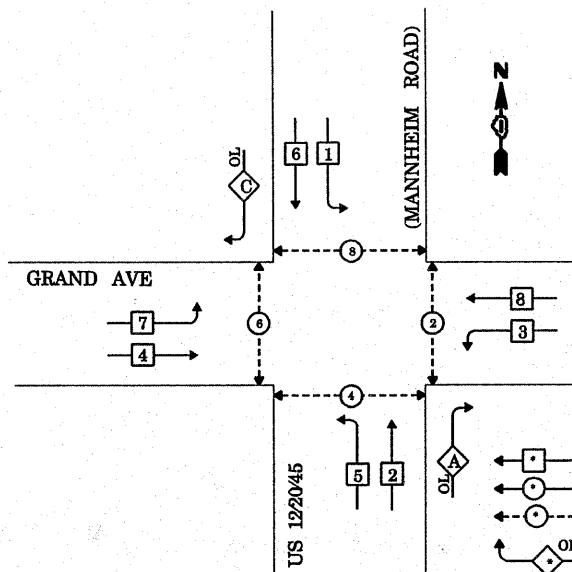


CONTROLLER SEQUENCE



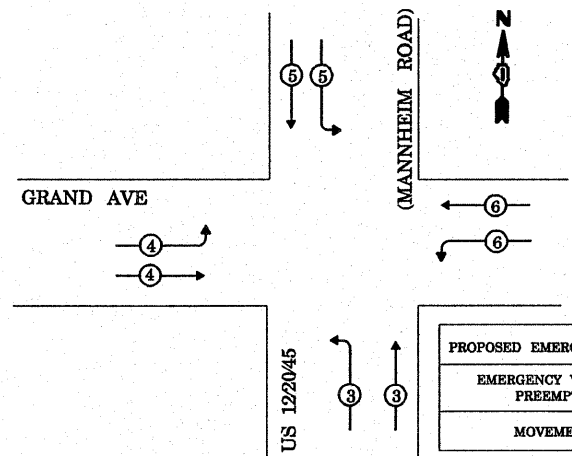
LEGEND
 SINGLE ENTRY PHASE
 DUAL ENTRY PHASE
 PEDESTRIAN PHASE
 OVERLAP
 NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

