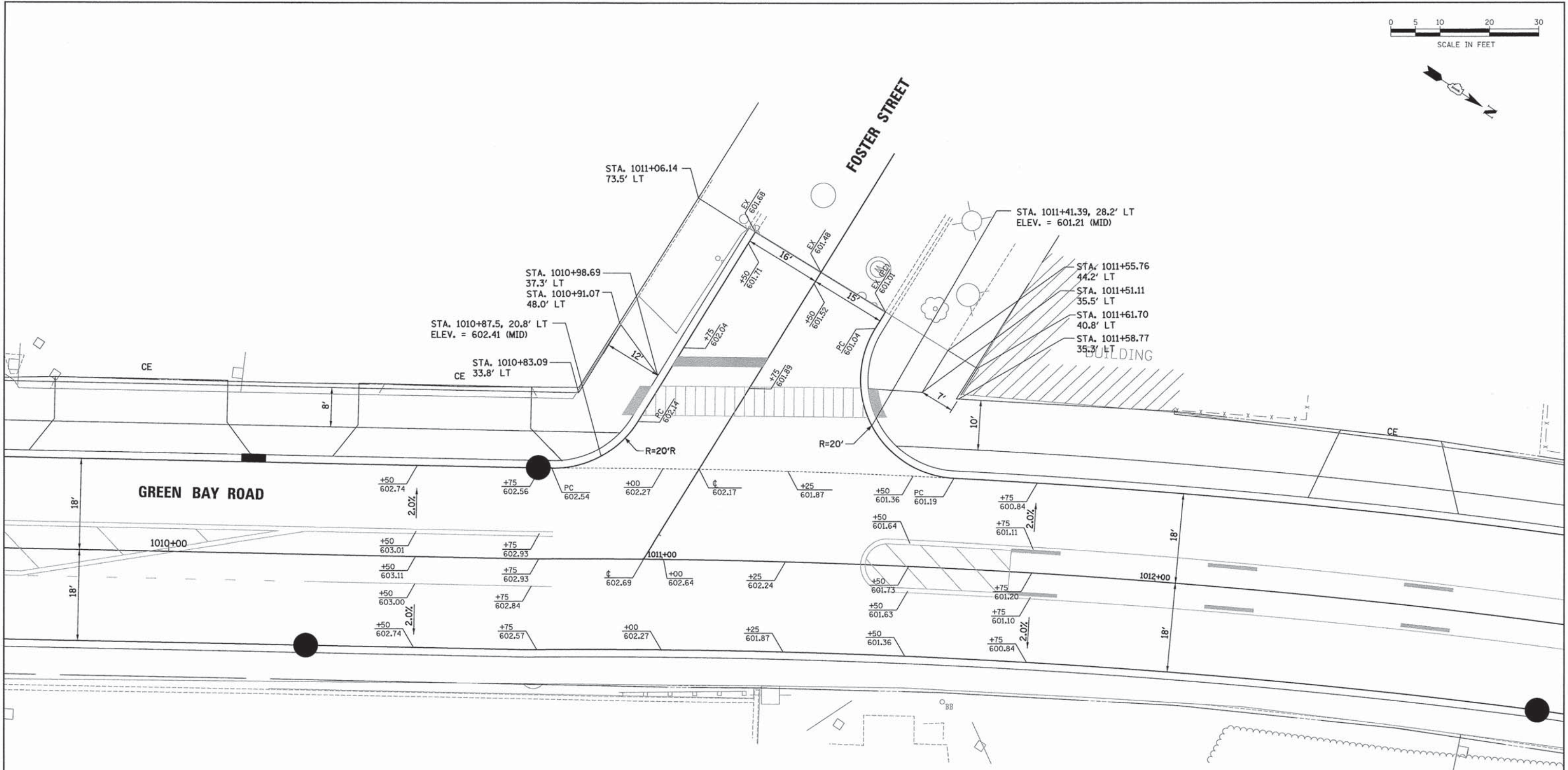




DATE	BY
DATE	BY
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DATE	BY
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DATE	BY
DATE	BY
DATE	BY
DATE	BY



FILE NAME: ER081\_sht.plt.dgn



USER NAME = bhanrichs	DESIGNED - BAH	REVISED - -
PLOT SCALE = 10,0000' / 1"	DRAWN - BAH	REVISED -
PLOT DATE = 1/7/2016	CHECKED - MAR	REVISED -
	DATE - 10/9/2015	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**INTERSECTION DETAIL SHEETS  
GREEN BAY ROAD AND FOSTER STREET**

SCALE: \_\_\_\_\_ SHEET 3 OF 12 SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

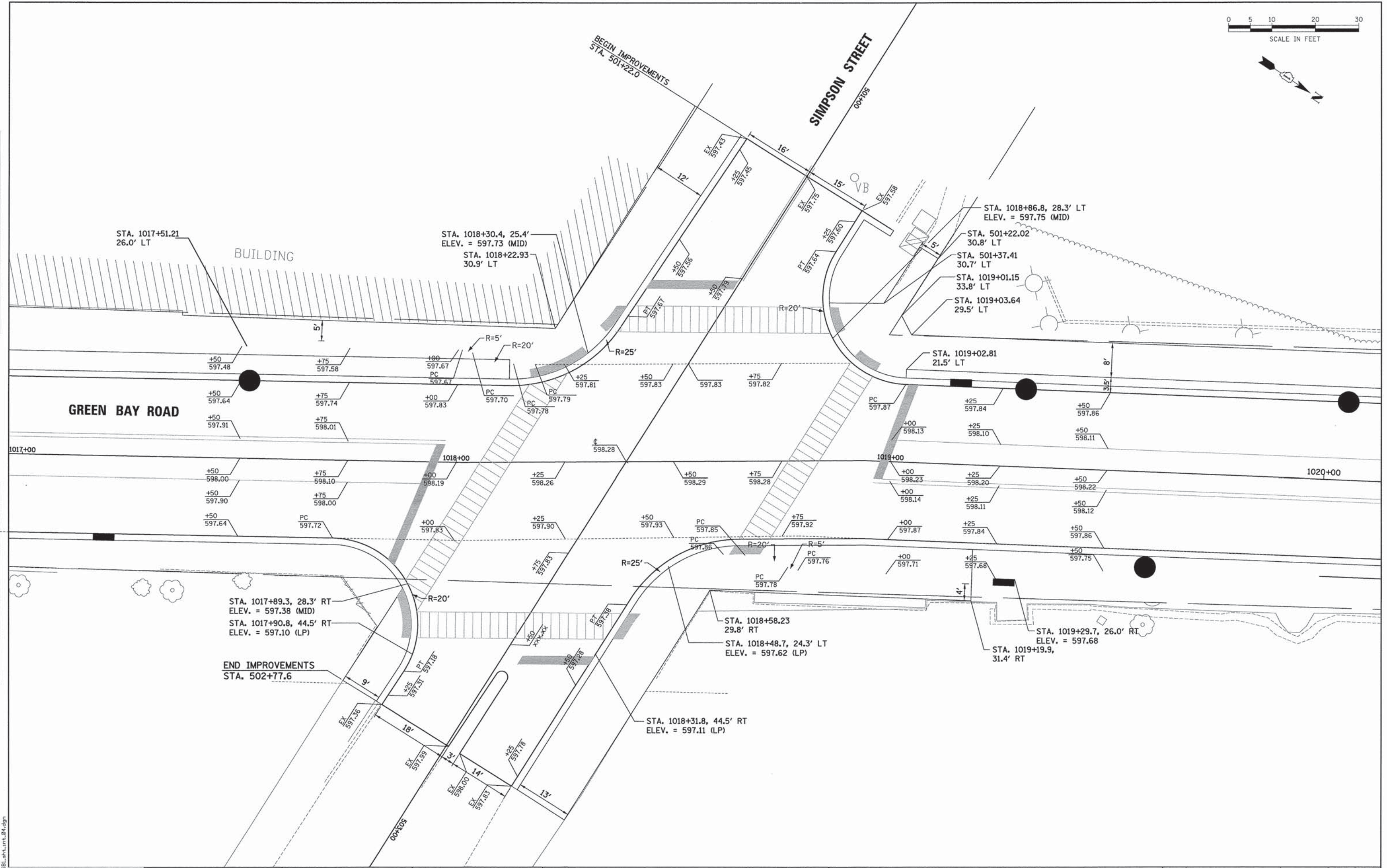
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	201
CONTRACT NO. 61C32			[ILLINOIS] FED. AID PROJECT	





PLAN	SUBMITTED	DATE
	PLOTTED	
	ALIGNMENT CHECKED	
	NOTE BOOK	
	CADD FILE NAME	

PROFILE	SUBMITTED	DATE
	PLOTTED	
	GRADES CHECKED	
	NOTE BOOK	
	STRUCTURE NOTATIONS OK'D	



FILE NAME: ER02L-INT-INT-04.dgn

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 DEERFIELD, IL 60015  
 (847) 426-1000  
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USER NAME = bharrish	DESIGNED - BAH	REVISED - -
PLLOT SCALE = 1/8" = 10'-0"	DRAWN - BAH	REVISED - -
PLLOT DATE = 1/7/2016	CHECKED - MAR	REVISED - -
	DATE - 10/9/2015	REVISED - -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

<b>INTERSECTION DETAIL SHEETS</b>			
<b>GREEN BAY ROAD AND SIMPSON STREET</b>			
SCALE: _____	SHEET 4 OF 12 SHEETS	STA. _____	TO STA. _____

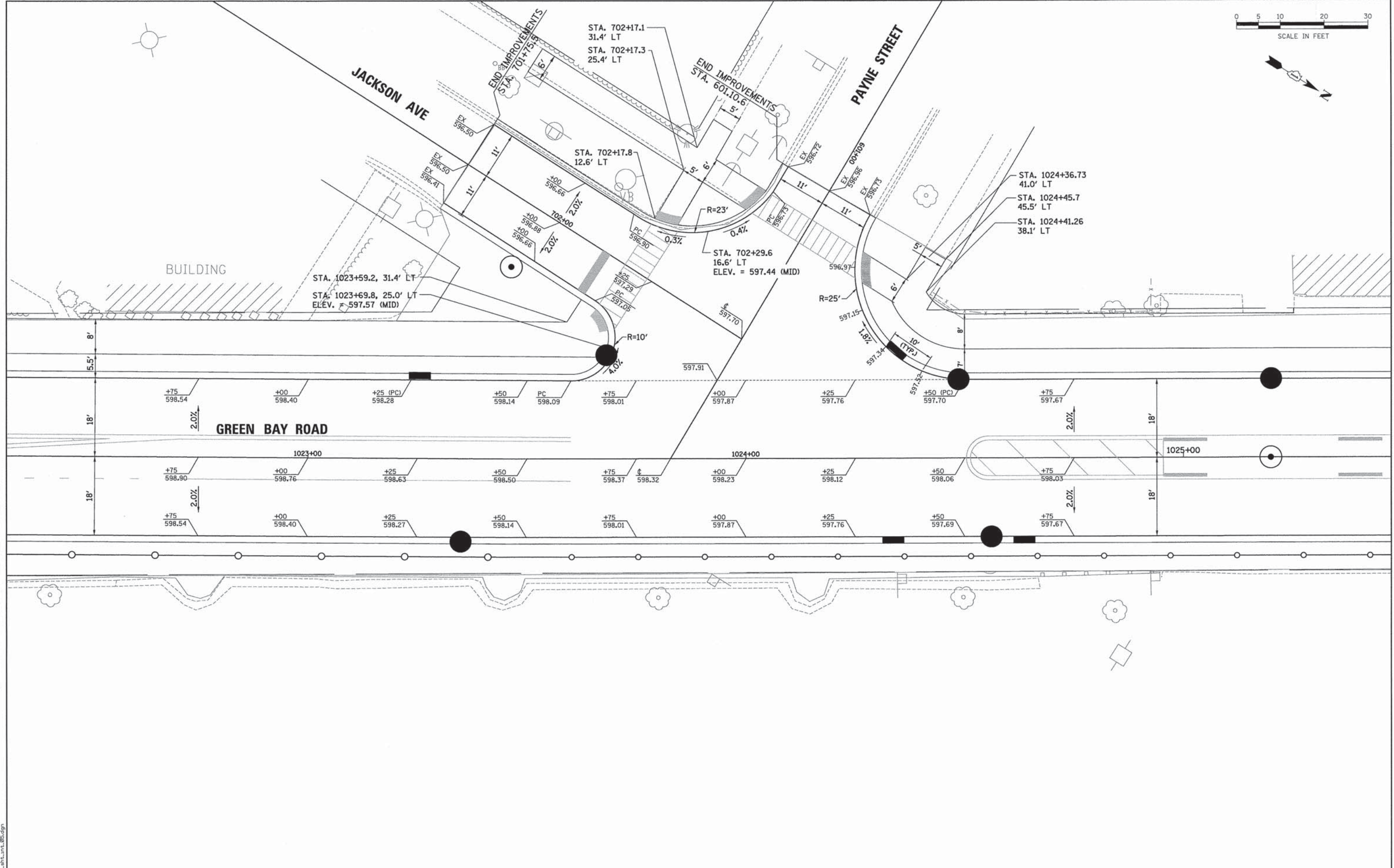
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-	13-00270-00-CH	COOK	393	202
<b>CONTRACT NO. 61C32</b>				
ILLINOIS FED. AID PROJECT				





PLAN	SURVEYED	BY	DATE
	PLOTTED		
	CHECKED		
	RT. OF WAY CHECKED		
	PAID FILE NAME		
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PROFILE	SURVEYED	BY	DATE
	PLOTTED		
	CHECKED		
	RT. OF WAY CHECKED		
	STRUCTURE NOTATIONS CHKD		
	NO.		



FILE NAME: ERGB1.dwg

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 Fort Lauderdale, FL 33304  
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 Fax: 954.343.8801  
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USER NAME = bherrsch	DESIGNED - BAH	REVISED - -
PLLOT SCALE = 10,0000 ' / in.	DRAWN - BAH	REVISED - -
PLLOT DATE = 1/7/2016	CHECKED - MAR	REVISED - -
	DATE - 10/9/2015	REVISED - -

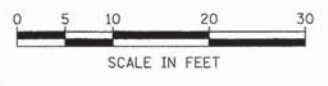
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**INTERSECTION DETAIL SHEETS  
GREEN BAY ROAD AND PAYNE STREET**

SCALE: \_\_\_\_\_ SHEET 5 OF 12 SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

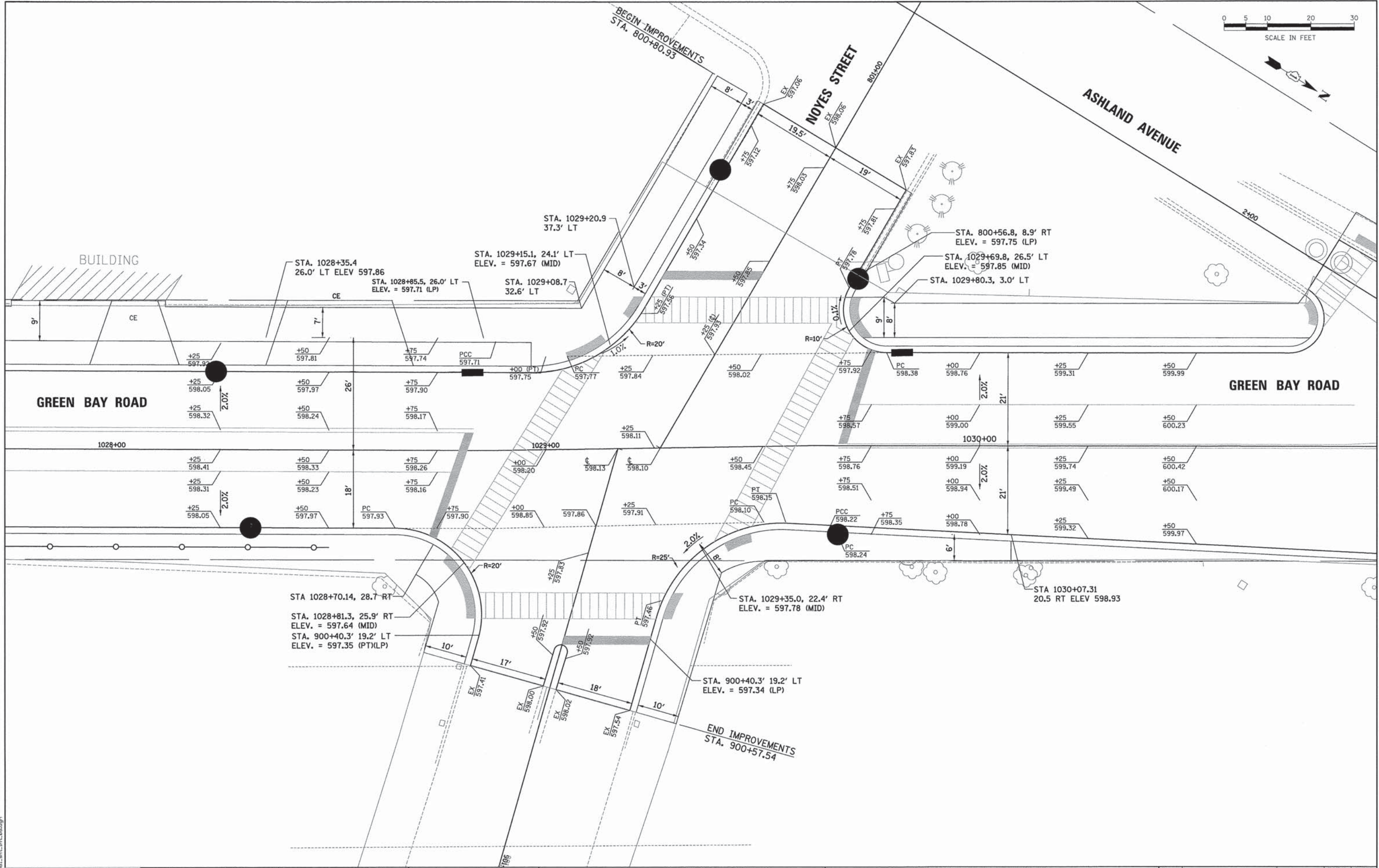
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-	13-00270-00-CH	COOK	393	203
CONTRACT NO. 61C32			ILLINOIS FED. AID PROJECT	





PLAN	DATE
SURVEYED	BY
ALIGNED	BY
CHECKED	BY
RT. OF WAY	BY
CHECKED	BY
NO.	

PROFILE	DATE
PLotted	BY
CHECKED	BY
B.M. NOTED	BY
STRUCTURE	BY
NOTATINS	BY
CHECKED	BY
NO.	



FILE NAME: ER081\_sht\_1011\_05.dgn

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 Naperville, IL 60563  
 630.256.0000

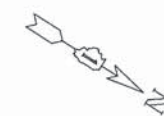
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PLOT SCALE = 10.0000' / 1"	DRAWN - BAH	REVISED - -
PLOT DATE = 1/7/2016	CHECKED - MAR	REVISED - -
	DATE - 10/9/2015	REVISED - -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>INTERSECTION DETAIL SHEETS</b>	
<b>GREEN BAY ROAD AND NOYES STREET</b>	
SCALE: _____	SHEET 6 OF 12 SHEETS STA. _____ TO STA. _____

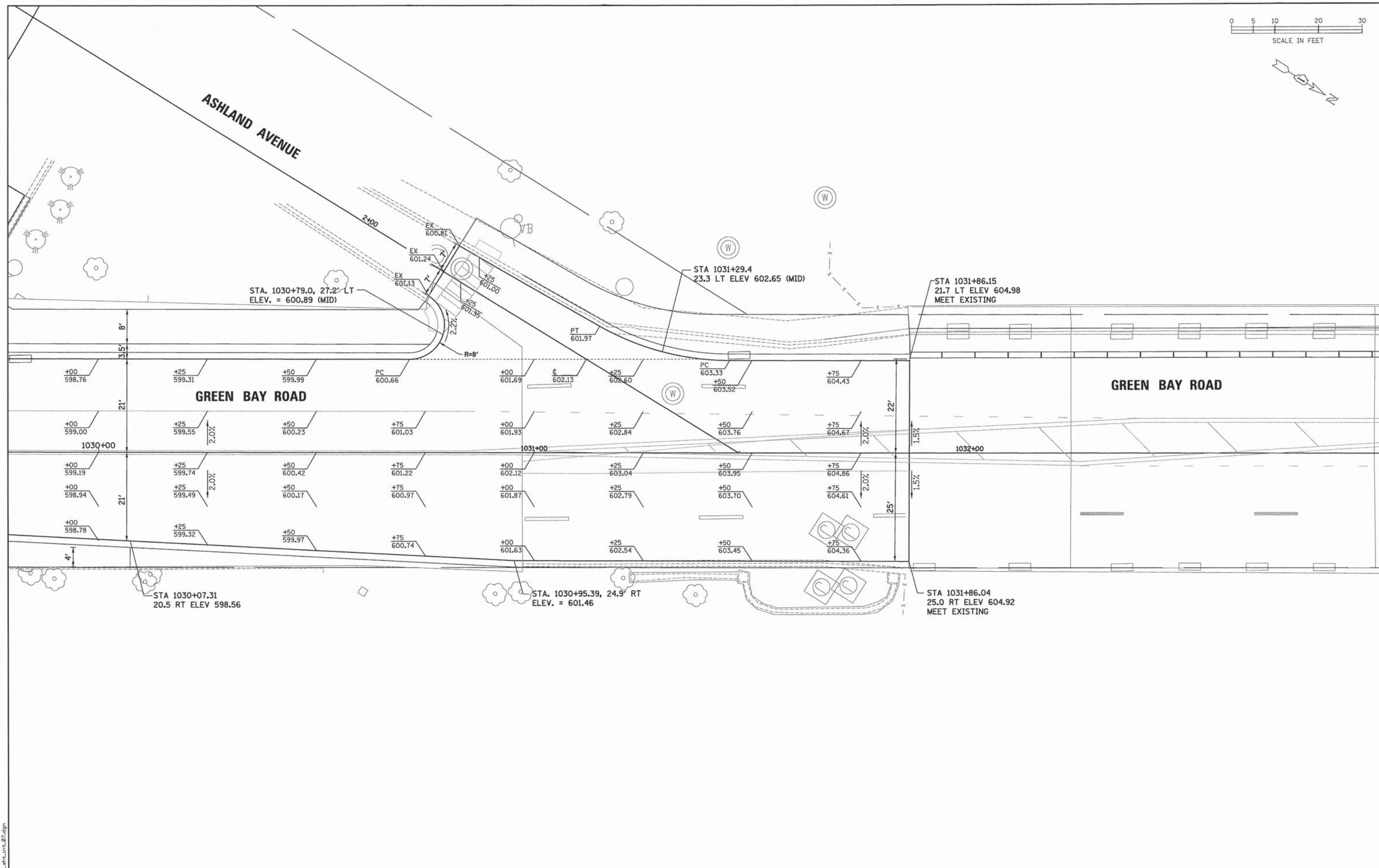
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-	13-00270-00-CH	COOK	393	204
CONTRACT NO. G1C32				
ILLINOIS FED. AID PROJECT				





PLAN	DATE
SURVEYED	BY
PLOTTED	
CHECKED	
ALIGNED	
CAD FILE NAME	

PROFILE	DATE
SURVEYED	BY
GRADES CHECKED	
STRUCTURE NOTATIONS CHKD	



FILE NAME: EROB1\_ah.tnt\_07.dgn



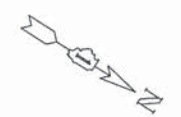
USER NAME = bhenrcha	DESIGNED - BAH	REVISED - -
PLotted	DRAWN - BAH	REVISED -
NOTE BOOK NO.	CHECKED - MAR	REVISED -
DATE = 1/7/2016	DATE - 10/9/2015	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

INTERSECTION DETAIL SHEETS	
GREEN BAY ROAD AND SOMETHING STREET	
SCALE:	SHEET 7 OF 12 SHEETS STA. TO STA.

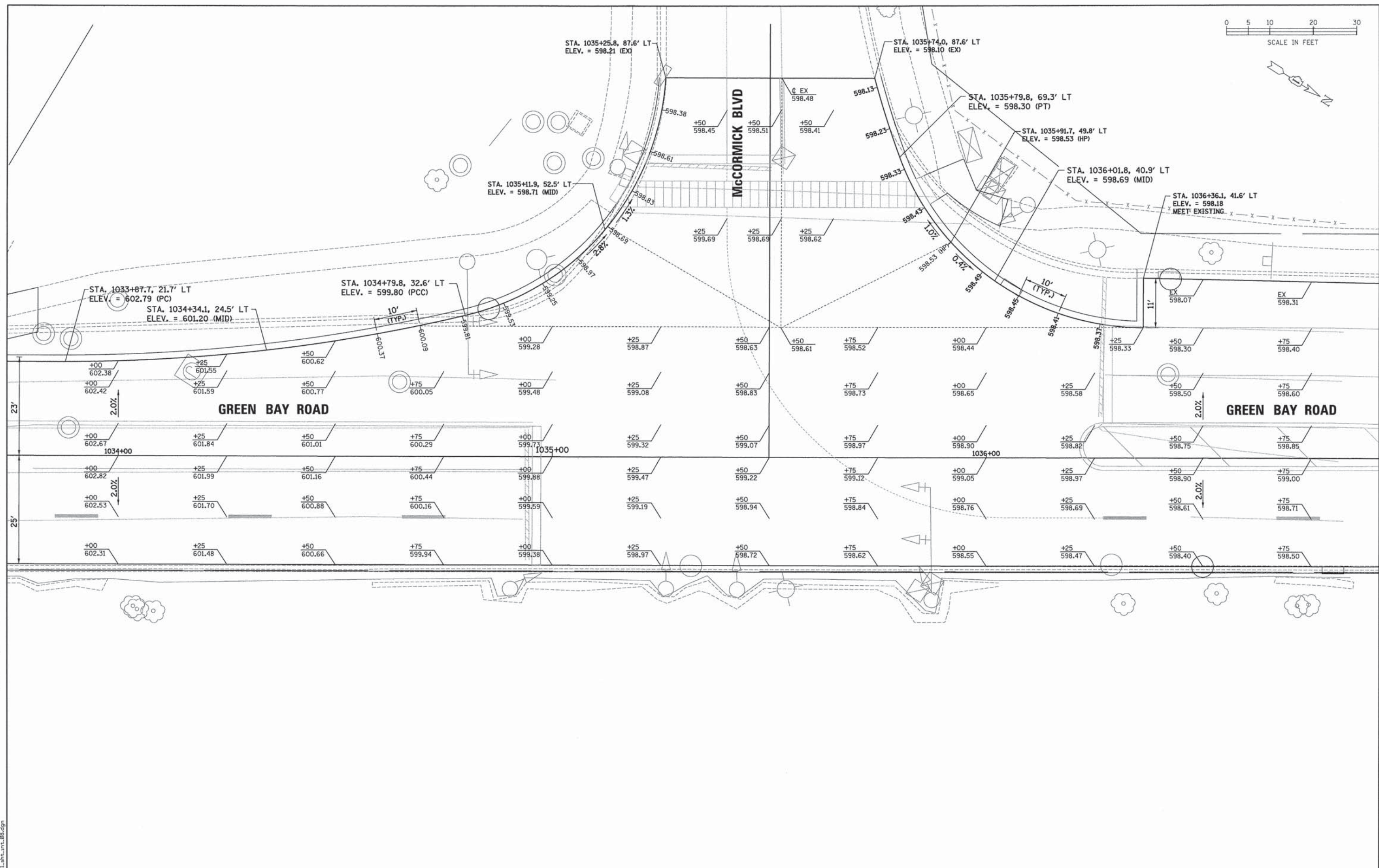
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	205
CONTRACT NO. 61C32			ILLINOIS FED. AID PROJECT	





DATE	
BY	
SURVEYED	
PLOTTED	
CHECKED	
NO. OF WAY CHECKED	
NO.	
CADD FILE NAME	

DATE	
BY	
SURVEYED	
PLOTTED	
CHECKED	
NO. OF WAY CHECKED	
NO.	
STRUCTURE NOTATIONS CHRD	



FILE NAME: EDR011\_dtd.t\_08.dgn



USER NAME = bhenrichs	DESIGNED - BAH	REVISED - -
PLOT SCALE = 10.0000' / 1"	DRAWN - BAH	REVISED - -
PLOT DATE = 1/7/2016	CHECKED - MAR	REVISED - -
	DATE - 10/9/2015	REVISED - -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>INTERSECTION DETAIL SHEETS</b>	
<b>GREEN BAY ROAD AND McCORMICK BLVD</b>	
SCALE:	SHEET 8 OF 12 SHEETS STA. TO STA.

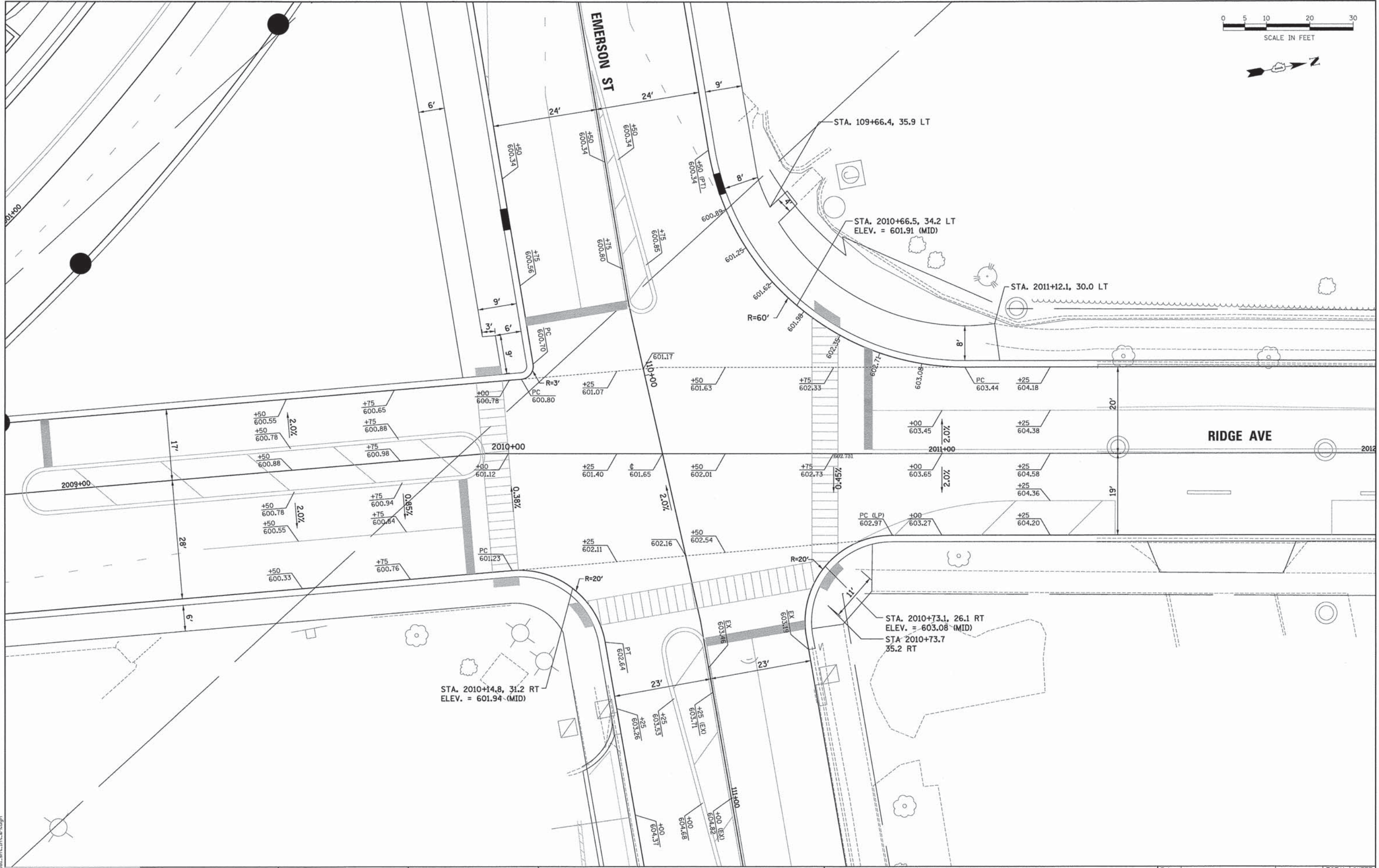
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	206
CONTRACT NO. 61C32				
ILLINOIS FED. AID PROJECT				





DATE	BY
SURVEYED	BY
ALIGNED	BY
CHECKED	BY
RT. OF WAY CHECKED	BY
PAID FILE NAME	
NO.	

DATE	BY
SURVEYED	BY
ALIGNED	BY
CHECKED	BY
RT. OF WAY CHECKED	BY
PAID FILE NAME	
NO.	



FILE NAME: ER081\_sht.mt.09.dgn

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 1214 N. 10TH STREET, SUITE 100  
 DEERFIELD, IL 60015  
 (708) 431-1100  
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USER NAME = bhenrichs	DESIGNED - BAH	REVISD - -
	DRAWN - BAH	REVISD - -
	CHECKED - MAR	REVISD - -
	DATE - 10/9/2015	REVISD - -

PLLOT SCALE = 1/8" = 10'-0"	REVISD - -
PLLOT DATE = 1/7/2016	REVISD - -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**INTERSECTION DETAIL SHEETS  
RIDGE AVENUE AND EMERSON STREET**

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	207
				CONTRACT NO. 61C32
ILLINOIS FED. AID PROJECT				

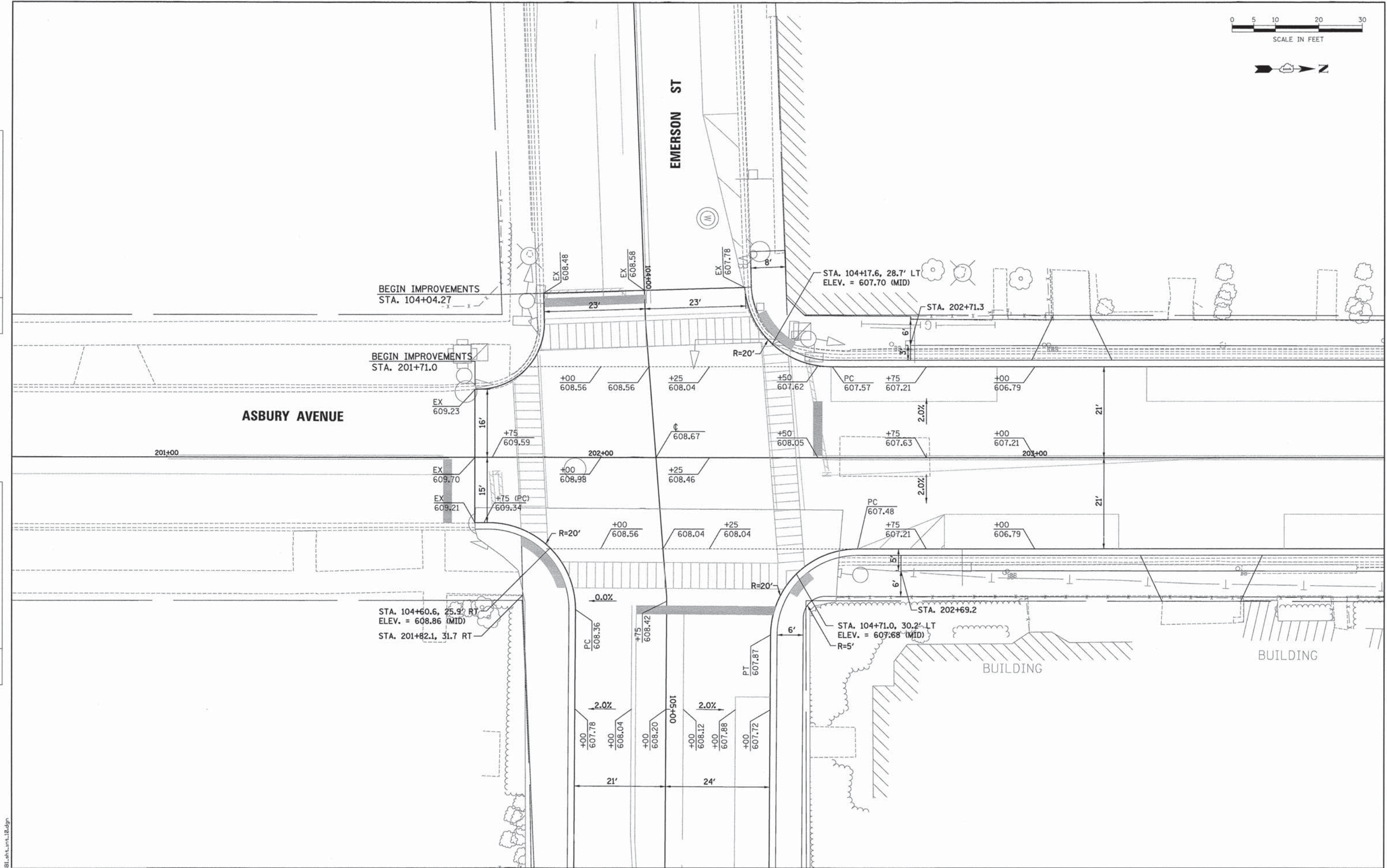
SCALE: \_\_\_\_\_ SHEET 9 OF 12 SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_





PLAN	SURVEYED	DATE
	ALIGNMENT CHECKED	
	RT. OF WAY CHECKED	
	PAID FILE NAME	
	NO.	

PROFILE	SURVEYED	DATE
	GRADES CHECKED	
	B.M. NOTED	
	STRUCTURE NOTATIONS CHECKED	
	NO.	



FILE NAME: ER081\_sht\_10.dgn

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	DRAWN - BAH	REVISED -
	CHECKED - MAR	REVISED -
	DATE - 10/9/2015	REVISED -
PLOT SCALE = 10.0000' / 1"		
PLOT DATE = 1/7/2016		

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>INTERSECTION DETAIL SHEETS</b>	
<b>EMERSON STREET AND ASBURY AVENUE</b>	
SCALE: _____	SHEET 10 OF 12 SHEETS
STA. _____	TO STA. _____

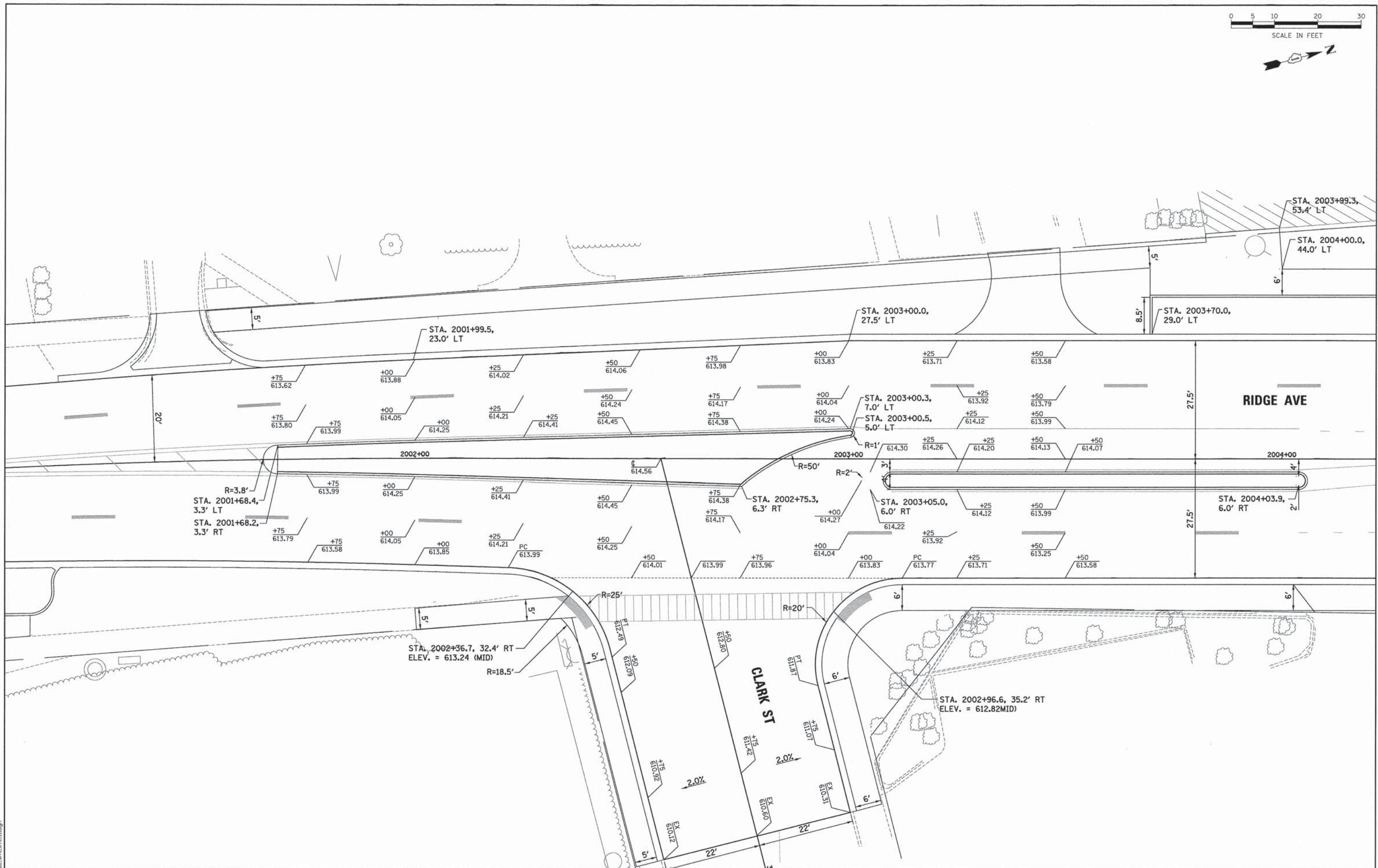
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	208
CONTRACT NO. 61C32				
ILLINOIS FED. AID PROJECT				





PLAN	SURVEYED	BY	DATE
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	NOTED		
	RT. OF WAY CHECKED		
	NO. _____		
	ADD FILE NAME		

PROFILE	SURVEYED	BY	DATE
	ALIGNED		
	NOTED		
	RT. OF WAY CHECKED		
	NO. _____		
	ADD FILE NAME		



FILE NAME: ERGBL\_sht\_int\_11.dgn

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USER NAME = bhenrichs	DESIGNED - BAH	REVISED - -
PLOT SCALE = 10.0000' / 1" =	DRAWN - BAH	REVISED - -
PLOT DATE = 1/7/2016	CHECKED - MAR	REVISED - -
	DATE - 10/9/2015	REVISED - -

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

**INTERSECTION DETAIL SHEETS**  
**GREEN BAY ROAD AND CLARK STREET**

SCALE: \_\_\_\_\_ SHEET 11 OF 12 SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	209
				CONTRACT NO. G1C32
ILLINOIS FED. AID PROJECT				



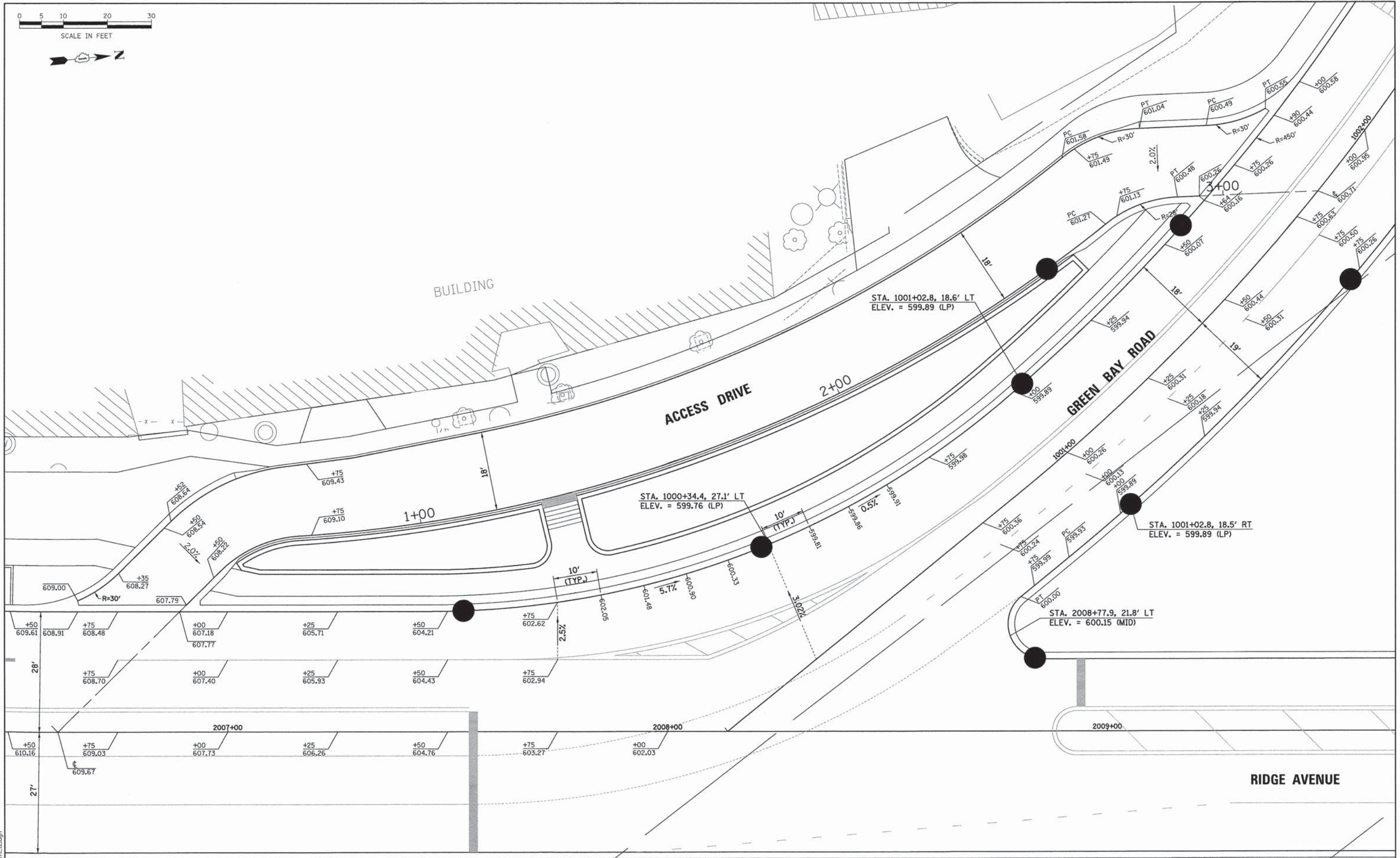


SCALE IN FEET



PLAN	DATE
SURVEYED	BY
ALIGNED	BY
CHECKED	BY
RT. OF WAY CHECKED	BY
ADD. FILE NAME	
NO.	

PROFILE	DATE
SURVEYED	BY
GRADES CHECKED	BY
BLM. NOTED	BY
STRUCTURE NOTATIONS CHRD	
NO.	



FILE NAME: ERGR1\_sht\_int\_12.dgn

**ESI** CONSULTANTS, LTD.  
 1000 N. WASHINGTON ST.  
 SUITE 200  
 CHICAGO, IL 60610  
 TEL: 312.281.1000  
 WWW.ESI-CONSULTANTS.COM

USER NAME = bharrichs	DESIGNED - BAH	REVISED - -
PLOT SCALE = 10.0000' / 1"	DRAWN - BAH	REVISED -
PLOT DATE = 1/7/2016	CHECKED - MAR	REVISED -
	DATE = 10/9/2015	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**







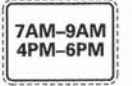



























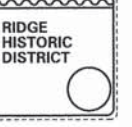


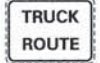




















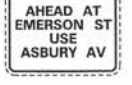




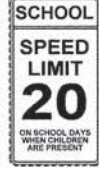


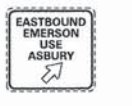
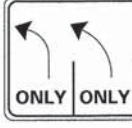
<b>INTERSECTION DETAIL SHEETS GREEN BAY ROAD AND ACCESS DRIVE</b>			
SCALE:	SHEET 12 OF 12 SHEETS	STA.	TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	210
CONTRACT NO. 61C32			ILLINOIS FED. AID PROJECT	



DATE	
BY	
PLAN	
SURVEYED	
PLOTTED	
GRADES CHECKED	
STRUCTURE NOTATIONS OK'D	
NO.	

DATE	
BY	
PROFILE	
SURVEYED	
PLOTTED	
GRADES CHECKED	
STRUCTURE NOTATIONS OK'D	
NO.	

E1		M1-8 18"X24"	E9		M5-1 21"X15"	E17		R3-2 24"X24"	E25		R5-6 24"X24"	E33		W11-2 30"X30"	E41		W4-1L 30"X30"	E49		18"X24"	E57		6"X30"	P5		R3-1 24" X 24" OR 36" X 36"
E2		M6-1L 21"X15"	E10		R10-I101P 12"X24"	E18		R3-4 24"X24"	E26		R6-2 24"X30"	E34		W11-8 30"X30"	E42		W4-2 30"X30"	E50		30"X30"	E58		24"X30"	P6		R3-1 24" X 24" OR 36" X 36"
E3		M6-1R 21"X15"	E11		R1-1 30"X30"	E19		R3-7L 30"X30"	E27		R7-1 12"X18"	E35		W1-1R 30"X30"	E43		0M-3R 12"X36"	E51		6"X36"	E59		EV-1 EVANSTON INFO. SIGN WORDING VARIES VAR.XVAR.	P7		R3-9b 24" X 36"
E4		M6-3 21"X15"	E12		R1-2 30"X30" X30"	E20		R3-7L 30"X30"	E28		R7-108 12"X18"	E36		W13-1P 18"X18"	E44		12"X18"	E52		12"X18"	E60		EV-2 EVANSTON HISTORIC SIGN 24"X24"	P8		R3-5R 30" X 36"
E5		M6-4 21"X15"	E13		R14-1 18"X24"	E21		R3-8 30"X30"	E29		R7-2 12"X18"	E37		W16-7P 12"X24"	E45		12"X18"	E53		18"X18"	P1		R4-7 18" X 30"			
E6		M6-4L 21"X15"	E14		R1-5b 30"X30"	E22		R4-7 18"X24"	E30		R7-201 6"X12"	E38		R10-I101P 12"X24"	E46		10"X36"	E54		10"X30"	P2		R3-5 30" X 36"			
E7		M6-4R 21"X15"	E15		R2-1 24"X30"	E23		R5-1 30"X30"	E31		S1-1 30"X30"	E39		W1-7 48"X24"	E47		18"X24"	E55		24"X30"	P3		R2-1 24" X 30"			
E8		R10-11b 24"X24"	E16		R3-1 24"X24"	E24		R5-2 24"X24"	E32		S5-1 24"X48"	E40		R2-1 24"X30"	E48		12"X18"	E56		36"X36"	P4		R3-8b 18"X36"			

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EVANSTON, IL 60201  
www.esiconsultants.com

USER NAME	= bhennrichs
DESIGNED	- BAH
DRAWN	- BAH
CHECKED	- MAR
DATE	- 10/9/2015
PLLOT SCALE	= 1:8000' / 1"
PLLOT DATE	= 1/7/2016

REVISED	-
REVISED	-
REVISED	-
REVISED	-

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PAVEMENT MARKING AND SIGNING SHEETS  
SIGN LEGEND**

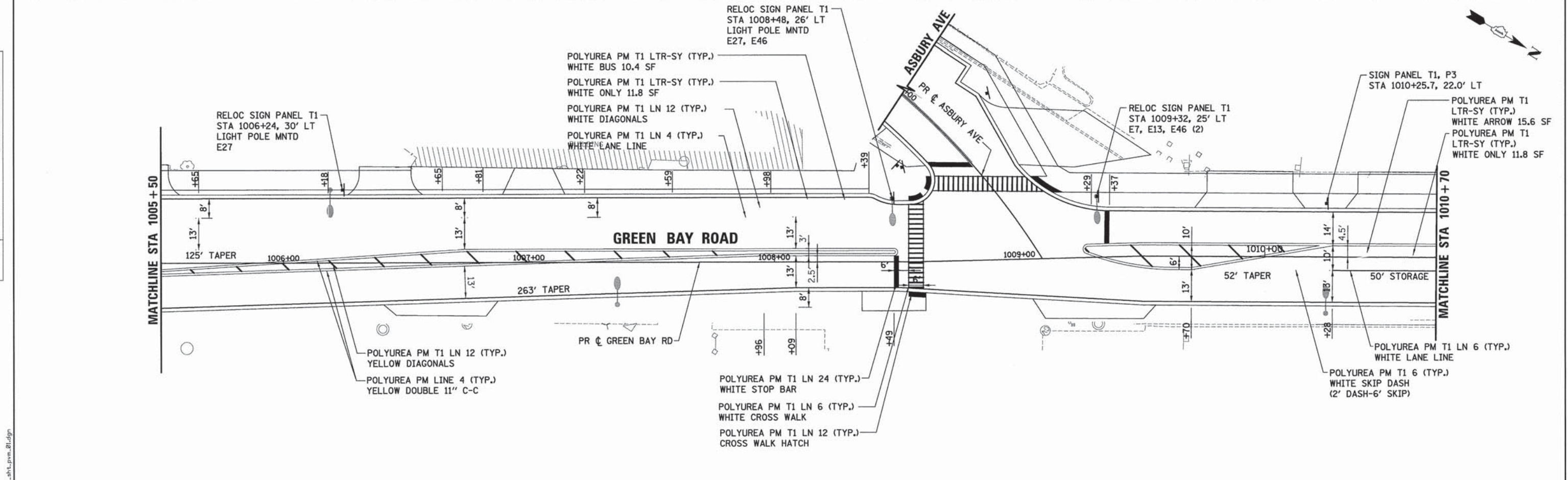
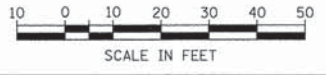
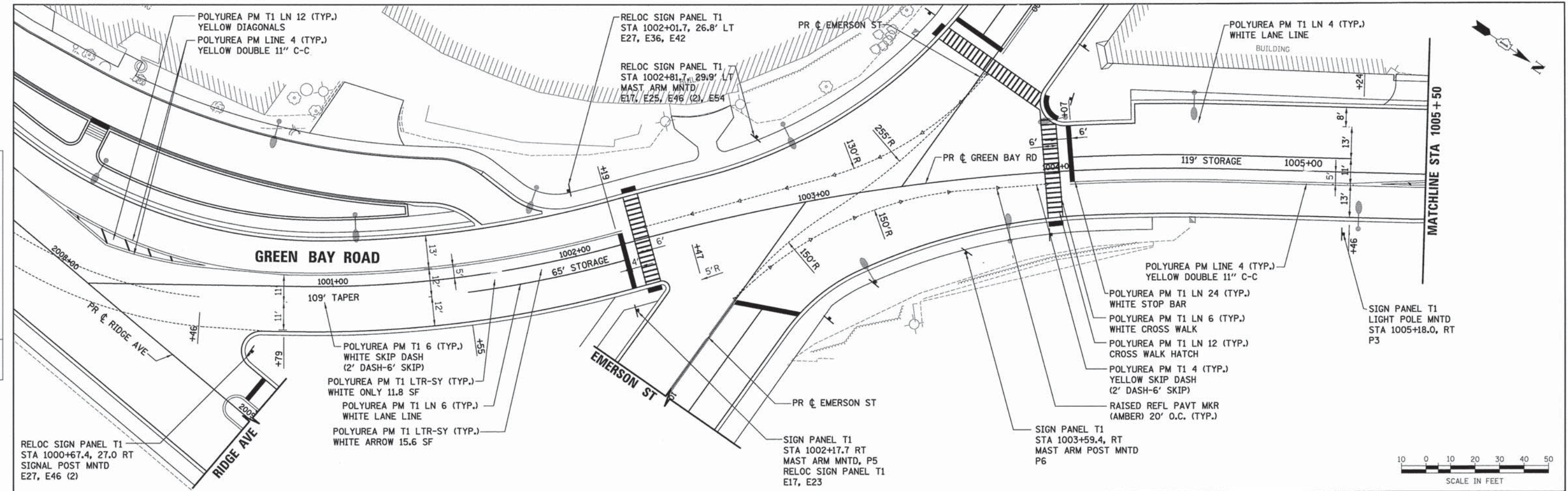
SCALE: SHEET 1 OF 9 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	211
CONTRACT NO.				61C32
ILLINOIS FED. AID PROJECT				



PLAN	SUPERSEDED	DATE
	NO. OF SHEETS	
	NO. OF SHEETS CHECKED	
	RT. OF WAY CHECKED	
	NO. OF FILE NAME	

PROFILE	SUPERSEDED	DATE
	NO. OF SHEETS	
	NO. OF SHEETS CHECKED	
	B.M. NOTED	
	STRUCTURE NOTATIONS CHYD	



USER NAME = bhanrichs	DESIGNED - BAH	REVISED - -
PLLOT SCALE = 20,0000' / 1"	DRAWN - BAH	REVISED - -
PLLOT DATE = 1/7/2016	CHECKED - MAR	REVISED - -
	DATE - 10/9/2015	REVISED - -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

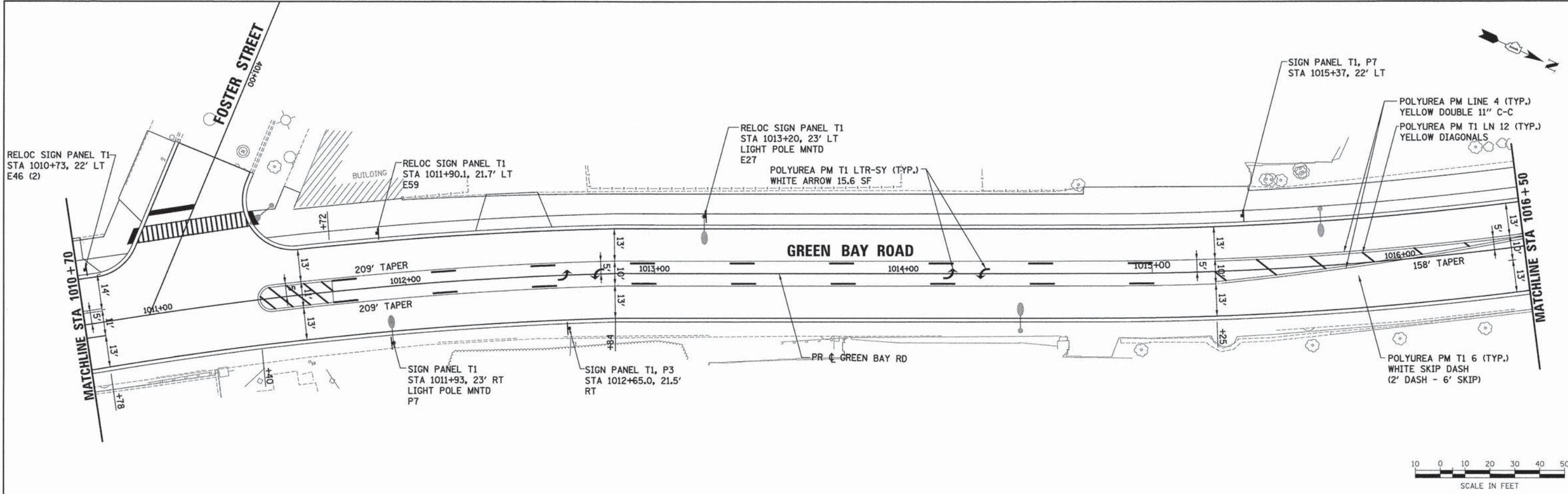
<b>PAVEMENT MARKING AND SIGNING SHEETS</b>	
<b>GREEN BAY ROAD</b>	
SCALE:	SHEET 2 OF 9 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	212
			CONTRACT NO.	61C32
ILLINOIS FED. AID PROJECT				

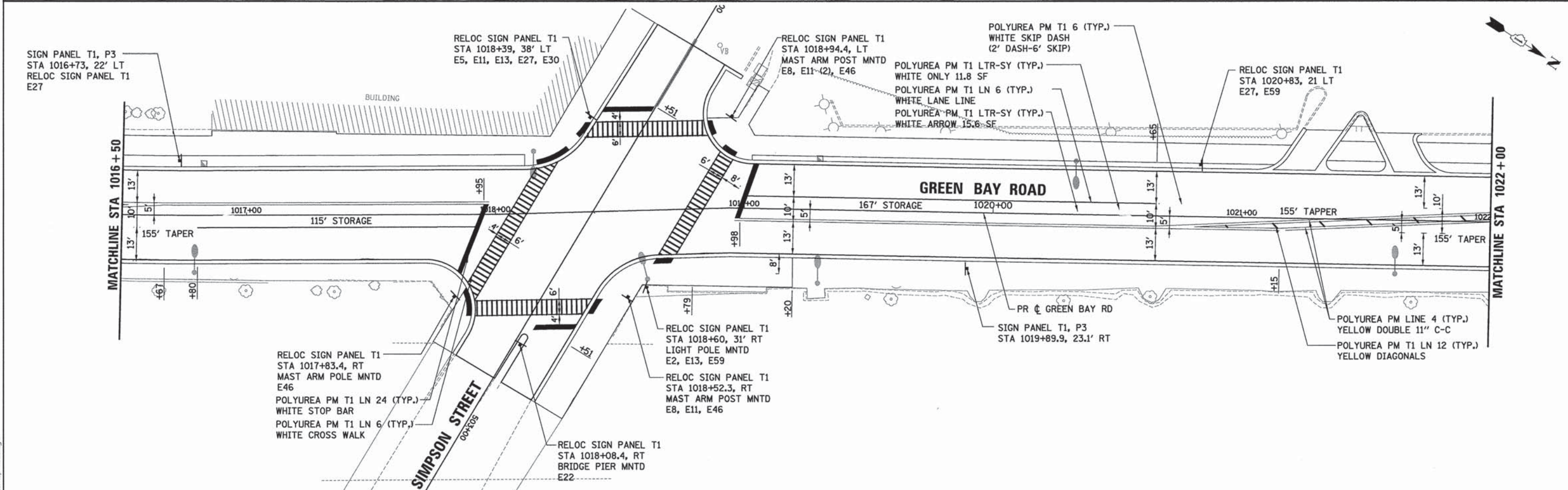
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PLAN	SURVEYED	DATE
	PLOTTED	BY
	NOTES CHECKED	
	RT. OF WAY CHECKED	
	CADD FILE NAME	



PROFILE	SURVEYED	DATE
	PLOTTED	BY
	NOTES CHECKED	
	STRUCTURE NOTATIONS CHKD	



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 DEERFIELD, IL 60015  
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 WWW.ESI-CONSULTANTS.COM

USER NAME = bherr1sch	DESIGNED - BAH	REVISED - -
	DRAWN - BAH	REVISED - -
PLOT SCALE = 28.0000" / 1"	CHECKED - MAR	REVISED - -
PLOT DATE = 1/7/2016	DATE - 10/9/2015	REVISED - -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>PAVEMENT MARKING AND SIGNING SHEETS</b>			
<b>GREEN BAY ROAD</b>			
SCALE:	SHEET 3 OF 9 SHEETS	STA.	TO STA.

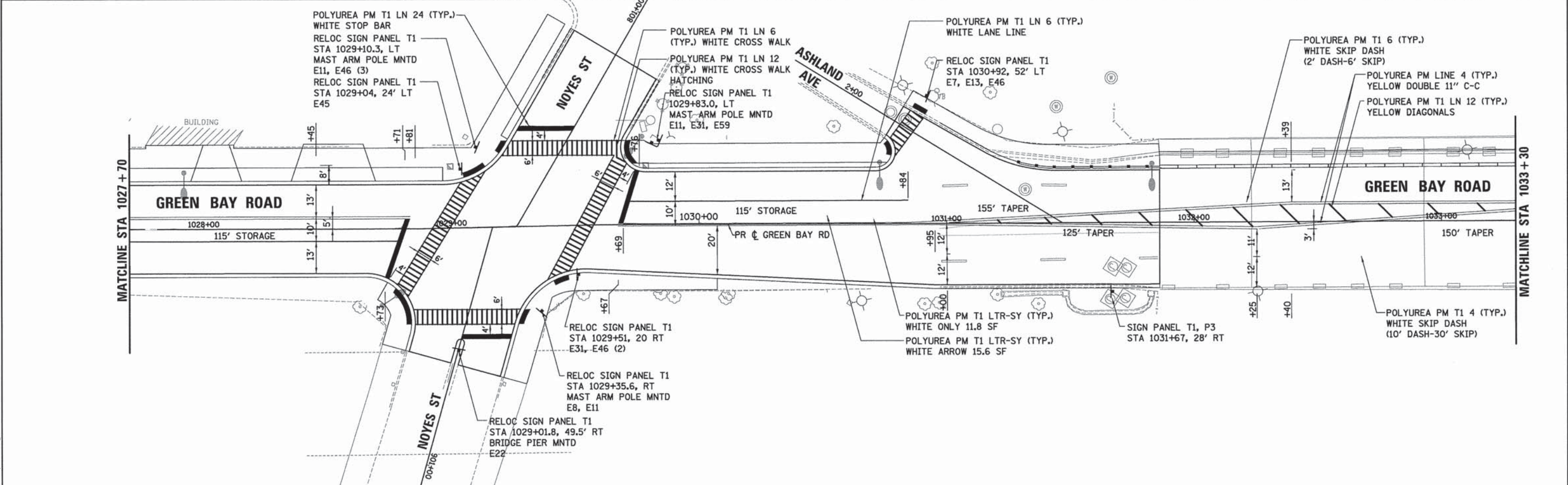
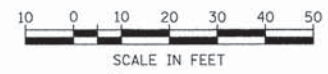
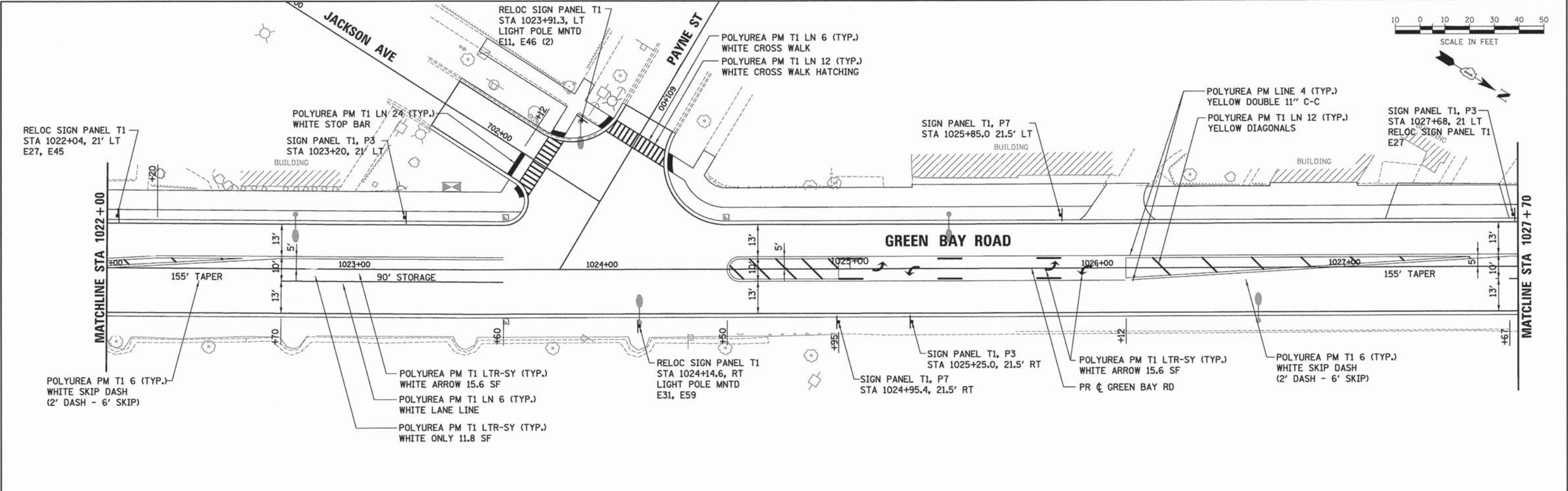
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	213
CONTRACT NO. 61C32				
ILLINOIS FED. AID PROJECT				

FILE NAME: ER081\_sht1.pvn\_02.dgn



PLAN	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	ALIGNMENT CHECKED	
	STRUCTURE NOTATIONS OK'D	
	NOTE BOOK NO.	
	FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	ALIGNMENT CHECKED	
	STRUCTURE NOTATIONS OK'D	
	NOTE BOOK NO.	
	FILE NAME	



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USER NAME = bhernscho	DESIGNED - BAH	REVISED - -
PLLOT SCALE = 20,0000' / 1" =	DRAWN - BAH	REVISED - -
PLLOT DATE = 1/7/2016	CHECKED - MAR	REVISED - -
	DATE - 10/9/2015	REVISED - -

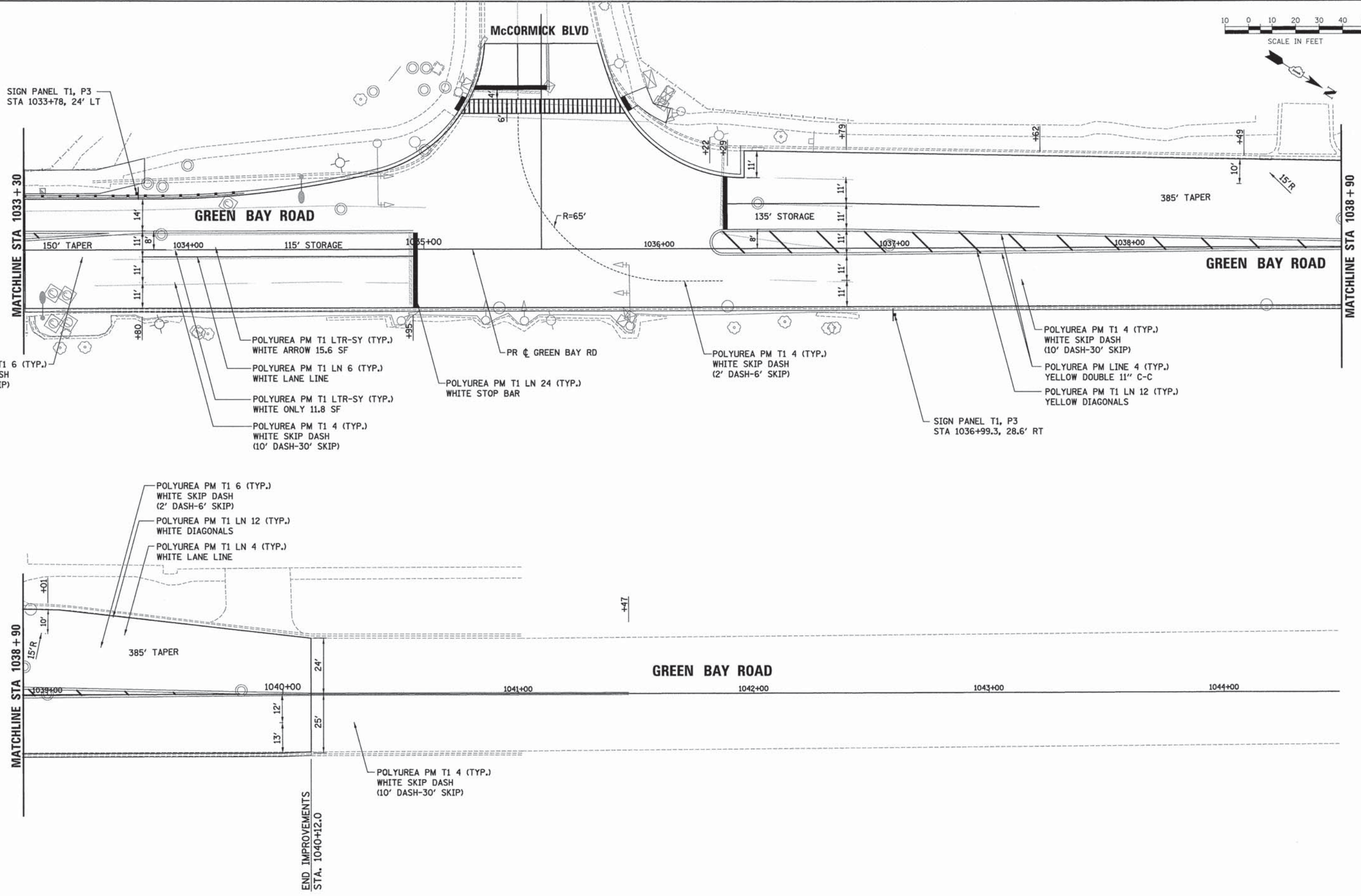
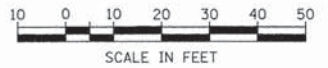
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING AND SIGNING SHEETS	
GREEN BAY ROAD	
SCALE:	SHEET 4 OF 9 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	214
CONTRACT NO. 61C32				
ILLINOIS FED. AID PROJECT				

FILE NAME: ER081\_ahc.pvn\_02.dgn





PLAN	SURVEYED	BY	DATE
	ALIGNED		
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PROFILE	SURVEYED	BY	DATE
	GRADES CHECKED		
	BLM. NOTED		
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FILE NAME: ER081-sh1-pvm-04.dgn

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USER NAME = bhenrichs	DESIGNED - BAH	REVISED - -
PLOT SCALE = 20,0000' / 1"	DRAWN - BAH	REVISED - -
PLOT DATE = 1/7/2016	CHECKED - MAR	REVISED - -
	DATE - 10/9/2015	REVISED - -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

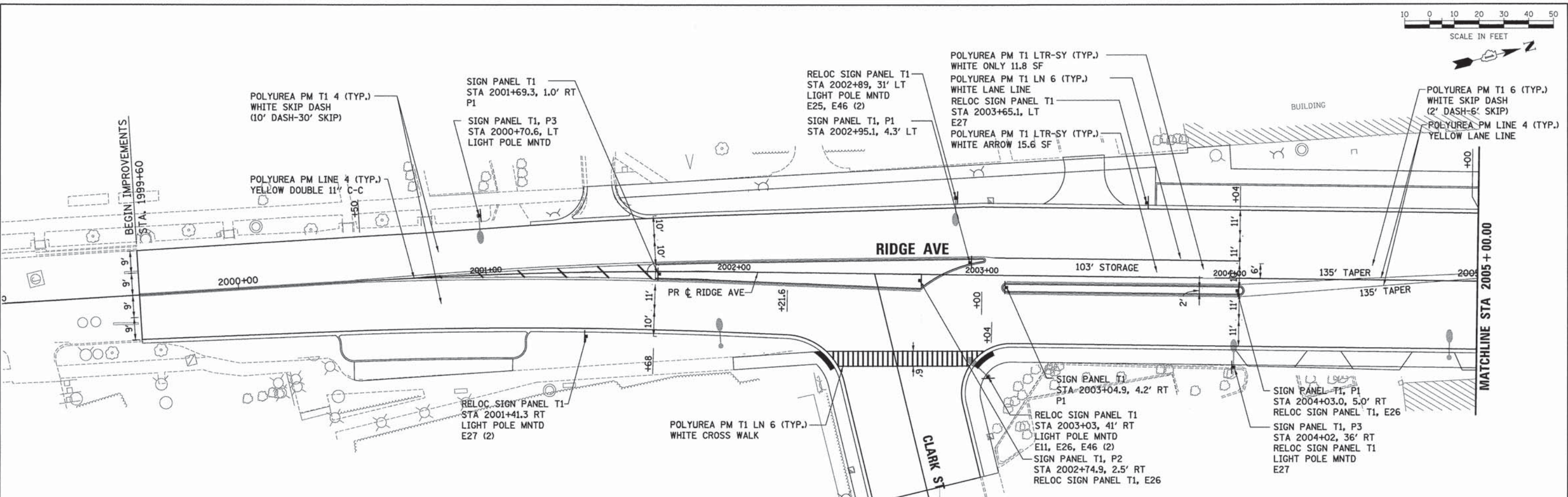
<b>PAVEMENT MARKING AND SIGNING SHEETS GREEN BAY ROAD</b>			
SCALE:	SHEET 5 OF 9 SHEETS	STA.	TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	215
CONTRACT NO. 61C32				
ILLINOIS FED. AID PROJECT				

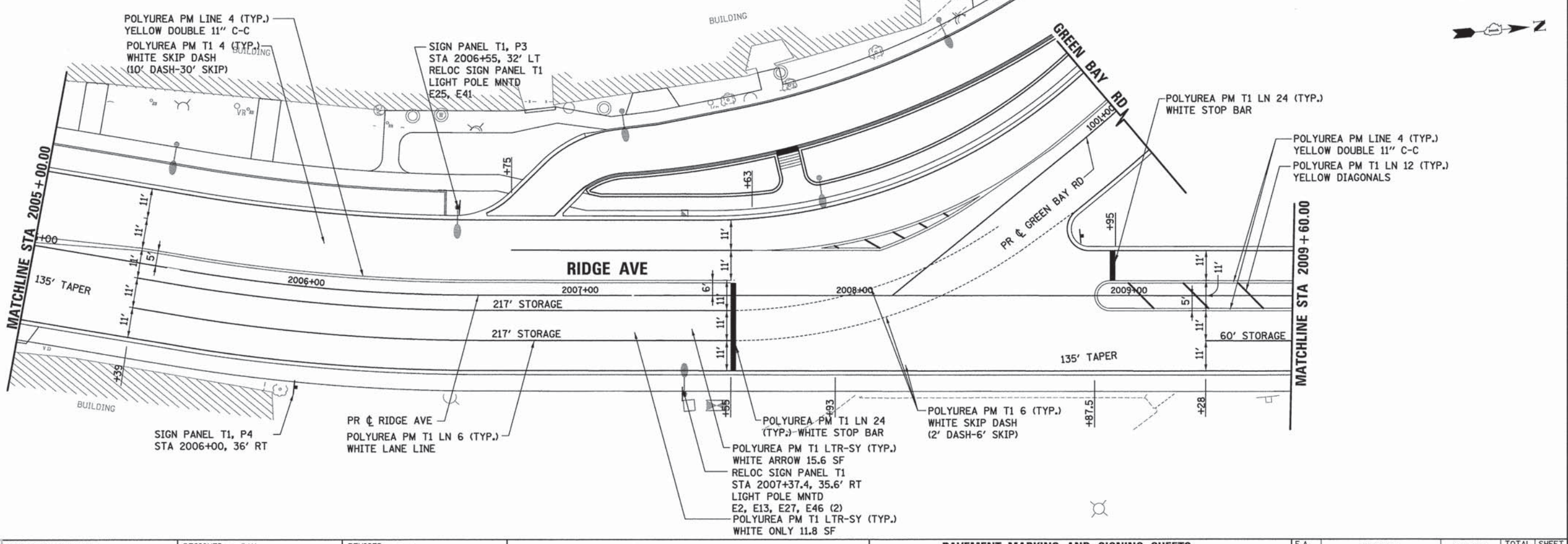




PLAN	SURVEYED	DATE
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	CHECKED	
	BY	
	NO.	
	BY	
	NO.	



