F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1321	2009-034 TS	COOK	45	1
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 60G39		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

DISTRICT 1
HIGHWAY SAFETY IMPROVEMENT PROJECT
TRAFFIC SIGNAL MODERNIZATION AND LIGHTING

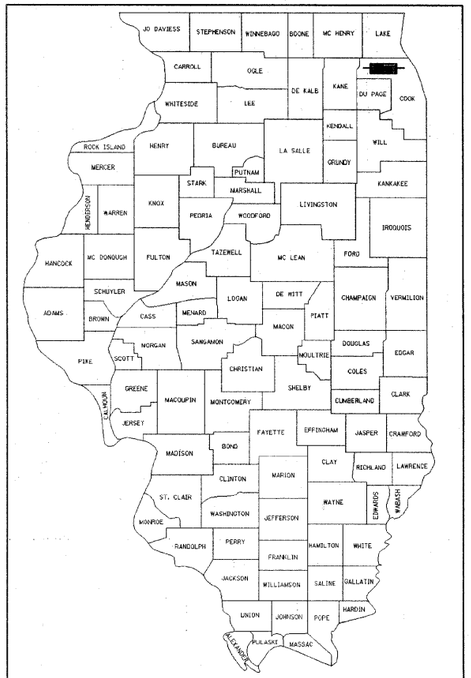
IL ROUTE 19 (IRVING PARK ROAD)
WEST OF WESTVIEW PLAZA ENTRANCE
TO EAST OF KINGSBURY DRIVE
HANOVER PARK, ILLINOIS

F.A.U. ROUTE 1321 /ILL 19 (IRVING PARK ROAD)
SECTION 2009-034 TS
PROJECT NO. HSIP-1321(019)
COOK COUNTY
C-91-401-09

FOR INDEX OF SHEETS, SEE SHEET NO. 2

IDOT STANDARDS

STD. No.	DESCRIPTION
000001-05	STANDARD SYMBOLS, ABBREVIATION AND PATTERNS
001006	DECIMAL OF AN INCH AND A FOOT
424001-05	CURB RAMPS FOR SIDEWALKS
606001-04	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
606301-04	P.C. CONCRETE ISLANDS AND MEDIANS
701006-03	OFF-RD OPERATIONS, 2L, 2W, 4.5 m (15') TO 600 mm (24") FROM PAVEMENT EDGE
701011-02	OFF-RD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701101-02	OFF-RD OPERATIONS, MULTILANE, 4.5 m (15') TO 600 mm (24") FROM PAVEMENT EDGE
701301-03	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701501-05	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701601-06	URBAN LANE CLOSURE, MULTILANE 1W OR 2W NON-TRAVERSABLE MEDIAN
701701-06	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-04	LANE CLOSURE, MULTILANE, 1W OR 2W CROSSWALK OR SIDEWALK CLOSURE
701901-01	TRAFFIC CONTROL DEVICES
720001-01	SIGN PANEL MOUNTING DETAILS
814001-02	HANDHOLES
814006-02	DOUBLE HANDHOLES
857001-01	STANDARDS PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
862001-01	UNINTERRUPTABLE POWER SUPPLY (UPS)
873001-02	TRAFFIC SIGNAL GROUNDING & BONDING
877001-04	STEEL MAST ARM ASSEMBLY AND POLE
878001-07	CONCRETE FOUNDATION DETAILS
880001-01	SPAN WIRE MOUNTED SIGNALS AND FLASHING BEACON INSTALLATION
880006-01	TRAFFIC SIGNAL MOUNTING DETAILS
886001-01	DETECTOR LOOP INSTALLATIONS



LOCATION OF SECTION INDICATED THUS:- ▬

PREPARED BY: Steven Travia 3/20/09
TRAFFIC ENGINEER **DATE**

George M. Ziegler 3-13-09
ENGINEER DATE

GEORGE M. ZIEGLER
ILLINOIS REGISTRATION No. 062-045853
EXPIRATION DATE: 11-30-2009
PROFESSIONAL DESIGN FIRM No.: 184-001742
EXPIRATION DATE: 04-30-2009

062-045853 REGISTERED PROFESSIONAL ENGINEER ILLINOIS

SHEETS 5-31

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

CONTRACT NO. 60G39

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED March 20 2009
Donn M. O'Keefe
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
May 8, 2009
Charles J. Ingersoll
ENGINEER OF DESIGN AND ENVIRONMENT
May 8, 2009
Christine M. Reed
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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DISTRICT 1 - BUREAU OF TRAFFIC: STEVE TRAVIA / DARYLE DREW (847) 705-4420

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INDEX OF SHEETS

CHRISTOPHER B. BURKE ENGINEERING LTD.
9575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

PLAN — NOTE BOOK — No. ____
SURVEYED — PLOTTED — GRADES CHECKED — BEAM ANG. CHKD — STRUCTURE NO(ATING CHKD
BY — DATE

PROFILE — NOTE BOOK — No. ____
SURVEYED — PLOTTED — GRADES CHECKED — BEAM ANG. CHKD — STRUCTURE NO(ATING CHKD
BY — DATE

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	PLOT DATE = 3/18/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS
IL. ROUTE 19 (IRVING PARK ROAD) AT WESTVIEW CENTER TO KINGSBURY DRIVE
HANOVER PARK, ILLINOIS

SCALE: N.T.S. | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1321	2009-034-TS	COOK	45	2
		CONTRACT NO.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	URBAN 90% FED. 10% STATE TOTAL	ILL Route 19 at Westview Plaza Ent. Y031 1F	ILL Route 19 at Westview Plaza Ent. Y031 3D *	ILL Rte 19 at Barrington Road Y031 1F	ILL Rte 19 at Barrington Road Y031 3D *	ILL Rte 19 at Kingsbury Drive Y031 1F	ILL Rte 19 at Kingsbury Drive Y031 3D *	Interconnect Y031 1F	Lighting Y030 1E
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	2699	250		1836		613			
42400800	DETECTABLE WARNINGS	SQ FT	220	24		115		81			
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	160			160					
44000600	SIDEWALK REMOVAL	SQ FT	2486	250		1629		607			
44001700	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	492	78		330		84			
44002020	CONCRETE MEDIAN SURFACE REMOVAL	SQ FT	233			233					
44003100	MEDIAN REMOVAL	SQ FT	490			490					
44003500	MEDIAN REMOVAL AND REPLACEMENT (SPECIAL)	SQ FT	120			120					
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	2		2		2			
67100100	MOBILIZATION	LSUM	1	0.25		0.25		0.25		0.25	
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	LSUM	1	0.25		0.25		0.25		0.25	
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	LSUM	1	0.25		0.25		0.25		0.25	
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	LSUM	1	0.25		0.25		0.25		0.25	
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	LSUM	1	0.25		0.25		0.25		0.25	
** 72000100	SIGN PANEL - TYPE 1	SQ FT	34.5			18		16.5			
** 72000200	SIGN PANEL - TYPE 2	SQ FT	82.5	37.5		30		15			
** 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	254.8			254.8					
** 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	220			220					
** 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	991			991					
** 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	1152	150		750		252			
** 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	411	103		188		120			
** 78008250	POLYUREA PAVEMENT MARKING TYPE I - LINE 12"	FOOT	114					114			
78300100	PAVEMENT MARKING REMOVAL	SQ FT	2234	252		1639		343			
80400100	ELECTRICAL SERVICE INSTALLATION	EACH	1								1
80400200	ELECTRICAL UTILITY SERVICE CONNECTION	L SUM	1								1
81000600	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	2456	461		913		385		697	
81000700	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	383	22		296		65			
81000800	CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	106	91		10		5			
81001000	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	110	10		100					
81001100	CONDUIT IN TRENCH, 5" DIA., GALVANIZED STEEL	FOOT	20			10		10			
81018500	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	1500	166		564		233		537	
81018700	CONDUIT PUSHED, 3" DIA., GALVANIZED STEEL	FOOT	2200								2200
81018900	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	894	177		390		327			
81400100	HANDHOLE	EACH	14	5		6		3			
81400200	HEAVY-DUTY HANDHOLE	EACH	8	2		4		2			
81400300	DOUBLE HANDHOLE	EACH	5	1		2		2			
81701385	ELECTRICAL CABLE IN CONDUIT, 600 V (EPR-TYPE USE), 3-1/C 350MCM	FOOT	100								100
81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	9252	631		1345		579		697	6000
82102310	LUMNIAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 310 W	EACH	41								41
83050810	LIGHT POLE, ALUMINUM, 47.5 FT. M. H., 15 FT. MAST ARM	EACH	41								41
83600315	LIGHT POLE FOUDATION, 30" DIAMETER, OFFSET	FOOT	40								40
83600400	POLE FOUNDATION, METAL	EACH	41								41
83800205	BREAKAWAY DEVICE, TRANSFORMER BASE, 15 INCH BOLT CIRCLE	EACH	41								41
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	4							4	
85700205	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	2	1				1			
85700305	FULL-ACTUATED CONTROLLER AND TYPE V CABINET, SPECIAL	EACH	1			1					
86000105	MASTER CONTROLLER (SPECIAL)	EACH	1							1	
86400100	TRANSCEIVER - FIBER OPTIC	EACH	3	1		1		1			
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1758	182		1049		527			
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	3988	196	449	1794	343	948	258		
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	5715	1761		2323		1631			
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	2702	229		1851		622			

* 100% COST TO THE VILLAGE OF HANOVER PARK

** SPECIALTY ITEMS

CHRISTOPHER B. BURKE ENGINEERING LTD.
9575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

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PROFILE — SURVEYED / PLOTTED / PROF. CHECKED / BENCH MARK NOTED / STRUCTURE NOTATIONS CHKD / NOTE BOOK / NO. / BY / DATE

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	PLOT DATE = 3/18/2009	DATE -	REVISED -

IL. ROUTE 19 (IRVING PARK ROAD) AT WEST OF WESTVIEW PLAZA ENT. TO EAST OF KINGSBURY DRIVE HANOVER PARK, ILLINOIS

SCALE: 1" = 20.0000 'SHEET NO. OF SHEETS STA. TO STA.

SUMMARY OF QUANTITIES

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1321	2009-034-TS	COOK	45	3
		CONTRACT NO. 60G39		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	URBAN 90% FED. 10% STATE TOTAL	ILL Route 19 at Westview Plaza Ent. Y031 1F	ILL Route 19 at Westview Plaza Ent. Y031 3D *	ILL Rte 19 at Barrington Road Y031 1F	ILL Rte 19 at Barrington Road Y031 3D *	ILL Rte 19 at Kingsbury Drive Y031 1F	ILL Rte 19 at Kingsbury Drive Y031 3D *	Interconnect Y031 1F	Lighting Y030 1E
87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14. 1 PAIR	FOOT	6170	1663		2730		1777			
87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	224	71		39		114			
87502480	TRAFFIC SIGNAL POST, GALVANIZED STEEL, 14 FT.	EACH	1					1			
87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL, 16 FT.	EACH	5	1		3		1			
87700140	STEEL MAST ARM ASSEMBLY AND POLE, 20 FT.	EACH	1					1			
87700150	STEEL MAST ARM ASSEMBLY AND POLE, 22 FT.	EACH	1	1							
87700190	STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	2	1		1					
87700200	STEEL MAST ARM ASSEMBLY AND POLE, 32 FT.	EACH	1			1					
87700210	STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	3	1		1		1			
87700220	STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	1					1			
87700270	STEEL MAST ARM ASSEMBLY AND POLE, 46 FT.	EACH	1			1					
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	24	4		12		8			
87800150	CONCRETE FOUNDATION, TYPE C	FOOT	12	4		4		4			
87800400	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	45	30				15			
87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	105	15		60		30			
87900200	DRILL EXISTING HANDHOLE	EACH	6					2		4	
88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	23	7		8		8			
88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4	2				2			
88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	5	1		2		2			
88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	7	1		4		2			
88030240	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5-SECTION, BRACKET MOUNTED	EACH	2			2					
88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	6	2		2		2			
88102747	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	5			3		2			
88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	30	8		12		10			
88500100	INDUCTIVE LOOP DETECTOR	EACH	24	7		8		9			
88600100	DETECTOR LOOP, TYPE I	FOOT	2000	543		773		684			
88700200	LIGHT DETECTOR	EACH	2		2						
88700300	LIGHT DETECTOR AMPLIFIER	EACH	1		1						
88800100	PEDESTRIAN PUSH-BUTTON	EACH	11	2		5		4			
89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	3	1		1		1			
89501400	RELOCATE EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	3				2		1		
89501410	RELOCATE EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	2				1		1		
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	11067					361		10706	
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	3	1		1		1			
89502380	REMOVE EXISTING HANDHOLE	EACH	30	8		14		8			
89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	27	8		12		7			
X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	51.4							51.4	
X0322925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	8589							8589	
X0324387	LUMINAIRE SAFETY CABLE ASSEMBLY	EACH	41								41
X0325705	RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 2	EACH	3							3	
X0325737	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	3	1		1		1			
X0945500	PAINT EXISTING POLE COMPLETE	EACH	1						1		
X8050015	SERVICE INSTALLATION - POLE MOUNTED	EACH	3	1		1		1			
X8250085	LIGHTING CONTROLLER, DUPLEX CONSOLE TYPE	EACH	1								1
X8620020	UNINTERRUPTIBLE POWER SUPPLY	EACH	3	1		1		1			
X8710020	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	FOOT	8754							8754	
X8730027	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	2052	464		914		674			
X8730250	ELECTRIC CABLE IN CONDUIT, NO. 20 3C, TWISTED, SHIELDED	FOOT	1050		449		343		258		
X0326164	PAINT NEW MAST ARM AND POLE, UNDER 40 FOOT	EACH	3						3		
X0325037	PAINT NEW SIGNAL POST	EACH	2						2		
XX006937	GROUND ROD, 5/8" DIA.X 10 FT.	EACH	3								3
X0326458	PAVEMENT REPLACEMENT, SPECIAL	SQ YD	124			124					
81603210	UNIT DUCT, 3-1/C NO.4, 1/C NO.6 GROUND, 600V, (EPR-TYPE RHW), 1 1/4" DIA. POLYETHYLENE	FOOT	7500								7500

* 100% COST TO THE VILLAGE OF HANOVER PARK

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FILE NAME = $FILEABBREV$	USER NAME = kanthaphixayboe	DESIGNED - ABR	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
IL ROUTE 19 (IRVING PARK ROAD) AT WEST OF WESTVIEW PLAZA ENT. TO EAST OF KINGSBURY DRIVE
HANOVER PARK, ILLINOIS

SCALE: 1" = 20.0000 | SHEET NO. OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1321	2009-034-TS	COOK	45	4

CONTRACT NO. 60G39

FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT

NOTES FOR TEMPORARY TRAFFIC SIGNALS

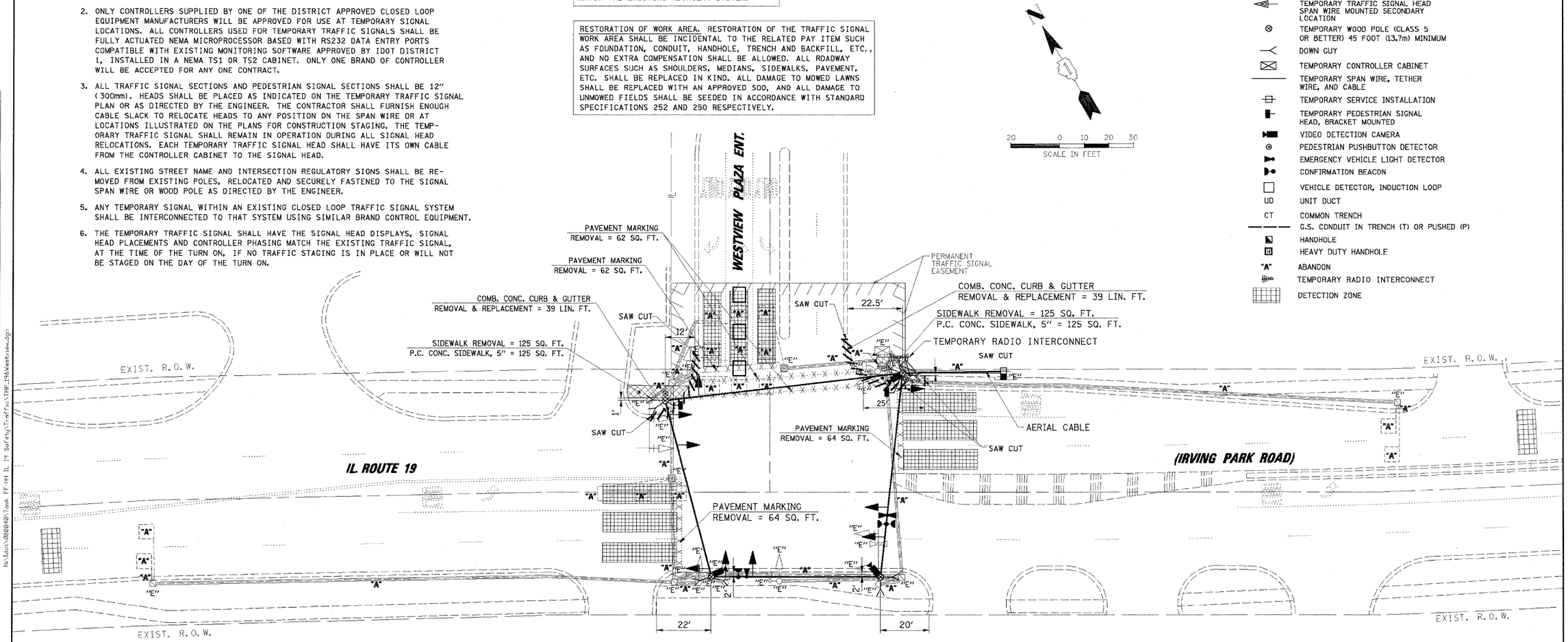
1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1, INSTALLED IN A NEMA TS1 OR TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
3. ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE 12" (300mm). HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
4. ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
5. ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
6. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.

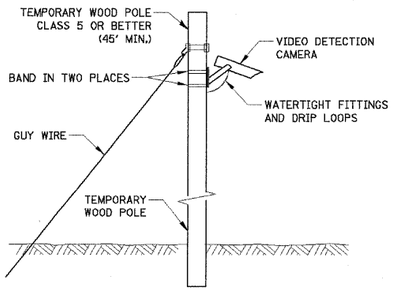
NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

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, MEDIANS, 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 SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

TEMPORARY TRAFFIC SIGNAL LEGEND

- TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED ORIGINAL LOCATION
- TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED SECONDARY LOCATION
- TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM
- DOWN GUY
- TEMPORARY CONTROLLER CABINET
- TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE
- TEMPORARY SERVICE INSTALLATION
- TEMPORARY PEDESTRIAN SIGNAL HEAD, BRACKET MOUNTED
- VIDEO DETECTION CAMERA
- PEDESTRIAN PUSHBUTTON DETECTOR
- EMERGENCY VEHICLE LIGHT DETECTOR
- CONFIRMATION BEACON
- VEHICLE DETECTOR, INDUCTION LOOP
- UD — UNIT DUCT
- CT — COMMON TRENCH
- G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)
- HANDHOLE
- HEAVY DUTY HANDHOLE
- "A" — ABANDON
- TEMPORARY RADIO INTERCONNECT
- DETECTION ZONE





TEMPORARY VIDEO DETECTION MOUNTING DETAIL
(NOT TO SCALE)

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: VILLAGE OF HANOVER PARK

2	EACH	EMERGENCY VEHICLE LIGHT DETECTOR
1	EACH	LIGHT DETECTOR AMPLIFIER

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

1	EACH	CONTROLLER AND CABINET (COMPLETE)
6	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION
1	EACH	SIGNAL HEAD, 1-FACE, 5-SECTION
1	EACH	SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION
1	EACH	SIGNAL HEAD, 3-FACE, 3-3 SECTION
2	EACH	STEEL MAST ARM AND POLE
5	EACH	SIGNAL POST
1	EACH	SERVICE INSTALLATION
2	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
2	EACH	PEDESTRIAN PUSH-BUTTON
4	EACH	TRAFFIC SIGNAL BACKPLATE

EXISTING EQUIPMENT TO BE REMOVED LEGEND

- "E" — EXISTING SIGNAL HEAD TO BE REMOVED
- "E" — EXISTING SERVICE INSTALLATION TO BE REMOVED
- "E" — EXISTING SIGNAL POST AND FOUNDATION TO BE REMOVED
- "E" — EXISTING ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED
- "E" — EXISTING CONTROLLER AND FOUNDATION TO BE REMOVED
- "E" — EXISTING HANDHOLE TO BE REMOVED
- "E" — EXISTING PEDESTRIAN SIGNAL HEAD TO BE REMOVED
- "E" — EXISTING PEDESTRIAN PUSHBUTTON TO BE REMOVED
- "E" — EMERGENCY VEHICLE LIGHT DETECTOR TO BE REMOVED
- "E" — CONFIRMATION BEACON TO BE REMOVED
- "E" — EXISTING HEAVY-DUTY HANDHOLE TO BE REMOVED
- "E" — EXISTING STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED

CHRISTOPHER B. BURKE ENGINEERING LTD.
9575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

PLAN: SURVEYED — PLOTTED — DRAWN / CHECKED — ALIGNMENT CHECKED — ALL DATA CHECKED — CADD FILE NAME — NOTE BOOK — NO. — STRUCTURE NO(TANS ONLY)
PROFILE: SURVEYED — PLOTTED — DRAWN / CHECKED — NOTE BOOK — NO. — STRUCTURE NO(TANS ONLY)
BY — DATE

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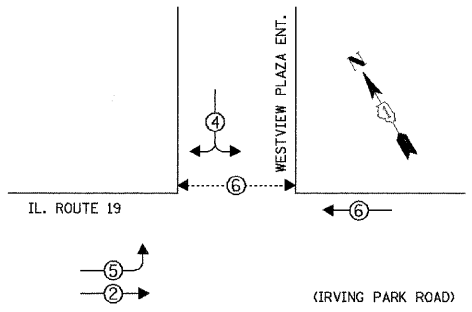
FILE NAME = ...\Traffic\TMP_19&Westview.dgn	USER NAME = FPACIONE	DESIGNED - ABR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT IL. ROUTE 19 (IRVING PARK ROAD) AND WESTVIEW PLAZA ENTRANCE
		DRAWN - FPB / FCP	REVISED -		
	PLOT SCALE = 20'	CHECKED - MJT	REVISED -		SCALE: 1" = 20' | SHEET NO. OF SHEETS | STA. TO STA.
	PLOT DATE = 3/18/2009	DATE -	REVISED -		

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1321	2009-034 TS	COOK	45	5
		CONTRACT NO. 60G39		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

TEMPORARY CONTROLLER SEQUENCE

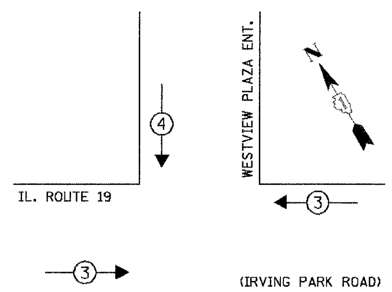


LEGEND

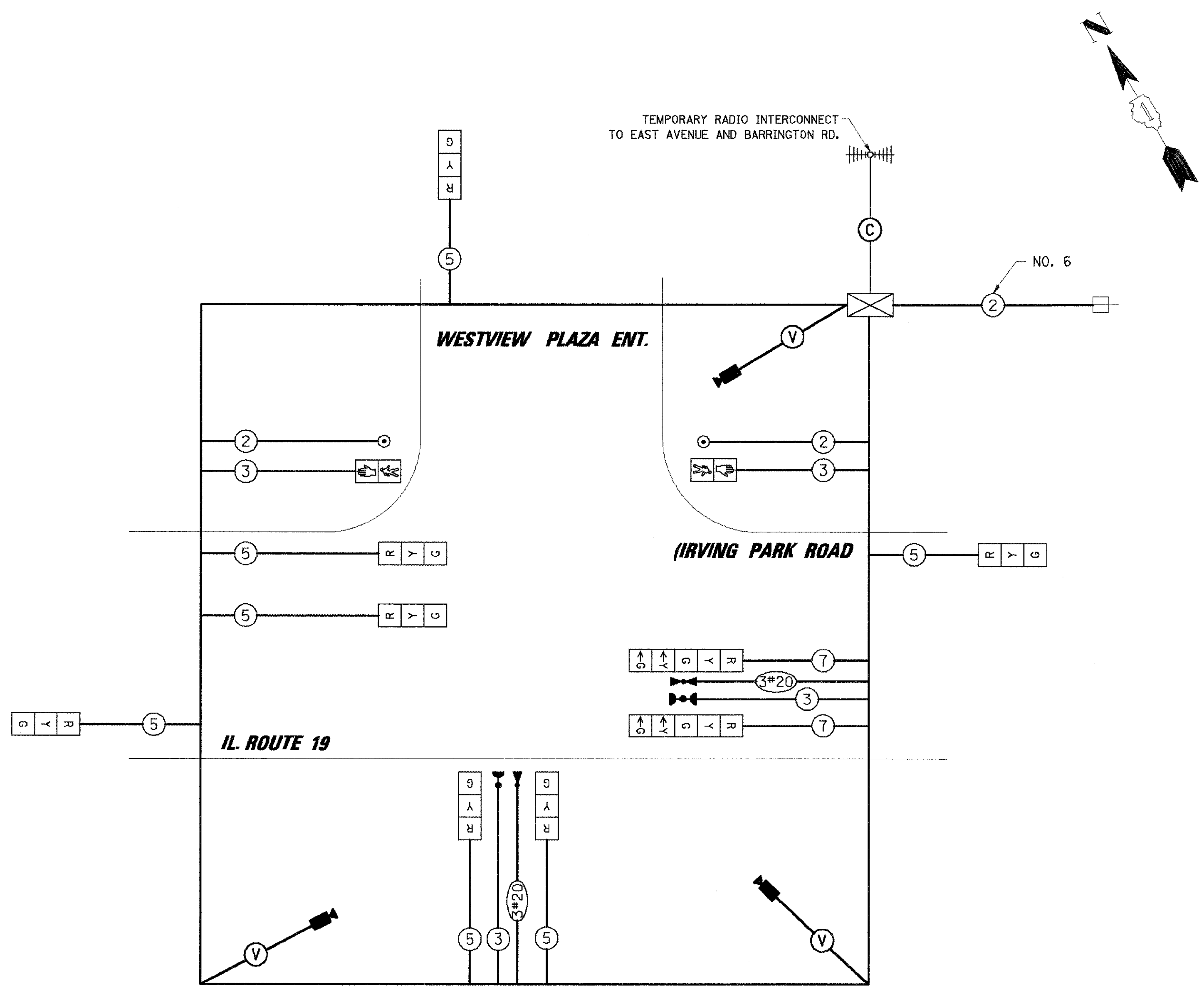
- DUAL ENTRY PHASE
- PEDESTRIAN PHASE
- * NUMBER REFERS TO ASSOCIATED PHASE

TEMPORARY PHASE DESIGNATION DIAGRAM

TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE



TEMPORARY EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↓



TEMPORARY CABLE DIAGRAM LEGEND

- R — TEMPORARY TRAFFIC SIGNAL SECTION OR PEDESTRIAN SIGNAL SECTION 12" (300mm)
- TEMPORARY CONTROLLER CABINET
- TEMPORARY SERVICE INSTALLATION
- (5) — INDICATES NUMBER OF CONDUCTORS IN CABLE. ALL CONDUCTORS TO BE NUMBER 14 AWG WIRE UNLESS OTHERWISE NOTED.
- EMERGENCY VEHICLE LIGHT DETECTOR
- CONFIRMATION BEACON
- VEHICLE DETECTOR, INDUCTION LOOP
- PEDESTRIAN PUSHBUTTON DETECTOR
- 12" (300mm) PEDESTRIAN SIGNAL SECTION
- VIDEO DETECTION CAMERA
- (V) — VENDOR CABLE
- TEMPORARY RADIO INTERCONNECT
- (C) — COAXIAL CABLE

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

TEMPORARY CABLE PLAN

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, MEDIANS, 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 SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

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

TYPE	NO. OF LAMPS	WATTAGE x INCAND.	WATTAGE LED	x % OPERATION	TOTAL WATTAGE
SIGNAL (RED)	9		17	0.50	76.50
(YELLOW)	9		25	0.25	56.25
(GREEN)	9		15	0.25	33.75
ARROW	4		12	0.10	4.80
PED. SIGNAL	2		25	1.00	50.00
CONTROLLER	1		100	1.00	100.00
ILLUM. SIGN	-		25	0.05	-
VIDEO SYSTEM	1	150	-	1.00	150.00
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	471.30

ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAY/DISTRICT 1
201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096

ENERGY SUPPLY: CONTACT: MARTY RUBIN
PHONE: (847) 608-2400
COMPANY: COMED

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)
C - CONTROLLER W/ UPS	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'+L-2= (6m+L-0.6m)=
D - CONTROLLER	4 (1.2)	SIGNAL POST	2 (1.0)		
E - M. ARM POLE		CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	6 (1.8)
36" (900mm)	15 (4.6)	ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
42" (1050mm)	25 (7.6)	GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

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FILE NAME = ...\Traffic\TCB_19&Westview.dgn	USER NAME = FPACIONE	DESIGNED - ABR	REVISED -
		DRAWN - FPB / FCP	REVISED -
	PLOT SCALE = 20'	CHECKED - MJT	REVISED -
	PLOT DATE = 3/18/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION DIAGRAM AND TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE IL ROUTE 19 (IRVING PARK ROAD) AND WESTVIEW PLAZA ENTRANCE

SCALE: N.T.S. | SHEET NO. OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1321	2009-034 TS	COOK	45	6

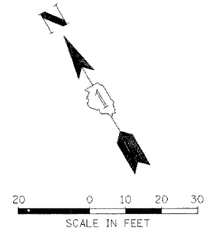
CONTRACT NO. 60G39

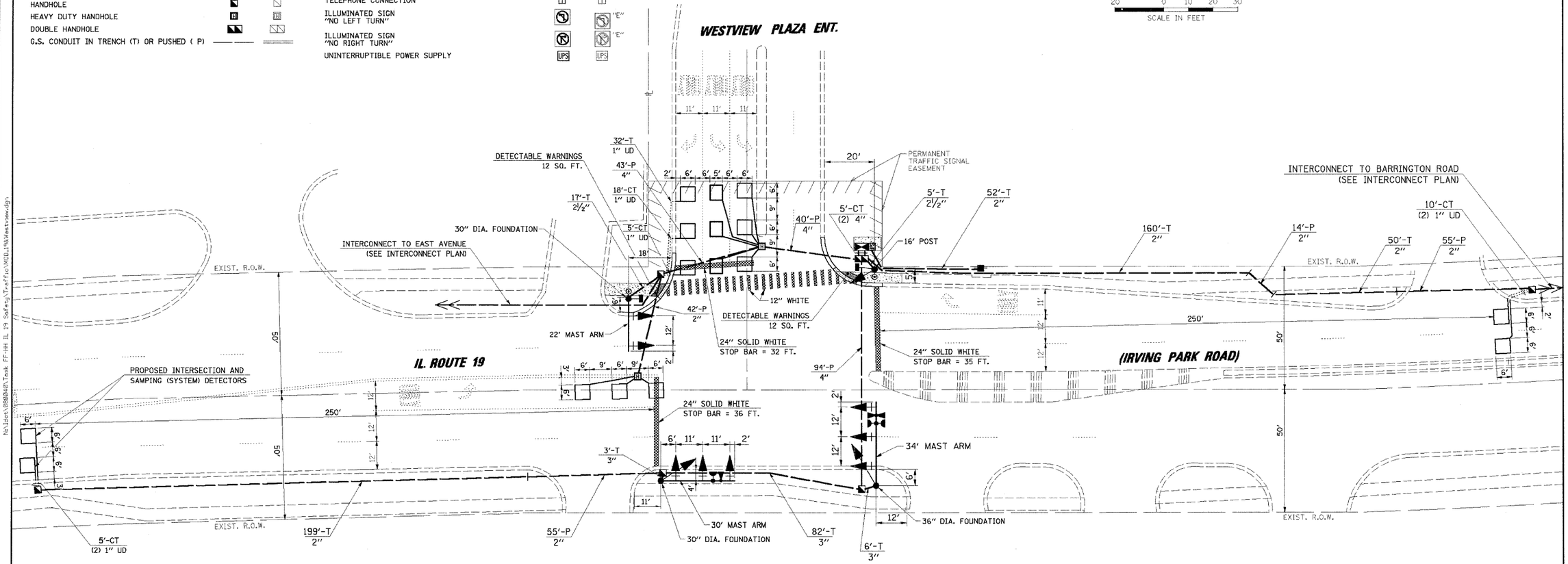
FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT

TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING
CONTROLLER	▣	⊠
SERVICE INSTALLATION	■	⊟
SIGNAL HEAD	⊢►	⊢▷
SIGNAL HEAD WITH BACKPLATE	⊢►►	⊢▷▷
SIGNAL HEAD, PEDESTRIAN	⊢■	⊢□
SIGNAL POST	●	○
MAST ARM ASSEMBLY AND POLE, STEEL	●———	○———
MAST ARM ASSEMBLY AND POLE, ALUMINUM	●———	○———
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE	●—✕	○—✕
UNIT DUCT	UD	
COMMON TRENCH	CT	
HANDHOLE	◥	◹
HEAVY DUTY HANDHOLE	H	H
DOUBLE HANDHOLE	◥◣	◹◺
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)	———	———

	PROPOSED	EXISTING
PEDESTRIAN PUSHBUTTON DETECTOR	⊙	⊕
DETECTOR LOOP	□	⬚
CAST IRON JUNCTION BOX	Ⓙ	Ⓙ"E"
EMERGENCY VEHICLE LIGHT DETECTOR	◀■	◁⊏
CONFIRMATION BEACON	●◀	○◁
SIGNAL HEAD OPTICALLY PROGRAMMED	►"P"	▷"P"
CONDUIT SPLICE	——●——	
WOOD POLE	⊗	⊗"E"
RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II	▭	▭"E"
VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE	▬	▭
RAILROAD CONTROL CABINET	⊠	⊠"E"
TELEPHONE CONNECTION	T	T
ILLUMINATED SIGN "NO LEFT TURN"	⊘	⊘"E"
ILLUMINATED SIGN "NO RIGHT TURN"	⊘	⊘"E"
UNINTERRUPTIBLE POWER SUPPLY	UPS	UPS





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

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, MEDIANS, 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 SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

CHRISTOPHER B. BURKE ENGINEERING LTD.
9575 W. Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

PLAN: SURVEYED, ROUTED, ALIGNMENT CHECKED, PLOTTED, ALL MARKED, NOTE BOOK, NO., ROAD FILE NAME, BY, DATE
PROFILE: SURVEYED, PLOTTED, GRADES CHECKED, NOTE BOOK, NO., STRUCTURE NOTATIONS CHKD, BY, DATE

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		DRAWN - FPB / FCP	REVISED -
	PLOT SCALE = 20'	CHECKED - MJT	REVISED -
	PLOT DATE = 3/18/2009	DATE -	REVISED -

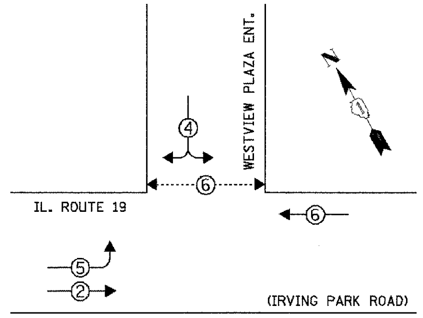
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODERNIZATION PLAN
IL. ROUTE 19 (IRVING PARK ROAD) AND WESTVIEW PLAZA ENTRANCE

SCALE: 1" = 20' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1321	2009-034 TS	COOK	45	7
		CONTRACT NO. 60G39		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTROLLER SEQUENCE

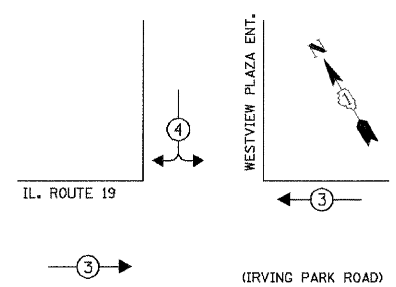


PHASE DESIGNATION DIAGRAM

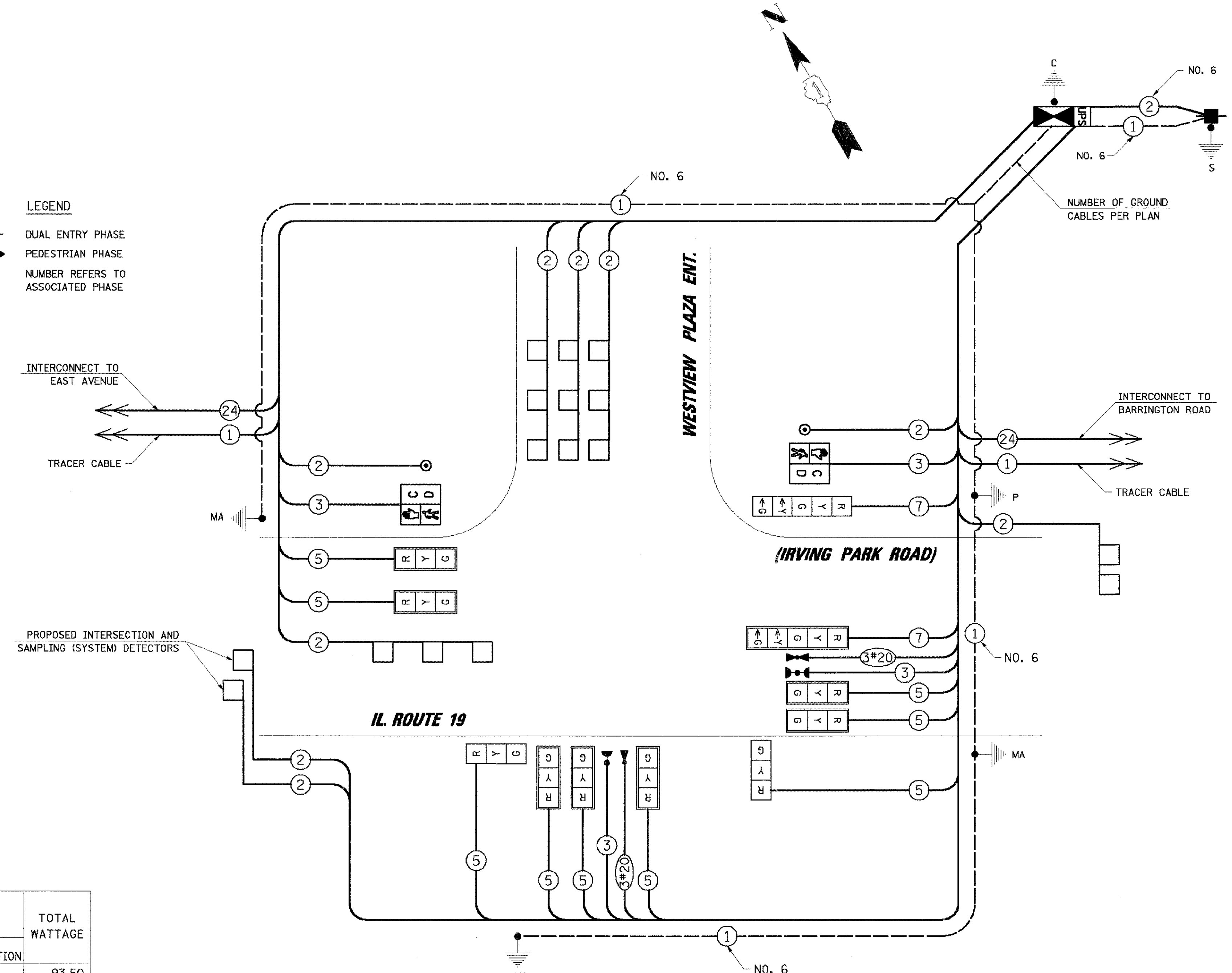
LEGEND

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT		

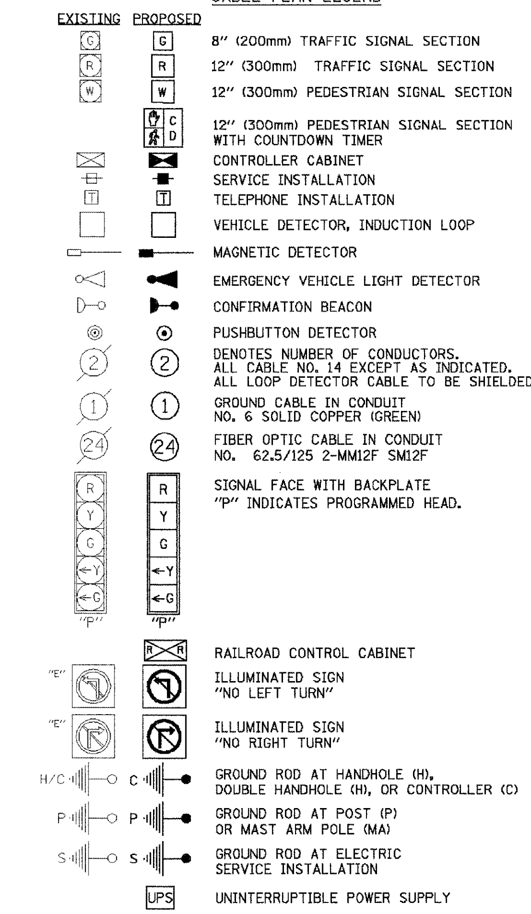


THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.

