

CABLE PLAN LEGEND

- 12" (300MM) TRAFFIC SIGNAL SECTION
- PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN
- CONTROLLER CABINET
- SERVICE INSTALLATION
- EMERGENCY VEHICLE LIGHT DETECTOR
- CONFIRMATION BEACON
- PUSHBUTTON DETECTOR
- DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
- SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD.
- SIGNAL FACE WITHOUT BACKPLATE. "P" INDICATES PROGRAMMED HEAD.
- VIDEO DETECTION CAMERA
- PROPOSED PTZ CAMERA
- GROUND ROD @ SERVICE INSTALLATION
- GROUND ROD AT CONTROLLER (C), POST (P), OR MAST ARM (MA)
- PROPOSED LUMINAIRE
- VIDEO IMAGE CABLE, BELDEN 8281 COAXIAL CABLE

EMERGENCY VEHICLE PREEMPTION SEQUENCE

NO SCALE

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

OVERLAP B = PHASE 4 + PHASE 5

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

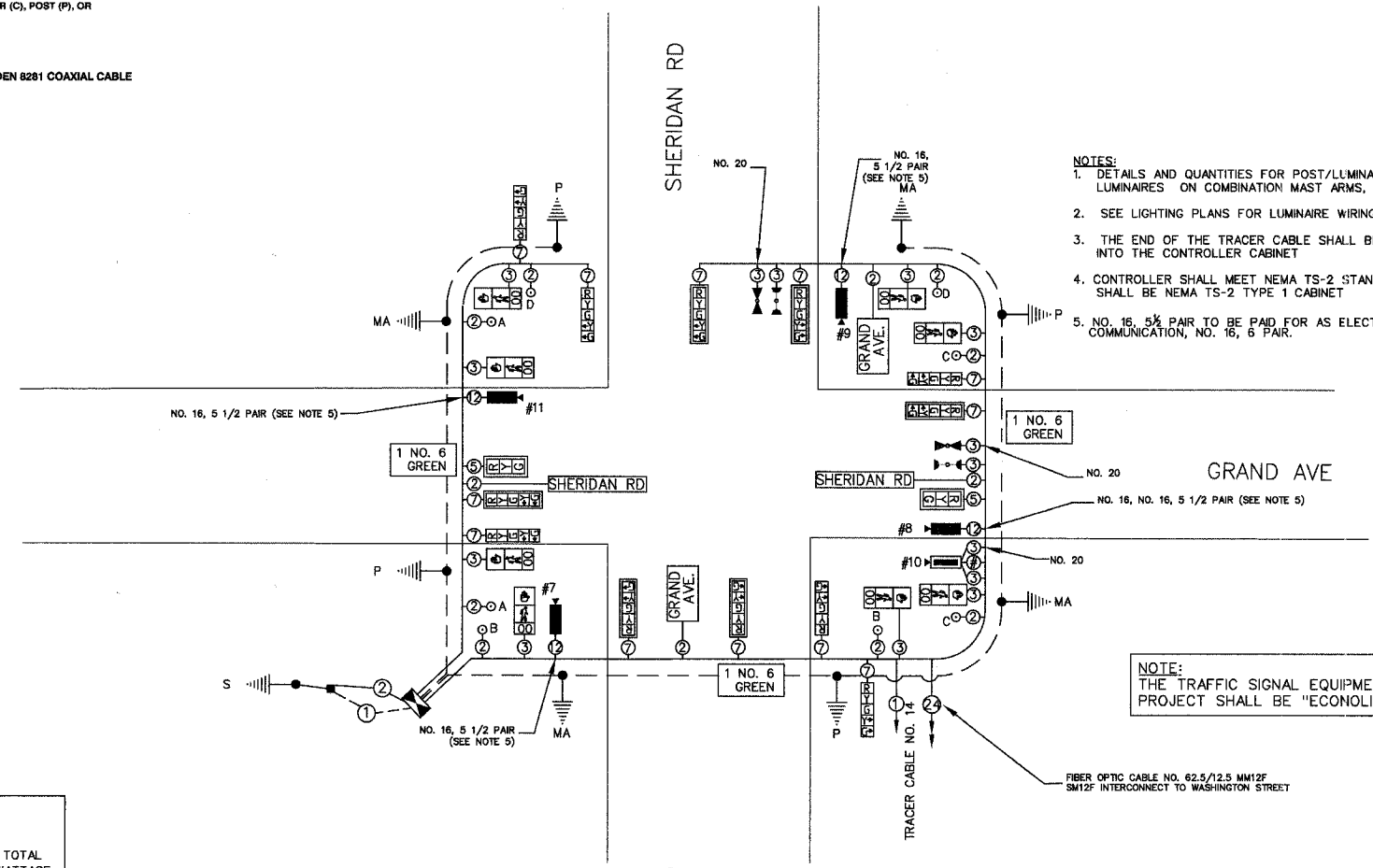
OVERLAP D = PHASE 8 + PHASE 9

PHASE DESIGNATION DIAGRAM

NO SCALE

- ### NOTES:
1. DETAILS AND QUANTITIES FOR POST/LUMINAIRE SPECIAL AND COBRA LUMINAIRE ON COMBINATION MAST ARMS, REFER TO LIGHTING PLANS.
 2. SEE LIGHTING PLANS FOR LUMINAIRE WIRING AND ELECTRIC FEED.
 3. THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.
 4. CONTROLLER SHALL MEET NEMA TS-2 STANDARDS AND THE CABINET SHALL BE NEMA TS-2 TYPE 1 CABINET.
 5. NO. 16, 5 1/2 PAIR TO BE PAID FOR AS ELECTRICAL CABLE IN CONDUIT, COMMUNICATION, NO. 16, 6 PAIR.