PROFILE	SURVEYED	DATE
	PLOTTED	
	CHECKED	
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	NO.	
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	NO.	



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 DEERFIELD, IL 60015  
 Fax: 847.351.1000

USER NAME = bhairsche	DESIGNED - BAH	REVISED - -
	DRAWN - BAH	REVISED - -
	CHECKED - MAR	REVISED - -
	DATE - 10/9/2015	REVISED - -

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

**PAVEMENT MARKING AND SIGNING SHEETS**  
**RIDGE AVENUE**

SCALE: SHEET 6 OF 9 SHEETS STA. TO STA.

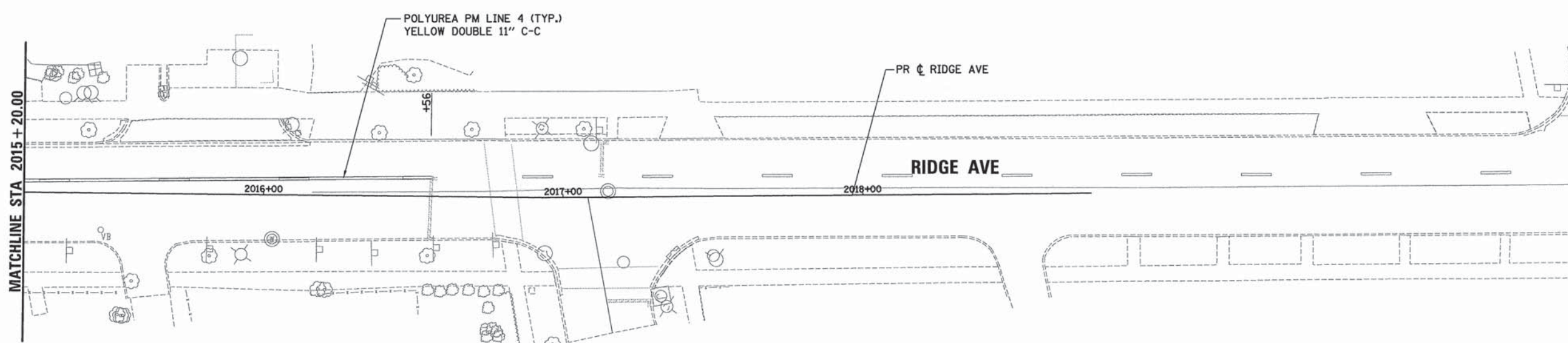
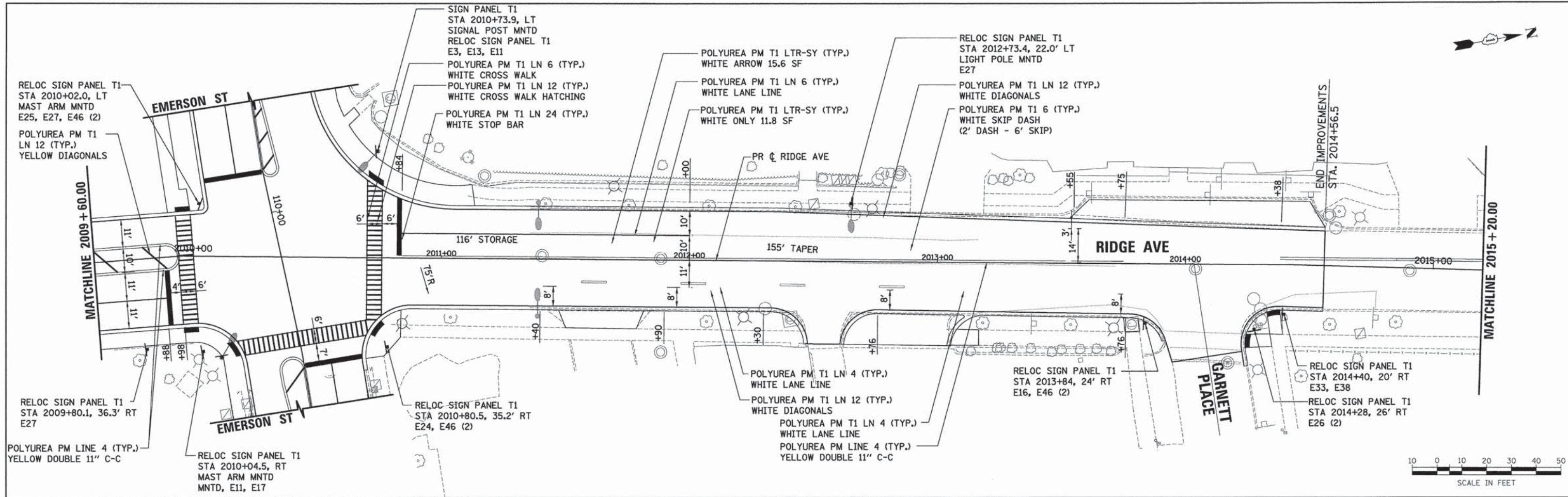
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	216
				CONTRACT NO. G1C32
ILLINOIS FED. AID PROJECT				

FILE NAME: ER081.dwg, pvc\_05.dwg



PLAN	REVISIONS	DATE
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PROFILE	REVISIONS	DATE
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	DATE	
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	DATE	



USER NAME = bhenrichs	DESIGNED - BAH	REVISED - -
PLOT SCALE = 20.0000' / 1" =	DRAWN - BAH	REVISED - -
PLOT DATE = 1/7/2016	CHECKED - MAR	REVISED - -
	DATE - 10/9/2015	REVISED - -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>PAVEMENT MARKING AND SIGNING SHEETS RIDGE AVENUE</b>			
SCALE:	SHEET 7 OF 9 SHEETS	STA.	TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	217
				CONTRACT NO. 61C32
ILLINOIS FED. AID PROJECT				

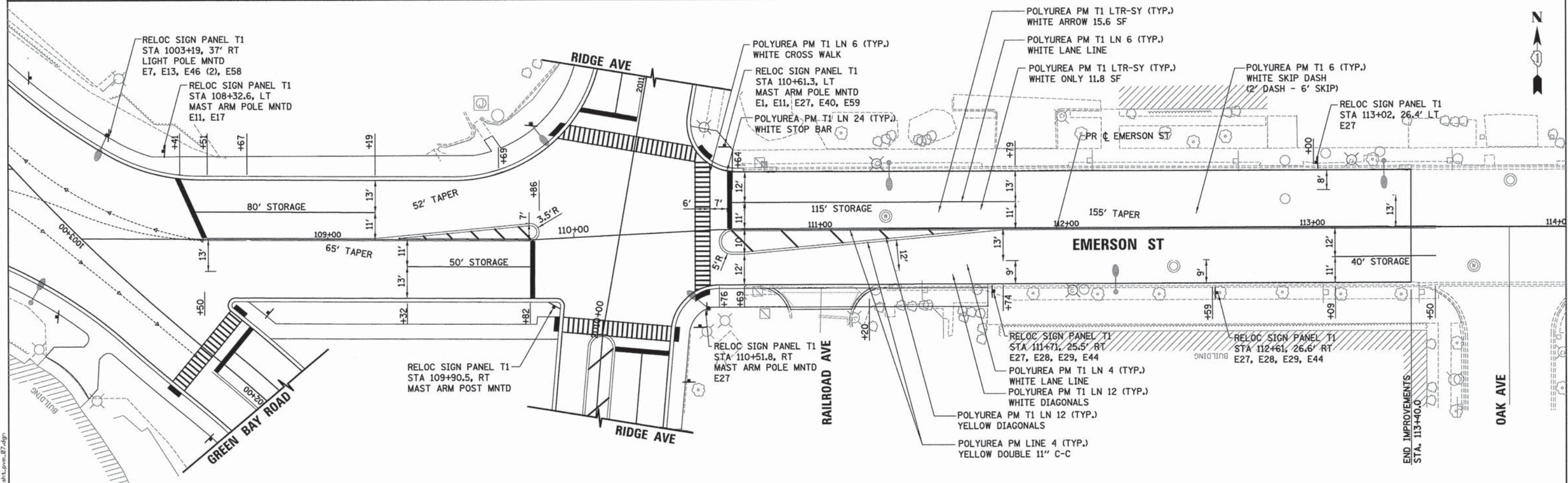
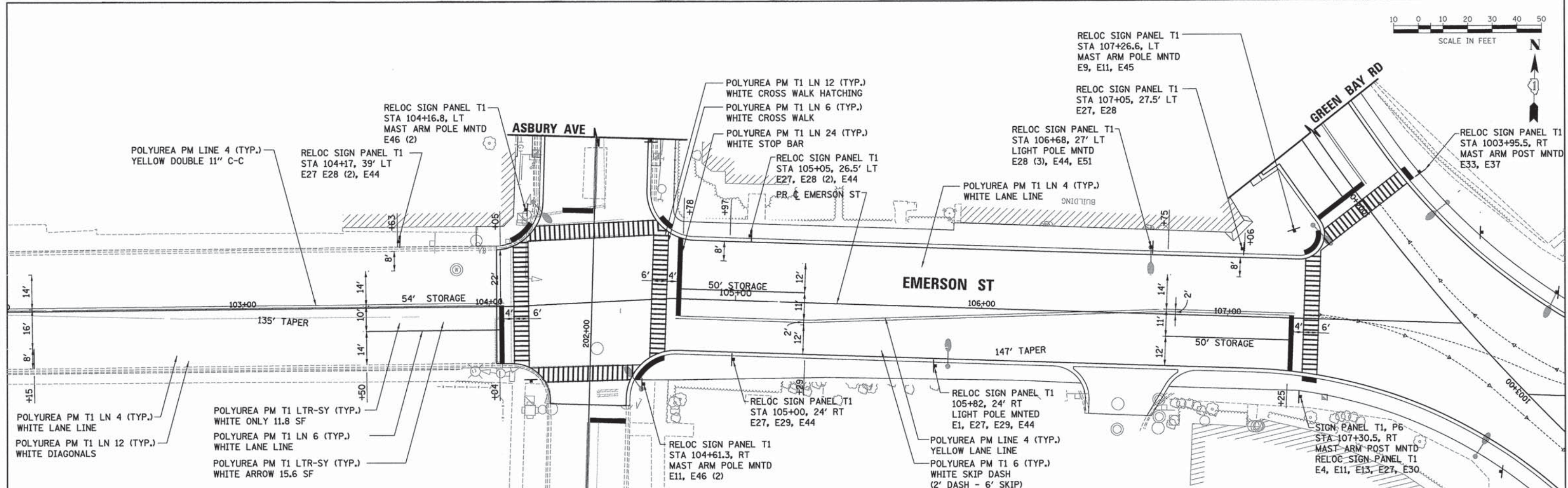
FILE NAME: ERGB1-sh1-pm.dgn





PLAN	SURVEYED	DATE
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	CHECKED	
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	NO.	

PROFILE	SURVEYED	DATE
	PLOTTED	
	CHECKED	
	BY	
	NO.	



FILE NAME: ER081-sh1-pm-07.dgn

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USER NAME = bharriso	DESIGNED - BAH	REVISED - -
PLOT SCALE = 28.0000' / 1"	DRAWN - BAH	REVISED - -
PLOT DATE = 1/7/2016	CHECKED - MAR	REVISED - -
	DATE - 10/9/2015	REVISED - -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**PAVEMENT MARKING AND SIGNING SHEETS  
 EMERSON STREET**

SCALE: SHEET 8 OF 9 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	218
				CONTRACT NO. G1C32
ILLINOIS FED. AID PROJECT				



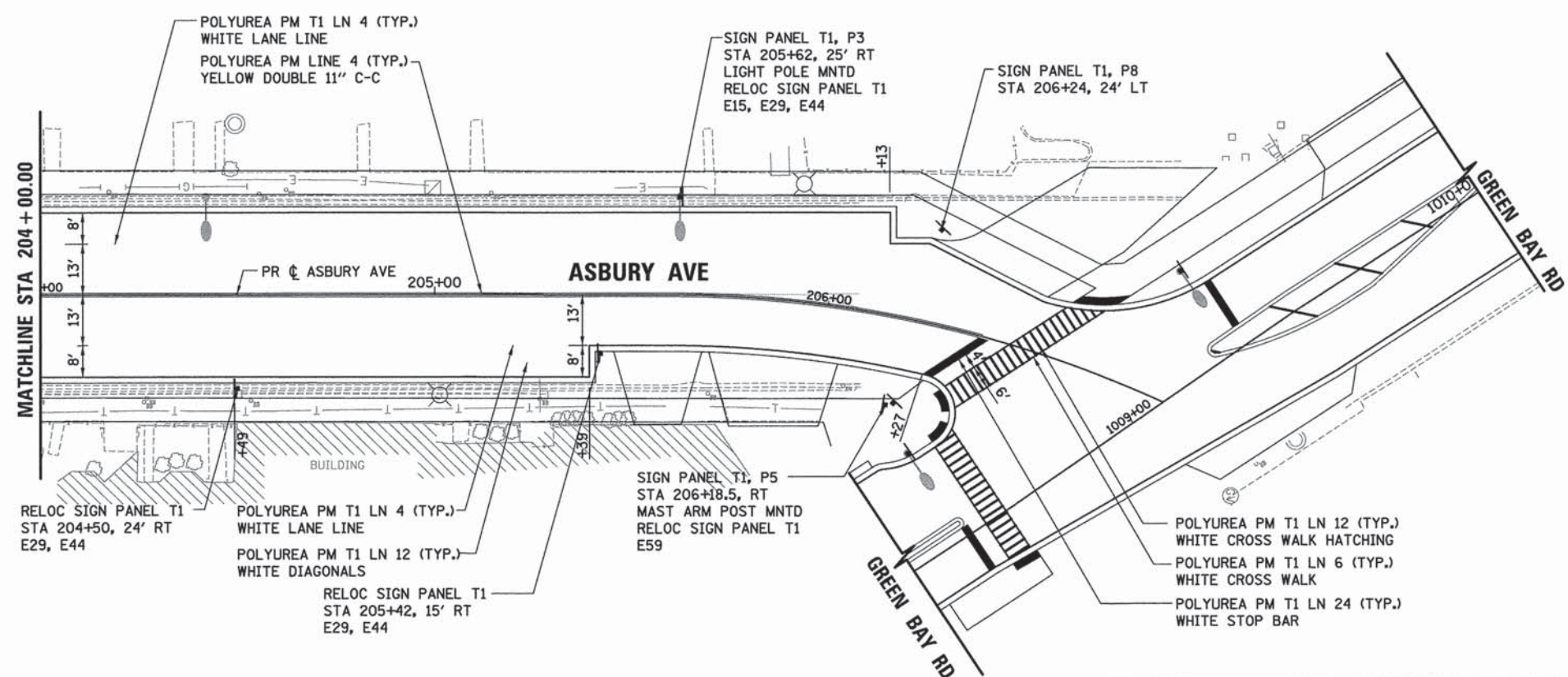
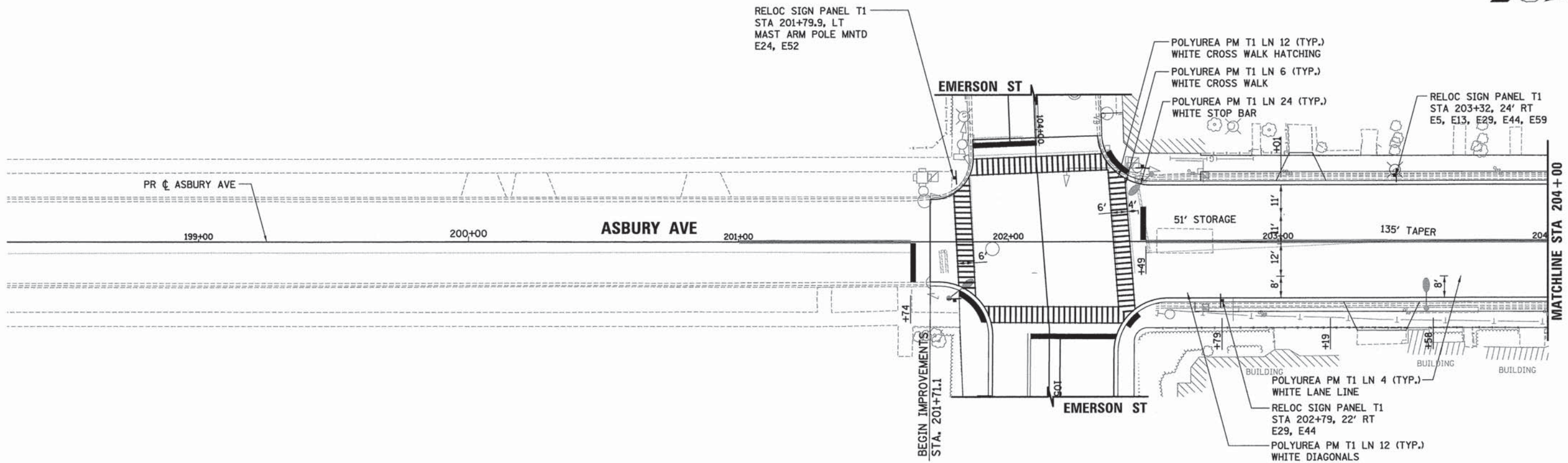


SCALE IN FEET



DATE	
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GRADES CHECKED	
S.M. NOTED	
STRUCTURE NOTATIONS CIPRD	
PROFILE	
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USER NAME = bharrsch	DESIGNED - BAH	REVISED - -
PLLOT SCALE = 20,000' / 1"	DRAWN - BAH	REVISED - -
PLLOT DATE = 1/7/2016	CHECKED - MAR	REVISED - -
	DATE - 10/9/2015	REVISED - -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

<b>PAVEMENT MARKING AND SIGNING SHEETS    ASBURY AVENUE</b>			
SCALE:	SHEET 9 OF 9 SHEETS	STA.	TO STA.

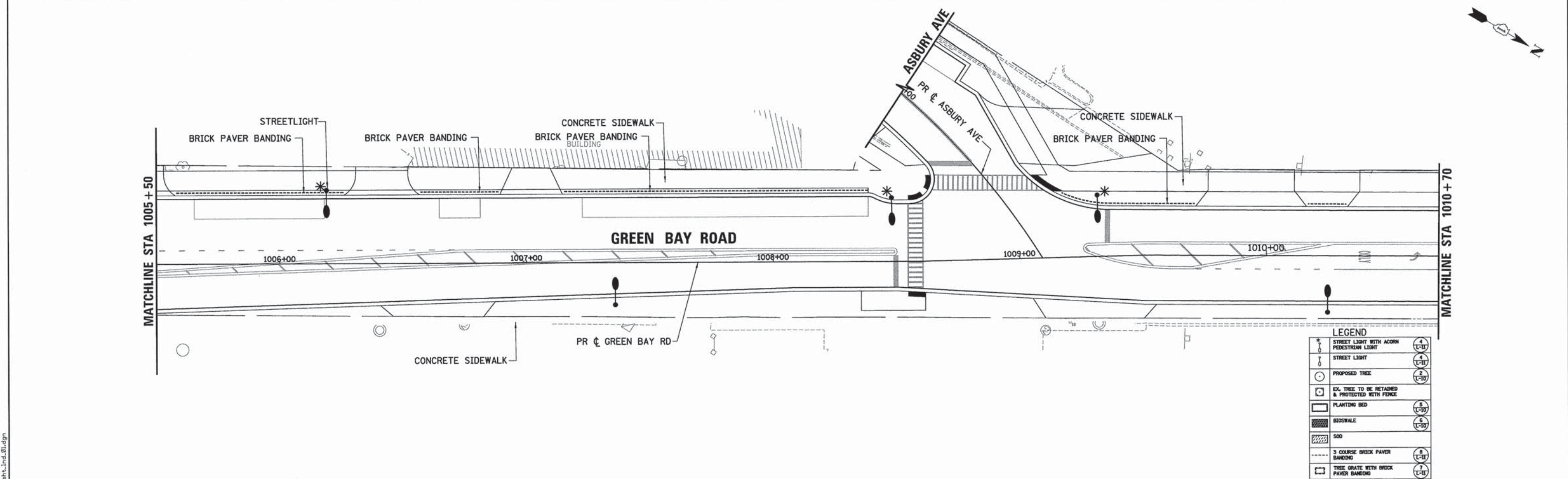
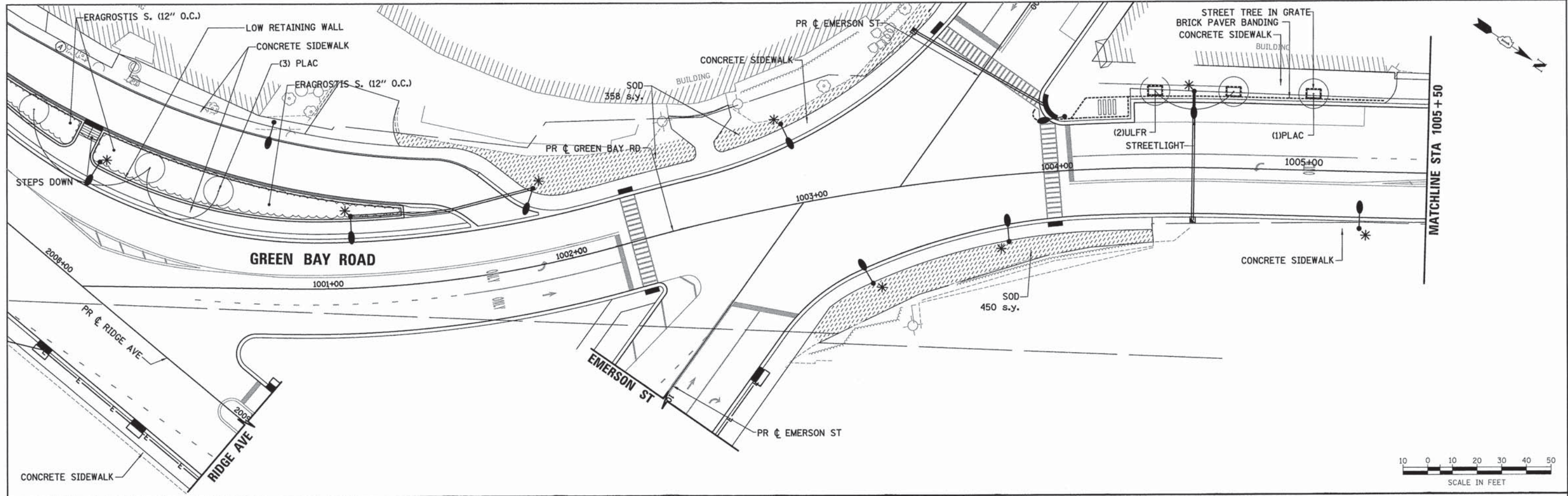
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	219
CONTRACT NO. G1C32			ILLINOIS FED. AID PROJECT	

FILE NAME: ERGBL\_sht.pvn\_893.dgn



PLAN	SURVEYED	DATE
	ALIGNED	BY
	CHECKED	
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	STRUCTURE NOTATIONS OK'D	

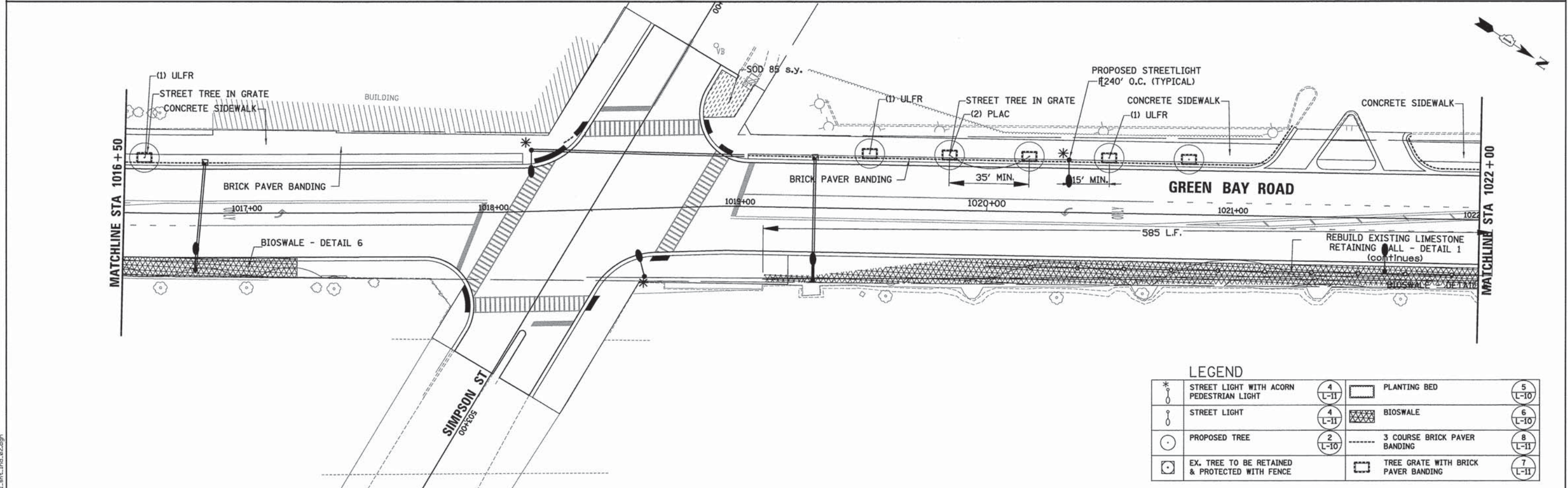
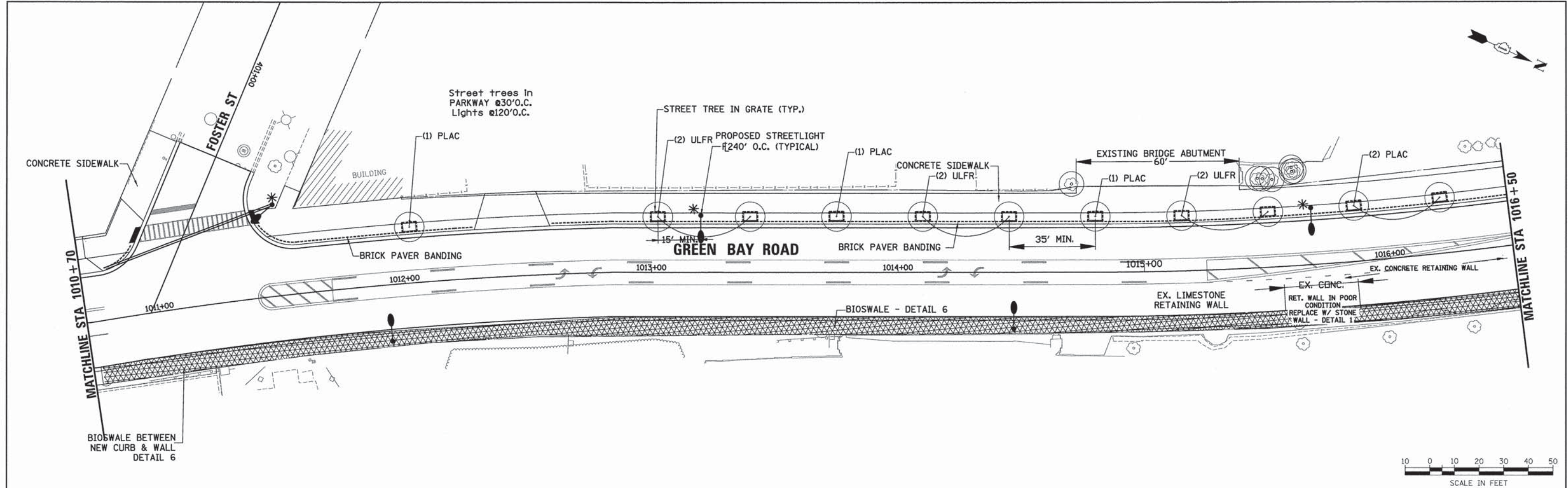


	USER NAME = bhensichs	DESIGNED - DL	REVISED - -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>LANDSCAPING SHEETS GREEN BAY ROAD</b>	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 20.0000' / 1" =	DRAWN - DL	REVISED -			-	13-00270-00-CH	COOK	393	220
	PLOT DATE = 1/7/2016	CHECKED - CK	REVISED -			-	CONTRACT NO. G1C32			
	DATE - 10/9/2015	REVISED -	-	SCALE: SHEET 10 OF 9 SHEETS STA. TO STA.		ILLINOIS FED. AID PROJECT				



PLAN	DATE
SURVEYED	BY
PLOTTED	
CHECKED	
NO. OF WAY CHECKED	
DATE FILE NAME	
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PROFILE	DATE
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CHECKED	
NO. OF WAY CHECKED	
DATE FILE NAME	
NO.	



LEGEND			
	STREET LIGHT WITH ACORN PEDESTRIAN LIGHT		PLANTING BED
	STREET LIGHT		BIOSWALE
	PROPOSED TREE		3 COURSE BRICK PAVER BANDING
	EX. TREE TO BE RETAINED & PROTECTED WITH FENCE		TREE GRATE WITH BRICK PAVER BANDING
	4 L-II		5 L-10
	4 L-II		6 L-10
	2 L-10		8 L-II
	7 L-II		7 L-II

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USER NAME = bhenrichs	DESIGNED - DL	REVISED - -
PLLOT SCALE = 28.0000' / 1" =	DRAWN - DL	REVISED - -
PLLOT DATE = 1/7/2016	CHECKED - CK	REVISED - -
	DATE - 10/9/2015	REVISED - -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**LANDSCAPING SHEETS  
 GREEN BAY ROAD**

SCALE: SHEET 11 OF 9 SHEETS STA. TO STA.

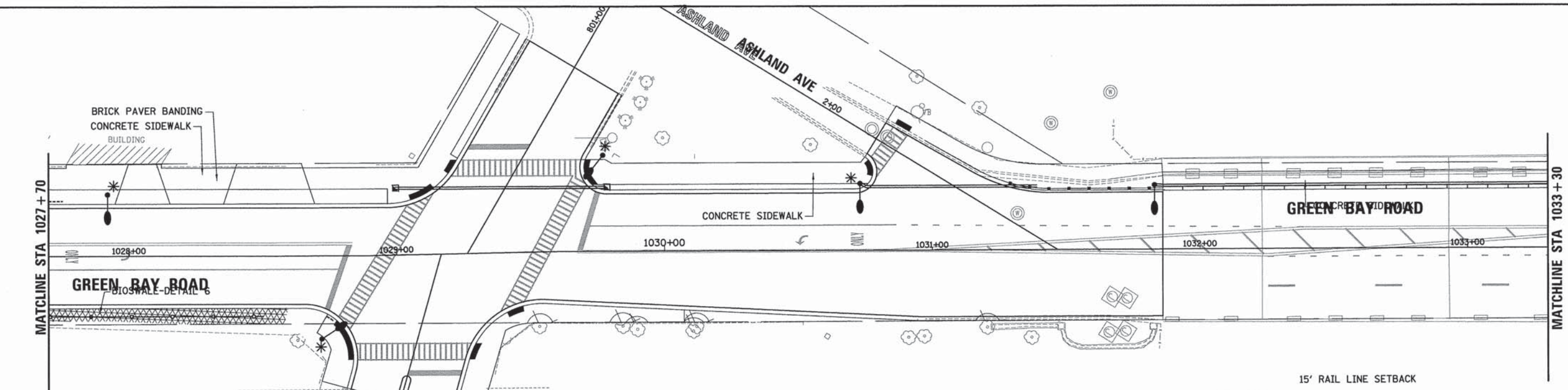
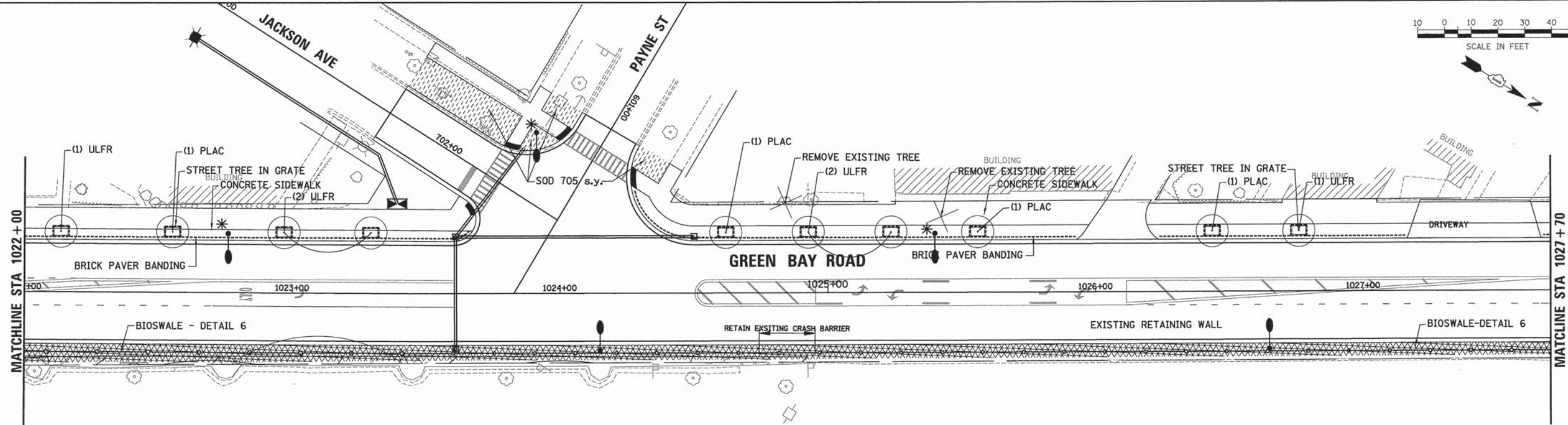
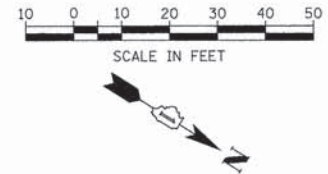
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-	13-00270-00-CH	COOK	393	221
CONTRACT NO. 01C32				
ILLINOIS FED. AID PROJECT				

FILE NAME: EROB1\_sht\_11.dwg



DATE	
BY	
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NO. _____	
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DATE	
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LEGEND			
	STREET LIGHT WITH ACORN PEDESTRIAN LIGHT	(4 L-11)	(5 L-10)
	STREET LIGHT	(4 L-11)	(6 L-10)
	PROPOSED TREE	(2 L-10)	(8 L-11)
	EX. TREE TO BE RETAINED & PROTECTED WITH FENCE		(7 L-11)
	PLANTING BED		
	BIOSWALE		
	3 COURSE BRICK PAVER BANDING		
	TREE GRATE WITH BRICK PAVER BANDING		



USER NAME = bhenr10hs	DESIGNED - DL	REVISED - -
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PLOT SCALE = 28.0000' / 1" =	CHECKED - CK	REVISED - -
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

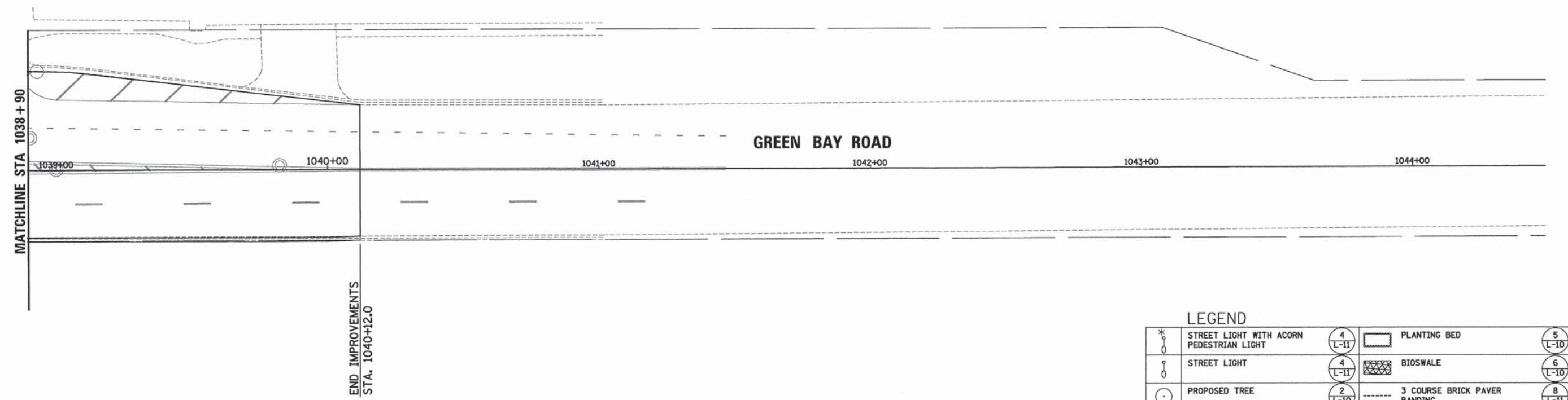
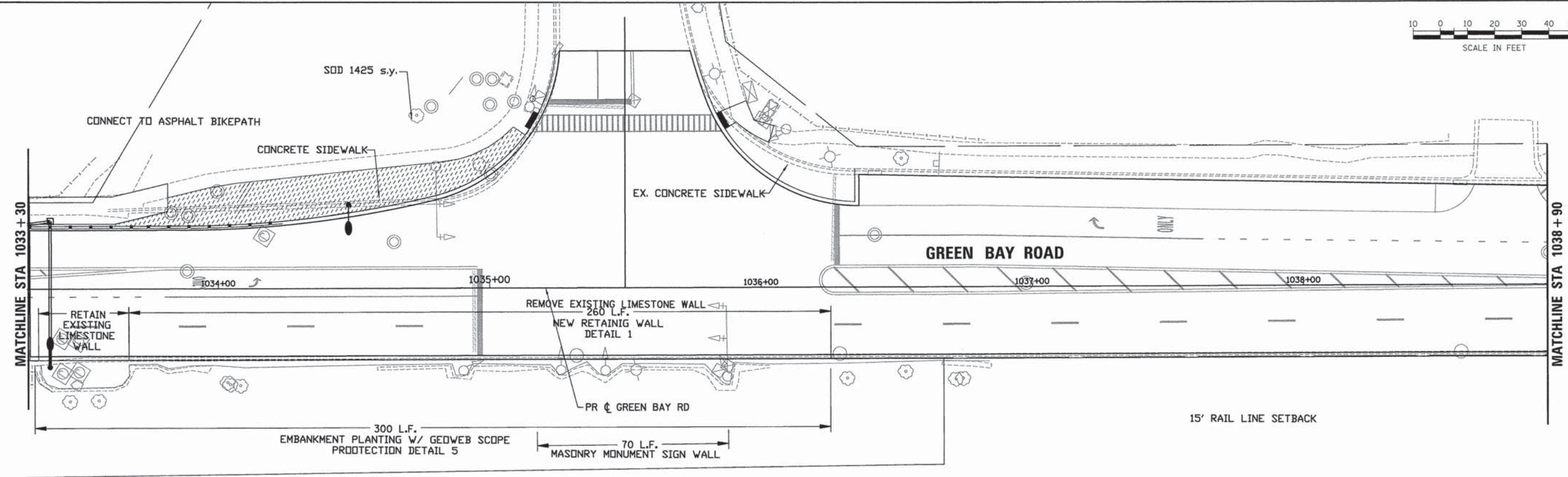
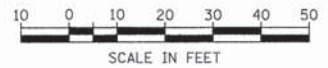
LANDSCAPING SHEETS  
GREEN BAY ROAD

SCALE: SHEET 12 OF 9 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	222
CONTRACT NO. 61C32				
ILLINOIS FED. AID PROJECT				

FILE NAME: EFG01.sht...ind.02.dgn





LEGEND			
	4 L-11		5 L-10
	4 L-11		6 L-10
	2 L-10		8 L-11
			7 L-11

PLAN	DATE
SURVEYED	BY
ALIGNMENT CHECKED	
RT. OF WAY CHECKED	
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NOTE BOOK NO.	

PROFILE	DATE
SURVEYED	BY
GRADES CHECKED	
B.M. NOTED	
STRUCTURE NOTATIONS CHKD	
NOTE BOOK NO.	

FILE NAME: ERGBL\_sht\_13rd\_04.dgn

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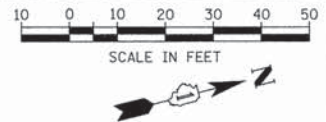
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	DATE - 10/9/2015	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

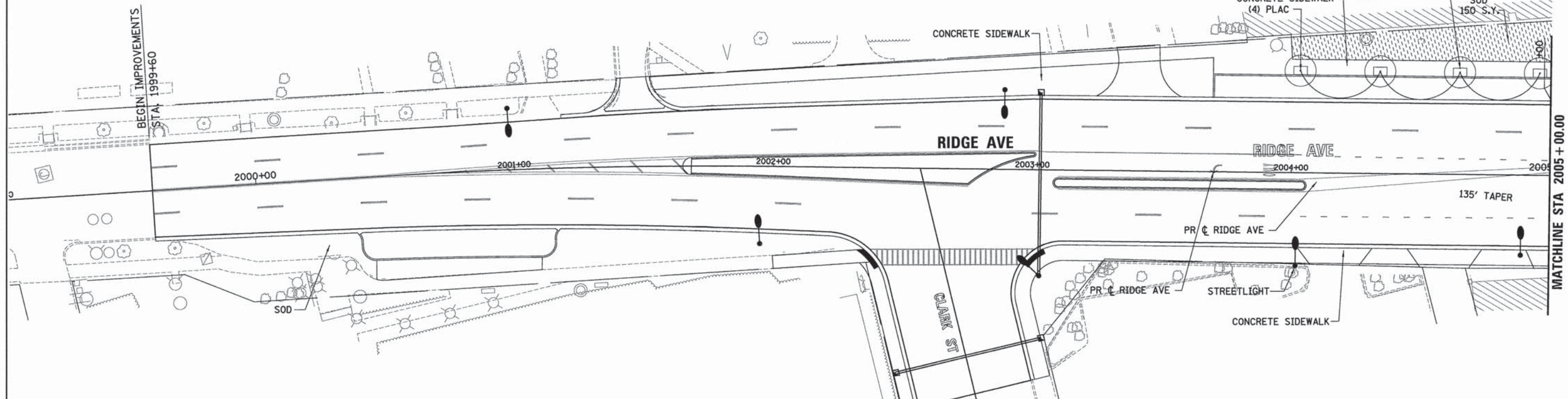
LANDSCAPING SHEETS			
GREEN BAY ROAD			
SCALE:	SHEET 13 OF 9 SHEETS	STA.	TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	223
CONTRACT NO. G1C32			ILLINOIS FED. AID PROJECT	

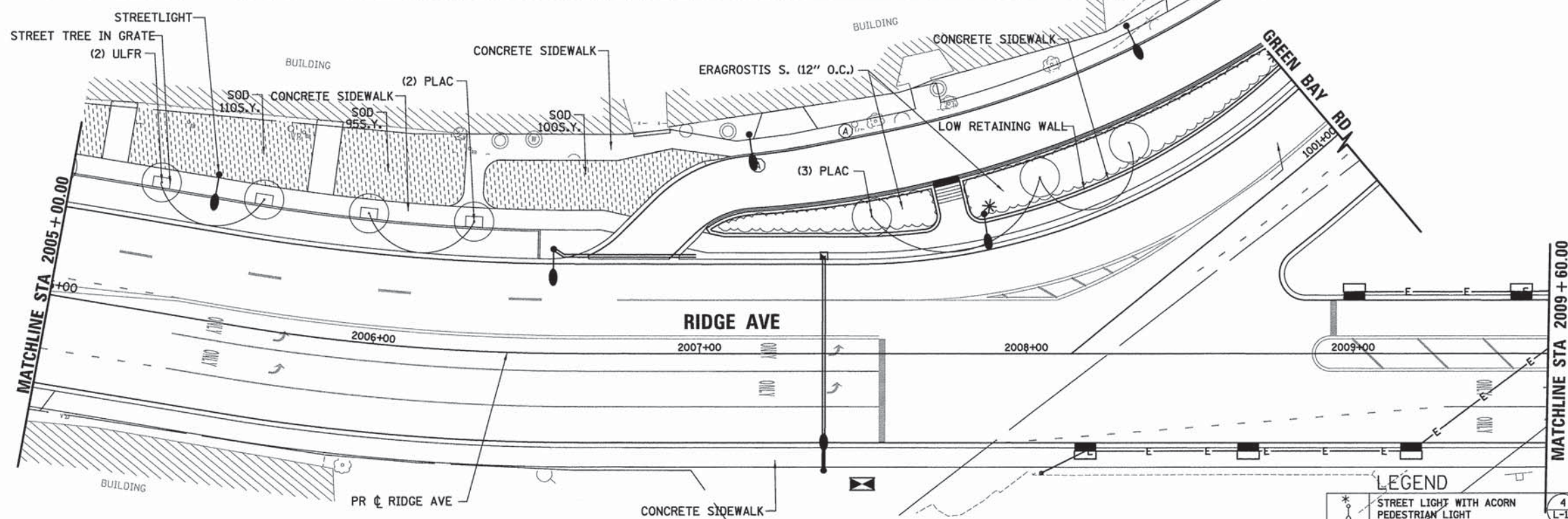




PLAN	SURVEYED	DATE
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	CHECKED	
	NOTED	
	STRUCTURE NOTATIONS OK'D	
NO.		



PROFILE	SURVEYED	DATE
	PLOTTED	BY
	CHECKED	
	NOTED	
	STRUCTURE NOTATIONS OK'D	
NO.		



LEGEND			
	4		5
	4		6
	2		8
	1		7
	L-11		L-10
	L-11		L-10
	L-10		L-11
	L-11		L-11

FILE NAME: ERG01\_sht\_14.dwg

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USER NAME = bhanrscha	DESIGNED - DL	REVISED - -
PLLOT SCALE = 28,8000' / 1" =	DRAWN - DL	REVISED - -
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	DATE - 10/9/2015	REVISED - -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**LANDSCAPING SHEETS  
RIDGE AVENUE**

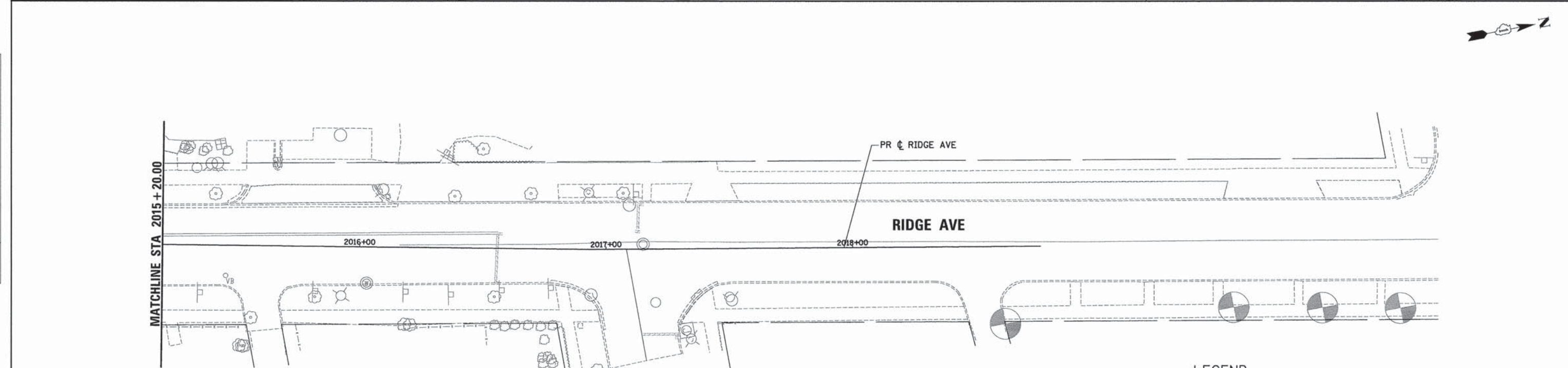
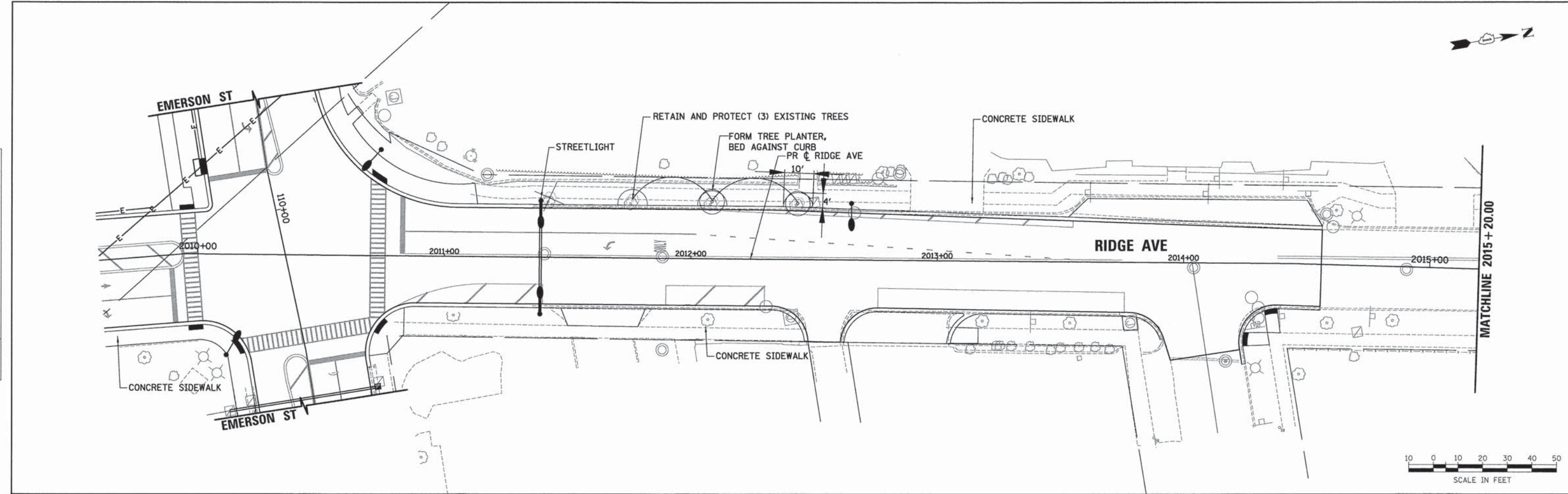
SCALE: SHEET 14 OF 9 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	224
				CONTRACT NO. G1C32
ILLINOIS FED. AID PROJECT				



PLAN	SUBMITTED	DATE
	PLOTTED	
	ALIGNMENT CHECKED	
	NOTE BOOK	
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	CADD FILE NAME	

PROFILE	SUBMITTED	DATE
	PLOTTED	
	GRADES CHECKED	
	NOTE BOOK	
	NO.	
	STRUCTURE NOTATIONS CHECKED	



LEGEND			
	4 L-11		5 L-10
	4 L-11		6 L-10
	2 L-10		8 L-11
			7 L-11

FILE NAME: ER001\_sht\_1.mxd\_08.dgn

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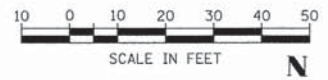
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PLOT DATE = 1/7/2016	DATE - 10/9/2015	REVISED - -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

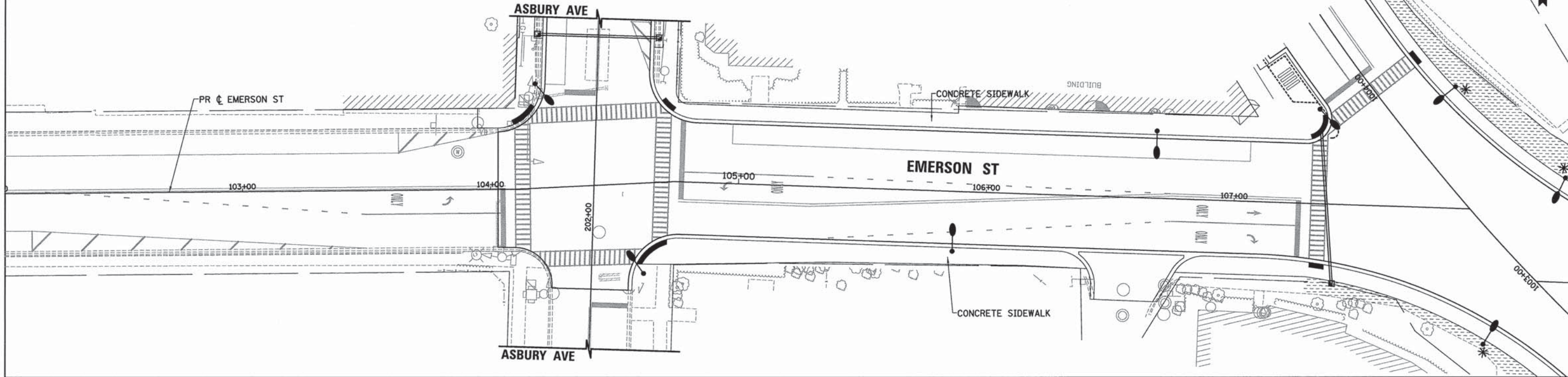
<b>LANDSCAPING SHEETS RIDGE AVENUE</b>	
SCALE:	SHEET 15 OF 9 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	225
CONTRACT NO. 61C32				
ILLINOIS FED. AID PROJECT				

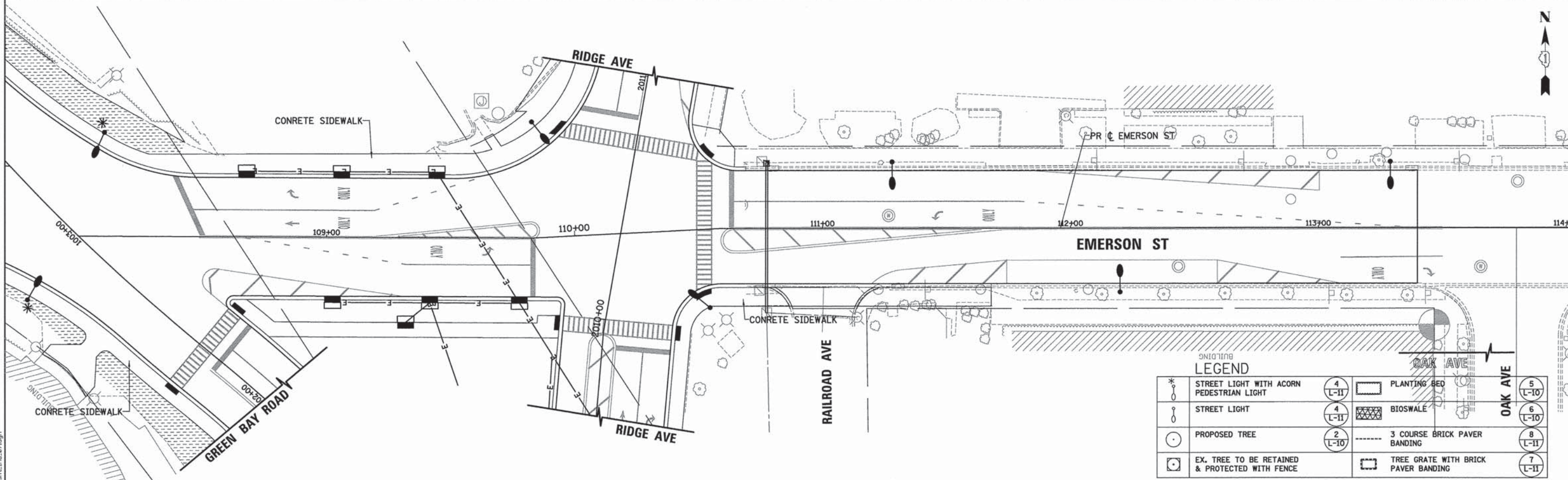




PLAN	DATE
SURVEYED	BY
ALIGNMENT CHECKED	
RT. OF WAY CHECKED	
NOTE BOOK NO.	
PADD FILE NAME	



PROFILE	DATE
SURVEYED	BY
GRADES CHECKED	
B.M. NOTED	
STRUCTURE NOTATIONS OK'D	
NOTE BOOK NO.	



LEGEND			
	STREET LIGHT WITH ACORN PEDESTRIAN LIGHT		PLANTING BED
	STREET LIGHT		BIOSWALE
	PROPOSED TREE		3 COURSE BRICK PAVER BANDING
	EX. TREE TO BE RETAINED & PROTECTED WITH FENCE		TREE GRATE WITH BRICK PAVER BANDING

FILE NAME: ERG811\_sht\_1.rvt.dgn

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USER NAME = bhansrsh	DESIGNED - DL	REVISED - -
PLOT SCALE = 20.0000' / 1" =	DRAWN - DL	REVISED -
PLOT DATE = 1/7/2016	CHECKED - CK	REVISED -
	DATE - 10/9/2015	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**LANDSCAPING SHEETS  
 EMERSON STREET**

SCALE: SHEET 16 OF 9 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	226
CONTRACT NO. 61C32				
ILLINOIS FED. AID PROJECT				

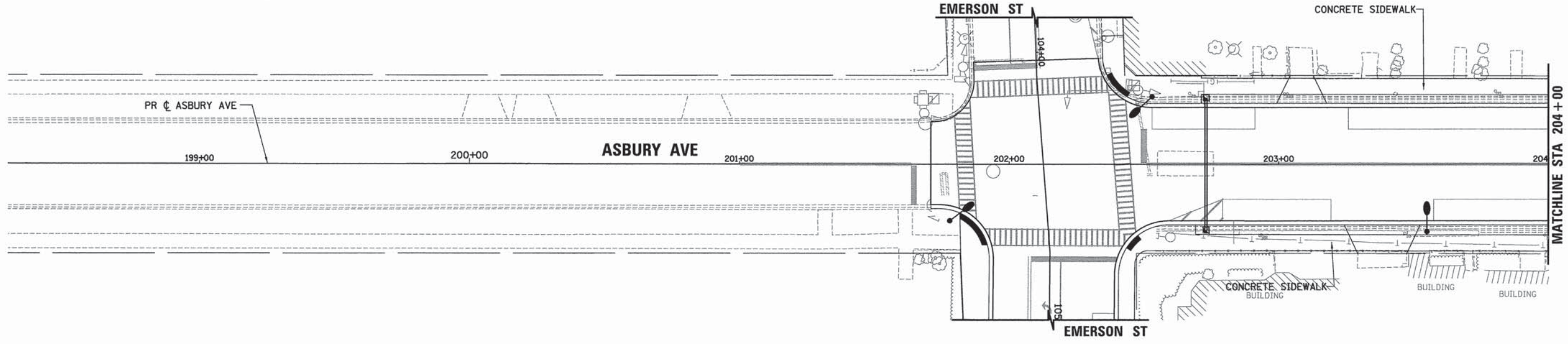




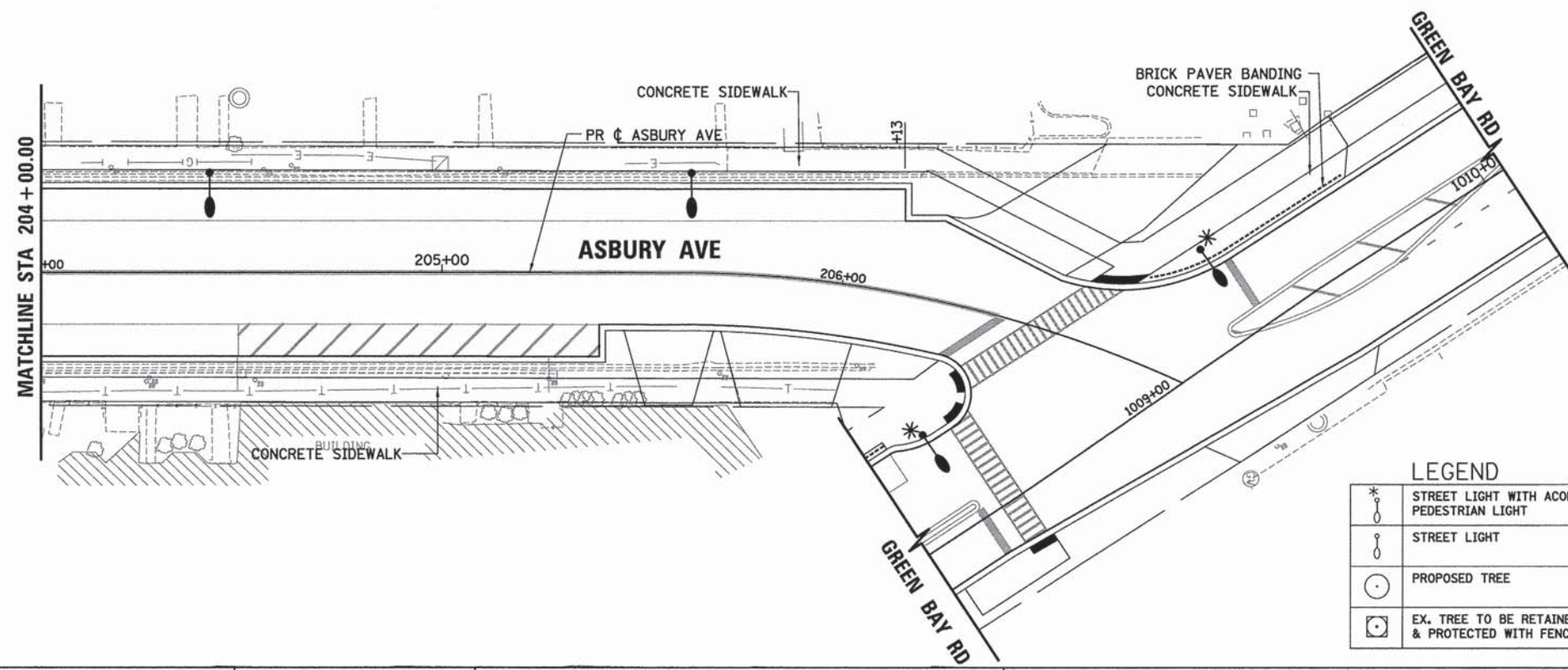
SCALE IN FEET



PLAN	SURVEYED	DATE
NOTE BOOK NO.	ALIGNMENT CHECKED	BY
	GRADES CHECKED	
	RT. OF WAY CHECKED	
	ROAD FILE NAME	



PROFILE	SURVEYED	DATE
NOTE BOOK NO.	GRADES CHECKED	BY
	B.M. NOTED	
	STRUCTURE NOTATIONS CHKD	



LEGEND			
	STREET LIGHT WITH ACORN PEDESTRIAN LIGHT	4 L-11	5 L-10
	STREET LIGHT	4 L-11	6 L-10
	PROPOSED TREE	2 L-10	8 L-11
	EX. TREE TO BE RETAINED & PROTECTED WITH FENCE		7 L-11
	PLANTING BED		
	BIOSWALE		
	3 COURSE BRICK PAVER BANDING		
	TREE GRATE WITH BRICK PAVER BANDING		



USER NAME = bhennrichs	DESIGNED - DL	REVISED - -
DESIGNED - DL	DRAWN - DL	REVISED - -
CHECKED - CK	DATE - 10/9/2015	REVISED - -
PLOT SCALE = 20.0000' / 1" =		
PLOT DATE = 1/7/2016		

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

LANDSCAPING SHEETS  
ASBURY AVENUE

SCALE: SHEET 17 OF 9 SHEETS STA. TO STA.

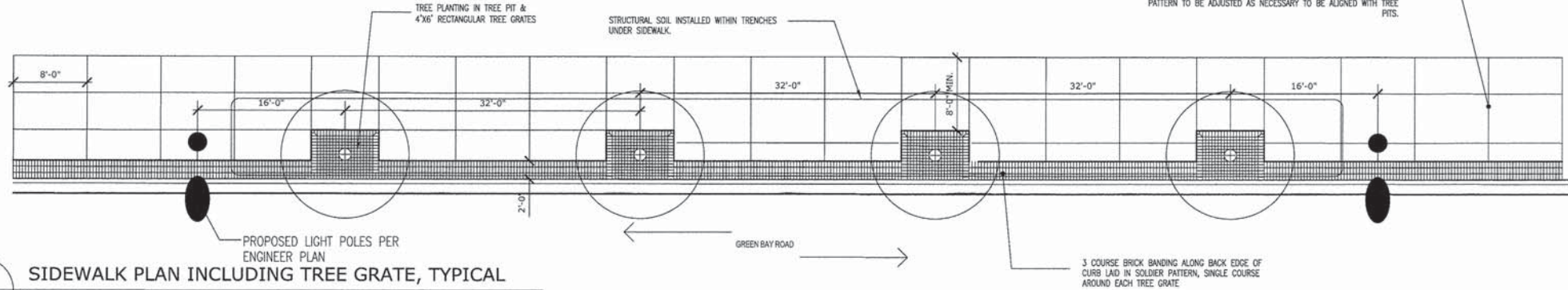
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	227
CONTRACT NO. 61C32				
ILLINOIS FED. AID PROJECT				

FILE NAME: ERGB1\_ah1\_ind\_09.dgn

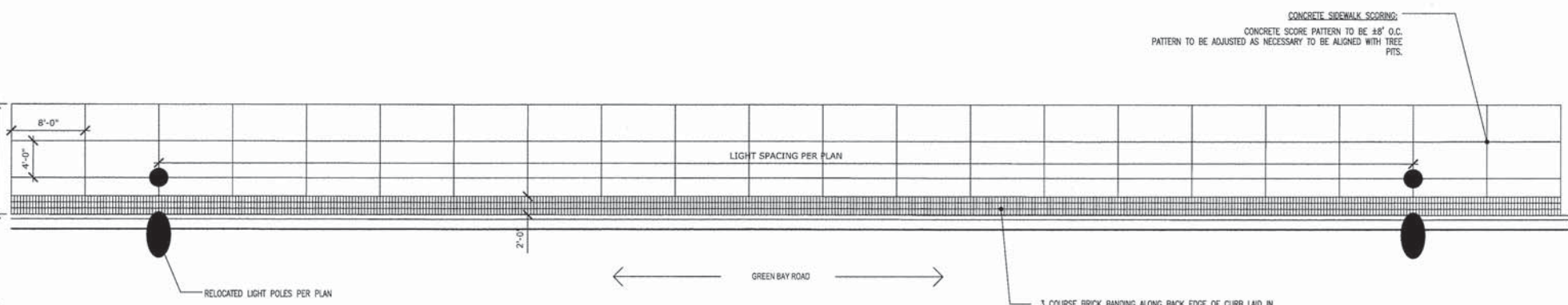


DATE	BY

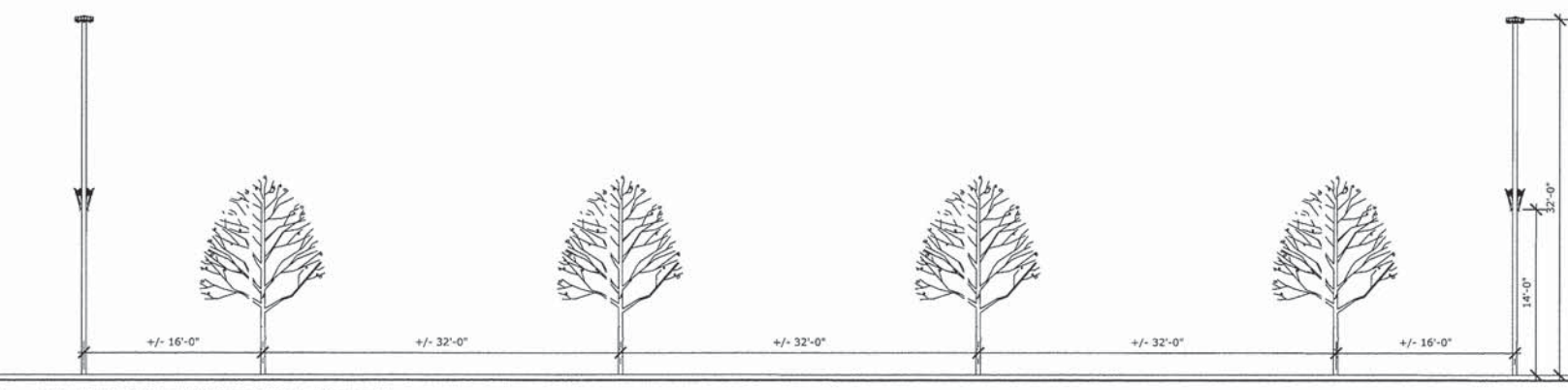
DATE	BY



**1** SIDWALK PLAN INCLUDING TREE GRATE, TYPICAL  
L-11 1/8" = 1'-0"



**2** SIDWALK PLAN, TYPICAL  
L-11 1/8" = 1'-0"



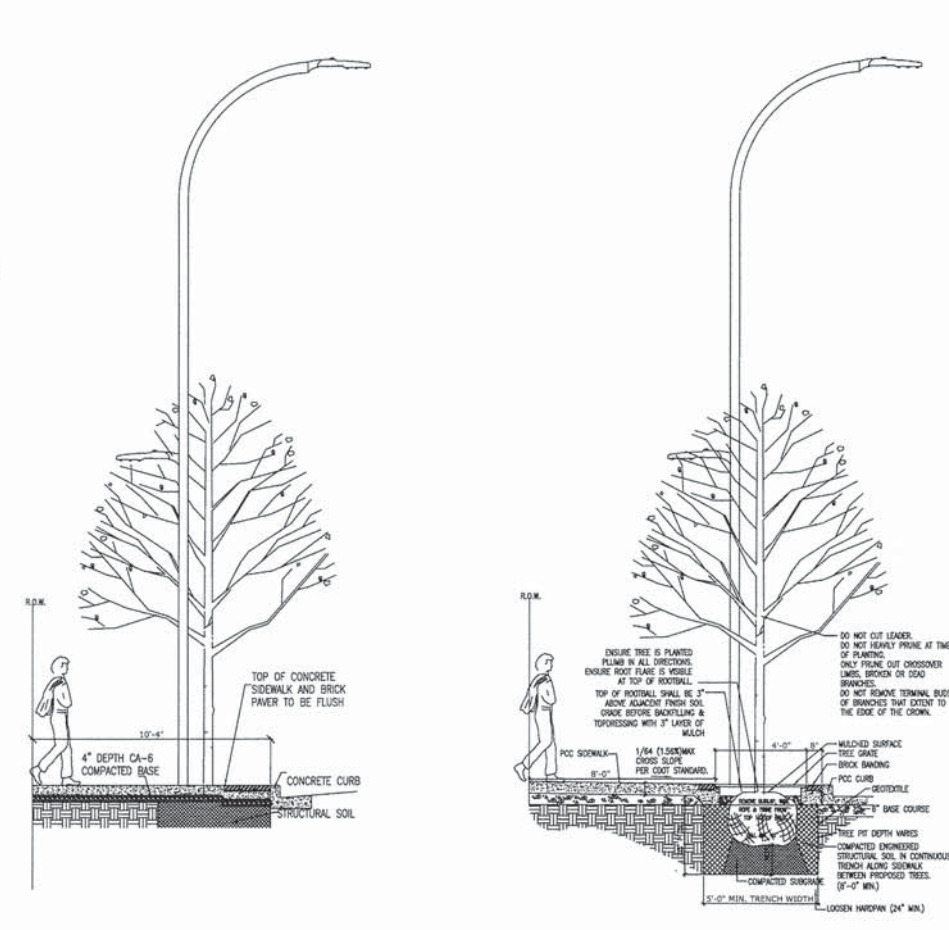
**3** SIDWALK ELEVATION, TYPICAL  
L-11 1/8" = 1'-0"

**STREETSCAPE PLANT SCHEDULE - WEST SIDE OF GREENBAY ROAD**

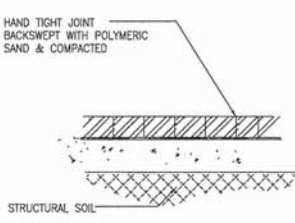
KEY	Genus	Species	Variety	Common Name	Quantity	Size	Spacing	Mature Size
<b>Trees</b>								
PLAC	<i>Platanus</i>	<i>acerifolia</i>	Exclamation!	London Plane Tree	19	3" BB	Per Plan	60'H x 45'W
ULFR	<i>Ulmus</i>		Frontier	Hybrid Elm	20	3" BB	Per Plan	50'H x 30'W
note: ALL TREES ALONG SIDEWALK ARE PLANTED IN TREE GRATES PER DETAILS.								
<b>Ornamental Grasses</b>								
ERSP	<i>Eragrostis</i>	<i>spectabilis</i>		Purple Love Grass	3,600	Plug	1' o.c.	24"H x 18"W

**BIOSWALE PLANT SCHEDULE**

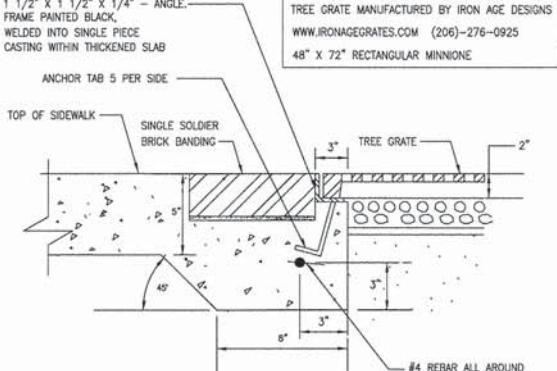
Common Name	Size	Spacing	TOTAL QUANTITY
ERAGROSTIS	PLUG	12" O.C.	10413



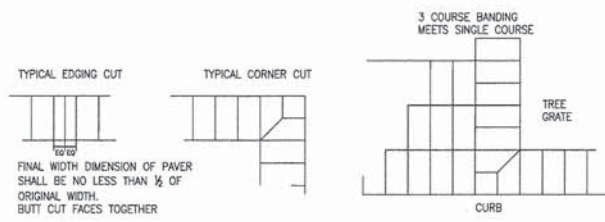
**4** SIDWALK SECTION, TYPICAL  
L-10 1/4" = 1'-0"



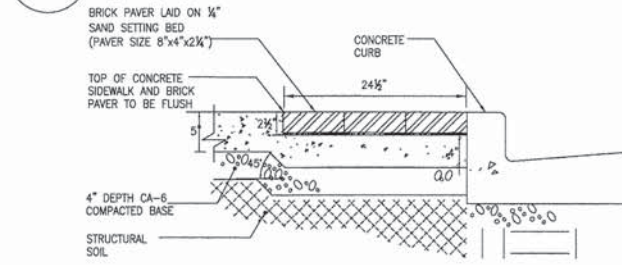
**5** BRICK BANDING SUB-DRAIN DETAIL  
L-11 1" = 1'-0"



**7** BRICK BANDING AT TREE GRATE DETAIL  
L-11 2" = 1'-0"



**6** BRICK BANDING TYPICAL DETAILS  
L-11 1" = 1'-0"



**8** BRICK BANDING DETAIL  
L-11 1" = 1'-0"

FILE NAME: ERGRB1-sh-t-h.dwg

USER NAME = bherricha

PLOT SCALE = 1:20000 ' / 1"r.

