

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

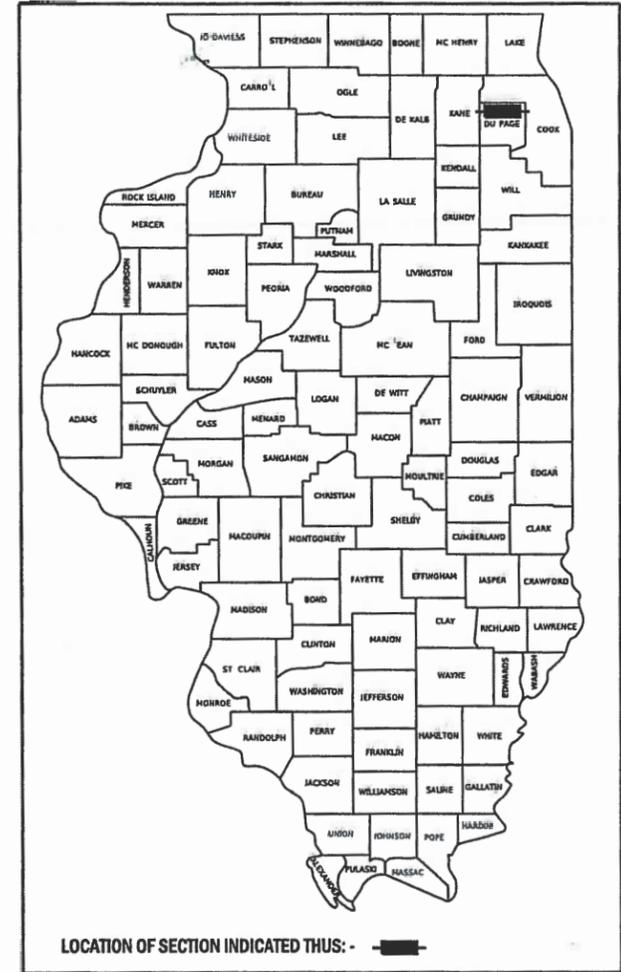
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	17-DCCSS-01-TL	DUPAGE	277	1
ILLINOIS CONTRACT NO. 61F05				

FOR INDEX OF SHEETS, SEE SHEET NO. 2  
FOR LIST OF HIGHWAY STANDARDS, SEE SHEET NO. 2  
FOR SUMMARY OF QUANTITIES, SEE SHEETS NO. 4 - 8

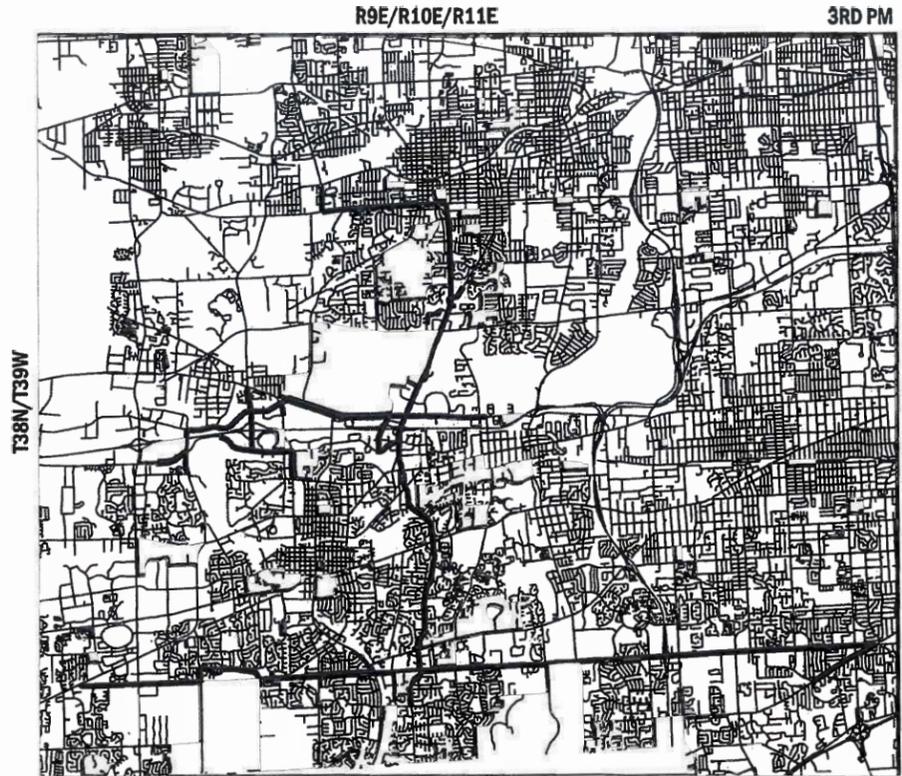
# PLANS FOR PROPOSED FEDERAL AID HIGHWAY

VARIOUS ROUTES, VARIOUS LOCATIONS  
SECTION 17-DCCSS-01-TL  
PROJECT NO. QIHB(040)  
CENTRAL SIGNAL SYSTEM EXPANSION 1  
DuPAGE COUNTY

C-91-128-18

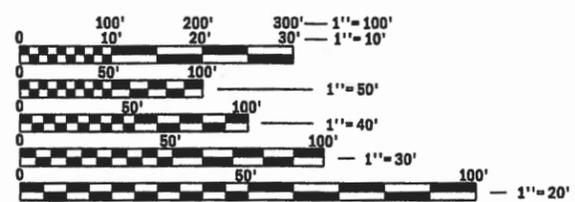


PROJECT IS LOCATED IN THE CITIES DARIEN, NAPERVILLE, WHEATON, WARRENVILLE, THE VILLAGES OF DOWNERS GROVE, WOODRIDGE, LISLE AND WINFIELD TOWNSHIP.



NAPERVILLE, LISLE, DOWNERS GROVE AND MILTON TOWNSHIP

LOCATION MAP  
NO SCALE



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

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



DANIEL WIKTORZAK  
062-060950  
REGISTERED PROFESSIONAL ENGINEER OF ILLINOIS

*[Signature]*  
SIGNATURE  
7-30-18  
DATE  
11-30-17  
EXPIRES

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

APPROVED *Christopher Snyder* DATE July 27, 2018  
DUPAGE COUNTY DIVISION OF TRANSPORTATION  
DIRECTOR OF TRANSPORTATION/COUNTY ENGINEER

PASSED AUGUST 23, 2018 DATE  
*Christopher Holt*  
DISTRICT 1 ENGINEER OF LOCAL ROADS & STREETS

RELEASING FOR BID  
BASED ON LIMITED  
REVIEW August 24, 2018 DATE  
*Anthony J. Quinlan* REGIONAL ENGINEER

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OF THE STATE OF ILLINOIS

PROGRAM AND OFFICE ENGINEER: CHARLES F. RIDDLE, P.E., SCHAUMBURG, IL

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## HIGHWAY STANDARDS

000001-06	STANDARD SYMBOLS, ABBREVIATIONS, & PATTERNS
001006	DECIMAL OF AN INCH AND OF A FOOT
701006-05	OFF-RD OPERATIONS, 2L, 2W, 15'(4.5M) TO 24"(600MM) FROM PAVEMENT EDGE
701011-04	OFF-RD MOVING OPERATIONS 2L, 2W, DAY ONLY
701101-05	OFF-RD OPERATIONS, MULTILANE 15'(4.5M) TO 24"(600MM) FROM PAVEMENT EDGE
701106-02	OFF-RD OPERATIONS, MULTILANE MORE THAN 15'(4.5M) AWAY
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
701426-09	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATION, FOR SPEEDS $\geq$ 45 MPH
701427-05	LANE CLOSURES, MULTILANE, INTERMITTENT OR MOVING OPERATION, FOR SPEEDS $\leq$ 40 MPH
701502-08	URBAN LANE CLOSURE, 2L, 2W, WITH BIDIRECTIONAL LEFT TURN LANE
701601-09	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W, WITH NONTRAVERSABLE MEDIAN
701602-09	URBAN LANE CLOSURE, MULTILANE, 2W, WITH BIDIRECTIONAL LEFT TURN LANE
701606-10	URBAN SINGLE LANE CLOSURE, MULTILANE 2W WITH MOUNTABLE MEDIAN
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-06	SIDEWALK, CORNER OF CROSSWALK CLOSURE
701901-07	TRAFFIC CONTROL DEVICES
814001-03	HANDHOLES
857001-01	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
862001-01	UNINTERRUPTABLE POWER SUPPLY (UPS)
873001-02	TRAFFIC SIGNAL GROUNDING AND BONDING



USER NAME = dwiktorzak	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 8/28/2018	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS, HIGHWAY STANDARDS,  
GENERAL NOTES AND COMMITMENTS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	2
CONTRACT NO.			61F05	

SCALE: NTS SHEET 1 OF 2 SHEETS STA. TO STA.

**GENERAL NOTES**

- THE ILLINOIS DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", APRIL 1, 2016; MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, LATEST EDITION; PROJECT SPECIFICATIONS; ALL APPLICABLE REQUIREMENTS OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION; THE CITY OF NAPERVILLE, DARIEN, WHEATON, AND WARRANVILLE; THE VILLAGES OF DOWNERS GROVE, WOODRIDGE, AND LISLE; THE DUPAGE COUNTY DIVISION OF TRANSPORTATION; ALL APPLICABLE REQUIREMENTS OF THE ORDINANCES OF AUTHORITIES HAVING JURISDICTION; AND ALL ADDENDA THERETO SHALL GOVERN THIS WORK.
- THE STANDARDS SPECIFICATIONS, PROJECT SPECIFICATIONS, CONSTRUCTION PLANS, AND SUBSEQUENT DETAILS ARE ALL TO BE CONSIDERED AS PART OF THE CONTRACT.
- THE CONTRACTOR SHALL SOLELY BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ADEQUATE SIGNS, TRAFFIC CONTROL DEVICES, AND WARNING DEVICES TO INFORM AND PROTECT THE PUBLIC DURING ALL PHASES OF CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR RETURNING ALL AREAS AFFECTED BY EQUIPMENT OR LABORERS TO EXISTING CONDITIONS. THE CONTRACTOR IS ALSO RESPONSIBLE FOR PROTECTING ALL NEW WORK UNTIL COMPLETION OF THIS CONTRACT.
- EXISTING UTILITIES: WHEN THE PLANS OR SPECIAL PROVISIONS INCLUDE INFORMATION PERTAINING TO THE LOCATION OF UNDERGROUND UTILITY FACILITIES, SUCH INFORMATION IS BASED ON RECORD INFORMATION PROVIDED BY THE INDIVIDUAL UTILITY OWNERS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL SUCH FACILITIES. THE CONTRACTOR SHALL ALSO CONTACT J.U.L.I.E. TO OBTAIN LOCATES OF THE RESPECTIVE UTILITY COMPANIES UNDERGROUND FACILITIES.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND THE CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION.
- THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE ORDERING ANY MATERIALS AND STARTING ANY WORK. FOR LOCATIONS OF UTILITIES, LOCALLY OWNED EQUIPMENT, LEASED ENFORCEMENT CAMERA SYSTEM FACILITIES, AND IDOT UNDERGROUND FACILITIES, CONTACT THE LOCAL COUNTIES MUNICIPALITIES, AND IDOT FOR LOCATES, THE CONTRACTOR SHALL CALL 'JULIE' AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED UTILITIES (48 HOURS NOTIFICATION REQUIRED).
- 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.

- THIS PROJECT INVOLVES THE INSTALLATION OF CONDUIT; HANDHOLES; UPGRADED OR REPLACEMENT CONTROLLERS; FIBER-OPTIC CABLE; PTZ CAMERAS AND THEIR PERIPHERALS AND CABLES; AND MOUNTING POLES AT LOCATIONS SHOWN ON THE PLANS.
- THESE PLANS USE EXISTING PLANS AS BACKGROUND WHERE POSSIBLE. THE CONTRACTOR SHALL USE CARE TO CORRECTLY DISTINGUISH PROPOSED WORK FROM THE EXISTING WORK. CALLOUTS AND OTHER INFORMATION IN THE BACKGROUND OF THE VIDEO CAMERA INSTALLATION, COMMUNICATION NODES, AND COMMUNICATION INTERCONNECT PLAN SHEETS ARE NOT APPLICABLE TO THIS CONTRACT. APPLICABLE ITEMS ON THESE SHEETS ARE IDENTIFIED BY BOLD CALLOUTS. BACKGROUNDS HAVE BEEN LIGHTENED TO HIGHLIGHT THE DISTINCTION BETWEEN BOLD CALLOUTS AND BACKGROUNDS.
- RIGHT-OF-WAY LINES SHOWN ON THE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL ENSURE THAT ALL WORK IS PERFORMED WITHIN EXISTING COUNTY, CITY OR STATE RIGHT-OF-WAY. THIS PROJECT INVOLVES NO RIGHT-OF-WAY ACQUISITION.
- THE SYSTEM COMMUNICATIONS ARE INTENDED TO OPERATE USING BOTH EXISTING AND PROPOSED FIBER OPTIC CABLES. INTERCONNECT SCHEMATICS ARE INCLUDED FOR AREAS THAT INVOLVE PROPOSED FIBER OPTIC CABLE. SHEETS SHOWING EXISTING CABLES ARE ALSO INCLUDED FOR INFORMATION ONLY.
- GENERAL FIBER SPLICES AND TERMINATIONS ARE SHOWN ON THE FIBER LAYOUT SHEETS FOR SINGLE-MODE FIBERS ONLY. SPECIFIC TUBE AND FIBERS THAT ARE SPLICED SHALL BE CHOSEN SYSTEMATICALLY AND BE DOCUMENTED AND LABELED TO THE SATISFACTION OF THE ENGINEER.
- THE CONTRACTOR SHALL COORDINATE WITH DUDOT FOR THE LOCATION AND ORIENTATION OF EACH PROPOSED CCTV CAMERA PRIOR TO CAMERA INSTALLATION.
- THE CONTRACTOR SHALL MARK THE RECORD DRAWINGS TO REFLECT ANY CHANGES TO THE PLANS, THE RECORD DRAWING REQUIREMENTS ARE IDENTIFIED IN SECTION 801.16 OF THE STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL CONTACT THE IDOT D1 TRAFFIC CONTROL SUPERVISOR A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
- ABBREVIATIONS HAVE BEEN USED THROUGHOUT THE PLANS. SEE ARTICLE 101.01 OF THE STANDARD SPECIFICATIONS, STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS (STANDARD 000001), AND DISTRICT ONE DETAIL STANDARD TRAFFIC SIGNAL DESIGN DETAILS (TS-05) FOR MOST ABBREVIATIONS. IN ADDITION, THE FOLLOWING ABBREVIATIONS HAVE BEEN USED IN THE PLANS AND ARE TO BE CONSTRUED THE SAME AS THE RESPECTIVE EXPRESSIONS REPRESENTED:

ATMS	ADVANCED TRAFFIC MANAGEMENT SYSTEM
CCTV	CLOSED-CIRCUIT TELEVISION
HAR	HIGHWAY ADVISORY RADIO
IDOT	ILLINOIS DEPARTMENT OF TRANSPORTATION
ISTHA	ILLINOIS STATE TOLL HIGHWAY AUTHORITY
ITS	INTELLIGENT TRANSPORTATION SYSTEM
DUDOT	DUPAGE COUNTY DIVISION OF TRANSPORTATION
TMC	TRAFFIC MANAGEMENT CENTER
ONC	OUTDOOR NETWORK CABLE

- A NOMININAL QUANTITY HAS BEEN ADDED FOR THE FOLLOWING PAY ITEMS TO ACCOUNT FOR BLOCKED OR UNDERSIZED CONDUITS AND ARE TO BE USED AT THE DIRECTION OF THE ENGINEER:

81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	400	FOOT
81028750	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 2" DIA.	1,350	FOOT
81400100	HANDHOLE	5	EACH
81400200	HEAVY-DUTY HANDHOLE	3	EACH
87300925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	2,000	FOOT
87900200	DRILL EXISTING HANDHOLE	11	EACH
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	3,350	FOOT
89502350	REMOVE AND REINSTALL ELECTRIC CABLE FROM CONDUIT	3,350	FOOT
X8100863	INTERCEPT EXISTING CONDUIT	5	EACH



USER NAME = dwiktorzak	DESIGNED -	REVISED -
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PLOT DATE = 8/28/2018	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**INDEX OF SHEETS, HIGHWAY STANDARDS,  
GENERAL NOTES AND COMMITMENTS**

SCALE: NTS	SHEET 2	OF 2	SHEETS	STA.	TO STA.
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	3
CONTRACT NO.			61F05	
ILLINOIS		FED. AID PROJECT		

**SUMMARY OF QUANTITIES HEADING LEGEND**

**A SHEET 75TH ST CORRIDOR INTERSECTIONS**

- 9 75TH ST AND US RTE 34 (OGDEN AVE)
- 10 75TH ST AND IL RTE 59
- 11 - 12 75TH ST AND BEEBE DR
- 13 75TH ST AND FORT HILL DR
- 14 75TH ST AND BOOK RD
- 15 - 16 RICKERT RD AND BOOK RD
- 17 - 18 RICKERT DR AND WEST ST
- 19 - 20 75TH ST AND PLAINFIELD-NAPERVILLE RD
- 21 75TH ST AND MILLBROOK DR
- 22 75TH ST AND MODAFF RD
- 23 - 24 75TH ST AND OLYMPUS DR
- 25 75TH ST AND WASHINGTON ST
- 26 - 27 75TH ST AND NAPER BLVD
- 28 - 29 75TH ST AND WEHRLI RD
- 30 75TH ST AND RANCHVIEW DR
- 31 - 32 75TH ST AND GREENE RD
- 33 75TH ST AND IL RTE 53
- 34 - 35 75TH ST AND WOODRIDGE DR
- 36 - 37 75TH ST AND JANES AVE
- 38 - 39 75TH ST AND I-355 (EAST)
- 40 - 41 75TH ST AND WOODWARD AVE
- 42 75TH ST AND DUNHAM RD
- 43 - 44 75TH ST AND LEMONT RD
- 45 75TH ST AND LYMAN AVE
- 46 75TH ST AND FAIRMOUNT AVE
- 47 - 48 75TH ST AND FAIRVIEW AVE
- 49 75TH ST AND EXNER RD / WILLIAMS ST
- 50 75TH ST AND ADAMS ST
- 51 - 52 75TH ST AND CASS AVE
- 53 - 54 75TH ST AND PLAINFIELD RD

**B SHEET DIEHL ROAD CORRIDOR INTERSECTIONS**

- 55 DIEHL RD AND NALCO EAST ENTR
- 56 DIEHL RD AND TELLABS DR
- 57 - 58 DIEHL RD AND RAYMOND DR
- 59 DIEHL RD AND DAVIS PKWY
- 60 - 61 DIEHL RD AND WINFIELD RD
- 62 DIEHL RD AND BULGER CT / WEAVER PKWY
- 63 - 64 DIEHL RD AND MILL ST
- 65 - 66 DIEHL RD AND FREEDOM DR
- 67 - 68 DIEHL RD AND NAPERVILLE RD

**C SHEET FERRY ROAD / WARRENVILLE ROAD CORRIDOR INTERSECTIONS**

- 69 70 FERRY RD AND RAYMOND DR
- 71 FERRY RD AND RIVER RD
- 72 FERRY RD AND TORCH PKWY
- 73 - 74 FERRY RD AND WINFIELD RD
- 75 FERRY RD AND CHASE CT / BELLA VISTA PKWY
- 76 - 77 FERRY RD / MILL ST AND WARRENVILLE RD
- 78 WARRENVILLE RD AND HERRICK RD
- 79 - 80 WARRENVILLE RD AND WASHINGTON ST
- 81 WARRENVILLE RD AND ILLINOIS HOSPITAL AND H.S.A. ENTRANCE
- 82 - 83 WARRENVILLE RD AND WEST LUCENT LN / FREEDOM DR
- 84 - 85 WARRENVILLE RD AND NAPERVILLE RD
- 86 WARRENVILLE RD AND NAVISTAR DR
- 87 WARRENVILLE RD AND CABOT DR
- 88 WARRENVILLE RD AND LEASK LN
- 89 - 90 WARRENVILLE RD AND YACKLEY AVE

**D SHEET IL RTE 38 (ROOSEVELT RD) CORRIDOR INTERSECTIONS**

- 91 IL RTE 38 (ROOSEVELT RD) AND COUNTY FARM RD
- 92 IL RTE 38 (ROOSEVELT RD) AND HAZELTON AVE
- 93 IL RTE 38 (ROOSEVELT RD) AND SADDLE RD
- 94 IL RTE 38 (ROOSEVELT RD) AND CARLTON AVE
- 95 IL RTE 38 (ROOSEVELT RD) AND WEST ST
- 96 IL RTE 38 (ROOSEVELT RD) AND MAIN ST
- 97 IL RTE 38 (ROOSEVELT RD) AND NAPERVILLE RD

**E SHEET WINFIELD ROAD CORRIDOR INTERSECTIONS**

- 98 WINFIELD RD AND I-88 (SOUTH)
- 99 - 100 WINFIELD RD AND I-88 (NORTH)
- 101 WINFIELD RD AND TORCH PKWY
- 102 WINFIELD RD AND WARRENVILLE RD

**F SHEET MILL STREET CORRIDOR INTERSECTIONS**

- 103 MILL ST AND BAUER RD
- 104 MILL ST AND BELLA VISTA PKWY

**G SHEET FREEDOM DRIVE CORRIDOR INTERSECTIONS**

- 105 FREEDOM DRIVE AND INDEPENDENCE AVE
- 106 - 107 FREEDOM DRIVE AND I-88 SOUTH (RAMP B)
- 108 FREEDOM DRIVE AND I-88 NORTH (RAMD E AND D)

**H SHEET NAPER BLVD / NAPPERVILLE ROAD CORRIDOR INTERSECTIONS**

- 109 - 110 NAPER BLVD AND BAILEY RD
- 111 NAPER BLVD AND MARKET MEADOW / FOX RUN
- 112 - 113 NAPER BLVD AND HOBSON RD
- 114 - 115 NAPER BLVD AND CULPEPPER DR
- 116 - 117 NAPER BLVD AND GREEN TRAILS DR
- 118 NAPER BLVD AND DUNROBIN RD
- 119 NAPER BLVD AND MAPLE AVE / CHICAGO AVE
- 120 121 NAPER BLVD AND PLANK RD
- 122 - 123 NAPER BLVD AND US RTE 34 (OGDEN AVE)
- 124 NAPER BLVD AND TOWER CROSSING
- 125 - 126 NAPER BLVD AND RIDGELAND AVE
- 127 NAPERVILLE RD AND CENTRAL PARK ENTRANCE
- 128 NAPERVILLE RD AND WEST LUCENT LN / NAVISTAR DR
- 129 NAPERVILLE RD AND F.H. BELLINGER PARKWAY
- 130 NAPERVILLE RD AND IL RTE 56 (BUTTERFIELD RD)
- 131 - 132 NAPERVILLE RD AND DANADA SQ
- 133 NAPERVILLE RD AND LOOP RD
- 134 - 135 NAPERVILLE RD AND BLANCHARD RD
- 136 NAPERVILLE RD AND DANADA DR
- 137 - 138 NAPERVILLE RD AND LONGFELLOW DR
- 139 NAPERVILLE RD AND FARNHAM LN
- 140 - 141 NAPERVILLE RD AND ELM ST

**I SHEET LEMONT ROAD CORRIDOR INTERSECTIONS**

- 142 LEMONT RD AND CHESTNUT CT
- 143 LEMONT RD AND GROVE SHOPPING CENTER
- 144 LEMONT RD AND DUNHAM RD

**J SHEET PLAINFIELD ROAD CORRIDOR INTERSECTIONS**

- 145 - 146 PLAINFIELD RD AND MANNING RD
- 147 PLAINFIELD RD AND BAILEY RD
- 148 - 149 PLAINFIELD RD AND CASS AVE

**K SHEET RAYMOND DRIVE CORRIDOR INTERSECTIONS**

- 150 RAYMOND DR AND MCDOWELL RD

**L SHEET COUNTY FARM ROAD CORRIDOR INTERSECTIONS**

- 151 - 152 COUNTY FARM RD AND WILLIAMS ST
- 153 COUNTY FARM RD AND MANCHESTER RD

**M SHEET WASHINGTON STREET CORRIDOR INTERSECTIONS**

- 154 WASHINGTON ST AND HOBSON RD

**N SHEET US RTE 34 (OGDEN AVE) CORRIDOR INTERSECTIONS**

- 155 US RTE 34 (OGDEN AVE) AND IROQUOIS AVE
- 156 US RTE 34 (OGDEN AVE) AND NAPERVILLE-WHEATON RD

**O SHEET BLANCHARD ROAD CORRIDOR INTERSECTIONS**

- 157 BLANCHARD RD AND TOWN SQUARE

**P SHEET INTERCONNECT**

- 158 - 238 INTERCONNECT SYSTEM

	USER NAME = dwiktorzak	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SUMMARY OF QUANTITIES</b>			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DRAWN -	REVISIED -				VAR.	17-DCCSS-01-TL	DUPAGE	277	4		
PLOT SCALE = 40.0000 ' / in.	CHECKED -	REVISED -				CONTRACT NO. 61F05						
PLOT DATE = 8/28/2018	DATE -	REVISED -				ILLINOIS FED. AID PROJECT						
				SCALE:	SHEET 1	OF 5	SHEETS	STA.	TO STA.			

				80% STATE / 20% DuPAGE COUNTY															
				A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	TRAFFIC SIGNAL															
				0021															
				URBAN															
67100100	MOBILIZATION	L SUM	1	1															
70102622	TRAFFIC CONTROL AND PROTECTION, STANDARD 701502	L SUM	1	1															
70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1	1															
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	1															
70102632	TRAFFIC CONTROL AND PROTECTION, STANDARD 701602	L SUM	1	1															
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1															
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	1															
81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	6176																6176
81028750	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 2" DIA.	FOOT	28192																28192
81400100	HANDHOLE	EACH	30																30
81400200	HEAVY-DUTY HANDHOLE	EACH	13																13
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	108	31	9	15	7	4	2	3	22	3	3	1	2	1	2	1	2
87300010	GROUNDING EXISTING HANDHOLE FRAME AND COVER	EACH	262	87	9	50		16	4		62	14		4	4		8	4	
87300925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	50716																50716



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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES**

SCALE: SHEET 2 OF 5 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	5
CONTRACT NO. 61F05				
ILLINOIS		FED. AID PROJECT		

				80% STATE / 20% DuPAGE COUNTY															
				A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	TRAFFIC SIGNAL															
				0021															
				URBAN															
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	358	264								94							
87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	35650	10700	750	6200		2250	750		9000	2250		750	750		1500	750	
87900200	DRILL EXISTING HANDHOLE	EACH	63								2								61
88500100	INDUCTIVE LOOP DETECTOR	EACH	219	45	19	55		16	8		46	14					7	9	
89501410	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	27	6	2	6		2	1		6	2					1	1	
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	20295																20295
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	65	18	9	13		4	2		12	3		1	1		1	1	
Z0010688	CAMERA MOUNTING ASSEMBLY	EACH	7	2	1	2		1					1						
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	412																412
X0324599	ROD AND CLEAN EXISTING CONDUIT	FOOT	153614																153614
X0326255	APPLICATION SERVER	EACH	2																2
X1400012	REMOVE AND REINSTALL FIBER OPTIC CABLE IN CONDUIT	FOOT	12713																12713
X1400102	OUTDOOR RATED NETWORK CABLE	FOOT	8582	3082	829	1384		84		186	2327		492				199		
X1400215	REMOTE CONTROLLED VIDEO SYSTEM	EACH	43	16	5	7		1		1	10		2				1		

	USER NAME = dwiktorzak	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SUMMARY OF QUANTITIES</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 40,0000' / in.	DRAWN -	REVISED -						VAR.	17-DCC55-01-TL	DUPAGE	277	6
	PLOT DATE = 8/28/2018	CHECKED -	REVISED -		SCALE:	SHEET 3	OF 5	SHEETS	STA.	TO STA.	CONTRACT NO.	61F05	ILLINOIS

				80% STATE / 20% DUPAGE COUNTY															
				A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	TRAFFIC SIGNAL															
				0021															
				URBAN															
X1400216	LAYER II (DATALINK) SWITCH	EACH	83	23	9	13		4	2	3	17	3	3	1	1	1	2	1	
X1400217	TERMINATE FIBER IN CABINET	EACH	216																216
X1400218	FIBER OPTIC CABLE IN CONDUIT, 24 SINGLE MODE	FOOT	175325																175325
X1400219	SPLICE FIBER IN CABINET	EACH	320																320
X1400303	FIBER OPTIC PATCH PANEL, 24 PORT, CABINET MOUNT	EACH	1																1
X1400335	WIRELESS TRANSMISSION SYSTEM POINT TO POINT	EACH	4		2	2													
X8100863	INTERCEPT EXISTING CONDUIT	EACH	5																5
X8570215	FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	32	10	6	6		1	1		5	1		1	1				
X8570226	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	27	6	2	6		2	1		6	2					1	1	
X8620050	UNINTERRUPTABLE POWER SUPPLY, GROUND MOUNTED	EACH	2								2								
X8620200	UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	48	5	5	14		4	2	2	11	3		1				1	
X8710024	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F	FOOT	12116																12116
X8950212	MODIFY EXISTING CONTROLLER CABINET, SPECIAL	EACH	67	22	7	9		2	1	3	15	1	3	1	1	1	1		
X8950510	REMOVE FIBER OPTIC CABLE FROM CONDUIT	FOOT	7617																7617



USER NAME = dwiktorzak	DESIGNED -	REVISED -
PLOT SCALE = 40.0000" / in.	DRAWN -	REVISED -
PLOT DATE = 8/28/2018	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES			
SCALE:	SHEET 4	OF 5 SHEETS	STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	7
CONTRACT NO.			61F05	
ILLINOIS FED. AID PROJECT				

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	TRAFFIC SIGNAL															
				0021															
				URBAN															
XX005800	RELOCATE EXISTING UPS BATTERY BACK-UP SYSTEM	EACH	4	2		1										1			
XX007018	LAYER III (NETWORK) SWITCH	EACH	13	5		3					4						1		
XX007952	TERMINAL SERVER	EACH	1	1															
XX008254	LAYER III FIBER OPTIC TRANSCIEVER MODULE, SFP TYPE, LONG DISTANCE	EACH	1														1		
XX008788	WIRELESS ACCESS POINT	EACH	4	3							1								
XX009245	DETECTOR BASE STATION	EACH	4	3							1								
XX009246	LONG RANGE DIRECTIONAL ANTENNA	EACH	3	3															
XX009247	WIRELESS DETECTION UNIT	EACH	30	26							4								
XX009248	DETECTOR SEALANT PACKAGE	EACH	93	87							6								
XX009249	INSTALLATION TOOLKIT	L SUM	1	0.75							0.25								
XX009250	ELECTRIC METER SOCKET	EACH	81	26	6	14		4	2	2	15	3	3	1	2		2	1	
XX009251	FIREWALL	EACH	1															1	



USER NAME = dwiktorzak	DESIGNED -	REVISED -
PLOT SCALE = 40.0000' / in.	DRAWN -	REVISED -
PLOT DATE = 8/28/2018	CHECKED -	REVISED -
	DATE -	REVISED -

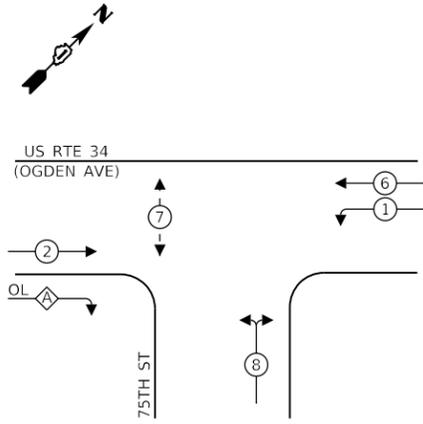
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: SHEET 5 OF 5 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	8
CONTRACT NO.			61F05	
ILLINOIS FED. AID PROJECT				

**EXISTING CONTROLLER SEQUENCE**



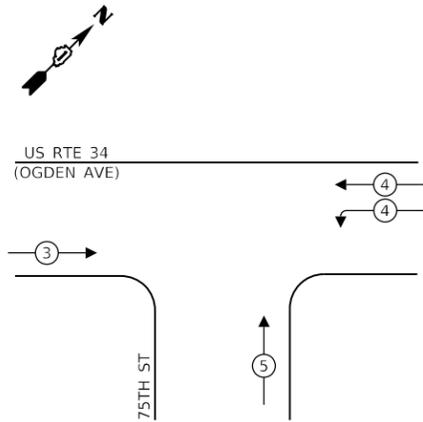
**LEGEND:**

- ← ⊙ → PROTECTED PHASE
- ← ⊙ - PROTECTED/PERMITTED PHASE
- ← ⊙ → PEDESTRIAN PHASE
- ← ⊙ OL OVERLAP

**RIGHT TURN OVERLAP PHASE DESIGNATION:**

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2	+ 8

**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	13	11	50	71.5
(YELLOW)	13	20	5	13.0
(GREEN)	13	12	45	70.2
PERMISSIVE ARROW	4	10	10	4.0
PED. SIGNAL	2	20	100	40.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	250	50	-
PTZ CAMERA	-	75	100	-
<b>TOTAL =</b>				<b>323.7</b>

ENERGY COSTS TO:

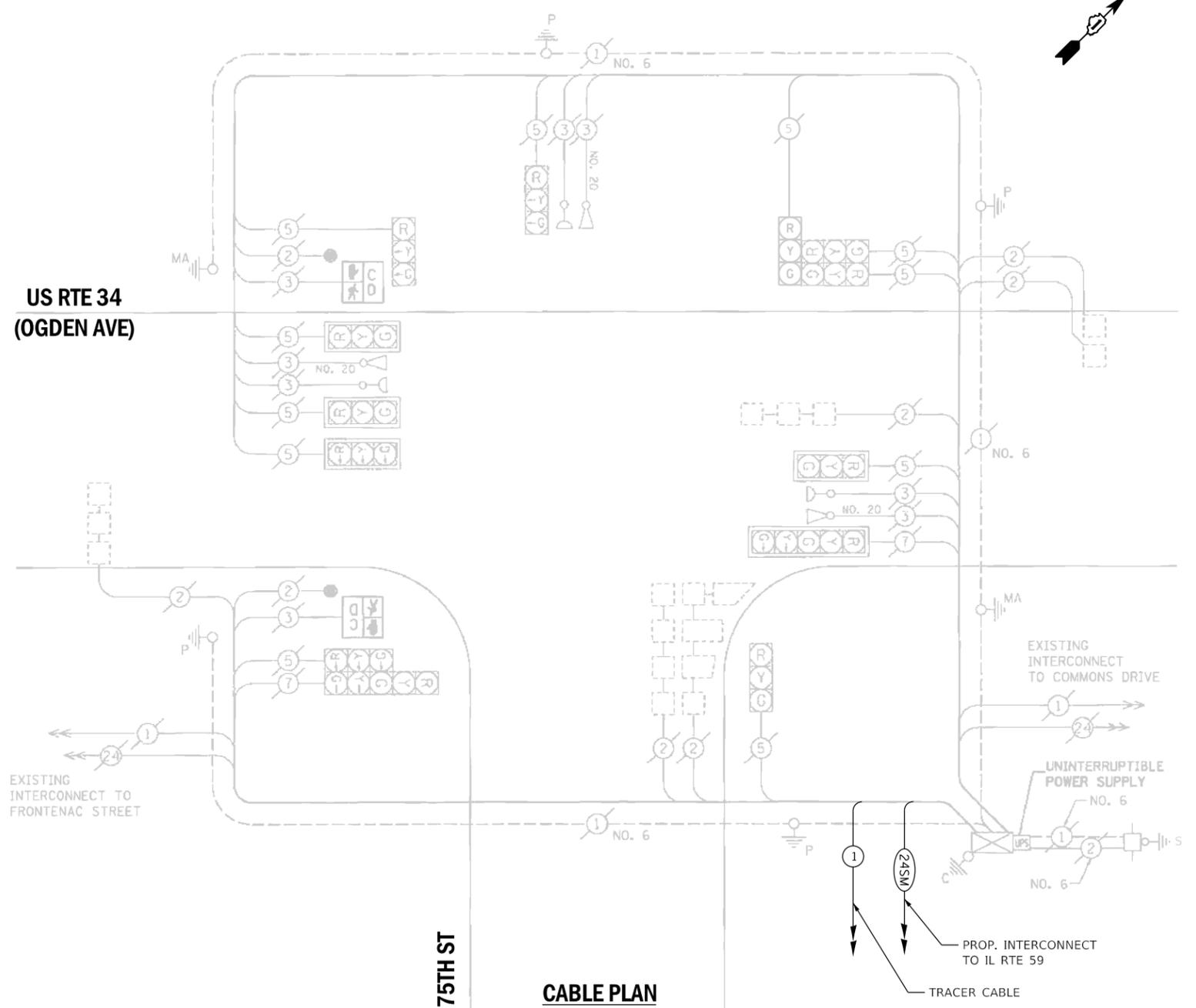
**CITY OF AURORA**

44 E. DOWNER PLACE  
AURORA, ILLINOIS 60507-2067

ENERGY SUPPLY: CONTACT: MR. RICK SEIDEL  
PHONE: (630)-229-5138  
COMPANY: COM-ED LOMBARD

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION



TS SHT NO. 1



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
PLOT SCALE = 40,0000 ' / in.	DRAWN - RG	REVISED -
PLOT DATE = 8/28/2018	CHECKED - ZH	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

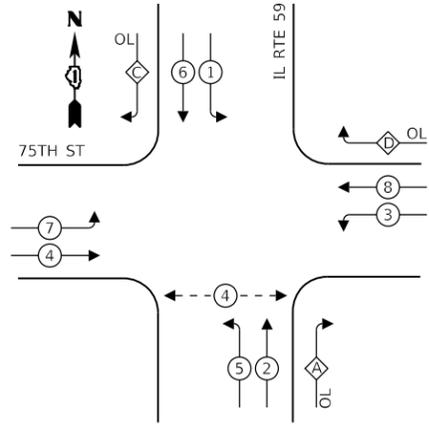
**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES  
75TH ST AND US RTE 34 (OGDEN AVE)**

SCALE: NTS SHEET 1 OF 46 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	9
ILLINOIS FED. AID PROJECT			CONTRACT NO. 61F05	

**IDOT  
TS 6047  
ECON 191**

**EXISTING CONTROLLER SEQUENCE**



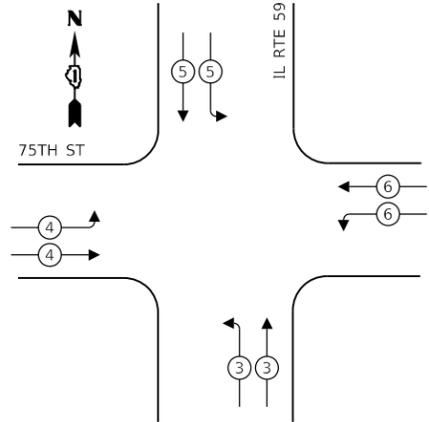
**LEGEND:**

- ⊙ — PROTECTED PHASE
- ⊙ — PROTECTED/PERMITTED PHASE
- ⊙ — PEDESTRIAN PHASE
- ⊙ — OVERLAP

**RIGHT TURN OVERLAP PHASE DESIGNATION:**

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

**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



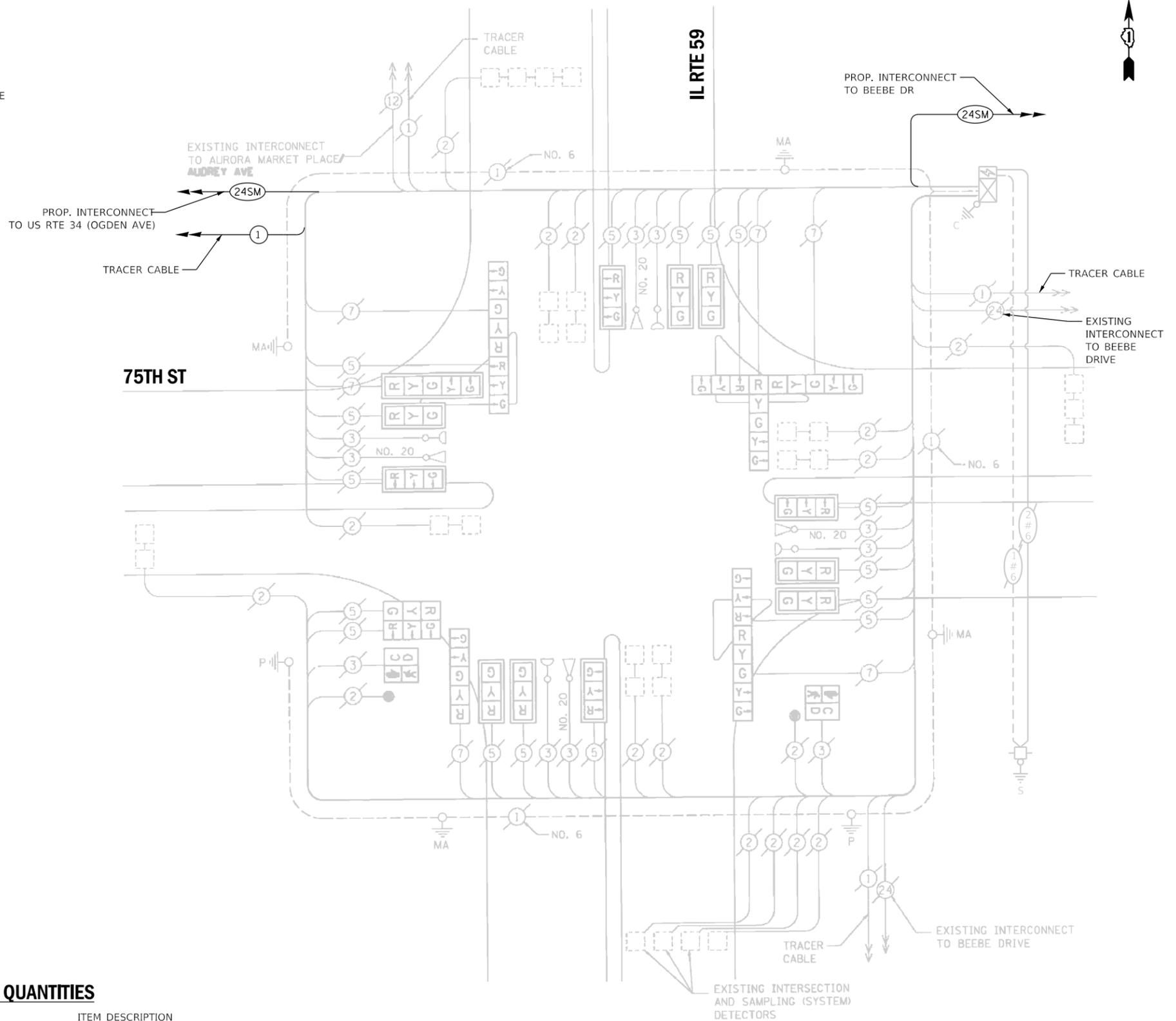
**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	22	11	50	121.0
(YELLOW)	22	20	5	22.0
(GREEN)	22	12	45	118.8
PERMISSIVE ARROW	12	10	10	12.0
PED. SIGNAL	2	20	100	40.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	250	50	-
PTZ CAMERA	-	75	100	-
TOTAL =				438.8

ENERGY COSTS TO:  
**ILLINOIS DEPARTMENT OF TRANSPORTATION**  
 201 WEST CENTER COURT  
 SCHAUMBURG, IL 60196-1096  
 ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
 PHONE: (630)-424-5704  
 COMPANY: COM-ED LOMBARD

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION



**CABLE PLAN**  
(NOT TO SCALE)

TS SHT NO. 2



USER NAME = dwiktorzak  
 DESIGNED - DW  
 DRAWN - RG  
 PLOT SCALE = 40,0000 ' / in.  
 PLOT DATE = 8/28/2018  
 CHECKED - ZH  
 DATE -

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES**  
**75TH ST AND IL RTE 59**

SCALE: NTS SHEET 2 OF 46 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	10
CONTRACT NO. 61F05				

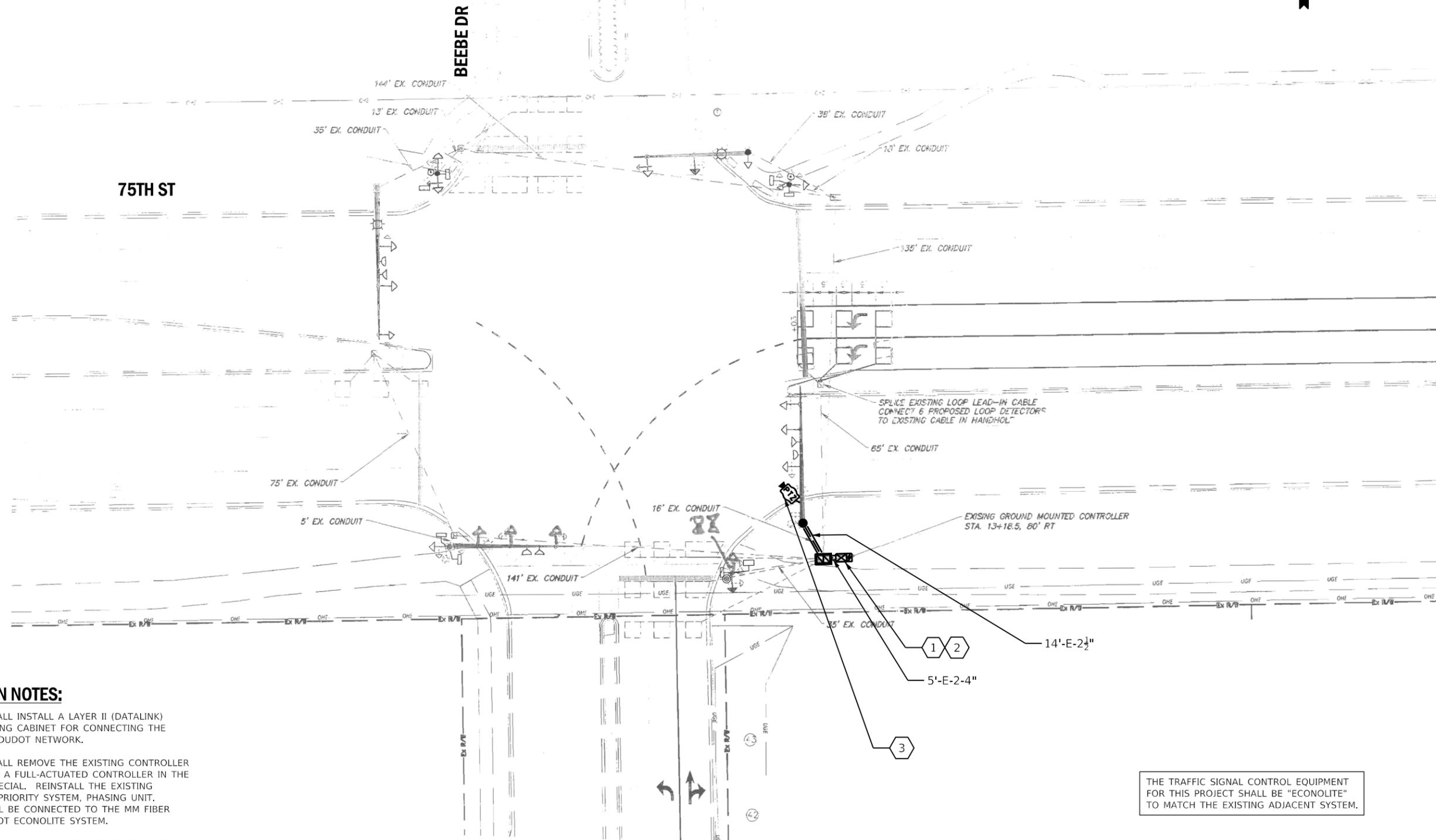
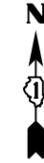
IDOT  
 TS 6360  
 ECON 106

**REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT:**

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPOERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: DUPAGE COUNTY DIVISION OF TRANSPORTATION

1 EACH CONTROLLER



**CONSTRUCTION NOTES:**

- 1 THE CONTRACTOR SHALL INSTALL A LAYER II (DATALINK) SWITCH IN THE EXISTING CABINET FOR CONNECTING THE PTZ CAMERA TO THE DUDOT NETWORK.
- 2 THE CONTRACTOR SHALL REMOVE THE EXISTING CONTROLLER AND REPLACE IT WITH A FULL-ACTUATED CONTROLLER IN THE EXISTING CABINET, SPECIAL. REINSTALL THE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT. THE CONTROLLER WILL BE CONNECTED TO THE MM FIBER AND THE EXISTING IDOT ECONOLITE SYSTEM.
- 3 THE CONTRACTOR SHALL INSTALL A REMOTE CONTROLLED VIDEO SYSTEM ON THE EXISTING COMBINATION MAST ARM ASSEMBLY AND POLE.

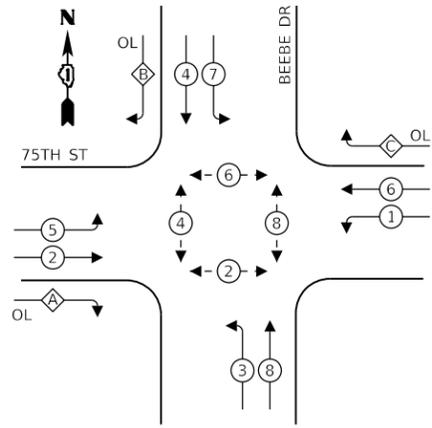
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

TS SHT NO. 3

	USER NAME = dwiktorzak	DESIGNED - DW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODERNIZATION PLAN 75TH ST AND BEEBE DR		F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 40,0000 ' / in.	CHECKED - ZH	REVISED -				VAR.	17-DCCSS-01-TL	DUPAGE	277	11
	PLOT DATE = 8/28/2018	DATE -	REVISED -		SCALE: NTS	SHEET 3 OF 46 SHEETS	STA.	TO STA.	CONTRACT NO. 61F05 ILLINOIS FED. AID PROJECT		

FILE NAME = p:\IPW1.dzcorp.com\DLZ\Documents\Projects\2017\1782\2130\W02\_Centracs Expansion 1\CADD\_Sheets\Int 19-sht-ts-plan.dgn

**EXISTING CONTROLLER SEQUENCE**



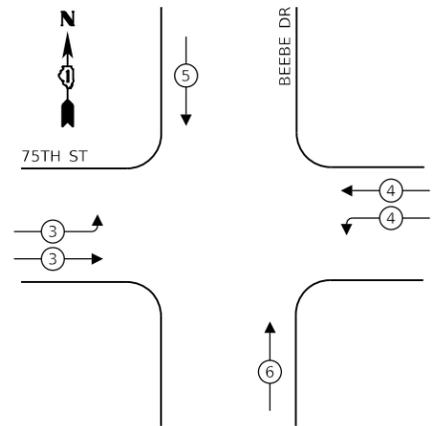
**LEGEND:**

- ⊙ — PROTECTED PHASE
- ⊙ — PROTECTED/PERMITTED PHASE
- ⊙ — PEDESTRIAN PHASE
- ⊙ — OVERLAP

**RIGHT TURN OVERLAP PHASE DESIGNATION:**

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

**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	20	11	50	110.0
(YELLOW)	20	20	5	20.0
(GREEN)	20	12	45	108.0
PERMISSIVE ARROW	12	10	10	12.0
PED. SIGNAL	8	20	100	160.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	4	250	50	500.0
PTZ CAMERA	1	75	100	75.0
<b>TOTAL =</b>				<b>1110.0</b>

ENERGY COSTS TO:

**DUPAGE COUNTY D.O.T.**

421 N. COUNTY FARM RD.  
WHEATON, IL 60187

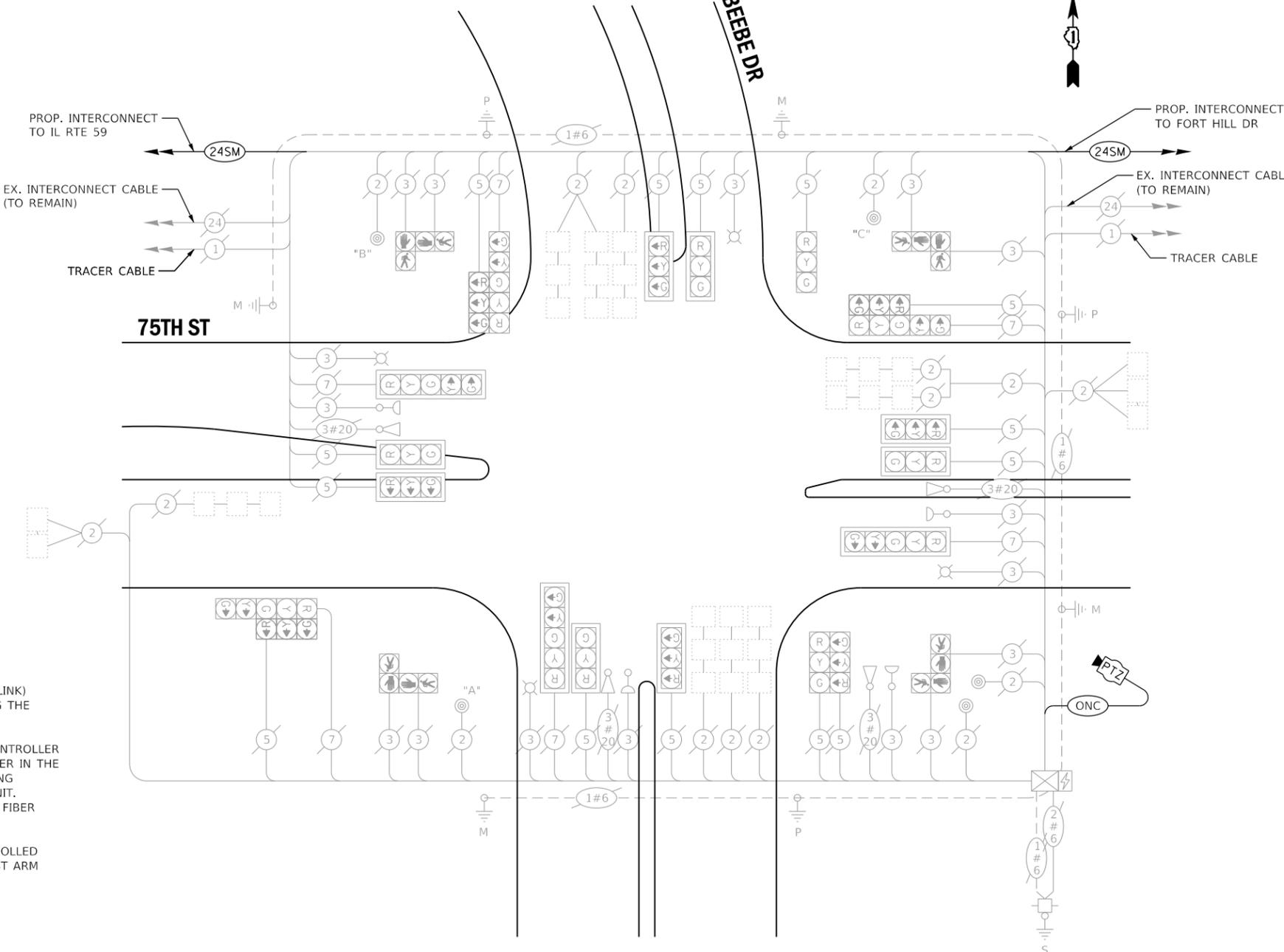
ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
PHONE: (630)-424-5704  
COMPANY: COM-ED LOMBARD  
ACCOUNT NUMBER:

**CONSTRUCTION NOTES:**

- 1 THE CONTRACTOR SHALL INSTALL A LAYER II (DATALINK) SWITCH IN THE EXISTING CABINET FOR CONNECTING THE PTZ CAMERA TO THE DUDOT NETWORK.
- 2 THE CONTRACTOR SHALL REMOVE THE EXISTING CONTROLLER AND REPLACE IT WITH A FULL-ACTUATED CONTROLLER IN THE EXISTING CABINET, SPECIAL. REINSTALL THE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT. THE CONTROLLER WILL BE CONNECTED TO THE MM FIBER AND THE EXISTING IDOT ECONOLITE SYSTEM.
- 3 THE CONTRACTOR SHALL INSTALL A REMOTE CONTROLLED VIDEO SYSTEM ON THE EXISTING COMBINATION MAST ARM ASSEMBLY AND POLE.

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
91.5	FOOT	OUTDOOR RATED NETWORK CABLE
1	EACH	REMOTE CONTROLLED VIDEO SYSTEM
1	EACH	LAYER II (DATALINK) SWITCH
1	EACH	FULL-ACTUATED CONTROLLER IN EXISTING CABINET
1	EACH	MODIFY EXISTING CONTROLLER CABINET, SPECIAL
1	EACH	ELECTRIC METER SOCKET



**CABLE PLAN**  
(NOT TO SCALE)

PUSH BUTTON "A" SHALL PLACE A CALL IN PHASE 2 AND 4  
PUSH BUTTON "B" SHALL PLACE A CALL IN PHASE 4 AND 6  
PUSH BUTTON "C" SHALL PLACE A CALL IN PHASE 6 AND 8

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

TS SHT NO. 4



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
PLOT SCALE = 40.0000' / in.	DRAWN - RG	REVISED -
PLOT DATE = 8/28/2018	CHECKED - ZH	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

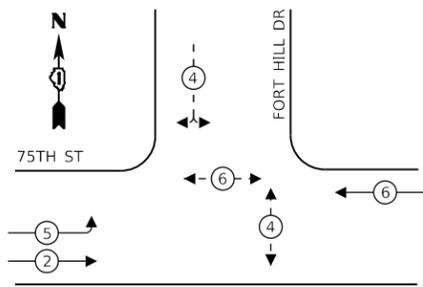
**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES**  
**75TH ST AND BEEBE DR**

SCALE: NTS SHEET 4 OF 46 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	12
			CONTRACT NO.	61F05
		ILLINOIS	FED. AID PROJECT	

**DUDOT**

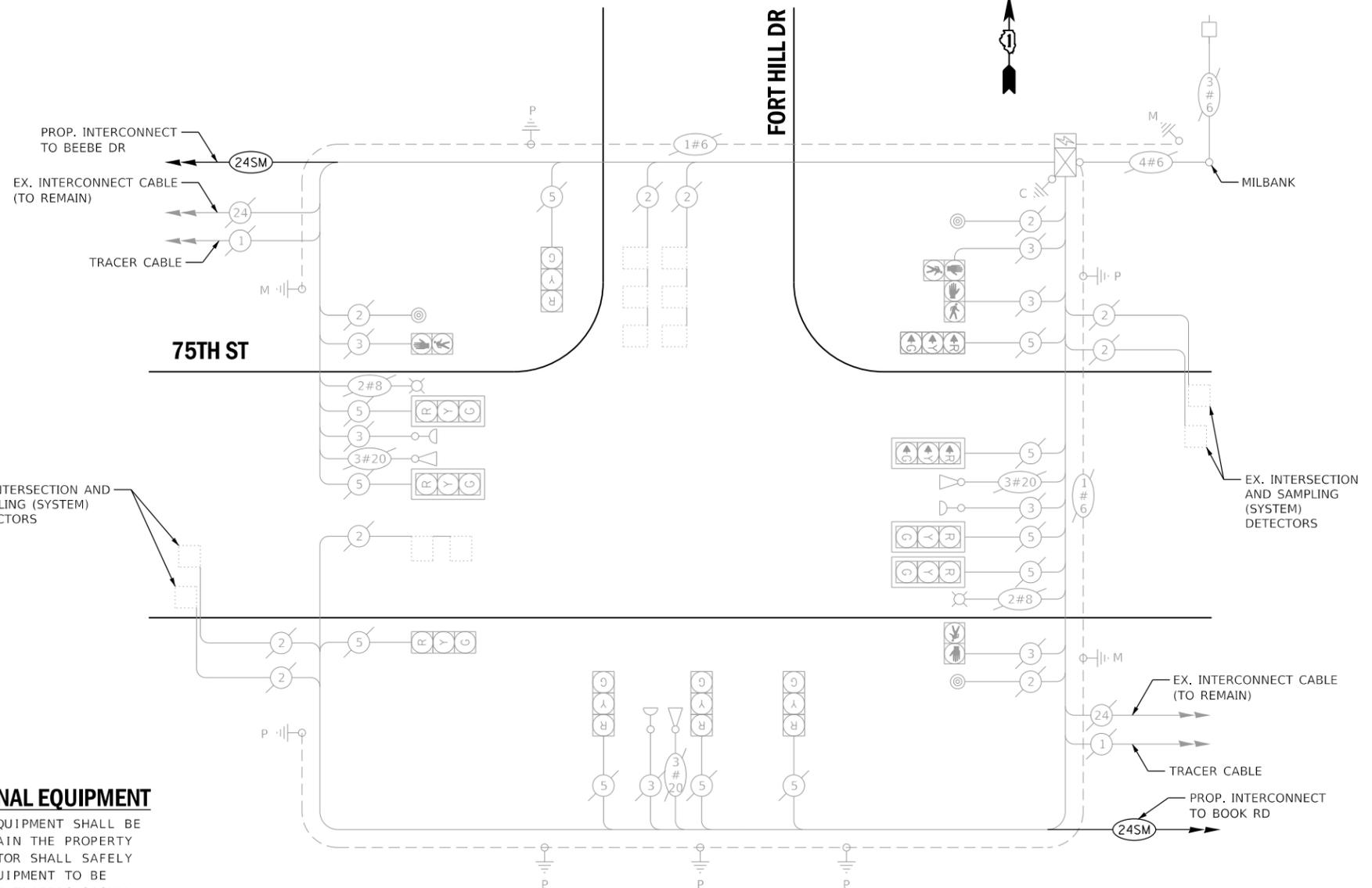
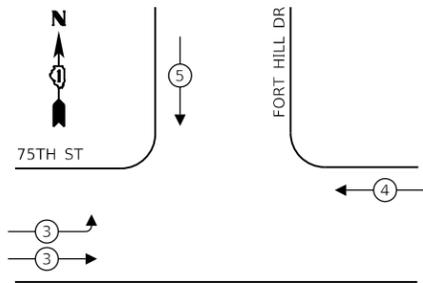
**EXISTING CONTROLLER SEQUENCE**



**LEGEND:**

- ⊙ — PROTECTED PHASE
- ⊙ — PROTECTED/PERMITTED PHASE
- ⊙ — PEDESTRIAN PHASE
- OL — OVERLAP

**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**CABLE PLAN**  
(NOT TO SCALE)

**REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT**

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: DUPAGE COUNTY DIVISION OF TRANSPORTATION

1 EACH CONTROLLER

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	LAYER II (DATALINK) SWITCH
1	EACH	FULL-ACTUATED CONTROLLER IN EXISTING CABINET
1	EACH	MODIFY EXISTING CONTROLLER CABINET, SPECIAL
1	EACH	ELECTRIC METER SOCKET

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" AND NTCIP (LATEST VERSION) TO MATCH THE EXISTING ADJACENT SYSTEM.

**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	11	11	50	60.5
(YELLOW)	11	20	5	11.0
(GREEN)	11	12	45	59.4
PERMISSIVE ARROW	-	10	10	-
PED. SIGNAL	4	20	100	80.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	2	250	50	250.0
PTZ CAMERA	-	75	100	-
<b>TOTAL =</b>				<b>585.9</b>

ENERGY COSTS TO:

**DUPAGE COUNTY D.O.T.**

421 N. COUNTY FARM RD.  
WHEATON, IL 60187

ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
PHONE: (630)-424-5704  
COMPANY: COM-ED LOMBARD  
ACCOUNT NUMBER:

TS SHT NO. 5



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
PLOT SCALE = 40,0000 ' / in.	DRAWN - RG	REVISED -
PLOT DATE = 8/28/2018	CHECKED - ZH	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

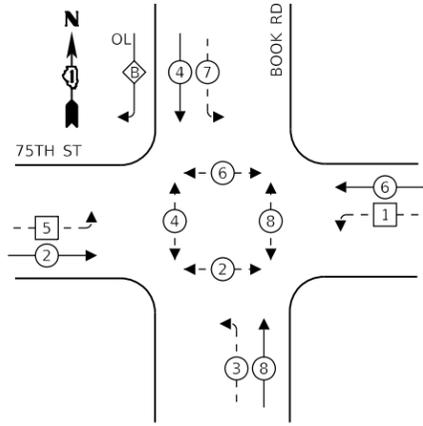
**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES**  
**75TH ST AND FORT HILL DR**

SCALE: NTS SHEET 5 OF 46 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	17-DCCSS-01-TL	DUPAGE	277	13
			CONTRACT NO. 61F05	
		ILLINOIS FED. AID PROJECT		

**DUDOT**

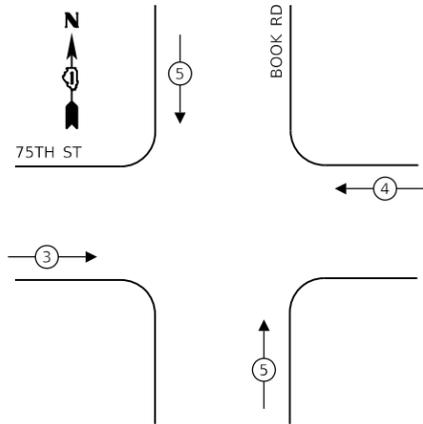
**EXISTING CONTROLLER SEQUENCE**



**LEGEND:**

- ⊙ — PROTECTED PHASE
- ⊙ — PROTECTED/PERMITTED PHASE
- ⊙ — PEDESTRIAN PHASE
- ⊙ — OVERLAP

**EXISTING EMERGENCY VEHICLE  
PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL  
ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16	11	50	88.0
(YELLOW)	16	20	5	16.0
(GREEN)	16	12	45	86.4
PERMISSIVE ARROW	12	10	10	12.0
PED. SIGNAL	8	20	100	160.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	4	250	50	500.0
PTZ CAMERA	-	75	100	-
TOTAL =				987.4

ENERGY COSTS TO:

**DUPAGE COUNTY D.O.T.**

421 N. COUNTY FARM RD.  
WHEATON, IL 60187

ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
PHONE: (630)-424-5704  
COMPANY: COM-ED LOMBARD  
ACCOUNT NUMBER: \_\_\_\_\_

**REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT**

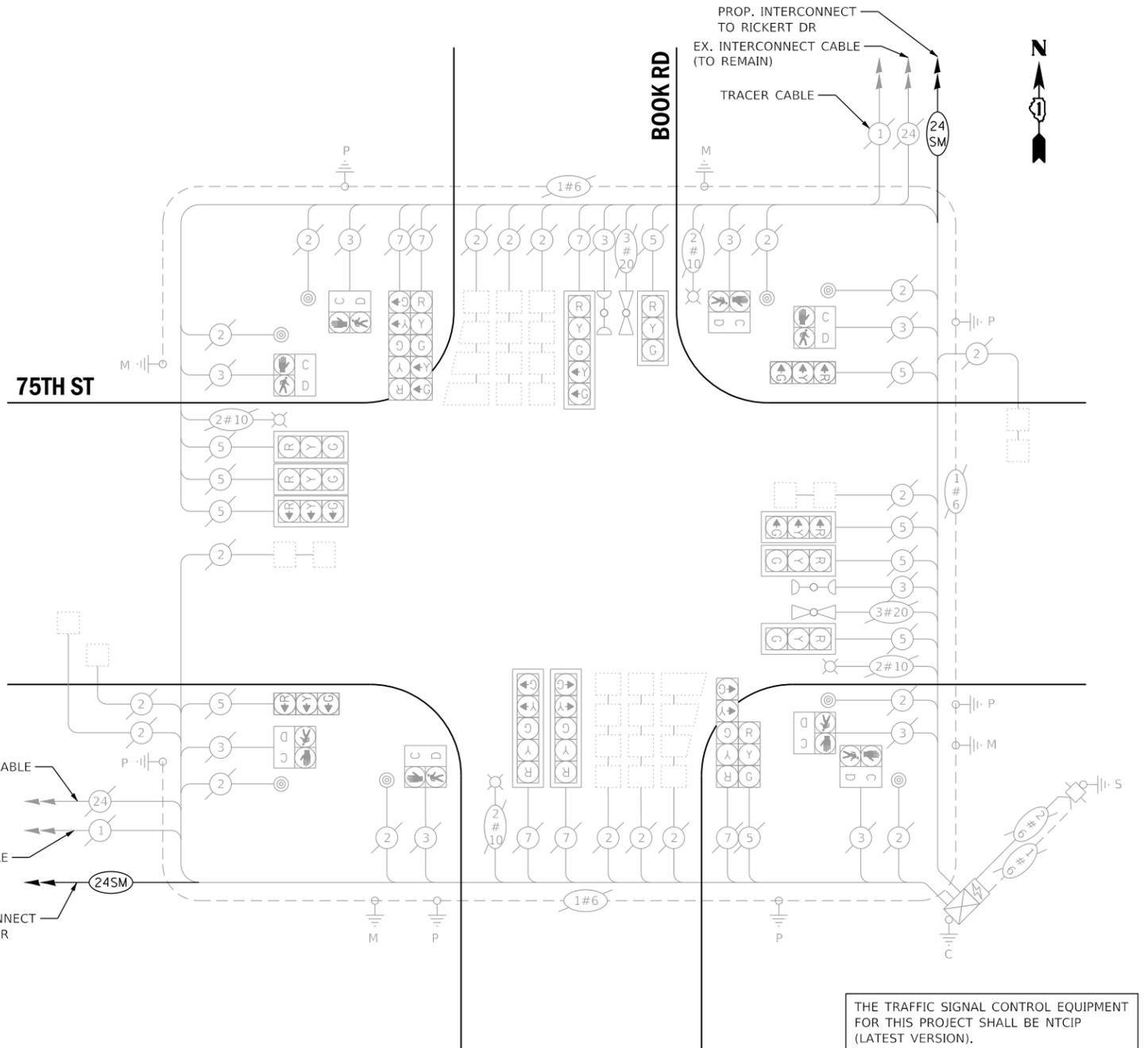
THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: DUPAGE COUNTY DIVISION OF TRANSPORTATION

1 EACH CONTROLLER

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	FULL-ACTUATED CONTROLLER IN EXISTING CABINET
1	EACH	MODIFY EXISTING CONTROLLER CABINET, SPECIAL LAYER III (NETWORK) SWITCH
1	EACH	ELECTRIC METER SOCKET



THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE NTCIP (LATEST VERSION).

**CABLE PLAN**  
(NOT TO SCALE)

TS SHT NO. 6



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
PLOT SCALE = 40.0000 ' / in.	DRAWN - RG	REVISED -
PLOT DATE = 8/28/2018	CHECKED - ZH	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE  
PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES  
75TH ST AND BOOK RD**

SCALE: NTS SHEET 6 OF 46 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	14
			CONTRACT NO. 61F05	
		ILLINOIS	FED. AID PROJECT	

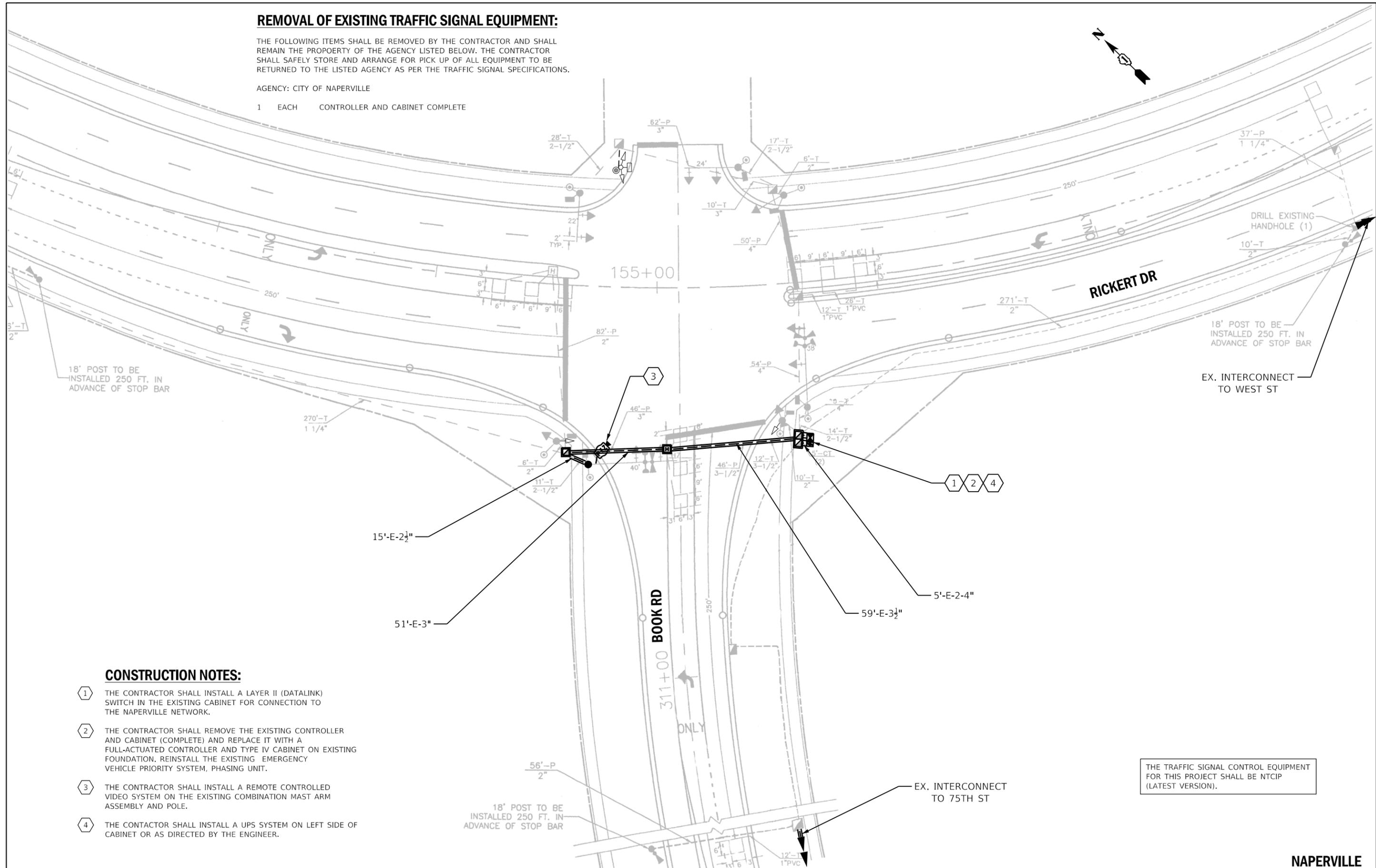
**DUDOT**

**REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT:**

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPOERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: CITY OF NAPERVILLE

1 EACH CONTROLLER AND CABINET COMPLETE



**CONSTRUCTION NOTES:**

- 1 THE CONTRACTOR SHALL INSTALL A LAYER II (DATALINK) SWITCH IN THE EXISTING CABINET FOR CONNECTION TO THE NAPERVILLE NETWORK.
- 2 THE CONTRACTOR SHALL REMOVE THE EXISTING CONTROLLER AND CABINET (COMPLETE) AND REPLACE IT WITH A FULL-ACTUATED CONTROLLER AND TYPE IV CABINET ON EXISTING FOUNDATION. REINSTALL THE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT.
- 3 THE CONTRACTOR SHALL INSTALL A REMOTE CONTROLLED VIDEO SYSTEM ON THE EXISTING COMBINATION MAST ARM ASSEMBLY AND POLE.
- 4 THE CONTRACTOR SHALL INSTALL A UPS SYSTEM ON LEFT SIDE OF CABINET OR AS DIRECTED BY THE ENGINEER.

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE NTCIP (LATEST VERSION).

