

3041 Woodcreek Drive, Suite 211
Downer's Grove, Illinois 60515-5417
(630) 641-9900



04-25-14 LETTING ITEM 019

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

**VARIOUS LOCATIONS IN SOUTH COOK COUNTY #5
LIGHT EMITTING DIODE (LED) INSTALLATION
SECTION 2013-076TS
COOK COUNTY**

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2013-076TS	COOK	65	1
ILLINOIS			CONTRACT NO. 60X65	

D-91-157-14



LOCATION OF SECTION INDICATED THUS: - [shaded rectangle] -

C-91-157-14



**COOK COUNTY
LOCATION MAP
SEE SHEET 3**

FOR INDEX OF SHEETS, SEE SHEET NO. 2

Brian K. Scifers

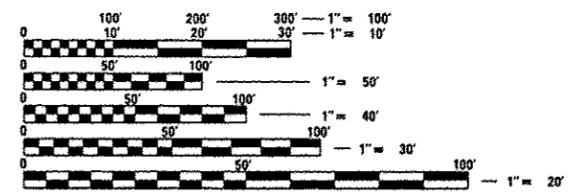
BRIAN K. SCIFERS

REGISTRATION NO. 062-054567

DATE: 2/3/2014 EXPIRES: 11-30-2015

STANDARDS

- 701006-05 OFF-ROAD OPERATIONS 2L, 2W, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
- 701101-04 OFF-ROAD OPERATIONS MULTILANE, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
- 701701-09 URBAN LANE CLOSURE MULTILANE INTERSECTION
- 701901-03 TRAFFIC CONTROL DEVICES
- 720001-01 SIGN PANEL MOUNTING DETAIL
- 720006-04 SIGN PANEL ERECTION DETAILS
- 857001-01 STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
- 862001-01 UNINTERRUPTABLE POWER SUPPLY (UPS)
- 880006-01 TRAFFIC SIGNAL MOUNTING DETAILS



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

PROJECT ENGINEER: SUDUD MAHMOUD
PROJECT MANAGER: SHAR-DAY SMITH

CONTRACT NO. 60X65

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED Feb 7 20 14

John D. Baranzelli
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

March 21 20 14
John D. Baranzelli, P.E.
ENGINEER OF DESIGN AND ENVIRONMENT

March 21 20 14
Omer Osman, P.E.
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

**PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS**



INDEX OF SHEETS

PAGE #	DESCRIPTION
1	COVER PAGE
2	INDEX OF SHEETS & GENERAL NOTES
3-4	LOCATION MAP
5	S&D HEADINGS
6-8	S&D SHEETS
9-15	IDOT TS DETAILS

PAGE #	TS#	INTERSECTION NAME
16	2580	IL 50/CICERO AVE @ 167TH ST
17	170	US 6/159TH ST @ IL 50/CICERO AVE
18	275	US 6/159TH ST @ RIDGELAND AVE
19	4075	147TH ST @ CENTRAL AVE
20	4076	147TH ST @ RIDGELAND AVE
21	2570	IL 50/CICERO AVE @ 151ST ST
22	2575	IL 50/CICERO AVE @ 155TH ST
23	2595	IL 50/CICERO AVE @ 166TH ST/FIELDCREST DR
24	205	US 6/159TH ST @ CENTRAL AVE
25	325	US 6/159TH ST @ LARAMIE AVE
26	9950	US 6/159TH ST @ OAK FOREST HOSPITAL
27	20365	US 6/159TH ST @ 91ST AVE/PARK HILL DR
28	1830	IL 43/HARLEM AVE @ 143RD ST DELETED
29	2210	IL 43/HARLEM AVE @ 151ST ST DELETED
30	21522	IL 7/143RD ST @ 100TH ST DELETED
31	190	US 6/159TH ST @ 94TH ST
32	165	US 6/159TH ST @ IL 43 HARLEM AVE
33	20401	US 6/159TH ST @ RAVENNA AVE DELETED
34	20560	US 6/WOLF RD @ 167TH ST
35	1911	131ST ST @ 16TH AVE
36	1920	IL 7/143RD ST @ 100TH AVE/WEST AVE
37	21520	IL 7/143RD ST @ IL 7/WOLF RD
38	163	IL 7/159TH ST @ WILL COOK RD DELETED
39	1905	IL 7/SOUTHWEST HWY @ 131ST ST
40-41	1910	IL 7/SOUTHWEST HWY @ 135TH ST
42-43	1915	IL 7/SOUTHWEST HWY @ 143RD ST
44	158	IL 7/WOLF RD @ 151ST ST
45	159	IL 7/WOLF RD @ 153RD ST
46	235	US 6/159TH ST @ 71ST ST DELETED
47	185	US 6/159TH ST @ 80TH AVE
48	160	US 6/159TH ST @ IL 7/WOLF RD NORTH JUNCTION DELETED
49	21920	US 6/159TH ST @ ORLAND TOWN CENTER/JEWEL
50	162	US 6/WOLF RD @ BROOKHILL DR
51	161	US 6/WOLF RD @ US 6/173RD ST-SOUTH JUNCTION
52	156	WOLF RD @ 179TH ST
53	330	US 6/159TH ST @ 88TH AVE
54	8920	IL 43/HARLEM AVE @ 171ST ST
55	2255	IL 43/HARLEM AVE @ 183RD ST
56	22263	IL 43/HARLEM AVE @ 191ST ST
57	7417	US 45/LA GRANGE RD @ 183RD ST
58	2256	183RD ST @ OAK PARK AVE
59	4108	183RD ST @ RIDGELAND AVE
60	11325	IL 43/HARLEM AVE @ 161ST ST
61	8910	IL 43/HARLEM AVE @ 167TH ST
62	8935	IL 43/HARLEM AVE @ BREMENTONNE/163RD ST
63	180	US 6/159TH ST @ 76TH AVE
64	240	US 6/159TH ST @ 84TH AVE
65	11330	US 6/159TH ST @ PARK CENTER

GENERAL NOTES

ALL CONSTRUCTION SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (SSRBC), AND SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS, ADOPTED JANUARY 1, 2014 BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION AND ALL AMENDMENTS THERETO; IN CASE OF CONFLICT, THE MORE RESTRICTIVE PROVISIONS SHALL APPLY. ANY REFERENCE TO STANDARDS IN THE PLANS OR SPECIAL PROVISIONS SHALL BE INTERPRETED TO BE THE LATEST STANDARDS OF THE DEPARTMENT.

THE CONTRACTOR SHALL CHECK THE PROPOSED TRAFFIC SIGNAL EQUIPMENT LOCATIONS FOR OVERHEAD UTILITY CONFLICTS. THE CONTRACTOR SHALL COORDINATE ANY CONFLICTS WITH THE UTILITY COMPANIES AND THE RESIDENT ENGINEER BEFORE ORDERING MATERIALS.

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, LOCAL GOVERNMENT AGENCIES, AND IDOT.

THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.

WHENEVER, DURING CONSTRUCTION OPERATIONS, ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF GUTTERS, DRAINAGE STRUCTURES, DITCHES, ETC. SUCH THAT THE NATURAL FLOW LINE OF WATER IS OBSTRUCTED, THE LOOSE MATERIAL WILL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES AND FLOW LINES SHALL BE FREE FROM DIRT AND DEBRIS. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. THE CONTRACTOR'S FAILURE TO PROVIDE THE ABOVE WILL PRECLUDE ANY POSSIBLE ADDED COMPENSATION REQUESTED DUE TO DELAYS OF UNSUITABLE MATERIALS CREATED AS A RESULT THEREOF.

THE CONTRACTOR SHALL NOTIFY THE IDOT ARTERIAL TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

THE CONTRACTOR SHALL SOLELY BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ADEQUATE SIGNS, TRAFFIC CONTROL DEVICES, AND WARNING DEVICES TO INFORM AND PROTECT THE PUBLIC DURING ALL PHASES OF CONSTRUCTION.

THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT OR THE DIRECTION OF THE ENGINEER.

THE CONTRACTOR IS RESPONSIBLE FOR RETURNING ALL AREAS AFFECTED BY EQUIPMENT OR LABORERS TO EXISTING CONDITIONS. THE CONTRACTOR IS ALSO RESPONSIBLE FOR PROTECTING ALL NEW WORK UNTIL COMPLETION OF THIS CONTRACT.

RESTORATION OF WORK AREA: RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS SIGNAL POST, UNINTERRUPTIBLE POWER SUPPLY ETC. AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD IN ACCORDANCE TO STANDARD SPECIFICATIONS ARTICLE 252 WHICH SHALL INCLUDE THE REQUIRED WATERING PER ARTICLE 252.08. ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEED IN ACCORDANCE WITH STANDARD SPECIFICATIONS ARTICLE 250 AND 251, RESPECTIVELY.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION.

THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE ORDERING ANY MATERIALS AND STARTING ANY WORK. FOR LOCATIONS OF UTILITIES, LOCALLY OWNED EQUIPMENT, LEASED ENFORCEMENT CAMERA SYSTEM FACILITIES, AND IDOT UNDERGROUND FACILITIES. CONTACT THE LOCAL COUNTIES, MUNICIPALITIES, AND IDOT FOR LOCATES. THE CONTRACTOR SHALL CALL 'JULIE' AT (800)892-0123 OR 811. IN THE CITY OF CHICAGO CONTACT DIGGER AT (312)744-7000 FOR FIELD LOCATIONS OF BURIED UTILITIES (48 HOURS NOTIFICATION REQUIRED).

AT LOCATIONS ON THE PLANS WHERE TRAFFIC SIGNAL POST REMOVAL AND NEW TRAFFIC SIGNAL POST INSTALLATIONS ARE SPECIFIED, THE CONTRACTOR SHALL INSPECT THE EXISTING POST FOUNDATIONS, PRIOR TO REMOVING THE EXISTING TRAFFIC SIGNAL POST TO BE REPLACED, THE CONTRACTOR SHALL VERIFY THAT THE EXISTING CONDITION OF THE ANCHOR BOLT IS ACCEPTABLE. IF THE EXISTING ANCHOR BOLT CONDITION IS NOT ACCEPTABLE, THE CONTRACTOR SHALL REPLACE ANCHOR BOLT AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL BE PAID FOR THE NUMBER OF TRAFFIC SIGNAL POSTS INSTALLED AND NO OTHER COMPENSATION WILL BE PROVIDED.

THE CONTRACTOR SHALL RELOCATE ANY EXISTING TRAFFIC SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS, AND PEDESTRIAN PUSH-BUTTONS FROM PAINTED POSTS THAT ARE INDICATED FOR REPLACEMENT TO A NEW POST AS SHOWN ON THE PLANS, EXCEPT AS SHOWN TO BE REPLACED ON THE PLANS, OR AS DIRECTED BY THE ENGINEER. THE COST OF REMOVAL, RELOCATION, AND ANY NEW MOUNTING HARDWARE NECESSARY TO COMPLETE THIS WORK SHALL BE INCLUDED IN THE TRAFFIC SIGNAL POST PAY ITEM OF THE LENGTH AS SPECIFIED IN THE PLANS.

THE CONTRACTOR SHALL RELOCATE ANY EXISTING SIGN PANELS, INCLUDING BLANK OUT SIGNS, FROM PAINTED POSTS THAT ARE INDICATED FOR REPLACEMENT TO A NEW POST AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE COST OF REMOVAL, RELOCATION, AND ANY NEW MOUNTING HARDWARE NECESSARY TO COMPLETE THIS WORK SHALL BE INCLUDED IN THE PAY ITEM OF THE LENGTH AS SPECIFIED IN THE PLANS.

CONTRACTOR SHALL REPLACE ALL EXISTING METAL TRAFFIC SIGNAL AND PEDESTRIAN BRACKETS TO NEW POLYCARBONATE BRACKETS. THE COST OF THIS WORK SHALL BE INCLUDED IN THE CORRESPONDING SIGNAL HEAD, LED, RETROFIT PAY ITEM OF THE TYPE AND NUMBER OF SIGNAL HEADS, FACES, AND SECTIONS AS SPECIFIED IN THE PLANS.

PARTIAL PAYMENT AS DESCRIBED IN ARTICLE 109.07(b) OF THE STANDARD SPECIFICATIONS WILL NOT BE ALLOWED FOR ITEMS INCLUDED IN THIS CONTRACT.

FOR TS 2580 LOCATION, DUE TO THE PRESENCE OF A RED LIGHT RUNNING (RLR) CAMERA WITHIN THE PROJECT LIMITS, CONTRACTOR SHALL NOTIFY THE CITY OF OAK FOREST AND GATSO-USA PRIOR TO THE START OF CONSTRUCTION. THE CITY OF OAK FOREST AND GATSO-USA SHALL MAKE THE RLR CAMERA INOPERATIVE FOR THE TIME OF CONSTRUCTION. ANY RLR CAMERA EQUIPMENT THAT IS IN CONFLICT WITH THE PROPOSED CONSTRUCTION SHALL BE REMOVED BY ITS RESPECTIVE OWNERS PRIOR TO THE START OF CONSTRUCTION.

CITY OF OAK FOREST
15440 SOUTH CENTRAL AVENUE
OAK FOREST, IL 60452
(708) 687-4050

GATSO-USA
900 CUMMINGS CTR. 410-T
BEVERLY, MA 01915

FOR TS 170 LOCATION, DUE TO THE PRESENCE OF A RED LIGHT RUNNING (RLR) CAMERA WITHIN THE PROJECT LIMITS, CONTRACTOR SHALL NOTIFY THE CITY OF OAK FOREST PRIOR TO THE START OF CONSTRUCTION. THE CITY OF OAK FOREST SHALL MAKE THE RLR CAMERA INOPERATIVE FOR THE TIME OF CONSTRUCTION. ANY RLR CAMERA EQUIPMENT THAT IS IN CONFLICT WITH THE PROPOSED CONSTRUCTION SHALL BE REMOVED BY ITS RESPECTIVE OWNERS PRIOR TO THE START OF CONSTRUCTION.

CITY OF OAK FOREST
15440 SOUTH CENTRAL AVENUE
OAK FOREST, IL 60452
(708) 687-4050

FOR TS 165 LOCATION, DUE TO THE PRESENCE OF A RED LIGHT RUNNING (RLR) CAMERA WITHIN THE PROJECT LIMITS, CONTRACTOR SHALL NOTIFY THE VILLAGE OF ORLAND PARK AND REDFLEX TRAFFIC SYSTEMS PRIOR TO THE START OF CONSTRUCTION. THE VILLAGE OF ORLAND PARK OR REDFLEX TRAFFIC SYSTEMS SHALL MAKE THE RLR CAMERA INOPERATIVE FOR THE TIME OF CONSTRUCTION. ANY RLR CAMERA EQUIPMENT THAT IS IN CONFLICT WITH THE PROPOSED CONSTRUCTION SHALL BE REMOVED BY ITS RESPECTIVE OWNERS PRIOR TO THE START OF CONSTRUCTION.

VILLAGE OF ORLAND PARK
14700 RAVINIA AVENUE
ORLAND PARK, IL 60462
(708) 403-6100

REDFLEX TRAFFIC SYSTEMS
15020 N 74TH STREET
SCOTTSDALE, AZ 85260
(480) 607-0705

FOR TS 2255 LOCATION, DUE TO THE PRESENCE OF A RED LIGHT RUNNING (RLR) CAMERA WITHIN THE PROJECT LIMITS, CONTRACTOR SHALL NOTIFY THE VILLAGE OF TINLEY PARK AND REDFLEX TRAFFIC SYSTEMS PRIOR TO THE START OF CONSTRUCTION. THE VILLAGE OF TINLEY PARK OR REDFLEX TRAFFIC SYSTEMS SHALL MAKE THE RLR CAMERA INOPERATIVE FOR THE TIME OF CONSTRUCTION. ANY RLR CAMERA EQUIPMENT THAT IS IN CONFLICT WITH THE PROPOSED CONSTRUCTION SHALL BE REMOVED BY ITS RESPECTIVE OWNERS PRIOR TO THE START OF CONSTRUCTION.

VILLAGE OF TINLEY PARK
16250 OAK PARK AVENUE
TINLEY PARK, IL 60477
(708) 444-5000

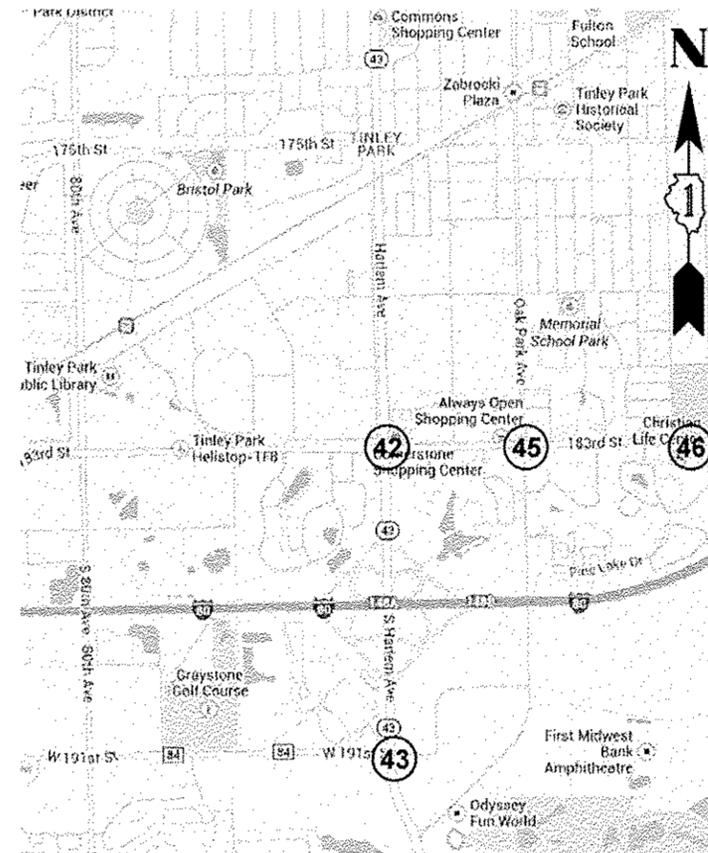
REDFLEX TRAFFIC SYSTEMS
15020 N 74TH STREET
SCOTTSDALE, AZ 85260
(480) 607-0705

FOR TS 8920 LOCATION, DUE TO THE PRESENCE OF A RED LIGHT RUNNING (RLR) CAMERA WITHIN THE PROJECT LIMITS, CONTRACTOR SHALL NOTIFY THE VILLAGE OF TINLEY PARK PRIOR TO THE START OF CONSTRUCTION. THE VILLAGE OF TINLEY PARK SHALL MAKE THE RLR CAMERA INOPERATIVE FOR THE TIME OF CONSTRUCTION. ANY RLR CAMERA EQUIPMENT THAT IS IN CONFLICT WITH THE PROPOSED CONSTRUCTION SHALL BE REMOVED BY ITS RESPECTIVE OWNERS PRIOR TO THE START OF CONSTRUCTION.

VILLAGE OF TINLEY PARK
16250 OAK PARK AVENUE
TINLEY PARK, IL 60477
(708) 444-5000

FILE NAME # D:\00763\shl-gennote.dgn	USER NAME # Brian Salfers	DESIGNED - BKS	REVISED - SVS 8/10/11	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INDEX OF SHEETS AND GENERAL NOTES	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Default	PLOT SCALE # 40.0000 1/4" = 1'	CHECKED - BKS	REVISED -			2013-07675	COOK	65	2	
	PLOT DATE # 3/12/2014	DATE -	REVISED -			CONTRACT NO. 60X65		ILLINOIS FEG. AID PROJECT		
						SCALE:	SHEET	OF	SHEETS	STA.

LOC #	TS #	INTERSECTION
1	TS 2580	IL 50 Cicero Ave @ 167th St
2	TS 170	US 6 159th St @ IL 50 Cicero Ave
3	TS 275	US 6 159th St @ Ridgeland Ave
4	TS 4075	147th @ Central
5	TS 4076	147th @ Ridgeland Ave
6	TS 2570	IL 50/Cicero Ave @ 151st St
7	TS 2575	IL 50/Cicero Ave @ 155th St
8	TS 2595	IL 50/Cicero Ave @ 166th/Fieldcrest Dr
9	TS 205	US 6/159th St @ Central Ave
10	TS 325	US 6/159th St @ Laramie Ave
11	TS 9950	US 6/159th St @ Oak Forest Hospital
12	TS 20365	US 6/159th St @ 91st Ave/Park Hill Dr
13	TS 4280	IL 43 Harlem Ave @ 143rd St
14	TS 2240	IL 43 Harlem Ave @ 161st St
15	TS 21522	IL 7/143rd St @ 100th St
16	TS 190	US 6 159th St @ 94th St
17	TS 165	US 6 159th St @ IL 43 Harlem Ave
18	TS 20491	US 6 159th St @ Rovinia
19	TS 20560	US 6 Wolf Rd @ 167th St
20	TS 1911	131st St @ 76th Ave
21	TS 1920	IL 7/143rd St @ 100th Ave/West Ave
22	TS 21520	IL 7/143rd St @ IL 7/Wolf Rd
23	TS 163	IL 7/159th St @ Will Cook Rd
24	TS 1905	IL 7/Southwest Hwy @ 131st
25	TS 1910	IL 7/Southwest Hwy @ 135th St
26	TS 1915	IL 7/Southwest Hwy @ 143rd St
27	TS 158	IL 7/Wolf Rd @ 151st
28	TS 159	IL 7/Wolf Rd @ 153rd St
29	TS 235	US 6/159th St @ 71st St
30	TS 185	US 6/159th St @ 80th Ave
31	TS 160	US 6/159th St @ IL 7/Wolf Rd North Junction
32	TS 21920	US 6/159th St @ Orland Town Center/Jewel
33	TS 162	US 6/Wolf Rd @ Brookhill Dr
34	TS 161	US 6/Wolf Rd @ US 6/173rd St South Junction
35	TS 156	Wolf Rd @ 179th St
36	TS 330	US 6/159th St @ 88th Ave
37		NOT USED
38		NOT USED
39		NOT USED
40		NOT USED
41	TS 8920	IL 43 Harlem Ave @ 171st St
42	TS 2255	IL 43 Harlem Ave @ 183rd St
43	TS 22263	IL 43 Harlem Ave @ 191st St
44	TS 7417	US 45 La Grange Rd @ 183rd St
45	TS 2256	183rd St @ Oak Park Ave
46	TS 4108	183rd St @ Ridgeland Ave
47	TS 11325	IL 43/Harlem Ave @ 161st St
48	TS 8910	IL 43/Harlem Ave @ 167th St
49	TS 8935	IL 43/Harlem Ave @ Brementown/163rd St
50	TS 180	US 6/159th St @ 76th Ave
51	TS 240	US 6/159th St @ 84th Ave
52	TS 11330	US 6/159th St @ Park Center



FILE NAME - D:\6X65\sh-t-locmap2.dgn	USER NAME - Brian Scifers	DESIGNED - WBL	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	LOCATION MAP		F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
	PLT SCALE - 48,0000 / in.	CHECKED - BKS	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	2013-076TS	COOK	65
Default	PLT DATE - 2/12/2014	DATE -	REVISED -							CONTRACT NO. 60X65		ILLINOIS FED. AID PROJECT	



SUMMARY OF QUANTITIES HEADING LEGEND								
COLUMN NUMBER	TS#	INTERSECTION	FUNDING PARTICIPATION					
			STATE	OAK FOREST	ORLAND HILLS	ORLAND PARK	PALOS HEIGHTS	OAK FOREST HOSPITAL
1	2580	IL 50 Cicero Ave @ 167th St	100.0%					
1	170	US 6 159th St @ IL 50 Cicero Ave	100.0%					
2	275	US 6 159th St @ Ridgeland Ave	96.7%	3.3%				
1	4075	147th @ Central Av	100.0%					
1	4076	147th @ Ridgeland Ave	100.0%					
3	2570	IL 50/Cicero Ave @ 151st St	95.0%	5.0%				
3	2575	IL 50/Cicero Ave @ 155th St	95.0%	5.0%				
2	2595	IL 50/Cicero Ave @ 166th/Fieldcrest Dr	96.7%	3.3%				
1	205	US 6/159th St @ Central Ave	100.0%					
3	325	US 6/159th St @ Laramie Ave	95.0%	5.0%				
18	9950	US 6/159th St @ Oak Forest Hospital	95.0%					5.0%
4	20365	US 6/159th St @ 91st Ave/Park Hill Dr	95.0%		2.5%	2.5%		
5	4280	IL 43 Harlem Ave @ 143rd St	97.5%			2.5%		
6	2240	IL 43 Harlem Ave @ 151st St	96.7%			3.3%		
5	21522	IL 7 143rd St @ 100th St	97.5%			2.5%		
5	190	US 6 159th St @ 94th St	97.5%			2.5%		
1	165	US 6 159th St @ IL 43 Harlem Ave	100.0%					
7	20491	US 6 159th St @ Ravinia	95.0%			5.0%		
1	20560	US 6 Wolf Rd @ 167th St	100.0%					
8	1911	131st St @ 76th Ave	95.0%				5.0%	
6	1920	IL 7/143rd St @ 100th Ave/West Ave	96.7%			3.3%		
1	21520	IL 7/143rd St @ IL 7/Wolf Rd	100.0%					
6	183	IL 7/159th St @ Will Cook Rd	97.5%			2.5%		
5	1905	IL 7/Southwest Hwy @ 131st	97.5%			2.5%		
1	1910	IL 7/Southwest Hwy @ 135th St	100.0%					
10	1915	IL 7/Southwest Hwy @ 143rd St	96.0%			4.0%		

SUMMARY OF QUANTITIES HEADING LEGEND							
COLUMN NUMBER	TS#	INTERSECTION	FUNDING PARTICIPATION				
			STATE	ORLAND PARK	GEORGE GEORGIOUS	TINLEY PARK	DDR CORP.
1	158	IL 7/Wolf Rd @ 151st	100.0%				
1	159	IL 7/Wolf Rd @ 153rd St	100.0%				
11	235	US 6/159th St @ 71st Ct	95.0%	2.5%		2.5%	
1	185	US 6/159th St @ 80th Ave	100.0%				
1	160	US 6/159th St @ IL 7/Wolf Rd North Junction	100.0%				
7	21920	US 6/159th St @ Orland Town Center/Jewel	95.0%	5.0%			
6	162	US 6/Wolf Rd @ Brookhill Dr	96.7%	3.3%			
1	161	Wolf Rd @ US 6 (SW Hwy)	100.0%				
1	156	Wolf Rd @ 179th St	100.0%				
12	330	US 6/159th St @ 88th Ave	95.0%	2.5%	2.5%		
13		NOT USED					
14		NOT USED					
15		NOT USED					
16	8920	IL 43 Harlem Ave @ 171st ST	97.5%			2.5%	
16	2255	IL 43 Harlem Ave @ 183rd St	97.5%			2.5%	
16	22263	IL 43 Harlem Ave @ 191st St	97.5%			2.5%	
16	7417	US 45 La Grange Rd @ 183rd St	97.5%			2.5%	
17	2256	183rd St @ Oak Park Ave	95.0%			5.0%	
1	4108	183rd St @ Ridgeland Ave	100.0%				
17	11325	IL 43/Harlem Ave @ 161st St	95.0%			5.0%	
16	8910	IL 43/Harlem Ave @ 167th St	97.5%			2.5%	
17	8935	IL 43/Harlem Ave @ Bementown/163rd St	95.0%			5.0%	
11	180	US 6/159th St @ 76th Ave	95.0%	2.5%		2.5%	
7	240	US 6/159th St @ 84th Ave	95.0%	5.0%			
9	11330	US 6/159th St @ Park Center	95.0%				5.0%

FILE NAME =
D:\62K65\shc-5001.dgn
Default

USER NAME = SES
PLOT SCALE = 48.0000 1/ in.
PLOT DATE = 2/4/2014

DESIGNED -	PHL	REVISED -	
DRAWN -	PHL	REVISED -	
CHECKED -	BKS	REVISED -	
DATE -		REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES
(SHEET 1 OF 4)

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2013-076TS	COOK	65	5
CONTRACT NO. 60X65			ILLINOIS FED. AID PROJECT	

Rev.



100% STATE
URBAN

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE															
				A,01	C,01	C,02	C,03	C,04	C,05	C,06	C,07	G,01	C,08	C,09	C,10	C,11	C,12	G,02	
				1	2	3	4	5	6	7	8	9	10	11	12	16	17	18	
				TRAFFIC SIGNAL 0021 URBAN															
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6															
67100100	MOBILIZATION	L SUM	1	1															
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1															
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	41	15	2	3	1	2	2	2	1	1	1	1	1	5	3	1	
87502440	TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	3						1				2						
87502480	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	11	1	1	2			2				2	1	2				
87502490	TRAFFIC SIGNAL POST, GALVANIZED STEEL 15 FT.	EACH	1															1	
87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	29	5	1	2		3	1	4			2	1	2	4	1	3	
87502520	TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.	EACH	5						1				3		1				
88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	22		1	6			1	2					2	4	3	3	
88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	11			2			1	2			3	2	1				
88030070	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	3															3	
88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	5			2												3	
88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	30	4	1	2		4	1	4				2	2	4	5	1	
88030210	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	5		2									1	2				
88030220	SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2										1					1	
88030240	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	23	4	1			4	1	4				2	1	4		2	

11

Rev.



CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE																	
				TRAFFIC SIGNAL																	
				0021																	
				URBAN																	
1	2	3	4	5	6	7	8	9	10	11	12	16	17	18							
88030250	SIGNAL HEAD, LED, 2-FACE, 1-4 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	1															1			
88030310	SIGNAL HEAD, LED, 3-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2		1				1												
88030330	SIGNAL HEAD, LED, 3-FACE, 2-3 SECTION, 1-5 SECTION BRACKET MOUNTED	EACH	1											1							
88055150	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1											1							
88055160	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	7											7							
88055165	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	2											2							
88055200	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	1											1							
88060130	COMBINATION SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION OPTICALLY PROGRAMMED, 1-5 SECTION, BRACKET MOUNTED	EACH	1											1							
88060180	COMBINATION SIGNAL HEAD, LED, 2-FACE, 1-5 SECTION OPTICALLY PROGRAMMED, 1-3 SECTION, BRACKET MOUNTED	EACH	1											1							
88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	39	4	4	6	2		2	1	2	2				6	8	2			
88102747	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	26	11	1	6			1	3	1					1	2				
88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	60	4	2	8		4	2	6				8	2	4	8	8	4		
88800100	PEDESTRIAN PUSH-BUTTON	EACH	28	2	2	2	2						2	8			4	4	2		
89502210	MODIFY EXISTING CONTROLLER CABINET	EACH	39	14	1	3	1	2	2	2	1	1	1	1	1	5	3	1			
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	27	6	2	3	1	1	1	2	1	1	1	1	1	2	3	1			
88102710	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED	EACH	8											8							

Rev.



CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE																	
				TRAFFIC SIGNAL																	
				0021																	
				URBAN																	
1	2	3	4	5	6	7	8	9	10	11	12	16	17	18							
X8620050	UNINTERRUPTABLE POWER SUPPLY, GROUND MOUNTED	EACH	1	1																	
X8620200	UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	38	13	1	3	1	2	2	2	1	1	1	1	1	5	3	1			
X8803040	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED, RETROFIT	EACH	13	10						1	2										
X8803051	SIGNAL HEAD, LED, 3-FACE, 2-3 SECTION, 1-5 SECTION, BRACKET MOUNTED, RETROFIT	EACH	2	2																	
X8803082	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	28	17		4	4		3												
X8803084	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	86	40		12	2		3	3	6	6				4	10				
X8803088	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	66	36		4	2		1	5	2	4				4	8				
X8803090	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	4	2							2										
X8803110	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED, RETROFIT	EACH	1						1												
X8803210	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	51	26		4	2		1	2		4				4	8				
X8803910	SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED RETROFIT	EACH	1							1											
X8880015	PEDESTRIAN PUSH-BUTTON, NON-LATCHING	EACH	47	13	3	10			3	6	3					9					
88055370	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	1											1							
Ø 10076604	TRAINEES- TRAINING PROGRAM GRADUATE	HOUR	500	500																	

Ø 0042

Rev.

TRAFFIC SIGNAL LEGEND

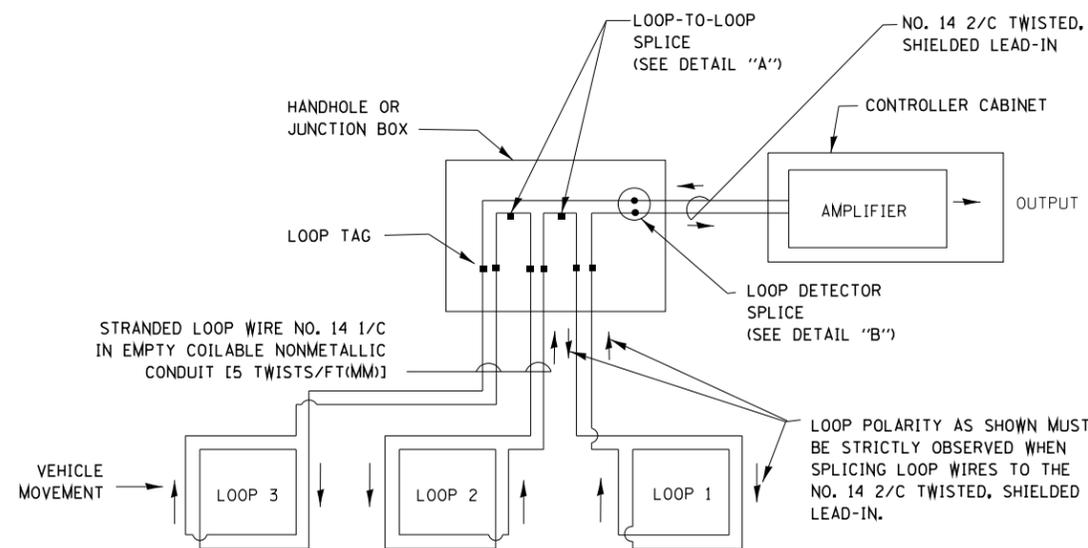
ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED
CONTROLLER CABINET				EMERGENCY VEHICLE LIGHT DETECTOR				ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1/C, UNLESS NOTED OTHERWISE			
RAILROAD CONTROL CABINET				CONFIRMATION BEACON				COAXIAL CABLE			
COMMUNICATIONS 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				STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED			
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH PTZ CAMERA				INTERSECTION ITEM				ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED			
SIGNAL POST				REMOVE ITEM				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				SIGNAL POST AND FOUNDATION TO BE REMOVED			
GUY WIRE				ABANDON ITEM				INTERSECTION & SAMPLING (SYSTEM) DETECTOR			
SIGNAL HEAD				12" (300mm) TRAFFIC SIGNAL SECTION				SAMPLING (SYSTEM) DETECTOR			
SIGNAL HEAD CONSTRUCTION STAGES (NUMBERS INDICATE THE CONSTRUCTION STAGE)				12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE				QUEUE DETECTOR			
SIGNAL HEAD WITH BACKPLATE				SIGNAL FACE				PREFORMED QUEUE DETECTOR			
SIGNAL HEAD OPTICALLY PROGRAMMED				SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD				PREFORMED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR			
FLASHER INSTALLATION (S DENOTES SOLAR POWER)				"RB" INDICATES REFLECTIVE BACKPLATE				PREFORMED SAMPLING (SYSTEM) DETECTOR			
PEDESTRIAN SIGNAL HEAD				12" (300mm) PEDESTRIAN SIGNAL HEAD WALK/DON'T WALK SYMBOL							
PEDESTRIAN PUSHBUTTON DETECTOR				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, OUTLINED							
ACCESSIBLE PEDESTRIAN PUSHBUTTON DETECTOR				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, SOLID							
ILLUMINATED SIGN "NO LEFT TURN"				PEDESTRIAN SIGNAL HEAD, INTERNATIONAL SYMBOL, WITH COUNTDOWN TIMER							
ILLUMINATED SIGN "NO RIGHT TURN"				RADIO INTERCONNECT							
DETECTOR LOOP, TYPE I				RADIO REPEATER							
PREFORMED DETECTOR LOOP				DENOTES NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE, ALL DETECTOR LOOP CABLE TO BE SHIELDED							
MICROWAVE VEHICLE SENSOR				GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)							
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		

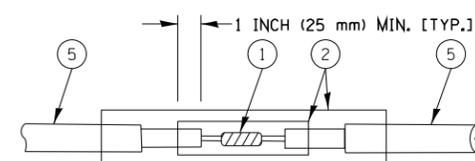
LOOP DETECTOR NOTES

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.

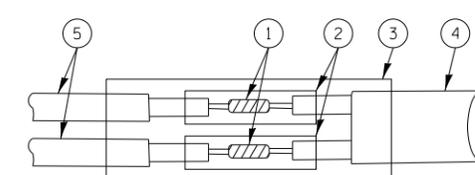


DETECTOR LOOP WIRING SCHEMATIC

- 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.

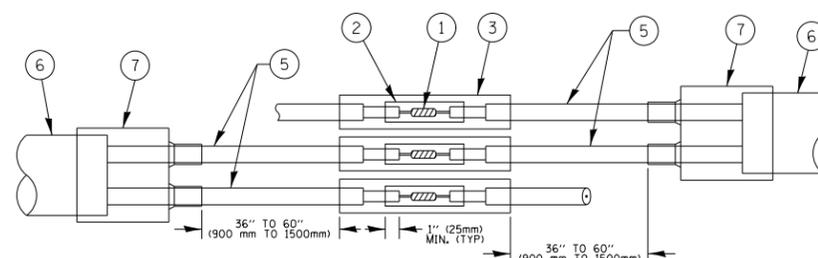


DETAIL "A"
LOOP-TO-LOOP SPLICE

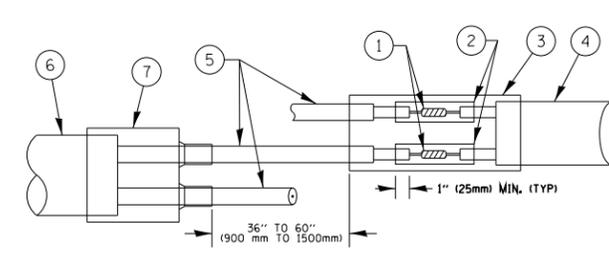


DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A"
LOOP-TO-LOOP SPLICE

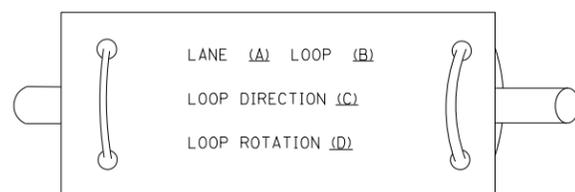


DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

PRE-FORMED LOOP

LOOP DETECTOR SPLICE

LOOP LEAD-IN CABLE TAG



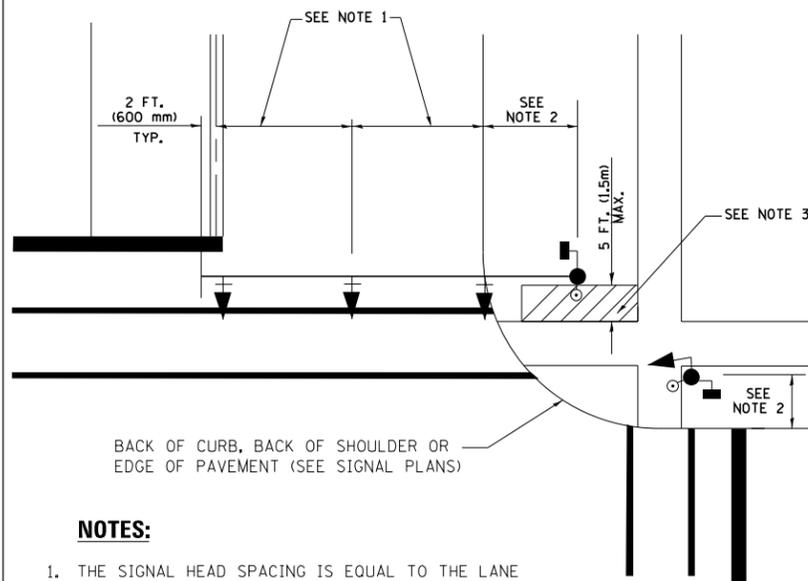
- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

- 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 = footemj	DESIGNED - DAD	REVISED - DAG 1-1-14	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ca:\pwwork\pwwork\footemj\d0108315\ts05.dgn		DRAWN - BCK	REVISED -		SCALE: NONE	SHEET NO. 2 OF 7 SHEETS	STA.	TO STA.	2013-076TS	COOK	65	10
		CHECKED - DAD	REVISED -						TS-05			
		DATE - 10-28-09	REVISED -						FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	

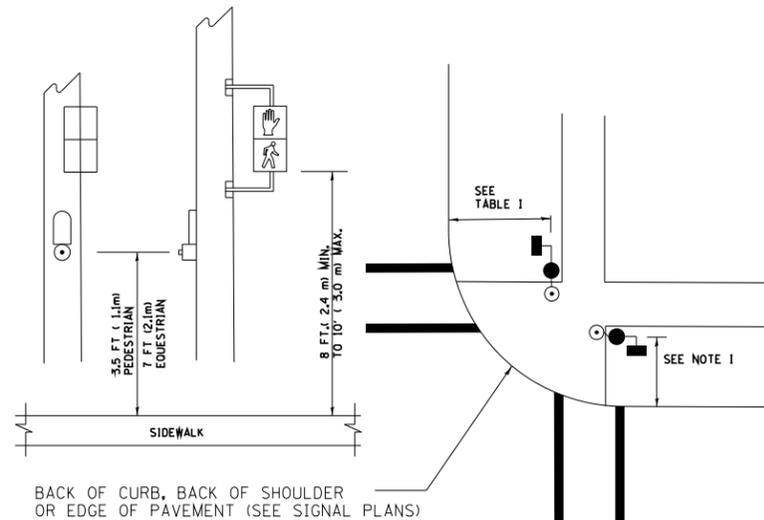
**TRAFFIC SIGNAL MAST ARM AND SIGNAL POST
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR
FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN
WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.**



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."

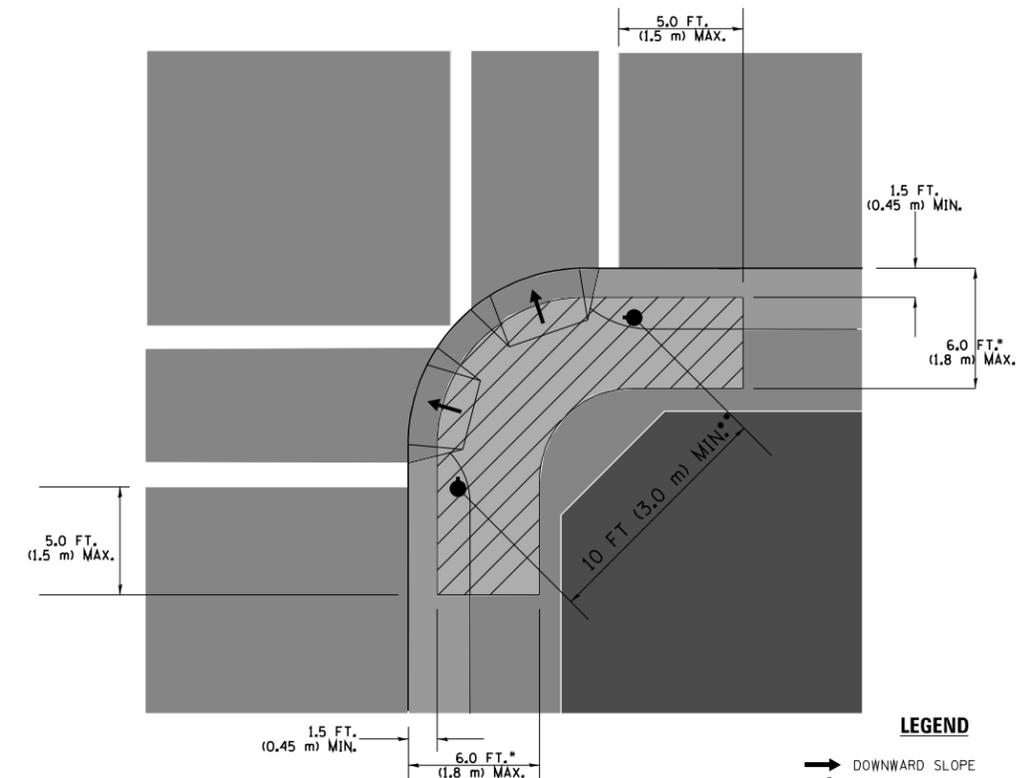
**PEDESTRIAN SIGNAL POST
AND
PEDESTRIAN PUSH BUTTON POST**



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:

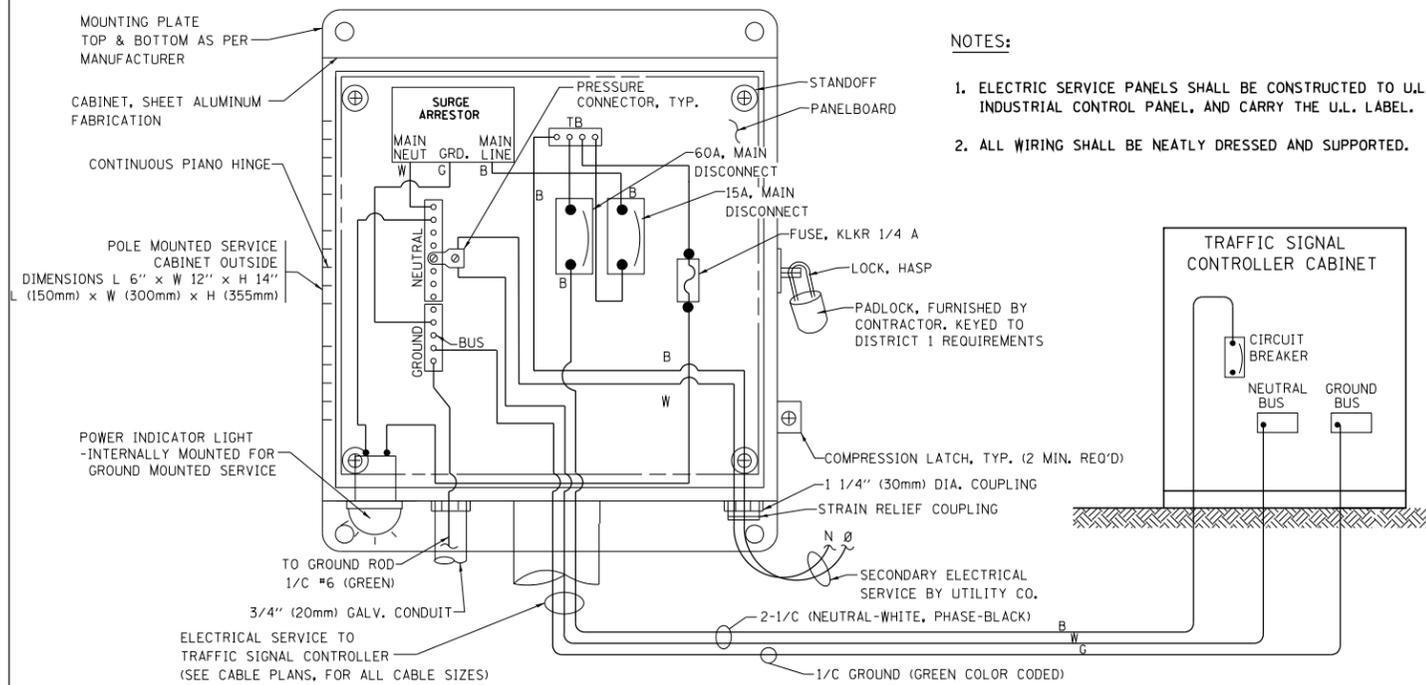
1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM 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

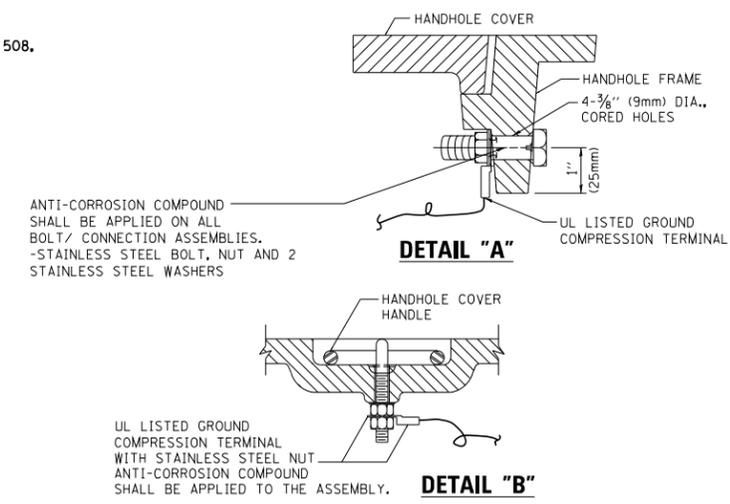
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 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.

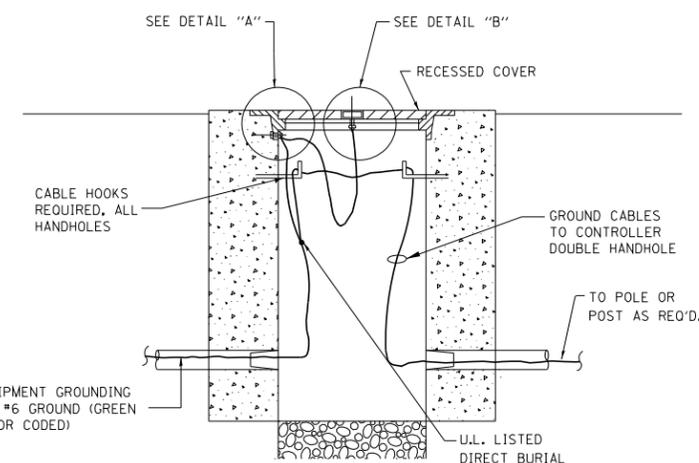


**ELECTRICAL SERVICE – PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)
SERVICE INSTALLATION POLE MOUNT (SHOWN)
(NOT TO SCALE)**

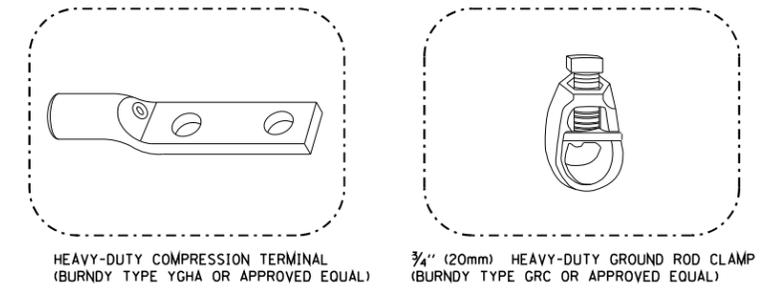


**NOTES:
GROUNDING SYSTEM**

1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC.). GROUND ROD SHALL BE 3/4" DIA. x 10'-0" (20mm x 3.0m) LONG, COPPER CLAD. ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.
2. THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
3. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
4. THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.

