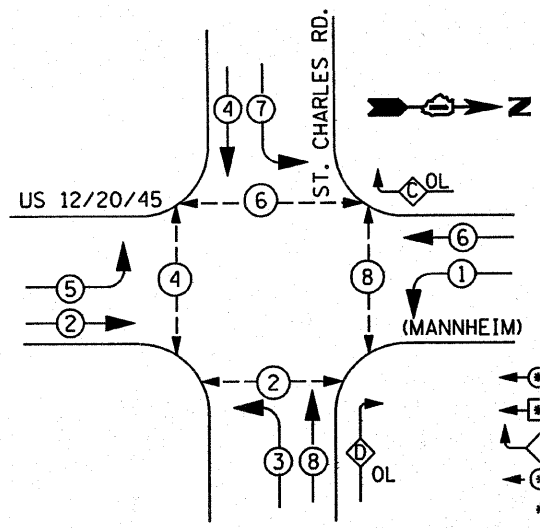


NOTE:
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE 'ECONOLITE' TO MATCH THE ADJACENT SYSTEM.



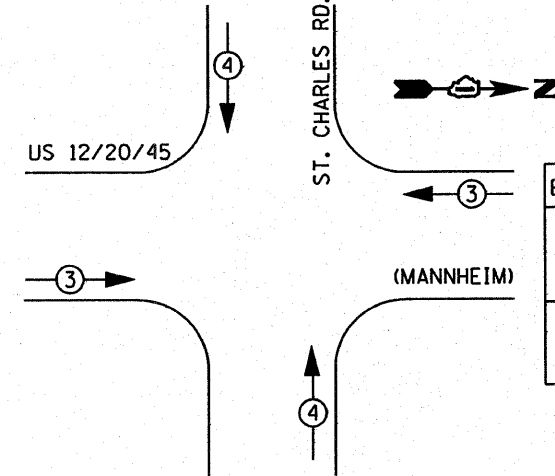
LEGEND
 1. DUAL ENTRY PHASE
 2. SINGLE ENTRY PHASE
 3. OVERLAP
 4. PEDESTRIAN PHASE
 * NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