PLOT DATE = 1/7/2016

DESIGNED - DL

DRAWN - DL

CHECKED - CK

DATE - 10/9/2015

REVISED - -

REVISED - -

REVISED - -

REVISED - -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

LANDSCAPING SHEETS  
DETAILS

SCALE: \_\_\_\_\_ SHEET 9 OF 9 SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	228
CONTRACT NO. 61C32				
ILLINOIS FED. AID PROJECT				



# TRAFFIC SIGNAL LEGEND

ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED
CONTROLLER CABINET				EMERGENCY VEHICLE LIGHT DETECTOR				ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1/C, UNLESS NOTED OTHERWISE			
RAILROAD CONTROL CABINET				CONFIRMATION BEACON				COAXIAL CABLE			
COMMUNICATIONS CABINET				HANDHOLE				VENDOR CABLE FOR CAMERA			
MASTER CONTROLLER				HEAVY DUTY HANDHOLE				COPPER INTERCONNECT CABLE, NO. 18 3 PAIR TWISTED, SHIELDED			
MASTER MASTER CONTROLLER				DOUBLE HANDHOLE				FIBER OPTIC CABLE NO. 62.5/125, MM12F			
UNINTERRUPTABLE POWER SUPPLY				JUNCTION BOX				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM12F			
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT				UNDERGROUND CONDUIT, GALVANIZED STEEL (UC)				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM24F			
TELEPHONE CONNECTION (P) POLE OR (G) GROUND MOUNT				TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM24F			
STEEL MAST ARM ASSEMBLY AND POLE				COMMON TRENCH				GROUND ROD AT (C) CONTROLLER, (H) HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE			
ALUMINUM MAST ARM ASSEMBLY AND POLE				COILABLE NONMETALLIC CONDUIT (EMPTY)				CONTROLLER CABINET AND FOUNDATION TO BE REMOVED			
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE				SYSTEM ITEM		S	S	STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED			
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH PTZ CAMERA				INTERSECTION ITEM		I	IP	ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED			
SIGNAL POST				REMOVE ITEM	R			STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE AND FOUNDATION TO BE REMOVED			
TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM				RELOCATE ITEM	RL			SIGNAL POST AND FOUNDATION TO BE REMOVED			
GUY WIRE				ABANDON ITEM	A			12" (300mm) TRAFFIC SIGNAL SECTION			
SIGNAL HEAD				12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE				SIGNAL FACE			
SIGNAL HEAD CONSTRUCTION STAGES (NUMBERS INDICATE THE CONSTRUCTION STAGE)				12" (300mm) PEDESTRIAN SIGNAL HEAD WALK/DON'T WALK SYMBOL				SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD			
SIGNAL HEAD WITH BACKPLATE				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, OUTLINED				"RB" INDICATES REFLECTIVE BACKPLATE			
SIGNAL HEAD OPTICALLY PROGRAMMED				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, SOLID				PEDESTRIAN SIGNAL HEAD, INTERNATIONAL SYMBOL, WITH COUNTDOWN TIMER			
FLASHER INSTALLATION (S DENOTES SOLAR POWER)				PEDESTRIAN SIGNAL HEAD, INTERNATIONAL SYMBOL, WITH COUNTDOWN TIMER				RADIO INTERCONNECT			
PEDESTRIAN SIGNAL HEAD				RADIO REPEATER				DENOTES NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE, ALL DETECTOR LOOP CABLE TO BE SHIELDED			
PEDESTRIAN PUSHBUTTON DETECTOR				GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)							
ACCESSIBLE PEDESTRIAN PUSHBUTTON DETECTOR											
ILLUMINATED SIGN "NO LEFT TURN"											
ILLUMINATED SIGN "NO RIGHT TURN"											
DETECTOR LOOP, TYPE I											
PERFORMED DETECTOR LOOP											
MICROWAVE VEHICLE SENSOR											
VIDEO DETECTION CAMERA											
VIDEO DETECTION ZONE											
PAN, TILT, ZOOM CAMERA											
WIRELESS DETECTOR SENSOR											
WIRELESS ACCESS POINT											

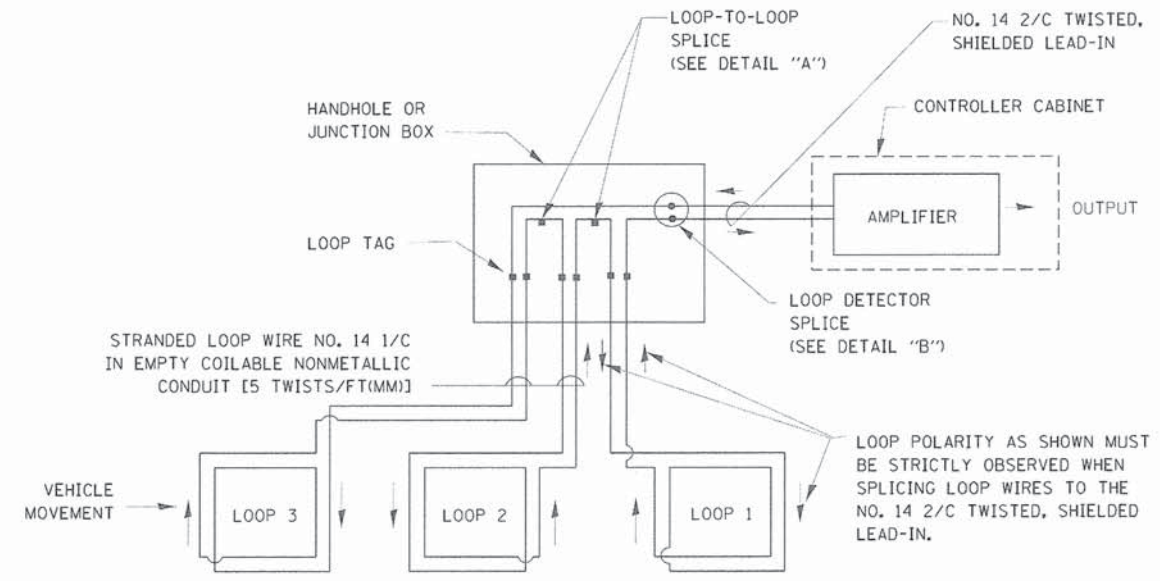
## RAILROAD SYMBOLS

	EXISTING	PROPOSED
RAILROAD CONTROL CABINET		
RAILROAD CANTILEVER MAST ARM		
FLASHING SIGNAL		
CROSSING GATE		
CROSSBUCK		



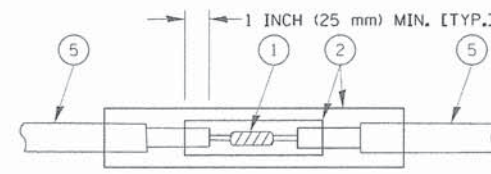
**LOOP DETECTOR NOTES**

1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

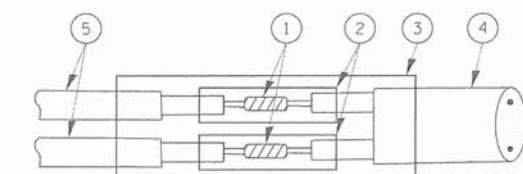


**DETECTOR LOOP WIRING SCHEMATIC**

- LOOPS SHALL BE SPLICED IN SERIES.
- SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm). IF IN CONCRETE, THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.



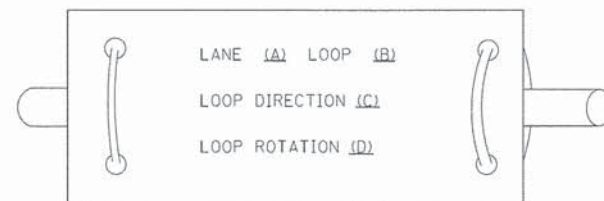
DETAIL "A"  
LOOP-TO-LOOP SPLICE



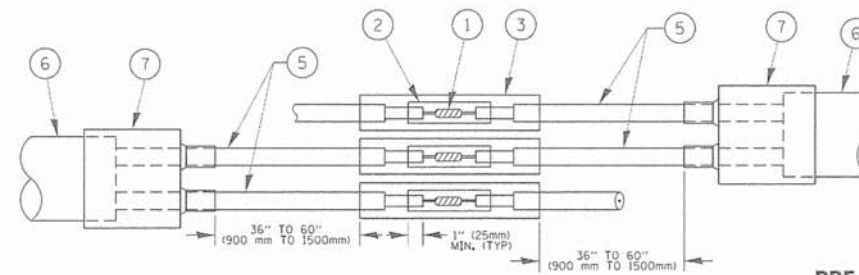
DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

**TYPE I LOOP**

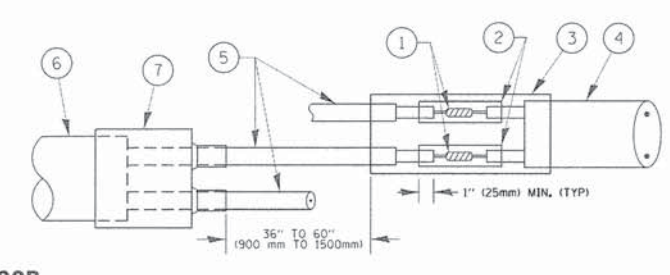
**LOOP LEAD-IN CABLE TAG**



- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



DETAIL "A"  
LOOP-TO-LOOP SPLICE



DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

**PRE-FORMED LOOP**

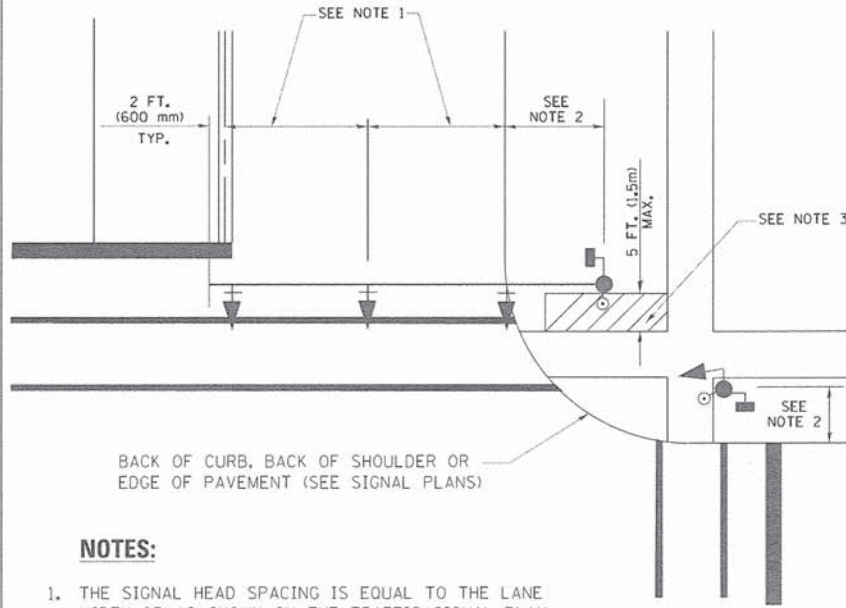
**LOOP DETECTOR SPLICE**

- ① WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH. THE WESTERN UNION SPLICES SHALL BE STAGGERED.
- ② WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- ③ WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGTH 6" (150 mm), UNDERWATER GRADE.
- ④ NO. 14 2/C TWISTED, SHIELDED CABLE.
- ⑤ LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
- ⑥ PRE-FORMED LOOP
- ⑦ XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

FILE NAME *	USER NAME * Footenw	DESIGNED - DAD	REVISED - -DAG 1-1-14	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS</b>			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pawork\pawdot\footenw\108100.00\tds...	PLT SCALE = 50:0000 1/4" = 1'	DRAWN - BCK	REVISED -		SCALE: NONE	SHEET NO. 2 OF 7 SHEETS	STA.	TO STA.	13-00270-00-CH	COOK	393	230	
	PLT DATE = 1/13/2014	CHECKED - DAD	REVISED -						TS-05				
		DATE - 10-28-09	REVISED -						FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				CONTRACT NO. 61C32



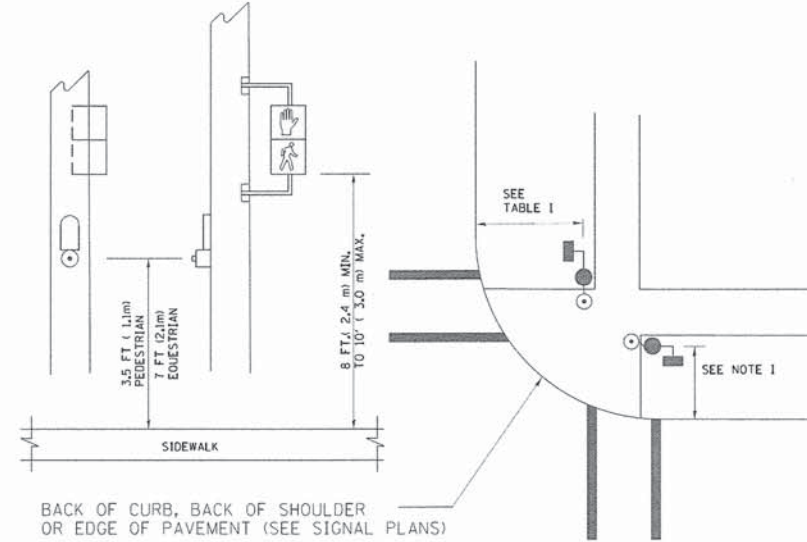
**TRAFFIC SIGNAL MAST ARM AND SIGNAL POST  
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR  
FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN  
WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.**



**NOTES:**

1. THE SIGNAL HEAD SPACING IS EQUAL TO THE LANE WIDTH OR AS SHOWN ON THE TRAFFIC SIGNAL PLAN.
2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
3. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST.
4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
5. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

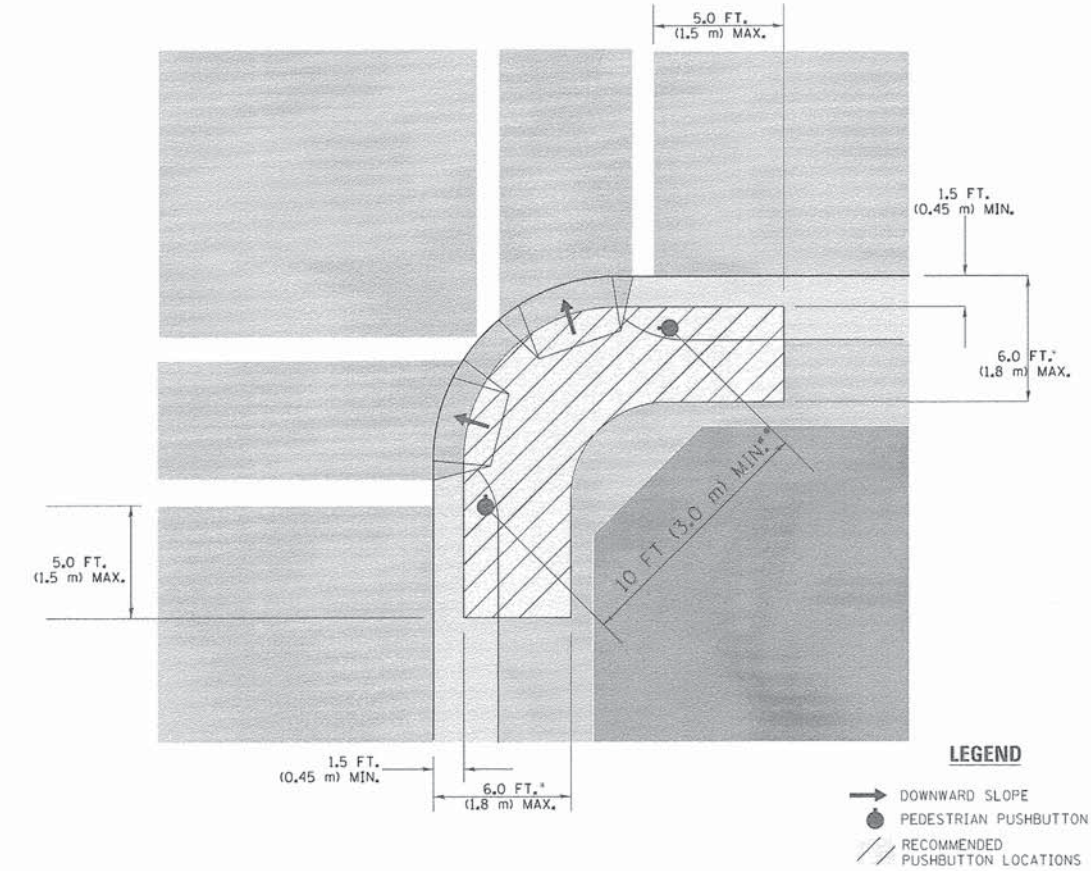
**PEDESTRIAN SIGNAL POST  
AND  
PEDESTRIAN PUSH BUTTON POST**



**NOTES:**

1. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
2. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE PEDESTRIAN SIGNAL POST OR THE PEDESTRIAN PUSH BUTTON POST.
3. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
4. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

**RECOMMENDED PUSHBUTTON LOCATIONS**



**LEGEND**

- DOWNWARD SLOPE
- PEDESTRIAN PUSHBUTTON
- /// RECOMMENDED PUSHBUTTON LOCATIONS

- \* WHERE THERE ARE CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5 FT (0.45 m) AND 6 FT (1.8 m) FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT, IT SHOULD NOT BE FURTHER THAN 10 FT (3 m) FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
- \*\* WHERE THERE ARE CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT IMPRACTICAL TO PROVIDE THE 10 FT (3 m) SEPERATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

**NOTES:**

1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) OF A VEHICULAR SIGNAL FACE THAT IS NOT LOCATED OVER A HIGHWAY SHALL BE AT LEAST 8 FT (2.4 m) BUT NOT MORE THAN 19 FT (5.8 m) ABOVE THE SIDEWALK OR, IF THERE IS NO SIDEWALK, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY.
3. THE BOTTOM OF THE SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001, 877002, 877006, 877011 AND 877012 WITH A MINIMUM OF 16 FT (5.0 m) AND A MAXIMUM OF 18 FT. (5.5 m) FROM THE HIGHEST POINT OF PAVEMENT.
4. THE BOTTOM OF THE TEMPORARY SPAN WIRE MOUNTED SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARD 880001 WITH A MINIMUM OF 17 FT (5.18 m) FROM THE HIGHEST POINT OF PAVEMENT.
5. THE TOP OF THE SIGNAL HOUSING OF A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL NOT BE MORE THAN 25.6 FT (7.8 m) ABOVE THE PAVEMENT.

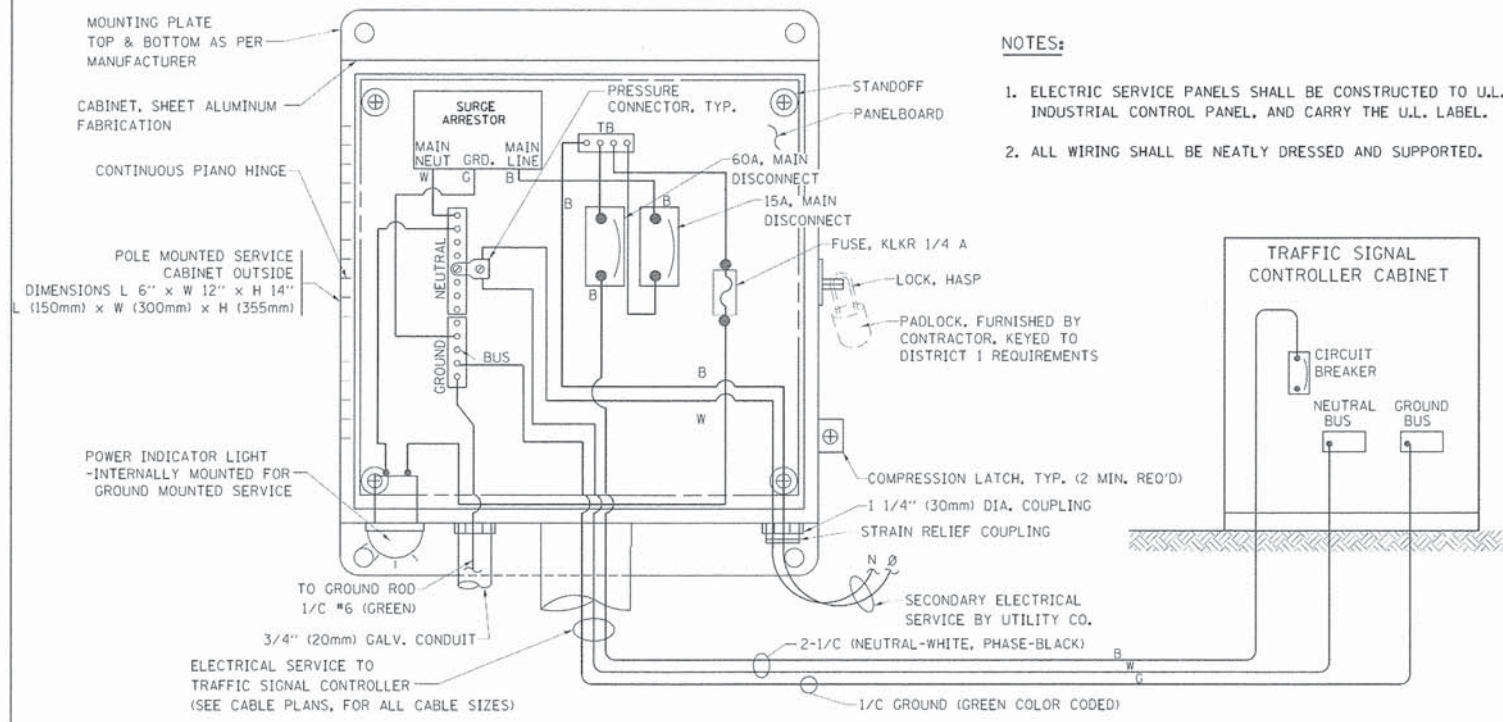
**TRAFFIC SIGNAL EQUIPMENT OFFSET**

TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN PUSHBUTTON POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TEMPORARY WOOD POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
CONTROLLER CABINET	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.
SERVICE INSTALLATION, GROUND MOUNT	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.

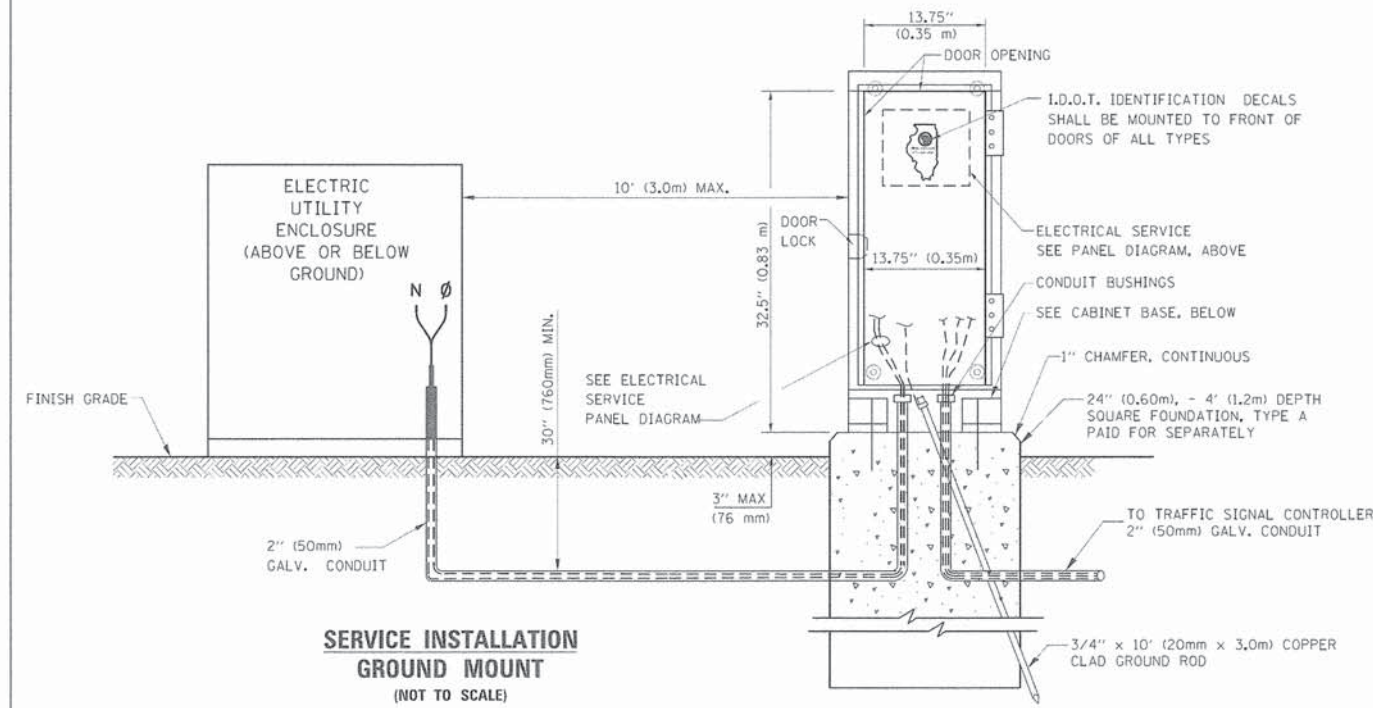
**NOTES:**

1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TO THE ROADWAY SIDE OF THE FOUNDATION.
4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS, FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" CHART AND THE TRAFFIC SIGNAL INSTALLATION PLAN, COULD EFFECT THE PLACEMENT OF THE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS AND THE PEDESTRIAN PUSHBUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL INSTALLATION PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE. THE PROPOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THE ABOVE REQUIREMENTS. THE PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS MUST MEET THE REQUIREMENTS UNDER THE DETAILS ON THIS SHEET.



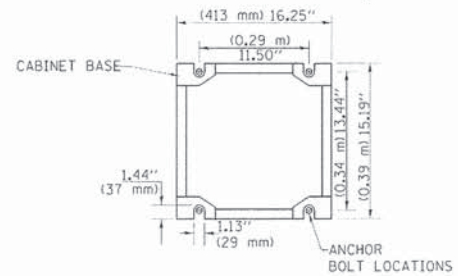


**ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)**  
**SERVICE INSTALLATION POLE MOUNT (SHOWN)**  
 (NOT TO SCALE)

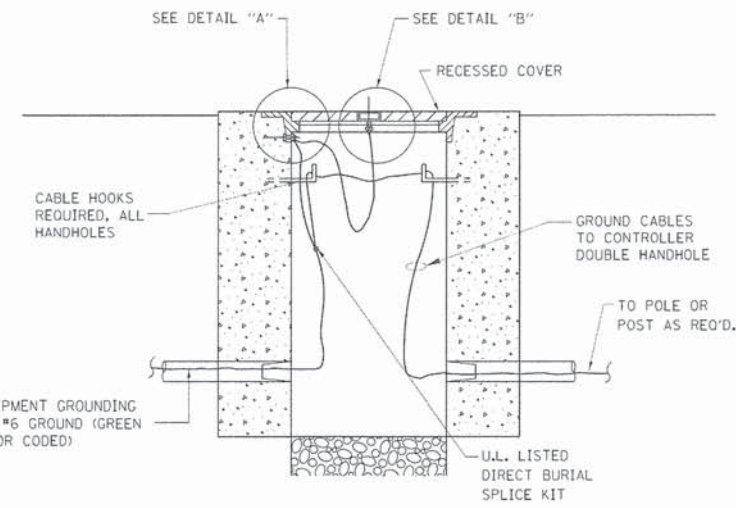
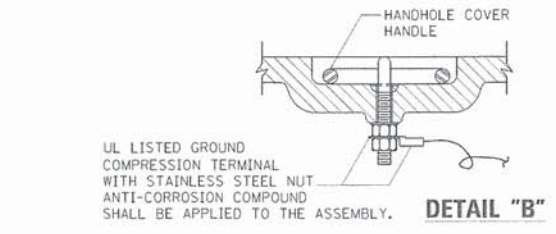
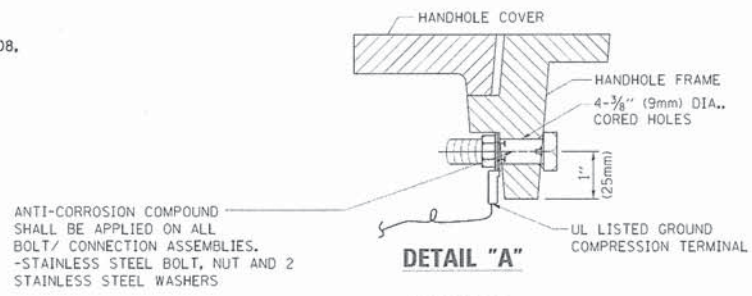


**SERVICE INSTALLATION GROUND MOUNT**  
 (NOT TO SCALE)

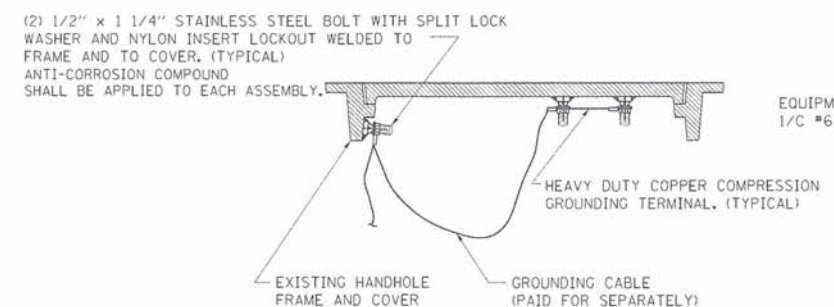
**CABINET - BASE BOLT PATTERN**  
 (NOT TO SCALE)



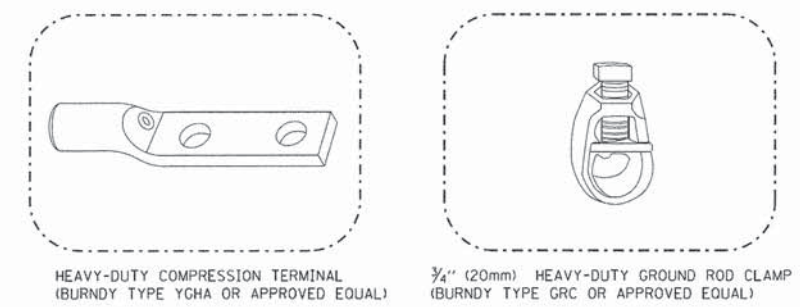
- NOTES:**
1. ELECTRICAL SERVICE PANELS SHALL BE CONSTRUCTED TO U.L. STD 508, INDUSTRIAL CONTROL PANEL, AND CARRY THE U.L. LABEL.
  2. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.



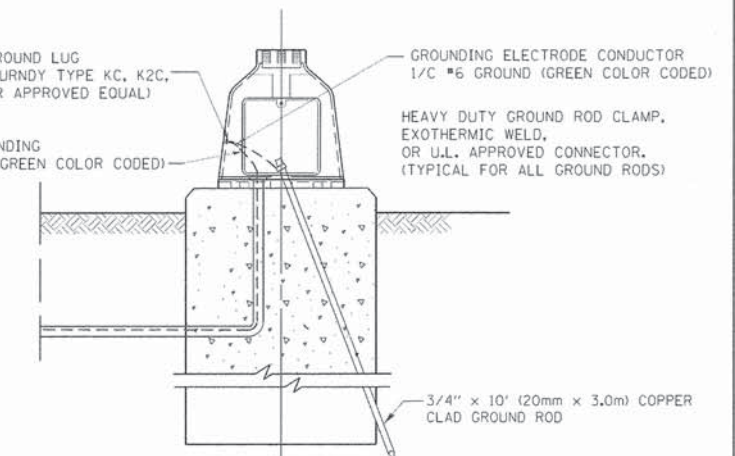
**HANDHOLE COVER & FRAME - GROUNDING DETAIL**  
 (NOT TO SCALE)



**EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL**  
 (NOT TO SCALE)



- NOTES:**
- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
  - GROUND CABLE SHALL BE LOOPEO OVER HOOKS IN THE HANDHOLES
  - 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES
  - 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES.
  - 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



**MAST ARM POLE / POST-GROUNDING DETAIL**  
 (NOT TO SCALE)

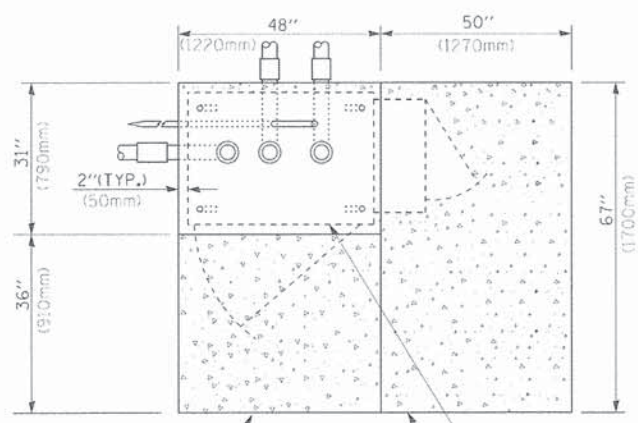
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DRAWN - BCK	CHECKED - DAD	DATE - 10-28-09	REVISED -
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STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

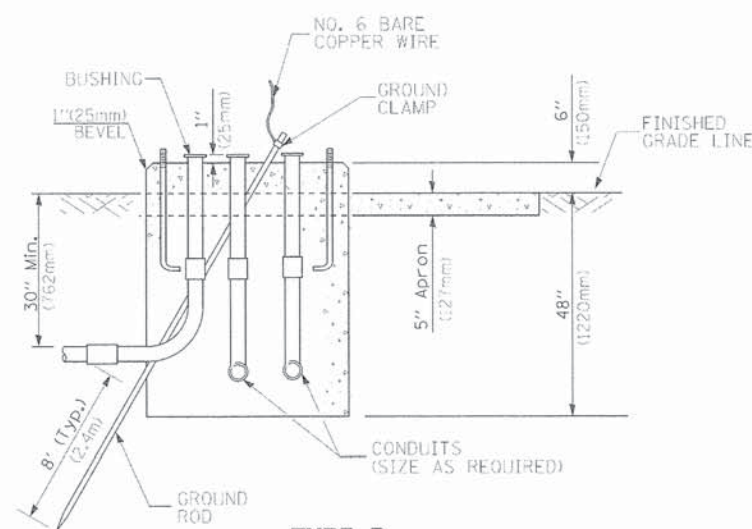
DISTRICT ONE			
STANDARD TRAFFIC SIGNAL DESIGN DETAILS			
SCALE: NONE	SHEET NO. 4 OF 7 SHEETS	STA. _____	TO STA. _____

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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TS-05			CONTRACT NO. 61C32	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

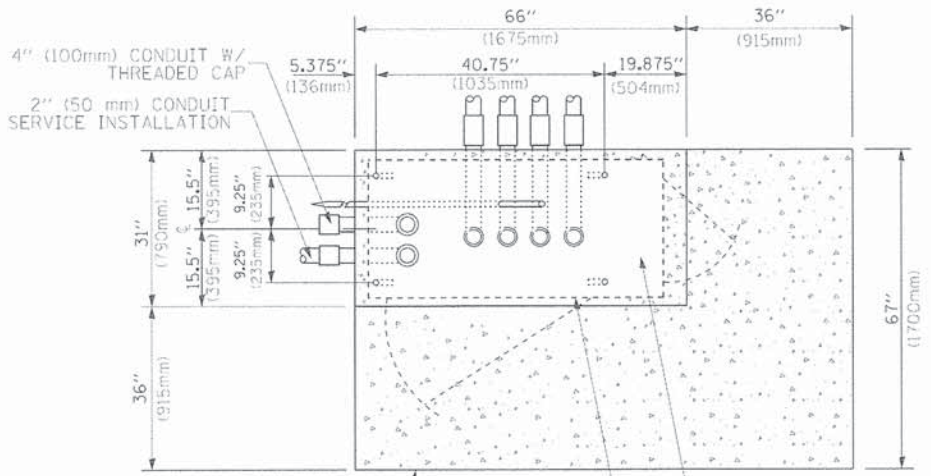




**TOP VIEW**

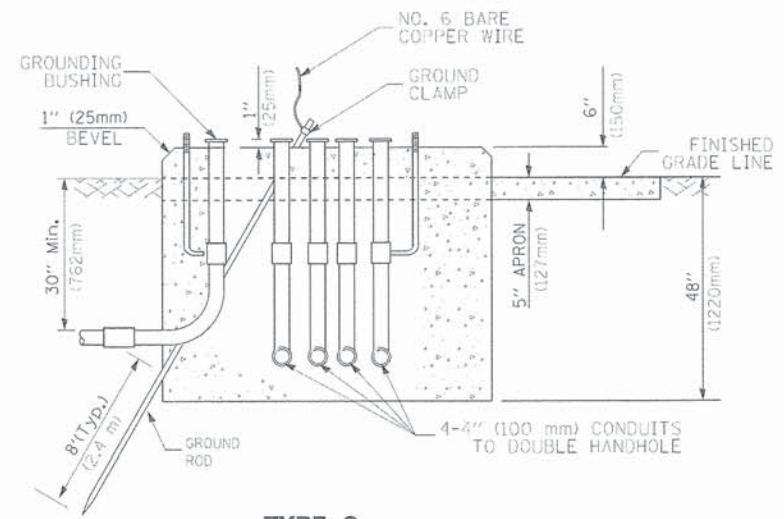


**TYPE D  
FOR GROUND MOUNTED  
CONTROLLER CABINET  
AND UPS BATTERY CABINET**

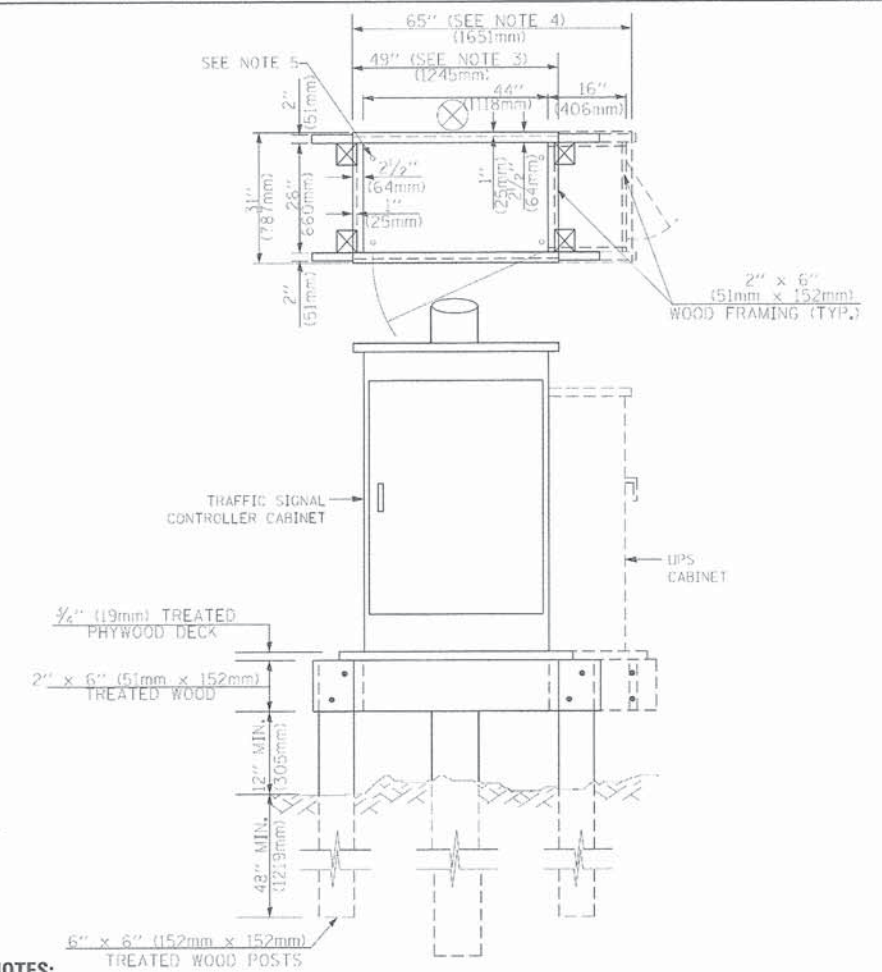


**TOP VIEW**

**NOTE:**  
TOP OF FOUNDATION SHALL BE HIGHER THAN TOP OF DOUBLE HANDHOLE



**TYPE C  
FOR GROUND MOUNTED  
SUPER P (TYPE IV) AND SUPER R (TYPE V)  
CONTROLLER CABINETS**



**NOTES:**

1. BASED ON CONTROLLER CABINET TYPE IV WITH BASE DIMENSIONS OF 26" x 44" (660mm x 1118mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
2. BASED ON UNINTERRUPTIBLE POWER SUPPLY CABINET WITH BASE DIMENSIONS OF 16" x 25" (406mm x 635mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
3. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.
4. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET.
5. DRILLED HOLES THROUGH THE PLATFORM BASE TO MATCH THE CONTROLLER CABINET BOLT TEMPLATE. FASTEN THE CONTROLLER CABINET TO THE PLATFORM WITH CARRIAGE BOLTS, WASHERS AND NUTS.
6. FASTEN ALL SUPPORT WOOD FRAMING TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION.

**TEMPORARY SIGNAL CONTROLLER  
WOOD SUPPORT PLATFORM**

CABLE SLACK LENGTH	FEET	METER
HANDHOLE	6.5	2.0
DOUBLE HANDHOLE	13.0	4.0
SIGNAL POST	2.0	0.6
MAST ARM	2.0	0.6
CONTROLLER CABINET	1.5	0.5
FIBER OPTIC AT CABINET	13.0	4.0
ELECTRIC SERVICE AT (CABINET OR SERVICE LOCATION)	1.5	0.5
GROUND CABLE (SIGNAL POST, MAST ARM, CABINET)	1.5	0.5
GROUND CABLE (BETWEEN FRAME AND COVER)	5.0	1.6

**CABLE SLACK**

VERTICAL CABLE LENGTH	FEET	METER
MAST ARM POLE (MAST ARM MOUNTED SIGNAL HEAD) (L = MAST ARM LENGTH - DISTANCE TO SIGNAL HEAD FROM END OF ARM)	20.0+L	6.0+L
BRACKET MOUNTED (MAST ARM POLE OR SIGNAL POLE)	13.0	4.0
PEDESTRIAN PUSH BUTTON	6.0	2.0
SERVICE INSTALLATION POLE MOUNT TO SERVICE DROP	13.5	4.1
SERVICE INSTALLATION POLE MOUNT TO GROUND	13.5	4.1
SERVICE INSTALLATION GROUND MOUNT	6.0	2.0
FOUNDATION (SIGNAL POST, MAST ARM POLE, CONTROLLER CABINET, SERVICE-GROUND MOUNT)	3.0	1.0

**VERTICAL CABLE LENGTH**

FOUNDATION	DEPTH
TYPE A - Signal Post	4'-0" (1.2m)
TYPE C - CONTROLLER W/ UPS	4'-0" (1.2m)
TYPE D - CONTROLLER	4'-0" (1.2m)
SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SQUARE	4'-0" (1.2m)

**DEPTH OF FOUNDATION**

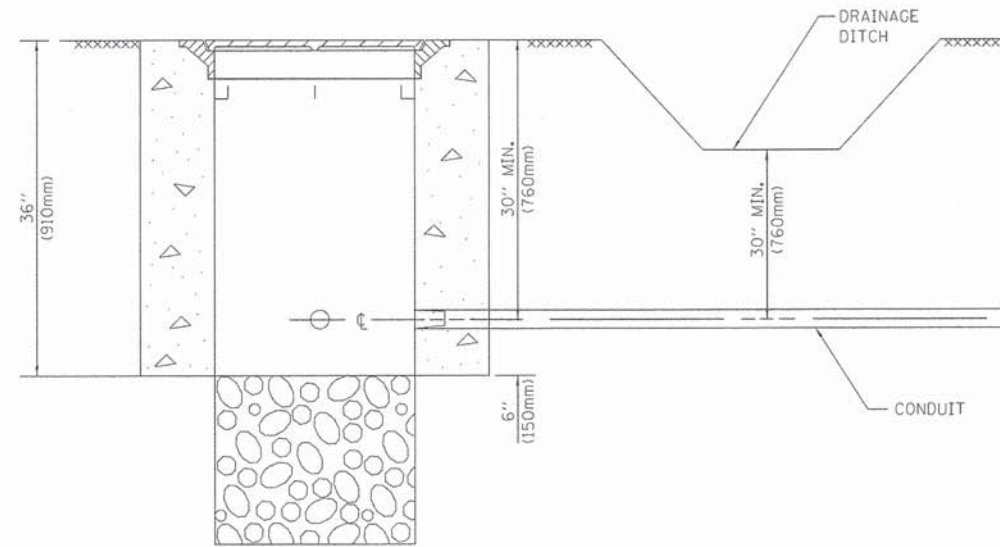
MAST ARM LENGTH	FOUNDATION DEPTH	FOUNDATION DIAMETER	SPIRAL DIAMETER	QUANTITY OF REBARS	SIZE OF REBARS
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 55' (16.8 m) and up to 65' (19.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 65' (19.8 m) and less than 75' (22.9 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 75' (22.9 m)	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

**NOTES:**

1. These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average Unconfined Compressive Strength (qu) > 1.0 tsf (100 kpa). This strength shall be verified by boring data prior to construction or with testing by the Engineer during foundation drilling. The Bureau of Bridges & Structures should be contacted for a revised design if other conditions are encountered.
2. Combination mast arm assemblies under 55 feet (16.8 m) shall use 36" (900 mm) diameter foundations.
3. Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm) diameter foundations.
4. For mast arm assemblies with dual arms refer to state standard 878001.

**DEPTH OF MAST ARM FOUNDATIONS, TYPE E**

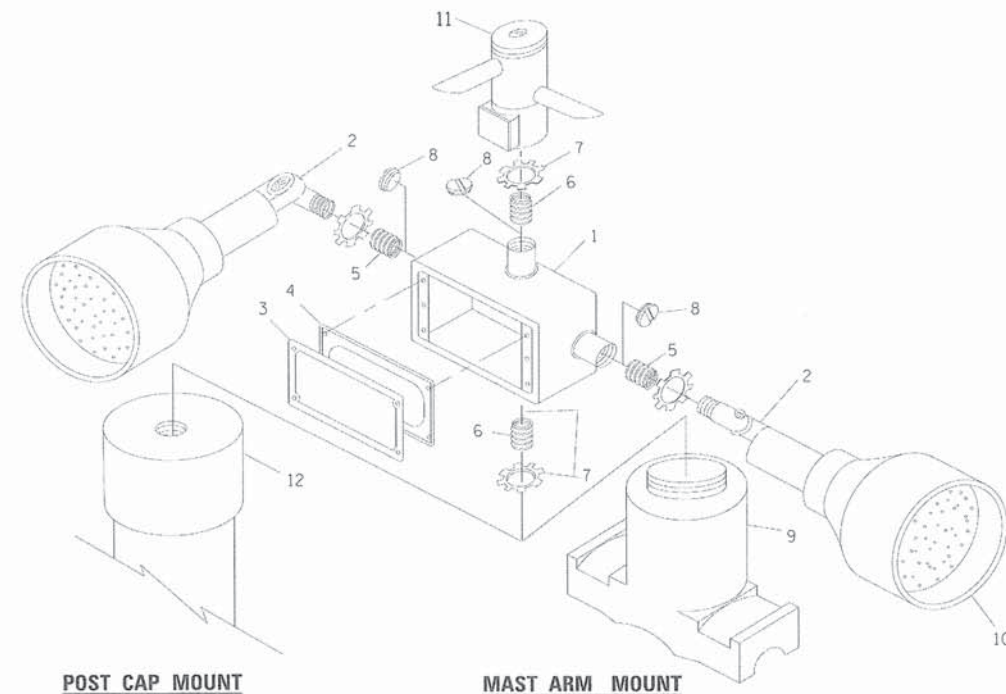




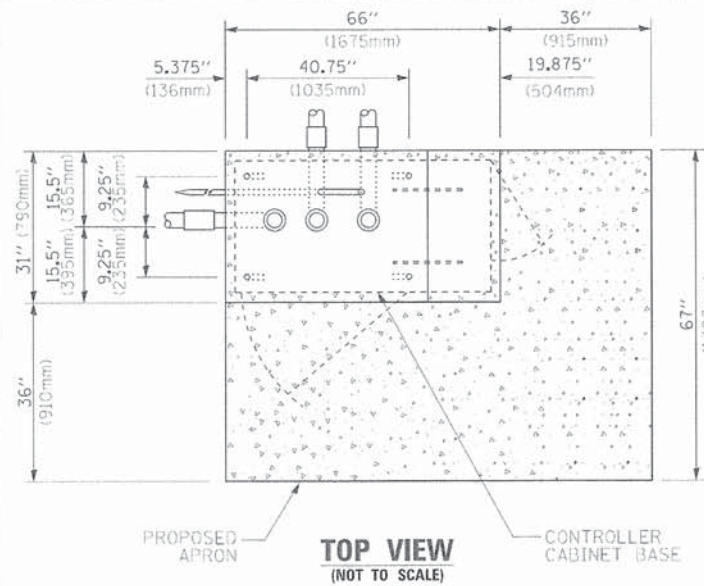
**NOTES:**

1. CONDUIT DEPTH SHALL BE A MINIMUM OF 30" (760mm) BELOW THE BOTTOM OF THE DRAINAGE DITCH OR ANY SLOPING GROUND
2. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL CONDUIT PLACED UNDER ROADWAY PAVEMENT, MULTI-USE PATHS, SIDEWALKS AND SOIL SURFACES.
3. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL HANDHOLES, HEAVY DUTY HANDHOLES AND DOUBLE HANDHOLES.

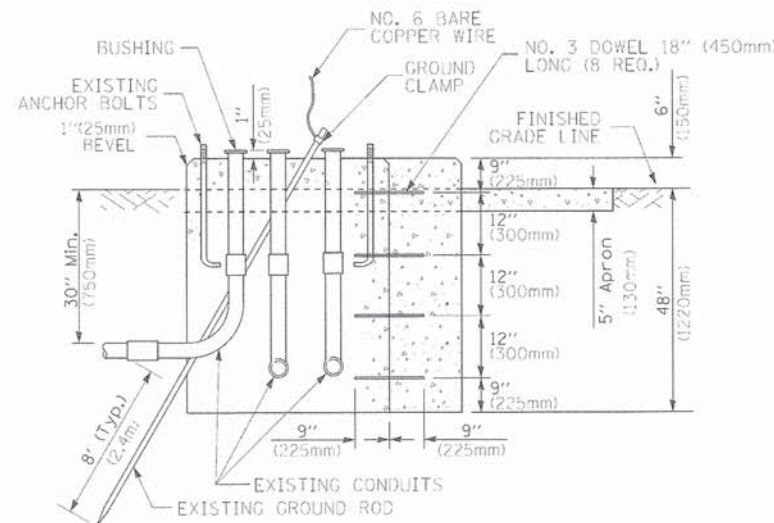
**HANDHOLE WITH MINIMUM CONDUIT DEPTH**  
(NOT TO SCALE)



**EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL**



**TOP VIEW**  
(NOT TO SCALE)

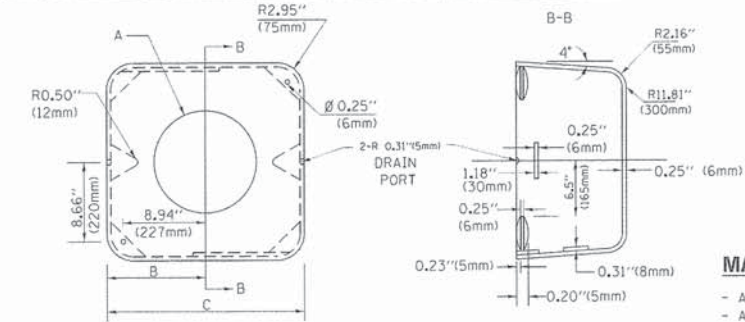


**MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION**  
(NOT TO SCALE)

ITEM NO.	IDENTIFICATION
1	OUTLET BOX - GALV. 21 CU.IN. (0.000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4" (19 mm) CLOSE NIPPLE
7	3/4" (19 mm) LOCKNUT
8	3/4" (19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

**NOTES:**

1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
2. ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT  
ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT  
ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
3. WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4" (19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.



**MATERIAL:**  
- ASTM A36 STEEL  
- ASTM A-123 HOT DIPPED GALVANIZED

A	B	C	HEIGHT	WEIGHT
VARIES	9.5" (241mm)	19" (483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)
VARIES	10.75" (273mm)	21.5" (546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 kg)
VARIES	13.0" (330mm)	26" (660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)
VARIES	18.5" (470mm)	37" (940mm)	7" (178mm) - 12" (300mm)	126 lbs (57 kg)

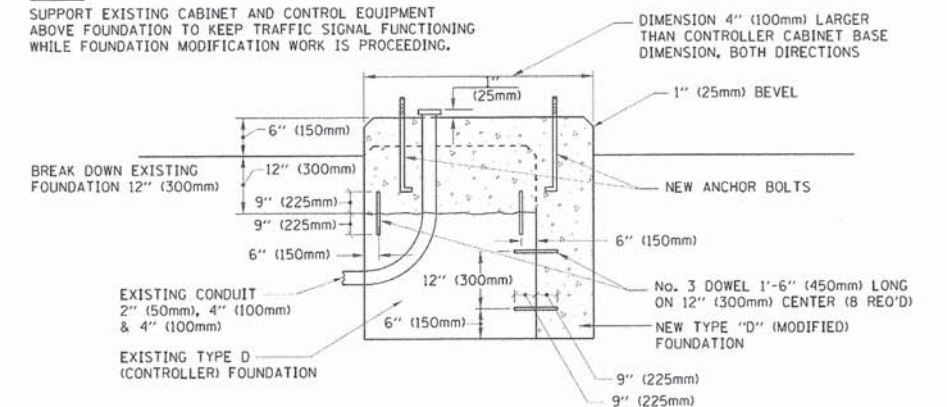
**SHROUD**

**NOTES:**

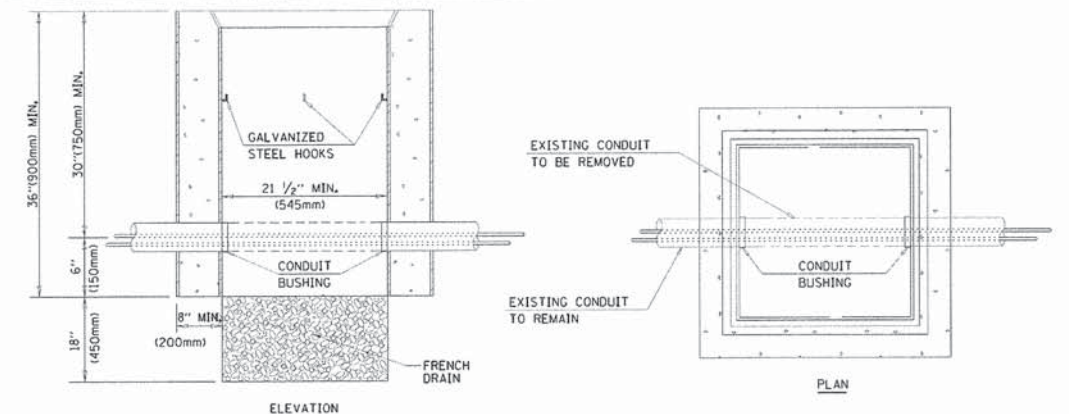
1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
2. THE SUPPLIER SHALL VERIFIED THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.

**NOTE:**

SUPPORT EXISTING CABINET AND CONTROL EQUIPMENT ABOVE FOUNDATION TO KEEP TRAFFIC SIGNAL FUNCTIONING WHILE FOUNDATION MODIFICATION WORK IS PROCEEDING.



**MODIFY EXISTING TYPE "D" FOUNDATION**



**NOTES:**

1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
2. REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCLUDED WITH THE COST OF THE HANDHOLE.

**HANDHOLE TO INTERCEPT EXISTING CONDUIT**

FILE NAME *	USER NAME * Coatesj	DESIGNED - DAD	REVISED - -DAG 1-1-14
ca:\pwwork\spedot\Coatesj\101093315\101093315.dgn		DRAWN - BCK	REVISED -
		CHECKED - DAD	REVISED -
		DATE - 10-28-09	REVISED -

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

**DISTRICT ONE**  
**STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

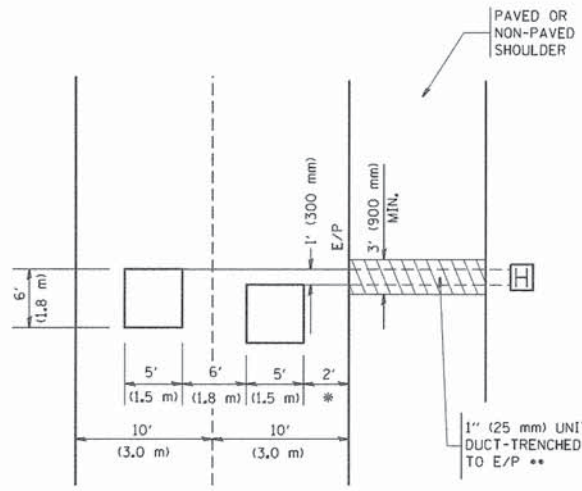
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	234
	TS-05	CONTRACT NO.	61C32	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



**LOOPS NEXT TO SHOULDERS**

PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' (900 mm) X WIDTH OF PAVED SHOULDER.

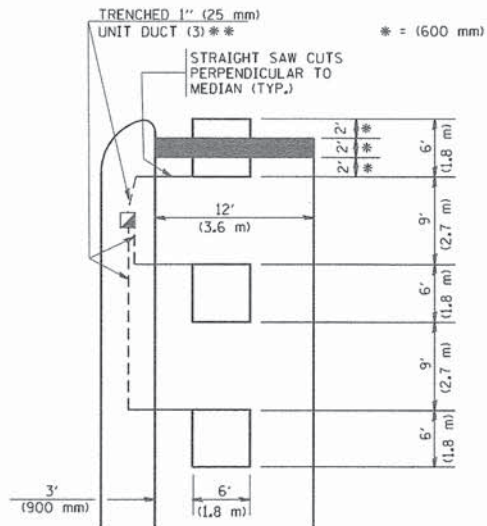


\* = (600 mm)

\*\* UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

**LEFT TURN LANES WITH MEDIANS  
VOLUME DENSITY ("FAR OUT" DETECTION)  
ON SAME APPROACH  
(PROTECTED / PERMITTED LEFT TURN PHASING)**

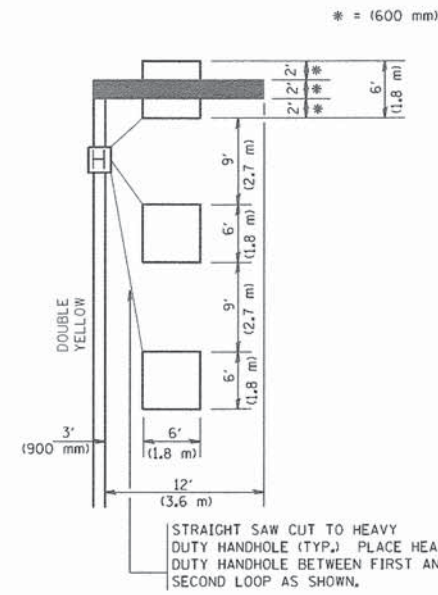
HANDHOLE LOCATION MAY VARY DEPENDING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS. HEAVY-DUTY HANDHOLES TO BE USED WHEN THE MEDIAN IS MOUNTABLE. REFER TO STANDARD 814001 TO ENSURE THAT HANDHOLE FITS IN MEDIAN.



\*\* UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

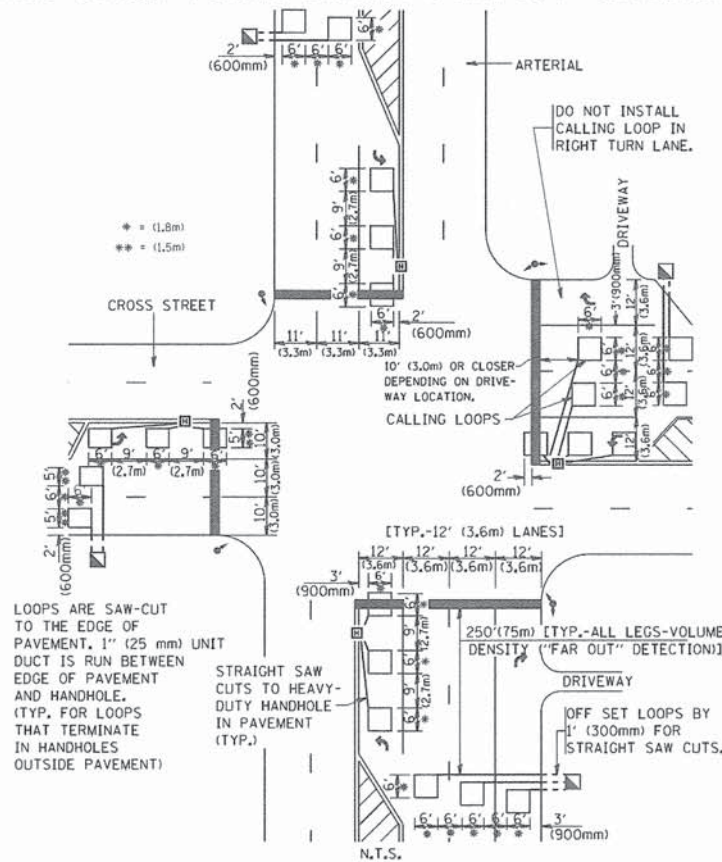
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

**LEFT TURN LANES WITHOUT MEDIANS  
VOLUME DENSITY ("FAR OUT" DETECTION)  
ON SAME APPROACH  
(PROTECTED / PERMITTED LEFT TURN PHASING)**



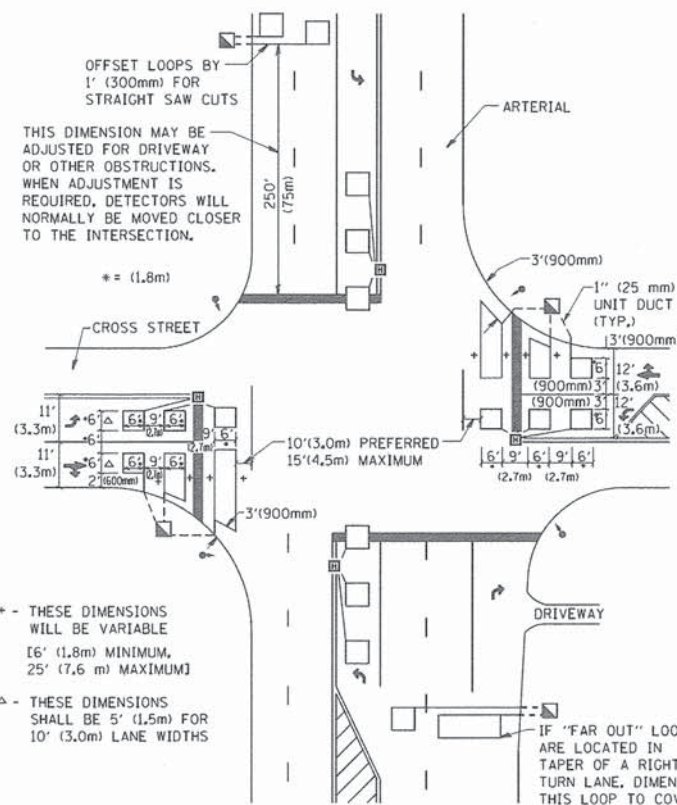
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

**ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION)  
CROSS STREET-VOLUME DENSITY ("FAR OUT" DETECTION)**



**DETAIL 1  
N.T.S.**

**ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION)  
CROSS STREET-NON VOLUME DENSITY ("UPTIGHT" PRESENCE DETECTION)**



**DETAIL 2  
N.T.S.**

**NOTES:**

**VEHICLES LOOP DETECTORS**

- \* ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED, SHIELDED.
- \* EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE PAVEMENT.
- \* EACH DETECTOR LOOP SHALL HAVE ITS OWN ONE INCH (25 mm) UNIT DUCT BETWEEN THE EDGE OF PAVEMENT AND THE FIRST HANDHOLE OR JUNCTION BOX. EACH UNIT DUCT RUN SHALL BE SHOWN ON THE PLANS BY THE DESIGNER, BUT SHALL NOT BE PAID FOR SEPARATELY. THIS ITEM IS INCIDENTAL TO THE PAY ITEM FOR DETECTOR LOOPS.
- \* ONE DIMENSION OF ALL DETECTOR LOOPS SHALL BE SIX FEET (1.8 m)
- \* EACH LANE OF NON-LOCKING, PRESENCE DETECTION AND EACH LANE OF A DOUBLE LEFT TURN LANE REQUIRES A SEPARATE INDUCTIVE LOOP DETECTOR AND LEAD IN CABLE.
- \* WHEN NON-LOCKING, PRESENCE DETECTION IS USED, MORE THAN ONE LOOP PER LANE IS REQUIRED BEHIND THE STOP BAR (i.e. 1-1/2, 1-3/4, 2).
- \* WHEN SYSTEM LOOPS ARE REQUIRED ON AN APPROACH OF AN INTERSECTION, THE LOOPS USED FOR VOLUME DENSITY AND INTERSECTION TIMING SHALL ALSO BE USED AS SYSTEM DETECTORS. EACH ONE OF THESE TYPE OF LOOPS REQUIRES A SEPARATE TWO CONDUCTOR NO. 14 TWISTED SHIELDED CABLE AND A SEPARATE INDUCTIVE LOOP DETECTOR WHEN NEW CONTROLLERS ARE UTILIZED. THE DESIGNER SHALL LABEL THESE TYPES OF LOOPS AS "INTERSECTION AND SAMPLING (SYSTEM) DETECTORS" ON THE SIGNAL LAYOUT, THE INTERCONNECT PLAN AND THE SYSTEM CABLE PLAN. WHEN AN EXISTING CONTROLLER IS UTILIZED FOR THIS TYPE OF DETECTION, THE PAY ITEM "INDUCTIVE LOOP DETECTOR WITH SYSTEM OUTPUT" SHOULD BE USED.

**PLACEMENT OF DETECTORS**

THE FOLLOWING FIGURES REPRESENT THE MOST COMMON DETECTOR LOOP LOCATIONS AND SIZES. ADJUSTMENTS WILL BE NECESSARY FOR SPECIFIC GEOMETRIC CONSIDERATIONS.

LOCATIONS AND DEMENSIONS OF DETECTOR LOOPS ARE REQUIRED ON ALL SIGNAL LAYOUT PLAN SHEETS.

"FAR OUT" DETECTION REFERS TO LOCKING, PRESENCE TYPE DETECTION LOCATED IN THRU LANES, RIGHT TURN LANES, AND RIGHT TURN LANE TAPER AREAS (IF APPLICABLE), USUALLY 250' (75 m) IN ADVANCE OF STOP BARS. "UPTIGHT" DETECTION REFERS TO NON-LOCKING PRESENCE TYPE DETECTION LOCATED IN ALL LANES AND 10'-15' (3.0 m-4.5 m) BEHIND THE CROSSING STREET'S EDGE OF PAVEMENT EXTENDED.

**NOTE:**

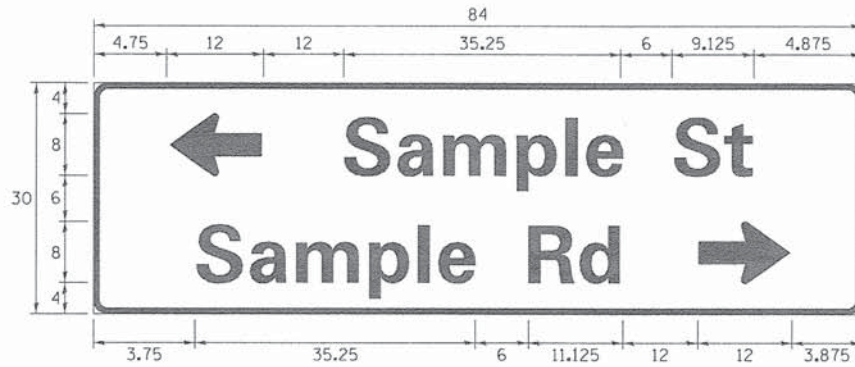
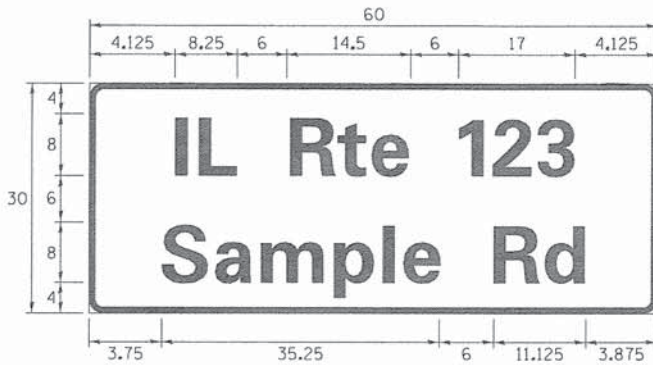
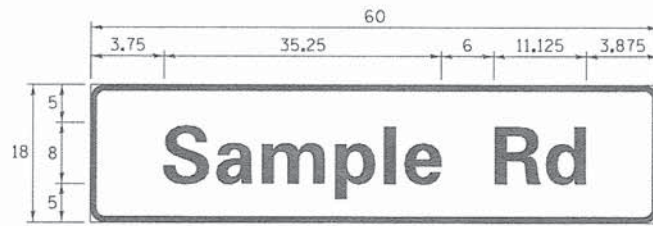
ALL DETAILS AND NOTES SHOWN ARE FROM THE I.D.O.T. DISTRICT 1 TRAFFIC SIGNAL DESIGN GUIDELINES DATED JANUARY 1995

THIS DRAWING HAS BEEN PREPARED TO ASSIST THE RESIDENT ENGINEER FOR ALL ROADWAY RESURFACING OR S.M.A.R.T. PROJECTS WHERE THE DIMENSIONS ARE NOT SHOWN ON THE PLANS AND THE FINAL LOCATIONS FOR CROSSWALKS OR STOP BARS ARE NOT DETERMINED.

FILE NAME = W:\dststd\22x34\ts07.dgn	USER NAME = goglianob	DESIGNED -	REVISED - -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DISTRICT 1 - DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING</b>			F.A. - RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	PLOT SCALE = 50,0000 ' / IN.	DRAWN -	REVISED -						13-00270-00-CH	COOK	393	235	
	PLOT DATE = 1/4/2008	CHECKED - R.K.F.	REVISED -			SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.				CONTRACT NO. G1C32
		DATE -	REVISED -										FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT



**SIGN PANEL – TYPE 1 OR TYPE 2**



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D OR C	-	1 OR 2	ZZ	-

**COMMON STREET NAME ABBREVIATIONS AND WIDTHS**

NAME	ABBREVIATION	WIDTH (INCH)	
		SERIES "C"	SERIES "D"
AVENUE	Ave	15.000	18.250
BOULEVARD	Bvd	17.125	20.000
CIRCLE	Cir	11.125	13.000
COURT	Ct	8.250	9.625
DRIVE	Dr	8.625	10.125
HIGHWAY	Hwy	18.375	22.000
ILLINOIS	IL	7.000	8.250
LANE	Ln	9.125	10.750
PARKWAY	Pkwy	23.375	27.375
PLACE	Pl	7.125	7.750
ROAD	Rd	9.625	11.125
ROUTE	Rte	12.625	14.500
STREET	St	8.000	9.125
TERRACE	Ter	12.625	14.625
TRAIL	Tr	7.750	9.125
UNITED STATES	US	10.375	12.250

**GENERAL NOTES**

- WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 877001, 877002, 877006, 877011 AND 877012, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" x 8'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS FOR 80 M.P.H. WIND VELOCITY.
- ALL SIGNS SHALL CONSIST OF A WHITE LEGEND AND BORDER (TYPE ZZ SHEETING) ON A GREEN BACKGROUND (TYPE ZZ SHEETING)
- THE SIGN LENGTH SHALL BE IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHALL NOT EXCEED 8'-0". ALL BORDERS SHALL BE 3/4" WIDE. CORNER RADIUS SHALL BE 1-7/8". THE SPACING BETWEEN THE WORDS SHOULD BE 6", IF POSSIBLE, BUT MAY BE REDUCED TO 5" WHEN SPACING IS CRITICAL. A MINIMUM OF 2-1/2" SHALL BE INCLUDED BETWEEN THE WORD AND THE RIGHT AND LEFT EDGES OF THE SIGN.
- A PREFERRED METHOD FOR THE SIGN DESIGN IS TO USE SERIES "D" LETTER ON A ONE-LINE SIGN 18" IN HEIGHT AND A MAXIMUM OF 8'-0" IN WIDTH. IF SERIES "D" DOES NOT FIT ON A 8'-0" SIGN, THEN SERIES "C" SHOULD BE TRIED. IF SERIES "C" DOES NOT FIT ON A 8'-0" SIGN, A 30" HIGH TWO-LINE SIGN CAN BE USED. THE CROSSROAD DESIGNATION AS TO STREET, AVENUE, ETC. SHOULD BE SPELLED OUT ON THE SECOND LINE, IF THERE IS SPACE AVAILABLE.
- LED ILLUMINATED STREET NAME SIGNS CAN BE USED IN PLACE OF REGULAR SIGN PANELS BUT ANY SPECIAL WORDING AND SYMBOLOGY MUST BE APPROVED BY THE DEPARTMENT. GENERAL DESIGN REQUIREMENT AS LISTED ABOVE (COLOR, FONT, SIZE, ETC.) MUST BE FOLLOWED.
- SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS.

