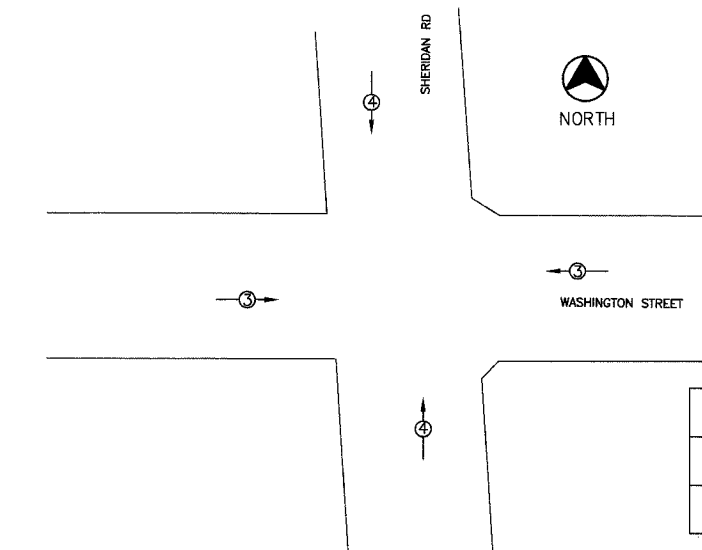


CABLE PLAN LEGEND

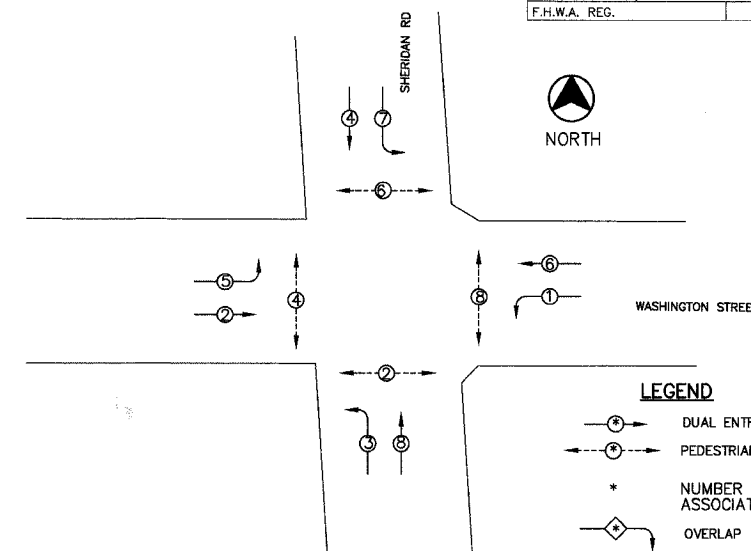
- 12" (300MM) TRAFFIC SIGNAL SECTION
- 12" (300MM) PEDESTRIAN SIGNAL HEAD
- CONTROLLER CABINET
- SERVICE INSTALLATION
- EMERGENCY VEHICLE LIGHT DETECTOR
- CONFIRMATION BEACON
- PUSHBUTTON DETECTOR
- DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
- 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
- UNINTERRUPTIBLE POWER SUPPLY