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

CABLE PLAN

CABLE PLAN LEGEND



SCHEDULE OF QUANTITIES		
ITEM	UNIT	TOTAL
PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	250
DETECTABLE WARNINGS	SQ FT	24
SIDEWALK REMOVAL	SQ FT	250
COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	78
SIGN PANEL - TYPE 2	SQ FT	37.5
THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	150
THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	103
PAVEMENT MARKING REMOVAL	SQ FT	252
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	461
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	22
CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	91
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	10
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	166
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	177
HANDHOLE	EACH	5
HEAVY-DUTY HANDHOLE	EACH	2
DOUBLE HANDHOLE	EACH	1
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	631
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	182
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	645
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1761
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	229
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14. 1 PR	FOOT	1663
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	71
TRAFFIC SIGNAL POST, GALVANIZED STEEL, 16 FT	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 22 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	4
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	30
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	15
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	7
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	8
INDUCTIVE LOOP DETECTOR	EACH	7
DETECTOR LOOP, TYPE I	FOOT	543
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	2
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	8
REMOVE EXISTING CONCRETE FOUNDATION	EACH	8
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	464
ELECTRIC CABLE IN CONDUIT, NO. 20 3C, TWISTED, SHIELDED	FOOT	449

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

TYPE	NO. OF LAMPS	WATTAGE X INCAND.	WATTAGE LED	X % OPERATION	TOTAL WATTAGE
SIGNAL (RED)	11		17	0.50	93.50
(YELLOW)	11		25	0.25	68.75
(GREEN)	11		15	0.25	41.25
ARROW	4		12	0.10	4.80
PED. SIGNAL	2		25	1.00	50.00
CONTROLLER	1		100	1.00	100.00
ILLUM. SIGN	-		25	0.05	-
VIDEO SYSTEM	-		150	1.00	-
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	358.30

ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAY/DISTRICT 1
201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096

ENERGY SUPPLY: CONTACT: MARTY RUBIN
PHONE: (847) 608-2400
COMPANY: COMED

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)
C - CONTROLLER W/ UPS	4 (1.2)	DOUBLE HANDHOLE	13	(4.0)	MAST ARM (L) POLE	20'+L-2=
D - CONTROLLER	4 (1.2)	SIGNAL POST	2	(1.0)		(6m+L-0.6m)=
E - M. ARM POLE		CONTROLLER CAB.	1	(0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13	(4.0)	PED. PUSHBUTTON	6 (1.8)
36" (900mm)	15 (4.6)	ELECTRIC SERVICE	1	(0.5)	ELECTRIC SERVICE	13.5 (4.1)
42" (1050mm)	25 (7.6)	GROUND CABLE	1	(0.5)	SERVICE TO GROUND	13.5 (4.1)
					POST MOUNTED	6 (1.8)

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, MEDIANS, 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 SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

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		DRAWN - FPB / FCP	REVISED -
	PLOT SCALE = 20'	CHECKED - MJT	REVISED -
	PLOT DATE = 3/18/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE IL ROUTE 19 (IRVING PARK ROAD) AND WESTVIEW PLAZA ENTRANCE

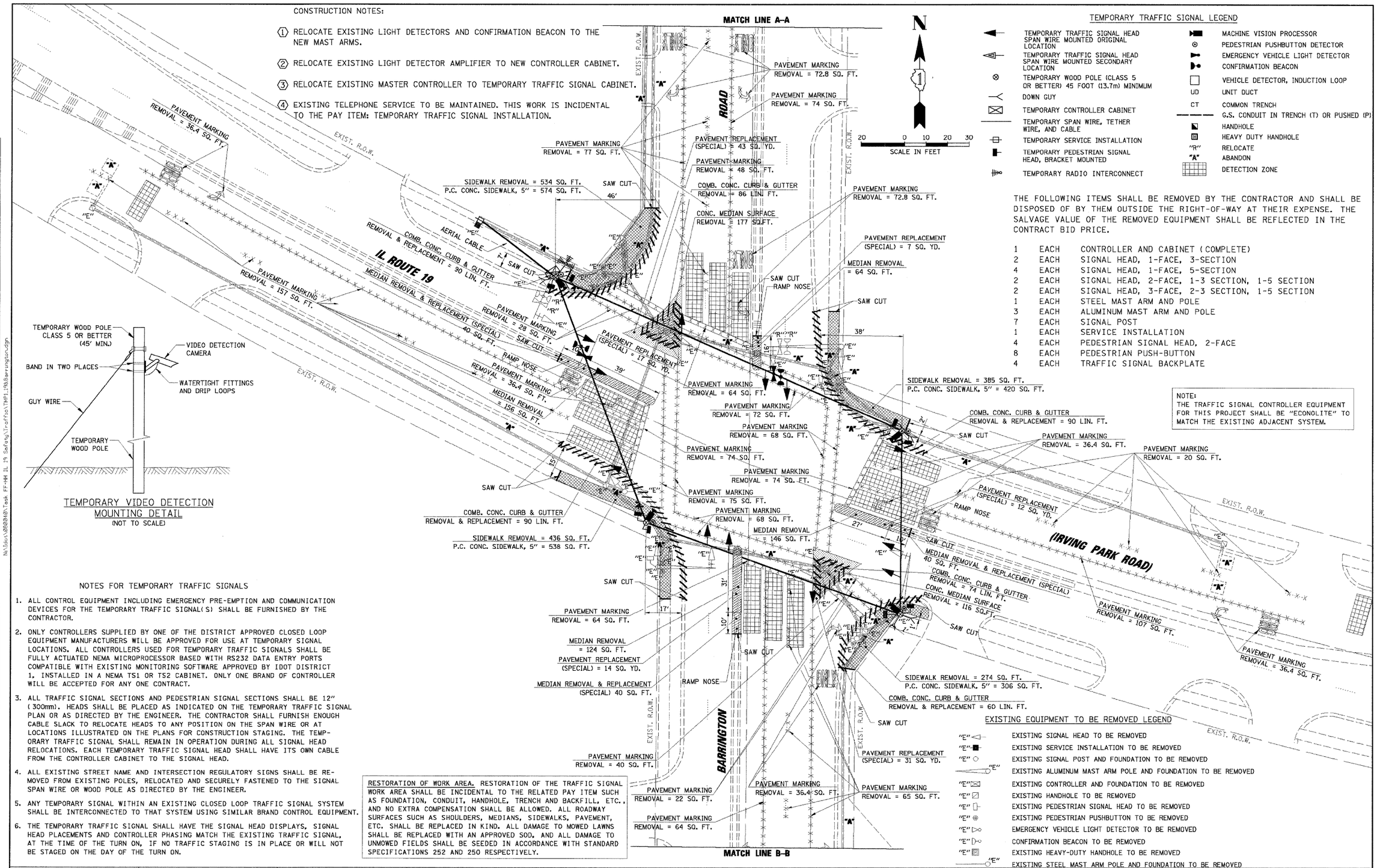
SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1321	2009-034 TS	COOK	45	8
		CONTRACT NO. 60G39		

FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

CONSTRUCTION NOTES:

1. RELOCATE EXISTING LIGHT DETECTORS AND CONFIRMATION BEACON TO THE NEW MAST ARMS.
2. RELOCATE EXISTING LIGHT DETECTOR AMPLIFIER TO NEW CONTROLLER CABINET.
3. RELOCATE EXISTING MASTER CONTROLLER TO TEMPORARY TRAFFIC SIGNAL CABINET.
4. EXISTING TELEPHONE SERVICE TO BE MAINTAINED. THIS WORK IS INCIDENTAL TO THE PAY ITEM: TEMPORARY TRAFFIC SIGNAL INSTALLATION.



TEMPORARY TRAFFIC SIGNAL LEGEND

- TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED ORIGINAL LOCATION
- TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED SECONDARY LOCATION
- TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM
- DOWN GUY
- TEMPORARY CONTROLLER CABINET
- TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE
- TEMPORARY SERVICE INSTALLATION
- TEMPORARY PEDESTRIAN SIGNAL HEAD, BRACKET MOUNTED
- TEMPORARY RADIO INTERCONNECT
- MACHINE VISION PROCESSOR
- PEDESTRIAN PUSHBUTTON DETECTOR
- EMERGENCY VEHICLE LIGHT DETECTOR
- CONFIRMATION BEACON
- VEHICLE DETECTOR, INDUCTION LOOP
- UD UNIT DUCT
- CT COMMON TRENCH
- G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)
- HANDHOLE
- HEAVY DUTY HANDHOLE
- "R" RELOCATE
- "A" ABANDON
- DETECTION ZONE

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

1	EACH	CONTROLLER AND CABINET (COMPLETE)
2	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION
4	EACH	SIGNAL HEAD, 1-FACE, 5-SECTION
2	EACH	SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION
2	EACH	SIGNAL HEAD, 3-FACE, 2-3 SECTION, 1-5 SECTION
1	EACH	STEEL MAST ARM AND POLE
3	EACH	ALUMINUM MAST ARM AND POLE
7	EACH	SIGNAL POST
1	EACH	SERVICE INSTALLATION
4	EACH	PEDESTRIAN SIGNAL HEAD, 2-FACE
8	EACH	PEDESTRIAN PUSH-BUTTON
4	EACH	TRAFFIC SIGNAL BACKPLATE

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

TEMPORARY VIDEO DETECTION MOUNTING DETAIL
(NOT TO SCALE)

NOTES FOR TEMPORARY TRAFFIC SIGNALS

1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1, INSTALLED IN A NEMA TS1 OR TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
3. ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE 12" (300mm). HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
4. ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
5. ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
6. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.

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, MEDIANS, 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 SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

EXISTING EQUIPMENT TO BE REMOVED LEGEND

- "E" EXISTING SIGNAL HEAD TO BE REMOVED
- "E" EXISTING SERVICE INSTALLATION TO BE REMOVED
- "E" EXISTING SIGNAL POST AND FOUNDATION TO BE REMOVED
- "E" EXISTING ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED
- "E" EXISTING CONTROLLER AND FOUNDATION TO BE REMOVED
- "E" EXISTING HANDHOLE TO BE REMOVED
- "E" EXISTING PEDESTRIAN SIGNAL HEAD TO BE REMOVED
- "E" EXISTING PEDESTRIAN PUSHBUTTON TO BE REMOVED
- "E" EMERGENCY VEHICLE LIGHT DETECTOR TO BE REMOVED
- "E" CONFIRMATION BEACON TO BE REMOVED
- "E" EXISTING HEAVY-DUTY HANDHOLE TO BE REMOVED
- "E" EXISTING STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED

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PROFILE: SURVEYED, PLOTTED, GRADES CHECKED, NOTE BOOK, NO. — PLAN: ALIGNMENT CHECKED, PLOTTED, CAD FILE NAME, NOTE BOOK, NO. — STRUCTURE NOTATNS CHKD — BY — DATE

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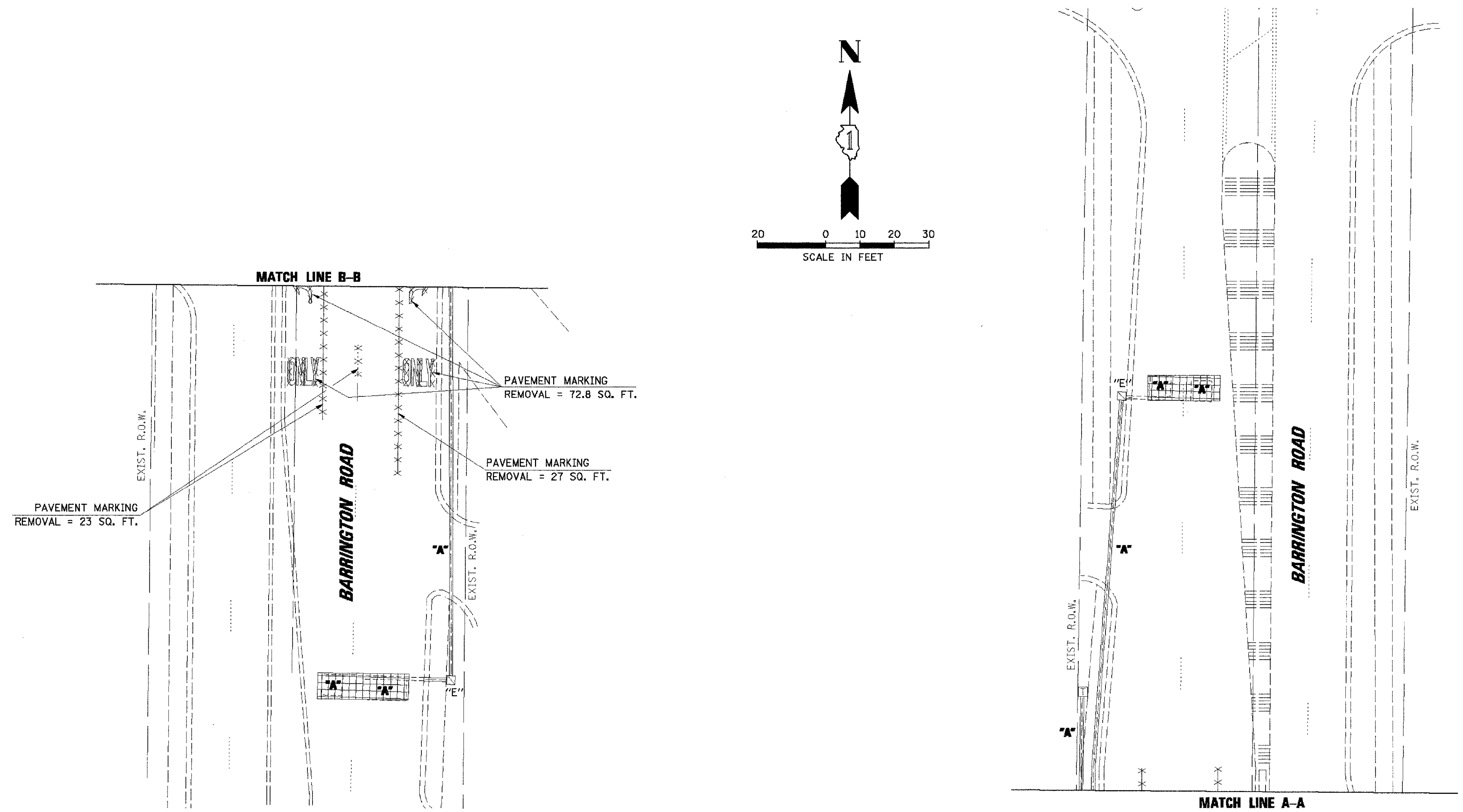
		DRAWN - FPB / FCP	REVISED -
	PLOT SCALE = 20'	CHECKED - MJT	REVISED -
	PLOT DATE = 3/18/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
IL. ROUTE 19 (IRVING PARK ROAD) AND BARRINGTON ROAD

SCALE: 1" = 20' | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1321	2009-034 TS	COOK	45	9
		CONTRACT NO. 60G39		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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

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, MEDIANS, 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 SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

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FILE NAME = ...\Traffic\TMP2_19&Barrington.dgn	USER NAME = FPACIONE	DESIGNED - ABR	REVISED -
		DRAWN - FPB / FCP	REVISED -
	PLOT SCALE = 20'	CHECKED - MJT	REVISED -
	PLOT DATE = 3/18/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

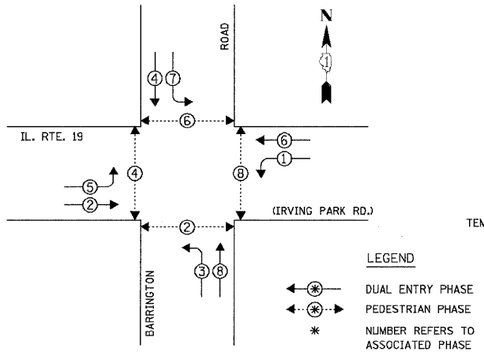
TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
IL ROUTE 19 (IRVING PARK ROAD) AND BARRINGTON ROAD

SCALE: 1" = 20' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1321	2009-034 TS	COOK	45	10
		CONTRACT NO. 60G39		

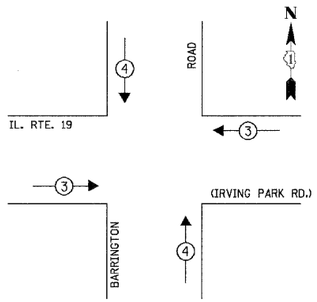
FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT

TEMPORARY CONTROLLER SEQUENCE

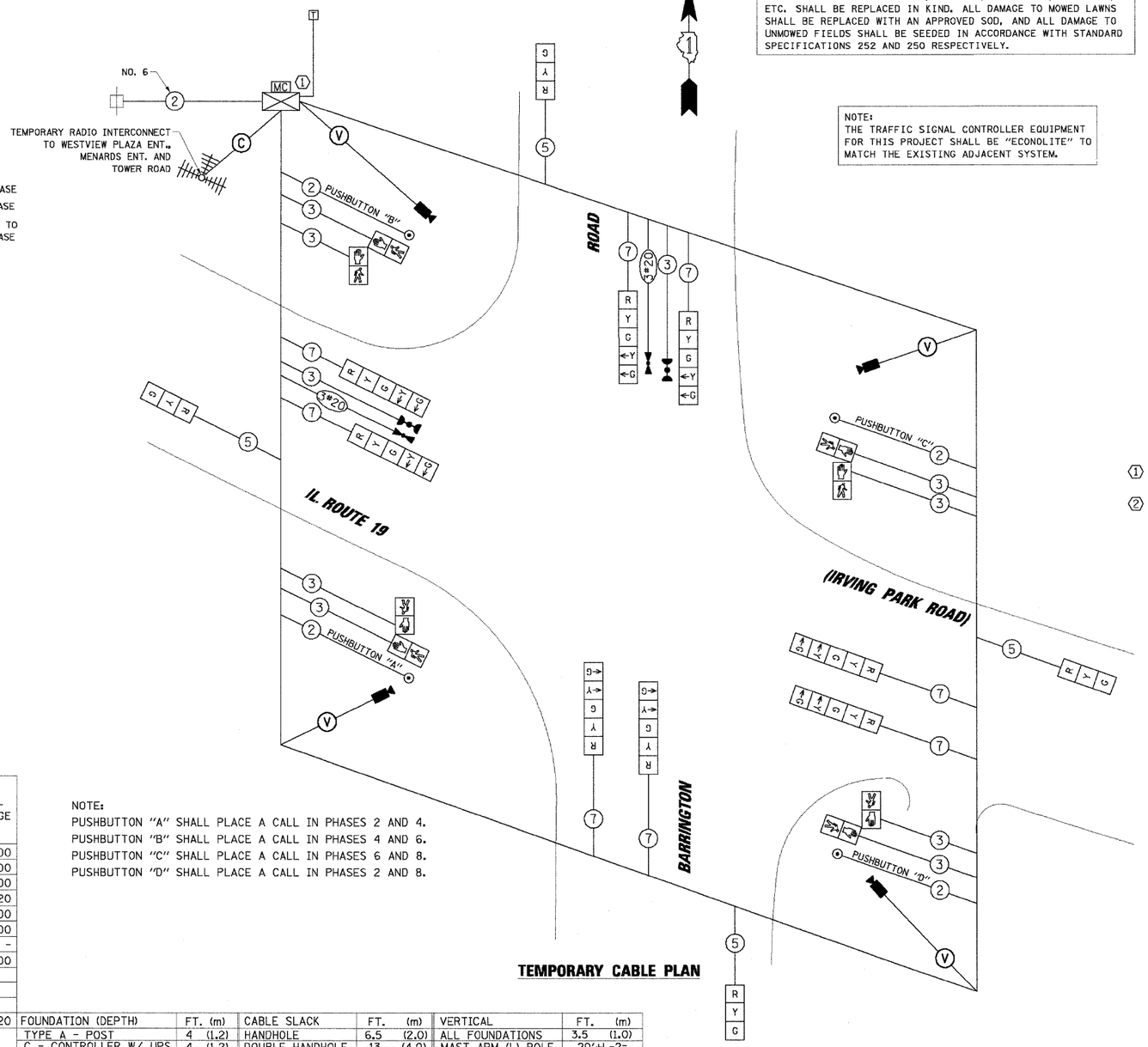


TEMPORARY PHASE DESIGNATION DIAGRAM

TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE



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



TEMPORARY CABLE PLAN

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, MEDIANS, 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 SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

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

TEMPORARY CABLE DIAGRAM LEGEND

- R — TEMPORARY TRAFFIC SIGNAL SECTION OR PEDESTRIAN SIGNAL SECTION 12" (300mm)
- TEMPORARY CONTROLLER CABINET
- TEMPORARY SERVICE INSTALLATION
- (5) — INDICATES NUMBER OF CONDUCTORS IN CABLE. ALL CONDUCTORS TO BE NUMBER 14 AWG WIRE UNLESS OTHERWISE NOTED.
- EMERGENCY VEHICLE LIGHT DETECTOR
- CONFIRMATION BEACON
- VEHICLE DETECTOR, INDUCTION LOOP
- PEDESTRIAN PUSHBUTTON DETECTOR
- 12" (300mm) PEDESTRIAN SIGNAL SECTION
- VIDEO DETECTION CAMERA
- (V) — VENDOR CABLE
- TEMPORARY RADIO INTERCONNECT
- (C) — COAXIAL CABLE

CONSTRUCTION NOTES:

(1) RELOCATE EXISITNG MASTER CONTROLLER TO THE TEMPORARY TRAFFIC SIGNAL CABINET.

(2) EXISTING TELEPHONE SERVICE TO BE MAINTAINED. THIS WORK IS INCIDENTAL TO THE PAY ITEM: TRAFFIC SIGNAL INSTALLATION.

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	WATTAGE LED	X % OPERATION	
SIGNAL (RED)	12		17	0.50	102.00
(YELLOW)	12		25	0.25	75.00
(GREEN)	12		15	0.25	45.00
ARROW	16		12	0.10	19.20
PED. SIGNAL	8		25	1.00	200.00
CONTROLLER	1		100	1.00	100.00
ILLUM. SIGN	-		25	0.05	-
VIDEO SYSTEM	1	150	-	1.00	150.00
FLASHER				0.50	
ENERGY COSTS TO:			TOTAL =		691.20

FOUNDATION (DEPTH)	FT. (m)
TYPE A - POST	4 (1.2)
C - CONTROLLER W/ UPS	4 (1.2)
D - CONTROLLER	4 (1.2)
E - M. ARM POLE	
30" (750mm)	15 (4.6)
36" (900mm)	15 (4.6)
42" (1050mm)	25 (7.6)

CABLE SLACK	FT. (m)
HANDHOLE	6.5 (2.0)
DOUBLE HANDHOLE	13 (4.0)
SIGNAL POST	2 (1.0)
CONTROLLER CAB.	1 (0.5)
FIBER OPTIC	13 (4.0)
ELECTRIC SERVICE	1 (0.5)
GROUND CABLE	1 (0.5)

VERTICAL	FT. (m)
ALL FOUNDATIONS	3.5 (1.0)
MAST ARM (L) POLE	20'+L-2= (6m+L-0.6m)=
BRACKET MOUNTED	13 (4.0)
PED. PUSHBUTTON	6 (1.8)
ELECTRIC SERVICE	13.5 (4.1)
SERVICE TO GROUND	13.5 (4.1)
POST MOUNTED	6 (1.8)

ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAY/DISTRICT 1
201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096
ENERGY SUPPLY: CONTACT: MARTY RUBIN
PHONE: (847) 608-2400
COMPANY: COMED

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9575 West Higgins Road, Suite 600
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PROFILE | PLAN | NOTE BOOK | NO. | SURFACED | PLOTTED | CRAMES CHECKED | ALIGNMENT CHECKED | ALL MATERIALS | STRUCTURE NOTATNS CKED | CADD FILE NAME | BY | DATE

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION DIAGRAM AND TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL ROUTE 19 (IRVING PARK ROAD) AND BARRINGTON ROAD

SCALE: 1" = 20' | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1321	2009-034 TS	COOK	45	11
		CONTRACT NO. 60G39		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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Rosemont, Illinois 60018
(847) 823-0500

PLAN / PROFILE — DRAWN, PLOTTED, GRADES CHECKED, ALIGNMENT CHECKED, PLOT SCALE, PLOT MODE, CAD FILE NAME, NOTE BOOK, NO., STRUCTURE (ABUTMENTS ONLY) — BY, DATE

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MATCH LINE A–A

MATCH LINE B–B

MATCH LINE C–C

MATCH LINE D–D

IL ROUTE 19

ROAD

(IRVING PARK ROAD)

BARRINGTON

EXIST. R.O.W.

INTERCONNECT TO WESTVIEW PLAZA ENT.
(SEE INTERCONNECT PLAN)

8'-CT (2) 2"
34'-P (2) 2"
165'-T (2) 2"
6" SOLID WHITE
36" DIA. FOUNDATION
DEPRESSED CURB
DETECTABLE WARNINGS 28 SQ. FT.
16' POST
15'-CT 2½"
25'-CT 4"
48'-CT 2½"
20'-P 2"
5'-CT (2) 5"
32' MAST ARM
6" SOLID WHITE
4" WHITE SKIP DASH (10' DASH, 30' SKIP) TYP.
125'-T 2"
PAVEMENT MARKING LETTER AND SYMBOL-WHITE
73'-P (2) 4"
75'-CT 4"
16' POST
DETECTABLE WARNINGS 14 SQ. FT.
DEPRESSED CURB
55'-P 2"
90'-P 4"
126'
12" WHITE
24" SOLID WHITE STOP BAR = 63 FT.
24" SOLID WHITE STOP BAR = 37 FT.
44'-CT 2½"
PAVEMENT MARKING LETTER AND SYMBOL-WHITE
4" WHITE SKIP DASH (10' DASH, 30' SKIP) TYP.
34' MAST ARM
36" DIA. FOUNDATION
14'-T 2½"
40'-CT 2½"
DEPRESSED CURB
DETECTABLE WARNINGS 19 SQ. FT.
DETECTABLE WARNINGS 14 SQ. FT.
16' POST
DEPRESSED CURB
34'-P 4"
24" SOLID WHITE STOP BAR = 37 FT.
52'-P 2"
120'-P 4"
125'-T 2½"
DETECTABLE WARNINGS 12 SQ. FT.
DEPRESSED CURB
36" DIA. FOUNDATION
30' MAST ARM
24" SOLID WHITE STOP BAR = 51 FT.
12" WHITE
46' MAST ARM
57'-P 2"
DEPRESSED CURB
36" DIA. FOUNDATION
10'-T 3"
17'-T 2"
DETECTABLE WARNINGS 28 SQ. FT.
85'-P 2"
4" WHITE SKIP DASH (10' DASH, 30' SKIP) TYP.
6" SOLID WHITE
155'-T 2"
4" WHITE SKIP DASH (10' DASH, 30' SKIP) TYP.
54'-P 2"
31'-T 2"
41'-P 2"
6" SOLID WHITE
ONLY
PAVEMENT MARKING LETTER AND SYMBOL-WHITE

N

SCALE IN FEET 20 0 10 20 30

TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING
CONTROLLER	■	⊠
SERVICE INSTALLATION	■	⊟
SIGNAL HEAD	→	▷
SIGNAL HEAD WITH BACKPLATE	→	▷
SIGNAL HEAD, PEDESTRIAN	■	⊏
SIGNAL POST	●	○
MAST ARM ASSEMBLY AND POLE, STEEL	●—	○—
MAST ARM ASSEMBLY AND POLE, ALUMINUM	●—	○—
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE	●—☼	○—☼
UNIT DUCT	UD	
COMMON TRENCH	CT	
HANDHOLE	◪	◪
HEAVY DUTY HANDHOLE	■	⊞
DOUBLE HANDHOLE	◪◪	◪◪
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)		
PEDESTRIAN PUSHBUTTON DETECTOR	⊙	⊙
DETECTOR LOOP	□	□
CAST IRON JUNCTION BOX	Ⓘ	Ⓘ"E"
EMERGENCY VEHICLE LIGHT DETECTOR	◀	◁
CONFIRMATION BEACON	●	○
SIGNAL HEAD OPTICALLY PROGRAMMED	→"P"	▷"P"
CONDUIT SPLICE		
WOOD POLE	⊗	⊗"E"
RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II		"E"
VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE	▬	▭
RAILROAD CONTROL CABINET	⊠	⊠"E"
TELEPHONE CONNECTION	☐	☐
ILLUMINATED SIGN "NO LEFT TURN"		"E"
ILLUMINATED SIGN "NO RIGHT TURN"		"E"
UNINTERRUPTIBLE POWER SUPPLY	UPS	
RELOCATED	"R"	

CONSTRUCTION NOTES:

1. RELOCATE EXISTING LIGHT DETECTORS AND CONFIRMATION BEACON TO THE NEW MAST ARMS.
2. RELOCATE EXISTING LIGHT DETECTOR AMPLIFIER TO NEW CONTROLLER CABINET.
3. ALL EXISTING CONFIRMATION BEACONS SHALL BE RETROFITTED WITH L.E.D. INDICATIONS. THIS WORK SHALL BE INCIDENTAL TO THE PAY ITEM: UNINTERRUPTIBLE POWER SUPPLY.