**LOCAL SUPPLIERS:**

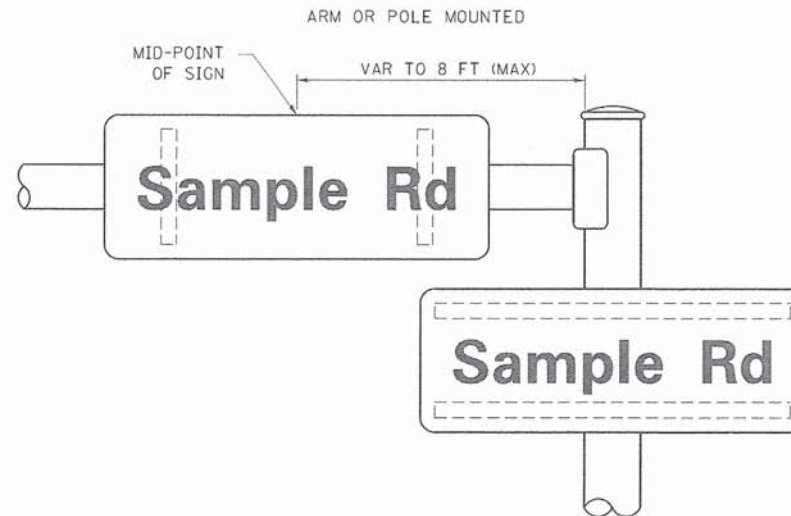
- J.O. HERBERT COMPANY, INC. MIDLOTHIAN, VA
- WESTERN REMAC, INC. WOODRIDGE, IL

**PARTS LISTING:**

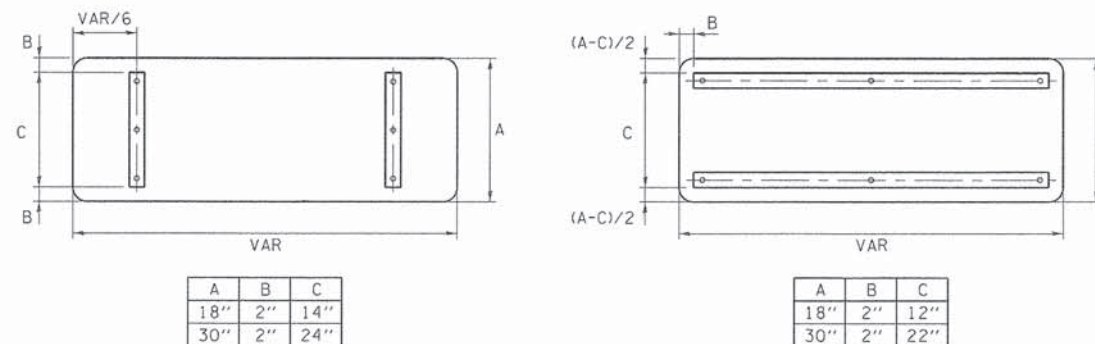
- SIGN CHANNEL PART \*HPN053 (MED. CHANNEL)
- SIGN SCREWS 1/4" x 14 x 1" H.W.H. #3
- BRACKETS SELF TAPPING WITH NEOPRENE WASHER
- CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING PART \*HPN034 (UNIVERSAL)

OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BACKET OF THE ABOVE PRODUCT.

**MOUNTING LOCATION**



**SUPPORTING CHANNELS**



**STANDARD ALPHABETS SPACING CHART**

( 8" ) UPPER CASE AND ( 6" ) LOWER CASE

FHWA SERIES "C"				FHWA SERIES "D"			
CHARACTER	LEFT SPACING ( INCH )	WIDTH ( INCH )	RIGHT SPACING ( INCH )	CHARACTER	LEFT SPACING ( INCH )	WIDTH ( INCH )	RIGHT SPACING ( INCH )
A	0.240	5.122	0.240	A	0.240	6.804	0.240
B	0.880	4.482	0.480	B	0.960	5.446	0.400
C	0.720	4.482	0.720	C	0.800	5.446	0.800
D	0.880	4.482	0.720	D	0.960	5.446	0.800
E	0.880	4.082	0.480	E	0.960	4.962	0.400
F	0.880	4.082	0.240	F	0.960	4.962	0.240
G	0.720	4.482	0.720	G	0.800	5.446	0.800
H	0.880	4.482	0.880	H	0.960	5.446	0.960
I	0.880	1.120	0.880	I	0.960	1.280	0.960
J	0.240	4.082	0.880	J	0.240	5.122	0.960
K	0.880	4.482	0.480	K	0.960	5.604	0.400
L	0.880	4.082	0.240	L	0.960	4.962	0.240
M	0.880	5.284	0.880	M	0.960	6.244	0.960
N	0.880	4.482	0.880	N	0.960	5.446	0.960
O	0.720	4.722	0.720	O	0.800	5.684	0.800
P	0.880	4.482	0.720	P	0.960	5.446	0.240
Q	0.720	4.722	0.720	Q	0.800	5.684	0.800
R	0.880	4.482	0.480	R	0.960	5.446	0.400
S	0.480	4.482	0.480	S	0.400	5.446	0.400
T	0.240	4.082	0.240	T	0.240	4.962	0.240
U	0.880	4.482	0.880	U	0.960	5.446	0.960
V	0.240	4.962	0.240	V	0.240	6.084	0.240
W	0.240	6.084	0.240	W	0.240	7.124	0.240
X	0.240	4.722	0.240	X	0.400	5.446	0.400
Y	0.240	5.122	0.240	Y	0.240	6.884	0.240
Z	0.480	4.482	0.480	Z	0.400	5.446	0.400
a	0.320	3.842	0.640	a	0.400	4.562	0.720
b	0.720	4.082	0.480	b	0.800	4.802	0.480
c	0.480	4.002	0.240	c	0.480	4.722	0.240
d	0.480	4.082	0.720	d	0.480	4.802	0.800
e	0.480	4.082	0.320	e	0.480	4.722	0.320
f	0.320	2.480	0.160	f	0.320	2.882	0.160
g	0.480	4.082	0.720	g	0.480	4.802	0.800
h	0.720	4.082	0.640	h	0.800	4.722	0.720
i	0.720	1.120	0.720	i	0.800	1.280	0.800
j	0.000	2.320	0.720	j	0.000	2.642	0.800
k	0.720	4.322	0.160	k	0.800	5.122	0.160
l	0.720	1.120	0.720	l	0.800	1.280	0.800
m	0.720	6.724	0.640	m	0.800	7.926	0.720
n	0.720	4.082	0.640	n	0.800	4.722	0.720
o	0.480	4.082	0.480	o	0.480	4.882	0.480
p	0.720	4.082	0.480	p	0.800	4.802	0.480
q	0.480	4.082	0.720	q	0.480	4.802	0.800
r	0.720	2.642	0.160	r	0.800	3.042	0.160
s	0.320	3.362	0.240	s	0.320	3.762	0.240
t	0.080	2.882	0.080	t	0.080	3.202	0.080
u	0.640	4.082	0.720	u	0.720	4.722	0.800
v	0.160	4.722	0.160	v	0.160	5.684	0.160
w	0.160	7.524	0.160	w	0.160	9.046	0.160
x	0.000	5.202	0.000	x	0.000	6.244	0.000
y	0.160	4.962	0.160	y	0.160	6.004	0.160
z	0.240	3.362	0.240	z	0.240	4.002	0.240
1	0.720	1.680	0.880	1	0.800	2.000	0.960
2	0.480	4.482	0.480	2	0.800	5.446	0.800
3	0.480	4.482	0.480	3	1.440	5.446	0.800
4	0.240	4.962	0.720	4	0.160	6.004	0.960
5	0.480	4.482	0.480	5	0.800	5.446	0.800
6	0.720	4.482	0.720	6	0.800	5.446	0.800
7	0.240	4.482	0.720	7	0.560	5.446	0.560
8	0.480	4.482	0.480	8	0.800	5.446	0.800
9	0.480	4.482	0.480	9	0.800	5.446	0.800
0	0.720	4.722	0.720	0	0.800	5.684	0.800
-	0.240	2.802	0.240	-	0.240	2.802	0.240

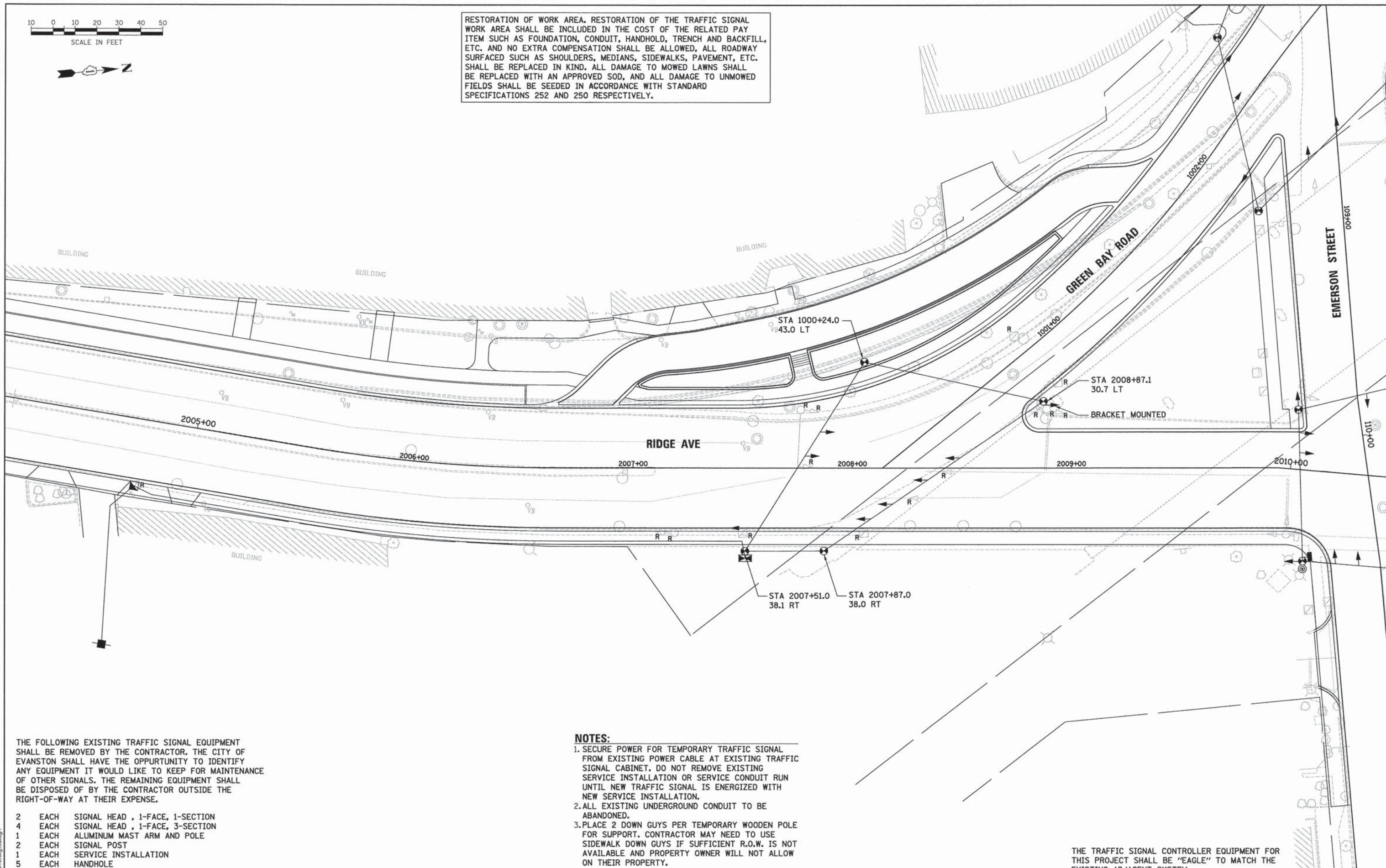




RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE COST OF THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLD, TRENCH AND BACKFILL, ETC. AND NO EXTRA COMPENSATION SHALL BE ALLOWED, ALL ROADWAY SURFACED SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

DATE	
BY	
PLAN	
SURVEYED	
ALIGNED	
CHECKED	
RT. OF WAY	
CHECKED	
NO. _____	
FILE NAME	

DATE	
BY	
PROFILE	
SURVEYED	
GRADES	
CHECKED	
BLM. NOTED	
STRUCTURE	
NOTATIONS	
CHKD	
NO. _____	
FILE NAME	



THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR. THE CITY OF EVANSTON SHALL HAVE THE OPPURTUNITY TO IDENTIFY ANY EQUIPMENT IT WOULD LIKE TO KEEP FOR MAINTENANCE OF OTHER SIGNALS. THE REMAINING EQUIPMENT SHALL BE DISPOSED OF BY THE CONTRACTOR OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE.

- 2 EACH SIGNAL HEAD , 1-FACE, 1-SECTION
- 4 EACH SIGNAL HEAD , 1-FACE, 3-SECTION
- 1 EACH ALUMINUM MAST ARM AND POLE
- 2 EACH SIGNAL POST
- 1 EACH SERVICE INSTALLATION
- 5 EACH HANDHOLE

- NOTES:**
1. SECURE POWER FOR TEMPORARY TRAFFIC SIGNAL FROM EXISTING POWER CABLE AT EXISTING TRAFFIC SIGNAL CABINET. DO NOT REMOVE EXISTING SERVICE INSTALLATION OR SERVICE CONDUIT RUN UNTIL NEW TRAFFIC SIGNAL IS ENERGIZED WITH NEW SERVICE INSTALLATION.
  2. ALL EXISTING UNDERGROUND CONDUIT TO BE ABANDONED.
  3. PLACE 2 DOWN GUYS PER TEMPORARY WOODEN POLE FOR SUPPORT. CONTRACTOR MAY NEED TO USE SIDEWALK DOWN GUYS IF SUFFICIENT R.O.W. IS NOT AVAILABLE AND PROPERTY OWNER WILL NOT ALLOW ON THEIR PROPERTY.

THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

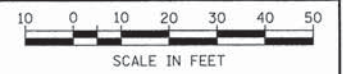
ESI CONSULTANTS, LTD. <small>2015 S. JOLI AVENUE, SUITE 100 JOLI, ILLINOIS 62451 618-792-1100</small>	USER NAME = bhanricha	DESIGNED - BAH	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC SIGNAL PLAN SHEETS</b> <b>TEMPORARY TRAFFIC SIGNAL PLAN</b> <b>GREEN BAY RD AND RIDGE AVE</b>		F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 20.0000' / 1" =	CHECKED - JMY	REVISED -		13-00270-00-CH	COOK	393	237			
	PLOT DATE = 1/7/2016	DATE - 10/9/2015	REVISED -		CONTRACT NO. G1C32						
SCALE: SHEET 1 OF 38 SHEETS STA. TO STA.					ILLINOIS FED. AID PROJECT						





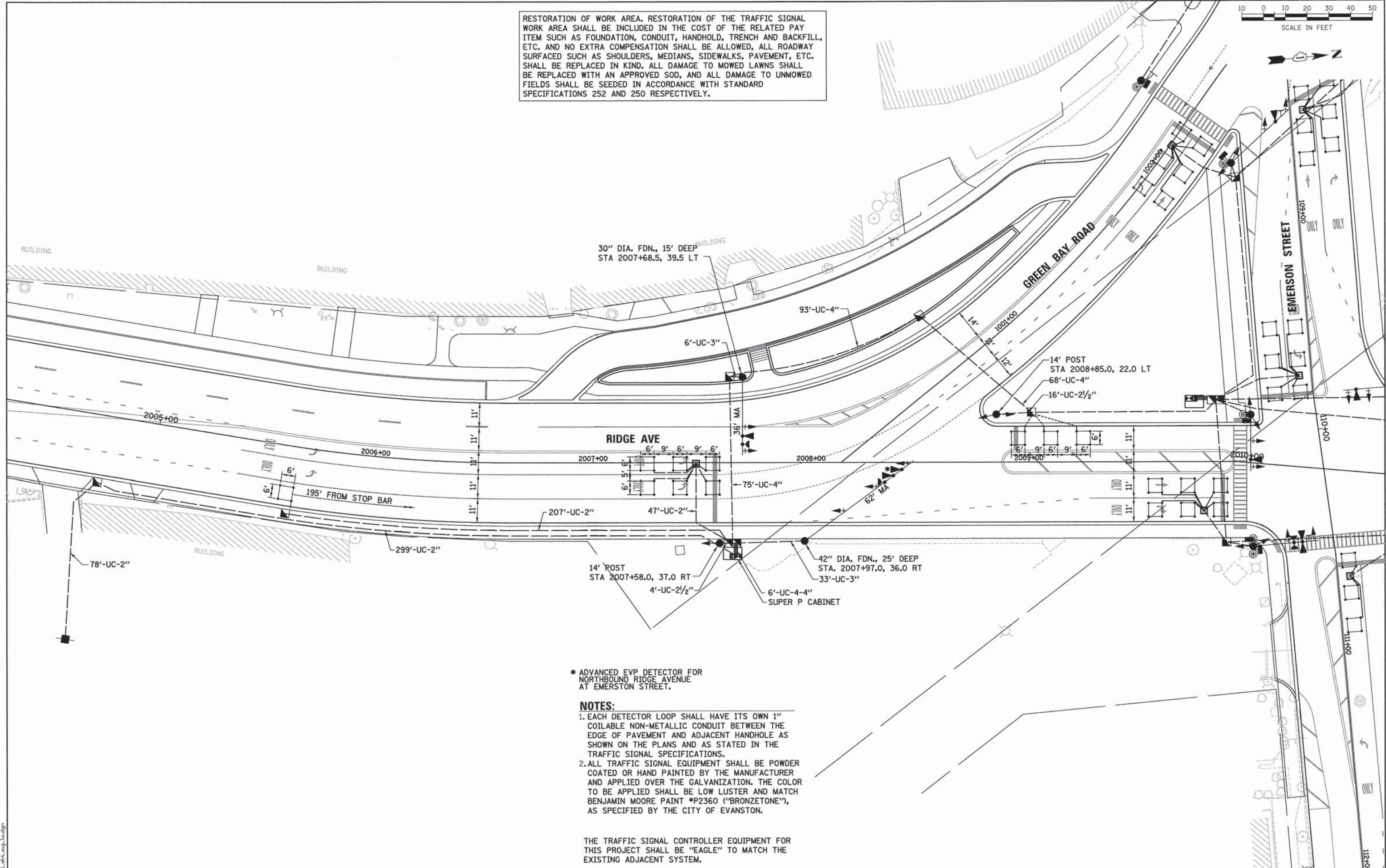


RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE COST OF THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLD, TRENCH AND BACKFILL, ETC. AND NO EXTRA COMPENSATION SHALL BE ALLOWED, ALL ROADWAY SURFACED SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.



PLAN	SURVEYED	DATE
	PLOTTED	BY
	CHECKED	
	NO. OF WAY CHECKED	
	CADD FILE NAME	
	NO.	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	CHECKED	
	NO. OF WAY CHECKED	
	STRUCTURE NOTATION CHD	
	NO.	



\* ADVANCED EVP DETECTOR FOR NORTHBOUND RIDGE AVENUE AT EMERSTON STREET.

- NOTES:**
1. EACH DETECTOR LOOP SHALL HAVE ITS OWN 1" COILABLE NON-METALLIC CONDUIT BETWEEN THE EDGE OF PAVEMENT AND ADJACENT HANDHOLE AS SHOWN ON THE PLANS AND AS STATED IN THE TRAFFIC SIGNAL SPECIFICATIONS.
  2. ALL TRAFFIC SIGNAL EQUIPMENT SHALL BE POWDER COATED OR HAND PAINTED BY THE MANUFACTURER AND APPLIED OVER THE GALVANIZATION. THE COLOR TO BE APPLIED SHALL BE LOW LUSTER AND MATCH BENJAMIN MOORE PAINT #P2360 ("BRONZETONE"), AS SPECIFIED BY THE CITY OF EVANSTON.

THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.



USER NAME = bherrschs	DESIGNED - BAH	REVISED -
PLOT SCALE = 20.0000' / in.	DRAWN - BAH	REVISED -
PLOT DATE = 1/7/2016	CHECKED - JMY	REVISED -
	DATE - 10/9/2015	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>TRAFFIC SIGNAL PLAN SHEETS</b>	
<b>TRAFFIC SIGNAL PLAN</b>	
<b>GREEN BAY RD AND RIDGE AVE</b>	
SCALE: _____	SHEET 3 OF 38 SHEETS STA. _____ TO STA. _____

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	239
				CONTRACT NO. 61C32
ILLINOIS FED. AID PROJECT				

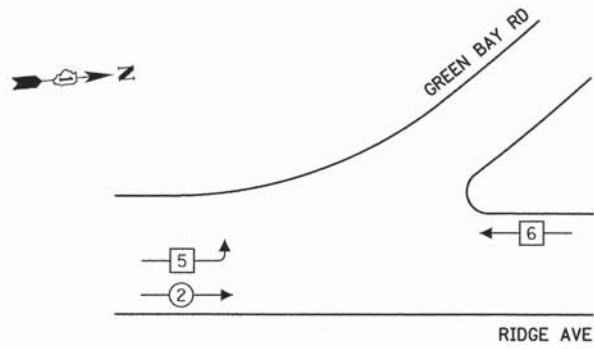
FILE NAME: ER001\_4ht\_1st\_10.dgn



DATE	
BY	
SURVEYED	
PLOTTED	
CHECKED	
DATE	
NOTE BOOK	
NO.	

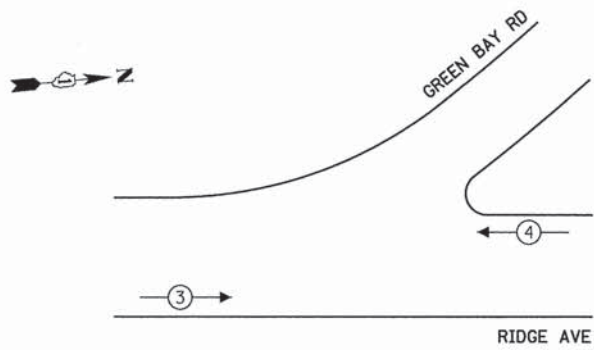
DATE	
BY	
PROFILE	
PLOTTED	
CHECKED	
DATE	
NOTE BOOK	
NO.	

**PROPOSED CONTROLLER SEQUENCE**



- LEGEND**
- ◻ SINGLE ENTRY PHASE
  - ◉ DUAL ENTRY PHASE
  - ◉ PEDESTRIAN PHASE
  - ◊ OL OVERLAP

**PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	WATTAGE LED	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	7	11	50	38.5
(YELLOW)	7	20	5	7
(GREEN)	8	12	45	43.2
PERMISSIVE ARROW	-	10	10	-
PED. SIGNAL	-	20	100	-
CONTROLLER	1	100	100	100
UPS	1	25	100	25
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
<b>TOTAL =</b>				<b>213.7</b>

ENERGY COSTS TO:  
**CITY OF EVANSTON**  
 2100 RIDGE AVE  
 EVANSTON, ILLINOIS 60201

ENERGY SUPPLY: CONTACT: CARLO F. CAVALLARO  
 PHONE: 847-816-5368  
 COMPANY: COMMONWEALTH EDISON  
 ACCOUNT NUMBER: \_\_\_\_\_



USER NAME =	bhanrichs
DESIGNED -	BAH
DRAWN -	BAH
CHECKED -	JMY
DATE -	10/9/2015
PLLOT SCALE =	1:80000' / 1" =
PLLOT DATE =	1/7/2016

REVISED -	-
REVISED -	-
REVISED -	-
REVISED -	-

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

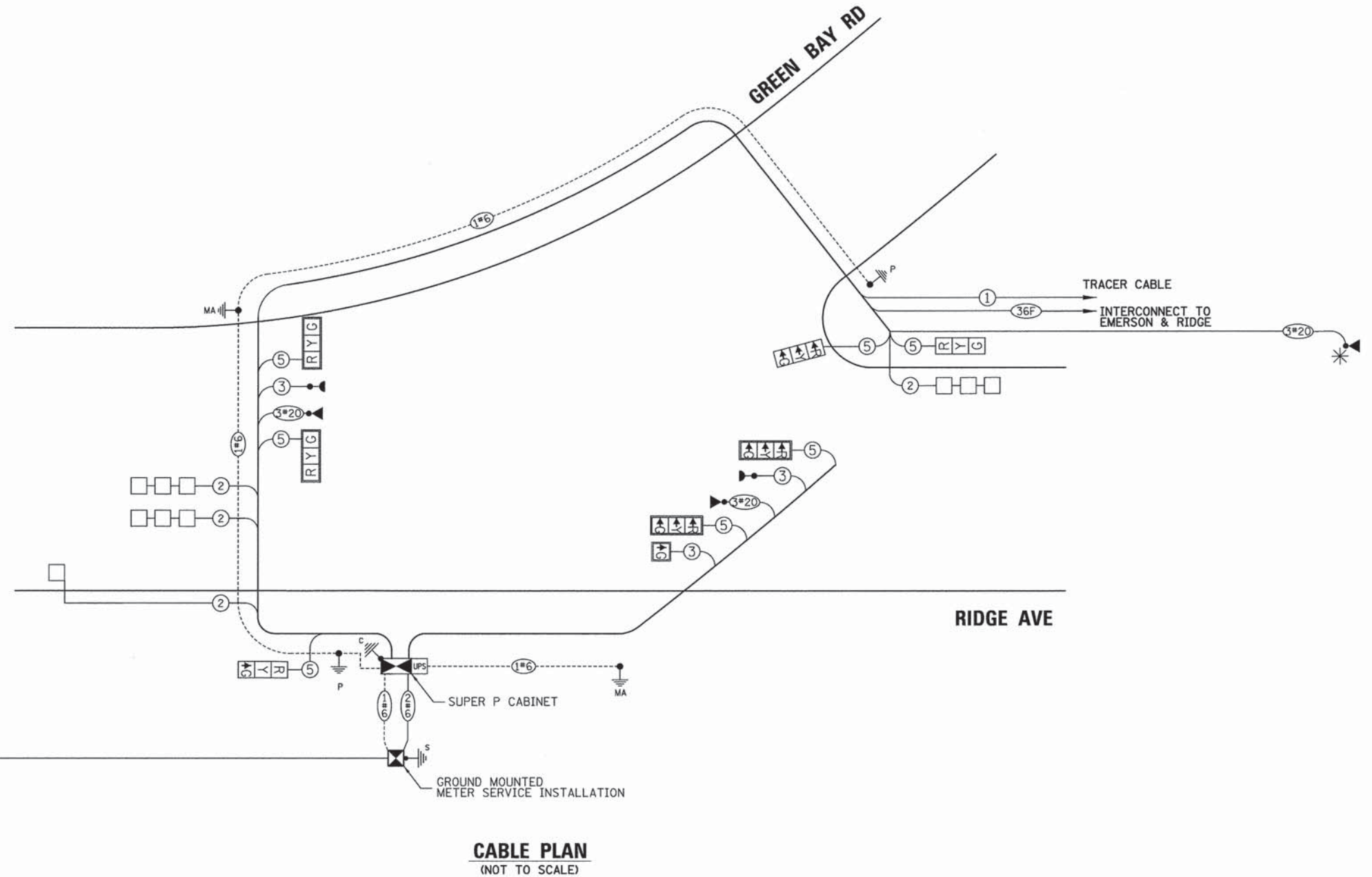
**TRAFFIC SIGNAL PLAN SHEETS  
 CABLE PLAN  
 GREEN BAY RD AND RIDGE AVE**

SCALE: SHEET 4 OF 38 SHEETS STA. TO STA.

\*ADVANCE DETECTOR INSTALLED ON SOUTHBOUND MAST ARM AT EMERSON AND RIDGE.

THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	240
				CONTRACT NO. GIC32
ILLINOIS FED. AID PROJECT				



**CABLE PLAN**  
(NOT TO SCALE)

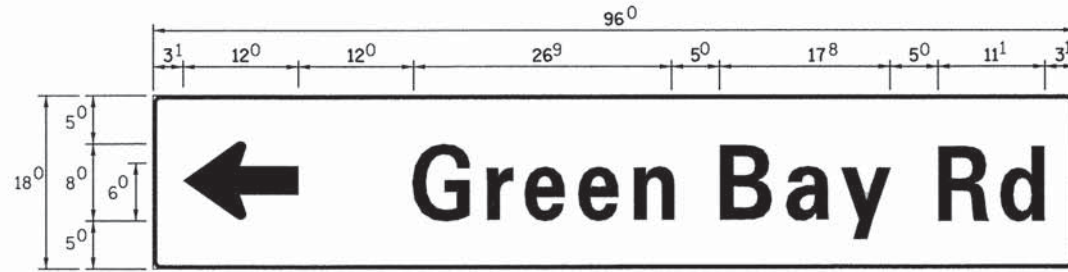
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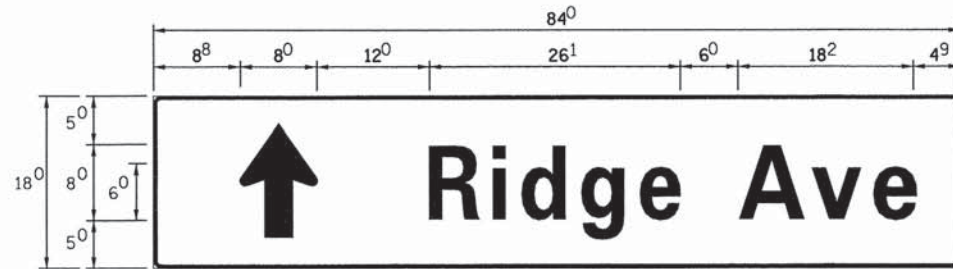
PLAN SURVEYED BY DATE  
 ALIGNED CHECKED  
 RT. OF WAY CHECKED  
 NO. CAD FILE NAME

PROFILE SURVEYED BY DATE  
 CHECKED  
 B.M. NOTED  
 NO. STRUCTURE NOTATION CPWD

**SIGN PANEL – TYPE 1 OR TYPE 2**



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY REQUIRED
D	12	1	ZZ	1



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY REQUIRED
D	10.5	1	ZZ	1

**NOTE:**  
 FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION  
 PLEASE SEE DISTRICT ONE MAST ARM MOUNTED STREET  
 NAME SIGNS DETAIL.

**SCHEDULE OF QUANTITIES**

ITEM	UNIT	QTY
SIGN PANEL - TYPE 1	SQ FT	9.0
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	790.5
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	7
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	39
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	252
HANDHOLE	EACH	5
HEAVY-DUTY HANDHOLE	EACH	1
DOUBLE HANDHOLE	EACH	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
PAINT NEW TRAFFIC SIGNAL POST	EACH	2
PAINT NEW MAST ARM AND POLE, UNDER 40 FOOT	EACH	1
PAINT NEW MAST ARM AND POLE, 40 FOOT AND OVER	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	448
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	366
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1231.5
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	420
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	848.5
TRAFFIC SIGNAL POST, 14 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE 34 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE 62 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	8
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	15
CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	25
SIGNAL HEAD, LED, 1-FACE, 1-SECTION, MAST-ARM MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	5
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	5
INDUCTIVE LOOP DETECTOR	EACH	4
DETECTOR LOOP, TYPE 1	FOOT	357
LIGHT DETECTOR	EACH	3
LIGHT DETECTOR AMPLIFIER	EACH	1
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	5
REMOVE EXISTING CONCRETE FOUNDATION	EACH	3
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	699
FULL-ACTUATED CONTROLLER AND TYPE SUPER P CABINET (SPECIAL)	EACH	1
UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1

FILE NAME: ER001\_wt\_11g\_1e.dgn



USER NAME = bharrichs	DESIGNED - BAH	REVISED - -
PLLOT SCALE = 10.0000' / 1" =	DRAWN - BAH	REVISED -
PLLOT DATE = 1/7/2016	CHECKED - JMY	REVISED -
	DATE - 10/9/2015	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL PLAN SHEETS – MAST ARM MOUNTED  
 STREET NAME SIGNS AND SCHEDULE OF QUANTITIES  
 GREEN BAY RD AND RIDGE AVE

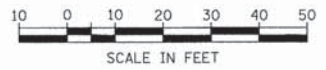
SCALE: \_\_\_\_\_ SHEET 5 OF 38 SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR  
 THIS PROJECT SHALL BE "EAGLE" TO MATCH THE  
 EXISTING ADJACENT SYSTEM.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	241
				CONTRACT NO. 61C32
ILLINOIS FED. AID PROJECT				

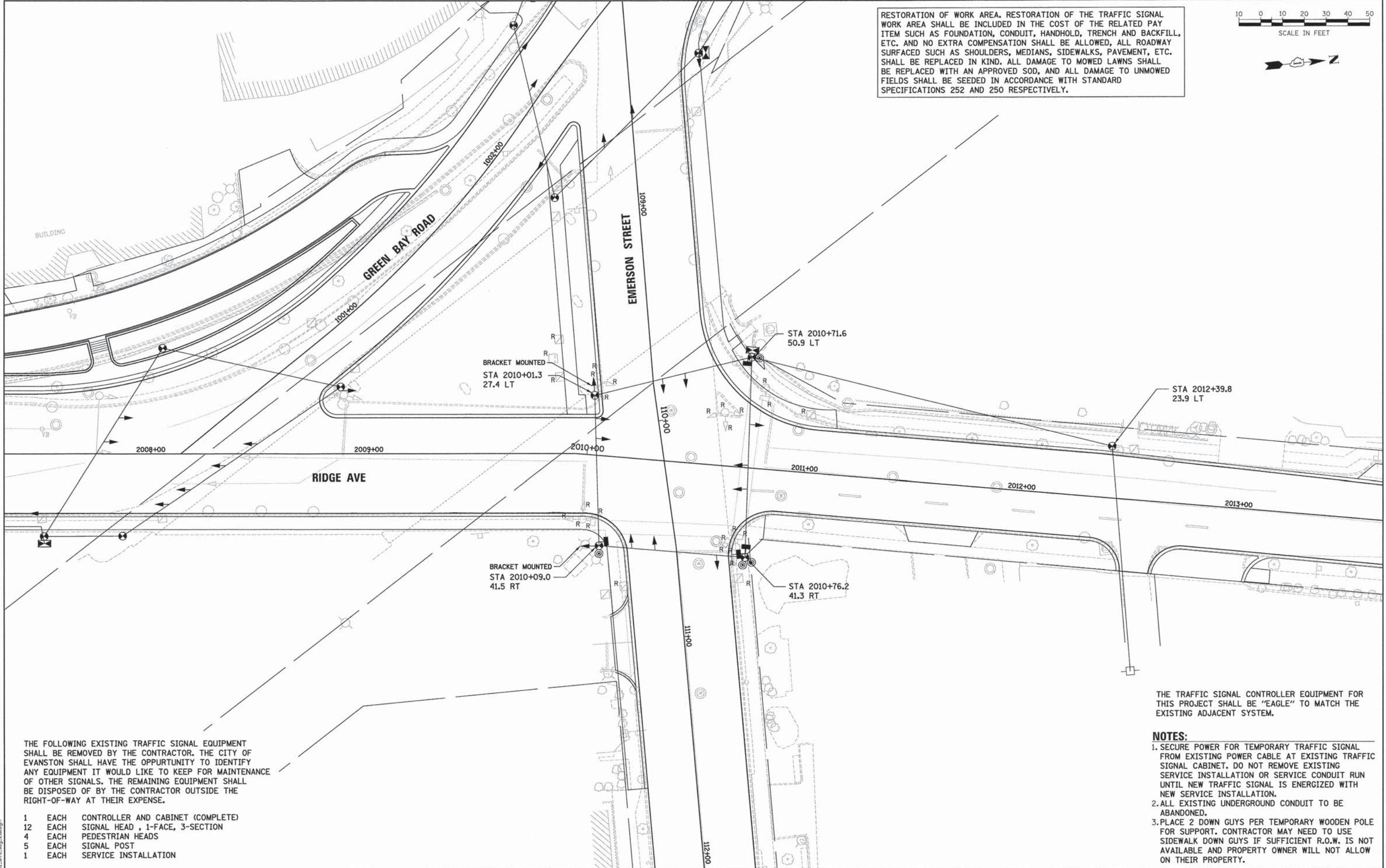


RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE COST OF THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLD, TRENCH AND BACKFILL, ETC. AND NO EXTRA COMPENSATION SHALL BE ALLOWED, ALL ROADWAY SURFACED SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDD IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.



PLAN	SURVEYED	DATE
	ALIGNED	BY
	RT. OF WAY	CHECKED
	NO.	NO.
	FILE NAME	

PROFILE	SURVEYED	DATE
	GRADES	BY
	B.M. NOTED	CHECKED
	NO.	NO.
	STRUCTURE	NOTATIONS
	CHKD	



THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR. THE CITY OF EVANSTON SHALL HAVE THE OPPURTUNITY TO IDENTIFY ANY EQUIPMENT IT WOULD LIKE TO KEEP FOR MAINTENANCE OF OTHER SIGNALS. THE REMAINING EQUIPMENT SHALL BE DISPOSED OF BY THE CONTRACTOR OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE.

- 1 EACH CONTROLLER AND CABINET (COMPLETE)
- 12 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 4 EACH PEDESTRIAN HEADS
- 5 EACH SIGNAL POST
- 1 EACH SERVICE INSTALLATION

THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

- NOTES:**
1. SECURE POWER FOR TEMPORARY TRAFFIC SIGNAL FROM EXISTING POWER CABLE AT EXISTING TRAFFIC SIGNAL CABINET. DO NOT REMOVE EXISTING SERVICE INSTALLATION OR SERVICE CONDUIT RUN UNTIL NEW TRAFFIC SIGNAL IS ENERGIZED WITH NEW SERVICE INSTALLATION.
  2. ALL EXISTING UNDERGROUND CONDUIT TO BE ABANDONED.
  3. PLACE 2 DOWN GUYS PER TEMPORARY WOODEN POLE FOR SUPPORT. CONTRACTOR MAY NEED TO USE SIDEWALK DOWN GUYS IF SUFFICIENT R.O.W. IS NOT AVAILABLE AND PROPERTY OWNER WILL NOT ALLOW ON THEIR PROPERTY.

FILE NAME: ERGB1\_ah1.swg-2a.dgn

**ESI** CONSULTANTS, LTD.  
 100 N. LAUREL STREET, SUITE 100  
 EVANSTON, IL 60120  
 TEL: 847.329.1000  
 WWW.ESI-CONSULTANTS.COM

USER NAME = bhanrisha	DESIGNED - BAH	REVISED - -
	DRAWN - BAH	REVISED - -
PLOT SCALE = 20,0000' / 1" =	CHECKED - JMY	REVISED - -
PLOT DATE = 1/7/2016	DATE - 10/9/2015	REVISED - -

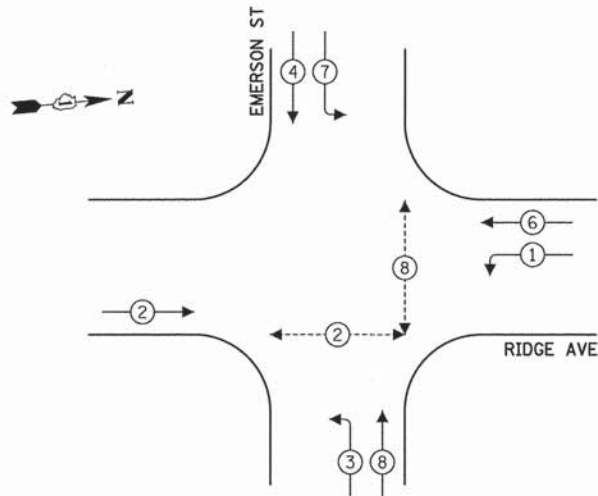
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>TRAFFIC SIGNAL PLAN SHEETS</b>	
<b>TEMPORARY TRAFFIC SIGNAL PLAN</b>	
<b>EMERSON ST AND RIDGE AVE</b>	
SCALE: _____	SHEET 6 OF 38 SHEETS STA. _____ TO STA. _____

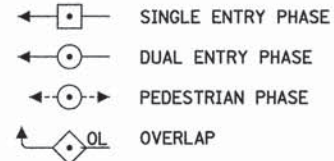
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	242
CONTRACT NO. 61C32			ILLINOIS FED. AID PROJECT	



**TEMPORARY CONTROLLER SEQUENCE**

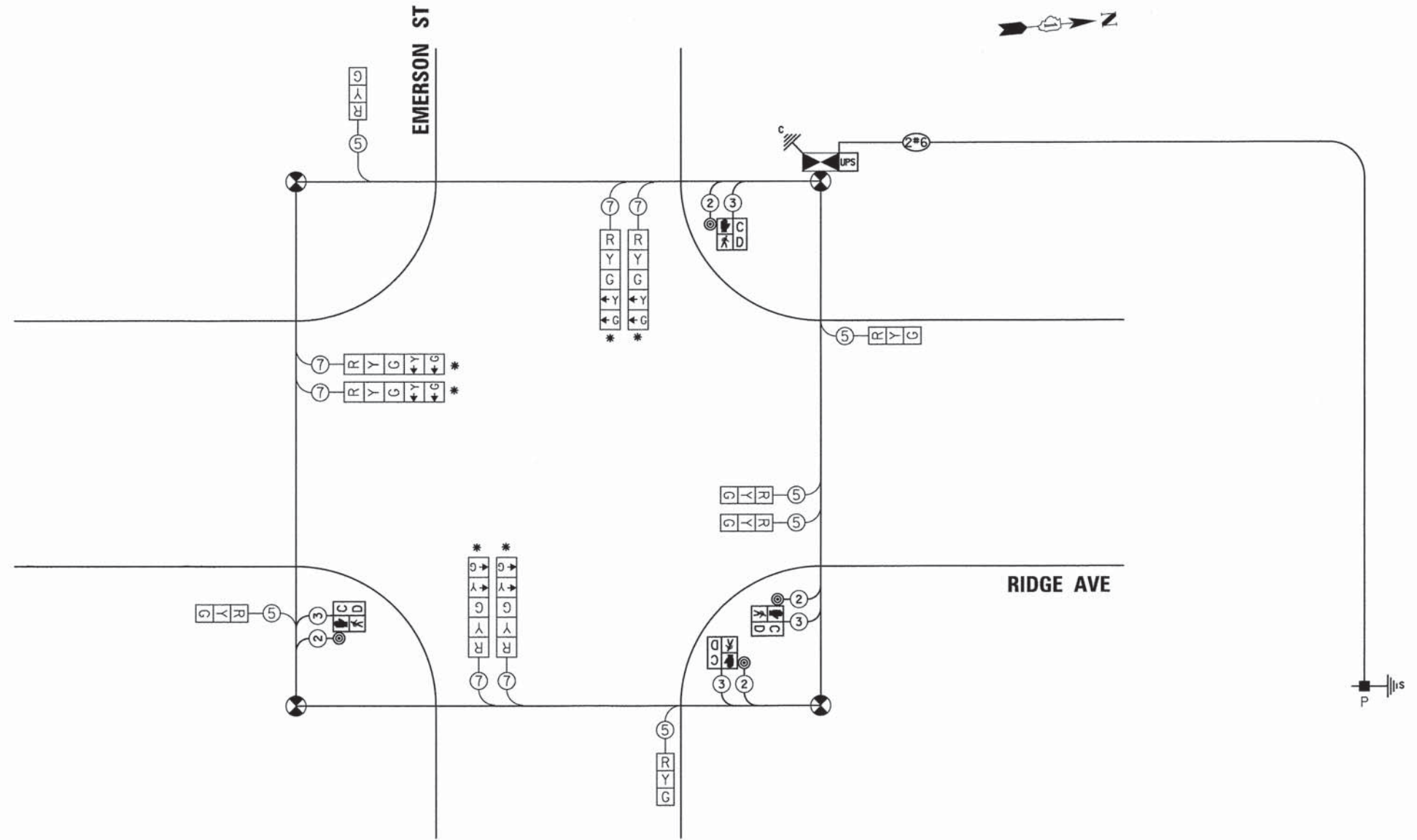


**LEGEND**



PLAN	SURVEYED	DATE
	PLOTTED	BY
	NOTED	NO.
	FILED	NO.
	FILED	NO.

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	NOTED	NO.
	FILED	NO.
	FILED	NO.



**CABLE PLAN**  
(NOT TO SCALE)

\* LEFT TURN SECTIONS SHALL BE BAGGED AND PHASES DEACTIVATED UNTIL DEDICATED LEFT TURN LANES ARE PROVIDED. ENGINEER TO DIRECT CONTRACTOR WHEN TO ACTIVATE PHASE AND UNBAG TURN SECTIONS.

**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	WATTAGE LED	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	11	50	66
(YELLOW)	12	20	5	12
(GREEN)	12	12	45	64.8
PERMISSIVE ARROW	12	10	10	12
PED. SIGNAL	4	20	100	80
CONTROLLER	1	100	100	-
UPS	1	25	100	100
VIDEO SYSTEM	-	150	100	25
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
TOTAL =				359.8

ENERGY COSTS TO:

CITY OF EVANSTON  
2100 RIDGE AVE  
EVANSTON, ILLINOIS 60201

ENERGY SUPPLY: CONTACT: CARLO F. CAVALLARO  
PHONE: 847-816-5368  
COMPANY: COMMONWEALTH EDISON  
ACCOUNT NUMBER:

THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

USER NAME = bhansrche	DESIGNED - BAH	REVISED - -
DESIGNED - BAH	DRAWN - BAH	REVISED - -
DESIGNED - BAH	CHECKED - JMY	REVISED - -
DESIGNED - BAH	DATE - 10/9/2015	REVISED - -

PLOT SCALE = 1,0000' / 1"	CHECKED - JMY	REVISED - -
PLOT DATE = 1/7/2016	DATE - 10/9/2015	REVISED - -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL PLAN SHEETS  
TEMPORARY CABLE PLAN  
EMERSON ST AND RIDGE AVE

SCALE: SHEET 7 OF 38 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	243
				CONTRACT NO. 61C32
ILLINOIS FED. AID PROJECT				

FILE NAME: ER081-eh-t-sig-2h-dgn



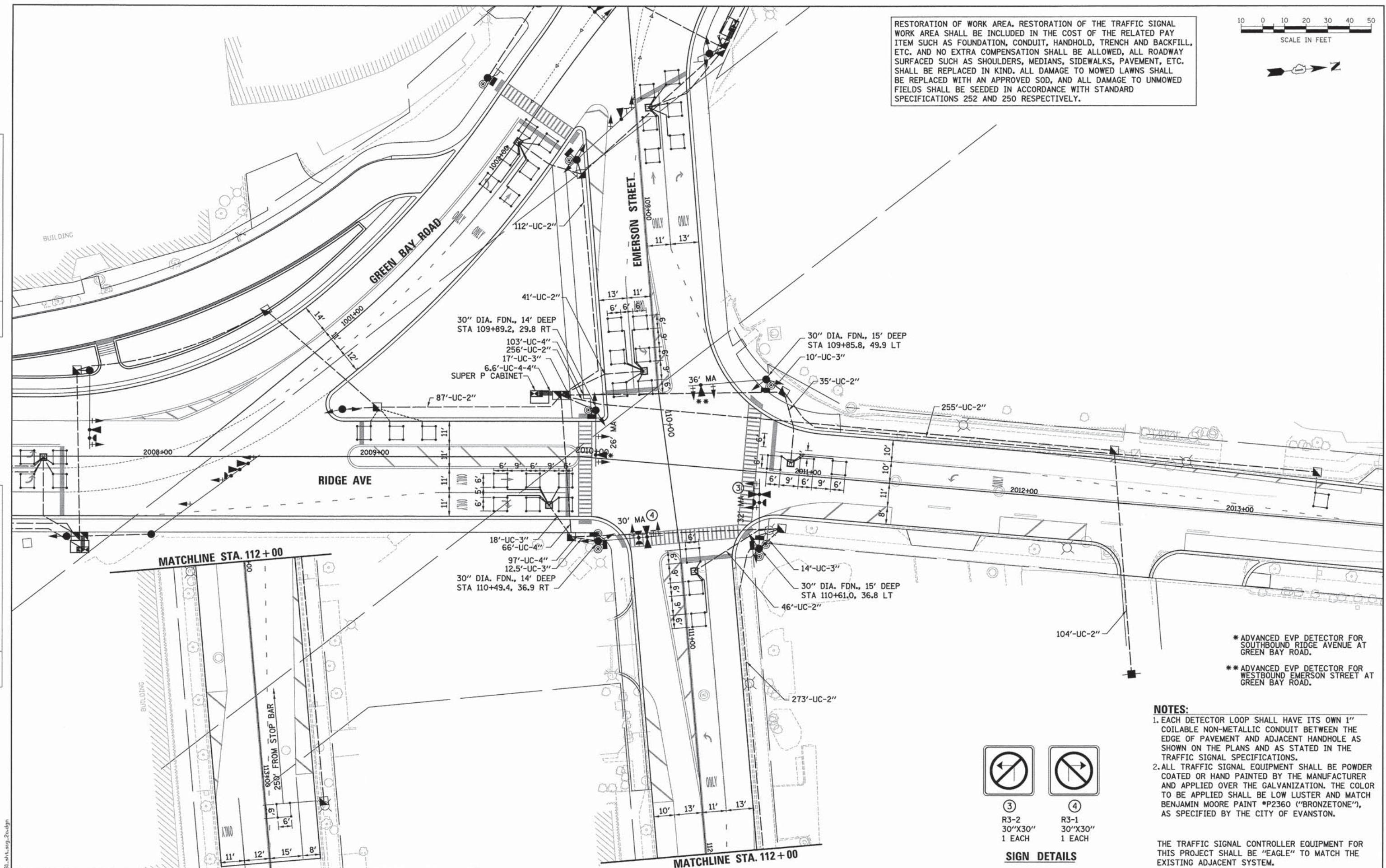


RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE COST OF THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLD, TRENCH AND BACKFILL, ETC. AND NO EXTRA COMPENSATION SHALL BE ALLOWED, ALL ROADWAY SURFACED SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.



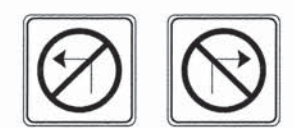
PLAN	SURVEYED	DATE
	ALIGNED	BY
	GRADES CHECKED	
	RT. OF WAY CHECKED	
	NO. OF FILE NAME	

PROFILE	SURVEYED	DATE
	GRADES CHECKED	BY
	S.M. NOTED	
	STRUCTURE NOTATIONS CHFD	



\* ADVANCED EVP DETECTOR FOR SOUTHBOUND RIDGE AVENUE AT GREEN BAY ROAD.  
 \*\* ADVANCED EVP DETECTOR FOR WESTBOUND EMERSON STREET AT GREEN BAY ROAD.

- NOTES:**
- EACH DETECTOR LOOP SHALL HAVE ITS OWN 1" COILABLE NON-METALLIC CONDUIT BETWEEN THE EDGE OF PAVEMENT AND ADJACENT HANDHOLE AS SHOWN ON THE PLANS AND AS STATED IN THE TRAFFIC SIGNAL SPECIFICATIONS.
  - ALL TRAFFIC SIGNAL EQUIPMENT SHALL BE POWDER COATED OR HAND PAINTED BY THE MANUFACTURER AND APPLIED OVER THE GALVANIZATION. THE COLOR TO BE APPLIED SHALL BE LOW LUSTER AND MATCH BENJAMIN MOORE PAINT #P2360 ("BRONZETONE"), AS SPECIFIED BY THE CITY OF EVANSTON.



③ R3-2 30"X30" 1 EACH  
 ④ R3-1 30"X30" 1 EACH

**SIGN DETAILS**

THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

**ESI** CONSULTANTS, LTD.  
 1000 N. WILSON AVENUE, SUITE 100  
 DEERFIELD, IL 60015  
 (847) 426-1000  
 www.esiconsultants.com

USER NAME = bhenrichs	DESIGNED - BAH	REVISED - -
PLLOT SCALE = 20.0000' / 1" =	DRAWN - BAH	REVISED - -
PLLOT DATE = 1/7/2016	CHECKED - JMY	REVISED - -
	DATE - 10/9/2015	REVISED - -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

<b>TRAFFIC SIGNAL PLAN SHEETS</b>			
<b>TRAFFIC SIGNAL PLAN</b>			
<b>EMERSON ST AND RIDGE AVE</b>			
SCALE:	SHEET 8 OF 38 SHEETS	STA.	TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	244
				CONTRACT NO. 61C32
[ILLINOIS] FED. AID PROJECT				

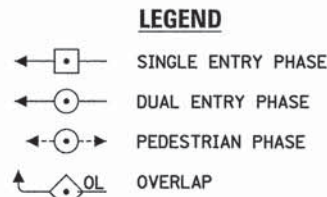
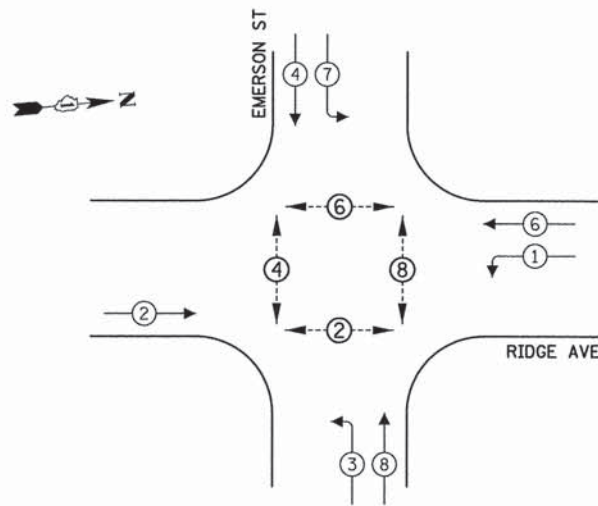
FILE NAME: ERGB1\_ah1\_s1g\_2c.dgn



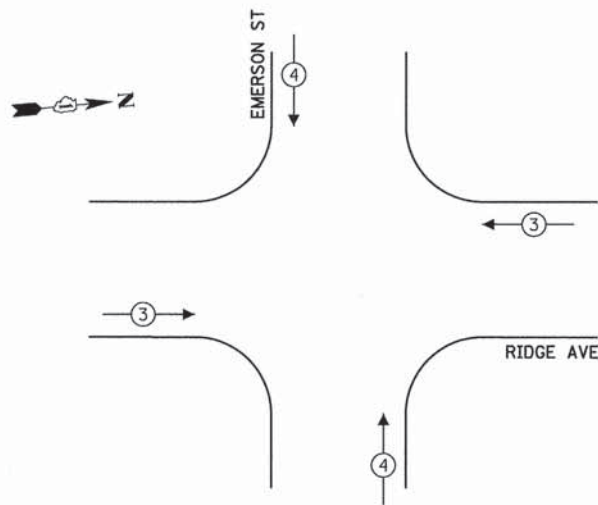
PLAN	SURVEYED	DATE
	ALIGNED	BY
	NOTED	NO.
	CHECKED	
	RT. OF WAY	
	CHECKED	
	FILE NAME	

PROFILE	SURVEYED	DATE
	ALIGNED	BY
	NOTED	NO.
	CHECKED	
	STRUCTURE	
	NOTATIONS	
	CHKD	

**PROPOSED CONTROLLER SEQUENCE**



**PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE**



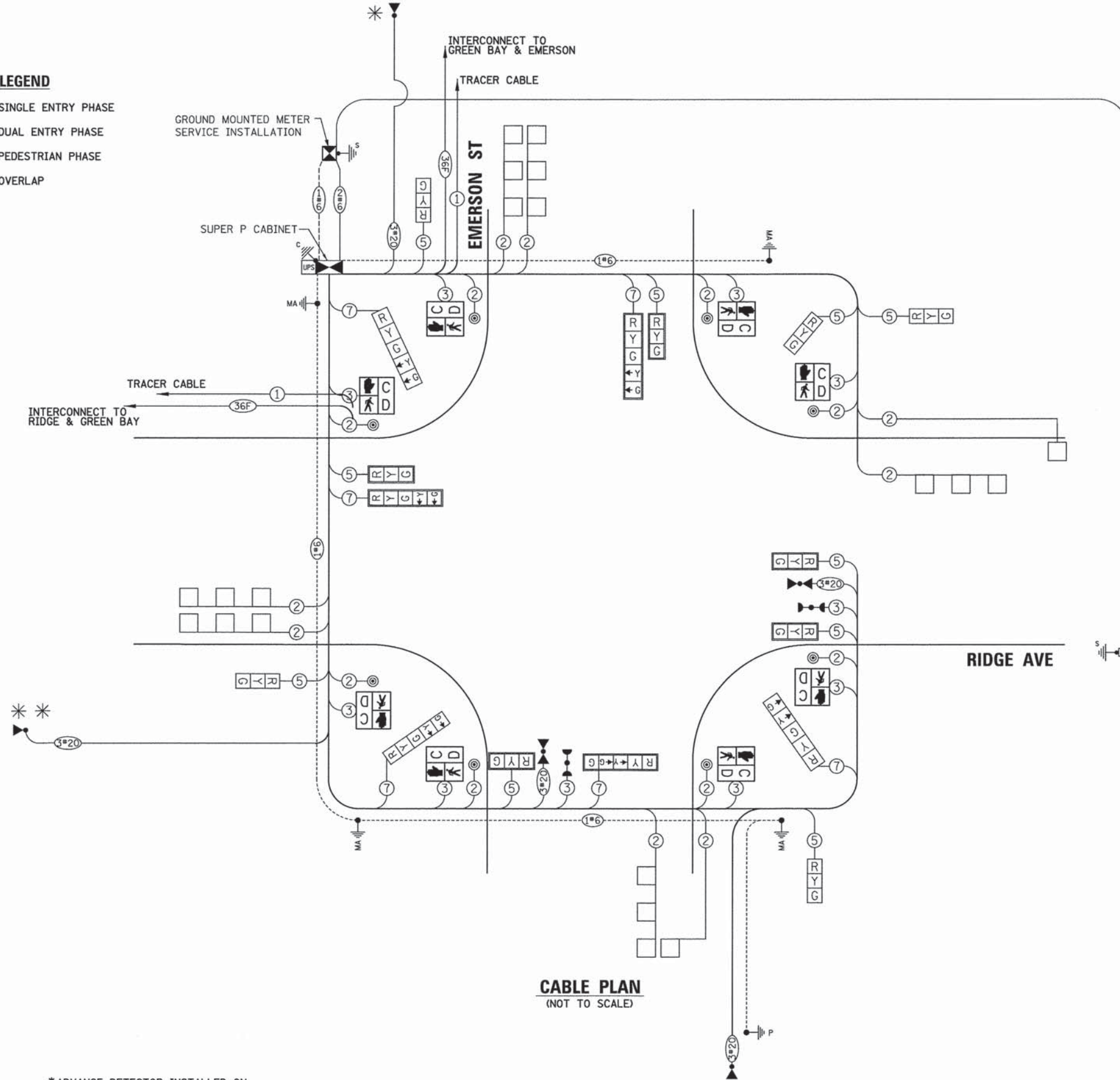
**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	WATTAGE LED	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16	11	50	82.5
(YELLOW)	16	20	5	15
(GREEN)	16	12	45	81
PERMISSIVE ARROW	12	10	10	12
PED. SIGNAL	8	20	100	160
CONTROLLER	1	100	100	100
UPS	1	25	100	25
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
<b>TOTAL =</b>				<b>475.5</b>

ENERGY COSTS TO:  
**CITY OF EVANSTON**  
 2100 RIDGE AVE  
 EVANSTON, ILLINOIS 60201

ENERGY SUPPLY: CONTACT: CARLO F. CAVALLARO  
 PHONE: 847-816-5368  
 COMPANY: COMMONWEALTH EDISON  
 ACCOUNT NUMBER: \_\_\_\_\_

\*ADVANCE DETECTOR INSTALLED ON EASTBOUND MAST ARM AT EMERSON AND GREEN BAY.  
 \*\*ADVANCE DETECTOR INSTALLED ON NORTHBOUND MAST ARM AT RIDGE AND GREEN BAY.



**CABLE PLAN**  
(NOT TO SCALE)

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL PLAN SHEETS  
 CABLE PLAN  
 EMERSON ST AND RIDGE AVE

THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.



USER NAME = bhensrhc  
 DESIGNED - BAH  
 DRAWN - BAH  
 CHECKED - JMY  
 DATE - 10/9/2015

REVISIONS  
 REVISED - -  
 REVISED - -  
 REVISED - -  
 REVISED - -

DESIGNED - BAH  
 DRAWN - BAH  
 CHECKED - JMY  
 DATE - 10/9/2015

SCALE: SHEET 9 OF 38 SHEETS STA. TO STA.

TRAFFIC SIGNAL PLAN SHEETS  
 CABLE PLAN  
 EMERSON ST AND RIDGE AVE  
 SCALE: SHEET 9 OF 38 SHEETS STA. TO STA.

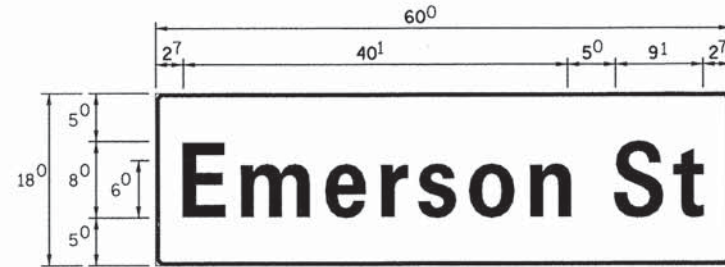
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	245
				CONTRACT NO. 61C32
ILLINOIS FED. AID PROJECT				



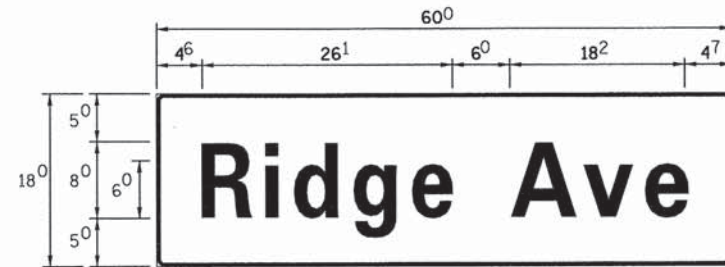
PLAN	SUBMITTED	DATE
	PLOTTED	
	CHECKED	
	BY	
	NO.	

PROFILE	SUBMITTED	DATE
	PLOTTED	
	CHECKED	
	BY	
	NO.	

**SIGN PANEL - TYPE 1 OR TYPE 2**



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY REQUIRED
D	7.5	1	ZZ	2



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY REQUIRED
D	7.5	1	ZZ	2

**NOTE:**  
FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION  
PLEASE SEE DISTRICT ONE MAST ARM MOUNTED STREET  
NAME SIGNS DETAIL.

**SCHEDULE OF QUANTITIES**

ITEM	UNIT	QTY
SIGN PANEL - TYPE 1	SQ FT	42.5
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	1352.6
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	53.5
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	573
HANDHOLE	EACH	6
HEAVY-DUTY HANDHOLE	EACH	4
DOUBLE HANDHOLE	EACH	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
PAINT NEW MAST ARM AND POLE, UNDER 40 FOOT	EACH	4
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	2477
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1379
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1642.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	846.5
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	403
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	1607.6
STEEL MAST ARM ASSEMBLY AND POLE 26 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE 30 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE 32 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE 36 FT.	EACH	1
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	59
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	5
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	3
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	3
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	8
INDUCTIVE LOOP DETECTOR	EACH	8
DETECTOR LOOP, TYPE 1	FOOT	1203
LIGHT DETECTOR	EACH	4
LIGHT DETECTOR AMPLIFIER	EACH	1
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	5
REMOVE EXISTING DOUBLE HANDHOLE	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	6
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	1090.6
FULL-ACTUATED CONTROLLER AND TYPE SUPER P CABINET (SPECIAL)	EACH	1
UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	6
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1

THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME: ER021\_sht\_aug\_26.dgn



USER NAME = bherrschs	DESIGNED - BAH	REVISED - -
DRAWN - BAH	CHECKED - JMY	REVISED -
DATE - 10/9/2015		REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL PLAN SHEETS - MAST ARM MOUNTED  
STREET NAME SIGNS AND SCHEDULE OF QUANTITIES  
EMERSON ST AND RIDGE AVE**

SCALE: \_\_\_\_\_ SHEET 10 OF 38 SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	246
CONTRACT NO. G1C32				
ILLINOIS FED. AID PROJECT				

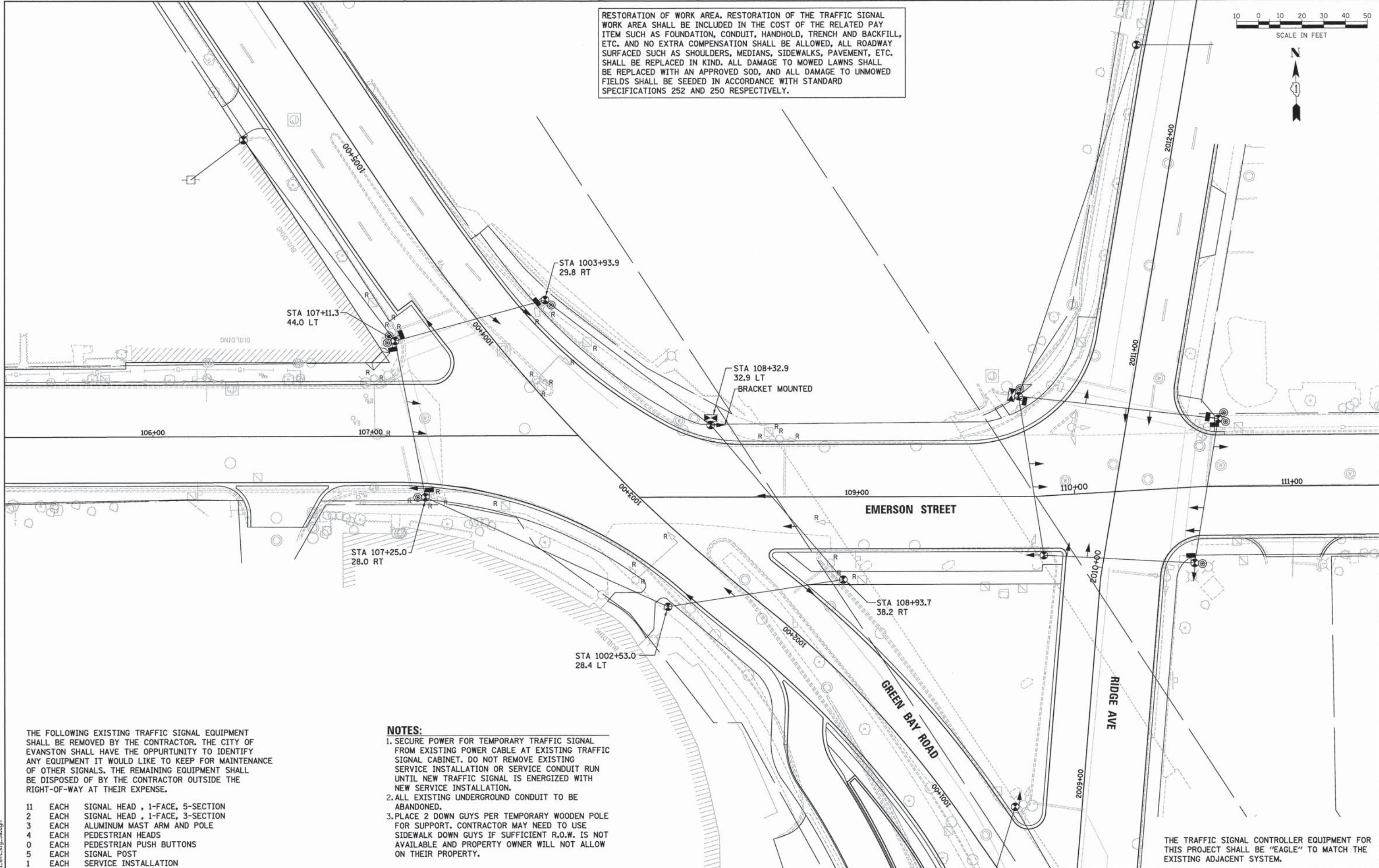


RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE COST OF THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLD, TRENCH AND BACKFILL, ETC. AND NO EXTRA COMPENSATION SHALL BE ALLOWED, ALL ROADWAY SURFACED SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.



PLAN	SURVEYED	DATE
	ALIGNED	BY
	RT. OF WAY CHECKED	
	PAID FILE NAME	

PROFILE	SURVEYED	DATE
	GRADES CHECKED	BY
	S.M. NOTED	
	STRUCTURE NOTATIONS CHECKED	



THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR. THE CITY OF EVANSTON SHALL HAVE THE OPPURTUNITY TO IDENTIFY ANY EQUIPMENT IT WOULD LIKE TO KEEP FOR MAINTENANCE OF OTHER SIGNALS. THE REMAINING EQUIPMENT SHALL BE DISPOSED OF BY THE CONTRACTOR OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE.

- 11 EACH SIGNAL HEAD , 1-FACE, 5-SECTION
- 2 EACH SIGNAL HEAD , 1-FACE, 3-SECTION
- 3 EACH ALUMINUM MAST ARM AND POLE
- 4 EACH PEDESTRIAN HEADS
- 0 EACH PEDESTRIAN PUSH BUTTONS
- 5 EACH SIGNAL POST
- 1 EACH SERVICE INSTALLATION

- NOTES:**
1. SECURE POWER FOR TEMPORARY TRAFFIC SIGNAL FROM EXISTING POWER CABLE AT EXISTING TRAFFIC SIGNAL CABINET. DO NOT REMOVE EXISTING SERVICE INSTALLATION OR SERVICE CONDUIT RUN UNTIL NEW TRAFFIC SIGNAL IS ENERGIZED WITH NEW SERVICE INSTALLATION.
  2. ALL EXISTING UNDERGROUND CONDUIT TO BE ABANDONED.
  3. PLACE 2 DOWN GUYS PER TEMPORARY WOODEN POLE FOR SUPPORT. CONTRACTOR MAY NEED TO USE SIDEWALK DOWN GUYS IF SUFFICIENT R.O.W. IS NOT AVAILABLE AND PROPERTY OWNER WILL NOT ALLOW ON THEIR PROPERTY.

THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.



USER NAME = bhenrsche	DESIGNED - BAH	REVISED - -
	DRAWN - BAH	REVISED - -
	CHECKED - JMY	REVISED - -
	DATE - 10/9/2015	REVISED - -

PLLOT SCALE = 20,0000 ' / 1" =
PLLOT DATE = 1/7/2016

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL PLAN SHEETS
TEMPORARY TRAFFIC SIGNAL PLAN
GREEN BAY RD AND EMERSON ST
SCALE: SHEET 11 OF 38 SHEETS STA. TO STA.

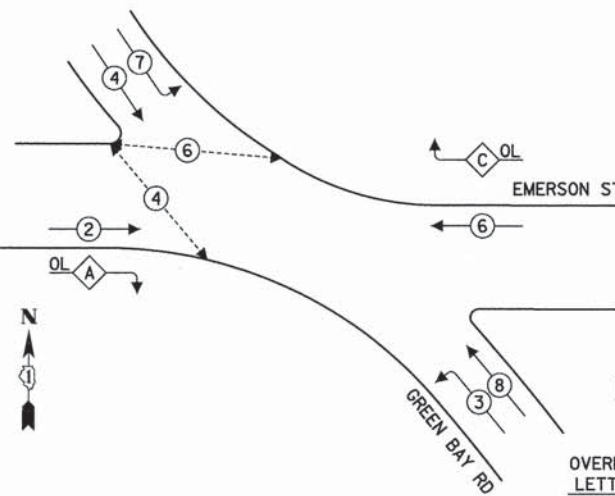
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	247
				CONTRACT NO. G1C32
ILLINOIS FED. AID PROJECT				



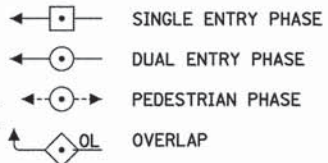
PLAN	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	ALIGNED	
	FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	ALIGNED	
	FILE NAME	

**TEMPORARY CONTROLLER SEQUENCE**

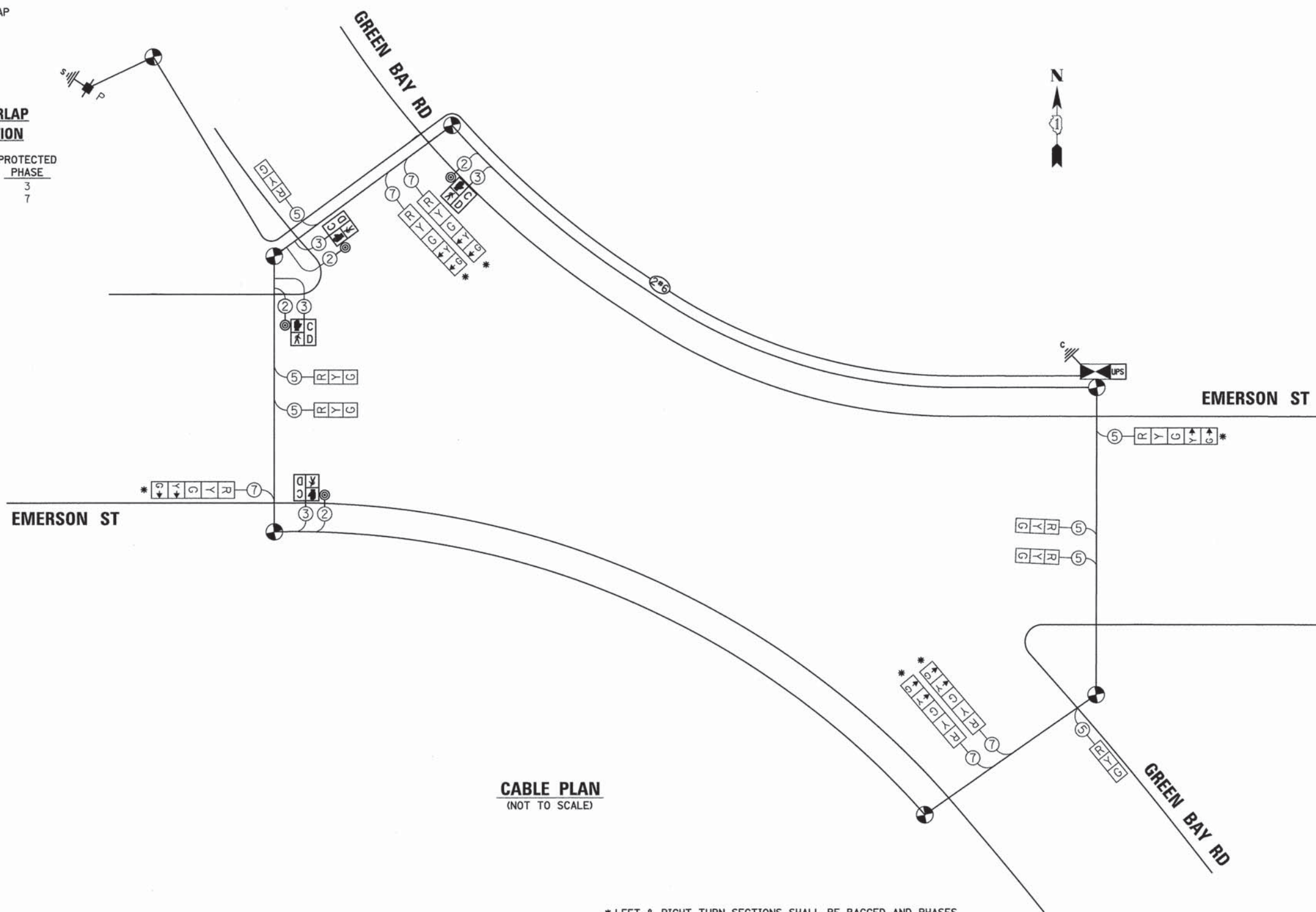


**LEGEND**



**RIGHT TURN OVERLAP PHASE DESIGNATION**

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2	+ 3
C	= 6	+ 7



**CABLE PLAN**  
(NOT TO SCALE)

\* LEFT & RIGHT TURN SECTIONS SHALL BE BAGGED AND PHASES DEACTIVATED UNTIL DEDICATED LEFT & RIGHT TURN LANES ARE PROVIDED. ENGINEER TO DIRECT CONTRACTOR WHEN TO ACTIVATE PHASE AND UNBAG TURN SECTIONS.

THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	WATTAGE LED	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	11	50	66
(YELLOW)	12	20	5	12
(GREEN)	12	12	45	64.8
PERMISSIVE ARROW	12	10	10	12
PED. SIGNAL	4	20	100	80
CONTROLLER	1	100	100	100
UPS	1	25	100	25
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
<b>TOTAL =</b>				<b>359.8</b>

ENERGY COSTS TO:

CITY OF EVANSTON  
2100 RIDGE AVE  
EVANSTON, ILLINOIS 60201

ENERGY SUPPLY: CONTACT: CARLO F. CAVALLARO  
PHONE: 847-816-5368  
COMPANY: COMMONWEALTH EDISON  
ACCOUNT NUMBER:



USER NAME = bharrish  
DESIGNED - BAH  
DRAWN - BAH  
CHECKED - JMY  
DATE - 10/9/2015  
PLOT SCALE = 1:8000' / in.  
PLOT DATE = 1/7/2016

REVISIONS:  
REVISED - -  
REVISED - -  
REVISED - -  
REVISED - -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL PLAN SHEETS  
TEMPORARY CABLE PLAN  
GREEN BAY RD AND EMERSON ST

SCALE: SHEET 12 OF 38 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	248
CONTRACT NO. 61C32				
ILLINOIS FED. AID PROJECT				



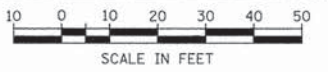
RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE COST OF THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLD, TRENCH AND BACKFILL, ETC. AND NO EXTRA COMPENSATION SHALL BE ALLOWED, ALL ROADWAY SURFACED SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

**NOTES:**

1. EACH DETECTOR LOOP SHALL HAVE ITS OWN 1" COILABLE NON-METALLIC CONDUIT BETWEEN THE EDGE OF PAVEMENT AND ADJACENT HANDHOLE AS SHOWN ON THE PLANS AND AS STATED IN THE TRAFFIC SIGNAL SPECIFICATIONS.
2. ALL TRAFFIC SIGNAL EQUIPMENT SHALL BE POWDER COATED OR HAND PAINTED BY THE MANUFACTURER AND APPLIED OVER THE GALVANIZATION. THE COLOR TO BE APPLIED SHALL BE LOW LUSTER AND MATCH BENJAMIN MOORE PAINT #P2360 ("BRONZETONE"), AS SPECIFIED BY THE CITY OF EVANSTON.

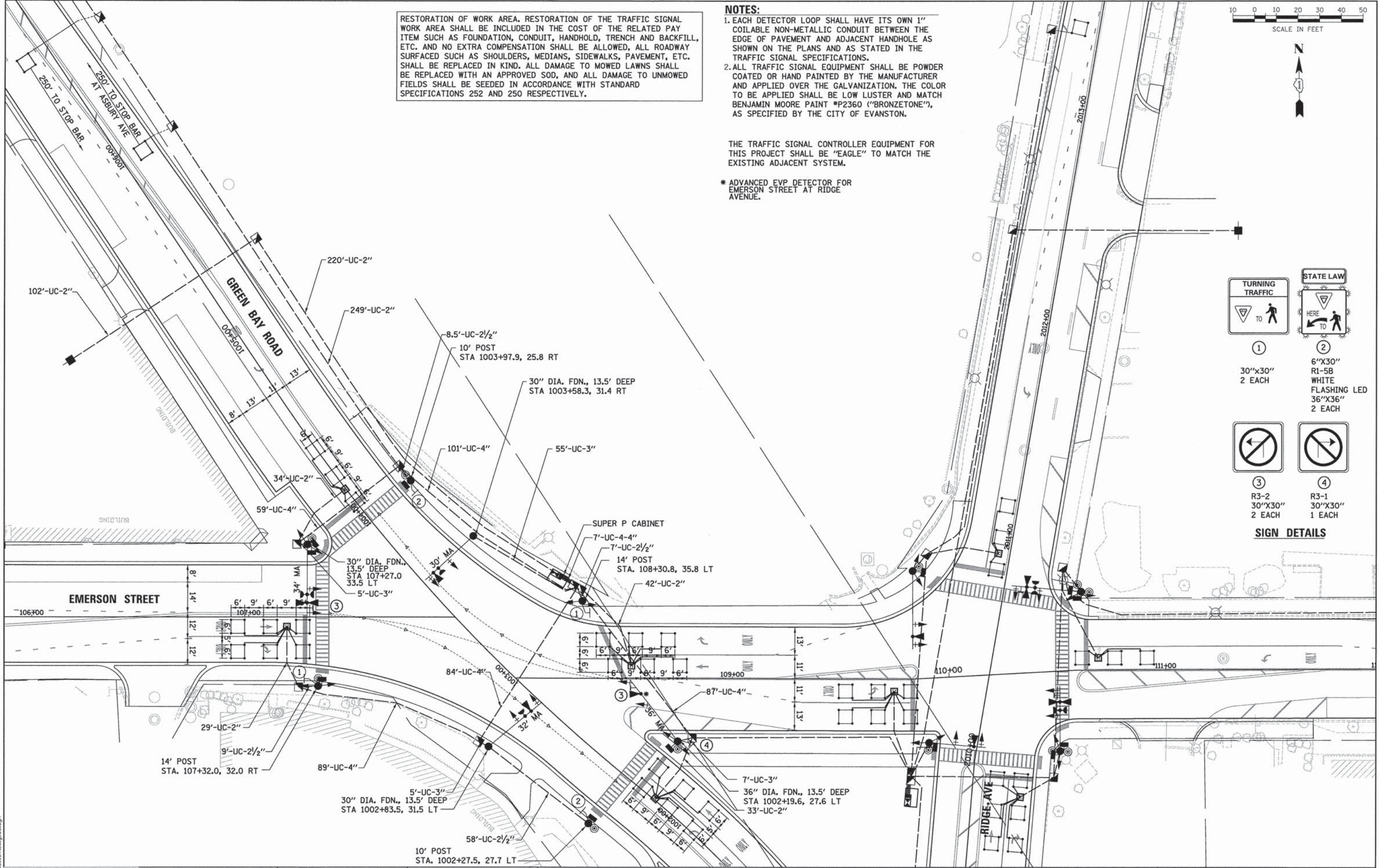
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

\* ADVANCED EVP DETECTOR FOR EMERSON STREET AT RIDGE AVENUE.



PLAN	SURVEYED	DATE
	ALIGNED	
	CHECKED	
	BY	
	NO. OF WAY CHECKED	
	NO. OF FILE NAME	

PROFILE	SURVEYED	DATE
	GRADES CHECKED	
	B.M. NOTED	
	STRUCTURE NOTATIONS CHKD	
	NO.	



**TURNING TRAFFIC**

① 30"x30" 2 EACH

② 6"x30" R1-5B WHITE FLASHING LED 36"x36" 2 EACH

③ R3-2 30"x30" 2 EACH

④ R3-1 30"x30" 1 EACH

**SIGN DETAILS**

**ESI** CONSULTANTS, LTD.  
 200 N. WILSON AVENUE, SUITE 200  
 EVANSTON, ILLINOIS 60120  
 TEL: 847.329.1000 FAX: 847.329.1001  
 WWW.ESI-CONSULTANTS.COM

USER NAME = bhennrichs	DESIGNED - BAH	REVISED - -
	DRAWN - BAH	REVISED - -
	CHECKED - JMY	REVISED - -
	DATE - 10/9/2015	REVISED - -
PLOT SCALE = 20,00000' / 1"		
PLOT DATE = 1/7/2016		

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL PLAN SHEETS**  
**TRAFFIC SIGNAL PLAN**  
**GREEN BAY RD AND EMERSON ST**

SCALE: \_\_\_\_\_ SHEET 13 OF 38 SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	249
			CONTRACT NO. G1C32	
[ILLINOIS] FED. AID PROJECT				

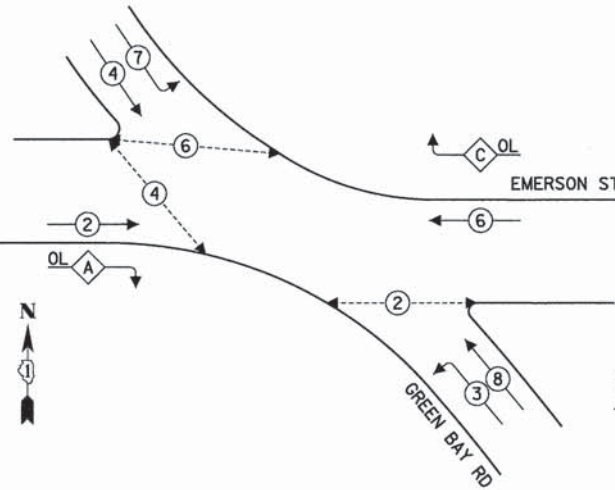
FILE NAME: ERGBL\_ahL.swg\_20.dgn



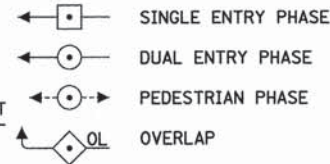
DATE	
BY	
PLAN	
SURVEYED	
PLOTTED	
GRADES CHECKED	
STRUCTURE NOTATION CHECKED	
NOTE BOOK NO.	
CADD FILE NAME	

DATE	
BY	
PROFILE	
SURVEYED	
PLOTTED	
GRADES CHECKED	
STRUCTURE NOTATION CHECKED	
NOTE BOOK NO.	
CADD FILE NAME	

**PROPOSED CONTROLLER SEQUENCE**



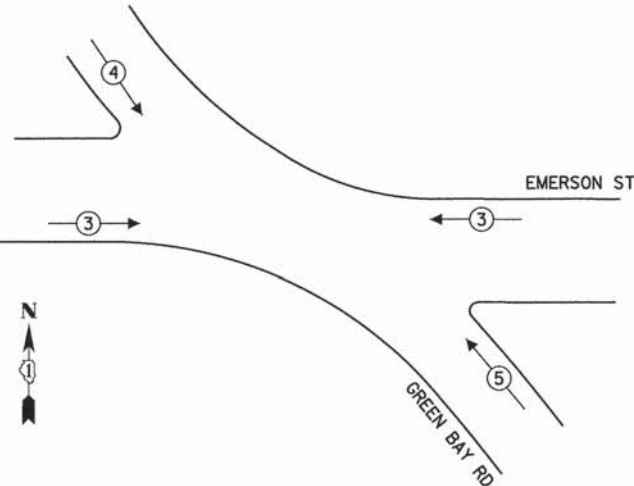
**LEGEND**



**RIGHT TURN OVERLAP PHASE DESIGNATION**

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2 + 3	
C	= 6 + 7	

**PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	WATTAGE LED	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16	11	50	88
(YELLOW)	16	20	5	16
(GREEN)	16	12	45	86.4
PERMISSIVE ARROW	4	10	10	4
PED. SIGNAL	6	20	100	120
CONTROLLER	1	100	100	100
UPS	1	25	100	25
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
TOTAL =				429.4

ENERGY COSTS TO:

CITY OF EVANSTON  
2100 RIDGE AVE  
EVANSTON, ILLINOIS 60201

ENERGY SUPPLY: CONTACT: CARLO F. CAVALLARO  
PHONE: 847-816-5368  
COMPANY: COMMONWEALTH EDISON  
ACCOUNT NUMBER:



USER NAME = bhncr1chs
DESIGNED - BAH
DRAWN - BAH
CHECKED - JMY
DATE - 10/9/2015
PLOT SCALE = 1/8" = 1' / 1"
PLOT DATE = 1/7/2016

DESIGNED - BAH	REVISED - -
DRAWN - BAH	REVISED - -
CHECKED - JMY	REVISED - -
DATE - 10/9/2015	REVISED - -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

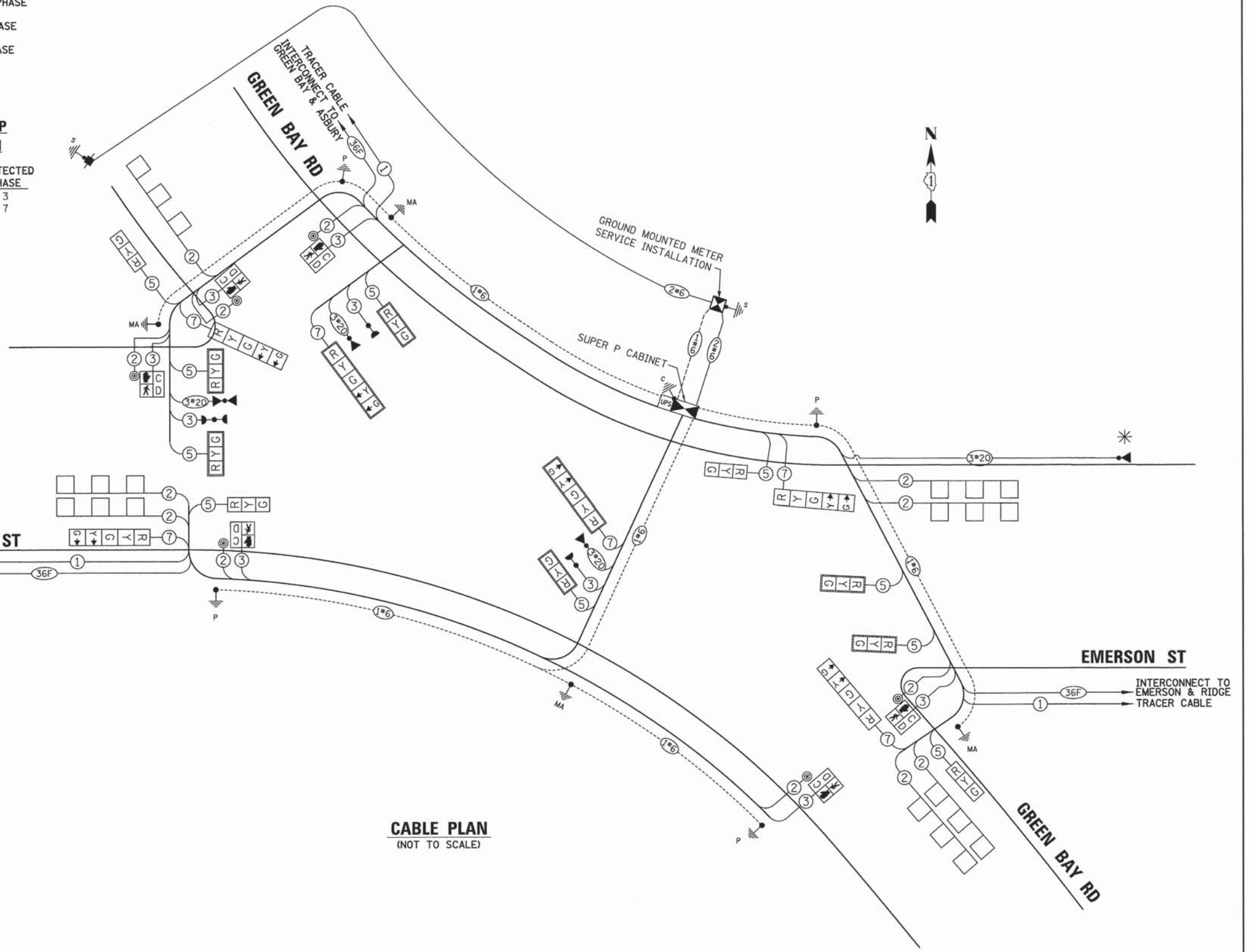
TRAFFIC SIGNAL PLAN SHEETS  
CABLE PLAN  
GREEN BAY RD AND EMERSON ST

SCALE: SHEET 14 OF 38 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	250
CONTRACT NO. 61C32				
ILLINOIS FED. AID PROJECT				

**EMERSON ST**

TRACER CABLE INTERCONNECT TO EMERSON & ASBURY



**CABLE PLAN**  
(NOT TO SCALE)

\*ADVANCE DETECTOR INSTALLED ON WESTBOUND MAST ARM AT EMERSON STREET AND RIDGE AVENUE.

THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

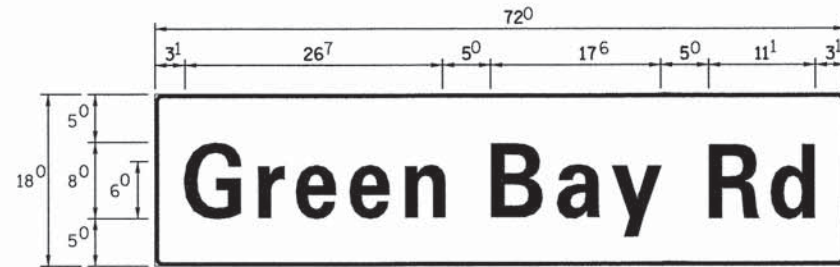
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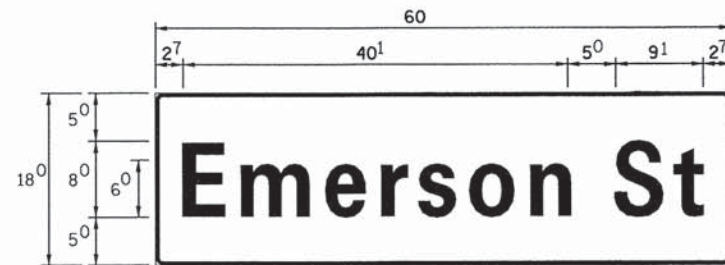
PLAN	SURVEYED	BY	DATE
	PLOTTED		
	GRADES CHECKED		
	STRUCTURE NOTATION CHECKED		
	NO. _____		
	CADD FILE NAME		

PROFILE	SURVEYED	BY	DATE
	PLOTTED		
	GRADES CHECKED		
	STRUCTURE NOTATION CHECKED		
	NO. _____		

**SIGN PANEL - TYPE 1 OR TYPE 2**



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY REQUIRED
D	9.0	1	ZZ	2



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY REQUIRED
D	7.5	1	ZZ	2

**NOTE:**  
FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION  
PLEASE SEE DISTRICT ONE MAST ARM MOUNTED STREET  
NAME SIGNS DETAIL.

**SCHEDULE OF QUANTITIES**

ITEM	UNIT	QTY
SIGN PANEL - TYPE 1	SQ FT	66.8
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	994.9
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	82.5
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	72
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	448
HANDHOLE	EACH	7
HEAVY-DUTY HANDHOLE	EACH	4
DOUBLE HANDHOLE	EACH	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
PAINT NEW TRAFFIC SIGNAL POST	EACH	4
PAINT NEW MAST ARM AND POLE, UNDER 40 FOOT	EACH	4
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1105
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1711
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2048
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	659
ELECTRIC CABLE IN CONDUIT, LEAD IN, NO. 14 1 PAIR	FOOT	1063.5
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	368
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	1217.5
TRAFFIC SIGNAL POST, 10 FT.	EACH	2
TRAFFIC SIGNAL POST, 14 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE 30 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE 32 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE 34 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE 36 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	16
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	40.5
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	13.5
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIME	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIME	EACH	1
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	8
INDUCTIVE LOOP DETECTOR	EACH	7
DETECTOR LOOP, TYPE 1	FOOT	764.5
LIGHT DETECTOR	EACH	3
LIGHT DETECTOR AMPLIFIER	EACH	1
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	5
REMOVE EXISTING CONCRETE FOUNDATION	EACH	8
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	958.9
FULL-ACTUATED CONTROLLER AND TYPE SUPER P CABINET (SPECIAL)	EACH	1
SIGN PANEL - TYPE 1 (SPECIAL)	SQ FT	12.5
MASTER CONTROLLER (SPECIAL)	EACH	1
UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	6
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1

FILE NAME: ER031.sht, sig\_3a.dgn



USER NAME = bherr10hs	DESIGNED - BAH	REVISED - -
PLOT SCALE = 1/8" = 1'-0"	DRAWN - BAH	REVISED -
PLOT DATE = 1/7/2016	CHECKED - JMY	REVISED -
	DATE - 10/9/2015	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL PLAN SHEETS - MAST ARM MOUNTED

GREEN BAY RD AND EMERSON ST

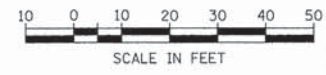
SCALE: \_\_\_\_\_ SHEET 15 OF 38 SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR  
THIS PROJECT SHALL BE "EAGLE" TO MATCH THE  
EXISTING ADJACENT SYSTEM.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	251
CONTRACT NO. 61C32				
ILLINOIS FED. AID PROJECT				

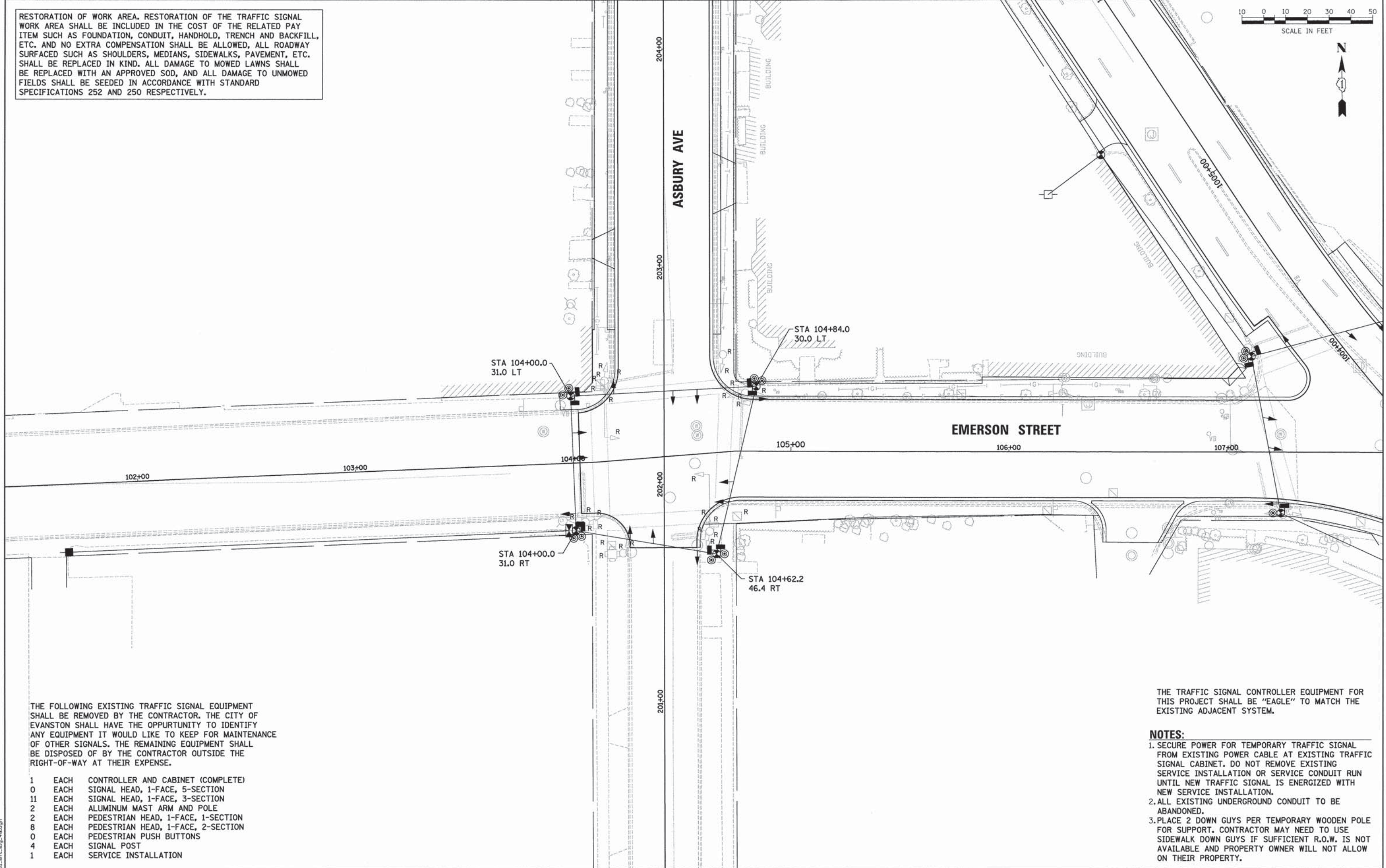


RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE COST OF THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLD, TRENCH AND BACKFILL, ETC. AND NO EXTRA COMPENSATION SHALL BE ALLOWED, ALL ROADWAY SURFACED SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.



PLAN	SURVEYED	DATE
	ALIGNED	BY
	CHECKED	
	RT. OF WAY	
	CHECKED	
	NO. _____	
	FILE NAME	

PROFILE	SURVEYED	DATE
	PROPOSED	BY
	CHECKED	
	S.M. NOTED	
	STRUCTURE	
	NOTATIONS	
	CHKD	
	NO. _____	



THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR. THE CITY OF EVANSTON SHALL HAVE THE OPPURTUNITY TO IDENTIFY ANY EQUIPMENT IT WOULD LIKE TO KEEP FOR MAINTENANCE OF OTHER SIGNALS. THE REMAINING EQUIPMENT SHALL BE DISPOSED OF BY THE CONTRACTOR OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE.

- 1 EACH CONTROLLER AND CABINET (COMPLETE)
- 0 EACH SIGNAL HEAD, 1-FACE, 5-SECTION
- 11 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 2 EACH ALUMINUM MAST ARM AND POLE
- 2 EACH PEDESTRIAN HEAD, 1-FACE, 1-SECTION
- 8 EACH PEDESTRIAN HEAD, 1-FACE, 2-SECTION
- 0 EACH PEDESTRIAN PUSH BUTTONS
- 4 EACH SIGNAL POST
- 1 EACH SERVICE INSTALLATION

THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

- NOTES:**
1. SECURE POWER FOR TEMPORARY TRAFFIC SIGNAL FROM EXISTING POWER CABLE AT EXISTING TRAFFIC SIGNAL CABINET. DO NOT REMOVE EXISTING SERVICE INSTALLATION OR SERVICE CONDUIT RUN UNTIL NEW TRAFFIC SIGNAL IS ENERGIZED WITH NEW SERVICE INSTALLATION.
  2. ALL EXISTING UNDERGROUND CONDUIT TO BE ABANDONED.
  3. PLACE 2 DOWN GUYS PER TEMPORARY WOODEN POLE FOR SUPPORT. CONTRACTOR MAY NEED TO USE SIDEWALK DOWN GUYS IF SUFFICIENT R.O.W. IS NOT AVAILABLE AND PROPERTY OWNER WILL NOT ALLOW ON THEIR PROPERTY.

FILE NAME: ERGB1...ahk.sig-4.mxd



USER NAME =	bhenrichs
DESIGNED -	BAH
DRAWN -	BAH
CHECKED -	JMY
DATE -	10/9/2015
PLOT SCALE =	28.0000' / 1"v
PLOT DATE =	1/7/2016

DESIGNED -	BAH	REVISED -	-
DRAWN -	BAH	REVISED -	-
CHECKED -	JMY	REVISED -	-
DATE -	10/9/2015	REVISED -	-

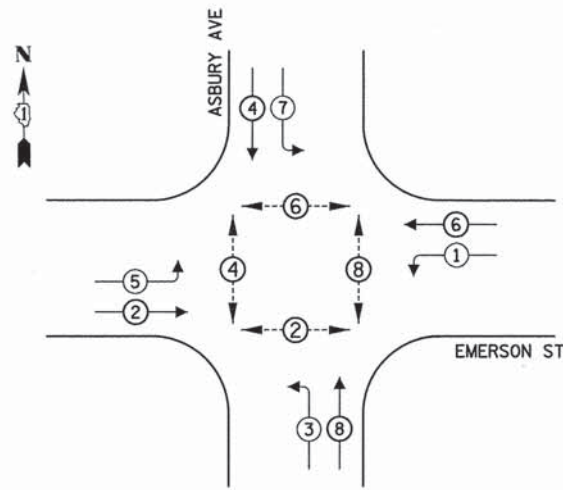
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL PLAN SHEETS  
TEMPORARY TRAFFIC SIGNAL PLAN  
EMERSON STREET AND ASBURY AVENUE  
SCALE: \_\_\_\_\_ SHEET 16 OF 38 SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	252
				CONTRACT NO. G1C32
ILLINOIS FED. AID PROJECT				



**TEMPORARY CONTROLLER SEQUENCE**

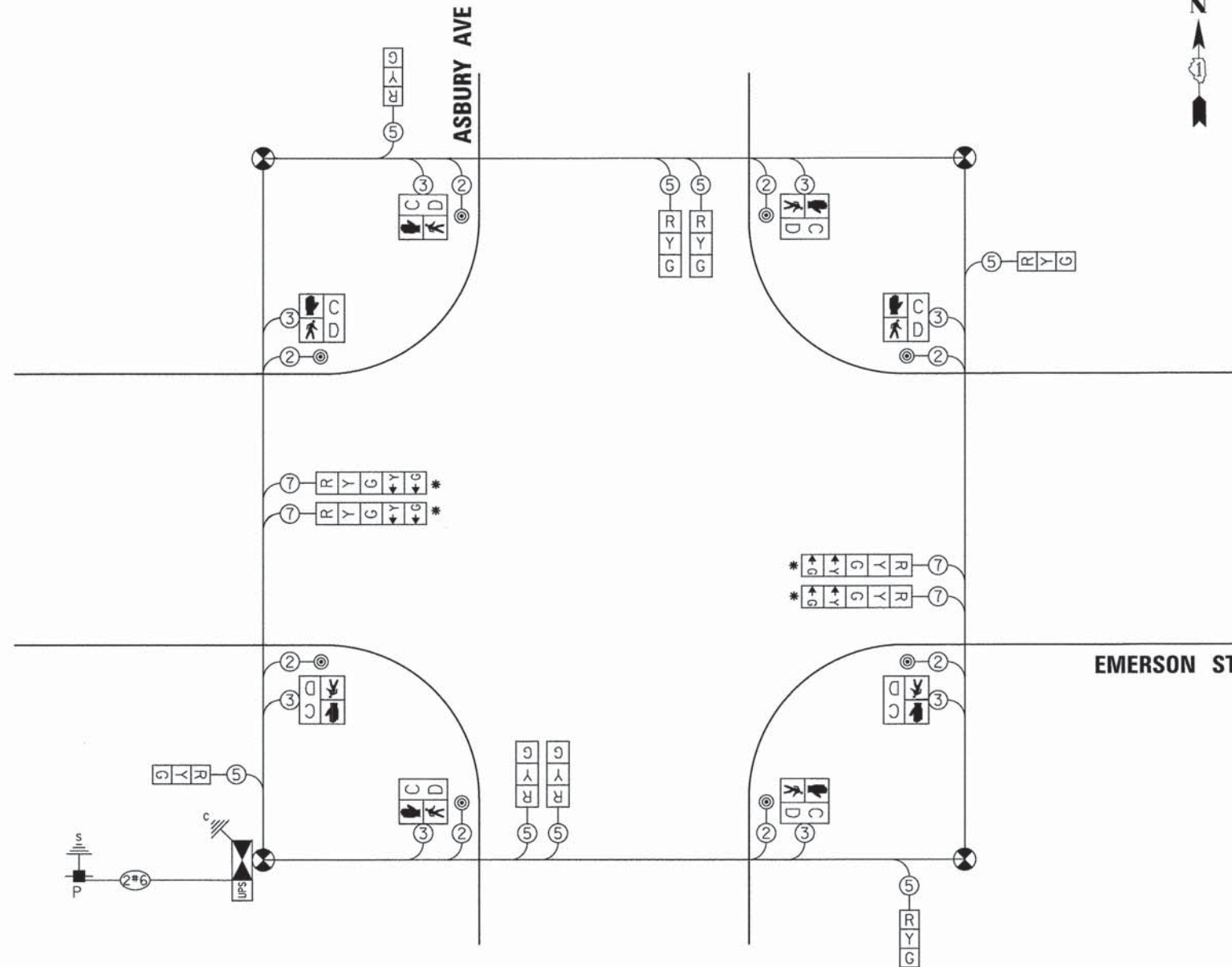


**LEGEND**

- ◻ SINGLE ENTRY PHASE
- ◉ DUAL ENTRY PHASE
- ◉ PEDESTRIAN PHASE
- ◊ OL OVERLAP

PLAN	SURVEYED	DATE
	PLOTTED	BY
	NOTED	NO.
	NOTED	NO.
	NOTED	NO.
	NOTED	NO.
	NOTED	NO.

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	NOTED	NO.
	NOTED	NO.
	NOTED	NO.
	NOTED	NO.
	NOTED	NO.



**CABLE PLAN**  
(NOT TO SCALE)

**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	11	50	66
(YELLOW)	12	20	5	12
(GREEN)	12	12	45	64.8
PERMISSIVE ARROW	8	10	10	-
PED. SIGNAL	8	20	100	160
CONTROLLER	1	100	100	100
UPS	1	25	100	25
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
<b>TOTAL =</b>				<b>427.8</b>

ENERGY COSTS TO:

CITY OF EVANSTON  
2100 RIDGE AVE  
EVANSTON, ILLINOIS 60201

ENERGY SUPPLY: CONTACT: CARLO F. CAVALLARO  
PHONE: 847-816-5368  
COMPANY: COMMONWEALTH EDISON  
ACCOUNT NUMBER:

\* LEFT TURN SECTIONS SHALL BE BAGGED AND PHASES DEACTIVATED UNTIL DEDICATED LEFT TURN LANES ARE PROVIDED. ENGINEER TO DIRECT CONTRACTOR WHEN TO ACTIVATE PHASE AND UNBAG TURN SECTIONS.

THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.



USER NAME = bhanrichs
DESIGNED - BAH
DRAWN - BAH
CHECKED - JMY
DATE - 10/9/2015
PLLOT SCALE = 1:80000' / 1"
PLLOT DATE = 1/7/2016

REVISED - -
REVISED - -
REVISED - -
REVISED - -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL PLAN SHEETS  
TEMPORARY CABLE PLAN  
EMERSON STREET AND ASBURY AVENUE

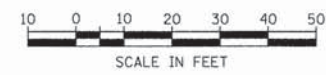
SCALE: SHEET 17 OF 38 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	253
				CONTRACT NO. 61C32
ILLINOIS FED. AID PROJECT				

FILE NAME: ERGB1\_ahLsig-4b.dgn

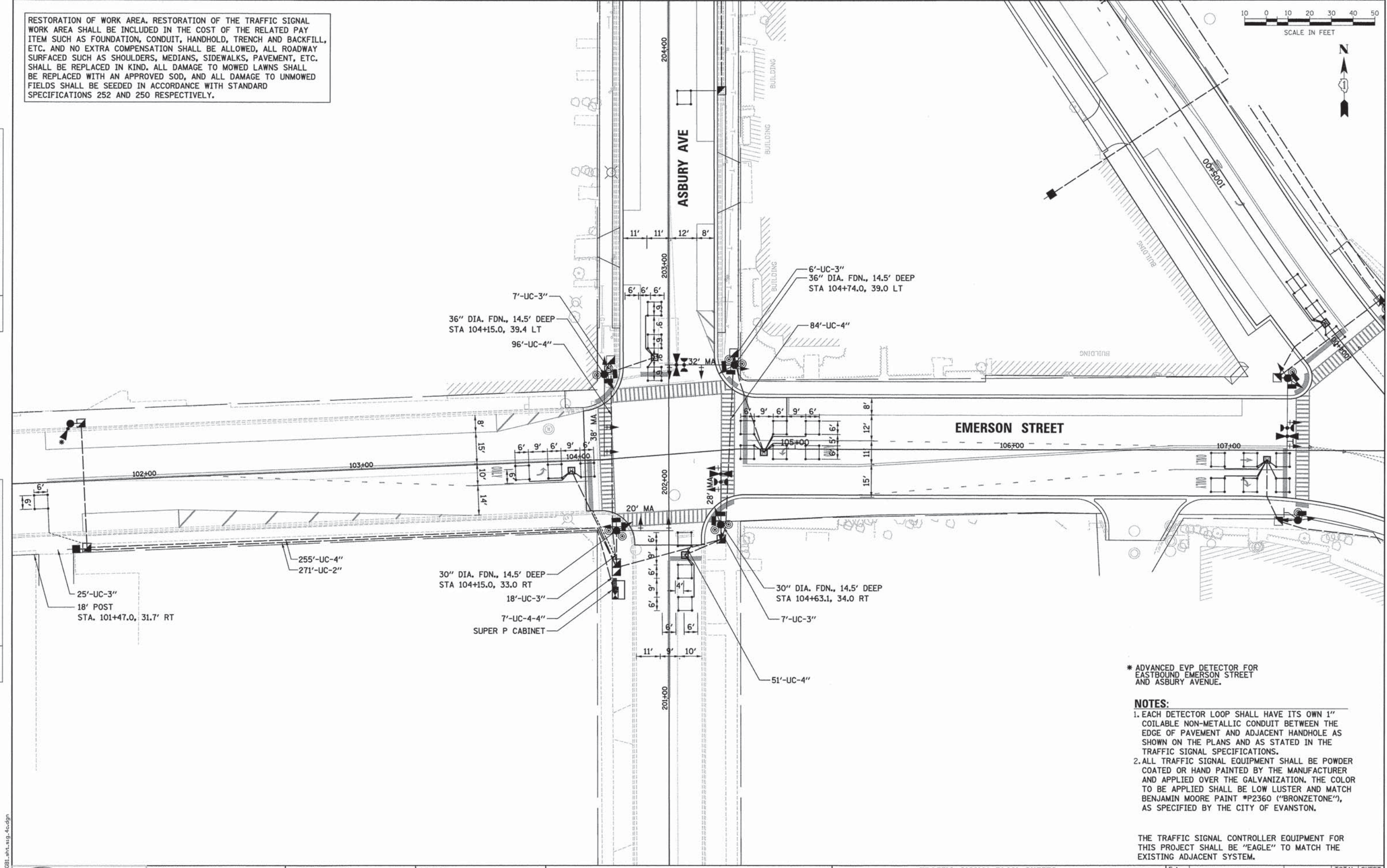


RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE COST OF THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLD, TRENCH AND BACKFILL, ETC. AND NO EXTRA COMPENSATION SHALL BE ALLOWED, ALL ROADWAY SURFACED SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.



PLAN	SURVEYED	DATE
	ALIGNED	
	NOTED	
	BY	
	NO. OF	
	FILE	

PROFILE	SURVEYED	DATE
	GRADES	
	BLM	
	NOTED	
	BY	
	NO. OF	
	FILE	



\* ADVANCED EVP DETECTOR FOR EASTBOUND EMERSON STREET AND ASBURY AVENUE.

- NOTES:**
1. EACH DETECTOR LOOP SHALL HAVE ITS OWN 1" COILABLE NON-METALLIC CONDUIT BETWEEN THE EDGE OF PAVEMENT AND ADJACENT HANDHOLE AS SHOWN ON THE PLANS AND AS STATED IN THE TRAFFIC SIGNAL SPECIFICATIONS.
  2. ALL TRAFFIC SIGNAL EQUIPMENT SHALL BE POWDER COATED OR HAND PAINTED BY THE MANUFACTURER AND APPLIED OVER THE GALVANIZATION. THE COLOR TO BE APPLIED SHALL BE LOW LUSTER AND MATCH BENJAMIN MOORE PAINT #P2360 ("BRONZETONE"), AS SPECIFIED BY THE CITY OF EVANSTON.

THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.



USER NAME =	bhenrichs
DESIGNED -	BAH
DRAWN -	BAH
CHECKED -	JMY
DATE -	10/9/2015
PLOT SCALE =	20.0000' / 1"
PLOT DATE =	1/7/2016

DESIGNED -	BAH	REVISED -	-
DRAWN -	BAH	REVISED -	-
CHECKED -	JMY	REVISED -	-
DATE -	10/9/2015	REVISED -	-

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL PLAN SHEETS  
TRAFFIC SIGNAL PLAN  
EMERSON STREET AND ASBURY AVENUE  
SCALE: SHEET 18 OF 38 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	254
				CONTRACT NO. 61C32
ILLINOIS FED. AID PROJECT				

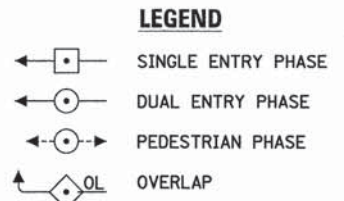
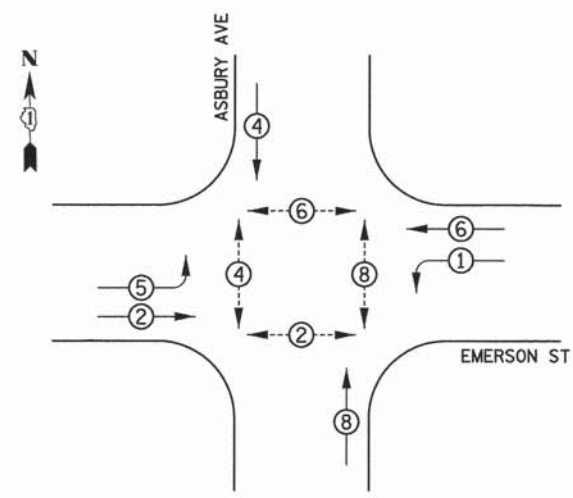
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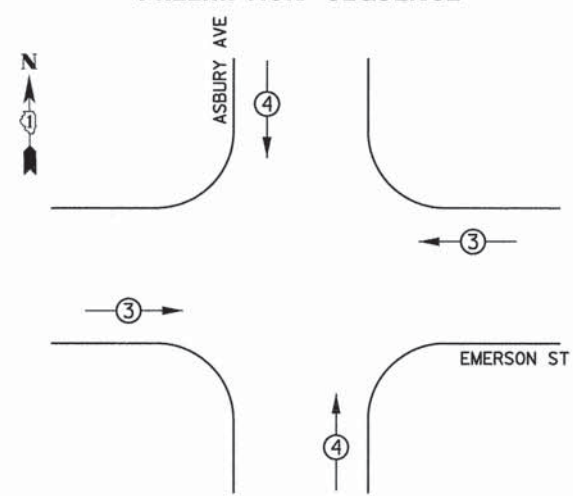
PLAN SURVEYED BY DATE  
 NOTE BOOK NO. ALIGNMENT CHECKED BY DATE  
 RT. OF WAY CHECKED BY DATE  
 PLOD FILE NAME

PROFILE SURVEYED BY DATE  
 NOTE BOOK NO. GRADES CHECKED BY DATE  
 STRUCTURE NOTATIONS CHECKED BY DATE

**PROPOSED CONTROLLER SEQUENCE**



**PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE**

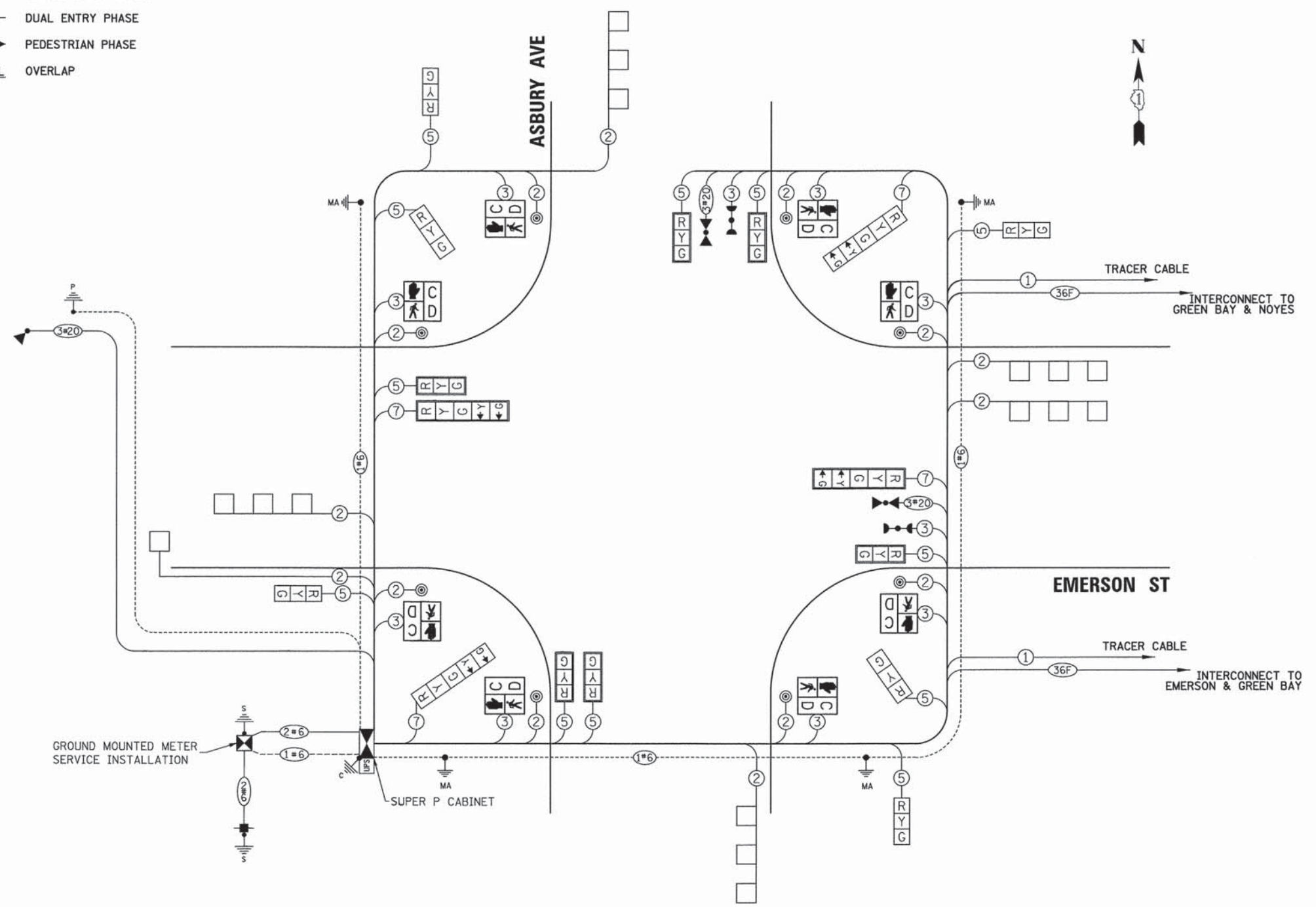


**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	WATTAGE LED	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	14	11	50	308
(YELLOW)	14	20	5	14
(GREEN)	14	12	45	75.6
PERMISSIVE ARROW	8	10	10	
PED. SIGNAL	8	20	100	160
CONTROLLER	1	100	100	100
UPS	1	25	100	25
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
<b>TOTAL =</b>				<b>690.6</b>

ENERGY COSTS TO:  
 CITY OF EVANSTON  
 2100 RIDGE AVE  
 EVANSTON, ILLINOIS 60201

ENERGY SUPPLY: CONTACT: CARLO F. CAVALLARO  
 PHONE: 847-816-5368  
 COMPANY: COMMONWEALTH EDISON  
 ACCOUNT NUMBER:



**CABLE PLAN**  
(NOT TO SCALE)



USER NAME = bhannrchs  
 DESIGNED - BAH  
 DRAWN - BAH  
 CHECKED - JMY  
 DATE - 10/9/2015

REVISED - -  
 REVISED - -  
 REVISED - -  
 REVISED - -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL PLAN SHEETS  
 CABLE PLAN  
 EMERSON STREET AND ASBURY AVENUE

SCALE: SHEET 19 OF 38 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	255
				CONTRACT NO. 61C32

ILLINOIS FED. AID PROJECT

THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

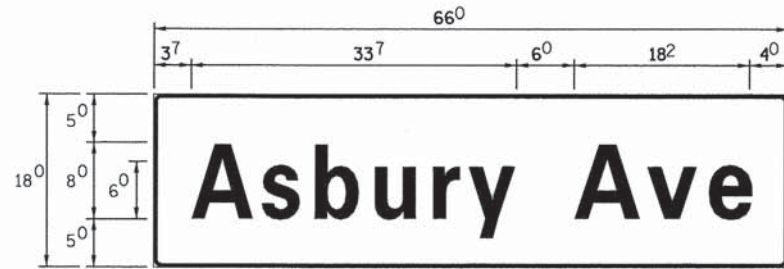
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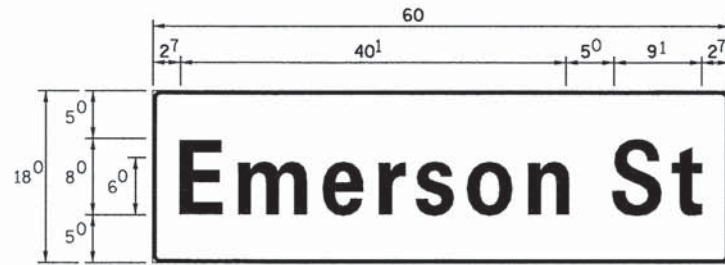
DATE	
BY	
SURVEYED	
PLANNED	
CHECKED	
RT. OF WAY CHECKED	
NO. _____	
ADD FILE NAME	

DATE	
BY	
SURVEYED	
PLANNED	
CHECKED	
S.M. NOTED	
STRUCTURE NOTATIONS CHFD	
NO. _____	

**SIGN PANEL – TYPE 1 OR TYPE 2**



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY REQUIRED
D	8.25	1	ZZ	2



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY REQUIRED
D	7.5	1	ZZ	2

**NOTE:**  
FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION  
PLEASE SEE DISTRICT ONE MAST ARM MOUNTED STREET  
NAME SIGNS DETAIL.

**SCHEDULE OF QUANTITIES**

ITEM	UNIT	QTY
SIGN PANEL - TYPE 1	SQ FT	31.5
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	260
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	38
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	574
HANDHOLE	EACH	4
HEAVY-DUTY HANDHOLE	EACH	4
DOUBLE HANDHOLE	EACH	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
PAINT NEW TRAFFIC SIGNAL POST	EACH	1
PAINT NEW MAST ARM AND POLE, UNDER 40 FOOT	EACH	4
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	800
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1461.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1670
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	580
ELECTRIC CABLE IN CONDUIT, LEAD IN, NO. 14 1 PAIR	FOOT	846.5
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	299.5
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	881.5
TRAFFIC SIGNAL POST, 18 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE 20 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE 28 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE 32 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE 38 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	4
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	29
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	29
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	10
INDUCTIVE LOOP DETECTOR	EACH	6
DETECTOR LOOP, TYPE 1	FOOT	1320.5
LIGHT DETECTOR	EACH	3
LIGHT DETECTOR AMPLIFIER	EACH	1
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	3
REMOVE EXISTING DOUBLE HANDHOLE	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	7
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	728.5
FULL-ACTUATED CONTROLLER AND TYPE SUPER P CABINET (SPECIAL)	EACH	1
UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	8
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1

FILE NAME: ER081\_ah1\_sug\_4e.dgn

**ESI** CONSULTANTS, LTD.  
2015 W. JOLIET STREET, SUITE 100  
JOLIET, ILLINOIS 61781  
www.esiconsultants.com

USER NAME = bhenrscha	DESIGNED -- BAH	REVISED --
	DRAWN -- BAH	REVISED --
PLOT SCALE = 1/8"=1'-0"	CHECKED -- JMY	REVISED --
PLOT DATE = 1/7/2016	DATE -- 10/9/2015	REVISED --

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL PLAN SHEETS – MAST ARM MOUNTED  
STREET NAME SIGNS AND SCHEDULE OF QUANTITIES  
EMERSON STREET AND ASBURY AVENUE**

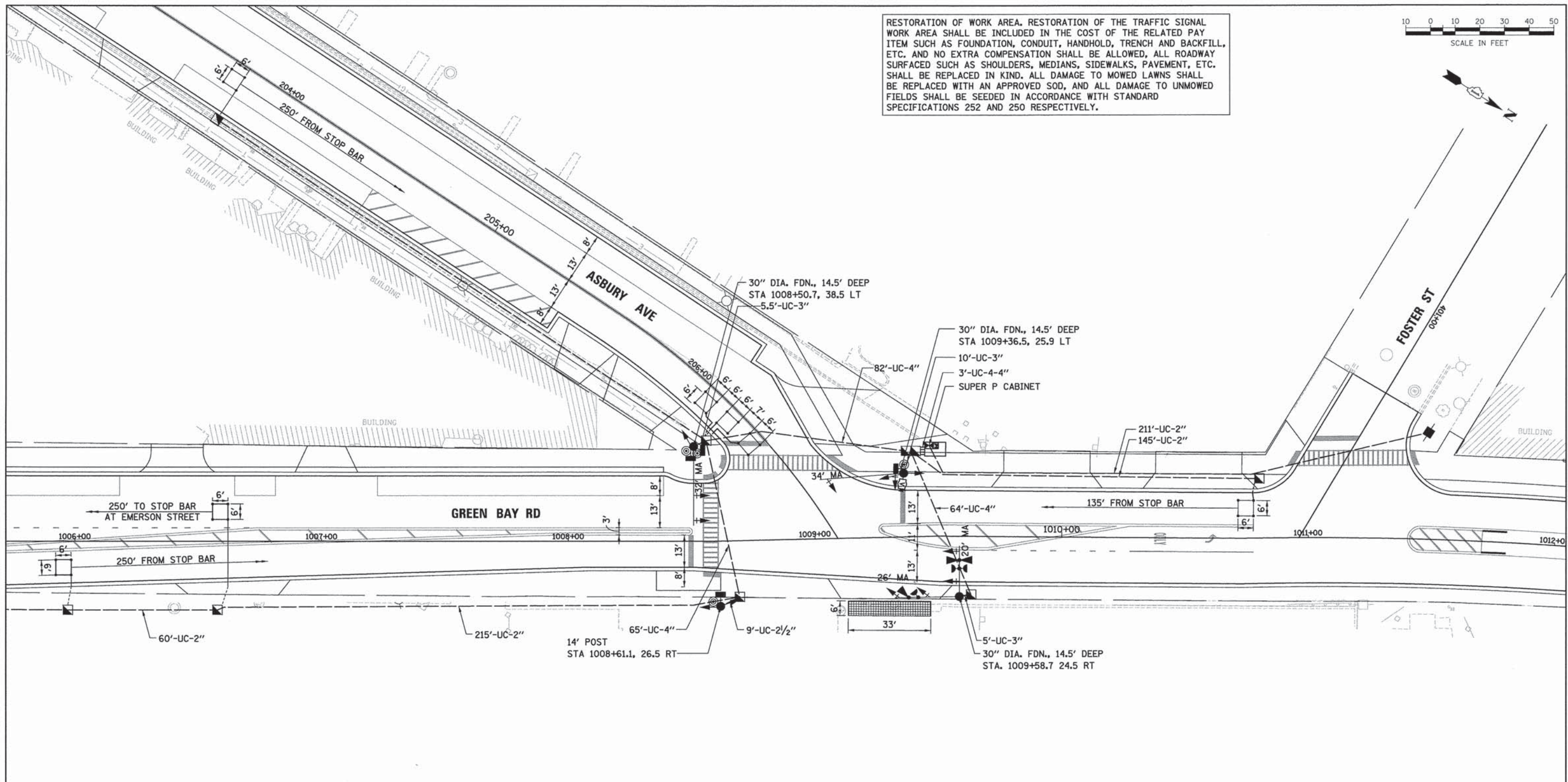
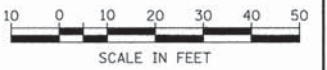
SCALE: \_\_\_\_\_ SHEET 20 OF 38 SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	256
			CONTRACT NO. 41C32	
ILLINOIS FED. AID PROJECT				

THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.



RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE COST OF THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLD, TRENCH AND BACKFILL, ETC. AND NO EXTRA COMPENSATION SHALL BE ALLOWED, ALL ROADWAY SURFACED SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDING IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.



PLAN	SURVEYED	DATE
	ALIGNED	BY
	NOTED	
	RT. OF WAY	
	CHECKED	
	NO. FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	CHECKED	
	S.M. NOTED	
	STRUCTURE	
	NOTATIONS	
	CHKD	

- NOTES:**
- EACH DETECTOR LOOP SHALL HAVE ITS OWN 1" COILABLE NON-METALLIC CONDUIT BETWEEN THE EDGE OF PAVEMENT AND ADJACENT HANDHOLE AS SHOWN ON THE PLANS AND AS STATED IN THE TRAFFIC SIGNAL SPECIFICATIONS.
  - ALL TRAFFIC SIGNAL EQUIPMENT SHALL BE POWDER COATED OR HAND PAINTED BY THE MANUFACTURER AND APPLIED OVER THE GALVANIZATION. THE COLOR TO BE APPLIED SHALL BE LOW LUSTER AND MATCH BENJAMIN MOORE PAINT #P2360 ("BRONZETONE"), AS SPECIFIED BY THE CITY OF EVANSTON.

THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.



USER NAME = bhansrsha	DESIGNED - BAH	REVISED - -
PLLOT SCALE = 20.0000' / 1"	DRAWN - BAH	REVISED - -
PLLOT DATE = 1/7/2016	CHECKED - JMY	REVISED - -
	DATE - 10/9/2015	REVISED - -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL PLAN SHEETS  
TRAFFIC SIGNAL PLAN  
GREEN BAY ROAD AND ASBURY AVENUE  
SCALE: \_\_\_\_\_ SHEET 21 OF 38 SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	257
CONTRACT NO. 61C32				
ILLINOIS FED. AID PROJECT				

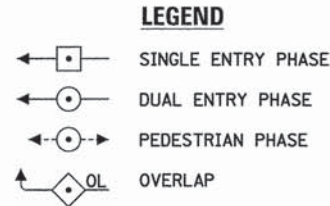
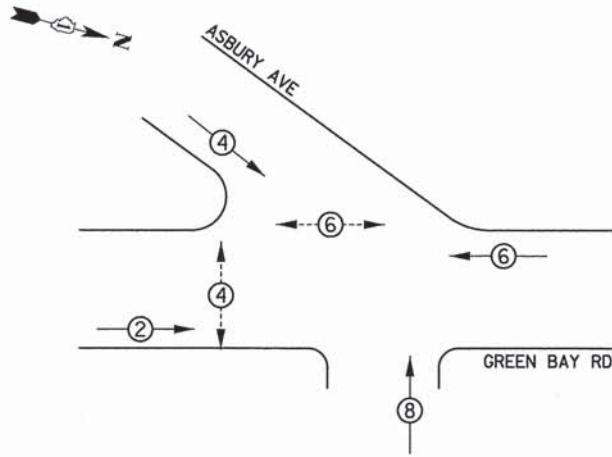
FILE NAME: ER081\_ah1\_sig\_500.dgn



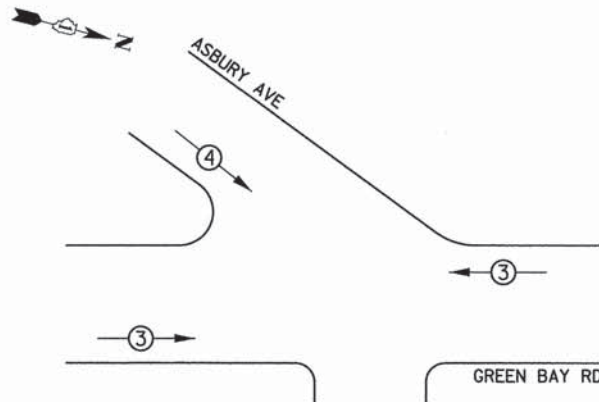
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 PLOTTED: \_\_\_\_\_  
 CHECKED: \_\_\_\_\_  
 NO. OF WAY CHECKED: \_\_\_\_\_  
 PLAN NO.: \_\_\_\_\_  
 FILE NAME: \_\_\_\_\_

DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
 SURVEYED: \_\_\_\_\_  
 PLOTTED: \_\_\_\_\_  
 CHECKED: \_\_\_\_\_  
 NO. OF WAY CHECKED: \_\_\_\_\_  
 PROFILE NO.: \_\_\_\_\_  
 FILE NAME: ERGB1\_ah1.sig\_5d.dgn

**PROPOSED CONTROLLER SEQUENCE**



**PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE**

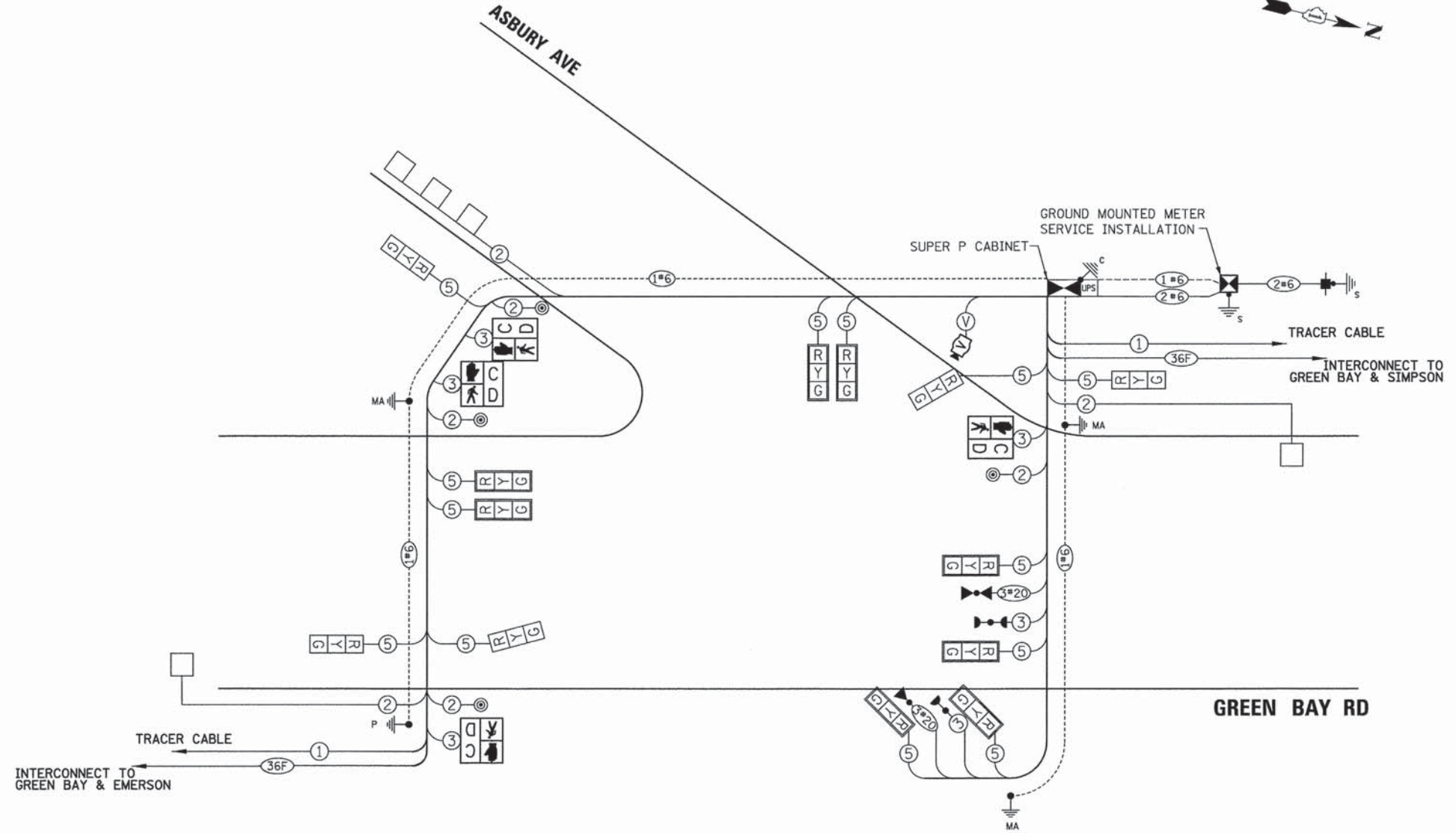


**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	WATTAGE LED	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	13	11	50	71.5
(YELLOW)	13	20	5	13
(GREEN)	13	12	45	70.2
PERMISSIVE ARROW	-	10	10	-
PED. SIGNAL	4	20	100	80
CONTROLLER	1	100	100	100
UPS	1	25	100	25
VIDEO SYSTEM	1	150	100	150
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
<b>TOTAL =</b>				<b>509.7</b>

ENERGY COSTS TO:  
 CITY OF EVANSTON  
 2100 RIDGE AVE  
 EVANSTON, ILLINOIS 60201

ENERGY SUPPLY: CONTACT: CARLO F. CAVALLARO  
 PHONE: 847-816-5368  
 COMPANY: COMMONWEALTH EDISON  
 ACCOUNT NUMBER: \_\_\_\_\_



**CABLE PLAN**  
 (NOT TO SCALE)



USER NAME = bharrish	DESIGNED -- BAH	REVISED --
PLLOT SCALE = 1:8000' / 1"	DRAWN -- BAH	REVISED --
PLLOT DATE = 1/7/2016	CHECKED -- JMY	REVISED --
	DATE -- 10/9/2015	REVISED --

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL PLAN SHEETS  
 CABLE PLAN  
 GREEN BAY ROAD AND ASBURY AVENUE

SCALE: SHEET 22 OF 38 SHEETS STA. TO STA.

THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

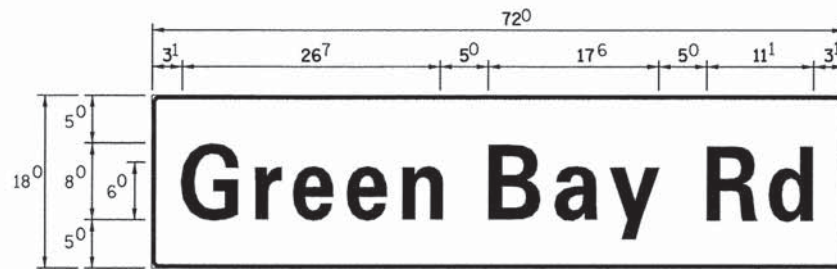
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	258
				CONTRACT NO. 61C32
ILLINOIS FED. AID PROJECT				



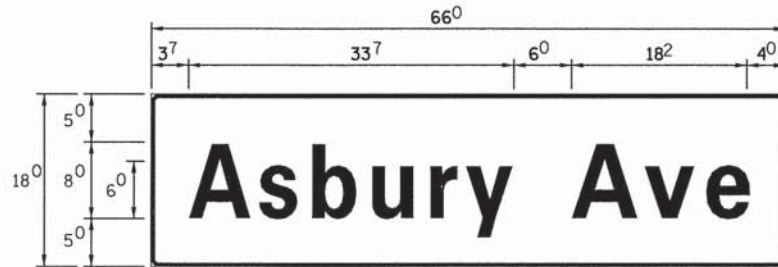
DATE \_\_\_\_\_ BY \_\_\_\_\_  
 SURVEYED \_\_\_\_\_ CHECKED \_\_\_\_\_  
 ALIGNED \_\_\_\_\_ CHECKED \_\_\_\_\_  
 PLAN NOTE BOOK NO. \_\_\_\_\_  
 FILE NAME: ER081\_sht\_131\_5m.dgn

DATE \_\_\_\_\_ BY \_\_\_\_\_  
 SURVEYED \_\_\_\_\_ CHECKED \_\_\_\_\_  
 PROFILE NOTE BOOK NO. \_\_\_\_\_  
 FILE NAME: ER081\_sht\_131\_5m.dgn

**SIGN PANEL – TYPE 1 OR TYPE 2**



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY REQUIRED
D	9	1	ZZ	1



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY REQUIRED
D	8.25	1	ZZ	2

**NOTE:**  
 FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION  
 PLEASE SEE DISTRICT ONE MAST ARM MOUNTED STREET  
 NAME SIGNS DETAIL.

**SCHEDULE OF QUANTITIES**

ITEM	UNIT	QTY
SIGN PANEL - TYPE 1	SQ FT	34.5
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	881
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	19
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	8
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	223
HANDHOLE	EACH	6
DOUBLE HANDHOLE	EACH	1
PAINT NEW TRAFFIC SIGNAL POST	EACH	1
PAINT NEW MAST ARM AND POLE, UNDER 40 FOOT	EACH	2
PAINT NEW MAST ARM AND POLE, 40 FOOT AND OVER	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	458.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	827.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1629
ELECTRIC CABLE IN CONDUIT, LEAD IN, NO. 14 1 PAIR	FOOT	1103
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	246.5
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	727.5
TRAFFIC SIGNAL POST, 14 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE 32 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE 34 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 20 FT. AND 26 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	4
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	43.5
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	1
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	6
INDUCTIVE LOOP DETECTOR	EACH	4
DETECTOR LOOP, TYPE 1	FOOT	230
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	278
VIDEO DETECTION SYSTEM	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE SUPER P CABINET (SPECIAL)	EACH	1
UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	4
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL PLAN SHEETS – MAST ARM MOUNTED  
 STREET NAME SIGNS AND SCHEDULE OF QUANTITIES  
 GREEN BAY ROAD AND ASBURY AVENUE

THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR  
 THIS PROJECT SHALL BE "EAGLE" TO MATCH THE  
 EXISTING ADJACENT SYSTEM.



USER NAME = bhennrachs	DESIGNED - BAH	REVISED - -
PLOT SCALE = 10,0000' / 1" =	DRAWN - BAH	REVISED -
PLOT DATE = 1/7/2016	CHECKED - JMY	REVISED -
	DATE - 10/9/2015	REVISED -

SCALE: \_\_\_\_\_ SHEET 23 OF 38 SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	259
			CONTRACT NO. 61C32	
ILLINOIS FED. AID PROJECT				

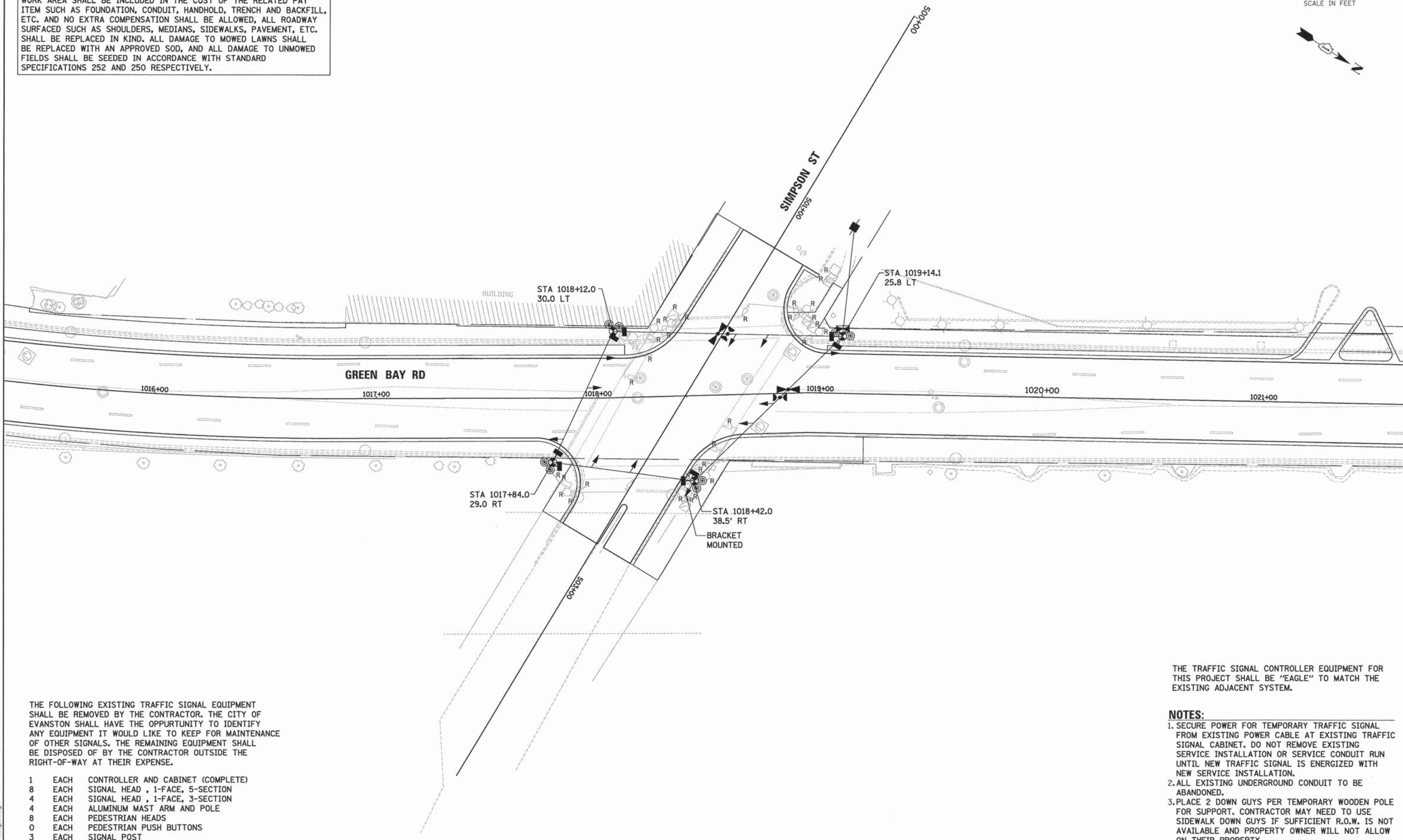


RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE COST OF THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLD, TRENCH AND BACKFILL, ETC. AND NO EXTRA COMPENSATION SHALL BE ALLOWED, ALL ROADWAY SURFACED SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.



PLAN	SURVEYED	DATE
	ALIGNED	
	CHECKED	
	BY	
	NO.	

PROFILE	SURVEYED	DATE
	GRADES	
	CHECKED	
	BY	
	NO.	



THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR. THE CITY OF EVANSTON SHALL HAVE THE OPPURTUNITY TO IDENTIFY ANY EQUIPMENT IT WOULD LIKE TO KEEP FOR MAINTENANCE OF OTHER SIGNALS. THE REMAINING EQUIPMENT SHALL BE DISPOSED OF BY THE CONTRACTOR OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE.

- 1 EACH CONTROLLER AND CABINET (COMPLETE)
- 8 EACH SIGNAL HEAD , 1-FACE, 5-SECTION
- 4 EACH SIGNAL HEAD , 1-FACE, 3-SECTION
- 4 EACH ALUMINUM MAST ARM AND POLE
- 8 EACH PEDESTRIAN HEADS
- 0 EACH PEDESTRIAN PUSH BUTTONS
- 3 EACH SIGNAL POST
- 1 EACH SERVICE INSTALLATION

THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

- NOTES:**
1. SECURE POWER FOR TEMPORARY TRAFFIC SIGNAL FROM EXISTING POWER CABLE AT EXISTING TRAFFIC SIGNAL CABINET. DO NOT REMOVE EXISTING SERVICE INSTALLATION OR SERVICE CONDUIT RUN UNTIL NEW TRAFFIC SIGNAL IS ENERGIZED WITH NEW SERVICE INSTALLATION.
  2. ALL EXISTING UNDERGROUND CONDUIT TO BE ABANDONED.
  3. PLACE 2 DOWN GUYS PER TEMPORARY WOODEN POLE FOR SUPPORT. CONTRACTOR MAY NEED TO USE SIDEWALK DOWN GUYS IF SUFFICIENT R.O.W. IS NOT AVAILABLE AND PROPERTY OWNER WILL NOT ALLOW ON THEIR PROPERTY.

FILE NAME: ERGBL\_sht\_219\_5a.dgn



USER NAME = bhnr1cha	DESIGNED - BAH	REVISED - -
	DRAWN - BAH	REVISED - -
PLOT SCALE = 20.0000' / 1"	CHECKED - JMY	REVISED - -
PLOT DATE = 1/7/2016	DATE - 10/9/2015	REVISED - -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>TRAFFIC SIGNAL PLAN SHEETS TEMPORARY TRAFFIC SIGNAL PLAN GREEN BAY ROAD AND SIMPSON STREET</b>			
SCALE:	SHEET 24 OF 38 SHEETS	STA.	TO STA.