EMERGENCY VEHICLE PREEMPTION SEQUENCE

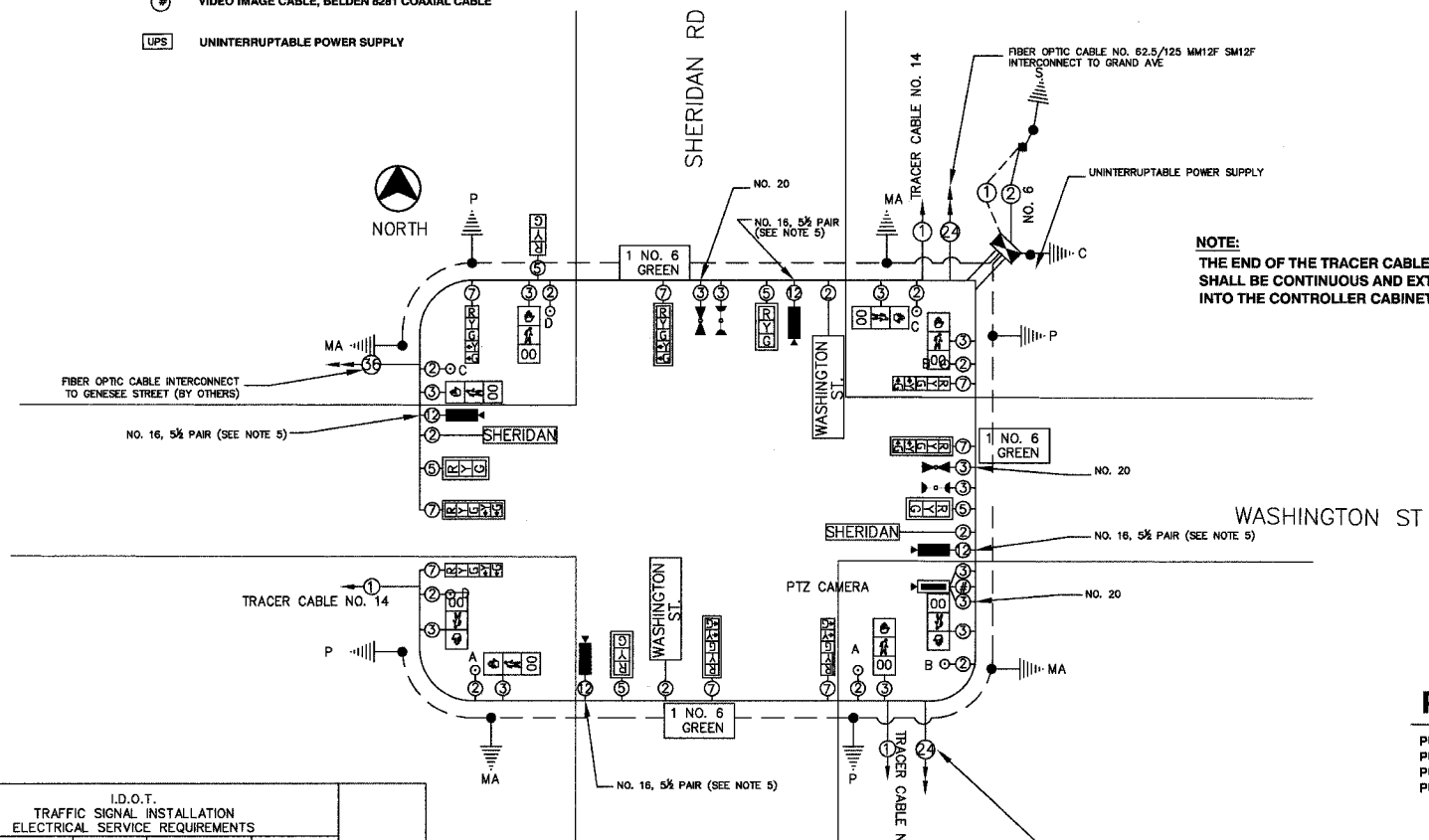
NO SCALE

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



PHASE DESIGNATION DIAGRAM

NO SCALE



CABLE PLAN

NO SCALE

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE INCAND.	LED % OPERATION	TOTAL WATTAGE	
SIGNAL					
RED	14	135	10	0.50	119
YELLOW	14	135	19	0.25	87.5
GREEN	14	135	11	0.25	52.5
ARROW	16	135	9	0.10	19.2
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 STREET, SCHMIDGALL, ILLINOIS 60196-0306				TOTAL	814.1
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	4
		30"	15	FIBER OPTIC	13.5
		36"	15	ELECTRIC SERVICE	13.5
				SERVICE TO GROUND	13.5
				POST MOUNTED	6
				MAST ARM, LUMINAIRE/CAMERA	40
				MAST ARM, PTZ CAMERA	38.5
				POST LUMINAIRE	30

