

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	62	1
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 60W37		

D-91-272-13

FOR INDEX OF SHEETS, SEE SHEET NO. 2

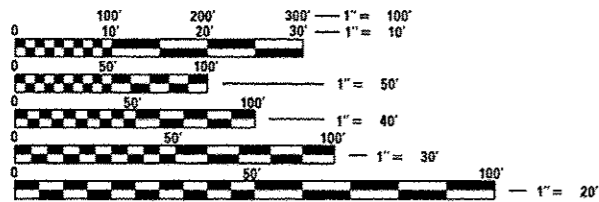
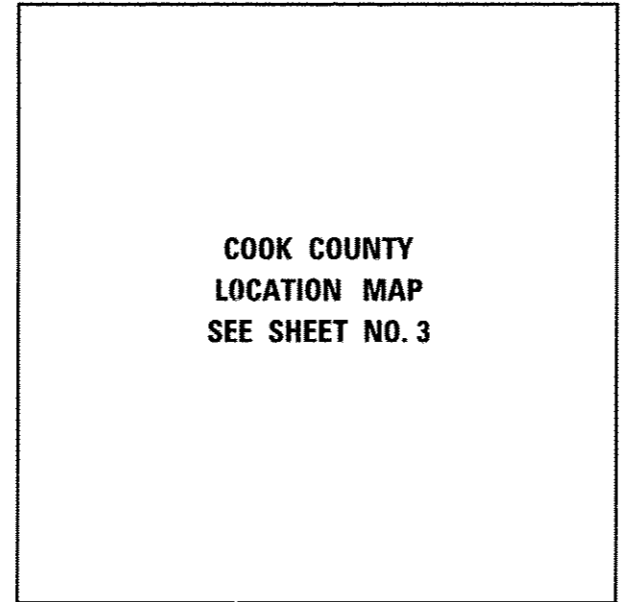
**PROPOSED
HIGHWAY PLANS**

IDOT STANDARDS:

STD. NO.	TITLE
000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND SYMBOLS
701001-02	OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5m) AWAY
701006-04	OFF-ROAD OPERATIONS, 2L, 2W, 15' (4.5m) TO 24" (600mm) FROM PAVEMENT EDGE
701101-03	OFF-ROAD OPERATIONS, MULTILANE, 15' (4.5m) TO 24" (600 mm) FROM PAVEMENT EDGE
701106-02	OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' (4.5m) AWAY
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701502-05	URBAN LANE CLOSURE, 2L, 2W, BIDIRECTIONAL LEFT TURN LANE
701601-08	URBAN LANE CLOSURE, MULTILANE, 1W, OR 2W WITH NONTRAVERSABLE MEDIAN
701606-08	URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701701-08	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701901-02	TRAFFIC CONTROL DEVICES
720001-01	SIGN PANEL MOUNTING DETAILS
857001-01	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
862001-01	UNINTERRUPTABLE POWER SUPPLY (UPS)
880006-01	TRAFFIC SIGNAL MOUNTING DETAILS

**VARIOUS LOCATIONS IN NORTHWEST COOK COUNTY
LIGHT EMITTING DIODE (LED) INSTALLATION
CONTRACT #2**

**SECTION 2013-006TS
COOK COUNTY
C-91-272-13**



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 LOCATING INFORMATION FOR EXCAVATORS
1-800-892-0123
OR 811

PROJECT ENGINEER: SUDUD MAHMOUD
PROJECT MANAGER: DARYLE DREW

CONTRACT NO. 60W37

BRUCE P. TALBOT
062-048494
REGISTERED
PROFESSIONAL
ENGINEER
OF
ILLINOIS
Expires 11-30-13

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9875
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: codd@cemcon.com Website: www.cemcon.com

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED May 17 2013
John F. ...
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

June 28 2013
John D. Baranzoni P.E.
acting ENGINEER OF DESIGN AND ENVIRONMENT

June 28 2013
Amer Osman P.E.
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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

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- 9-14 DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAILS

PAGE	TS#	INTERSECTION NAME
15	3213	IL 68 DUNDEE RD AT BUFFALO GROVE FIRE HOUSE
16	3112	IL 68 DUNDEE RD AT BUFFALO GROVE HIGH SCHOOL
17	3110	IL 68 DUNDEE RD AT BUFFALO GROVE RD
18	3155	IL 68 DUNDEE RD AT GOLFVIEW TERRACE
19	3210	IL 68 DUNDEE RD AT WEIDNER RD/CROFTON LN
20	20480	PALATINE RD AT ROSELLE RD
21	5315	HICKS RD AT CARPENTER DR
22	5295	HICKS RD AT CUNNINGHAM DR
23	11735	HICKS RD AT HELEN RD
24	5305	HICKS RD AT ILLINOIS AVE/INDUSTRIAL AVE
25	12005	HICKS RD AT SELLSTROM DR (FKA OLD HICKS RD)
26	2970	IL 62 ALGONQUIN RD AT HARPER COLLEGE DR
27	2990	IL 62 ALGONQUIN RD AT ROSELLE RD
28	3122	IL 68 DUNDEE RD AT DENISE DR
29	3120	IL 68 DUNDEE RD AT HICKS RD
30	1157	IL 68 DUNDEE RD AT LYNDA DR
31	3165	IL 68 DUNDEE RD AT QUENTIN RD
32	3190	IL 68 DUNDEE RD AT SMITH RD
33	3168	IL 68 DUNDEE RD AT STERLING AVE
34	5425	LAKE COOK RD AT QUENTIN RD
35	5610	PALATINE RD AT QUENTIN RD
36	14715	PALATINE RD AT SMITH ST
37	1150	US 12-IL 53 RAND RD AT IL 53 HICKS RD
38	1280	US 14 NORTHWEST HWY AT QUENTIN RD
39	20590	US 14 NORTHWEST HWY AT FIRST BANK DR
40-41	1225	US 14 NORTHWEST HWY AT HICKS RD S JCT
42	1180	US 14 NORTHWEST HWY AT IL 53 EAST RAMP
43	1185	US 14 NORTHWEST HWY AT IL 53 WEST RAMP
44	1172	US 14 NORTHWEST HWY AT STERLING AVE
45	1250	US 14 NORTHWEST HWY AT US POST OFFICE ENTRANCE
46	5300	HICKS RD AT EUCLID AVE
47	11730	HICKS RD AT NORTHROP GRUMMAN DR
48	2665	IL 53 EAST RAMP AT IL 62 ALGONQUIN RD
49	2860	IL 58 GOLF RD AT RING RD (3COM)
50	2770	IL 58 GOLF RD AT GOULD DR
51	2930	IL 62 ALGONQUIN RD AT ARBOR DR
52	14741	IL 62 ALGONQUIN RD AT CARRIAGE WAY/ESSEX WAY
53	2980	IL 62 ALGONQUIN RD AT MAGNOLIA DR/COMMERCE DR
54	2708	IL 62 ALGONQUIN RD AT MARKET PLACE ENTRANCE
55	2985	IL 62 ALGONQUIN RD AT NEW WILKE RD
56	21595	IL 62 ALGONQUIN RD AT NEWPORT DR
57	14744	IL 62 ALGONQUIN RD AT WEBER RD/OLD WILKE RD
58	5395	KIRCHOFF RD AT WILKE RD/NEW WILKE RD
59	5600	OLD PLUM GROVE RD AT MEACHAM RD
60	2967	IL 62 ALGONQUIN RD AT MEIJER DR
61		TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS (TC-10)
62		TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) (TC-14)

GENERAL NOTES:

THE CONTRACTOR SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 72 HOURS IN ADVANCE OF BEGINNING WORK.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION. THIS SHALL INCLUDE LOCATING THE MAST ARM FOUNDATIONS AND VERIFYING THE MAST ARMS LENGTHS.

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).

IF THIS CONTRACT REQUIRES THE SERVICES OF AN ELECTRICAL CONTRACTOR, THE CONTRACTOR SHALL BE RESPONSIBLE AT HIS/HER OWN EXPENSE FOR LOCATING EXISTING IDOT ELECTRICAL FACILITIES PRIOR TO PERFORMING ANY WORK. IF THIS CONTRACT DOES NOT REQUIRE THE SERVICES OF AN ELECTRICAL CONTRACTOR, THE CONTRACTOR MAY REQUEST ONE FREE LOCATE FOR EXISTING IDOT ELECTRICAL FACILITIES FROM THE DISTRICT ONE ELECTRICAL MAINTENANCE CONTRACTOR PRIOR TO THE START OF ANY WORK. ADDITIONAL REQUESTS MAY BE AT THE EXPENSE OF THE CONTRACTOR. THE LOCATION OF UNDERGROUND TRAFFIC FACILITIES DOES NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY TO REPAIR ANY FACILITIES DAMAGED DURING CONSTRUCTION AT THEIR EXPENSE.

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.

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

ANY REFERENCE TO THE STANDARDS THROUGHOUT THE PLANS OR SPECIAL PROVISIONS SHALL BE INTERPRETED AS THE TEST STANDARD OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION.

THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE PLANS AND SHALL NOTIFY THE ENGINEER AT ONCE OF ANY DISCREPANCIES.

THE CONTRACTOR IS REQUIRED TO ATTEND AN ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT) PRECONSTRUCTION MEETING AND SHALL INFORM THE IDOT TRAFFIC ENGINEER BEFORE WORK COMMENCES.

THE CONTRACTOR SHALL KEEP PUBLIC STREET PAVEMENTS CLEAN OF DIRT AND DEBRIS.

THE CONTRACTOR SHALL BE RESPONSIBLE IN PROVIDING SAFE AND HEALTHFUL CONDITIONS THROUGHOUT THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND AND SURFACE UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE RESTORED TO A CONDITION EQUAL TO THAT EXISTING BEFORE THE DAMAGE INCURRED. THIS WORK SHALL BE AT THE CONTRACTOR'S EXPENSE.

NEW CONTROLLER CABINETS SHALL BE PLACED SO THAT, a) THE DOORS OPEN AWAY FROM THE CURB OR TRAVEL WAY., b) AND THE TRAFFIC MOVEMENTS AT THE INTERSECTION ARE VISIBLE FROM THE CONTROLLER.

ANY CONTROLLER CABINET WHETHER NEW OR EXISTING TO RECEIVE UPS, WILL HAVE A "L" SHAPED 3 FOOT CONCRETE MAINTENANCE PAD INSTALLED. THE COST OF INSTALLATION OF CONCRETE PAD IS INCIDENTAL TO NEW CONTROLLER AND OR UPS INSTALLATIONS.

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 REUSABLE, THEN THE EXISTING POST SHALL REMAIN IN PLACE OR AS DIRECTED BY THE ENGINEER.

ALL EXISTING SIGNING SHALL BE MAINTAINED PER ARTICLE 107.25 OF THE STANDARD SPECIFICATIONS AND TRANSFERRED TO THE NEW TRAFFIC SIGNALS WHERE APPLICABLE.

CONTRACTOR SHALL REPLACE BROKEN MOUNTING BRACKETS AT ALL RETROFIT SIGNAL HEAD INTERSECTIONS 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 CONTRACTOR SHALL RELOCATE EXISTING SIGN PANELS FROM PAINTED POSTS THAT ARE INDICATED FOR REPLACEMENT TO A 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 TRAFFIC SIGNAL POST, GALVANIZED STEEL PAY ITEM OF THE LENGTH AS SPECIFIED ON THE PLANS.

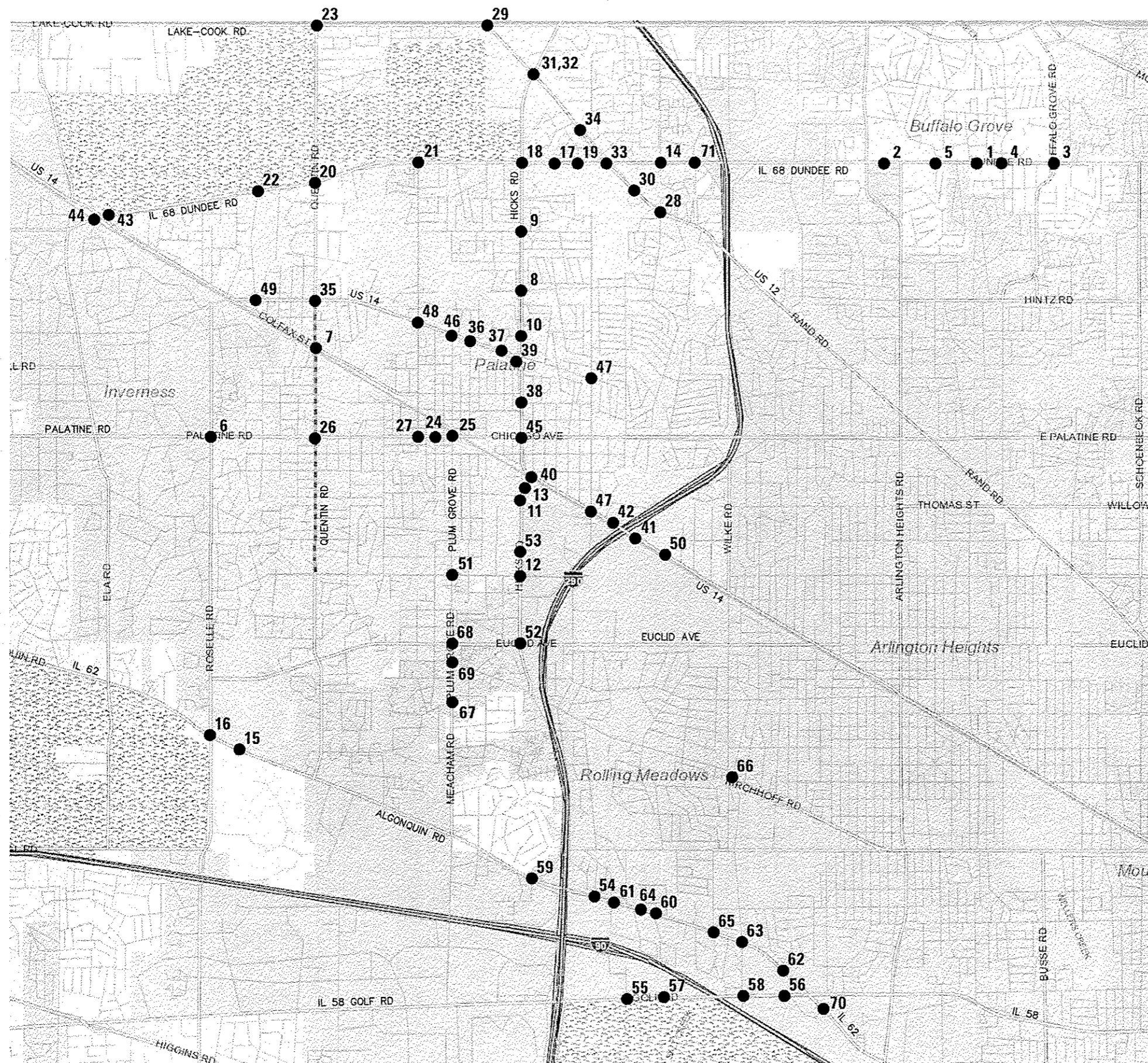
DUE TO THE PRESENCE OF A RED LIGHT RUNNING (RLR) CAMERA FOR THE BELOW LISTED LOCATIONS, CONTRACTOR SHALL NOTIFY THE VILLAGE AND RLR CAMERA COMPANY PRIOR TO THE START OF CONSTRUCTION. THE VILLAGE OR THE RLR CAMERA COMPANY SHALL MAKE THE CAMERA INOPERATIVE FOR THE TIME OF CONSTRUCTION. ANY RLR CAMERA EQUIPMENT THAT IS IN CONFLICT WITH THE PROPOSED CONSTRUCTION SHALL BE REMOVED BY ITS RESPECTIVE OWNERS PRIOR TO THE START OF CONSTRUCTION.

RLR CAMERA LOCATION:

TS# 2665 IL ROUTE 53 EAST RAMP AT IL ROUTE 62 ALGONQUIN ROAD
TS# 5300 HICKS ROAD AT EUCLID AVENUE

VILLAGE OF ROLLING MEADOWS REDSPEED ILLINOIS
3600 KIRCHOFF ROAD 400 EISENHOWER LANE NORTH
ROLLING MEADOWS, IL 60008 LOMBARD, IL 60148
847-394-8500 630-317-5720

FILE NAME *	USER NAME * JGC	DESIGNED - BPT	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INDEX OF SHEETS				 PREPARED BY: CEMCON, Ltd. Consulting Engineers, Land Surveyors & Planners 2220 White Oak Circle, Suite 100 Aurora, Illinois 60504-9875 Ph: 630.662.2100 Fax: 630.862.2199 E-Mail: codd@cemcon.com Website: www.cemcon.com	
NAME: \MICROST\352186\ 02-INDEX.DGN		DRAWN - RDS/JGC	REVISED -		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS		SHEET NO.
		CHECKED - BPT	REVISED -		VAR.	2013-006TS	COOK	62		2
		DATE - 04-26-13	REVISED -		CONTRACT NO. 60W37					
				SCALE: 1"=20'	SHEET NO.	OF	SHEETS	STA.	TO STA.	
				FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT						



#	TS#	LOCATION
1	3213	IL 68 DUNDEE RD AT BUFFALO GROVE FIRE HOUSE
2	3112	IL 68 DUNDEE RD AT BUFFALO GROVE HIGH SCHOOL
3	3110	IL 68 DUNDEE RD AT BUFFALO GROVE RD
4	3155	IL 68 DUNDEE RD AT GOLFVIEW TERRACE
5	3210	IL 68 DUNDEE RD AT WEIDNER RD/CROFTON LN
6	20480	PALATINE RD AT ROSELLE RD
7	5670	DELETED
8	5315	HICKS RD AT CARPENTER DR
9	5295	HICKS RD AT CUNNINGHAM DR
10	14730	DELETED
11	11735	HICKS RD AT HELEN RD
12	5305	HICKS RD AT ILLINOIS AVE/INDUSTRIAL AVE
13	12005	HICKS RD AT SELLSTROM DR (FKA OLD HICKS RD)
14	2685	DELETED
15	2970	IL 62 ALGONQUIN RD AT HARPER COLLEGE DR
16	2990	IL 62 ALGONQUIN RD AT ROSELLE RD
17	3122	IL 68 DUNDEE RD AT DENISE DR
18	3120	IL 68 DUNDEE RD AT HICKS RD
19	1157	IL 68 DUNDEE RD AT LYNDA DR
20	3165	IL 68 DUNDEE RD AT QUENTIN RD
21	3190	IL 68 DUNDEE RD AT SMITH RD
22	3168	IL 68 DUNDEE RD AT STERLING AVE
23	5425	LAKE-COOK RD AT QUENTIN RD
24	14720	DELETED
25	14725	DELETED
26	5610	PALATINE RD AT QUENTIN RD
27	14715	PALATINE RD AT SMITH ST
28	385	DELETED
29	410	DELETED
30	12175	DELETED
31	1150	US 12-IL 53 RAND RD AT IL 53 HICKS RD
32	1150	DELETED
33	1155	DELETED
34	1160	DELETED
35	1280	US 14 NORTHWEST HWY AT QUENTIN RD
36	1190	DELETED
37	20590	US 14 NORTHWEST HWY AT FIRST BANK DR
38	1235	DELETED
39	11985	DELETED
40	1225	US 14 NORTHWEST HWY AT HICKS RD S JCT
41	1180	US 14 NORTHWEST HWY AT IL 53 EAST RAMP
42	1185	US 14 NORTHWEST HWY AT IL 53 WEST RAMP
43	11861	DELETED
44	11862	DELETED
45	1270	DELETED
46	1315	DELETED
47	1290	DELETED
48	1300	DELETED
49	1172	US 14 NORTHWEST HWY AT STERLING AVE
50	1250	US 14 NORTHWEST HWY AT US POST OFFICE ENTRANCE
51	5660	DELETED
52	5300	HICKS RD AT EUCLID AVE
53	11730	HICKS RD AT NORTHROP GRUMMAN DR
54	2665	IL 53 EAST RAMP AT IL 62 ALGONQUIN RD
55	2860	IL 58 GOLF RD AT RING RD (3COM)
56	2817	DELETED
57	2770	IL 58 GOLF RD AT GOULD DR
58	2815	DELETED
59	2930	IL 62 ALGONQUIN RD AT ARBOR DR
60	14741	IL 62 ALGONQUIN RD AT CARRIAGE WAY/ESSEX WAY
61	2980	IL 62 ALGONQUIN RD AT MAGNOLIA DR/COMMERCE DR
62	2708	IL 62 ALGONQUIN RD AT MARKET PLACE ENTRANCE
63	2985	IL 62 ALGONQUIN RD AT NEW WILKE RD
64	21595	IL 62 ALGONQUIN RD AT NEWPORT DR
65	14744	IL 62 ALGONQUIN RD AT WEBER RD/OLD WILKE RD
66	5395	KIRCHOFF RD AT WILKE RD/NEW WILKE RD
67	5600	OLD PLUM GROVE RD AT MEACHAM RD
68	5085	DELETED
69	5665	DELETED
70	2967	IL 62 ALGONQUIN RD AT MEIJER DR
71	2660	DELETED

FILE NAME = \MICROST\352106\ 03-LOC MAP.DGN

USER NAME = JJC

DESIGNED - BPT

REVISD -

PLDT SCALE = NOT TO SCALE

DRAWN - RDS/JCC

REVISD -

PLDT DATE = X

CHECKED - BPT

REVISD -

DATE - 04-26-13

REVISD -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LOCATION MAP

SCALE: 1"= SHEET NO. OF SHEETS STA. TO STA.

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Consulting Engineers, Land Surveyors & Planners
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	62	3
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 60W37	

SUMMARY OF QUANTITIES HEADING LEGEND											
FUNDING PARTICIPATION											
LOCATION	COLUMN	TS	INTERSECTION	MUNICIPALITY	STATE	LAKE COUNTY	BUFFALO GROVE	PALATINE	ROLLING MEADOWS	U. S. POSTAL SERVICE	ATRIUM AT 3800 GOLF, LLC
1	3	3213	IL 68 DUNDEE RD AT BUFFALO GROVE FIRE HOUSE	BUFFALO GROVE	96.7%		3.3%				
2	3	3112	IL 68 DUNDEE RD AT BUFFALO GROVE HIGH SCHOOL	BUFFALO GROVE	96.7%		3.3%				
3	1	3110	IL 68 DUNDEE RD AT BUFFALO GROVE RD	BUFFALO GROVE	100.0%						
4	8	3155	IL 68 DUNDEE RD AT GOLFVIEW TERRACE	BUFFALO GROVE	95.0%		5.0%				
5	8	3210	IL 68 DUNDEE RD AT WEIDNER RD/CROFTON LN	BUFFALO GROVE	95.0%		5.0%				
6	1	20480	PALATINE RD AT ROSELLE RD	INVERNESS	100.0%						
7		5670	DELETED								
8	9	5315	HICKS RD AT CARPENTER DR	PALATINE	95.0%			5.0%			
9	9	5295	HICKS RD AT CUNNINGHAM DR	PALATINE	95.0%			5.0%			
10		14730	DELETED	PALATINE							
11	4	11735	HICKS RD AT HELEN RD	PALATINE	96.7%			3.3%			
12	10	5305	HICKS RD AT ILLINOIS AVE/INDUSTRIAL AVE	PALATINE	95.0%			2.5%	2.5%		
13	9	12005	HICKS RD AT SELLSTROM DR (FKA OLD HICKS RD)	PALATINE	95.0%			5.0%			
14		2685	DELETED								
15	9	2970	IL 62 ALGONQUIN RD AT HARPER COLLEGE DR	PALATINE	95.0%			5.0%			
16	1	2990	IL 62 ALGONQUIN RD AT ROSELLE RD	PALATINE	100.0%						
17	9	3122	IL 68 DUNDEE RD AT DENISE DR	PALATINE	95.0%			5.0%			
18	1	3120	IL 68 DUNDEE RD AT HICKS RD	PALATINE	100.0%						
19	9	1157	IL 68 DUNDEE RD AT LYNDA DR	PALATINE	95.0%			5.0%			
20	1	3165	IL 68 DUNDEE RD AT QUENTIN RD	PALATINE	100.0%						
21	9	3190	IL 68 DUNDEE RD AT SMITH RD	PALATINE	95.0%			5.0%			
22	4	3168	IL 68 DUNDEE RD AT STERLING AVE	PALATINE	96.7%			3.3%			
23	13	5425	LAKE COOK RD AT QUENTIN RD	PALATINE	97.5%	2.5%					
24		14720	DELETED								
25		14725	DELETED								
26	1	5610	PALATINE RD AT QUENTIN RD	PALATINE	100.0%						
27	4	14715	PALATINE RD AT SMITH ST	PALATINE	96.7%			3.3%			
28		385	DELETED								
29		410	DELETED								
30		12175	DELETED								
31	1	1150	US 12-IL 53 RAND RD AT IL 53 HICKS RD	PALATINE	100.0%						
32		1150	DELETED								
33		1155	DELETED								
34		1160	DELETED								
35	1	1280	US 14 NORTHWEST HWY AT QUENTIN RD	PALATINE	100.0%						
36		1190	DELETED								
37	9	20590	US 14 NORTHWEST HWY AT FIRST BANK DR	PALATINE	95.0%			5.0%			
38		1235	DELETED								
39		11985	DELETED								
40	2	1225	US 14 NORTHWEST HWY AT HICKS RD S JCT	PALATINE	97.5%			2.5%			
41	1	1180	US 14 NORTHWEST HWY AT IL 53 EAST RAMP	PALATINE	100.0%						
42	1	1185	US 14 NORTHWEST HWY AT IL 53 WEST RAMP	PALATINE	100.0%						
43		11861	DELETED								
44		11862	DELETED								
45		1270	DELETED								
46		1315	DELETED								
47		1290	DELETED								
48		1300	DELETED								
49	9	1172	US 14 NORTHWEST HWY AT STERLING AVE	PALATINE	95.0%			5.0%			
50	6	1250	US 14 NORTHWEST HWY AT US POST OFFICE ENTRANCE	PALATINE	96.7%					3.3%	
51		5660	DELETED								
52	1	5300	HICKS RD AT EUCLID AVE	ROLLING MEADOWS	100.0%						
53	5	11730	HICKS RD AT NORTHROP GRUMMAN DR	ROLLING MEADOWS	96.7%				3.3%		
54	1	2665	IL 53 EAST RAMP AT IL 62 ALGONQUIN RD	ROLLING MEADOWS	100.0%						
55	7	2860	IL 58 GOLF RD AT RING RD (3COM)	ROLLING MEADOWS	96.7%						3.3%
56		2817	DELETED								
57	11	2770	IL 58 GOLF RD AT GOULD DR	ROLLING MEADOWS	95.0%				5.0%		
58		2815	DELETED								

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FILE NAME *	USER NAME * JGC	DESIGNED - BPT	REVISED -
\\MICROST\352106\04-SUMMARY.DGN		DRAWN - RDS/JGC	REVISED -
		CHECKED - BPT	REVISED -
		DATE - 04-26-13	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES (SHEET 1 OF 5)			
SCALE: 1"=20'	SHEET NO. OF SHEETS	STA.	TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	26	4
CONTRACT NO. 60W37				
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT				

SUMMARY OF QUANTITIES HEADING LEGEND											
FUNDING PARTICIPATION											
LOCATION #	COLUMN #	TS #	INTERSECTION	MUNICIPALITY	STATE	LAKE COUNTY	BUFFALO GROVE	PALATINE	ROLLING MEADOWS	U. S. POSTAL SERVICE	ATRIUM AT 3800 GOLF, LLC
59	11	2930	IL 62 ALGONQUIN RD AT ARBOR DR	ROLLING MEADOWS	95.0%				5.0%		
60	11	14741	IL 62 ALGONQUIN RD AT CARRIAGE WAY/ESSEX WAY	ROLLING MEADOWS	95.0%				5.0%		
61	11	2980	IL 62 ALGONQUIN RD AT MAGNOLIA DR/COMMERCE DR	ROLLING MEADOWS	95.0%				5.0%		
62	11	2708	IL 62 ALGONQUIN RD AT MARKET PLACE ENTRANCE	ROLLING MEADOWS	95.0%				5.0%		
63	11	2985	IL 62 ALGONQUIN RD AT NEW WILKE RD	ROLLING MEADOWS	95.0%				5.0%		
64	5	21595	IL 62 ALGONQUIN RD AT NEWPORT DR	ROLLING MEADOWS	96.7%				3.3%		
65	5	14744	IL 62 ALGONQUIN RD AT WEBER RD/OLD WILKE RD	ROLLING MEADOWS	96.7%				3.3%		
66	12	5395	KIRCHOFF RD AT WILKE RD/NEW WILKE RD	ROLLING MEADOWS	92.5%				7.5%		
67	5	5600	OLD PLUM GROVE RD AT MEACHAM RD	ROLLING MEADOWS	96.7%				3.3%		
68		5085	DELETED								
69		5665	DELETED								
70	11	2967	IL 62 ALGONQUIN RD AT MEIJER DR	ROLLING MEADOWS	95.0%				5.0%		
71		2660	DELETED								

FILE NAME *
 \MICROST\352186\ 05-SUMMARY.DGN

USER NAME * JGC	DESIGNED - BPT	REVISED -
	DRAWN - RDS/JGC	REVISED -
PLOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -
PLOT DATE * X	DATE - 04-26-13	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES
 (SHEET 2 OF 5)**

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



PREPARED BY:
CEMCON, Ltd.
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 Aurora, Illinois 60504-9675
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	62	5
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 60W37	

07ADV, 01
07C0V, 01
07C0V, 02
07C0V, 03
07C0V, 04
07C0V, 01
07C0V, 02
07C0V, 05
07C0V, 06
07C0V, 07
07C0V, 08
07C0V, 09
07C0V, 10
07C0V, 11

CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE 0021																				
				TRAFFIC SIGNAL																				
				URBAN																				
1	2	3	4	5	6	7	8	9	10	11	12	13												
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	45	12	1	2	3	4	1	1	2	9	1	7	1	1								
86400100	TRANSCEIVER - FIBER OPTIC	EACH	5				2	1	1					1										
87502480	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	7				3							4										
87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	9	3			1					3	2											
87502520	TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.	EACH	1				1																	
88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	11	2			8							1										
88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	19				12					2	5											
88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	6	4			2																	
88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	13	4			2					4	3											
88030210	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	5				2						3											
88030240	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	6									4	2											

FILE NAME *
MICROSTV352106V 06-SUMMARY.DGN

USER NAME * JGC
DESIGNED - BPT
DRAWN - RDS/JGC
CHECKED - BPT
DATE - 04-26-13

REVISIONS
REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
(SHEET 3 OF 5)

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

PREPARED BY:
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	62	6
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60W37	

CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY	1	2	3	4	5	6	7	8	9	10	11	12	13
				CONSTRUCTION CODE 0021												
				TRAFFIC SIGNAL												
				URBAN												
88030310	SIGNAL HEAD, LED, 3-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1												1	
88030330	SIGNAL HEAD, LED, 3-FACE, 2-3 SECTION, 1-5 SECTION BRACKET MOUNTED	EACH	1												1	
88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	62	11		2	6	4	2			24		10	3	
88102747	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	13	4		2		2	1			3		1		
88102757	PEDESTRIAN SIGNAL HEAD, LED, 3-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2	1											1	
88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	36	18				10					4	4		
88500100	INDUCTIVE LOOP DETECTOR	EACH	29					8	5	8					8	
88800100	PEDESTRIAN PUSH-BUTTON	EACH	44				6					22		16		
89502210	MODIFY EXISTING CONTROLLER CABINET	EACH	40	12	1	2	3	2			2	9	1	6	1	1
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	27	4		1	1	4	1	1	1	6	1	6	1	
X8570226	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	5					2	1	1					1	
X8620200	UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	45	12	1	2	3	4	1	1	2	9	1	7	1	1
X8880015	PEDESTRIAN PUSH-BUTTON, NON-LATCHING	EACH	46	17		4		6	3		4	5		3	4	
X8803038	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-4 SECTION, BRACKET MOUNTED, RETROFIT	EACH	1									1				

FILE NAME * MICROST\252186\ 07-SUMMARY.DGN	USER NAME * JGC	DESIGNED - BPT	REVISED -
		DRAWN - RDS/JGC	REVISED -
PLOT SCALE * NOT TO SCALE		CHECKED - BPT	REVISED -
PLOT DATE * X		DATE - 04-26-13	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES
(SHEET 4 OF 5)**

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

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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-0067S	COOK	62	7
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 60W37	

CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY	1	2	3	4	5	6	7	8	9	10	11	12	13
				CONSTRUCTION CODE 0021												
				TRAFFIC SIGNAL												
				URBAN												
X8803040	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED, RETROFIT	EACH	7	2					1			3		1		
X8803042	SIGNAL HEAD, LED, 2-FACE, 1-4 SECTION, 1-5 SECTION, BRACKET MOUNTED, RETROFIT	EACH	1									1				
X8803050	SIGNAL HEAD, LED, 3-FACE, 1-3 SECTION, 2-5 SECTION, BRACKET MOUNTED, RETROFIT	EACH	2	2												
X8803082	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	16			5		1	1			5		4		
X8803084	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	67	16		7		3	3			28		10		
X8803088	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	24	4		3		1	1			9		6		
X8803090	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	3									3				
X8803120	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	2									2				
X8803210	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	26	6		3		1	2			9		5		
X8803910	SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED RETROFIT	EACH	2									1		1		
0070604	TRAINEES-TRAINING PROGRAM GRADUATE	HOOR	500	500												

FILE NAME *
MICROST\252106\00-SUMMARY.DGN

USER NAME * JGC
DESIGNED - BPT
DRAWN - RDS/JGC
PLOT SCALE * NOT TO SCALE
CHECKED - BPT
PLOT DATE * X
DATE - 04-26-13

REVISIONS
REVISED -
REVISED -
REVISED -
REVISED -

0042

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
(SHEET 5 OF 5)

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

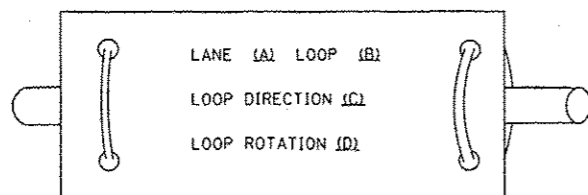
PREPARED BY:
CEMCON, Ltd.
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Aurora, Illinois 60504-9675
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	62	8
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 60W37	

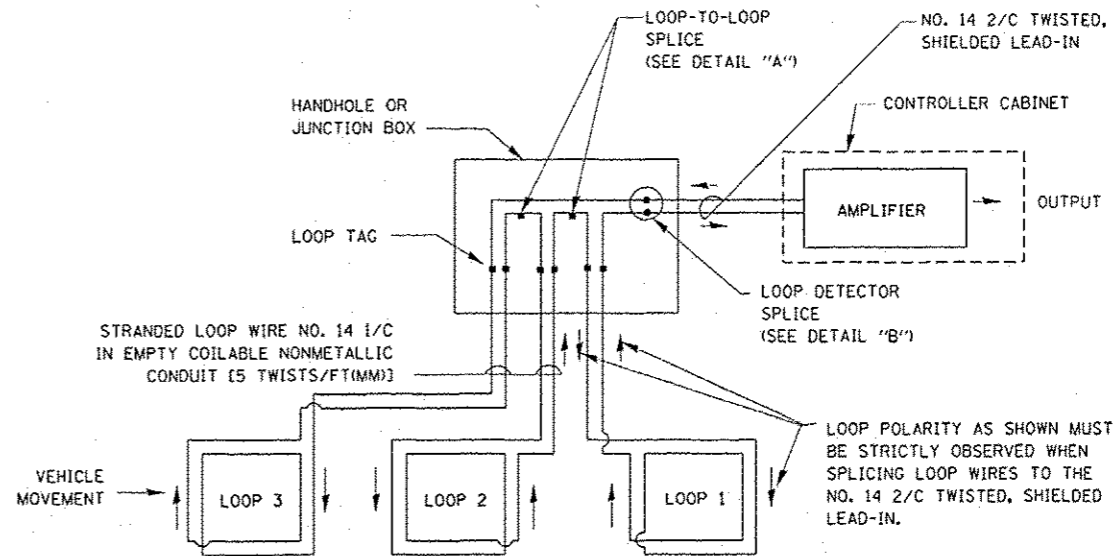
LOOP DETECTOR NOTES

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 DIVESHOLES 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.

LOOP LEAD-IN CABLE TAG

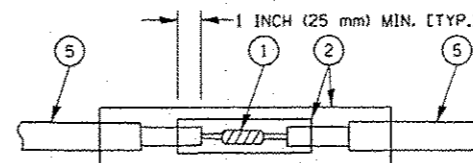


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

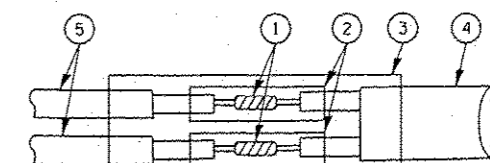


DETECTOR LOOP WIRING SCHEMATIC

- 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.

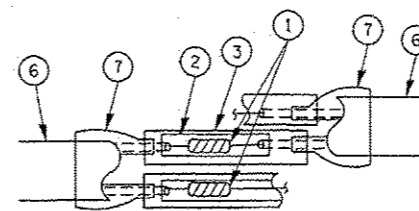


**DETAIL "A"
LOOP-TO-LOOP SPLICE**

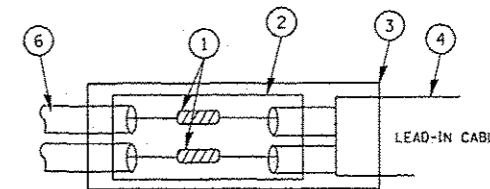


**DETAIL "B"
LOOP-TO-CONTROLLER SPLICE**

TYPE I LOOP



**DETAIL "A"
LOOP-TO-LOOP SPLICE**



**DETAIL "B"
LOOP-TO-CONTROLLER SPLICE**

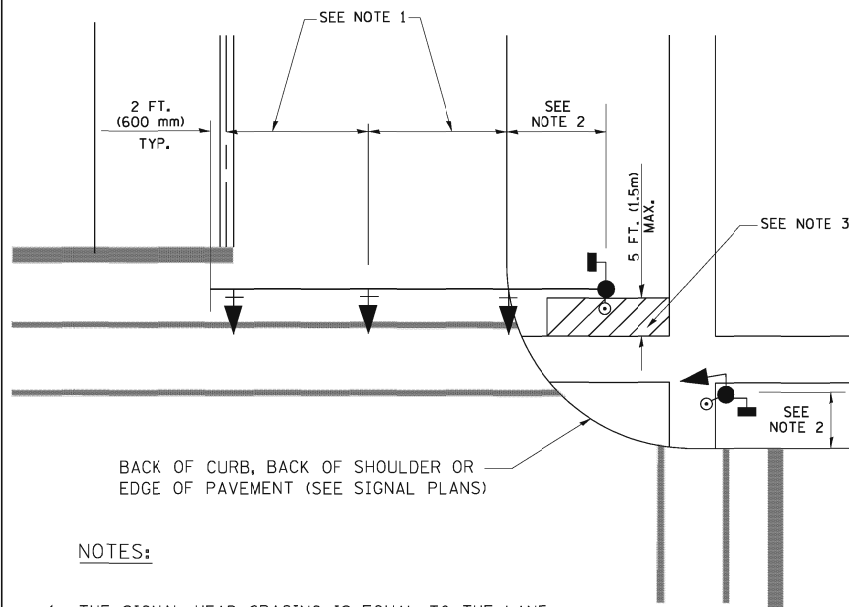
LOOP DETECTOR SPLICE

- 1 WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH.
- 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 = kanthapxaybc	DESIGNED - DAD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
o:\pwork\p\1007\KANTHAPXAYBC\d01126	4\tr of fio. lagnd.v7.dgn	DRAWN - BCK	REVISED -			VAR.	2013-006TS	COOK	62	9
	PLOT SCALE = 20,0000 / IN.	CHECKED - DAD	REVISED -			CONTRACT NO. 60W37				
	PLOT DATE = 10/07/2009	DATE - 10/28/09	REVISED -			SCALE:	SHEET NO. 1 OF 6 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.

TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

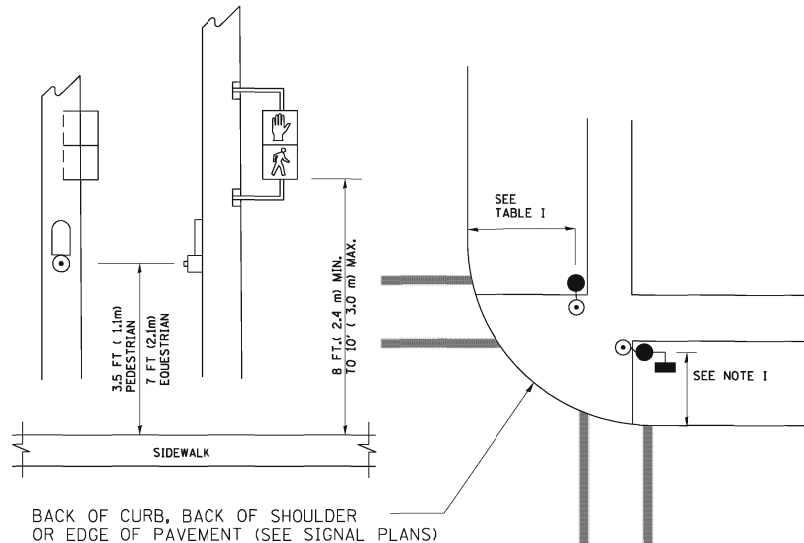
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



NOTES:

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

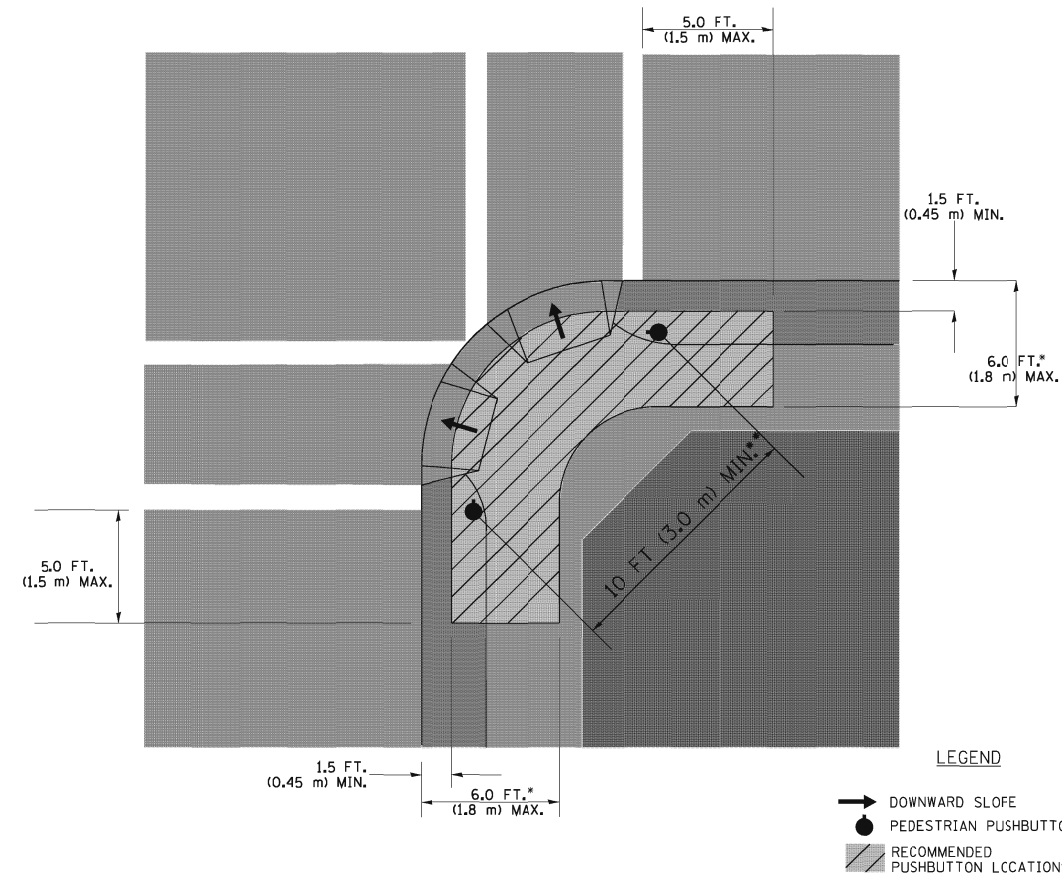
PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST



NOTES:

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

RECOMMENDED PUSHBUTTON LOCATIONS



LEGEND

- DOWNWARD SLOPE
- PEDESTRIAN PUSHBUTTON
- ▨ RECOMMENDED PUSHBUTTON LOCATIONS

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

NOTES:

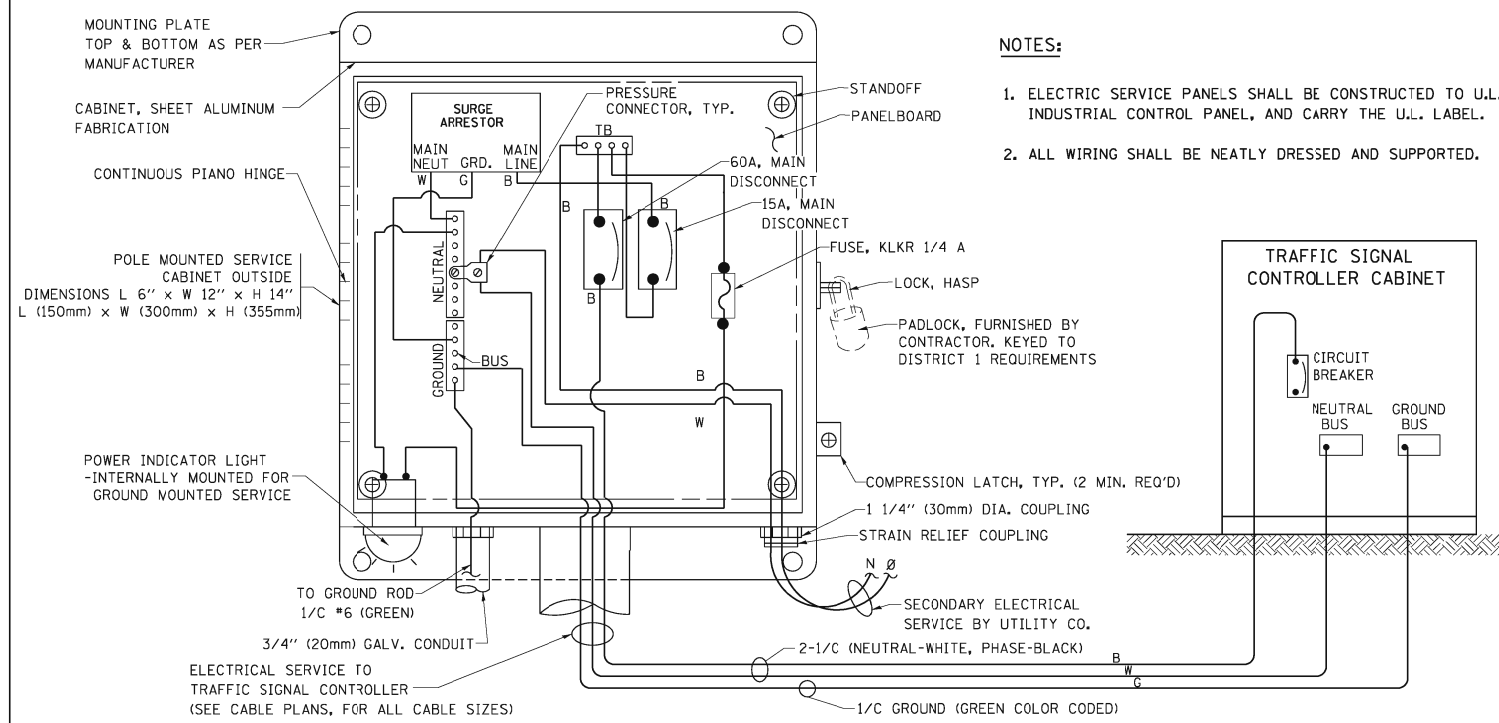
1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM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

TRAFFIC SIGNAL EQUIPMENT OFFSET

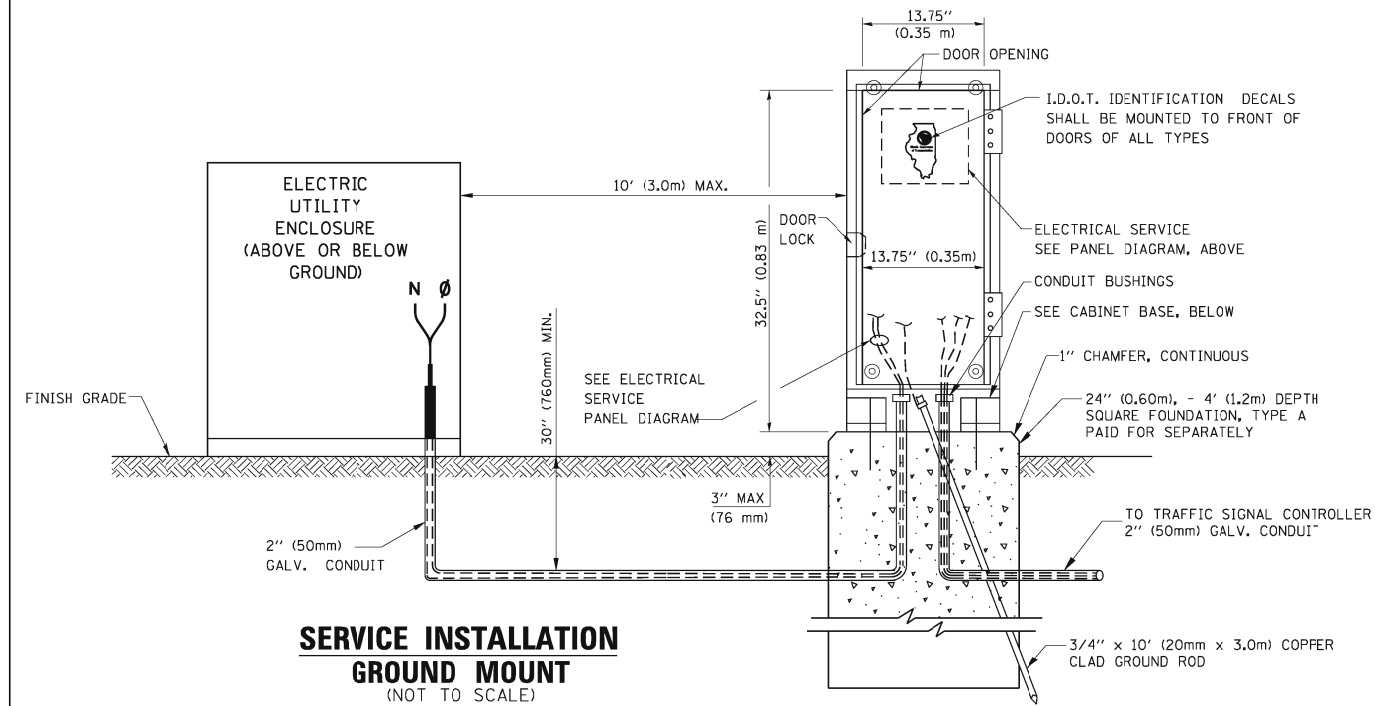
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10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

NOTES:

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

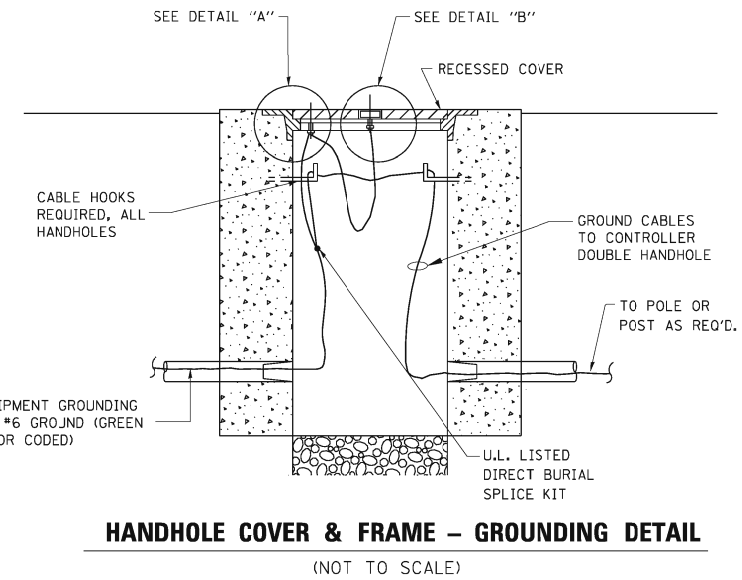
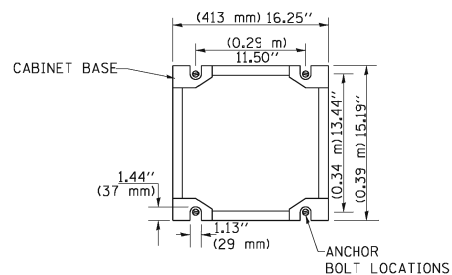


**ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)
SERVICE INSTALLATION POLE MOUNT (SHOWN)**
(NOT TO SCALE)

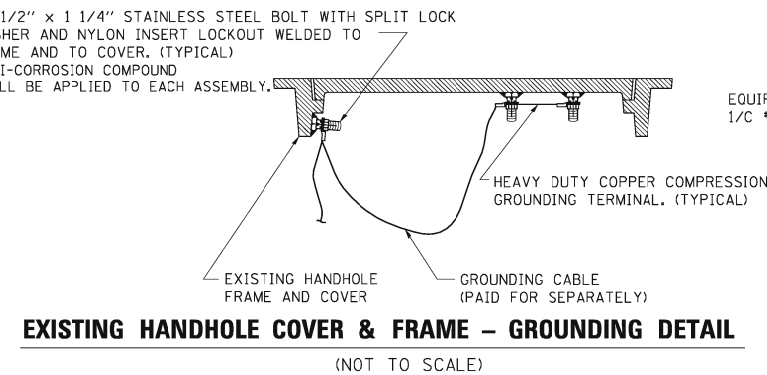


**SERVICE INSTALLATION
GROUND MOUNT**
(NOT TO SCALE)

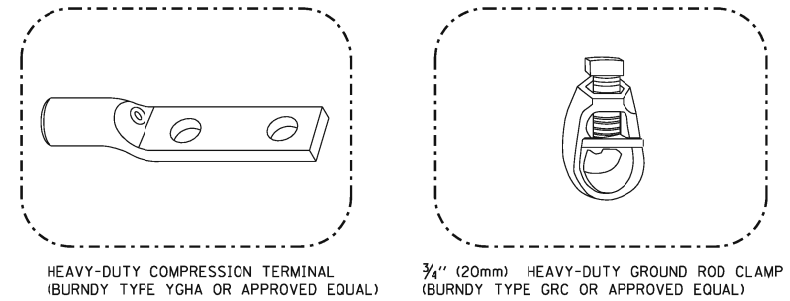
CABINET - BASE BOLT PATTERN
(NOT TO SCALE)



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

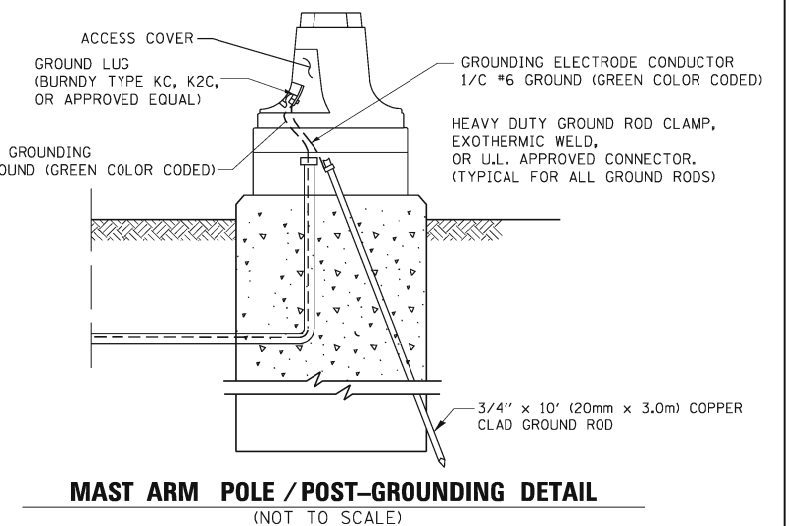


EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL
(NOT TO SCALE)



HEAVY-DUTY COMPRESSION TERMINAL (BURNDY TYPE YGHA OR APPROVED EQUAL)
3/4" (20mm) HEAVY-DUTY GROUND ROD CLAMP (BURNDY TYPE GRC OR APPROVED EQUAL)

- 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.