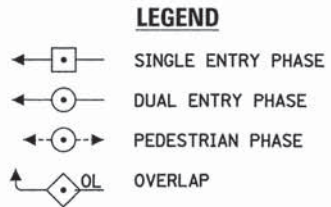
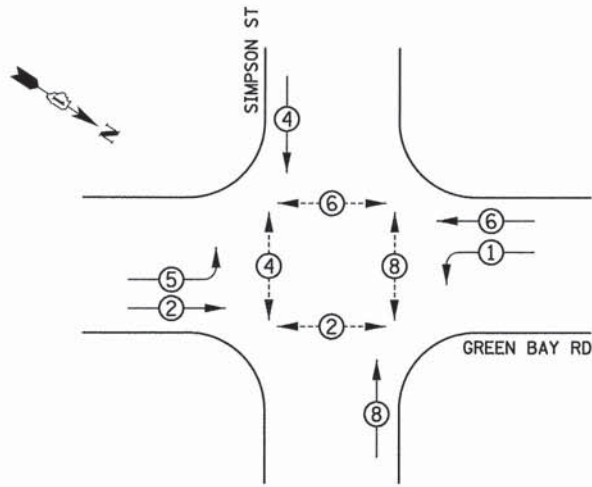
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	260
CONTRACT NO. 61C32			[ILLINOIS] FED. AID PROJECT	



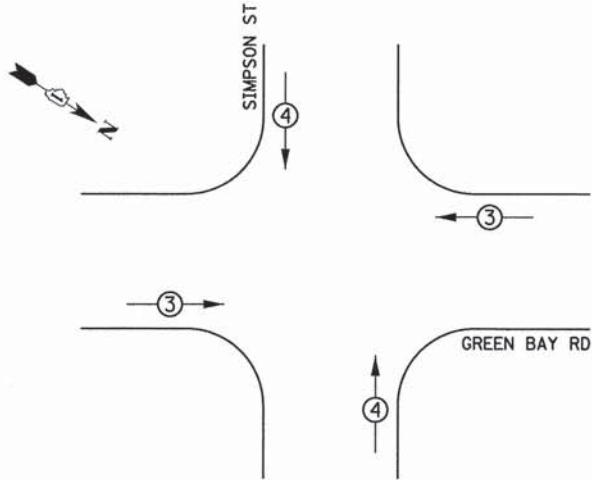
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 SURVEYED \_\_\_\_\_  
 PLOTTED \_\_\_\_\_  
 CHECKED \_\_\_\_\_  
 NOTE BOOK NO. \_\_\_\_\_  
 STRUCTURE NOTATION: CHKD \_\_\_\_\_  
 CAD FILE NAME \_\_\_\_\_

DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
 SURVEYED \_\_\_\_\_  
 PLOTTED \_\_\_\_\_  
 CHECKED \_\_\_\_\_  
 NOTE BOOK NO. \_\_\_\_\_  
 STRUCTURE NOTATION: CHKD \_\_\_\_\_

**TEMPORARY CONTROLLER SEQUENCE**



**TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	WATTAGE LED	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	11	50	66
(YELLOW)	12	20	5	12
(GREEN)	12	12	45	64.8
PERMISSIVE ARROW	8	10	10	6
PED. SIGNAL	8	20	100	160
CONTROLLER	1	100	100	100
UPS	1	25	100	25
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
<b>TOTAL =</b>				<b>433.8</b>

ENERGY COSTS TO:

CITY OF EVANSTON  
 2100 RIDGE AVE  
 EVANSTON, ILLINOIS 60201

ENERGY SUPPLY: CONTACT: CARLO F. CAVALLARO  
 PHONE: 847-816-5368  
 COMPANY: COMMONWEALTH EDISON  
 ACCOUNT NUMBER:



USER NAME = bhmr:sche  
 DESIGNED - BAH  
 DRAWN - BAH  
 CHECKED - JMY  
 DATE - 10/9/2015  
 PLT SCALE = 1:0000''/1in.  
 PLT DATE = 1/7/2016

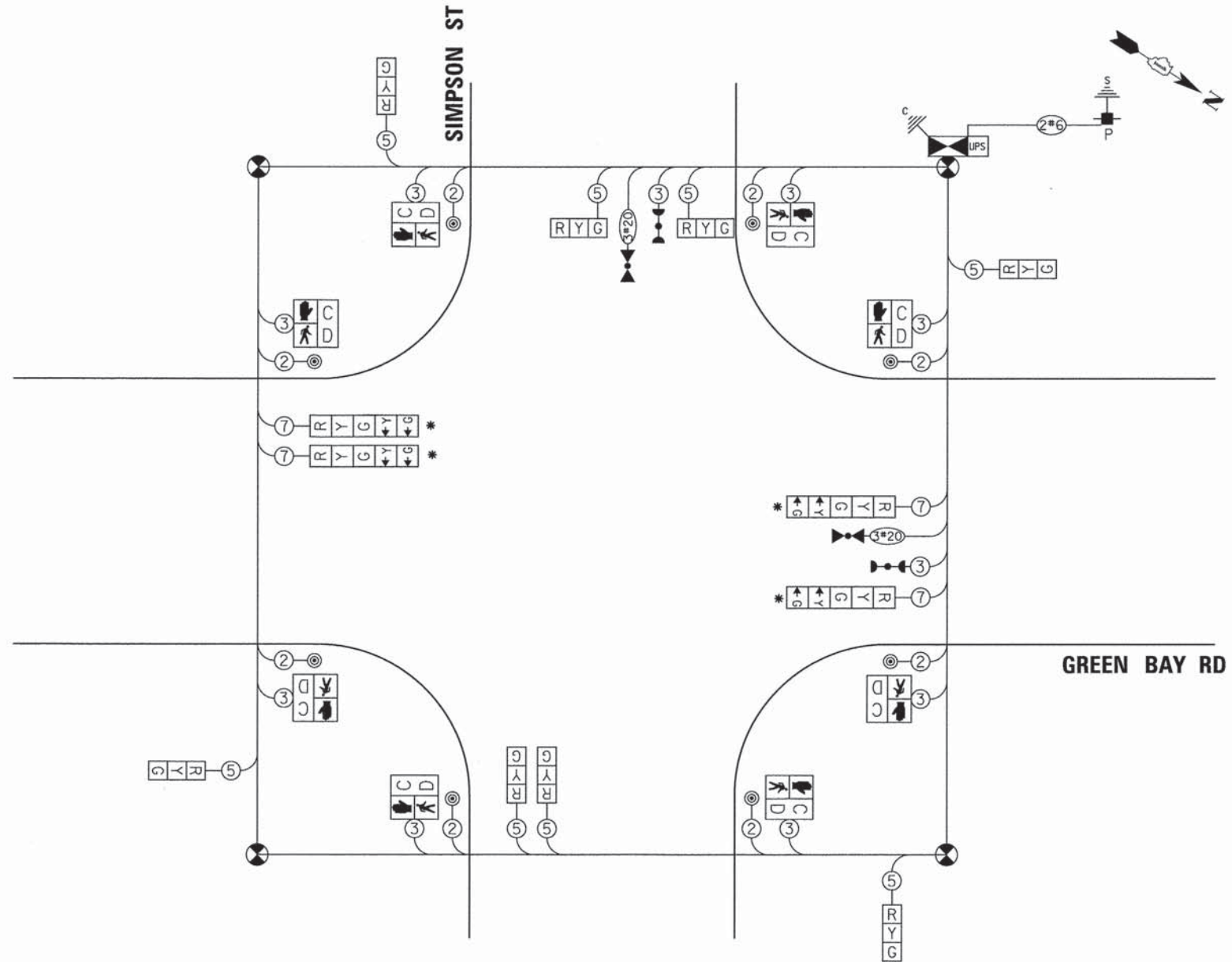
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 REVISED - -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL PLAN SHEETS  
 TEMPORARY CABLE PLAN  
 GREEN BAY ROAD AND SIMPSON STREET

SCALE: SHEET 25 OF 38 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	261
				CONTRACT NO. 61C32
ILLINOIS FED. AID PROJECT				



**CABLE PLAN**  
 (NOT TO SCALE)

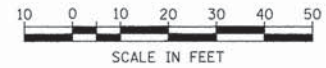
\* LEFT TURN SECTIONS SHALL BE BAGGED AND PHASES DEACTIVATED UNTIL DEDICATED LEFT TURN LANES ARE PROVIDED. ENGINEER TO DIRECT CONTRACTOR WHEN TO ACTIVATE PHASE AND UNBAG TURN SECTIONS.

THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME: ER081\_ah1a\_sig\_6b.dgn

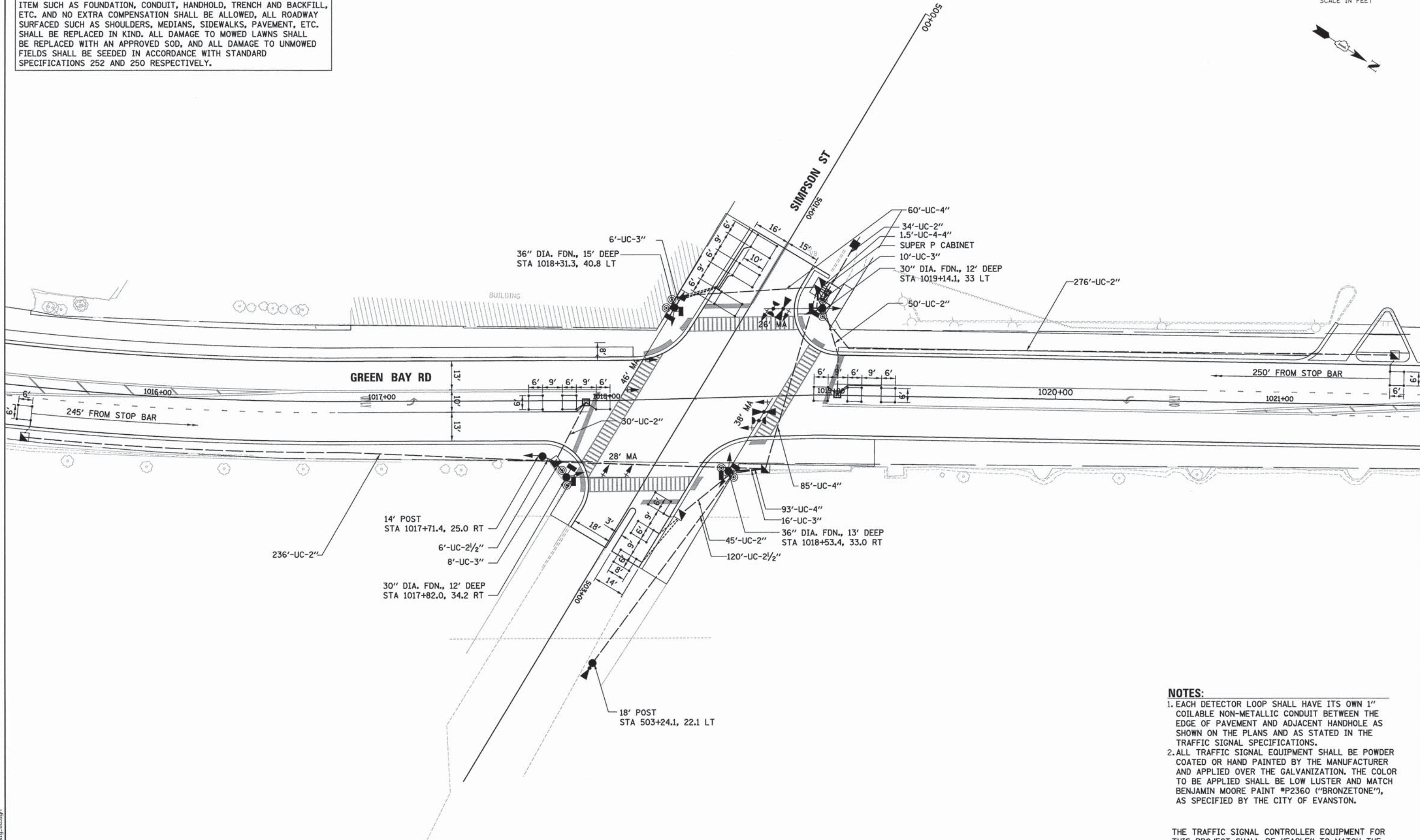


RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE COST OF THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLD, TRENCH AND BACKFILL, ETC. AND NO EXTRA COMPENSATION SHALL BE ALLOWED, ALL ROADWAY SURFACED SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.



PLAN	SURVEYED	DATE
	ALIGNED	BY
	CHECKED	
	RT. OF WAY	
	CHECKED	
	NO.	
	FILE NAME	

PROFILE	SURVEYED	DATE
	GRADES	BY
	NOTED	
	STRUCTURE	
	NOTATIONS	
	CHECKED	
	NO.	



- NOTES:**
1. EACH DETECTOR LOOP SHALL HAVE ITS OWN 1" COILABLE NON-METALLIC CONDUIT BETWEEN THE EDGE OF PAVEMENT AND ADJACENT HANDHOLE AS SHOWN ON THE PLANS AND AS STATED IN THE TRAFFIC SIGNAL SPECIFICATIONS.
  2. ALL TRAFFIC SIGNAL EQUIPMENT SHALL BE POWDER COATED OR HAND PAINTED BY THE MANUFACTURER AND APPLIED OVER THE GALVANIZATION. THE COLOR TO BE APPLIED SHALL BE LOW LUSTER AND MATCH BENJAMIN MOORE PAINT #P2360 ("BRONZETONE"), AS SPECIFIED BY THE CITY OF EVANSTON.

THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME: ERGB1\_ahk.mxd

**ESI** CONSULTANTS, LTD.  
 1000 W. FULLER STREET, SUITE 100  
 DEERFIELD, IL 60015  
 (708) 426-1000  
 www.esiconsultants.com

USER NAME = bhenrucha	DESIGNED - BAH	REVISED - -
	DRAWN - BAH	REVISED - -
PLOT SCALE = 28.0000' / 1" =	CHECKED - JMY	REVISED - -
PLOT DATE = 1/7/2016	DATE - 10/9/2015	REVISED - -

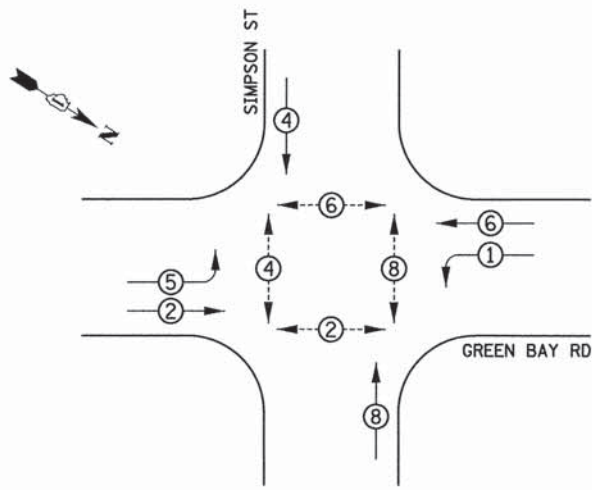
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>TRAFFIC SIGNAL PLAN SHEETS</b>			
<b>TRAFFIC SIGNAL PLAN</b>			
<b>GREEN BAY ROAD AND SIMPSON STREET</b>			
SCALE:	SHEET 26 OF 38 SHEETS	STA.	TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	262
				CONTRACT NO. G1C32
ILLINOIS FED. AID PROJECT				



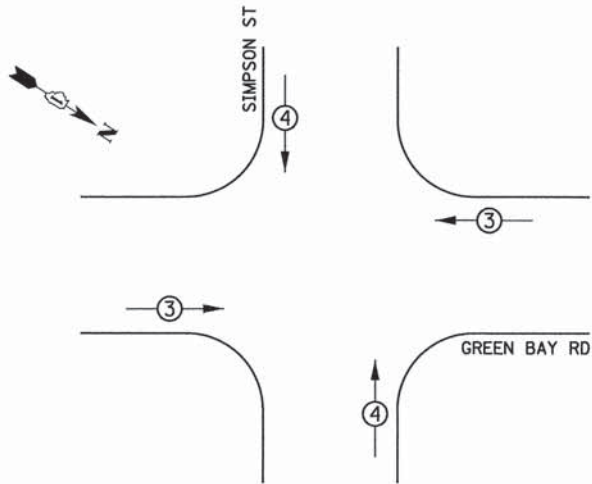
**PROPOSED CONTROLLER SEQUENCE**



**LEGEND**

- ◻ SINGLE ENTRY PHASE
- ◉ DUAL ENTRY PHASE
- ◉ PEDESTRIAN PHASE
- ◊ OL OVERLAP

**PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE**



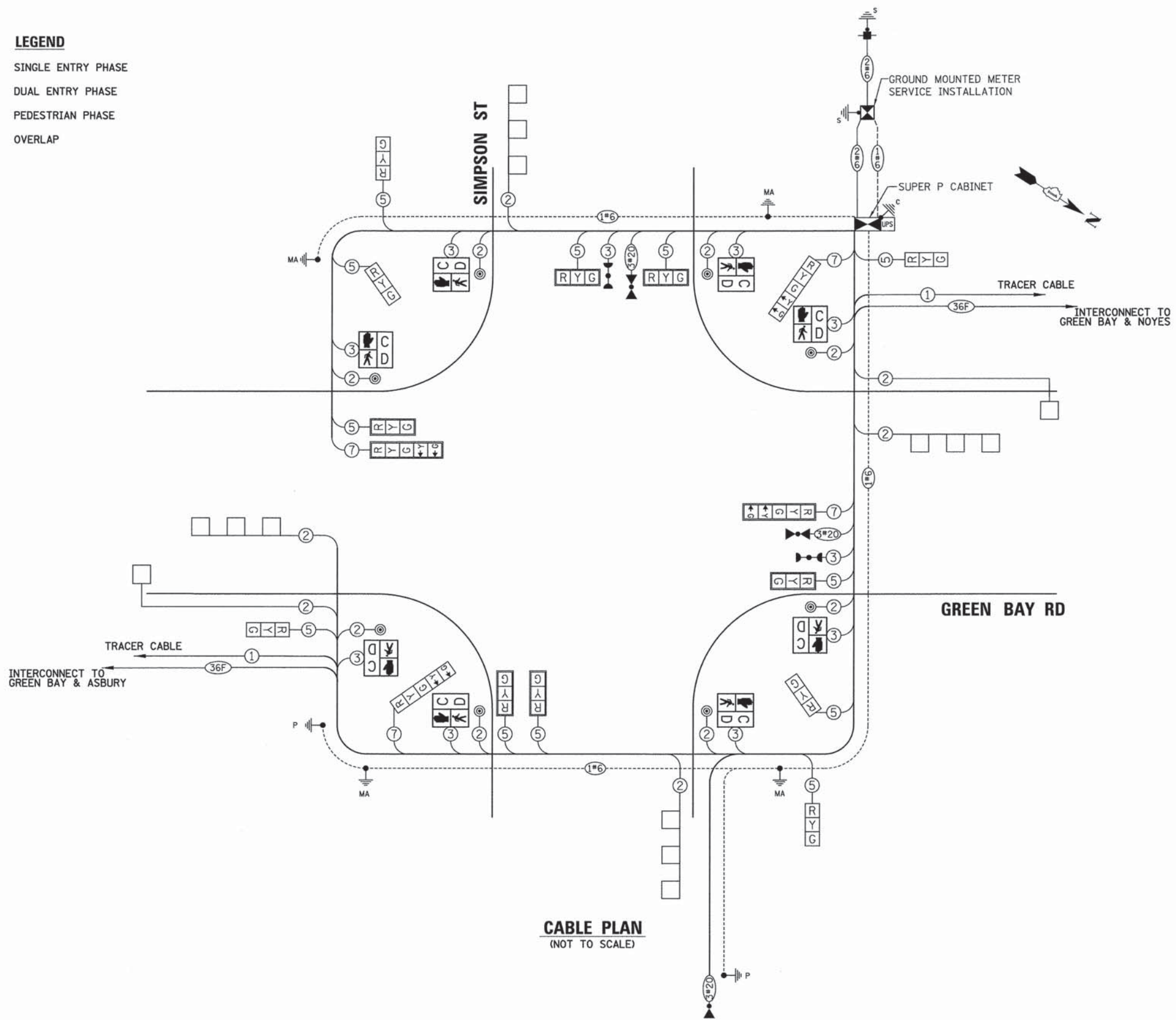
**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	WATTAGE		TOTAL WATTAGE
		LED	% OPERATION	
SIGNAL (RED)	16	11	50	88
(YELLOW)	16	20	5	16
(GREEN)	16	12	45	86.4
PERMISSIVE ARROW	8	10	10	8
PED. SIGNAL	8	20	100	160
CONTROLLER	1	100	100	100
UPS	1	25	100	25
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
<b>TOTAL =</b>				<b>483.4</b>

ENERGY COSTS TO:

CITY OF EVANSTON  
2100 RIDGE AVE  
EVANSTON, ILLINOIS 60201

ENERGY SUPPLY: CONTACT: CARLO F. CAVALLARO  
PHONE: 847-816-5368  
COMPANY: COMMONWEALTH EDISON  
ACCOUNT NUMBER:



**CABLE PLAN**  
(NOT TO SCALE)

PLAN	DATE
BY	
NO.	
NO.	
NO.	

PROFILE	DATE
BY	
NO.	
NO.	
NO.	

FILE NAME: ERGBL\_ahL\_sig\_Bd.dgn



USER NAME = bhennrichs  
DESIGNED - BAH  
DRAWN - BAH  
CHECKED - JMY  
DATE - 10/9/2015

REVISED - -  
REVISED - -  
REVISED - -  
REVISED - -

PLOT SCALE = 1:0000 "/>

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

**TRAFFIC SIGNAL PLAN SHEETS**  
**CABLE PLAN**  
**GREEN BAY ROAD AND SIMPSON STREET**

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	263
				CONTRACT NO. 61C32
ILLINOIS FED. AID PROJECT				

THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

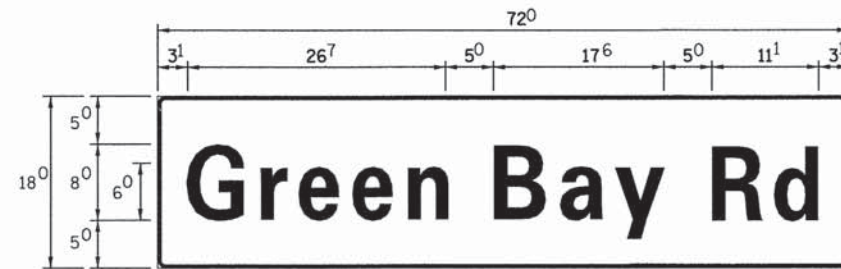
SCALE: SHEET 27 OF 38 SHEETS STA. TO STA.



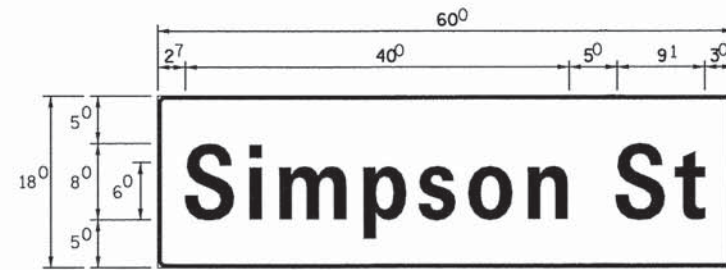
DATE \_\_\_\_\_ BY \_\_\_\_\_  
 SURVEYED \_\_\_\_\_  
 PLAN NOTE BOOK NO. \_\_\_\_\_  
 ALIGNED CHECKED \_\_\_\_\_  
 RT. OF WAY CHECKED \_\_\_\_\_  
 P.O.D. FILE NAME \_\_\_\_\_

DATE \_\_\_\_\_ BY \_\_\_\_\_  
 SURVEYED \_\_\_\_\_  
 PROFILE NOTE BOOK NO. \_\_\_\_\_  
 PLOTTED CHECKED \_\_\_\_\_  
 B.M. NOTED \_\_\_\_\_  
 STRUCTURE NOTATIONS CHFD \_\_\_\_\_

**SIGN PANEL – TYPE 1 OR TYPE 2**



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY REQUIRED
D	9	1	ZZ	2



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY REQUIRED
D	7.5	1	ZZ	2

**NOTE:**  
 FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION  
 PLEASE SEE DISTRICT ONE MAST ARM MOUNTED STREET  
 NAME SIGNS DETAIL.

**SCHEDULE OF QUANTITIES**

ITEM	UNIT	QTY
SIGN PANEL - TYPE 1	SQ FT	33.0
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	670
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	126
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	40
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	244
HANDHOLE	EACH	6
HEAVY-DUTY HANDHOLE	EACH	2
DOUBLE HANDHOLE	EACH	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
PAINT NEW TRAFFIC SIGNAL POST	EACH	2
PAINT NEW MAST ARM AND POLE, UNDER 40 FOOT	EACH	3
PAINT NEW MAST ARM AND POLE, 40 FOOT AND OVER	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1050
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1500.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1753
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	621
ELECTRIC CABLE IN CONDUIT, LEAD IN, NO. 14 1 PAIR	FOOT	1304.5
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	68
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	466.5
TRAFFIC SIGNAL POST, 14 FT.	EACH	1
TRAFFIC SIGNAL POST, 18 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE 26 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE 28 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE 38 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE 48 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	8
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	24
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	28
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	8
INDUCTIVE LOOP DETECTOR	EACH	6
DETECTOR LOOP, TYPE 1	FOOT	576
LIGHT DETECTOR	EACH	3
LIGHT DETECTOR AMPLIFIER	EACH	1
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	4
REMOVE EXISTING DOUBLE HANDHOLE	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	8
REMOVE EXISTING FLASHING BEACON INSTALLATION COMPLETE	EACH	1
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	696
FULL-ACTUATED CONTROLLER AND TYPE SUPER P CABINET (SPECIAL)	EACH	1
UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	8
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1

FILE NAME: ERGB1.sh1.sig-6e.dgn

**ESI** CONSULTANTS, LTD.  
 2720 N. WISCONSIN AVENUE, SUITE 100  
 DEERFIELD, IL 60015  
 (847) 426-1000  
 www.esiconsultants.com

USER NAME = bhanracha	DESIGNED - BAH	REVISED - -
PLLOT SCALE = 1/8" = 1'-0"	DRAWN - BAH	REVISED - -
PLLOT DATE = 1/7/2016	CHECKED - JMY	REVISED - -
	DATE - 10/9/2015	REVISED - -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL PLAN SHEETS – MAST ARM MOUNTED  
 STREET NAME SIGNS AND SCHEDULE OF QUANTITIES  
 GREEN BAY ROAD AND SIMPSON STREET**

SCALE: \_\_\_\_\_ SHEET 28 OF 38 SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	264
CONTRACT NO. G1C32			ILLINOIS FED. AID PROJECT	

THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

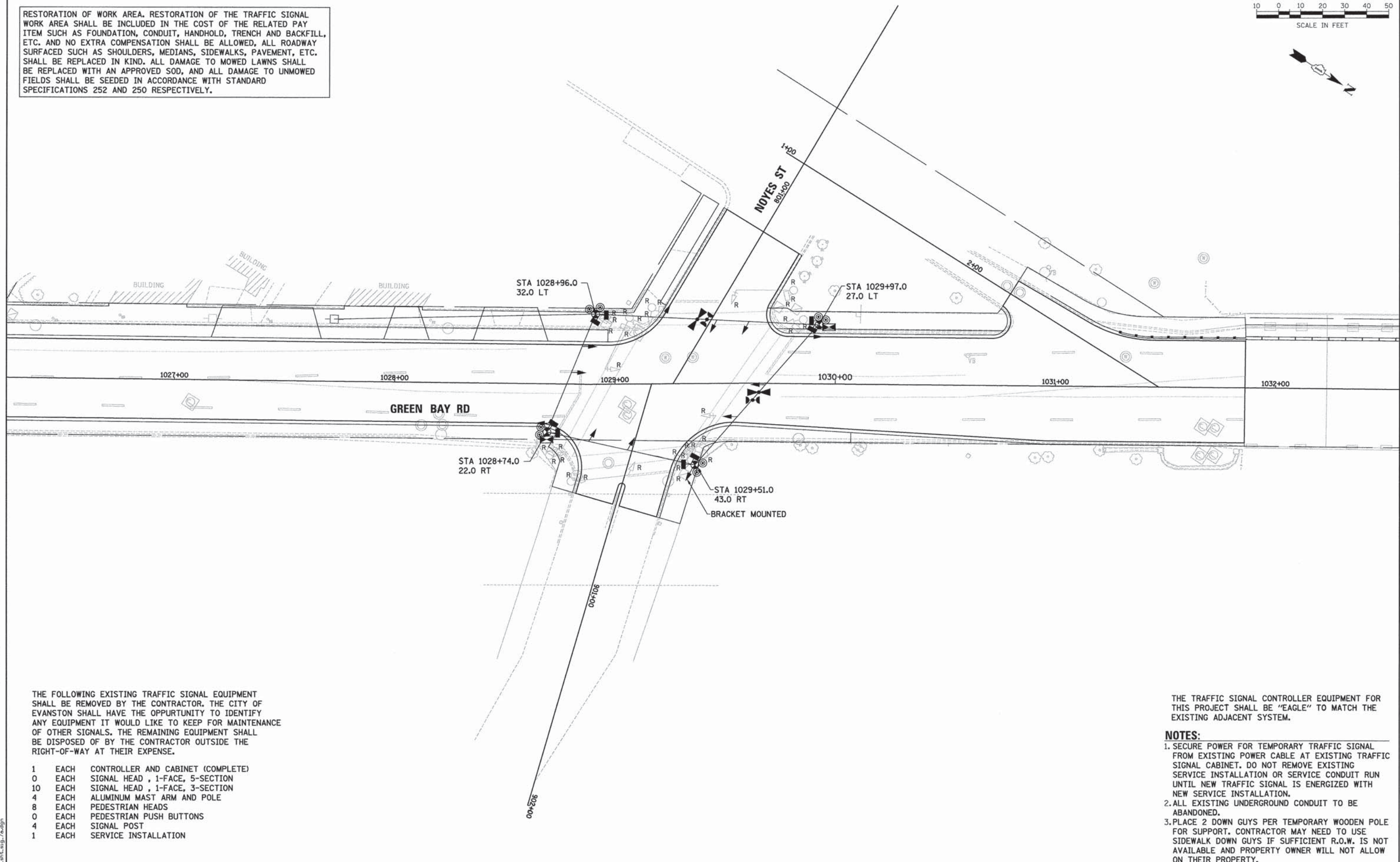


RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE COST OF THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLD, TRENCH AND BACKFILL, ETC. AND NO EXTRA COMPENSATION SHALL BE ALLOWED, ALL ROADWAY SURFACED SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.



PLAN	SURVEYED	BY	DATE
	PLOTTED		
	NOTED		
	FILED		
	NO. _____		

PROFILE	SURVEYED	BY	DATE
	PLOTTED		
	NOTED		
	FILED		
	NO. _____		



THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR. THE CITY OF EVANSTON SHALL HAVE THE OPPURTUNITY TO IDENTIFY ANY EQUIPMENT IT WOULD LIKE TO KEEP FOR MAINTENANCE OF OTHER SIGNALS. THE REMAINING EQUIPMENT SHALL BE DISPOSED OF BY THE CONTRACTOR OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE.

- 1 EACH CONTROLLER AND CABINET (COMPLETE)
- 0 EACH SIGNAL HEAD , 1-FACE, 5-SECTION
- 10 EACH SIGNAL HEAD , 1-FACE, 3-SECTION
- 4 EACH ALUMINUM MAST ARM AND POLE
- 8 EACH PEDESTRIAN HEADS
- 0 EACH PEDESTRIAN PUSH BUTTONS
- 4 EACH SIGNAL POST
- 1 EACH SERVICE INSTALLATION

THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

- NOTES:**
1. SECURE POWER FOR TEMPORARY TRAFFIC SIGNAL FROM EXISTING POWER CABLE AT EXISTING TRAFFIC SIGNAL CABINET. DO NOT REMOVE EXISTING SERVICE INSTALLATION OR SERVICE CONDUIT RUN UNTIL NEW TRAFFIC SIGNAL IS ENERGIZED WITH NEW SERVICE INSTALLATION.
  2. ALL EXISTING UNDERGROUND CONDUIT TO BE ABANDONED.
  3. PLACE 2 DOWN GUYS PER TEMPORARY WOODEN POLE FOR SUPPORT. CONTRACTOR MAY NEED TO USE SIDEWALK DOWN GUYS IF SUFFICIENT R.O.W. IS NOT AVAILABLE AND PROPERTY OWNER WILL NOT ALLOW ON THEIR PROPERTY.

FILE NAME: ERG81\_ah1\_sug\_7a.dgn



USER NAME = bherrsch	DESIGNED - BAH	REVISED - -
PLLOT SCALE = 28,0000 " / 1"	DRAWN - BAH	REVISED - -
PLLOT DATE = 1/7/2016	CHECKED - JMY	REVISED - -
	DATE - 10/9/2015	REVISED - -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>TRAFFIC SIGNAL PLAN SHEETS</b>	
<b>TEMPORARY TRAFFIC SIGNAL PLAN</b>	
<b>GREEN BAY ROAD AND NOYES STREET</b>	
SCALE: _____	SHEET 29 OF 38 SHEETS STA. _____ TO STA. _____

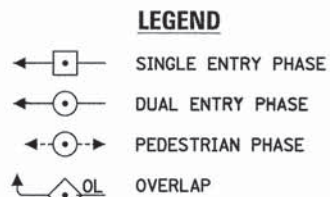
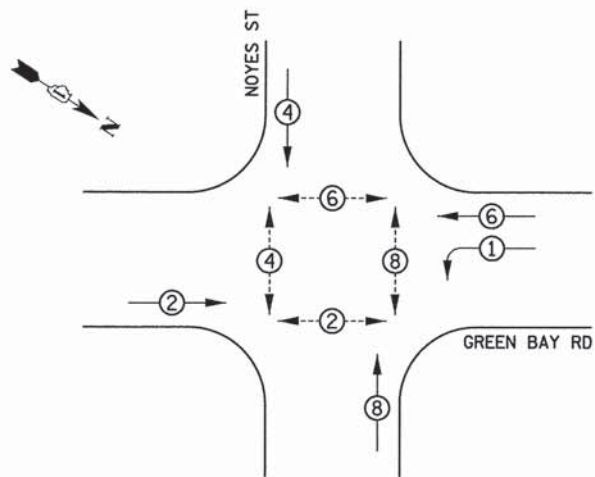
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	265
CONTRACT NO. G1C32				
ILLINOIS FED. AID PROJECT				



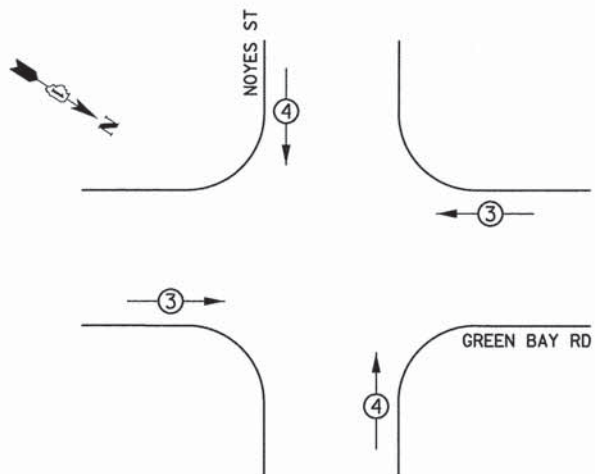
PLAN	SURVEYED	DATE
	ALIGNED	BY
	GRADES CHECKED	
	RT. OF WAY CHECKED	
	NO. _____	PROJ. FILE NAME

PROFILE	SURVEYED	DATE
	GRADES CHECKED	BY
	NO. NOTED	
	STRUCTURE NOTATIONS CHECKED	

**TEMPORARY CONTROLLER SEQUENCE**



**TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE**



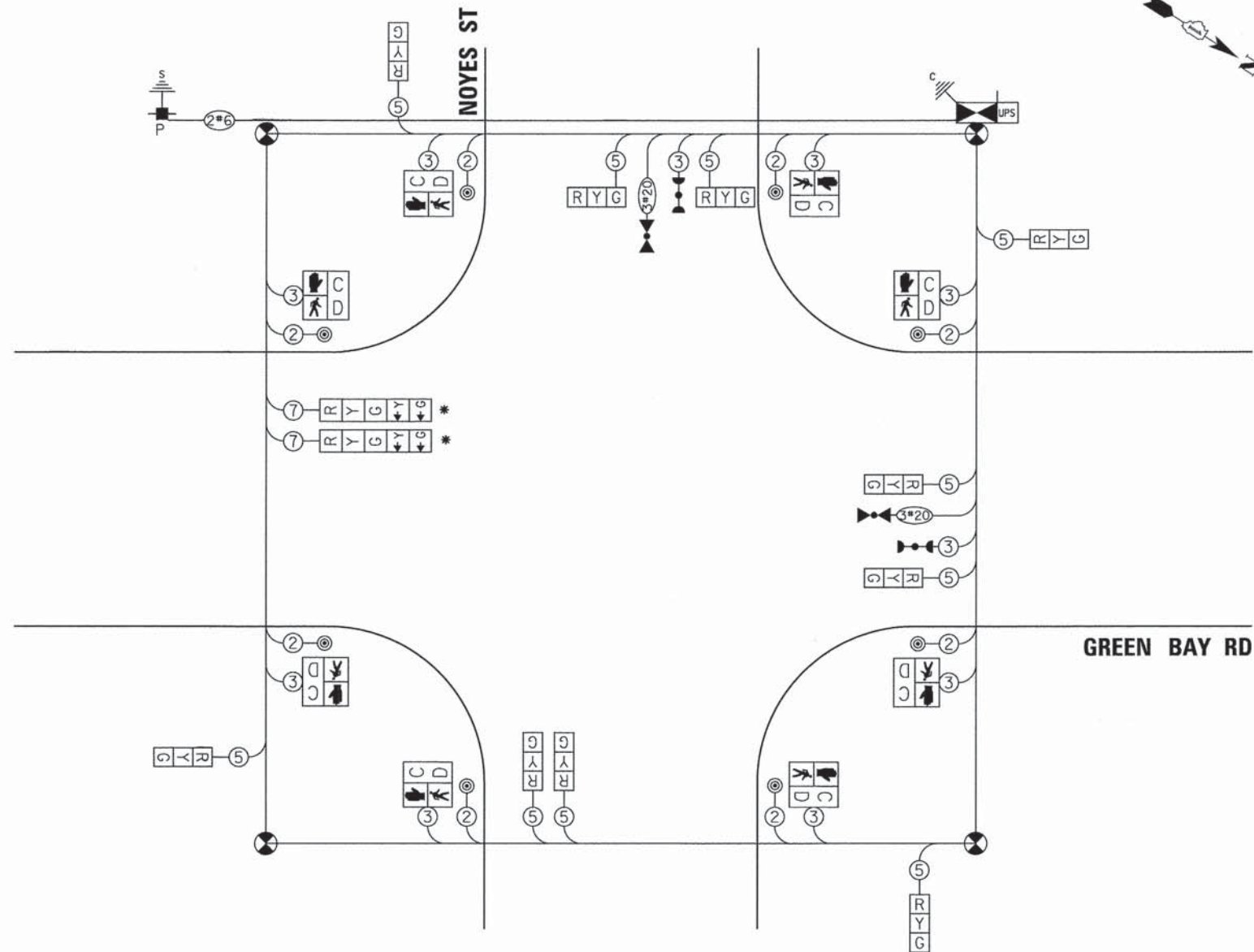
**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	WATTAGE LED	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	11	50	66
(YELLOW)	12	20	5	12
(GREEN)	12	12	45	64.8
PERMISSIVE ARROW	4	10	10	4
PED. SIGNAL	8	20	100	160
CONTROLLER	1	100	100	100
UPS	1	25	100	25
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
TOTAL =				431.8

ENERGY COSTS TO:

CITY OF EVANSTON  
2100 RIDGE AVE  
EVANSTON, ILLINOIS 60201

ENERGY SUPPLY: CONTACT: CARLO F. CAVALLARO  
PHONE: 847-816-5368  
COMPANY: COMMONWEALTH EDISON  
ACCOUNT NUMBER:



**CABLE PLAN**  
(NOT TO SCALE)

\* LEFT TURN SECTIONS SHALL BE BAGGED AND PHASES DEACTIVATED UNTIL DEDICATED LEFT TURN LANES ARE PROVIDED. ENGINEER TO DIRECT CONTRACTOR WHEN TO ACTIVATE PHASE AND UNBAG TURN SECTIONS.

THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME: ER081-ah-l-wg-7b.dgn

**ESI** ESI CONSULTANTS, LTD.  
www.esiconsultants.com

USER NAME = bherrsch
DESIGNED - BAH
DRAWN - BAH
CHECKED - JMY
DATE - 10/9/2015
REVISIONS
REVISED -
REVISED -
REVISED -
REVISED -

DESIGNED - BAH	REVISED -
DRAWN - BAH	REVISED -
CHECKED - JMY	REVISED -
DATE - 10/9/2015	REVISED -

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

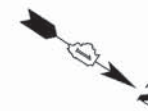
**TRAFFIC SIGNAL PLAN SHEETS**  
**TEMPORARY CABLE PLAN**  
**GREEN BAY ROAD AND NOYES STREET**

SCALE: SHEET 30 OF 38 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	266
				CONTRACT NO. 61C32
ILLINOIS FED. AID PROJECT				

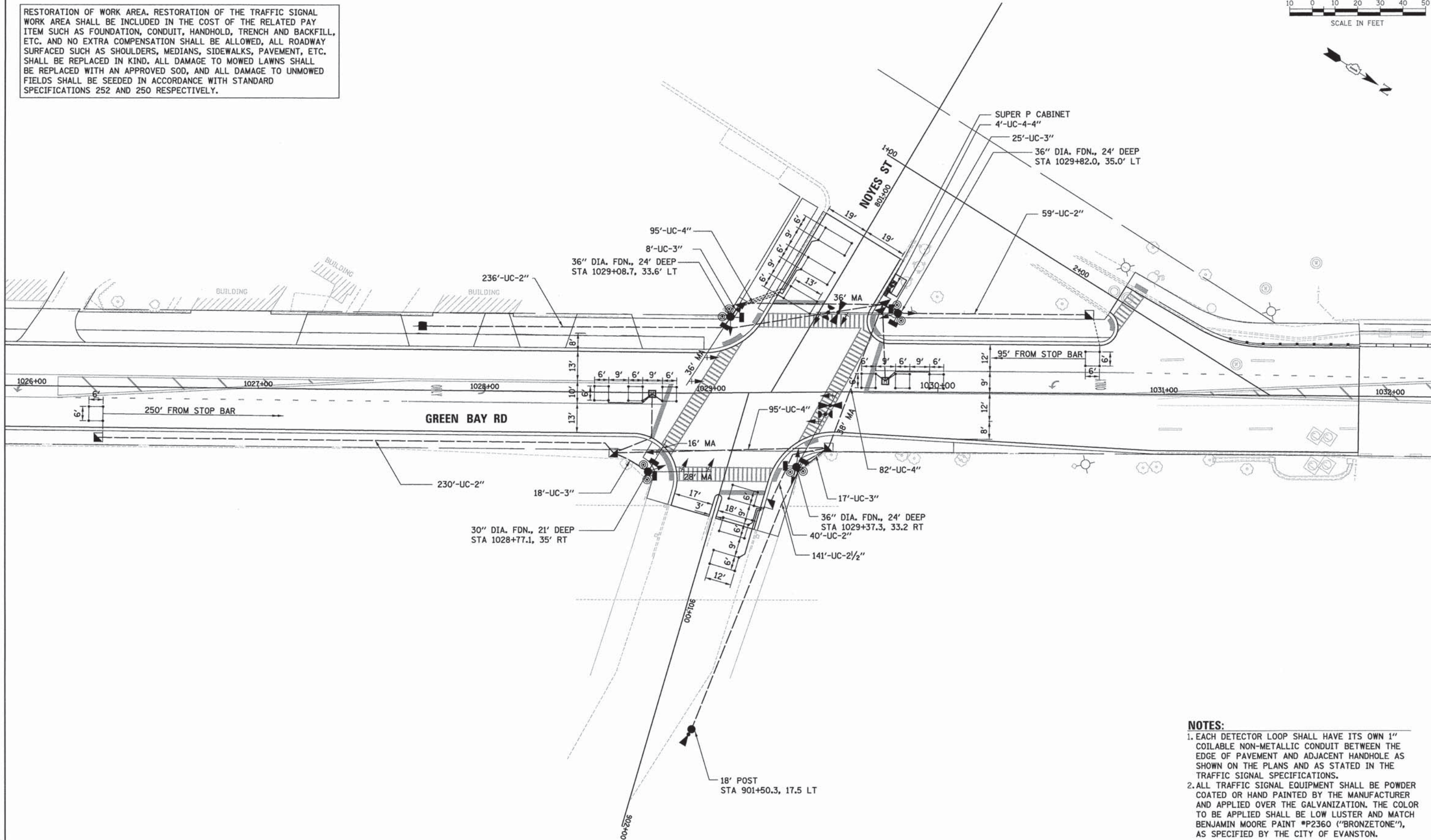


RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE COST OF THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLD, TRENCH AND BACKFILL, ETC. AND NO EXTRA COMPENSATION SHALL BE ALLOWED, ALL ROADWAY SURFACED SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.



PLAN	DATE
SURVEYED	BY
ALIGNED	BY
CHECKED	BY
RT. OF WAY	BY
CHECKED	BY
NO.	NO.
NO.	NO.
NO.	NO.

PROFILE	DATE
SURVEYED	BY
GRADES	BY
CHECKED	BY
B.M. NOTED	BY
STRUCTURE	BY
NOTATION'S	BY
CHFD	BY
NO.	NO.
NO.	NO.



- NOTES:**
1. EACH DETECTOR LOOP SHALL HAVE ITS OWN 1" COILABLE NON-METALLIC CONDUIT BETWEEN THE EDGE OF PAVEMENT AND ADJACENT HANDHOLE AS SHOWN ON THE PLANS AND AS STATED IN THE TRAFFIC SIGNAL SPECIFICATIONS.
  2. ALL TRAFFIC SIGNAL EQUIPMENT SHALL BE POWDER COATED OR HAND PAINTED BY THE MANUFACTURER AND APPLIED OVER THE GALVANIZATION. THE COLOR TO BE APPLIED SHALL BE LOW LUSTER AND MATCH BENJAMIN MOORE PAINT #P2360 ("BRONZETONE"), AS SPECIFIED BY THE CITY OF EVANSTON.

THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME: ETR081...shl.sig-7.dwg



USER NAME = bhenrichs	DESIGNED - BAH	REVISIONS
	DRAWN - BAH	REVISIONS
	CHECKED - JMY	REVISIONS
	DATE - 10/9/2015	REVISIONS

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL PLAN SHEETS  
TRAFFIC SIGNAL PLAN  
GREEN BAY ROAD AND NOYES STREET**

SCALE: \_\_\_\_\_ SHEET 31 OF 38 SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

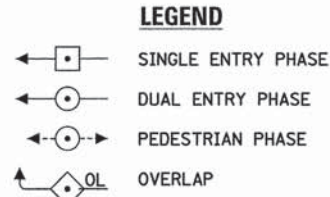
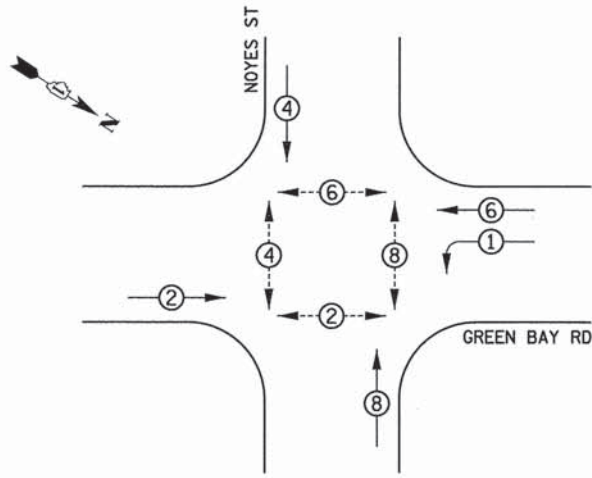
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	267
				CONTRACT NO. 61C32
ILLINOIS FED. AID PROJECT				



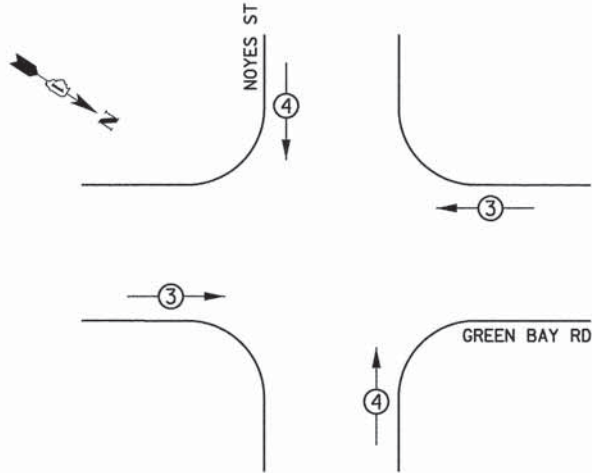
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 NOTE BOOK NO.: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_  
 FILE NAME: \_\_\_\_\_

DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
 SURVEYED: \_\_\_\_\_  
 PLOTTED: \_\_\_\_\_  
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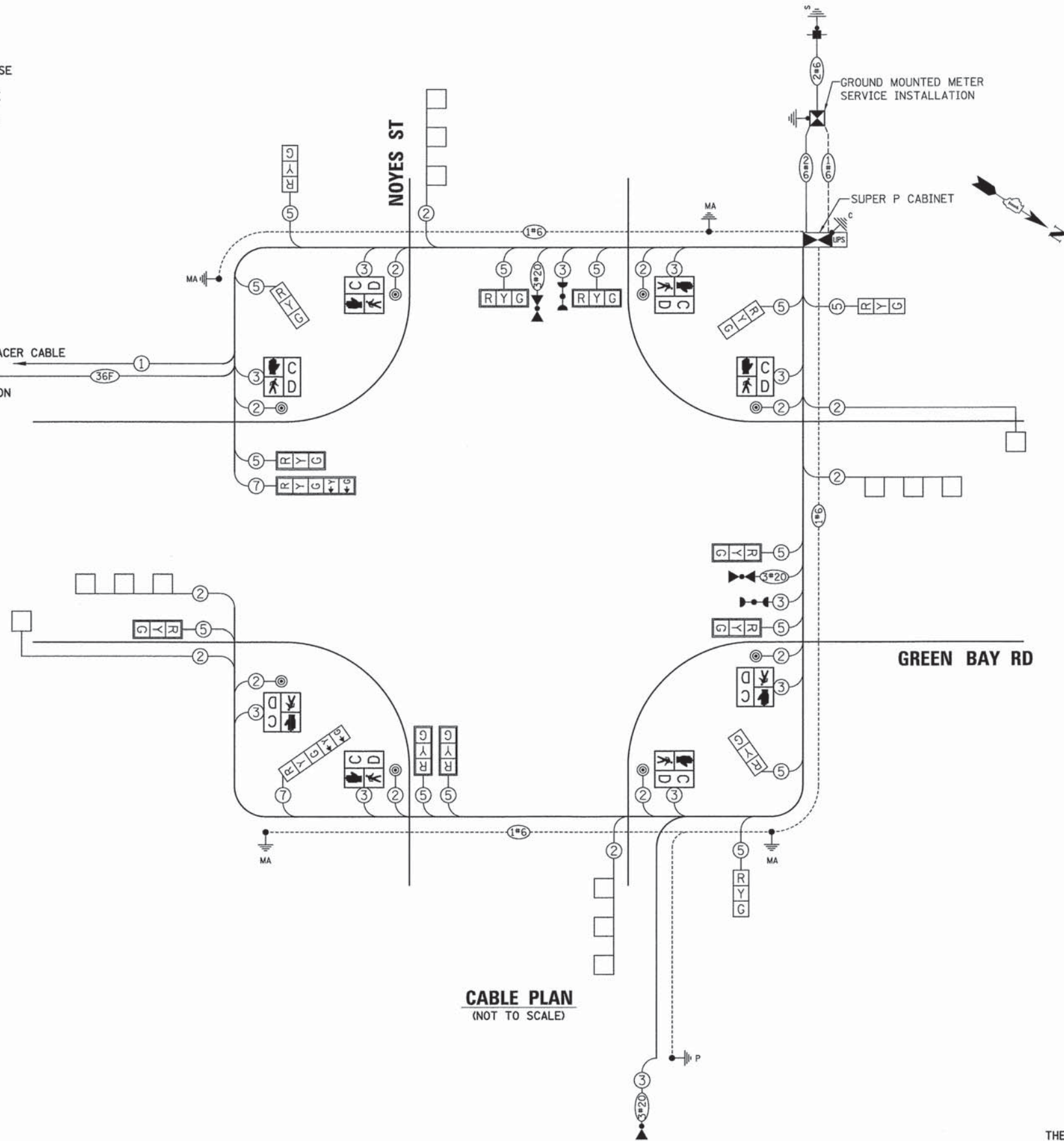
**PROPOSED CONTROLLER SEQUENCE**



**PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE**



TRACER CABLE  
 INTERCONNECT TO GREEN BAY & SIMPSON



**CABLE PLAN**  
(NOT TO SCALE)

**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	WATTAGE		TOTAL WATTAGE
		LED	% OPERATION	
SIGNAL (RED)	16	11	50	88
(YELLOW)	16	20	5	16
(GREEN)	16	12	45	86.4
PERMISSIVE ARROW	8	10	10	8
PED. SIGNAL	8	20	100	160
CONTROLLER	1	100	100	160
UPS	1	25	100	100
VIDEO SYSTEM	-	150	100	25
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
<b>TOTAL =</b>				<b>483.4</b>

ENERGY COSTS TO:  
 CITY OF EVANSTON  
 2100 RIDGE AVE  
 EVANSTON, ILLINOIS 60201

ENERGY SUPPLY: CONTACT: CARLO F. CAVALLARO  
 PHONE: 847-816-5368  
 COMPANY: COMMONWEALTH EDISON  
 ACCOUNT NUMBER: \_\_\_\_\_

THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.



USER NAME = bharrschs	DESIGNED - BAH	REVISED - -
PLOT SCALE = 1.0000' / 1"	DRAWN - BAH	REVISED - -
PLOT DATE = 1/7/2016	CHECKED - JMY	REVISED - -
	DATE - 10/9/2015	REVISED - -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

<b>TRAFFIC SIGNAL PLAN SHEETS</b>			
<b>CABLE PLAN</b>			
<b>GREEN BAY ROAD AND NOYES STREET</b>			
SCALE:	SHEET 32 OF 38	SHEETS STA.	TO STA.

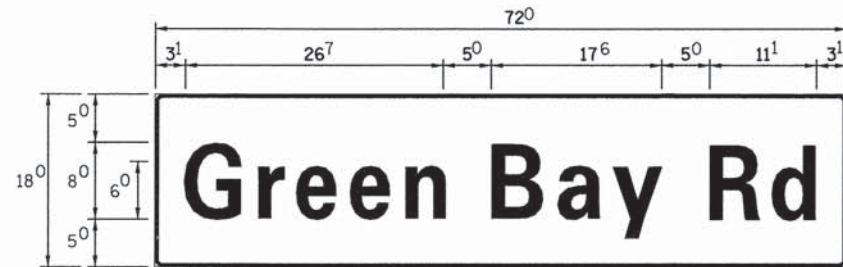
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	268
				CONTRACT NO. 61C32
ILLINOIS FED. AID PROJECT				



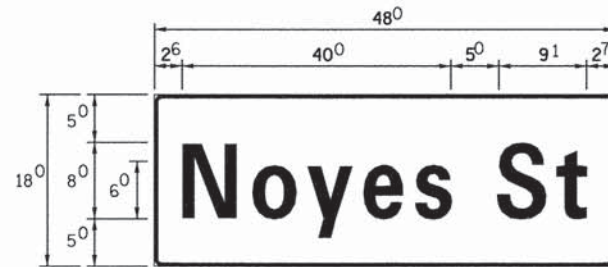
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	PLOTTED		
	CHECKED		
	BY		
	DATE		
	NO. OF WAY CHECKED		
	FILE NAME		

PROFILE	SURVEYED	BY	DATE
	PLOTTED		
	CHECKED		
	BY		
	DATE		
	NO. OF WAY CHECKED		
	FILE NAME		

**SIGN PANEL - TYPE 1 OR TYPE 2**



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY REQUIRED
D	9	1	ZZ	2



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY REQUIRED
D	6	1	ZZ	2

**NOTE:**  
FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION  
PLEASE SEE DISTRICT ONE MAST ARM MOUNTED STREET  
NAME SIGNS DETAIL.

**SCHEDULE OF QUANTITIES**

ITEM	UNIT	QTY
SIGN PANEL - TYPE 1	SQ FT	30.0
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	416
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	371
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	68
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	288
HANDHOLE	EACH	6
HEAVY-DUTY HANDHOLE	EACH	2
DOUBLE HANDHOLE	EACH	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
PAINT NEW TRAFFIC SIGNAL POST	EACH	1
PAINT NEW MAST ARM AND POLE, UNDER 40 FOOT	EACH	3
PAINT NEW MAST ARM AND POLE, 40 FOOT AND OVER	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1188
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1650.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2233.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	431.5
ELECTRIC CABLE IN CONDUIT, LEAD IN, NO. 14 1 PAIR	FOOT	1123.5
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	272.5
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	748
TRAFFIC SIGNAL POST, 18 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE 36 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE 38 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 16 FT. AND 28 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	4
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	21
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	72
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	8
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	1
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	9
INDUCTIVE LOOP DETECTOR	EACH	6
DETECTOR LOOP, TYPE 1	FOOT	636.5
LIGHT DETECTOR	EACH	3
LIGHT DETECTOR AMPLIFIER	EACH	1
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	4
REMOVE EXISTING DOUBLE HANDHOLE	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	9
REMOVE EXISTING FLASHING BEACON INSTALLATION COMPLETE	EACH	1
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	728.5
FULL-ACTUATED CONTROLLER AND TYPE SUPER P CABINET (SPECIAL)	EACH	1
UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	8
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1

FILE NAME: ERGBL.shl.ssg\_7e.dgn



USER NAME = bhenschs	DESIGNED - BAH	REVISED - -
PLLOT SCALE = 10.0000' / 1" =	DRAWN - BAH	REVISED -
PLLOT DATE = 1/7/2016	CHECKED - JMY	REVISED -
	DATE - 10/9/2015	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

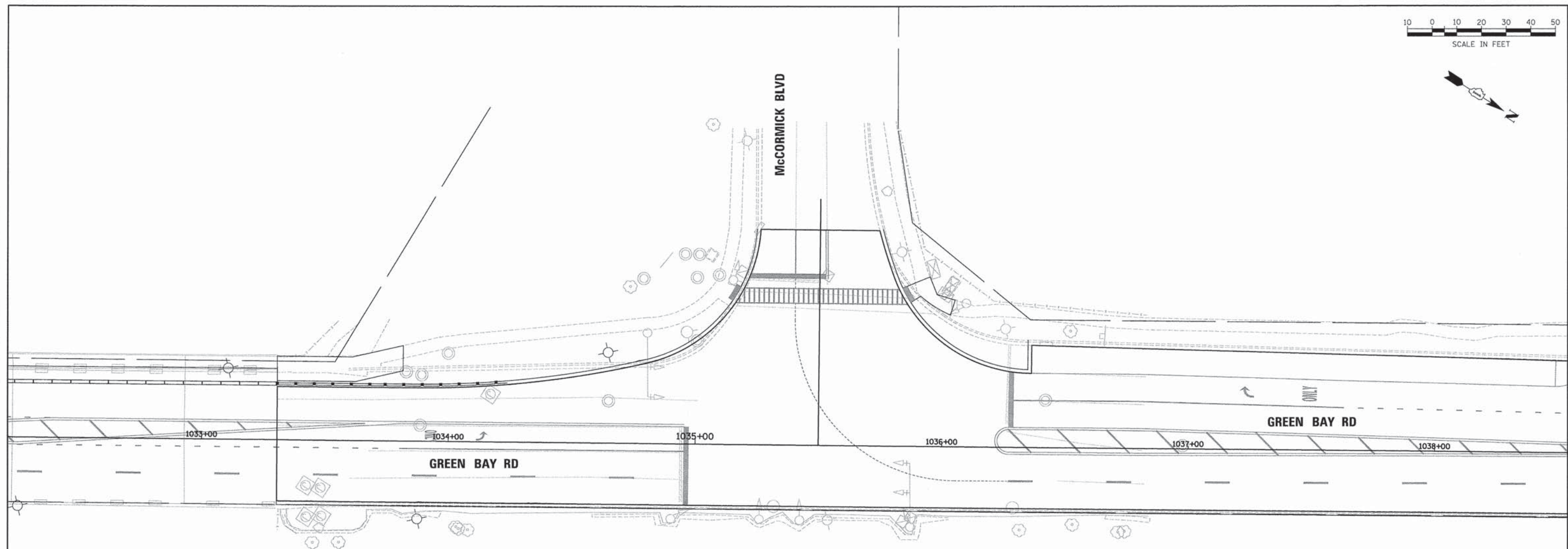
TRAFFIC SIGNAL PLAN SHEETS - MAST ARM MOUNTED  
STREET NAME SIGNS AND SCHEDULE OF QUANTITIES  
GREEN BAY ROAD AND NOYES STREET

SCALE: \_\_\_\_\_ SHEET 33 OF 38 SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR  
THIS PROJECT SHALL BE "EAGLE" TO MATCH THE  
EXISTING ADJACENT SYSTEM.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	269
				CONTRACT NO. 61C32
ILLINOIS FED. AID PROJECT				





PLAN	SURVEYED	BY	DATE
	PLOTTED		
	CHECKED		
	DATE		
	NOTE BOOK NO.		
	FILE NAME		

PROFILE	SURVEYED	BY	DATE
	PLOTTED		
	CHECKED		
	DATE		
	NOTE BOOK NO.		
	FILE NAME		

**FOR INFORMATION ONLY**



USER NAME = bherrschs	DESIGNED - BAH	REVISED - -
PLOT SCALE = 20.0000' / 1"	DRAWN - BAH	REVISED - -
PLOT DATE = 1/7/2016	CHECKED - JMY	REVISED - -
	DATE - 10/9/2015	REVISED - -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL PLAN SHEETS			
TRAFFIC SIGNAL PLAN			
GREEN BAY ROAD AND McCORMICK BLVD			
SCALE:	SHEET 34 OF 38 SHEETS	STA.	TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	270
				CONTRACT NO. 61C32
ILLINOIS FED. AID PROJECT				

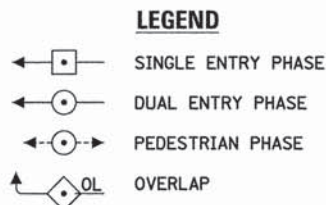
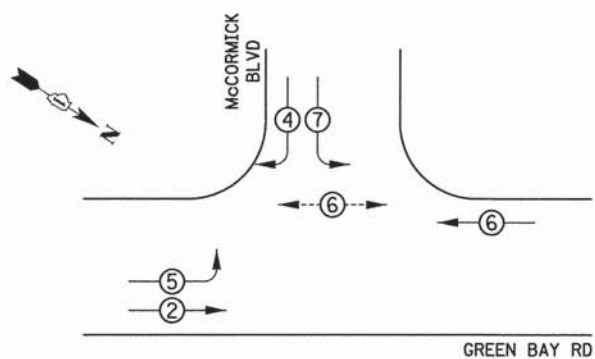
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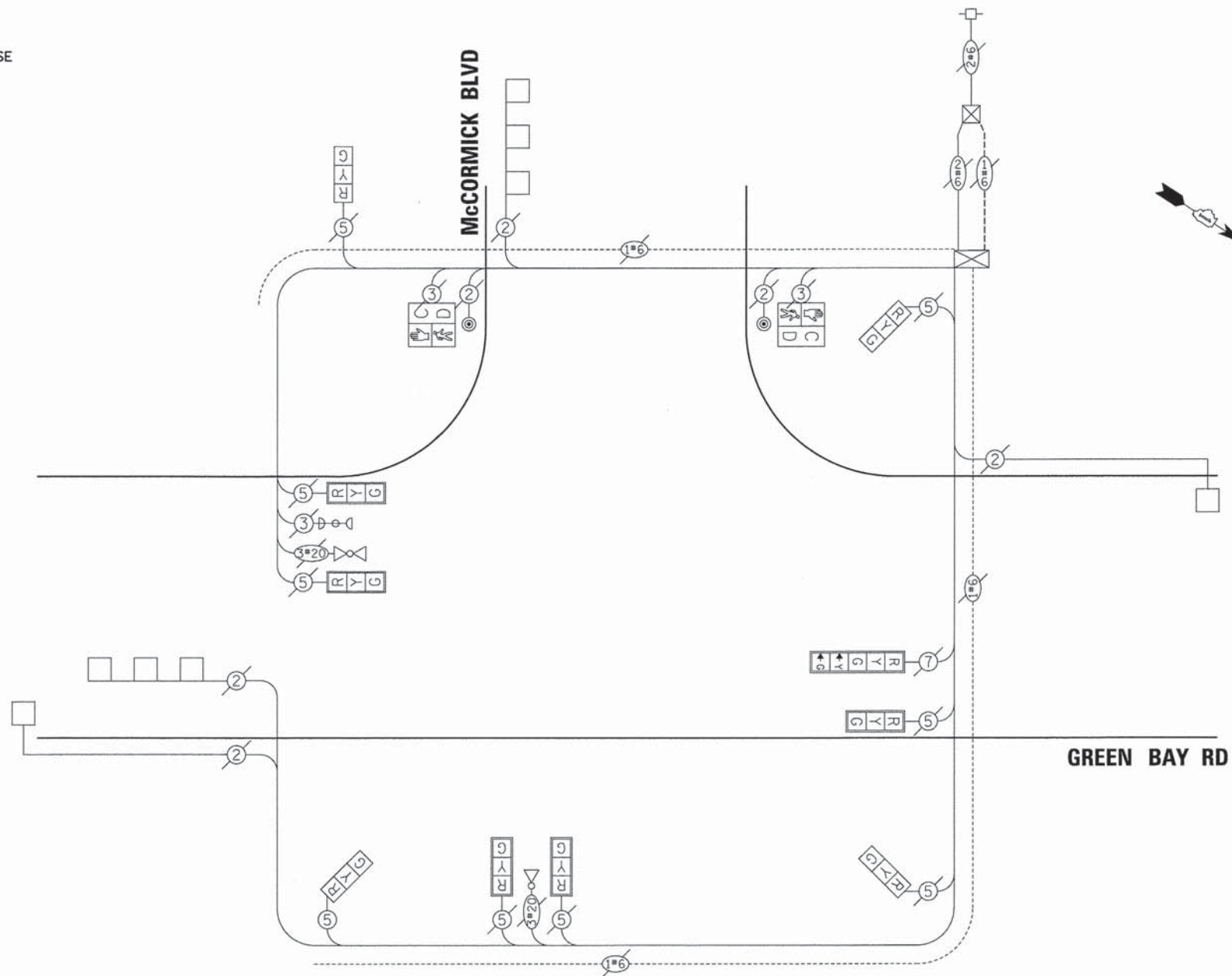
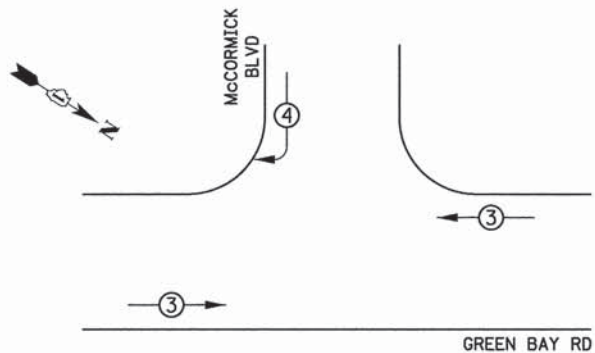
PLAN	SURVEYED	DATE
	PLOTTED	BY
	NOTED	
	CHECKED	
	RT. OF WAY	
	CHECKED	
	NO. _____	PAID FILE NAME

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	NOTED	
	CHECKED	
	STRUCTURE	
	NOTATIONS	
	CHKD	
	NO. _____	

**EXISTING CONTROLLER SEQUENCE**



**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**CABLE PLAN**  
(NOT TO SCALE)

**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	WATTAGE LED	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16	11	50	88
(YELLOW)	16	20	5	16
(GREEN)	16	12	45	86.4
PERMISSIVE ARROW	2	10	10	2
PED. SIGNAL	8	20	100	160
CONTROLLER	1	100	100	160
UPS	1	25	100	100
VIDEO SYSTEM	-	150	100	25
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
<b>TOTAL =</b>				<b>477.4</b>

ENERGY COSTS TO:

CITY OF EVANSTON  
2100 RIDGE AVE  
EVANSTON, ILLINOIS 60201

ENERGY SUPPLY: CONTACT: \_\_\_\_\_  
PHONE: \_\_\_\_\_  
COMPANY: COMMONWEALTH EDISON  
ACCOUNT NUMBER: \_\_\_\_\_

**FOR INFORMATION ONLY**

THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.



USER NAME = bhwnrscha  
DESIGNED - BAH  
DRAWN - BAH  
CHECKED - JMY  
DATE - 10/9/2015  
PLOT SCALE = 1:0000'' / 1in.  
PLOT DATE = 1/7/2016

REVISED - -  
REVISED - -  
REVISED - -  
REVISED - -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL PLAN SHEETS  
CABLE PLAN  
GREEN BAY ROAD AND McCORMICK BLVD  
SCALE: SHEET 35 OF 38 SHEETS STA. TO STA.

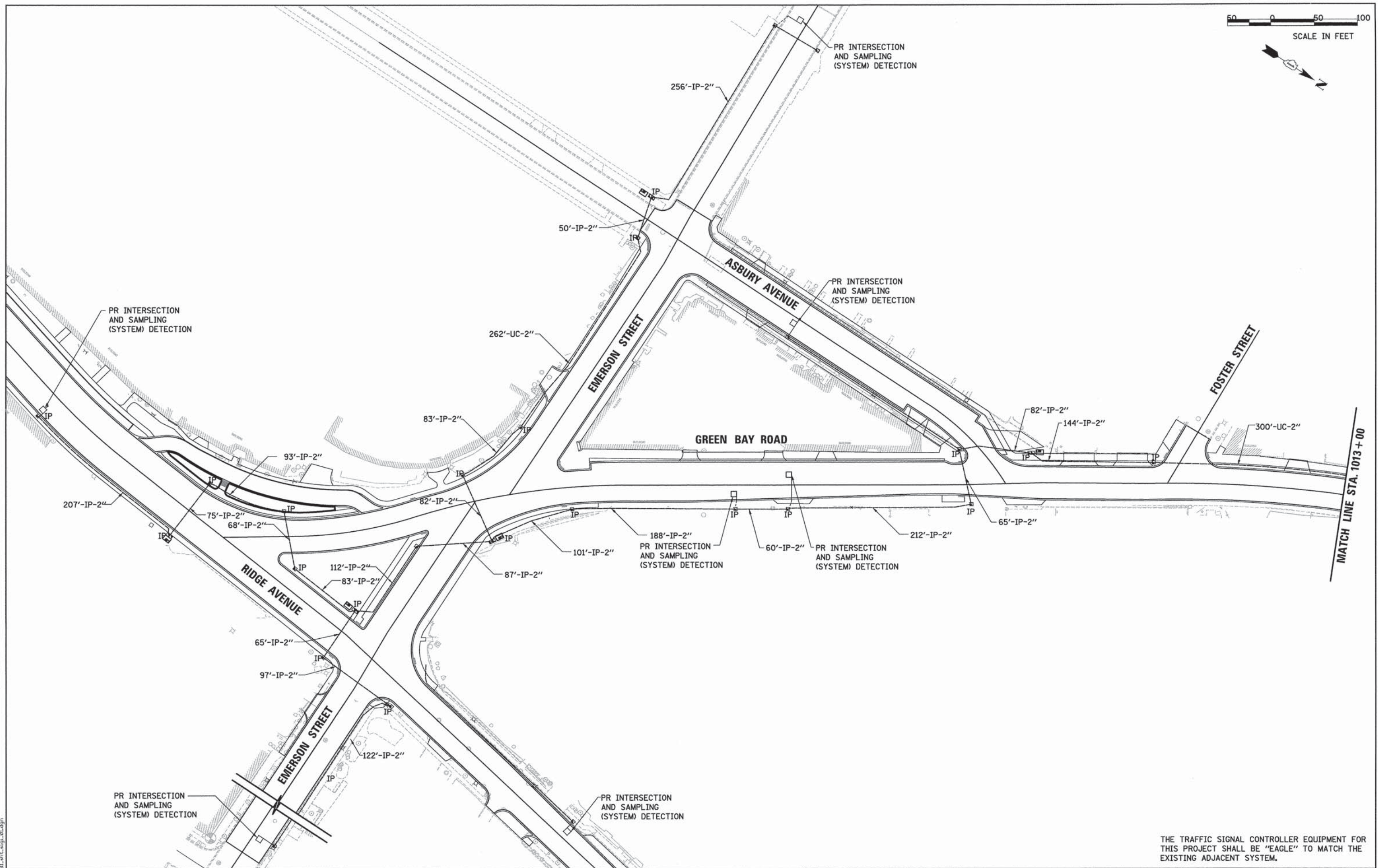
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	271
				CONTRACT NO. 61C32
ILLINOIS FED. AID PROJECT				





PLAN	SURVEYED	BY	DATE
	PLOTTED		
	CHECKED		
	RT. OF WAY CHECKED		
	ADD FILE NAME		
NO.			

PROFILE	SURVEYED	BY	DATE
	PLOTTED		
	CHECKED		
	RT. OF WAY CHECKED		
	STRUCTURE NOTATIONS CHECKED		
NO.			