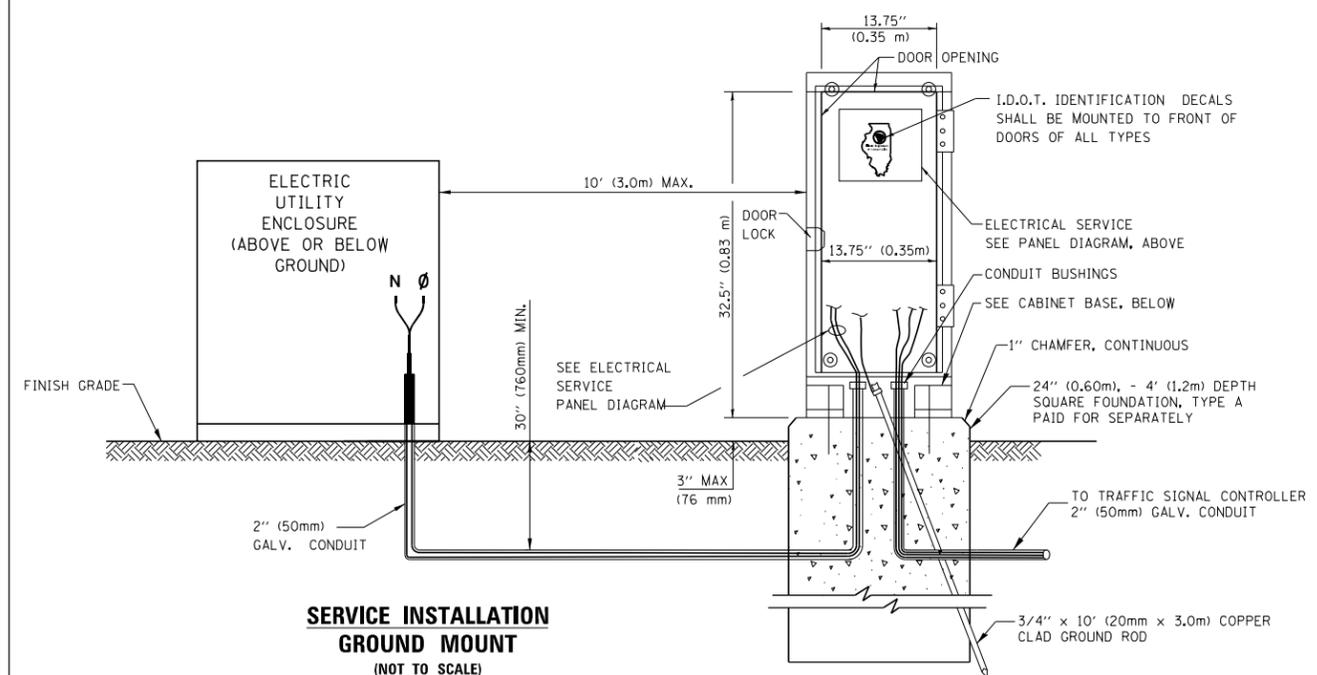


**HANDHOLE COVER & FRAME – GROUNDING DETAIL
(NOT TO SCALE)**

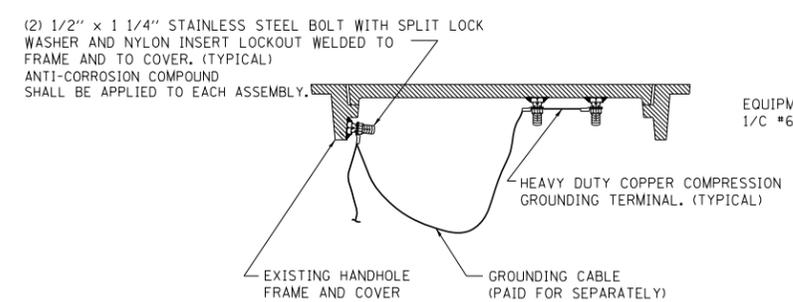


NOTES:

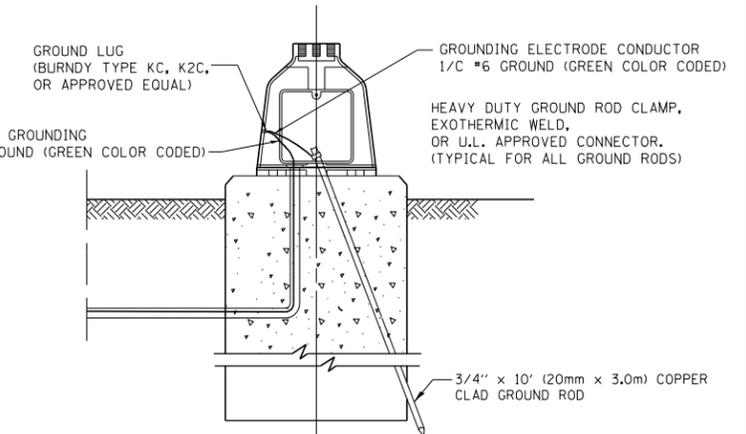
- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
- GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



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

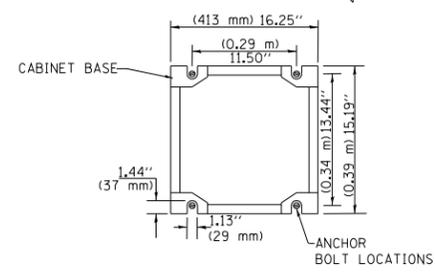


**EXISTING HANDHOLE COVER & FRAME – GROUNDING DETAIL
(NOT TO SCALE)**



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

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

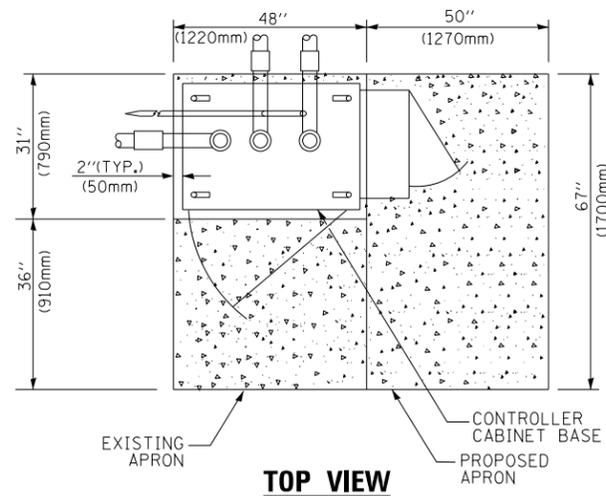


FILE NAME =	USER NAME = footemj	DESIGNED - DAD	REVISED - DAG 1-1-14
ca:\pwwork\pwwork\footemj\d0108315\ts05.dgn		DRAWN - BCK	REVISED -
		CHECKED - DAD	REVISED -
		DATE - 10-28-09	REVISED -

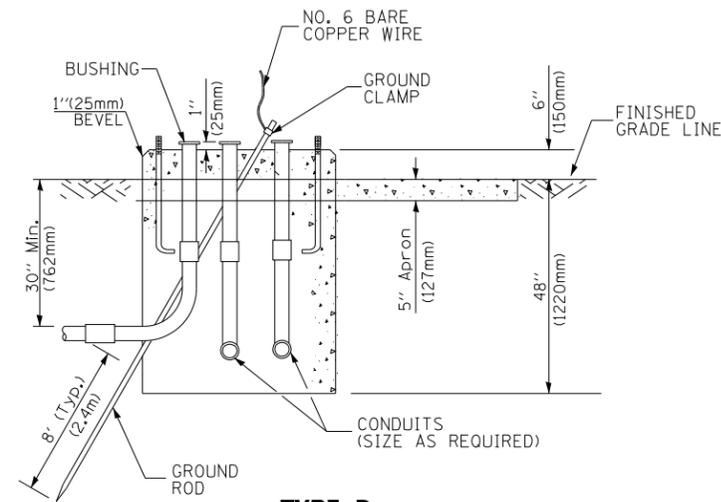
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

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

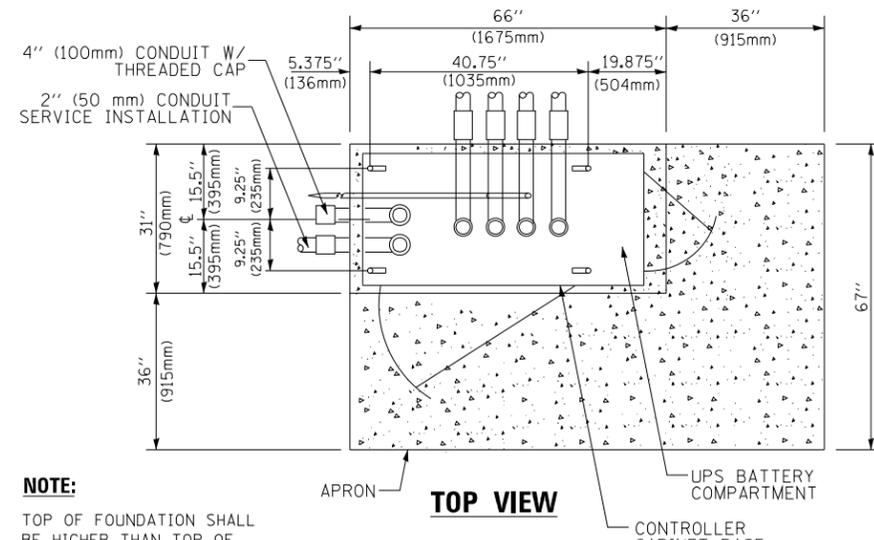
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2013-076TS	COOK	65	12
	TS-05	CONTRACT NO.	60X65	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



TOP VIEW



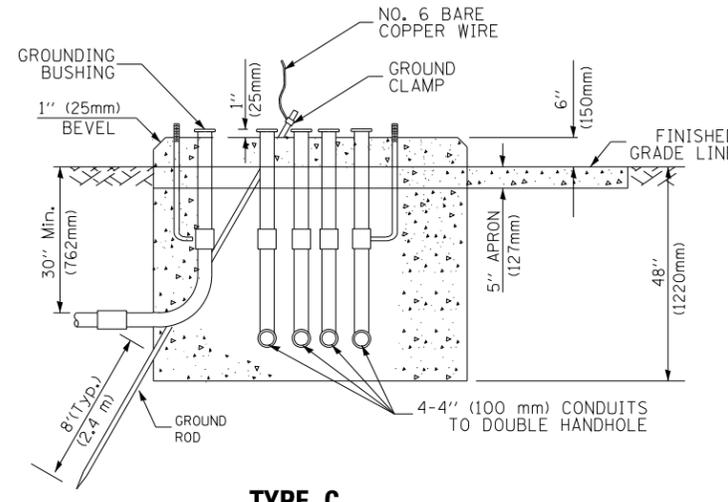
**TYPE D
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET**



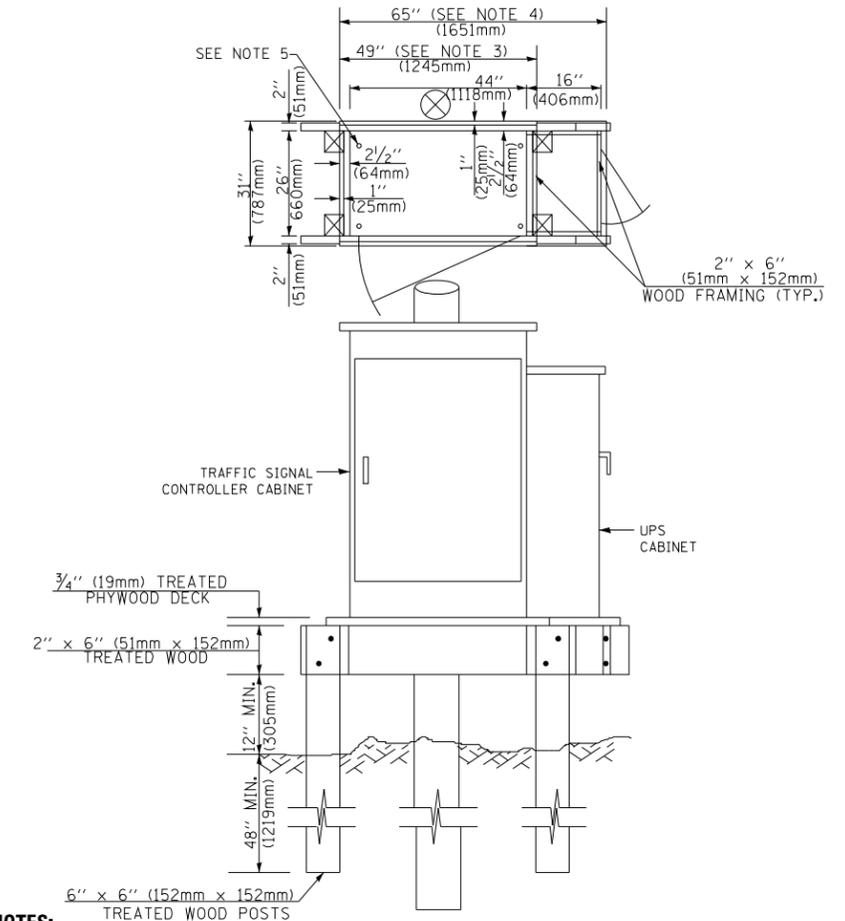
TOP VIEW

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	① 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)
	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 65' (19.8 m) and up 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..

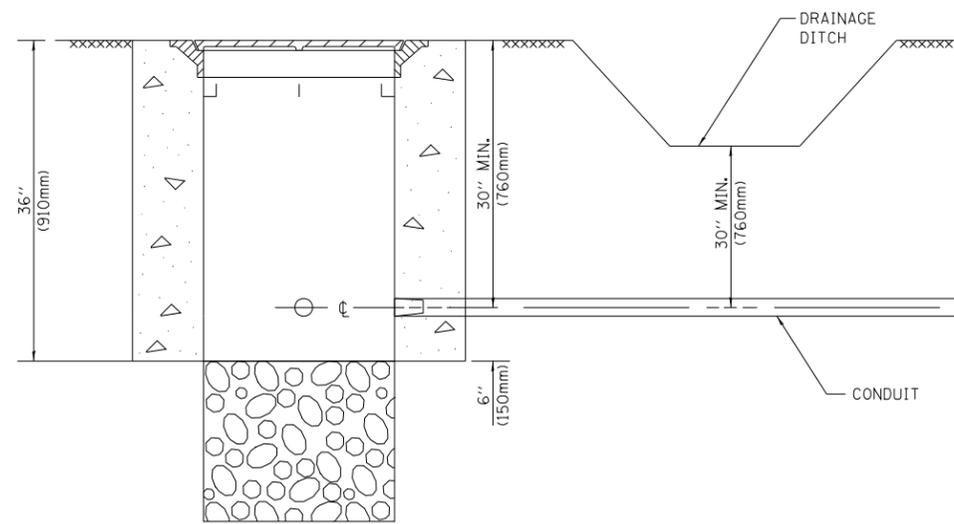
DEPTH OF MAST ARM FOUNDATIONS, TYPE E

FILE NAME =	USER NAME = footemj	DESIGNED - DAG	REVISED - DAG 1-1-14
ca:\pwork\p1dot\footemj\d0108315\ts05.dgn		DRAWN - BCK	REVISED -
	PLOT SCALE = 50.0000' / in.	CHECKED - DAD	REVISED -
	PLOT DATE = 1/13/2014	DATE - 10-28-09	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DISTRICT ONE			
STANDARD TRAFFIC SIGNAL DESIGN DETAILS			
SCALE: NONE	SHEET NO. 5 OF 7 SHEETS	STA.	TO STA.

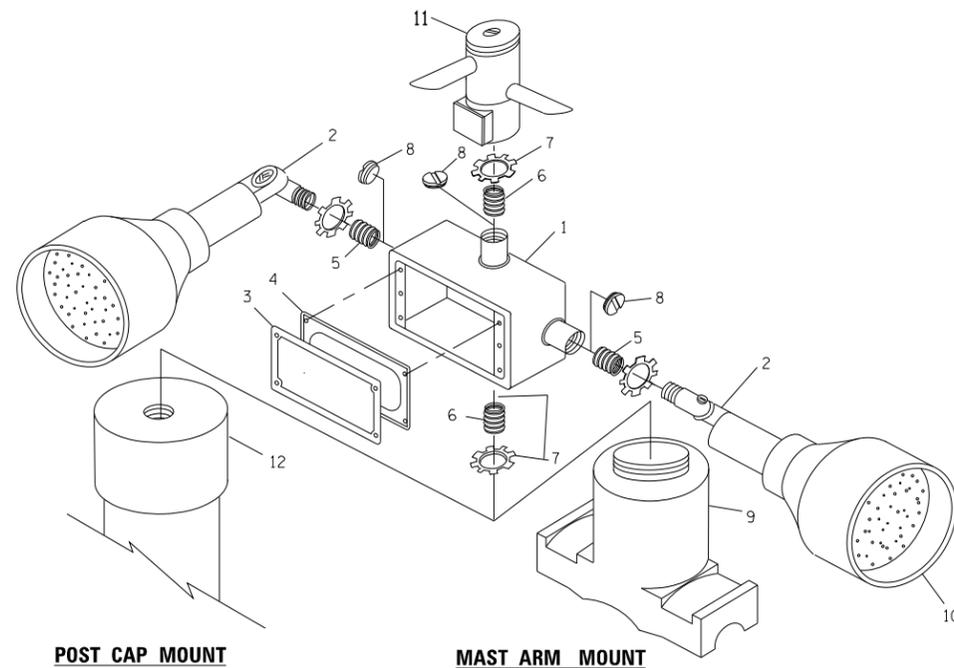
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2013-076TS	COOK	65	13
TS-05		CONTRACT NO.	60X65	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



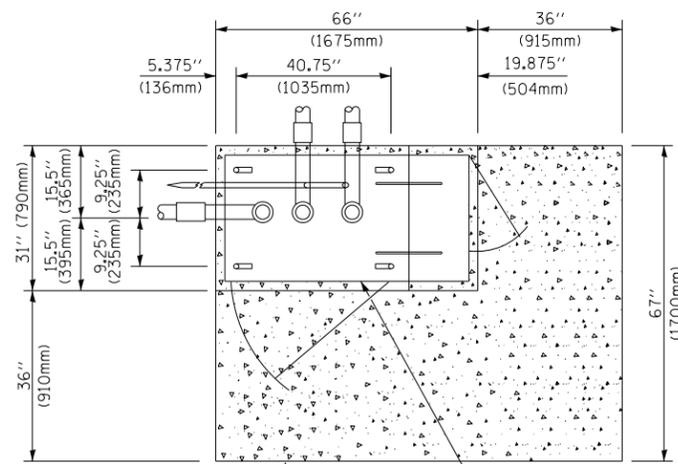
NOTES:

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.

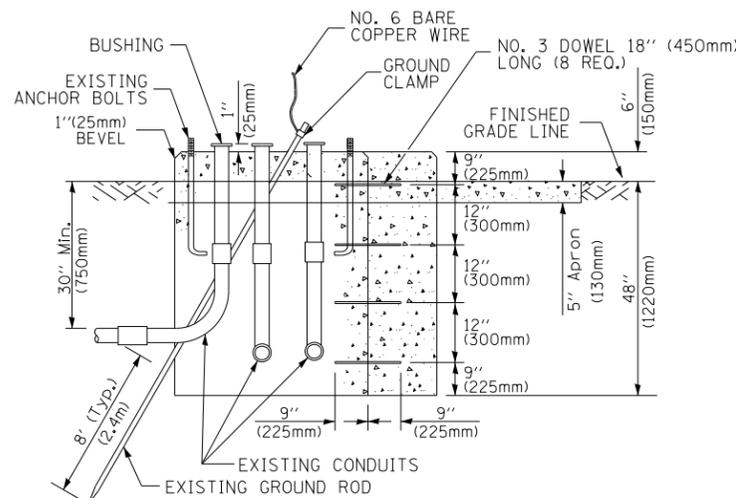
HANDHOLE WITH MINIMUM CONDUIT DEPTH
(NOT TO SCALE)



EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL



TOP VIEW
(NOT TO SCALE)

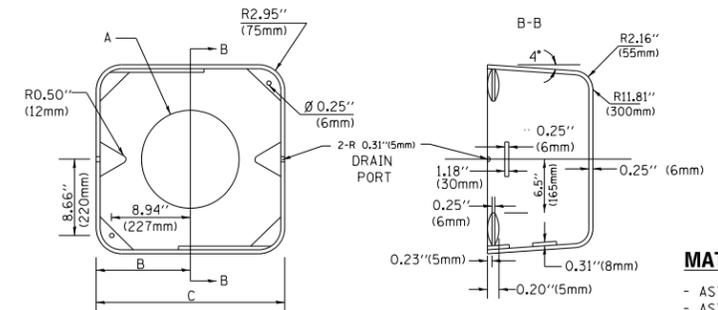


MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION
(NOT TO SCALE)

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-0-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
VARIABLES	9.5" (241mm)	19" (483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)
VARIABLES	10.75" (273mm)	21.5" (546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 kg)
VARIABLES	13.0" (330mm)	26" (660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)
VARIABLES	18.5" (470mm)	37" (940mm)	7" (178mm) - 12" (300mm)	126 lbs (57 kg)

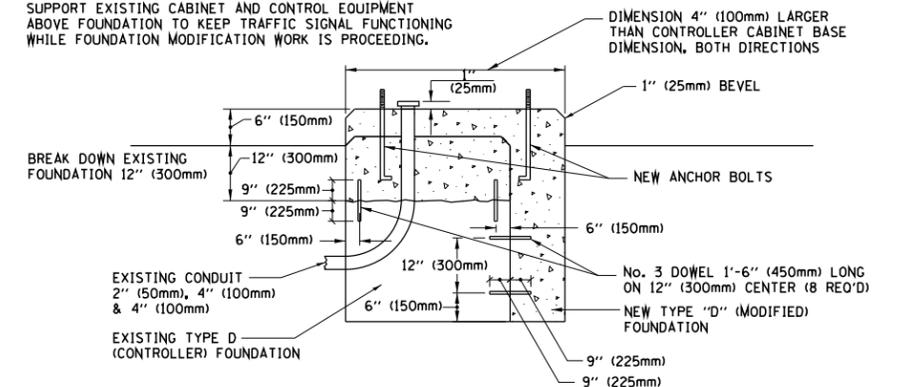
SHROUD

NOTES:

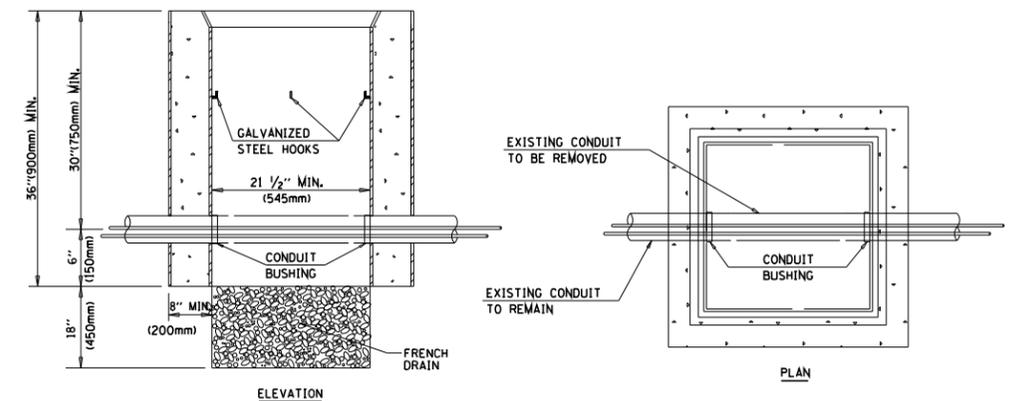
1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
2. THE SUPPLIER SHALL VERIFY THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.

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

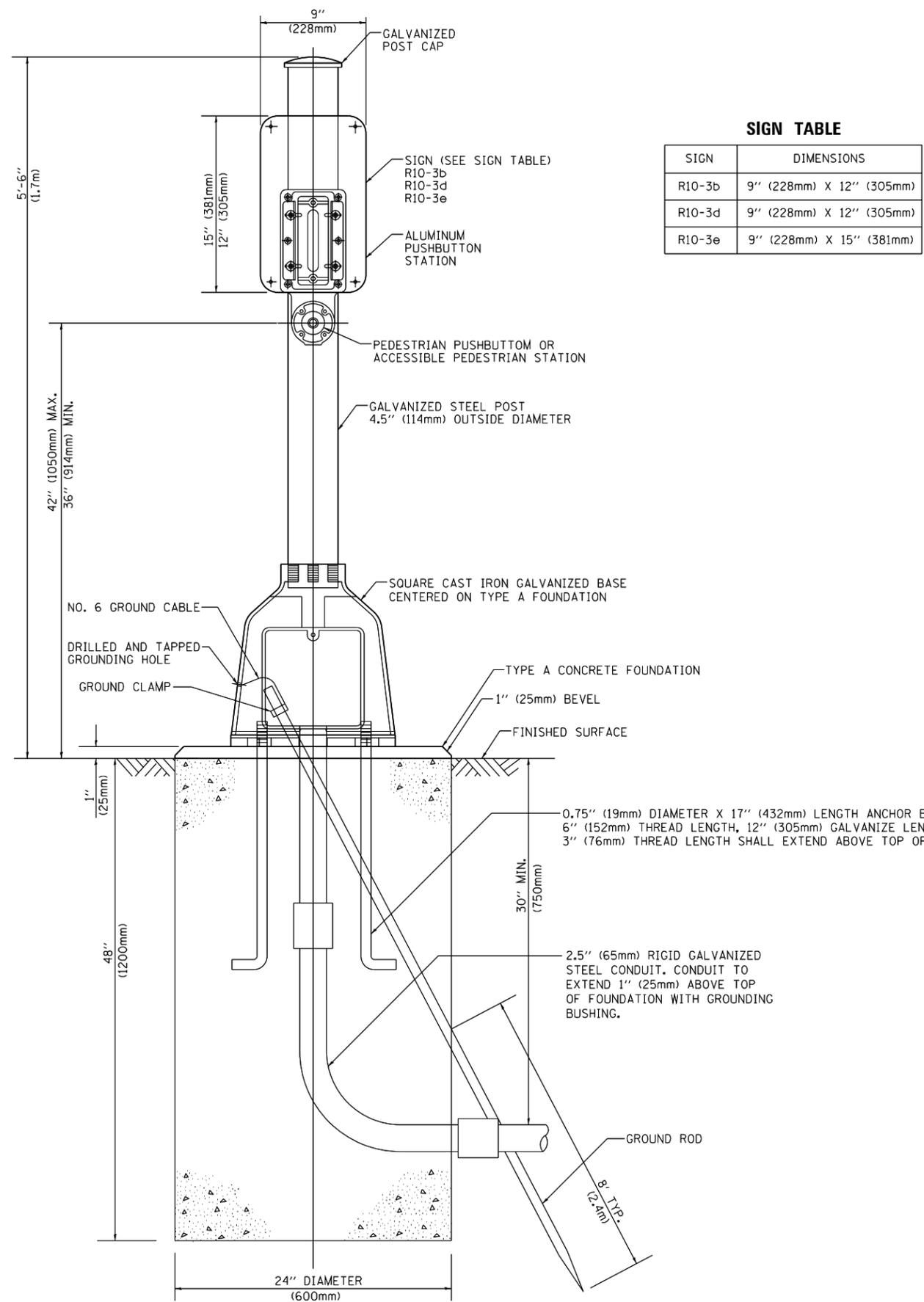
FILE NAME =	USER NAME = footemj	DESIGNED - DAD	REVISED - DAG 1-1-14
ca:\pwwork\pwwork\footemj\d0108315\ts05.dgn		DRAWN - BCK	REVISED -
	PLOT SCALE = 50.0000' / in.	CHECKED - DAD	REVISED -
	PLOT DATE = 1/13/2014	DATE - 10-28-09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

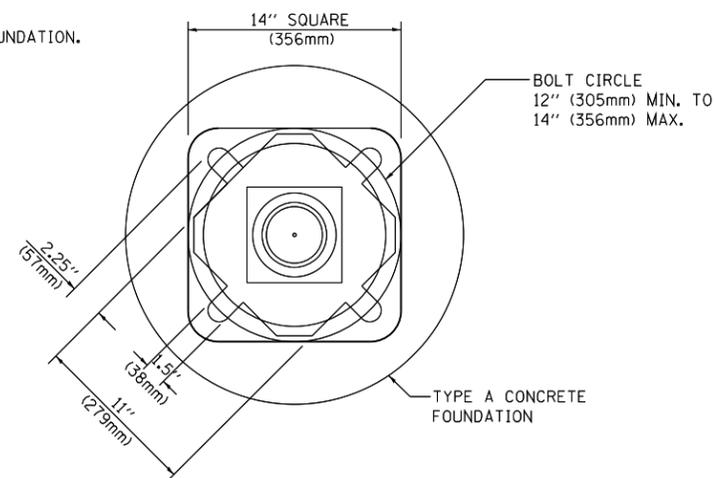
SCALE: NONE SHEET NO. 6 OF 7 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2013-076TS	COOK	65	14
	TS-05	CONTRACT NO.	60X65	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



SIGN TABLE

SIGN	DIMENSIONS
R10-3b	9" (228mm) X 12" (305mm)
R10-3d	9" (228mm) X 12" (305mm)
R10-3e	9" (228mm) X 15" (381mm)



BOLT PATTERN

PEDESTRIAN PUSH BUTTON POST, TYPE A

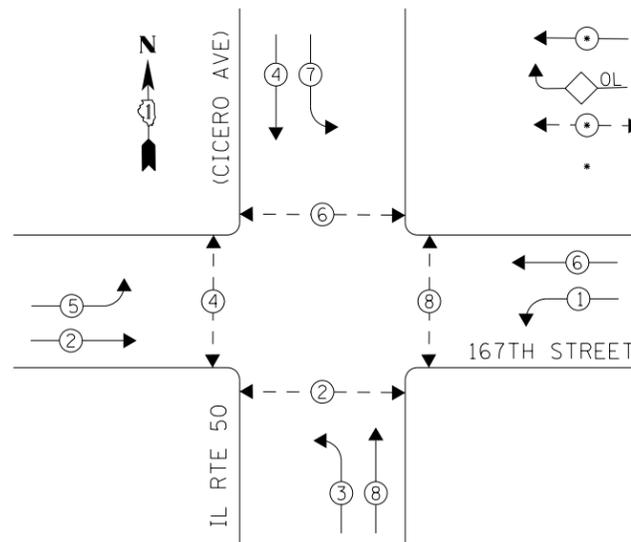
FILE NAME =	USER NAME = footemj	DESIGNED - DAG	REVISED - DAG 1-1-14
ca:\pwwork\pwwork\footemj\d0108315\ts05.dgn		DRAWN - GND	REVISED -
PLOT SCALE = 50.0000' / in.		CHECKED - DAD	REVISED -
PLOT DATE = 1/13/2014		DATE - 10/1/2012	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

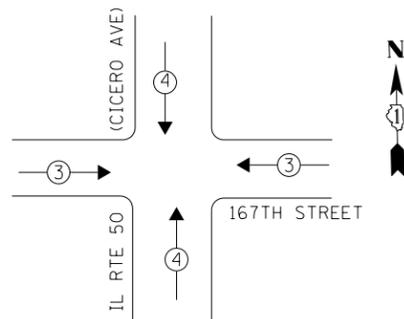
DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS			
SCALE: NONE	SHEET NO. 7 OF 7 SHEETS	STA.	TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2013-076TS	COOK	65	15
TS-05			CONTRACT NO. 60X65	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

EXISTING CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↓ ↑

LEGEND

- ← ⊙ → DUAL ENTRY PHASE
- ◊ OL OVERLAP
- ← ⊙ → PEDESTRIAN PHASE
- * NUMBER REFERS TO ASSOCIATED PHASE

- REC RED LIGHT ENFORCEMENT CABINET
- ⊙ RED LIGHT ENFORCEMENT DETECTION UNIT
- F RED LIGHT ENFORCEMENT FLASH UNIT
- 📷 RED LIGHT ENFORCEMENT CAMERA

CONSTRUCTION NOTES

- 1 THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 14 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.
- 3 THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 16 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.

NOTES

- 1) ALL COSTS RELATED TO ATTACHING THE POSTS TO THE EXISTING FOUNDATION SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED
- 2) PRIOR TO REMOVING ANY TRAFFIC SIGNAL POST SPECIFIED TO BE REPLACED IN THE SAME LOCATION THE CONTRACTOR SHALL VERIFY THAT THE PATTERN, SPACING, AND CONDITION OF THE EXISTING BOLTS ARE SUITABLE FOR RE-USE WITH A NEW POST. IF THE BOLTS ARE NOT USABLE, REPLACE AS DIRECTED BY THE ENGINEER.
- 3) THE CONTRACTOR SHALL RELOCATE EXISTING SIGN PANELS FROM POSTS THAT ARE INDICATED FOR REPLACEMENT TO THE NEW POSTS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE COST OF REMOVAL, RELOCATION AND ANY NEW MOUNTING HARDWARE NECESSARY TO COMPLETE THIS WORK SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED.

RETROFIT ALL EXISTING SIGNAL HEADS TO L.E.D.

CONTRACTOR SHALL REPLACE BROKEN MOUNTING BRACKETS AT ALL RETROFIT SIGNAL HEADS OR AS DIRECTED BY THE ENGINEER. THE COST OF THIS WORK SHALL BE INCLUDED IN THE CORRESPONDING SIGNAL HEAD, LED, RETROFIT PAY ITEM OF THE TYPE AND NUMBER OF SIGNAL HEADS, FACES, AND SECTIONS AS SPECIFIED IN THE PLANS.

SCHEDULE OF QUANTITIES

Items	Unit	Quantity
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED, RETROFIT	EACH	2
SIGNAL HEAD, LED, 3-FACE, 2-3 SECTION, 1-5 SECTION, BRACKET MOUNTED, RETROFIT	EACH	2
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	4

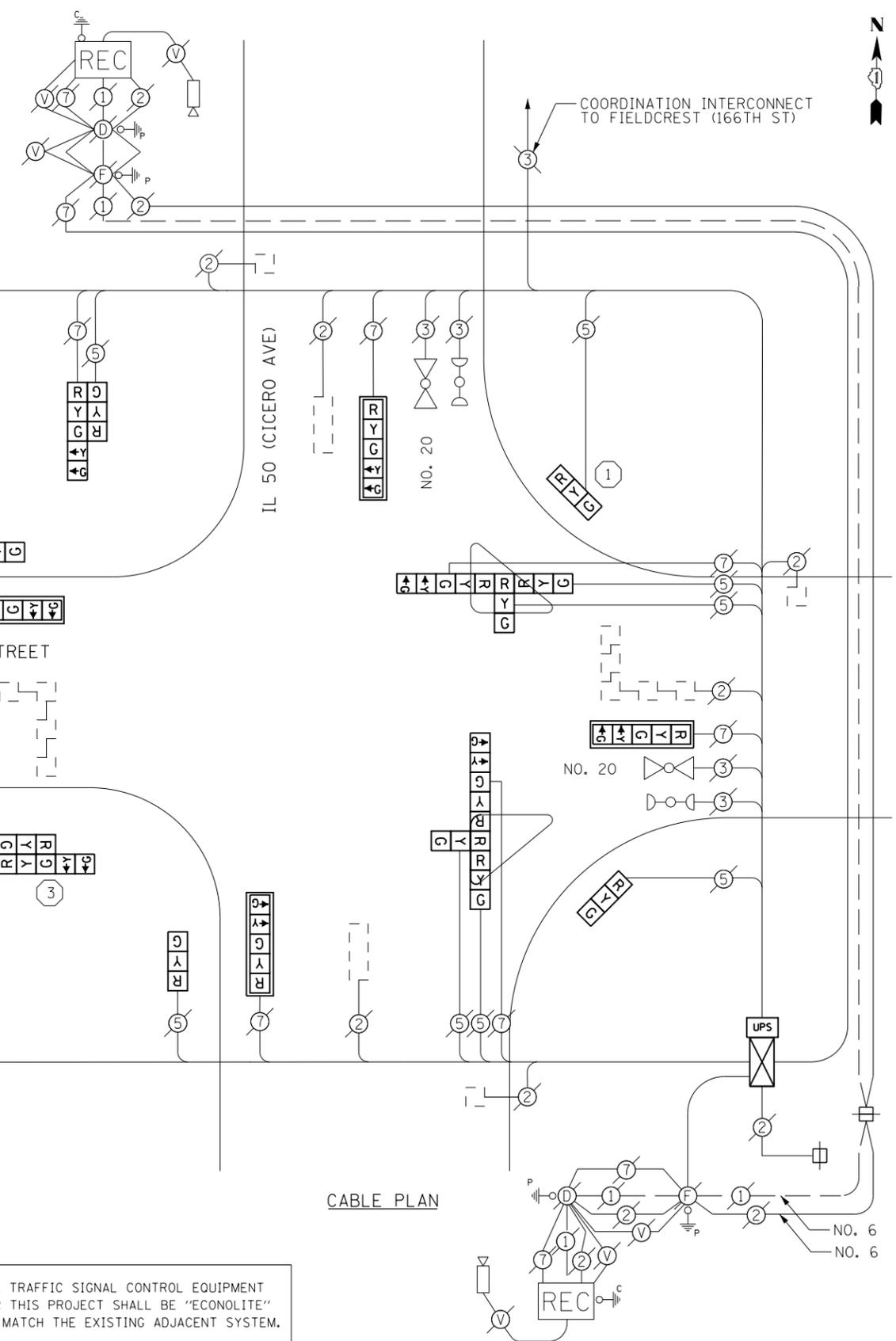
I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	18	-	17	0.50	153.0
(YELLOW)	18	-	25	0.25	112.5
(GREEN)	18	-	15	0.25	67.5
ARROW	16	-	12	0.10	19.2
PED. SIGNAL	-	-	25	1.00	-
CONTROLLER	1	-	100	1.00	100.0
ILLUM. SIGN	-	-	25	0.05	-
VIDEO SYSTEM	-	150	-	1.00	-
BATTERY BACKUP	1	25	-	1.00	25.0
LUMINAIRE	-	250	-	0.50	-
FLASHER	-	-	25	0.50	-
TOTAL =					477.2

ENERGY COSTS- **BILLED TO: IDOT DISTRICT 1**
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY- **CONTACT BRAD SHINABARGAR**
PHONE 708-325-2692
COMMONWEALTH EDISON

FILE NAME = D160X65-sh-t-TS2580.dgn	USER NAME = SE3	DESIGNED - PHL	REVISED -
Default	PLOT SCALE = 48.0000' / in.	DRAWN - PHL	REVISED -
	PLOT DATE = 2/4/2014	CHECKED - BKS	REVISED -
		DATE - \$SUBDATE	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



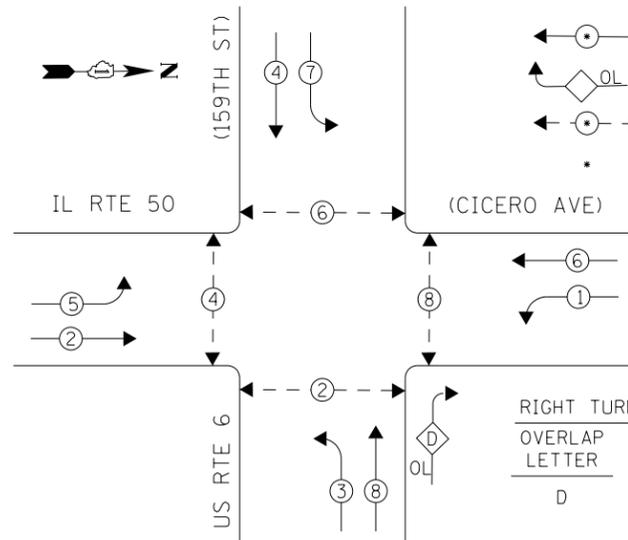
CABLE PLAN

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

TS 2580
OAK FOREST

IL 50 (CICERO AVE)/167TH STREET - CABLE PLAN SCHEDULE OF QUANTITIES, PHASE DESIG. DIAGRAM & EVP SEQUENCE		F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SCALE: SHEET OF SHEETS STA. TO STA.			2013-076TS	COOK	65	16
				CONTRACT NO. 60X65		
		ILLINOIS FED. AID PROJECT				

EXISTING CONTROLLER SEQUENCE

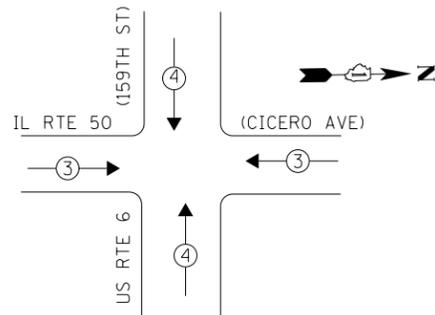


- LEGEND**
- DUAL ENTRY PHASE
 - OVERLAP
 - PEDESTRIAN PHASE
 - * NUMBER REFERS TO ASSOCIATED PHASE

RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
D	8	1

PHASE DESIGNATION DIAGRAM



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↓ ↑

I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	13	-	17	0.50	110.50
(YELLOW)	13	-	25	0.25	81.25
(GREEN)	13	-	15	0.25	48.75
ARROW	20	-	12	0.10	24.00
PED. SIGNAL	8	-	25	1.00	200.00
CONTROLLER	1	100	-	1.00	100.00
ILLUM. SIGN	-	-	25	0.05	-
VIDEO SYSTEM	-	150	-	1.00	-
BATTERY BACKUP	1	25	-	1.00	25.00
LUMINAIRE	-	250	-	0.50	-
FLASHER	-	-	25	0.50	-
TOTAL =				589.50	

ENERGY COSTS- **BILLED TO: IDOT DISTRICT 1**
 201 WEST CENTER COURT
 SCHAUMBURG, IL 60196-1096

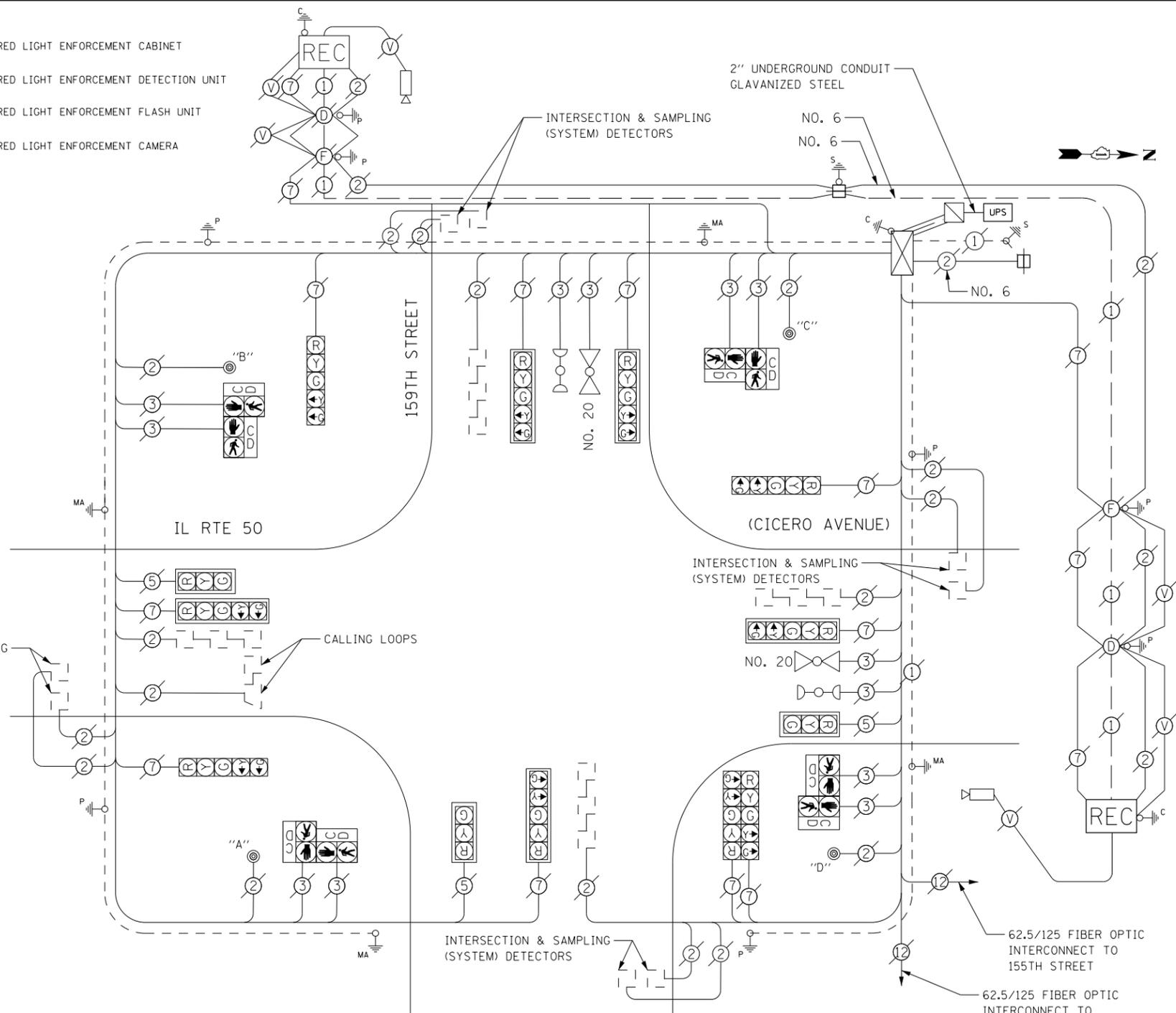
ENERGY SUPPLY- **CONTACT BRAD SHINABARGAR**
 PHONE **708-325-2692**
 COMMONWEALTH EDISON

THE UPS SHALL BE INSTALLED NEXT TO THE EXISTING CONTROLLER CABINET USING HELICAL GROUND ANCHORS DUE TO THE PHYSICAL CONSTRAINTS OR AS DIRECTED BY THE ENGINEER. THIS WORK, CONDUIT, AND ELECTRICAL CABLE NEEDED TO PROPERLY INSTALL THE UPS SHALL BE INCLUDED IN THE PAY ITEM 1/32 UNINTERRUPTABLE POWER SUPPLY, GROUND MOUNTED.

SCHEDULE OF QUANTITIES

Items	Unit	Quantity
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
UNINTERRUPTABLE POWER SUPPLY, GROUND MOUNTED	EACH	1

- RED LIGHT ENFORCEMENT CABINET
- RED LIGHT ENFORCEMENT DETECTION UNIT
- RED LIGHT ENFORCEMENT FLASH UNIT
- RED LIGHT ENFORCEMENT CAMERA



CABLE PLAN

PUSHBUTTON NOTES:

- PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4
- PUSHBUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6
- PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8
- PUSHBUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8

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

TS 170
OAK FOREST

FILE NAME = D160X65-sht-TS170.dgn	USER NAME = SE3	DESIGNED - PHL	REVISED -
Default	PLOT SCALE = 40.0000' / in.	DRAWN - PHL	REVISED -
	PLOT DATE = 2/4/2014	CHECKED - BKS	REVISED -
		DATE - \$SUBDATE	REVISED -

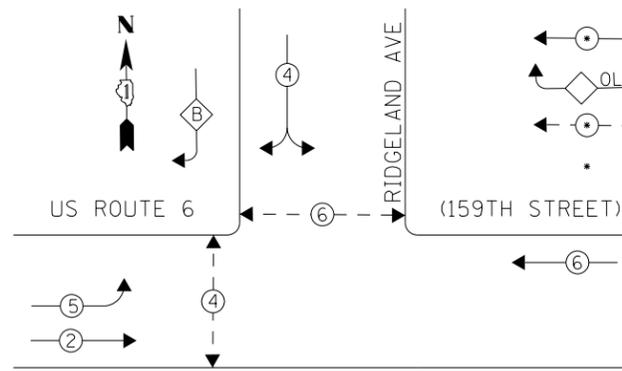
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL RTE 50 (CICERO AVE)/US RTE 6 (159TH ST) - CABLE PLAN
SCHEDULE OF QUANTITIES, PHASE DESIG. DIAGRAM & EVP SEQUENCE

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2013-076TS	COOK	65	17
CONTRACT NO. 60X65			ILLINOIS FED. AID PROJECT	

EXISTING CONTROLLER SEQUENCE

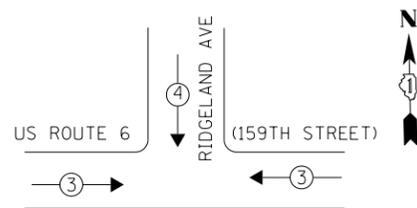


- LEGEND**
- ← ⊙ → DUAL ENTRY PHASE
 - ◊ OL OVERLAP
 - ← ⊙ → PEDESTRIAN PHASE
 - * NUMBER REFERS TO ASSOCIATED PHASE

RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
B	4	5

PHASE DESIGNATION DIAGRAM



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↓

I. D. O. T.
TRAFFIC SIGNAL INSTALLATION
ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	11	-	17	0.50	93.5
(YELLOW)	11	-	25	0.25	68.75
(GREEN)	11	-	15	0.25	41.25
ARROW	8	-	12	0.10	9.6
PED. SIGNAL	4	-	25	1.00	100.0
CONTROLLER	1	100	-	1.00	100.0
ILLUM. SIGN	-	-	-	-	-
VIDEO SYSTEM	-	-	-	-	-
BATTERY BACKUP LUMINAIRE	1	25	-	1.00	25.0
FLASHER	-	-	-	-	-
TOTAL =					438.1

ENERGY COSTS- **BILLED TO: IDOT DISTRICT 1**
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

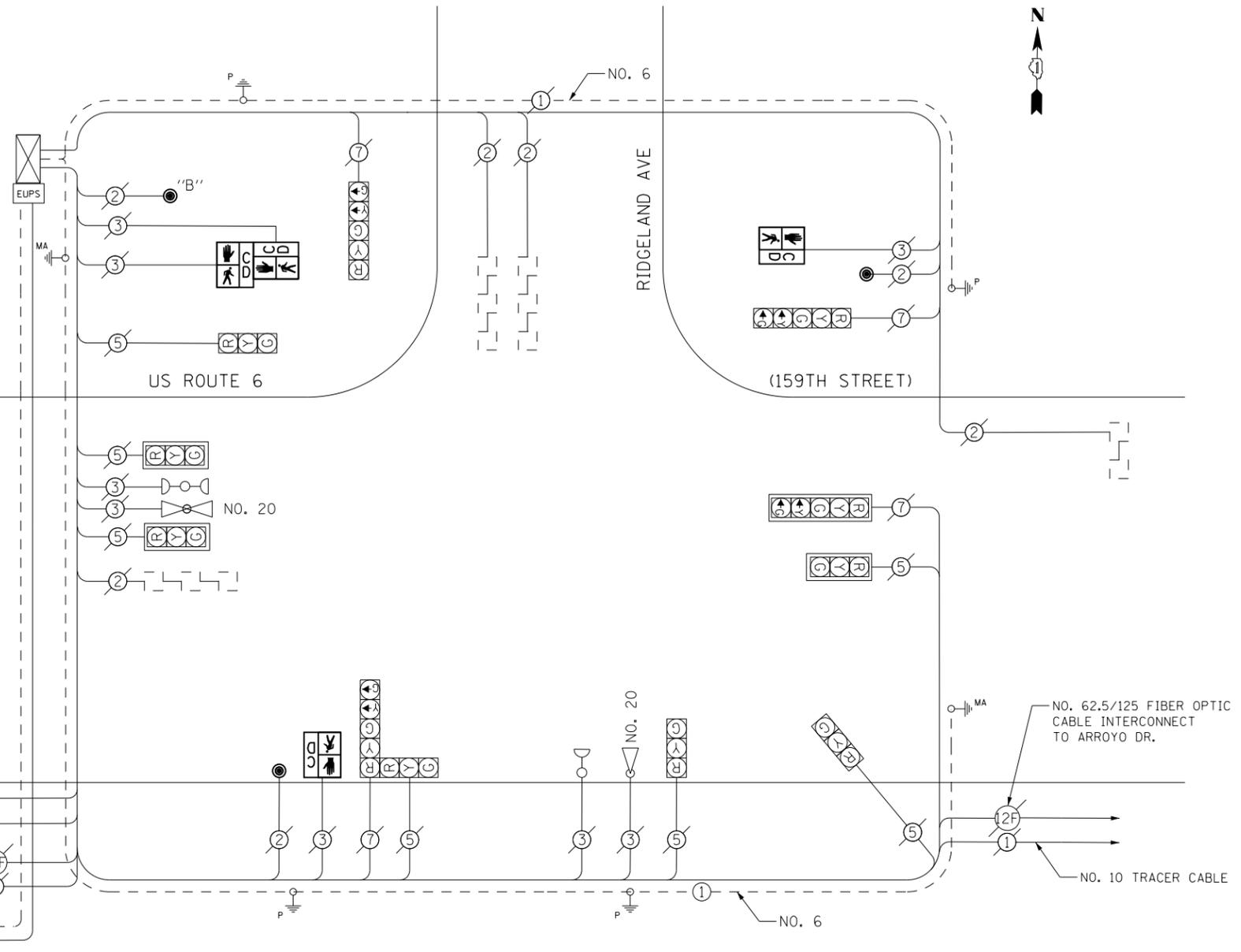
ENERGY SUPPLY- **CONTACT BRAD SHINABARGAR**
PHONE 708-325-2692
COMMONWEALTH EDISON

SCHEDULE OF QUANTITIES

Items	Unit	Quantity
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
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
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
PEDESTRIAN PUSH-BUTTON, NON-LATCHING	EACH	3

NO. 62.5/125 FIBER OPTIC CABLE INTERCONNECT TO OAK PARK AVE.

NO. 10 TRACER CABLE



CABLE PLAN

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

PUSHBUTTON NOTES:

PUSHBUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6

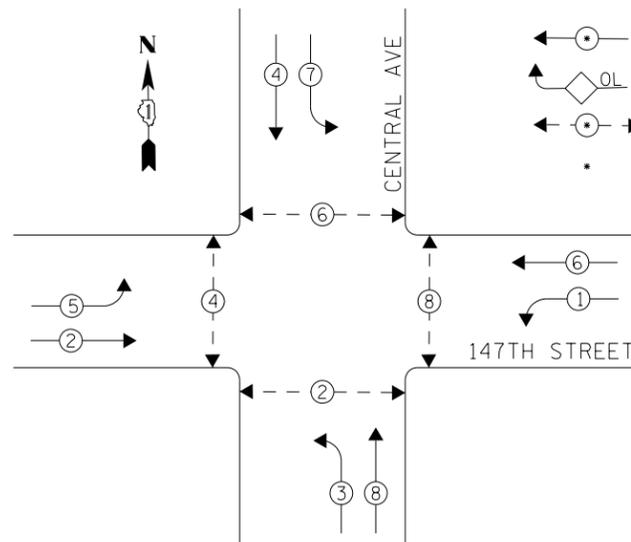
REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 1 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE
- 3 EACH PEDESTRIAN PUSH-BUTTON

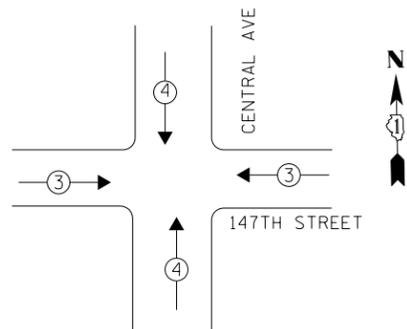
TS 275
OAK FOREST

EXISTING CONTROLLER SEQUENCE



- LEGEND**
- ← ⊙ → DUAL ENTRY PHASE
 - ◊ OL OVERLAP
 - ← ⊙ → PEDESTRIAN PHASE
 - * NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↓ ↑

I. D. O. T.
TRAFFIC SIGNAL INSTALLATION
ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	-	17	0.50	102.0
(YELLOW)	12	-	25	0.25	75.0
(GREEN)	12	-	15	0.25	45.0
ARROW	16	-	12	0.10	19.2
PED. SIGNAL	8	-	25	1.00	200.0
CONTROLLER	1	100	-	1.00	100.0
ILLUM. SIGN	-	-	-	-	-
VIDEO SYSTEM	-	-	-	-	-
BATTERY BACKUP	1	25	-	1.00	25.0
LUMINAIRE	-	-	-	-	-
FLASHER	-	-	-	-	-
TOTAL =					566.2

ENERGY COSTS- **BILLED TO: IDOT DISTRICT 1**
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY- **CONTACT BRAD SHINABARGAR**
PHONE 708-325-2692
COMMONWEALTH EDISON

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

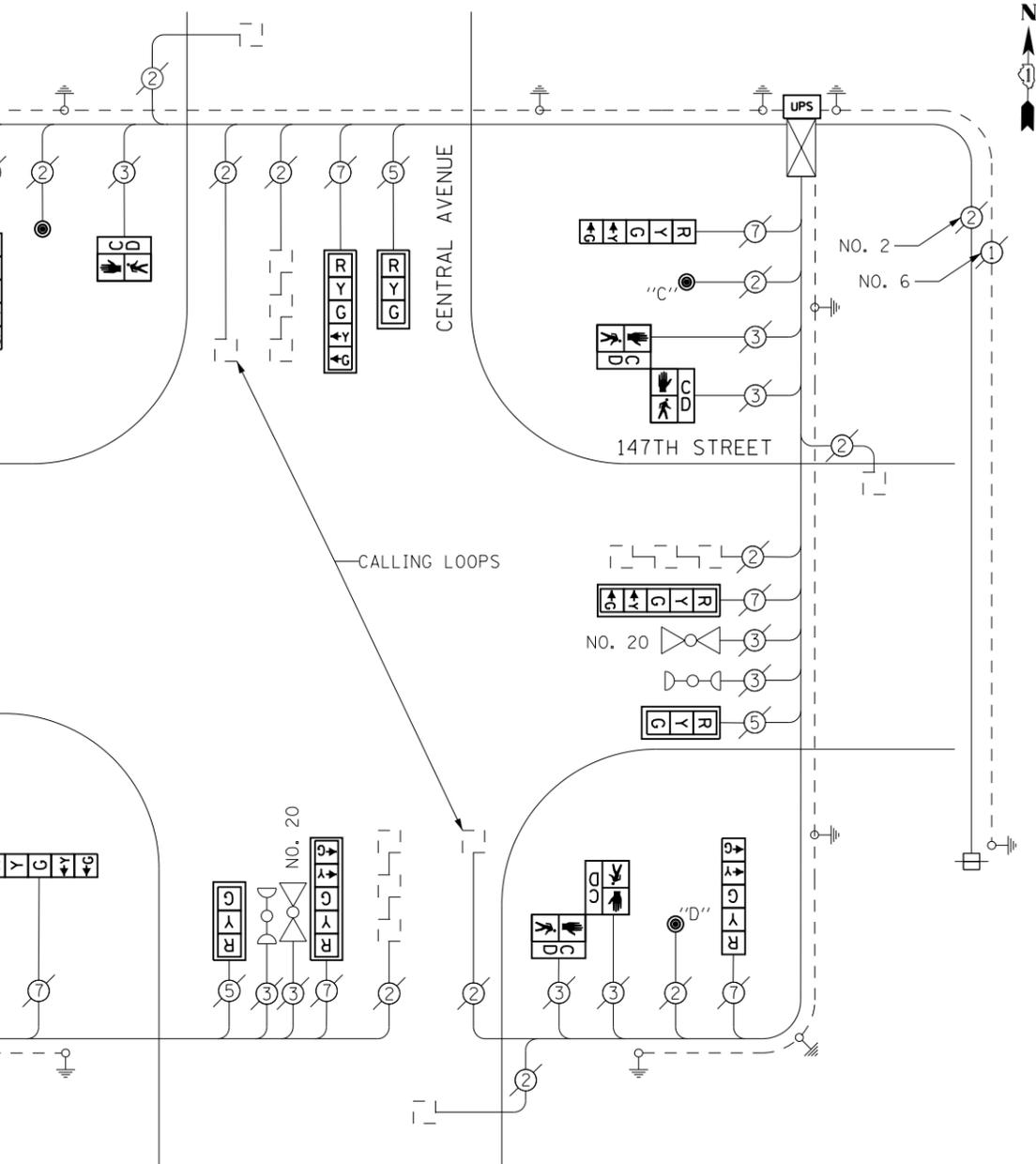
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 3 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE
- 5 EACH PEDESTRIAN PUSH-BUTTON

SCHEDULE OF QUANTITIES

Items	Unit	Quantity
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
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	3
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	4
PEDESTRIAN PUSH-BUTTON, NON-LATCHING	EACH	5

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



CABLE PLAN

PUSHBUTTON NOTES:

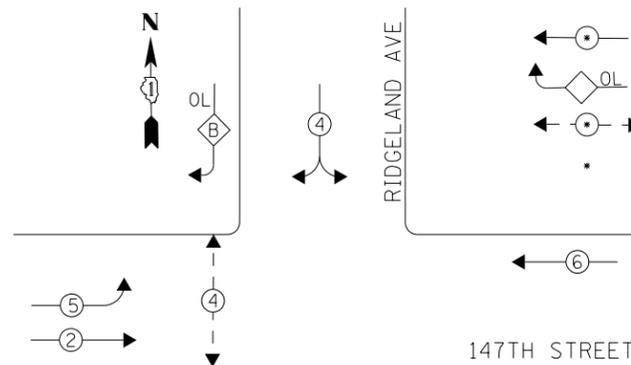
PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4
 PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8
 PUSHBUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8

RETROFIT ALL EXISTING
SIGNAL HEADS TO L.E.D.

CONTRACTOR SHALL REPLACE BROKEN MOUNTING BRACKETS AT ALL RETROFIT SIGNAL HEADS OR AS DIRECTED BY THE ENGINEER. THE COST OF THIS WORK SHALL BE INCLUDED IN THE CORRESPONDING SIGNAL HEAD, LED, RETROFIT PAY ITEM OF THE TYPE AND NUMBER OF SIGNAL HEADS, FACES, AND SECTIONS AS SPECIFIED IN THE PLANS.