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

NOTES:

GROUNDING SYSTEM

- 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.
- 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.
- ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
- THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.

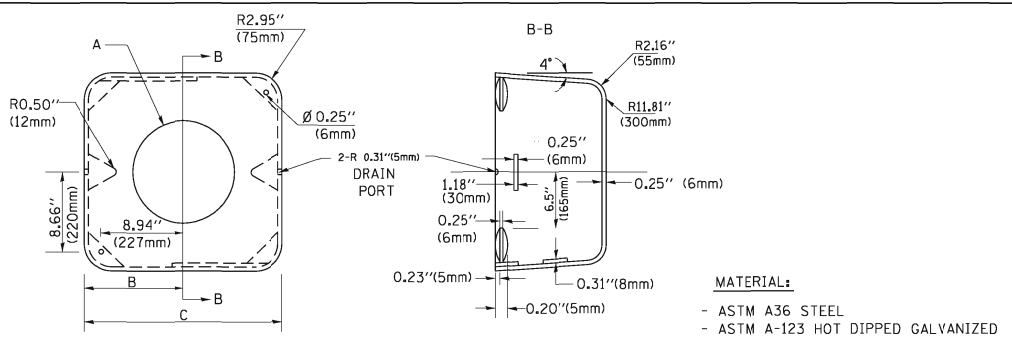
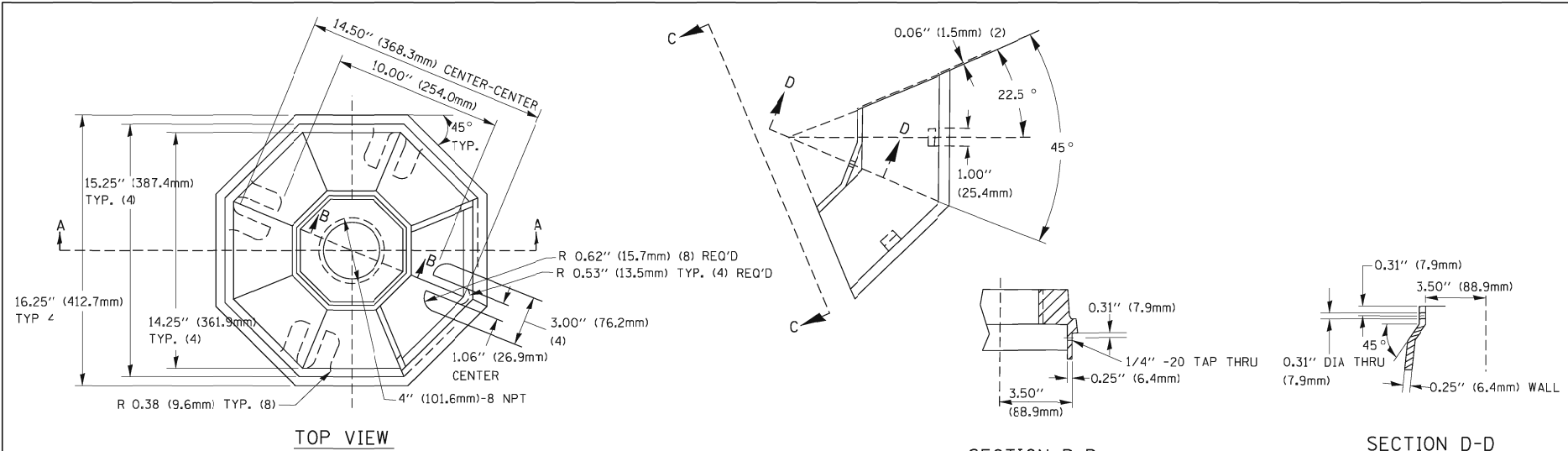
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		CHECKED - DAD	REVISED -
		DATE - 10/28/09	REVISED -
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PLOT DATE = 10/6/2009			

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT 1
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

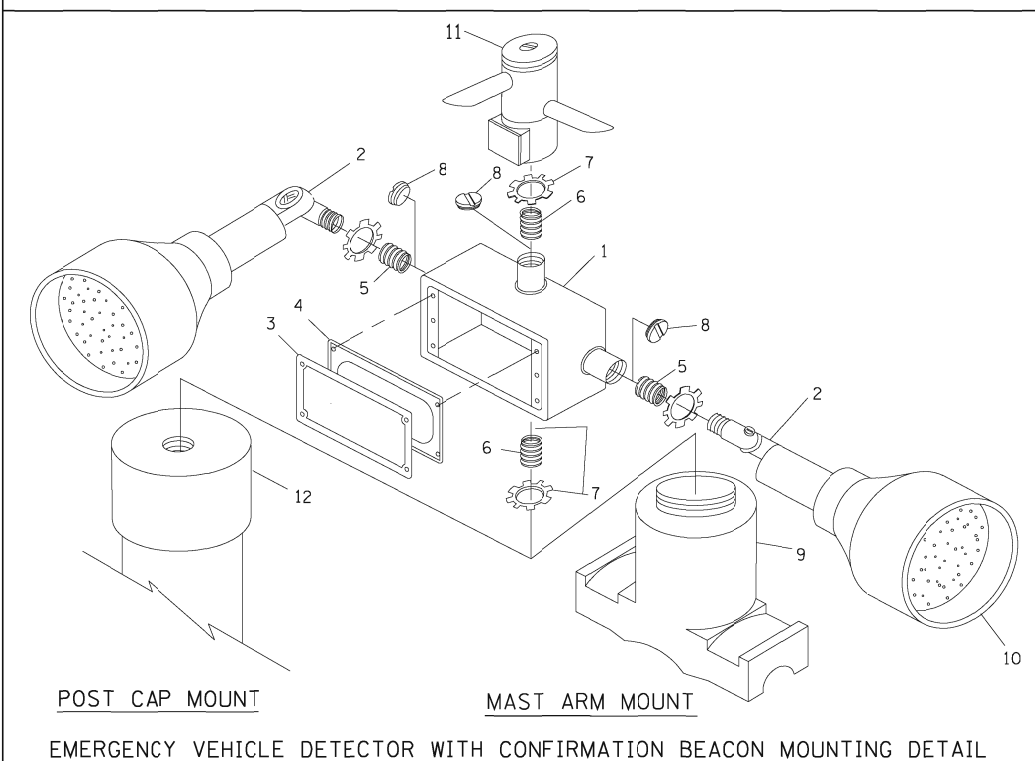
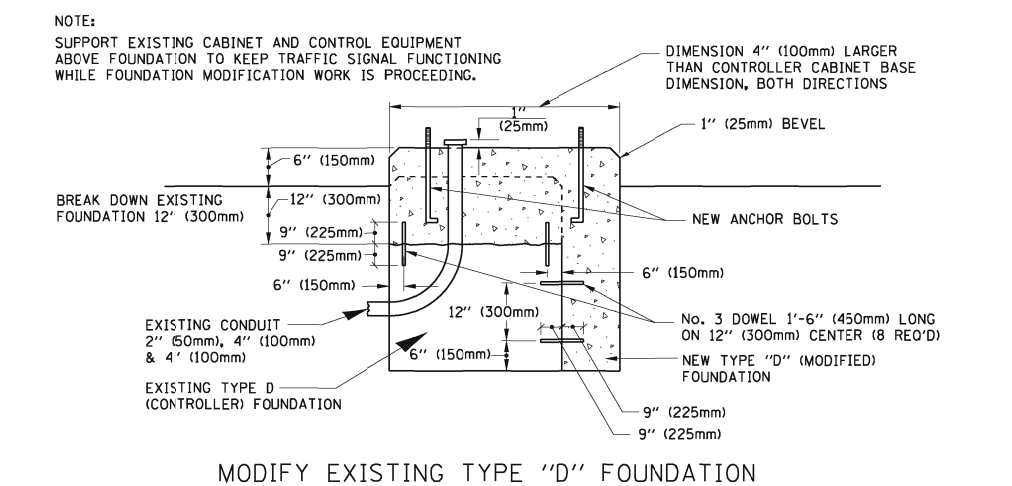
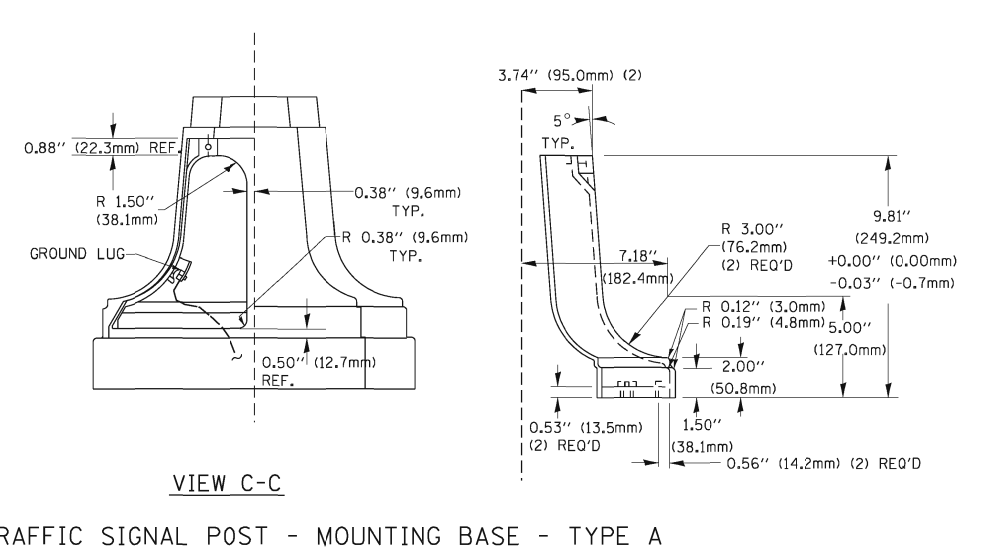
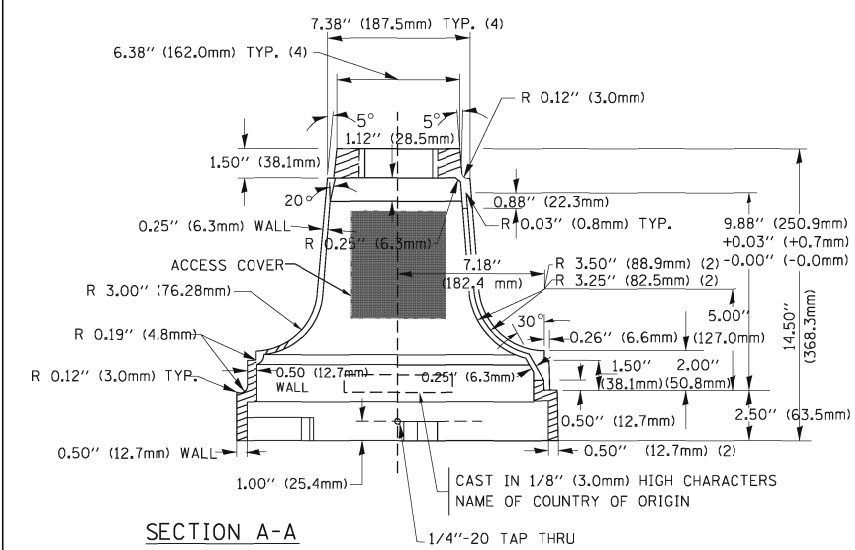
SCALE: SHEET NO. 3 OF 6 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	62	11
CONTRACT NO. 60W37				
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			



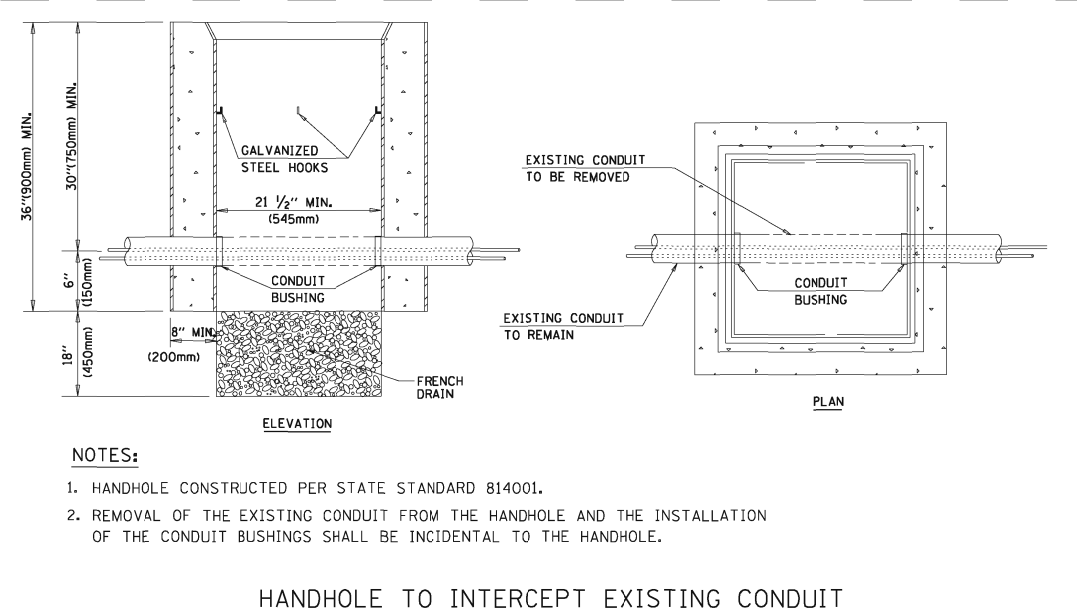
A	B	C	HEIGHT	WEIGHT
VARIABLES	9.5\" (241mm)	19\" (483mm)	7\" (178mm) - 12\" (300mm)	53 lbs (24kg)
VARIABLES	10.75\" (273mm)	21.5\" (546mm)	7\" (178mm) - 12\" (300mm)	68 lbs (31 kg)
VARIABLES	13.0\" (330mm)	26\" (660mm)	7\" (178mm) - 12\" (300mm)	81 lbs (37 kg)
VARIABLES	18.5\" (470mm)	37\" (940mm)	7\"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

- NOTES:**
- 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.
 - THE SUPPLIER SHALL VERIFY THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
 - THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.

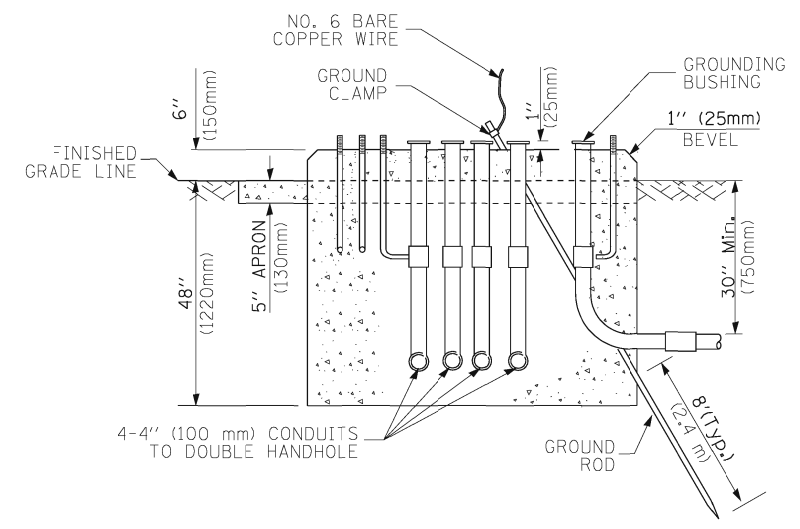
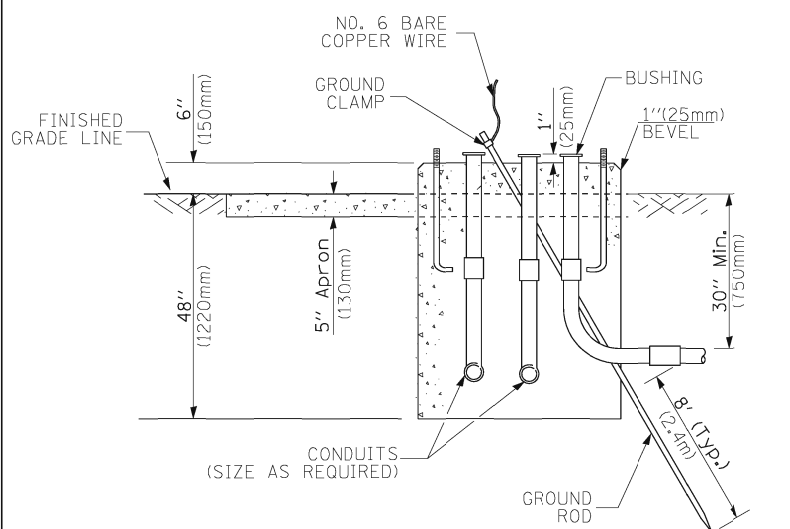
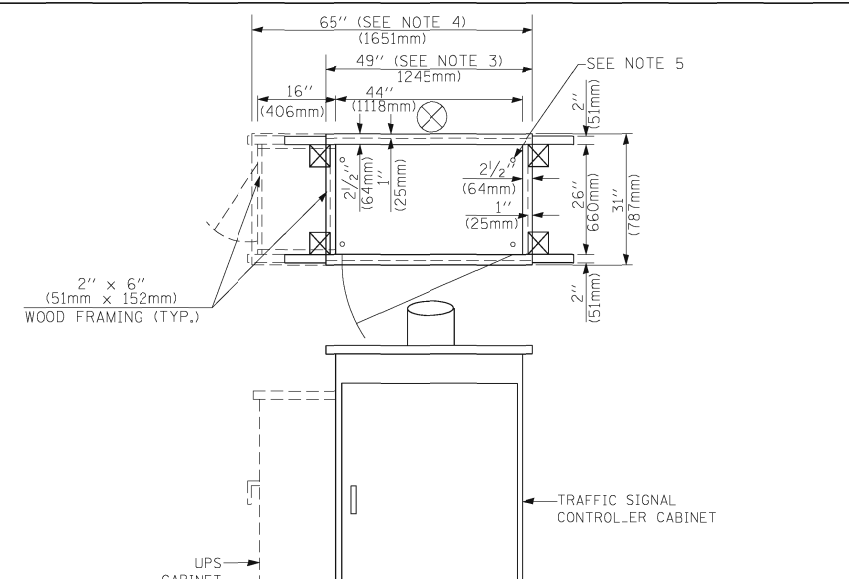
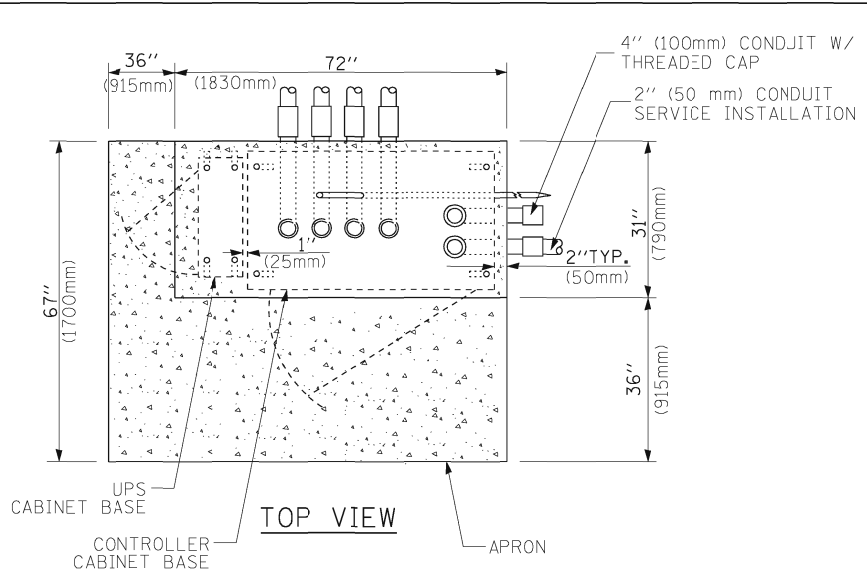
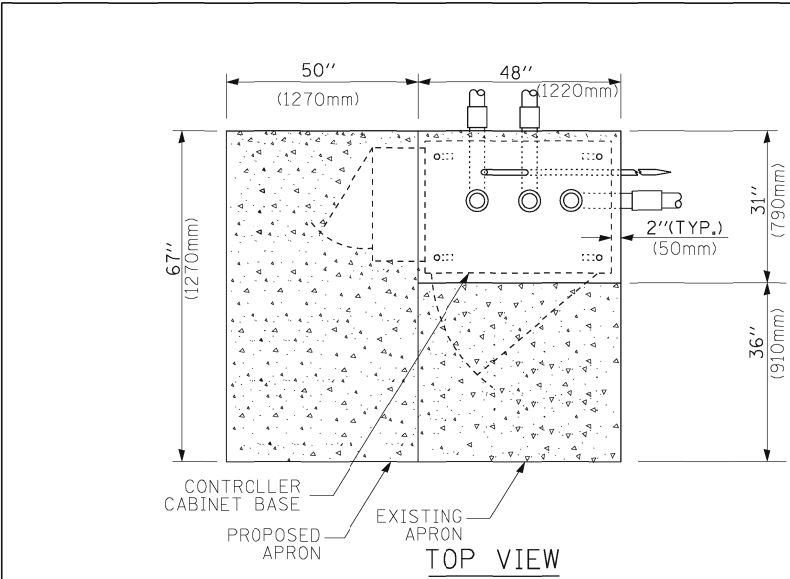


ITEM NO.	IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU.IN. (0.000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4\" (19 mm) CLOSE NIPPLE
7	3/4\" (19 mm) LOCKNUT
8	3/4\" (19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR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

- NOTES:**
- ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
 - ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT
ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT
ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
 - 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.



- NOTES:**
- HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
 - REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCIDENTAL TO THE HANDHOLE.



- 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.

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

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

**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)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	11'-0" (3.4 m)	36" (900mm)	24" (600mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 55' (16.8 m) and less than 65' (19.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

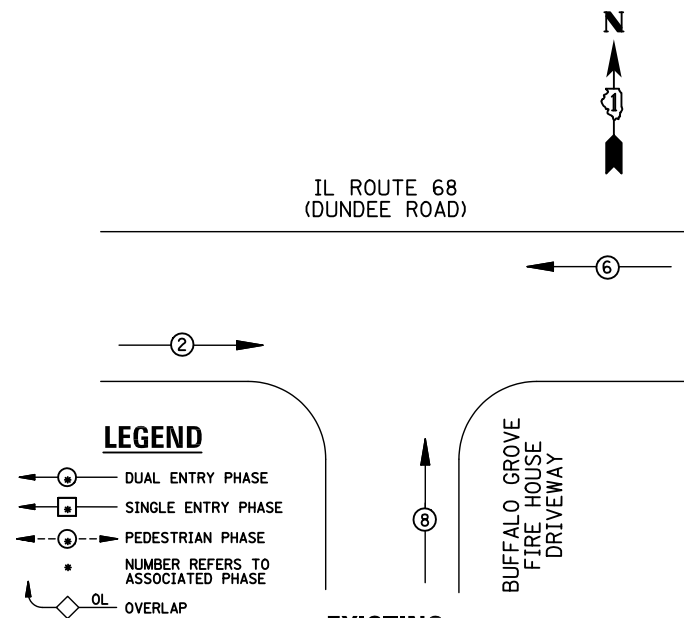
- NOTES:**
1. These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average Unconfined Compressive Strength (Qu) > 1.0 tsf (100 kpa). This strength shall be verified by boring data prior to construction or with testing by 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

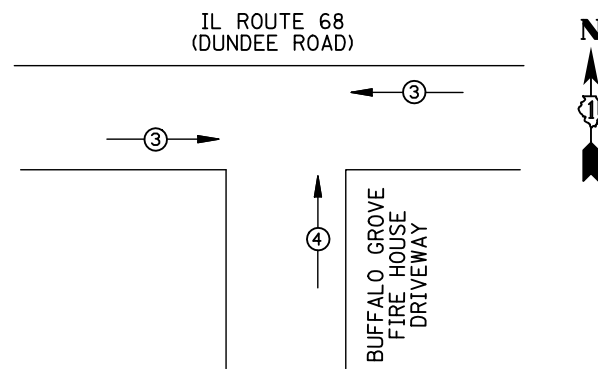
TRAFFIC SIGNAL LEGEND

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															
UNINTERRUPTIBLE POWER SUPPLY				JUNCTION BOX				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM12F															
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT				GALVANIZED STEEL CONDUIT IN TRENCH (T) OR PUSHED (P)				FIBER OPTIC CABLE NO. 62.5/125, MM12F															
TELEPHONE CONNECTION (P) POLE OR (G) GROUND MOUNT				TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE				FIBER OPTIC CABLE NO. 62.5/125, MM12F															
STEEL MAST ARM ASSEMBLY AND POLE				COMMON TRENCH				FIBER OPTIC CABLE NO. 62.5/125, (NUMBER OF FIBERS & TYPE TO BE NOTED ON PLANS)															
ALUMINUM MAST ARM ASSEMBLY AND POLE				COILABLE NONMETALLIC CONDUIT (EMPTY)				GROUND ROD AT (C) CONTROLLER, (H) HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE															
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE				SYSTEM ITEM				CONTROLLER CABINET AND FOUNDATION TO BE REMOVED															
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH PTZ CAMERA				INTERSECTION ITEM				STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED															
SIGNAL POST				REMOVE ITEM				ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED															
TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM				RELOCATE ITEM				STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE AND FOUNDATION TO BE REMOVED															
GUY WIRE				ABANDON ITEM				SIGNAL POST AND FOUNDATION TO BE REMOVED															
SIGNAL HEAD				12" (300mm) TRAFFIC SIGNAL SECTION				INTERSECTION & SAMPLING (SYSTEM) DETECTOR															
SIGNAL HEAD CONSTRUCTION STAGES (NUMBERS INDICATE THE CONSTRUCTION STAGE)				12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE				SAMPLING (SYSTEM) DETECTOR															
SIGNAL HEAD WITH BACKPLATE				SIGNAL FACE				EXISTING INTERSECTION LOOP DETECTOR															
SIGNAL HEAD OPTICALLY PROGRAMMED				SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD				PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR															
FLASHER INSTALLATION (S DENOTES SOLAR POWER)				12" (300mm) PEDESTRIAN SIGNAL HEAD WALK/DON'T WALK SYMBOL				EXISTING PREFORMED INTERSECTION LOOP DETECTOR															
PEDESTRIAN SIGNAL HEAD				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMEOL, OUTLINED				PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR															
PEDESTRIAN PUSHBUTTON DETECTOR				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMEOL, SOLID				PREFORMED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR															
ACCESSIBLE PEDESTRIAN PUSHBUTTON DETECTOR				PEDESTRIAN SIGNAL HEAD, INTERNATIONAL SYMBOL, WITH COUNTDOWN TIMER				PREFORMED SAMPLING (SYSTEM) DETECTOR															
ILLUMINATED SIGN "NO LEFT TURN"				RADIO INTERCONNECT				<h2 style="margin: 0;">RAILROAD SYMBOLS</h2> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">EXISTING</th> <th style="width: 50%;">PROPOSED</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> </tbody> </table>				EXISTING	PROPOSED										
EXISTING	PROPOSED																						
ILLUMINATED SIGN "NO RIGHT TURN"				RADIO REPEATER																			
DETECTOR LOOP, TYPE I				DENOTES NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE, ALL DETECTOR LOOP CABLE TO BE SHIELDED																			
PREFORMED DETECTOR LOOP				GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)																			
MICROWAVE VEHICLE SENSOR																							
VIDEO DETECTION CAMERA																							
VIDEO DETECTION ZONE																							
PAN, TILT, ZOOM CAMERA																							
WIRELESS DETECTOR SENSOR																							
WIRELESS ACCESS POINT																							

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



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

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		%OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	8	135	17	0.50	68
(YELLOW)	8	135	25	0.25	50
(GREEN)	8	135	15	0.25	30
ARROW		135	12	0.10	
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 248
ENERGY SUPPLY	CONTACT: X				
	PHONE: X				
	COMPANY: X				
FILE NAME =	USER NAME = JGC	DESIGNED - BPT	REVISED -		
\\MICROST\352106\01-3213.DGN		DRAWN - JGC/RDS	REVISED -		
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	PLOT DATE = X	DATE - 04-26-13	REVISED -		

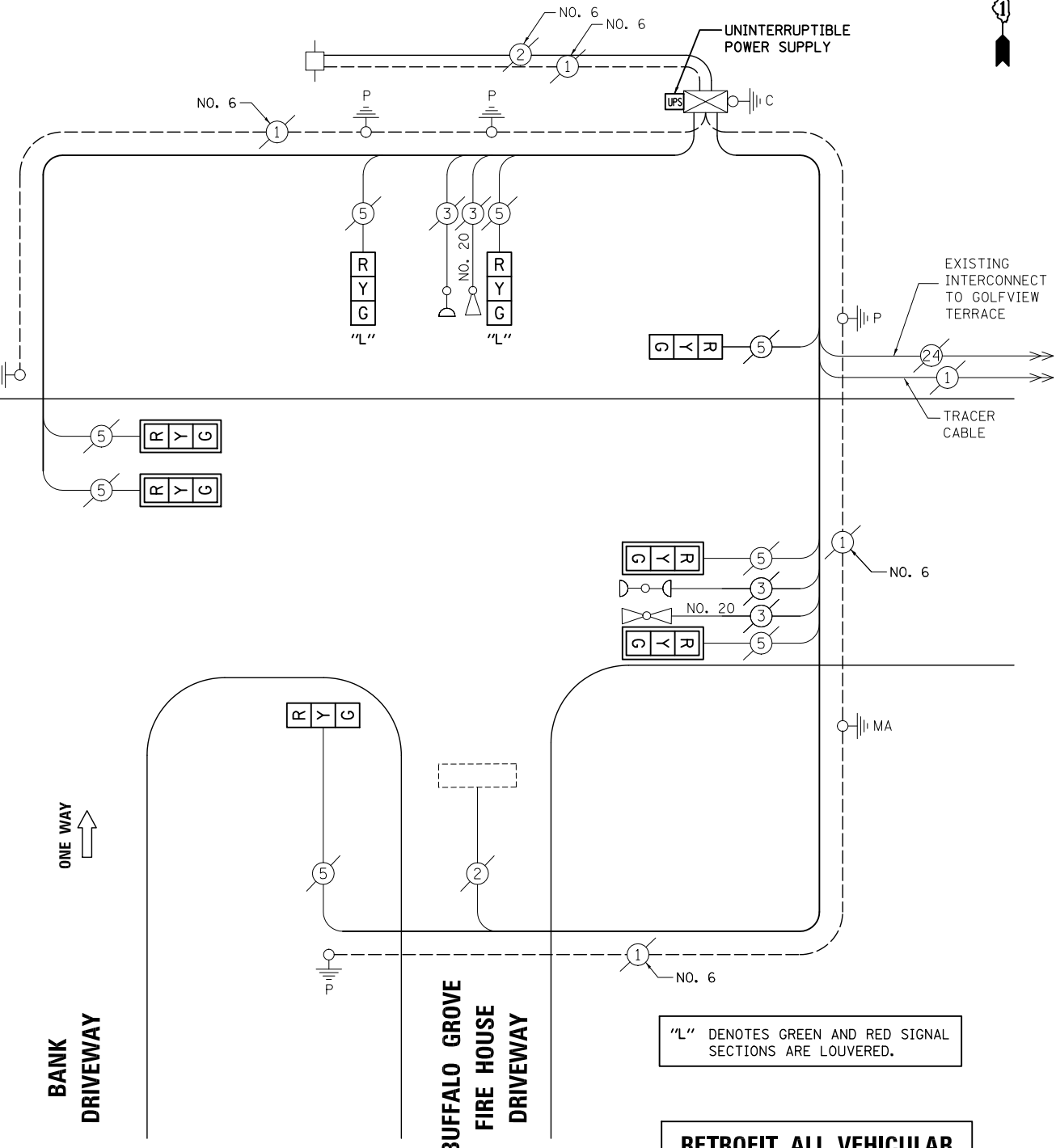
SCHEDULE OF QUANTITIES

ITEM	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	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	4

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SCHEDULE OF QUANTITIES, CABLE PLAN,
PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
IL ROUTE 68 (DUNDEE ROAD) AT BUFFALO GROVE FIRE HOUSE**

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.



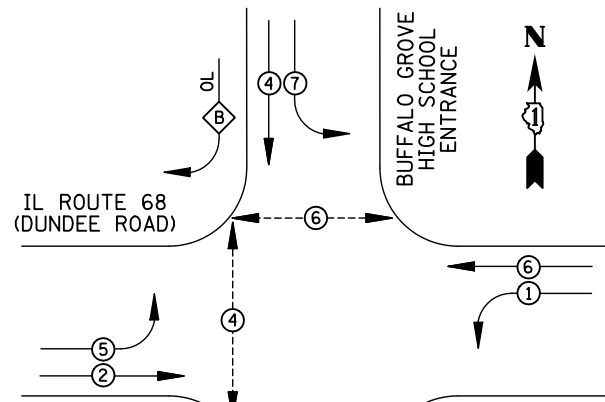
NOTE:
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	62	15
				CONTRACT NO. 60W37
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

TS# 3213
BUFFALO GROVE

EXISTING CONTROLLER SEQUENCE



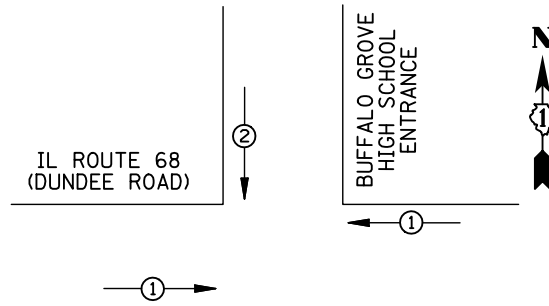
LEGEND

- ⊙ DUAL ENTRY PHASE
- ⊠ SINGLE ENTRY PHASE
- ⊖ PEDESTRIAN PHASE
- NUMBER REFERS TO ASSOCIATED PHASE
- ◇ OL OVERLAP

RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
B	= 4	+ 5

EXISTING PHASE DESIGNATION DIAGRAM



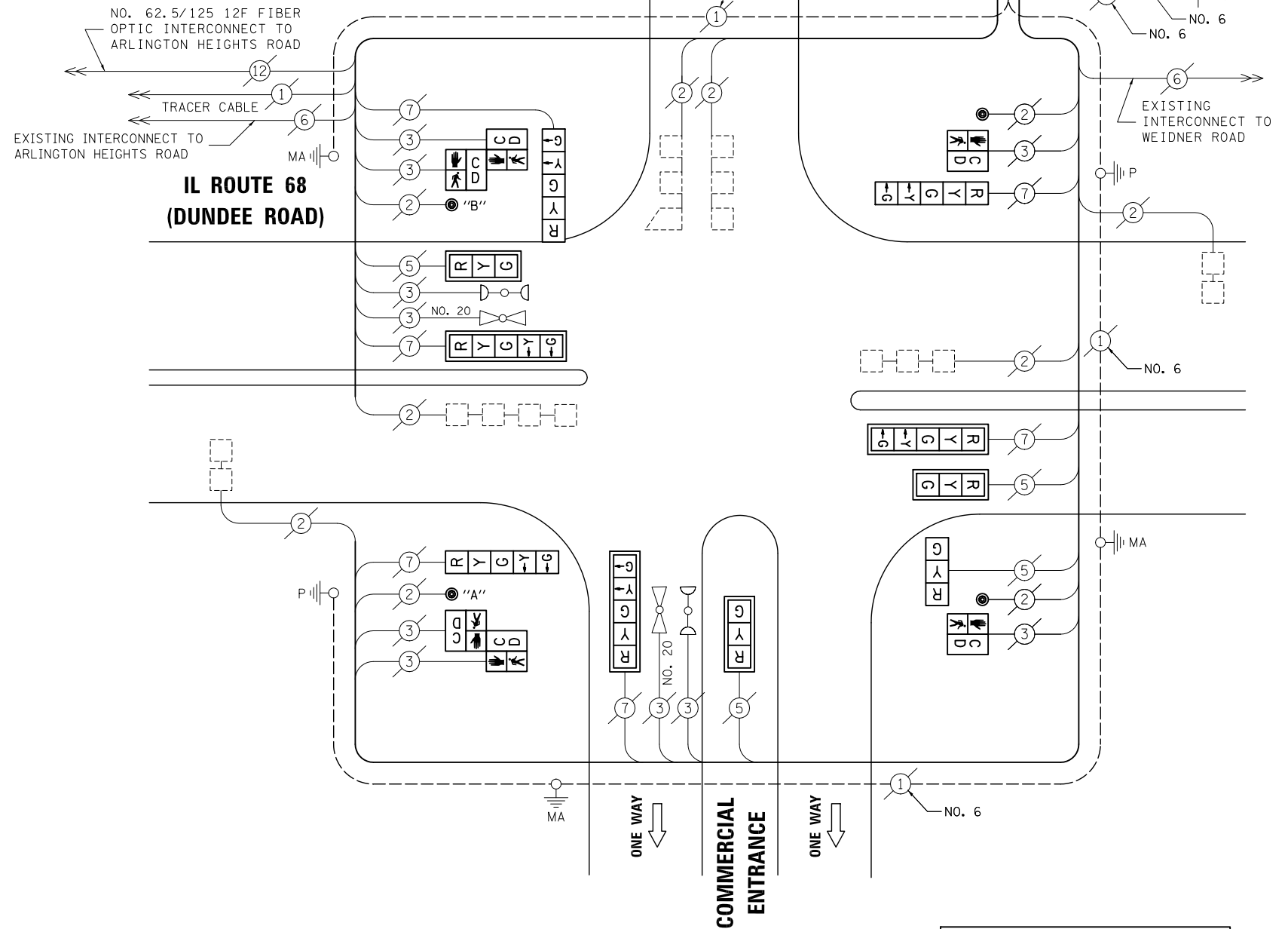
EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	1	2
MOVEMENT	↔	↓

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

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 PUSH-BUTTON



CABLE PLAN

NOTE:

PUSH-BUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4.
PUSH-BUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6.

NOTE:

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

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

SCHEDULE OF QUANTITIES

ITEM

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

UNIT QUANTITY

- EACH 1
- EACH 2
- EACH 2
- EACH 1
- EACH 1
- EACH 1
- EACH 4
- EACH 1
- EACH 3
- EACH 3
- EACH 3

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	10	135	17	0.50	85
(YELLOW)	10	135	25	0.25	62.5
(GREEN)	10	135	15	0.25	37.5
ARROW	12	135	12	0.10	14.4
PED. SIGNAL	6	90	25	1.00	150
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 449.4
ENERGY SUPPLY CONTACT: X					
PHONE: X					
COMPANY: X					
FILE NAME = \MICROST\352106\ 02-3112.DGN	USER NAME = JGC				DESIGNED - BPT
	PLOT SCALE = NOT TO SCALE				DRAWN - JGC/RDS
	PLOT DATE = X				CHECKED - BPT
					DATE - 04-26-13
					REVISED -
					REVISED -
					REVISED -
					REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION IL ROUTE 68 (DUNDEE ROAD) AT BUFFALO GROVE HIGH SCHOOL

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

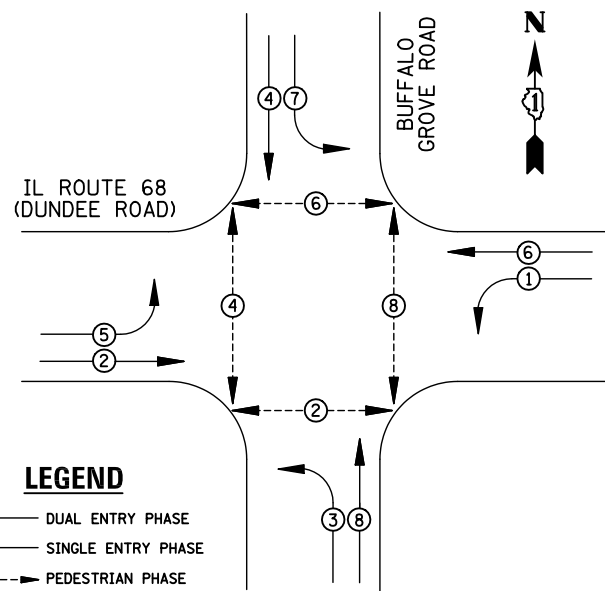
PREPARED BY: **CEMCON, Ltd.**
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	26	16
			CONTRACT NO. 60W37	

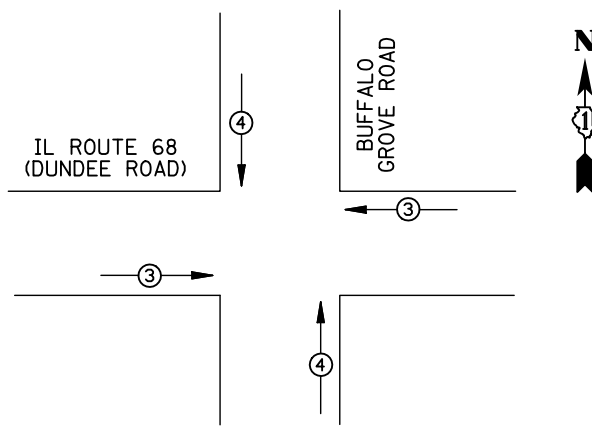
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

TS# 3112 BUFFALO GROVE

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



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

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		%OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	12	135	15	0.25	45
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 541.2
ENERGY SUPPLY CONTACT: X					
PHONE: X					
COMPANY: X					
FILE NAME = \MICROST\352106\ 03-3110.DGN	USER NAME = JGC	DESIGNED - BPT	REVISED -		
		DRAWN - JGC/RDS	REVISED -		
	PLOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -		
	PLOT DATE = X	DATE - 04-26-13	REVISED -		

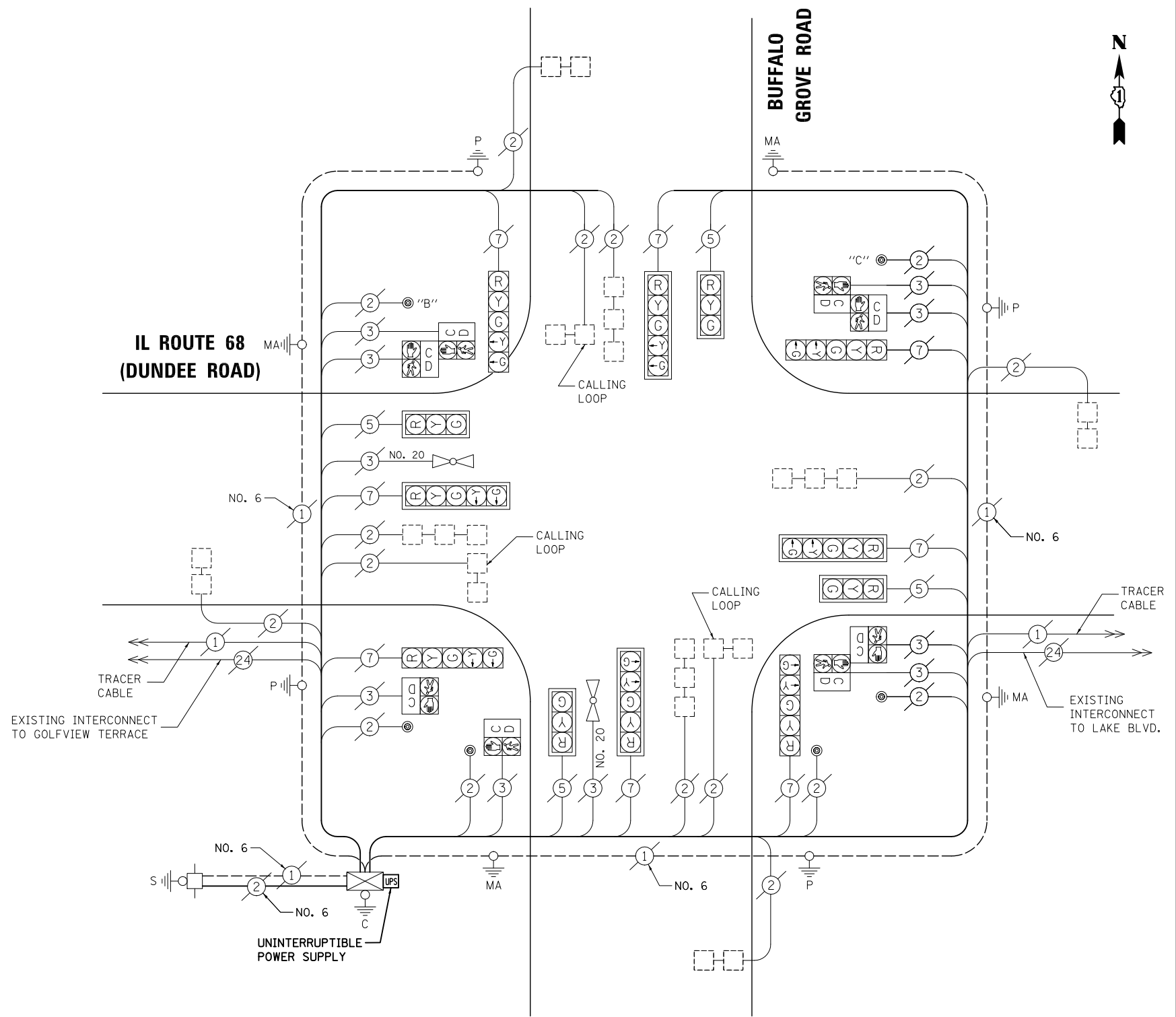
SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION IL ROUTE 68 (DUNDEE ROAD) AT BUFFALO GROVE ROAD

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.



CABLE PLAN

NOTE:
PUSH-BUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6.
PUSH-BUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8.

