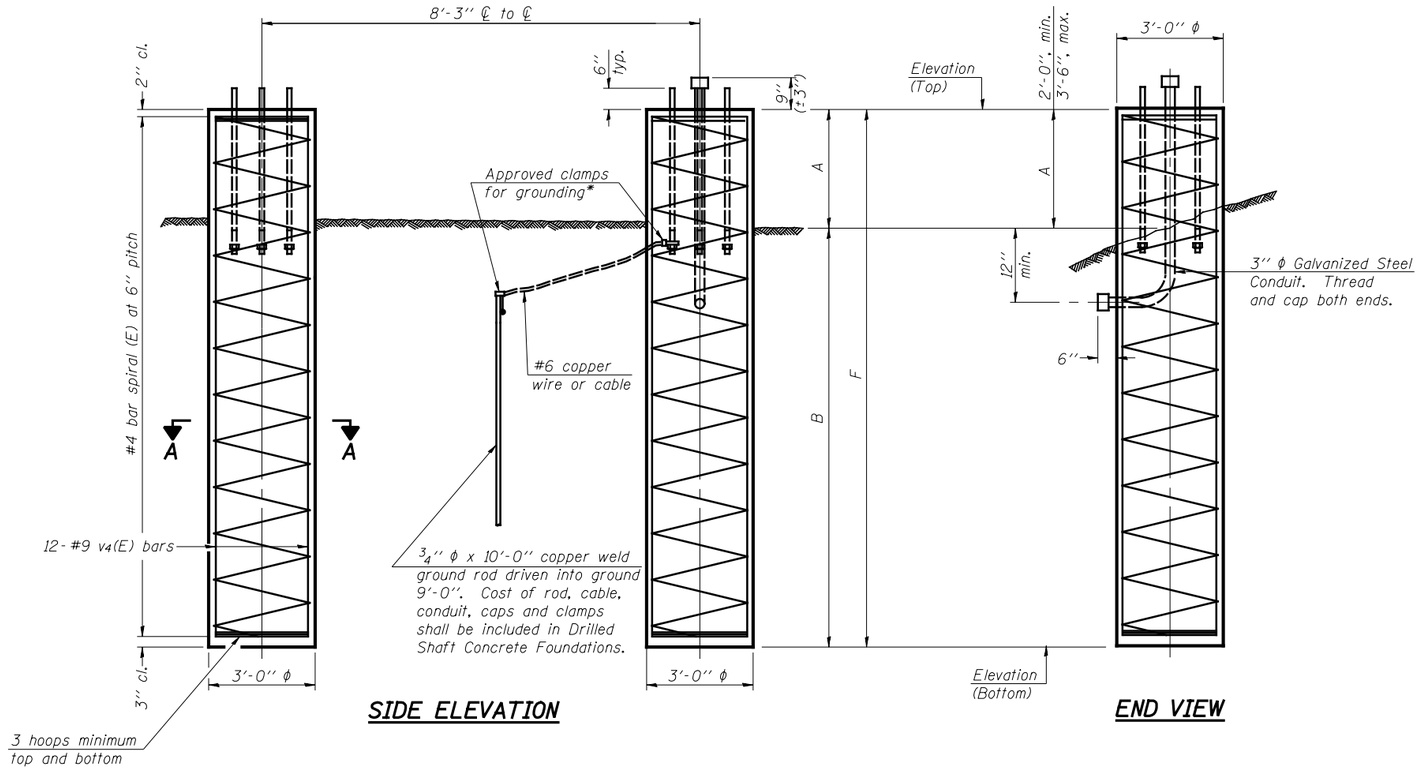
6-1-12

FILE NAME =	USER NAME =	DESIGNED - ESW	REVISED -
		CHECKED - JWS	REVISED -
	PLOT SCALE =	DRAWN - PDB	REVISED -
	PLOT DATE =	CHECKED - BRM	REVISED -

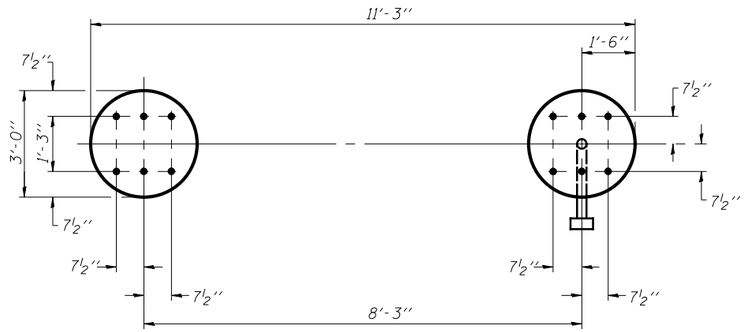
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES
DRILLED SHAFT DETAILS
SHEET NO. 35 OF 53 SHEETS

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	422
		CONTRACT NO. 74295		
	ILLINOIS	FED. AID PROJECT		



SIDE ELEVATION **END VIEW**



PLAN

For anchor rod size and placement, see Support Frame Detail Sheet.

* Anchor rod shall be ground or filed to bright metal at clamp and cable connection location.

BAR LIST - EACH FOUNDATION

Bar	Number	Size	Length	Shape
v4(E)	24	#9	F less 5"	——
#4 bar spiral (E) - see Side Elevation				

NOTES:

The foundation dimensions shown are based on the presence of mostly cohesive soils with an average Unconfined Compressive Strength (Qu) of at least 1.25 tsf, which must be determined by previous soil investigations at the jobsite. When other conditions are indicated, the boring data will be included in the plans and the foundation dimensions shown will be the result of site specific designs.

If the conditions encountered are different than those indicated, the Contractor shall notify the Engineer to determine if the foundation dimensions need to be modified. If dimensions "B" or "F" are revised by more than 12" by the Contractor, "as-built" plans shall be prepared and submitted to the District Bureau of Operations for future reference.

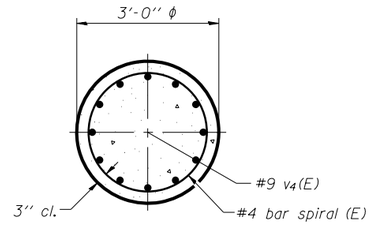
No sonotubes or decomposable forms shall be used below the lower conduit entrance.

Permanent metal forms or other shielding may not be left in place below that elevation without the Engineer's written permission.

Concrete shall be placed monolithically, without construction joints.

Backfill shall be placed per Article 502 of Standard Specification and prior to erection of support column.

A normal surface finish followed by a Bridge Seat Sealer application will be required on concrete surfaces above the lowest elevation 6" below finished ground line. Cost included in Drilled Shaft Concrete Foundation.



SECTION A-A

DETAILS FOR 10" ϕ SUPPORT FRAME TYPE I-A or II-A TRUSS

Structure Number	Station	Left Foundation					Right Foundation					Class DS Concrete (Cu. Yds.)
		Elevation Top	Elevation Bottom	A	B	F	Elevation Top	Elevation Bottom	A	B	F	
7S025I057R162.0	2290+50						631.92	612.42	3'-0"	16'-6"	19'-6"	10.2
7S025I057R163.4	2351+00	604.03	582.28	3'-0"	18'-9"	21'-9"	605.00	584.00	3'-0"	18'-0"	21'-0"	22.4
7S025I070L098.6	2387+00	608.11	588.61	3'-0"	16'-6"	19'-6"	609.48	589.98	3'-0"	16'-6"	19'-6"	20.4

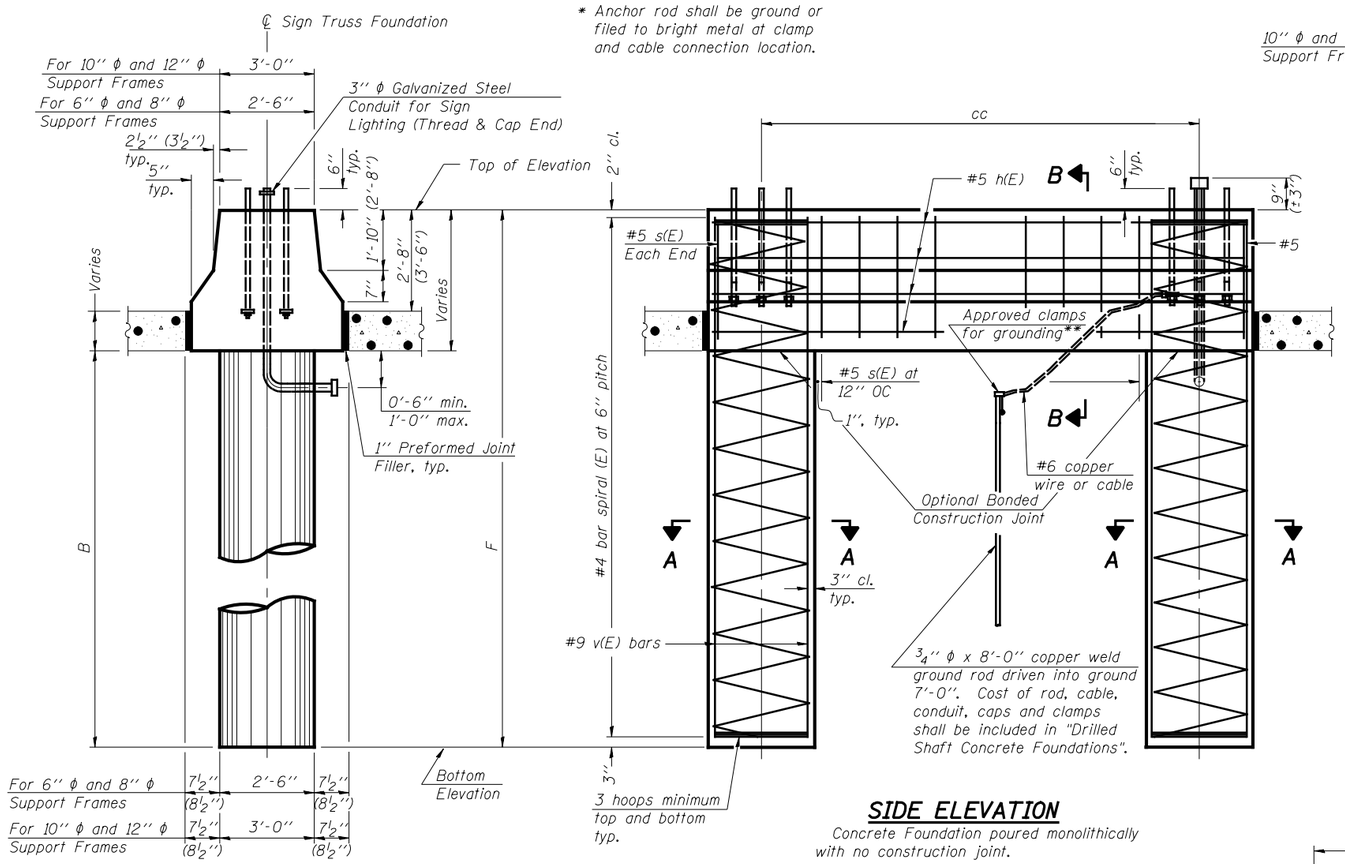
OS4-F3 6-1-12

FILE NAME =	USER NAME =	DESIGNED - ESW	REVISED -
		CHECKED - JWS	REVISED -
	PLOT SCALE =	DRAWN - PDB	REVISED -
	PLOT DATE =	CHECKED - BRM	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES
DRILLED SHAFT DETAILS
SHEET NO. 36 OF 53 SHEETS

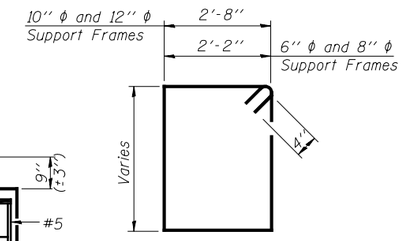
F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	423
		CONTRACT NO. 74295		
	ILLINOIS FED. AID PROJECT			



END VIEW

SIDE ELEVATION

Concrete Foundation poured monolithically with no construction joint.



BAR s(E)

NOTES:

The foundation dimensions shown are based on the presence of mostly cohesive soils with an average Unconfined Compressive Strength (Qu) of at least 1.25 tsf, which must be determined by previous soil investigations at the jobsite. When other conditions are indicated, the boring data will be included in the plans and the foundation dimensions shown will be the result of site specific designs.

If the conditions encountered are different than those indicated, the Contractor shall notify the Engineer to determine if the foundation dimensions need to be modified. If dimensions "B" or "F" are revised by more than 12'' by the Contractor, "as-built" plans shall be prepared and submitted to the District Bureau of Operations for future reference.

No sonotubes or decomposable forms shall be used below the lower conduit entrance.

Permanent metal forms or other shielding may not be left in place below that elevation without the Engineer's written permission.

Concrete shall be placed monolithically, without construction joints.

Backfill shall be placed per Article 502 of Standard Specification and prior to erection of support column.

A normal surface finish followed by a Bridge Seat Sealer application will be required on concrete surfaces above the lowest elevation 6'' below finished ground line. Cost included in Drilled Shaft Concrete Foundation.

Pipe Support Frames	cc	M	a	a/2
6''ϕ	7'-0''	9'-6''	0'-11''	5½''
8''ϕ	7'-6''	10'-0''	1'-1½''	6¾''
10''ϕ	8'-3''	11'-3''	1'-3''	7½''
12''ϕ	9'-0''	12'-0''	1'-6''	9''

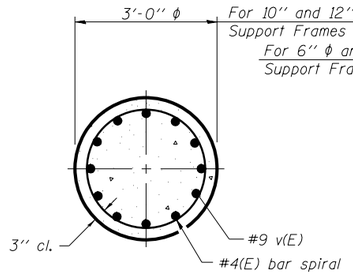
BAR LIST - EACH FOUNDATION

Bar	Number	Size	Length	Shape
h(E)	10	#5	M less 4''	——
s(E)	Varies	#5	Varies	□
v(E)	16	#9	F less 0'-5''	——
v(E)	24	#9	F less 0'-5''	——
#4(E) bar spiral _ see Side Elevation				

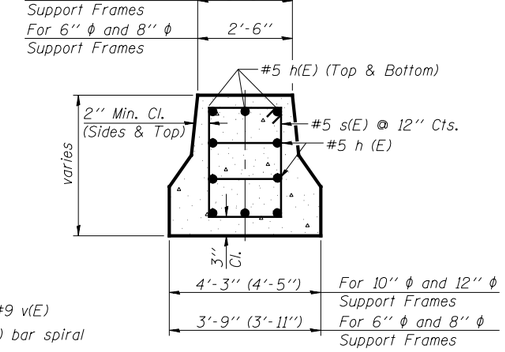
6'' ϕ and 8'' ϕ Support Frame

10'' ϕ and 12'' ϕ Support Frame

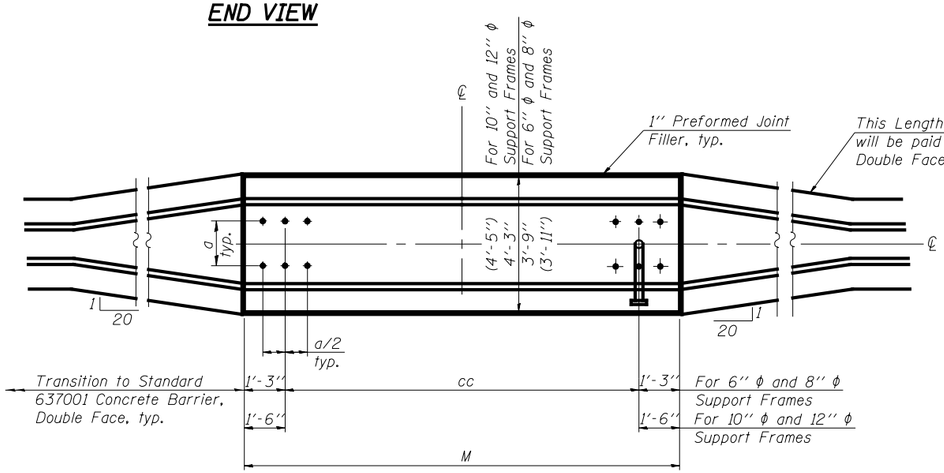
All dimensions in parenthesis are for 42'' high barrier.



SECTION A-A



SECTION B-B



PLAN

Structure Number	Station	Left Foundation				Right Foundation				Class DS Concrete (Cu. Yds.)
		Elevation Top	Elevation Bottom	B	F	Elevation Top	Elevation Bottom	B	F	
7S025I057R162.7	2326+30	604.03	584.95	14'-6"	19'-1"	-	-	-	-	9.9

OS4-MED 6-1-12

FILE NAME =	USER NAME =	DESIGNED - ESW	REVISED -
		CHECKED - JWS	REVISED -
	PLOT SCALE =	DRAWN - PDB	REVISED -
	PLOT DATE =	CHECKED - BRM	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

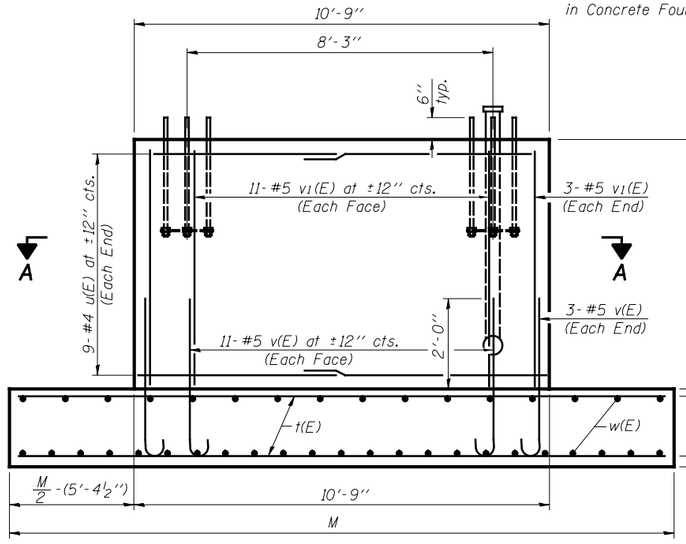
OVERHEAD SIGN STRUCTURES
MEDIAN SUPPORT FOUNDATION DETAILS
SHEET NO. 37 OF 53 SHEETS

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	((25-4)R	EFFINGHAM	1760	424
		CONTRACT NO. 74295		
	ILLINOIS	FED. AID PROJECT		

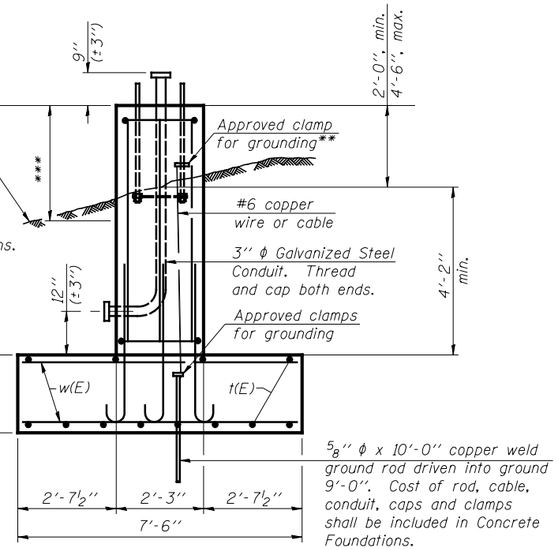
For anchor rod size and placement, see Support Frame Detail Sheet.

** Anchor rod shall be ground or filed to bright metal at clamp and cable connection location.

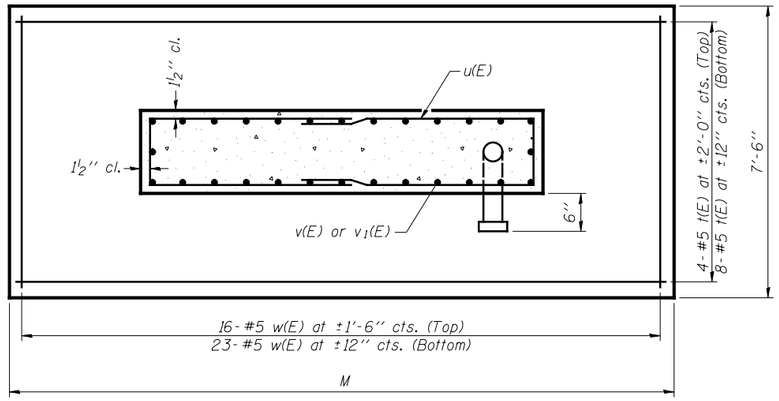
*** A normal surface finish followed by a Bridge Seat Sealer application will be required on concrete surfaces above the lowest elevation 6'' below finished ground line. Cost included in Concrete Foundations.



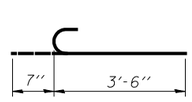
SIDE ELEVATION



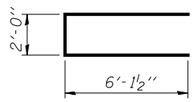
END ELEVATION



SECTION A-A



BAR v(E)



BAR u(E)

BAR LIST - EACH FOUNDATION

Bar	Number	Size	Length	Shape
t(E)	12	#5	*	
u(E)	18	#4	14'-3''	
v(E)	28	#5	4'-1''	
v1(E)	28	#5	*	
w(E)	39	#5	7'-3''	

*Length of t(E) bar = (Dim. M) - 6''
v1(E) bar = (Dim. N) - 3''

Structure Number	Station	Left Foundation				Right Foundation				Class SI Concrete (Cu. Yds.)
		Elevation Top	Elevation Bottom	N	M	Elevation Top	Elevation Bottom	N	M	
7S025I057R162.0	2290+50	633.96	622.05	10'-2"	21'-6"					19.6

Note:
The foundation dimensions shown are based on the presence of mostly cohesive soils with an average Unconfined Compressive Strength (Qu) of at least 1.0 tsf, which must be determined by previous soil investigations at the jobsite. When other conditions are indicated, the boring data will be included in the plans and the foundation dimensions shown will be the result of site specific designs.

During construction, if footing length or width or wall height change by more than 12'', or if reinforcement is changed, ''as-built'' plans shall be prepared and submitted to the District Bureau of Operations for future reference.

DETAILS FOR 10'' ϕ SUPPORT FRAME

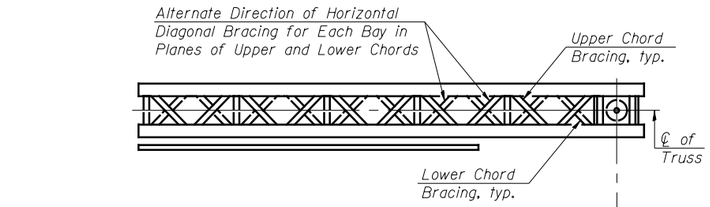
OS-F3 6-1-12

FILE NAME =	USER NAME =	DESIGNED - ESW	REVISED -
		CHECKED - JWS	REVISED -
	PLOT SCALE =	DRAWN - PDB	REVISED -
	PLOT DATE =	CHECKED - BRM	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

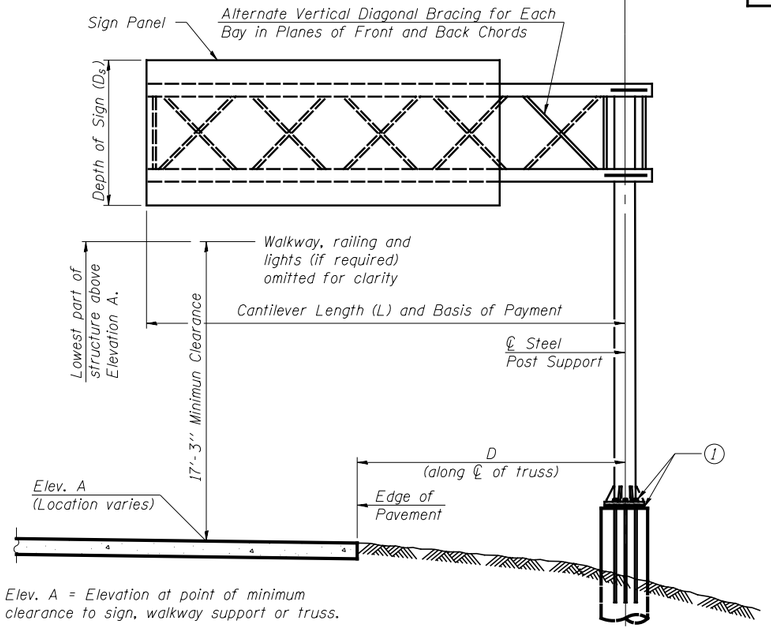
OVERHEAD SIGN STRUCTURES
SPREAD FOOTING DETAILS
SHEET NO. 38 OF 53 SHEETS

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	425
		CONTRACT NO. 74295		
	ILLINOIS FED. AID PROJECT			



TYPICAL PLAN

(Walkway not shown)



Elev. A = Elevation at point of minimum clearance to sign, walkway support or truss.

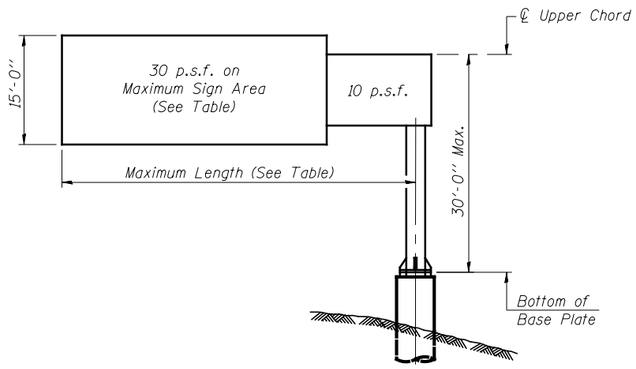
TYPICAL ELEVATION

Looking in Direction of Traffic

Sign support structures may be subject to damaging vibrations and oscillations when sign panels are not in place during erection or maintenance of the structure. To avoid these vibrations and oscillations, consideration should be given to attaching temporary blank sign panels to the structure.

Structure Number	Station	Design Truss Type	Cantilever Length (L)	Elev. A	Dim. D	D_s	Total Sign Area
7C025I057R161.8	2280+10	II-C-A	30'-0"	615.50	18'-0"	17'-0"	229.50 SF
7C025I057L162.5	2316+90	II-C-A	30'-0"	604.94	18'-0"	15'-0"	202.50 SF
7C025I057L162.8	2331+00	II-C-A	30'-0"	599.76	18'-0"	17'-0"	229.50 SF
7C025I057L163.0	24+75	II-C-A	30'-0"	594.51	18'-0"	17'-0"	229.50 SF

Truss Type	Maximum Sign Area	Maximum Length
I-C-A	170 Sq. Ft.	25 Ft.
II-C-A	340 Sq. Ft.	30 Ft.
III-C-A	400 Sq. Ft.	40 Ft.



DESIGN WIND LOADING DIAGRAM

Parameters shown are basis for I.D.O.T. Standards Installations not within dimensional limits shown require special analysis for all components.

Note:
Trusses shall be shipped individually with adequate provision to prevent detrimental motion during transport. This may require ropes between horizontals and diagonals or energy dissipating (elastic) ties to the vehicle. The contractor is responsible for maintaining the configuration and protection of the trusses.

(1) After adjustments to level truss and insure adequate vertical clearance, all top and leveling nuts shall be tightened against the base plate with a minimum torque of 200 lb.-ft. Stainless steel mesh shall then be placed around the perimeter of the base plate. Secure to base plate with stainless steel banding.

* If M270 Gr. 50W (M222) steel is proposed, chemistry for plate to be used shall first be approved by the Engineer as suitable for galvanizing and welding.

GENERAL NOTES

DESIGN: AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals. ("AASHTO Specifications")

CONSTRUCTION: Current (at time of letting) Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Supplemental Specifications and Special Provisions. ("Standard Specifications")

LOADING: 90 M.P.H. WIND VELOCITY

WALKWAY LOADING: Dead load plus 500 lbs. concentrated live load.

DESIGN STRESSES:
Field Units
f'_c = 3,500 p.s.i.
fy = 60,000 p.s.i. (reinforcement)

WELDING: All welds to be continuous unless otherwise shown. All welding to be done in accordance with current AWS D1.1 and D1.2 Structural Welding Codes (Steel and Aluminum) and the Standard Specificiations.

MATERIALS: Aluminum Alloys as shown throughout plans. All Structural Steel Pipe shall be ASTM A53 Grade B or A500 Grade B or C. If A500 pipe is substituted for A53, then the outside diameter shall be as detailed and wall thickness greater than or equal to A53.
All Structural Steel Plates and Shapes shall conform to AASHTO M270 Gr. 36, Gr. 50 or Gr. 50W*. Stainless steel for shims, sleeves and handhole covers shall be ASTM A240, Type 302 or 304, or another alloy suitable for exterior exposure and acceptable to the Engineer.
The steel pipe and stiffening ribs at the base plate for the column shall have a minimum longitudinal Charpy V-Notch (CVN) energy of 15 lb.-ft. at 40° F. (Zone 2) before galvanizing.

FASTENERS FOR ALUMINUM TRUSSES: All bolts noted as "high strength" must satisfy the requirements of AASHTO M164 (ASTM A325), or approved alternate, and must have matching lock nuts. Threaded studs for splices (if Members interfere) must satisfy the requirements of ASTM A449, ASTM A193, Grade B7, or approved alternate, and must have matching lock nuts. Bolts and lock nuts not required to be high strength must satisfy the requirements of ASTM A307. All bolts and lock nuts must be hot dip galvanized per AASHTO M232. The lock nuts must have nylon or steel inserts. A stainless steel flat washer conforming to ASTM A240 Type 302 or 304, is required under both head and nut or under both nuts where threaded studs are used. High strength bolt installation shall conform to Article 505.04 (f) (2)d of the IDOT Standard Specifications for Road and Bridge Construction. Rotational capacity ("ROCAP") testing of bolts will not be required.

U-BOLTS AND EYEBOLTS: U-Bolts and Eyebolts must be produced from ASTM A276 Type 304, 304L, 316 or 316L, Condition A, cold finished stainless steel, or an equivalent material acceptable to the Engineer. All nuts for U-Bolts and Eyebolts must be lock nuts equivalent to ASTM A307 with nylon or steel inserts and hot dip galvanized per AASHTO M232. A stainless steel flat washer conforming to ASTM A240, Type 302 or 304, is required under each U-Bolt and Eyebolt lock nut.

GALVANIZING: All Steel Grating, Plates, Shapes and Pipe shall be Hot Dip Galvanized after fabrication in accordance with AASHTO M111. Painting is not permitted.

ANCHOR RODS: Shall conform to ASTM F1554 Gr. 105.

CONCRETE SURFACES: All concrete surfaces above an elevation 6" below the lowest final ground line at each foundation shall be cleaned and coated with Bridge Seat Sealer in accordance with the Standard Specifications.

REINFORCEMENT BARS: Reinforcement Bars designated (E) shall be epoxy coated in accordance with the Standard Specifications.

FOUNDATIONS: The contract unit price for Drilled Shaft Concrete Foundations shall include reinforcement bars complete in place.

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
OVERHEAD SIGN STRUCTURE CANTILEVER TYPE I-C-A	Foot	
OVERHEAD SIGN STRUCTURE CANTILEVER TYPE II-C-A	Foot	120
OVERHEAD SIGN STRUCTURE CANTILEVER TYPE III-C-A	Foot	
OVERHEAD SIGN STRUCTURE WALKWAY, TYPE A	Foot	78
DRILLED SHAFT CONCRETE FOUNDATIONS	Cu. Yds.	35.2

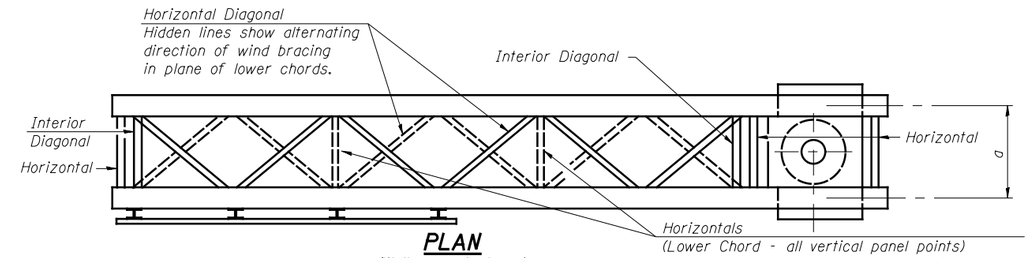
OSC-A-1 6-1-12

FILE NAME =	USER NAME =	DESIGNED - ESW	REVISED - 4-27-11
		CHECKED - JWS	REVISED -
	PLOT SCALE =	DRAWN - PDB	REVISED -
	PLOT DATE =	CHECKED - BRM	REVISED -

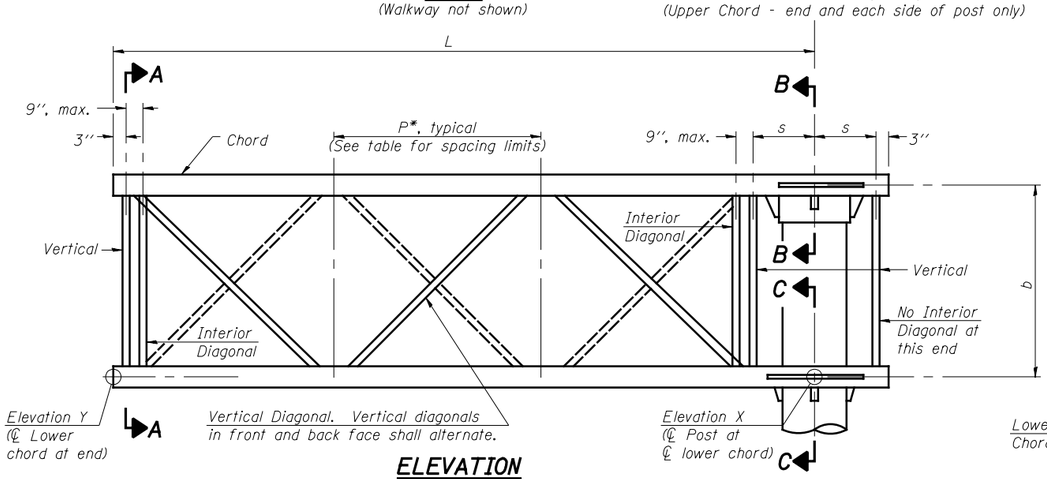
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CANTILEVER SIGN STRUCTURES – GENERAL PLAN & ELEVATION
ALUMINUM TRUSS & STEEL POST
SHEET NO. 39 OF 53 SHEETS

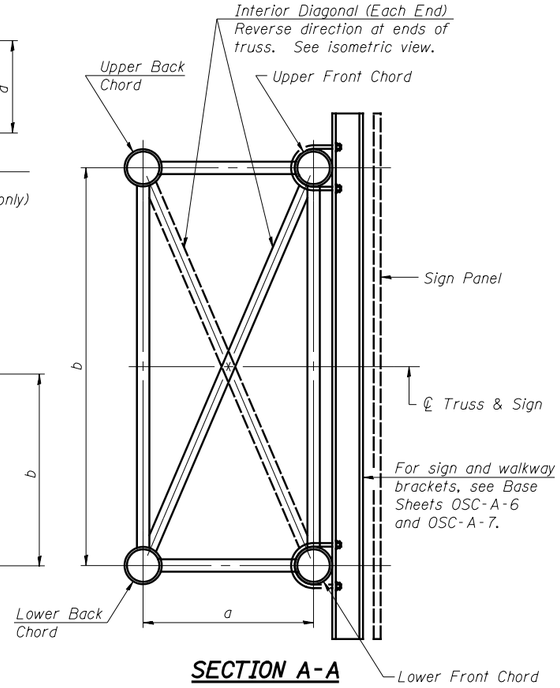
F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	426
		CONTRACT NO. 74295		
	ILLINOIS	FED. AID PROJECT		



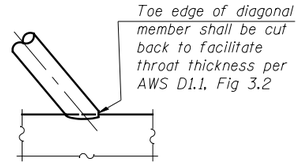
PLAN
(Walkway not shown)



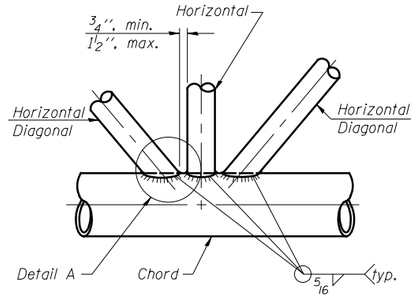
ELEVATION
(Sign and walkway omitted for clarity)



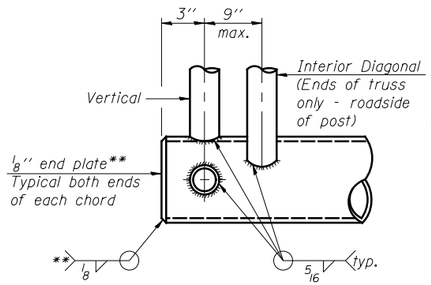
SECTION A-A



DETAIL A

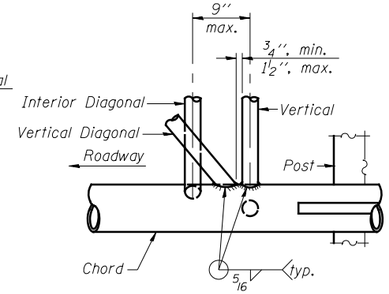


TRUSS INTERIOR JOIST DETAIL

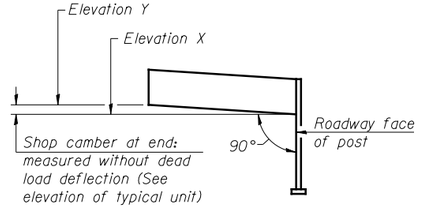


CANTILEVER END JOINT DETAIL

** Contractor may alternatively use standard aluminum drive-fit cap to close ends. 1/2" ϕ Drain hole in end plate / drive-fit cap.



POST END JOINT DETAIL



CAMBER DIAGRAM
(For Fabrication Only)

TYPICAL TRUSS UNIT
For Section B-B and Section C-C, see Base Sheet OSC-A-3.

Note:
There are twice as many horizontal diagonals as there are vertical diagonals.

TRUSS UNIT TABLE

Truss Type	Dimension "a"	Dimension "b"	Dimension "s"	Limits for Panel Spacing (P)*	Up. & Low. Chord		Verticals; Horizontals; Vertical, Horizontal, and Interior Diagonals	
					O.D.	Wall	O.D.	Wall
I-C-A	24"	54"	16"	36" min. to 48" max.	5"	5/16"	2 1/2"	5/16"
II-C-A	36"	66"	21"	42" min. to 54" max.	6 1/2"	5/16"	3 1/4"	5/16"
III-C-A (35' Max.)	36"	84"	21"	48" min. to 66" max.	7"	3/8"	3 1/2"	3/8"
III-C-A (>35' to 40')	36"	84"	21"	48" min. to 66" max.	8"	3/8"	3 1/2"	3/8"

$$*P = \frac{L - s - 3''}{\#\ Panels}$$

Structure Number	Station	Truss Type	Design Length (L)	Number of Panels Per Unit	Panel Length (P)*
7C025I057L161.8	2280+10	II-C-A	28'-0"	7	4'-0"
7C025I057L162.5	2316+90	II-C-A	28'-0"	7	4'-0"
7C025I057L162.8	2331+00	II-C-A	28'-0"	7	4'-0"
7C025I057R163.0	24+75	II-C-A	28'-0"	7	4'-0"

ISOMETRIC VIEW
TYPICAL TRUSS UNIT
ASTM B221 Alloy 6061 Temper T6

SHOP CAMBER TABLE

Unit Length (L)	Shop Camber at End
15'	1 1/2"
16'-17'	1 3/4"
18'-20'	2"
21'-22'	2 1/4"
23'-25'	2 1/2"
26'-27'	2 3/4"
28'-30'	3"
31'-32'	3 1/4"
33'-35'	3 1/2"
36'-37'	4"
38'-40'	4 1/2"

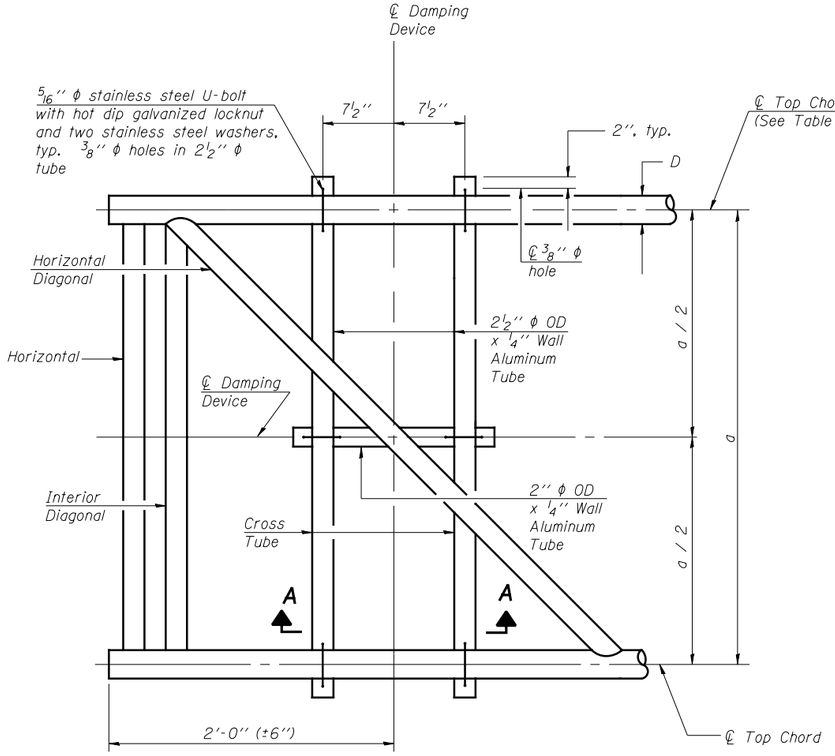
OSC-A-2 6-1-12

FILE NAME =	USER NAME =	DESIGNED - ESW	REVISED -
		CHECKED - JWS	REVISED -
	PLOT SCALE =	DRAWN - PDB	REVISED -
	PLOT DATE =	CHECKED - BRM	REVISED -

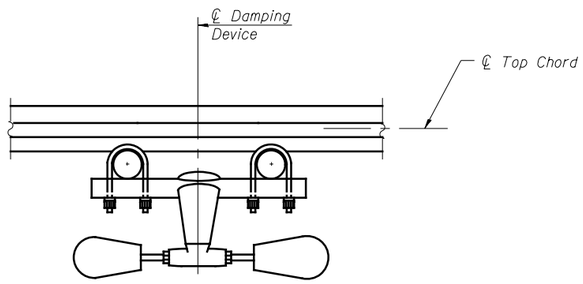
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CANTILEVER SIGN STRUCTURES – TRUSS DETAILS
ALUMINUM TRUSS & STEEL POST
SHEET NO. 40 OF 53 SHEETS

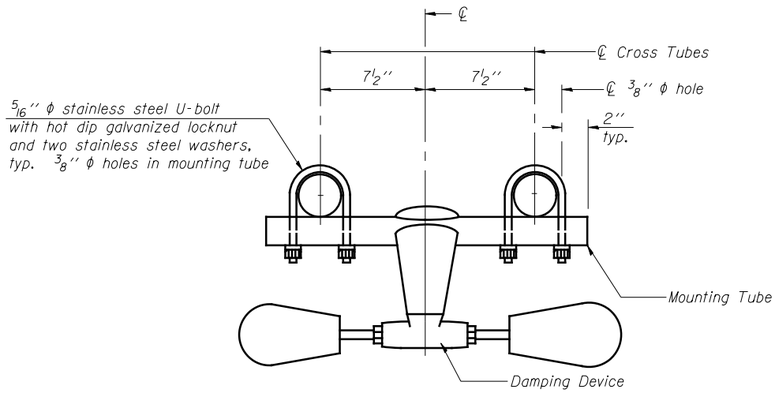
F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	427
		CONTRACT NO. 74295		
	ILLINOIS FED. AID PROJECT			



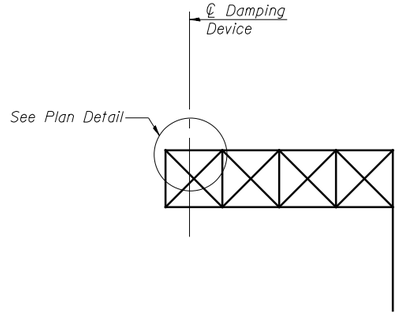
PLAN DETAIL



SECTION A-A



TRUSS DAMPING DEVICE CONNECTION DETAIL



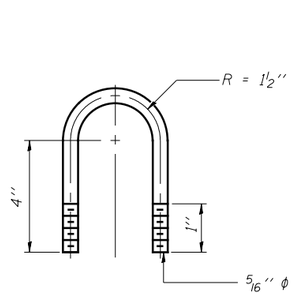
ELEVATION

Aluminum Cantilever Sign Structure

GENERAL NOTES

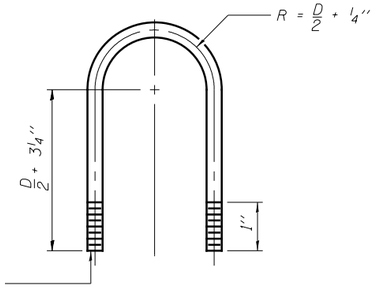
Damper: One damper per truss. (31 lbs. Stockbridge-Type Aluminum- 29'' minimum between ends of weights)

Materials: Aluminum tubes shall be ASTM B221 alloy 6061 temper T6



DAMPING DEVICE MOUNTING TUBE U-BOLT DETAIL

(Typical)

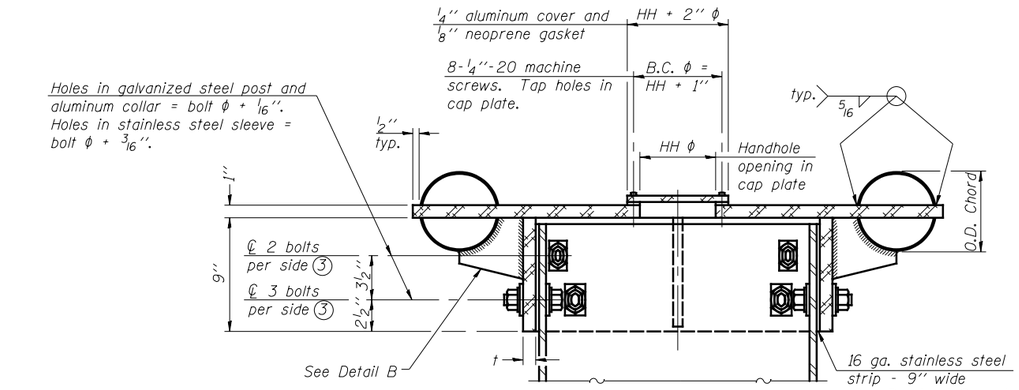


TOP CHORD TO CROSS TUBE U-BOLT DETAIL

(Typical)

OSC-A-D 6-1-12

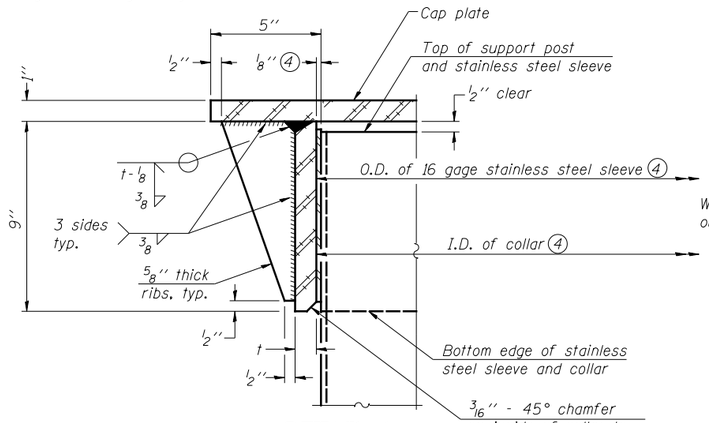
FILE NAME =	USER NAME =	DESIGNED - ESW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CANTILEVER SIGN STRUCTURE DAMPING DEVICE	F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED - JWS	REVISED -			57/70	(25-4)R	EFFINGHAM	1760	428
	PLOT SCALE =	DRAWN - PDB	REVISED -						CONTRACT NO. 74295	
	PLOT DATE =	CHECKED - BRM	REVISED -		SHEET NO. 41 OF 53 SHEETS			ILLINOIS	FED. AID PROJECT	



SECTION B-B

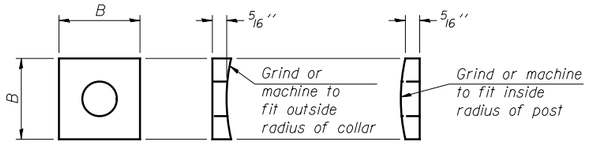
Bolts, washers (including contoured washers), and locknuts shall be stainless steel.

(4) Collar I.D. shall be manufactured to correspond to O.D. of actual galvanized post and stainless steel sleeve plus 1/8'' (±1/16''). Maximum gap between post and collar at any location equals 1/8'' before tightening bolts.



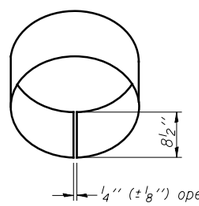
DETAIL A

(Two locations)



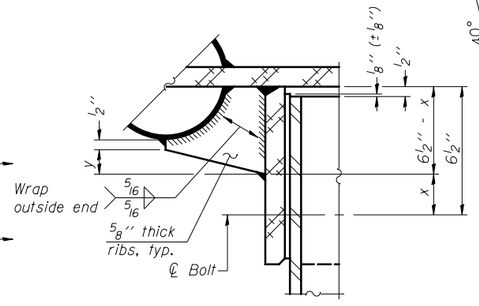
CONTOURED WASHERS

Bolt Size	Contoured Washers	
	Hole Dia.	B
7/8''	1''	2 1/2''
1''	1 1/8''	3''
1 1/4''	1 3/8''	3 1/4''



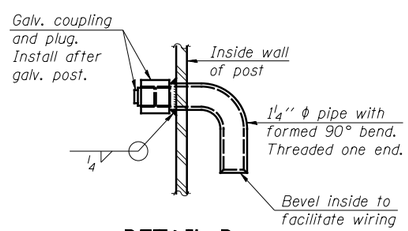
DETAIL OF STAINLESS STEEL SLEEVE

Weld to post after galvanizing. (Prepare post surface to insure tight, uniform fit and allow welding.) Welds to be 1 1/2'' long at 6'' cts. along top edge and at 1/4'' opening.

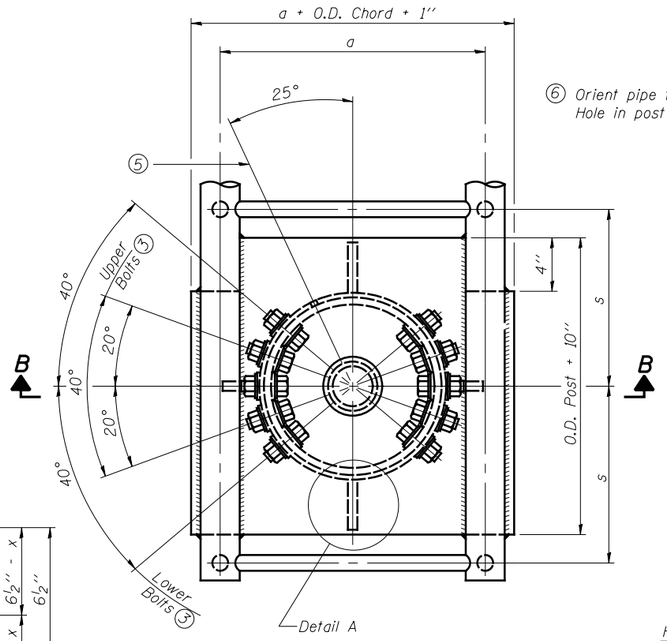


DETAIL B

Two locations
(For details not shown, see Detail C)



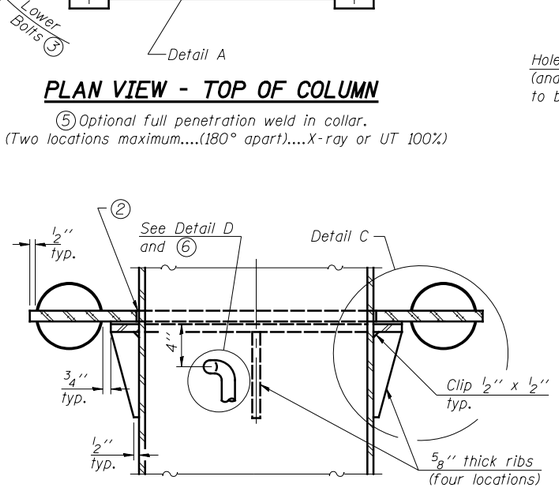
DETAIL D



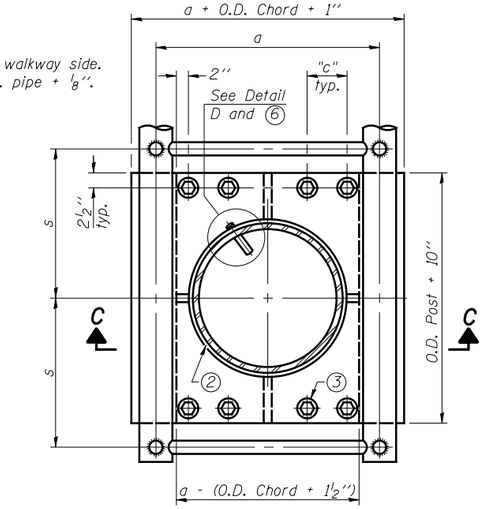
PLAN VIEW - TOP OF COLUMN

(5) Optional full penetration weld in collar. (Two locations maximum....(180° apart)....X-ray or UT 100%)

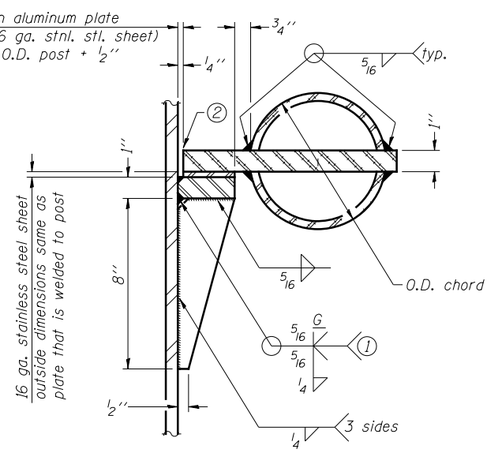
(6) Orient pipe toward walkway side. Hole in post = O.D. pipe + 1/8''.



SECTION C-C



SECTION THRU POST ABOVE LOWER CHORDS



DETAIL C

Truss Type	Post Size	Upper & Lower Connection Bolt Diameter (3)	Lower Juncture Bolt Spacing Dimension "c" (3)	Opening in Cap Plate "HH"	Collar Thickness (t)	Side Ribs	
						x	y
I-C-A	16'' ϕ (83#/')	7/8''	3 1/4''	8''	5/8''	1 3/4''	2 1/4''
II-C-A	24'' ϕ (125#/')	1''	3 1/2''	12''	7/8''	2''	1 1/4''
III-C-A (35' max.)	24'' ϕ (125#/')	1 1/4''	3 1/2''	12''	7/8''	2''	1''
III-C-A (>35' to 40')	24'' ϕ (171#/')	1 1/4''	3 1/2''	12''	7/8''	2''	1''

(1) Grind top if required to fully seat aluminum plate and stainless steel sheet.

(2) After tightening lower connection bolts, fill gap with non-hardening, silicone caulk suitable for exterior exposure and acceptable to the Engineer. Cost is included in Overhead Sign Structure Cantilever.

(3) Upper and lower connection bolts in collar and bolts at lower chord connection shall be high strength with matching locknuts. Connection bolts shall have 2 stainless steel flat washers each.

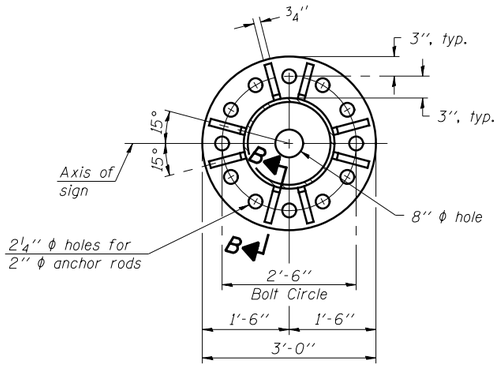
OSC-A-3 6-1-12

FILE NAME =	USER NAME =	DESIGNED - ESW	REVISED -
		CHECKED - JWS	REVISED -
	PLOT SCALE =	DRAWN - PDB	REVISED -
	PLOT DATE =	CHECKED - BRM	REVISED -

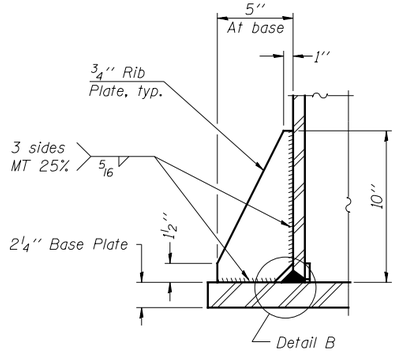
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CANTILEVER SIGN STRUCTURES - JUNCTURE DETAILS
ALUMINUM TRUSS & STEEL POST
SHEET NO. 42 OF 53 SHEETS

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	429
		CONTRACT NO. 74295		
	ILLINOIS FED. AID PROJECT			



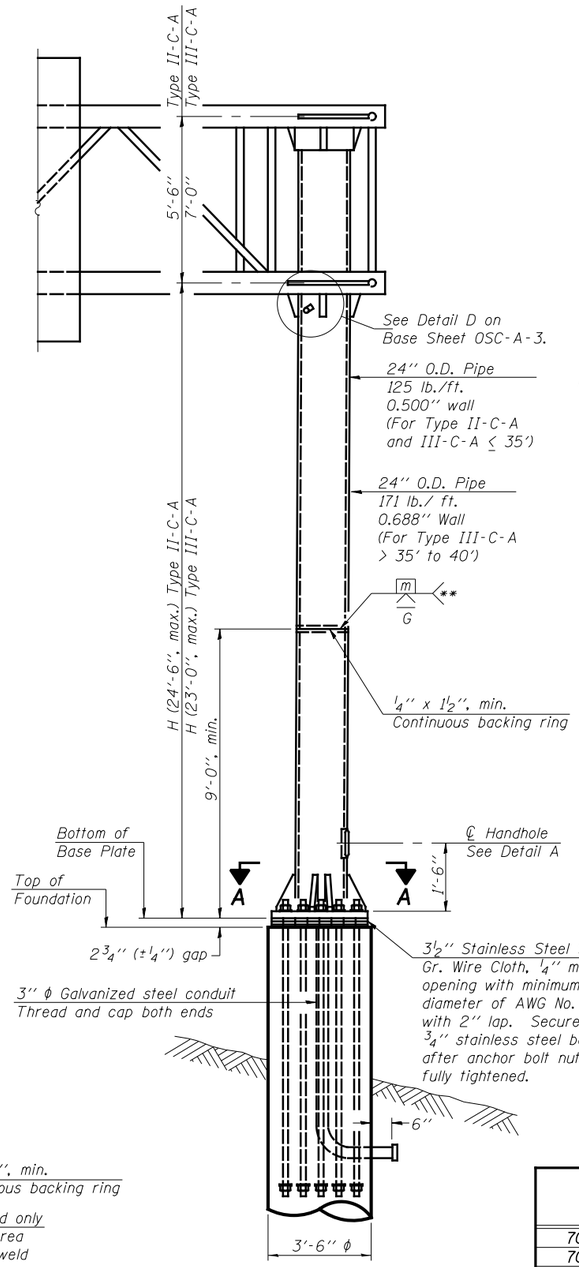
SECTION A-A



SECTION B-B

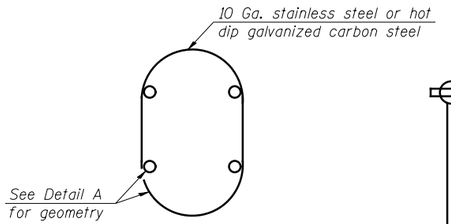
DETAIL B

(Typical rib)

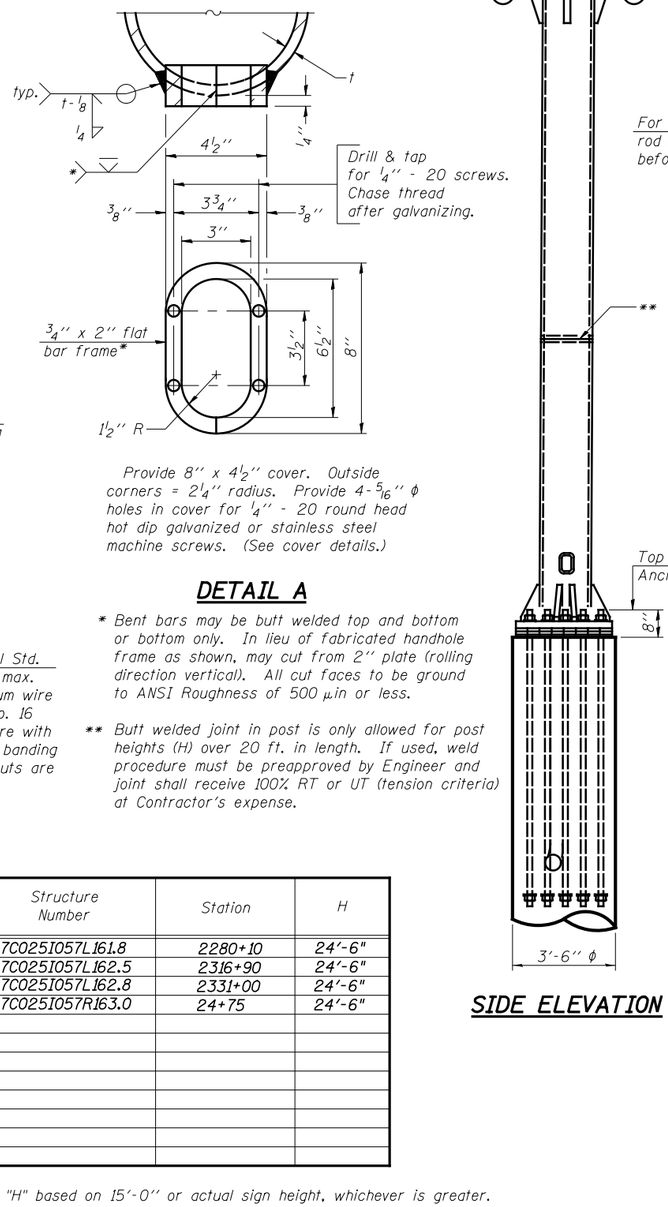


FRONT ELEVATION

For Foundation Details see Base Sheet OSC-A-9.