TS SHT NO. 7



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
	DRAWN - RG	REVISED -
PLOT SCALE = 40,0000' / in.	CHECKED - ZH	REVISED -
PLOT DATE = 8/28/2018	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

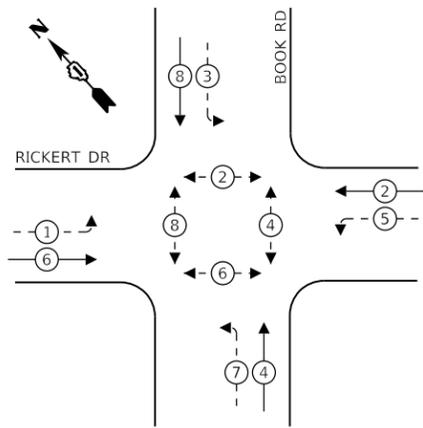
TRAFFIC SIGNAL MODERNIZATION PLAN  
RICKERT DR AND BOOK RD

SCALE: NTS SHEET 7 OF 46 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	15
			CONTRACT NO.	61F05
ILLINOIS FED. AID PROJECT				

NAPERVILLE

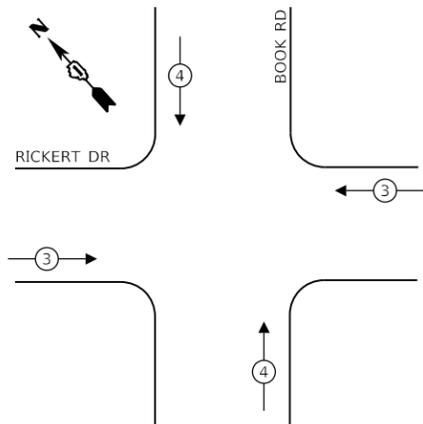
**EXISTING CONTROLLER SEQUENCE**



**LEGEND:**

- ⊙ — PROTECTED PHASE
- ⊙ — — PROTECTED/PERMITTED PHASE
- ⊙ — ⊙ — PEDESTRIAN PHASE
- OL — OVERLAP

**EXISTING EMERGENCY VEHICLE  
PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL  
ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	15	11	50	82.5
(YELLOW)	15	20	5	15.0
(GREEN)	15	12	45	81.0
PERMISSIVE ARROW	16	10	10	16.0
PED. SIGNAL	8	20	100	160.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	-	-	-
PTZ CAMERA	1	75	100	75.0
<b>TOTAL =</b>				<b>554.5</b>

ENERGY COSTS TO:

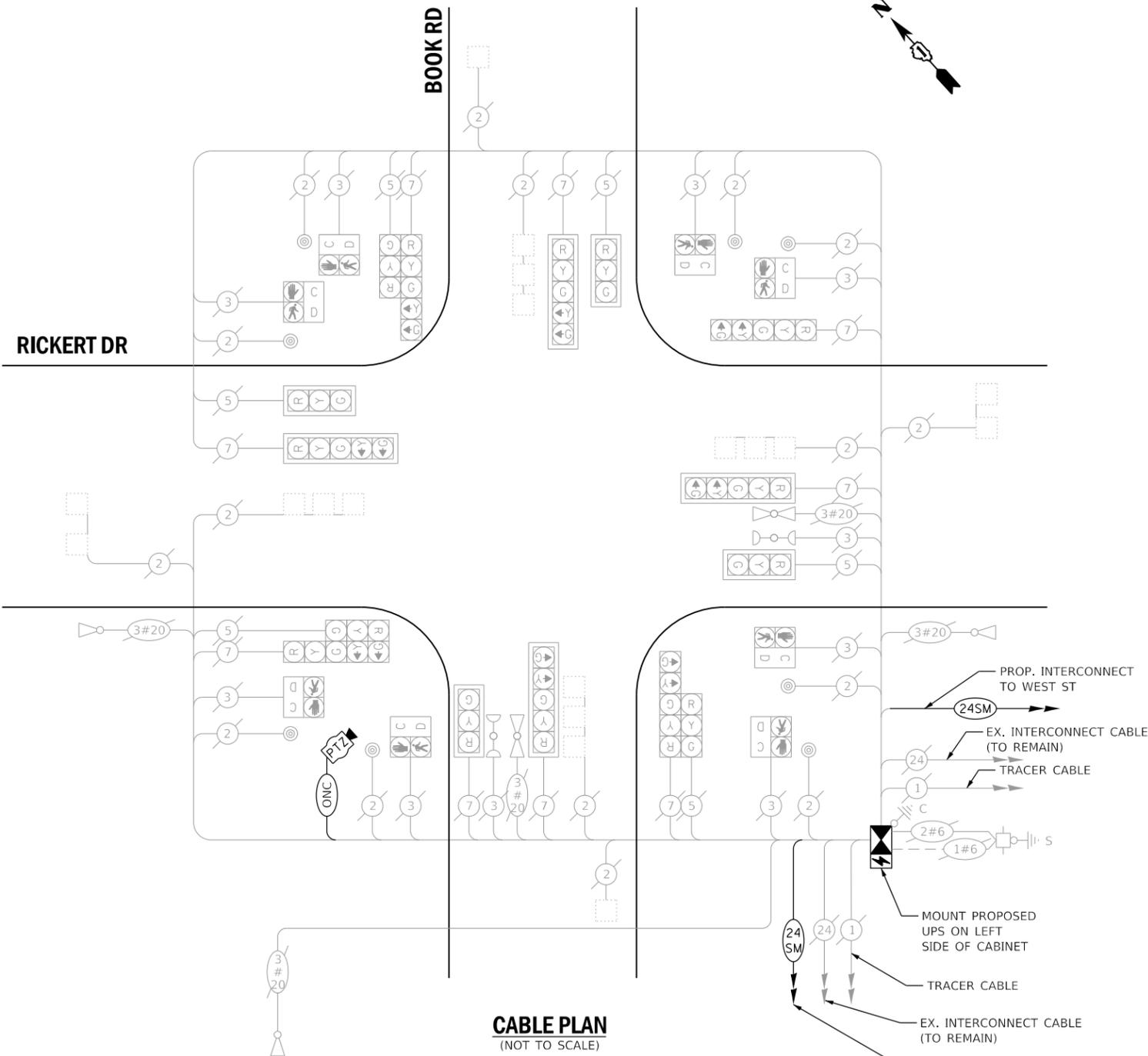
**CITY OF NAPERVILLE**

400 S. EAGLE ST.  
NAPERVILLE, IL 60540

ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
PHONE: (630)-424-5704  
COMPANY: COM-ED LOMBARD  
ACCOUNT NUMBER:

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
8	EACH	INDUCTIVE LOOP DETECTOR
1	EACH	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
215.5	FOOT	OUTDOOR RATED NETWORK CABLE
1	EACH	REMOTE CONTROLLED VIDEO SYSTEM
1	EACH	LAYER II (DATALINK) SWITCH
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL



**CABLE PLAN**  
(NOT TO SCALE)

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE NTCIP (LATEST VERSION).

TS SHT NO. 8



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
PLOT SCALE = 40.0000 ' / in.	DRAWN - RG	REVISED -
PLOT DATE = 8/28/2018	CHECKED - ZH	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE  
PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES  
RICKERT DR AND BOOK RD**

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	16
CONTRACT NO.			61F05	
ILLINOIS FED. AID PROJECT				

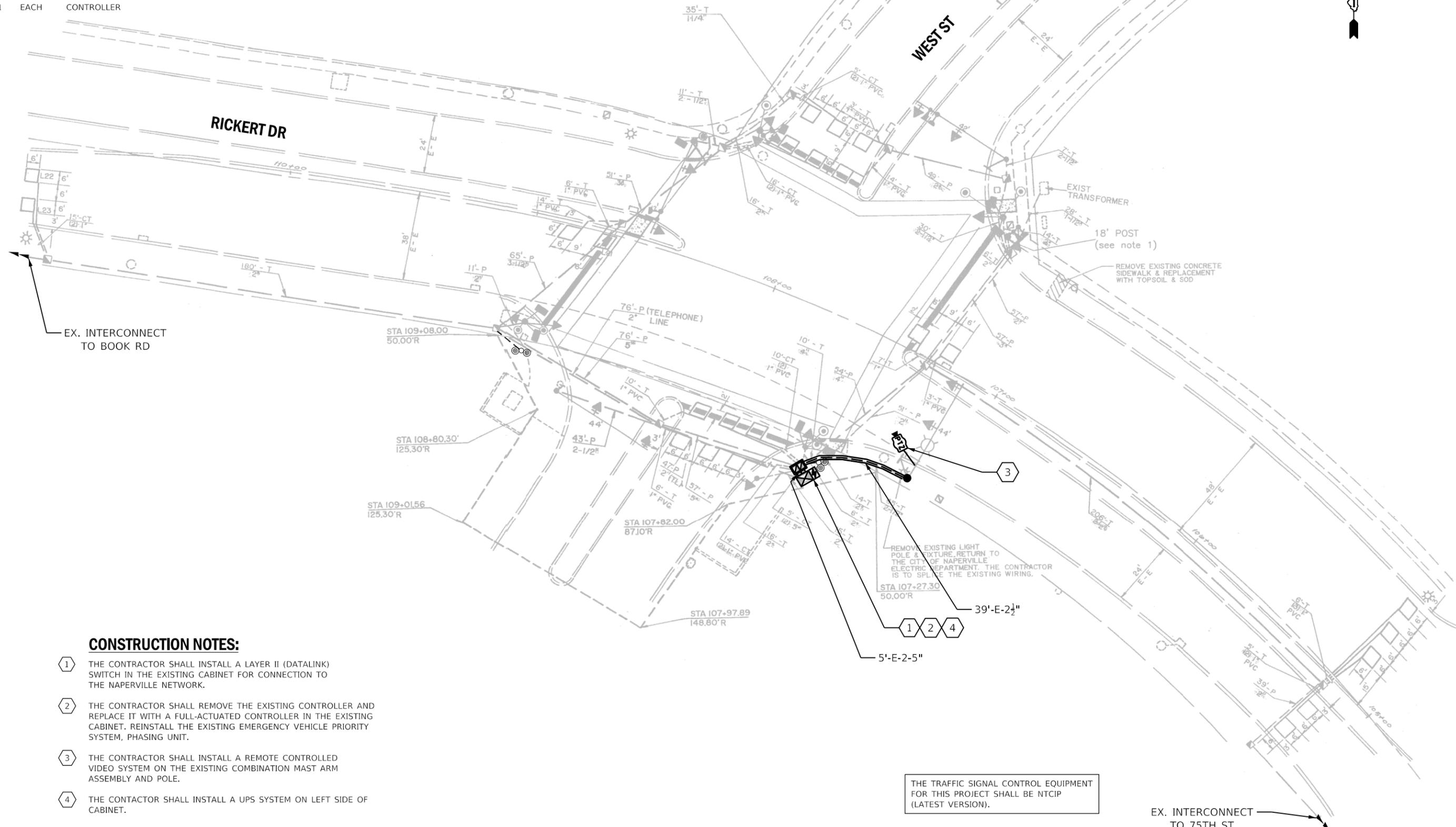
**NAPERVILLE**

**REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT:**

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: CITY OF NAPERVILLE

1 EACH CONTROLLER



**CONSTRUCTION NOTES:**

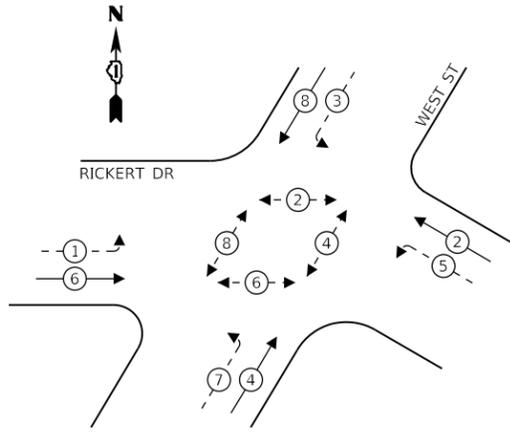
- 1 THE CONTRACTOR SHALL INSTALL A LAYER II (DATALINK) SWITCH IN THE EXISTING CABINET FOR CONNECTION TO THE NAPERVILLE NETWORK.
- 2 THE CONTRACTOR SHALL REMOVE THE EXISTING CONTROLLER AND REPLACE IT WITH A FULL-ACTUATED CONTROLLER IN THE EXISTING CABINET. REINSTALL THE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT.
- 3 THE CONTRACTOR SHALL INSTALL A REMOTE CONTROLLED VIDEO SYSTEM ON THE EXISTING COMBINATION MAST ARM ASSEMBLY AND POLE.
- 4 THE CONTRACTOR SHALL INSTALL A UPS SYSTEM ON LEFT SIDE OF CABINET.

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE NTCIP (LATEST VERSION).

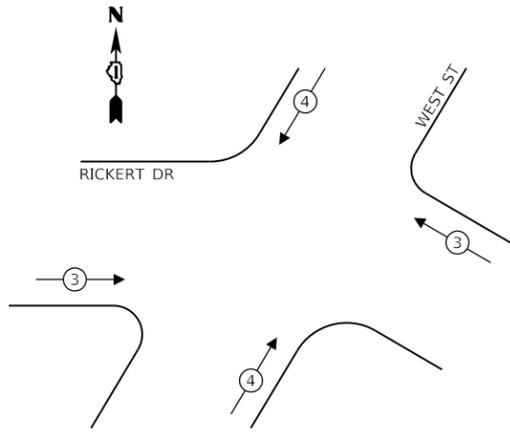
TS SHT NO. 9

	USER NAME = dwiktorzak	DESIGNED - DW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODERNIZATION PLAN RICKERT DR AND WEST ST		F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 40.0000' / in.	CHECKED - ZH	REVISED -				VAR.	17-DCCSS-01-TL	DUPAGE	277	17
	PLOT DATE = 8/28/2018	DATE -	REVISED -		SCALE: NTS	SHEET 9 OF 46 SHEETS	STA.	TO STA.	CONTRACT NO. 61F05		
FILE NAME = p:\p1\dlz\corp.com\DLZ\Documents\Projects\2017\1782\2130\W02_Centracs_Expansion_1\CADD_Sheets\Int_55-sht-ts-plan.dgn Default											

**EXISTING CONTROLLER SEQUENCE**



**EXISTING EMERGENCY VEHICLE  
PREEMPTION SEQUENCE**



**LEGEND:**

- ← ⊙ → PROTECTED PHASE
- ← ⊙ - - ⊙ → PROTECTED/PERMITTED PHASE
- ← ⊙ ⊙ → PEDESTRIAN PHASE
- ← ⊙ ⊙ ⊙ → OL OVERLAP

**TRAFFIC SIGNAL  
ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16	11	50	88.0
(YELLOW)	16	20	5	16.0
(GREEN)	16	12	45	86.4
PERMISSIVE ARROW	20	10	10	20.0
PED. SIGNAL	8	20	100	160.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	-	-	-
PTZ CAMERA	1	75	100	75.0
<b>TOTAL =</b>				<b>570.4</b>

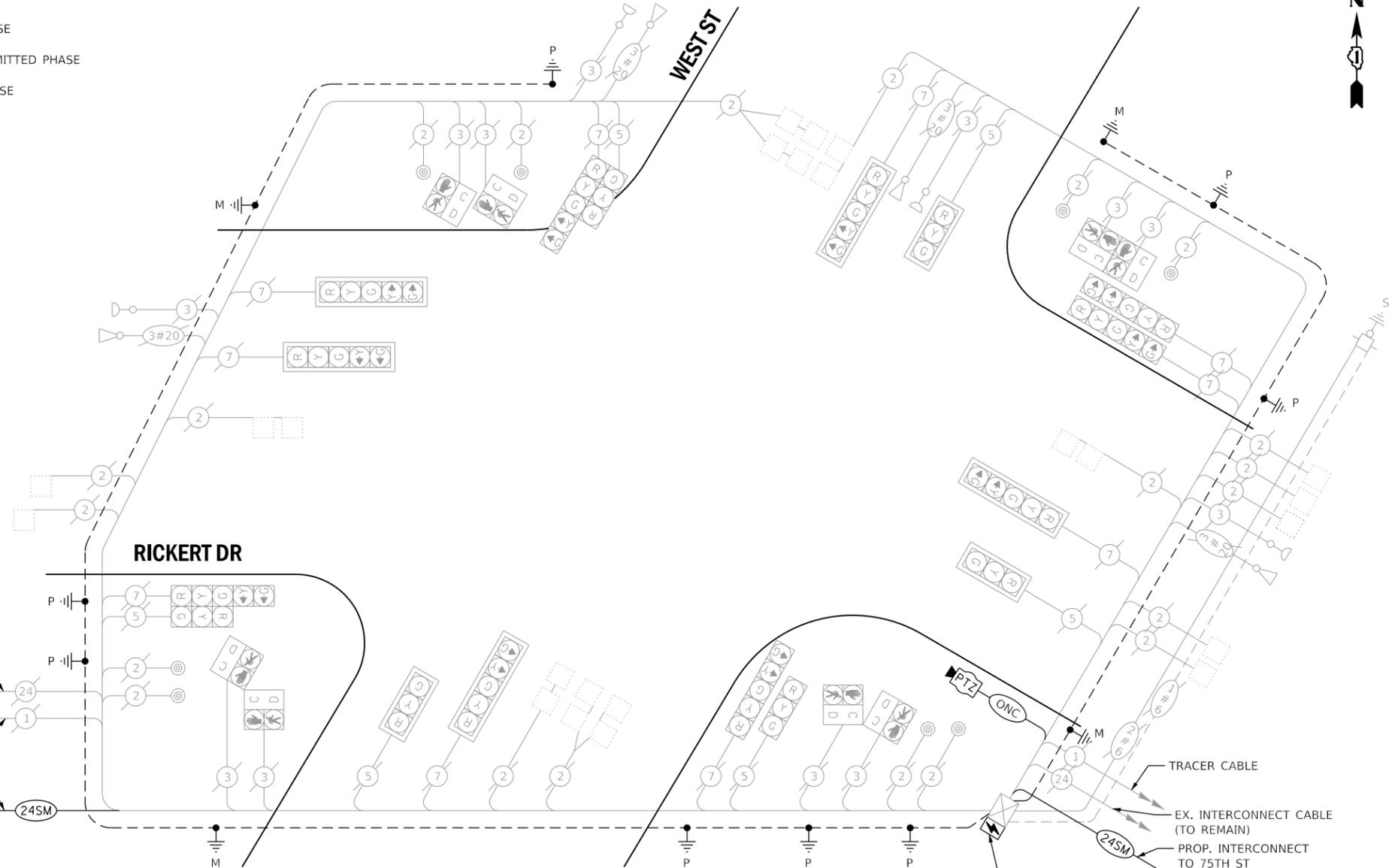
**CITY OF NAPERVILLE**

400 S. EAGLE ST.  
NAPERVILLE, IL 60540

ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
PHONE: (630)-424-5704  
COMPANY: COM-ED LOMBARD  
ACCOUNT NUMBER: \_\_\_\_\_

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
8	EACH	GROUNDING EXISTING HANDHOLE FRAME AND COVER
750	FOOT	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
117	FOOT	OUTDOOR RATED NETWORK CABLE
1	EACH	REMOTE CONTROLLED VIDEO SYSTEM
1	EACH	LAYER II (DATALINK) SWITCH
1	EACH	FULL-ACTUATED CONTROLLER IN EXISTING CABINET
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
1	EACH	MODIFY EXISTING CONTROLLER CABINET, SPECIAL

**SCHEDULE OF QUANTITIES**



**CABLE PLAN**  
(NOT TO SCALE)

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE NTCIP (LATEST VERSION).

TS SHT NO. 10



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
PLOT SCALE = 40.0000' / in.	DRAWN - RG	REVISED -
PLOT DATE = 8/28/2018	CHECKED - ZH	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

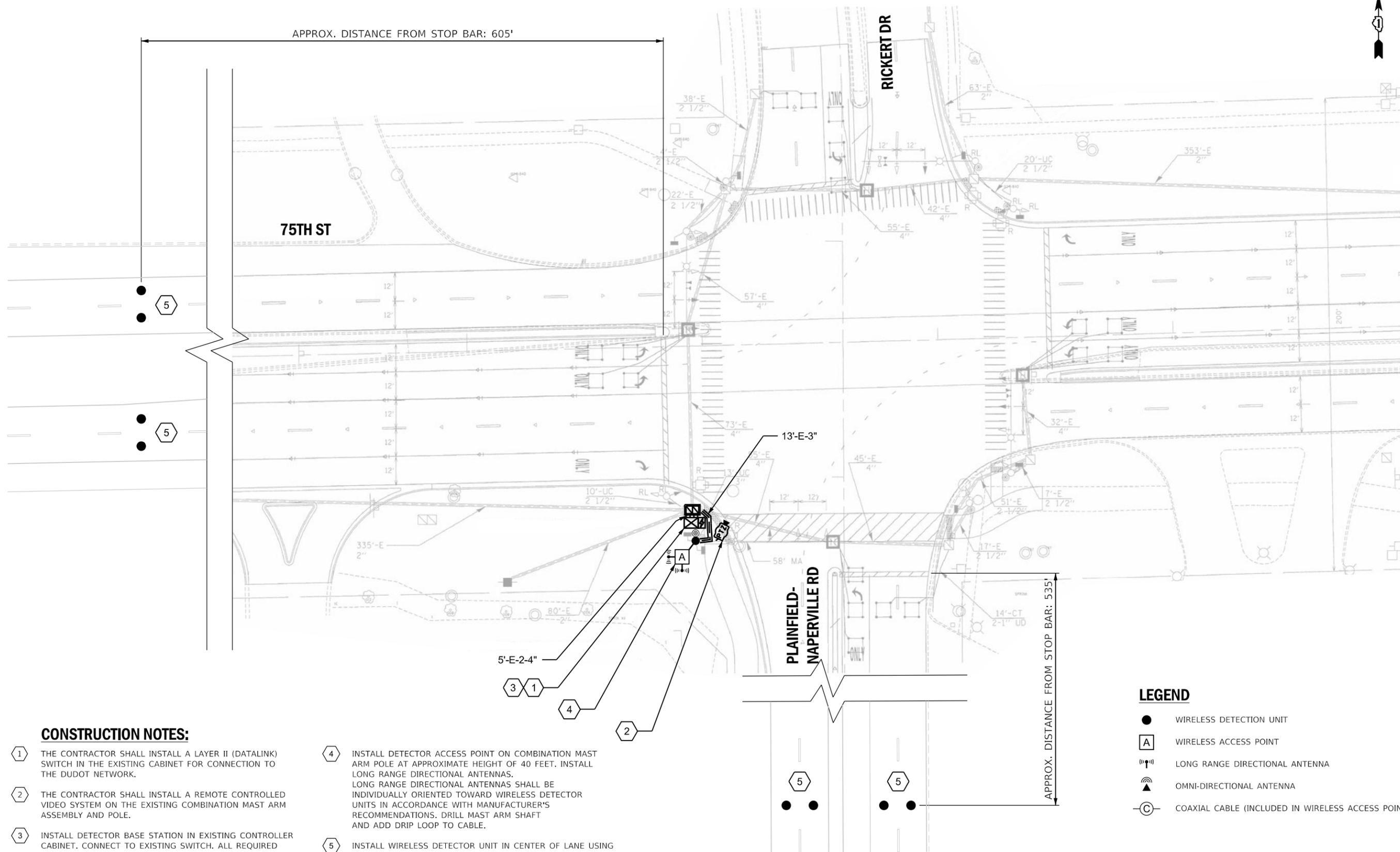
**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE  
PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES  
RICKERT DR AND WEST ST**

SCALE: NTS SHEET 10 OF 46 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	18
			CONTRACT NO.	61F05
ILLINOIS FED. AID PROJECT				



APPROX. DISTANCE FROM STOP BAR: 605'



**CONSTRUCTION NOTES:**

- 1 THE CONTRACTOR SHALL INSTALL A LAYER II (DATALINK) SWITCH IN THE EXISTING CABINET FOR CONNECTION TO THE DUDOT NETWORK.
- 2 THE CONTRACTOR SHALL INSTALL A REMOTE CONTROLLED VIDEO SYSTEM ON THE EXISTING COMBINATION MAST ARM ASSEMBLY AND POLE.
- 3 INSTALL DETECTOR BASE STATION IN EXISTING CONTROLLER CABINET. CONNECT TO EXISTING SWITCH. ALL REQUIRED ETHERNET PATCH CABLES AND JUMPER CABLES SHALL BE INCLUDED IN THE DETECTOR BASE STATION PAY ITEM.
- 4 INSTALL DETECTOR ACCESS POINT ON COMBINATION MAST ARM POLE AT APPROXIMATE HEIGHT OF 40 FEET. INSTALL LONG RANGE DIRECTIONAL ANTENNAS. LONG RANGE DIRECTIONAL ANTENNAS SHALL BE INDIVIDUALLY ORIENTED TOWARD WIRELESS DETECTOR UNITS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. DRILL MAST ARM SHAFT AND ADD DRIP LOOP TO CABLE.
- 5 INSTALL WIRELESS DETECTOR UNIT IN CENTER OF LANE USING INSTALLATION TOOLKIT AND DETECTOR SEALANT PACKAGE.

**LEGEND**

- WIRELESS DETECTOR UNIT
- [A] WIRELESS ACCESS POINT
- ⎓ LONG RANGE DIRECTIONAL ANTENNA
- ⎓ OMNI-DIRECTIONAL ANTENNA
- Ⓢ COAXIAL CABLE (INCLUDED IN WIRELESS ACCESS POINT)

TS SHT NO. 11



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
	DRAWN - RG	REVISED -
PLOT SCALE = 40,0000' / in.	CHECKED - ZH	REVISED -
PLOT DATE = 8/28/2018	DATE -	REVISED -

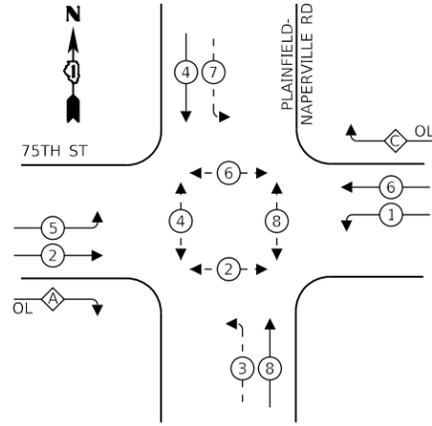
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODERNIZATION PLAN  
75TH ST AND PLAINFIELD-NAPERVILLE RD

SCALE: NTS SHEET 11 OF 46 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	19
			CONTRACT NO.	61F05
		ILLINOIS	FED. AID PROJECT	

**EXISTING CONTROLLER SEQUENCE**



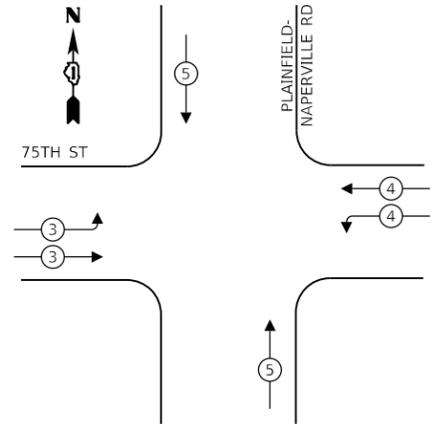
**LEGEND:**

- ⊙ — PROTECTED PHASE
- ⊙ — PROTECTED/PERMITTED PHASE
- ⊙ — PEDESTRIAN PHASE
- OL — OVERLAP

**RIGHT TURN OVERLAP PHASE DESIGNATION:**

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

**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**LEGEND**

- WIRELESS DETECTION UNIT
- A WIRELESS ACCESS POINT
- LONG RANGE DIRECTIONAL ANTENNA
- ▲ OMNI-DIRECTIONAL ANTENNA
- C COAXIAL CABLE (INCLUDED IN WIRELESS ACCESS POINT)

**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	18	11	50	99.0
(YELLOW)	18	20	5	18.0
(GREEN)	18	12	45	97.2
PERMISSIVE ARROW	16	10	10	16.0
PED. SIGNAL	8	20	100	160.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	4	250	50	500.0
PTZ CAMERA	1	75	100	75.0
<b>TOTAL =</b>				<b>1090.2</b>

ENERGY COSTS TO:

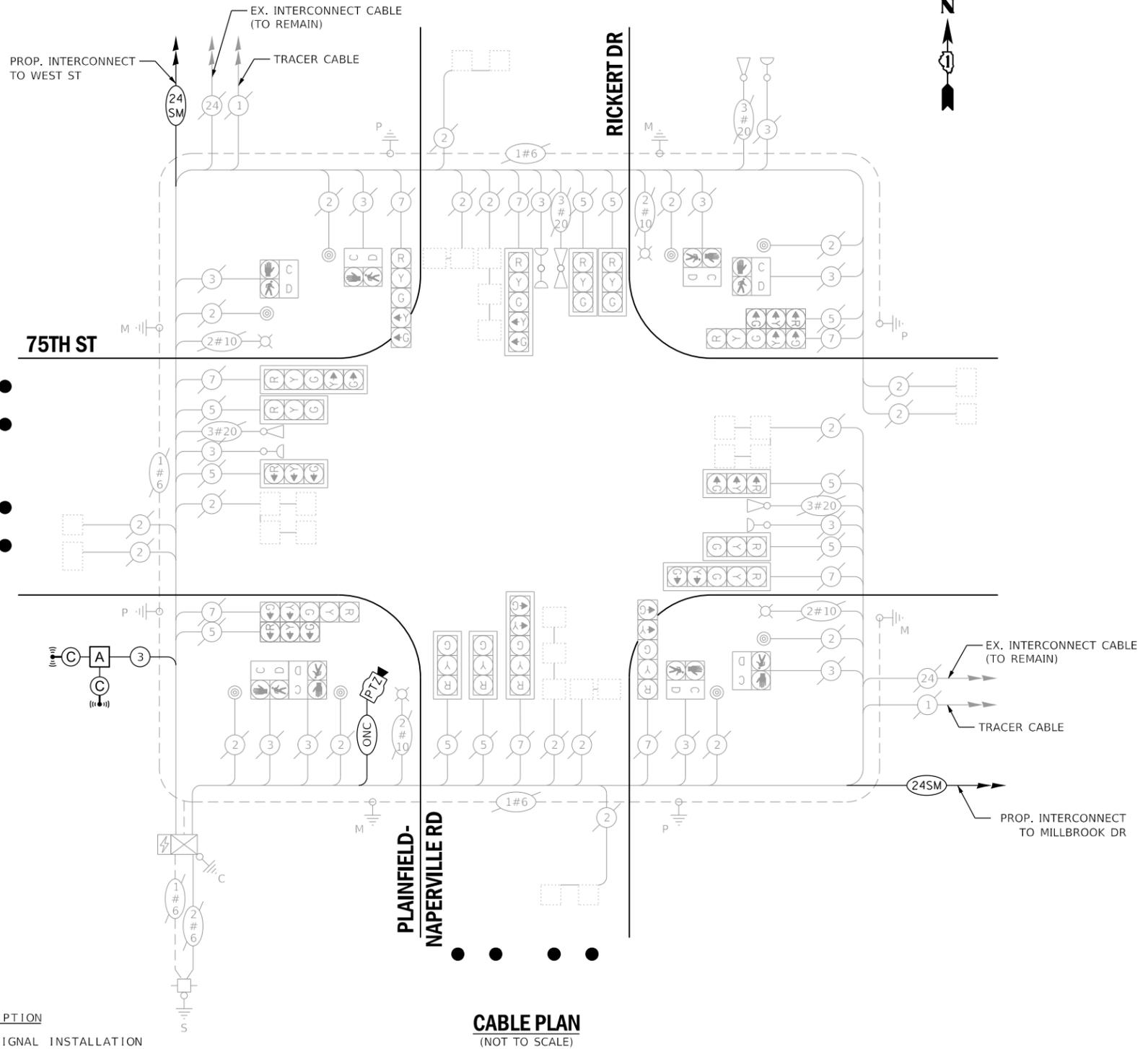
**DUPAGE COUNTY D.O.T.**

421 N. COUNTY FARM RD.  
WHEATON, IL 60187

ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
PHONE: (630)-424-5704  
COMPANY: COM-ED LOMBARD  
ACCOUNT NUMBER:

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
80.5	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
90.5	FOOT	OUTDOOR RATED NETWORK CABLE
1	EACH	REMOTE CONTROLLED VIDEO SYSTEM
1	EACH	LAYER II (DATALINK) SWITCH
1	EACH	MODIFY EXISTING CONTROLLER CABINET, SPECIAL
1	EACH	WIRELESS ACCESS POINT
1	EACH	DETECTOR BASE STATION
1	EACH	LONG RANGE DIRECTIONAL ANTENNA
8	EACH	WIRELESS DETECTION UNIT
27	EACH	DETECTOR SEALANT PACKAGE
1	EACH	ELECTRIC METER SOCKET



TS SHT NO. 12



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
PLOT SCALE = 40.0000 ' / in.	DRAWN - RG	REVISED -
PLOT DATE = 8/28/2018	CHECKED - ZH	REVISED -
	DATE -	REVISED -

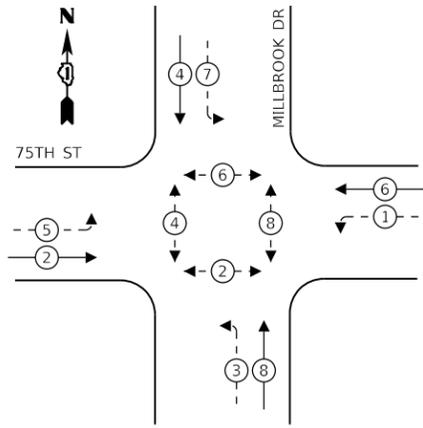
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES  
75TH ST AND RICKERT DR/PLAINFIELD-NAPERVILLE RD**

SCALE: NTS SHEET 12 OF 46 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	20
			CONTRACT NO. 61F05	
		ILLINOIS	FED. AID PROJECT	

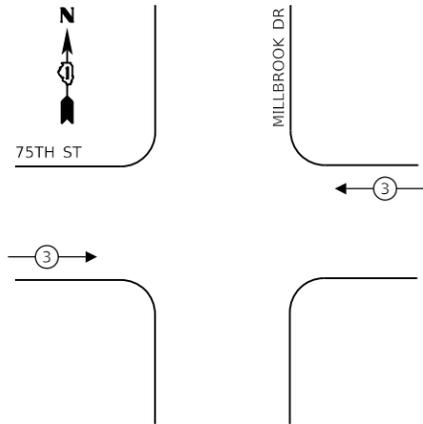
**EXISTING CONTROLLER SEQUENCE**



**LEGEND:**

- ⊙ — PROTECTED PHASE
- ⊙ — PROTECTED/PERMITTED PHASE
- ⊙ — PEDESTRIAN PHASE
- OL — OVERLAP

**EXISTING EMERGENCY VEHICLE  
PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL  
ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	10	11	50	55.0
(YELLOW)	10	20	5	10.0
(GREEN)	10	12	45	54.0
PERMISSIVE ARROW	16	10	10	16.0
PED. SIGNAL	8	20	100	160.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	-	-	-
PTZ CAMERA	-	75	100	-
<b>TOTAL =</b>				<b>420.0</b>

ENERGY COSTS TO:

**DUPAGE COUNTY D.O.T.**

421 N. COUNTY FARM RD.  
WHEATON, IL 60187

ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
PHONE: (630)-424-5704  
COMPANY: COM-ED LOMBARD  
ACCOUNT NUMBER: \_\_\_\_\_

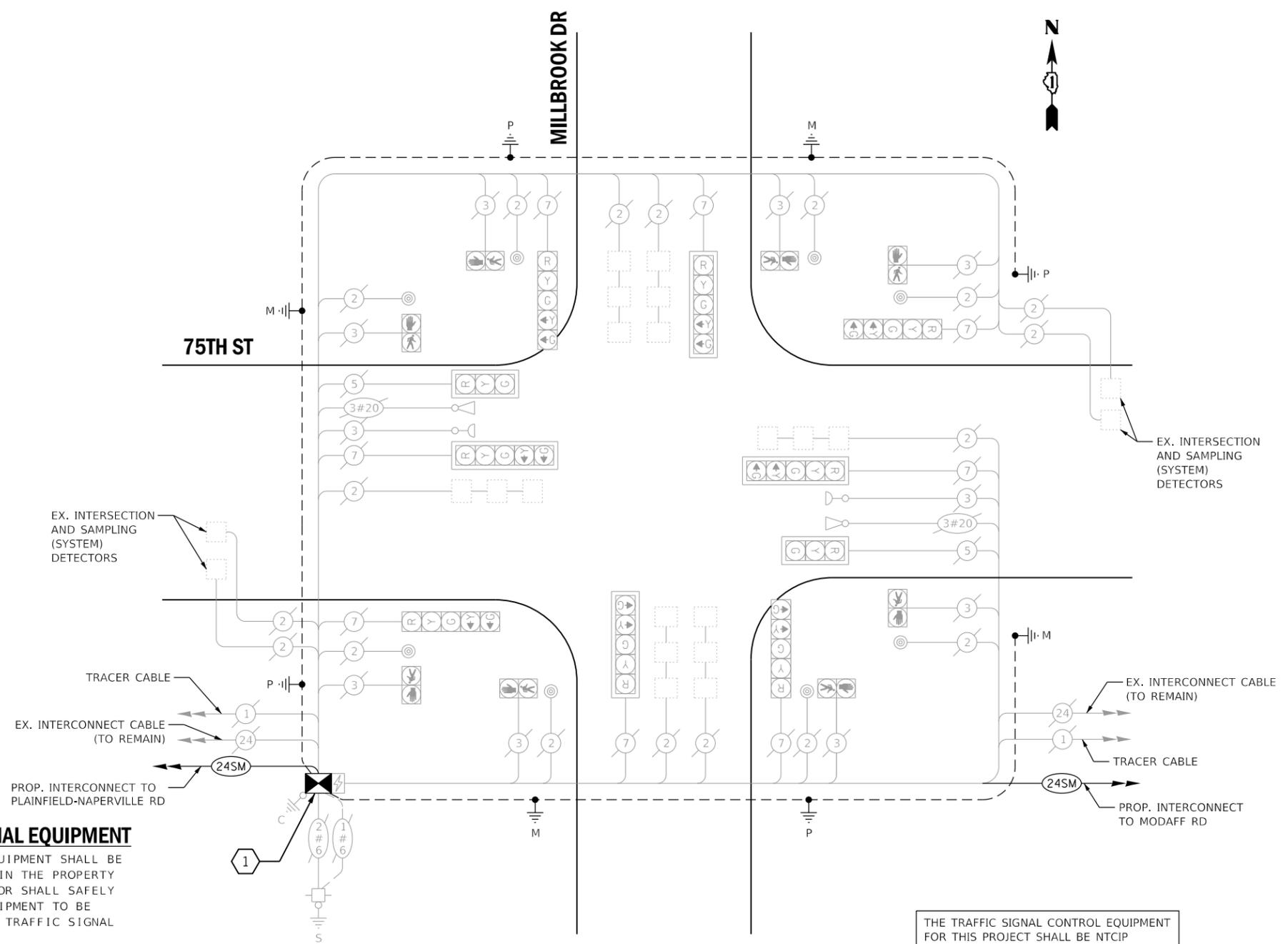
**REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT**

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: DUPAGE COUNTY DIVISION OF TRANSPORTATION  
1 EACH CONTROLLER AND CABINET (COMPLETE)

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
7	EACH	GROUNDING EXISTING HANDHOLE FRAME AND COVER
750	FOOT	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C
10	EACH	INDUCTIVE LOOP DETECTOR
1	EACH	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	LAYER II (DATALINK) SWITCH
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
1	EACH	RELOCATE EXISTING UPS BATTERY BACK-UP SYSTEM
1	EACH	ELECTRIC METER SOCKET



**CABLE PLAN**  
(NOT TO SCALE)

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE NTCIP (LATEST VERSION).

**CONSTRUCTION NOTES:**

- 1 THE CONTRACTOR SHALL REMOVE THE EXISTING CONTROLLER AND CABINET (COMPLETE) AND REPLACE IT WITH A FULL-ACTUATED CONTROLLER AND TYPE IV CABINET ON EXISTING FOUNDATION. REINSTALL THE EXISTING UNINTERRUPTABLE POWER SUPPLY UNIT, EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT AND ACCESSIBLE PUSHBUTTON HARDWARE.

TS SHT NO. 13



USER NAME = dwiktorzak  
DESIGNED - DW  
DRAWN - RG  
PLOT SCALE = 40,0000 ' / in.  
CHECKED - ZH  
PLOT DATE = 8/28/2018  
DATE -

REVISD -  
REVISD -  
REVISD -  
REVISD -

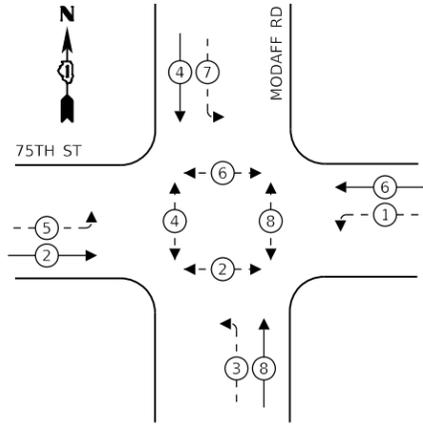
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE  
PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES**  
**75TH ST AND MILLBROOK DR**

SCALE: NTS SHEET 13 OF 46 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	21
CONTRACT NO. 61F05			ILLINOIS FED. AID PROJECT	

**EXISTING CONTROLLER SEQUENCE**



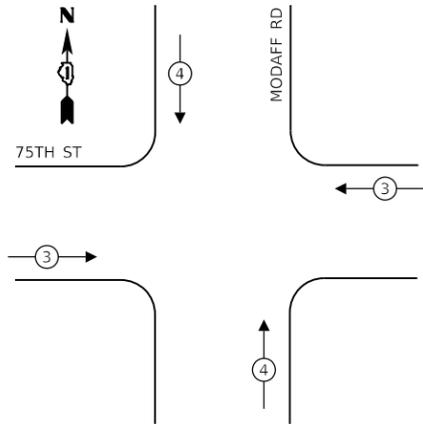
**LEGEND:**

- ⊙ — PROTECTED PHASE
- ⊙ — — PROTECTED/PERMITTED PHASE
- ⊙ — ⊙ — PEDESTRIAN PHASE
- ⊙ — OL — OVERLAP

**RIGHT TURN OVERLAP PHASE DESIGNATION:**

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2	+ 4
B	= 4	+ 6
C	= 6	+ 8
D	= 2	+ 8

**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

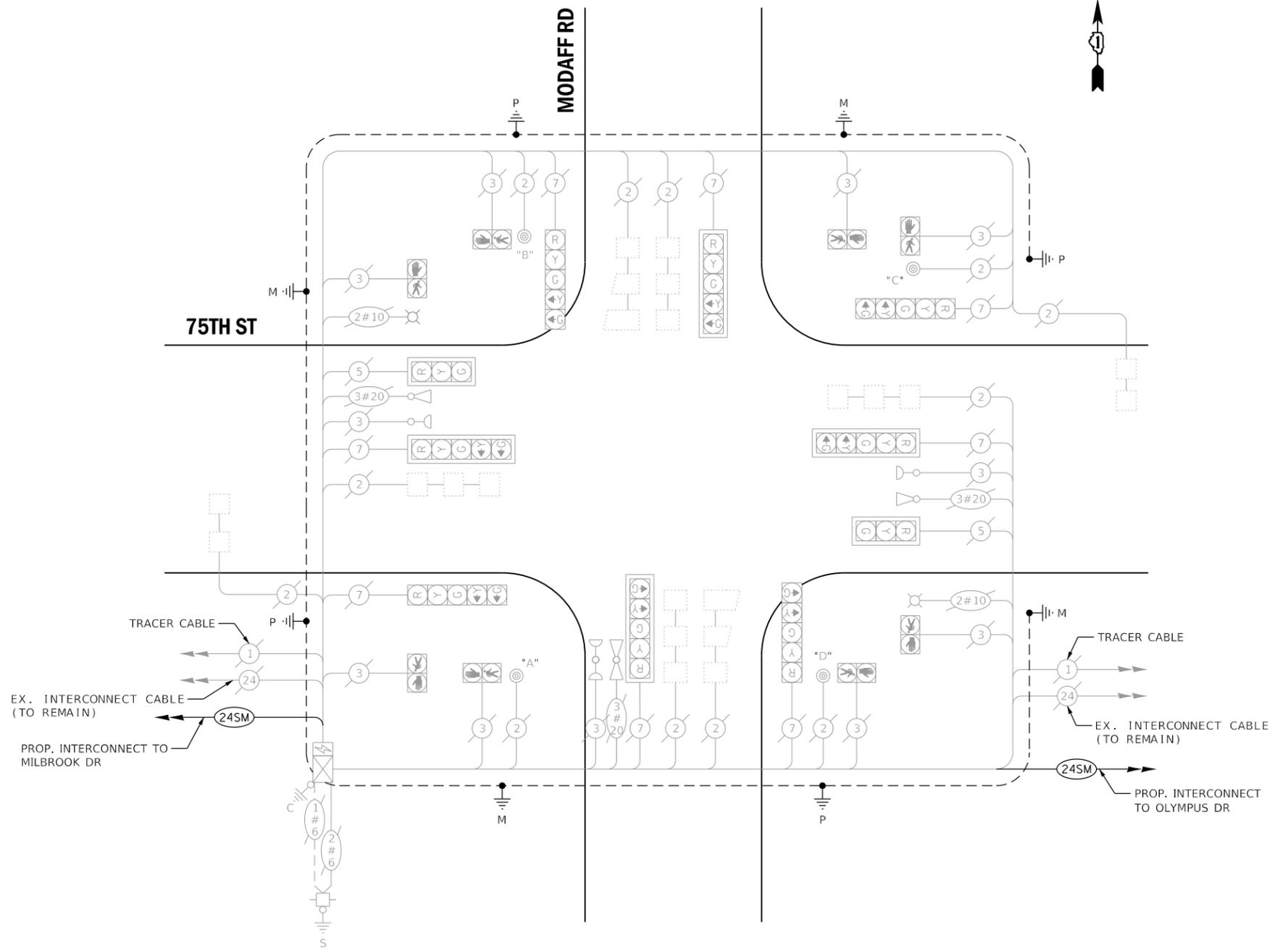
TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	10	11	50	55.0
(YELLOW)	10	20	5	10.0
(GREEN)	10	12	45	54.0
PERMISSIVE ARROW	16	10	10	16.0
PED. SIGNAL	8	20	100	160.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	2	250	50	250.0
PTZ CAMERA	-	75	100	-
<b>TOTAL =</b>				<b>670.0</b>

ENERGY COSTS TO:

**DUPAGE COUNTY D.O.T.**

421 N. COUNTY FARM RD.  
WHEATON, IL 60187

ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
PHONE: (630)-424-5704  
COMPANY: COM-ED LOMBARD  
ACCOUNT NUMBER:



**CABLE PLAN**  
(NOT TO SCALE)

PUSHBUTTON "A" SHALL PLACE CALLS IN PHASES 2 & 4  
PUSHBUTTON "B" SHALL PLACE CALLS IN PHASES 4 & 6  
PUSHBUTTON "C" SHALL PLACE CALLS IN PHASES 6 & 8  
PUSHBUTTON "D" SHALL PLACE CALLS IN PHASES 2 & 8

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
10	EACH	GROUNDING EXISTING HANDHOLE FRAME AND COVER
750	FOOT	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C
1	EACH	LAYER II (DATALINK) SWITCH
1	EACH	MODIFY EXISTING CONTROLLER CABINET, SPECIAL
1	EACH	ELECTRIC METER SOCKET

TS SHT NO. 14



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
PLOT SCALE = 40.0000 ' / in.	DRAWN - RG	REVISED -
PLOT DATE = 8/28/2018	CHECKED - ZH	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES**  
**75TH ST AND MODAFF RD**

SCALE: NTS SHEET 14 OF 46 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	22
			CONTRACT NO. 61F05	
ILLINOIS FED. AID PROJECT				

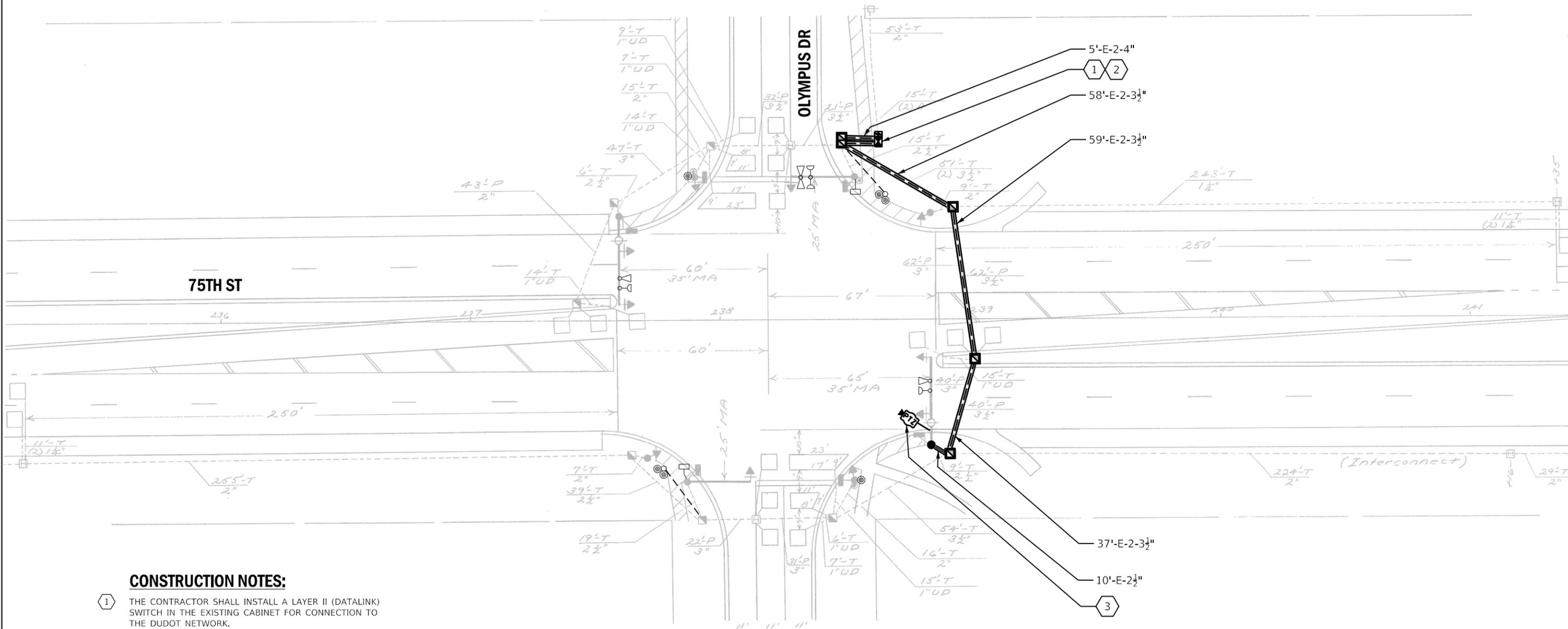
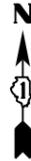
**DUDOT**

**REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT:**

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: DUPAGE COUNTY DIVISION OF TRANSPORTATION

1 EACH CONTROLLER AND CABINET COMPLETE



**CONSTRUCTION NOTES:**

- 1 THE CONTRACTOR SHALL INSTALL A LAYER II (DATALINK) SWITCH IN THE EXISTING CABINET FOR CONNECTION TO THE DUDOT NETWORK.
- 2 THE CONTRACTOR SHALL REMOVE THE EXISTING CONTROLLER AND CABINET (COMPLETE) AND REPLACE IT WITH A FULL-ACTUATED CONTROLLER AND TYPE IV CABINET ON EXISTING FOUNDATION. REINSTALL THE EXISTING UNINTERRUPTABLE POWER SUPPLY UNIT AND EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT.
- 3 THE CONTRACTOR SHALL INSTALL A REMOTE CONTROLLED VIDEO SYSTEM ON THE EXISTING COMBINATION MAST ARM ASSEMBLY AND POLE.

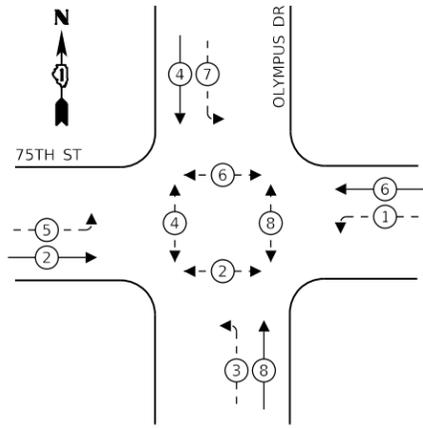
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE NTCIP (LATEST VERSION).

TS SHT NO. 15

**DUDOT**

	USER NAME = dwiktorzak	DESIGNED - DW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODERNIZATION PLAN 75TH ST AND OLYMPUS DR			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 40.0000 ' / in.	CHECKED - ZH	REVISED -					VAR.	17-DCCSS-01-TL	DUPAGE	277	23
	PLOT DATE = 8/28/2018	DATE -	REVISED -		SCALE: NTS	SHEET 15	OF 46 SHEETS	STA.	TO STA.	CONTRACT NO. 61F05		
FILE NAME = p:\IPW1.dzcorp.com\DLZ\Documents\Projects\2017\1782\2130\W02_Centracs Expansion_1\CADD_Sheets\113-sht-ts-plan.dgn											ILLINOIS FED. AID PROJECT	

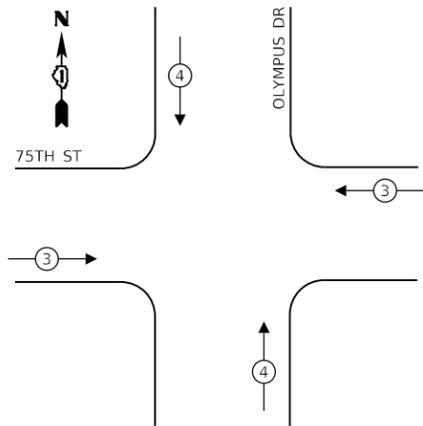
**EXISTING CONTROLLER SEQUENCE**



**LEGEND:**

- ← ⊙ → PROTECTED PHASE
- ← ⊙ - PROTECTED/PERMITTED PHASE
- ← ⊙ → PEDESTRIAN PHASE
- ⊙ OL OVERLAP

**EXISTING EMERGENCY VEHICLE  
PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL  
ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	10	11	50	55.0
(YELLOW)	10	20	5	10.0
(GREEN)	10	12	45	54.0
PERMISSIVE ARROW	16	10	10	16.0
PED. SIGNAL	8	20	100	160.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	2	250	50	250.0
PTZ CAMERA	1	75	100	75.0
TOTAL =				745.0

ENERGY COSTS TO:

**DUPAGE COUNTY D.O.T.**

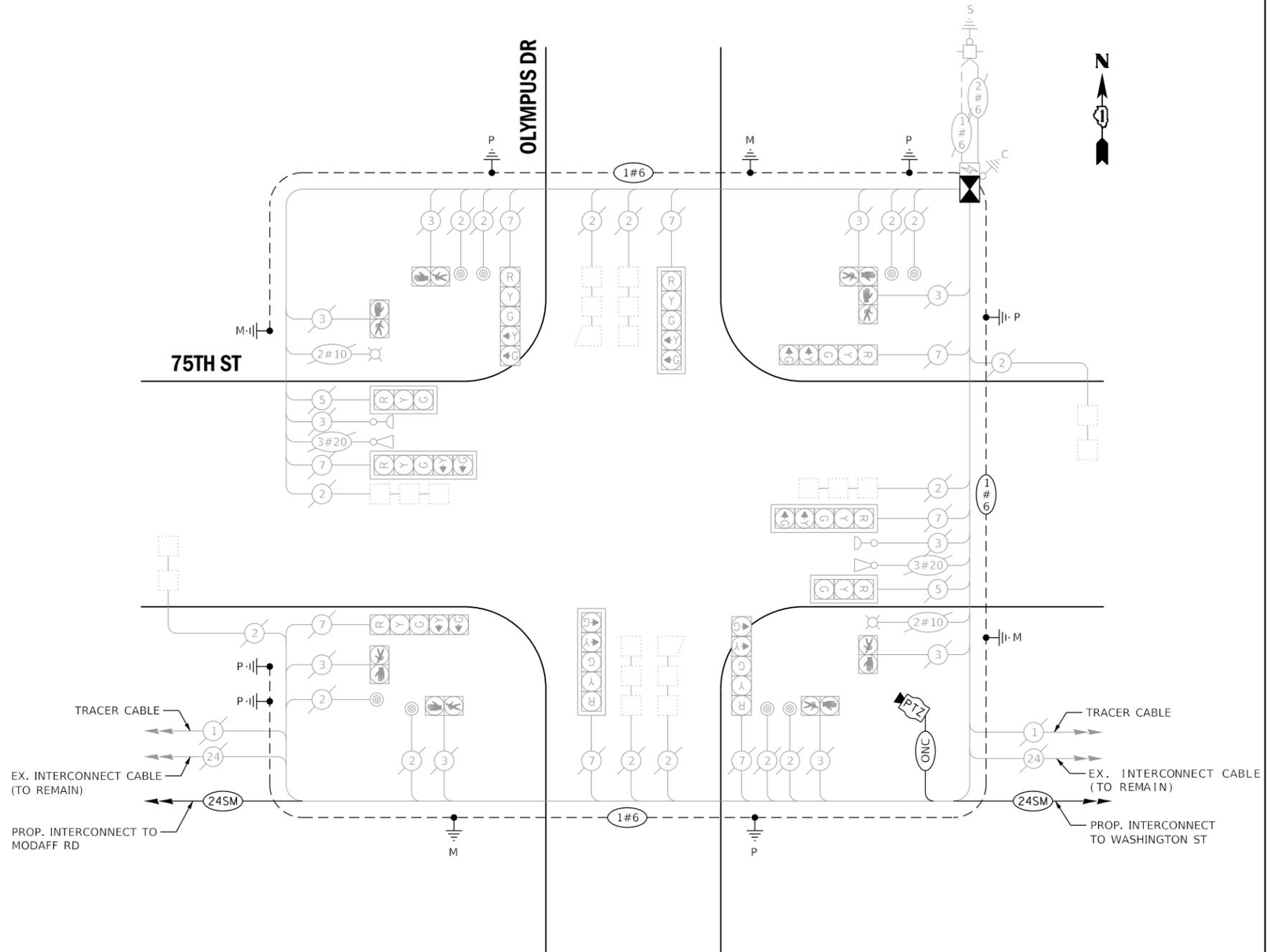
421 N. COUNTY FARM RD.  
WHEATON, IL 60187

ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
PHONE: (630)-424-5704  
COMPANY: COM-ED LOMBARD  
ACCOUNT NUMBER: \_\_\_\_\_

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
9	EACH	GROUNDING EXISTING HANDHOLE FRAME AND COVER
750	FOOT	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C
8	EACH	INDUCTIVE LOOP DETECTOR
1	EACH	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
261	FOOT	OUTDOOR RATED NETWORK CABLE
1	EACH	REMOTE CONTROLLED VIDEO SYSTEM
1	EACH	LAYER 11 (DATALINK) SWITCH
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
1	EACH	RELOCATE EXISTING UPS BATTERY BACK-UP SYSTEM
1	EACH	ELECTRIC METER SOCKET

**SCHEDULE OF QUANTITIES**

**CABLE PLAN  
(NOT TO SCALE)**



THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE NTCIP (LATEST VERSION).

TS SHT NO. 16



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
PLOT SCALE = 40.0000 ' / in.	DRAWN - RG	REVISED -
PLOT DATE = 8/28/2018	CHECKED - ZH	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

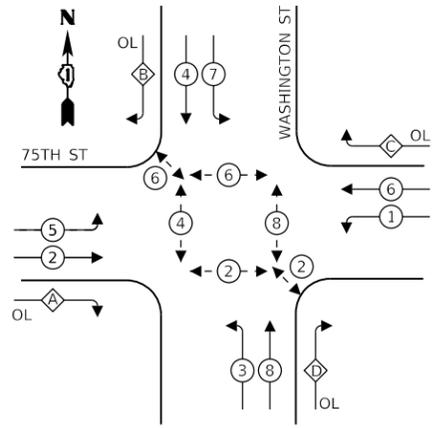
**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE  
PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES  
75TH ST AND OLYMPUS DR**

SCALE: NTS SHEET 16 OF 46 SHEETS STA. TO STA.

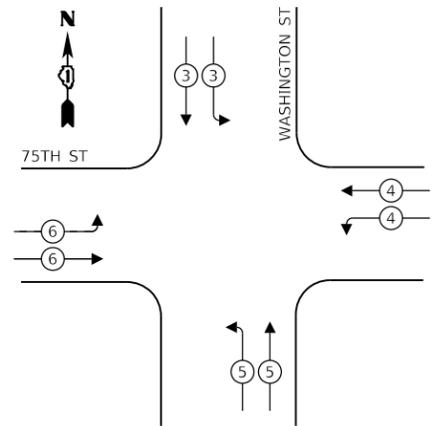
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	24
			CONTRACT NO. 61F05	
ILLINOIS FED. AID PROJECT				

DUDOT

**EXISTING CONTROLLER SEQUENCE**



**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**LEGEND:**

- ⊙ — PROTECTED PHASE
- ⊙ — PROTECTED/PERMITTED PHASE
- ⊙ — PEDESTRIAN PHASE
- ⊙ — OVERLAP

**RIGHT TURN OVERLAP PHASE DESIGNATION:**

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

**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	26	11	50	143.0
(YELLOW)	26	20	5	26.0
(GREEN)	26	12	45	140.4
PERMISSIVE ARROW	20	10	10	20.0
PED. SIGNAL	12	20	100	240.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	1	150	100	150.0
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	4	120	50	240.0
LUMINAIRE	-	-	-	-
PTZ CAMERA	1	75	100	75.0
<b>TOTAL =</b>				<b>1159.4</b>

ENERGY COSTS TO:

**DUPAGE COUNTY D.O.T.**

421 N. COUNTY FARM RD.  
WHEATON, IL 60187

ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
PHONE: (630)-424-5704  
COMPANY: COM-ED LOMBARD  
ACCOUNT NUMBER:

**REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT**

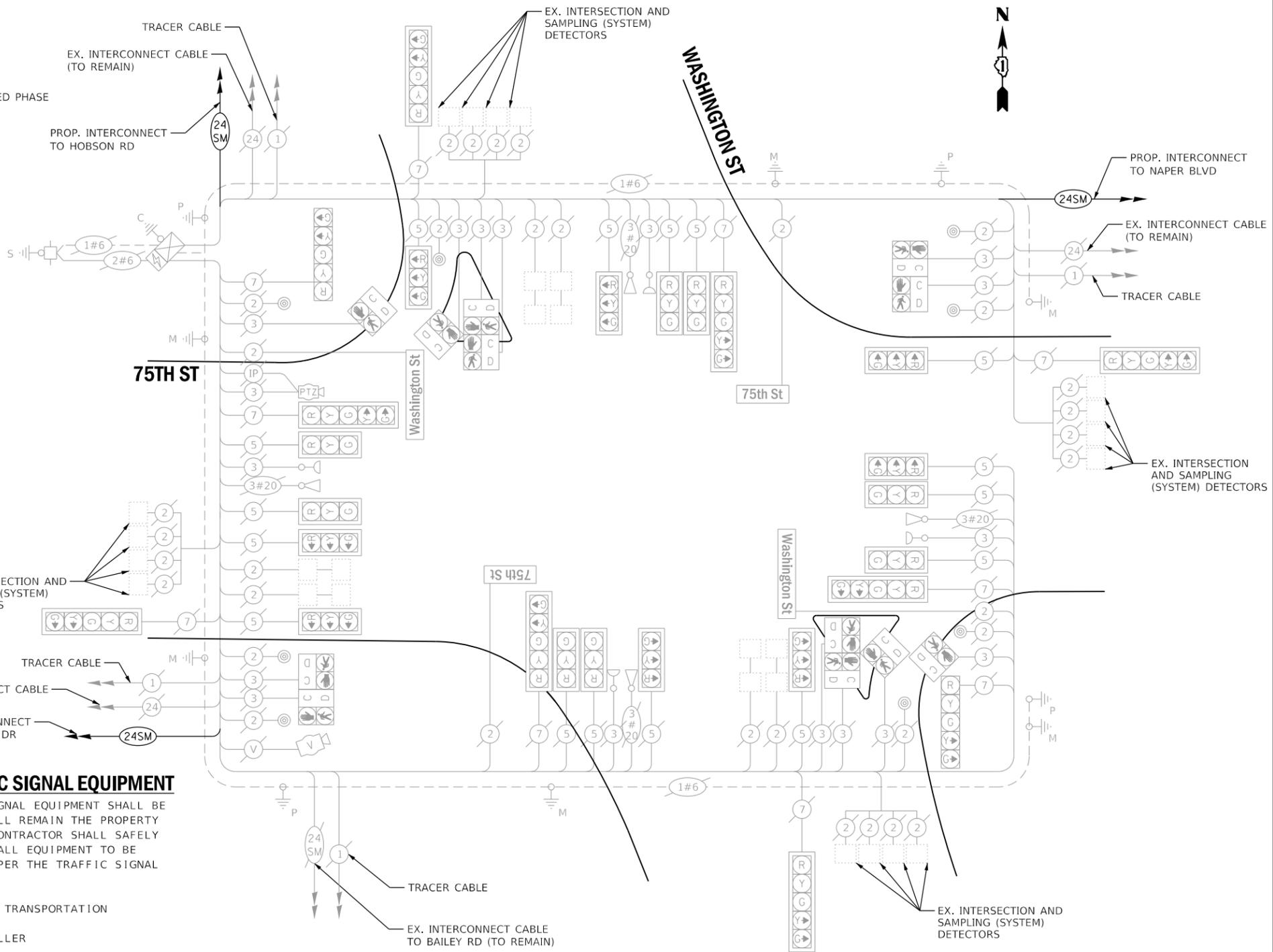
THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: DUPAGE COUNTY DIVISION OF TRANSPORTATION

1 EACH MASTER CONTROLLER

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	LAYER II (DATALINK) SWITCH
1	EACH	MODIFY EXISTING CONTROLLER CABINET, SPECIAL
1	EACH	ELECTRIC METER SOCKET



**CABLE PLAN**  
(NOT TO SCALE)

NOTE:  
EXISTING LAYER II SWITCH TO REMAIN IN USE FOR NAPERVILLE CTMS NETWORK. PROPOSED LAYER II SWITCH WILL BE PROVISIONED FOR DUDOT NETWORK.

TS SHT NO. 17



USER NAME = dwiktorzak  
DESIGNED - DW  
DRAWN - RG  
PLOT SCALE = 40.0000" / in.  
CHECKED - ZH  
PLOT DATE = 8/28/2018  
DATE -

REVISED -  
REVISED -  
REVISED -  
REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

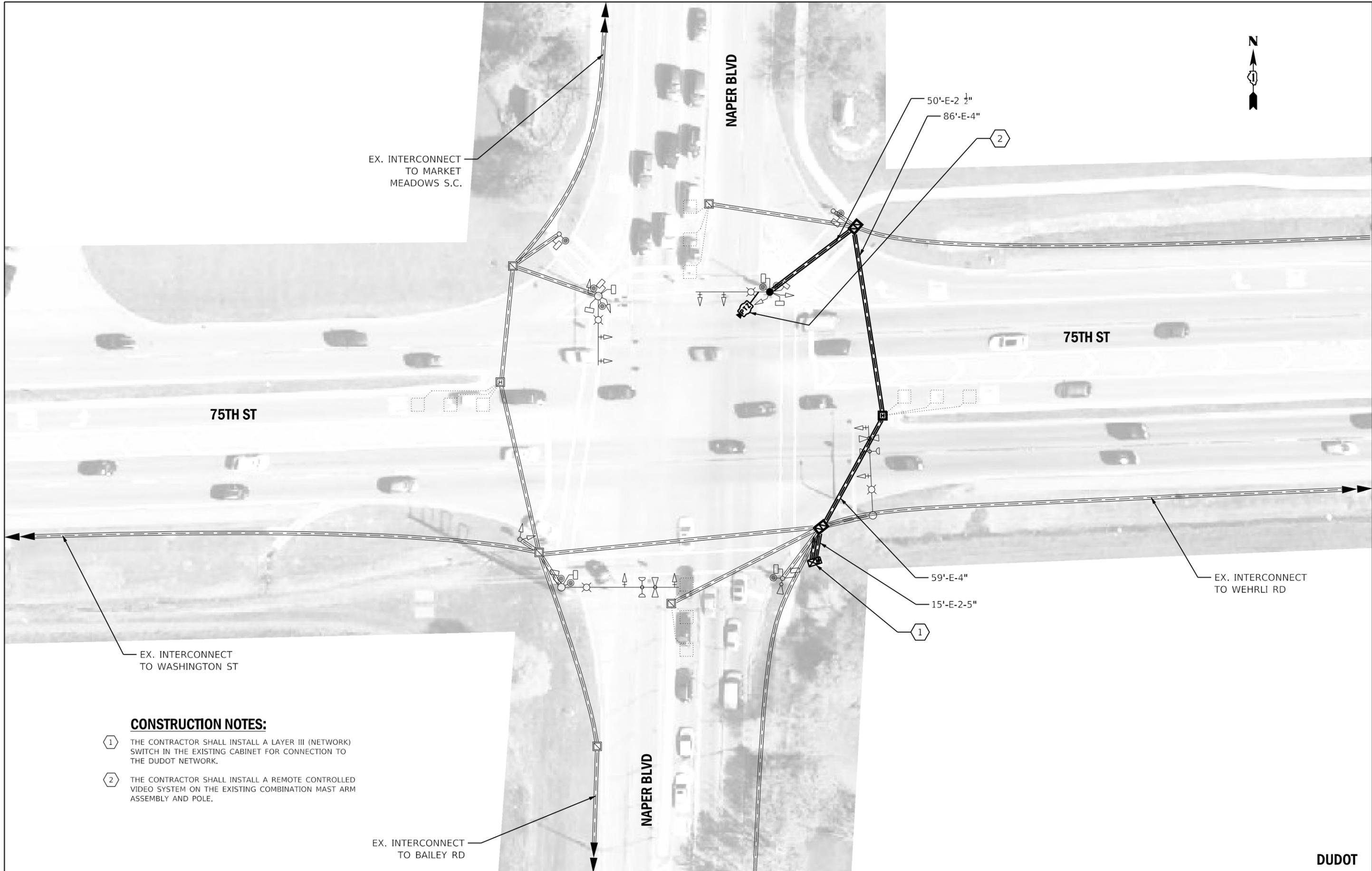
**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES**  
**75TH ST AND WASHINGTON ST**

SCALE: NTS SHEET 17 OF 46 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCS5-01-TL	DUPAGE	277	25
CONTRACT NO. 61F05			ILLINOIS FED. AID PROJECT	

**DUDOT**

TS SHT NO. 18



**CONSTRUCTION NOTES:**

- ① THE CONTRACTOR SHALL INSTALL A LAYER III (NETWORK) SWITCH IN THE EXISTING CABINET FOR CONNECTION TO THE DUDOT NETWORK.
- ② THE CONTRACTOR SHALL INSTALL A REMOTE CONTROLLED VIDEO SYSTEM ON THE EXISTING COMBINATION MAST ARM ASSEMBLY AND POLE.

	USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
		DRAWN - RG	REVISED -
	PLOT SCALE = 40,0000' / in.	CHECKED - ZH	REVISED -
	PLOT DATE = 8/28/2018	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

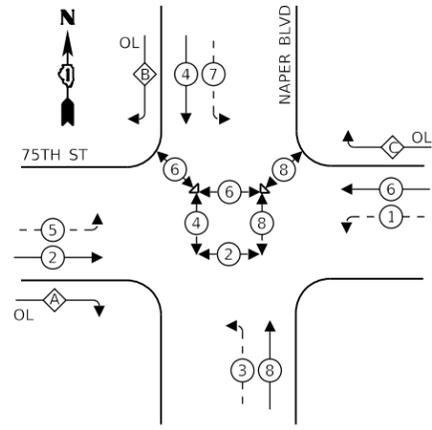
**TRAFFIC SIGNAL MODERNIZATION PLAN  
75TH ST AND NAPER BLVD**

SCALE: NTS      SHEET 18 OF 46 SHEETS      STA.      TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	26
			CONTRACT NO.	61F05
ILLINOIS FED. AID PROJECT				

**DUDOT**

**EXISTING CONTROLLER SEQUENCE**



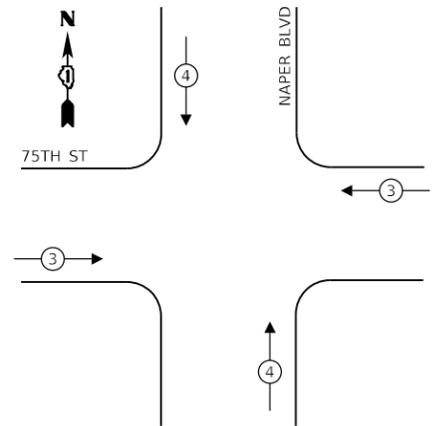
**LEGEND:**

- ⊙ — PROTECTED PHASE
- ⊙ — PROTECTED/PERMITTED PHASE
- ⊙ — PEDESTRIAN PHASE
- ⊙ — OVERLAP

**RIGHT TURN OVERLAP PHASE DESIGNATION:**

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

**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	15	11	50	82.5
(YELLOW)	15	20	5	15.0
(GREEN)	15	12	45	81.0
PERMISSIVE ARROW	24	10	10	24.0
PED. SIGNAL	12	20	100	240.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	-	-	-
PTZ CAMERA	1	75	100	75.0
<b>TOTAL =</b>				<b>642.5</b>

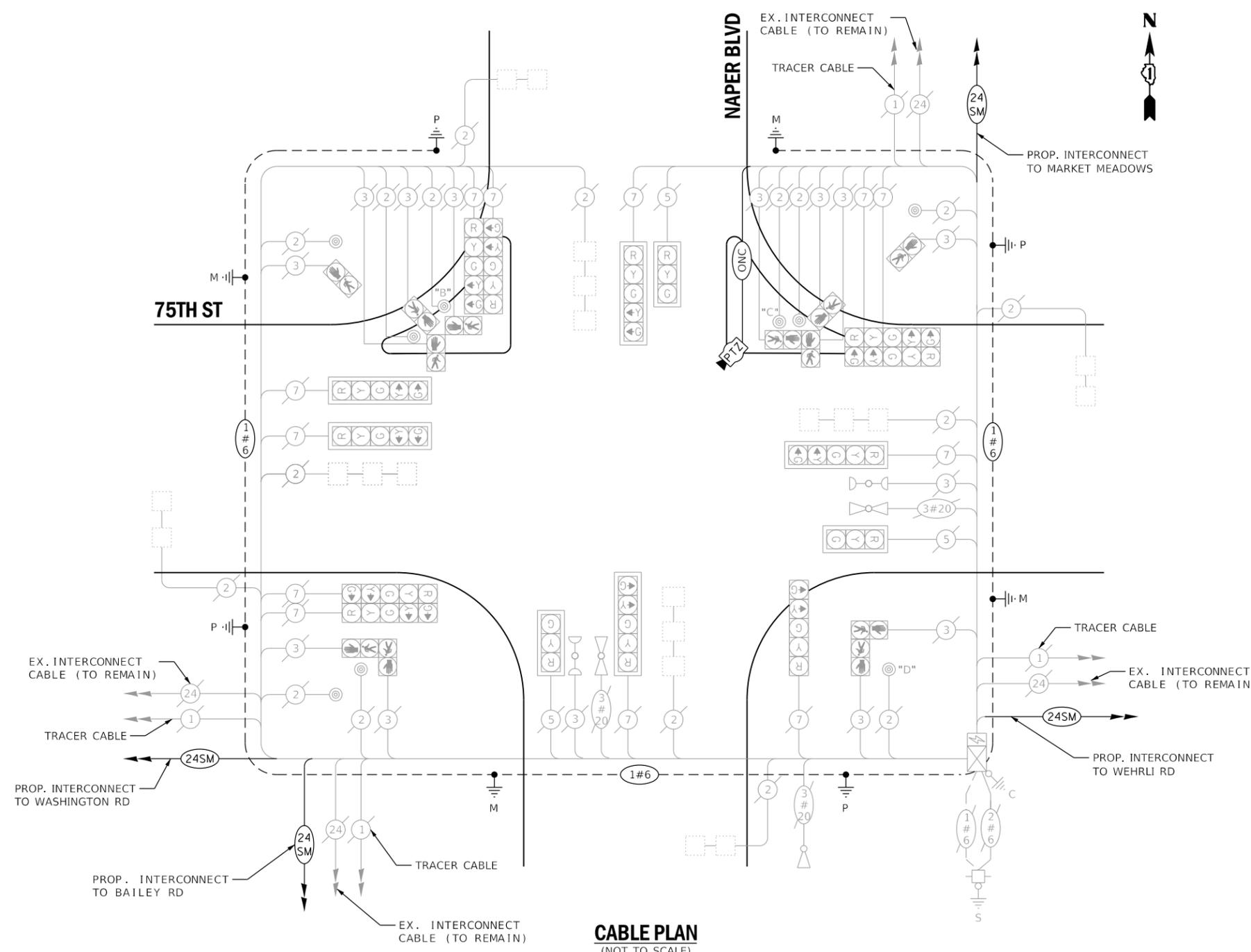
ENERGY COSTS TO:

**DUPAGE COUNTY D.O.T.**

421 N. COUNTY FARM RD.  
WHEATON, IL 60187

ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
PHONE: (630)-424-5704  
COMPANY: COM-ED LOMBARD  
ACCOUNT NUMBER:

TS SHT NO. 19



**CABLE PLAN**  
(NOT TO SCALE)

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
6	EACH	GROUNDING EXISTING HANDHOLE FRAME AND COVER
750	FOOT	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C
302	FOOT	OUTDOOR RATED NETWORK CABLE
1	EACH	REMOTE CONTROLLED VIDEO SYSTEM
1	EACH	MODIFY EXISTING CONTROLLER CABINET, SPECIAL
1	EACH	LAYER III (NETWORK) SWITCH
1	EACH	ELECTRIC METER SOCKET

PUSHBUTTON "B" SHALL PLACE CALLS IN PHASES 4 & 6  
PUSHBUTTON "C" SHALL PLACE CALLS IN PHASES 6 & 8  
PUSHBUTTON "D" SHALL PLACE CALLS IN PHASES 2 & 8

<b>DLZ</b>	USER NAME = dwiktorzak	DESIGNED - DW	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES 75TH ST AND NAPER BLVD</b>	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	PLOT SCALE = 40.0000' / in.	CHECKED - ZH	REVISED -			VAR.	17-DCCSS-01-TL	DUPAGE	277	27	
PLOT DATE = 8/28/2018	DATE -	REVISED -		SCALE: NTS	SHEET 19 OF 46 SHEETS	STA.	TO STA.	CONTRACT NO. 61F05			
						ILLINOIS		FED. AID PROJECT			

**DUDOT**

FILE NAME = p:\IPW1.dzcorp.com\DLZ\Documents\Projects\2017\1782\2130\W02\_Centracs Expansion 1\CADD\_Sheets\Int 9-sht-ts-cable.dgn  
Default

**CONSTRUCTION NOTES:**

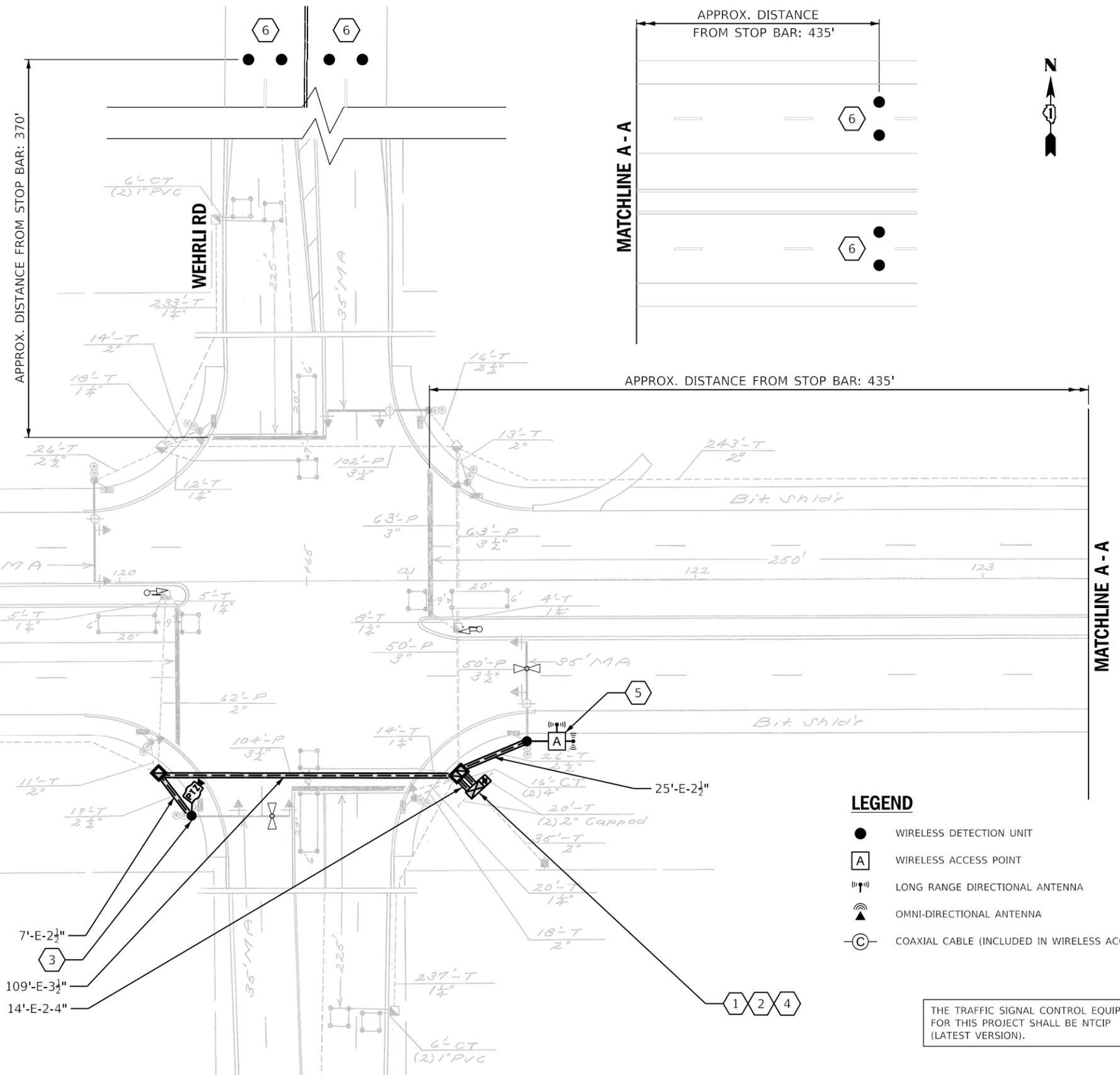
- 1 THE CONTRACTOR SHALL INSTALL A LAYER II (DATALINK) SWITCH IN THE EXISTING CABINET FOR CONNECTION TO THE DUDOT NETWORK.
- 2 THE CONTRACTOR SHALL REMOVE THE EXISTING CONTROLLER AND REPLACE IT WITH A FULL-ACTUATED CONTROLLER IN THE EXISTING CABINET.
- 3 THE CONTRACTOR SHALL INSTALL A REMOTE CONTROLLED VIDEO SYSTEM ON THE EXISTING MAST ARM ASSEMBLY AND POLE.
- 4 INSTALL DETECTOR BASE STATION IN EXISTING CONTROLLER CABINET. CONNECT TO EXISTING SWITCH. ALL REQUIRED ETHERNET PATCH CABLES AND JUMPER CABLES SHALL BE INCLUDED IN THE DETECTOR BASE STATION PAY ITEM.
- 5 INSTALL DETECTOR ACCESS POINT ON COMBINATION MAST ARM POLE AT APPROXIMATE HEIGHT OF 35 FEET. INSTALL LONG RANGE DIRECTIONAL ANTENNAS. LONG RANGE DIRECTIONAL ANTENNAS SHALL BE INDIVIDUALLY ORIENTED TOWARD WIRELESS DETECTOR UNITS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. DRILL MAST ARM SHAFT AND ADD DRIP LOOP TO CABLE.
- 6 INSTALL WIRELESS DETECTOR UNIT IN CENTER OF LANE USING INSTALLATION TOOLKIT AND DETECTOR SEALANT PACKAGE.

**REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT:**

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: DUPAGE COUNTY DIVISION OF TRANSPORTATION

1 EACH CONTROLLER



APPROX. DISTANCE FROM STOP BAR: 435'

APPROX. DISTANCE FROM STOP BAR: 435'

**LEGEND**

- WIRELESS DETECTION UNIT
- A WIRELESS ACCESS POINT
- ↑ LONG RANGE DIRECTIONAL ANTENNA
- ⊙ OMNI-DIRECTIONAL ANTENNA
- ⊖ COAXIAL CABLE (INCLUDED IN WIRELESS ACCESS POINT)

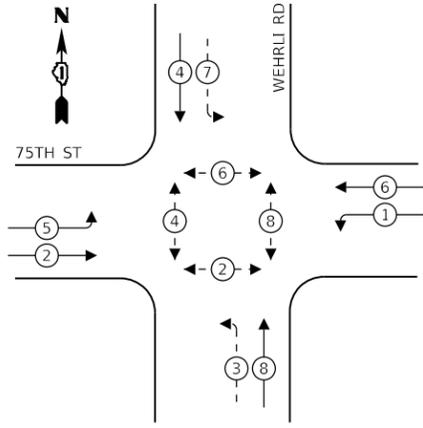
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE NTCIP (LATEST VERSION).

TS SHT NO. 20

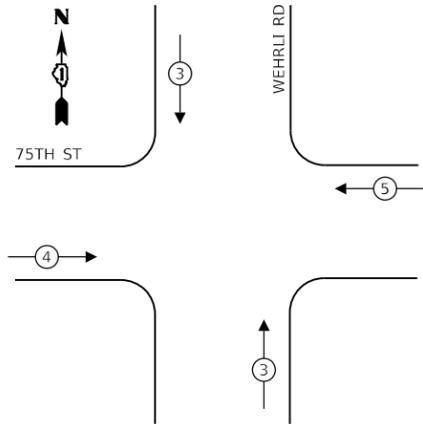
	USER NAME = dwiktorzak	DESIGNED - DW	REVISED -	<p align="center"><b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b></p>	<p align="center"><b>TRAFFIC SIGNAL MODERNIZATION PLAN</b> <b>75TH ST AND WEHRLI RD</b></p>			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 40.0000' / in.	CHECKED - ZH	REVISED -					VAR.	17-DCCSS-01-TL	DUPAGE	277	28
	PLOT DATE = 8/28/2018	DATE -	REVISED -		SCALE: NTS	SHEET 20	OF 46 SHEETS	STA.	TO STA.	CONTRACT NO. 61F05		
<p>FILE NAME = p:\IPW1.dzcorp.com\DLZ\Documents\Projects\2017\1782\2130\W02_Centracs_Expansion_1\CADD_Sheets\Int_8-sht-ts-plan.dgn</p>											ILLINOIS FED. AID PROJECT	

**DUDOT**

**EXISTING CONTROLLER SEQUENCE**



**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**LEGEND:**

- ⊙ — PROTECTED PHASE
- ⊙ — PROTECTED/PERMITTED PHASE
- ⊙ — PEDESTRIAN PHASE
- OL — OVERLAP

**LEGEND**

- WIRELESS DETECTION UNIT
- A WIRELESS ACCESS POINT
- ( ) LONG RANGE DIRECTIONAL ANTENNA
- ⊙ OMNI-DIRECTIONAL ANTENNA
- ⊙ COAXIAL CABLE (INCLUDED IN WIRELESS ACCESS POINT)

**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	14	11	50	77.0
(YELLOW)	14	20	5	14.0
(GREEN)	14	12	45	75.6
PERMISSIVE ARROW	8	10	10	8.0
PED. SIGNAL	8	20	100	160.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	3	250	50	375.0
PTZ CAMERA	1	75	100	75.0
<b>TOTAL =</b>				<b>909.6</b>

ENERGY COSTS TO:

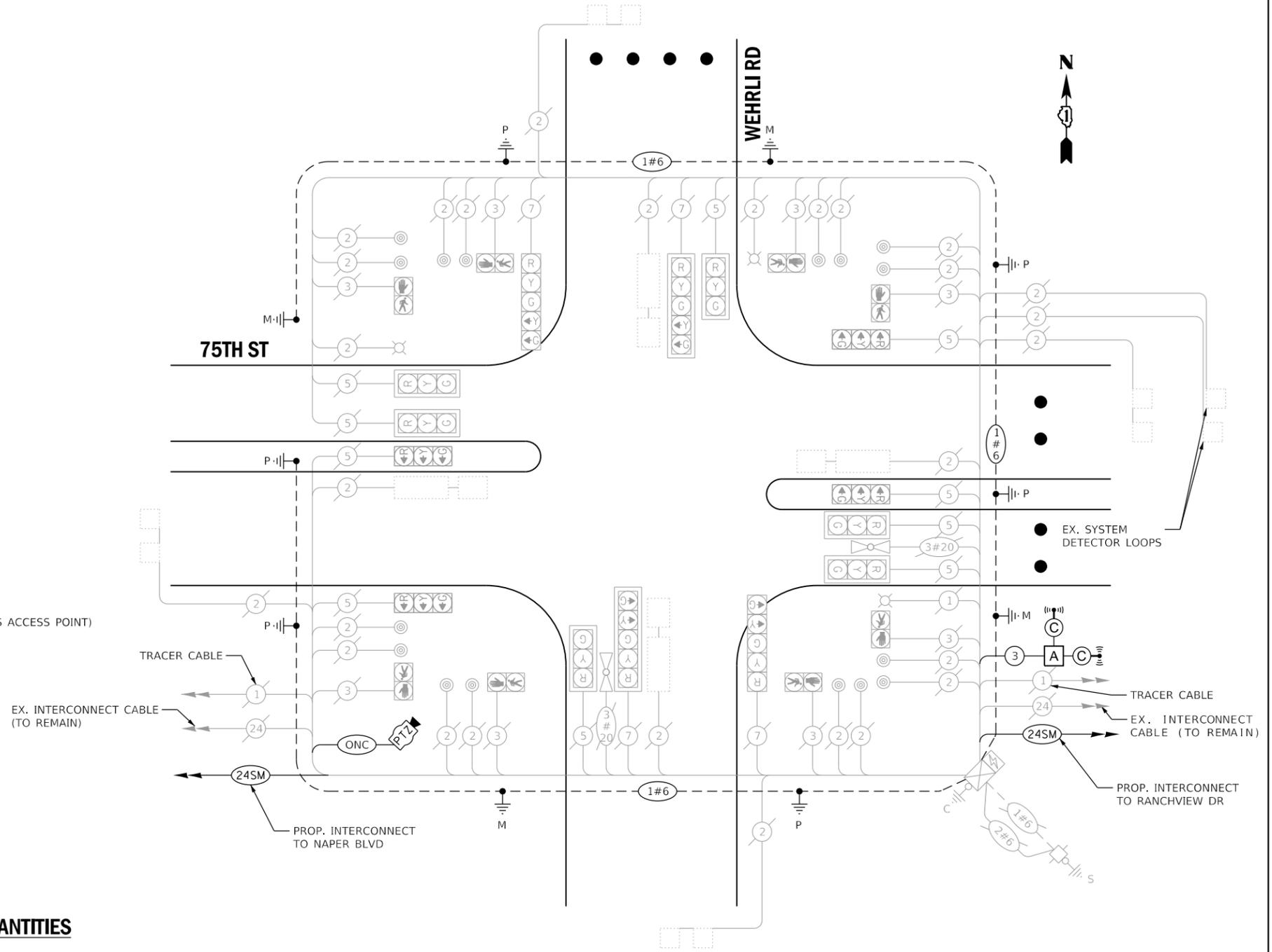
**DUPAGE COUNTY D.O.T.**

421 N. COUNTY FARM RD.  
WHEATON, IL 60187

ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
PHONE: (630)-424-5704  
COMPANY: COM-ED LOMBARD  
ACCOUNT NUMBER:

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
5	EACH	GROUNDING EXISTING HANDHOLE FRAME AND COVER
91	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
750	FOOT	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
179	FOOT	OUTDOOR RATED NETWORK CABLE
1	EACH	REMOTE CONTROLLED VIDEO SYSTEM
1	EACH	LAYER II (DATALINK) SWITCH
1	EACH	FULL-ACTUATED CONTROLLER IN EXISTING CABINET
1	EACH	MODIFY EXISTING CONTROLLER CABINET, SPECIAL
1	EACH	WIRELESS ACCESS POINT
1	EACH	DETECTOR BASE STATION
1	EACH	LONG RANGE DIRECTIONAL ANTENNA
8	EACH	WIRELESS DETECTION UNIT
27	EACH	DETECTOR SEALANT PACKAGE
1	EACH	ELECTRIC METER SOCKET



**CABLE PLAN**  
(NOT TO SCALE)

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE NTCIP (LATEST VERSION).

TS SHT NO. 21



USER NAME = dwiktorzak  
DESIGNED - DW  
DRAWN - RG  
PLOT SCALE = 40.0000 ' / in.  
CHECKED - ZH  
PLOT DATE = 8/28/2018  
DATE -

REVISD -  
REVISD -  
REVISD -  
REVISD -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

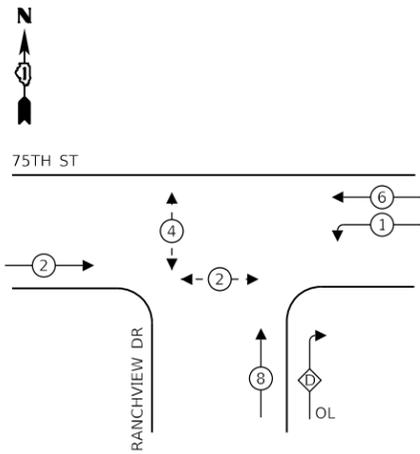
**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES**  
**75TH ST AND WEHRLI RD**

SCALE: NTS SHEET 21 OF 46 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	29
			CONTRACT NO. 61F05	
		ILLINOIS FED. AID PROJECT		

DUDOT

**EXISTING CONTROLLER SEQUENCE**



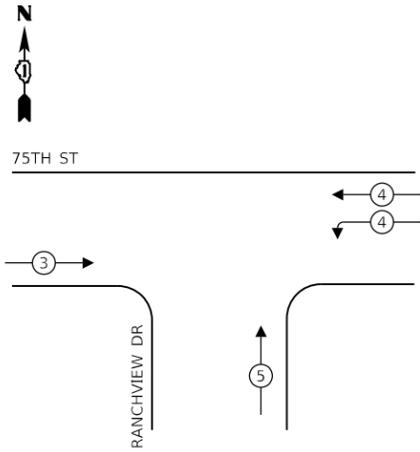
**LEGEND:**

- ← ⊙ → PROTECTED PHASE
- ← ⊙ - PROTECTED/PERMITTED PHASE
- ← ⊙ → PEDESTRIAN PHASE
- ← ⊙ OL OVERLAP

**RIGHT TURN OVERLAP PHASE DESIGNATION:**

$$\frac{\text{OVERLAP LETTER}}{D} = \frac{\text{PERMISSIVE PHASE}}{8} + \frac{\text{PROTECTED PHASE}}{1}$$

**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	11	50	66.0
(YELLOW)	12	20	5	12.0
(GREEN)	12	12	45	64.8
PERMISSIVE ARROW	4	10	10	4.0
PED. SIGNAL	4	20	100	80.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	2	250	50	250.0
PTZ CAMERA	-	75	100	-
<b>TOTAL =</b>				<b>601.8</b>

**REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT**

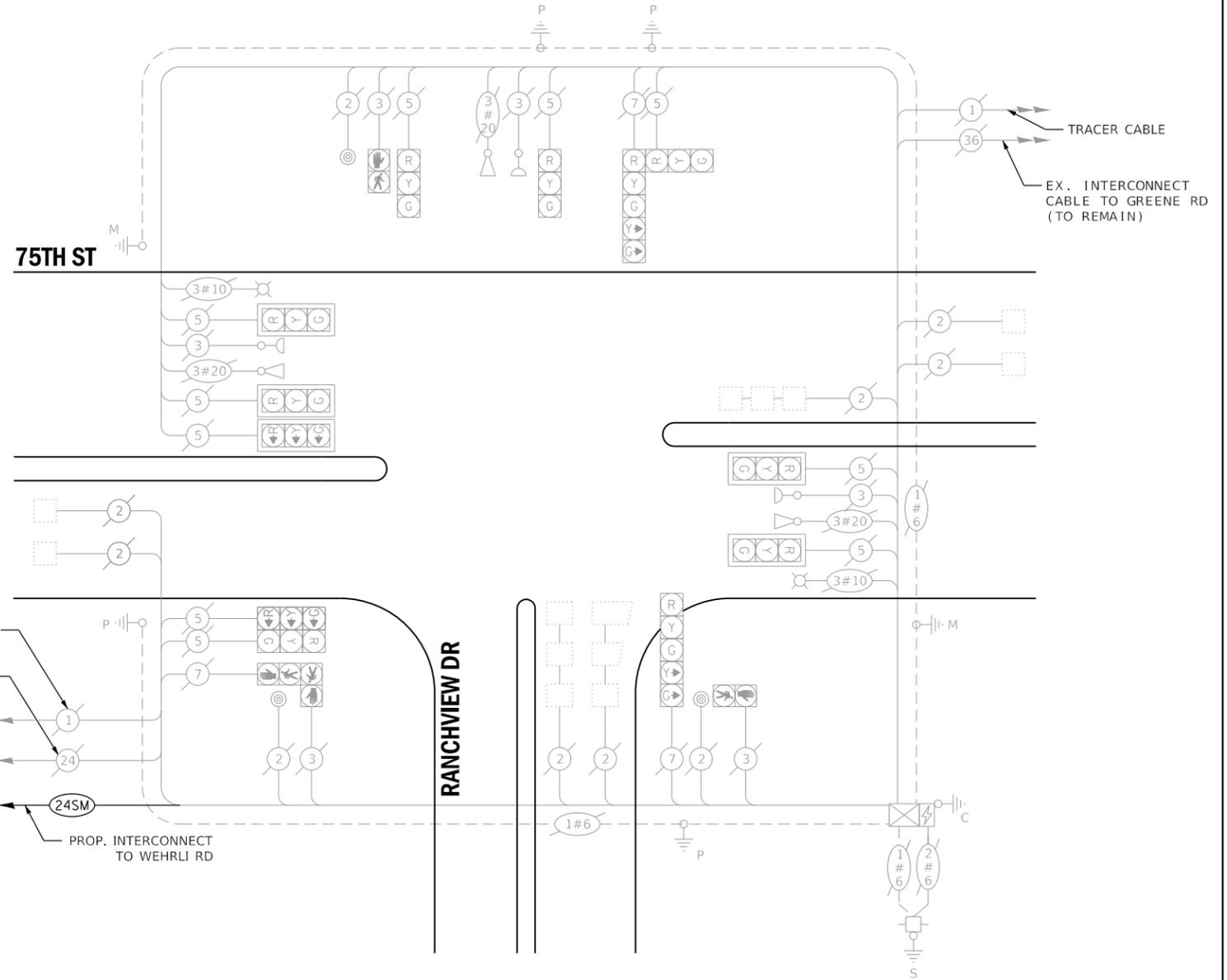
THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: DUPAGE COUNTY DIVISION OF TRANSPORTATION

1 EACH CONTROLLER

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	LAYER II (DATALINK) SWITCH
1	EACH	FULL-ACTUATED CONTROLLER IN EXISTING CABINET
1	EACH	MODIFY EXISTING CONTROLLER CABINET, SPECIAL
1	EACH	ELECTRIC METER SOCKET



**CABLE PLAN**  
(NOT TO SCALE)

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE NTCIP (LATEST VERSION).

TS SHT NO. 22

**DUPAGE COUNTY D.O.T.**

421 N. COUNTY FARM RD.  
WHEATON, IL 60187

ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
PHONE: (630)-424-5704  
COMPANY: COM-ED LOMBARD  
ACCOUNT NUMBER:



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
PLOT SCALE = 40,0000' / in.	DRAWN - RG	REVISED -
PLOT DATE = 8/28/2018	CHECKED - ZH	REVISED -
	DATE -	REVISED -

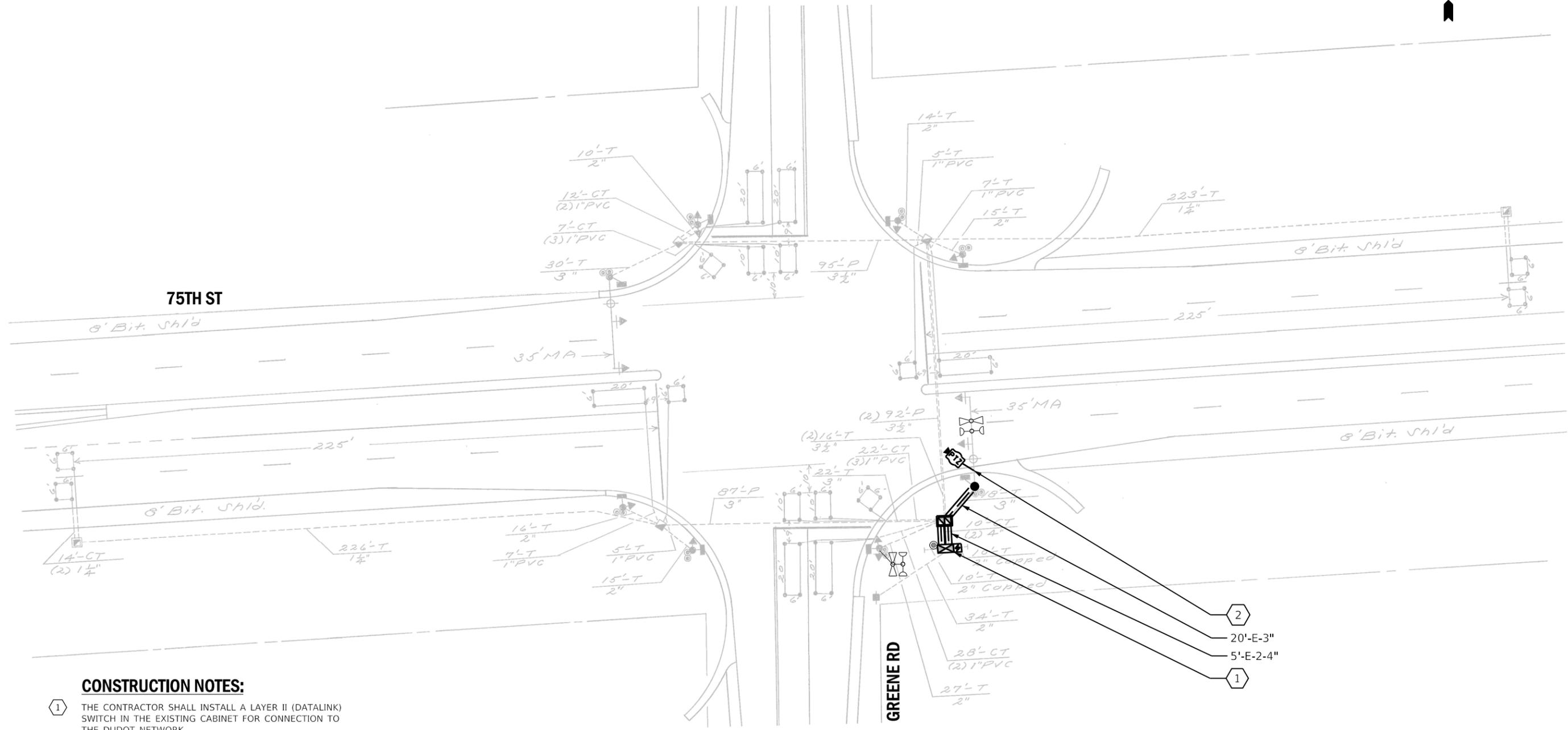
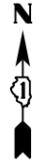
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES**  
75TH ST AND RANCHVIEW DR

SCALE: NTS SHEET 22 OF 46 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	30
			CONTRACT NO.	61F05
ILLINOIS FED. AID PROJECT				

**DUDOT**



**CONSTRUCTION NOTES:**

- 1 THE CONTRACTOR SHALL INSTALL A LAYER II (DATALINK) SWITCH IN THE EXISTING CABINET FOR CONNECTION TO THE DUDOT NETWORK.
- 2 THE CONTRACTOR SHALL INSTALL A REMOTE CONTROLLED VIDEO SYSTEM ON THE EXISTING COMBINATION MAST ARM ASSEMBLY AND POLE.

TS SHT NO. 23

**DUDOT**



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
	DRAWN - RG	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - ZH	REVISED -
PLOT DATE = 8/28/2018	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

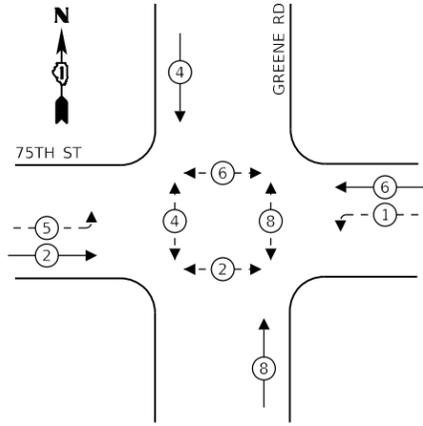
**TRAFFIC SIGNAL MODERNIZATION PLAN  
75TH ST AND GREENE RD**

SCALE: NTS      SHEET 23 OF 46 SHEETS      STA.      TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	31
CONTRACT NO. 61F05			ILLINOIS FED. AID PROJECT	

FILE NAME = p:\IPW1.dzcorp.com\DLZ\Documents\Projects\2017\1782\2130\W02\_Centracs\_Expansion\_1\CADD\_Sheets\Int 6-sht-ts-plan.dgn  
Default

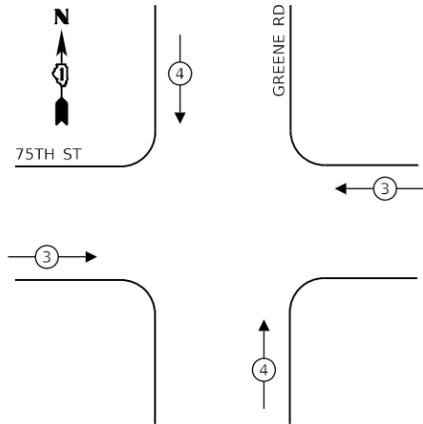
**EXISTING CONTROLLER SEQUENCE**



**LEGEND:**

- ⊙ — PROTECTED PHASE
- ⊙ — PROTECTED/PERMITTED PHASE
- ⊙ — PEDESTRIAN PHASE
- OL — OVERLAP

**EXISTING EMERGENCY VEHICLE  
PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL  
ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	11	50	66.0
(YELLOW)	12	20	5	12.0
(GREEN)	12	12	45	64.8
PERMISSIVE ARROW	8	10	10	8.0
PED. SIGNAL	8	20	100	160.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	2	250	50	250.0
PTZ CAMERA	1	75	100	75.0
<b>TOTAL =</b>				<b>760.8</b>

ENERGY COSTS TO:

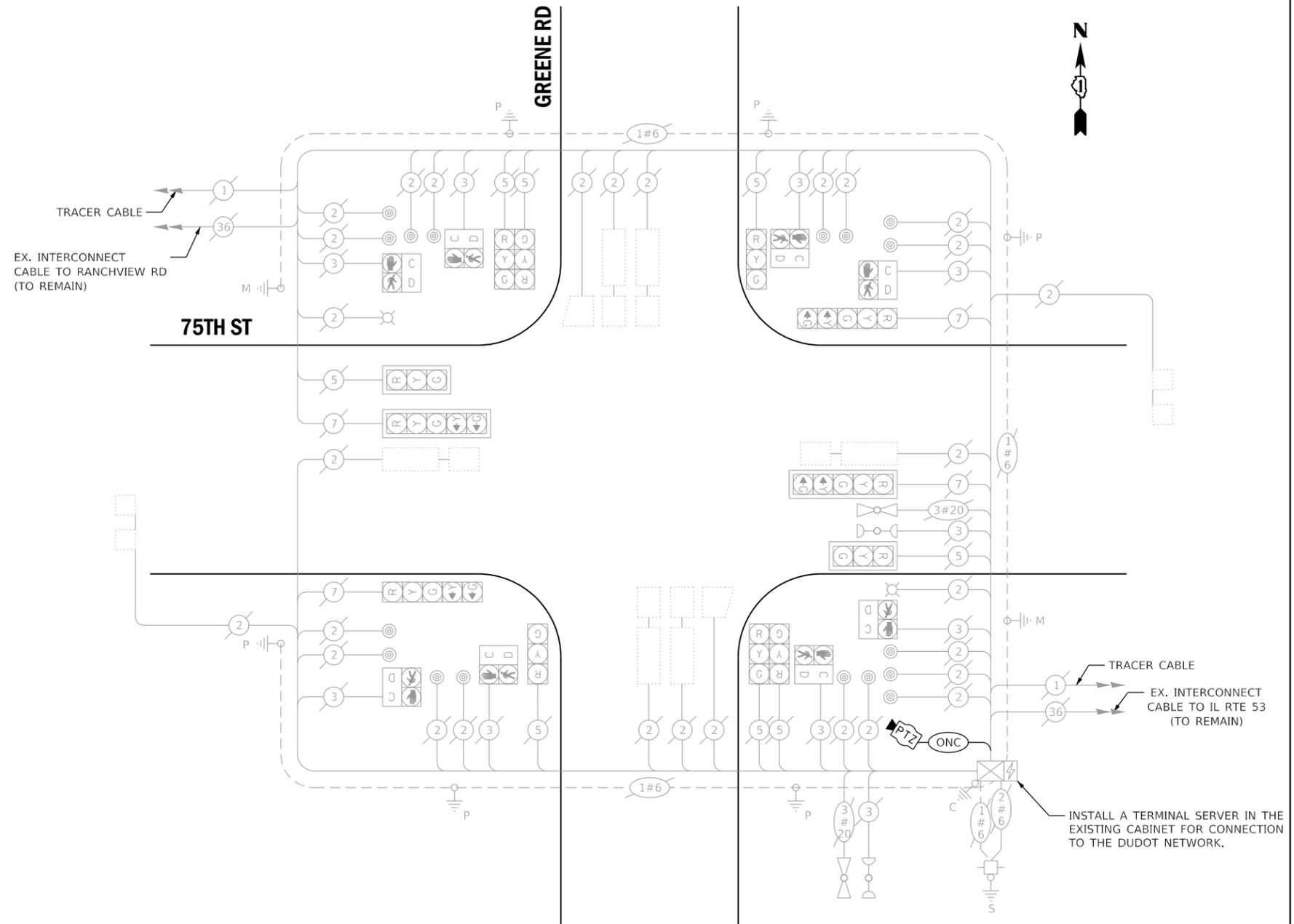
**DUPAGE COUNTY D.O.T.**

421 N. COUNTY FARM RD.  
WHEATON, IL 60187

ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
PHONE: (630)-424-5704  
COMPANY: COM-ED LOMBARD  
ACCOUNT NUMBER:

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
97.5	FOOT	OUTDOOR RATED NETWORK CABLE
1	EACH	REMOTE CONTROLLED VIDEO SYSTEM
1	EACH	LAYER II (DATALINK) SWITCH
1	EACH	MODIFY EXISTING CONTROLLER CABINET, SPECIAL
1	EACH	TERMINAL SERVER
1	EACH	ELECTRIC METER SOCKET



**CABLE PLAN**  
(NOT TO SCALE)

CONNECT TERMINAL SERVER TO EXISTING INTERCONNECT CABLE RUNNING TO IL 53/75TH STREET TO MAINTAIN IDOT CONTROLLERS SERIAL COMMUNICATIONS ON THE DUDOT CENTRACS SYSTEM.

TS SHT NO. 24



USER NAME = dwiktorzak  
DESIGNED - DW  
DRAWN - RG  
PLOT SCALE = 40.0000 ' / in.  
CHECKED - ZH  
PLOT DATE = 8/28/2018  
DATE -

REVISED -  
REVISED -  
REVISED -  
REVISED -

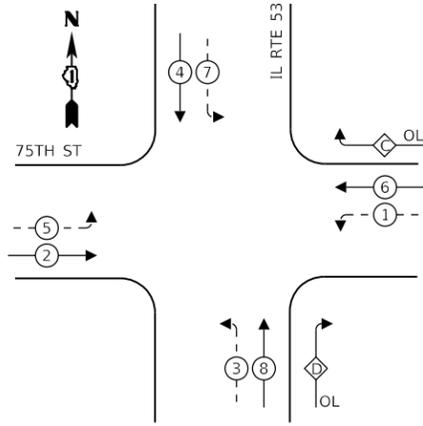
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE  
PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES**  
**75TH ST AND GREENE RD**

SCALE: NTS SHEET 24 OF 46 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	32
			CONTRACT NO. 61F05	
		ILLINOIS FED. AID PROJECT		

**EXISTING CONTROLLER SEQUENCE**



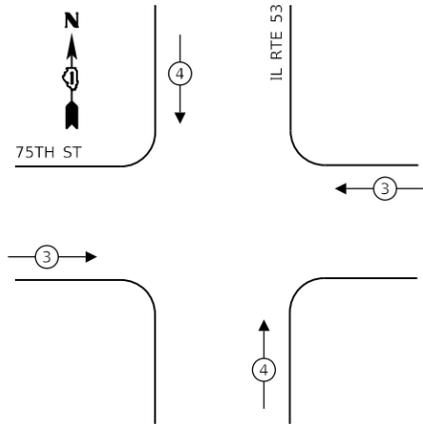
**LEGEND:**

- ← ⊙ → PROTECTED PHASE
- ← ⊙ - PROTECTED/PERMITTED PHASE
- ← ⊙ → PEDESTRIAN PHASE
- ← ⊙ OL OVERLAP

**RIGHT TURN OVERLAP PHASE DESIGNATION:**

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

**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

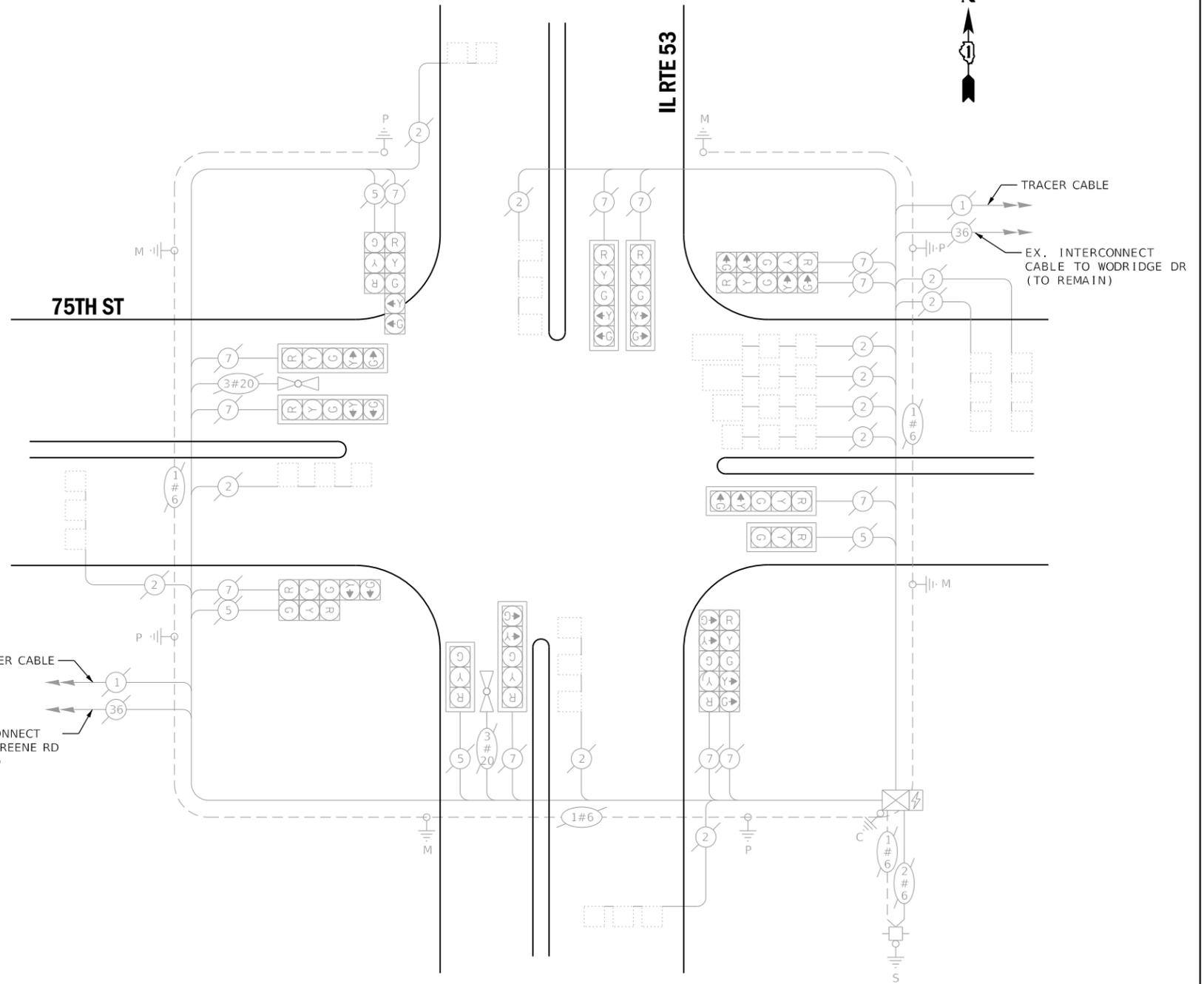
TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16	11	50	88.0
(YELLOW)	16	20	5	16.0
(GREEN)	16	12	45	86.4
PERMISSIVE ARROW	24	10	10	24.0
PED. SIGNAL	-	20	100	-
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	-	-	-
PTZ CAMERA	-	75	100	-
TOTAL =				339.4

ENERGY COSTS TO:

**ILLINOIS DEPARTMENT OF TRANSPORTATION**

DIVISION OF HIGHWAYS/DISTRICT 1  
201 WEST CENTER COURT/ SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY: CONTACT: MR. DAVE SCHACHT  
PHONE: (630)-437-2129  
COMPANY: COMMONWEALTH EDISON  
ACCOUNT NUMBER: \_\_\_\_\_



**CABLE PLAN**  
(NOT TO SCALE)

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION

TS SHT NO. 25



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
PLOT SCALE = 40.0000" / in.	DRAWN - RG	REVISED -
PLOT DATE = 8/28/2018	CHECKED - ZH	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES**  
**75TH ST AND IL RTE 53**

SCALE: NTS SHEET 25 OF 46 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	33
			CONTRACT NO.	61F05
ILLINOIS FED. AID PROJECT				

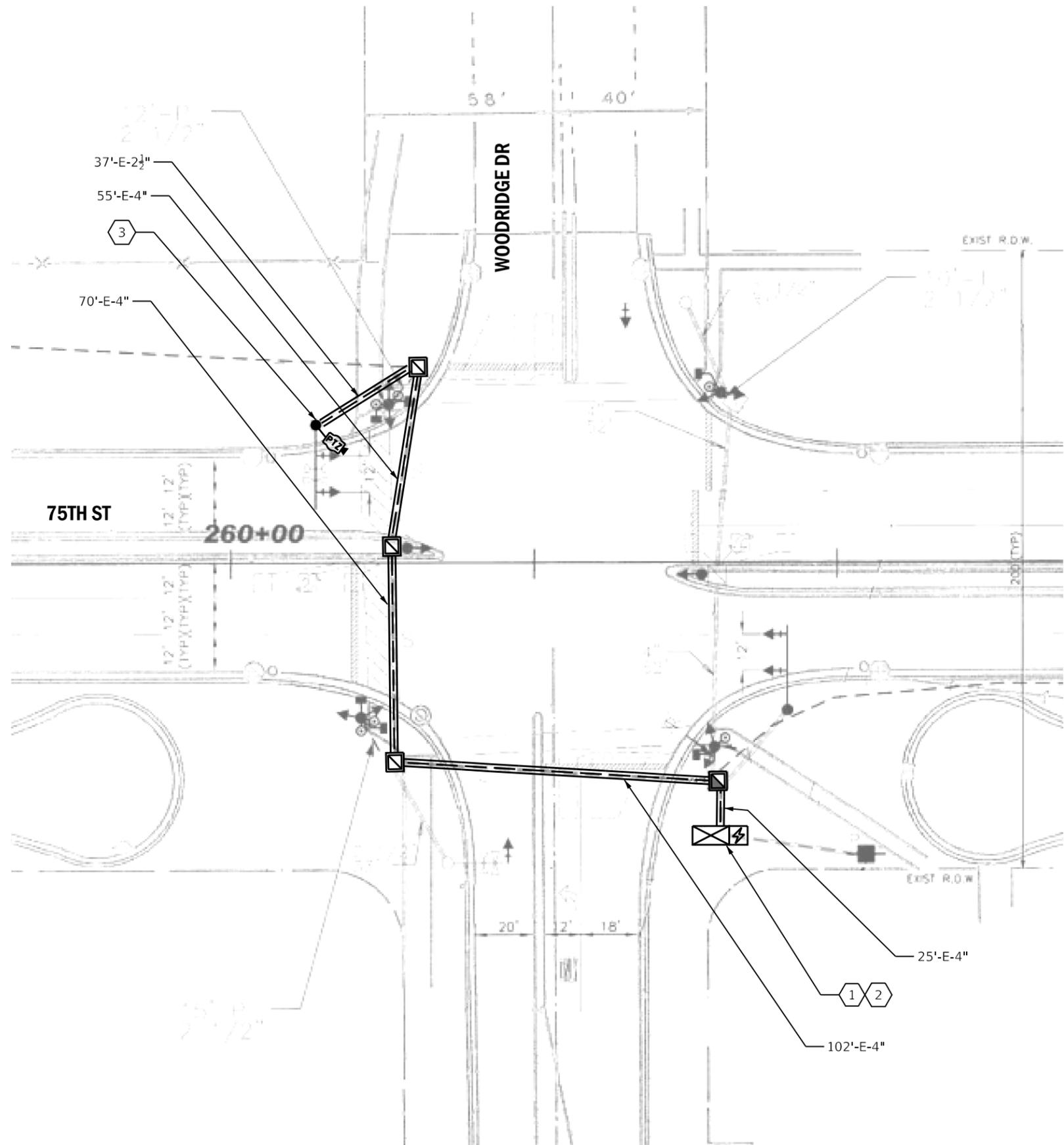
**DUDOT**  
**TS 6220**

**REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT:**

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: DUPAGE COUNTY DIVISION OF TRANSPORTATION

1 EACH CONTROLLER



**CONSTRUCTION NOTES:**

- 1 THE CONTRACTOR SHALL INSTALL A LAYER II (DATALINK) SWITCH IN THE EXISTING CABINET FOR CONNECTION TO THE DUDOT NETWORK.
- 2 THE CONTRACTOR SHALL REMOVE THE EXISTING CONTROLLER AND REPLACE IT WITH A FULL-ACTUATED CONTROLLER IN THE EXISTING CABINET. REINSTALL THE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT.
- 3 THE CONTRACTOR SHALL INSTALL A REMOTE CONTROLLED VIDEO SYSTEM AND A CAMERA MOUNTING ASSEMBLY ON THE EXISTING TRAFFIC SIGNAL MAST ARM ASSEMBLY AND POLE.

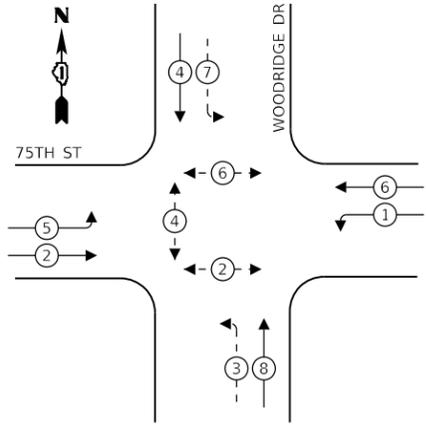
TS SHT NO. 26

**DUDOT**

	USER NAME = dwiktorzak	DESIGNED - DW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODERNIZATION PLAN 75TH ST AND WOODRIDGE DR			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 40,0000' / in.	CHECKED - ZH	REVISED -					VAR.	17-DCCSS-01-TL	DUPAGE	277	34
	PLOT DATE = 8/28/2018	DATE -	REVISED -		SCALE: NTS	SHEET 26	OF 46	SHEETS	STA.	TO STA.	CONTRACT NO. 61F05	
ILLINOIS FED. AID PROJECT												

FILE NAME = p:\IPW1.dzcorp.com\DLZ\Documents\Projects\2017\1782\2130\W02\_Centracs\_Expansion\_1\CADD\_Sheets\Int\_4-sht-ts-plan.dgn  
Default

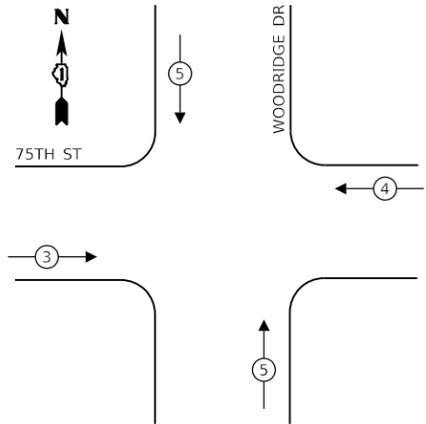
**EXISTING CONTROLLER SEQUENCE**



**LEGEND:**

- ⊙ — PROTECTED PHASE
- ⊖ — PROTECTED/PERMITTED PHASE
- ⊙ — PEDESTRIAN PHASE
- OL — OVERLAP

**EXISTING EMERGENCY VEHICLE  
PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL  
ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16	11	50	88.0
(YELLOW)	16	20	5	16.0
(GREEN)	16	12	45	86.4
PERMISSIVE ARROW	-	10	10	-
PED. SIGNAL	6	20	100	120.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	-	-	-
PTZ CAMERA	1	75	100	75.0
<b>TOTAL =</b>				<b>510.4</b>

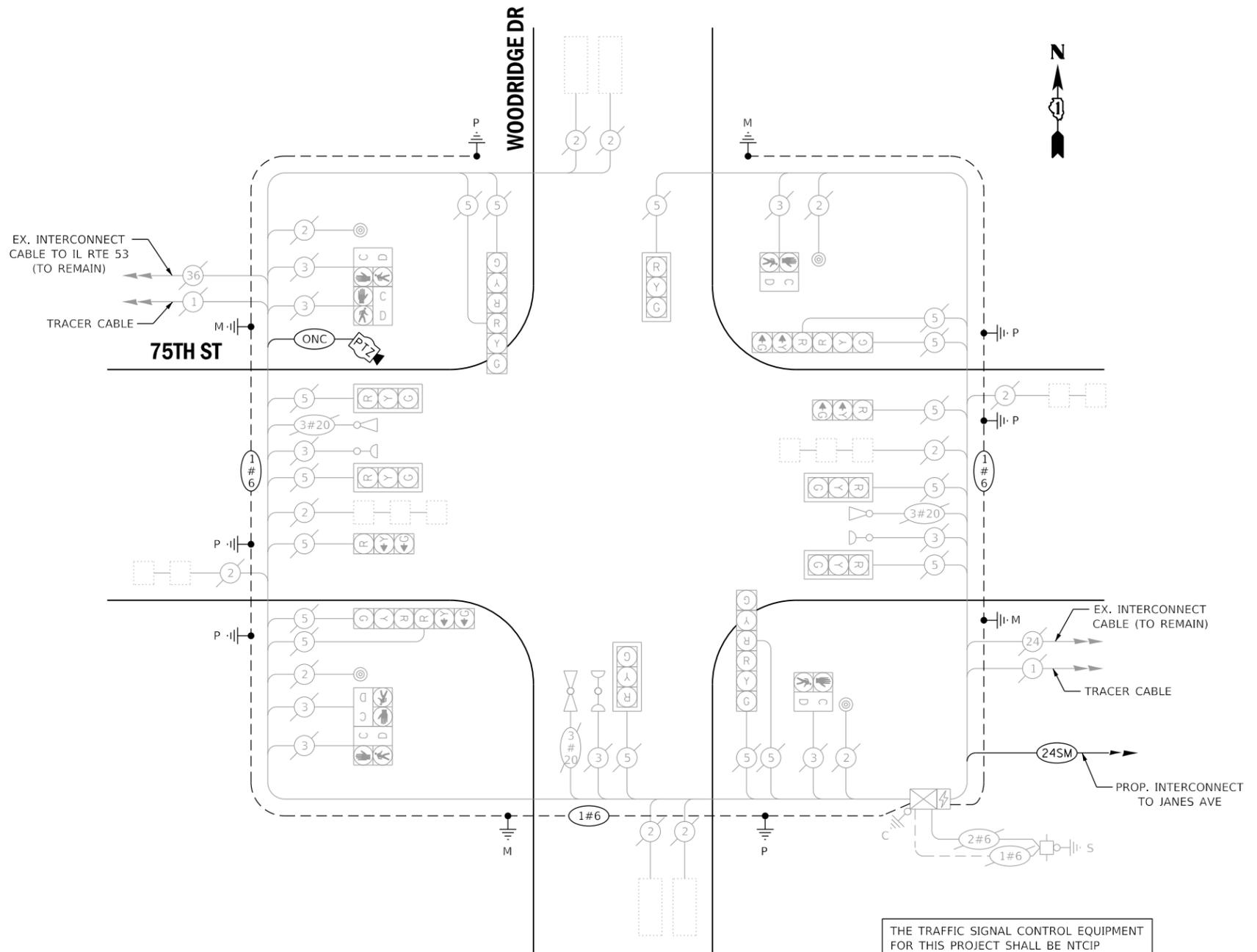
ENERGY COSTS TO:  
**DUPAGE COUNTY D.O.T.**

421 N. COUNTY FARM RD.  
WHEATON, IL 60187

ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
PHONE: (630)-424-5704  
COMPANY: COM-ED LOMBARD  
ACCOUNT NUMBER: \_\_\_\_\_

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
6	EACH	GROUNDING EXISTING HANDHOLE FRAME AND COVER
750	FOOT	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	CAMERA MOUNTING ASSEMBLY
365	FOOT	OUTDOOR RATED NETWORK CABLE
1	EACH	REMOTE CONTROLLED VIDEO SYSTEM
1	EACH	FULL-ACTUATED CONTROLLER IN EXISTING CABINET
1	EACH	MODIFY EXISTING CONTROLLER CABINET, SPECIAL LAYER III (DATALINK) SWITCH
1	EACH	LAYER III (DATALINK) SWITCH
1	EACH	ELECTRIC METER SOCKET



**CABLE PLAN**  
(NOT TO SCALE)

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE NTCIP (LATEST VERSION).

TS SHT NO. 27



USER NAME = dwiktorzak  
DESIGNED - DW  
DRAWN - RG  
PLOT SCALE = 40,0000 ' / in.  
CHECKED - ZH  
PLOT DATE = 8/28/2018  
DATE -

REVISED -  
REVISED -  
REVISED -  
REVISED -

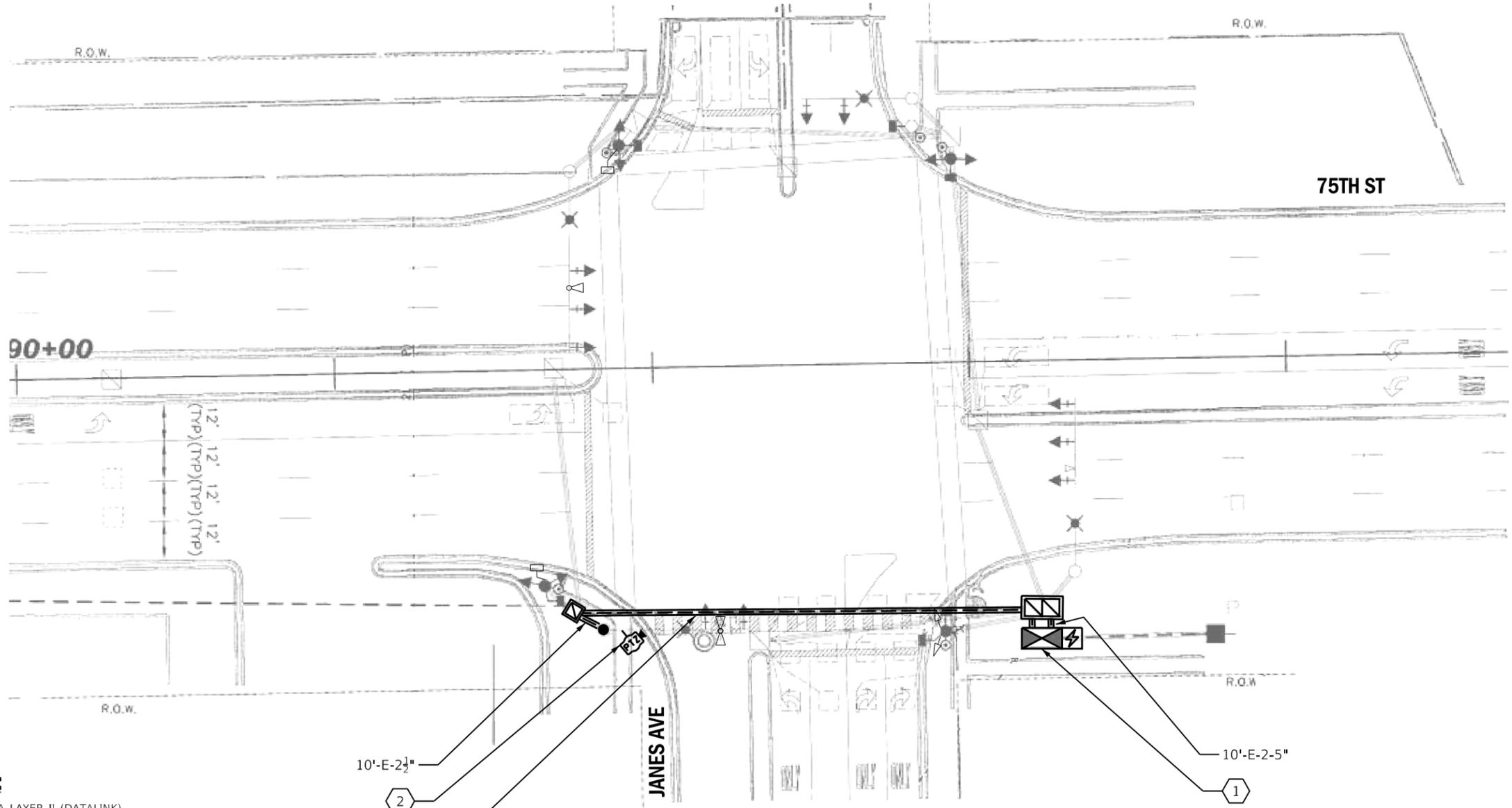
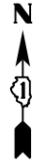
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE  
PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES**  
**75TH ST AND WOODRIDGE DR**

SCALE: NTS SHEET 27 OF 46 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	17-DCCSS-01-TL	DUPAGE	277	35
			CONTRACT NO. 61F05	
ILLINOIS FED. AID PROJECT				

**DUDOT**



**CONSTRUCTION NOTES:**

- ① THE CONTRACTOR SHALL INSTALL A LAYER II (DATALINK) SWITCH IN THE EXISTING CABINET FOR CONNECTION TO THE DUDOT NETWORK.
- ② THE CONTRACTOR SHALL INSTALL A REMOTE CONTROLLED VIDEO SYSTEM ON THE EXISTING COMBINATION MAST ARM ASSEMBLY AND POLE.

10'-E-2 1/2"  
②  
135'-E-3 1/2"

10'-E-2-5"  
①

TS SHT NO. 28

**DUDOT**



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
	DRAWN - RG	REVISED -
PLOT SCALE = 40,0000 ' / in.	CHECKED - ZH	REVISED -
PLOT DATE = 8/28/2018	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

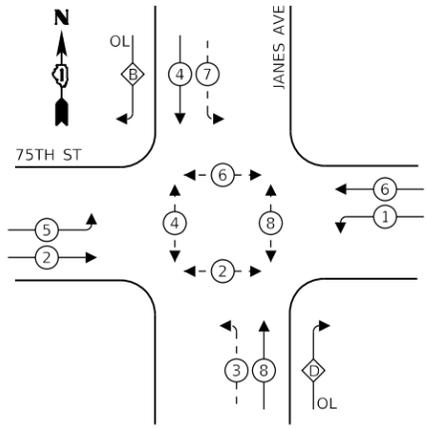
**TRAFFIC SIGNAL MODERNIZATION PLAN  
75TH ST AND JANES AVE**

SCALE: NTS    SHEET 28 OF 46 SHEETS    STA.    TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	36
CONTRACT NO. 61F05			ILLINOIS FED. AID PROJECT	

FILE NAME = p:\IPW1.dzcorp.com\DLZ\Documents\Projects\2017\1782\2130\W02\_Centracs Expansion\_1\CADD\_Sheets\Int\_3-sht-ts-plan.dgn  
Default

**EXISTING CONTROLLER SEQUENCE**



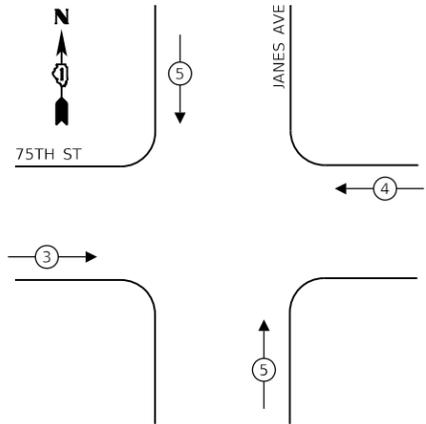
**LEGEND:**

- ← ⊛ → PROTECTED PHASE
- ← - ⊛ - PROTECTED/PERMITTED PHASE
- ← ⊛ → PEDESTRIAN PHASE
- ← ⊛ OL OVERLAP

**RIGHT TURN OVERLAP PHASE DESIGNATION:**

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
B	= 4	+ 5
D	= 8	+ 1

**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

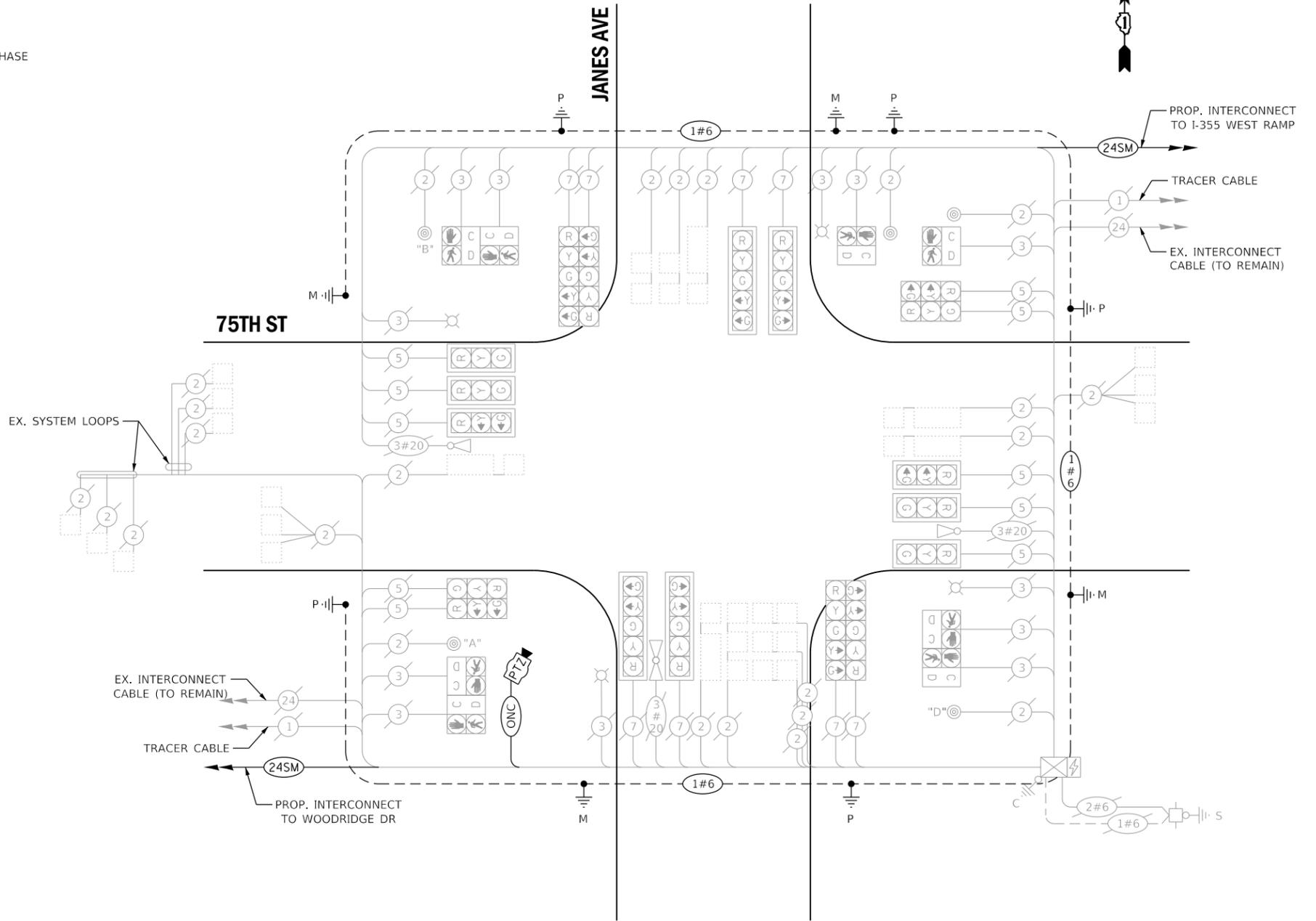
TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	18	11	50	99.0
(YELLOW)	18	20	5	18.0
(GREEN)	18	12	45	97.2
PERMISSIVE ARROW	16	10	10	16.0
PED. SIGNAL	8	20	100	160.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	4	250	50	500.0
PTZ CAMERA	1	75	100	75.0
<b>TOTAL =</b>				<b>1090.2</b>

ENERGY COSTS TO:

**DUPAGE COUNTY D.O.T.**

421 N. COUNTY FARM RD.  
WHEATON, IL 60187

ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
PHONE: (630)-424-5704  
COMPANY: COM-ED LOMBARD  
ACCOUNT NUMBER:



**CABLE PLAN**  
(NOT TO SCALE)

PUSHBUTTON "A" SHALL PLACE CALLS IN PHASES 2 & 4  
PUSHBUTTON "B" SHALL PLACE CALLS IN PHASES 4 & 6  
PUSHBUTTON "D" SHALL PLACE CALLS IN PHASES 2 & 8

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
5	EACH	GROUNDING EXISTING HANDHOLE FRAME AND COVER
750	FOOT	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C
234	FOOT	OUTDOOR RATED NETWORK CABLE
1	EACH	REMOTE CONTROLLED VIDEO SYSTEM
1	EACH	LAYER II (DATALINK) SWITCH
1	EACH	MODIFY EXISTING CONTROLLER CABINET, SPECIAL
1	EACH	ELECTRIC METER SOCKET

TS SHT NO. 29



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
PLOT SCALE = 40.0000 ' / in.	DRAWN - RG	REVISED -
PLOT DATE = 8/28/2018	CHECKED - ZH	REVISED -
	DATE -	REVISED -

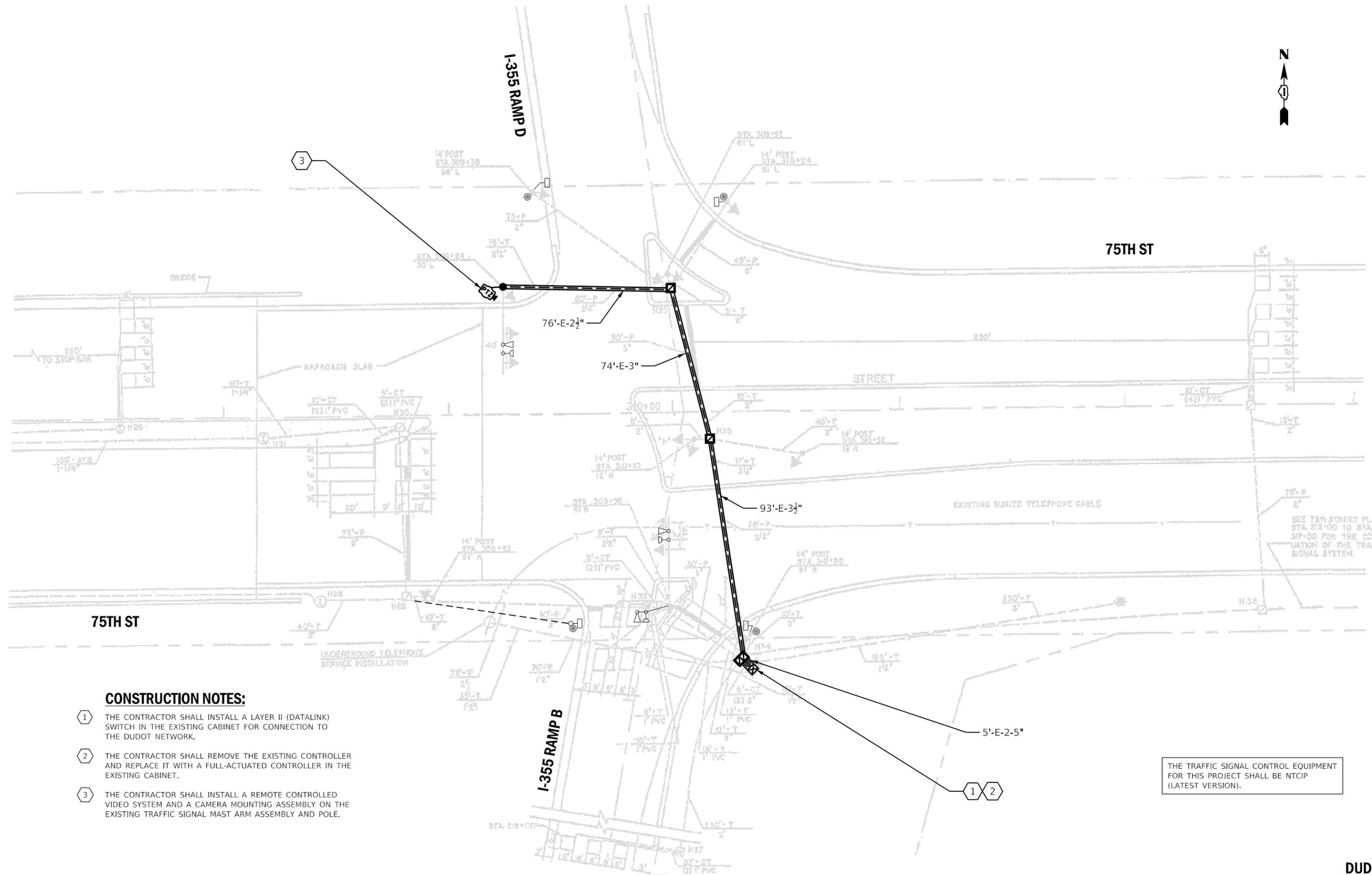
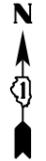
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES**  
**75TH ST AND JANES AVE**

SCALE: NTS SHEET 29 OF 46 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	37
			CONTRACT NO. 61F05	
ILLINOIS FED. AID PROJECT				

**DUDOT**



**CONSTRUCTION NOTES:**

- 1 THE CONTRACTOR SHALL INSTALL A LAYER II (DATALINK) SWITCH IN THE EXISTING CABINET FOR CONNECTION TO THE DUDOT NETWORK.
- 2 THE CONTRACTOR SHALL REMOVE THE EXISTING CONTROLLER AND REPLACE IT WITH A FULL-ACTUATED CONTROLLER IN THE EXISTING CABINET.
- 3 THE CONTRACTOR SHALL INSTALL A REMOTE CONTROLLED VIDEO SYSTEM AND A CAMERA MOUNTING ASSEMBLY ON THE EXISTING TRAFFIC SIGNAL MAST ARM ASSEMBLY AND POLE.

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE NTCIP (LATEST VERSION).

TS SHT NO. 30



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
PLOT SCALE = 40.0000' / in.	DRAWN - RG	REVISED -
PLOT DATE = 8/28/2018	CHECKED - ZH	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODERNIZATION PLAN  
75TH ST AND I-355 (EAST)

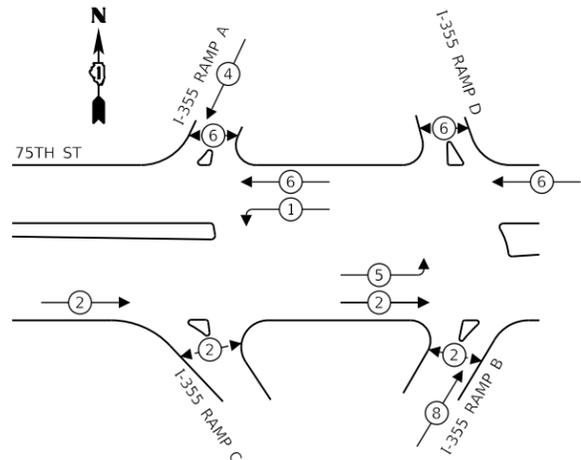
SCALE: NTS SHEET 30 OF 46 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	38
CONTRACT NO. 61F05			ILLINOIS FED. AID PROJECT	

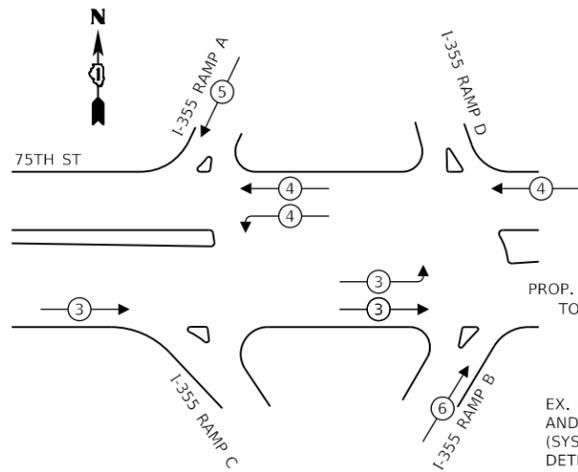
DUDOT

FILE NAME = p:\IPW1.dzcorp.com\DLZ\Documents\Projects\2017\1782\2130\W02\_Centracs Expansion\_1\CADD\_Sheets\1st\_1-sht-ts-plan.dgn  
Default

**EXISTING CONTROLLER SEQUENCE**



**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**LEGEND:**

- ⊙ — PROTECTED PHASE
- ⊙ — PROTECTED/PERMITTED PHASE
- ⊙ — PEDESTRIAN PHASE
- ⊙ — OL — OVERLAP

SEE SHEET 234  
PROP. CONNECTION  
TO ISTHA

EX. INTERSECTION  
AND SAMPLING  
(SYSTEM)  
DETECTORS

EX. INTERCONNECT  
CABLE (TO REMAIN)

TRACER CABLE

PROP. INTERCONNECT  
TO JANES AVE

EX. INTERSECTION  
AND SAMPLING  
(SYSTEM)  
DETECTORS

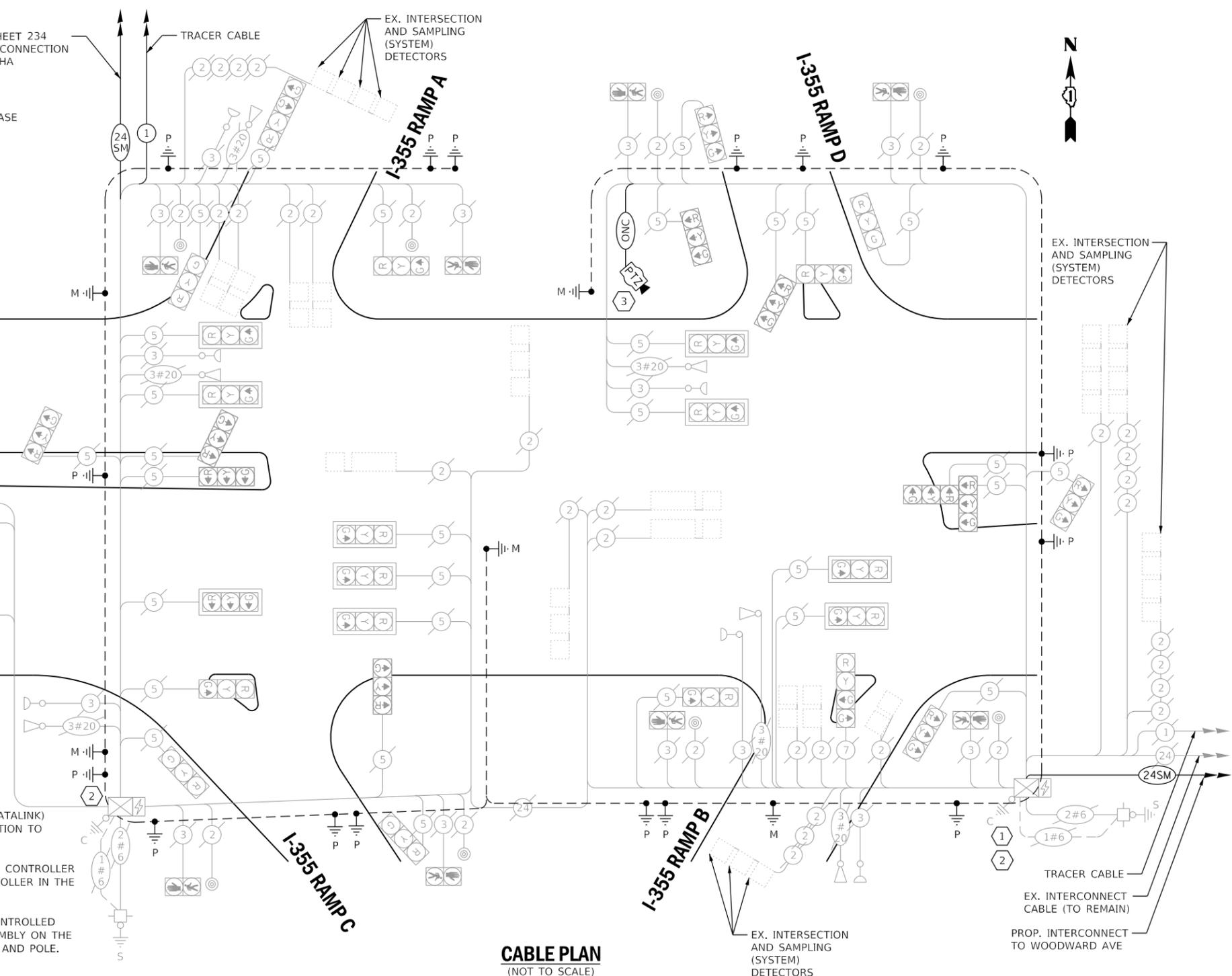
**CONSTRUCTION NOTES:**

- 1 THE CONTRACTOR SHALL INSTALL A LAYER II (DATALINK) SWITCH IN THE EXISTING CABINET FOR CONNECTION TO THE DUDOT NETWORK.
- 2 THE CONTRACTOR SHALL REMOVE THE EXISTING CONTROLLER AND REPLACE IT WITH A FULL-ACTUATED CONTROLLER IN THE EXISTING CABINET.
- 3 THE CONTRACTOR SHALL INSTALL A REMOTE CONTROLLED VIDEO SYSTEM AND A CAMERA MOUNTING ASSEMBLY ON THE EXISTING TRAFFIC SIGNAL MAST ARM ASSEMBLY AND POLE.