TS 4075
OAK FOREST

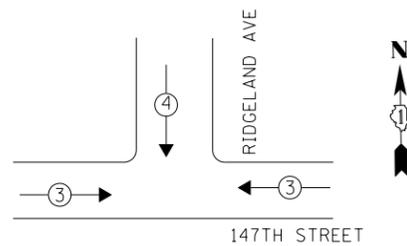
EXISTING CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
B	= 4	+ 5

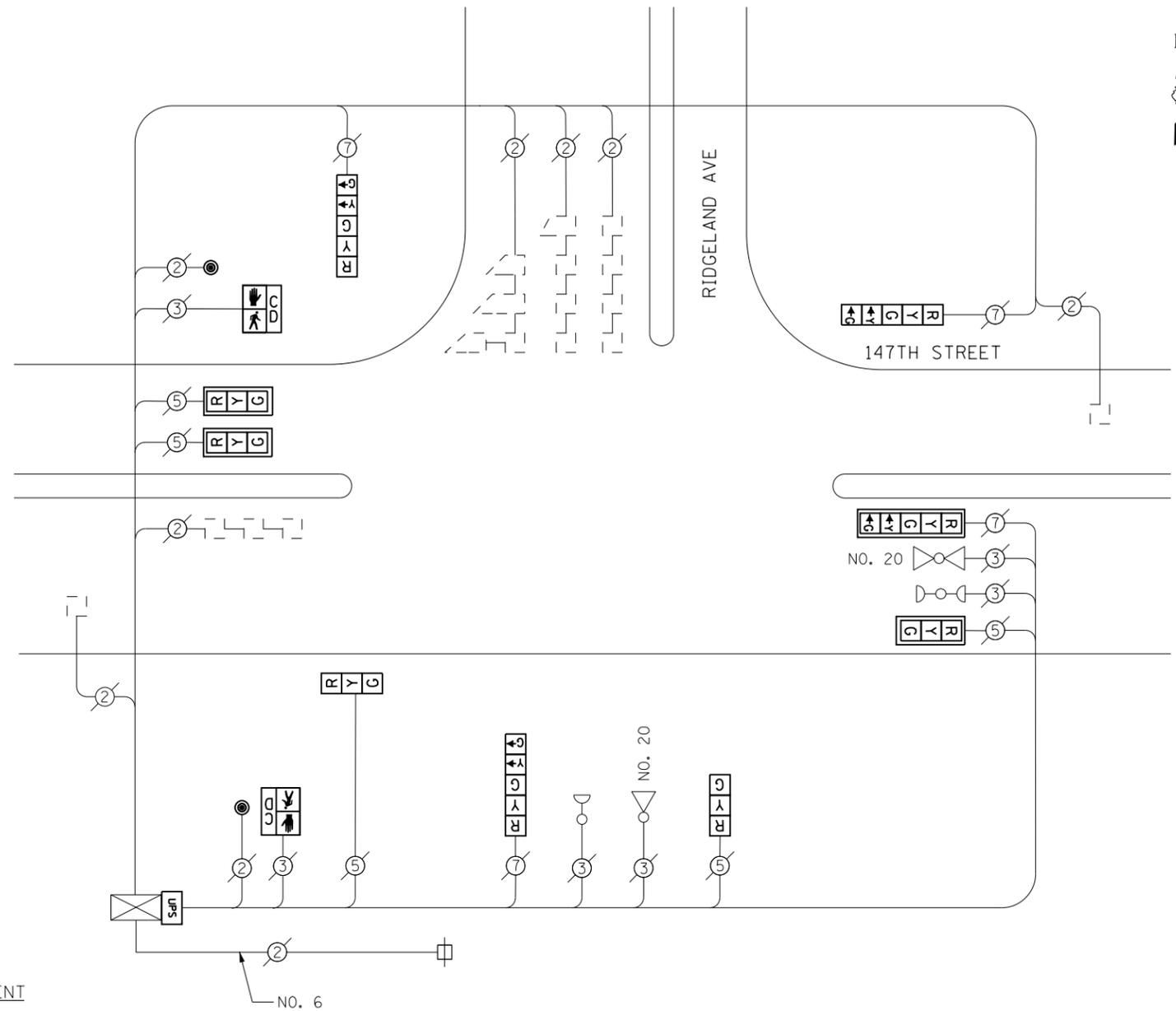


EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↓

LEGEND

- ← ⊙ → DUAL ENTRY PHASE
- ◊ OL OVERLAP
- ← ⊙ → PEDESTRIAN PHASE
- * NUMBER REFERS TO ASSOCIATED PHASE



CABLE PLAN

RETROFIT ALL EXISTING SIGNAL HEADS TO L.E.D.

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 2 EACH PEDESTRIAN PUSH-BUTTON

SCHEDULE OF QUANTITIES

Items	Unit	Quantity
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
PEDESTRIAN PUSH-BUTTON	EACH	2
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	2
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	3
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	1
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	3

CONTRACTOR SHALL REPLACE BROKEN MOUNTING BRACKETS AT ALL RETROFIT SIGNAL HEADS OR AS DIRECTED BY THE ENGINEER. THE COST OF THIS WORK SHALL BE INCLUDED IN THE CORRESPONDING SIGNAL HEAD, LED, RETROFIT PAY ITEM OF THE TYPE AND NUMBER OF SIGNAL HEADS, FACES, AND SECTIONS AS SPECIFIED IN THE PLANS.

I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	9	-	17	0.50	76.5
(YELLOW)	9	-	25	0.25	56.25
(GREEN)	9	-	15	0.25	33.75
ARROW	8	-	12	0.10	9.6
PED. SIGNAL	2	-	25	1.00	50.0
CONTROLLER	1	100	-	1.00	100.0
ILLUM. SIGN	-	-	-	-	-
VIDEO SYSTEM	-	-	-	-	-
BATTERY BACKUP	1	25	-	1.00	25.0
LUMINAIRE	-	-	-	-	-
FLASHER	-	-	-	-	-
TOTAL =					351.1

ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY- CONTACT BRAD SHINABARGAR
PHONE 708-325-2692
COMMONWEALTH EDISON

FILE NAME = D160X65-sh1-TS4076.dgn	USER NAME = SE3	DESIGNED - PHL	REVISED -
Default	PLOT SCALE = 40.0000' / in.	DRAWN - PHL	REVISED -
	PLOT DATE = 2/4/2014	CHECKED - BKS	REVISED -
		DATE - \$SUBDATE	REVISED -

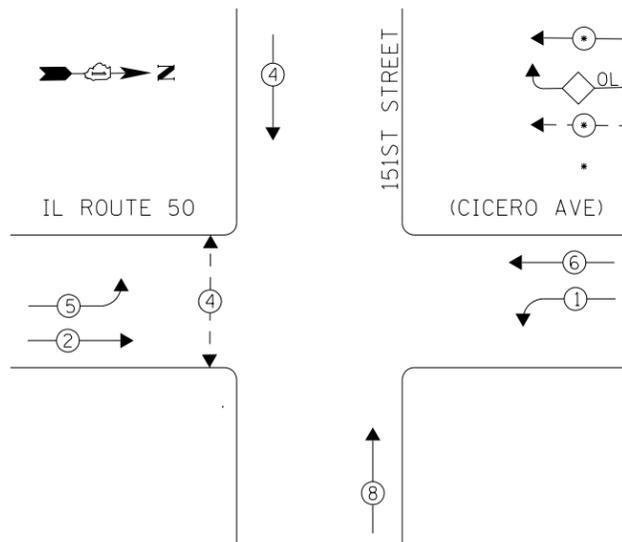
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

RIDGELAND AVE/147TH STREET - CABLE PLAN
SCHEDULE OF QUANTITIES, PHASE DESIG. DIAGRAM & EVP SEQUENCE
SCALE: SHEET OF SHEETS STA. TO STA.

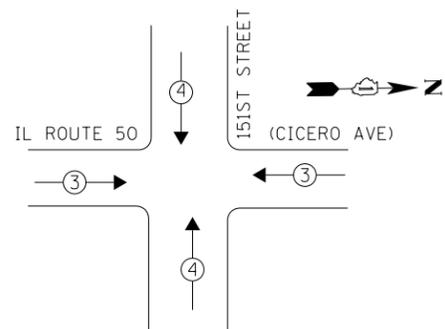
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2013-076TS	COOK	65	20
CONTRACT NO. 60X65				
ILLINOIS FED. AID PROJECT				

TS 4076 OAK FOREST

EXISTING CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

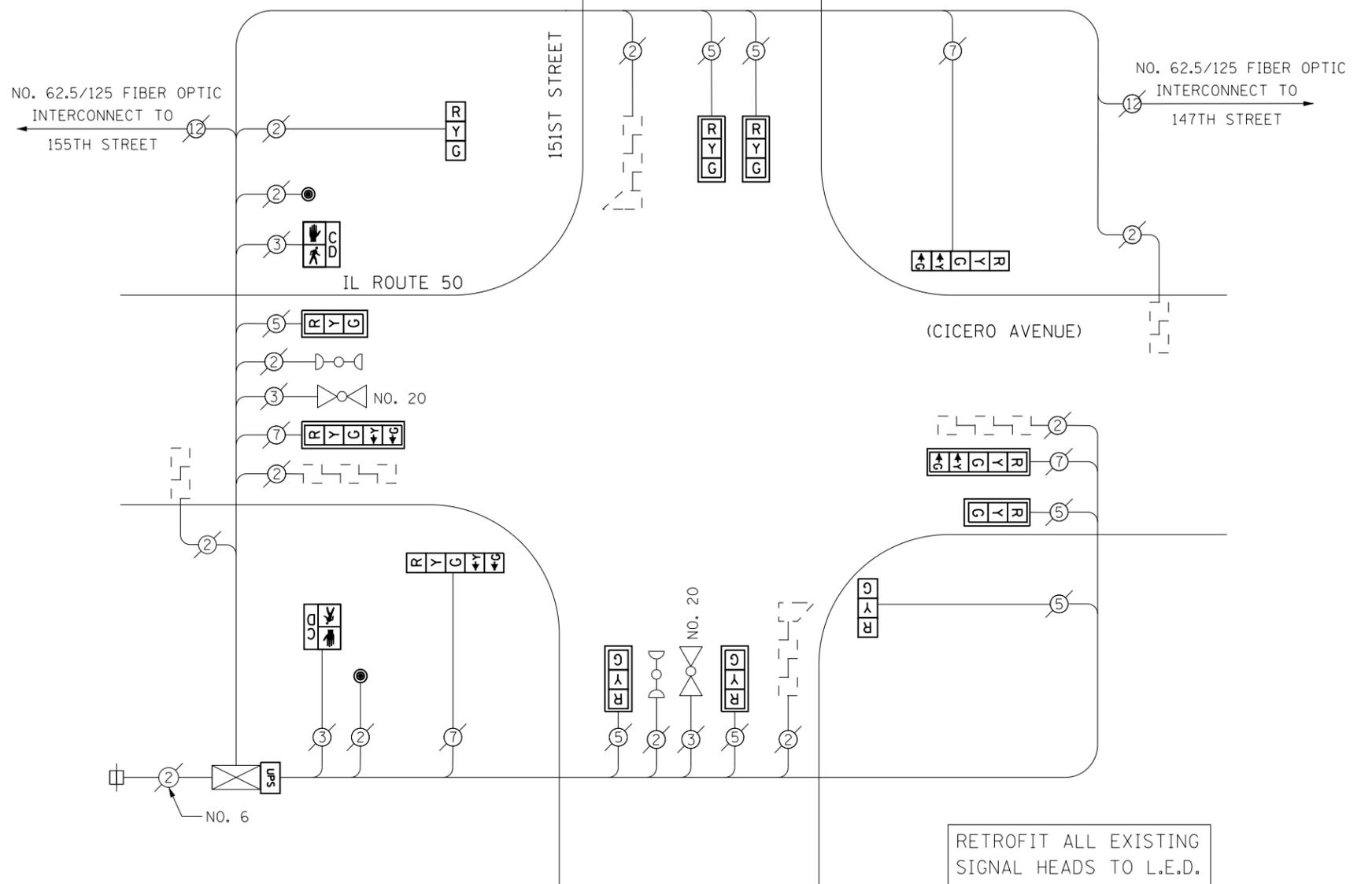
EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↓ ↑

LEGEND

- ← ⊙ → DUAL ENTRY PHASE
- ◊ OL OVERLAP
- ← ⊙ → PEDESTRIAN PHASE
- * NUMBER REFERS TO ASSOCIATED PHASE

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

NO. 62.5/125 FIBER OPTIC INTERCONNECT TO 155TH STREET



CABLE PLAN

RETROFIT ALL EXISTING SIGNAL HEADS TO L.E.D.

CONTRACTOR SHALL REPLACE BROKEN MOUNTING BRACKETS AT ALL RETROFIT SIGNAL HEADS OR AS DIRECTED BY THE ENGINEER. THE COST OF THIS WORK SHALL BE INCLUDED IN THE CORRESPONDING SIGNAL HEAD, LED, RETROFIT PAY ITEM OF THE TYPE AND NUMBER OF SIGNAL HEADS, FACES, AND SECTIONS AS SPECIFIED IN THE PLANS.

SCHEDULE OF QUANTITIES

Items	Unit	Quantity
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
PEDESTRIAN PUSH-BUTTON	EACH	2
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	2
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	6
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	2

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 2 EACH PEDESTRIAN PUSH-BUTTON

I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	-	17	0.50	102.0
(YELLOW)	12	-	25	0.25	75.0
(GREEN)	12	-	15	0.25	45.0
ARROW	8	-	12	0.10	9.6
PED. SIGNAL	2	-	25	1.00	50.0
CONTROLLER	1	100	-	1.00	100.0
ILLUM. SIGN	-	-	-	-	-
VIDEO SYSTEM	-	-	-	-	-
BATTERY BACKUP	1	25	-	1.00	25.0
LUMINAIRE	-	-	-	-	-
FLASHER	-	-	-	-	-
TOTAL =				406.6	

ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY- CONTACT BRAD SHINABARGAR
PHONE 708-325-2692
COMMONWEALTH EDISON

FILE NAME = D:\60X65-sht-TS2570.dgn	USER NAME = SE3	DESIGNED - PHL	REVISED -
Default	PLOT SCALE = 40.0000' / in.	DRAWN - PHL	REVISED -
	PLOT DATE = 2/4/2014	CHECKED - BKS	REVISED -
		DATE - \$SUBDATE	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

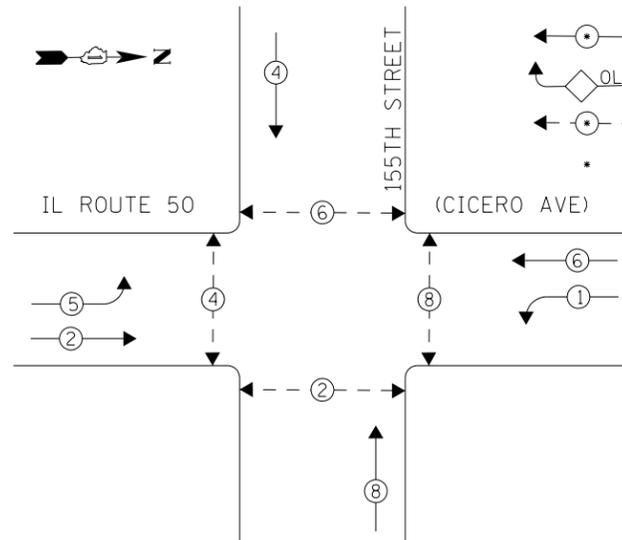
IL ROUTE 50 (CICERO AVE)/151ST STREET- CABLE PLAN SCHEDULE OF QUANTITIES, PHASE DESIG. DIAGRAM & EVP SEQUENCE

SCALE: SHEET OF SHEETS STA. TO STA.

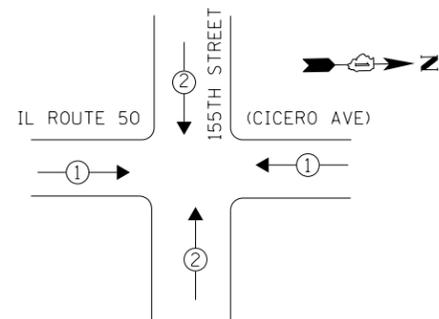
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2013-076TS	COOK	65	21
CONTRACT NO. 60X65				
ILLINOIS FED. AID PROJECT				

TS 2570 OAK FOREST

EXISTING CONTROLLER SEQUENCE



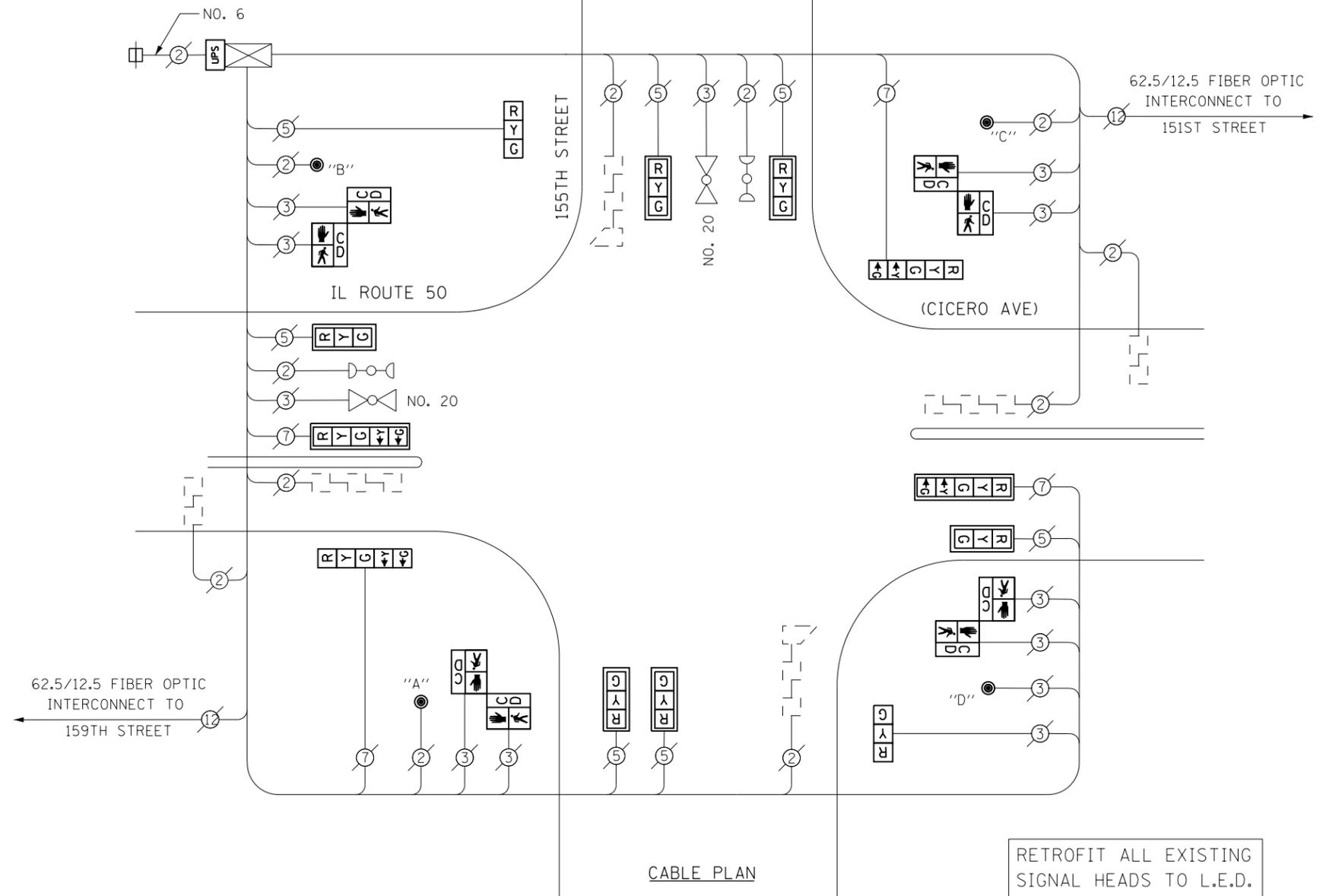
PHASE DESIGNATION DIAGRAM



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	1	2
MOVEMENT	← →	↓ ↑

- LEGEND**
- ← ⊙ → DUAL ENTRY PHASE
 - ◊ OL OVERLAP
 - ← ⊙ → PEDESTRIAN PHASE
 - * NUMBER REFERS TO ASSOCIATED PHASE



CABLE PLAN

RETROFIT ALL EXISTING SIGNAL HEADS TO L.E.D.

CONTRACTOR SHALL REPLACE BROKEN MOUNTING BRACKETS AT ALL RETROFIT SIGNAL HEADS OR AS DIRECTED BY THE ENGINEER. THE COST OF THIS WORK SHALL BE INCLUDED IN THE CORRESPONDING SIGNAL HEAD, LED, RETROFIT PAY ITEM OF THE TYPE AND NUMBER OF SIGNAL HEADS, FACES, AND SECTIONS AS SPECIFIED IN THE PLANS.

SCHEDULE OF QUANTITIES

Items	Unit	Quantity
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	2
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	6
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	2
PEDESTRIAN PUSH-BUTTON, NON-LATCHING	EACH	4

PUSHBUTTON NOTES:

- PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4
- PUSHBUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6
- PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8
- PUSHBUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

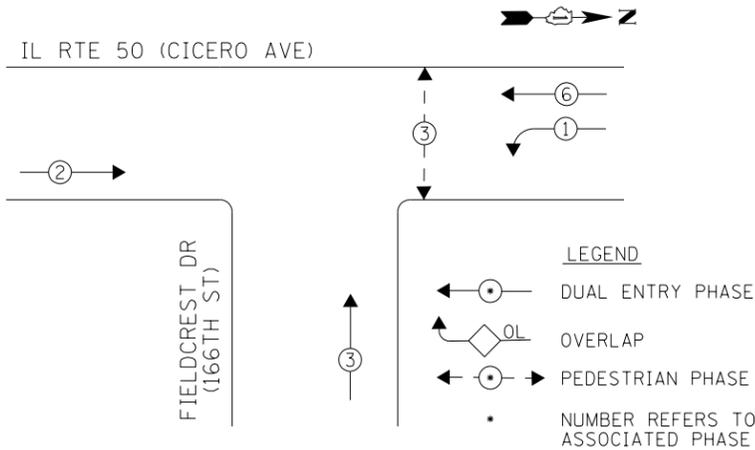
- 4 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE
- 4 EACH PEDESTRIAN PUSH-BUTTON

I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	-	17	0.50	102.0
(YELLOW)	12	-	25	0.25	75.0
(GREEN)	12	-	15	0.25	45.0
ARROW	8	-	12	0.10	9.6
PED. SIGNAL	8	-	25	1.00	200.0
CONTROLLER	1	100	-	1.00	100.0
ILLUM. SIGN	-	-	-	-	-
VIDEO SYSTEM	-	-	-	-	-
BATTERY BACKUP	1	25	-	1.00	25.0
LUMINAIRE	-	-	-	-	-
FLASHER	-	-	-	-	-
TOTAL =					556.6

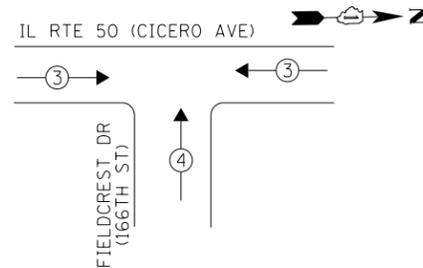
ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY- CONTACT BRAD SHINABARGAR
PHONE 708-325-2692
COMMONWEALTH EDISON

EXISTING CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

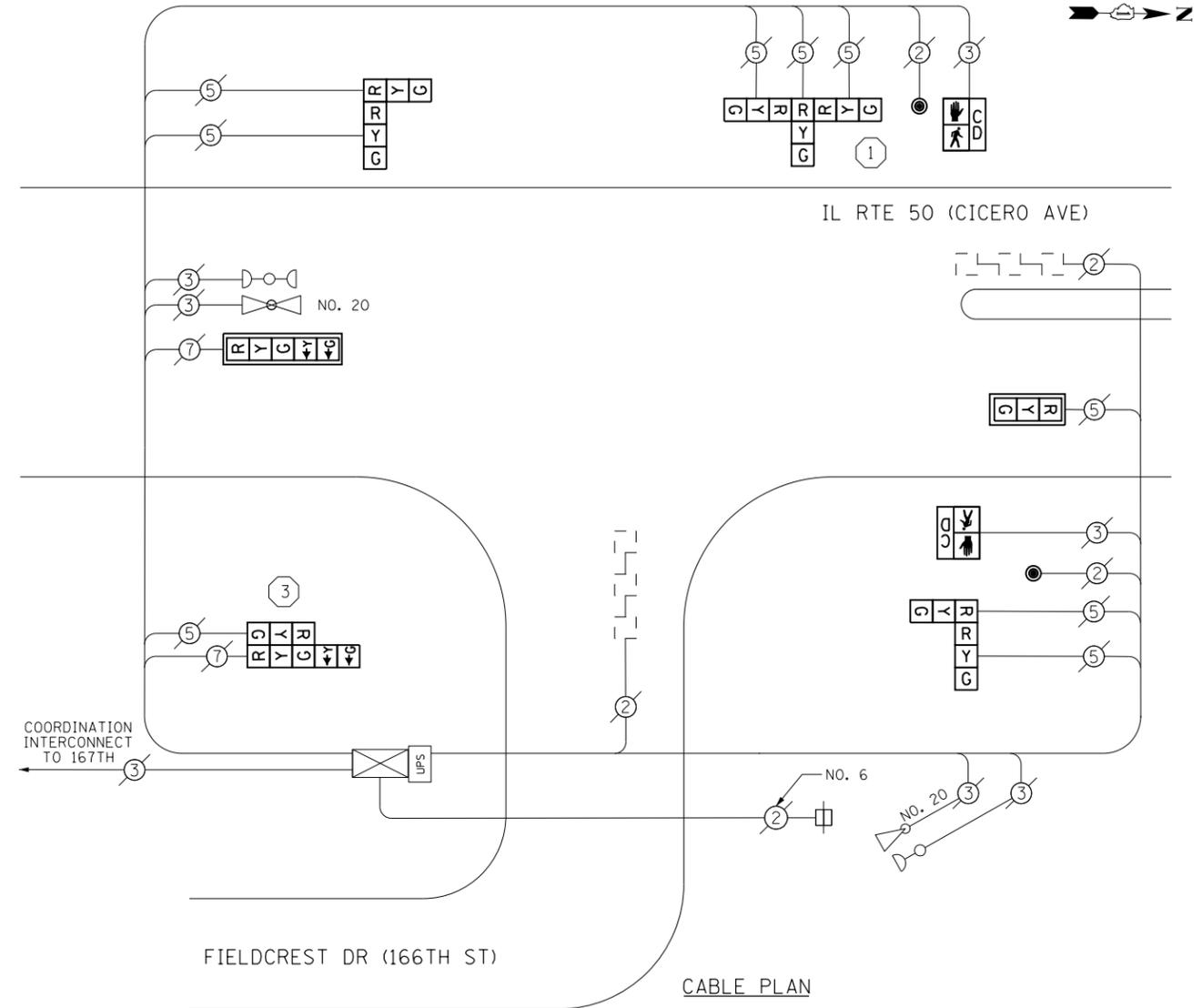
EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	←→	↑

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

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 2 EACH PEDESTRIAN PUSH-BUTTON
- 1 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 1 EACH SIGNAL HEAD, 1-FACE, 5-SECTION
- 2 EACH SIGNAL HEAD, 2-FACE, 3-SECTION
- 1 EACH SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION
- 1 EACH SIGNAL HEAD, 3-FACE, 3-SECTION



CONSTRUCTION NOTES

- ① THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 14 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.
- ③ THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 16 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.

NOTES

- 1) ALL COSTS RELATED TO ATTACHING THE POSTS TO THE EXISTING FOUNDATION SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED
- 2) PRIOR TO REMOVING ANY TRAFFIC SIGNAL POST SPECIFIED TO BE REPLACED IN THE SAME LOCATION THE CONTRACTOR SHALL VERIFY THAT THE PATTERN, SPACING, AND CONDITION OF THE EXISTING BOLTS ARE SUITABLE FOR RE-USE WITH A NEW POST. IF THE BOLTS ARE NOT USABLE, REPLACE AS DIRECTED BY THE ENGINEER.
- 3) THE CONTRACTOR SHALL RELOCATE EXISTING SIGN PANELS FROM POSTS THAT ARE INDICATED FOR REPLACEMENT TO THE NEW POSTS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE COST OF REMOVAL, RELOCATION AND ANY NEW MOUNTING HARDWARE NECESSARY TO COMPLETE THIS WORK SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED.

SCHEDULE OF QUANTITIES

Items	Unit	Quantity
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM 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	2
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 3-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	2
PEDESTRIAN PUSH-BUTTON	EACH	2
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1

I. D. O. T.
TRAFFIC SIGNAL INSTALLATION
ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	11	-	17	0.50	93.5
(YELLOW)	11	-	25	0.25	68.75
(GREEN)	11	-	15	0.25	41.25
ARROW	4	-	12	0.10	4.8
PED. SIGNAL	2	-	25	1.00	50.0
CONTROLLER	1	100	-	1.00	100.0
ILLUM. SIGN	-	-	25	0.05	-
VIDEO SYSTEM	-	150	-	1.00	-
BATTERY BACKUP	1	25	-	1.00	25.0
LUMINAIRE	-	250	-	0.50	-
FLASHER	-	-	25	0.50	-
TOTAL =					383.3

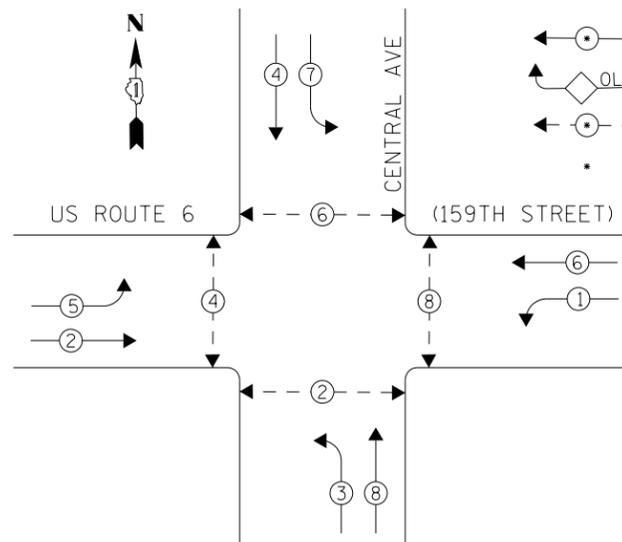
ENERGY COSTS- **BILLED TO: IDOT DISTRICT 1**
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY- **CONTACT BRAD SHINABARGAR**
PHONE 708-325-2692
COMMONWEALTH EDISON

TS 2595
 OAK FOREST

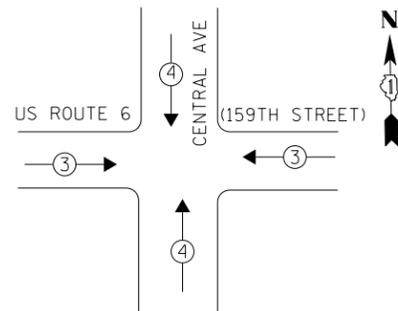


EXISTING CONTROLLER SEQUENCE



- LEGEND**
- ← ⊙ → DUAL ENTRY PHASE
 - ◊ OL OVERLAP
 - ← ⊙ → PEDESTRIAN PHASE
 - * NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↓ ↑

I. D. O. T.
TRAFFIC SIGNAL INSTALLATION
ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	-	17	0.50	102.0
(YELLOW)	12	-	25	0.25	75.0
(GREEN)	12	-	15	0.25	45.0
ARROW	16	-	12	0.10	19.2
PED. SIGNAL	8	-	25	1.00	200.0
CONTROLLER	1	100	-	1.00	100.0
ILLUM. SIGN	-	-	-	-	-
VIDEO SYSTEM	-	-	-	-	-
BATTERY BACKUP	1	25	-	1.00	25.0
LUMINAIRE	-	-	-	-	-
FLASHER	-	-	-	-	-
TOTAL =					566.2

ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY- CONTACT BRAD SHINABARGAR
PHONE 708-325-2692
COMMONWEALTH EDISON

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

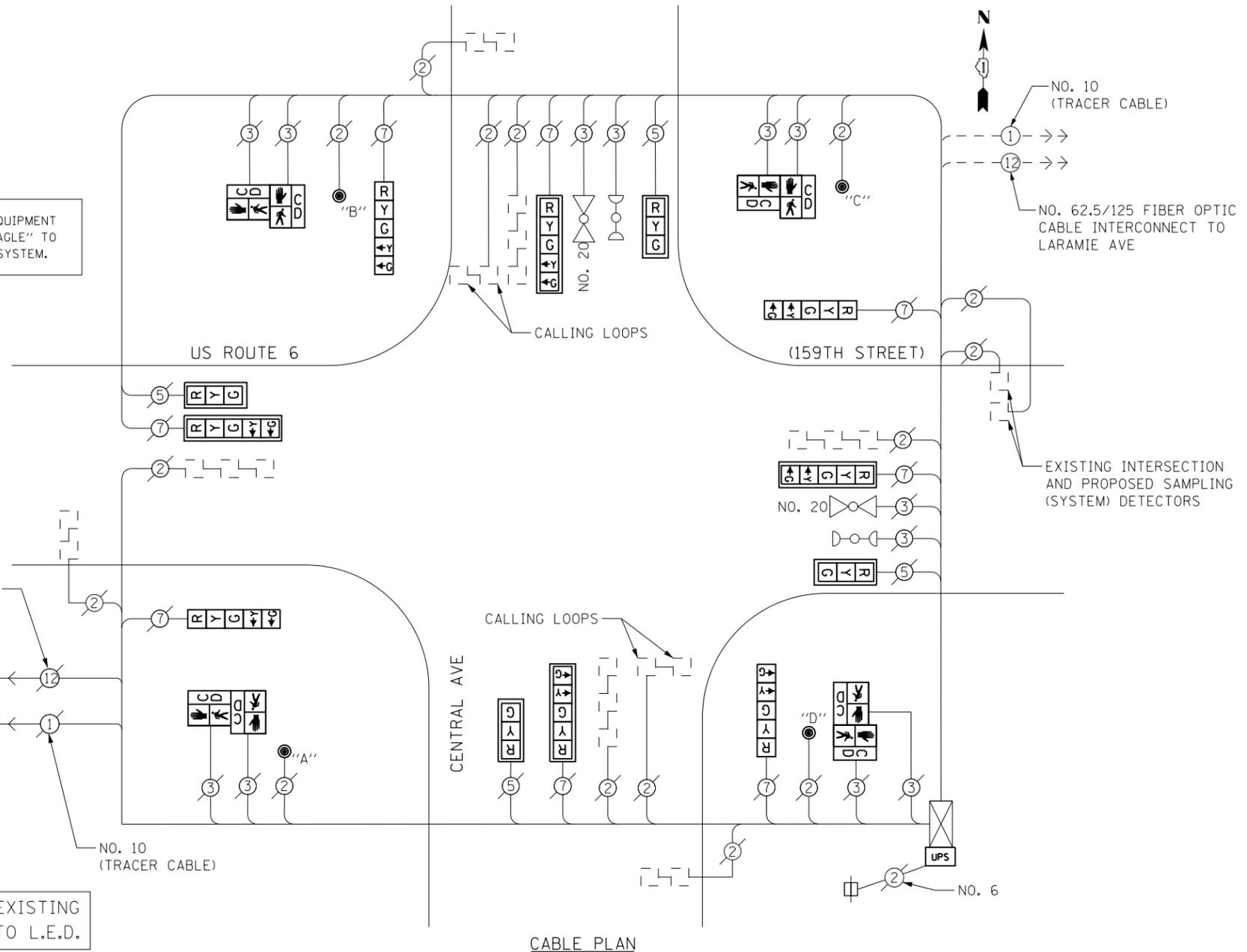
NO. 62.5/125 FIBER OPTIC CABLE INTERCONNECT TO ARROYO DRIVE

RETROFIT ALL EXISTING SIGNAL HEADS TO L.E.D.

CONTRACTOR SHALL REPLACE BROKEN MOUNTING BRACKETS AT ALL RETROFIT SIGNAL HEADS OR AS DIRECTED BY THE ENGINEER. THE COST OF THIS WORK SHALL BE INCLUDED IN THE CORRESPONDING SIGNAL HEAD, LED, RETROFIT PAY ITEM OF THE TYPE AND NUMBER OF SIGNAL HEADS, FACES, AND SECTIONS AS SPECIFIED IN THE PLANS.

SCHEDULE OF QUANTITIES

Items	Unit	Quantity
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	4
PEDESTRIAN PUSH-BUTTON, NON-LATCHING	EACH	4



PUSHBUTTON NOTES:

PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4
 PUSHBUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6
 PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8
 PUSHBUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 4 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE
- 4 EACH PEDESTRIAN PUSH-BUTTON

FILE NAME = D160X65-shr-TS205.dgn	USER NAME = SE3	DESIGNED - PHL	REVISED -
Default	PLOT SCALE = 40.0000' / in.	DRAWN - PHL	REVISED -
	PLOT DATE = 2/4/2014	CHECKED - BKS	REVISED -
		DATE - \$SUBDATE	REVISED -

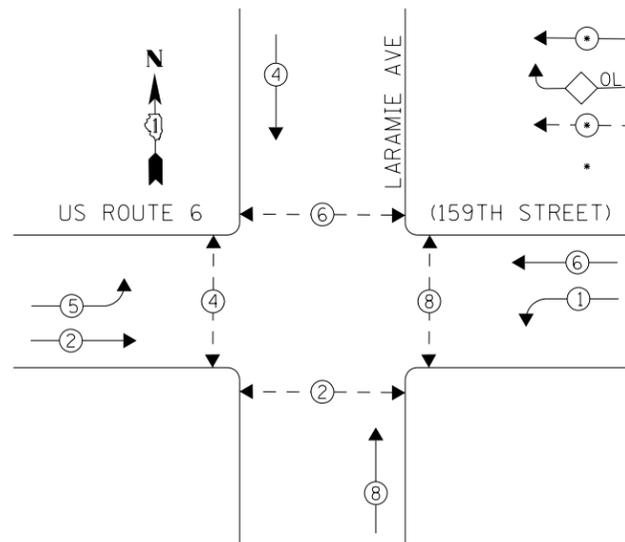
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 6 (159TH STREET)/CENTRAL AVE - CABLE PLAN
 SCHEDULE OF QUANTITIES, PHASE DESIG. DIAGRAM & EVP SEQUENCE
 SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2013-076TS	COOK	65	24
CONTRACT NO. 60X65				
ILLINOIS FED. AID PROJECT				

TS 205
OAK FOREST

EXISTING CONTROLLER SEQUENCE



- LEGEND**
- ← ⊙ → DUAL ENTRY PHASE
 - ◊ OL OVERLAP
 - ← ⊙ → PEDESTRIAN PHASE
 - * NUMBER REFERS TO ASSOCIATED PHASE

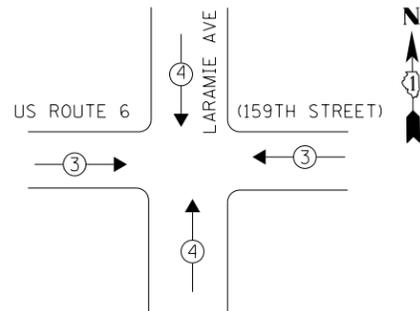
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 4 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 2 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE
- 6 EACH PEDESTRIAN PUSH-BUTTON
- 8 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 4 EACH SIGNAL HEAD, 1-FACE, 5-SECTION

PHASE DESIGNATION DIAGRAM

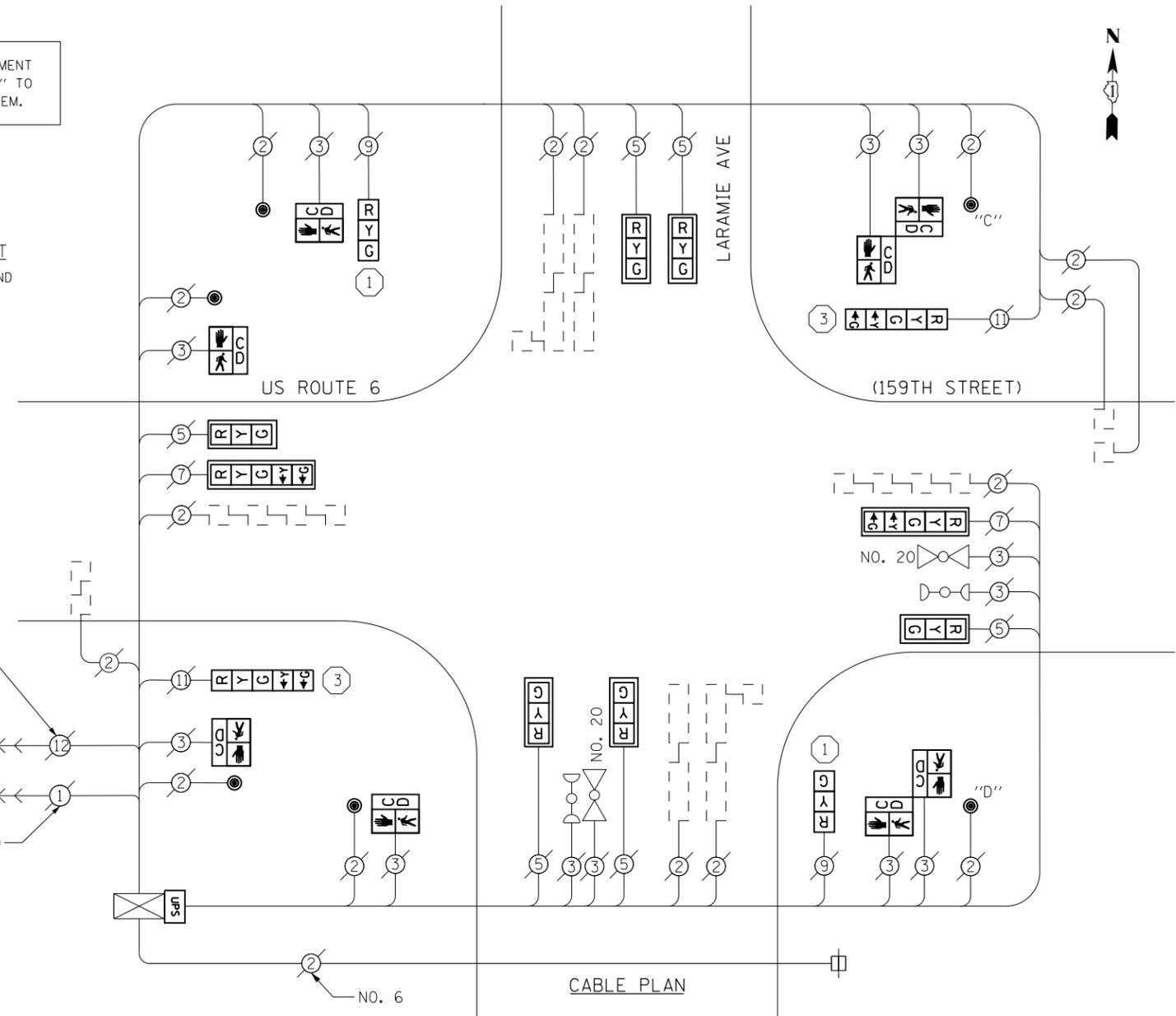


PUSHBUTTON NOTES:

PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8
 PUSHBUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↓ ↑



NO. 62.5/125 FIBER OPTIC CABLE INTERCONNECT TO CENTRAL AVE

NO. 10 (TRACER CABLE)

CABLE PLAN

SCHEDULE OF QUANTITIES

Items	Unit	Quantity
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	2
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	8
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1
PEDESTRIAN PUSH-BUTTON, NON-LATCHING	EACH	6

NOTES

- 1) ALL COSTS RELATED TO ATTACHING THE POSTS TO THE EXISTING FOUNDATION SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED
- 2) PRIOR TO REMOVING ANY TRAFFIC SIGNAL POST SPECIFIED TO BE REPLACED IN THE SAME LOCATION THE CONTRACTOR SHALL VERIFY THAT THE PATTERN, SPACING, AND CONDITION OF THE EXISTING BOLTS ARE SUITABLE FOR RE-USE WITH A NEW POST. IF THE BOLTS ARE NOT USABLE, REPLACE AS DIRECTED BY THE ENGINEER.
- 3) THE CONTRACTOR SHALL RELOCATE EXISTING SIGN PANELS FROM POSTS THAT ARE INDICATED FOR REPLACEMENT TO THE NEW POSTS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE COST OF REMOVAL, RELOCATION AND ANY NEW MOUNTING HARDWARE NECESSARY TO COMPLETE THIS WORK SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED.

CONSTRUCTION NOTES

- 1) THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 14 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.
- 3) THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 16 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.

I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	-	17	0.50	102.0
(YELLOW)	12	-	25	0.25	75.0
(GREEN)	12	-	15	0.25	45.0
ARROW	8	-	12	0.10	9.6
PED. SIGNAL	8	-	25	1.00	200.0
CONTROLLER	1	100	100	1.00	100.0
ILLUM. SIGN	-	-	-	-	-
VIDEO SYSTEM	-	-	-	-	-
BATTERY BACKUP	1	25	-	1.00	25.0
LUMINAIRE	-	-	-	-	-
FLASHER	-	-	-	-	-
TOTAL =					556.6

ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
 201 WEST CENTER COURT
 SCHAUMBURG, IL 60196-1096

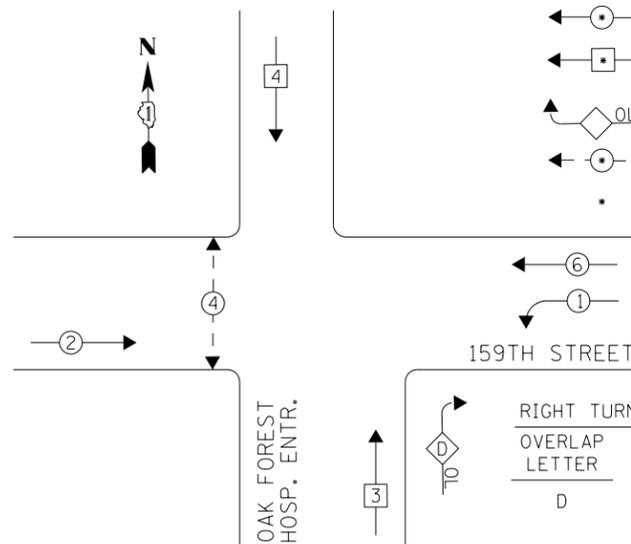
ENERGY SUPPLY- CONTACT BRAD SHINABARGAR
 PHONE 708-325-2692
 COMMONWEALTH EDISON

TS 325
OAK FOREST

EXISTING CONTROLLER SEQUENCE

LEGEND

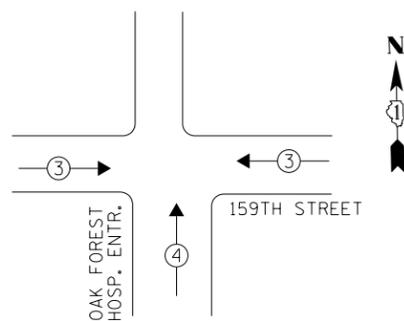
- ← ⊙ → DUAL ENTRY PHASE
- ← □ → SINGLE ENTRY PHASE
- ◊ OL OVERLAP
- ← ⊙ → PEDESTRIAN PHASE
- NUMBER REFERS TO ASSOCIATED PHASE



RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
D	3	1

PHASE DESIGNATION DIAGRAM



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↑

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

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

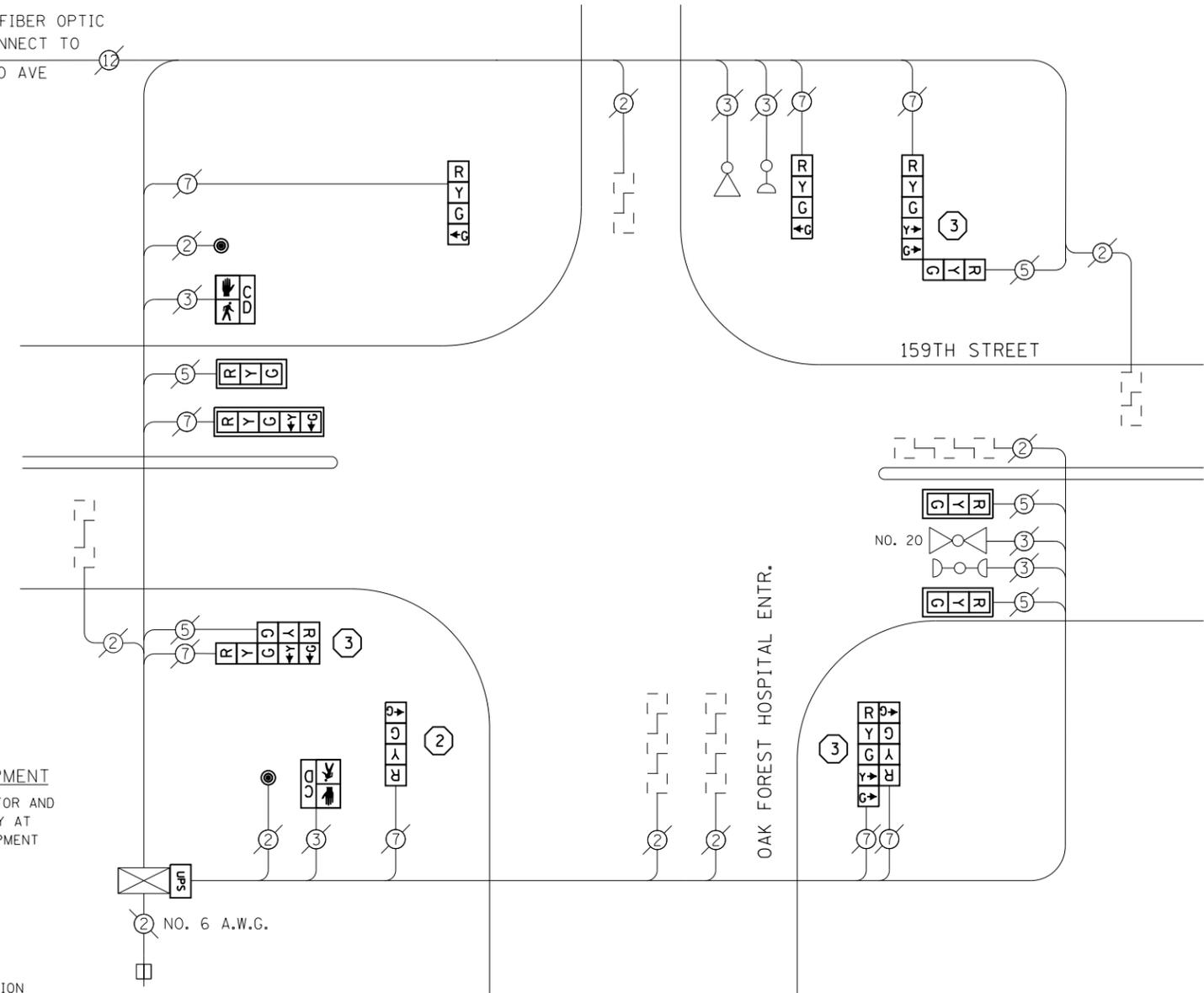
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 2 EACH PEDESTRIAN SIGNAL HEAD
- 2 EACH PEDESTRIAN PUSH-BUTTON
- 3 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 3 EACH SIGNAL HEAD, 1-FACE, 4-SECTION
- 1 EACH SIGNAL HEAD, 1-FACE, 5-SECTION
- 2 EACH SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION
- 1 EACH SIGNAL HEAD, 2-FACE, 1-4 SECTION, 1-5 SECTION

SCHEDULE OF QUANTITIES

Items	Unit	Quantity
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 15 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	3
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	3
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	3
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	1
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 TIMER	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	4
PEDESTRIAN PUSH-BUTTON	EACH	2
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1
SIGNAL HEAD, LED, 2-FACE, 1-4 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	1

62.5/12.5 FIBER OPTIC INTERCONNECT TO CICERO AVE



CABLE PLAN

NOTES

- 1) ALL COSTS RELATED TO ATTACHING THE POSTS TO THE EXISTING FOUNDATION SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED
- 2) PRIOR TO REMOVING ANY TRAFFIC SIGNAL POST SPECIFIED TO BE REPLACED IN THE SAME LOCATION THE CONTRACTOR SHALL VERIFY THAT THE PATTERN, SPACING, AND CONDITION OF THE EXISTING BOLTS ARE SUITABLE FOR RE-USE WITH A NEW POST. IF THE BOLTS ARE NOT USABLE, REPLACE AS DIRECTED BY THE ENGINEER.
- 3) THE CONTRACTOR SHALL RELOCATE EXISTING SIGN PANELS FROM POSTS THAT ARE INDICATED FOR REPLACEMENT TO THE NEW POSTS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE COST OF REMOVAL, RELOCATION AND ANY NEW MOUNTING HARDWARE NECESSARY TO COMPLETE THIS WORK SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED.

CONSTRUCTION NOTES

- 2) THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 15 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.
- 3) THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 16 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.

I. D. O. T.
TRAFFIC SIGNAL INSTALLATION
ELECTRICAL SERVICE REQUIREMENTS

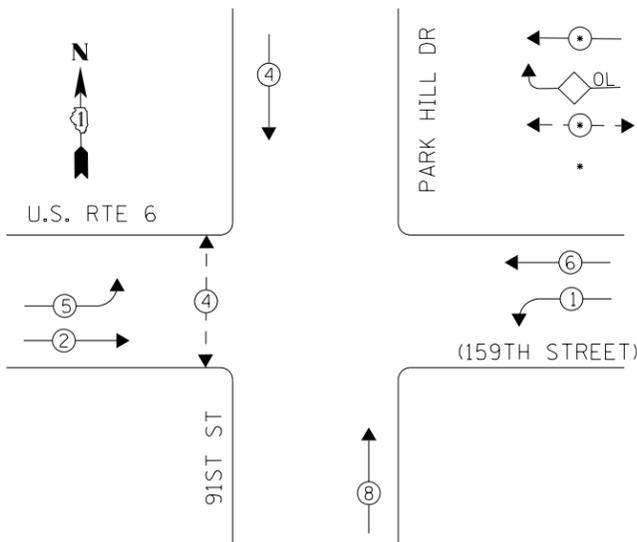
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	13	-	17	0.50	110.5
(YELLOW)	13	-	25	0.25	81.25
(GREEN)	13	-	15	0.25	48.75
ARROW	12	-	12	0.25	14.4
PED. SIGNAL	4	-	25	1.00	50.0
CONTROLLER	1	100	-	1.00	100.0
ILLUM. SIGN	-	-	25	0.05	-
VIDEO SYSTEM	-	150	-	1.00	-
BATTERY BACKUP	1	25	-	1.00	25.0
LUMINAIRE	-	250	-	0.50	-
FLASHER	-	-	25	0.50	-
TOTAL =					429.9

ENERGY COSTS- **BILLED TO: IDOT DISTRICT 1**
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY- **CONTACT BRAD SHINABARGAR**
PHONE 708-325-2692
COMMONWEALTH EDISON

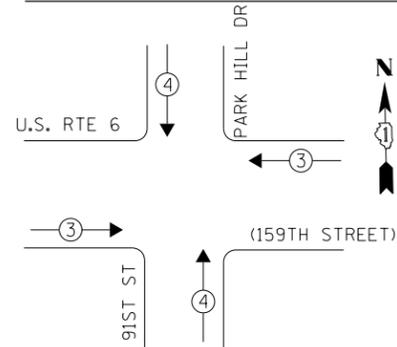
TS 9950
OAK FOREST

EXISTING CONTROLLER SEQUENCE



- LEGEND**
- ← ⊙ → DUAL ENTRY PHASE
 - ◊ OL OVERLAP
 - ← ⊙ → PEDESTRIAN PHASE
 - * NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↓ ↑

I. D. O. T.
TRAFFIC SIGNAL INSTALLATION
ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	10	-	17	0.50	85.0
(YELLOW)	10	-	25	0.25	62.5
(GREEN)	10	-	15	0.25	37.5
ARROW	8	-	12	0.10	9.6
PED. SIGNAL	2	-	25	1.00	50.0
CONTROLLER	1	100	-	1.00	100.0
ILLUM. SIGN	-	-	-	0.05	-
VIDEO SYSTEM	-	-	-	1.00	-
BATTERY BACKUP	1	25	-	1.00	25.0
LUMINAIRE	-	-	-	-	-
FLASHER	-	-	25	0.50	-
TOTAL =					369.6

ENERGY COSTS- **BILLED TO: IDOT DISTRICT 1**
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY- **CONTACT BRAD SHINABARGAR**
PHONE 708-325-2692
COMMONWEALTH EDISON

SCHEDULE OF QUANTITIES

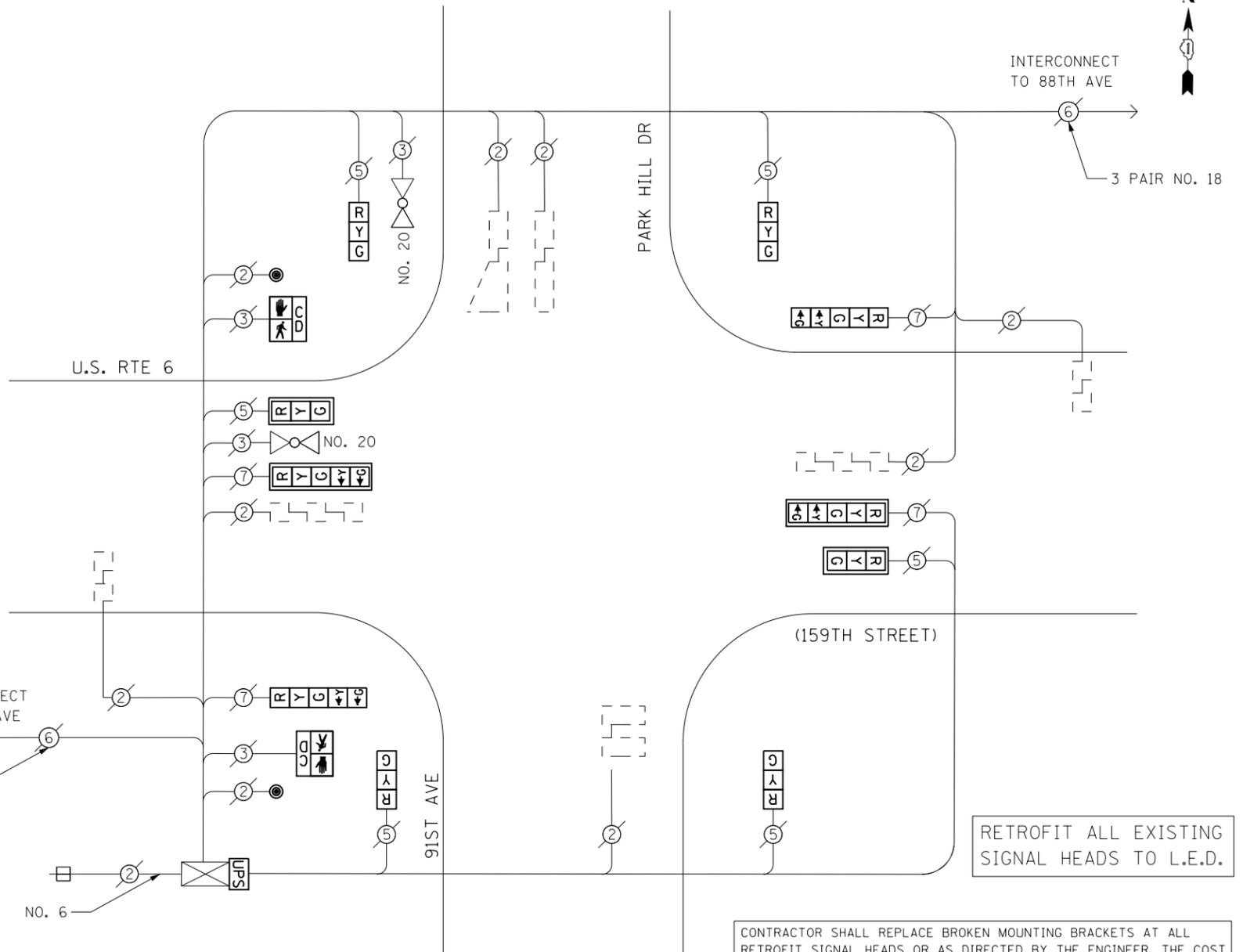
Items	Unit	Quantity
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
PEDESTRIAN PUSH-BUTTON	EACH	2
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	2

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 2 EACH PEDESTRIAN PUSH-BUTTON

ACCESS TO INSIDE OF CONTROLLER CABINET BY DESIGNER WAS NOT POSSIBLE PRIOR TO CONSTRUCTION. CONTRACTOR SHALL COORDINATE CONTROLLER AND CABINET TYPE WITH ENGINEER PRIOR TO ORDERING UPS MATERIALS AND EQUIPMENT. CONTRACTOR SHALL INSTALL UPS IF APPROVED BY THE ENGINEER.