HANDHOLE COVER



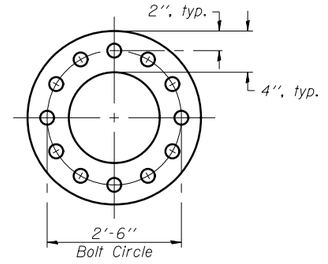
Provide 8'' x 4 1/2'' cover. Outside corners = 2 1/4'' radius. Provide 4-5/16'' ϕ holes in cover for 1/4'' - 20 round head hot dip galvanized or stainless steel machine screws. (See cover details.)

DETAIL A

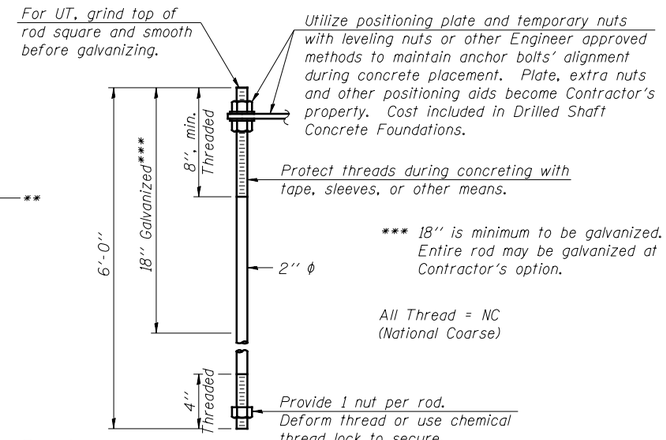
* Bent bars may be butt welded top and bottom or bottom only. In lieu of fabricated handhole frame as shown, may cut from 2'' plate (rolling direction vertical). All cut faces to be ground to ANSI Roughness of 500 μin or less.

** Butt welded joint in post is only allowed for post heights (H) over 20 ft. in length. If used, weld procedure must be preapproved by Engineer and joint shall receive 100% RT or UT (tension criteria) at Contractor's expense.

SIDE ELEVATION



SUGGESTED POSITIONING PLATE



ANCHOR ROD DETAIL

Anchor rods shall conform to ASTM F1554 Grade 105. Galvanize the upper 18'' (minimum***) and associated AASHTO M291, Grade A, C or DH heavy hex nuts and hardened washers per AASHTO M232. No welding shall be permitted on rods. Provide a nut at bottom, a hexagon locknut and washer above base plate and a leveling nut and washer below base plate. Nuts shall each be tightened with 200 lb.-ft. minimum torque against base plate. Before or after threading, but before galvanizing, each anchor rod shall be ultrasonically tested (UT) by a Level II or III inspector, qualified in accord with ANSI guidelines, to insure no rejectable flaws exist in the upper 18'' (tension criteria). Cost of testing included in Drilled Shaft Concrete Foundations.

Structure Number	Station	H
7C025I057L161.8	2280+10	24'-6"
7C025I057L162.5	2316+90	24'-6"
7C025I057L162.8	2331+00	24'-6"
7C025I057R163.0	24+75	24'-6"

Note: "H" based on 15'-0'' or actual sign height, whichever is greater.

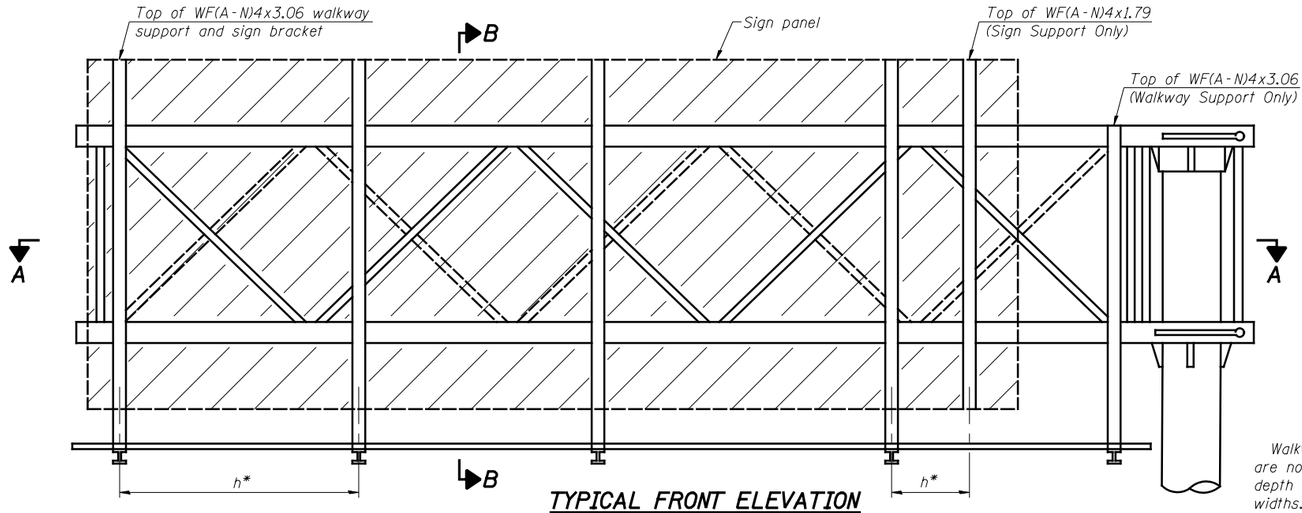
OSC-A-5 6-1-12

FILE NAME =	USER NAME =	DESIGNED - ESW	REVISED -
		CHECKED - JWS	REVISED -
	PLOT SCALE =	DRAWN - PDB	REVISED -
	PLOT DATE =	CHECKED - BRN	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CANTILEVER SIGN STRUCTURES – TYPE II-C-A & III-C-A
TRUSS SUPPORT POST – ALUMINUM TRUSS & STEEL POST
SHEET NO. 43 OF 53 SHEETS

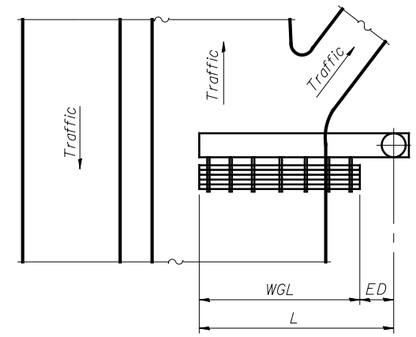
F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	430
		CONTRACT NO. 74295		
	ILLINOIS FED. AID PROJECT			



TYPICAL FRONT ELEVATION

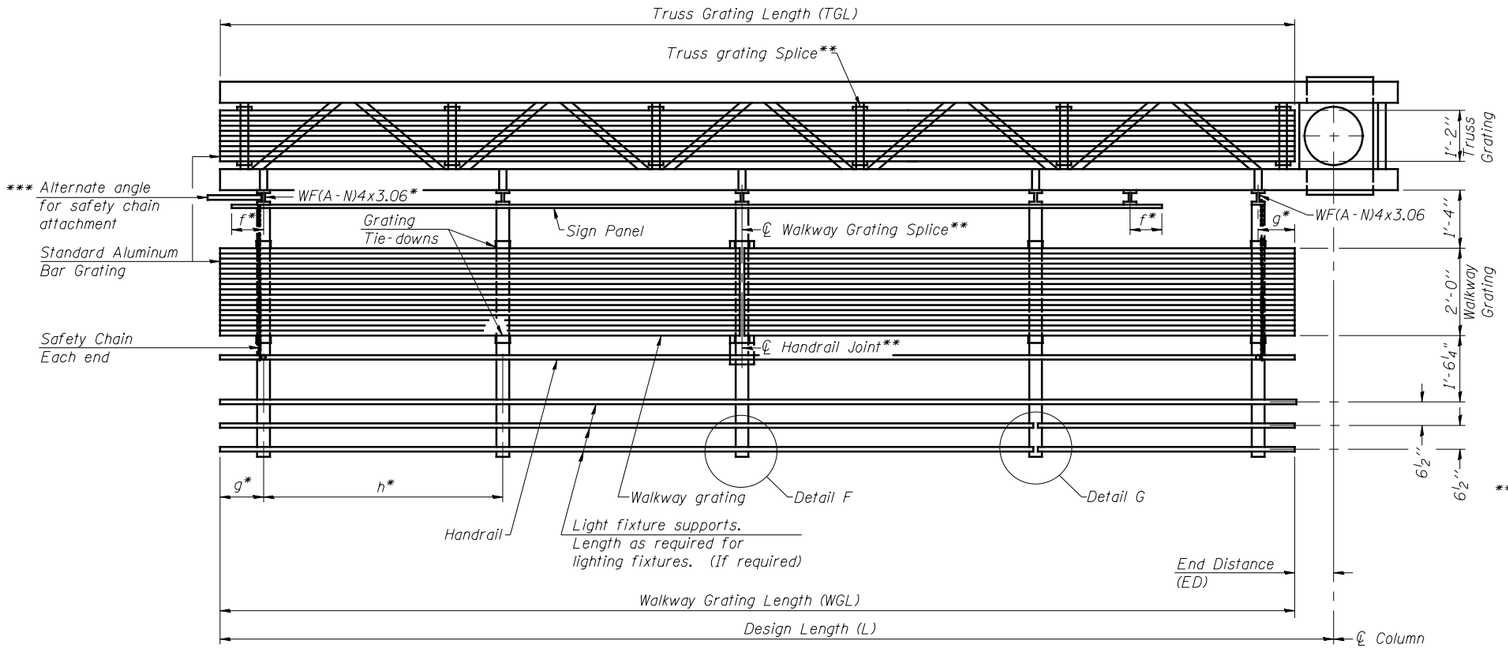
With lights and handrail omitted for clarity.

Walkway and truss grating dimensions are nominal and may vary (width ±½", depth ±½") based on available standard widths.



PLAN
WALKWAY AND HANDRAIL SKETCH

(Road plan beneath truss varies)



Structure Number	Station	WGL	ED	TGL
7C025I057R161.8	2280+10	19'-6"	10'-6"	28'-6"
7C025I057L162.5	2316+90	19'-6"	10'-6"	28'-6"
7C025I057L162.8	2331+00	19'-6"	10'-6"	28'-6"
7C025I057L163.0	24+75	19'-6"	10'-6"	28'-6"

Notes:

* Space walkway brackets WF(A-N)4x3.06 and sign brackets WF(A-N)4x1.79 for efficiency and within limits shown:

f = 12" maximum, 4" minimum (End of sign to ℄ of nearest bracket)
g = 12" maximum, 4" minimum (End of walkway to ℄ of nearest bracket)
h = 6'-0" maximum (℄ to ℄ sign and/or walkway support brackets, WF(A-N)4x1.79 or WF(A-N)4x3.06)

*** If walkway bracket at safety chain location is behind sign, add angle to bracket. See alternate safety chain attachment on base sheet OSC-A-8

For details of sign placement, sign/walkway brackets, truss and walkway gratings, grating splices and Section B-B, see Base Sheet OSC-A-7.
For details of handrail, handrail joint, safety chain and Details F and G, see Base Sheet OSC-A-8.

Truss grating to facilitate inspection shall run full length of cantilevers. Cost of truss grating is included in Overhead Sign Structure Cantilever.

SECTION A-A

Handrail and walkway grating shall span a minimum of three brackets between splices.
** Use and location of handrail joints or grating splices are optional, based on lengths needed and material availability.

$$TGL = L - \left(\frac{\text{Post O.D.}}{2} + 6''\right)$$

BRACKET TABLE

WF(A-N)4x1.79 or WF(A-N)4x3.06
ASTM B308, Alloy 6061-T6

Sign Width		Number Brackets Required
Greater Than	Less Than or Equal To	
	8'-0"	2
8'-0"	14'-0"	3
14'-0"	20'-0"	4
20'-0"	26'-0"	5
26'-0"	32'-0"	6

OSC-A-6 6-1-12

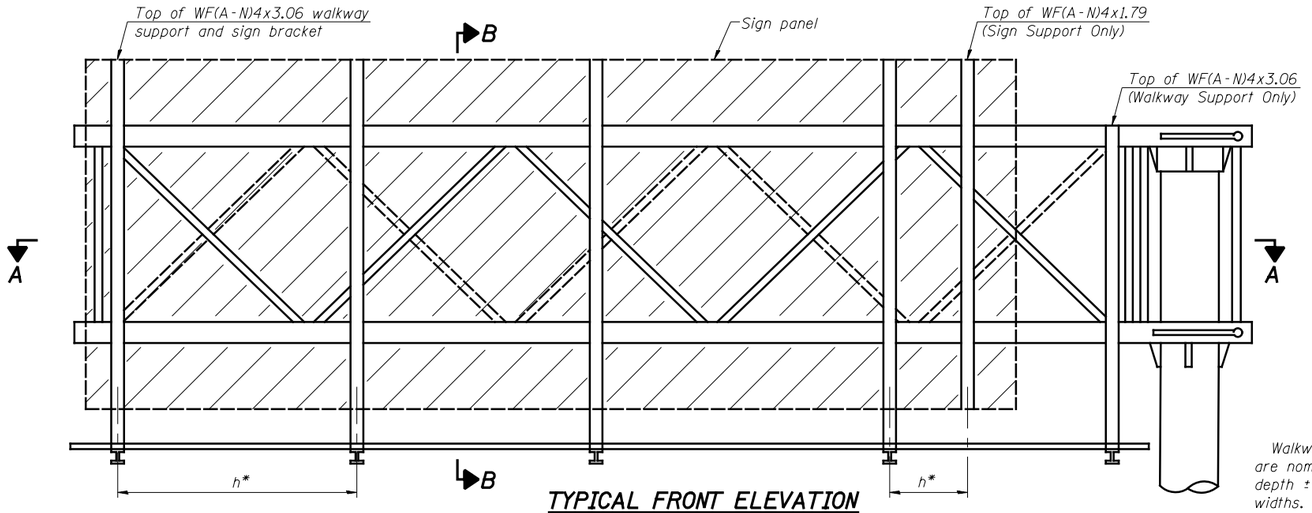
FILE NAME =	USER NAME =	DESIGNED - ESW	REVISED -
		CHECKED - JWS	REVISED -
	PLOT SCALE =	DRAWN - PDB	REVISED -
	PLOT DATE =	CHECKED - BRM	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CANTILEVER SIGN STRUCTURES – ALUMINUM WALKWAY
DETAILS – ALUMINUM TRUSS & STEEL POST

SHEET NO. 44 OF 53 SHEETS

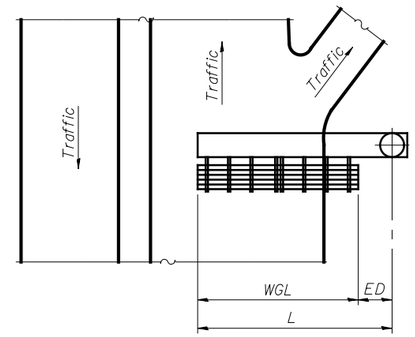
F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	431
		CONTRACT NO. 74295		
	ILLINOIS FED. AID PROJECT			



TYPICAL FRONT ELEVATION

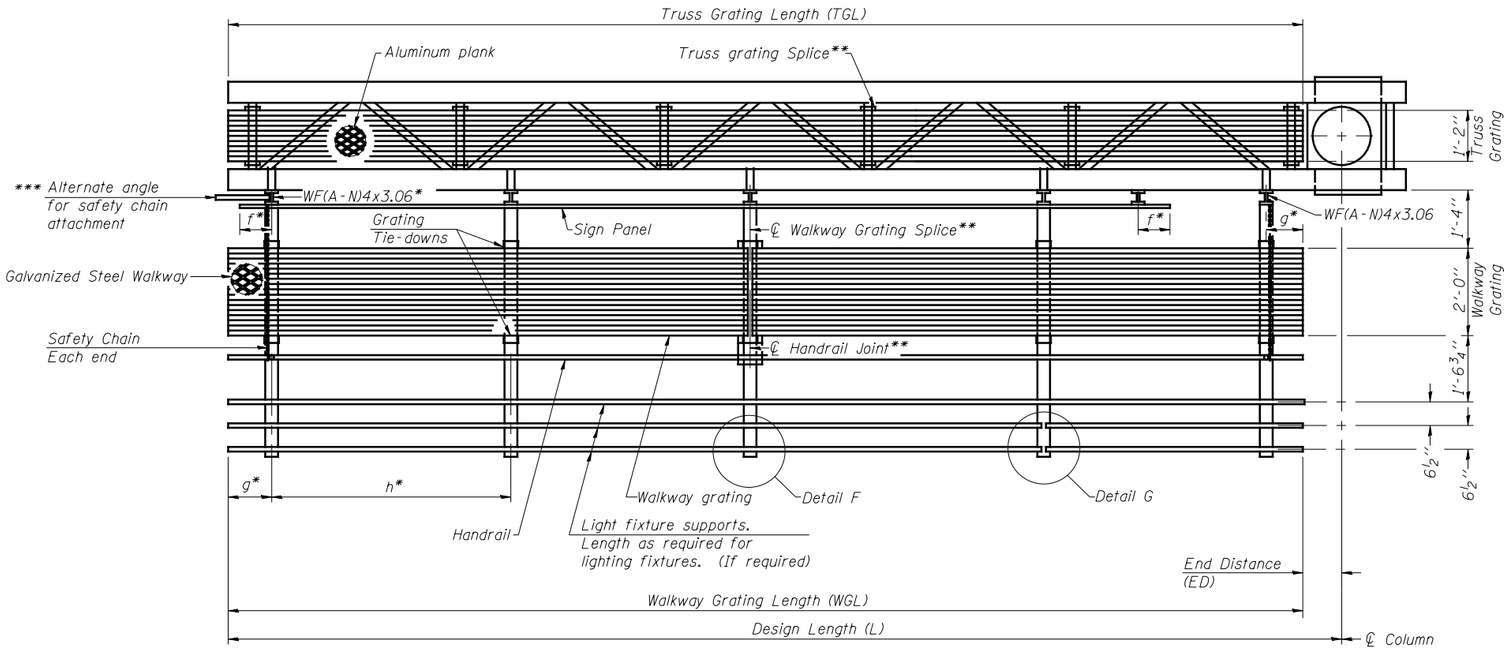
With lights and handrail omitted for clarity.

Walkway and truss grating dimensions are nominal and may vary (width ±½", depth ±½") based on available standard widths.



PLAN
WALKWAY AND HANDRAIL SKETCH

(Road plan beneath truss varies)



Structure Number	Station	WGL	ED	TGL
7C025I057L161.8	2280+10	19'-6"	10'-6"	28'-6"
7C025I057L162.5	2316+90	19'-6"	10'-6"	28'-6"
7C025I057L162.8	2331+00	19'-6"	10'-6"	28'-6"
7C025I057R163.0	24+75	19'-6"	10'-6"	28'-6"

Notes:

* Space walkway brackets WF(A-N)4x3.06 and sign brackets WF(A-N)4x1.79 for efficiency and within limits shown:

f = 12" maximum, 4" minimum (End of sign to ℄ of nearest bracket)
g = 12" maximum, 4" minimum (End of walkway to ℄ of nearest bracket)
h = 6'-0" maximum (℄ to ℄ sign and/or walkway support brackets, WF(A-N)4x1.79 or WF(A-N)4x3.06)

*** If walkway bracket at safety chain location is behind sign, add angle to bracket. See alternate safety chain attachment on base sheet OSC-A-8.

For details of sign placement, sign/walkway brackets, truss and walkway gratings, grating splices and Section B-B, see Base Sheet OSC-A-7S.
For details of handrail, handrail joint, safety chain and Details F and G, see Base Sheet OSC-A-8.

Truss grating to facilitate inspection shall run full length of cantilevers. Cost of truss grating is included in Overhead Sign Structure Cantilever.

SECTION A-A

Handrail and walkway grating shall span a minimum of three brackets between splices.
** Use and location of handrail joints or grating splices are optional, based on lengths needed and material availability.

$$TGL = L - \left(\frac{\text{Post O.D.}}{2} + 6''\right)$$

BRACKET TABLE

WF(A-N)4x1.79 or WF(A-N)4x3.06
ASTM B308, Alloy 6061-T6

Sign Width		Number Brackets Required
Greater Than	Less Than or Equal To	
	8'-0"	2
8'-0"	14'-0"	3
14'-0"	20'-0"	4
20'-0"	26'-0"	5
26'-0"	32'-0"	6

OSC-A-6S 6-1-12

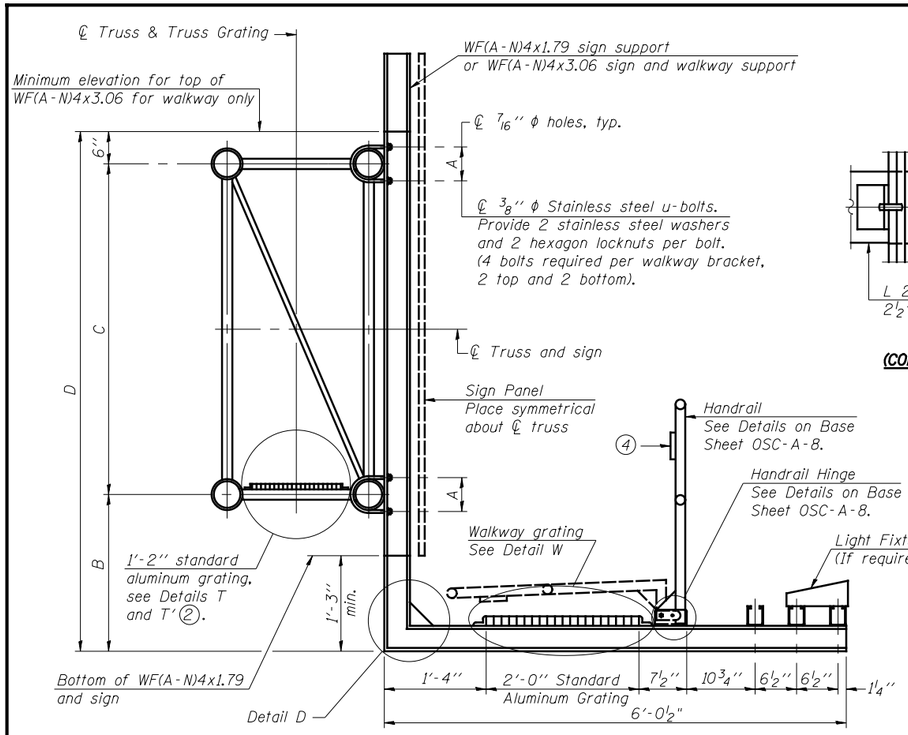
FILE NAME =	USER NAME =	DESIGNED - ESW	REVISED -
		CHECKED - JWS	REVISED -
	PLOT SCALE =	DRAWN - PDB	REVISED -
	PLOT DATE =	CHECKED - BRM	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CANTILEVER SIGN STRUCTURES – ALTERNATE STEEL
WALKWAY DETAILS – ALUMINUM TRUSS & STEEL POST

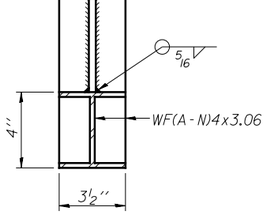
SHEET NO. 45 OF 53 SHEETS

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	432
		CONTRACT NO. 74295		
	ILLINOIS FED. AID PROJECT			

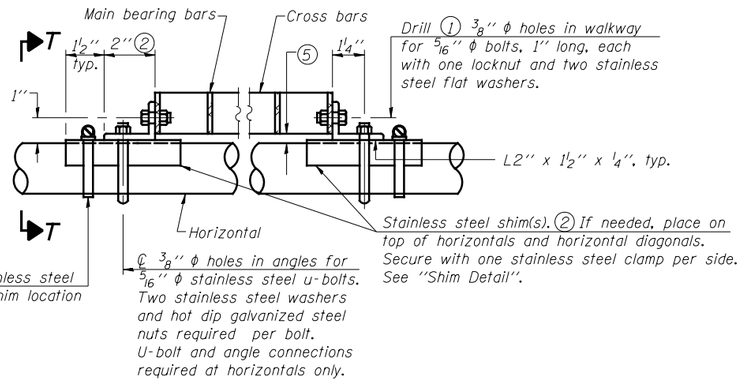


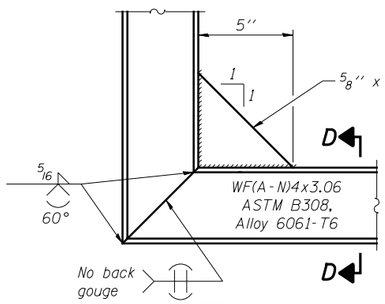
SECTION B-B

Sign shall be even with the top of the bracket, but it may extend no more than 6" above the top of the bracket for field adjustments.



SECTION D-D

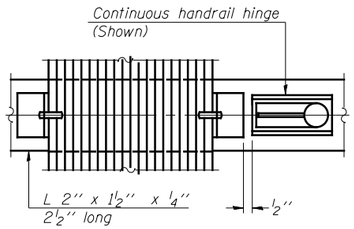




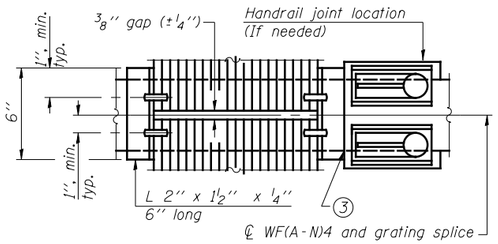
DETAIL D

DETAIL T

(Continuous Truss grating)

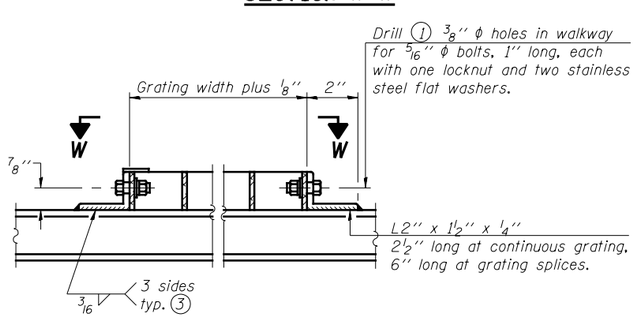


(CONTINUOUS WALKWAY GRATING)



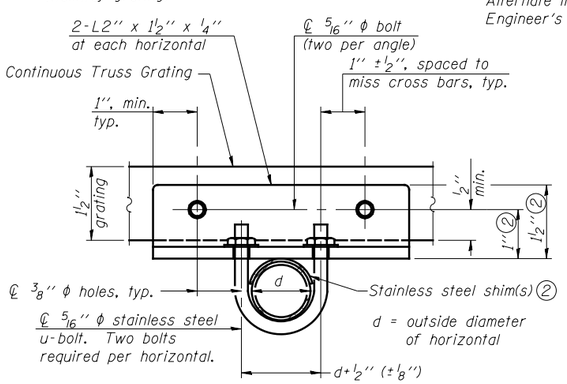
(AT WALKWAY GRATING SPLICE)

SECTION W-W

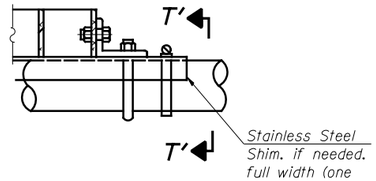


DETAIL W

(Walkway grating)



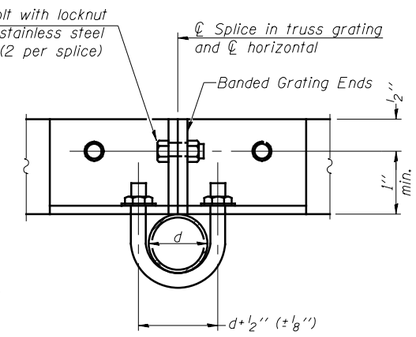
SECTION T-T



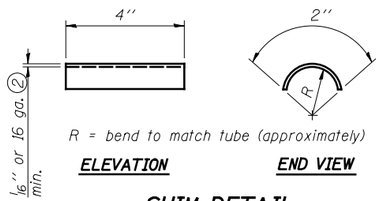
DETAIL T'

(Truss grating splice)

Details not shown same as Detail T. Alternate materials may be used subject to the Engineer's review and approval.



SECTION T'-T'



SHIM DETAIL

Structure Number	Station	A	(6) B	C	(6) D
7C025I057L161.8	2280+10	7"	7'-0"	5'-6"	13'-0"
7C025I057L162.5	2316+90	7"	6'-0"	5'-6"	12'-0"
7C025I057L162.8	2331+00	7"	7'-0"	5'-6"	13'-0"
7C025I057R163.0	24+75	7"	7'-0"	5'-6"	13'-0"

SPECIFICATIONS FOR STANDARD ALUMINUM GRATING

Main Bearing Bars (MBB) shall be 3/16" x 1 1/2" on 1 3/16" centers and conform to ASTM B211 Alloy 6061-T6.

Cross bars (CB) shall be 3/16" x 1 1/2" on 4" centers and conform to ASTM B221 Alloy 6063-T5 or 6061-T6.

OR

Aluminum Grating with modified "T" sections for main bearing bars shall meet the following requirements:

Main bars shall conform to ASTM B221 Alloy 6061-T6 and have a minimum section modulus equal to 0.0705 in.³ per bar, a depth of 1 1/2", spaced on 1 3/16" centers.

Cross bars shall conform to ASTM B221 Alloy 6063-T5 or T-42 and spaced on 4" centers.

(1) Drilling holes in grating may be done in shop or field, based on Contractor's preference and subject to accurate alignment.

(2) Stainless steel shims shall be placed as shown in Detail T if needed to compensate for alignment variations between horizontal and diagonal pipes beyond adjustment provided by angles. Thicker shims may be used subject to shims performing properly.

(3) If Handrail Joint present, weld angle to WF(A-N)4 and 1/4" extension bars. (See Base Sheet OSC-A-8.)

(4) PL 1/8" x 1/2" x 2" welded to handrail posts to protect locations that contact grating.

(5) Tube to grating gap may vary from 0 to 1/2", max. to align walkway, allow for camber, etc.

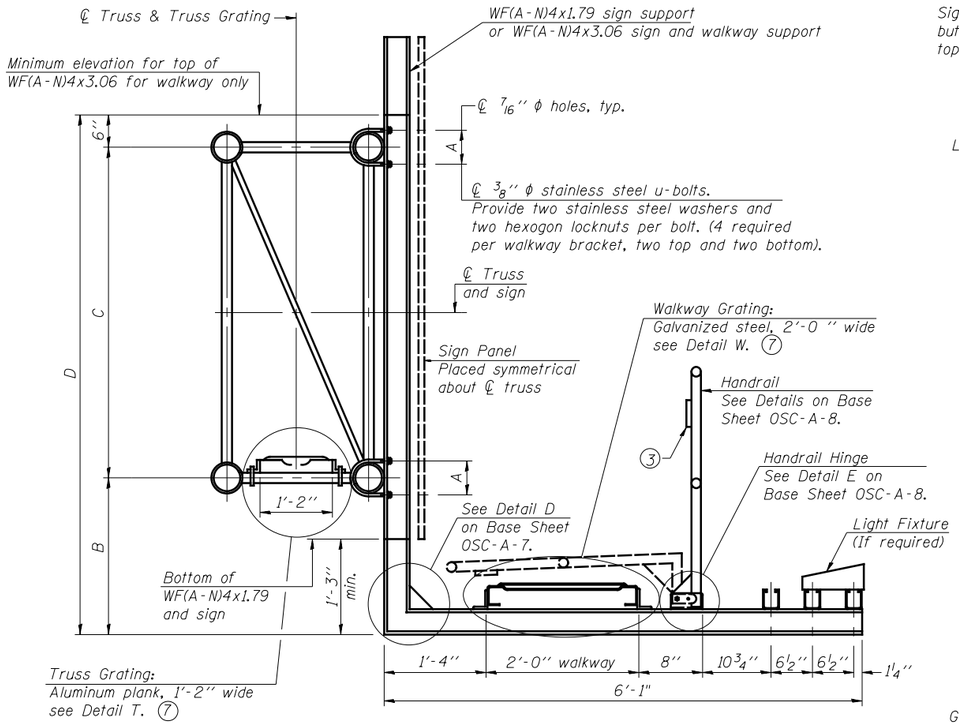
(6) Based on actual sign height, D_S, given on OSC-A-1.

OSC-A-7

6-1-12

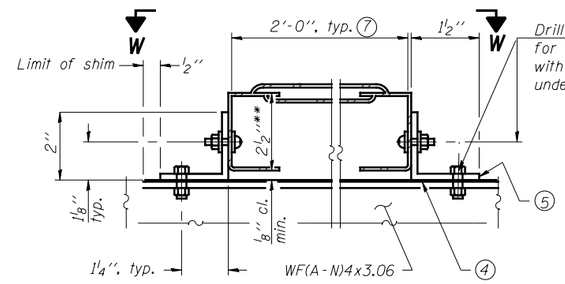
FILE NAME =	USER NAME =	DESIGNED - ESW	REVISED - 4-27-11	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CANTILEVER SIGN STRUCTURES – WALKWAY DETAILS ALUMINUM TRUSS & STEEL POST
		CHECKED - JWS	REVISED -		SHEET NO. 46 OF 53 SHEETS
	PLOT SCALE =	DRAWN - PDB	REVISED -		
	PLOT DATE =	CHECKED - BRM	REVISED -		

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	433
		CONTRACT NO. 74295		
	ILLINOIS	FED. AID PROJECT		

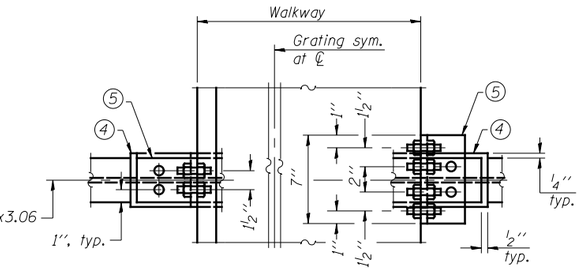


SECTION B-B

Sign shall be even with the top of the bracket, but it may extend no more than 6'' above the top of the bracket for field adjustments.

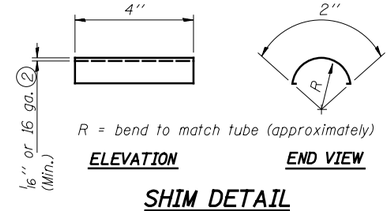


DETAIL W
GALVANIZED STEEL WALKWAY GRATING

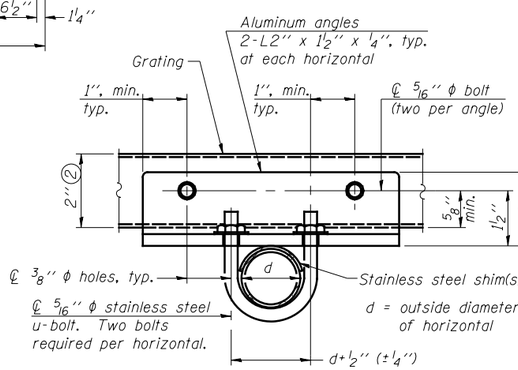


WALKWAY GRATING CONTINUOUS **AT WALKWAY GRATING SPLICE**

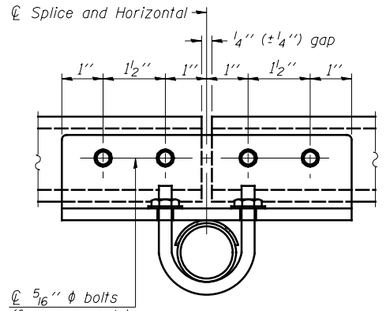
SECTION W-W



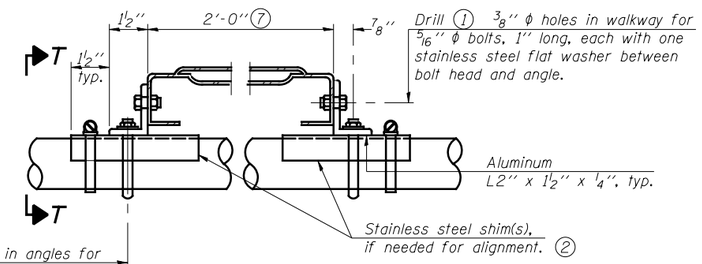
SHIM DETAIL



SECTION T-T
(Truss Grating Continuous)



SECTION T-T
(Truss Grating Splice)
Alternate splice details and locations may be used subject to the Engineer's review and approval.



DETAIL T
(Truss grating at horizontal)

ALUMINUM TRUSS GRATING

Structure Number	Station	A	(8) B	C	(8) D
7C025I057R161.8	2280+10	7"	7'-0"	5'-6"	13'-0"
7C025I057L162.5	2316+90	7"	6'-0"	5'-6"	12'-0"
7C025I057L162.8	2331+00	7"	7'-0"	5'-6"	13'-0"
7C025I057L163.0	24+75	7"	7'-0"	5'-6"	13'-0"

(1) Drilling holes in grating may be done in shop or field, based on Contractor's preference and subject to accurate alignment.

(2) Stainless steel shims shall be placed under angles at horizontals and horizonal diagonals if needed to compensate for alignment variations and differences in horizontal diagonal pipe sizes beyond adjustment provided by angles. Secure with one stainless steel clamp per location, se ''Shim Detail''. Thicker shim plates may be used when needed subject to shims performing properly.

(3) ℄ 1/8" x 1/2" x 2" welded to handrail posts to protect locations that contact grating.

(4) 1/16'' (or 16 ga.) x 2 1/2'' x 4'' stainless steel shim adhered to top of WF(A-N)4x3.06 beneath each galvanized angle, typ. Adhesives for shims shall be suitable for materials joined and full exposure conditions.

(5) Galvanized steel L2'' x 2'' x 1/4'', 3 1/2'' long with continuous grating 7'' long at grating splice.

(6) Details shown are considered equal alternatives to Aluminum Walkway Details and may be substituted by Contractor at no charge in contract cost.

(7) Perforated or expanded metal grating providing a skid resistant (non-serrated) surface and capable of supporting a 500 pound concentrated load with a 6'-0'' clear span. Walkway and truss grating dimensions are nominal and may vary (width ±1/2'', depth 1/2'') based on available standard sizes. Cut ends of grating shall be free of burrs or hazardous projections and coated with zinc-rich primer or equivalent.

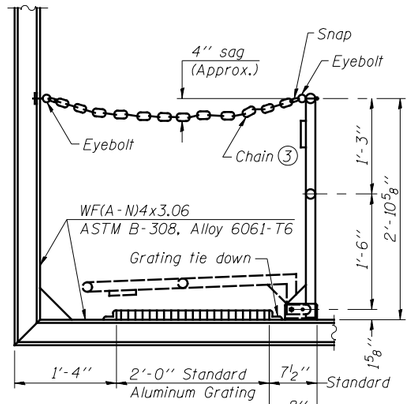
(8) Based on actual sign height, Ds, given on OSC-A-1.

OSC-A-7S 6-1-12

FILE NAME =	USER NAME =	DESIGNED - ESW	REVISED - 4-27-11	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		CHECKED - JWS	REVISED -	
	PLOT SCALE =	DRAWN - PDB	REVISED -	
	PLOT DATE =	CHECKED - BRM	REVISED -	

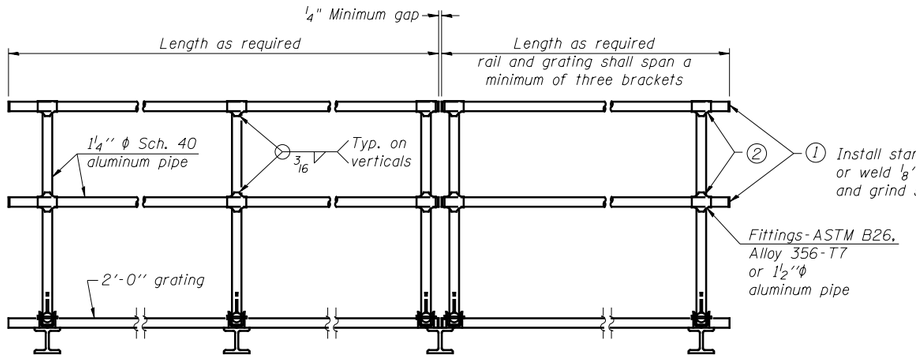
CANTILEVER SIGN STRUCTURES
ALTERNATE WALKWAY DETAILS
SHEET NO. 47 OF 53 SHEETS

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	434
		CONTRACT NO. 74295		
	ILLINOIS FED. AID PROJECT			

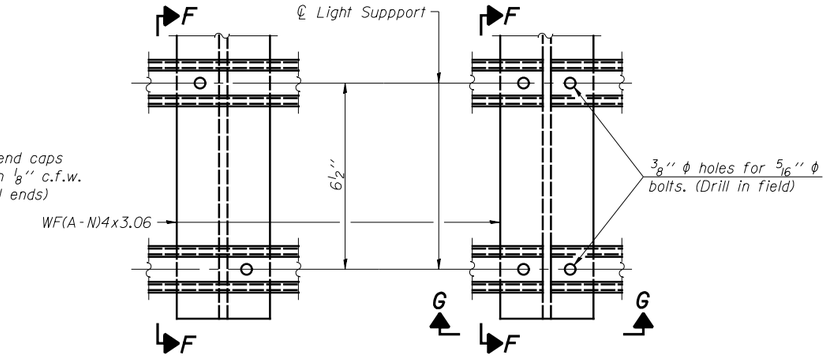


SIDE ELEVATION

(Showing Safety Chain W/O Sign)



FRONT ELEVATION



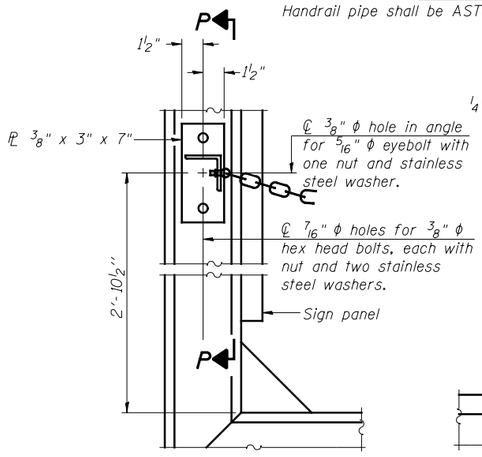
DETAIL F

DETAIL G

HANDRAIL DETAILS

Handrail pipe shall be ASTM B241 or B429, Alloy 6063-T6 or Alloy 6061-T6.

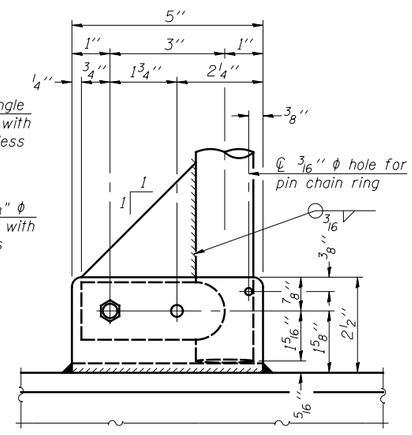
(2) Horizontal handrail member shall be continuous thru fitting. Provide 7/16'' ϕ hole in fitting for 3/8'' ϕ bolt. Field drill 7/16'' ϕ hole in horizontal rail member. Provide locknut and two stainless steel washers for bolt. (Use 5/16'' eyebolts in 7/16'' ϕ holes on top rail at ends only.)



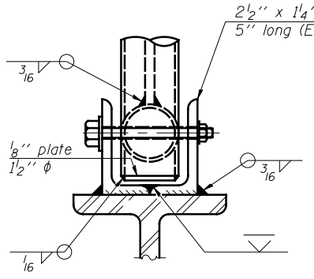
ALTERNATE SAFETY CHAIN ATTACHMENT

(With Sign Present)

Items not shown same as "Side Elevation" of "Handrail Details"

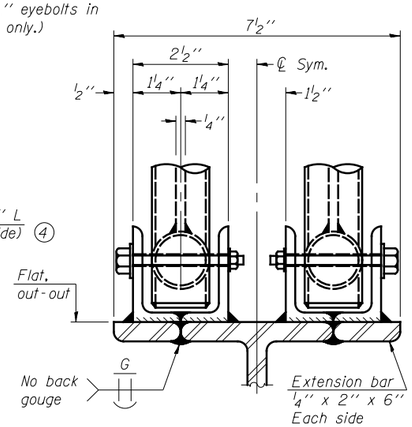


SIDE ELEVATION



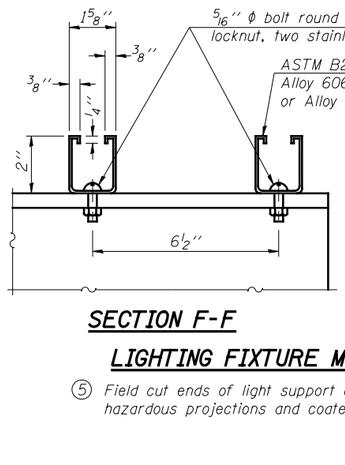
FRONT ELEVATION

Details not shown same as "ELEVATION" at right.

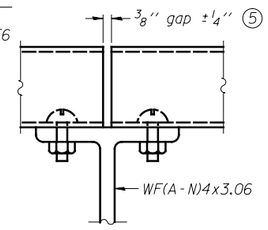


ELEVATION AT HANDRAIL JOINT (4)

Details not shown same as "FRONT ELEVATION"



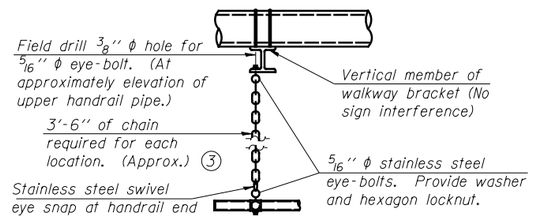
SECTION F-F



SECTION G-G

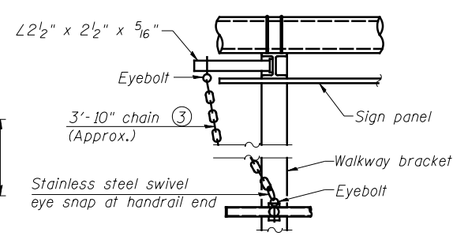
LIGHTING FIXTURE MOUNTS (IF REQUIRED)

(5) Field cut ends of light support channels shall be free of burrs or hazardous projections and coated with zinc-rich primer or equivalent.



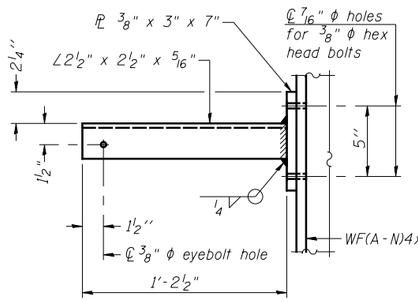
SAFETY CHAIN

One required for each end of each walkway.

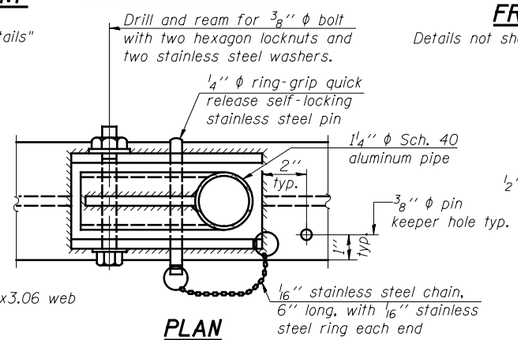


ALTERNATE SAFETY CHAIN ATTACHMENT

Details not shown similar to "Safety Chain" Details
(Walkway omitted for clarity)

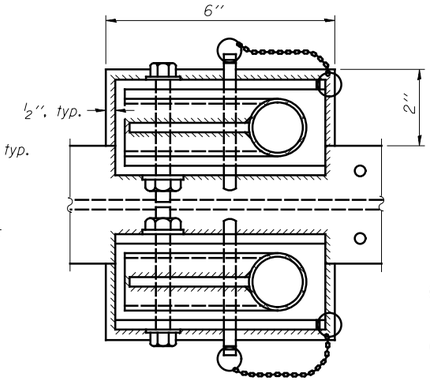


SECTION P-P



PLAN

DETAIL E HANDRAIL HINGE



PLAN AT HANDRAIL JOINT

Details not shown same as "PLAN"

(3) 3/16'' Type 304L stainless steel chain, approximately 12 links per foot.

(4) Extrusions may be used in lieu of the details shown, with approval of the Engineer.

OSC-A-8 6-1-12

FILE NAME =	USER NAME =	DESIGNED - ESW	REVISED -
		CHECKED - JWS	REVISED -
	PLOT SCALE =	DRAWN - PDB	REVISED -
	PLOT DATE =	CHECKED - BRM	REVISED -

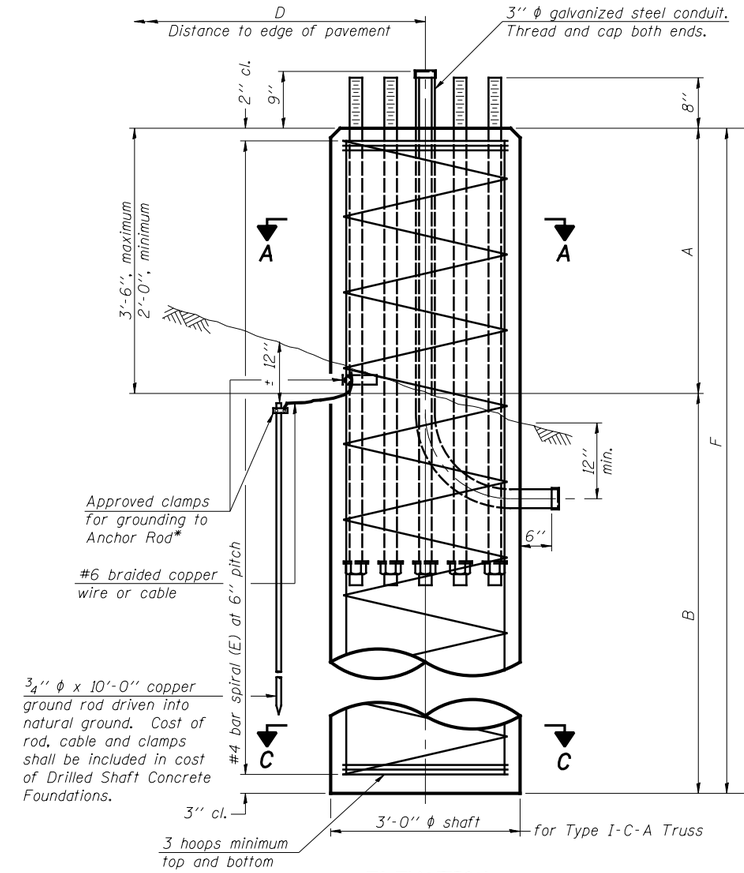
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CANTILEVER SIGN STRUCTURES – HANDRAIL DETAILS
ALUMINUM TRUSS & STEEL POST

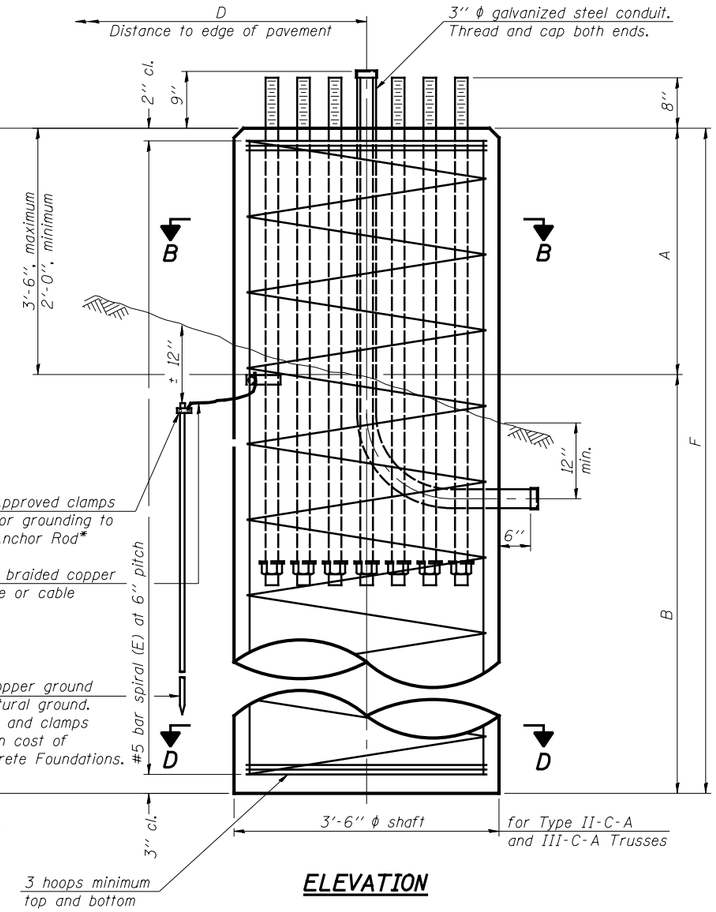
SHEET NO. 48 OF 53 SHEETS

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	435
		CONTRACT NO. 74295		
	ILLINOIS FED. AID PROJECT			

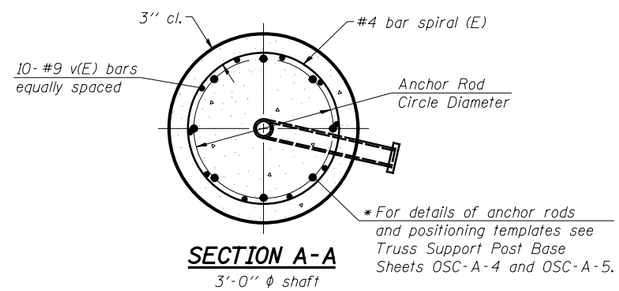
* Grind anchor rod to bright finish at ground clamp location before installing clamp.



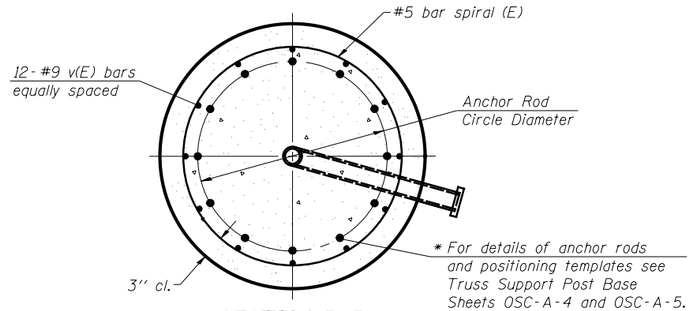
ELEVATION



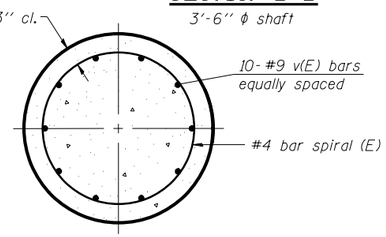
ELEVATION



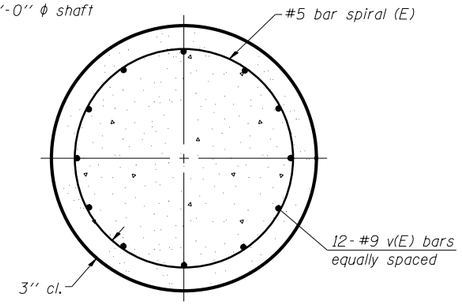
SECTION A-A
3'-0'' ϕ shaft



SECTION B-B
3'-6'' ϕ shaft



SECTION C-C
3'-0'' ϕ shaft



SECTION D-D
3'-6'' ϕ shaft

NOTES:

The foundation dimensions shown in the Foundation Design Table are based on the presence of mostly cohesive soils with an average Unconfined Compressive Strength (Qu) of at least 1.25 tsf, which must be determined by previous soil investigations at the jobsite. When other conditions are indicated, the boring data will be included in the plans and the foundation dimensions shown in the Foundation Data Table will be the result of site specific designs.

If the conditions encountered are different than those indicated, the Contractor shall notify the Engineer to determine if the foundation dimensions need to be modified. If dimensions "B" or "F" are revised by more than 12" by the Contractor, "as-built" plans shall be prepared and submitted to the District Bureau of Operations for future reference.

No sonotubes or decomposable forms shall be used below the lower conduit entrance. Permanent metal forms or other shielding may not be left in place below that elevation without the Engineer's written permission.

Concrete shall be placed monolithically, without construction joints.

Backfill shall be placed per Article 502 of Standard Specification and prior to erection of support column.

A normal surface finish followed by a Bridge Seat Sealer application will be required on concrete surfaces above the lowest elevation 6" below finished ground line. Cost included in "Drilled Shaft Concrete Foundation".

FOUNDATION DESIGN TABLE

Truss Type	Post Base Sheet	Maximum CantileverLength (ft)	Maximum Total Sign Area (sq ft)	Shaft Diameter (in)	"B" Depth (ft)	Anchor Rods		Anchor Rod Circle Diameter (in)
						No.	Diameter (in)	
I-C-A	OSC-A-4	25	170	3.0	16.0	8	2	22
II-C-A	OSC-A-5	30	170	3.5	17.0	12	2	30
II-C-A	OSC-A-5	30	340	3.5	21.5	12	2	30
III-C-A	OSC-A-5	35	170	3.5	19.0	12	2	30
III-C-A	OSC-A-5	35	250	3.5	22.5	12	2	30
III-C-A	OSC-A-5	35	400	3.5	26.5	12	2	30
III-C-A	OSC-A-5	40	400	3.5	32.0	12	2	30

FOUNDATION DATA TABLE

Structure Number	Station	Truss Type	Shaft Diameter	Elevation Top	Elevation Bottom	Qu	A	B	F	Class DS Concrete Cubic Yards
7C025I057L161.8	2280+10	II-C-A	3'-6"	616.50	592.00		3'-0"	21'-6"	24'-6"	8.8
7C025I057L162.5	2316+90	II-C-A	3'-6"	605.97	581.47		3'-0"	21'-6"	24'-6"	8.8
7C025I057L162.8	2331+00	II-C-A	3'-6"	601.04	576.54		3'-0"	21'-6"	24'-6"	8.8
7C025I057R163.0	24+75	II-C-A	3'-6"	595.50	571.00		3'-0"	21'-6"	24'-6"	8.8

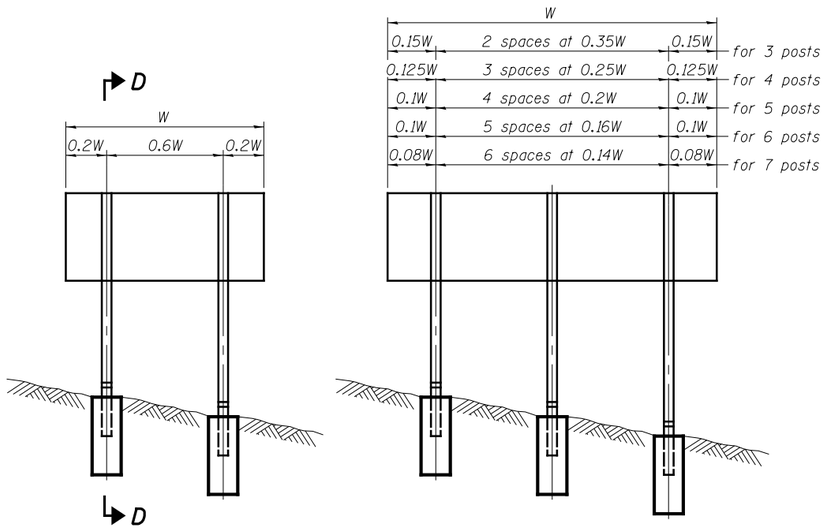
OSC-A-9 6-1-12

FILE NAME =	USER NAME =	DESIGNED - ESW	REVISED -
		CHECKED - JWS	REVISED -
	PLOT SCALE =	DRAWN - PDB	REVISED -
	PLOT DATE =	CHECKED - BRM	REVISED -

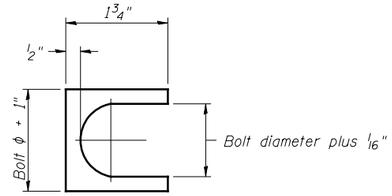
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CANTILEVER SIGN STRUCTURES - DRILLED SHAFT
ALUMINUM TRUSS & STEEL POST
SHEET NO. 49 OF 53 SHEETS

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	436
		CONTRACT NO. 74295		
	ILLINOIS FED. AID PROJECT			

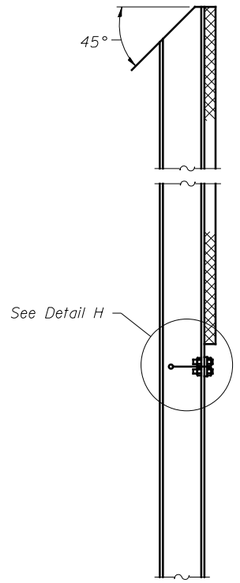


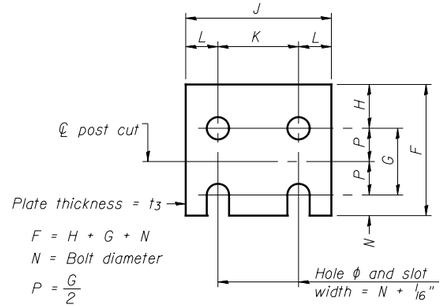
ELEVATION



SHIM DETAIL

Furnish two 0.01" thick and two 0.03" thick stainless steel or brass (ASTM B36) shims per post.