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
2	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
11	EACH	GROUNDING EXISTING HANDHOLE FRAME AND COVER
1700	FOOT	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C
2	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	CAMERA MOUNTING ASSEMBLY
324	FOOT	OUTDOOR RATED NETWORK CABLE
1	EACH	REMOTE CONTROLLED VIDEO SYSTEM
2	EACH	LAYER II (DATALINK) SWITCH
2	EACH	FULL-ACTUATED CONTROLLER IN EXISTING CABINET
2	EACH	MODIFY EXISTING CONTROLLER CABINET, SPECIAL
2	EACH	ELECTRIC METER SOCKET

**CABLE PLAN**  
(NOT TO SCALE)



**REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT**

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: DUPAGE COUNTY DIVISION OF TRANSPORTATION

2	EACH	CONTROLLER
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THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE NTCIP (LATEST VERSION).

**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	31	11	50	170.5
(YELLOW)	31	20	5	31.0
(GREEN)	33	12	45	178.2
PERMISSIVE ARROW	-	10	10	-
PED. SIGNAL	8	20	100	160.0
CONTROLLER	2	100	100	200.0
UPS	2	25	100	50.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	-	-	-
PTZ CAMERA	1	75	100	75.0
<b>TOTAL =</b>				<b>864.7</b>

ENERGY COSTS TO:

**DUPAGE COUNTY D.O.T.**

421 N. COUNTY FARM RD.  
WHEATON, IL 60187

ENERGY SUPPLY: CONTACT: MR. JOE STACHO

PHONE: (630)-424-5704

COMPANY: COM-ED LOMBARD

ACCOUNT NUMBER:

TS SHT NO. 31



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
PLOT SCALE = 40,0000' / in.	DRAWN - RG	REVISED -
PLOT DATE = 8/28/2018	CHECKED - ZH	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES**  
**75TH ST AND I-355 EAST AND WEST RAMPS**

SCALE: NTS SHEET 31 OF 46 SHEETS STA. TO STA.

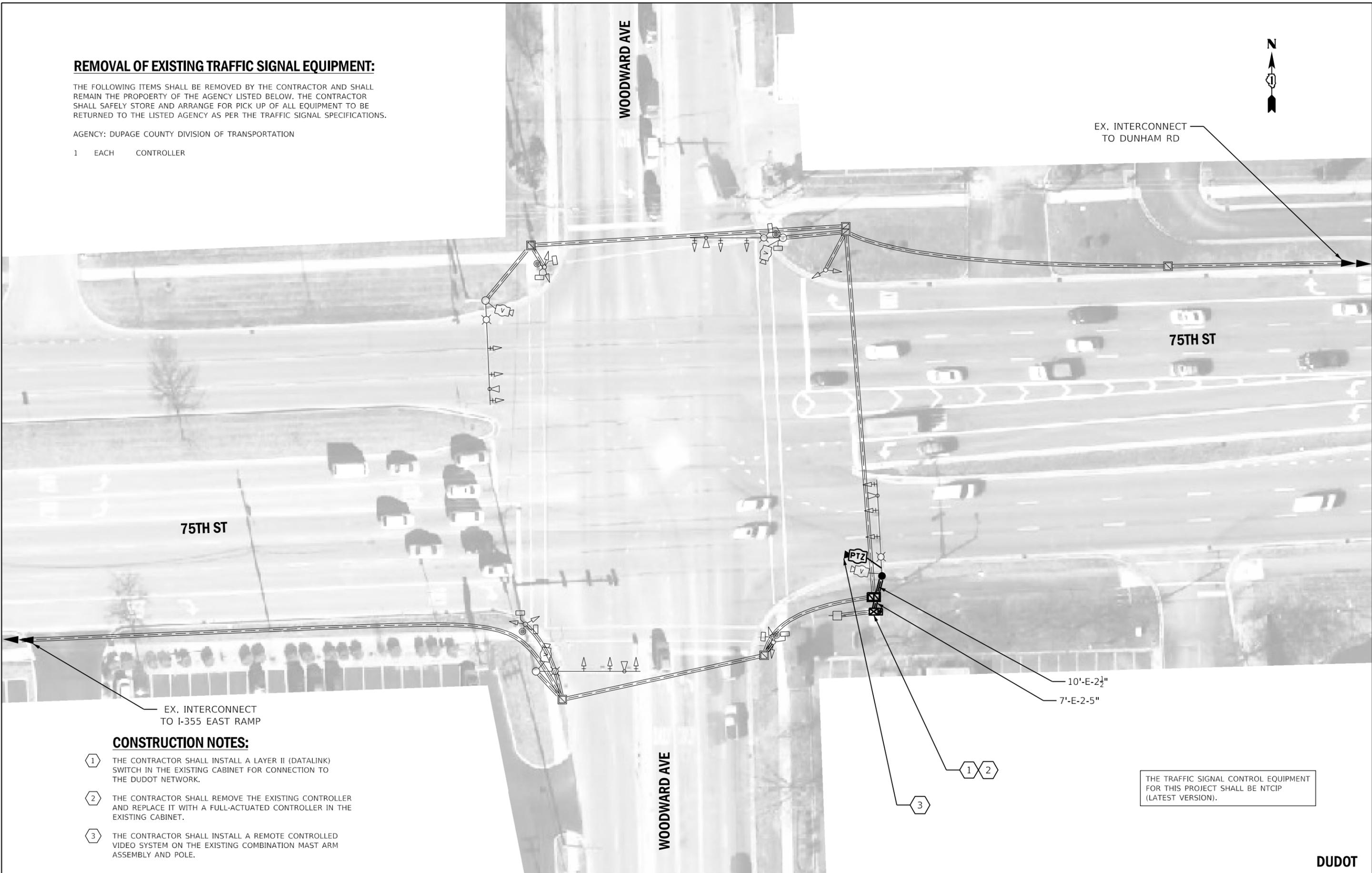
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	39
ILLINOIS			CONTRACT NO. 61F05	
FED. AID PROJECT				

**REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT:**

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: DUPAGE COUNTY DIVISION OF TRANSPORTATION

1 EACH CONTROLLER



**CONSTRUCTION NOTES:**

- 1 THE CONTRACTOR SHALL INSTALL A LAYER II (DATALINK) SWITCH IN THE EXISTING CABINET FOR CONNECTION TO THE DUDOT NETWORK.
- 2 THE CONTRACTOR SHALL REMOVE THE EXISTING CONTROLLER AND REPLACE IT WITH A FULL-ACTUATED CONTROLLER IN THE EXISTING CABINET.
- 3 THE CONTRACTOR SHALL INSTALL A REMOTE CONTROLLED VIDEO SYSTEM ON THE EXISTING COMBINATION MAST ARM ASSEMBLY AND POLE.

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE NTCIP (LATEST VERSION).

TS SHT NO. 32

**DUDOT**



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
	DRAWN - RG	REVISED -
PLOT SCALE = 40,0000 ' / in.	CHECKED - ZH	REVISED -
PLOT DATE = 8/28/2018	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

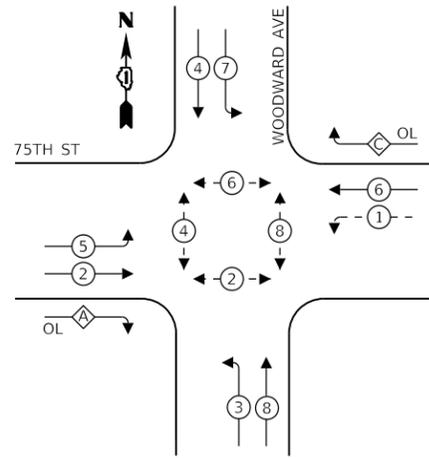
TRAFFIC SIGNAL MODERNIZATION PLAN  
75TH ST AND WOODWARD AVE

SCALE: NTS SHEET 32 OF 46 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	40
CONTRACT NO. 61F05				
ILLINOIS FED. AID PROJECT				

FILE NAME = p:\IPW1.dzcorp.com\DLZ\Documents\Projects\2017\1782\2130\W02\_Centracs Expansion\_1\CADD\_Sheets\Int 20-sht-ts-plan.dgn Default

**EXISTING CONTROLLER SEQUENCE**



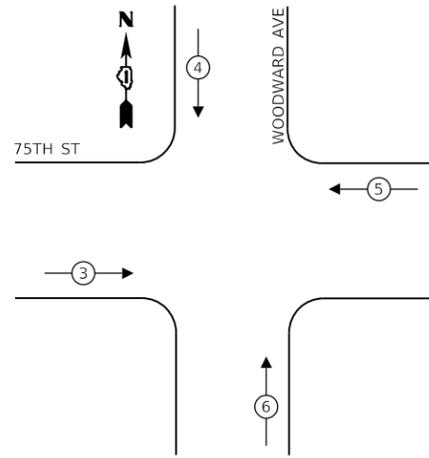
**LEGEND:**

- ⊙ — PROTECTED PHASE
- ⊙ - - PROTECTED/PERMITTED PHASE
- ⊙ — — PEDESTRIAN PHASE
- ⊙ — OL OVERLAP

**RIGHT TURN OVERLAP PHASE DESIGNATION:**

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

**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	20	11	50	110.0
(YELLOW)	20	20	5	20.0
(GREEN)	20	12	45	108.0
PERMISSIVE ARROW	8	10	10	8.0
PED. SIGNAL	8	20	100	160.0
CONTROLLER	1	100	100	100.0
UPS	-	25	100	-
VIDEO SYSTEM	1	150	100	150.0
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	4	250	50	500.0
PTZ CAMERA	1	75	100	75.0
<b>TOTAL =</b>				<b>1231.0</b>

ENERGY COSTS TO:

**DUPAGE COUNTY D.O.T.**

421 N. COUNTY FARM RD.  
WHEATON, IL 60187

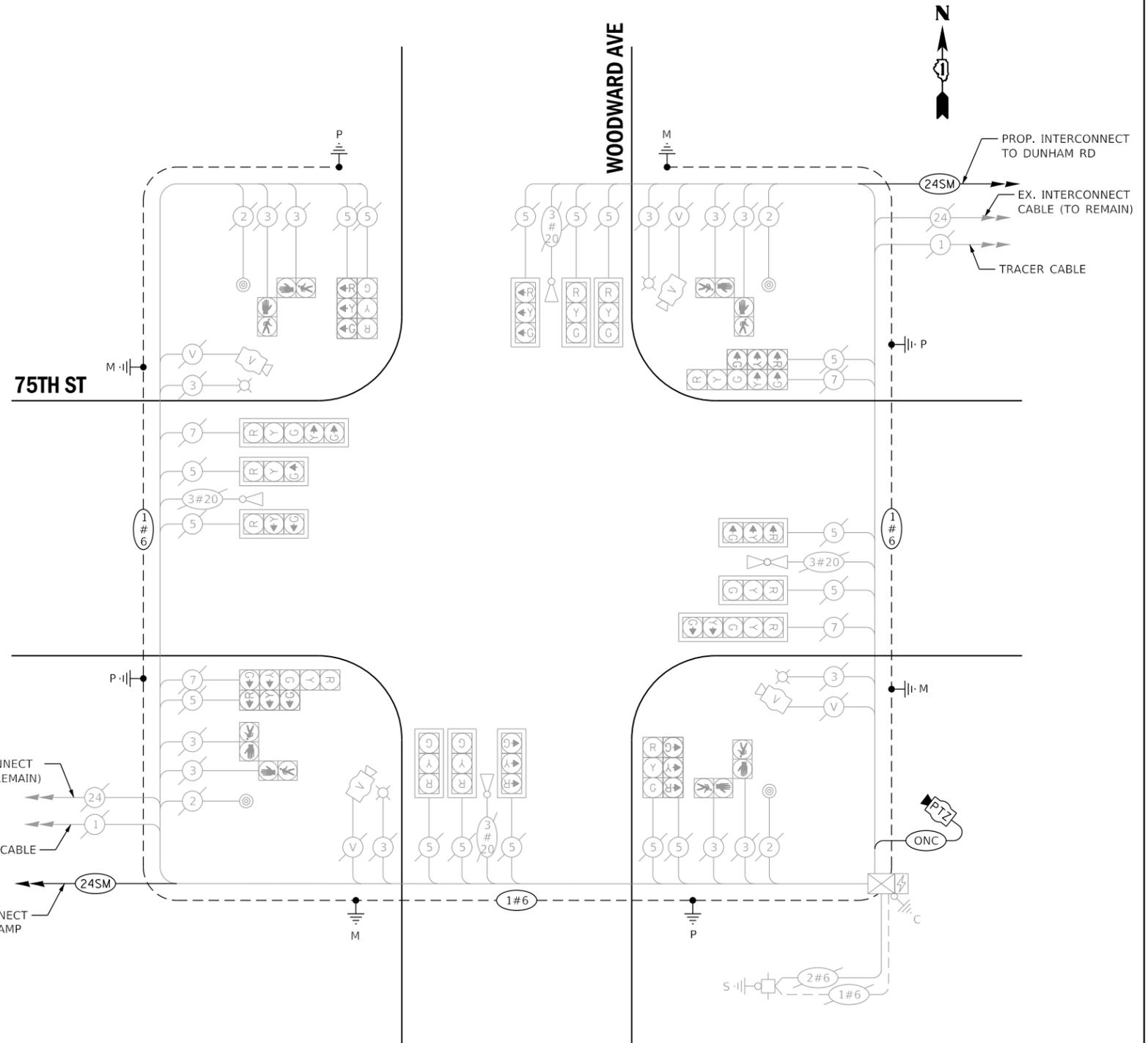
ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
PHONE: (630)-424-5704  
COMPANY: COM-ED LOMBARD  
ACCOUNT NUMBER:

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
5	EACH	GROUNDING EXISTING HANDHOLE FRAME AND COVER
750	FOOT	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
89.5	FOOT	OUTDOOR RATED NETWORK CABLE
1	EACH	REMOTE CONTROLLED VIDEO SYSTEM
1	EACH	LAYER II (DATALINK) SWITCH
1	EACH	FULL-ACTUATED CONTROLLER IN EXISTING CABINET
1	EACH	MODIFY EXISTING CONTROLLER CABINET, SPECIAL
1	EACH	ELECTRIC METER SOCKET

EX. INTERCONNECT CABLE (TO REMAIN)  
TRACER CABLE  
PROP. INTERCONNECT TO I-355 EAST RAMP

**CABLE PLAN**  
(NOT TO SCALE)



THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE NTCIP (LATEST VERSION).

TS SHT NO. 33



USER NAME = dwiktorzak  
DESIGNED - DW  
DRAWN - RG  
PLOT SCALE = 40,0000 ' / in.  
CHECKED - ZH  
PLOT DATE = 8/28/2018  
DATE -

REVISED -  
REVISED -  
REVISED -  
REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

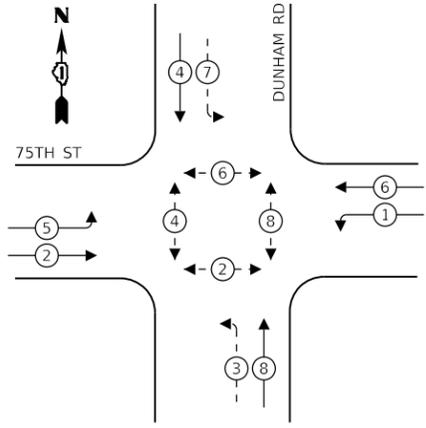
CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE  
PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES  
75TH ST AND WOODWARD AVE

SCALE: NTS SHEET 33 OF 46 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	17-DCCSS-01-TL	DUPAGE	277	41
CONTRACT NO. 61F05			ILLINOIS FED. AID PROJECT	

**DUDOT**

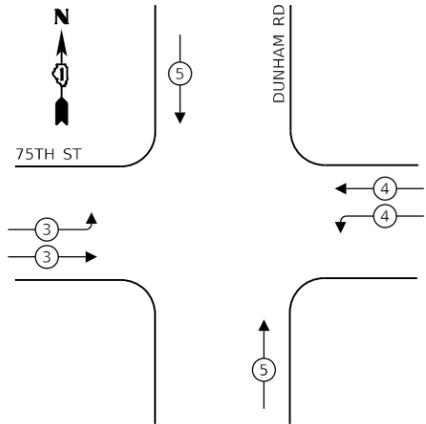
**EXISTING CONTROLLER SEQUENCE**



**LEGEND:**

- ⊙ — PROTECTED PHASE
- ⊙ — PROTECTED/PERMITTED PHASE
- ⊙ — PEDESTRIAN PHASE
- OL — OVERLAP

**EXISTING EMERGENCY VEHICLE  
PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL  
ELECTRICAL SERVICE REQUIREMENTS**

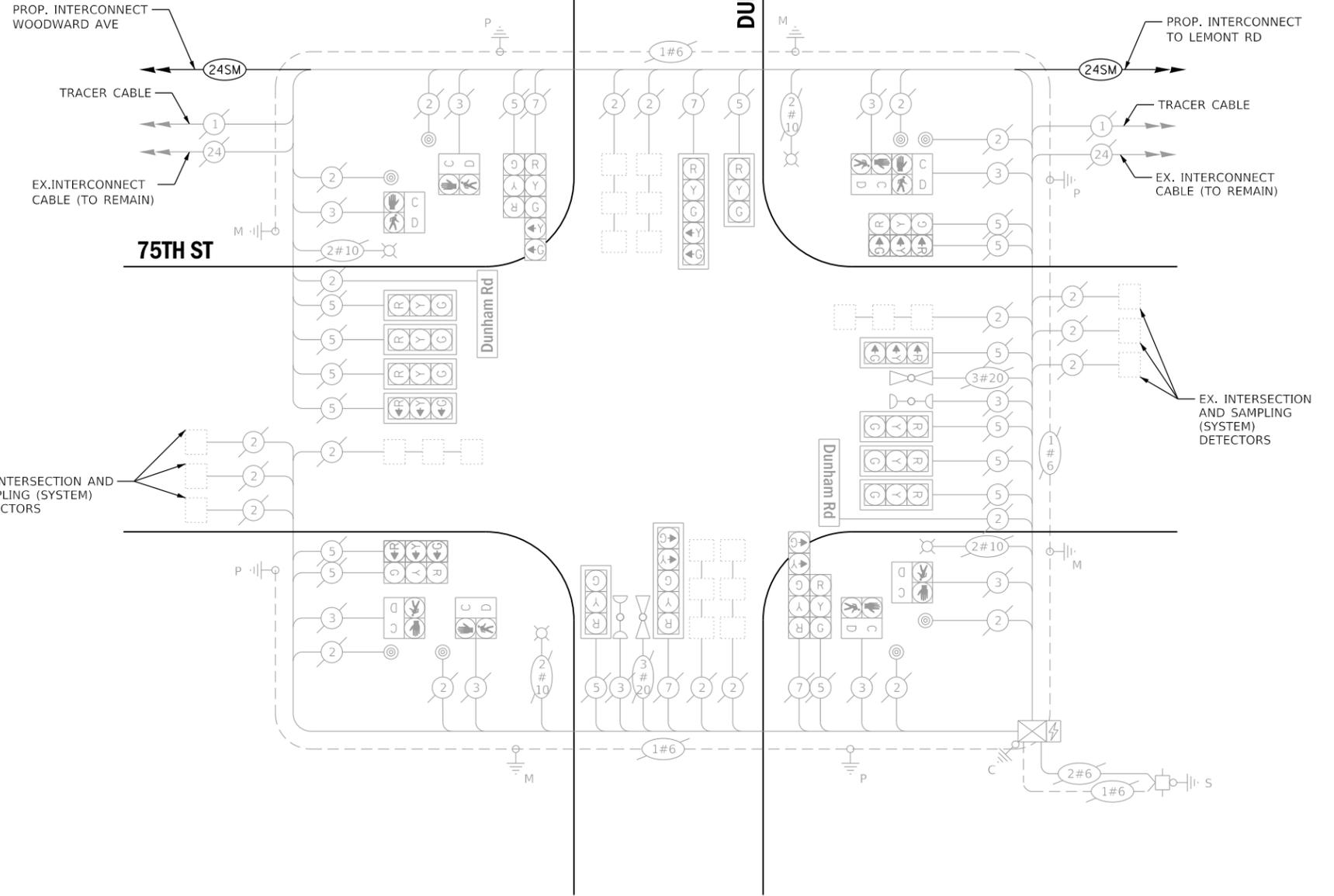
TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	20	11	50	110.0
(YELLOW)	20	20	5	20.0
(GREEN)	20	12	45	108.0
PERMISSIVE ARROW	8	10	10	8.0
PED. SIGNAL	8	20	100	160.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	2	120	50	120.0
LUMINAIRE	4	250	50	500.0
PTZ CAMERA	-	75	100	-
<b>TOTAL =</b>				<b>1151.0</b>

ENERGY COSTS TO:

**DUPAGE COUNTY D.O.T.**

421 N. COUNTY FARM RD.  
WHEATON, IL 60187

ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
PHONE: (630)-424-5704  
COMPANY: COM-ED LOMBARD  
ACCOUNT NUMBER: \_\_\_\_\_



**CABLE PLAN**  
(NOT TO SCALE)

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
1	EACH	LAYER II (DATALINK) SWITCH
1	EACH	MODIFY EXISTING CONTROLLER CABINET, SPECIAL
1	EACH	ELECTRIC METER SOCKET

TS SHT NO. 34



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
PLOT SCALE = 40.0000' / in.	DRAWN - RG	REVISED -
PLOT DATE = 8/28/2018	CHECKED - ZH	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE  
PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES  
75TH ST AND DUNHAM RD**

SCALE: NTS SHEET 34 OF 46 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	42
			CONTRACT NO. 61F05	

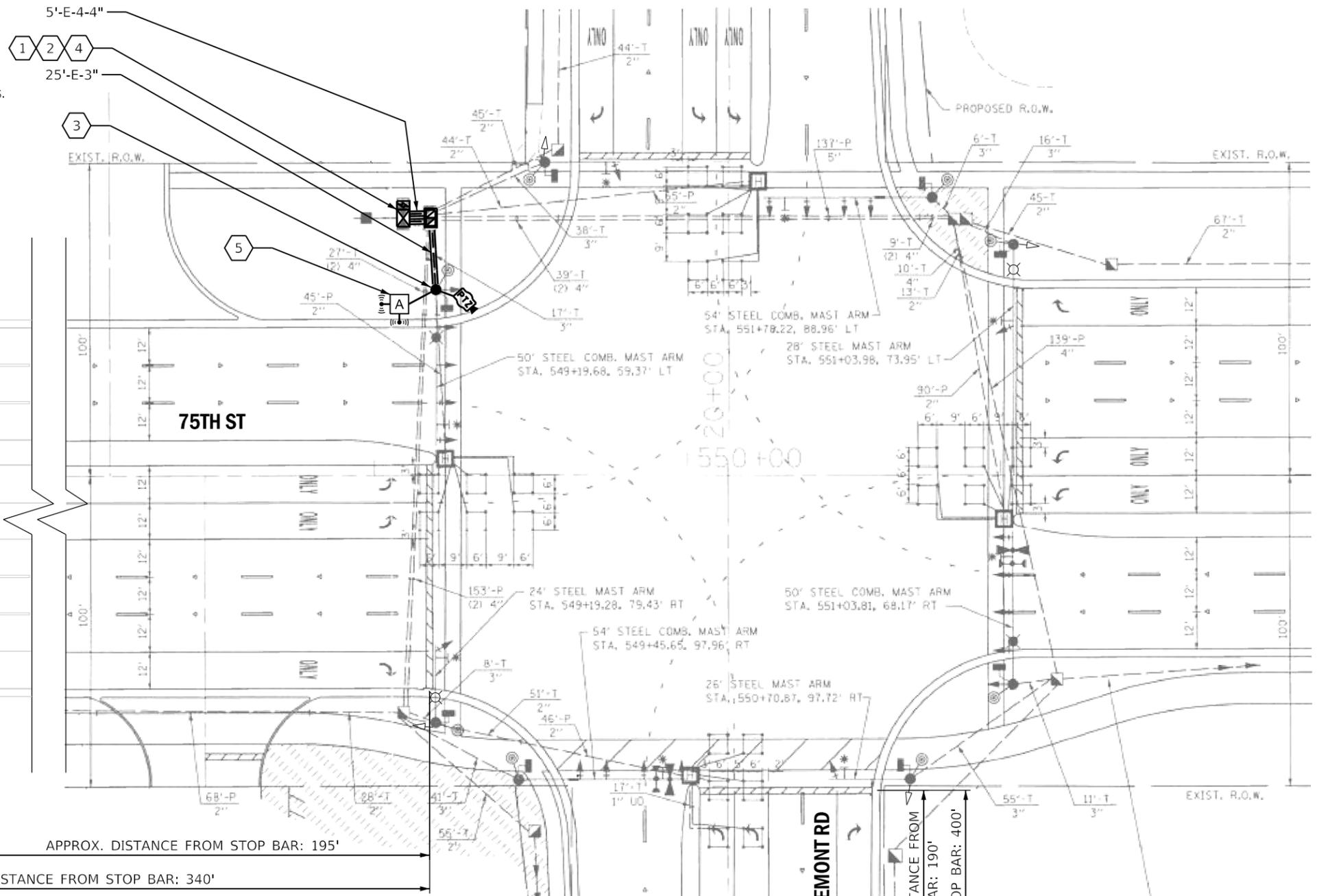
**DUDOT**

**REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT:**

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: DUPAGE COUNTY DIVISION OF TRANSPORTATION

1 EACH MASTER CONTROLLER



**CONSTRUCTION NOTES:**

- 1 THE CONTRACTOR SHALL INSTALL A LAYER III (NETWORK) SWITCH IN THE EXISTING CABINET FOR CONNECTION TO THE DUDOT NETWORK.
- 2 THE CONTRACTOR SHALL REMOVE THE EXISTING MASTER CONTROLLER. THE EQUIPMENT SHALL BE RETURNED TO DUDOT AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.
- 3 THE CONTRACTOR SHALL INSTALL A REMOTE CONTROLLED VIDEO SYSTEM ON THE EXISTING COMBINATION MAST ARM ASSEMBLY AND POLE.
- 4 INSTALL DETECTOR BASE STATION IN EXISTING CONTROLLER CABINET. CONNECT TO EXISTING SWITCH. ALL REQUIRED ETHERNET PATCH CABLES AND JUMPER CABLES SHALL BE INCLUDED IN THE DETECTOR BASE STATION PAY ITEM.
- 5 INSTALL DETECTOR ACCESS POINT ON COMBINATION MAST ARM POLE AT APPROXIMATE HEIGHT OF 40 FEET. INSTALL LONG RANGE DIRECTIONAL ANTENNAS. LONG RANGE DIRECTIONAL ANTENNAS SHALL BE INDIVIDUALLY ORIENTED TOWARD WIRELESS DETECTOR UNITS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. DRILL MAST ARM SHAFT AND ADD DRIP LOOP TO CABLE.
- 6 INSTALL WIRELESS DETECTOR UNIT IN CENTER OF LANE USING INSTALLATION TOOLKIT AND DETECTOR SEALANT PACKAGE.

**LEGEND**

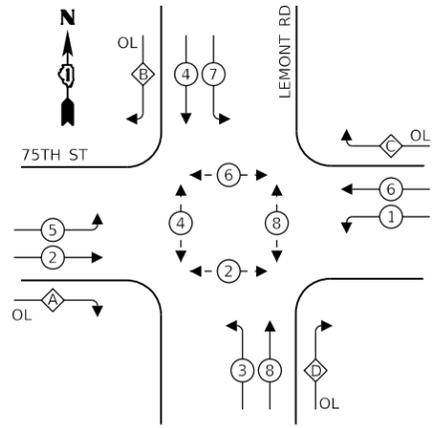
- WIRELESS DETECTION UNIT
- A WIRELESS ACCESS POINT
- (↑) LONG RANGE DIRECTIONAL ANTENNA
- ⊕ OMNI-DIRECTIONAL ANTENNA
- ⊖ COAXIAL CABLE (INCLUDED IN WIRELESS ACCESS POINT)

TS SHT NO. 35

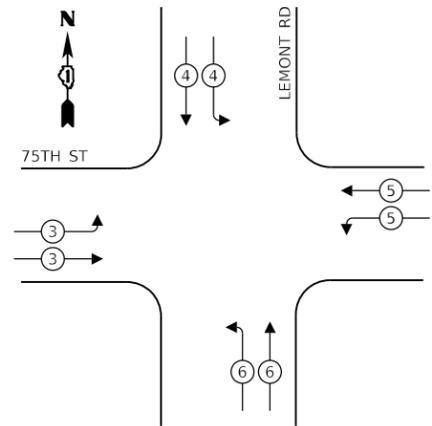
	USER NAME = dwiktorzak	DESIGNED - DW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODERNIZATION PLAN 75TH ST AND LEMONT RD			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 40,0000' / in.	CHECKED - ZH	REVISED -		SCALE: NTS	SHEET 35	OF 46 SHEETS	STA.	TO STA.	17-DCCSS-01-TL	DUPAGE	277
	PLOT DATE = 8/28/2018	DATE -	REVISED -									CONTRACT NO. 61F05
FILE NAME = p:\p1\pw1.dzcorp.com\DLZ\Documents\Projects\2017\1782\2130\W02_Centracs_Expansion_1\CADD_Sheets\Int_22-sht-ts-plan.dgn Default												

**DUDOT**

**EXISTING CONTROLLER SEQUENCE**



**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**LEGEND:**

- ◉ PROTECTED PHASE
- ◉- PROTECTED/PERMITTED PHASE
- ◉- PEDESTRIAN PHASE
- ◉ OL OVERLAP

**RIGHT TURN OVERLAP PHASE DESIGNATION:**

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

**LEGEND**

- WIRELESS DETECTION UNIT
- ◻ A WIRELESS ACCESS POINT
- ⌈⌋ LONG RANGE DIRECTIONAL ANTENNA
- ⌈⌋ OMNI-DIRECTIONAL ANTENNA
- ◉ COAXIAL CABLE (INCLUDED IN WIRELESS ACCESS POINT)

**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	26	11	50	143.0
(YELLOW)	26	20	5	26.0
(GREEN)	26	12	45	140.4
PERMISSIVE ARROW	16	10	10	16.0
PED. SIGNAL	8	20	100	160.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	4	120	50	240.0
LUMINAIRE	4	250	50	500.0
PTZ CAMERA	1	75	100	75.0
<b>TOTAL =</b>				<b>1425.4</b>

ENERGY COSTS TO:

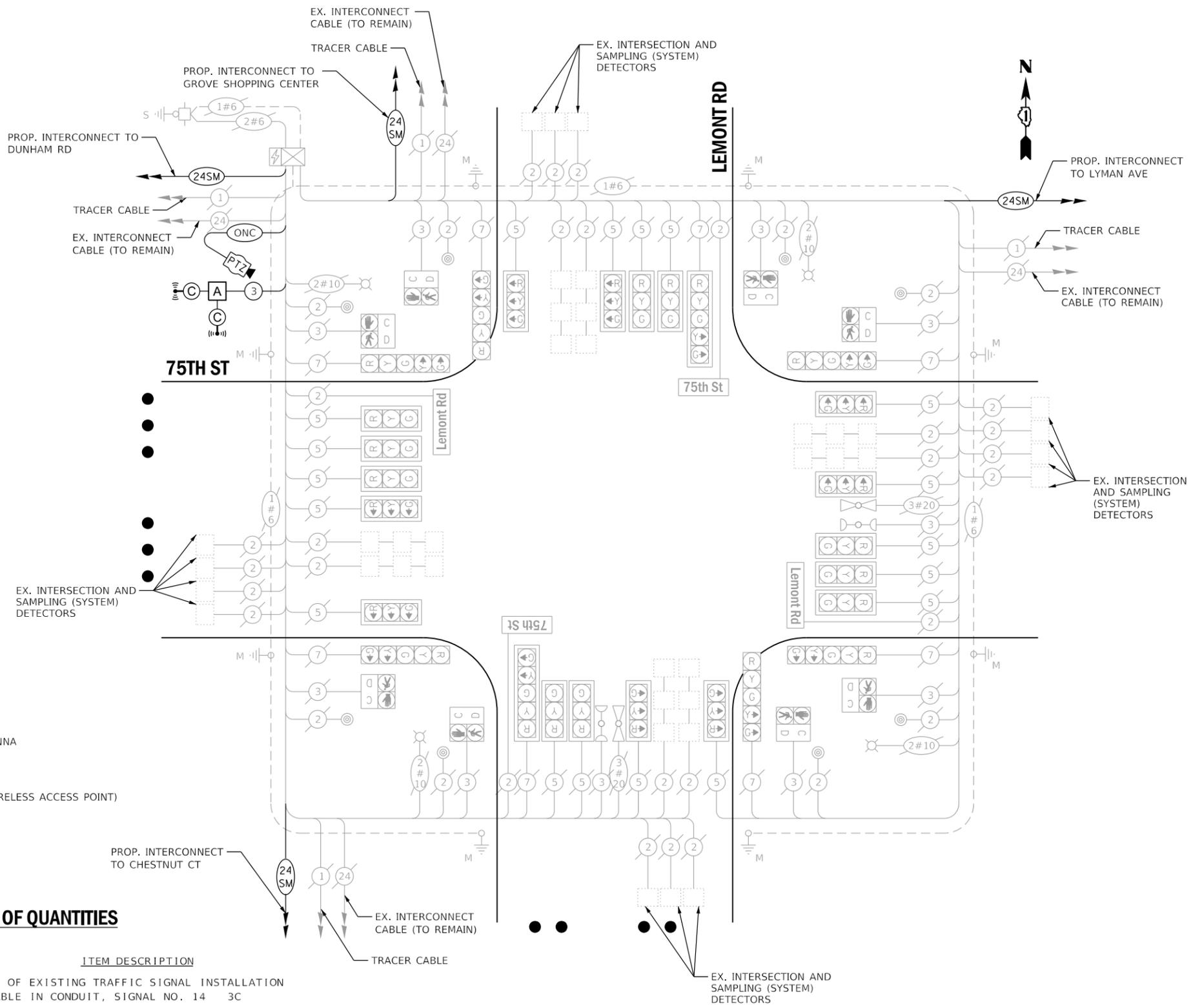
**DUPAGE COUNTY D.O.T.**

421 N. COUNTY FARM RD.  
WHEATON, IL 60187

ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
PHONE: (630)-424-5704  
COMPANY: COM-ED LOMBARD  
ACCOUNT NUMBER:

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
92.5	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
102.5	FOOT	OUTDOOR RATED NETWORK CABLE
1	EACH	REMOTE CONTROLLED VIDEO SYSTEM
1	EACH	MODIFY EXISTING CONTROLLER CABINET, SPECIAL
1	EACH	LAYER III (NETWORK) SWITCH
1	EACH	WIRELESS ACCESS POINT
1	EACH	DETECTOR BASE STATION
1	EACH	LONG RANGE DIRECTIONAL ANTENNA
10	EACH	WIRELESS DETECTION UNIT
33	EACH	DETECTOR SEALANT PACKAGE
1	EACH	ELECTRIC METER SOCKET



**CABLE PLAN**  
(NOT TO SCALE)

TS SHT NO. 36



USER NAME = dwiktorzak  
DESIGNED - DW  
DRAWN - RG  
PLOT SCALE = 40.0000 ' / in.  
CHECKED - ZH  
PLOT DATE = 8/28/2018  
DATE -

REVISED -  
REVISED -  
REVISED -  
REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

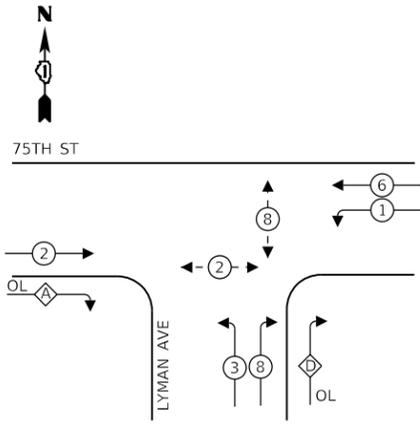
**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES**  
**75TH ST AND LEMONT RD**

SCALE: NTS SHEET 36 OF 46 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	44
CONTRACT NO. 61F05				

**DUDOT**

**EXISTING CONTROLLER SEQUENCE**



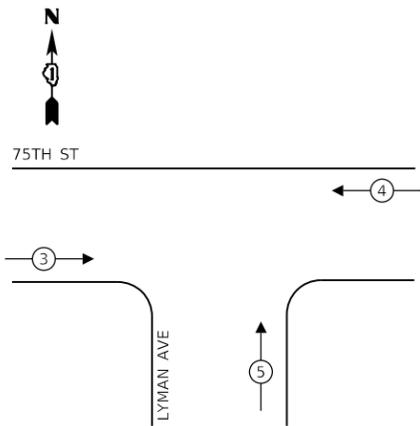
**LEGEND:**

- ⊙ — PROTECTED PHASE
- ⊖ — PROTECTED/PERMITTED PHASE
- ⊙ — PEDESTRIAN PHASE
- ⊙ — OVERLAP

**RIGHT TURN OVERLAP PHASE DESIGNATION:**

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2	+ 3
D	= 8	+ 1

**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	13	11	50	71.5
(YELLOW)	13	20	5	13.0
(GREEN)	13	12	45	70.2
PERMISSIVE ARROW	4	10	10	4.0
PED. SIGNAL	4	20	100	80.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	2	120	50	120.0
LUMINAIRE	2	250	50	250.0
PTZ CAMERA	-	75	100	-
<b>TOTAL =</b>				<b>733.7</b>

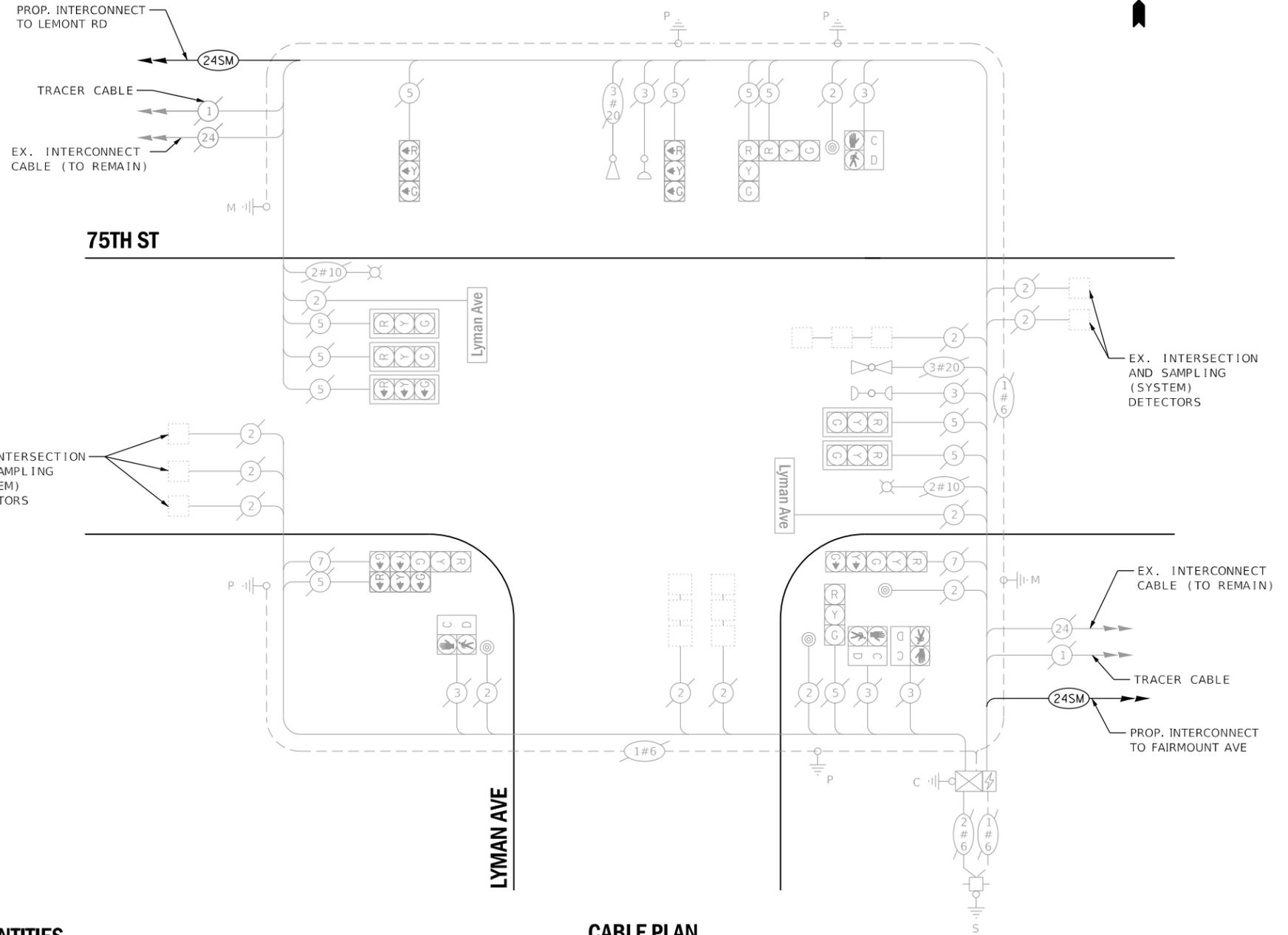
**ENERGY COSTS TO: DUPAGE COUNTY D.O.T.**

421 N. COUNTY FARM RD.  
WHEATON, IL 60187

ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
PHONE: (630)-424-5704  
COMPANY: COM-ED LOMBARD  
ACCOUNT NUMBER:

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
1	EACH	LAYER II (DATALINK) SWITCH
1	EACH	MODIFY EXISTING CONTROLLER CABINET, SPECIAL
1	EACH	ELECTRIC METER SOCKET



**CABLE PLAN (NOT TO SCALE)**

TS SHT NO. 37



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
PLOT SCALE = 40,0000 ' / in.	DRAWN - RG	REVISED -
PLOT DATE = 8/28/2018	CHECKED - ZH	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

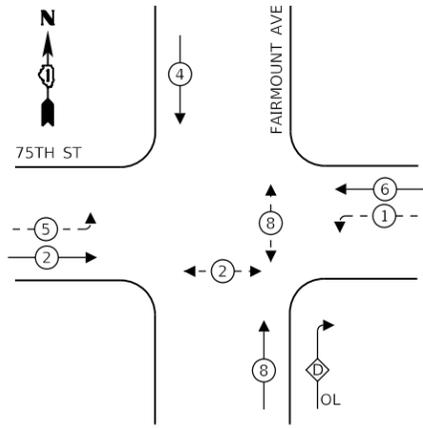
**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES  
75TH ST AND LYMAN AVE**

SCALE: NTS SHEET 37 OF 46 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	45
			CONTRACT NO. 61F05	

**DUDOT**

**EXISTING CONTROLLER SEQUENCE**



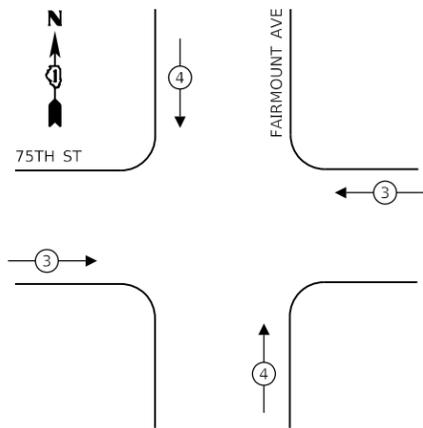
**LEGEND:**

- ← ⊙ → PROTECTED PHASE
- ← ⊙ - - ⊙ → PROTECTED/PERMITTED PHASE
- ← ⊙ ⊙ → PEDESTRIAN PHASE
- ← ⊙ ⊙ OL → OVERLAP

**RIGHT TURN OVERLAP PHASE DESIGNATION:**

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
D	= 8	+ 1

**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	11	50	66.0
(YELLOW)	12	20	5	12.0
(GREEN)	12	12	45	64.8
PERMISSIVE ARROW	12	10	10	12.0
PED. SIGNAL	4	20	100	80.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	2	250	50	250.0
PTZ CAMERA	-	75	100	-
<b>TOTAL =</b>				<b>609.8</b>

**DUPAGE COUNTY D.O.T.**

421 N. COUNTY FARM RD.  
WHEATON, IL 60187

ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
PHONE: (630)-424-5704  
COMPANY: COM-ED LOMBARD  
ACCOUNT NUMBER:

**REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT**

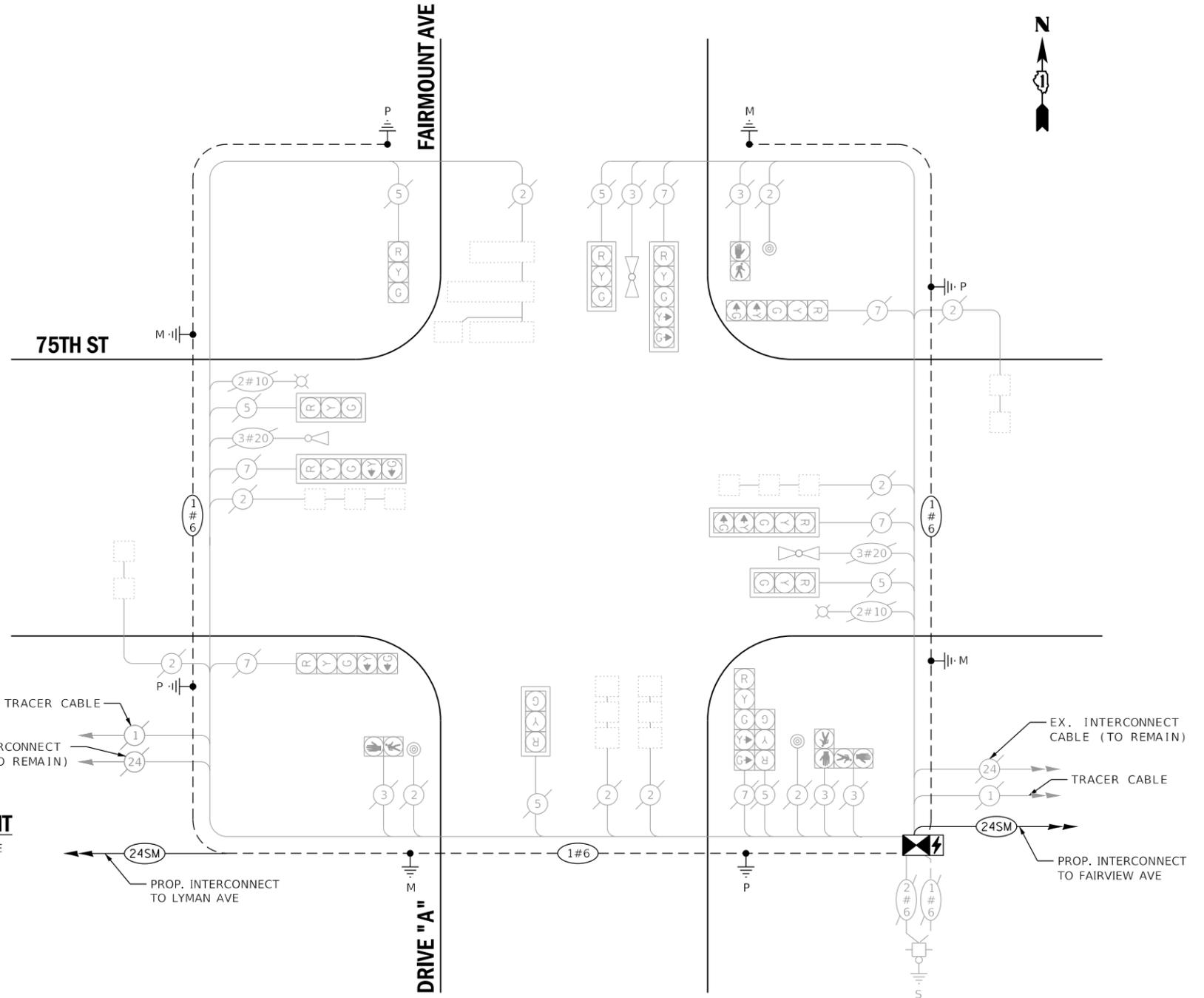
THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: DUPAGE COUNTY DIVISION OF TRANSPORTATION

1	EACH	CONTROLLER AND CABINET (COMPLETE)
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**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
6	EACH	GROUNDING EXISTING HANDHOLE FRAME AND COVER
750	FOOT	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C
7	EACH	INDUCTIVE LOOP DETECTOR
1	EACH	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	LAYER II (DATALINK) SWITCH
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
1	EACH	ELECTRIC METER SOCKET



**CABLE PLAN**  
(NOT TO SCALE)

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE NTCIP (LATEST VERSION).

TS SHT NO. 38



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
PLOT SCALE = 40.0000' / in.	DRAWN - RG	REVISED -
PLOT DATE = 8/28/2018	CHECKED - ZH	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES**  
**75TH ST AND FAIRMOUNT AVE**

SCALE: NTS SHEET 38 OF 46 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	46
			CONTRACT NO. 61F05	
ILLINOIS FED. AID PROJECT				

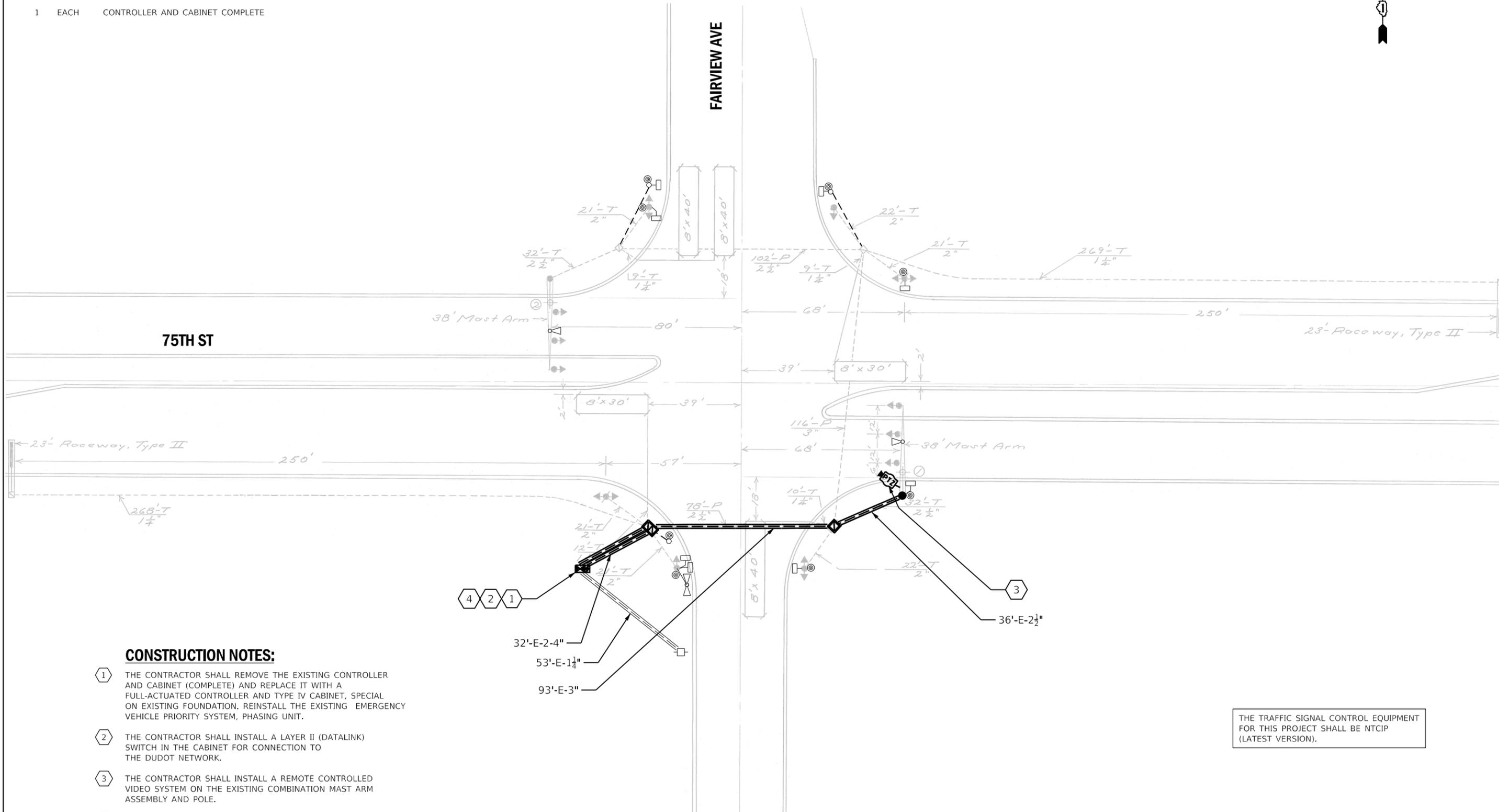
DUDOT

**REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT:**

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: DUPAGE COUNTY DIVISION OF TRANSPORTATION

1 EACH CONTROLLER AND CABINET COMPLETE



**CONSTRUCTION NOTES:**

- ① THE CONTRACTOR SHALL REMOVE THE EXISTING CONTROLLER AND CABINET (COMPLETE) AND REPLACE IT WITH A FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL ON EXISTING FOUNDATION. REINSTALL THE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT.
- ② THE CONTRACTOR SHALL INSTALL A LAYER II (DATALINK) SWITCH IN THE CABINET FOR CONNECTION TO THE DUDOT NETWORK.
- ③ THE CONTRACTOR SHALL INSTALL A REMOTE CONTROLLED VIDEO SYSTEM ON THE EXISTING COMBINATION MAST ARM ASSEMBLY AND POLE.
- ④ THE CONTRACTOR SHALL INSTALL A UPS SYSTEM.

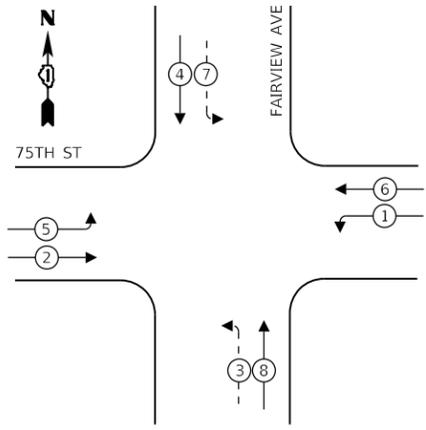
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE NTCIP (LATEST VERSION).

TS SHT NO. 39

**DUDOT**

	USER NAME = dwiktorzak	DESIGNED - DW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODERNIZATION PLAN 75TH ST AND FAIRVIEW AVE			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 40,0000 ' / in.	CHECKED - ZH	REVISED -					VAR.	17-DCCSS-01-TL	DUPAGE	277	47
	PLOT DATE = 8/28/2018	DATE -	REVISED -		SCALE: NTS	SHEET 39	OF 46 SHEETS	STA.	TO STA.	CONTRACT NO. 61F05		
FILE NAME = p:\IPW1.dzcorp.com\DLZ\Documents\Projects\2017\1782\2130\W02_Centracs Expansion_1\CADD_Sheets\Int_25-sht-ts-plan.dgn											ILLINOIS FED. AID PROJECT	

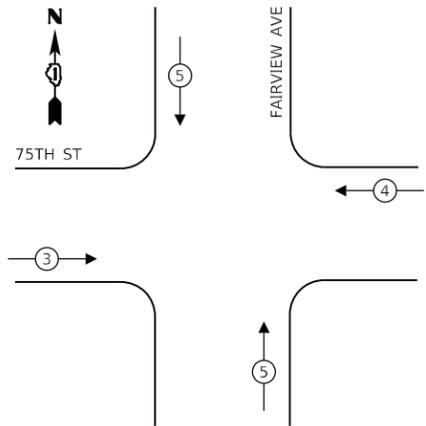
**EXISTING CONTROLLER SEQUENCE**



**LEGEND:**

- ← ⊙ → PROTECTED PHASE
- ← ⊙ - - ⊙ → PROTECTED/PERMITTED PHASE
- ← ⊙ ⊙ → PEDESTRIAN PHASE
- ← ⊙ ⊙ → OL OVERLAP

**EXISTING EMERGENCY VEHICLE  
PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL  
ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16	11	50	88.0
(YELLOW)	16	20	5	16.0
(GREEN)	16	12	45	86.4
PERMISSIVE ARROW	8	10	10	8.0
PED. SIGNAL	8	20	100	160.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	250	50	-
PTZ CAMERA	1	75	100	75.0
TOTAL =				558.4

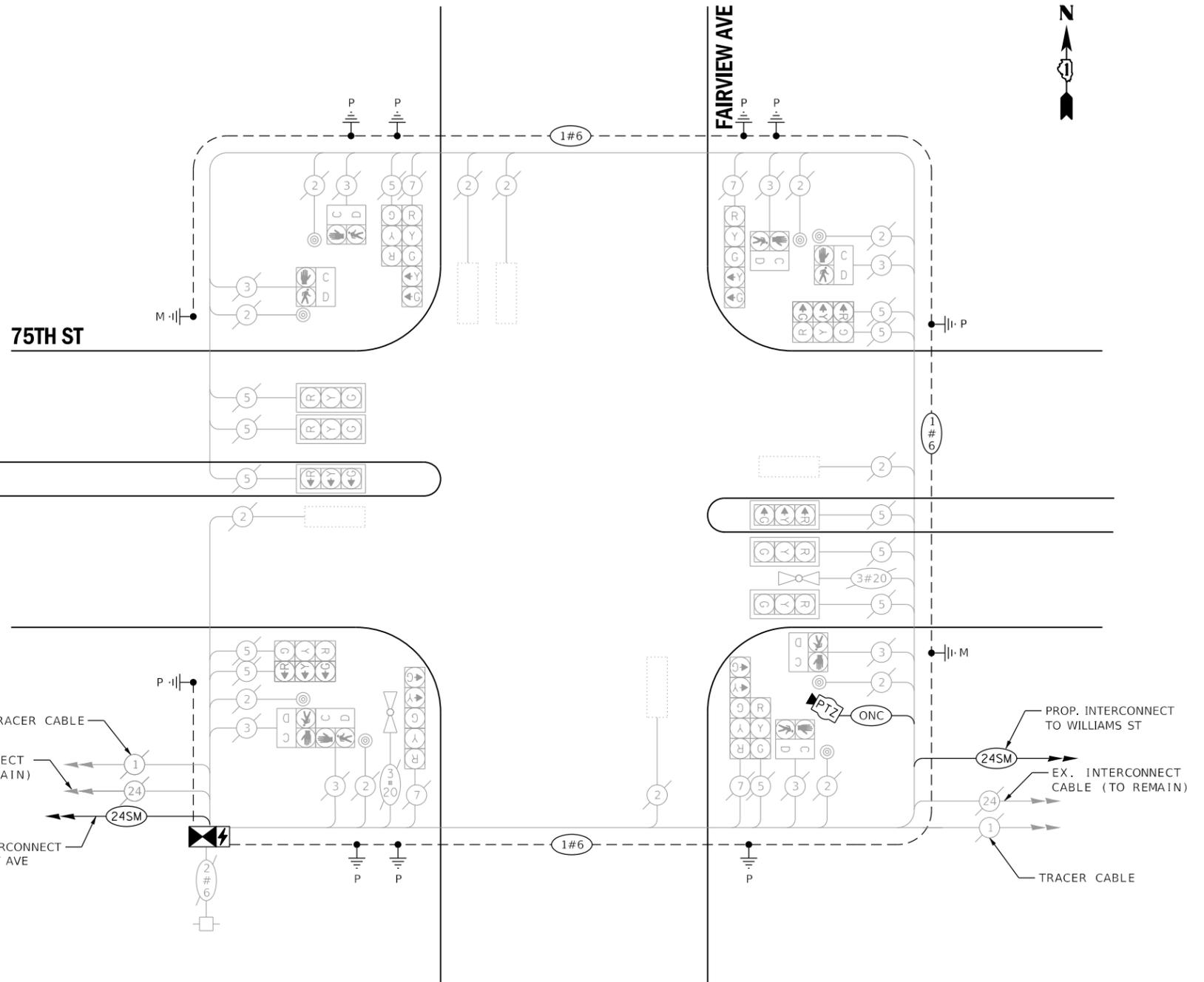
ENERGY COSTS TO:

**DUPAGE COUNTY D.O.T.**

421 N. COUNTY FARM RD.  
WHEATON, IL 60187

ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
PHONE: (630)-424-5704  
COMPANY: COM-ED LOMBARD  
ACCOUNT NUMBER:

TS SHT NO. 40



**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
5	EACH	GROUNDING EXISTING HANDHOLE FRAME AND COVER
750	FOOT	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C
5	EACH	INDUCTIVE LOOP DETECTOR
1	EACH	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
240	FOOT	OUTDOOR RATED NETWORK CABLE
1	EACH	REMOTE CONTROLLED VIDEO SYSTEM
1	EACH	LAYER II (DATALINK) SWITCH
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
1	EACH	ELECTRIC METER SOCKET

**CABLE PLAN  
(NOT TO SCALE)**

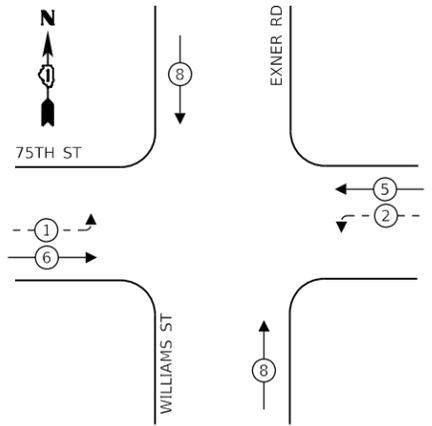
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE NTCIP (LATEST VERSION).

	USER NAME = dwiktorzak	DESIGNED - DW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	<b>CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES</b> 75TH ST AND FAIRVIEW AVE			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 40.0000 ' / in.	CHECKED - ZH	REVISED -		SCALE: NTS	SHEET 40	OF 46	SHEETS	STA.	TO STA.	17-DCCSS-01-TL	DUPAGE
PLOT DATE = 8/28/2018	DATE -	REVISED -									CONTRACT NO. 61F05	
											ILLINOIS FED. AID PROJECT	

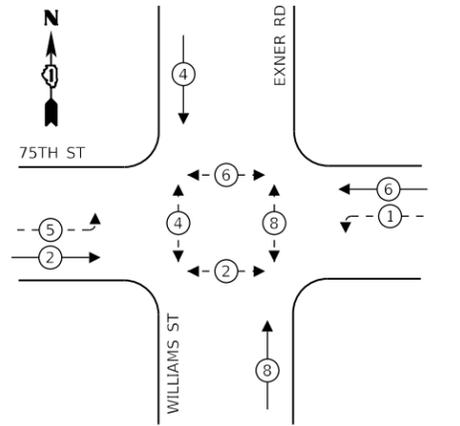
**DUDOT**

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Default

**EXISTING CONTROLLER SEQUENCE**



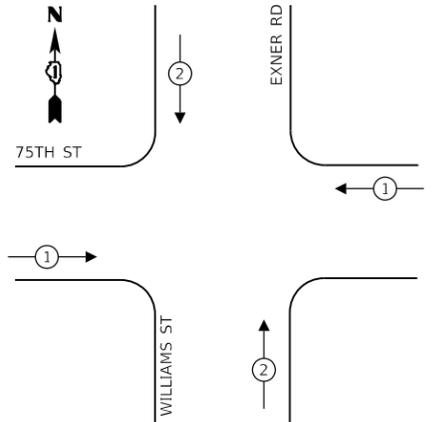
**PROPOSED CONTROLLER SEQUENCE**



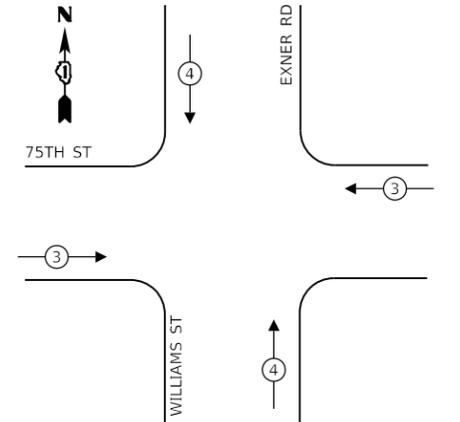
**LEGEND:**

- ⊙\* PROTECTED PHASE
- ⊙\*-- PROTECTED/PERMITTED PHASE
- ⊙\*→ PEDESTRIAN PHASE
- ⊙ OL OVERLAP

**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	11	50	66.0
(YELLOW)	12	20	5	12.0
(GREEN)	12	12	45	64.8
PERMISSIVE ARROW	8	10	10	8.0
PED. SIGNAL	8	20	100	160.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	2	250	50	250.0
PTZ CAMERA	-	75	100	-
<b>TOTAL =</b>				<b>685.8</b>

**REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT**

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: DUPAGE COUNTY DIVISION OF TRANSPORTATION

- 1 EACH CONTROLLER AND CABINET (COMPLETE)

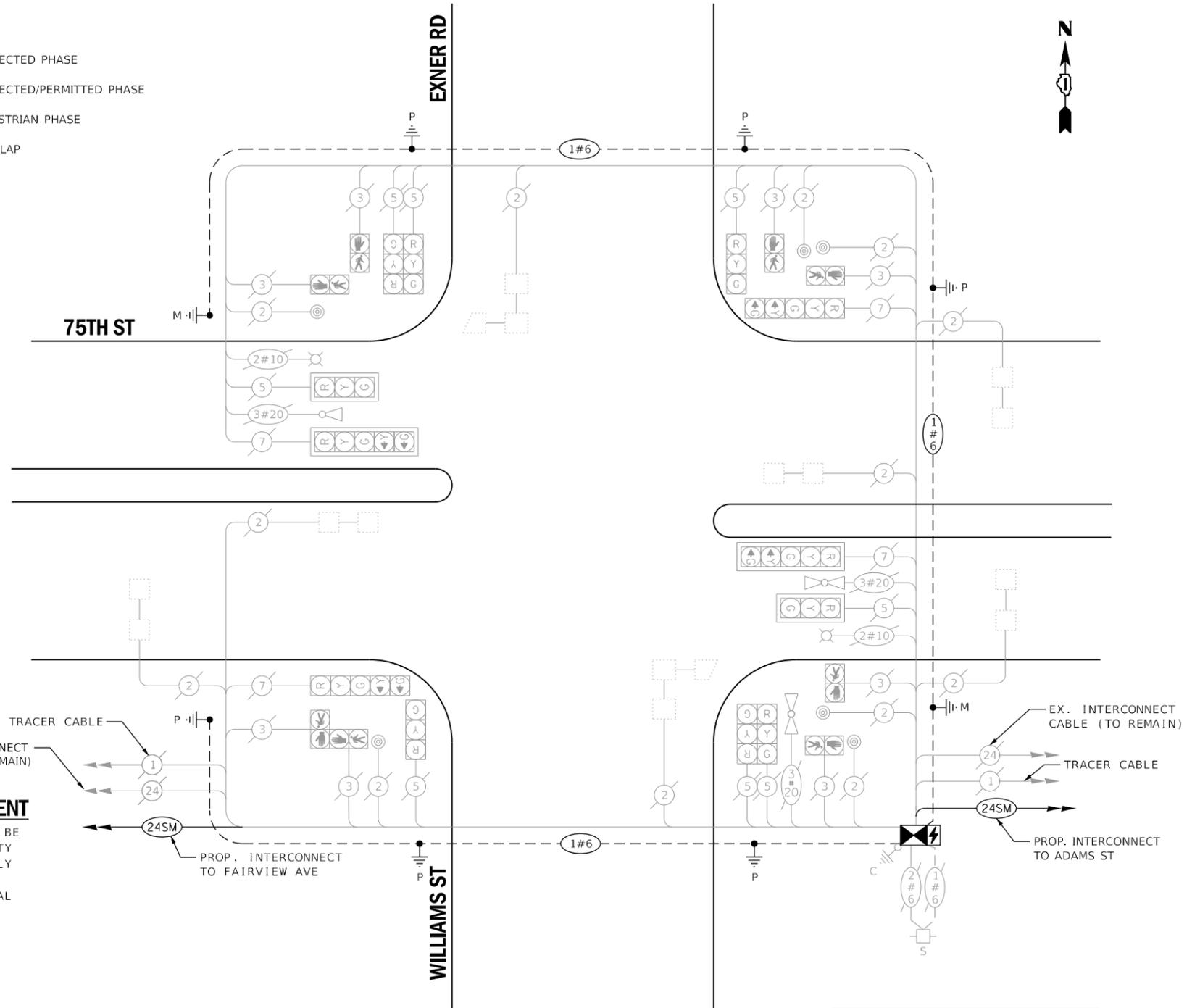
**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
4	EACH	GROUNDING EXISTING HANDHOLE FRAME AND COVER
750	FOOT	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C
7	EACH	INDUCTIVE LOOP DETECTOR
1	EACH	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	LAYER II (DATALINK) SWITCH
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
1	EACH	UNINTERRUPTIBLE POWER SUPPLY, SPECIAL
1	EACH	ELECTRIC METER SOCKET

TRACER CABLE  
EX. INTERCONNECT CABLE (TO REMAIN)

PROP. INTERCONNECT TO FAIRVIEW AVE

**CABLE PLAN (NOT TO SCALE)**



THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE NTCIP (LATEST VERSION).

NOTE: THE CONTRACTOR SHALL ROTATE THE PHASES AS SHOWN IN THE PLANS. THIS WORK SHALL BE INCLUDED IN THE PAY ITEM FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL.

TS SHT NO. 41

**DUPAGE COUNTY D.O.T.**

421 N. COUNTY FARM RD.  
WHEATON, IL 60187

ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
PHONE: (630)-424-5704  
COMPANY: COM-ED LOMBARD  
ACCOUNT NUMBER:



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
PLOT SCALE = 40,0000' / in.	DRAWN - RG	REVISED -
PLOT DATE = 8/28/2018	CHECKED - ZH	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

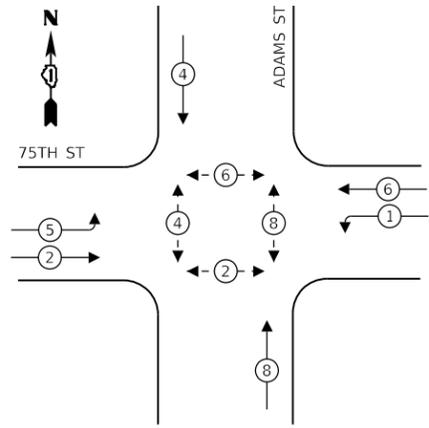
**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES  
75TH ST AND EXNER RD/WILLIAMS ST**

SCALE: NTS SHEET 41 OF 46 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	49
			CONTRACT NO. 61F05	
ILLINOIS FED. AID PROJECT				

DUDOT

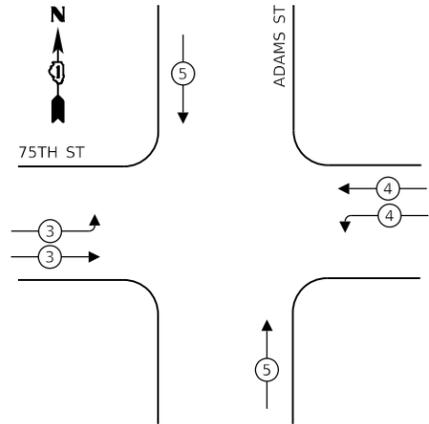
**EXISTING CONTROLLER SEQUENCE**



**LEGEND:**

- ← ⊙ → PROTECTED PHASE
- ← ⊙ - - ⊙ → PROTECTED/PERMITTED PHASE
- ← ⊙ ⊙ → PEDESTRIAN PHASE
- ← ⊙ ⊙ ⊙ → OL OVERLAP

**EXISTING EMERGENCY VEHICLE  
PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL  
ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	20	11	50	110.0
(YELLOW)	20	20	5	20.0
(GREEN)	20	12	45	108.0
PERMISSIVE ARROW	-	10	10	-
PED. SIGNAL	8	20	100	160.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	4	120	50	240.0
LUMINAIRE	4	250	50	500.0
PTZ CAMERA	-	75	100	-
<b>TOTAL =</b>				<b>1263.0</b>

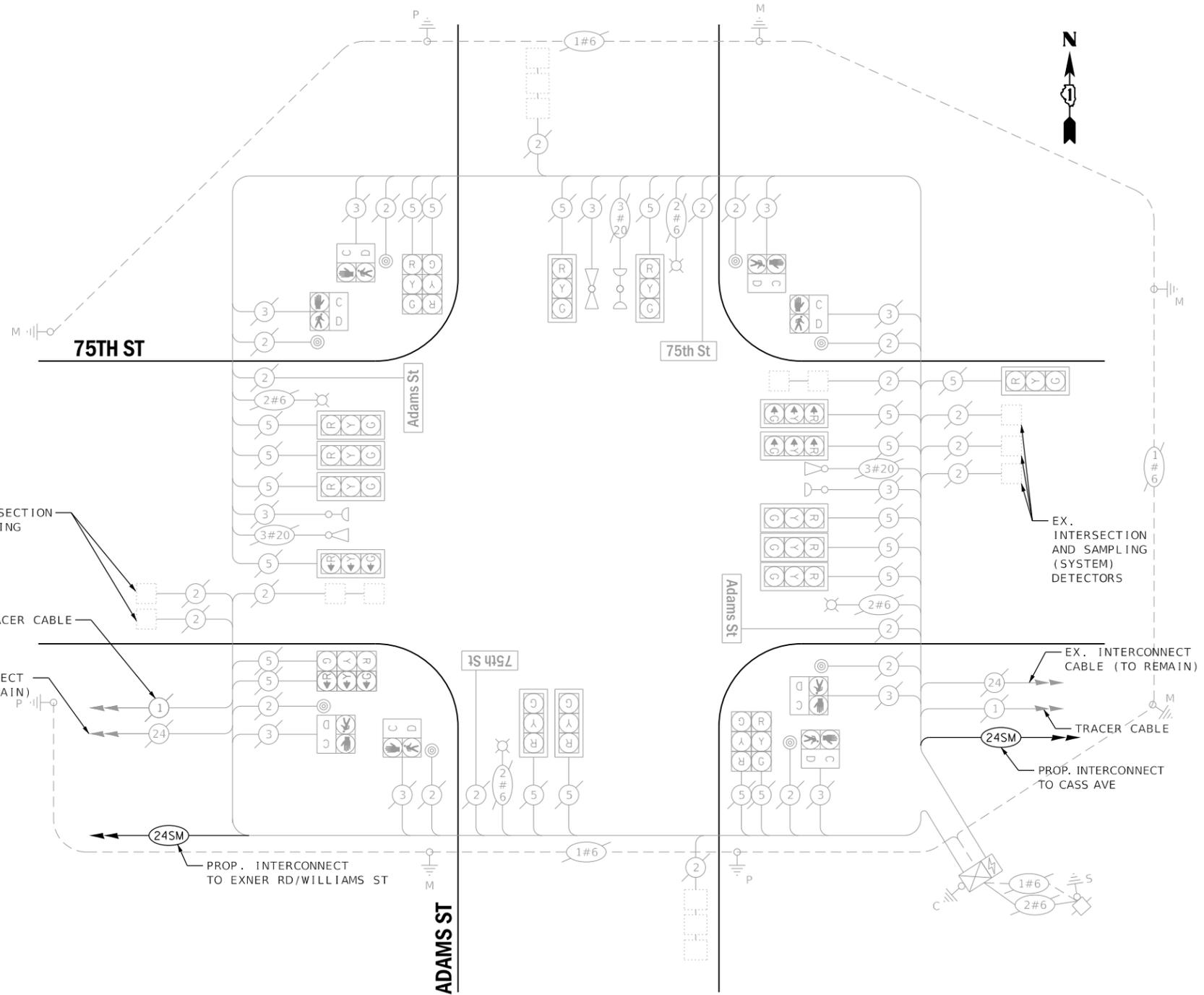
ENERGY COSTS TO:  
**DUPAGE COUNTY D.O.T.**

421 N. COUNTY FARM RD.  
WHEATON, IL 60187

ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
PHONE: (630)-424-5704  
COMPANY: COM-ED LOMBARD  
ACCOUNT NUMBER: \_\_\_\_\_

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
1	EACH	LAYER II (DATALINK) SWITCH
1	EACH	MODIFY EXISTING CONTROLLER CABINET, SPECIAL
1	EACH	ELECTRIC METER SOCKET



**CABLE PLAN  
(NOT TO SCALE)**

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE  
PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES  
75TH ST AND ADAMS ST**

SCALE: NTS SHEET 42 OF 46 SHEETS STA. TO STA.