FILE NAME: ER021.dwg

**ESI** CONSULTANTS, LTD.  
 1175 N. WILSON AVENUE, SUITE 100  
 DEERFIELD, IL 60015  
 TEL: 847.938.8800  
 FAX: 847.938.8801  
 WWW.ESI-CONSULTANTS.COM

USER NAME = bhenrschs	DESIGNED - BAH	REVISED - -
PLLOT SCALE = 50.0001' / 1in.	DRAWN - BAH	REVISED - -
PLLOT DATE = 1/7/2016	CHECKED - JMY	REVISED - -
	DATE - 10/9/2015	REVISED - -

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

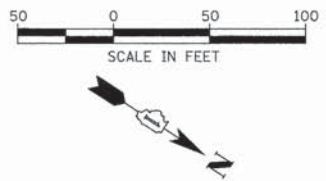
**TRAFFIC SIGNAL PLAN SHEETS**  
**PROPOSED INTERCONNECT PLAN - (SHEET 1 OF 2)**  
**GREEN BAY ROAD - EMERSON STREET TO NOYES STREET**

SCALE: \_\_\_\_\_ SHEET 36 OF 38 SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

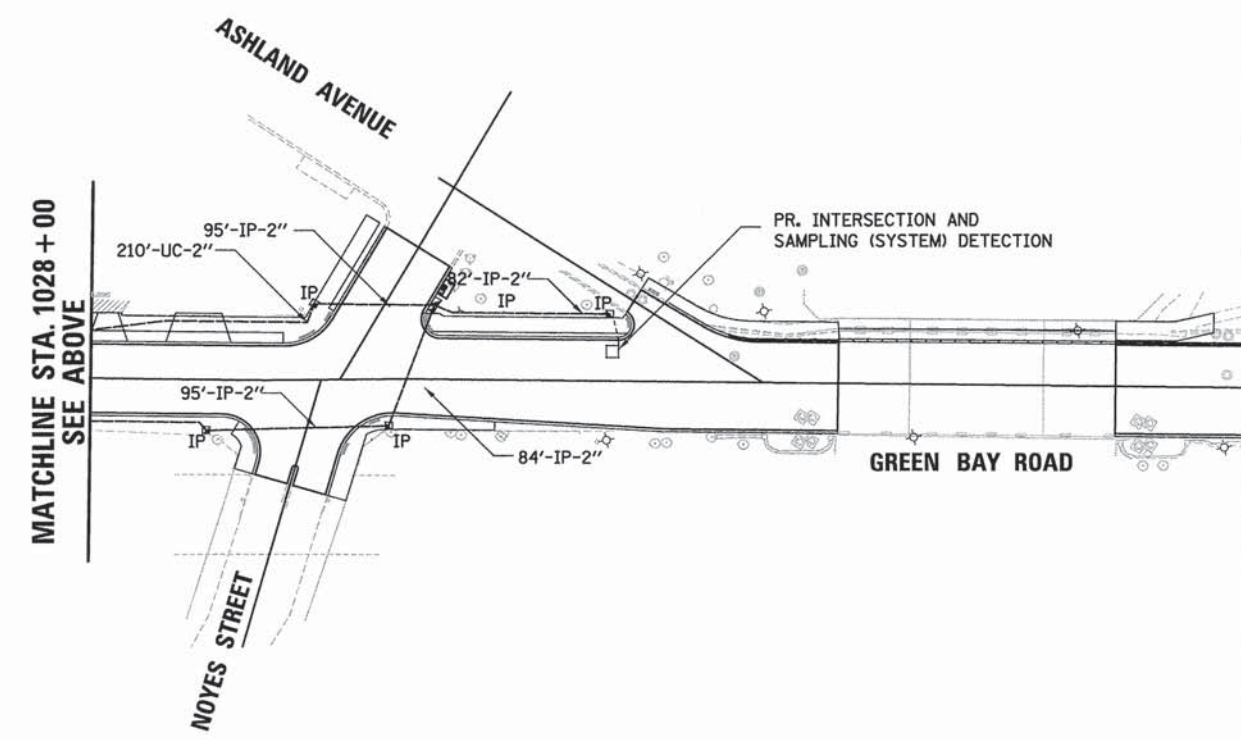
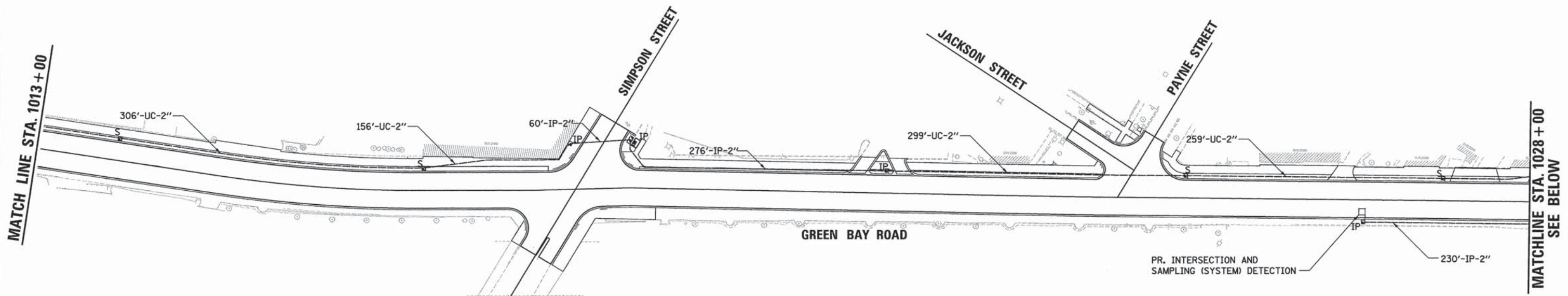
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	272
CONTRACT NO. G1C32			ILLINOIS FED. AID PROJECT	





PLAN	SURVEYED	BY	DATE
	ALIGNED		
	CHECKED		
	RT. OF WAY		
	CHECKED		
	NO.		

PROFILE	SURVEYED	BY	DATE
	GRADES		
	CHECKED		
	B.M. NOTED		
	STRUCTURE		
	NOTATYS		
	CHYD		



FILE NAME: ERGB1\_ah1.sgi\_02.dgn

**ESI** CONSULTANTS, LTD.  
 100 N. MICHIGAN STREET, SUITE 1000  
 CHICAGO, ILLINOIS 60601  
 TEL: 312.467.1000 FAX: 312.467.1001  
 WWW.ESI-CONSULTANTS.COM

USER NAME = bhenrichs	DESIGNED - BAH	REVISED - -
	DRAWN - BAH	REVISED - -
PLOT SCALE = 50.0001' / 1" =	CHECKED - JMY	REVISED - -
PLOT DATE = 1/7/2016	DATE - 10/9/2015	REVISED - -

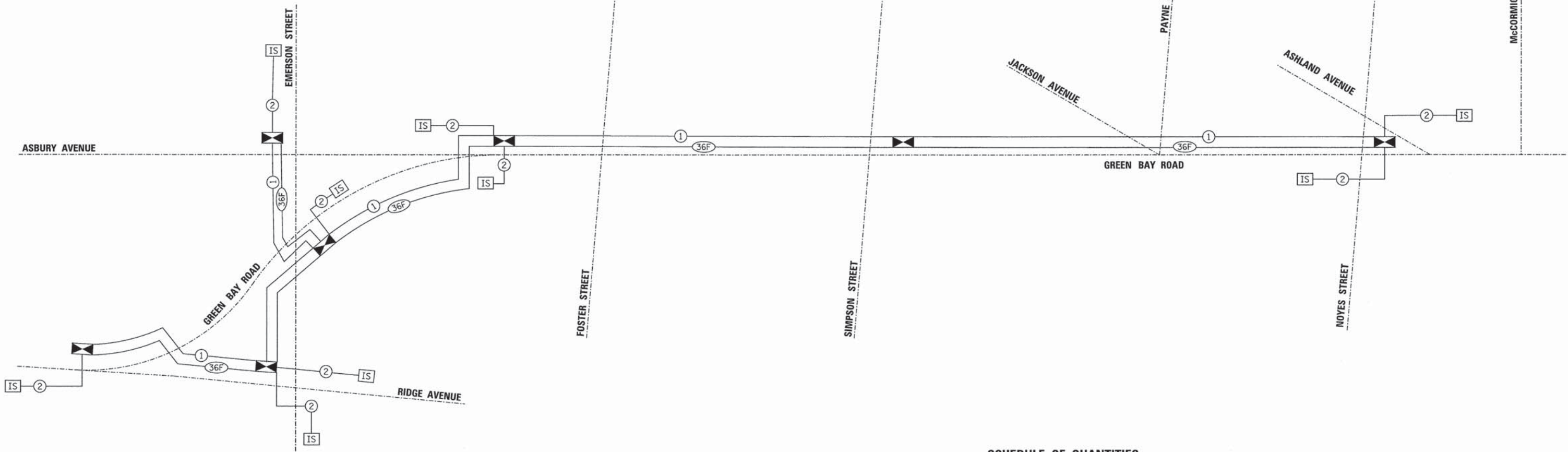
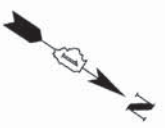
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL PLAN SHEETS  
 PROPOSED INTERCONNECT PLAN - (SHEET 2 OF 2)  
 GREEN BAY ROAD - EMERSON STREET TO NOYES STREET**

SCALE: \_\_\_\_\_ SHEET 37 OF 38 SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	273
CONTRACT NO. 61C32			ILLINOIS FED. AID PROJECT	





**SCHEDULE OF QUANTITIES**

ITEM	UNIT	QTY
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	1792
HANDHOLE	EACH	4
TRANSCEIVER - FIBER OPTIC	EACH	7
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	4187
FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F	FOOT	4187

PLAN	REVISIONS	DATE
NO.	BY	
	DATE	
	BY	
	DATE	
	BY	
	DATE	

PROFILE	REVISIONS	DATE
NO.	BY	
	DATE	
	BY	
	DATE	
	BY	
	DATE	

FILE NAME: ER001\_sht.dgn



USER NAME = bhenrichs	DESIGNED - BAH	REVISED - -
	DRAWN - BAH	REVISED - -
PLOT SCALE = 1,0000' / in.	CHECKED - JMY	REVISED - -
PLOT DATE = 1/7/2016	DATE - 10/9/2015	REVISED - -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>TRAFFIC SIGNAL PLAN SHEETS PROPOSED INTERCONNECT SCHEMATIC AND SCHEDULE OF QUANTITIES</b>			
SCALE: _____	SHEET 38 OF 38 SHEETS	STA. _____	TO STA. _____

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	274
CONTRACT NO. 61C32			ILLINOIS FED. AID PROJECT	

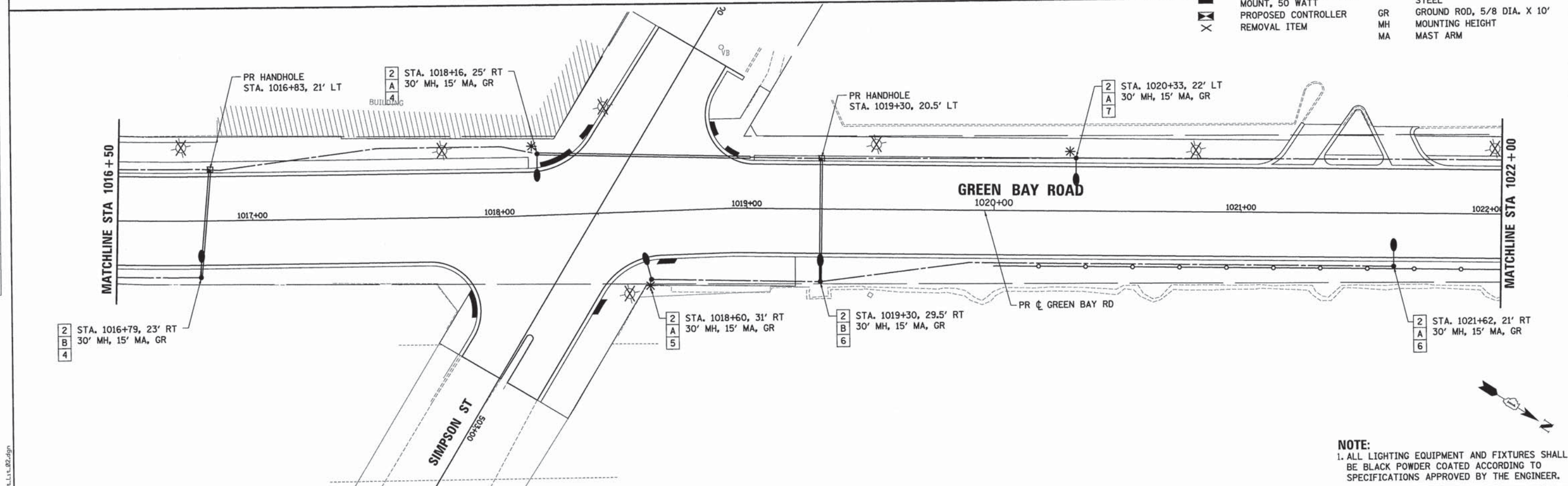
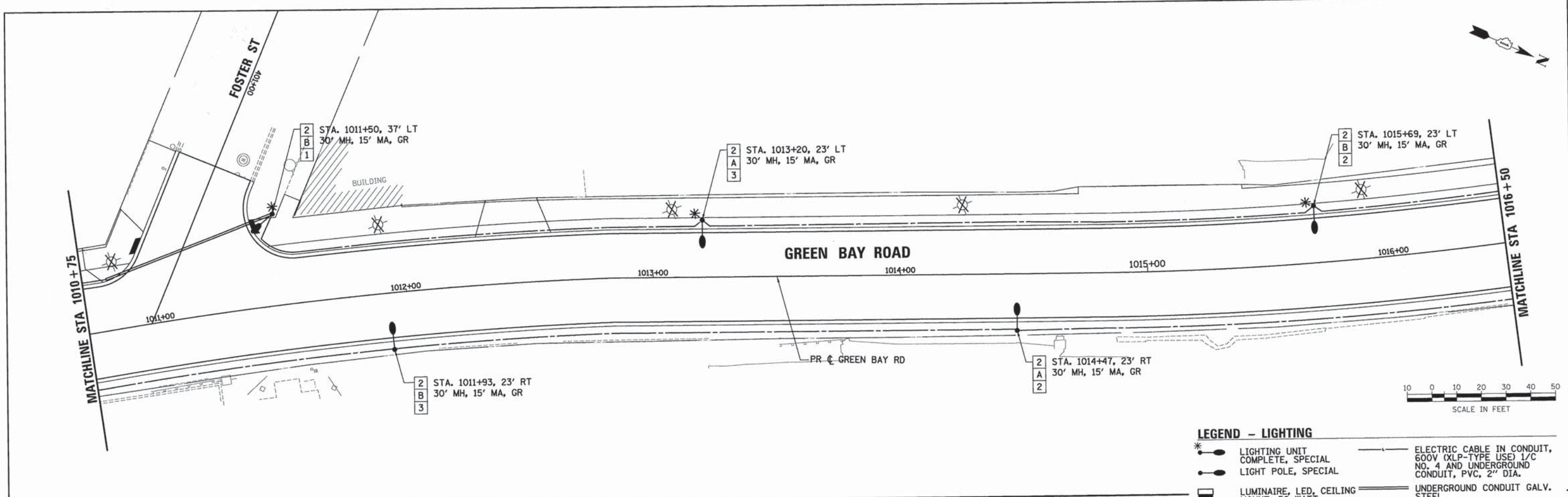






PLAN	SURVEYED	DATE
	PLOTTED	BY
	NOTED	
	RT. OF WAY CHECKED	
	CADD FILE NAME	
	NO.	

PROFILE	SURVEYED	DATE
	GRADES CHECKED	BY
	BLM. NOTED	
	STRUCTURE NOTATIONS CHFD	
	NO.	



**NOTE:**  
 1. ALL LIGHTING EQUIPMENT AND FIXTURES SHALL BE BLACK POWDER COATED ACCORDING TO SPECIFICATIONS APPROVED BY THE ENGINEER.

ESI CONSULTANTS, LTD.  
 300 N. WASHINGTON ST., SUITE 200  
 CHICAGO, IL 60610  
 TEL: 312.467.1000  
 FAX: 312.467.1001  
 WWW.ESI-CONSULTANTS.COM

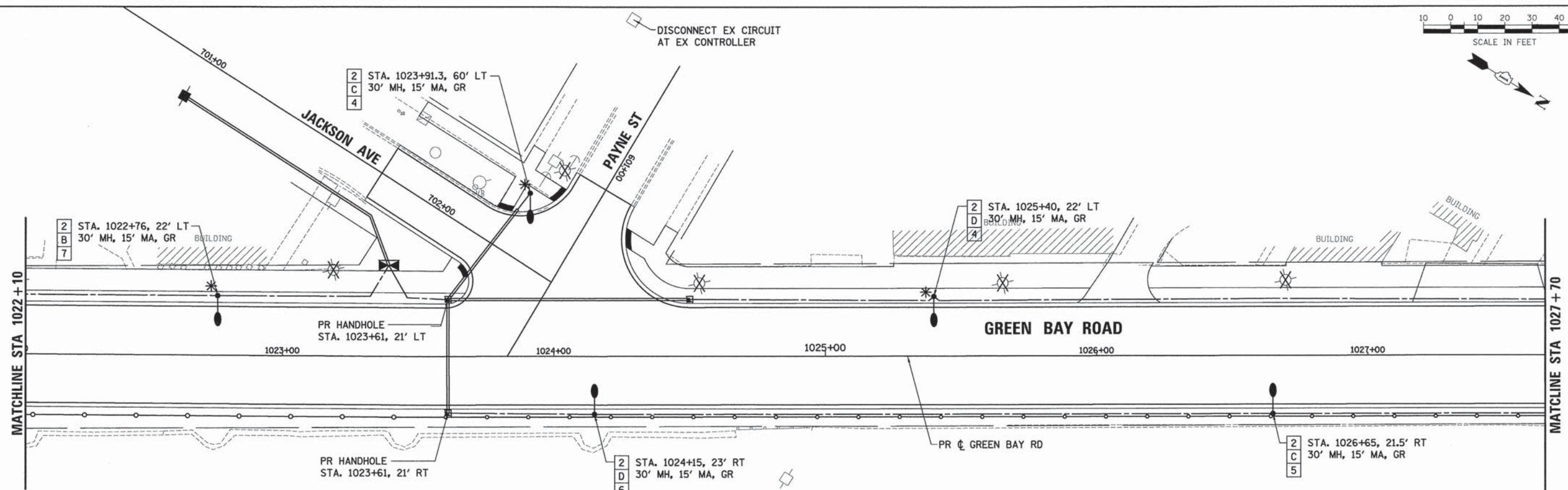
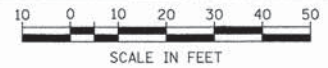
USER NAME = bhan1010	DESIGNED - BAH	REVISED -
	DRAWN - BAH	REVISED -
	CHECKED - MAR	REVISED -
	DATE - 10/9/2015	REVISED -
PLOT SCALE = 28.2724' / 1" =		
PLOT DATE = 1/7/2016		

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

<b>LIGHTING PLAN SHEETS GREEN BAY ROAD</b>	
SCALE:	SHEET 2 OF 12 SHEETS STA. TO STA.

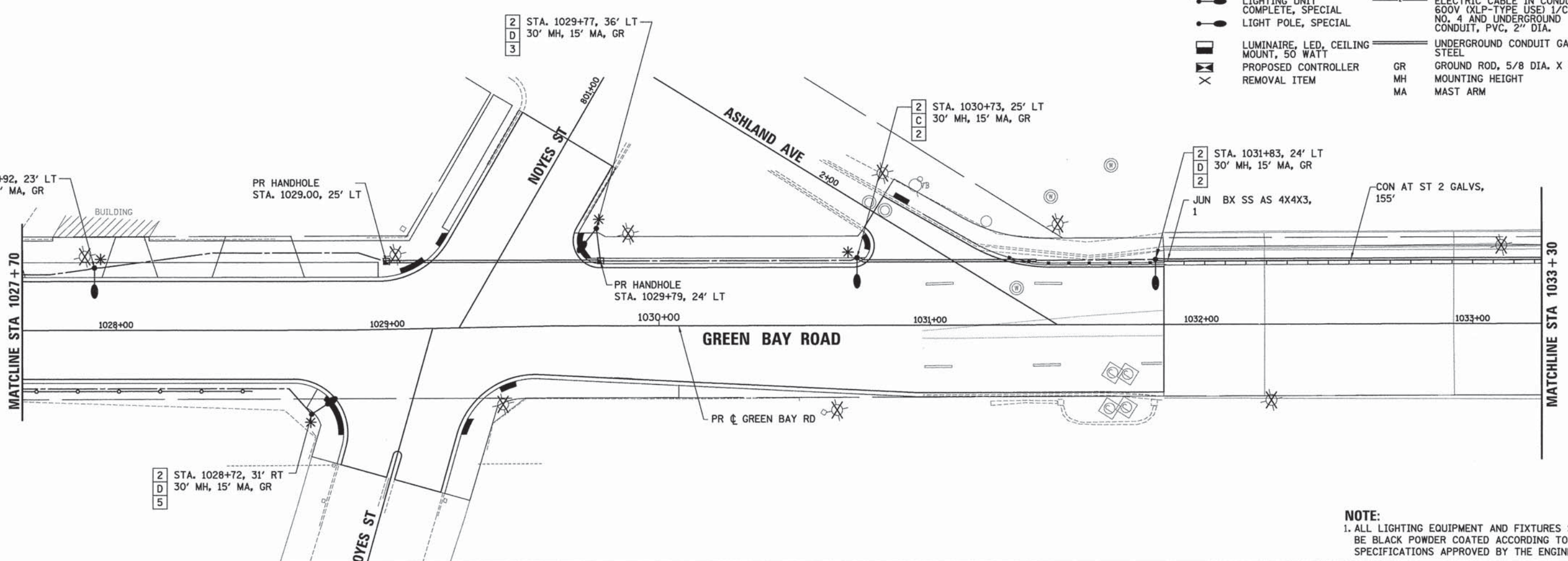
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	276
				CONTRACT NO. G1C32
ILLINOIS FED. AID PROJECT				





**LEGEND - LIGHTING**

* LIGHTING UNIT COMPLETE, SPECIAL	— ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 4 AND UNDERGROUND CONDUIT, PVC, 2" DIA.
● LIGHT POLE, SPECIAL	— UNDERGROUND CONDUIT GALV. STEEL
■ LUMINAIRE, LED, CEILING MOUNT, 50 WATT	GR GROUND ROD, 5/8 DIA. X 10'
⊠ PROPOSED CONTROLLER	MH MOUNTING HEIGHT
✕ REMOVAL ITEM	MA MAST ARM



**NOTE:**  
1. ALL LIGHTING EQUIPMENT AND FIXTURES SHALL BE BLACK POWDER COATED ACCORDING TO SPECIFICATIONS APPROVED BY THE ENGINEER.

PLAN

SURVEYED	DATE
ALIGNED	BY
CHECKED	
RT. OF WAY CHECKED	
NO. _____	
FILE NAME	

PROFILE

SURVEYED	DATE
GRADES CHECKED	BY
S.M. NOTED	
STRUCTURE NOTATIONS CHKD	
NO. _____	

FILE NAME: ERGBL\_ah.Lt.B3.dgn

**ESI** CONSULTANTS, LTD.  
2014 S. ILLINOIS AVENUE, SUITE 200, CHICAGO, IL 60605  
 Excellence. Service. Integrity.

USER NAME = bhenrsche	DESIGNED -- BAH	REVISED --
	DRAWN -- BAH	REVISED --
PLOT SCALE = 20.0000' / 1" =	CHECKED -- MAR	REVISED --
PLOT DATE = 1/7/2016	DATE -- 10/9/2015	REVISED --

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

LIGHTING PLAN SHEETS  
GREEN BAY ROAD

SCALE:	SHEET 3 OF 12 SHEETS	STA. TO STA.
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	277
				CONTRACT NO. 61C32
ILLINOIS FED. AID PROJECT				





PR HANDHOLE  
 STA. 1033+38, 25' LT  
 JUN BX SS AS 4X4X3,  
 1

2  
 C  
 1  
 STA. 1034+48, 31' LT  
 30' MH, 15' MA, GR

MATCHLINE STA 1033 + 30.00

2  
 D  
 1  
 STA. 1033+38, 29' RT  
 30' MH, 15' MA, GR

PR  $\phi$  GREEN BAY RD

GREEN BAY ROAD

McCORMICK BLVD

1034+00

1035+00

1036+00

1037+00

1038+00

1039+00

PLAN	SURVEYED	DATE
	PLOTTED	
	CHECKED	
	BY	
	NO.	

PROFILE	SURVEYED	DATE
	PLOTTED	
	CHECKED	
	BY	
	NO.	

**NOTE:**  
 1. ALL LIGHTING EQUIPMENT AND FIXTURES SHALL BE BLACK POWDER COATED ACCORDING TO SPECIFICATIONS APPROVED BY THE ENGINEER.

**LEGEND - LIGHTING**

*	LIGHTING UNIT COMPLETE, SPECIAL		ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 4 AND UNDERGROUND CONDUIT, PVC, 2" DIA.
	LIGHT POLE, SPECIAL		LUMINAIRE, LED, CEILING MOUNT, 50 WATT
	PROPOSED CONTROLLER		GROUND ROD, 5/8 DIA. X 10'
	REMOVAL ITEM		MOUNTING HEIGHT
			MA MAST ARM
			UNDERGROUND CONDUIT GALV. STEEL



USER NAME = bhenrichs	DESIGNED - BAH	REVISED - -
	DRAWN - BAH	REVISED -
PLOT SCALE = 28.0000" / 1"	CHECKED - MAR	REVISED -
PLOT DATE = 1/7/2016	DATE - 10/9/2015	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

LIGHTING PLAN SHEETS	
GREEN BAY ROAD	
SCALE:	SHEET 4 OF 12 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	278
CONTRACT NO. 61C32			ILLINOIS FED. AID PROJECT	

FILE NAME: EROB1-shr-L1-1-04.dgn

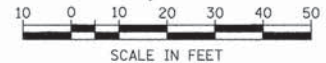
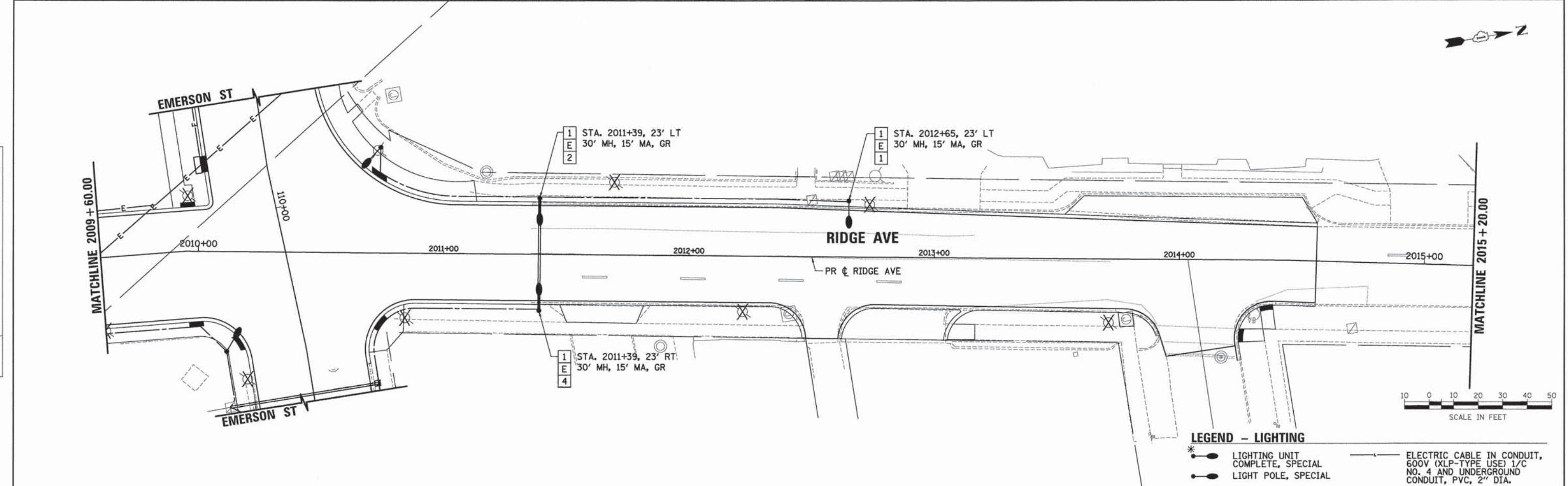






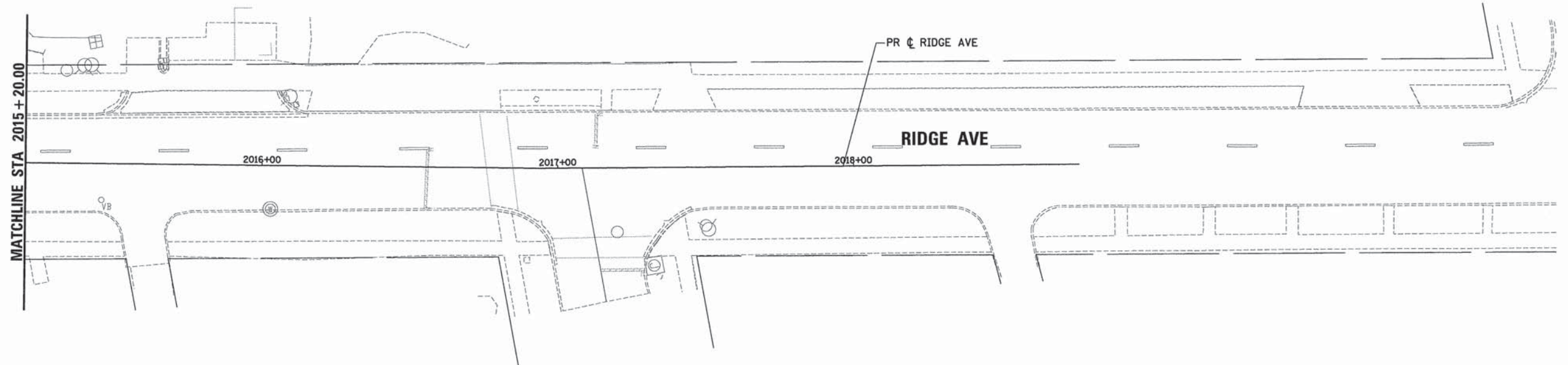
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	RT. OF WAY CHECKED		
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	FILE NAME		

PROFILE	SURVEYED	BY	DATE
	GRADES CHECKED		
	B.M. NOTED		
	STRUCTURE NOTATIONS CHFD		
	NO. _____		



**LEGEND - LIGHTING**

* LIGHTING UNIT COMPLETE, SPECIAL	— ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 4 AND UNDERGROUND CONDUIT, PVC, 2" DIA.
● LIGHT POLE, SPECIAL	— UNDERGROUND CONDUIT GALV. STEEL
■ LUMINAIRE, LED, CEILING MOUNT, 50 WATT	GR GROUND ROD, 5/8 DIA. X 10'
▣ PROPOSED CONTROLLER	MH MOUNTING HEIGHT
✕ REMOVAL ITEM	MA MAST ARM



**NOTE:**  
1. ALL LIGHTING EQUIPMENT AND FIXTURES SHALL BE BLACK POWDER COATED ACCORDING TO SPECIFICATIONS APPROVED BY THE ENGINEER.



USER NAME = bhenrichs	DESIGNED - BAH	REVISED - -
DRAWN - BAH	CHECKED - MAR	DATE - 10/9/2015
PLLOT SCALE = 20.0000' / 1" =		
PLLOT DATE = 1/7/2016		

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>LIGHTING PLAN SHEETS RIDGE AVENUE</b>			
SCALE:	SHEET 6 OF 12 SHEETS	STA. TO STA.	

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	280
				CONTRACT NO. 61C32
ILLINOIS FED. AID PROJECT				

FILE NAME: ERGB1\_ah+L1+1\_86.dgn







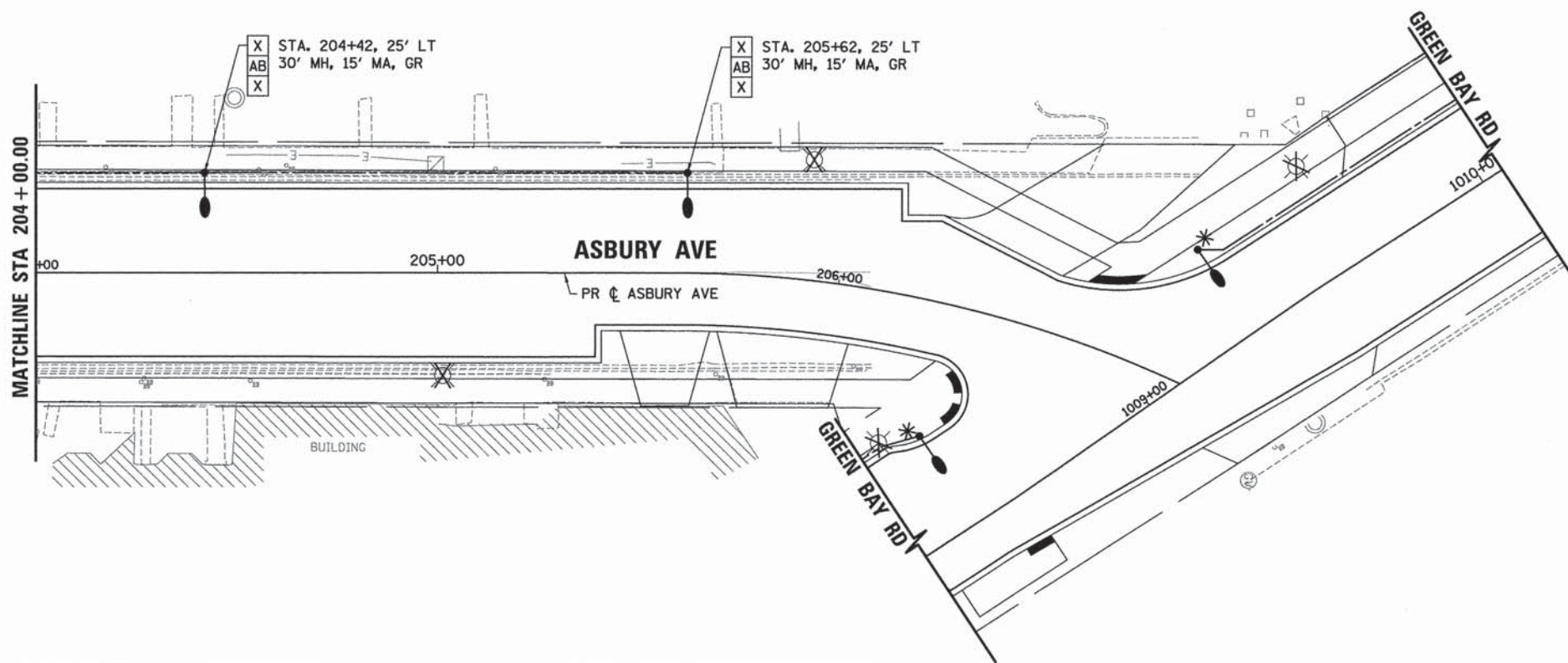
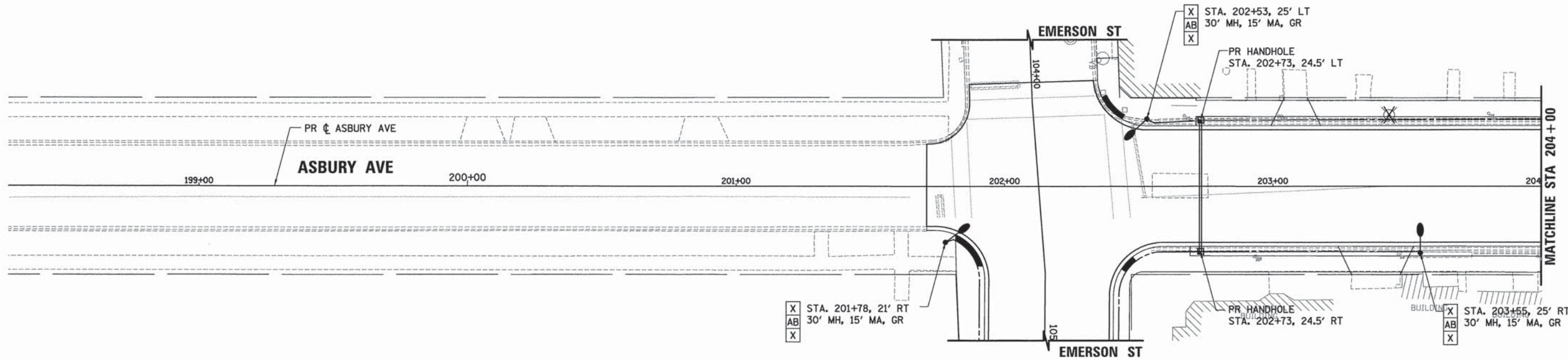


SCALE IN FEET



PLAN	SURVEYED	DATE
	PLOTTED	
	CHECKED	
	BY	
	NO.	
	FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	
	CHECKED	
	BY	
	NO.	
	FILE NAME	



**NOTE:**  
1. ALL LIGHTING EQUIPMENT AND FIXTURES SHALL BE BLACK POWDER COATED ACCORDING TO SPECIFICATIONS APPROVED BY THE ENGINEER.

**LEGEND - LIGHTING**

	LIGHTING UNIT COMPLETE, SPECIAL		ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 4 AND UNDERGROUND CONDUIT, PVC, 2" DIA.
	LIGHT POLE, SPECIAL		UNDERGROUND CONDUIT GALV. STEEL
	LUMINAIRE, LED, CEILING MOUNT, 50 WATT		GR GROUND ROD, 5/8 DIA. X 10'
	PROPOSED CONTROLLER		MH MOUNTING HEIGHT
	REMOVAL ITEM		MA MAST ARM

FILE NAME: ERGBI\_sht.Lt.09.dgn

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USER NAME = bhanrichs	DESIGNED - BAH	REVISED - -
PLLOT SCALE = 28.0000' / 1" =	DRAWN - BAH	REVISED -
PLLOT DATE = 1/7/2016	CHECKED - MAR	REVISED -
	DATE - 10/9/2015	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**LIGHTING PLAN SHEETS  
ASBURY AVENUE**

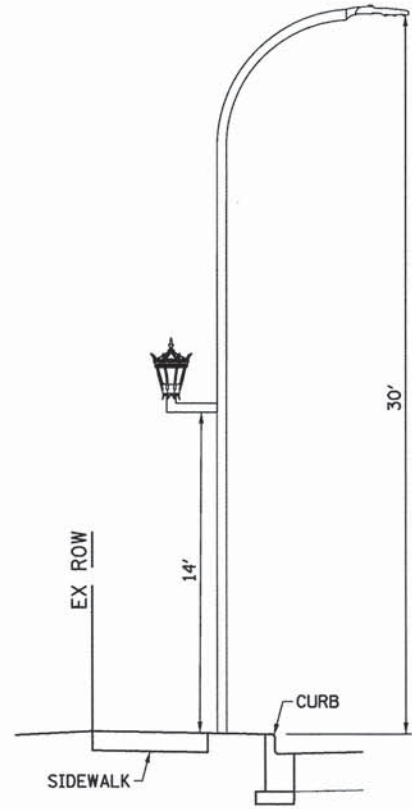
SCALE: SHEET 8 OF 12 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	282
CONTRACT NO. 61C32				
ILLINOIS FED. AID PROJECT				

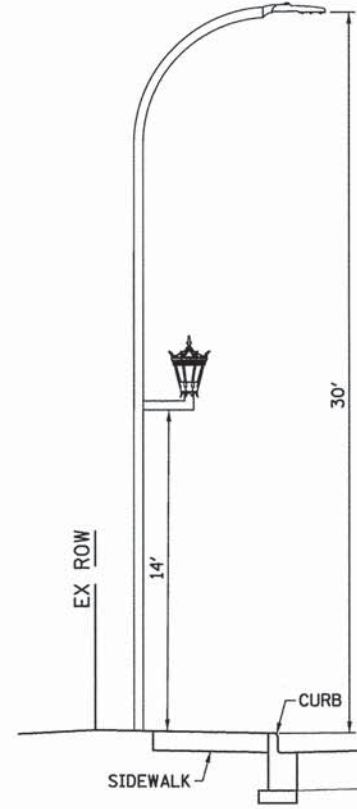


PLAN	REVISIONS	BY	DATE
NOTE BOOK NO.	PLOTTED		
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	PROPOSED CHECKED		
	ADD FILE NAME		

PROFILE	REVISIONS	BY	DATE
NOTE BOOK NO.	GRADES CHECKED		
	B.M. NOTED		
	STRUCTURE NOTATIONS CHKD		



**LIGHTING DETAIL  
LIGHT POLE IN FRONT OF SIDEWALK**



**LIGHTING DETAIL  
LIGHT POLE IN BACK OF SIDEWALK**

FILE NAME: ER081.sh\11.18.dgn

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 WWW.ESI-CONSULTANTS.COM

USER NAME = bhenrichs	DESIGNED - BAH	REVISED - -
	DRAWN - BAH	REVISED - -
PLOT SCALE = 1:8000 ' / in.	CHECKED - MAR	REVISED - -
PLOT DATE = 1/7/2016	DATE - 10/9/2015	REVISED - -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**LIGHTING PLAN SHEETS  
SCHEMATIC**

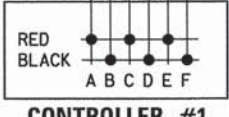
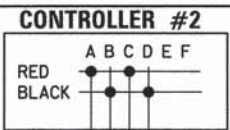
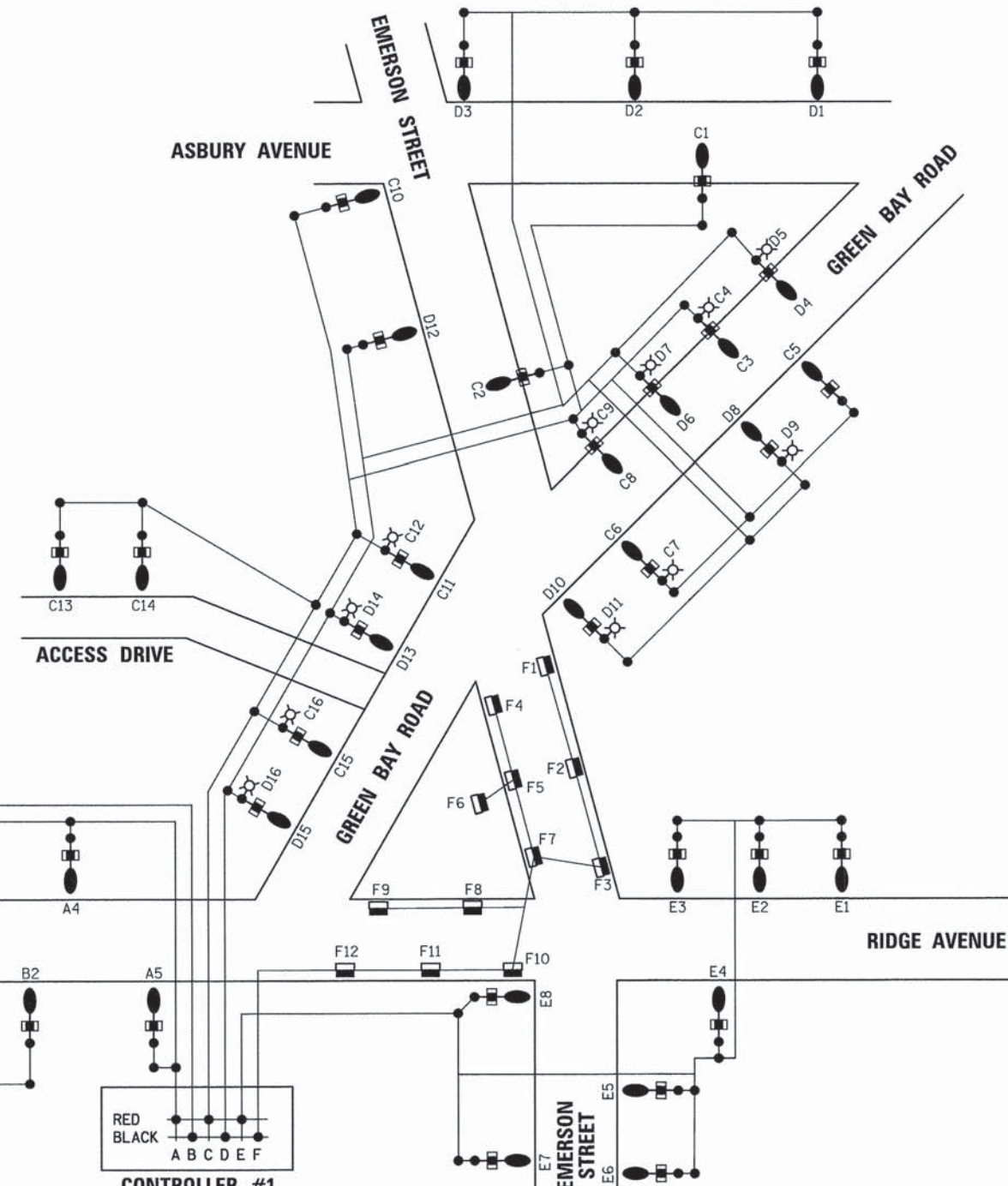
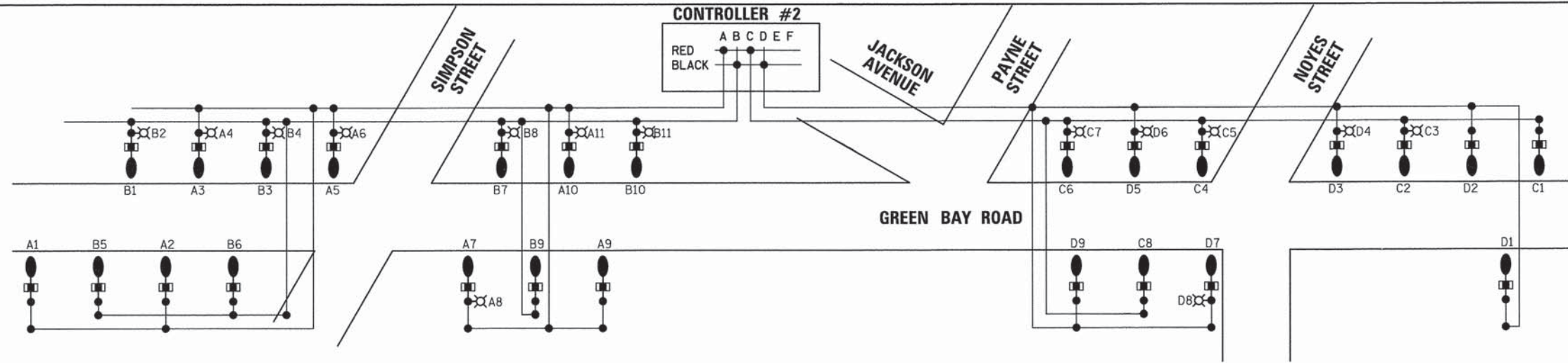
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	283
CONTRACT NO. 61C32			ILLINOIS FED. AID PROJECT	

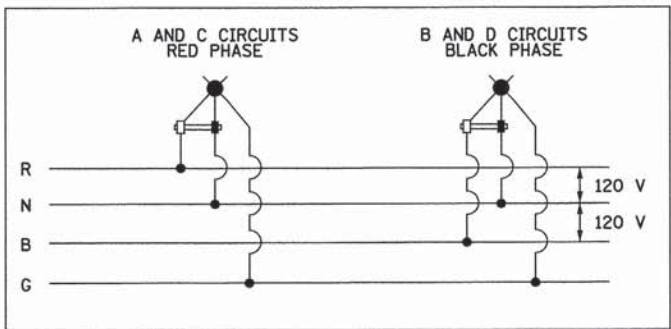


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NOTE BOOK	PLOTTED	BY
NO.	GRADES CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	NO.	

PROFILE	SURVISED	DATE
NOTE BOOK	PLOTTED	BY
NO.	GRADES CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	NO.	



**TYPICAL POLE WIRING**



**LOAD TABULATIONS CONTROLLER #1**

CIRCUIT	WATTS	AMPS @ 120 V	
		RED PHASE	BLACK PHASE
A	890	7.42	
B	712		5.93
C	1939	16.16	
D	2098		17.48
E	1424	11.87	
F	1212		10.10

**INDIVIDUAL LUMINAIRE LOAD DATA**

	RATED WATTS	INPUT VOLTS	MAX INPUT AMPS
ROADWAY	178	120	4
PEDESTRIAN	53	120	4
UNDERPASS	101	120	4

**LOAD TABULATIONS CONTROLLER #2**

CIRCUIT	WATTS	AMPS @ 120 V	
		RED PHASE	BLACK PHASE
A	1458	12.15	
B	1458		12.15
C	1049	8.74	
D	1227		10.23

**NOTES:**

- CONTRACTOR SHALL PLACE SIX COPIES, 11 x 17 OR LARGER, OF THIS SHEET IN A WATER RESISTANT FOLDER INSIDE THE CONTROL CABINET.
- ALL LIGHTING FIXTURES WILL HAVE AN OUTLET AT THE BASE FOR HOLIDAY DECORATIONS.

**LEGEND**

- LIGHT POLE, SPECIAL
- LIGHTING UNIT COMPLETE, SPECIAL LUMINAIRE LED, CEILING MOUNT 50 W
- LUMINAIRE, LED, CEILING MOUNT, 50 WATT
- FUSE, 4.0 AMP
- A1 LUMINAIRE CIRCUIT
- CONNECTION



USER NAME = bhmrnschs  
 DESIGNED - BAH  
 DRAWN - BAH  
 CHECKED - MAR  
 DATE - 10/9/2015

REVISED -  
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 REVISED -  
 REVISED -

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 DEPARTMENT OF TRANSPORTATION

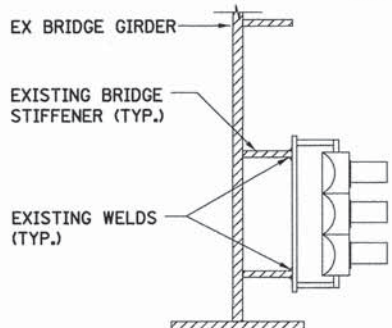
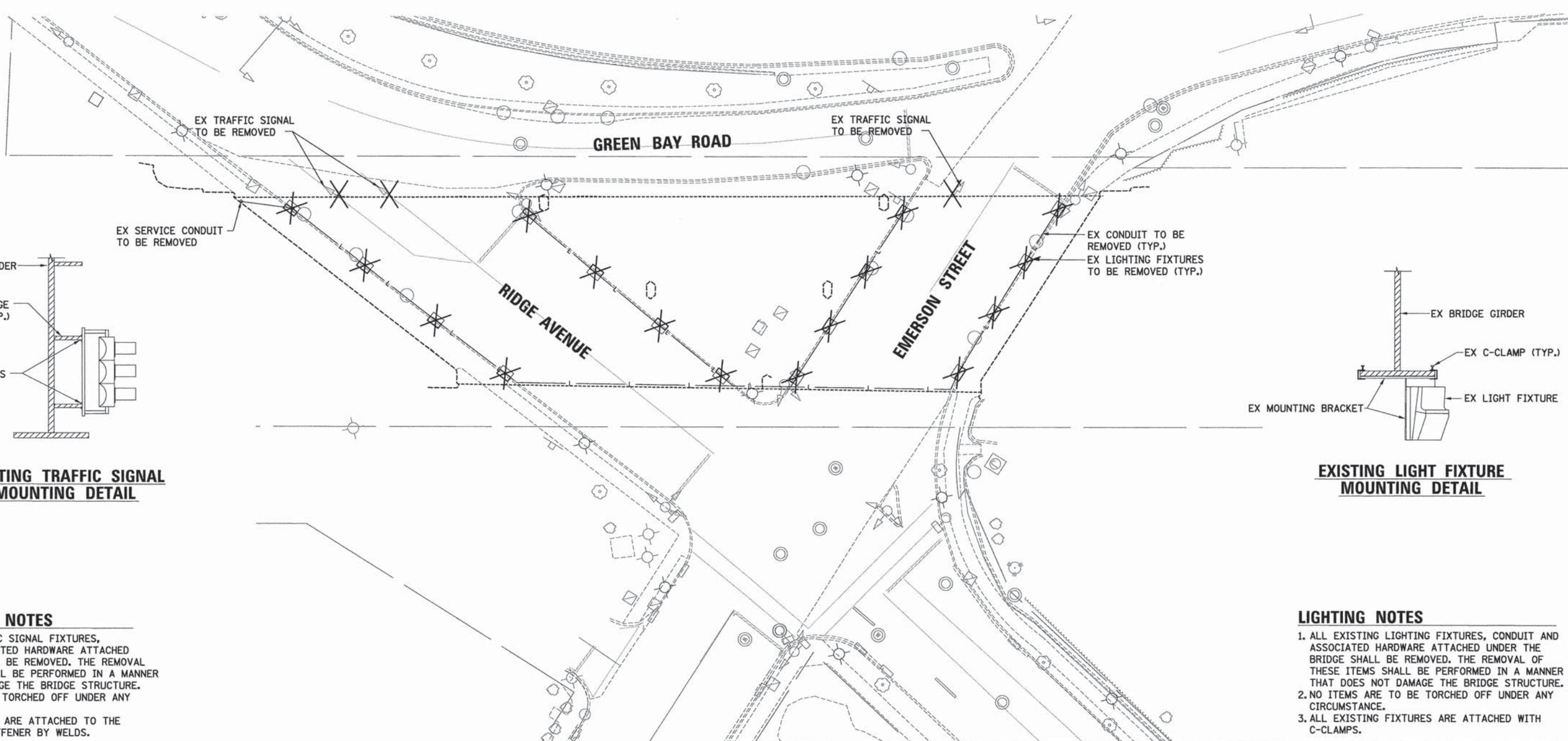
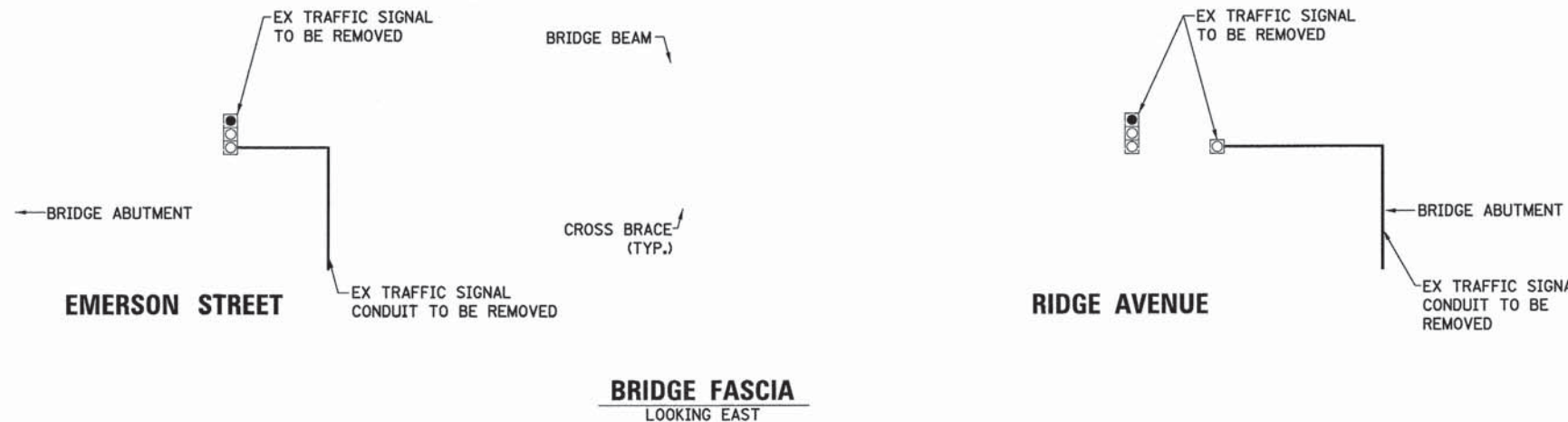
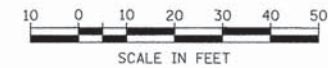
LIGHTING PLAN SHEETS  
 LIGHTING DETAILS

SCALE: \_\_\_\_\_ SHEET 10 OF 12 SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

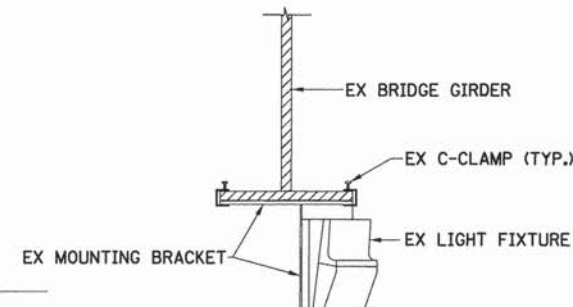
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	284
CONTRACT NO. 61C32			ILLINOIS FED. AID PROJECT	

FILE NAME: ER081\_ah.Lt.Lt.11.dgn





**EXISTING TRAFFIC SIGNAL MOUNTING DETAIL**



**EXISTING LIGHT FIXTURE MOUNTING DETAIL**

**TRAFFIC SIGNAL NOTES**

1. ALL EXISTING TRAFFIC SIGNAL FIXTURES, CONDUIT AND ASSOCIATED HARDWARE ATTACHED TO THE BRIDGE SHALL BE REMOVED. THE REMOVAL OF THESE ITEMS SHALL BE PERFORMED IN A MANNER THAT DOES NOT DAMAGE THE BRIDGE STRUCTURE.
2. NO ITEMS ARE TO BE TORCHED OFF UNDER ANY CIRCUMSTANCE.
3. ALL TRAFFIC SIGNALS ARE ATTACHED TO THE EXISTING GIRDER STIFFENER BY WELDS.

**LIGHTING NOTES**

1. ALL EXISTING LIGHTING FIXTURES, CONDUIT AND ASSOCIATED HARDWARE ATTACHED UNDER THE BRIDGE SHALL BE REMOVED. THE REMOVAL OF THESE ITEMS SHALL BE PERFORMED IN A MANNER THAT DOES NOT DAMAGE THE BRIDGE STRUCTURE.
2. NO ITEMS ARE TO BE TORCHED OFF UNDER ANY CIRCUMSTANCE.
3. ALL EXISTING FIXTURES ARE ATTACHED WITH C-CLAMPS.

PLAN	SURVEYED	DATE
	ALIGNED	BY
	GRADES	CHECKED
	RT. OF WAY	CHECKED
	NO.	NO.
	FILE NAME	

PROFILE	SURVEYED	DATE
	GRADES	BY
	NOTED	CHECKED
	STRUCTURE	NOTATIONS
	NO.	NO.
	FILE NAME	

FILE NAME: ERGB1\_sht.Lt.12.dgn

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 1300 N. WASHINGTON ST., SUITE 200  
 DEERFIELD, IL 60015  
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USER NAME = bhanrichs	DESIGNED - BAH	REVISED - -
	DRAWN - BAH	REVISED - -
PLOT SCALE = 20.0000' / 1" =	CHECKED - MAR	REVISED - -
PLOT DATE = 1/7/2016	DATE - 10/9/2015	REVISED - -

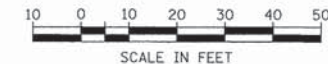
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**LIGHTING PLAN SHEETS**  
**EXISTING STREET LIGHTING**  
**AND TRAFFIC SIGNAL REMOVAL DETAILS**

SCALE: SHEET 11 OF 12 SHEETS STA. TO STA.

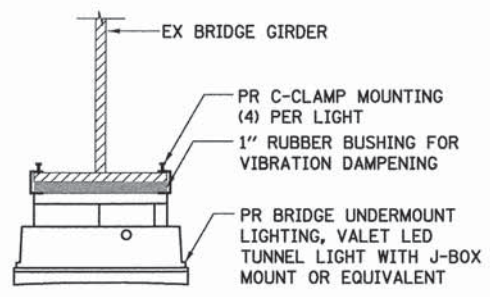
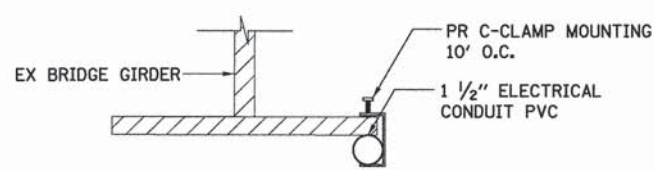
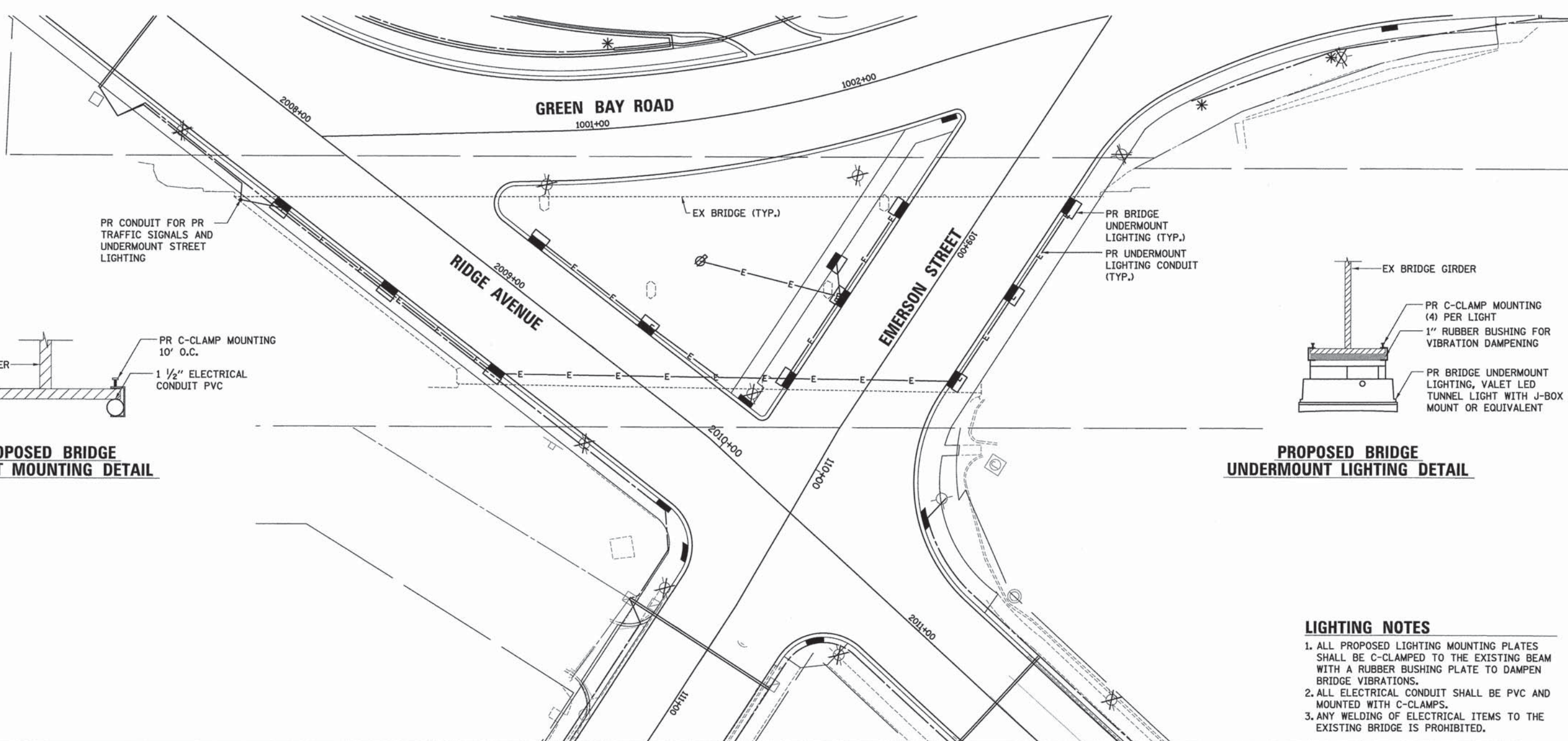
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-	13-00270-00-CH	COOK	393	285
				CONTRACT NO. 61C32
ILLINOIS FED. AID PROJECT				





PLAN	SURVEYED	DATE
	NOTE BOOK	BY
	ALIGNED	
	RT. OF WAY	
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	NO.	
	FILE NAME	

PROFILE	SURVEYED	DATE
	GRADES	BY
	NOTED	
	STRUCTURE	
	NOTATIONS	
	CHKD	
	NO.	



- LIGHTING NOTES**
1. ALL PROPOSED LIGHTING MOUNTING PLATES SHALL BE C-CLAMPED TO THE EXISTING BEAM WITH A RUBBER BUSHING PLATE TO DAMPEN BRIDGE VIBRATIONS.
  2. ALL ELECTRICAL CONDUIT SHALL BE PVC AND MOUNTED WITH C-CLAMPS.
  3. ANY WELDING OF ELECTRICAL ITEMS TO THE EXISTING BRIDGE IS PROHIBITED.



USER NAME = bhenrachs	DESIGNED - BAH	REVISED - -
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	DATE - 10/9/2015	REVISED - -
PLOT SCALE = 20.0000' / 1" =		
PLOT DATE = 1/7/2016		

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

LIGHTING PLAN SHEETS  
PROPOSED STREET LIGHTING  
MOUNTING DETAILS

SCALE: SHEET 12 OF 12 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	286
				CONTRACT NO. 61C32
ILLINOIS FED. AID PROJECT				

FILE NAME: ERGB1.dwg



**WATERMAIN SUGGESTED SEQUENCE OF CONSTRUCTION**

**GREEN BAY AVE (SIMPSON TO NOYES)**

- CITY OF EVANSTON WILL INSTALL PR 12" VALVE (S1) AT SIMPSON/GREEN BAY
- WHEN REQUESTED BY CONTRACTOR, CITY WILL CLOSE VALVES TO ISOLATE THE WORK AREA. CUT AND REMOVE SIMPSON WATER MAIN, INCLUDING EX VALVE 10011.
- INSTALL PR VALVES (S2), (S3), (S4), CROSS AND ASSOCIATED WATER MAIN BETWEEN VALVES. CONNECT PR WATER MAIN TO EX WATERMAIN ALONG SIMPSON. CONTRACTOR TO USE THE SWAB METHOD TO SANITIZE THE PARTS.
- CITY WILL OPEN VALVES
- CONSTRUCT 10" WATER MAIN ALONG GREEN BAY FROM PR VALVE (S4) TO PR VALVE (N1) INCLUDING ALL VALVES, FIRE HYDRANTS AND PR VALVE (P1) AND VALVE (P2)
- PRESSURE TEST USING PR VALVE (S4) AS SOURCE POINT
- CHLORINATE WATER MAIN USING PR VALVE (N1) AS A WHIP
- CITY TO OPEN VALVE S4
- TRANSFER SERVICES FROM EX WATER MAIN TO PR WATER MAIN FOR ALL CUSTOMERS ALONG GREEN BAY FROM SIMPSON TO NOYES
- WHEN REQUESTED BY CONTRACTOR, CITY WILL CLOSE VALVES TO ISOLATE THE WORK AREA. REMOVE EX VALVE 10080 AND CAP ENDS OF OPEN PIPES.
- REMOVE EX PIPE AT THE JACKSON/GREEN BAY AREA, INCLUDING EX VALVE 10015, AND ROTATE PR 8" X 8" TEE AND CONNECT TO PR VALVE (P2)
- CAP EX TEE AT JACKSON/GREEN BAY
- CITY TO OPEN VALVES
- WHEN REQUESTED BY CONTRACTOR, CITY WILL CLOSE VALVES TO ISOLATE THE WORK AREA. INSTALL PR CROSS AND WATER MAIN AND VALVES (N2), (N3) AND (N4)
- PRESSURE TEST USING PR VALVE (N1) AS SOURCE POINT AND CHLORINATE USING VALVES (N2), (N3) AND (N4) AS WHIPS
- CITY TO OPEN VALVES
- TRANSFER SERVICE FROM EX WATER MAIN TO PR WATER MAIN
- WHEN REQUESTED BY CONTRACTOR, CITY WILL CLOSE VALVES TO ISOLATE THE WORK AREA. CONNECT TO NOYES AND GREEN BAY WATER MAINS
- REMOVE EX VALVES 10021 AND 10022
- CITY TO OPEN VALVES

**GREEN BAY AVE (SIMPSON TO EMERSON)**

- CONSTRUCT PR WATER MAIN FROM PR VALVE (S2) TO PR VALVE (A1), INCLUDING ALL VALVES AND FIRE HYDRANTS
- PRESSURE TEST AND CHLORINATE USING PR VALVE (S2) AS SOURCE POINT AND ASBURY FHA1 AS WHIP
- CITY TO OPEN VALVE
- TRANSFER SERVICES FROM EX WATER MAIN TO PR WATER MAIN ON GREEN BAY AND ASBURY FROM SIMPSON TO EMERSON
- WHEN REQUESTED BY CONTRACTOR, CITY WILL CLOSE VALVES TO ISOLATE THE WORK AREA. CONNECT FOSTER/GREEN BAY WATER MAIN BY SWABBING AND CAP OPEN END OF EX WATER MAIN
- CITY TO OPEN VALVE EX 15039 ON FOSTER WEST OF GREEN BAY
- REMOVE EX VALVES
  - o 10012 AT SIMPSON/GREEN BAY
  - o 15045 AT SIMPSON/GREEN BAY
  - o 15048 AT FOSTER/GREEN BAY
  - o 15061 ON GREEN BAY BETWEEN FOSTER AND SIMPSON
- WHEN REQUESTED BY CONTRACTOR, CITY WILL CLOSE VALVES TO ISOLATE THE WORK AREA. REMOVE EX VALVE 15054 AT EMERSON/ASBURY AND CAP OPEN ENDS OF PIPE
- INSTALL PR VALVE (E1) AT EMERSON/ASBURY
- CONNECT PR VALVE (A1) TO WATER MAIN WITH TEE
- CITY TO OPEN VALVES

**RIDGE AVE & EMERSON ST INTERSECTION**

- REMOVE TWO TEES AND REPLACE WITH STRAIGHT PIPE AND 90° BEND
- INSTALL PR VALVES (R1) AND (E2) AT EMERSON/RIDGE
- CITY TO OPEN VALVES

**EMERSON ST (GREEN BAY TO RIDGE)**

- CONSTRUCT WATER MAIN FROM PR VALVE (E2) TO PR VALVE (E1) WHILE INSTALLING PR VALVE (R2) AND PR FIRE HYDRANT ASSEMBLY NEAR (E1) IN THE PROCESS
- PRESSURE TEST AND CHLORINATE USING PR VALVE (E2) AS SOURCE POINT AND PR FIRE HYDRANT NEAR (E1) AS WHIP
- CITY TO OPEN VALVES
- TRANSFER SERVICE TO PROPERTY 1901 ON EMERSON/GREEN BAY
- TIE PR WATER MAIN INTO EX WATER MAIN ON EMERSON AND CAP EX WATER MAIN ON EMERSON

**RIDGE AVE (EMERSON TO GARNETT)**

- CONSTRUCT PR WATER MAIN FROM PR VALVE (R2) TO PR VALVE (R4) AND PR VALVE (R3) WHILE INSTALLING THESE PR VALVES AND FIRE HYDRANT
- PRESSURE TEST AND CHLORINATE WATER MAIN FROM PR VALVE (R4) AS A SOURCE POINT TO PR VALVE (R4) AND PR VALVE (R3) AS WHIPS
- OPEN EX VALVES
- REMOVE EX VALVE 14065
- CAP OPEN EX ENDS OF PIPE
- CONNECT PR WATER MAIN TO EX WATER MAIN AND (R4) TO (R3) AND CAP OPEN EX WATER MAIN ENDS
- CITY TO OPEN VALVES

PLAN	SURVEYED	DATE
NOTE BOOK	PLOTTED	
NO.	GRADES CHECKED	
	STRUCTURE NOTATIONS CHECKED	
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PROFILE	SURVEYED	DATE
NOTE BOOK	PLOTTED	
NO.	GRADES CHECKED	
	STRUCTURE NOTATIONS CHECKED	

FILE NAME: ERIGEL\_13-0270-00.dgn

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USER NAME = bhenrichs	DESIGNED - BAH	REVISED - -
PLOT SCALE = 1:8000' / 1"	DRAWN - BAH	REVISED - -
PLOT DATE = 1/7/2016	CHECKED - MAR	REVISED - -
	DATE - 10/9/2015	REVISED - -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**WATER MAIN PLAN AND PROFILES  
WATER MAIN SEQUENCING OF CONSTRUCTION**

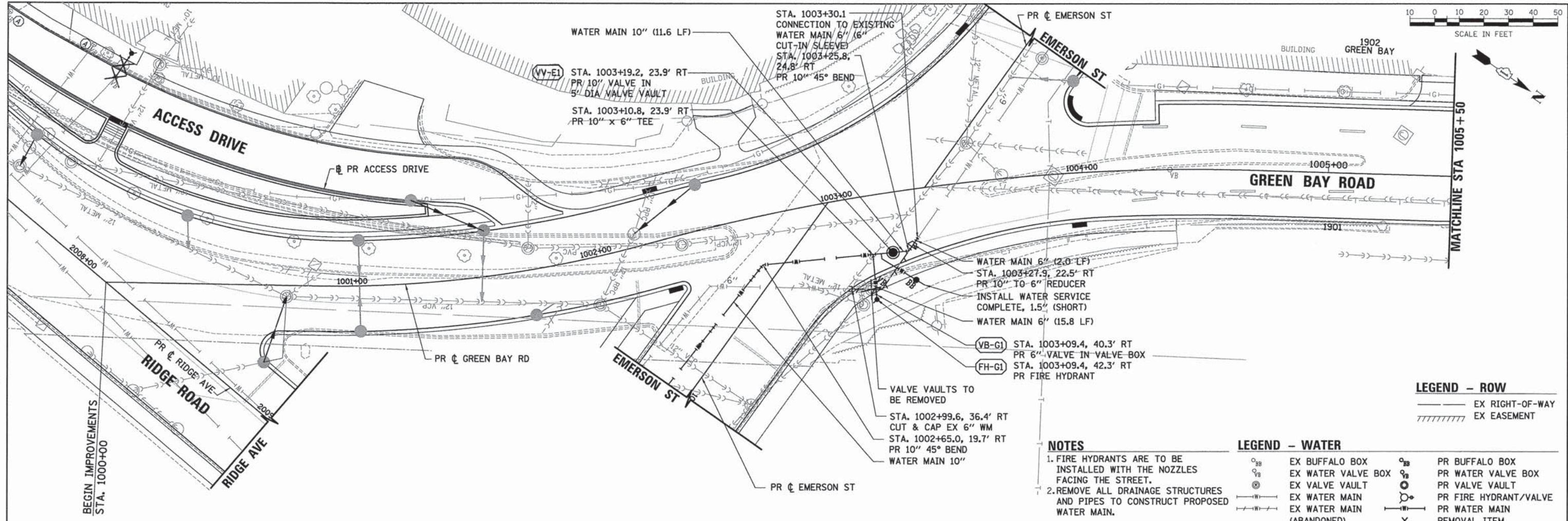
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	287
CONTRACT NO. 61C32			ILLINOIS FED. AID PROJECT	



PLAN	SURVEYED	BY	DATE
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	NOTED		
	RT. OF WAY CHECKED		
	NO. _____		
	FILE NAME		

PROFILE	SURVEYED	BY	DATE
	PLOTTED		
	NOTED		
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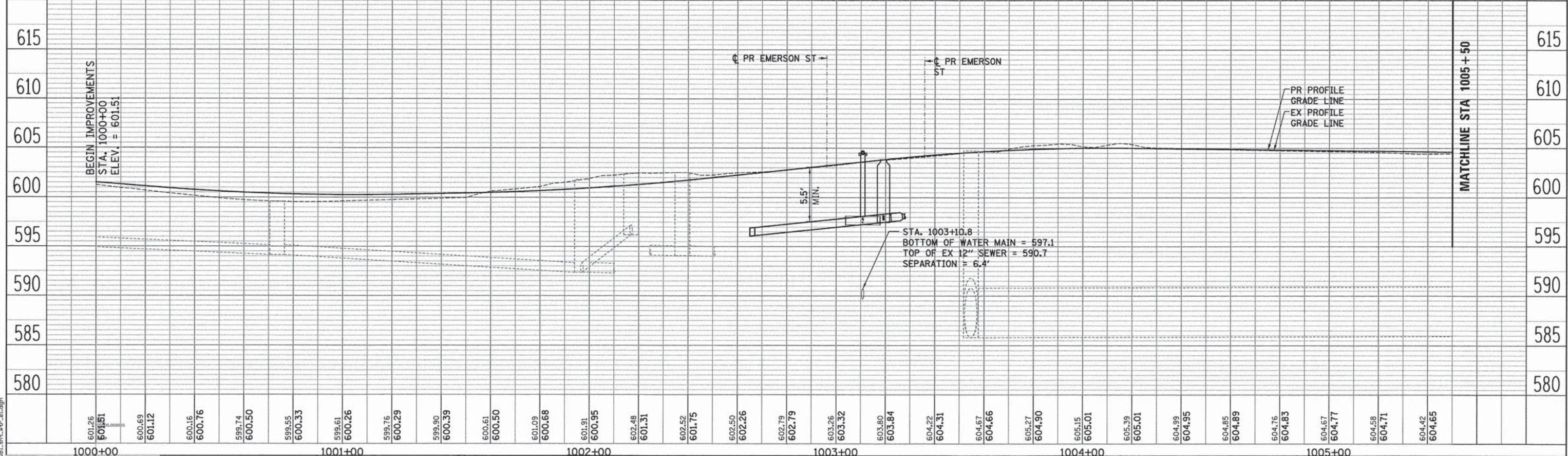
**LEGEND - ROW**

---	EX RIGHT-OF-WAY
////	EX EASEMENT

- NOTES**
- FIRE HYDRANTS ARE TO BE INSTALLED WITH THE NOZZLES FACING THE STREET.
  - REMOVE ALL DRAINAGE STRUCTURES AND PIPES TO CONSTRUCT PROPOSED WATER MAIN.