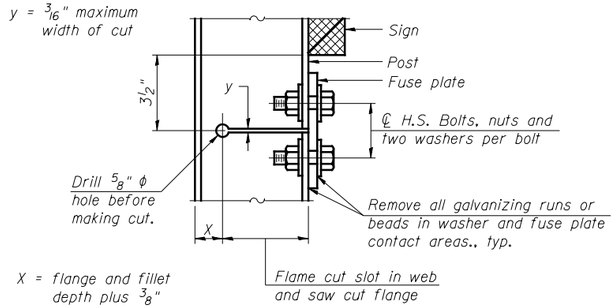




FUSE PLATE DATA		
N = Bolt Diameter	G	H
1/2"	2"	1 1/8"
5/8"	2 1/4"	1 1/4"
3/4"	2 1/2"	1 3/8"
7/8"	2 3/4"	1 1/2"
1"	3"	1 5/8"
1 1/8"	3 1/4"	1 3/4"
1 1/4"	3 1/2"	1 7/8"

FUSE PLATE DETAIL

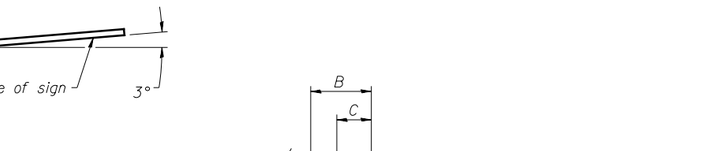
(Install with notches down.)



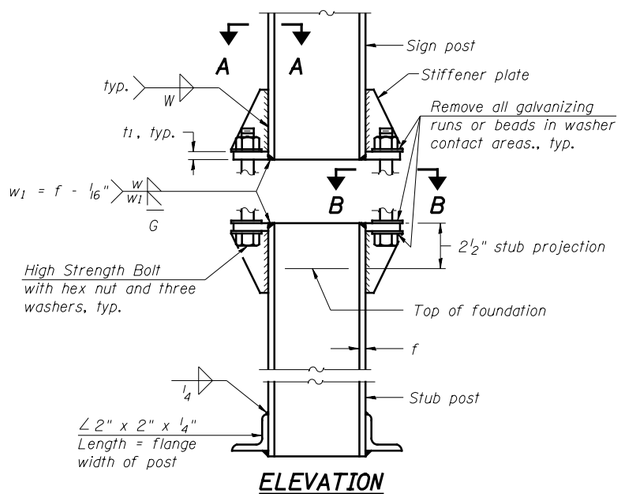
DETAIL H

STIFFENER PLATE DETAIL

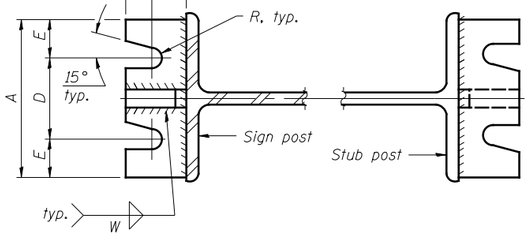
Diameter



LOCATION SKETCH

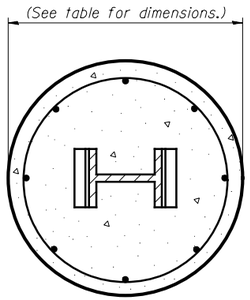


ELEVATION
SIGN POST & STUB POST

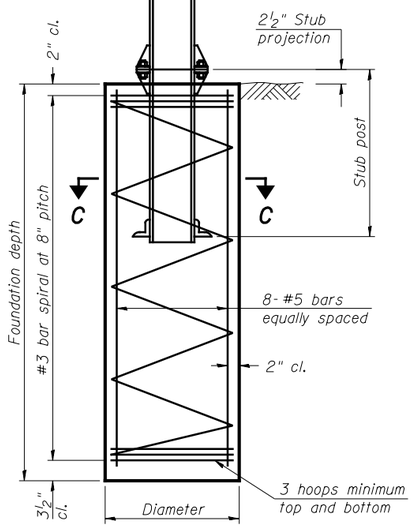


SECTION A-A

SECTION B-B



SECTION C-C



SECTION D-D

GENERAL NOTES

Posts shall be plumbed by using shims with post-to-stub post connection bolts snug tight only. Final tightening of all High Strength Bolts shall be in accordance with Article 727.05 and threads at the junction of the bolt and nut shall be burred or center punched to prevent the nut from loosening.

LOADING: 80 m.p.h. wind with 30% gust factor, normal to sign.

DESIGN STRESSES:
Structural steel - 20,000 p.s.i.
Reinforcing steel - 20,000 p.s.i.
Concrete - 1,400 p.s.i.
Footing soil pressure - 2,000 p.s.f.

After fabrication, the post, fuse plate and upper 6", min. of the stub post shall be hot-dip galvanized in accordance with AASHTO M111. All bolts, nuts and washers shall be hot-dip galvanized in accordance with AASHTO M232.

Work this sheet with Base Sheet BAW-A-2.

BAW-A-1 6-1-12

(Sheet 1 of 2)

FILE NAME =	USER NAME =	DESIGNED - ESW	REVISED -
		CHECKED - JWS	REVISED -
	PLOT SCALE =	DRAWN - PDB	REVISED -
	PLOT DATE =	CHECKED - BRM	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BREAK-AWAY WIDE FLANGE STEEL SIGN POST DETAILS

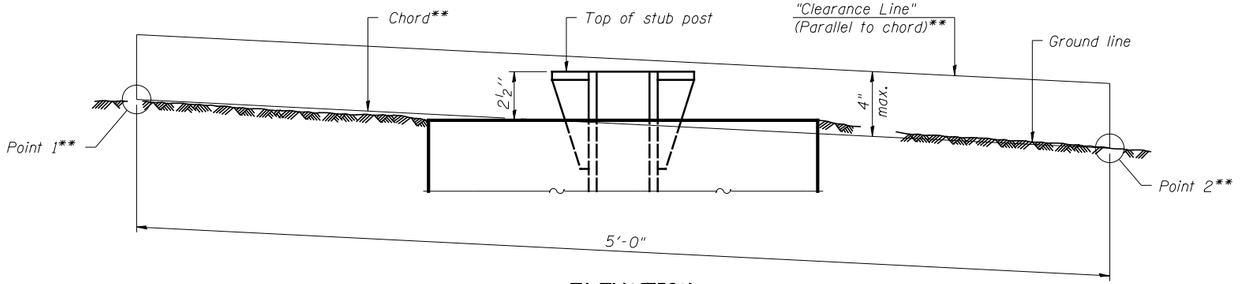
SHEET NO. 50 OF 53 SHEETS

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	437
		CONTRACT NO. 74295		
	ILLINOIS FED. AID PROJECT			

POST	CONCRETE FOUNDATION TABLE							POST TO STUB POST CONNECTION DATA										FUSE PLATE DATA			
	Foundation			Reinforcement			Stub Post														
	Diameter	* Minimum Depth	Concrete (1) cu. yds.)	Vertical Bars Length	Bar Spirals Diameter	Bar Spirals Length	lbs. (2)	Length	Bolt Size	A	B	C	D	E	t_1	t_2	R	W	J	K	L	t_3
W6x9	2'-0"	6'-0"	0.70	5'-9"	1'-8½"	79'-0"	78	2'-3"	⅝" x 3¼"	6"	2¼"	1¼"	3½"	1¼"	¾"	½"	11/32"	¼"	4"	2¼"	⅞"	¼"
W6x15	2'-0"	6'-0"	0.70	5'-9"	1'-8½"	79'-0"	78	2'-6"	⅝" x 3¼"	6"	2¼"	1¼"	3½"	1¼"	¾"	½"	11/32"	¼"	6"	3½"	1¼"	⅜"
W8x18	2'-0"	6'-0"	0.70	5'-9"	1'-8½"	79'-0"	78	2'-6"	¾" x 3¾"	6"	2½"	1⅜"	3¼"	1⅜"	1"	½"	13/32"	5/16"	5¼"	2¾"	1¼"	⅜"
W10x22	2'-6"	6'-6"	1.18	6'-3"	2'-2½"	105'-0"	92	3'-0"	¾" x 3¾"	6"	2½"	1⅜"	3¼"	1⅜"	1"	½"	13/32"	5/16"	5¾"	2¾"	1½"	½"
W10x26	2'-6"	7'-0"	1.27	6'-9"	2'-2½"	112'-0"	98	3'-0"	⅞" x 4"	7"	2¾"	1½"	4"	1½"	1"	¾"	15/32"	⅜"	5¾"	2¾"	1½"	⅝"
W12x26	2'-6"	7'-9"	1.41	7'-6"	2'-2½"	119'-0"	107	3'-0"	⅞" x 4"	7"	2¾"	1½"	4"	1½"	1"	¾"	15/32"	⅜"	6½"	3½"	1½"	⅝"
W14x30	3'-0"	7'-3"	1.90	7'-0"	2'-8½"	145'-0"	113	3'-0"	⅞" x 4"	7"	2¾"	1½"	4"	1½"	1"	¾"	15/32"	⅜"	6¾"	3½"	1⅝"	½"
W14x38	3'-0"	8'-0"	2.09	7'-9"	2'-8½"	153'-0"	122	3'-6"	1" x 4½"	7½"	3"	1¾"	4"	1¾"	1¼"	¾"	17/32"	⅜"	6¾"	3½"	1⅝"	½"
W16x45	3'-0"	8'-6"	2.23	8'-3"	2'-8½"	162'-0"	130	3'-6"	1" x 4½"	7½"	3"	1¾"	4"	1¾"	1¼"	¾"	17/32"	⅜"	7"	3½"	1¾"	½"

*Dimensional changes required for varying site conditions shall be approved by the Engineer.

POST	FUSE PLATE BOLT SIZE Sign Height																			
	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	13'-0"	14'-0"	15'-0"	16'-0"	17'-0''	18'-0''	19'-0''	20'-0''	21'-0''	22'-0''	23'-0''	24'-0''
W6x9	½" x 1½"	½" x 1½"	½" x 1½"	½" x 1½"	——	——	——	——	——	——	——	——	——	——	——	——	——	——	——	——	——
W6x15	½" x 1¾"	½" x 1¾"	½" x 1¾"	⅝" x 2"	⅝" x 2"	¾" x 2"	¾" x 2"	¾" x 2"	¾" x 2"	——	——	——	——	——	——	——	——	——	——	——	——
W8x18	½" x 1¾"	½" x 1¾"	½" x 1¾"	½" x 1¾"	⅝" x 2"	⅝" x 2"	¾" x 2"	¾" x 2"	¾" x 2"	¾" x 2"	——	——	——	——	——	——	——	——	——	——	——
W10x22	½" x 2"	½" x 2"	½" x 2"	½" x 2"	½" x 2"	⅝" x 2"	⅝" x 2"	¾" x 2¼"	¾" x 2¼"	¾" x 2¼"	¾" x 2¼"	¾" x 2¼"	¾" x 2¼"	——	——	——	——	——	——	——	——
W10x26	½" x 2"	½" x 2"	½" x 2"	½" x 2"	½" x 2"	⅝" x 2¼"	⅝" x 2¼"	¾" x 2½"	¾" x 2½"	¾" x 2½"	¾" x 2½"	¾" x 2½"	¾" x 2½"	¾" x 2½"	——	——	——	——	——	——	——
W12x26	½" x 2"	½" x 2"	½" x 2"	½" x 2"	½" x 2"	⅝" x 2¼"	⅝" x 2¼"	¾" x 2½"	¾" x 2½"	¾" x 2½"	¾" x 2½"	¾" x 2½"	¾" x 2½"	¾" x 2½"	¾" x 2½"	——	——	——	——	——	——
W14x30	½" x 2"	½" x 2"	½" x 2"	½" x 2"	½" x 2"	⅝" x 2"	⅝" x 2"	¾" x 2¼"	¾" x 2¼"	¾" x 2¼"	¾" x 2¼"	¾" x 2¼"	¾" x 2¼"	¾" x 2¼"	¾" x 2¼"	¾" x 2¼"	¾" x 2¼"	——	——	——	——
W14x38	½" x 2"	½" x 2"	½" x 2"	½" x 2"	½" x 2"	⅝" x 2¼"	⅝" x 2¼"	¾" x 2½"	¾" x 2½"	¾" x 2½"	¾" x 2½"	⅞" x 2½"	⅞" x 2½"	1" x 2¾"	1" x 2¾"	1" x 2¾"	1" x 2¾"	1" x 2¾"	1" x 2¾"	1" x 2¾"	1" x 2¾"
W16x45	——	½" x 2"	½" x 2"	½" x 2"	½" x 2"	½" x 2"	½" x 2"	⅝" x 2¼"	⅝" x 2¼"	⅝" x 2¼"	¾" x 2½"	¾" x 2½"	⅞" x 2½"	⅞" x 2½"	⅞" x 2½"	1" x 2¾"	1" x 2¾"	1" x 2¾"	1" x 2¾"	1" x 2¾"	1" x 2¾"



ELEVATION
GROUND LINE & STUB POST

** For all "Point 1" and "Point 2" locations, "Clearance Line" must be at or above top of stub post.

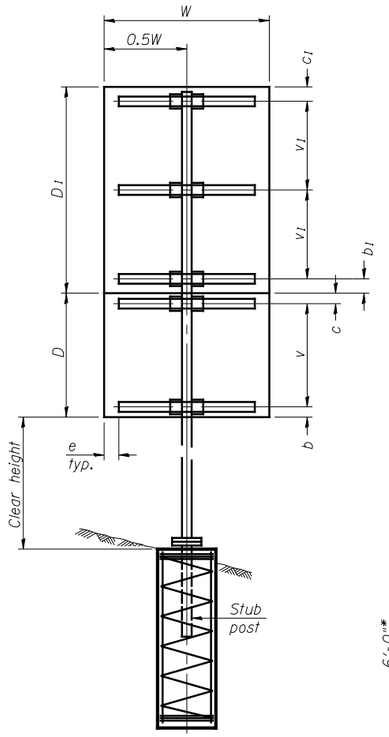
(1) Quantity includes all concrete necessary for one foundation.

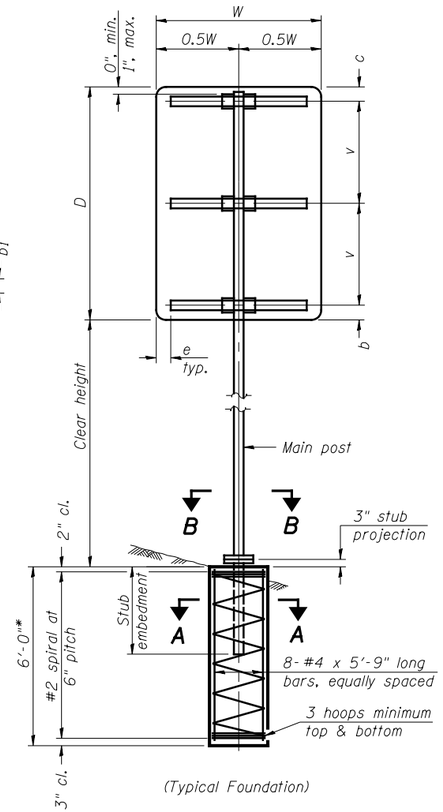
(2) Includes reinforcement bars and spiral hooping for one foundation.

BAW-A-2 6-1-12

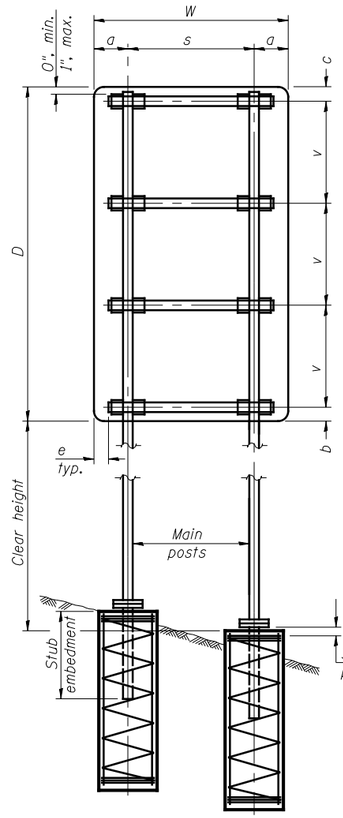
(Sheet 2 of 2)

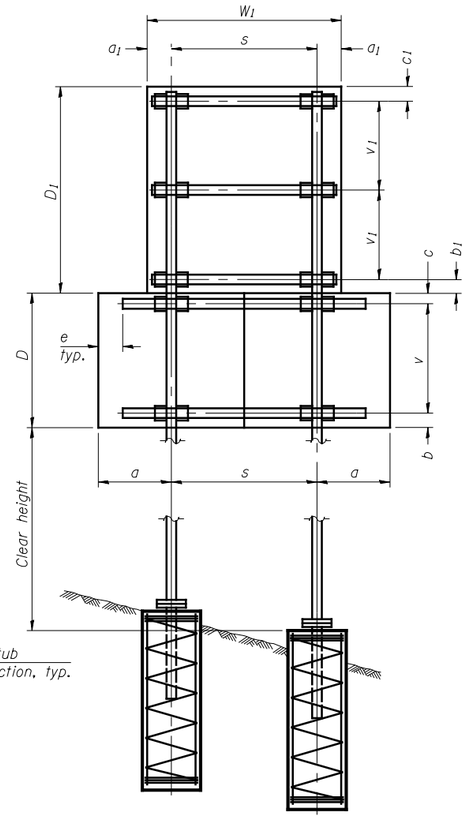
FILE NAME =	USER NAME =	DESIGNED - ESW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BREAK-AWAY WIDE FLANGE STEEL SIGN POST TABLES	F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED - JWS	REVISED -			57/70	(25-4)R	EFFINGHAM	1760	438
	PLOT SCALE =	DRAWN - PDB	REVISED -					CONTRACT NO. 74295		
	PLOT DATE =	CHECKED - BRM	REVISED -		SHEET NO. 51 OF 53 SHEETS			ILLINOIS FED. AID PROJECT		





(Typical Foundation)





SINGLE POST ASSEMBLY EXAMPLES

* Dimensional changes required for varying site conditions shall be approved by the Engineer.

a or a_1 = 6" min. to 2'-0" max. (Approximately 0.2W or 0.2W_1)
b or b_1 = 3" min. to 4" max
c or c_1 = 3" min. to 4" max
e = 0" min. to 6" max
s = 3'-0" min. to 6'-0" max. (Approximately 0.6W or 0.6W_1)
v or v_1 = 2'-0" min. to 2'-11" max.

DUAL POST ASSEMBLY EXAMPLES

MAIN POST STEEL TUBING	WEIGHT PER FOOT (POUND)	STUB POST TABLE		MAIN POST TABLE				
		Stub Embedment	Stub Post Length	Bolt Size	A	t	R	Bolt Circle
3" x 2" x 1/4"	7.11	2'-0"	2'-3"	1/2" x 2 3/4"	8 1/4"	5/8"	9/32"	6 1/2"
4" x 2" x 1/4"	8.81	2'-0"	2'-3"	1/2" x 2 3/4"	8 1/4"	5/8"	9/32"	6 1/2"
4" x 3" x 1/4"	10.51	2'-3"	2'-6"	5/8" x 3 1/4"	10"	3/4"	11/32"	8"
5" x 3" x 1/4"	12.21	2'-3"	2'-6"	5/8" x 3 1/4"	10"	3/4"	11/32"	8"
6" x 3" x 1/4"	13.91	2'-3"	2'-6"	5/8" x 3 1/4"	11 1/2"	3/4"	11/32"	9 1/2"
6" x 4" x 1/4"	15.62	2'-3"	2'-6"	3/4" x 3 1/2"	11 1/2"	3/4"	13/32"	9 1/2"
6" x 4" x 5/16"	19.08	2'-3"	2'-6"	3/4" x 3 1/2"	11 1/2"	3/4"	13/32"	9 1/2"
7" x 5" x 1/4"	19.02	2'-6"	2'-9"	3/4" x 3 1/2"	1'-2"	3/4"	13/32"	1'-0"
8" x 4" x 1/4"	19.02	2'-6"	2'-9"	3/4" x 3 1/2"	1'-2"	3/4"	13/32"	1'-0"
8" x 6" x 1/4"	22.42	2'-6"	2'-9"	7/8" x 3 1/2"	1'-2"	3/4"	15/32"	1'-0"

GENERAL NOTES

Posts shall be plumbed by using shims with post-to-stub post connection bolts snug tight only. Final tightening of all High Strength Bolts shall be in accordance with Article 727.05 and threads at the junction of the bolt and nut shall be burred or center punched to prevent the nut from loosening.

One foundation requires 0.7 cubic yards of concrete and 46 pounds of reinforcement bars and spiral hoops.

LOADING: 80 mph wind with 30% gust factor, normal to sign.

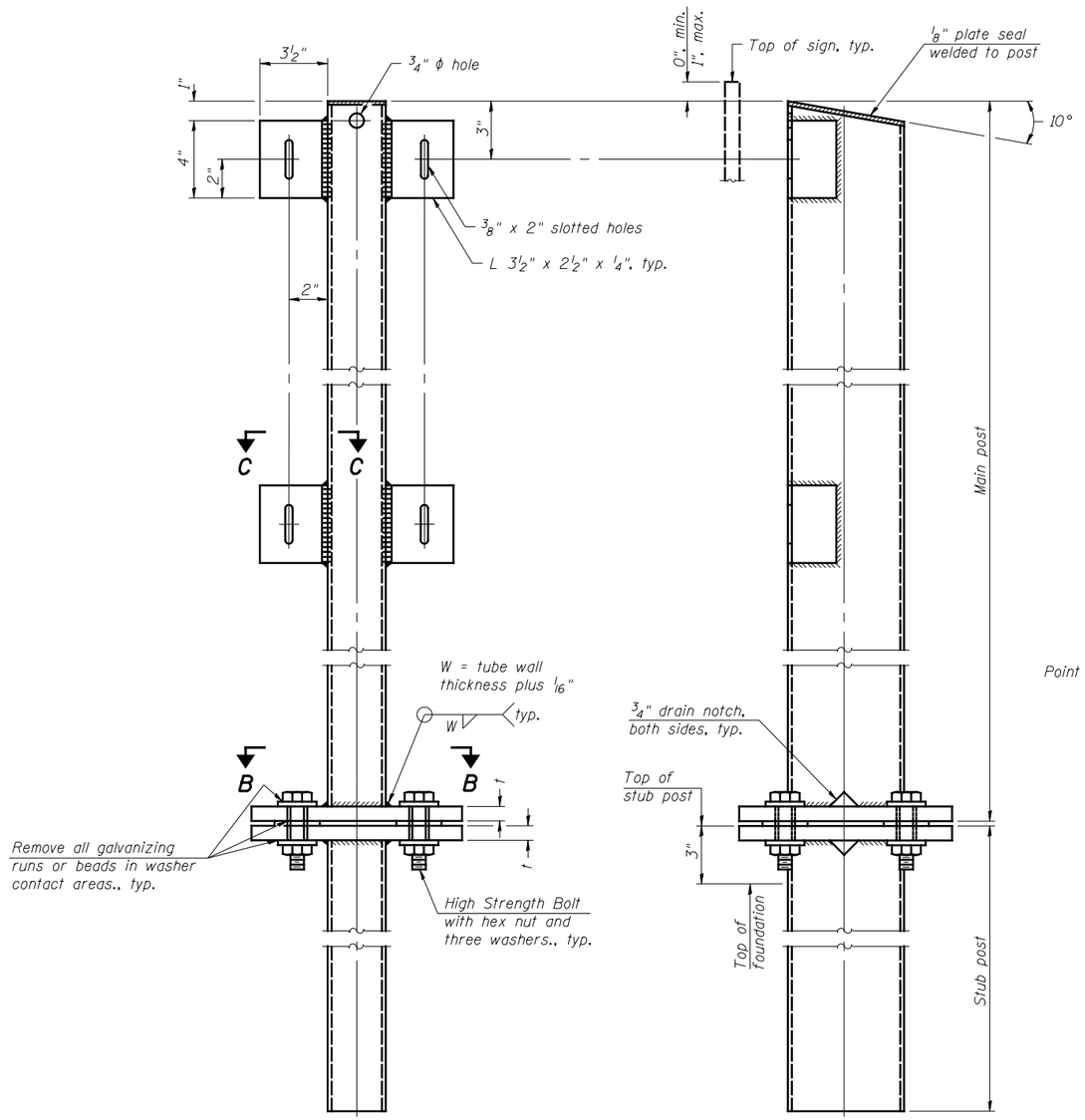
DESIGN STRESSES:
Structural steel - 20,000 psi
Reinforcing steel - 20,000 psi
Concrete - 1,400 psi
Footing soil pressure - 2,000 psf

After fabrication, the post, fuse plate, base plate and upper 6", min. of the stub post shall be hot-dip galvanized in accordance with AASHTO M111. All bolts, nuts and washers shall be hot-dip galvanized in accordance with AASHTO M232.

For Sections A-A and B-B, see Base Sheet BAT-A-2.

FOUNDATIONS:
All necessary excavation or drilling (except in rock); backfilling with excavated material; disposal of unsuitable or surplus material; formwork; and furnishing and placing the Class SI Concrete and reinforcement bars, shall be included in the pay item used for foundations.

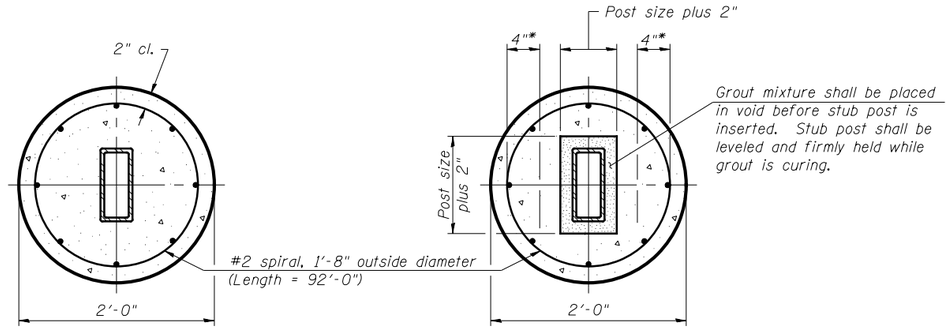
The measurement of the tubular steel shall be computed on the basis of the weight per foot of the support, multiplied by the combined length of the main posts and stub posts.



FRONT ELEVATION

SIDE ELEVATION

MAIN POST & STUB POST

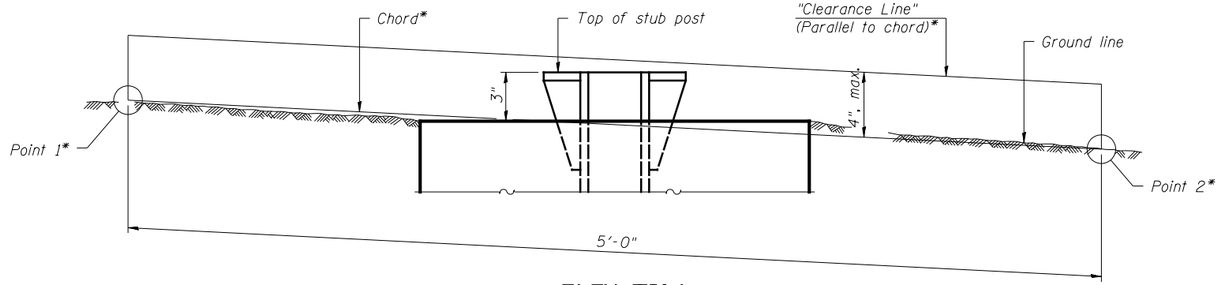


SECTION A-A
(CAST-IN-PLACE)

OR

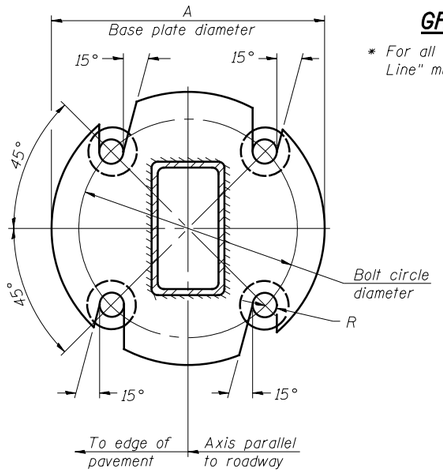
SECTION A-A
(PRECAST)

* Hot dip galvanized lifting loops or inserts may be placed in precast foundation inside the spiral reinforcement but not within 6" of the long axis of the post. Inserts must be adequate for safely lifting a total of 3,000 pounds and must not interfere with installation of the stub post or proper functioning of the slip base.

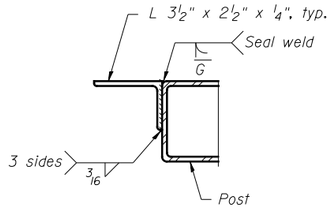


ELEVATION
GROUND LINE & STUB POST

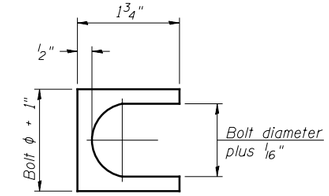
* For all "Point 1" and "Point 2" locations, "Clearance Line" must be at or above top of stub post.



SECTION B-B



SECTION C-C
Weld continuously around corners.



SHIM DETAIL
Furnish two 0.01" thick and two 0.03" thick stainless steel or brass (ASTM B36) shims per post.

BAT-A-2 6-1-12

(Sheet 2 of 2)

FILE NAME =	USER NAME =	DESIGNED - ESW	REVISED -
		CHECKED - JWS	REVISED -
	PLOT SCALE =	DRAWN - PDB	REVISED -
	PLOT DATE =	CHECKED - BRM	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BREAK-AWAY TUBULAR STEEL SIGN POSTS AND DETAILS
SHEET NO. 53 OF 53 SHEETS

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	(25-4)R	EFFINGHAM	1760	440
		CONTRACT NO. 74295		
	ILLINOIS	FED. AID PROJECT		

TRAFFIC SIGNAL GENERAL NOTES

THIS TRAFFIC SIGNAL PORTION OF THE ENTIRE PROJECT IS LOCATED AT THE INTERSECTION OF FAI 57/70 SOUTHBOUND RAMPS AND US 45 ALL IN THE CITY OF EFFINGHAM, EFFINGHAM COUNTY THE WORK INCLUDED IN THIS SECTION CONSISTS OF INSTALLING TRAFFIC SIGNALS AND ALL OTHER WORK NECESSARY TO COMPLETE THIS SECTION.

THE EXISTING UTILITY LINES ARE SHOWN ON THE PLANS TO INDICATE THEIR PRESENCE AND APPROXIMATE LOCATION. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO BEGINNING CONSTRUCTION. CALL J.U.L.I.E. AT 1-800-892-0123.

THE TRAFFIC SIGNAL ENGINEER (JOSH PORTER) AT THE ILLINOIS DEPARTMENT OF TRANSPORTATON SHALL BE NOTIFIED AT 217-342-8291 AT LEAST 72 HOURS PRIOR TO TURNING ON ANY FLASHER OR CONTROLLER UNIT.

THE SIZE OF THE CABLE SUPPLIED SHALL BE EQUAL TO OR GREATER THAN THE SIZE OF THE CABLE REQUIRED TO CARRY THE LOAD BETWEEN THE CONTROLLER AND THE SERVICE INSTALLATION.

THE CONTRACTOR SHALL ARRANGE FOR A FACTORY OR SUPPLIER REPRESENTATIVE TO BE PRESENT AT THE INTERSECTION WHEN THE SIGNALS ARE TURNED ON. THE REPRESENTATIVE SHALL MAKE CERTAIN THAT ALL EQUIPMENT OPERATES TO THE SATISFACTION OF THE ENGINEER.

A 2 FOOT MINIMUM, 6 FOOT DESIRABLE, HORIZONTAL CLEARANCE SHALL BE MAINTAINED FROM THE BACK OF CURB TO THE EDGE OF HANDHOLES, JUNCTION BOXES AND SIGNAL POST FOUNDATIONS. A 5 FOOT MINIMUM HORIZONTAL CLEARANCE SHALL BE MAINTAINED FROM THE BACK OF THE CURB TO ALL MAST ARM FOUNDATIONS. CONTROLLER FOUNDATIONS SHALL BE LOCATED AS FAR FROM THE BACK OF THE CURB AS POSSIBLE TO PROTECT THE CONTROLLER CABINET.

ALL HARDWARE SHALL BE TIGHTENED AND WELL SECURED. CABLES SHALL BE NEATLY WOUND IN HANDHOLES. CABLES SHALL BE NEATLY TRAINED IN THE CONTROLLER CABINET.

ALL THREADS OF BOLTS USED IN ASSEMBLY OF TRAFFIC SIGNAL COMPONENTS SHALL BE COATED WITH A NON-LEAD BASED ANTI-SEIZE COMPOUND, SIMILAR TO LEAD PLATE, PRIOR TO ASSEMBLY.

NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR PLACING CONDUIT AT GREATER THAN 2 FOOT MINIMUM DEPTH TO AVOID OBSTACLES SUCH AS UNDERGROUND UTILITIES.

THE CONTRACTOR IS RESPONSIBLE FOR UNCOVERING OR HAND DIGGING AROUND UTILITIES AS NECESSARY. THE COST OF THIS WORK IS TO BE INCLUDED WITH THE TRENCH AND BACKFILL FOR ELECTRICAL WORK PAY ITEM.

THE NUMBER OF CONDUCTORS FOR ELECTRIC CABLES AS SHOWN ON THE PLANS SHALL BE THE MINIMUM NUMBER OF CONDUCTORS FURNISHED FOR EACH LOCATION. THE CONTRACTOR MAY SUBSTITUTE AN ELECTRIC CABLE WITH MORE CONDUCTORS THAN SPECIFIED BUT NO ADDITIONAL COMPENSATION WILL BE MADE FOR THE EXTRA CONDUCTORS.

ALL NEW TRAFFIC SIGNAL WIRING SHALL EXTEND FROM CONTROLLER TO SIGNAL. SPLICES IN HANDHOLES WILL NOT BE ALLOWED.

ALL MAST ARM MOUNTED SIGNAL HEADS ON AN INDIVIDUAL MAST ARM SHALL BE MOUNTED SO THAT THE RED INDICATIONS ARE LEVEL WITH EACH OTHER.

TRAFFIC SIGNAL HEADS SHALL BE PROPERLY COVERED PRIOR TO INTERSECTION TURN-ON OR AS DIRECTED BY THE ENGINEER. THIS COST SHALL BE INCLUDED WITH THE COST OF THE ASSOCIATED SIGNAL HEAD PAY ITEMS.

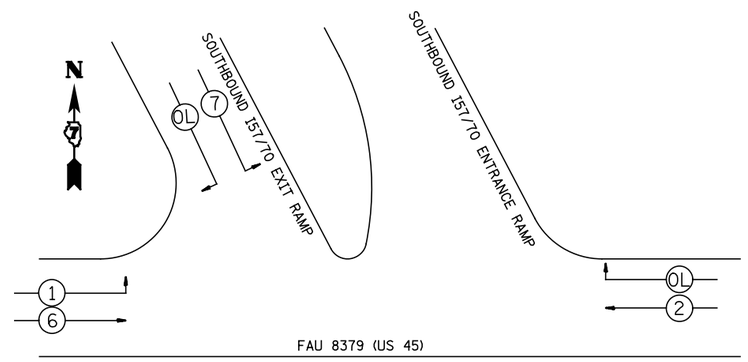
ALL TRAFFIC SIGNAL MAST ARM ASSEMBLIES (STANDARD, COMBINATION, OR DUAL) MUST BE DESIGNED FOR THE LOADINGS SHOWN ON THE HIGHWAY STANDARDS OR THESE SIGNAL PLANS, WHICHEVER IS GREATER.

AMEREN EFFINGHAM OC
JON TIPTON
OFFICE: (217) 347-3141
CELL: (217) 663-5614
EMAIL: JTipton@ameren.com

NUMBER OF TURNS REQUIRED IN DETECTOR LOOPS

6 X 6		LOOP SIZE
		2 TURNS
		3 TURNS
0	545	4 TURNS
546	818	5 TURNS
819	1145	6 TURNS
1146	1527	7 TURNS
1528	1964	8 TURNS
1965	2455	9 TURNS
2456	3000	10 TURNS

THE NUMBERS IN THE TABLE REPRESENT THE LENGTH OF ELECTRIC CABLE FROM THE LOOP TO THE CABINET



PHASE DESIGNATION DIAGRAM

LEGEND

2 — VEHICULAR PHASE NO. X

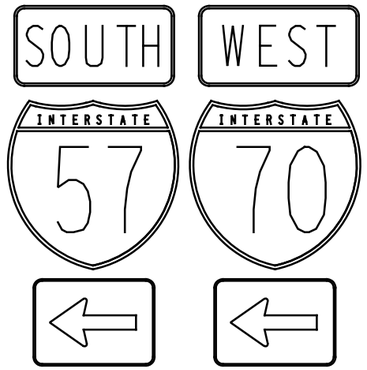
FILE NAME = $FILE$	USER NAME = $USER$	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -
	PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US 45 & SB I57/70 RAMPS
TRAFFIC SIGNALS–GENERAL NOTES & DETAILS

SCALE: | SHEET NO. 1 OF 7 SHEETS | STA. | TO STA.

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	•	EFFINGHAM	1760	441
•(25-4)R&(25-4HVB-1)BY&(25-4)BR		CONTRACT NO. 74295		
	ILLINOIS	FED. AID PROJECT		

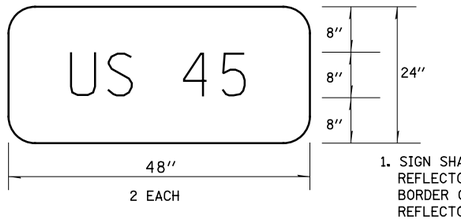


24"x12"

24"x24"

21"x15"

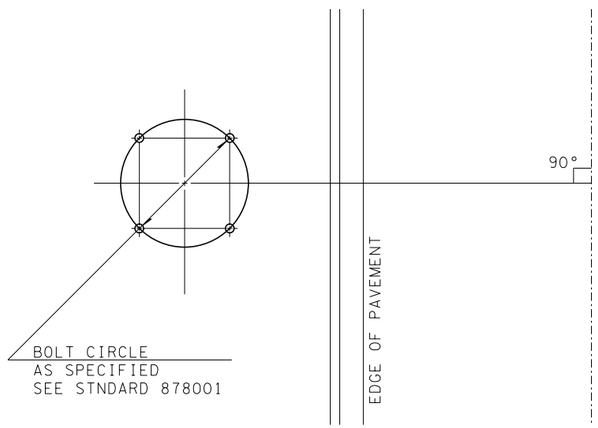
TO BE INSTALLED ON SOUTHBOUND MAST ARM (STA 65+24 35' Lt.)



1. SIGN SHALL HAVE A WHITE REFLECTORIZED LEGEND AND BORDER ON A GREEN REFLECTORIZED BACKGROUND.
2. LETTER SIZE: 8D.

TO BE INSTALLED ON WESTBOUND MAST ARM (STA 65+96 35' Lt.)

SIGN PANEL DETAILS



DETAIL OF MAST ARM FOUNDATION BOLT PATTERN

BILL OF MATERIALS - US 45 & SB RAMPS-I57/70

ITEM	UNIT	QUANTITY
SIGN PANEL-TYPE 1	SQ FT	24.4
SERVICE INSTALLATION, TYPE A	EACH	1.0
UNDERGROUND CONDUIT, PVC, 3/4" DIA.	FOOT	53.0
UNDERGROUND CONDUIT, PVC, 1 1/4" DIA.	FOOT	61.0
UNDERGROUND CONDUIT, PVC, 1 1/2" DIA.	FOOT	755.0
UNDERGROUND CONDUIT, PVC, 2 1/2" DIA.	FOOT	108.0
UNDERGROUND CONDUIT, PVC, 4" DIA.	FOOT	410.0
HANDHOLE	EACH	5.0
DOUBLE HANDHOLE	EACH	1.0
GULFBOX JUNCTION	EACH	5.0
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 8	FOOT	527.0
LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, PHOTO-CELL CONTROL, 400 WATT	EACH	2.0
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1.0
UNINTERRUPTIBLE POWER SUPPLY, EXTENDED	EACH	1.0
ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 5C	FOOT	2017.0
ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 7C	FOOT	1467.0
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PR	FOOT	3905.0
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	35.0
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	591.0
TRAFFIC SIGNAL POST, ALUMINUM 16 FT.	EACH	3.0
STEEL MAST ARM ASSEMBLY AND POLE, 28 FT	EACH	1.0
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 34 FT	EACH	1.0
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 48 FT	EACH	1.0
CONCRETE FOUNDATION, TYPE A	FOOT	9.0
CONCRETE FOUNDATION, TYPE C	FOOT	3.5
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	10.0
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	24.0
SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION BRACKET MOUNTED	EACH	2.0
SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	4.0
SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	2.0
SIGNAL HEAD, POLYCARBONATE, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1.0
SIGNAL HEAD, POLYCARBONATE, LED, 2-FACE, 5-SECTION BRACKET MOUNTED	EACH	1.0
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	12.0
INDUCTIVE LOOP DETECTOR	EACH	14.0
DETECTOR LOOP, TYPE 1	FOOT	1137.0
LIGHT DETECTOR	EACH	3.0
LIGHT DETECTOR AMPLIFIER	EACH	1.0
ELECTRIC CABLE IN CONDUIT, NO. 20 3/C, TWISTED, SHIELDED	FOOT	823.0

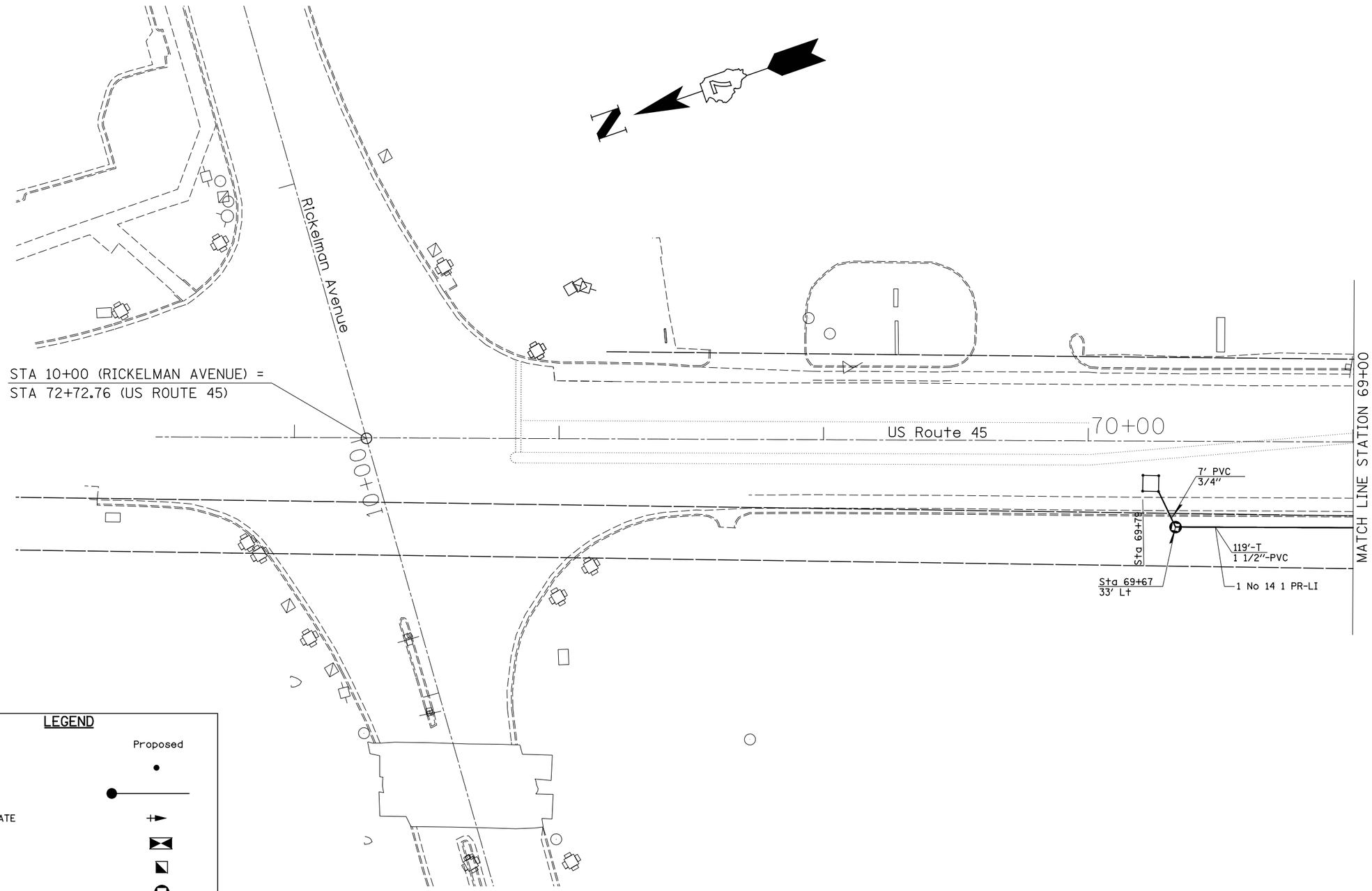
FILE NAME = $FILEL$	USER NAME = $USER$	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -
	PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US 45 & SB I57/70 RAMPS
TRAFFIC SIGNALS–BILL OF MATERIALS & DETAILS

SCALE: | SHEET NO. 2 OF 7 SHEETS | STA. | TO STA.

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	*	EFFINGHAM	1760	442
*(25-4)R&(25-4HVB-1)BY&(25-4)BR		CONTRACT NO. 74295		
ILLINOIS	FED. AID PROJECT			



LEGEND

	Proposed
SIGNAL POST	●
MAST ARM	●——
SIGNAL HEAD W/ BACKPLATE	+►
CONTROLLER	▣
HANDHOLE	◥
GULFBOX JUNCTION	⬭
DOUBLE HANDHOLE	◥◤
DETECTOR LOOP	□
WOOD POLE	⊗

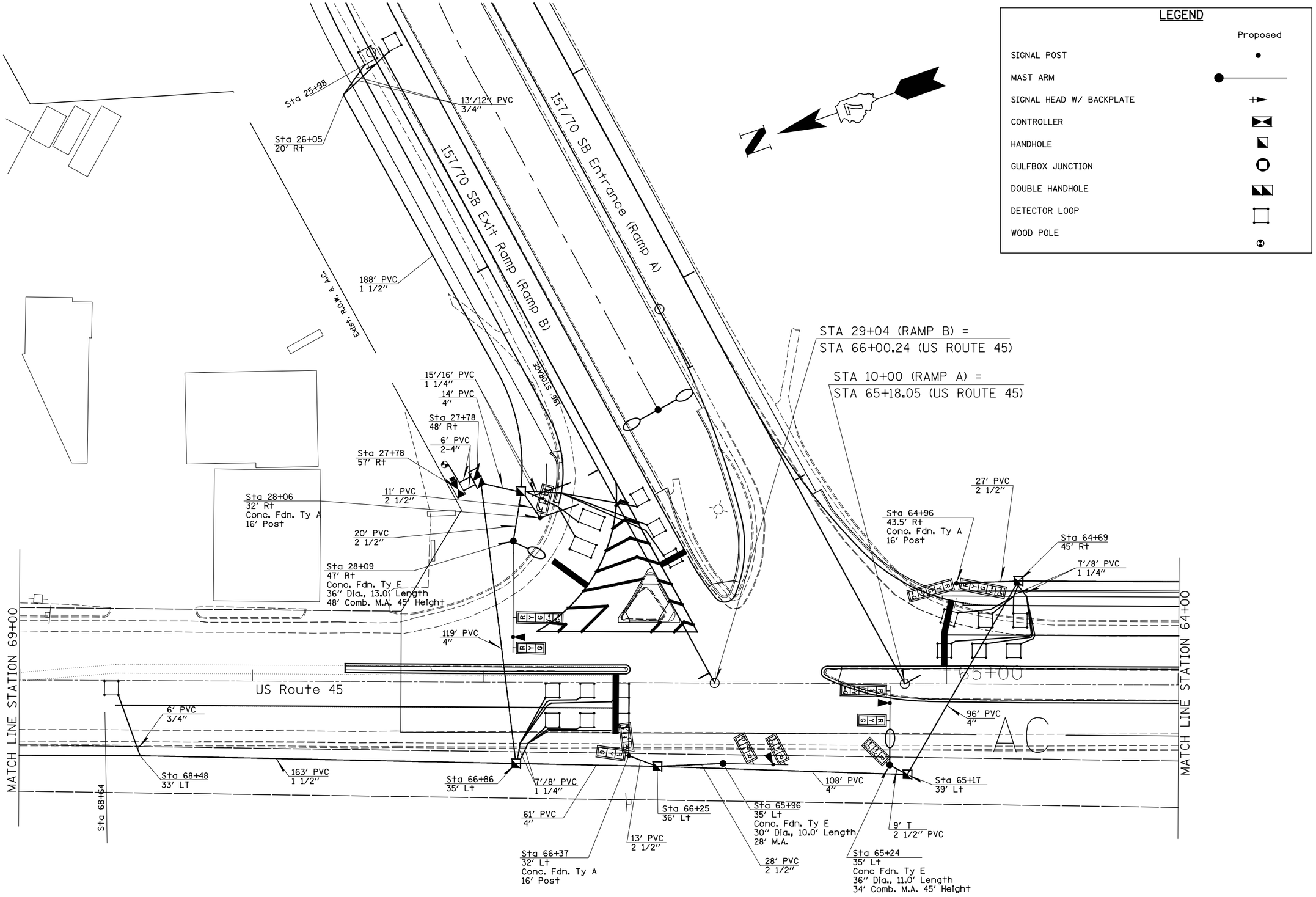
FILE NAME = $FILE$	USER NAME = $USER$	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -
	PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

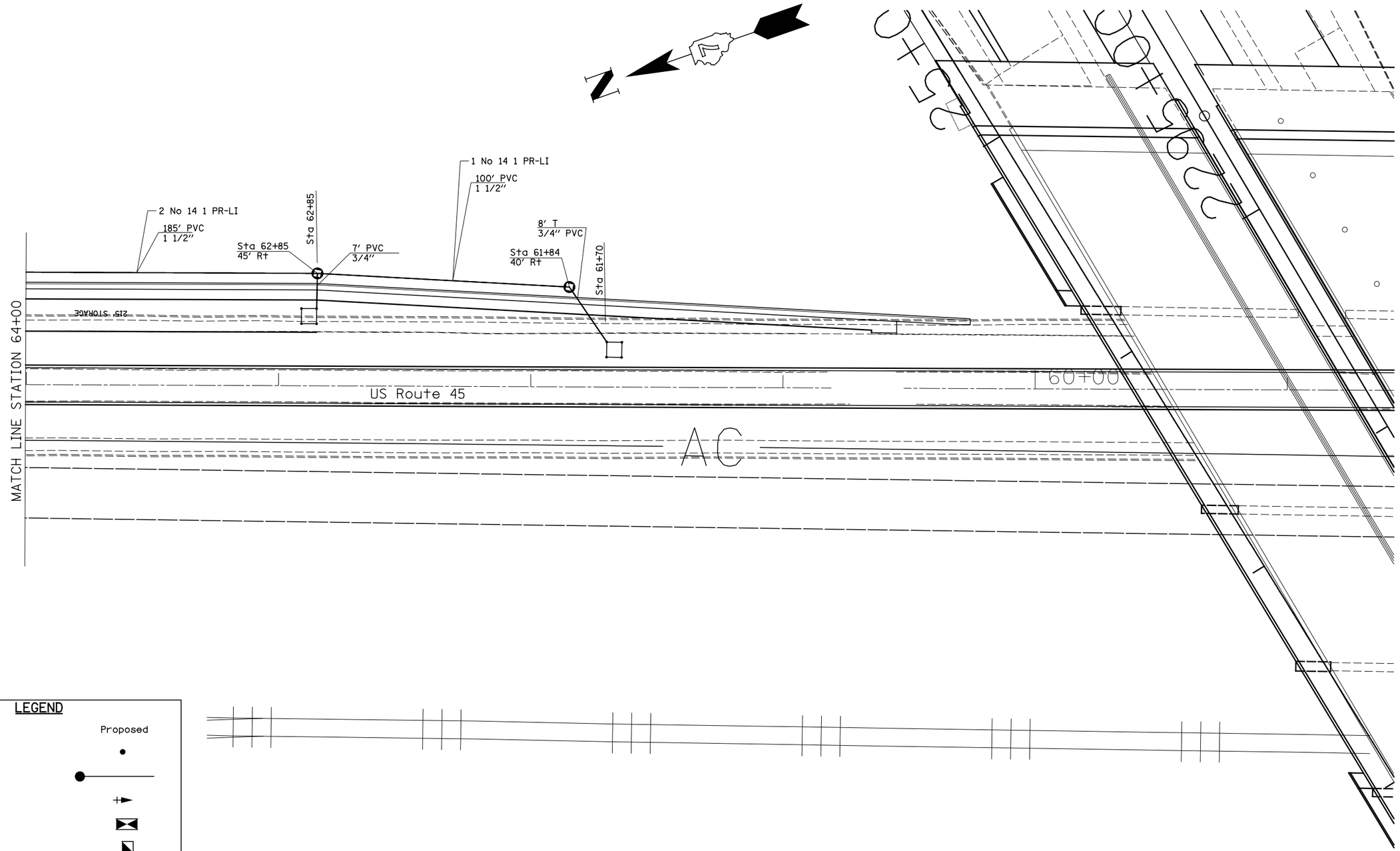
US 45 & SB I57/70 RAMPS
TRAFFIC SIGNALS–SIGNAL & CABLE LAYOUT

SCALE: | SHEET NO. 3 OF 7 SHEETS | STA. 73+00 | TO STA. 69+00

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	•	EFFINGHAM	1760	443
•(25-4)R&(25-4HVB-1)BY&(25-4)BR		CONTRACT NO. 74295		
ILLINOIS	FED. AID PROJECT			



FILE NAME = $FILE$	USER NAME = $USER$	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	US 45 & SB I57/70 RAMPS TRAFFIC SIGNALS–SIGNAL LAYOUT	F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -			70	•	EFFINGHAM	1760	444
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -			•(25-4)R&(25-4HVB-1)BY&(25-4)BR		CONTRACT NO. 74295		
	PLOT DATE = $DATE$	DATE -	REVISED -		SCALE: SHEET NO. 4 OF 7 SHEETS STA. 69+00 TO STA. 64+00			ILLINOIS	FED. AID PROJECT	



LEGEND

	Proposed
SIGNAL POST	●
MAST ARM	●———
SIGNAL HEAD W/ BACKPLATE	+►
CONTROLLER	▶◀
HANDHOLE	◪
GULFBOX JUNCTION	⬭
DOUBLE HANDHOLE	◪◪
DETECTOR LOOP	▢
WOOD POLE	⊗

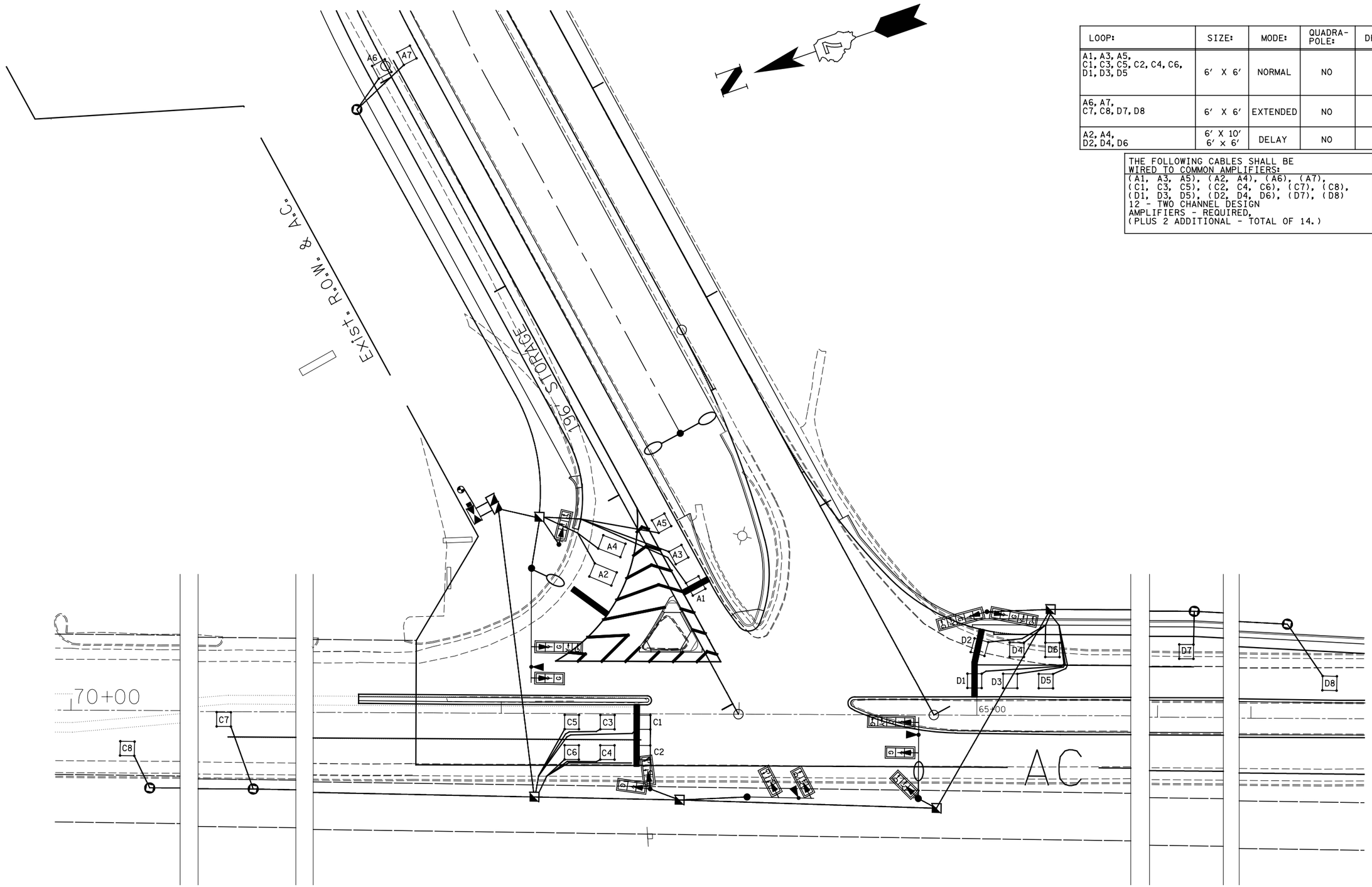
FILE NAME = $FILEL$	USER NAME = $USER$	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -
	PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US 45 & SB I57/70 RAMPS
TRAFFIC SIGNALS–SIGNAL & CABLE LAYOUT

SCALE: | SHEET NO. 5 OF 7 SHEETS | STA. 64+00 TO STA. 60+00

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	•	EFFINGHAM	1760	445
•(25-4)R&(25-4HVB-1)BY&(25-4)BR		CONTRACT NO. 74295		
	ILLINOIS FED. AID PROJECT			



LOOP:	SIZE:	MODE:	QUADRA-POLE:	DELAY:
A1, A3, A5, C1, C3, C5, C2, C4, C6, D1, D3, D5	6' X 6'	NORMAL	NO	0
A6, A7, C7, C8, D7, D8	6' X 6'	EXTENDED	NO	0
A2, A4, D2, D4, D6	6' X 10' 6' x 6'	DELAY	NO	15

THE FOLLOWING CABLES SHALL BE WIRED TO COMMON AMPLIFIERS:
(A1, A3, A5), (A2, A4), (A6), (A7),
(C1, C3, C5), (C2, C4, C6), (C7), (C8),
(D1, D3, D5), (D2, D4, D6), (D7), (D8)
12 - TWO CHANNEL DESIGN AMPLIFIERS - REQUIRED,
(PLUS 2 ADDITIONAL - TOTAL OF 14.)