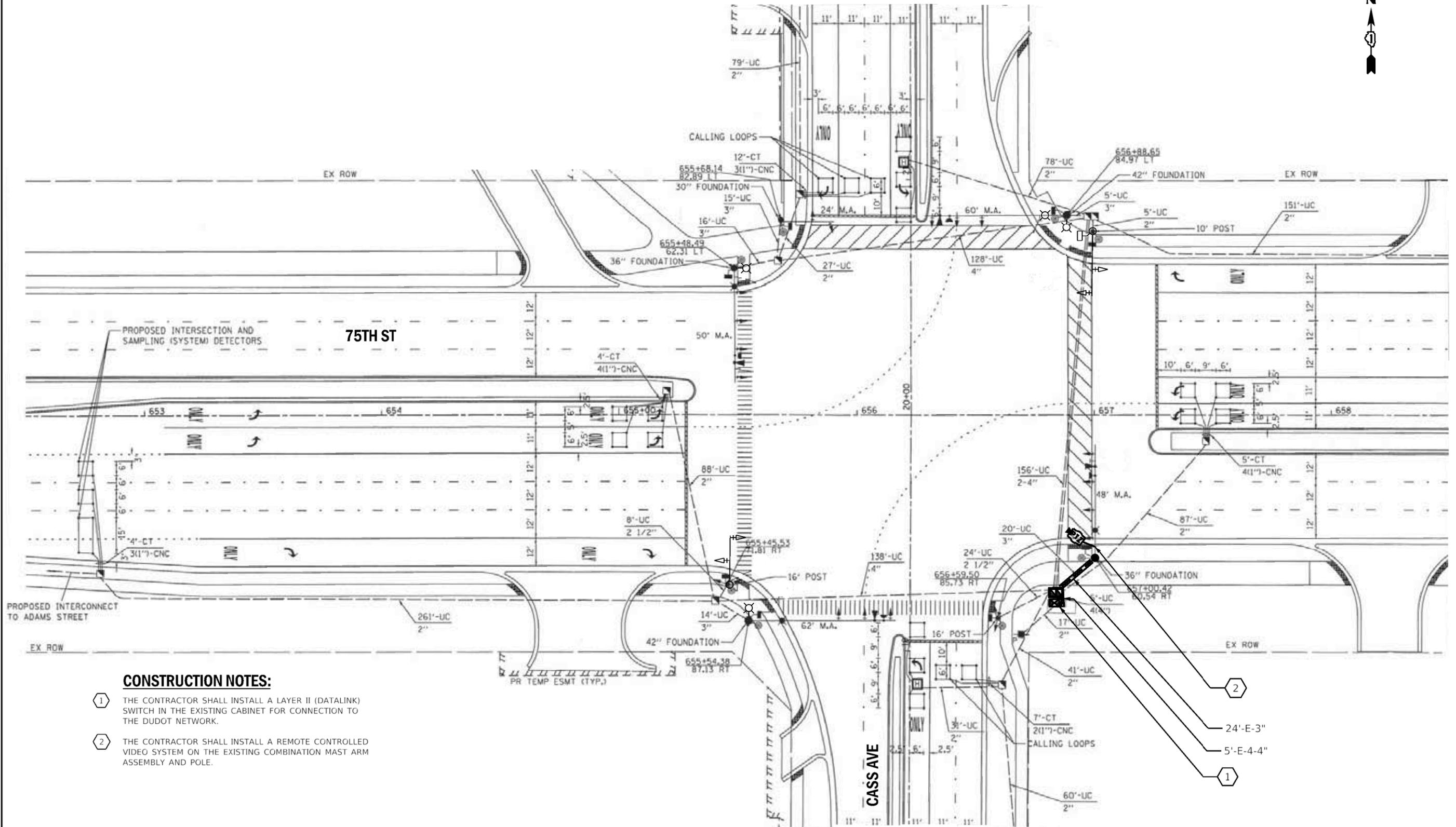
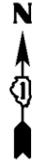
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	50
			CONTRACT NO. 61F05	
		ILLINOIS	FED. AID PROJECT	

**DUDOT**

TS SHT NO. 42



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
PLOT SCALE = 40.0000 ' / in.	DRAWN - RG	REVISED -
PLOT DATE = 8/28/2018	CHECKED - ZH	REVISED -
	DATE -	REVISED -



**CONSTRUCTION NOTES:**

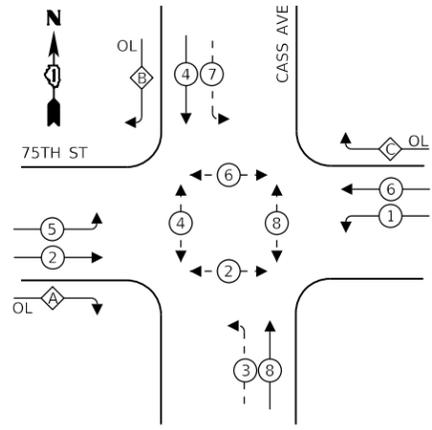
- 1 THE CONTRACTOR SHALL INSTALL A LAYER II (DATALINK) SWITCH IN THE EXISTING CABINET FOR CONNECTION TO THE DUDOT NETWORK.
- 2 THE CONTRACTOR SHALL INSTALL A REMOTE CONTROLLED VIDEO SYSTEM ON THE EXISTING COMBINATION MAST ARM ASSEMBLY AND POLE.

TS SHT NO. 43

**DUDOT**

	USER NAME = rgeorgescu	DESIGNED - DW	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC SIGNAL MODERNIZATION PLAN</b> <b>75TH ST AND CASS AVE</b>		F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 39.9962' / in.	CHECKED - ZH	REVISED -				VAR.	17-DCC55-01-TL	DUPAGE	277	51
	PLOT DATE = 8/13/2018	DATE -	REVISED -	SCALE: NTS		SHEET 43	OF 46 SHEETS	STA.	TO STA.	CONTRACT NO. 61F05	
<small>FILE NAME = pw:\IPW1.dlx\corp.com\DLZ\Documents\Projects\2017\1782\2130\W02_Centracs Expansion_11\CADD_Sheets\Int_78-sht-ts-plan.dgn          Default</small>											

**EXISTING CONTROLLER SEQUENCE**



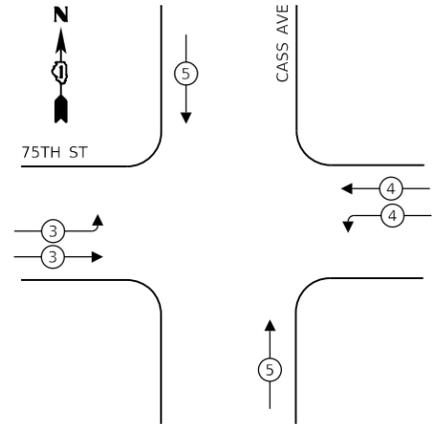
**LEGEND:**

- ⊙ — PROTECTED PHASE
- ⊙ — PROTECTED/PERMITTED PHASE
- ⊙ — PEDESTRIAN PHASE
- ⊙ — OVERLAP

**RIGHT TURN OVERLAP PHASE DESIGNATION:**

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

**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	22	11	50	121.0
(YELLOW)	22	20	5	22.0
(GREEN)	22	12	45	118.8
PERMISSIVE ARROW	20	10	10	20.0
PED. SIGNAL	8	20	100	160.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	4	120	50	240.0
LUMINAIRE	7	250	50	875.0
PTZ CAMERA	1	75	100	75.0
TOTAL =				1756.8

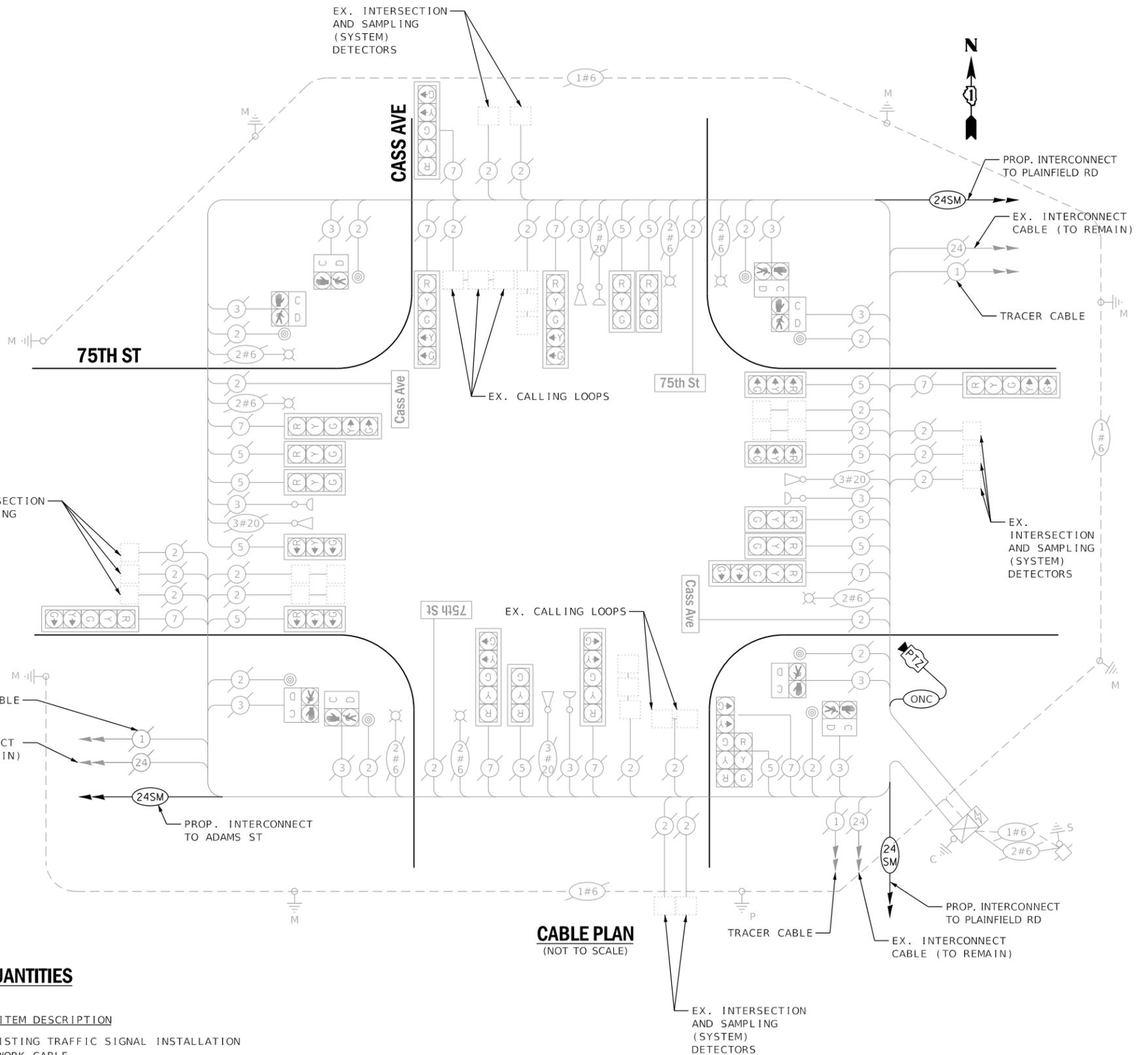
**DUPAGE COUNTY D.O.T.**

421 N. COUNTY FARM RD.  
WHEATON, IL 60187

ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
PHONE: (630)-424-5704  
COMPANY: COM-ED LOMBARD  
ACCOUNT NUMBER:

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
101.5	FOOT	OUTDOOR RATED NETWORK CABLE
1	EACH	REMOTE CONTROLLED VIDEO SYSTEM
1	EACH	LAYER II (DATALINK) SWITCH
1	EACH	MODIFY EXISTING CONTROLLER CABINET, SPECIAL
1	EACH	ELECTRIC METER SOCKET



TS SHT NO. 44



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
PLOT SCALE = 40.0000 "/> <td>DRAWN - RG</td> <td>REVISED -</td>	DRAWN - RG	REVISED -
PLOT DATE = 8/28/2018	CHECKED - ZH	REVISED -
	DATE -	REVISED -

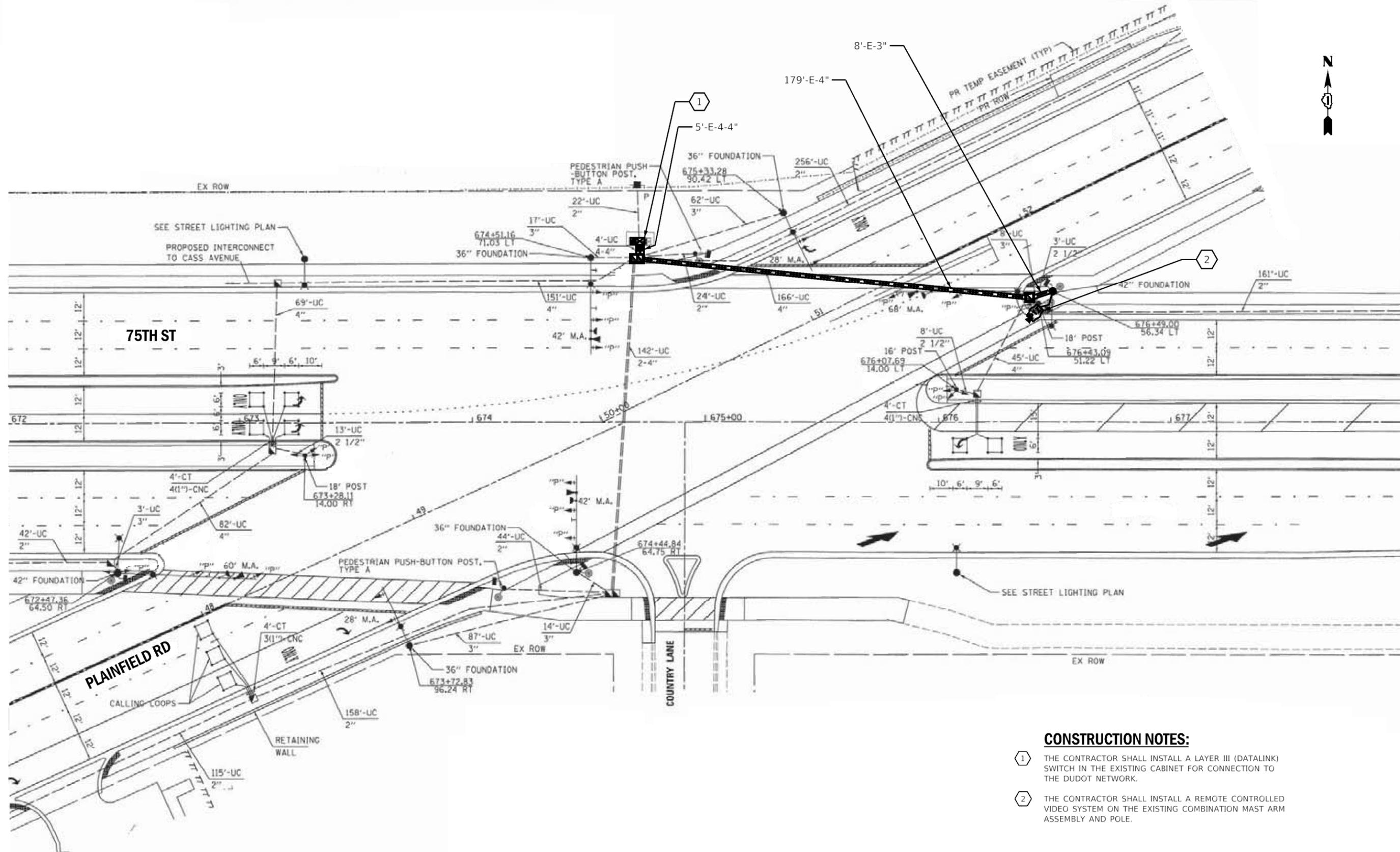
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES  
75TH ST AND CASS AVE**

SCALE: NTS SHEET 44 OF 46 SHEETS STA. TO STA.

**DUDOT**

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	52
CONTRACT NO. 61F05			ILLINOIS FED. AID PROJECT	



**CONSTRUCTION NOTES:**

- ① THE CONTRACTOR SHALL INSTALL A LAYER III (DATALINK) SWITCH IN THE EXISTING CABINET FOR CONNECTION TO THE DUDOT NETWORK.
- ② THE CONTRACTOR SHALL INSTALL A REMOTE CONTROLLED VIDEO SYSTEM ON THE EXISTING COMBINATION MAST ARM ASSEMBLY AND POLE.



USER NAME = rgeorgescu	DESIGNED - DW	REVISED -
PLOT SCALE = 40.0030' / in.	DRAWN - RG	REVISED -
PLOT DATE = 8/13/2018	CHECKED - ZH	REVISED -
	DATE -	REVISED -

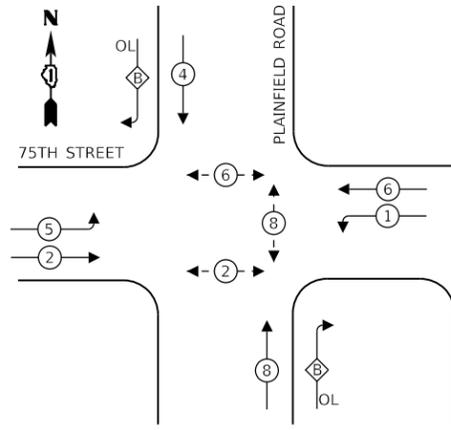
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODERNIZATION PLAN  
75TH ST AND PLAINFIELD RD

SCALE: NTS SHEET 45 OF 46 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL		277	53
CONTRACT NO. 61F05			ILLINOIS FED. AID PROJECT	

**EXISTING CONTROLLER SEQUENCE**



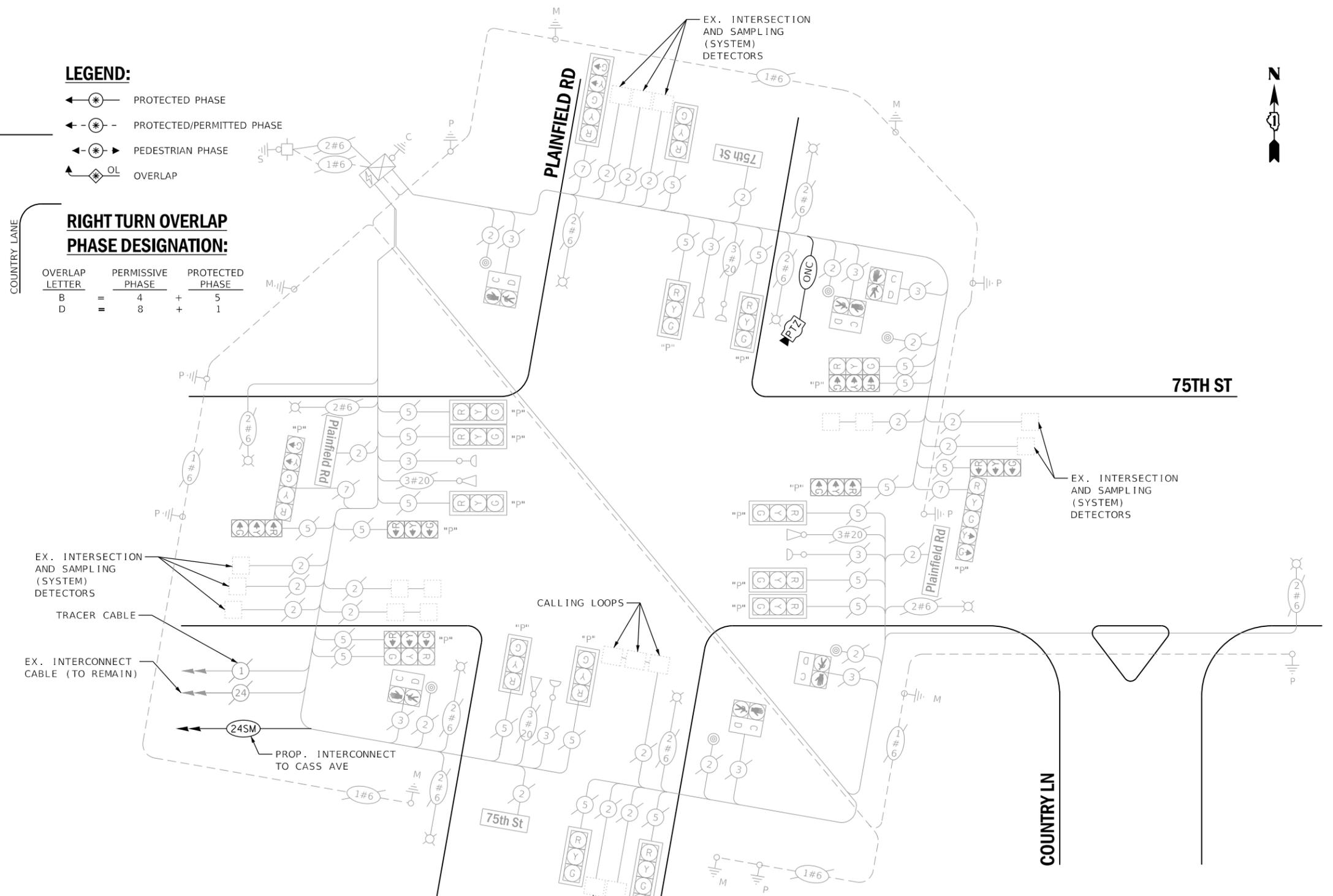
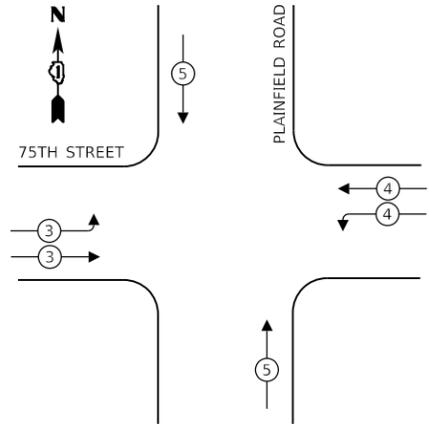
**LEGEND:**

- ⊙ — PROTECTED PHASE
- ⊙ — PROTECTED/PERMITTED PHASE
- ⊙ — PEDESTRIAN PHASE
- ⊙ — OVERLAP

**RIGHT TURN OVERLAP PHASE DESIGNATION:**

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
B	= 4	+ 5
D	= 8	+ 1

**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**CABLE PLAN**  
(NOT TO SCALE)

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
271	FOOT	OUTDOOR RATED NETWORK CABLE
1	EACH	REMOTE CONTROLLED VIDEO SYSTEM
1	EACH	MODIFY EXISTING CONTROLLER CABINET, SPECIAL
1	EACH	LAYER III (DATALINK) SWITCH
1	EACH	ELECTRIC METER SOCKET

**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	24	11	50	132.0
(YELLOW)	24	20	5	24.0
(GREEN)	24	12	45	129.6
PERMISSIVE ARROW	8	10	10	8.0
PED. SIGNAL	6	20	100	120.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	4	120	50	240.0
LUMINAIRE	10	250	50	1250.0
PTZ CAMERA	1	75	100	75.0
<b>TOTAL =</b>				<b>2103.6</b>

ENERGY COSTS TO:  
**DUPAGE COUNTY D.O.T.**  
 421 N. COUNTY FARM RD.  
 WHEATON, IL 60187  
 CONTACT: MR. JOE STACHO  
 PHONE: (630)-424-5704  
 COMPANY: COM-ED LOMBARD  
 ACCOUNT NUMBER:

TS SHT NO. 46



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
PLOT SCALE = 40.0000' / in.	DRAWN - RG	REVISED -
PLOT DATE = 8/28/2018	CHECKED - ZH	REVISED -
	DATE -	REVISED -

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

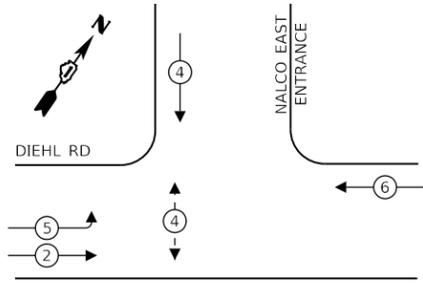
**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES**  
**75TH ST AND PLAINFIELD RD**

SCALE: NTS SHEET 46 OF 46 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	54
			CONTRACT NO. 61F05	
		ILLINOIS FED. AID PROJECT		

FILE NAME = p:\p1\dlz\corp.com\DLZ\Documents\Projects\2017\1782\2130\W02\_Centracs Expansion\_1\CADD\_Sheets\Int\_29-sht-ts-cable.dgn  
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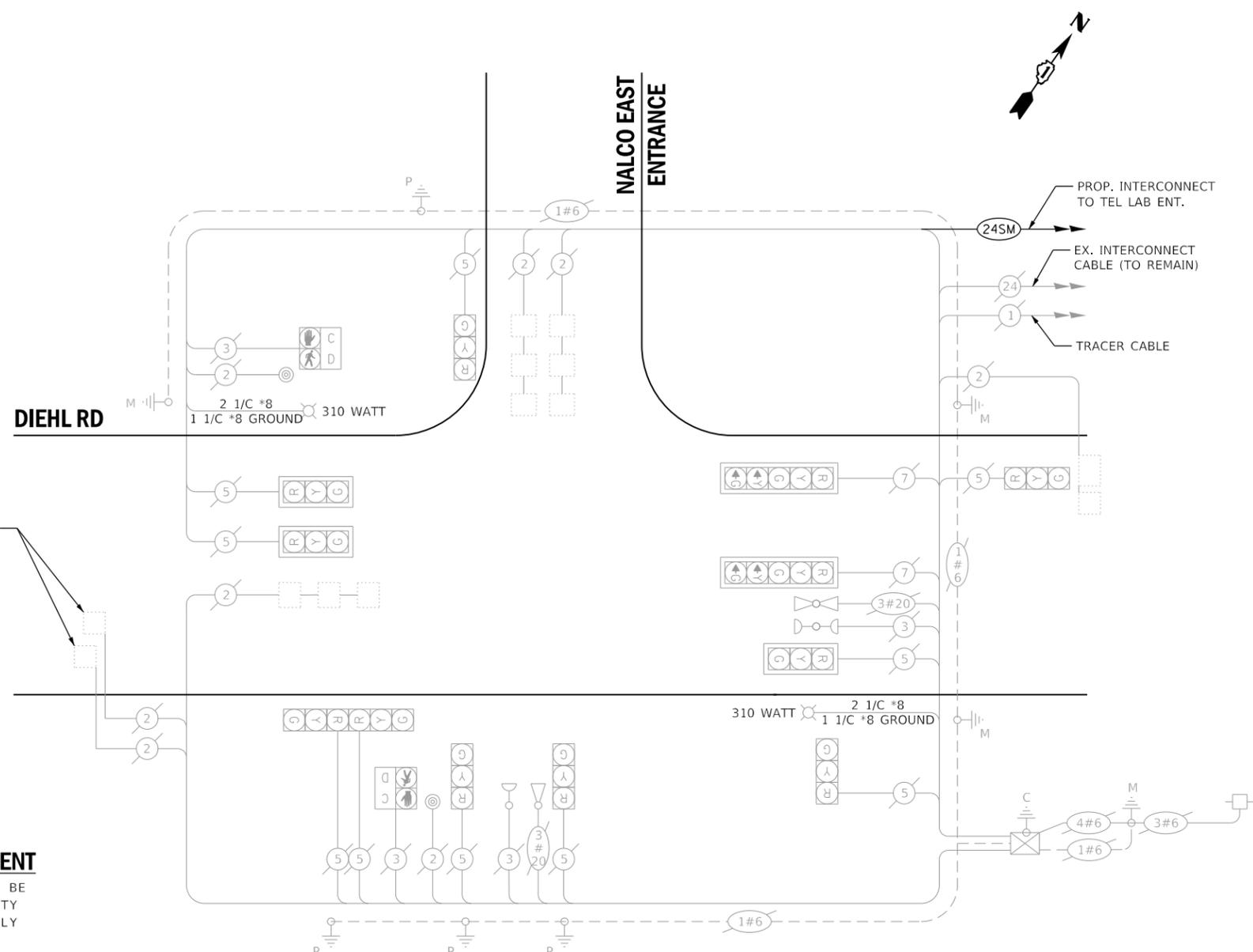
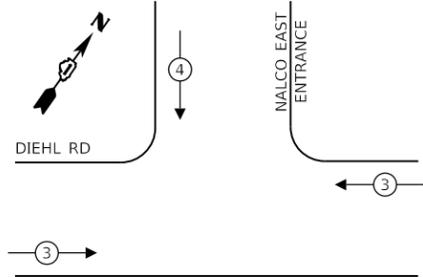
**EXISTING CONTROLLER SEQUENCE**



**LEGEND:**

- ⊙ — PROTECTED PHASE
- ⊙ — — PROTECTED/PERMITTED PHASE
- ⊙ — ⊙ — PEDESTRIAN PHASE
- ⊙ — OL — OVERLAP

**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE NTCIP (LATEST VERSION).

**CABLE PLAN**  
(NOT TO SCALE)

**REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT**

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: CITY OF NAPERVILLE

1 EACH CONTROLLER

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	LAYER II (DATALINK) SWITCH
1	EACH	FULL-ACTUATED CONTROLLER IN EXISTING CABINET
1	EACH	MODIFY EXISTING CONTROLLER CABINET, SPECIAL

**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	11	50	66.0
(YELLOW)	12	20	5	12.0
(GREEN)	12	12	45	64.8
PERMISSIVE ARROW	4	10	10	4.0
PED. SIGNAL	2	20	100	40.0
CONTROLLER	1	100	100	100.0
UPS	-	25	100	-
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	2	250	50	250.0
PTZ CAMERA	-	75	100	-
<b>TOTAL =</b>				<b>536.8</b>

ENERGY COSTS TO:

**CITY OF NAPERVILLE**

400 S. EAGLE ST.  
NAPERVILLE, IL 60540

ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
PHONE: (630)-424-5704  
COMPANY: COM-ED LOMBARD  
ACCOUNT NUMBER:

TS SHT NO. 47



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
PLOT SCALE = 40.0000 ' / in.	DRAWN - RG	REVISED -
PLOT DATE = 8/29/2018	CHECKED - ZH	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

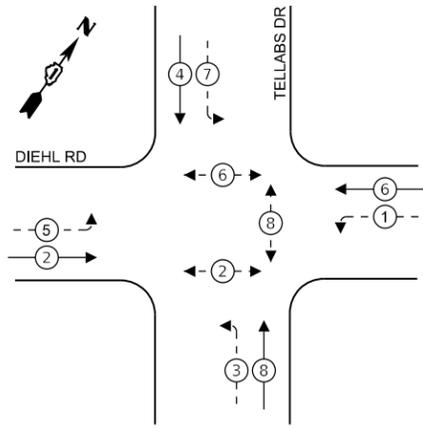
**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES**  
**DIEHL RD AND NALCO EAST ENTR**

SCALE: NTS SHEET 1 OF 14 SHEETS STA. TO STA.

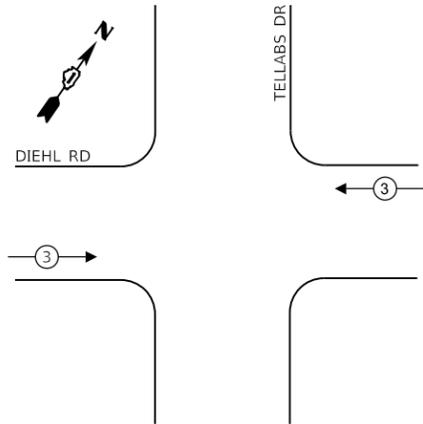
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	55
			CONTRACT NO. 61F05	
		ILLINOIS	FED. AID PROJECT	

**NAPERVILLE**

**EXISTING CONTROLLER SEQUENCE**



**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**LEGEND:**

- ⊙ — PROTECTED PHASE
- ⊙ — PROTECTED/PERMITTED PHASE
- ⊙ — PEDESTRIAN PHASE
- ⊙ — OVERLAP

**REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT**

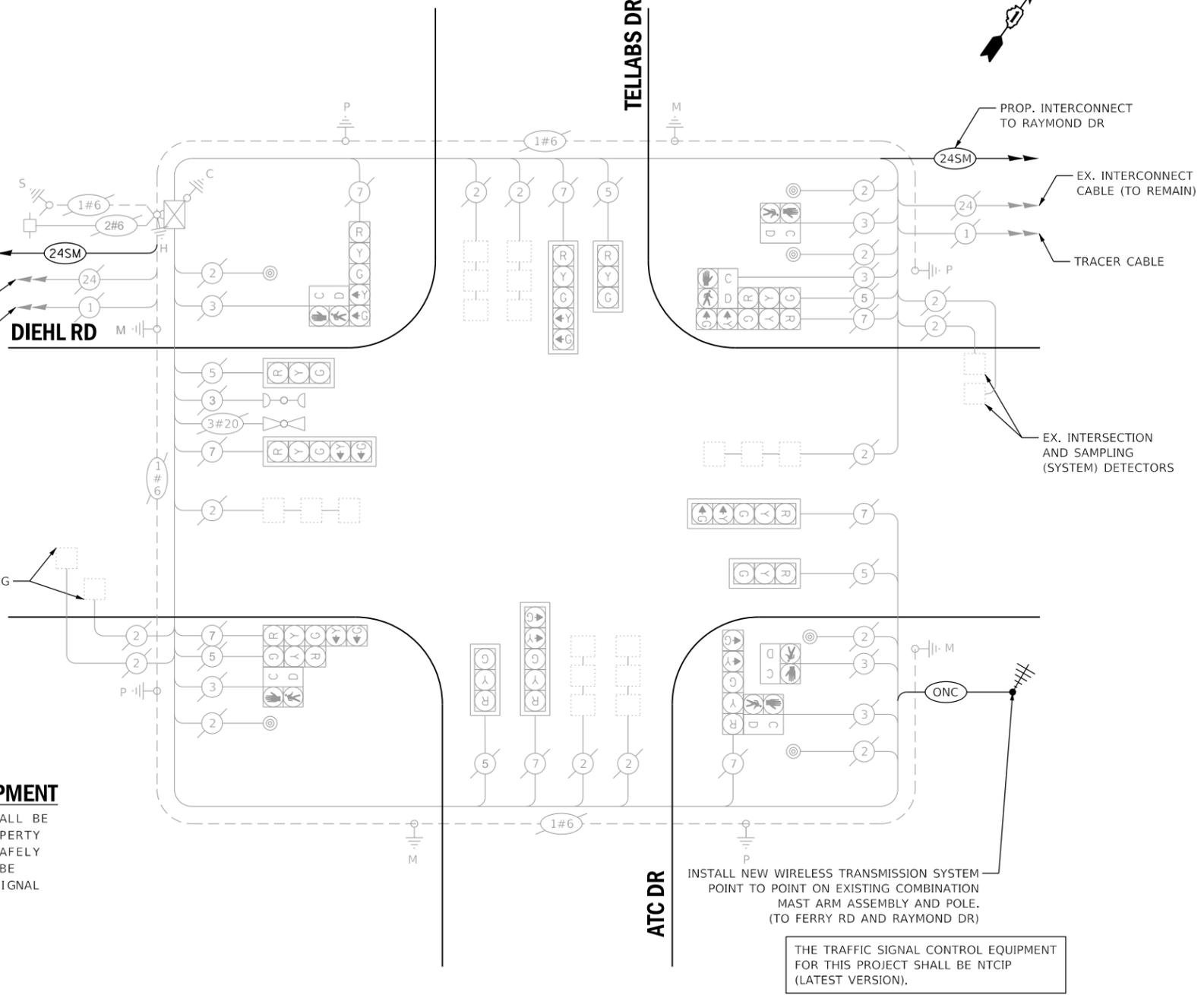
THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: CITY OF NAPERVILLE

1 EACH CONTROLLER

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	LAYER II (DATALINK) SWITCH
1	EACH	WIRELESS TRANSMISSION SYSTEM POINT TO POINT
1	EACH	FULL-ACTUATED CONTROLLER IN EXISTING CABINET
1	EACH	MODIFY EXISTING CONTROLLER CABINET, SPECIAL



**CABLE PLAN**  
(NOT TO SCALE)

INSTALL NEW WIRELESS TRANSMISSION SYSTEM POINT TO POINT ON EXISTING COMBINATION MAST ARM ASSEMBLY AND POLE. (TO FERRY RD AND RAYMOND DR)

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE NTCIP (LATEST VERSION).

**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	14	11	50	77.0
(YELLOW)	14	20	5	14.0
(GREEN)	14	12	45	75.6
PERMISSIVE ARROW	16	10	10	16.0
PED. SIGNAL	6	20	100	120.0
CONTROLLER	1	100	100	100.0
UPS	-	25	100	-
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	250	50	-
PTZ CAMERA	-	75	100	-
TOTAL =				402.6

ENERGY COSTS TO:

**CITY OF NAPERVILLE**

400 S. EAGLE ST.  
NAPERVILLE, IL 60540

ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
PHONE: (630)-424-5704  
COMPANY: COM-ED LOMBARD  
ACCOUNT NUMBER:

TS SHT NO. 48



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
PLOT SCALE = 40.0000 ' / in.	DRAWN - RG	REVISED -
PLOT DATE = 8/29/2018	CHECKED - ZH	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES  
DIEHL RD AND TELLABS DR**

SCALE: NTS SHEET 2 OF 14 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	56
			CONTRACT NO.	61F05
ILLINOIS FED. AID PROJECT				

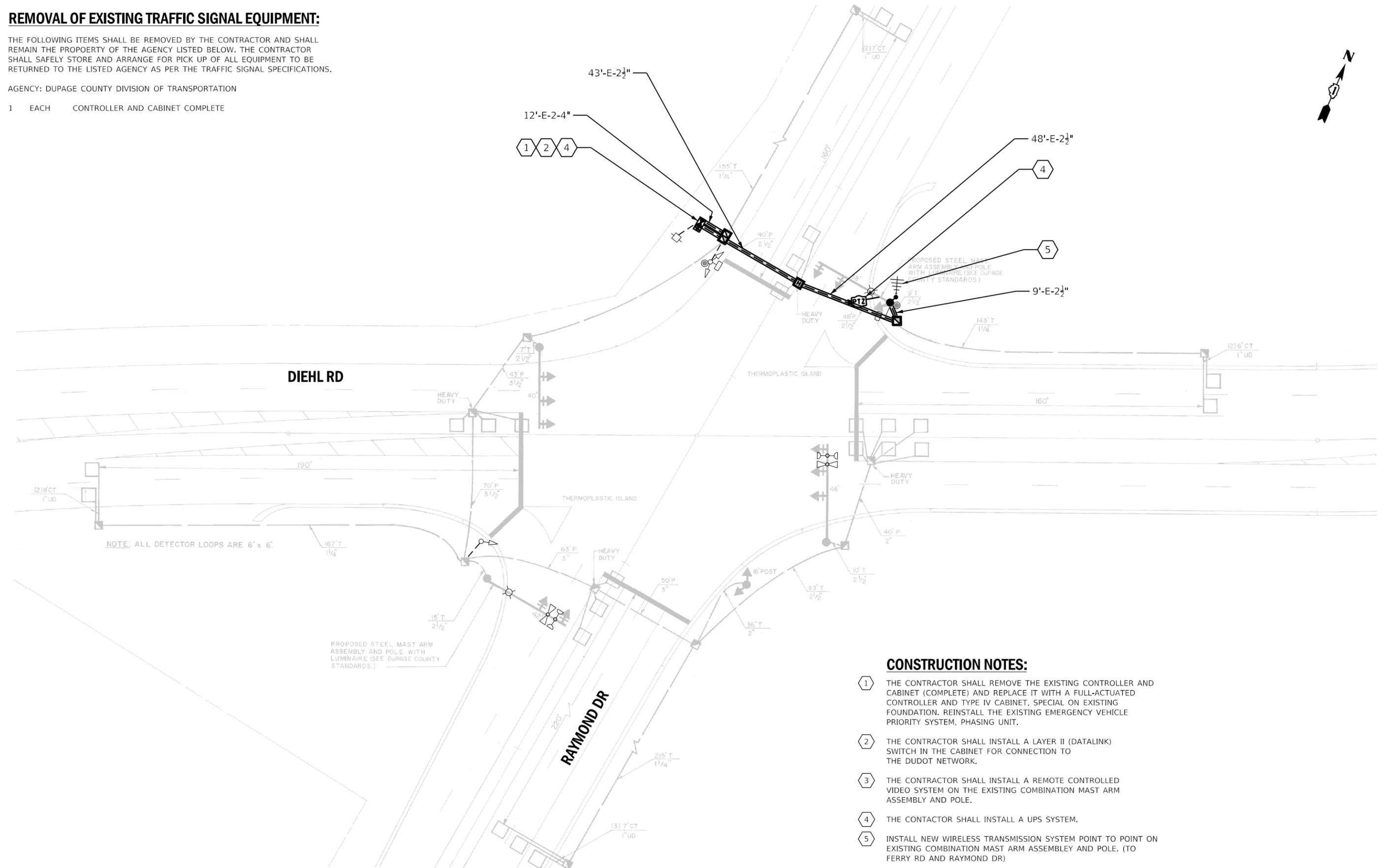
**NAPERVILLE**

**REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT:**

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: DUPAGE COUNTY DIVISION OF TRANSPORTATION

1 EACH CONTROLLER AND CABINET COMPLETE



NOTE: ALL DETECTOR LOOPS ARE 6' x 6'

PROPOSED STEEL MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE (SEE DUPAGE COUNTY STANDARDS.)

**CONSTRUCTION NOTES:**

- ① THE CONTRACTOR SHALL REMOVE THE EXISTING CONTROLLER AND CABINET (COMPLETE) AND REPLACE IT WITH A FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL ON EXISTING FOUNDATION. REINSTALL THE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT.
- ② THE CONTRACTOR SHALL INSTALL A LAYER II (DATALINK) SWITCH IN THE CABINET FOR CONNECTION TO THE DUDOT NETWORK.
- ③ THE CONTRACTOR SHALL INSTALL A REMOTE CONTROLLED VIDEO SYSTEM ON THE EXISTING COMBINATION MAST ARM ASSEMBLY AND POLE.
- ④ THE CONTACTOR SHALL INSTALL A UPS SYSTEM.
- ⑤ INSTALL NEW WIRELESS TRANSMISSION SYSTEM POINT TO POINT ON EXISTING COMBINATION MAST ARM ASSEMBLY AND POLE. (TO FERRY RD AND RAYMOND DR)

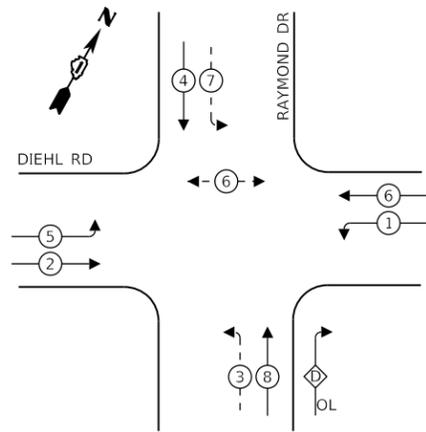
TS SHT NO. 49

**DUDOT**

	USER NAME = dwiktorzak	DESIGNED - DW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODERNIZATION PLAN DIEHL RD AND RAYMOND DR			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 40,0000 ' / in.	CHECKED - ZH	REVISED -					VAR.	17-DCCSS-01-TL	DUPAGE	277	57
	PLOT DATE = 8/28/2018	DATE -	REVISED -		SCALE: NTS	SHEET 3	OF 14 SHEETS	STA.	TO STA.	CONTRACT NO. 61F05		
											ILLINOIS FED. AID PROJECT	

FILE NAME = p:\IPW1.dzcorp.com\DLZ\Documents\Projects\2017\1782\2130\W03\_Centracs Expansion 2\CADD\_Sheets\0204-sht-ts-plan.dgn

**EXISTING CONTROLLER SEQUENCE**



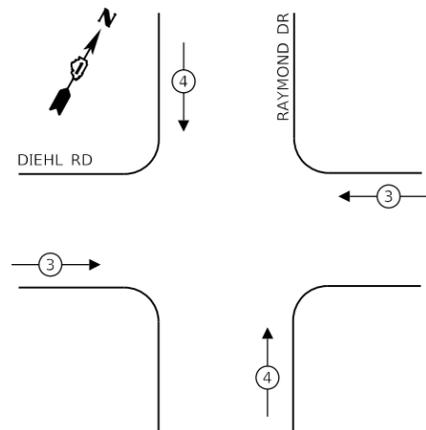
**LEGEND:**

- ← ⊙ → PROTECTED PHASE
- ← ⊙ - - ⊙ → PROTECTED/PERMITTED PHASE
- ← ⊙ ⊙ → PEDESTRIAN PHASE
- ← ⊙ ⊙ OL → OVERLAP

**RIGHT TURN OVERLAP PHASE DESIGNATION:**

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
D	= 1	+ 8

**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

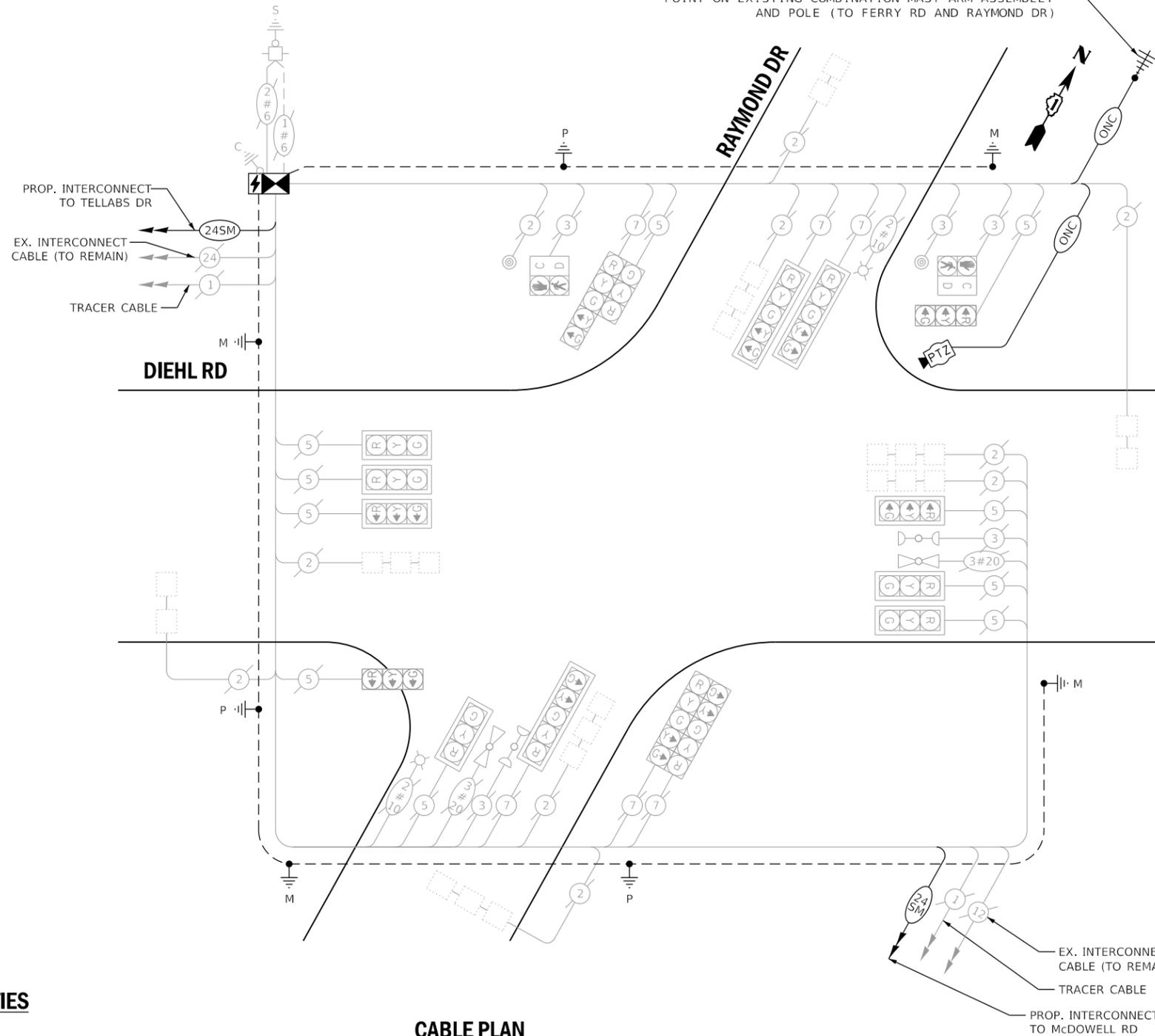
TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16	11	50	88.0
(YELLOW)	16	20	5	16.0
(GREEN)	16	12	45	86.4
PERMISSIVE ARROW	12	10	10	12.0
PED. SIGNAL	2	20	100	40.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	2	250	50	250.0
PTZ CAMERA	1	75	100	75.0
<b>TOTAL =</b>				<b>692.4</b>

ENERGY COSTS TO:

**DUPAGE COUNTY D.O.T.**

421 N. COUNTY FARM RD.  
WHEATON, IL 60187

ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
PHONE: (630)-424-5704  
COMPANY: COM-ED LOMBARD  
ACCOUNT NUMBER: \_\_\_\_\_



**CABLE PLAN**  
(NOT TO SCALE)

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
9	EACH	GROUNDING EXISTING HANDHOLE FRAME AND COVER
750	FOOT	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C
9	EACH	INDUCTIVE LOOP DETECTOR
1	EACH	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
400	FOOT	OUTDOOR RATED NETWORK CABLE
1	EACH	REMOTE CONTROLLED VIDEO SYSTEM
1	EACH	WIRELESS TRANSMISSION SYSTEM POINT TO POINT
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
1	EACH	LAYER II (DATALINK) SWITCH
1	EACH	ELECTRIC METER SOCKET

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE NTCIP (LATEST VERSION).

TS SHT NO. 50



USER NAME = dwiktorzak  
DESIGNED - DW  
DRAWN - RG  
PLOT SCALE = 40,0000 ' / in.  
CHECKED - ZH  
PLOT DATE = 8/28/2018  
DATE -

REVISED -  
REVISED -  
REVISED -  
REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

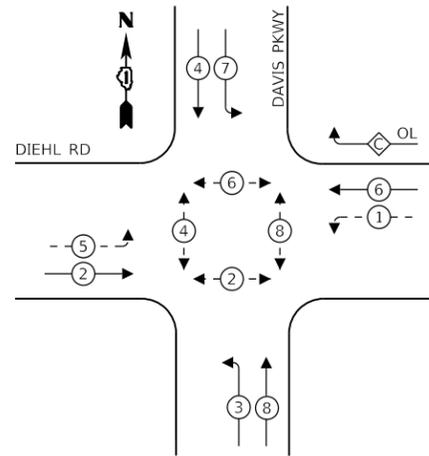
**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES**  
**DIEHL RD AND RAYMOND DR**

SCALE: NTS SHEET 4 OF 14 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	17-DCCSS-01-TL	DUPAGE	277	58
CONTRACT NO. 61F05				
ILLINOIS FED. AID PROJECT				

**DUDOT**

**EXISTING CONTROLLER SEQUENCE**



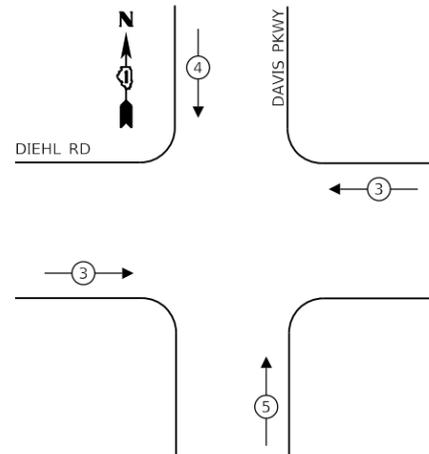
**LEGEND:**

- ⊙ — PROTECTED PHASE
- ⊙ — PROTECTED/PERMITTED PHASE
- ⊙ — PEDESTRIAN PHASE
- OL — OVERLAP

**RIGHT TURN OVERLAP PHASE DESIGNATION:**

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
C	= 6	+ 7

**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	18	11	50	99.0
(YELLOW)	18	20	5	18.0
(GREEN)	18	12	45	97.2
PERMISSIVE ARROW	12	10	10	12.0
PED. SIGNAL	8	20	100	160.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	4	250	50	500.0
PTZ CAMERA	-	75	100	-
<b>TOTAL =</b>				<b>1011.2</b>

ENERGY COSTS TO:

**DUPAGE COUNTY D.O.T.**

421 N. COUNTY FARM RD.  
WHEATON, IL 60187

ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
PHONE: (630)-424-5704  
COMPANY: COM-ED LOMBARD  
ACCOUNT NUMBER:

**REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT**

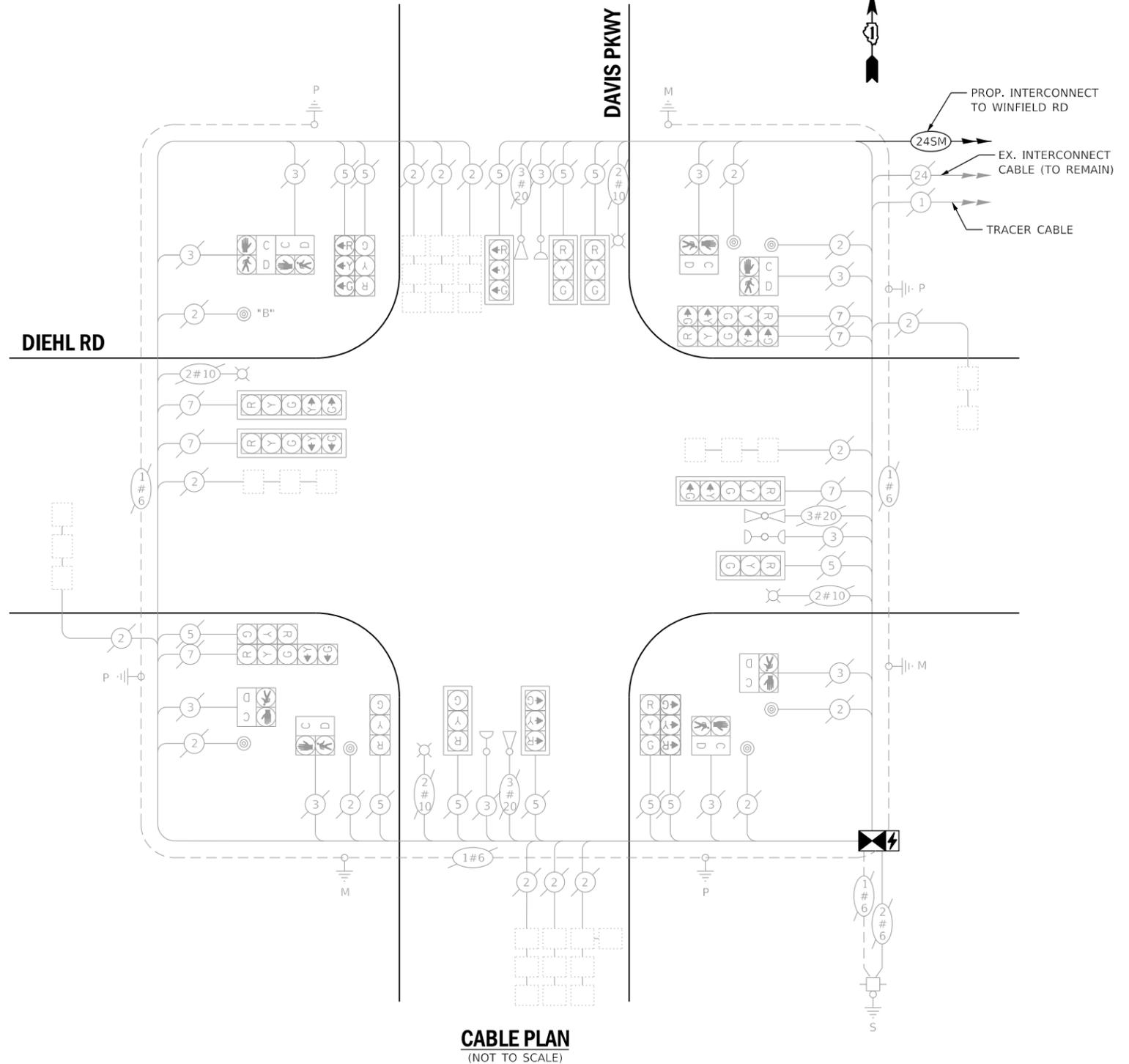
THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: DUPAGE COUNTY DIVISION OF TRANSPORTATION

1 EACH CONTROLLER AND CABINET (COMPLETE)

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
10	EACH	INDUCTIVE LOOP DETECTOR
1	EACH	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	LAYER 11 (DATALINK) SWITCH
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
1	EACH	ELECTRIC METER SOCKET



THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE NTCIP (LATEST VERSION).

TS SHT NO. 51



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
PLOT SCALE = 40.0000' / in.	DRAWN - RG	REVISED -
PLOT DATE = 8/28/2018	CHECKED - ZH	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES  
DIEHL RD AND DAVIS PKWY**

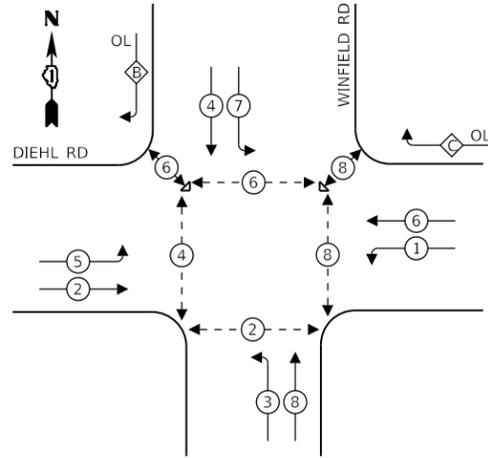
SCALE: NTS SHEET 5 OF 14 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	59
		CONTRACT NO. 61F05		
		ILLINOIS FED. AID PROJECT		

DUDOT



**EXISTING CONTROLLER SEQUENCE**



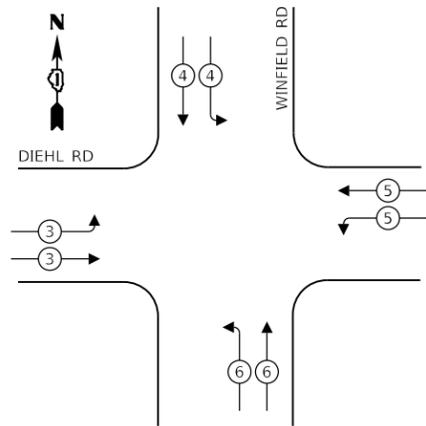
**LEGEND:**

- ← ⊛ → PROTECTED PHASE
- ← ⊛ - PROTECTED/PERMITTED PHASE
- ← ⊛ → PEDESTRIAN PHASE
- ⊛ OL OVERLAP

**RIGHT TURN OVERLAP PHASE DESIGNATION:**

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

**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	22	11	50	121.0
(YELLOW)	22	20	5	22.0
(GREEN)	22	12	45	118.8
PERMISSIVE ARROW	8	10	10	8.0
PED. SIGNAL	12	20	100	240.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	3	-	-	375.0
PTZ CAMERA	1	75	100	75.0
<b>TOTAL =</b>				<b>1084.8</b>

ENERGY COSTS TO:

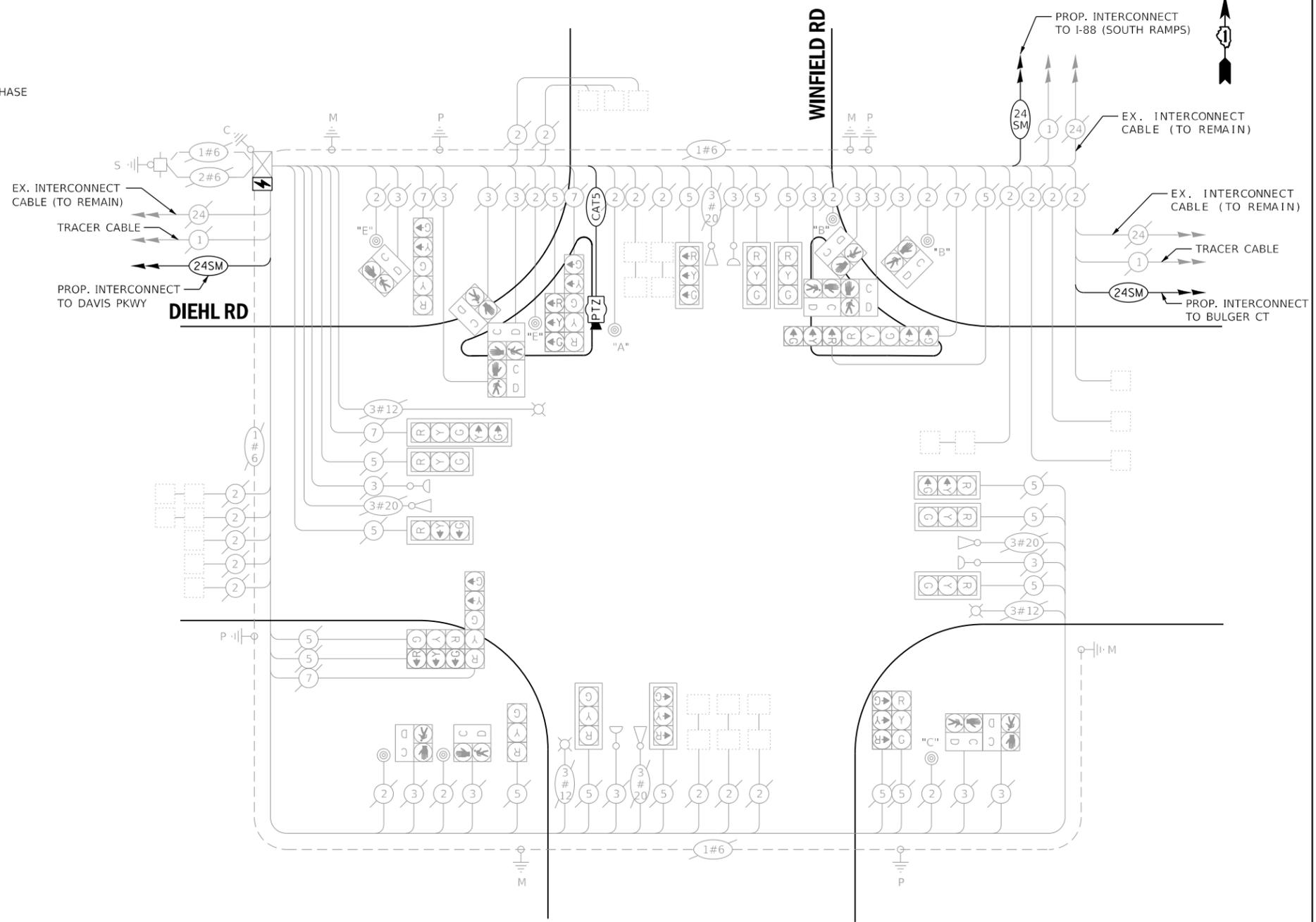
**DUPAGE COUNTY D.O.T.**

421 N. COUNTY FARM RD.  
WHEATON, IL 60187

ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
PHONE: (630)-424-5704  
COMPANY: COM-ED LOMBARD  
ACCOUNT NUMBER: \_\_\_\_\_

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
151	FOOT	OUTDOOR RATED NETWORK CABLE
1	EACH	REMOTE CONTROLLED VIDEO SYSTEM
1	EACH	LAYER 11 (DATALINK) SWITCH
1	EACH	FULL-ACTUATED CONTROLLER IN EXISTING CABINET
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
1	EACH	MODIFY EXISTING CONTROLLER CABINET, SPECIAL
1	EACH	ELECTRIC METER SOCKET



**CABLE PLAN**  
(NOT TO SCALE)

PUSHBUTTON "A" SHALL PLACE CALLS IN PHASES 4 & 6  
PUSHBUTTON "B" SHALL PLACE CALLS IN PHASES 6 & 8  
PUSHBUTTON "C" SHALL PLACE CALLS IN PHASES 2 & 8  
PUSHBUTTON "E" SHALL PLACE CALLS IN PHASES 3

TS SHT NO. 53



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
PLOT SCALE = 40.0000' / in.	DRAWN - RG	REVISED -
PLOT DATE = 8/28/2018	CHECKED - ZH	REVISED -
	DATE -	REVISED -

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

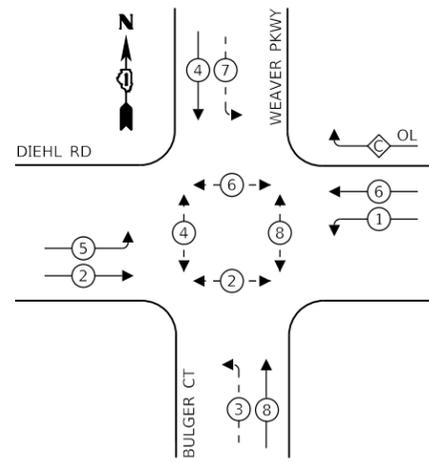
**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES**  
**WINFIELD RD AND DIEHL RD**

SCALE: NTS SHEET 7 OF 14 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	61
			CONTRACT NO. 61F05	
ILLINOIS FED. AID PROJECT				

**DUDOT**

**EXISTING CONTROLLER SEQUENCE**



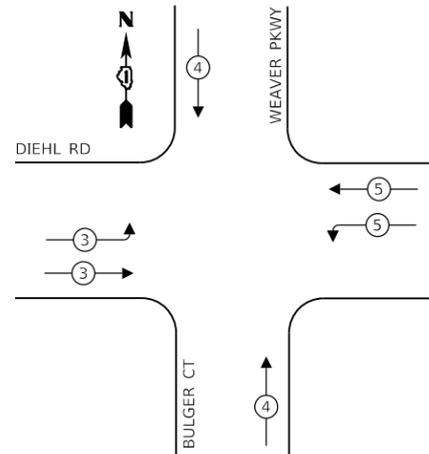
**LEGEND:**

- ⊙ — PROTECTED PHASE
- ⊙ — PROTECTED/PERMITTED PHASE
- ⊙ — PEDESTRIAN PHASE
- OL — OVERLAP

**RIGHT TURN OVERLAP PHASE DESIGNATION:**

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
C	= 6	+ 7

**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16	11	50	88.0
(YELLOW)	16	20	5	16.0
(GREEN)	16	12	45	86.4
PERMISSIVE ARROW	12	10	10	12.0
PED. SIGNAL	8	20	100	160.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	250	50	-
PTZ CAMERA	-	75	100	-
TOTAL =				487.4

ENERGY COSTS TO:

**DUPAGE COUNTY D.O.T.**

421 N. COUNTY FARM RD.  
WHEATON, IL 60187

ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
PHONE: (630)-424-5704  
COMPANY: COM-ED LOMBARD  
ACCOUNT NUMBER:

**REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT**

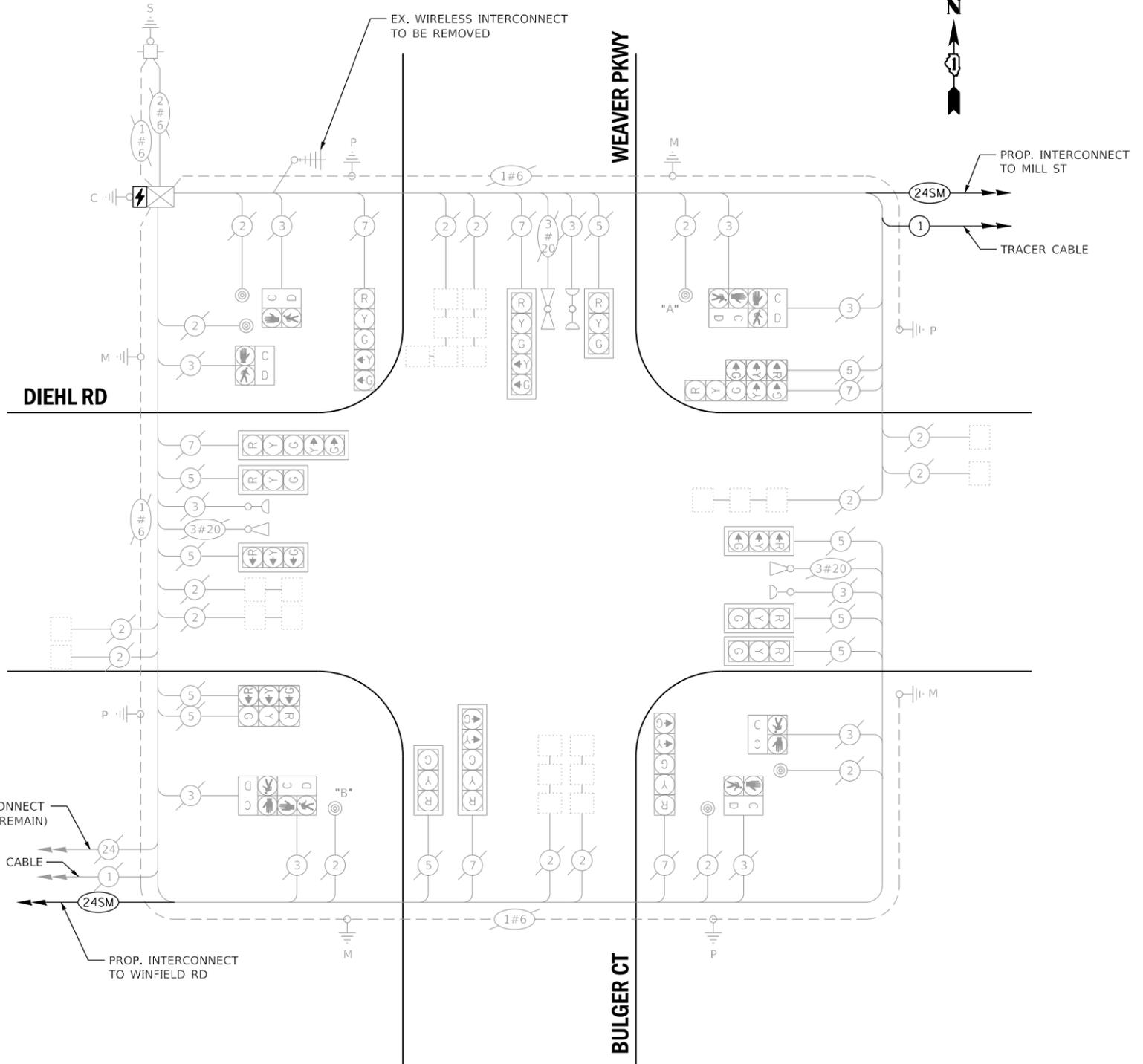
THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: DUPAGE COUNTY DIVISION OF TRANSPORTATION

- 1 EACH CONTROLLER
- 1 EACH WIRELESS INTERCONNECT

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	LAYER II (DATALINK) SWITCH
1	EACH	FULL-ACTUATED CONTROLLER IN EXISTING CABINET
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
1	EACH	MODIFY EXISTING CONTROLLER CABINET, SPECIAL
1	EACH	ELECTRIC METER SOCKET



**CABLE PLAN (NOT TO SCALE)**

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE NTCIP (LATEST VERSION).

TS SHT NO. 54



USER NAME = dwiktorzak  
DESIGNED - DW  
DRAWN - RG  
PLOT SCALE = 40,0000 ' / in.  
CHECKED - ZH  
PLOT DATE = 8/28/2018  
DATE -

REVISED -  
REVISED -  
REVISED -  
REVISED -

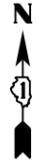
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES  
DIEHL RD AND BULGER CT/WEAVER PKWY**

SCALE: NTS SHEET 8 OF 14 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	62
			CONTRACT NO. 61F05	
ILLINOIS FED. AID PROJECT				

**DUDOT**

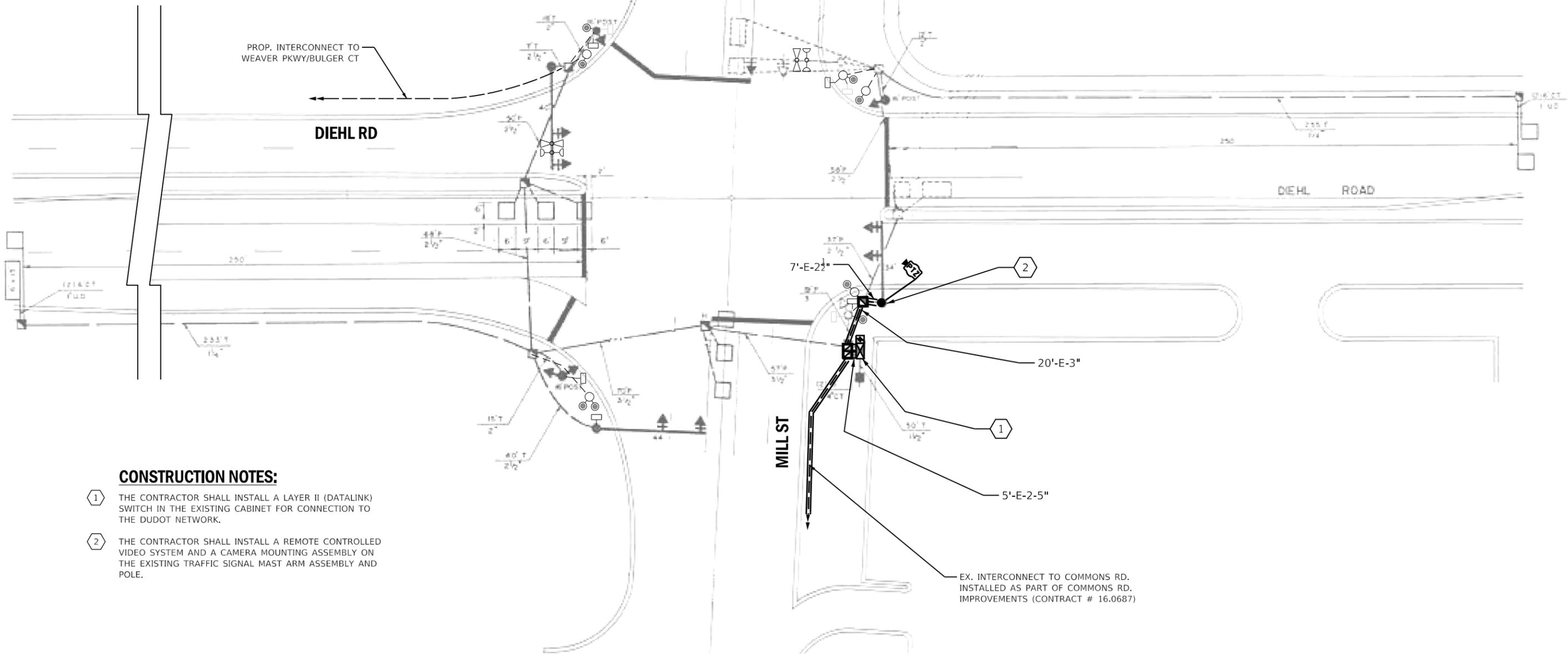


**REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT:**

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: DUPAGE COUNTY DIVISION OF TRANSPORTATION

1 EACH WIRELESS INTERCONNECT



**CONSTRUCTION NOTES:**

- 1 THE CONTRACTOR SHALL INSTALL A LAYER II (DATALINK) SWITCH IN THE EXISTING CABINET FOR CONNECTION TO THE DUDOT NETWORK.
- 2 THE CONTRACTOR SHALL INSTALL A REMOTE CONTROLLED VIDEO SYSTEM AND A CAMERA MOUNTING ASSEMBLY ON THE EXISTING TRAFFIC SIGNAL MAST ARM ASSEMBLY AND POLE.