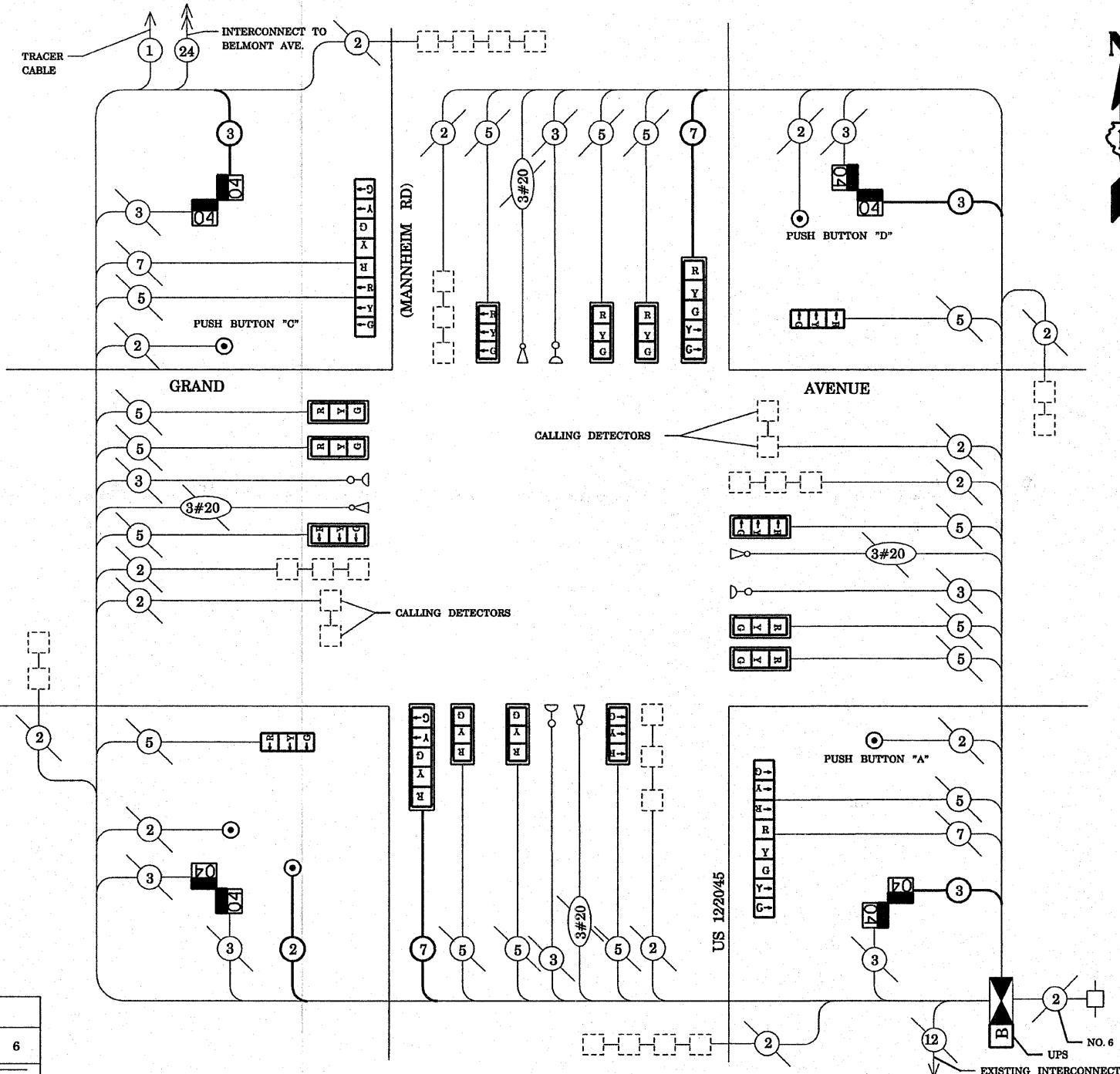
RIGHT TURN OVERLAP PHASE DESIGNATION

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMPTOR	3	4	5	6
MOVEMENT	↘	↘	↘	↘



CABLE PLAN

CABLE PLAN LEGEND

- | PROPOSED | EXISTING | |
|----------|----------|-------------------------------------------------------------------------------------------------------------|
| | | 8" (200mm) TRAFFIC SIGNAL SECTION |
| | | 12" (300mm) TRAFFIC SIGNAL SECTION |
| | | 12" (300mm) PEDESTRIAN SIGNAL SECTION |
| | | 12" (300mm) PEDESTRIAN SIGNAL SECTION |
| | | CONTROLLER CABINET |
| | | SERVICE INSTALLATION |
| | | TELEPHONE CONNECTION |
| | | MAGNETIC DETECTOR |
| | | PUSHBUTTON DETECTOR |
| | | VEHICLE DETECTOR, INDUCTION LOOP |
| | | 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 |
| | | RAILROAD CONTROL CABINET |
| | | ILLUMINATED SIGN, FIBER OPTIC "NO LEFT TURN" |
| | | ILLUMINATED SIGN, FIBER OPTIC "NO RIGHT TURN" |
| | | GROUND ROD AT HANDHOLE, DOUBLE HANDHOLE, OR CONTROLLER |
| | | GROUND ROD AT POST OR MAST ARM POLE |
| | | GROUND ROD AT ELECTRIC SERVICE INSTALLATION |
| | | GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN) |
| | | FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F & SM12F |
| | | MICROWAVE VEHICLE SENSOR |
| | | VIDEO DETECTOR |
| | | CLOSED CIRCUIT TV |
| | | EMERGENCY VEHICLE LIGHT DETECTOR |
| | | CONFIRMATION BEACON |
| | | UNINTERRUPTIBLE POWER SUPPLY |
| | | PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER |

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
27	FOOT	COMBINATION CURB AND GUTTER REMOVAL
27	FOOT	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
0.1	L SUM	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501
0.1	L SUM	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701
0.1	L SUM	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801
704	FOOT	THERMOPLASTIC PAVEMENT MARKING - LINE 12"
191	FOOT	THERMOPLASTIC PAVEMENT MARKING - LINE 24"
1130	SQ FT	THERMOPLASTIC PAVEMENT MARKING REMOVAL
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
1	EACH	TRANSCEIVER - FIBER OPTIC
157	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C
526	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
379	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C
2	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.
2	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
14	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM

QUANTITY	UNIT	ITEM
10	EACH	INDUCTIVE LOOP DETECTOR
5	EACH	PEDESTRIAN PUSH-BUTTON
1328	FOOT	REMOVE ELECTRIC CABLE FROM CONDUIT
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	REMOVE EXISTING HANDHOLE
12	EACH	SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED
2	EACH	SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, BRACKET MOUNTED
2	EACH	SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, MAST ARM MOUNTED
2	EACH	SIGNAL HEAD, L.E.D., 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
4	EACH	PEDESTRIAN SIGNAL HEAD, L.E.D., 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
1	EACH	UNINTERRUPTIBLE POWER SUPPLY

THE END OF THE TRACER CABLE SHALL BE TIED TO A CABLE HOOK IN THE DOUBLE HANDHOLE CLOSEST TO THE CONTROLLER FOUNDATION.

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

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

TYPE	NO. LAMPS	WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	20	17	0.50	170.00
(YELLOW)	20	25	0.25	125.00
(GREEN)	20	15	0.25	75.00
ARROW	8	12	0.10	9.60
PED. SIGNAL	8	25	1.00	200.00
CONTROLLER	1	100	1.00	100.00
ILLUM. SIGN				
FLASHER				
ENERGY COSTS TO:				TOTAL = 679.60
VILLAGE OF FRANKLIN PARK 4500 BELMONT AVENUE FRANKLIN PARK, IL 60131				
ENERGY SUPPLY CONTACT: LINDA KLOC PHONE: (708)410-5313 COMPANY: COMMONWEALTH EDISON				