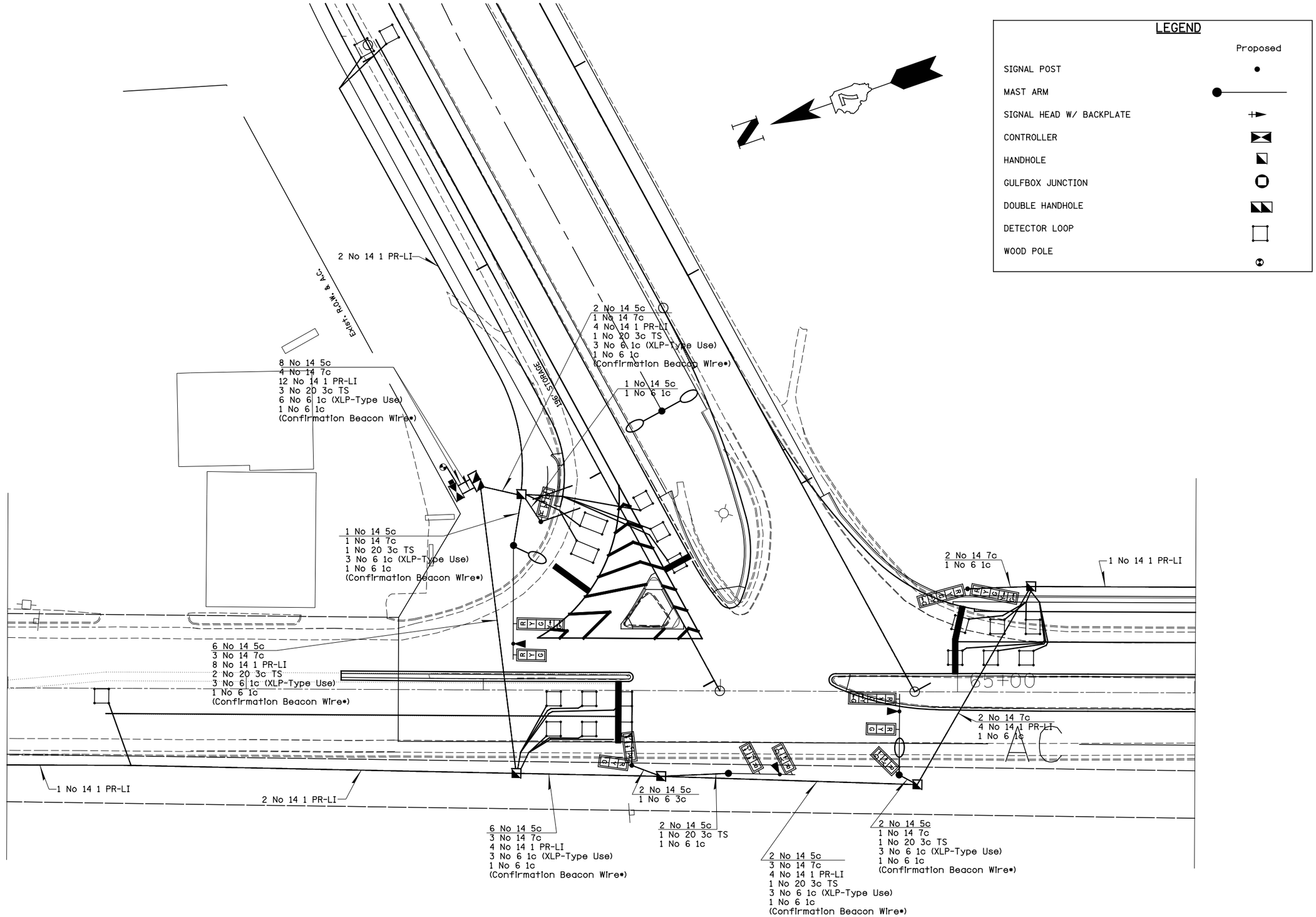
FILE NAME = $FILEL$	USER NAME = $USER$	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -
	PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US 45 & SB I57/70 RAMPS
TRAFFIC SIGNALS–DETECTOR LOOP LAYOUT

SCALE: | SHEET NO. 6 OF 7 SHEETS | STA. 73+00 | TO STA. 69+00

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	•	EFFINGHAM	1760	446
	•(25-4)R&(25-4HVB-1)BY&(25-4)BR	CONTRACT NO. 74295		
	ILLINOIS FED. AID PROJECT			



LEGEND

	Proposed
SIGNAL POST	●
MAST ARM	●———
SIGNAL HEAD W/ BACKPLATE	+►
CONTROLLER	▶◀
HANDHOLE	◥
GULFBOX JUNCTION	⬭
DOUBLE HANDHOLE	◥◤
DETECTOR LOOP	□
WOOD POLE	⊗

FILE NAME = $FILE$	USER NAME = $USER$	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -
	PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US 45 & SB I57/70 RAMPS
TRAFFIC SIGNALS–CABLE LAYOUT

SCALE: | SHEET NO. 7 OF 7 SHEETS | STA. 69+00 | TO STA. 64+00

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	•	EFFINGHAM	1760	447
•(25-4)R&(25-4HVB-1)BY&(25-4)BR		CONTRACT NO. 74295		
	ILLINOIS FED. AID PROJECT			

Illinois Department of Transportation
Division of Highways
IDOT

SOIL BORING LOG

Page 1 of 1

Date 4/20/10

ROUTE FAI 57/70 DESCRIPTION US 45 and I-57/70 Interchange Ramp Traffic Signals LOGGED BY E. Sandschafer

SECTION * LOCATION N 1/2, SEC. 16, TWP. 8 N, RNG. 6 E, 3 PM

COUNTY Effingham DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

STRUCT. NO. N/A
Station N/A

BORING NO. TS 1001
Station 66+78
Offset 57.0ft Rt
Ground Surface Elev. 602.70 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
▽ First Encounter 598.0 ft
▼ Upon Completion 584.7 ft
▼ After 24 Hrs. 597.2 ft

DEPTH (ft)	BLOWS /6"	UCS Qu (tsf)	MOIST (%)	Description
				3" topsoil. 602.40
				Brown, CLAY.
				600.70
	3			Stiff, damp, brown, SANDY CLAY
	4	1.5	13	w/ GRAVEL.
	4	PP		
				▽ 598.00
-5	2			Brown, fine grained, SAND. 597.70
	2	1.1	20	Stiff, damp, brown/gray/red,
	2	B		▼ CLAY.
	2			
	3	1.9	23	
	3	B		
-10	2			
	2	1.1	17	
	3	B		
				590.70
	0			Gray, SILTY CLAY.
				589.70
	5	4.3	11	Hard, damp, brown to gray, CLAY
	14	B		LOAM TILL.
-15	12			
	31	4.9	9	
	36	S		
	10			
	21	7.1	9	▽
	29	BS		
582.70 -20	14			

DEPTH (ft)	BLOWS /6"	UCS Qu (tsf)	MOIST (%)	Description
	26	3.4	9	Very stiff, damp, gray, SANDY
	29	S		CLAY LOAM TILL.
				578.20
-25	23			Hard, damp, gray, CLAY LOAM
	50	+4.5	7	TILL.
	50/5"	PP		576.80
				Extent of exploration.
-30				
				*
				Contract 74295
				Section (25-4)R & (25-4HVB-1)BY
				& (25-4)BR
				US 45 and I-57/70 Interchange
				Ramps A & B
				North side of Interchange
				US 45 Stationing
-35				
-40				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated)
Abbreviations W.O.H - Sampler Advanced By Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Seating
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)

File Name S:\NEW GEOTECHNICAL\GINTDATA\PROJECTS\EFFINGHAM CO (025)\I-57_70 THREE LANES\025-I70_I57 TRAF SIGNAL FDNS 2010.GPJ Data Template DGTEMPLT.GDT Date Printed 4/11/13
Latitude W 88 deg 31.962 min Longitude N 39 deg 08.827 min Datum Job Number

Illinois Department of Transportation
Division of Highways
IDOT

SOIL BORING LOG

Page 1 of 1

Date 4/20/10

ROUTE FAI 57/70 DESCRIPTION US 45 and I-57/70 Interchange Ramp Traffic Signals LOGGED BY E. Sandschafer

SECTION * LOCATION N 1/2, SEC. 16, TWP. 8 N, RNG. 6 E, 3 PM

COUNTY Effingham DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

STRUCT. NO. N/A
Station N/A

BORING NO. TS 1002
Station 65+24
Offset 37.0ft Lt
Ground Surface Elev. 601.47 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
▽ First Encounter 579.5 ft
▼ Upon Completion 588.0 ft
▼ After 24 Hrs. 595.0 ft

DEPTH (ft)	BLOWS /6"	UCS Qu (tsf)	MOIST (%)	Description
				3" topsoil. 601.17
				Medium to very stiff, damp,
				brown/gray/red, CLAY.
	13			
	6	2.3	15	
	15	PP		
-5	3			
	5	1.0	17	
	8	B		▼
	2			
	4	1.5	20	
	5	B		
				591.97
-10	2			Medium to very stiff, damp, gray
	3	0.7	20	marbled red, CLAY LOAM.
	3	B		
	4			
	10	2.6	12	
	17	B		▽
				586.97
-15	20			Hard to very dense, very moist,
	28	6.7	9	brown to gray, SANDY CLAY
	37	S		LOAM TILL.
	16			
	25	7.2	8	
	28	BS		
-20	22			

DEPTH (ft)	BLOWS /6"	UCS Qu (tsf)	MOIST (%)	Description
	48		7	Hard to very dense, very moist,
	50			brown to gray, SANDY CLAY
				LOAM TILL. (continued)
				▽
	29			
	48		13	
	50/5"			577.97
				Extent of exploration.
-25				
				*
				Contract 74295
				Section (25-4)R & (25-4HVB-1)BY
				& (25-4)BR
				US 45 and I-57/70 Interchange
				Ramps A & B
				North side of Interchange
				US 45 Stationing'
-30				
-35				
-40				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated)
Abbreviations W.O.H - Sampler Advanced By Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Seating
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)

File Name S:\NEW GEOTECHNICAL\GINTDATA\PROJECTS\EFFINGHAM CO (025)\I-57_70 THREE LANES\025-I70_I57 TRAF SIGNAL FDNS 2010.GPJ Data Template DGTEMPLT.GDT Date Printed 4/11/13
Latitude W 88 deg 31.934 min Longitude N 39 deg 08.807 min Datum Job Number

FILE NAME = $FILE1$	USER NAME = $USER$	DESIGNED -	REVISED -
		DRAWN -	REVISED -
$MODELNAME$	PLOT SCALE = $SCALE$	CHECKED -	REVISED -
	PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL BORINGS

SCALE: | SHEET 7A OF 7 SHEETS | STA. | TO STA.

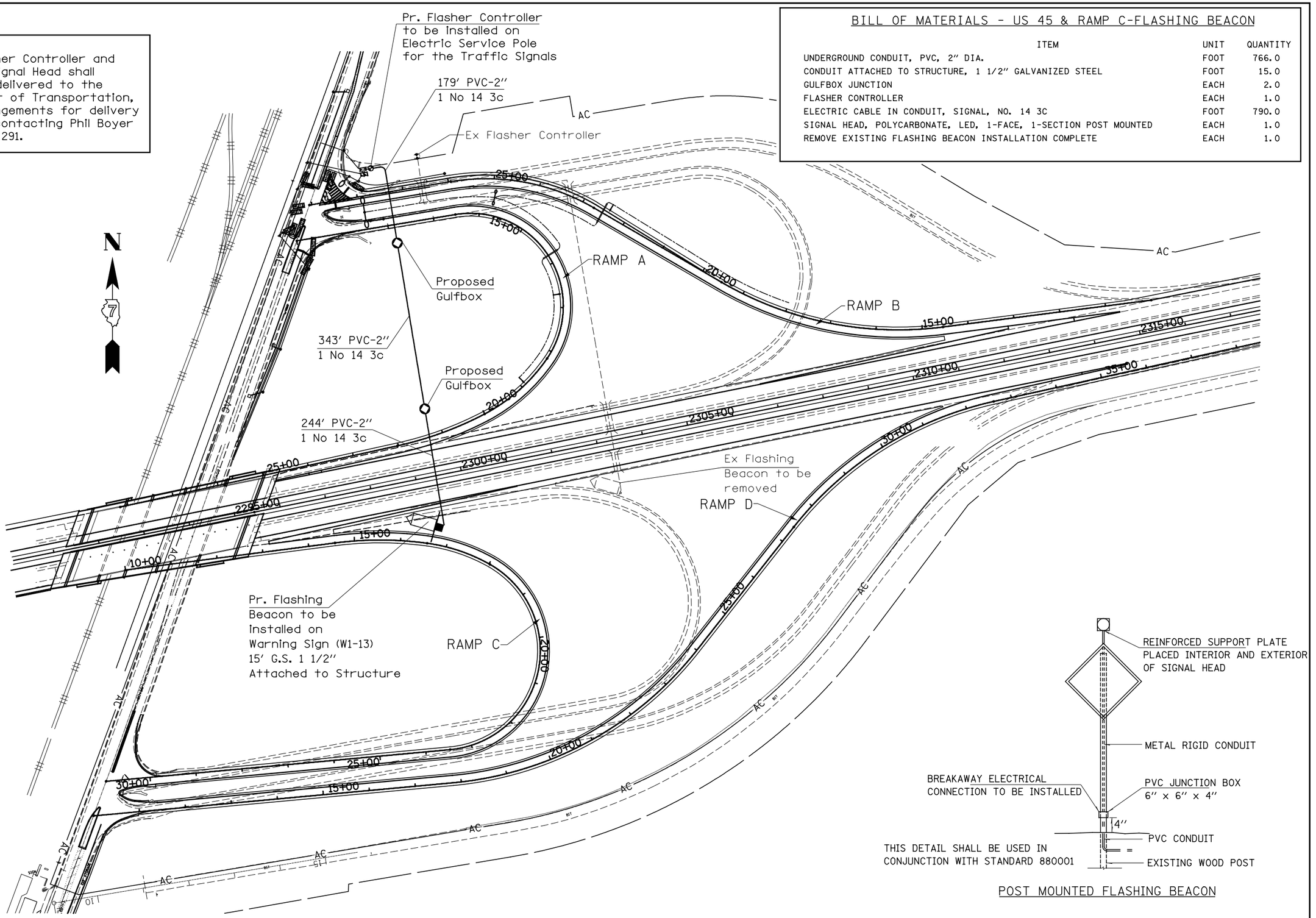
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	*	EFFINGHAM	1760	447A
		CONTRACT NO. 74295		
	ILLINOIS FED. AID PROJECT			

*(25-4)R & (25-4HVB-1)BY

NOTE:
The existing Flasher Controller and Flashing Beacon Signal Head shall be salvaged and delivered to the Illinois Department of Transportation, District 7. Arrangements for delivery can be made by contacting Phil Boyer 217-342-3951 ext 291.

BILL OF MATERIALS - US 45 & RAMP C-FLASHING BEACON

ITEM	UNIT	QUANTITY
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	766.0
CONDUIT ATTACHED TO STRUCTURE, 1 1/2" GALVANIZED STEEL	FOOT	15.0
GULFBOX JUNCTION	EACH	2.0
FLASHER CONTROLLER	EACH	1.0
ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 3C	FOOT	790.0
SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 1-SECTION POST MOUNTED	EACH	1.0
REMOVE EXISTING FLASHING BEACON INSTALLATION COMPLETE	EACH	1.0



POST MOUNTED FLASHING BEACON

FILE NAME = $FILEL$	USER NAME = $USER$	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -
$MODELNAME$	PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FLASHING BEACON DETAILS

SCALE: | SHEET 7B OF 7 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	•	EFFINGHAM	1760	447B
		CONTRACT NO. 74295		
	ILLINOIS FED. AID PROJECT			

•(25-4)R & (25-4HVB-1)BY

GENERAL NOTES

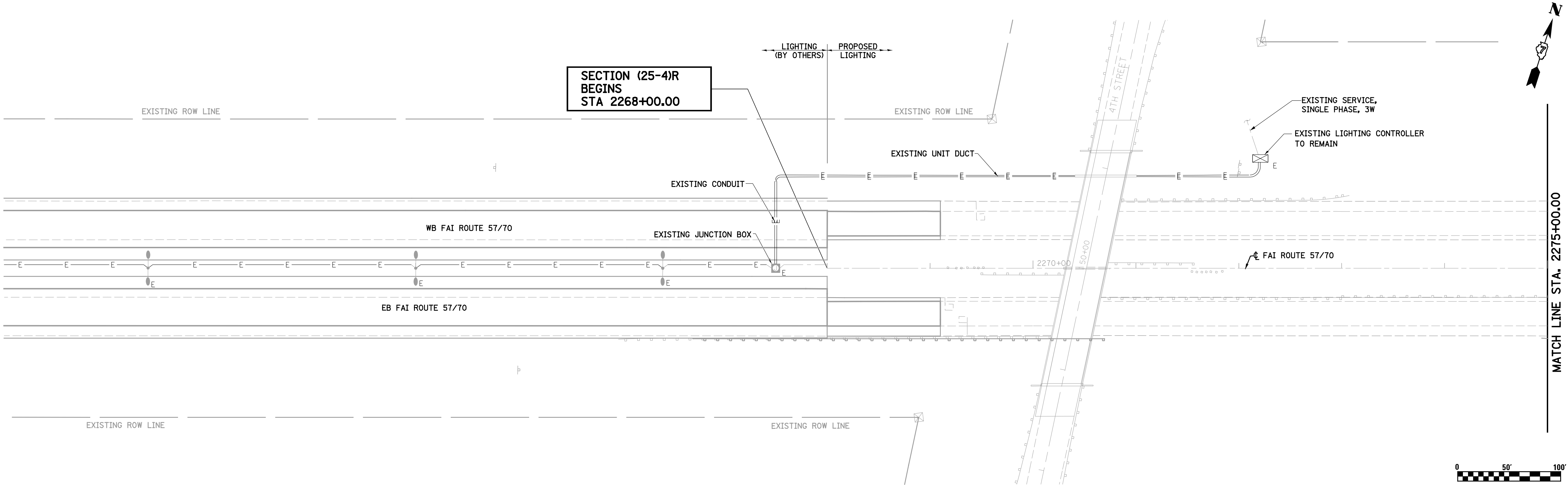
1. ALL PROPOSED LIGHTING UNITS SHALL BE LABELED ACCORDING TO THE STANDARD SPECIFICATIONS, WITH POLE NUMBERS ATTACHED WITH STAINLESS STEEL BANDING. LIGHTING UNIT NUMBERING SHALL BE AS DIRECTED BY THE ENGINEER.
2. EXISTING LIGHT POLES AND FOUNDATIONS TO BE REMOVED, AND ALL ASSOCIATED HARDWARE AND APPURTENANCES, SHALL NOT BE SALVAGED BUT SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OFF SITE AT THE CONTRACTOR'S EXPENSE.
3. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE ELECTRICAL WORK WITH OTHER TRADES.
4. CONTRACTOR SHALL INSTALL LIGHT POLES AT THE LOCATIONS INDICATED ON THE PLANS, MAINTAINING ADEQUATE CLEARANCE FROM OVERHEAD UTILITY LINES. CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY CLEARANCES PER THE NATIONAL ELECTRICAL SAFETY CODE AND/OR THE REQUIREMENTS OF THE UTILITY COMPANIES. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ALL CONFLICTS BETWEEN PROPOSED LIGHT POLE LOCATIONS AND UTILITY LINES. THE LOCATION OF BURIED AND ABOVE GROUND UTILITIES SHOWN ARE APPROXIMATE AND ARE SHOWN FOR INFORMATION ONLY. REROUTING, DISCONNECTION, RELOCATION, PROTECTION ETC., OF ANY UTILITIES MUST BE COORDINATED BETWEEN THE CONTRACTOR, UTILITY COMPANY, AND OWNER. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.
5. THE CONTRACTOR IS RESPONSIBLE FOR UNCOVERING OR HAND DIGGING AROUND UTILITIES AS NECESSARY. THE COST OF THIS WORK IS TO BE INCLUDED WITH THE APPLICABLE UNDERGROUND CONDUIT OR UNIT DUCT PAY ITEM.
6. PROPOSED LIGHT POLES ALONG THE RAMPS AND MAINLINE TO BE INSTALLED AT A 20 FEET SETBACK FROM THE EDGE OF TRAVELED PAVEMENT OR 5 FEET BEHIND THE GUARDRAIL UNLESS NOTED OTHERWISE ON THE PLANS. NO POLES SHALL BE INSTALLED IN THE FLOWLINE OF DITCH. POLE SETBACK TO BE ADJUSTED IF NECESSARY AS DIRECTED BY THE ENGINEER.
7. NO LIGHTING CIRCUIT OR PORTION THEREOF SHALL BE REMOVED FROM NIGHTTIME OPERATION WITHOUT APPROVAL OF THE ENGINEER.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE LIGHTING SYSTEM UNTIL IDOT HAS TAKEN ACCEPTANCE OF THE SYSTEM. ALL EXISTING CIRCUITS AND CABLES TO THE LIGHT POLES SHALL BE MAINTAINED AS NEEDED AND THIS WORK SHALL BE INCIDENTAL TO THE CONTRACT.
9. ALL RELOCATIONS AND ADJUSTMENTS TO EXISTING LIGHTING UNITS TO SERVE AS TEMPORARY LIGHTING DUE TO STAGING OR CONSTRUCTION SHALL BE MADE AT NO ADDITIONAL COST. ADDITIONAL AERIAL CABLE SPANS SHALL BE FURNISHED AND INSTALLED AS DIRECTED BY THE ENGINEER, AND THE COST OF THIS WORK SHALL BE INCIDENTAL TO THE CONTRACT.
10. BREAKAWAY DEVICES SHALL NOT BE INSTALLED FOR POLES LOCATED BEHIND THE GUARDRAIL OR MOUNTED ON BRIDGE PARAPET WALLS OR MEDIAN BARRIER WALL.
11. UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT SHALL BE SCHEDULE 80.
12. WASHERS SHALL BE LARGE ENOUGH TO FILL SLOTTED HOLES IN THE POLE BASEPLATE. STAINLESS STEEL SCREEN SHALL COMPLETELY AND PERMANENTLY COVER HOLES ON THE UNDERSIDE OF POLE BASEPLATE.

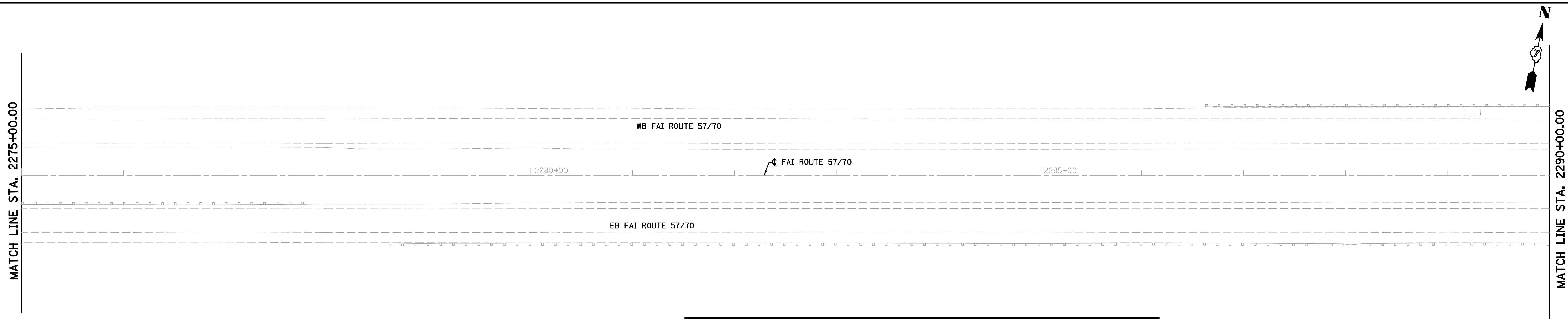
LIGHTING SCHEDULE

PAY ITEM	DESCRIPTION	UNIT	TOTAL QUANTITY
	ELECTRIC SERVICE INSTALLATION	EACH	3
	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 2 1/2" DIA.	FOOT	1,255
	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 3" DIA.	FOOT	350
	CONDUIT EMBEDDED IN STRUCTURE, 2" DIA., PVC	FOOT	7,735
	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 12" X 10" X 6"	EACH	4
	JUNCTION BOX, STAINLESS STEEL, EMBEDDED IN STRUCTURE, 8" X 24" X 10"	EACH	7
	UNIT DUCT, 600V, 2-1C NO.8, 1/C NO.8 GROUND, (XLP-TYPE USE), 3/4" DIA. POLYETHYLENE	FOOT	10,719
	UNIT DUCT, 600V, 2-1C NO.4, 1/C NO.6 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE	FOOT	10,922
	UNIT DUCT, 600V, 2-1C NO.6, 1/C NO.8 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE	FOOT	8,888
	UNIT DUCT, 600V, 2-1C NO.2, 1/C NO.4 GROUND, (XLP-TYPE USE), 1 1/4" DIA. POLYETHYLENE	FOOT	1,020
	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 8	FOOT	1,368
	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 6	FOOT	14,709
	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 4	FOOT	13,674
	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 400 WATT	EACH	178
	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, PHOTO-CELL CONTROL, 400 WATT	EACH	2
	SIGN LIGHTING (HIGH PRESSURE SODIUM)	EACH	30
	LIGHTING CONTROLLER, POLE MOUNTED, 240VOLT, 30AMP	EACH	1
	LIGHTING CONTROLLER, BASE MOUNTED, 480VOLT, 100AMP	EACH	2
	LIGHTING CONTROLLER, BASE MOUNTED, 480VOLT, 200AMP	EACH	1
	LIGHT POLE, ALUMINUM, 45 FT. M.H., 8 FT. DAVIT ARM - TWIN	EACH	31
	LIGHT POLE, ALUMINUM, 50 FT. M.H., 15 FT. DAVIT ARM	EACH	106
	LIGHT POLE, ALUMINUM, 50FT. M.H., 15 FT. DAVIT ARM, TWIN	EACH	5
	LIGHT POLE FOUNDATION METAL, 15" BOLT CIRCLE, 8" X 8'	EACH	107
	BREAKAWAY DEVICE, COUPLING, WITH STAINLESS STEEL SCREEN	EACH	380
	REMOVAL OF LIGHTING UNIT, NO SALVAGE	EACH	19
	REMOVAL OF POLE FOUNDATION	EACH	10
	REMOVAL OF LIGHTING CONTROLLER	EACH	4
	REMOVAL OF ELECTRIC SERVICE INSTALLATION	EACH	2
	REMOVAL OF LIGHTING CONTROLLER FOUNDATION	EACH	4
	CONDUIT ATTACHED TO STRUCTURE, 2" DIA. STAINLESS STEEL	FOOT	40
	LIGHT POLE FOUNDATION, SPECIAL	EACH	23
	TEMPORARY LIGHTING SYSTEM	L SUM	1
	MODIFY EXISTING LIGHTING CONTROLLER	EACH	1
	LIGHT POLE FOUNDATION, INTEGRAL WITH BARRIER WALL	EACH	8

LIGHTING INDEX

448 GENERAL NOTES, SCHEDULES AND INDEX OF SHEETS
449-458 EXISTING LIGHTING REMOVAL AND TEMPORARY LIGHTING
459-472 PROPOSED LIGHTING
473-476 WIRING DIAGRAMS
477-481 LIGHTING DETAILS AND LUMINAIRE PERFORMANCE TABLE
481A LIGHT POLE FOUNDATION DETAIL
482 LIGHTING DETAILS AND LUMINAIRE PERFORMANCE TABLE





LEGEND

Symbol	Description
R	EXISTING HIGH MAST TOWER TO BE REMOVED
ET	EXISTING HIGH MAST TOWER USED FOR TEMPORARY LIGHTING AND THEN REMOVED
	TEMPORARY WOOD POLE, 55 FEET, CLASS 4
E	EXISTING LIGHTING CONTROLLER
T	TEMPORARY WOOD POLE, 55 FEET, CLASS 4 WITH 250W HPS LUMINAIRE, 45 FEET MOUNTING HEIGHT ARROW INDICATES LUMINAIRE AIMING DIRECTION
E	EXISTING UNIT DUCT OR CABLE IN CONDUIT
E	EXISTING LIGHTING UNIT
E	EXISTING JUNCTION BOX
A	AERIAL CABLE, 2-1/C NO 4 UNLESS OTHERWISE NOTED WITH MESSENGER WIRE
T	TEMPORARY UNIT DUCT, 2-1C NO. 6, 1/C NO. 8 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE

THIS SHEET FOR INFORMATION ONLY

NOTES:

1. THE LOCATIONS OF EXISTING UNIT DUCT AS SHOWN ON THE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION IN THE FIELD PRIOR TO CONSTRUCTION.
2. EXISTING HIGH MAST TOWER TO BE REMOVED. THIS WORK SHALL BE PAID FOR AS "REMOVAL OF LIGHTING UNIT, NO SALVAGE" PAY ITEM. FOUNDATION REMOVAL SHALL BE PAID FOR AS "REMOVAL OF POLE FOUNDATION" PAY ITEM.

0 50' 100'

L-2

FILE NAME = S:\Projects\403-00072.57-70\dgn\N TriLv\lighting_Existing_ntl.dgn	USER NAME = $USER$	DESIGNED - JWS	REVISED -
		DRAWN - PDB	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -
	PLOT DATE = $DATE$	DATE - 11-02-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING LIGHTING REMOVAL AND TEMPORARY LIGHTING
NORTH TRI LEVEL

SCALE: 1"=50' | SHEET NO. 2 OF 35 SHEETS | STA. 226000.00 TO STA. 229000.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	449

CONTRACT NO. 74295

FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT

MATCH LINE STA. 2290+00.00

MATCH LINE STA. 2305+00.00

TEMPORARY LIGHTING TO BE CONSTRUCTED IN STAGE 2

TEMPORARY LIGHTING TO BE CONSTRUCTED IN PRE-STAGE 1

STA 2296+10.00
85' LT

STA 2298+40.00
100' LT

STA 2300+60.00
135' LT

STA 2301+60.00

STA 2302+45.00
100' LT

STA 2304+75.00
104' LT

WB FAI ROUTE 57/70

℄ FAI ROUTE 57/70

EB FAI ROUTE 57/70

2290+00

2295+00

2300+00

POT STA 2295+42.88

IL CENTRAL RAILROAD

US ROUTE 45

STA 2295+25.00
100' RT

STA 2297+25.00
110' RT

STA 2299+50.00

EXISTING SIGN LIGHTING TO BE REMOVED

NOTE 2

STA 2301+60.00

DOWNGUY AND ANCHOR (TYP)

EXISTING RAMP C

CONTINUED ON SHEET 5

CONTINUED ON SHEET 5

TEMPORARY LIGHTING TO BE CONSTRUCTED IN STAGE 2

MATCH LINE STA. 26+00.00

0 50' 100'

NOTES:

1. THE LOCATIONS OF EXISTING UNIT DUCT AS SHOWN ON THE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION IN THE FIELD PRIOR TO CONSTRUCTION.
2. EXISTING HIGH MAST TOWER TO BE REMOVED. THIS WORK SHALL BE PAID FOR AS "REMOVAL OF LIGHTING UNIT, NO SALVAGE" PAY ITEM. FOUNDATION REMOVAL SHALL BE PAID FOR AS "REMOVAL OF POLE FOUNDATION" PAY ITEM.

MATCH LINE STA. 23+00.00

TEMPORARY LIGHTING TO BE CONSTRUCTED IN PRE-STAGE 1

STA 24+00.00
38' RT

EXISTING RAMP A

MATCH LINE STA. 25+50.00

STA 2310+00.00
140' LT

DOWNGUY AND ANCHOR (TYP)

TEMPORARY LIGHTING TO BE CONSTRUCTED IN STAGE 2

STA 2312+00.00
100' LT

STA 2313+70.00
90' LT

EXISTING RAMP B

STA 2316+00

NOTE 2

EXISTING ROW LINE

MATCH LINE STA. 2305+00.00

MATCH LINE STA. 2320+00.00
SEE SHEET 6

WB FAI ROUTE 57/70

℄ FAI ROUTE 57/70

EB FAI ROUTE 57/70

2305+00

2310+00

2315+00

STA 2310+65.00
105' RT

STA 2308+80.00
170' RT

DOWNGUY AND ANCHOR (TYP)

STA 33+00.00
33' LT

STA 2314+00.00
101' RT

STA 2316+00.00
97' RT

TEMPORARY LIGHTING TO BE CONSTRUCTED IN PRE-STAGE 1

TEMPORARY LIGHTING TO BE CONSTRUCTED IN STAGE 2

EXISTING ROW LINE

EXISTING ROW LINE

0 50' 100'

LEGEND

- EXISTING HIGH MAST TOWER TO BE REMOVED
- EXISTING HIGH MAST TOWER USED FOR TEMPORARY LIGHTING AND THEN REMOVED
- TEMPORARY WOOD POLE, 55 FEET, CLASS 4
- EXISTING LIGHTING CONTROLLER
- TEMPORARY WOOD POLE, 55 FEET, CLASS 4 WITH 250W HPS LUMINAIRE, 45 FEET MOUNTING HEIGHT ARROW INDICATES LUMINAIRE AIMING DIRECTION
- EXISTING UNIT DUCT OR CABLE IN CONDUIT
- EXISTING LIGHTING UNIT
- EXISTING JUNCTION BOX
- AERIAL CABLE, 2-1/C NO 4 UNLESS OTHERWISE NOTED WITH MESSENGER WIRE
- TEMPORARY UNIT DUCT, 2-1C NO. 6, 1/C NO. 8 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE

L-3

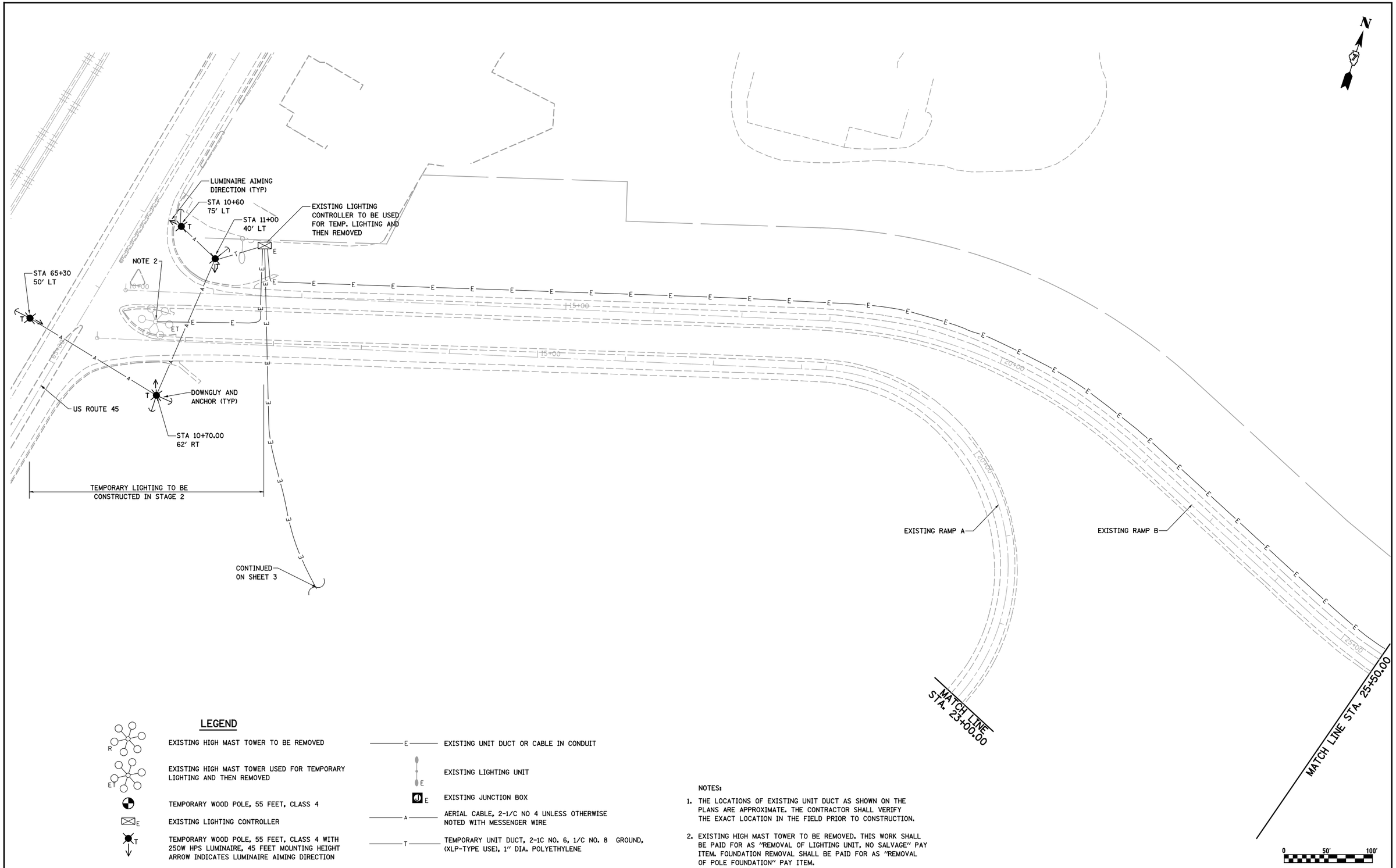
FILE NAME = S:\Projects\483-00072.57-70\dgn\N Tri-Lv\Lighting_Existing_ntl.dgn	USER NAME = $USER$	DESIGNED - JWS	REVISED -
		DRAWN - PDB	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -
	PLOT DATE = $DATE$	DATE - 11-02-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING LIGHTING REMOVAL AND TEMPORARY LIGHTING
NORTH TRI LEVEL

SCALE: 1"=50' | SHEET NO. 3 OF 35 SHEETS | STA. 2290+00.00 TO STA. 2320+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	450
		CONTRACT NO. 74295		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



LEGEND

- EXISTING HIGH MAST TOWER TO BE REMOVED
- EXISTING HIGH MAST TOWER USED FOR TEMPORARY LIGHTING AND THEN REMOVED
- TEMPORARY WOOD POLE, 55 FEET, CLASS 4
- EXISTING LIGHTING CONTROLLER
- TEMPORARY WOOD POLE, 55 FEET, CLASS 4 WITH 250W HPS LUMINAIRE, 45 FEET MOUNTING HEIGHT ARROW INDICATES LUMINAIRE AIMING DIRECTION
- EXISTING UNIT DUCT OR CABLE IN CONDUIT
- EXISTING LIGHTING UNIT
- EXISTING JUNCTION BOX
- AERIAL CABLE, 2-1/C NO 4 UNLESS OTHERWISE NOTED WITH MESSENGER WIRE
- TEMPORARY UNIT DUCT, 2-1C NO. 6, 1/C NO. 8 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE

NOTES:

1. THE LOCATIONS OF EXISTING UNIT DUCT AS SHOWN ON THE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION IN THE FIELD PRIOR TO CONSTRUCTION.
2. EXISTING HIGH MAST TOWER TO BE REMOVED. THIS WORK SHALL BE PAID FOR AS "REMOVAL OF LIGHTING UNIT, NO SALVAGE" PAY ITEM. FOUNDATION REMOVAL SHALL BE PAID FOR AS "REMOVAL OF POLE FOUNDATION" PAY ITEM.

L-4

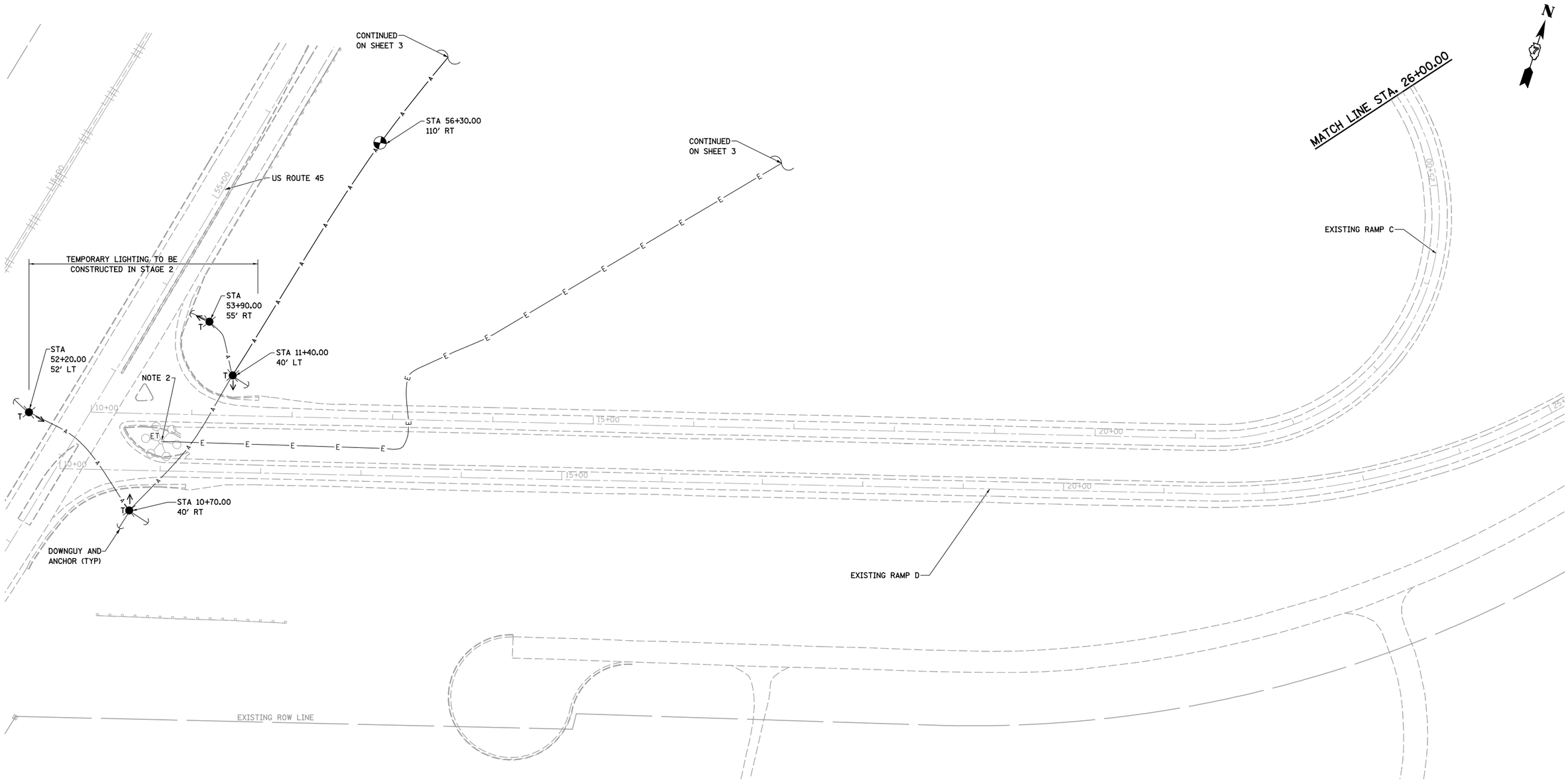
FILE NAME = S:\Projects\403-00072,57-70\dgn\N Tri_v\Lighting_Existing_ntl.dgn	USER NAME = $USER$	DESIGNED - JWS	REVISED -
		DRAWN - PDB	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -
	PLOT DATE = $DATE$	DATE - 10-11-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING LIGHTING REMOVAL AND TEMPORARY LIGHTING
NORTH TRI LEVEL

SCALE: 1"=50' | SHEET NO. 4 OF 35 SHEETS | STA. 10+00.00 TO STA. 25+50.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	451
		CONTRACT NO. 74295		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



LEGEND

- EXISTING HIGH MAST TOWER TO BE REMOVED
- EXISTING HIGH MAST TOWER USED FOR TEMPORARY LIGHTING AND THEN REMOVED
- TEMPORARY WOOD POLE, 55 FEET, CLASS 4
- EXISTING LIGHTING CONTROLLER
- TEMPORARY WOOD POLE, 55 FEET, CLASS 4 WITH 250W HPS LUMINAIRE, 45 FEET MOUNTING HEIGHT ARROW INDICATES LUMINAIRE AIMING DIRECTION
- EXISTING UNIT DUCT OR CABLE IN CONDUIT
- EXISTING LIGHTING UNIT
- EXISTING JUNCTION BOX
- AERIAL CABLE, 2-1/C NO 4 UNLESS OTHERWISE NOTED WITH MESSENGER WIRE
- TEMPORARY UNIT DUCT, 2-1C NO. 6, 1/C NO. 8 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE

NOTES:

1. THE LOCATIONS OF EXISTING UNIT DUCT AS SHOWN ON THE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION IN THE FIELD PRIOR TO CONSTRUCTION.
2. EXISTING HIGH MAST TOWER TO BE REMOVED. THIS WORK SHALL BE PAID FOR AS "REMOVAL OF LIGHTING UNIT, NO SALVAGE" PAY ITEM. FOUNDATION REMOVAL SHALL BE PAID FOR AS "REMOVAL OF POLE FOUNDATION" PAY ITEM.

0 50' 100'

L-5

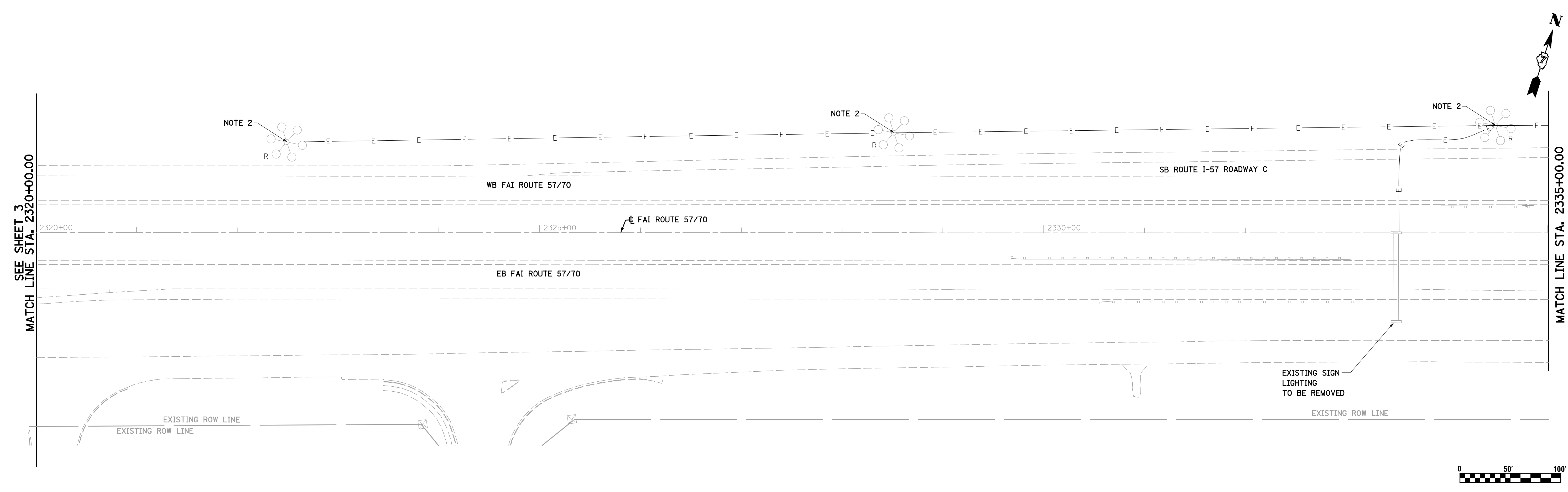
FILE NAME = S:\Projects\403-00072,57-70\dgn\N TriLv\Lighting,Existing,ntLdgn	USER NAME = $USER$	DESIGNED - JWS	REVISED -
		DRAWN - PDB	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -
	PLOT DATE = $DATE$	DATE - 10-11-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING LIGHTING REMOVAL AND TEMPORARY LIGHTING
NORTH TRI LEVEL

SCALE: 1"=50' | SHEET NO. 5 OF 35 SHEETS | STA. 10+00.00 TO STA. 26+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	452
		CONTRACT NO. 74295		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

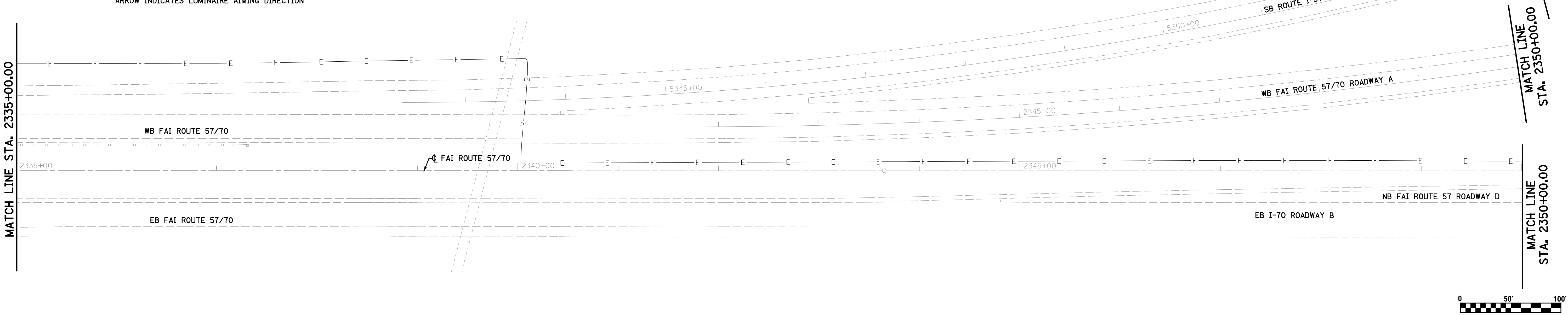


LEGEND

R	EXISTING HIGH MAST TOWER TO BE REMOVED
ET	EXISTING HIGH MAST TOWER USED FOR TEMPORARY LIGHTING AND THEN REMOVED
	TEMPORARY WOOD POLE, 55 FEET, CLASS 4
E	EXISTING LIGHTING CONTROLLER
T	TEMPORARY WOOD POLE, 55 FEET, CLASS 4 WITH 250W HPS LUMINAIRE, 45 FEET MOUNTING HEIGHT ARROW INDICATES LUMINAIRE AIMING DIRECTION
E	EXISTING UNIT DUCT OR CABLE IN CONDUIT
E	EXISTING LIGHTING UNIT
E	EXISTING JUNCTION BOX
A	AERIAL CABLE, 2-1/C NO 4 UNLESS OTHERWISE NOTED WITH MESSENGER WIRE
T	TEMPORARY UNIT DUCT, 2-1C NO. 6, 1/C NO. 8 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE

NOTES:

1. THE LOCATIONS OF EXISTING UNIT DUCT AS SHOWN ON THE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION IN THE FIELD PRIOR TO CONSTRUCTION.
2. EXISTING HIGH MAST TOWER TO BE REMOVED. THIS WORK SHALL BE PAID FOR AS "REMOVAL OF LIGHTING UNIT, NO SALVAGE" PAY ITEM. FOUNDATION REMOVAL SHALL BE PAID FOR AS "REMOVAL OF POLE FOUNDATION" PAY ITEM.

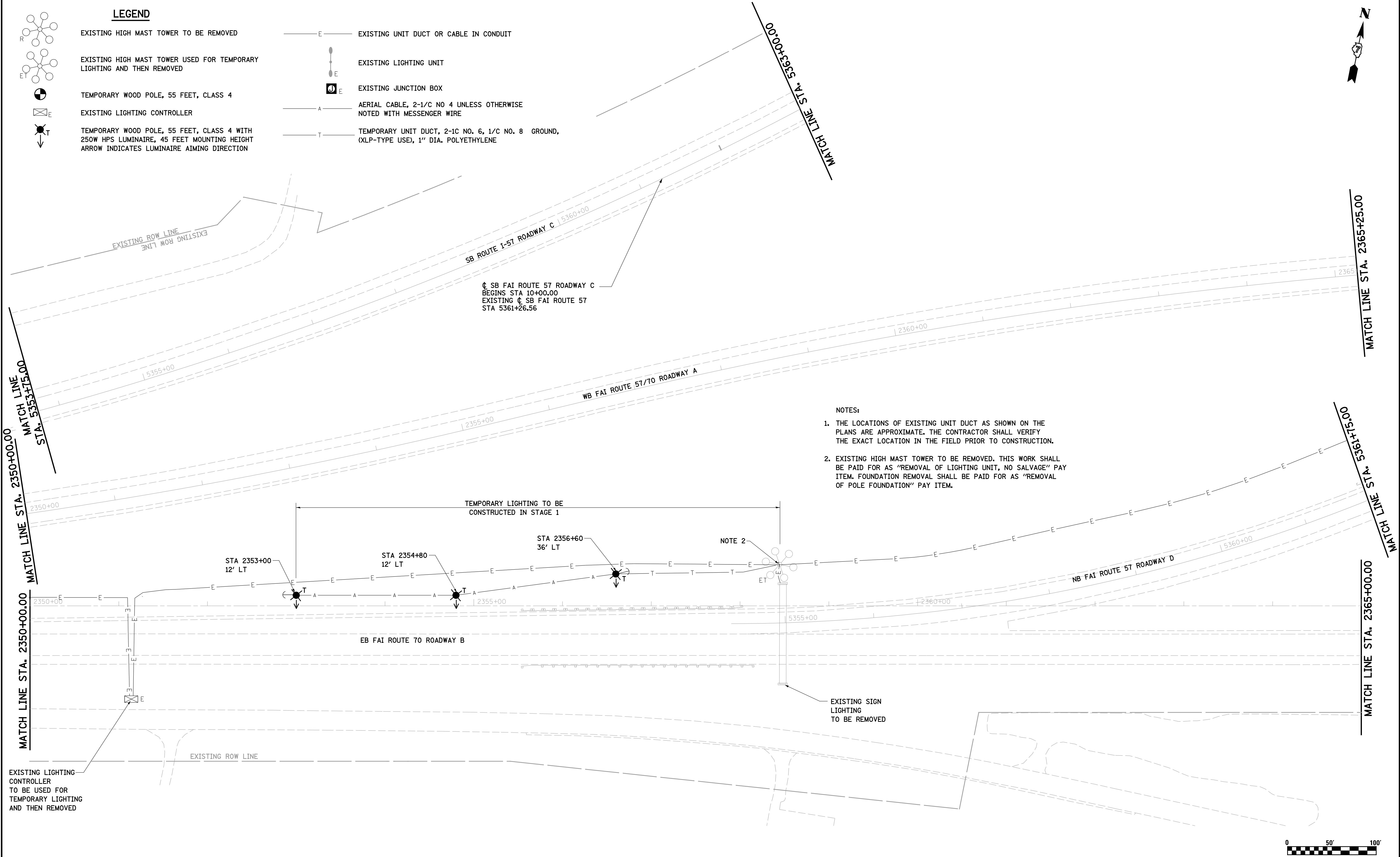


L-6

FILE NAME =	USER NAME = $USER$	DESIGNED - JWS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING LIGHTING REMOVAL AND TEMPORARY LIGHTING NORTH TRI LEVEL	F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S:\Projects\483-00072.57-70\dgn\N Tri\Lv1\lighting_Existing.ntl.dgn		DRAWN - PDB	REVISED -			57/70	(25-4)R	EFFINGHAM	1760	453
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -			CONTRACT NO. 74295				
	PLOT DATE = $DATE$	DATE - 11-02-12	REVISED -		SCALE: 1"=50' SHEET NO. 6 OF 35 SHEETS STA. 2320+00.00 TO STA. 2350+00.00	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

LEGEND

- EXISTING HIGH MAST TOWER TO BE REMOVED (R)
- EXISTING HIGH MAST TOWER USED FOR TEMPORARY LIGHTING AND THEN REMOVED (ET)
- TEMPORARY WOOD POLE, 55 FEET, CLASS 4
- EXISTING LIGHTING CONTROLLER (E)
- TEMPORARY WOOD POLE, 55 FEET, CLASS 4 WITH 250W HPS LUMINAIRE, 45 FEET MOUNTING HEIGHT ARROW INDICATES LUMINAIRE AIMING DIRECTION (T)
- —E— EXISTING UNIT DUCT OR CABLE IN CONDUIT
- EXISTING LIGHTING UNIT (E)
- EXISTING JUNCTION BOX (E)
- —A— AERIAL CABLE, 2-1/C NO 4 UNLESS OTHERWISE NOTED WITH MESSENGER WIRE
- —T— TEMPORARY UNIT DUCT, 2-1C NO. 6, 1/C NO. 8 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE



NOTES:

1. THE LOCATIONS OF EXISTING UNIT DUCT AS SHOWN ON THE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION IN THE FIELD PRIOR TO CONSTRUCTION.
2. EXISTING HIGH MAST TOWER TO BE REMOVED. THIS WORK SHALL BE PAID FOR AS "REMOVAL OF LIGHTING UNIT, NO SALVAGE" PAY ITEM. FOUNDATION REMOVAL SHALL BE PAID FOR AS "REMOVAL OF POLE FOUNDATION" PAY ITEM.

L-7

FILE NAME = s:\projects\-00072.57-70\dgn\S Tri Lvl\pmk_stl.dgn	USER NAME = $USER$	DESIGNED - JWS	REVISED -
		DRAWN - PDB	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

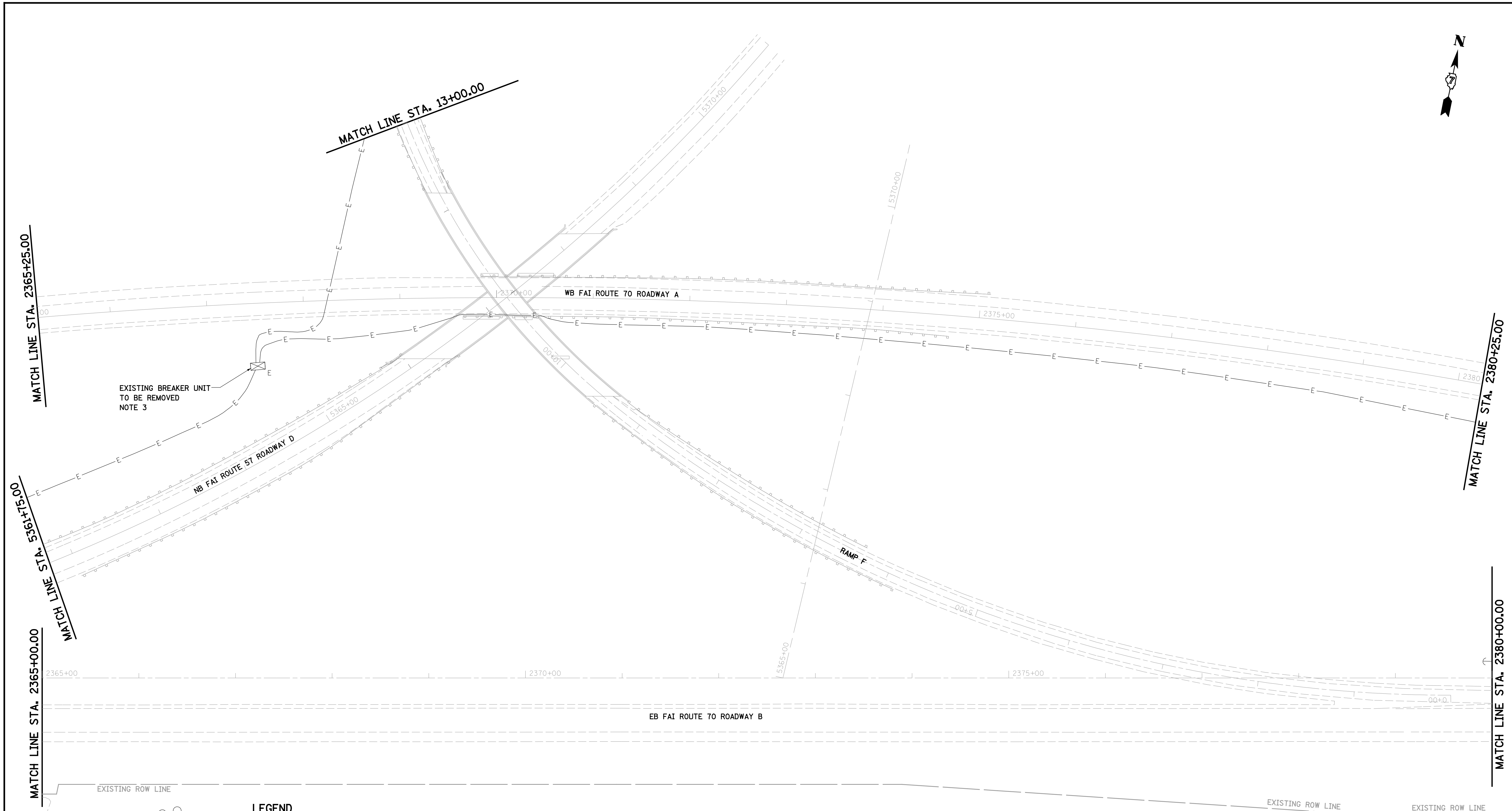
EXISTING LIGHTING REMOVAL AND TEMPORARY LIGHTING
NORTH TRI LEVEL

SCALE: 1"=50' | SHEET NO. 7 OF 35 SHEETS | STA. 2350+00.00 TO STA. 2365+00.00

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	454

CONTRACT NO. 74295

FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT



LEGEND

EXISTING HIGH MAST TOWER TO BE REMOVED	EXISTING UNIT DUCT OR CABLE IN CONDUIT
EXISTING HIGH MAST TOWER USED FOR TEMPORARY LIGHTING AND THEN REMOVED	EXISTING LIGHTING UNIT
TEMPORARY WOOD POLE, 55 FEET, CLASS 4	EXISTING JUNCTION BOX
EXISTING LIGHTING CONTROLLER	AERIAL CABLE, 2-1/C NO 4 UNLESS OTHERWISE NOTED WITH MESSENGER WIRE
TEMPORARY WOOD POLE, 55 FEET, CLASS 4 WITH 250W HPS LUMINAIRE, 45 FEET MOUNTING HEIGHT ARROW INDICATES LUMINAIRE AIMING DIRECTION	TEMPORARY UNIT DUCT, 2-1C NO. 6, 1/C NO. 8 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE

NOTES:

1. THE LOCATIONS OF EXISTING UNIT DUCT AS SHOWN ON THE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION IN THE FIELD PRIOR TO CONSTRUCTION.
2. EXISTING HIGH MAST TOWER TO BE REMOVED. THIS WORK SHALL BE PAID FOR AS "REMOVAL OF LIGHTING UNIT, NO SALVAGE" PAY ITEM. FOUNDATION REMOVAL SHALL BE PAID FOR AS "REMOVAL OF POLE FOUNDATION" PAY ITEM.
3. REMOVAL WILL BE PAID FOR AS "REMOVAL OF EXISTING CONTROLLER" PAY ITEM

0 50' 100'

L-8

FILE NAME =	USER NAME = $USER$	DESIGNED - JWS	REVISED -
s:\projects\-00072.57-70\dgn\S Tri.L+\pmk_stl.dgn		DRAWN - PDB	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -
	PLOT DATE = $DATE$	DATE - 11-02-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING LIGHTING REMOVAL AND TEMPORARY LIGHTING
NORTH TRI LEVEL

SCALE: 1"=50' | SHEET NO. 8 OF 35 SHEETS | STA. 2365+00.00 TO STA. 2380+00.00

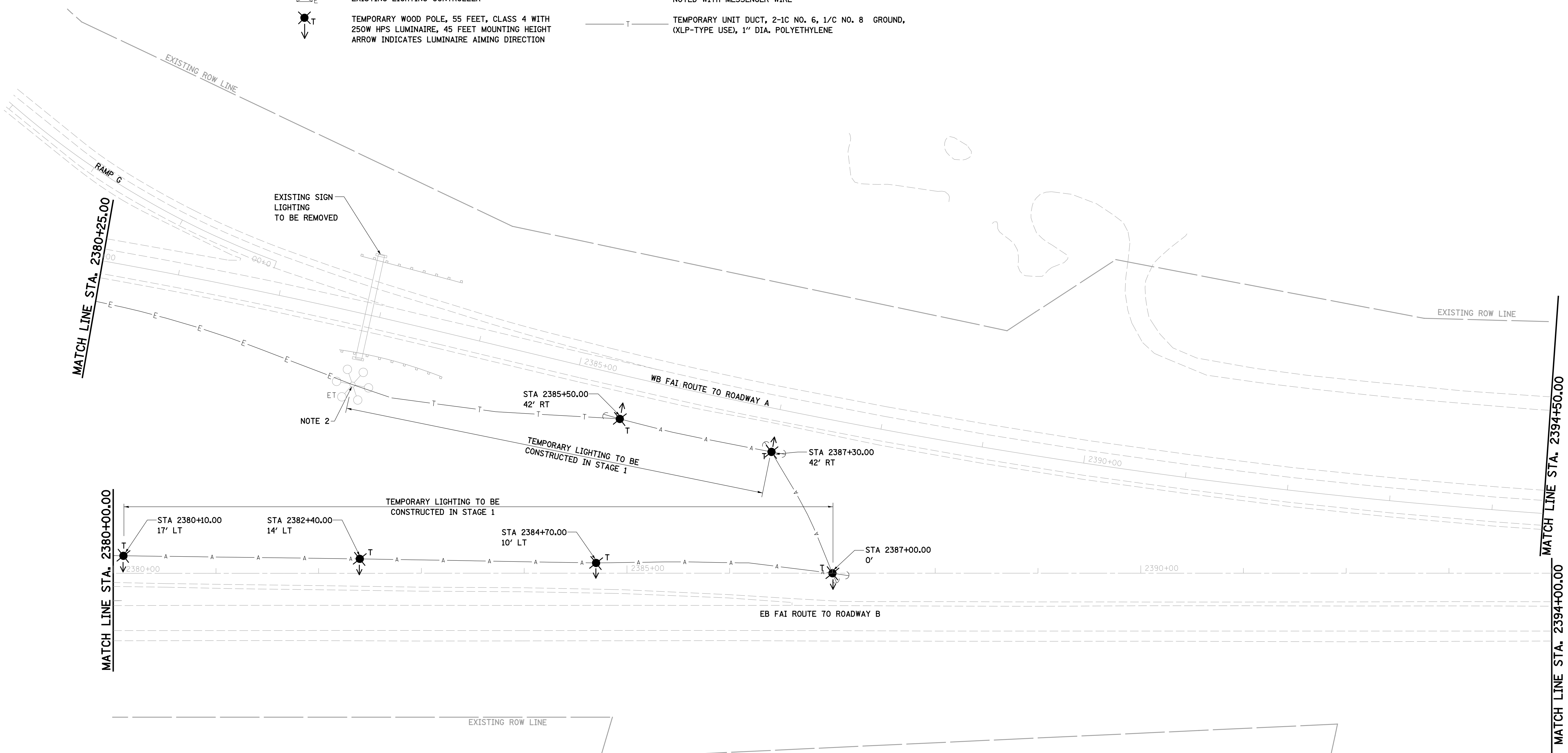
F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	455

CONTRACT NO. 74295

FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT

LEGEND

- EXISTING HIGH MAST TOWER TO BE REMOVED (R)
- EXISTING HIGH MAST TOWER USED FOR TEMPORARY LIGHTING AND THEN REMOVED (ET)
- TEMPORARY WOOD POLE, 55 FEET, CLASS 4
- EXISTING LIGHTING CONTROLLER (E)
- TEMPORARY WOOD POLE, 55 FEET, CLASS 4 WITH 250W HPS LUMINAIRE, 45 FEET MOUNTING HEIGHT ARROW INDICATES LUMINAIRE AIMING DIRECTION (T)
- —E— EXISTING UNIT DUCT OR CABLE IN CONDUIT
- EXISTING LIGHTING UNIT (E)
- EXISTING JUNCTION BOX (E)
- —A— AERIAL CABLE, 2-1/C NO 4 UNLESS OTHERWISE NOTED WITH MESSENGER WIRE
- —T— TEMPORARY UNIT DUCT, 2-1C NO. 6, 1/C NO. 8 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE



NOTES:

1. THE LOCATIONS OF EXISTING UNIT DUCT AS SHOWN ON THE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION IN THE FIELD PRIOR TO CONSTRUCTION.