NOTE:
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	PLOT SCALE = 20'	CHECKED - MJT	REVISED -
	PLOT DATE = 3/18/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODERNIZATION PLAN
IL ROUTE 19 (IRVING PARK ROAD) AND BARRINGTON ROAD

SCALE: 1" = 20' | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1321	2009-034 TS	COOK	45	12
		CONTRACT NO. 60G39		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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PLAN | SURVEYED | DRAWN | ALIGNMENT CHECKED | GRADES CHECKED | ALL NOTES CHKD | CADD FILE NAME | NOTE BOOK | NO. | BY | DATE

PROFILE | SURVEYED | DRAWN | ALIGNMENT CHECKED | GRADES CHECKED | ALL NOTES CHKD | STRUCTURE NOTATNS CHKD | NOTE BOOK | NO. | BY | DATE

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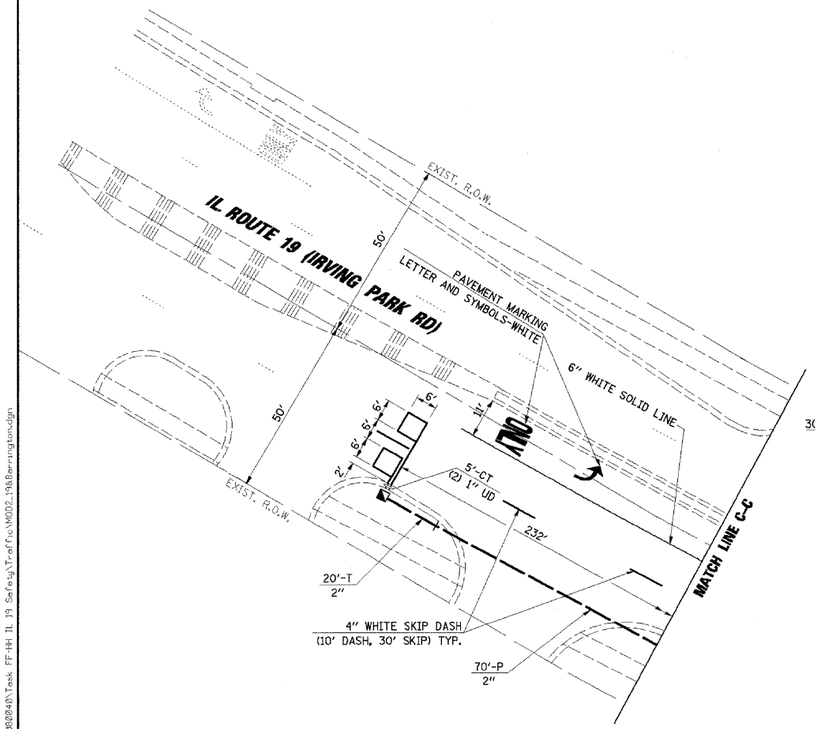

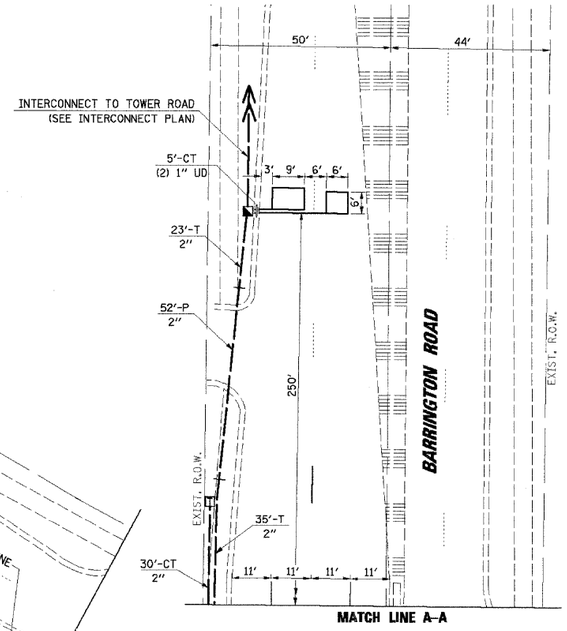

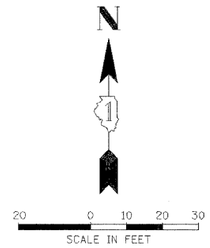

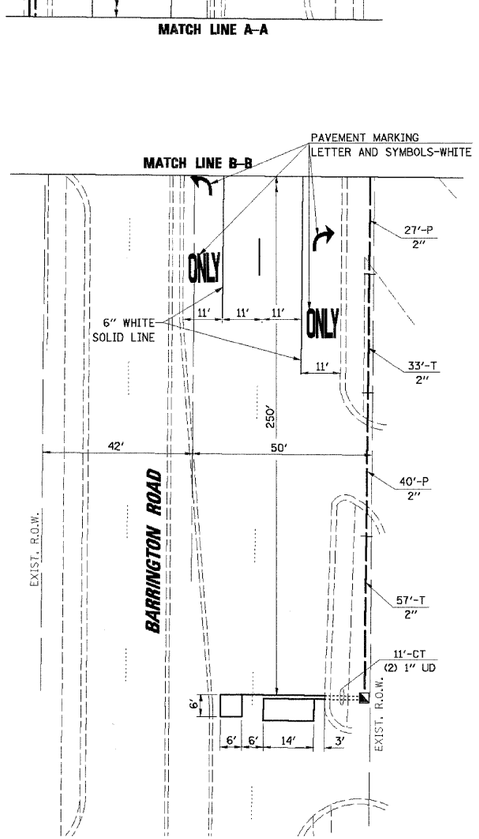

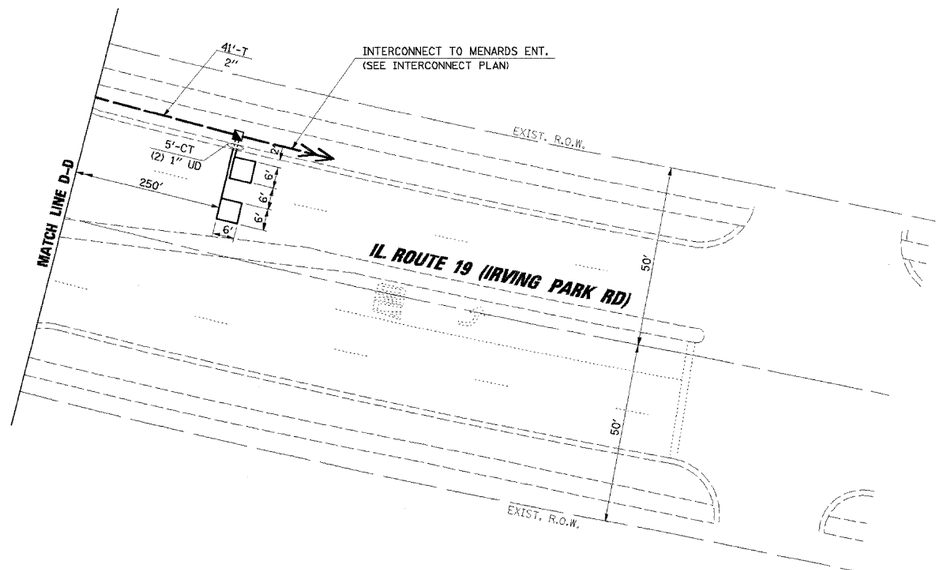

NOTE:
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODERNIZATION PLAN
IL ROUTE 19 (IRVING PARK ROAD) AND BARRINGTON ROAD

SCALE: 1" = 20' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1321	2009-034 TS	COOK	45	13
		CONTRACT NO. 60G39		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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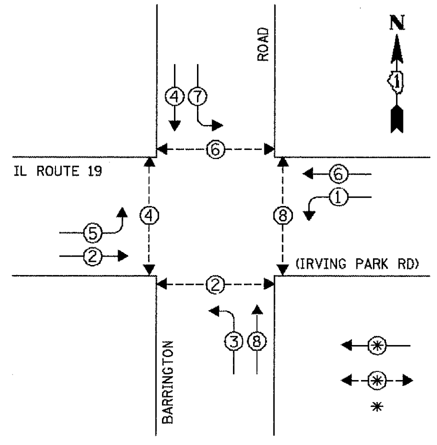
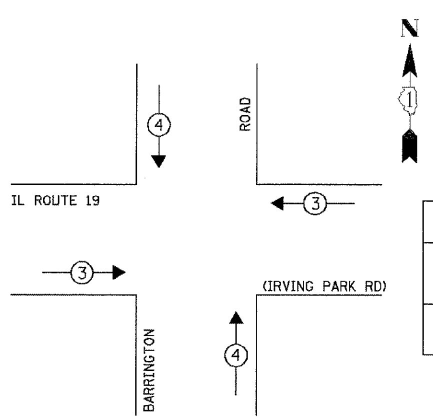
(847) 823-0500

CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE

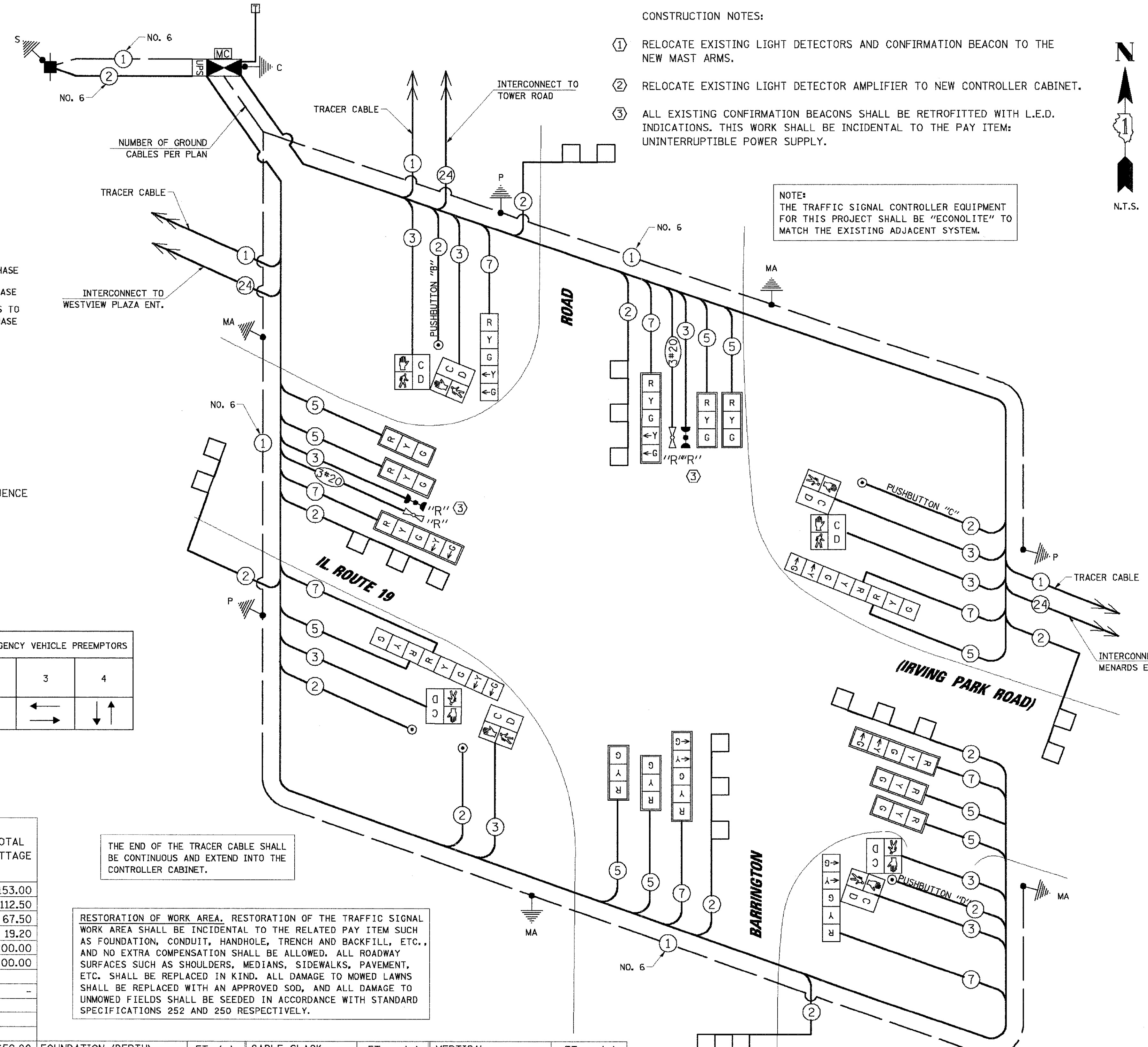


PROPOSED EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	⇄	↓↑

CONSTRUCTION NOTES:

1. RELOCATE EXISTING LIGHT DETECTORS AND CONFIRMATION BEACON TO THE NEW MAST ARMS.
2. RELOCATE EXISTING LIGHT DETECTOR AMPLIFIER TO NEW CONTROLLER CABINET.
3. ALL EXISTING CONFIRMATION BEACONS SHALL BE RETROFITTED WITH L.E.D. INDICATIONS. THIS WORK SHALL BE INCIDENTAL TO THE PAY ITEM: UNINTERRUPTIBLE POWER SUPPLY.

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



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

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, MEDIANS, 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 SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

CABLE PLAN

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

CABLE PLAN LEGEND

EXISTING	PROPOSED	
G	G	8" (200mm) TRAFFIC SIGNAL SECTION
R	R	12" (300mm) TRAFFIC SIGNAL SECTION
W	W	12" (300mm) PEDESTRIAN SIGNAL SECTION
	C D	12" (300mm) PEDESTRIAN SIGNAL SECTION WITH COUNTDOWN TIMER
		CONTROLLER CABINET
		SERVICE INSTALLATION
T	T	TELEPHONE INSTALLATION
		VEHICLE DETECTOR, INDUCTION LOOP
		MAGNETIC DETECTOR
		EMERGENCY VEHICLE LIGHT DETECTOR
		CONFIRMATION BEACON
		PUSHBUTTON DETECTOR
2	2	DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
1	1	GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
24	24	FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F SM12F
R Y G ←Y ←G "P"	R Y G ←Y ←G "P"	SIGNAL FACE WITH BACKPLATE "P" INDICATES PROGRAMMED HEAD.
		RAILROAD CONTROL CABINET
"E"		ILLUMINATED SIGN "NO LEFT TURN"
"E"		ILLUMINATED SIGN "NO RIGHT TURN"
H/C	C	GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C)
P	P	GROUND ROD AT POST (P) OR MAST ARM POLE (MA)
S	S	GROUND ROD AT ELECTRIC SERVICE INSTALLATION
	UPS	UNINTERRUPTIBLE POWER SUPPLY
	"R"	RELOCATED

N.T.S.

SCHEDULE OF QUANTITIES ITEM	UNIT	TOTAL
PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	1836
DETECTABLE WARNINGS	SQ FT	115
COMBINATION CURB AND GUTTER REMOVAL	FOOT	160
SIDEWALK REMOVAL	SQ FT	1629
COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	330
CONCRETE MEDIAN SURFACE REMOVAL	SQ FT	233
MEDIAN REMOVAL	SQ FT	490
MEDIAN REMOVAL AND REPLACEMENT, SPECIAL	SQ FT	120
SIGN PANEL - TYPE 1	SQ FT	18
SIGN PANEL - TYPE 2	SQ FT	30
THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	254.8
THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	220
THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	991
THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	750
THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	188
PAVEMENT MARKING REMOVAL	SQ FT	1639
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	913
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	296
CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	10
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	100
CONDUIT IN TRENCH, 5" DIA., GALVANIZED STEEL	FOOT	10
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	564
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	390
HANDHOLE	EACH	6
HEAVY-DUTY HANDHOLE	EACH	4
DOUBLE HANDHOLE	EACH	2
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	1345
FULL-ACTUATED CONTROLLER AND TYPE V CABINET, SPECIAL	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1049
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	2137
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2323
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1651
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14. 1 PR	FOOT	2730
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	39
TRAFFIC SIGNAL POST, GALVANIZED STEEL, 16 FT	EACH	3
STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 32 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 46 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	12
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	60
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	8
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5-SECTION, BRACKETMOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	3
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	12
INDUCTIVE LOOP DETECTOR	EACH	8
DETECTOR LOOP, TYPE I	FOOT	773
PEDESTRIAN PUSH-BUTTON	EACH	5
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
RELOCATE EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	2
RELOCATE EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	14
REMOVE EXISTING CONCRETE FOUNDATION	EACH	12
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	914
ELECTRIC CABLE IN CONDUIT, NO. 20 3C, TWISTED, SHIELDED	FOOT	343
PAVEMENT REPLACEMENT, SPECIAL	SQ YD	124

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

TYPE	NO. OF LAMPS	WATTAGE INCAND.	WATTAGE LED	x % OPERATION	TOTAL WATTAGE
SIGNAL (RED)	18		17	0.50	153.00
(YELLOW)	18		25	0.25	112.50
(GREEN)	18		15	0.25	67.50
ARROW	16		12	0.10	19.20
PED. SIGNAL	8		25	1.00	200.00
CONTROLLER	1		100	1.00	100.00
ILLUM. SIGN	-		25	0.05	
VIDEO SYSTEM	-		150	1.00	-
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	652.20

ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAY/DISTRICT 1
201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096

ENERGY SUPPLY: CONTACT: MARTY RUBIN
PHONE: (847) 608-2400
COMPANY: COMED

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)
C - CONTROLLER W/ UPS	4 (1.2)	DOUBLE HANDHOLE	13	(4.0)	MAST ARM (L) POLE	20'+L-2= (6m+L-0.6m)=
D - CONTROLLER	4 (1.2)	SIGNAL POST	2	(1.0)		
E - M. ARM POLE		CONTROLLER CAB.	1	(0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13	(4.0)	PED. PUSHBUTTON	6 (1.8)
36" (900mm)	15 (4.6)	ELECTRIC SERVICE	1	(0.5)	ELECTRIC SERVICE	13.5 (4.1)
42" (1050mm)	25 (7.6)	GROUND CABLE	1	(0.5)	SERVICE TO GROUND	13.5 (4.1)
					POST MOUNTED	6 (1.8)

FILE NAME = ...\Traffic\CAB_19&Barrington.dgn	USER NAME = FPACIONE	DESIGNED - ABR	REVISED -
		DRAWN - FPB / FCP	REVISED -
	PLOT SCALE = 20'	CHECKED - MJT	REVISED -
	PLOT DATE = 3/18/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

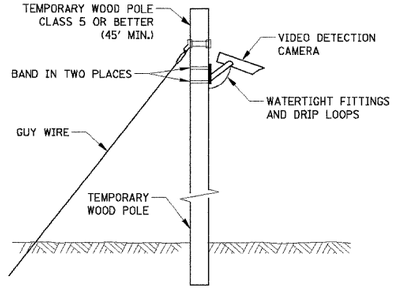
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE IL ROUTE 19 (IRVING PARK ROAD) AND BARRINGTON ROAD

SCALE: 1" = 20' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1321	2009-034 TS	COOK	45	14
		CONTRACT NO. 60G39		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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

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, MEDIANS, 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 SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.



TEMPORARY VIDEO DETECTION MOUNTING DETAIL
(NOT TO SCALE)

TEMPORARY TRAFFIC SIGNAL LEGEND

- TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED ORIGINAL LOCATION
- TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED SECONDARY LOCATION
- TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM
- DOWN GUY
- TEMPORARY CONTROLLER CABINET
- TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE
- TEMPORARY SERVICE INSTALLATION
- TEMPORARY PEDESTRIAN SIGNAL HEAD, BRACKET MOUNTED
- TEMPORARY RADIO INTERCONNECT
- MACHINE VISION PROCESSOR
- PEDESTRIAN PUSHBUTTON DETECTOR
- EMERGENCY VEHICLE LIGHT DETECTOR
- CONFIRMATION BEACON
- VEHICLE DETECTOR, INDUCTION LOOP
- UD — UNIT DUCT
- CT — COMMON TRENCH
- G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)
- HANDHOLE
- HEAVY DUTY HANDHOLE
- "R" — RELOCATE
- "A" — ABANDON
- DETECTION ZONE

EXISTING EQUIPMENT TO BE REMOVED LEGEND

- "E" — EXISTING SIGNAL HEAD TO BE REMOVED
- "E" — EXISTING SERVICE INSTALLATION TO BE REMOVED
- "E" — EXISTING SIGNAL POST AND FOUNDATION TO BE REMOVED
- "E" — EXISTING ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED
- "E" — EXISTING CONTROLLER AND FOUNDATION TO BE REMOVED
- "E" — EXISTING HANDHOLE TO BE REMOVED
- "E" — EXISTING PEDESTRIAN SIGNAL HEAD TO BE REMOVED
- "E" — EXISTING PEDESTRIAN PUSHBUTTON TO BE REMOVED
- "E" — EMERGENCY VEHICLE LIGHT DETECTOR TO BE REMOVED
- "E" — CONFIRMATION BEACON TO BE REMOVED
- "E" — EXISTING HEAVY-DUTY HANDHOLE TO BE REMOVED
- "E" — EXISTING STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED

NOTES FOR TEMPORARY TRAFFIC SIGNALS

1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1, INSTALLED IN A NEMA TS1 OR TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
3. ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE 12" (300mm). HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
4. ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
5. ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
6. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

1	EACH	CONTROLLER AND CABINET (COMPLETE)
5	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION
2	EACH	SIGNAL HEAD, 1-FACE, 5-SECTION
1	EACH	SIGNAL HEAD, 2-FACE, 2-3 SECTION
2	EACH	SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION
2	EACH	ALUMINUM MAST ARM AND POLE
4	EACH	SIGNAL POST
1	EACH	SERVICE INSTALLATION
2	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
2	EACH	PEDESTRIAN PUSH-BUTTON
4	EACH	TRAFFIC SIGNAL BACKPLATE

CONSTRUCTION NOTES:

(1) RELOCATE EXISTING LIGHT DETECTORS AND CONFIRMATION BEACON TO THE NEW MAST ARMS.

(2) RELOCATE EXISTING LIGHT DETECTOR AMPLIFIER TO NEW CONTROLLER CABINET.

CHRISTOPHER B. BURKE ENGINEERING LTD.
5515 West Higgins Road Suite 600
Rosemont, Illinois 60018
(847) 823-0500

PLAN / PROFILE — DRAWN, PLOTTED, GRADES CHECKED, ALIGNMENT CHECKED, QTY'S CHECKED, ADD FILE NAME, NOTE BOOK, NO., BY, DATE, STRUCTURE NO'S/PINS CHKD

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FILE NAME = ...\Traffic\TMP_198kingsbury.dgn	USER NAME = FPVICINE	DESIGNED - ABR	REVISED -
		DRAWN - FPB / FCP	REVISED -
	PLOT SCALE = 20'	CHECKED - MJT	REVISED -
	PLOT DATE = 3/18/2009	DATE -	REVISED -

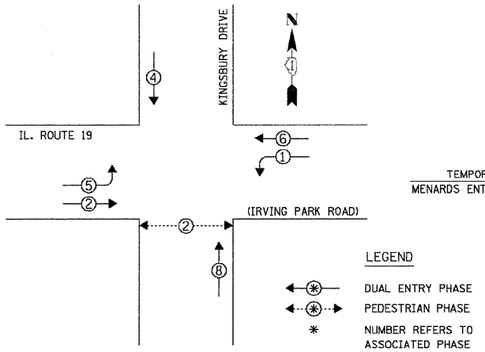
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
IL ROUTE 19 (IRVING PARK ROAD) AND KINGSBURY DRIVE

SCALE: 1" = 20' | SHEET NO. OF SHEETS | STA. | TO STA.

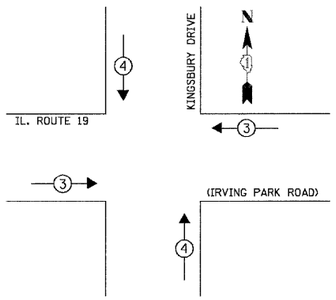
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1321	2009-034 TS	COOK	45	15
		CONTRACT NO. 60G39		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

TEMPORARY CONTROLLER SEQUENCE

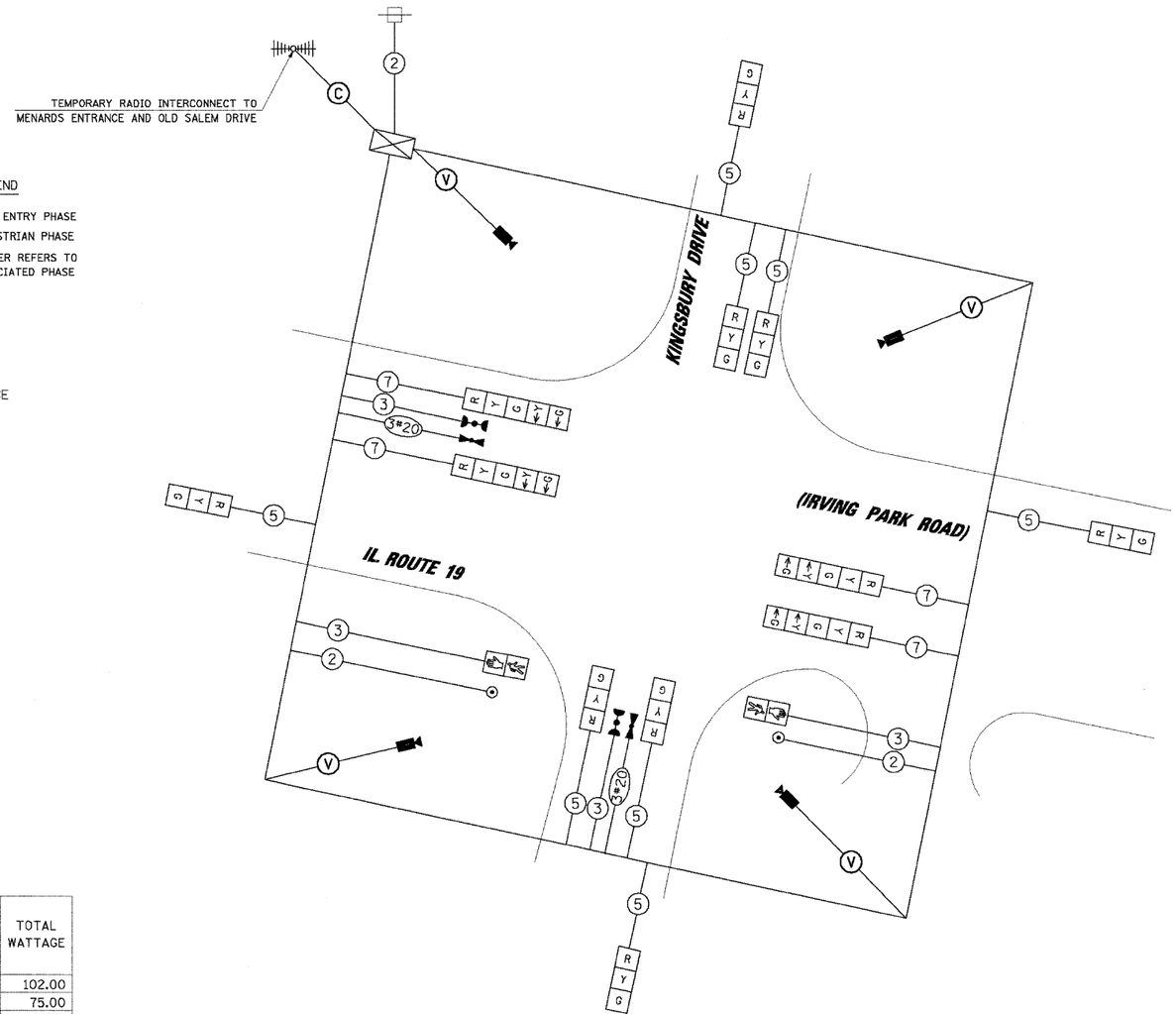


TEMPORARY PHASE DESIGNATION DIAGRAM

TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE



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



TEMPORARY CABLE PLAN

TEMPORARY CABLE DIAGRAM LEGEND

- TEMPORARY TRAFFIC SIGNAL SECTION OR PEDESTRIAN SIGNAL SECTION 12" (300mm)
- TEMPORARY CONTROLLER CABINET
- TEMPORARY SERVICE INSTALLATION
- (5) INDICATES NUMBER OF CONDUCTORS IN CABLE. ALL CONDUCTORS TO BE NUMBER 14 AWG WIRE UNLESS OTHERWISE NOTED.
- EMERGENCY VEHICLE LIGHT DETECTOR
- CONFIRMATION BEACON
- VEHICLE DETECTOR, INDUCTION LOOP
- PEDESTRIAN PUSHBUTTON DETECTOR
- 12" (300mm) PEDESTRIAN SIGNAL SECTION
- VIDEO DETECTION CAMERA
- (V) VENDOR CABLE
- TEMPORARY RADIO INTERCONNECT
- (C) COAXIAL CABLE

CONSTRUCTION NOTES:

(1) RELOCATE EXISTING LIGHT DETECTORS AND CONFIRMATION BEACON TO THE NEW MAST ARMS.

(2) RELOCATE EXISTING LIGHT DETECTOR AMPLIFIER TO NEW CONTROLLER CABINET.

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	WATTAGE LED	X % OPERATION	
SIGNAL (RED)	12		17	0.50	102.00
(YELLOW)	12		25	0.25	75.00
(GREEN)	12		15	0.25	45.00
ARROW	8		12	0.10	9.60
PED. SIGNAL	2		25	1.00	50.00
CONTROLLER	1		100	1.00	100.00
ILLUM. SIGN	-		25	0.05	-
VIDEO SYSTEM	1	150	-	1.00	150.00
FLASHER				0.50	
ENERGY COSTS TO:			TOTAL =	531.60	

FOUNDATION (DEPTH)	FT.	(m)
TYPE A - POST	4	(1.2)
C - CONTROLLER W/ UPS	4	(1.2)
D - CONTROLLER	4	(1.2)
E - M. ARM POLE		
30" (750mm)	15	(4.6)
36" (900mm)	15	(4.6)
42" (1050mm)	25	(7.6)

CABLE SLACK	FT.	(m)
HANDHOLE	6.5	(2.0)
DOUBLE HANDHOLE	13	(4.0)
SIGNAL POST	2	(1.0)
CONTROLLER CAB.	1	(0.5)
FIBER OPTIC	13	(4.0)
ELECTRIC SERVICE	1	(0.5)
GROUND CABLE	1	(0.5)

VERTICAL	FT.	(m)
ALL FOUNDATIONS	3.5	(1.0)
MAST ARM (L) POLE	20'+L-2=	
	(6m+L-0.6m)=	
BRACKET MOUNTED	13	(4.0)
PED. PUSHBUTTON	6	(1.8)
ELECTRIC SERVICE	13.5	(4.1)
SERVICE TO GROUND	13.5	(4.1)
POST MOUNTED	6	(1.8)

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

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, MEDIANS, 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 SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAY/DISTRICT 1
201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096
ENERGY SUPPLY: CONTACT: MARTY RUBIN
PHONE: (847) 608-2400
COMPANY: COMED

FILE NAME = ...\Traffic\TCB_19&Kingsbury.dgn	USER NAME = FPACIONE	DESIGNED - ABR	REVISED -
		DRAWN - FPB / FCP	REVISED -
	PLOT SCALE = 20'	CHECKED - MJT	REVISED -
	PLOT DATE = 3/18/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION DIAGRAM AND TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL ROUTE 19 (IRVING PARK ROAD) AND KINGSBURY ROAD

SCALE: 1" = 20' | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1321	2009-034 TS	COOK	45	16
		CONTRACT NO. 60G39		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CHRISTOPHER B. BURKE ENGINEERING LTD.
9575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

PLAN / PROFILE — SURVEYED — PLOTTED — GRADES CHECKED — NOTE BOOK — STRUCTURE NO(S)/PINS CHKD — SURVEY ALIGNMENT CHECKED — ALL PTS. AS STAKED — CADD FILE NAME — NOTE BOOK — NO. — BY — DATE

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Rosemont, Illinois 60018
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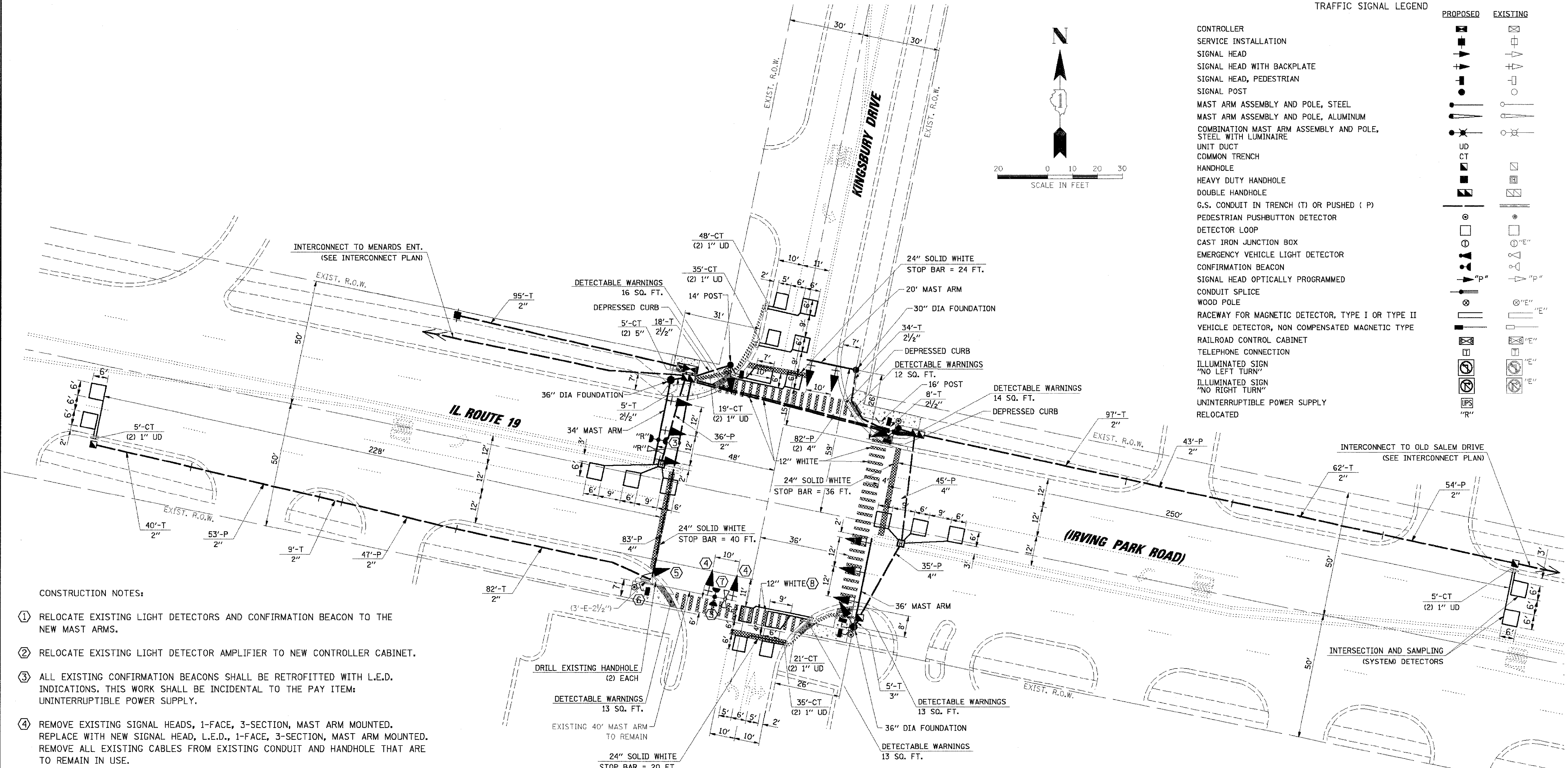

TRAFFIC SIGNAL LEGEND (PROPOSED / EXISTING)

- CONTROLLER
- SERVICE INSTALLATION
- SIGNAL HEAD
- SIGNAL HEAD WITH BACKPLATE
- SIGNAL HEAD, PEDESTRIAN
- SIGNAL POST
- MAST ARM ASSEMBLY AND POLE, STEEL
- MAST ARM ASSEMBLY AND POLE, ALUMINUM
- COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE
- UNIT DUCT — UD
- COMMON TRENCH — CT
- HANDHOLE
- HEAVY DUTY HANDHOLE
- DOUBLE HANDHOLE
- G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)
- PEDESTRIAN PUSHBUTTON DETECTOR
- DETECTOR LOOP
- CAST IRON JUNCTION BOX
- EMERGENCY VEHICLE LIGHT DETECTOR
- CONFIRMATION BEACON
- SIGNAL HEAD OPTICALLY PROGRAMMED — "P"
- CONDUIT SPLICE
- WOOD POLE
- RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II
- VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE
- RAILROAD CONTROL CABINET
- TELEPHONE CONNECTION
- ILLUMINATED SIGN "NO LEFT TURN"
- ILLUMINATED SIGN "NO RIGHT TURN"
- UNINTERRUPTIBLE POWER SUPPLY — UPS
- RELOCATED — "R"

CONSTRUCTION NOTES:

1. RELOCATE EXISTING LIGHT DETECTORS AND CONFIRMATION BEACON TO THE NEW MAST ARMS.
2. RELOCATE EXISTING LIGHT DETECTOR AMPLIFIER TO NEW CONTROLLER CABINET.
3. ALL EXISTING CONFIRMATION BEACONS SHALL BE RETROFITTED WITH L.E.D. INDICATIONS. THIS WORK SHALL BE INCIDENTAL TO THE PAY ITEM: UNINTERRUPTIBLE POWER SUPPLY.
4. REMOVE EXISTING SIGNAL HEADS, 1-FACE, 3-SECTION, MAST ARM MOUNTED. REPLACE WITH NEW SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED. REMOVE ALL EXISTING CABLES FROM EXISTING CONDUIT AND HANDHOLE THAT ARE TO REMAIN IN USE.
5. REMOVE EXISTING SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED. REPLACE WITH NEW SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, BRACKET MOUNTED. REMOVE ALL EXISTING CABLES FROM EXISTING CONDUIT AND HANDHOLE THAT ARE TO REMAIN IN USE.
6. REMOVE EXISTING PEDESTRIAN SIGNAL HEAD, 1-FACE AND PEDESTRIAN PUSHBUTTON. REPLACE WITH NEW PEDESTRIAN SIGNAL HEAD, L.E.D. WITH COUNTDOWN TIMER AND NEW PEDESTRIAN PUSHBUTTON. REMOVE ALL EXISTING CABLES FROM EXISTING CONDUIT AND HANDHOLE THAT ARE TO REMAIN IN USE.
7. REMOVE EXISTING CABLES, 3/C AND 3#20, TWISTED SHIELDED FROM EXISTING CONDUIT AND HANDHOLE THAT ARE TO REMAIN IN USE.
8. USE POLYUREA PAVEMENT MARKING ON THE DRIVEWAY FOR CROSSWALK.
9. PAINT NEW MAST ARMS AND TRAFFIC SIGNAL POSTS TO MATCH EXISTING MAST ARM TO REMAIN.

