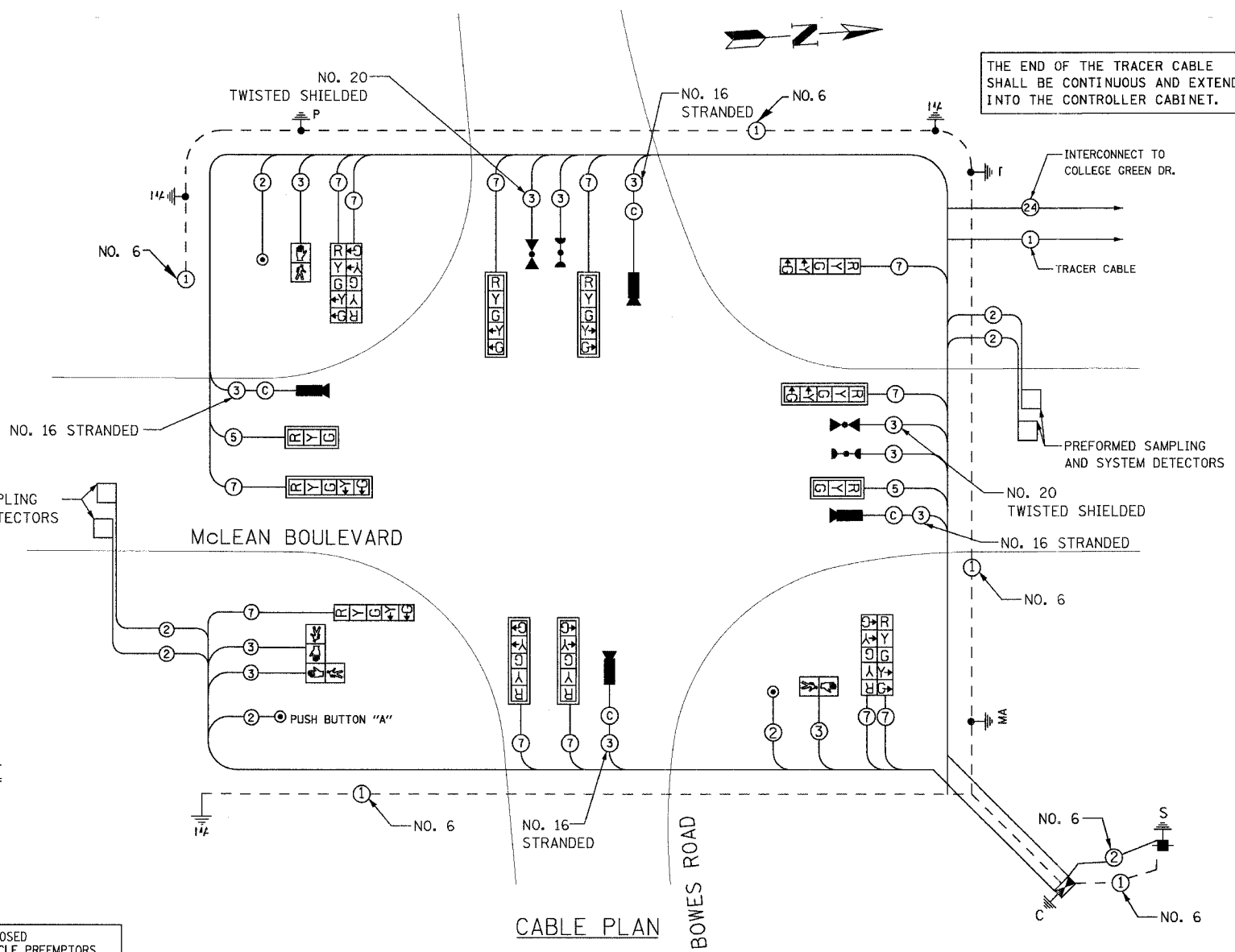


CONTRACT NO. 83737				
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2509 96-00094-01-WR		KANE	187	116
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

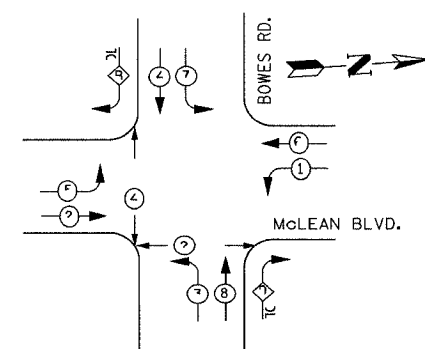
CABLE PLAN LEGEND

- EXISTING PROPOSED
- SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD
 - RAILROAD CONTROL CABINET
 - ILLUMINATED SIGN, L.E.D. "NO LEFT TURN"
 - ILLUMINATED SIGN, L.E.D. "NO RIGHT TURN"
 - GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C).
 - GROUND ROD AT POST (P), OR MAST ARM POLE (MA).
 - GROUND ROD AT ELECTRIC SERVICE INSTALLATION
 - GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
 - FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 MM12F SM12F
 - 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
 - EMERGENCY VEHICLE LIGHT DETECTOR
 - CONFIRMATION BEACON
 - PUSHBUTTON DETECTOR
 - VEHICLE DETECTOR, INDUCTION LOOP
 - DENOTES NUMBER OF CONDUCTORS, ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
 - VIDEO DETECTOR

THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.