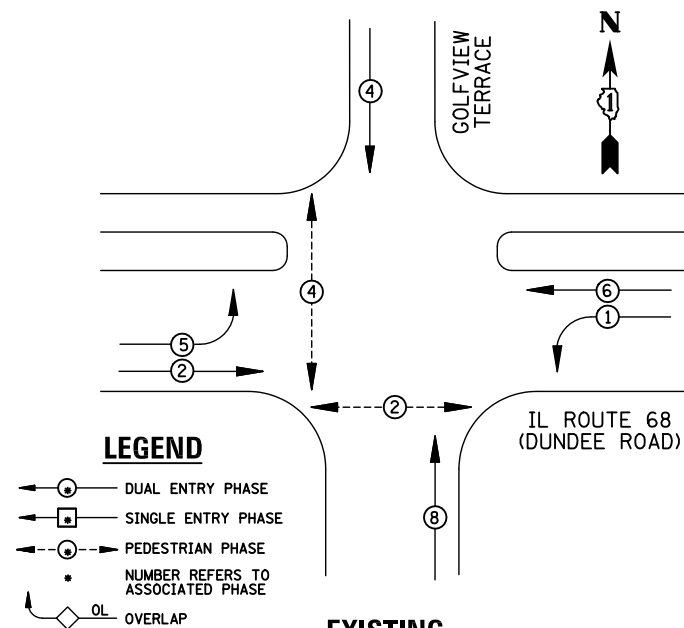
NOTE:
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

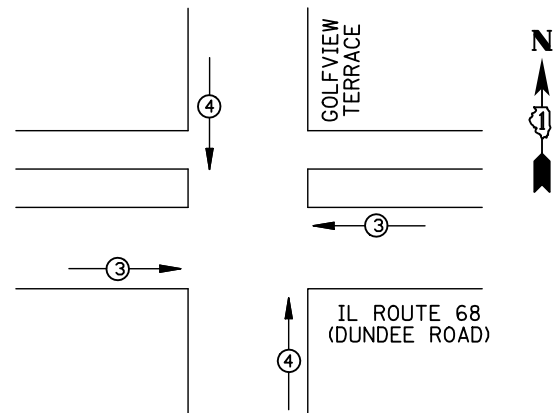
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	62	17
			CONTRACT NO. 60W37	
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

TS# 3110
BUFFALO GROVE

EXISTING CONTROLLER SEQUENCE

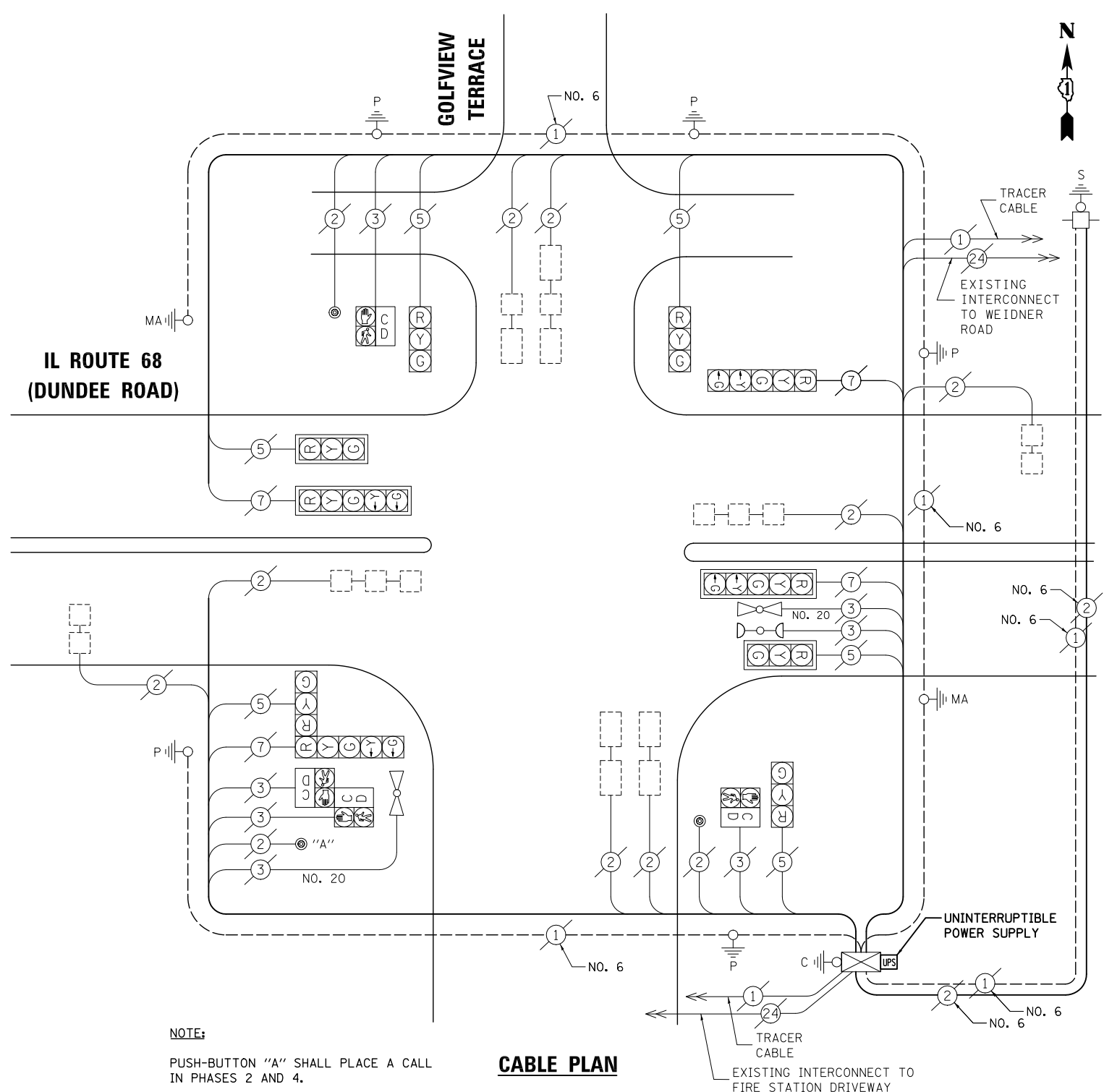


EXISTING PHASE DESIGNATION DIAGRAM



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

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



CABLE PLAN

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS						TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE		%OPERATION		
SIGNAL (RED)	10	135	17	0.50		85
(YELLOW)	10	135	25	0.25		62.5
(GREEN)	10	135	15	0.25		37.5
ARROW	8	135	12	0.10		9.6
PED. SIGNAL	4	90	25	1.00		100
CONTROLLER	1	100	100	1.00		100
ILLUM. SIGN		84		0.05		
FLASHER		135	25	0.50		
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL =	394.6
ENERGY SUPPLY	CONTACT: X					
	PHONE: X					
	COMPANY: X					
FILE NAME = \MICROST\352106\ 04-3155.DGN	USER NAME = JGC	DESIGNED - BPT	REVISED -			
		DRAWN - JGC/RDS	REVISED -			
	PLOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -			
	PLOT DATE = X	DATE - 04-26-13	REVISED -			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

**SCHEDULE OF QUANTITIES, CABLE PLAN,
PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
IL ROUTE 68 (DUNDEE ROAD) AT GOLFVIEW TERRACE**

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

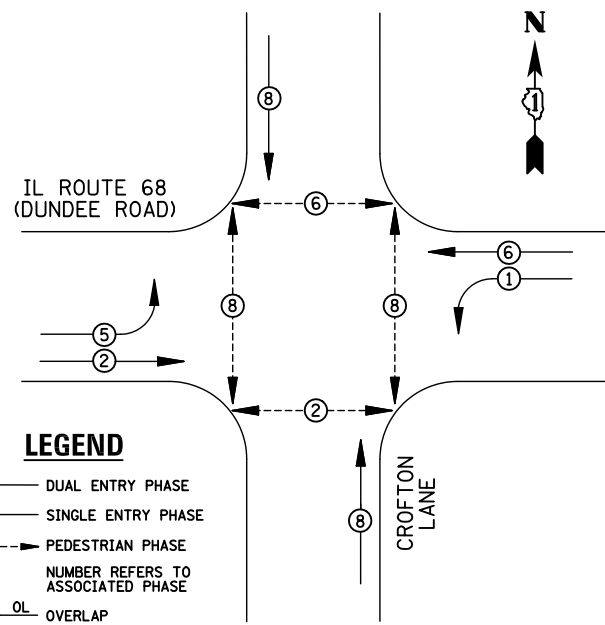
NOTE:
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

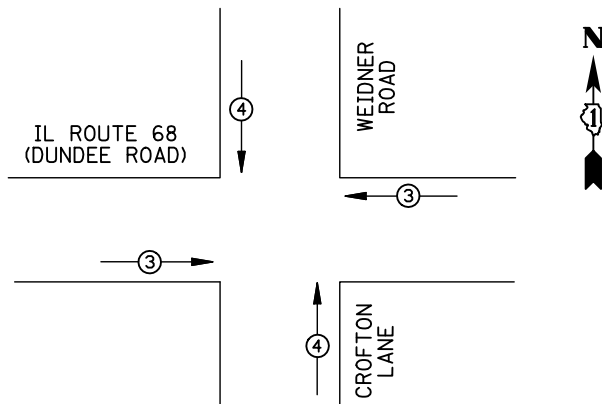
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	62	18
			CONTRACT NO. 60W37	
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

TS# 3155
BUFFALO GROVE

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



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

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	10	135	17	0.50	85
(YELLOW)	10	135	25	0.25	62.5
(GREEN)	10	135	15	0.25	37.5
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 494.6
ENERGY SUPPLY CONTACT:	X				
PHONE:	X				
COMPANY:	X				
FILE NAME = \MICROST\352106\ 05-3210.DGN	USER NAME = JGC	DESIGNED - BPT	REVISED -		
		DRAWN - JGC/RDS	REVISED -		
	PLOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -		
	PLOT DATE = X	DATE - 04-26-13	REVISED -		

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

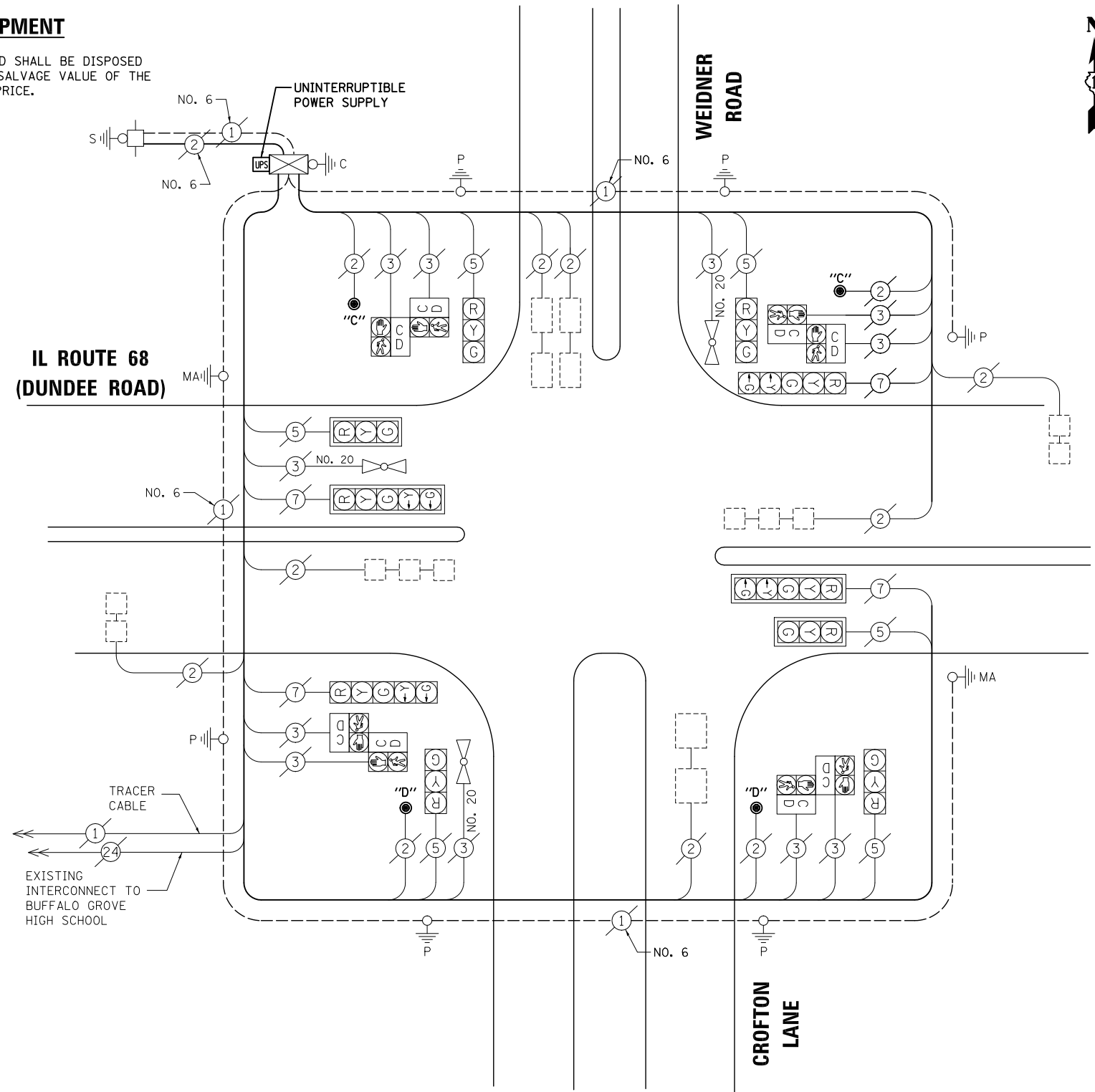
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 4 EACH PEDESTRIAN PUSH-BUTTON

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	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	4

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION



CABLE PLAN

NOTE: PUSH-BUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8. PUSH-BUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8.

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

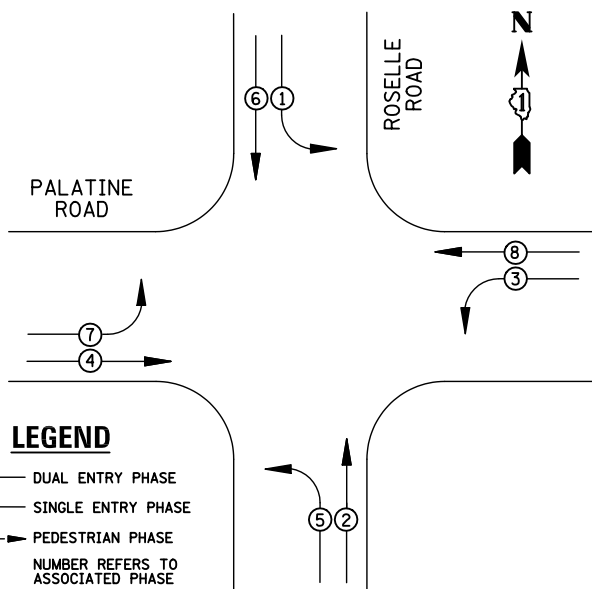
TS# 3210 BUFFALO GROVE

PREPARED BY: **CEMCON, Ltd.**
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

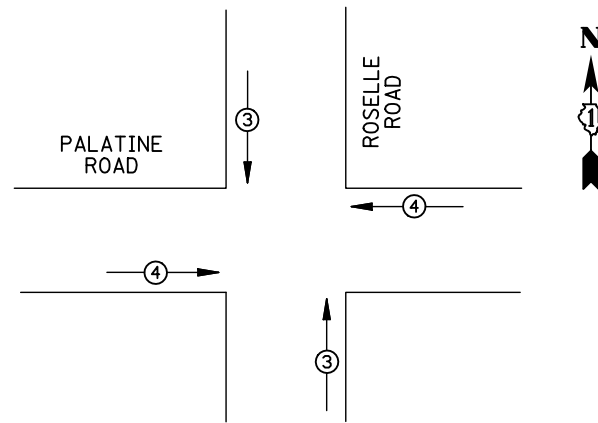
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION IL ROUTE 68 (DUNDEE ROAD) AT WEIDNER ROAD / CROFTON LANE			
SCALE: N.T.S.	SHEET NO.	OF SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	62	19
				CONTRACT NO. 60W37
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

EXISTING CONTROLLER SEQUENCE

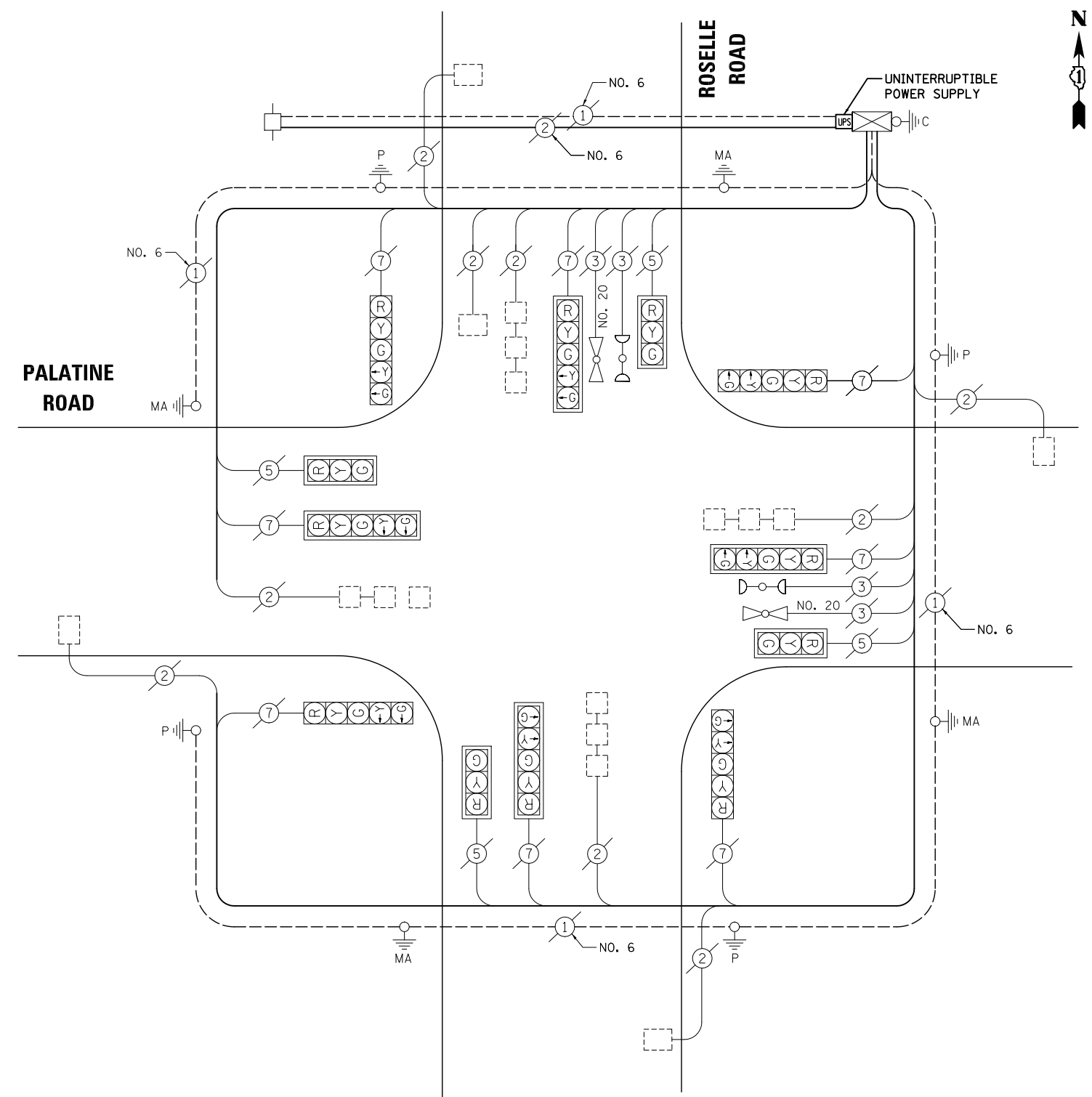


EXISTING PHASE DESIGNATION DIAGRAM



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

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



CABLE PLAN

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	12	135	15	0.25	45
ARROW	16	135	12	0.10	19.2
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	

ENERGY COSTS TO:
ILLINOIS DEPARTMENT OF TRANSPORTATION
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

CONTACT: X
PHONE: X
COMPANY: X

TOTAL = 241.2

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1

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

FILE NAME = \MICROST\352106\06-20480.DGN
USER NAME = JGC
DESIGNED - BPT
DRAWN - JGC/RDS
PLOT SCALE = NOT TO SCALE
PLOT DATE = X

REVISIED -
REVISIED -
REVISIED -
REVISIED -
DATE - 04-26-13

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SCHEDULE OF QUANTITIES, CABLE PLAN,
PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
PALATINE ROAD AT ROSELLE ROAD**

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

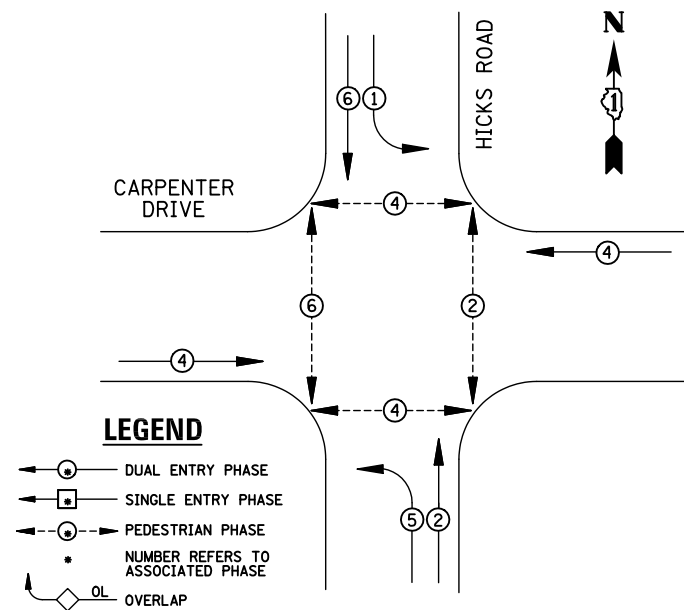
PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	62	20

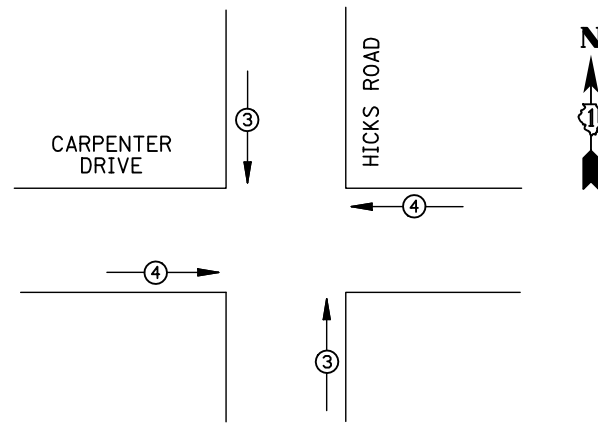
CONTRACT NO. 60W37
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

TS# 20480
INVERNESS

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



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

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

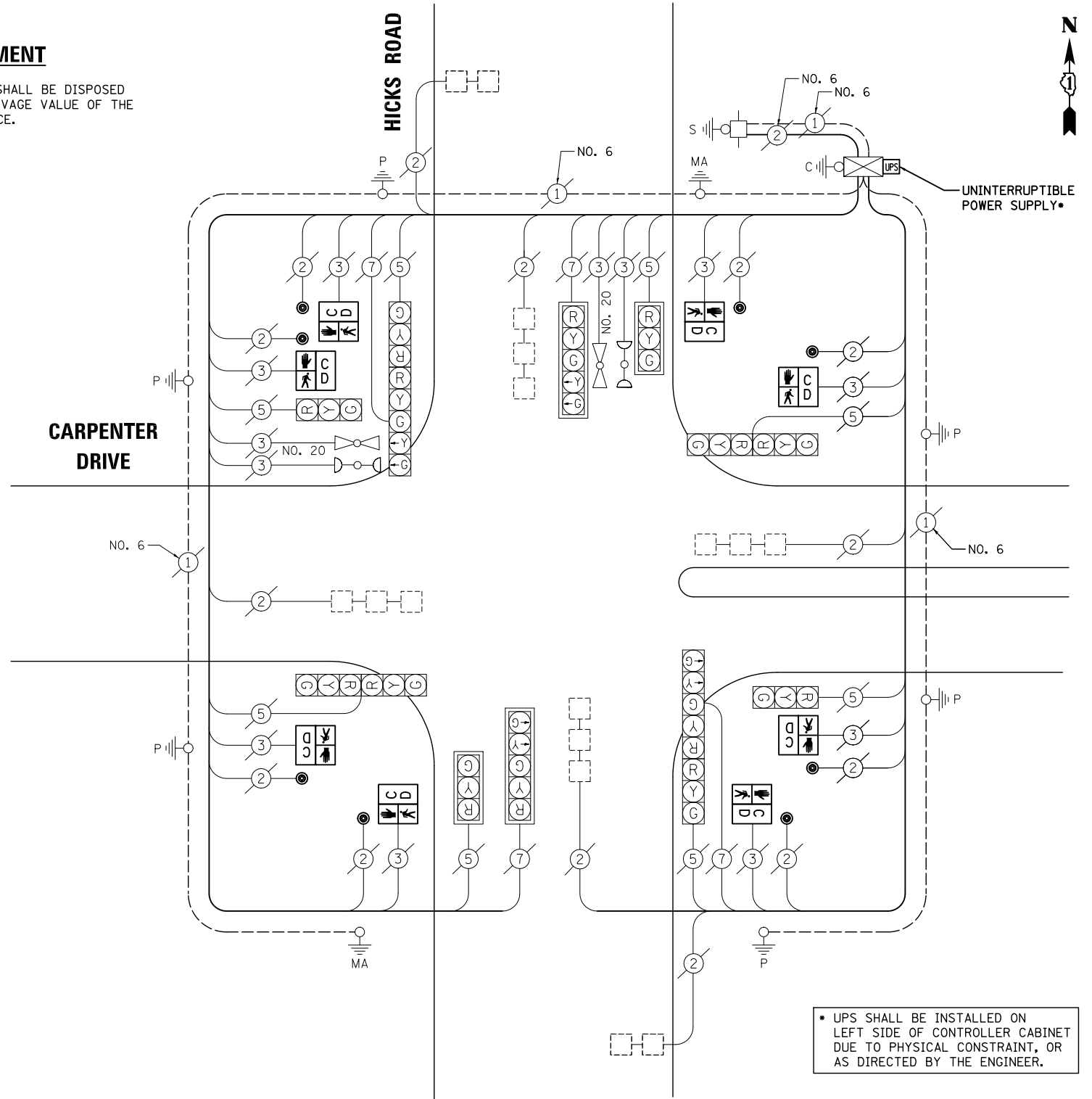
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 8 EACH PEDESTRIAN SIGNAL HEAD
- 8 EACH PEDESTRIAN PUSH-BUTTON

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	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

UNIT	QUANTITY
EACH	1
EACH	8
EACH	8
EACH	1
EACH	1
EACH	1



CABLE PLAN

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

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

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	14	135	17	0.50	119
(YELLOW)	14	135	25	0.25	87.5
(GREEN)	14	135	15	0.25	52.5
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 568.6
ENERGY SUPPLY CONTACT:	X				
PHONE:	X				
COMPANY:	X				
FILE NAME =	USER NAME = JGC	DESIGNED - BPT	REVISED -		
\\MICROST\352106\08-5315.DGN		DRAWN - JGC/RDS	REVISED -		
	PLOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -		
	PLOT DATE = X	DATE - 04-26-13	REVISED -		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN,
PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
HICKS ROAD AT CARPENTER DRIVE

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

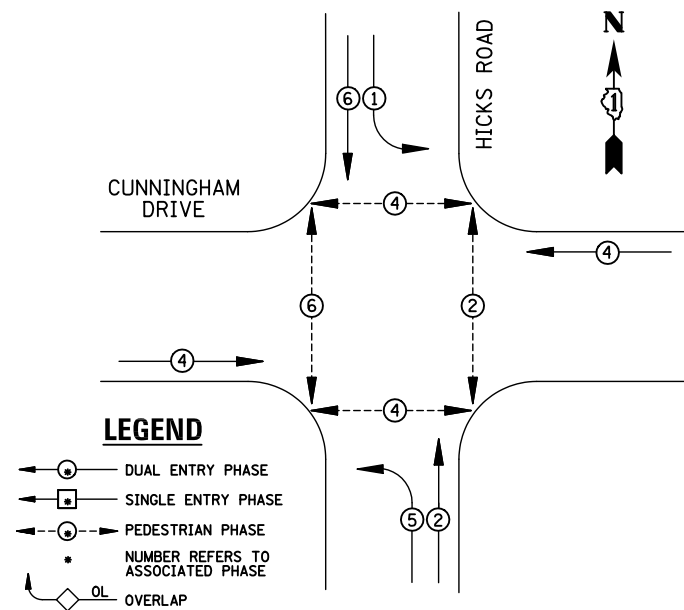
PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	62	21

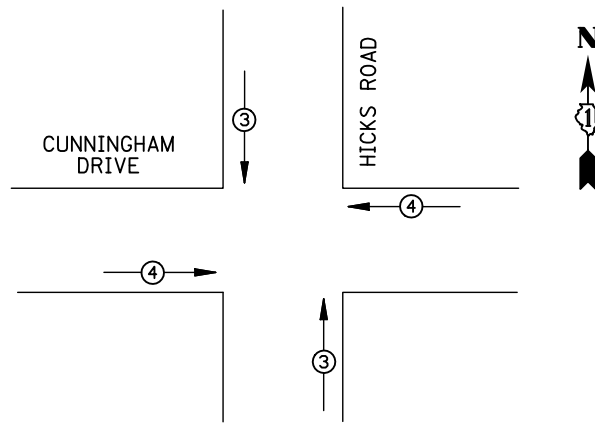
CONTRACT NO. 60W37
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

TS# 5315
PALATINE

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



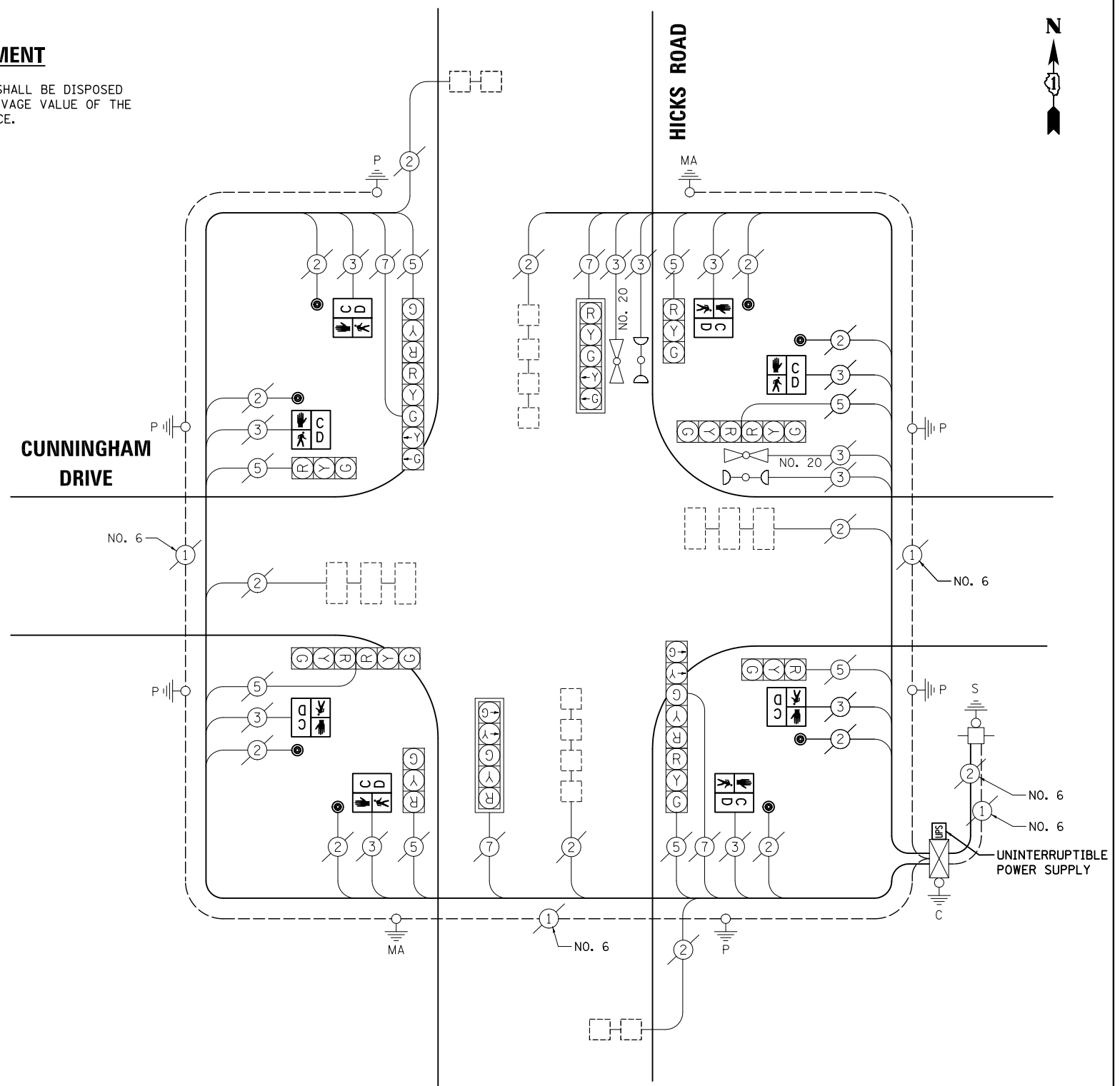
EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	
MOVEMENT	↑	↓	←

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

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.

- 8 EACH PEDESTRIAN SIGNAL HEAD
- 8 EACH PEDESTRIAN PUSH-BUTTON



CABLE PLAN

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8
PEDESTRIAN PUSH-BUTTON	EACH	8
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1

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

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	14	135	17	0.50	119
(YELLOW)	14	135	25	0.25	87.5
(GREEN)	14	135	15	0.25	52.5
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 568.6
ENERGY SUPPLY CONTACT: X					
PHONE: X					
COMPANY: X					
FILE NAME =	USER NAME = JGC				DESIGNED - BPT
DESIGNED - BPT	DRAWN - JGC/RDS				REVISIONS -
DRAWN - JGC/RDS	CHECKED - BPT				REVISIONS -
CHECKED - BPT	DATE - 04-26-13				REVISIONS -
DATE - 04-26-13					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN,
PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
HICKS ROAD AT CUNNINGHAM DRIVE

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

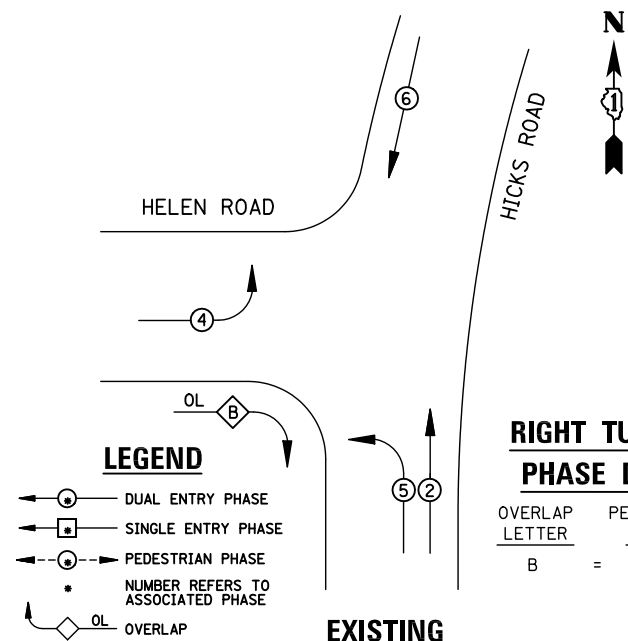
PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	26	22

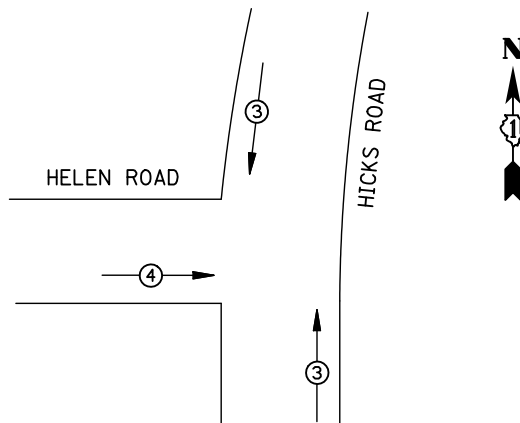
CONTRACT NO. 60W37
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

TS# 5295
PALATINE

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



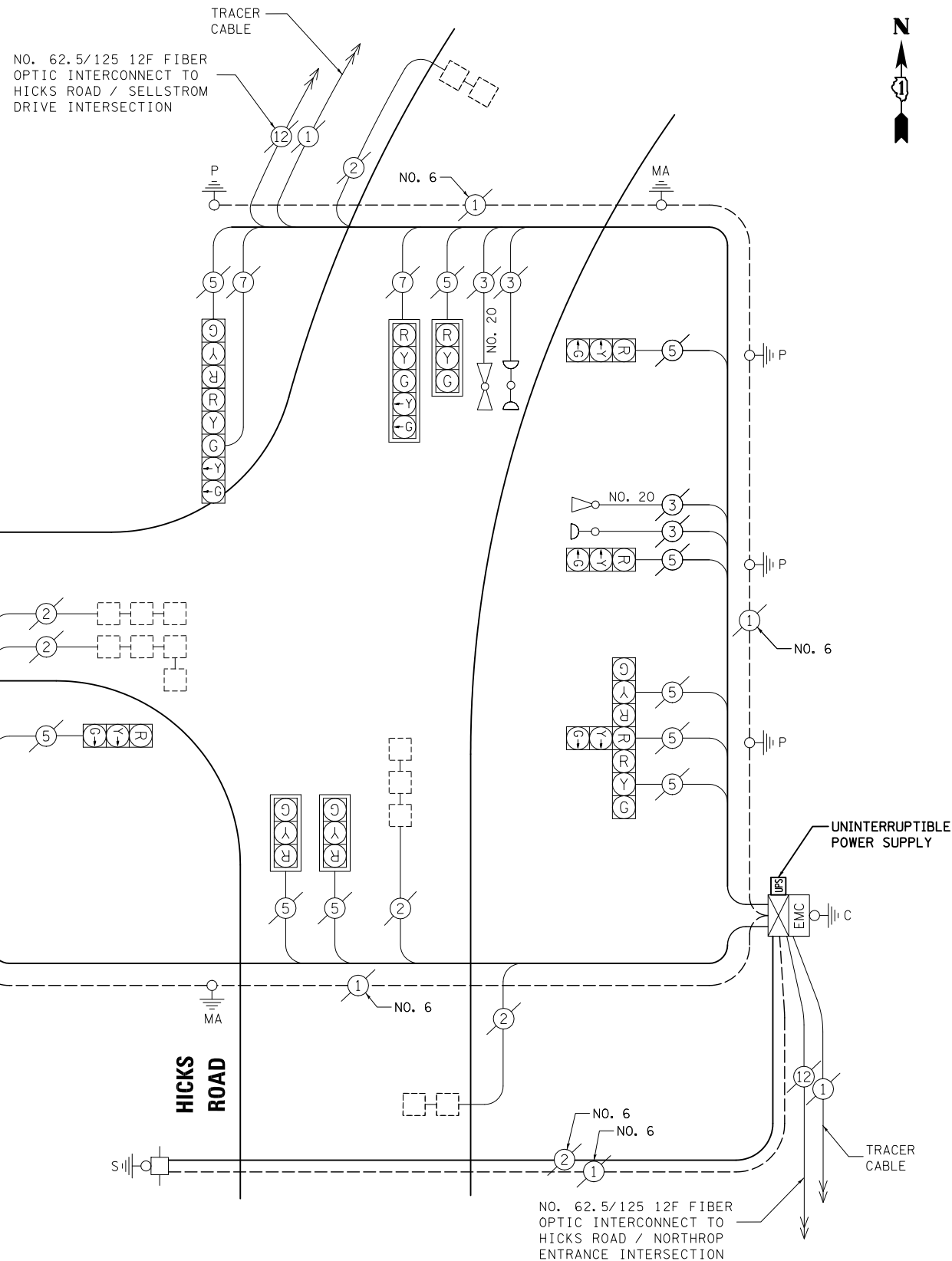
EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	12	135	15	0.25	45
ARROW	4	135	12	0.10	4.8
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 326.8
ENERGY SUPPLY CONTACT: X					
PHONE: X					
COMPANY: X					
FILE NAME = \MICROST\352106\ 11-11735.DGN	USER NAME = JGC	DESIGNED - BPT	REVISED -		
	PLOT SCALE = NOT TO SCALE	DRAWN - JGC/RDS	REVISED -		
	PLOT DATE = X	CHECKED - BPT	REVISED -		
		DATE - 04-26-13	REVISED -		

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION



CABLE PLAN

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

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION HICKS ROAD AT HELEN ROAD

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

PREPARED BY: **CEMCON, Ltd.**
 Consulting Engineers, Land Surveyors & Planners
 2280 White Oak Circle, Suite 100
 Aurora, Illinois 60504-9675
 Ph: 630.862.2100 Fax: 630.862.2199
 E-Mail: cadd@cemcon.com Website: www.cemcon.com

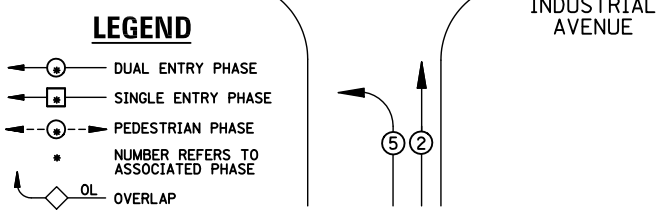
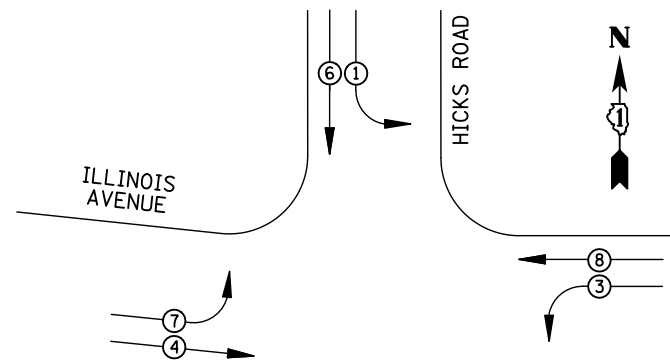
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	62	23

CONTRACT NO. 60W37

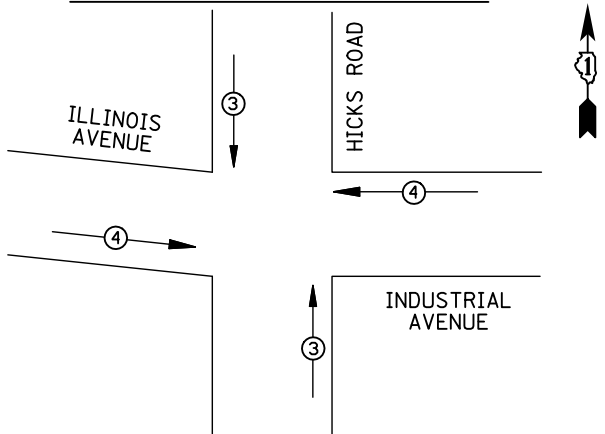
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

TS# 11735 PALATINE

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	↑	←

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

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.

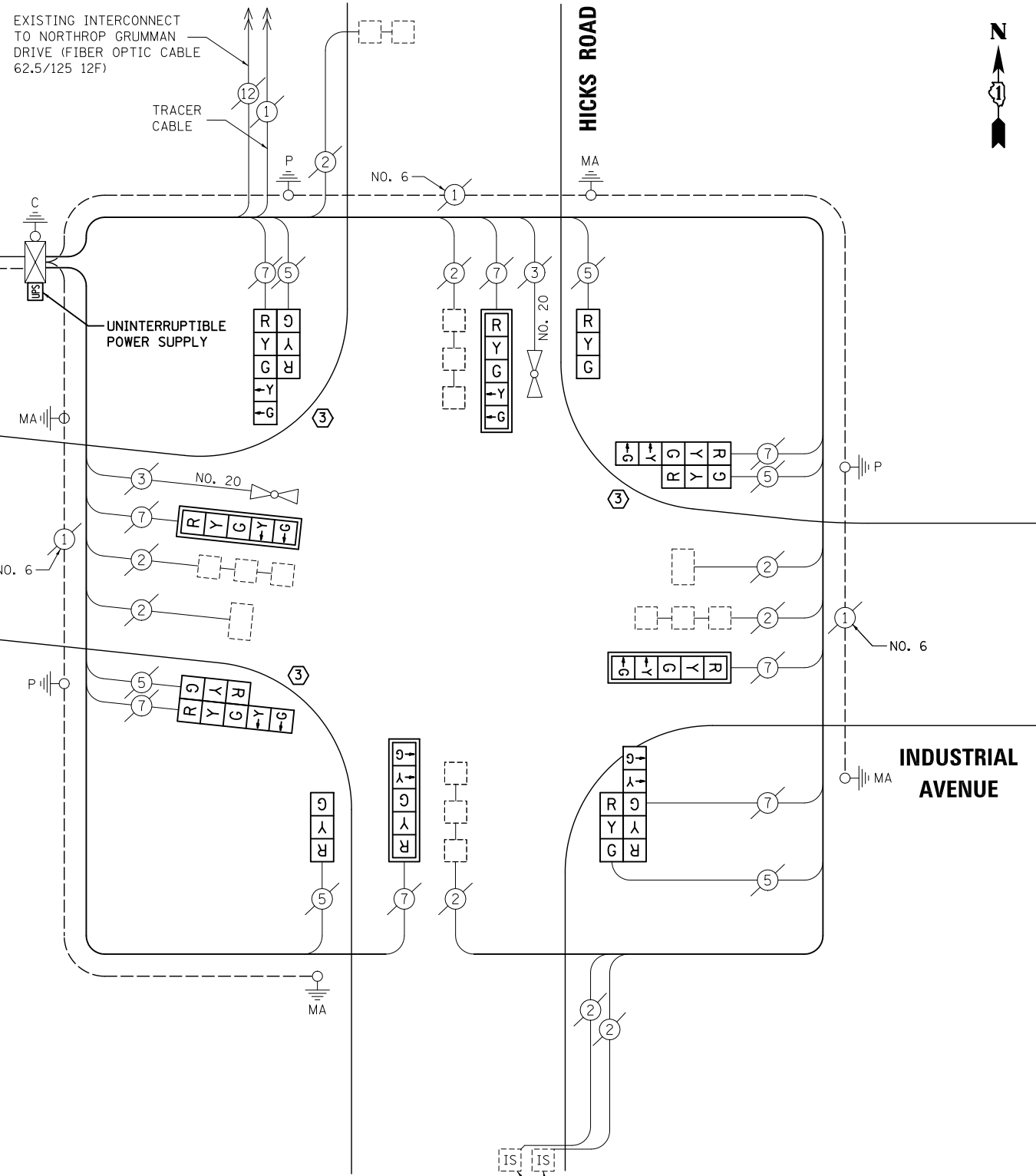
- 3 EACH TRAFFIC SIGNAL POST
- 6 EACH SIGNAL HEAD, 3-SECTION
- 8 EACH SIGNAL HEAD, 5-SECTION
- 4 EACH TRAFFIC SIGNAL BACKPLATE

- 1 REPLACE 14 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
- 2 REPLACE 15 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
- 3 REPLACE 16 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
- 4 REPLACE 18 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	3
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	4
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



CABLE PLAN

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

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	14	135	17	0.50	119
(YELLOW)	14	135	25	0.25	75
(GREEN)	14	135	15	0.25	52.5
ARROW	16	135	12	0.10	19.2
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 365.7
ENERGY SUPPLY	CONTACT: X				
	PHONE: X				
	COMPANY: X				
FILE NAME = \MICROST\352106\ 12-5305.DGN	USER NAME = JGC	DESIGNED - BPT	REVISED -		
		DRAWN - JGC/RDS	REVISED -		
		PLOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -	
		PLOT DATE = X	DATE - 04-26-13	REVISED -	

SCHEDULE OF QUANTITIES, CABLE PLAN,
PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
HICKS ROAD AT ILLINOIS AVENUE / INDUSTRIAL AVENUE

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

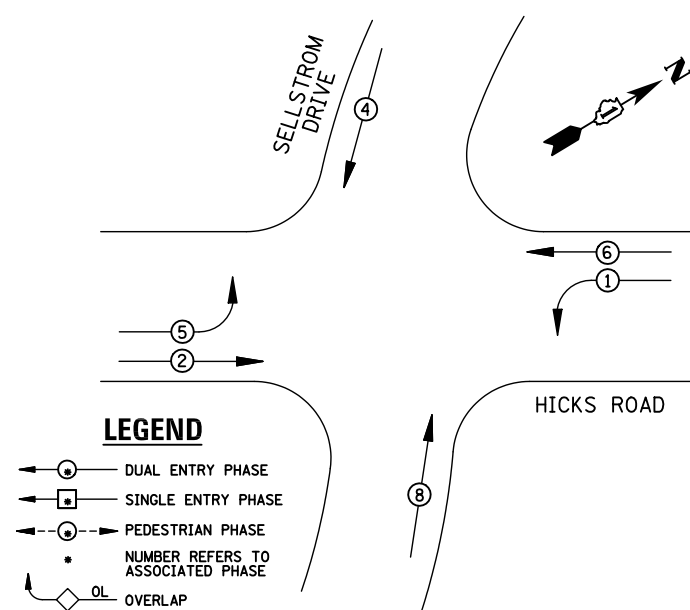
PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	62	24

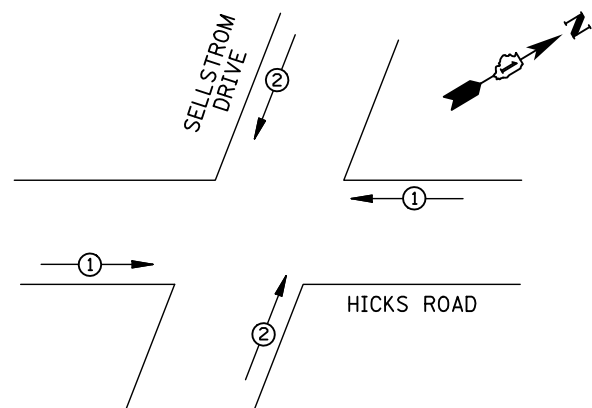
CONTRACT NO. 60W37
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