CABLE PLAN

RETROFIT ALL EXISTING SIGNAL HEADS TO L.E.D.

CONTRACTOR SHALL REPLACE BROKEN MOUNTING BRACKETS AT ALL RETROFIT SIGNAL HEADS OR AS DIRECTED BY THE ENGINEER. THE COST OF THIS WORK SHALL BE INCLUDED IN THE CORRESPONDING SIGNAL HEAD, LED, RETROFIT PAY ITEM OF THE TYPE AND NUMBER OF SIGNAL HEADS, FACES, AND SECTIONS AS SPECIFIED IN THE PLANS.

FILE NAME = D160X65-shr-TS20365.dgn	USER NAME = SE3	DESIGNED - PHL	REVISED -
Default	PLOT SCALE = 40.0000' / in.	DRAWN - PHL	REVISED -
	PLOT DATE = 2/4/2014	CHECKED - BKS	REVISED -
		DATE - \$SUBDATE	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

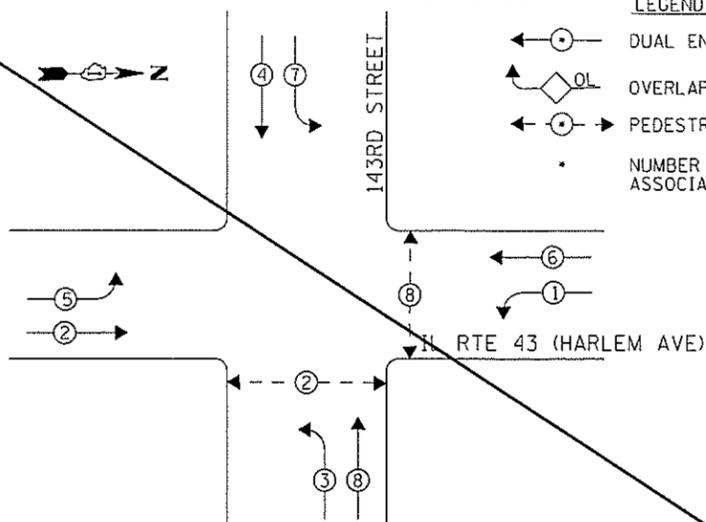
US RTE 6 (159TH STREET) AT 91ST ST/PARK HILL DR- CABLE PLAN
SCHEDULE OF QUANTITIES, PHASE DESIG. DIAGRAM & EVP SEQUENCE

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2013-076TS	COOK	65	27
CONTRACT NO. 60X65				
ILLINOIS FED. AID PROJECT				

TS 20365
ORLAND PARK

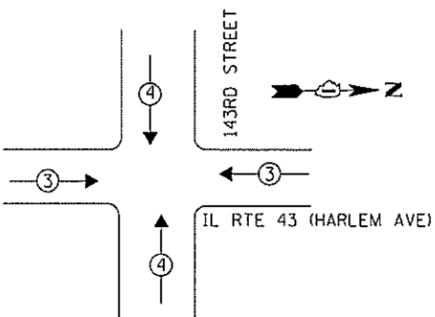
EXISTING CONTROLLER SEQUENCE



LEGEND

- ← ⊙ → DUAL ENTRY PHASE
- ← ⊙ OL → OVERLAP
- ← ⊙ → PEDESTRIAN PHASE
- NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↓ ↑

I. D. O. T.
TRAFFIC SIGNAL INSTALLATION
ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16	-	17	0.50	136.0
(YELLOW)	16	-	25	0.25	100.0
(GREEN)	16	-	15	0.25	60.0
ARROW	16	-	12	0.10	19.2
PED. SIGNAL	4	-	25	1.00	100.0
CONTROLLER	1	100	-	1.00	100.0
ILLUM. SIGN	-	-	25	0.50	-
VIDEO SYSTEM	-	-	-	1.00	-
BATTERY BACKUP	1	25	-	1.00	25.0
LUMINAIRE	-	-	-	0.50	-
FLASHER	-	-	25	0.50	-
TOTAL =					540.2

ENERGY COSTS- BILLED TO: IOT DISTRICT 1
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY- CONTACT BRAD SHINABARGAR
PHONE 708-325-2692
COMMONWEALTH EDISON

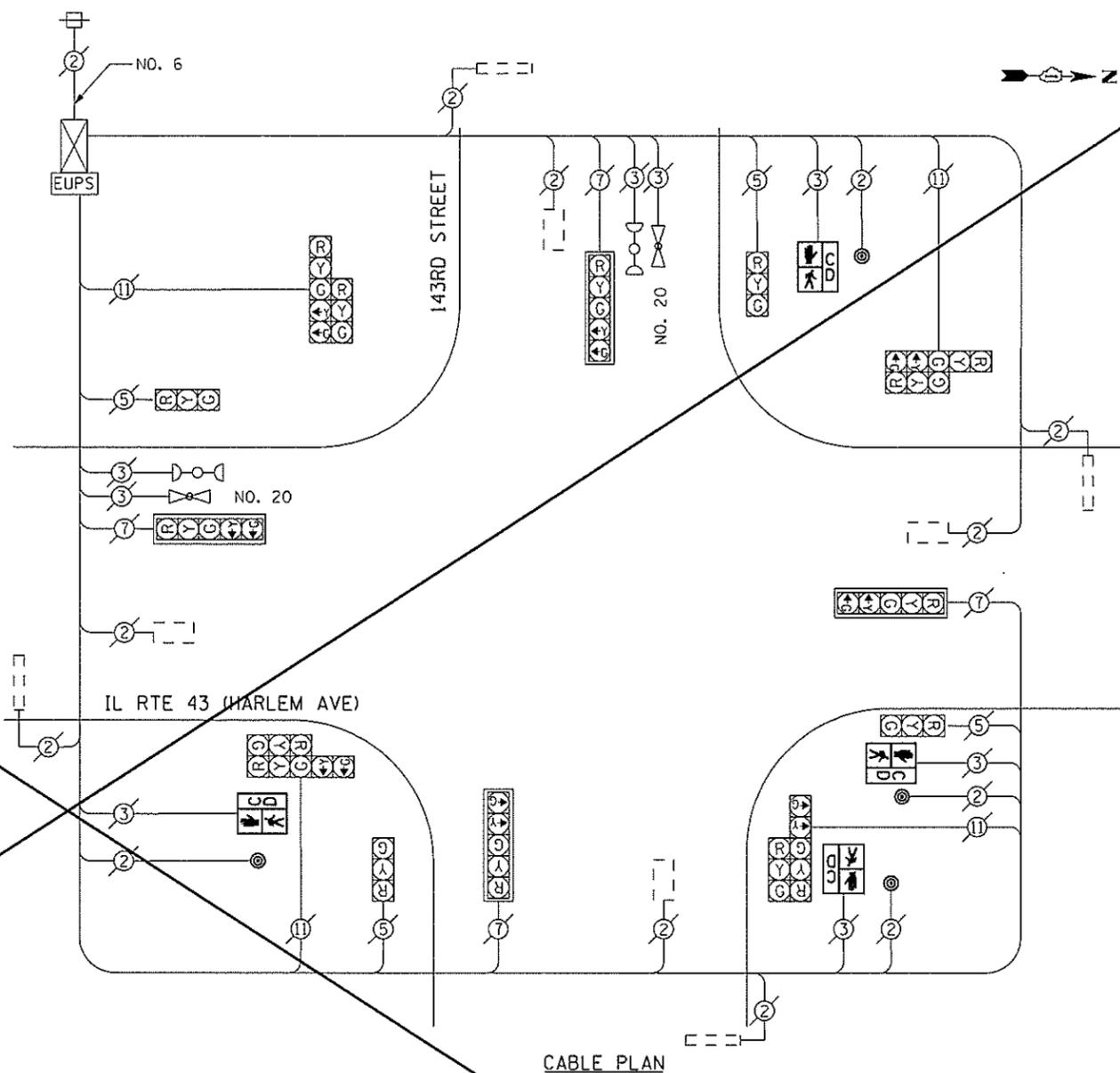
SCHEDULE OF QUANTITIES

Items	Unit	Quantity
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
PEDESTRIAN PUSH-BUTTON	EACH	4
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL RTE 43 (HARLEM AVE) at 143RD STREET - CABLE PLAN
SCHEDULE OF QUANTITIES, PHASE DESIG. DIAGRAM & EVP SEQUENCE

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2013-07615	COOK	65	28
				CONTRACT NO. 60X65
[ILLINOIS] FED. AID PROJECT				



REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

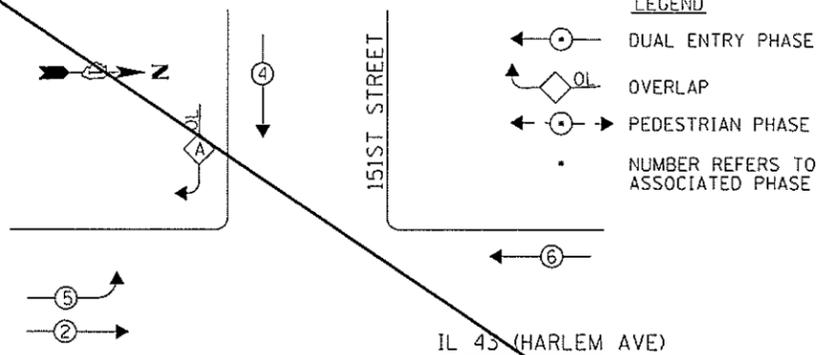
- 4 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE
- 4 EACH PEDESTRIAN PUSH-BUTTON

TS 4280
ORLAND PARK

FILE NAME = DIG6X65-shc-TS4280.dgn	USER NAME = Brian Seifers	DESIGNED - PHL	REVISED - SVS 3/10/14
		DRAWN - PHL	REVISED -
	PLOT SCALE = 40,0000 ' / 1in.	CHECKED - BKS	REVISED -
	PLOT DATE = 3/6/2014	DATE - *SUBDATE	REVISED -

SCALE: SHEET OF SHEETS STA. TO STA.

EXISTING CONTROLLER SEQUENCE



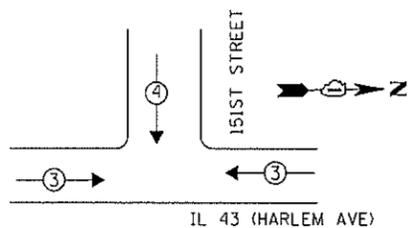
LEGEND

- ◉ DUAL ENTRY PHASE
- ◊ OL OVERLAP
- ◉ PEDESTRIAN PHASE
- NUMBER REFERS TO ASSOCIATED PHASE

RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2	+ 3

PHASE DESIGNATION DIAGRAM



REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

3 EACH TRAFFIC SIGNAL POST

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

RED LIGHT RUNNING CAMERA EQUIPMENT INSTALLED AT THIS LOCATION. EQUIPMENT ROUTING AND CABLES ARE UNKNOWN.

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	←→	↓

I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	-	17	0.50	102.0
(YELLOW)	6	-	25	0.25	37.5
(GREEN)	6	-	15	0.25	22.5
ARROW	12	-	12	0.10	14.4
PED. SIGNAL	-	-	25	1.00	-
CONTROLLER	1	100	-	1.00	100.0
ILLUM. SIGN	-	-	25	0.50	-
VIDEO SYSTEM	-	150	-	1.00	-
BATTERY BACKUP	1	25	-	1.00	25.0
LUMINAIRE	-	250	-	0.50	-
FLASHER	-	-	25	0.50	-
TOTAL					301.4

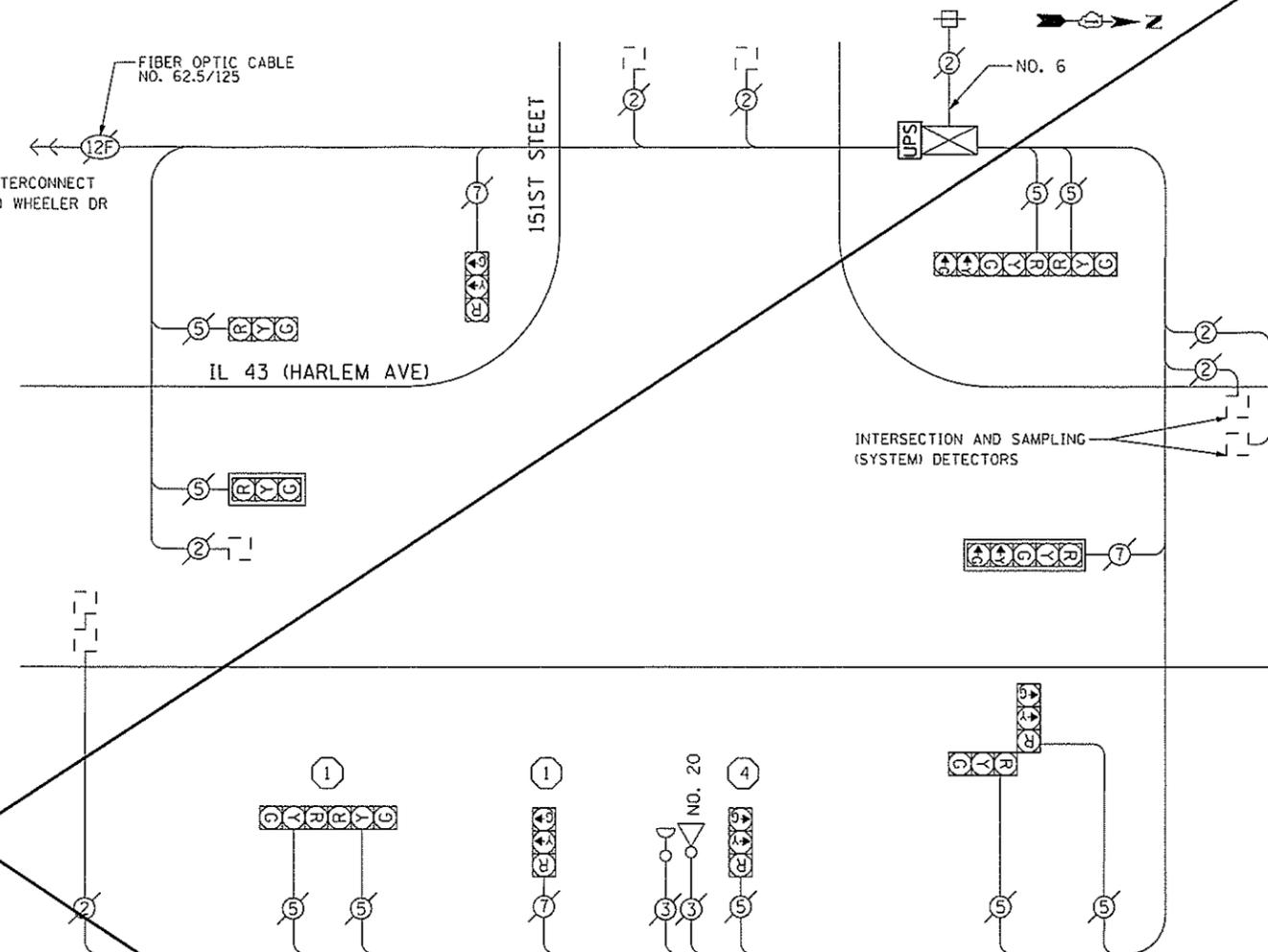
ENERGY COSTS- **BILLED TO: IDOT DISTRICT 1**
 201 WEST CENTER COURT
 SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY- **CONTACT BRAD SHINABARGAR**
 PHONE 708-325-2692
 COMMONWEALTH EDISON

SCHEDULE OF QUANTITIES

Items	Unit	Quantity
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	2
TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1

FIBER OPTIC CABLE NO. 62.5/125
 INTERCONNECT TO WHEELER DR



CABLE PLAN

CONSTRUCTION NOTES

- ① THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 14 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.
- ④ THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 18 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.

NOTES

- 1) ALL COSTS RELATED TO ATTACHING THE POSTS TO THE EXISTING FOUNDATION SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED
- 2) PRIOR TO REMOVING ANY TRAFFIC SIGNAL POST SPECIFIED TO BE REPLACED IN THE SAME LOCATION THE CONTRACTOR SHALL VERIFY THAT THE PATTERN, BRACING, AND CONDITION OF THE EXISTING BOLTS ARE SUITABLE FOR RE-USE WITH A NEW POST. IF THE BOLTS ARE NOT USABLE, REPLACE AS DIRECTED BY THE ENGINEER.
- 3) THE CONTRACTOR SHALL RELOCATE EXISTING SIGN PANELS FROM POSTS THAT ARE INDICATED FOR REPLACEMENT TO THE NEW POSTS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE COST OF REMOVAL, RELOCATION AND ANY NEW MOUNTING HARDWARE NECESSARY TO COMPLETE THIS WORK SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED.

TS 2240
 ORLAND PARK

FILE NAME = 0152465-shr-152240.dgn	USER NAME = Brian Scifars	DESIGNED - PHL	REVISED - SVS 3/19/14
Default	PLOT SCALE = 40.0000' / in.	DRAWN - PHL	REVISED -
	PLOT DATE = 3/6/2014	CHECKED - BKS	REVISED -
		DATE - *SUBDATE	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

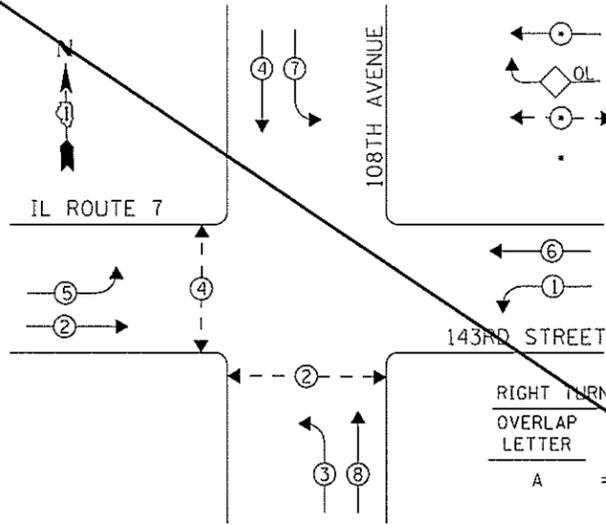
IL 43 (HARLEM AVE)/151ST STREET- CABLE PLAN			
SCHEDULE OF QUANTITIES, PHASE DESIG. DIAGRAM & EVP SEQUENCE			
SCALE:	SHEET	OF	SHEETS
STA.	TO STA.		

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2013-076TS	COOK	55	29
CONTRACT NO. 60X65			ILLINOIS FED. AID PROJECT	

EXISTING CONTROLLER SEQUENCE

LEGEND

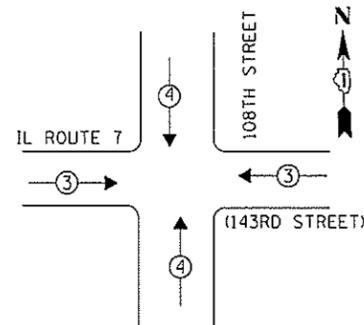
- DUAL ENTRY PHASE
- OVERLAP
- PEDESTRIAN PHASE
- NUMBER REFERS TO ASSOCIATED PHASE



RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2	+ 3

PHASE DESIGNATION DIAGRAM



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

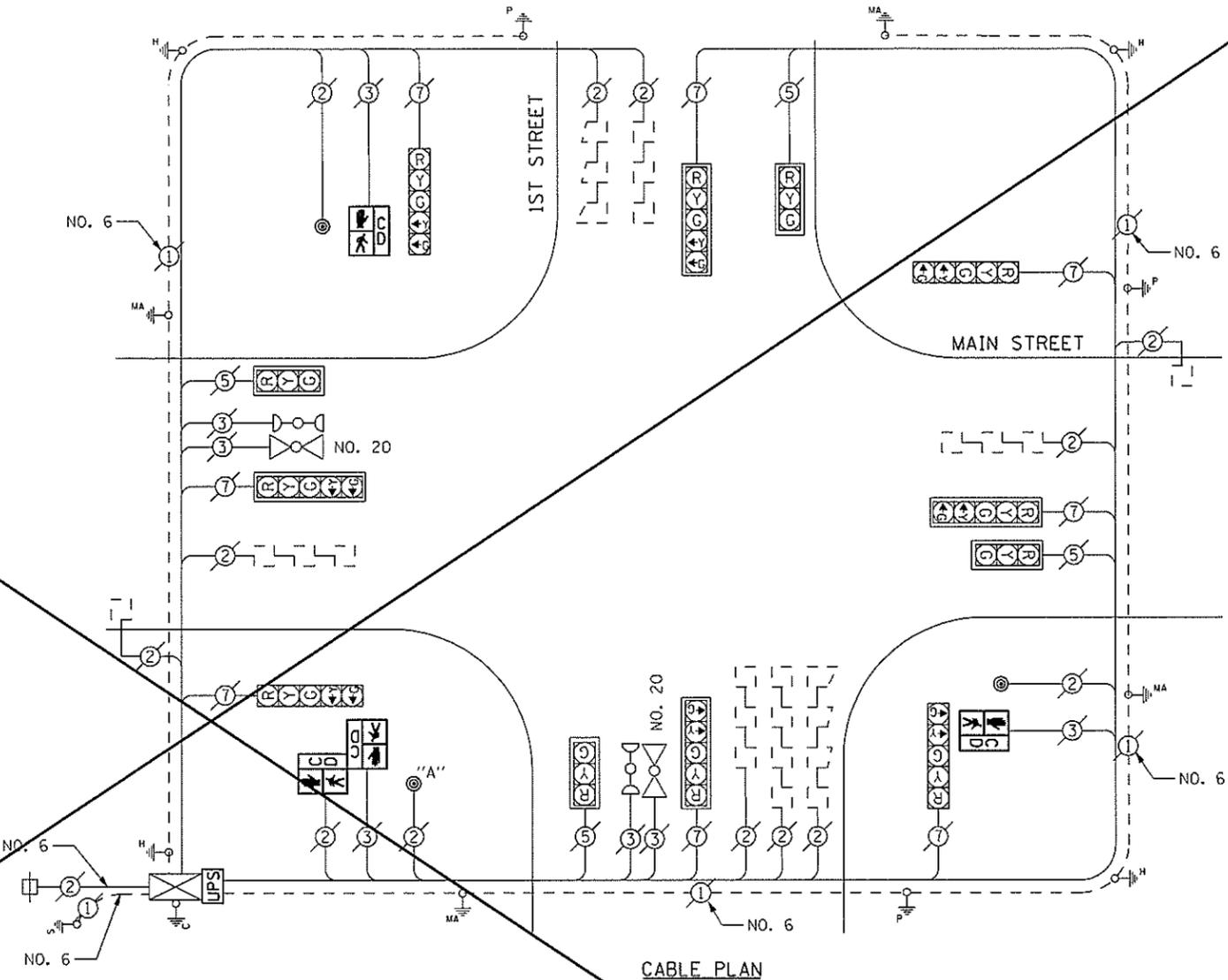
EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↓ ↑

I. D. O. T.
TRAFFIC SIGNAL INSTALLATION
ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	-	17	0.50	102.0
(YELLOW)	12	-	25	0.25	75.0
(GREEN)	12	-	15	0.25	45.0
ARROW	16	-	12	0.10	19.2
PED. SIGNAL	4	-	25	1.00	100.0
CONTROLLER	1	100	-	1.00	100.0
ILLUM. SIGN	-	-	25	0.50	-
VIDEO SYSTEM	-	-	-	1.00	-
BATTERY BACKUP	1	25	-	1.00	25.0
LUMINAIRE	-	-	-	0.50	-
FLASHER	-	-	25	0.50	-
TOTAL =					466.2

ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY- CONTACT BRAD SHINABARGAR
PHONE 708-325-2692
COMMONWEALTH EDISON



CABLE PLAN

Items	Unit	Quantity
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
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
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
PEDESTRIAN PUSH-BUTTON, NON-LATCHING	EACH	3

ACCESS TO INSIDE OF CONTROLLER CABINET BY DESIGNER WAS NOT POSSIBLE PRIOR TO CONSTRUCTION. CONTRACTOR SHALL COORDINATE CONTROLLER AND CABINET TYPE WITH ENGINEER PRIOR TO ORDERING UPS MATERIALS AND EQUIPMENT. CONTRACTOR SHALL INSTALL UPS IF APPROVED BY THE ENGINEER.

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 1 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE
- 3 EACH PEDESTRIAN PUSH-BUTTON

PUSHBUTTON NOTES:

PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4

TS-21522
ORLAND PARK

FILE NAME = D160X65-Int-1521522.dgn
Default

USER NAME = Brian Seifers
PLOT SCALE = 40.0000' / 1" IN.
PLOT DATE = 3/8/2014

DESIGNED - PHL
DRAWN - PHL
CHECKED - BKS
DATE - *SUBDATE

REVISED - SVS 3/10/14
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

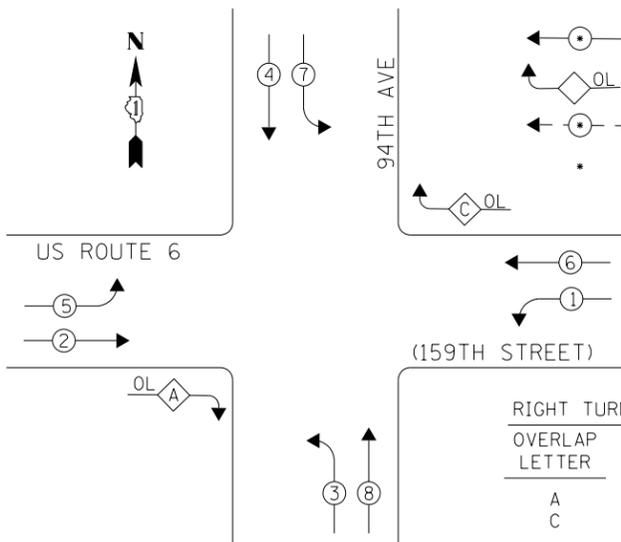
IL ROUTE 7 (143RD STREET)/108TH STREET - CABLE PLAN
SCHEDULE OF QUANTITIES, PHASE DESIG. DIAGRAM & EVP SEQUENCE

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2013-076TS	COOK	65	30
CONTRACT NO. 60X65			[ILLINOIS] FED. AID PROJECT	



EXISTING CONTROLLER SEQUENCE

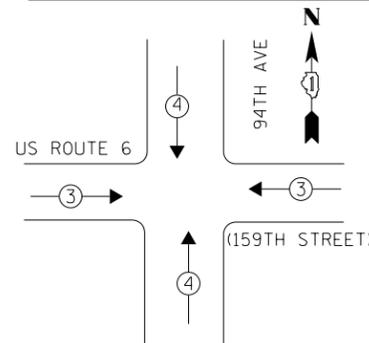


- LEGEND**
- ← ⊙ → DUAL ENTRY PHASE
 - ◊ OL OVERLAP
 - ← ⊙ → PEDESTRIAN PHASE
 - * NUMBER REFERS TO ASSOCIATED PHASE

RIGHT TURN OVERLAP PHASE DESIGNATION

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

PHASE DESIGNATION DIAGRAM



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↓ ↑

I. D. O. T.
TRAFFIC SIGNAL INSTALLATION
ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16	-	17	0.50	136.0
(YELLOW)	16	-	25	0.25	100.0
(GREEN)	16	-	15	0.25	60.0
ARROW	24	-	12	0.10	28.8
PED. SIGNAL	-	-	25	1.00	-
CONTROLLER	1	100	-	1.00	100.0
ILLUM. SIGN	-	-	25	0.50	-
VIDEO SYSTEM	-	-	-	1.00	-
BATTERY BACKUP	1	25	-	1.00	25.0
LUMINAIRE	-	-	-	0.50	-
FLASHER	-	-	25	0.50	-
TOTAL =				449.8	

ENERGY COSTS- **BILLED TO: IDOT DISTRICT 1**
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY- **CONTACT BRAD SHINABARGAR**
PHONE 708-325-2692
COMMONWEALTH EDISON

INTERSECTION AND SAMPLING (SYSTEM) DETECTORS

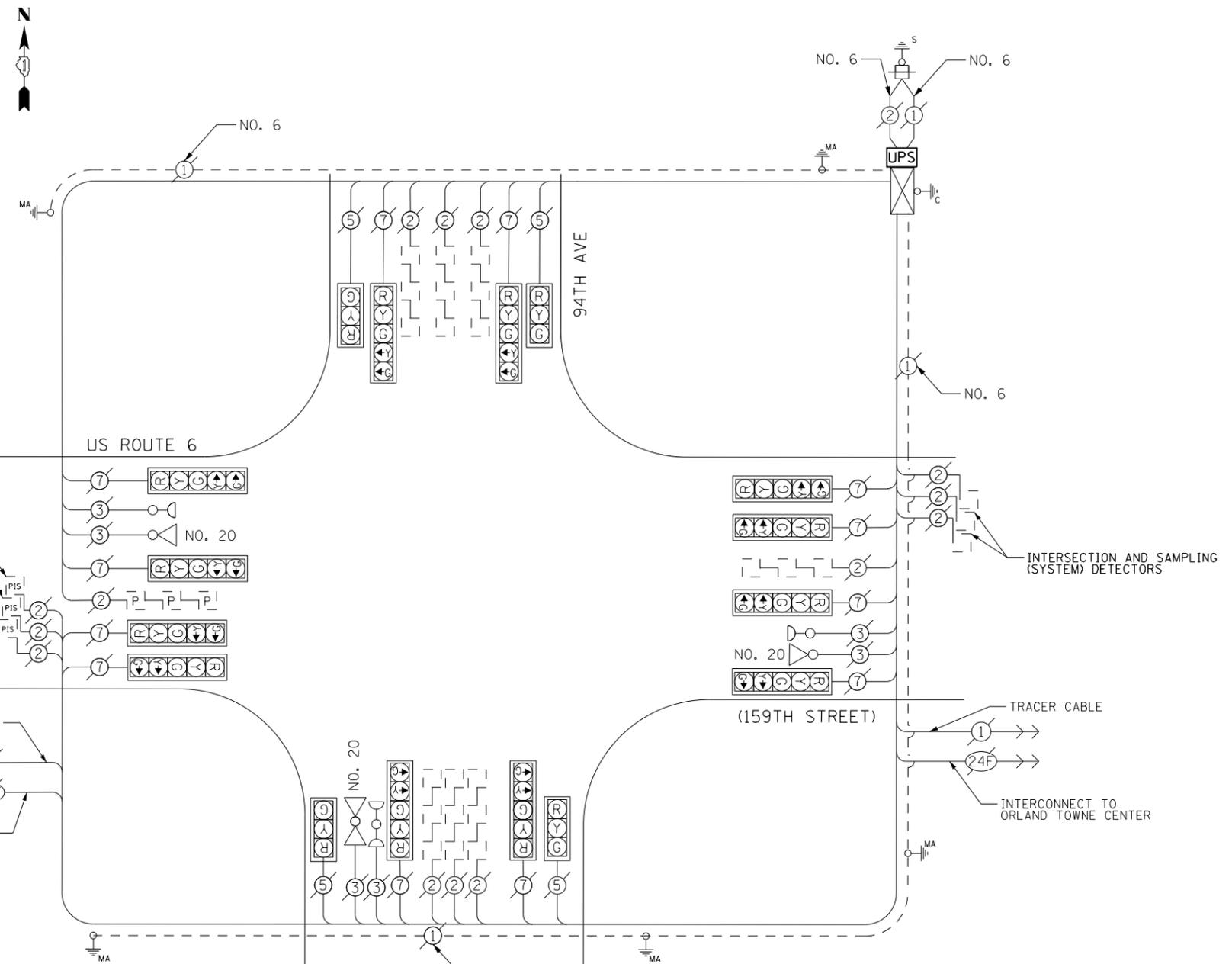
TRACER CABLE
INTERCONNECT TO LAGRANGE ROAD

SCHEDULE OF QUANTITIES

Items	Unit	Quantity
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1

CABLE PLAN

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



FILE NAME = D160X65-shr-TS190.dgn	USER NAME = SE3	DESIGNED - PHL	REVISED -
Default	PLOT SCALE = 40.0000' / in.	DRAWN - PHL	REVISED -
	PLOT DATE = 2/4/2014	CHECKED - BKS	REVISED -
		DATE - \$SUBDATE	REVISED -

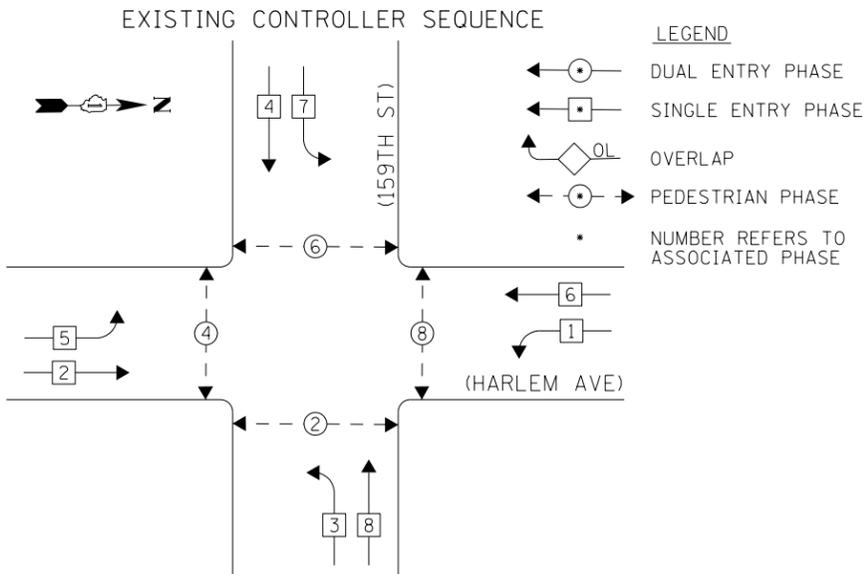
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 6 (159TH STREET)/94TH AVE - CABLE PLAN
SCHEDULE OF QUANTITIES, PHASE DESIG. DIAGRAM & EVP SEQUENCE

SCALE: SHEET OF SHEETS STA. TO STA.

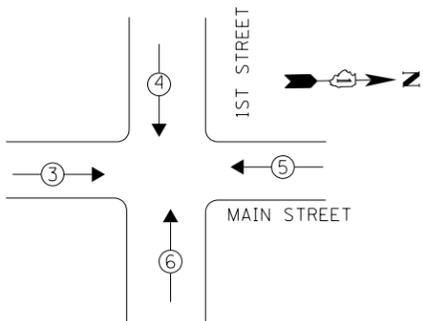
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2013-076TS	COOK	65	31
CONTRACT NO. 60X65				
ILLINOIS FED. AID PROJECT				

TS 190
ORLAND PARK



- LEGEND**
- ◉ DUAL ENTRY PHASE
 - ◻ SINGLE ENTRY PHASE
 - ◊ OL OVERLAP
 - ◉ PEDESTRIAN PHASE
 - NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS				
EMERGENCY VEHICLE PREEMPTOR	3	4	5	6
MOVEMENT	→	↓	←	↑

**I. D. O. T.
TRAFFIC SIGNAL INSTALLATION
ELECTRICAL SERVICE REQUIREMENTS**

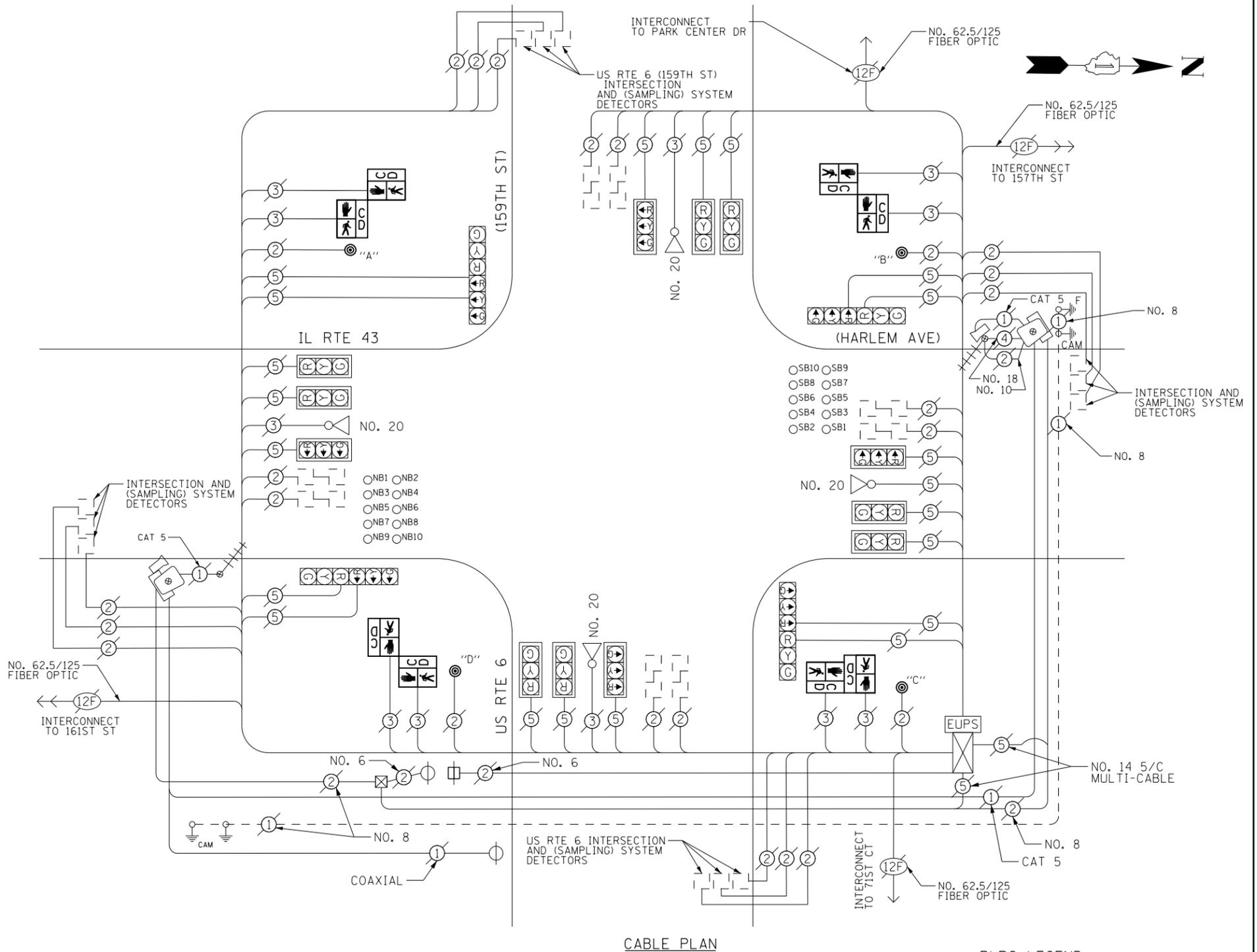
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	28	-	17	0.50	238.0
(YELLOW)	20	-	25	0.25	125.0
(GREEN)	20	-	15	0.25	75.0
ARROW	16	-	12	0.10	19.2
PED. SIGNAL	8	-	25	1.00	200.0
CONTROLLER	1	100	-	1.00	100.0
ILLUM. SIGN	-	-	25	0.50	-
VIDEO SYSTEM	-	150	-	1.00	-
BATTERY BACKUP	1	25	-	1.00	25.0
LUMINAIRE	-	250	-	0.50	-
FLASHER	-	-	25	0.50	-
TOTAL =				782.2	

ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY- CONTACT BRAD SHINABARGAR
PHONE 708-325-2692
COMMONWEALTH EDISON

SCHEDULE OF QUANTITIES

Items	Unit	Quantity
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
PEDESTRIAN PUSH-BUTTON, NON-LATCHING	EACH	4



PUSHBUTTON NOTES:
PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4
PUSHBUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6
PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8
PUSHBUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8

- RLRC LEGEND**
- # (FMS) FLUSH MOUNTED SENSOR
INDICATES SENSOR NUMBER
 - ⊠ RLRC SERVICE INSTALLATION WITH DISCONNECT
 - ⊕ FMS AP ANTENNA BOX
 - ◻ FLASH
 - ◻ CAMERA ENCLOSURE WITH POLE MOUNTED CABINET

FILE NAME = D160X65-sh1-TS165.dgn	USER NAME = SE3	DESIGNED - PHL	REVISED -
		DRAWN - PHL	REVISED -
		CHECKED - BKS	REVISED -
		DATE - \$SUBDATE	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

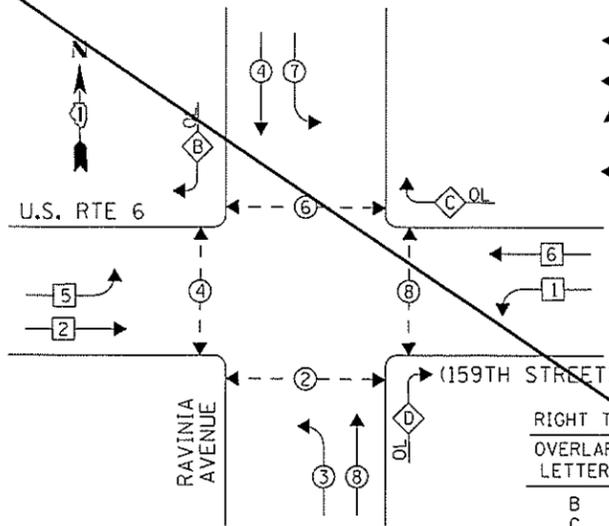
**1ST STREET /MAIN STREET - CABLE PLAN
SCHEDULE OF QUANTITIES, PHASE DESIG. DIAGRAM & EVP SEQUENCE**

SCALE: SHEET OF SHEETS STA. TO STA.

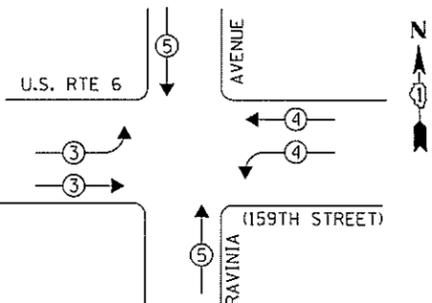
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2013-076TS	COOK	65	32
CONTRACT NO. 60X65				
ILLINOIS FED. AID PROJECT				

TS 165
ORLAND PARK

EXISTING CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT	→	←	↕

I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	18	-	17	0.50	153.0
(YELLOW)	14	-	25	0.25	87.5
(GREEN)	14	-	15	0.25	52.5
ARROW	28	-	12	0.10	33.6
PED. SIGNAL	8	-	25	1.00	200.0
CONTROLLER	1	100	-	1.00	100.0
ILLUM. SIGN	-	-	84	0.05	-
VIDEO SYSTEM	-	150	-	1.00	-
BATTERY BACKUP	1	25	-	1.00	25.0
LUMINAIRE	-	-	-	-	-
FLASHER	-	-	25	0.50	-
TOTAL =					651.6

ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
 201 WEST CENTER COURT
 SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY- CONTACT BRAD SHINABARGAR
 PHONE 708-325-2692
 COMMONWEALTH EDISON

LEGEND

- ◉ DUAL ENTRY PHASE
- ◻ SINGLE ENTRY PHASE
- ◊ OL OVERLAP
- ◉ PEDESTRIAN PHASE
- NUMBER REFERS TO ASSOCIATED PHASE

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

RIGHT TURN OVERLAP PHASE DESIGNATION		
OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
B	= 4	+ 5
C	= 6	+ 7
D	= 8	+ 1

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 4 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 2 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE
- 6 EACH PEDESTRIAN PUSH-BUTTON

SCHEDULE OF QUANTITIES

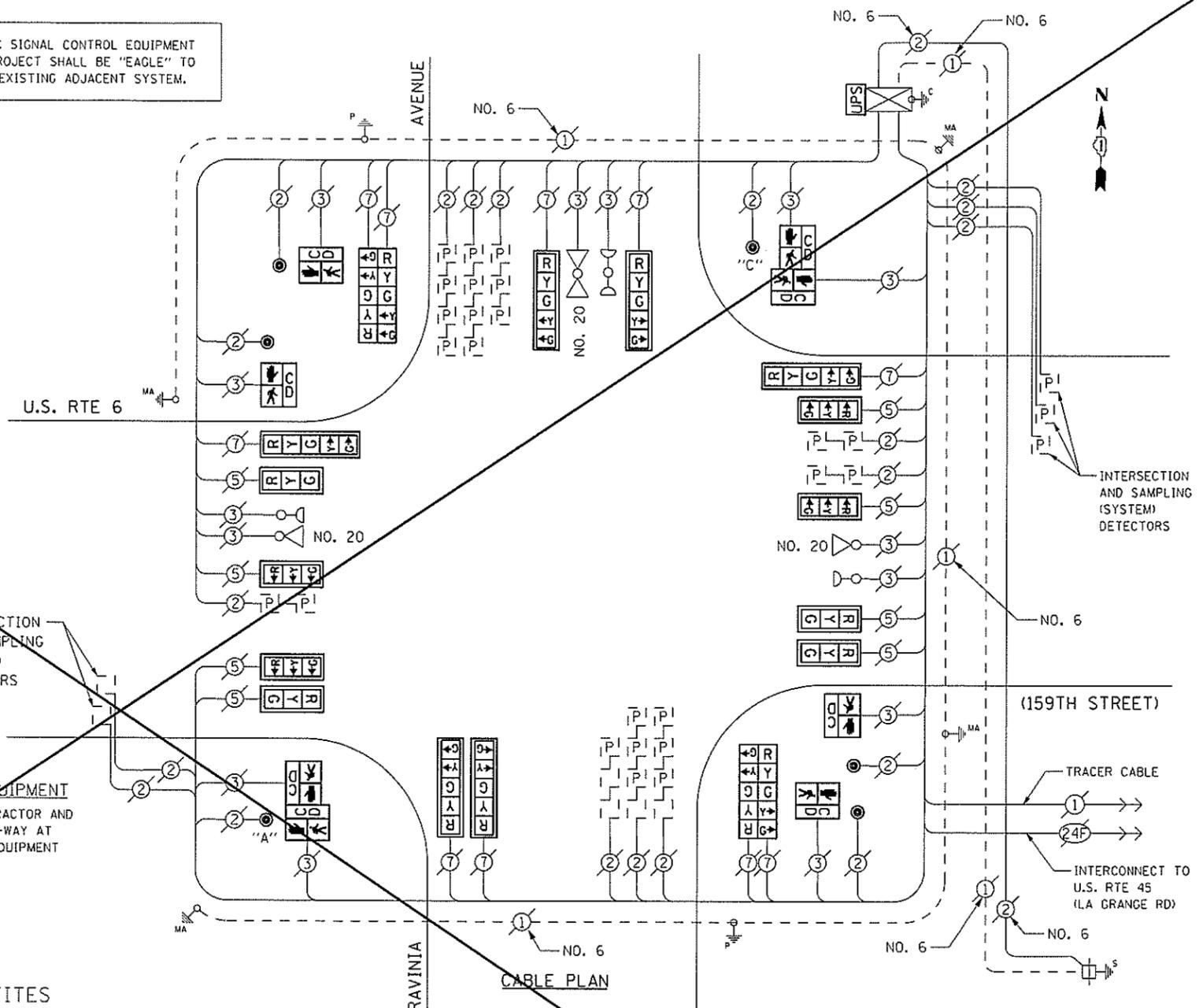
Items	Unit	Quantity
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	8
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	6
SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED RETROFIT	EACH	2
PEDESTRIAN PUSH-BUTTON, NON-LATCHING	EACH	6

RETROFIT ALL EXISTING SIGNAL HEADS TO L.E.D.

CONTRACTOR SHALL REPLACE BROKEN MOUNTING BRACKETS AT ALL RETROFIT SIGNAL HEADS OR AS DIRECTED BY THE ENGINEER. THE COST OF THIS WORK SHALL BE INCLUDED IN THE CORRESPONDING SIGNAL HEAD, LED, RETROFIT PAY ITEM OF THE TYPE AND NUMBER OF SIGNAL HEADS, FACES, AND SECTIONS AS SPECIFIED IN THE PLANS.

PUSHBUTTON NOTES:

PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4
 PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8



CABLE PLAN

FILE NAME = D:\60X65-11-1520491.dgn	USER NAME = Brian Soifers	DESIGNED - PHL	REVISED - SVS 3/10/14
PLT SCALE = 40.0000' / 1" =	PLDT DATE = 3/6/2014	DRAWN - PHL	REVISOR -
		CHECKED - BKS	REVISOR -
		DATE - *SUBDATE	REVISOR -

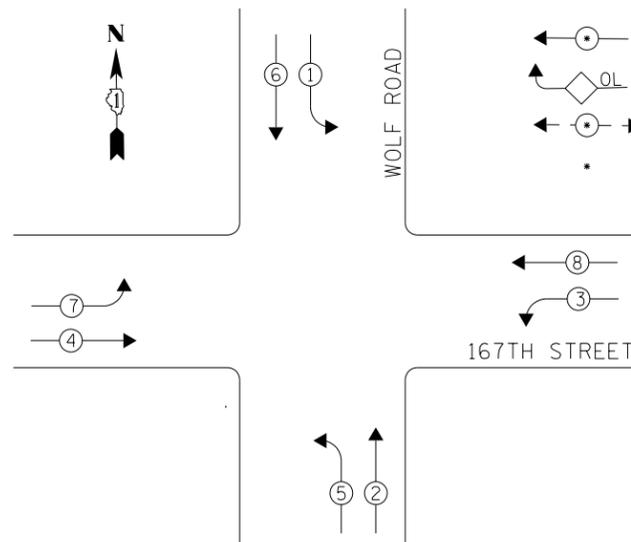
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

US RTE 6 (159TH STREET) AT RAVINIA AVENUE - CABLE PLAN SCHEDULE OF QUANTITIES, PHASE DESIG. DIAGRAM & EVP SEQUENCE

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2013-076TS	COOK	66	33
CONTRACT NO. 60X65			[ILLINOIS] FED. AID PROJECT	

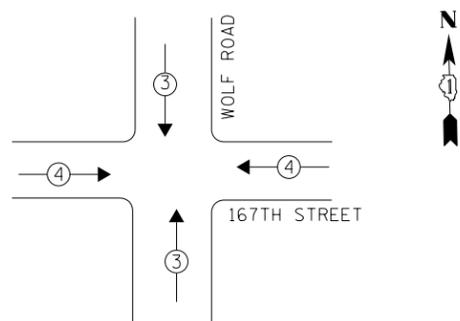
TS 20491 ORLAND PARK

EXISTING CONTROLLER SEQUENCE



- LEGEND**
- ← ⊙ → DUAL ENTRY PHASE
 - ◊ OL OVERLAP
 - ← ⊙ → PEDESTRIAN PHASE
 - * NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	↓ ↑	← →

I. D. O. T.
TRAFFIC SIGNAL INSTALLATION
ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	-	17	0.50	102.0
(YELLOW)	12	-	25	0.25	75.0
(GREEN)	12	-	15	0.25	45.0
ARROW	16	-	12	0.10	19.2
PED. SIGNAL	-	-	-	1.00	-
CONTROLLER	1	100	-	1.00	100.0
ILLUM. SIGN	-	-	25	0.50	-
VIDEO SYSTEM	-	-	-	1.00	-
BATTERY BACKUP	1	25	-	1.00	25.0
LUMINAIRE	-	-	-	0.50	-
FLASHER	-	-	25	0.50	-
TOTAL =					366.2

ENERGY COSTS- **BILLED TO: IDOT DISTRICT 1**
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

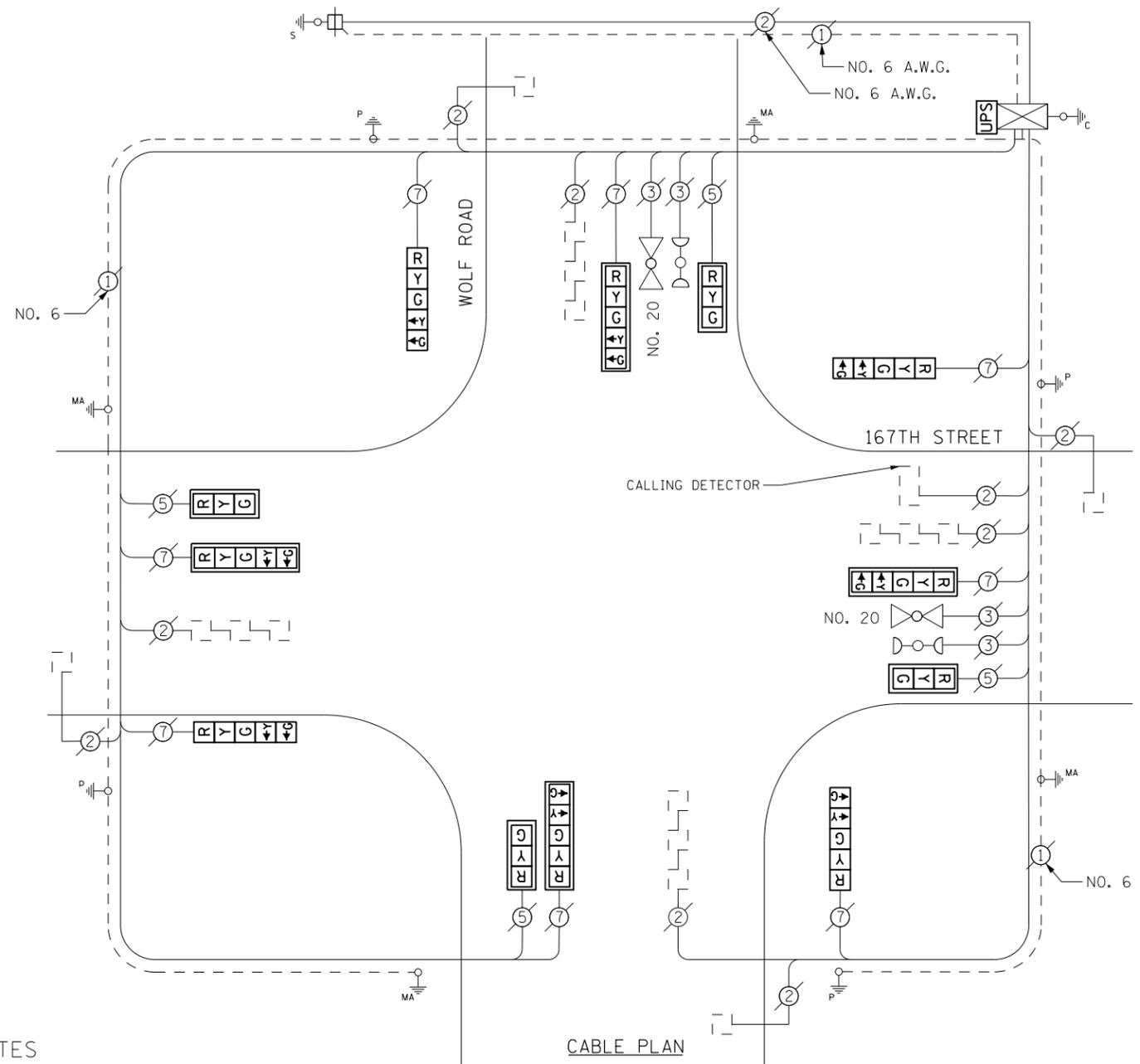
ENERGY SUPPLY- **CONTACT BRAD SHINABARGAR**
PHONE 708-325-2692
COMMONWEALTH EDISON

SCHEDULE OF QUANTITIES

Items	Unit	Quantity
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	4

RETROFIT ALL EXISTING SIGNAL HEADS TO L.E.D.