CONTROLLER SEQUENCE



LEGEND

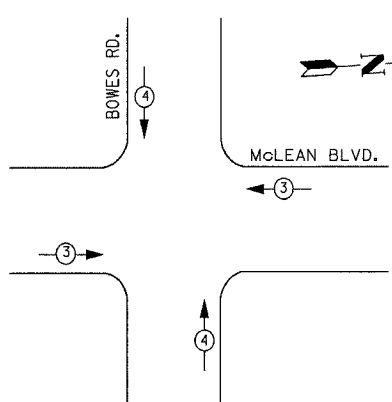
- DUAL ENTRY PHASE
- PEDESTRIAN PHASE
- OVERLAP
- NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

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

PUSH BUTTON "A" SHALL PLACE A CALL IN PHASE 4+2

EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT		

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

MAST ARM MOUNTED STREET NAME SIGNS SHALL BE PROVIDED ON ALL MAST ARMS

NOTES:

- TRAFFIC CONTROL EQUIPMENT SHALL BE MANUFACTURED BY EAGLE
- A UPS BATTERY BACK-UP SYSTEM, ALPHA FXM1100 (MANUFACTURED BY "ALPHA TECHNOLOGIES") SHALL BE INSTALLED IN THE TYPE IV CONTROLLER CABINET WITH A FX-200 EXTERNAL BATTERY ENCLOSURE. THE EXTERNAL BATTERY ENCLOSURE SHOULD MOUNT TO THE POWER PANEL SIDE OF THE TYPE IV CABINET WITH 4 SHELVES TO STORE THE BATTERIES. THE SYSTEM SHALL BE CAPABLE OF 3-HOUR MINIMUM BATTERY LIFE TO PROVIDE ONE HOUR OF FULL FUNCTIONING SIGNAL AND 2 HOURS OF FLASHING RED.
- ALL TRAFFIC SIGNAL HEADS SHALL BE L.E.D. (LIGHT EMITTING DIODE), AND MANUFACTURED BY DIALITE CORPORATION OR APPROVED EQUAL.
- ALL PEDESTRIAN TRAFFIC SIGNAL HEADS SHALL BE L.E.D. WITH COUNTDOWN FEATURE AND MANUFACTURED BY DIALITE CORPORATION OR APPROVED EQUIVALENT.
- VIDEO DETECTION SYSTEM SHALL BE MANUFACTURED BY AUTOSCOPE OR ITERIS.
- STREET LIGHTING INSTALLED AND ENERGIZED AS PART OF THE ROADWAY LIGHTING PLANS.
- MAST ARM MOUNTED STREET NAME SIGNS SHALL BE INSTALLED BY THE KANE COUNTY HIGHWAY DEPARTMENT.

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	OPERATION	
SIGNAL (RED)	14	135	17	0.50	119.00
(YELLOW)	14	135	25	0.25	87.50
(GREEN)	14	135	15	0.25	52.50
ARROW	24	135	12	0.10	28.80
PED. SIGNAL	4	90	25	1.00	100.0
CONTROLLER		100	100	1.00	100.00
ILLUM. SIGN		84		0.05	
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 487.8

KANE COUNTY DEPARTMENT OF TRANSPORTATION
41011 Burlington Road
St. Charles, IL 60175
CONTACT: MIKE LYNCH
PHONE: (847) 816-5331
COMPANY: COM. EDISON

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'+L-2'
E - M. ARM POLE		SIGNAL POST	2 (1.0)	6m+L-0.6m	
24" (600mm)	10 (3.0)	CONTROL CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
		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)

URS 100 SOUTH WACKER DRIVE
SUITE 500 CHICAGO, IL 60606 TEL (312) 939-1000 FAX (312) 939-4198

REVISIONS	
NAME	DATE

McLEAN BOULEVARD

CABLE PLAN AND PHASE DESIGNATION DIAGRAM
McLEAN BLVD AND BOWES ROAD

SCALE: N.T.S. DRAWN BY VAP
DATE 04/06/2007 CHECKED BY RAM