TS# 5305
PALATINE

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



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

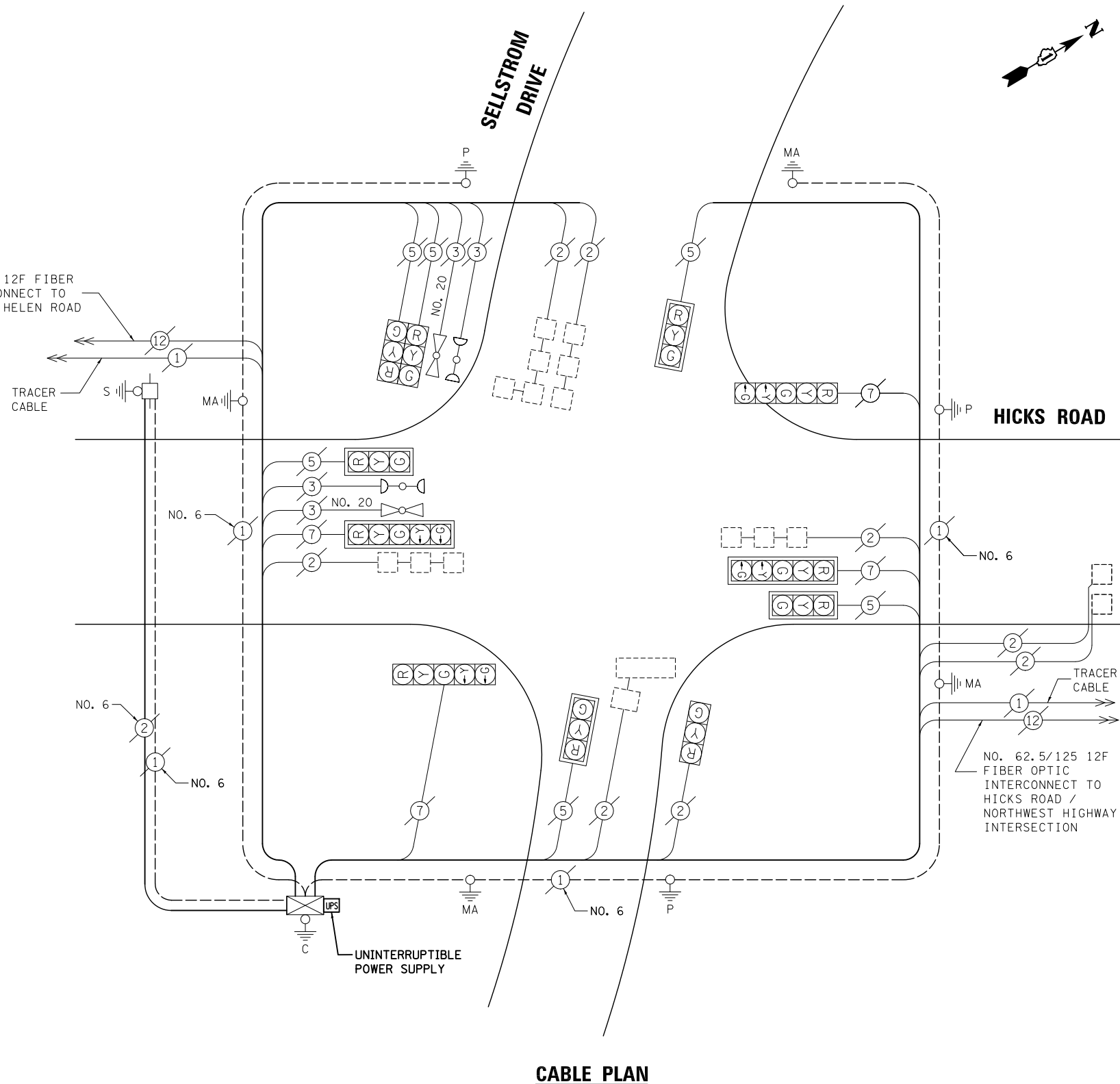
EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		%OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	11	135	17	0.50	93.5
(YELLOW)	11	135	25	0.25	68.75
(GREEN)	11	135	15	0.25	41.25
ARROW	8	135	12	0.10	9.6
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 313.1
ENERGY SUPPLY	CONTACT: X				
	PHONE: X				
	COMPANY: X				
FILE NAME =	USER NAME = JGC	DESIGNED - BPT	REVISED -		
\\MICROST\352106\ 13-12005.DGN		DRAWN - JGC/RDS	REVISED -		
	PLOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -		
	PLOT DATE = X	DATE - 04-26-13	REVISED -		

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1

NO. 62.5/125 12F FIBER OPTIC INTERCONNECT TO HICKS ROAD / HELEN ROAD INTERSECTION



CABLE PLAN

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

TS# 12005
PALATINE

PREPARED BY:
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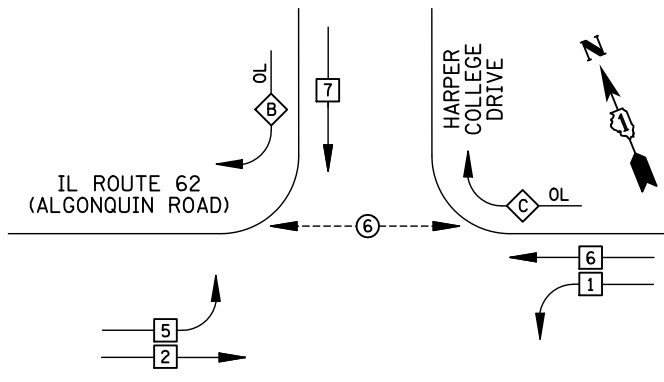
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	62	25
CONTRACT NO. 60W37				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN,
PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
HICKS ROAD AT SELSTROM DRIVE

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

EXISTING CONTROLLER SEQUENCE



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

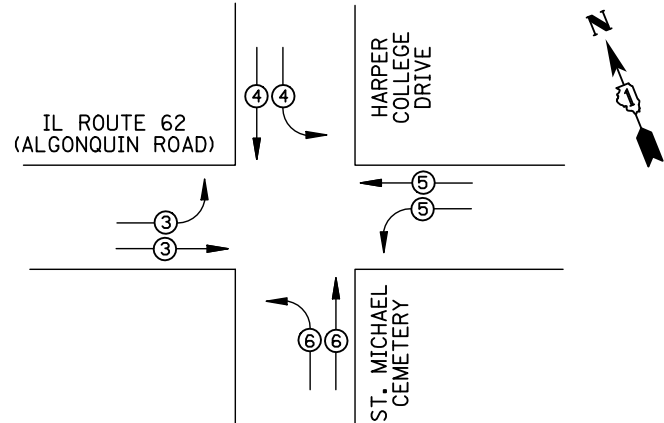
RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
B	=	+ 5
C	=	+ 7

LEGEND

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

EXISTING PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTORS				
EMERGENCY VEHICLE PREEMPTOR	3	4	5	6
MOVEMENT	↔	↕	↔	↕

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

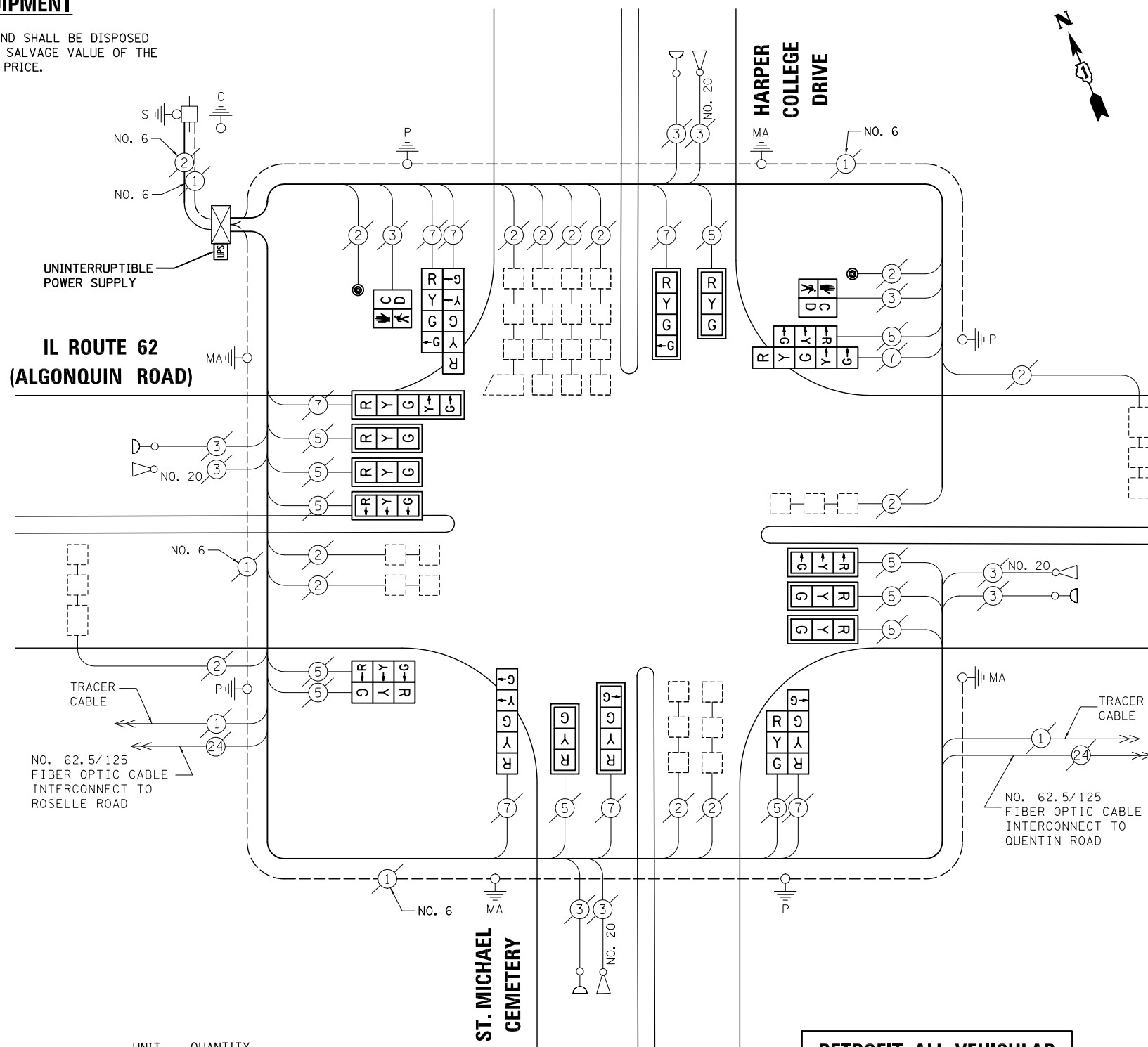
I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	20	135	17	0.50	170
(YELLOW)	20	135	25	0.25	125
(GREEN)	24	135	15	0.25	90
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	2	90	25	1.00	50
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 544.6
ENERGY SUPPLY CONTACT: X					
PHONE: X					
COMPANY: X					
FILE NAME = \MICROST\352106\ 15-2970.DGN	USER NAME = JGC	DESIGNED - BPT	REVISED -		
		DRAWN - JGC/RDS	REVISED -		
		PLOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -	
		PLOT DATE = X	DATE - 04-26-13	REVISED -	

SCHEDULE OF QUANTITIES

ITEM	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, 2-FACE, 1-3 SECTION, 1-4 SECTION, BRACKET MOUNTED, RETROFIT	EACH	1
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED, RETROFIT	EACH	1
SIGNAL HEAD, LED, 2-FACE, 1-4 SECTION, 1-5 SECTION, BRACKET MOUNTED, RETROFIT	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	1
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	1
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	1

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 62 (ALGONQUIN ROAD)



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

CABLE PLAN

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

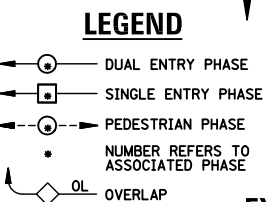
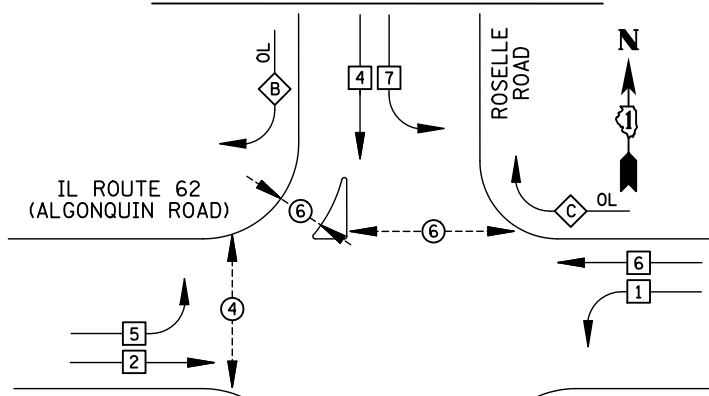
PREPARED BY: **CEMCON, Ltd.**
 Consulting Engineers, Land Surveyors & Planners
 2280 White Oak Circle, Suite 100
 Aurora, Illinois 60504-9675
 Ph: 630.862.2100 Fax: 630.862.2199
 E-Mail: cadd@cemcon.com Website: www.cemcon.com

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION IL ROUTE 62 (ALGONQUIN ROAD) AT HARPER COLLEGE DRIVE
 SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	62	26
				CONTRACT NO. 60W37
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

TS# 2970 PALATINE

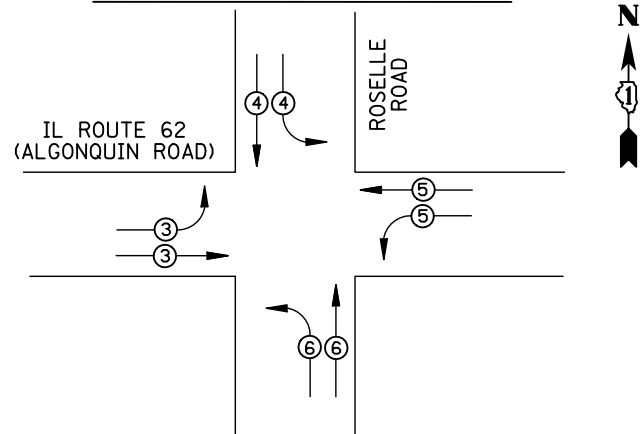
EXISTING CONTROLLER SEQUENCE



RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2	+ 3
B	= 4	+ 5
C	= 6	+ 7
D	= 8	+ 1

EXISTING PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTORS

EMERGENCY VEHICLE PREEMPTOR	3	4	5	6
MOVEMENT	→	↓	↶	↷

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

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

TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	24	135	17	0.50	204
(YELLOW)	24	135	25	0.25	150
(GREEN)	24	135	15	0.25	90
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	6	90	25	1.00	150
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN	4	84	100	0.50	200
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 913.2
ENERGY SUPPLY CONTACT: X					
PHONE: X					
COMPANY: X					

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.

16	EACH	SIGNAL HEAD, 3-SECTION
8	EACH	SIGNAL HEAD, 5-SECTION
12	EACH	TRAFFIC SIGNAL BACKPLATE
6	EACH	PEDESTRIAN SIGNAL HEAD
4	EACH	PEDESTRIAN PUSH-BUTTON

SCHEDULE OF QUANTITIES

ITEM

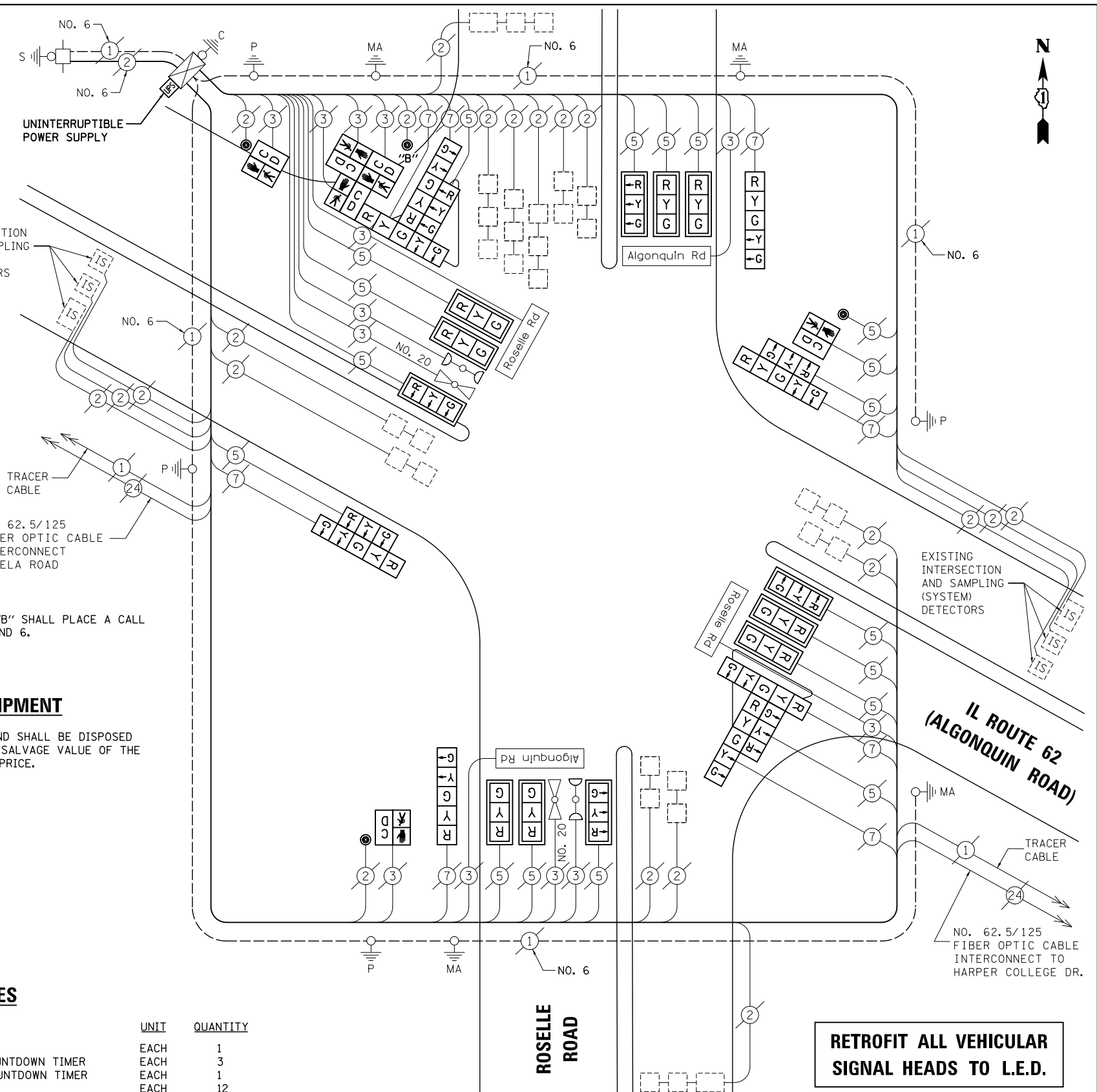
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	3
PEDESTRIAN SIGNAL HEAD, LED, 3-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	1
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	12
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1
PEDESTRIAN PUSH-BUTTON, NON-LATCHING	EACH	4
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED, RETROFIT	EACH	2
SIGNAL HEAD, LED, 3-FACE, 1-3 SECTION, 2-5 SECTION, BRACKET MOUNTED, RETROFIT	EACH	2
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	12
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	2

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

EXISTING INTERSECTION AND SAMPLING (SYSTEM) DETECTORS

NO. 62.5/125 FIBER OPTIC CABLE INTERCONNECT TO ELA ROAD

NOTE:
PUSH-BUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6.



CABLE PLAN

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

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

FILE NAME = \MICROST\352106\ 16-2990.DGN

USER NAME = JGC
DESIGNED - BPT
DRAWN - JGC/RDS
CHECKED - BPT
DATE - 04-26-13

REVISED -
REVISED -
REVISED -
REVISED -

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION IL ROUTE 62 (ALGONQUIN ROAD) AT ROSELLE ROAD

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

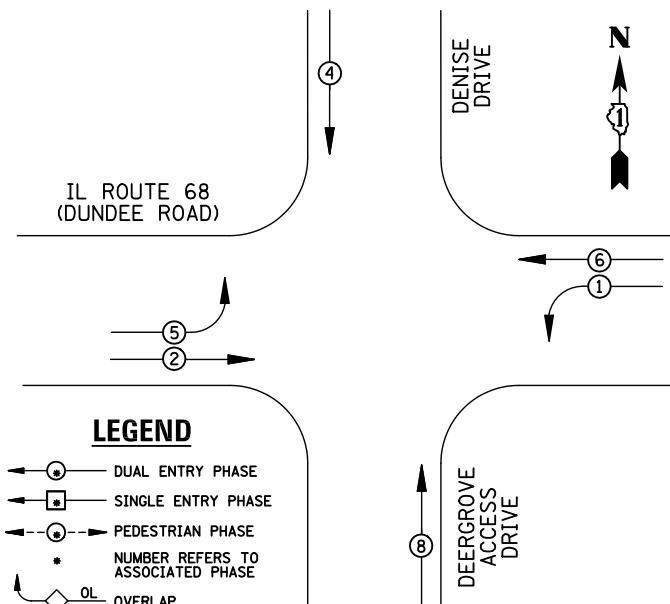
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	62	27
CONTRACT NO. 60W37				

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

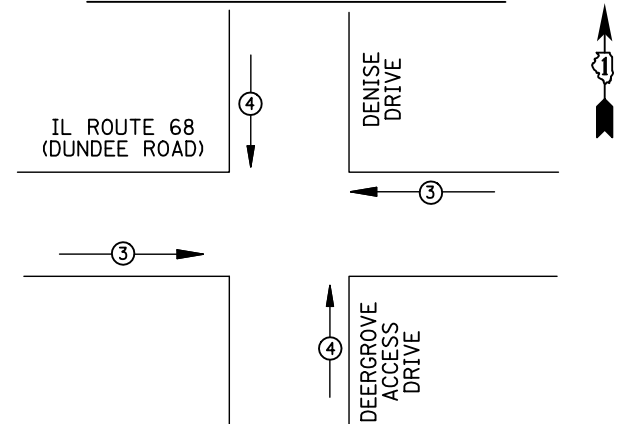
PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

TS# 2990 PALATINE

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



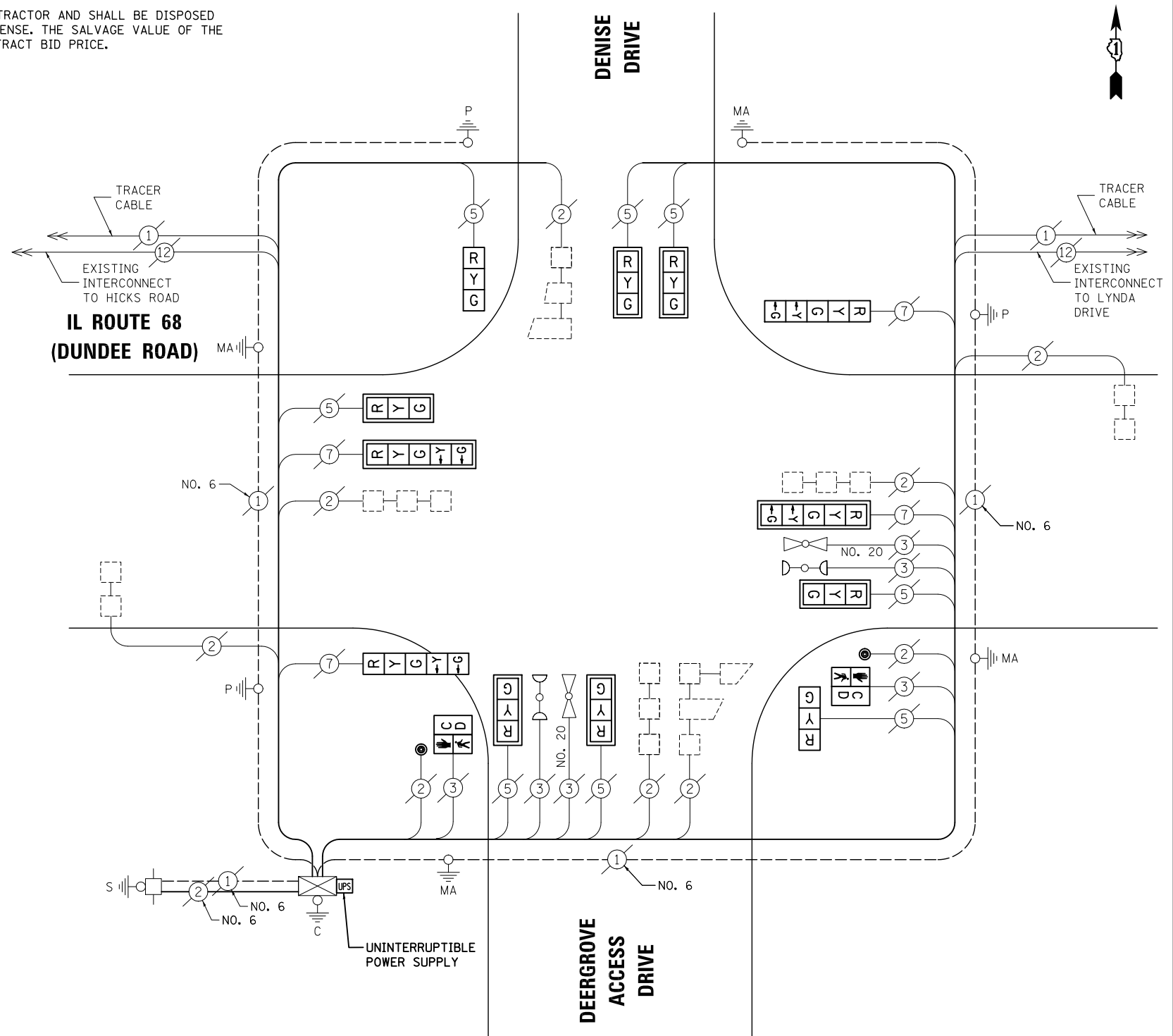
EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↑ ↓

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

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



CABLE PLAN

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

SCHEDULE OF QUANTITIES

ITEM	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
UNINTERRUPTIBLE 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

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

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	12	135	15	0.25	45
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	2	90	25	1.00	50
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 381.6
ENERGY SUPPLY	CONTACT: X				
	PHONE: X				
	COMPANY: X				

FILE NAME = \MICROST\352106\ 17-3122.DGN	USER NAME = JGC	DESIGNED - BPT	REVISED -
		DRAWN - JGC/RDS	REVISED -
		PLOT SCALE = NOT TO SCALE	CHECKED - BPT
		PLOT DATE = X	DATE - 04-26-13

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

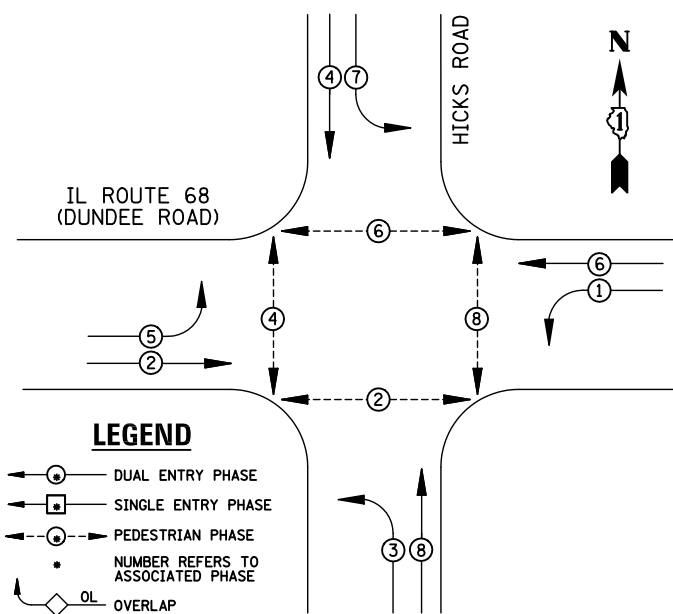
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION IL ROUTE 68 (DUNDEE ROAD) AT DENISE DRIVE

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	62	28
			CONTRACT NO. 60W37	
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

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TS# 3122 PALATINE

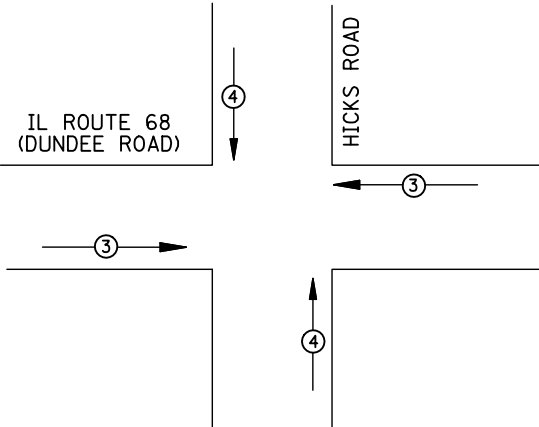
EXISTING CONTROLLER SEQUENCE



LEGEND

- ⊖ DUAL ENTRY PHASE
- ⊣ SINGLE ENTRY PHASE
- ⊖ PEDESTRIAN PHASE
- NUMBER REFERS TO ASSOCIATED PHASE
- OL OVERLAP

EXISTING PHASE DESIGNATION DIAGRAM



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

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	16	135	17	0.50	136
(YELLOW)	16	135	25	0.25	100
(GREEN)	16	135	15	0.25	60
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 615.2
ENERGY SUPPLY	CONTACT: X				
	PHONE: X				
	COMPANY: X				

SCHEDULE OF QUANTITIES

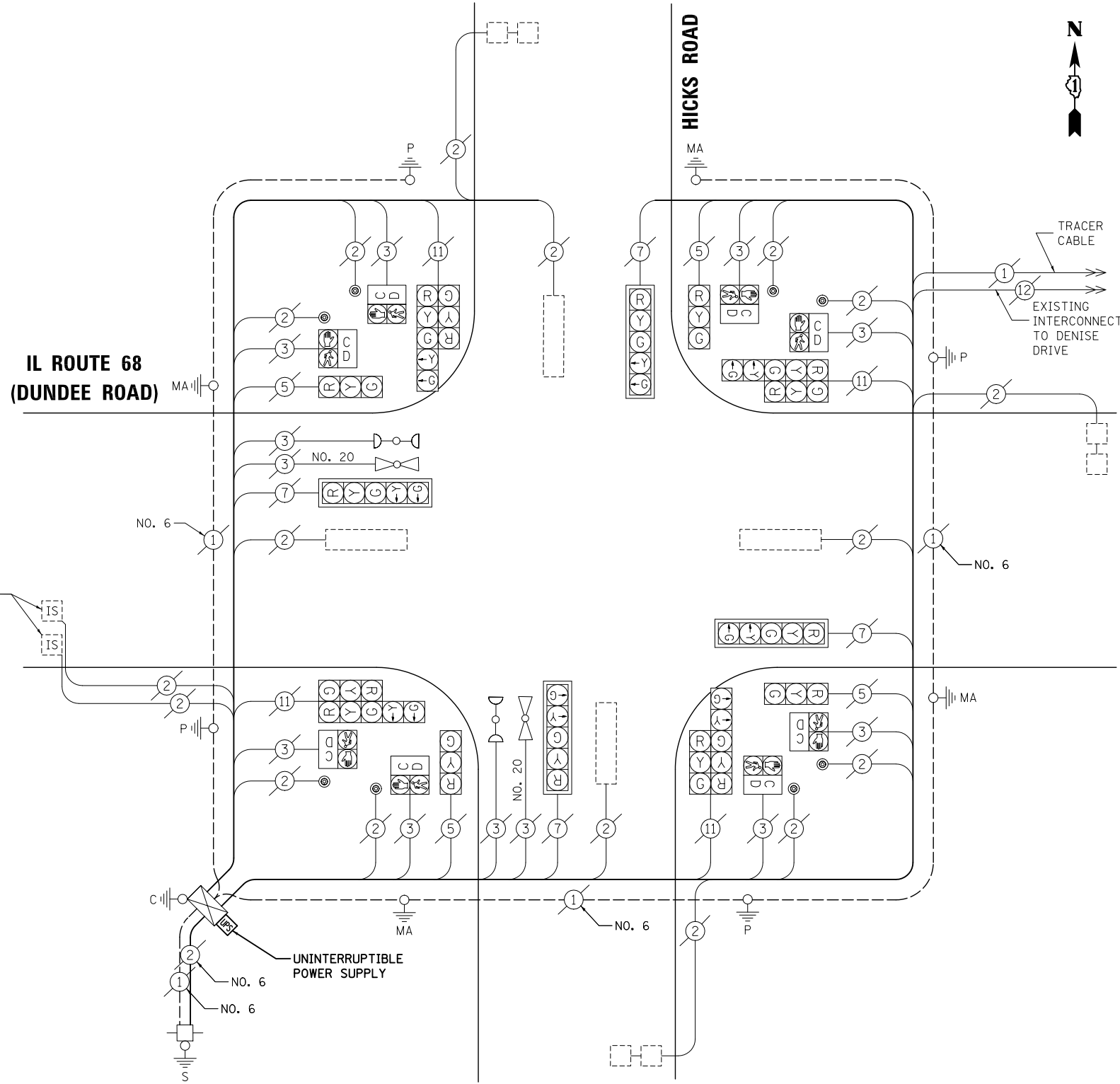
ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DESIGNED - BPT	REVISED -
DRAWN - JGC/RDS	REVISED -
CHECKED - BPT	REVISED -
DATE - 04-26-13	REVISED -

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION IL ROUTE 68 (DUNDEE ROAD) AT HICKS ROAD

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.



CABLE PLAN

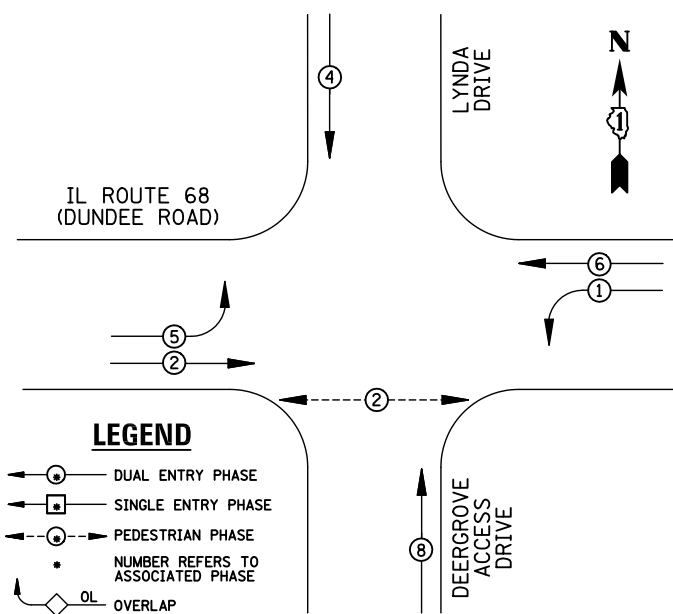
NOTE:
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

PREPARED BY:
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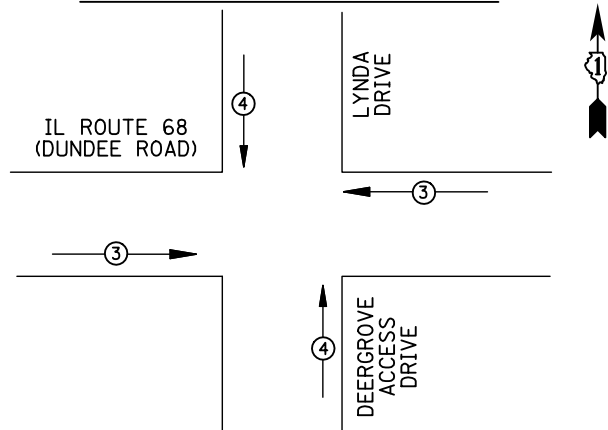
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	62	29
			CONTRACT NO. 60W37	
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

TS# 3120
PALATINE

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



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

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	12	135	15	0.25	45
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	2	90	25	1.00	50
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 381.6
ENERGY SUPPLY	CONTACT: X				
	PHONE: X				
	COMPANY: X				
FILE NAME = \MICROST\352106\ 19-1157.DGN	USER NAME = JGC	DESIGNED - BPT	REVISED -		
		DRAWN - JGC/RDS	REVISED -		
	PLOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -		
	PLOT DATE = X	DATE - 04-26-13	REVISED -		

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

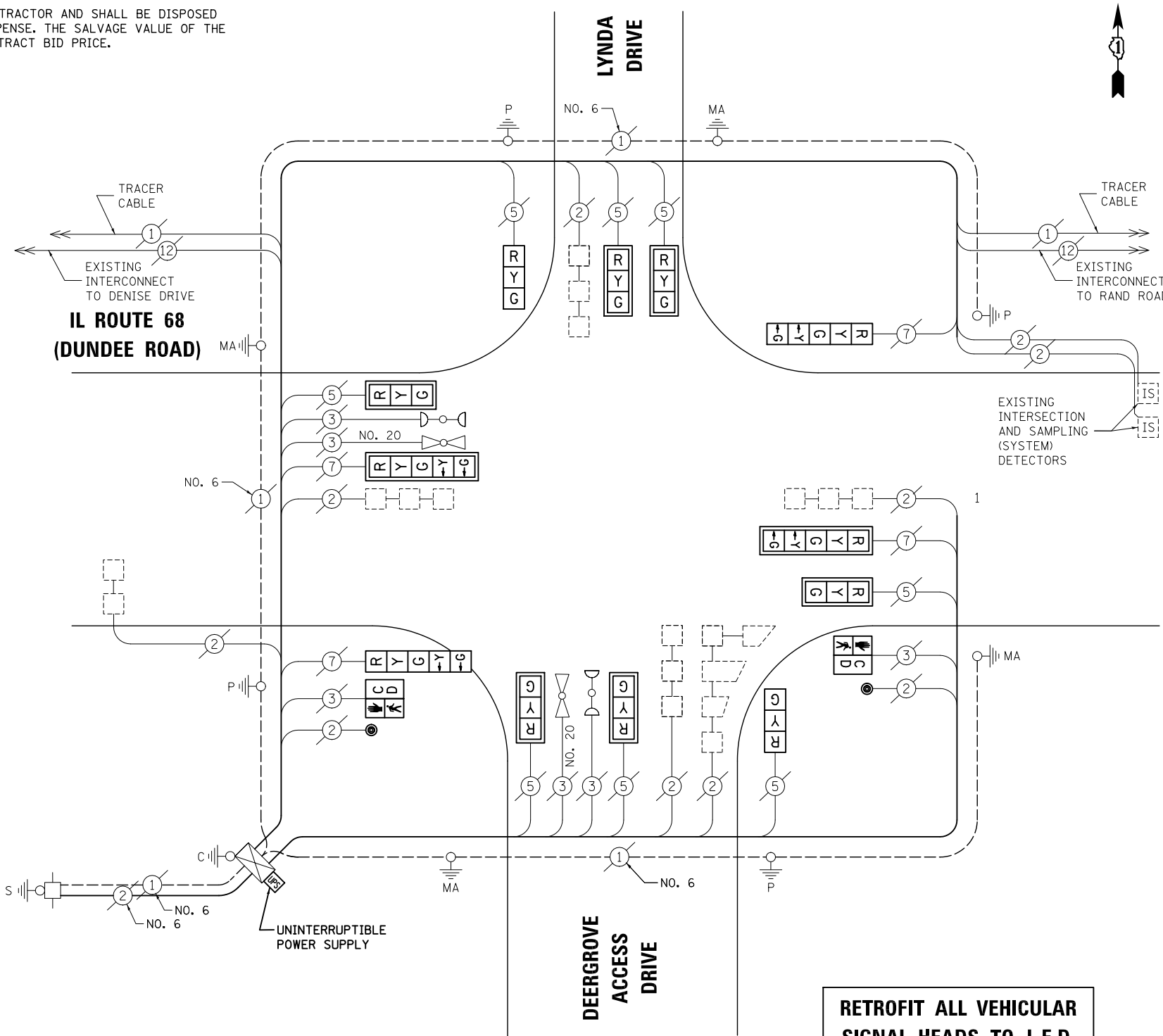
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 2 EACH PEDESTRIAN SIGNAL HEAD
- 2 EACH PEDESTRIAN PUSH-BUTTON

SCHEDULE OF QUANTITIES

ITEM	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
UNINTERRUPTIBLE 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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



CABLE PLAN

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

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION IL ROUTE 68 (DUNDEE ROAD) AT LYNDA DRIVE

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

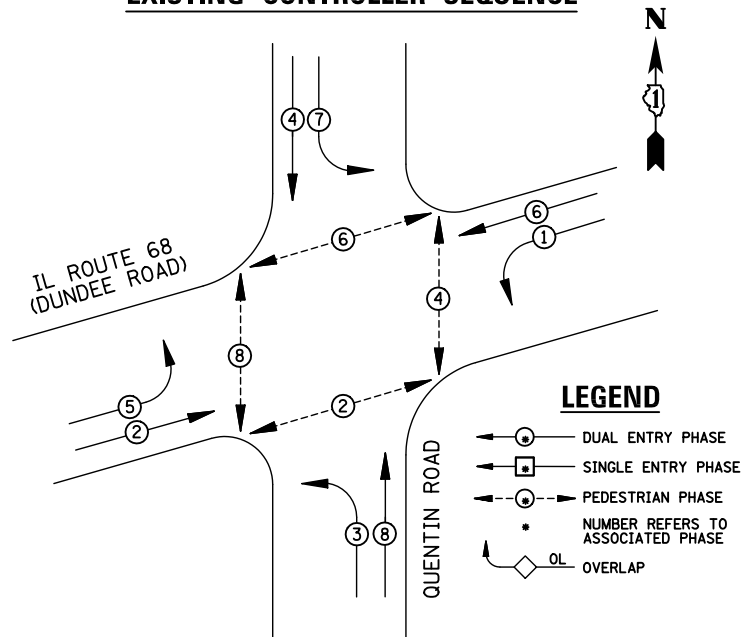
RETROFIT ALL VEHICULAR SIGNAL HEADS TO L.E.D.

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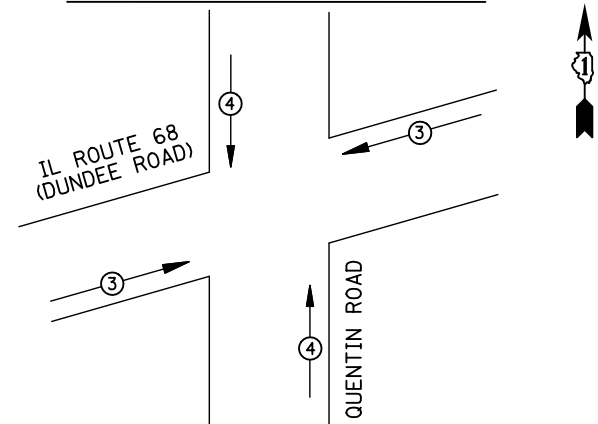
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	62	30
			CONTRACT NO. 60W37	
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

TS# 1157
PALATINE

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



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

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	12	135	15	0.25	45
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 541.2
ENERGY SUPPLY	CONTACT: X				
	PHONE: X				
	COMPANY: X				
FILE NAME = \MICROST\352106\ 20-3165.DGN	USER NAME = JGC	DESIGNED - BPT	REVISED -		
		DRAWN - JGC/RDS	REVISED -		
		PLOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -	
		PLOT DATE = X	DATE - 04-26-13	REVISED -	

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.

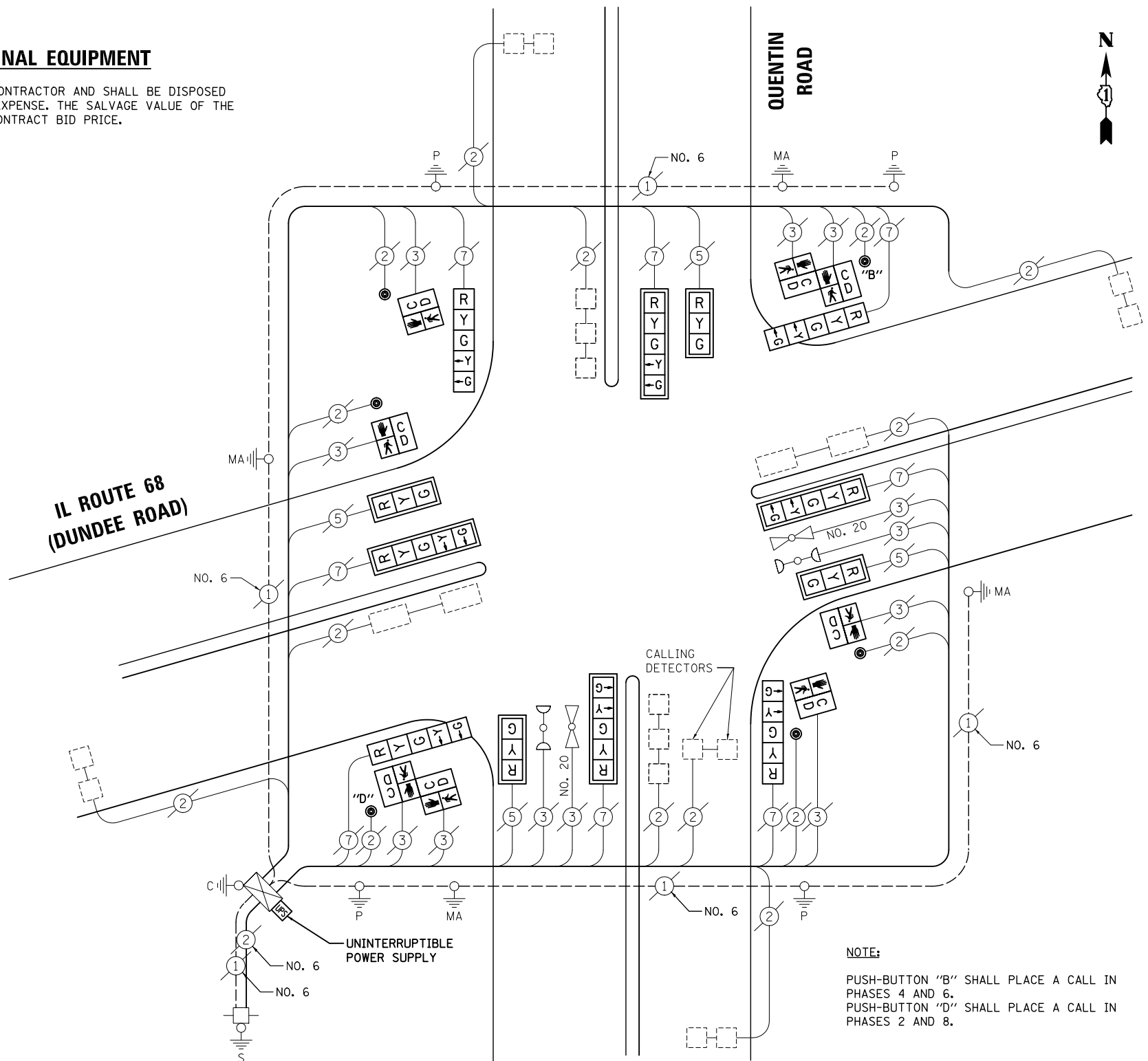
- 8 EACH PEDESTRIAN SIGNAL HEAD
- 6 EACH PEDESTRIAN PUSH-BUTTON

SCHEDULE OF QUANTITIES

ITEM	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
PEDESTRIAN PUSH-BUTTON, NON-LATCHING	EACH	6
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

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 68 (DUNDEE ROAD)



CABLE PLAN

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

NOTE: PUSH-BUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6. PUSH-BUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8.

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

TS# 3165 PALATINE

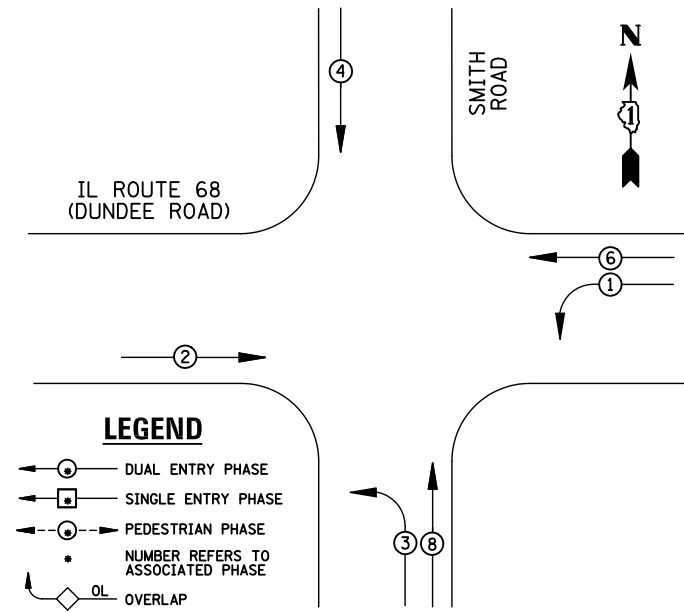
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 E-Mail: cadd@cemcon.com Website: www.cemcon.com

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION IL ROUTE 68 (DUNDEE ROAD) AT QUENTIN ROAD

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	62	31
				CONTRACT NO. 60W37
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

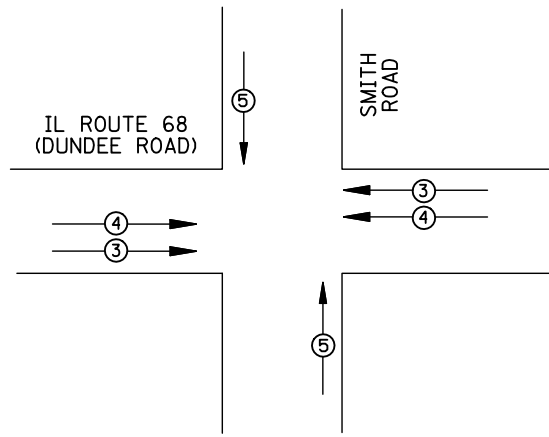
EXISTING CONTROLLER SEQUENCE



LEGEND

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

EXISTING PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT	↔	↔	↕

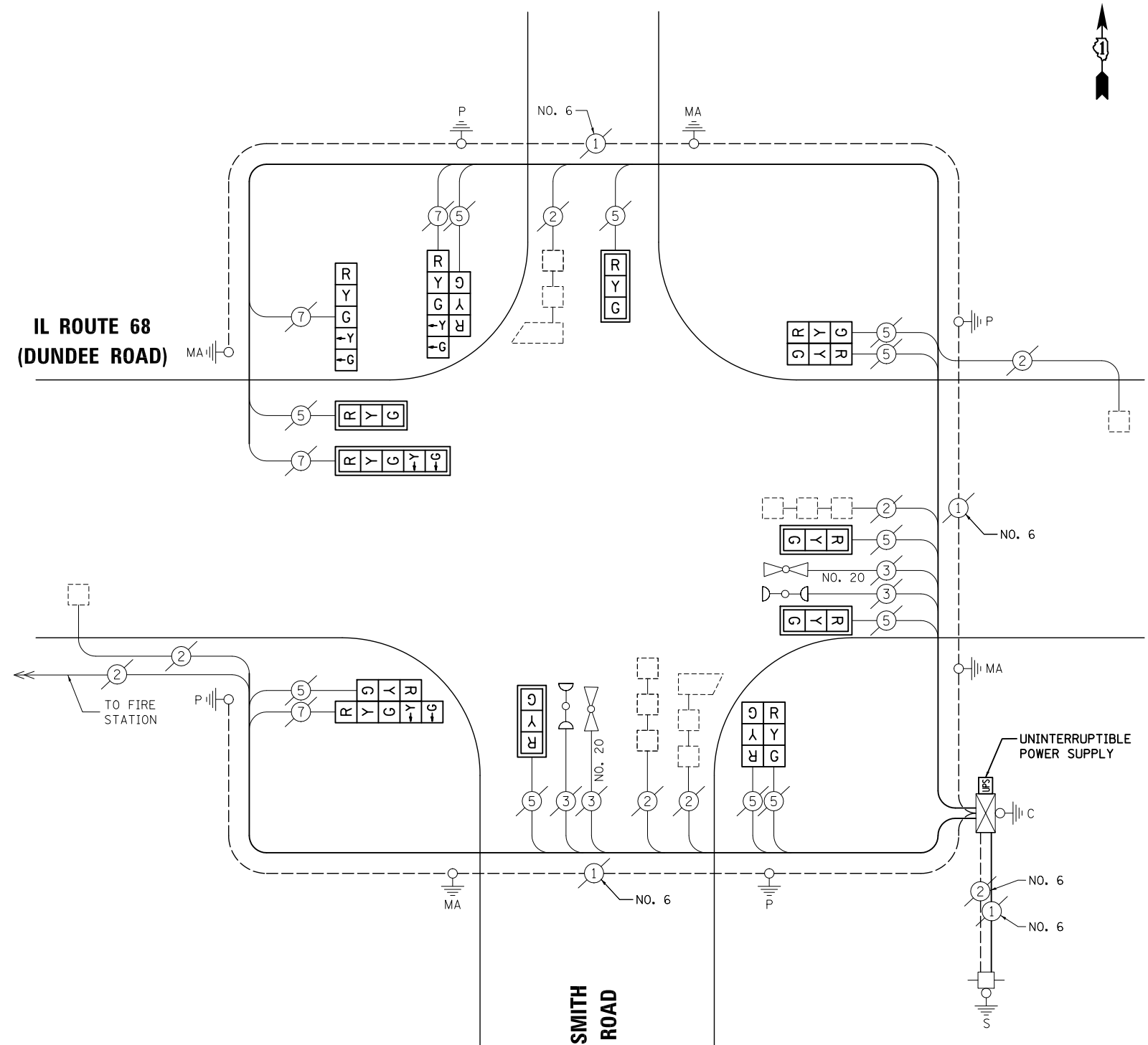
EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		%OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	15	135	17	0.50	127.5
(YELLOW)	15	135	25	0.25	93.75
(GREEN)	15	135	15	0.25	56.25
ARROW	8	135	12	0.10	9.6
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 387.1
ENERGY SUPPLY CONTACT: X					
PHONE: X					
COMPANY: X					
FILE NAME = \MICROST\352106\ 21-3190.DGN	USER NAME = JGC	DESIGNED - BPT	REVISED -		
		DRAWN - JGC/RDS	REVISED -		
		PLOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -	
		PLOT DATE = X	DATE - 04-26-13	REVISED -	

SCHEDULE OF QUANTITIES

ITEM	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	2
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	5
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	1
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



CABLE PLAN

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

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

TS# 3190
PALATINE

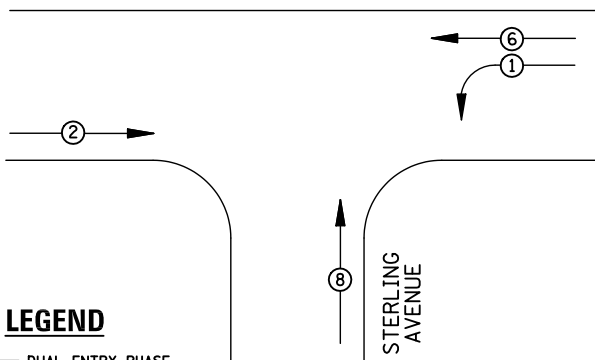
PREPARED BY:
CEMCON, Ltd.
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SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION IL ROUTE 68 (DUNDEE ROAD) AT SMITH ROAD			
SCALE: N.T.S.	SHEET NO.	OF SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	62	32
				CONTRACT NO. 60W37
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

EXISTING CONTROLLER SEQUENCE

IL ROUTE 68
(DUNDEE ROAD)

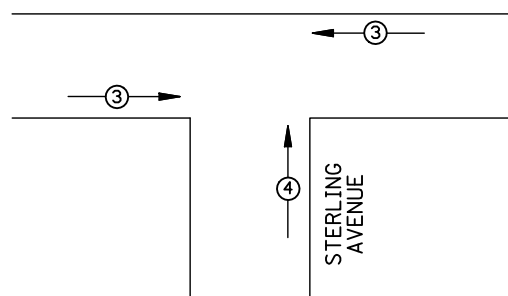


LEGEND

- ⊕ DUAL ENTRY PHASE
- ⊞ SINGLE ENTRY PHASE
- ⊖ PEDESTRIAN PHASE
- NUMBER REFERS TO ASSOCIATED PHASE
- OL OVERLAP

EXISTING PHASE DESIGNATION DIAGRAM

IL ROUTE 68
(DUNDEE ROAD)



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

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE		%OPERATION	
		INCAND.	LED		
SIGNAL (RED)	11	135	17	0.50	93.5
(YELLOW)	11	135	25	0.25	68.75
(GREEN)	12	135	15	0.25	45
ARROW	4	135	12	0.10	4.8
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 312.05
ENERGY SUPPLY CONTACT:	X				
PHONE:	X				
COMPANY:	X				
FILE NAME = MICROST\352106\ 22-3168.DGN	USER NAME = JGC	DESIGNED - BPT	REVISED -		
		DRAWN - JGC/RDS	REVISED -		
	PLOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -		
	PLOT DATE = X	DATE - 04-26-13	REVISED -		

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1

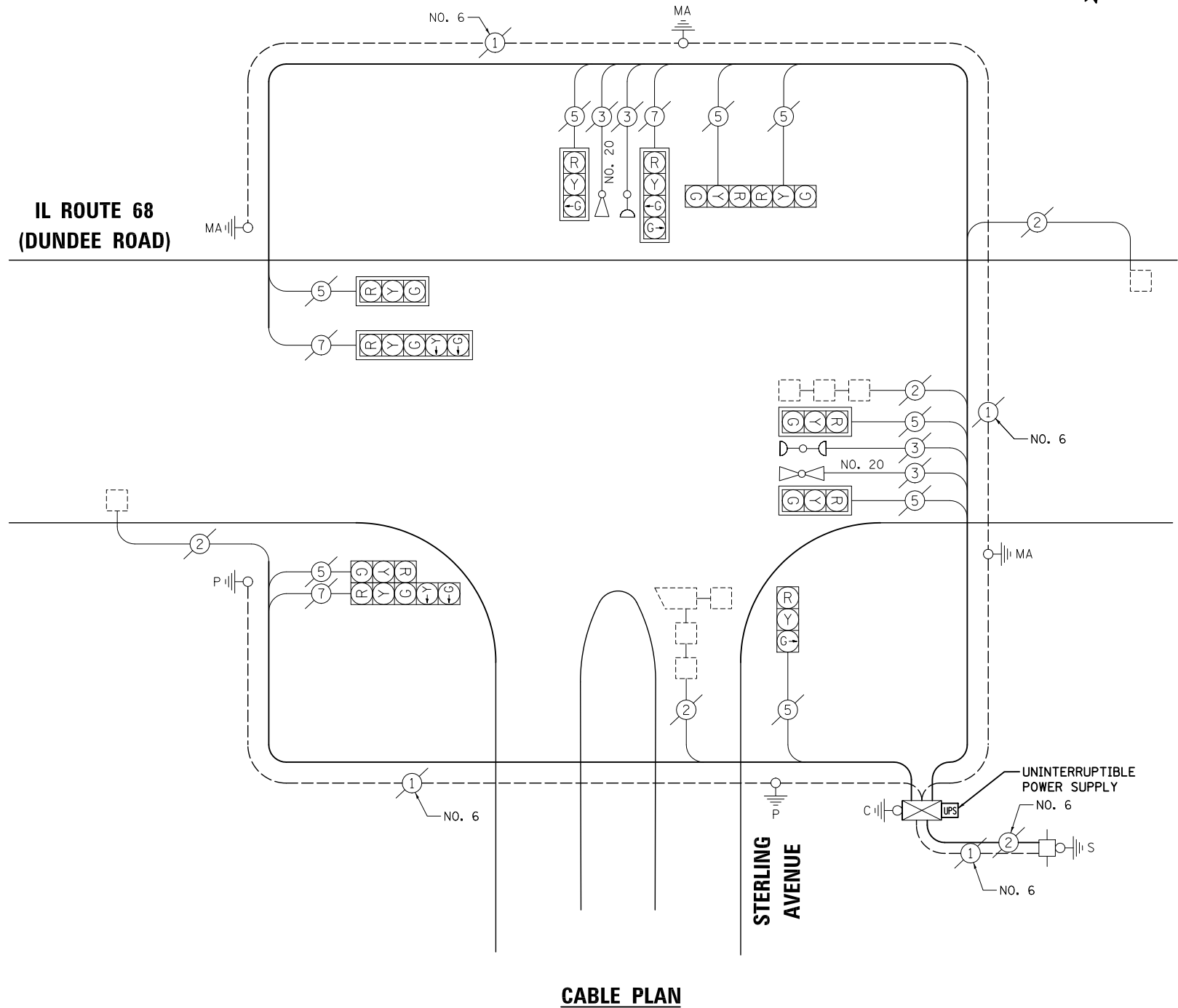
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SCHEDULE OF QUANTITIES, CABLE PLAN,
PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
IL ROUTE 68 (DUNDEE ROAD) AT STERLING AVENUE**

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

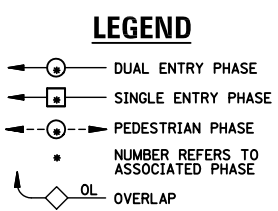
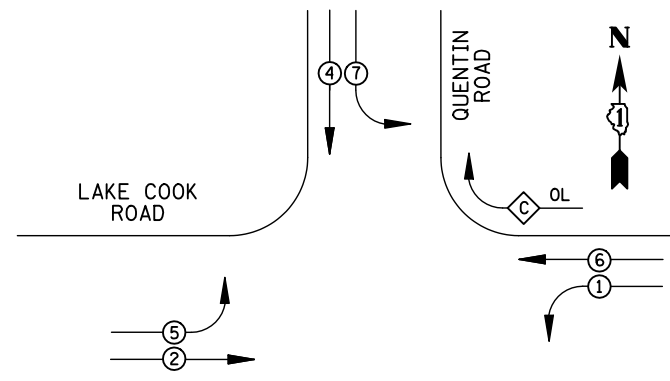
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	62	33
			CONTRACT NO. 60W37	
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



CABLE PLAN

TS# 3168
PALATINE

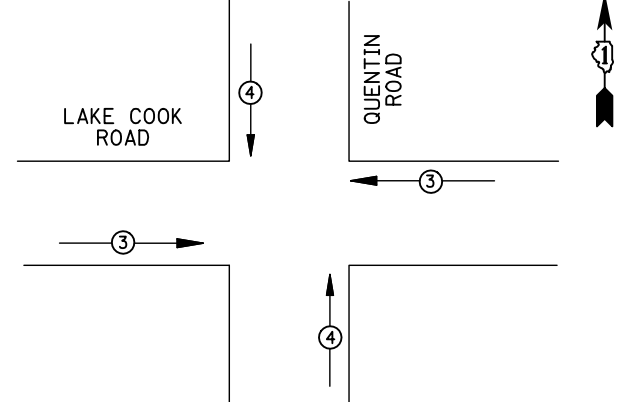
EXISTING CONTROLLER SEQUENCE



RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
C	= 6	+ 7
D	= 8	+ 1

EXISTING PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTORS

EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↑ ↓

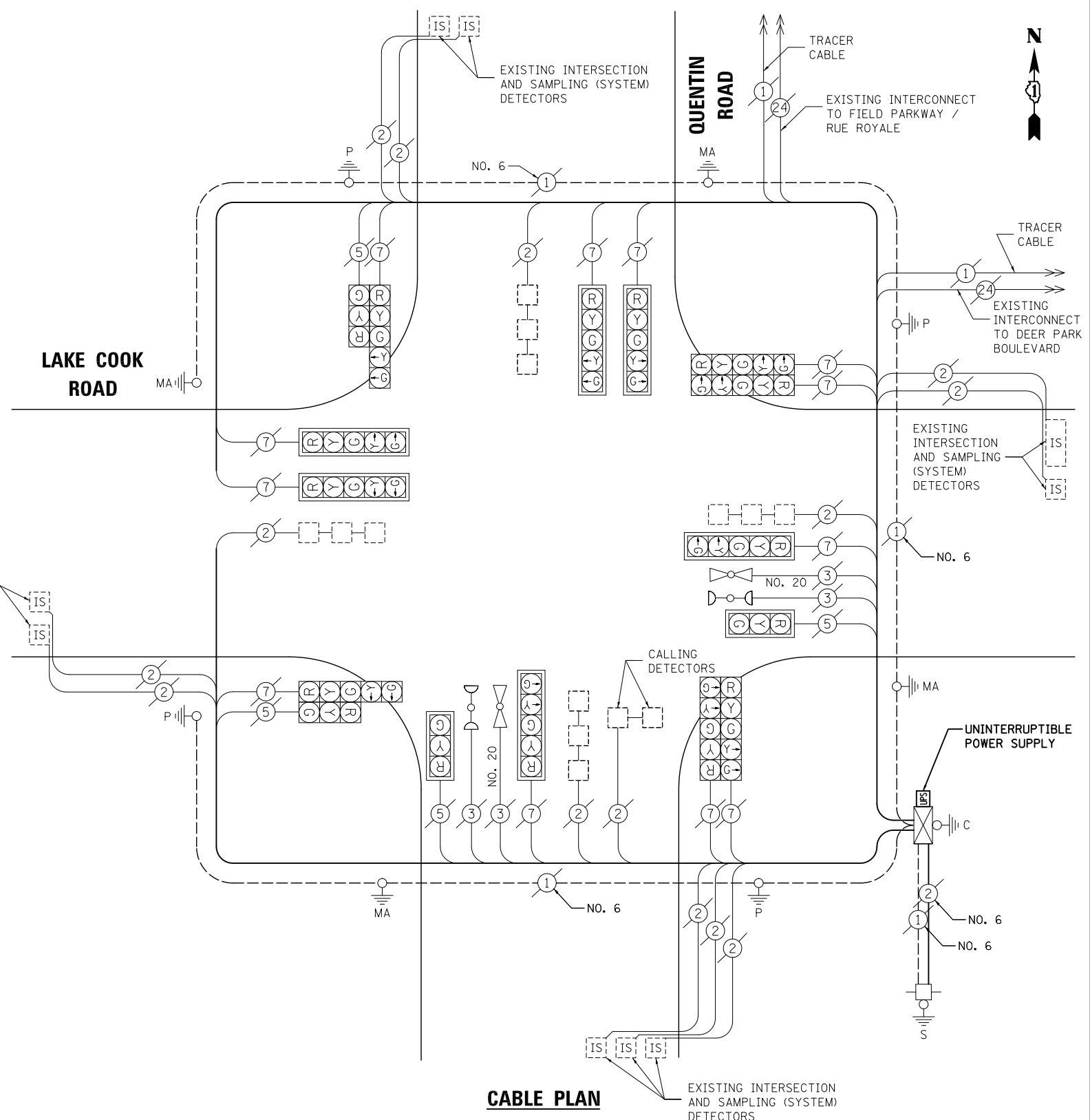
EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

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

TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16	135	17	0.50	136
(YELLOW)	16	135	25	0.25	100
(GREEN)	16	135	15	0.25	60
ARROW	24	135	12	0.10	28.8
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 424.8
ENERGY SUPPLY CONTACT: X					
PHONE: X					
COMPANY: X					

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1



CABLE PLAN

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

FILE NAME = \MICROST\352106\ 23-5425.DGN	USER NAME = JGC	DESIGNED - BPT	REVISED -
		DRAWN - JGC/RDS	REVISED -
	PLOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -
	PLOT DATE = X	DATE - 04-26-13	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION LAKE COOK ROAD AT QUENTIN ROAD

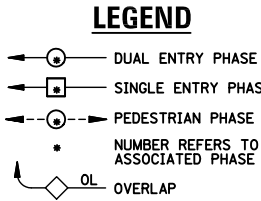
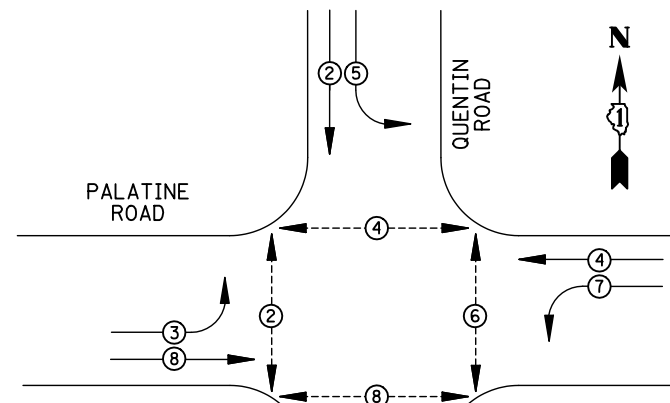
SCALE: N.T.S.	SHEET NO. OF SHEETS	STA. TO STA.
---------------	---------------------	--------------

PREPARED BY: **CEMCON, Ltd.**
 Consulting Engineers, Land Surveyors & Planners
 2280 White Oak Circle, Suite 100
 Aurora, Illinois 60504-9675
 Ph: 630.862.2100 Fax: 630.862.2199
 E-Mail: cadd@cemcon.com Website: www.cemcon.com

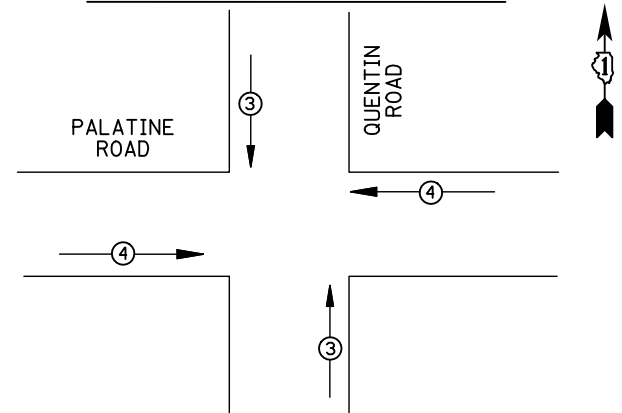
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	62	34
CONTRACT NO. 60W37				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

TS# 5425 PALATINE

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	↑	←

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

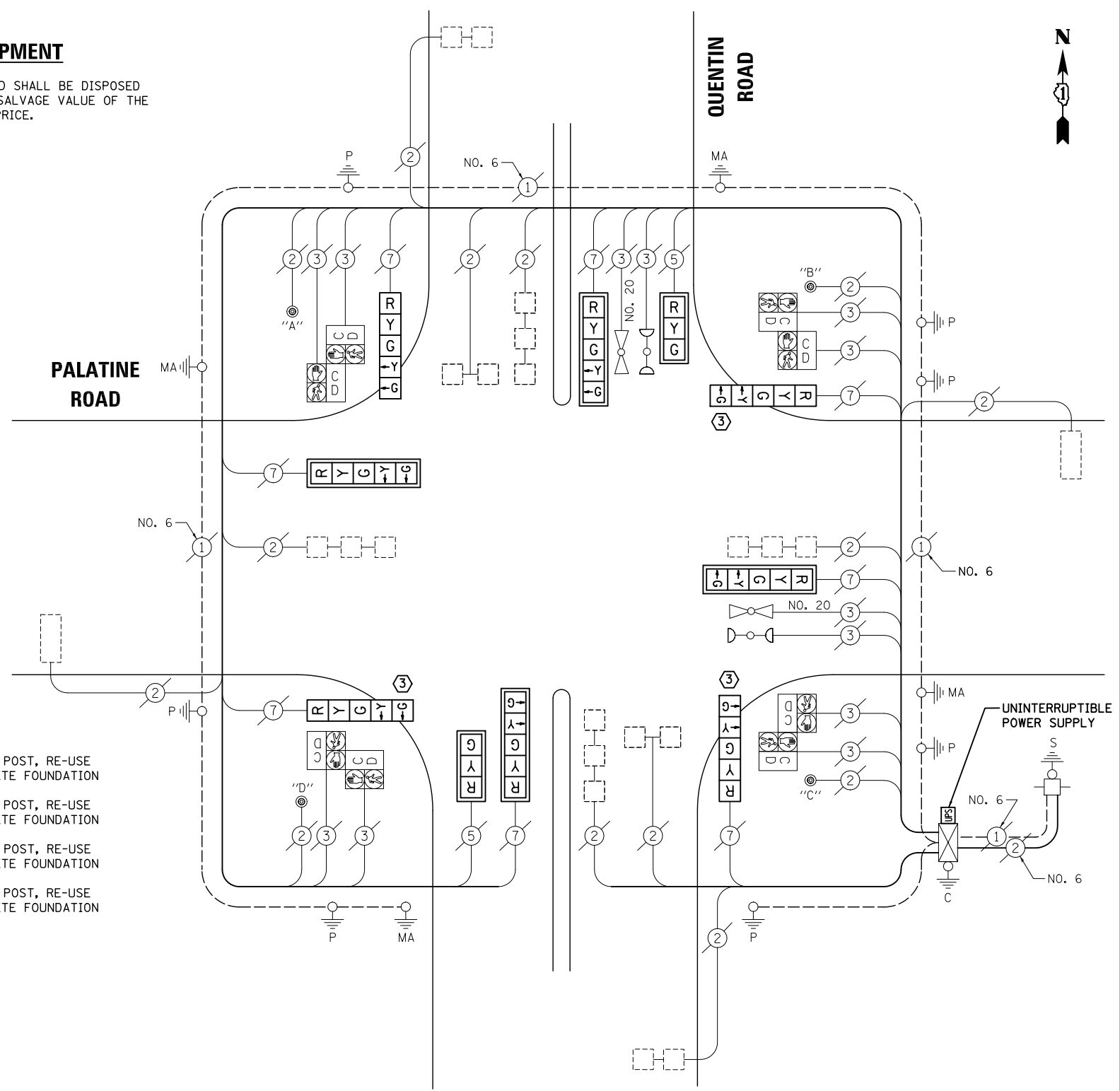
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 3 EACH TRAFFIC SIGNAL POST
- 2 EACH SIGNAL HEAD, 3-SECTION
- 8 EACH SIGNAL HEAD, 5-SECTION
- 6 EACH TRAFFIC SIGNAL BACKPLATE

- ① REPLACE 14 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
- ② REPLACE 15 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
- ③ REPLACE 16 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
- ④ REPLACE 18 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL, 16 FT.	EACH	3
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM 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

NOTE:

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

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

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

TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	10	135	17	0.50	85
(YELLOW)	10	135	25	0.25	62.5
(GREEN)	10	135	15	0.25	37.5
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	

ENERGY COSTS TO: TOTAL = 504.2

ILLINOIS DEPARTMENT OF TRANSPORTATION
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY CONTACT: X
PHONE: X
COMPANY: X

FILE NAME = \MICROST\352106\ 26-5610.DGN	USER NAME = JGC	DESIGNED - BPT	REVISED -
		DRAWN - JGC/RDS	REVISED -
		CHECKED - BPT	REVISED -
		DATE - 04-26-13	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION PALATINE ROAD AT QUENTIN ROAD

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

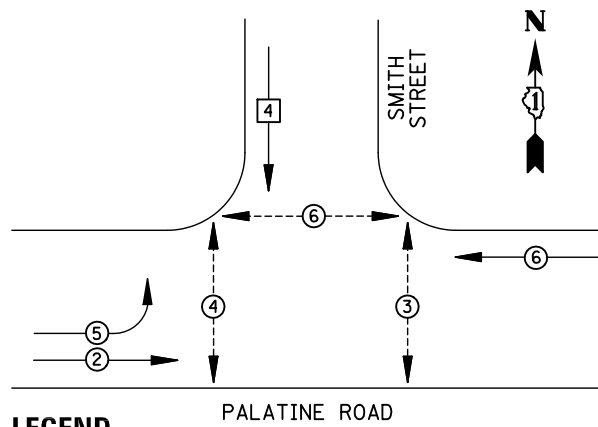
PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	62	35

CONTRACT NO. 60W37
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

TS# 5610
PALATINE

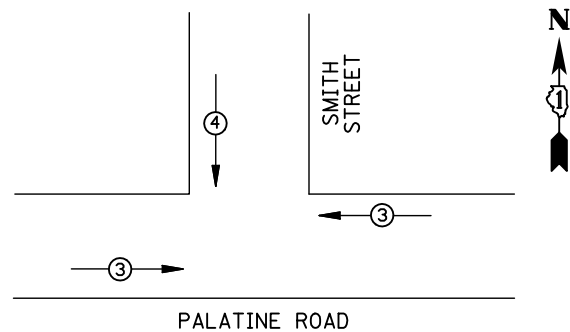
EXISTING CONTROLLER SEQUENCE



LEGEND

- ⊖ DUAL ENTRY PHASE
- ⊠ SINGLE ENTRY PHASE
- ⊖ PEDESTRIAN PHASE
- * NUMBER REFERS TO ASSOCIATED PHASE
- OL OVERLAP

EXISTING PHASE DESIGNATION DIAGRAM



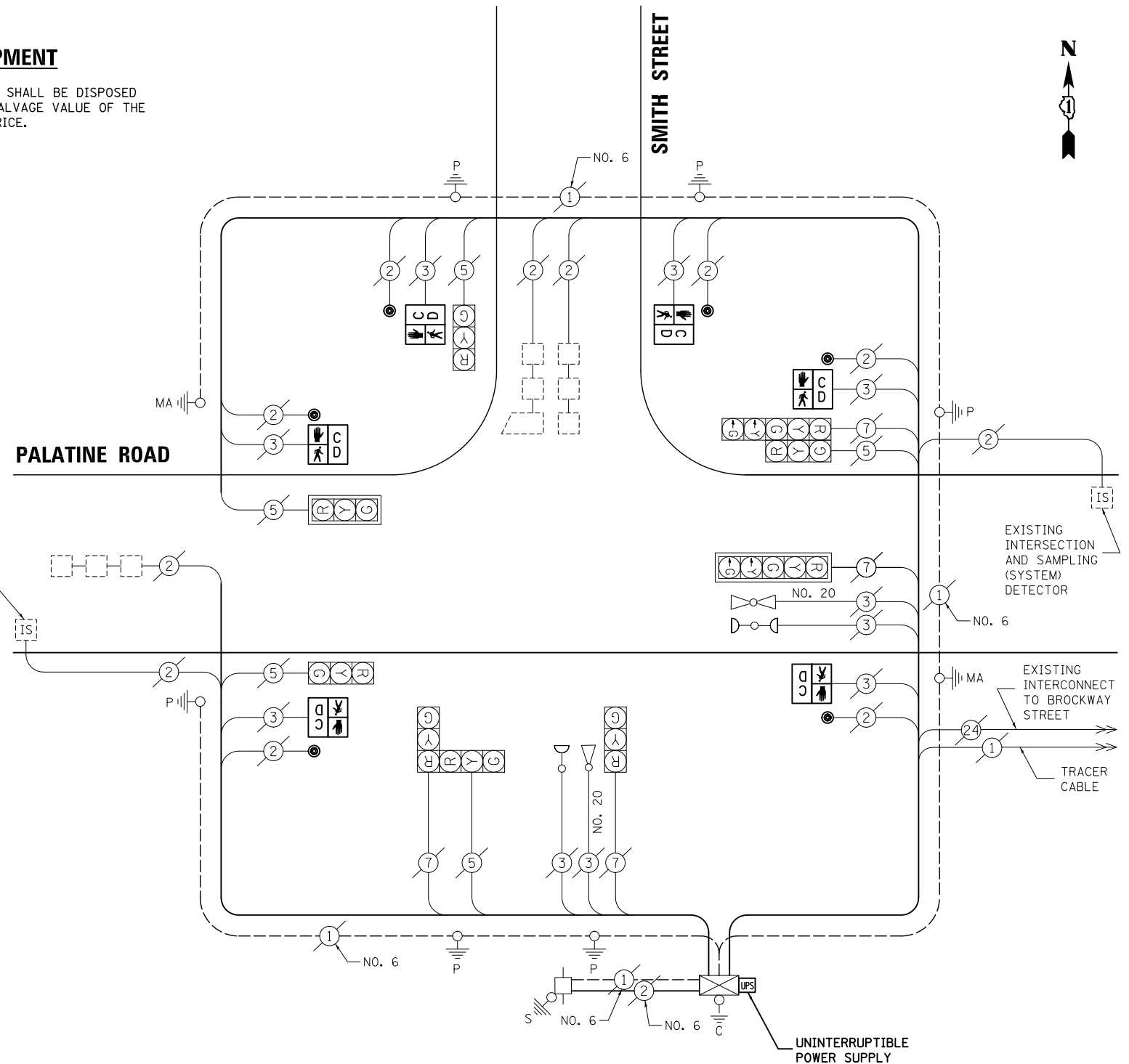
EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	
MOVEMENT	←	↓	

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

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.

- 6 EACH PEDESTRIAN SIGNAL HEAD
- 6 EACH PEDESTRIAN PUSH-BUTTON



CABLE PLAN

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

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	6
PEDESTRIAN PUSH-BUTTON	EACH	6
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	9	135	17	0.50	76.5
(YELLOW)	9	135	25	0.25	56.25
(GREEN)	9	135	15	0.25	33.75
ARROW	4	135	12	0.10	4.8
PED. SIGNAL	6	90	25	1.00	150
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 421.3
ENERGY SUPPLY CONTACT: X					
PHONE: X					
COMPANY: X					
FILE NAME = MICROST\352106\ 27-14715.DGN	USER NAME = JGC		DESIGNED - BPT	REVISED -	
	PLOT SCALE = NOT TO SCALE		DRAWN - JGC/RDS	REVISED -	
	PLOT DATE = X		CHECKED - BPT	REVISED -	
			DATE - 04-26-13	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN,
PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
PALATINE ROAD AT SMITH STREET

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

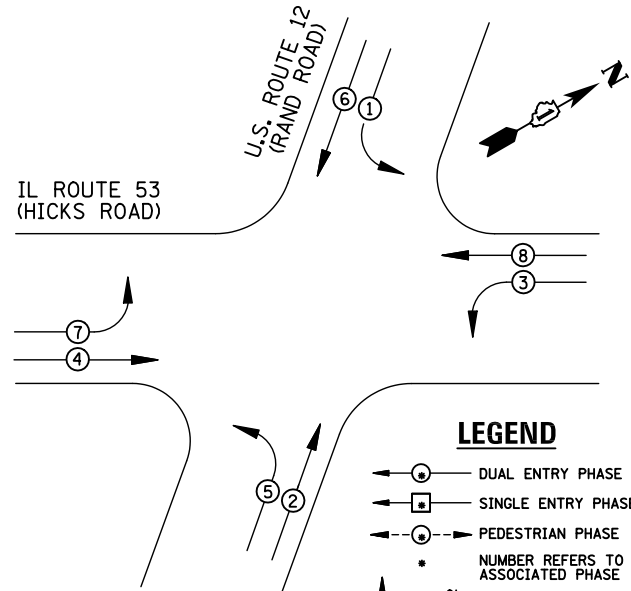
PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	62	36
			CONTRACT NO. 60W37	

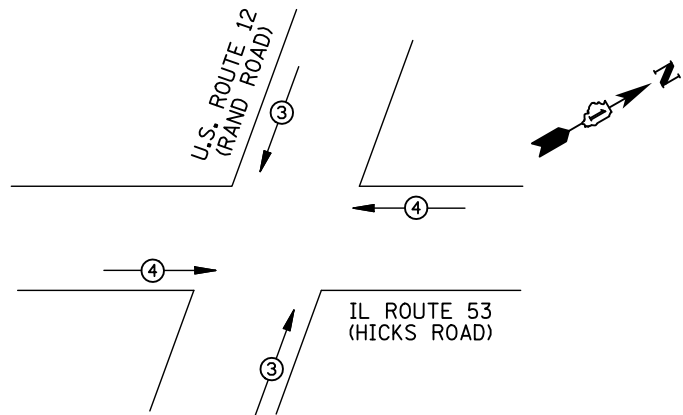
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

TS# 14715
PALATINE

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



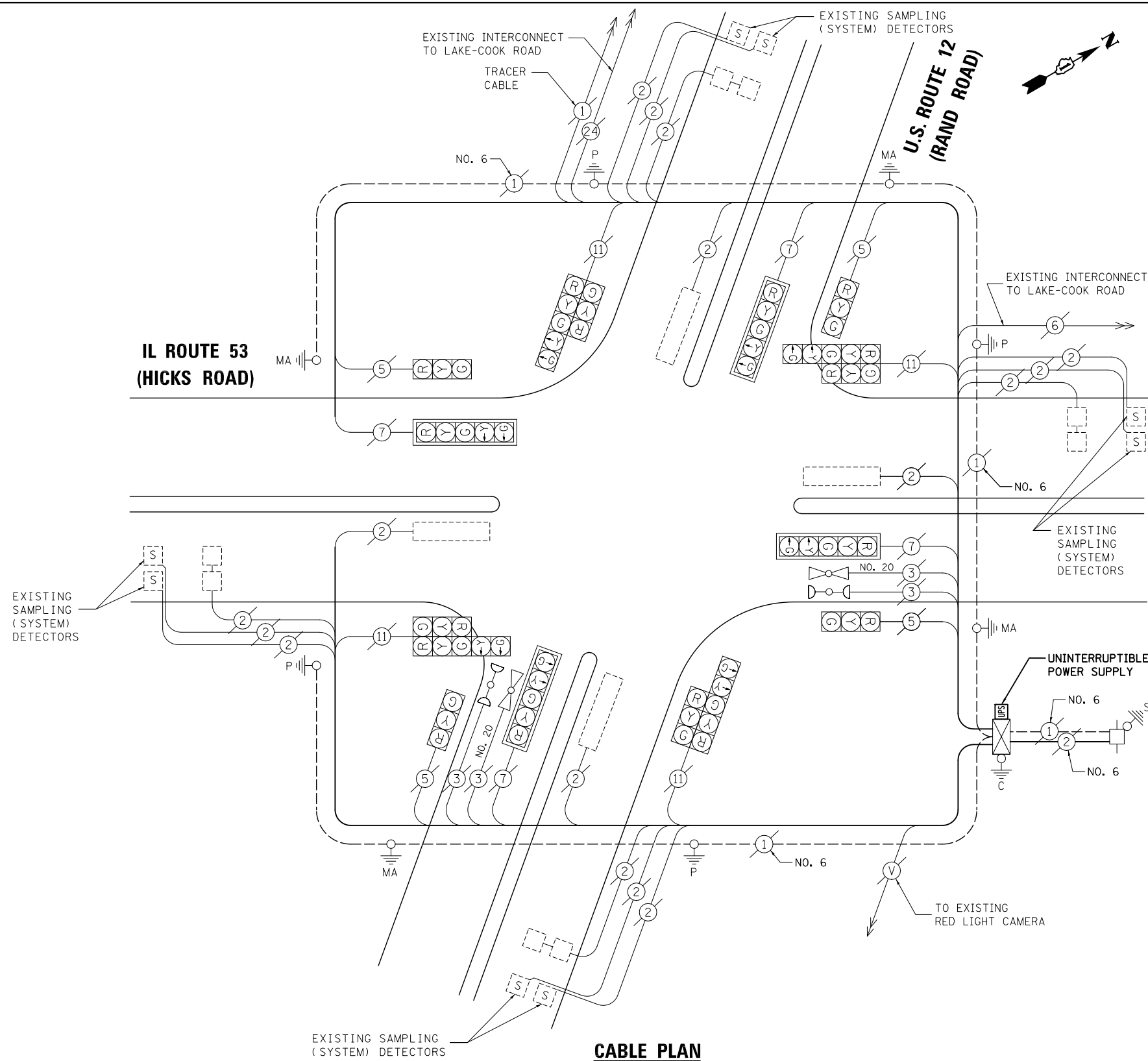
EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	↑	→

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	16	135	17	0.50	136
(YELLOW)	16	135	25	0.25	100
(GREEN)	16	135	15	0.25	60
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 615.2
ENERGY SUPPLY	CONTACT: X				
	PHONE: X				
	COMPANY: X				
FILE NAME = \MICROST\352106\ 31-1150.DGN	USER NAME = JGC	DESIGNED - BPT	REVISED -		
		DRAWN - JGC/RDS	REVISED -		
	PLOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -		
	PLOT DATE = X	DATE - 04-26-13	REVISED -		

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1



CABLE PLAN

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN,
PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
U.S. ROUTE 12 (RAND ROAD) AT IL ROUTE 53 (HICKS ROAD)

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

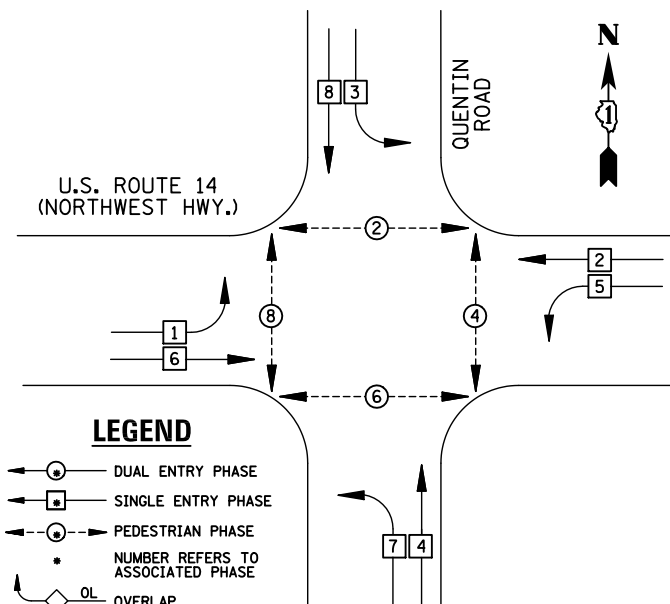
PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	62	37

CONTRACT NO. 60W37
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

TS# 1150
PALATINE

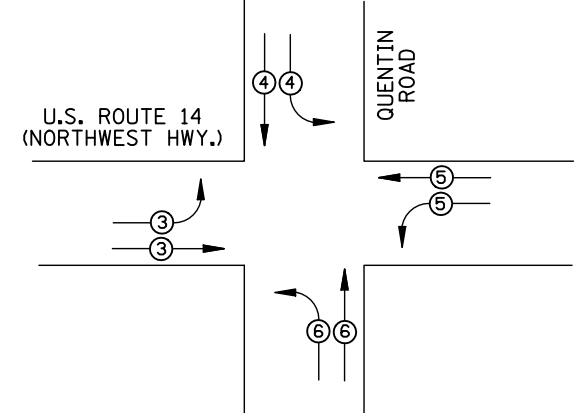
EXISTING CONTROLLER SEQUENCE



LEGEND

- ⊕ DUAL ENTRY PHASE
- ⊞ SINGLE ENTRY PHASE
- ⊙ PEDESTRIAN PHASE
- NUMBER REFERS TO ASSOCIATED PHASE
- ◊ OL OVERLAP

EXISTING PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTORS				
EMERGENCY VEHICLE PREEMPTOR	3	4	5	6
MOVEMENT				

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		%OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	20	135	17	0.50	170
(YELLOW)	20	135	25	0.25	125
(GREEN)	20	135	15	0.25	75
ARROW		135	12	0.10	
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	

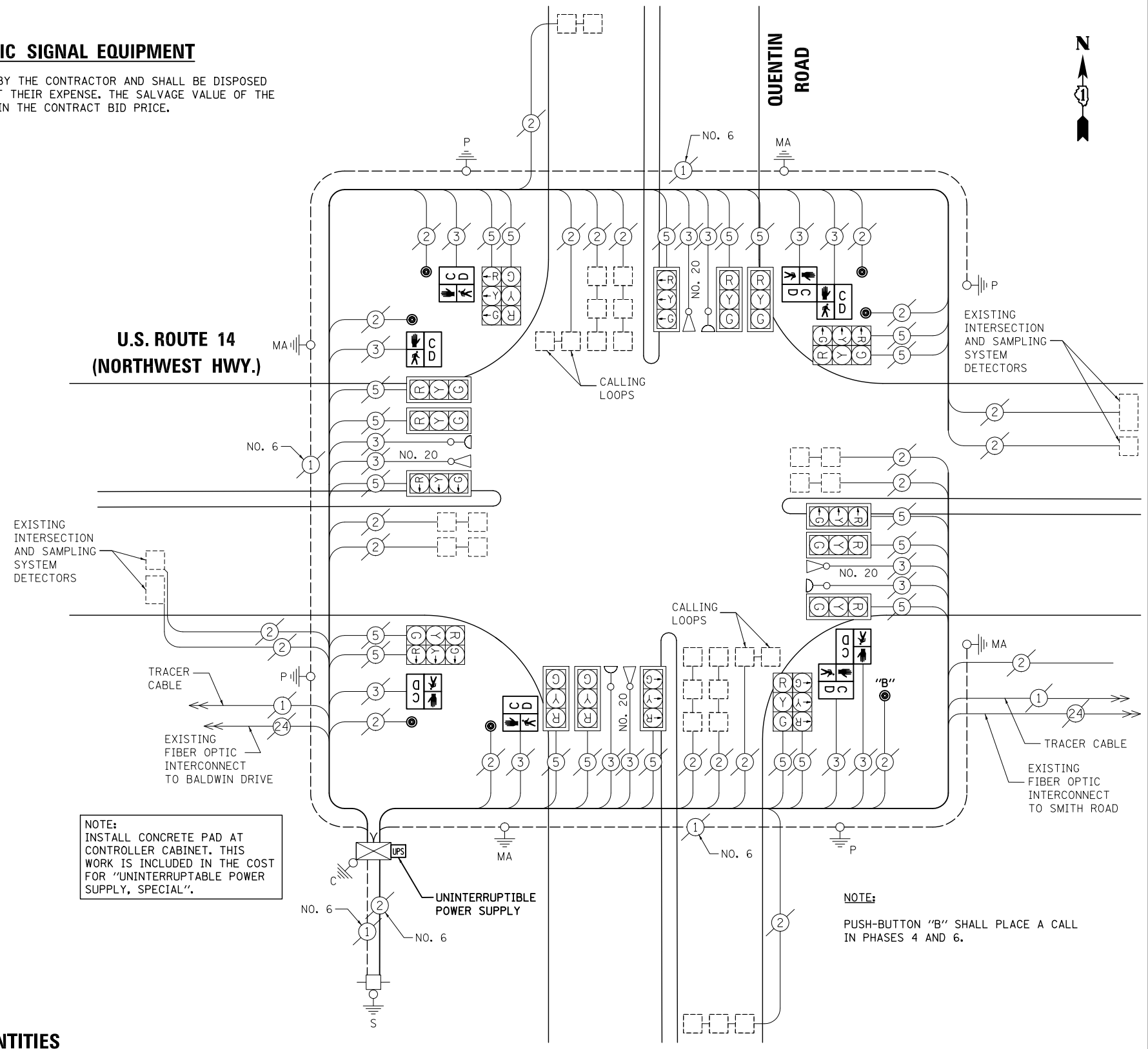
ENERGY COSTS TO: TOTAL = 670
 ILLINOIS DEPARTMENT OF TRANSPORTATION
 201 WEST CENTER COURT
 SCHAUMBURG, IL 60196-1096
 ENERGY SUPPLY CONTACT: X
 PHONE: X
 COMPANY: X

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.

- 8 EACH PEDESTRIAN SIGNAL HEAD
- 7 EACH PEDESTRIAN PUSH-BUTTON

U.S. ROUTE 14 (NORTHWEST HWY.)



NOTE: INSTALL CONCRETE PAD AT CONTROLLER CABINET. THIS WORK IS INCLUDED IN THE COST FOR "UNINTERRUPTIBLE POWER SUPPLY, SPECIAL".

NOTE: PUSH-BUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6.

CABLE PLAN

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

SCHEDULE OF QUANTITIES

ITEM	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
PEDESTRIAN PUSH-BUTTON, NON-LATCHING	EACH	7

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
 U.S. ROUTE 14 (NORTHWEST HWY.) AT QUENTIN ROAD

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

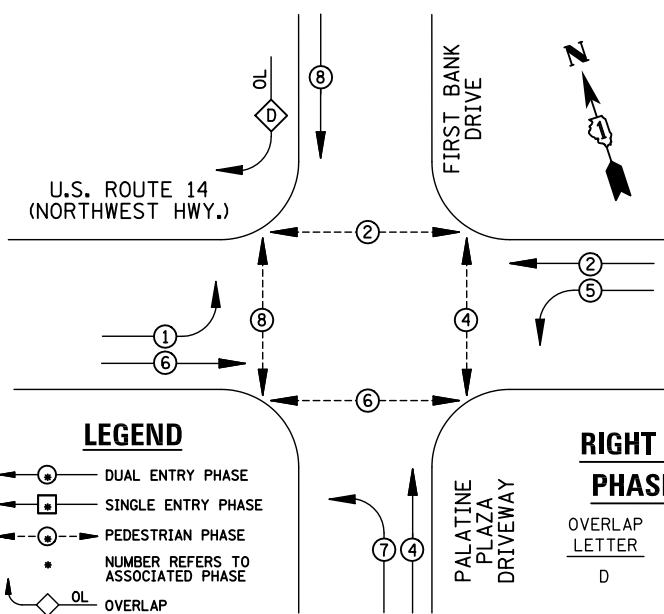
PREPARED BY:
CEMCON, Ltd.
 Consulting Engineers, Land Surveyors & Planners
 2280 White Oak Circle, Suite 100
 Aurora, Illinois 60504-9675
 Ph: 630.862.2100 Fax: 630.862.2199
 E-Mail: cadd@cemcon.com Website: www.cemcon.com

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	62	38

CONTRACT NO. 60W37
 FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

FILE NAME = \MICROST\352106\ 35-1280.DGN
 USER NAME = JGC
 DESIGNED - BPT
 DRAWN - JGC/RDS
 PLOT SCALE = NOT TO SCALE
 PLOT DATE = X
 CHECKED - BPT
 DATE - 04-26-13
 REVISED -
 REVISED -
 REVISED -
 REVISED -

EXISTING CONTROLLER SEQUENCE



REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

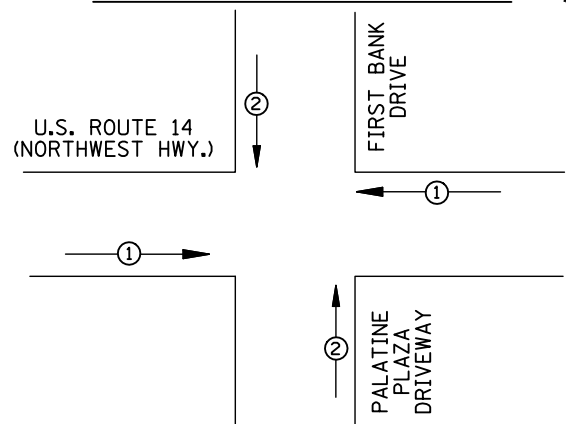
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 8 EACH PEDESTRIAN SIGNAL HEAD
- 5 EACH PEDESTRIAN PUSH-BUTTON

RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
D	= 8	+ 1

EXISTING PHASE DESIGNATION DIAGRAM



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

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

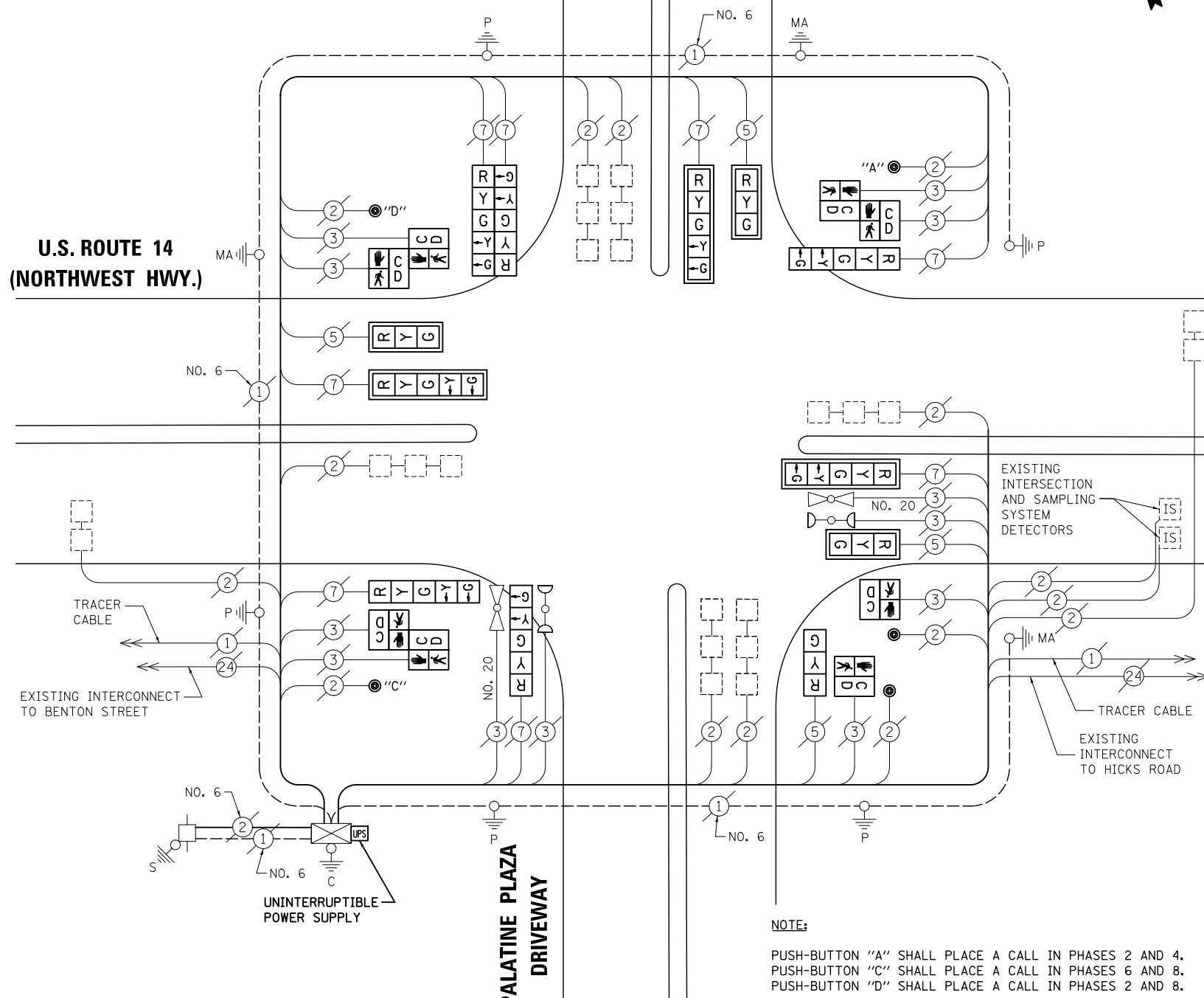
I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	12	135	15	0.25	45
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 541.2
ENERGY SUPPLY CONTACT: X					
PHONE: X					
COMPANY: X					
FILE NAME = \MICROST\352106\ 37-20590.DGN	USER NAME = JGC	DESIGNED - BPT	REVISED -		
		DRAWN - JGC/RDS	REVISED -		
	PLOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -		
	PLOT DATE = X	DATE - 04-26-13	REVISED -		

SCHEDULE OF QUANTITIES

ITEM	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
PEDESTRIAN PUSH-BUTTON, NON-LATCHING	EACH	5
SIGNAL HEAD, LED, 1-FACE, 3-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	3
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	3
SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED RETROFIT	EACH	1

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

U.S. ROUTE 14 (NORTHWEST HWY.)



CABLE PLAN

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

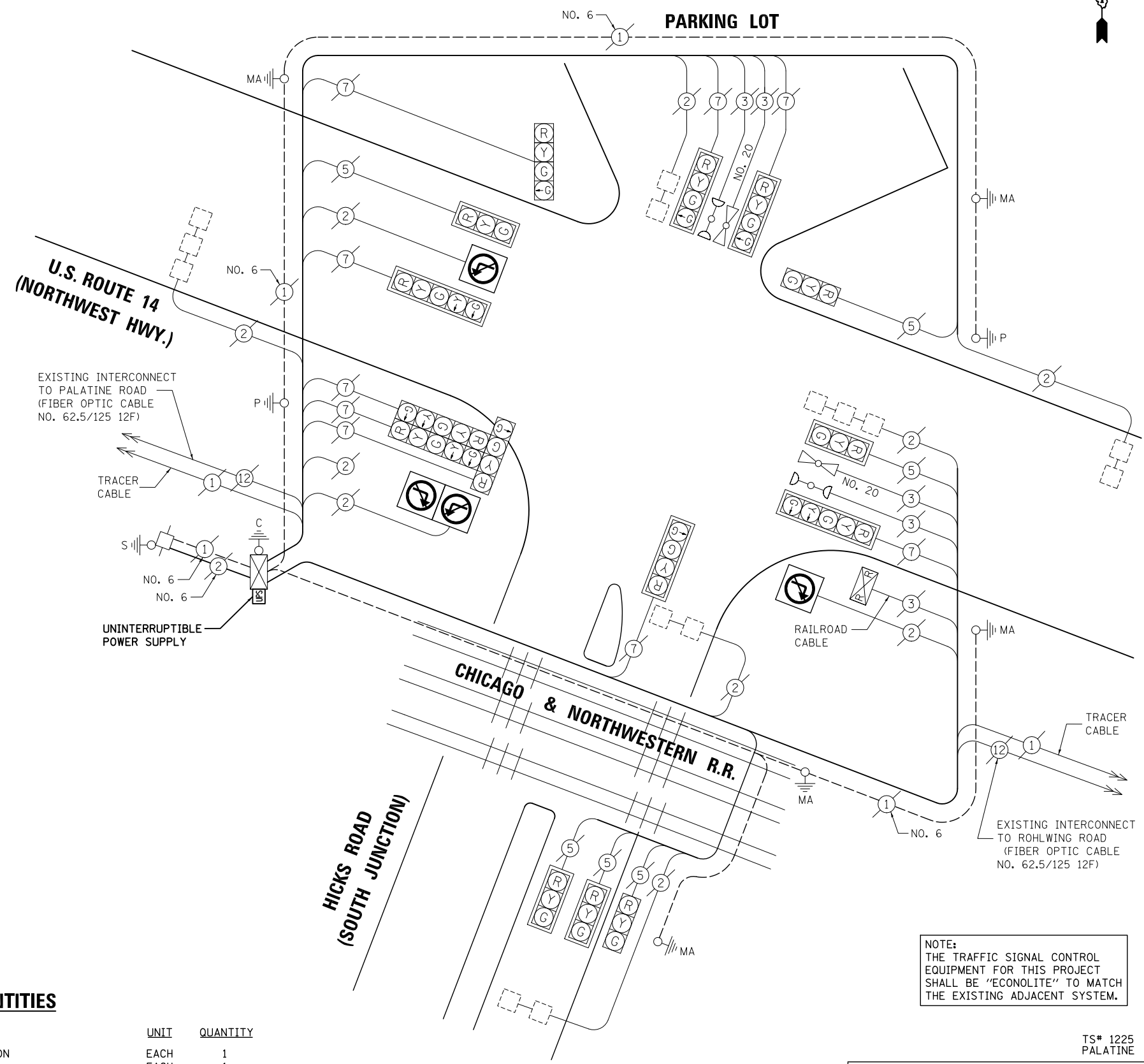
RETROFIT ALL VEHICULAR SIGNAL HEADS TO L.E.D.

PREPARED BY: **CEMCON, Ltd.**
 Consulting Engineers, Land Surveyors & Planners
 2280 White Oak Circle, Suite 100
 Aurora, Illinois 60504-9675
 Ph: 630.862.2100 Fax: 630.862.2199
 E-Mail: cadd@cemcon.com Website: www.cemcon.com

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION U.S. ROUTE 14 (NORTHWEST HWY.) AT FIRST BANK DRIVE

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	62	39
CONTRACT NO. 60W37				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

TS# 20590 PALATINE



CABLE PLAN

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

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE		%OPERATION	
		INCAND.	LED		
SIGNAL (RED)	15	135	17	0.50	127.5
(YELLOW)	15	135	25	0.25	93.75
(GREEN)	20	135	15	0.25	75
ARROW	8	135	12	0.10	9.6
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	

ENERGY COSTS TO: TOTAL = **405.85**
ILLINOIS DEPARTMENT OF TRANSPORTATION
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY CONTACT: X
PHONE: X
COMPANY: X

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1

TS# 1225
PALATINE

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

FILE NAME = \MICROST\352106\ 40-1225-1.DGN
USER NAME = JGC
DESIGNED - BPT
DRAWN - JGC/RDS
PLOT SCALE = NOT TO SCALE
PLOT DATE = X

REVISIONS:
REVISED -
REVISED -
CHECKED - BPT
DATE - 04-26-13

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES AND CABLE PLAN
U.S. ROUTE 14 (NORTHWEST HWY.) AT HICKS ROAD (SOUTH JUNCTION)
SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	62	40

CONTRACT NO. 60W37
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

SEQUENCE OF OPERATION

MOVEMENT	← 2 5		← 2 6		3		DL 4										F L A S H		
PHASE	2 + 5		2 + 6		3		4												
INTERVAL	1	2	3	4A	4B	5A	5B	6	7A	7B	8	9A	9B	9C	9D	10A	10B	10C	10D
CHANGE TO		2+6		3		4			2+5 2+6 4				2+5			2+6			
U.S. ROUTE 14 (NORTHWEST HWY.) FAR LEFT AND END MAST ARM SIGNALS	R	R	G	Y	R	Y	R	R	R	R	R	R	R	R	R	R	R	R	R
U.S. ROUTE 14 (NORTHWEST HWY.) NEAR RIGHT AND FAR RIGHT SIGNALS	R	R	G	Y	R	Y	R	R	R	R	R	R	R	R	R	R	R	R	R
U.S. ROUTE 14 (NORTHWEST HWY.) FAR RIGHT AND END MAST ARM SIGNALS	G	G	G	Y	R	Y	R	R	R	R	R	R	R	R	R	R	R	R	R
U.S. ROUTE 14 (NORTHWEST HWY.) FAR RIGHT SIGNAL	G	G	G	Y	R	Y	R	R	R	R	R	R	R	R	R	R	R	R	R
HICKS ROAD (SOUTH OF TRACKS) MAST ARM SIGNALS	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	R	R	Y	R	R
HICKS ROAD (NORTH OF TRACKS) ALL SIGNALS	R	R	R	R	R	R	R	R	R	R	R	G	G	G	Y	R	G	G	Y
PARKING LOT ENTRANCE ALL SIGNALS	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R

PHASE 2+6 SHALL BE PLACED ON RECALL

RAILROAD PREEMPTION SEQUENCE OF OPERATION

	PREEMPTOR NUMBER 3		PREEMPTOR NUMBER 4		PREEMPTOR NUMBER 5		PREEMPTOR NUMBER 2												
CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER	1	3	6	8															
CHANGE FROM EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER					2	3	4												
RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1A	1B	1C	1D	1E	1F	1G	1H	1J	1K	1L	1M	1N	1P	2	3	4	5	CLEAR TO NORMAL SEQUENCE
CHANGE TO RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1B	2	1D	2	1F	2	1H	2	1K	2	1M	2	1P	2	3	4	5		△
U.S. ROUTE 14 (NORTHWEST HWY.) FAR LEFT AND END MAST ARM SIGNALS	R	R	Y	R	R	R	R	R	Y	R	R	R	R	R	R	R	R	G	△
U.S. ROUTE 14 (NORTHWEST HWY.) NEAR RIGHT AND FAR RIGHT SIGNALS	R	R	Y	R	R	R	R	R	Y	R	R	R	R	R	R	R	R	G	△
U.S. ROUTE 14 (NORTHWEST HWY.) FAR RIGHT AND END MAST ARM SIGNALS	Y	R	Y	R	R	R	R	R	Y	R	R	R	R	R	R	R	R	G	△
U.S. ROUTE 14 (NORTHWEST HWY.) FAR RIGHT SIGNAL	Y	R	Y	R	R	R	R	R	Y	R	R	R	R	R	R	R	R	G	△
HICKS ROAD (SOUTH OF TRACKS) MAST ARM SIGNALS	R	R	R	R	R	R	R	R	Y	R	R	R	R	R	R	R	R	R	△
HICKS ROAD (NORTH OF TRACKS) ALL SIGNALS	R	R	R	R	R	R	R	R	G	G	R	R	G	G	R	R	G	Y	R
PARKING LOT ENTRANCE ALL SIGNALS	R	R	R	R	Y	R	R	R	R	R	R	R	Y	R	R	R	R	R	△
INTERNALLY ILLUMINATED NO RIGHT TURN SIGNS	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	△
INTERNALLY ILLUMINATED NO LEFT TURN SIGNS	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	△

△ 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.

NLT = "NO LEFT TURN" OR

NRT = "NO RIGHT TURN" OR

EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION

	PREEMPTOR NUMBER 3		PREEMPTOR NUMBER 4		PREEMPTOR NUMBER 5																
CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER	1	1	3	3	6	6	8	8	8											CLEAR TO NORMAL SEQUENCE	
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	2	3	4
CHANGE TO EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	2	1C	3 OR 4	2	1F	3 OR 4	1H	2 OR 3	4	1L	1M	1N	2	3	1R	1S	1T	4			
U.S. ROUTE 14 (NORTHWEST HWY.) FAR LEFT AND END MAST ARM SIGNALS	R	R	R	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
U.S. ROUTE 14 (NORTHWEST HWY.) NEAR RIGHT AND FAR RIGHT SIGNALS	R	R	R	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
U.S. ROUTE 14 (NORTHWEST HWY.) FAR RIGHT AND END MAST ARM SIGNALS	G	Y	R	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
U.S. ROUTE 14 (NORTHWEST HWY.) FAR RIGHT SIGNAL	G	Y	R	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
HICKS ROAD (SOUTH OF TRACKS) MAST ARM SIGNALS	R	R	R	R	R	R	R	R	R	R	R	Y	R	R	R	R	G	Y	R	R	R
HICKS ROAD (NORTH OF TRACKS) ALL SIGNALS	R	R	R	R	R	R	R	R	R	R	R	R	G	G	Y	R	G	G	G	Y	R
PARKING LOT ENTRANCE ALL SIGNALS	R	R	R	R	R	R	R	R	Y	R	G	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 INTERVAL 2, 3 OR 4 IS TERMINATED.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SEQUENCE OF OPERATION, RAILROAD
 PREEMPTION SEQUENCE OF OPERATION AND
 EMERGENCY VEHICLE PREEMPTION
 SEQUENCE OF OPERATION
 U.S. ROUTE 14 (NORTHWEST HWY.)
 AND HICKS ROAD (SOUTH JUNCTION)
 DRAWN BY: FN
 CHECKED BY: GMZ
 SCALE: N.T.S.
 DATE: 6-30-98

CHRISTOPHER B. BURKE ENGINEERING LTD.
 2575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-0500

PREPARED BY:
CEMCON, Ltd.
 Consulting Engineers, Land Surveyors & Planners
 2280 White Oak Circle, Suite 100
 Aurora, Illinois 60504-9675
 Ph: 630.862.2100 Fax: 630.862.2199
 E-Mail: cadd@cemcon.com Website: www.cemcon.com

FILE NAME = \MICROST\352106\40-1225-2.DGN	USER NAME = JGC	DESIGNED - BPT	REVISED -
PLOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISIONS -	
PLOT DATE = X	DATE - 04-26-13		

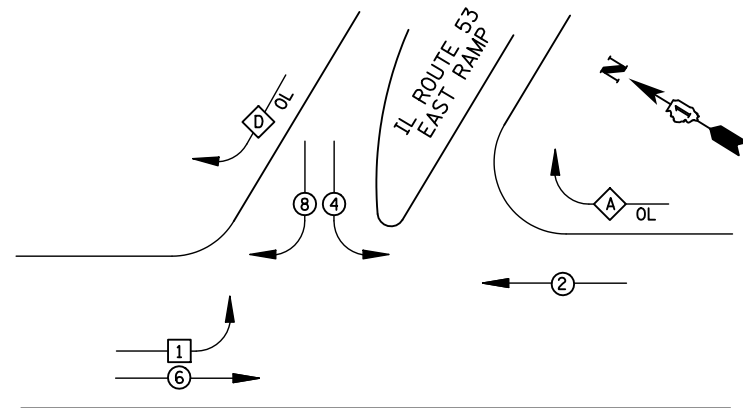
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**SEQUENCE OF OPERATION, RAILROAD PREEMPTION SEQUENCE
 OF OPERATION AND EMERGENCY VEHICLE PREEMPTION
 U.S. ROUTE 14 (NORTHWEST HWY.) AT HICKS ROAD (SOUTH JUNCTION)**
 SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	62	41
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60W37	

TS# 1225
 PALATINE

EXISTING CONTROLLER SEQUENCE

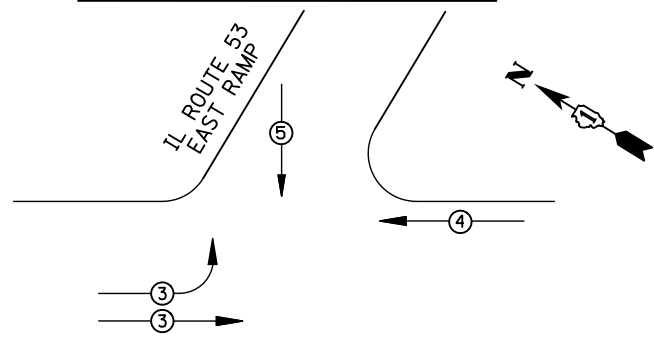


- LEGEND**
- ⊕ DUAL ENTRY PHASE
 - ⊖ SINGLE ENTRY PHASE
 - ⊙ PEDESTRIAN PHASE
 - NUMBER REFERS TO ASSOCIATED PHASE
 - OL OVERLAP

RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2 +	4
D	= 8 +	1

EXISTING PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT	↗	←	↓

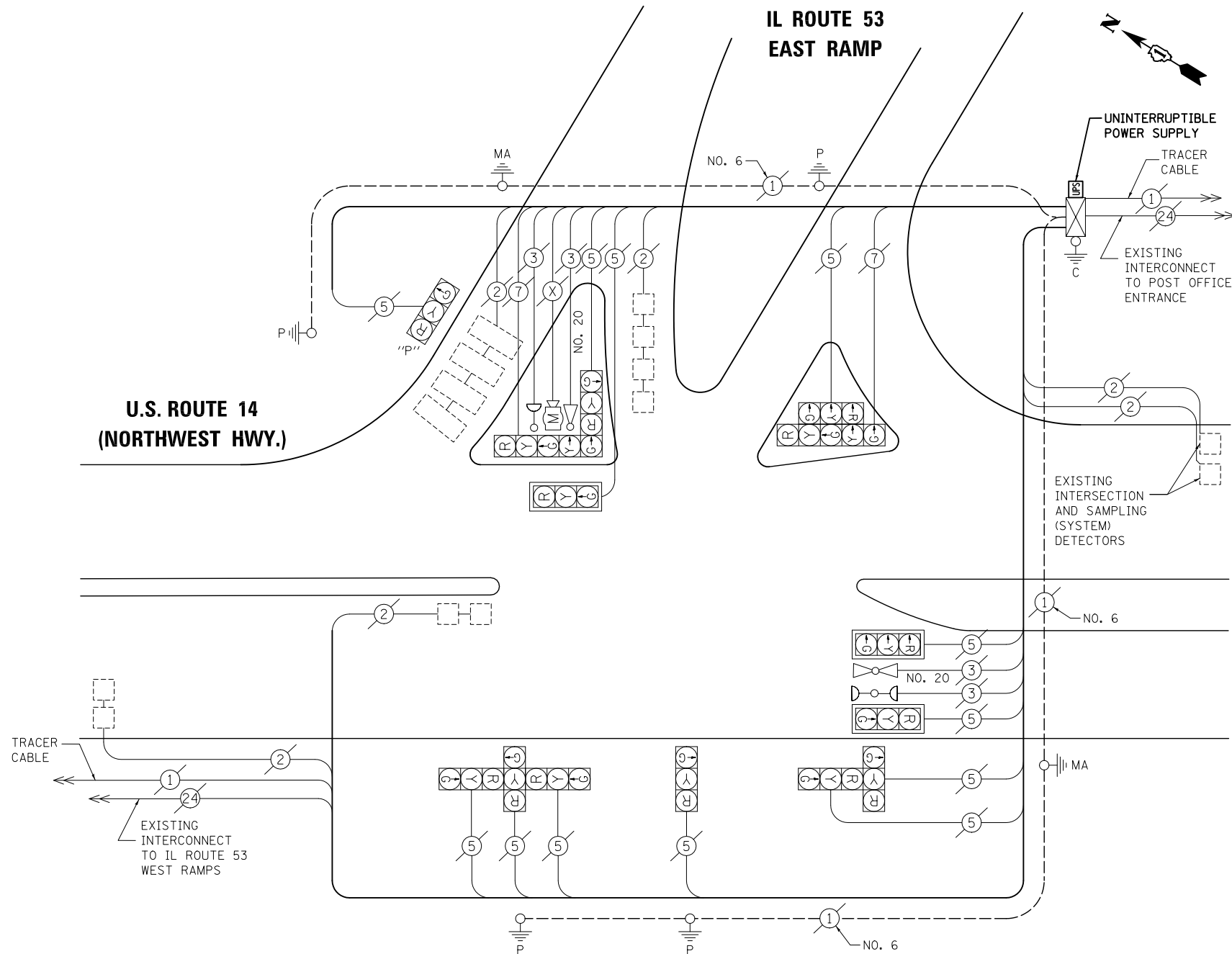
EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	14	135	17	0.50	119
(YELLOW)	14	135	25	0.25	87.5
(GREEN)	14	135	15	0.25	52.5
ARROW	4	135	12	0.10	4.8
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 363.8
ENERGY SUPPLY	CONTACT: X				
	PHONE: X				
	COMPANY: X				
FILE NAME = \MICROST\352106\ 41-1180.DGN	USER NAME = JGC	DESIGNED - BPT	REVISED -		
		DRAWN - JGC/RDS	REVISED -		
	PLOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -		
	PLOT DATE = X	DATE - 04-26-13	REVISED -		

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1

IL ROUTE 53 EAST RAMP



CABLE PLAN

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

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION U.S. ROUTE 14 (NORTHWEST HWY.) AT IL ROUTE 53 EAST RAMP

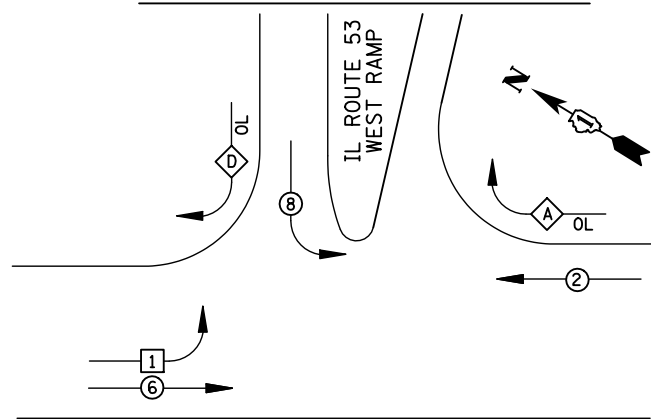
PREPARED BY:
CEMCON, Ltd.
 Consulting Engineers, Land Surveyors & Planners
 2280 White Oak Circle, Suite 100
 Aurora, Illinois 60504-9675
 Ph: 630.862.2100 Fax: 630.862.2199
 E-Mail: cadd@cemcon.com Website: www.cemcon.com

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	62	42

CONTRACT NO. 60W37
 FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

TS# 1180 PALATINE

EXISTING CONTROLLER SEQUENCE

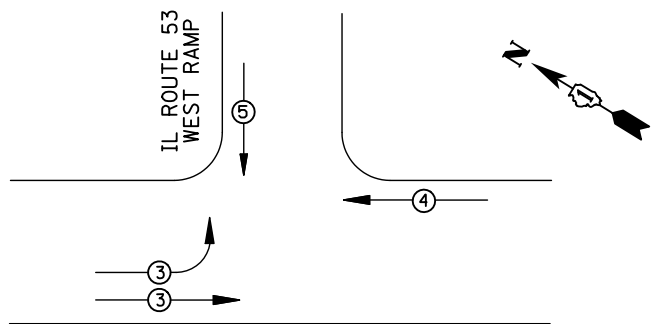


- LEGEND**
- ⊕ DUAL ENTRY PHASE
 - ⊞ SINGLE ENTRY PHASE
 - ⊖ PEDESTRIAN PHASE
 - NUMBER REFERS TO ASSOCIATED PHASE
 - OL OVERLAP

RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2 +	8
D	= 8 +	1

EXISTING PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTORS				
EMERGENCY VEHICLE PREEMPTOR	3	4	5	
MOVEMENT	↗	←	↓	

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		%OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	14	135	17	0.50	119
(YELLOW)	14	135	25	0.25	87.5
(GREEN)	14	135	15	0.25	52.5
ARROW	4	135	12	0.10	4.8
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 363.8
ENERGY SUPPLY	CONTACT: X				
	PHONE: X				
	COMPANY: X				
FILE NAME = \MICROST\352106\ 42-1185.DGN	USER NAME = JGC	DESIGNED - BPT	REVISED -		
		DRAWN - JGC/RDS	REVISED -		
	PLOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -		
	PLOT DATE = X	DATE - 04-26-13	REVISED -		

SCHEDULE OF QUANTITIES

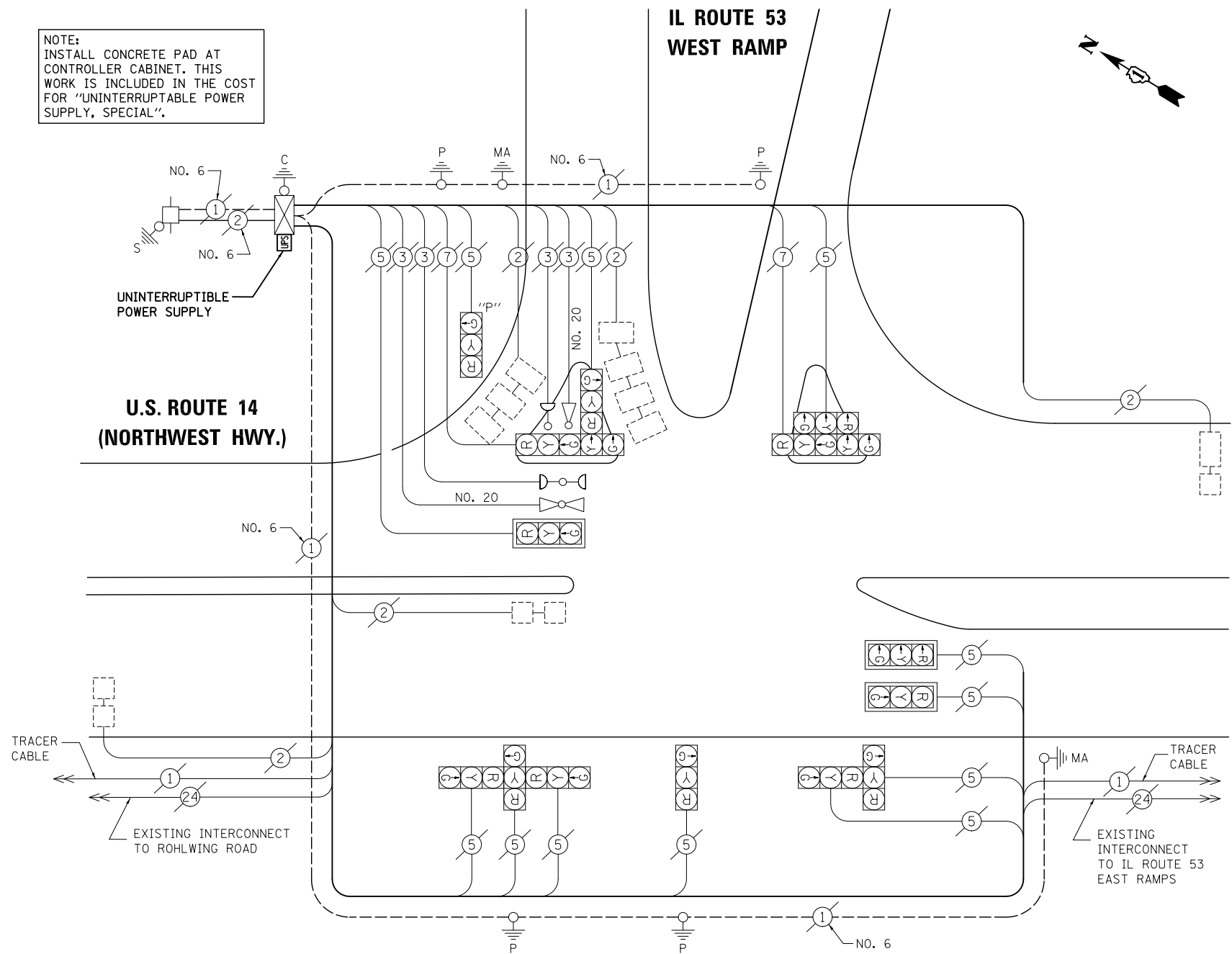
ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN,
PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
U.S. ROUTE 14 (NORTHWEST HWY.) AT IL ROUTE 53 WEST RAMP

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

NOTE:
INSTALL CONCRETE PAD AT CONTROLLER CABINET. THIS WORK IS INCLUDED IN THE COST FOR "UNINTERRUPTIBLE POWER SUPPLY, SPECIAL".



CABLE PLAN

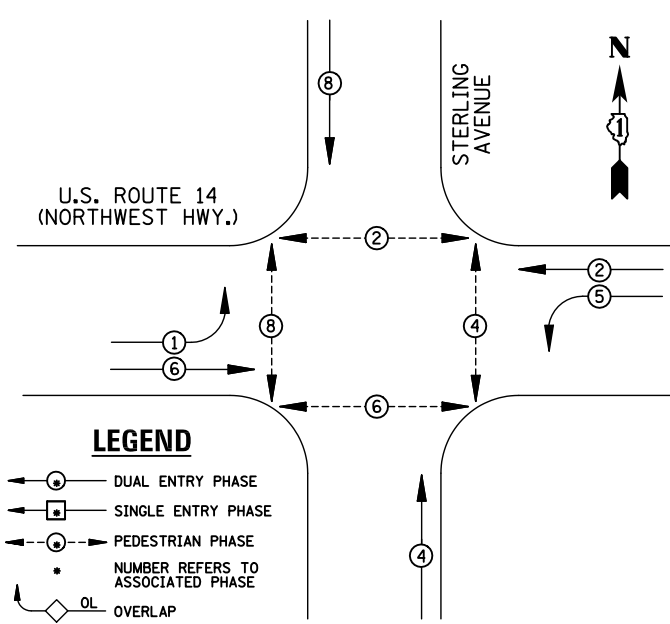
NOTE:
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

TS# 1185
PALATINE

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	62	43
			CONTRACT NO. 60W37	
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

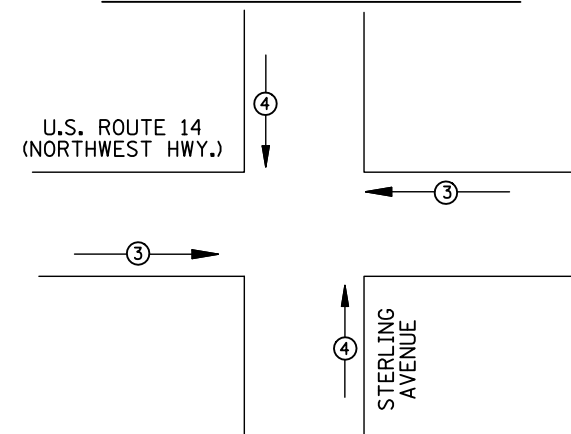
EXISTING CONTROLLER SEQUENCE



LEGEND

- ⊕ DUAL ENTRY PHASE
- ⊖ SINGLE ENTRY PHASE
- ⊙ PEDESTRIAN PHASE
- NUMBER REFERS TO ASSOCIATED PHASE
- OL OVERLAP

EXISTING PHASE DESIGNATION DIAGRAM



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

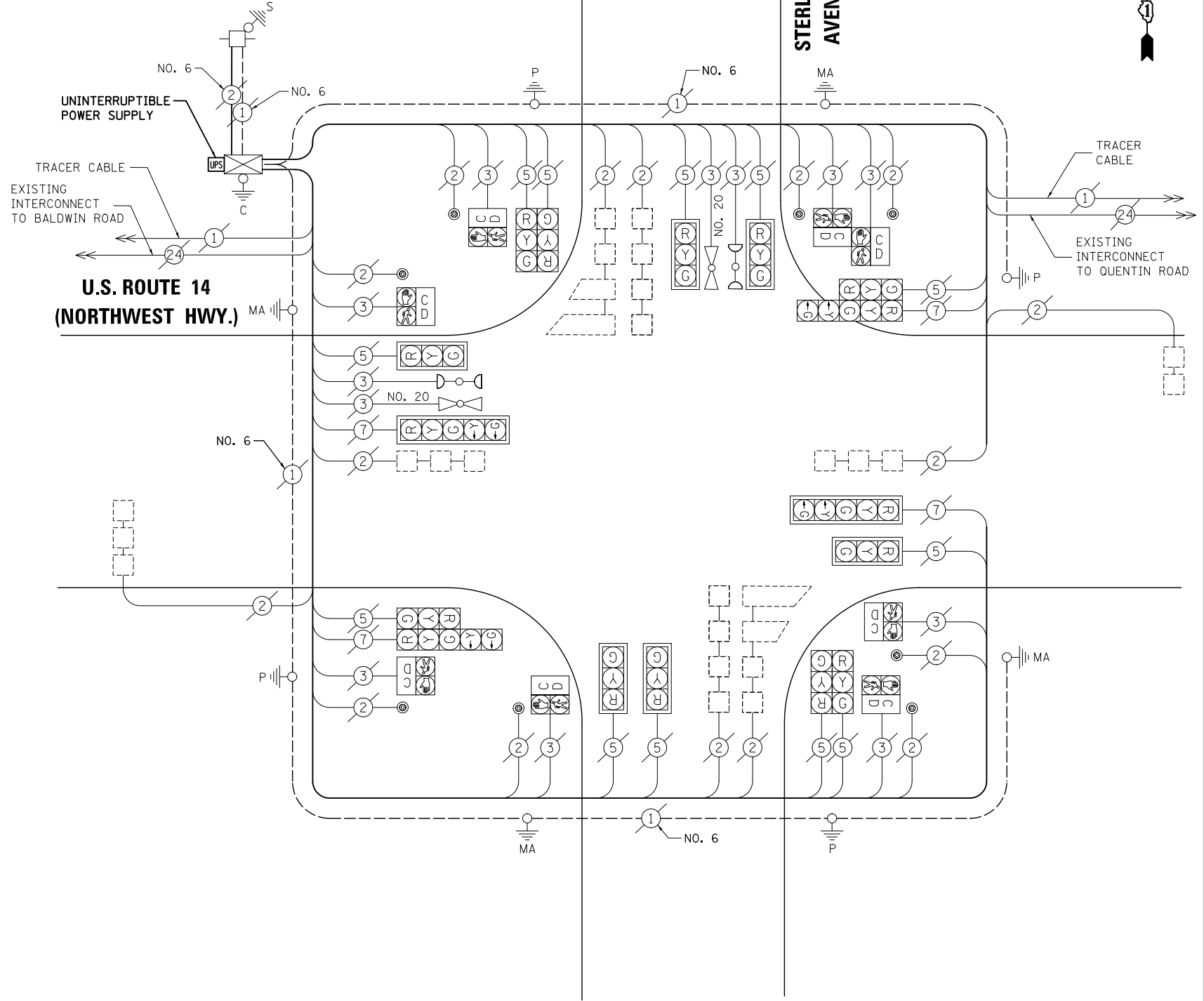
EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	16	135	17	0.50	136
(YELLOW)	16	135	25	0.25	100
(GREEN)	16	135	15	0.25	60
ARROW	8	135	12	0.10	9.6
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 405.6
ENERGY SUPPLY	CONTACT: X				
	PHONE: X				
	COMPANY: X				

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION



CABLE PLAN

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

FILE NAME = \MICROST\352106\ 49-1172.DGN
 USER NAME = JGC
 PLOT SCALE = NOT TO SCALE
 PLOT DATE = X

DESIGNED - BPT	REVISED -
DRAWN - JGC/RDS	REVISED -
CHECKED - BPT	REVISED -
DATE - 04-26-13	REVISED -

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION U.S. ROUTE 14 (NORTHWEST HWY.) AT STERLING AVENUE			
SCALE: N.T.S.	SHEET NO. OF SHEETS	STA. TO STA.	

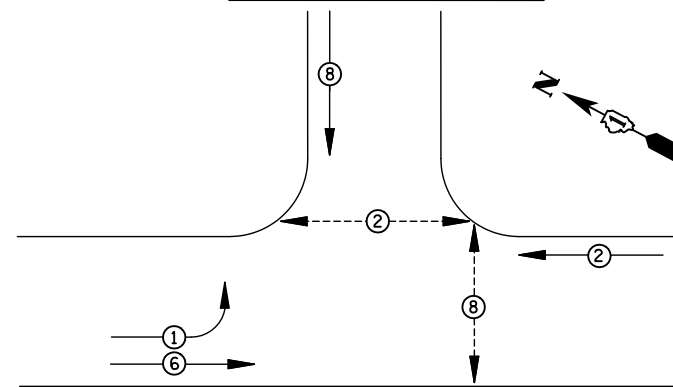
PREPARED BY:
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 Consulting Engineers, Land Surveyors & Planners
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	62	44

CONTRACT NO. 60W37
 FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

TS# 1172 PALATINE

EXISTING AND PROPOSED CONTROLLER SEQUENCE

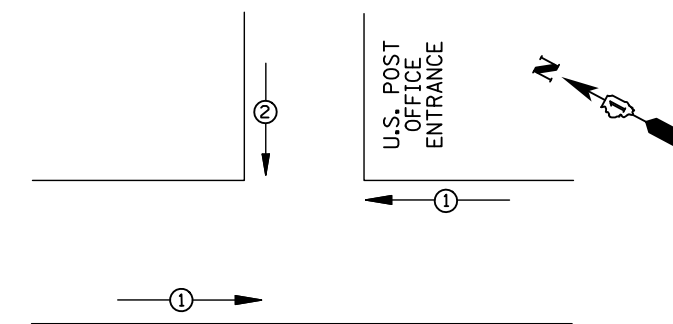


U.S. ROUTE 14 (NORTHWEST HWY.)

LEGEND

- ⊕ DUAL ENTRY PHASE
- ⊖ SINGLE ENTRY PHASE
- ⊙ PEDESTRIAN PHASE
- NUMBER REFERS TO ASSOCIATED PHASE
- OL OVERLAP

EXISTING AND PROPOSED PHASE DESIGNATION DIAGRAM



U.S. ROUTE 14 (NORTHWEST HWY.)

EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	1	2
MOVEMENT	←	↓

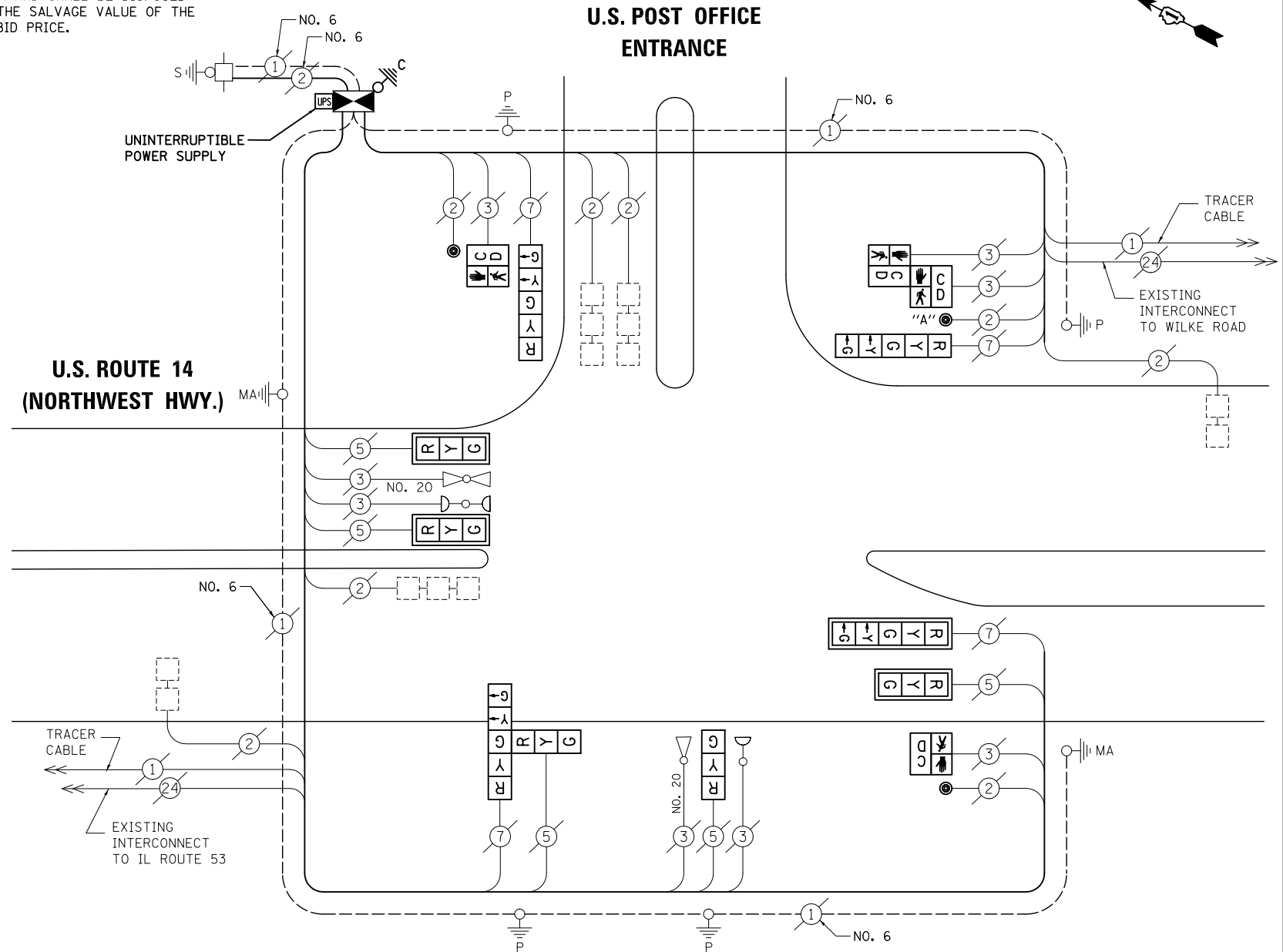
EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	9	135	17	0.50	76.5
(YELLOW)	9	135	25	0.25	56.25
(GREEN)	9	135	15	0.25	33.75
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	4	90	25	1.00	100
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 376.1
ENERGY SUPPLY CONTACT: X					
PHONE: X					
COMPANY: X					
FILE NAME = \MICROST\352106\ 50-1250.DGN	USER NAME = JGC				DESIGNED - BPT
	PLOT SCALE = NOT TO SCALE				DRAWN - JGC/RDS
	PLOT DATE = X				CHECKED - BPT
					DATE - 04-26-13
					REVISED -
					REVISED -
					REVISED -
					REVISED -

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
- 3 EACH PEDESTRIAN PUSH-BUTTON
- 1 EACH CONTROLLER AND CABINET, COMPLETE



NOTE:
PUSH-BUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 8.

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRANSCIVER - FIBER OPTIC	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
INDUCTIVE LOOP DETECTOR	EACH	5
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1
PEDESTRIAN PUSH-BUTTON, NON-LATCHING	EACH	3
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED, RETROFIT	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-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	1
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	2

CABLE PLAN

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

NOTE:
CONTRACTOR SHALL RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT TO NEW CONTROLLER CABINET. THE COST OF THIS WORK SHALL BE INCLUDED IN THE PAY ITEM "FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL".

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

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

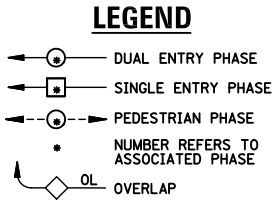
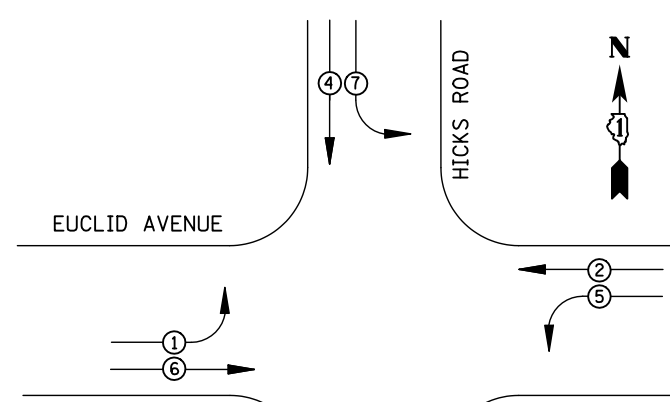
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION U.S. ROUTE 14 (NORTHWEST HWY.) AT U.S. POST OFFICE ENTRANCE

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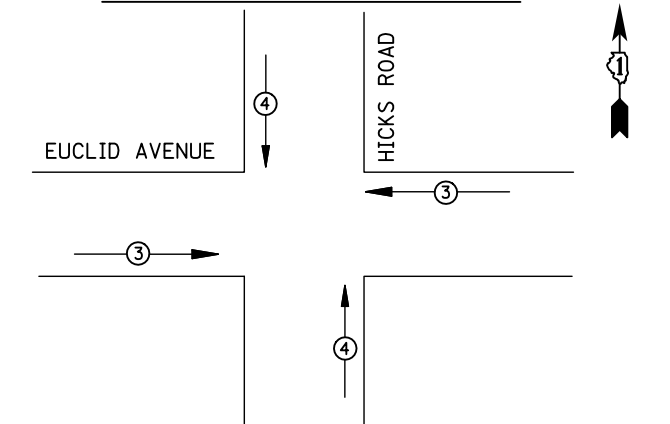
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	62	45
CONTRACT NO. 60W37				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

TS# 1250 PALATINE

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



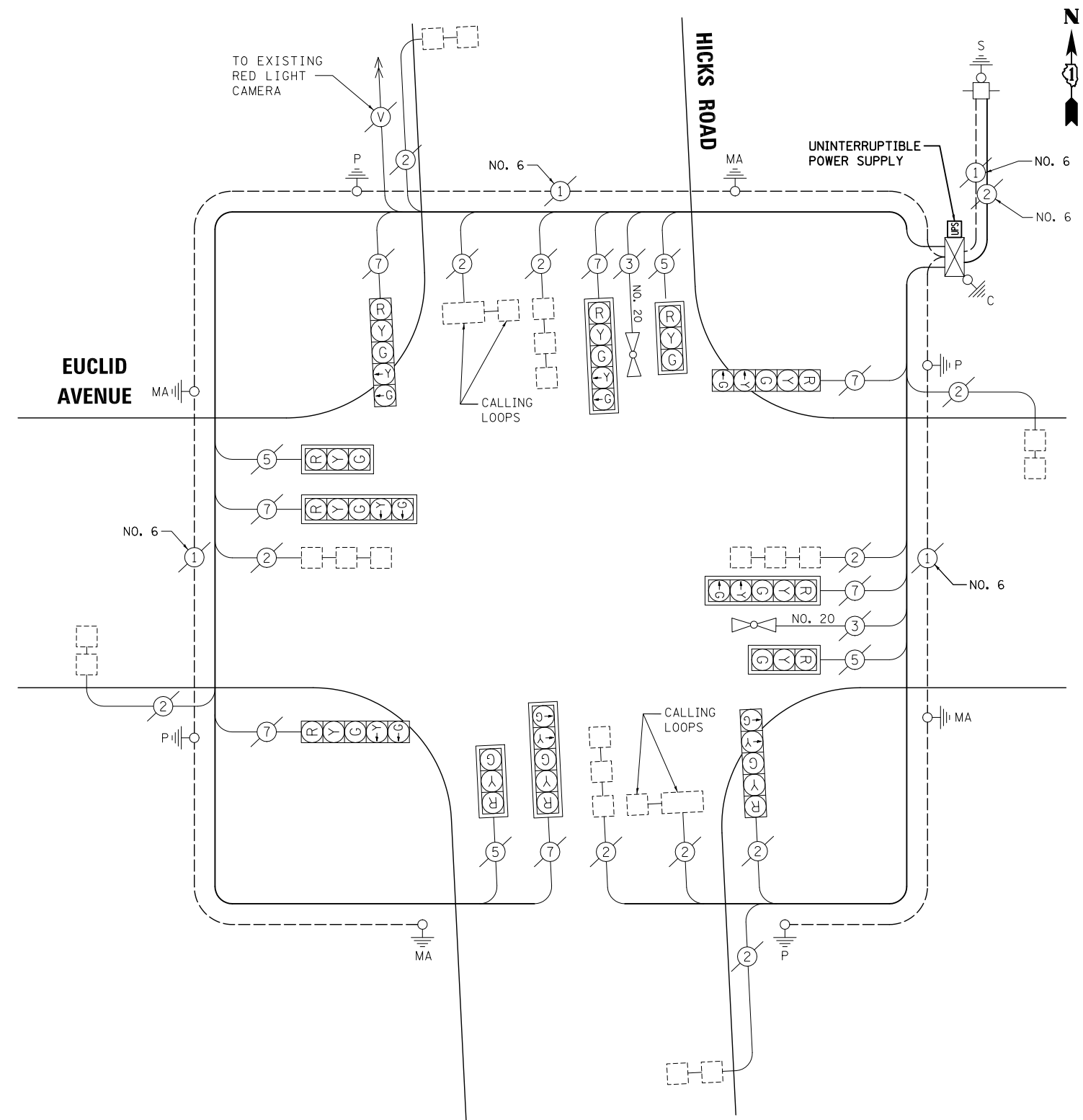
EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	←→	↑↓

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	12	135	15	0.25	45
ARROW	16	135	12	0.10	19.2
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 341.2
ENERGY SUPPLY	CONTACT: X				
	PHONE: X				
	COMPANY: X				

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1



CABLE PLAN

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

FILE NAME = \MICROST\352106\ 52-5300.DGN	USER NAME = JGC	DESIGNED - BPT	REVISED -
	PLOT SCALE = NOT TO SCALE	DRAWN - JGC/RDS	REVISED -
	PLOT DATE = X	CHECKED - BPT	REVISED -
		DATE - 04-26-13	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION HICKS ROAD AT EUCLID AVENUE			
SCALE: N.T.S.	SHEET NO.	OF SHEETS	STA. TO STA.