CONTRACTOR SHALL REPLACE BROKEN MOUNTING BRACKETS AT ALL RETROFIT SIGNAL HEADS OR AS DIRECTED BY THE ENGINEER. THE COST OF THIS WORK SHALL BE INCLUDED IN THE CORRESPONDING SIGNAL HEAD, LED, RETROFIT PAY ITEM OF THE TYPE AND NUMBER OF SIGNAL HEADS, FACES, AND SECTIONS AS SPECIFIED IN THE PLANS.



CABLE PLAN

FILE NAME = D160X65-sht-TS20560.dgn	USER NAME = SE3	DESIGNED - PHL	REVISED -
Default	PLOT SCALE = 40.0000' / in.	DRAWN - PHL	REVISED -
	PLOT DATE = 2/4/2014	CHECKED - BKS	REVISED -
		DATE - \$SUBDATE	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

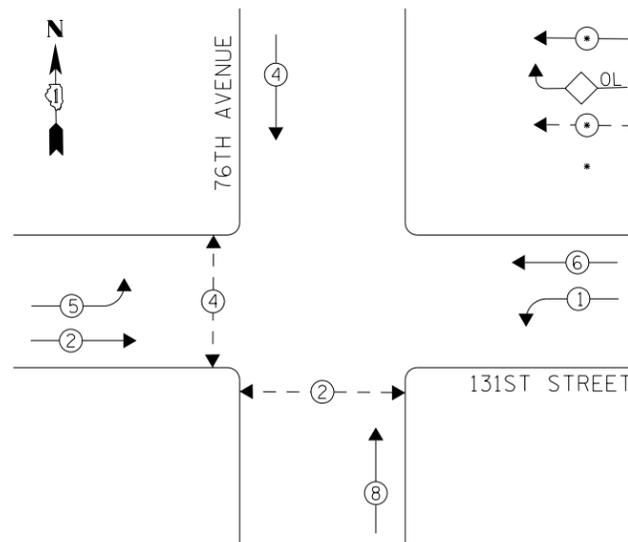
WOLF ROAD / 167TH STREET - CABLE PLAN
SCHEDULE OF QUANTITIES, PHASE DESIG. DIAGRAM & EVP SEQUENCE

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2013-076TS	COOK	65	34
CONTRACT NO. 60X65				
ILLINOIS FED. AID PROJECT				

TS 20560
ORLAND PARK

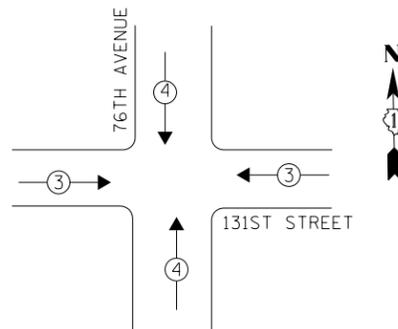
EXISTING CONTROLLER SEQUENCE



LEGEND

- DUAL ENTRY PHASE
- OVERLAP
- PEDESTRIAN PHASE
- * NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT		

I. D. O. T.
TRAFFIC SIGNAL INSTALLATION
ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16	-	17	0.50	136.0
(YELLOW)	16	-	25	0.25	100.0
(GREEN)	16	-	15	0.25	60.0
ARROW	8	-	12	0.10	9.6
PED. SIGNAL	4	-	25	1.00	100.0
CONTROLLER	1	100	-	1.00	100.0
ILLUM. SIGN	-	-	84	0.05	-
VIDEO SYSTEM	-	150	-	1.00	-
BATTERY BACKUP	1	25	-	1.00	25.0
LUMINAIRE	-	-	-	0.50	-
FLASHER	-	-	25	0.50	-
TOTAL =				530.6	

ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY- CONTACT BRAD SHINABARGAR
PHONE 708-325-2692
COMMONWEALTH EDISON

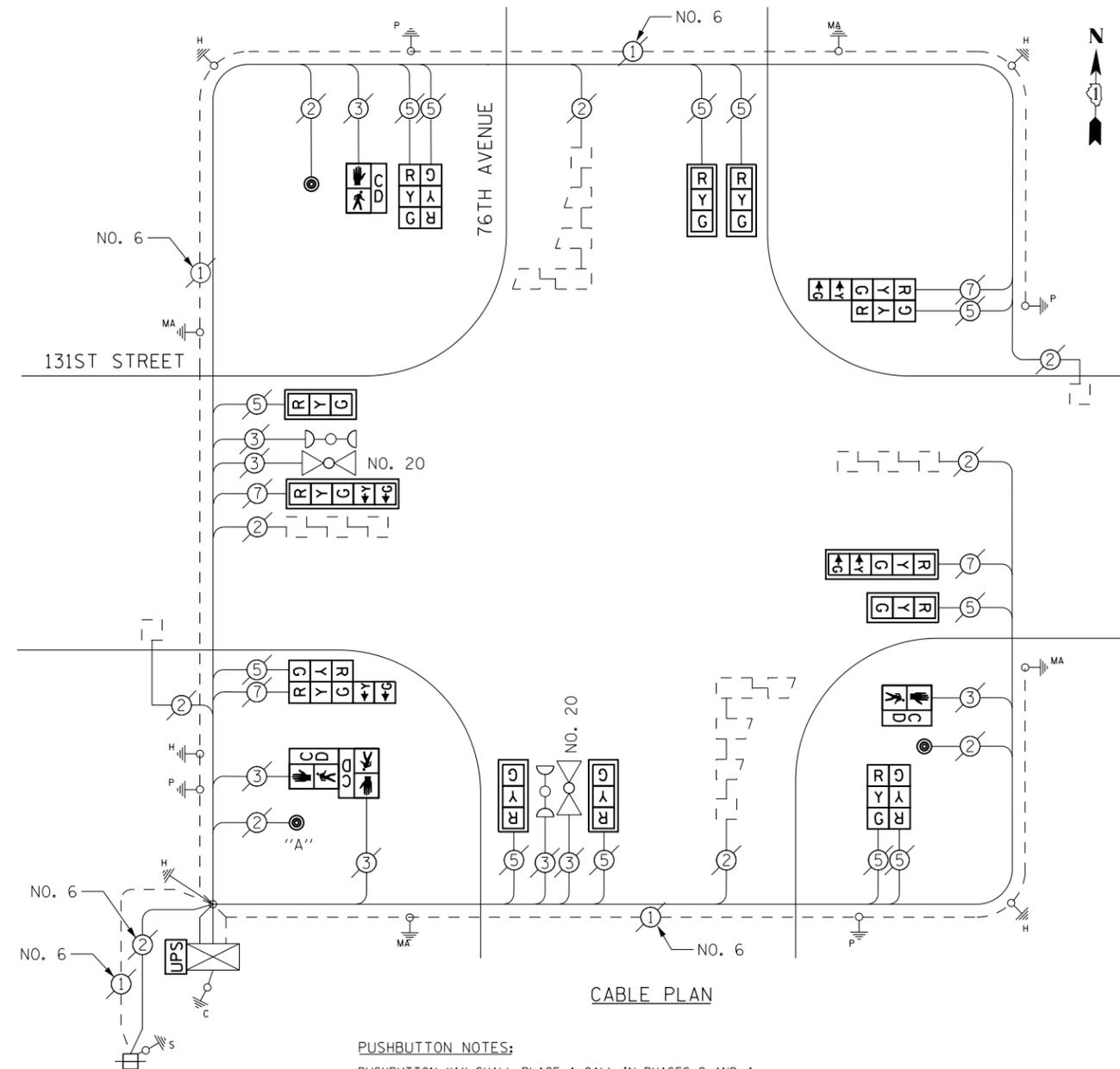
REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 1 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE
- 3 EACH PEDESTRIAN PUSH-BUTTON

SCHEDULE OF QUANTITIES

Items	Unit	Quantity
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
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
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED, RETROFIT	EACH	2
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	6
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	2
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	2
PEDESTRIAN PUSH-BUTTON, NON-LATCHING	EACH	3



CABLE PLAN

PUSHBUTTON NOTES:

PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4

UPS SHALL BE INSTALLED ON LEFT SIDE OF CONTROLLER CABINET DUE TO LIMITED CLEARANCE, OR AS DIRECTED BY THE ENGINEER.

RETROFIT ALL EXISTING SIGNAL HEADS TO L.E.D.

CONTRACTOR SHALL REPLACE BROKEN MOUNTING BRACKETS AT ALL RETROFIT SIGNAL HEADS OR AS DIRECTED BY THE ENGINEER. THE COST OF THIS WORK SHALL BE INCLUDED IN THE CORRESPONDING SIGNAL HEAD, LED, RETROFIT PAY ITEM OF THE TYPE AND NUMBER OF SIGNAL HEADS, FACES, AND SECTIONS AS SPECIFIED IN THE PLANS.

TS 1911
ORLAND PARK

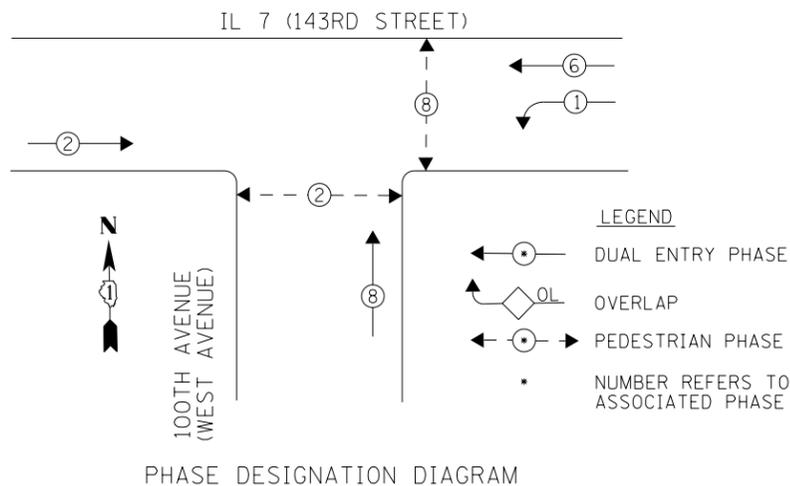
FILE NAME = D:\60X65-shr-TS1911.dgn	USER NAME = SE3	DESIGNED - PHL	REVISED -
Default	PLOT SCALE = 48.0000' / in.	DRAWN - PHL	REVISED -
	PLOT DATE = 2/4/2014	CHECKED - BKS	REVISED -
		DATE - \$SUBDATE	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

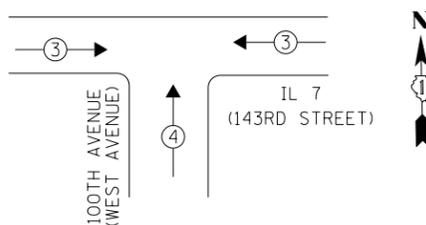
131ST STREET AT 76TH AVENUE - CABLE PLAN
SCHEDULE OF QUANTITIES, PHASE DESIG. DIAGRAM & EVP SEQUENCE
SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2013-076TS	COOK	65	35
CONTRACT NO. 60X65				
ILLINOIS FED. AID PROJECT				

EXISTING CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT		

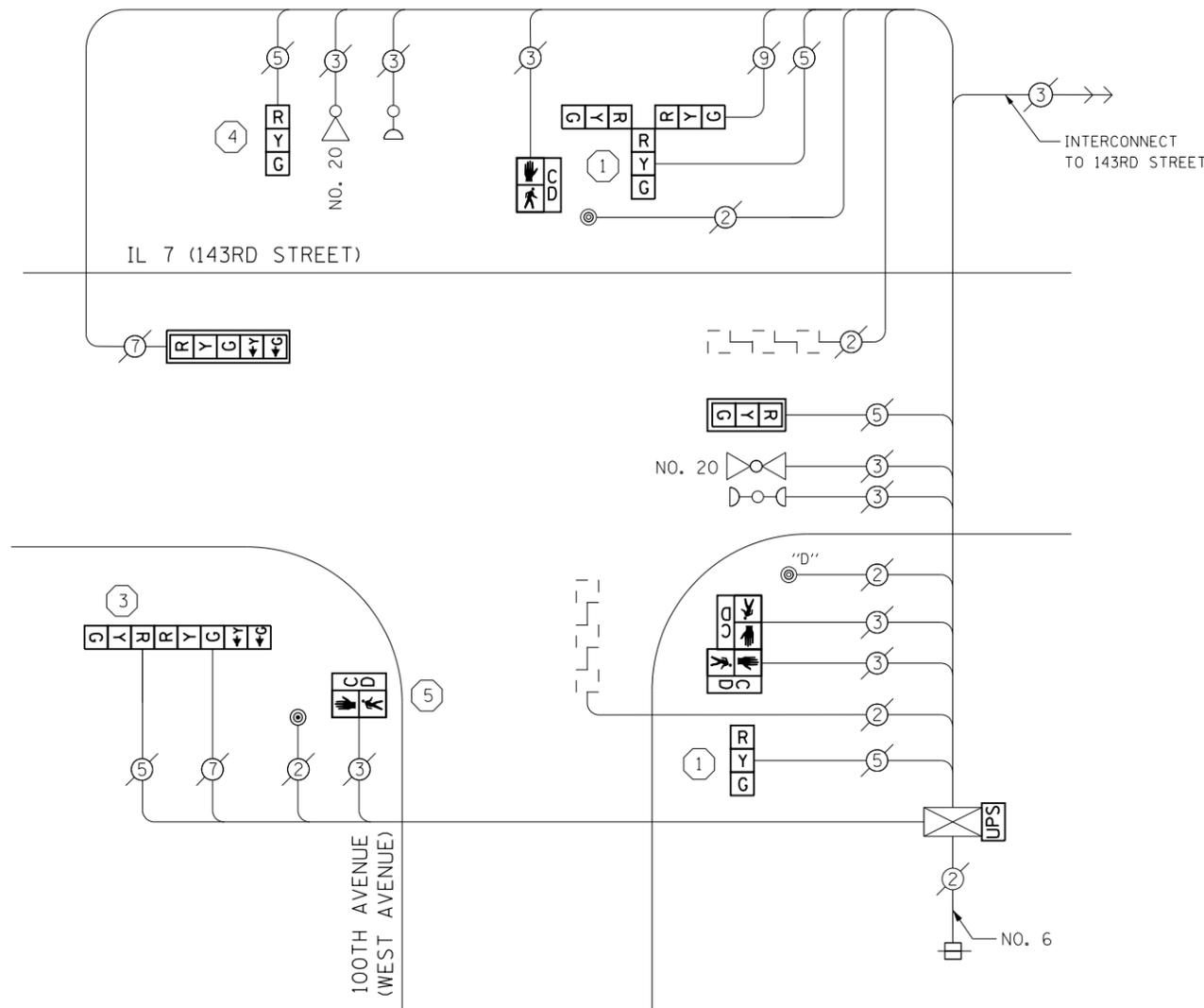
REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT
 THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 5 EACH TRAFFIC SIGNAL POST
- 3 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 1 EACH SIGNAL HEAD, 1-FACE, 5-SECTION
- 1 EACH SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION
- 1 EACH SIGNAL HEAD, 3-FACE, 3-SECTION
- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 1 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE
- 3 EACH PEDESTRIAN PUSH-BUTTON

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

SCHEDULE OF QUANTITIES

Items	Unit	Quantity
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	2
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	1
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 3-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
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, ALUMINUM	EACH	2
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1
PEDESTRIAN PUSH-BUTTON, NON-LATCHING	EACH	3



CABLE PLAN

PUSHBUTTON NOTES:
 PUSHBUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8

CONSTRUCTION NOTES

- 1 THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 14 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.
- 3 THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 16 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.
- 4 THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 18 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.
- 5 THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 10 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.

NOTES

- 1) ALL COSTS RELATED TO ATTACHING THE POSTS TO THE EXISTING FOUNDATION SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED
- 2) PRIOR TO REMOVING ANY TRAFFIC SIGNAL POST SPECIFIED TO BE REPLACED IN THE SAME LOCATION THE CONTRACTOR SHALL VERIFY THAT THE PATTERN, SPACING, AND CONDITION OF THE EXISTING BOLTS ARE SUITABLE FOR RE-USE WITH A NEW POST. IF THE BOLTS ARE NOT USABLE, REPLACE AS DIRECTED BY THE ENGINEER.
- 3) THE CONTRACTOR SHALL RELOCATE EXISTING SIGN PANELS FROM POSTS THAT ARE INDICATED FOR REPLACEMENT TO THE NEW POSTS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE COST OF REMOVAL, RELOCATION AND ANY NEW MOUNTING HARDWARE NECESSARY TO COMPLETE THIS WORK SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED.

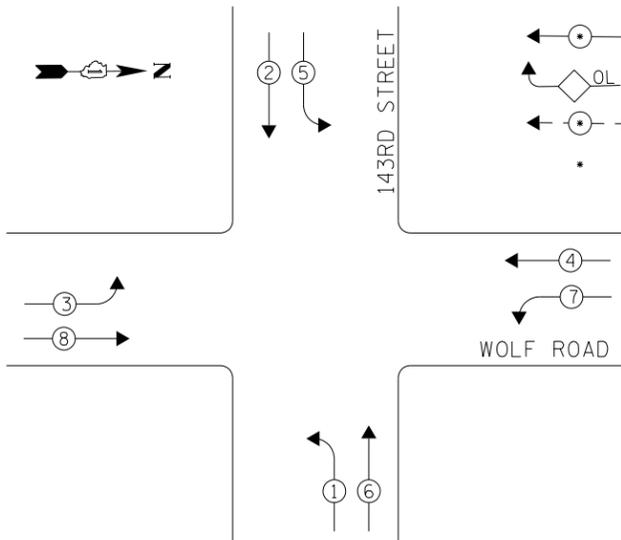
I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	9	-	17	0.50	76.5
(YELLOW)	9	-	25	0.25	56.25
(GREEN)	9	-	15	0.25	33.75
ARROW	4	-	12	0.10	4.8
PED. SIGNAL	4	-	25	1.00	100.0
CONTROLLER	1	100	-	1.00	100.0
ILLUM. SIGN	-	-	84	0.05	-
VIDEO SYSTEM	-	150	-	1.00	-
BATTERY BACKUP	1	25	-	1.00	25.0
LUMINAIRE	-	250	-	-	-
FLASHER	-	-	25	0.50	-
TOTAL =					396.3

ENERGY COSTS- **BILLED TO: IDOT DISTRICT 1**
 201 WEST CENTER COURT
 SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY- **CONTACT BRAD SHINABARGAR**
 PHONE 708-325-2692
 COMMONWEALTH EDISON

TS 1920
ORLAND PARK

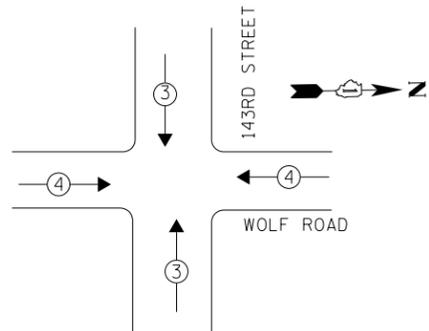
EXISTING CONTROLLER SEQUENCE



LEGEND

- ← ⊙ → DUAL ENTRY PHASE
- ◊ OL OVERLAP
- ← ⊙ → PEDESTRIAN PHASE
- * NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

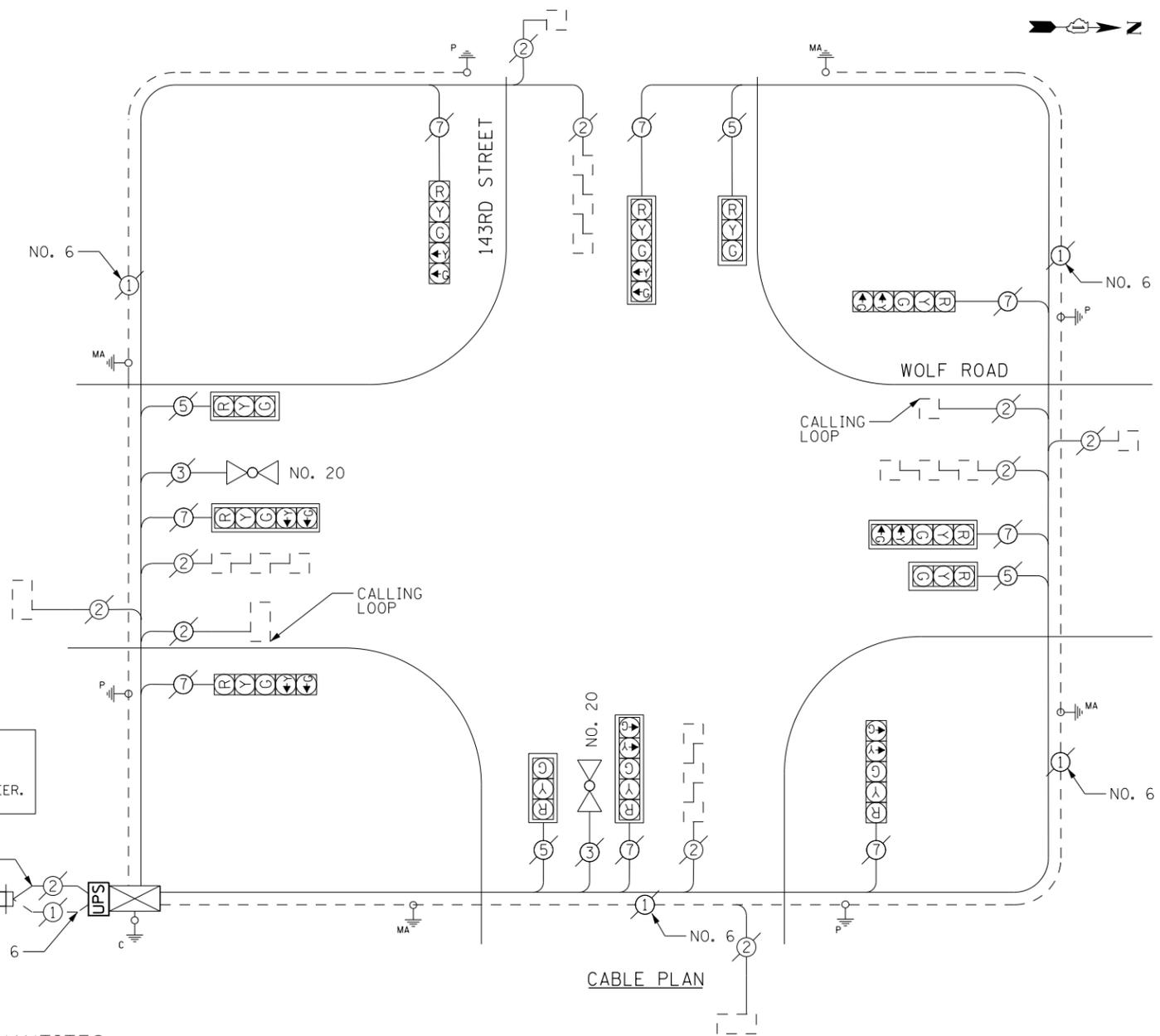
EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	↓ ↑	← →

I. D. O. T.
TRAFFIC SIGNAL INSTALLATION
ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	-	17	0.50	102.0
(YELLOW)	12	-	25	0.25	75.0
(GREEN)	12	-	15	0.25	45.0
ARROW	16	-	12	0.10	19.2
PED. SIGNAL	-	-	25	1.00	-
CONTROLLER	1	100	-	1.00	100.0
ILLUM. SIGN	-	-	25	0.50	-
VIDEO SYSTEM	-	150	-	1.00	-
BATTERY BACKUP	1	25	-	1.00	25.0
LUMINAIRE	-	250	-	0.50	-
FLASHER	-	-	25	0.50	-
TOTAL =					366.2

ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY- CONTACT BRAD SHINABARGAR
PHONE 708-325-2692
COMMONWEALTH EDISON



UPS SHALL BE INSTALLED ON LEFT SIDE OF CONTROLLER CABINET DUE TO PHYSICAL CONSTRAINT, OR AS DIRECTED BY THE ENGINEER.

RETROFIT ALL EXISTING SIGNAL HEADS TO L.E.D.

SCHEDULE OF QUANTITIES

Items	Unit	Quantity
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	4

FILE NAME = D160X65-sht-TS21520.dgn
Default

USER NAME = SE3
PLOT SCALE = 40.0000' / in.
PLOT DATE = 2/4/2014

DESIGNED - PHL
DRAWN - PHL
CHECKED - BKS
DATE - \$SUBDATE

REVISED -
REVISED -
REVISED -
REVISED -

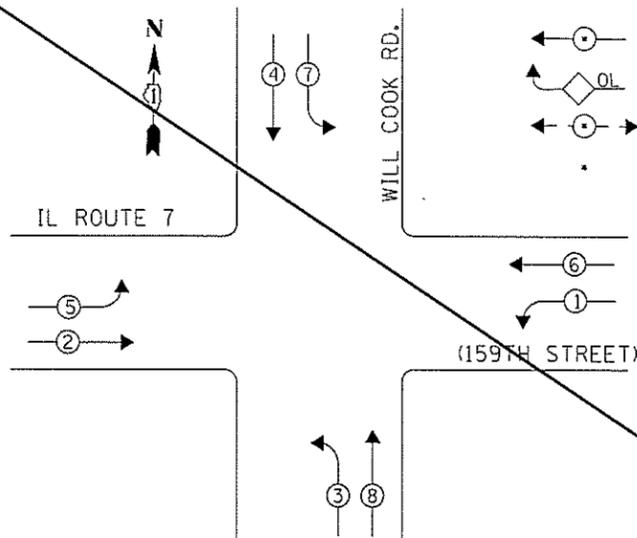
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WOLF ROAD /143RD STREET - CABLE PLAN
SCHEDULE OF QUANTITIES, PHASE DESIG. DIAGRAM & EVP SEQUENCE
SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTÉ. SECTION COUNTY TOTAL SHEETS SHEET NO.
2013-076TS COOK 65 37
CONTRACT NO. 60X65
ILLINOIS FED. AID PROJECT

TS 21520
ORLAND PARK

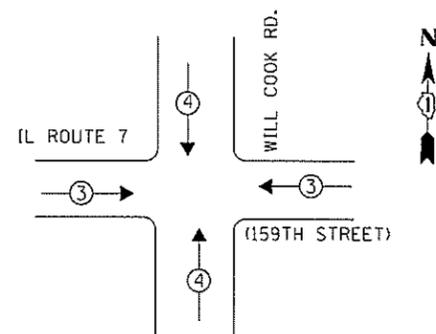
EXISTING CONTROLLER SEQUENCE



LEGEND

- ← ○ → DUAL ENTRY PHASE
- ◊ OL OVERLAP
- ← ○ → PEDESTRIAN PHASE
- NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↓ ↑

I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	-	17	0.50	102.0
(YELLOW)	12	-	25	0.25	75.0
(GREEN)	12	-	15	0.25	45.0
ARROW	16	-	12	0.10	19.2
PED. SIGNAL	-	-	25	1.00	-
CONTROLLER	1	100	-	1.00	100.0
ILLUM. SIGN	-	-	25	0.50	-
VIDEO SYSTEM	-	150	-	1.00	-
BATTERY BACKUP	1	25	-	1.00	25.0
LUMINAIRE	-	250	-	0.50	-
FLASHER	-	-	25	0.50	-
TOTAL =					366.2

ENERGY COSTS- **BILLED TO: IDOT DISTRICT 1**
 201 WEST CENTER COURT
 SCHAUMBURG, IL 60196-1096

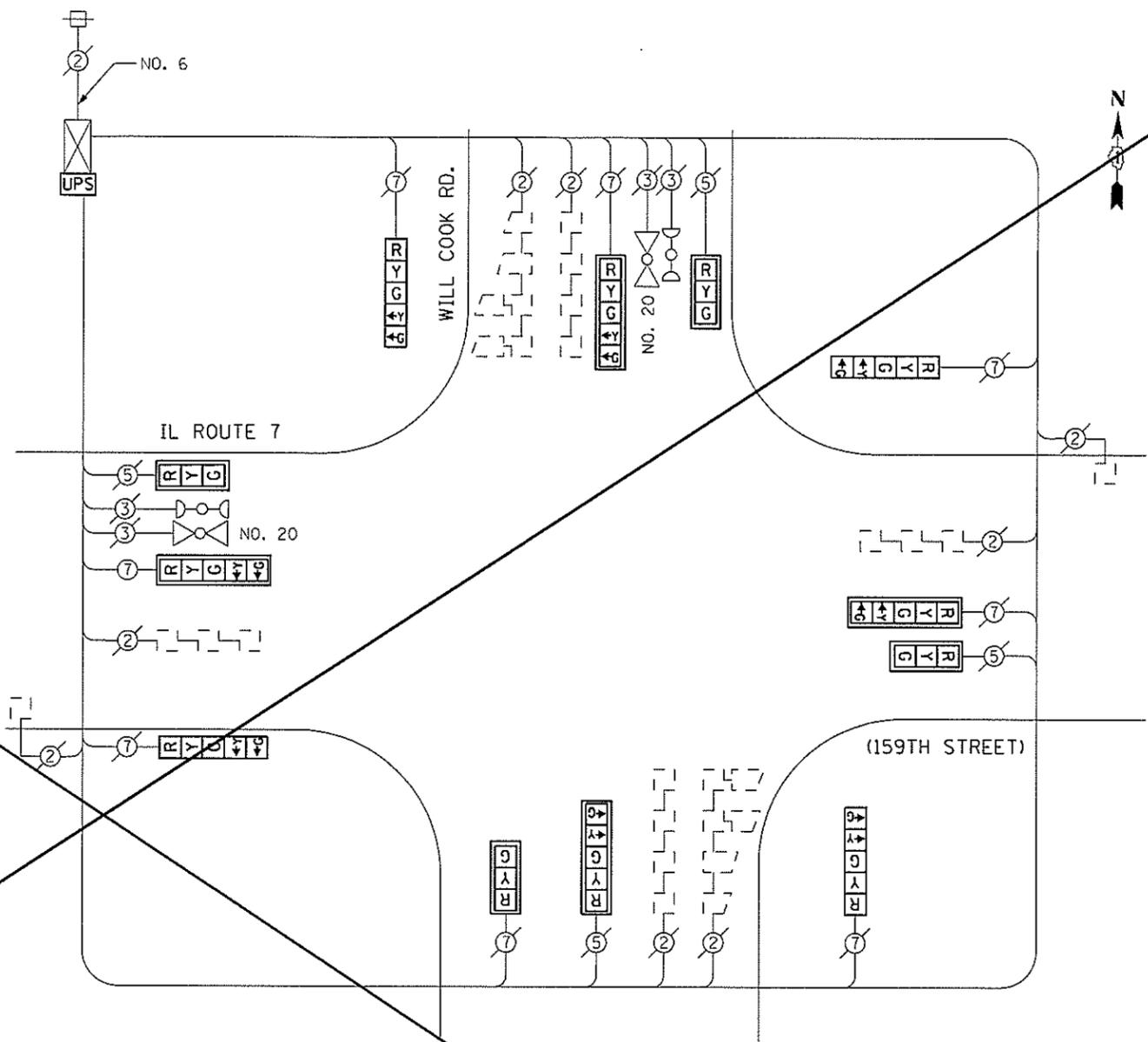
ENERGY SUPPLY- **CONTACT BRAD SHINABARGAR**
 PHONE 708-325-2692
 COMMONWEALTH EDISON

SCHEDULE OF QUANTITIES

Items	Unit	Quantity
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	4

RETROFIT ALL EXISTING SIGNAL HEADS TO L.E.D.

CONTRACTOR SHALL REPLACE BROKEN MOUNTING BRACKETS AT ALL RETROFIT SIGNAL HEADS OR AS DIRECTED BY THE ENGINEER. THE COST OF THIS WORK SHALL BE INCLUDED IN THE CORRESPONDING SIGNAL HEAD, LED, RETROFIT PAY ITEM OF THE TYPE AND NUMBER OF SIGNAL HEADS, FACES, AND SECTIONS AS SPECIFIED IN THE PLANS.



CABLE PLAN

FILE NAME = 201065-sh-t-TS163.dgn	USER NAME = Brian Scifers	DESIGNED - PHL	REVISED - 3/18/14 SVS
PLDT SCALE = 40.0000' / in.	PLDT DATE = 3/6/2014	DRAWN - PHL	REVISIONS -
		CHECKED - BKS	REVISIONS -
		DATE - \$SUBDATE	REVISIONS -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

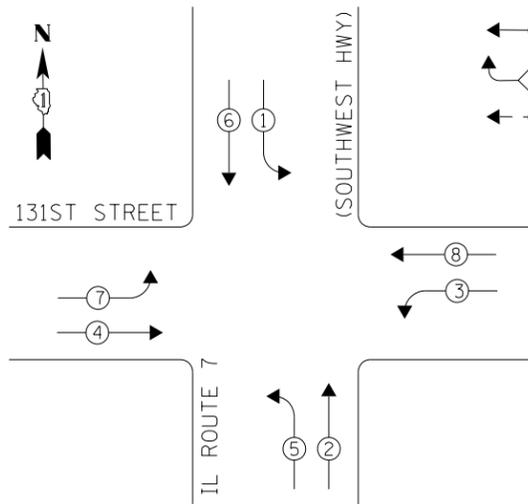
IL ROUTE 7 (159TH STEET)/WILL COOK ROAD - CABLE PLAN SCHEDULE OF QUANTITIES, PHASE DESIG. DIAGRAM & EVP SEQUENCE

SCALE: SHEET OF SHEETS STA. TO STA.

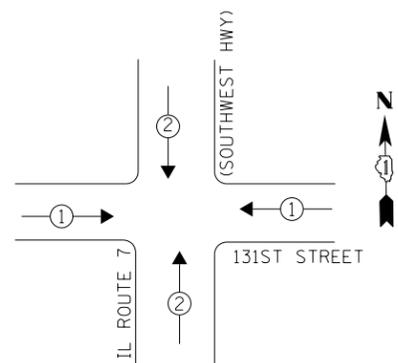
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2013-076T5	COOK	66	38
			CONTRACT NO. 60X65	
ILLINOIS FED. AID PROJECT				

TS 163 ORLAND PARK

EXISTING CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	1	2
MOVEMENT	← →	↓ ↑

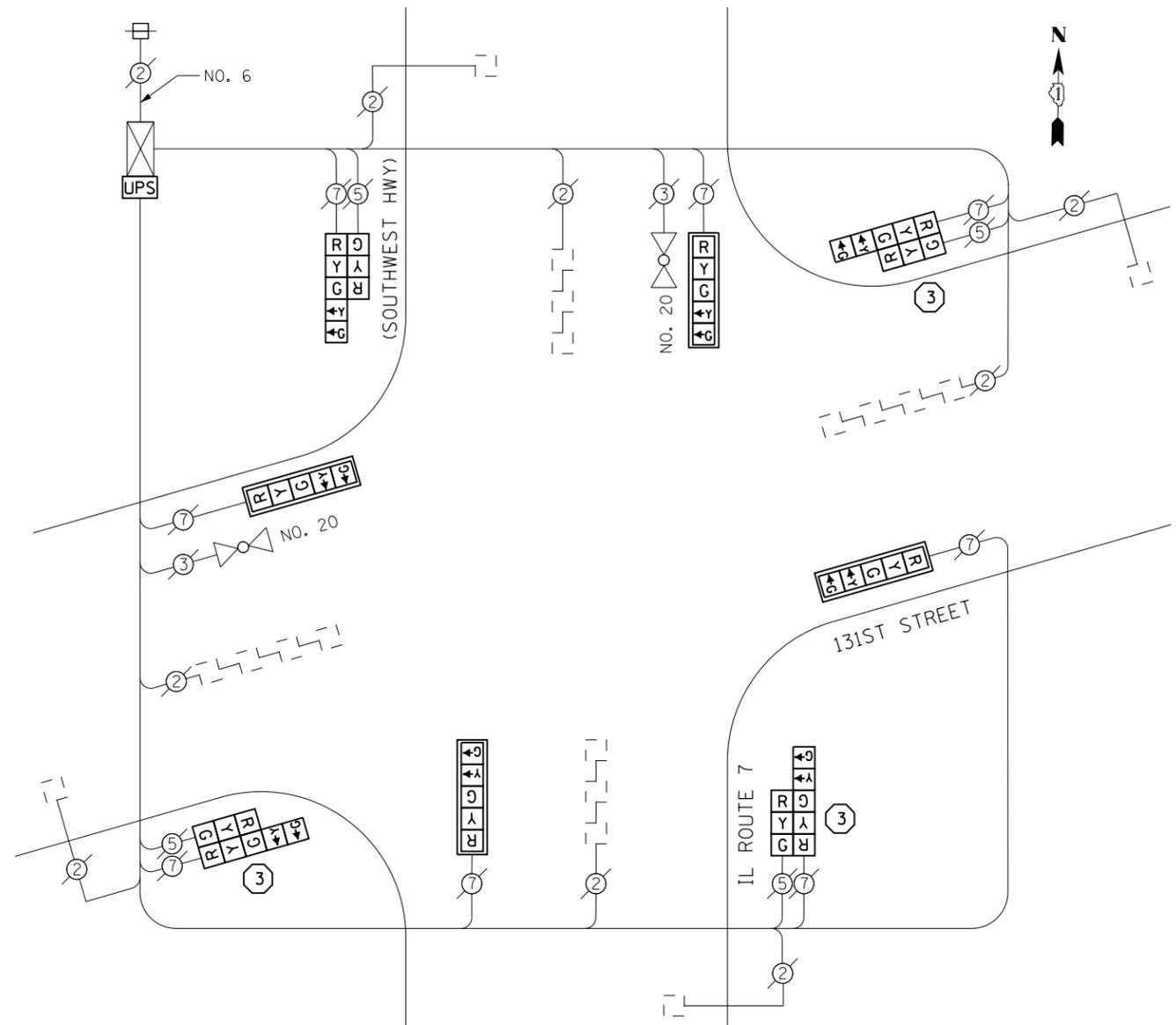
LEGEND

- ← ⊙ → DUAL ENTRY PHASE
- ◊ OL OVERLAP
- ← ⊙ → PEDESTRIAN PHASE
- * NUMBER REFERS TO ASSOCIATED PHASE

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 3 EACH TRAFFIC SIGNAL POST
- 4 EACH SIGNAL HEAD, 1-FACE, 5-SECTION
- 4 EACH SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION



CABLE PLAN

SCHEDULE OF QUANTITIES

Items	Unit	Quantity
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	3
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	4
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1

CONSTRUCTION NOTES

- 3 THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 16 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.

NOTES

- 1) ALL COSTS RELATED TO ATTACHING THE POSTS TO THE EXISTING FOUNDATION SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED
- 2) PRIOR TO REMOVING ANY TRAFFIC SIGNAL POST SPECIFIED TO BE REPLACED IN THE SAME LOCATION THE CONTRACTOR SHALL VERIFY THAT THE PATTERN, SPACING, AND CONDITION OF THE EXISTING BOLTS ARE SUITABLE FOR RE-USE WITH A NEW POST. IF THE BOLTS ARE NOT USABLE, REPLACE AS DIRECTED BY THE ENGINEER.
- 3) THE CONTRACTOR SHALL RELOCATE EXISTING SIGN PANELS FROM POSTS THAT ARE INDICATED FOR REPLACEMENT TO THE NEW POSTS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE COST OF REMOVAL, RELOCATION AND ANY NEW MOUNTING HARDWARE NECESSARY TO COMPLETE THIS WORK SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED.

TS 1905
ORLAND PARK

I. D. O. T.
TRAFFIC SIGNAL INSTALLATION
ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	-	17	0.50	102.0
(YELLOW)	12	-	25	0.25	75.0
(GREEN)	12	-	15	0.25	45.0
ARROW	16	-	12	0.10	19.2
PED. SIGNAL	-	-	25	1.00	-
CONTROLLER	1	100	-	1.00	100.0
ILLUM. SIGN	-	-	84	0.05	-
VIDEO SYSTEM	-	150	-	1.00	-
BATTERY BACKUP	1	25	-	1.00	25.0
LUMINAIRE	-	-	-	-	-
FLASHER	-	-	25	0.50	-
TOTAL =					366.2

ENERGY COSTS- **BILLED TO: IDOT DISTRICT 1**
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY- **CONTACT BRAD SHINABARGAR**
PHONE 708-325-2692
COMMONWEALTH EDISON

FILE NAME = D:\60X65-sht-TS1905.dgn	USER NAME = SE3	DESIGNED - PHL	REVISED -
Default	PLOT SCALE = 48.0000' / in.	DRAWN - PHL	REVISED -
	PLOT DATE = 2/4/2014	CHECKED - BKS	REVISED -
		DATE - \$SUBDATE	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 7 (SOUTHWEST HWY) AT 131ST STREET - CABLE PLAN
SCHEDULE OF QUANTITIES, PHASE DESIG. DIAGRAM & EVP SEQUENCE

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTÉ.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2013-076TS	COOK	65	39
CONTRACT NO. 60X65			ILLINOIS FED. AID PROJECT	

CONSTRUCTION NOTES

- 3 THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 16 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.

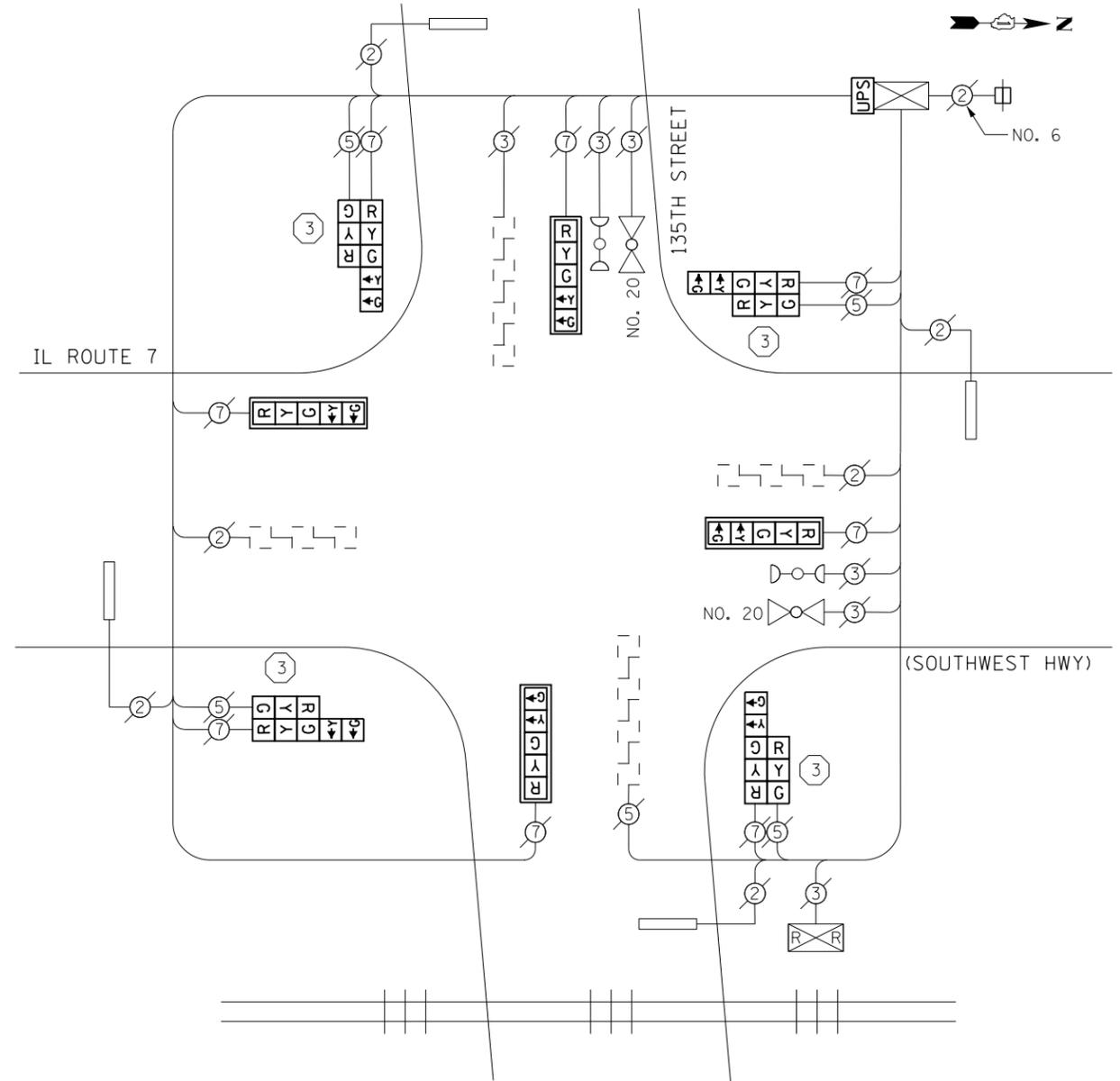
NOTES

- 1) ALL COSTS RELATED TO ATTACHING THE POSTS TO THE EXISTING FOUNDATION SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED
- 2) PRIOR TO REMOVING ANY TRAFFIC SIGNAL POST SPECIFIED TO BE REPLACED IN THE SAME LOCATION THE CONTRACTOR SHALL VERIFY THAT THE PATTERN, SPACING, AND CONDITION OF THE EXISTING BOLTS ARE SUITABLE FOR RE-USE WITH A NEW POST. IF THE BOLTS ARE NOT USABLE, REPLACE AS DIRECTED BY THE ENGINEER.
- 3) THE CONTRACTOR SHALL RELOCATE EXISTING SIGN PANELS FROM POSTS THAT ARE INDICATED FOR REPLACEMENT TO THE NEW POSTS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE COST OF REMOVAL, RELOCATION AND ANY NEW MOUNTING HARDWARE NECESSARY TO COMPLETE THIS WORK SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED.

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 4 EACH TRAFFIC SIGNAL POST
- 4 EACH SIGNAL HEAD, 1-FACE, 5-SECTION
- 4 EACH SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION



CABLE PLAN

SCHEDULE OF QUANTITIES

Items	Unit	Quantity
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	4
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1

ACCESS TO INSIDE OF CONTROLLER CABINET BY DESIGNER WAS NOT POSSIBLE PRIOR TO CONSTRUCTION. CONTRACTOR SHALL COORDINATE CONTROLLER AND CABINET TYPE WITH ENGINEER PRIOR TO ORDERING UPS MATERIALS AND EQUIPMENT. CONTRACTOR SHALL INSTALL UPS IF APPROVED BY THE ENGINEER.

I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	-	17	0.50	102.0
(YELLOW)	12	-	25	0.25	75.0
(GREEN)	12	-	15	0.25	45.0
ARROW	16	-	12	0.10	19.2
PED. SIGNAL	-	-	25	1.00	-
CONTROLLER	1	100	-	1.00	100.0
ILLUM. SIGN	-	-	84	0.05	-
VIDEO SYSTEM	-	150	-	1.00	-
BATTERY BACKUP	1	25	-	1.00	25.0
LUMINAIRE	-	-	-	-	-
FLASHER	-	-	25	0.50	-
TOTAL =					366.2

ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY- CONTACT BRAD SHINABARGAR
PHONE 708-325-2692
COMMONWEALTH EDISON

TS 1910
ORLAND PARK



SEQUENCE OF OPERATION

MOVEMENT																							F			
PHASE																							L			
INTERVAL																							A			
CHANGE TO																							S			
																							H			
IL RTE. 7 (SOUTHWEST HWY.) NEAR RIGHT SIGNAL	N/B	R	R	R	R	R	R	G	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R		
IL RTE. 7 (SOUTHWEST HWY.) FAR LEFT AND END MAST ARM SIGNALS	N/B	R	R	R	R	R	R	G	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R		
IL RTE. 7 (SOUTHWEST HWY.) NEAR RIGHT SIGNAL	S/B	R	R	R	R	G	G	R	R	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R		
IL RTE. 7 (SOUTHWEST HWY.) FAR LEFT AND END MAST ARM SIGNALS	S/B	R	R	R	R	G	G	R	R	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R		
135th ST. NEAR RIGHT SIGNAL	E/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	G	Y	R	G	Y	R	R
135th ST. FAR LEFT AND END MAST ARM SIGNALS	E/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	G	Y	R	G	Y	R	R
135th ST. NEAR RIGHT SIGNALS	W/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R		
135th ST. FAR LEFT AND END MAST ARM SIGNALS	W/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R		

RAILROAD PREEMPTION SEQUENCE OF OPERATION

CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER																			PREEMPTOR NUMBER 3	PREEMPTOR NUMBER 4	PREEMPTOR NUMBER 2	
	1	5	7	9	11	15	18	21											2	3		
CHANGE FROM EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER																			2	3		
RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1A	1B	1C	1D	1E	1F	1G	1H	1J	1K	1L	1M	1N	1P	1Q	1R	1S	2	3	4	5	CLEAR TO NORMAL SEQUENCE
CHANGE TO RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	2	1C	2	1E	2	1G	2	2	2	1L	2	1N	2	1Q	2	1S	2	3	4	5		
IL RTE. 7 (SOUTHWEST HWY.) NEAR RIGHT SIGNAL	N/B	R	R	R	Y	R	Y	R	R	R	R	R	R	R	Y	R	R	R	R	R	G	△
IL RTE. 7 (SOUTHWEST HWY.) FAR LEFT AND END MAST ARM SIGNALS	N/B	R	R	R	Y	R	Y	R	R	R	R	R	R	R	Y	R	R	R	R	R	G	△
IL RTE. 7 (SOUTHWEST HWY.) NEAR RIGHT SIGNAL	S/B	R	Y	R	R	R	Y	R	R	R	R	R	R	R	Y	R	R	R	R	R	G	△
IL RTE. 7 (SOUTHWEST HWY.) FAR LEFT AND END MAST ARM SIGNALS	S/B	R	Y	R	R	R	Y	R	R	R	R	R	R	R	Y	R	R	R	R	R	G	△
135th ST. NEAR RIGHT SIGNAL	E/B	R	R	R	R	R	R	R	R	Y	R	Y	R	R	Y	R	R	R	R	R	R	△
135th ST. FAR LEFT AND END MAST ARM SIGNALS	E/B	R	R	R	R	R	R	R	R	Y	R	Y	R	R	Y	R	R	R	R	R	R	△
135th ST. NEAR RIGHT SIGNALS	W/B	R	R	R	R	R	R	R	R	G	R	R	G	G	R	R	G	G	G	Y	R	△
135th ST. FAR LEFT AND END MAST ARM SIGNALS	W/B	R	R	R	R	R	R	R	R	G	R	R	G	G	R	R	G	G	G	Y	R	△

HOLD

△ RAILROAD PREEMPTION SEQUENCE SHALL PROVIDE THE PROPER CLEARANCE INTERVAL TO RESUME THE NORMAL SEQUENCE OF OPERATION OR PROPER CLEARANCE INTERVAL TO DISPLAY AN EMERGENCY VEHICLE INTERVAL (IF APPLICABLE) AFTER RAILROAD PREEMPTION INTERVAL 5 IS TERMINATED.

EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION

CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER																			PREEMPTOR NUMBER 3	PREEMPTOR NUMBER 4	CLEAR TO NORMAL SEQUENCE		
	1	5	5	7	7	9	9	11	15	15	18	18	21	21	2	3							
EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1A	1B	1C	1D	1E	1F	1G	1H	1J	1K	1L	1M	1N	1P	1Q	1R	1S	1T	1U	1V	2	3	
CHANGE TO EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	2	2	1D	3	2	1G	3	2	1K	3	2	1N	2	3	1R	2	3	1U	2	3			◇
IL RTE. 7 (SOUTHWEST HWY.) NEAR RIGHT SIGNAL	N/B	R	R	R	R	G	Y	R	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	◇
IL RTE. 7 (SOUTHWEST HWY.) FAR LEFT AND END MAST ARM SIGNALS	N/B	R	R	R	R	G	Y	R	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	◇
IL RTE. 7 (SOUTHWEST HWY.) NEAR RIGHT SIGNAL	S/B	R	G	Y	R	R	R	R	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	◇
IL RTE. 7 (SOUTHWEST HWY.) FAR LEFT AND END MAST ARM SIGNALS	S/B	R	G	Y	R	R	R	R	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	◇
135th ST. NEAR RIGHT SIGNAL	E/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	◇
135th ST. FAR LEFT AND END MAST ARM SIGNALS	E/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	◇
135th ST. NEAR RIGHT SIGNALS	W/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	◇
135th ST. FAR LEFT AND END MAST ARM SIGNALS	W/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	◇

◇ EMERGENCY VEHICLE SEQUENCE SHALL PROVIDE THE PROPER CLEARANCE INTERVAL TO RESUME THE NORMAL SEQUENCE OF OPERATION OR PROPER CLEARANCE INTERVAL TO DISPLAY A DIFFERENT EMERGENCY VEHICLE INTERVAL AFTER EMERGENCY VEHICLE 2 OR 3 IS TERMINATED.