2. EXISTING HIGH MAST TOWER TO BE REMOVED. THIS WORK SHALL BE PAID FOR AS "REMOVAL OF LIGHTING UNIT, NO SALVAGE" PAY ITEM. FOUNDATION REMOVAL SHALL BE PAID FOR AS "REMOVAL OF POLE FOUNDATION" PAY ITEM.

EXISTING ROW LINE

0 50' 100'

L-9

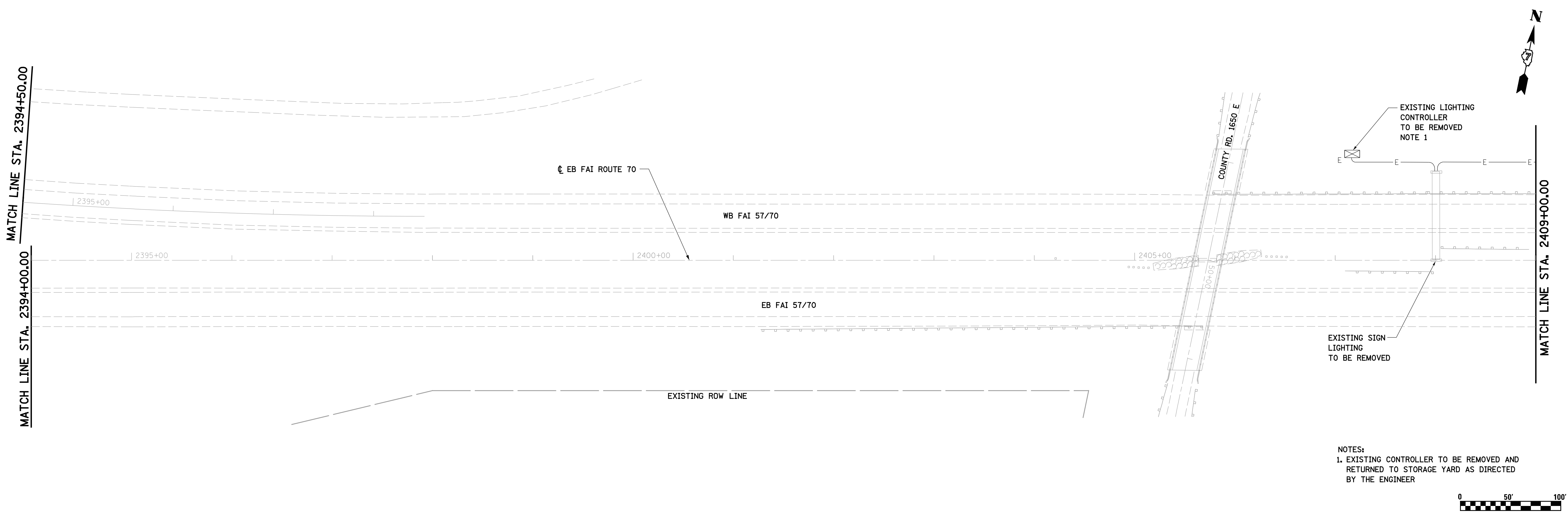
FILE NAME =	USER NAME = $USER$	DESIGNED - JWS	REVISED -
		DRAWN - PDB	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -
	PLOT DATE = $DATE$	DATE - 11-02-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

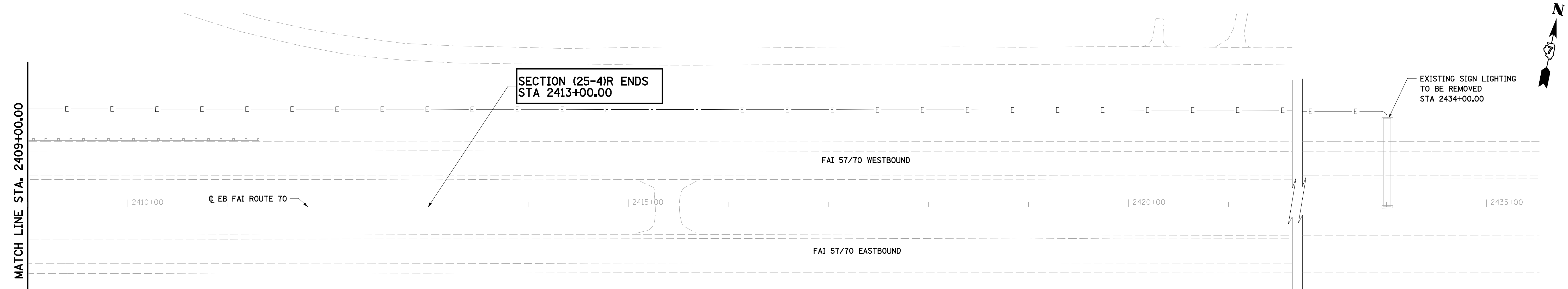
EXISTING LIGHTING REMOVAL AND TEMPORARY LIGHTING
NORTH TRI LEVEL

SCALE: 1"=50' | SHEET NO. 9 OF 35 SHEETS | STA. 2380+00.00 TO STA. 2394+00.00

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	456
		CONTRACT NO. 74295		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



NOTES:
1. EXISTING CONTROLLER TO BE REMOVED AND RETURNED TO STORAGE YARD AS DIRECTED BY THE ENGINEER



LEGEND

- EXISTING HIGH MAST TOWER TO BE REMOVED
- EXISTING HIGH MAST TOWER USED FOR TEMPORARY LIGHTING AND THEN REMOVED
- TEMPORARY WOOD POLE, 55 FEET, CLASS 4
- EXISTING LIGHTING CONTROLLER
- TEMPORARY WOOD POLE, 55 FEET, CLASS 4 WITH 250W HPS LUMINAIRE, 45 FEET MOUNTING HEIGHT ARROW INDICATES LUMINAIRE AIMING DIRECTION
- EXISTING UNIT DUCT OR CABLE IN CONDUIT
- EXISTING LIGHTING UNIT
- EXISTING JUNCTION BOX
- AERIAL CABLE, 2-1/C NO 4 UNLESS OTHERWISE NOTED WITH MESSENGER WIRE
- TEMPORARY UNIT DUCT, 2-1C NO. 6, 1/C NO. 8 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE

0 50' 100'

L-10

FILE NAME = s:\projects\-00072.57-70\dgn\5 Tri.Lv\pmk_stl.dgn	USER NAME = $USER$	DESIGNED - JWS	REVISED -
		DRAWN - PDB	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -
	PLOT DATE = $DATE$	DATE - 11-02-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

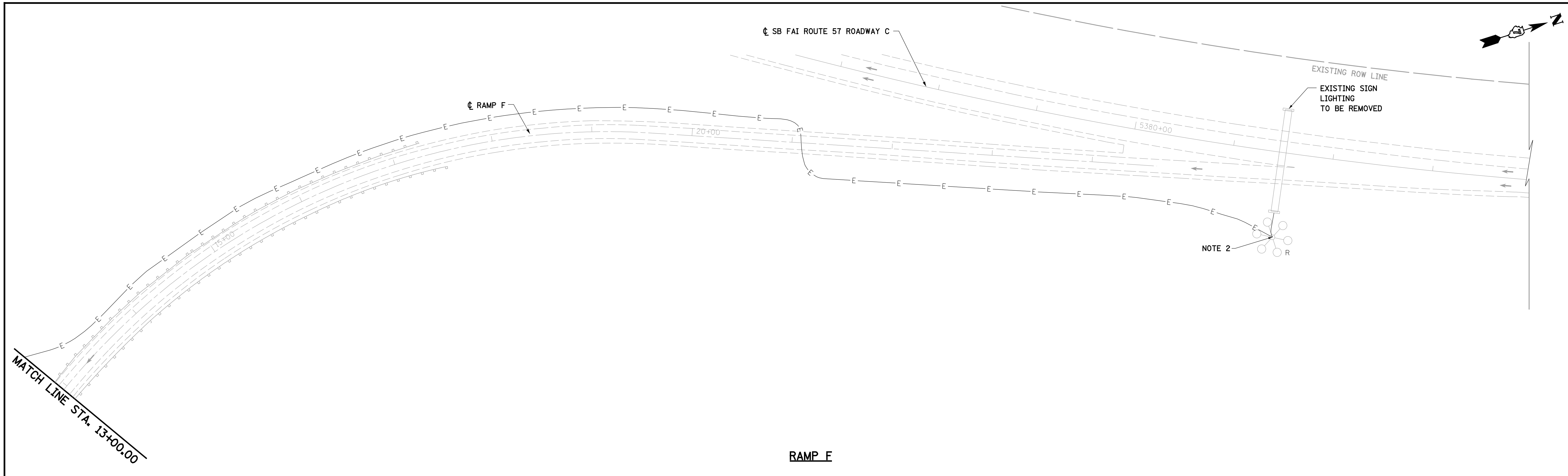
EXISTING LIGHTING REMOVAL AND TEMPORARY LIGHTING
NORTH TRI LEVEL

SCALE: 1"=50' | SHEET NO. 10 OF 35 SHEETS | STA. 2394+00.00 TO STA. 2424+00.00

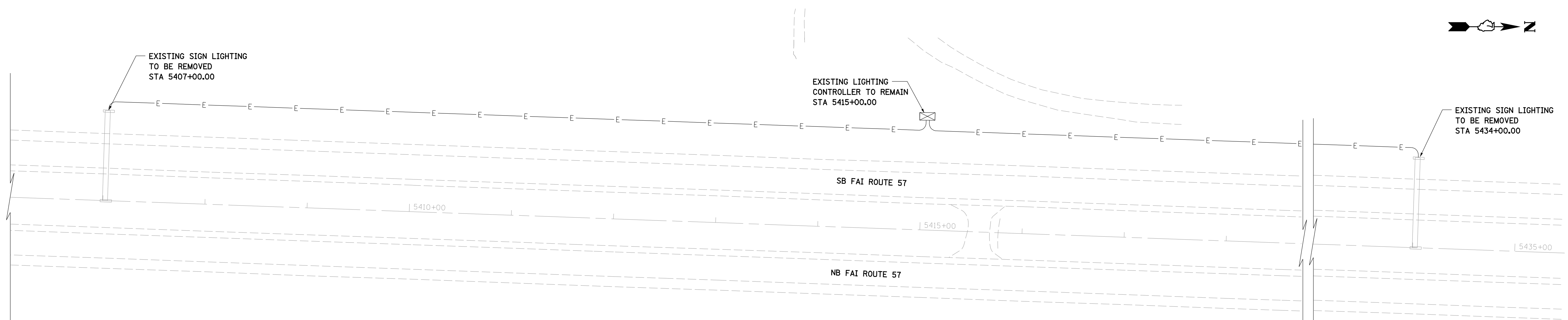
F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	457

CONTRACT NO. 74295

FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT



RAMP F



I-57 NORTH

LEGEND

Symbol	Description
R	EXISTING HIGH MAST TOWER TO BE REMOVED
ET	EXISTING HIGH MAST TOWER USED FOR TEMPORARY LIGHTING AND THEN REMOVED
	TEMPORARY WOOD POLE, 55 FEET, CLASS 4
E	EXISTING LIGHTING CONTROLLER
T	TEMPORARY WOOD POLE, 55 FEET, CLASS 4 WITH 250W HPS LUMINAIRE, 45 FEET MOUNTING HEIGHT ARROW INDICATES LUMINAIRE AIMING DIRECTION
E	EXISTING UNIT DUCT OR CABLE IN CONDUIT
E	EXISTING LIGHTING UNIT
E	EXISTING JUNCTION BOX
A	AERIAL CABLE, 2-1/C NO 4 UNLESS OTHERWISE NOTED WITH MESSENGER WIRE
T	TEMPORARY UNIT DUCT, 2-1C NO. 6, 1/C NO. 8 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE

NOTES:

1. THE LOCATIONS OF EXISTING UNIT DUCT AS SHOWN ON THE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION IN THE FIELD PRIOR TO CONSTRUCTION.
2. EXISTING HIGH MAST TOWER TO BE REMOVED. THIS WORK SHALL BE PAID FOR AS "REMOVAL OF LIGHTING UNIT, NO SALVAGE" PAY ITEM. FOUNDATION REMOVAL SHALL BE PAID FOR AS "REMOVAL OF POLE FOUNDATION" PAY ITEM.

0 50' 100'

L-11

FILE NAME =	USER NAME = $USER$	DESIGNED - JWS	REVISED -
s:\projects\-80072.57-70\dgn\S Tri\L\lpmk_st1.dgn		DRAWN - PDB	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -
	PLOT DATE = $DATE$	DATE - 11-02-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

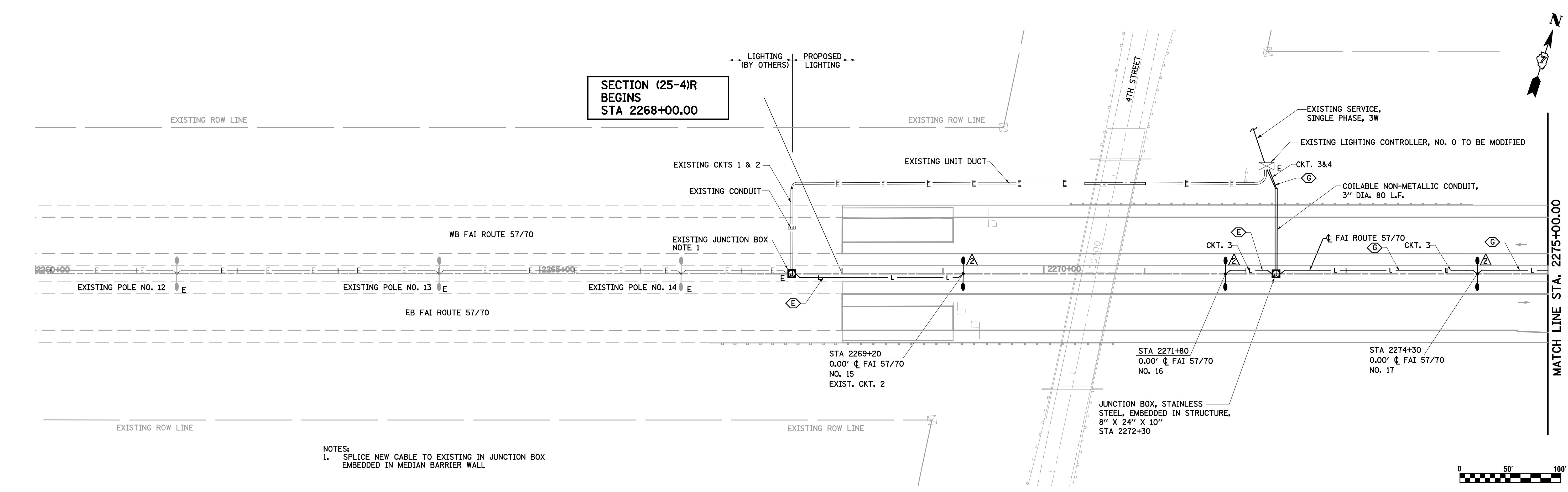
EXISTING LIGHTING REMOVAL AND TEMPORARY LIGHTING
NORTH TRI LEVEL

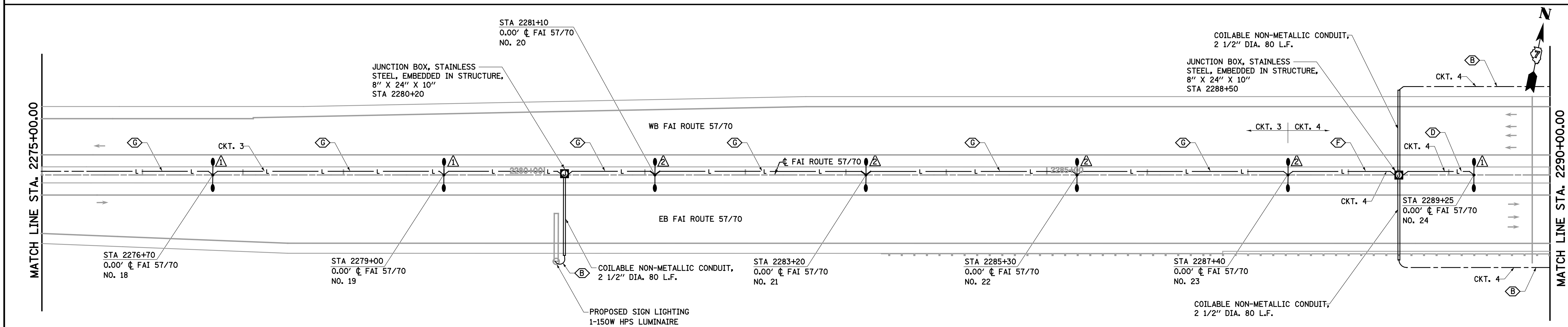
SCALE: 1"=50' | SHEET NO. 11 OF 35 SHEETS | STA. 13+00.00 TO STA. 24+00.00

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	458

CONTRACT NO. 74295

FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT





LEGEND

- EXISTING LIGHTING UNIT, TWIN
- PROPOSED LIGHTING UNIT, 45 FT ALUMINUM POLE, TWIN 8 FT DAVIT ARM, (2) 400W HPS LUMINAIRES, M-C-3
- PROPOSED LIGHTING UNIT, 50 FT ALUMINUM POLE, 15 FT DAVIT ARM, 400W HPS LUMINAIRE, M-C-3
- EXISTING LIGHTING CONTROLLER
- PROPOSED LIGHTING CONTROLLER
- SERVICE INSTALLATION
- COMBINATION LIGHTING UNIT, 45 FT MH, 15 FT MAST ARM, 400 HPS LUMINAIRE, PHOTO-CELL CONTROL, M-C-3
- PROPOSED LIGHTING UNIT, 50 FT ALUMINUM POLE, TWIN 15 FT DAVIT ARM, (2) 400W HPS LUMINAIRES, M-C-3
- JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE OR EMBEDDED IN STRUCTURE, SIZE AS NOTED
- PROPOSED UNIT DUCT, SIZE AS NOTED
- PROPOSED ELECTRIC CABLE IN CONDUIT, SIZE AS NOTED
- PROPOSED UNDERGROUND COILABLE NON-METALLIC CONDUIT, SIZE AS NOTED
- EXISTING UNIT DUCT OR CABLE IN CONDUIT

CABLE / CONDUIT SCHEDULE

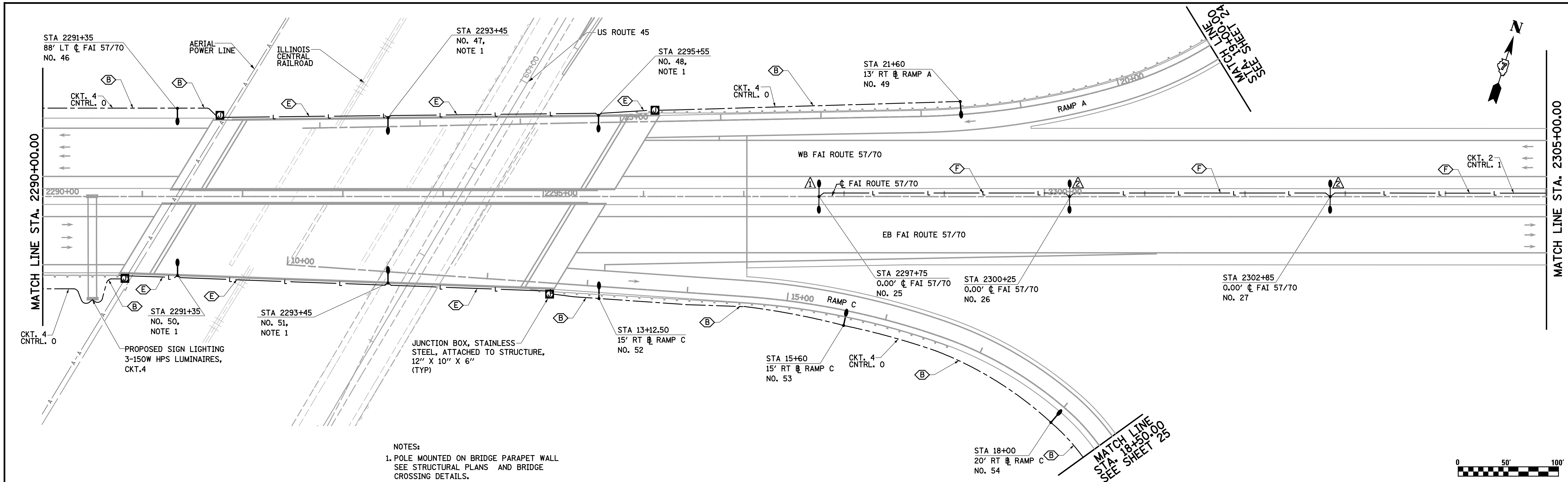
- (A) UNIT DUCT, 600V, 2-1C NO. 8, 1/C NO. 8 GROUND, (XLP-TYPE USE), 3/4" DIA. POLYETHYLENE
- (B) UNIT DUCT, 600V, 2-1C NO. 6, 1/C NO. 8 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE
- (C) UNIT DUCT, 600V, 2-1C NO. 4, 1/C NO. 6 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE
- (D) ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 8, 1/C NO. 8 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
- (E) ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 6, 1/C NO. 8 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
- (F) ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 4, 1/C NO. 6 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
- (G) ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 6, 2-1/C NO. 4, 1/C NO. 6 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
- (L) UNIT DUCT, 600V, 2-1C NO. 2, 1/C NO. 4 GROUND, (XLP-TYPE USE), 1 1/4" DIA. POLYETHYLENE

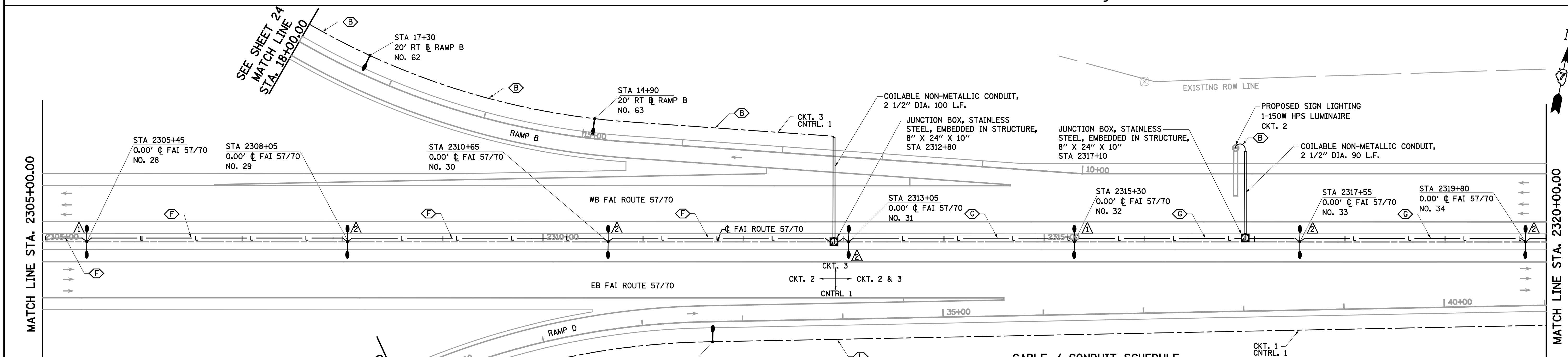
- ⚠1 LIGHT POLE FOUNDATION
- ⚠2 LIGHT POLE FOUNDATION (SPECIAL)

0 50' 100'

L-12

FILE NAME = S:\Projects\483-00072\57-70\dgn\N TriLvl\lighting_Prop_ntl.dgn	USER NAME = $USER$	DESIGNED - JWS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PROPOSED LIGHTING, NORTH TRI LEVEL	F.A.I. RTE. 57/70	SECTION (25-4)R	COUNTY EFFINGHAM	TOTAL SHEETS 1760	SHEET NO. 459
		DRAWN - PDB	REVISED -					CONTRACT NO. 74295		
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -							
	PLOT DATE = $DATE$	DATE - 11-02-12	REVISED -		SCALE: 1"=50' SHEET NO. 12 OF 35 SHEETS STA. 226000.00 TO STA. 229000.00	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		





LEGEND

- EXISTING LIGHTING UNIT, TWIN
- PROPOSED LIGHTING UNIT, 45 FT ALUMINUM POLE, TWIN 8 FT DAVIT ARM, (2) 400W HPS LUMINAIRES, M-C-3
- PROPOSED LIGHTING UNIT, 50 FT ALUMINUM POLE, 15 FT DAVIT ARM, 400W HPS LUMINAIRE, M-C-3
- EXISTING LIGHTING CONTROLLER
- PROPOSED LIGHTING CONTROLLER
- SERVICE INSTALLATION
- COMBINATION LIGHTING UNIT, 45 FT MH, 15 FT MAST ARM, 400 HPS LUMINAIRE, PHOTO-CELL CONTROL, M-C-3
- PROPOSED LIGHTING UNIT, 50 FT ALUMINUM POLE, TWIN 15 FT DAVIT ARM, (2) 400W HPS LUMINAIRES, M-C-3
- JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE OR EMBEDDED IN STRUCTURE, SIZE AS NOTED
- PROPOSED UNIT DUCT, SIZE AS NOTED
- PROPOSED ELECTRIC CABLE IN CONDUIT, SIZE AS NOTED
- PROPOSED UNDERGROUND COILABLE NON-METALLIC CONDUIT, SIZE AS NOTED
- EXISTING UNIT DUCT OR CABLE IN CONDUIT

CABLE / CONDUIT SCHEDULE

- (A) UNIT DUCT, 600V, 2-1C NO. 8, 1/C NO. 8 GROUND, (XLP-TYPE USE), 3/4" DIA. POLYETHYLENE
- (B) UNIT DUCT, 600V, 2-1C NO. 6, 1/C NO. 8 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE
- (C) UNIT DUCT, 600V, 2-1C NO. 4, 1/C NO. 6 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE
- (D) ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 8, 1/C NO. 8 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
- (E) ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 6, 1/C NO. 8 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
- (F) ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 4, 1/C NO. 6 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
- (G) ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 6, 2-1/C NO. 4, 1/C NO. 6 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
- (L) UNIT DUCT, 600V, 2-1C NO. 2, 1/C NO. 4 GROUND, (XLP-TYPE USE), 1 1/4" DIA. POLYETHYLENE

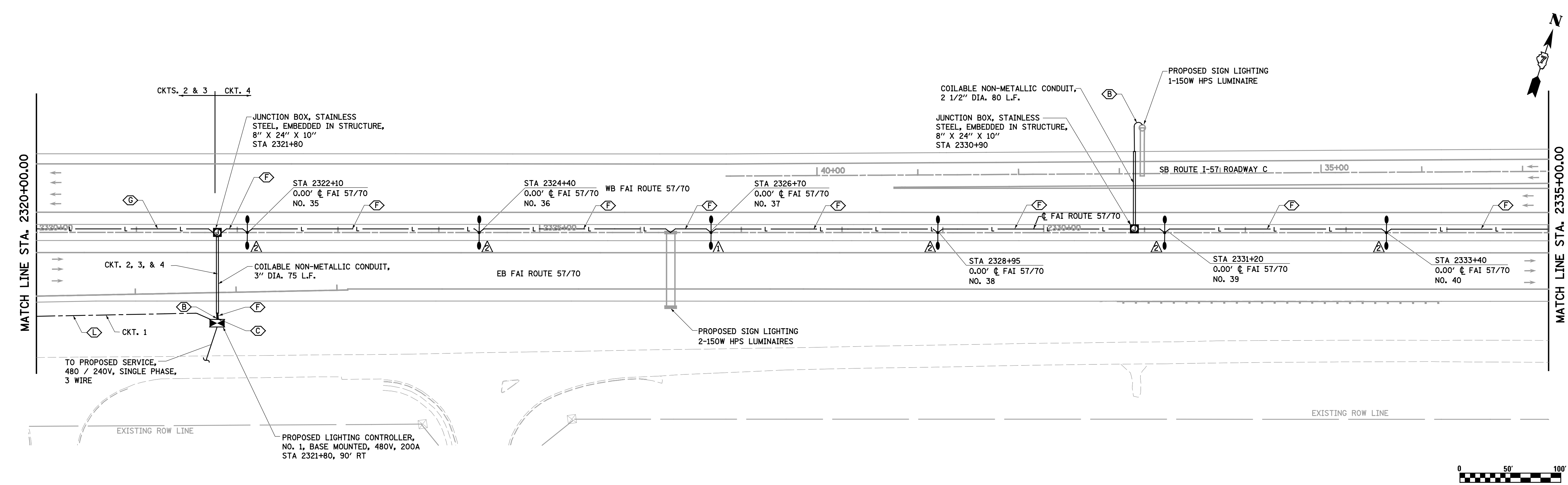
- (1) LIGHT POLE FOUNDATION
- (2) LIGHT POLE FOUNDATION (SPECIAL)

0 50' 100'

L-13

FILE NAME =	USER NAME = $USER$	DESIGNED - JWS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PROPOSED LIGHTING, NORTH TRI LEVEL
		DRAWN - PDB	REVISED -		
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -		
	PLOT DATE = $DATE$	DATE - 11-02-12	REVISED -		SCALE: 1"=50' / SHEET NO. 13 OF 35 SHEETS / STA. 2290+00.00 TO STA. 2320+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	460
		CONTRACT NO. 74295		
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

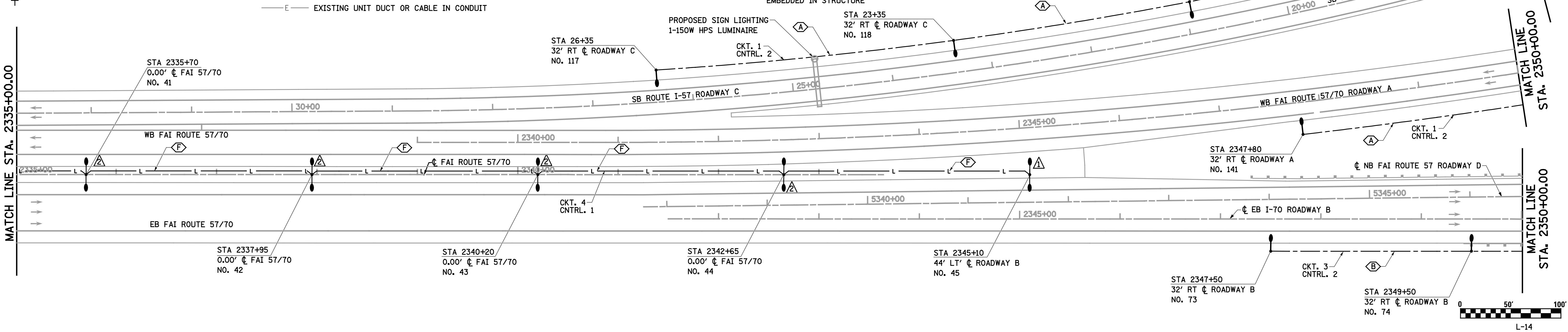


LEGEND

- EXISTING LIGHTING UNIT, TWIN
- PROPOSED LIGHTING UNIT, 45 FT ALUMINUM POLE, TWIN 8 FT DAVIT ARM, (2) 400W HPS LUMINAIRES, M-C-3
- PROPOSED LIGHTING UNIT, 50 FT ALUMINUM POLE, 15 FT DAVIT ARM, 400W HPS LUMINAIRE, M-C-3
- E EXISTING LIGHTING CONTROLLER
- PROPOSED LIGHTING CONTROLLER
- SERVICE INSTALLATION
- COMBINATION LIGHTING UNIT, 45 FT MH, 15 FT MAST ARM, 400 HPS LUMINAIRE, PHOTO-CELL CONTROL, M-C-3
- PROPOSED LIGHTING UNIT, 50 FT ALUMINUM POLE, TWIN 15 FT DAVIT ARM, (2) 400W HPS LUMINAIRES, M-C-3
- JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE OR EMBEDDED IN STRUCTURE, SIZE AS NOTED
- PROPOSED UNIT DUCT, SIZE AS NOTED
- L PROPOSED ELECTRIC CABLE IN CONDUIT, SIZE AS NOTED
- PROPOSED UNDERGROUND COILABLE NON-METALLIC CONDUIT, SIZE AS NOTED
- E EXISTING UNIT DUCT OR CABLE IN CONDUIT

CABLE / CONDUIT SCHEDULE

- (A) UNIT DUCT, 600V, 2-1C NO. 8, 1/C NO. 8 GROUND, (XLP-TYPE USE), 3/4" DIA. POLYETHYLENE
- (B) UNIT DUCT, 600V, 2-1C NO. 6, 1/C NO. 8 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE
- (C) UNIT DUCT, 600V, 2-1C NO. 4, 1/C NO. 6 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE
- (D) ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 8, 1/C NO. 8 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
- (E) ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 6, 1/C NO. 8 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
- (F) ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 4, 1/C NO. 6 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
- (G) ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 6, 2-1/C NO. 4, 1/C NO. 6 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
- (L) UNIT DUCT, 600V, 2-1C NO. 2, 1/C NO. 4 GROUND, (XLP-TYPE USE), 1 1/4" DIA. POLYETHYLENE
- △1 LIGHT POLE FOUNDATION
- △2 LIGHT POLE FOUNDATION (SPECIAL)



L-14

FILE NAME = S:\Projects\483-88872.57-70\dgn\N Tri-Lv\lighting.Prop.ntl.dgn	USER NAME = $USER$	DESIGNED - JWS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		DRAWN - PDB	REVISED -	
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -	
	PLOT DATE = $DATE$	DATE - 11-02-12	REVISED -	

PROPOSED LIGHTING, NORTH TRI LEVEL

SCALE: 1"=50' | SHEET NO. 14 OF 35 SHEETS | STA. 2320+00.00 TO STA. 2350+00.00

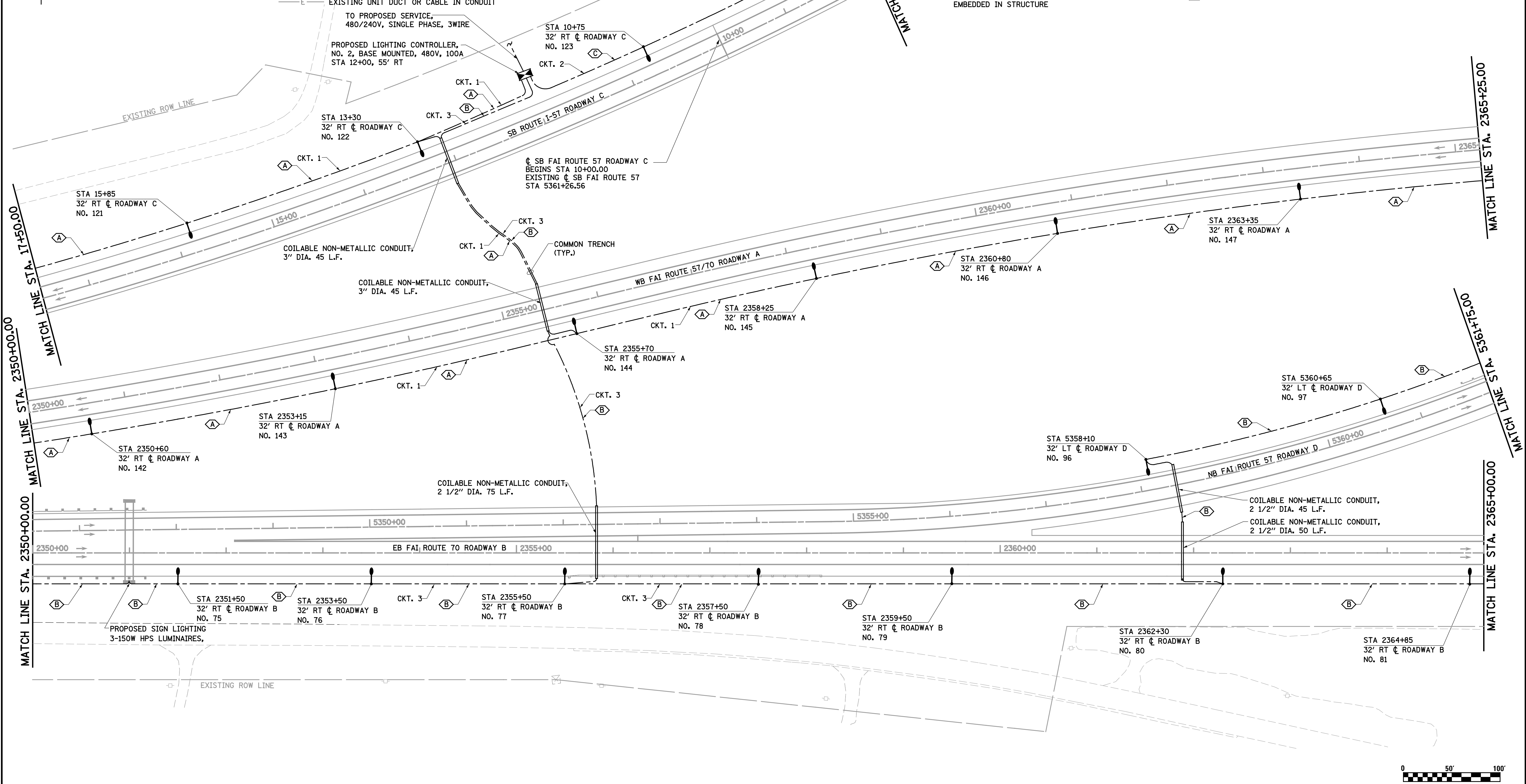
F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	461
		CONTRACT NO. 74295		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

LEGEND

- EXISTING LIGHTING UNIT, TWIN
- PROPOSED LIGHTING UNIT, 45 FT ALUMINUM POLE, TWIN 8 FT DAVIT ARM, (2) 400W HPS LUMINAIRES, M-C-3
- PROPOSED LIGHTING UNIT, 50 FT ALUMINUM POLE, 15 FT DAVIT ARM, 400W HPS LUMINAIRE, M-C-3
- EXISTING LIGHTING CONTROLLER
- PROPOSED LIGHTING CONTROLLER
- SERVICE INSTALLATION
- COMBINATION LIGHTING UNIT, 45 FT MH, 15 FT MAST ARM, 400 HPS LUMINAIRE, PHOTO-CELL CONTROL, M-C-3
- PROPOSED LIGHTING UNIT, 50 FT ALUMINUM POLE, TWIN 15 FT DAVIT ARM, (2) 400W HPS LUMINAIRES, M-C-3
- JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE OR EMBEDDED IN STRUCTURE, SIZE AS NOTED
- PROPOSED UNIT DUCT, SIZE AS NOTED
- PROPOSED ELECTRIC CABLE IN CONDUIT, SIZE AS NOTED
- PROPOSED UNDERGROUND COILABLE NON-METALLIC CONDUIT, SIZE AS NOTED
- EXISTING UNIT DUCT OR CABLE IN CONDUIT

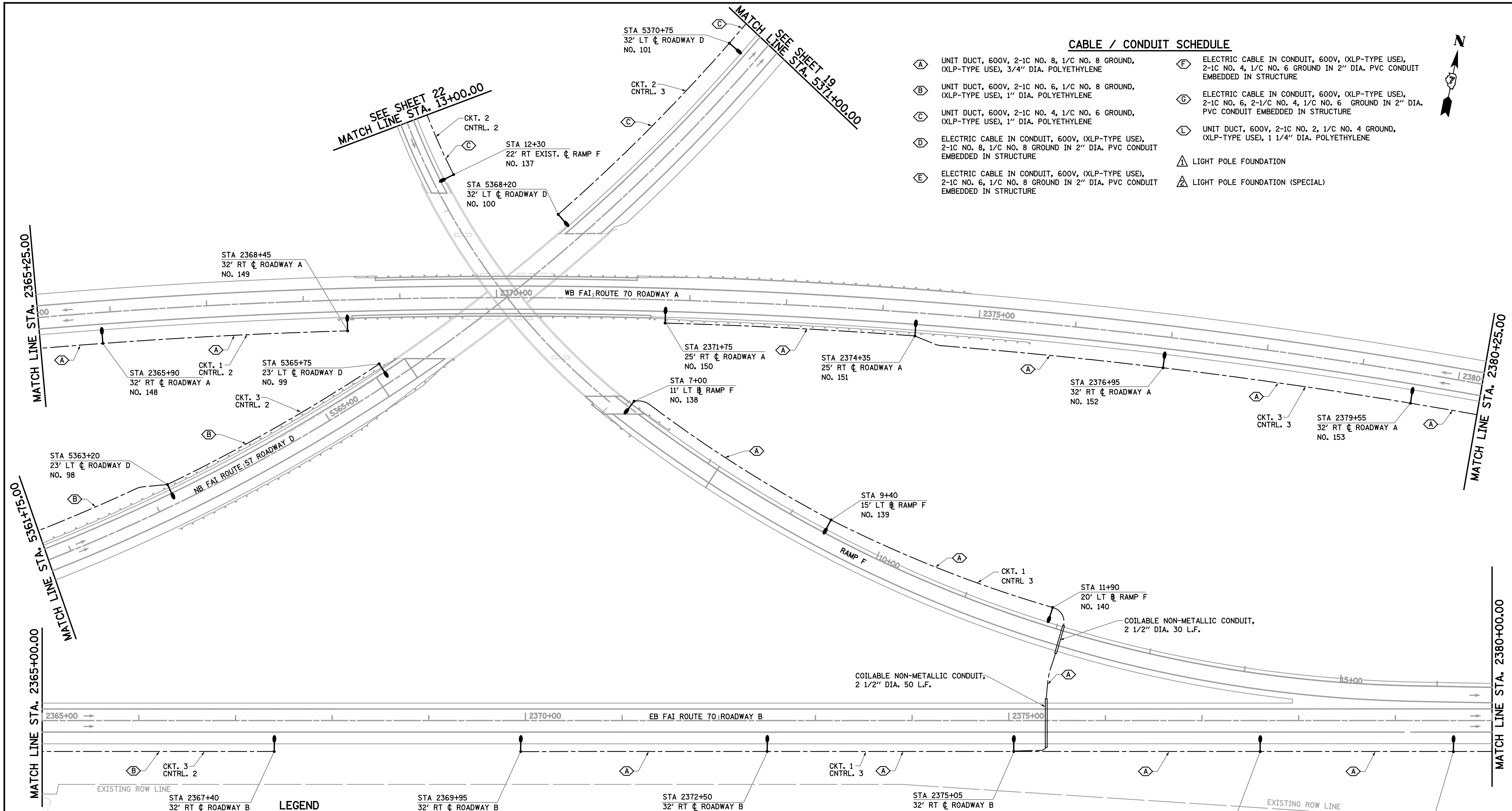
CABLE / CONDUIT SCHEDULE

- (A) UNIT DUCT, 600V, 2-1C NO. 8, 1/C NO. 8 GROUND, (XLP-TYPE USE), 3/4" DIA. POLYETHYLENE
- (B) UNIT DUCT, 600V, 2-1C NO. 6, 1/C NO. 8 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE
- (C) UNIT DUCT, 600V, 2-1C NO. 4, 1/C NO. 6 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE
- (D) ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 8, 1/C NO. 8 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
- (E) ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 6, 1/C NO. 8 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
- (F) ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 4, 1/C NO. 6 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
- (G) ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 6, 2-1/C NO. 4, 1/C NO. 6 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
- (L) UNIT DUCT, 600V, 2-1C NO. 2, 1/C NO. 4 GROUND, (XLP-TYPE USE), 1 1/4" DIA. POLYETHYLENE
- (1) LIGHT POLE FOUNDATION
- (2) LIGHT POLE FOUNDATION (SPECIAL)



L-15

FILE NAME =	USER NAME = $USER$	DESIGNED - JWS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PROPOSED LIGHTING, NORTH TRI LEVEL	F.A.I RTE. 57/70	SECTION (25-4)R	COUNTY EFFINGHAM	TOTAL SHEETS 1760	SHEET NO. 462
		DRAWN - PDB	REVISED -							
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -			CONTRACT NO. 74295				
	PLOT DATE = $DATE$	DATE - 11-02-12	REVISED -		SCALE: 1"=50' SHEET NO. 15 OF 35 SHEETS STA. 2350+00.00 TO STA. 2365+00.00	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



CABLE / CONDUIT SCHEDULE

- (A) UNIT DUCT, 600V, 2-1C NO. 8, 1/C NO. 8 GROUND, (XLP-TYPE USE), 3/4" DIA. POLYETHYLENE
- (B) UNIT DUCT, 600V, 2-1C NO. 6, 1/C NO. 8 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE
- (C) UNIT DUCT, 600V, 2-1C NO. 4, 1/C NO. 6 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE
- (D) ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 8, 1/C NO. 8 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
- (E) ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 6, 1/C NO. 8 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
- (F) ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 4, 1/C NO. 6 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
- (G) ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 6, 2-1/C NO. 4, 1/C NO. 6 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
- (L) UNIT DUCT, 600V, 2-1C NO. 2, 1/C NO. 4 GROUND, (XLP-TYPE USE), 1 1/4" DIA. POLYETHYLENE
- LIGHT POLE FOUNDATION
- LIGHT POLE FOUNDATION (SPECIAL)

LEGEND

- EXISTING LIGHTING UNIT, TWIN (E)
- PROPOSED LIGHTING UNIT, 45 FT ALUMINUM POLE, TWIN 8 FT DAVIT ARM, (2) 400W HPS LUMINAIRES, M-C-3
- PROPOSED LIGHTING UNIT, 50 FT ALUMINUM POLE, 15 FT DAVIT ARM, 400W HPS LUMINAIRE, M-C-3
- EXISTING LIGHTING CONTROLLER (E)
- PROPOSED LIGHTING CONTROLLER
- SERVICE INSTALLATION
- COMBINATION LIGHTING UNIT, 45 FT MH, 15 FT MAST ARM, 400 HPS LUMINAIRE, PHOTO-CELL CONTROL, M-C-3
- PROPOSED LIGHTING UNIT, 50 FT ALUMINUM POLE, TWIN 15 FT DAVIT ARM, (2) 400W HPS LUMINAIRES, M-C-3
- JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE OR EMBEDDED IN STRUCTURE, SIZE AS NOTED
- PROPOSED UNIT DUCT, SIZE AS NOTED
- L — PROPOSED ELECTRIC CABLE IN CONDUIT, SIZE AS NOTED
- PROPOSED UNDERGROUND COILABLE NON-METALLIC CONDUIT, SIZE AS NOTED
- E — EXISTING UNIT DUCT OR CABLE IN CONDUIT

L-16

FILE NAME =	USER NAME = $USER$	DESIGNED - JWS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PROPOSED LIGHTING, NORTH TRI LEVEL
s:\projects\00072.57-70\dgn\S Tri.Lv\pmk_std.dgn		DRAWN - PDB	REVISED -		
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -		
	PLOT DATE = $DATE$	DATE - 11-02-12	REVISED -		SCALE: 1"=50' / SHEET NO. 16 OF 35 SHEETS / STA. 2365+00.00 TO STA. 2380+00.00

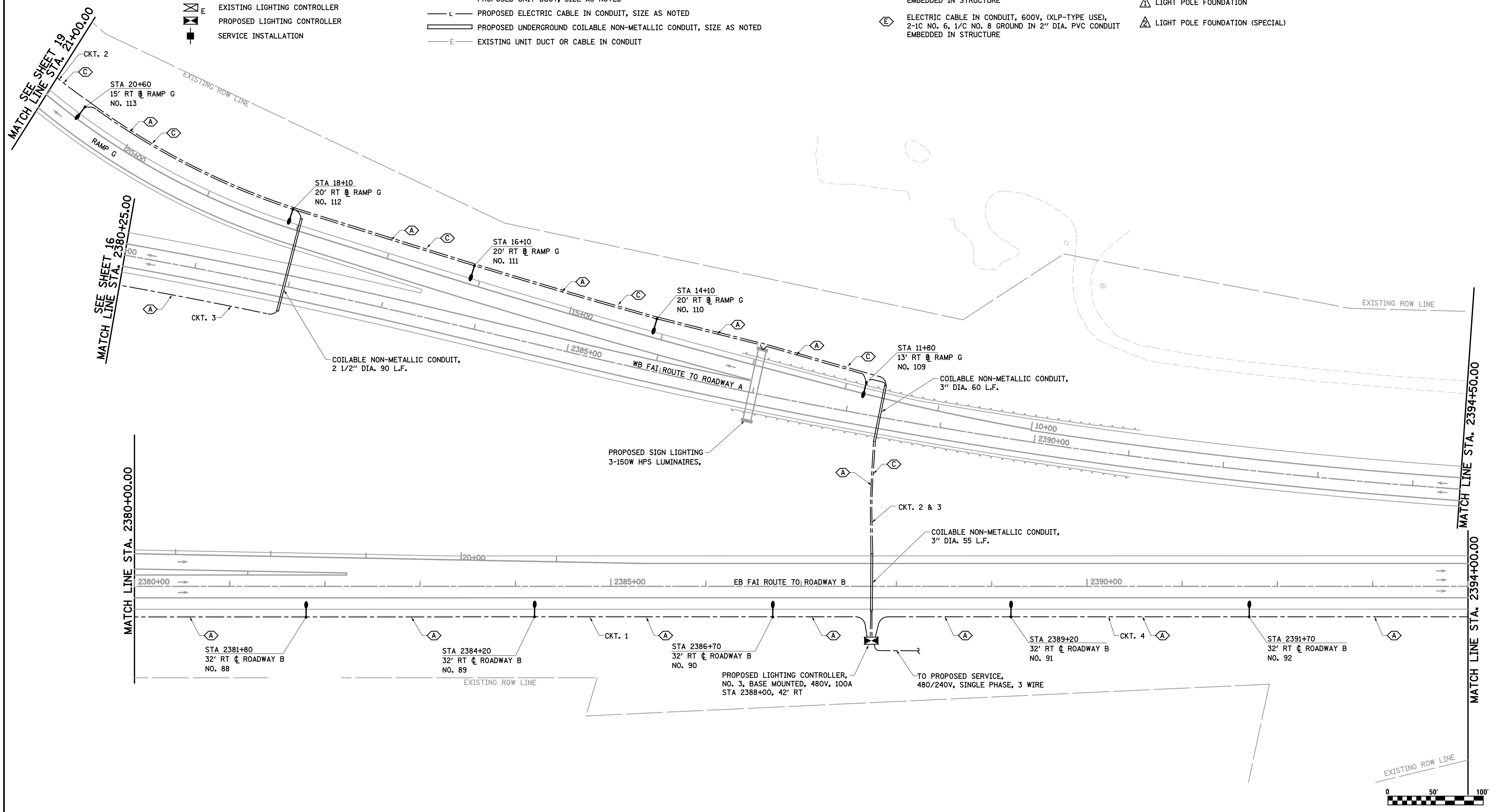
F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	463
		CONTRACT NO. 74295		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

LEGEND

- EXISTING LIGHTING UNIT, TWIN
- PROPOSED LIGHTING UNIT, 45 FT ALUMINUM POLE, TWIN 8 FT DAVIT ARM, (2) 400W HPS LUMINAIRES, M-C-3
- PROPOSED LIGHTING UNIT, 50 FT ALUMINUM POLE, 15 FT DAVIT ARM, 400W HPS LUMINAIRE, M-C-3
- EXISTING LIGHTING CONTROLLER
- PROPOSED LIGHTING CONTROLLER
- SERVICE INSTALLATION
- COMBINATION LIGHTING UNIT, 45 FT MH, 15 FT MAST ARM, 400 HPS LUMINAIRE, PHOTO-CELL CONTROL, M-C-3
- PROPOSED LIGHTING UNIT, 50 FT ALUMINUM POLE, TWIN 15 FT DAVIT ARM, (2) 400W HPS LUMINAIRES, M-C-3
- JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE OR EMBEDDED IN STRUCTURE, SIZE AS NOTED
- PROPOSED UNIT DUCT, SIZE AS NOTED
- PROPOSED ELECTRIC CABLE IN CONDUIT, SIZE AS NOTED
- PROPOSED UNDERGROUND COILABLE NON-METALLIC CONDUIT, SIZE AS NOTED
- EXISTING UNIT DUCT OR CABLE IN CONDUIT

CABLE / CONDUIT SCHEDULE

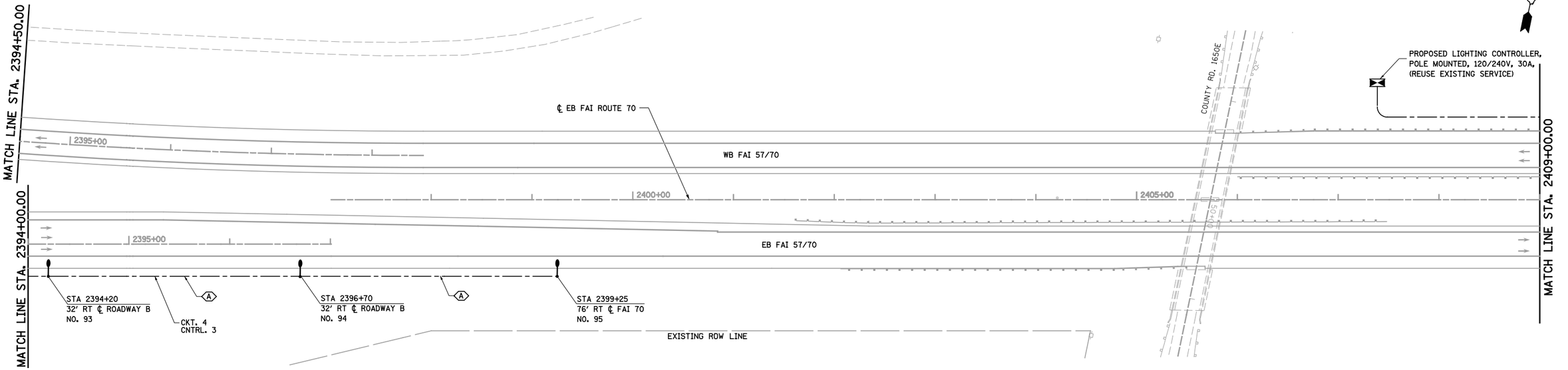
- (A) UNIT DUCT, 600V, 2-1C NO. 8, 1/C NO. 8 GROUND, (XLP-TYPE USE), 3/4" DIA. POLYETHYLENE
- (B) UNIT DUCT, 600V, 2-1C NO. 6, 1/C NO. 8 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE
- (C) UNIT DUCT, 600V, 2-1C NO. 4, 1/C NO. 6 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE
- (D) ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 8, 1/C NO. 8 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
- (E) ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 6, 1/C NO. 8 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
- (F) ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 4, 1/C NO. 6 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
- (G) ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 6, 2-1/C NO. 4, 1/C NO. 6 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
- (L) UNIT DUCT, 600V, 2-1C NO. 2, 1/C NO. 4 GROUND, (XLP-TYPE USE), 1 1/4" DIA. POLYETHYLENE
- (1) LIGHT POLE FOUNDATION
- (2) LIGHT POLE FOUNDATION (SPECIAL)



L-17

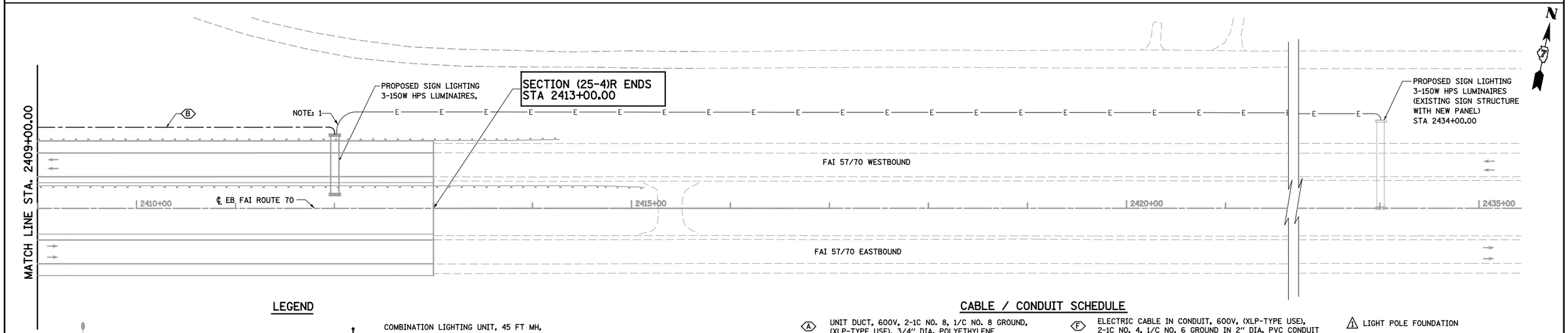
FILE NAME =	USER NAME = $USER$	DESIGNED - JWS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PROPOSED LIGHTING, NORTH TRI LEVEL
		DRAWN - PDB	REVISED -		
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -		
	PLOT DATE = $DATE$	DATE - 11-02-12	REVISED -		SCALE: 1"=50' | SHEET NO. 17 OF 35 SHEETS | STA. 2380+00.00 TO STA. 2394+00.00

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	464
		CONTRACT NO. 74295		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



NOTE:

1. RECOVER SUFFICIENT LENGTH OF EXISTING UNIT DUCT AND REUSE IT TO FEED SIGN LIGHTING AT STA 2434+00 WITHOUT SPLICES.



LEGEND

- EXISTING LIGHTING UNIT, TWIN
- PROPOSED LIGHTING UNIT, 45 FT ALUMINUM POLE, TWIN 8 FT DAVIT ARM, (2) 400W HPS LUMINAIRES, M-C-3
- PROPOSED LIGHTING UNIT, 50 FT ALUMINUM POLE, 15 FT DAVIT ARM, 400W HPS LUMINAIRE, M-C-3
- EXISTING LIGHTING CONTROLLER
- PROPOSED LIGHTING CONTROLLER
- SERVICE INSTALLATION
- COMBINATION LIGHTING UNIT, 45 FT MH, 15 FT MAST ARM, 400 HPS LUMINAIRE, PHOTO-CELL CONTROL, M-C-3
- PROPOSED LIGHTING UNIT, 50 FT ALUMINUM POLE, TWIN 15 FT DAVIT ARM, (2) 400W HPS LUMINAIRES, M-C-3
- JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE OR EMBEDDED IN STRUCTURE, SIZE AS NOTED
- PROPOSED UNIT DUCT, SIZE AS NOTED
- PROPOSED ELECTRIC CABLE IN CONDUIT, SIZE AS NOTED
- PROPOSED UNDERGROUND COILABLE NON-METALLIC CONDUIT, SIZE AS NOTED
- EXISTING UNIT DUCT OR CABLE IN CONDUIT

CABLE / CONDUIT SCHEDULE

- (A) UNIT DUCT, 600V, 2-1C NO. 8, 1/C NO. 8 GROUND, (XLP-TYPE USE), 3/4" DIA. POLYETHYLENE
- (B) UNIT DUCT, 600V, 2-1C NO. 6, 1/C NO. 8 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE
- (C) UNIT DUCT, 600V, 2-1C NO. 4, 1/C NO. 6 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE
- (D) ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 8, 1/C NO. 8 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
- (E) ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 6, 1/C NO. 8 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
- (F) ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 4, 1/C NO. 6 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
- (G) ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 6, 2-1/C NO. 4, 1/C NO. 6 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
- (L) UNIT DUCT, 600V, 2-1C NO. 2, 1/C NO. 4 GROUND, (XLP-TYPE USE), 1 1/4" DIA. POLYETHYLENE

- (1) LIGHT POLE FOUNDATION
- (2) LIGHT POLE FOUNDATION (SPECIAL)

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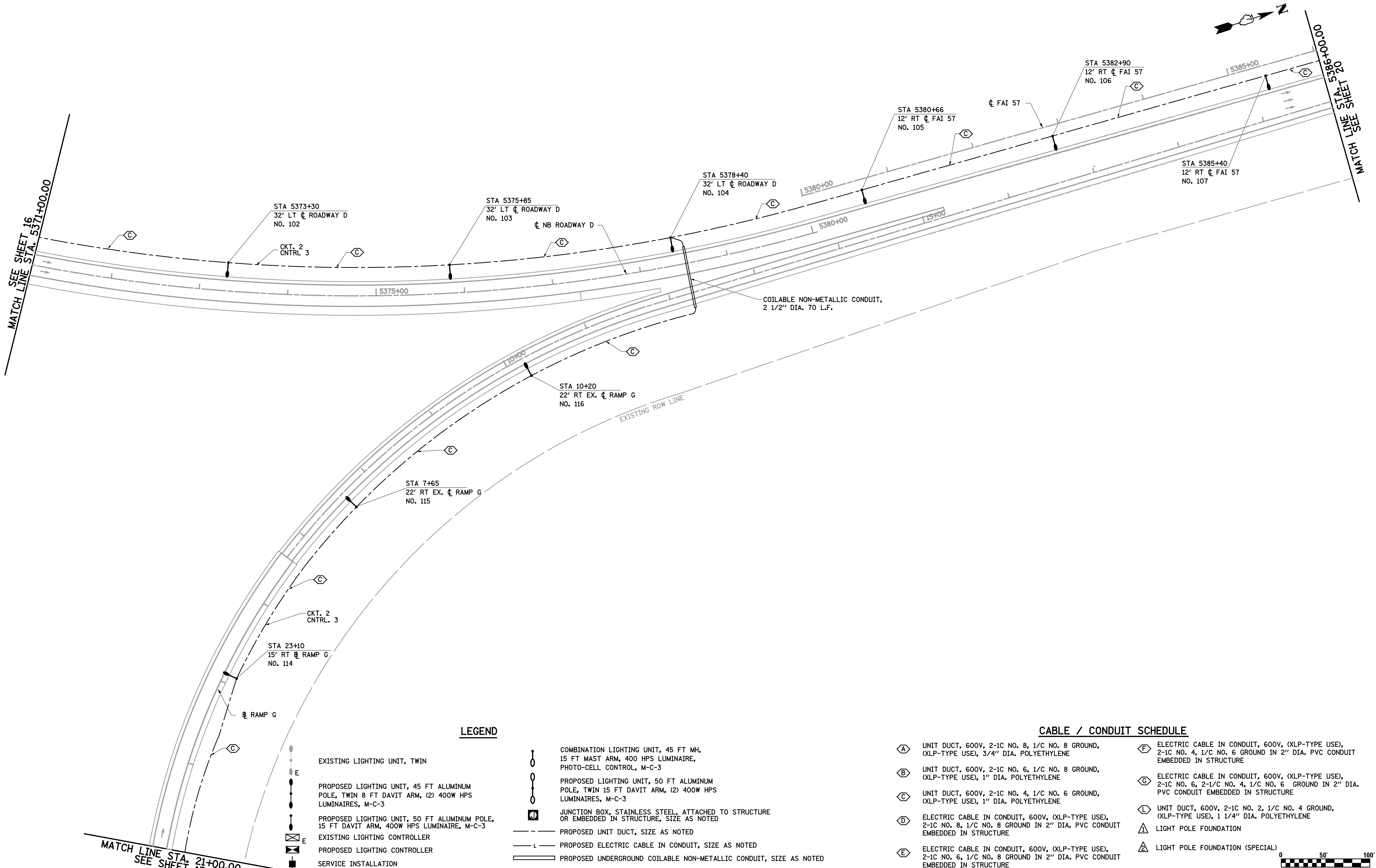
		DRAWN - PDB	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -
	PLOT DATE = $DATE$	DATE - 11-02-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED LIGHTING, FAI ROUTE 70

SCALE: 1"=50' | SHEET NO. 18 OF 35 SHEETS | STA. 2394+00.00 TO STA. 2424+00.00

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	465
		CONTRACT NO. 74295		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



LEGEND

Symbol	Description
	EXISTING LIGHTING UNIT, TWIN
	PROPOSED LIGHTING UNIT, 45 FT ALUMINUM POLE, TWIN 8 FT DAVIT ARM, (2) 400W HPS LUMINAIRES, M-C-3
	PROPOSED LIGHTING UNIT, 50 FT ALUMINUM POLE, 15 FT DAVIT ARM, 400W HPS LUMINAIRE, M-C-3
E	EXISTING LIGHTING CONTROLLER
	PROPOSED LIGHTING CONTROLLER
	SERVICE INSTALLATION
	COMBINATION LIGHTING UNIT, 45 FT MH, 15 FT MAST ARM, 400 HPS LUMINAIRE, PHOTO-CELL CONTROL, M-C-3
	PROPOSED LIGHTING UNIT, 50 FT ALUMINUM POLE, TWIN 15 FT DAVIT ARM, (2) 400W HPS LUMINAIRES, M-C-3
J	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE OR EMBEDDED IN STRUCTURE, SIZE AS NOTED
	PROPOSED UNIT DUCT, SIZE AS NOTED
L	PROPOSED ELECTRIC CABLE IN CONDUIT, SIZE AS NOTED
	PROPOSED UNDERGROUND COILABLE NON-METALLIC CONDUIT, SIZE AS NOTED
E	EXISTING UNIT DUCT OR CABLE IN CONDUIT

CABLE / CONDUIT SCHEDULE

Symbol	Description
A	UNIT DUCT, 600V, 2-1C NO. 8, 1/C NO. 8 GROUND, (XLP-TYPE USE), 3/4" DIA. POLYETHYLENE
B	UNIT DUCT, 600V, 2-1C NO. 6, 1/C NO. 8 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE
C	UNIT DUCT, 600V, 2-1C NO. 4, 1/C NO. 6 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE
D	ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 8, 1/C NO. 8 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
E	ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 6, 1/C NO. 8 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
F	ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 4, 1/C NO. 6 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
G	ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 6, 2-1/C NO. 4, 1/C NO. 6 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
L	UNIT DUCT, 600V, 2-1C NO. 2, 1/C NO. 4 GROUND, (XLP-TYPE USE), 1 1/4" DIA. POLYETHYLENE
1	LIGHT POLE FOUNDATION
2	LIGHT POLE FOUNDATION (SPECIAL)

0 50' 100'

L-19

FILE NAME = s:\projects\00072.57-70\dgn\S Tri-Lvl\pmk_stl.dgn	USER NAME = $USER$	DESIGNED - JWS	REVISED -
		DRAWN - PDB	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -
	PLOT DATE = $DATE$	DATE - 11-02-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

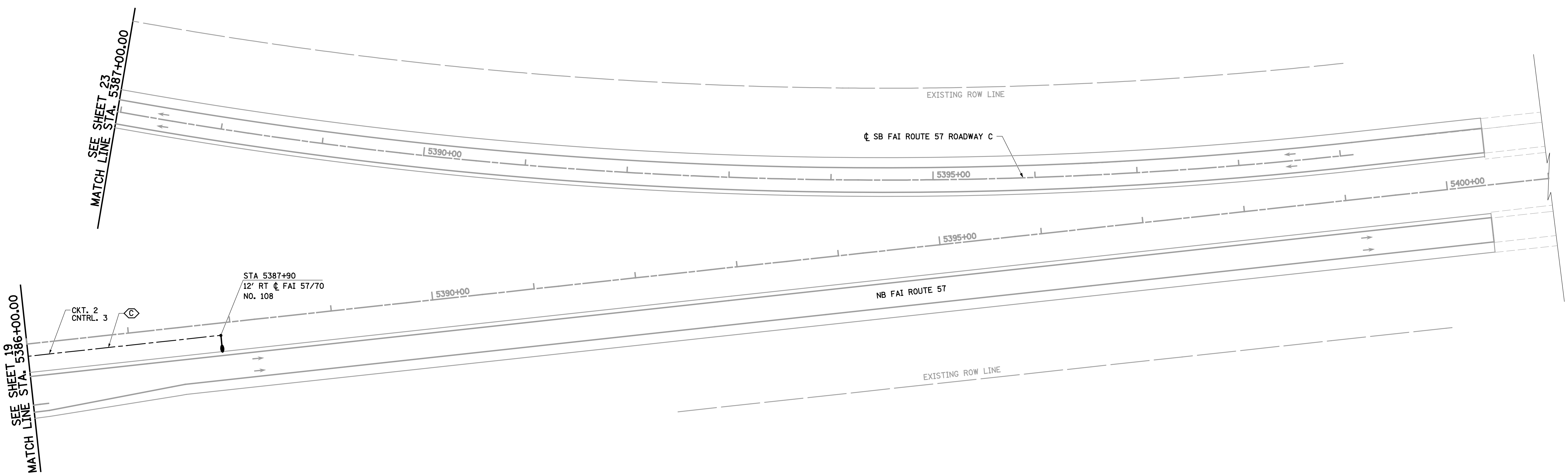
PROPOSED LIGHTING, RAMP G NORTH TRI LEVEL

SCALE: 1"=50' | SHEET NO. 19 OF 35 SHEETS | STA. 21+00.00 TO STA. 5386+00.00

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	466

CONTRACT NO. 74295

FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT



LEGEND

EXISTING LIGHTING UNIT, TWIN

PROPOSED LIGHTING UNIT, 45 FT ALUMINUM POLE, TWIN 8 FT DAVIT ARM, (2) 400W HPS LUMINAIRES, M-C-3

PROPOSED LIGHTING UNIT, 50 FT ALUMINUM POLE, 15 FT DAVIT ARM, 400W HPS LUMINAIRE, M-C-3

E EXISTING LIGHTING CONTROLLER

PROPOSED LIGHTING CONTROLLER

SERVICE INSTALLATION

COMBINATION LIGHTING UNIT, 45 FT MH, 15 FT MAST ARM, 400 HPS LUMINAIRE, PHOTO-CELL CONTROL, M-C-3

PROPOSED LIGHTING UNIT, 50 FT ALUMINUM POLE, TWIN 15 FT DAVIT ARM, (2) 400W HPS LUMINAIRES, M-C-3

JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE OR EMBEDDED IN STRUCTURE, SIZE AS NOTED

PROPOSED UNIT DUCT, SIZE AS NOTED

L PROPOSED ELECTRIC CABLE IN CONDUIT, SIZE AS NOTED

PROPOSED UNDERGROUND COILABLE NON-METALLIC CONDUIT, SIZE AS NOTED

E EXISTING UNIT DUCT OR CABLE IN CONDUIT

CABLE / CONDUIT SCHEDULE

A UNIT DUCT, 600V, 2-1C NO. 8, 1/C NO. 8 GROUND, (XLP-TYPE USE), 3/4" DIA. POLYETHYLENE

B UNIT DUCT, 600V, 2-1C NO. 6, 1/C NO. 8 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE

C UNIT DUCT, 600V, 2-1C NO. 4, 1/C NO. 6 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE

D ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 8, 1/C NO. 8 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE

E ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 6, 1/C NO. 8 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE

F ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 4, 1/C NO. 6 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE

G ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 6, 2-1/C NO. 4, 1/C NO. 6 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE

L UNIT DUCT, 600V, 2-1C NO. 2, 1/C NO. 4 GROUND, (XLP-TYPE USE), 1 1/4" DIA. POLYETHYLENE

1 LIGHT POLE FOUNDATION

2 LIGHT POLE FOUNDATION (SPECIAL)

0 50' 100'

L-20

FILE NAME =	USER NAME = $USER$	DESIGNED - JWS	REVISED -
		DRAWN - PDB	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -
	PLOT DATE = $DATE$	DATE - 11-02-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

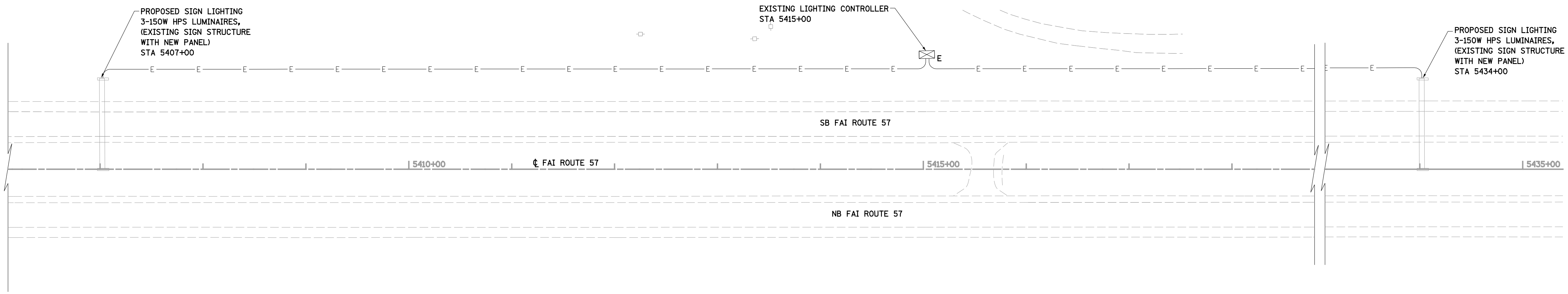
PROPOSED LIGHTING, ROADWAY C NORTH TRI LEVEL

SCALE: 1"=50' | SHEET NO. 20 OF 35 SHEETS | STA. 5387+00.00 TO STA. 5400+40.00

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	467

CONTRACT NO. 74295

FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT



LEGEND

- EXISTING LIGHTING UNIT, TWIN
- PROPOSED LIGHTING UNIT, 45 FT ALUMINUM POLE, TWIN 8 FT DAVIT ARM, (2) 400W HPS LUMINAIRES, M-C-3
- PROPOSED LIGHTING UNIT, 50 FT ALUMINUM POLE, 15 FT DAVIT ARM, 400W HPS LUMINAIRE, M-C-3
- E EXISTING LIGHTING CONTROLLER
- PROPOSED LIGHTING CONTROLLER
- SERVICE INSTALLATION
- COMBINATION LIGHTING UNIT, 45 FT MH, 15 FT MAST ARM, 400 HPS LUMINAIRE, PHOTO-CELL CONTROL, M-C-3
- PROPOSED LIGHTING UNIT, 50 FT ALUMINUM POLE, TWIN 15 FT DAVIT ARM, (2) 400W HPS LUMINAIRES, M-C-3
- JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE OR EMBEDDED IN STRUCTURE, SIZE AS NOTED
- PROPOSED UNIT DUCT, SIZE AS NOTED
- L PROPOSED ELECTRIC CABLE IN CONDUIT, SIZE AS NOTED
- PROPOSED UNDERGROUND COILABLE NON-METALLIC CONDUIT, SIZE AS NOTED
- E EXISTING UNIT DUCT OR CABLE IN CONDUIT

CABLE / CONDUIT SCHEDULE

- (A) UNIT DUCT, 600V, 2-1C NO. 8, 1/C NO. 8 GROUND, (XLP-TYPE USE), 3/4" DIA. POLYETHYLENE
- (B) UNIT DUCT, 600V, 2-1C NO. 6, 1/C NO. 8 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE
- (C) UNIT DUCT, 600V, 2-1C NO. 4, 1/C NO. 6 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE
- (D) ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 8, 1/C NO. 8 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
- (E) ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 6, 1/C NO. 8 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
- (F) ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 4, 1/C NO. 6 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
- (G) ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 6, 2-1/C NO. 4, 1/C NO. 6 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
- (L) UNIT DUCT, 600V, 2-1C NO. 2, 1/C NO. 4 GROUND, (XLP-TYPE USE), 1 1/4" DIA. POLYETHYLENE
- 1 LIGHT POLE FOUNDATION
- 2 LIGHT POLE FOUNDATION (SPECIAL)

0 50' 100'

L-21

FILE NAME = s:\projects•-00072_57-70\dgn\S TriLv\pmk_stl.dgn	USER NAME = $USER$	DESIGNED - JWS	REVISED -
		DRAWN - PDB	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -
	PLOT DATE = $DATE$	DATE - 11-02-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

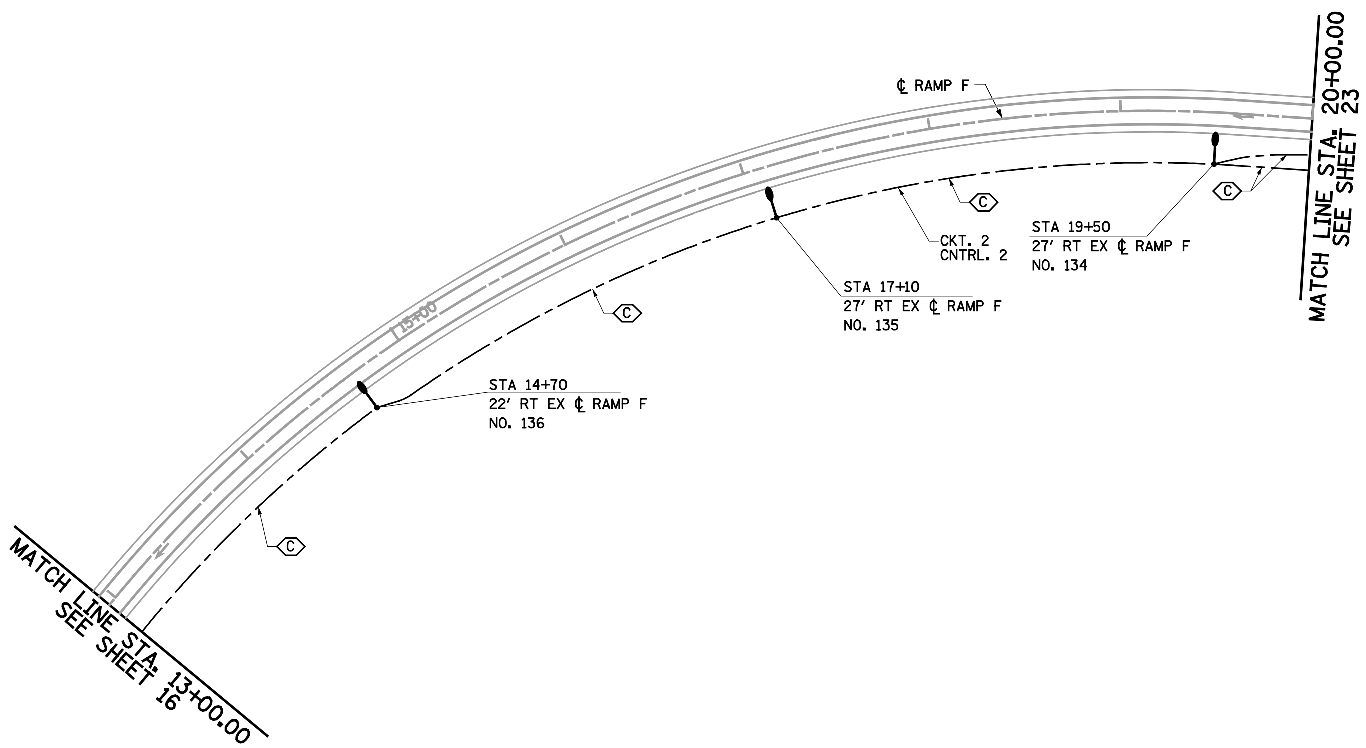
PROPOSED LIGHTING, FAI ROUTE 57 NORTH TRI LEVEL

SCALE: 1"=50' | SHEET NO. 21 OF 35 SHEETS | STA. 5387+00.00 TO STA. 5400+40.00

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	468

CONTRACT NO. 74295

FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT



LEGEND

- EXISTING LIGHTING UNIT, TWIN
- PROPOSED LIGHTING UNIT, 45 FT ALUMINUM POLE, TWIN 8 FT DAVIT ARM, (2) 400W HPS LUMINAIRES, M-C-3
- PROPOSED LIGHTING UNIT, 50 FT ALUMINUM POLE, 15 FT DAVIT ARM, 400W HPS LUMINAIRE, M-C-3
- EXISTING LIGHTING CONTROLLER
- PROPOSED LIGHTING CONTROLLER
- SERVICE INSTALLATION
- COMBINATION LIGHTING UNIT, 45 FT MH, 15 FT MAST ARM, 400 HPS LUMINAIRE, PHOTO-CELL CONTROL, M-C-3
- PROPOSED LIGHTING UNIT, 50 FT ALUMINUM POLE, TWIN 15 FT DAVIT ARM, (2) 400W HPS LUMINAIRES, M-C-3
- JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE OR EMBEDDED IN STRUCTURE, SIZE AS NOTED
- PROPOSED UNIT DUCT, SIZE AS NOTED
- PROPOSED ELECTRIC CABLE IN CONDUIT, SIZE AS NOTED
- PROPOSED UNDERGROUND COILABLE NON-METALLIC CONDUIT, SIZE AS NOTED
- EXISTING UNIT DUCT OR CABLE IN CONDUIT

CABLE / CONDUIT SCHEDULE

- A — UNIT DUCT, 600V, 2-1C NO. 8, 1/C NO. 8 GROUND, (XLP-TYPE USE), 3/4" DIA. POLYETHYLENE
- B — UNIT DUCT, 600V, 2-1C NO. 6, 1/C NO. 8 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE
- C — UNIT DUCT, 600V, 2-1C NO. 4, 1/C NO. 6 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE
- D — ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 8, 1/C NO. 8 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
- E — ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 6, 1/C NO. 8 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
- F — ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 4, 1/C NO. 6 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
- G — ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 6, 2-1/C NO. 4, 1/C NO. 6 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
- L — UNIT DUCT, 600V, 2-1C NO. 2, 1/C NO. 4 GROUND, (XLP-TYPE USE), 1 1/4" DIA. POLYETHYLENE

- 1 — LIGHT POLE FOUNDATION
- 2 — LIGHT POLE FOUNDATION (SPECIAL)

0 50' 100'

L-22

FILE NAME =	USER NAME = $USER$	DESIGNED - JWS	REVISED -
s:\projects\-00072.57-70\dgn\S Tri Lv\pmk_st1.dgn		DRAWN - PDB	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -
	PLOT DATE = $DATE$	DATE - 11-02-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED LIGHTING, RAMP F NORTH TRI LEVEL

SCALE: 1"=50' | SHEET NO. 22 OF 35 SHEETS | STA. 13+00.00 TO STA. 24+00.00

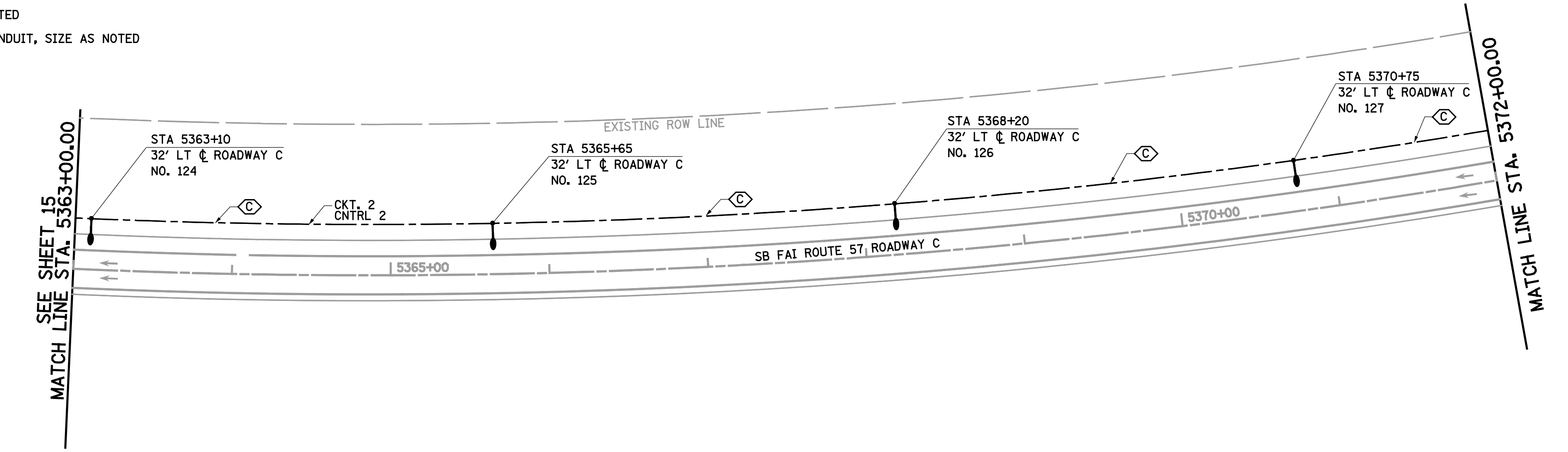
F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	469

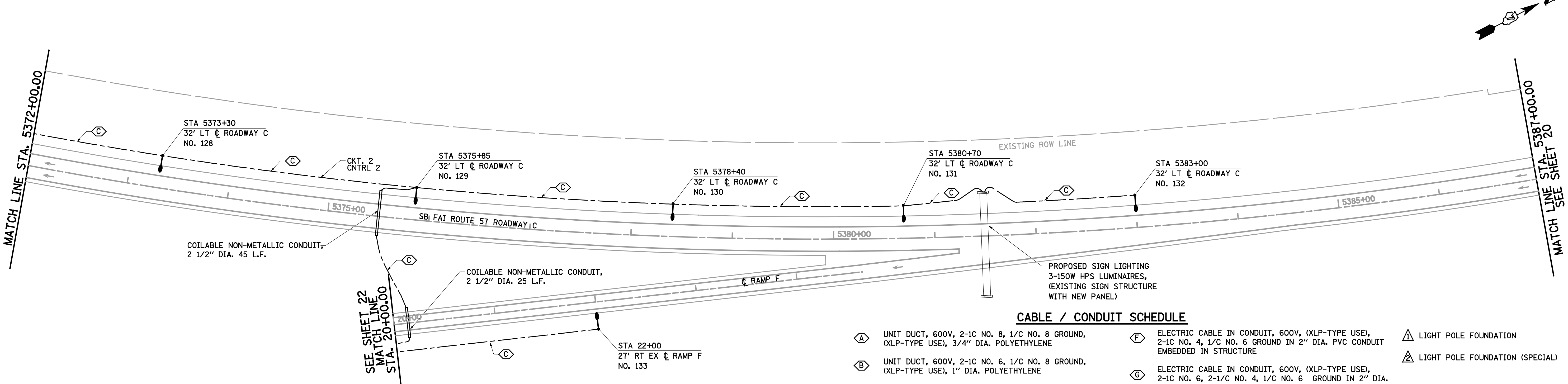
CONTRACT NO. 74295

FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT

LEGEND

- EXISTING LIGHTING UNIT, TWIN
- PROPOSED LIGHTING UNIT, 45 FT ALUMINUM POLE, TWIN 8 FT DAVIT ARM, (2) 400W HPS LUMINAIRES, M-C-3
- PROPOSED LIGHTING UNIT, 50 FT ALUMINUM POLE, 15 FT DAVIT ARM, 400W HPS LUMINAIRE, M-C-3
- EXISTING LIGHTING CONTROLLER
- PROPOSED LIGHTING CONTROLLER
- SERVICE INSTALLATION
- COMBINATION LIGHTING UNIT, 45 FT MH, 15 FT MAST ARM, 400 HPS LUMINAIRE, PHOTO-CELL CONTROL, M-C-3
- PROPOSED LIGHTING UNIT, 50 FT ALUMINUM POLE, TWIN 15 FT DAVIT ARM, (2) 400W HPS LUMINAIRES, M-C-3
- JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE OR EMBEDDED IN STRUCTURE, SIZE AS NOTED
- PROPOSED UNIT DUCT, SIZE AS NOTED
- PROPOSED ELECTRIC CABLE IN CONDUIT, SIZE AS NOTED
- PROPOSED UNDERGROUND COILABLE NON-METALLIC CONDUIT, SIZE AS NOTED
- EXISTING UNIT DUCT OR CABLE IN CONDUIT





CABLE / CONDUIT SCHEDULE

- (A) UNIT DUCT, 600V, 2-1C NO. 8, 1/C NO. 8 GROUND, (XLP-TYPE USE), 3/4" DIA. POLYETHYLENE
- (B) UNIT DUCT, 600V, 2-1C NO. 6, 1/C NO. 8 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE
- (C) UNIT DUCT, 600V, 2-1C NO. 4, 1/C NO. 6 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE
- (D) ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 8, 1/C NO. 8 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
- (E) ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 6, 1/C NO. 8 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
- (F) ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 4, 1/C NO. 6 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
- (G) ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 6, 2-1/C NO. 4, 1/C NO. 6 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
- (L) UNIT DUCT, 600V, 2-1C NO. 2, 1/C NO. 4 GROUND, (XLP-TYPE USE), 1 1/4" DIA. POLYETHYLENE

1. LIGHT POLE FOUNDATION
2. LIGHT POLE FOUNDATION (SPECIAL)

0 50' 100'

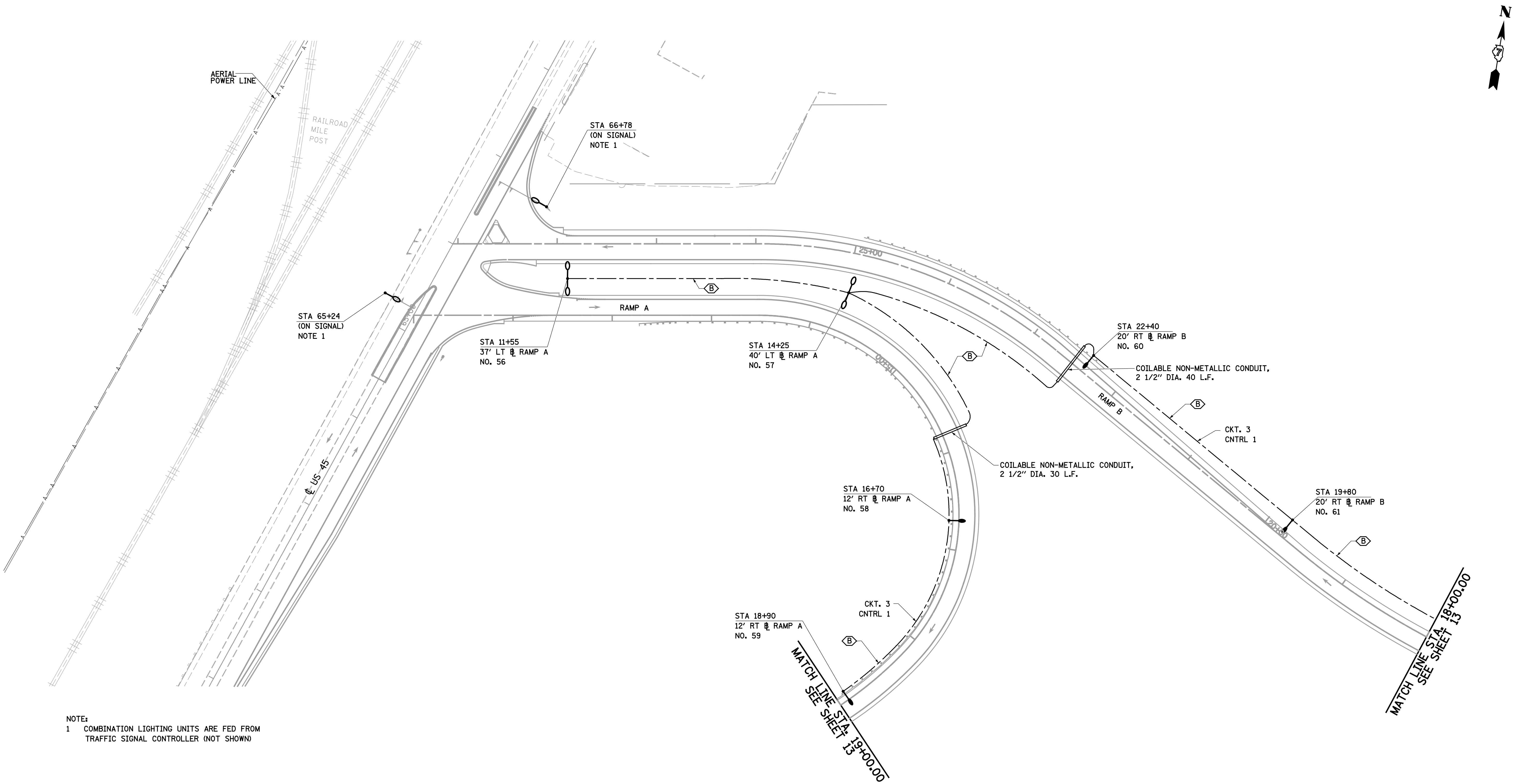
L-23

FILE NAME =	USER NAME = $USER$	DESIGNED - JWS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PROPOSED LIGHTING, ROADWAY C NORTH TRI LEVEL
s:\projects-00072.57-70\dgn\S Tri.Lv\pmk_stl.dgn		DRAWN - PDB	REVISED -		
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -		
	PLOT DATE = $DATE$	DATE - 11-02-12	REVISED -		SCALE: 1"=50' / SHEET NO. 23 OF 35 SHEETS / STA. 5363+00.00 TO STA. 5387+00.00

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	470

CONTRACT NO. 74295

FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT



NOTE:
1 COMBINATION LIGHTING UNITS ARE FED FROM TRAFFIC SIGNAL CONTROLLER (NOT SHOWN)

LEGEND

- EXISTING LIGHTING UNIT, TWIN
- PROPOSED LIGHTING UNIT, 45 FT ALUMINUM POLE, TWIN 8 FT DAVIT ARM, (2) 400W HPS LUMINAIRES, M-C-3
- PROPOSED LIGHTING UNIT, 50 FT ALUMINUM POLE, 15 FT DAVIT ARM, 400W HPS LUMINAIRE, M-C-3
- EXISTING LIGHTING CONTROLLER
- PROPOSED LIGHTING CONTROLLER
- SERVICE INSTALLATION
- COMBINATION LIGHTING UNIT, 45 FT MH, 15 FT MAST ARM, 400 HPS LUMINAIRE, PHOTO-CELL CONTROL, M-C-3
- PROPOSED LIGHTING UNIT, 50 FT ALUMINUM POLE, TWIN 15 FT DAVIT ARM, (2) 400W HPS LUMINAIRES, M-C-3
- JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE OR EMBEDDED IN STRUCTURE, SIZE AS NOTED
- PROPOSED UNIT DUCT, SIZE AS NOTED
- PROPOSED ELECTRIC CABLE IN CONDUIT, SIZE AS NOTED
- PROPOSED UNDERGROUND COILABLE NON-METALLIC CONDUIT, SIZE AS NOTED
- EXISTING UNIT DUCT OR CABLE IN CONDUIT

CABLE / CONDUIT SCHEDULE

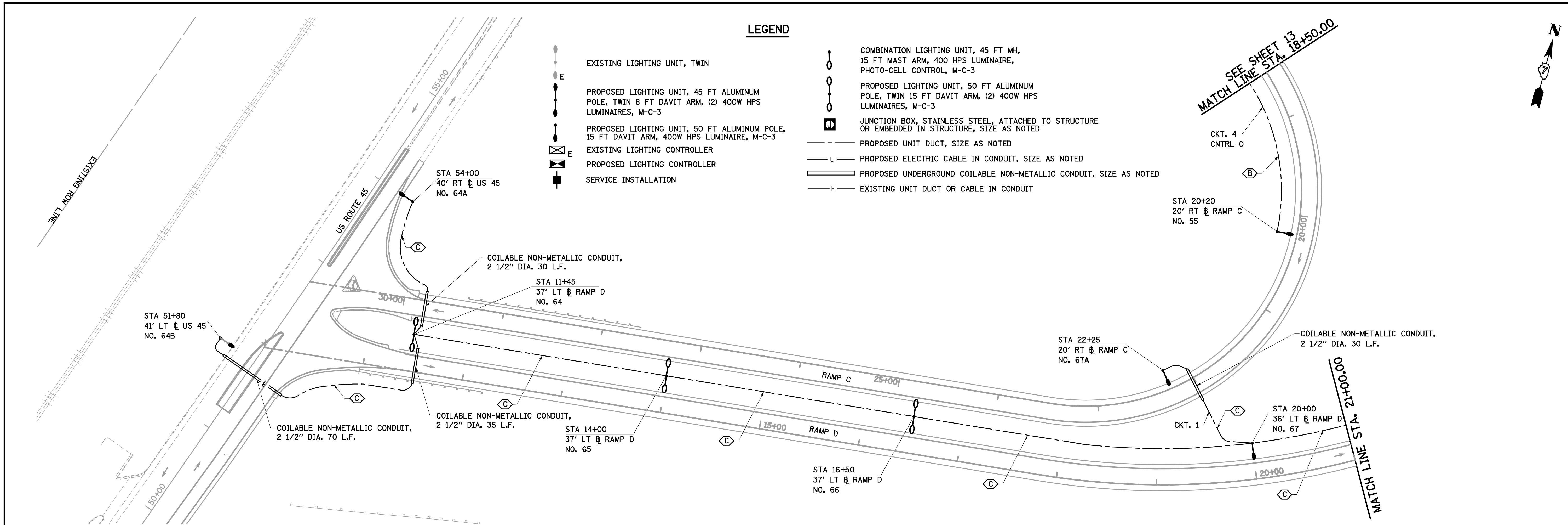
- A UNIT DUCT, 600V, 2-1C NO. 8, 1/C NO. 8 GROUND, (XLP-TYPE USE), 3/4" DIA. POLYETHYLENE
- B UNIT DUCT, 600V, 2-1C NO. 6, 1/C NO. 8 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE
- C UNIT DUCT, 600V, 2-1C NO. 4, 1/C NO. 6 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE
- D ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 8, 1/C NO. 8 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
- E ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 6, 1/C NO. 8 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
- F ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 4, 1/C NO. 6 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
- G ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 6, 2-1/C NO. 4, 1/C NO. 6 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
- L UNIT DUCT, 600V, 2-1C NO. 2, 1/C NO. 4 GROUND, (XLP-TYPE USE), 1 1/4" DIA. POLYETHYLENE

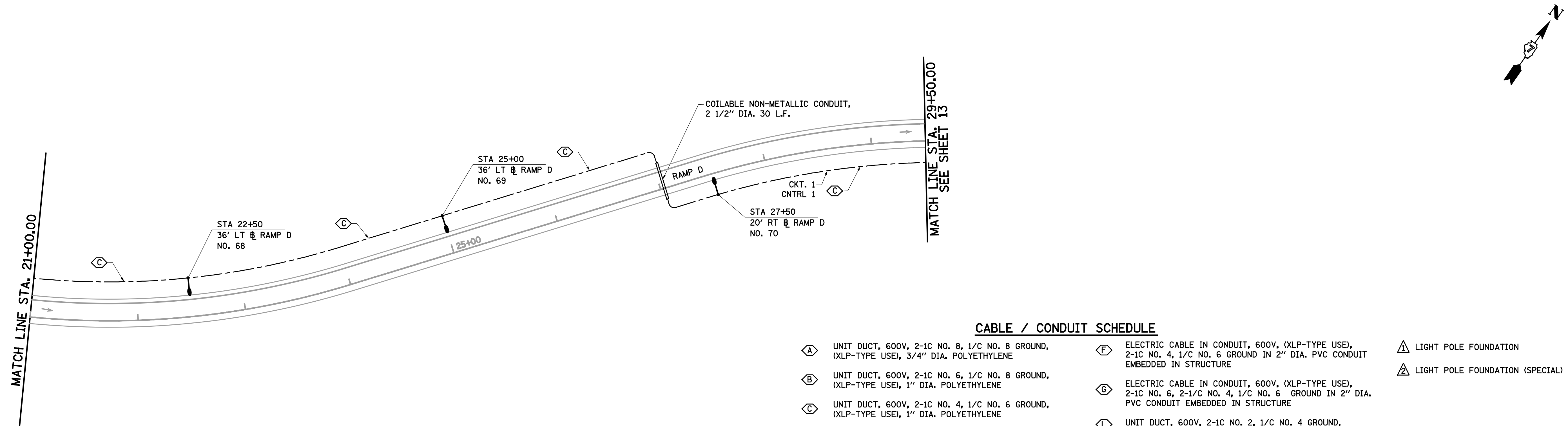
- 1 LIGHT POLE FOUNDATION
- 2 LIGHT POLE FOUNDATION (SPECIAL)

50' 100'

L-24

FILE NAME	USER NAME = $USER$	DESIGNED - JWS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PROPOSED LIGHTING, US ROUTE 45 RAMP A	F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - PDB	REVISED -			57/70	(25-4)R	EFFINGHAM	1760	471
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -			CONTRACT NO. 74295				
	PLOT DATE = $DATE$	DATE - 11-02-12	REVISED -		SCALE: 1"=50' SHEET NO. 24 OF 35 SHEETS STA. TO STA.	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				





CABLE / CONDUIT SCHEDULE

- (A) UNIT DUCT, 600V, 2-1C NO. 8, 1/C NO. 8 GROUND, (XLP-TYPE USE), 3/4" DIA. POLYETHYLENE
- (B) UNIT DUCT, 600V, 2-1C NO. 6, 1/C NO. 8 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE
- (C) UNIT DUCT, 600V, 2-1C NO. 4, 1/C NO. 6 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE
- (D) ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 8, 1/C NO. 8 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
- (E) ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 6, 1/C NO. 8 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
- (F) ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 4, 1/C NO. 6 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
- (G) ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE), 2-1C NO. 6, 2-1/C NO. 4, 1/C NO. 6 GROUND IN 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
- (L) UNIT DUCT, 600V, 2-1C NO. 2, 1/C NO. 4 GROUND, (XLP-TYPE USE), 1 1/4" DIA. POLYETHYLENE

1 LIGHT POLE FOUNDATION

2 LIGHT POLE FOUNDATION (SPECIAL)

50' 100'

L-25

FILE NAME	USER NAME = $USER$	DESIGNED - JWS	REVISED -
s:\projects\-00072.57-78\dgn\S Trnl.x\pmk_stl.dgn		DRAWN - PDB	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -
	PLOT DATE = $DATE$	DATE - 11-02-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

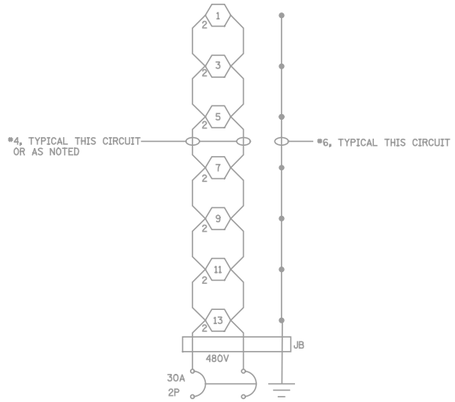
PROPOSED LIGHTING, US ROUTE 45 RAMP C

SCALE: 1"=50' | SHEET NO. 25 OF 35 SHEETS | STA. | TO STA.

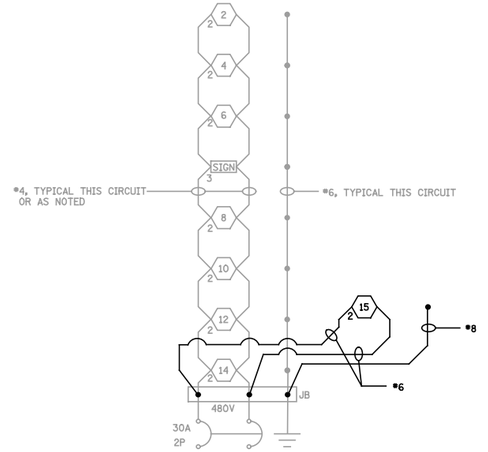
F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	472

CONTRACT NO. 74295

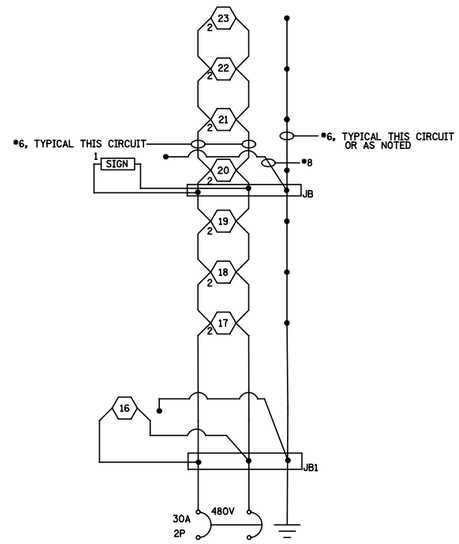
FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT



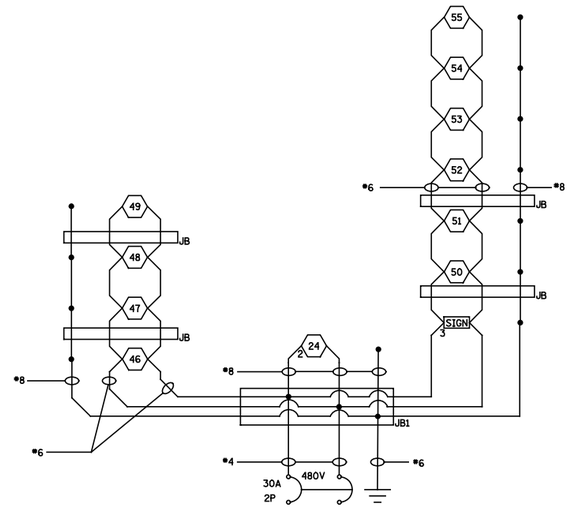
LIGHTING CKT 1 (EXISTING)
EXISTING LIGHTING CONTROLLER BASE MOUNTED



LIGHTING CKT 2 (EXISTING)
EXISTING LIGHTING CONTROLLER BASE MOUNTED



LIGHTING CKT 3 (PROPOSED)
EXISTING LIGHTING CONTROLLER BASE MOUNTED



LIGHTING CKT 4 (PROPOSED)
EXISTING LIGHTING CONTROLLER BASE MOUNTED

NOTES:

1. ALL NECESSARY REVISIONS TO THE WIRING SHOWN ON THIS SHEET SHALL BE MADE AT NO ADDITIONAL COST TO THE DEPARTMENT AND TO THE SATISFACTION OF THE ENGINEER.

⬡ 400W PROPOSED LUMINAIRE

2⬡ (2) 400W PROPOSED LUMINAIRES ON TWIN ARMS

SIGN SIGN LIGHTING, NUMBER OF 150W LUMINAIRES AS INDICATED

▭ JUNCTION BOX

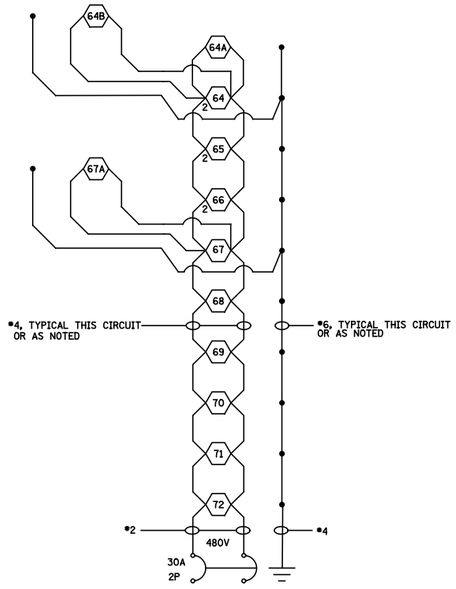
FILE NAME = S:\Projects\403-00072.57-70\dgn\N TrlLv\lighting detail.dgn	USER NAME = $USER$	DESIGNED - VG	REVISED -
		DRAWN - PDB	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -
	PLOT DATE = $DATE$	DATE - 10-30-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

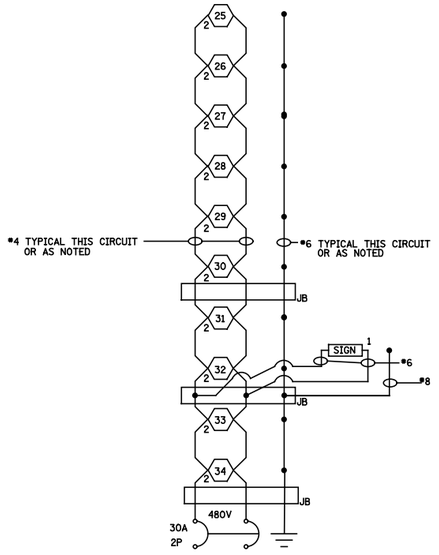
WIRING DIAGRAM (EXISTING 4TH STREET CONTROLLER) NO. 0

SCALE: | SHEET NO. 26 OF 35 SHEETS | STA. | TO STA.

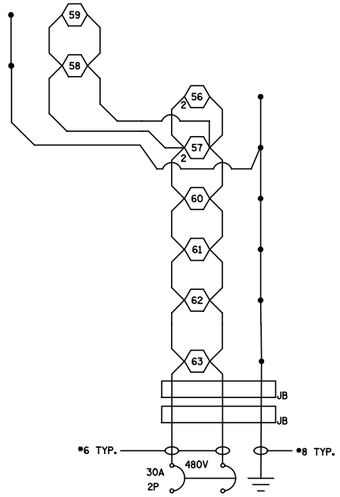
F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	473
		CONTRACT NO. 74295		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



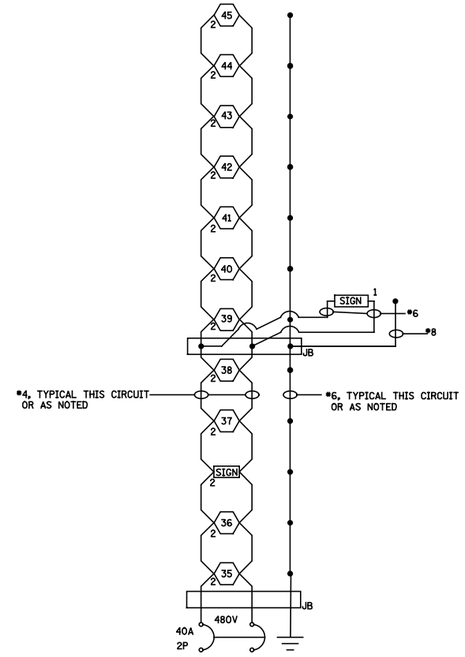
LIGHTING CKT 1 (PROPOSED)
PROPOSED LIGHTING CONTROLLER BASE MOUNTED



LIGHTING CKT 2 (PROPOSED)
PROPOSED LIGHTING CONTROLLER BASE MOUNTED



LIGHTING CKT 3 (PROPOSED)
PROPOSED LIGHTING CONTROLLER BASE MOUNTED



LIGHTING CKT 4 (PROPOSED)
PROPOSED LIGHTING CONTROLLER BASE MOUNTED

NOTES:

1. ALL NECESSARY REVISIONS TO THE WIRING SHOWN ON THIS SHEET SHALL BE MADE AT NO ADDITIONAL COST TO THE DEPARTMENT AND TO THE SATISFACTION OF THE ENGINEER.

400W PROPOSED LUMINAIRE

2 (2) 400W PROPOSED LUMINAIRES ON TWIN ARMS

SIGN SIGN LIGHTING, NUMBER OF 150W LUMINAIRES AS INDICATED

JUNCTION BOX

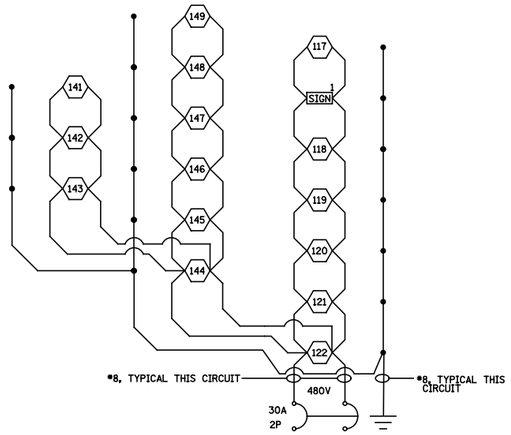
FILE NAME = S:\Projects\403-00072,57-70\dgn\N Trl Lv\lighting detail.dgn	USER NAME = $USER$	DESIGNED - VG	REVISED -
		DRAWN - PDB	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -
	PLOT DATE = $DATE$	DATE - 10-30-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

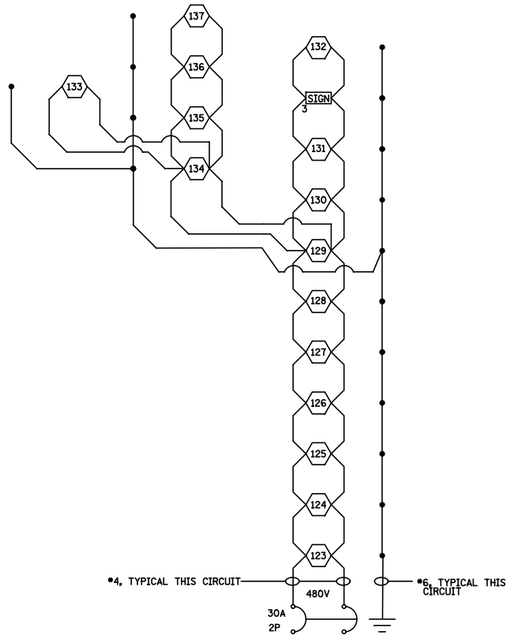
WIRING DIAGRAM (PROPOSED CONTROLLER) NO.1

SCALE: | SHEET NO. 27 OF 35 SHEETS | STA. | TO STA.

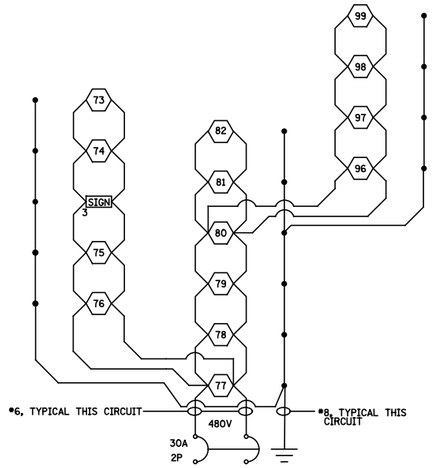
F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	474
		CONTRACT NO. 74295		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



LIGHTING CKT 1 (PROPOSED)
PROPOSED LIGHTING CONTROLLER BASE MOUNTED



LIGHTING CKT 2 (PROPOSED)
PROPOSED LIGHTING CONTROLLER BASE MOUNTED



LIGHTING CKT 3 (PROPOSED)
PROPOSED LIGHTING CONTROLLER BASE MOUNTED

NOTES:

1. ALL NECESSARY REVISIONS TO THE WIRING SHOWN ON THIS SHEET SHALL BE MADE AT NO ADDITIONAL COST TO THE DEPARTMENT AND TO THE SATISFACTION OF THE ENGINEER.

⬡ 400W PROPOSED LUMINAIRE

2⬡ (2) 400W PROPOSED LUMINAIRES ON TWIN ARMS

SIGN SIGN LIGHTING, NUMBER OF 150W LUMINAIRES AS INDICATED

▭ JUNCTION BOX

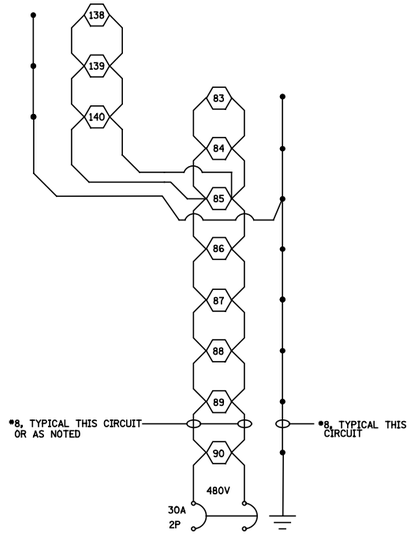
FILE NAME = S:\Projects\403-00072,57-70\dgn\N TrlLv\lighting detail.dgn	USER NAME = $USER$	DESIGNED - VG	REVISED -
		DRAWN - PDB	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -
	PLOT DATE = $DATE$	DATE - 10-30-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

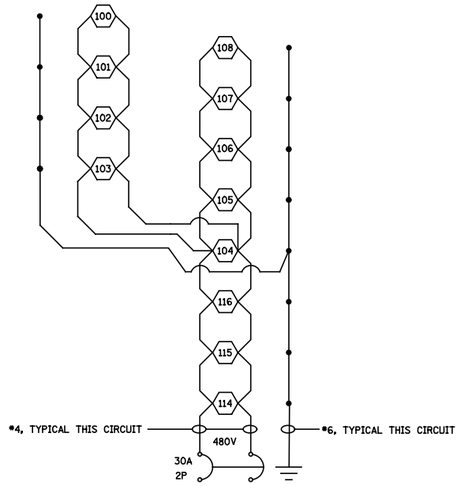
WIRING DIAGRAM (PROPOSED CONTROLLER) NO.2

SCALE: | SHEET NO. 28 OF 35 SHEETS | STA. | TO STA.

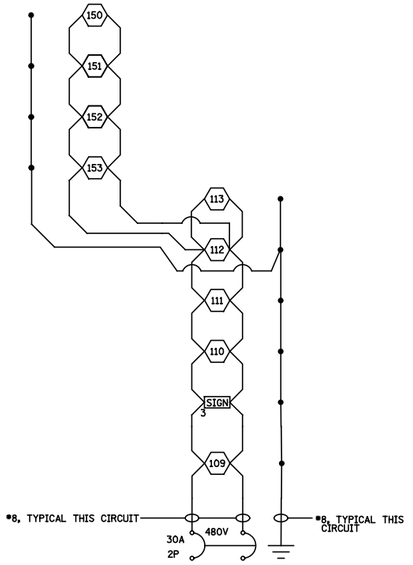
F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	475
		CONTRACT NO. 74295		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



LIGHTING CKT 1 (PROPOSED)
PROPOSED LIGHTING CONTROLLER BASE MOUNTED



LIGHTING CKT 2 (PROPOSED)
PROPOSED LIGHTING CONTROLLER BASE MOUNTED



LIGHTING CKT 3 (PROPOSED)
PROPOSED LIGHTING CONTROLLER BASE MOUNTED

NOTES:

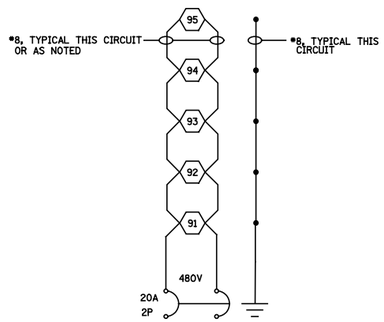
1. ALL NECESSARY REVISIONS TO THE WIRING SHOWN ON THIS SHEET SHALL BE MADE AT NO ADDITIONAL COST TO THE DEPARTMENT AND TO THE SATISFACTION OF THE ENGINEER.

⬡ 400W PROPOSED LUMINAIRE

2 ⬡ (2) 400W PROPOSED LUMINAIRES ON TWIN ARMS

SIGN SIGN LIGHTING, NUMBER OF 150W LUMINAIRES AS INDICATED

▭ JUNCTION BOX



LIGHTING CKT 4 (PROPOSED)
PROPOSED LIGHTING CONTROLLER BASE MOUNTED

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	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -
	PLOT DATE = $DATE$	DATE - 10-30-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WIRING DIAGRAM (PROPOSED CONTROLLER) NO. 3

SCALE: | SHEET NO. 29 OF 35 SHEETS | STA. | TO STA.