NOTES:

- DETAILS AND QUANTITIES FOR POST/LUMINAIRE SPECIAL AND COBRA LUMINAIRE ON COMBINATION MAST ARMS, REFER TO LIGHTING PLANS.
- SEE LIGHTING PLANS FOR LUMINAIRE WIRING AND ELECTRIC FEED.
- THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.
- CONTROLLER SHALL MEET NEMA TS-2 STANDARDS AND THE CABINET SHALL BE NEMA TS-2 TYPE 1 CABINET.
- NO. 16, 5/8" 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."

PUSH BUTTON NOTES

- PUSH BUTTONS "A" SHALL PLACE A CALL IN PHASE 2 ONLY
- PUSH BUTTONS "B" SHALL PLACE A CALL IN PHASE 8 ONLY
- PUSH BUTTONS "C" SHALL PLACE A CALL IN PHASE 6 ONLY
- PUSH BUTTONS "D" SHALL PLACE A CALL IN PHASE 4 ONLY

THE POSTED SPEED LIMIT ON:

WASHINGTON STREET IS 25 MPH
SHERIDAN ROAD IS 30 MPH

TRAFFIC SIGNAL - SCHEDULE OF QUANTITIES

CODED PAY ITEM	ITEM DESCRIPTION	UNIT	QUANTITY
81000700	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	58
81000800	CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	46
81000900	CONDUIT IN TRENCH, 3 1/2" DIA., GALVANIZED STEEL	FOOT	13
81018800	CONDUIT PUSHED, 3 1/2" DIA., GALVANIZED STEEL	FOOT	169
81018900	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	164
81019000	CONDUIT PUSHED, 5" DIA., GALVANIZED STEEL	FOOT	81
81400100	HANDHOLE	EACH	2
81400300	DOUBLE HANDHOLE	EACH	2
81500200	TRENCH & BACKFILL FOR ELECTRICAL WORK	FOOT	117
85700205	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	1077
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3/C	FOOT	1537
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5/C	FOOT	1036.5
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7/C	FOOT	1260
87301615	ELECTRIC CABLE IN CONDUIT, COMMUNICATION, NO. 16, 6 PAIR	FOOT	714
87704070	STEEL COMBINATION MAST ARM ASSEMBLY & POLE 28 FT. (SPECIAL)	EACH	1
87704080	STEEL COMBINATION MAST ARM ASSEMBLY & POLE 30 FT. (SPECIAL)	EACH	1
87704090	STEEL COMBINATION MAST ARM ASSEMBLY & POLE 32 FT. (SPECIAL)	EACH	2
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	16
87800200	CONCRETE FOUNDATION, TYPE D	FOOT	4
87800400	CONCRETE FOUNDATION, TYPE E, 30" DIA.	FOOT	60
88040080	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED (SPECIAL)	EACH	1
88040100	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED (SPECIAL)	EACH	4
88040155	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED, SPECIAL	EACH	4
88040170	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED (SPECIAL)	EACH	3
88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8
88200110	TRAFFIC SIGNAL BACKPLATE, LOUVERED	EACH	8
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	5
89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	8
X0323153	ELECTRIC CABLE IN CONDUIT, GROUND, NO. 6 1C (GREEN)	FOOT	1015
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	418
XX003661	ELECTRIC CABLE IN CONDUIT, COAXIAL	FOOT	165
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
XX006590	REMOTE-CONTROLLED VIDEO SYSTEM	EACH	1
XX006661	UNINTERRUPTIBLE POWER SUPPLY	EACH	1

REVISIONS		
NO.	ITEM	DATE

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

McCLURE ENGINEERING ASSOCIATES, INC.
 2728 Grand Ave., Waukegan, IL 60085 Design Firm License: Illinois #184-000818
 TEL 847-336-7100 FAX 847-336-7155 Copyright 2005 by
 EMAIL wk@mcclureengineering.com McClure Engineering Associates, Inc.

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