TS SHT NO. 55

**DUDOT**



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
	DRAWN - RG	REVISED -
PLOT SCALE = 40,0000 ' / in.	CHECKED - ZH	REVISED -
PLOT DATE = 8/28/2018	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

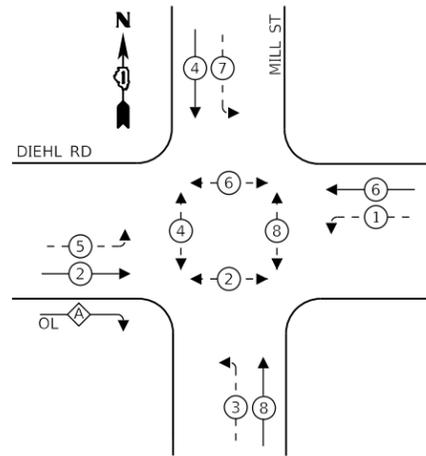
**TRAFFIC SIGNAL MODERNIZATION PLAN  
MILL ST AND DIEHL RD**

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	63
CONTRACT NO.			61F05	
ILLINOIS FED. AID PROJECT				

FILE NAME = p:\IPW1.dzcorp.com\DLZ\Documents\Projects\2017\1782\2130\W03\_Centracs\_Expansion\_2\CADD\_Sheets\0212-sht-ts-plan.dgn  
Default

**EXISTING CONTROLLER SEQUENCE**



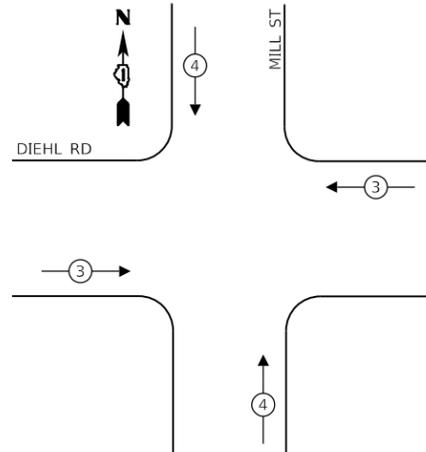
**LEGEND:**

- ⊙ — PROTECTED PHASE
- ⊙ — PROTECTED/PERMITTED PHASE
- ⊙ — PEDESTRIAN PHASE
- OL — OVERLAP

**RIGHT TURN OVERLAP PHASE DESIGNATION:**

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2	+ 3

**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	13	11	50	71.5
(YELLOW)	13	20	5	13.0
(GREEN)	13	12	45	70.2
PERMISSIVE ARROW	20	10	10	20.0
PED. SIGNAL	8	20	100	160.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	250	50	-
PTZ CAMERA	1	75	100	75.0
<b>TOTAL =</b>				<b>534.7</b>

ENERGY COSTS TO:

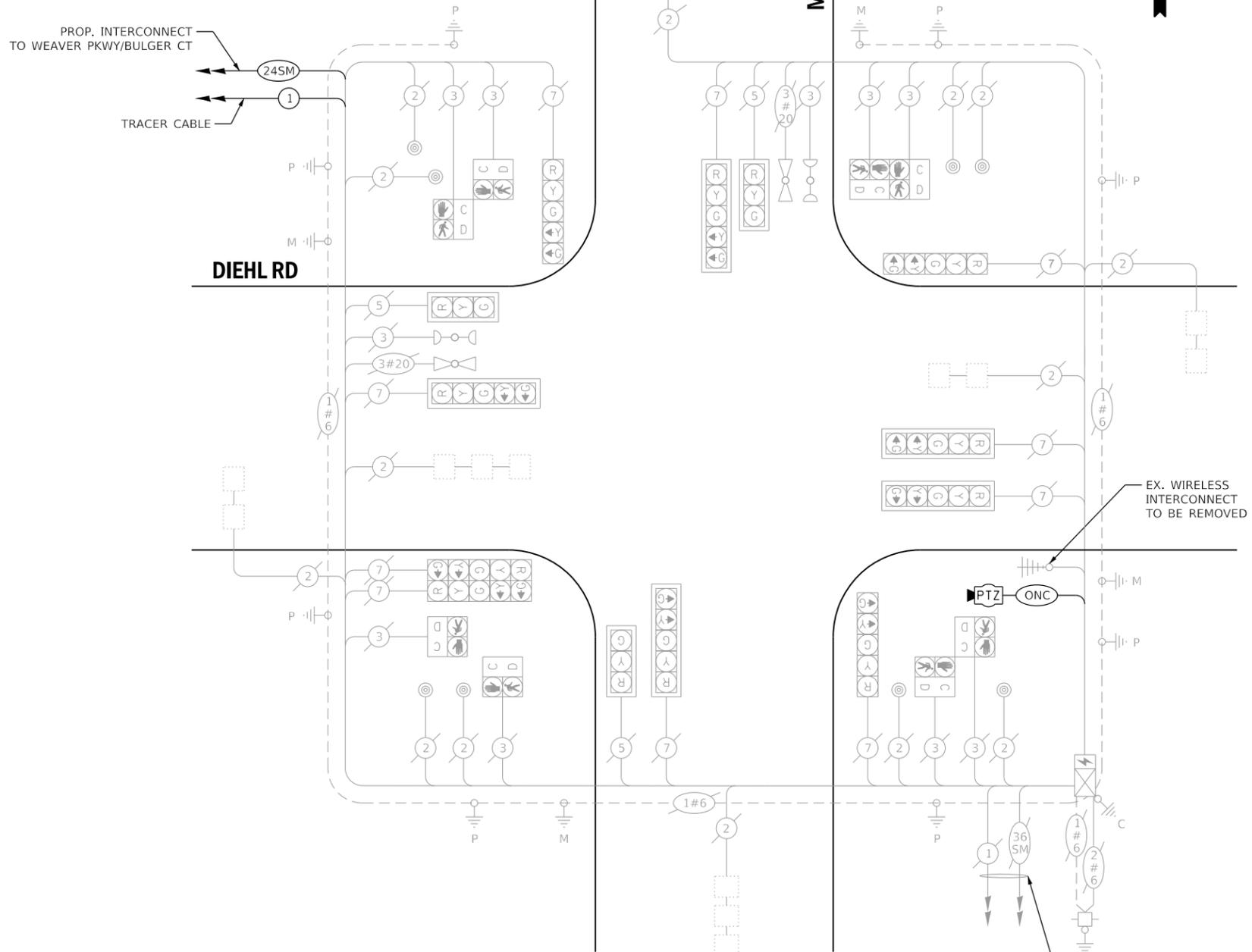
**DUPAGE COUNTY D.O.T.**

421 N. COUNTY FARM RD.  
WHEATON, IL 60187

ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
PHONE: (630)-424-5704  
COMPANY: COM-ED LOMBARD  
ACCOUNT NUMBER:

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	CAMERA MOUNTING ASSEMBLY
96	FOOT	OUTDOOR RATED NETWORK CABLE
1	EACH	REMOTE CONTROLLED VIDEO SYSTEM
1	EACH	LAYER II (DATALINK) SWITCH
1	EACH	MODIFY EXISTING CONTROLLER CABINET, SPECIAL
1	EACH	ELECTRIC METER SOCKET



**CABLE PLAN**  
(NOT TO SCALE)

TS SHT NO. 56



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
PLOT SCALE = 40.0000 ' / in.	DRAWN - RG	REVISED -
PLOT DATE = 8/28/2018	CHECKED - ZH	REVISED -
	DATE -	REVISED -

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

**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES**  
**DIEHL RD AND MILL ST**

SCALE: NTS SHEET 10 OF 14 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	64
			CONTRACT NO. 61F05	
ILLINOIS FED. AID PROJECT				

**DUDOT**

**REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT:**

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: DUPAGE COUNTY DIVISION OF TRANSPORTATION

1 EACH CONTROLLER

EX. INTERCONNECT  
INDEPENDENCE AVE

FREEDOM DR

DIEHL RD

EX. INTERCONNECT  
TO NAPER BLVD

**CONSTRUCTION NOTES:**

- 1 THE CONTRACTOR SHALL INSTALL A LAYER II (DATALINK) SWITCH IN THE EXISTING CABINET FOR CONNECTION TO THE DUDOT NETWORK.
- 2 THE CONTRACTOR SHALL INSTALL A REMOTE CONTROLLED VIDEO SYSTEM ON THE EXISTING COMBINATION MAST ARM ASSEMBLY AND POLE.
- 3 THE CONTRACTOR SHALL REMOVE THE EXISTING CONTROLLER AND REPLACE IT WITH A FULL-ACTUATED CONTROLLER IN THE EXISTING CABINET. REINSTALL THE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT.

3 1  
10'-E-2-4"  
11'-E-2-1/2"

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE NTCIP (LATEST VERSION).

TS SHT NO. 57



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
	DRAWN - RG	REVISED -
PLOT SCALE = 40,0000 ' / in.	CHECKED - ZH	REVISED -
PLOT DATE = 8/28/2018	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODERNIZATION PLAN  
FREEDOM DR AND DIEHL RD

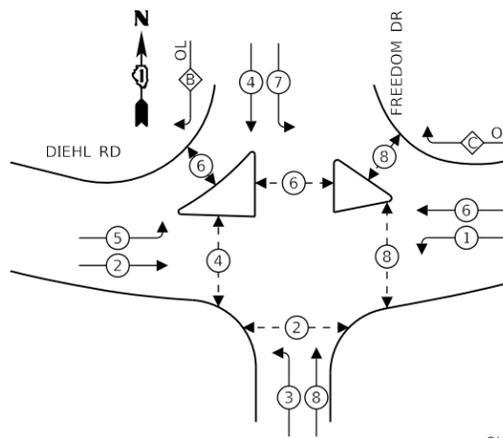
SCALE: NTS SHEET 11 OF 14 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	65
CONTRACT NO. 61F05				
ILLINOIS		FED. AID PROJECT		

DUDOT

FILE NAME = p:\IPW1.dzcorp.com\DLZ\Documents\Projects\2017\1782\2130\W02\_Centracs\_Expansion\_1\CADD\_Sheets\Int 64-sht-ts-plan.dgn

**EXISTING CONTROLLER SEQUENCE**



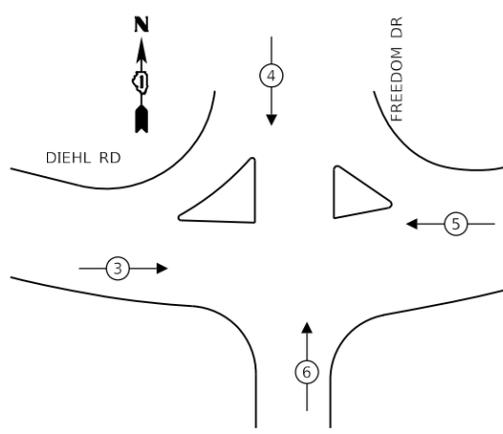
**LEGEND:**

- ← \* → PROTECTED PHASE
- ← \* - - → PROTECTED/PERMITTED PHASE
- ← \* - - - → PEDESTRIAN PHASE
- ← \* OL → OVERLAP

**RIGHT TURN OVERLAP PHASE DESIGNATION:**

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

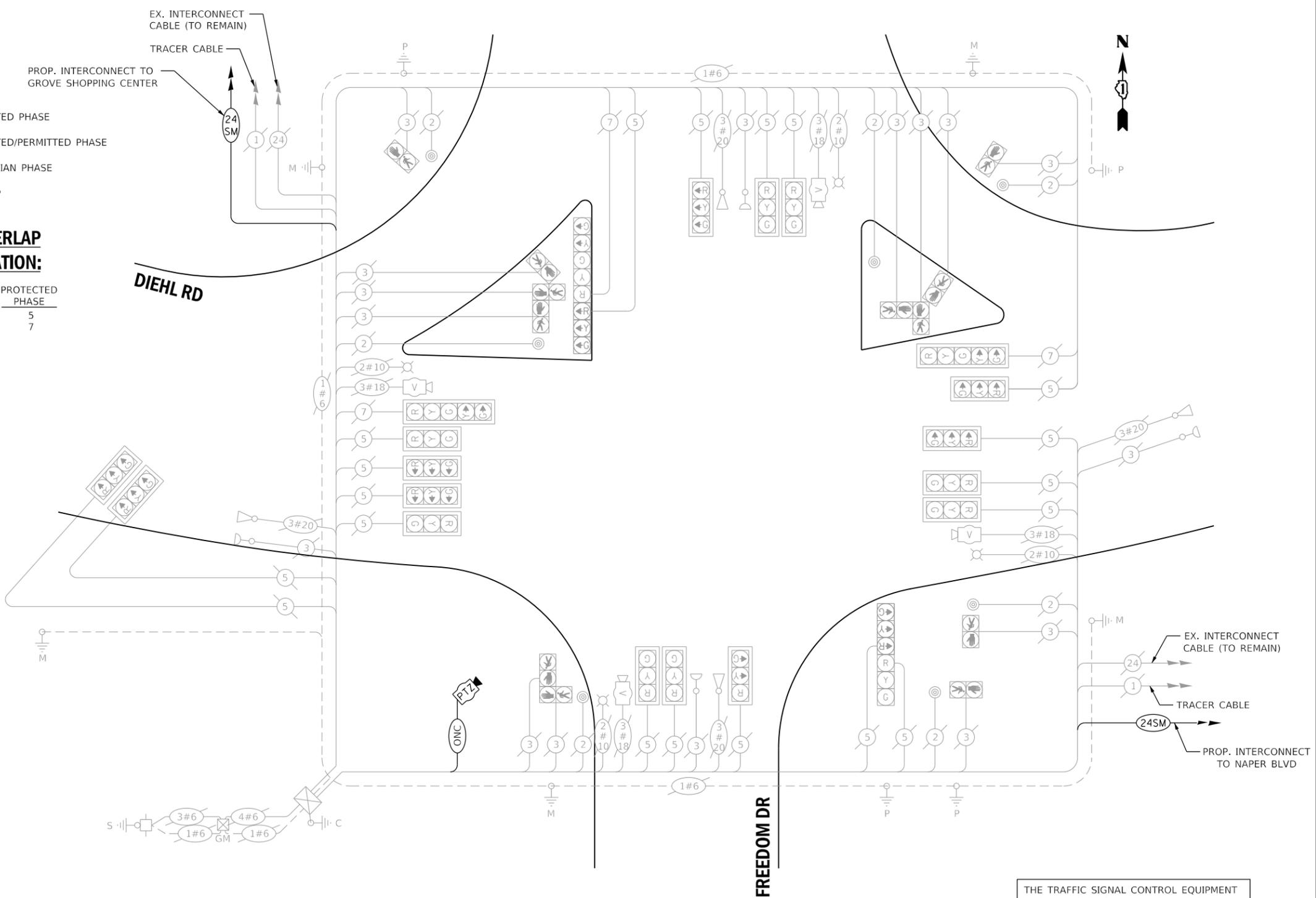
**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	22	11	50	121.0
(YELLOW)	22	20	5	22.0
(GREEN)	22	12	45	118.8
PERMISSIVE ARROW	6	10	10	6.0
PED. SIGNAL	12	20	100	240.0
CONTROLLER	1	100	100	100.0
UPS	-	25	100	-
VIDEO SYSTEM	1	150	100	150.0
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	4	250	50	500.0
PTZ CAMERA	1	75	100	75
<b>TOTAL =</b>				<b>1332.8</b>

ENERGY COSTS TO:  
**DUPAGE COUNTY D.O.T.**  
 421 N. COUNTY FARM RD.  
 WHEATON, IL 60187  
 CONTACT: MR. JOE STACHO  
 PHONE: (630)-424-5704  
 COMPANY: COM-ED LOMBARD  
 ACCOUNT NUMBER:



**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
93.5	FOOT	OUTDOOR RATED NETWORK CABLE
1	EACH	REMOTE CONTROLLED VIDEO SYSTEM
1	EACH	LAYER 11 (DATALINK) SWITCH
1	EACH	FULL-ACTUATED CONTROLLER IN EXISTING CABINET
1	EACH	MODIFY EXISTING CONTROLLER CABINET, SPECIAL

**CABLE PLAN**  
(NOT TO SCALE)

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE NTCIP (LATEST VERSION).

TS SHT NO. 58



USER NAME = dwiktorzak  
 DESIGNED - DW  
 DRAWN - RG  
 PLOT SCALE = 40,0000 ' / in.  
 CHECKED - ZH  
 PLOT DATE = 8/28/2018  
 DATE -

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE  
 PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES  
 FREEDOM DRIVE AND DIEHL ROAD

SCALE: NTS SHEET 12 OF 14 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	66
			CONTRACT NO. 61F05	
ILLINOIS FED. AID PROJECT				

**DUDOT**

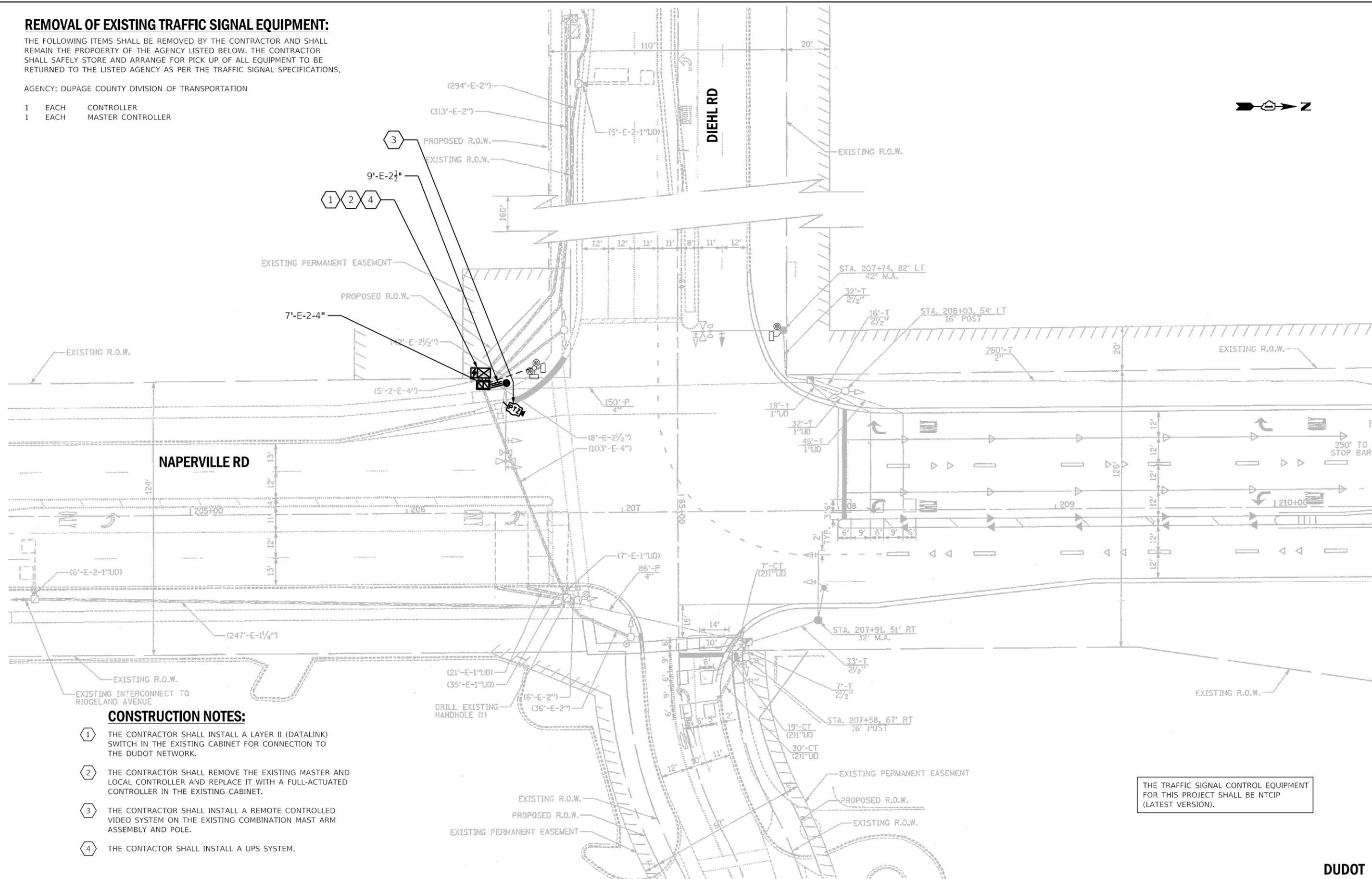
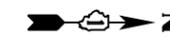
FILE NAME = p:\IPW1.dzcorp.com\DLZ\Documents\Projects\2017\1782\2130\W02\_Centracs Expansion 1\CADD\_Sheets\Int 64-sht-ts-cable.dgn  
 Default

**REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT:**

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: DUPAGE COUNTY DIVISION OF TRANSPORTATION

- 1 EACH CONTROLLER
- 1 EACH MASTER CONTROLLER



- 1 THE CONTRACTOR SHALL INSTALL A LAYER II (DATALINK) SWITCH IN THE EXISTING CABINET FOR CONNECTION TO THE DUDOT NETWORK.
- 2 THE CONTRACTOR SHALL REMOVE THE EXISTING MASTER AND LOCAL CONTROLLER AND REPLACE IT WITH A FULL-ACTUATED CONTROLLER IN THE EXISTING CABINET.
- 3 THE CONTRACTOR SHALL INSTALL A REMOTE CONTROLLED VIDEO SYSTEM ON THE EXISTING COMBINATION MAST ARM ASSEMBLY AND POLE.
- 4 THE CONTRACTOR SHALL INSTALL A UPS SYSTEM.

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE NTCIP (LATEST VERSION).

TS SHT NO. 59



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
PLOT SCALE = 40.0000' / in.	DRAWN - RG	REVISED -
PLOT DATE = 8/28/2018	CHECKED - ZH	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODERNIZATION PLAN  
NAPERVILLE RD AND DIEHL RD

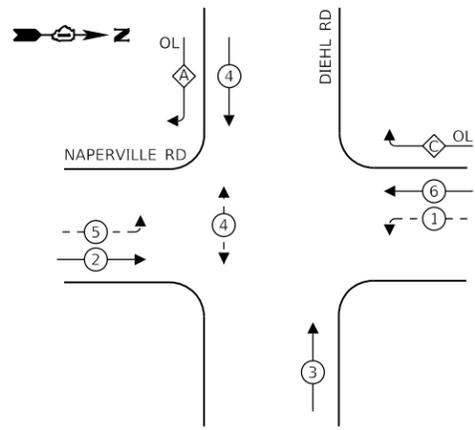
SCALE: NTS SHEET 13 OF 14 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	67
CONTRACT NO. 61F05				

DUDOT

FILE NAME = p:\IPW1.dzcorp.com\DLZ\Documents\Projects\2017\1782\2130\W02\_Centracs Expansion\_1\CADD\_Sheets\Int 47-sht-ts-plan.dgn

**EXISTING CONTROLLER SEQUENCE**



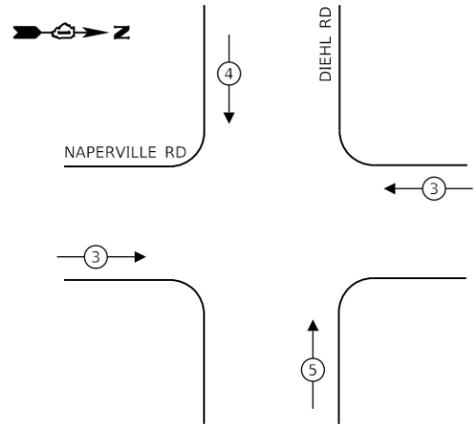
**LEGEND:**

- ← ⊙ → PROTECTED PHASE
- ← ⊙ - - ⊙ PROTECTED/PERMITTED PHASE
- ← ⊙ → PEDESTRIAN PHASE
- ← ⊙ OL → OVERLAP

**RIGHT TURN OVERLAP PHASE DESIGNATION:**

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

**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

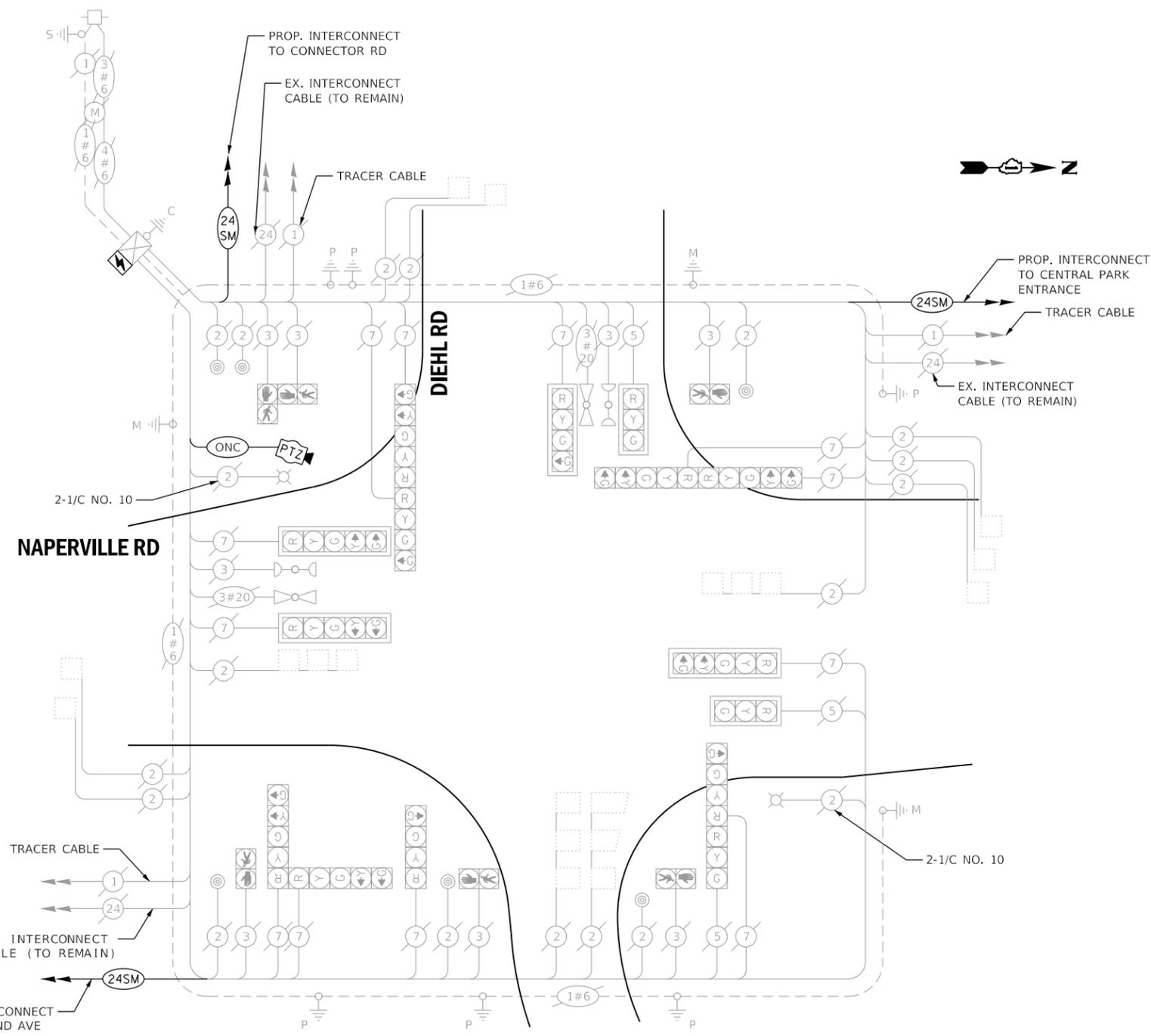
TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	15	11	50	82.5
(YELLOW)	15	20	5	15.0
(GREEN)	19	12	45	102.6
PERMISSIVE ARROW	16	10	10	16.0
PED. SIGNAL	6	20	100	120.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	2	250	50	250.0
PTZ CAMERA	1	75	100	75.0
<b>TOTAL =</b>				<b>786.1</b>

ENERGY COSTS TO:

**DUPAGE COUNTY D.O.T.**

421 N. COUNTY FARM RD.  
WHEATON, IL 60187

ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
PHONE: (630)-424-5704  
COMPANY: COM-ED LOMBARD  
ACCOUNT NUMBER: \_\_\_\_\_



**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
88.5	FOOT	OUTDOOR RATED NETWORK CABLE
1	EACH	REMOTE CONTROLLED VIDEO SYSTEM
1	EACH	LAYER 11 (DATALINK) SWITCH
1	EACH	FULL-ACTUATED CONTROLLER IN EXISTING CABINET
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
1	EACH	MODIFY EXISTING CONTROLLER CABINET, SPECIAL
1	EACH	ELECTRIC METER SOCKET

**CABLE PLAN**  
(NOT TO SCALE)

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE NTCIP (LATEST VERSION).

TS SHT NO. 60



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
PLOT SCALE = 40.0000 ' / in.	DRAWN - RG	REVISED -
PLOT DATE = 8/28/2018	CHECKED - ZH	REVISED -
	DATE -	REVISED -

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

**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES**  
**NAPERVILLE RD AND DIEHL RD**

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	68
			CONTRACT NO. 61F05	
ILLINOIS FED. AID PROJECT				

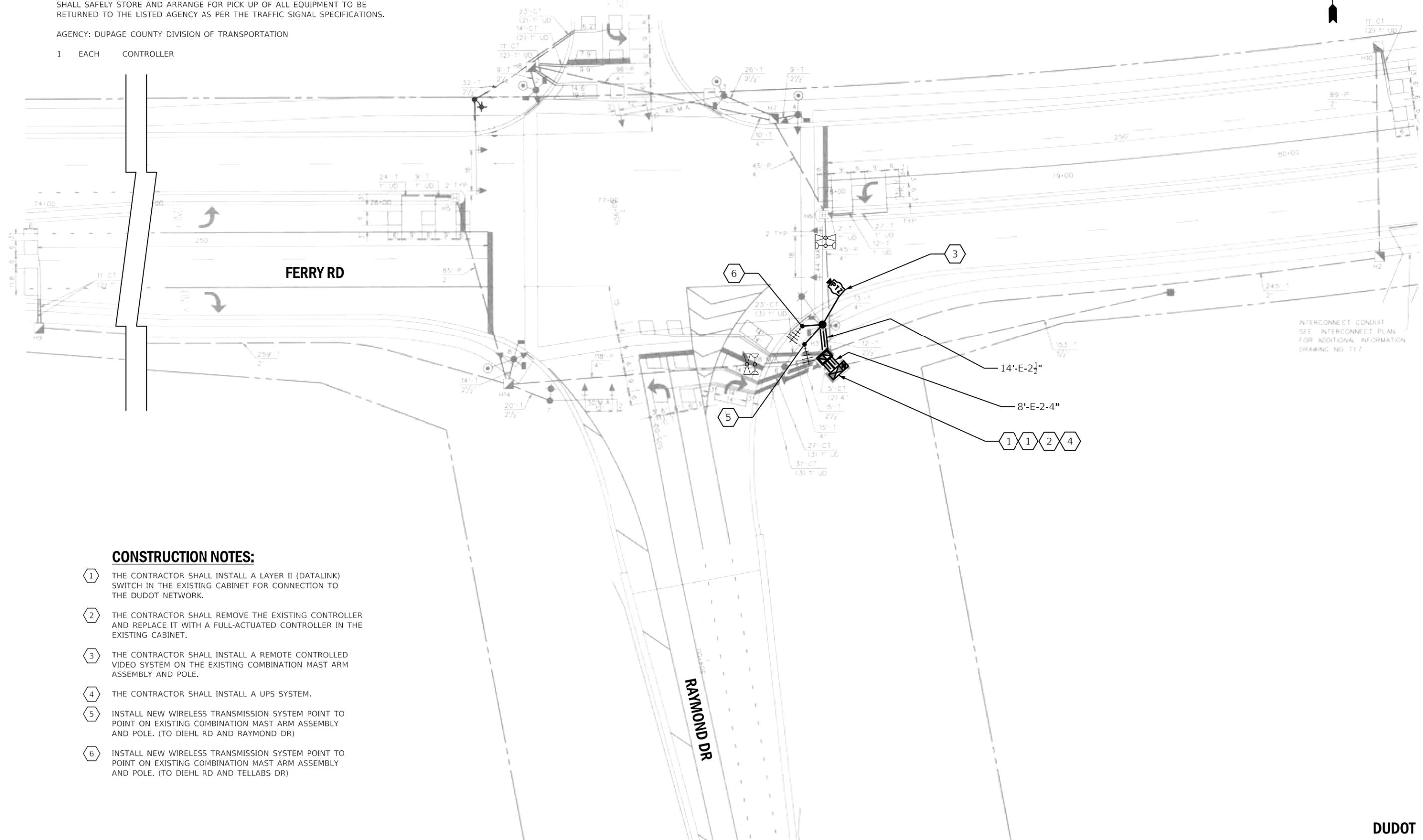
**DUDOT**

**REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT:**

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: DUPAGE COUNTY DIVISION OF TRANSPORTATION

1 EACH CONTROLLER



**CONSTRUCTION NOTES:**

- ① THE CONTRACTOR SHALL INSTALL A LAYER II (DATALINK) SWITCH IN THE EXISTING CABINET FOR CONNECTION TO THE DUDOT NETWORK.
- ② THE CONTRACTOR SHALL REMOVE THE EXISTING CONTROLLER AND REPLACE IT WITH A FULL-ACTUATED CONTROLLER IN THE EXISTING CABINET.
- ③ THE CONTRACTOR SHALL INSTALL A REMOTE CONTROLLED VIDEO SYSTEM ON THE EXISTING COMBINATION MAST ARM ASSEMBLY AND POLE.
- ④ THE CONTRACTOR SHALL INSTALL A UPS SYSTEM.
- ⑤ INSTALL NEW WIRELESS TRANSMISSION SYSTEM POINT TO POINT ON EXISTING COMBINATION MAST ARM ASSEMBLY AND POLE. (TO DIEHL RD AND RAYMOND DR)
- ⑥ INSTALL NEW WIRELESS TRANSMISSION SYSTEM POINT TO POINT ON EXISTING COMBINATION MAST ARM ASSEMBLY AND POLE. (TO DIEHL RD AND TELLABS DR)

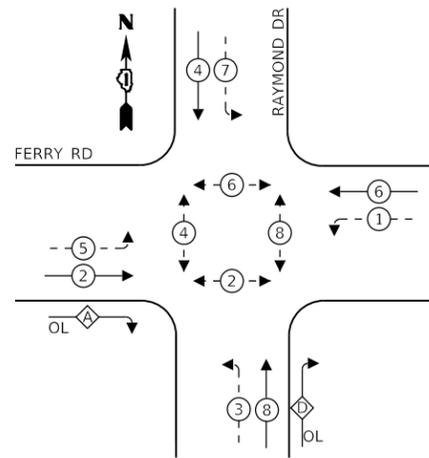
TS SHT NO. 61

**DUDOT**

	USER NAME = dwiktorzak	DESIGNED - DW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODERNIZATION PLAN FERRY RD AND RAYMOND RD			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 40,0000' / in.	CHECKED - ZH	REVISED -					VAR.	17-DCCSS-01-TL	DUPAGE	277	69
	PLOT DATE = 8/28/2018	DATE -	REVISED -		SCALE: NTS	SHEET 1	OF 22 SHEETS	STA.	TO STA.	CONTRACT NO. 61F05		
											ILLINOIS FED. AID PROJECT	

FILE NAME = p:\IPW1.dzcorp.com\DLZ\Documents\Projects\2017\1782\2130\W03\_Centracs Expansion 2\CADD\_Sheets\0300-sht-ts-plan.dgn

**EXISTING CONTROLLER SEQUENCE**



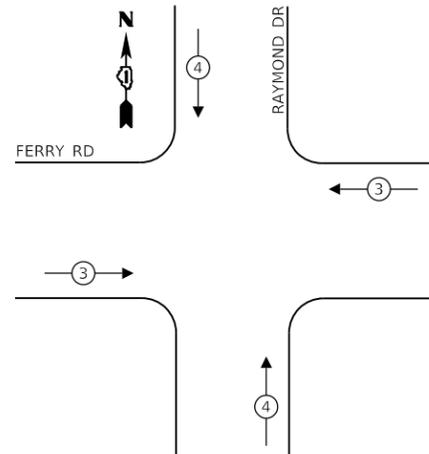
**LEGEND:**

- ⊙ — PROTECTED PHASE
- ⊙ — — PROTECTED/PERMITTED PHASE
- ⊙ — ⊙ — PEDESTRIAN PHASE
- ⊙ — OL — OVERLAP

**RIGHT TURN OVERLAP PHASE DESIGNATION:**

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2	+ 3
D	= 1	+ 8

**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	15	11	50	82.5
(YELLOW)	15	20	5	15.0
(GREEN)	15	12	45	81.0
PERMISSIVE ARROW	26	10	10	26.0
PED. SIGNAL	8	20	100	160.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	3	250	50	375.0
PTZ CAMERA	1	75	100	75.0
<b>TOTAL =</b>				<b>939.5</b>

ENERGY COSTS TO:

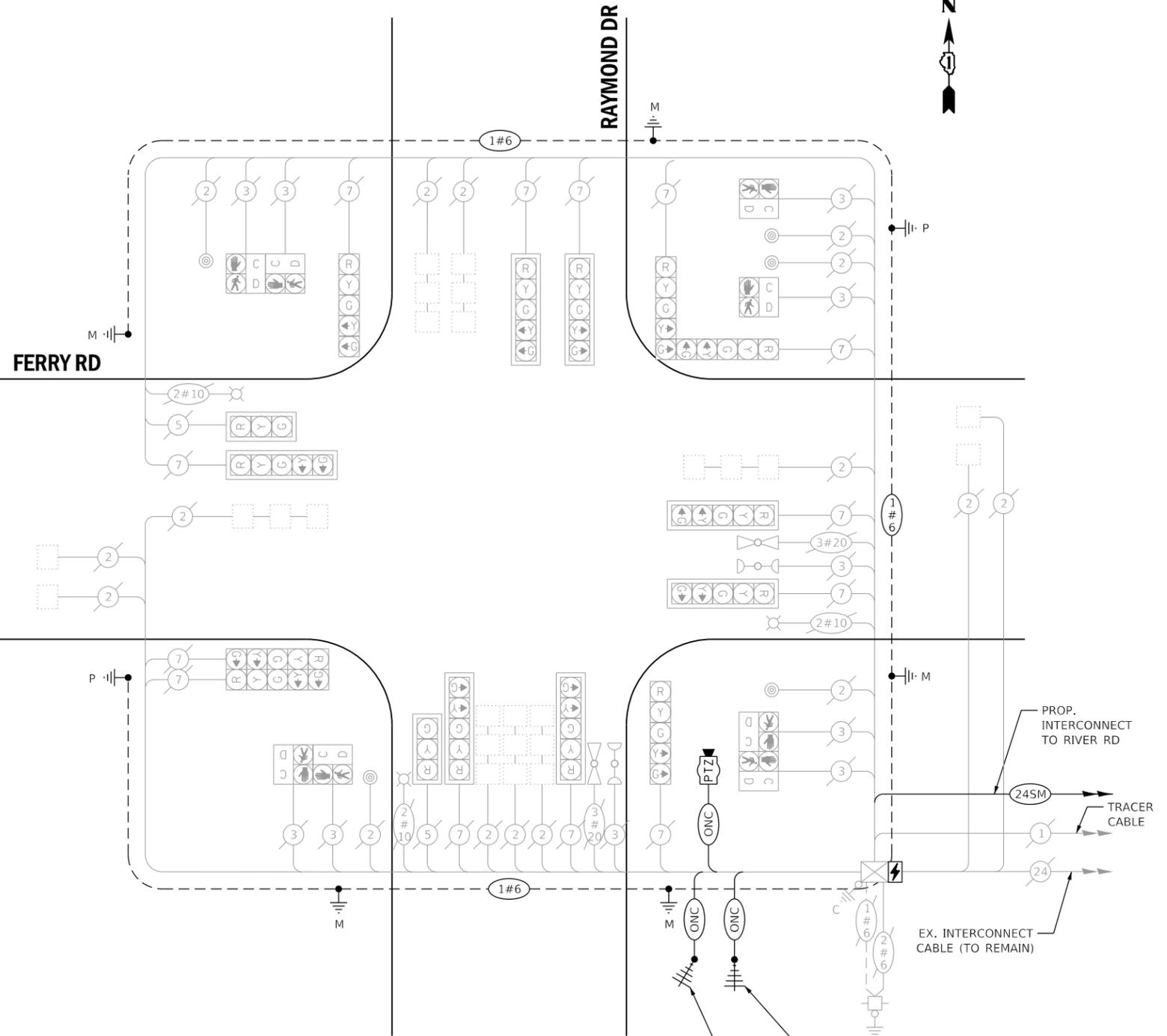
**DUPAGE COUNTY D.O.T.**

421 N. COUNTY FARM RD.  
WHEATON, IL 60187

ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
PHONE: (630)-424-5704  
COMPANY: COM-ED LOMBARD  
ACCOUNT NUMBER:

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
4	EACH	GROUNDING EXISTING HANDHOLE FRAME AND COVER
750	FOOT	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
190	FOOT	OUTDOOR RATED NETWORK CABLE
1	EACH	REMOTE CONTROLLED VIDEO SYSTEM
2	EACH	LAYER II (DATALINK) SWITCH
2	EACH	WIRELESS TRANSMISSION SYSTEM POINT TO POINT
1	EACH	FULL-ACTUATED CONTROLLER IN EXISTING CABINET
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
1	EACH	MODIFY EXISTING CONTROLLER CABINET, SPECIAL
1	EACH	ELECTRIC METER SOCKET



**CABLE PLAN**  
(NOT TO SCALE)

- INSTALL NEW WIRELESS TRANSMISSION SYSTEM POINT TO POINT ON EXISTING COMBINATION MAST ARM ASSEMBLY AND POLE. (TO DIEHL RD AND RAYMOND DR)
- INSTALL NEW WIRELESS TRANSMISSION SYSTEM POINT TO POINT ON EXISTING COMBINATION MAST ARM ASSEMBLY AND POLE. (TO DIEHL RD AND TELLABS DR)

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE NTCIP (LATEST VERSION).

TS SHT NO. 62



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
PLOT SCALE = 40.0000" / in.	DRAWN - RG	REVISED -
PLOT DATE = 8/28/2018	CHECKED - ZH	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

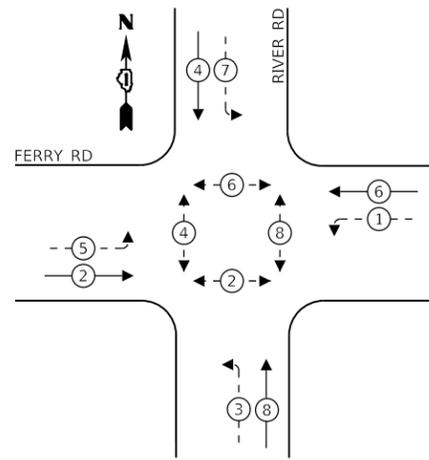
**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES**  
FERRY RD AND RAYMOND DR

SCALE: NTS SHEET 2 OF 22 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	70
			CONTRACT NO.	61F05
ILLINOIS FED. AID PROJECT				

**DUDOT**

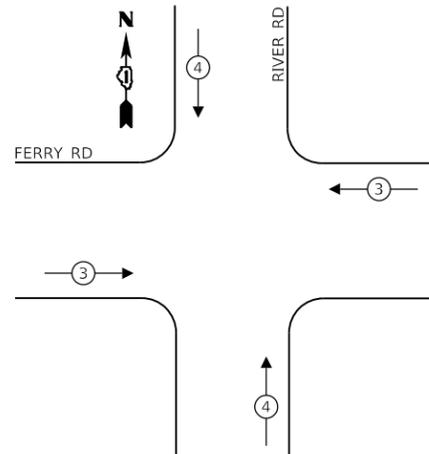
**EXISTING CONTROLLER SEQUENCE**



**LEGEND:**

- ⊙ — PROTECTED PHASE
- ⊙ — PROTECTED/PERMITTED PHASE
- ⊙ — PEDESTRIAN PHASE
- OL — OVERLAP

**EXISTING EMERGENCY VEHICLE  
PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL  
ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	11	50	66.0
(YELLOW)	12	20	5	12.0
(GREEN)	12	12	45	64.8
PERMISSIVE ARROW	16	10	10	16.0
PED. SIGNAL	8	20	100	160.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	2	250	50	250.0
PTZ CAMERA	-	75	100	-
<b>TOTAL =</b>				<b>693.8</b>

ENERGY COSTS TO:

**DUPAGE COUNTY D.O.T.**

421 N. COUNTY FARM RD.  
WHEATON, IL 60187

ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
PHONE: (630)-424-5704  
COMPANY: COM-ED LOMBARD  
ACCOUNT NUMBER:

**REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT**

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: DUPAGE COUNTY DIVISION OF TRANSPORTATION

1 EACH CONTROLLER AND CABINET (COMPLETE)

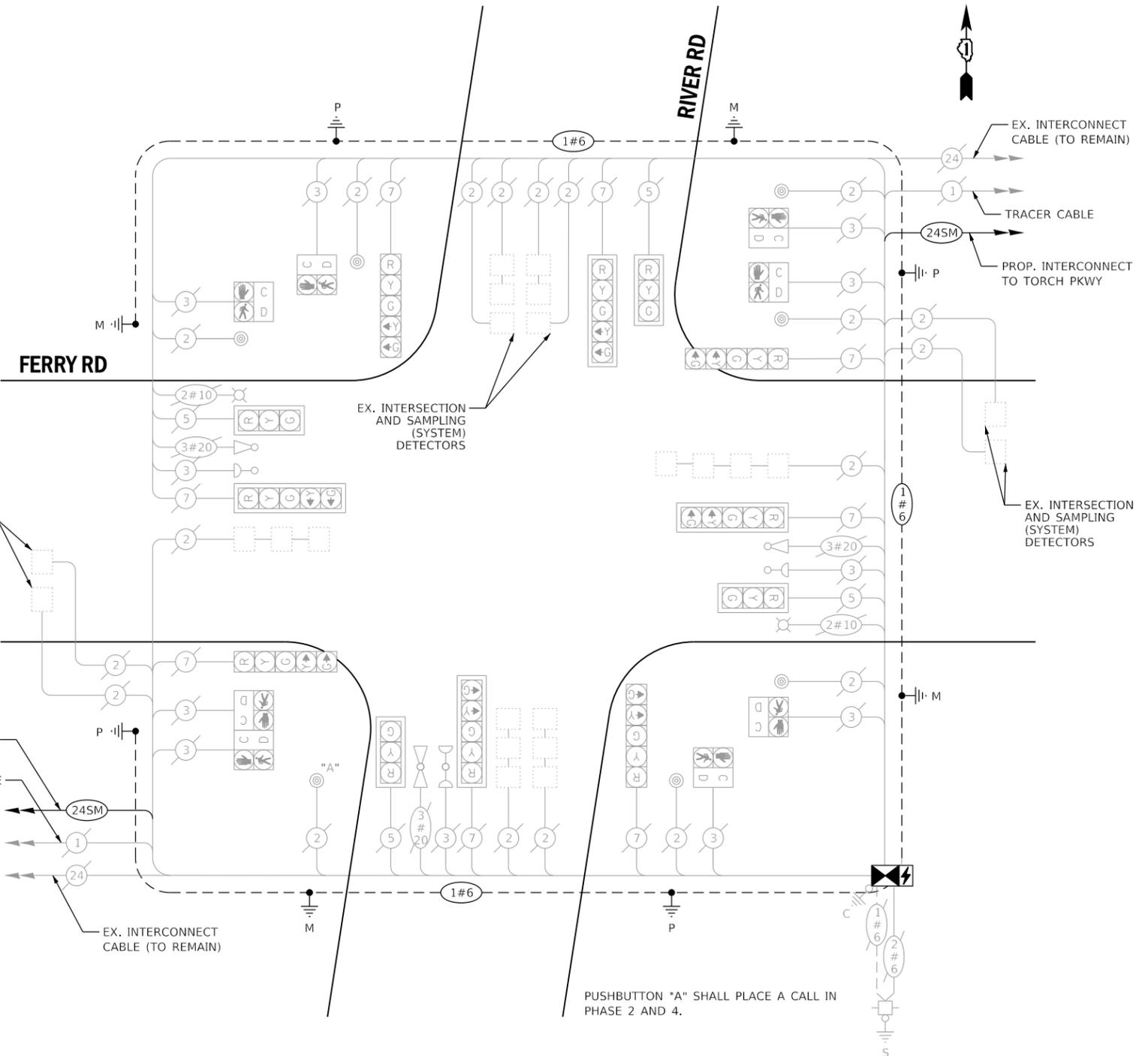
**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
6	EACH	GROUNDING EXISTING HANDHOLE FRAME AND COVER
750	FOOT	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C
12	EACH	INDUCTIVE LOOP DETECTOR
1	EACH	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	LAYER II (DATALINK) SWITCH
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
1	EACH	UNINTERRRUPTABLE POWER SUPPLY, SPECIAL
1	EACH	ELECTRIC METER SOCKET

**FERRY RD**

EX. INTERSECTION AND SAMPLING (SYSTEM) DETECTORS

PROP. INTERCONNECT TO RAYMOND DR  
TRACER CABLE



**CABLE PLAN  
(NOT TO SCALE)**

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE NTCIP (LATEST VERSION).

TS SHT NO. 63



USER NAME = dwiktorzak  
DESIGNED - DW  
DRAWN - RG  
PLOT SCALE = 40.0000 ' / in.  
CHECKED - ZH  
PLOT DATE = 8/28/2018  
DATE -

REVISIED -  
REVISIED -  
REVISIED -  
REVISIED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

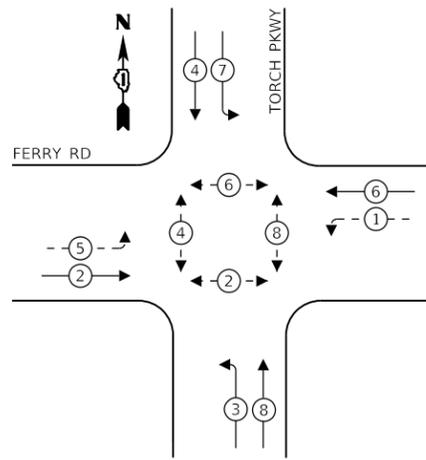
CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE  
PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES  
FERRY RD AND RIVER RD

SCALE: NTS SHEET 3 OF 22 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
17-DCCSS-01-TL	DUPAGE	277	71	
CONTRACT NO. 61F05				
ILLINOIS FED. AID PROJECT				

DUDOT

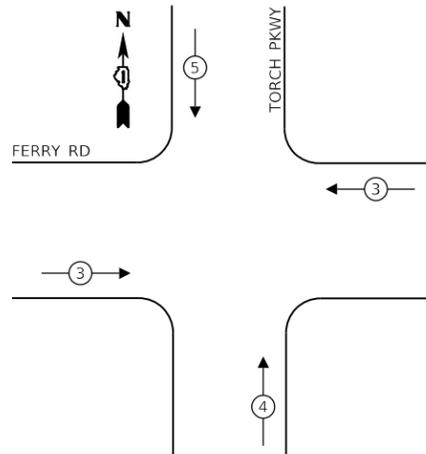
**EXISTING CONTROLLER SEQUENCE**



**LEGEND:**

- ⊙ — PROTECTED PHASE
- ⊙ — PROTECTED/PERMITTED PHASE
- ⊙ — PEDESTRIAN PHASE
- OL — OVERLAP

**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	18	11	50	99.0
(YELLOW)	18	20	5	18.0
(GREEN)	18	12	45	97.2
PERMISSIVE ARROW	8	10	10	8.0
PED. SIGNAL	8	20	100	160.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	250	50	-
PTZ CAMERA	-	75	100	-
<b>TOTAL =</b>				<b>507.2</b>

ENERGY COSTS TO:

**DUPAGE COUNTY D.O.T.**

421 N. COUNTY FARM RD.  
WHEATON, IL 60187

ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
PHONE: (630)-424-5704  
COMPANY: COM-ED LOMBARD  
ACCOUNT NUMBER:

**REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT**

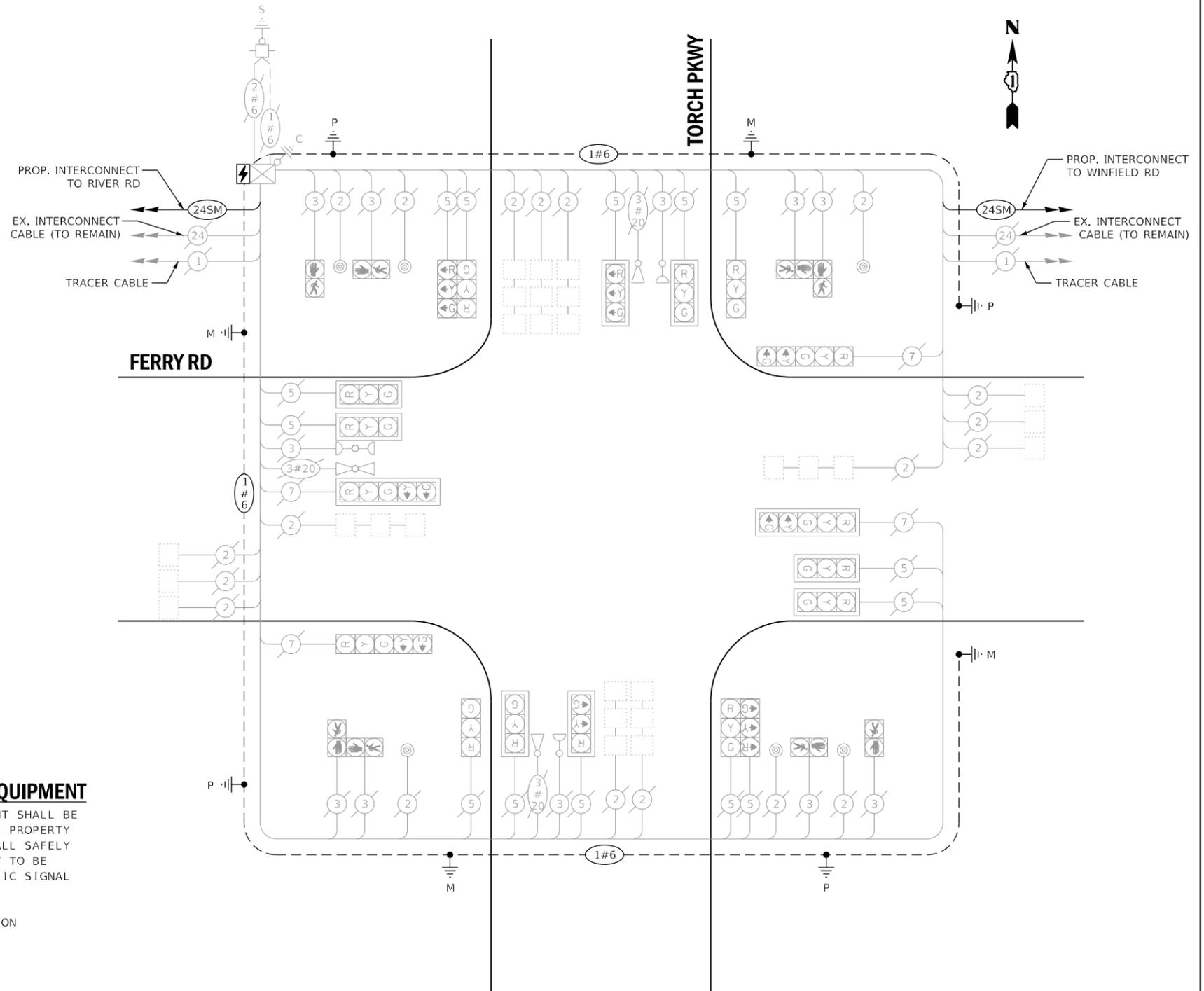
THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: DUPAGE COUNTY DIVISION OF TRANSPORTATION

1 EACH CONTROLLER

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
7	EACH	GROUNDING EXISTING HANDHOLE FRAME AND COVER
750	FOOT	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	LAYER 11 (DATALINK) SWITCH
1	EACH	FULL-ACTUATED CONTROLLER IN EXISTING CABINET
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
1	EACH	MODIFY EXISTING CONTROLLER CABINET, SPECIAL
1	EACH	ELECTRIC METER SOCKET



**CABLE PLAN**  
(NOT TO SCALE)

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE NTCIP (LATEST VERSION).

TS SHT NO. 64



USER NAME = dwiktorzak  
DESIGNED - DW  
DRAWN - RG  
PLOT SCALE = 40.0000 ' / in.  
CHECKED - ZH  
PLOT DATE = 8/28/2018  
DATE -

REVISED -  
REVISED -  
REVISED -  
REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES**  
**FERRY RD AND TORCH PKWY**

SCALE: NTS SHEET 4 OF 22 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	72
CONTRACT NO. 61F05			ILLINOIS FED. AID PROJECT	

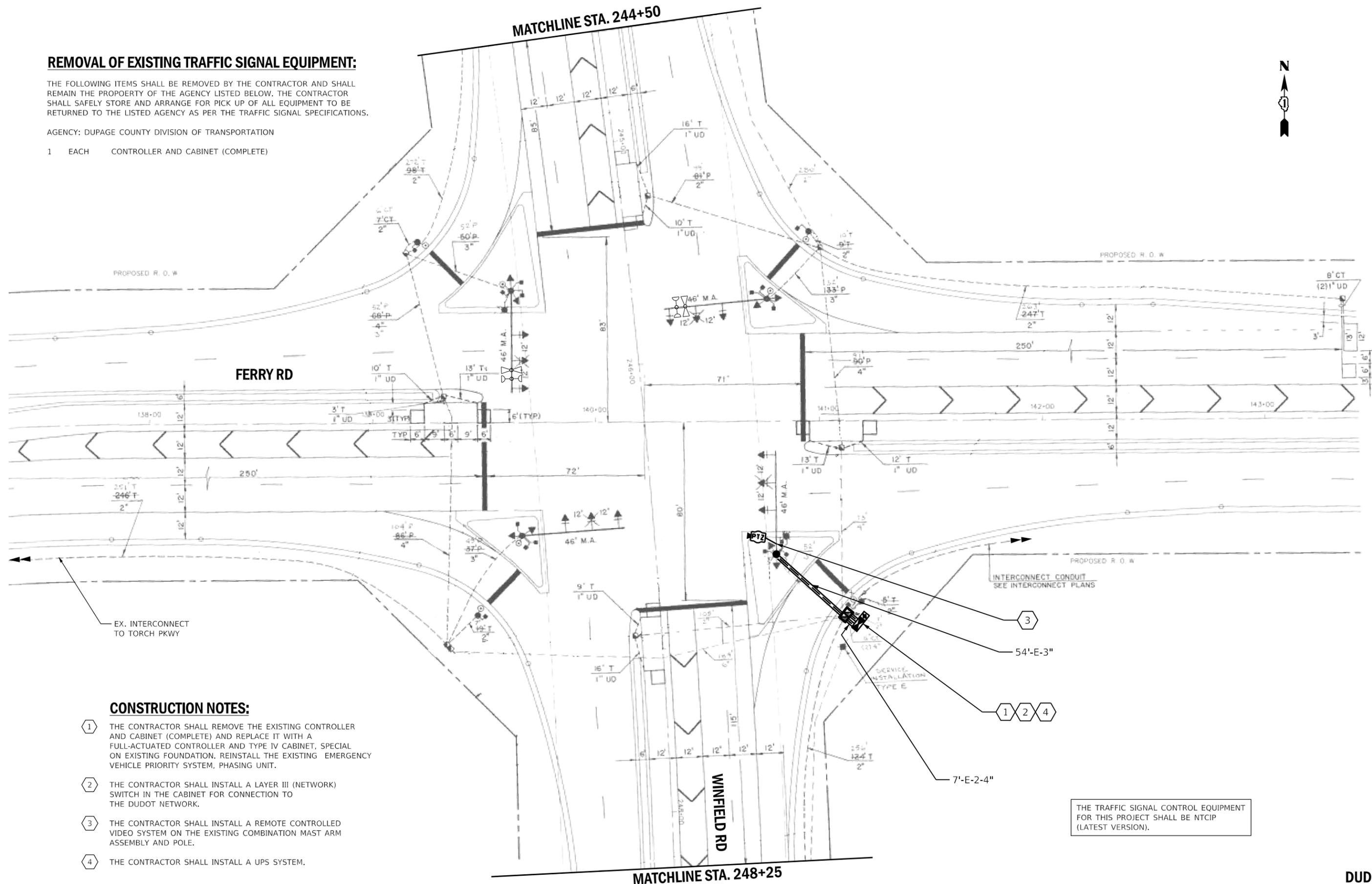
**DUDOT**

**REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT:**

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: DUPAGE COUNTY DIVISION OF TRANSPORTATION

- 1 EACH CONTROLLER AND CABINET (COMPLETE)



**CONSTRUCTION NOTES:**

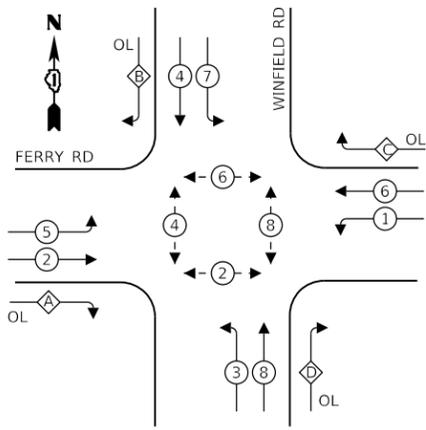
- ① THE CONTRACTOR SHALL REMOVE THE EXISTING CONTROLLER AND CABINET (COMPLETE) AND REPLACE IT WITH A FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL ON EXISTING FOUNDATION. REINSTALL THE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT.
- ② THE CONTRACTOR SHALL INSTALL A LAYER III (NETWORK) SWITCH IN THE CABINET FOR CONNECTION TO THE DUDOT NETWORK.
- ③ THE CONTRACTOR SHALL INSTALL A REMOTE CONTROLLED VIDEO SYSTEM ON THE EXISTING COMBINATION MAST ARM ASSEMBLY AND POLE.
- ④ THE CONTRACTOR SHALL INSTALL A UPS SYSTEM.

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE NTCIP (LATEST VERSION).

TS SHT NO. 65

	USER NAME = dwiktorzak	DESIGNED - DW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODERNIZATION PLAN WINFIELD RD AND FERRY RD			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 40,0000' / in.	CHECKED - ZH	REVISED -					VAR.	17-DCCSS-01-TL	DUPAGE	277	73
	PLOT DATE = 8/28/2018	DATE -	REVISED -		SCALE: NTS	SHEET 5	OF 22 SHEETS	STA.	TO STA.	CONTRACT NO. 61F05		
											ILLINOIS	FED. AID PROJECT

**EXISTING CONTROLLER SEQUENCE**



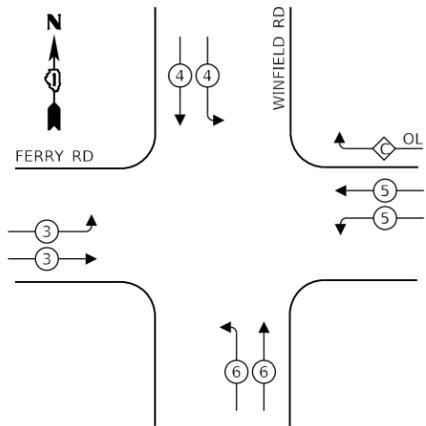
**LEGEND:**

- ⊙ — PROTECTED PHASE
- ⊙ — PROTECTED/PERMITTED PHASE
- ⊙ — PEDESTRIAN PHASE
- OL — OVERLAP

**RIGHT TURN OVERLAP PHASE DESIGNATION:**

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

**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	20	11	50	110.0
(YELLOW)	20	20	5	20.0
(GREEN)	20	12	45	108.0
PERMISSIVE ARROW	16	10	10	16.0
PED. SIGNAL	16	20	100	320.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	2	-	-	250.0
PTZ CAMERA	1	75	100	75.0
<b>TOTAL =</b>				<b>1024.0</b>

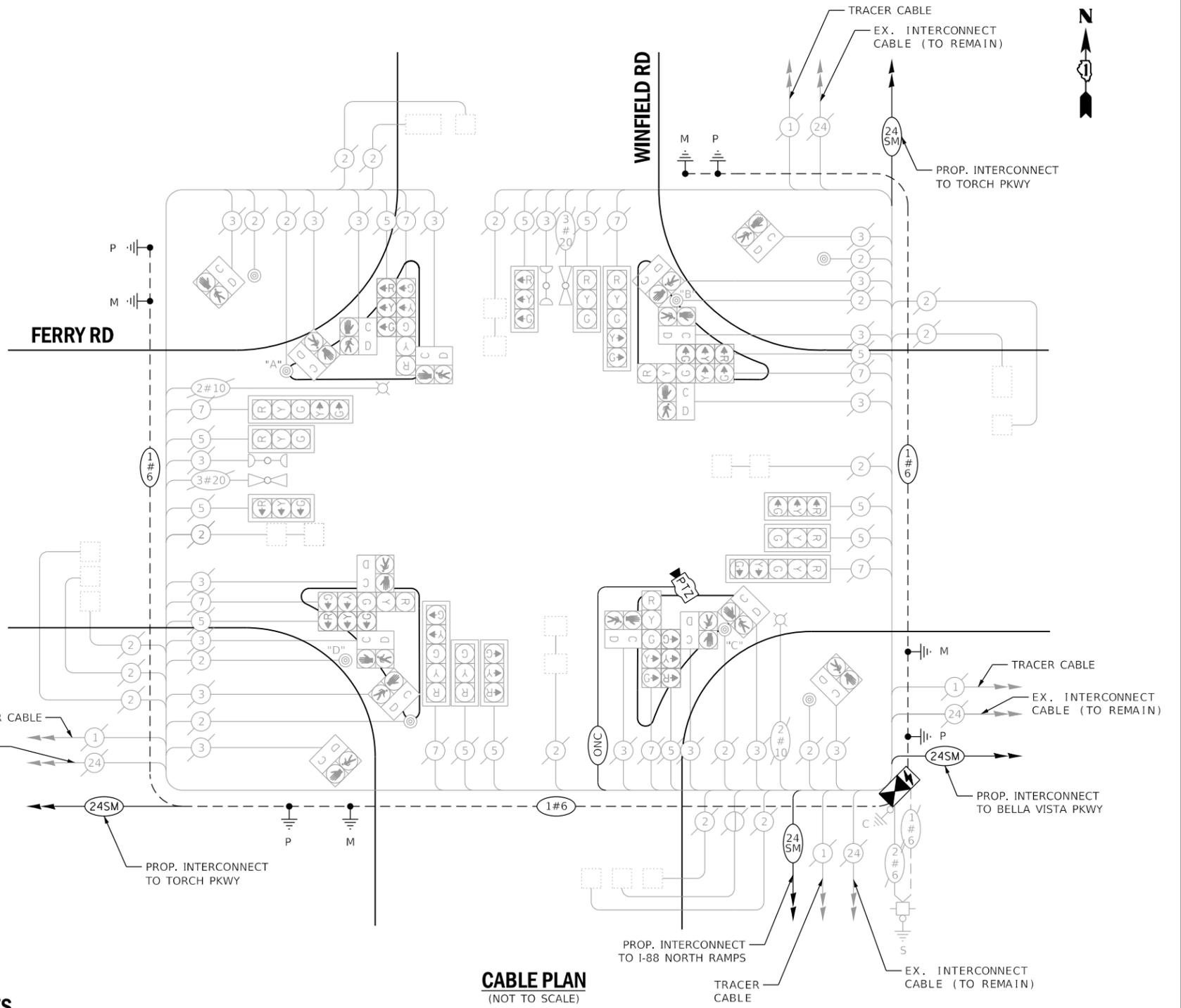
**DUPAGE COUNTY D.O.T.**

421 N. COUNTY FARM RD.  
WHEATON, IL 60187

ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
PHONE: (630)-424-5704  
COMPANY: COM-ED LOMBARD  
ACCOUNT NUMBER:

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
6	EACH	GROUNDING EXISTING HANDHOLE FRAME AND COVER
850	FOOT	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C
14	EACH	INDUCTIVE LOOP DETECTOR
1	FOOT	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM PHASING UNIT
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
134	EACH	OUTDOOR RATED NETWORK CABLE
1	EACH	REMOTE CONTROLLED VIDEO SYSTEM
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
1	EACH	LAYER III (NETWORK) SWITCH
1	EACH	ELECTRIC METER SOCKET



**CABLE PLAN**  
(NOT TO SCALE)

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE NTCIP (LATEST VERSION).

**PUSHBUTTON NOTES:**  
PUSHBUTTON "A" SHALL PLACE CALLS IN PHASES 4 & 6  
PUSHBUTTON "B" SHALL PLACE CALLS IN PHASES 6 & 8  
PUSHBUTTON "C" SHALL PLACE CALLS IN PHASES 2 & 8  
PUSHBUTTON "D" SHALL PLACE CALLS IN PHASES 2 & 4

TS SHT NO. 66



USER NAME = dwiktorzak  
DESIGNED - DW  
DRAWN - RG  
PLOT SCALE = 40.0000" / in.  
PLOT DATE = 8/28/2018  
CHECKED - ZH  
DATE -

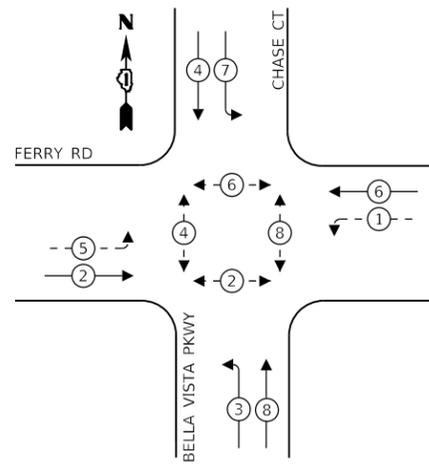
REVISD -  
REVISD -  
REVISD -  
REVISD -

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

**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES**  
**WINFIELD RD AND FERRY RD**

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	74
CONTRACT NO. 61F05			ILLINOIS FED. AID PROJECT	

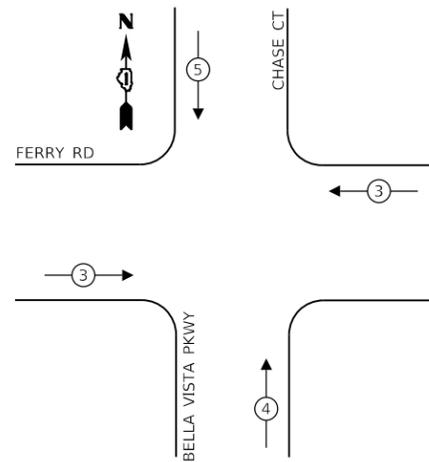
**EXISTING CONTROLLER SEQUENCE**



**LEGEND:**

- ⊙ — PROTECTED PHASE
- ⊙ — PROTECTED/PERMITTED PHASE
- ⊙ — PEDESTRIAN PHASE
- OL — OVERLAP

**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	18	11	50	99.0
(YELLOW)	18	20	5	18.0
(GREEN)	18	12	45	97.2
PERMISSIVE ARROW	8	10	10	8.0
PED. SIGNAL	8	20	100	160.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	250	50	-
PTZ CAMERA	-	75	100	-
<b>TOTAL =</b>				<b>507.2</b>

ENERGY COSTS TO:

**DUPAGE COUNTY D.O.T.**

421 N. COUNTY FARM RD.  
WHEATON, IL 60187

ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
PHONE: (630)-424-5704  
COMPANY: COM-ED LOMBARD  
ACCOUNT NUMBER: \_\_\_\_\_

**REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT**

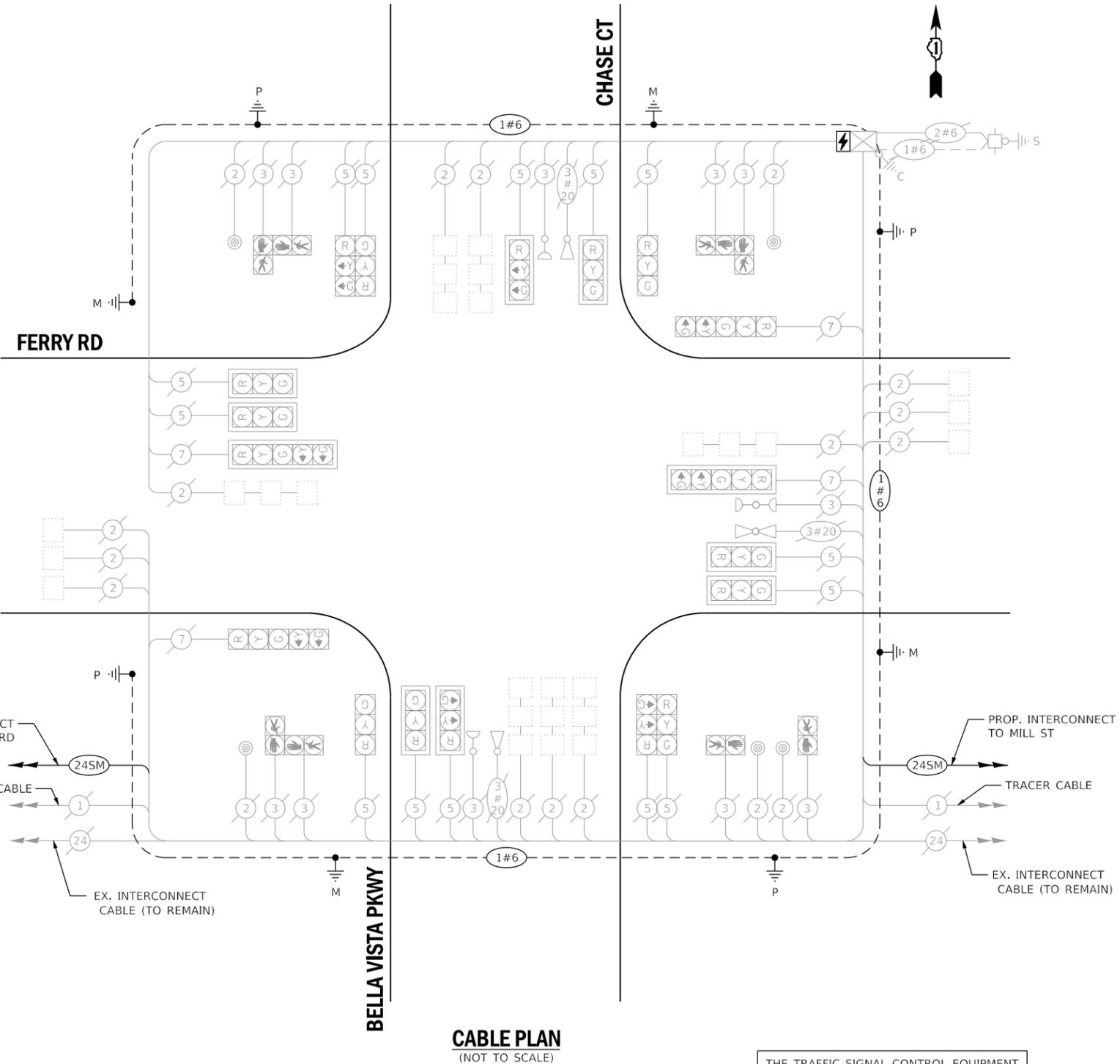
THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: DUPAGE COUNTY DIVISION OF TRANSPORTATION

1 EACH CONTROLLER

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
8	EACH	GROUNDING EXISTING HANDHOLE FRAME AND COVER
750	FOOT	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	LAYER 11 (DATALINK) SWITCH
1	EACH	FULL-ACTUATED CONTROLLER IN EXISTING CABINET
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
1	EACH	MODIFY EXISTING CONTROLLER CABINET, SPECIAL
1	EACH	ELECTRIC METER SOCKET



**CABLE PLAN**  
(NOT TO SCALE)

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE NTCIP (LATEST VERSION).