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

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, MEDIANS, 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 SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

FILE NAME = ...\Traffic\MOD_19&Kingsbury.dgn	USER NAME = FPACIONE	DESIGNED - ABR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODERNIZATION PLAN IL ROUTE 19 (IRVING PARK ROAD) AND KINGSBURY DRIVE
		DRAWN - FPB / FCP	REVISED -		
	PLOT SCALE = 20'	CHECKED - MJT	REVISED -		
	PLOT DATE = 3/18/2009	DATE -	REVISED -		SCALE: 1" = 20' SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1321	2009-034 TS	COOK	45	17
		CONTRACT NO. 60G39		
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

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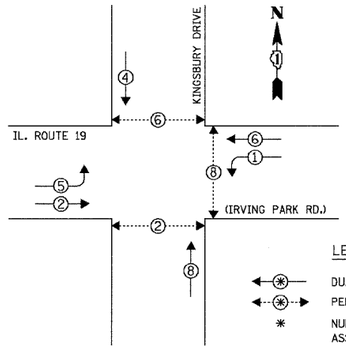
PLAN: SURVEYED, PLOTTED, ALIGNMENT CHECKED, ALL NEW MONUMENTS SET, NOTE BOOK, NO., CADD FILE NAME, BY, DATE

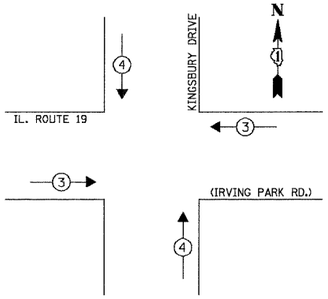
PROFILE: SURVEYED, PLOTTED, GRADES CHECKED, GRADES NOTED, STRUCTURE NOTATIONS CHKD, NOTE BOOK, NO., BY, DATE

CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

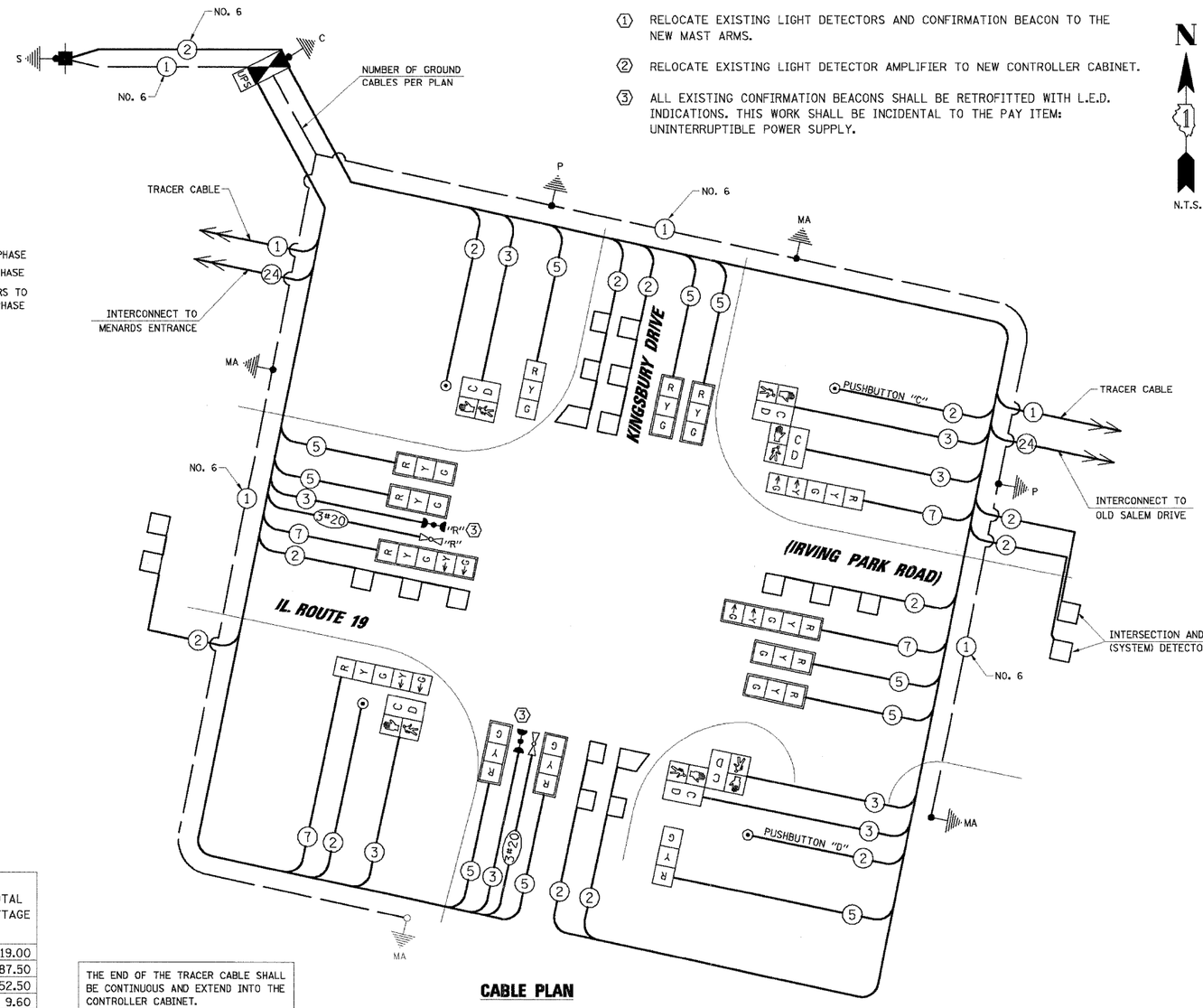
EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

CONSTRUCTION NOTES:

1. RELOCATE EXISTING LIGHT DETECTORS AND CONFIRMATION BEACON TO THE NEW MAST ARMS.
2. RELOCATE EXISTING LIGHT DETECTOR AMPLIFIER TO NEW CONTROLLER CABINET.
3. ALL EXISTING CONFIRMATION BEACONS SHALL BE RETROFITTED WITH L.E.D. INDICATIONS. THIS WORK SHALL BE INCIDENTAL TO THE PAY ITEM: UNINTERRUPTIBLE POWER SUPPLY.



CABLE PLAN LEGEND

EXISTING	PROPOSED	
C	G	8" (200mm) TRAFFIC SIGNAL SECTION
R	R	12" (300mm) TRAFFIC SIGNAL SECTION
W	W	12" (300mm) PEDESTRIAN SIGNAL SECTION
C D	C D	12" (300mm) PEDESTRIAN SIGNAL SECTION WITH COUNTDOWN TIMER
		CONTROLLER CABINET
		SERVICE INSTALLATION
T	T	TELEPHONE INSTALLATION
		VEHICLE DETECTOR, INDUCTION LOOP
		MAGNETIC DETECTOR
		EMERGENCY VEHICLE LIGHT DETECTOR
		CONFIRMATION BEACON
		PUSHBUTTON DETECTOR
(2)	(2)	DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
(1)	(1)	GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
(24)	(24)	FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F SM12F
R Y G ←Y ←G "P"	R Y G ←Y ←G "P"	SIGNAL FACE WITH BACKPLATE "P" INDICATES PROGRAMMED HEAD.
		RAILROAD CONTROL CABINET
"E"		ILLUMINATED SIGN "NO LEFT TURN"
"E"		ILLUMINATED SIGN "NO RIGHT TURN"
H/C	C	GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C)
P	P	GROUND ROD AT POST (P) OR MAST ARM POLE (MA)
S	S	GROUND ROD AT ELECTRIC SERVICE INSTALLATION
	UPS	UNINTERRUPTIBLE POWER SUPPLY

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	WATTAGE LED	X % OPERATION	
SIGNAL (RED)	14		17	0.50	119.00
(YELLOW)	14		25	0.25	87.50
(GREEN)	14		15	0.25	52.50
ARROW	8		12	0.10	9.60
PED. SIGNAL	6		25	1.00	150.00
CONTROLLER	1		100	1.00	100.00
ILLUM. SIGN	-		25	0.05	-
VIDEO SYSTEM	-	150	-	1.00	-
FLASHER				0.50	
ENERGY COSTS TO:			TOTAL =		518.60

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

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

CABLE PLAN

NOTE:

PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8.
PUSHBUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8.

FOUNDATION (DEPTH)	FT.	(m)
TYPE A - POST	4	(1.2)
C - CONTROLLER W/ UPS	4	(1.2)
D - CONTROLLER	4	(1.2)
E - M. ARM POLE		
30" (750mm)	15	(4.6)
36" (900mm)	15	(4.6)
42" (1050mm)	25	(7.6)

CABLE SLACK	FT.	(m)
HANDHOLE	6.5	(2.0)
DOUBLE HANDHOLE	13	(4.0)
SIGNAL POST	2	(1.0)
CONTROLLER CAB.	1	(0.5)
FIBER OPTIC	13	(4.0)
ELECTRIC SERVICE	1	(0.5)
GROUND CABLE	1	(0.5)

VERTICAL	FT.	(m)
ALL FOUNDATIONS	3.5	(1.0)
MAST ARM (L) POLE	20'+L-2=	(6m+L-0.6m)=
BRACKET MOUNTED	13	(4.0)
PED. PUSHBUTTON	6	(1.8)
ELECTRIC SERVICE	13.5	(4.1)
SERVICE TO GROUND	13.5	(4.1)
POST MOUNTED	6	(1.8)

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, MEDIANS, 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 SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

SCHEDULE OF QUANTITIES

ITEM	UNIT	TOTAL
PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	813
DETECTABLE WARNINGS	SQ FT	81
SIDEWALK REMOVAL	SQ FT	807
COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	84
SIGN PANEL - TYPE 1	SQ FT	16.5
SIGN PANEL - TYPE 2	SQ FT	15
THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	252
THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	120
POLYUREA PAVEMENT MARKING TYPE 1 - LINE 12	FOOT	114
PAVEMENT MARKING REMOVAL	SQ FT	343
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	388
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	65
CONDUIT IN TRENCH, 3" DIA. GALVANIZED STEEL	FOOT	5
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	0
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	233
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	327
HANDHOLE	EACH	3
HEAVY-DUTY HANDHOLE	EACH	2
DOUBLE HANDHOLE	EACH	2
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	579
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	527
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1208
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1681
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	622
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PR	FOOT	1777
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	114
TRAFFIC SIGNAL POST, GALVANIZED STEEL, 14 FT	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL, 16 FT	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 20 FT	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 34 FT	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 36 FT	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	8
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	15
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	30
DRILL EXISTING HANDHOLE	EACH	2
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	8
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	10
INDUCTIVE LOOP DETECTOR	EACH	9
DETECTOR LOOP, TYPE I	FOOT	684
PEDESTRIAN PUSH-BUTTON	EACH	4
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
RELOCATE EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	1
RELOCATE EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	361
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	6
REMOVE EXISTING CONCRETE FOUNDATION	EACH	7
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
PAINT EXISTING POLE COMPLETE	EACH	1
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING NO. 6 1C	FOOT	674
ELECTRIC CABLE IN CONDUIT, NO. 20 3C, TWISTED, SHIELDED	FOOT	258
PAINT NEW MAST ARM AND POLE, UNDER 40 FEET	EACH	3
PAINT NEW TRAFFIC SIGNAL POST	EACH	2

FILE NAME = ...\Traffic\CAB_19&Kingsbury.dgn	USER NAME = FPACIONE	DESIGNED - ABR	REVISED -
		DRAWN - FPB / FCP	REVISED -
	PLOT SCALE = 20'	CHECKED - MJT	REVISED -
	PLOT DATE = 3/18/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

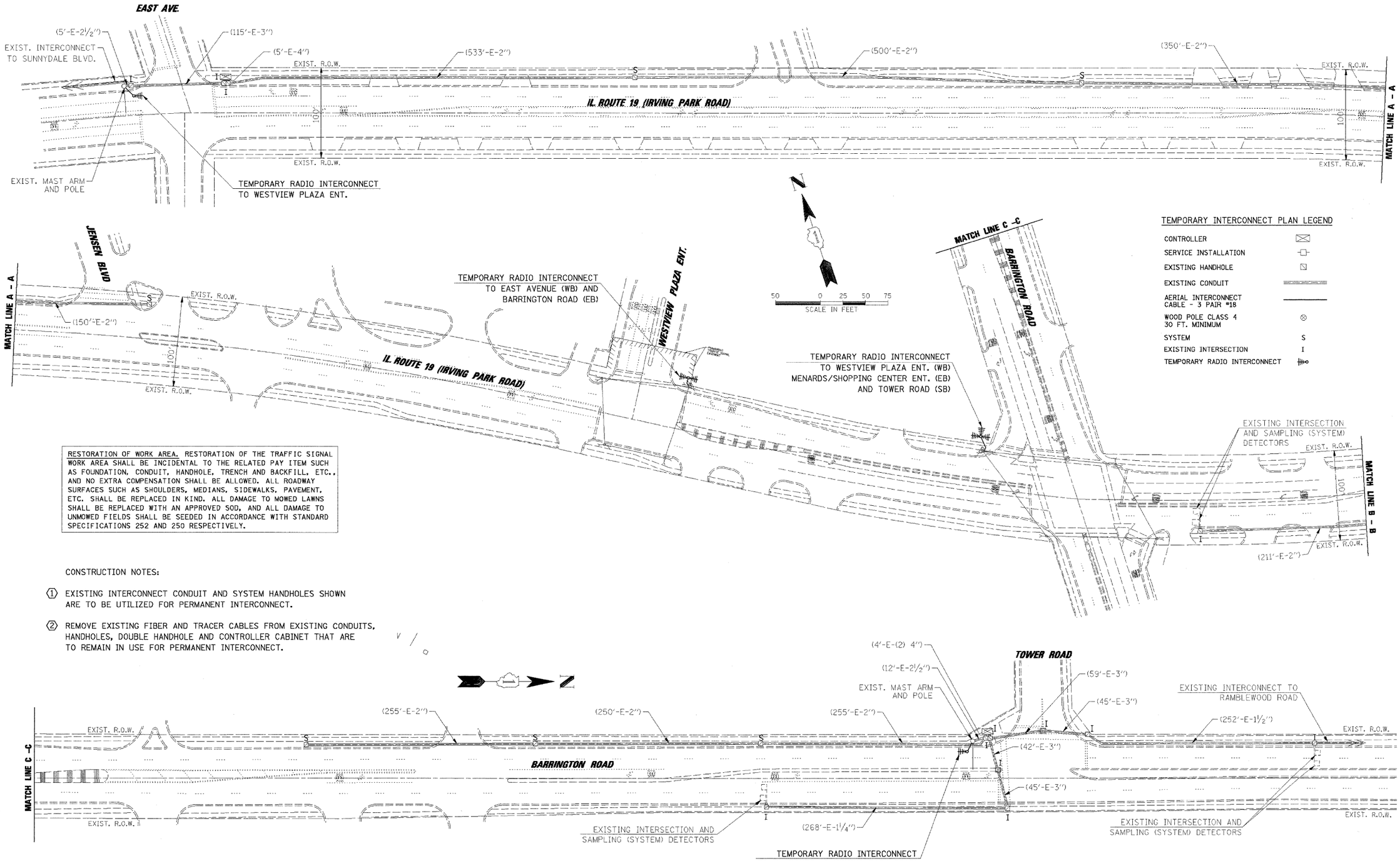
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL ROUTE 19 (IRVING PARK ROAD) AND KINGSBURY DRIVE

SCALE: 1" = 20' | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1321	2009-034 TS	COOK	45	18
		CONTRACT NO. 60G39		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAY/DISTRICT 1
201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096

ENERGY SUPPLY: CONTACT: MARTY RUBIN
PHONE: (847) 608-2400
COMPANY: COMED



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, MEDIANS, 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 SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

CONSTRUCTION NOTES:

1. EXISTING INTERCONNECT CONDUIT AND SYSTEM HANDHOLES SHOWN ARE TO BE UTILIZED FOR PERMANENT INTERCONNECT.

2. REMOVE EXISTING FIBER AND TRACER CABLES FROM EXISTING CONDUITS, HANDHOLES, DOUBLE HANDHOLE AND CONTROLLER CABINET THAT ARE TO REMAIN IN USE FOR PERMANENT INTERCONNECT.

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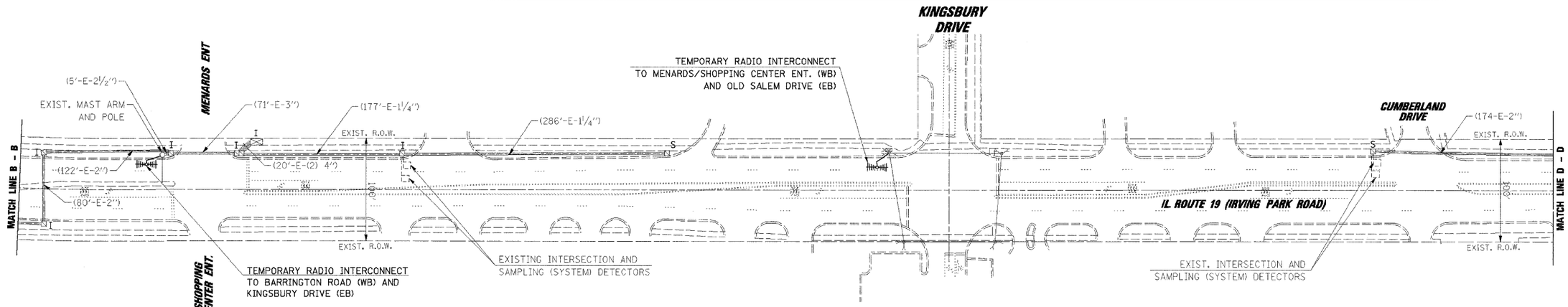
FILE NAME = ...\Traffic\INT_Tmpl-IL19.dgn	USER NAME = FPACIONE	DESIGNED - ABR	REVISED -
		DRAWN - FPB / FCP	REVISED -
	PLOT SCALE = 50'	CHECKED - MJT	REVISED -
	PLOT DATE = 3/18/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY INTERCONNECT PLAN
IL ROUTE 19 (IRVING PARK ROAD) FROM EAST AVENUE TO OLD SALEM ROAD
BARRINGTON ROAD FROM IL ROUTE 19 (IRVING PARK ROAD) TO TOWER ROAD
SCALE: 1" = 50' | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1321	2009-034 TS	COOK	45	19
		CONTRACT NO. 60G39		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



CONSTRUCTION NOTES:

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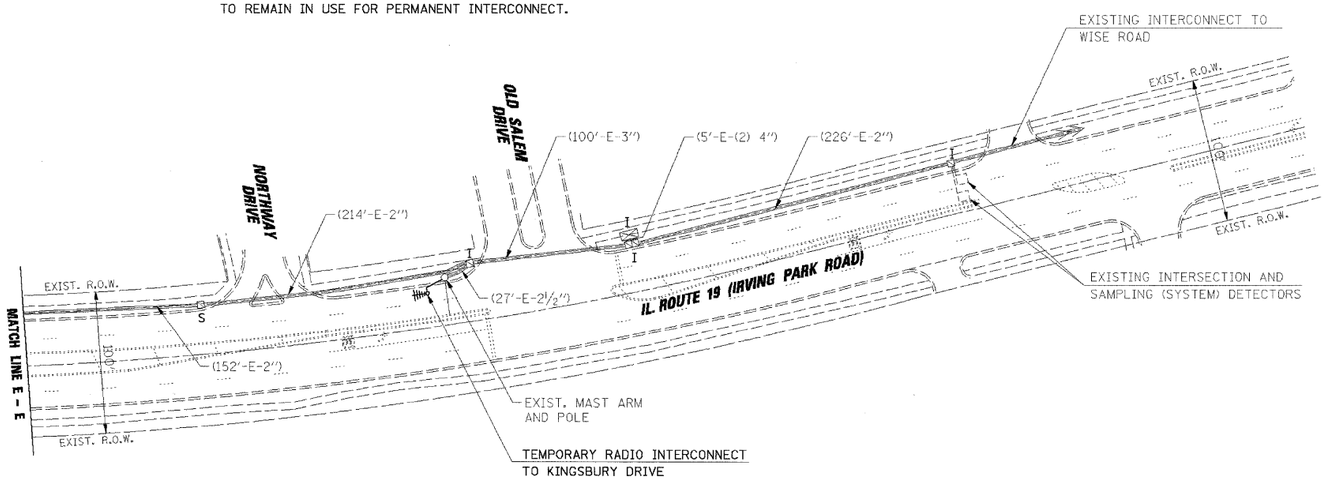
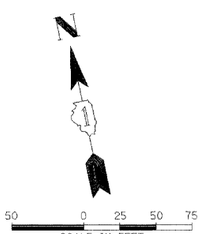
(2) REMOVE EXISTING FIBER AND TRACER CABLES FROM EXISTING CONDUITS, HANDHOLES, DOUBLE HANDHOLE AND CONTROLLER CABINET THAT ARE TO REMAIN IN USE FOR PERMANENT INTERCONNECT.



TEMPORARY INTERCONNECT PLAN LEGEND

CONTROLLER	⊠
SERVICE INSTALLATION	-□-
EXISTING HANDHOLE	⧅
EXISTING CONDUIT	═══
AERIAL INTERCONNECT CABLE - 3 PAIR #18	———
WOOD POLE CLASS 4 30 FT. MINIMUM	⊗
SYSTEM	S
EXISTING INTERSECTION	I
TEMPORARY RADIO INTERCONNECT	╫



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		DRAWN - FPB / FCP	REVISED -
	PLOT SCALE = 50'	CHECKED - MJT	REVISED -
	PLOT DATE = 3/18/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY INTERCONNECT PLAN
IL. ROUTE 19 (IRVING PARK ROAD) FROM EAST AVENUE TO OLD SALEM DRIVE
BARRINGTON ROAD FROM IL. ROUTE 19 (IRVING PARK ROAD) TO TOWER ROAD

SCALE: 1" = 50' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1321	2009-034 TS	COOK	45	20
		CONTRACT NO. 60G39		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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Rosemont, Illinois 60018
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PLAN
NOTE BOOK
NO.

SURVEYED
PLOTTED
DRAWN
CHECKED
QUANTITIES
STRUCTURE NO(S)/STNS CHKD

PROFILE
NOTE BOOK
NO.

BY | DATE

CORRECTED
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ALIGNMENT CHECKED
NOTE BOOK / PAGE(S)
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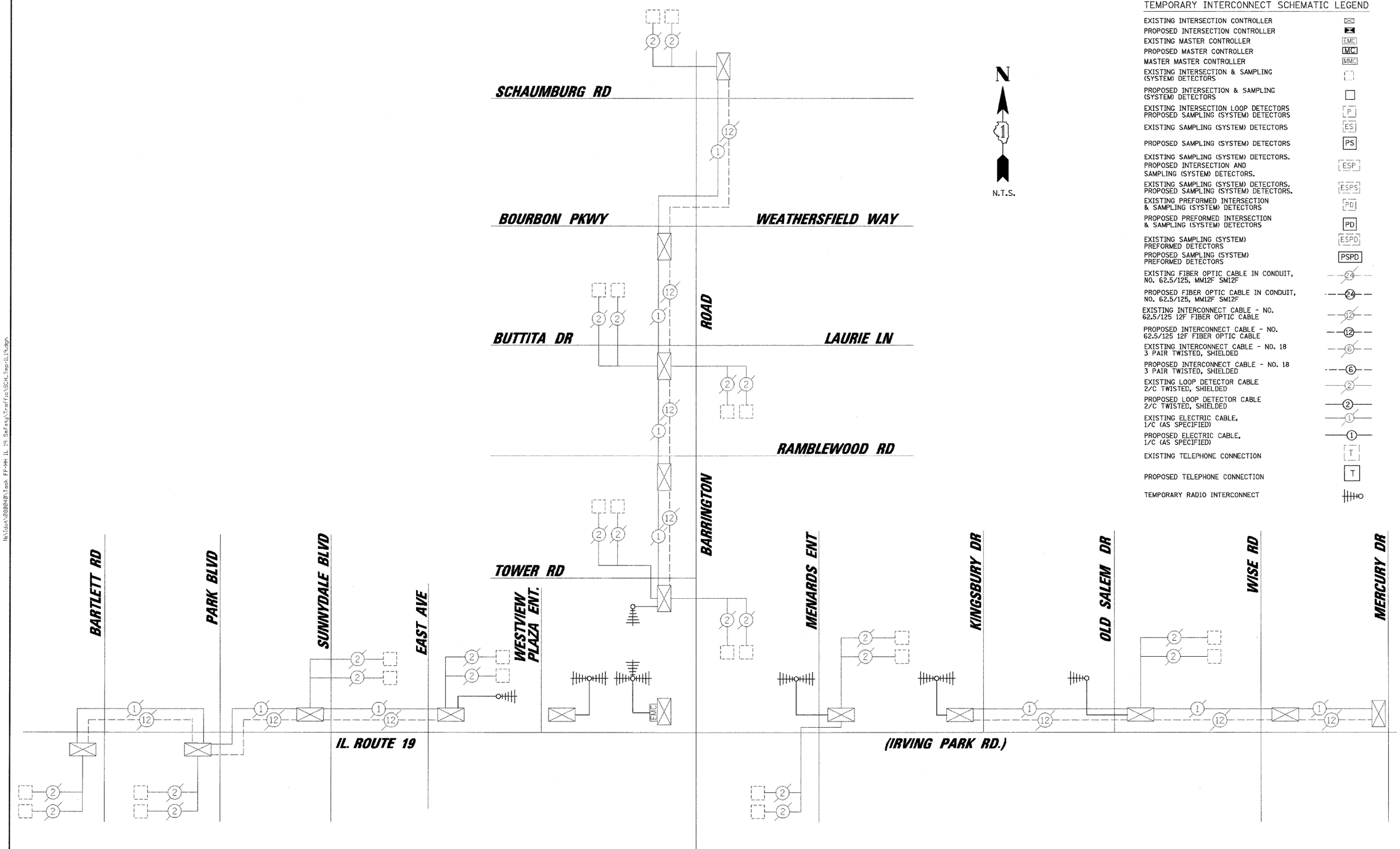

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N.T.S.

TEMPORARY INTERCONNECT SCHEMATIC LEGEND

- EXISTING INTERSECTION CONTROLLER
- PROPOSED INTERSECTION CONTROLLER
- EXISTING MASTER CONTROLLER — EMC
- PROPOSED MASTER CONTROLLER — MC
- MASTER MASTER CONTROLLER — MMC
- EXISTING INTERSECTION & SAMPLING (SYSTEM) DETECTORS
- PROPOSED INTERSECTION & SAMPLING (SYSTEM) DETECTORS
- EXISTING INTERSECTION LOOP DETECTORS PROPOSED SAMPLING (SYSTEM) DETECTORS — P
- EXISTING SAMPLING (SYSTEM) DETECTORS — ES
- PROPOSED SAMPLING (SYSTEM) DETECTORS — PS
- EXISTING SAMPLING (SYSTEM) DETECTORS. PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTORS. — ESP
- EXISTING SAMPLING (SYSTEM) DETECTORS. PROPOSED SAMPLING (SYSTEM) DETECTORS. — ESPS
- EXISTING PREFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS — PD
- PROPOSED PREFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS — PD
- EXISTING SAMPLING (SYSTEM) PREFORMED DETECTORS — ESPD
- PROPOSED SAMPLING (SYSTEM) PREFORMED DETECTORS — PSPD
- EXISTING FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F — 24
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- EXISTING LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED — 2
- PROPOSED LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED — 2
- EXISTING ELECTRIC CABLE, 1/C (AS SPECIFIED) — 1
- PROPOSED ELECTRIC CABLE, 1/C (AS SPECIFIED) — 1
- EXISTING TELEPHONE CONNECTION — T
- PROPOSED TELEPHONE CONNECTION — T
- TEMPORARY RADIO INTERCONNECT

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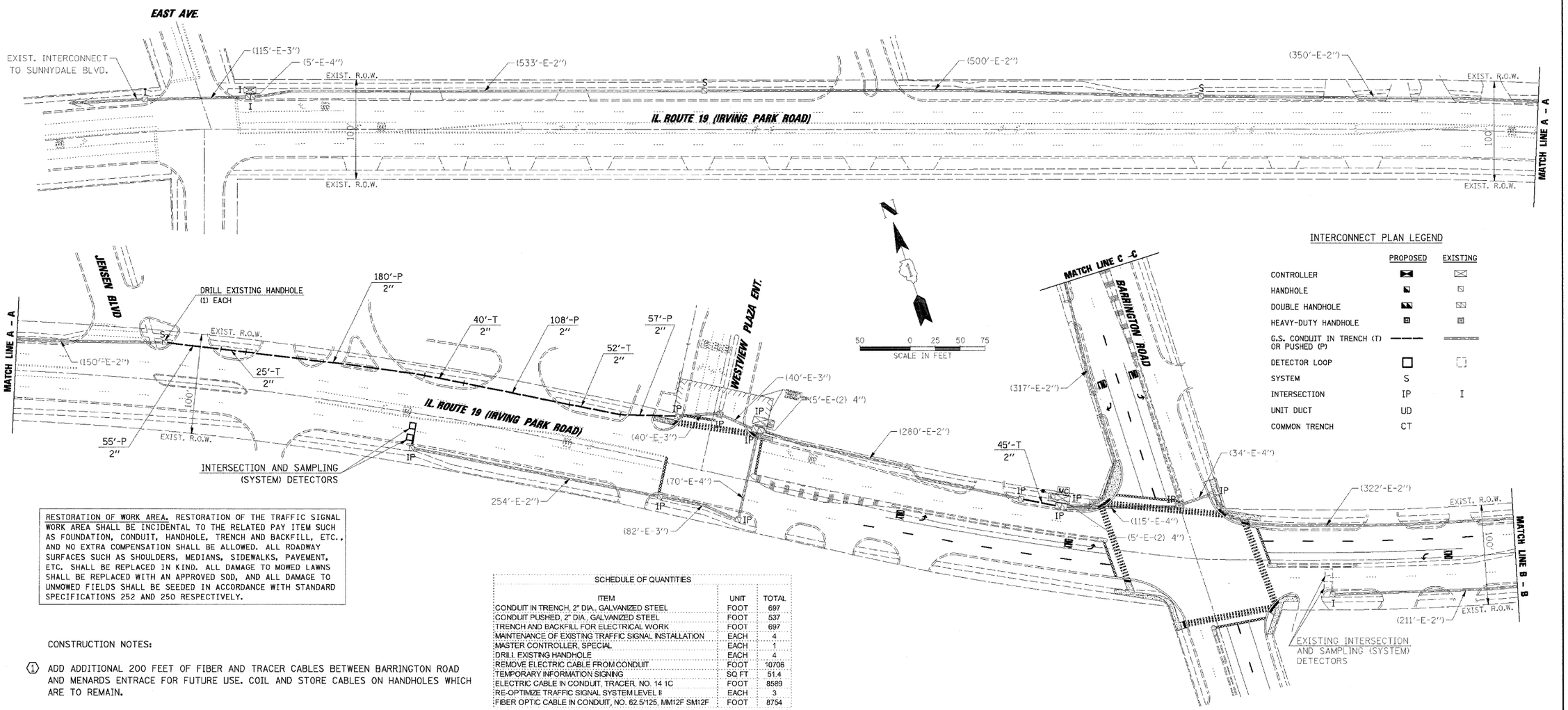
		DRAWN - FPB / FCP	REVISED -
	PLOT SCALE = 20'	CHECKED - MJT	REVISED -
	PLOT DATE = 3/18/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY INTERCONNECT SCHEMATIC
IL ROUTE 19 (IRVING PARK RD.) FROM BARTLETT ROAD TO MERCURY DRIVE
BARRINGTON ROAD FROM IL ROUTE 19 (IRVING PARK RD.) TO SCHAUMBURG ROAD

SCALE: N.T.S. | SHEET NO. OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1321	2009-034 TS	COOK	45	21
		CONTRACT NO. 60G39		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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, MEDIANS, 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 SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

SCHEDULE OF QUANTITIES

ITEM	UNIT	TOTAL
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	697
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	537
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	697
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	4
MASTER CONTROLLER, SPECIAL	EACH	1
DRILL EXISTING HANDHOLE	EACH	4
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	10706
TEMPORARY INFORMATION SIGNING	SQ FT	51.4
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	8589
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL II	EACH	3
FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	FOOT	8754

CONSTRUCTION NOTES:

① ADD ADDITIONAL 200 FEET OF FIBER AND TRACER CABLES BETWEEN BARRINGTON ROAD AND MENARDS ENTRACE FOR FUTURE USE. COIL AND STORE CABLES ON HANDHOLES WHICH ARE TO REMAIN.

CHRISTOPHER B. BURKE ENGINEERING LTD.
9575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

PLAN / PROFILE — SURVEYED, PLOTTED, LEVELS CHECKED, STRUCTURE NOTATNS CHKD — NOTE BOOK — NO. — DATE — BY

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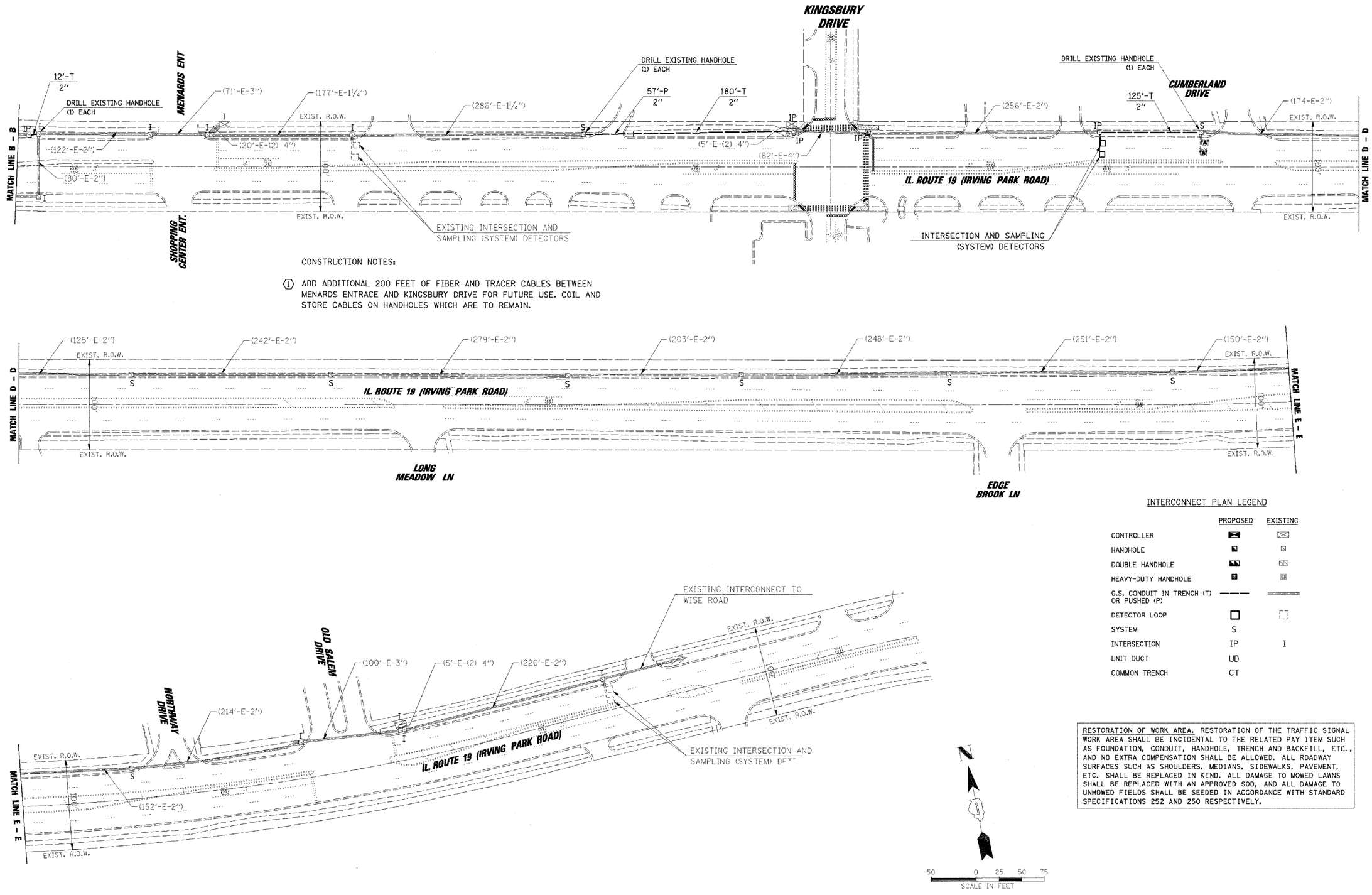
	PLOT DATE = 3/18/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN
IL. ROUTE 19 (IRVING PARK ROAD) FROM EAST AVENUE TO OLD SALEM DRIVE
BARRINGTON ROAD FROM IL ROUTE 19 (IRVING PARK ROAD) TO TOWER ROAD

SCALE: 1" = 50' | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1321	2009-034 TS	COOK	45	22
		CONTRACT NO. 60G39		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



CONSTRUCTION NOTES:

(1) ADD ADDITIONAL 200 FEET OF FIBER AND TRACER CABLES BETWEEN MENARDS ENTRACE AND KINGSBURY DRIVE FOR FUTURE USE. COIL AND STORE CABLES ON HANDHOLES WHICH ARE TO REMAIN.