TS 1910 ORLAND PARK

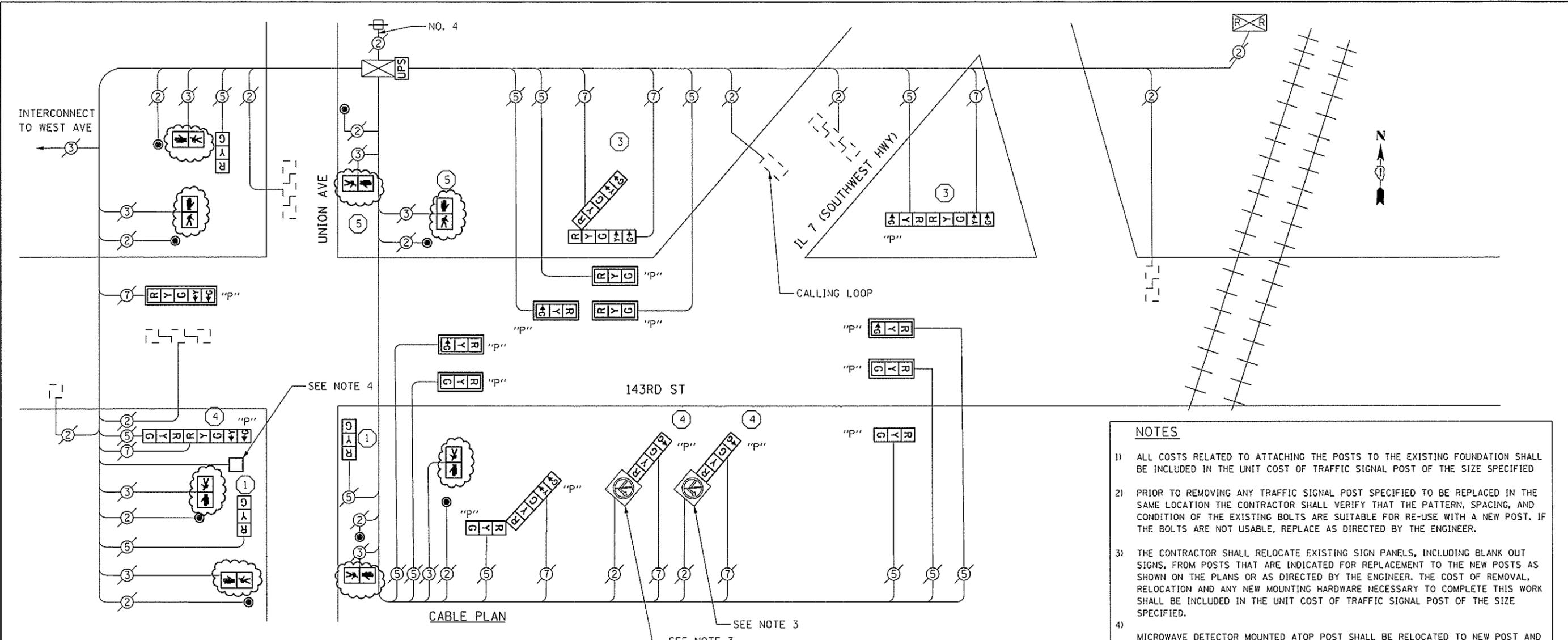
FILE NAME - D:\60X65-shr-TS1910CS.dgn	USER NAME - SE3	DESIGNED - PHL	REVISED -
		DRAWN - PHL	REVISED -
		CHECKED - BKS	REVISED -
		DATE - \$SUBDATE	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

IL RTE 7 (SOUTHWEST HWY) AT 135TH ST - SEQUENCE OF OPERATION, RR PREEMPTION SEQUENCE OF OPERATION, EVP SEQUENCE OF OPERATION

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2013-076TS	COOK	65	41
CONTRACT NO. 60X65				
ILLINOIS FED. AID PROJECT				



**I. D. O. T.
TRAFFIC SIGNAL INSTALLATION
ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. LAMPS	WATTAGE INCAND. LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	22	- 17	0.50	187.0
(YELLOW)	22	- 25	0.25	137.5
(GREEN)	22	- 15	0.25	82.5
ARROW	14	- 12	0.10	16.8
PED. SIGNAL	8	- 25	1.00	200.0
CONTROLLER	1	100	1.00	100.0
ILLUM. SIGN	-	-	0.05	-
VIDEO SYSTEM	-	-	1.00	-
BATTERY BACKUP	1	25	1.00	25.0
LUMINAIRE	-	-	-	-
FLASHER	-	- 25	0.50	-
TOTAL =				748.8

ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
 201 WEST CENTER COURT
 SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY- CONTACT BRAD SHINABARGAR
 PHONE 708-325-2692
 COMMONWEALTH EDISON

SCHEDULE OF QUANTITIES

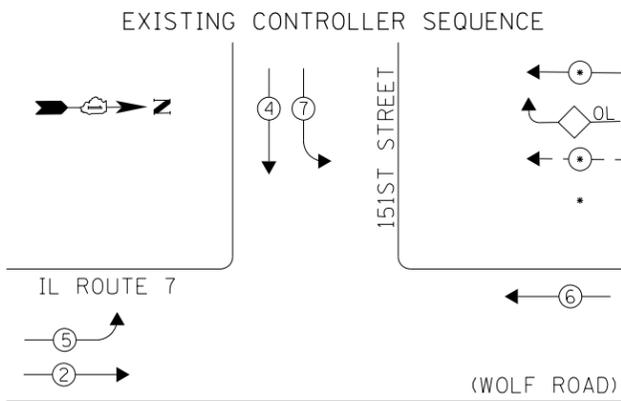
Items	Unit	Quantity
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	2
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	2
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2
TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.	EACH	3
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3
SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1
OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	7
OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	2
OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	1
COMBINATION SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION OPTICALLY PROGRAMMED, 1-5 SECTION, BRACKET MOUNTED	EACH	1
COMBINATION SIGNAL HEAD, LED, 2-FACE, 1-5 SECTION OPTICALLY PROGRAMMED, 1-3 SECTION, BRACKET MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED	EACH	8
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	8
PEDESTRIAN PUSH-BUTTON	EACH	8
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION	EACH	1

ACCESS TO INSIDE OF CONTROLLER CABINET BY DESIGNER WAS NOT POSSIBLE PRIOR TO CONSTRUCTION, CONTRACTOR SHALL COORDINATE CONTROLLER AND CABINET TYPE WITH ENGINEER PRIOR TO ORDERING UPS MATERIALS AND EQUIPMENT. CONTRACTOR SHALL INSTALL UPS IF APPROVED BY THE ENGINEER.

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT
 THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

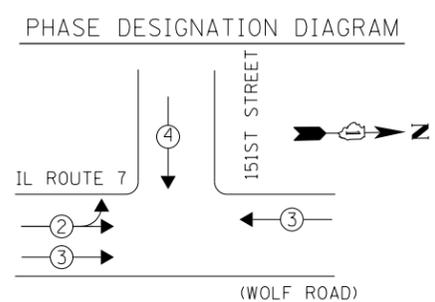
- 3 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 1 EACH SIGNAL HEAD, 2-FACE, 5-SECTION
- 8 EACH O.P. SIGNAL HEAD, 1-FACE, 1-3 SECTION
- 2 EACH O.P. SIGNAL HEAD, 1-FACE, 1-4 SECTION
- 1 EACH O.P. SIGNAL HEAD, 1-FACE, 1-5 SECTION
- 1 EACH O.P. SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION
- 1 EACH SIGNAL HEAD, 2-FACE, O.P. 1-3 SECTION, 1-5 SECTION
- 1 EACH SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION
- 8 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 8 EACH PEDESTRIAN PUSH-BUTTON

- CONSTRUCTION NOTES**
- 1) THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 14 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.
 - 3) THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 16 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.
 - 4) THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 18 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.
 - 5) THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 10 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.
- TS 1915
ORLAND PARK**



LEGEND

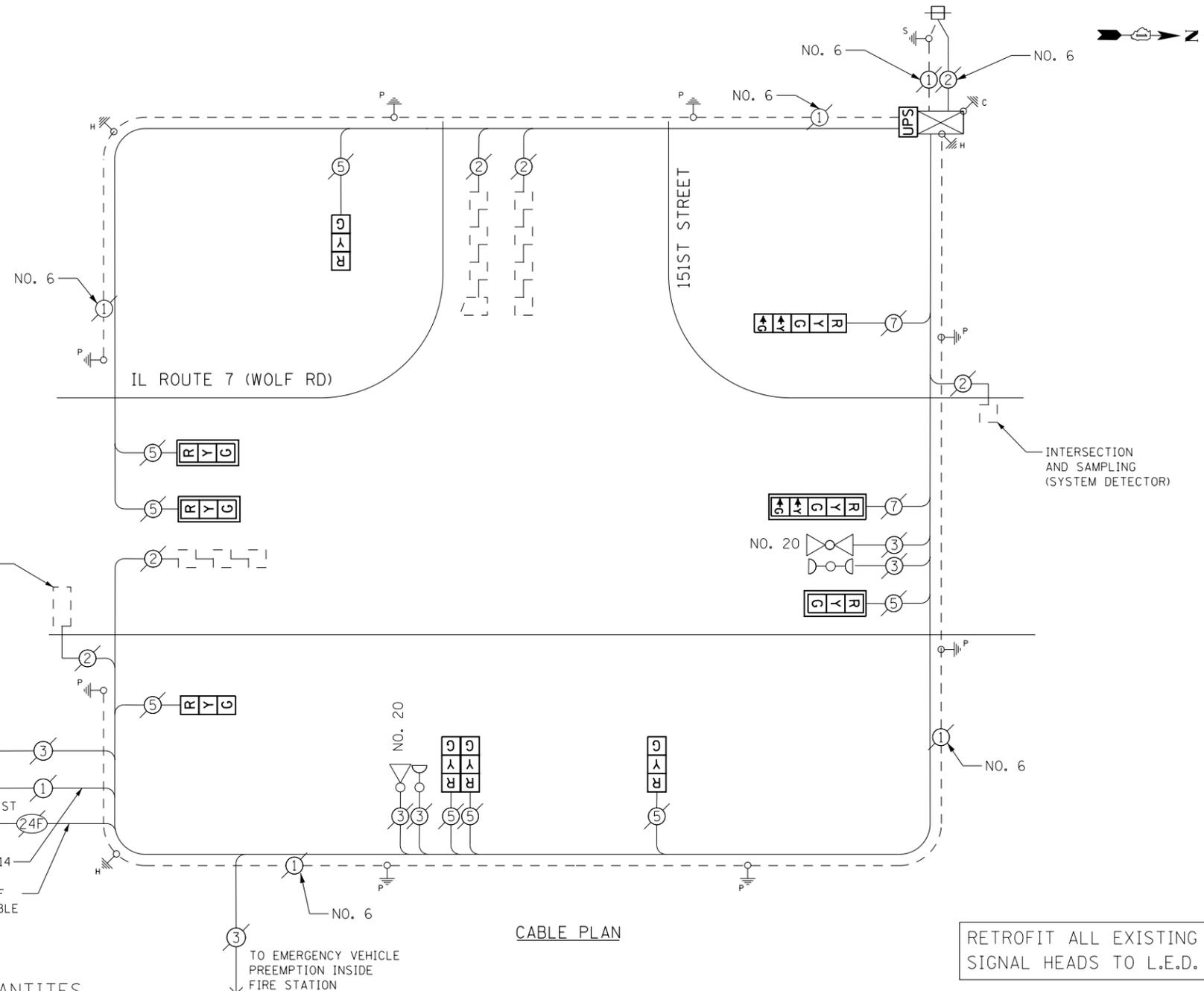
- ← ⊙ → DUAL ENTRY PHASE
- ◊ OL OVERLAP
- ← ⊙ → PEDESTRIAN PHASE
- * NUMBER REFERS TO ASSOCIATED PHASE



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	2**	3	4
MOVEMENT	→	←	↓

** FIRE STATION PUSHBUTTON PHASE
NOTE: INTERSECTION SHALL CLEAR TO ALL RED PRIOR TO DISPLAYING PRIORITY LANE INTERVAL 2.



SCHEDULE OF QUANTITIES

Items	Unit	Quantity
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	3
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	3
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	1
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	1
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	1

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

CONTRACTOR SHALL REPLACE BROKEN MOUNTING BRACKETS AT ALL RETROFIT SIGNAL HEADS OR AS DIRECTED BY THE ENGINEER. THE COST OF THIS WORK SHALL BE INCLUDED IN THE CORRESPONDING SIGNAL HEAD, LED, RETROFIT PAY ITEM OF THE TYPE AND NUMBER OF SIGNAL HEADS, FACES, AND SECTIONS AS SPECIFIED IN THE PLANS.

RETROFIT ALL EXISTING SIGNAL HEADS TO L.E.D.

I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	10	-	17	0.50	85.0
(YELLOW)	10	-	25	0.25	62.5
(GREEN)	10	-	15	0.25	37.5
ARROW	4	-	12	0.10	4.8
PED. SIGNAL	-	-	25	1.00	-
CONTROLLER	1	100	-	1.00	100.0
ILLUM. SIGN	-	-	25	0.50	-
VIDEO SYSTEM	1	-	-	1.00	-
BATTERY BACKUP	1	25	-	1.00	25.0
LUMINAIRE	-	-	-	0.50	-
FLASHER	-	-	25	0.50	-
TOTAL =					314.8

ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY- CONTACT BRAD SHINABARGAR
PHONE 708-325-2692
COMMONWEALTH EDISON

FILE NAME = D:\60X65-sht-TS158.dgn	USER NAME = SE3	DESIGNED - PHL	REVISED -
Default	PLOT SCALE = 40.0000' / in.	DRAWN - PHL	REVISED -
	PLOT DATE = 2/4/2014	CHECKED - BKS	REVISED -
		DATE - \$SUBDATE	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 7 (WOLF RD)/151ST ST - CABLE PLAN
SCHEDULE OF QUANTITIES, PHASE DESIG. DIAGRAM & EVP SEQUENCE

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2013-076TS	COOK	65	44
CONTRACT NO. 60X65				
ILLINOIS FED. AID PROJECT				

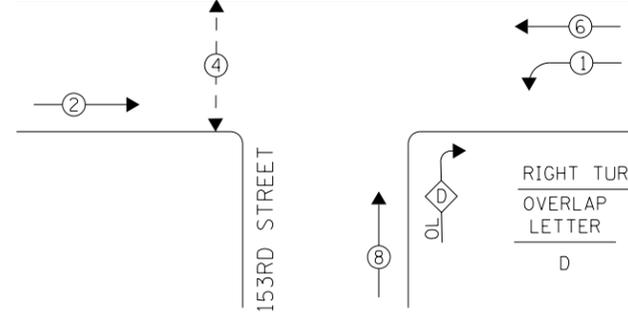
TS 158 ORLAND PARK

EXISTING CONTROLLER SEQUENCE

LEGEND

- DUAL ENTRY PHASE
- OVERLAP
- PEDESTRIAN PHASE
- * NUMBER REFERS TO ASSOCIATED PHASE

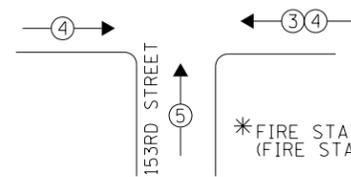
IL ROUTE 7 (WOLF ROAD)



PHASE DESIGNATION DIAGRAM

RIGHT TURN OVERLAP PHASE DESIGNATION		
OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
D	= 8	+ 1

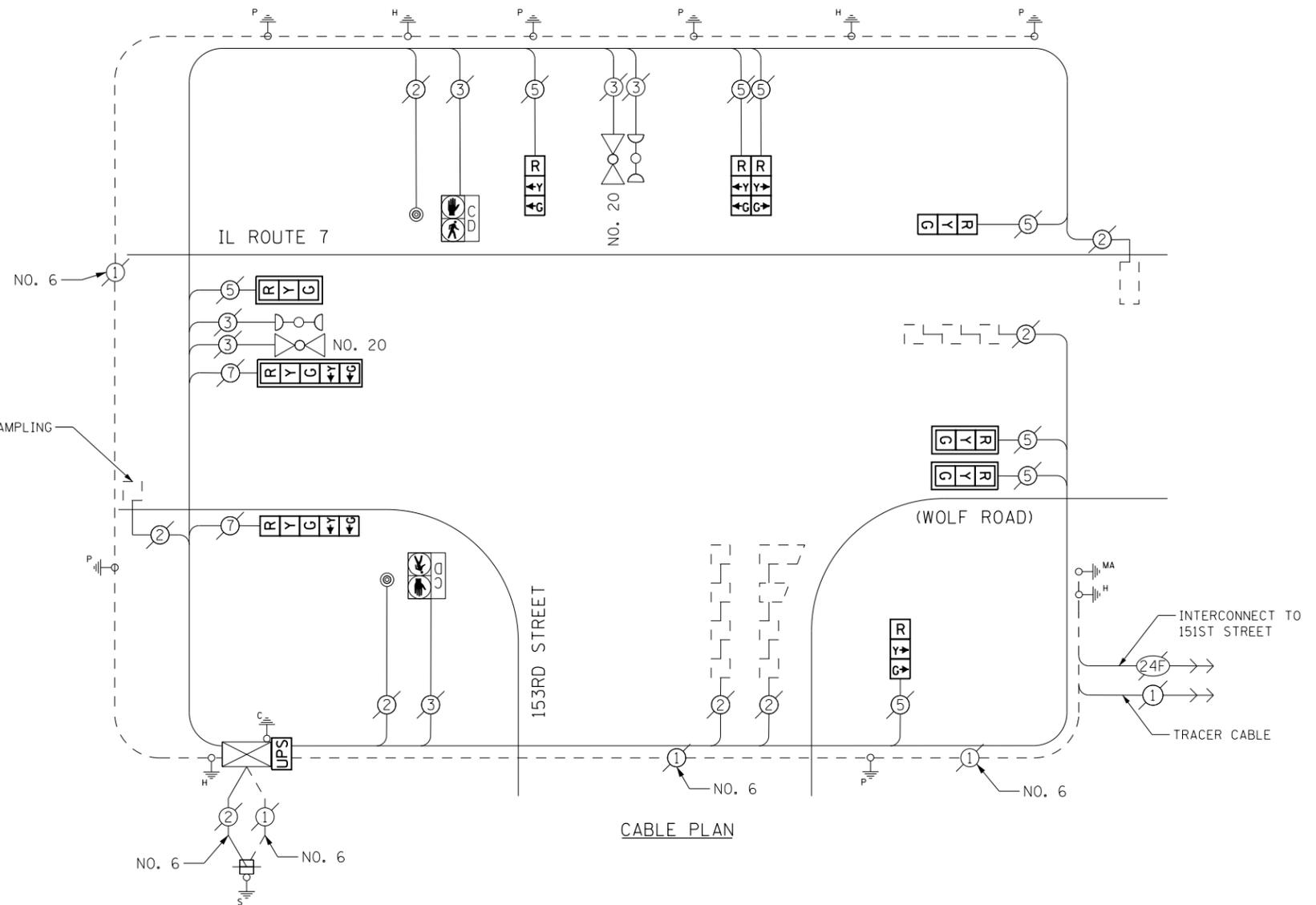
IL ROUTE 7 (WOLF ROAD)



* FIRE STATION PUSHBUTTON PHASE (FIRE STATION NEAR 151ST ST)

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3*	4	5
MOVEMENT			



CABLE PLAN

SCHEDULE OF QUANTITIES

Items	Unit	Quantity
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	3
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	3
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	1
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	1
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	1

ACCESS TO INSIDE OF CONTROLLER CABINET BY DESIGNER WAS NOT POSSIBLE PRIOR TO CONSTRUCTION. CONTRACTOR SHALL COORDINATE CONTROLLER AND CABINET TYPE WITH ENGINEER PRIOR TO ORDERING UPS MATERIALS AND EQUIPMENT. CONTRACTOR SHALL INSTALL UPS IF APPROVED BY THE ENGINEER.

CONTRACTOR SHALL REPLACE BROKEN MOUNTING BRACKETS AT ALL RETROFIT SIGNAL HEADS OR AS DIRECTED BY THE ENGINEER. THE COST OF THIS WORK SHALL BE INCLUDED IN THE CORRESPONDING SIGNAL HEAD, LED, RETROFIT PAY ITEM OF THE TYPE AND NUMBER OF SIGNAL HEADS, FACES, AND SECTIONS AS SPECIFIED IN THE PLANS.

RETROFIT ALL EXISTING SIGNAL HEADS TO L.E.D.

I. D. O. T.
TRAFFIC SIGNAL INSTALLATION
ELECTRICAL SERVICE REQUIREMENTS

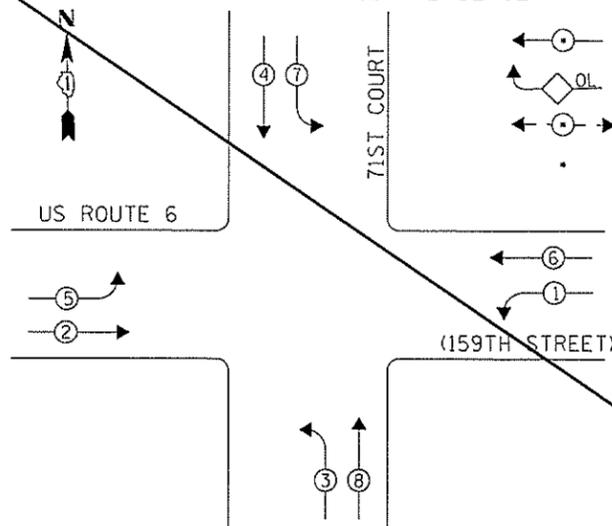
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	10	-	17	0.50	85.0
(YELLOW)	10	-	25	0.25	62.5
(GREEN)	10	-	15	0.25	37.5
ARROW	4	-	12	0.10	4.8
PED. SIGNAL	2	-	25	1.00	50.0
CONTROLLER	1	100	-	1.00	100.0
ILLUM. SIGN	-	-	25	0.50	-
VIDEO SYSTEM	-	150	-	1.00	-
BATTERY BACKUP	1	25	-	1.00	25.0
LUMINAIRE	-	250	-	0.50	-
FLASHER	-	-	25	0.50	-
TOTAL =					364.8

ENERGY COSTS- **BILLED TO: IDOT DISTRICT 1**
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY- **CONTACT BRAD SHINABARGAR**
PHONE 708-325-2692
COMMONWEALTH EDISON

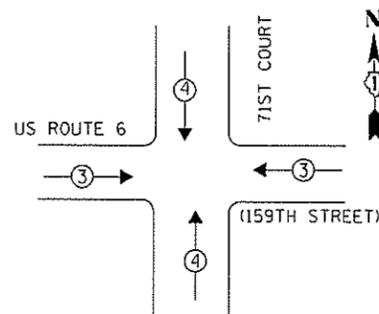
TS 159
 ORLAND PARK

EXISTING CONTROLLER SEQUENCE



- LEGEND**
- DUAL ENTRY PHASE
 - OVERLAP
 - PEDESTRIAN PHASE
 - NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT		

I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	14	-	17	0.50	119.0
(YELLOW)	14	-	25	0.25	87.5
(GREEN)	14	-	15	0.25	52.5
ARROW	16	-	12	0.10	19.2
PED. SIGNAL	-	-	25	1.00	-
CONTROLLER	1	100	-	1.00	100.0
ILLUM. SIGN	-	-	25	0.50	-
VIDEO SYSTEM	-	150	-	1.00	-
BATTERY BACKUP	1	25	-	1.00	25.0
LUMINAIRE	-	250	-	0.50	-
FLASHER	-	-	25	0.50	-
TOTAL =					403.2

ENERGY COSTS- **BILLED TO: IDOT DISTRICT 1**
 201 WEST CENTER COURT
 SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY- **CONTACT BRAD SHINABARGAR**
 PHONE 708-325-2692
 COMMONWEALTH EDISON

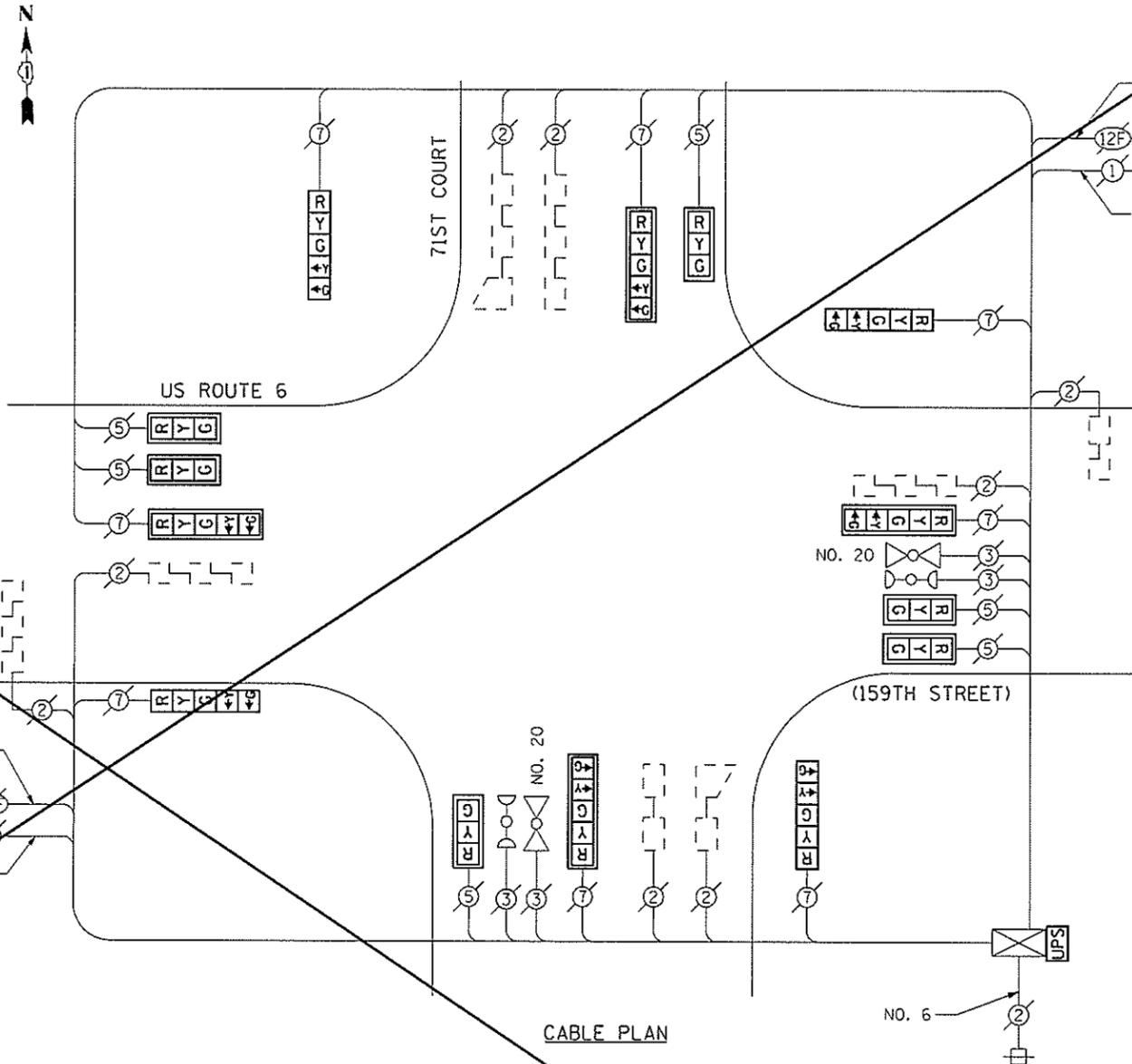
SCHEDULE OF QUANTITIES

Items	Unit	Quantity
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	6
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	4

RETROFIT ALL EXISTING SIGNAL HEADS TO L.E.D.

CONTRACTOR SHALL REPLACE BROKEN MOUNTING BRACKETS AT ALL RETROFIT SIGNAL HEADS OR AS DIRECTED BY THE ENGINEER. THE COST OF THIS WORK SHALL BE INCLUDED IN THE CORRESPONDING SIGNAL HEAD, LED, RETROFIT PAY ITEM OF THE TYPE AND NUMBER OF SIGNAL HEADS, FACES, AND SECTIONS AS SPECIFIED IN THE PLANS.

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



CABLE PLAN

FILE NAME 0160105-sh1-15235.dgn	USER NAME = Brian Scifers	DESIGNED - PHL	REVISED - SVS 3/10/14
Default	PLOT SCALE = 40.0000' / in.	DRAWN - PHL	REVISED -
	PLDT DATE = 3/6/2014	CHECKED - BKS	REVISED -
		DATE - *SUBDATE	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

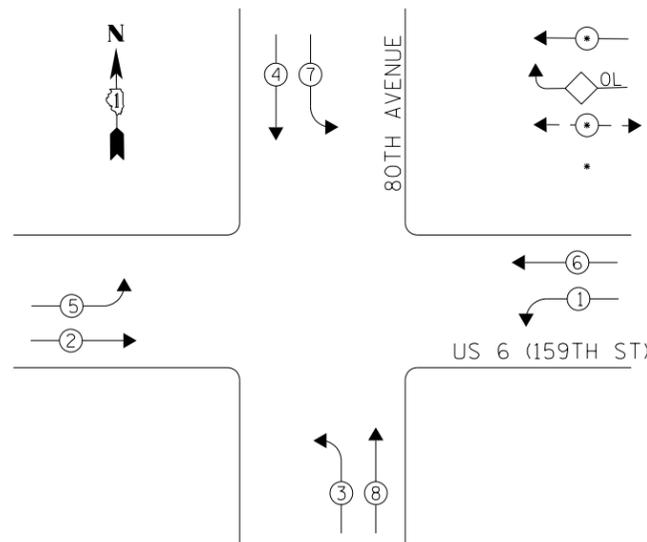
US ROUTE 6 (159TH STREET)/71ST COURT-CABLE PLAN
SCHEDULE OF QUANTITIES, PHASE DESIG. DIAGRAM & EVP SEQUENCE

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2013-076TS	COOK	45	46
CONTRACT NO. 60X65			[ILLINOIS] FED. AID PROJECT	

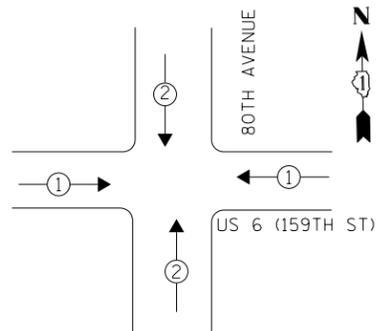
TS 235 ORLAND PARK

EXISTING CONTROLLER SEQUENCE



- LEGEND**
- ← ⊙ → DUAL ENTRY PHASE
 - ◊ OL OVERLAP
 - ← ⊙ → PEDESTRIAN PHASE
 - * NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	1	2
MOVEMENT	← →	↓ ↑

I. D. O. T.
TRAFFIC SIGNAL INSTALLATION
ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16	-	17	0.50	136
(YELLOW)	16	-	25	0.25	100.0
(GREEN)	16	-	15	0.25	60.0
ARROW	16	-	12	0.10	19.2
PED. SIGNAL	-	-	25	1.00	-
CONTROLLER	1	100	-	1.00	100.0
ILLUM. SIGN	-	-	25	0.50	-
VIDEO SYSTEM	-	-	-	1.00	-
BATTERY BACKUP	1	25	-	1.00	25.0
LUMINAIRE	-	-	-	0.50	-
FLASHER	-	-	25	0.50	-
TOTAL =				440.2	

ENERGY COSTS- **BILLED TO: IDOT DISTRICT 1**
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY- **CONTACT BRAD SHINABARGAR**
PHONE 708-325-2692
COMMONWEALTH EDISON

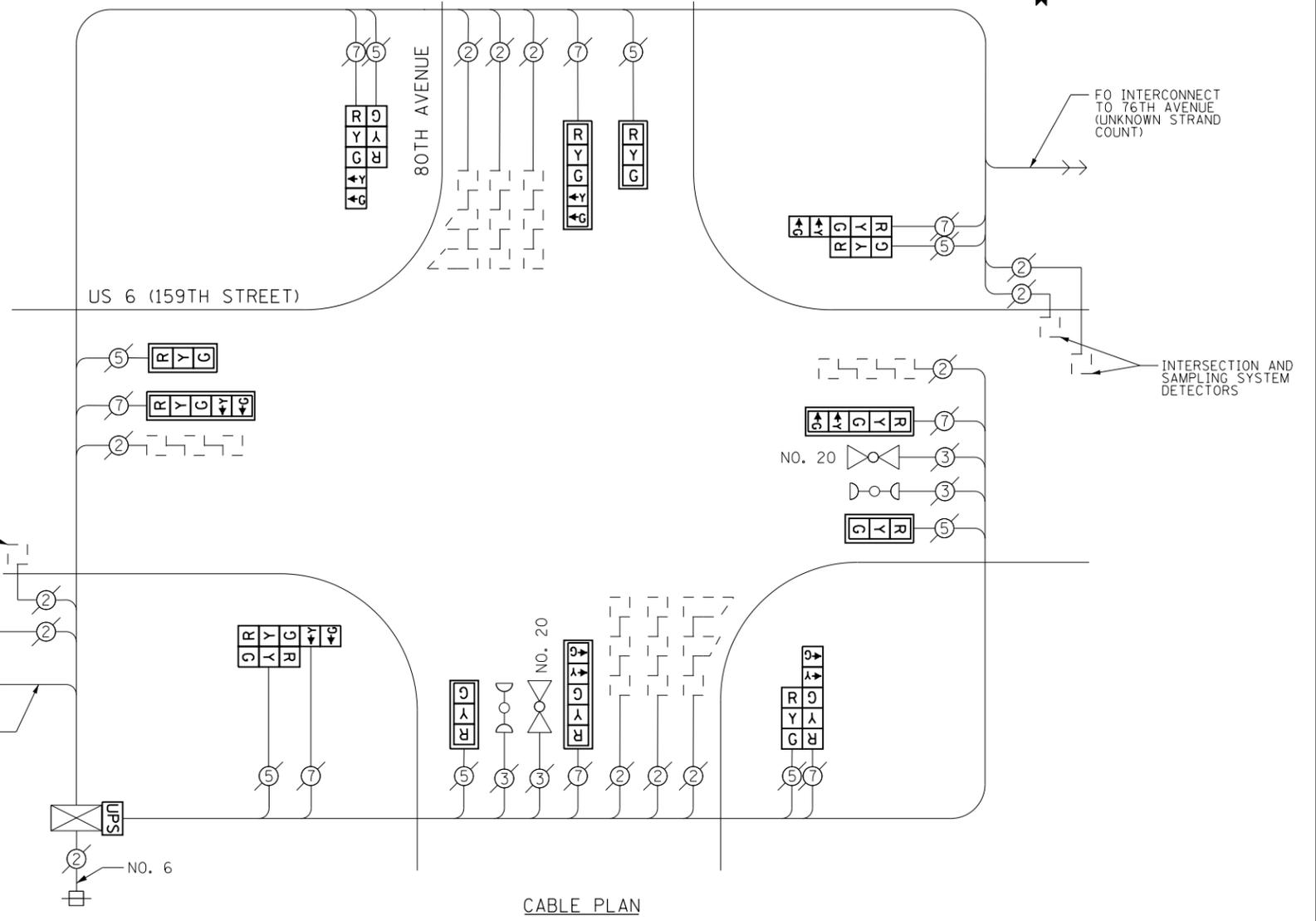
SCHEDULE OF QUANTITIES

Items	Unit	Quantity
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED, RETROFIT	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	4

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

RETROFIT ALL EXISTING SIGNAL HEADS TO L.E.D.

CONTRACTOR SHALL REPLACE BROKEN MOUNTING BRACKETS AT ALL RETROFIT SIGNAL HEADS OR AS DIRECTED BY THE ENGINEER. THE COST OF THIS WORK SHALL BE INCLUDED IN THE CORRESPONDING SIGNAL HEAD, LED, RETROFIT PAY ITEM OF THE TYPE AND NUMBER OF SIGNAL HEADS, FACES, AND SECTIONS AS SPECIFIED IN THE PLANS.



CABLE PLAN

FILE NAME = D:\60X65-shr-TS185.dgn	USER NAME = SE3	DESIGNED - SMS	REVISED -
Default	PLOT SCALE = 40.0000' / in.	DRAWN - SMS	REVISED -
	PLOT DATE = 2/4/2014	CHECKED - BKS	REVISED -
		DATE - \$SUBDATE	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US RTE 6 (159TH STREET) AT 80TH AVENUE - CABLE PLAN
SCHEDULE OF QUANTITIES, PHASE DESIG. DIAGRAM & EVP SEQUENCE
SCALE: SHEET OF SHEETS STA. TO STA.

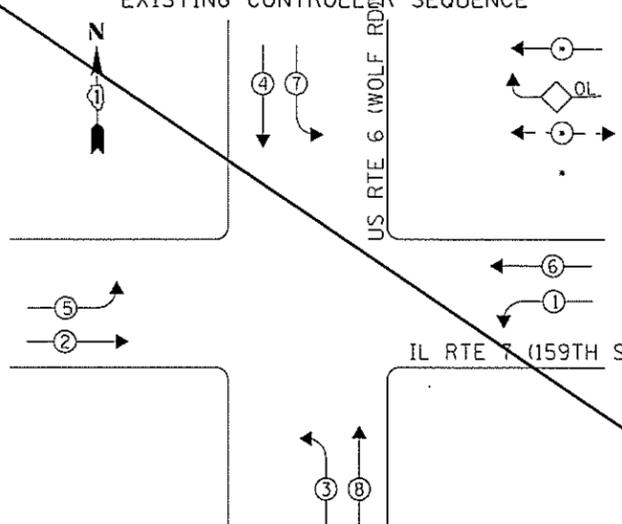
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2013-076TS	COOK	65	47
CONTRACT NO. 60X65				
ILLINOIS FED. AID PROJECT				

TS 185
ORLAND PARK

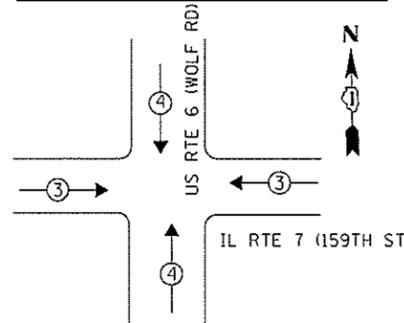
EXISTING CONTROLLER SEQUENCE

LEGEND

- DUAL ENTRY PHASE
- OVERLAP
- PEDESTRIAN PHASE
- NUMBER REFERS TO ASSOCIATED PHASE



PHASE DESIGNATION DIAGRAM



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↑ ↓

I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16	-	17	0.50	136.0
(YELLOW)	16	-	25	0.25	100.0
(GREEN)	16	-	15	0.25	60.0
ARROW	16	-	12	0.10	19.2
PED. SIGNAL	-	-	25	1.00	-
CONTROLLER	1	100	-	1.00	100.0
ILLUM. SIGN	-	-	25	0.50	-
VIDEO SYSTEM	-	-	-	1.00	-
BATTERY BACKUP	1	25	-	1.00	25.0
LUMINAIRE	-	-	-	0.50	-
FLASHER	-	-	25	0.50	-
				TOTAL =	440.2

ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

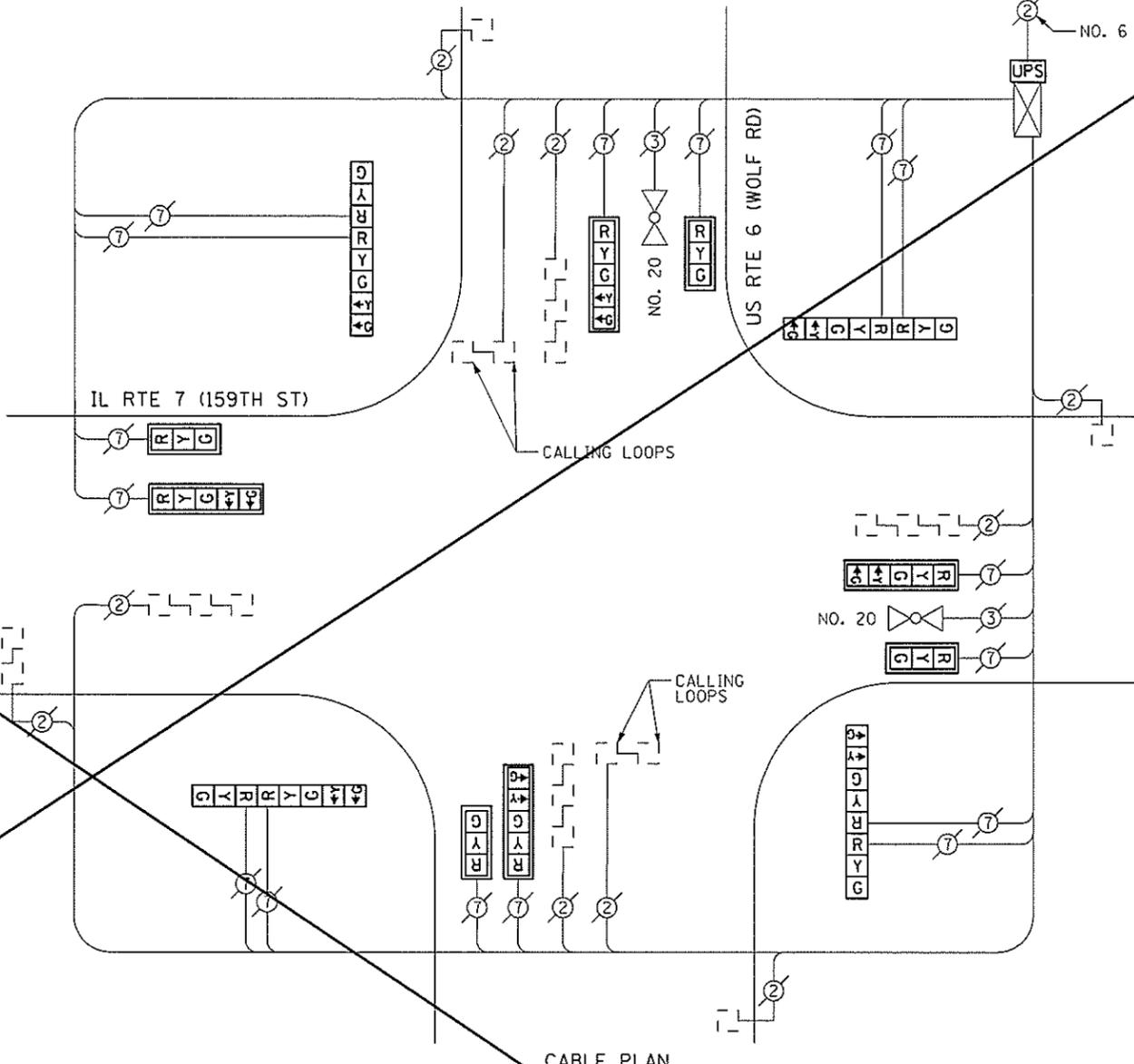
ENERGY SUPPLY- CONTACT BRAD SHINABARGAR
PHONE 708-325-2692
COMMONWEALTH EDISON

SCHEDULE OF QUANTITIES

Items	Unit	Quantity
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED, RETROFIT	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	4

RETROFIT ALL EXISTING SIGNAL HEADS TO L.E.D.

CONTRACTOR SHALL REPLACE BROKEN MOUNTING BRACKETS AT ALL RETROFIT SIGNAL HEADS OR AS DIRECTED BY THE ENGINEER. THE COST OF THIS WORK SHALL BE INCLUDED IN THE CORRESPONDING SIGNAL HEAD, LED, RETROFIT PAY ITEM OF THE TYPE AND NUMBER OF SIGNAL HEADS, FACES, AND SECTIONS AS SPECIFIED IN THE PLANS.



CABLE PLAN

FILE NAME = 0160X65-sh1-15160.dgn
Default

USER NAME = Brian Scifers
DESIGNED - SMS
DRAWN - SMS
CHECKED - BKS
DATE - *SUBDATE

REVISED - SMS 3/19/14
REVISED -
REVISED -
REVISED -

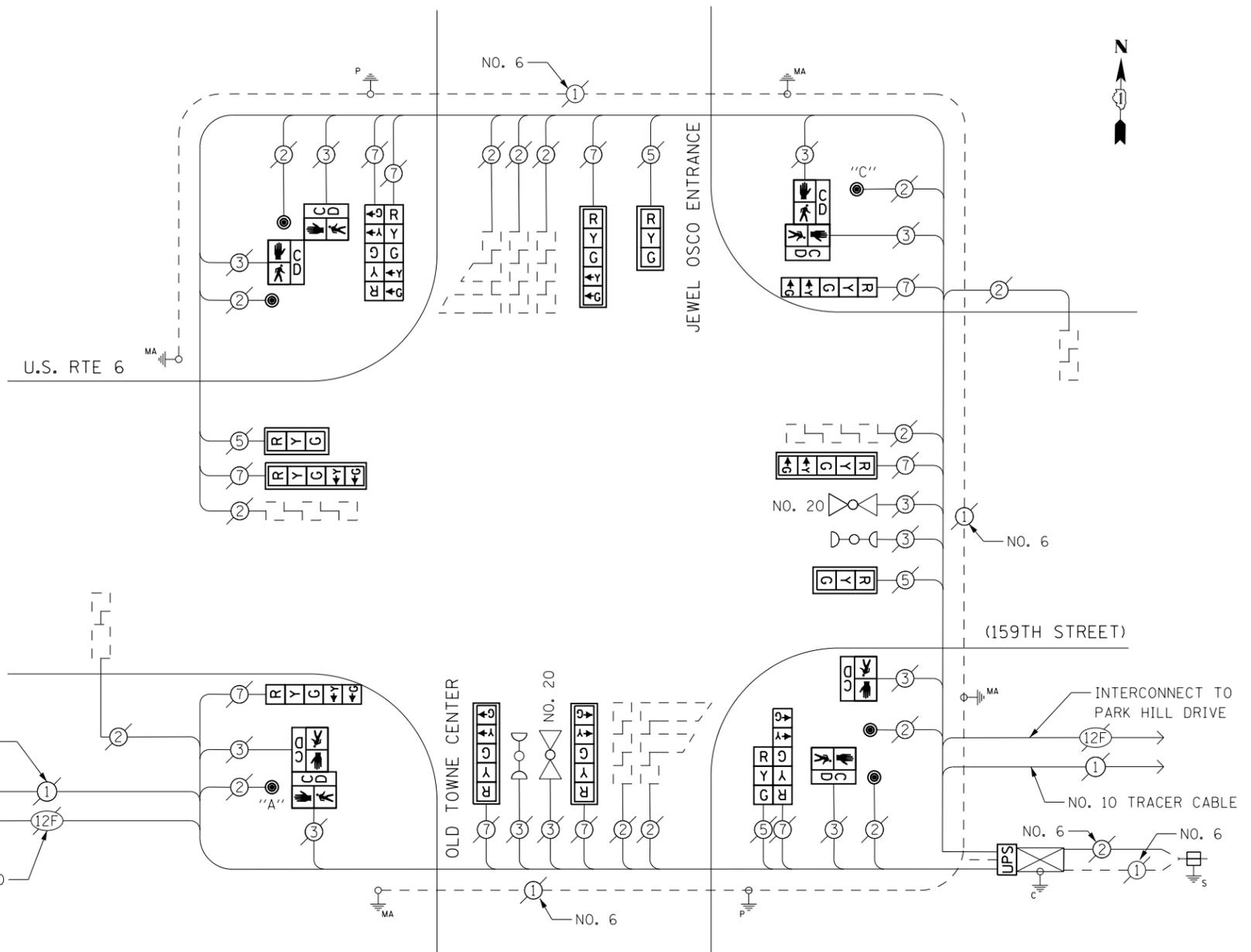
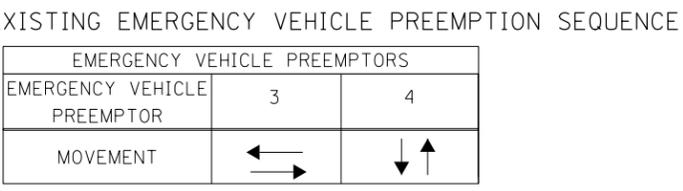
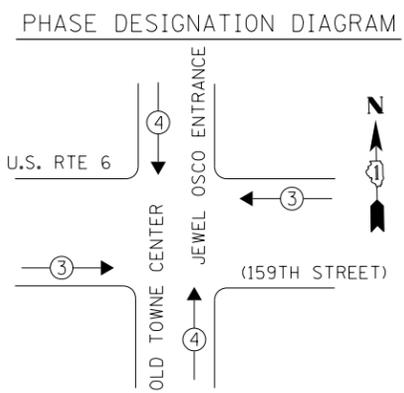
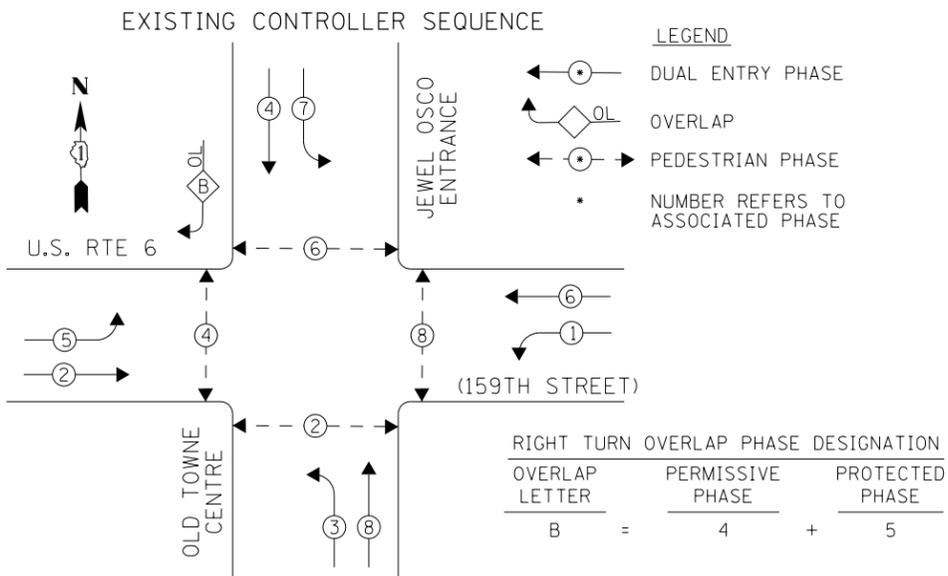
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

US 6 (159TH STREET) AT IL 7 (WOLF ROAD) - CABLE PLAN SCHEDULE OF QUANTITIES, PHASE DESIG. DIAGRAM & EVP SEQUENCE

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2013-076TS	COOK	65	48
CONTRACT NO. 60X65			ILLINOIS FED. AID PROJECT	

TS-160 ORLAND PARK



SCHEDULE OF QUANTITIES

Items	Unit	Quantity
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	3
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED, RETROFIT	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	3
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	5
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	2
SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED RETROFIT	EACH	1
PEDESTRIAN PUSH-BUTTON, NON-LATCHING	EACH	6

PUSHBUTTON NOTES:
 PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4
 PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT
 THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 4 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 2 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE
- 6 EACH PEDESTRIAN PUSH-BUTTON

UPS SHALL BE INSTALLED ON LEFT SIDE OF CONTROLLER CABINET DUE TO PHYSICAL CONSTRAINT, OR AS DIRECTED BY THE ENGINEER.

RETROFIT ALL EXISTING SIGNAL HEADS TO L.E.D.

CONTRACTOR SHALL REPLACE BROKEN MOUNTING BRACKETS AT ALL RETROFIT SIGNAL HEADS OR AS DIRECTED BY THE ENGINEER. THE COST OF THIS WORK SHALL BE INCLUDED IN THE CORRESPONDING SIGNAL HEAD, LED, RETROFIT PAY ITEM OF THE TYPE AND NUMBER OF SIGNAL HEADS, FACES, AND SECTIONS AS SPECIFIED IN THE PLANS.

I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

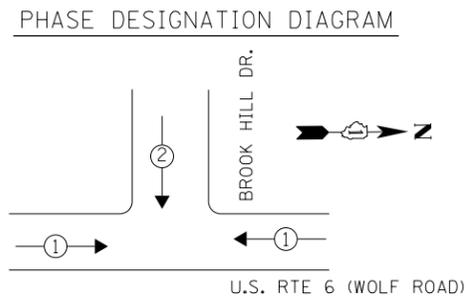
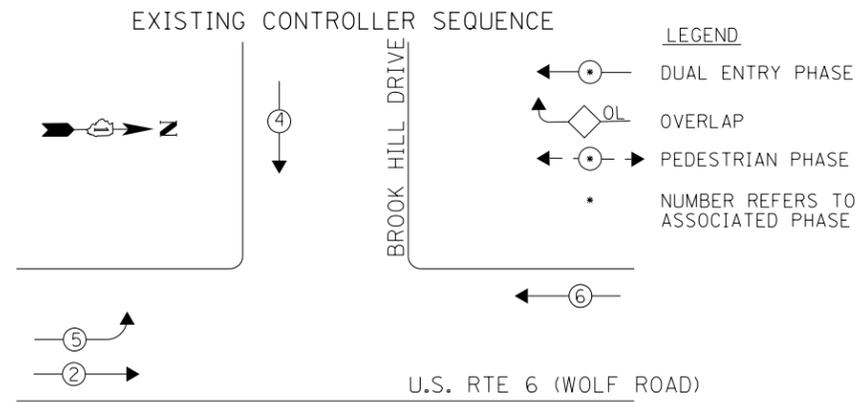
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	14	-	17	0.50	119.0
(YELLOW)	14	-	25	0.25	87.5
(GREEN)	14	-	15	0.25	52.5
ARROW	20	-	12	0.10	24.0
PED. SIGNAL	8	-	25	1.00	200.0
CONTROLLER	1	100	-	1.00	100.0
ILLUM. SIGN	-	-	-	0.05	-
VIDEO SYSTEM	-	-	-	1.00	-
BATTERY BACKUP	1	25	-	1.00	25.0
LUMINAIRE	-	-	-	-	-
FLASHER	-	-	25	0.50	-
TOTAL =					608.0

ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
 201 WEST CENTER COURT
 SCHAMBURG, IL 60196-1096

ENERGY SUPPLY- CONTACT BRAD SHINABARGAR
 PHONE 708-325-2692
 COMMONWEALTH EDISON

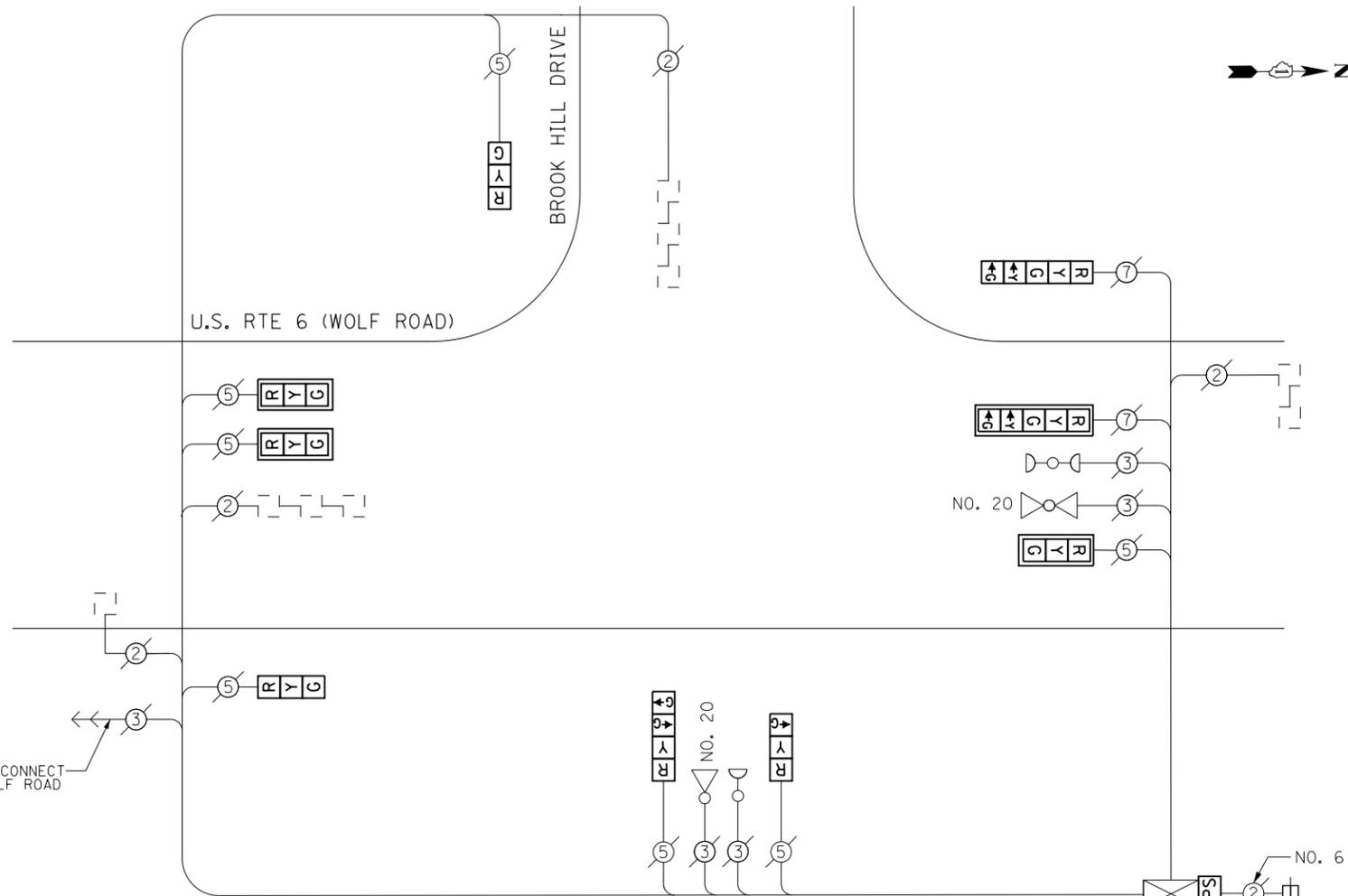
ACCESS TO INSIDE OF CONTROLLER CABINET BY DESIGNER WAS NOT POSSIBLE PRIOR TO CONSTRUCTION. CONTRACTOR SHALL COORDINATE CONTROLLER AND CABINET TYPE WITH ENGINEER PRIOR TO ORDERING UPS MATERIALS AND EQUIPMENT. CONTRACTOR SHALL INSTALL UPS IF APPROVED BY THE ENGINEER.

TS 21920 ORLAND PARK



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	1	2
MOVEMENT	← →	↓



CABLE PLAN

I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	9	-	17	0.50	76.50
(YELLOW)	9	-	25	0.25	56.25
(GREEN)	7	-	15	0.25	26.25
ARROW	7	-	12	0.10	8.4
PED. SIGNAL	-	-	25	1.00	-
CONTROLLER	1	100	-	1.00	100.00
ILLUM. SIGN	-	-	25	0.50	-
VIDEO SYSTEM	-	150	-	1.00	-
BATTERY BACKUP	1	25	-	1.00	25.00
LUMINAIRE	-	250	-	0.50	-
FLASHER	-	-	25	0.50	-
TOTAL =				292.4	

Items	Unit	Quantity
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	3
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	3
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	1
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED, RETROFIT	EACH	1
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	1

RETROFIT ALL EXISTING SIGNAL HEADS TO L.E.D.

CONTRACTOR SHALL REPLACE BROKEN MOUNTING BRACKETS AT ALL RETROFIT SIGNAL HEADS OR AS DIRECTED BY THE ENGINEER. THE COST OF THIS WORK SHALL BE INCLUDED IN THE CORRESPONDING SIGNAL HEAD, LED, RETROFIT PAY ITEM OF THE TYPE AND NUMBER OF SIGNAL HEADS, FACES, AND SECTIONS AS SPECIFIED IN THE PLANS.