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	476
		CONTRACT NO. 74295		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

10/16/12

ILLINOIS DEPARTMENT OF TRANSPORTATION
LUMINAIRE PERFORMANCE TABLE – PROPOSED LIGHTING

GIVEN CONDITIONS

ROADWAY DATA:	Pavement Width	48 FT
	Number Of Lanes (In Direction of Travel)	4
	Median Width	FT
	IES Surface Classification	R3
	Q-Zero Value	.07
LIGHT POLE DATA:	Mounting Height	50 FT
	Mast Arm Length	15 FT
	Pole Set-Back From Edge Of Pavement	20 FT
LUMINAIRE DATA:	Lamp Type	HPS
	Lamp Lumens	50000
	IES Vertical Distribution	M
	IES Control Of Distribution	FC
	IES Lateral Distribution	3
	Total Light Loss Factor	0.684
LAYOUT DATA:	Spacing	195 FT
	Configuration	One Side
	Luminaire Overhang Over Edge Of Pavement Lane	-5 FT

NOTE: Variations from the above specified IES distribution pattern may be requested and acceptance of variations will be subject to review by the Engineer based on how well the performance requirements are met.

PERFORMANCE REQUIREMENTS

NOTE: These performance requirements shall be the minimum acceptable standards of photometric performance for the luminaire, based on the given conditions listed above.

ILLUMINATION:	Average Horizontal Illumination, (E_{Ave})	0.90 fc
	Uniformity Ratio, (E_{Ave}/E_{Min})	3.0
LUMINANCE:	Average Luminance: (L_{Ave})	0.60 Cd/m^2
	Uniformity Ratios: (L_{Ave}/L_{Min})	3.5
	(L_{Max}/L_{Min})	6.0
	Maximum Veiling Luminance Ratio: (L_v/L_{Ave})	0.3

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10/16/12

ILLINOIS DEPARTMENT OF TRANSPORTATION
LUMINAIRE PERFORMANCE TABLE – TEMPORARY LIGHTING

GIVEN CONDITIONS

ROADWAY DATA:	Pavement Width	24 FT
	Number Of Lanes (In Direction of Travel)	2
	Median Width	FT
	IES Surface Classification	R3
	Q-Zero Value	.07
LIGHT POLE DATA:	Mounting Height	45 FT
	Mast Arm Length	FT
	Pole Set-Back From Edge Of Pavement	30 FT
LUMINAIRE DATA:	Lamp Type	HPS
	Lamp Lumens	28000
	IES Vertical Distribution	L
	IES Control Of Distribution	NC
	IES Lateral Distribution	4
	Total Light Loss Factor	0.684
LAYOUT DATA:	Spacing	230 FT
	Configuration	One Side
	Luminaire Overhang Over Edge Of Pavement Lane	-30 FT

NOTE: Variations from the above specified IES distribution pattern may be requested and acceptance of variations will be subject to review by the Engineer based on how well the performance requirements are met.

PERFORMANCE REQUIREMENTS

NOTE: These performance requirements shall be the minimum acceptable standards of photometric performance for the luminaire, based on the given conditions listed above.

ILLUMINATION:	Average Horizontal Illumination, (E_{Ave})	0.60 fc
	Uniformity Ratio, (E_{Ave}/E_{Min})	3.0
LUMINANCE:	Average Luminance: (L_{Ave})	0.40 Cd/m^2
	Uniformity Ratios: (L_{Ave}/L_{Min})	3.5
	(L_{Max}/L_{Min})	6.0
	Maximum Veiling Luminance Ratio: (L_v/L_{Ave})	

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10/25/12

ILLINOIS DEPARTMENT OF TRANSPORTATION
SIGN LUMINAIRE PERFORMANCE TABLE

GIVEN CONDITIONS

SIGN PANEL DATA:	Type (T=Truss C=Cantilever)	T
	Height	12 FT
	Width	36 FT
	Maintained Reflectance	
	Contrast	
MOUNTING DATA:	Number of Luminaires Per Sign	3
	Mounting Height (- below, + above) Bottom Edge of Sign Panel	0 FT
	Distance to Edge of Sign Panel	6 FT
	Fixture Spacing (If More Than 1)	12 FT
	Luminaire Setback From Sign Face	4.25 FT
LUMINAIRE DATA:	Lamp Type (HPS – Typical)	HPS
	Lamp Lumens	16000
	IES Vertical Distribution	S
	IES Control Of Distribution	NC
	IES Lateral Distribution	4
	Total Light Loss Factor	0.7
LAYOUT DATA:	Ambient Light Level	Medium

NOTE: Variations from the above specified IES distribution pattern may be requested and acceptance of variations will be subject to review by the Engineer based on how well the performance requirements are met.

PERFORMANCE REQUIREMENTS

NOTE: These performance requirements shall be the minimum acceptable standards of photometric performance for the luminaire, based on the given conditions listed above.

ILLUMINATION:	Maintained Average Sign Illumination	26 fc
	Uniformity Ratio, (Max / Min)	6.0
LUMINANCE:	Maintained Average Sign Luminance	40 Cd/m^2
	Uniformity Ratio, (L_{Max}/L_{Min})	6.0
	Sign Gradient Luminance Difference Ratio, (Max)	2.0

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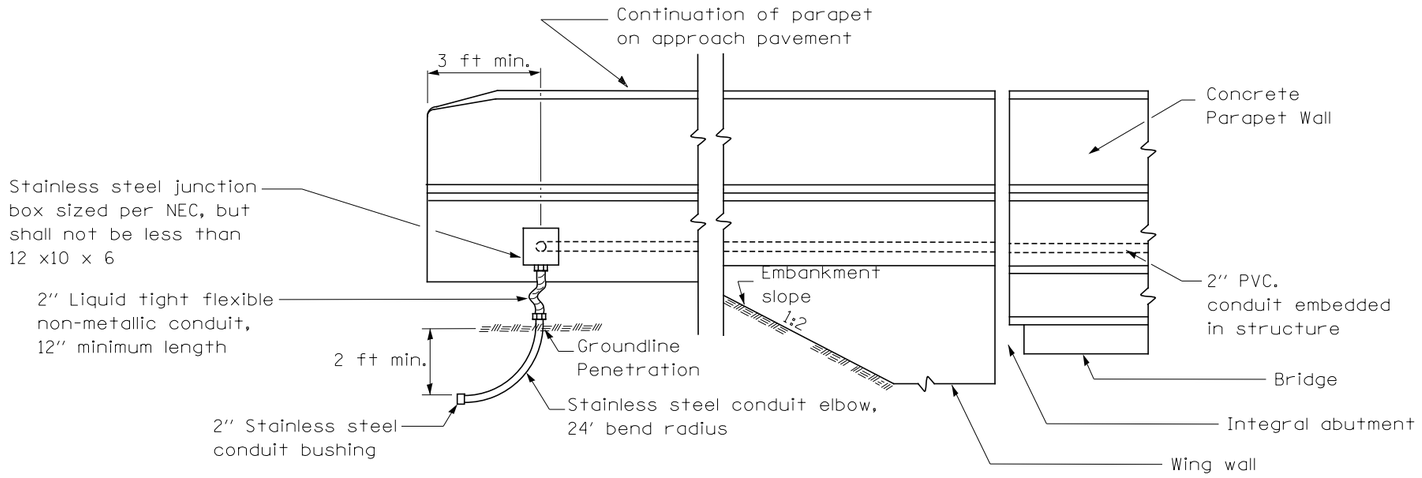
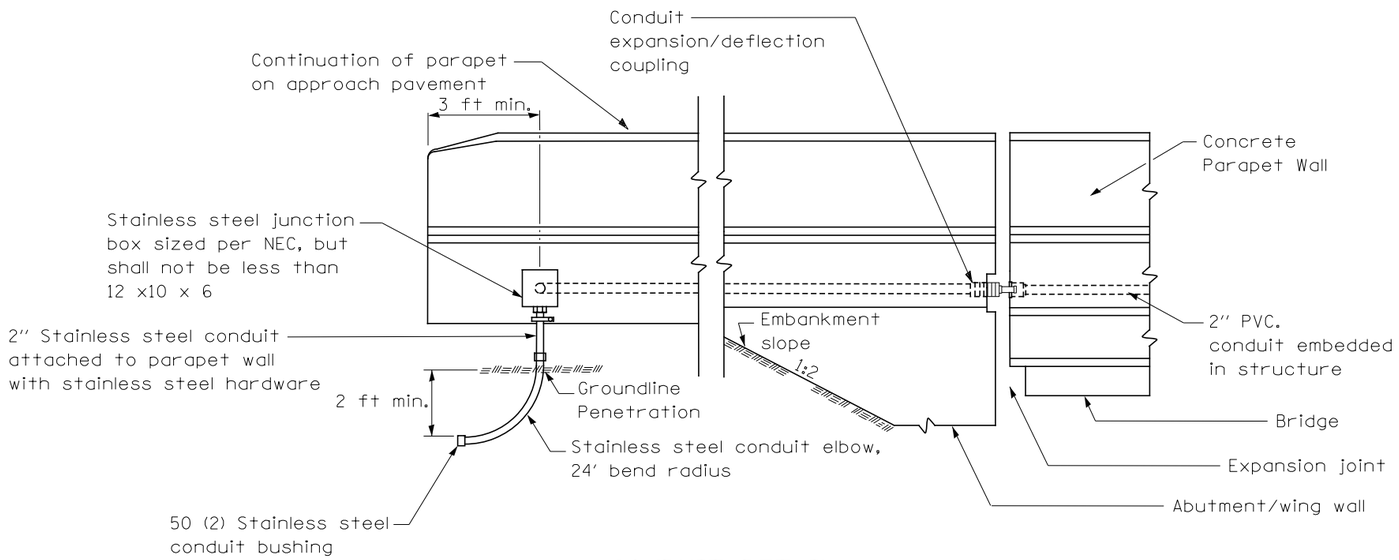
		DRAWN - PDB	REVISED -			57/70	(25-4)R	EFFINGHAM	1760	477
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -					CONTRACT NO. 74295		
	PLOT DATE = $DATE$	DATE - 10-30-12	REVISED -		SCALE:	SHEET NO. 30 OF 35 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT



CONDUIT DETAIL

(Integral Abutment)



CONDUIT DETAIL

(Open Abutment)

GENERAL NOTES

Stainless steel conduit, couplings, and elbows shall be according to Section 810 of the Standard Specifications, as applicable, shall be Type 304 or Type 316, and shall be manufactured according to UL Standard 6A and ANSI Standard C 80.1.

Conduit fittings shall be the threaded type, shall be Type 304 or Type 316 stainless steel, and shall be manufactured according to UL Standard 514B.

All stainless steel and liquid tight flexible non-metallic conduit, including all fittings, bushings, couplings, and elbows shall be included in the cost of the "Junction Box, Stainless Steel, Attached to Structure, 12" X 10" X 6" " pay item.

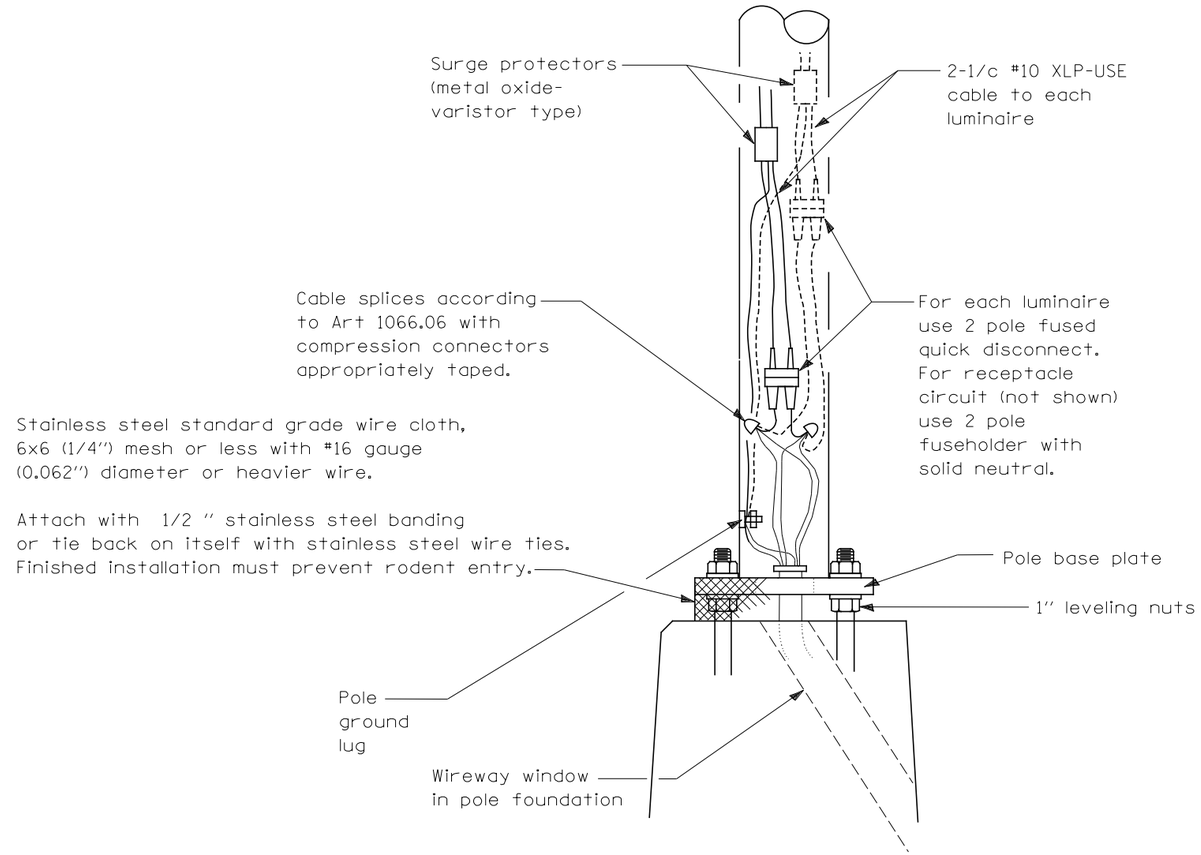
FILE NAME = S:\Projects\403-00072,57-T0\dgn\N TrlLv\lighting detail.dgn	USER NAME = $USER$	DESIGNED - VG	REVISED -
		DRAWN - PDB	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -
	PLOT DATE = $DATE$	DATE - 10-30-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONDUIT EXITING PARAPET ON APPROACH PAVEMENT

SCALE: | SHEET NO. 31 OF 35 SHEETS | STA. | TO STA.

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	478
		CONTRACT NO. 74295		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



WIRING DETAIL

NO SCALE

GENERAL NOTES

All taped splices shall use 2 layers of electrical tape over 3 layers of rubber tape as required by the Standard Specifications. Coat the finished taped splice with bonding compound.

All cable splices shall be taped unless another method has been specifically approved by the Engineer.

For example purposes the pole is shown on an anchor base. If the pole is required to be set on a breakaway base, consult the Standard Specifications.

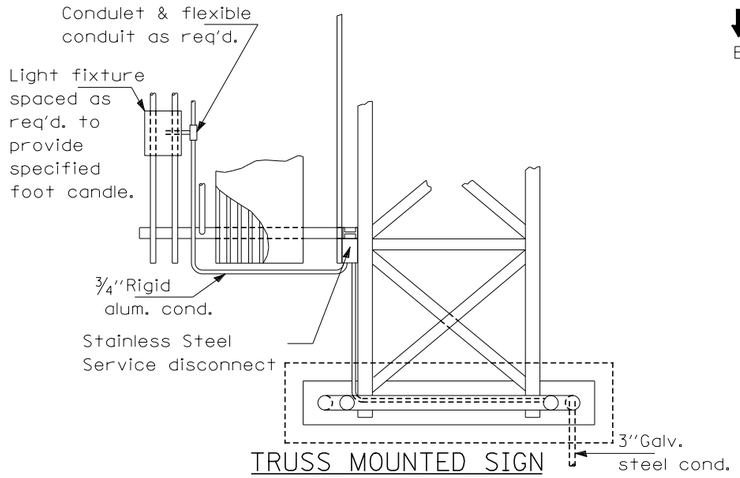
FILE NAME = S:\Projects\403-00072,57-70\dgn\N Trl Lv\lighting detail.dgn	USER NAME = $USER$	DESIGNED - VG	REVISED -
		DRAWN - PDB	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -
	PLOT DATE = $DATE$	DATE - 10-30-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

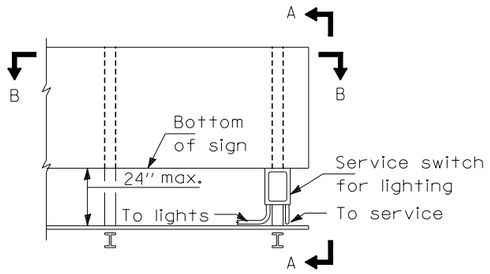
POLE HANDHOLE WIRING, FAI ROUTE 57/70

SCALE: | SHEET NO. 32 OF 35 SHEETS | STA. | TO STA.

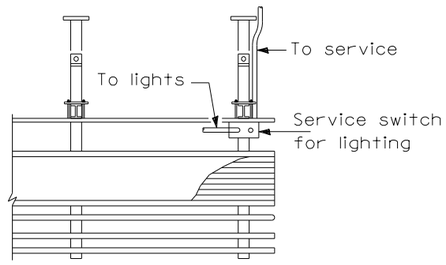
F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	479
		CONTRACT NO. 74295		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



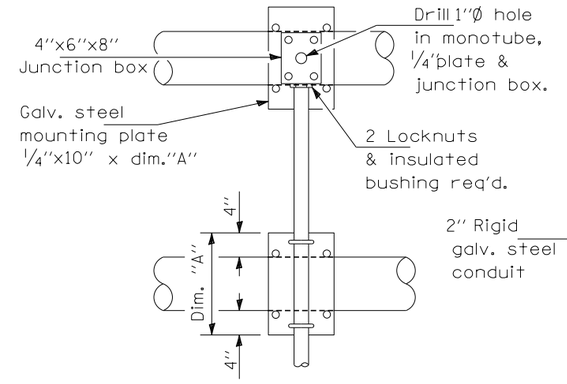
TRUSS MOUNTED SIGN
(Top view)



FRONT ELEVATION



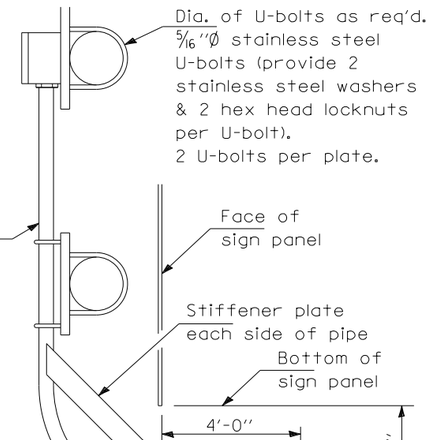
SECTION B-B



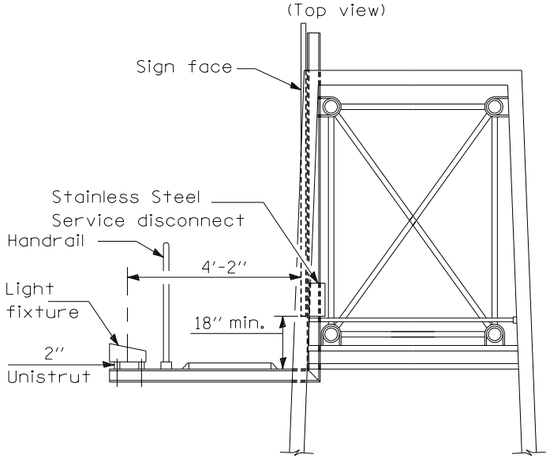
TOP BOTTOM

Dimension "A" = monotube dia. + 8"
Dimension "B" = monotube dia. + 3/8"

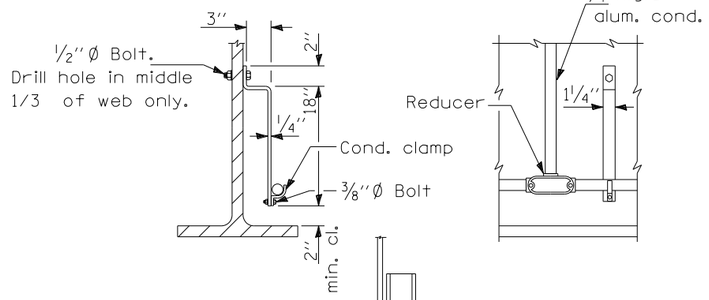
MOUNTING PLATES

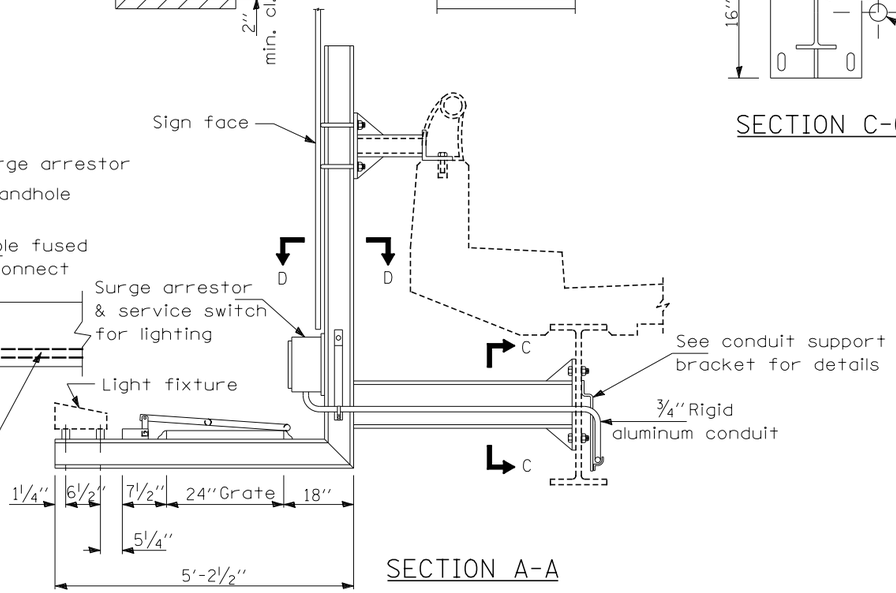


TWIN MONOTUBE

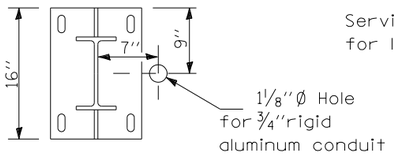


TRUSS MOUNTED SIGN
(Side elevation)

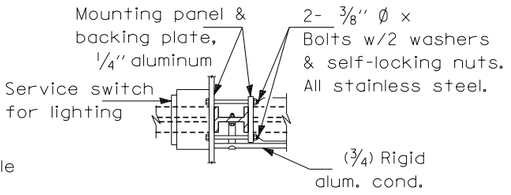




SECTION A-A



SECTION C-C



SECTION D-D

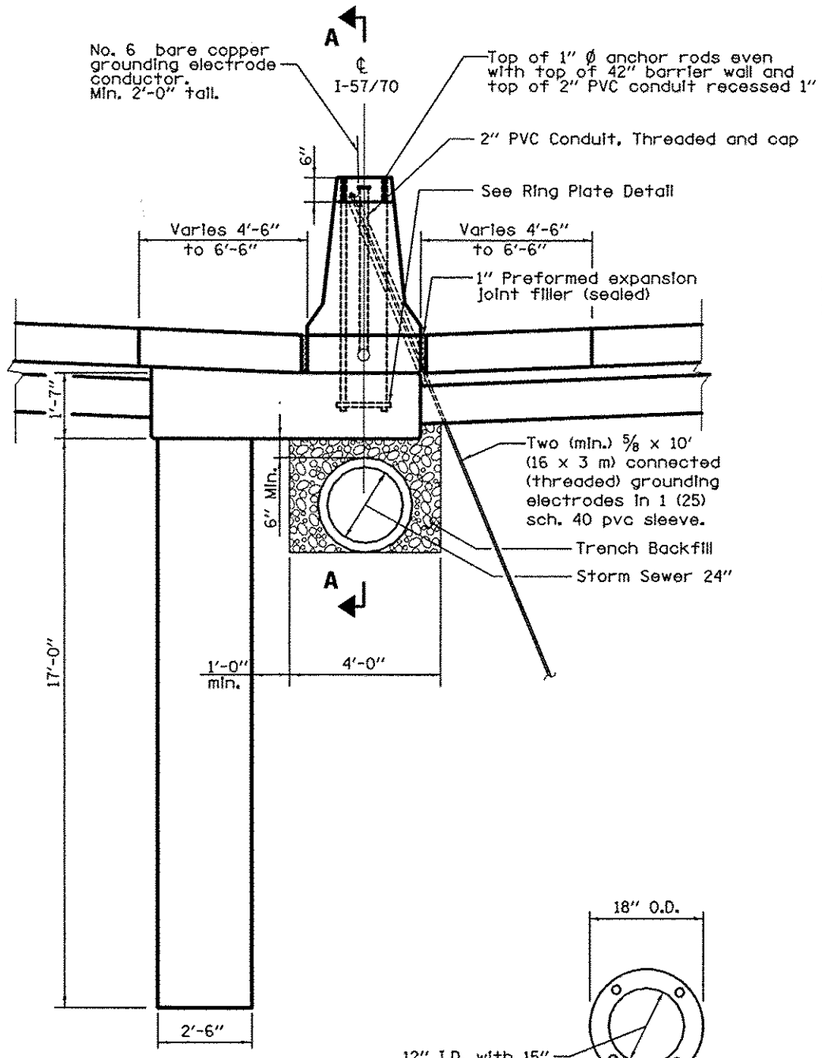
GENERAL NOTES

All sign lighting fixtures shall have a minimum of 3 mounting points.

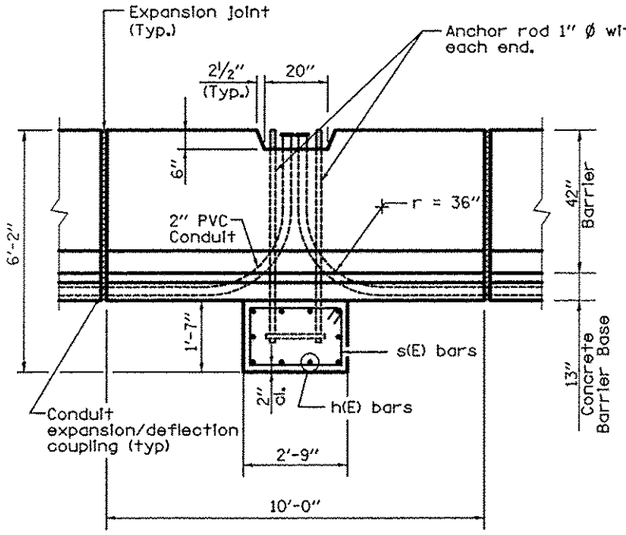
All mounting hardware shall be stainless steel.

L-33

FILE NAME = S:\Projects\403-00072.57-70\dgn\N TrlLv\lighting detail.dgn	USER NAME = $USER$	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SIGN LIGHTING DETAILS	F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -			57/70	(25-4)R	EFFINGHAM	1760	480
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -						CONTRACT NO. 74295	
	PLOT DATE = $DATE$	DATE -	REVISED -		SCALE: SHEET NO. 33 OF 35 SHEETS STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



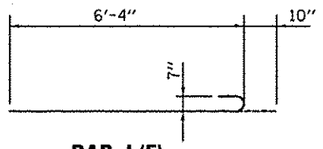
ELEVATION FOUNDATION



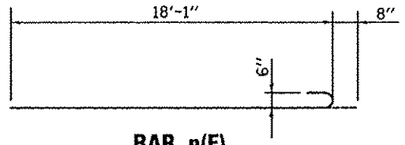
SECTION A-A

DESIGN STRESSES

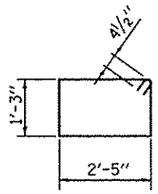
f'c = 3500 psi
fy = 60,000psi



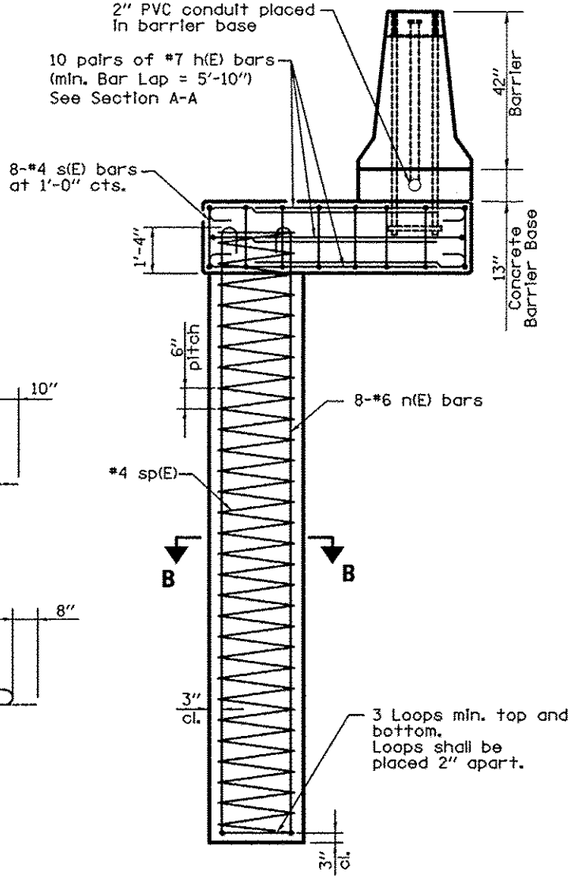
BAR h(E)



BAR n(E)

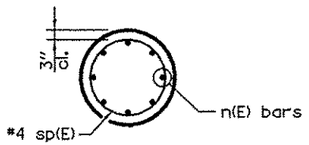


BAR s(E)



ELEVATION FOUNDATION

(with Reinforcement)



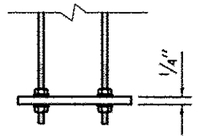
SECTION B-B

ELEVATION FOUNDATION

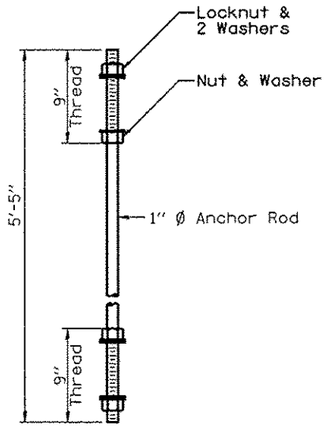
TOP VIEW

Notes:
See Highway Standard 836011 for other details not shown.

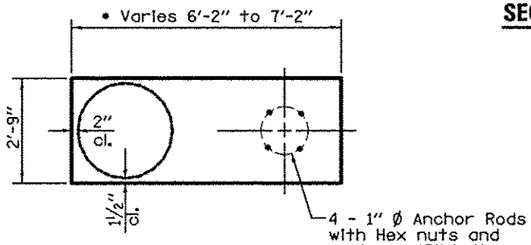
Reinforcement bars designated (E) shall be epoxy coated.



RING PLATE DETAIL



ANCHOR ROD DETAIL



PLAN – CAP BEAM

• If length is less than 6'-8" h(E) bars shall be cut to fit in field while maintaining 5'-10" Lap.

BILL OF MATERIALS

Bar	No.	Size	Length	Shape
h(E)	20	#7	7'-2"	
n(E)	8	#6	18'-9"	
s(E)	8	#4	8'-1"	
•• sp(E)	1	#4	18'-1"	

•• Length is height of spiral.

EXP. 11-30-2014

Chadwick J. Fuesting 8/8/13

L-34

FILE NAME =	USER NAME = john	DESIGNED - ACS	REVISED -
S:\Projects\403-00072,51-70\dgn\H Traffic\lighting details.dgn		DRAWN - WJS	REVISED -
	PLOT SCALE = 40.0000 ' / IN.	CHECKED - BB	REVISED -
	PLOT DATE = 8/8/2013	DATE - 10-30-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

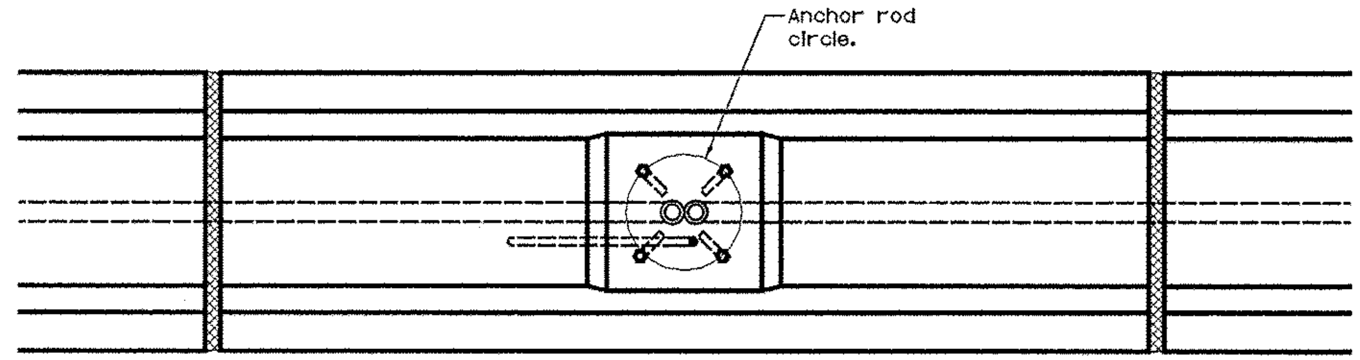
LIGHT POLE FOUNDATION SPECIAL

SCALE: | SHEET NO. 34 OF 35 SHEETS | STA. | TO STA.

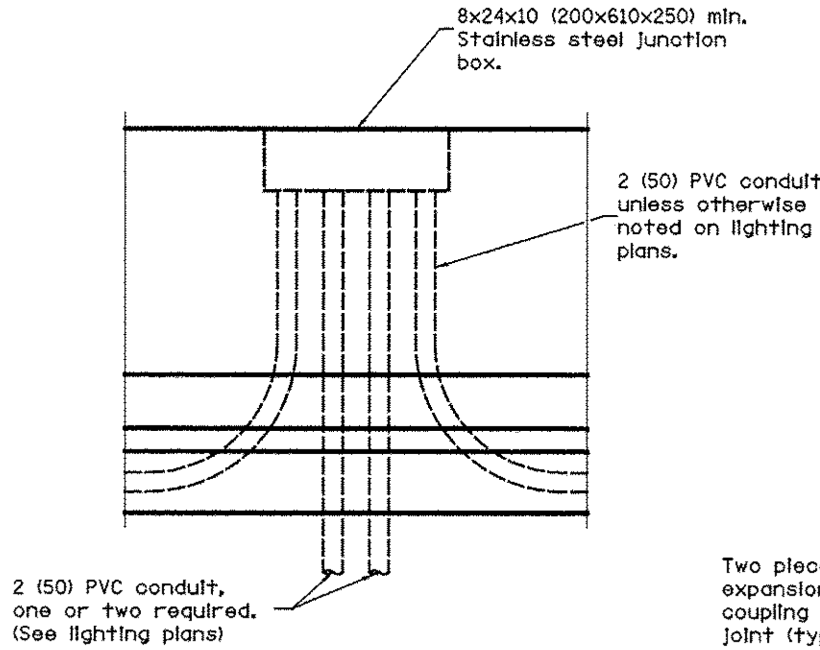
F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	481
		CONTRACT NO. 74295		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

FOUNDATION TABLE				
LIGHT POLE MOUNTING HEIGHT	SHAFT DIAMETER	SHAFT DEPTH	ANCHOR ROD LENGTH (1)	ANCHOR ROD CIRCLE DIA.
≤30′ (9.1 m)	24 (610)	36 (914)	6′-0″ (1.83 m)	11½ (292)
31′-35′ (9.4 m - 10.7 m)	24 (610)	3′-6″ (1.06 m)	6′-6″ (1.98 m)	11½ (292)
36′-40′ (10.9 m - 12.2 m)	30 (762)	4′-0″ (1.22 m)	7′-0″ (2.13 m)	15 (381)
41′-45′ (12.5 m - 13.7 m)	30 (762)	4′-6″ (1.37 m)	7′-6″ (2.29 m)	15 (381)
46′-50′ (14.0 m - 15.2 m)	30 (762)	5′-0″ (1.52 m)	8′-0″ (2.44 m)	15 (381)

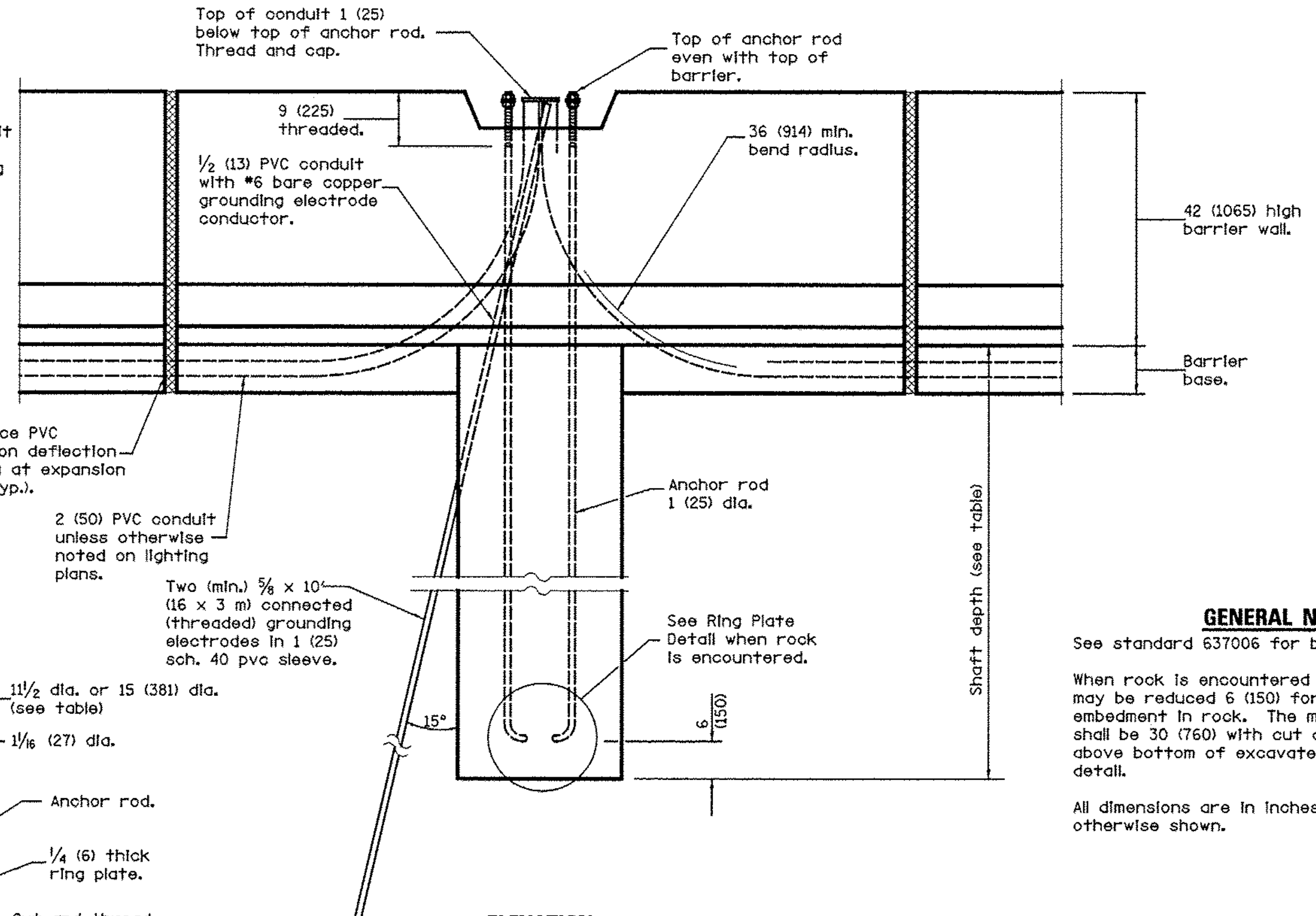
(1) Length does not include 4 (100) hook.



PLAN

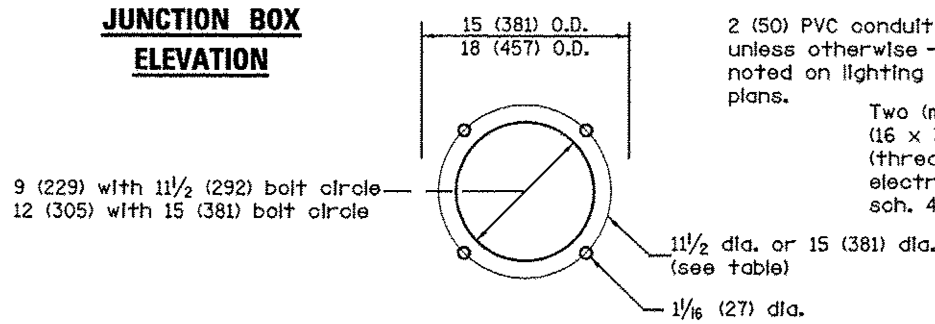


JUNCTION BOX ELEVATION

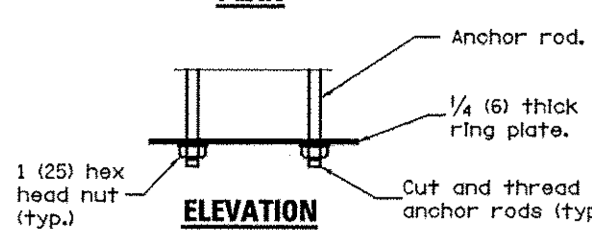


ELEVATION

LIGHT POLE FOUNDATION



PLAN



ELEVATION

RING PLATE DETAIL

GENERAL NOTES

See standard 637006 for barrier wall details

When rock is encountered the foundation depth may be reduced 6 (150) for every 12 (300) of embedment in rock. The minimum foundation depth shall be 30 (760) with cut anchor rods 6 (150) above bottom of excavated hole. See ring plate detail.

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

L-34A

FILE NAME = S:\Projects\403-00072.57-70\dgn\H Tr\Lw\lighting detail.dgn	USER NAME = john	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 40.0000 ′ / IN.	CHECKED -	REVISED -
	PLOT DATE = 8/8/2013	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

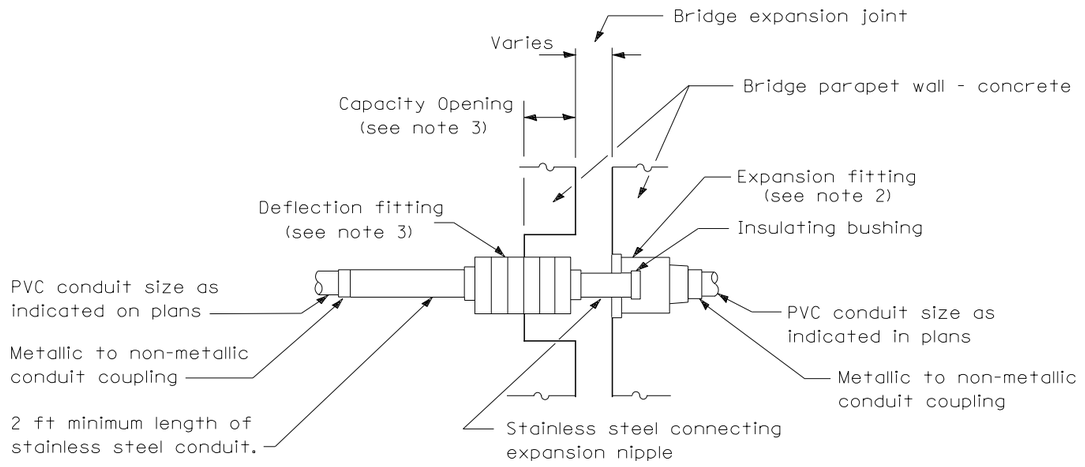
LIGHT POLE FOUNDATION DETAIL

SCALE: | SHEET NO. 34A OF 35 SHEETS | STA. | TO STA.

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	481A

CONTRACT NO. 74295

FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT



CONDUIT EXPANSION/
DEFLECTION COUPLING DETAIL

GENERAL NOTES

1. The Contractor shall install a conduit expansion/deflection coupling at the joints in the concrete parapet on the bridge capable of accepting the longitudinal movement. All metallic parts of the coupling shall be made of stainless steel or as approved by the Engineer. Any non-stainless metal shall be hot dip galvanized and coated to prevent reaction with the concrete. The cost of the coupling shall be part of and incidental to the conduit system.

2. The barrel in the expansion fitting shall be fully embedded in the concrete on one side of the expansion joint. One half the length of the deflection fitting shall be embedded in the concrete on the other side of the coupling.

3. A cavity opening 3" larger in diameter than the deflection fitting shall be provided in the concrete to ensure proper performance of the coupling.

4. Careful attention to joint movement over a range of temperatures shall be coordinated with the selection and installation of the coupling to ensure the range of movement of the coupling is not exceeded at temperature extremes.

5. All manufacturer's installation instructions shall be carefully followed to ensure optimum performance of the expansion/deflection coupling.

6. The Contractor shall install couplings at all bridge expansion joints and shall be responsible to determine the proper number of couplings required.

FILE NAME = S:\Projects\403-00072.57-70\dgn\N TrlLv\lighting detail.dgn	USER NAME = $USER$	DESIGNED -	REVISED -
		DRAWN -	REVISED -
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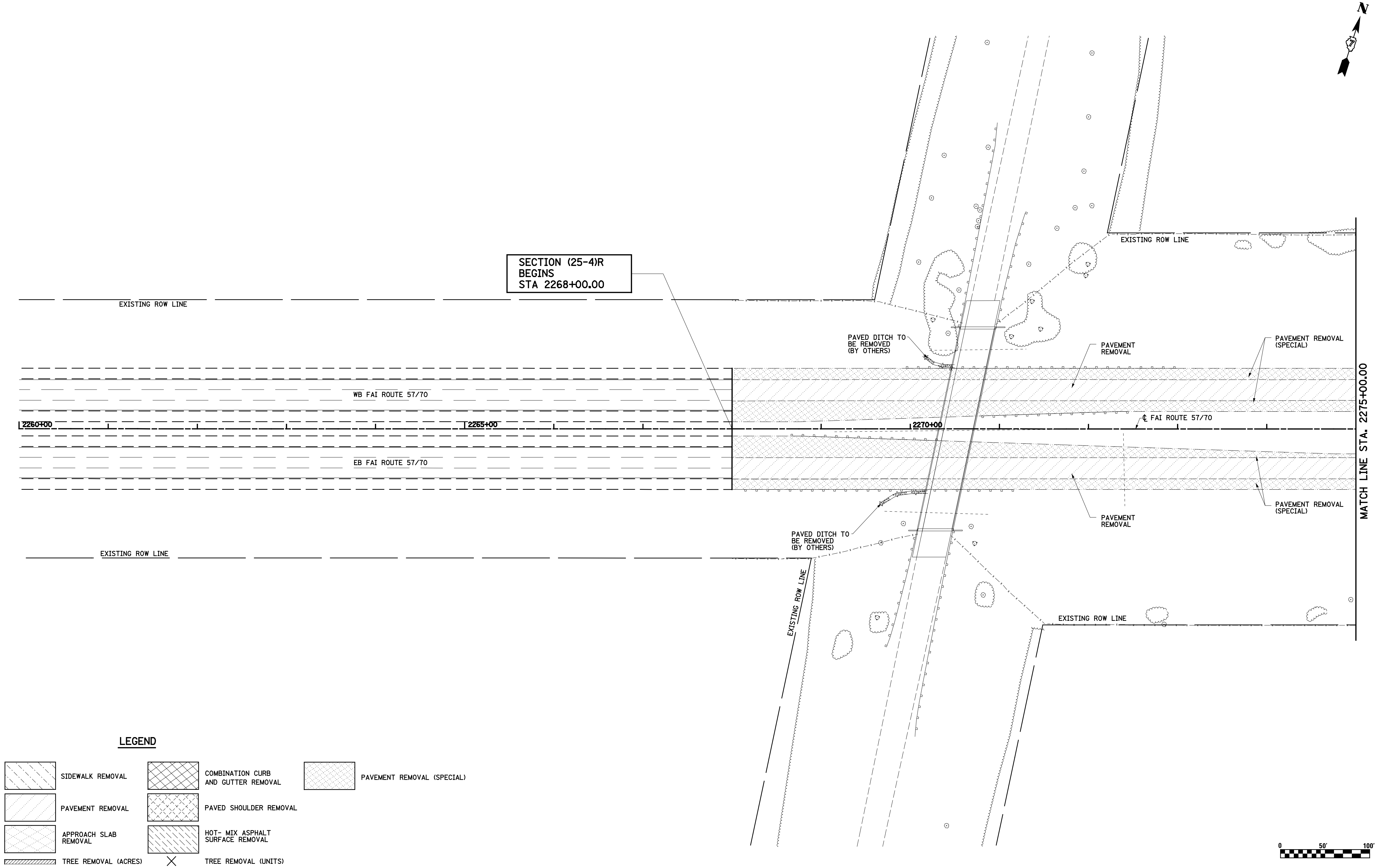
	PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONDUIT COUPLING EXPANSION / DEFLECTION

SCALE: | SHEET NO. 35 OF 35 SHEETS | STA. | TO STA.

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	482
		CONTRACT NO. 74295		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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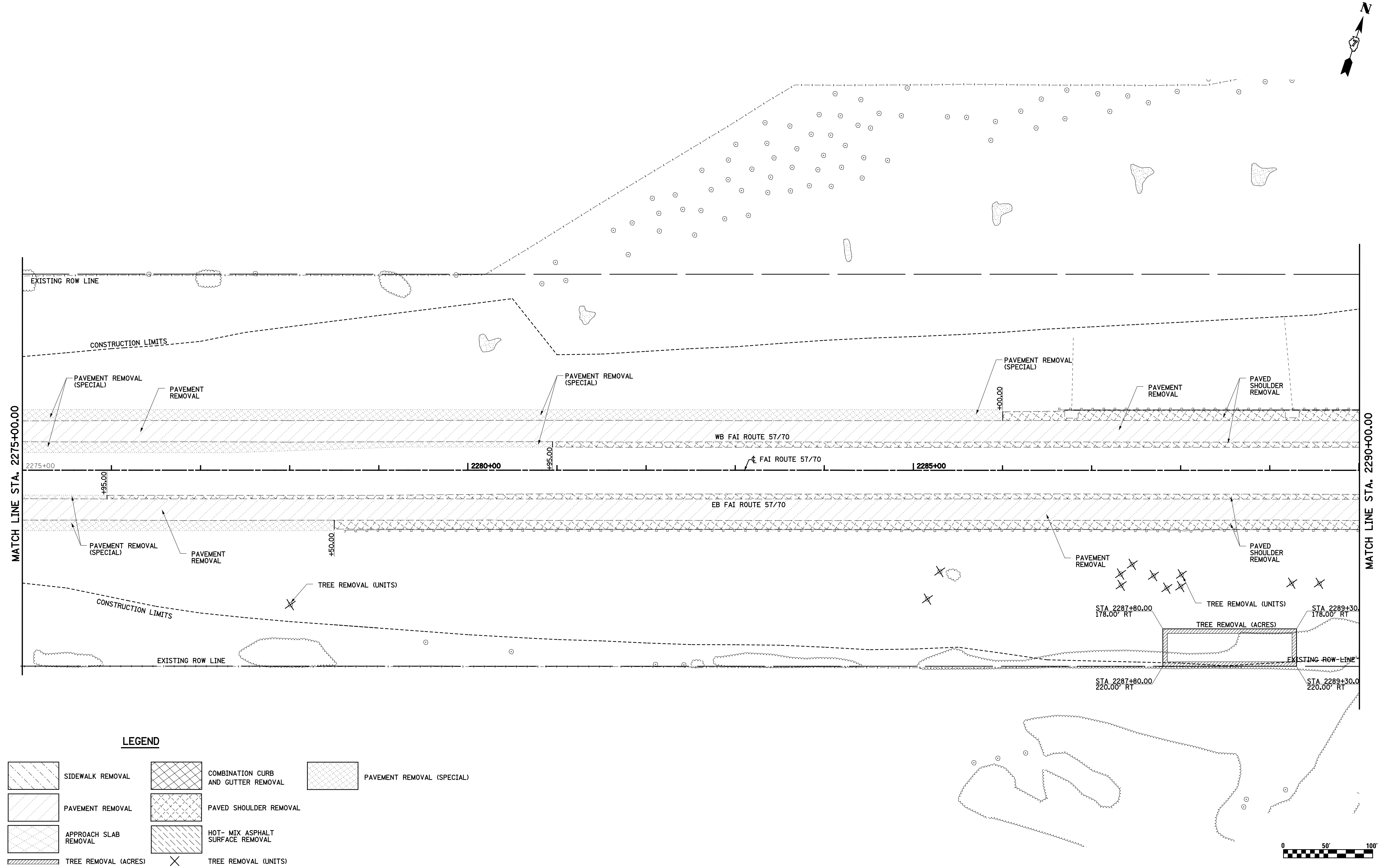
	PLOT DATE = $DATE$	DATE - 3-31-08	REVISED -		SCALE: 1"=50' SHEET NO. 1 OF 16 SHEETS STA. 2255+00.00 TO STA. 2275+00.00	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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	PLOT DATE = $DATE$	DATE - 3-31-08	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REMOVAL PLAN, FAI ROUTE 57/70

SCALE: 1"=50' | SHEET NO. 2 OF 16 SHEETS | STA. 226000.00 TO STA. 2290+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	484

CONTRACT NO. 74295

FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT

PAVEMENT REMOVAL
EXISTING DELINEATORS ON BRIDGE TO BE REMOVED, COST TO BE INCLUDED IN TRAFFIC CONTROL.
PAVED SHOULDER REMOVAL
℄ FAI ROUTE 57/70
PAVEMENT REMOVAL
PAVED SHOULDER REMOVAL
EB FAI ROUTE 57/70
APPROACH SLAB REMOVAL
PAVED SHOULDER REMOVAL
℄ RAMP C BEGINS STA 10+00.00 68' RT STA 2292+44.59 ℄ FAI ROUTE 57/70
APPROACH SLAB REMOVAL
COMBINATION CURB AND GUTTER REMOVAL
MEDIAN REMOVAL PARTIAL DEPTH
PAVEMENT REMOVAL
PAVED SHOULDER REMOVAL
RAMP C
℄ RAMP C
TREE REMOVAL (UNITS)
MEDIAN REMOVAL PARTIAL DEPTH
PAVED SHOULDER REMOVAL
CONCRETE MEDIAN SURFACE REMOVAL
COMBINATION CURB AND GUTTER REMOVAL
PAVEMENT REMOVAL
PAVED SHOULDER REMOVAL
PAVED DITCH REMOVAL
℄ US ROUTE 45
MEDIAN REMOVAL PARTIAL DEPTH
COMBINATION CURB AND GUTTER REMOVAL
PAVEMENT REMOVAL
PAVED SHOULDER REMOVAL
PAVED SHOULDER REMOVAL
MATCH LINE US 45 STA. 51+00.00
MATCH LINE STA. 2290+00.00
MATCH LINE STA. 2305+00.00
℄ US ROUTE 45
PAVED SHOULDER REMOVAL
SIDEWALK REMOVAL
COMBINATION CURB AND GUTTER REMOVAL
MATCH LINE US 45 STA. 51+00.00

LEGEND

- SIDEWALK REMOVAL
- COMBINATION CURB AND GUTTER REMOVAL
- PAVEMENT REMOVAL (SPECIAL)
- PAVEMENT REMOVAL
- PAVED SHOULDER REMOVAL
- MEDIAN REMOVAL PARTIAL DEPTH
- APPROACH SLAB REMOVAL
- HOT- MIX ASPHALT SURFACE REMOVAL
- TREE REMOVAL (ACRES)
- TREE REMOVAL (UNITS)

0 50' 100'

FILE NAME =	USER NAME = $USER$	DESIGNED - JWS	REVISED -
		DRAWN - MAB	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

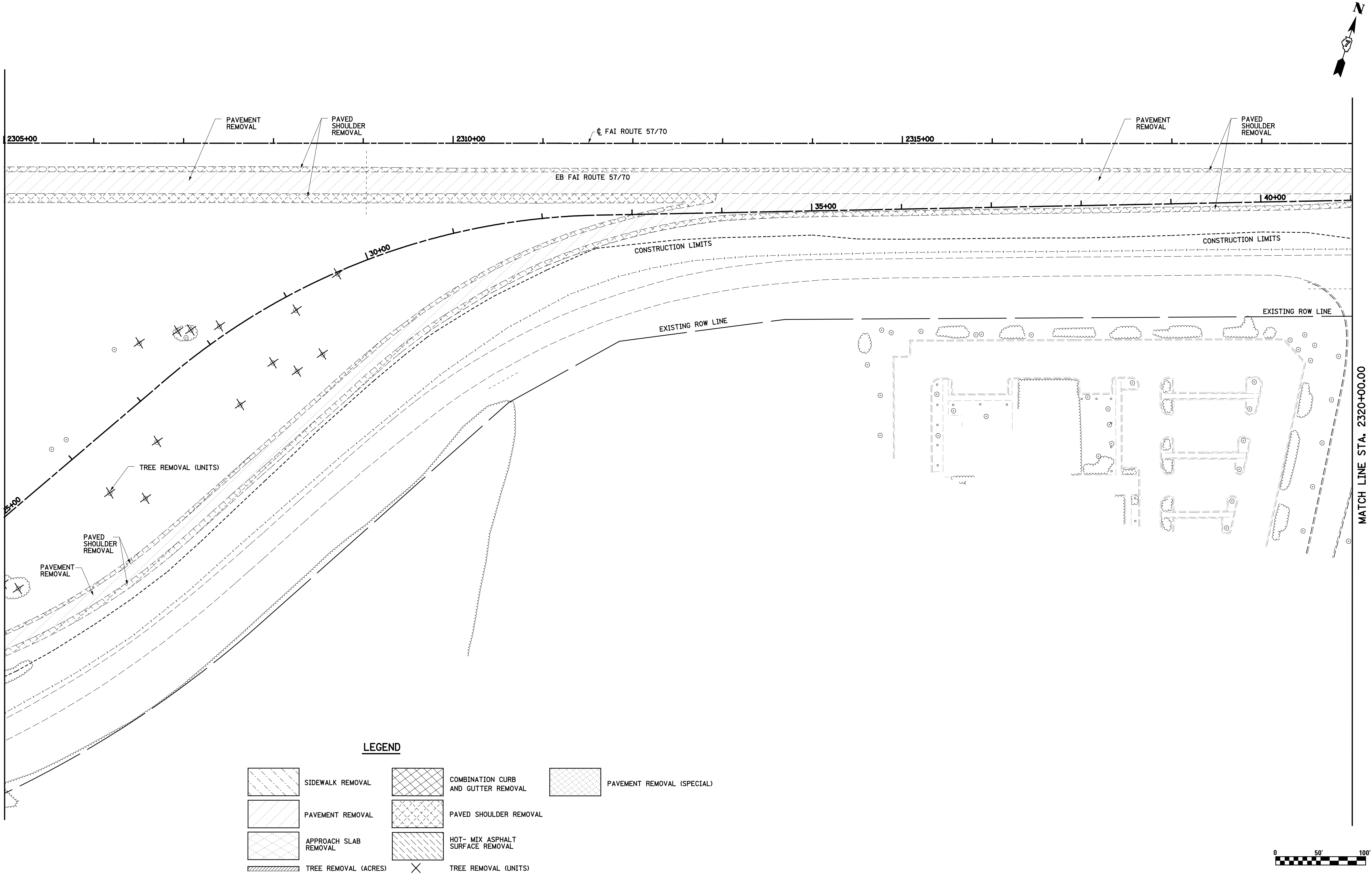
REMOVAL PLAN, FAI ROUTE 57/70 EASTBOUND

SCALE: 1"=50' | SHEET NO. 3 OF 16 SHEETS | STA. 2290+00.00 TO STA. 2305+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	485

CONTRACT NO. 74295

FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT



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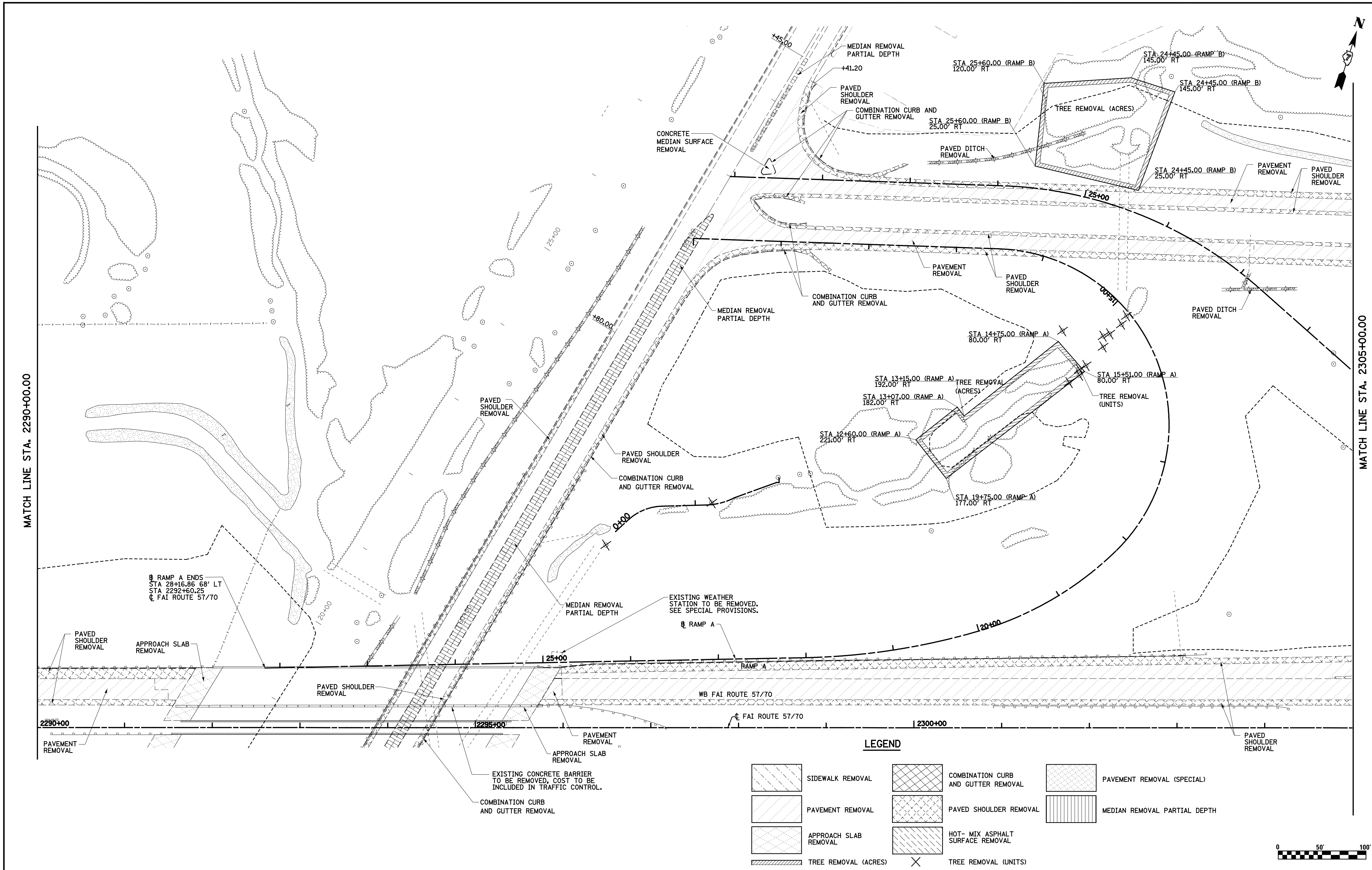
		DRAWN - MAB	REVISED -		
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -		SCALE: 1"=50' — SHEET NO. 4 OF 16 SHEETS — STA. 2305+00.00 TO STA. 2320+00.00
	PLOT DATE = $DATE$	DATE - 3-31-08	REVISED -		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	486
		CONTRACT NO. 74295		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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		DRAWN - MAB	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -
	PLOT DATE = $DATE$	DATE - 3-31-08	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REMOVAL PLAN, NORTH TRI LEVEL FAI ROUTE 57/70 WESTBOUND