TS SHT NO. 67



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
PLOT SCALE = 40.0000' / in.	DRAWN - RG	REVISED -
PLOT DATE = 8/28/2018	CHECKED - ZH	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES**  
**FERRY RD AND CHASE CT/BELLA VISTA PKWY**

SCALE: NTS SHEET 7 OF 22 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	75
			CONTRACT NO.	61F05
		ILLINOIS	FED. AID PROJECT	

**DUDOT**

MATCH LINE STA. 405+50

MATCH LINE STA. 341+25

WARRENVILLE RD

MATCH LINE STA. 341+25

ROAD

WARRENVILLE RD

FERRY RD

MILL ST

RELOCATED MILL

MATCH LINE STA. 405+50



INTERCONNECT CONDUIT  
SEE INTERCONNECT PLANS

THE TRAFFIC SIGNAL CONTROL EQUIPMENT  
FOR THIS PROJECT SHALL BE NTCIP  
(LATEST VERSION).

**CONSTRUCTION NOTES:**

- 1 THE CONTRACTOR SHALL REMOVE THE EXISTING CONTROLLER AND CABINET (COMPLETE) AND REPLACE IT WITH A FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL ON EXISTING FOUNDATION. REINSTALL THE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT.
- 2 THE CONTRACTOR SHALL INSTALL A LAYER II (DATALINK) SWITCH IN THE CABINET FOR CONNECTION TO THE DUDOT NETWORK.
- 3 THE CONTRACTOR SHALL INSTALL A REMOTE CONTROLLED VIDEO SYSTEM ON THE EXISTING COMBINATION MAST ARM ASSEMBLY AND POLE.
- 4 THE CONTRACTOR SHALL INSTALL A UPS SYSTEM.

1 2 4

EX. INTERCONNECT  
TO BELLA VISTA PKWY

TS SHT NO. 68



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
PLOT SCALE = 40,0000' / in.	DRAWN - RG	REVISED -
PLOT DATE = 8/28/2018	CHECKED - ZH	REVISED -
	DATE -	REVISED -

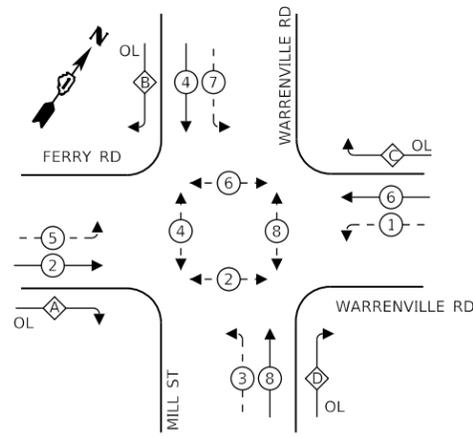
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODERNIZATION PLAN  
WARRENVILLE RD AND MILL ST/FERRY RD

SCALE: NTS SHEET 8 OF 22 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	76
			CONTRACT NO.	61F05
ILLINOIS FED. AID PROJECT				

**EXISTING CONTROLLER SEQUENCE**



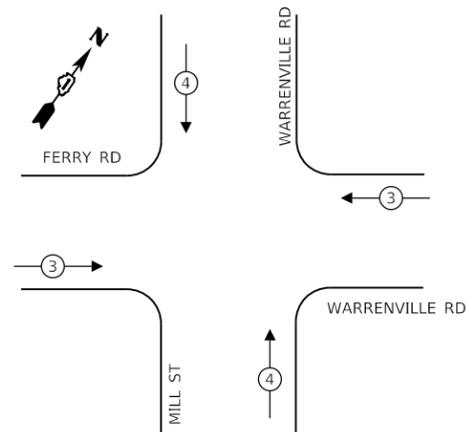
**LEGEND:**

- ⊙ — PROTECTED PHASE
- ⊙ — PROTECTED/PERMITTED PHASE
- ⊙ — PEDESTRIAN PHASE
- OL — OVERLAP

**RIGHT TURN OVERLAP PHASE DESIGNATION:**

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

**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16	11	50	88.0
(YELLOW)	16	20	5	16.0
(GREEN)	16	12	45	86.4
PERMISSIVE ARROW	32	10	10	32.0
PED. SIGNAL	16	20	100	320.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	2	-	-	250.0
PTZ CAMERA	1	75	100	75.0
<b>TOTAL =</b>				<b>992.4</b>

**REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT**

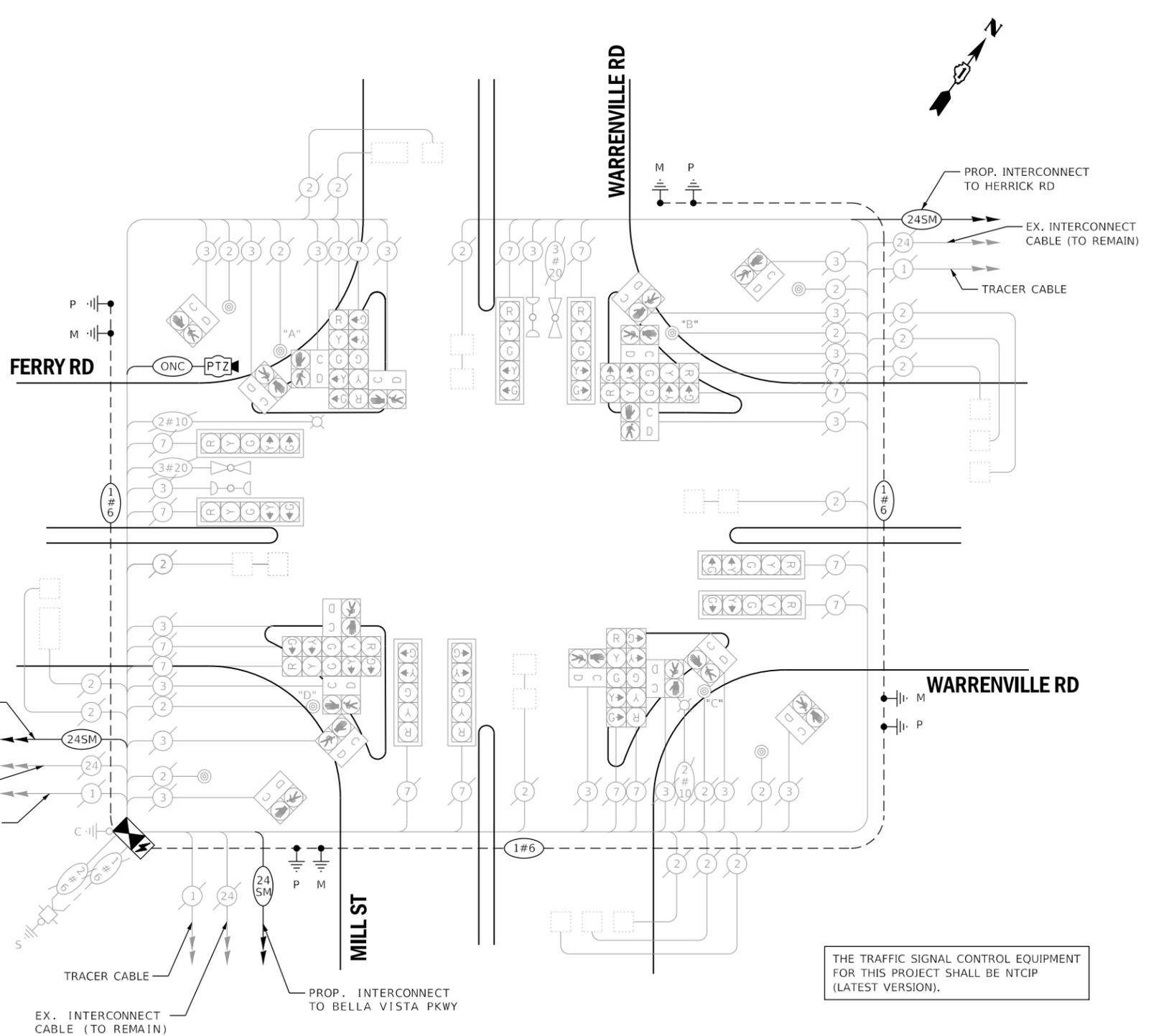
THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: DUPAGE COUNTY DIVISION OF TRANSPORTATION

1 EACH CONTROLLER AND CABINET (COMPLETE)

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
7	EACH	GROUNDING EXISTING HANDHOLE FRAME AND COVER
850	FOOT	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C
14	EACH	INDUCTIVE LOOP DETECTOR
1	EACH	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM PHASING UNIT
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
305	FOOT	OUTDOOR RATED NETWORK CABLE
1	EACH	REMOTE CONTROLLED VIDEO SYSTEM
1	EACH	LAYER II (DATALINK) SWITCH
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
1	EACH	ELECTRIC METER SOCKET



**CABLE PLAN (NOT TO SCALE)**

PUSHBUTTON "A" SHALL PLACE CALLS IN PHASES 4 & 6  
 PUSHBUTTON "B" SHALL PLACE CALLS IN PHASES 6 & 8  
 PUSHBUTTON "C" SHALL PLACE CALLS IN PHASES 2 & 4  
 PUSHBUTTON "D" SHALL PLACE CALLS IN PHASES 2 & 4

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE NTCIP (LATEST VERSION).

TS SHT NO. 69

**DUPAGE COUNTY D.O.T.**

421 N. COUNTY FARM RD.  
 WHEATON, IL 60187

ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
 PHONE: (630)-424-5704  
 COMPANY: COM-ED LOMBARD  
 ACCOUNT NUMBER:



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
PLOT SCALE = 40.0000' / in.	DRAWN - RG	REVISED -
PLOT DATE = 8/28/2018	CHECKED - ZH	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

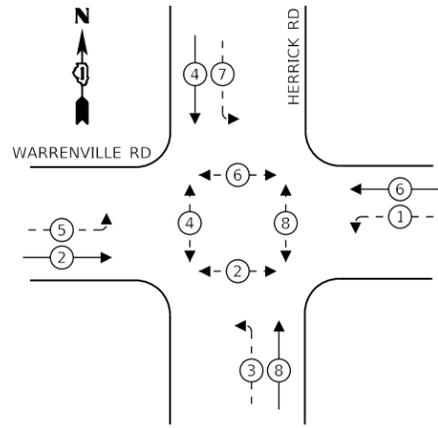
**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES  
 WARRENVILLE RD AND MILL ST/FERRY RD**

SCALE: NTS SHEET 9 OF 22 SHEETS STA. TO STA.

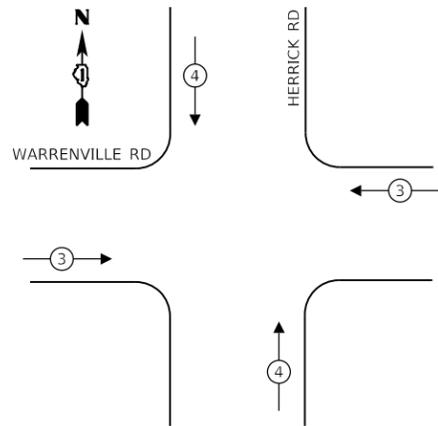
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	77
			CONTRACT NO.	61F05
		ILLINOIS	FED. AID PROJECT	

**DUDOT**

**EXISTING CONTROLLER SEQUENCE**

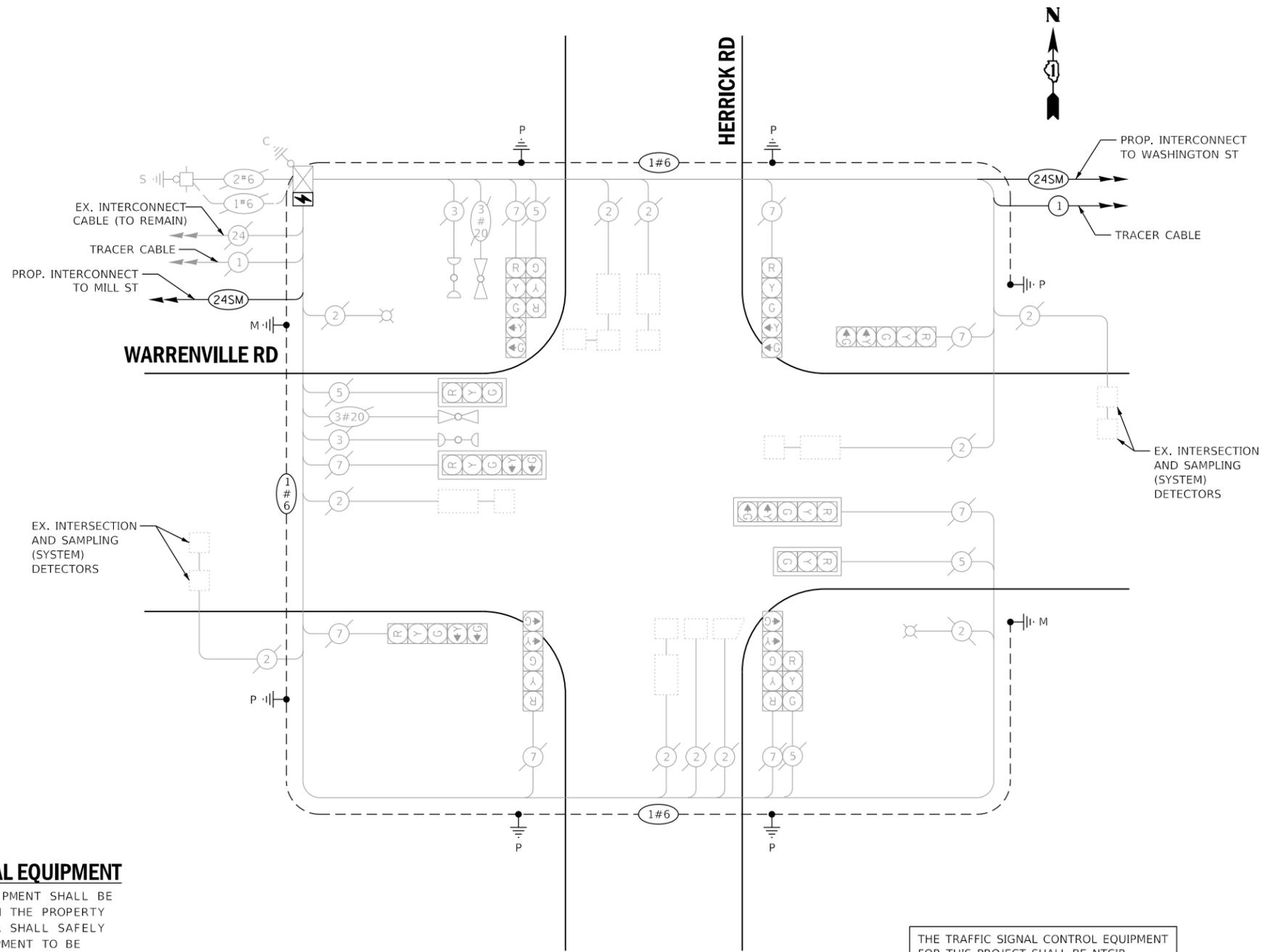


**EXISTING EMERGENCY VEHICLE  
PREEMPTION SEQUENCE**



**LEGEND:**

- ← ⊛ → PROTECTED PHASE
- ← ⊛ - - ⊛ → PROTECTED/PERMITTED PHASE
- ← ⊛ ⊛ → PEDESTRIAN PHASE
- ⊛ OL OVERLAP



**CABLE PLAN**  
(NOT TO SCALE)

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE NTCIP (LATEST VERSION).

**TRAFFIC SIGNAL  
ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	11	50	66.0
(YELLOW)	12	20	5	12.0
(GREEN)	12	12	45	64.8
PERMISSIVE ARROW	16	10	10	16.0
PED. SIGNAL	-	20	100	-
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	2	250	-	250.0
PTZ CAMERA	-	75	100	-
TOTAL =				533.8

**REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT**

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: DUPAGE COUNTY DIVISION OF TRANSPORTATION

1 EACH CONTROLLER

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
4	EACH	GROUNDING EXISTING HANDHOLE FRAME AND COVER
750	FOOT	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	LAYER II (DATALINK) SWITCH
1	EACH	FULL-ACTUATED CONTROLLER IN EXISTING CABINET
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
1	EACH	MODIFY EXISTING CONTROLLER CABINET, SPECIAL
1	EACH	ELECTRIC METER SOCKET

TS SHT NO. 70

**DUPAGE COUNTY D.O.T.**

421 N. COUNTY FARM RD.  
WHEATON, IL 60187

ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
PHONE: (630)-424-5704  
COMPANY: COM-ED LOMBARD  
ACCOUNT NUMBER:



USER NAME = dwiktorzak  
DESIGNED - DW  
DRAWN - RG  
PLOT SCALE = 40.0000 ' / in.  
PLOT DATE = 8/28/2018  
CHECKED - ZH  
DATE -

REVISD -  
REVISD -  
REVISD -  
REVISD -

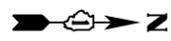
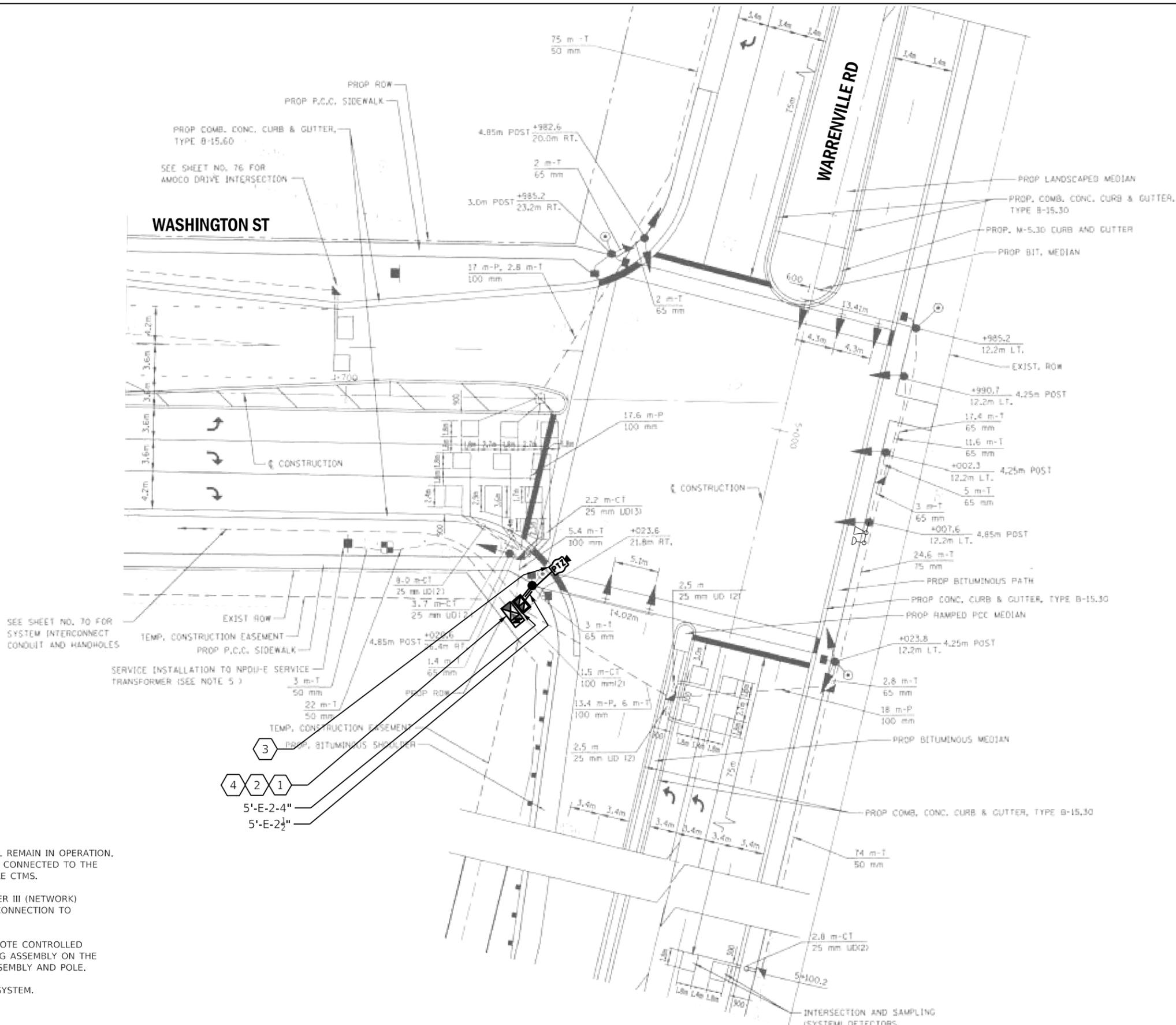
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE  
PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES  
WARRENVILLE RD AND HERRICK RD**

SCALE: NTS SHEET 10 OF 22 SHEETS STA. TO STA.

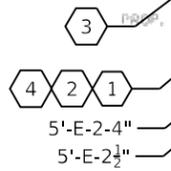
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	78
			CONTRACT NO. 61F05	

**DUDOT**



**CONSTRUCTION NOTES:**

- 1 THE EXISTING NAPERVILLE SWITCH SHALL REMAIN IN OPERATION. THE SIGNAL CONTROLLER SHALL REMAIN CONNECTED TO THE NAPERVILLE SWITCH AND THE NAPERVILLE CTMS.
- 2 THE CONTRACTOR SHALL INSTALL A LAYER III (NETWORK) SWITCH IN THE EXISTING CABINET FOR CONNECTION TO THE DUDOT NETWORK.
- 3 THE CONTRACTOR SHALL INSTALL A REMOTE CONTROLLED VIDEO SYSTEM AND A CAMERA MOUNTING ASSEMBLY ON THE EXISTING TRAFFIC SIGNAL MAST ARM ASSEMBLY AND POLE.
- 4 THE CONTACTOR SHALL INSTALL A UPS SYSTEM.



TS SHT NO. 71



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
	DRAWN - RG	REVISED -
PLOT SCALE = 40,0000' / in.	CHECKED - ZH	REVISED -
PLOT DATE = 8/28/2018	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL MODERNIZATION PLAN  
WARRENVILLE RD AND WASHINGTON ST**

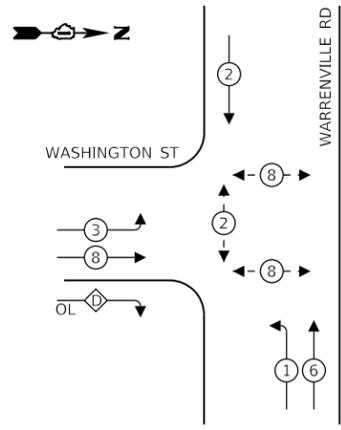
SCALE: NTS      SHEET 11 OF 22 SHEETS      STA.      TO STA.

**DUDOT**

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	79
CONTRACT NO. 61F05			ILLINOIS FED. AID PROJECT	

FILE NAME = p:\IPW1.dzcorp.com\DLZ\Documents\Projects\2017\1782\2130\W02\_Centracs Expansion\_1\CADD\_Sheets\Int\_36-sht-ts-plan.dgn  
Default

**EXISTING CONTROLLER SEQUENCE**



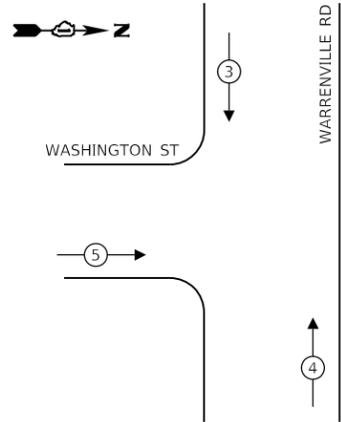
**LEGEND:**

- ← ⊙ → PROTECTED PHASE
- ← ⊙ - PROTECTED/PERMITTED PHASE
- ← ⊙ → PEDESTRIAN PHASE
- ← ⊙ OL OVERLAP

**RIGHT TURN OVERLAP PHASE DESIGNATION:**

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2	+ 3
D	= 8	+ 1

**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**CONSTRUCTION NOTES:**

- 1 THE EXISTING NAPERVILLE SWITCH SHALL REMAIN IN OPERATION. THE SIGNAL CONTROLLER SHALL REMAIN CONNECTED TO THE NAPERVILLE SWITCH AND THE NAPERVILLE CTMS.
- 2 THE CONTRACTOR SHALL INSTALL A LAYER III (NETWORK) SWITCH IN THE EXISTING CABINET FOR CONNECTION TO THE DUDOT NETWORK.
- 3 THE CONTRACTOR SHALL INSTALL A REMOTE CONTROLLED VIDEO SYSTEM AND A CAMERA MOUNTING ASSEMBLY ON THE EXISTING TRAFFIC SIGNAL MAST ARM ASSEMBLY AND POLE.
- 4 THE CONTRACTOR SHALL INSTALL A UPS SYSTEM.

**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	13	11	50	71.5
(YELLOW)	13	20	5	13.0
(GREEN)	13	12	45	70.2
PERMISSIVE ARROW	8	10	10	8.0
PED. SIGNAL	6	20	100	120.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	-	-	-
PTZ CAMERA	1	75	100	75.0
<b>TOTAL =</b>				<b>482.7</b>

ENERGY COSTS TO:

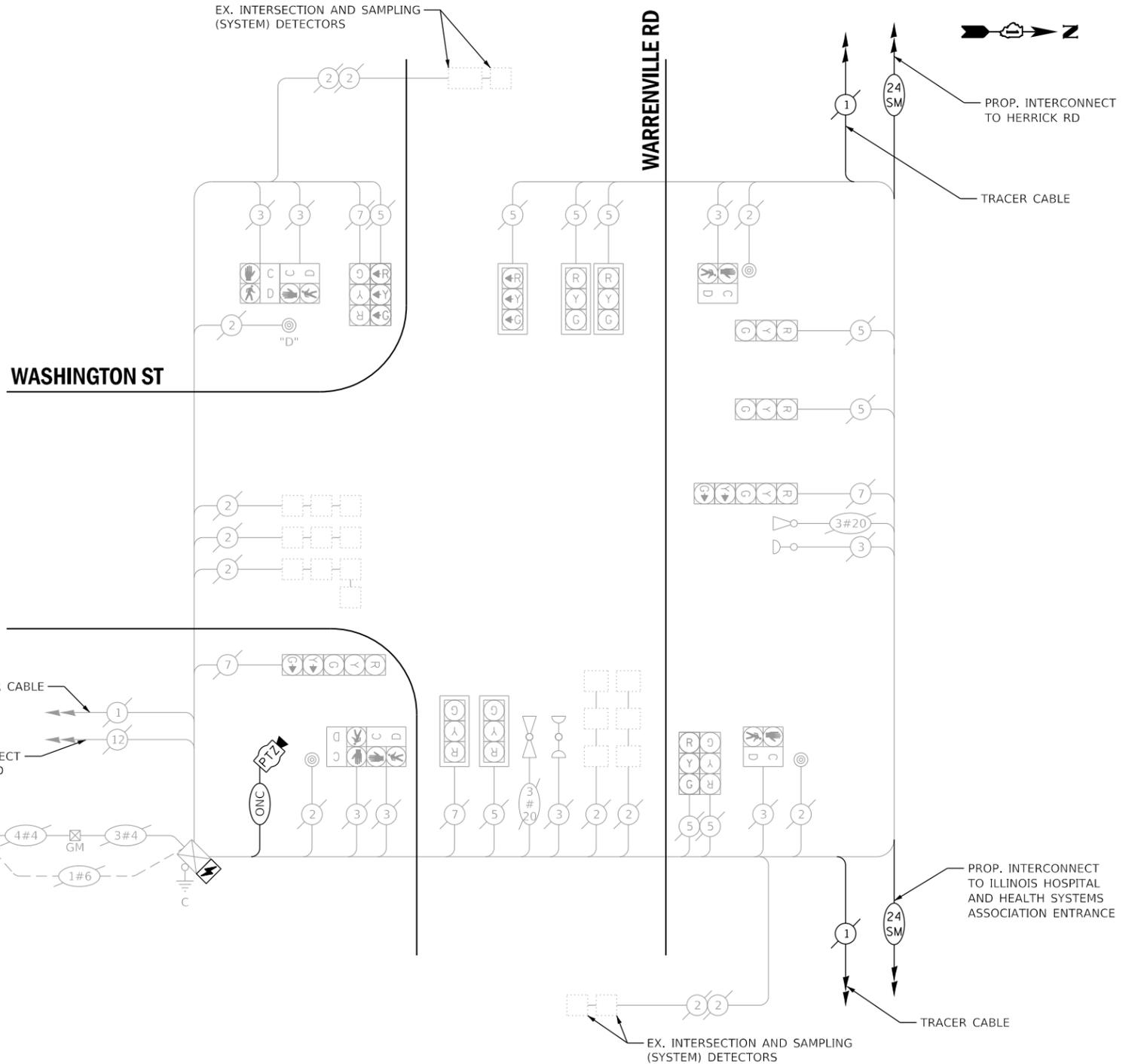
**DUPAGE COUNTY D.O.T.**

421 N. COUNTY FARM RD.  
WHEATON, IL 60187

ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
PHONE: (630)-424-5704  
COMPANY: COM-ED LOMBARD  
ACCOUNT NUMBER:

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
1	EACH	CAMERA MOUNTING ASSEMBLY
72.5	FOOT	OUTDOOR RATED NETWORK CABLE
1	EACH	REMOTE CONTROLLED VIDEO SYSTEM
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
1	EACH	MODIFY EXISTING CONTROLLER CABINET, SPECIAL
1	EACH	LAYER III (NETWORK) SWITCH
1	EACH	ELECTRIC METER SOCKET



**CABLE PLAN (NOT TO SCALE)**

PUSHBUTTON "D" SHALL PLACE A CALL IN PHASE 2 AND 8.

TS SHT NO. 72



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
PLOT SCALE = 40.0000 ' / in.	DRAWN - RG	REVISED -
PLOT DATE = 8/28/2018	CHECKED - ZH	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

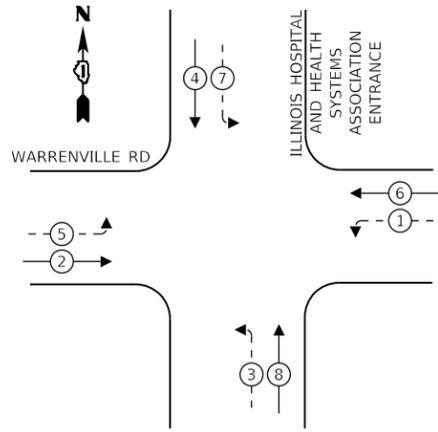
**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES  
WARRENVILLE RD AND WASHINGTON ST**

SCALE: NTS SHEET 12 OF 22 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	80
			CONTRACT NO. 61F05	
ILLINOIS FED. AID PROJECT				

**DUDOT**

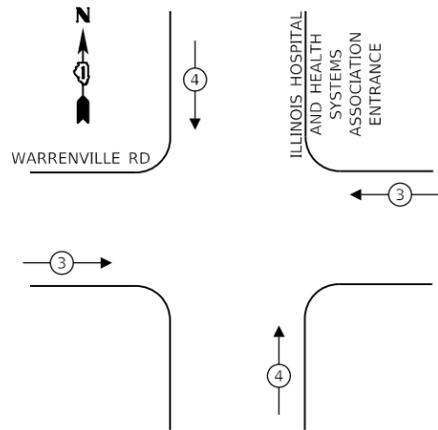
**EXISTING CONTROLLER SEQUENCE**



**LEGEND:**

- ⊙ — PROTECTED PHASE
- ⊙ — — PROTECTED/PERMITTED PHASE
- ⊙ — ⊙ — PEDESTRIAN PHASE
- OL — OVERLAP

**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	14	11	50	77.0
(YELLOW)	14	20	5	14.0
(GREEN)	14	12	45	75.6
PERMISSIVE ARROW	16	10	10	16.0
PED. SIGNAL	2	20	100	40.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	1	250	50	125.0
PTZ CAMERA	-	75	100	-
<b>TOTAL =</b>				<b>472.6</b>

**REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT**

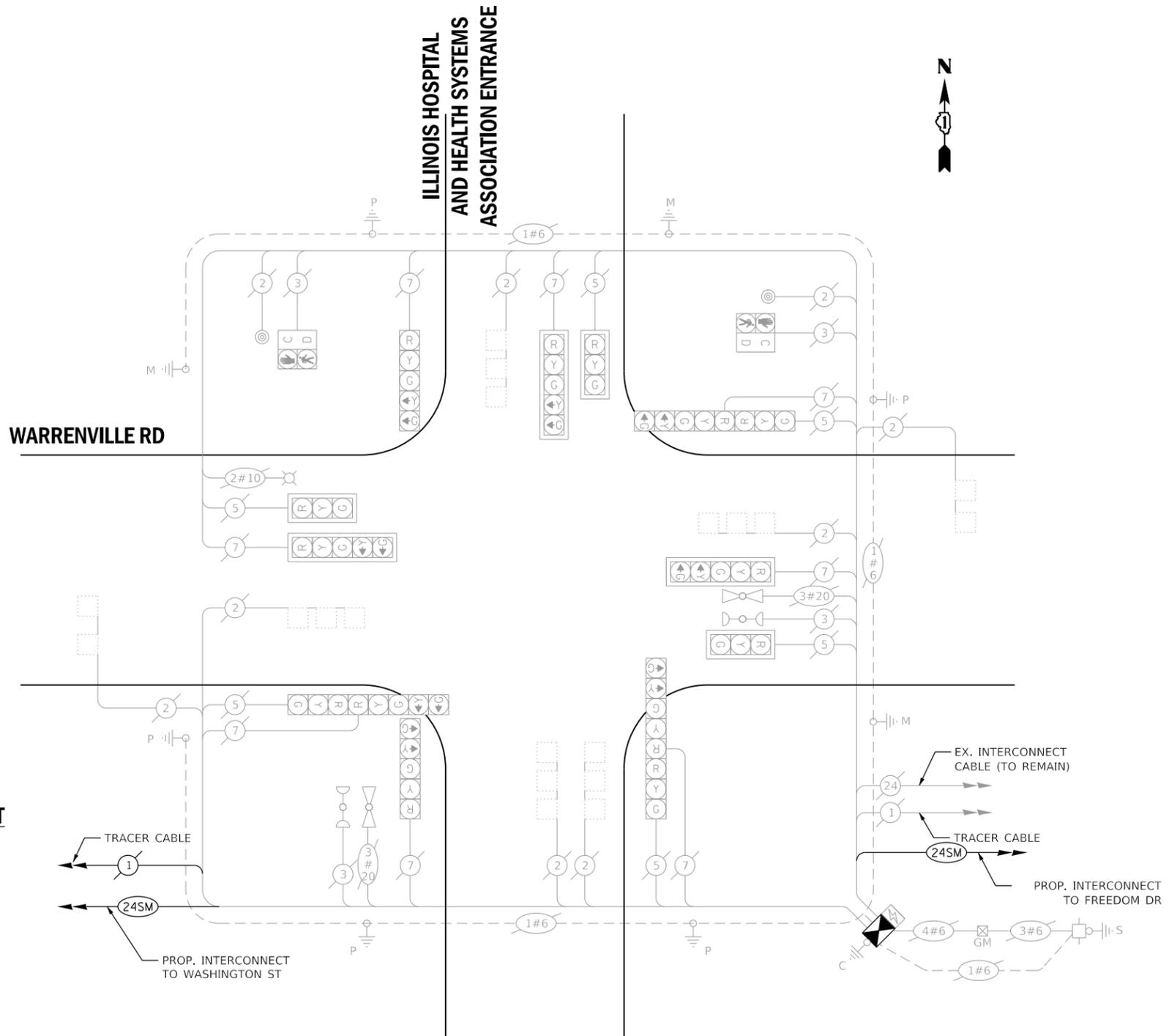
THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: DUPAGE COUNTY DIVISION OF TRANSPORTATION

- 1 EACH CONTROLLER AND CABINET (COMPLETE)

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
7	EACH	INDUCTIVE LOOP DETECTOR
1	EACH	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	LAYER II (DATALINK) SWITCH
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
1	EACH	RELOCATE EXISTING UPS BATTERY BACK-UP SYSTEM



**CABLE PLAN**  
(NOT TO SCALE)

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE NTCIP (LATEST VERSION).

TS SHT NO. 73

**DUPAGE COUNTY D.O.T.**

421 N. COUNTY FARM RD.  
WHEATON, IL 60187

ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
PHONE: (630)-424-5704  
COMPANY: COM-ED LOMBARD  
ACCOUNT NUMBER:



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
PLOT SCALE = 40.0000 ' / in.	DRAWN - RG	REVISED -
PLOT DATE = 8/28/2018	CHECKED - ZH	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES  
WARRENVILLE RD AND ILLINOIS HOSPITAL AND H.S.A. ENTRANCE**

SCALE: NTS SHEET 13 OF 22 SHEETS STA. TO STA.

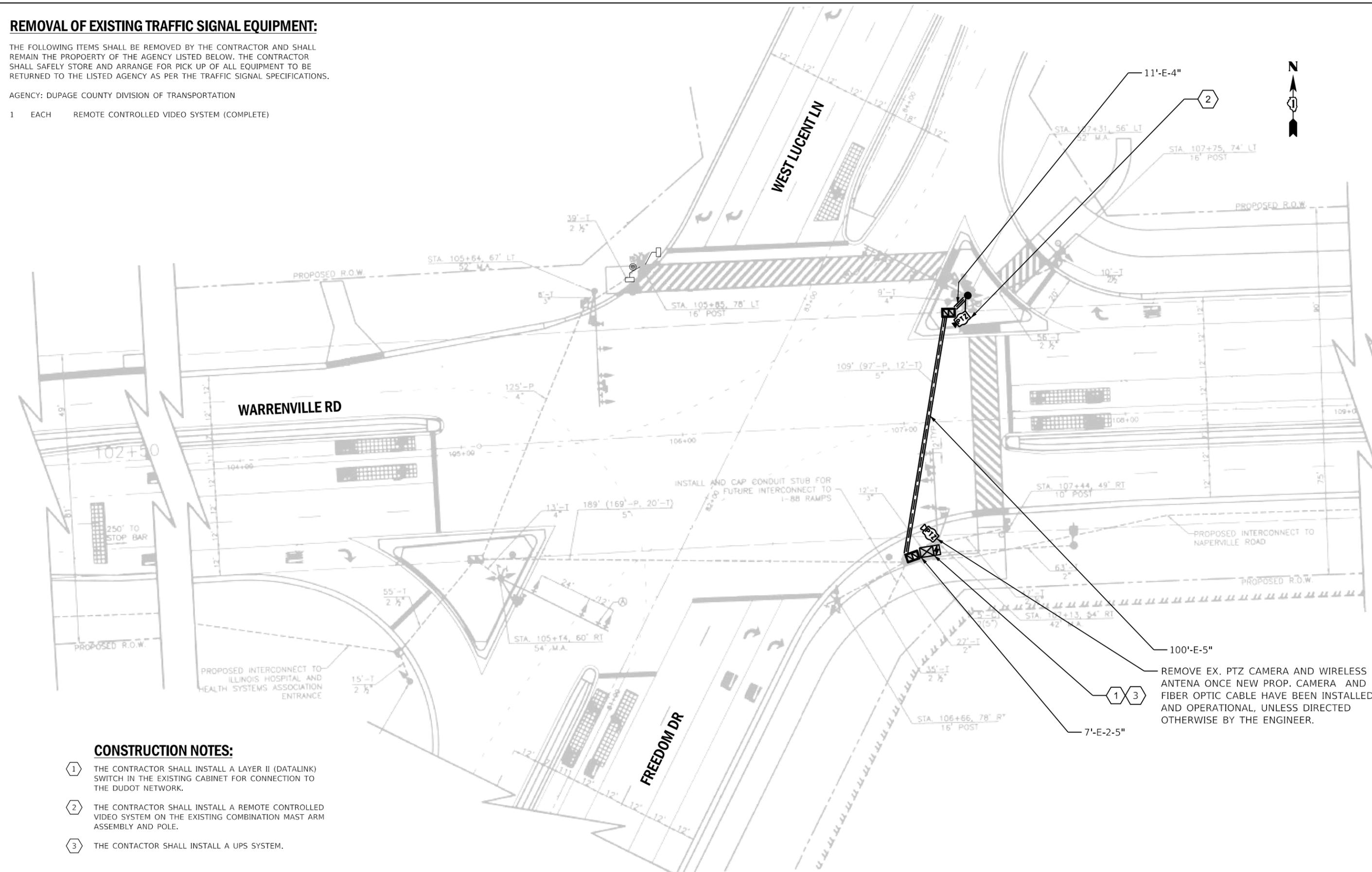
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	81
			CONTRACT NO. 61F05	
		ILLINOIS	FED. AID PROJECT	

**REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT:**

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: DUPAGE COUNTY DIVISION OF TRANSPORTATION

1 EACH REMOTE CONTROLLED VIDEO SYSTEM (COMPLETE)



**CONSTRUCTION NOTES:**

- 1 THE CONTRACTOR SHALL INSTALL A LAYER II (DATALINK) SWITCH IN THE EXISTING CABINET FOR CONNECTION TO THE DUDOT NETWORK.
- 2 THE CONTRACTOR SHALL INSTALL A REMOTE CONTROLLED VIDEO SYSTEM ON THE EXISTING COMBINATION MAST ARM ASSEMBLY AND POLE.
- 3 THE CONTRACTOR SHALL INSTALL A UPS SYSTEM.

REMOVE EX. PTZ CAMERA AND WIRELESS ANTENNA ONCE NEW PROP. CAMERA AND FIBER OPTIC CABLE HAVE BEEN INSTALLED AND OPERATIONAL, UNLESS DIRECTED OTHERWISE BY THE ENGINEER.

TS SHT NO. 74



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
PLOT SCALE = 40.0000 ' / in.	DRAWN - RG	REVISED -
PLOT DATE = 8/28/2018	CHECKED - ZH	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

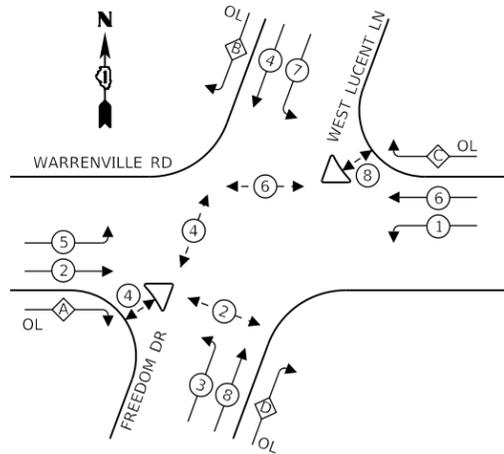
TRAFFIC SIGNAL MODERNIZATION PLAN  
WARRENVILLE RD AND WEST LUCENT LN/FREEDOM DR

SCALE: NTS SHEET 14 OF 22 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	82
CONTRACT NO. 61F05			ILLINOIS FED. AID PROJECT	

FILE NAME = p:\IPW1.dzcorp.com\DLZ\Documents\Projects\2017\1782\2130\W02\_Centracs Expansion\_1\CADD\_Sheets\Int\_38-sht-ts-plan.dgn

**EXISTING CONTROLLER SEQUENCE**



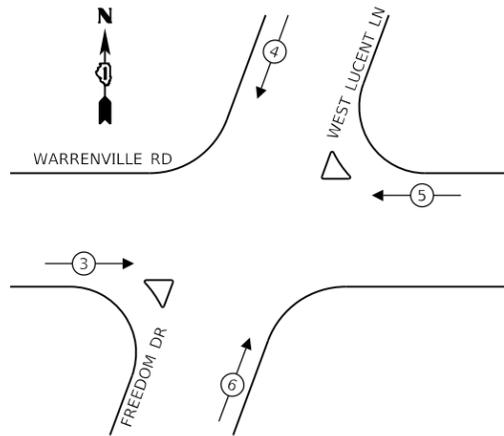
**LEGEND:**

- ⊙ — PROTECTED PHASE
- ⊙ — PROTECTED/PERMITTED PHASE
- ⊙ — PEDESTRIAN PHASE
- OL — OVERLAP

**RIGHT TURN OVERLAP PHASE DESIGNATION:**

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

**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	23	11	50	126.5
(YELLOW)	23	20	5	23.0
(GREEN)	23	12	45	124.2
PERMISSIVE ARROW	20	10	10	20.0
PED. SIGNAL	10	20	100	200.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	1	150	100	150.0
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	4	250	50	500.0
PTZ CAMERA	1	75	100	75.0
<b>TOTAL =</b>				<b>1343.7</b>

ENERGY COSTS TO:

**DUPAGE COUNTY D.O.T.**

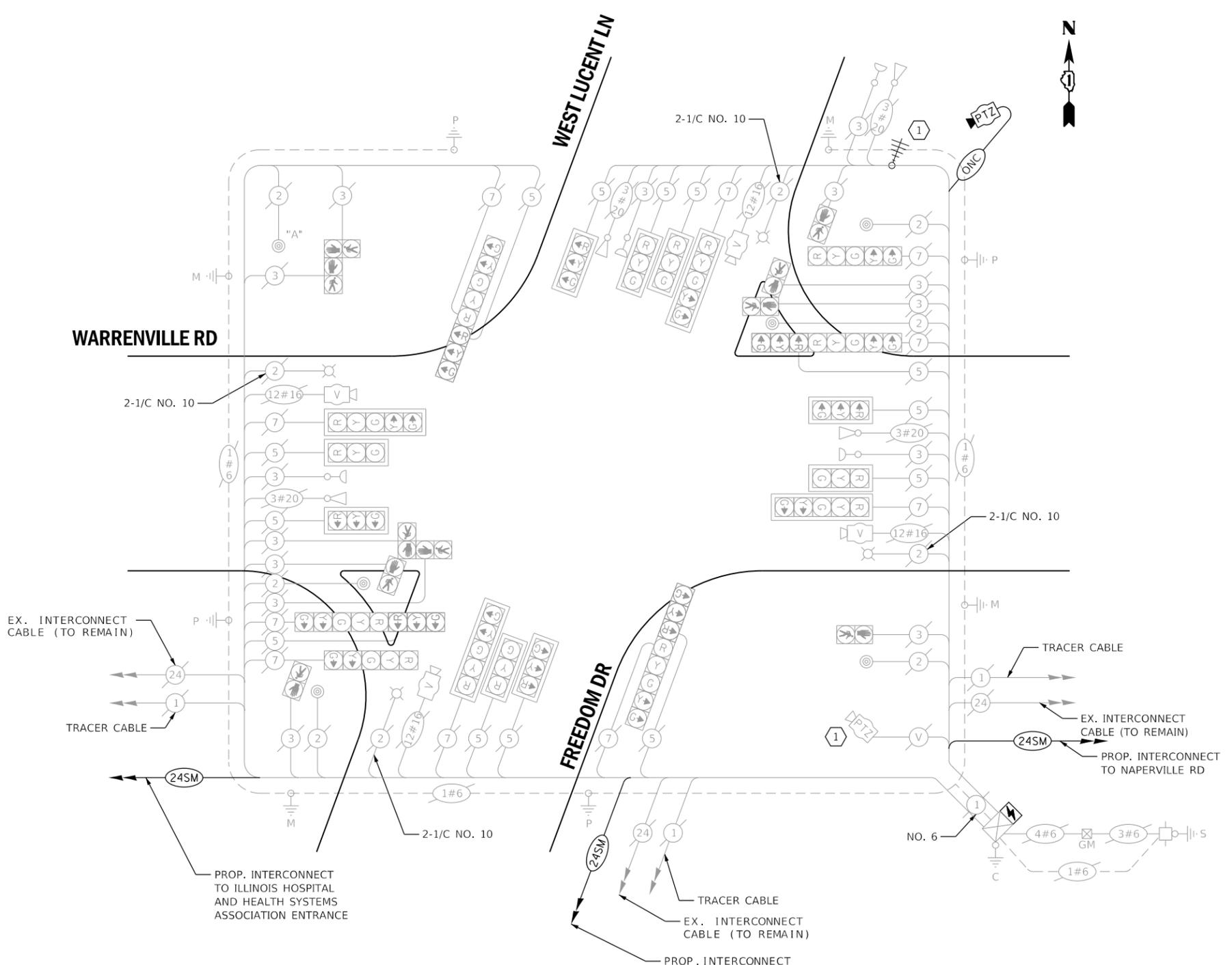
421 N. COUNTY FARM RD.  
WHEATON, IL 60187

ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
PHONE: (630)-424-5704  
COMPANY: COM-ED LOMBARD  
ACCOUNT NUMBER: \_\_\_\_\_

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
203.5	FOOT	OUTDOOR RATED NETWORK CABLE
1	EACH	REMOTE CONTROLLED VIDEO SYSTEM
1	EACH	LAYER II (DATALINK) SWITCH
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
1	EACH	MODIFY EXISTING CONTROLLER CABINET, SPECIAL
1	EACH	ELECTRIC METER SOCKET

**WARRENVILLE RD**



**CABLE PLAN (NOT TO SCALE)**

NOTE:

- 1 REMOVE EX. PTZ CAMERA AND WIRELESS ANTENNA ONCE NEW PROP. CAMERA AND FIBER OPTIC CABLE HAVE BEEN INSTALLED AND OPERATIONAL, UNLESS DIRECTED OTHERWISE BY THE ENGINEER.

TS SHT NO. 75



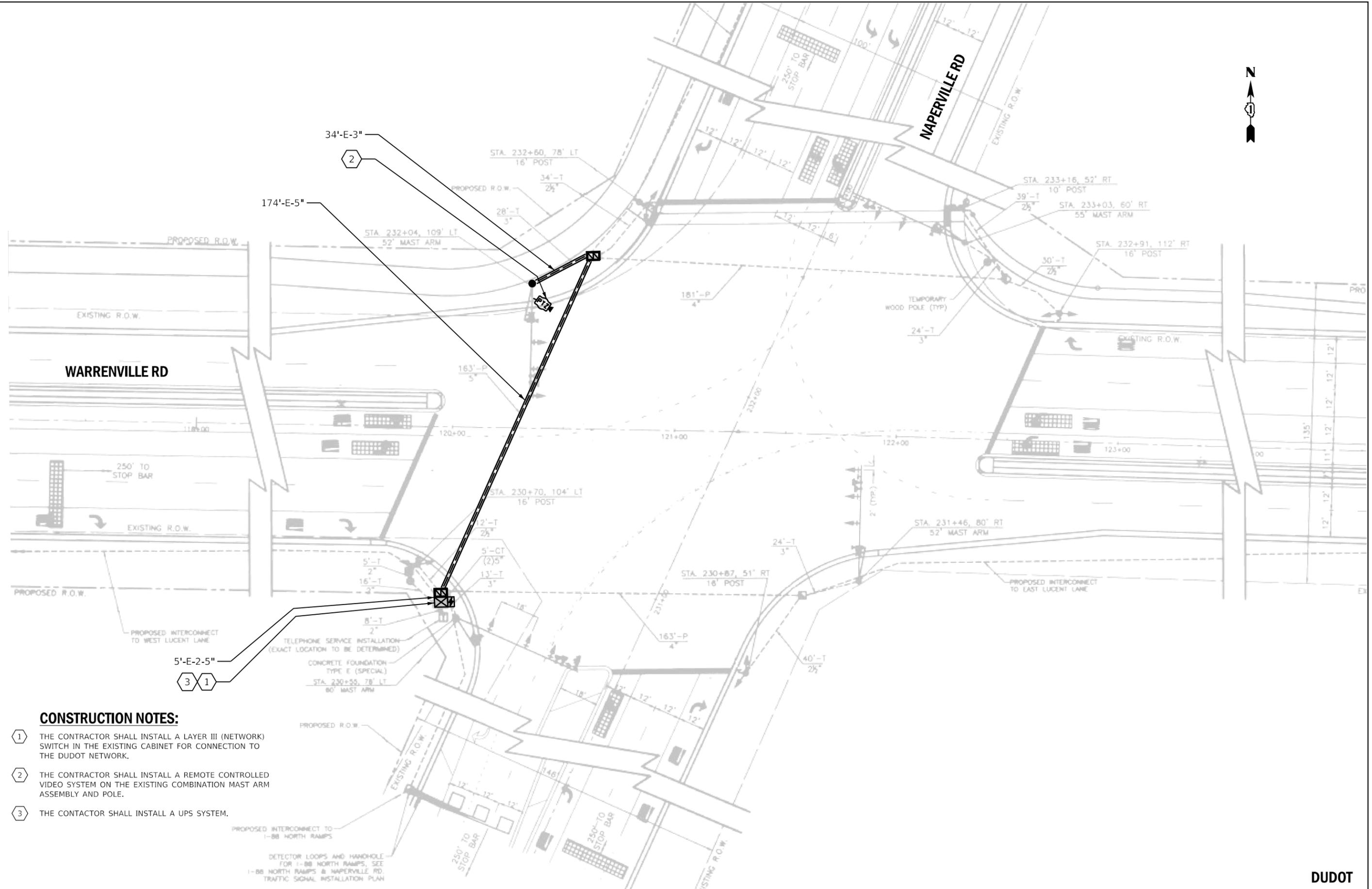
USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
PLOT SCALE = 40,0000 ' / in.	DRAWN - RG	REVISED -
PLOT DATE = 8/28/2018	CHECKED - ZH	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES  
WARRENVILLE RD AND WEST LUCENT LN/FREEDOM DR**

SCALE: NTS SHEET 15 OF 22 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	17-DCCSS-01-TL	DUPAGE	277	83
			CONTRACT NO.	61F05
		ILLINOIS	FED. AID PROJECT	



**CONSTRUCTION NOTES:**

- ① THE CONTRACTOR SHALL INSTALL A LAYER III (NETWORK) SWITCH IN THE EXISTING CABINET FOR CONNECTION TO THE DUDOT NETWORK.
- ② THE CONTRACTOR SHALL INSTALL A REMOTE CONTROLLED VIDEO SYSTEM ON THE EXISTING COMBINATION MAST ARM ASSEMBLY AND POLE.
- ③ THE CONTRACTOR SHALL INSTALL A UPS SYSTEM.



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
	DRAWN - RG	REVISED -
PLOT SCALE = 40.0000' / in.	CHECKED - ZH	REVISED -
PLOT DATE = 8/28/2018	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

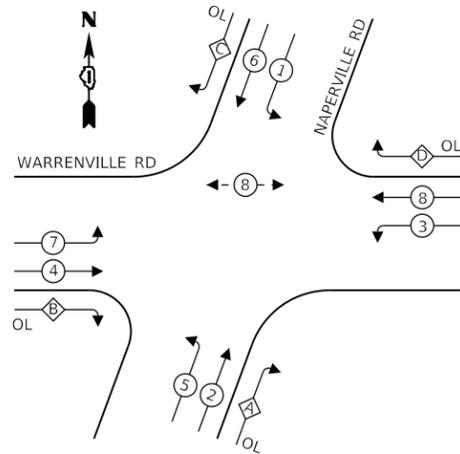
TRAFFIC SIGNAL MODERNIZATION PLAN  
WARRENVILLE RD AND NAPERVILLE RD

SCALE: NTS SHEET 16 OF 22 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	84
			CONTRACT NO.	61F05
ILLINOIS FED. AID PROJECT				

DUDOT

**EXISTING CONTROLLER SEQUENCE**



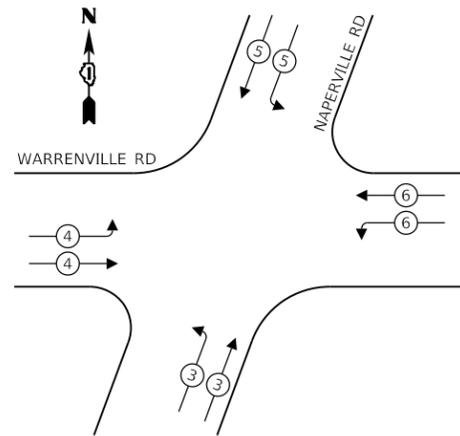
**LEGEND:**

- ⊙ — PROTECTED PHASE
- ⊙ — PROTECTED/PERMITTED PHASE
- ⊙ — PEDESTRIAN PHASE
- OL — OVERLAP

**RIGHT TURN OVERLAP PHASE DESIGNATION:**

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

**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	21	11	50	115.5
(YELLOW)	21	20	5	21.0
(GREEN)	21	12	45	113.4
PERMISSIVE ARROW	16	10	10	16.0
PED. SIGNAL	2	20	100	40.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	1	150	100	150.0
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	4	250	50	500.0
PTZ CAMERA	1	75	100	75.0
<b>TOTAL =</b>				<b>1155.9</b>

ENERGY COSTS TO:

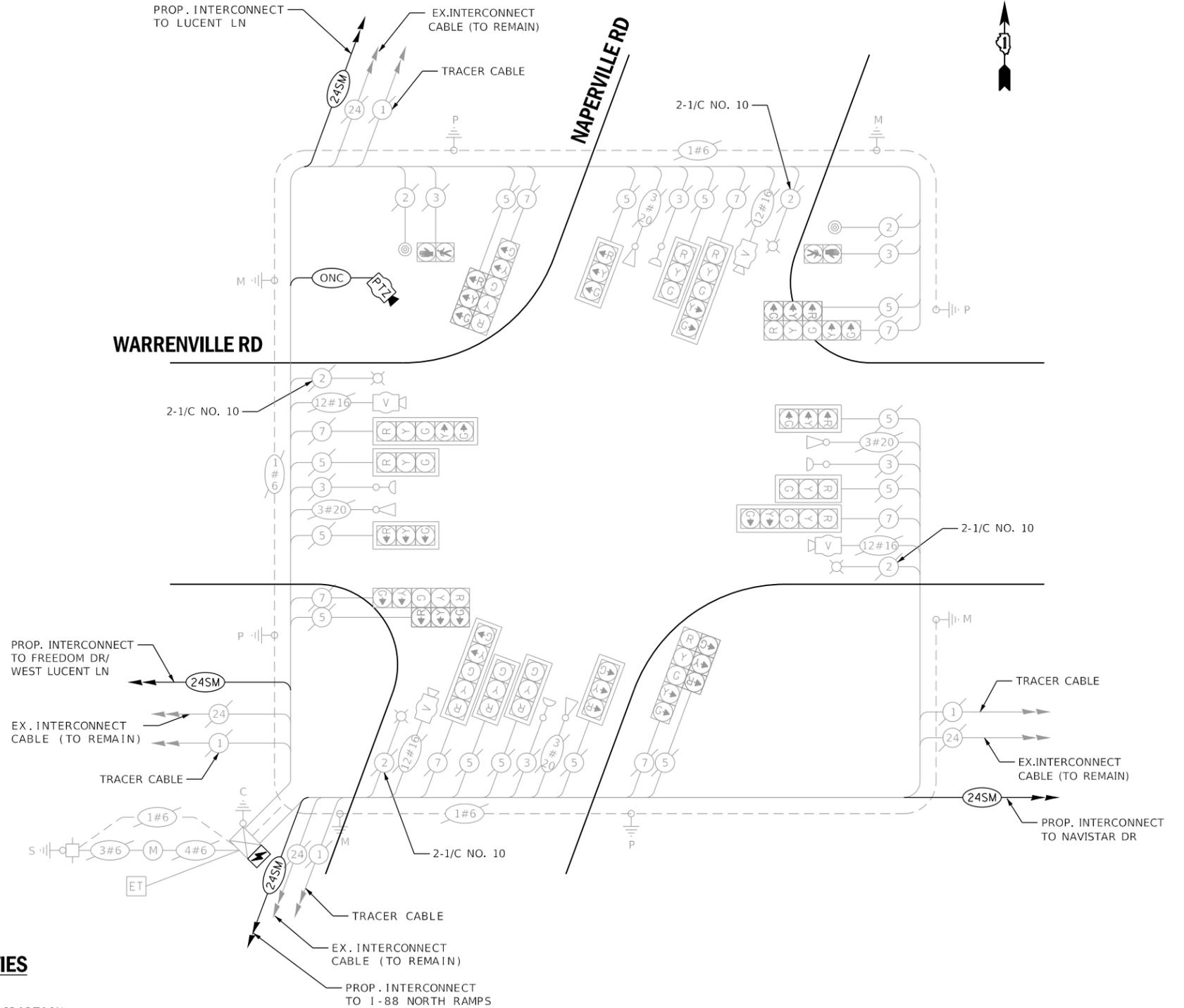
**DUPAGE COUNTY D.O.T.**

421 N. COUNTY FARM RD.  
WHEATON, IL 60187

ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
PHONE: (630)-424-5704  
COMPANY: COM-ED LOMBARD  
ACCOUNT NUMBER:

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
298.5	FOOT	OUTDOOR RATED NETWORK CABLE
1	EACH	REMOTE CONTROLLED VIDEO SYSTEM
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
1	EACH	MODIFY EXISTING CONTROLLER CABINET, SPECIAL
1	EACH	LAYER III (NETWORK) SWITCH
1	EACH	ELECTRIC METER SOCKET



TS SHT NO. 77



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
PLOT SCALE = 40.0000" / in.	DRAWN - RG	REVISED -
PLOT DATE = 8/28/2018	CHECKED - ZH	REVISED -
	DATE -	REVISED -

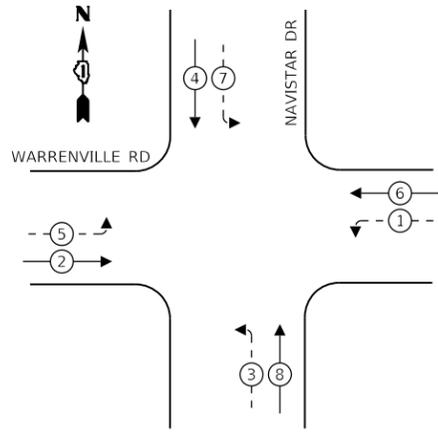
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES  
WARRENVILLE RD AND NAPERVILLE RD**

SCALE: NTS SHEET 17 OF 22 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	17-DCCSS-01-TL	DUPAGE	277	85
			CONTRACT NO. 61F05	
ILLINOIS FED. AID PROJECT				

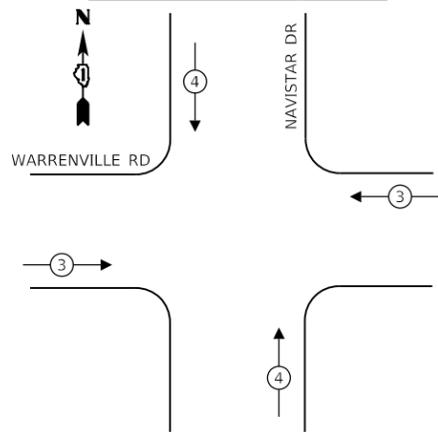
**EXISTING CONTROLLER SEQUENCE**



**LEGEND:**

- ← ⊛ → PROTECTED PHASE
- ← ⊛ - - ⊛ → PROTECTED/PERMITTED PHASE
- ← ⊛ ⊛ → PEDESTRIAN PHASE
- ← ⊛ ⊛ → OL OVERLAP

**EXISTING EMERGENCY VEHICLE  
PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL  
ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	11	50	66.0
(YELLOW)	12	20	5	12.0
(GREEN)	12	12	45	64.8
PERMISSIVE ARROW	16	10	10	16.0
PED. SIGNAL	2	20	100	40.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	2	250	50	250.0
PTZ CAMERA	-	75	100	-
<b>TOTAL =</b>				<b>573.8</b>

ENERGY COSTS TO:

**DUPAGE COUNTY D.O.T.**

421 N. COUNTY FARM RD.  
WHEATON, IL 60187

ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
PHONE: (630)-424-5704  
COMPANY: COM-ED LOMBARD  
ACCOUNT NUMBER: \_\_\_\_\_

**REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT**

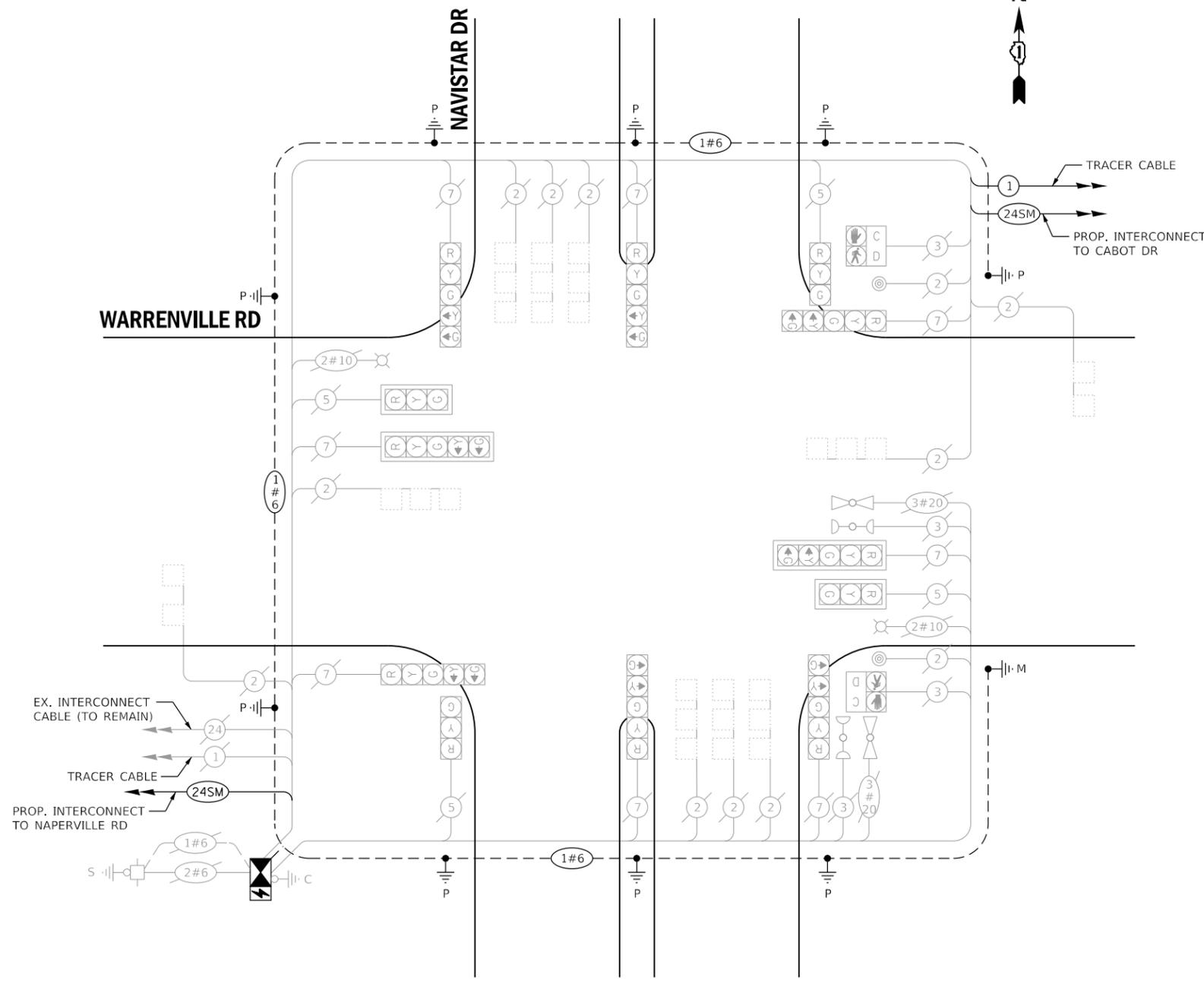
THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: DUPAGE COUNTY DIVISION OF TRANSPORTATION

1 EACH CONTROLLER AND CABINET (COMPLETE)

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
8	EACH	GROUNDING EXISTING HANDHOLE FRAME AND COVER
750	FOOT	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C
1	EACH	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	LAYER II (DATALINK) SWITCH
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
1	EACH	ELECTRIC METER SOCKET



**CABLE PLAN**  
(NOT TO SCALE)

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE NTCIP (LATEST VERSION).

TS SHT NO. 78



USER NAME = dwiktorzak  
PLOT SCALE = 40.0000 ' / in.  
PLOT DATE = 8/28/2018

DESIGNED - DW  
DRAWN - RG  
CHECKED - ZH  
DATE -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

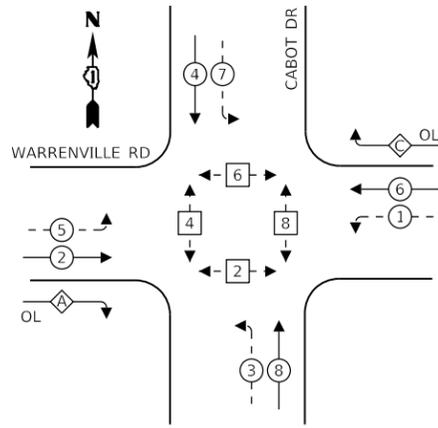
**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE  
PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES  
WARRENVILLE RD AND NAVISTAR DR**

SCALE: NTS SHEET 18 OF 22 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	86
			CONTRACT NO. 61F05	
ILLINOIS FED. AID PROJECT				

**DUDOT**

**EXISTING CONTROLLER SEQUENCE**



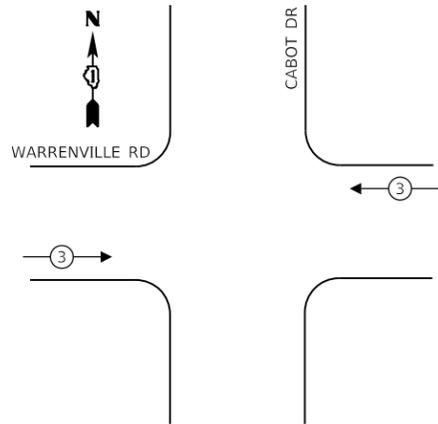
**LEGEND:**

- ← ⊛ → PROTECTED PHASE
- ← ⊛ - - ⊛ → PROTECTED/PERMITTED PHASE
- ← ⊛ ⊙ → PEDESTRIAN PHASE
- ← ⊛ ⊙ OL → OVERLAP
- ← ⊛ → SINGLE ENTRY PHASE

**RIGHT TURN OVERLAP PHASE DESIGNATION:**

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

**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**

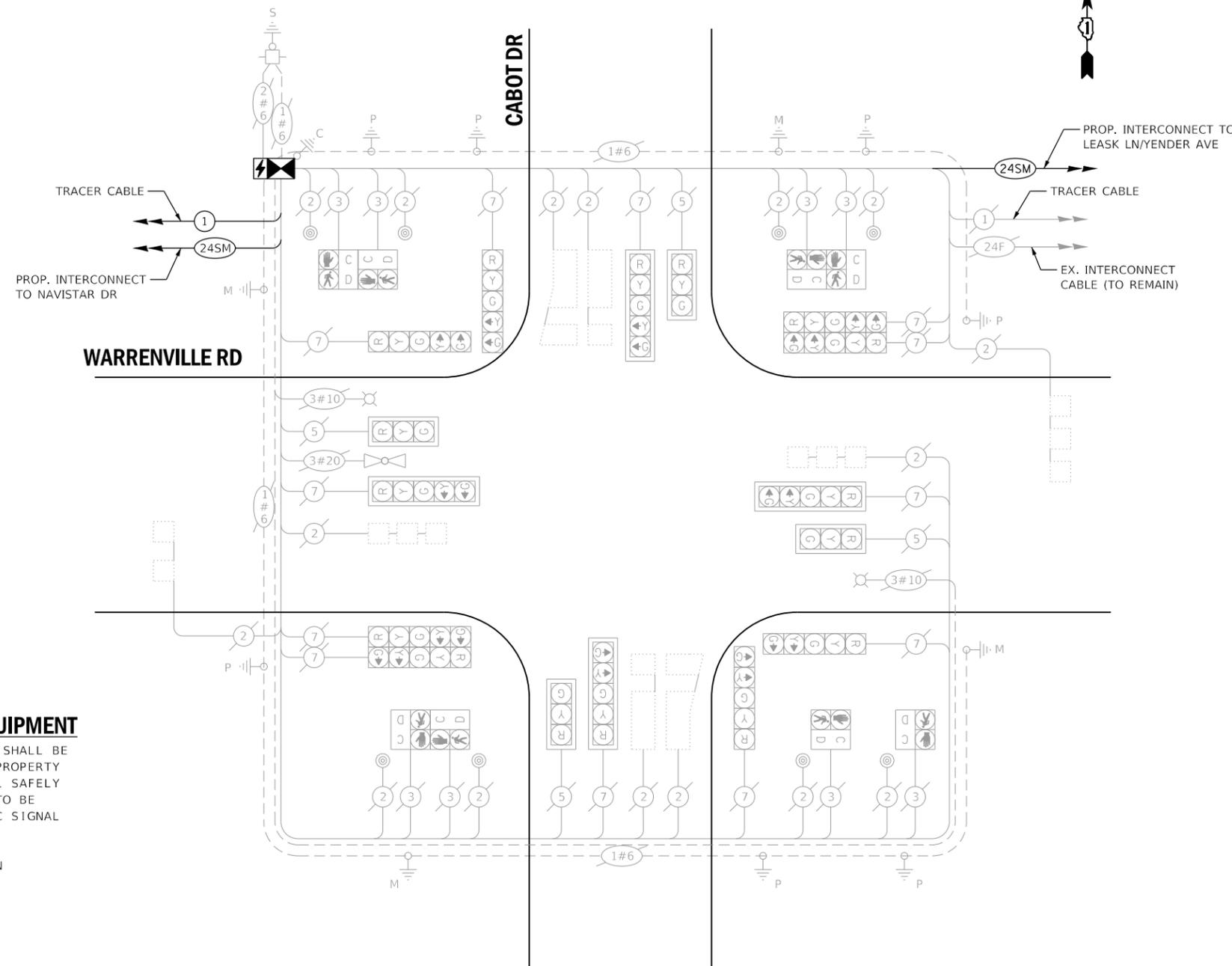


**REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT**

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: DUPAGE COUNTY DIVISION OF TRANSPORTATION

1 EACH CONTROLLER AND CABINET (COMPLETE)



**CABLE PLAN**  
(NOT TO SCALE)

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE NTCIP (LATEST VERSION).

