FOR INDEX OF SHEETS – SEE SHEET NO. 2

11-09-12 LETTING ITEM 067

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIES	2012-030TS	COOK	39	1
		CONTRACT #:	60T82	
	ILLINOIS FED. AID PROJECT			

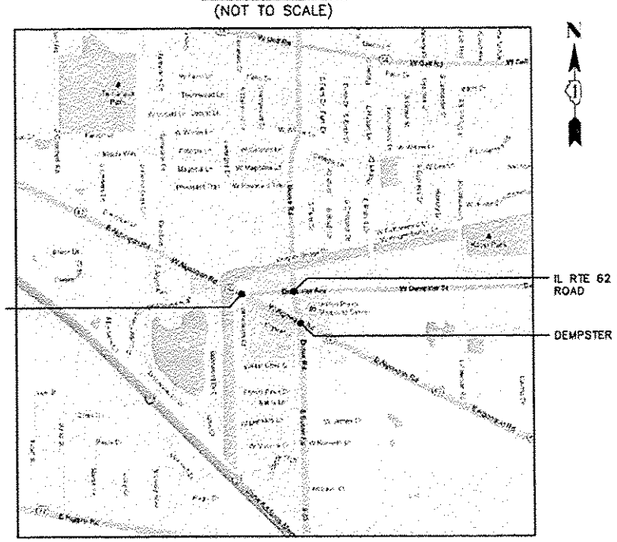
D-91-449-12

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

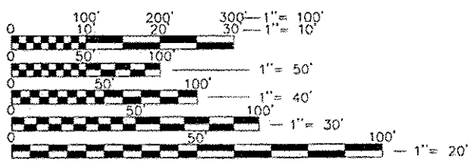
DISTRICT 1
HIGHWAY SAFETY IMPROVEMENT PROJECT (HSIP)
VARIOUS LOCATIONS IN
THE VILLAGE OF MOUNT PROSPECT
SECTION: 2012-030TS
PROJECT: ACHSIP-0005(908)
TRAFFIC SIGNAL MODERNIZATION
COOK COUNTY
JOB NO.: C-91-449-12

LOCATION MAP
(NOT TO SCALE)



LOCATION OF SECTION INDICATED THUS: ▬

PROJECT IS LOCATED IN THE VILLAGE OF MOUNT PROSPECT



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE BELOW SCALES MAY BE USED.

JULIE
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
CALL 811
811
Know what's below. Call before you dig.

NOTE:
THE CONTRACTOR IS SOLELY RESPONSIBLE FOR JOBSITE SAFETY.

KEVIN L. BELGRAVE
062-051750
LICENSED PROFESSIONAL ENGINEER
STATE OF ILLINOIS

SIGNED: Kevin L. Belgrave
Kevin L. Belgrave
DATE: 8/15/12

EXPIRES: 11/30/2013

GHA GEWALT HAMILTON ASSOCIATES, INC.
850 Forest Edge Drive * Vernon Hills, IL 60061
Consulting Engineers & Surveyors
847-478-9700
FAX: 847-478-9701

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED: Aug 17 20 12
John Fosterman
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

October 5 20 12
John D. Baranzelli, P.E. /BR
acting ENGINEER OF DESIGN AND ENVIRONMENT

October 5 20 12
William B. Frey /BR
acting DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

CONTRACT NO: 60T82

DISTRICT 1 - TRAFFIC OPERATIONS - SUDAD MAHMOUD (847)705-4420

INDEX OF SHEETS

GENERAL NOTES

THE ILLINOIS DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", JANUARY 1, 2012; MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, LATEST EDITION; PROJECT SPECIFICATIONS; ALL APPLICABLE REQUIREMENTS OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION; THE VILLAGE OF MOUNT PROSPECT; THE COOK COUNTY DIVISION OF TRANSPORTATION; ALL APPLICABLE REQUIREMENTS OF THE ORDINANCES OF AUTHORITIES HAVING JURISDICTION; AND ALL ADDENDA THERETO SHALL GOVERN THIS WORK.

THE STANDARD SPECIFICATIONS, PROJECT SPECIFICATIONS, CONSTRUCTION PLANS, AND SUBSEQUENT DETAILS ARE ALL TO BE CONSIDERED AS PART OF THE CONTRACT. INCIDENTAL ITEMS OR ACCESSORIES NECESSARY TO COMPLETE THIS WORK MAY NOT BE SPECIFICALLY NOTED BUT ARE TO BE CONSIDERED A PART OF THE CONTRACT.

WHENEVER, DURING CONSTRUCTION OPERATIONS, ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF GUTTERS, DRAINAGE STRUCTURES, DITCHES, ETC. SUCH THAT THE NATURAL FLOW LINE OF WATER IS OBSTRUCTED, THE LOOSE MATERIAL WILL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES AND FLOW LINES SHALL BE FREE FROM DIRT AND DEBRIS. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. THE CONTRACTOR'S FAILURE TO PROVIDE THE ABOVE WILL PRECLUDE ANY POSSIBLE ADDED COMPENSATION REQUESTED DUE TO DELAYS OF UNSTABLE MATERIALS CREATED AS A RESULT THEREOF.

THE CONTRACTOR SHALL SOLEY BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ADEQUATE SIGNS, TRAFFIC CONTROL DEVICES, AND WARNING DEVICES TO INFORM AND PROTECT THE PUBLIC DURING ALL PHASES OF CONSTRUCTION.

THE CONTRACTOR IS RESPONSIBLE FOR RETURNING ALL AREAS AFFECTED BY EQUIPMENT OR LABORERS TO EXISTING CONDITIONS. THE CONTRACTOR IS ALSO RESPONSIBLE FOR PROTECTING ALL NEW WORK UNTIL COMPLETION OF THIS CONTRACT.

EXISTING UTILITIES: WHEN THE PLANS OR SPECIAL PROVISIONS INCLUDE INFORMATION PERTAINING TO THE LOCATION OF UNDERGROUND UTILITY FACILITIES, SUCH INFORMATION IS BASED ON RECORD INFORMATION PROVIDED BY THE INDIVIDUAL UTILITY OWNERS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL SUCH FACILITIES. THE CONTRACTOR SHALL ALSO CONTACT J.U.L.I.E. TO OBTAIN LOCATES OF THE RESPECTIVE UTILITY COMPANIES UNDERGROUND FACILITIES.

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 IN ACCORDANCE TO STANDARD SPECIFICATIONS ARTICLE 252 WHICH SHALL INCLUDE THE REQUIRED WATERING PER ARTICLE 252.08. ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS ARTICLE 250 AND 251, RESPECTIVELY.

THE GENERAL CONTRACTOR IS REQUIRED TO HIRE AN ENVIRONMENTAL FIRM WITH AT LEAST FIVE (5) DOCUMENTED LEAKING UNDERGROUND STORAGE TANK CLEANUPS OR THAT IS PRE-QUALIFIED IN HAZARDOUS WASTE BY THE DEPARTMENT TO REMEDIATE THE SOIL CONTAMINATION AND MONITOR FOR WORKER PROTECTION.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION. THIS SHALL INCLUDE LOCATING THE MAST ARM FOUNDATIONS AND VERIFYING THE MAST ARM LENGTH.

THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE ORDERING ANY MATERIALS AND STARTING ANY WORK. FOR LOCATIONS OF UTILITIES, LOCALLY OWNED EQUIPMENT, LEASED ENFORCEMENT CAMERA SYSTEM FACILITIES, AND IDOT UNDERGROUND FACILITIES, CONTACT THE LOCAL COUNTIES, MUNICIPALITIES, AND IDOT FOR LOCATES. THE CONTRACTOR SHALL CALL 'JULIE' AT (800) 892-0123 OR 811, IN THE CITY OF CHICAGO CONTACT DIGGER AT (312) 744-7000 FOR FIELD LOCATIONS OF BURIED UTILITIES (48 HOURS NOTIFICATION REQUIRED).

THE CONTRACTOR SHALL CHECK THE PROPOSED TRAFFIC SIGNAL EQUIPMENT LOCATIONS FOR OVERHEAD UTILITY CONFLICTS. THE CONTRACTOR SHALL COORDINATE ANY CONFLICTS WITH THE UTILITY COMPANIES AND THE RESIDENT ENGINEER BEFORE ORDERING MATERIALS.

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, LOCAL GOVERNMENT AGENCIES, AND IDOT.

IDOT STANDARDS

000001-06	STANDARD SYMBOLS, ABBREVIATIONS, & PATTERNS
001006	DECIMAL OF AN INCH AND OF A FOOT
424001-06	PERPENDICULAR CURB RAMPS FOR SIDEWALKS
424006	DIAGONAL CURB RAMPS FOR SIDEWALKS
424011	CORNER PARALLEL CURB RAMPS FOR SIDEWALKS
424021	DEPRESSED CORNER FOR SIDEWALKS
701101-02	OFF-RD OPERATIONS, MULTILANE, 15' TO 24" FROM PAVEMENT EDGE
701106-02	OFF-RD OPERATIONS, MULTILANE, MORE THAN 15' AWAY
701606-08	URBAN LANE CLOSURE MULTILANE 2W WITH MOUNTABLE MEDIAN
701701-08	URBAN LANE CLOSURE MULTILANE INTERSECTION
701801-05	LANE CLOSURE MULTILANE 1W OR 2W CROSSWALK OR SIDEWALK CLOSURE
701901-02	TRAFFIC CONTROL DEVICES
720001-01	SIGN PANEL MOUNTING DETAIL
720006-03	SIGN PANEL ERECTION DETAIL
780001-03	TYPICAL PAVEMENT MARKINGS
805001-01	ELECTRICAL SERVICE INSTALLATION DETAILS
814001-02	HANDHOLE
814006-02	DOUBLE HANDHOLES
857001-01	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
862001-01	UNINTERRUPTIBLE POWER SUPPLY (UPS)
873001-02	TRAFFIC SIGNAL GROUNDING & BONDING
877001-05	STEEL MAST ARM ASSEMBLY AND POLE, 16' THROUGH 55'
878001-09	CONCRETE FOUNDATION DETAILS
880001-01	SPAN WIRE MOUNTED SIGNALS AND FLASHING BEACON INSTALLATION
880006-01	TRAFFIC SIGNAL MOUNTING DETAILS
886001-01	DETECTOR LOOP INSTALLATIONS

FILE NAME = 4085.882--TR1.dwg

GHA #4085.882

GEWALT HAMILTON ASSOCIATES, INC.

USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -
	DRAWN - ZCW	REVISED -
PLOT SCALE = 1" = .0833'	CHECKED - KLB	REVISED -
PLOT DATE = 8/15/2012	DATE - 8/15/2012	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS, GENERAL NOTES, & HIGHWAY STANDARDS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	2012-030TS	COOK	39	2
		CONTRACT #: 60T82		
	ILLINOIS FED. AID PROJECT			

URBAN ← LSSEV, 02 → 67POY, 01

SUMMARY OF QUANTITIES				CONSTRUCTION CODE				
		LOCATION OF WORK		DEMPSTER STREET AT BUSSE ROAD	IL 62 (ALGONQUIN RD) AT BUSSE ROAD	IL 62 (ALGONQUIN RD) AT DEMPSTER STREET	INTERCONNECT	EMERGENCY VEHICLE PREEMPTION
		FUNDING BREAKDOWNS		90% FEDERAL 10% STATE	90% FEDERAL 10% STATE	90% FEDERAL 10% STATE	90% FEDERAL 10% STATE	100% VILLAGE OF MOUNT PROSPECT
				TRAFFIC SIGNALS	TRAFFIC SIGNALS	TRAFFIC SIGNALS	INTERCONNECT	TRAFFIC SIGNALS
		TYPE		0021	0021	0021	0021	0021
CODE NO.	ITEM	UNIT	TOTAL	URBAN	URBAN	URBAN	URBAN	URBAN
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	1,095	765	110	220		
42400800	DETECTABLE WARNINGS	SQ FT	28	28				
44000600	SIDEWALK REMOVAL	SQ FT	1,095	765	110	220		
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	5.00	1.50	1.50	1.50	0.50	
67100100	MOBILIZATION	L SUM	1.00	0.30	0.30	0.30	0.10	
70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1.00	0.30	0.30	0.30	0.10	
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1.00	0.30	0.30	0.30	0.10	
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1.00	0.30	0.30	0.30	0.10	
* 72000100	SIGN PANEL - TYPE 1	SQ FT	63.00	31.50	13.50	18.00		
* 72000200	SIGN PANEL - TYPE 2	SQ FT	25.00		25.00			
80500020	SERVICE INSTALLATION - POLE MOUNTED	EACH	3.00	1.00	1.00	1.00		
81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	1,480	489	265	258	468	
81028210	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	420	102	243	75		
81028220	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	200	36	111	53		

* SPECIALTY ITEM

FILE NAME = 4085.882-TR1.dwg

GHA #4085.882

GHA GEWALT HAMILTON ASSOCIATES, INC.	USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -
		DRAWN - ZCW	REVISED -
	PLOT SCALE = 1" = .0833'	CHECKED - KLB	REVISED -
	PLOT DATE = 8/15/2012	DATE - 8/15/2012	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
(SHEET 1 OF 6)

SCALE N.A. | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	2012-030TS	COOK	39	3
		CONTRACT #:	60T82	
		ILLINOIS FED. AID PROJECT		

SUMMARY OF QUANTITIES		CONSTRUCTION CODE						
		LOCATION OF WORK		DEMPSTER STREET AT BUSSE ROAD	IL 62 (ALGONQUIN RD) AT BUSSE ROAD	IL 62 (ALGONQUIN RD) AT DEMPSTER STREET	INTERCONNECT	EMERGENCY VEHICLE PREEMPTION
		FUNDING BREAKDOWNS		90% FEDERAL 10% STATE	90% FEDERAL 10% STATE	90% FEDERAL 10% STATE	90% FEDERAL 10% STATE	100% VILLAGE OF MOUNT PROSPECT
				TRAFFIC SIGNALS	TRAFFIC SIGNALS	TRAFFIC SIGNALS	INTERCONNECT	TRAFFIC SIGNALS
		TYPE		0021	0021	0021	0021	0021
CODE NO.	ITEM	UNIT	TOTAL	URBAN	URBAN	URBAN	URBAN	URBAN
81028240	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	1,452	327	638	487		
81400100	HANDHOLE	EACH	8	2	2	4		
81400200	HEAVY-DUTY HANDHOLE	EACH	8	3	3	2		
81400300	DOUBLE HANDHOLE	EACH	7	2	3	2		
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1				1	
85900100	TRANSCEIVER	EACH	2	1		1		
86400100	TRANSCEIVER - FIBER OPTIC	EACH	1		1			
87300925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	3,537				3,537	
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	3,867	1,392	1,949	526		
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	6,040	1,641	2,121	537		1,741
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	5,810	1,431	2,149	2,230		
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	5,754	1,925	3,224	605		
87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	10,751	3,660	4,469	2,622		
87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	106	43	31	32		

* SPECIALTY ITEM

GHA #4085.882

GHA GEWALT HAMILTON ASSOCIATES, INC.	USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES (SHEET 2 OF 6)			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - ZCW	REVISED -					~	2012-030TS	COOK	39	1
	PLOT SCALE = 1" = .0833'	CHECKED - KLB	REVISED -							CONTRACT #: 60T82		
	PLOT DATE = 8/15/2012	DATE - 8/15/2012	REVISED -		SCALE N.A.	SHEET NO. OF SHEETS	STA. TO STA.			ILLINOIS FED. AID PROJECT		

FILE NAME = 4085.882-TR1.dwg

SUMMARY OF QUANTITIES		CONSTRUCTION CODE						
		LOCATION OF WORK		DEMPSTER STREET AT BUSSE ROAD	IL 62 (ALGONQUIN RD) AT BUSSE ROAD	IL 62 (ALGONQUIN RD) AT DEMPSTER STREET	INTERCONNECT	EMERGENCY VEHICLE PREEMPTION
		FUNDING BREAKDOWNS		90% FEDERAL 10% STATE	90% FEDERAL 10% STATE	90% FEDERAL 10% STATE	90% FEDERAL 10% STATE	100% VILLAGE OF MOUNT PROSPECT
				TRAFFIC SIGNALS	TRAFFIC SIGNALS	TRAFFIC SIGNALS	INTERCONNECT	TRAFFIC SIGNALS
		TYPE		0021	0021	0021	0021	0021
CODE NO.	ITEM	UNIT	TOTAL	URBAN	URBAN	URBAN	URBAN	URBAN
87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	2,074	601	799	674		
87502440	TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	8	2	4	2		
87502480	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	3			3		
87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	8	3	3	2		
87700210	STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	1	1				
87700220	STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	6	1	3	2		
87700240	STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.	EACH	1	1				
87700290	STEEL MAST ARM ASSEMBLY AND POLE, 50 FT.	EACH	2	1	1			
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	32	12	12	8		
87800150	CONCRETE FOUNDATION, TYPE C	FOOT	12	4	4	4		
87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	116	48	46	22		
87900200	DRILL EXISTING HANDHOLE	EACH	22	8	8	5	1	
88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	15	7	6	2		
88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2			2		

* SPECIALTY ITEM

FILE NAME = 4085.882-TR1.dwg

GHA GEWALT HAMILTON ASSOCIATES, INC.

USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -	
	DRAWN - ZCW	REVISED -	
PLOT SCALE = 1" = .0833'	CHECKED - KLB	REVISED -	
PLOT DATE = 8/15/2012	DATE - 8/15/2012	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
(SHEET 3 OF 6)

SCALE: N.A. | SHEET NO. OF SHEETS | STA. | TO STA.

GHA #4085.882

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	2012-030TS	COOK	39	5
		CONTRACT #:	60T82	
	ILLINOIS FED. AID PROJECT			

SUMMARY OF QUANTITIES		CONSTRUCTION CODE						
		LOCATION OF WORK		DEMPSTER STREET AT BUSSE ROAD	IL 62 (ALGONQUIN RD) AT BUSSE ROAD	IL 62 (ALGONQUIN RD) AT DEMPSTER STREET	INTERCONNECT	EMERGENCY VEHICLE PREEMPTION
		FUNDING BREAKDOWNS		90% FEDERAL 10% STATE	90% FEDERAL 10% STATE	90% FEDERAL 10% STATE	90% FEDERAL 10% STATE	100% VILLAGE OF MOUNT PROSPECT
				TRAFFIC SIGNALS	TRAFFIC SIGNALS	TRAFFIC SIGNALS	INTERCONNECT	TRAFFIC SIGNALS
		TYPE		0021	0021	0021	0021	0021
CODE NO.	ITEM	UNIT	TOTAL	URBAN	URBAN	URBAN	URBAN	URBAN
88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	12	5	6	1		
88030210	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2	1		1		
88030220	SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4	2	2			
88030240	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	4	1	2	1		
88055160	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	5			5		
88060390	COMBINATION SIGNAL HEAD, LED, 3-FACE, 1-3 SECTION OPTICALLY PROGRAMMED, 2-3 SECTION, BRACKET MOUNTED	EACH	1			1		
88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	12	5	3	4		
88102747	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	3	1	2			
88102757	PEDESTRIAN SIGNAL HEAD, LED, 3-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2	1	1			
88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	32	12	12	8		
88500100	INDUCTIVE LOOP DETECTOR	EACH	30	11	11	8		
88600100	DETECTOR LOOP, TYPE I	FOOT	1,781	600	584	597		
88700200	LIGHT DETECTOR	EACH	6					6
88700300	LIGHT DETECTOR AMPLIFIER	EACH	3					3

14

* SPECIALTY ITEM

FILE NAME = 4085.882-TR1.dgn

GHA #4085.882

GHA GEWALT HAMILTON ASSOCIATES, INC.				
USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES (SHEET 4 OF 6)
	DRAWN - ZCW	REVISED -		
PLOT SCALE = 1" = .0833'	CHECKED - KLB	REVISED -		SCALE N.A. SHEET NO. OF SHEETS STA. TO STA.
PLOT DATE = 8/15/2012	DATE - 8/15/2012	REVISED -		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	2012-030TS	COOK	39	6
		CONTRACT #: 60T82		
	ILLINOIS FED. AID PROJECT			

SUMMARY OF QUANTITIES				CONSTRUCTION CODE					
		LOCATION OF WORK		DEMPSTER STREET AT BUSSE ROAD	IL 62 (ALGONQUIN RD) AT BUSSE ROAD	IL 62 (ALGONQUIN RD) AT DEMPSTER STREET	INTERCONNECT	EMERGENCY VEHICLE PREEMPTION
		FUNDING BREAKDOWNS		90% FEDERAL 10% STATE	90% FEDERAL 10% STATE	90% FEDERAL 10% STATE	90% FEDERAL 10% STATE	100% VILLAGE OF MOUNT PROSPECT
				TRAFFIC SIGNALS	TRAFFIC SIGNALS	TRAFFIC SIGNALS	INTERCONNECT	TRAFFIC SIGNALS
		TYPE		0021	0021	0021	0021	0021
CODE NO.	ITEM	UNIT	TOTAL	URBAN	URBAN	URBAN	URBAN	URBAN
88800100	PEDESTRIAN PUSH-BUTTON	EACH	22	9	9	4		
89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1	1				
89500120	REMOVE EXISTING SERVICE INSTALLATION	EACH	1	1				
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	8,693	1,328	1,874	1,601	3,890	
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	3	1	1	1		
89502380	REMOVE EXISTING HANDHOLE	EACH	26	7	10	9		
89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	24	8	8	8		
X0324085	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	3,482	540	784	417		1,741
X0324599	ROD AND CLEAN EXISTING CONDUIT	FOOT	4,163	664	937	617	1,945	
X0325225	BRICK PAVEMENT REMOVAL AND REPLACEMENT	SQ FT	900		900			
X8100105	CONDUIT SPLICE	EACH	16	5	8	3		
X8570226	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	2	1		1		
X8570231	FULL-ACTUATED CONTROLLER AND TYPE V CABINET, SPECIAL	EACH	1		1			
X8600105	MASTER CONTROLLER (SPECIAL)	EACH	1		1			

* SPECIALTY ITEM

FILE NAME = 4085.882-TR1.dwg

GHA GEWALT HAMILTON ASSOCIATES, INC.

USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -
	DRAWN - ZCW	REVISED -
PLOT SCALE = 1" = .0833'	CHECKED - KLB	REVISED -
PLOT DATE = 8/15/2012	DATE - 8/15/2012	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
(SHEET 5 OF 6)

SCALE: N.A. | SHEET NO. OF SHEETS | STA. | TO STA.

GHA #4085.882

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	2012-030TS	COOK	39	7
		CONTRACT #: 60782		
	ILLINOIS FED. AID PROJECT			

SUMMARY OF QUANTITIES		CONSTRUCTION CODE						
		LOCATION OF WORK		DEMPSTER STREET AT BUSSE ROAD	IL 62 (ALGONQUIN RD) AT BUSSE ROAD	IL 62 (ALGONQUIN RD) AT DEMPSTER STREET	INTERCONNECT	EMERGENCY VEHICLE PREEMPTION
		FUNDING BREAKDOWNS		90% FEDERAL 10% STATE	90% FEDERAL 10% STATE	90% FEDERAL 10% STATE	90% FEDERAL 10% STATE	100% VILLAGE OF MOUNT PROSPECT
				TRAFFIC SIGNALS	TRAFFIC SIGNALS	TRAFFIC SIGNALS	INTERCONNECT	TRAFFIC SIGNALS
		TYPE		0021	0021	0021	0021	0021
CODE NO.	ITEM	UNIT	TOTAL	URBAN	URBAN	URBAN	URBAN	URBAN
X8620200	UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	3	1	1	1		
X8710024	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F	FOOT	3,537				3,537	
Z0007430	TEMPORARY SIDEWALK	SQ FT	1,095	765	110	220		
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	128	51	51	26		
Z0033044	RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 1	EACH	3				3	
Z0073510	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	3.00	1.00	1.00	1.00		

* SPECIALTY ITEM

GHA #4085.882

GHA GEWALT HAMILTON ASSOCIATES, INC.	USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		DRAWN - ZCW	REVISED -	
	PLOT SCALE = 1" = .0833'	CHECKED - KLB	REVISED -	
	PLOT DATE = 8/15/2012	DATE - 8/15/2012	REVISED -	

SUMMARY OF QUANTITIES (SHEET 6 OF 6)

SCALE: N.A. | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	2012-030TS	COOK	39	8
		CONTRACT #:	60T82	
	ILLINOIS FED. AID PROJECT			

FILE NAME = 4085.882-TRI.dwg

LOOP DETECTOR NOTES

1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT 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.

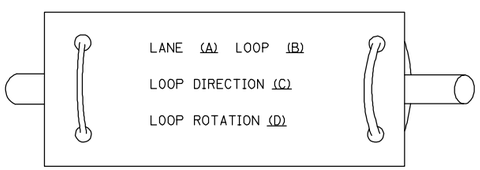
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.

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

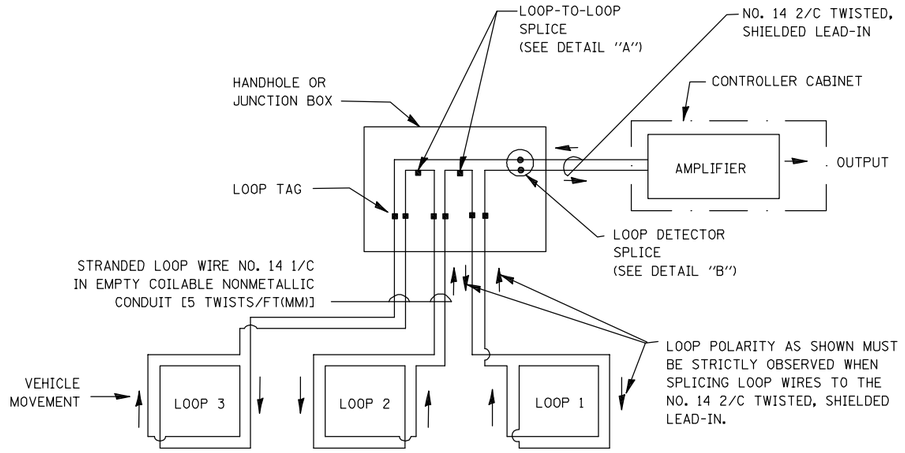


A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY

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

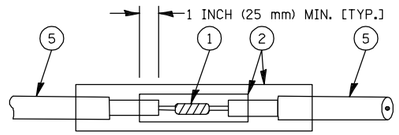
C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".

D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

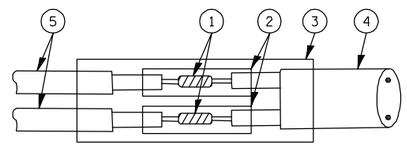


DETECTOR LOOP WIRING SCHEMATIC

- 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.

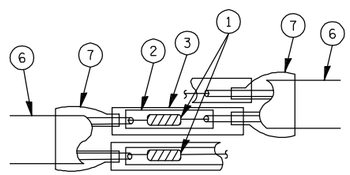


DETAIL "A"
LOOP-TO-LOOP SPLICE



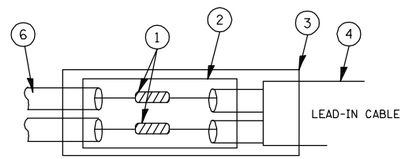
DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A"
LOOP-TO-LOOP SPLICE

PRE-FORMED LOOP



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.

(6) PRE-FORMED LOOP

(7) XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

GHA #4085.882

FILE NAME = 4085.882-TR1.dwg

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USER NAME = ZACH WALLSTEN	DESIGNED - DAD	REVISED -
	DRAWN - BCK	REVISED -
PLOT SCALE = 1" = .0833'	CHECKED - DAD	REVISED -
PLOT DATE = 8/15/2012	DATE - 10-28-09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

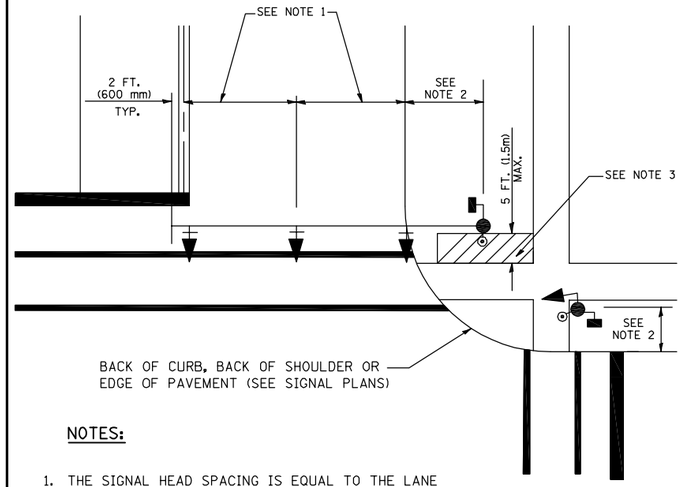
DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET NO. 1 OF 6 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
–	2012-030TS	COOK	39	9
	TS-05	CONTRACT #:	60T82	
	ILLINOIS FED. AID PROJECT			

TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

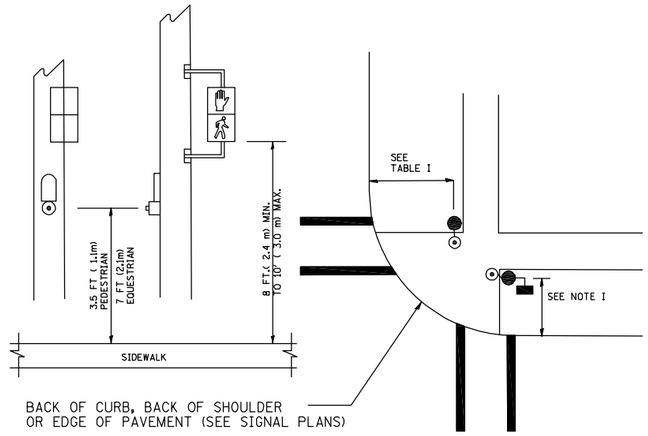
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



NOTES:

1. THE SIGNAL HEAD SPACING IS EQUAL TO THE LANE WIDTH OR AS SHOWN ON THE TRAFFIC SIGNAL PLAN.
2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
3. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST.
4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
5. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

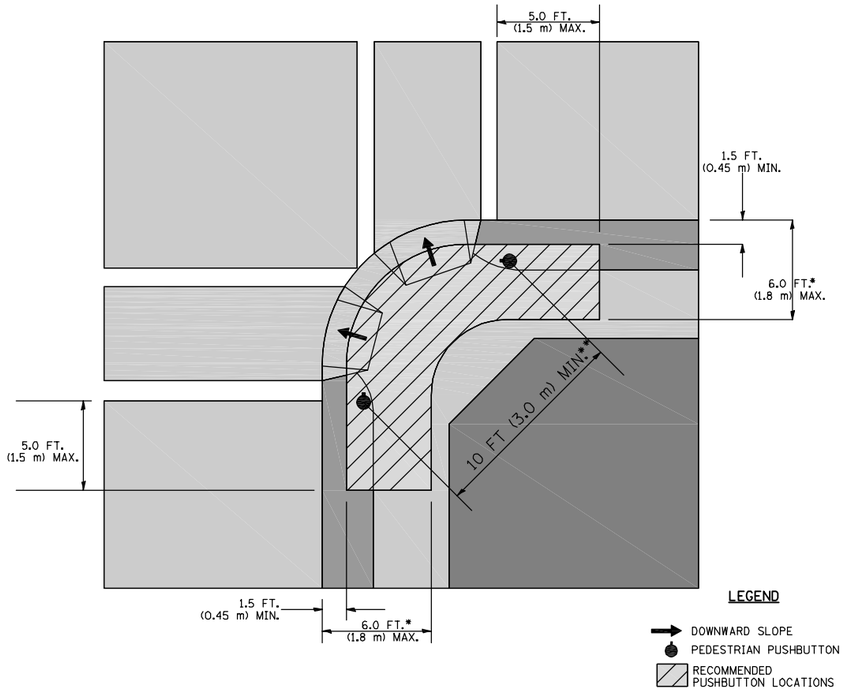
PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST



NOTES:

1. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
2. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE PEDESTRIAN SIGNAL POST OR THE PEDESTRIAN PUSH BUTTON POST.
3. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
4. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

RECOMMENDED PUSHBUTTON LOCATIONS



* WHERE THERE ARE CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5 FT (0.45 m) AND 6 FT (1.8 m) FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT, IT SHOULD NOT BE FURTHER THAN 10 FT (3 m) FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.

** WHERE THERE ARE CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT IMPRACTICAL TO PROVIDE THE 10 FT (3 m) SEPERATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

NOTES:

PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.

THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) OF A VEHICULAR SIGNAL FACE THAT IS NOT LOCATED OVER A HIGHWAY SHALL BE AT LEAST 8 FT (2.4 m) BUT NOT MORE THAN 19 FT (5.8 m) ABOVE THE SIDEWALK OR, IF THERE IS NO SIDEWALK, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY.

THE BOTTOM OF THE SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001, 877002, 877006, 877011 AND 877012 WITH A MINIMUM OF 16 FT (5.0 m) AND A MAXIMUM OF 18 FT. (5.5 m) FROM THE HIGHEST POINT OF PAVEMENT.

THE BOTTOM OF THE TEMPORARY SPAN WIRE MOUNTED SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARD 880001 WITH A MINIMUM OF 17 FT (5.18 m) FROM THE HIGHEST POINT OF PAVEMENT.

THE TOP OF THE SIGNAL HOUSING OF A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL NOT BE MORE THAN 25.6 FT (7.8 m) ABOVE THE PAVEMENT.

TRAFFIC SIGNAL EQUIPMENT OFFSET

TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN PUSHBUTTON POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TEMPORARY WOOD POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
CONTROLLER CABINET	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.
SERVICE INSTALLATION, GROUND MOUNT	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.

NOTES:

1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TO THE ROADWAY SIDE OF THE FOUNDATION.
4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS, FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" CHART AND THE TRAFFIC SIGNAL INSTALLATION PLAN, COULD EFFECT THE PLACEMENT OF THE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS AND THE PEDESTRIAN PUSHBUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL INSTALLATION PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE. THE PROPOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THE ABOVE REQUIREMENTS. THE PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS MUST MEET THE REQUIREMENTS UNDER THE DETAILS ON THIS SHEET.

GHA #4085.882

FILE NAME = 4085.882-TR1.dwg

GHA GEWALT HAMILTON ASSOCIATES, INC.

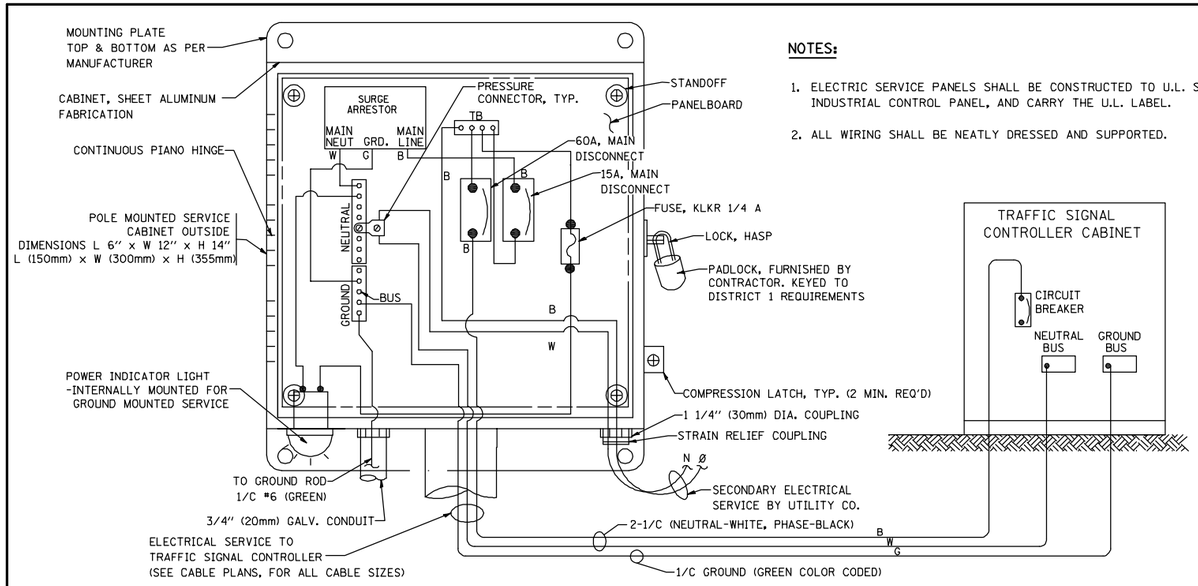
USER NAME = ZACH WALLSTEN	DESIGNED - DAD	REVISED -
	DRAWN - BCK	REVISED -
PLOT SCALE = 1" = .0833'	CHECKED - DAD	REVISED -
PLOT DATE = 8/15/2012	DATE - 10-28-09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET NO. 2 OF 6 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
–	2012-030TS	COOK	39	10
	TS-05	CONTRACT #:	60T82	
		ILLINOIS FED. AID PROJECT		



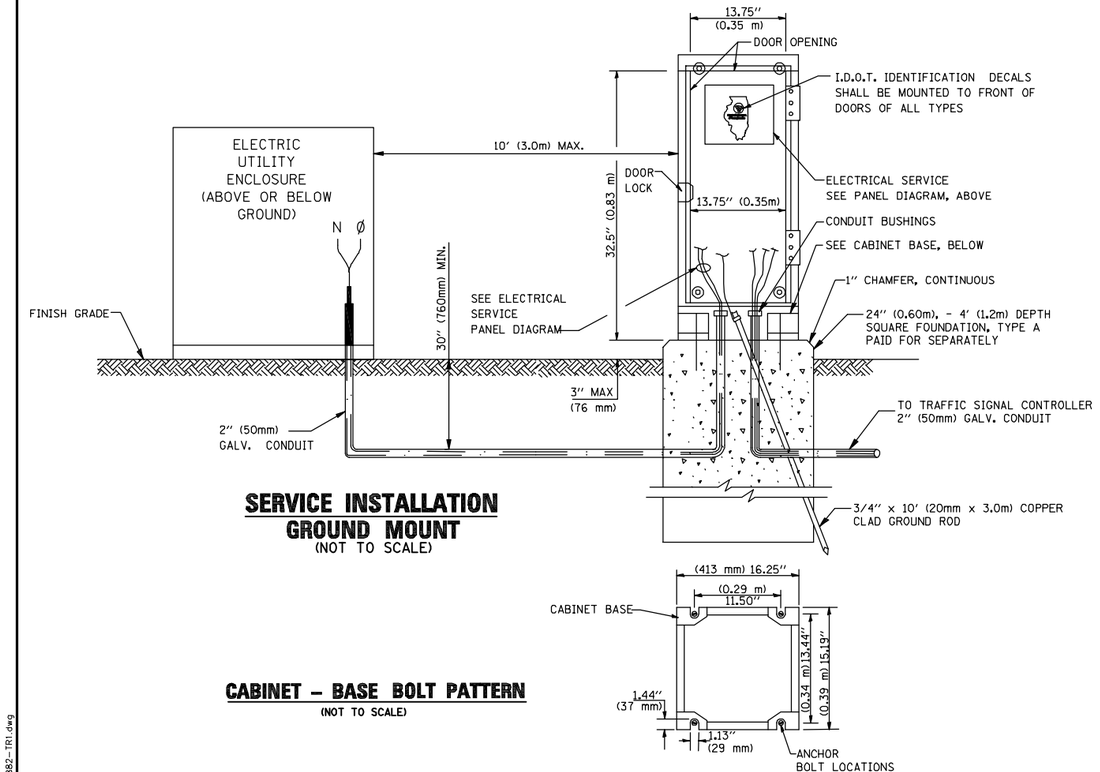
ELECTRICAL SERVICE – PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)

SERVICE INSTALLATION POLE MOUNT (SHOWN)

(NOT TO SCALE)

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.

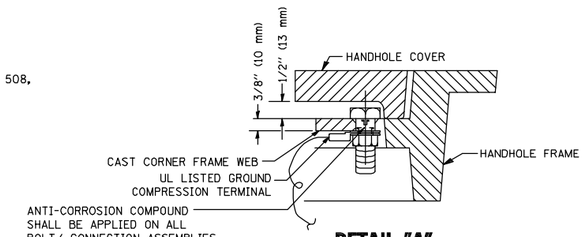


SERVICE INSTALLATION GROUND MOUNT

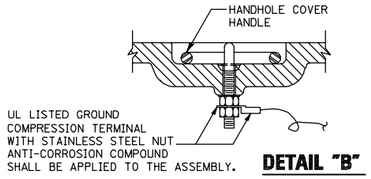
(NOT TO SCALE)

CABINET – BASE BOLT PATTERN

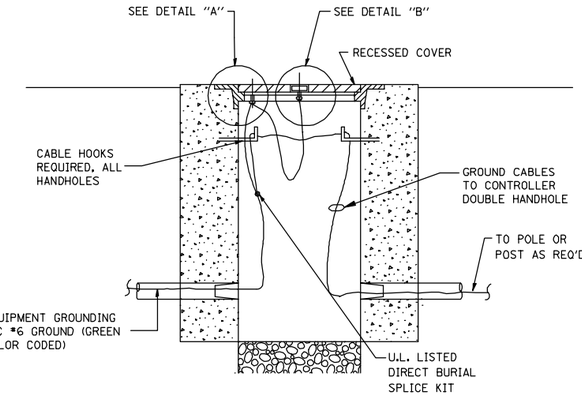
(NOT TO SCALE)



DETAIL "A"

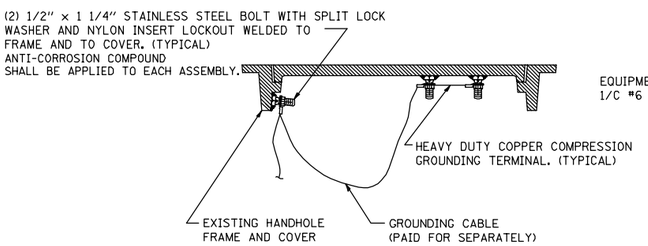


DETAIL "B"



HANDHOLE COVER & FRAME – GROUNDING DETAIL

(NOT TO SCALE)



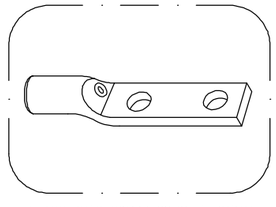
EXISTING HANDHOLE COVER & FRAME – GROUNDING DETAIL

(NOT TO SCALE)

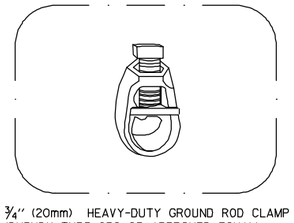
NOTES:

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.



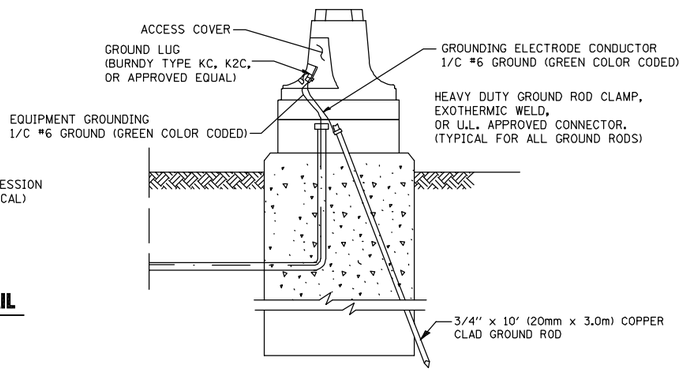
HEAVY-DUTY COMPRESSION TERMINAL (BURNDY TYPE YGHA OR APPROVED EQUAL)



3/4" (20mm) HEAVY-DUTY GROUND ROD CLAMP (BURNDY TYPE GRC OR APPROVED EQUAL)

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.



MAST ARM POLE / POST–GROUNDING DETAIL

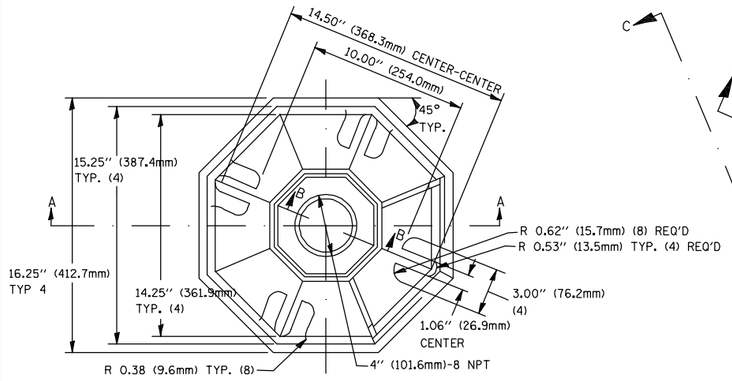
(NOT TO SCALE)

FILE NAME = 4085.882-TR1.dwg

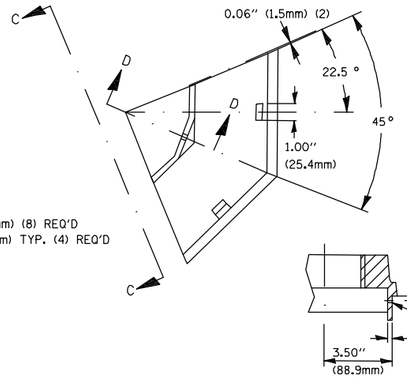
GHA #4085.882

GEWALT HAMILTON ASSOCIATES, INC.	USER NAME = ZACH WALLSTEN	DESIGNED - DAD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS
		DRAWN - BCK	REVISED -		
	PLOT SCALE = 1" = .0833'	CHECKED - DAD	REVISED -		
	PLOT DATE = 8/15/2012	DATE - 10-28-09	REVISED -		SCALE: NONE / SHEET NO. 3 OF 6 SHEETS / STA. / TO STA.

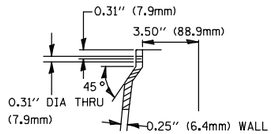
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
–	2012-030TS	COOK	39	11
	TS-05	CONTRACT #:	60T82	
		ILLINOIS FED. AID PROJECT		



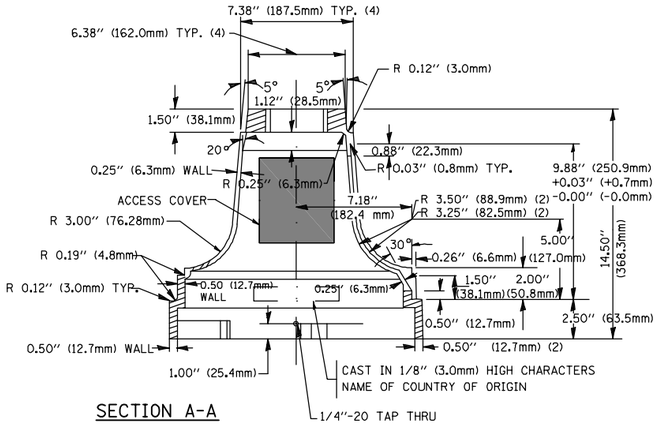
TOP VIEW



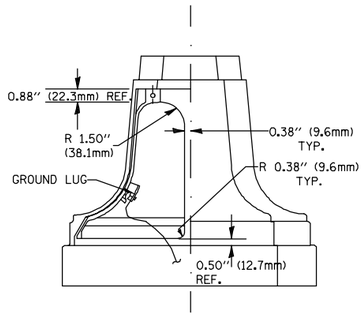
SECTION B-B



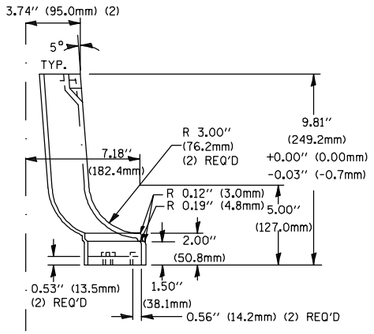
SECTION D-D



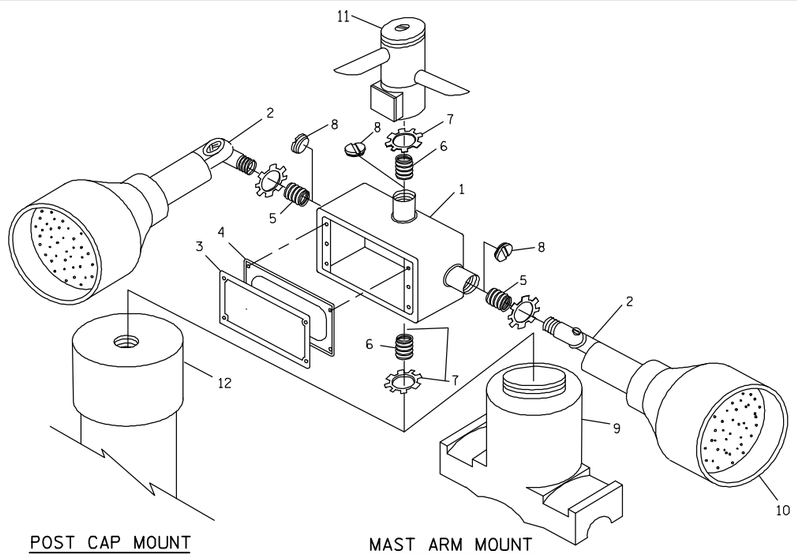
SECTION A-A



VIEW C-C



TRAFFIC SIGNAL POST - MOUNTING BASE - TYPE A



POST CAP MOUNT

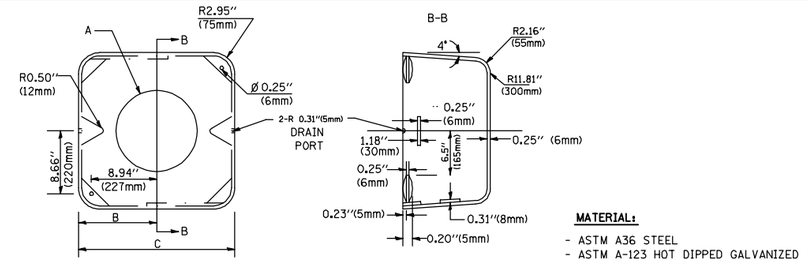
MAST ARM MOUNT

EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL

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	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

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.



MATERIAL:
- ASTM A36 STEEL
- ASTM A-123 HOT DIPPED GALVANIZED

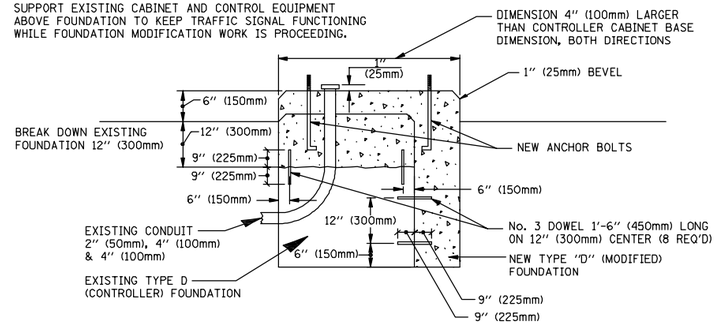
A	B	C	HEIGHT	WEIGHT
VARIES	9.5"(241mm)	19"(483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)
VARIES	10.75"(273mm)	21.5"(546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 kg)
VARIES	13.0"(330mm)	26"(660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)
VARIES	18.5"(470mm)	37"(940mm)	7" (178mm) - 12" (300mm)	126 lbs (57 kg)

SHROUD

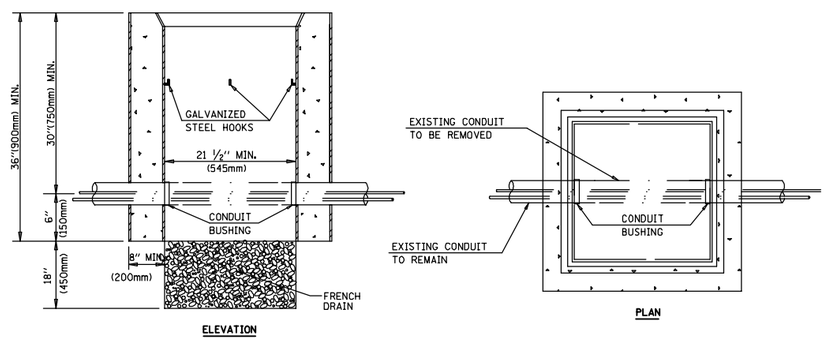
NOTES:

1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
2. THE SUPPLIER SHALL VERIFIED THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.

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



MODIFY EXISTING TYPE "D" FOUNDATION



NOTES:

1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
2. REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCIDENTAL TO THE HANDHOLE.

HANDHOLE TO INTERCEPT EXISTING CONDUIT

GHA #4085.882

FILE NAME = 4085.882-TRI.dwg

GEWALT HAMILTON ASSOCIATES, INC.

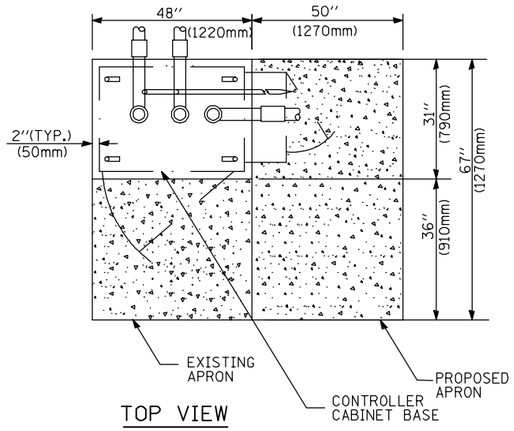
USER NAME = ZACH WALLSTEN	DESIGNED - DAD	REVISED -	
	DRAWN - BCK	REVISED -	
PLOT SCALE = 1" = .0833'	CHECKED - DAD	REVISED -	
PLOT DATE = 8/15/2012	DATE - 10-28-09	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

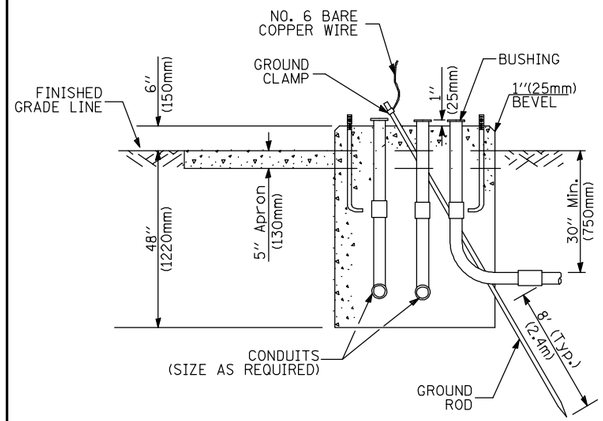
DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET NO. 4 OF 6 SHEETS | STA. | TO STA.

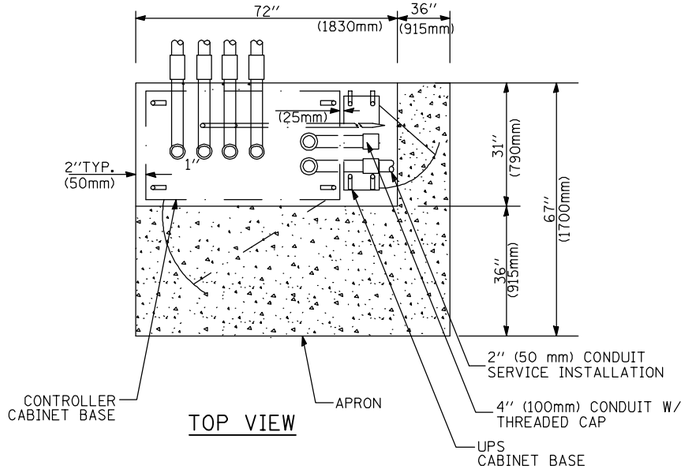
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	2012-030TS	COOK	39	12
	TS-05	CONTRACT #:	60T82	
	ILLINOIS FED. AID PROJECT			



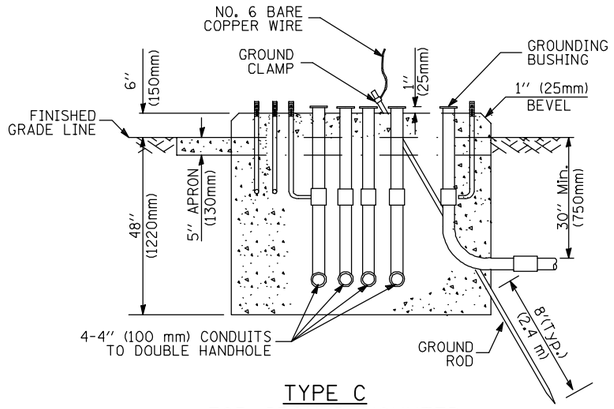
TOP VIEW



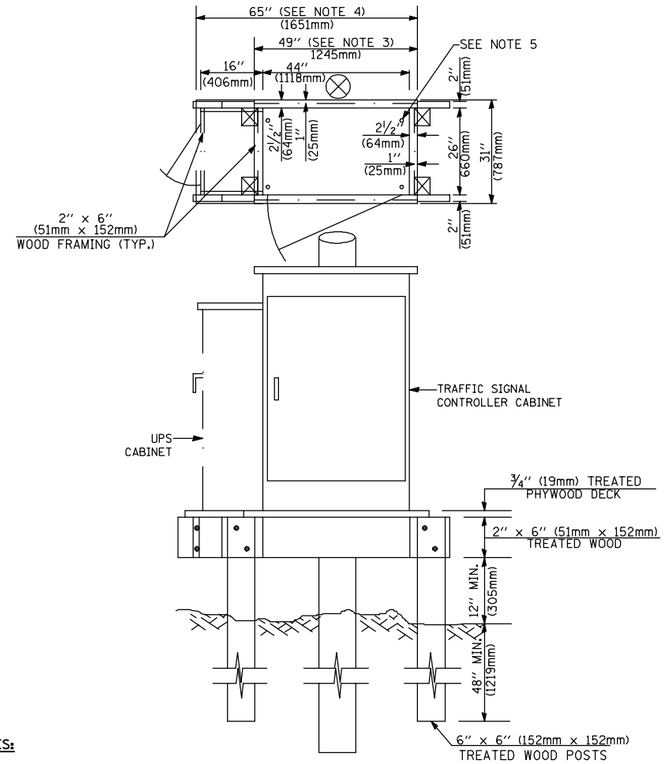
TYPE D
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET



TOP VIEW



TYPE C
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET



NOTES:

1. BASED ON CONTROLLER CABINET TYPE IV WITH BASE DIMENSIONS OF 26'' x 44'' (660mm x 1118mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
2. BASED ON UNINTERRUPTIBLE POWER SUPPLY CABINET WITH BASE DIMENSIONS OF 16'' x 25'' (406mm x 635mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
3. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.
4. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET.
5. DRILLED HOLES THROUGH THE PLATFORM BASE TO MATCH THE CONTROLLER CABINET BOLT TEMPLATE. FASTEN THE CONTROLLER CABINET TO THE PLATFORM WITH CARRIAGE BOLTS, WASHERS AND NUTS.
6. FASTEN ALL SUPPORT WOOD FRAMING TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION.

TEMPORARY SIGNAL CONTROLLER
WOOD SUPPORT PLATFORM

CABLE SLACK LENGTH	FEET	METER
HANDHOLE	6.5	2.0
DOUBLE HANDHOLE	13.0	4.0
SIGNAL POST	2.0	0.6
MAST ARM	2.0	0.6
CONTROLLER CABINET	1.5	0.5
FIBER OPTIC AT CABINET	13.0	4.0
ELECTRIC SERVICE AT (CABINET OR SERVICE LOCATION)	1.5	0.5
GROUND CABLE (SIGNAL POST, MAST ARM, CABINET)	1.5	0.5
GROUND CABLE (BETWEEN FRAME AND COVER)	5.0	1.6

CABLE SLACK

VERTICAL CABLE LENGTH	FEET	METER
MAST ARM POLE (MAST ARM MOUNTED SIGNAL HEAD) (L = MAST ARM LENGTH - DISTANCE TO SIGNAL HEAD FROM END OF ARM)	20.0+L	6.0+L
BRACKET MOUNTED (MAST ARM POLE OR SIGNAL POLE)	13.0	4.0
PEDESTRIAN PUSH BUTTON	6.0	2.0
SERVICE INSTALLATION POLE MOUNT TO SERVICE DROP	13.5	4.1
SERVICE INSTALLATION POLE MOUNT TO GROUND	13.5	4.1
SERVICE INSTALLATION GROUND MOUNT	6.0	2.0
FOUNDATION (SIGNAL POST, MAST ARM POLE, CONTROLLER CABINET, SERVICE-GROUND MOUNT)	3.0	1.0

VERTICAL CABLE LENGTH

FOUNDATION	DEPTH
TYPE A - Signal Post	4'-0'' (1.2m)
TYPE C - CONTROLLER W/ UPS	4'-0'' (1.2m)
TYPE D - CONTROLLER	4'-0'' (1.2m)
SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SQUARE	4'-0'' (1.2m)

DEPTH OF FOUNDATION

Mast Arm Length	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30' (9.1 m)	10'-0'' (3.0 m)	30'' (750mm)	24'' (600mm)	8	6(19)
Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)	13'-6'' (4.1 m)	30'' (750mm)	24'' (600mm)	8	6(19)
	11'-0'' (3.4 m)	36'' (900mm)	30'' (750mm)	12	7(22)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	13'-0'' (4.0 m)	36'' (900mm)	30'' (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	15'-0'' (4.6 m)	36'' (900mm)	30'' (750mm)	12	7(22)
Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)	21'-0'' (6.4 m)	42'' (1060mm)	36'' (900mm)	16	8(25)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	25'-0'' (7.6 m)	42'' (1060mm)	36'' (900mm)	16	8(25)

NOTES:

1. These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average Unconfined Compressive Strength (Qu) > 1.0 tsf (100 kpa). This strength shall be verified by boring data prior to construction or with testing by the Engineer during foundation drilling. The Bureau of Bridges & structures should be contacted for a revised design if other conditions are encountered.
2. Combination mast arm assemblies under 55 feet (16.8 m) shall use 36'' (900 mm) diameter foundations.
3. Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42'' (1060 mm) diameter foundations.
4. For mast arm assemblies with dual arms refer to state standard 878001.

DEPTH OF MAST ARM FOUNDATIONS, TYPE E

GHA #4085.882

FILE NAME = 4085.882_TR1.dwg

GHA GEWALT HAMILTON ASSOCIATES, INC.

USER NAME = ZACH WALLSTEN	DESIGNED - DAD	REVISED -	
	DRAWN - BCK	REVISED -	
PLOT SCALE = 1" = .0833'	CHECKED - DAD	REVISED -	
PLOT DATE = 8/15/2012	DATE - 10-28-09	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET NO. 5 OF 6 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
–	2012-030TS	COOK	39	13
	TS-05	CONTRACT #:	60T82	
	ILLINOIS FED. AID PROJECT			

TRAFFIC SIGNAL LEGEND

ITEM	REMOVAL	EXISTING	PROPOSED
CONTROLLER CABINET	R		
RAILROAD CONTROL CABINET			
COMMUNICATIONS CABINET	R CC	ECC	CC
MASTER CONTROLLER		EMC	MC
MASTER MASTER CONTROLLER		EMMC	MMC
UNINTERRUPTIBLE POWER SUPPLY	R UPS	EUPS	UPS
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT	R	P	P
TELEPHONE CONNECTION (P) POLE OR (G) GROUND MOUNT	R T	P T	P T
STEEL MAST ARM ASSEMBLY AND POLE	R		
ALUMINUM MAST ARM ASSEMBLY AND POLE	R		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE	R		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH PTZ CAMERA	R PTZ	PTZ	PTZ
SIGNAL POST	R		
TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM	R		
GUY WIRE	R		
SIGNAL HEAD	R		
SIGNAL HEAD CONSTRUCTION STAGES (NUMBERS INDICATE THE CONSTRUCTION STAGE)			2
SIGNAL HEAD WITH BACKPLATE	R		
SIGNAL HEAD OPTICALLY PROGRAMMED	R "P"	"P"	"P"
FLASHER INSTALLATION (S DENOTES SOLAR POWER)	R "F"	"F"	"F"
PEDESTRIAN SIGNAL HEAD	R		
PEDESTRIAN PUSHBUTTON DETECTOR	R		
ACCESSIBLE PEDESTRIAN PUSHBUTTON DETECTOR	R APS	APS	APS
ILLUMINATED SIGN "NO LEFT TURN"	R		
ILLUMINATED SIGN "NO RIGHT TURN"	R		
DETECTOR LOOP, TYPE I			
PREFORMED DETECTOR LOOP		P	P
MICROWAVE VEHICLE SENSOR	R M	M	M
VIDEO DETECTION CAMERA	R V	V	V
VIDEO DETECTION ZONE			
PAN, TILT, ZOOM CAMERA	R PTZ	PTZ	PTZ
WIRELESS DETECTOR SENSOR	R W	W	W
WIRELESS ACCESS POINT	R		

ITEM	REMOVAL	EXISTING	PROPOSED
EMERGENCY VEHICLE LIGHT DETECTOR	R		
CONFIRMATION BEACON	R		
HANDHOLE	R		
HEAVY DUTY HANDHOLE	R H	H	H
DOUBLE HANDHOLE	R		
JUNCTION BOX	R		
GALVANIZED STEEL CONDUIT IN TRENCH (T) OR PUSHED (P)			
TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE	R		
COMMON TRENCH			CT
COILABLE NONMETALLIC CONDUIT (EMPTY)			CNC
SYSTEM ITEM		S	S
INTERSECTION ITEM		I	IP
REMOVE ITEM	R		
RELOCATE ITEM	RL		
ABANDON ITEM	A		
12" (300mm) TRAFFIC SIGNAL SECTION		R	R
12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE		R Y G	
SIGNAL FACE		R Y G Y G	R Y G Y G
SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD		R Y G Y G "P"	R Y G Y G "P"
12" (300mm) PEDESTRIAN SIGNAL HEAD WALK/DON'T WALK SYMBOL		DW W	
12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, OUTLINED			
12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, SOLID			
PEDESTRIAN SIGNAL HEAD, INTERNATIONAL SYMBOL, WITH COUNTDOWN TIMER		C D	C D
RADIO INTERCONNECT	R		
RADIO REPEATER	R ERR	ERR	RR
DENOTES NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE, ALL DETECTOR LOOP CABLE TO BE SHIELDED		5	5
GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)		1	1

ITEM	REMOVAL	EXISTING	PROPOSED
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1/C, UNLESS NOTED OTHERWISE		I	I
COAXIAL CABLE		C	C
VENDOR CABLE FOR CAMERA		V	V
COPPER INTERCONNECT CABLE, NO. 18 3 PAIR TWISTED, SHIELDED		6	6
FIBER OPTIC CABLE NO. 62.5/125, MM12F		12F	
FIBER OPTIC CABLE NO. 62.5/125, MM12F SM12F		24F	24F
FIBER OPTIC CABLE NO. 62.5/125, (NUMBER OF FIBERS & TYPE TO BE NOTED ON PLANS)			
GROUND ROD AT (C) CONTROLLER, (H) HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE		C	C
CONTROLLER CABINET AND FOUNDATION TO BE REMOVED	RCF		
STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED	RMF		
ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED	RMF		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE AND FOUNDATION TO BE REMOVED	RMF		
SIGNAL POST AND FOUNDATION TO BE REMOVED	RMF		
INTERSECTION & SAMPLING (SYSTEM) DETECTOR		IS	IS
SAMPLING (SYSTEM) DETECTOR		S	S
EXISTING INTERSECTION LOOP DETECTOR PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR		P	
EXISTING PREFORMED INTERSECTION LOOP DETECTOR PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR		PP	
PREFORMED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR		PIS	PIS
PREFORMED SAMPLING (SYSTEM) DETECTOR		PS	PS

RAILROAD SYMBOLS

	EXISTING	PROPOSED
RAILROAD CONTROL CABINET		
RAILROAD CANTILEVER MAST ARM		
FLASHING SIGNAL		
CROSSING GATE		
CROSSBUCK		

GHA #4085.882

FILE NAME = 4085.882_TR1.dwg

GEWALT HAMILTON ASSOCIATES, INC.

USER NAME = ZACH WALLSTEN	DESIGNED - DAD/BCK	REVISED -	
	DRAWN - BCK	REVISED -	
PLOT SCALE = 1" = .0833'	CHECKED - DAD	REVISED -	
PLOT DATE = 8/15/2012	DATE - 10-28-09	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

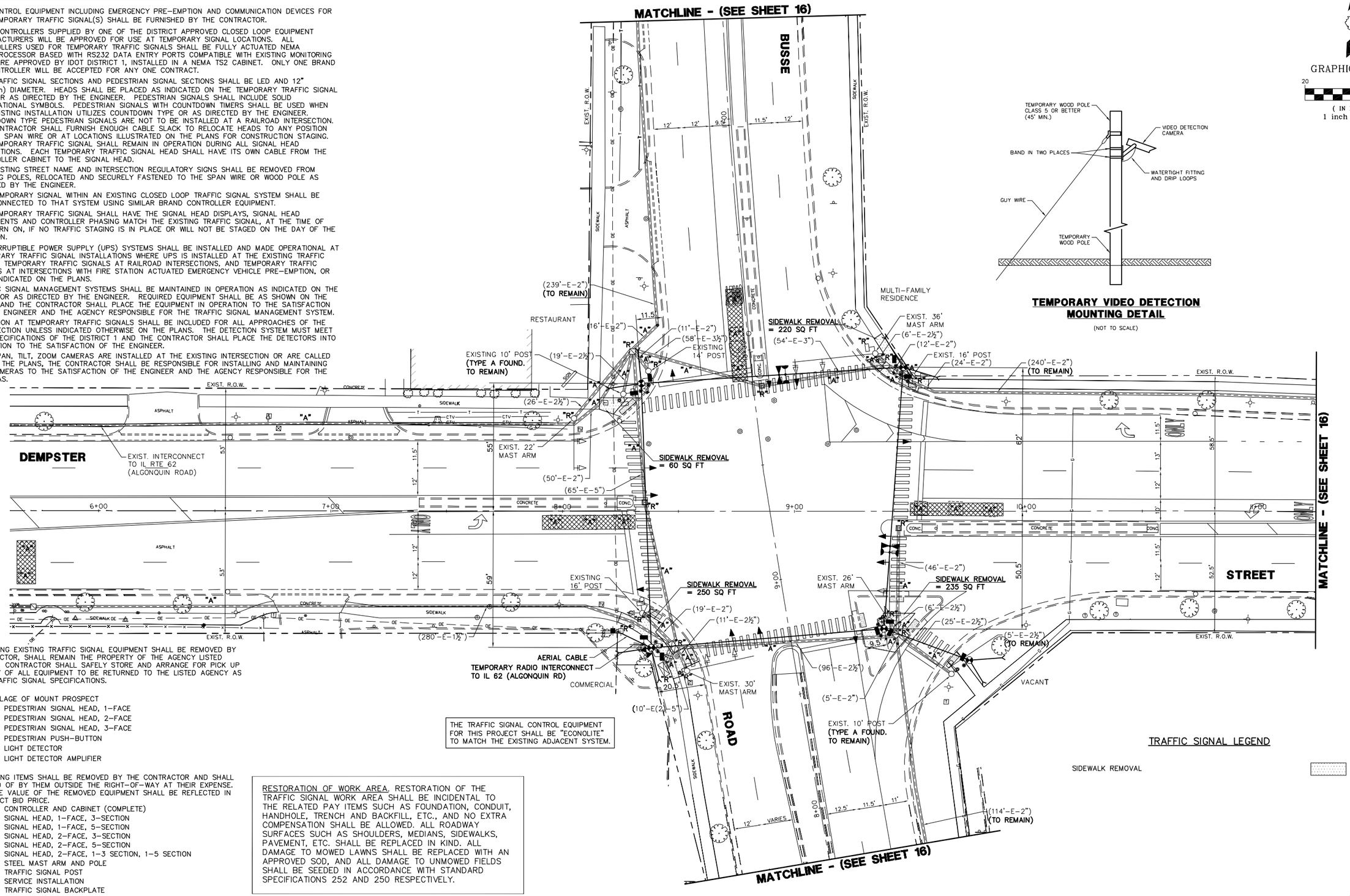
DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET NO. 6 OF 6 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	2012-030TS	COOK	39	14
	TS-05	CONTRACT #:	60T82	
	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 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 LED AND 12" (300mm) DIAMETER. HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. PEDESTRIAN SIGNALS SHALL INCLUDE SOLID INTERNATIONAL SYMBOLS. PEDESTRIAN SIGNALS WITH COUNTDOWN TIMERS SHALL BE USED WHEN THE EXISTING INSTALLATION UTILIZES COUNTDOWN TYPE OR AS DIRECTED BY THE ENGINEER. COUNTDOWN TYPE PEDESTRIAN SIGNALS ARE NOT TO BE INSTALLED AT A RAILROAD INTERSECTION. 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 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 CONTROLLER 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.
7. UNINTERRUPTIBLE POWER SUPPLY (UPS) SYSTEMS SHALL BE INSTALLED AND MADE OPERATIONAL AT TEMPORARY TRAFFIC SIGNAL INSTALLATIONS WHERE UPS IS INSTALLED AT THE EXISTING TRAFFIC SIGNAL, TEMPORARY TRAFFIC SIGNALS AT RAILROAD INTERSECTIONS, AND TEMPORARY TRAFFIC SIGNALS AT INTERSECTIONS WITH FIRE STATION ACTUATED EMERGENCY VEHICLE PRE-EMPTION, OR WHEN INDICATED ON THE PLANS.
8. TRAFFIC SIGNAL MANAGEMENT SYSTEMS SHALL BE MAINTAINED IN OPERATION AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER. REQUIRED EQUIPMENT SHALL BE AS SHOWN ON THE PLANS AND THE CONTRACTOR SHALL PLACE THE EQUIPMENT IN OPERATION TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE TRAFFIC SIGNAL MANAGEMENT SYSTEM.
9. DETECTION AT TEMPORARY TRAFFIC SIGNALS SHALL BE INCLUDED FOR ALL APPROACHES OF THE INTERSECTION UNLESS INDICATED OTHERWISE ON THE PLANS. THE DETECTION SYSTEM MUST MEET THE SPECIFICATIONS OF THE DISTRICT 1 AND THE CONTRACTOR SHALL PLACE THE DETECTORS INTO OPERATION TO THE SATISFACTION OF THE ENGINEER.
10. WHEN PAN, TILT, ZOOM CAMERAS ARE INSTALLED AT THE EXISTING INTERSECTION OR ARE CALLED FOR IN THE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING THE CAMERAS TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE CAMERAS.



TEMPORARY VIDEO DETECTION MOUNTING DETAIL

(NOT TO SCALE)

N

GRAPHIC SCALE

20 0 10 20

(IN FEET)

1 inch = 20 ft.

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

AGENCY: VILLAGE OF MOUNT PROSPECT

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

THE TRAFFIC SIGNAL CONTROL 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 ITEMS 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.

TRAFFIC SIGNAL LEGEND

SIDEWALK REMOVAL

GHA #4085.882

FILE NAME = 4085.882-TR1.dwg

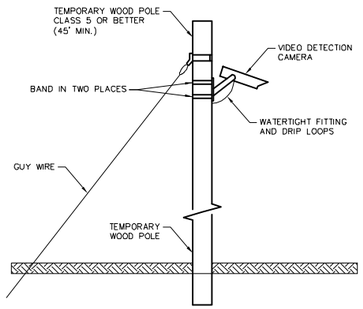
GHA GEWALT HAMILTON ASSOCIATES, INC.

USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY TRAFFIC SIGNAL INSTALLATION & REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT DEMPSTER STREET AT BUSSE ROAD	
	DRAWN - ZCW	REVISED -			
PLOT SCALE = 1" = .0833'	CHECKED - KLB	REVISED -			
PLOT DATE = 8/15/2012	DATE - 8/15/2012	REVISED -		SCALE: 1"=20' SHEET NO. OF SHEETS STA. TO STA.	

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
–	2012-030TS	COOK	39	15
		CONTRACT #:	60T82	
	ILLINOIS FED. AID PROJECT			

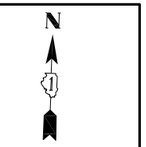
NOTES FOR TEMPORARY TRAFFIC SIGNALS:

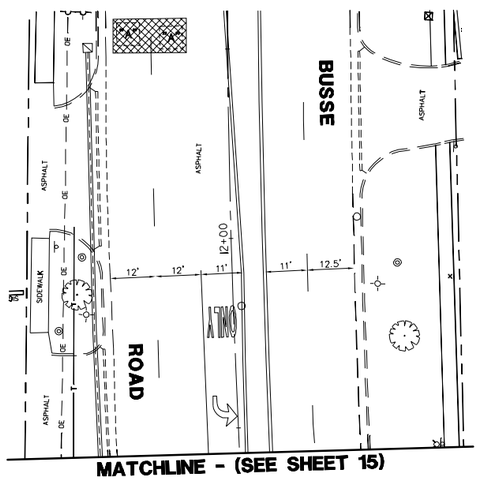
1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. 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 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 LED AND 12" (300mm) DIAMETER. HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. PEDESTRIAN SIGNALS SHALL INCLUDE SOLID INTERNATIONAL SYMBOLS. PEDESTRIAN SIGNALS WITH COUNTDOWN TIMERS SHALL BE USED WHEN THE EXISTING INSTALLATION UTILIZES COUNTDOWN TYPE OR AS DIRECTED BY THE ENGINEER. COUNTDOWN TYPE PEDESTRIAN SIGNALS ARE NOT TO BE INSTALLED AT A RAILROAD INTERSECTION. 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 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 CONTROLLER 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.
7. UNINTERRUPTIBLE POWER SUPPLY (UPS) SYSTEMS SHALL BE INSTALLED AND MADE OPERATIONAL AT TEMPORARY TRAFFIC SIGNAL INSTALLATIONS WHERE UPS IS INSTALLED AT THE EXISTING TRAFFIC SIGNAL. TEMPORARY TRAFFIC SIGNALS AT RAILROAD INTERSECTIONS, AND TEMPORARY TRAFFIC SIGNALS AT INTERSECTIONS WITH FIRE STATION ACTUATED EMERGENCY VEHICLE PRE-EMPTION, OR WHEN INDICATED ON THE PLANS.
8. TRAFFIC SIGNAL MANAGEMENT SYSTEMS SHALL BE MAINTAINED IN OPERATION AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER. REQUIRED EQUIPMENT SHALL BE AS SHOWN ON THE PLANS AND THE CONTRACTOR SHALL PLACE THE EQUIPMENT IN OPERATION TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE TRAFFIC SIGNAL MANAGEMENT SYSTEM.
9. DETECTION AT TEMPORARY TRAFFIC SIGNALS SHALL BE INCLUDED FOR ALL APPROACHES OF THE INTERSECTION UNLESS INDICATED OTHERWISE ON THE PLANS. THE DETECTION SYSTEM MUST MEET THE SPECIFICATIONS OF THE DISTRICT 1 AND THE CONTRACTOR SHALL PLACE THE DETECTORS INTO OPERATION TO THE SATISFACTION OF THE ENGINEER.
10. WHEN PAN, TILT, ZOOM CAMERAS ARE INSTALLED AT THE EXISTING INTERSECTION OR ARE CALLED FOR IN THE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING THE CAMERAS TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE CAMERAS.

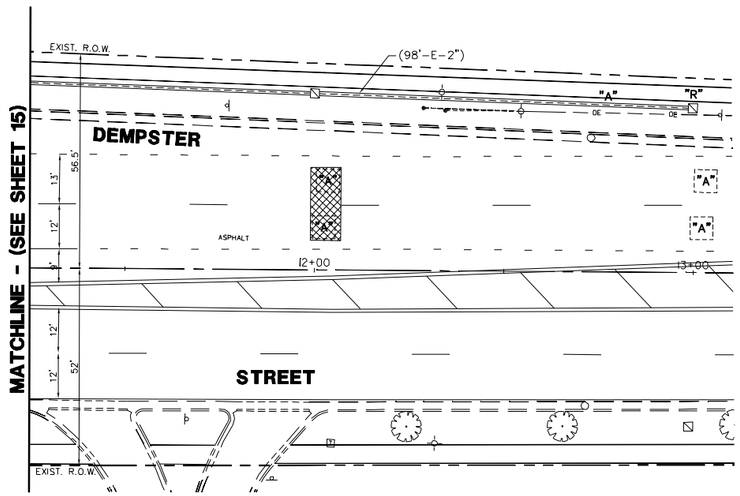


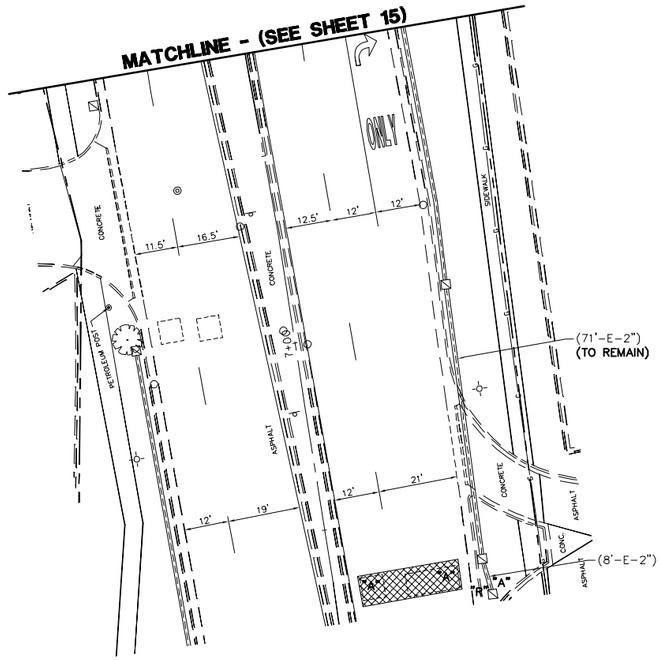
TEMPORARY VIDEO DETECTION MOUNTING DETAIL

(NOT TO SCALE)









RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEMS 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.

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

FILE NAME = 4085.882-TR1.dwg

GHA #4085.882

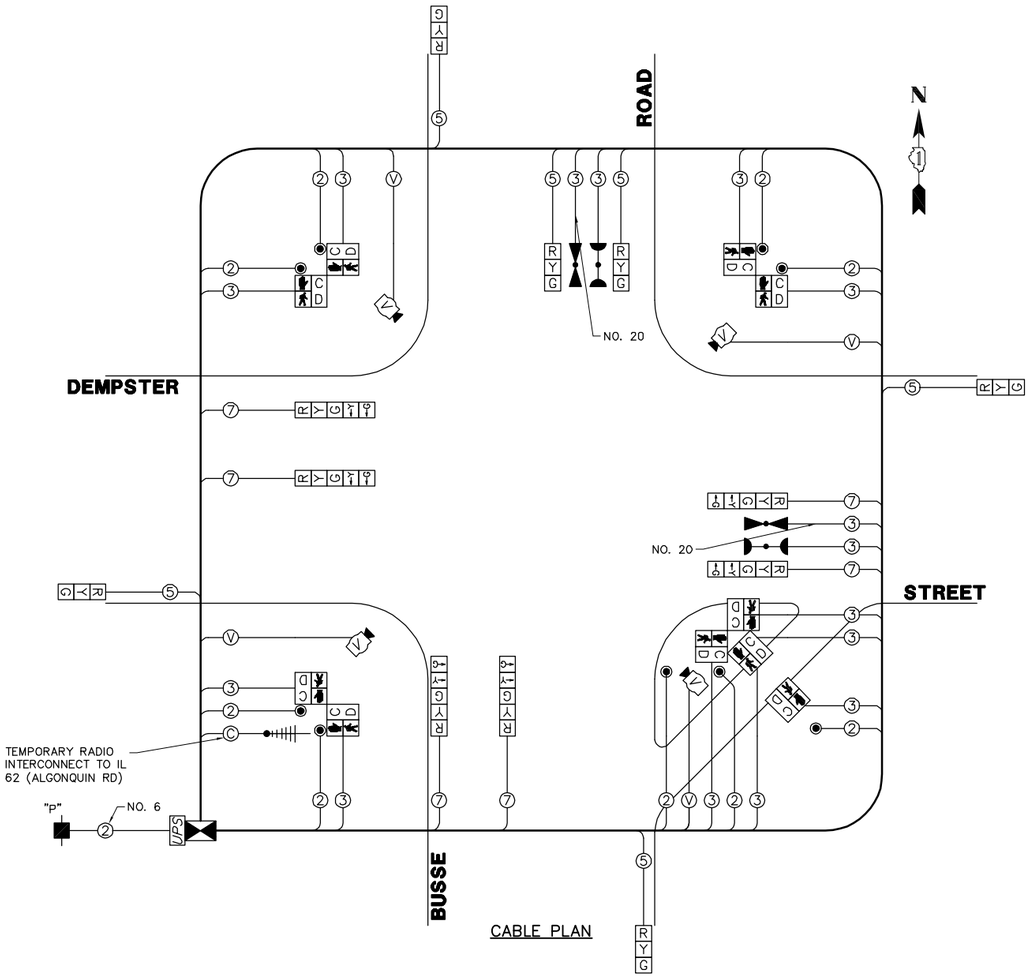
GEWALT HAMILTON ASSOCIATES, INC.	USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -
		DRAWN - ZCW	REVISED -
	PLOT SCALE = 1" = .0833'	CHECKED - KLB	REVISED -
	PLOT DATE = 8/15/2012	DATE - 8/15/2012	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL INSTALLATION & REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT DEMPSTER STREET AT BUSSE ROAD

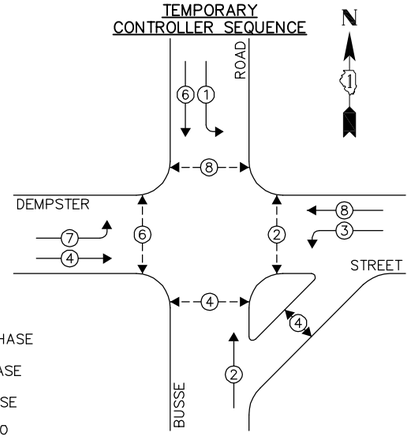
SCALE: 1"=20' | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
–	2012-030TS	COOK	39	16
		CONTRACT #:	60T82	
		ILLINOIS FED. AID PROJECT		



CABLE PLAN

TEMPORARY
CONTROLLER SEQUENCE

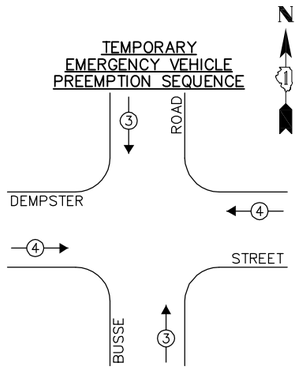


LEGEND:

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

TEMPORARY PHASE DESIGNATION DIAGRAM

TEMPORARY
EMERGENCY VEHICLE
PREEMPTION SEQUENCE



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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS		WATTAGE			TOTAL WATTAGE
TYPE	NO. LAMPS	INCAND.	L.E.D.	% OPERATION	
SIGNAL (RED)	12	135	17	0.50	102.0
SIGNAL (YELLOW)	12	135	25	0.25	75.0
SIGNAL (GREEN)	12	135	15	0.25	45.0
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	8	90	25	1.00	200.0
CONTROLLER	1	–	100	1.00	100.0
LUMINAIRE	–	–	250	0.50	–
L.E.D. ST. NAME SIGN	–	–	64	0.50	–
VIDEO SYSTEM	1	–	150	1.00	150.0
BATTERY BACKUP	1	–	25	1.00	25.0
ILLUMINATED SIGN	–	–	25	0.05	–
				TOTAL =	716.2

ENERGY COSTS – BILLED TO: VILLAGE OF MOUNT PROSPECT
(ADDRESS) 1700 W. CENTRAL AVE
(ADDRESS) MT. PROSPECT, IL 60056
ENERGY SUPPLY – CONTACT: NEW BUSINESS
PHONE: (866) 639-3552
COMPANY: COM-ED LIBERTYVILLE

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

GHA #4085.882

FILE NAME = 4085.882-Cable.dwg

GHA GEWALT HAMILTON ASSOCIATES, INC.

USER NAME = ZACH WALLSTEN
PLOT SCALE = 1" = .0833'
PLOT DATE = 8/15/2012

DESIGNED - JRD	DRAWN - ZCW	CHECKED - KLB
REVISED -	REVISED -	REVISED -
DATE - 8/15/2012	REVISED -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

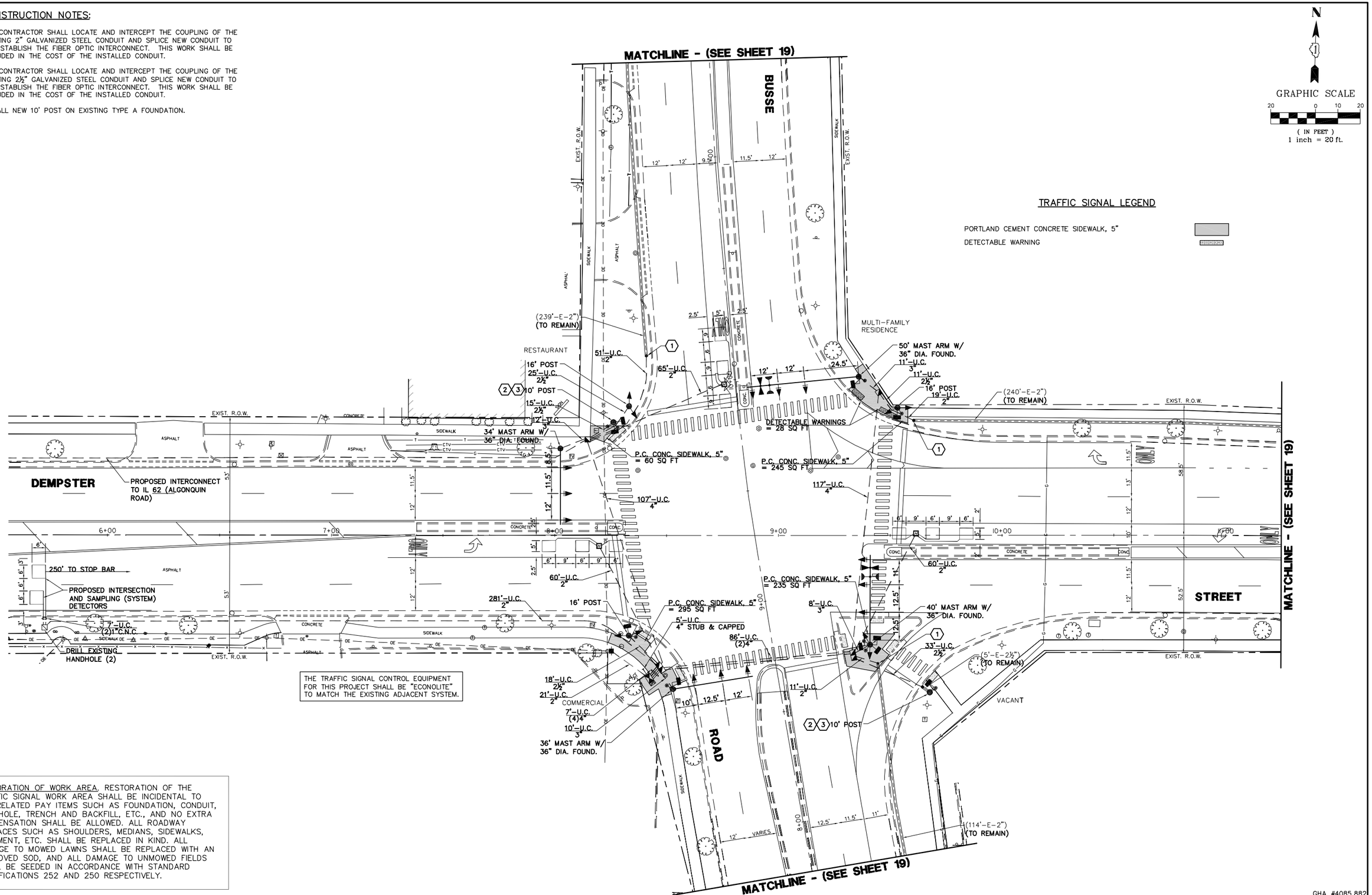
TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION DIAGRAM, & TEMPORARY VEHICLE PREEMPTION SEQUENCE
DEMPSTER STREET AT BUSSE ROAD

SCALE: N.A. | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
–	2012-030TS	COOK	39	17
		CONTRACT #: 60T82		
	ILLINOIS FED. AID PROJECT			

CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL LOCATE AND INTERCEPT THE COUPLING OF THE EXISTING 2" GALVANIZED STEEL CONDUIT AND SPLICE NEW CONDUIT TO RE-ESTABLISH THE FIBER OPTIC INTERCONNECT. THIS WORK SHALL BE INCLUDED IN THE COST OF THE INSTALLED CONDUIT.
2. THE CONTRACTOR SHALL LOCATE AND INTERCEPT THE COUPLING OF THE EXISTING 2½" GALVANIZED STEEL CONDUIT AND SPLICE NEW CONDUIT TO RE-ESTABLISH THE FIBER OPTIC INTERCONNECT. THIS WORK SHALL BE INCLUDED IN THE COST OF THE INSTALLED CONDUIT.
3. INSTALL NEW 10' POST ON EXISTING TYPE A FOUNDATION.



TRAFFIC SIGNAL LEGEND

PORTLAND CEMENT CONCRETE SIDEWALK, 5"

DETECTABLE WARNING

THE TRAFFIC SIGNAL CONTROL 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 ITEMS 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 = 4085.882-TR1.dwg

GHA #4085.882

GEWALT HAMILTON ASSOCIATES, INC.

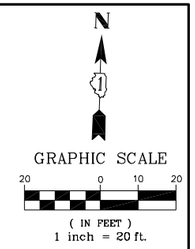
USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -	
	DRAWN - ZCW	REVISED -	
PLOT SCALE = 1" = .0833'	CHECKED - KLB	REVISED -	
PLOT DATE = 8/15/2012	DATE - 8/15/2012	REVISED -	

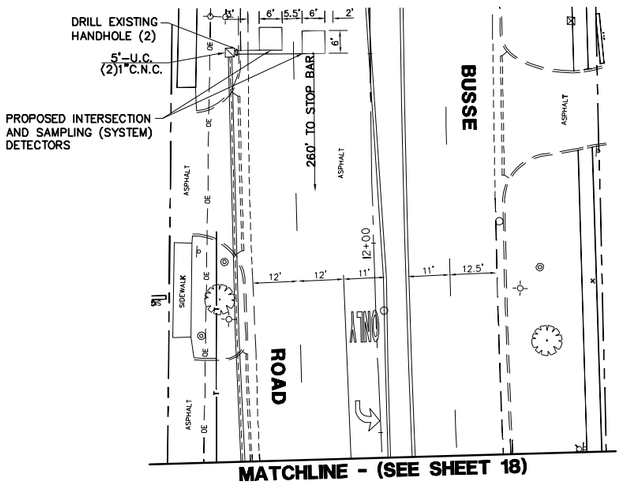
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

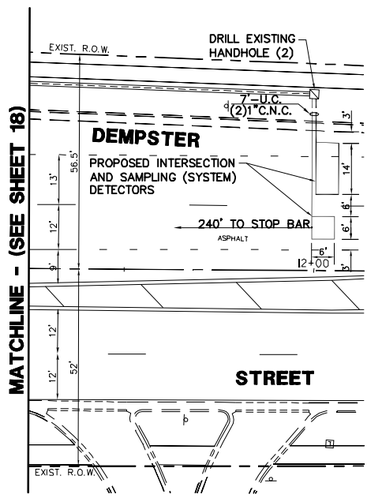
TRAFFIC SIGNAL MODERNIZATION PLAN
DEMPSTER STREET AT BUSSE ROAD

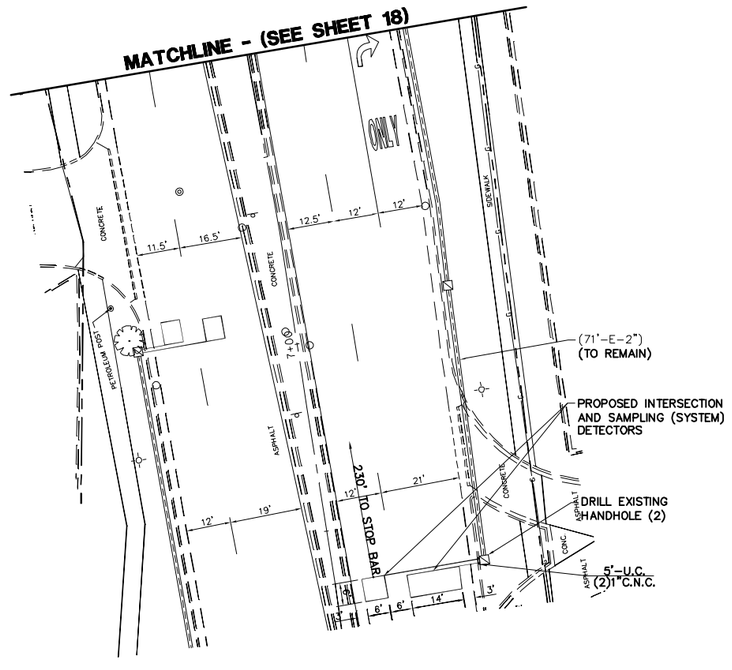
SCALE: 1"=20' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
–	2012-030TS	COOK	39	18
		CONTRACT #:	60T82	
	ILLINOIS FED. AID PROJECT			









RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEMS 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.

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

FILE NAME = 4085.882-TR1.dwg

GHA #4085.882

GEWALT HAMILTON ASSOCIATES, INC.	USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODERNIZATION PLAN DEMPSTER STREET AT BUSSE ROAD
		DRAWN - ZCW	REVISED -		
	PLOT SCALE = 1" = .0833'	CHECKED - KLB	REVISED -		
	PLOT DATE = 8/15/2012	DATE - 8/15/2012	REVISED -		SCALE: 1"=20' SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
–	2012-030TS	COOK	39	19
		CONTRACT #:	60T82	
	ILLINOIS FED. AID PROJECT			

SCHEDULE OF QUANTITIES

DEMPSTER STREET AT BUSSE ROAD

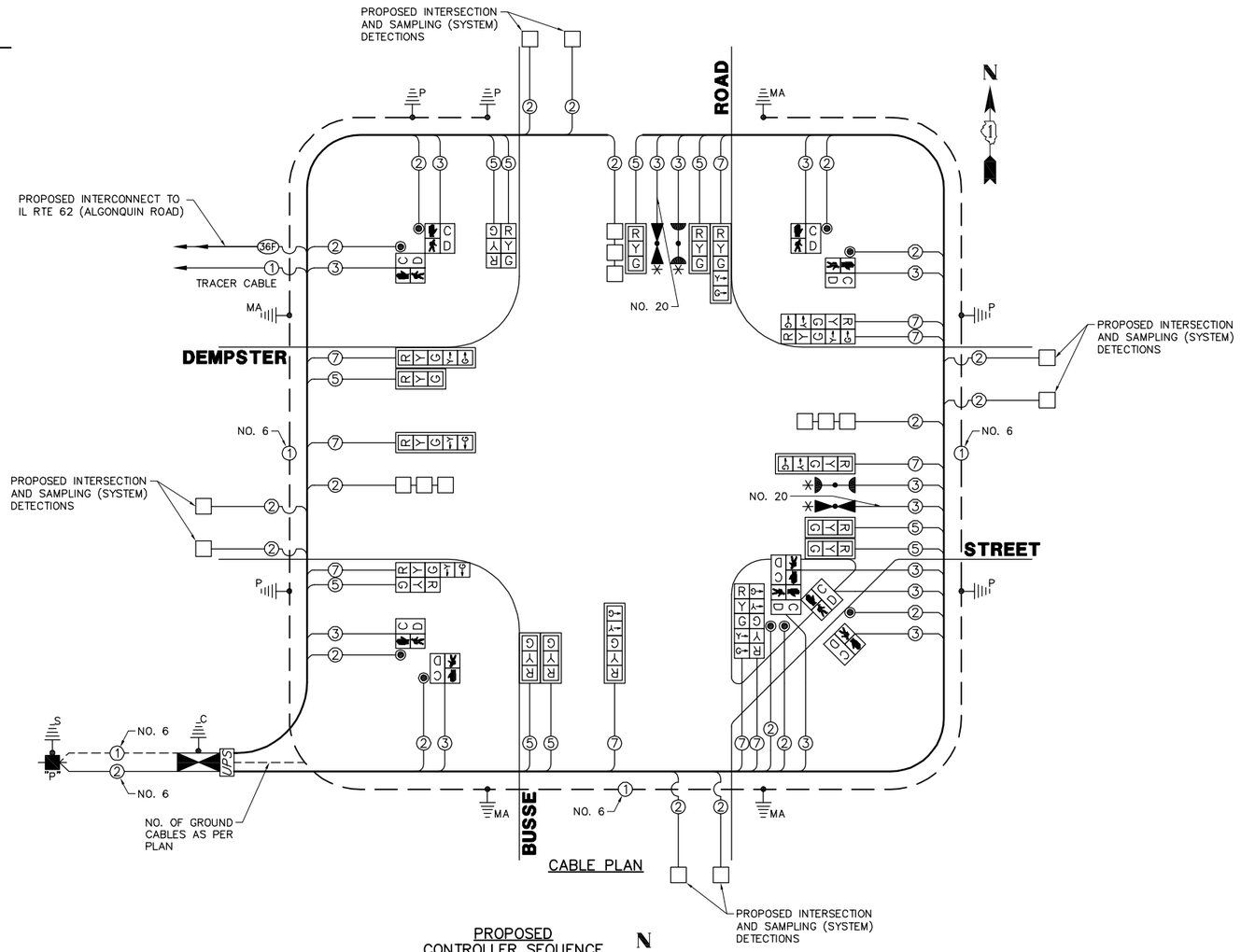
NO.	QUANT.	UNIT	
1.	765	SQ FT	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH
2.	28	SQ FT	DETECTABLE WARNINGS
3.	765	SQ FT	SIDEWALK REMOVAL
4.	1.50	CAL MO	ENGINEER'S FIELD OFFICE, TYPE A
5.	0.30	L SUM	MOBILIZATION
6.	0.30	L SUM	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606
7.	0.30	L SUM	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701
8.	0.30	L SUM	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801
9.	31.50	SQ FT	SIGN PANEL - TYPE 1
10.	1	EACH	SERVICE INSTALLATION - POLE MOUNTED
11.	489	FOOT	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.
12.	102	FOOT	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.
13.	36	FOOT	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.
14.	327	FOOT	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.
15.	2	EACH	HANDHOLE
16.	3	EACH	HEAVY-DUTY HANDHOLE
17.	2	EACH	DOUBLE HANDHOLE
18.	1	EACH	TRANSCEIVER
19.	1,392	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C
20.	2,181	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
21.	1,431	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C
22.	1,925	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C
23.	3,660	FOOT	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR
24.	43	FOOT	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C
25.	601	FOOT	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C
26.	2	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.
27.	3	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
28.	1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.
29.	1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.
30.	1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.
31.	1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 50 FT.
32.	12	FOOT	CONCRETE FOUNDATION, TYPE A
33.	4	FOOT	CONCRETE FOUNDATION, TYPE C
34.	48	FOOT	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER
35.	8	EACH	DRILL EXISTING HANDHOLE
36.	7	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
37.	5	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED
38.	1	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED
39.	2	EACH	SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED
40.	1	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
41.	5	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
42.	1	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
43.	1	EACH	PEDESTRIAN SIGNAL HEAD, LED, 3-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
44.	12	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
45.	11	EACH	INDUCTIVE LOOP DETECTOR
46.	600	FOOT	DETECTOR LOOP, TYPE I
✳ 47.	2	EACH	LIGHT DETECTOR
✳ 48.	1	EACH	LIGHT DETECTOR AMPLIFIER
49.	9	EACH	PEDESTRIAN PUSH-BUTTON
50.	1	EACH	TEMPORARY TRAFFIC SIGNAL INSTALLATION
51.	1	EACH	REMOVE EXISTING SERVICE INSTALLATION
52.	1,328	FOOT	REMOVE ELECTRIC CABLE FROM CONDUIT
53.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
54.	7	EACH	REMOVE EXISTING HANDHOLE
55.	8	EACH	REMOVE EXISTING CONCRETE FOUNDATION
✳ 56.	540	FOOT	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C
57.	664	FOOT	ROD AND CLEAN EXISTING CONDUIT
58.	5	EACH	CONDUIT SPLICE
59.	1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
60.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
61.	765	SQ FT	TEMPORARY SIDEWALK
62.	51.40	SQ FT	TEMPORARY INFORMATION SIGNING
63.	1	EACH	TEMPORARY TRAFFIC SIGNAL TIMING

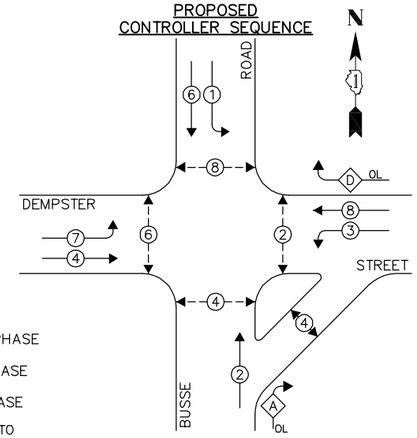
✳ 100% OF THE COST SHALL BE PAID FOR BY THE VILLAGE OF MOUNT PROSPECT

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE L.E.D.	% OPERATION	
SIGNAL (RED)	20	135	17	0.50	170.0
SIGNAL (YELLOW)	20	135	25	0.25	125.0
SIGNAL (GREEN)	20	135	15	0.25	75.0
ARROW	20	135	12	0.10	24.0
PED. SIGNAL	10	90	25	1.00	250.0
CONTROLLER	1	–	100	1.00	100.0
LUMINAIRE	–	–	250	0.50	–
L.E.D. ST. NAME SIGN	–	–	64	0.50	–
VIDEO SYSTEM	–	–	150	1.00	–
BATTERY BACKUP	1	–	25	1.00	25.0
ILLUMINATED SIGN	–	–	25	0.05	–
				TOTAL =	769.0

ENERGY COSTS – BILLED TO: VILLAGE OF MOUNT PROSPECT
(ADDRESS) 1700 W. CENTRAL AVE
(ADDRESS) MT. PROSPECT, IL 60056
ENERGY SUPPLY – CONTACT: NEW BUSINESS
PHONE: (866) 639-3552
COMPANY: COM-ED LIBERTYVILLE

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



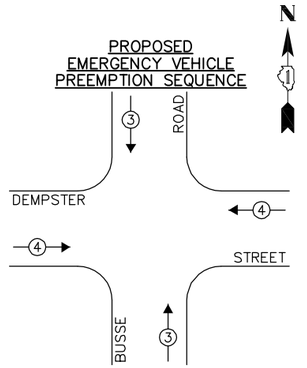


OVERLAP LETTER		PERMISSIVE PHASE		PROTECTED PHASE
A	=	2	+	3
D	=	8	+	1

LEGEND:

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

PROPOSED PHASE DESIGNATION DIAGRAM



PROPOSED EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT		

GHA #4085.882

FILE NAME = 4085.882-Cable.dwg

GEWALT HAMILTON ASSOCIATES, INC.

USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE DEMPSTER STREET AT BUSSE ROAD	
	DRAWN - ZCW	REVISED -			
PLOT SCALE = 1" = .0833'	CHECKED - KLB	REVISED -			
PLOT DATE = 8/15/2012	DATE - 8/15/2012	REVISED -		SCALE: N.A. SHEET NO. OF SHEETS STA. TO STA.	

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
–	2012-030TS	COOK	39	20
		CONTRACT #:	60T82	
	ILLINOIS FED. AID PROJECT			

CONSTRUCTION NOTES:

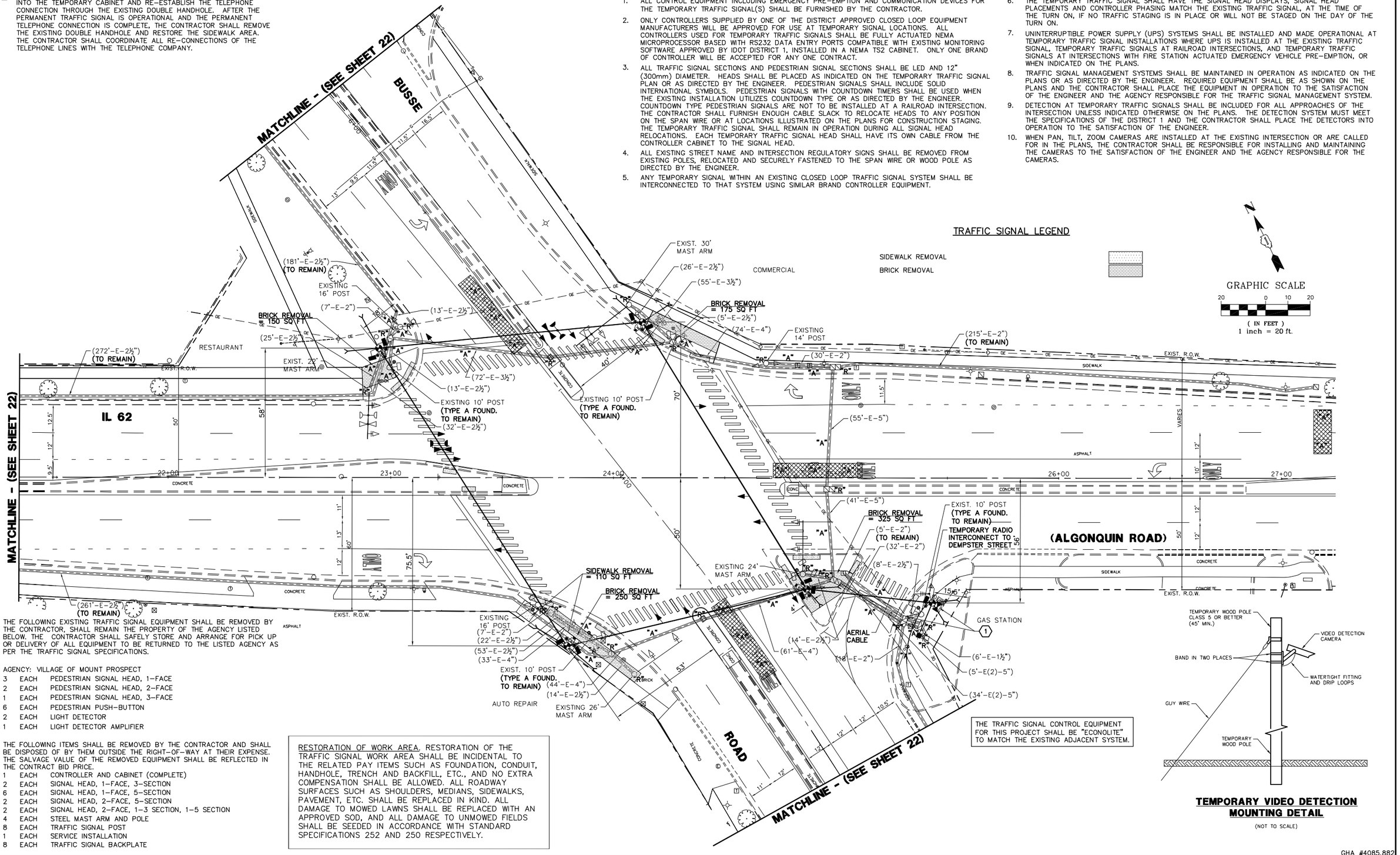
(1) THE CONTRACTOR SHALL INSTALL A TEMPORARY MASTER CONTROLLER INTO THE TEMPORARY CABINET AND RE-ESTABLISH THE TELEPHONE CONNECTION THROUGH THE EXISTING DOUBLE HANDHOLE. AFTER THE PERMANENT TRAFFIC SIGNAL IS OPERATIONAL AND THE PERMANENT TELEPHONE CONNECTION IS COMPLETE, THE CONTRACTOR SHALL REMOVE THE EXISTING DOUBLE HANDHOLE AND RESTORE THE SIDEWALK AREA. THE CONTRACTOR SHALL COORDINATE ALL RE-CONNECTIONS OF THE TELEPHONE LINES WITH THE TELEPHONE COMPANY.

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 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 LED AND 12" (300mm) DIAMETER. HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. PEDESTRIAN SIGNALS SHALL INCLUDE SOLID INTERNATIONAL SYMBOLS. PEDESTRIAN SIGNALS WITH COUNTDOWN TIMERS SHALL BE USED WHEN THE EXISTING INSTALLATION UTILIZES COUNTDOWN TYPE OR AS DIRECTED BY THE ENGINEER. COUNTDOWN TYPE PEDESTRIAN SIGNALS ARE NOT TO BE INSTALLED AT A RAILROAD INTERSECTION. 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 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 CONTROLLER EQUIPMENT.

NOTES FOR TEMPORARY TRAFFIC SIGNALS (CONTINUED):

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.
7. UNINTERRUPTIBLE POWER SUPPLY (UPS) SYSTEMS SHALL BE INSTALLED AND MADE OPERATIONAL AT TEMPORARY TRAFFIC SIGNAL INSTALLATIONS WHERE UPS IS INSTALLED AT THE EXISTING TRAFFIC SIGNAL, TEMPORARY TRAFFIC SIGNALS AT RAILROAD INTERSECTIONS, AND TEMPORARY TRAFFIC SIGNALS AT INTERSECTIONS WITH FIRE STATION ACTUATED EMERGENCY VEHICLE PRE-EMPTION, OR WHEN INDICATED ON THE PLANS.
8. TRAFFIC SIGNAL MANAGEMENT SYSTEMS SHALL BE MAINTAINED IN OPERATION AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER. REQUIRED EQUIPMENT SHALL BE AS SHOWN ON THE PLANS AND THE CONTRACTOR SHALL PLACE THE EQUIPMENT IN OPERATION TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE TRAFFIC SIGNAL MANAGEMENT SYSTEM.
9. DETECTION AT TEMPORARY TRAFFIC SIGNALS SHALL BE INCLUDED FOR ALL APPROACHES OF THE INTERSECTION UNLESS INDICATED OTHERWISE ON THE PLANS. THE DETECTION SYSTEM MUST MEET THE SPECIFICATIONS OF THE DISTRICT 1 AND THE CONTRACTOR SHALL PLACE THE DETECTORS INTO OPERATION TO THE SATISFACTION OF THE ENGINEER.
10. WHEN PAN, TILT, ZOOM CAMERAS ARE INSTALLED AT THE EXISTING INTERSECTION OR ARE CALLED FOR IN THE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING THE CAMERAS TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE CAMERAS.



TRAFFIC SIGNAL LEGEND

SIDEWALK REMOVAL

BRICK REMOVAL

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

AGENCY: VILLAGE OF MOUNT PROSPECT

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

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEMS 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.

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

TEMPORARY VIDEO DETECTION MOUNTING DETAIL

(NOT TO SCALE)

GHA #4085.882

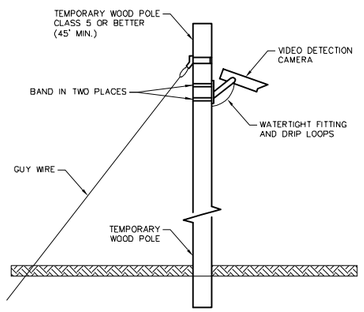
FILE NAME = 4085.882-TR1.dwg

GHA GEWALT HAMILTON ASSOCIATES, INC.	USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY TRAFFIC SIGNAL INSTALLATION & REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT IL 62 (ALGONQUIN RD) AT BUSSE ROAD
		DRAWN - ZCW	REVISED -		
	PLOT SCALE = 1" = .0833'	CHECKED - KLB	REVISED -		
	PLOT DATE = 8/15/2012	DATE - 8/15/2012	REVISED -		SCALE: 1"=20' SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
–	2012-030TS	COOK	39	21
		CONTRACT #:	60T82	
	ILLINOIS FED. AID PROJECT			

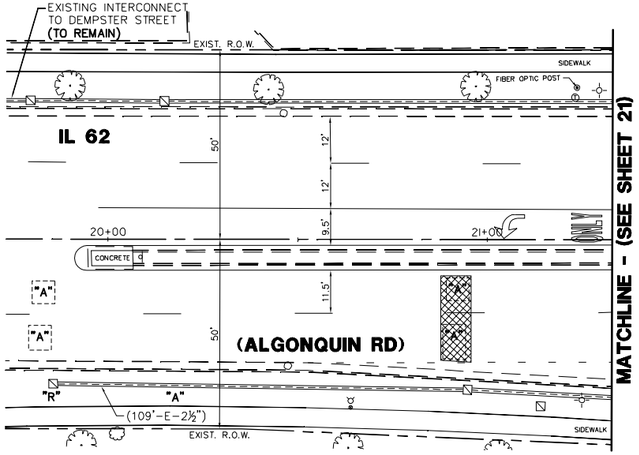
NOTES FOR TEMPORARY TRAFFIC SIGNALS:

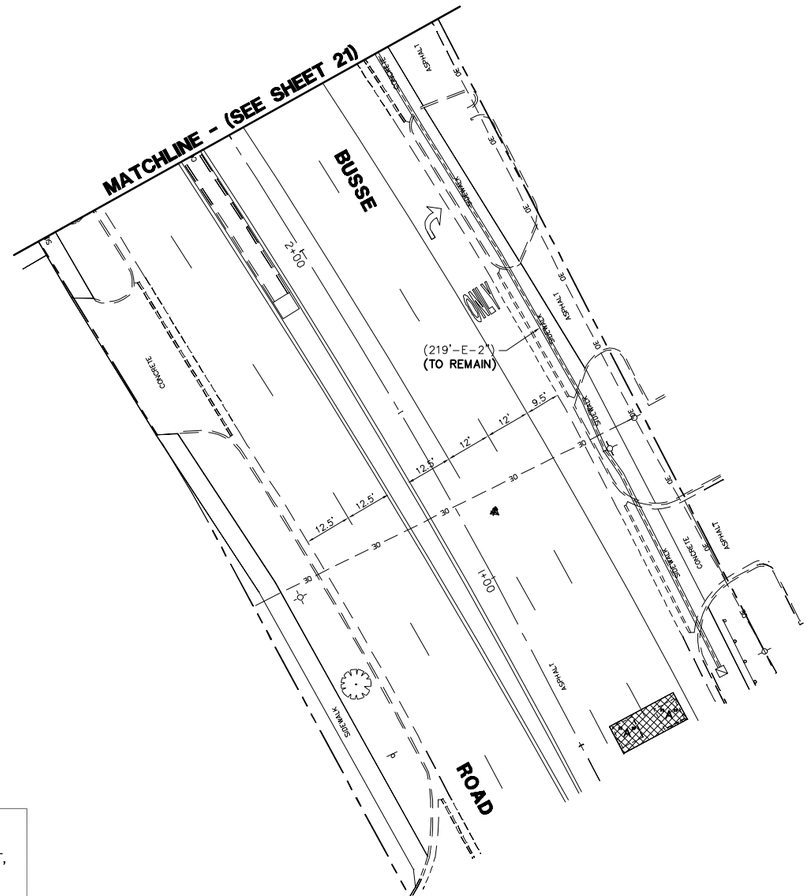
1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. 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 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 LED AND 12" (300mm) DIAMETER. HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. PEDESTRIAN SIGNALS SHALL INCLUDE SOLID INTERNATIONAL SYMBOLS. PEDESTRIAN SIGNALS WITH COUNTDOWN TIMERS SHALL BE USED WHEN THE EXISTING INSTALLATION UTILIZES COUNTDOWN TYPE OR AS DIRECTED BY THE ENGINEER. COUNTDOWN TYPE PEDESTRIAN SIGNALS ARE NOT TO BE INSTALLED AT A RAILROAD INTERSECTION. 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 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 CONTROLLER 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.
7. UNINTERRUPTIBLE POWER SUPPLY (UPS) SYSTEMS SHALL BE INSTALLED AND MADE OPERATIONAL AT TEMPORARY TRAFFIC SIGNAL INSTALLATIONS WHERE UPS IS INSTALLED AT THE EXISTING TRAFFIC SIGNAL, TEMPORARY TRAFFIC SIGNALS AT RAILROAD INTERSECTIONS, AND TEMPORARY TRAFFIC SIGNALS AT INTERSECTIONS WITH FIRE STATION ACTUATED EMERGENCY VEHICLE PRE-EMPTION, OR WHEN INDICATED ON THE PLANS.
8. TRAFFIC SIGNAL MANAGEMENT SYSTEMS SHALL BE MAINTAINED IN OPERATION AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER. REQUIRED EQUIPMENT SHALL BE AS SHOWN ON THE PLANS AND THE CONTRACTOR SHALL PLACE THE EQUIPMENT IN OPERATION TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE TRAFFIC SIGNAL MANAGEMENT SYSTEM.
9. DETECTION AT TEMPORARY TRAFFIC SIGNALS SHALL BE INCLUDED FOR ALL APPROACHES OF THE INTERSECTION UNLESS INDICATED OTHERWISE ON THE PLANS. THE DETECTION SYSTEM MUST MEET THE SPECIFICATIONS OF THE DISTRICT 1 AND THE CONTRACTOR SHALL PLACE THE DETECTORS INTO OPERATION TO THE SATISFACTION OF THE ENGINEER.
10. WHEN PAN, TILT, ZOOM CAMERAS ARE INSTALLED AT THE EXISTING INTERSECTION OR ARE CALLED FOR IN THE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING THE CAMERAS TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE CAMERAS.

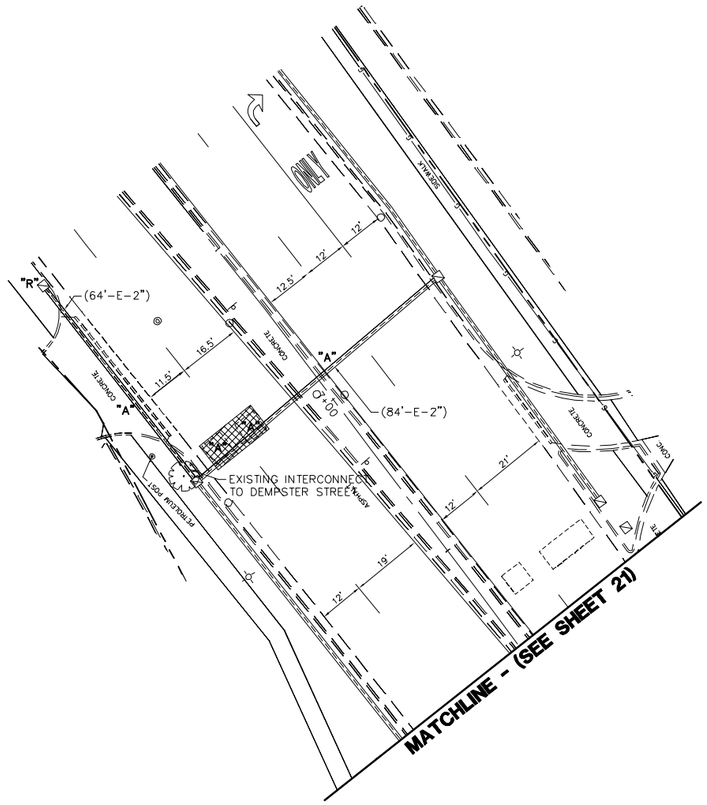


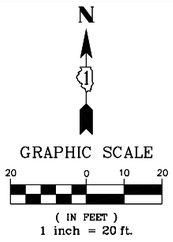
TEMPORARY VIDEO DETECTION MOUNTING DETAIL

(NOT TO SCALE)









THE TRAFFIC SIGNAL CONTROL 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 ITEMS 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.

GHA #4085.882

GHA GEWALT HAMILTON ASSOCIATES, INC.

USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -	
	DRAWN - ZCW	REVISED -	
PLOT SCALE = 1" = .0833'	CHECKED - KLB	REVISED -	
PLOT DATE = 8/15/2012	DATE - 8/15/2012	REVISED -	

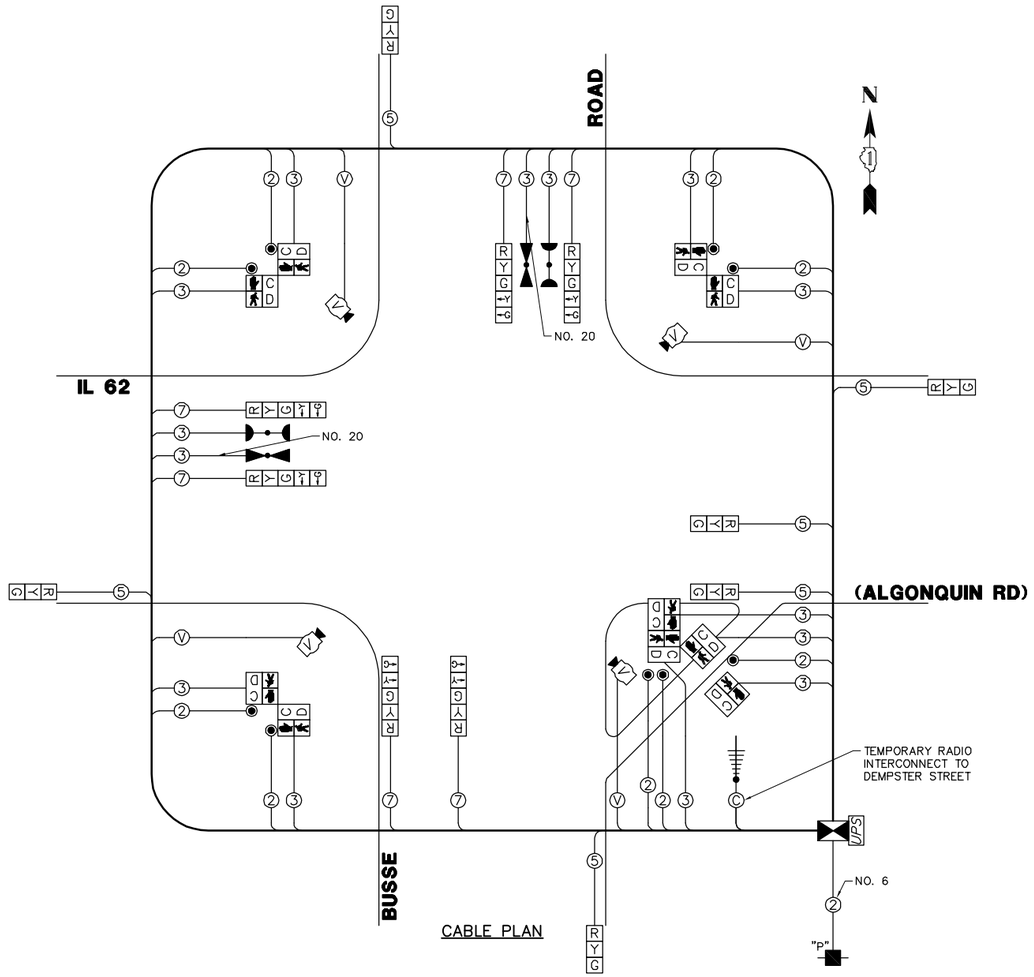
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL INSTALLATION & REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
IL RTE 62 (ALGONQUIN RD) AT BUSSE ROAD

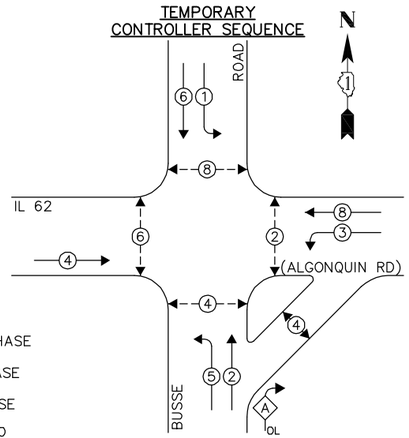
SCALE 1"=20' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
–	2012-030TS	COOK	39	22
		CONTRACT #:	60T82	
	ILLINOIS FED. AID PROJECT			

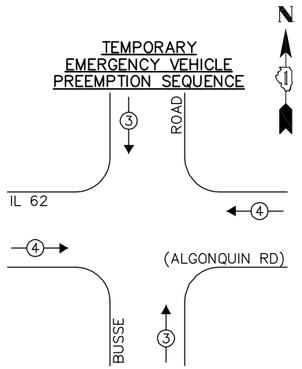
FILE NAME = 4085.882-TR1.dwg



CABLE PLAN



TEMPORARY PHASE DESIGNATION DIAGRAM



I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
		WATTAGE			
TYPE	NO. LAMPS	INCAND.	L.E.D.	% OPERATION	
SIGNAL (RED)	12	135	17	0.50	102.0
SIGNAL (YELLOW)	12	135	25	0.25	75.0
SIGNAL (GREEN)	12	135	15	0.25	45.0
ARROW	12	135	12	0.10	14.4
PED. SIGNAL	8	90	25	1.00	200.0
CONTROLLER	1	–	100	1.00	100.0
LUMINAIRE	–	–	250	0.50	–
L.E.D. ST. NAME SIGN	–	–	64	0.50	–
VIDEO SYSTEM	1	–	150	1.00	150.0
BATTERY BACKUP	1	–	25	1.00	25.0
ILLUMINATED SIGN	–	–	25	0.05	–
				TOTAL =	711.4

ENERGY COSTS – BILLED TO: VILLAGE OF MOUNT PROSPECT
(ADDRESS) 1700 W. CENTRAL AVE
(ADDRESS) MT. PROSPECT, IL 60056
ENERGY SUPPLY – CONTACT: NEW BUSINESS
PHONE: (866) 639-3552
COMPANY: COM-ED LIBERTYVILLE

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

TEMPORARY EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	⏐⏐	⏐⏐

GHA #4085.882

FILE NAME = 4085.882-Cable.dwg

GHA GEWALT HAMILTON ASSOCIATES, INC.

USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -	
	DRAWN - ZCW	REVISED -	
PLOT SCALE = 1" = .0833'	CHECKED - KLB	REVISED -	
PLOT DATE = 8/15/2012	DATE - 8/15/2012	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION DIAGRAM, & TEMPORARY VEHICLE PREEMPTION SEQUENCE
IL 62 (ALGONQUIN RD) AT BUSSE ROAD

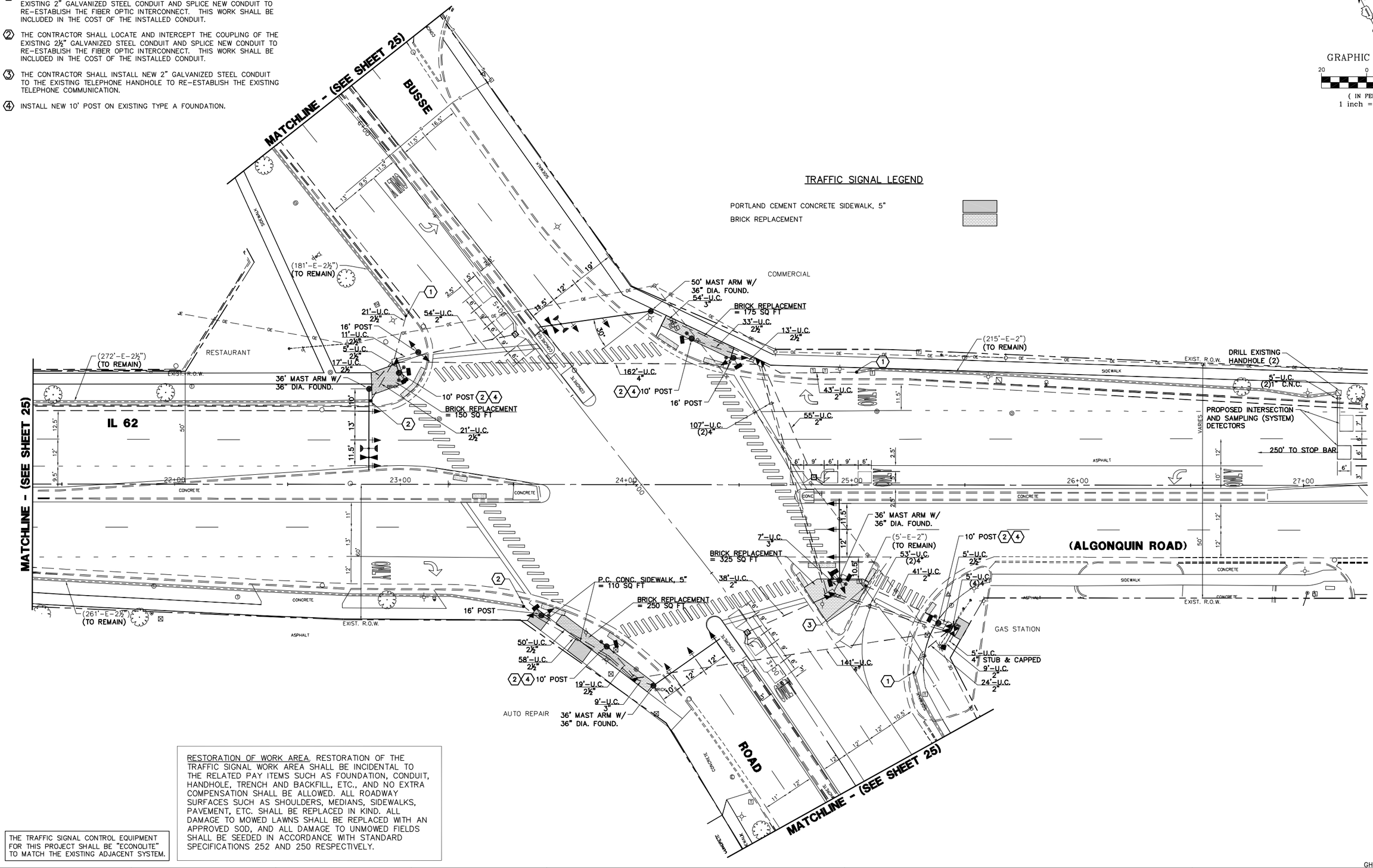
SCALE: N.A. | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
–	2012-030TS	COOK	39	23
		CONTRACT #: 60T82		
	ILLINOIS FED. AID PROJECT			

CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL LOCATE AND INTERCEPT THE COUPLING OF THE EXISTING 2" GALVANIZED STEEL CONDUIT AND SPLICE NEW CONDUIT TO RE-ESTABLISH THE FIBER OPTIC INTERCONNECT. THIS WORK SHALL BE INCLUDED IN THE COST OF THE INSTALLED CONDUIT.
2. THE CONTRACTOR SHALL LOCATE AND INTERCEPT THE COUPLING OF THE EXISTING 2½" GALVANIZED STEEL CONDUIT AND SPLICE NEW CONDUIT TO RE-ESTABLISH THE FIBER OPTIC INTERCONNECT. THIS WORK SHALL BE INCLUDED IN THE COST OF THE INSTALLED CONDUIT.
3. THE CONTRACTOR SHALL INSTALL NEW 2" GALVANIZED STEEL CONDUIT TO THE EXISTING TELEPHONE HANDHOLE TO RE-ESTABLISH THE EXISTING TELEPHONE COMMUNICATION.
4. INSTALL NEW 10' POST ON EXISTING TYPE A FOUNDATION.

GRAPHIC SCALE
20 0 10 20
(IN FEET)
1 inch = 20 ft.



RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEMS 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.

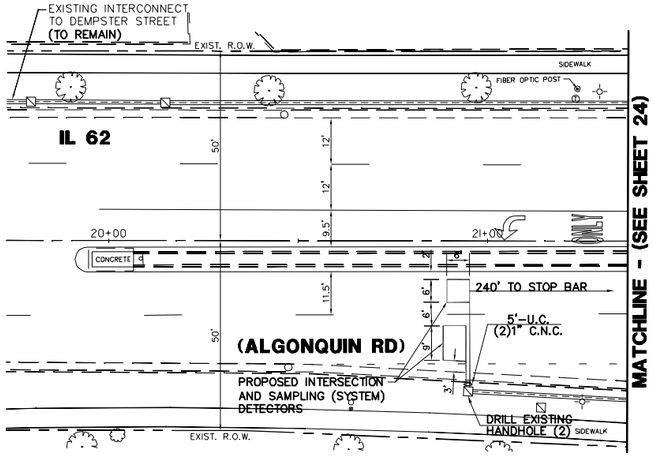
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

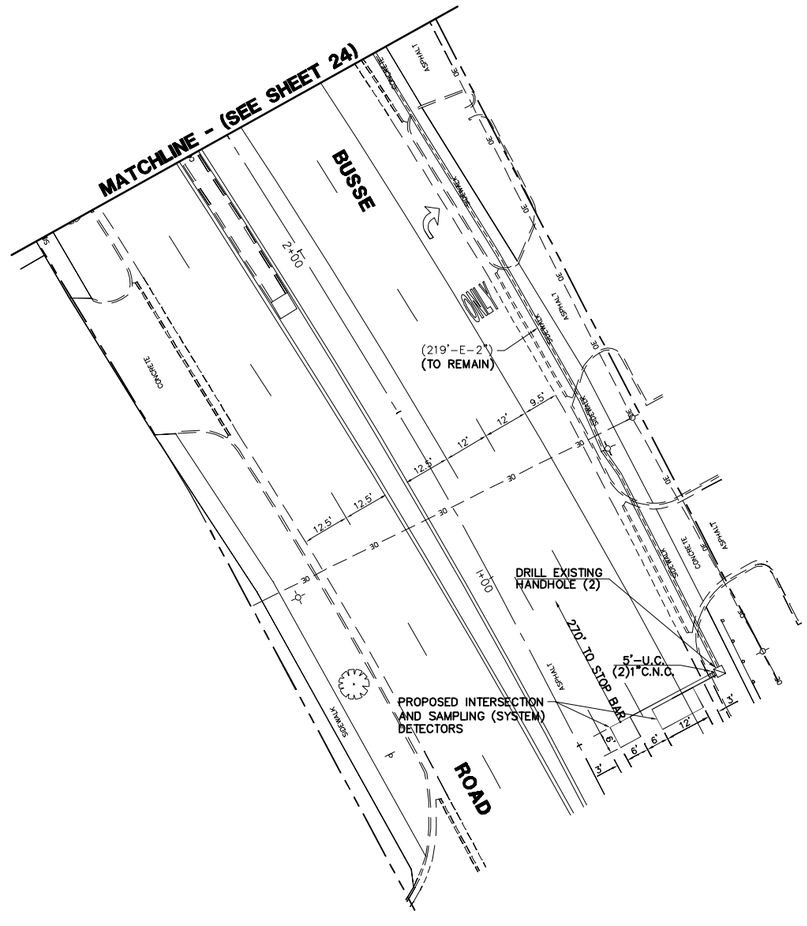
GHA #4085.882

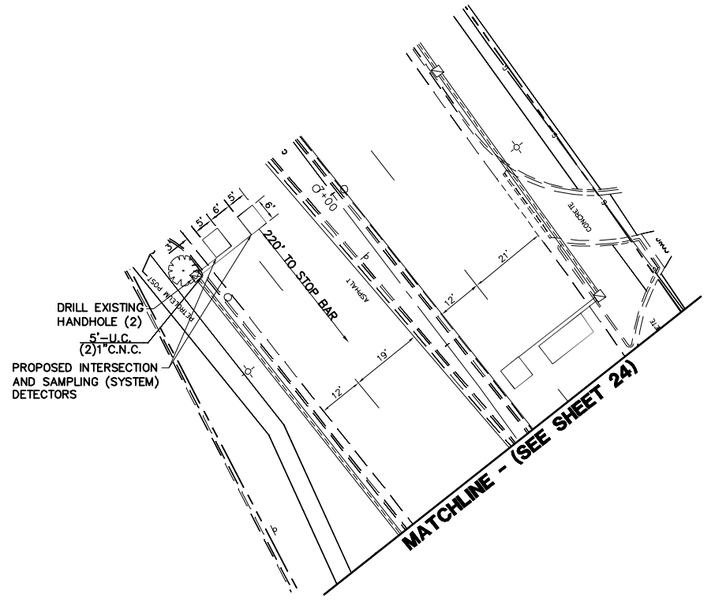
GHA GEWALT HAMILTON ASSOCIATES, INC.	USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODERNIZATION PLAN (1 OF 2) IL 62 (ALGONQUIN RD) AT BUSSE ROAD
		DRAWN - ZCW	REVISED -		
	PLOT SCALE = 1" = .0833'	CHECKED - KLB	REVISED -		
	PLOT DATE = 8/15/2012	DATE - 8/15/2012	REVISED -		SCALE 1"=20' SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
–	2012-030TS	COOK	39	24
		CONTRACT #:	60T82	
	ILLINOIS FED. AID PROJECT			

FILE NAME = 4085.882-TR1.dwg







RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEMS 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.

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

FILE NAME = 4085.882-TR1.dwg

GHA GEWALT HAMILTON ASSOCIATES, INC.

USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -	
	DRAWN - ZCW	REVISED -	
PLOT SCALE = 1" = .0833'	CHECKED - KLB	REVISED -	
PLOT DATE = 8/15/2012	DATE - 8/15/2012	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODERNIZATION PLAN (2 OF 2)
IL RTE 62 (ALGONQUIN RD) AT BUSSE ROAD

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

GHA #4085.882

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
–	2012-030TS	COOK	39	25
		CONTRACT #:	60T82	
	ILLINOIS FED. AID PROJECT			

SCHEDULE OF QUANTITIES

IL 62 (ALGONQUIN RD) AT BUSSE ROAD

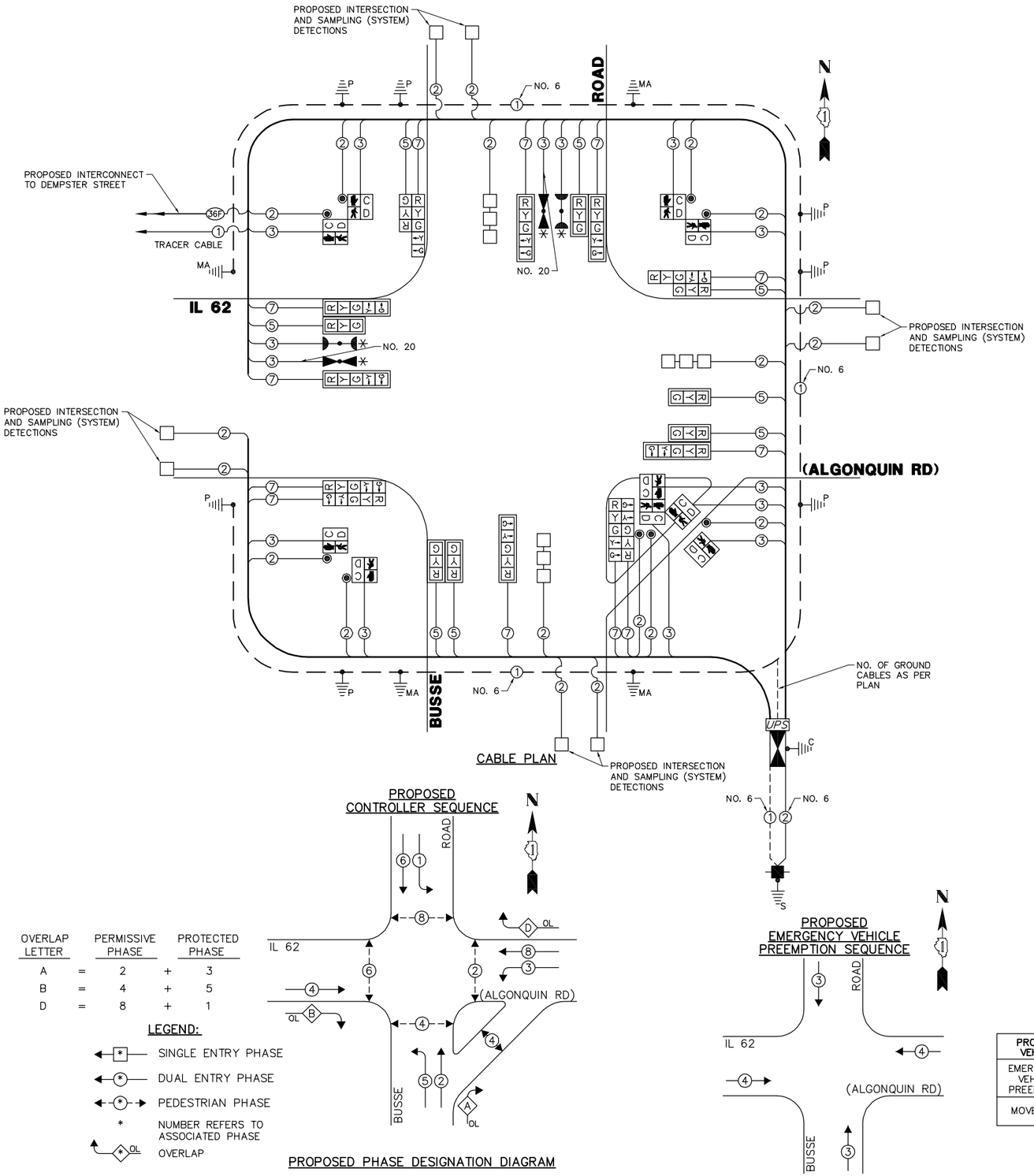
NO.	QUANT.	UNIT	
1.	110	SQ FT	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH
2.	110	SQ FT	SIDEWALK REMOVAL
3.	1.50	CAL MO	ENGINEER'S FIELD OFFICE, TYPE A
4.	0.30	L SUM	MOBILIZATION
5.	0.30	L SUM	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606
6.	0.30	L SUM	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701
7.	0.30	L SUM	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801
8.	13.50	SQ FT	SIGN PANEL - TYPE 1
9.	25.00	SQ FT	SIGN PANEL - TYPE 2
10.	1	EACH	SERVICE INSTALLATION - POLE MOUNTED
11.	265	FOOT	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.
12.	243	FOOT	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.
13.	111	FOOT	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.
14.	638	FOOT	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.
15.	2	EACH	HANDHOLE
16.	3	EACH	HEAVY-DUTY HANDHOLE
17.	3	EACH	DOUBLE HANDHOLE
18.	1	EACH	TRANSCEIVER - FIBER OPTIC
19.	1,949	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C
20.	2,905	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
21.	2,149	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C
22.	3,224	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C
23.	4,469	FOOT	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR
24.	31	FOOT	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C
25.	799	FOOT	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C
26.	4	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.
27.	3	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
28.	3	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.
29.	1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 50 FT.
30.	12	FOOT	CONCRETE FOUNDATION, TYPE A
31.	4	FOOT	CONCRETE FOUNDATION, TYPE C
32.	46	FOOT	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER
33.	8	EACH	DRILL EXISTING HANDHOLE
34.	6	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
35.	6	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED
36.	2	EACH	SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED
37.	2	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
38.	3	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
39.	2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
40.	1	EACH	PEDESTRIAN SIGNAL HEAD, LED, 3-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
41.	12	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
42.	11	EACH	INDUCTIVE LOOP DETECTOR
43.	584	FOOT	DETECTOR LOOP, TYPE I
✳ 44.	2	EACH	LIGHT DETECTOR
✳ 45.	1	EACH	LIGHT DETECTOR AMPLIFIER
46.	9	EACH	PEDESTRIAN PUSH-BUTTON
47.	1,874	FOOT	REMOVE ELECTRIC CABLE FROM CONDUIT
48.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
49.	10	EACH	REMOVE EXISTING HANDHOLE
50.	8	EACH	REMOVE EXISTING CONCRETE FOUNDATION
✳ 51.	784	FOOT	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C
52.	937	FOOT	ROD AND CLEAN EXISTING CONDUIT
53.	900	SQ FT	BRICK PAVEMENT REMOVAL AND REPLACEMENT
54.	8	EACH	CONDUIT SPLICE
55.	1	EACH	FULL-ACTUATED CONTROLLER AND TYPE V CABINET, SPECIAL
56.	1	EACH	MASTER CONTROLLER (SPECIAL)
57.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
58.	110	SQ FT	TEMPORARY SIDEWALK
59.	51.40	SQ FT	TEMPORARY INFORMATION SIGNING
60.	1	EACH	TEMPORARY TRAFFIC SIGNAL TIMING

✳ 100% OF THE COST SHALL BE PAID FOR BY THE VILLAGE OF MOUNT PROSPECT

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
		WATTAGE			
TYPE	NO. LAMPS	INCAND.	L.E.D.	% OPERATION	
SIGNAL (RED)	20	135	17	0.50	170.0
SIGNAL (YELLOW)	20	135	25	0.25	125.0
SIGNAL (GREEN)	20	135	15	0.25	75.0
ARROW	22	135	12	0.10	26.4
PED. SIGNAL	10	90	25	1.00	250.0
CONTROLLER	1	–	100	1.00	100.0
LUMINAIRE	–	–	250	0.50	–
L.E.D. ST. NAME SIGN	–	–	64	0.50	–
VIDEO SYSTEM	–	–	150	1.00	–
BATTERY BACKUP	1	–	25	1.00	25.0
ILLUMINATED SIGN	–	–	25	0.05	–
				TOTAL =	771.4

ENERGY COSTS – BILLED TO: VILLAGE OF MOUNT PROSPECT
(ADDRESS) 1700 W. CENTRAL AVE
(ADDRESS) MT. PROSPECT, IL 60056
ENERGY SUPPLY – CONTACT: NEW BUSINESS
PHONE: (866) 639-3552
COMPANY: COM-ED LIBERTYVILLE

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



OVERLAP LETTER		PERMISSIVE PHASE		PROTECTED PHASE
A	=	2	+	3
B	=	4	+	5
D	=	8	+	1

LEGEND:

- SINGLE ENTRY PHASE
- DUAL ENTRY PHASE
- PEDESTRIAN PHASE
- * NUMBER REFERS TO ASSOCIATED PHASE
- OL OVERLAP

PROPOSED PHASE DESIGNATION DIAGRAM

PROPOSED EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT		

GHA #4085.882

GEWALT HAMILTON ASSOCIATES, INC.	USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -	
		DRAWN - ZCW	REVISED -	
	PLOT SCALE = 1" = .0833'	CHECKED - KLB	REVISED -	
	PLOT DATE = 8/15/2012	DATE - 8/15/2012	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 62 (ALGONQUIN RD) AT BUSSE ROAD

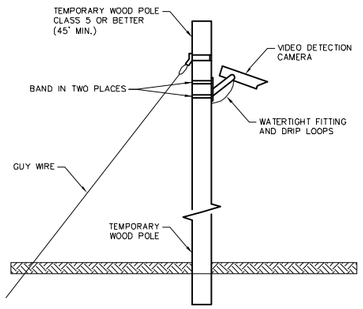
SCALE N.A. | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
–	2012-030TS	COOK	39	26
		CONTRACT #:	60T82	
		ILLINOIS FED. AID PROJECT		

FILE NAME = 4085.882-Cable.dwg

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 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 LED AND 12" (300mm) DIAMETER. HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. PEDESTRIAN SIGNALS SHALL INCLUDE SOLID INTERNATIONAL SYMBOLS. PEDESTRIAN SIGNALS WITH COUNTDOWN TIMERS SHALL BE USED WHEN THE EXISTING INSTALLATION UTILIZES COUNTDOWN TYPE OR AS DIRECTED BY THE ENGINEER. COUNTDOWN TYPE PEDESTRIAN SIGNALS ARE NOT TO BE INSTALLED AT A RAILROAD INTERSECTION. 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 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 CONTROLLER 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.
7. UNINTERRUPTIBLE POWER SUPPLY (UPS) SYSTEMS SHALL BE INSTALLED AND MADE OPERATIONAL AT TEMPORARY TRAFFIC SIGNAL INSTALLATIONS WHERE UPS IS INSTALLED AT THE EXISTING TRAFFIC SIGNAL. TEMPORARY TRAFFIC SIGNALS AT RAILROAD INTERSECTIONS, AND TEMPORARY TRAFFIC SIGNALS AT INTERSECTIONS WITH FIRE STATION ACTUATED EMERGENCY VEHICLE PRE-EMPTION, OR WHEN INDICATED ON THE PLANS.
8. TRAFFIC SIGNAL MANAGEMENT SYSTEMS SHALL BE MAINTAINED IN OPERATION AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER. REQUIRED EQUIPMENT SHALL BE AS SHOWN ON THE PLANS AND THE CONTRACTOR SHALL PLACE THE EQUIPMENT IN OPERATION TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE TRAFFIC SIGNAL MANAGEMENT SYSTEM.
9. DETECTION AT TEMPORARY TRAFFIC SIGNALS SHALL BE INCLUDED FOR ALL APPROACHES OF THE INTERSECTION UNLESS INDICATED OTHERWISE ON THE PLANS. THE DETECTION SYSTEM MUST MEET THE SPECIFICATIONS OF THE DISTRICT 1 AND THE CONTRACTOR SHALL PLACE THE DETECTORS INTO OPERATION TO THE SATISFACTION OF THE ENGINEER.
10. WHEN PAN, TILT, ZOOM CAMERAS ARE INSTALLED AT THE EXISTING INTERSECTION OR ARE CALLED FOR IN THE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING THE CAMERAS TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE CAMERAS.



TEMPORARY VIDEO DETECTION MOUNTING DETAIL

(NOT TO SCALE)

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

AGENCY: VILLAGE OF MOUNT PROSPECT

4	EACH	PEDESTRIAN SIGNAL HEAD, 1-FACE
4	EACH	PEDESTRIAN PUSH-BUTTON
2	EACH	LIGHT DETECTOR
1	EACH	LIGHT DETECTOR AMPLIFIER

THE FOLLOWNG 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)
9	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-SECTION
2	EACH	STEEL MAST ARM AND POLE
8	EACH	TRAFFIC SIGNAL POST
6	EACH	SERVICE INSTALLATION
1	EACH	TRAFFIC SIGNAL BACKPLATE

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEMS 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.

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

CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL KEEP THE PROGRAMMED MAST ARM MOUNTED TRAFFIC SIGNAL HEADS AND EXISTING EMERGENCY VEHICLE LIGHT DETECTOR WITH CONFIRMATION BEACON OPERATIONAL FOR THE DURATION OF THE TEMPORARY TRAFFIC SIGNAL.
2. ALL EXISTING MAST ARM MOUNTED SIGNAL HEADS SHALL BE CABLED OVERHEAD FROM THE TOP OF THE MAST ARM TO THE TEMPORARY WOOD POLE AND DOWN TO THE TEMPORARY CONTROLLER CABINET.

TRAFFIC SIGNAL LEGEND

SIDEWALK REMOVAL

GHA #4085.882

FILE NAME = 4085.882_TR1.dwg

GHA GEWALT HAMILTON ASSOCIATES, INC.	USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -	
		DRAWN - ZCW	REVISED -	
	PLOT SCALE = 1" = .0833'	CHECKED - KLB	REVISED -	
	PLOT DATE = 8/15/2012	DATE - 8/15/2012	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL INSTALLATION & REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT IL 62 (ALGONQUIN RD) AT DEMPSTER STREET

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	2012-030TS	COOK	39	27
		CONTRACT #:	60T82	
	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.
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3. ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE LED AND 12" (300mm) DIAMETER. HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. PEDESTRIAN SIGNALS SHALL INCLUDE SOLID INTERNATIONAL SYMBOLS. PEDESTRIAN SIGNALS WITH COUNTDOWN TIMERS SHALL BE USED WHEN THE EXISTING INSTALLATION UTILIZES COUNTDOWN TYPE OR AS DIRECTED BY THE ENGINEER. COUNTDOWN TYPE PEDESTRIAN SIGNALS ARE NOT TO BE INSTALLED AT A RAILROAD INTERSECTION. 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.
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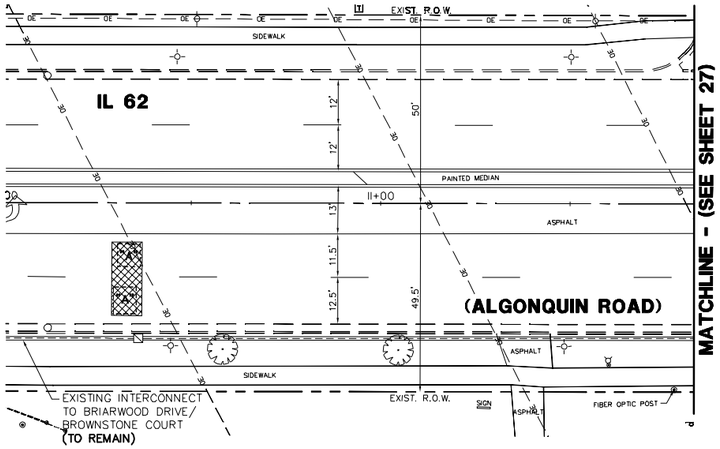
6. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.
7. UNINTERRUPTIBLE POWER SUPPLY (UPS) SYSTEMS SHALL BE INSTALLED AND MADE OPERATIONAL AT TEMPORARY TRAFFIC SIGNAL INSTALLATIONS WHERE UPS IS INSTALLED AT THE EXISTING TRAFFIC SIGNAL, TEMPORARY TRAFFIC SIGNALS AT RAILROAD INTERSECTIONS, AND TEMPORARY TRAFFIC SIGNALS AT INTERSECTIONS WITH FIRE STATION ACTUATED EMERGENCY VEHICLE PRE-EMPTION, OR WHEN INDICATED ON THE PLANS.
8. TRAFFIC SIGNAL MANAGEMENT SYSTEMS SHALL BE MAINTAINED IN OPERATION AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER. REQUIRED EQUIPMENT SHALL BE AS SHOWN ON THE PLANS AND THE CONTRACTOR SHALL PLACE THE EQUIPMENT IN OPERATION TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE TRAFFIC SIGNAL MANAGEMENT SYSTEM.
9. DETECTION AT TEMPORARY TRAFFIC SIGNALS SHALL BE INCLUDED FOR ALL APPROACHES OF THE INTERSECTION UNLESS INDICATED OTHERWISE ON THE PLANS. THE DETECTION SYSTEM MUST MEET THE SPECIFICATIONS OF THE DISTRICT 1 AND THE CONTRACTOR SHALL PLACE THE DETECTORS INTO OPERATION TO THE SATISFACTION OF THE ENGINEER.
10. WHEN PAN, TILT, ZOOM CAMERAS ARE INSTALLED AT THE EXISTING INTERSECTION OR ARE CALLED FOR IN THE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING THE CAMERAS TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE CAMERAS.

TEMPORARY VIDEO DETECTION MOUNTING DETAIL

(NOT TO SCALE)



GRAPHIC SCALE

20 0 10 20

(IN FEET)

1 inch = 20 ft.

THE TRAFFIC SIGNAL CONTROL 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 ITEMS 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 = 4085.882-TR1.dwg

GHA #4085.882

GHA GEWALT HAMILTON ASSOCIATES, INC.

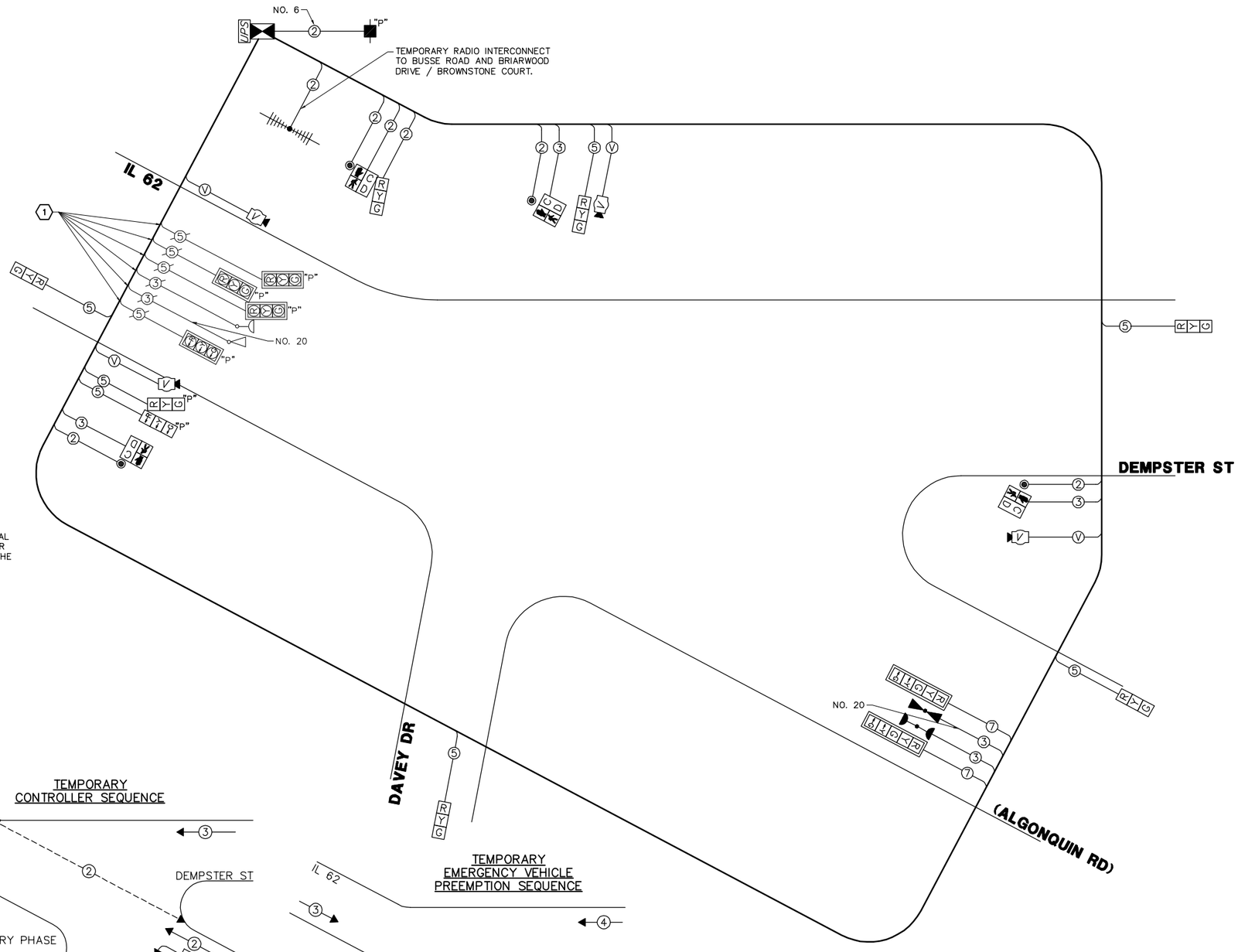
USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -	
	DRAWN - ZCW	REVISED -	
PLOT SCALE = 1" = .0833'	CHECKED - KLB	REVISED -	
PLOT DATE = 8/15/2012	DATE - 8/15/2012	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL INSTALLATION & REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT IL 62 (ALGONQUIN RD) AT DEMPSTER STREET

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
–	2012-030TS	COOK	39	28
		CONTRACT #: 60T82		
	ILLINOIS FED. AID PROJECT			



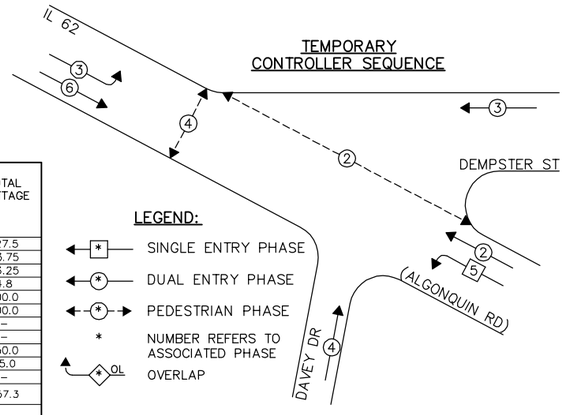
CONSTRUCTION NOTES:

(1) THE CONTRACTOR SHALL KEEP THE EXISTING PROGRAMMED MAST ARM MOUNTED TRAFFIC SIGNAL HEADS AND EXISTING EMERGENCY LIGHT DETECTOR WITH CONFIRMATION BEACON OPERATIONAL FOR THE DURATION OF THE TEMPORARY TRAFFIC SIGNAL.

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS						TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE L.E.D.	% OPERATION		
SIGNAL (RED)	15	135	17	0.50		127.5
SIGNAL (YELLOW)	15	135	25	0.25		93.75
SIGNAL (GREEN)	15	135	15	0.25		56.25
ARROW	4	135	12	0.10		4.8
PED. SIGNAL	4	90	25	1.00		100.0
CONTROLLER	1	–	100	1.00		100.0
LUMINAIRE	–	–	250	0.50		–
L.E.D. ST. NAME SIGN	–	–	64	0.50		–
VIDEO SYSTEM	1	–	150	1.00		150.0
BATTERY BACKUP	1	–	25	1.00		25.0
ILLUMINATED SIGN	–	–	25	0.05		–
					TOTAL =	657.3

ENERGY COSTS – BILLED TO: VILLAGE OF MOUNT PROSPECT
(ADDRESS) 1700 W. CENTRAL AVE
(ADDRESS) MT. PROSPECT, IL 60056
ENERGY SUPPLY – CONTACT: NEW BUSINESS
PHONE: (866) 639-3552
COMPANY: COM-ED LIBERTYVILLE

TEMPORARY CONTROLLER SEQUENCE

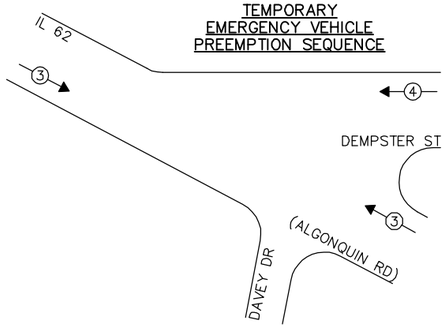


LEGEND:

- SINGLE ENTRY PHASE
- DUAL ENTRY PHASE
- PEDESTRIAN PHASE
- * NUMBER REFERS TO ASSOCIATED PHASE
- OL OVERLAP

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

TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE



TEMPORARY EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	⟋	←

TEMPORARY PHASE DESIGNATION DIAGRAM

GHA #4085.882

GEWALT HAMILTON ASSOCIATES, INC.	USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -	
		DRAWN - ZCW	REVISED -	
	PLOT SCALE = 1" = .0833'	CHECKED - KLB	REVISED -	
	PLOT DATE = 8/15/2012	DATE - 8/15/2012	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION DIAGRAM, & TEMPORARY VEHICLE PREEMPTION SEQUENCE
IL 62 (ALGONQUIN RD) AT DEMPSTER STREET

SCALE: N.A. | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
–	2012-030TS	COOK	39	29
		CONTRACT #:	60T82	
		ILLINOIS FED. AID PROJECT		

FILE NAME = 4085.882-Cable.dwg

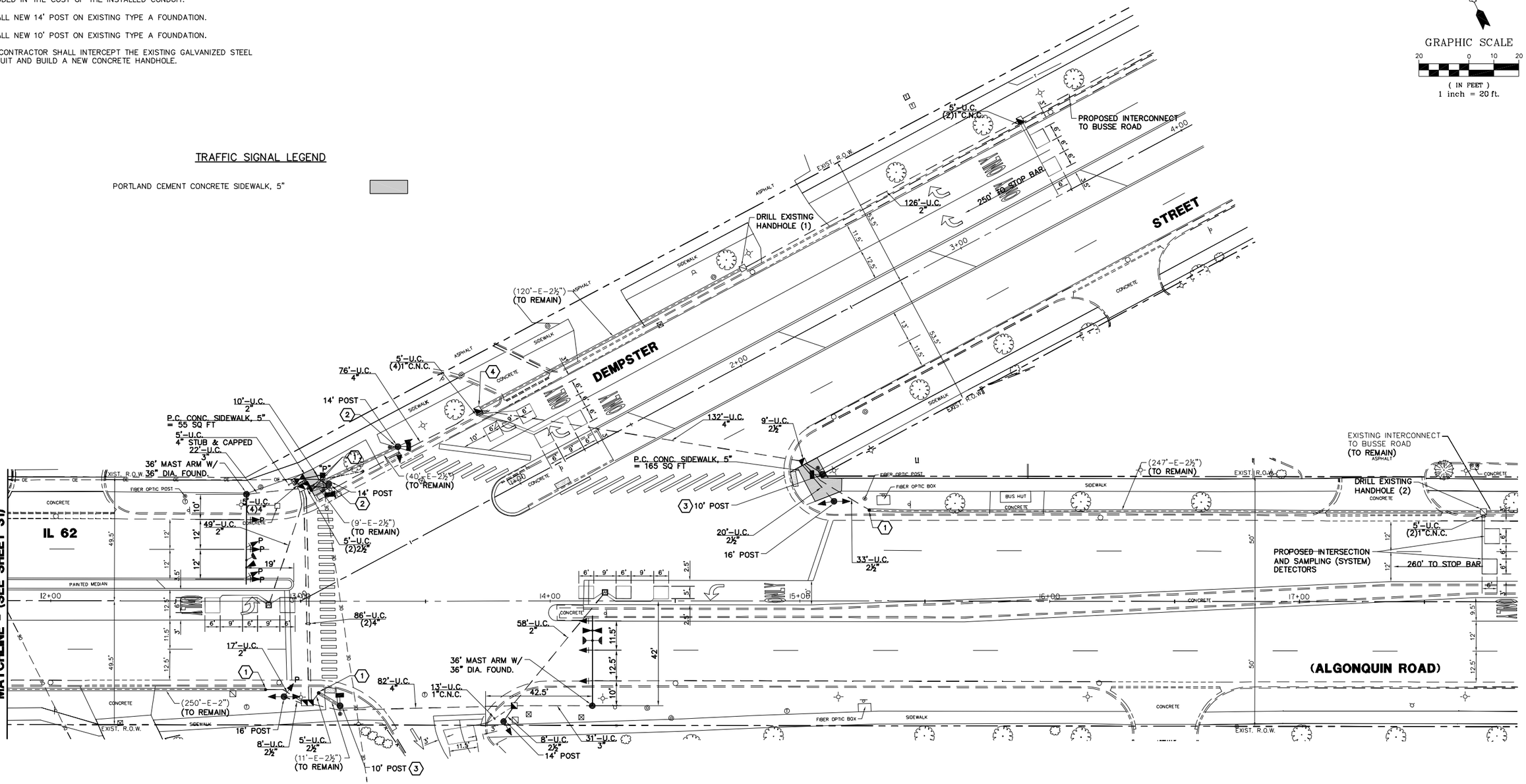
CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL LOCATE AND INTERCEPT THE COUPLING OF THE EXISTING GALVANIZED STEEL CONDUIT AND SPLICE NEW CONDUIT TO RE-ESTABLISH THE FIBER OPTIC INTERCONNECT. THIS WORK SHALL BE INCLUDED IN THE COST OF THE INSTALLED CONDUIT.
2. INSTALL NEW 14' POST ON EXISTING TYPE A FOUNDATION.
3. INSTALL NEW 10' POST ON EXISTING TYPE A FOUNDATION.
4. THE CONTRACTOR SHALL INTERCEPT THE EXISTING GALVANIZED STEEL CONDUIT AND BUILD A NEW CONCRETE HANDHOLE.

GRAPHIC SCALE
20 0 10 20
(IN FEET)
1 inch = 20 ft.

TRAFFIC SIGNAL LEGEND

PORTLAND CEMENT CONCRETE SIDEWALK, 5"



RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEMS 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.

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

FILE NAME = 4085.882-TR1.dwg

GHA #4085.882

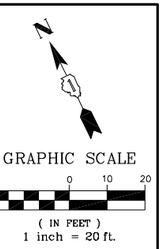
GHA GEWALT HAMILTON ASSOCIATES, INC.	USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -
		DRAWN - ZCW	REVISED -
	PLOT SCALE = 1" = .0833'	CHECKED - KLB	REVISED -
	PLOT DATE = 8/15/2012	DATE - 8/15/2012	REVISED -

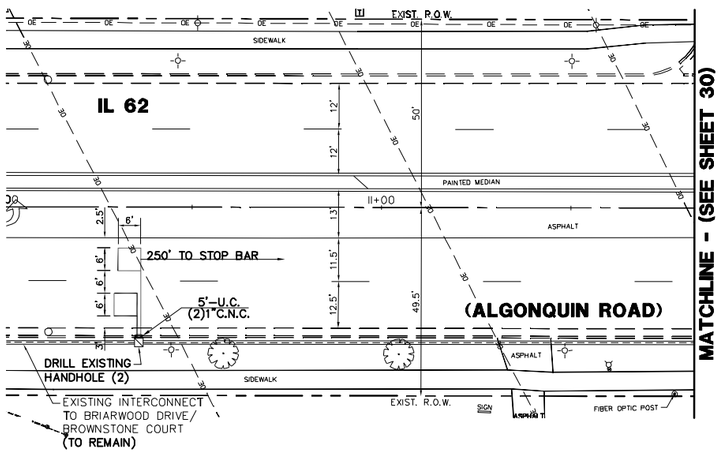
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODERNIZATION PLAN
IL 62 (ALGONQUIN RD) AT DEMPSTER STREET

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
–	2012-030TS	COOK	39	30
		CONTRACT #:	60T82	
		ILLINOIS FED. AID PROJECT		





RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEMS 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.

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

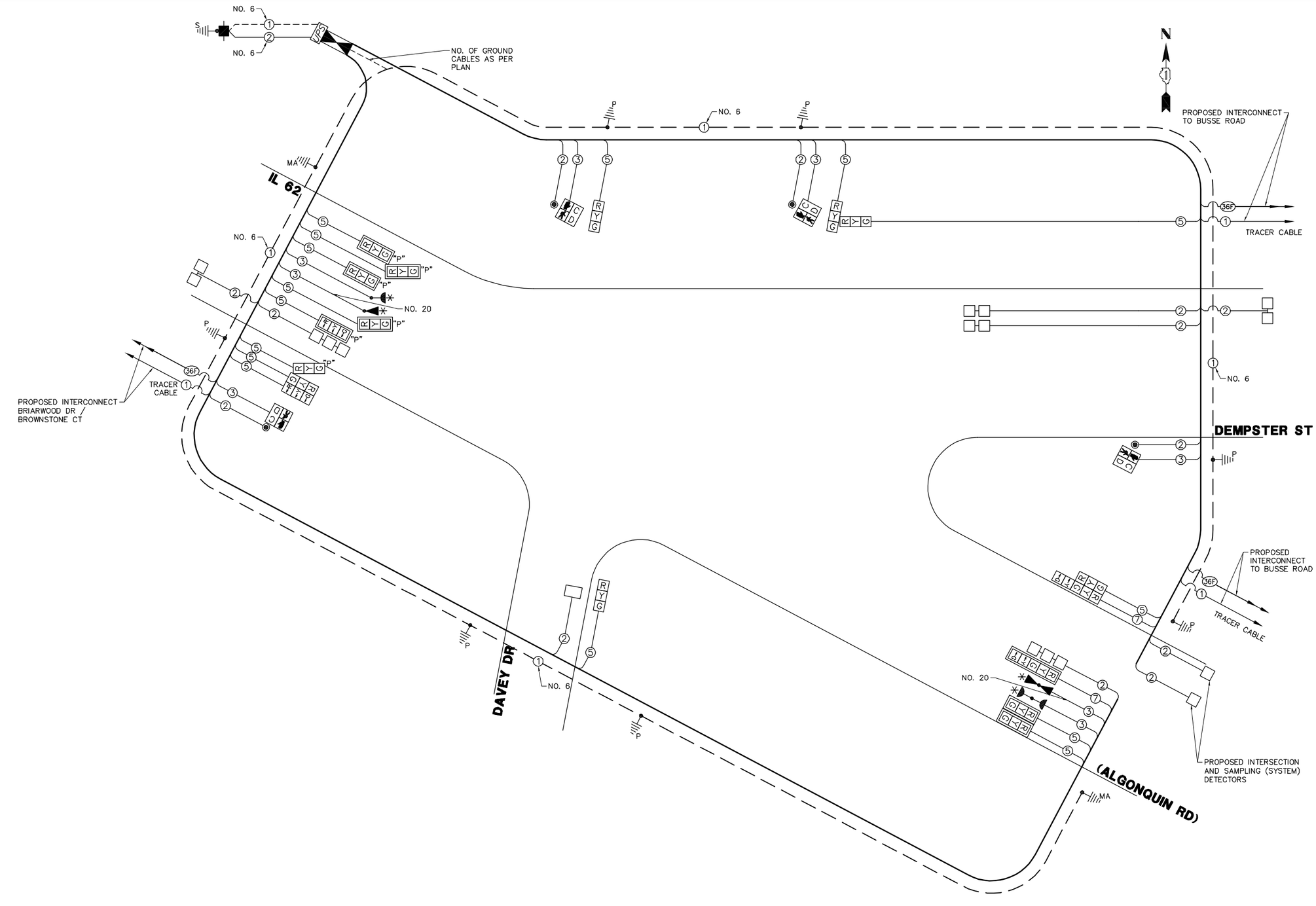
FILE NAME = 4085.882-TR1.dwg

GHA #4085.882

GHA GEWALT HAMILTON ASSOCIATES, INC.

USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODERNIZATION PLAN IL 62 (ALGONQUIN RD) AT DEMPSTER STREET	
	DRAWN - ZCW	REVISED -			
PLOT SCALE = 1" = .0833'	CHECKED - KLB	REVISED -			
PLOT DATE = 8/15/2012	DATE - 8/15/2012	REVISED -		SCALE: 1"=20' SHEET NO. OF SHEETS STA. TO STA.	

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
–	2012–030TS	COOK	39	31
		CONTRACT #:	60T82	
	ILLINOIS FED. AID PROJECT			



✳ 100% OF THE COST SHALL BE PAID FOR BY THE VILLAGE OF MOUNT PROSPECT

GHA #4085.882

FILE NAME = 4085.882-Cable.dwg

GHA GEWALT HAMILTON ASSOCIATES, INC.	USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -
		DRAWN - ZCW	REVISED -
	PLOT SCALE = 1" = .0833'	CHECKED - KLB	REVISED -
	PLOT DATE = 8/15/2012	DATE - 8/15/2012	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN
IL 62 (ALGONQUIN RD) AT DEMPSTER STREET

SCALE: N.A. | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
–	2012–030TS	COOK	39	32
		CONTRACT #:	60T82	
	ILLINOIS FED. AID PROJECT			

SCHEDULE OF QUANTITIES

IL 62 (ALGONQUIN RD) AT DEMPSTER STREET

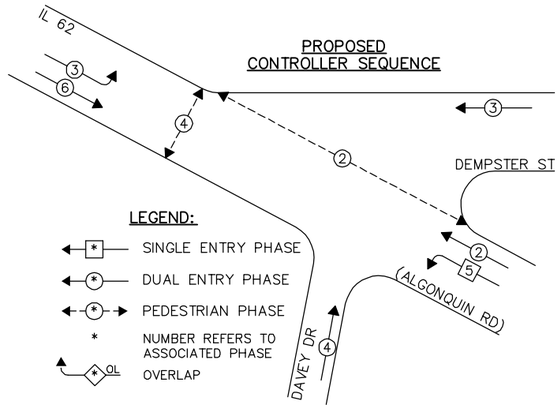
NO.	QUANT.	UNIT	
1.	220	SQ FT	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH
2.	220	SQ FT	SIDEWALK REMOVAL
3.	1.50	CAL MO	ENGINEER'S FIELD OFFICE, TYPE A
4.	0.30	L SUM	MOBILIZATION
5.	0.30	L SUM	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606
6.	0.30	L SUM	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701
7.	0.30	L SUM	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801
8.	18	SQ FT	SIGN PANEL - TYPE 1
9.	1	EACH	SERVICE INSTALLATION - POLE MOUNTED
10.	258	FOOT	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.
11.	75	FOOT	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.
12.	53	FOOT	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.
13.	487	FOOT	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.
14.	4	EACH	HANDHOLE
15.	2	EACH	HEAVY-DUTY HANDHOLE
16.	2	EACH	DOUBLE HANDHOLE
17.	1	EACH	TRANSCEIVER
18.	526	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C
19.	954	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
20.	2,230	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C
21.	605	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C
22.	2,622	FOOT	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR
23.	32	FOOT	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C
24.	674	FOOT	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C
25.	2	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.
26.	3	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.
27.	2	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
28.	2	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.
29.	8	FOOT	CONCRETE FOUNDATION, TYPE A
30.	4	FOOT	CONCRETE FOUNDATION, TYPE C
31.	22	FOOT	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER
32.	5	EACH	DRILL EXISTING HANDHOLE
33.	2	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
34.	2	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
35.	1	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED
36.	1	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED
37.	1	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
38.	5	EACH	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED
39.	1	EACH	COMBINATION SIGNAL HEAD, LED, 3-FACE, 1-3 SECTION OPTICALLY PROGRAMMED, 2-3 SECTION, BRACKET MOUNTED
40.	4	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
41.	8	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
42.	8	EACH	INDUCTIVE LOOP DETECTOR
43.	597	FOOT	DETECTOR LOOP, TYPE I
✳ 44.	2	EACH	LIGHT DETECTOR
✳ 45.	1	EACH	LIGHT DETECTOR AMPLIFIER
46.	4	EACH	PEDESTRIAN PUSH-BUTTON
47.	1,601	FOOT	REMOVE ELECTRIC CABLE FROM CONDUIT
48.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
49.	9	EACH	REMOVE EXISTING HANDHOLE
50.	8	EACH	REMOVE EXISTING CONCRETE FOUNDATION
✳ 51.	417	FOOT	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C
52.	617	FOOT	ROD AND CLEAN EXISTING CONDUIT
53.	3	EACH	CONDUIT SPLICE
54.	1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
55.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
56.	220	SQ FT	TEMPORARY SIDEWALK
57.	26	SQ FT	TEMPORARY INFORMATION SIGNING
58.	1	EACH	TEMPORARY TRAFFIC SIGNAL TIMING

✳ 100% OF THE COST SHALL BE PAID FOR BY THE VILLAGE OF MOUNT PROSPECT

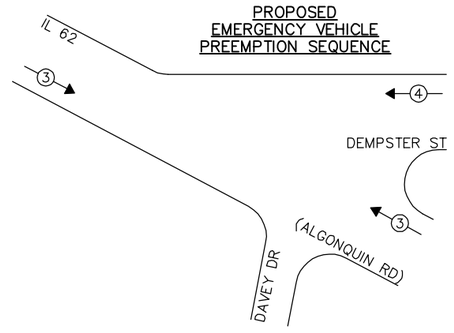
I.D.O.T.
TRAFFIC SIGNAL INSTALLATION
ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE L.E.D.	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	17	135	17	0.50	144.5
SIGNAL (YELLOW)	17	135	25	0.25	106.25
SIGNAL (GREEN)	17	135	15	0.25	63.75
ARROW	4	135	12	0.10	4.8
PED. SIGNAL	4	90	25	1.00	100.0
CONTROLLER	1	–	100	1.00	100.0
LUMINAIRE	–	–	250	0.50	–
L.E.D. ST. NAME SIGN	–	–	64	0.50	–
VIDEO SYSTEM	–	–	150	1.00	–
BATTERY BACKUP	1	–	25	1.00	25.0
ILLUMINATED SIGN	–	–	25	0.05	–
				TOTAL =	544.3

ENERGY COSTS – BILLED TO: VILLAGE OF MOUNT PROSPECT
(ADDRESS) 1700 W. CENTRAL AVE
(ADDRESS) MT. PROSPECT, IL 60056
ENERGY SUPPLY – CONTACT: NEW BUSINESS
PHONE: (866) 639-3552
COMPANY: COM-ED LIBERTYVILLE



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



PROPOSED EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	⟋	←

PROPOSED PHASE DESIGNATION DIAGRAM

GHA #4085.882

FILE NAME = 4085.882-Cable.dwg

GEWALT HAMILTON ASSOCIATES, INC.

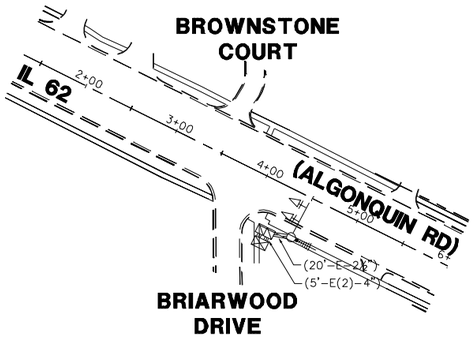
USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -	
	DRAWN - ZCW	REVISED -	
PLOT SCALE = 1" = .0833'	CHECKED - KLB	REVISED -	
PLOT DATE = 8/15/2012	DATE - 8/15/2012	REVISED -	

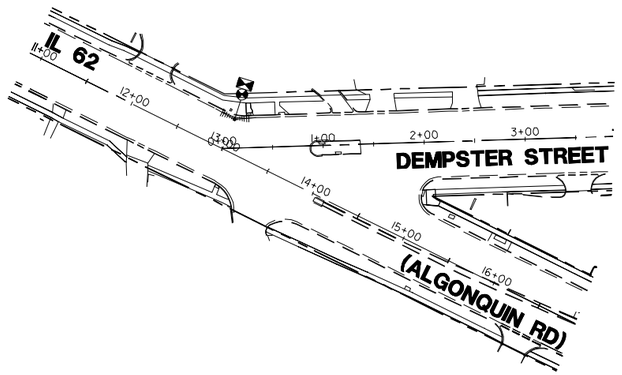
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

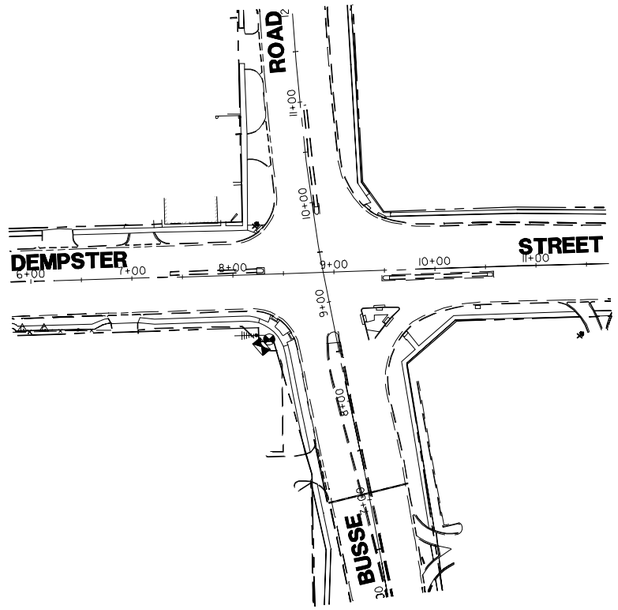
SCHEDULE OF QUANTITIES, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 62 (ALGONQUIN RD) AT DEMPSTER STREET

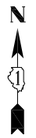
SCALE: N.A. | SHEET NO. OF SHEETS | STA. TO STA.

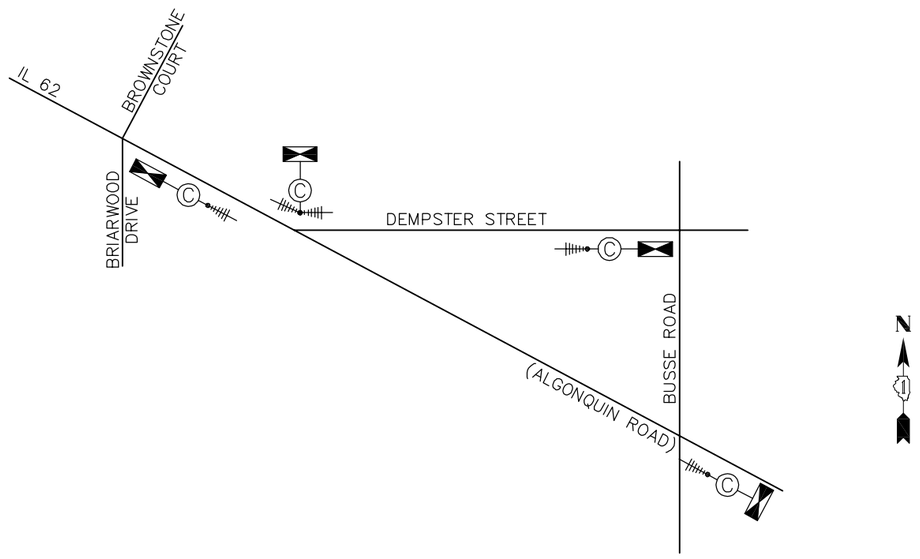
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
–	2012-030TS	COOK	39	33
		CONTRACT #:	60T82	
	ILLINOIS FED. AID PROJECT			

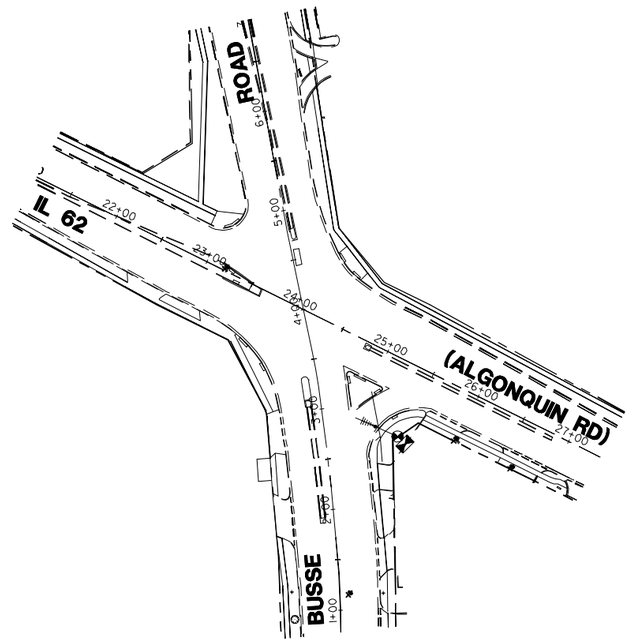












THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME = 4085.882-TR1.dwg

GHA GEWALT HAMILTON ASSOCIATES, INC.

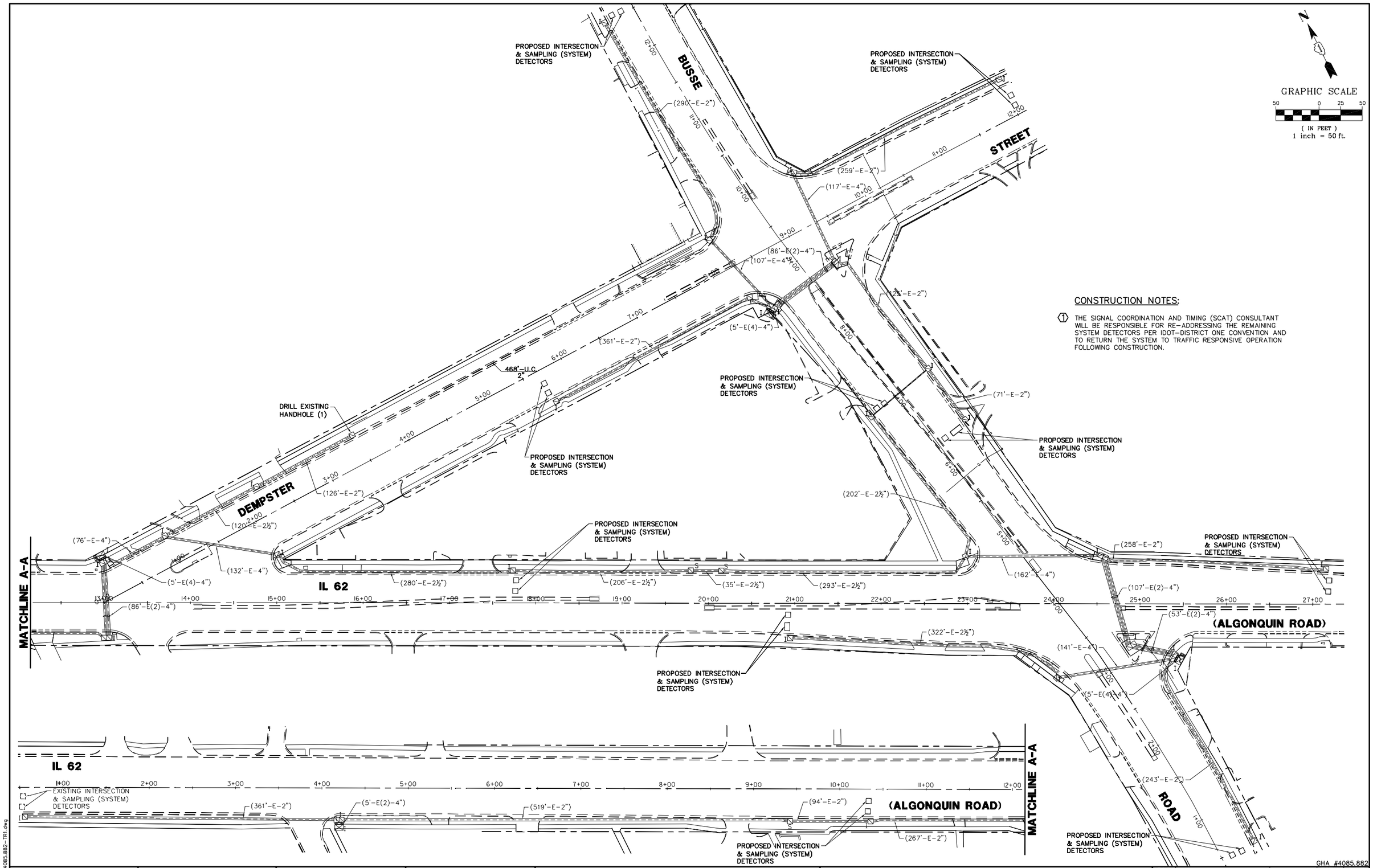
USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -	
	DRAWN - ZCW	REVISED -	
PLOT SCALE = 1" = .0833'	CHECKED - KLB	REVISED -	
PLOT DATE = 8/15/2012	DATE - 8/15/2012	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY INTERCONNECT PLAN & SCHEMATIC - IL 62 (ALGONQUIN RD) FROM BUSSE ROAD TO BRIARWOOD COURT

SCALE: N.A. | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
–	2012-030TS	COOK	39	34
		CONTRACT #:	60T82	
	ILLINOIS FED. AID PROJECT			



CONSTRUCTION NOTES:

1. THE SIGNAL COORDINATION AND TIMING (SCAT) CONSULTANT WILL BE RESPONSIBLE FOR RE-ADDRESSING THE REMAINING SYSTEM DETECTORS PER IDOT-DISTRICT ONE CONVENTION AND TO RETURN THE SYSTEM TO TRAFFIC RESPONSIVE OPERATION FOLLOWING CONSTRUCTION.

GHA #4085.882

FILE NAME = 4085.882-TR1.dwg

GHA GEWALT HAMILTON ASSOCIATES, INC.	USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -	
		DRAWN - ZCW	REVISED -	
	PLOT SCALE = 1" = .0833'	CHECKED - KLB	REVISED -	
	PLOT DATE = 8/15/2012	DATE - 8/15/2012	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN
IL 62 (ALGONQUIN RD), DEMPSTER STREET, & BUSSE ROAD

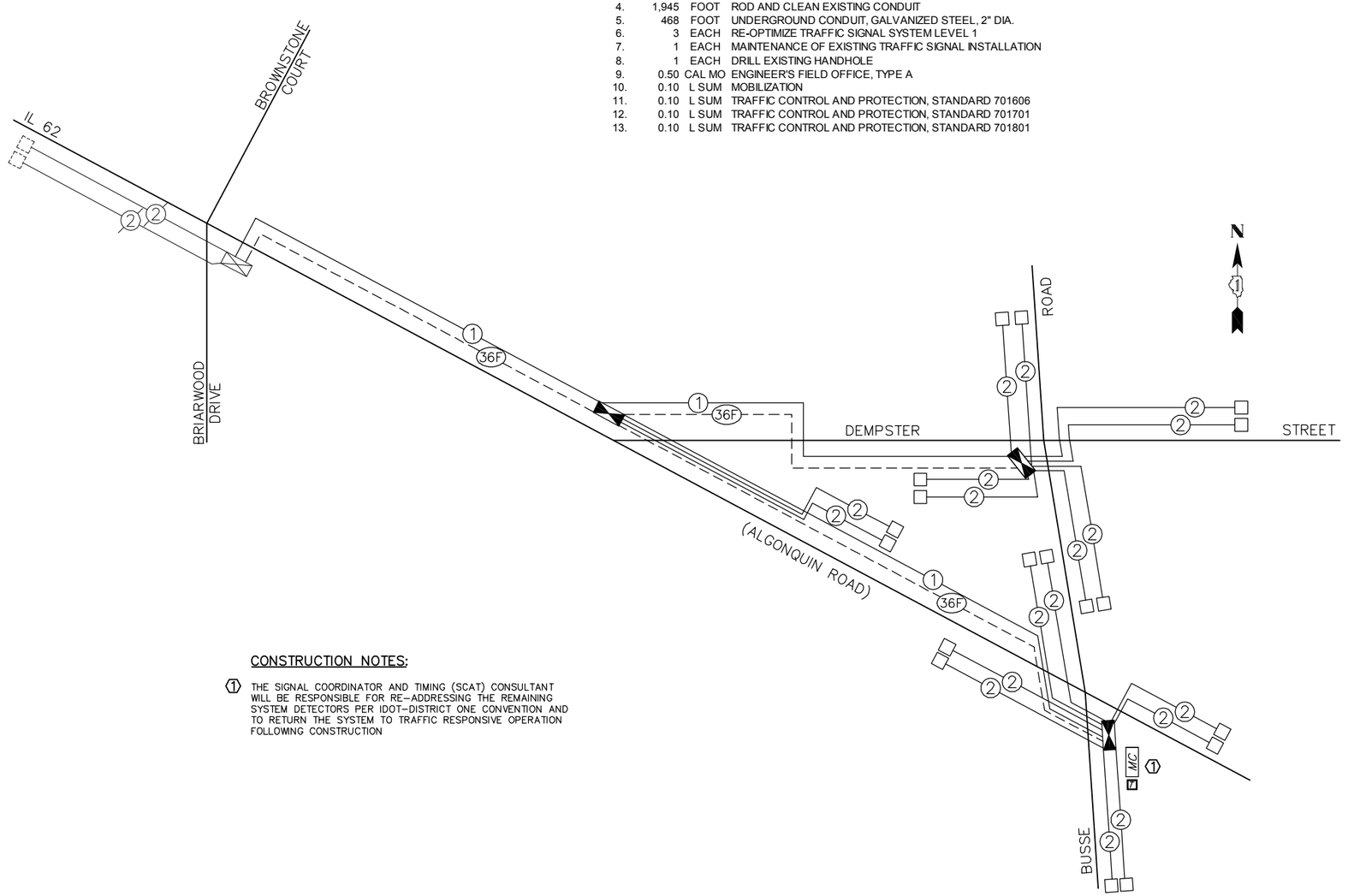
SCALE: 1"=50' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
–	2012-030TS	COOK	39	35
		CONTRACT #:	60T82	
	ILLINOIS FED. AID PROJECT			

SCHEDULE OF QUANTITIES

INTERCONNECT

NO.	QUANT.	UNIT	
1.	3,890	FOOT	REMOVE ELECTRIC CABLE FROM CONDUIT
2.	3,537	FOOT	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C
3.	3,537	FOOT	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F
4.	1,945	FOOT	ROD AND CLEAN EXISTING CONDUIT
5.	468	FOOT	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.
6.	3	EACH	RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 1
7.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
8.	1	EACH	DRILL EXISTING HANDHOLE
9.	0.50	CAL MO	ENGINEER'S FIELD OFFICE, TYPE A
10.	0.10	L SUM	MOBILIZATION
11.	0.10	L SUM	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606
12.	0.10	L SUM	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701
13.	0.10	L SUM	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801



CONSTRUCTION NOTES:

⟨1⟩ THE SIGNAL COORDINATOR AND TIMING (SCAT) CONSULTANT WILL BE RESPONSIBLE FOR RE-ADDRESSING THE REMAINING SYSTEM DETECTORS PER IDOT-DISTRICT ONE CONVENTION AND TO RETURN THE SYSTEM TO TRAFFIC RESPONSIVE OPERATION FOLLOWING CONSTRUCTION

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

FILE NAME = 4085.882-TR1.dwg

GHA GEWALT HAMILTON ASSOCIATES, INC.

USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -	
	DRAWN - ZCW	REVISED -	
PLOT SCALE = 1" = .0833'	CHECKED - KLB	REVISED -	
PLOT DATE = 8/15/2012	DATE - 8/15/2012	REVISED -	

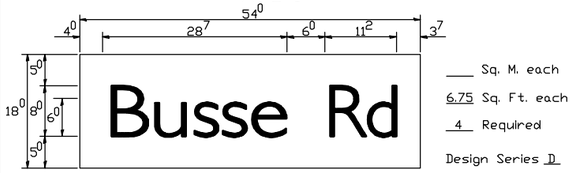
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT SCHEMATIC - IDOT SYSTEM #4

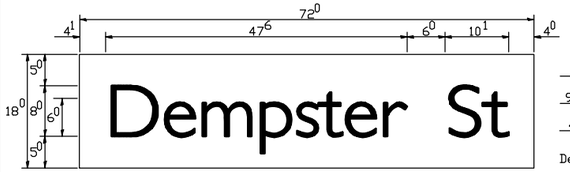
SCALE: N.A. | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
–	2012-030TS	COOK	39	36
		CONTRACT #: 60T82		
	ILLINOIS FED. AID PROJECT			

TYPE I



____ Sq. M. each
6.75 Sq. Ft. each
4 Required
Design Series D

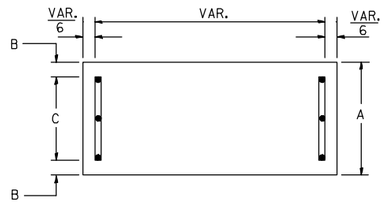


____ Sq. M. each
9.0 Sq. Ft. each
4 Required
Design Series D

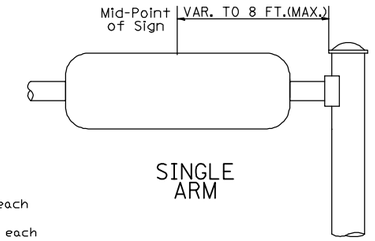
TYPE II

____ Sq. M. each
12.5 Sq. Ft. each
2 Required
Design Series D

SUPPORTING CHANNELS

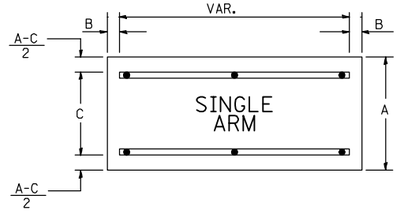


A	B	C
18"	2"	14"



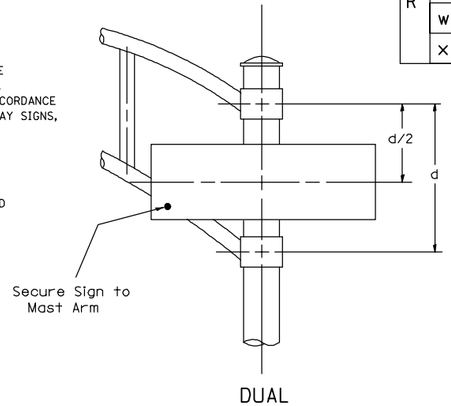
SINGLE ARM

SUPPORTING CHANNELS



SINGLE ARM

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



DUAL ARM

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 877001, 877002, 877006, 877011 AND 877012, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" x 8'-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 8'-0".
4. ALL BORDERS SHALL BE ¾" WIDE AND CORNER RADIUS SHALL BE 2-1/4 ".
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:

* J.O. HERBERT CO.
MIDLOTHIAN, VA.

* WESTERN REMAC INC.
WOODRIDGE, 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.

SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM shall be used. See Note #5.

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 i 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, $2^{\textcircled{3}}$ DENOTES $\frac{3''}{8}$

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^{4}	4^{7}	6^{0}	v	4^{2}	4^{7}
W	4^{4}	5^{2}	6^{0}	7^{0}	w	5^{5}	6^{4}
X	3^{4}	4^{0}	4^{5}	5^{3}	x	4^{4}	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}

NOTE: SIGN DIMENSIONS ARE IN ENGLISH UNITS

GHA #4085.882

FILE NAME = 4085.882-TR1.dwg

GHA GEWALT HAMILTON ASSOCIATES, INC.

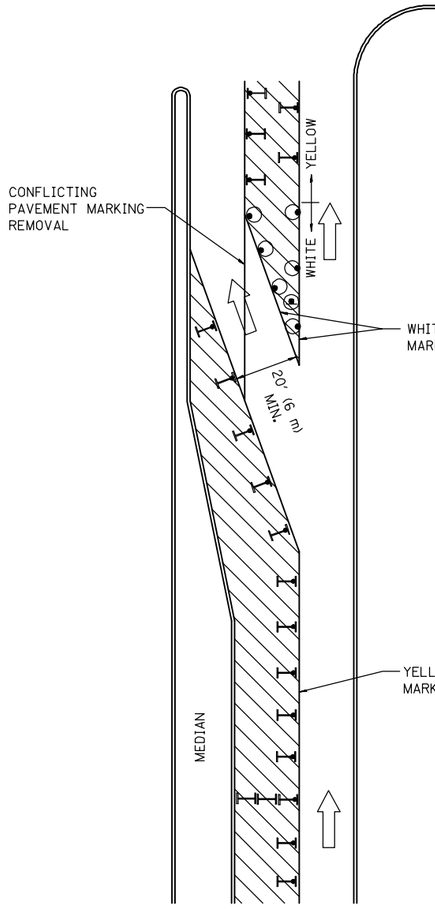
USER NAME = ZACH WALLSTEN	DESIGNED - DAD/BCK	REVISED - DAG 10/28/09	
	DRAWN - BCK	REVISED -	
PLOT SCALE = 1" = .0833'	CHECKED - DAG/DAD	REVISED -	
PLOT DATE = 8/15/2012	DATE - 03-15-09	REVISED -	

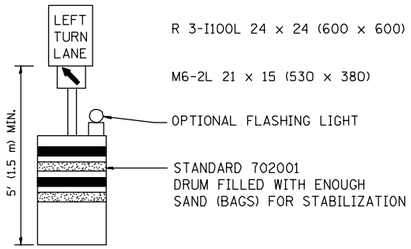
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS
MAST ARM MOUNTED STREET NAME SIGNS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
–	2012-030TS	COOK	39	37
	TS-02	CONTRACT #:	60T82	
		ILLINOIS FED. AID PROJECT		





GENERAL NOTES

1. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT. WHEN CONES ARE BEING USED, THE "LEFT TURN LANE" SIGN MAY BE SKID MOUNTED AT A MINIMUM HEIGHT OF 5' (1.5 m).
2. STEADY BURNING LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
3. REFLECTORIZED TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE BARRICADED AREA OF EACH TURN BAY WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS.
4. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-100 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
5. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
6. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS.
7. FORM BT 725 IS REQUIRED.
8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

LEGEND

- WORK AREA
- LANE OPEN TO TRAFFIC
- TYPE I OR II BARRICADE WITH STEADY BURN LIGHT
- DRUM WITH STEADY BURN LIGHT
- DRUM WITH SIGN (WITH OPTIONAL FLASHING LIGHT) SEE DETAIL
- TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

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

GHA #4085.882

FILE NAME = 4085.882-TR1.dwg

GHA GEWALT HAMILTON ASSOCIATES, INC.

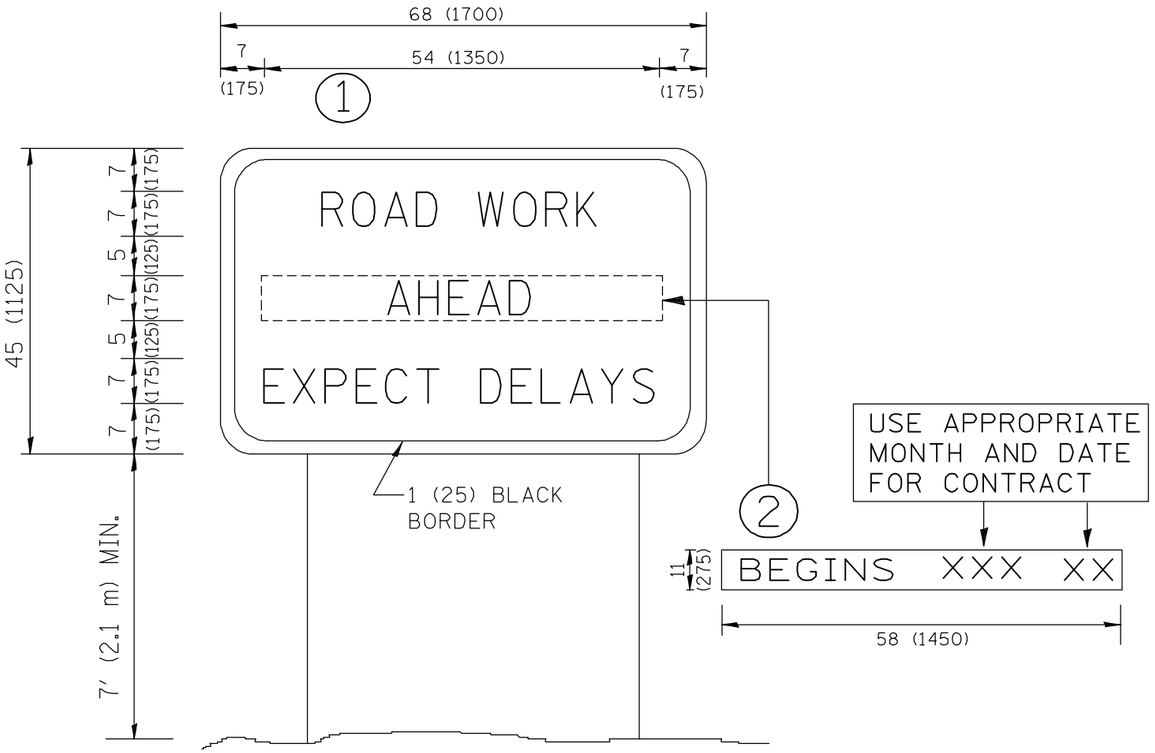
USER NAME = ZACH WALLSTEN	REVISED - T. RAMMACHER 09-08-94	REVISED - R. BORO 09-14-09	
	REVISED - A. HOUSEH 11-07-95	REVISED -	
PLOT SCALE = 1" = .0833'	REVISED - A. HOUSEH 10-12-96	REVISED -	
PLOT DATE = 8/15/2012	REVISED - T. RAMMACHER 01-06-00	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
–	2012-030TS	COOK	39	38
	TC-14	CONTRACT #:	60T82	
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.

GHA #4085.882

FILE NAME = 4085.882-TR1.dwg

GHA GEWALT HAMILTON ASSOCIATES, INC.	USER NAME = ZACH WALLSTEN	DESIGNED -	REVISED - R. MIRS 09-15-97	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ARTERIAL ROAD INFORMATION SIGN
		DRAWN -	REVISED - R. MIRS 12-11-97		SCALE: NONE / SHEET NO. 1 OF 1 SHEETS / STA. / TO STA.
	PLOT SCALE = 1" = .0833'	CHECKED -	REVISED - T. RAMMACHER 02-02-99		
	PLOT DATE = 8/15/2012	DATE -	REVISED - C. JUCIUS 03-31-07		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
–	2012-030TS	COOK	39	39
	TC-22	CONTRACT #:	60T82	
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		