ENERGY COSTS- **BILLED TO: IDOT DISTRICT 1**
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY- **CONTACT BRAD SHINABARGAR**
PHONE 708-325-2692
COMMONWEALTH EDISON

TS 162
ORLAND PARK / WESTHAVEN

FILE NAME = D:\60X65-sht-TS162.dgn	USER NAME = SE3	DESIGNED - SMS	REVISED -
Default	PLOT SCALE = 40.0000' / in.	DRAWN - SMS	REVISED -
	PLOT DATE = 2/4/2014	CHECKED - BKS	REVISED -
		DATE - \$SUBDATE	REVISED -

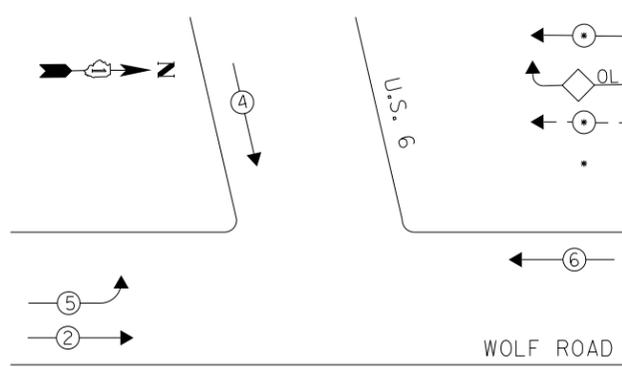
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

US 6 / WOLF RD AT BROOKHILL DRIVE - CABLE PLAN
SCHEDULE OF QUANTITIES, PHASE DESIG. DIAGRAM & EVP SEQUENCE

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2013-076TS	COOK	65	50
				CONTRACT NO. 60X65
ILLINOIS FED. AID PROJECT				

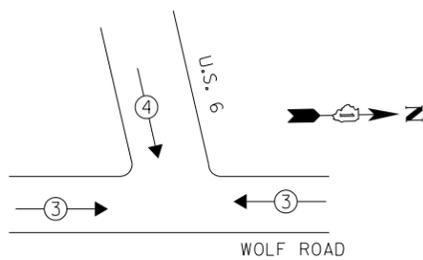
EXISTING CONTROLLER SEQUENCE



LEGEND

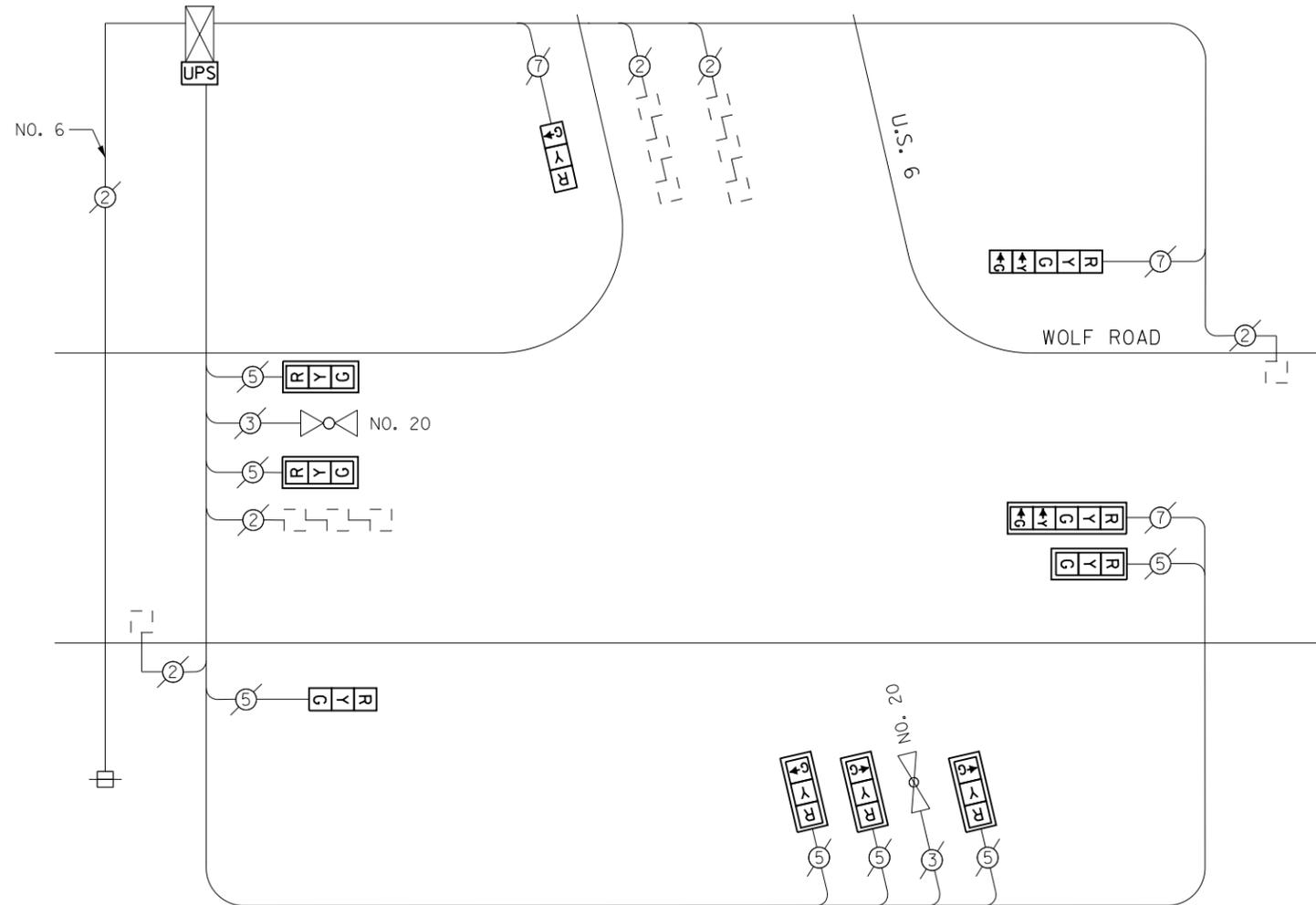
- ◉ DUAL ENTRY PHASE
- ◊ OL OVERLAP
- ◉ PEDESTRIAN PHASE
- NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	←→	↓



I. D. O. T.
TRAFFIC SIGNAL INSTALLATION
ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	10	-	17	0.50	85.0
(YELLOW)	10	-	25	0.25	62.5
(GREEN)	6	-	15	0.25	22.5
ARROW	8	-	12	0.10	9.6
PED. SIGNAL	-	-	25	1.00	-
CONTROLLER	1	100	-	1.00	100.0
ILLUM. SIGN	-	-	25	0.50	-
VIDEO SYSTEM	-	150	-	1.00	-
BATTERY BACKUP	1	25	-	1.00	25.0
LUMINAIRE	-	250	-	0.50	-
FLASHER	-	-	25	0.50	-
TOTAL =					304.6

Items	Unit	Quantity
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	5
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	3
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	1
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	1

ENERGY COSTS- **BILLED TO: IDOT DISTRICT 1**
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY- **CONTACT BRAD SHINABARGAR**
PHONE 708-325-2692
COMMONWEALTH EDISON

RETROFIT ALL EXISTING
SIGNAL HEADS TO L.E.D.

CONTRACTOR SHALL REPLACE BROKEN MOUNTING BRACKETS AT ALL
RETROFIT SIGNAL HEADS OR AS DIRECTED BY THE ENGINEER. THE COST
OF THIS WORK SHALL BE INCLUDED IN THE CORRESPONDING SIGNAL
HEAD, LED, RETROFIT PAY ITEM OF THE TYPE AND NUMBER OF SIGNAL
HEADS, FACES, AND SECTIONS AS SPECIFIED IN THE PLANS.

TS 161
ORLAND PARK

FILE NAME = D:\60X65-shr-TS161.dgn	USER NAME = SE3	DESIGNED - SMS	REVISED -
Default	PLOT SCALE = 40.0000' / in.	DRAWN - SMS	REVISED -
	PLOT DATE = 2/4/2014	CHECKED - BKS	REVISED -
		DATE - \$SUBDATE	REVISED -

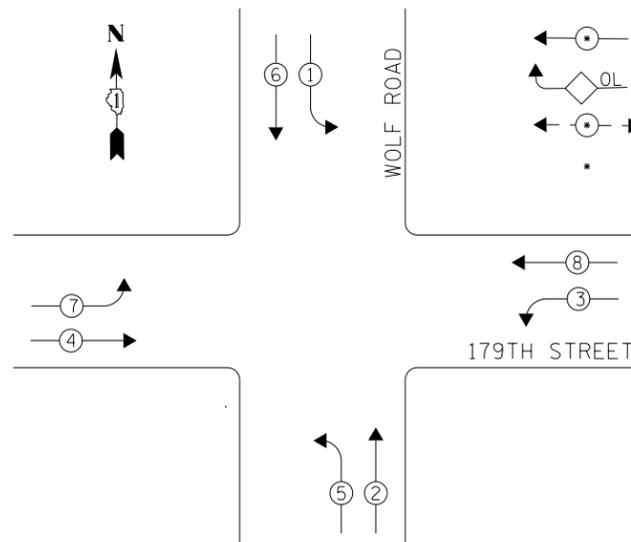
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US 6 / WOLF RD AT US 6 / 173RD ST SOUTH JUNCTION - CABLE PLAN
SCHEDULE OF QUANTITIES, PHASE DESIG. DIAGRAM & EVP SEQUENCE

SCALE: SHEET OF SHEETS STA. TO STA.

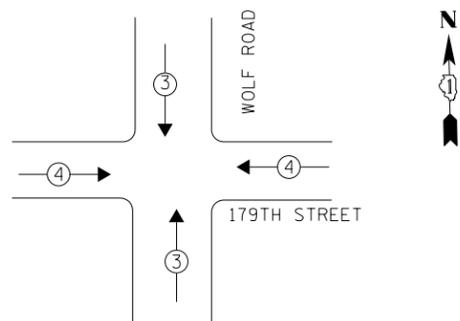
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2013-076TS	COOK	65	51
			CONTRACT NO. 60X65	
ILLINOIS FED. AID PROJECT				

EXISTING CONTROLLER SEQUENCE



- LEGEND**
- ← ⊙ → DUAL ENTRY PHASE
 - ◊ OL OVERLAP
 - ← ⊙ → PEDESTRIAN PHASE
 - * NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

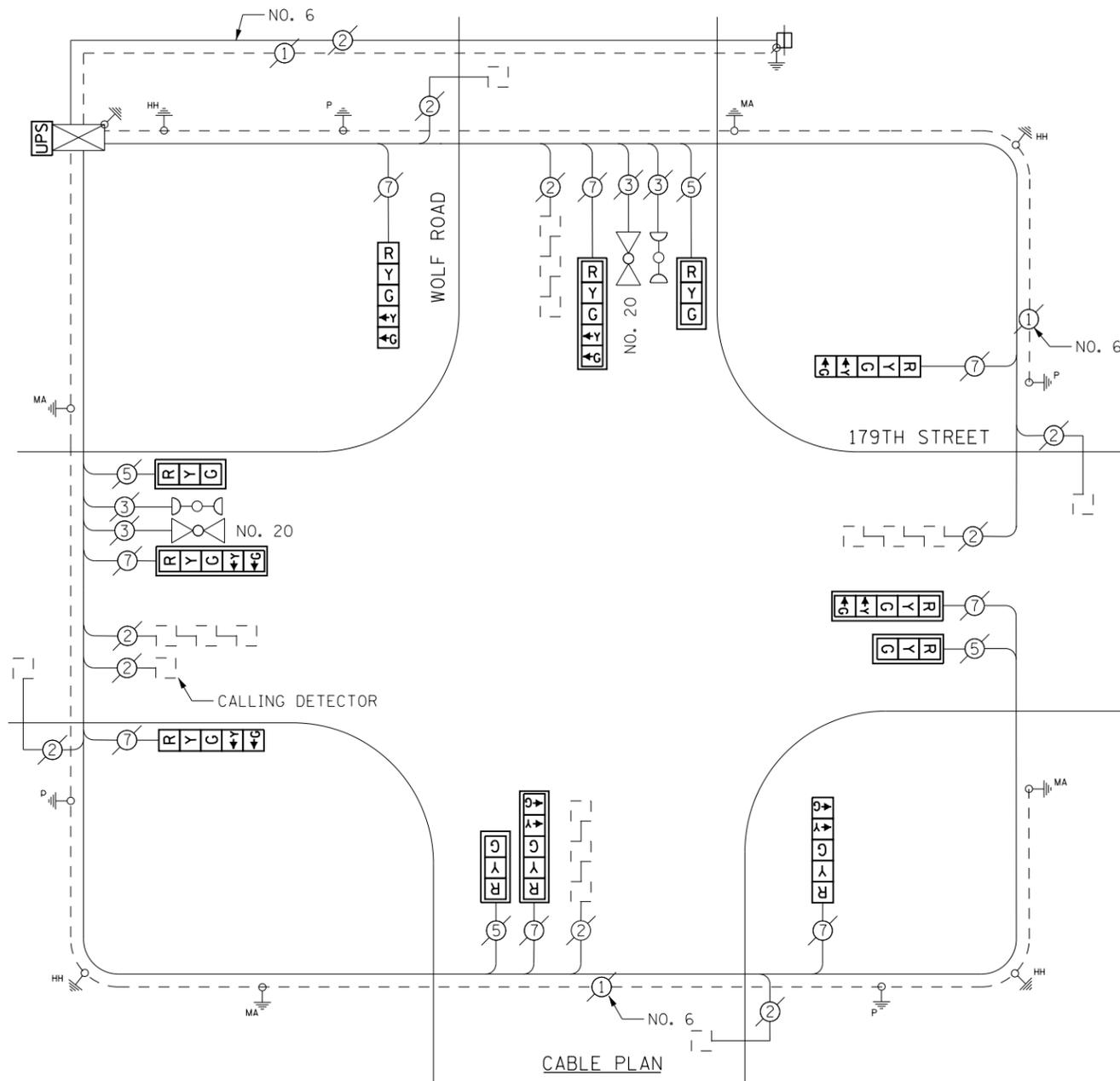
EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	↓ ↑	← →

I. D. O. T.
TRAFFIC SIGNAL INSTALLATION
ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	-	17	0.50	102.0
(YELLOW)	12	-	25	0.25	75.0
(GREEN)	12	-	15	0.25	45.0
ARROW	16	-	12	0.10	19.2
PED. SIGNAL	-	-	25	1.00	-
CONTROLLER	1	100	-	1.00	100.0
ILLUM. SIGN	-	-	25	0.50	-
VIDEO SYSTEM	-	150	-	1.00	-
BATTERY BACKUP	1	25	-	1.00	25.0
LUMINAIRE	-	250	-	0.50	-
FLASHER	-	-	25	0.50	-
TOTAL =				366.2	

ENERGY COSTS- **BILLED TO: IDOT DISTRICT 1**
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY- **CONTACT BRAD SHINABARGAR**
PHONE 708-325-2692
COMMONWEALTH EDISON



SCHEDULE OF QUANTITIES

Items	Unit	Quantity
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	4

RETROFIT ALL EXISTING SIGNAL HEADS TO L.E.D.

CONTRACTOR SHALL REPLACE BROKEN MOUNTING BRACKETS AT ALL RETROFIT SIGNAL HEADS OR AS DIRECTED BY THE ENGINEER. THE COST OF THIS WORK SHALL BE INCLUDED IN THE CORRESPONDING SIGNAL HEAD, LED, RETROFIT PAY ITEM OF THE TYPE AND NUMBER OF SIGNAL HEADS, FACES, AND SECTIONS AS SPECIFIED IN THE PLANS.

TS 156
ORLAND PARK

FILE NAME = D160X65-sht-TS156.dgn	USER NAME = SE3	DESIGNED - SMS	REVISED -
Default	PLOT SCALE = 40.0000' / in.	DRAWN - SMS	REVISED -
	PLOT DATE = 2/4/2014	CHECKED - BKS	REVISED -
		DATE - \$SUBDATE	REVISED -

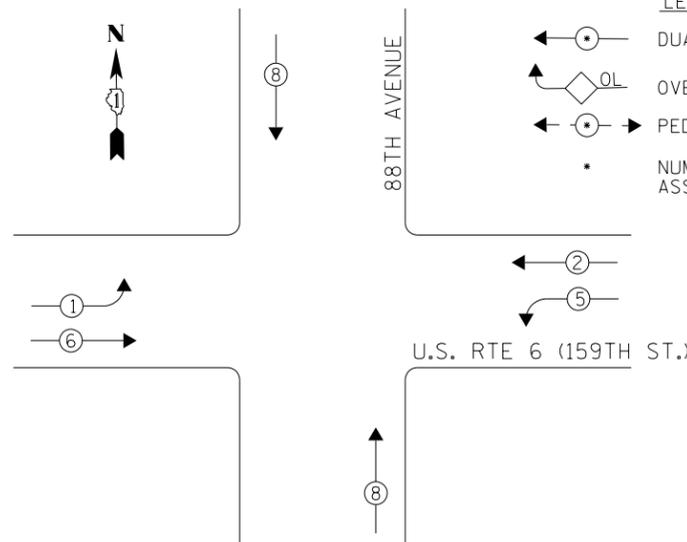
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WOLF ROAD / 179TH STREET - CABLE PLAN
SCHEDULE OF QUANTITIES, PHASE DESIG. DIAGRAM & EVP SEQUENCE

SCALE: SHEET OF SHEETS STA. TO STA.

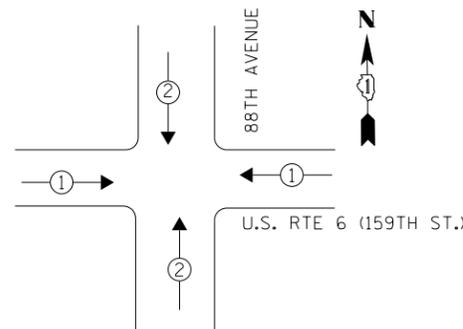
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2013-076TS	COOK	65	52
CONTRACT NO. 60X65				
ILLINOIS FED. AID PROJECT				

EXISTING CONTROLLER SEQUENCE



- LEGEND**
- ← ⊙ → DUAL ENTRY PHASE
 - ◊ OL OVERLAP
 - ← ⊙ → PEDESTRIAN PHASE
 - * NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	1	2
MOVEMENT	← →	↓ ↑

I. D. O. T.
TRAFFIC SIGNAL INSTALLATION
ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	14	-	17	0.50	119.0
(YELLOW)	14	-	25	0.25	87.5
(GREEN)	14	-	15	0.25	52.5
ARROW	8	-	12	0.10	9.6
PED. SIGNAL	-	-	25	1.00	-
CONTROLLER	1	100	-	1.00	100.0
ILLUM. SIGN	-	-	25	0.50	-
VIDEO SYSTEM	-	150	-	1.00	-
BATTERY BACKUP	1	25	-	1.00	25.0
LUMINAIRE	-	250	-	0.50	-
FLASHER	-	-	25	0.50	-
TOTAL =				393.6	

ENERGY COSTS- **BILLED TO: IDOT DISTRICT 1**
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY- **CONTACT BRAD SHINABARGAR**
PHONE 708-325-2692
COMMONWEALTH EDISON

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

Items	Unit	Quantity
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	2
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2
TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 3-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
SIGNAL HEAD, LED, 3-FACE, 2-3 SECTION, 1-5 SECTION BRACKET MOUNTED	EACH	1
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	4
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1

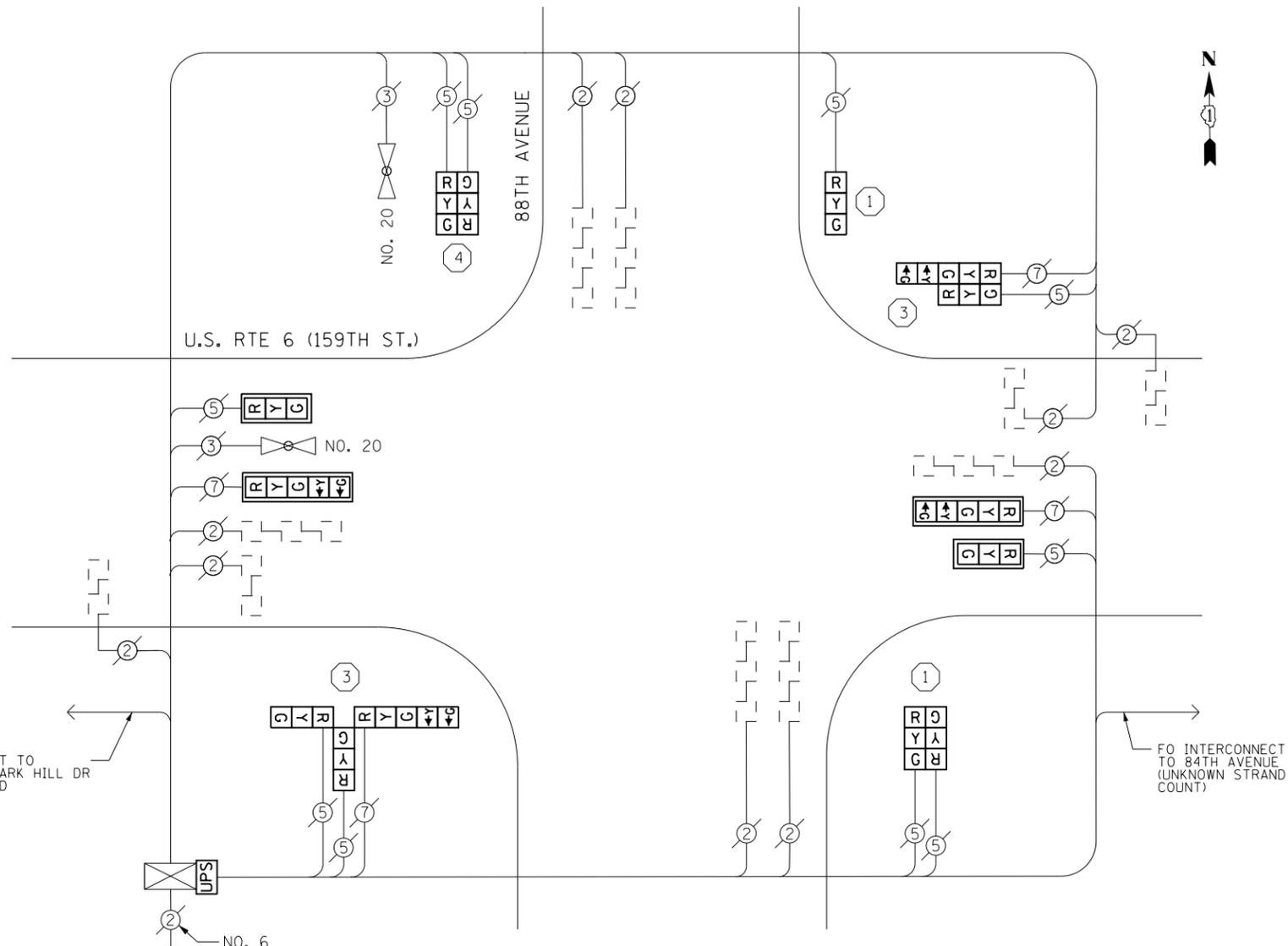
CONSTRUCTION NOTES

- ① THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 14 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.
- ③ THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 16 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.
- ④ THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 18 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 5 EACH TRAFFIC SIGNAL POST
- 3 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 2 EACH SIGNAL HEAD, 1-FACE, 5-SECTION
- 2 EACH SIGNAL HEAD, 2-FACE, 3-SECTION
- 1 EACH SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION
- 1 EACH SIGNAL HEAD, 3-FACE, 2-3 SECTION, 1-5 SECTION



CABLE PLAN

NOTES

- 1) ALL COSTS RELATED TO ATTACHING THE POSTS TO THE EXISTING FOUNDATION SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED
- 2) PRIOR TO REMOVING ANY TRAFFIC SIGNAL POST SPECIFIED TO BE REPLACED IN THE SAME LOCATION THE CONTRACTOR SHALL VERIFY THAT THE PATTERN, SPACING, AND CONDITION OF THE EXISTING BOLTS ARE SUITABLE FOR RE-USE WITH A NEW POST. IF THE BOLTS ARE NOT USABLE, REPLACE AS DIRECTED BY THE ENGINEER.
- 3) THE CONTRACTOR SHALL RELOCATE EXISTING SIGN PANELS FROM POSTS THAT ARE INDICATED FOR REPLACEMENT TO THE NEW POSTS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE COST OF REMOVAL, RELOCATION AND ANY NEW MOUNTING HARDWARE NECESSARY TO COMPLETE THIS WORK SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED.

TS 330
ORLAND PARK / WESTHAVEN

FILE NAME = D:\60X65-shr-TS330.dgn	USER NAME = SE3	DESIGNED - SMS	REVISED -
Default	PLOT SCALE = 40.0000' / in.	DRAWN - SMS	REVISED -
	PLOT DATE = 2/4/2014	CHECKED - BKS	REVISED -
		DATE - \$SUBDATE	REVISED -

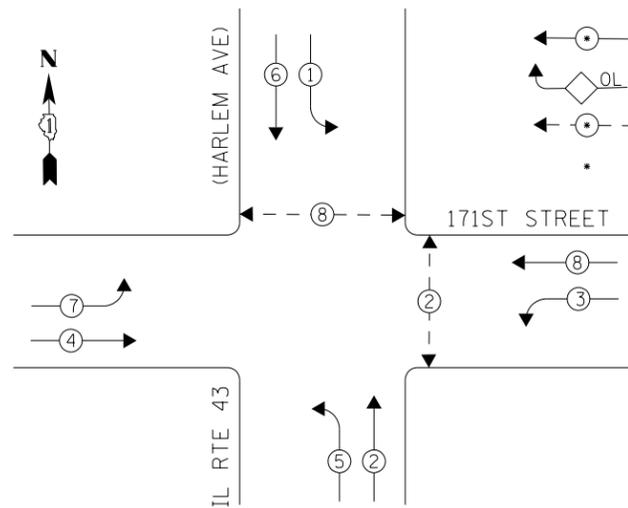
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US RTE 6 (159TH STREET) AT 88TH AVENUE - CABLE PLAN
SCHEDULE OF QUANTITIES, PHASE DESIG. DIAGRAM & EVP SEQUENCE

SCALE: SHEET OF SHEETS STA. TO STA.

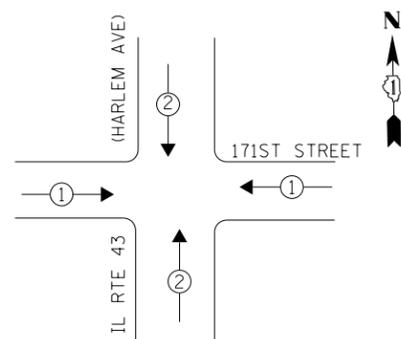
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2013-076TS	COOK	65	53
CONTRACT NO. 60X65				
ILLINOIS FED. AID PROJECT				

EXISTING CONTROLLER SEQUENCE



- LEGEND**
- ← ⊙ → DUAL ENTRY PHASE
 - ◊ OL OVERLAP
 - ← ⊙ → PEDESTRIAN PHASE
 - * NUMBER REFERS TO ASSOCIATED PHASE

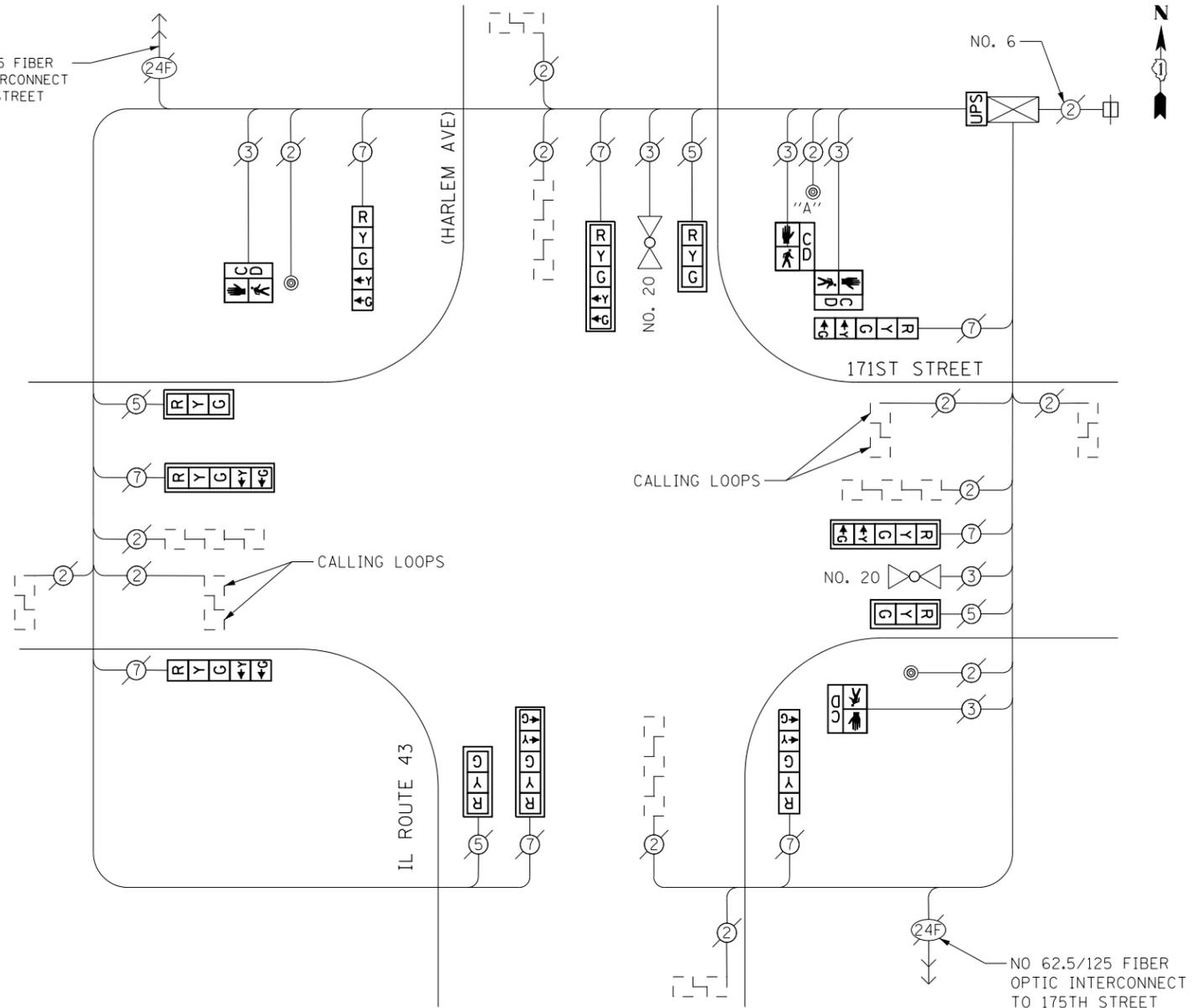
PHASE DESIGNATION DIAGRAM



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	1	2
MOVEMENT	← →	↓ ↑

RED LIGHT RUNNING CAMERA EQUIPMENT INSTALLED AT THIS LOCATION. EQUIPMENT ROUTING AND CABLES ARE UNKNOWN.



CABLE PLAN

PUSHBUTTON NOTES:
PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 8

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

SCHEDULE OF QUANTITIES

Items	Unit	Quantity
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
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
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	4
PEDESTRIAN PUSH-BUTTON, NON-LATCHING	EACH	3

RETROFIT ALL EXISTING SIGNAL HEADS TO L.E.D.

CONTRACTOR SHALL REPLACE BROKEN MOUNTING BRACKETS AT ALL RETROFIT SIGNAL HEADS OR AS DIRECTED BY THE ENGINEER. THE COST OF THIS WORK SHALL BE INCLUDED IN THE CORRESPONDING SIGNAL HEAD, LED, RETROFIT PAY ITEM OF THE TYPE AND NUMBER OF SIGNAL HEADS, FACES, AND SECTIONS AS SPECIFIED IN THE PLANS.

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 4 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 3 EACH PEDESTRIAN PUSH-BUTTON

I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	-	17	0.50	102.0
(YELLOW)	12	-	25	0.25	75.0
(GREEN)	12	-	15	0.25	45.0
ARROW	16	-	12	0.10	19.2
PED. SIGNAL	4	-	25	1.00	100.0
CONTROLLER	1	100	-	1.00	100.0
ILLUM. SIGN	-	-	84	0.05	-
VIDEO SYSTEM	-	150	-	1.00	-
BATTERY BACKUP	1	25	-	1.00	25.0
LUMINAIRE	-	-	-	0.50	-
FLASHER	-	-	25	0.50	-
TOTAL =					466.2

ENERGY COSTS- **BILLED TO: IDOT DISTRICT 1**
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY- **CONTACT BRAD SHINABARGAR**
PHONE 708-325-2692
COMMONWEALTH EDISON

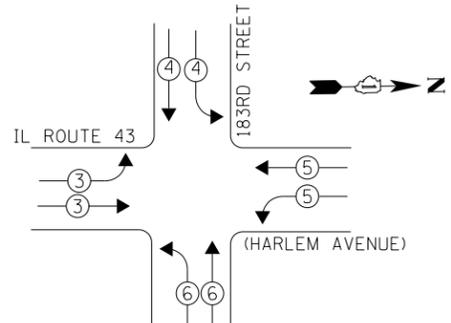
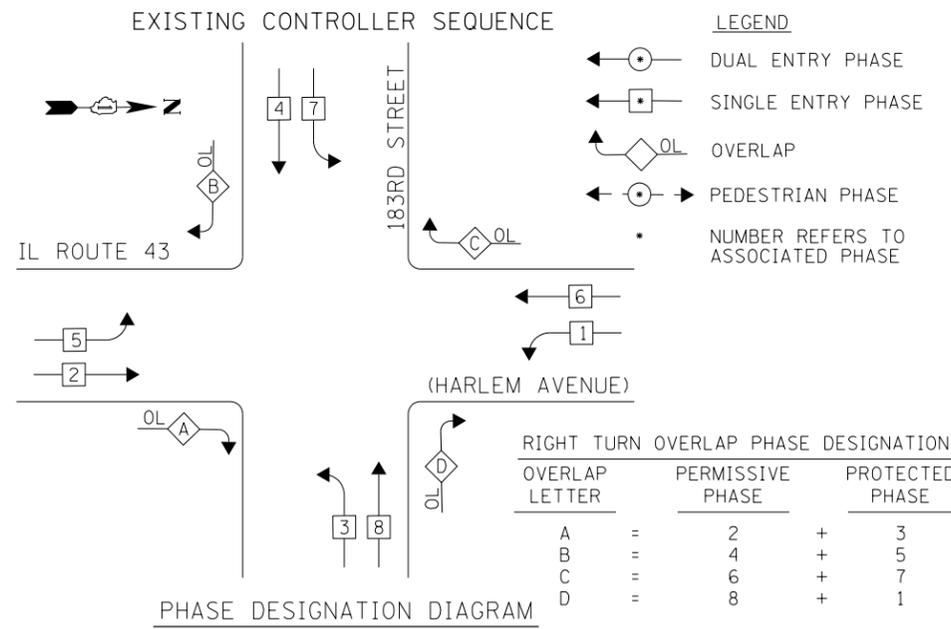
FILE NAME = D:\60X65-sh1-TS8920.dgn	USER NAME = SE3	DESIGNED - PHL	REVISED -
Default	PLOT SCALE = 40.0000' / in.	DRAWN - PHL	REVISED -
	PLOT DATE = 2/4/2014	CHECKED - BKS	REVISED -
		DATE - \$SUBDATE	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 43 (HARLEM AVENUE) AT 171ST STREET - CABLE PLAN
SCHEDULE OF QUANTITIES, PHASE DESIG. DIAGRAM & EVP SEQUENCE

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2013-076TS	COOK	65	54
CONTRACT NO. 60X65				
ILLINOIS FED. AID PROJECT				

TS 8920 TINLEY PARK



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	3	4	5	6
MOVEMENT	→	↓	←	↑

I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	26	-	17	0.50	221.0
(YELLOW)	18	-	25	0.25	112.5
(GREEN)	18	-	15	0.25	67.5
ARROW	38	-	12	0.10	45.6
PED. SIGNAL	-	-	25	1.00	-
CONTROLLER	1	100	-	1.00	100.0
ILLUM. SIGN	-	-	84	0.05	-
VIDEO SYSTEM	1	150	-	1.00	150.0
BATTERY BACKUP	1	25	-	1.00	25.0
LUMINAIRE	-	-	-	-	-
FLASHER	-	-	25	0.50	-
TOTAL =					571.6

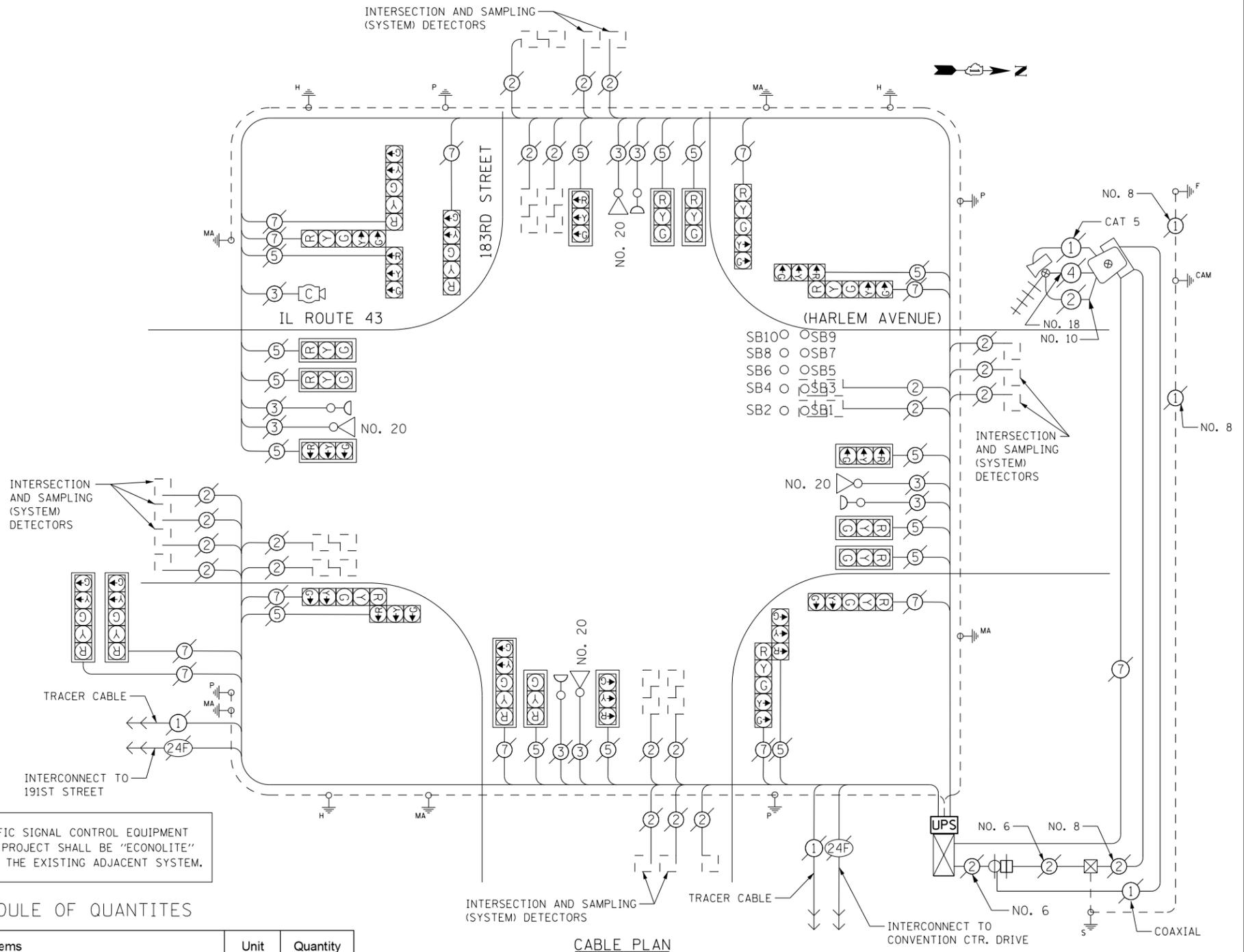
ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY- CONTACT BRAD SHINABARGAR
PHONE 708-325-2692
COMMONWEALTH EDISON

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

SCHEDULE OF QUANTITIES

Items	Unit	Quantity
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1



- RLRC LEGEND**
- # (FMS) FLUSH MOUNTED SENSOR # INDICATES SENSOR NUMBER
 - ⊠ RLRC SERVICE INSTALLATION WITH DISCONNECT
 - ⊗ FMS AP ANTENNA BOX
 - ◻ FLASH
 - ◻ CAMERA ENCLOSURE WITH POLE MOUNTED CABINET

FILE NAME = D:\60X65-shr-TS2255.dgn	USER NAME = SE3	DESIGNED - PHL	REVISED -
Default	PLOT SCALE = 40.0000' / in.	DRAWN - PHL	REVISED -
	PLOT DATE = 2/4/2014	CHECKED - BKS	REVISED -
		DATE - \$SUBDATE	REVISED -

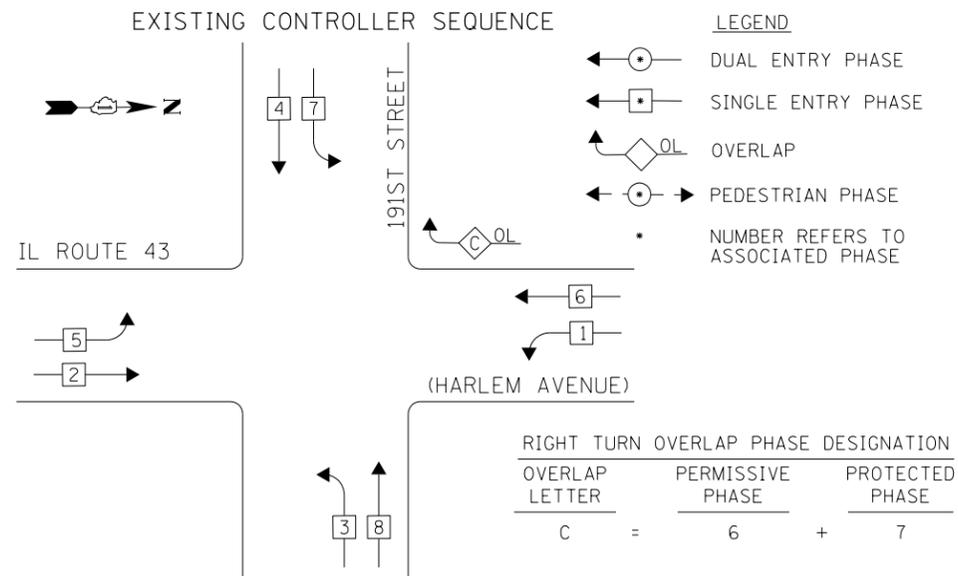
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 43 (HARLEM AVENUE) AT 183RD STREET - CABLE PLAN
SCHEDULE OF QUANTITIES, PHASE DESIG. DIAGRAM & EVP SEQUENCE

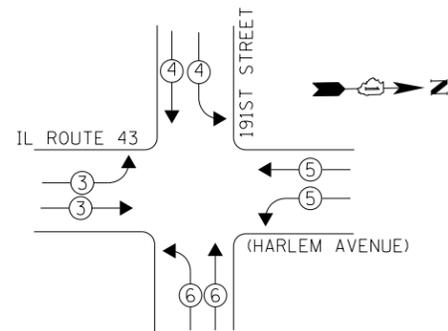
SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2013-076TS	COOK	65	55
CONTRACT NO. 60X65				
ILLINOIS FED. AID PROJECT				

TS 2255
TINLEY PARK



PHASE DESIGNATION DIAGRAM



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS				
EMERGENCY VEHICLE PREEMPTOR	3	4	5	6
MOVEMENT	→	↓	←	↖

**I. D. O. T.
TRAFFIC SIGNAL INSTALLATION
ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	20	-	17	0.50	170.0
(YELLOW)	12	-	25	0.25	75.0
(GREEN)	12	-	15	0.25	45.0
ARROW	20	-	12	0.10	24.0
PED. SIGNAL	-	-	25	1.00	-
CONTROLLER	1	100	-	1.00	100.0
ILLUM. SIGN	-	-	84	0.05	-
VIDEO SYSTEM	-	150	-	1.00	-
BATTERY BACKUP	1	25	-	1.00	25.0
LUMINAIRE	-	-	-	-	-
FLASHER	-	-	25	0.50	-
TOTAL =					439.0

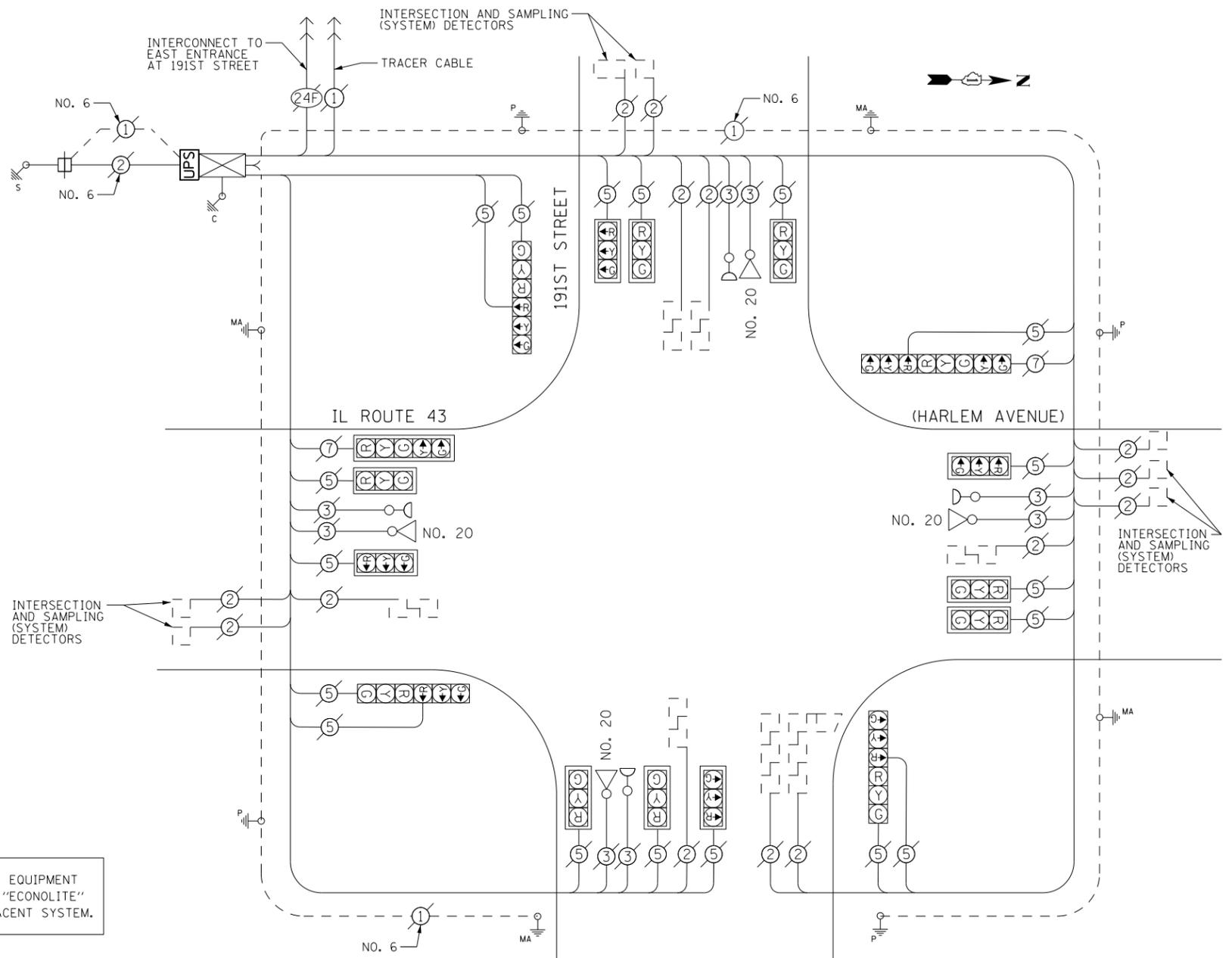
ENERGY COSTS- **BILLED TO: IDOT DISTRICT 1**
 201 WEST CENTER COURT
 SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY- **CONTACT BRAD SHINABARGAR**
 PHONE 708-325-2692
 COMMONWEALTH EDISON

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

SCHEDULE OF QUANTITIES

Items	Unit	Quantity
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1



CABLE PLAN

FILE NAME = D160X65-shr-TS22263.dgn	USER NAME = SE3	DESIGNED - PHL	REVISED -
Default	PLOT SCALE = 40.0000' / in.	DRAWN - PHL	REVISED -
	PLOT DATE = 2/4/2014	CHECKED - BKS	REVISED -
		DATE - \$SUBDATE	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

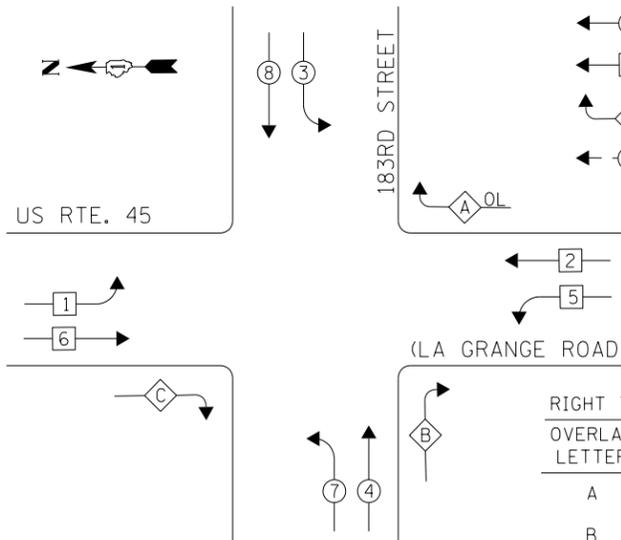
**IL ROUTE 43 (HARLEM AVENUE) AT 191ST STREET - CABLE PLAN
SCHEDULE OF QUANTITIES, PHASE DESIG. DIAGRAM & EVP SEQUENCE**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2013-076TS	COOK	65	56
CONTRACT NO. 60X65				
ILLINOIS FED. AID PROJECT				

TS 22263
TINLEY PARK

EXISTING CONTROLLER SEQUENCE



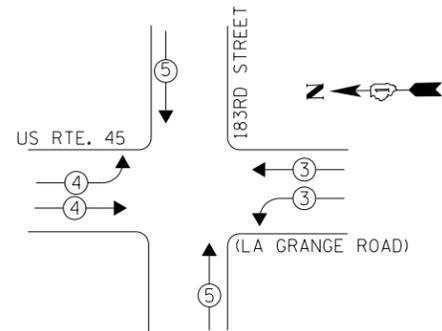
LEGEND

- ◀ ⊙ ▶ DUAL ENTRY PHASE
- ◀ ⊠ ▶ SINGLE ENTRY PHASE
- ◀ ⊙ OL ▶ OVERLAP
- ◀ ⊙ ▶ PEDESTRIAN PHASE
- NUMBER REFERS TO ASSOCIATED PHASE

RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2 + 3	
B	= 4 + 5	
C	= 6 + 7	

PHASE DESIGNATION DIAGRAM



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

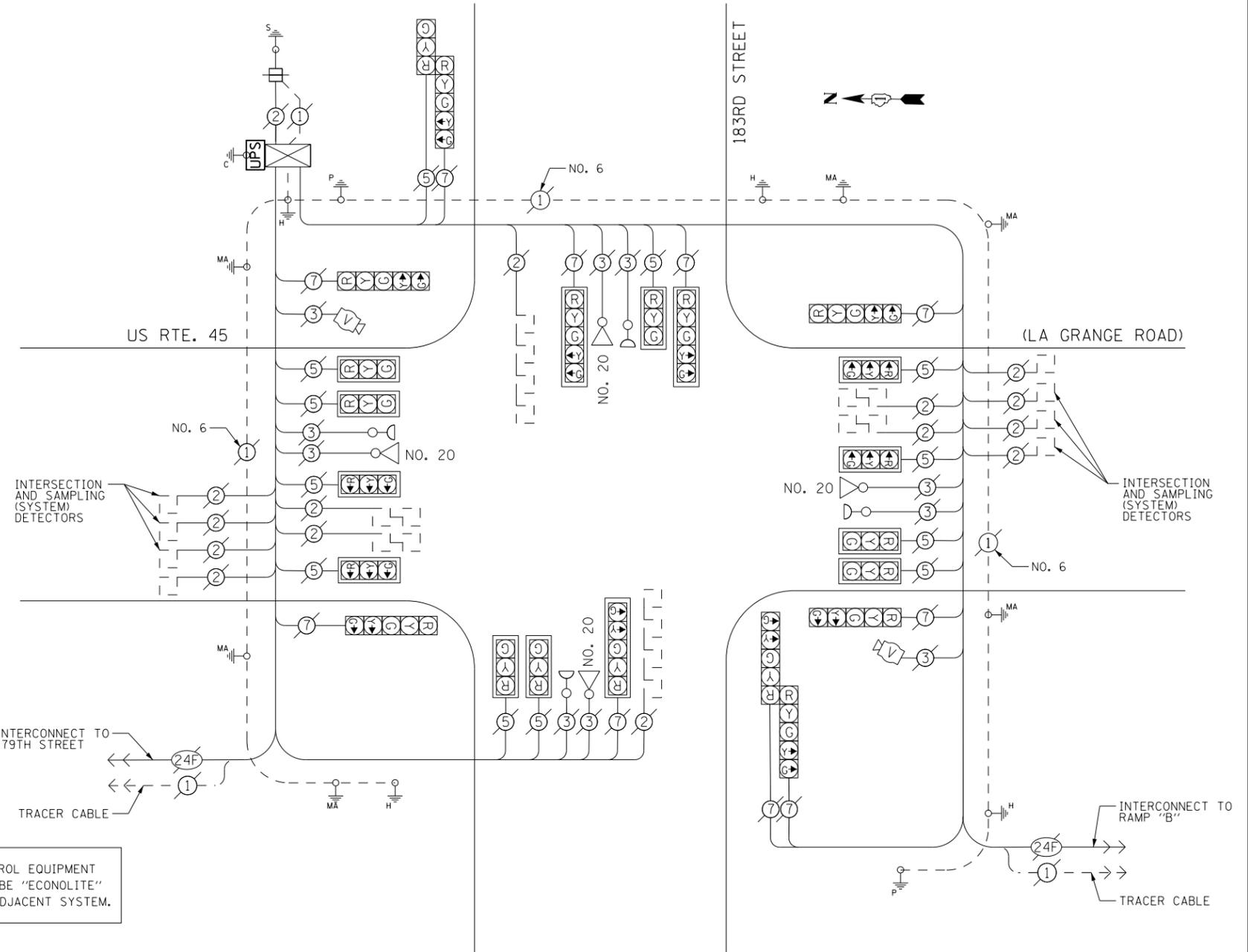
EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT	←	→	↑

I. D. O. T.
TRAFFIC SIGNAL INSTALLATION
ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	22	-	17	0.50	187.0
(YELLOW)	18	-	25	0.25	112.5
(GREEN)	18	-	15	0.25	67.5
ARROW	28	-	12	0.10	33.6
PED. SIGNAL	-	-	25	1.00	-
CONTROLLER	1	100	-	1.00	100.0
ILLUM. SIGN	-	-	84	0.05	-
VIDEO SYSTEM	-	150	-	1.00	-
BATTERY BACKUP LUMINAIRE	1	25	-	1.00	25.0
FLASHER	-	-	25	0.50	-
TOTAL =					525.6

ENERGY COSTS- **BILLED TO: IDOT DISTRICT 1**
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY- **CONTACT BRAD SHINABARGAR**
PHONE 708-325-2692
COMMONWEALTH EDISON



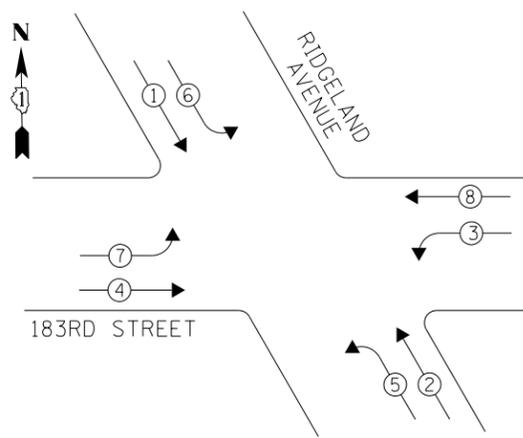
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

SCHEDULE OF QUANTITIES

Items	Unit	Quantity
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1

CABLE PLAN

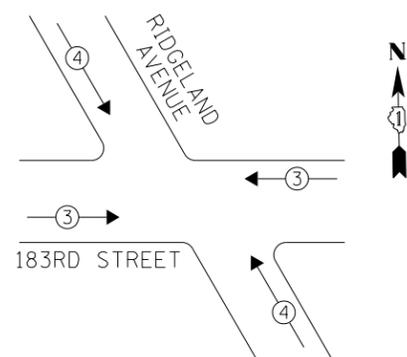
EXISTING CONTROLLER SEQUENCE



LEGEND

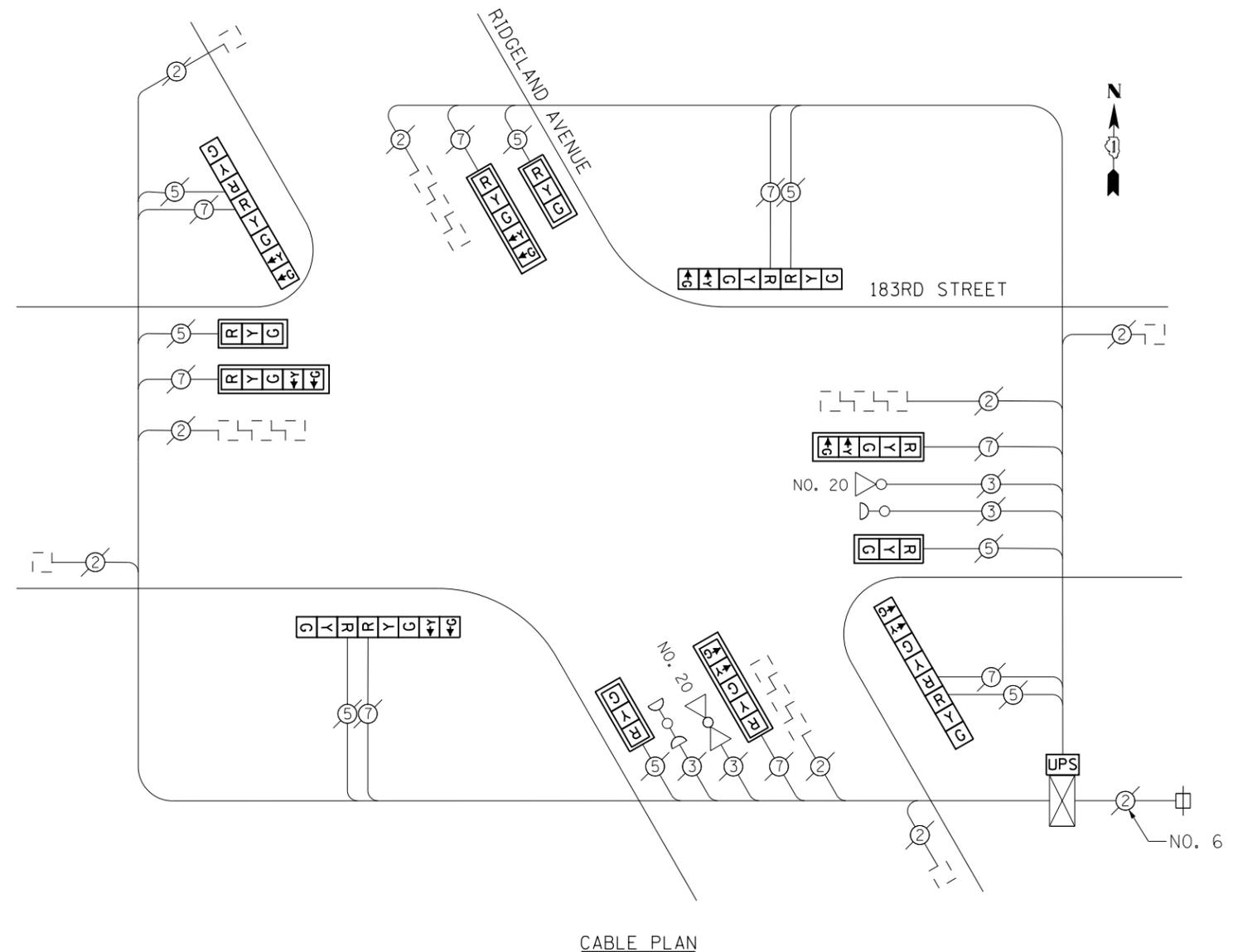
- ◉ DUAL ENTRY PHASE
- ◻ SINGLE ENTRY PHASE
- ◊ OL OVERLAP
- ◉ PEDESTRIAN PHASE
- NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	↔	↗



CABLE PLAN

SCHEDULE OF QUANTITIES

Items	Unit	Quantity
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED, RETROFIT	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	4

RETROFIT ALL EXISTING SIGNAL HEADS TO L.E.D.