**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16	11	50	88.0
(YELLOW)	16	20	5	16.0
(GREEN)	16	12	45	86.4
PERMISSIVE ARROW	24	10	10	24.0
PED. SIGNAL	8	20	100	160.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	2	250	50	250.0
PTZ CAMERA	-	75	100	-
TOTAL =				749.4

ENERGY COSTS TO:

**DUPAGE COUNTY D.O.T.**

421 N. COUNTY FARM RD.  
WHEATON, IL 60187

ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
PHONE: (630)-424-5704  
COMPANY: COM-ED LOMBARD  
ACCOUNT NUMBER:

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
8	EACH	INDUCTIVE LOOP DETECTOR
1	EACH	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	LAYER 11 (DATALINK) SWITCH
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
1	EACH	ELECTRIC METER SOCKET

TS SHT NO. 79



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
PLOT SCALE = 40.0000 ' / in.	DRAWN - RG	REVISED -
PLOT DATE = 8/28/2018	CHECKED - ZH	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

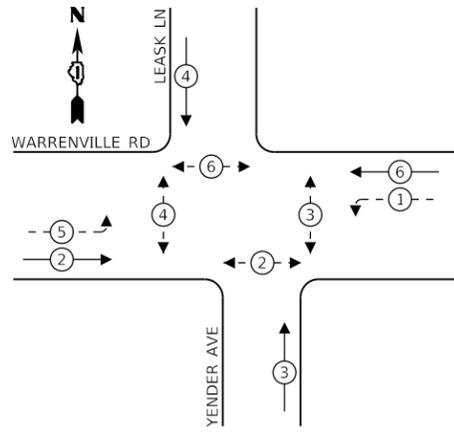
**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES**  
**WARRENVILLE RD AND CABOT DR**

SCALE: NTS SHEET 19 OF 22 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	87
			CONTRACT NO. 61F05	
		ILLINOIS	FED. AID PROJECT	

**DUDOT**

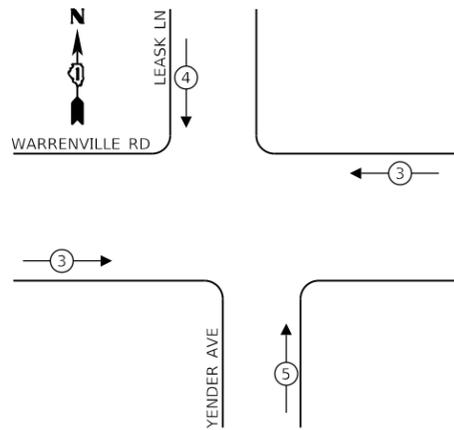
**EXISTING CONTROLLER SEQUENCE**



**LEGEND:**

- ← ⊙ → PROTECTED PHASE
- ← ⊙ - - ⊙ → PROTECTED/PERMITTED PHASE
- ← ⊙ ⊙ → PEDESTRIAN PHASE
- ← ⊙ ⊙ OL → OVERLAP
- ← ⊙ → SINGLE ENTRY PHASE

**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	11	11	50	60.5
(YELLOW)	11	20	5	11.0
(GREEN)	16	12	45	86.4
PERMISSIVE ARROW	8	10	10	8.0
PED. SIGNAL	8	20	100	160.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	-	-	-
PTZ CAMERA	-	75	100	-
<b>TOTAL =</b>				<b>450.9</b>

**REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT**

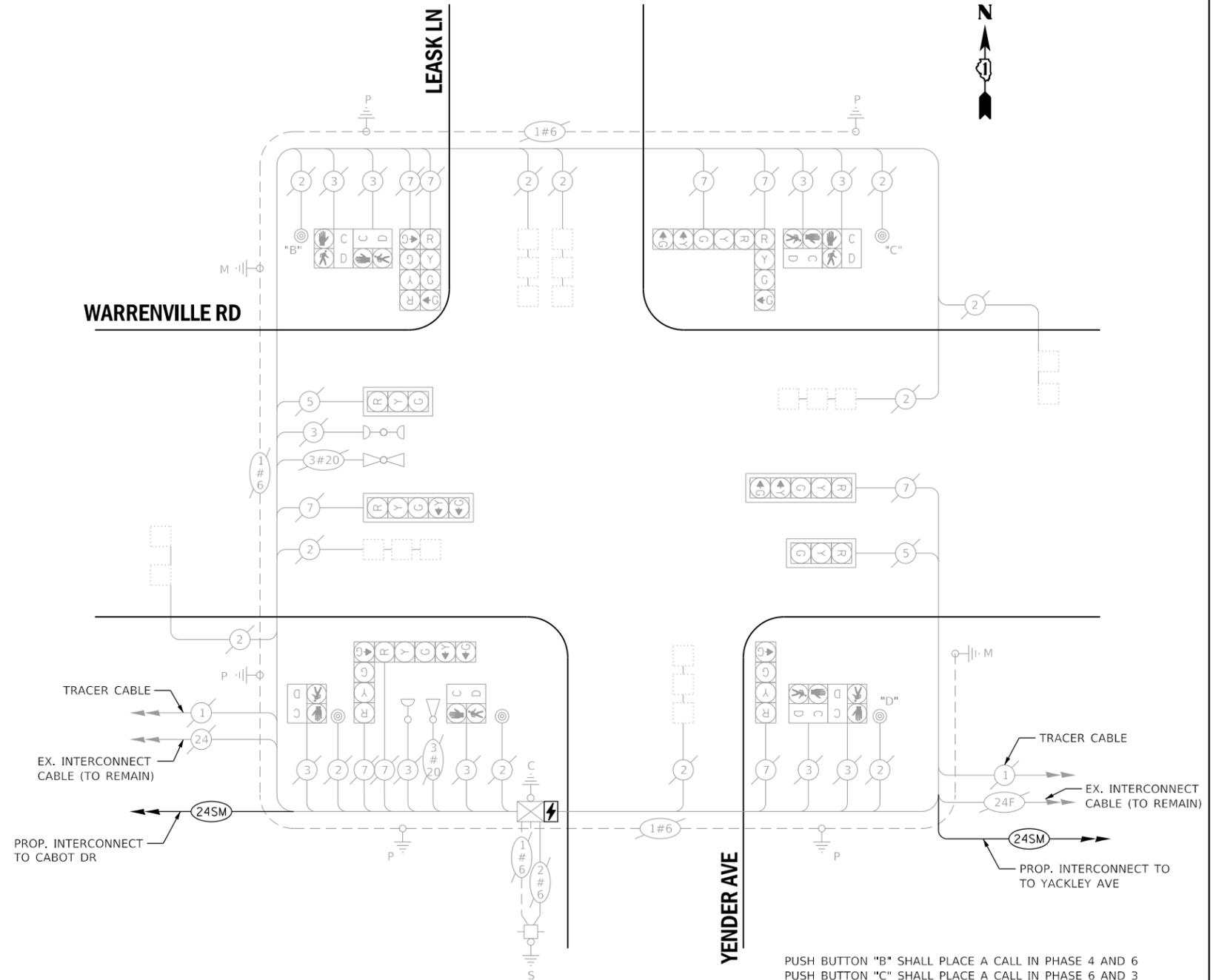
THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: DUPAGE COUNTY DIVISION OF TRANSPORTATION

- 1 EACH CONTROLLER
- 1 EACH MASTER CONTROLLER

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	LAYER 11 (DATALINK) SWITCH
1	EACH	FULL-ACTUATED CONTROLLER IN EXISTING CABINET
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
1	EACH	MODIFY EXISTING CONTROLLER CABINET, SPECIAL
1	EACH	ELECTRIC METER SOCKET



**CABLE PLAN**  
(NOT TO SCALE)

PUSH BUTTON "B" SHALL PLACE A CALL IN PHASE 4 AND 6  
PUSH BUTTON "C" SHALL PLACE A CALL IN PHASE 6 AND 3  
PUSH BUTTON "D" SHALL PLACE A CALL IN PHASE 2 AND 3

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE NTCIP (LATEST VERSION).

TS SHT NO. 80

**DUPAGE COUNTY D.O.T.**

421 N. COUNTY FARM RD.  
WHEATON, IL 60187

ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
PHONE: (630)-424-5704  
COMPANY: COM-ED LOMBARD  
ACCOUNT NUMBER:



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
PLOT SCALE = 40.0000 "/> <td>CHECKED - ZH</td> <td>REVISED -</td>	CHECKED - ZH	REVISED -
PLOT DATE = 8/28/2018	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES  
WARRENVILLE RD AND LEASK LN**

SCALE: NTS SHEET 20 OF 22 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	88
CONTRACT NO. 61F05				
ILLINOIS FED. AID PROJECT				

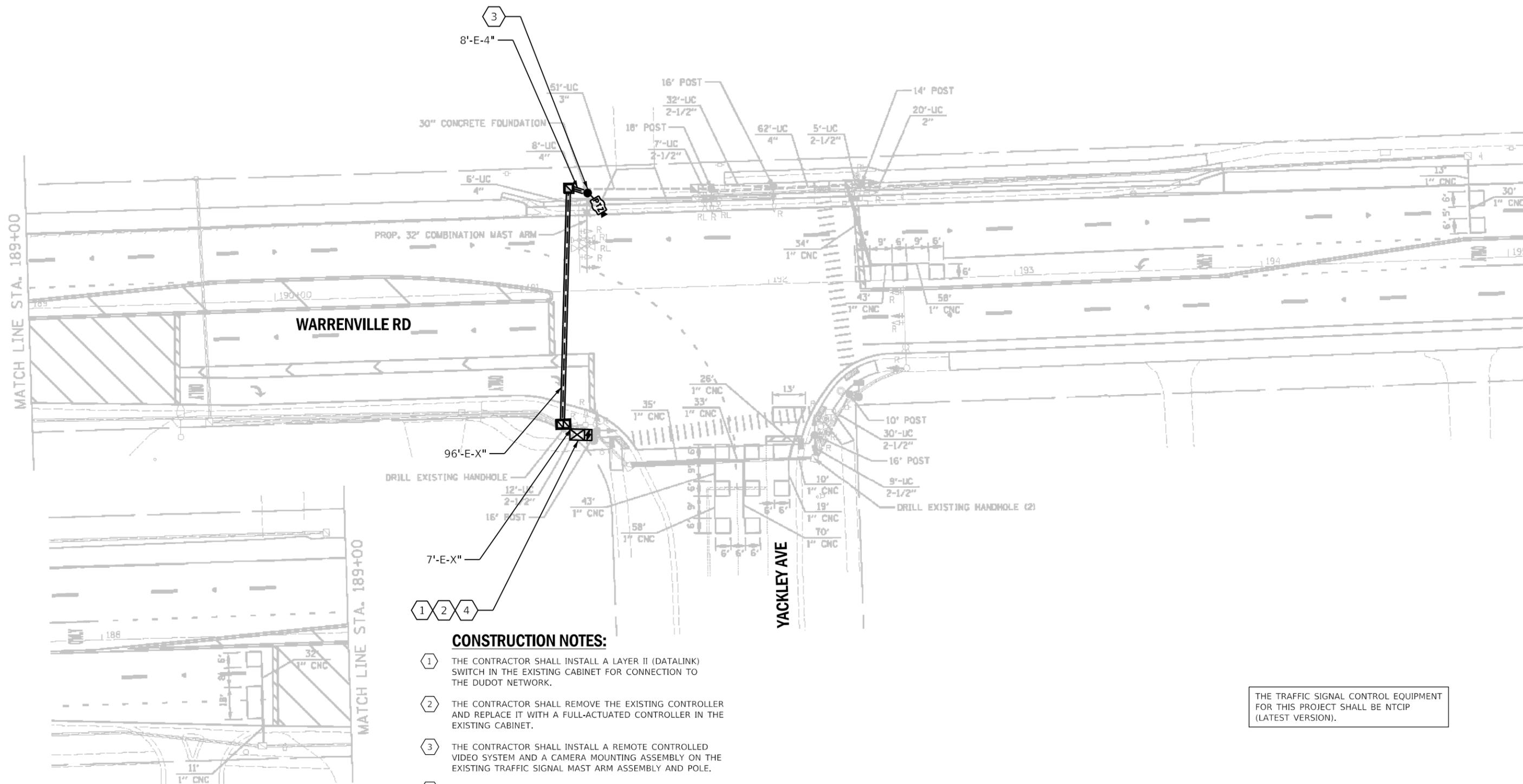
**DUDOT**

**REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT:**

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: DUPAGE COUNTY DIVISION OF TRANSPORTATION

1 EACH CONTROLLER



**CONSTRUCTION NOTES:**

- 1 THE CONTRACTOR SHALL INSTALL A LAYER II (DATALINK) SWITCH IN THE EXISTING CABINET FOR CONNECTION TO THE DUDOT NETWORK.
- 2 THE CONTRACTOR SHALL REMOVE THE EXISTING CONTROLLER AND REPLACE IT WITH A FULL-ACTUATED CONTROLLER IN THE EXISTING CABINET.
- 3 THE CONTRACTOR SHALL INSTALL A REMOTE CONTROLLED VIDEO SYSTEM AND A CAMERA MOUNTING ASSEMBLY ON THE EXISTING TRAFFIC SIGNAL MAST ARM ASSEMBLY AND POLE.
- 4 THE CONTRACTOR SHALL INSTALL A UPS SYSTEM.

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE NTCP (LATEST VERSION).

TS SHT NO. 81



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
PLOT SCALE = 40,0000 ' / in.	DRAWN - RG	REVISED -
PLOT DATE = 8/28/2018	CHECKED - ZH	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

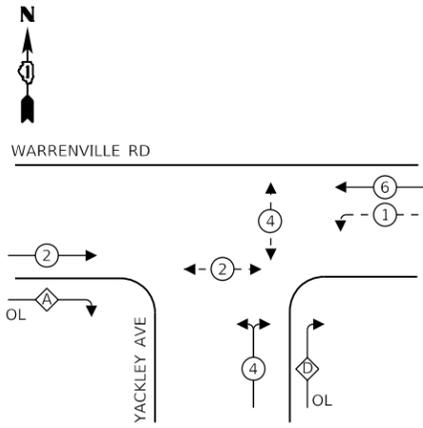
TRAFFIC SIGNAL MODERNIZATION PLAN  
WARRENVILLE RD AND YACKLEY AVE

SCALE: NTS SHEET 21 OF 22 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	89
CONTRACT NO. 61F05				
ILLINOIS		FED. AID PROJECT		

DUDOT

**EXISTING CONTROLLER SEQUENCE**



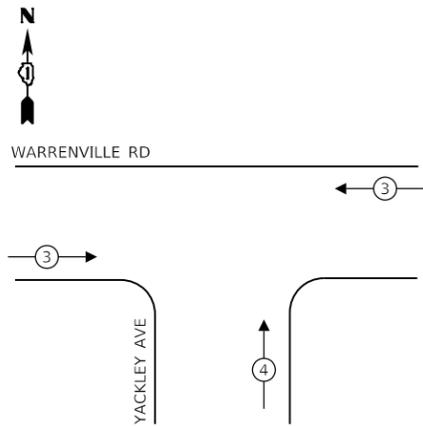
**LEGEND:**

- ← ⊙ → PROTECTED PHASE
- ← ⊙ - - ⊙ → PROTECTED/PERMITTED PHASE
- ← ⊙ ⊙ → PEDESTRIAN PHASE
- ← ⊙ ⊙ OL → OVERLAP

**RIGHT TURN OVERLAP PHASE DESIGNATION:**

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2	+ 4
C	= 4	+ 1

**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	11	50	66.0
(YELLOW)	12	20	5	12.0
(GREEN)	14	12	45	75.6
PERMISSIVE ARROW	12	10	10	12.0
PED. SIGNAL	4	20	100	80.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	1	250	50	125.0
PTZ CAMERA	1	75	100	75.0
<b>TOTAL =</b>				<b>570.6</b>

ENERGY COSTS TO:

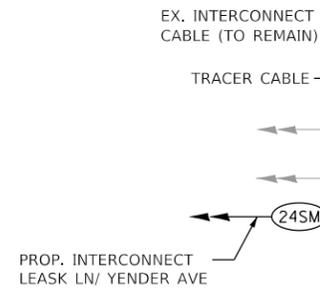
**DUPAGE COUNTY D.O.T.**

421 N. COUNTY FARM RD.  
WHEATON, IL 60187

ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
PHONE: (630)-424-5704  
COMPANY: COM-ED LOMBARD  
ACCOUNT NUMBER:

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	CAMERA MOUNTING ASSEMBLY
180	FOOT	OUTDOOR RATED NETWORK CABLE
1	EACH	REMOTE CONTROLLED VIDEO SYSTEM
1	EACH	LAYER II (DATALINK) SWITCH
1	EACH	FULL-ACTUATED CONTROLLER IN EXISTING CABINET
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
1	EACH	MODIFY EXISTING CONTROLLER CABINET, SPECIAL
1	EACH	ELECTRIC METER SOCKET



**WARRENVILLE RD**

**YACKLEY AVE**

**CABLE PLAN**  
(NOT TO SCALE)

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE NTCIP (LATEST VERSION).

TS SHT NO. 82



USER NAME = dwiktorzak  
DESIGNED - DW  
DRAWN - RG  
PLOT SCALE = 40,0000 ' / in.  
CHECKED - ZH  
PLOT DATE = 8/28/2018  
DATE -

REVISED -  
REVISED -  
REVISED -  
REVISED -

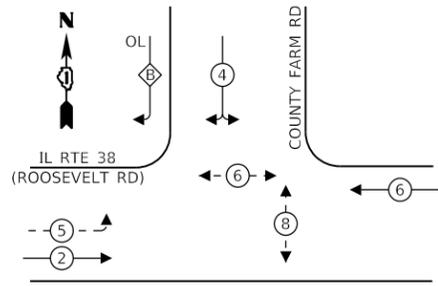
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES**  
**WARRENVILLE RD AND YACKLEY AVE**

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	90
			CONTRACT NO. 61F05	
		ILLINOIS	FED. AID PROJECT	

**EXISTING CONTROLLER SEQUENCE**



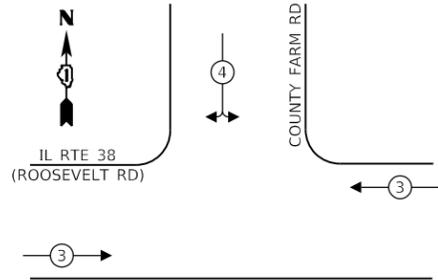
**LEGEND:**

- ⊙ — PROTECTED PHASE
- ⊙ — — — PROTECTED/PERMITTED PHASE
- ⊙ — ⊙ — PEDESTRIAN PHASE
- OL — OVERLAP

**RIGHT TURN OVERLAP PHASE DESIGNATION:**

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
B	= 4	+ 5

**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	11	50	66.0
(YELLOW)	12	20	5	12.0
(GREEN)	12	12	45	64.8
PERMISSIVE ARROW	8	10	10	8.0
PED. SIGNAL	4	20	100	80.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	2	250	50	250.0
PTZ CAMERA	-	75	100	-
<b>TOTAL =</b>				<b>605.8</b>

ENERGY COSTS TO:

**DUPAGE COUNTY D.O.T.**

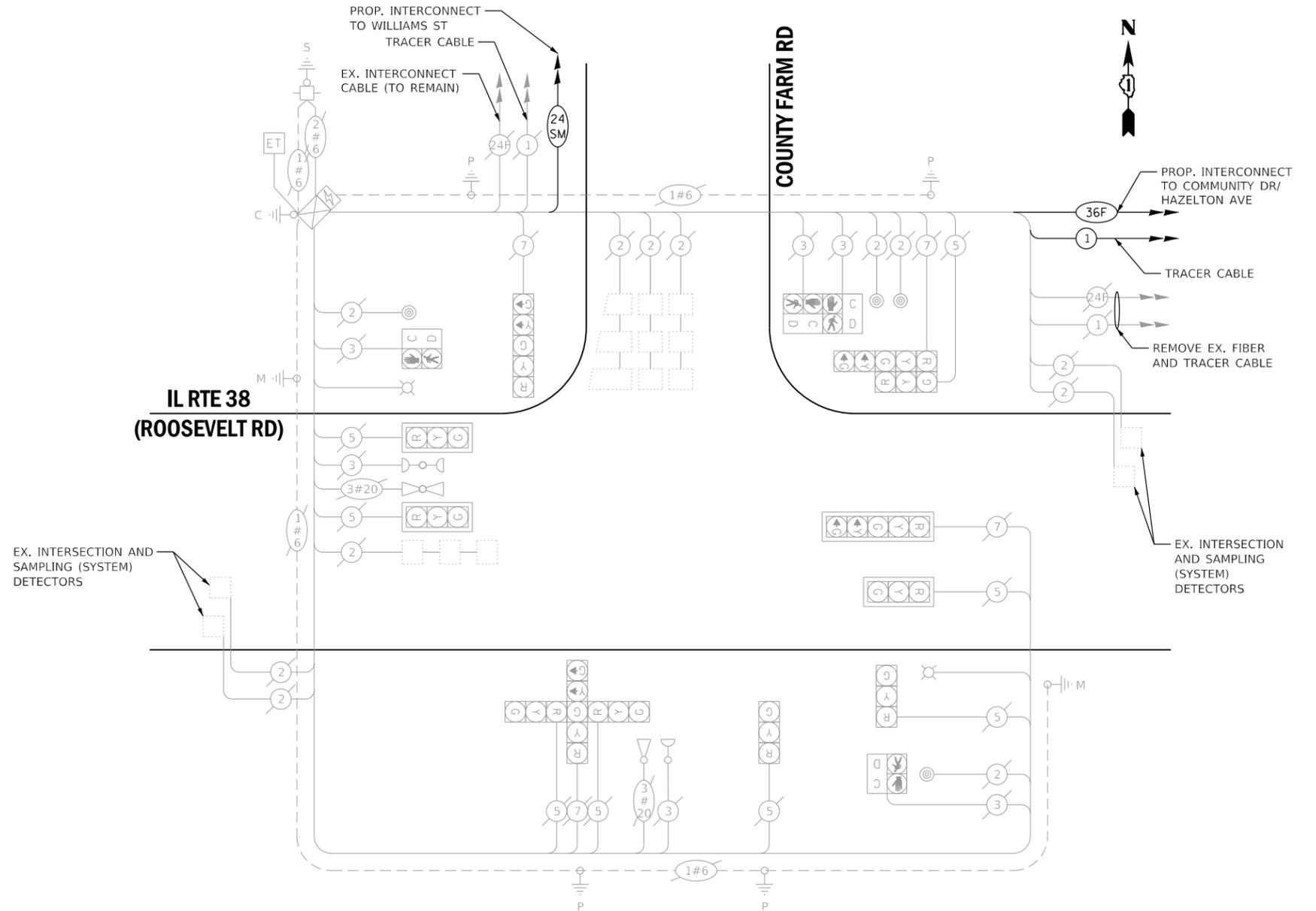
421 N. COUNTY FARM RD.  
WHEATON, IL 60187

ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
PHONE: (630)-424-5704  
COMPANY: COM-ED LOMBARD  
ACCOUNT NUMBER: \_\_\_\_\_

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION

**CABLE PLAN**  
(NOT TO SCALE)



TS SHT NO. 83



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
PLOT SCALE = 40,0000 ' / in.	DRAWN - RG	REVISED -
PLOT DATE = 8/28/2018	CHECKED - ZH	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

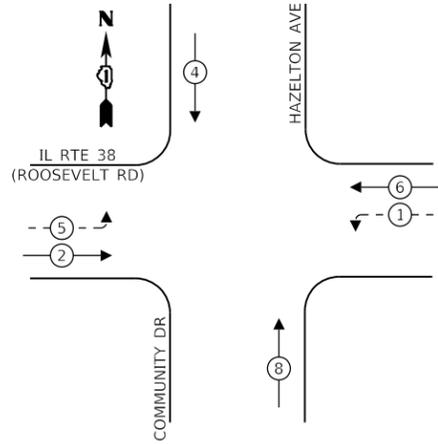
**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES  
IL RTE 38 (ROOSEVELT RD) AND COUNTY FARM RD**

SCALE: NTS SHEET 1 OF 7 SHEETS STA. TO STA.

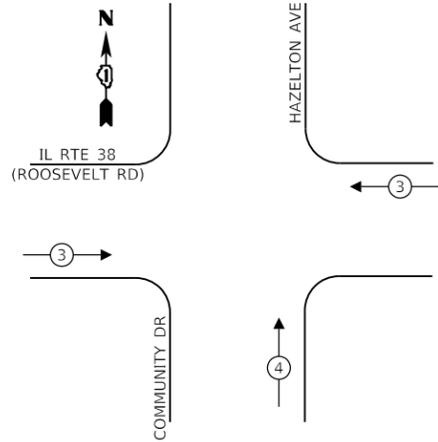
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	91
			CONTRACT NO. 61F05	
ILLINOIS FED. AID PROJECT				

**IDOT**  
**TS 8225**  
**ECON 117**

**EXISTING CONTROLLER SEQUENCE**



**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**LEGEND:**

- ← ⊙ ← PROTECTED PHASE
- ← ⊙ - - PROTECTED/PERMITTED PHASE
- ← ⊙ → PEDESTRIAN PHASE
- ← ⊙ OL OVERLAP

**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	11	50	66.0
(YELLOW)	12	20	5	12.0
(GREEN)	12	12	45	64.8
PERMISSIVE ARROW	8	10	10	8.0
PED. SIGNAL	-	20	100	-
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	-	-	-
PTZ CAMERA	-	75	100	-
TOTAL =				275.8

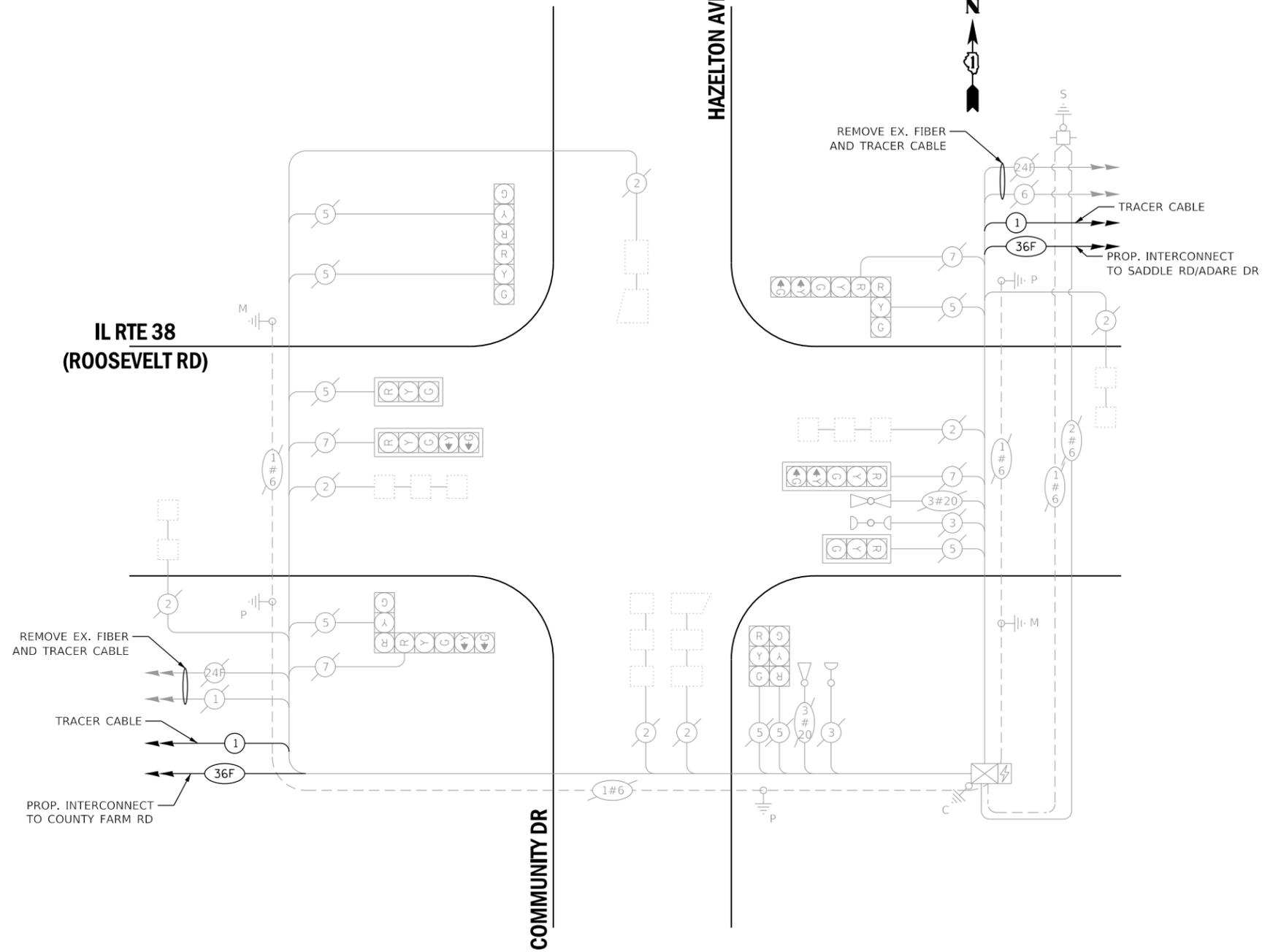
ENERGY COSTS TO:

**ILLINOIS DEPARTMENT OF TRANSPORTATION**

DIVISION OF HIGHWAYS/DISTRICT 1  
201 WEST CENTER COURT/ SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
PHONE: (630)-424-5704  
COMPANY: COM-ED LOMBARD  
ACCOUNT NUMBER:

**IL RTE 38 (ROOSEVELT RD)**



**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION

**CABLE PLAN (NOT TO SCALE)**

TS SHT NO. 84



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
PLOT SCALE = 40.0000 ' / in.	DRAWN - RG	REVISED -
PLOT DATE = 8/28/2018	CHECKED - ZH	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

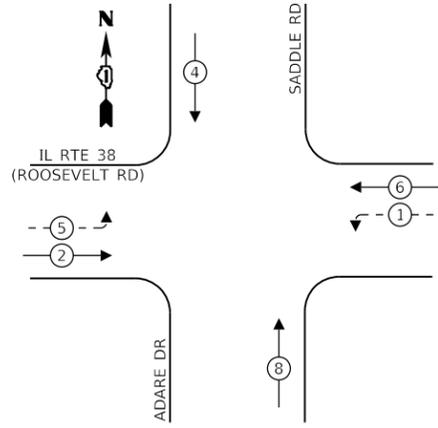
**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES  
IL RTE 38 (ROOSEVELT RD) AND HAZELTON AVE/COMMUNITY DR**

SCALE: NTS SHEET 2 OF 7 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	92
			CONTRACT NO. 61F05	
		ILLINOIS FED. AID PROJECT		

**IDOT  
TS 15261  
ECON 117**

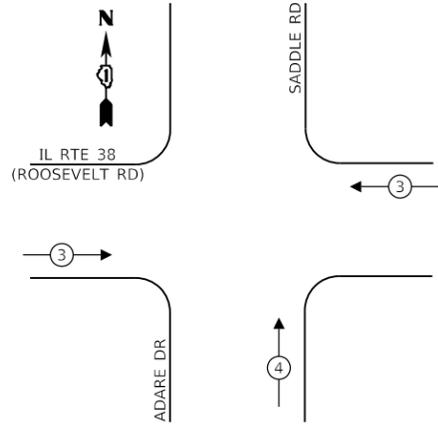
**EXISTING CONTROLLER SEQUENCE**



**LEGEND:**

- ← ⊙ → PROTECTED PHASE
- ← ⊙ - - ⊙ → PROTECTED/PERMITTED PHASE
- ← ⊙ ⊙ → PEDESTRIAN PHASE
- ← ⊙ ⊙ → OL OVERLAP

**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	14	11	50	77.0
(YELLOW)	14	20	5	14.0
(GREEN)	14	12	45	75.6
PERMISSIVE ARROW	8	10	10	8.0
PED. SIGNAL	-	20	100	-
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	-	-	-
PTZ CAMERA	-	75	100	-
<b>TOTAL =</b>				<b>299.6</b>

ENERGY COSTS TO:

**ILLINOIS DEPARTMENT OF TRANSPORTATION**

DIVISION OF HIGHWAYS/DISTRICT 1  
201 WEST CENTER COURT/ SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY: CONTACT: MR. DAVE SCHACHT  
PHONE: (630)-437-2129  
COMPANY: COMMONWEALTH EDISON  
ACCOUNT NUMBER: \_\_\_\_\_

TS SHT NO. 85



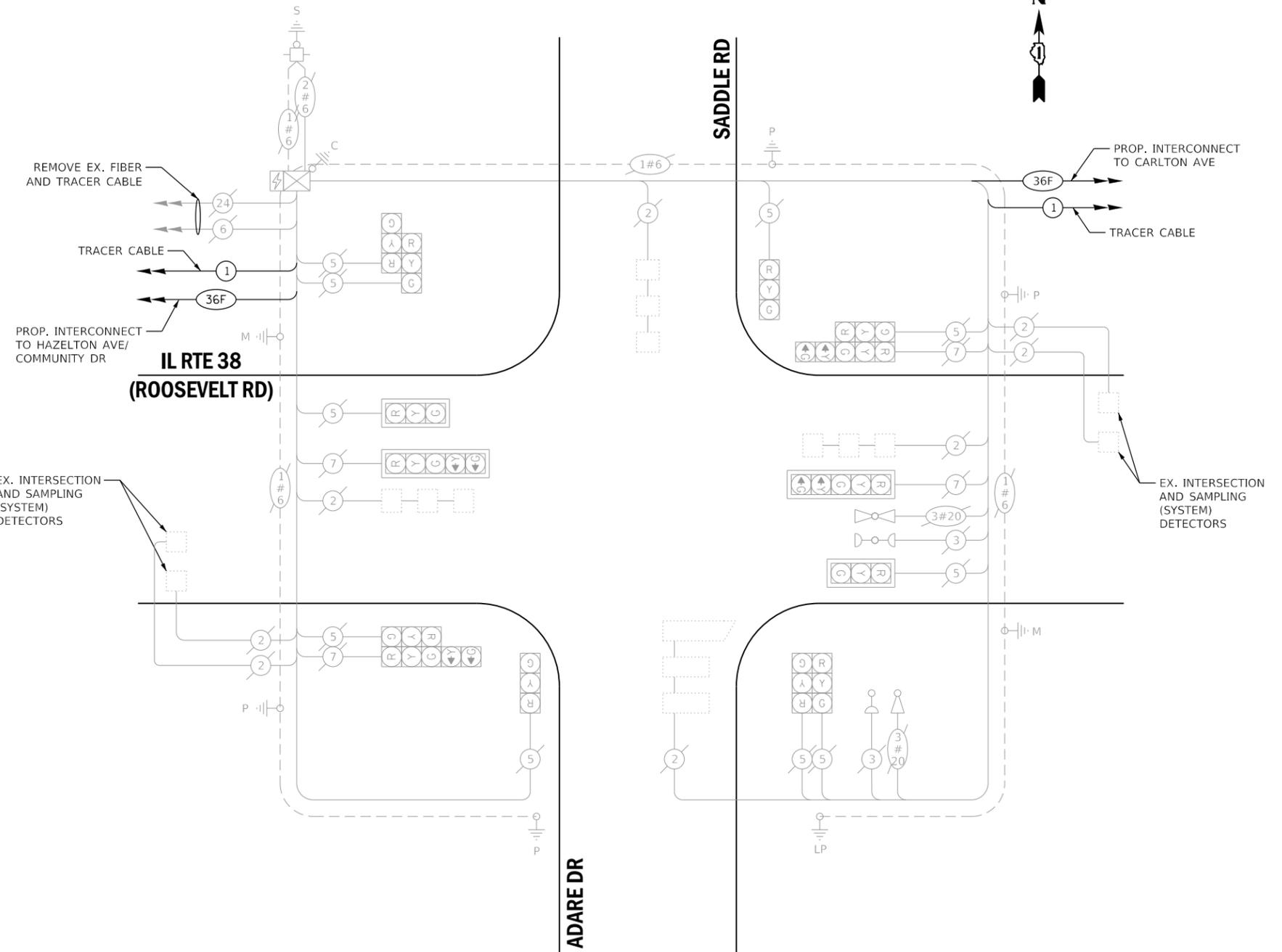
USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
PLOT SCALE = 40.0000 ' / in.	DRAWN - RG	REVISED -
PLOT DATE = 8/28/2018	CHECKED - ZH	REVISED -
	DATE -	REVISED -

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION

**SCHEDULE OF QUANTITIES**

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**CABLE PLAN**  
(NOT TO SCALE)



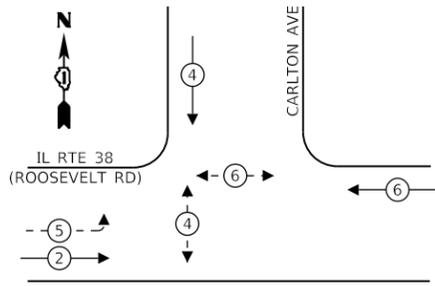
**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES**  
**IL RTE 38 (ROOSEVELT RD) AND SADDLE RD**

SCALE: NTS SHEET 3 OF 7 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	93
			CONTRACT NO. 61F05	
		ILLINOIS FED. AID PROJECT		

**IDOT**  
**TS 15260**  
**ECON 117**

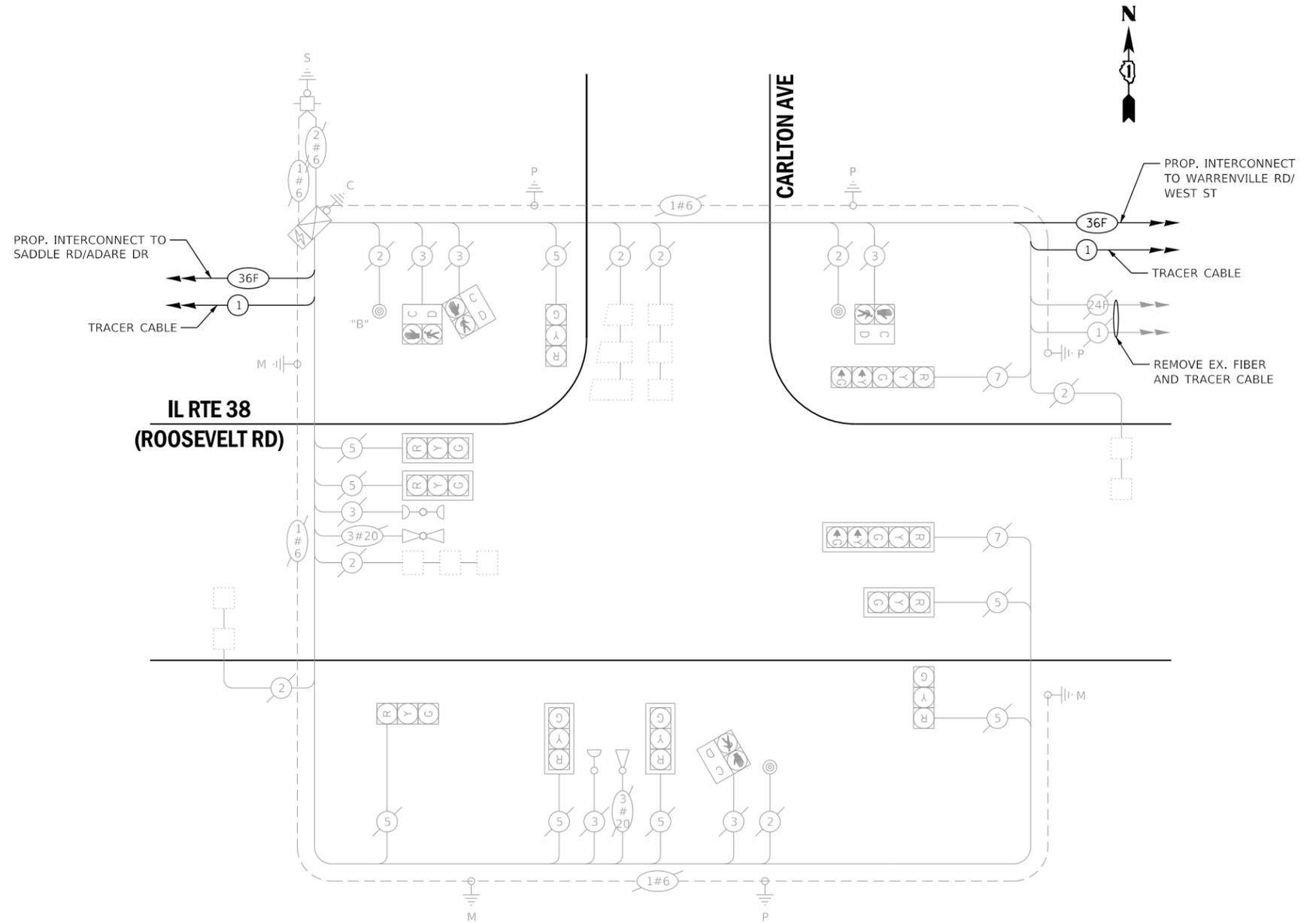
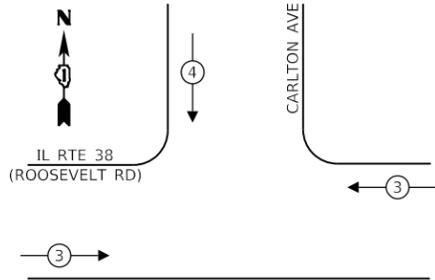
**EXISTING CONTROLLER SEQUENCE**



**LEGEND:**

- ⊙ — PROTECTED PHASE
- ⊙ — — — PROTECTED/PERMITTED PHASE
- ⊙ — ⊙ — PEDESTRIAN PHASE
- ⊙ — ⊙ — OL OVERLAP

**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



PUSH BUTTON "B" SHALL PLACE A CALL IN PHASE 4 AND 6

**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	10	11	50	55.0
(YELLOW)	10	20	5	10.0
(GREEN)	10	12	45	54.0
PERMISSIVE ARROW	4	10	10	4.0
PED. SIGNAL	4	20	100	80.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	-	-	-
PTZ CAMERA	-	75	100	-
TOTAL =				328.0

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION

**CABLE PLAN (NOT TO SCALE)**

TS SHT NO. 86

**ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION**

DIVISION OF HIGHWAYS/DISTRICT 1  
 201 WEST CENTER COURT/ SCHAUMBURG, IL 60196-1096  
 ENERGY SUPPLY: CONTACT: MR. DAVE SCHACHT  
 PHONE: (630)-437-2129  
 COMPANY: COMMONWEALTH EDISON  
 ACCOUNT NUMBER:



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
PLOT SCALE = 40,0000 ' / in.	DRAWN - RG	REVISED -
PLOT DATE = 8/28/2018	CHECKED - ZH	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

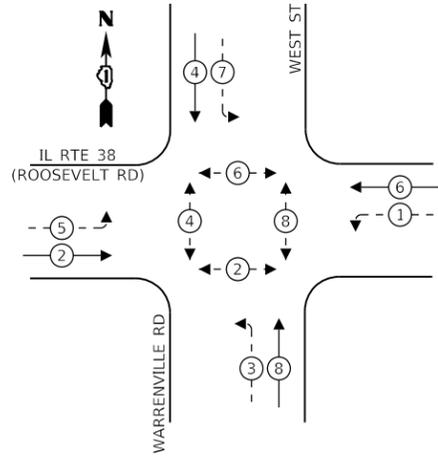
**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES  
 IL RTE 38 (ROOSEVELT RD) AND CARLTON AVE**

SCALE: NTS SHEET 4 OF 7 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	94
			CONTRACT NO.	61F05
ILLINOIS FED. AID PROJECT				

**IDOT  
 TS 15255  
 ECON 40**

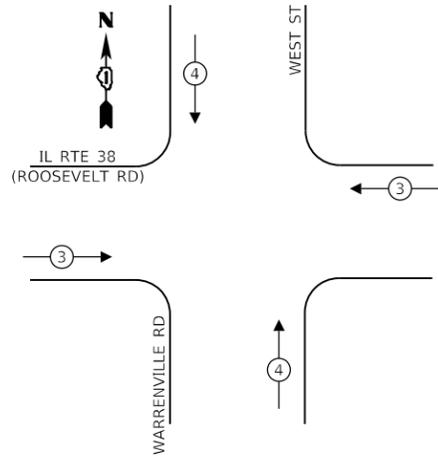
**EXISTING CONTROLLER SEQUENCE**



**LEGEND:**

- ⊙ — PROTECTED PHASE
- ⊙ — PROTECTED/PERMITTED PHASE
- ⊙ — PEDESTRIAN PHASE
- OL — OVERLAP

**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	14	11	50	77.0
(YELLOW)	14	20	5	14.0
(GREEN)	14	12	45	75.6
PERMISSIVE ARROW	16	10	10	16.0
PED. SIGNAL	8	20	100	160.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	-	-	-
PTZ CAMERA	-	75	100	-
<b>TOTAL =</b>				<b>467.6</b>

ENERGY COSTS TO:

**ILLINOIS DEPARTMENT OF TRANSPORTATION**

DIVISION OF HIGHWAYS/DISTRICT 1  
201 WEST CENTER COURT/ SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY: CONTACT: MR. DAVE SCHACHT  
PHONE: (630)-437-2129  
COMPANY: COMMONWEALTH EDISON  
ACCOUNT NUMBER: \_\_\_\_\_

**IL RTE 38 (ROOSEVELT RD)**

EX. INTERSECTION AND SAMPLING (SYSTEM) DETECTORS

REMOVE EX. FIBER AND TRACER CABLE

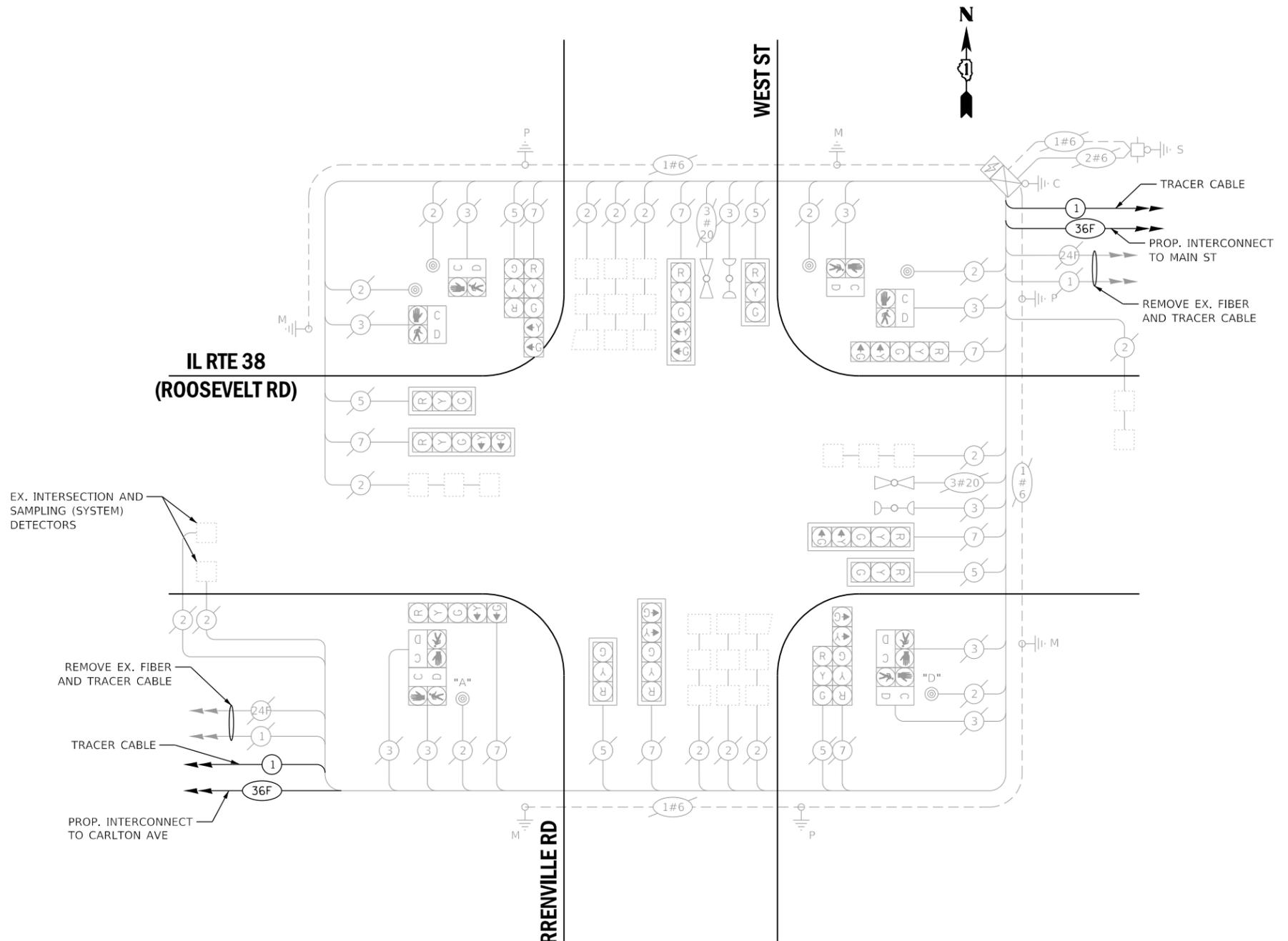
TRACER CABLE

PROP. INTERCONNECT TO CARLTON AVE

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION

**CABLE PLAN (NOT TO SCALE)**



PUSH BUTTON "A" SHALL PLACE A CALL IN PHASE 2 AND 4  
PUSH BUTTON "D" SHALL PLACE A CALL IN PHASE 2 AND 8

TS SHT NO. 87



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
PLOT SCALE = 40.0000 ' / in.	DRAWN - RG	REVISED -
PLOT DATE = 8/28/2018	CHECKED - ZH	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

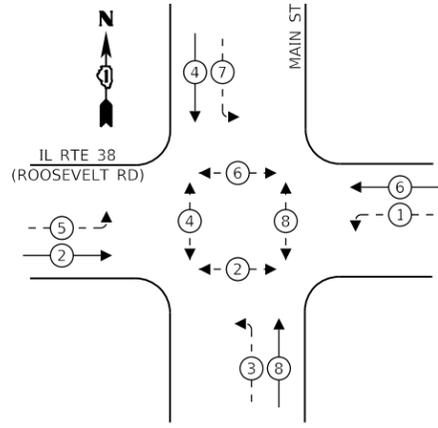
**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES  
IL RTE 38 (ROOSEVELT RD) AND WEST ST/WARRENVILLE RD**

SCALE: NTS SHEET 5 OF 7 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCC55-01-TL	DUPAGE	277	95
			CONTRACT NO. 61F05	

**IDOT  
TS 15250  
ECON 40**

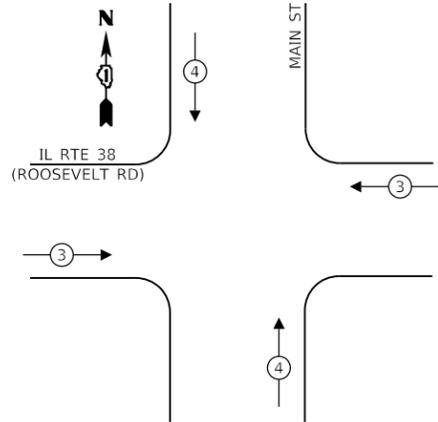
**EXISTING CONTROLLER SEQUENCE**



**LEGEND:**

- ⊙ — PROTECTED PHASE
- ⊙ — — PROTECTED/PERMITTED PHASE
- ⊙ — ⊙ — PEDESTRIAN PHASE
- ⊙ — OL — OVERLAP

**EXISTING EMERGENCY VEHICLE  
PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL  
ELECTRICAL SERVICE REQUIREMENTS**

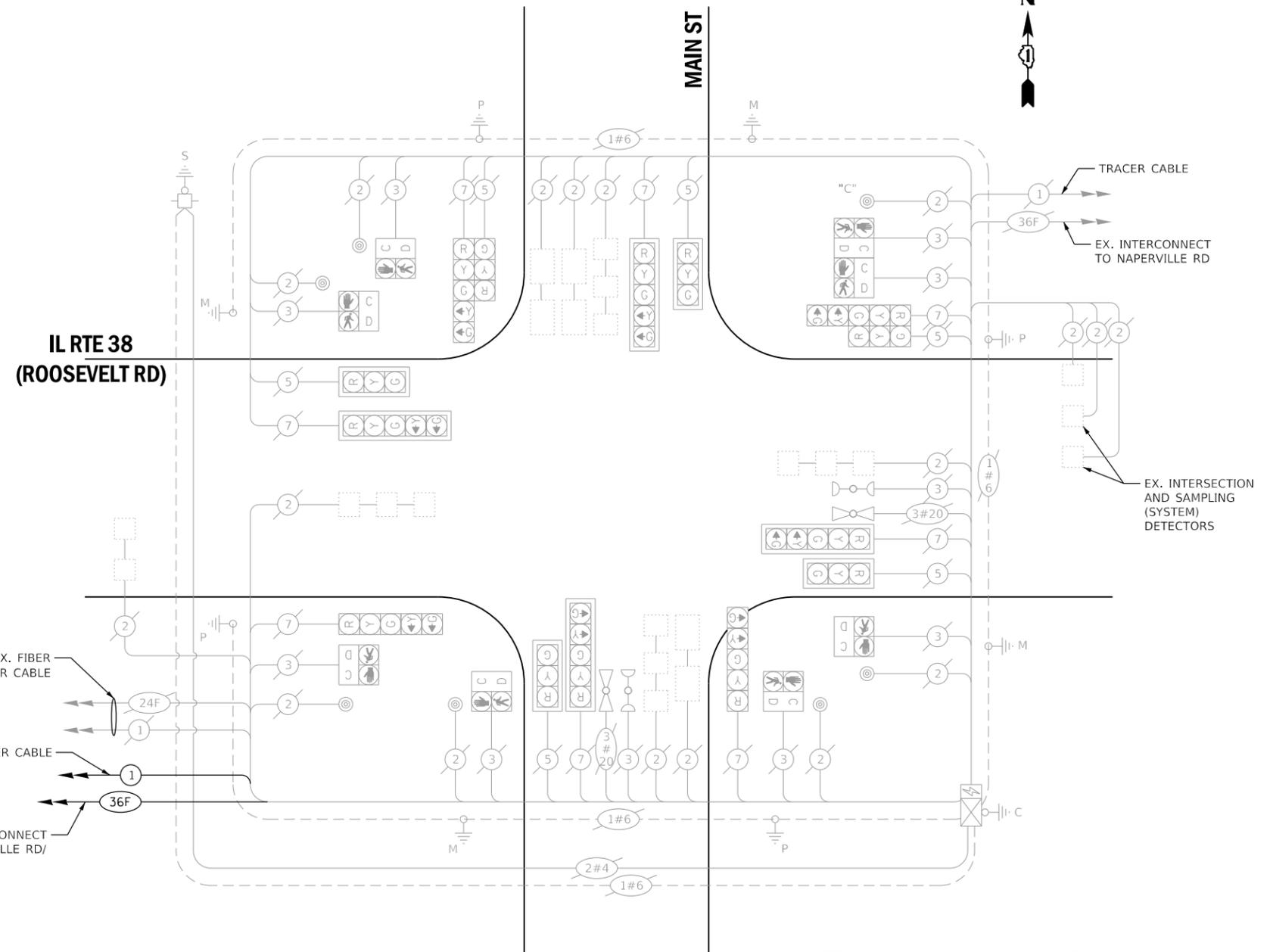
TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	14	11	50	77.0
(YELLOW)	14	20	5	14.0
(GREEN)	14	12	45	75.6
PERMISSIVE ARROW	16	10	10	16.0
PED. SIGNAL	8	20	100	160.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	-	-	-
PTZ CAMERA	-	75	100	-
TOTAL =				467.6

ENERGY COSTS TO:

**ILLINOIS DEPARTMENT OF TRANSPORTATION**

DIVISION OF HIGHWAYS/DISTRICT 1  
201 WEST CENTER COURT/ SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY: CONTACT: MR. DAVE SCHACHT  
PHONE: (630)-437-2129  
COMPANY: COMMONWEALTH EDISON  
ACCOUNT NUMBER: \_\_\_\_\_



**CABLE PLAN  
(NOT TO SCALE)**

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION

TS SHT NO. 88



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
PLOT SCALE = 40.0000 ' / in.	DRAWN - RG	REVISED -
PLOT DATE = 8/28/2018	CHECKED - ZH	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

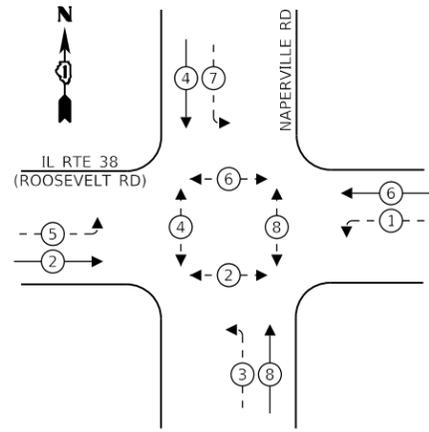
**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE  
PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES  
IL RTE 38 (ROOSEVELT RD) AND MAIN ST**

SCALE: NTS SHEET 6 OF 7 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	96
			CONTRACT NO.	61F05
ILLINOIS FED. AID PROJECT				

**IDOT  
TS 15245  
ECON 40**

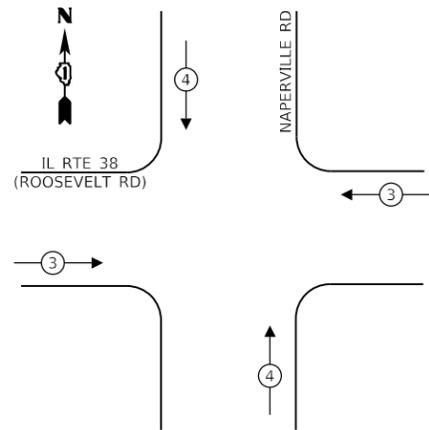
**EXISTING CONTROLLER SEQUENCE**



**LEGEND:**

- ⊙\* — PROTECTED PHASE
- ⊙\* — PROTECTED/PERMITTED PHASE
- ⊙\* — PEDESTRIAN PHASE
- ⊙\* — OL — OVERLAP

**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	14	11	50	77.0
(YELLOW)	14	20	5	14.0
(GREEN)	14	12	45	75.6
PERMISSIVE ARROW	16	10	10	16.0
PED. SIGNAL	8	20	100	160.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	4	250	50	500.0
PTZ CAMERA	-	75	100	-
<b>TOTAL =</b>				<b>967.6</b>

ENERGY COSTS TO:

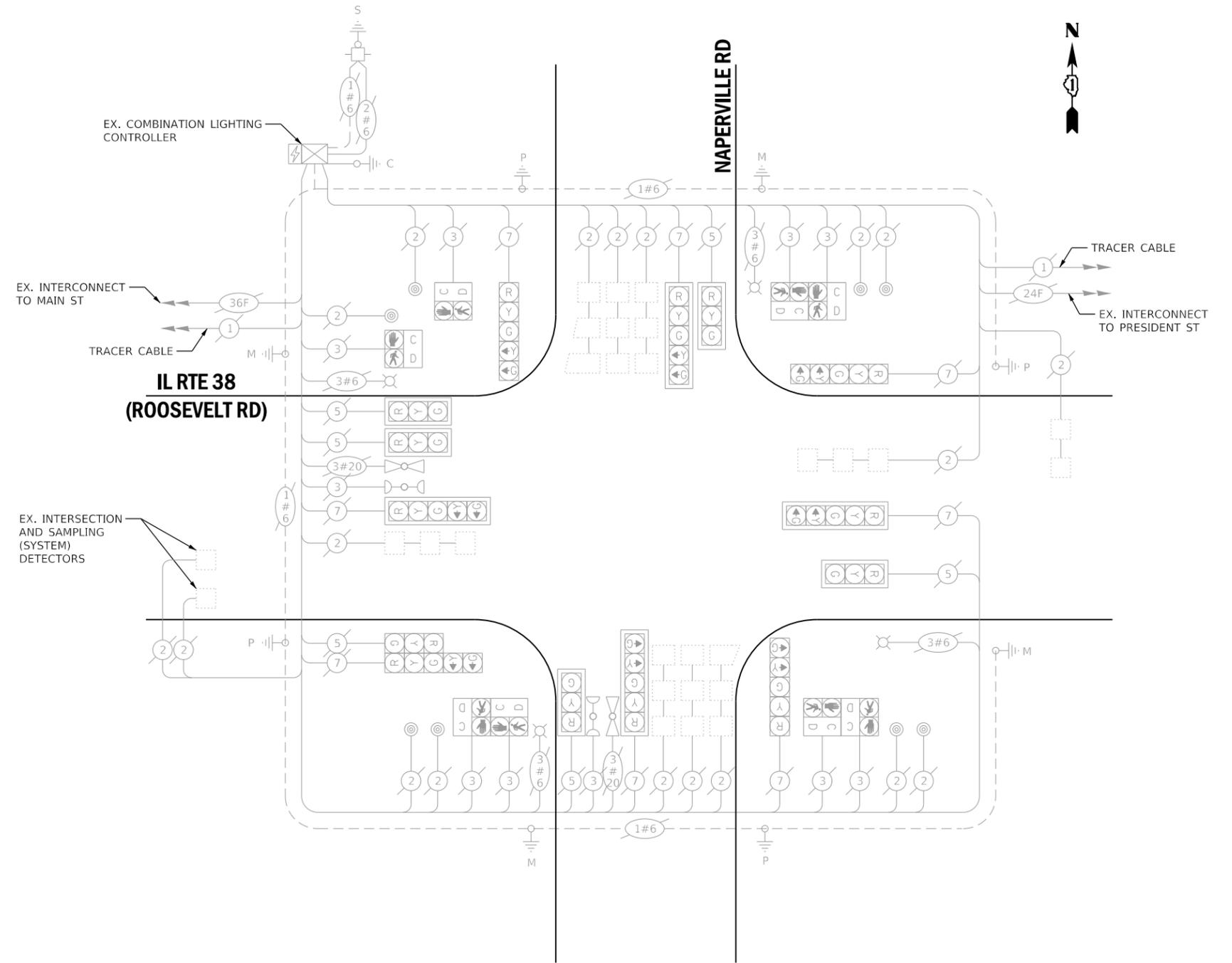
**ILLINOIS DEPARTMENT OF TRANSPORTATION**

DIVISION OF HIGHWAYS/DISTRICT 1  
201 WEST CENTER COURT/ SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY: CONTACT: MR. DAVE SCHACHT  
PHONE: (630)-437-2129  
COMPANY: COMMONWEALTH EDISON  
ACCOUNT NUMBER: \_\_\_\_\_

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION



**CABLE PLAN**  
(NOT TO SCALE)

TS SHT NO. 89



USER NAME = dwiktorzak	DESIGNED - DW	REVISED -
PLOT SCALE = 40.0000 ' / in.	DRAWN - RG	REVISED -
PLOT DATE = 8/28/2018	CHECKED - ZH	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

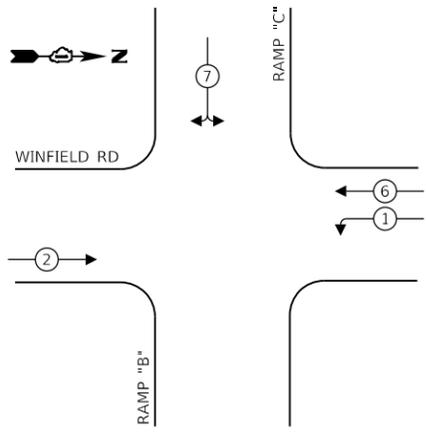
**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES  
IL RTE 38 (ROOSEVELT RD) AND NAPERVILLE RD**

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	97
			CONTRACT NO.	61F05
ILLINOIS FED. AID PROJECT				

**IDOT**  
**TS 15240**  
**ECON 40**

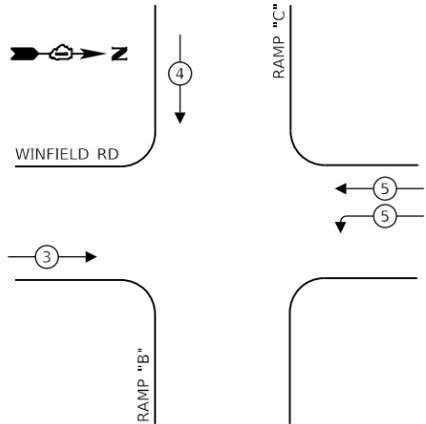
**EXISTING CONTROLLER SEQUENCE**



**LEGEND:**

- ← ⊙ → PROTECTED PHASE
- ← ⊙ - PROTECTED/PERMITTED PHASE
- ← ⊙ → PEDESTRIAN PHASE
- ← ⊙ OL → OVERLAP

**EXISTING EMERGENCY VEHICLE  
PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL  
ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	13	11	50	71.5
(YELLOW)	13	20	5	13.0
(GREEN)	13	12	45	70.2
PERMISSIVE ARROW	-	10	10	-
PED. SIGNAL	4	20	100	80.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	250	50	-
PTZ CAMERA	-	75	100	-
<b>TOTAL =</b>				<b>359.7</b>

**ENERGY COSTS TO:  
DUPAGE COUNTY D.O.T.**

421 N. COUNTY FARM RD.  
WHEATON, IL 60187

ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
PHONE: (630)-424-5704  
COMPANY: COM-ED LOMBARD  
ACCOUNT NUMBER:

**REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT**

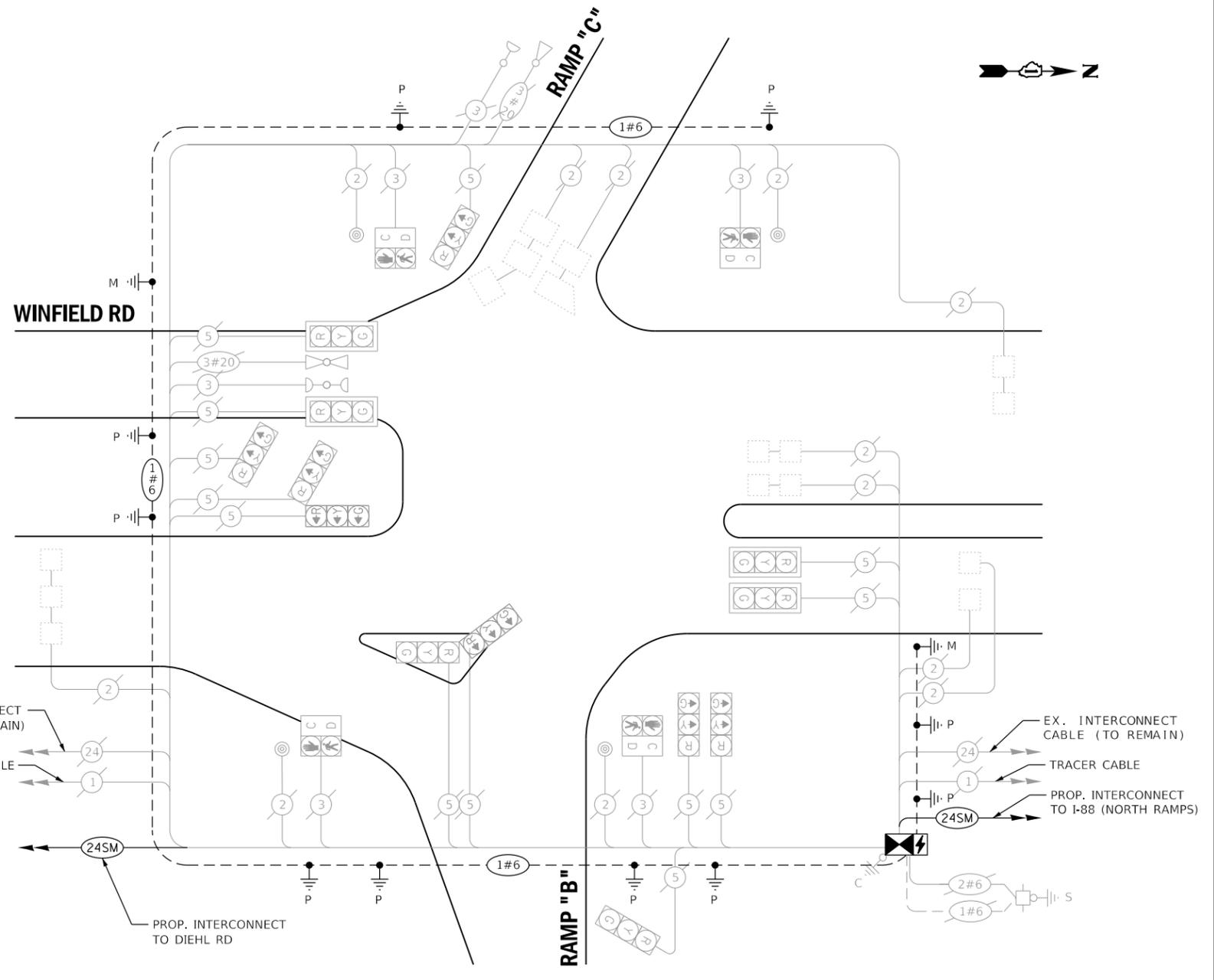
THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: DUPAGE COUNTY DIVISION OF TRANSPORTATION

1 EACH CONTROLLER AND CABINET (COMPLETE)

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
5	EACH	GROUNDING EXISTING HANDHOLE FRAME AND COVER
750	FOOT	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C
8	EACH	INDUCTIVE LOOP DETECTOR
1	EACH	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	LAYER II (DATALINK) SWITCH
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
1	EACH	ELECTRIC METER SOCKET



**CABLE PLAN  
(NOT TO SCALE)**

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE NTCIP (LATEST VERSION).

TS SHT NO. 90



USER NAME = dwiktorzak  
DESIGNED - DW  
DRAWN - RG  
PLOT SCALE = 40,0000 ' / in.  
CHECKED - ZH  
PLOT DATE = 8/28/2018  
DATE -

REVISED -  
REVISED -  
REVISED -  
REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE  
PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES  
WINFIELD RD AND I-88 (SOUTH)

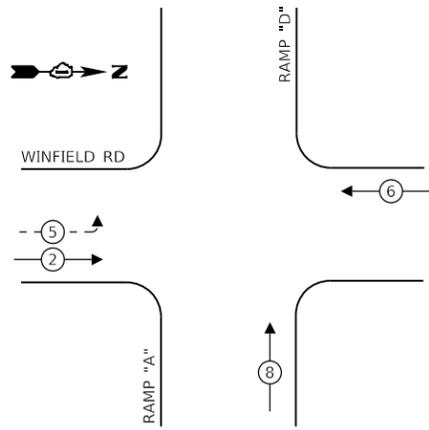
SCALE: NTS SHEET 1 OF 5 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	98
CONTRACT NO. 61F05			ILLINOIS FED. AID PROJECT	

DUDOT



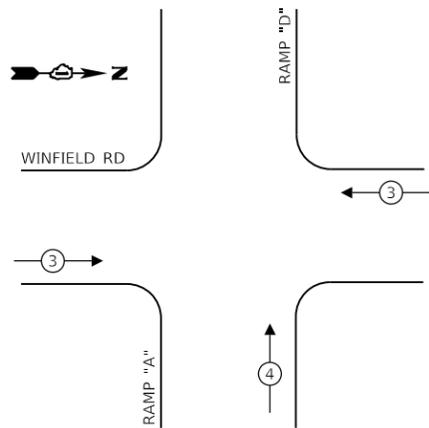
**EXISTING CONTROLLER SEQUENCE**



**LEGEND:**

- ← ⊙ → PROTECTED PHASE
- ← ⊙ - - ⊙ → PROTECTED/PERMITTED PHASE
- ← ⊙ ⊙ → PEDESTRIAN PHASE
- ← ⊙ ⊙ OL → OVERLAP

**EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

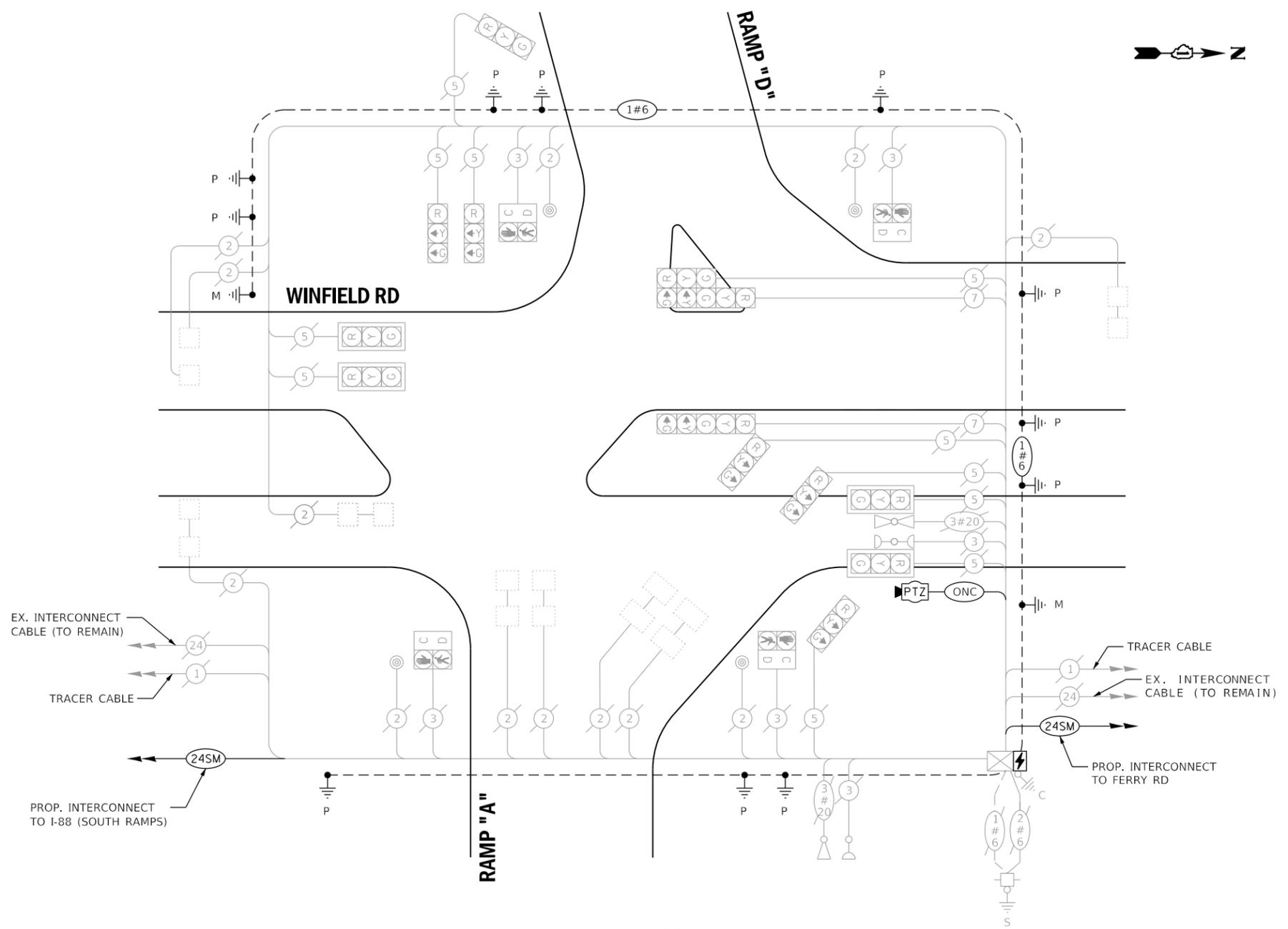
TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	13	11	50	71.5
(YELLOW)	13	20	5	13.0
(GREEN)	13	12	45	70.2
PERMISSIVE ARROW	4	10	10	4.0
PED. SIGNAL	4	20	100	80.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	-	-	-
PTZ CAMERA	1	75	100	75.0
<b>TOTAL =</b>				<b>438.7</b>

ENERGY COSTS TO:

**DUPAGE COUNTY D.O.T.**

421 N. COUNTY FARM RD.  
WHEATON, IL 60187

ENERGY SUPPLY: CONTACT: MR. JOE STACHO  
PHONE: (630)-424-5704  
COMPANY: COM-ED LOMBARD  
ACCOUNT NUMBER:



**CABLE PLAN**  
(NOT TO SCALE)

**SCHEDULE OF QUANTITIES**

TOTAL QTY.	UNITS	ITEM DESCRIPTION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
6	EACH	GROUNDING EXISTING HANDHOLE FRAME AND COVER
750	FOOT	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	CAMERA MOUNTING ASSEMBLY
84	FOOT	OUTDOOR RATED NETWORK CABLE
1	EACH	REMOTE CONTROLLED VIDEO SYSTEM
1	EACH	LAYER 11 (DATALINK) SWITCH
1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
1	EACH	MODIFY EXISTING CONTROLLER CABINET, SPECIAL
1	EACH	ELECTRIC METER SOCKET

TS SHT NO. 92



USER NAME = dwiktorzak  
DESIGNED - DW  
DRAWN - RG  
PLOT SCALE = 40,0000 ' / in.  
PLOT DATE = 8/28/2018  
CHECKED - ZH  
DATE -

REVISED -  
REVISED -  
REVISED -  
REVISED -

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

**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES**  
**WINFIELD RD AND I-88 (NORTH)**

SCALE: NTS SHEET 3 OF 5 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	17-DCCSS-01-TL	DUPAGE	277	100
			CONTRACT NO. 61F05	
		ILLINOIS	FED. AID PROJECT	

**DUDOT**

FILE NAME = p:\IPW1.dzcorp.com\DLZ\Documents\Projects\2017\1782\2130\W03\_Centracs Expansion 2\CADD\_Sheets\0502-sht-ts-cable.dgn  
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