INTERCONNECT PLAN LEGEND

	PROPOSED	EXISTING
CONTROLLER	▬	▭
HANDHOLE	◥	◹
DOUBLE HANDHOLE	◥◤	◹◺
HEAVY-DUTY HANDHOLE	▣	▣
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)	———	———
DETECTOR LOOP	□	□
SYSTEM	S	
INTERSECTION	IP	I
UNIT DUCT	UD	
COMMON TRENCH	CT	

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, MEDIANS, 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 SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

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PLAN — SURVEYED — DRAWN — ALIGNMENT CHECKED — GRADES CHECKED — DESIGN AGREEMENT CHECKED — CADD FILE NAME — NOTE BOOK — NO. — BY — DATE

PROFILE — SURVEYED — DRAWN — ALIGNMENT CHECKED — GRADES CHECKED — DESIGN AGREEMENT CHECKED — STRUCTURE NO(S)/RNS CHKD — NOTE BOOK — NO. — BY — DATE

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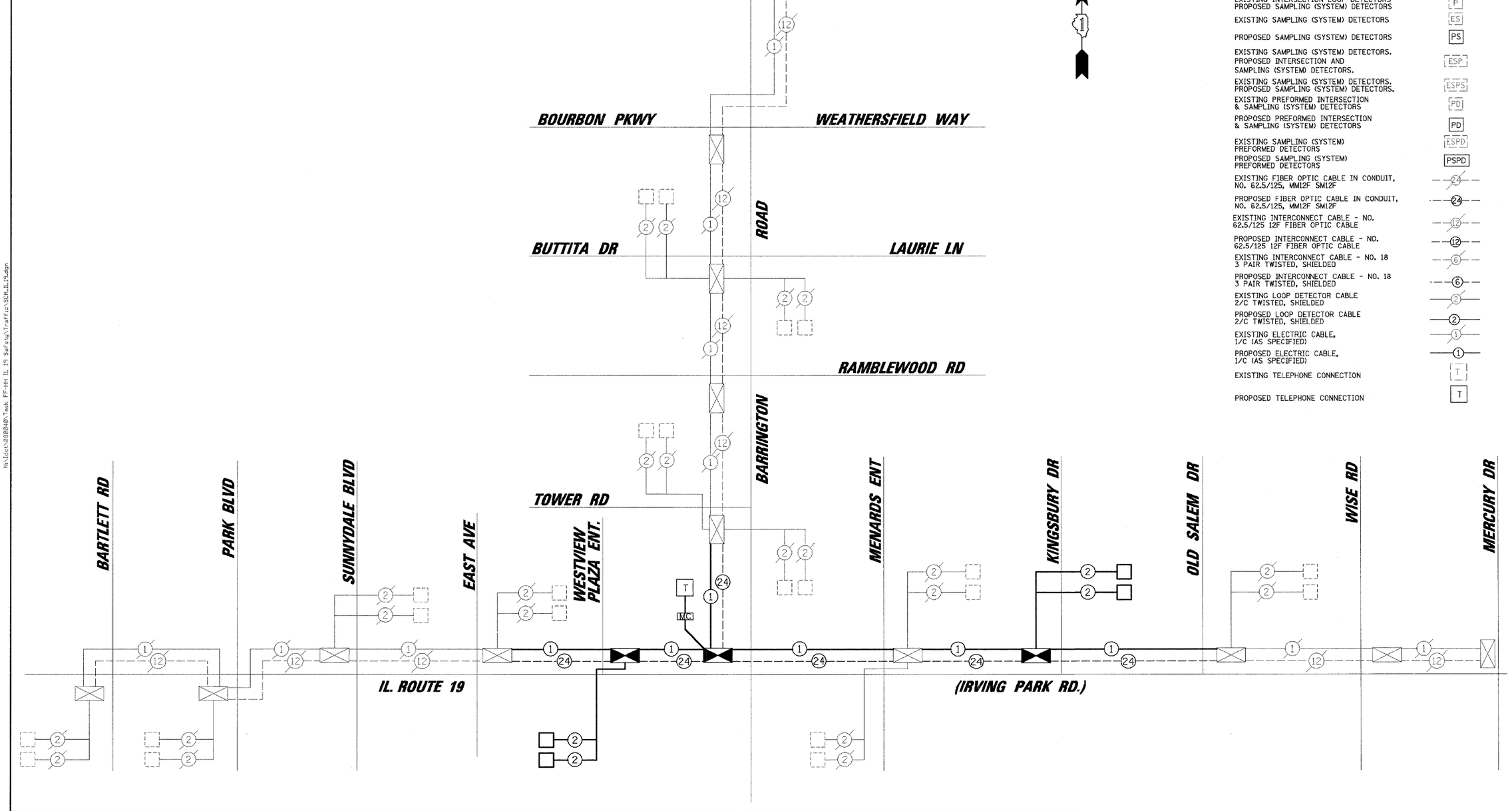
		DRAWN - FPB / FCP	REVISED -
	PLOT SCALE = 50'	CHECKED - MJT	REVISED -
	PLOT DATE = 3/18/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN
IL. ROUTE 19 (IRVING PARK ROAD) FROM EAST AVENUE TO OLD SALEM DRIVE
BARRINGTON ROAD FROM (IL. ROUTE 19 (IRVING PARK ROAD) TO TOWER ROAD

SCALE: 1" = 50' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1321	2009-034 TS	COOK	45	23
		CONTRACT NO. 60G39		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



INTERCONNECT SCHEMATIC LEGEND

- EXISTING INTERSECTION CONTROLLER
- PROPOSED INTERSECTION CONTROLLER
- EXISTING MASTER CONTROLLER — EMC
- PROPOSED MASTER CONTROLLER — MC
- MASTER MASTER CONTROLLER — MMC
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- PROPOSED SAMPLING (SYSTEM) DETECTORS — PS
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- EXISTING SAMPLING (SYSTEM) DETECTORS. PROPOSED SAMPLING (SYSTEM) DETECTORS. — ESPS
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- PROPOSED PREFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS — PD
- EXISTING SAMPLING (SYSTEM) PREFORMED DETECTORS — ESPD
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- EXISTING TELEPHONE CONNECTION — T
- PROPOSED TELEPHONE CONNECTION — T

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PROFILE — SURVEYED / PLOTTED / GRADES CHECKED / NOTE BOOK / NO. / STRUCTURE NO(S)/STRS CHKD / BY / DATE

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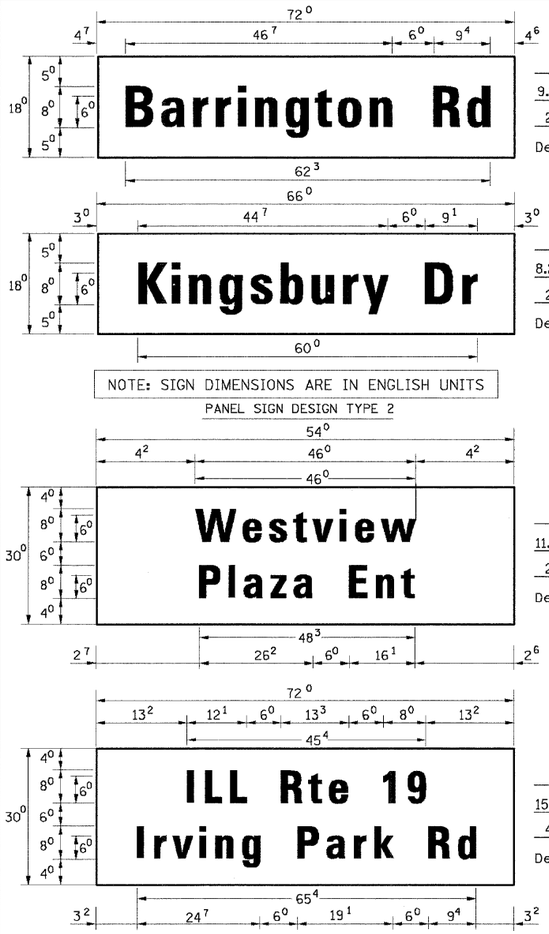
	PLOT DATE = 3/18/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT SCHEMATIC
IL ROUTE 19 (IRVING PARK RD.) FROM BARTLETT ROAD TO MERCURY DRIVE
BARRINGTON ROAD FROM IL ROUTE 19 (IRVING PARK RD.) TO SCHAUMBURG ROAD

SCALE: N.T.S. | SHEET NO. OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1321	2009-034 TS	COOK	45	24
		CONTRACT NO. 60G39		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



___ Sq. M. each
9.0 Sq. Ft. each
2 Required
Design Series C

___ Sq. M. each
8.25 Sq. Ft. each
2 Required
Design Series C

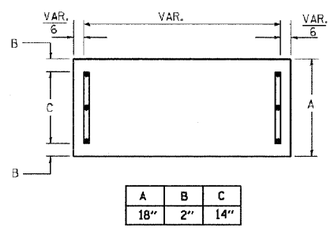
NOTE: SIGN DIMENSIONS ARE IN ENGLISH UNITS

PANEL SIGN DESIGN TYPE 2

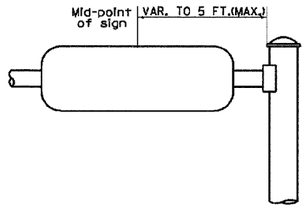
___ Sq. M. each
11.25 Sq. Ft. each
2 Required
Design Series D

___ Sq. M. each
15.0 Sq. Ft. each
4 Required
Design Series C

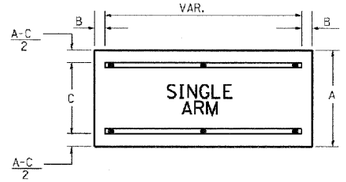
SUPPORTING CHANNELS



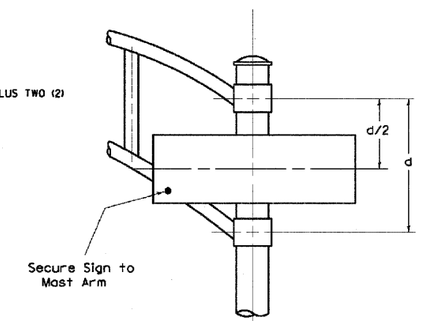
A	B	C
18"	2"	14"



SUPPORTING CHANNELS



A	B	C
18"	2"	12"
30"	2"	22"



DUAL ARM

SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM
Shall be used. See Note *5.

GENERAL NOTES

1. WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 834001, 834006 AND 834011, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" x 6'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS FOR 80 M.P.H. WIND VELOCITY.
2. ALL SIGNS SHALL HAVE A WHITE REFLECTORIZED LEGEND AND BORDER ON A GREEN REFLECTORIZED BACKGROUND, TYPE A SHEETING.
3. THE SIGN LENGTH SHOULD BE INCREASED IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHOULD NOT EXCEED 6'-0".
4. ALL BORDERS SHALL BE ¾" WIDE AND CORNER RADIUS SHALL BE 2-¼".
5. SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS. LOCAL SUPPLIERS OF THE SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM ARE:
   - * A.K.T. CORPORATION, SCHAUMBURG, IL
   - * AMERICAN FABRICATION CO., CHICAGO HEIGHTS, IL
   - * TUCKER COMPANY, INC., WAUWATOSA, WI
   - * WESTERN TRAFFIC CONTROL INC., CICERO, IL

PARTS LISTING

SIGN CHANNEL	PART #HPN053 (MED. CHANNEL)
SIGN SCREWS	¼" x 14 x 1" H.W.H. #3 SELF TAPPING WITH NEOPRENE WASHER
BRACKETS	PART #HPN034 (UNIVERSAL) CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING

OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BRACKET OF THE ABOVE PRODUCT.

Upper Case to Lower Case
Spacing Chart 8-6 Inch Series "C & D"

FIRST LETTER \ SECOND LETTER	a c d e g o q	b h i k l m n p r u	f w	j	s t	v y	x	z
SERIES	C D	C D	C D	C D	C D	C D	C D	C D
A W X	1^{2} 1^{4}	1^{4} 1^{5}	1^{2} 1^{4}	0^{6} 1^{0}	1^{1} 1^{4}	0^{6} 1^{0}	1^{1} 1^{2}	1^{2} 1^{4}
B	1^{4} 1^{5}	2^{0} 2^{1}	1^{4} 1^{5}	1^{1} 1^{2}	1^{4} 1^{5}	1^{2} 1^{4}	1^{2} 1^{4}	1^{6} 1^{7}
C E G	1^{4} 1^{5}	2^{0} 2^{1}	1^{2} 1^{4}	0^{6} 1^{0}	1^{2} 1^{4}	1^{2} 1^{4}	1^{4} 1^{5}	1^{4} 1^{5}
D O Q R	1^{4} 1^{5}	2^{0} 2^{1}	1^{4} 1^{5}	0^{6} 1^{0}	1^{2} 1^{4}	1^{2} 1^{4}	1^{4} 1^{5}	1^{4} 1^{5}
F	0^{5} 0^{6}	1^{4} 1^{5}	0^{6} 1^{0}	0^{5} 0^{6}	0^{6} 1^{0}	0^{6} 1^{0}	0^{6} 1^{0}	1^{1} 1^{2}
H I M N	2^{0} 2^{1}	2^{2} 2^{4}	2^{0} 2^{1}	1^{4} 1^{5}	1^{6} 1^{7}	1^{6} 1^{7}	2^{0} 2^{1}	2^{0} 2^{1}
J U	2^{0} 2^{1}	2^{0} 2^{1}	1^{6} 1^{7}	1^{4} 1^{5}	1^{6} 1^{7}	1^{6} 1^{7}	1^{6} 1^{7}	2^{0} 2^{1}
K L	1^{1} 1^{2}	1^{6} 1^{7}	1^{1} 1^{2}	0^{5} 0^{6}	1^{1} 1^{2}	1^{1} 1^{2}	1^{1} 1^{2}	1^{2} 1^{4}
P	1^{2} 1^{4}	1^{4} 1^{5}	1^{2} 1^{4}	0^{5} 0^{6}	1^{1} 1^{2}	1^{1} 1^{2}	1^{2} 1^{4}	1^{2} 1^{4}
S	1^{2} 1^{4}	1^{6} 1^{7}	1^{2} 1^{4}	0^{6} 1^{0}	1^{2} 1^{4}	1^{2} 1^{4}	1^{2} 1^{4}	1^{2} 1^{4}
T	1^{1} 1^{2}	1^{6} 1^{7}	0^{6} 1^{0}	0^{6} 1^{0}	1^{1} 1^{2}	1^{1} 1^{2}	1^{1} 1^{2}	1^{2} 1^{4}
V	0^{6} 1^{0}	1^{4} 1^{5}	1^{1} 1^{2}	0^{6} 1^{0}	1^{2} 1^{4}	1^{2} 1^{4}	1^{2} 1^{4}	1^{2} 1^{4}
Y	0^{5} 0^{6}	1^{4} 1^{5}	0^{6} 1^{0}	0^{5} 0^{6}	0^{5} 0^{7}	0^{5} 0^{6}	0^{6} 1^{0}	1^{1} 1^{2}
Z	1^{6} 1^{7}	2^{2} 2^{4}	1^{6} 1^{7}	1^{2} 1^{4}	1^{6} 1^{7}	1^{6} 1^{7}	1^{6} 1^{7}	2^{0} 2^{1}

Lower Case to Lower Case
Spacing Chart 6 Inch Series "C & D"

FIRST LETTER \ SECOND LETTER	a c d e g o q	b h i k l m n p r u	f w	j	s t	v y	x	z
SERIES	C D	C D	C D	C D	C D	C D	C D	C D
a d h g l j l m n q u	1^{6} 1^{7}	2^{2} 2^{4}	1^{6} 1^{7}	1^{2} 1^{4}	1^{4} 1^{5}	1^{4} 1^{5}	1^{6} 1^{7}	1^{6} 1^{7}
b f k o p s	1^{2} 1^{4}	1^{6} 1^{7}	1^{1} 1^{2}	0^{5} 0^{6}	1^{1} 1^{2}	1^{1} 1^{2}	1^{2} 1^{4}	1^{2} 1^{4}
c e	1^{2} 1^{4}	1^{6} 1^{7}	1^{2} 1^{4}	0^{6} 1^{0}	1^{2} 1^{4}	1^{2} 1^{4}	1^{2} 1^{4}	1^{2} 1^{4}
r	0^{6} 1^{0}	1^{2} 1^{4}	0^{6} 1^{0}	0^{3} 0^{3}	0^{5} 0^{6}	0^{5} 0^{6}	0^{6} 1^{0}	0^{6} 1^{0}
t z	1^{2} 1^{4}	1^{6} 1^{7}	1^{2} 1^{4}	0^{6} 1^{0}	1^{1} 1^{2}	1^{1} 1^{2}	1^{2} 1^{4}	1^{2} 1^{4}
v y	1^{1} 1^{2}	1^{4} 1^{5}	1^{1} 1^{2}	0^{5} 0^{6}	0^{6} 1^{0}	0^{6} 1^{0}	1^{1} 1^{2}	1^{1} 1^{2}
w	1^{1} 1^{2}	1^{4} 1^{5}	1^{1} 1^{2}	0^{5} 0^{6}	1^{1} 1^{2}	1^{1} 1^{2}	1^{1} 1^{2}	1^{2} 1^{4}
x	1^{2} 1^{4}	1^{6} 1^{7}	1^{1} 1^{2}	0^{5} 0^{6}	1^{1} 1^{2}	1^{1} 1^{2}	1^{1} 1^{2}	1^{2} 1^{4}

Number to Number
Spacing Chart 8 Inch Series "C & D"

FIRST NUMBER \ SECOND NUMBER	0	1	2	3	4	5	6	7	8	9
SERIES	C D	C D	C D	C D	C D	C D	C D	C D	C D	C D
0 9	1^{6} 1^{7}	1^{6} 1^{7}	1^{4} 1^{5}	1^{2} 1^{4}	1^{4} 1^{5}	1^{4} 1^{5}	1^{6} 1^{7}	1^{2} 1^{4}	1^{6} 1^{7}	1^{6} 1^{7}
1	2^{0} 2^{1}	2^{0} 2^{1}	2^{0} 2^{1}	1^{6} 1^{7}	1^{4} 1^{5}	2^{0} 2^{1}	2^{0} 2^{1}	1^{4} 1^{5}	2^{0} 2^{1}	2^{0} 2^{1}
2 3 4	1^{4} 1^{5}	1^{4} 1^{5}	1^{4} 1^{5}	1^{2} 1^{4}	1^{2} 1^{4}	1^{4} 1^{5}	1^{4} 1^{5}	1^{1} 1^{2}	1^{6} 1^{7}	1^{4} 1^{5}
5	1^{4} 1^{5}	1^{4} 1^{5}	1^{4} 1^{5}	1^{1} 1^{2}	1^{1} 1^{2}	1^{4} 1^{5}	1^{4} 1^{5}	1^{1} 1^{2}	1^{4} 1^{5}	1^{4} 1^{5}
6	1^{6} 1^{7}	1^{4} 1^{5}	1^{4} 1^{5}	1^{2} 1^{5}	1^{2} 1^{4}	1^{4} 1^{5}	1^{4} 1^{5}	1^{1} 1^{2}	1^{4} 1^{5}	1^{4} 1^{5}
7	1^{2} 1^{4}	1^{2} 1^{4}	1^{4} 1^{5}	1^{2} 1^{5}	0^{5} 0^{6}	1^{2} 1^{4}	1^{4} 1^{5}	1^{1} 1^{2}	1^{4} 1^{5}	1^{2} 1^{4}
8	1^{6} 1^{7}	1^{6} 1^{7}	1^{4} 1^{5}	1^{2} 1^{5}	1^{2} 1^{4}	1^{4} 1^{5}	1^{6} 1^{7}	1^{2} 1^{4}	1^{6} 1^{7}	1^{4} 1^{5}

EXAMPLE. 2^{3} DENOTES $2\frac{3}{8}$"

UPPER AND LOWER CASE LETTER WIDTHS

LETTERS	6 INCH UPPER CASE LETTERS SERIES C	6 INCH UPPER CASE LETTERS SERIES D	8 INCH UPPER CASE LETTERS SERIES C	8 INCH UPPER CASE LETTERS SERIES D	LETTERS	6 INCH LOWER CASE LETTERS SERIES C	6 INCH LOWER CASE LETTERS SERIES D
A	3^{6}	5^{0}	5^{0}	6^{5}	a	3^{5}	4^{2}
B	3^{2}	4^{0}	4^{3}	5^{3}	b	3^{5}	4^{2}
C	3^{2}	4^{0}	4^{3}	5^{3}	c	3^{5}	4^{1}
D	3^{2}	4^{0}	4^{3}	5^{3}	d	3^{5}	4^{2}
E	3^{0}	3^{5}	4^{0}	4^{7}	e	3^{5}	4^{2}
F	3^{0}	3^{5}	4^{0}	4^{7}	f	2^{3}	2^{6}
G	3^{2}	4^{0}	4^{3}	5^{3}	g	3^{5}	4^{2}
H	3^{2}	4^{0}	4^{3}	5^{3}	h	3^{5}	4^{2}
I	0^{7}	0^{7}	1^{1}	1^{2}	i	1^{1}	1^{1}
J	3^{0}	3^{6}	4^{0}	5^{0}	j	2^{0}	2^{2}
K	3^{2}	4^{1}	4^{3}	5^{4}	k	3^{5}	4^{2}
L	3^{0}	3^{5}	4^{0}	4^{7}	l	1^{1}	1^{1}
M	3^{7}	4^{5}	5^{1}	6^{1}	m	6^{0}	7^{0}
N	3^{2}	4^{0}	4^{3}	5^{3}	n	3^{5}	4^{2}
O	3^{4}	4^{2}	4^{5}	5^{5}	o	3^{6}	4^{3}
P	3^{2}	4^{0}	4^{3}	5^{3}	p	3^{5}	4^{2}
Q	3^{4}	4^{2}	4^{5}	5^{5}	q	3^{5}	4^{2}
R	3^{2}	4^{0}	4^{3}	5^{3}	r	2^{6}	3^{2}
S	3^{2}	4^{0}	4^{3}	5^{3}	s	3^{6}	4^{2}
T	3^{0}	3^{5}	4^{0}	4^{7}	t	2^{7}	3^{2}
U	3^{2}	4^{0}	4^{3}	5^{3}	u	3^{5}	4^{2}
V	3^{5}	4^{1}	4^{7}	6^{0}	v	4^{2}	4^{7}
W	4^{1}	5^{2}	6^{0}	7^{0}	w	5^{5}	6^{4}
X	3^{4}	4^{0}	4^{5}	5^{3}	x	4^{1}	5^{1}
Y	3^{6}	5^{0}	5^{0}	6^{6}	y	4^{6}	5^{3}
Z	3^{2}	4^{0}	4^{3}	5^{3}	z	3^{6}	4^{3}

NUMBER	6 INCH SERIES C	6 INCH SERIES D	8 INCH SERIES C	8 INCH SERIES D
1	1^{2}	1^{4}	1^{5}	2^{0}
2	3^{2}	4^{0}	4^{3}	5^{3}
3	3^{2}	4^{0}	4^{3}	5^{3}
4	3^{5}	4^{3}	4^{7}	5^{7}
5	3^{2}	4^{0}	4^{3}	5^{3}
6	3^{2}	4^{0}	4^{3}	5^{3}
7	3^{2}	4^{0}	4^{3}	5^{3}
8	3^{2}	4^{0}	4^{3}	5^{3}
9	3^{2}	4^{0}	4^{3}	5^{3}
0	3^{4}	4^{2}	4^{5}	5^{5}

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		DRAWN - T.J.R.	REVISED -	06-98
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	PLOT DATE = 1/4/2008	DATE - 02-79	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
MAST ARM MOUNTED STREET NAME SIGNS
SCALE: | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1321	2009-034 TS	COOK	45	25
	TS-02	CONTRACT NO. 60G39		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

LOOP DETECTOR NOTES

1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE UNIT DUCT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). UNIT DUCT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.

2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.

3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.

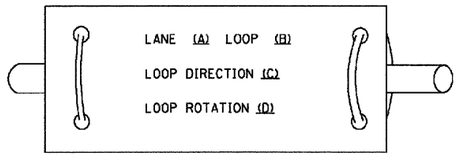
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.

5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.

6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.

7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

LOOP LEAD-IN CABLE TAG

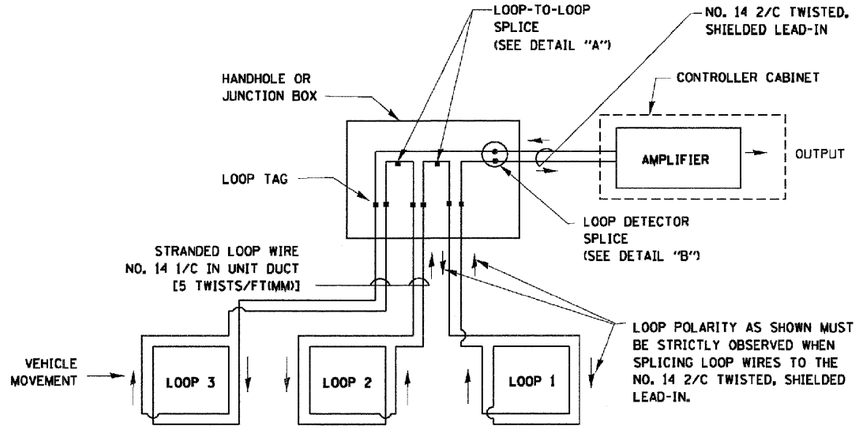


A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY

B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.

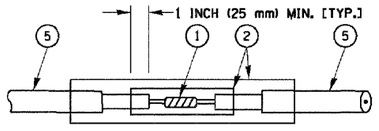
C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".

D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

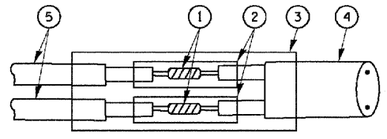


DETECTOR LOOP WIRING SCHEMATIC

- LOOPS SHALL BE SPLICED IN SERIES.
- SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm). IF IN CONCRETE, THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.



DETAIL "A"
LOOP-TO-LOOP SPLICE



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

LOOP DETECTOR SPLICE

(1) WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH.

(2) WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.

(3) WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGHT 6" (150 mm), UNDERWATER GRADE.

(4) NO. 14 2/C TWISTED, SHIELDED CABLE.

(5) LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.

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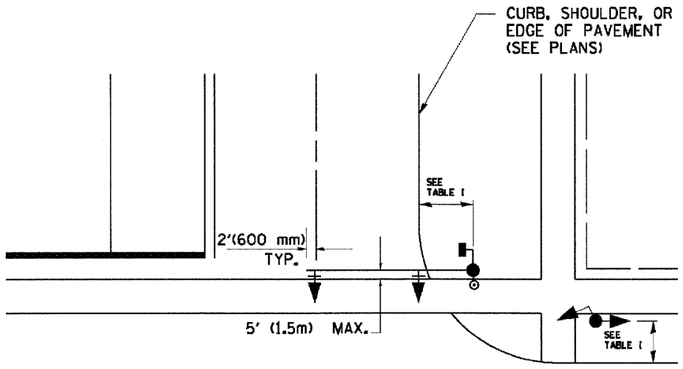
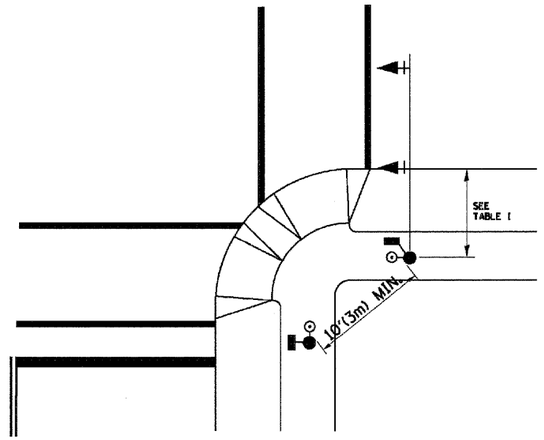
		DRAWN - R.W.P.	REVISED - BUR. TRAFFIC 01-01-02					1321	2009-034 TS	COOK	45	26
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - D.A.Z.	REVISED -						TS-05	CONTRACT NO. 60G39		
	PLOT DATE = 1/4/2008	DATE - 05-30-00	REVISED -		SCALE: NONE	SHEET NO. 1 OF 4 SHEETS	STA. TO STA.		FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	

TRAFFIC SIGNAL MAST ARM AND POST

MAST ARM MOUNTED SIGNAL IN PROPOSED & FUTURE SIDEWALK AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNAL AND PUSHBUTTON DETECTOR



PEDESTRIAN SIGNAL PUSHBUTTON



RECOMMENDED PUSHBUTTON LOCATIONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHALL BE IN ACCORDANCE WITH THE CURRENT MUTCD (SEE NOTE 1). TO MEET MUTCD REQUIREMENTS, PEDESTRIAN SIGNAL PUSHBUTTONS MAY HAVE TO BE MOUNTED ON A SEPARATE POST.

NOTES:

1. AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS WITH PEDESTRIAN ACTUATION. EACH PUSHBUTTON SHALL ACTIVATE BOTH THE WALK INTERVAL AND THE ACCESSIBLE PEDESTRIAN SIGNALS.

   AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS, PUSHBUTTONS SHOULD CLEARLY INDICATE WHICH CROSSWALK SIGNAL IS ACTUATED BY EACH PUSHBUTTON. PUSHBUTTONS AND TACTILE ARROWS SHOULD HAVE HIGH VISUAL CONTRAST (SEE THE DEPARTMENT OF JUSTICE'S AMERICANS WITH DISABILITIES ACT STANDARDS FOR ACCESSIBLE DESIGN, 1991). TACTILE ARROWS SHOULD POINT IN THE SAME DIRECTION AS THE ASSOCIATED CROSSWALK. AT CORNERS OF SIGNALIZED LOCATIONS WITH ACCESSIBLE PEDESTRIAN SIGNALS WHERE PEDESTRIAN PUSHBUTTONS ARE PROVIDED, THE PUSHBUTTONS SHOULD BE SEPARATED BY THE DISTANCE OF AT LEAST 10 FT (3m). THIS ENABLES PEDESTRIANS WHO HAVE VISUAL DISABILITIES TO DISTINGUISH AND LOCATE THE APPROPRIATE PUSHBUTTON.

   PUSHBUTTONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHOULD BE LOCATED AS FOLLOWS:

   A: ADJACENT TO A LEVEL ALL-WEATHER SURFACE TO PROVIDE ACCESS FROM A WHEELCHAIR, AND WHERE THERE IS AN ALL WEATHER SURFACE, WHEELCHAIR ACCESSIBLE ROUTE TO THE RAMP.

   B: WITHIN 5 FT (1.5m) OF THE CROSSWALK EXTENDED.

   C: WITHIN 10 FT (3m) OF THE EDGE OF CURB, SHOULDER, OR PAVEMENT.

   D: PARALLEL TO THE CROSSWALK TO BE USED (SEE MUTCD FIGURE 4E-2).

   E: NORMAL PEDESTRIAN PUSHBUTTON MOUNTING HEIGHT SHOULD BE 3.5 FT (1.05m) ABOVE ADJACENT SIDEWALK

2. PEDESTRIAN SIGNAL FACES SHALL BE MOUNTED WITH THE BOTTOM OF THE HOUSING NOT LESS THAN 8 FT (2.4m) NOR MORE THAN 10 FT (3.0m) ABOVE THE SIDEWALK LEVEL AND SO THERE IS A PEDESTRIAN INDICATION IN THE LINE OF PEDESTRIANS' VISION WHICH PERTAINS TO THE CROSSWALK BEING USED.

3. THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, NOT MOUNTED OVER A ROADWAY, SHALL BE AT LEAST 10 FT (3.0m) BUT NOT MORE THAN 15 FT (4.5m) ABOVE THE SIDEWALK OR, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE HIGHWAY IF NO SIDEWALKS EXIST.

4. THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, MOUNTED OVER A ROADWAY, SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001 AND 877006. (16 FT (5m) MIN., 18 FT (5.5m) MAX., FROM HIGHEST POINT OF PAVEMENT)

PEDESTRIAN SIGNAL POST

PEDESTRIAN SIGNAL HEAD AND PEDESTRIAN PUSHBUTTON DETECTOR LOCATION

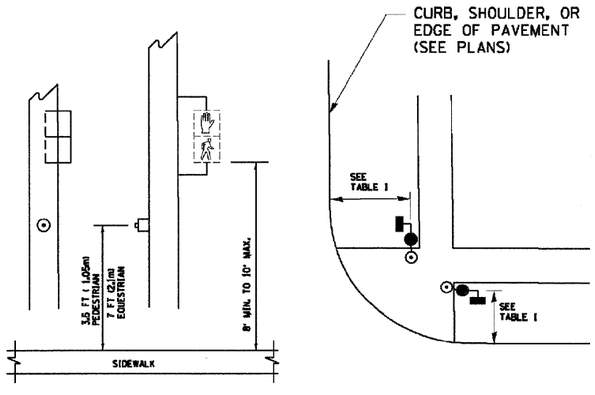


TABLE I

TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MIN. DIST. FROM BACK OF CURB)	SHOULDER/NON-CURBED AREA (MIN. DIST. FROM EDGE OF PAVEMENT)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
PEDESTRIAN PUSHBUTTON	SEE NOTE 1	SEE NOTE 1

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	PLOT SCALE = 50.0000 ' / IN.	CHECKED - D.A.Z.	REVISED -
	PLOT DATE = 1/4/2008	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET NO. 2 OF 4 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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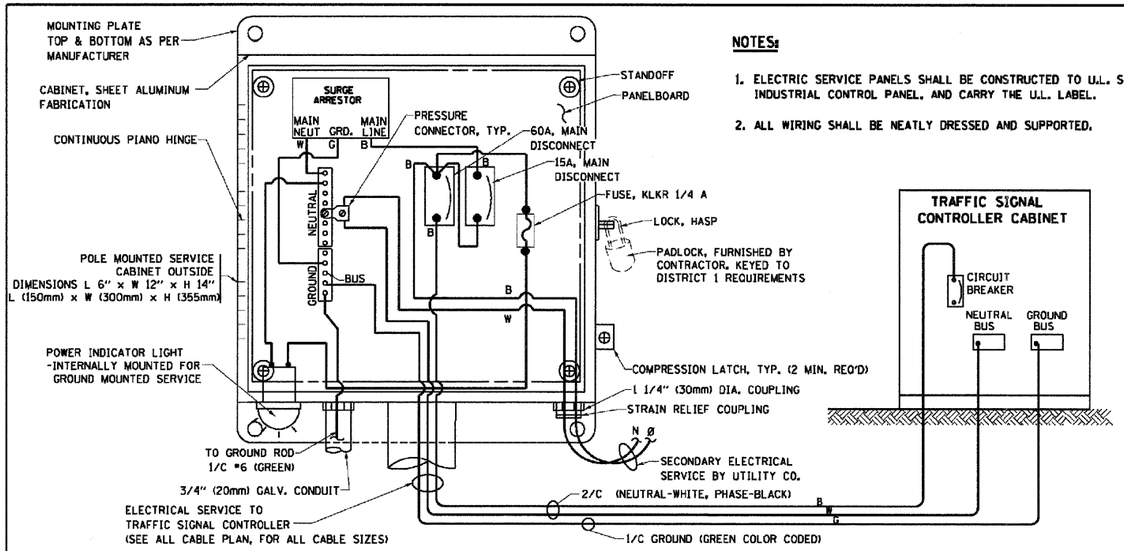
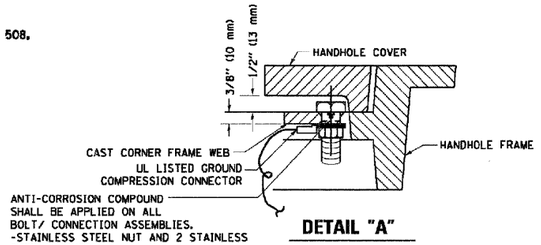
	TS-05	CONTRACT NO. 60039		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



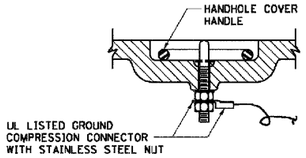
NOTES:

1. ELECTRIC SERVICE PANELS SHALL BE CONSTRUCTED TO U.L. STD 508, INDUSTRIAL CONTROL PANEL, AND CARRY THE U.L. LABEL.
2. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.

ELECTRICAL SERVICE – PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)



DETAIL "A"



DETAIL "B"

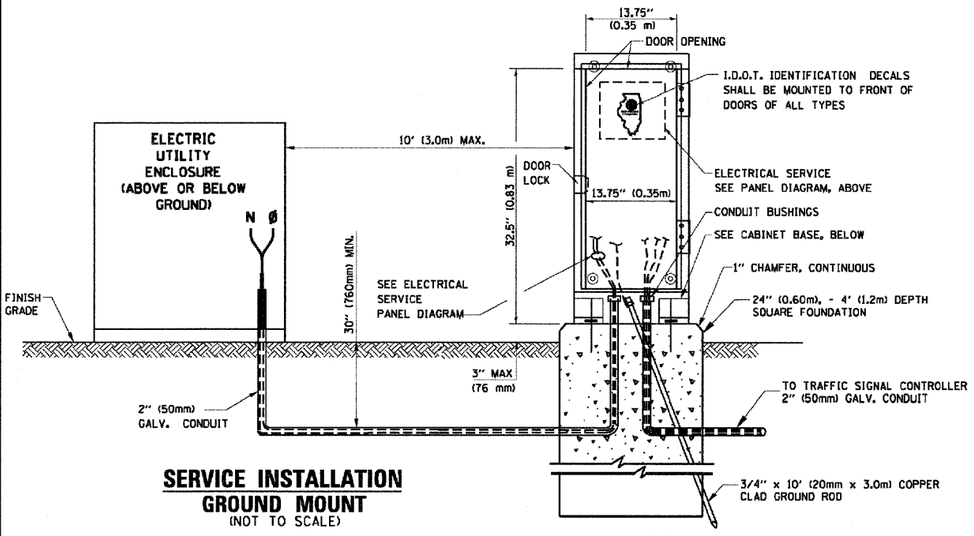
NOTES:

GROUNDING SYSTEM

1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC.). GROUND ROD SHALL BE 3/4" DIA. x 10'-0" (20mm x 3.0m) LONG, COPPER CLAD. ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.
2. THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION, AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
3. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
4. THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.

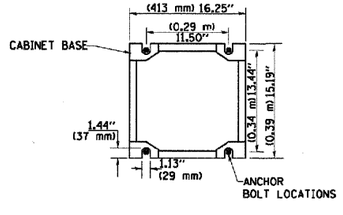
SERVICE INSTALLATION POLE MOUNT (SHOWN)

(NOT TO SCALE)



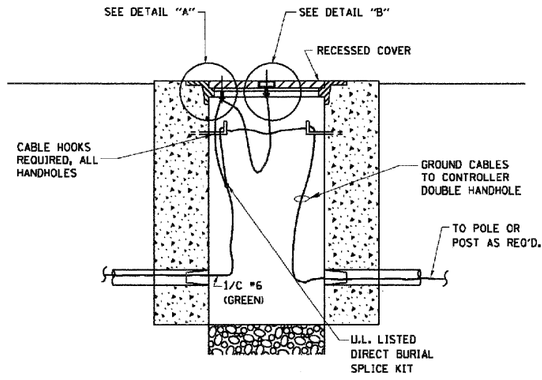
SERVICE INSTALLATION GROUND MOUNT

(NOT TO SCALE)



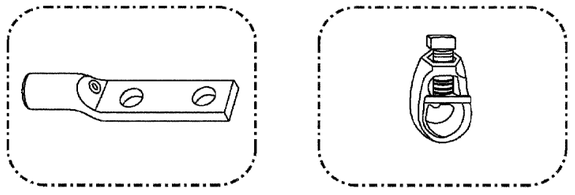
CABINET – BASE BOLT PATTERN

(NOT TO SCALE)



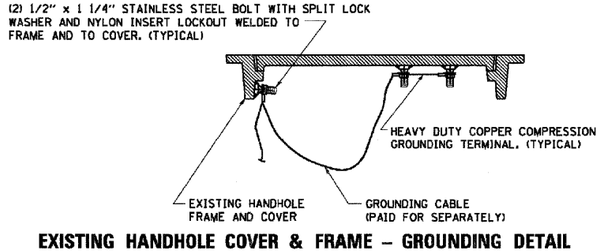
HANDHOLE COVER & FRAME – GROUNDING DETAIL

(NOT TO SCALE)



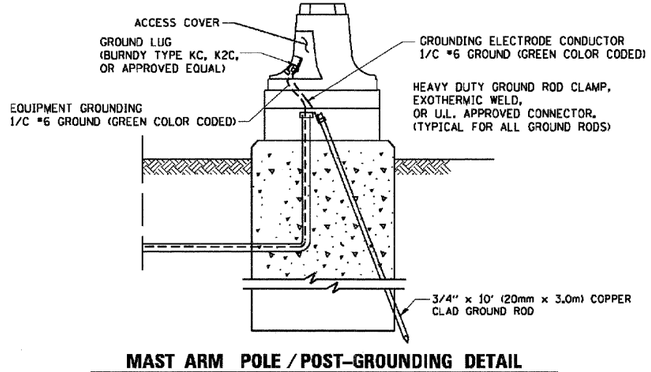
NOTES:

- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
- GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES
  6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES
  13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES.
  5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



EXISTING HANDHOLE COVER & FRAME – GROUNDING DETAIL

(NOT TO SCALE)



MAST ARM POLE / POST–GROUNDING DETAIL

(NOT TO SCALE)

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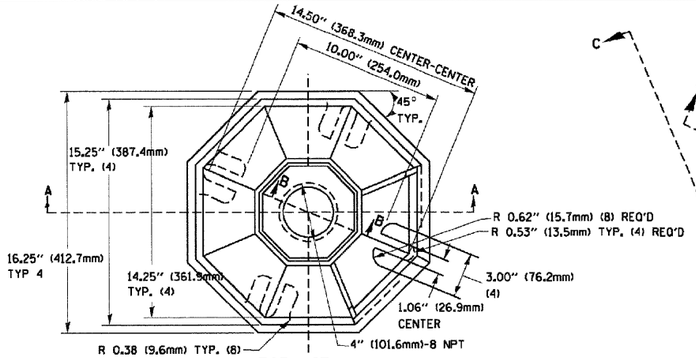
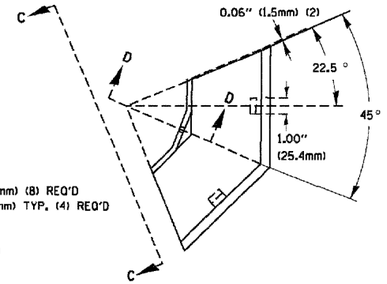
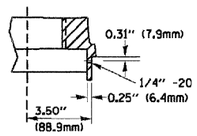
		DRAWN - R.W.P.	REVISED - BUR. TRAFFIC 01-01-02					1321	2009-034 TS	COOK	45	28
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - D.A.Z.	REVISED -						TS-05	CONTRACT NO. 60G39		
	PLOT DATE = 1/4/2008	DATE - 05-30-00	REVISED -		SCALE: NONE	SHEET NO. 3 OF 4 SHEETS	STA. TO STA.		FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	

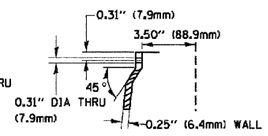


TOP VIEW





SECTION B-B



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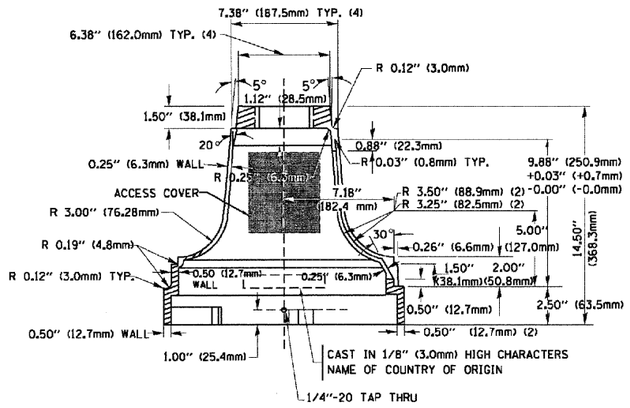
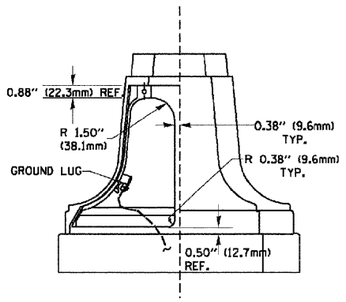
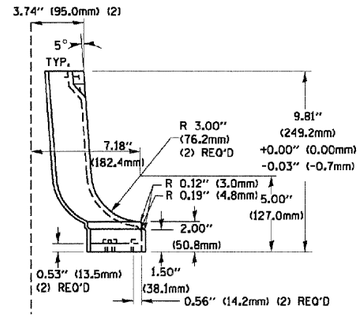


SECTION A-A

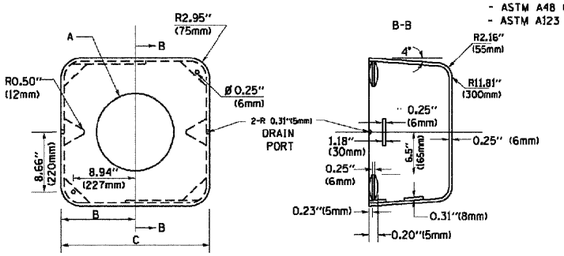


VIEW C-C



TRAFFIC SIGNAL POST - MOUNTING BASE - TYPE A

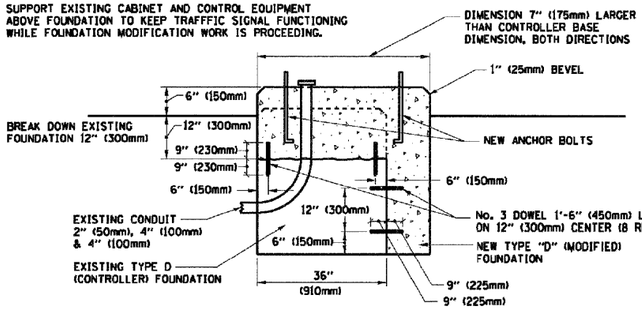
MATERIAL:
- ASTM A48 CLASS 30 GREY IRON
- ASTM A123 HOT DIPPED GALVANIZED



TYPE	A	B	C	HEIGHT	WEIGHT
I	Ø 10.125"(257mm)	9.5"(241mm)	19"(483mm)	12" (300mm)	24kg
II	Ø 11.125"(283mm)	10.75"(273mm)	21.5"(546mm)	12" (300mm)	26kg

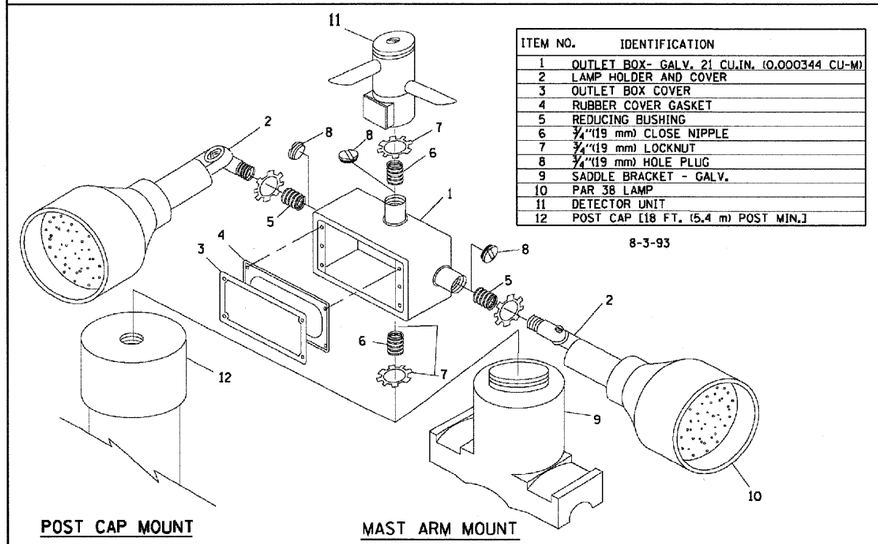
SHROUD DETAIL

NOTE:
SUPPORT EXISTING CABINET AND CONTROL EQUIPMENT ABOVE FOUNDATION TO KEEP TRAFFFIC SIGNAL FUNCTIONING WHILE FOUNDATION MODIFICATION WORK IS PROCEEDING.



MODIFY EXISTING TYPE "D" FOUNDATION

(NOT TO SCALE)



ITEM NO.	IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU.IN. (0.000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	¾"(19 mm) CLOSE NIPPLE
7	¾"(19 mm) LOCKNUT
8	¾"(19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	PAR 38 LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

8-3-93

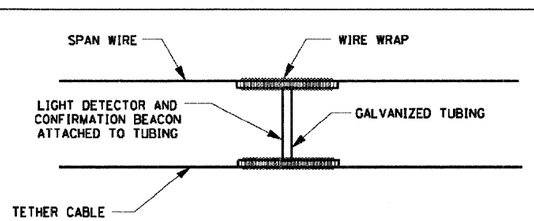
POST CAP MOUNT

MAST ARM MOUNT

EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL

NOTES:

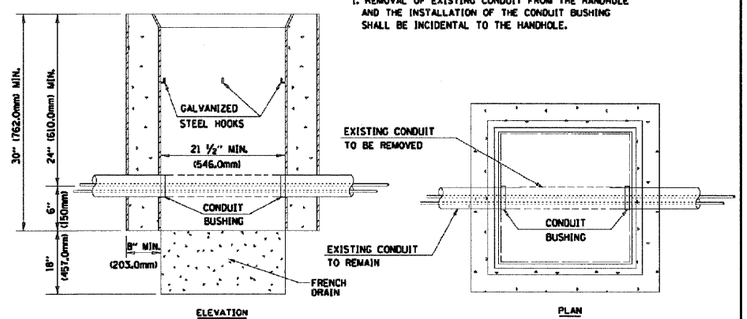
1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS *2 AND *11 SHALL BE ALUMINUM OR GALVANIZED
2. ITEM *1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT
   ITEM *2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT
   ITEM *9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
3. WHEN POST MOUNTING IS SPECIFIED, ITEM *9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A ¾"(19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.



LIGHT DETECTOR AND CONFIRMATION BEACON MOUNTING FOR TEMPORARY TRAFFIC SIGNALS

(NOT TO SCALE)

NOTES:
1. REMOVAL OF EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHING SHALL BE INCIDENTAL TO THE HANDHOLE.



DETAIL
HANDHOLE TO INTERCEPT EXISTING CONDUIT
N.T.S.

FILE NAME = W:\dist\std\22x34\ts05.dgn	USER NAME = gegliano6t	DESIGNED - D.A.D.	REVISED - BUR.TRAFFIC 03-15-01	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS
		DRAWN - R.W.P.	REVISED - BUR.TRAFFIC 11-12-01		
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - D.A.Z.	REVISED - BUR.TRAFFIC 01-01-02		
	PLOT DATE = 1/4/2008	DATE - 05-30-00	REVISED -		SCALE: NONE | SHEET NO. 4 OF 4 SHEETS | STA. | TO STA.

F.A.I.L. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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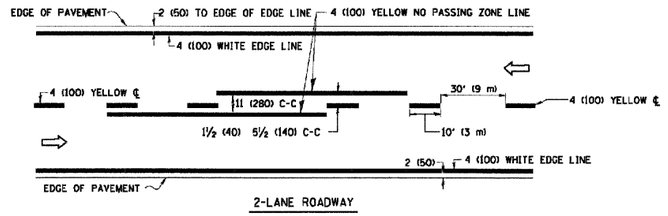
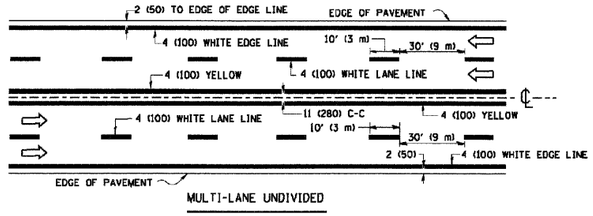
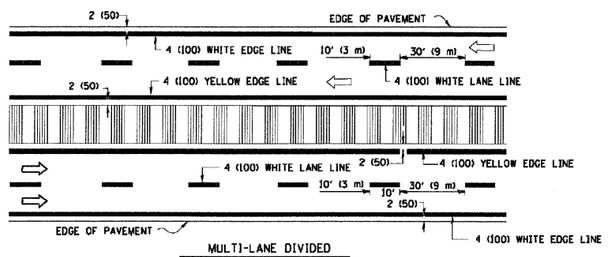
	TS-05	CONTRACT NO. 60G39		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



2-LANE ROADWAY



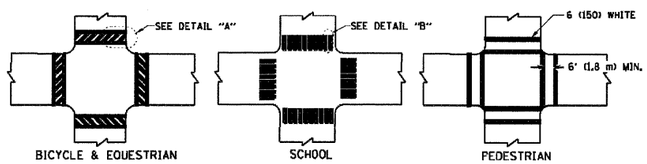
MULTI-LANE UNDIVIDED

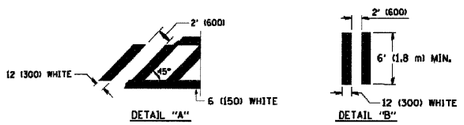


MULTI-LANE DIVIDED
WITH MOUNTABLE MEDIAN

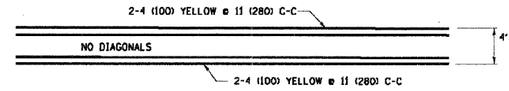
NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

TYPICAL LANE AND EDGE LINE MARKING

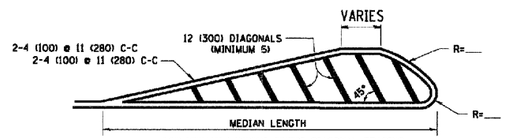




TYPICAL CROSSWALK MARKING



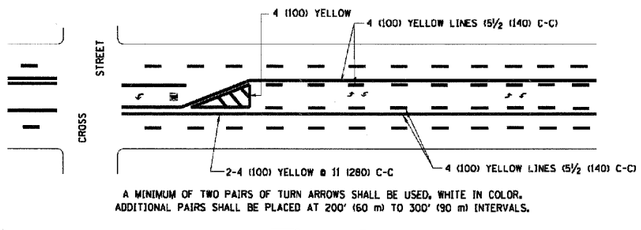
4' (1.2 m) WIDE MEDIANS ONLY



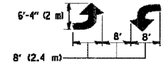
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h))
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE

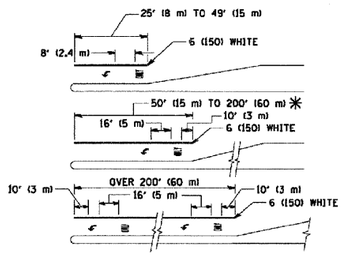


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

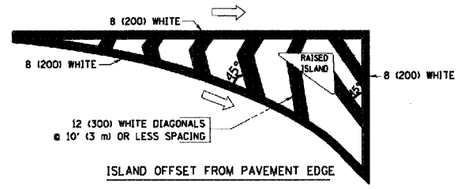


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
↰ AREA = 15.6 SQ. FT. (1.5 m^2) ONLY AREA = 20.8 SQ. FT. (1.9 m^2)

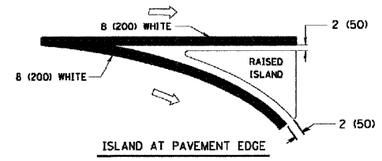
✳ TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



ISLAND OFFSET FROM PAVEMENT EDGE



ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVEDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW, EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS 8' (2.4m)	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m^2) EACH "X"=54.0 SQ. FT. (5.0 m^2)
SHOULDER DIAGONALS	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

All dimensions are in inches (millimeters) unless otherwise shown.

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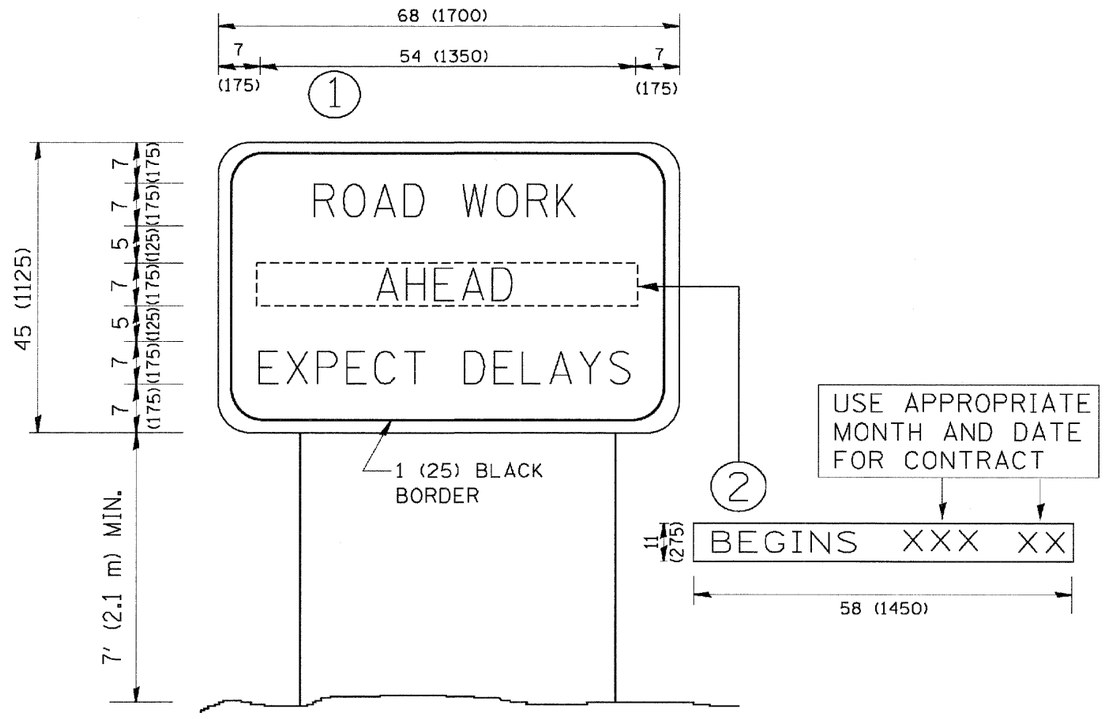
		DRAWN -	REVISED -A. HOUSEH 10-09-96
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED -A. HOUSEH 10-17-96
	PLOT DATE = 1/4/2888	DATE - 03-19-90	REVISED -T. RAMMACHER 01-06-00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
TYPICAL PAVEMENT MARKINGS

SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1321	2009-034 TS	COOK	45	30
	TC-13	CONTRACT NO. 60G39		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



NOTES:

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN (1) WITH INSTALLED PANEL (2) ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL (2) SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME = W:\diatstc\22x34\tc22.dgn	USER NAME = gegliancbt	DESIGNED -	REVISED - R. MIRS 09-15-97
		DRAWN -	REVISED - R. MIRS 12-11-97
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - T. RAMMACHER 02-02-99
	PLOT DATE = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ARTERIAL ROAD INFORMATION SIGN

SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1321	2009-034 TS	COOK	45	31
	TC-22	CONTRACT NO. 60G39		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

GENERAL NOTES:

1. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL UNDERGROUND UTILITIES BEFORE TRENCHING.
2. ALL LIGHT POLES SHALL HAVE A MINIMUM SETBACK OF 2 FEET FROM THE BACK OF CURB (UNLESS OTHEWISE NOTED).
3. SERVICE VOLTAGE IS 240/480V, 1PH, 3W, LUMINAIRE BALLAST SHALL BE CONNECTED AT 240V.
4. ALL LUMINAIRES SHALL HAVE A LUMINAIRE KEEPER INSTALLED (SEE DETAIL).
5. THE CONTRACTOR SHALL STAKE THE PROPOSED LOCATION OF THE LIGHT POLES AND HAVE THE LOCATIONS APPROVED BY THE ENGINEER BEFORE INSTALLING THE LIGHT POLE FOUNDATIONS.
6. UNLESS OTHERWISE INDICATED, ALL ITEMS AND WORK ARE PROPOSED NEW ITEMS AND WORK.
7. ALL LIGHT POLES SHALL BE INSTALLED AT A 2 FOOT SETBACK UNLESS OTHERWISE NOTED.
8. THE ACTUAL LIGHTING CONTROLLER LOCATION TO BE DETERMINED IN FIELD AFTER COMED SERVICE LOCATION IS VERIFIED

GENERAL LEGEND

- LIGHT POLE ALUMINUM 47½FOOT MOUNTING HEIGHT, 15 FOOT MAST ARM, 310W LUMINAIRE
- PROPOSED LIGHTING CONTROLLER "XT" DOUPLEX CONSOLE TYPE 240/480V, SINGLE PHASE, 3 WIRE
- UNIT DUCT WITH 3-1/C #4 & 1/C #6 GROUND 600V, (EPR-TYPE RHW), 1¼" DIA. POLYETHYLENE, SCHEDULE 40 (UNLESS OTHERWISE NOTED)
- CONDUIT SLEVE BELOW PAVEMENT, 3" RIGID GALVANIZED STEEL PUSHED, LENGTH AS NOTED
- COM ED SERVICE CONNECTION 240/480V, 1 PHASE, 3 WIRE

UNIT DESIGNATION

A A A 1

- 1 — LIGHT POLE DESIGNATION
- A — CIRCUIT DESIGNATION
- A — CONTROLLER DESIGNATION
- A — COUNTY DESIGNATION

LIGHT POLE SPACING TABLE
FOR REFERENCE POINTS SEE LIGHT POLE DIMENSION LINES ON SHEET E2

IL ROUTE 19						BARRINGTON ROAD					
SOUTH SIDE OF STREET			NORTH SIDE OF STREET			EAST SIDE OF STREET			WEST SIDE OF STREET		
FROM	TO	DISTANCE	FROM	TO	DISTANCE	FROM	TO	DISTANCE	FROM	TO	DISTANCE
XTH6	XTG7	200	—	—	—	XTG3	XTH2	200	—	—	—
XTG7	XTH5	200	XTF6	XTE7	200	XTH2	XTG2	190	XTG4	XTH3	200
XTH5	XTG6	200	XTE7	XTF5	200	XTG2	XTF2	145	XTH3	XTE4	180
XTG6	XTH4	150	XTF5	XTE5	150	XTF2	XTE2	190	XTE4	XTF3	145
XTH4	XTG5	170	XTE5	XTF4	120	—	—	—	XTF3	XTE3	150
XTG5	XTH1	170	XTF4	XTE1	185						
XTH1	XTG1	150	XTE1	XTF1	175						
XTG1	XTD1	180	XTF1	XTA1	180						
XTD1	XTC1	170	XTA1	XTB1	170						
XTC1	XTD2	190	XTB1	XTA3	190						
XTD2	XTC2	180	XTA3	XTB2	180						
XTC2	XTD3	180	XTB2	XTA4	180						
XTD3	XTC3	190	XTA4	XTB3	190						
—	—	—	XTB3	XTA6	190						

CHRISTOPHER B. BURKE ENGINEERING LTD.
9575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

FILE NAME = ...\Traffic\LIT_Notes-IL19.dgn
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PLOT DATE = 3/18/2009
DESIGNED - ABR
DRAWN - FPB / FCP
CHECKED - MJT
DATE -
REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHTING NOTES
IL. ROUTE 19 (IRVING PARK ROAD) AT WESTVIEW CENTER TO KINGSBURY DRIVE
HANOVER PARK, ILLINOIS

SCALE: N.T.S. | SHEET NO. OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1321	2009-034 TS	COOK	45	32

CONTRACT NO. 60G39

FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT

CHRISTOPHER B. BURKE ENGINEERING LTD.
9575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

PLAN / PROFILE

DESIGNED	BY	DATE
DRAWN		
PLOTTED		
CHECKED		
ALIGNMENT CHECKED		
GRADES CHECKED		
QUANTITIES CALCULATED		
STRUCTURE NOTATIONS CHKD		
CADD FILE NAME		
NOTE BOOK		
NO.		

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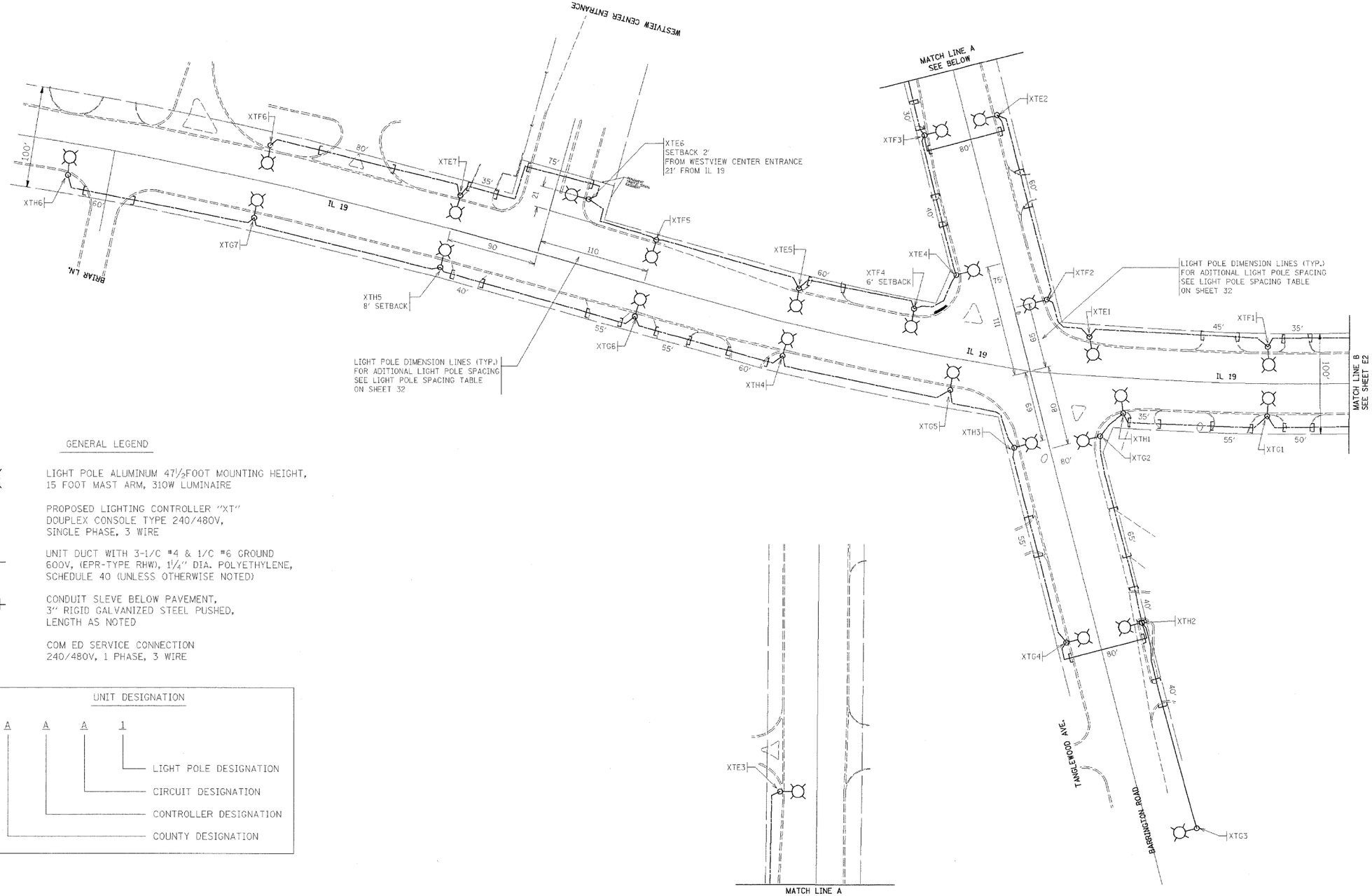


GENERAL LEGEND

LIGHT POLE ALUMINUM 47½FOOT MOUNTING HEIGHT, 15 FOOT MAST ARM, 310W LUMINAIRE

PROPOSED LIGHTING CONTROLLER "XT" DOUPLEX CONSOLE TYPE 240/480V, SINGLE PHASE, 3 WIRE

UNIT DUCT WITH 3-1/C #4 & 1/C #6 GROUND 600V, (EPR-TYPE RHW), 1¼" DIA. POLYETHYLENE, SCHEDULE 40 (UNLESS OTHERWISE NOTED)

CONDUIT SLEVE BELOW PAVEMENT, 3" RIGID GALVANIZED STEEL PUSHED, LENGTH AS NOTED

COM ED SERVICE CONNECTION 240/480V, 1 PHASE, 3 WIRE

UNIT DESIGNATION

A A A 1

- 1 — LIGHT POLE DESIGNATION
- A — CIRCUIT DESIGNATION
- A — CONTROLLER DESIGNATION
- A — COUNTY DESIGNATION

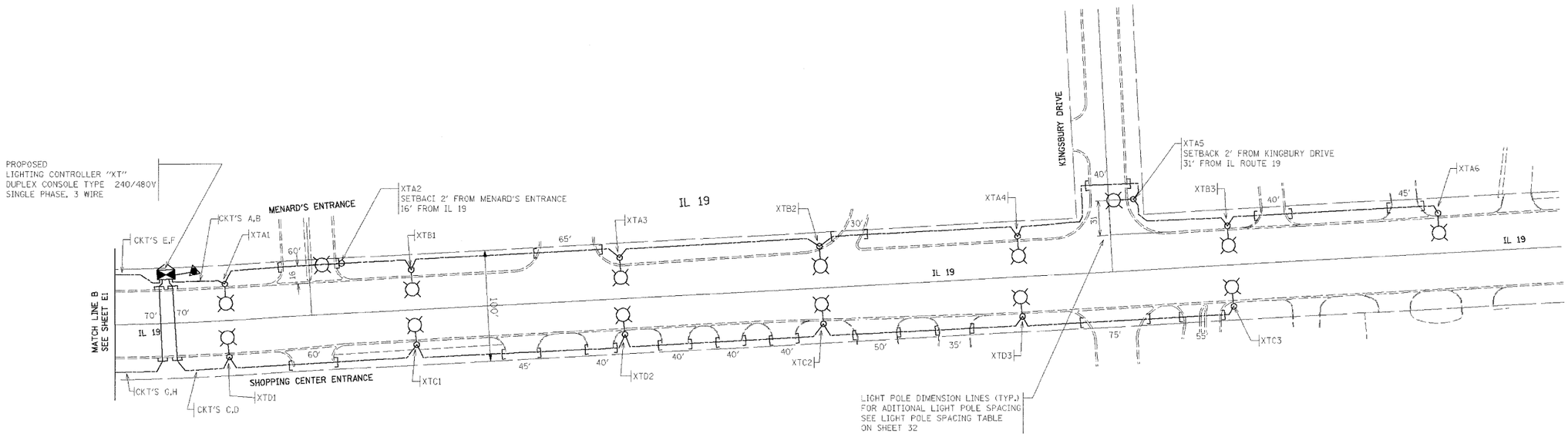
FILE NAME = ...\LIT_Westview&Barrington.dgn	USER NAME = FPACIONE	DESIGNED - ABR	REVISED -
		DRAWN - FPB / FCP	REVISED -
	PLOT SCALE = 50'	CHECKED - MJT	REVISED -
	PLOT DATE = 3/18/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED ROADWAY LIGHTING PLANS
IL. ROUTE 19 (IRVING PARK ROAD) AT WESTVIEW CENTER TO BARRINGTON ROAD
HANOVER PARK, ILLINOIS

SCALE: 1" = 50' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1321	2009-034 TS	COOK	45	33
		CONTRACT NO. 60G39		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



GENERAL LEGEND

- LIGHT POLE ALUMINUM 47½FOOT MOUNTING HEIGHT, 15 FOOT MAST ARM, 31CW LUMINAIRE
- PROPOSED LIGHTING CONTROLLER "XT" DOUPLEX CONSOLE TYPE 240/480V, SINGLE PHASE, 3 WIRE
- UNIT DUCT WITH 3-1/C #4 & 1/C #6 GROUND 600V, (EPR-TYPE RHW), 1¼" DIA. POLYETHYLENE, SCHEDULE 40 (UNLESS OTHERWISE NOTED)
- CONDUIT SLEVE BELOW PAVEMENT, 3" RIGID GALVANIZED STEEL PUSHED, LENGTH AS NOTED
- COM ED SERVICE CONNECTION 240/480V, 1 PHASE, 3 WIRE

UNIT DESIGNATION

A A A 1

- 1 — LIGHT POLE DESIGNATION
- A — CIRCUIT DESIGNATION
- A — CONTROLLER DESIGNATION
- A — COUNTY DESIGNATION

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Rosemont, Illinois 60018
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PROFILE — SURVEYED — PLOTTED — DRAWN — CHECKED — ALIGNMENT — NOTE BOOK — NO. — STRUCTURE NOTATNS — CHKD — BY — DATE

PLAN — SURVEYED — PLOTTED — DRAWN — CHECKED — ALIGNMENT CHECKED — ALL SHEETS CHECKED — NOTE BOOK — NO. — CADD FILE NAME — BY — DATE

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		DRAWN - FPB / FCP	REVISED -
	PLOT SCALE = 50'	CHECKED - MJT	REVISED -
	PLOT DATE = 3/18/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED ROADWAY LIGHTING PLANS
IL. ROUTE 19 (IRVING PARK ROAD) EAST OF BARRINGTON ROAD TO KINGSBURY DRIVE
HANOVER PARK, ILLINOIS

SCALE: 1" = 50' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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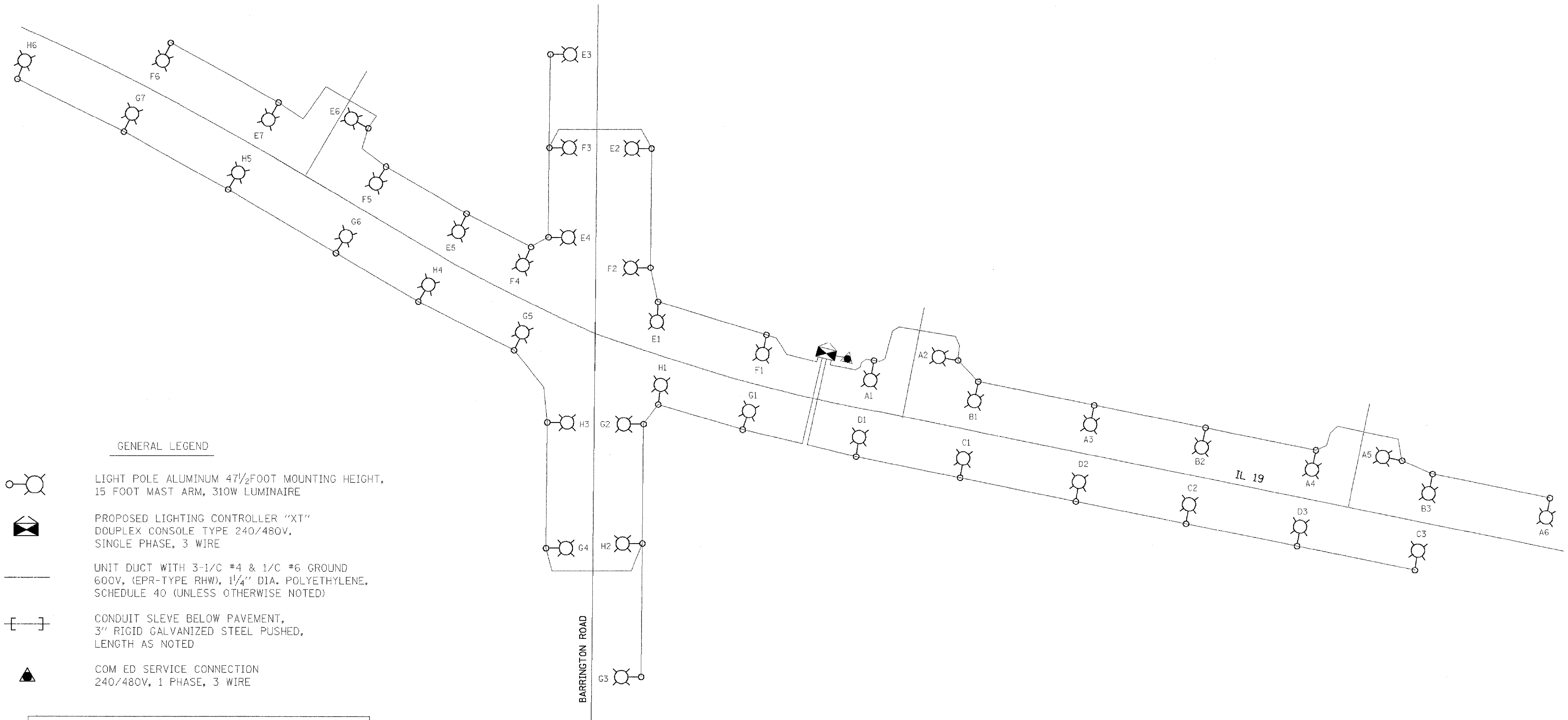
		CONTRACT NO. 60G39		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



GENERAL LEGEND

- LIGHT POLE ALUMINUM 47½FOOT MOUNTING HEIGHT, 15 FOOT MAST ARM, 310W LUMINAIRE
- PROPOSED LIGHTING CONTROLLER "XT" DUPLEX CONSOLE TYPE 240/480V, SINGLE PHASE, 3 WIRE
- UNIT DUCT WITH 3-1/C #4 & 1/C #6 GROUND 600V, (EPR-TYPE RHW), 1¼" DIA. POLYETHYLENE, SCHEDULE 40 (UNLESS OTHERWISE NOTED)
- CONDUIT SLEVE BELOW PAVEMENT, 3" RIGID GALVANIZED STEEL PUSHED, LENGTH AS NOTED
- COM ED SERVICE CONNECTION 240/480V, 1 PHASE, 3 WIRE

UNIT DESIGNATION

A A A 1

- 1 — LIGHT POLE DESIGNATION
- A — CIRCUIT DESIGNATION
- A — CONTROLLER DESIGNATION
- A — COUNTY DESIGNATION

LOAD TABLE			
CIRCUIT	RED PHASE	CIRCUIT	BLACK PHASE
A	9.0 A	B	4.5 A
C	4.5 A	D	4.5 A
E	10.5 A	F	9.0 A
G	10.5 A	H	9.0 A

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PLAN		BY	DATE
NOTE BOOK ___ NO. ___	SURVEYED / PLOTTED / ALIGNMENT CHECKED / R.O.W. OF WAY CHECKED / ADD FILE NAME		

PROFILE		BY	DATE
NOTE BOOK ___ NO. ___	SURVEYED / PLOTTED / GRADES CHECKED / B.M. NOTED / STRUCTURE NOTATIONS CHKD		

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		DRAWN - FPB / FCP	REVISED -
	PLOT SCALE = 50'	CHECKED - MJT	REVISED -
	PLOT DATE = 3/18/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ONE-LINE DIAGRAM
IL. ROUTE 19 (IRVING PARK ROAD) - WESTVIEW CENTER TO KINGSBURY DRIVE
HANOVER PARK, ILLINOIS

SCALE: 1" = 50' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1321	2009-034 TS	COOK	45	35
		CONTRACT NO. 60G39		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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PLAN
NOTE BOOK
NO.

PROFILE
SURVEYED
PLOTTED
BRAKES CHECKED
NOTE BOOK
NO.

BY	DATE	REVISIONS
		ALIGNMENT CHECKED
		PLANS CHECKED
		F.A.U. FILE NAME

STRUCTURE NOTATING CHKD

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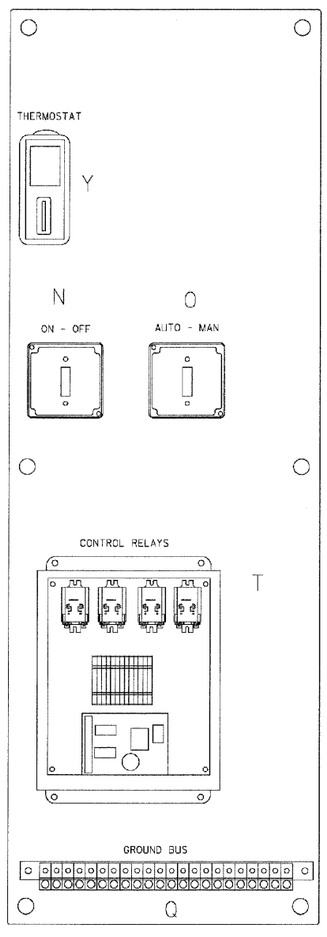
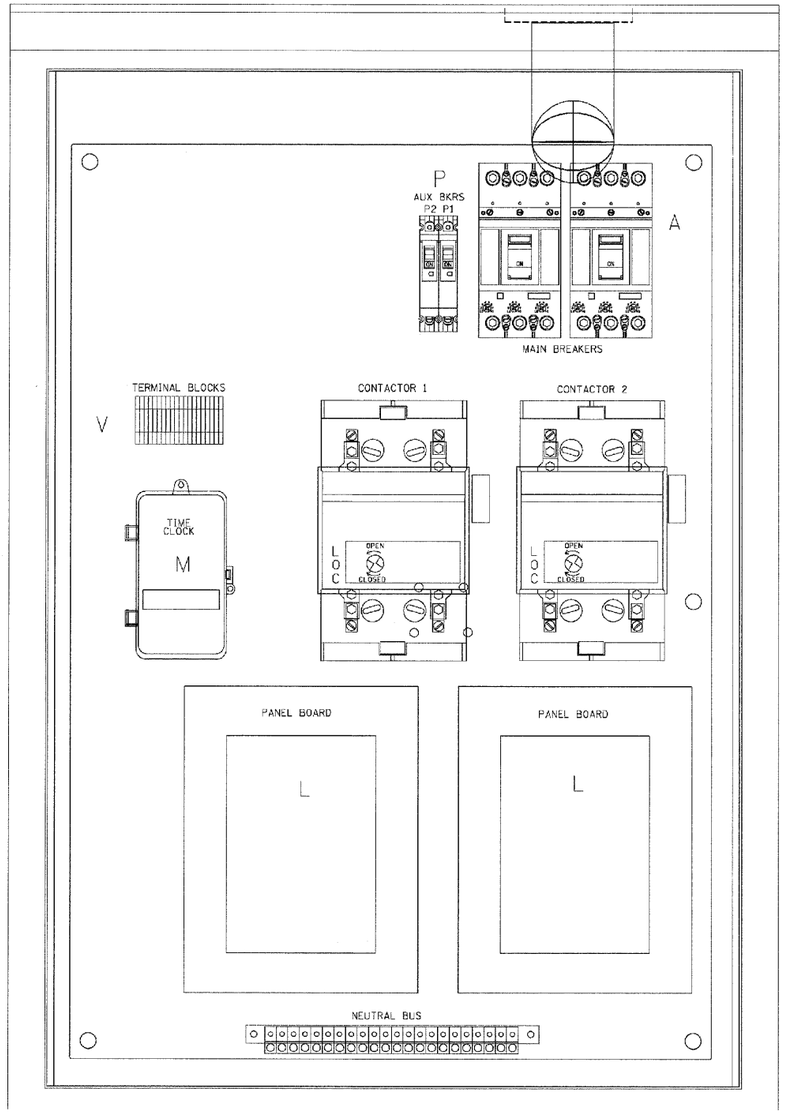
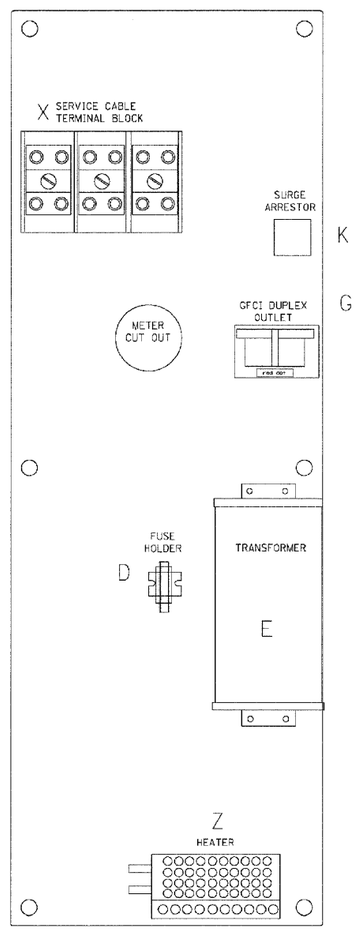


LEFT SIDE PANEL





RIGHT SIDE PANEL

BILL OF MATERIALS

ITEM *	QTY	DESCRIPTION
A	2	FXD62B175 BREAKERS 2 POLE 175 AMP WITH AUX CONTACT
C1,C2	2	MECHANICAL CONTRACTOR 8903PBV10X11V39 2 POLE 200 AMP 240V COIL WITH AUX CONTACTS
D	1	SECTIONAL FUSE HOLDER
E	1	1.5 KVA 277V-240/120 TRASFORMER
G	1	15 AMP GFCI
H	2	DOOR SWITCH
I	1	LIGHT FIXTURE
J	1	METER FITTING 1 PHASE 3 WIRE 200 AMP
K	1	SURGE ARRESTER
L	2	PANEL BOARD 480/240V 1 PHASE, 250 AMP COPPER BUS
M	1	2 CHANNEL DIGITAL TIME CLOCK
N	1	MOMENTARY SWITCH ON - OF
O	1	DPDT 20 AMP AUTO-MANUAL
P1	1	BREAKER 1P 15A
P2	1	BREAKER 1P 15A
Q	2	COPPER GROUND AND NEUTRAL BUS 1 X 16 X 1/4
T	1	CONTROL RELAY ASSEMBLY 240V COILS WITH DPDT 25 AMP RELAYS (R1,R2,R3,R4). MOMENTARY CONTACT ADAPTER. QTY 12 TERMINAL BLOCKS
V	20	TERMINAL BLOCKS
X	1	620 AMP SPLICE BLOCK
Y	1	CHROMALOX WR 80, 40-80 DEG THERMOSTAT
Z	1	HEATREX 276-10 375 WATT HEATER

*

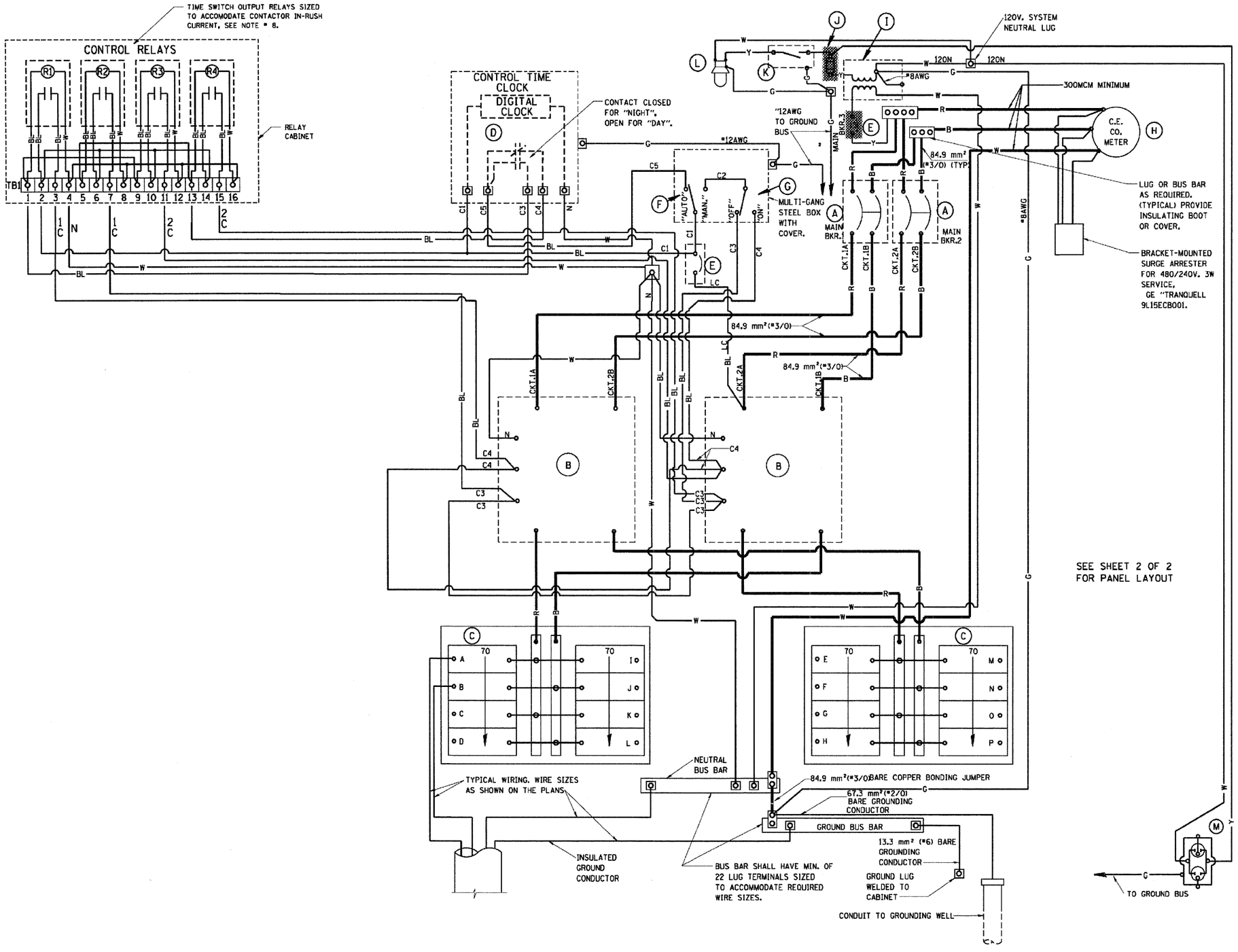
FILE NAME = ...\Traffic\LIT_de401-be280a.dgn	USER NAME = FPACIONE	DESIGNED - ABR	REVISED -
		DRAWN - FPB / FCP	REVISED -
	PLOT SCALE = 28'	CHECKED - MJT	REVISED -
	PLOT DATE = 3/18/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHTING CONTROLLER, DUPLEX TYPE

SCALE: N.T.S. | SHEET NO. OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1321	2009-034 TS	COOK	45	36
		CONTRACT NO. 60G39		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



DEVICE SCHEDULE		
ITEM	QUANT.	DESCRIPTION
(A)	2	CIRCUIT BREAKER, MOLDED CASE, THERMAL MAGNETIC, 2-POLE, 600V. A.C., 225A FRAME, 175A. NON-INTERCHANGABLE TRIP, BOLT-ON TYPE; INTERUPTING CAPACITY OF NOT LESS THAN THAN 22,000 RMS SYMMETRICAL AMPERES AT 480V.
(B)	2	LIGHTING CONTACTOR (REMOTE CONTROL SWITCH) MECHANICALLY HELD, ASCO 920, MOUNTED ON SUB PANEL 200A., 2P., 600V. WITH 240V. COIL.
(C)	2	PANEL BOARD (INTERIOR ONLY) 480/240V, SINGLE PHASE WITH 200A. COPPER MAINS AND EIGHT IP-70A BOLT-ON BRANCH BREAKERS EACH RATED 277V. WITH INTERUPTING CAPACITY OF NOT LESS THAN 14,000 RMS SYMMETRICAL AMPERES AT 277V.
(D)	1	TIME CLOCK: 240V, 60 HZ, MICROPROCESSOR BASED 2-CHANNEL CONTROLLER WITH ASTRONOMIC FUNCTIONS. RATED FOR -30 DEGREES C. TO +70 DEGREES C.
(E)	2	CIRCUIT BREAKER, MOLDED CASE, THERMAL MAGNETIC, 1-POLE, 277V., BOLT-ON TYPE, 15A WITH AN INTERUPTING RATING OF NOT LESS THAN 14,000 RMS SYMMETRICAL AMPERES AT 277V.
(F)	1	CONTROL SWITCH, MOMENTARY CONTACT, SPDT, 20A., 240V.
(G)	1	CONTROL SWITCH, TOGGLE TYPE, SPDT, 20A., 240V. PREMIUM SPEC. GRADE
(H)	1	SOCKET FOR ELECTRIC UTILITY COMPANY METER.
(I)	1	STEP DOWN TRANSFORMER 240V.-120V., 1KVA.
(J)	2	FUSE HOLDER 15A., 250V., 5A. FUSE
(K)	1	20A. SPST MICRO SWITCH (MOUNT WITH ACTUATOR TO SWITCH WHEN DOOR OPENED)
(L)	1	60 WATT LIGHT FIXTURE, VAPOR TIGHT, WITH GLOBE AND GUARD AND MOUNTING BOX.
(M)	1	GFI RECEPTACLE, 120V., 20A., PREMIUM SPEC. GRADE. NEMA REFERENCE 5-15R IN WEATHER-PROOF BOX WITH FLAP-TYPE COVER.

NOTES:

1. ALL CONTROL CABINET ITEMS SHALL HAVE SUITABLE IDENTIFICATION. OPEN CIRCUIT BREAKERS, CONTACTORS AND OTHER OPEN DEVICES SHALL HAVE PERMANENT SELF STICKING TAGS. DEVICES IN ENCLOSURES SHALL HAVE ENGRAVED 2-COLOR LAMINATED PLASTIC NAMEPLATES ATTACHED TO ENCLOSURES WITH SCREWS. NAMEPLATES SHALL BE ENGRAVED TO CORRESPOND TO DESIGNATIONS ON THE DRAWINGS. INTERNAL CABINET WIRING SHALL BE IDENTIFIED AS INDICATED OR AS DIRECTED BY THE ENGINEER BY MEANS OF SELF-STICKING TAGS APPLIED AT EACH CONNECTED END. IDENTIFICATION SHALL BE MADE BY THE CABINET MANUFACTURER.
2. ALL WIRING WITHIN THE CABINET SHALL BE COLOR CODED AS INDICATED.
   R = RED BL = BLUE W = WHITE
   B = BLACK Y = YELLOW G = GREEN
3. PROVIDE SEALING GROMMETS FOR ALL OPEN WIRING EXTENDED FROM DEVICES IN BOXES OR CABINETS WITHIN THE CONTROL CABINET.
4. ALL 120 VOLT SYSTEM AND ALL CONTROL WIRING SHALL BE #12AWG STRANDED UNLESS OTHERWISE INDICATED.
5. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.
6. THE CONTROLLER SHALL BE CONSTRUCTED TO U.L. STD. 508 AND BEAR THE U.L. LABEL "ENCLOSED INDUSTRIAL CONTROL PANEL"
7. SEE CABINET AND FOUNDATION DETAIL SHEET FOR SCHEMATIC DIAGRAM AND DEVICE LAYOUT.
8. CONTROL RELAYS CAN BE ELIMINATED IF THE CONTROL TIME CLOCK OUTPUT CONTACTS ARE RATED FOR CONTACTOR INRUSH CURRENT.

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		DRAWN - FPB / FCP	REVISED -
	PLOT SCALE = 20'	CHECKED - MJT	REVISED -
	PLOT DATE = 3/18/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONTROL CABINET, DUPLEX TYPE WIRING DETAIL

SCALE: N.T.S. | SHEET NO. OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1321	2009-034 TS	COOK	45	37
		CONTRACT NO. 60G39		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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PLAN — SURVEYED — DRAWN — TRACED — CHECKED — QUANTITIES — DESIGN STRESS — QUANTITIES CHECKED — NOTE BOOK — NO. — DATE — BY — ALIGNMENT CHECKED — PROFILE GRADES CHECKED — STRUCTURE NOTATING CHKD — CADD FILE NAME

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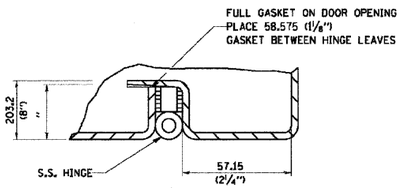

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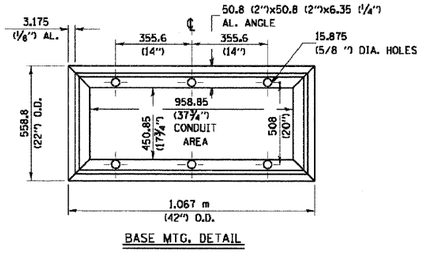
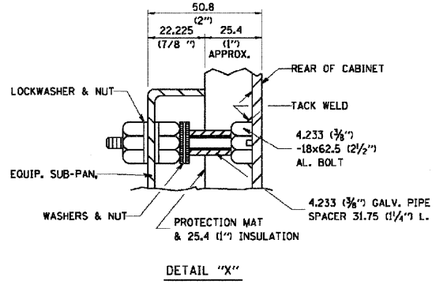


BASE MTG. DETAIL



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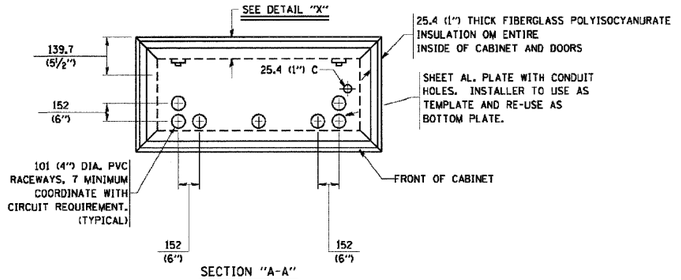

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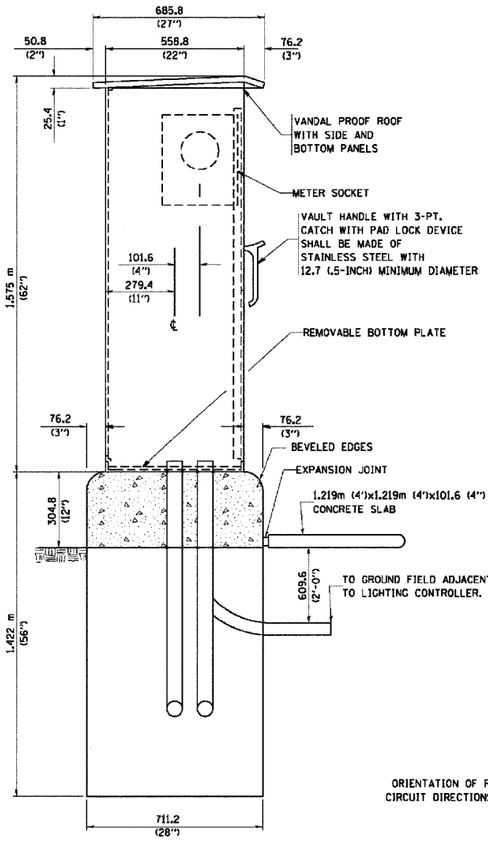
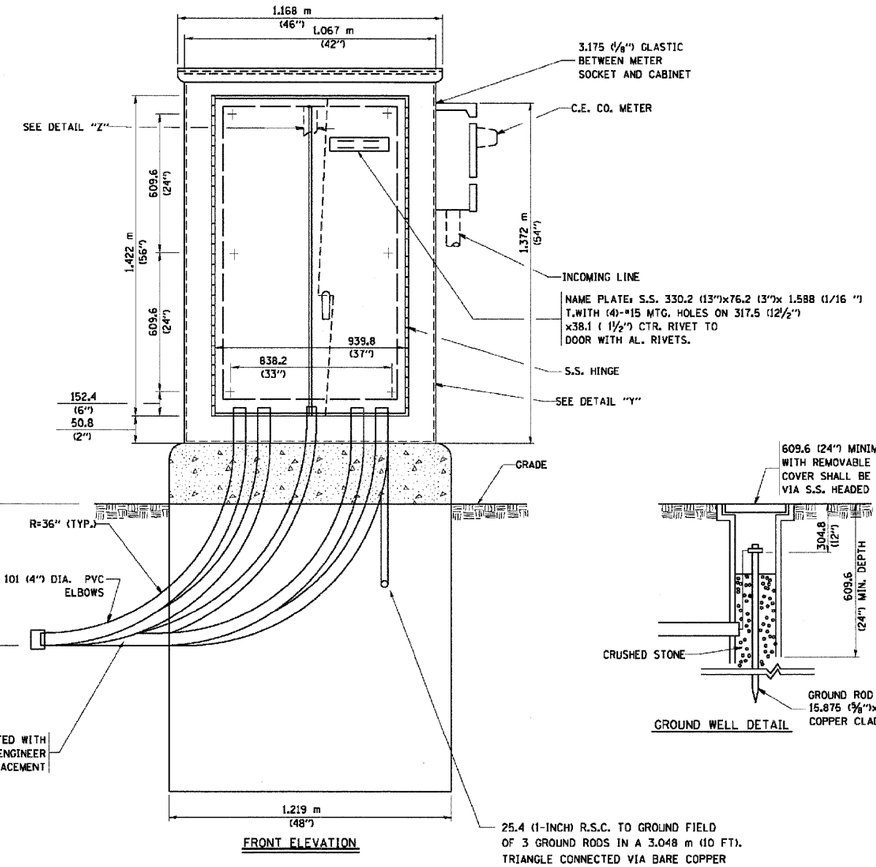
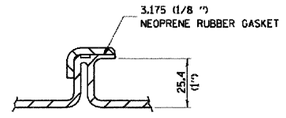


LEFT SIDE ELEVATION



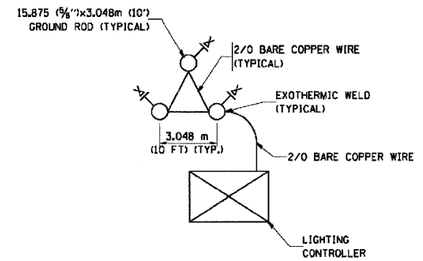
FRONT ELEVATION

ORIENTATION OF RACEWAYS SHALL BE COORDINATED WITH CIRCUIT DIRECTIONS AND BE INSPECTED BY THE ENGINEER PRIOR TO CONCRETE PLACEMENT



DETAIL "Z"

GROUND WELL DETAIL



GROUND FIELD DETAIL
(N.T.S.)

THE CONTRACTOR SHALL
VERIFY EXACT LOCATION
WITH THE ENGINEER

FILE NAME = ...\Traffic\LIT_det03-be200e.dgn	USER NAME = FPACIONE	DESIGNED - ABR	REVISED -
		DRAWN - FPB / FCP	REVISED -
	PLOT SCALE = 20'	CHECKED - MJT	REVISED -
	PLOT DATE = 3/18/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHTING CONTROLLER, DUPLEX TYPE

SCALE: N.T.S. | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1321	2009-034 TS	COOK	45	38
		CONTRACT NO. 60G39		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

NOTES

1. CABINET SHALL BE FABRICATED FROM 3.175 (0.125-INCH) SHEET ALUMINUM * 3003H14, FORMED AND ARC WELDED ASSEMBLY.
2. ALL SCREWS AND HARDWARE SHALL BE PLATED, GALVANIZED, OR MADE OF BRASS, ALUMINUM OR STAINLESS STEEL.
3. NAME PLATE SHALL HAVE ENGRAVED 19.05 (0.75-INCH) HIGH LETTERS FILLED IN BLACK: "STATE OF ILLINOIS LIGHTING CONTROLS" UNLESS OTHERWISE SPECIFIED.
4. ONE INCH THICK POLYISOCYANURATE INSULATION SHALL BE INSTALL AND PERMANENTLY CEMENTED ON ALL SIDES OF THE CABINET AND DOORS.
5. CABINET SHALL BE PRIMED AND PAINTED AS SPECIFIED.
6. ELECTRIC UTILITY METER BOX SHALL BE MOUNTED ON THE SIDE OF CONTROL CABINET AS SHOWN ON THE PANEL LAYOUT DIAGRAM.
7. THE COMPLETED CONTROLLER SHALL BE U.L. LISTED AS AN INDUSTRIAL CONTROL PANEL UNDER UL508.
8. METAL MOUNTING PANEL SHALL BE #10 GAUGE GALVANIZED SHEET STEEL FLANGED BACK 0.75-INCHES I.D. ON 4 SIDES.
9. CIRCUIT BREAKERS AND CONTACTORS AND OTHER COMPONENTS SHALL BE MOUNTED ON 3.175 (0.125-INCH) THICK GLASTIC INSULATION BACK PANEL.
10. ALL DEVICES SHALL BE FRONT REMOVABLE.
11. TIME CLOCK CHANNEL 1 N.O. CONTACT IS CLOSED NIGHT AND OPEN DAY
12. SET "ON TIME" TO 30 MINUTES AFTER ASTRONOMICAL SUNSET.
13. BUS BAR SHALL HAVE 22 LUG TERMINALS SIZED TO ACCOMMODATE REQUIRED WIRE SIZES.
    NEUTRAL BUS SHALL BE PAINTED WHITE.
    GROUND BUS SHALL BE PAINTED GREEN.
14. ALL LUGS SHALL BE OF COPPER SCREWS AND CONNECTORS, SPRING HELD.
15. ALL WIRING TERMINATIONS SHALL BE RATED NOT LESS THAN 75 DEGREE CENTIGRADE
16. ALL CONTROL WIRING SHALL BE 600V MACHINE TOOL WIRE TYPE MTW.
17. ALL POWER WIRING SHALL BE 600V TYPE RHH/RHW.
18. ALL WIRING WITHIN THE CABINET SHALL BE COLOR CODED AS INDICATED:

    R - RED Y - YELLOW
    B - BLACK W - WHITE
    BL- BLUE G - GREEN

19. ALL DIMENSIONS ARE IN MILIMETERS (INCHES) UNLESS OTHERWISE INDICATED
20. SCHEMATIC SHOWN WITH BREAKER OPEN, CONTACTOR OPEN, CABINET DOOR CLOSED, CLOCK NOT ACTIVE
21. A LAMINATED COPY OF THE CIRCUIT SCHEMATIC AND SCADA I/O DIAGRAM SHALL BE ATTACHED TO THE INSIDE OF THE CONTROLLER

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PLAN / PROFILE — NOTE BOOK NO. ____
SURVEYED ____ PLOTTED ____ GRADES CHECKED ____ R.P. OF WAY CHECKED ____ JOINTS CAPPED ____
BY ____ DATE ____

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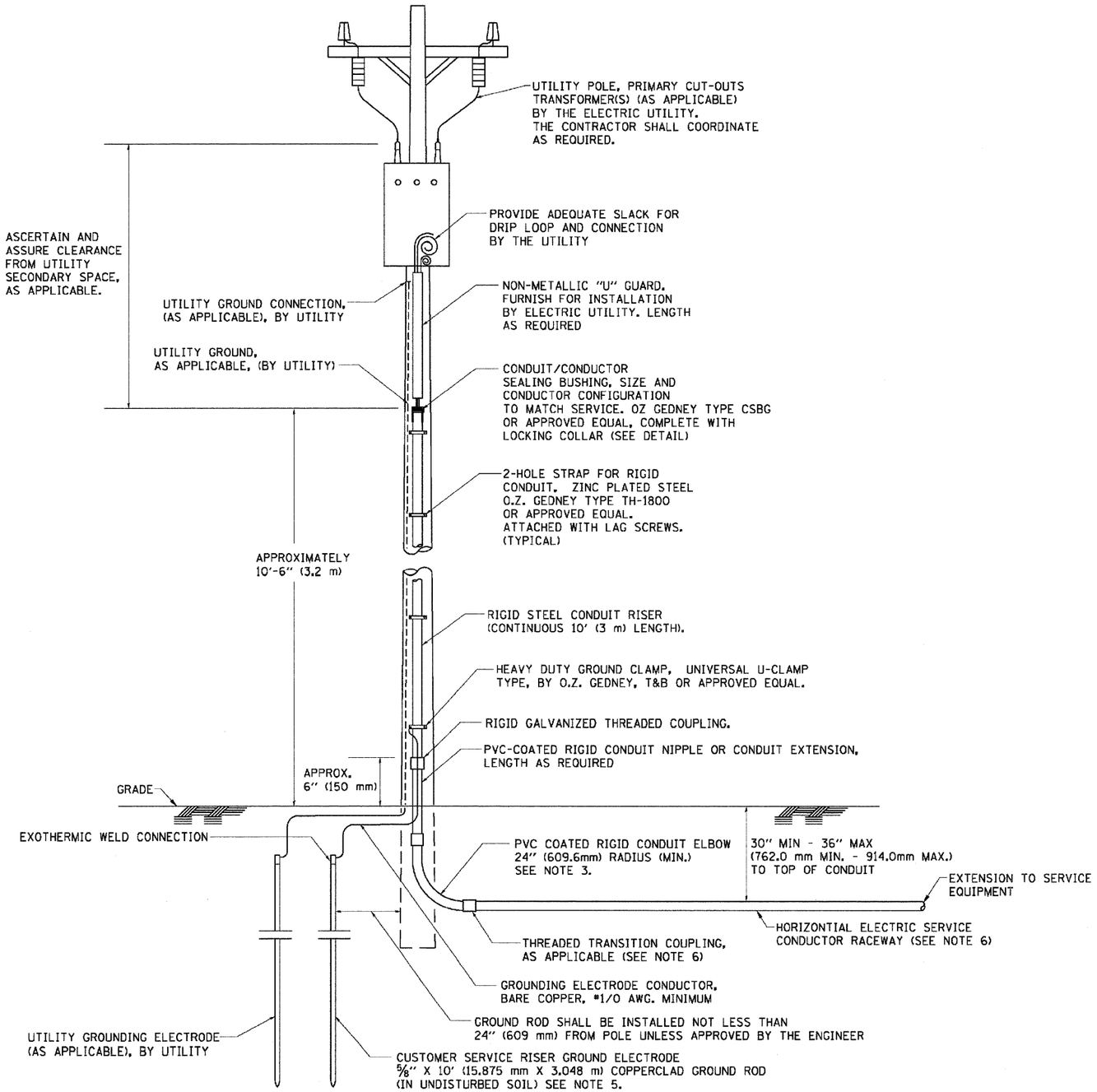
		DRAWN - FPB / FCP	REVISED -
	PLOT SCALE = 20'	CHECKED - MJT	REVISED -
	PLOT DATE = 3/18/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHTING CONTROLLER, DUPLEX TYPE

SCALE: N.T.S. | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1321	2009-034 TS	COOK	45	39
		CONTRACT NO. 60G39		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

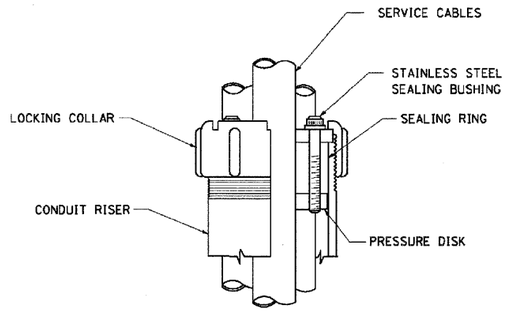


APPLICATION

THIS DETAIL APPLIES FOR LOW VOLTAGE ELECTRIC SERVICE (660 V OR LESS) FROM AN OVERHEAD UTILITY SUPPLY TO SEPERATLY-MOUNTED SERVICE EQUIPMENT.

NOTES

1. SERVICE VOLTAGE SHALL BE AS INDICATED ELSEWHERE IN THE DRAWINGS.
2. UNLESS OTHERWISE INDICATED, ITEMS AND WORK SHALL BE INCLUDED AND PAID AS PART OF THE ELECTRIC UTILITY SERVICE INSTALLATION PAY ITEM.
3. CONDUIT AND CONNECTOR DIAMETER SHALL MATCH THE DIAMETER OF THE SERVICE CONDUCTOR RACEWAY AS INDICATED ON THE PLANS.
4. PVC COATED RACEWAYS AND ACCESSORIES SHALL BE CAREFULLY INSTALLED WITH MFR RECOMMENDED TOOLS AND PROCEDURES TO AVOID DAMAGE. ANY DAMAGE SHALL BE REPAIRED WITH COMPATIBLE PVC TOUCH-UP MATERIAL TO THE SATISFACTION OF THE ENGINEER OR THE DAMAGED MATERIAL SHALL BE REPLACED AT NO ADDITIONAL COST.
5. THE CONTRACTOR SHALL OBTAIN INSPECTION AND APPROVAL BY THE ENGINEER OF SERVICE RISER GROUND ELECTRODE, RISER ELBOW, NIPPLE AND CONNECTION TO SERVICE CONDUCTOR RACEWAY EXTENSION BEFORE BACKFILL AND SHALL ALSO OBTAIN INSPECTION OF SERVICE RISER AND SEALING BUSHING BEFORE UTILITY "U" GUARD INSTALLATION AND SERVICE CONNECTION.
6. THE HORIZONTAL ELECTRIC SERVICE CONDUCTOR RACEWAY SHALL BE AS INDICATED AND SHALL BE MEASURED SEPARATELY FOR PAYMENT. WHEN THE RACEWAY IS PVC-COATED RIGID GALVANIZED STEEL, THE COUPLING SHALL BE THE SAME. WHEN THE RACEWAY IS PVC CONDUIT (IN CONCRETE), THE COUPLING SHALL BE A METALIC TO NON METALIC ADAPTER. WHEN THE RACEWAY IS ENCASED IN CONCRETE, THE CONCRETE SHALL EXTEND TO COVER THE COUPLING.
7. PLANS AND DETAILS INDICATE THE GENERAL NATURE AND REQUIREMENTS. THEY DO NOT SHOW EVERY ACCESSORY AND ATTACHMENT, AND THEY DO NOT RELIEVE THE CONTRACTOR OF THE REQUIREMENTS OF THE SPECIFICATIONS AND SPECIAL PROVISIONS TO ASCERTAIN UTILITY REQUIREMENTS AND TO COORDINATE ACCORDINGLY. FURNISHING ALL ITEMS AND WORK NOT PROVIDED BY THE UTILITY, BUT NECESSARY FOR A COMPLETE SERVICE INSTALLATION IS REQUIRED AND SHALL BE INCLUDED IN THE ELECTRIC UTILITY SERVICE INSTALLATION PAY ITEM.



SEALING BUSHING DETAIL

CHRISTOPHER B. BURKE ENGINEERING LTD.
9575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

PLAN / PROFILE — SURVEYED — PLOTTED — DRAWN — CHECKED — QUANTITIES CHECKED — STRUCTURE QUANTITIES CHKD — NOTE BOOK — NO. — BY — DATE

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		DRAWN - FPB / FCP	REVISED -	
	PLOT SCALE = 20'	CHECKED - MJT	REVISED -	
	PLOT DATE = 3/18/2009	DATE -	REVISED -	

ELECTRIC SERVICE INSTALLATION AERIAL REMOTE DISCONNECT

SCALE: N.T.S. | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1321	2009-034 TS	COOK	45	40
		CONTRACT NO. 60G39		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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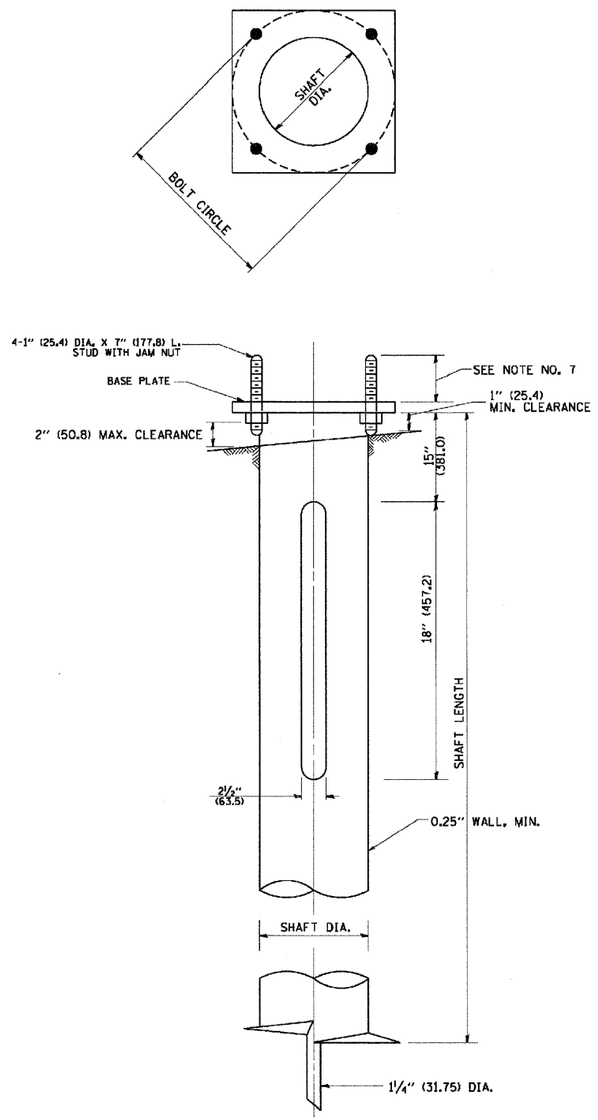


HELIX FOUNDATION SIZE

POLE MOUNTING HEIGHT	BOLT CIRCLE	SHAFT DIAMETER	SHAFT LENGTH	BASEPLATE
30 FT.	11½"	8⅝"	6 FT.	12"x12"x1"
31 FT.-35 FT.	11½"	8⅝"	6 FT.	12"x12"x1"
36 FT.-40FT.	15"	8⅝"	6 FT.	15"x15"x1¼"
41 FT.-45 FT.	15"	8⅝"	6 FT.	15"x15"x1¼"
46 FT.-50 FT.	15"	10"	8 FT.	15"x15"x1¼"

METAL HELIX FOUNDATION MATERIALS

ITEM	MATERIAL REQUIREMENT
BASEPLATE	AASHTO M 270M, GRADE 36 (M270M, GRADE 250)
SHAFT	ASTM A 252, GRADE 2 (PHOSPHOROUS 0.04% MAXIMUM, SULFUR 0.05% MAXIMUM)
HELIX SCREW	AASHTO M 183 (ASTM A 635)
PILOT POINT	AASHTO M 270 (ASTM A 575)
ANCHOR RODS/STUDS	AASHTO M 314 (ASTM F 1554)
HEXAGON NUTS	AASHTO M 291M (ASTM A 563) GRADE DH, OR AASHTO M 292 (ASTM A 194) GRADE 2H
WASHERS	AASHTO M 293 (ASTM F 436)

NOTES:

1. ALL DIMENSION IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
2. ALL MATERIAL SHALL BE GALVINIZED ACCORDING TO AASHTO M111, UNLESS OTHERWISE SPECIFIED.
3. ALL WELDS SHALL BE CONTINUOUS AND NOT LESS THAN ¼" (6.35 mm) FILLET WELDS. THE WELDED FOUNDATION SHALL BE CAPABLE OF WITHSTANDING 10,000 FT/LBS (13558.18 n.m) OF INSTALLATION TORQUE APPLIED ABOUT THE AXIS OF THE FOUNDATION.
4. THE HELIX FOUNDATION SHAFT SHALL BE INSTALLED VERTICAL AND THE BASE PLATE SHALL BE IN LEVEL. THE BREAKAWAY COUPLINGS AND HARDWARE SHALL NOT BE USED TO ALIGN THE POLE INSTALLATION.
5. THE CABLE TRENCH SHALL BE BACKFILLED AND FIRMLY COMPACTED BEFORE THE INSTALLATION OF THE LIGHT POLE.
6. THE CONTRACTOR SHALL COORDINATE EXTENSION OF ANCHOR BOLTS ABOVE TOP OF THE BASE PLATE WITH THE BREAKAWAY DEVICE MANUFACTURER'S REQUIREMENTS.
7. ANY VOIDS WITHIN THE METAL FOUNDATION SHALL BE FILLED WITH FINE AGGREGATE.
8. METAL FOUNDATIONS SHALL BE INSTALLED IN UNDISTURBED SOIL. PREDRILLING A PILOT HOLE AND/OR BACKFILLING AROUND THE FOUNDTION IS NOT ALLOWED.
9. THE METAL FOUNDATION SHALL NOT BE INSTALLED TO A TORQUE WHICH EXCEEDS THE MANUFACTURER'S MAXIMUM TORQUE RATING NOR SHALL IT BE INSTALLED TO AN INSTALLATION TORQUE VALUE OF LESS THAN 3,500 FT LB (4,750 KNM). METAL FOUNDATIONS THAT ARE NOT INSTALLED TO FULL INSTALLATION DEPTH OR DO NOT ACHIEVE THE MINIMUM INSTALLATION TORQUE SHALL BE REMOVED AND REPLACED WITH A CONCRETE FOUNDATION AT NO ADDITIONAL COST.
10. THE BASEPLATE SHALL BE PERPENDICULAR TO THE SHAFT AXIS (± 1°) AND THE HOLE CENTERLINE SHALL BE CONCENTRIC (± 0.188) TO THE SHAFT AXIS.
11. THE PILOT POINT AND SHAFT AXIS SHALL BE CONCENTRIC (± 0.125) AND IN LINE (± 2°).
12. THE BASEPLATE SHALL BE STAMPED WITH THE MANUFACTURERS NAME AND DATE OF MANUFACTURE.

FILE NAME = ...\Traffic\LIT_det06-be385.dgn	USER NAME = FPACIONE	DESIGNED - ABR	REVISED -
		DRAWN - FPB / FCP	REVISED -
	PLOT SCALE = 20'	CHECKED - MJT	REVISED -
	PLOT DATE = 3/18/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHT POLE FOUNDATION METAL

SCALE: N.T.S. | SHEET NO. OF SHEETS | STA. | TO STA.

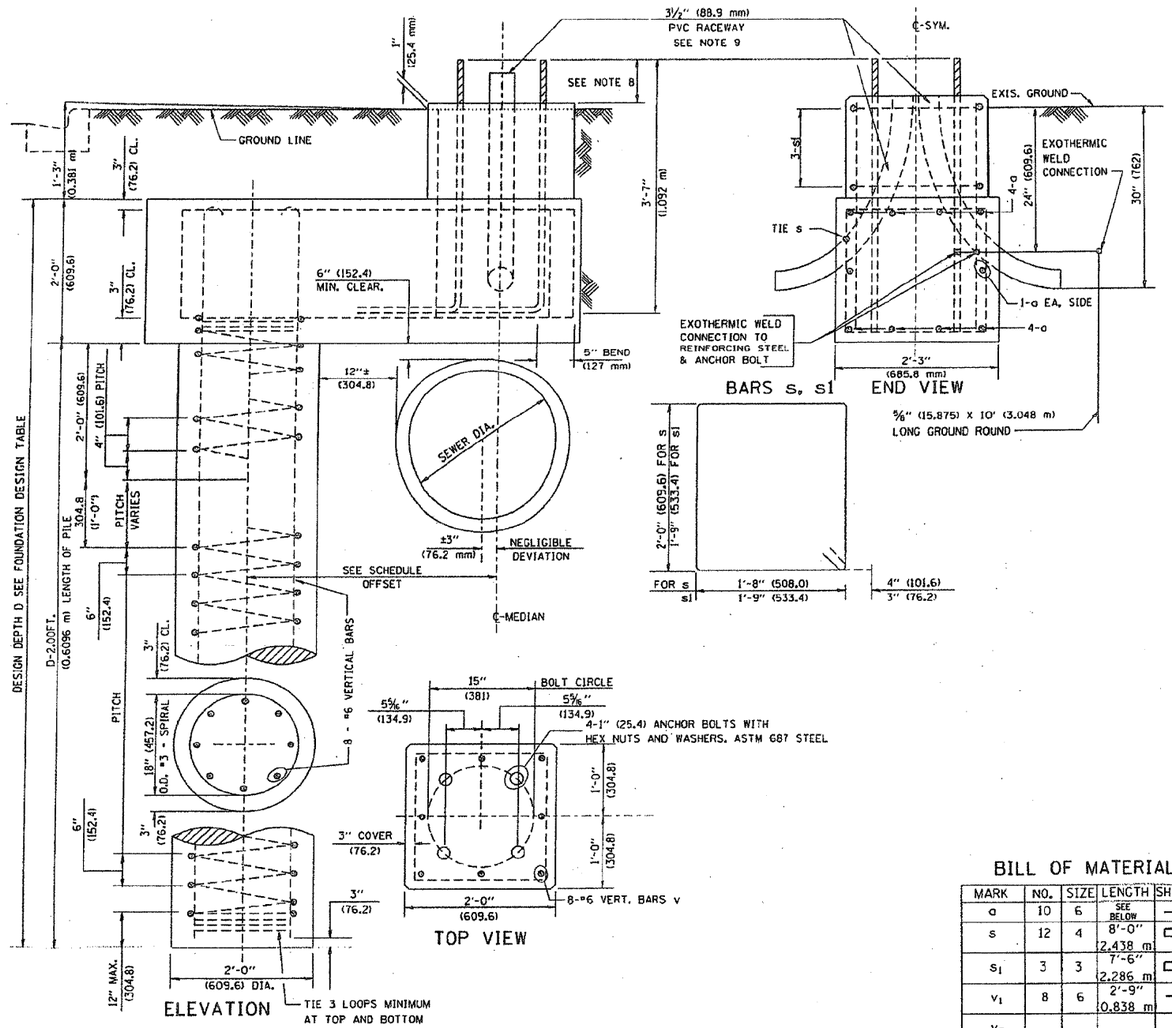
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1321	2009-034 TS	COOK	45	41
		CONTRACT NO. 60G39		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

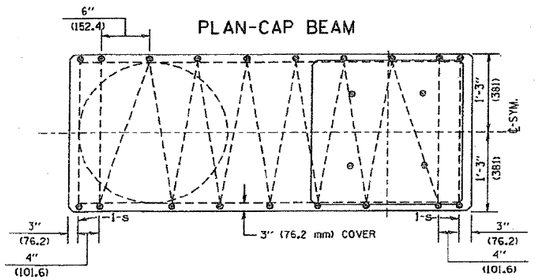
FOUNDATION DESIGN TABLE

TYPE OF SOIL	DESIGN DEPTH OF FOUNDATION		REINFORCEMENT IN FOUNDATION			
	SINGLE ARM D	TWIN ARM D	SINGLE ARM		TWIN ARM	
			VERT BARS	SPIRAL	VERT BARS	SPIRAL
SOFT CLAY	13'-0" (3.962 m)	15'-0" (4.572 m)	8-#6X12'-6" (3.810 m)	#3X122' (37.186 m)	8-#6X14'-3" (4.343 m)	#3X141' (42.977 m)
MEDIUM CLAY	9'-6" (2.896 m)	10'-9" (3.277 m)	8-#6X9'-0" (2.743 m)	#3X90' (27.432 m)	8-#6X10'-0" (3.048 m)	#3X100' (30.480 m)
STIFF CLAY	7'-0" (2.134 m)	8'-0" (2.438 m)	8-#6X6'-6" (1.981 m)	#3X66' (20.112 m)	8-#6X7'-6" (2.286 m)	#3X76' (23.165 m)
LOOSE SAND	9'-0" (2.743 m)	10'-0" (3.048 m)	8-#6X8'-6" (2.591 m)	#3X85' (25.908 m)	8-#6X9'-6" (2.896 m)	#3X94' (28.651 m)
MEDIUM SAND	8'-3" (2.515 m)	9'-0" (2.743 m)	8-#6X8'-0" (2.438 m)	#3X78' (23.774 m)	8-#6X8'-6" (2.591 m)	#3X85' (25.908 m)
DENSE SAND	7'-9" (2.362 m)	9'-0" (2.743 m)	8-#6X7'-6" (2.286 m)	#3X73' (22.250 m)	8-#6X8'-6" (2.591 m)	#3X85' (25.908 m)
ROCK OR SOLIDIFIED SLAG	5'-0" (1.524 m)	5'-0" (1.524 m)	NONE	NONE	NONE	NONE

NOTES

1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
2. THE ENGINEER SHALL DETERMINE THE CLASS OF SOIL DURING EXCAVATION AND SELECT THE DESIGN DEPTH OF FOUNDATION FROM THE DESIGN TABLE.
3. EXCAVATION OF THE POLE FOUNDATION SHALL BE MADE WITH AN AUGER, 24" (609.6 mm) OR 30" (762.0 mm) IN DIAMETER.
4. THE ANCHOR ROD SHALL BE A HOOK ROD TYPE. COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER.
5. THE ANCHOR BOLTS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED IN THE FORM.
6. THE ANCHOR RODS SHALL BE ACCORDING TO ASTM F1554 GRADE 725 (GRADE 105). NUTS SHALL BE HEXAGON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 DH, AND WASHERS SHALL BE ACCORDING TO ASTM F 436.
7. THE CONTRACTOR SHALL COORDINATE EXTENSION OF ANCHOR BOLTS ABOVE TOP OF FOUNDATION WITH THE BREAKAWAY DEVICE MANUFACTURER'S REQUIREMENTS. IF LIGHT POLE IS MOUNTED WITHOUT BREAKAWAY DEVICE, ANCHOR BOLTS SHALL PROJECT 2¾" (69.9 mm) ABOVE TOP OF THE FOUNDATION. THE CONTRACTOR SHALL CONFIRM ANCHOR BOLT EXTENTION WITH ENGINEER.
8. RACEWAYS SHALL PROJECT 1" (25.4 mm) ABOVE THE TOP OF THE FOUNDATION.
9. THE CABLE TRENCH SHALL BE BACKFILLED AND FIRMLY COMPACTED BEFORE THE LIGHT IS ERECTED.





BILL OF MATERIAL

MARK	NO.	SIZE	LENGTH	SHAPE
a	10	6	SEE BELOW	—
s	12	4	8'-0" 2.438 m	□
s_1	3	3	7'-6" 2.286 m	□
v_1	8	6	2'-9" 0.838 m	—
v_2				

OFFSET SCHEDULE

SEWER DIAM. d IN.	PILE OFFSET from℄-MED'N FT.	LENGTH of BAR a FT.
UP TO 24" (609.6 mm)	3'-3" (0.991 m)	*6 x 5'-3" (1.600 m)
27" (685.8 mm)TO 36" (914.4 mm)	3'-9" (1.143 m)	5'-9" (1.753 m)
42" (1066.8 mm) TO 48" (1219.2 mm)	4'-6" (1.372 m)	6'-6" (1.981 m)
54" (1371.6 mm) TO 60" (1524.0 mm)	5'-0" (1.524 m)	7'-0" (2.134 m)
66" (1676.4 mm) TO 72" (1828.8 mm)	5'-6" (1.676 m)	7'-6" (2.286 m)

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PROFILE — SURVEYED, PLOTTED, GRADES CHECKED, NOTE BOOK, NO., STRUCTURE NOTATIONS CHKD

DATE | BY

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		DRAWN - FPB / FCP	REVISED -
	PLOT SCALE = 20'	CHECKED - MJT	REVISED -
	PLOT DATE = 3/18/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHT POLE FOUNDATION OFFSET
40' (12.192 m) TO 47 1/2' (14.478 m) M.H.
15" (381 mm) BOLT CIRCLE

SCALE: N.T.S. | SHEET NO. OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1321	2009-034 TS	COOK	45	42
		CONTRACT NO. 60G39		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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PROFILE | PLAN | NOTE BOOK | SURVEYED | DRAWN | CHECKED | QUANTITIES | GRADES CHECKED | FINAL NOTES | PLOTTING NOTATNS CHKD | ALIGNMENT CHECKED | PLT. OF PLAT CHECKED | AS-BUILT CHANGES | DATE | BY

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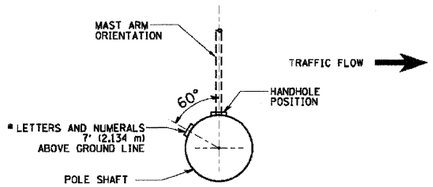
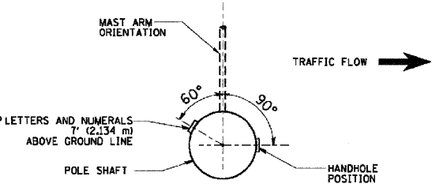
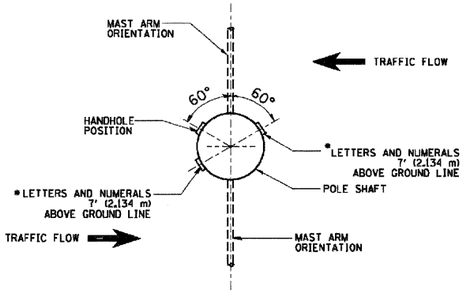


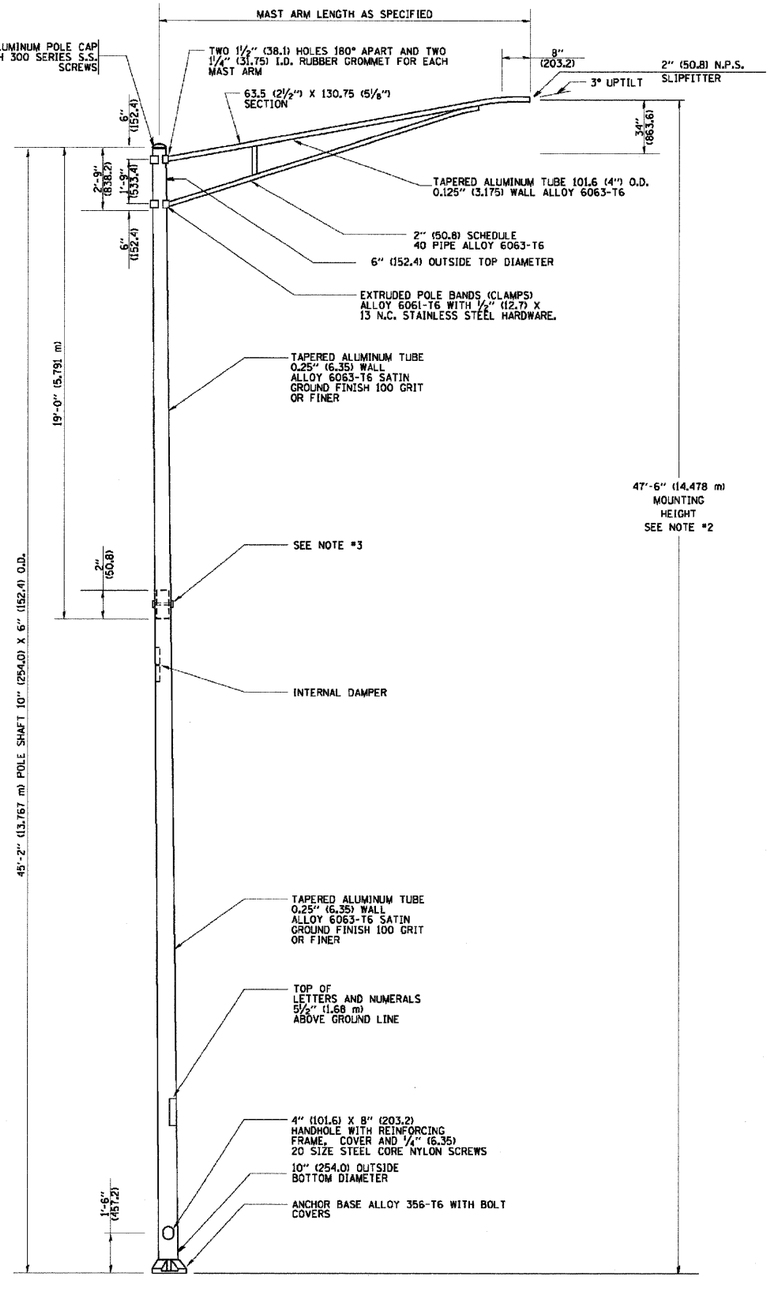
POSITION OF HANDHOLE AND POLE NUMBER FOR SINGLE MAST ARM POLES MOUNTED ON BRIDGE PARAPET OR BARRIER WALL

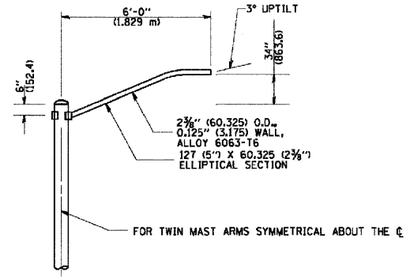


POSITION OF HANDHOLE AND POLE NUMBER FOR SINGLE MAST ARM POLES



POSITION OF HANDHOLE AND POLE NUMBER FOR TWIN MAST ARM POLES

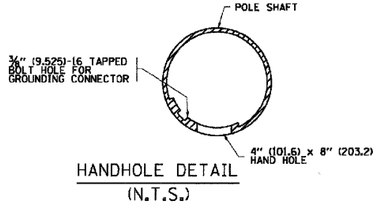




6' (1.8 m) SINGLE MEMBER MAST ARM
(N.T.S.)

NOTES:
1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
2. MOUNTING HEIGHT IS DEFINED AS THE DISTANCE FROM THE CENTERLINE OF THE TENON TO THE BOTTOM OF THE ANCHOR BASE.
3. TWO PIECE SHAFT WILL BE MATCHED MARKED AND INTERCHANGEABLE BETWEEN DIFFERENT UNITS. FIELD DRILLING OF THE HOLES WILL NOT BE ALLOWED.
4. THE LIGHT POLE WILL MEET AASHTO DESIGN CRITERIA AS SPECIFIED.
5. THE INSTALLING CONTRACTOR WILL PROVIDE A UL LISTED GROUNDING CONNECTOR. BURNDY K2C23, T&B SP4DL OR APPROVED EQUAL.
6. LIGHT POLES WILL NOT BE INSTALLED WITHOUT MAST ARMS AND LUMINAIRES.
7. LIGHT POLES WILL BE SET PLUMB ON THE FOUNDATION WITHOUT THE USE OF LEVELING NUTS, WASHERS OR SHIMS.
8. LIGHTING UNIT IDENTIFICATION NUMBERS SHALL BE INSTALLED BEFORE THE LIGHTING UNIT IS ENERGIZED.

LIGHT POLE BASE PLATE DETAIL
15 INCH (381.0) BOLT CIRCLE



HANDHOLE DETAIL
(N.T.S.)

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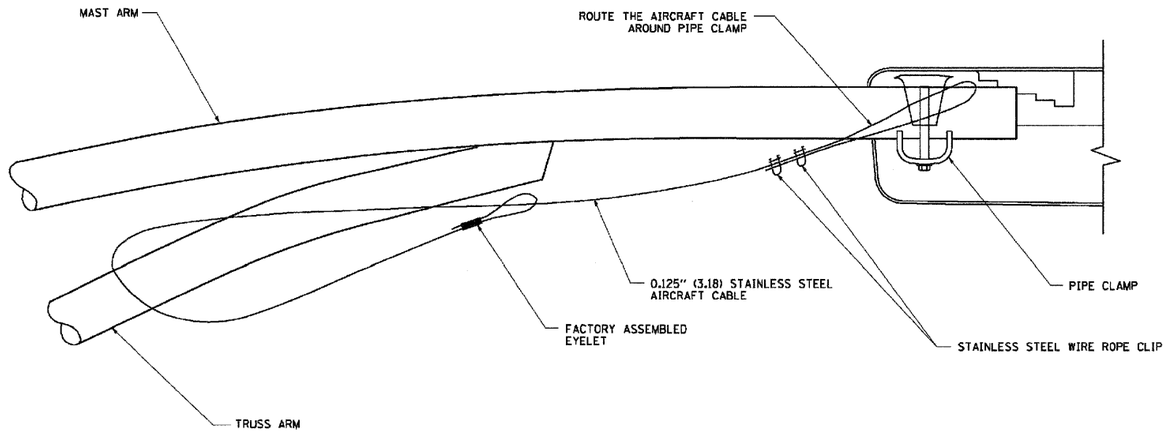
		DRAWN - FPB / FCP	REVISED -
	PLOT SCALE = 20'	CHECKED - MJT	REVISED -
	PLOT DATE = 3/18/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ALUMINUM LIGHT POLE
47'-6" (14.478 m) MOUNTING HEIGHT

SCALE: N.T.S. | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1321	2009-034 TS	COOK	45	43
		CONTRACT NO. 60G39		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



SIDE VIEW (TRUSS ARM)

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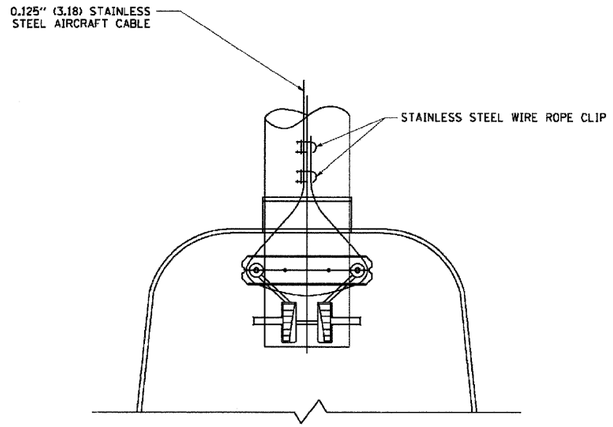

BOTTOM VIEW

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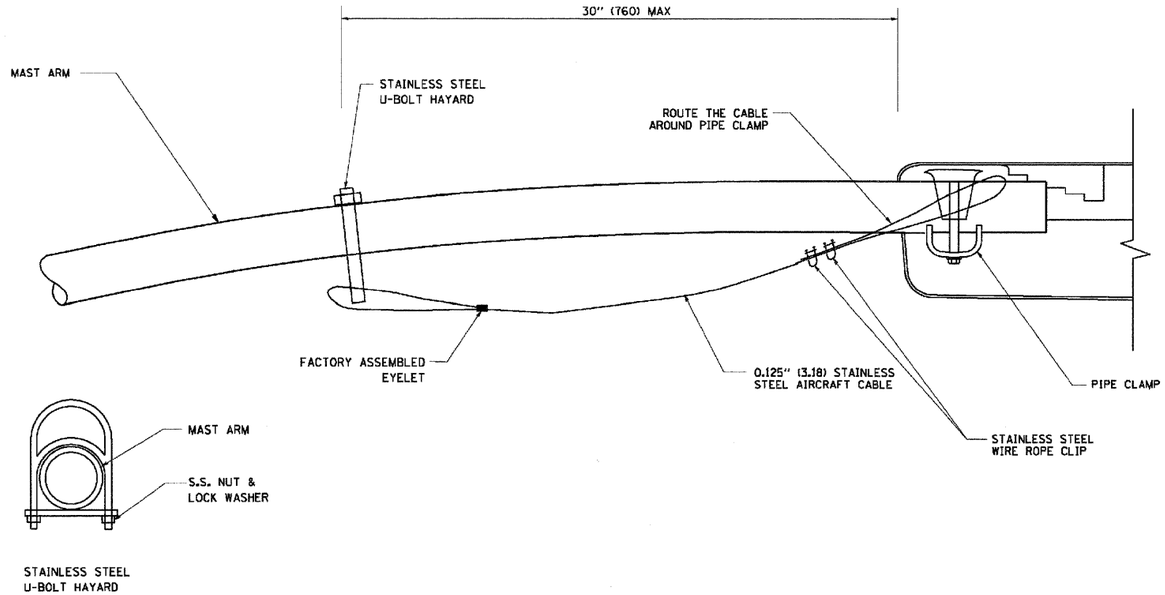

SIDE VIEW (SINGLE MEMBER OR DAVIT ARM)

N.T.S.

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.
2. CONTRACTOR SHALL ADJUST THE WIRE CLIP TO ELIMINATE ANY SLACK FROM THE WIRE ROPE.
3. THE 0.125" (3.18) STAINLESS STEEL AIRCRAFT CABLE SHALL REMAIN VISIBLE FROM THE GROUND LEVEL.
4. THE BREAKING STRENGTH OF THE CABLE SHALL BE 1700 LBS. MIN.

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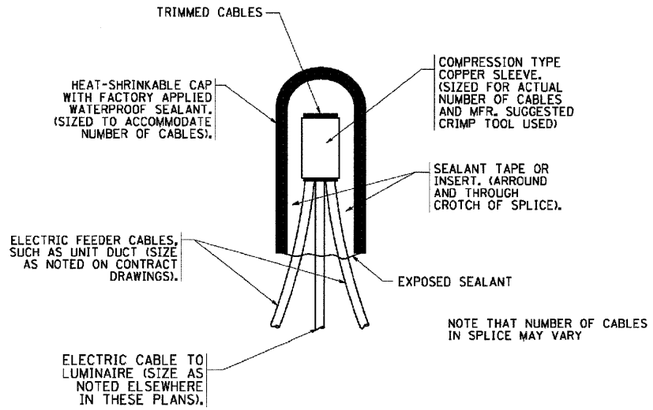
		DRAWN - FPB / FCP	REVISED -		
	PLOT SCALE = 20'	CHECKED - MJT	REVISED -		SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.
	PLOT DATE = 3/18/2009	DATE -	REVISED -		

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1321	2009-034 TS	COOK	45	44
		CONTRACT NO. 60G39		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



TYPICAL SPLICE DETAIL

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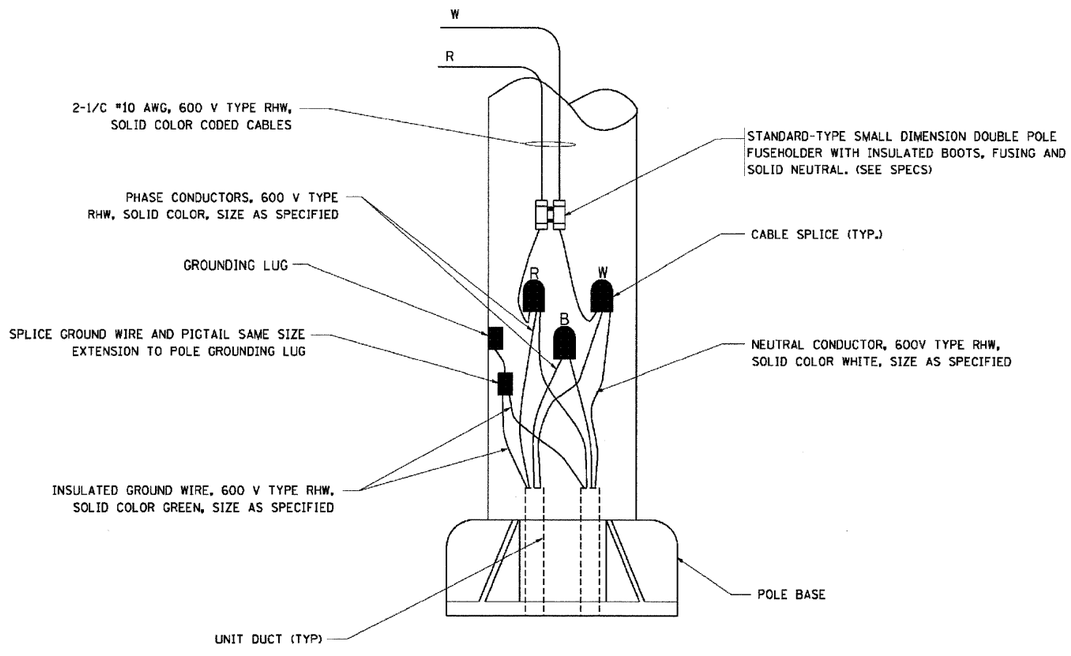
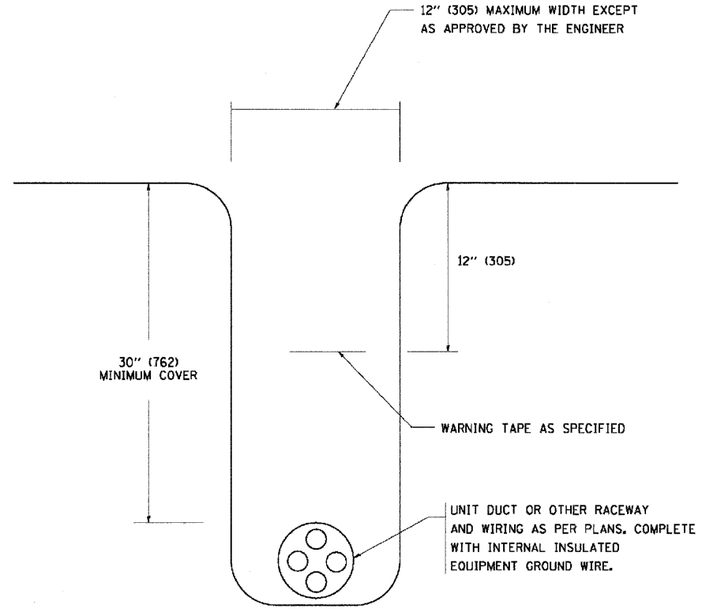


POLE WIRING DETAIL

N.T.S.



TYPICAL WIRING IN TRENCH DETAIL

N.T.S.

CHRISTOPHER B. BURKE ENGINEERING LTD.
9575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

PROFILE — SURVEYED — PLOTTED — GRADES CHECKED — NOTE BOOK — NO. — STRUCTURE NO(S) ATTACHED — DATE — BY

PLAN — SURVEYED — PLOTTED — ALIGNMENT CHECKED — NOTE BOOK — NO. — CADD FILE NAME — DATE — BY

N:\Jobs\3080948\Task FF-HH IL 19 Safety\Traffic\LIT_det010-be702.dgn

FILE NAME = ...\Traffic\LIT_det010-be702.dgn	USER NAME = FPACIONE	DESIGNED - ABR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MISC. ELECTRICAL DETAILS SHEET A					F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - FPB / FCP	REVISED -							1321	2009-034 TS	COOK	45	45
	PLOT SCALE = 20'	CHECKED - MJT	REVISED -									CONTRACT NO. 60G39		
	PLOT DATE = 3/18/2009	DATE -	REVISED -		SCALE: N.T.S.	SHEET NO. OF SHEETS	STA.	TO STA.		FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		