CONTRACTOR SHALL REPLACE BROKEN MOUNTING BRACKETS AT ALL RETROFIT SIGNAL HEADS OR AS DIRECTED BY THE ENGINEER. THE COST OF THIS WORK SHALL BE INCLUDED IN THE CORRESPONDING SIGNAL HEAD, LED, RETROFIT PAY ITEM OF THE TYPE AND NUMBER OF SIGNAL HEADS, FACES, AND SECTIONS AS SPECIFIED IN THE PLANS.

I. D. O. T.
TRAFFIC SIGNAL INSTALLATION
ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16	-	17	0.50	136.0
(YELLOW)	16	-	25	0.25	100.0
(GREEN)	16	-	15	0.25	60.0
ARROW	16	-	12	0.10	19.2
PED. SIGNAL	-	-	25	1.00	-
CONTROLLER	1	100	-	1.00	100.0
ILLUM. SIGN	-	-	84	0.05	-
VIDEO SYSTEM	-	150	-	1.00	-
BATTERY BACKUP	1	25	-	1.00	25.0
LUMINAIRE	-	-	-	-	-
FLASHER	-	-	25	0.50	-
TOTAL =					440.2

ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY- CONTACT BRAD SHINABARGAR
PHONE 708-325-2692
COMMONWEALTH EDISON

TS 4108
TINLEY PARK

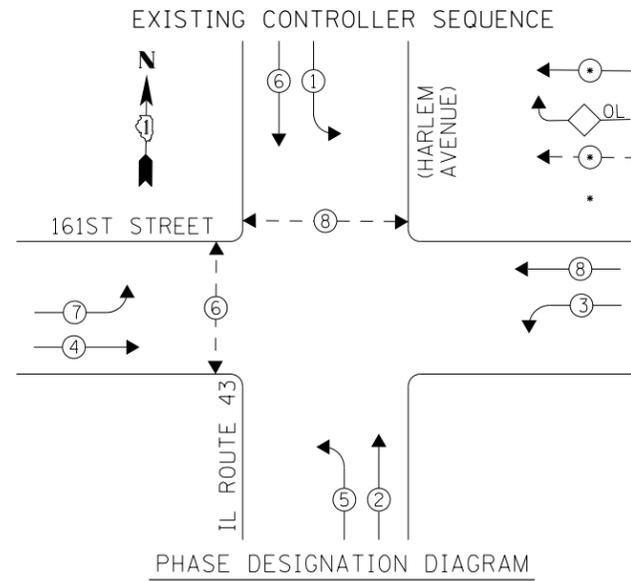
FILE NAME = D:\60X65-sht-TS4108.dgn	USER NAME = SE3	DESIGNED - PHL	REVISED -
Default	PLOT SCALE = 40.0000' / in.	DRAWN - PHL	REVISED -
	PLOT DATE = 2/4/2014	CHECKED - BKS	REVISED -
		DATE - \$SUBDATE	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

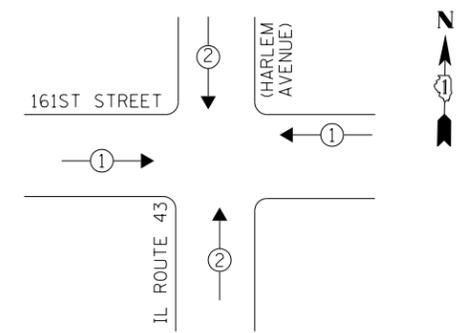
183RD STREET AT RIDGELAND AVENUE - CABLE PLAN
SCHEDULE OF QUANTITIES, PHASE DESIG. DIAGRAM & EVP SEQUENCE

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2013-076TS	COOK	65	59
CONTRACT NO. 60X65				
ILLINOIS FED. AID PROJECT				



LEGEND
 ○ → DUAL ENTRY PHASE
 ◇ OL OVERLAP
 ○ → PEDESTRIAN PHASE
 * NUMBER REFERS TO ASSOCIATED PHASE



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	1	2
MOVEMENT	← →	↓ ↑

**I. D. O. T.
TRAFFIC SIGNAL INSTALLATION
ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	14	-	17	0.50	119.0
(YELLOW)	14	-	25	0.25	87.5
(GREEN)	14	-	15	0.25	52.5
ARROW	16	-	12	0.10	19.2
PED. SIGNAL	4	-	25	1.00	100.0
CONTROLLER	1	100	-	1.00	100.0
ILLUM. SIGN	-	-	84	0.05	-
VIDEO SYSTEM	-	150	-	1.00	-
BATTERY BACKUP	1	25	-	1.00	25.0
LUMINAIRE	-	-	-	-	-
FLASHER	-	-	25	0.50	-
TOTAL =					503.2

ENERGY COSTS- **BILLED TO: IDOT DISTRICT 1**
 201 WEST CENTER COURT
 SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY- **CONTACT BRAD SHINABARGAR**
 PHONE 708-325-2692
 COMMONWEALTH EDISON

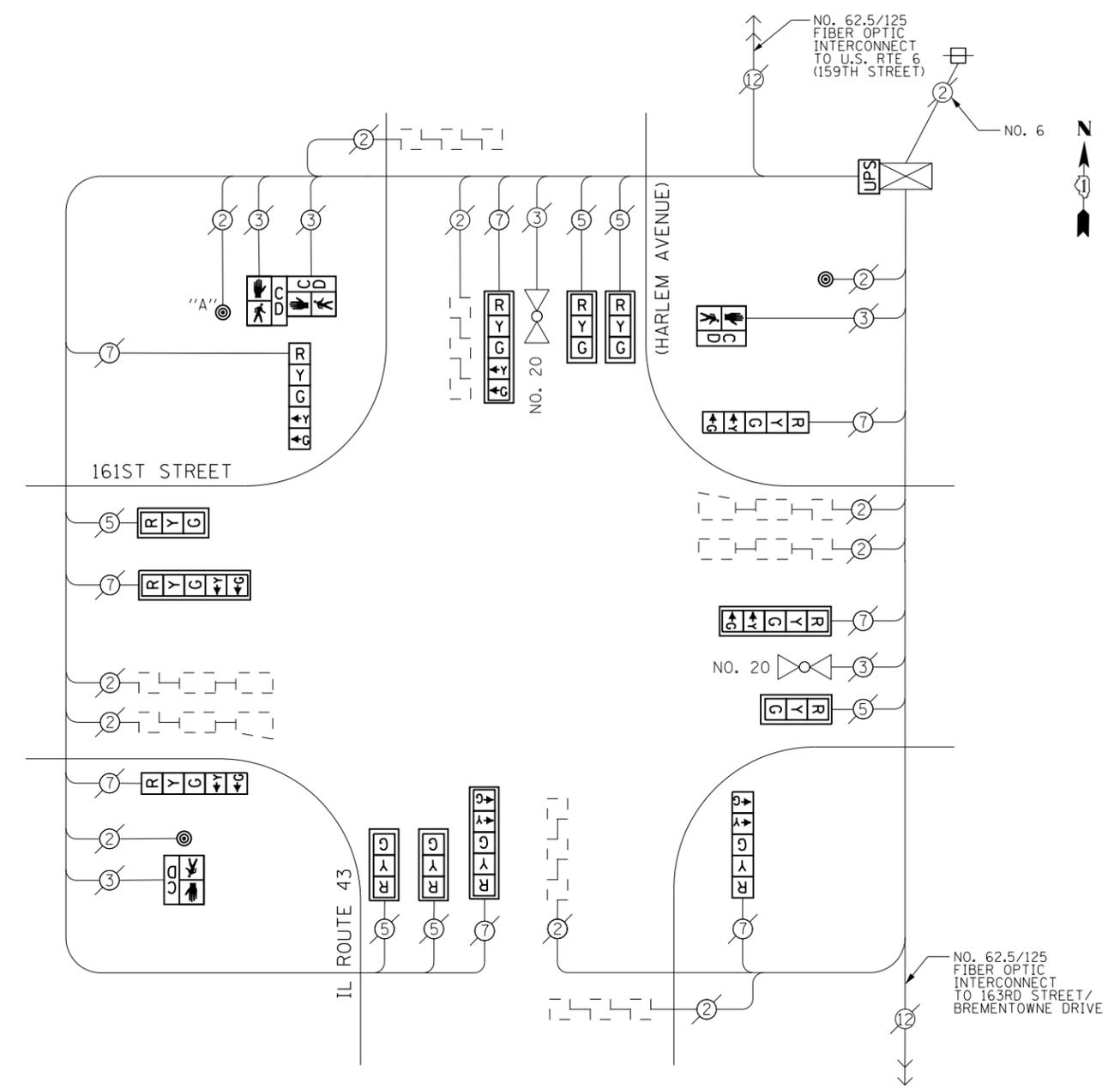
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

SCHEDULE OF QUANTITIES

Items	Unit	Quantity
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
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
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	6
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	4
PEDESTRIAN PUSH-BUTTON, NON-LATCHING	EACH	3

RETROFIT ALL EXISTING SIGNAL HEADS TO L.E.D.

CONTRACTOR SHALL REPLACE BROKEN MOUNTING BRACKETS AT ALL RETROFIT SIGNAL HEADS OR AS DIRECTED BY THE ENGINEER. THE COST OF THIS WORK SHALL BE INCLUDED IN THE CORRESPONDING SIGNAL HEAD, LED, RETROFIT PAY ITEM OF THE TYPE AND NUMBER OF SIGNAL HEADS, FACES, AND SECTIONS AS SPECIFIED IN THE PLANS.



CABLE PLAN

PUSHBUTTON NOTES:
 PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 6 AND 8

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT
 THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

2	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
1	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE
3	EACH	PEDESTRIAN PUSH-BUTTON

FILE NAME = D:\60X65-sh1-TS11325.dgn	USER NAME = SE3	DESIGNED - PHL	REVISED -
Default	PLOT SCALE = 40.0000' / in.	DRAWN - PHL	REVISED -
	PLOT DATE = 2/4/2014	CHECKED - BKS	REVISED -
		DATE - \$SUBDATE	REVISED -

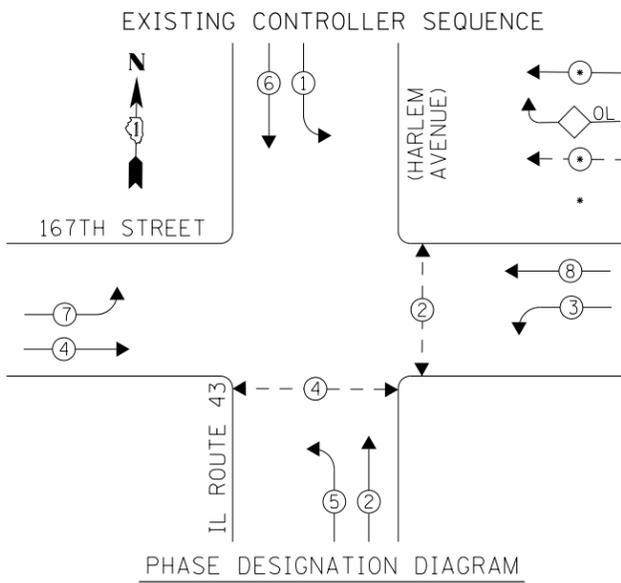
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**IL ROUTE 43 (HARLEM AVENUE) AT 161ST STREET - CABLE PLAN
SCHEDULE OF QUANTITIES, PHASE DESIG. DIAGRAM & EVP SEQUENCE**

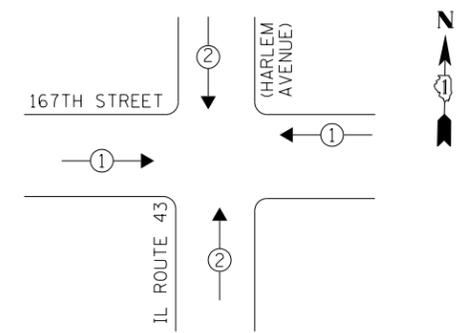
SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2013-076TS	COOK	65	60
CONTRACT NO. 60X65				
ILLINOIS FED. AID PROJECT				

TS 11325
TINLEY PARK



LEGEND
 ○ DUAL ENTRY PHASE
 ◇ OL OVERLAP
 ○ PEDESTRIAN PHASE
 * NUMBER REFERS TO ASSOCIATED PHASE



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	1	2
MOVEMENT	← →	↓ ↑

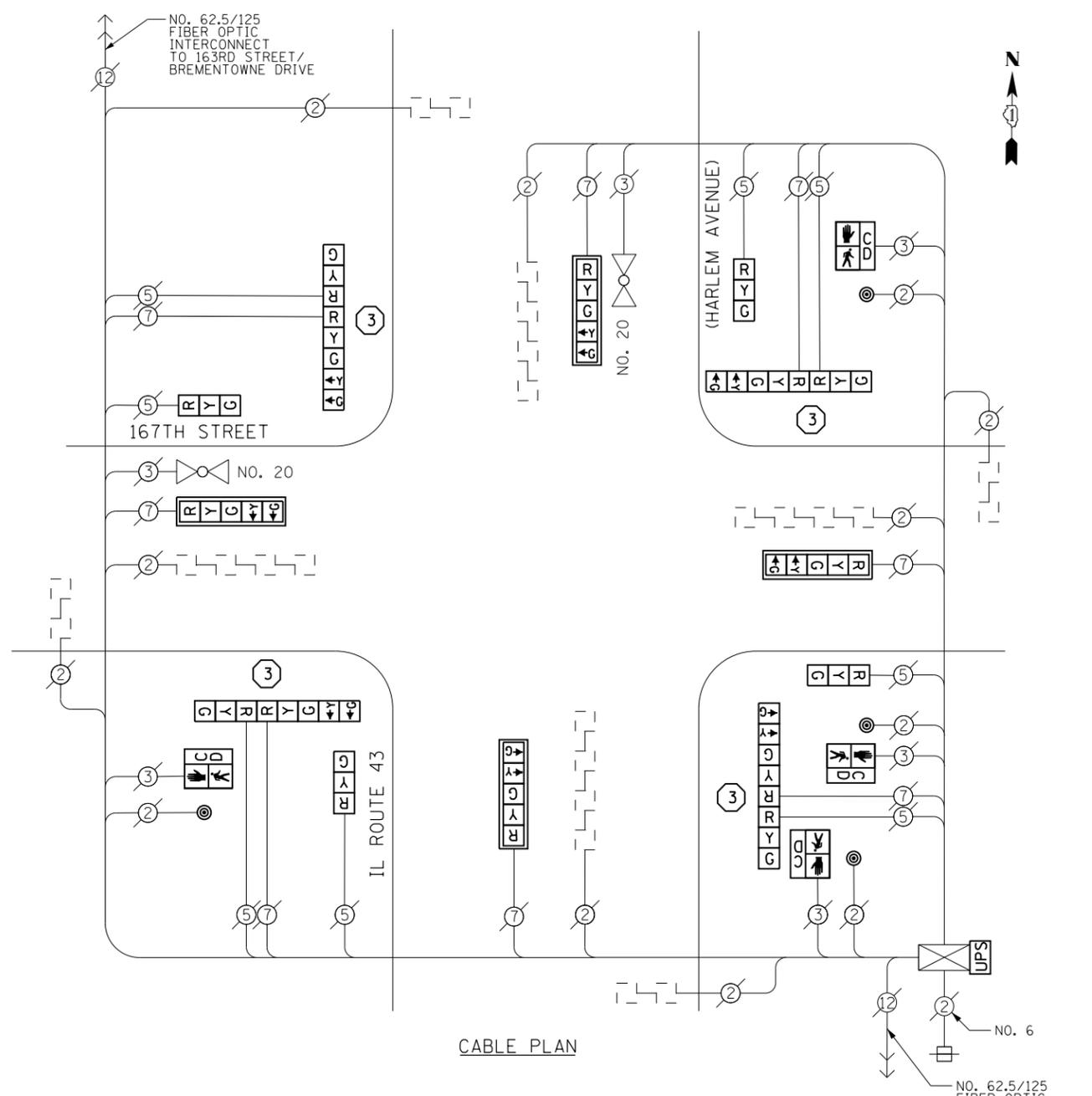
REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT
 THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 4 EACH TRAFFIC SIGNAL POST
- 4 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 4 EACH SIGNAL HEAD, 1-FACE, 5-SECTION
- 4 EACH SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION
- 4 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 4 EACH PEDESTRIAN PUSH-BUTTON

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

SCHEDULE OF QUANTITIES

Items	Unit	Quantity
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	8
PEDESTRIAN PUSH-BUTTON	EACH	4
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1



CABLE PLAN

CONSTRUCTION NOTES

- ③ THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 16 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.

NOTES

- 1) ALL COSTS RELATED TO ATTACHING THE POSTS TO THE EXISTING FOUNDATION SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED
- 2) PRIOR TO REMOVING ANY TRAFFIC SIGNAL POST SPECIFIED TO BE REPLACED IN THE SAME LOCATION THE CONTRACTOR SHALL VERIFY THAT THE PATTERN, SPACING, AND CONDITION OF THE EXISTING BOLTS ARE SUITABLE FOR RE-USE WITH A NEW POST. IF THE BOLTS ARE NOT USABLE, REPLACE AS DIRECTED BY THE ENGINEER.
- 3) THE CONTRACTOR SHALL RELOCATE EXISTING SIGN PANELS FROM POSTS THAT ARE INDICATED FOR REPLACEMENT TO THE NEW POSTS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE COST OF REMOVAL, RELOCATION AND ANY NEW MOUNTING HARDWARE NECESSARY TO COMPLETE THIS WORK SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED.

I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16	-	17	0.50	136.0
(YELLOW)	16	-	25	0.25	100.0
(GREEN)	16	-	15	0.25	60.0
ARROW	16	-	12	0.10	19.2
PED. SIGNAL	4	-	25	1.00	100.0
CONTROLLER	1	100	-	1.00	100.0
ILLUM. SIGN	-	-	84	0.05	-
VIDEO SYSTEM	-	150	-	1.00	-
BATTERY BACKUP	1	25	-	1.00	25.0
LUMINAIRE	-	-	-	-	-
FLASHER	-	-	25	0.50	-
TOTAL =				540.2	

ENERGY COSTS- **BILLED TO: IDOT DISTRICT 1**
 201 WEST CENTER COURT
 SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY- **CONTACT BRAD SHINABARGAR**
 PHONE 708-325-2692
 COMMONWEALTH EDISON

FILE NAME = D:\60X65-shr-TS8910.dgn	USER NAME = SE3	DESIGNED - PHL	REVISED -
Default	PLOT SCALE = 40.0000' / in.	DRAWN - PHL	REVISED -
	PLOT DATE = 2/4/2014	CHECKED - BKS	REVISED -
		DATE - \$SUBDATE	REVISED -

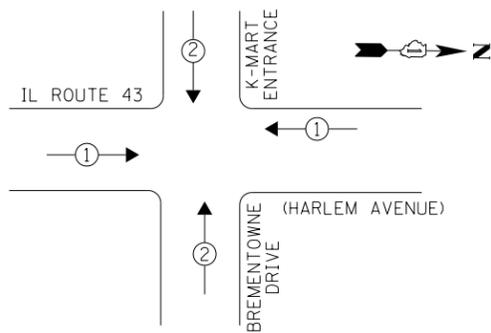
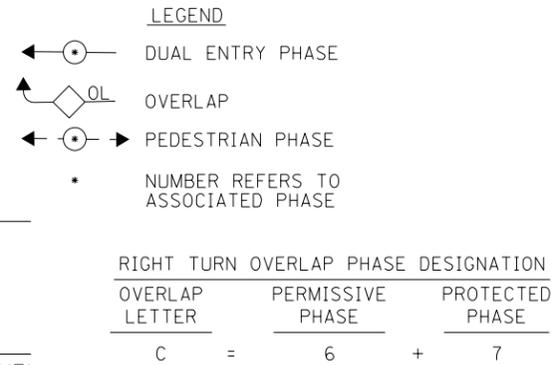
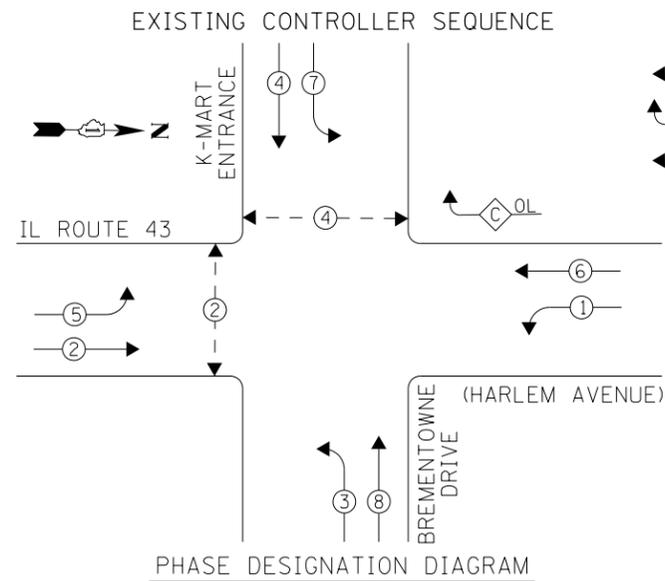
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

IL ROUTE 43 (HARLEM AVENUE) AT 167TH STREET - CABLE PLAN
 SCHEDULE OF QUANTITIES, PHASE DESIG. DIAGRAM & EVP SEQUENCE

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2013-076TS	COOK	65	61
CONTRACT NO. 60X65				
ILLINOIS FED. AID PROJECT				

TS 8910
 TINLEY PARK



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	1	2
MOVEMENT	← →	↓ ↑

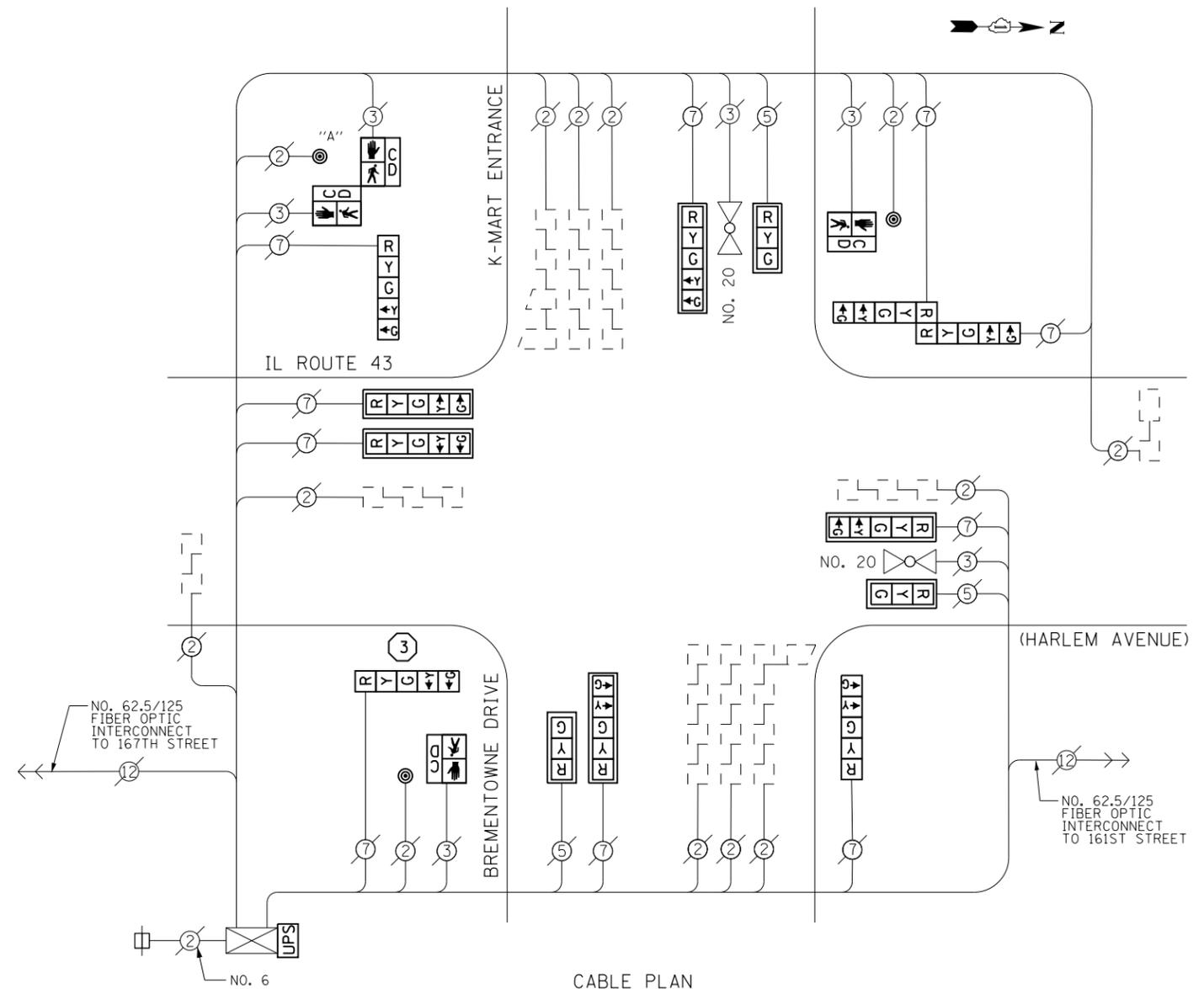
REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT
 THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 1 EACH TRAFFIC SIGNAL POST
- 3 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 8 EACH SIGNAL HEAD, 1-FACE, 5-SECTION
- 1 EACH SIGNAL HEAD, 2-FACE, 5-SECTION
- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 1 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE
- 3 EACH PEDESTRIAN PUSH-BUTTON

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

SCHEDULE OF QUANTITIES

Items	Unit	Quantity
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	3
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	3
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	6
SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1
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, ALUMINUM	EACH	8
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
PEDESTRIAN PUSH-BUTTON, NON-LATCHING	EACH	3



CABLE PLAN

PUSHBUTTON NOTES:
 PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4

CONSTRUCTION NOTES

- 3 THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 16 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.

NOTES

- ALL COSTS RELATED TO ATTACHING THE POSTS TO THE EXISTING FOUNDATION SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED
- PRIOR TO REMOVING ANY TRAFFIC SIGNAL POST SPECIFIED TO BE REPLACED IN THE SAME LOCATION THE CONTRACTOR SHALL VERIFY THAT THE PATTERN, SPACING, AND CONDITION OF THE EXISTING BOLTS ARE SUITABLE FOR RE-USE WITH A NEW POST. IF THE BOLTS ARE NOT USABLE, REPLACE AS DIRECTED BY THE ENGINEER.
- THE CONTRACTOR SHALL RELOCATE EXISTING SIGN PANELS FROM POSTS THAT ARE INDICATED FOR REPLACEMENT TO THE NEW POSTS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE COST OF REMOVAL, RELOCATION AND ANY NEW MOUNTING HARDWARE NECESSARY TO COMPLETE THIS WORK SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED.

I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	13	-	17	0.50	110.50
(YELLOW)	13	-	25	0.25	81.25
(GREEN)	13	-	15	0.25	48.75
ARROW	20	-	12	0.10	24.0
PED. SIGNAL	4	-	25	1.00	100.0
CONTROLLER	1	100	-	1.00	100.0
ILLUM. SIGN	-	-	84	0.05	-
VIDEO SYSTEM	-	150	-	1.00	-
BATTERY BACKUP	1	25	-	1.00	25.0
LUMINAIRE	-	-	-	-	-
FLASHER	-	-	25	0.50	-
TOTAL =					489.5

ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
 201 WEST CENTER COURT
 SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY- CONTACT BRAD SHINABARGAR
 PHONE 708-325-2692
 COMMONWEALTH EDISON

FILE NAME = D160X65-shr-TS8935.dgn	USER NAME = SE3	DESIGNED - PHL	REVISED -
Default	PLOT SCALE = 40.0000' / in.	DRAWN - PHL	REVISED -
	PLOT DATE = 2/4/2014	CHECKED - BKS	REVISED -
		DATE - \$SUBDATE	REVISED -

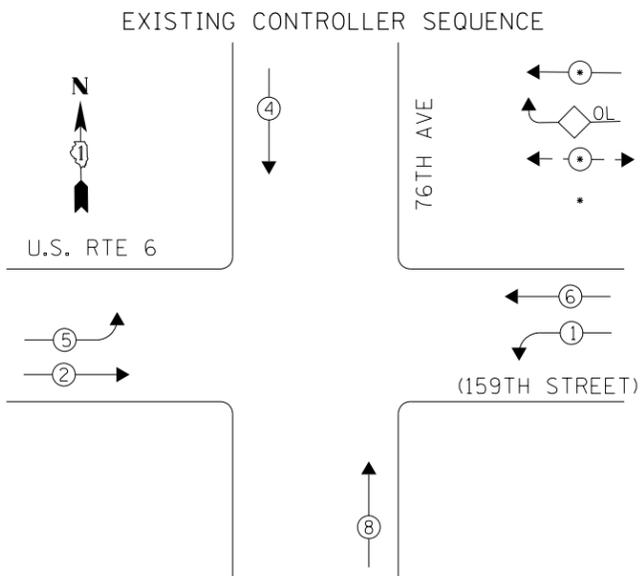
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

IL RTE 43 (HARLEM AVE) AT BREMENTOWNE/163RD ST - CABLE PLAN
 SCHEDULE OF QUANTITIES, PHASE DESIG. DIAGRAM & EVP SEQUENCE

SCALE: SHEET OF SHEETS STA. TO STA.

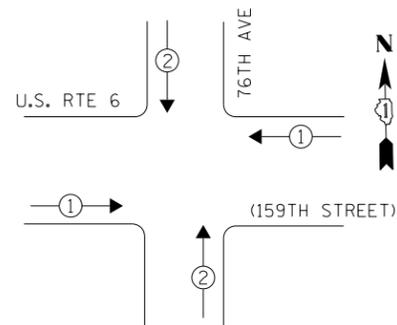
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2013-076TS	COOK	65	62
CONTRACT NO. 60X65				
ILLINOIS FED. AID PROJECT				

TS 8935
 TINLEY PARK



LEGEND
 ○ → DUAL ENTRY PHASE
 ◊ OL → OVERLAP
 ○ → PEDESTRIAN PHASE
 * → NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	1	2
MOVEMENT	← →	↓ ↑

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

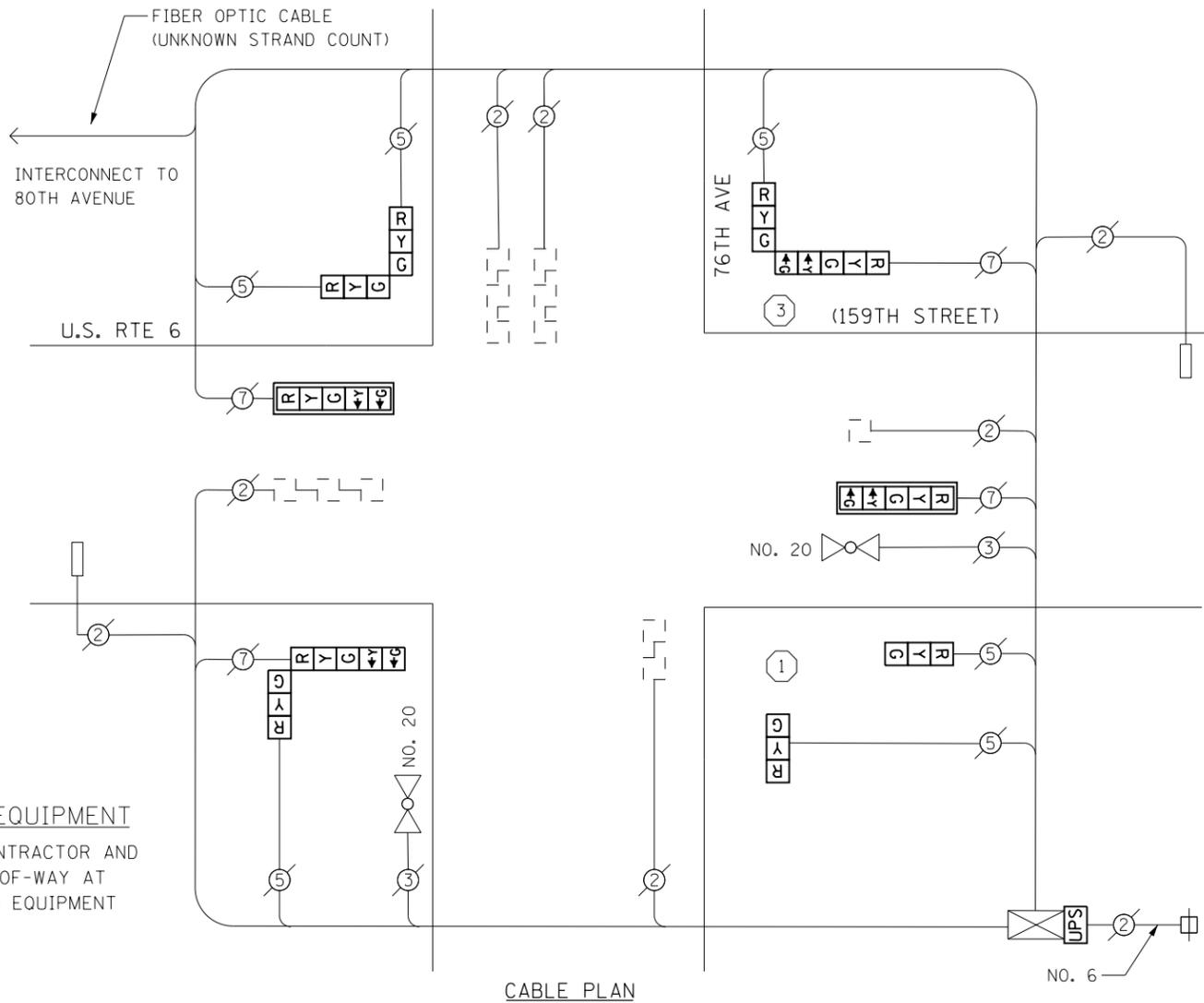
REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 2 EACH TRAFFIC SIGNAL POST
- 2 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 2 EACH SIGNAL HEAD, 1-FACE, 5-SECTION
- 1 EACH SIGNAL HEAD, 2-FACE, 3 SECTION
- 2 EACH SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION

SCHEDULE OF QUANTITIES

Items	Unit	Quantity
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2
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	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	2
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1



CABLE PLAN

CONSTRUCTION NOTES

- ① THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 14 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.
- ③ THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 16 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.

NOTES

- 1) ALL COSTS RELATED TO ATTACHING THE POSTS TO THE EXISTING FOUNDATION SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED
- 2) PRIOR TO REMOVING ANY TRAFFIC SIGNAL POST SPECIFIED TO BE REPLACED IN THE SAME LOCATION THE CONTRACTOR SHALL VERIFY THAT THE PATTERN, SPACING, AND CONDITION OF THE EXISTING BOLTS ARE SUITABLE FOR RE-USE WITH A NEW POST. IF THE BOLTS ARE NOT USABLE, REPLACE AS DIRECTED BY THE ENGINEER.
- 3) THE CONTRACTOR SHALL RELOCATE EXISTING SIGN PANELS FROM POSTS THAT ARE INDICATED FOR REPLACEMENT TO THE NEW POSTS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE COST OF REMOVAL, RELOCATION AND ANY NEW MOUNTING HARDWARE NECESSARY TO COMPLETE THIS WORK SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED.

I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	10	-	17	0.50	85.0
(YELLOW)	10	-	25	0.25	62.5
(GREEN)	10	-	15	0.25	37.5
ARROW	8	-	12	0.10	9.6
PED. SIGNAL	-	-	25	1.00	-
CONTROLLER	1	100	-	1.00	100.0
ILLUM. SIGN	-	-	-	0.05	-
VIDEO SYSTEM	-	-	-	1.00	-
BATTERY BACKUP	1	25	-	1.00	25.0
LUMINAIRE	-	-	-	-	-
FLASHER	-	-	25	0.50	-
TOTAL =					319.6

ENERGY COSTS- **BILLED TO: IDOT DISTRICT 1**
 201 WEST CENTER COURT
 SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY- **CONTACT BRAD SHINABARGAR**
 PHONE 708-325-2692
 COMMONWEALTH EDISON

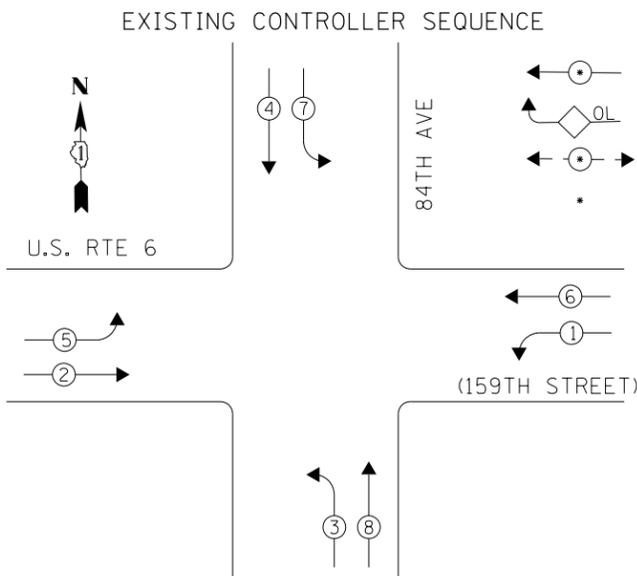
TS 180
TINLEY PARK

FILE NAME = D:\60X65-sht-TS180.dgn	USER NAME = SE3	DESIGNED - PHL	REVISED -
Default	PLOT SCALE = 40.0000' / in.	DRAWN - PHL	REVISED -
	PLOT DATE = 2/4/2014	CHECKED - BKS	REVISED -
		DATE - \$SUBDATE	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

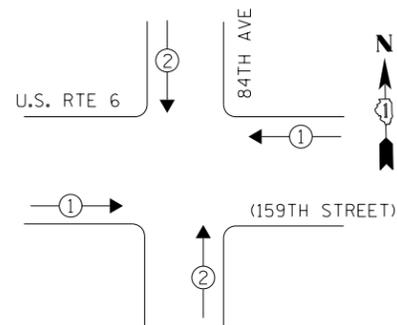
US RTE 6 (159TH STREET) AT 76TH AVE- CABLE PLAN
SCHEDULE OF QUANTITIES, PHASE DESIG. DIAGRAM & EVP SEQUENCE
 SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2013-076TS	COOK	65	63
CONTRACT NO. 60X65				
ILLINOIS FED. AID PROJECT				



LEGEND
 ○ → DUAL ENTRY PHASE
 ◊ OL → OVERLAP
 ○ → PEDESTRIAN PHASE
 * → NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	1	2
MOVEMENT	← →	↓ ↑

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

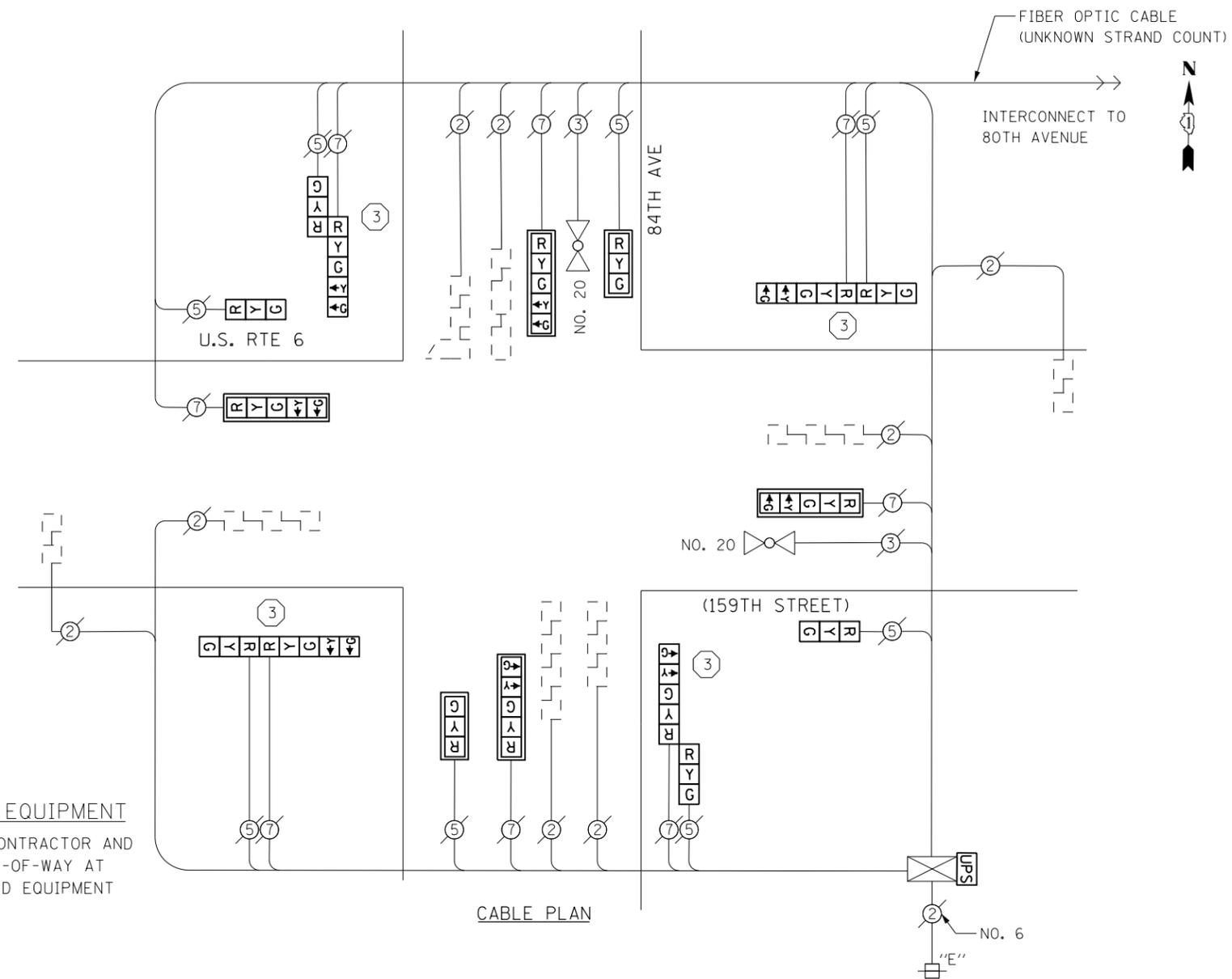
REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 4 EACH TRAFFIC SIGNAL POST
- 4 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 4 EACH SIGNAL HEAD, 1-FACE, 5-SECTION
- 4 EACH SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION

SCHEDULE OF QUANTITIES

Items	Unit	Quantity
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	6
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1



CABLE PLAN

CONSTRUCTION NOTES

- ③ THE CONTRACTOR SHALL REPLACE THE EXISTING TRAFFIC SIGNAL POST WITH THE PROPOSED TRAFFIC SIGNAL POST, 16 FT. AND ATTACH THE PROPOSED POST TO THE EXISTING FOUNDATION.

NOTES

- 1) ALL COSTS RELATED TO ATTACHING THE POSTS TO THE EXISTING FOUNDATION SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED
- 2) PRIOR TO REMOVING ANY TRAFFIC SIGNAL POST SPECIFIED TO BE REPLACED IN THE SAME LOCATION THE CONTRACTOR SHALL VERIFY THAT THE PATTERN, SPACING, AND CONDITION OF THE EXISTING BOLTS ARE SUITABLE FOR RE-USE WITH A NEW POST. IF THE BOLTS ARE NOT USABLE, REPLACE AS DIRECTED BY THE ENGINEER.
- 3) THE CONTRACTOR SHALL RELOCATE EXISTING SIGN PANELS FROM POSTS THAT ARE INDICATED FOR REPLACEMENT TO THE NEW POSTS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE COST OF REMOVAL, RELOCATION AND ANY NEW MOUNTING HARDWARE NECESSARY TO COMPLETE THIS WORK SHALL BE INCLUDED IN THE UNIT COST OF TRAFFIC SIGNAL POST OF THE SIZE SPECIFIED.

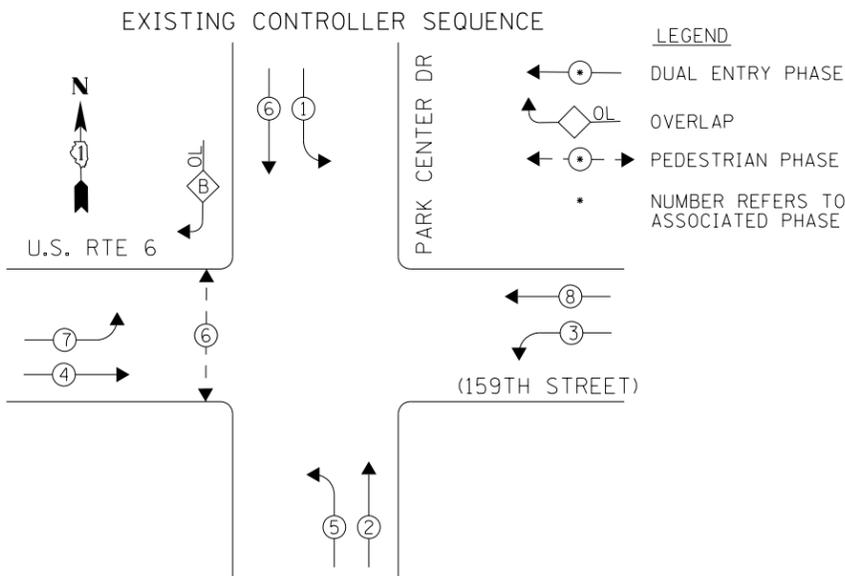
I. D. O. T.
TRAFFIC SIGNAL INSTALLATION
ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16	-	17	0.50	136.0
(YELLOW)	16	-	25	0.25	100.0
(GREEN)	16	-	15	0.25	60.0
ARROW	16	-	12	0.10	19.2
PED. SIGNAL	-	-	25	1.00	-
CONTROLLER	1	100	-	1.00	100.0
ILLUM. SIGN	-	-	-	0.05	-
VIDEO SYSTEM	-	-	-	1.00	-
BATTERY BACKUP	1	25	-	1.00	25.0
LUMINAIRE	-	-	-	-	-
FLASHER	-	-	25	0.50	-
TOTAL =					440.2

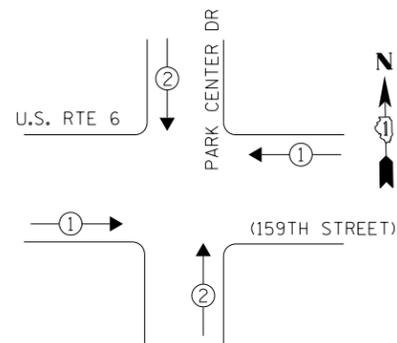
ENERGY COSTS- **BILLED TO: IDOT DISTRICT 1**
 201 WEST CENTER COURT
 SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY- **CONTACT BRAD SHINABARGAR**
 PHONE 708-325-2692
 COMMONWEALTH EDISON

TS 240
 TINLEY PARK



PHASE DESIGNATION DIAGRAM



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	1	2
MOVEMENT	← →	↓ ↑

**I. D. O. T.
TRAFFIC SIGNAL INSTALLATION
ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	14	-	17	0.50	119.0
(YELLOW)	14	-	25	0.25	87.5
(GREEN)	14	-	15	0.25	52.5
ARROW	16	-	12	0.10	19.2
PED. SIGNAL	2	-	25	1.00	50.0
CONTROLLER	1	100	-	1.00	100.0
ILLUM. SIGN	-	-	-	0.05	-
VIDEO SYSTEM	-	-	-	1.00	-
BATTERY BACKUP	1	25	-	1.00	25.0
LUMINAIRE	-	-	-	-	-
FLASHER	-	-	25	0.50	-
TOTAL =					453.2

ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
 201 WEST CENTER COURT
 SCHAUMBURG, IL 60196-1096

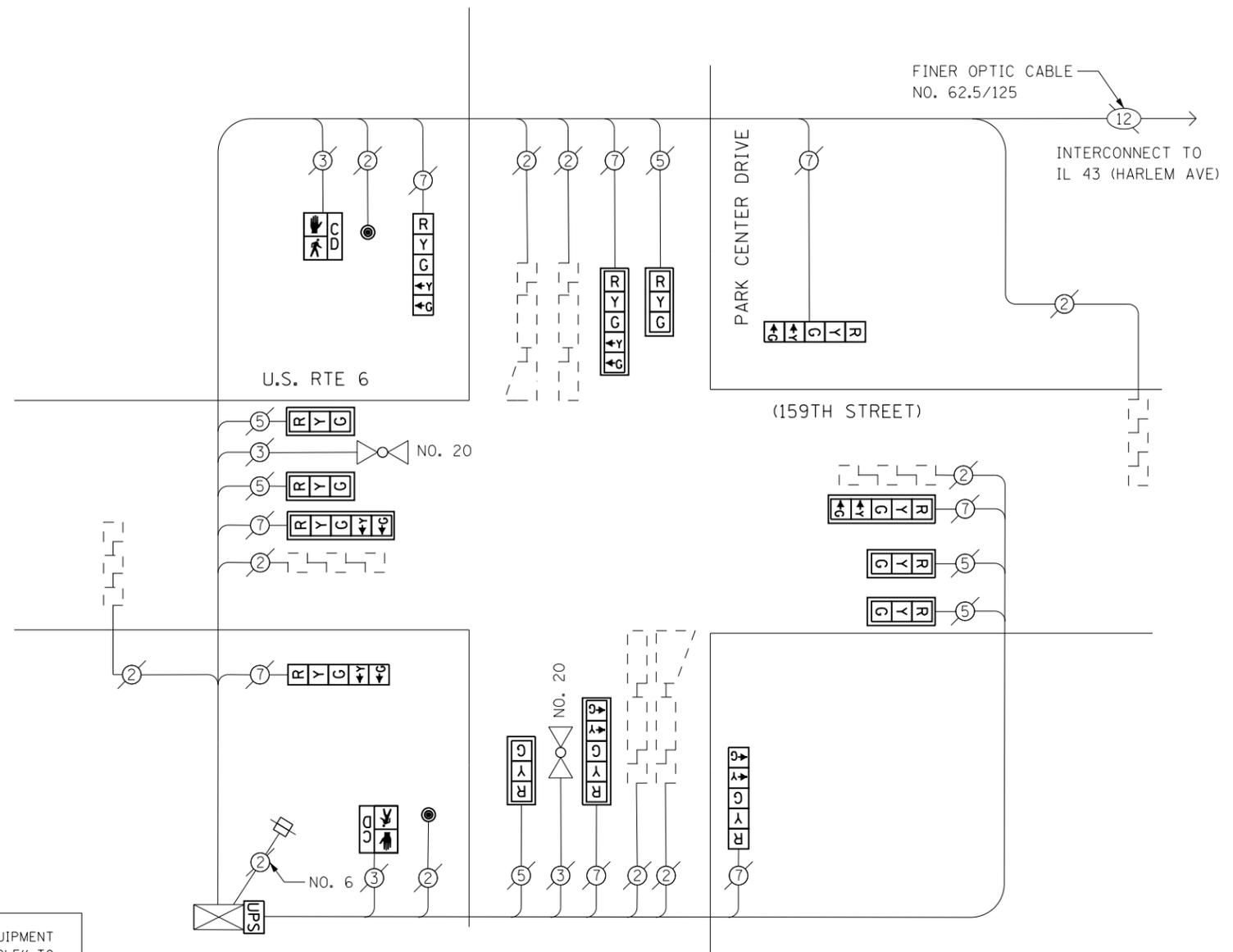
ENERGY SUPPLY- CONTACT BRAD SHINABARGAR
 PHONE 708-325-2692
 COMMONWEALTH EDISON

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

SCHEDULE OF QUANTITIES

Items	Unit	Quantity
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
PEDESTRIAN PUSH-BUTTON	EACH	2
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	6
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	4

CABLE PLAN



REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 2 EACH PEDESTRIAN PUSH-BUTTON

RETROFIT ALL EXISTING SIGNAL HEADS TO L.E.D.

CONTRACTOR SHALL REPLACE BROKEN MOUNTING BRACKETS AT ALL RETROFIT SIGNAL HEADS OR AS DIRECTED BY THE ENGINEER. THE COST OF THIS WORK SHALL BE INCLUDED IN THE CORRESPONDING SIGNAL HEAD, LED, RETROFIT PAY ITEM OF THE TYPE AND NUMBER OF SIGNAL HEADS, FACES, AND SECTIONS AS SPECIFIED IN THE PLANS.

TS 11330
TINLEY PARK