

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
22.5	SO FT	SIGN PANEL - TYPE 1
547	FOOT	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL
176	FOOT	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL
179	FOOT	CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL
15	FOOT	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL
163	FOOT	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL
271	FOOT	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL
7	EACH	HANDHOLE
1	EACH	HEAVY-DUTY HANDHOLE
2	EACH	DOUBLE HANDHOLE
1082	FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE V CABINET, SPECIAL
1	EACH	TRANSCEIVER-FIBER OPTIC
626	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C
1350	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
1187	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C
767	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C
2272	FOOT	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR
36	FOOT	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C
1	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.
2	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 20 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 24 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 44 FT.
1	FOOT	CONCRETE FOUNDATION, TYPE A
4	FOOT	CONCRETE FOUNDATION, TYPE C
30	FOOT	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER
30	FOOT	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER
5	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED
1	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
2	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED
2	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED
3	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
1	EACH	PEDESTRIAN SIGNAL HEAD, LED, 3-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
7	EACH	TRAFFIC SIGNAL BACKPLATE
9	EACH	INDUCTIVE LOOP DETECTOR
2	EACH	LIGHT DETECTOR
1	EACH	LIGHT DETECTOR AMPLIFIER
4	EACH	PEDESTRIAN PUSH-BUTTON
1	EACH	TEMPORARY TRAFFIC SIGNAL INSTALLATION
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
6	EACH	REMOVE EXISTING HANDHOLE
7	EACH	REMOVE EXISTING CONCRETE FOUNDATION
563	FOOT	PREFORMED DETECTOR LOOP
3	EACH	PAINT NEW TRAFFIC SIGNAL POST
3	EACH	PAINT NEW MAST ARM POLE, UNDER 40 FEET
1	EACH	PAINT NEW MAST ARM POLE, 40 FEET AND OVER
1	EACH	TEMPORARY TRAFFIC SIGNAL TIMING
1	EACH	SERVICE INSTALLATION, POLE MOUNT
1	EACH	UNINTERRUPTIBLE POWER SUPPLY (UPS)
794	FOOT	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C
417	FOOT	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED

• 100% COST TO VILLAGE OF PLAINFIELD

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO LAMPS	WATTAGE	%OPERATION		
SIGNAL (RED)	11	135	17	0.50	93.50
(YELLOW)	11	135	25	0.25	68.75
(GREEN)	11	135	35	0.25	41.25
ARROW	8	135	12	0.10	9.60
PED. SIGNAL	8	90	25	1.00	200.00
CONTROLLER	1	100	100	1.00	100.00
ILLUM. SIGN				0.05	
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	513.10

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 201 WEST CENTER COURT  
 SCHAUMBURG, ILLINOIS 60196-1096  
 ENERGY SUPPLY CONTACT: MR. DALE BALLINGER  
 PHONE: (815) 724-5717  
 COMPANY: COMED

PUSH BUTTON NOTE:  
 PUSH-BUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A-POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
D-CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (1) POLE	20' ± 2"
F-ARM POLE		SIGNAL POST	2 (0.6)	(6m ± 0.6m)	
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.3)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	16 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
		ELECTRIC SERVICE	1 (0.3)	ELECTRIC SERVICE	13.5 (4.1)
		GROUND CABLE	1 (0.3)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

FILE NAME =	USER NAME = #USER#	DESIGNED -	REVISED -
#FILE#		PKG, RRM	
		BB, ME, YB	
		PKG, RRM	
		DATE - 10/15/2008	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES  
 ILLINOIS ROUTE 59 AT US ROUTE 30 SOUTH INTERSECTION  
 SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	113 N-2	WILL	260	193
CONTRACT NO. 60E73				
FED. ROAD DIST. NO. ILLINOIS FAP 338 (IL RTE. 59)				

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

ILLINOIS RTE. 59

INTERCONNECT TO ILLINOIS RTE. 59 AND FORT BEGGS RD.

PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTORS

U.S. RTE. 30

PROPOSED SYSTEM DETECTORS

CABLE PLAN

EMERGENCY VEHICLE PREEMPTION SEQUENCE

ILL. RTE. 59

ILL. RTE. 59

U.S. RTE. 30

EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	←	→

CONTROLLER SEQUENCE

ILL. RTE. 59

ILL. RTE. 59

U.S. RTE. 30

PHASE DESIGNATION DIAGRAM

OVERLAP LETTER PERMISSIVE PHASE PROTECTED PHASE

D = 8 + 1

THE TRAFFIC SIGNAL WORK IN THIS CONTRACT SHALL BE COORDINATED WITH IDOT CONTRACT 62417.



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
(H)	(H)	12" (300mm) PEDESTRIAN SIGNAL SECTION
(C)	(C)	CONTROLLER CABINET
(S)	(S)	SERVICE INSTALLATION
(T)	(T)	TELEPHONE INSTALLATION
(V)	(V)	VEHICLE DETECTOR, INDUCTION LOOP
(M)	(M)	MAGNETIC DETECTOR
(E)	(E)	EMERGENCY VEHICLE LIGHT DETECTOR
(B)	(B)	CONFIRMATION BEACON
(P)	(P)	PUSH-BUTTON DETECTOR
(2)	(2)	2 DENOTES NUMBER OF CONDUCTORS, ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
(1)	(1)	1 GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
(24)	(24)	24 FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MMI2F & SMI2F
(R)	(R)	SIGNAL FACE WITH BACKPLATE. *P* INDICATES PROGRAMMED HEAD.
(E)	(E)	RAILROAD CONTROL CABINET
(E)	(E)	ILLUMINATED SIGN, FIBER OPTIC "NO LEFT TURN"
(E)	(E)	ILLUMINATED SIGN, FIBER OPTIC "NO RIGHT TURN"
H/C	H/C	GROUND ROD AT HANDHOLE, DOUBLE HANDHOLE, OR CONTROLLER
P	P	GROUND ROD AT POST OR MAST ARM POLE
S	S	GROUND ROD AT ELECTRIC SERVICE INSTALLATION
(M)	(M)	LOCAL AND MASTER CONTROLLER
(B)	(B)	UPS-BATTERY BACK-UP

LEGEND

(*)	DUAL ENTRY PHASE
(*)	SINGLE ENTRY PHASE
(O.L.)	OVERLAP
(*)	PEDESTRIAN PHASE
*	NUMBER REFERS TO ASSOCIATED PHASE

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