TS# 5300 ROLLING MEADOWS

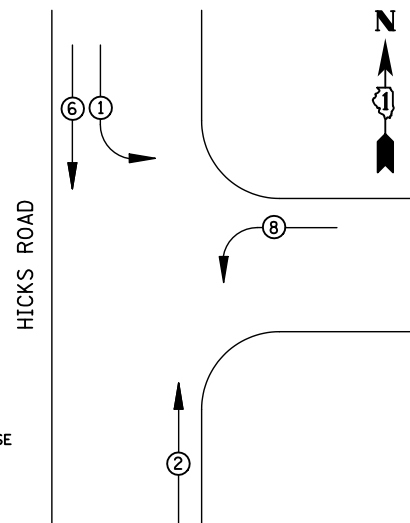
PREPARED BY:
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	62	46

CONTRACT NO. 60W37

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

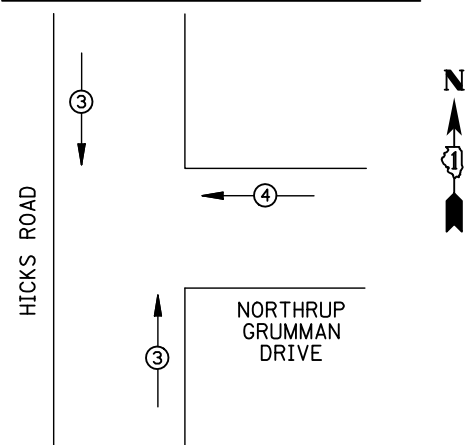
EXISTING CONTROLLER SEQUENCE



LEGEND

- ⊖ DUAL ENTRY PHASE
- ⊖ SINGLE ENTRY PHASE
- ⊖ PEDESTRIAN PHASE
- NUMBER REFERS TO ASSOCIATED PHASE
- OL OVERLAP

EXISTING PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	↑	←

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	10	135	17	0.50	85
(YELLOW)	10	135	25	0.25	62.5
(GREEN)	10	135	15	0.25	37.5
ARROW	4	135	12	0.10	4.8
PED. SIGNAL	1	90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 289.8
ENERGY SUPPLY	CONTACT: X				
	PHONE: X				
	COMPANY: X				
FILE NAME = \MICROST\352106\ 53-11738.DGN	USER NAME = JGC	DESIGNED - BPT	REVISED -		
		DRAWN - JGC/RDS	REVISED -		
		PLOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -	
		PLOT DATE = X	DATE - 04-26-13	REVISED -	

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

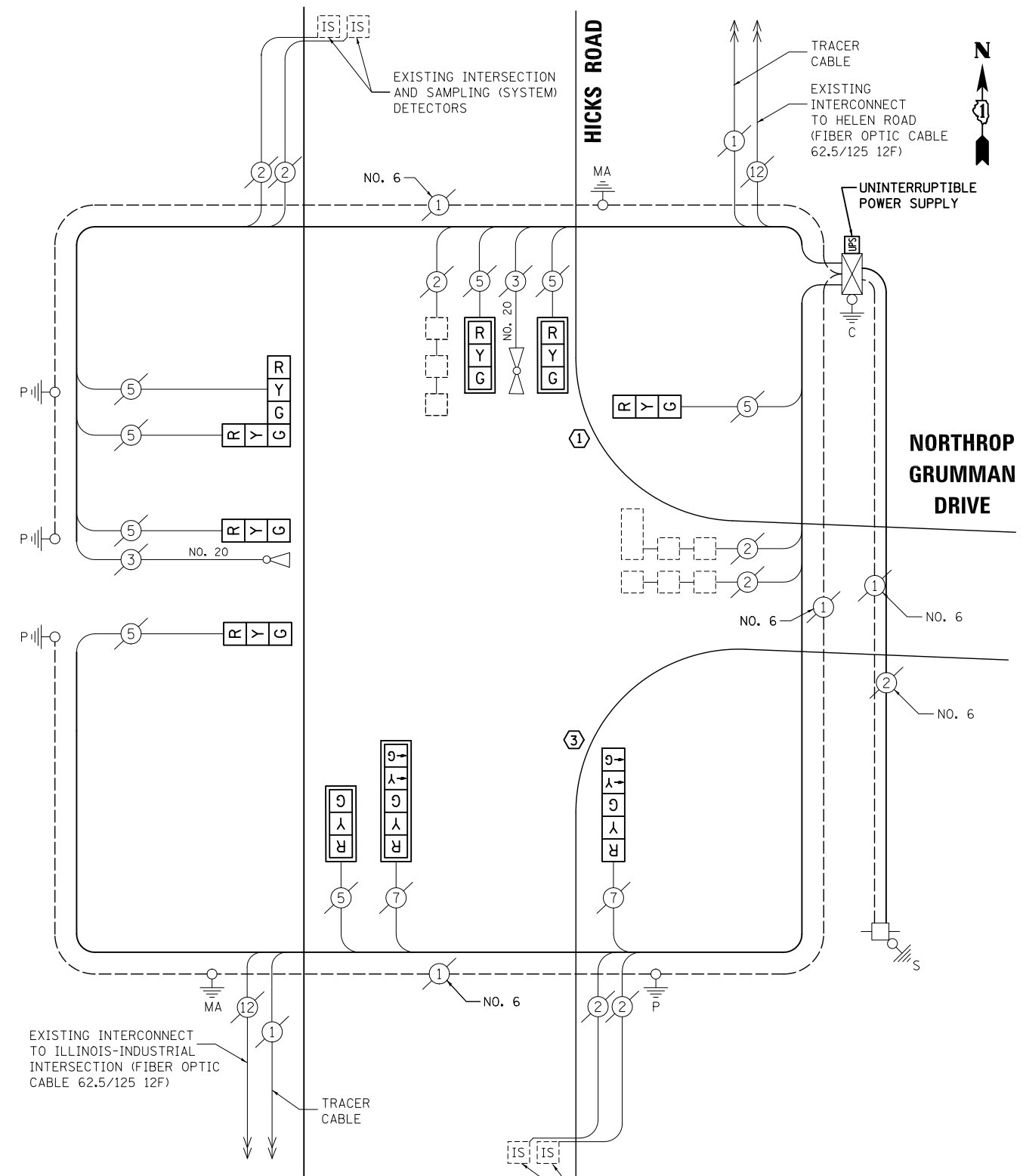
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 2 EACH TRAFFIC SIGNAL POST
- 8 EACH SIGNAL HEAD, 3-SECTION
- 2 EACH SIGNAL HEAD, 5-SECTION
- 4 EACH TRAFFIC SIGNAL BACKPLATE

- ① REPLACE 14 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
- ② REPLACE 15 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
- ③ REPLACE 16 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
- ④ REPLACE 18 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION

SCHEDULE OF QUANTITIES

ITEM	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	3
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	1
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	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



CABLE PLAN

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

TS# 11730 ROLLING MEADOWS

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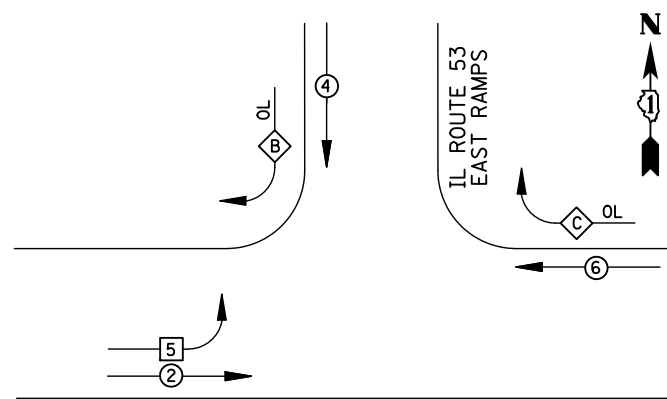
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN,
 PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
 HICKS ROAD AT NORTHROP GRUMMAN DRIVE

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	62	47
			CONTRACT NO. 60W37	
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

EXISTING CONTROLLER SEQUENCE



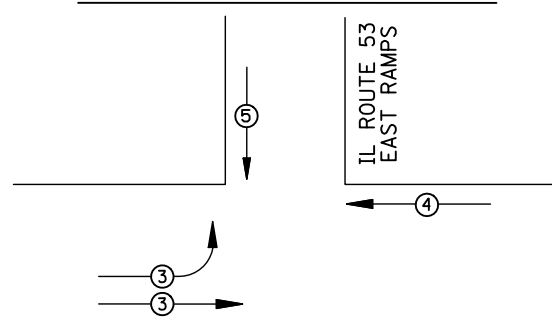
- LEGEND**
- ⊕ DUAL ENTRY PHASE
 - ⊞ SINGLE ENTRY PHASE
 - ⊙ PEDESTRIAN PHASE
 - NUMBER REFERS TO ASSOCIATED PHASE
 - OL OVERLAP

IL ROUTE 62
(ALGONQUIN ROAD)

**RIGHT TURN OVERLAP
PHASE DESIGNATION**

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
B	= 4 +	5
C	= 6 +	4

EXISTING PHASE DESIGNATION DIAGRAM



IL ROUTE 62
(ALGONQUIN ROAD)

EMERGENCY VEHICLE PREEMPTORS				
EMERGENCY VEHICLE PREEMPTOR	3	4	5	
MOVEMENT	↗	←	↓	

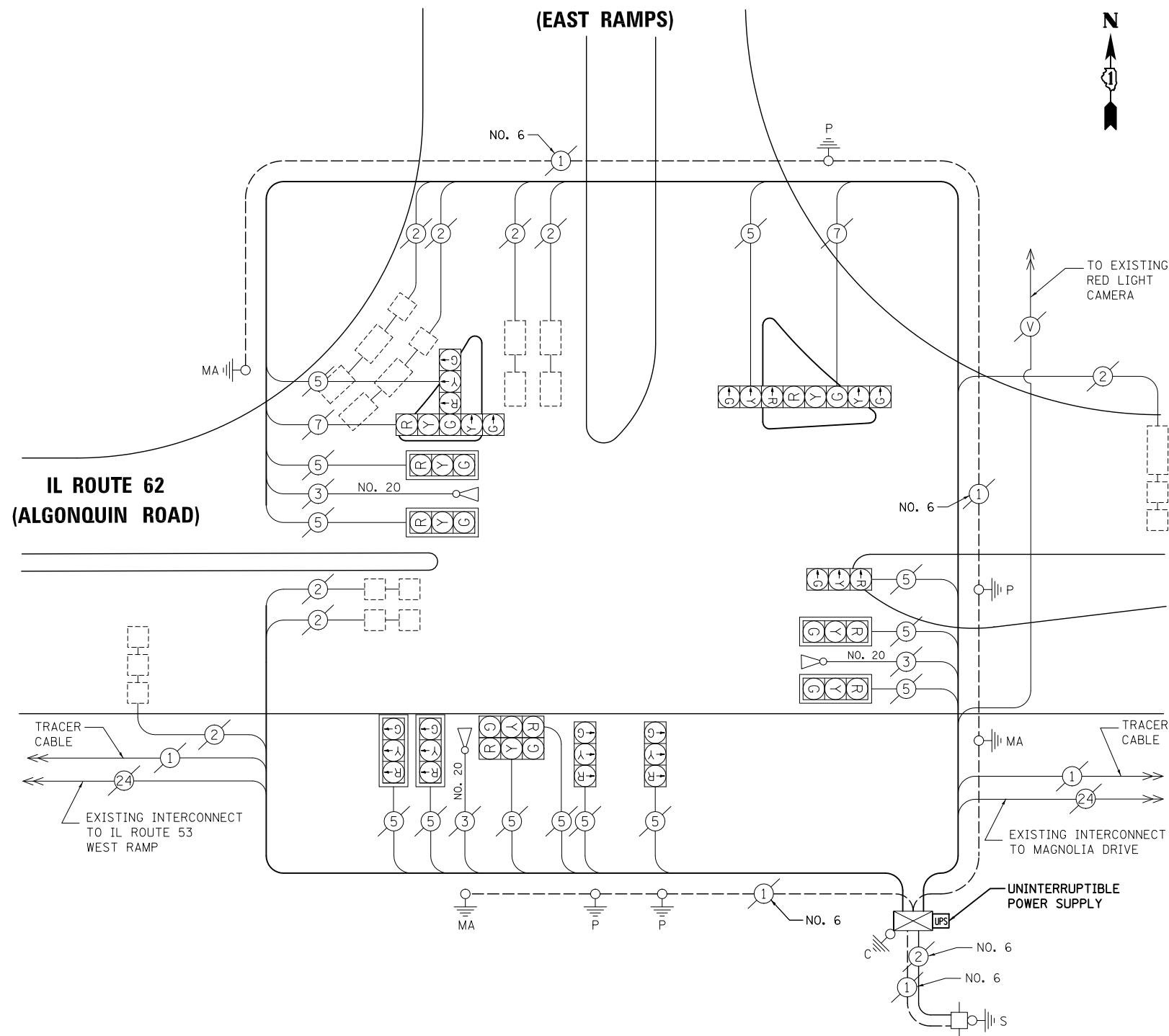
EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		%OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	15	135	17	0.50	127.5
(YELLOW)	15	135	25	0.25	93.75
(GREEN)	15	135	15	0.25	56.25
ARROW	4	135	12	0.10	4.8
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 382.3
ENERGY SUPPLY	CONTACT: X				
	PHONE: X				
	COMPANY: X				
FILE NAME = MICROST\352106\ 54-2665.DGN	USER NAME = JGC	DESIGNED - BPT	REVISED -		
		DRAWN - JGC/RDS	REVISED -		
	PLOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -		
	PLOT DATE = X	DATE - 04-26-13	REVISED -		

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1

**IL ROUTE 53
(EAST RAMPS)**



CABLE PLAN

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

**SCHEDULE OF QUANTITIES, CABLE PLAN,
PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
IL ROUTE 53 EAST RAMP AT IL ROUTE 62 (ALGONQUIN ROAD)**

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

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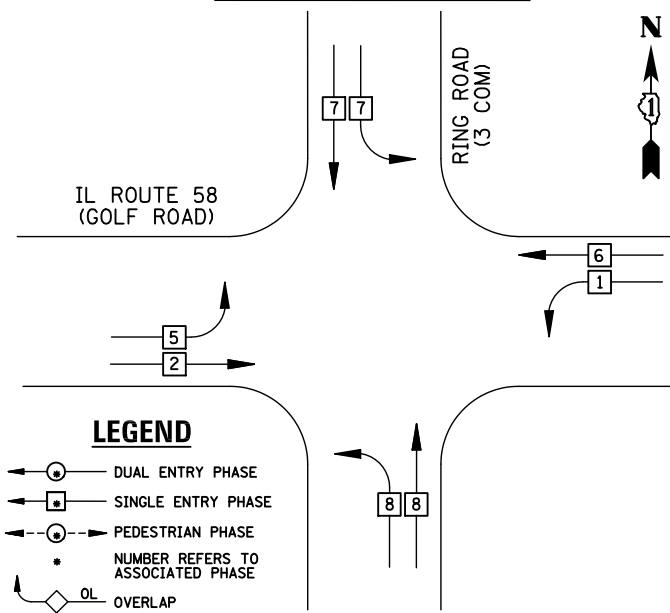
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	62	48

CONTRACT NO. 60W37

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

TS# 2665
ROLLING MEADOWS

EXISTING AND PROPOSED CONTROLLER SEQUENCE



EXISTING AND PROPOSED PHASE DESIGNATION DIAGRAM

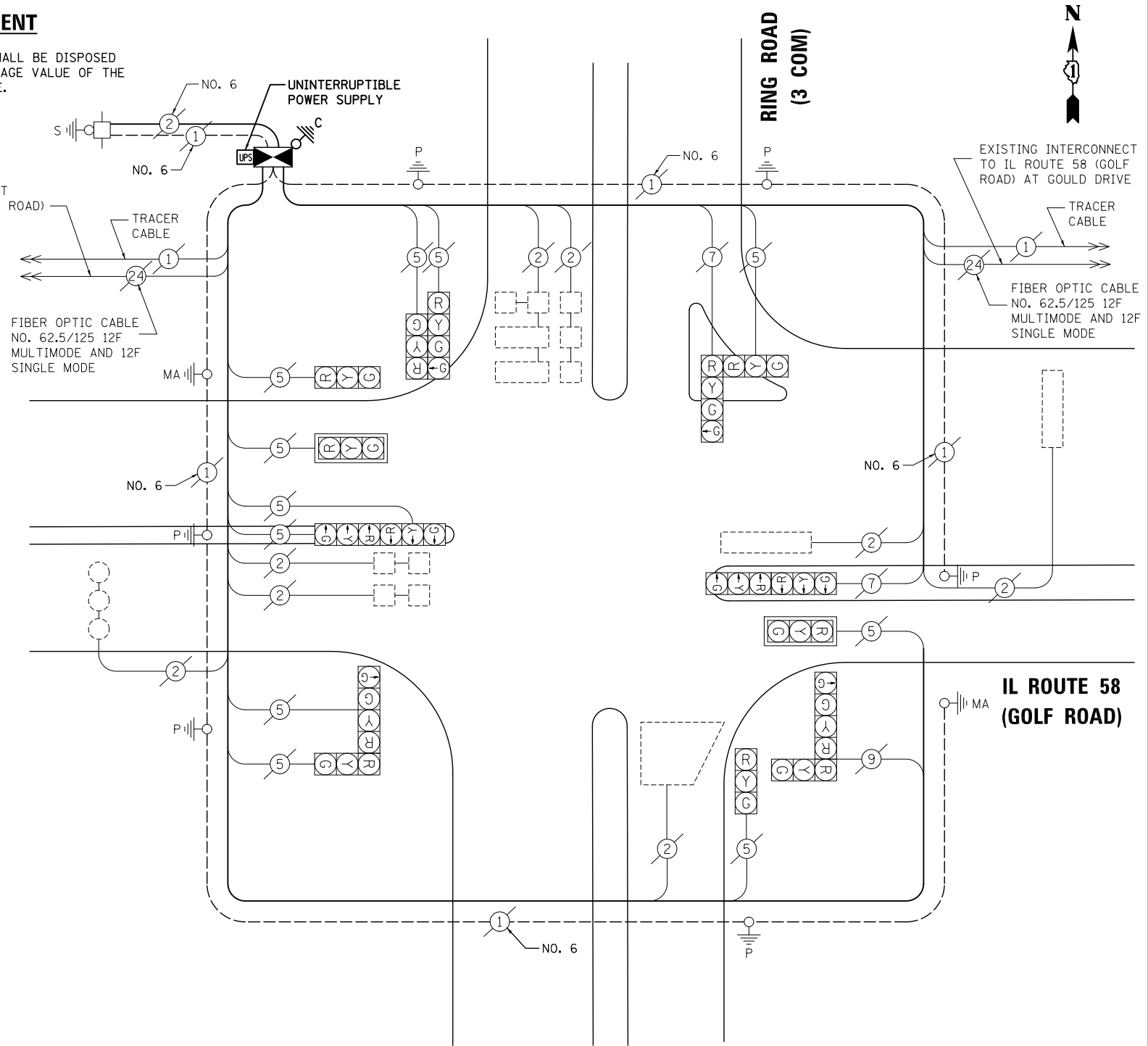
REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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.

- 1 EACH CONTROLLER AND CABINET, COMPLETE

NOTE: INSTALL CONCRETE PAD AT CONTROLLER CABINET. THIS WORK IS INCLUDED IN THE COST FOR "UNINTERRUPTABLE POWER SUPPLY, SPECIAL".

EXISTING INTERCONNECT TO IL ROUTE 58 (GOLF ROAD) AT US I-290/IL 53 AT E. FRONTAGE ROAD



CABLE PLAN

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRANSCIEVER - FIBER OPTIC	EACH	1
INDUCTIVE LOOP DETECTOR	EACH	8
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1

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

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE		%OPERATION	
		INCAND.	LED		
SIGNAL (RED)	16	135	17	0.50	136
(YELLOW)	16	135	25	0.25	100
(GREEN)	20	135	15	0.25	75
ARROW		135	12	0.10	
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	
ILLUM. SIGN		84		0.05	100
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 411
ENERGY SUPPLY CONTACT: X					
PHONE: X					
COMPANY: X					

DESIGNED - BPT	REVISED -
DRAWN - JGC/RDS	REVISED -
CHECKED - BPT	REVISED -
DATE - 04-26-13	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN AND PHASE DESIGNATION DIAGRAM IL ROUTE 58 (GOLF ROAD) AT RING ROAD (3 COM)			
SCALE: N.T.S.	SHEET NO. OF SHEETS	STA. TO STA.	

TS# 2860 ROLLING MEADOWS

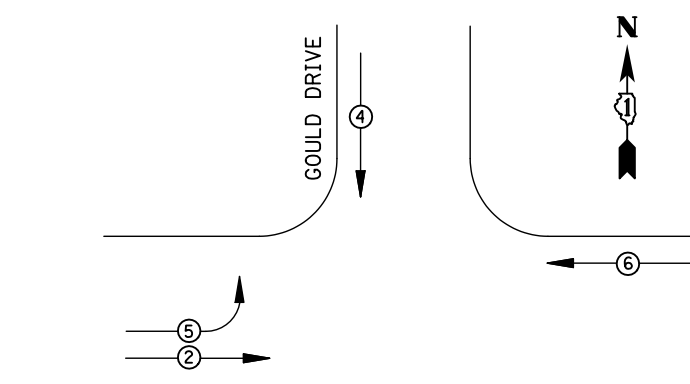
PREPARED BY: **CEMCON, Ltd.**
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 E-Mail: cadd@cemcon.com Website: www.cemcon.com

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	62	49

CONTRACT NO. 60W37

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

EXISTING CONTROLLER SEQUENCE



- LEGEND**
- ⊙ DUAL ENTRY PHASE
 - ⊠ SINGLE ENTRY PHASE
 - ⊖ PEDESTRIAN PHASE
 - NUMBER REFERS TO ASSOCIATED PHASE
 - OL OVERLAP

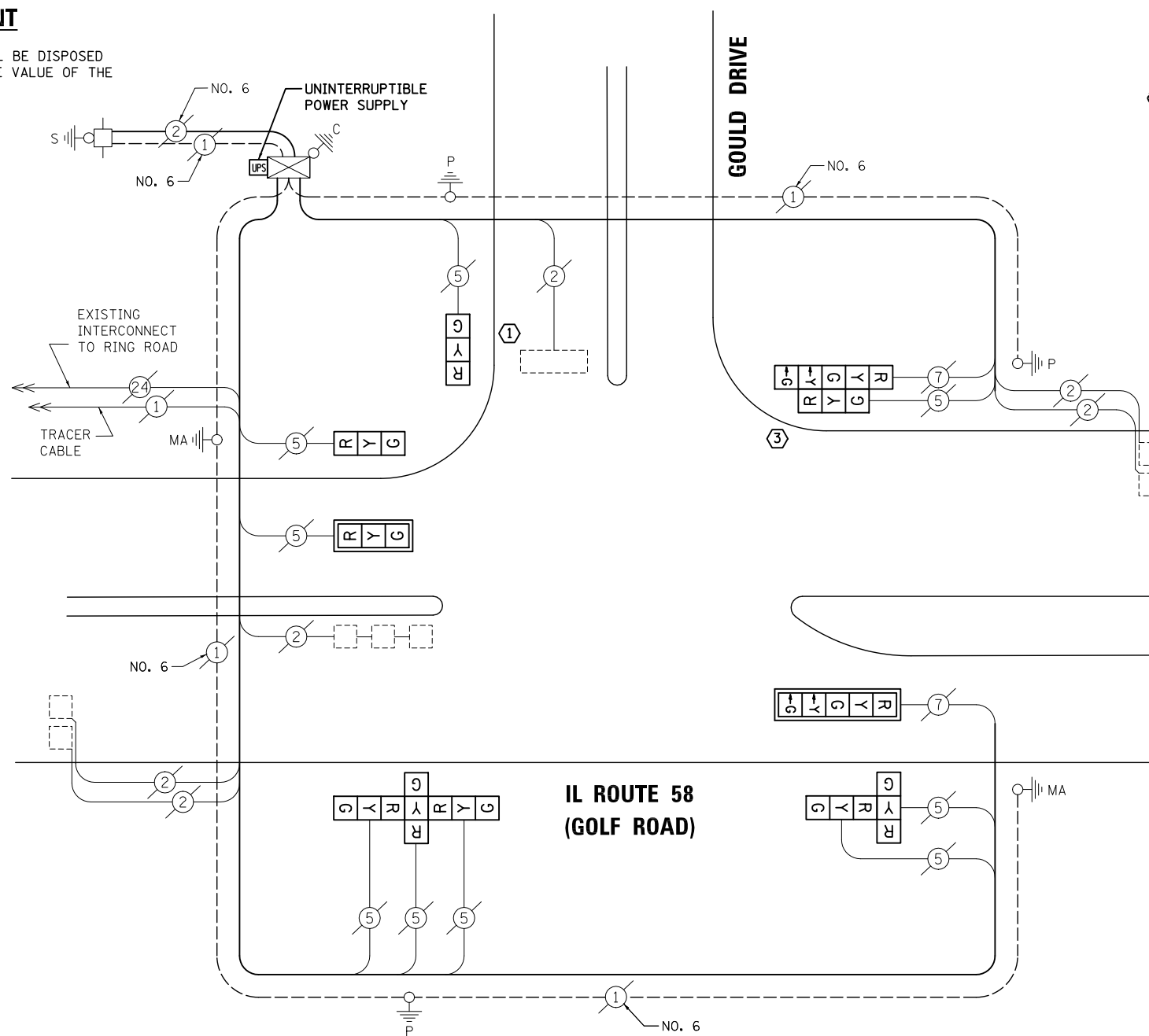
IL ROUTE 58
(GOLF ROAD)

**EXISTING
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.

- 2 EACH TRAFFIC SIGNAL POST
- 9 EACH SIGNAL HEAD, 3-SECTION
- 2 EACH SIGNAL HEAD, 5-SECTION
- 2 EACH TRAFFIC SIGNAL BACKPLATE



CABLE PLAN

- ① REPLACE 14 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
- ② REPLACE 15 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
- ③ REPLACE 16 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
- ④ REPLACE 18 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION

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

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE		%OPERATION	
		INCAND.	LED		
SIGNAL (RED)	11	135	17	0.50	93.5
(YELLOW)	11	135	25	0.25	68.75
(GREEN)	11	135	15	0.25	41.25
ARROW	4	135	12	0.10	4.8
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 308.3
ENERGY SUPPLY CONTACT: X					
PHONE: X					
COMPANY: X					
FILE NAME = MICROST\352106\ 57-2770.DGN	USER NAME = JGC		DESIGNED - BPT	REVISED -	
	PLOT SCALE = NOT TO SCALE		DRAWN - JGC/RDS	REVISED -	
	PLOT DATE = X		CHECKED - BPT	REVISED -	
			DATE - 04-26-13	REVISED -	

SCHEDULE OF QUANTITIES

ITEM	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, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	1
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	1
SIGNAL HEAD, LED, 3-FACE, 3-SECTION, BRACKET MOUNTED	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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN,
AND PHASE DESIGNATION DIAGRAM
IL ROUTE 58 (GOLF ROAD) AT GOULD DRIVE

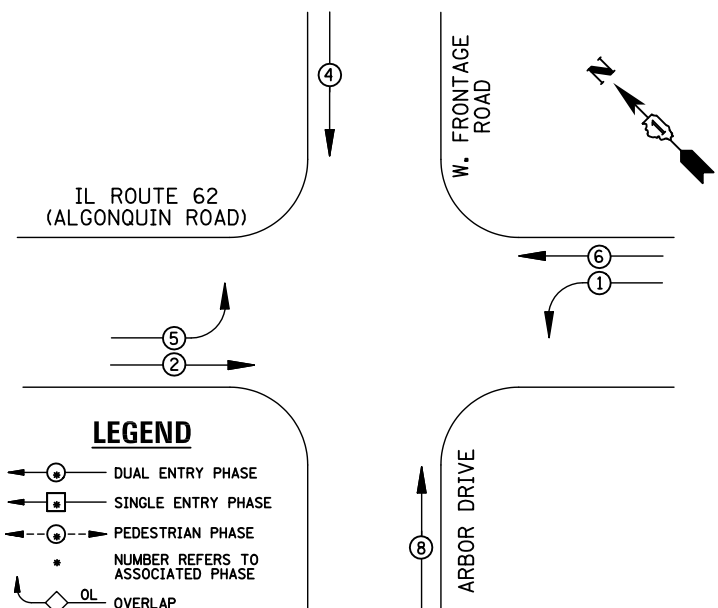
SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

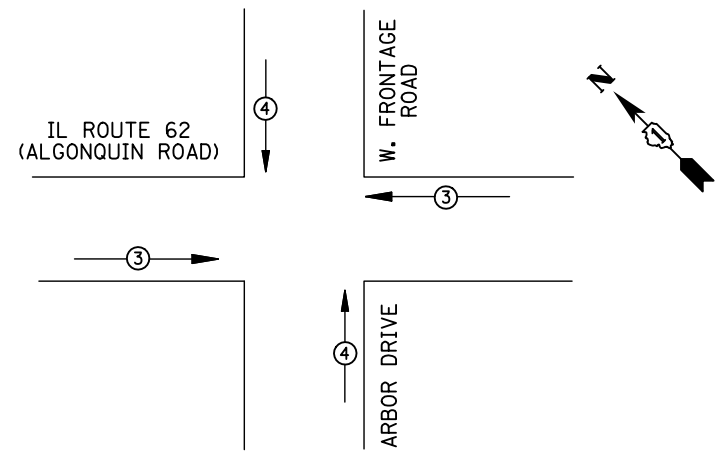
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	62	50
CONTRACT NO. 60W37				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

TS# 2770
ROLLING MEADOWS

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



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

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		%OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	12	135	15	0.25	45
ARROW	8	135	12	0.10	9.6
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 331.6
ENERGY SUPPLY	CONTACT: X				
	PHONE: X				
	COMPANY: X				

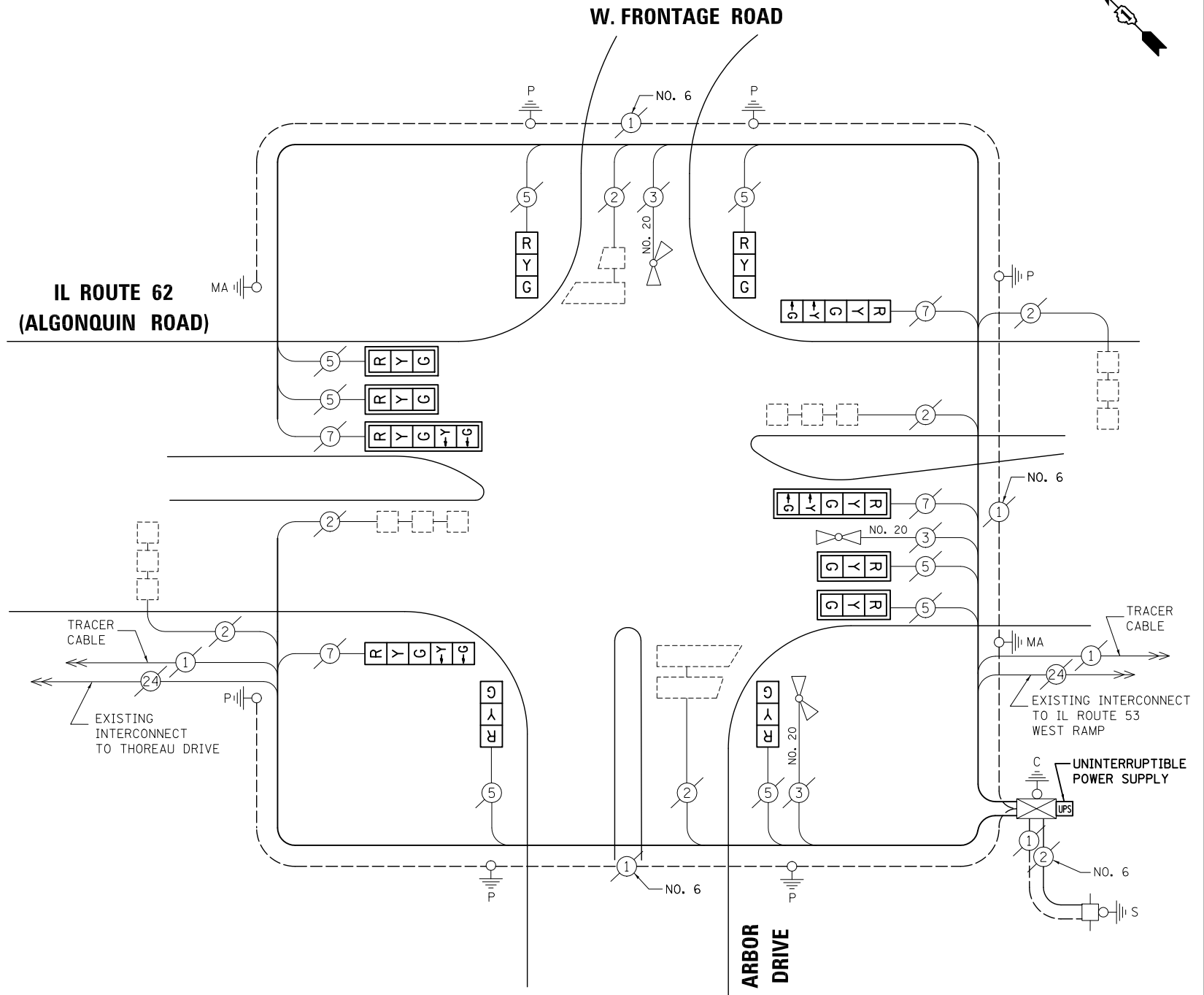
SCHEDULE OF QUANTITIES

ITEM	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	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	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	2

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DESIGNED - BPT	REVISED -
DRAWN - JGC/RDS	REVISED -
CHECKED - BPT	REVISED -
DATE - 04-26-13	REVISED -

FILE NAME = \MICROST\352106\ 59-2930.DGN	USER NAME = JGC
PLOT SCALE = NOT TO SCALE	
PLOT DATE = X	



CABLE PLAN

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

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

TS# 2930
ROLLING MEADOWS

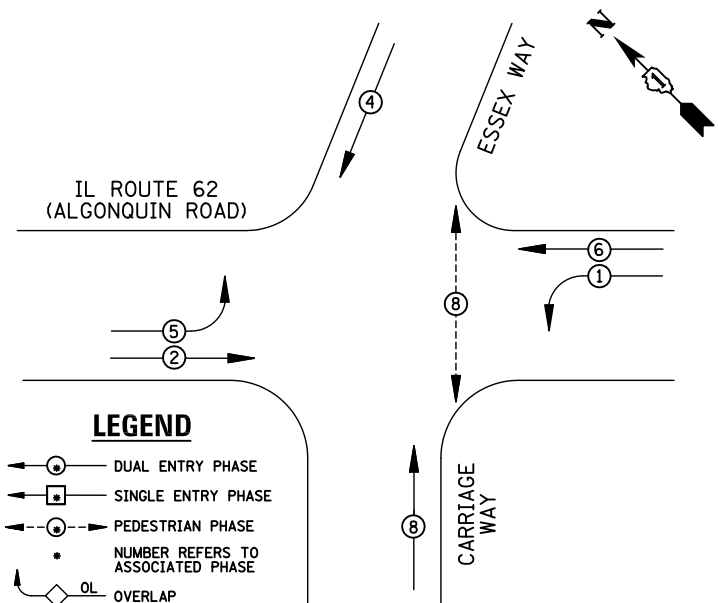
PREPARED BY:
CEMCON, Ltd.
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**SCHEDULE OF QUANTITIES, CABLE PLAN,
PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
IL ROUTE 62 (ALGONQUIN ROAD) AT ARBOR DRIVE / W. FRONTAGE ROAD**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	62	51
			CONTRACT NO. 60W37	
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

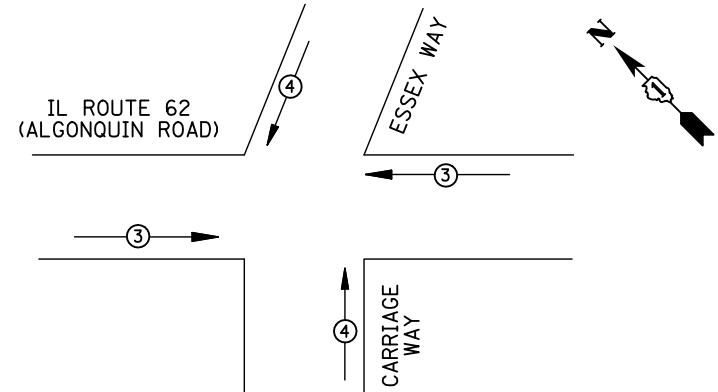
EXISTING CONTROLLER SEQUENCE



LEGEND

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

EXISTING PHASE DESIGNATION DIAGRAM



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

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

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.

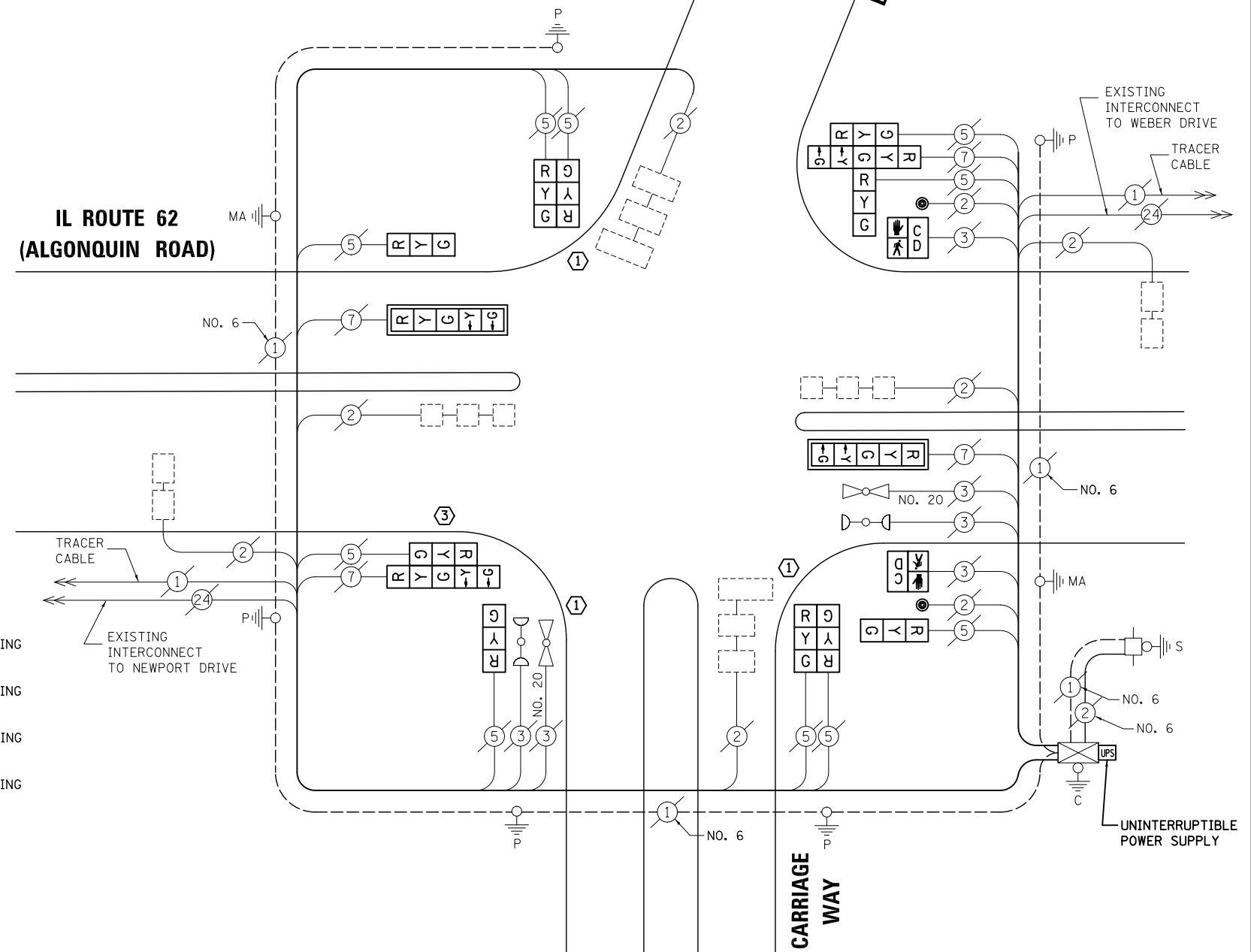
- 4 EACH TRAFFIC SIGNAL POST
- 10 EACH SIGNAL HEAD, 3-SECTION
- 4 EACH SIGNAL HEAD, 5-SECTION
- 2 EACH TRAFFIC SIGNAL BACKPLATE
- 2 EACH PEDESTRIAN SIGNAL HEAD

- ① REPLACE 14 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
- ② REPLACE 15 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
- ③ REPLACE 16 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
- ④ REPLACE 18 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	3
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3
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
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
UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1

IL ROUTE 62 (ALGONQUIN ROAD)



CABLE PLAN

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

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	14	135	17	0.50	119
(YELLOW)	14	135	25	0.25	87.5
(GREEN)	14	135	15	0.25	52.5
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	2	90	25	1.00	50
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 418.6
ENERGY SUPPLY	CONTACT: X				
	PHONE: X				
	COMPANY: X				

FILE NAME = \MICROST\352106\ 60-14741.DGN	USER NAME = JGC	DESIGNED - BPT	REVISED -
		DRAWN - JGC/RDS	REVISED -
		CHECKED - BPT	REVISED -
		DATE - 04-26-13	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION IL ROUTE 62 (ALGONQUIN ROAD) AT CARRIAGE WAY / ESSEX WAY

TS# 14741 ROLLING MEADOWS

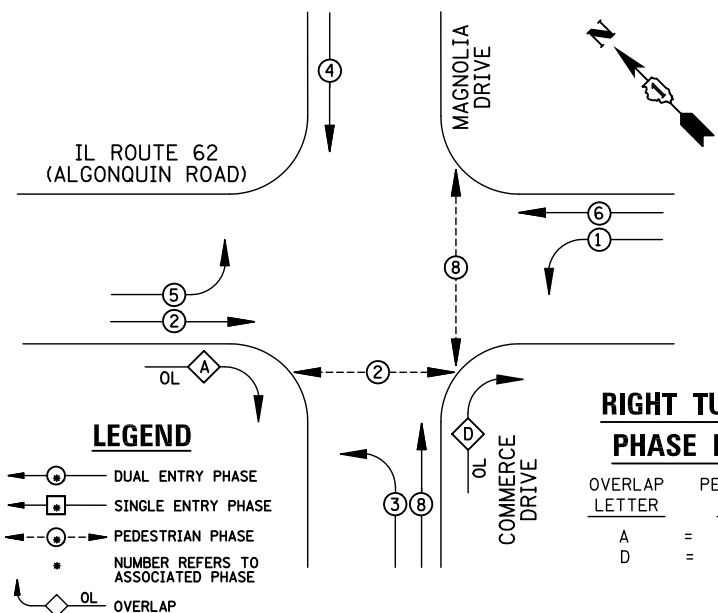
PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	62	52

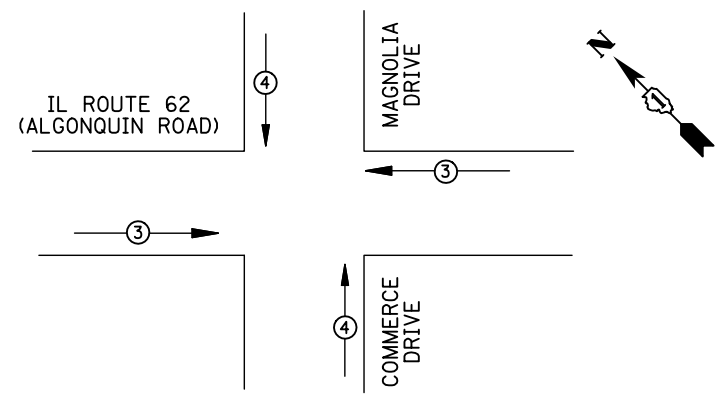
CONTRACT NO. 60W37

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

EXISTING AND PROPOSED CONTROLLER SEQUENCE



EXISTING AND PROPOSED PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTORS

EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↑ ↓

EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE

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

TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	17	135	17	0.50	144.5
(YELLOW)	17	135	25	0.25	106.25
(GREEN)	17	135	15	0.25	63.75
ARROW	20	135	12	0.10	24
PED. SIGNAL	4	90	25	1.00	100
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: TOTAL =					538.5
ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					
ENERGY SUPPLY	CONTACT: X				
	PHONE: X				
	COMPANY: X				

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

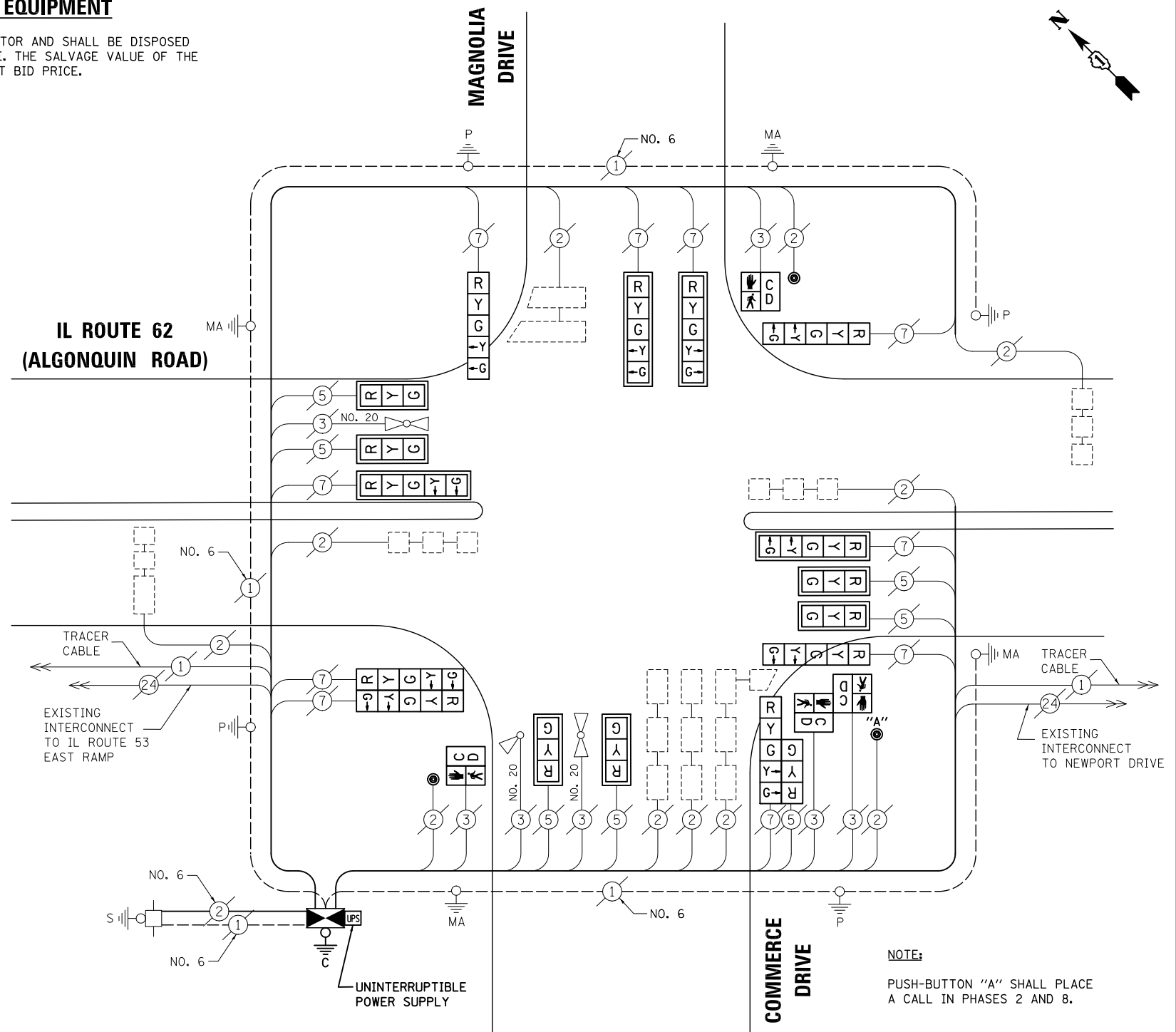
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 4 EACH PEDESTRIAN SIGNAL HEAD
- 3 EACH PEDESTRIAN PUSH-BUTTON
- 1 EACH CONTROLLER AND CABINET, COMPLETE

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRANSCEIVER - FIBER OPTIC	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
INDUCTIVE LOOP DETECTOR	EACH	8
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
PEDESTRIAN PUSH-BUTTON, NON-LATCHING	EACH	3
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	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	3
SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED RETROFIT	EACH	1

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION



CABLE PLAN

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

NOTE: CONTRACTOR SHALL RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT TO NEW CONTROLLER CABINET. THE COST OF THIS WORK SHALL BE INCLUDED IN THE PAY ITEM "FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL".

NOTE: PUSH-BUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 8.

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

TS# 2980 ROLLING MEADOWS

PREPARED BY:
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Consulting Engineers, Land Surveyors & Planners
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E-Mail: cadd@cemcon.com Website: www.cemcon.com

FILE NAME =	USER NAME = JGC	DESIGNED - BPT	REVISED -
\\MICROST\352106\ 61-2980.DGN		DRAWN - JGC/RDS	REVISED -
	PLOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -
	PLOT DATE = X	DATE - 04-26-13	REVISED -

DESIGNED - BPT	REVISED -
DRAWN - JGC/RDS	REVISED -
CHECKED - BPT	REVISED -
DATE - 04-26-13	REVISED -

SCALE: N.T.S.	SHEET NO. OF SHEETS	STA. TO STA.
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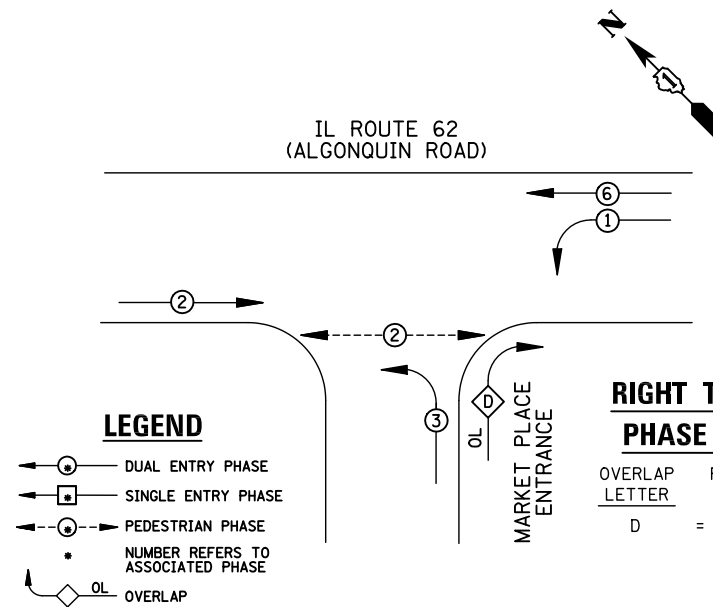
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
IL ROUTE 62 (ALGONQUIN ROAD) AT MAGNOLIA DRIVE / COMMERCE DRIVE

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	62	53

CONTRACT NO. 60W37

FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT
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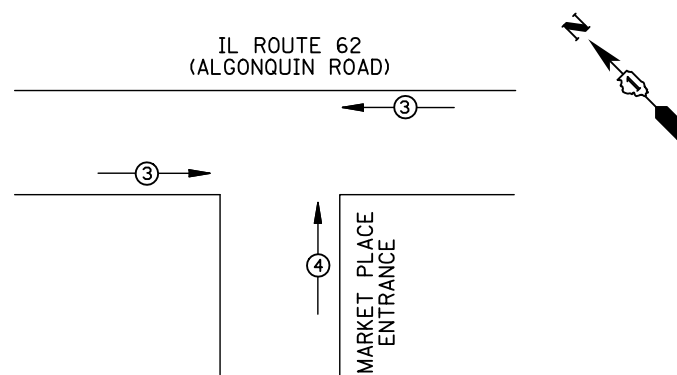
EXISTING CONTROLLER SEQUENCE



RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
D	= 3	+ 1

EXISTING PHASE DESIGNATION DIAGRAM



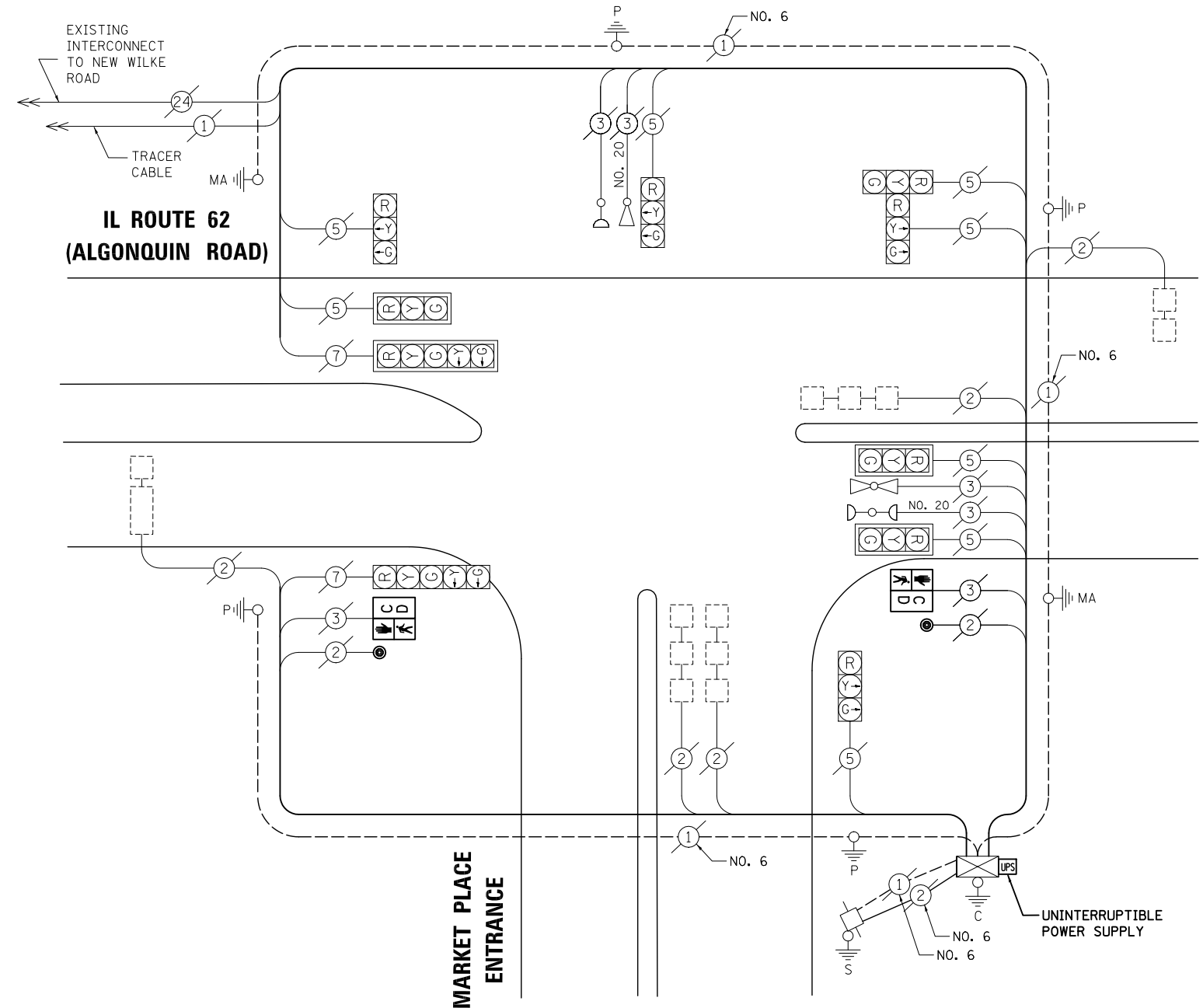
EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↑

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

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



CABLE PLAN

SCHEDULE OF QUANTITIES

ITEM	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
UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1

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

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	10	135	17	0.50	85
(YELLOW)	10	135	25	0.25	62.5
(GREEN)	10	135	15	0.25	37.5
ARROW	4	135	12	0.10	4.8
PED. SIGNAL	2	90	25	1.00	50
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 339.8
ENERGY SUPPLY CONTACT:	X				
PHONE:	X				
COMPANY:	X				

DESIGNED - BPT	REVISED -
DRAWN - JGC/RDS	REVISED -
CHECKED - BPT	REVISED -
DATE - 04-26-13	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION IL ROUTE 62 (ALGONQUIN ROAD) AT MARKET PLACE ENTRANCE			
SCALE: N.T.S.	SHEET NO.	OF SHEETS	STA. TO STA.

TS# 2708 ROLLING MEADOWS

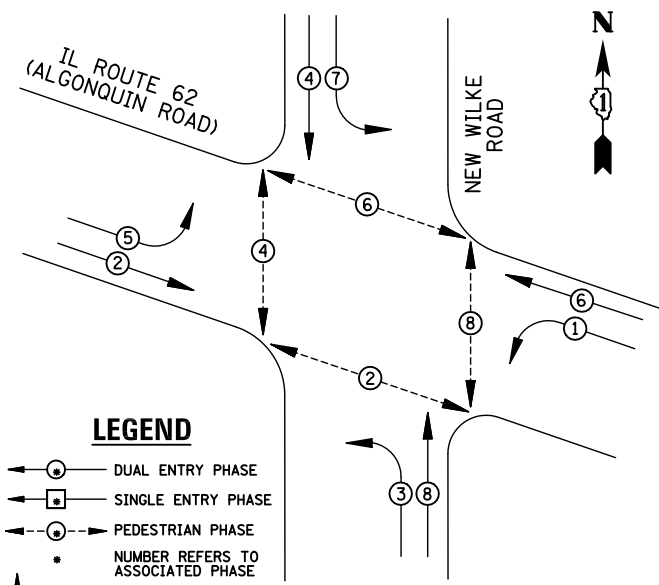
PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
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E-Mail: cadd@cemcon.com Website: www.cemcon.com

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	62	54

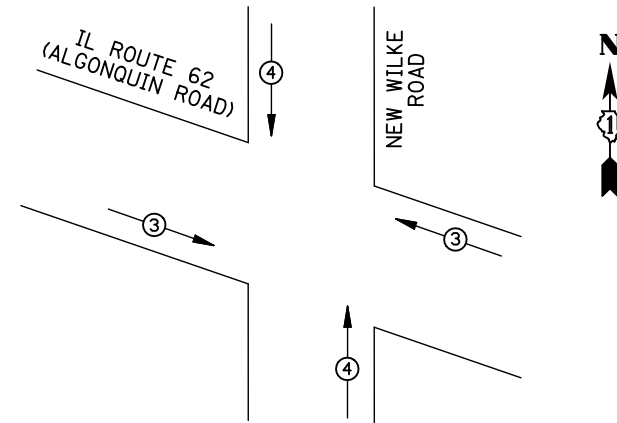
CONTRACT NO. 60W37

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

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM



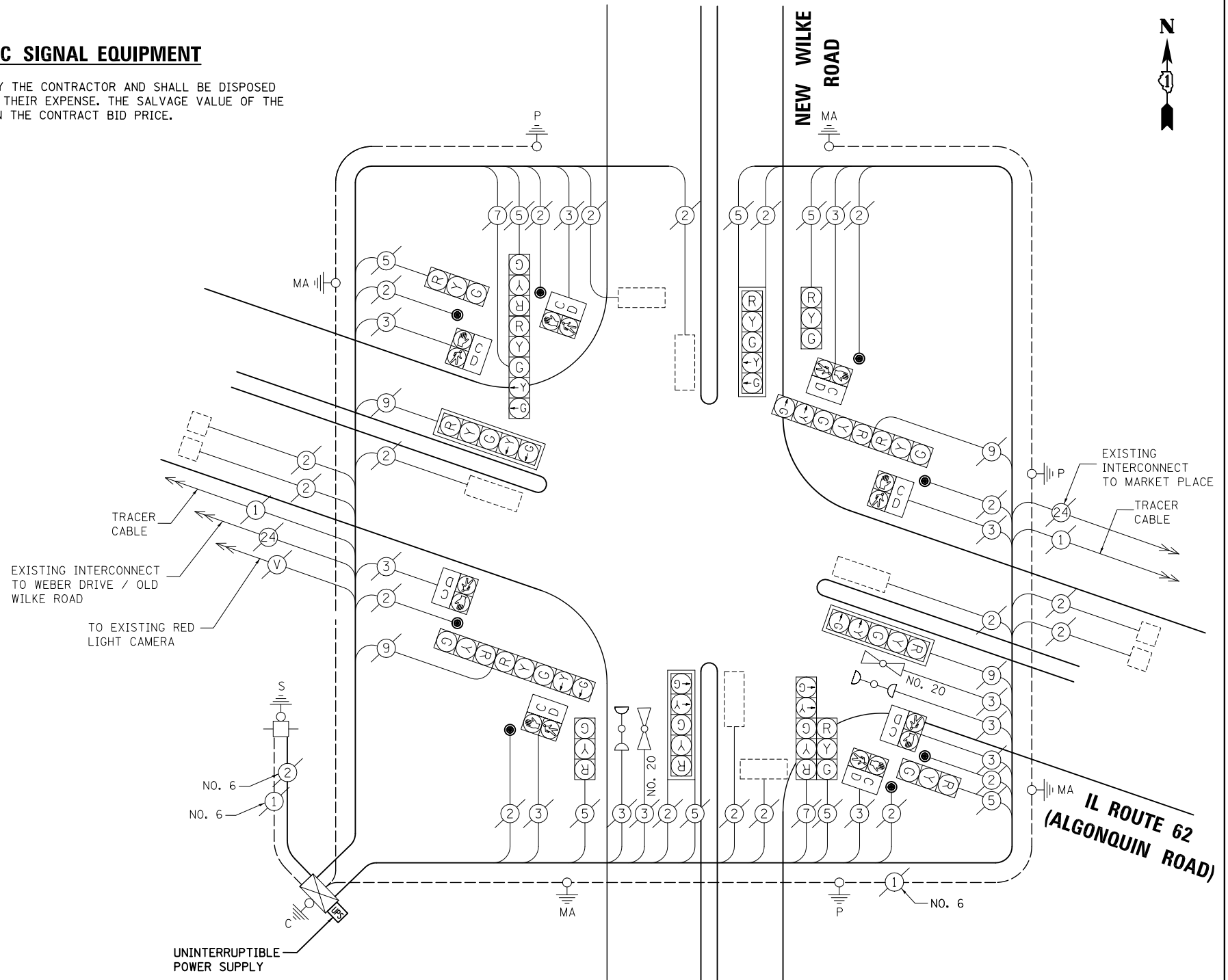
EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	
MOVEMENT	← →	↑ ↓	

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

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.

- 8 EACH PEDESTRIAN PUSH-BUTTON



CABLE PLAN

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	8
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1

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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	16	135	17	0.50	136
(YELLOW)	16	135	25	0.25	100
(GREEN)	16	135	15	0.25	60
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 615.2
ENERGY SUPPLY	CONTACT: X				
	PHONE: X				
	COMPANY: X				
FILE NAME = \MICROST\352106\ 63-2985.DGN	USER NAME = JGC	DESIGNED - BPT	REVISED -		
		DRAWN - JGC/RDS	REVISED -		
	PLOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -		
	PLOT DATE = X	DATE - 04-26-13	REVISED -		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN,
PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
IL ROUTE 62 (ALGONQUIN ROAD) AT NEW WILKE ROAD

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

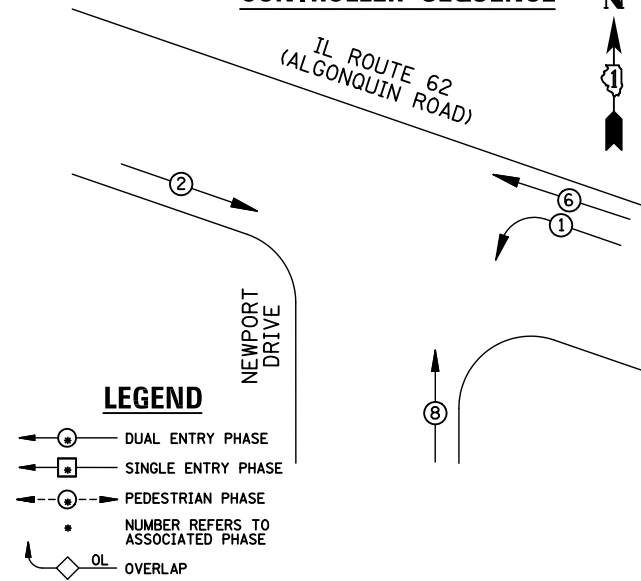
PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	62	55
CONTRACT NO. 60W37				

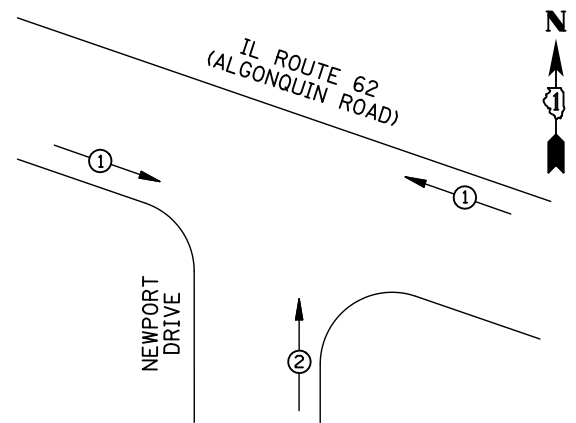
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

TS# 2985
ROLLING MEADOWS

EXISTING AND PROPOSED CONTROLLER SEQUENCE



EXISTING AND PROPOSED PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	1	2
MOVEMENT	←	↑

EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		%OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	8	135	17	0.50	68
(YELLOW)	8	135	25	0.25	50
(GREEN)	8	135	15	0.25	30
ARROW	4	135	12	0.10	4.8
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 252.8
ENERGY SUPPLY	CONTACT: X				
	PHONE: X				
	COMPANY: X				
FILE NAME = \MICROST\352106\ 64-21595.DGN	USER NAME = JGC	DESIGNED - BPT	REVISED -		
		DRAWN - JGC/RDS	REVISED -		
	PLOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -		
	PLOT DATE = X	DATE - 04-26-13	REVISED -		

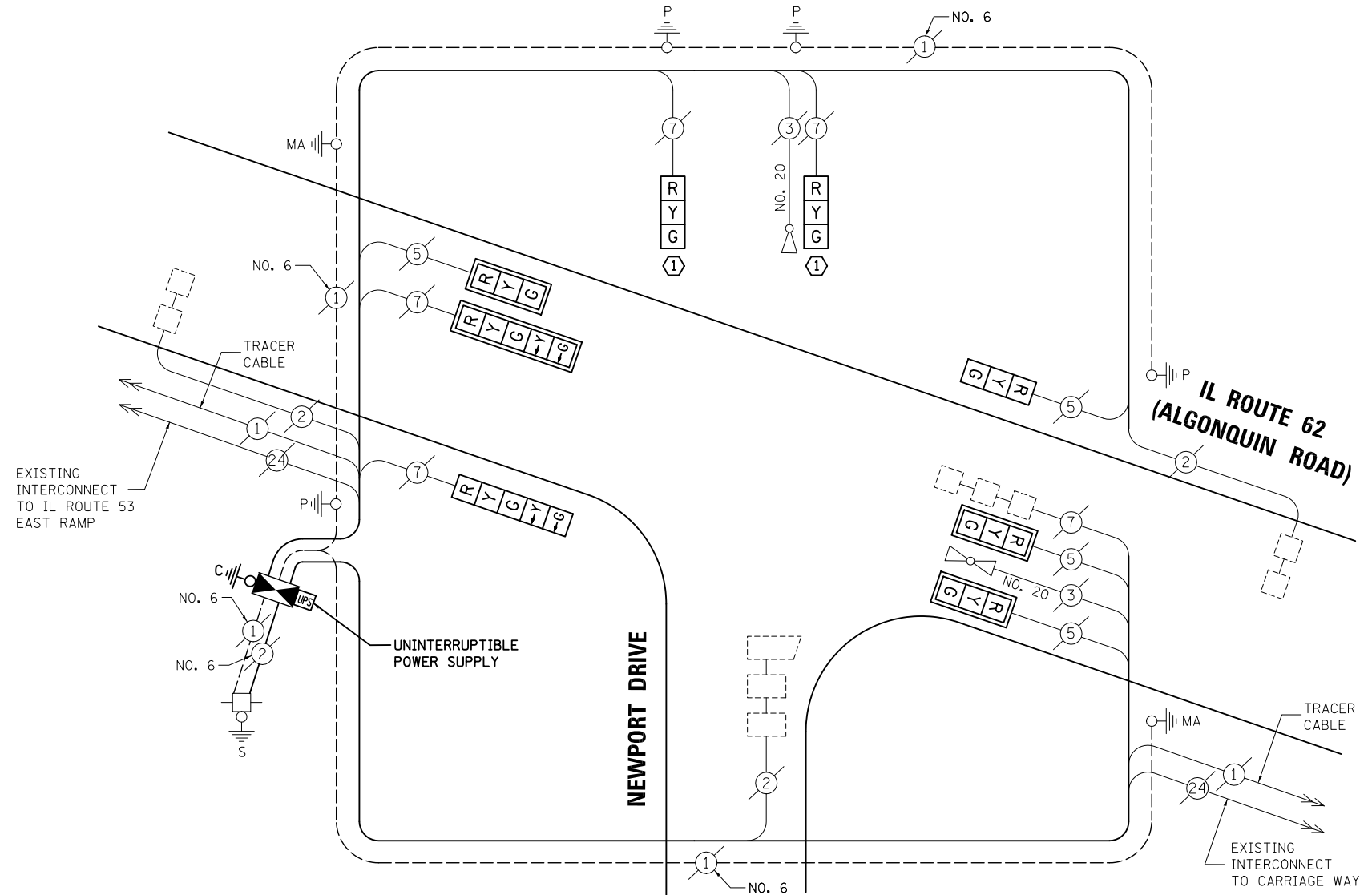
REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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 SIGNAL HEAD, 4-SECTION
- 1 EACH CONTROLLER AND CABINET, COMPLETE

NOTES:

- ① REMOVE EXISTING 4-SECTION SIGNAL HEAD AND REPLACE WITH NEW 3-SECTION HEAD.



CABLE PLAN

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

NOTE:
CONTRACTOR SHALL RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT TO NEW CONTROLLER CABINET. THE COST OF THIS WORK SHALL BE INCLUDED IN THE PAY ITEM "FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL".

RETROFIT ALL VEHICULAR SIGNAL HEADS TO L.E.D. EXCEPT AS NOTED

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
INDUCTIVE LOOP DETECTOR	EACH	4
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-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	1
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

**SCHEDULE OF QUANTITIES, CABLE PLAN,
PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
IL ROUTE 62 (ALGONQUIN ROAD) AT NEWPORT DRIVE**

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

TS# 21595
ROLLING MEADOWS

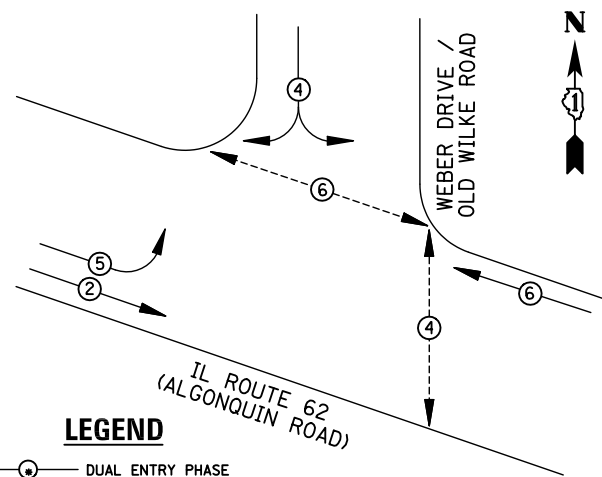
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	62	56

CONTRACT NO. 60W37

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

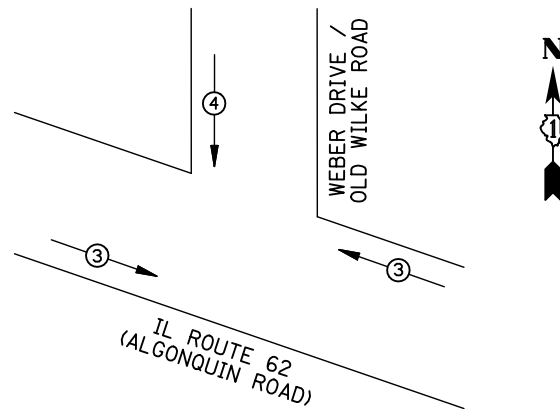
EXISTING CONTROLLER SEQUENCE



LEGEND

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

EXISTING PHASE DESIGNATION DIAGRAM



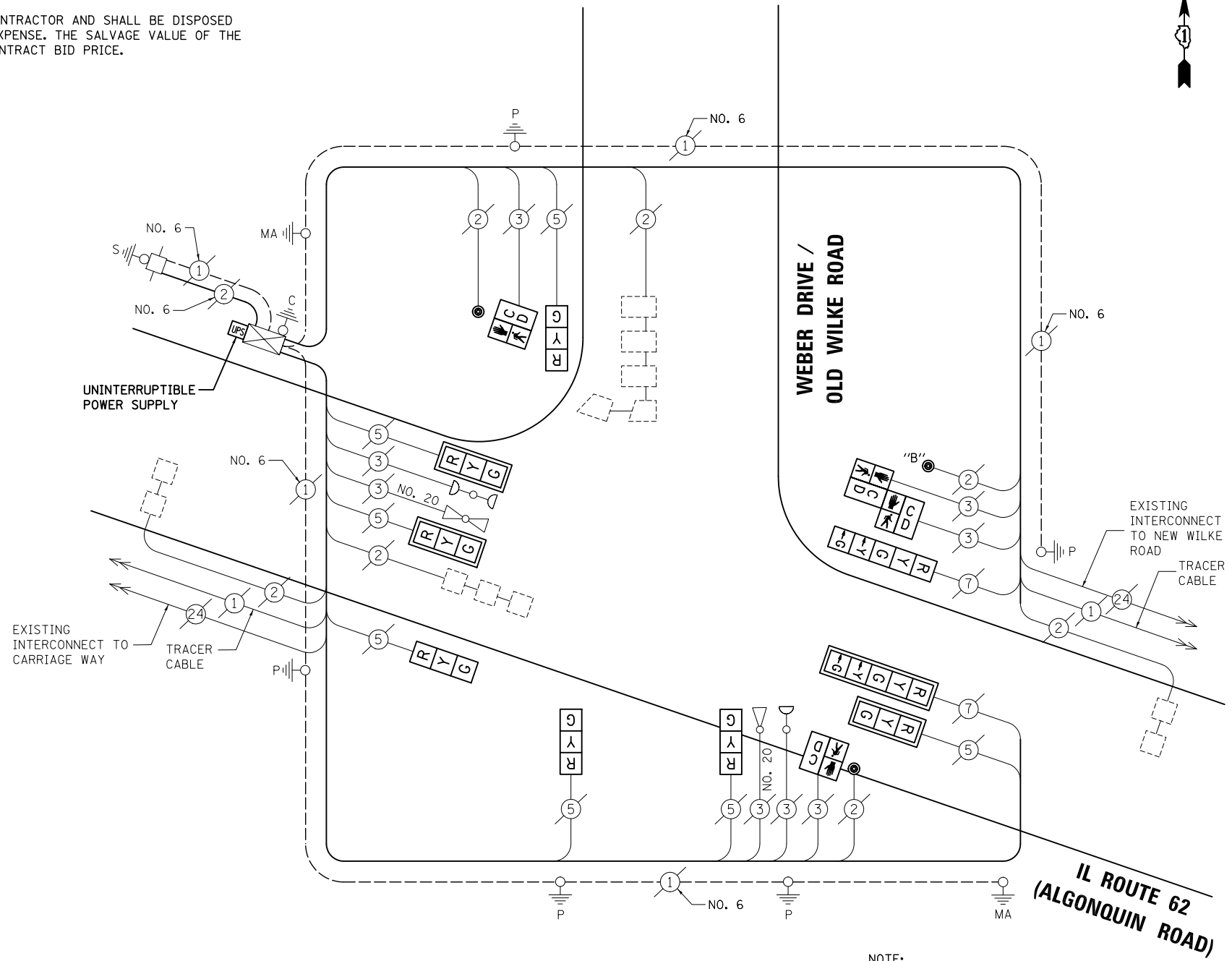
EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	←→	↕

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

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.

- 7 EACH SIGNAL HEAD, 3-SECTION
- 2 EACH SIGNAL HEAD, 5-SECTION
- 4 EACH TRAFFIC SIGNAL BACKPLATE
- 4 EACH PEDESTRIAN SIGNAL HEAD
- 3 EACH PEDESTRIAN PUSH-BUTTON



NOTE:
PUSH-BUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6.

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	3
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM 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	4
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

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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	9	135	17	0.50	76.5
(YELLOW)	9	135	25	0.25	56.25
(GREEN)	9	135	15	0.25	33.75
ARROW	4	135	12	0.10	4.8
PED. SIGNAL	4	90	25	1.00	100
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 371.3
ENERGY SUPPLY CONTACT:	X				
PHONE:	X				
COMPANY:	X				
FILE NAME = \MICROST\352106\ 65-14744.DGN	USER NAME = JGC	DESIGNED - BPT	REVISED -		
		DRAWN - JGC/RDS	REVISED -		
		PLOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -	
		PLOT DATE = X	DATE - 04-26-13	REVISED -	

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION IL ROUTE 62 (ALGONQUIN ROAD) AT WEBER DRIVE / OLD WILKE ROAD

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

TS# 14744 ROLLING MEADOWS

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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	62	57

CONTRACT NO. 60W37

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

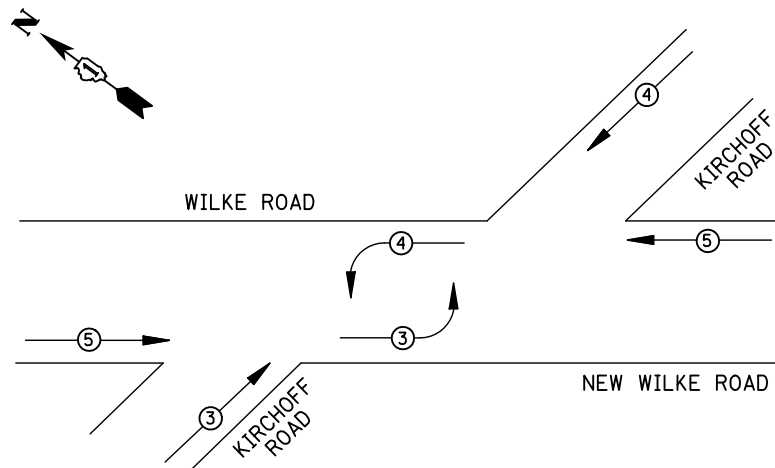
REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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.

- 6 EACH PEDESTRIAN SIGNAL HEAD
- 4 EACH PEDESTRIAN PUSH-BUTTON

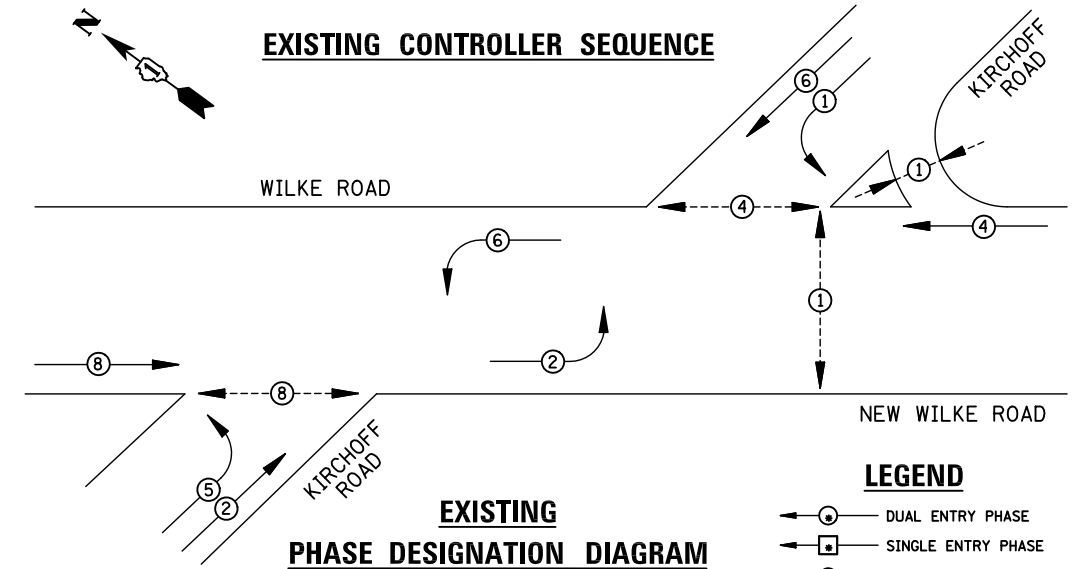
SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	3
PEDESTRIAN SIGNAL HEAD, LED, 3-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	4



EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT			

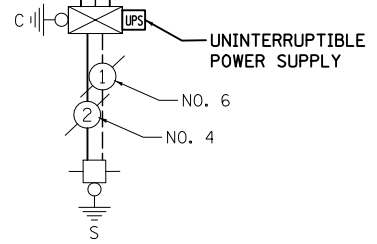
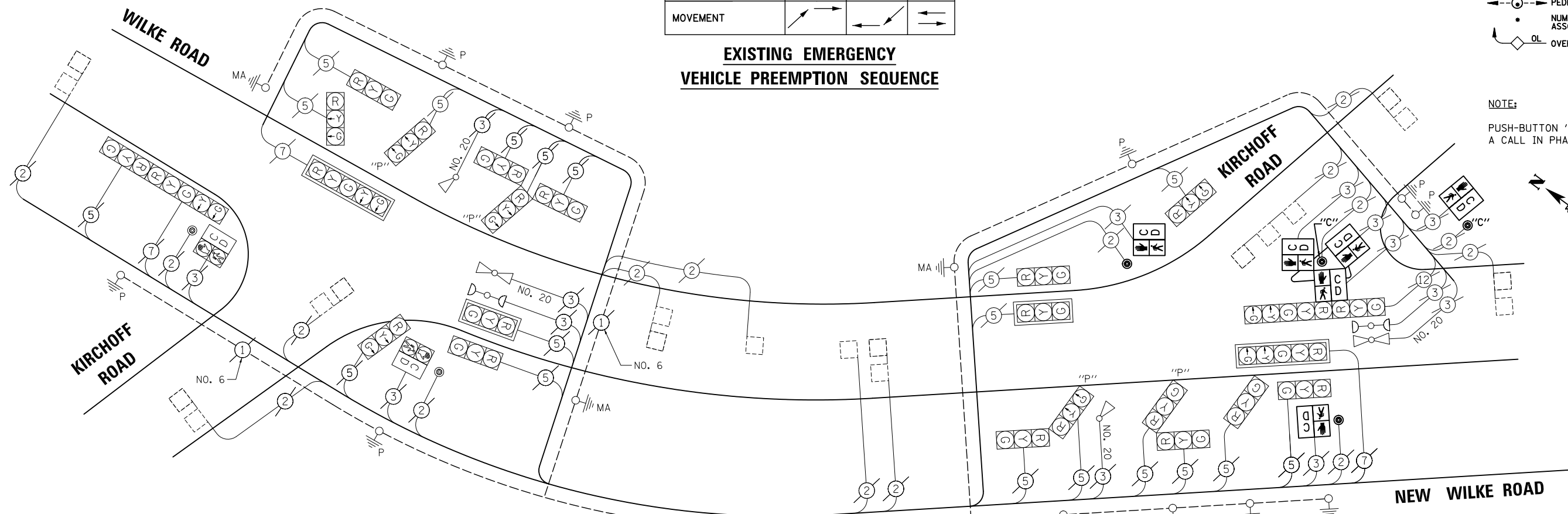
EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM

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

NOTE:
PUSH-BUTTON "C" SHALL PLACE A CALL IN PHASES 1 AND 4.



CABLE PLAN

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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE		%OPERATION	
		INCAND.	LED		
SIGNAL (RED)	24	135	17	0.50	204
(YELLOW)	24	135	25	0.25	150
(GREEN)	24	135	15	0.25	90
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 753.6
ENERGY SUPPLY CONTACT:	X				
PHONE:	X				
COMPANY:	X				

FILE NAME = \MICROST\352106\ 66-5395.DGN
USER NAME = JGC
DESIGNED - BPT
DRAWN - JGC/RDS
PLOT SCALE = NOT TO SCALE
PLOT DATE = X

REVISIONS:
REVISOR: -
DATE: - 04-26-13

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION KIRCHOFF ROAD AND WILKE ROAD / NEW WILKE ROAD
SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

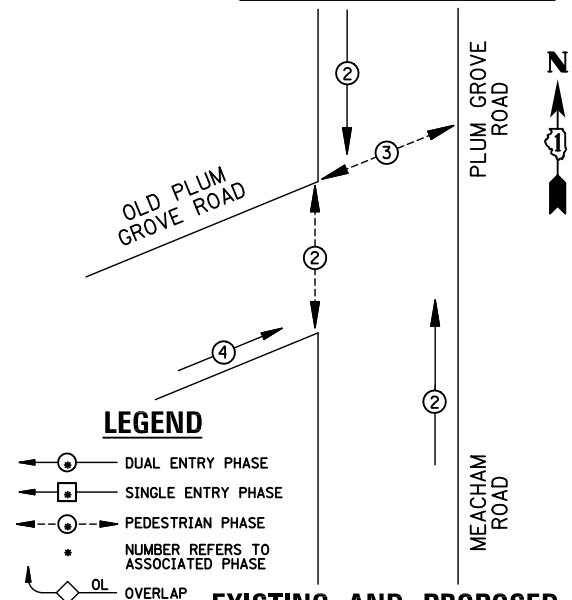
TS# 5395
ROLLING MEADOWS

PREPARED BY:
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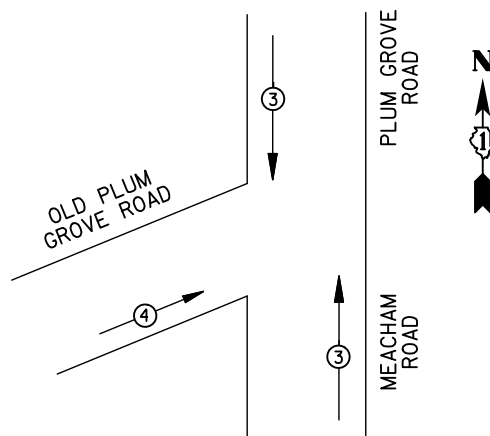
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	62	58

CONTRACT NO. 60W37
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

EXISTING AND PROPOSED CONTROLLER SEQUENCE



EXISTING AND PROPOSED PHASE DESIGNATION DIAGRAM



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

EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	7	135	17	0.50	59.5
(YELLOW)	7	135	25	0.25	43.75
(GREEN)	7	135	15	0.25	26.25
ARROW		135	12	0.10	
PED. SIGNAL	4	90	25	1.00	100
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 329.5
ENERGY SUPPLY CONTACT:	X				
PHONE:	X				
COMPANY:	X				

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

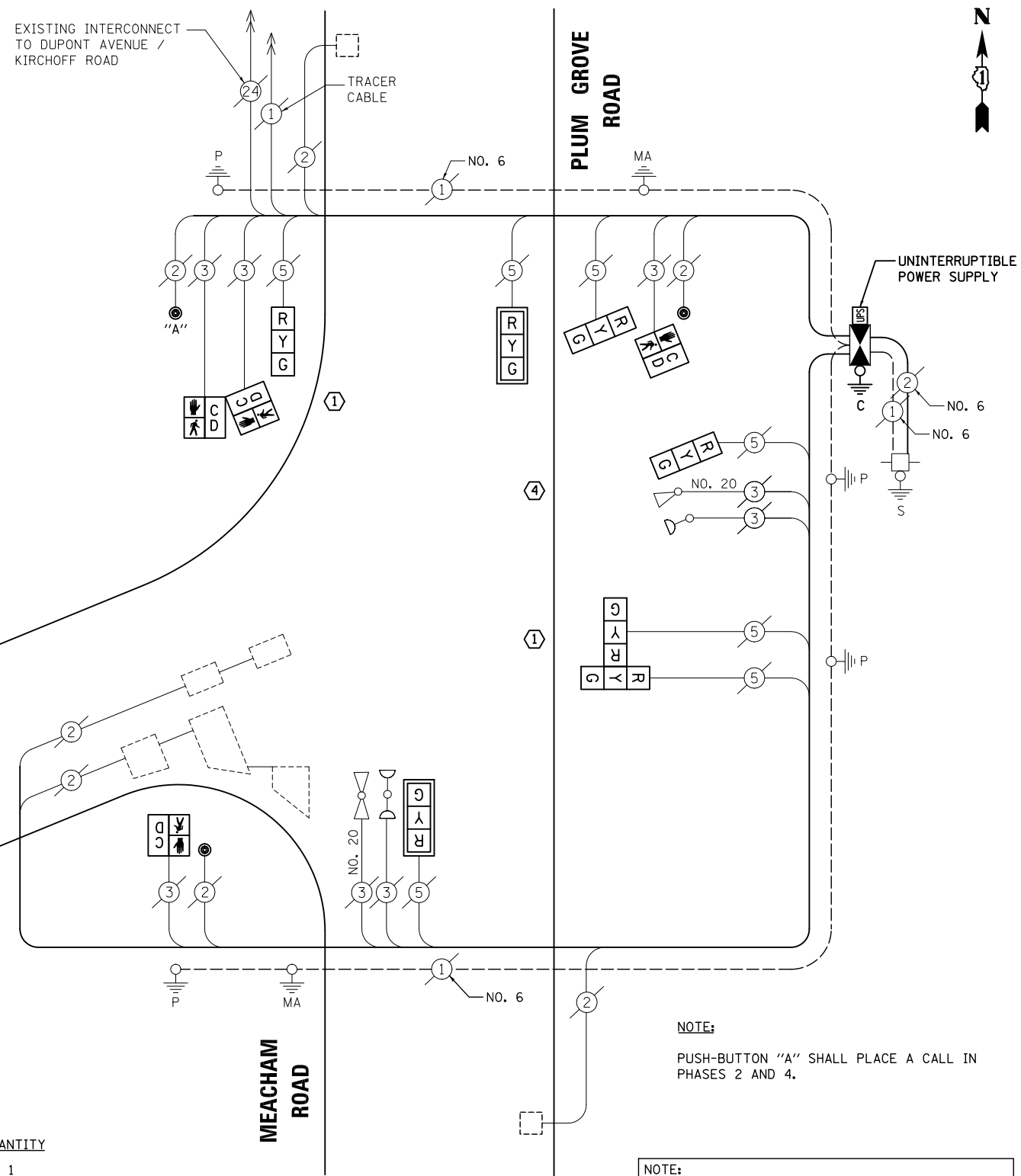
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 3 EACH TRAFFIC SIGNAL POST
- 6 EACH SIGNAL HEAD, 3-SECTION
- 1 EACH SIGNAL HEAD, 4-SECTION
- 2 EACH TRAFFIC SIGNAL BACKPLATE
- 4 EACH PEDESTRIAN SIGNAL HEAD
- 3 EACH PEDESTRIAN PUSH-BUTTON
- 1 EACH CONTROLLER AND CABINET, COMPLETE

- ① REPLACE 14 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
- ② REPLACE 15 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
- ③ REPLACE 16 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION
- ④ REPLACE 18 FT. PAINTED POST, RE-USE EXISTING TYPE A CONCRETE FOUNDATION

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 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	3
SIGNAL HEAD, LED, 2-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
INDUCTIVE LOOP DETECTOR	EACH	4
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
PEDESTRIAN PUSH-BUTTON, NON-LATCHING	EACH	3



CABLE PLAN

NOTE: PUSH-BUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4.

NOTE: CONTRACTOR SHALL RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT TO NEW CONTROLLER CABINET. THE COST OF THIS WORK SHALL BE INCLUDED IN THE PAY ITEM "FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL".

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

TS# 5600 ROLLING MEADOWS

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STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION OLD PLUM GROVE ROAD AT MEACHAM ROAD

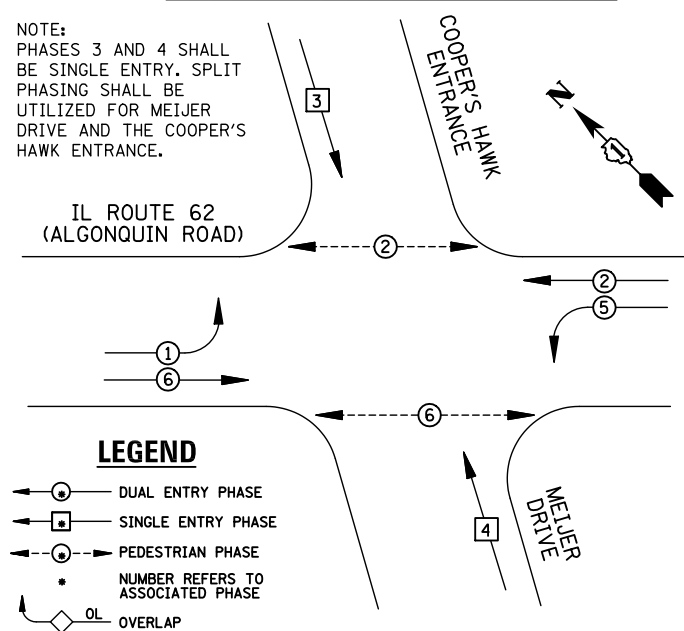
SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	62	59
				CONTRACT NO. 60W37

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

EXISTING CONTROLLER SEQUENCE

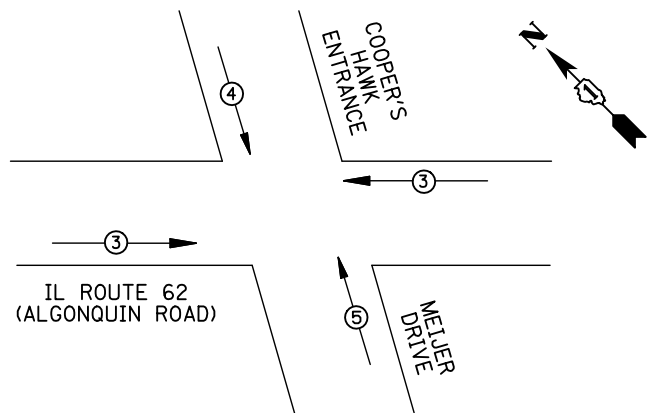
NOTE:
PHASES 3 AND 4 SHALL
BE SINGLE ENTRY. SPLIT
PHASING SHALL BE
UTILIZED FOR MEIJER
DRIVE AND THE COOPER'S
HAWK ENTRANCE.



LEGEND

- ① DUAL ENTRY PHASE
- ② SINGLE ENTRY PHASE
- ③ PEDESTRIAN PHASE
- NUMBER REFERS TO ASSOCIATED PHASE
- OL OVERLAP

EXISTING PHASE DESIGNATION DIAGRAM



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

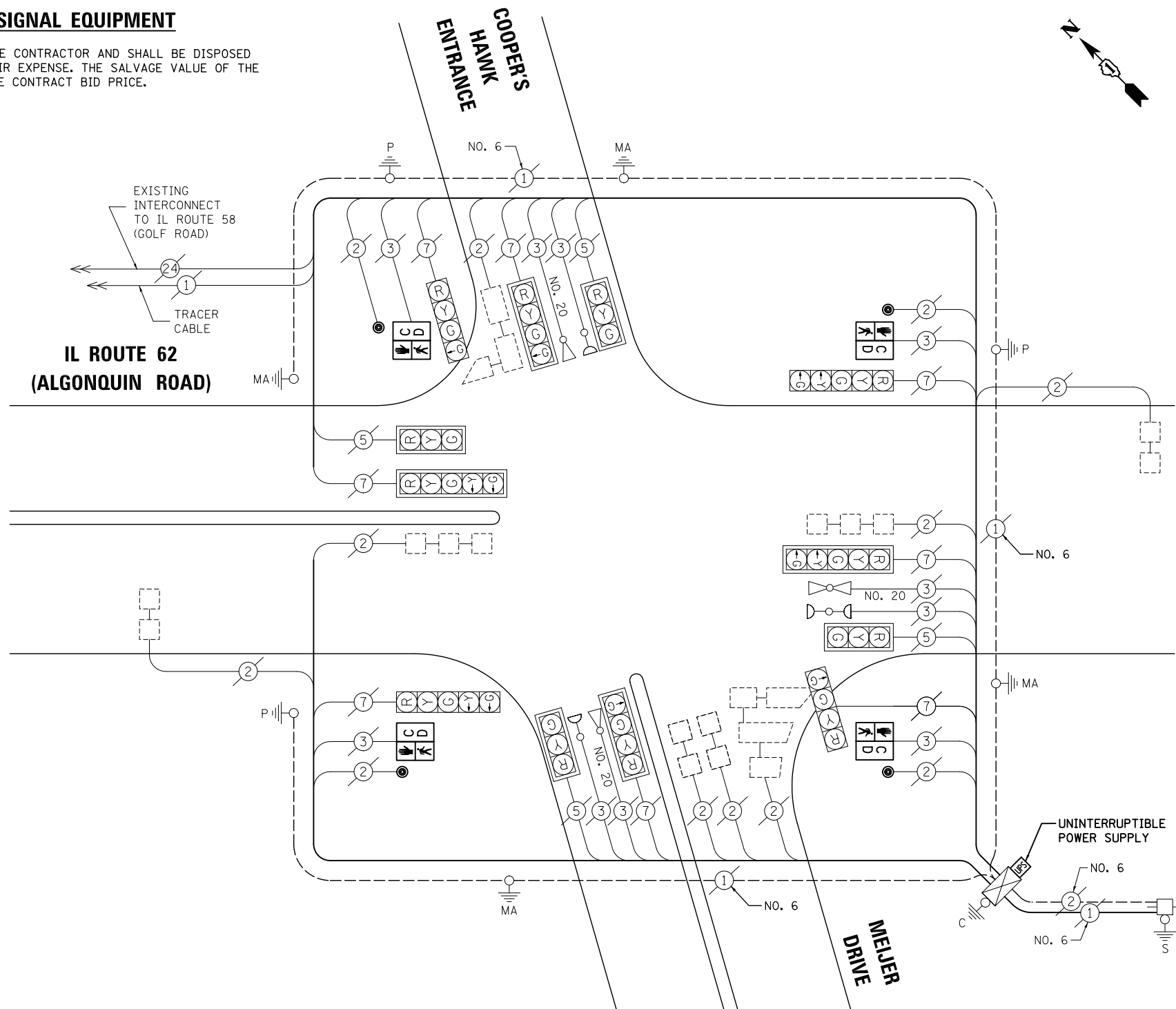
EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		%OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	16	135	15	0.25	60
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	4	90	25	1.00	100
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER		135	25	0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					TOTAL = 446.6
ENERGY SUPPLY	CONTACT: X				
	PHONE: X				
	COMPANY: X				
FILE NAME = MICROST\352106\ 70-2967.DGN	USER NAME = JGC	DESIGNED - BPT	REVISED -		
		DRAWN - JGC/RDS	REVISED -		
	PLOT SCALE = NOT TO SCALE	CHECKED - BPT	REVISED -		
	PLOT DATE = X	DATE - 04-26-13	REVISED -		

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
- 4 EACH PEDESTRIAN PUSH-BUTTON



CABLE PLAN

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

SCHEDULE OF QUANTITIES

ITEM	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
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN,
PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION
IL ROUTE 62 (ALGONQUIN ROAD) AT MEIJER DRIVE

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

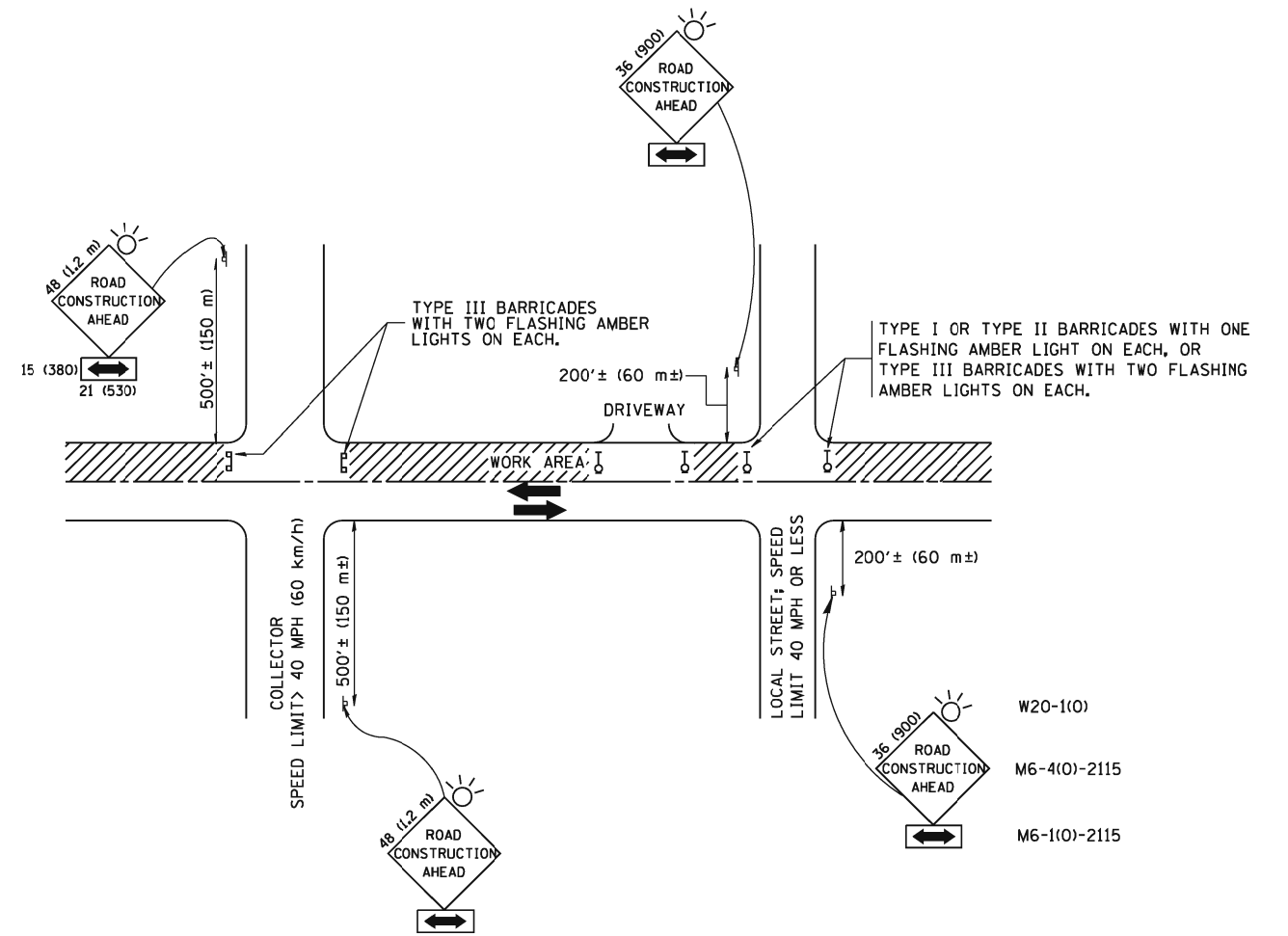
TS# 2967
ROLLING MEADOWS

PREPARED BY:
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	62	60

CONTRACT NO. 60W37

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



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

NOTES:

A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:

a) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.

b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.

2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:

a) ONE ROAD CONSTRUCTION AHEAD SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.

b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.

3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

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

C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.

D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

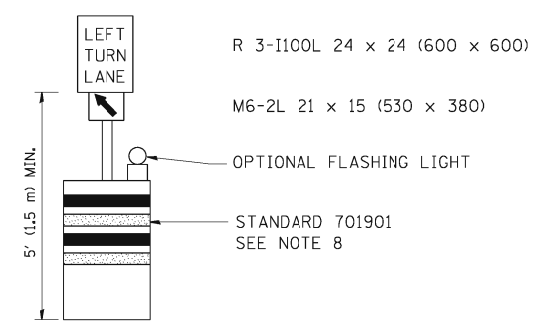
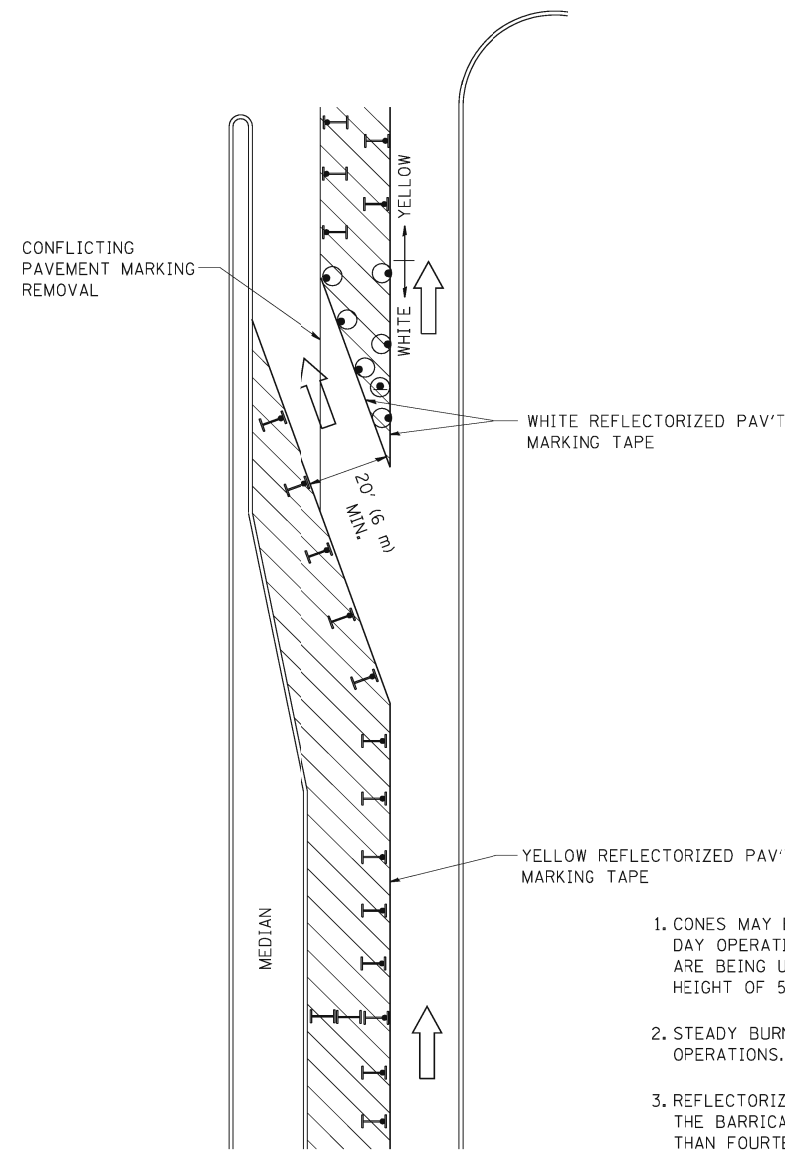
FILE NAME =	USER NAME = gaglianobt	DESIGNED - LHA	REVISED - J. OBERLE 10-18-95
W:\distatd\22x34\tc10.dgn		DRAWN -	REVISED - A. HOUSEH 03-06-96
	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 1/4/2008	DATE - 06-89	REVISED - T. RAMMACHER 01-06-00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	62	61
TC-10		CONTRACT NO. 60W37		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



GENERAL NOTES

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

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

LEGEND

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

FILE NAME =	USER NAME = drivakosgn	REVISED - T. RAMMACHER 09-08-94	REVISED - R. BORO 09-14-09
ct:\pw\work\PKWIDOT\DRIVAKOS\N\d0100315\14.dgn		REVISED - A. HOUSEH 11-07-95	REVISED -
		REVISED - A. HOUSEH 10-12-96	REVISED -
PLOT DATE = 9/14/2009		REVISED - T. RAMMACHER 01-06-00	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2013-006TS	COOK	62	62
TC-14		CONTRACT NO. 60W37		
<small>FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT</small>				