**LEGEND - WATER**

○ <sub>BB</sub>	EX BUFFALO BOX	○ <sub>BB</sub>	PR BUFFALO BOX
○ <sub>VB</sub>	EX WATER VALVE BOX	○ <sub>VB</sub>	PR WATER VALVE BOX
○	EX VALVE VAULT	○	PR VALVE VAULT
— —	EX WATER MAIN	— —	PR FIRE HYDRANT/VALVE
— —	EX WATER MAIN (ABANDONED)	— —	PR WATER MAIN
X		X	REMOVAL ITEM



601.26	601.51	600.69	601.12	600.16	600.76	599.74	600.50	599.55	600.33	599.61	600.26	599.76	600.29	599.90	600.39	600.61	600.50	601.09	600.68	601.91	600.95	602.48	601.31	602.52	601.75	602.50	602.26	602.79	602.79	603.26	603.32	603.80	603.84	604.22	604.31	604.67	604.66	605.27	604.90	605.15	605.01	605.39	605.01	604.99	604.95	604.85	604.89	604.76	604.83	604.67	604.77	604.58	604.71	604.42	604.65
1000+00										1001+00					1002+00					1003+00					1004+00					1005+00																									

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Tel: 312.467.1000  
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USER NAME = bhanrisha	DESIGNED - BAH	REVISED - -
PLLOT SCALE = 28,0000' / 1"	DRAWN - BAH	REVISED - -
PLLOT DATE = 1/7/2016	CHECKED - MAR	REVISED - -
	DATE - 10/9/2015	REVISED - -

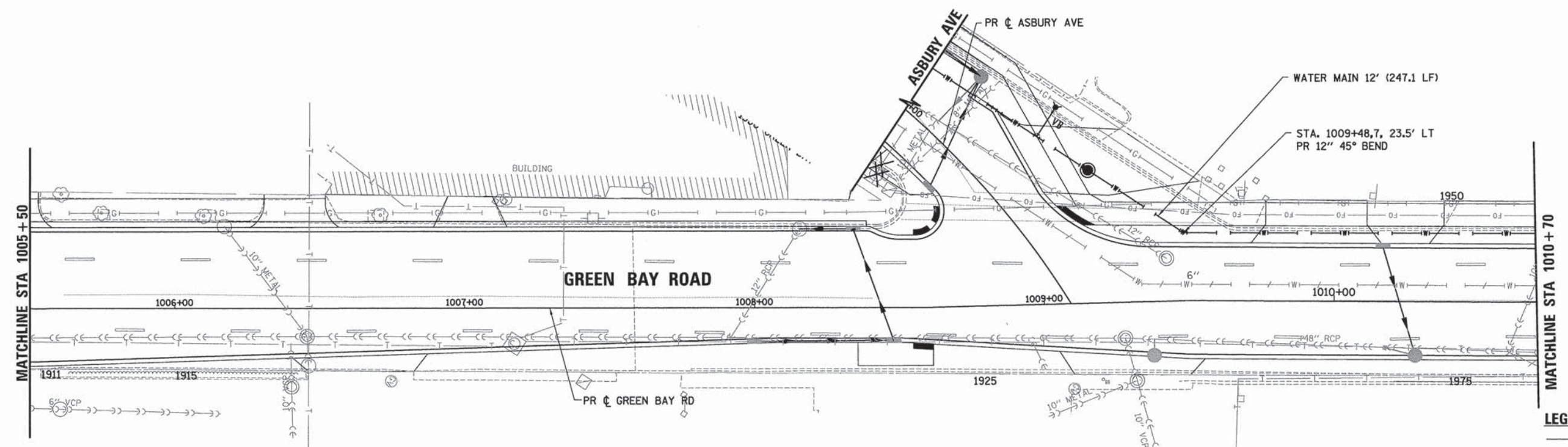
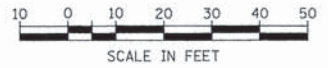
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**WATER MAIN PLAN AND PROFILES**  
**GREEN BAY ROAD**

SCALE: SHEET 2 OF 18 SHEETS STA. TO STA.

F.A. RT#	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	288
				CONTRACT NO. 61C32
				ILLINOIS FED. AID PROJECT



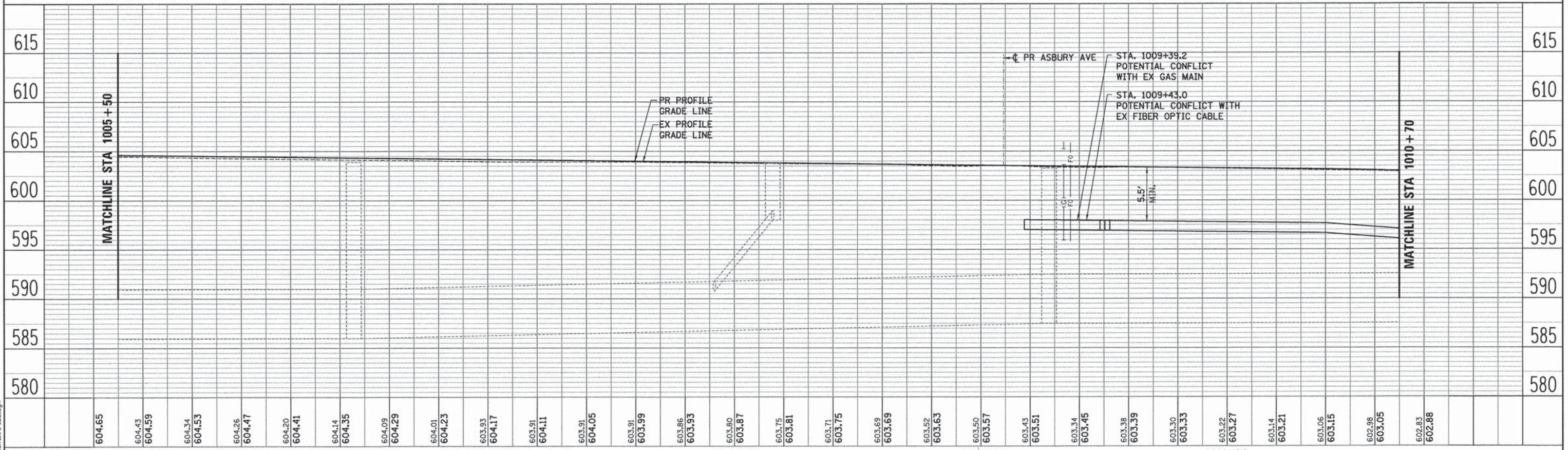


**LEGEND - ROW**  
 --- EX RIGHT-OF-WAY  
 // // // EX EASEMENT

**NOTES**  
 1. FIRE HYDRANTS ARE TO BE INSTALLED WITH THE NOZZLES FACING THE STREET.  
 2. REMOVE ALL DRAINAGE STRUCTURES AND PIPES TO CONSTRUCT PROPOSED WATER MAIN.

**LEGEND - WATER**

	EX BUFFALO BOX		PR BUFFALO BOX
	EX WATER VALVE BOX		PR WATER VALVE BOX
	EX VALVE VAULT		PR VALVE VAULT
	EX WATER MAIN		PR FIRE HYDRANT/VALVE
	EX WATER MAIN (ABANDONED)		PR WATER MAIN
			REMOVAL ITEM



<b>ESI CONSULTANTS, LTD.</b> USER NAME = bhenrichs DESIGNED - BAH DRAWN - BAH CHECKED - MAR DATE - 10/9/2015		REVISIONS REVISIONS REVISIONS REVISIONS		<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>				<b>WATER MAIN PLAN AND PROFILES</b> <b>GREEN BAY ROAD</b>				F.A. RTE. - SECTION 13-00270-00-CH COUNTY COOK TOTAL SHEETS 393 SHEET NO. 289 CONTRACT NO. 61C32	
PLOT SCALE = 20.0000' / 1"		PLOT DATE = 1/7/2016		SCALE:				SHEET 3 OF 18 SHEETS STA. TO STA.				ILLINOIS FED. AID PROJECT	

PLAN	DATE
SURVEYED	BY
ALIGNED	BY
CHECKED	BY
NO. OF WAY CHECKED	
NO. OF FILE CHECKED	

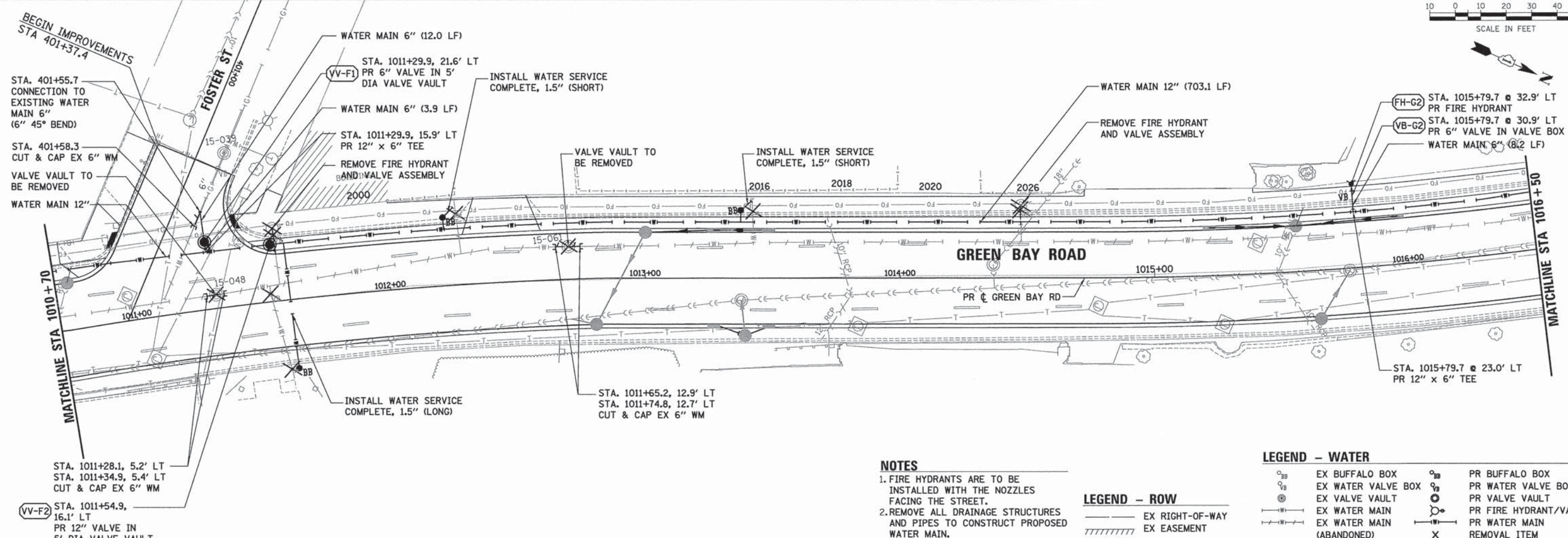
PROFILE	DATE
SURVEYED	BY
GRADES CHECKED	BY
NO. OF NOTED	
STRUCTURE NOTATIONS	
CHRD	

FILE NAME: ERGB1-shl-vr-82.dgn





DATE	
BY	
PLAN	SUBMITTED
	PLOTTED
	ALIGNED
	CHECKED
	NO. _____
	CADD FILE NAME



**NOTES**

1. FIRE HYDRANTS ARE TO BE INSTALLED WITH THE NOZZLES FACING THE STREET.
2. REMOVE ALL DRAINAGE STRUCTURES AND PIPES TO CONSTRUCT PROPOSED WATER MAIN.

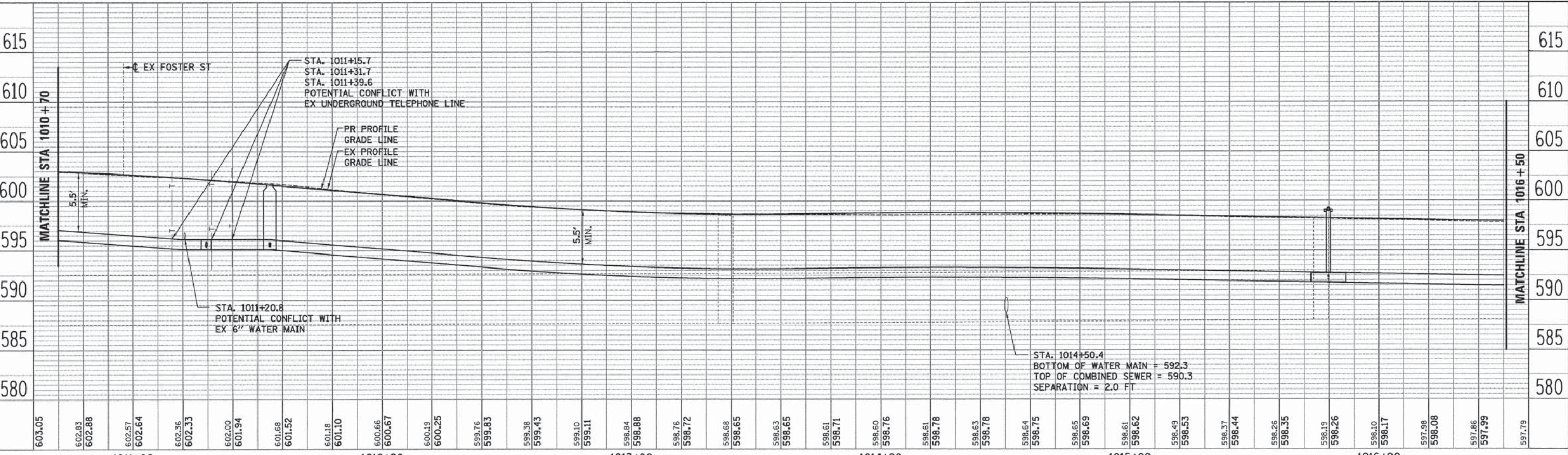
**LEGEND - ROW**

- EX RIGHT-OF-WAY
- ////// EX EASEMENT

**LEGEND - WATER**

- ⊙ EX BUFFALO BOX
- ⊙ EX WATER VALVE BOX
- ⊙ EX VALVE VAULT
- |— EX WATER MAIN
- |— EX WATER MAIN (ABANDONED)
- ⊙ PR BUFFALO BOX
- ⊙ PR WATER VALVE BOX
- ⊙ PR VALVE VAULT
- ⊙ PR FIRE HYDRANT/VALVE
- ⊙ PR WATER MAIN
- X REMOVAL ITEM

DATE	
BY	
PROFILE	SUBMITTED
	PLOTTED
	GRADES CHECKED
	STRUCTURE NOTATIONS CHKD
	NO. _____

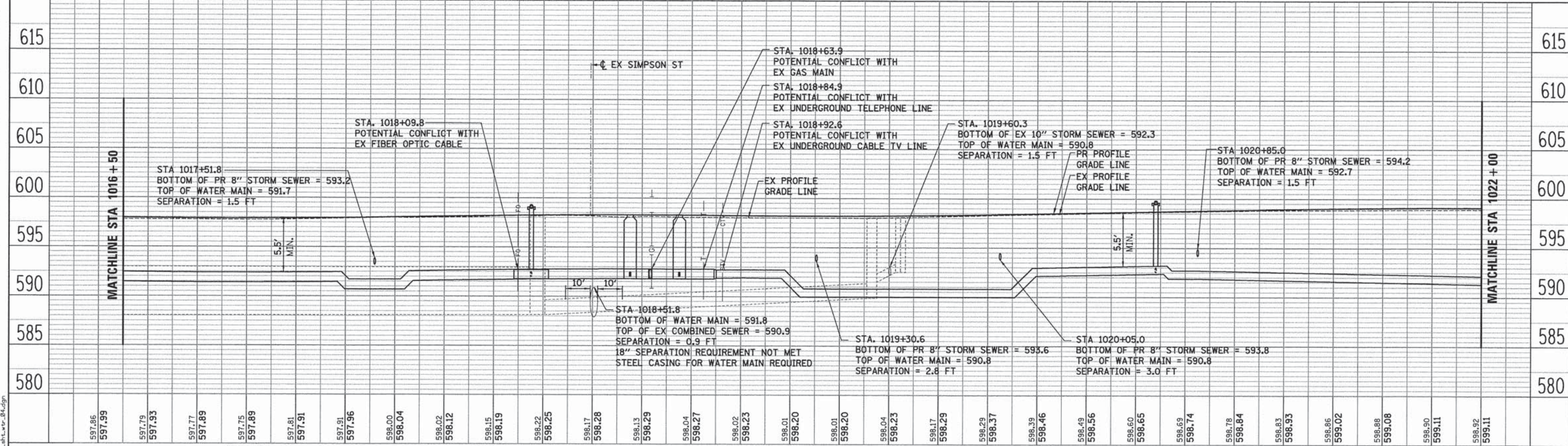
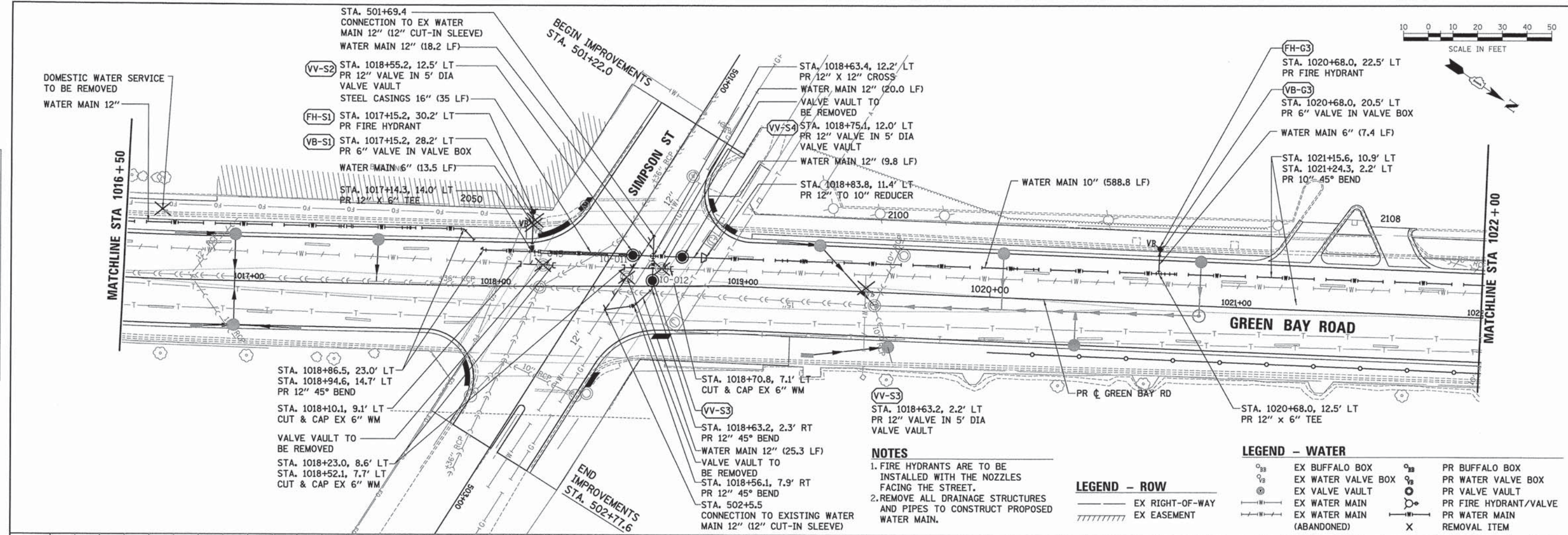


603.05	602.83	602.88	602.57	602.64	602.36	602.33	602.00	601.94	601.68	601.52	601.18	601.10	600.66	600.67	600.19	600.25	599.76	599.83	599.38	599.43	599.10	599.11	598.84	598.88	598.76	598.72	598.68	598.65	598.63	598.65	598.61	598.71	598.60	598.76	598.61	598.78	598.63	598.78	598.64	598.75	598.65	598.69	598.61	598.62	598.49	598.53	598.37	598.44	598.26	598.35	598.19	598.26	598.10	598.17	597.98	598.08	597.86	597.99	597.79
1011+00										1012+00					1013+00					1014+00					1015+00					1016+00																													
USER NAME = bhanrjcha										DESIGNED - BAH					REVISED - -					STATE OF ILLINOIS					WATER MAIN PLAN AND PROFILES					F.A. RTE.																													
DRAWN - BAH										CHECKED - MAR					DATE - 10/9/2015					DEPARTMENT OF TRANSPORTATION					GREEN BAY ROAD					SECTION 13-00270-00-CH					COUNTY COOK					TOTAL SHEETS 393					SHEET NO. 290														
PLT SCALE = 20.0000' / 1"										PLT DATE = 1/7/2016					SCALE:					SHEET 4 OF 18 SHEETS					STA. TO STA.					CONTRACT NO. 61C32					ILLINOIS FED. AID PROJECT																								



PLAN	SURVEYED	BY	DATE
	PLOTTED		
	CHECKED		
	DATE		
	NO.		

PROFILE	SURVEYED	BY	DATE
	PLOTTED		
	CHECKED		
	DATE		
	NO.		

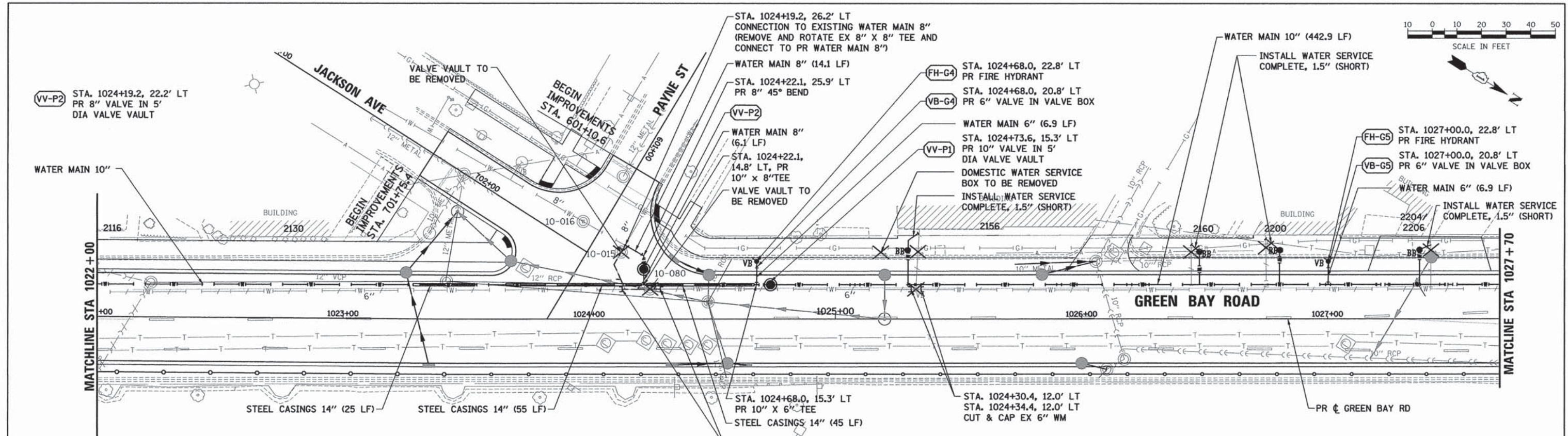


597.86	597.99	597.79	597.93	597.77	597.89	597.75	597.89	597.81	597.91	597.91	597.96	598.00	598.04	598.02	598.12	598.15	598.19	598.22	598.25	598.17	598.28	598.13	598.29	598.04	598.27	598.02	598.23	598.01	598.20	598.01	598.20	598.04	598.23	598.17	598.29	598.29	598.37	598.39	598.46	598.49	598.56	598.60	598.65	598.69	598.74	598.78	598.84	598.83	598.93	598.86	599.02	598.88	599.08	598.90	599.11	598.92	599.11																																
1017+00										1018+00										1019+00										1020+00										1021+00										1022+00																																							
USER NAME = bhanracha										DESIGNED - BAH										REVISIONS										WATER MAIN PLAN AND PROFILES										GREEN BAY ROAD										SECTION 13-00270-00-CH										COUNTY COOK										TOTAL SHEETS 393										SHEET NO. 291									
PLOT SCALE = 20.0000' / 1" =										CHECKED - MAR										DATE = 10/9/2015										SCALE:										SHEET 5 OF 18 SHEETS										STA. TO STA.										CONTRACT NO. 61C32										ILLINOIS FED. AID PROJECT																			



PLAN	SURVEYED	DATE
	PLOTTED	
	CHECKED	
	BY	
	NO.	
	FILE NAME	

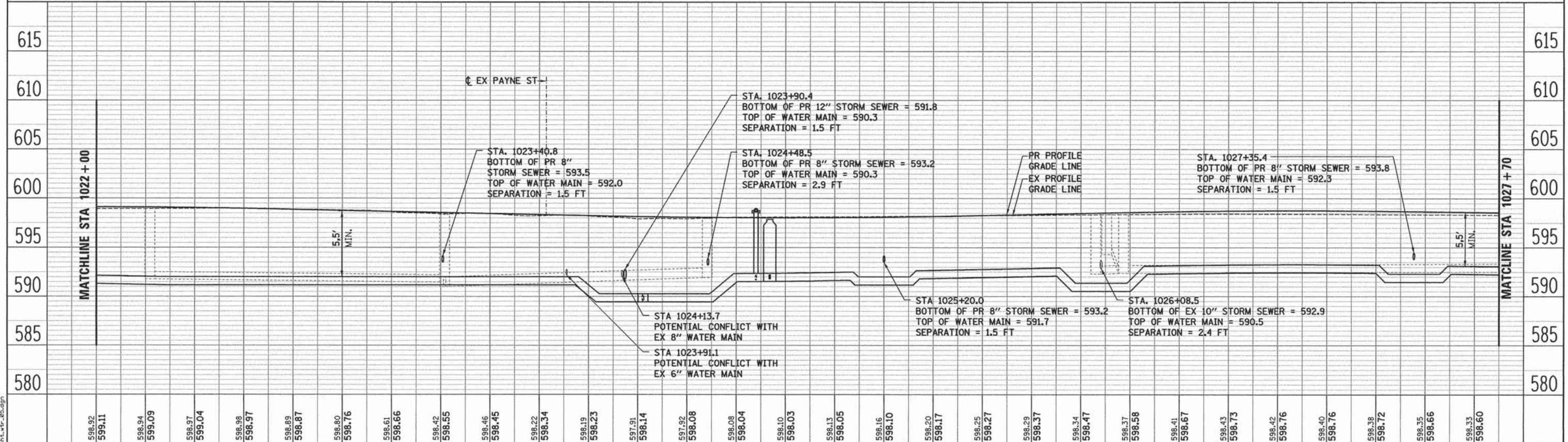
PROFILE	SURVEYED	DATE
	PLOTTED	
	CHECKED	
	BY	
	NO.	
	FILE NAME	



- NOTES**
- FIRE HYDRANTS ARE TO BE INSTALLED WITH THE NOZZLES FACING THE STREET.
  - REMOVE ALL DRAINAGE STRUCTURES AND PIPES TO CONSTRUCT PROPOSED WATER MAIN.

- LEGEND - ROW**
- EX RIGHT-OF-WAY
  - EX EASEMENT

- LEGEND - WATER**
- EX BUFFALO BOX
  - EX WATER VALVE BOX
  - EX VALVE VAULT
  - EX WATER MAIN
  - EX WATER MAIN (ABANDONED)
  - PR BUFFALO BOX
  - PR WATER VALVE BOX
  - PR VALVE VAULT
  - PR FIRE HYDRANT/VALVE
  - PR WATER MAIN
  - REMOVAL ITEM



1022+00	598.92	599.11	598.94	599.09	598.97	599.04	598.98	598.97	598.89	598.87	598.80	598.76	598.61	598.66	598.42	598.55	598.46	598.45	598.22	598.34	598.19	598.23	597.91	598.14	597.92	598.08	598.08	598.04	598.10	598.03	598.13	598.05	598.16	598.10	598.20	598.17	598.25	598.27	598.29	598.37	598.34	598.47	598.37	598.58	598.41	598.67	598.43	598.73	598.42	598.76	598.40	598.76	598.38	598.72	598.35	598.66	598.33	598.60
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USER NAME =	bhenrichs
DESIGNED -	BAH
DRAWN -	BAH
CHECKED -	MAR
DATE -	10/9/2015
PLotted SCALE =	20.0000' / 1" =
PLotted DATE =	1/28/2016

DESIGNED -	BAH	REVISED -	-
DRAWN -	BAH	REVISED -	-
CHECKED -	MAR	REVISED -	-
DATE -	10/9/2015	REVISED -	-

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SCALE:	SHEET 6 OF 18 SHEETS	STA. TO STA.
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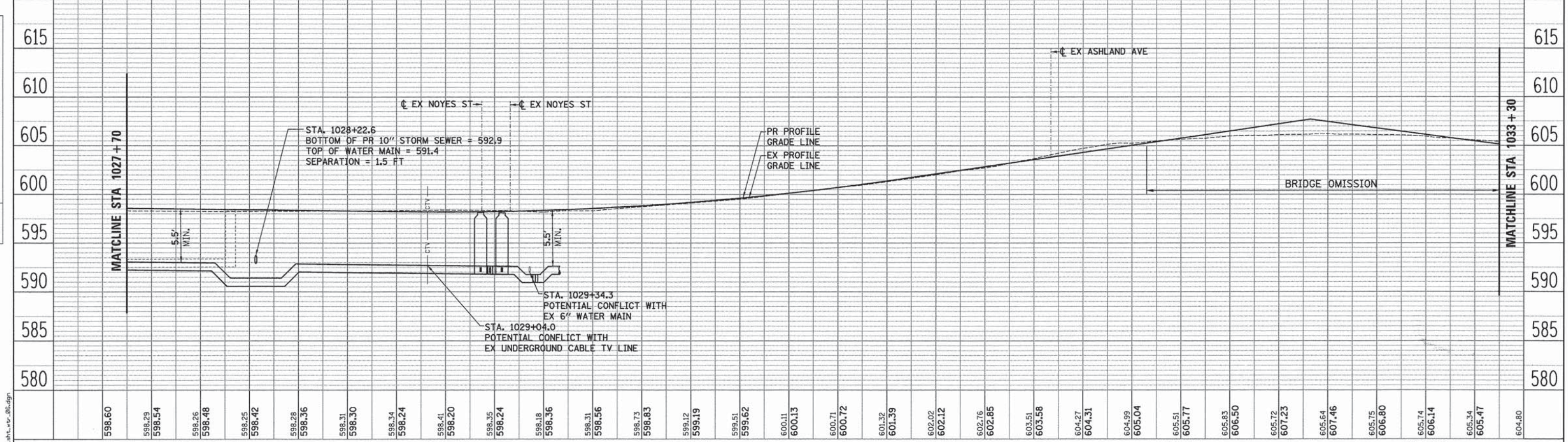
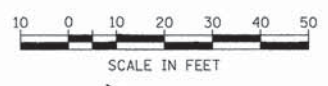
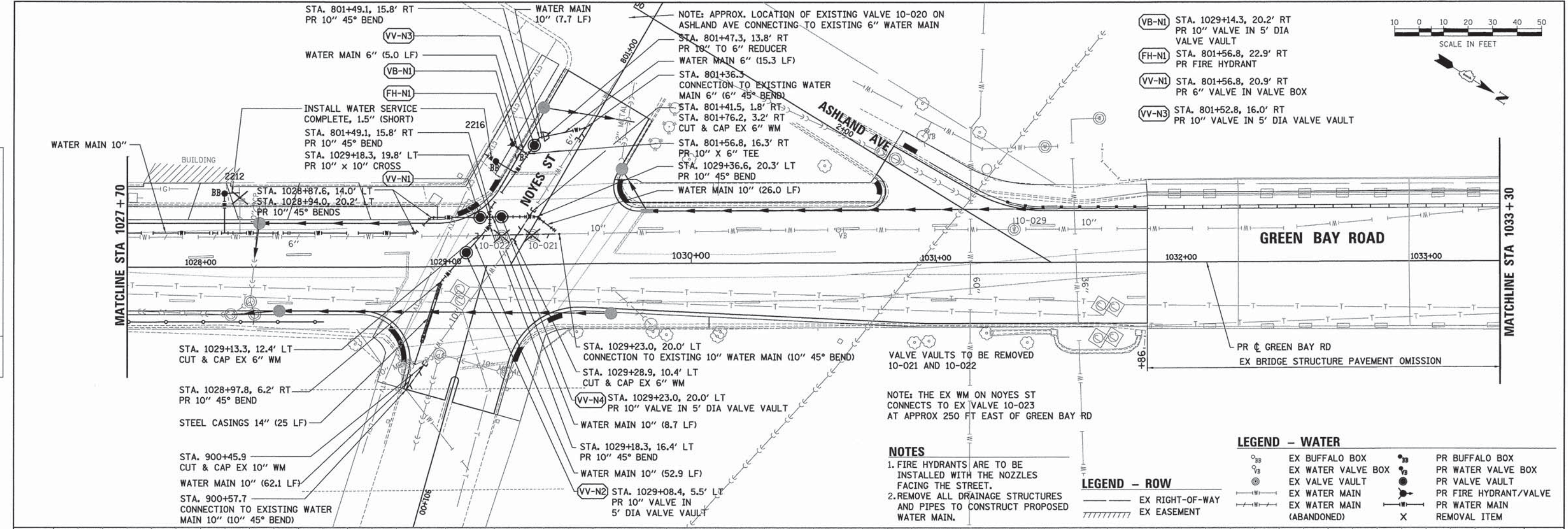
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	292
CONTRACT NO. 61C32				
ILLINOIS FED. AID PROJECT				





DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
 PLAN SURVEYED: \_\_\_\_\_  
 ALIGNMENT CHECKED: \_\_\_\_\_  
 RT. OF WAY CHECKED: \_\_\_\_\_  
 NO. \_\_\_\_\_ PLOD FILE NAME: \_\_\_\_\_

DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
 PROFILE SURVEYED: \_\_\_\_\_  
 GRADES CHECKED: \_\_\_\_\_  
 B.M. NOTED: \_\_\_\_\_  
 NO. \_\_\_\_\_ STRUCTURE NOTATIONS CHKD: \_\_\_\_\_



598.60	598.29	598.54	598.26	598.48	598.25	598.42	598.28	598.36	598.31	598.30	598.34	598.24	598.41	598.20	598.35	598.24	598.18	598.36	598.31	598.56	598.73	598.83	599.12	599.19	599.51	599.62	600.11	600.13	600.71	600.72	601.32	601.39	602.02	602.12	602.76	602.85	603.51	603.58	604.27	604.31	604.99	605.04	605.51	605.77	605.83	606.50	605.72	607.23	605.64	607.46	605.75	606.80	605.74	606.14	605.34	605.47	604.80		
1028+00										1029+00										1030+00										1031+00										1032+00										1033+00									

**ESI** CONSULTANTS, LTD.  
 USER NAME = bhansrcha  
 DESIGNED - BAH  
 DRAWN - BAH  
 CHECKED - MAR  
 DATE - 10/9/2015

REVISIONS:  
 REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

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

**WATER MAIN PLAN AND PROFILES**  
**GREEN BAY ROAD**  
 SCALE: SHEET 7 OF 18 SHEETS STA. TO STA.

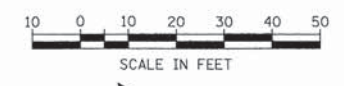
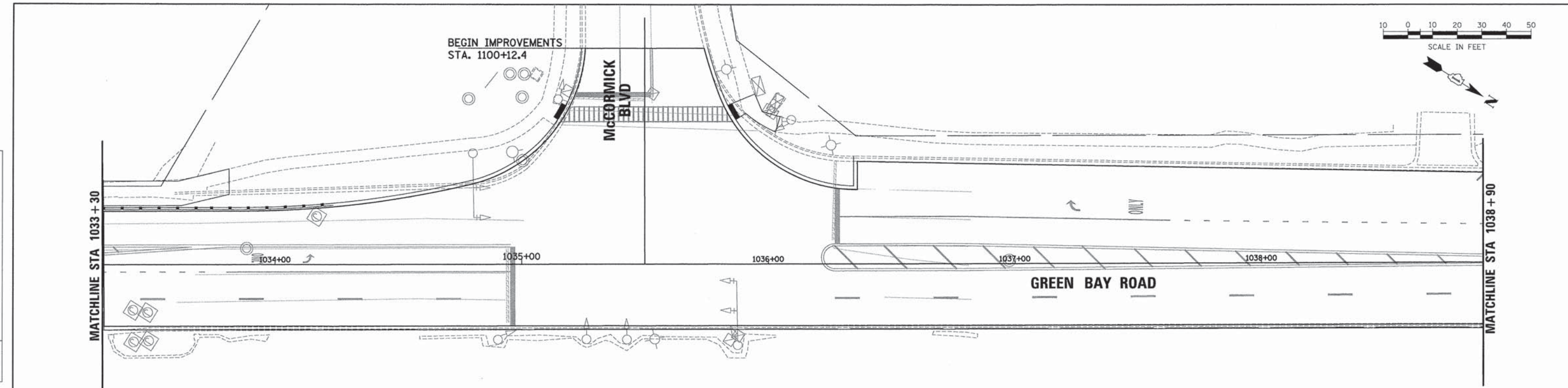
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	293
CONTRACT NO. 61C32			ILLINOIS FED. AID PROJECT	

FILE NAME: ERGB1-shl-vr-06.dgn

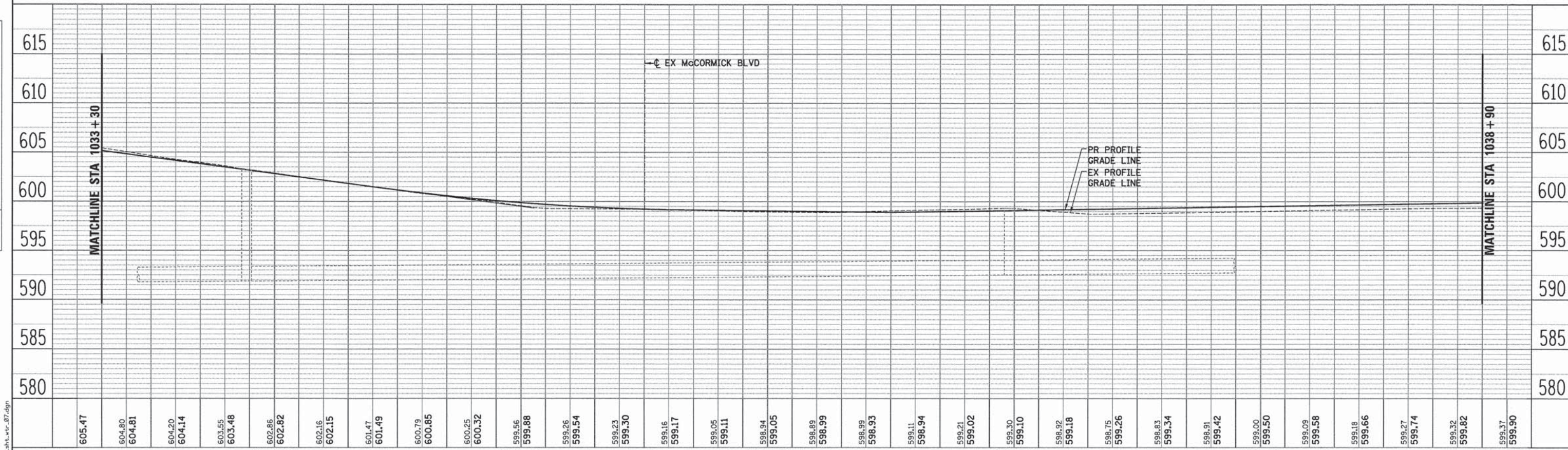


PLAN	SURVEYED	BY	DATE
	NOTE BOOK		
	NO.		
	ALIGNED		
	RT. OF WAY CHECKED		
	NO.		
	FILE NAME		

PROFILE	SURVEYED	BY	DATE
	GRADES CHECKED		
	NO.		
	STRUCTURE		
	NOTATION		
	CHWD		



- LEGEND - ROW**
- EX RIGHT-OF-WAY
  - EX EASEMENT
- LEGEND - WATER**
- EX BUFFALO BOX
  - EX WATER VALVE BOX
  - EX VALVE VAULT
  - EX WATER MAIN
  - EX WATER MAIN (ABANDONED)
  - PR BUFFALO BOX
  - PR WATER VALVE BOX
  - PR VALVE VAULT
  - PR FIRE HYDRANT/VALVE
  - PR WATER MAIN
  - REMOVAL ITEM



ESI CONSULTANTS, LTD.

1300 N. LaSalle Street, Suite 1400  
Chicago, IL 60610  
Tel: 312.487.1000  
www.esiconsultants.com

USER NAME = bhenrichs	DESIGNED - BAH	REVISED -
	DRAWN - BAH	REVISED -
PLOT SCALE = 20.0000' / 1" =	CHECKED - MAR	REVISED -
PLOT DATE = 1/7/2016	DATE - 10/9/2015	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

WATER MAIN PLAN AND PROFILES GREEN BAY ROAD			
SCALE:	SHEET 8 OF 18 SHEETS	STA. TO STA.	

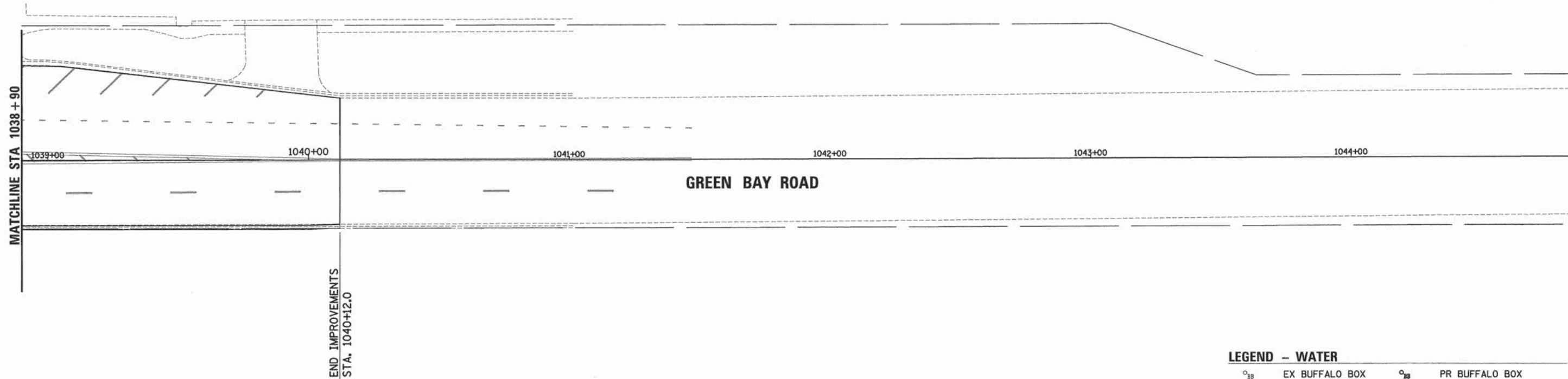
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	294
CONTRACT NO. 61C32				
ILLINOIS FED. AID PROJECT				

FILE NAME: EPG01-sh-l-vr-07.dgn





PLAN	SURVEYED	BY	DATE
	PLOTTED		
	CHECKED		
	PI. OF WAY CHECKED		
	CADD FILE NAME		
	NO.		



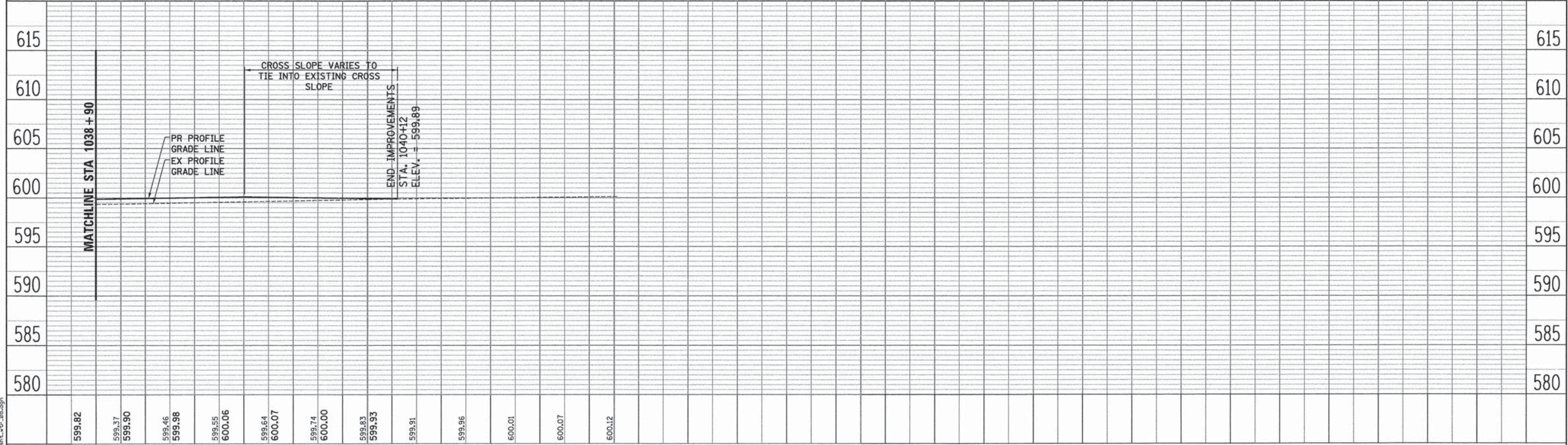
**LEGEND - ROW**

- EX RIGHT-OF-WAY
- ////// EX EASEMENT

**LEGEND - WATER**

- <sub>BB</sub> EX BUFFALO BOX
- <sub>VB</sub> EX WATER VALVE BOX
- ⊙ EX VALVE VAULT
- |W|— EX WATER MAIN
- |W|— EX WATER MAIN (ABANDONED)
- <sub>BB</sub> PR BUFFALO BOX
- <sub>VB</sub> PR WATER VALVE BOX
- ⊙ PR VALVE VAULT
- |W|— PR FIRE HYDRANT/VALVE
- |W|— PR WATER MAIN
- X REMOVAL ITEM

PROFILE	SURVEYED	BY	DATE
	PLOTTED		
	CHECKED		
	B.M. NOTED		
	STRUCTURE NOTATION CHKD		
	NO.		



FILE NAME: ER081\_011\_01\_01\_01.dgn

**ESI**  
ESI CONSULTANTS, LTD.  
1000 W. WASHINGTON ST. SUITE 200  
CHICAGO, IL 60606  
TEL: 312.467.1000  
WWW.ESI-CONSULTANTS.COM

USER NAME = bhenrichs	DESIGNED = BAH	REVISED = -
	DRAWN = BAH	REVISED = -
PLOT SCALE = 20.0000' / 1"	CHECKED = MAR	REVISED = -
PLOT DATE = 1/7/2016	DATE = 10/9/2015	REVISED = -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>WATER MAIN PLAN AND PROFILES GREEN BAY ROAD</b>			
SCALE:	SHEET 9 OF 18 SHEETS	STA.	TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	295
CONTRACT NO. 61C32				
ILLINOIS FED. AID PROJECT				



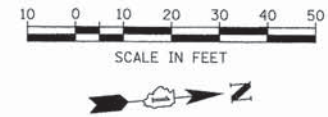
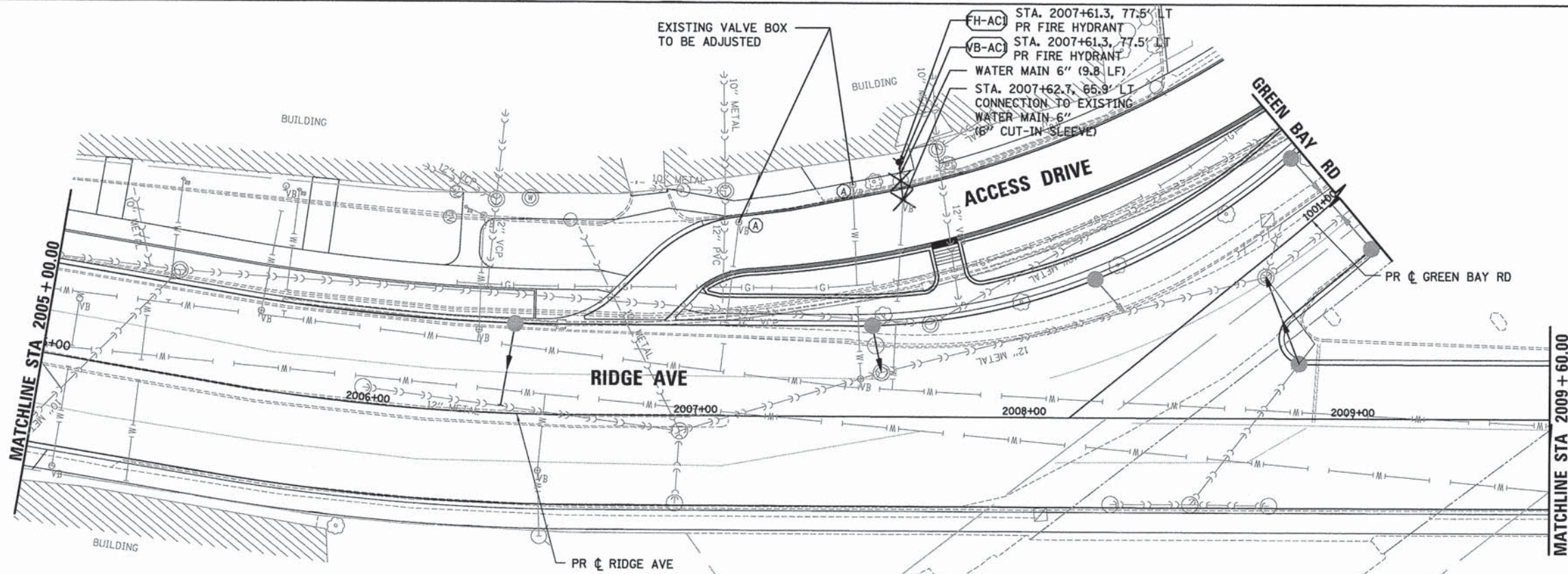




PLAN	SURVEYED	BY	DATE
	PLANNED		
	GRADES CHECKED		
	RT. OF WAY CHECKED		
	POD FILE NAME		
	NO.		

PROFILE	SURVEYED	BY	DATE
	B.M. NOTED		
	STRUCTURE NOTATIONS CHFD		
	NO.		

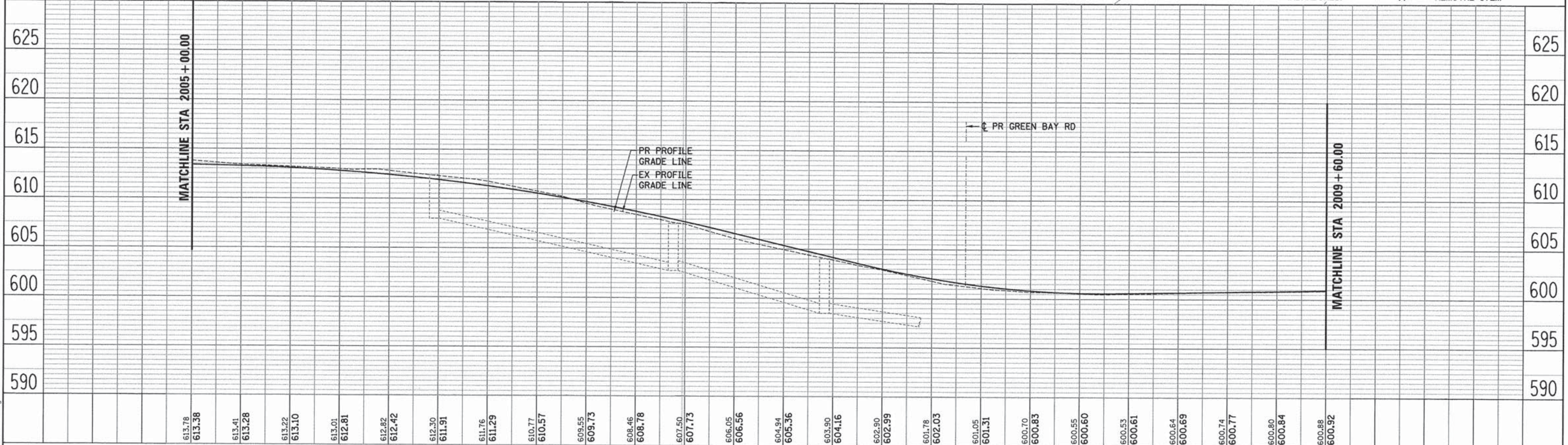
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**LEGEND - ROW**  
 --- EX RIGHT-OF-WAY  
 // // // // EX EASEMENT

**LEGEND - WATER**

	EX BUFFALO BOX		PR BUFFALO BOX
	EX WATER VALVE BOX		PR WATER VALVE BOX
	EX VALVE VAULT		PR VALVE VAULT
	EX WATER MAIN		PR FIRE HYDRANT/VALVE
	EX WATER MAIN (ABANDONED)		PR WATER MAIN
			REMOVAL ITEM



613.78	613.38	613.41	613.28	613.22	613.10	613.01	612.81	612.82	612.42	612.30	611.91	611.76	611.29	610.77	610.57	609.55	609.73	608.46	608.78	607.50	607.73	606.05	606.56	604.94	605.36	603.90	604.16	602.90	602.99	601.78	602.03	601.05	601.31	600.70	600.83	600.55	600.60	600.53	600.61	600.64	600.69	600.74	600.77	600.80	600.84	600.88	600.92
2005+00		2006+00				2007+00				2008+00				2009+00																																	

**ESI** ESI CONSULTANTS, LTD.  
 100 N. WILSON AVENUE, SUITE 100  
 DEERFIELD, ILLINOIS 60015  
 TEL: 847.938.8800 FAX: 847.938.8801  
 WWW.ESI-CONSULTANTS.COM

USER NAME = bhenrichs	DESIGNED - BAH	REVISED - -
PLOT SCALE = 28.0000' / 1"	DRAWN - BAH	REVISED - -
PLOT DATE = 1/7/2016	CHECKED - MAR	REVISED - -
	DATE - 10/9/2015	REVISED - -

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

**WATER MAIN PLAN AND PROFILES**  
**RIDGE AVENUE**

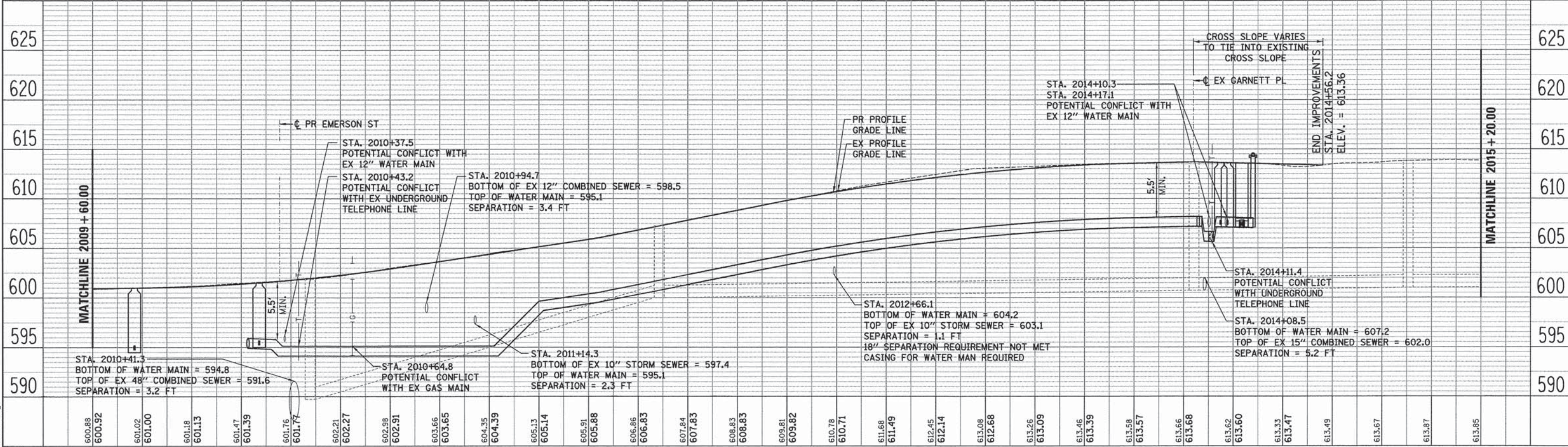
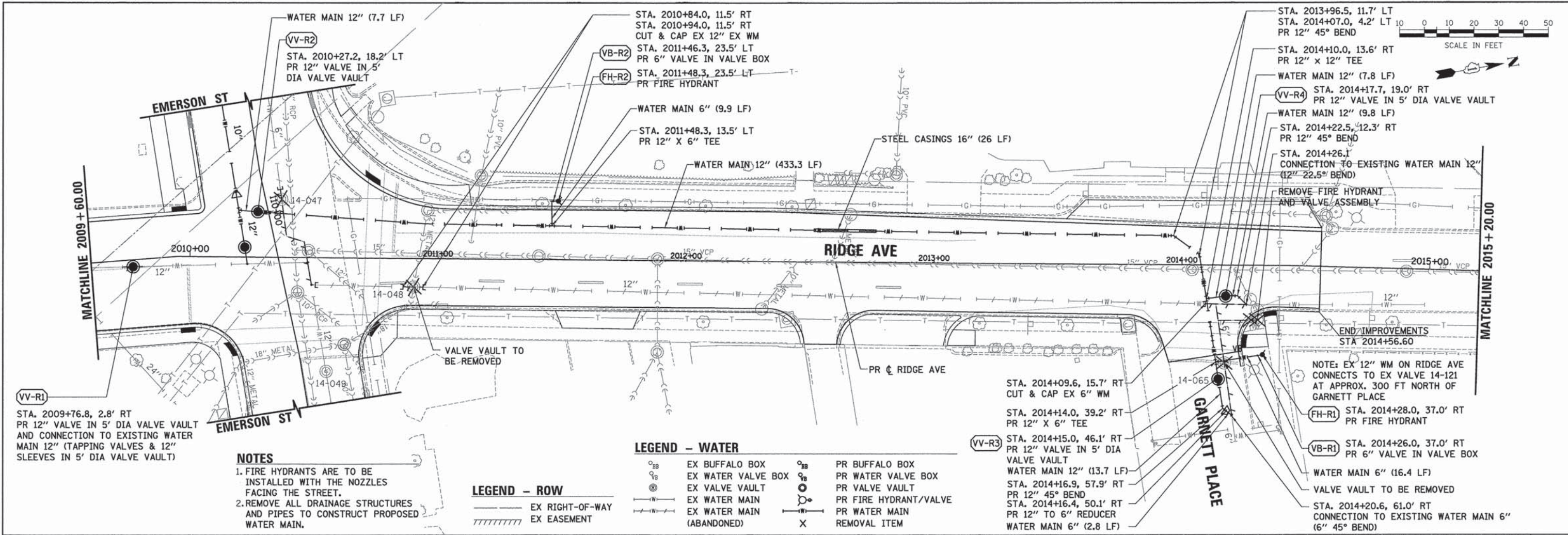
SCALE: SHEET 11 OF 18 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	297
CONTRACT NO. 61C32			ILLINOIS FED. AID PROJECT	



DATE	
BY	
REVISIONS	
PLANNED	
CHECKED	
NO. 1	
NO. 2	
NO. 3	
NO. 4	
NO. 5	
NO. 6	
NO. 7	
NO. 8	
NO. 9	
NO. 10	

DATE	
BY	
REVISIONS	
PLANNED	
CHECKED	
NO. 1	
NO. 2	
NO. 3	
NO. 4	
NO. 5	
NO. 6	
NO. 7	
NO. 8	
NO. 9	
NO. 10	



- NOTES**
- FIRE HYDRANTS ARE TO BE INSTALLED WITH THE NOZZLES FACING THE STREET.
  - REMOVE ALL DRAINAGE STRUCTURES AND PIPES TO CONSTRUCT PROPOSED WATER MAIN.

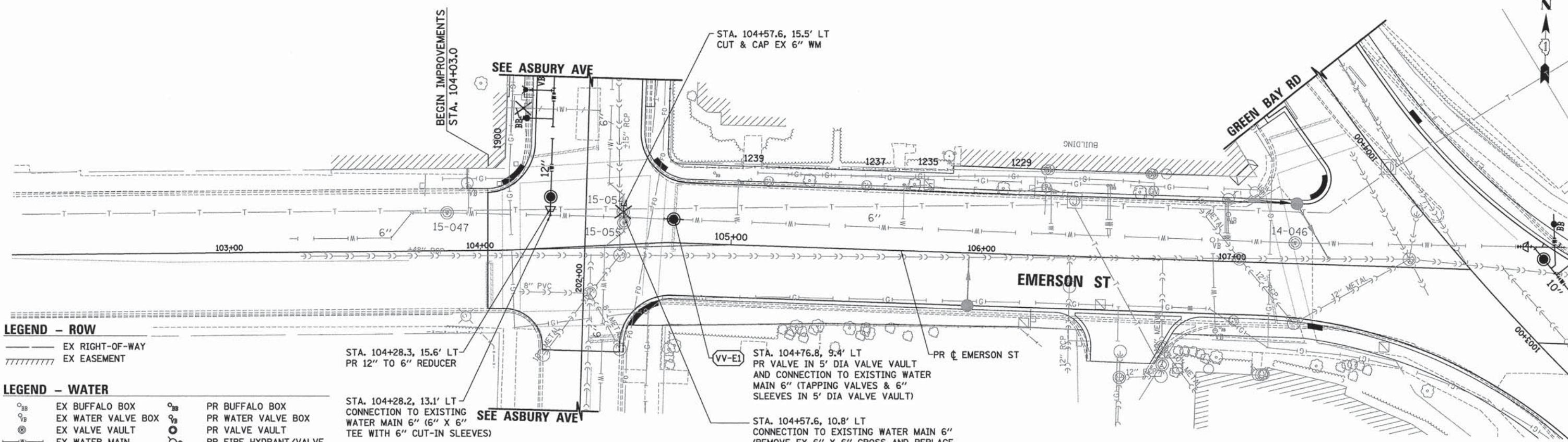
- LEGEND - WATER**
- EX BUFFALO BOX
  - EX WATER VALVE BOX
  - EX VALVE VAULT
  - EX WATER MAIN
  - EX WATER MAIN (ABANDONED)
  - PR BUFFALO BOX
  - PR WATER VALVE BOX
  - PR VALVE VAULT
  - PR FIRE HYDRANT/VALVE
  - PR WATER MAIN
  - REMOVAL ITEM
- LEGEND - ROW**
- EX RIGHT-OF-WAY
  - EX EASEMENT

600.88	600.92	601.02	601.00	601.18	601.13	601.47	601.39	601.76	601.77	602.21	602.27	602.98	602.91	603.66	603.65	604.35	604.39	605.13	605.14	605.91	605.88	606.86	606.83	607.84	607.83	608.83	608.83	609.81	609.82	610.78	610.71	611.68	611.49	612.45	612.14	613.08	612.68	613.26	613.09	613.46	613.39	613.58	613.57	613.66	613.68	613.62	613.60	613.33	613.47	613.49	613.67	613.87	613.85
2010+00		2011+00				2012+00				2013+00				2014+00				2015+00																																			
USER NAME = bhenrichs		DESIGNED - BAH		REVISED - -		DRAWN - BAH		REVISED - -		CHECKED - MAR		REVISED - -		DATE - 10/9/2015		REVISED - -		<p align="center"><b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b></p> <p align="center"><b>WATER MAIN PLAN AND PROFILES</b> <b>RIDGE AVENUE</b></p>										F.A. RTE.		SECTION		COUNTY		TOTAL SHEETS		SHEET NO.																	
PLOT SCALE = 20.0000' / 1" =		CONTRACT NO. 61C32		ILLINOIS FED. AID PROJECT																																																	





PLAN	SURVEYED	BY	DATE
	PLOTTED		
	CHECKED		
	RT. OF WAY CHECKED		
	NO. OF WAY CHECKED		
	NO. FILE NAME		



**LEGEND - ROW**

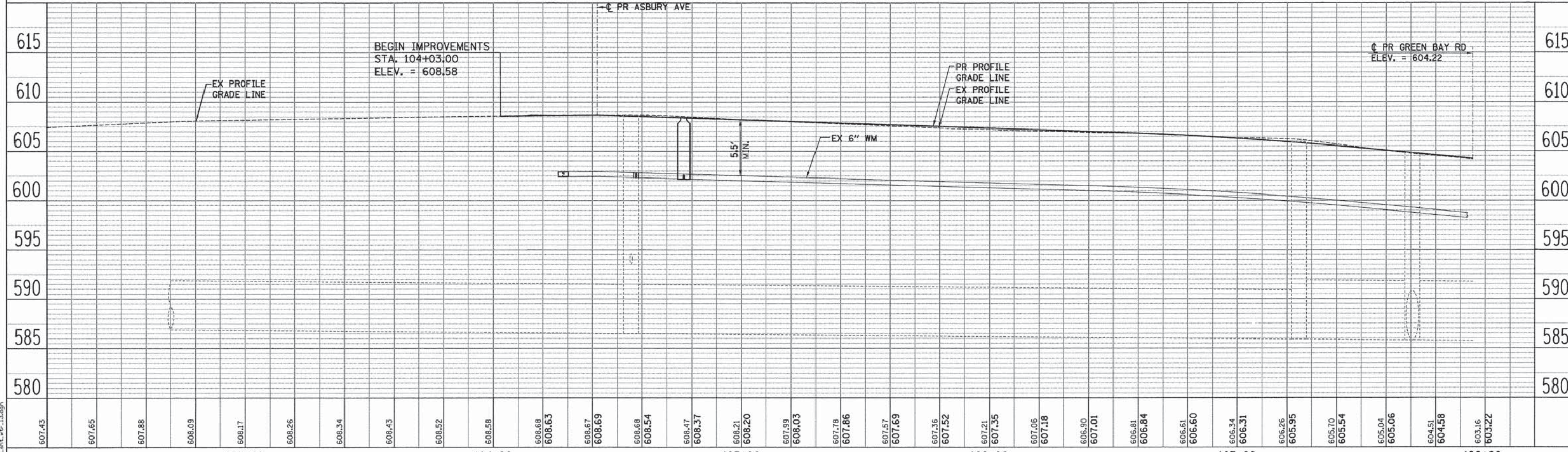
- EX RIGHT-OF-WAY
- /// EX EASEMENT

**LEGEND - WATER**

- |                 |                           |                 |                       |
|-----------------|---------------------------|-----------------|-----------------------|
| ○ <sub>BB</sub> | EX BUFFALO BOX            | ○ <sub>VB</sub> | PR BUFFALO BOX        |
| ○               | EX WATER VALVE BOX        | ○               | PR WATER VALVE BOX    |
| ○               | EX VALVE VAULT            | ○               | PR VALVE VAULT        |
| —               | EX WATER MAIN             | ○               | PR FIRE HYDRANT/VALVE |
| —               | EX WATER MAIN (ABANDONED) | —               | PR WATER MAIN         |
|                 |                           | X               | REMOVAL ITEM          |

NOTE: FIRE HYDRANTS ARE TO BE CONSTRUCTED WITH THE NOZZLES FACING THE STREET

PROFILE	SURVEYED	BY	DATE
	PLOTTED		
	CHECKED		
	B.M. NOTED		
	STRUCTURE NOTATIONS CHECKED		

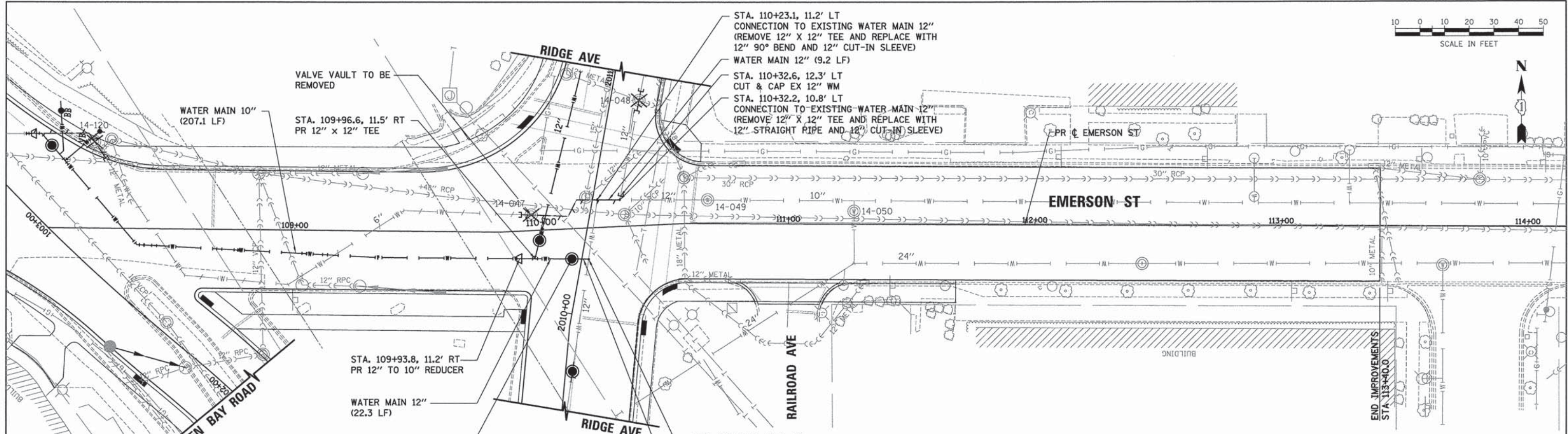


607.43	607.65	607.88	608.09	608.17	608.26	608.34	608.43	608.52	608.58	608.68	608.63	608.67	608.69	608.68	608.54	608.47	608.37	608.21	608.20	607.99	608.03	607.78	607.86	607.57	607.69	607.36	607.52	607.21	607.35	607.06	607.18	606.90	607.01	606.81	606.84	606.61	606.60	606.34	606.31	606.26	605.95	605.70	605.54	605.04	605.06	604.51	604.58	603.16	603.22										
103+00										104+00										105+00										106+00										107+00										108+00									
USER NAME = bhenrscha		DESIGNED - BAH		REVISED -		DRAWN - BAH		REVISED -		CHECKED - MAR		REVISED -		DATE - 10/9/2015		REVISED -		STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION										WATER MAIN PLAN AND PROFILES		EMERSON STREET		F.A. RTE.		SECTION		COUNTY		TOTAL SHEETS		SHEET NO.																			
PLOT SCALE = 28,80000' / 1"		PLOT DATE = 1/7/2016		SCALE:		SHEET 13 OF 18 SHEETS		STA.		TO STA.		13-00270-00-CH		COOK		393												299		CONTRACT NO. G1C32		ILLINOIS FED. AID PROJECT																											



PLAN  
 SURVEYED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
 PLOTTED BY: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_  
 NOTE BOOK NO. \_\_\_\_\_  
 RT. OF WAY CHECKED BY: \_\_\_\_\_  
 PLOTTED FILE NAME: \_\_\_\_\_

PROFILE  
 SURVEYED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
 PLOTTED BY: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_  
 NOTE BOOK NO. \_\_\_\_\_  
 STRUCTURE NOTATION CHRD



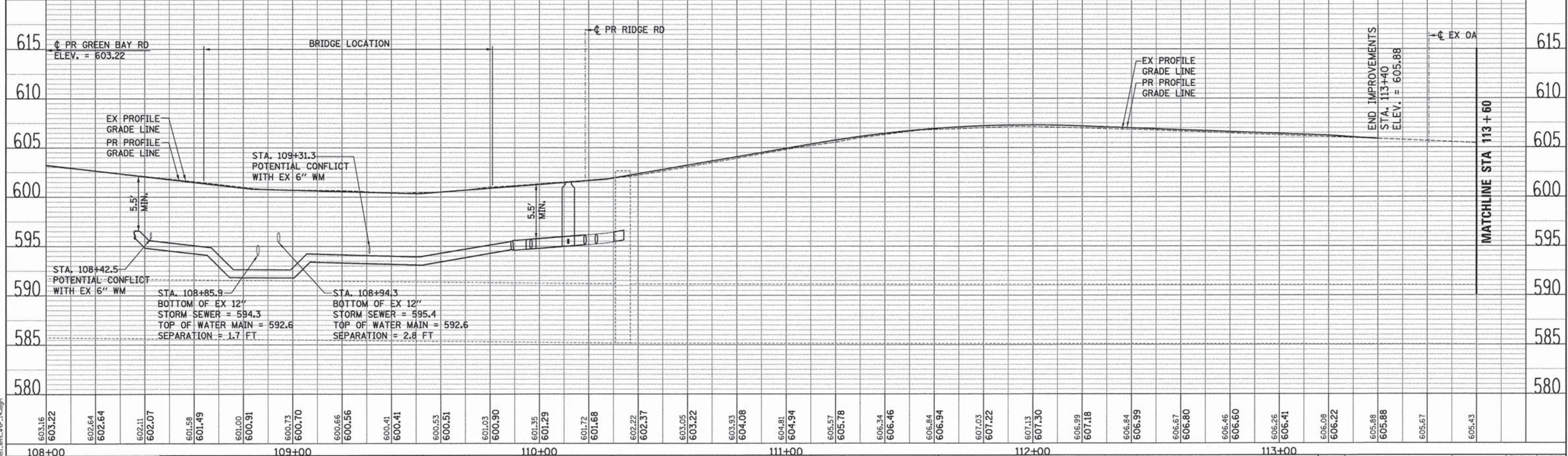
- NOTES**
- FIRE HYDRANTS ARE TO BE INSTALLED WITH THE NOZZLES FACING THE STREET.
  - REMOVE ALL DRAINAGE STRUCTURES AND PIPES TO CONSTRUCT PROPOSED WATER MAIN.

**LEGEND - WATER**

	EX BUFFALO BOX		PR BUFFALO BOX
	EX WATER VALVE BOX		PR WATER VALVE BOX
	EX VALVE VAULT		PR VALVE VAULT
	EX WATER MAIN		PR FIRE HYDRANT/VALVE
	EX WATER MAIN (ABANDONED)		PR WATER MAIN
			PR WATER MAIN REMOVAL ITEM

**LEGEND - ROW**

	EX RIGHT-OF-WAY
	EX EASEMENT



603.16	603.22	602.64	602.64	602.11	602.07	601.58	601.49	601.00	600.91	600.73	600.70	600.66	600.56	600.41	600.41	600.53	600.51	601.03	600.90	601.35	601.29	601.72	601.68	602.22	602.37	603.05	603.22	603.93	604.08	604.81	604.94	605.57	605.78	606.34	606.46	606.84	606.94	607.03	607.22	607.13	607.30	606.99	607.18	606.84	606.99	606.67	606.80	606.46	606.60	606.26	606.41	606.08	606.22	605.88	605.88	605.67	605.43
108+00		109+00				110+00				111+00				112+00				113+00																																							



USER NAME = bhenrichs	DESIGNED - BAH	REVISED -
PLotted SCALE = 28,000 / 1"	DRAWN - BAH	REVISED -
PLotted DATE = 1/7/2016	CHECKED - MAR	REVISED -
	DATE = 10/9/2015	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

**WATER MAIN PLAN AND PROFILES**  
**EMERSON STREET**

SCALE: SHEET 14 OF 18 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13-00270-00-CH	COOK	393	300
CONTRACT NO. G1C32				
ILLINOIS FED. AID PROJECT				