NOTE: THE TRAFFIC SIGNAL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE NTCIP."



CABLE PLAN

NO SCALE

TRAFFIC SIGNAL - SCHEDULE OF QUANTITIES			
CODED PAY ITEM	ITEM DESCRIPTION	UNIT	QUANTITY
81000700	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	59
81000800	CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	62
81000900	CONDUIT IN TRENCH, 3 1/2" DIA., GALVANIZED STEEL	FOOT	14
81018900	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	219
81019000	CONDUIT PUSHED, 5" DIA., GALVANIZED STEEL	FOOT	125
81400100	HANDHOLE	EACH	3
81400300	DOUBLE HANDHOLE	EACH	2
81500200	TRENCH & BACKFILL FOR ELECTRICAL WORK	FOOT	135
83700205	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
86400100	TRANSMITTER, FIBER OPTIC	EACH	1
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2/C	FOOT	1549
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3/C	FOOT	2172
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5/C	FOOT	1253
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7/C	FOOT	2389
87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	175
87301615	ELECTRIC CABLE IN CONDUIT, COMMUNICATION, NO. 16, 6 PAIR	FOOT	880
87704110	STEEL COMBINATION MAST ARM ASSEMBLY & POLE 36 FT. (SPECIAL)	EACH	1
87704150	STEEL COMBINATION MAST ARM ASSEMBLY & POLE 44 FT. (SPECIAL)	EACH	2
87704160	STEEL COMBINATION MAST ARM ASSEMBLY & POLE 46 FT. (SPECIAL)	EACH	1
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	16
87800200	CONCRETE FOUNDATION, TYPE D	FOOT	4
87800400	CONCRETE FOUNDATION, TYPE E, 30" DIA.	FOOT	15
87800415	CONCRETE FOUNDATION, TYPE E, 36" DIA.	FOOT	45
88040100	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED (SPECIAL)	EACH	2
88040155	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, SPECIAL	EACH	6
88040170	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED (SPECIAL)	EACH	6
88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8
88200110	TRAFFIC SIGNAL BACKPLATE, LOUVERED	EACH	12
88700200	LIGHT DETECTOR	EACH	2
88700300	LIGHT DETECTOR AMPLIFIER	EACH	1
88800100	PEDESTRIAN PUSH-BUTTON	EACH	8
89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
89502380	REMOVE EXISTING HANDHOLE	EACH	8
89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	8
X0323153	ELECTRIC CABLE IN CONDUIT, GROUND, NO. 6 1C (GREEN)	FOOT	1315
X0325060	2955 LAYER 2 SWITCH	EACH	1
X8050010	SERVICE INSTALLATION - GROUND MOUNTED	EACH	1
X8730320	ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 20 3/C, TWISTED, SHIELDED	FOOT	753
88040100	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED (SPECIAL)	EACH	2
88040155	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, SPECIAL	EACH	6
88040170	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED (SPECIAL)	EACH	6
XX003661	ELECTRIC CABLE IN CONDUIT, COAXIAL	FOOT	209
XX005428	INTERNALLY ILLUMINATED STREET NAME SIGN	EACH	4
XX005723	VIDEO DETECTION SYSTEM COMPLETE INTERSECTION	EACH	1
XX005932	TRAFFIC SIGNAL POST, 18 FT SPECIAL	EACH	2
XX005940	REMOTE-CONTROLLED VIDEO SYSTEM	EACH	1
XX006661	UNINTERRUPTIBLE POWER SUPPLY	EACH	1

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE INCAND.	LED % OPERATION	TOTAL WATTAGE	
SIGNAL					
RED	18	135	10	0.50	15.3
YELLOW	18	135	19	0.25	112.5
GREEN	18	135	11	0.25	67.5
ARROW	22	135	9	0.10	26.4
PED SIGNAL	8	90	9	1.00	200
CONTROLLER	1	100	100	1.00	100
STREET LIGHTS	6	84		0.50	252
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHWABERG, ILLINOIS 60196-0945				TOTAL	911.4
ENERGY SUPPLY CONTACT: TERRY BLECK PHONE: (847) 816-5239 COMPANY: COM. ED.					

FOUNDATION (DEPTH)	(FT.)	CABLE SLACK	(FT.)	VERTICAL	(FT.)	
TYPE A - POST	4	HANDHOLE	6.5	ALL FOUNDATIONS	3.5	
TYPE D - CONTROLLER	4	DOUBLE HANDHOLE	13	MAST ARM (L) POLE	20" L-2-	
TYPE E - MAST ARM POLE		SIGNAL POST	2	BRACKET MOUNTED	13	
	24"	10	CONTROLLER CABINET	1	PED. PUSHBUTTON	4
	30"	15	FIBER OPTIC	13	ELECTRIC SERVICE	13.5
	36"	15	ELECTRIC SERVICE	1	SERVICE TO GROUND	13.5
			GROUND CABLE	1	POST MOUNTED	6
					MAST ARM, LUMINAIRE/CAMERA	40
					MAST ARM, PTZ CAMERA	38.5
					POST LUMINAIRE	30

THE POSTED SPEED LIMIT ON:

GRAND AVENUE IS 25 MPH
SHERIDAN ROAD IS 30 MPH

REVISIONS		
NO.	ITEM	DATE

SCALE:	1" = 20'
DRAWN BY:	NLB
CHECKED BY:	CRF
DATE:	3-3-06

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CABLE PLAN/PHASE DIAGRAM
SHERIDAN ROAD AT GRAND AVENUE
SHERIDAN ROAD IMPROVEMENTS
 CITY OF WAUKEGAN JOB NUMBER: 02-28-04-164 LAKE COUNTY, ILLINOIS
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