SCALE: 1"=50' | SHEET NO. 5 OF 16 SHEETS | STA. 2290+00.00 TO STA. 2305+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	487

CONTRACT NO. 74295

FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT

LEGEND

- SIDEWALK REMOVAL
- COMBINATION CURB AND GUTTER REMOVAL
- PAVEMENT REMOVAL (SPECIAL)
- PAVEMENT REMOVAL
- PAVED SHOULDER REMOVAL
- APPROACH SLAB REMOVAL
- HOT- MIX ASPHALT SURFACE REMOVAL
- TREE REMOVAL (ACRES)
- TREE REMOVAL (UNITS)

0 50' 100'

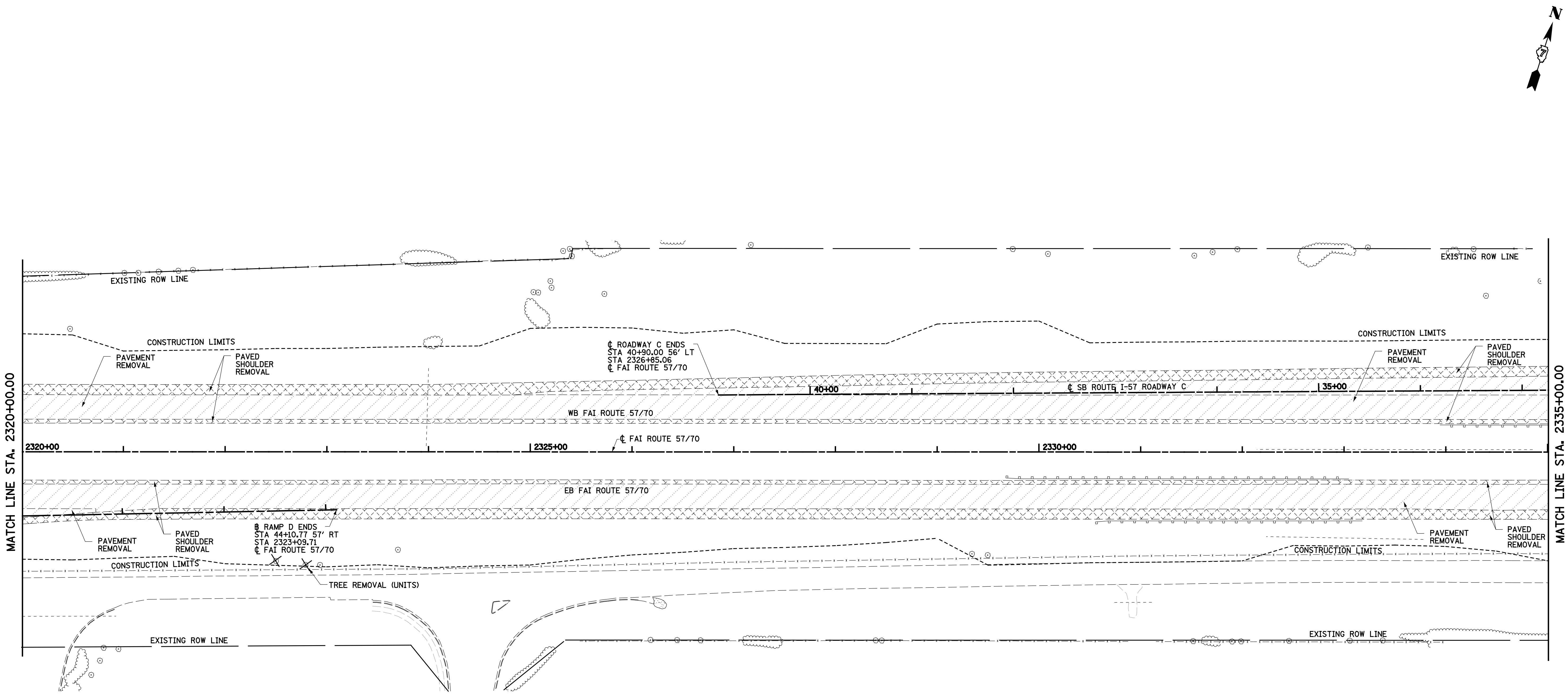
FILE NAME = S:\Projects\403-00072_57-70\dgn\N TriLv\removal_ntl.dgn	USER NAME = $USER$	DESIGNED - JWS	REVISED -
		DRAWN - MAB	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -
	PLOT DATE = $DATE$	DATE - 3-31-08	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REMOVAL PLAN, NORTH TRI LEVEL FAI ROUTE 57/70 WESTBOUND

SCALE: 1"=50'	SHEET NO. 6 OF 16 SHEETS	STA. 2305+00.00 TO STA. 2320+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	488
		CONTRACT NO. 74295		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



LEGEND

- SIDEWALK REMOVAL
- COMBINATION CURB AND GUTTER REMOVAL
- PAVEMENT REMOVAL (SPECIAL)
- PAVEMENT REMOVAL
- PAVED SHOULDER REMOVAL
- APPROACH SLAB REMOVAL
- HOT- MIX ASPHALT SURFACE REMOVAL
- TREE REMOVAL (ACRES)
- TREE REMOVAL (UNITS)

0 50' 100'

FILE NAME = S:\Projects\403-00072.57-70\dgn\N TriLv\removal_ntl.dgn	USER NAME = $USER$	DESIGNED - JWS	REVISED -
		DRAWN - MAB	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -
	PLOT DATE = $DATE$	DATE - 3-31-08	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

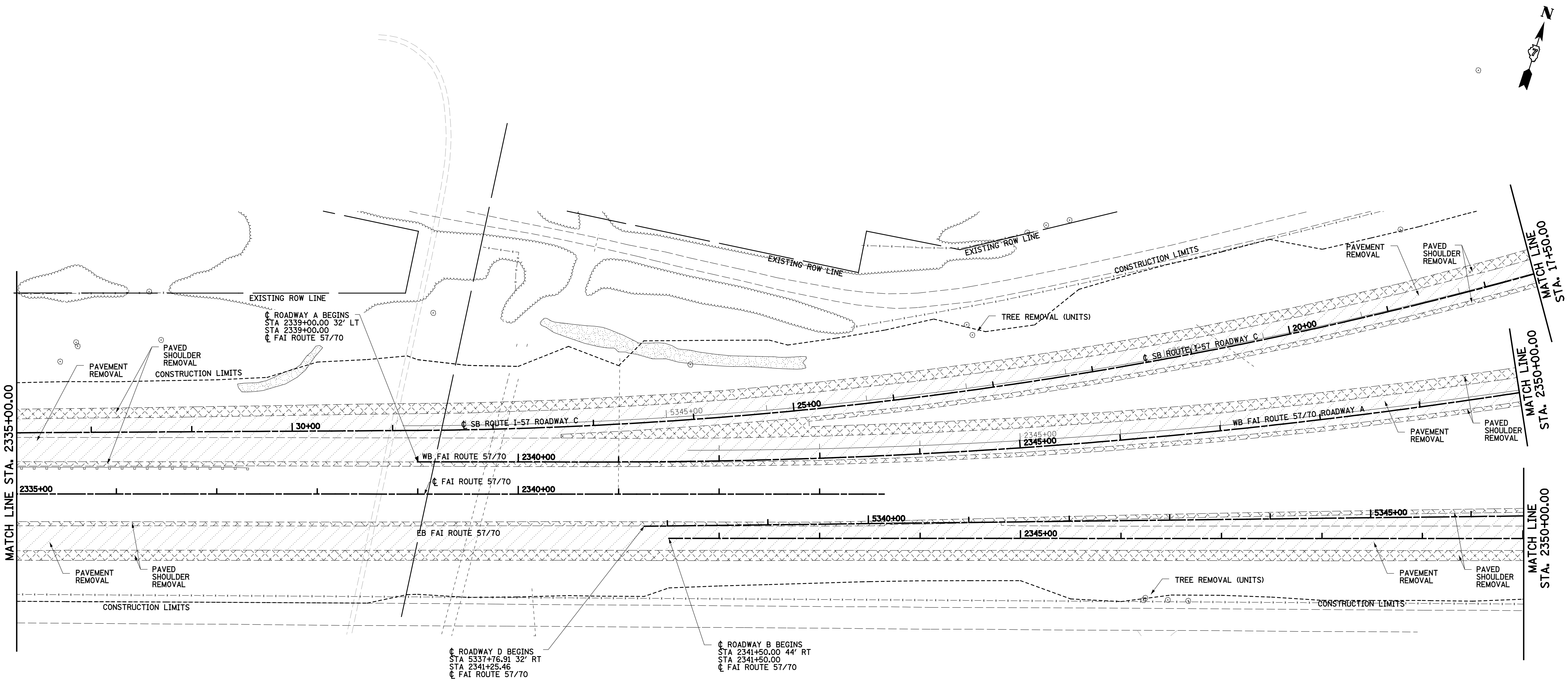
REMOVAL PLAN, NORTH TRI LEVEL FAI ROUTE 57/70

SCALE: 1"=50' | SHEET NO. 7 OF 16 SHEETS | STA. 2320+00.00 TO STA. 2335+00.00

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	489

CONTRACT NO. 74295

FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT



LEGEND

- SIDEWALK REMOVAL
- PAVEMENT REMOVAL
- APPROACH SLAB REMOVAL
- TREE REMOVAL (ACRES)
- COMBINATION CURB AND GUTTER REMOVAL
- PAVED SHOULDER REMOVAL
- HOT- MIX ASPHALT SURFACE REMOVAL
- TREE REMOVAL (UNITS)
- PAVEMENT REMOVAL (SPECIAL)

0 50' 100'

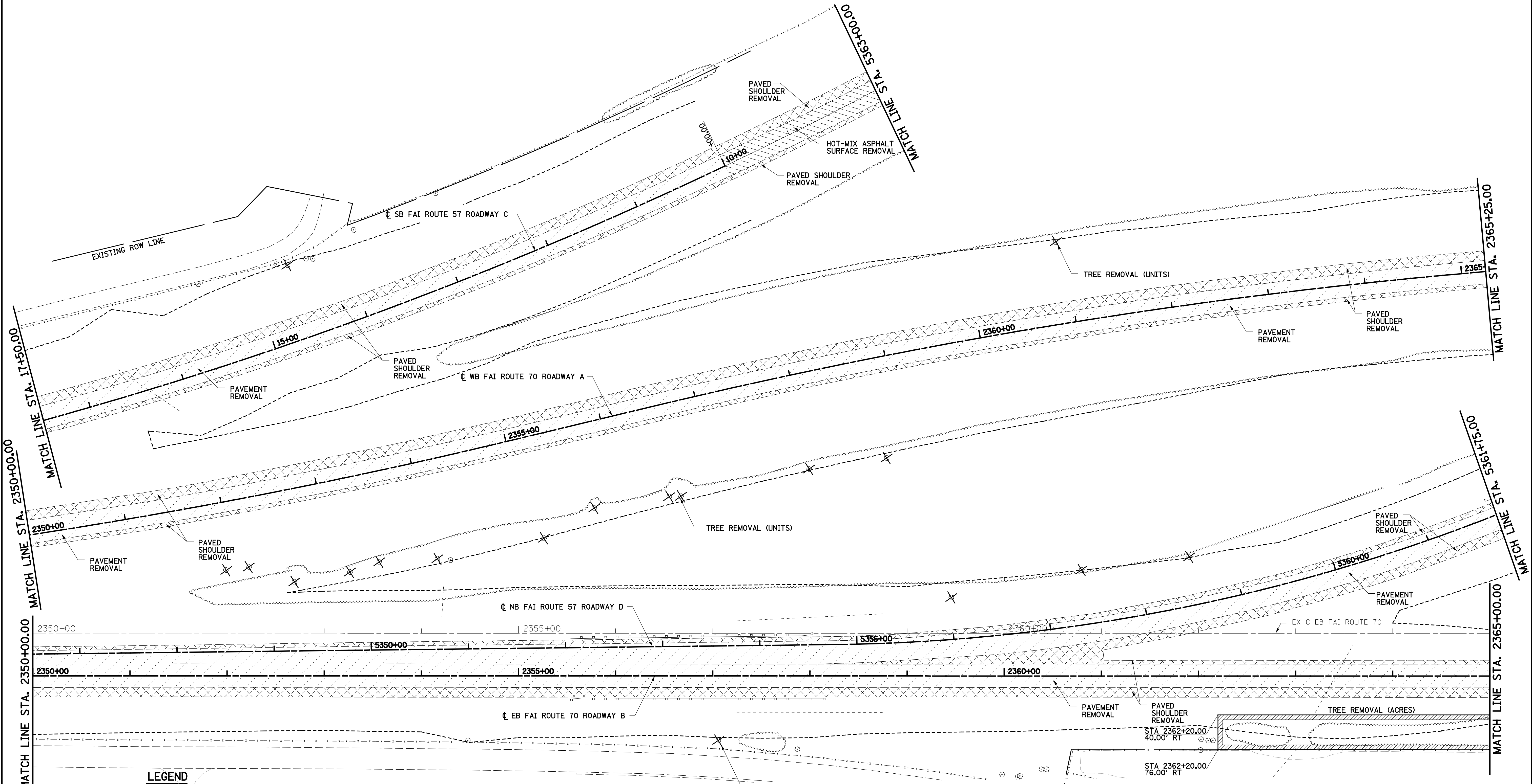
FILE NAME = S:\Projects\483-00072.57-70\dgn\N Tri\Lv\removal_ntl.dgn	USER NAME = $USER$	DESIGNED - JWS	REVISED -
		DRAWN - MAB	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -
	PLOT DATE = $DATE$	DATE - 3-31-08	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REMOVAL PLAN, NORTH TRI LEVEL FAI ROUTE 57/70

SCALE: 1"=50' | SHEET NO. 8 OF 16 SHEETS | STA. 2335+00.00 TO STA. 2350+00.00

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	490
		CONTRACT NO. 74295		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



LEGEND

SIDEWALK REMOVAL	COMBINATION CURB AND GUTTER REMOVAL
PAVEMENT REMOVAL	PAVED SHOULDER REMOVAL
APPROACH SLAB REMOVAL	HOT- MIX ASPHALT SURFACE REMOVAL
TREE REMOVAL (ACRES)	TREE REMOVAL (UNITS)
PAVEMENT REMOVAL (SPECIAL)	

FILE NAME = S:\Projects\483-00072.57-70\dgn\N Tri\Lv\removal_ntl.dgn	USER NAME = $USER$	DESIGNED - JWS	REVISED -
		DRAWN - MAB	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -
	PLOT DATE = $DATE$	DATE - 3-04-08	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

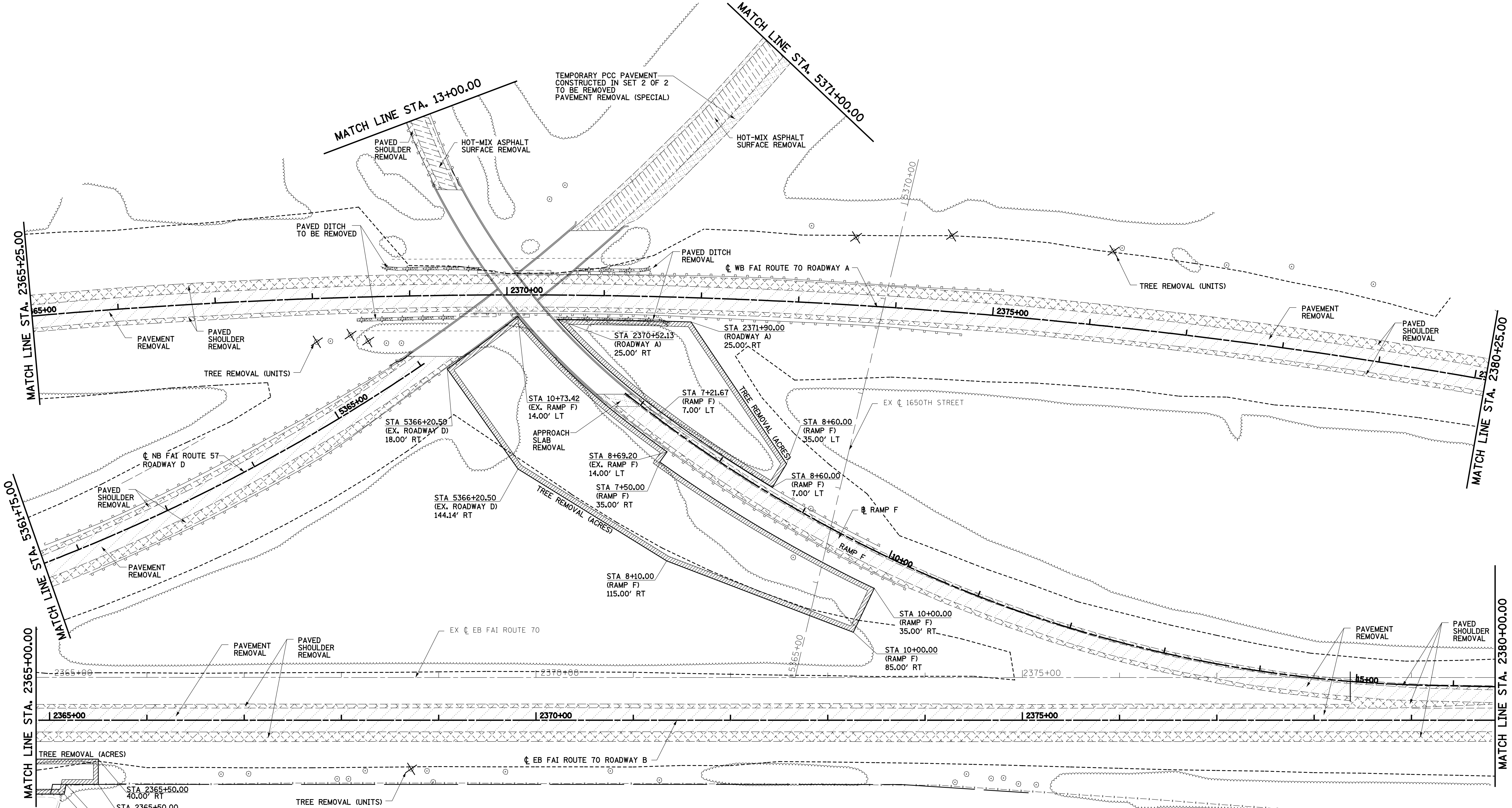
REMOVAL PLAN, NORTH TRI LEVEL

SCALE: 1"=50' | SHEET NO. 9 OF 16 SHEETS | STA. 2350+00.00 TO STA. 2365+00.00

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	491

CONTRACT NO. 74295

FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT

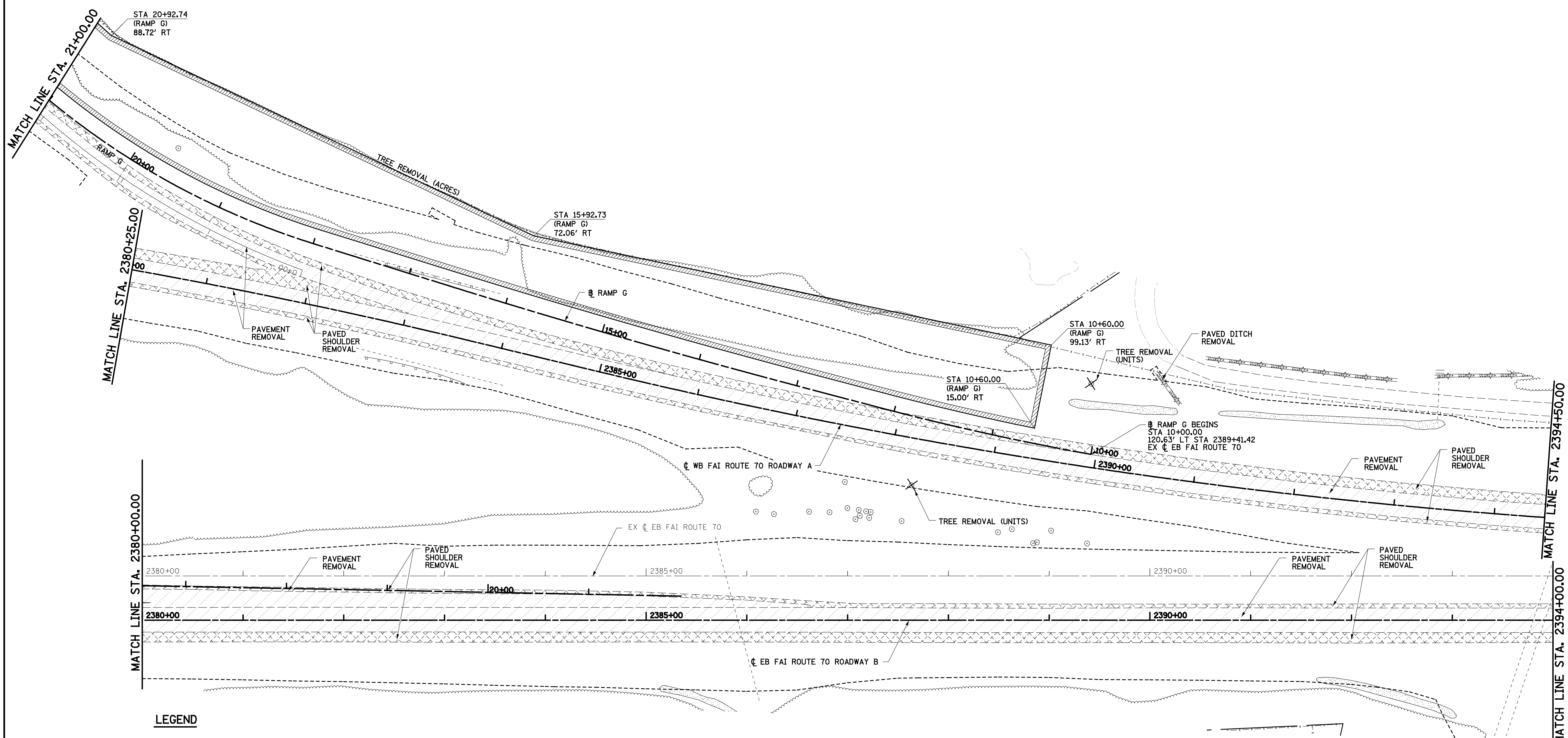


LEGEND

SIDEWALK REMOVAL	COMBINATION CURB AND GUTTER REMOVAL	PAVEMENT REMOVAL (SPECIAL)
PAVEMENT REMOVAL	PAVED SHOULDER REMOVAL	
APPROACH SLAB REMOVAL	HOT- MIX ASPHALT SURFACE REMOVAL	
TREE REMOVAL (ACRES)	TREE REMOVAL (UNITS)	

FILE NAME = S:\Projects\483-0007\2.57-70\dgn\N Tri-Lv\removal_nt1.dgn	USER NAME = $USER$	DESIGNED - JWS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REMOVAL PLAN, NORTH TRI LEVEL
		DRAWN - MAB	REVISED -		
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -		
	PLOT DATE = $DATE$	DATE - 3-04-08	REVISED -		SCALE: 1"=50' SHEET NO. 10 OF 16 SHEETS STA. 2365+00.00 TO STA. 2380+00.00

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	492
		CONTRACT NO. 74295		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



LEGEND

SIDEWALK REMOVAL	COMBINATION CURB AND GUTTER REMOVAL
PAVEMENT REMOVAL	PAVED SHOULDER REMOVAL
APPROACH SLAB REMOVAL	HOT- MIX ASPHALT SURFACE REMOVAL
TREE REMOVAL (ACRES)	TREE REMOVAL (UNITS)
PAVEMENT REMOVAL (SPECIAL)	

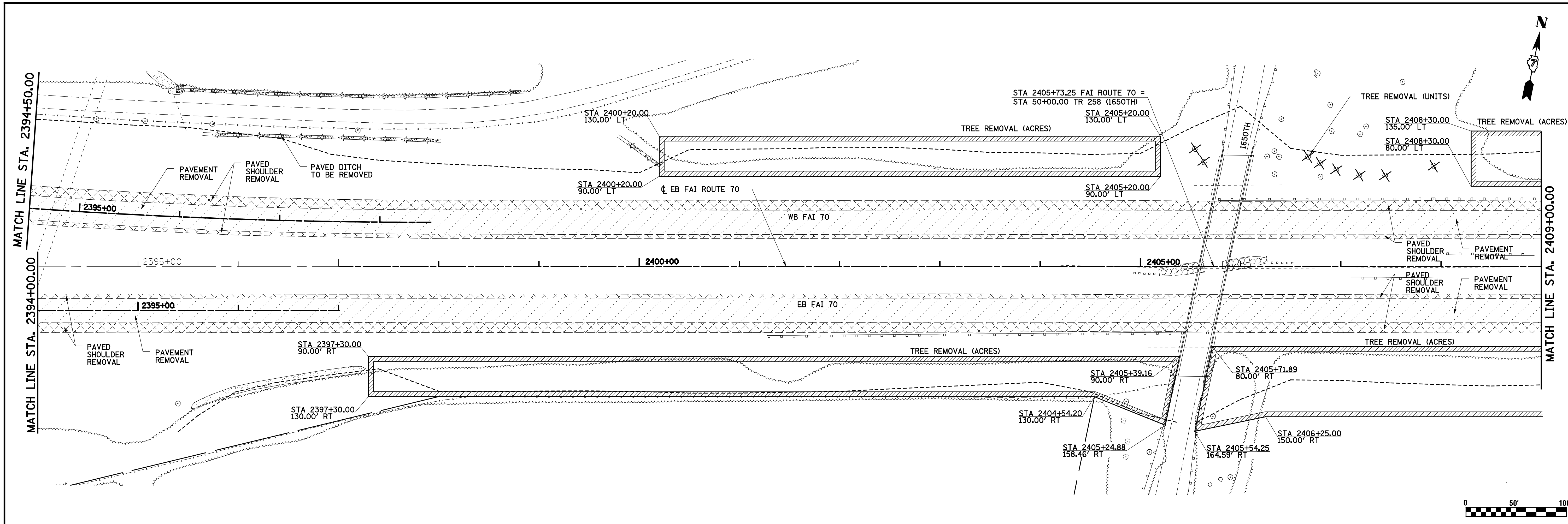
FILE NAME = S:\Projects\403-00072.57-70\dgn\N Tri Lv\removal_ntl.dgn	USER NAME = $USER$	DESIGNED - JWS	REVISED -
		DRAWN - MAB	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -
	PLOT DATE = $DATE$	DATE - 3-04-08	REVISED -

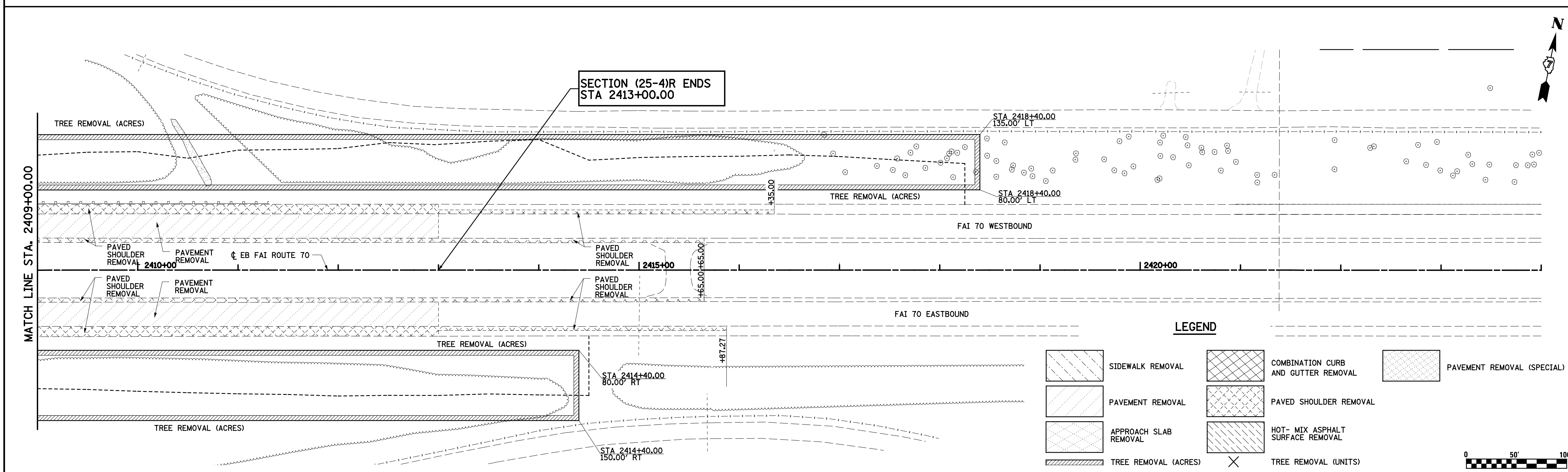
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REMOVAL PLAN, NORTH TRI LEVEL

SCALE: 1"=50' | SHEET NO. 11 OF 16 SHEETS | STA. 2380+00.00 TO STA. 2390+00.00

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	493
		CONTRACT NO. 74295		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		





FILE NAME =	USER NAME = $USER$	DESIGNED - JWS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		DRAWN - MAB	REVISED -	
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -	
	PLOT DATE = $DATE$	DATE - 3-04-08	REVISED -	

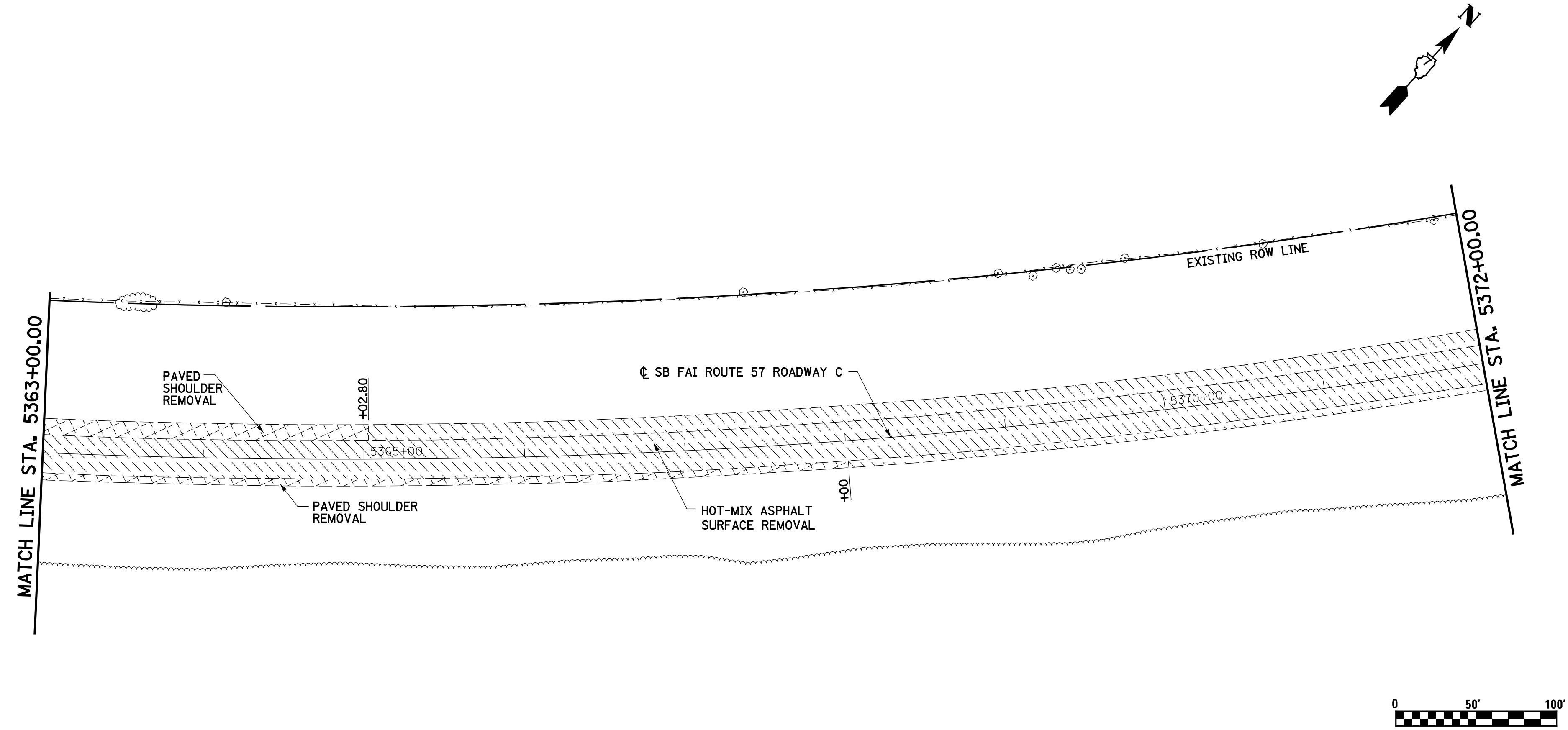
REMOVAL PLAN, NORTH TRI LEVEL I-70 EAST

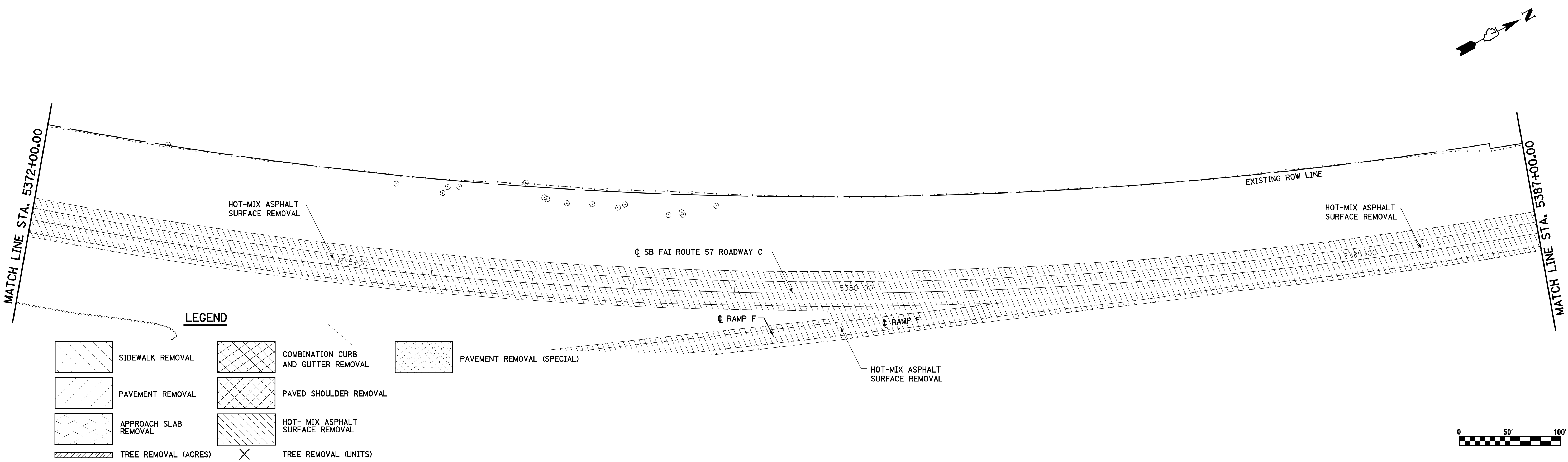
SCALE: 1"=50' | SHEET NO. 12 OF 16 SHEETS | STA. 2394+00.00 TO STA. 2424+00.00

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	494

CONTRACT NO. 74295

FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT





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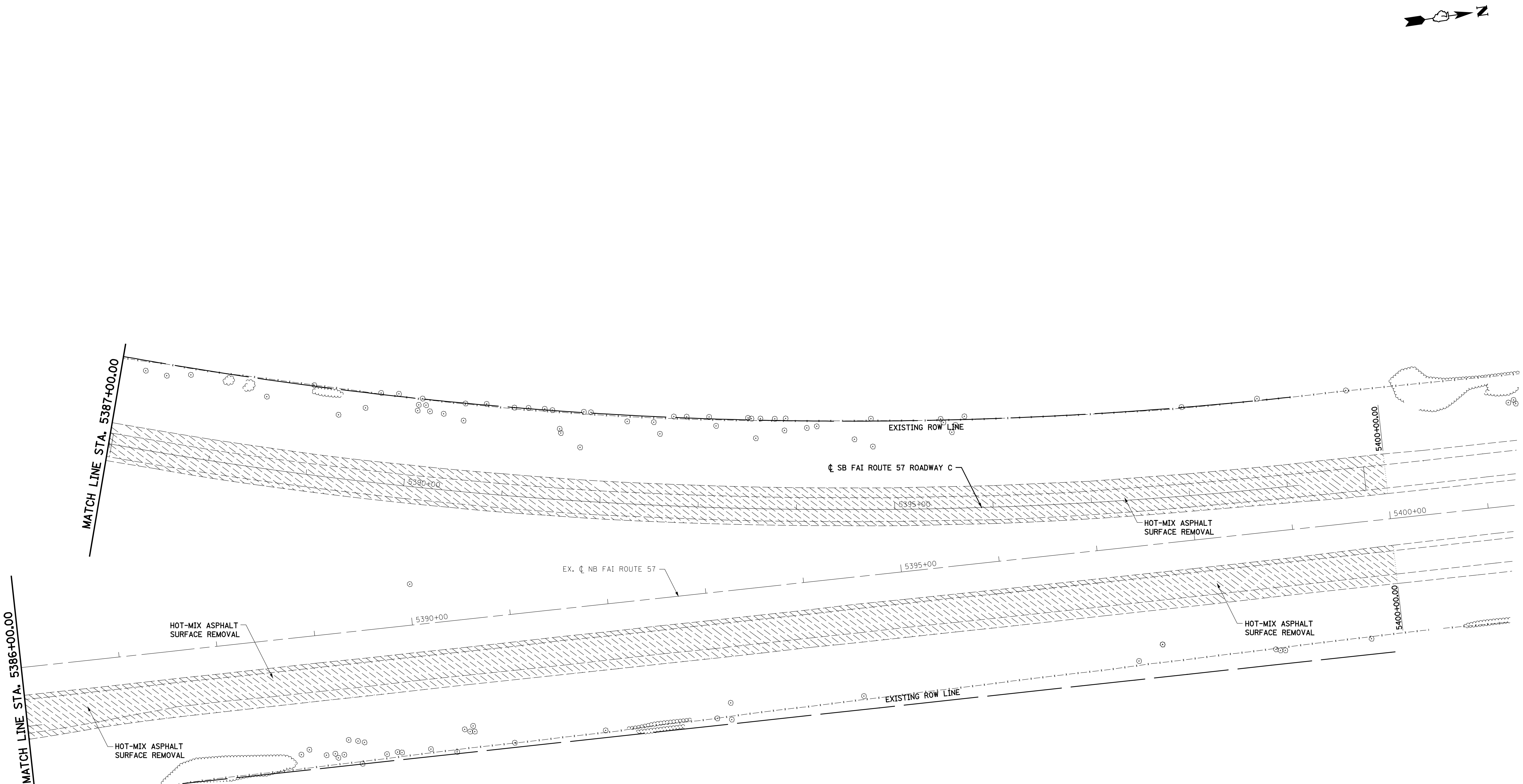
		DRAWN - MAB	REVISED -			COUNTY EFFINGHAM	TOTAL SHEETS 1760
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -		SCALE: 1"=50'	SHEET NO. 13 OF 16 SHEETS	SHEET NO. 495
	PLOT DATE = $DATE$	DATE - 3-04-08	REVISED -		STA. 5363+00.00 TO STA. 5387+00.00	CONTRACT NO. 74295	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT



LEGEND

- SIDEWALK REMOVAL
- COMBINATION CURB AND GUTTER REMOVAL
- PAVEMENT REMOVAL (SPECIAL)
- PAVEMENT REMOVAL
- PAVED SHOULDER REMOVAL
- APPROACH SLAB REMOVAL
- HOT- MIX ASPHALT SURFACE REMOVAL
- TREE REMOVAL (ACRES)
- TREE REMOVAL (UNITS)

0 50' 100'

FILE NAME = S:\Projects\483-00072.57-70\dgn\N Tri Lv\removal_ntl.dgn	USER NAME = $USER$	DESIGNED - JWS	REVISED -
		DRAWN - MAB	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -
	PLOT DATE = $DATE$	DATE - 3-04-08	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REMOVAL PLAN, ROADWAY C NORTH TRI LEVEL

SCALE: 1"=50' | SHEET NO. 14 OF 16 SHEETS | STA. 5387+00.00 TO STA. 5400+40.00

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	496
		CONTRACT NO. 74295		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

LEGEND

SIDEWALK REMOVAL	COMBINATION CURB AND GUTTER REMOVAL
PAVEMENT REMOVAL (SPECIAL)	
PAVEMENT REMOVAL	PAVED SHOULDER REMOVAL
APPROACH SLAB REMOVAL	HOT- MIX ASPHALT SURFACE REMOVAL
TREE REMOVAL (ACRES)	TREE REMOVAL (UNITS)

FILE NAME = S:\Projects\403-00072.57-70\dgn\N TriLv\removal_ntl.dgn	USER NAME = $USER$	DESIGNED - JWS	REVISED -
		DRAWN - MAB	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -
	PLOT DATE = $DATE$	DATE - 3-04-08	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

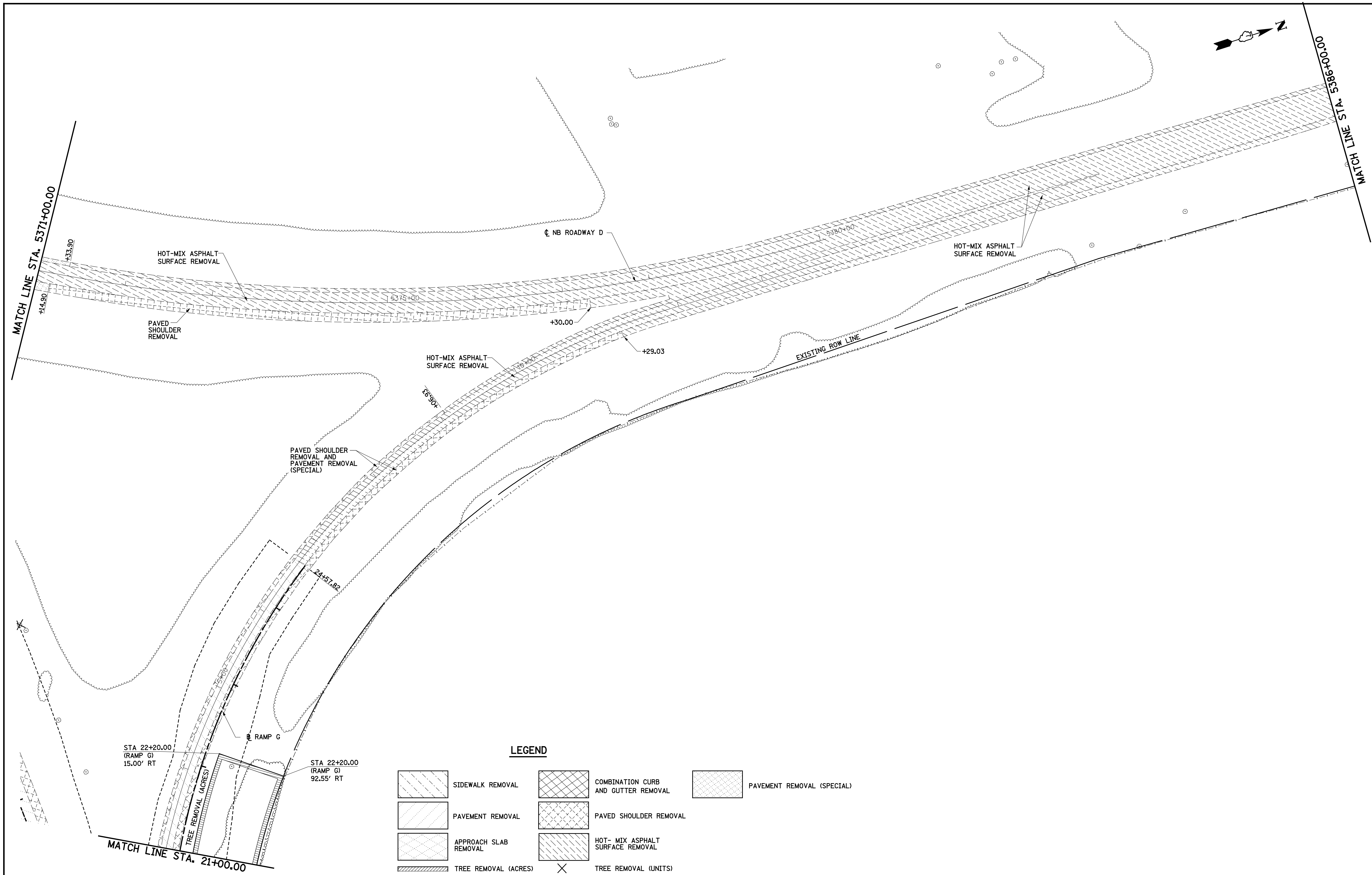
REMOVAL PLAN, RAMP F NORTH TRI LEVEL

SCALE: 1"=50' | SHEET NO. 15 OF 16 SHEETS | STA. 13+00.00 TO STA. 2384+36.39

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	497

CONTRACT NO. 74295

FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT



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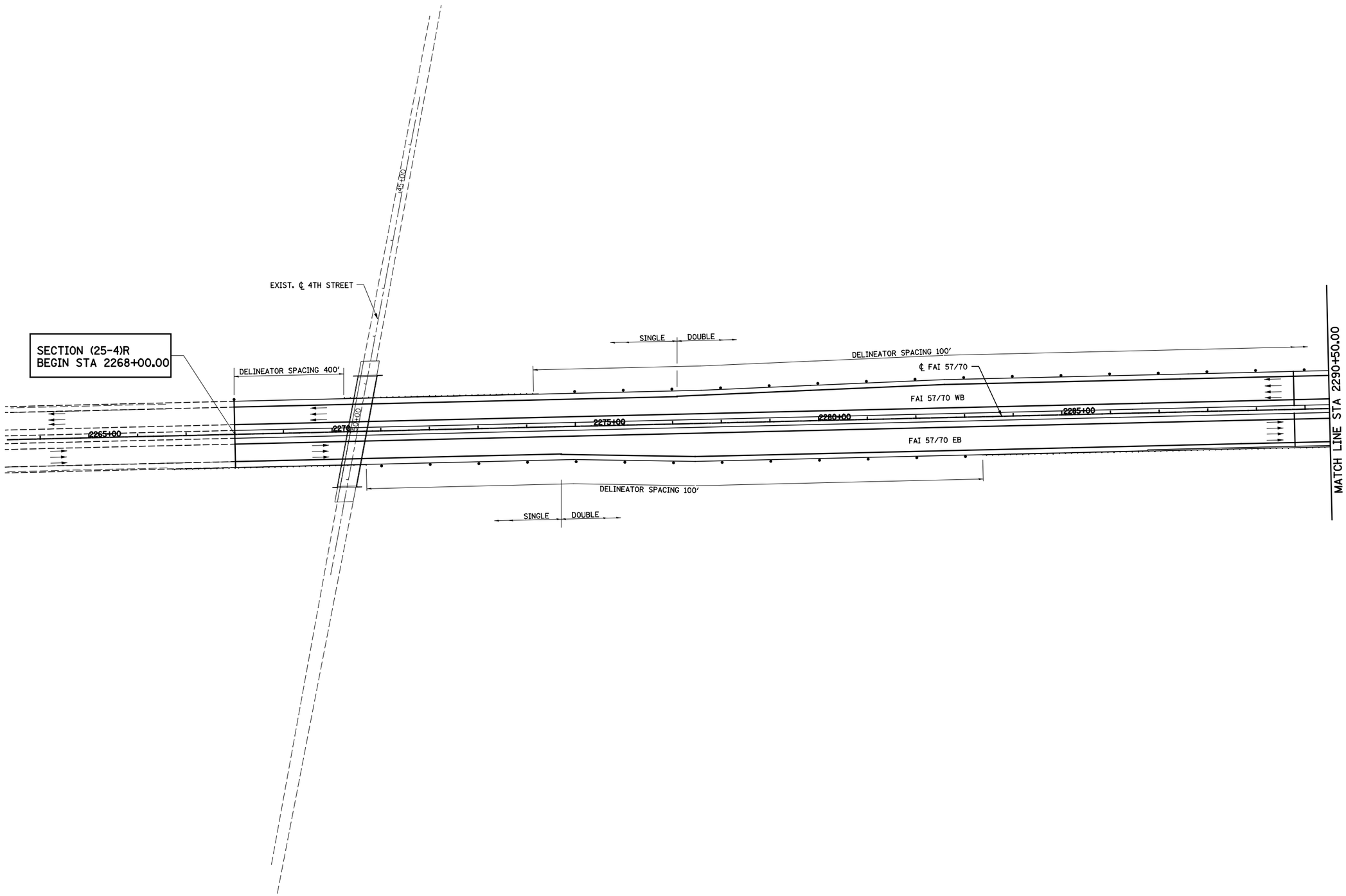
		DRAWN - MAB	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -
	PLOT DATE = $DATE$	DATE - 3-04-08	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REMOVAL PLAN, RAMP G NORTH TRI LEVEL

SCALE: 1"=50' | SHEET NO. 16 OF 16 SHEETS | STA. 21+00.00 TO STA. 5386+00.00

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-4)R	EFFINGHAM	1760	498
		CONTRACT NO. 74295		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



LEGEND

DELINEATOR •

NOTE: FOR EXISTING ALIGNMENTS AND CONTROLS PRESENTED ON THIS SHEET SEE HORIZONTAL CONTROL SHEET

0 100' 200'

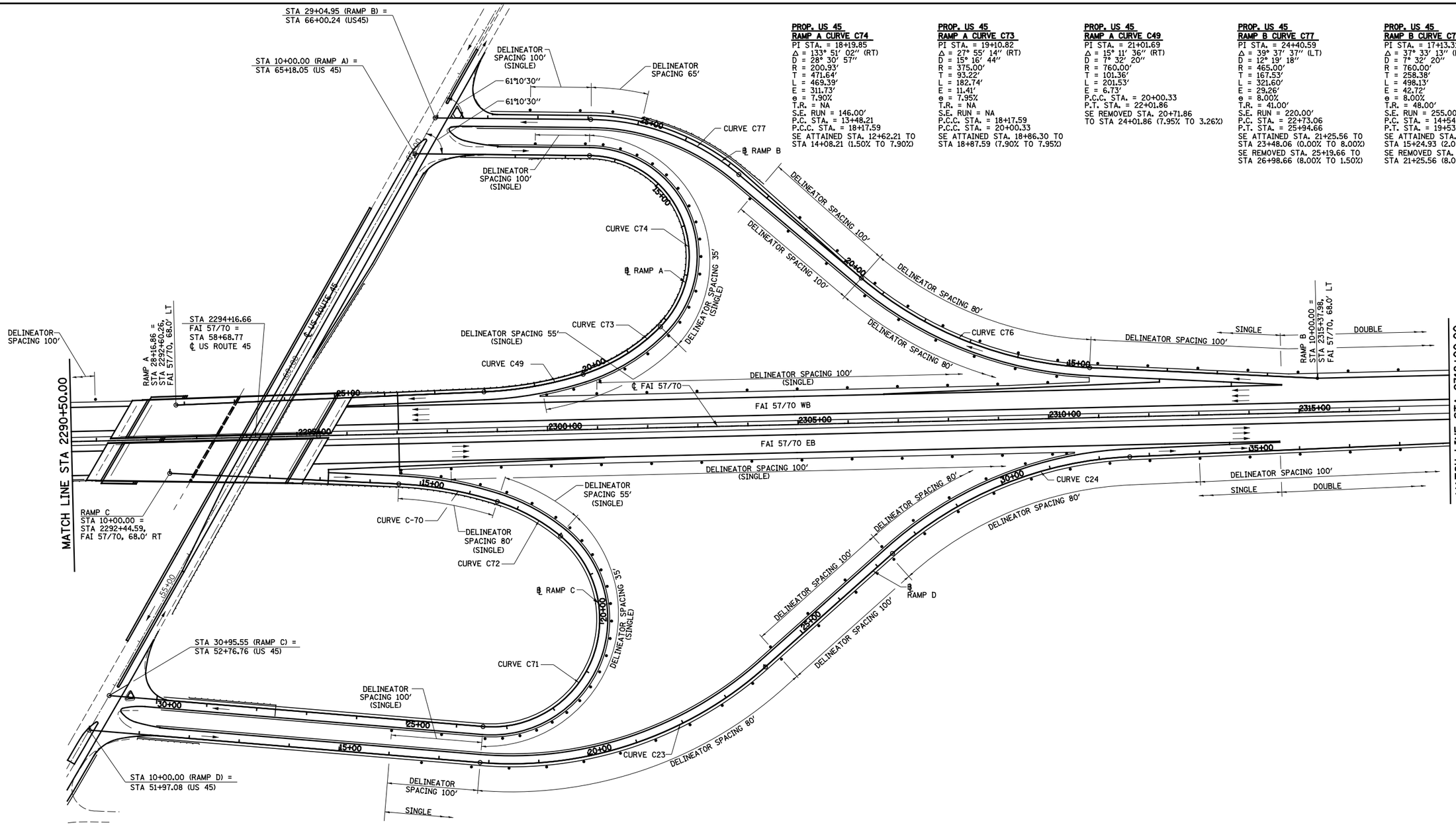
FILE NAME = S:\Projects\403-00072,57-70\dgn\N TriLv\delineator detail.dgn	USER NAME = $USER$	DESIGNED - JWS	REVISED -
		DRAWN - PDB	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -
	PLOT DATE = $DATE$	DATE - 5-25-08	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DELINEATOR DETAIL
FAI 57/70 AT US ROUTE 45

SCALE: 1"=100' | SHEET NO. 1 OF 6 SHEETS | STA. 2265+00.00 TO STA. 2290+50.00

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55/70	(25-4)R	EFFINGHAM	1760	499
		CONTRACT NO. 74295		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



PROP. US 45
RAMP A CURVE C74
PI STA. = 18+19.85
Δ = 133° 51' 02" (RT)
D = 28° 30' 57"
R = 200.93'
T = 471.64'
L = 469.39'
E = 311.73'
e = 7.90%
T.R. = NA
S.E. RUN = 146.00'
P.C. STA. = 13+48.21
P.C.C. STA. = 18+17.59
SE ATTAINED STA. 12+62.21 TO STA 14+08.21 (1.50% TO 7.90%)

PROP. US 45
RAMP A CURVE C73
PI STA. = 19+10.82
Δ = 27° 55' 14" (RT)
D = 15° 16' 44"
R = 375.00'
T = 93.22'
L = 182.74'
E = 11.41'
e = 7.95%
T.R. = NA
S.E. RUN = NA
P.C.C. STA. = 18+17.59
P.C.C. STA. = 20+00.33
SE ATTAINED STA. 18+86.30 TO STA 18+87.59 (7.90% TO 7.95%)

PROP. US 45
RAMP A CURVE C49
PI STA. = 21+01.69
Δ = 15° 11' 36" (RT)
D = 7° 32' 20"
R = 760.00'
T = 101.36'
L = 201.53'
E = 6.73'
P.C.C. STA. = 20+00.33
P.T. STA. = 22+01.86
SE REMOVED STA. 20+71.86 TO STA 24+01.86 (7.95% TO 3.26%)

PROP. US 45
RAMP B CURVE C77
PI STA. = 24+40.59
Δ = 39° 37' 37" (LT)
D = 12° 19' 18"
R = 465.00'
T = 167.53'
L = 321.60'
E = 29.26'
e = 8.00%
T.R. = 41.00'
S.E. RUN = 220.00'
P.C. STA. = 22+73.06
P.T. STA. = 25+94.66
SE ATTAINED STA. 21+25.56 TO STA 23+48.06 (0.00% TO 8.00%)
SE REMOVED STA. 25+19.66 TO STA 26+98.66 (8.00% TO 1.50%)

PROP. US 45
RAMP B CURVE C76
PI STA. = 17+13.31
Δ = 37° 33' 13" (RT)
D = 7° 32' 20"
R = 760.00'
T = 258.38'
L = 498.13'
E = 42.72'
e = 8.00%
T.R. = 48.00'
S.E. RUN = 255.00'
P.C. STA. = 14+54.93
P.T. STA. = 19+53.06
SE ATTAINED STA. 13+14.82 TO STA 15+24.93 (2.00% TO 8.00%)
SE REMOVED STA. 18+68.06 TO STA 21+25.56 (8.00% TO 0.00%)

PROP. US 45
RAMP C CURVE C-70
PI STA. = 15+58.22
Δ = 15° 06' 14" (RT)
D = 7° 32' 20"
R = 760.00'
T = 100.76'
L = 200.35'
E = 6.65'
e = 8.00%
T.R. = NA
S.E. RUN = NA
P.C. STA. = 14+57.46
P.C.C. STA. = 16+57.81
SE ATTAINED STA. 13+16+37 TO STA 15+27.46 (2.00% TO 8.00%)

PROP. US 45
RAMP C.CURVE C72
PI STA. = 17+30.86
Δ = 21° 45' 53" (RT)
D = 15° 04' 40"
R = 380.00'
T = 73.06'
L = 144.35'
E = 6.96'
e = 8.00%
T.R. = NA
S.E. RUN = NA
P.C.C. STA. = 16+57.81
P.C.C. STA. = 18+02.16
SE REMOVED STA. 17+37.16 TO STA 17+42.88 (8.00% TO 7.75%)

PROP. US 45
RAMP C CURVE C71
PI STA. = 24+89.03
Δ = 145° 14' 17" (RT)
D = 26° 38' 57"
R = 215.00'
T = 686.87'
L = 545.00'
E = 504.73'
e = 7.75%
T.R. = NA
S.E. RUN = 145.00'
P.C.C. STA. = 18+02.16
P.T. STA. = 23+47.16
SE REMOVED STA. 22+87.16 TO STA 24+32.16 (7.75% TO 1.50%)

PROP. US 45
RAMP D CURVE C23
PI STA. = 21+09.24
Δ = 46° 31' 26" (LT)
D = 7° 32' 20"
R = 760.00'
T = 326.71'
L = 617.12'
E = 67.25'
e = 8.00%
T.R. = 48.00'
S.E. RUN = 255.00'
P.C. STA. = 17+82.53
P.T. STA. = 23+99.65
SE ATTAINED STA. 16+60.53 TO STA 18+67.53 (1.50% TO 8.00%)
SE REMOVED STA. 23+14.65 TO STA 25+69.66 (8.00% TO 0.00%)

PROP. US 45
RAMP D CURVE C24
PI STA. = 30+11.02
Δ = 39° 17' 50" (RT)
D = 7° 32' 20"
R = 760.00'
T = 271.35'
L = 521.26'
E = 46.99'
e = 8.00%
T.R. = 48.00'
S.E. RUN = 255.00'
P.C. STA. = 27+39.67
P.T. STA. = 32+60.93
SE ATTAINED STA. 25+69.66 TO STA 28+24.67 (0.00% TO 8.00%)
SE REMOVED STA. 31+30.93 TO STA 34+60.93 (8.00% TO 3.26%)

LEGEND

DELINEATOR •

NOTE: FOR EXISTING ALIGNMENTS AND CONTROLS PRESENTED ON THIS SHEET SEE HORIZONTAL CONTROL SHEET

0 100' 200'

FILE NAME = S:\Projects\403-00072.57-70\dgn\N TrlLv\delineator detail.dgn	USER NAME = $USER$	DESIGNED - JWS	REVISED -
		DRAWN - PDB	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - BRM	REVISED -
	PLOT DATE = $DATE$	DATE - 5-25-08	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DELINEATOR DETAIL
FAI 57/70 AT US ROUTE 45

SCALE: 1"=100' | SHEET NO. 2 OF 6 SHEETS | STA. 2290+50.00 TO STA. 2318+00.00

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55/70	(25-4)R	EFFINGHAM	1760	500
		CONTRACT NO. 74295		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		