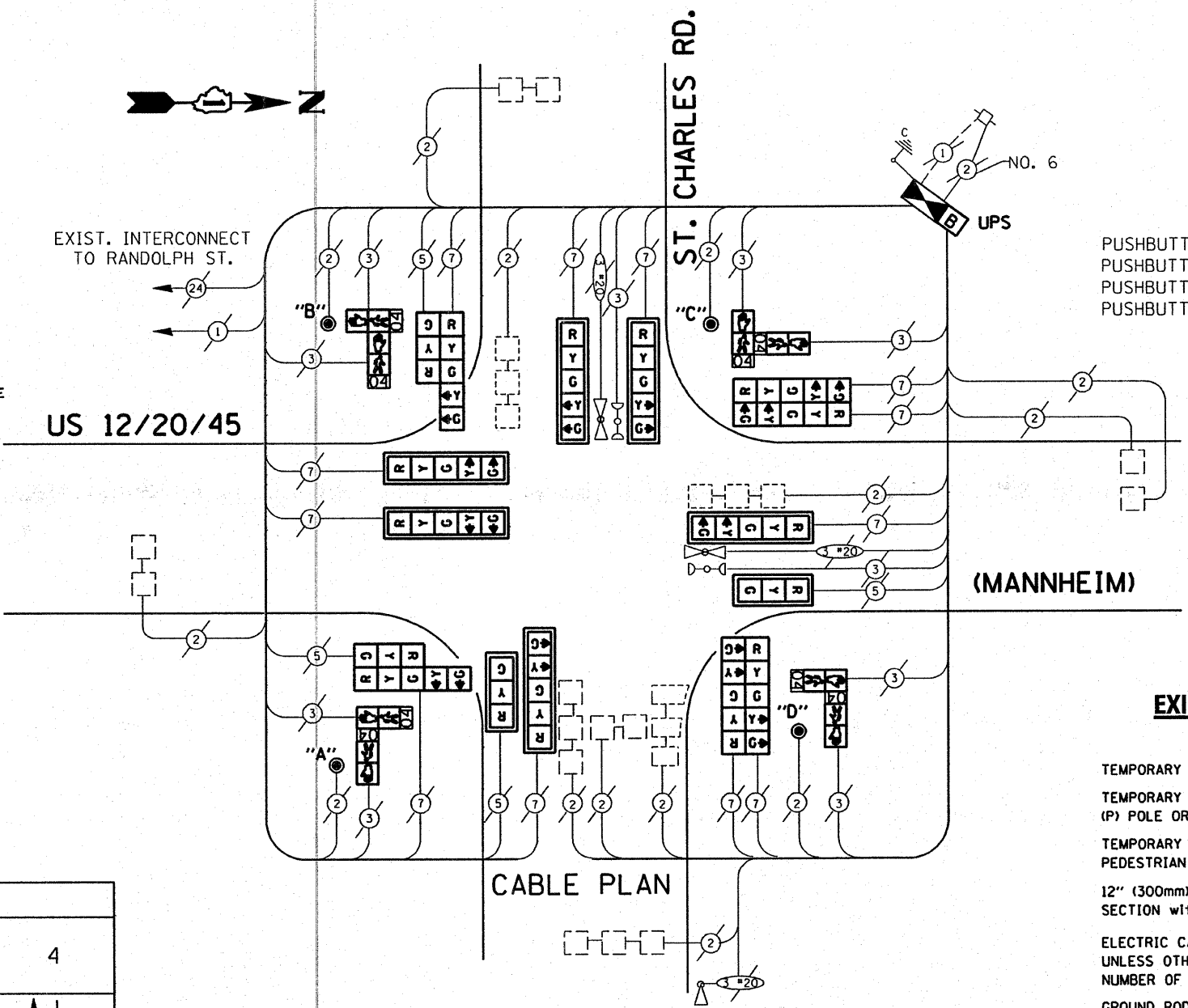
RIGHT TURN OVERLAP PHASE DESIGNATION

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

SIGNAL INSTALLATION EMERGENCY VEHICLE PREEMPTION SEQUENCE



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



CABLE PLAN

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

EXISTING CABLE DIAGRAM LEGEND

	PROPOSED	EXISTING
TEMPORARY CONTROLLER CABINET	[Symbol]	[Symbol]
TEMPORARY SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT	[Symbol]	[Symbol]
TEMPORARY TRAFFIC SIGNAL SECTION OR PEDESTRIAN SIGNAL SECTION, 12" (300 mm)	[Symbol]	[Symbol]
12" (300mm) PEDESTRIAN SIGNAL SECTION WITH COUNTDOWN TIMER	[Symbol]	[Symbol]
ELECTRIC CABLE IN CONDUIT, NO. 14, UNLESS OTHERWISE NOTED. NUMBER OF CONDUCTORS AS NOTED	[Symbol]	[Symbol]
GROUND ROD AT (C) CONTROLLER, (H) HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE	[Symbol]	[Symbol]
PEDESTRIAN PUSHBUTTON DETECTOR	[Symbol]	[Symbol]
VEHICLE DETECTOR, INDUCTION LOOP	[Symbol]	[Symbol]
CCTV DOME DRIVE UNIT	[Symbol]	[Symbol]
MICROWAVE VEHICLE SENSOR	[Symbol]	[Symbol]
VIDEO DETECTOR	[Symbol]	[Symbol]
CLOSED CIRCUIT TV	[Symbol]	[Symbol]
EMERGENCY VEHICLE SYSTEM DETECTOR	[Symbol]	[Symbol]
CONFIRMATION BEACON	[Symbol]	[Symbol]

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET (SPECIAL)	EACH	1
INDUCTIVE LOOP DETECTOR	EACH	10
SIGNAL HEAD, L.E.D. 1-FACE, 3 SECTION, MAST ARM MNTD.	EACH	2
SIGNAL HEAD, L.E.D. 1-FACE, 5 SECTION, MAST ARM MNTD.	EACH	6
SIGNAL HEAD, L.E.D. 2-FACE, 1-3, 1-5 SECT., BRKT. MNTD.	EACH	2
SIGNAL HEAD, L.E.D. 2-FACE, 5 SECTION, BRKT. MNTD.	EACH	2
PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER L.E.D., 2-FACE, BRKT. MTD.	EACH	4
PEDESTRIAN PUSH-BUTTON	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	8
THERMOPLASTIC PAVEMENT MARKING LINE 12"	FOOT	552
THERMOPLASTIC PAVEMENT MARKING LINE 24"	FOOT	165
THERMOPLASTIC PAVEMENT MARKING REMOVAL	FOOT	756
REMOVE EXISTING TRAFFIC SIGNAL	EACH	1
UNINTERRUPTIBLE POWER SUPPLY EQUIPMENT	EACH	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1

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

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

TYPE	NO. LAMPS	WATTAGE (INCAND.)	WATTAGE (LED)	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16	135	17	0.50	136.00
(YELLOW)	16	135	25	0.25	100.00
(GREEN)	16	135	15	0.25	60.00
ARROW	24	135	12	0.10	28.80
PED. SIGNAL	8	90	25	1.00	200.00
CONTROLLER	1	100	100	1.00	100.00
ILLUM. SIGN		84		0.05	

ENERGY COSTS TO: TOTAL = 624.80

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20' H-2"
E - M. ARM POLE		SIGNAL POST	2 (1.0)		16m+L-0.6m
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
36" (900mm)	15 (4.6)	ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
		GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

ENERGY SUPPLY CONTACT:
 PHONE: 708-410-5069
 COMPANY: COM. EDISON

DESIGNED - BCK
 DRAWN - BCK
 CHECKED - DAD
 DATE -

REVISOR -
 REVISION -
 REVISION -
 REVISION -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PROPOSED CABLE PLAN
 US 12/20/45 (MANNHEIM) @ ST. CHARLES RD.
 SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	2008-006 TS	COOK	100	56
CONTRACT NO. 60E31				
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT				