

FOR INDEX OF SHEETS, SEE SHEET NO. 2

04-25-14 LETTING ITEM 012

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

# PROPOSED HIGHWAY PLANS

DISTRICT 1  
HIGHWAY SAFETY IMPROVEMENT PROJECT  
FAP ROUTE 344 (IL ROUTE 83)

IL ROUTE 83 (KINGERY HWY. & BUSSE RD.)  
THIRD AVENUE / OAK MEADOWS DRIVE

TO MARK STREET  
PROJECT: ACHSIP-0344(058)

SECTION 2013-063TS  
DUPAGE COUNTY  
C-91-074-14



LOCATION OF SECTION INDICATED THUS: - [shaded box] -

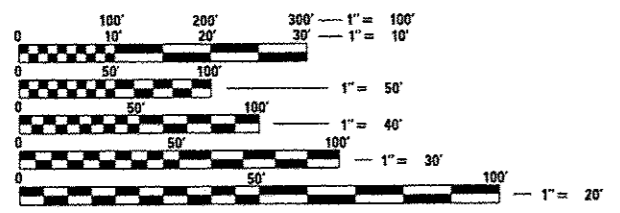
**HIGHWAY STANDARD**

- 000001-06 STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
- 424001-07 PERPENDICULAR CURB RAMPS FOR SIDEWALKS
- 424006-01 DIAGONAL CURB RAMPS FOR SIDEWALKS
- 442201-03 CLASS C AND D PATCHES
- 606001-05 CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
- 701101-04 OFF-ROAD OPERATIONS, MULTILANE, 15' TO 24" FROM PAVEMENT EDGE
- 701106-02 OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' AWAY
- 701421-06 LANE CLOSURE, MULTILANE, DAY OPERATIONS ONLY, FOR SPEEDS 45-55 MPH
- 701601-09 URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIUM
- 701701-09 URBAN LANE CLOSURE, MULTILANE INTERSECTION
- 701801-05 SIDEWALK, CORNER OR CROSSWALK CLOSURE
- 701901-03 TRAFFIC CONTROL DEVICES
- 720001-01 SIGN PANEL MOUNTING DETAILS
- 805001-01 ELECTRIC SERVICE INSTALLATION DETAILS
- 814001-02 HANDHOLES
- 814006-02 DOUBLE HANDHOLES
- 857001-01 STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
- 862001-01 UNINTERRUPTIBLE POWER SUPPLY (UPS)
- 873001-02 TRAFFIC SIGNAL GROUNDING AND BONDING
- 877001-05 STEEL MAST ARM ASSEMBLY AND POLE, 16' THROUGH 55'
- 877002-02 STEEL MAST ARM ASSEMBLY AND POLE, 56' THROUGH 75'
- 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

**DESIGN DESIGNATIONS**

ROUTE	FUNCTIONAL CLASSIFICATION	ADT	DESIGN SPEED	POSTED SPEED
IL ROUTE 83	STRATEGIC REGIONAL ARTERIAL (SRA)	49,500 (2011)	50 MPH	45 MPH
THIRD AVENUE	MAJOR COLLECTOR	7,800 (2012)	35 MPH	30 MPH
OAK MEADOWS DRIVE	MAJOR COLLECTOR	7,800 (2012)	35 MPH	30 MPH
GROVE AVENUE	MAJOR COLLECTOR	N/A	30 MPH	25 MPH
SHERWOOD DRIVE	LOCAL STREET	N/A	25 MPH	20 MPH
HILLSIDE DRIVE	LOCAL STREET	N/A	30 MPH	25 MPH
FOSTER AVENUE	MAJOR COLLECTOR	3,400 (2012)	30 MPH	25 MPH
MARK STREET	LOCAL STREET	1,650 (2012)	35 MPH	30 MPH

IMPROVEMENTS LOCATED IN THE VILLAGE OF BENSENVILLE AND THE CITY OF WOOD DALE

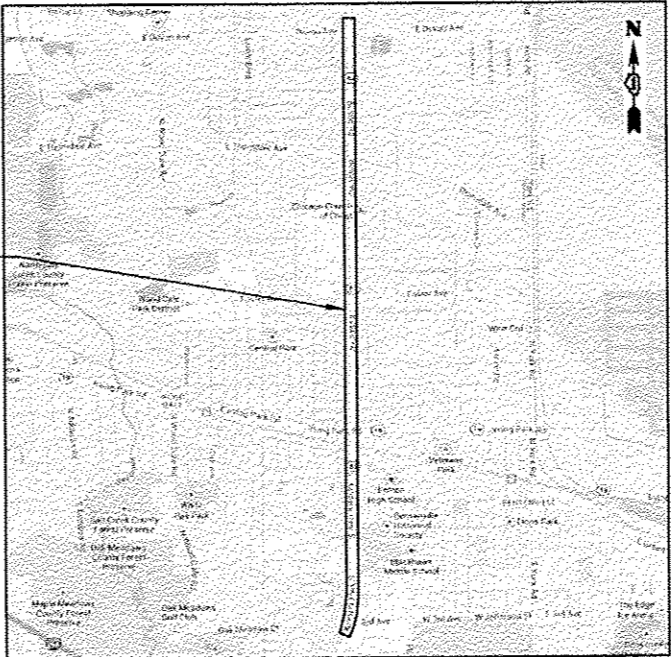


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

PROJECT ENGINEER: AMIR CUBIC / LUKASZ POCIECHA (847) 705-4419  
PROJECT MANAGER: SUDUD MAHMOUD (847) 705-4420  
CONTRACT NO. 60X35

**ADDISON TOWNSHIP**



LOCATION MAP

GROSS AND NET LENGTH = 17,320 FEET = 3.28 MILES

PLANS PREPARED BY:  
**CIVILTECH**  
450 E. Devon Ave., Suite 300 - Itasca, Illinois 60143  
Tel: 630.773.3900 - Fax: 630.773.3975  
www.civiltechinc.com



SIGNED: [Signature]  
JOSEPH EMRY, P.E. IL LIC. NO. 062-057496  
EXPIRES 11-30-2015  
DATE: 01/30/14

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED: [Signature] Jan 31 20 14  
[Signature] John J. [unclear]  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

[Signature] March 21 20 14  
John D. Baranzelli, P.E.  
ENGINEER OF DESIGN AND ENVIRONMENT

[Signature] March 21 20 14  
Omer Osman, P.E.  
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY AUTHORITY OF THE STATE OF ILLINOIS

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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 CITY OF CHICAGO AND THE VILLAGE OF NORRIDGE; 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 SOLELY 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.

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES. 48 HOUR NOTIFICATION IS REQUIRED.

THE CONTRACTOR SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 72 HOURS IN ADVANCE OF BEGINNING WORK.

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 LENGTHS.

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)

IF THIS CONTRACT REQUIRES THE SERVICES OF AN ELECTRICAL CONTRACTOR, THE CONTRACTOR SHALL BE RESPONSIBLE AT HIS/HER OWN EXPENSE FOR LOCATING EXISTING IDOT ELECTRICAL FACILITIES PRIOR TO PERFORMING ANY WORK. IF THIS CONTRACT DOES NOT REQUIRE THE SERVICES OF AN ELECTRICAL CONTRACTOR, THE CONTRACTOR MAY REQUEST ONE FREE LOCATE FOR EXISTING IDOT ELECTRICAL FACILITIES FROM THE DISTRICT ONE ELECTRICAL MAINTENANCE CONTRACTOR PRIOR TO THE START OF ANY WORK. ADDITIONAL REQUESTS MAY BE AT THE EXPENSE OF THE CONTRACTOR. THE LOCATION OF UNDERGROUND TRAFFIC FACILITIES DOES NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY TO REPAIR ANY FACILITIES DAMAGED DURING CONSTRUCTION AT THEIR EXPENSE.

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.

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

ALL CONDUIT SHALL BE PLACED IN TRENCH. ALL ROADWAY SURFACES SUCH AS PAVEMENT, SIDEWALK, ETC. SHALL BE REPLACED IN KIND. THE COST OF THIS WORK SHALL BE INCLUDED IN THE PAY ITEM "UNDERGROUND CONDUIT, GALVANIZED STEEL" OF THE SIZE SPECIFIED. NO ADDITIONAL COMPENSATION SHALL BE PROVIDED FOR TRENCH AND BACKFILL OR FOR RESTORATION.

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

TEMPORARY TRAFFIC SIGNAL NOTES

- ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
- 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.
- ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE 12 INCHES (300 MM). TRAFFIC SIGNAL SECTIONS SHALL BE LED WITH EXPANDABLE VIEW, UNLESS OTHERWISE APPROVED BY THE ENGINEER. PEDESTRIAN SIGNAL HEADS SHALL BE LIGHT EMITTING DIODE (LED) PEDESTRIAN COUNTDOWN SIGNAL HEADS EXCEPT WHEN A TEMPORARY TRAFFIC SIGNAL IS INSTALLED AT AN INTERSECTION INTERCONNECTED WITH A RAILROAD GRADE CROSSING. WHEN A TEMPORARY TRAFFIC SIGNAL IS INSTALLED AT AN INTERSECTION INTERCONNECTED WITH A RAILROAD GRADE CROSSING, LIGHT EMITTING DIODE (LED) PEDESTRIAN SIGNAL HEADS SHALL BE FURNISHED. THE TEMPORARY TRAFFIC SIGNAL HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ENOUGH EXTRA CABLE LENGTH 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.
- 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.
- ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT AT NO ADDITIONAL COST TO THE CONTRACT.
- 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.
- ALL TEMPORARY TRAFFIC SIGNAL INSTALLATIONS SHALL HAVE UNINTERRUPTIBLE POWER SUPPLY (UPS). THE UPS CABINET SHALL BE MOUNTED TO THE TEMPORARY TRAFFIC SIGNAL CABINET AND MEET THE REQUIREMENTS OF UNINTERRUPTIBLE POWER SUPPLY IN DIVISIONS 800 AND 1000 OF THESE SPECIFICATIONS.
- 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.
- DETECTION AT TEMPORARY TRAFFIC SIGNALS SHALL BE INCLUDED FOR ALL APPROACHES OF THE INTERSECTION UNLESS INDICATED OTHERWISE ON THE PLANS. PEDESTRIAN PUSH BUTTONS SHALL BE PROVIDED FOR ALL PEDESTRIAN SIGNAL HEADS/PHASES AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE DETECTION SYSTEM MUST MEET THE SPECIFICATIONS OF DISTRICT 1 AND THE CONTRACTOR SHALL PLACE THE DETECTORS INTO OPERATION TO THE SATISFACTION OF THE ENGINEER. DETECTION SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN TEMPORARY TRAFFIC SIGNAL INSTALLATION PAY ITEM.
- 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.



HOT-MIX ASPHALT MIXTURE REQUIREMENTS

MIXTURE TYPE	AIR VOIDS @Ndes	OMP
PATCHING		
CLASS D PATCHES (HMA BINDER IL-19 MM); 12" (IN 3 LIFTS)	4% @ TO GYR.	0c/0c

NOTES:

- THE UNIT WEIGHT TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURES IS 112 LB/SY/IN.
- THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR USE OF RECYCLED MATERIALS SEE SPECIAL PROVISIONS.
- QUALITY MANAGEMENT PROGRAM (OMP) IDENTIFIES THE PARTICULAR QUALITY CONTROL SPECIFICATION THAT APPLIES TO THE HMA MIXTURE.



USER NAME: jrt	DESIGNED: BRD	REVISED: 03/03/2014
PLT SEAL: 48-0028	DRAWN: JRT	REVISED:
PLT DATE: 3/3/2014	CHECKED: JJE	REVISED:
	DATE: 01/30/2014	REVISED:

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

NO SCALE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE. 344	SECTION 2013-063TS	COUNTY	TOTAL SHEETS 68	SHEET NO. 2
CONTRACT NO. 60X35			ILLINOIS FED. AID PROJECT	

CONSTRUCTION CODE

HSIP FUNDS

90% FEDERAL 5% STATE 5% ADDISON TWP	90% FEDERAL 5% STATE 2.5% BENSENVILLE 2.5% WOOD DALE	90% FEDERAL 5% STATE 5% BENSENVILLE	90% FEDERAL 5% STATE 5% BENSENVILLE	90% FEDERAL 5% STATE 2.5% BENSENVILLE 2.5% CENTERPOINT	100% BENSENVILLE	90% FEDERAL 10% STATE
MS30L,01	MS30L,02	MS30L,01 <sup>03</sup>	MS30L,01 <sup>03</sup>	MS30L,03 <sup>04</sup>	07POL,01	MS30L,04 <sup>05</sup>

URBAN

0021

TRAFFIC SIGNALS

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	TRAFFIC SIGNALS						
				IL ROUTE 83 AT THIRD AVENUE/OAK MEADOWS DRIVE	IL ROUTE 83 AT GROVE AVENUE/SHERWOOD DRIVE	IL ROUTE 83 AT HILLSIDE DRIVE	IL ROUTE 83 AT FOSTER AVENUE	IL ROUTE 83 AT MARK STREET	EM. VEHICLE PREEMPTION	INTERCONNECT
31101200	SUBBASE GRANULAR MATERIAL, TYPE B 4"	SO YD	97	28	21	22	7	19		
42001300	PROTECTIVE COAT	SO YD	107	28	24	22	9	24		
42400200	PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH	SO FT	847	238	189	195	61	164		
42400800	DETECTABLE WARNINGS	SO FT	125	27	34	27	12	25		
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	48		13		10	25		
44000600	SIDEWALK REMOVAL	SO FT	259		76		36	147		
44003100	MEDIAN REMOVAL	SO FT	32	32						
44201785	CLASS D PATCHES, TYPE I, 12 INCH	SO YD	52	16	11	13	6	6		
60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	48		13		10	25		
60624600	CORRUGATED MEDIAN	SO FT	10	10						
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	9	1.5	1.5	1.5	1.5	1.5		1.5



USER NAME = jrt	DESIGNED - BRD	REVISED -
PLOT SCALE = 1/8" = 10'-0"	DRAWN - JRT	REVISED -
PLOT DATE = 1/30/2014	CHECKED - JJE	REVISED -
	DATE - 01/30/2014	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL SUMMARY OF QUANTITIES  
IL ROUTE 83  
THIRD AVENUE /OAK MEADOWS DRIVE TO MARK STREET

NO SCALE	SHEET NO. 1 OF 10 SHEETS	STA.	TO STA.
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F.A.P. RTE. 344	SECTION 2013-063TS	COUNTY DUPAGE	TOTAL SHEETS 68	SHEET NO. 3
ILLINOIS FED. AID PROJECT				

CONSTRUCTION CODE

HSIP FUNDS

90% FEDERAL 5% STATE 5% ADDISON TWP	90% FEDERAL 5% STATE 2.5% BENSENVILLE 2.5% WOOD DALE	90% FEDERAL 5% STATE 5% BENSENVILLE	90% FEDERAL 5% STATE 5% BENSENVILLE	90% FEDERAL 5% STATE 2.5% BENSENVILLE 2.5% CENTERPOINT	100% BENSENVILLE	90% FEDERAL 10% STATE
01	02	01	01	03		04

URBAN

0021

TRAFFIC SIGNALS

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	TRAFFIC SIGNALS						
				IL ROUTE 83 AT THIRD AVENUE/ OAK MEADOWS DRIVE	IL ROUTE 83 AT GROVE AVENUE/ SHERWOOD DRIVE	IL ROUTE 83 AT HILLSIDE DRIVE	IL ROUTE 83 AT FOSTER AVENUE	IL ROUTE 83 AT MARK STREET	EM. VEHICLE PREEMPTION	INTERCONNECT
67100100	MOBILIZATION	L SUM	1	0.175	0.175	0.175	0.175	0.175		0.125
70100310	TRAFFIC CONTROL AND PROTECTION, STANDARD 701421	L SUM	1	0.175	0.175	0.175	0.175	0.175		0.125
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	0.175	0.175	0.175	0.175	0.175		0.125
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	0.175	0.175	0.175	0.175	0.175		0.125
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	0.175	0.175	0.175	0.175	0.175		0.125
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	3	0.5	0.5	0.5	0.5	0.5		0.5
* 72000100	SIGN PANEL - TYPE 1	SQ FT	177	30	30	45	30	42		
* 72000200	SIGN PANEL - TYPE 2	SQ FT	207	70	68	23	23	23		
* 72400710	RELOCATE SIGN PANEL - TYPE 1	SQ FT	15				15			
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	723	235			244	244		
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	29		13	16				

\* SPECIALTY ITEMS



USER NAME = jrt	DESIGNED - BRD	REVISED -
PLOT SCALE = 40,0000' / in.	DRAWN - JRT	REVISED -
PLOT DATE = 1/30/2014	CHECKED - JJE	REVISED -
	DATE - 01/30/2014	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL SUMMARY OF QUANTITIES

IL ROUTE 83  
THIRD AVENUE /OAK MEADOWS DRIVE TO MARK STREET

NO SCALE SHEET NO. 2 OF 10 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2013-063TS	DUPAGE	68	4
CONTRACT NO. 60X35				
ILLINOIS FED. AID PROJECT				

CONSTRUCTION CODE

HSIP FUNDS

90% FEDERAL 5% STATE 5% ADDISON TWP	90% FEDERAL 5% STATE 2.5% BENSENVILLE 2.5% WOOD DALE	90% FEDERAL 5% STATE 5% BENSENVILLE	90% FEDERAL 5% STATE 5% BENSENVILLE	90% FEDERAL 5% STATE 2.5% BENSENVILLE 2.5% CENTERPOINT	100% BENSENVILLE	90% FEDERAL 10% STATE
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URBAN

0021

TRAFFIC SIGNALS

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	TRAFFIC SIGNALS						
				IL ROUTE 83 AT THIRD AVENUE/ OAK MEADOWS DRIVE	IL ROUTE 83 AT GROVE AVENUE/ SHERWOOD DRIVE	IL ROUTE 83 AT HILLSIDE DRIVE	IL ROUTE 83 AT FOSTER AVENUE	IL ROUTE 83 AT MARK STREET	EM. VEHICLE PREEMPTION	INTERCONNECT
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	41					41		
78300100	PAVEMENT MARKING REMOVAL	SO FT	119		13	16	2	88		
80500020	SERVICE INSTALLATION - POLE MOUNTED	EACH	5	1	1	1	1	1		
81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	5218	737	629	536	771	536		2009
81028210	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	72	29	5	15	18	5		
81028220	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	565	129	100	121	119	96		
81028240	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	2595	500	476	511	543	565		
81400100	HANDHOLE	EACH	6	1	1		2	2		
81400200	HEAVY-DUTY HANDHOLE	EACH	22	5	4	5	6	2		
81400300	DOUBLE HANDHOLE	EACH	10	2	2	2	2	2		
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	3				1			2

\* SPECIALTY ITEMS



USER NAME = jrs	DESIGNED - BRD	REVISED -
PLOT SCALE = 48,000 / 1"	DRAWN - JRT	REVISED -
PLOT DATE = 1/30/2014	CHECKED - JJE	REVISED -
	DATE - 01/30/2014	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL SUMMARY OF QUANTITIES

IL ROUTE 83  
THIRD AVENUE /OAK MEADOWS DRIVE TO MARK STREET

NO SCALE SHEET NO. 3 OF 10 SHEETS STA. TO STA.

F.A.P. RTE. 344	SECTION 2013-063TS	COUNTY	TOTAL SHEETS 68	SHEET NO. 5
DUPAGE			CONTRACT NO. 60X35	
ILLINOIS FED. AID PROJECT				

				CONSTRUCTION CODE						
				HSIP FUNDS						
				90% FEDERAL 5% STATE 5% ADDISON TWP	90% FEDERAL 5% STATE 2.5% BENSENVILLE 2.5% WOOD DALE	90% FEDERAL 5% STATE 5% BENSENVILLE	90% FEDERAL 5% STATE 5% BENSENVILLE	90% FEDERAL 5% STATE 2.5% BENSENVILLE 2.5% CENTERPOINT	100% BENSENVILLE	90% FEDERAL 10% STATE
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0021						
				TRAFFIC SIGNALS						
				IL ROUTE 83 AT THIRD AVENUE/ OAK MEADOWS DRIVE	IL ROUTE 83 AT GROVE AVENUE/ SHERWOOD DRIVE	IL ROUTE 83 AT HILLSIDE DRIVE	IL ROUTE 83 AT FOSTER AVENUE	IL ROUTE 83 AT MARK STREET	EM. VEHICLE PREEMPTION	INTERCONNECT
86400100	TRANSCEIVER - FIBER OPTIC	EACH	5	1	1	1	1	1		
87300925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	19423							19423
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	2397	242	234	447	998	476		
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	5636	256	251	461	1026	490	3152	
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	18967	2764	3899	4341	3377	4586		
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	2771	1374	219		1178			
87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	10722	3926	1784	1499	1999	1514		
87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	321	146	46	29	46	54		
87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	4244	928	760	828	878	850		
87502440	TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	1				1			
87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2				2			

URBAN



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	DATE - 01/30/2014	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL SUMMARY OF QUANTITIES  
IL ROUTE 83  
THIRD AVENUE /OAK MEADOWS DRIVE TO MARK STREET

NO SCALE SHEET NO. 4 OF 10 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2013-063TS	DUPAGE	68	6
CONTRACT NO. 60X35				
ILLINOIS FED. AID PROJECT				

CONSTRUCTION CODE

HSIP FUNDS

90% FEDERAL 5% STATE 5% ADDISON TWP	90% FEDERAL 5% STATE 2.5% BENSENVILLE 2.5% WOOD DALE	90% FEDERAL 5% STATE 5% BENSENVILLE	90% FEDERAL 5% STATE 5% BENSENVILLE	90% FEDERAL 5% STATE 2.5% BENSENVILLE 2.5% CENTERPOINT	100% BENSENVILLE	90% FEDERAL 10% STATE
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URBAN

0021

TRAFFIC SIGNALS

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	TRAFFIC SIGNALS						
				IL ROUTE 83 AT THIRD AVENUE/OAK MEADOWS DRIVE	IL ROUTE 83 AT GROVE AVENUE/SHERWOOD DRIVE	IL ROUTE 83 AT HILLSIDE DRIVE	IL ROUTE 83 AT FOSTER AVENUE	IL ROUTE 83 AT MARK STREET	EM. VEHICLE PREEMPTION	INTERCONNECT
87700150	STEEL MAST ARM ASSEMBLY AND POLE 22 FT.	EACH	1					1		
87700160	STEEL MAST ARM ASSEMBLY AND POLE 24 FT.	EACH	5	2	1	2				
87700170	STEEL MAST ARM ASSEMBLY AND POLE 26 FT.	EACH	3	1			1	1		
87700180	STEEL MAST ARM ASSEMBLY AND POLE 28 FT.	EACH	1				1			
87700190	STEEL MAST ARM ASSEMBLY AND POLE 30 FT.	EACH	3		2		1			
87700210	STEEL MAST ARM ASSEMBLY AND POLE 34 FT.	EACH	1	1						
87700220	STEEL MAST ARM ASSEMBLY AND POLE 36 FT.	EACH	3			2	1			
87700230	STEEL MAST ARM ASSEMBLY AND POLE 38 FT.	EACH	1		1					
87700260	STEEL MAST ARM ASSEMBLY AND POLE, 44 FT.	EACH	1					1		
87700280	STEEL MAST ARM ASSEMBLY AND POLE 48 FT.	EACH	1					1		
87700300	STEEL MAST ARM ASSEMBLY AND POLE 52 FT.	EACH	4	2	1			1		



USER NAME - jrt	DESIGNED - BRD	REVISED -
	DRAWN - JRT	REVISED -
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PLOT DATE = 1/30/2014	DATE - 01/30/2014	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL SUMMARY OF QUANTITIES

IL ROUTE 83  
THIRD AVENUE /OAK MEADOWS DRIVE TO MARK STREET

NO SCALE SHEET NO. 5 OF 10 SHEETS STA. TO STA.

F.A.P. RTE. 344	SECTION 2013-063TS	COUNTY	TOTAL SHEETS 68	SHEET NO. 7
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60X35	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE						
				HSIP FUNDS						
				90% FEDERAL 5% STATE 5% ADDISON TWP	90% FEDERAL 5% STATE 2.5% BENSENVILLE 2.5% WOOD DALE	90% FEDERAL 5% STATE 5% BENSENVILLE	90% FEDERAL 5% STATE 5% BENSENVILLE	90% FEDERAL 5% STATE 2.5% BENSENVILLE 2.5% CENTERPOINT	100% BENSENVILLE	90% FEDERAL 10% STATE
				0021						
TRAFFIC SIGNALS							EM. VEHICLE PREEMPTION	INTERCONNECT		
IL ROUTE 83 AT THIRD AVENUE/ OAK MEADOWS DRIVE	IL ROUTE 83 AT GROVE AVENUE/ SHERWOOD DRIVE	IL ROUTE 83 AT HILLSIDE DRIVE	IL ROUTE 83 AT FOSTER AVENUE	IL ROUTE 83 AT MARK STREET						
87700310	STEEL MAST ARM ASSEMBLY AND POLE 54 FT.	EACH	1			1				
87700320	STEEL MAST ARM ASSEMBLY AND POLE 55 FT.	EACH	1				1			
87700330	STEEL MAST ARM ASSEMBLY AND POLE 56 FT.	EACH	1			1				
87700400	STEEL MAST ARM ASSEMBLY AND POLE 60 FT.	EACH	1					1		
87700404	STEEL MAST ARM ASSEMBLY AND POLE 62 FT.	EACH	1		1					
87700418	STEEL MAST ARM ASSEMBLY AND POLE 68 FT.	EACH	1				1			
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	36	8	4	8	12	4		
87800150	CONCRETE FOUNDATION, TYPE C	FOOT	20	4	4	4	4	4		
87800400	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	209	44	51	47	47	20		
87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	116	30	15	15	15	41		
87800420	CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	88		21	21	25	21		

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	DATE - 01/30/2014	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL SUMMARY OF QUANTITIES	
IL ROUTE 83	
THIRD AVENUE /OAK MEADOWS DRIVE TO MARK STREET	
NO SCALE	SHEET NO. 6 OF 10 SHEETS   STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2013-063TS	DUPAGE	68	8
CONTRACT NO. 60X35				
ILLINOIS FED. AID PROJECT				



				CONSTRUCTION CODE						
				HSIP FUNDS						
				90% FEDERAL 5% STATE 5% ADDISON TWP	90% FEDERAL 5% STATE 2.5% BENSENVILLE 2.5% WOOD DALE	90% FEDERAL 5% STATE 5% BENSENVILLE	90% FEDERAL 5% STATE 5% BENSENVILLE	90% FEDERAL 5% STATE 2.5% BENSENVILLE 2.5% CENTERPOINT	100% BENSENVILLE	90% FEDERAL 10% STATE
				0021						
				TRAFFIC SIGNALS						
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	IL ROUTE 83 AT THIRD AVENUE/ OAK MEADOWS DRIVE	IL ROUTE 83 AT GROVE AVENUE/ SHERWOOD DRIVE	IL ROUTE 83 AT HILLSIDE DRIVE	IL ROUTE 83 AT FOSTER AVENUE	IL ROUTE 83 AT MARK STREET	EM. VEHICLE PREEMPTION	INTERCONNECT
87900200	DRILL EXISTING HANDHOLE	EACH	9							9
88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	55	7	15	10	13	10		
88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	4		1		3			
88030210	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1		1					
88030240	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	2		1		1			
88030220	SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1				1			
88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	6				4	2		
88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	80	16	16	16	16	16		
88500100	INDUCTIVE LOOP DETECTOR	EACH	41	13	7	6	9	6		
88600100	DETECTOR LOOP, TYPE I	FOOT	4591	892	818	697	1331	853		
88700200	LIGHT DETECTOR	EACH	3						3	

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USER NAME = jrt	DESIGNED - BRD	REVISED -
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	DATE - 01/30/2014	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL SUMMARY OF QUANTITIES			
IL ROUTE 83			
THIRD AVENUE /OAK MEADOWS DRIVE TO MARK STREET			
NO SCALE	SHEET NO. 7 OF 10 SHEETS	STA.	TO STA.

F.A.P. RTE. 344	SECTION 2013-063TS	COUNTY DUPAGE	TOTAL SHEETS 68	SHEET NO. 9
CONTRACT NO. 60X35				
ILLINOIS FED. AID PROJECT				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE						
				HSIP FUNDS						
				90% FEDERAL 5% STATE 5% ADDISON TWP	90% FEDERAL 5% STATE 2.5% BENSENVILLE 2.5% WOOD DALE	90% FEDERAL 5% STATE 5% BENSENVILLE	90% FEDERAL 5% STATE 5% BENSENVILLE	90% FEDERAL 5% STATE 2.5% BENSENVILLE 2.5% CENTERPOINT	100% BENSENVILLE	90% FEDERAL 10% STATE
				0021						
				TRAFFIC SIGNALS						
				IL ROUTE 83 AT THIRD AVENUE/ OAK MEADOWS DRIVE	IL ROUTE 83 AT GROVE AVENUE/ SHERWOOD DRIVE	IL ROUTE 83 AT HILLSIDE DRIVE	IL ROUTE 83 AT FOSTER AVENUE	IL ROUTE 83 AT MARK STREET	EM. VEHICLE PREEMPTION	INTERCONNECT
88700300	LIGHT DETECTOR AMPLIFIER	EACH	1						1	
88800100	PEDESTRIAN PUSH-BUTTON	EACH	6				4	2		
89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	4	1	1	1		1		
89500100	RELOCATE EXISTING SIGNAL HEAD	EACH	27	11		8		8		
89500200	RELOCATE EXISTING PEDESTRIAN SIGNAL HEAD	EACH	6	2	2	2				
89500400	RELOCATE EXISTING PEDESTRIAN PUSH-BUTTON	EACH	6	2	2	2				
89501100	RELOCATE EXISTING TRAFFIC SIGNAL CONTROLLER	EACH	3	1		1		1		
89501150	RELOCATE EXISTING TRAFFIC SIGNAL POST	EACH	6	2	1	2		1		
89501400	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	12						12	
89501410	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	4						4	
89502200	MODIFY EXISTING CONTROLLER	EACH	2			1		1		

URBAN



USER NAME = j-s	DESIGNED - BRD	REVISED -
PLOT SCALE = 48,0000' / 1"	DRAWN - JRT	REVISED -
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	DATE - 01/30/2014	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL SUMMARY OF QUANTITIES  
IL ROUTE 83  
THIRD AVENUE / OAK MEADOWS DRIVE TO MARK STREET

NO SCALE SHEET NO. 8 OF 10 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2013-063TS		68	10
			CONTRACT NO. 60X35	
ILLINOIS FED. AID PROJECT				

CONSTRUCTION CODE

HSIP FUNDS

90% FEDERAL 5% STATE 5% ADDISON/TWIP	90% FEDERAL 5% STATE 2.5% BENSENVILLE 2.5% WOOD DALE	90% FEDERAL 5% STATE 5% BENSENVILLE	90% FEDERAL 5% STATE 5% BENSENVILLE	90% FEDERAL 5% STATE 2.5% BENSENVILLE 2.5% CENTERPOINT	100% BENSENVILLE	90% FEDERAL 10% STATE
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URBAN

0021

TRAFFIC SIGNALS

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	TRAFFIC SIGNALS						
				IL ROUTE 83 AT THIRD AVENUE/OAK MEADOWS DRIVE	IL ROUTE 83 AT GROVE AVENUE/SHERWOOD DRIVE	IL ROUTE 83 AT HILLSIDE DRIVE	IL ROUTE 83 AT FOSTER AVENUE	IL ROUTE 83 AT MARK STREET	EM. VEHICLE PREEMPTION	INTERCONNECT
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	34084	1431	1358	1641		1171		28483
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	5	1	1	1	1	1		
89502380	REMOVE EXISTING HANDHOLE	EACH	32	9	8	5	5	5		
89502382	REMOVE EXISTING DOUBLE HANDHOLE	EACH	5	1	1	1	1	1		
89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	44	11	11	11		11		
X0324085	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	3152						3152	
X0325938	TEMPORARY WIRELESS INTERCONNECT, COMPLETE	L SUM	1				1			
X8100105	CONDUIT SPLICE	EACH	4	1	1			2		
** X8570226	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	2		1		1			
X8620200	UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	5	1	1	1	1	1		
** X8630104	CONTROLLER CABINET, TYPE IV, SPECIAL	EACH	3	1		1		1		

\*\* SUPER P CABINET



USER NAME - JJK	DESIGNED - BRD	REVISED -
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	DATE - 01/30/2014	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL SUMMARY OF QUANTITIES

IL ROUTE 83  
THIRD AVENUE /OAK MEADOWS DRIVE TO MARK STREET

NO SCALE SHEET NO. 9 OF 10 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2013-0637S	DUPAGE	68	11
CONTRACT NO. 60X35				
ILLINOIS FED. AID PROJECT				

CONSTRUCTION CODE

HSIP FUNDS

90% FEDERAL 5% STATE 5% ADDISON TWP	90% FEDERAL 5% STATE 2.5% BENSENVILLE 2.5% WOOD DALE	90% FEDERAL 5% STATE 5% BENSENVILLE	90% FEDERAL 5% STATE 5% BENSENVILLE	90% FEDERAL 5% STATE 2.5% BENSENVILLE 2.5% CENTERPOINT	100% BENSENVILLE	90% FEDERAL 10% STATE
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URBAN

0021

TRAFFIC SIGNALS

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	TRAFFIC SIGNALS						
				IL ROUTE 83 AT THIRD AVENUE/OAK MEADOWS DRIVE	IL ROUTE 83 AT GROVE AVENUE/SHERWOOD DRIVE	IL ROUTE 83 AT HILLSIDE DRIVE	IL ROUTE 83 AT FOSTER AVENUE	IL ROUTE 83 AT MARK STREET	EM. VEHICLE PREEMPTION	INTERCONNECT
X8710024	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F	FOOT	19561							
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	103	26			26	51		
Z0033056	OPTIMIZE TRAFFIC SIGNAL SYSTEM	EACH	1							1
Z0073510	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	4	1	1	1		1		
*** Z0076600	TRAINEES	HOURS	500	85 <sup>01</sup>	85 <sup>02</sup>	85 <sup>03</sup>	85 <sup>03</sup>	85 <sup>04</sup>		75 <sup>05</sup>
*** Z0076604	TRAINEES-TRAINING PROGRAM GRADUATE	HOUR	500	85	85	85	85	85		75

\*\*\* CONSTRUCTION CODE 0042



USER NAME - jms	DESIGNED - BRD	REVISED -
DRAWN - JRT	CHECKED - JJE	REVISED -
PLOT SCALE - 48,000 1/16"	DATE - 01/30/2014	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL SUMMARY OF QUANTITIES	
IL ROUTE 83	
THIRD AVENUE/OAK MEADOWS DRIVE TO MARK STREET	
NO SCALE	SHEET NO. 10 OF 10 SHEETS STA. TO STA.

F.A.P. RTE. 344	SECTION 2013-0637S	COUNTY DUPAGE	TOTAL SHEETS 68	SHEET NO. 12
CONTRACT NO. 60X35				
ILLINOIS FED. AID PROJECT				

Rev

# TRAFFIC SIGNAL LEGEND

ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED
CONTROLLER CABINET				EMERGENCY VEHICLE LIGHT DETECTOR				ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1/C, UNLESS NOTED OTHERWISE			
RAILROAD CONTROL CABINET				CONFIRMATION BEACON				COAXIAL CABLE			
COMMUNICATIONS CABINET				HANDHOLE				VENDOR CABLE FOR CAMERA			
MASTER CONTROLLER				HEAVY DUTY HANDHOLE				COPPER INTERCONNECT CABLE, NO. 18 3 PAIR TWISTED, SHIELDED			
MASTER MASTER CONTROLLER				DOUBLE HANDHOLE				FIBER OPTIC CABLE NO. 62.5/125, MM12F			
UNINTERRUPTABLE POWER SUPPLY				JUNCTION BOX				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM12F			
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT				UNDERGROUND CONDUIT, GALVANIZED STEEL (UC)				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM24F			
TELEPHONE CONNECTION (P) POLE OR (G) GROUND MOUNT				TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM24F			
STEEL MAST ARM ASSEMBLY AND POLE				COMMON TRENCH				GROUND ROD AT (C) CONTROLLER, (H) HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE			
ALUMINUM MAST ARM ASSEMBLY AND POLE				COILABLE NONMETALLIC CONDUIT (EMPTY)				CONTROLLER CABINET AND FOUNDATION TO BE REMOVED			
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE				SYSTEM ITEM				STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED			
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH PTZ CAMERA				INTERSECTION ITEM				ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED			
SIGNAL POST				REMOVE ITEM				STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE AND FOUNDATION TO BE REMOVED			
TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM				RELOCATE ITEM				SIGNAL POST AND FOUNDATION TO BE REMOVED			
GUY WIRE				ABANDON ITEM				INTERSECTION & SAMPLING (SYSTEM) DETECTOR			
SIGNAL HEAD				12" (300mm) TRAFFIC SIGNAL SECTION				SAMPLING (SYSTEM) DETECTOR			
SIGNAL HEAD CONSTRUCTION STAGES (NUMBERS INDICATE THE CONSTRUCTION STAGE)				12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE				QUEUE DETECTOR			
SIGNAL HEAD WITH BACKPLATE				SIGNAL FACE				PERFORMED QUEUE DETECTOR			
SIGNAL HEAD OPTICALLY PROGRAMMED				SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD				PERFORMED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR			
FLASHER INSTALLATION (S DENOTES SOLAR POWER)				"RB" INDICATES REFLECTIVE BACKPLATE				PERFORMED SAMPLING (SYSTEM) DETECTOR			
PEDESTRIAN SIGNAL HEAD				12" (300mm) PEDESTRIAN SIGNAL HEAD WALK/DON'T WALK SYMBOL							
PEDESTRIAN PUSHBUTTON DETECTOR				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, OUTLINED							
ACCESSIBLE PEDESTRIAN PUSHBUTTON DETECTOR				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, SOLID							
ILLUMINATED SIGN "NO LEFT TURN"				PEDESTRIAN SIGNAL HEAD, INTERNATIONAL SYMBOL, WITH COUNTDOWN TIMER							
ILLUMINATED SIGN "NO RIGHT TURN"				RADIO INTERCONNECT							
DETECTOR LOOP, TYPE I				RADIO REPEATER							
PERFORMED DETECTOR LOOP				DENOTES NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE, ALL DETECTOR LOOP CABLE TO BE SHIELDED							
MICROWAVE VEHICLE SENSOR				GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)							
VIDEO DETECTION CAMERA											
VIDEO DETECTION ZONE											
PAN, TILT, ZOOM CAMERA											
WIRELESS DETECTOR SENSOR											
WIRELESS ACCESS POINT											

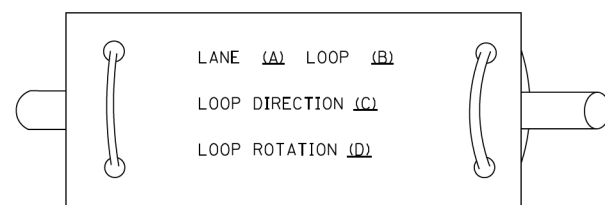
## RAILROAD SYMBOLS

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

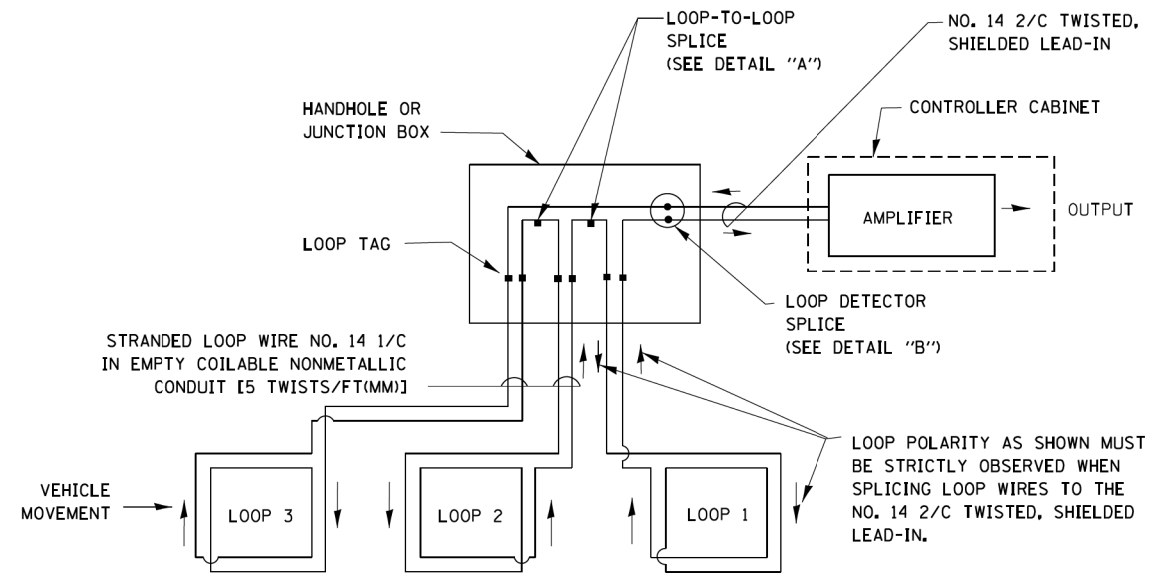
**LOOP DETECTOR NOTES**

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**

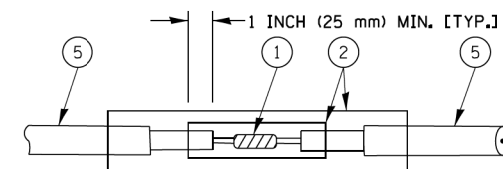


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

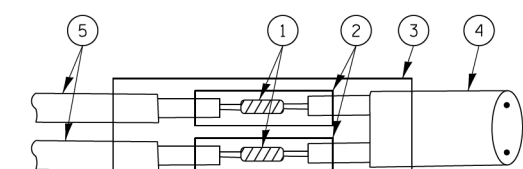


**DETECTOR LOOP WIRING SCHEMATIC**

- 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.

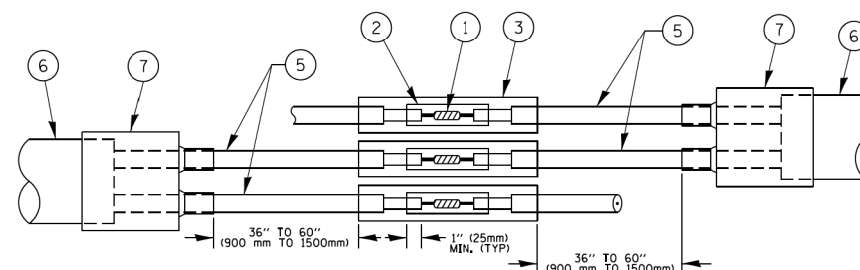


DETAIL "A"  
LOOP-TO-LOOP SPLICE

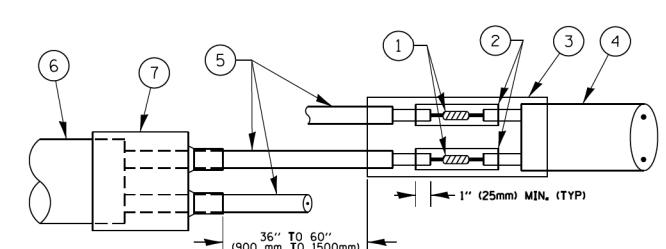


DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

**TYPE I LOOP**



DETAIL "A"  
LOOP-TO-LOOP SPLICE



DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

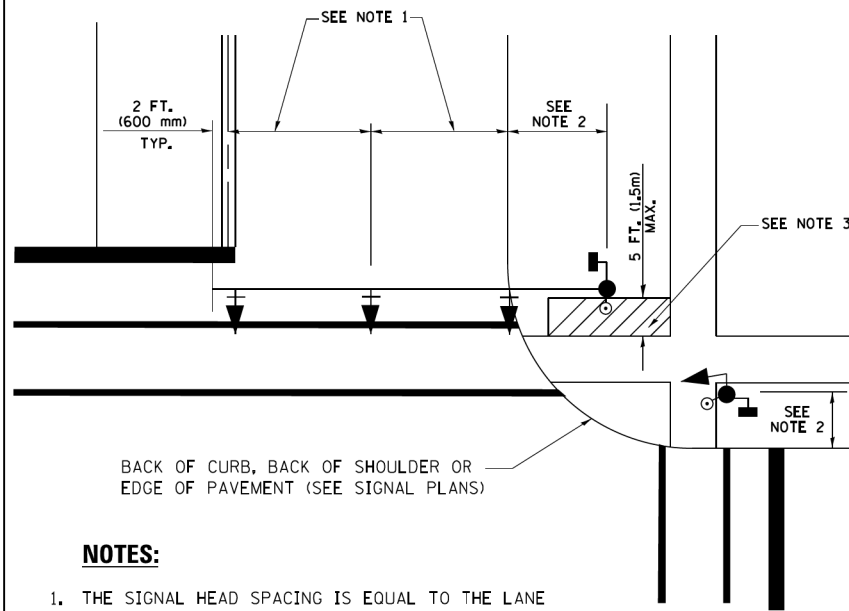
**PREFORMED LOOP**

**LOOP DETECTOR SPLICE**

- ① WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH. THE WESTERN UNION SPLICES SHALL BE STAGGERED.
- ② WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- ③ WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGTH 6" (150 mm), UNDERWATER GRADE.
- ④ NO. 14 2/C TWISTED, SHIELDED CABLE.
- ⑤ LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
- ⑥ PREFORMED LOOP
- ⑦ XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS, TYCO CBR-2 OR APPROVED EQUAL

FILE NAME =	USER NAME = footemj	DESIGNED - DAD	REVISED - DAG 1-1-14	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS</b>			F.A.P. RTE. 344	SECTION 2013-063TS	COUNTY	TOTAL SHEETS 68	SHEET NO. 14
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PLOT DATE = 1/13/2014	DATE - 10-28-09	CHECKED - DAD	REVISED -		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT							
		DATE - 10-28-09	REVISED -									

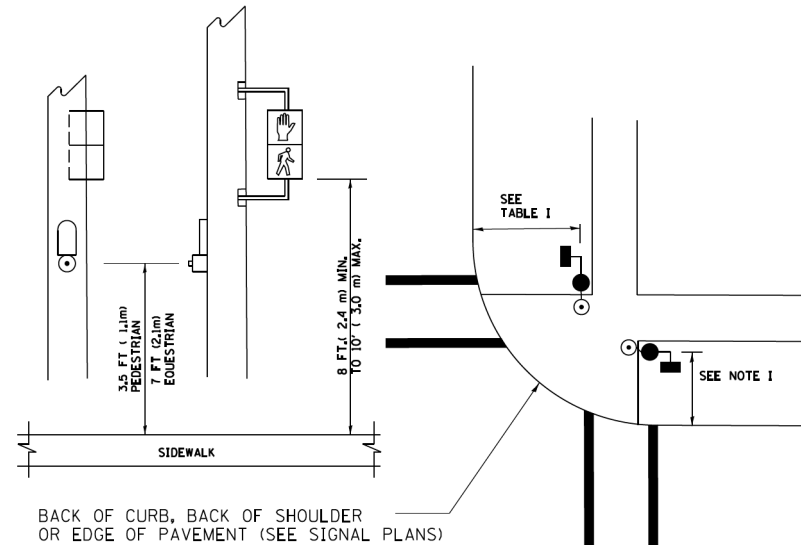
**TRAFFIC SIGNAL MAST ARM AND SIGNAL POST  
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR  
FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN  
WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.**



**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."

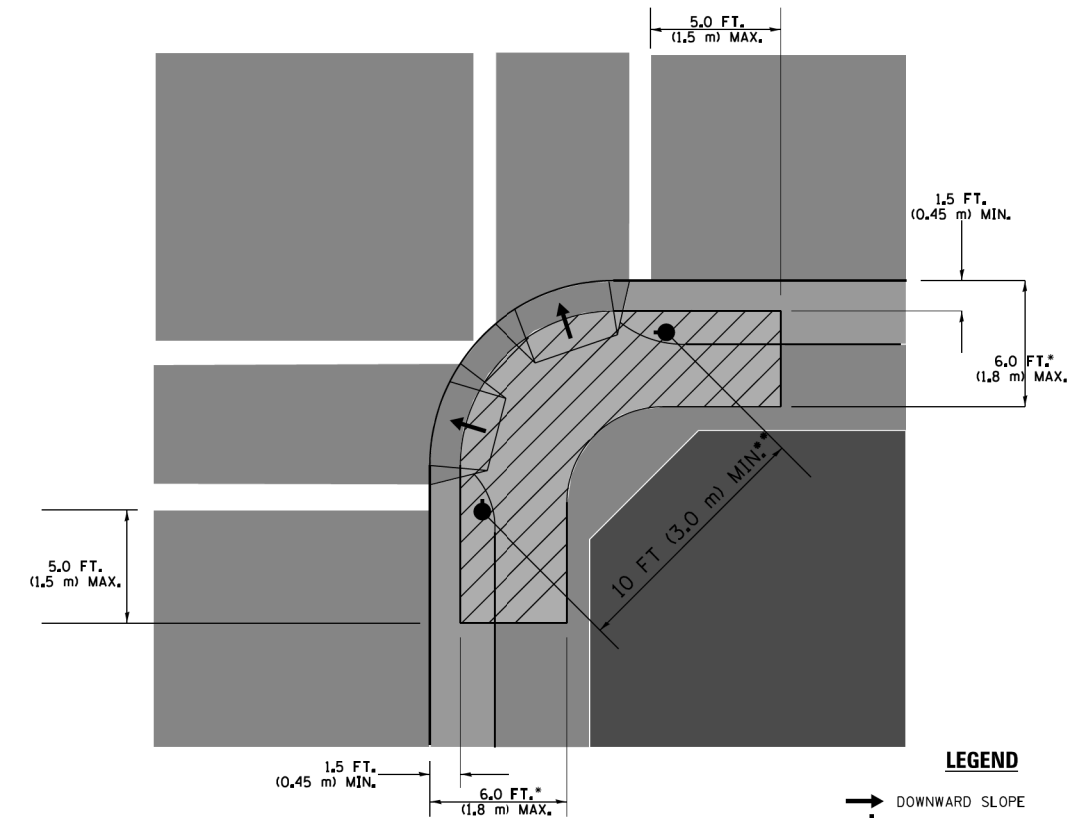
**PEDESTRIAN SIGNAL POST  
AND  
PEDESTRIAN PUSH BUTTON POST**



**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**



**LEGEND**

- DOWNWARD SLOPE
- PEDESTRIAN PUSHBUTTON
- ▨ 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:**

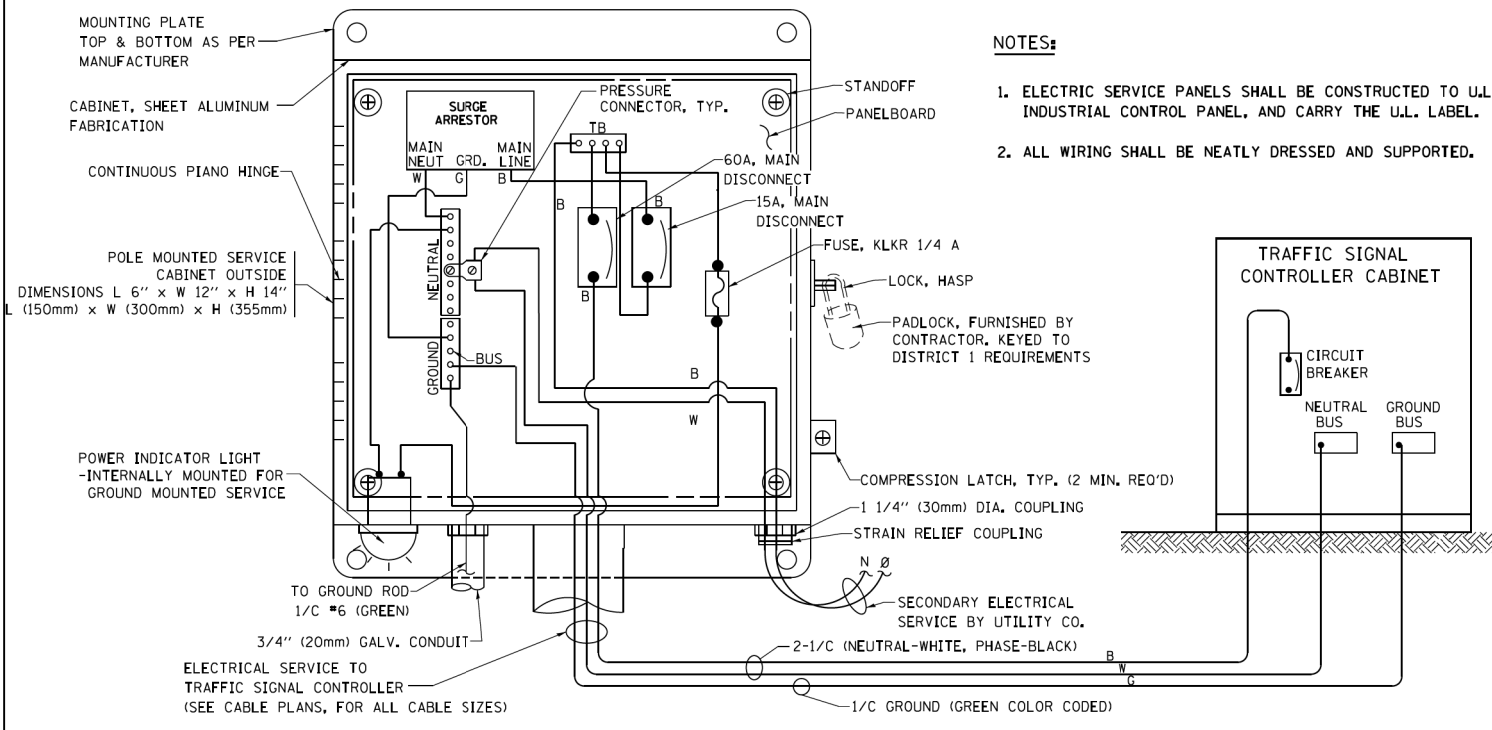
1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM 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.
3. 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.
4. 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.
5. 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**

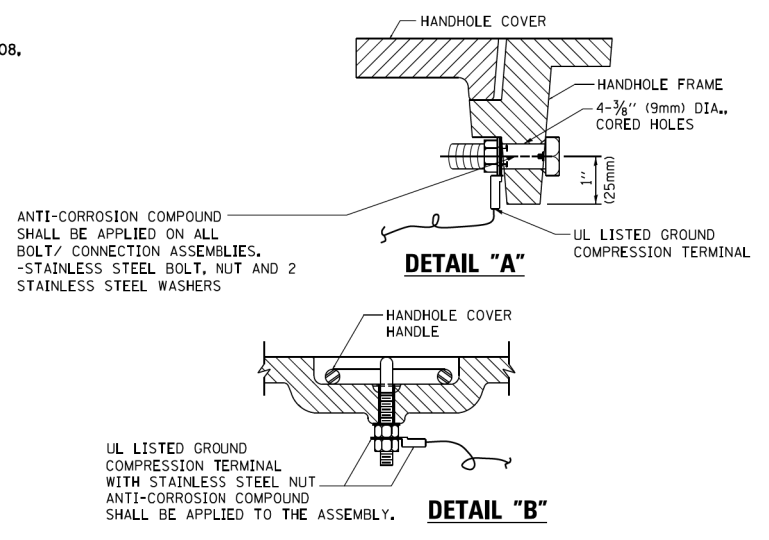
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 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.

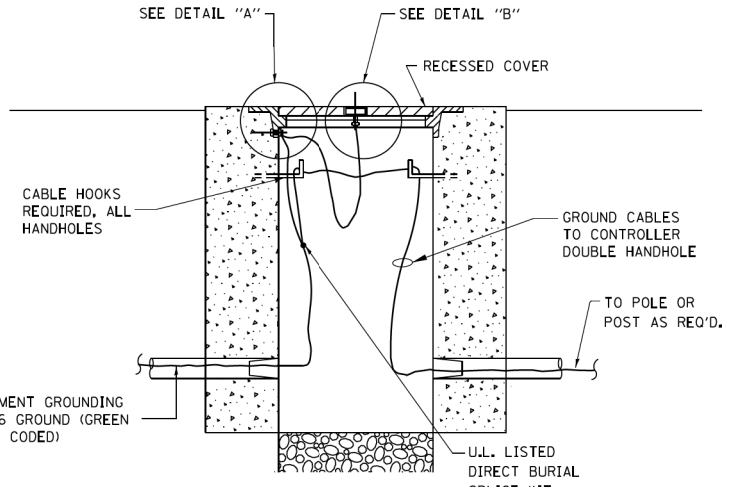


**ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE) SERVICE INSTALLATION POLE MOUNT (SHOWN) (NOT TO SCALE)**

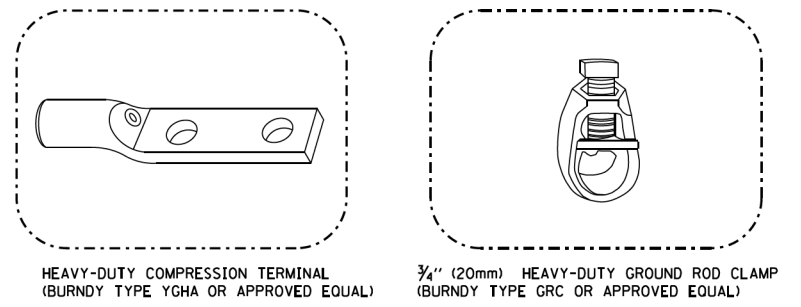


**NOTES:**  
**GROUNDING SYSTEM**

- 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.
- 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.
- ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
- THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.

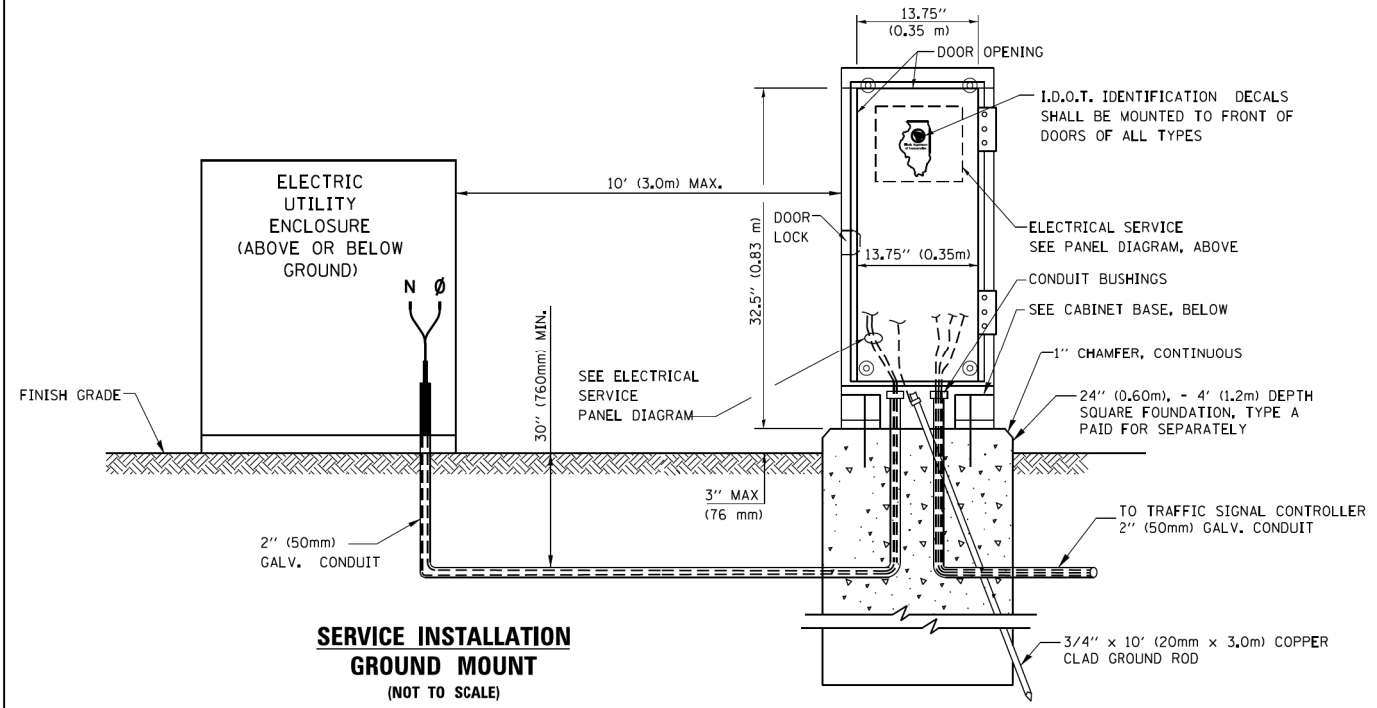


**HANDHOLE COVER & FRAME - GROUNDING DETAIL (NOT TO SCALE)**

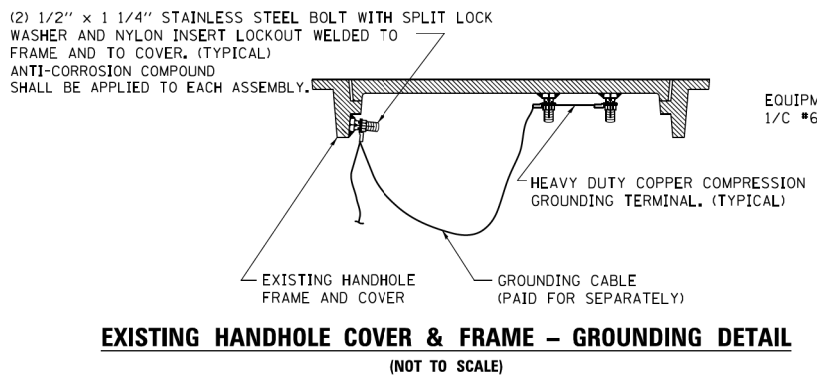


**NOTES:**

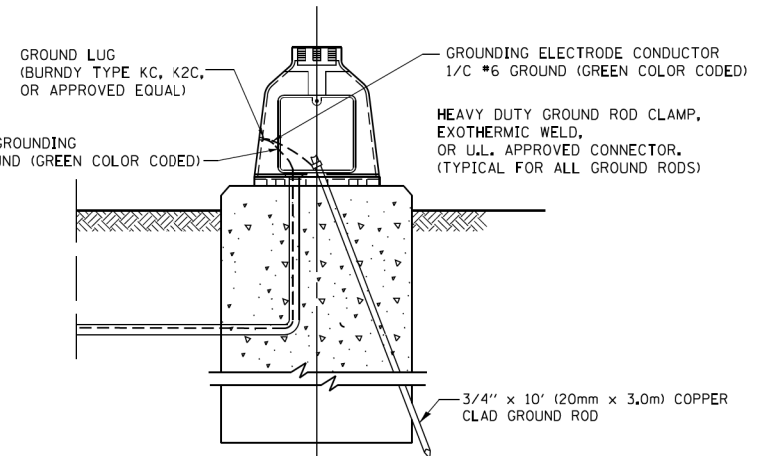
- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
- GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



**SERVICE INSTALLATION GROUND MOUNT (NOT TO SCALE)**

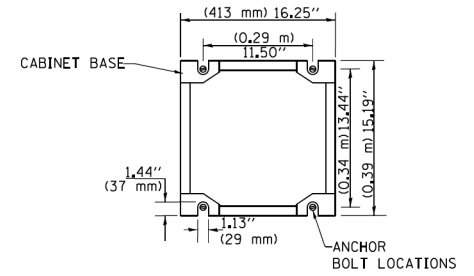


**EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL (NOT TO SCALE)**



**MAST ARM POLE / POST-GROUNDING DETAIL (NOT TO SCALE)**

**CABINET - BASE BOLT PATTERN (NOT TO SCALE)**



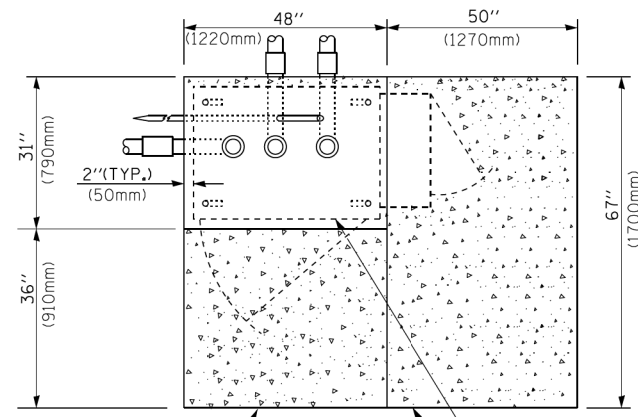
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	PLOT DATE = 1/13/2014	DATE - 10-28-09	REVISED -

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

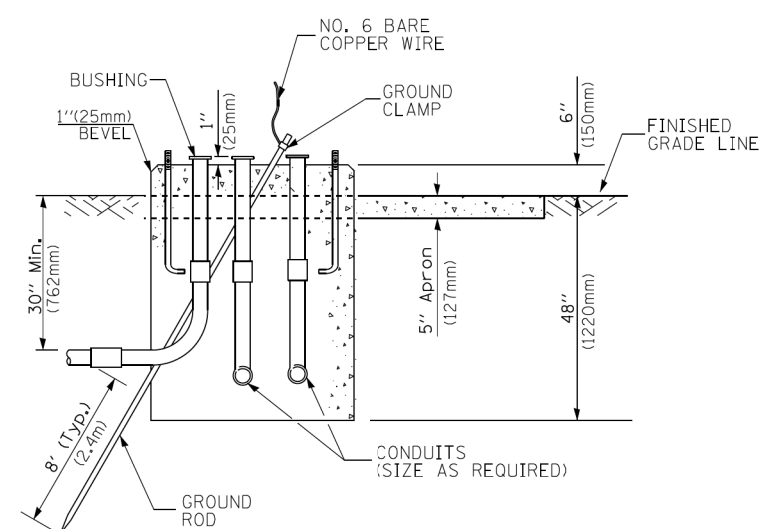
<b>DISTRICT ONE</b>	
<b>STANDARD TRAFFIC SIGNAL DESIGN DETAILS</b>	
SCALE: NONE	SHEET NO. 4 OF 7 SHEETS STA. TO STA.

F.A.P. RTE. 344	SECTION 2013-063TS	COUNTY DUPAGE	TOTAL SHEETS 68	SHEET NO. 16
<b>TS-05</b>		CONTRACT NO. 60X35		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

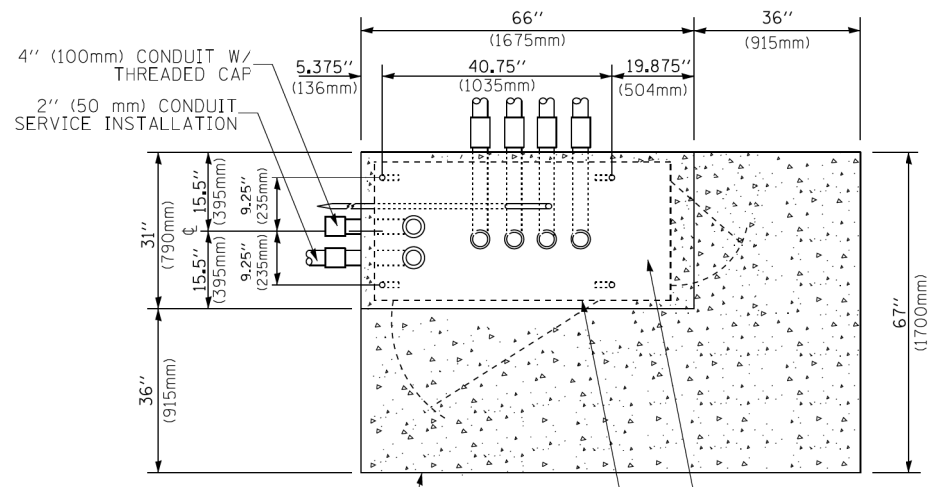




**TOP VIEW**

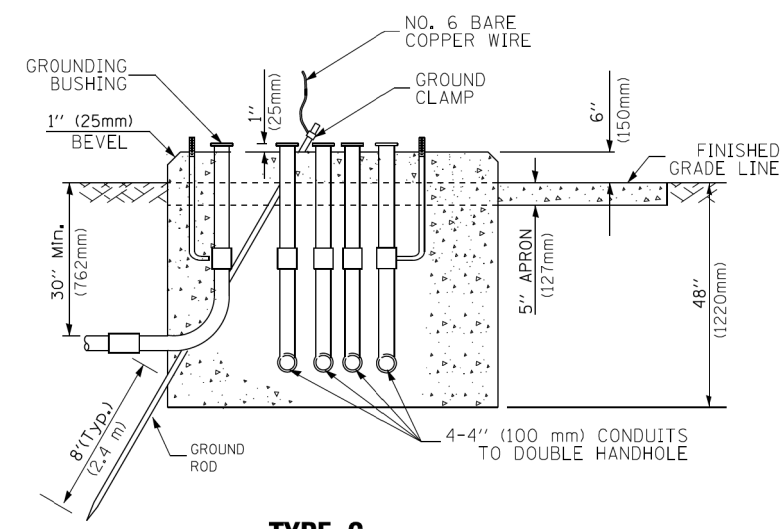


**TYPE D  
FOR GROUND MOUNTED  
CONTROLLER CABINET  
AND UPS BATTERY CABINET**

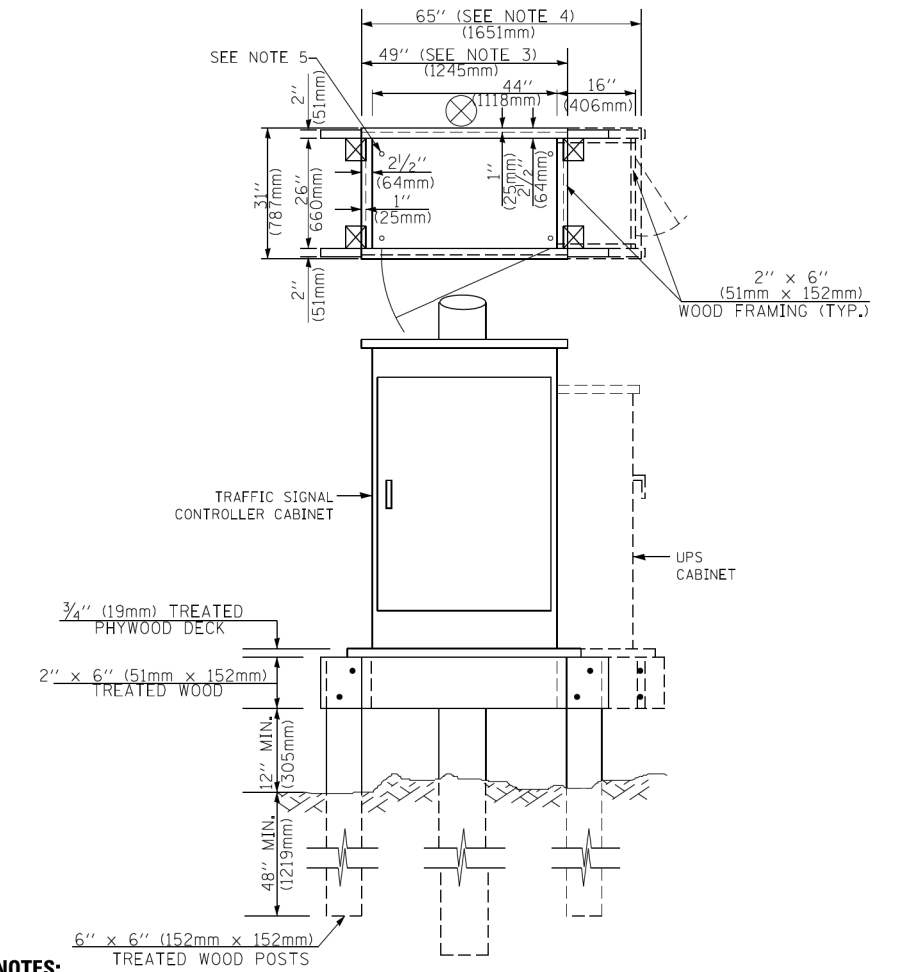


**TOP VIEW**

**NOTE:**  
TOP OF FOUNDATION SHALL BE HIGHER THAN TOP OF DOUBLE HANDHOLE



**TYPE C  
FOR GROUND MOUNTED  
SUPER P (TYPE IV) AND SUPER R (TYPE V)  
CONTROLLER CABINETS**



**NOTES:**

- 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.
- 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.
- PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.
- PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET.
- 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.
- 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)

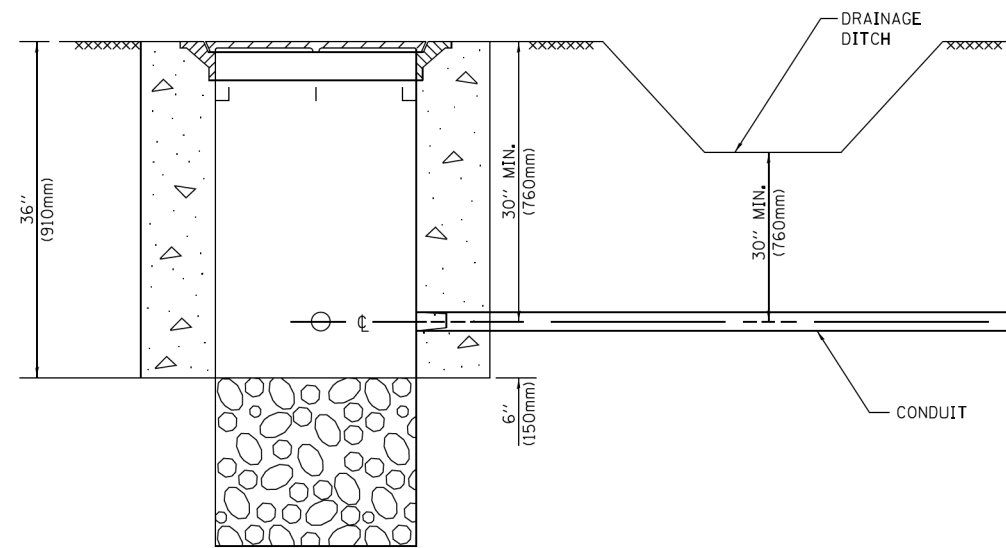
**DEPTH OF FOUNDATION**

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)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 55' (16.8 m) and less than 65' (19.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 65' (19.8 m) and less than 75' (22.9 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 75' (22.9 m)	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

**NOTES:**

- 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.
- Combination mast arm assemblies under 55 feet (16.8 m) shall use 36" (900 mm) diameter foundations.
- Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm) diameter foundations.
- For mast arm assemblies with dual arms refer to state standard 878001..

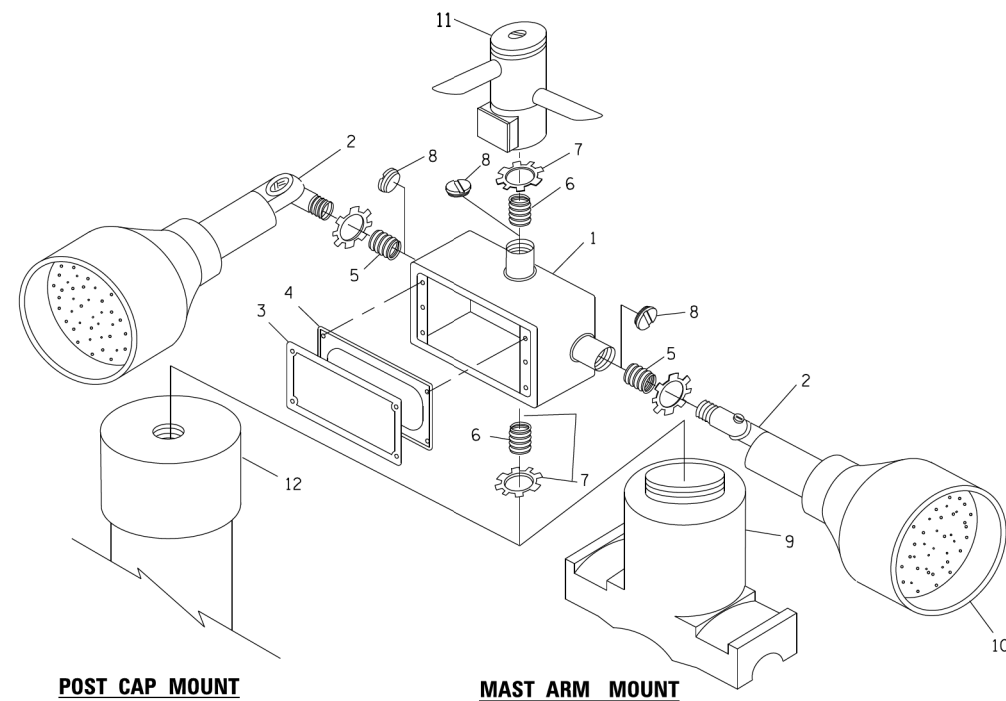
**DEPTH OF MAST ARM FOUNDATIONS, TYPE E**



**NOTES:**

- CONDUIT DEPTH SHALL BE A MINIMUM OF 30" (760mm) BELOW THE BOTTOM OF THE DRAINAGE DITCH OR ANY SLOPING GROUND
- THE MINIMUM CONDUIT DEPTH APPLIES TO ALL CONDUIT PLACED UNDER ROADWAY PAVEMENT, MULTI-USE PATHS, SIDEWALKS AND SOIL SURFACES.
- THE MINIMUM CONDUIT DEPTH APPLIES TO ALL HANDHOLES, HEAVY DUTY HANDHOLES AND DOUBLE HANDHOLES.

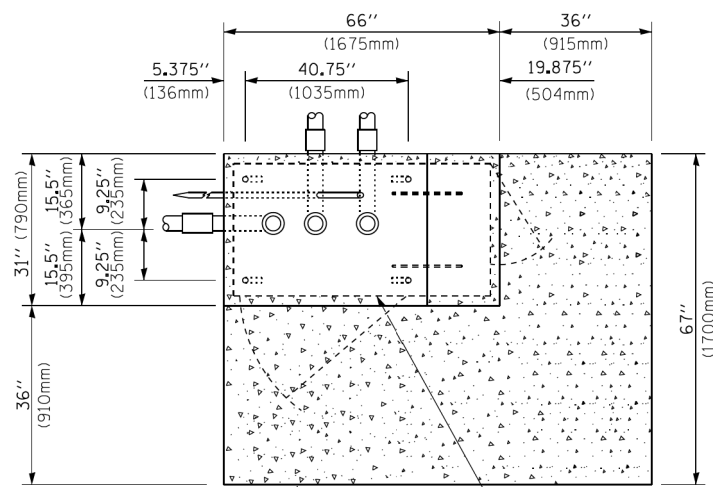
**HANDHOLE WITH MINIMUM CONDUIT DEPTH**  
(NOT TO SCALE)



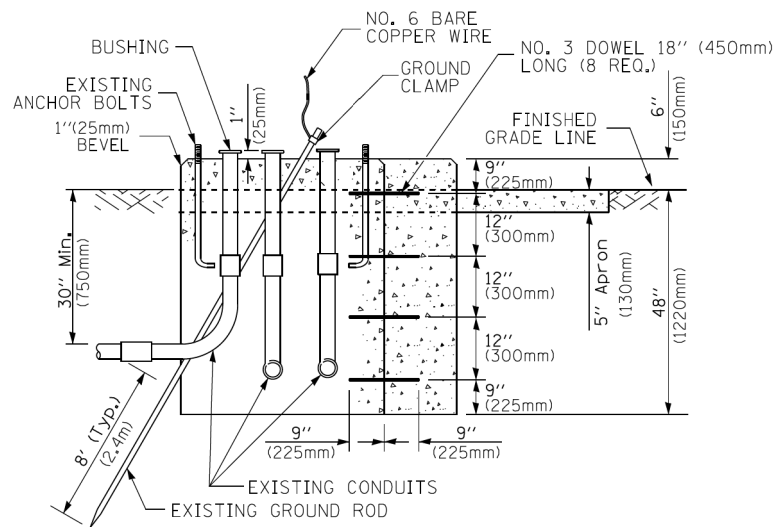
**POST CAP MOUNT**

**MAST ARM MOUNT**

**EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL**



**TOP VIEW**  
(NOT TO SCALE)

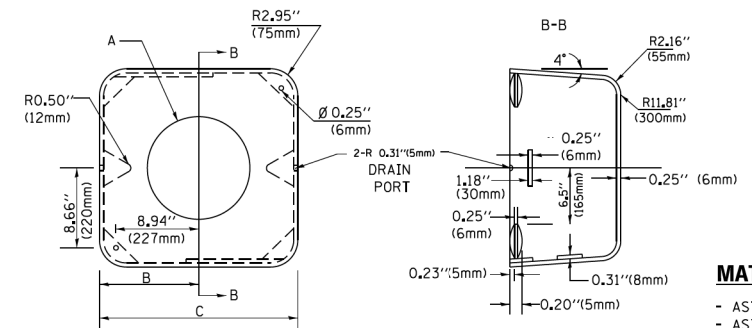


**MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION**  
(NOT TO SCALE)

ITEM NO.	IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU.IN. (0,000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4"(19 mm) CLOSE NIPPLE
7	3/4"(19 mm) LOCKNUT
8	3/4"(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:**

- ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
- 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
- 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 3/4 "(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
VARIABLES	9.5"(241mm)	19"(483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)
VARIABLES	10.75"(273mm)	21.5"(546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 kg)
VARIABLES	13.0"(330mm)	26"(660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)
VARIABLES	18.5"(470mm)	37"(940mm)	7" (178mm) - 12" (300mm)	126 lbs (57 kg)

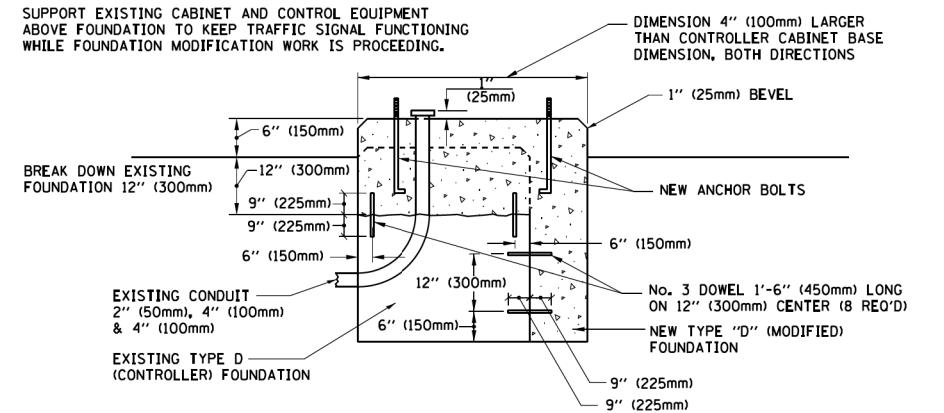
**SHROUD**

**NOTES:**

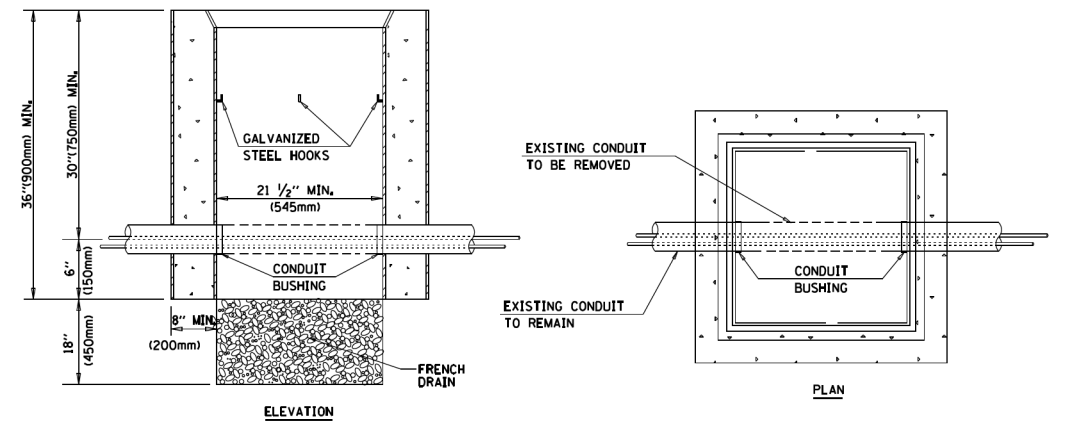
- DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
- THE SUPPLIER SHALL VERIFY THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
- THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.

**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:**

- HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
- REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCLUDED WITH THE COST OF THE HANDHOLE.

**HANDHOLE TO INTERCEPT EXISTING CONDUIT**

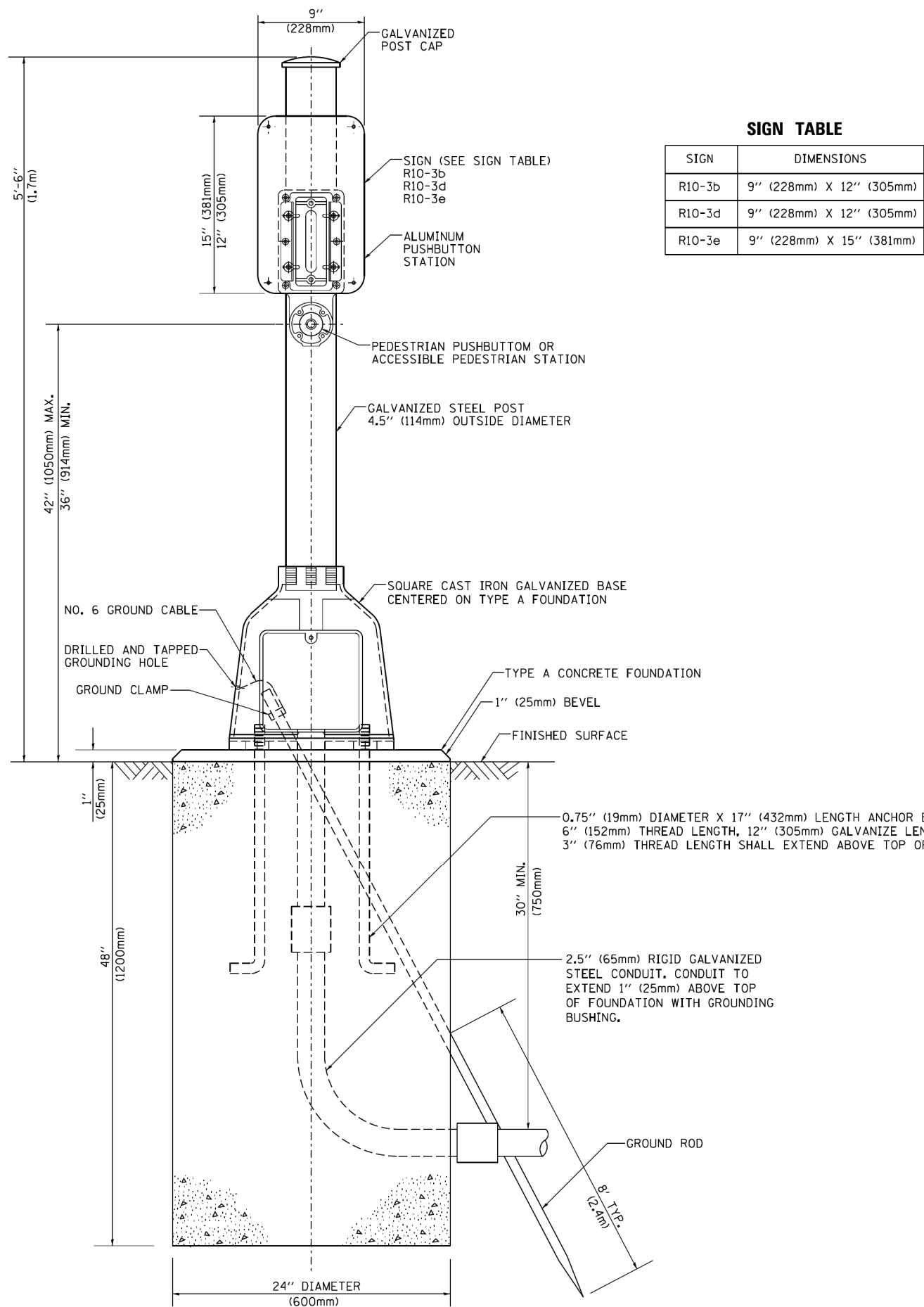
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	PLOT SCALE = 50.0000' / 1"	CHECKED - DAD	REVISED -
	PLOT DATE = 1/13/2014	DATE - 10-28-09	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE**  
**STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

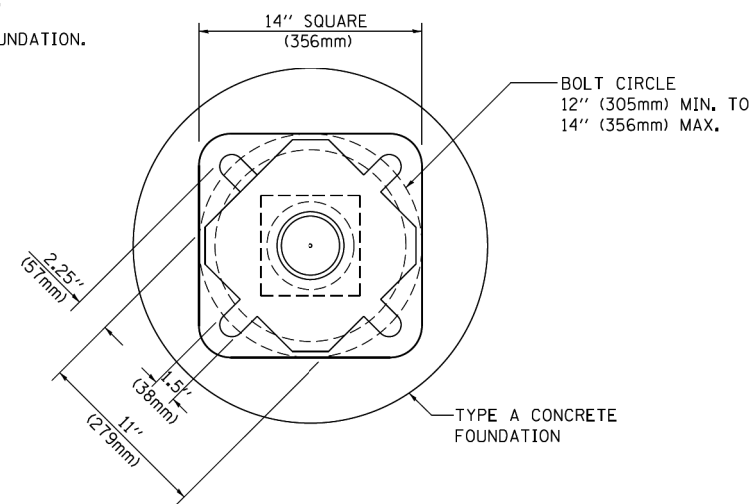
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2013-063TS	DUPAGE	68	18
TS-05		CONTRACT NO. 60X35		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



**SIGN TABLE**

SIGN	DIMENSIONS
R10-3b	9" (228mm) X 12" (305mm)
R10-3d	9" (228mm) X 12" (305mm)
R10-3e	9" (228mm) X 15" (381mm)



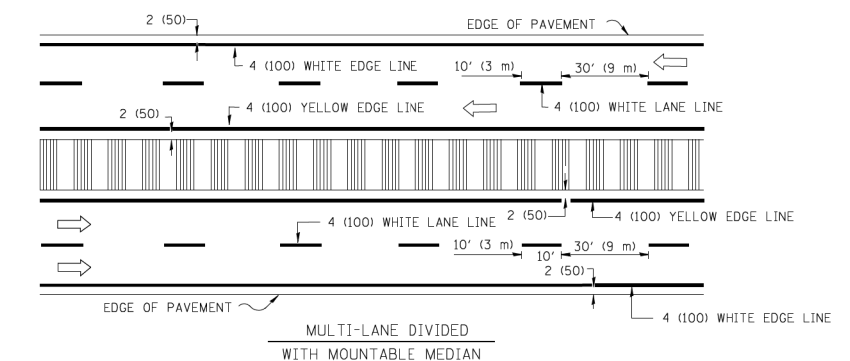
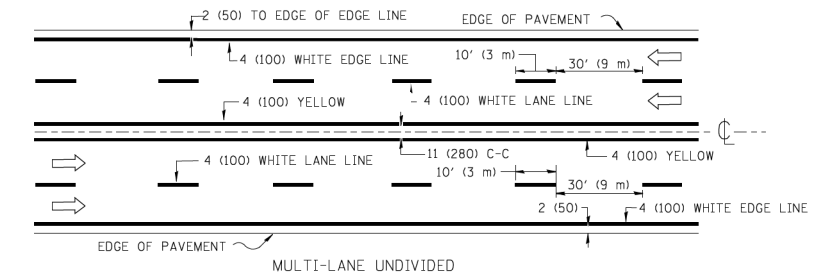
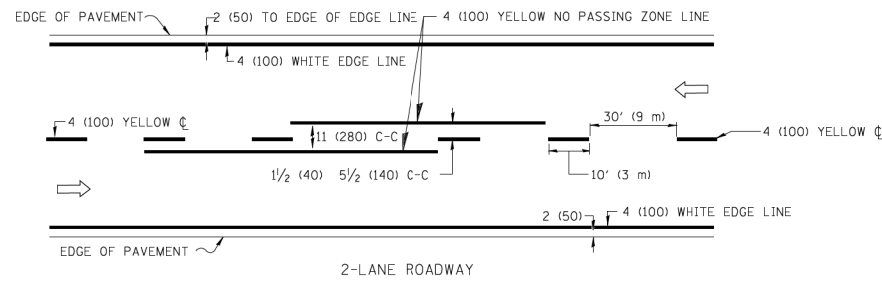
**BOLT PATTERN**  
**PEDESTRIAN PUSH BUTTON POST, TYPE A**

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

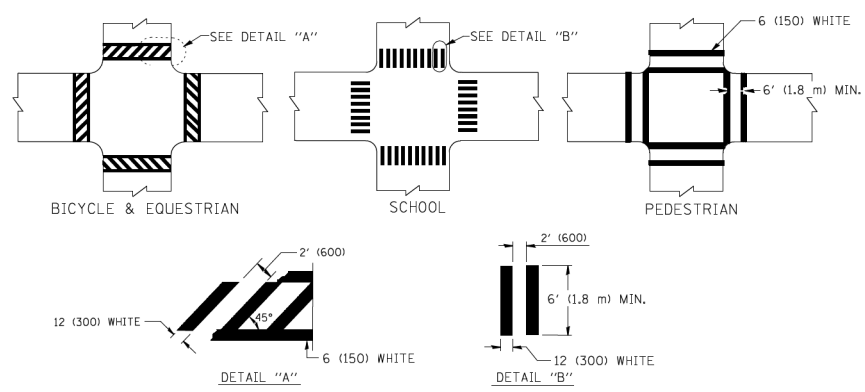
<b>DISTRICT ONE</b>			
<b>STANDARD TRAFFIC SIGNAL DESIGN DETAILS</b>			
SCALE: NONE	SHEET NO. 7 OF 7 SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2013-063TS	DUPAGE	68	19
<b>TS-05</b>			<b>CONTRACT NO. 60X35</b>	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

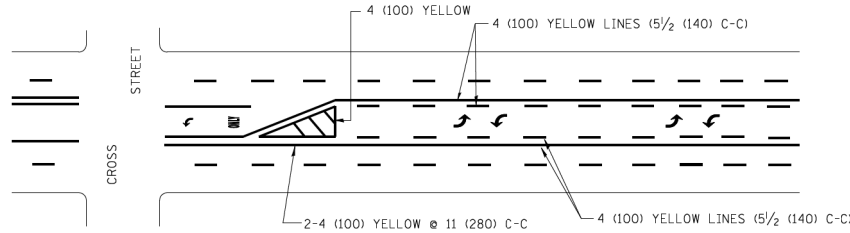
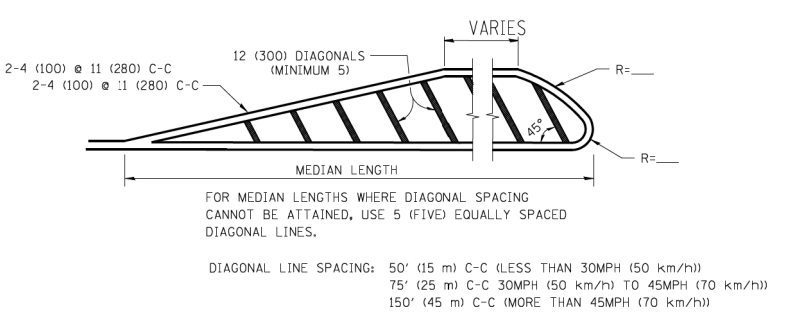
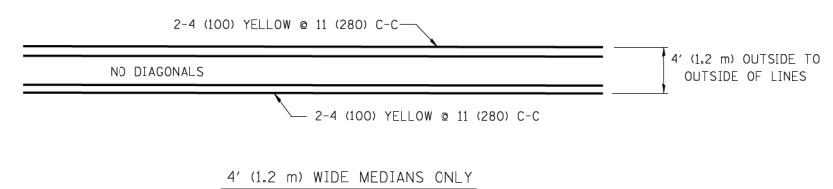


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

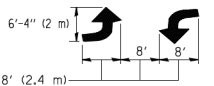
**TYPICAL LANE AND EDGE LINE MARKING**



**TYPICAL CROSSWALK MARKING**

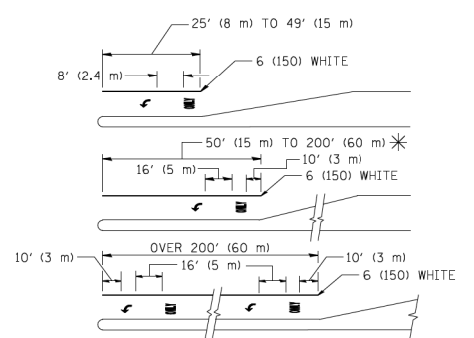


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



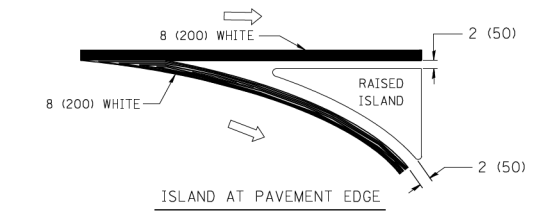
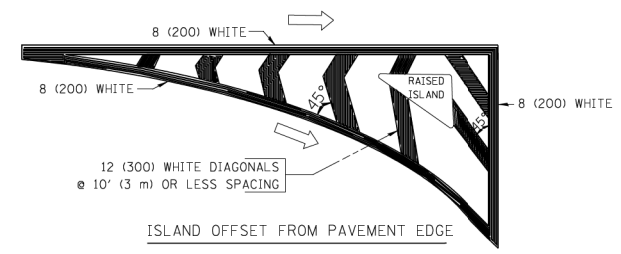
**TYPICAL LEFT (OR RIGHT) TURN LANE**

**TYPICAL PAINTED MEDIAN MARKING**



FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. AREA = 15.6 SQ. FT. (1.5 m<sup>2</sup>) ONLY AREA = 20.8 SQ. FT. (1.9 m<sup>2</sup>)  
 \* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

**TYPICAL TURN LANE MARKING**

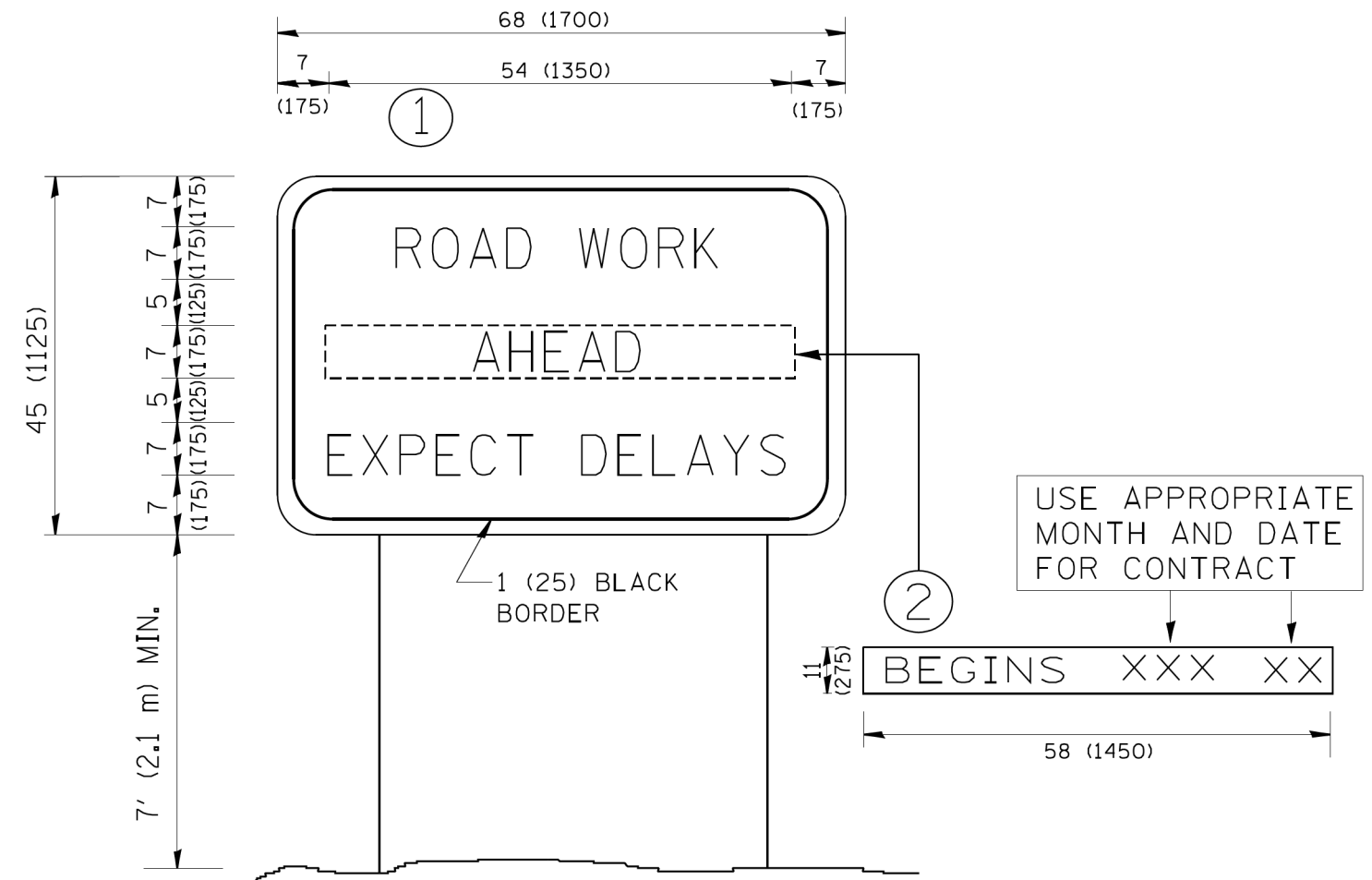


**TYPICAL ISLAND MARKING**

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

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

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



**NOTES:**

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

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

FILE NAME = W:\diststd\22x34\tc22.dgn	USER NAME = gegl1enobt	DESIGNED -	REVISED - R. MIRS 09-15-97
		DRAWN -	REVISED - R. MIRS 12-11-97
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - T. RAMMACHER 02-02-99
	PLOT DATE = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ARTERIAL ROAD  
INFORMATION SIGN**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2013-063TS	DUPAGE	68	21
<b>TC-22</b>		<b>CONTRACT NO. 60X35</b>		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

**TEMPORARY TRAFFIC SIGNAL NOTES**

- 59' OF THIS CONDUIT RUN SHALL BE CAPPED AND MAINTAINED FOR USE IN THE PERMANENT TRAFFIC SIGNAL INSTALLATION. EXISTING CABLES SHALL BE REMOVED FROM THE CONDUIT.
- 64' OF THIS CONDUIT RUN SHALL BE CAPPED AND MAINTAINED FOR USE IN THE PERMANENT TRAFFIC SIGNAL INSTALLATION. EXISTING CABLES SHALL BE REMOVED FROM THE CONDUIT.
- THESE SIGNAL POSTS SHALL BE RELOCATED TO THE PROPOSED TRAFFIC SIGNAL INSTALLATION.

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.

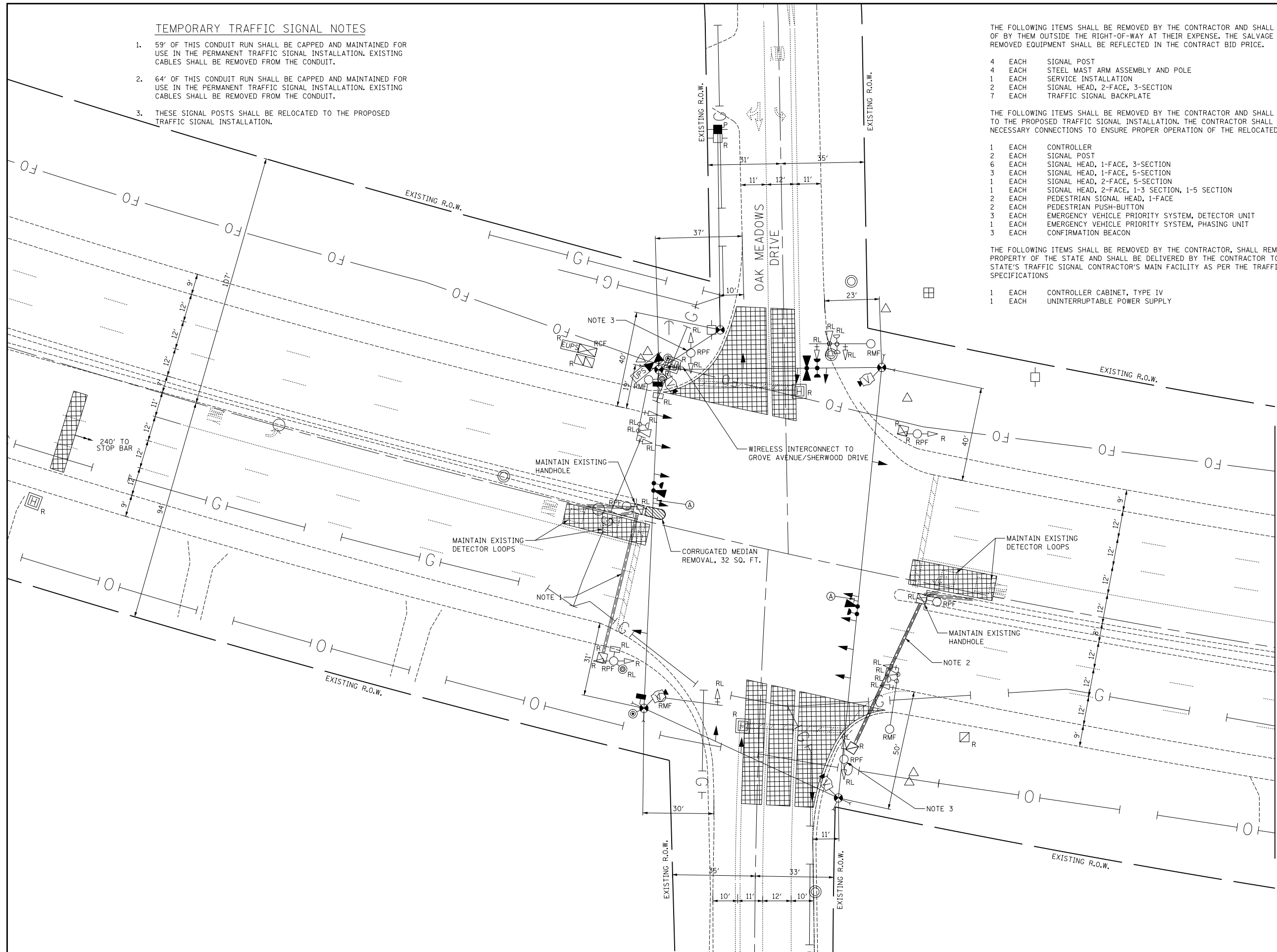
- 4 EACH SIGNAL POST
- 4 EACH STEEL MAST ARM ASSEMBLY AND POLE
- 1 EACH SERVICE INSTALLATION
- 2 EACH SIGNAL HEAD, 2-FACE, 3-SECTION
- 7 EACH TRAFFIC SIGNAL BACKPLATE

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE RELOCATED TO THE PROPOSED TRAFFIC SIGNAL INSTALLATION. THE CONTRACTOR SHALL MAKE ALL NECESSARY CONNECTIONS TO ENSURE PROPER OPERATION OF THE RELOCATED EQUIPMENT.

- 1 EACH CONTROLLER
- 2 EACH SIGNAL POST
- 6 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 3 EACH SIGNAL HEAD, 1-FACE, 5-SECTION
- 1 EACH SIGNAL HEAD, 2-FACE, 5-SECTION
- 1 EACH SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION
- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 2 EACH PEDESTRIAN PUSH-BUTTON
- 3 EACH EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT
- 1 EACH EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT
- 3 EACH CONFIRMATION BEACON

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE STATE AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE STATE'S TRAFFIC SIGNAL CONTRACTOR'S MAIN FACILITY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS

- 1 EACH CONTROLLER CABINET, TYPE IV
- 1 EACH UNINTERRUPTABLE POWER SUPPLY



MATCH LINE A  
(SEE SHEET 2 OF 2)

**LEFT ON GREEN ARROW ONLY**

R 10-5  
30"x36"  
(TYP.)  
2 REQUIRED

TS# 545



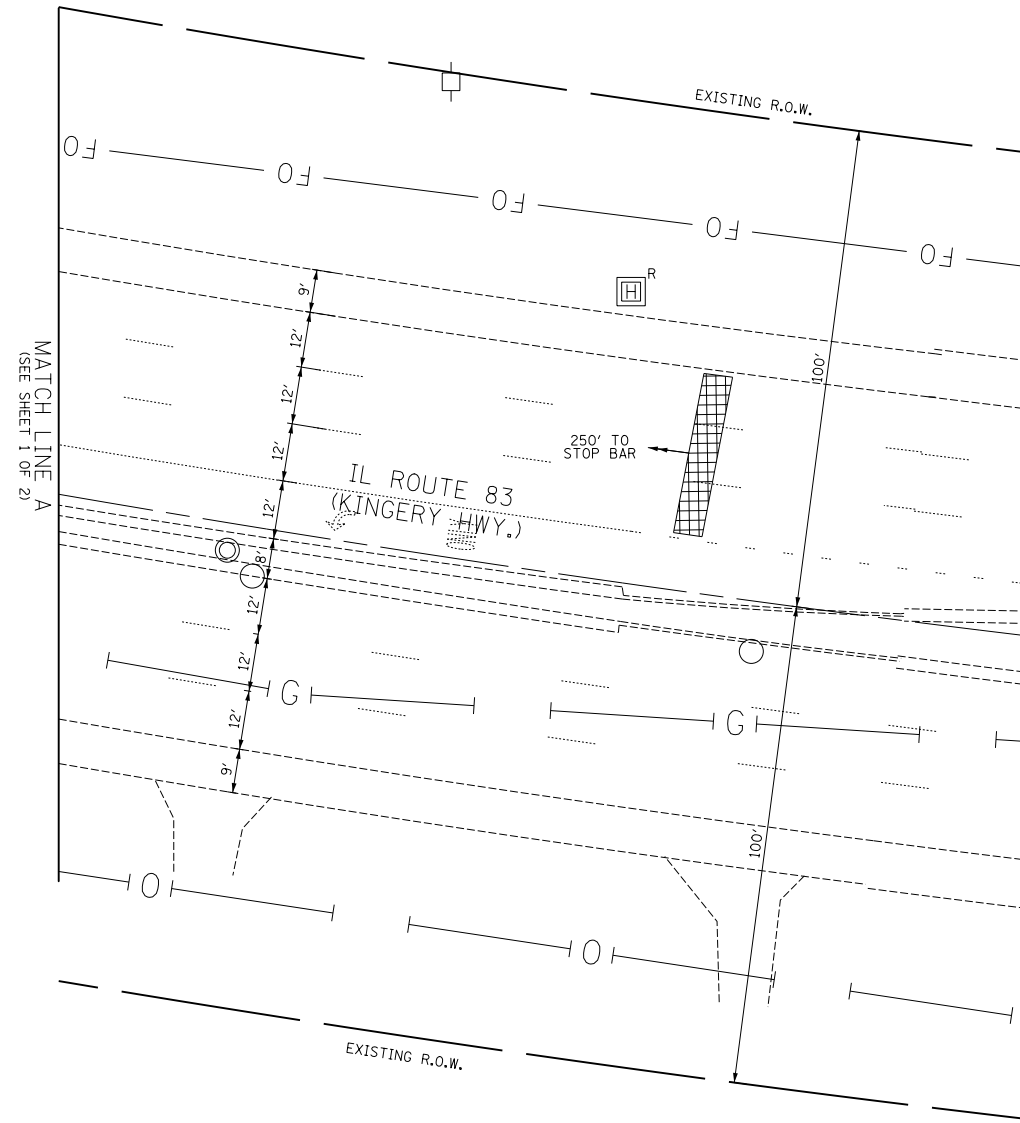
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PLOT DATE = 1/29/2014	DATE - 01/30/2014	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN AND REMOVAL PLAN  
IL ROUTE 83 (KINGERY HWY.) AT THIRD AVE./OAK MEADOWS DR.**

SCALE: 1" = 20'    SHEET NO. 1 OF 2 SHEETS    STA. TO STA.

F.A.P. RTE. 344	SECTION 2013-063TS	COUNTY	TOTAL SHEETS 68	SHEET NO. 22
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60X35	



TS# 545



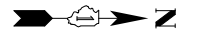
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	DRAWN - JRT	REVISED -
PLOT SCALE = 40.0000' / in.	CHECKED - JJE	REVISED -
PLOT DATE = 1/29/2014	DATE - 01/30/2014	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

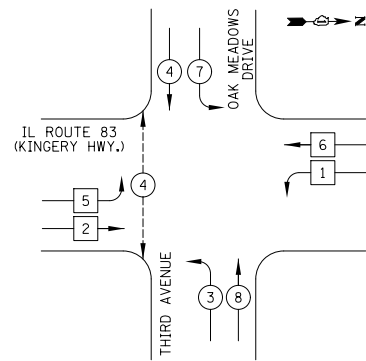
**TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN AND REMOVAL PLAN  
IL ROUTE 83 (KINGERY HWY.) AT THIRD AVE./OAK MEADOWS DR.**

SCALE: 1" = 20'    SHEET NO. 2 OF 2 SHEETS    STA.    TO STA.

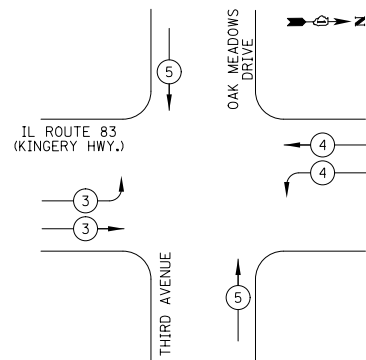
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2013-063TS	DUPAGE	68	23
				<b>CONTRACT NO. 60X35</b>
ILLINOIS FED. AID PROJECT				



**TEMPORARY CONTROLLER SEQUENCE**



**TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE**

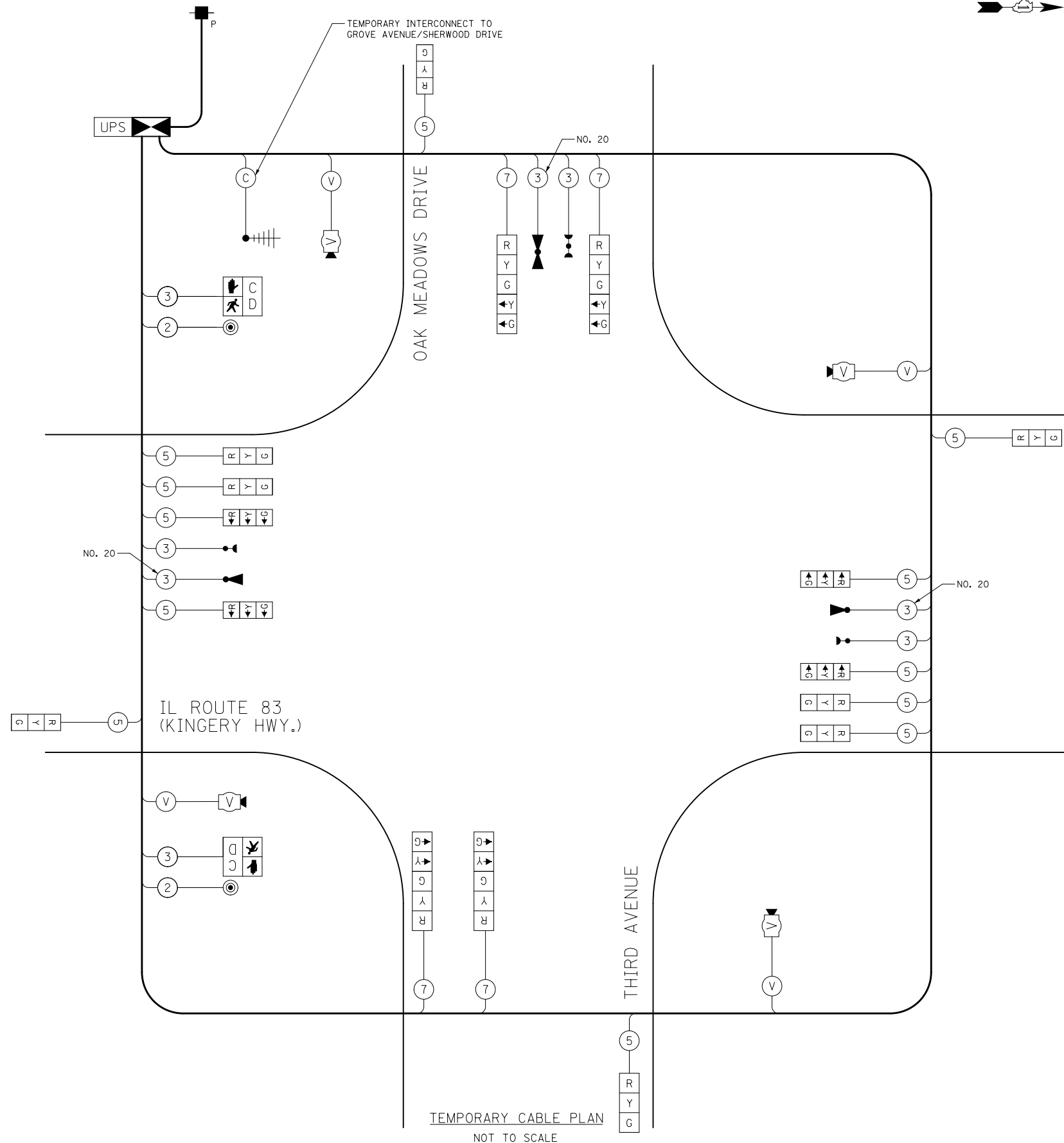


TEMPORARY EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT			

**LEGEND**

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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE		% OPERATION	
SIGNAL (RED)	16	INCAND.	17	0.50	136
(YELLOW)	16		25	0.25	100
(GREEN)	16		15	0.25	60
ARROW	8		12	0.10	10
PED. SIGNAL	2		25	1.00	50
CONTROLLER	1		100	1.00	100
VIDEO SYSTEM	1		150	1.00	150
TOTAL =					606
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					
ENERGY SUPPLY: CONTACT: TED ZAWISLAK PHONE: (630) 691-4861 COMPANY: COM ED					



TEMPORARY CABLE PLAN  
NOT TO SCALE

TS# 545



USER NAME = jrt	DESIGNED - BRD	REVISED -
PLOT SCALE = 40.0000' / in.	DRAWN - JRT	REVISED -
PLOT DATE = 1/29/2014	CHECKED - JJE	REVISED -
	DATE - 01/30/2014	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION DIAGRAM,  
AND TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE  
IL ROUTE 83 (KINGERY HWY.) AT THIRD AVE./OAK MEADOWS DR.**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2013-063TS	DUPAGE	68	24
CONTRACT NO. 60X35				
ILLINOIS FED. AID PROJECT				

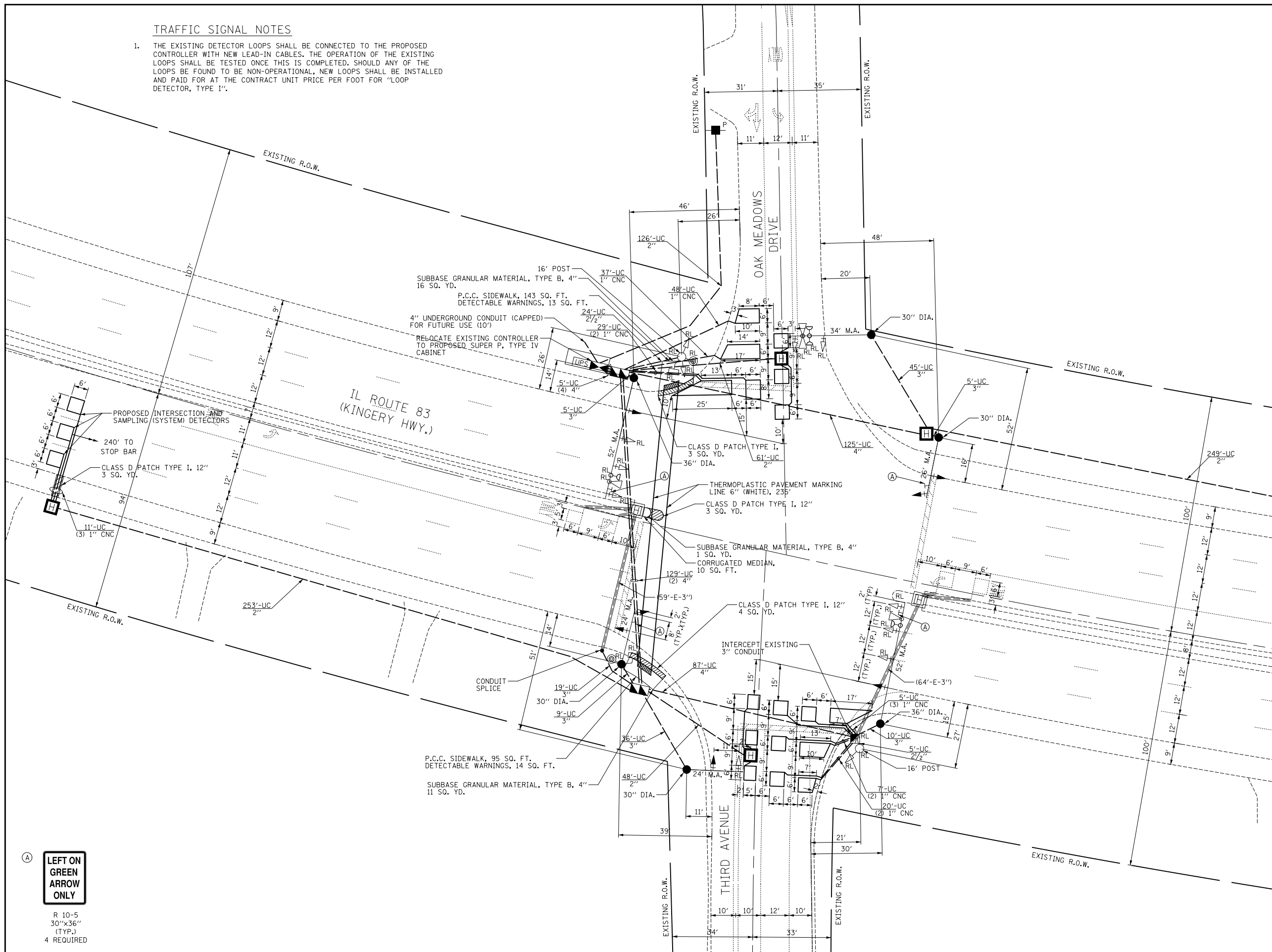
NOT TO SCALE SHEET NO. 1 OF 1 SHEETS STA. TO STA.





**TRAFFIC SIGNAL NOTES**

1. THE EXISTING DETECTOR LOOPS SHALL BE CONNECTED TO THE PROPOSED CONTROLLER WITH NEW LEAD-IN CABLES. THE OPERATION OF THE EXISTING LOOPS SHALL BE TESTED ONCE THIS IS COMPLETED. SHOULD ANY OF THE LOOPS BE FOUND TO BE NON-OPERATIONAL, NEW LOOPS SHALL BE INSTALLED AND PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR "LOOP DETECTOR, TYPE 1".



MATCHLINE A  
(SEE SHEET 2 OF 2)

**LEFT ON GREEN  
ARROW  
ONLY**

R 10-5  
30"x36"  
(TYP.)  
4 REQUIRED



USER NAME = jrt	DESIGNED - BRD	REVISED -
	DRAWN - JRT	REVISED -
PLOT SCALE = 40.0000' / in.	CHECKED - JJE	REVISED -
PLOT DATE = 1/29/2014	DATE - 01/30/2014	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

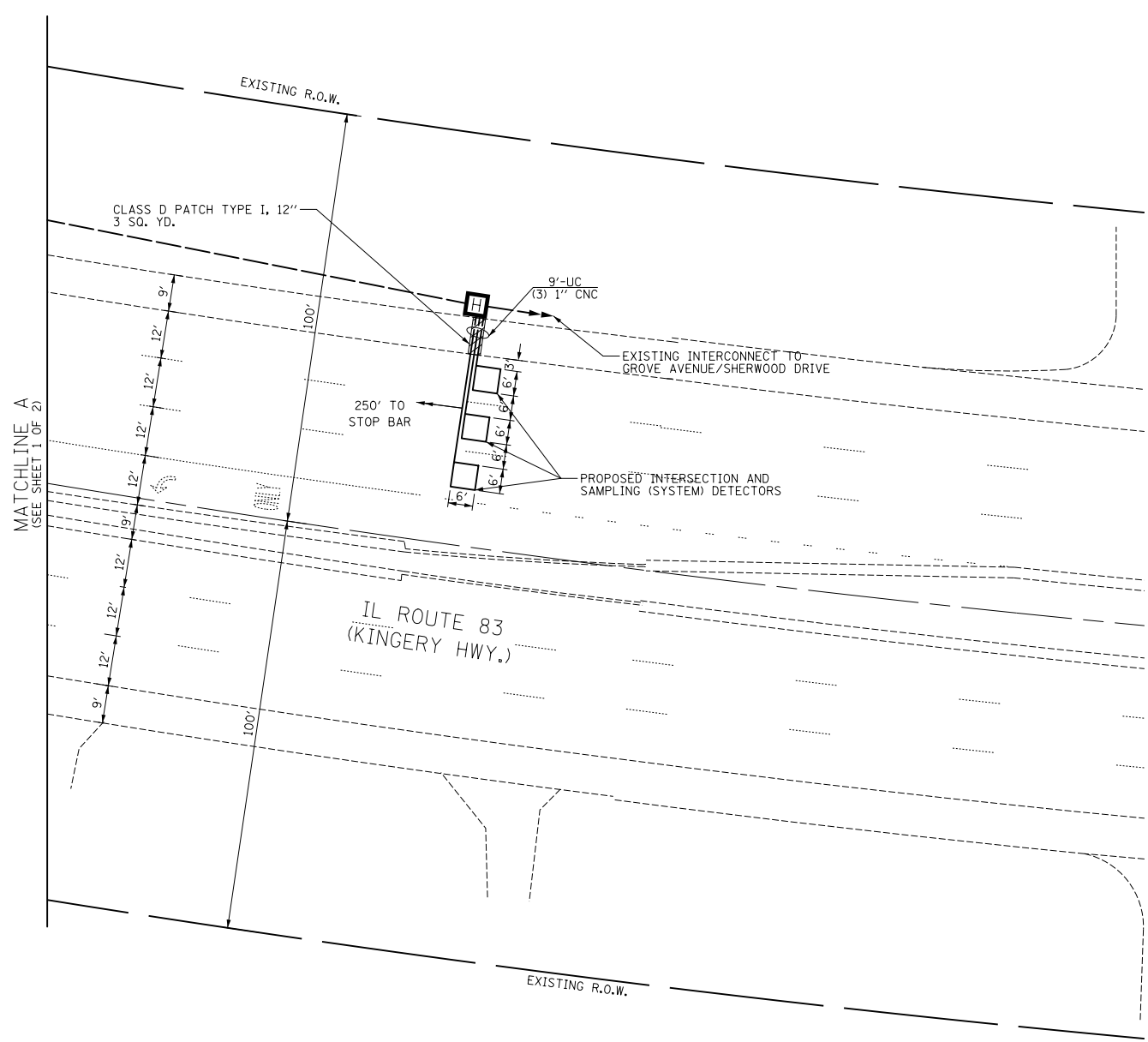
**TRAFFIC SIGNAL MODERNIZATION PLAN  
IL ROUTE 83 (KINGERY HWY.) AT THIRD AVE./OAK MEADOWS DR.**

SCALE: 1" = 20' SHEET NO. 1 OF 2 SHEETS STA. TO STA.


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2013-063TS	DUPAGE	68	25
CONTRACT NO. 60X35				

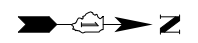
ILLINOIS FED. AID PROJECT

TS# 545



TS# 545

	USER NAME = jrt	DESIGNED - BRD	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC SIGNAL MODERNIZATION PLAN</b> <b>IL ROUTE 83 (KINGERY HWY.) AT THIRD AVE./OAK MEADOWS DR.</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 40.0000' / in.	DRAWN - JRT	REVISED -		344	2013-063TS	DUPAGE	68	26			
	PLOT DATE = 1/29/2014	CHECKED - JJE	REVISED -		<b>CONTRACT NO. 60X35</b>				ILLINOIS FED. AID PROJECT			
		DATE - 01/30/2014	REVISED -		SCALE: 1" = 20'	SHEET NO. 2 OF 2 SHEETS	STA.	TO STA.				



**CABLE PLAN NOTES**

1. THE EXISTING DETECTOR LOOPS SHALL BE CONNECTED TO THE PROPOSED CONTROLLER WITH INSTALLATION OF NEW LEAD-IN CABLES. THE OPERATION OF THE EXISTING LOOPS SHALL THEN BE TESTED. SHOULD ANY OF THE LOOPS BE FOUND TO BE NON-OPERATIONAL, NEW LOOPS SHALL BE INSTALLED AND PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR "LOOP DETECTOR, TYPE I".
2. THE EXISTING TRAFFIC SIGNAL CONTROLLER SHALL BE RELOCATED FROM THE EXISTING CONTROLLER CABINET TO THE PROPOSED SUPER "P", TYPE IV CABINET.

NOTE 2  
THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.

NUMBER OF CABLES AS PER PLAN

PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTORS

IL ROUTE 83 (KINGERY HWY.)

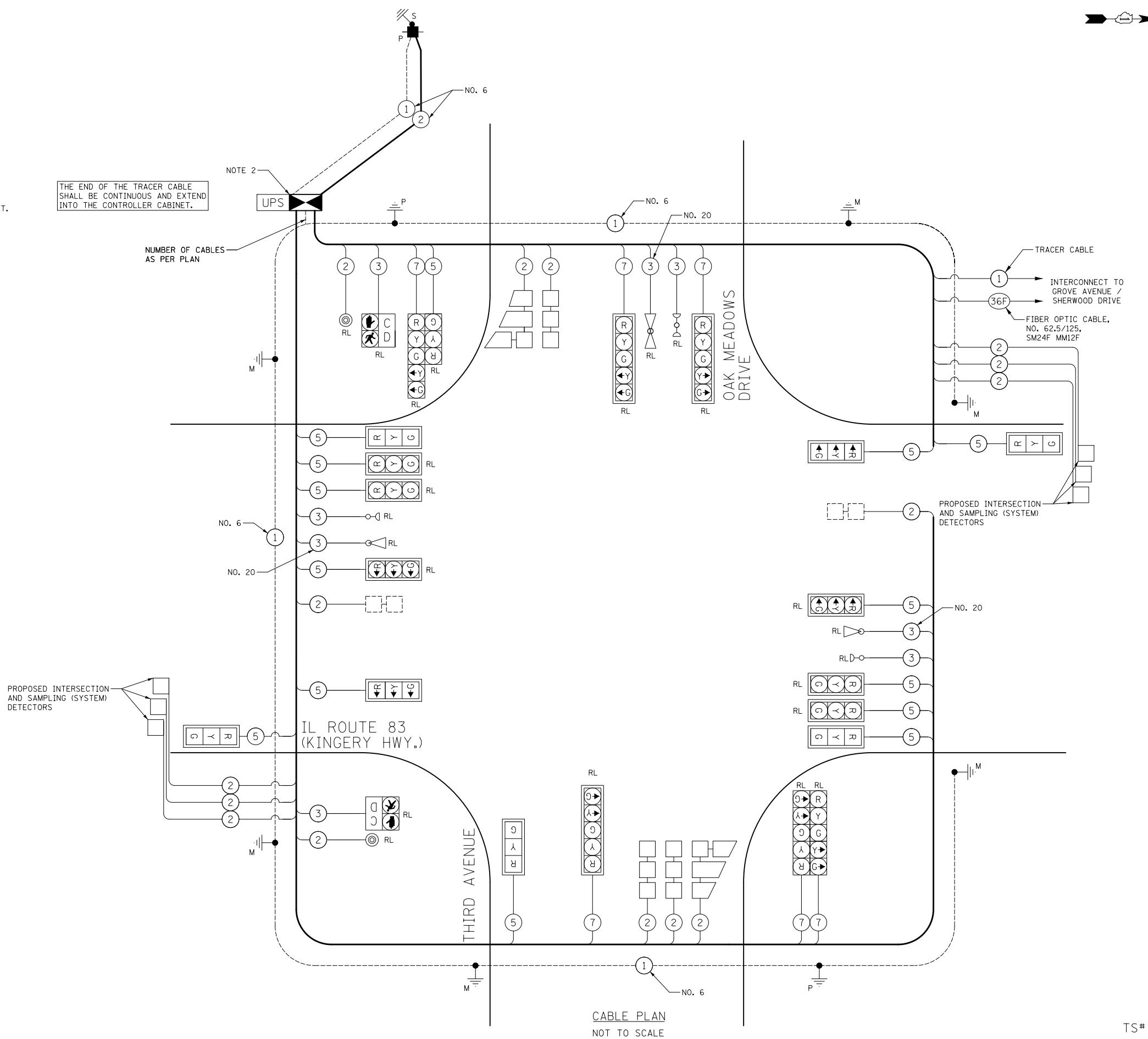
THIRD AVENUE

OAK MEADOWS DRIVE

PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTORS

TRACER CABLE  
INTERCONNECT TO GROVE AVENUE / SHERWOOD DRIVE  
FIBER OPTIC CABLE, NO. 62.5/125, SM24F MM12F

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE		% OPERATION	
		INCAND.	LED		
SIGNAL (RED)	20		17	0.50	170
(YELLOW)	20		25	0.25	125
(GREEN)	20		15	0.25	75
ARROW	12		12	0.10	14
PED. SIGNAL	2		25	1.00	50
CONTROLLER	1		100	1.00	100
FLASHER					
TOTAL =					534
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					
ENERGY SUPPLY: CONTACT: TED ZAWISLAK PHONE: (630) 691-4861 COMPANY: COM ED					



CABLE PLAN  
NOT TO SCALE

TS# 545



USER NAME = jrt	DESIGNED - BRD	REVISED -
PLOT SCALE = 40.0000' / in.	DRAWN - JRT	REVISED -
PLOT DATE = 1/29/2014	CHECKED - JJE	REVISED -
	DATE - 01/30/2014	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CABLE PLAN	
IL ROUTE 83 (KINGERY HWY.) AT THIRD AVE./OAK MEADOWS DR.	
NOT TO SCALE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.

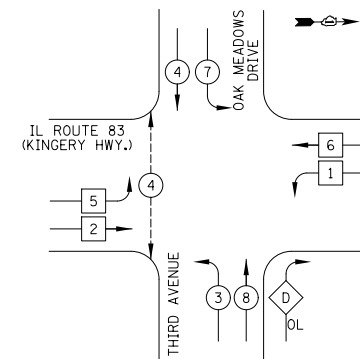
F.A.P. RTE. 344	SECTION 2013-063TS	COUNTY DUPAGE	TOTAL SHEETS 68	SHEET NO. 27
CONTRACT NO. 60X35				
ILLINOIS FED. AID PROJECT				

SCHEDULE OF QUANTITIES

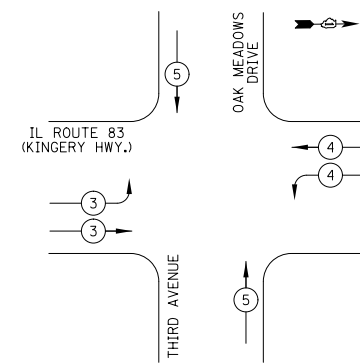
PAY ITEM	UNIT	QNTY.
SUBBASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	28
PROTECTIVE COAT	SQ YD	28
PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH	SQ FT	238
DETECTABLE WARNINGS	SQ FT	27
MEDIAN REMOVAL	SQ FT	32
CLASS D PATCHES, TYPE 1, 12 INCH	SQ YD	16
CORRUGATED MEDIAN	SQ FT	10
ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	2
CHANGEABLE MESSAGE SIGN	CAL MO	1
SIGN PANEL - TYPE 1	SQ FT	30
SIGN PANEL - TYPE 2	SQ FT	70
THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	235
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	737
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	29
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	129
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	500
HANDHOLE	EACH	1
HEAVY-DUTY HANDHOLE	EACH	5
DOUBLE HANDHOLE	EACH	2
TRANSCIEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	242
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	952
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2764
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1374
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	3926
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	146
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	928
STEEL MAST ARM ASSEMBLY AND POLE 24 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE 26 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE 34 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE 52 FT.	EACH	2
CONCRETE FOUNDATION, TYPE A	FOOT	8
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	44
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	30
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	7
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	16
INDUCTIVE LOOP DETECTOR	EACH	13
DETECTOR LOOP, TYPE I	FOOT	892
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
RELOCATE EXISTING SIGNAL HEAD	EACH	11
RELOCATE EXISTING PEDESTRIAN SIGNAL HEAD	EACH	2
RELOCATE EXISTING PEDESTRIAN PUSH-BUTTON	EACH	2
RELOCATE EXISTING TRAFFIC SIGNAL CONTROLLER	EACH	1
RELOCATE EXISTING TRAFFIC SIGNAL POST	EACH	2
* RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	3
* RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1431
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	9
REMOVE EXISTING DOUBLE HANDHOLE	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	11
* EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	696
CONDUIT SPLICE	EACH	1
UNINTERRUPTABLE POWER SUPPLY SPECIAL	EACH	1
** CONTROLLER CABINET, TYPE IV, SPECIAL	EACH	1
TEMPORARY INFORMATION SIGNING	SQ FT	26
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
TRAINEES	HOURS	170

\* 100% COST TO THE VILLAGE OF BENSENVILLE  
 \*\* SUPER P CABINET

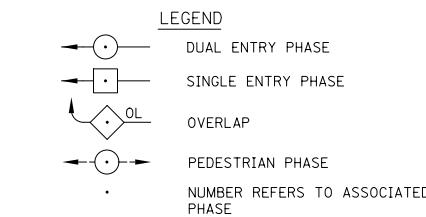
PROPOSED CONTROLLER SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT			



TS# 545

**TEMPORARY TRAFFIC SIGNAL NOTES**

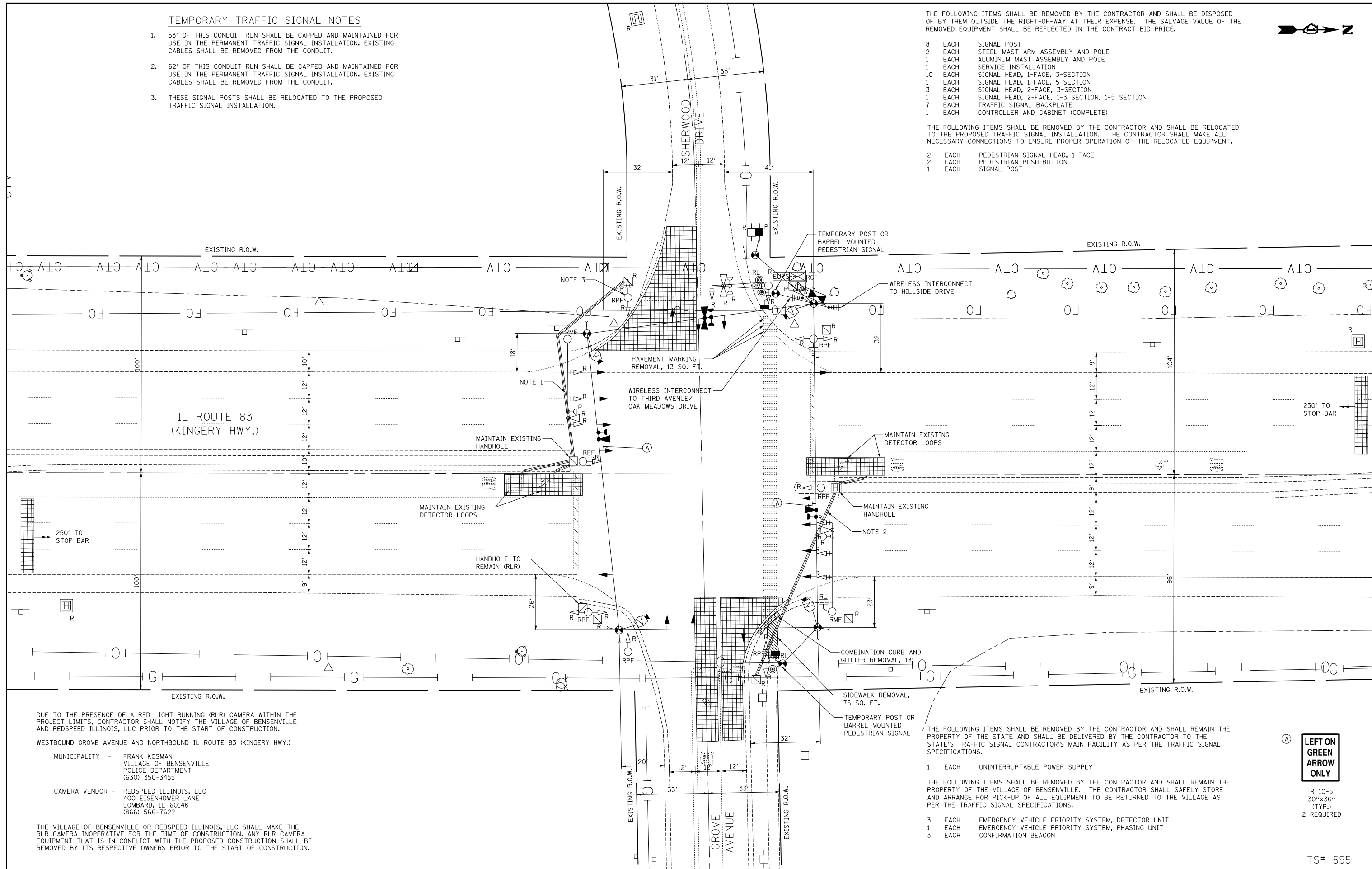
- 53' OF THIS CONDUIT RUN SHALL BE CAPPED AND MAINTAINED FOR USE IN THE PERMANENT TRAFFIC SIGNAL INSTALLATION. EXISTING CABLES SHALL BE REMOVED FROM THE CONDUIT.
- 62' OF THIS CONDUIT RUN SHALL BE CAPPED AND MAINTAINED FOR USE IN THE PERMANENT TRAFFIC SIGNAL INSTALLATION. EXISTING CABLES SHALL BE REMOVED FROM THE CONDUIT.
- THESE SIGNAL POSTS SHALL BE RELOCATED TO THE PROPOSED TRAFFIC SIGNAL INSTALLATION.

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.

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

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE RELOCATED TO THE PROPOSED TRAFFIC SIGNAL INSTALLATION. THE CONTRACTOR SHALL MAKE ALL NECESSARY CONNECTIONS TO ENSURE PROPER OPERATION OF THE RELOCATED EQUIPMENT.

- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 2 EACH PEDESTRIAN PUSH-BUTTON
- 1 EACH SIGNAL POST



DUE TO THE PRESENCE OF A RED LIGHT RUNNING (RLR) CAMERA WITHIN THE PROJECT LIMITS, CONTRACTOR SHALL NOTIFY THE VILLAGE OF BENSenville AND REDSPEED ILLINOIS, LLC PRIOR TO THE START OF CONSTRUCTION.

WESTBOUND GROVE AVENUE AND NORTHBOUND IL ROUTE 83 (KINGERY HWY.)

MUNICIPALITY - FRANK KOSMAN  
VILLAGE OF BENSenville  
POLICE DEPARTMENT  
(630) 350-3455

CAMERA VENDOR - REDSPEED ILLINOIS, LLC  
400 EISENHOWER LANE  
LOMBARD, IL 60148  
(866) 566-7622

THE VILLAGE OF BENSenville OR REDSPEED ILLINOIS, LLC SHALL MAKE THE RLR CAMERA INOPERATIVE FOR THE TIME OF CONSTRUCTION. ANY RLR CAMERA EQUIPMENT THAT IS IN CONFLICT WITH THE PROPOSED CONSTRUCTION SHALL BE REMOVED BY ITS RESPECTIVE OWNERS PRIOR TO THE START OF CONSTRUCTION.

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE STATE AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE STATE'S TRAFFIC SIGNAL CONTRACTOR'S MAIN FACILITY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

- 1 EACH UNINTERRUPTABLE POWER SUPPLY

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE VILLAGE OF BENSenville. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK-UP OF ALL EQUIPMENT TO BE RETURNED TO THE VILLAGE AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

- 3 EACH EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT
- 1 EACH EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT
- 3 EACH CONFIRMATION BEACON

**LEFT ON GREEN ARROW ONLY**

R 10-5  
30"x36"  
(TYP.)  
2 REQUIRED

TS# 595



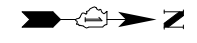
USER NAME = jrt	DESIGNED - BRD	REVISED -
	DRAWN - JRT	REVISED -
PLOT SCALE = 40.0000' / in.	CHECKED - JJE	REVISED -
PLOT DATE = 1/30/2014	DATE - 01/30/2014	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

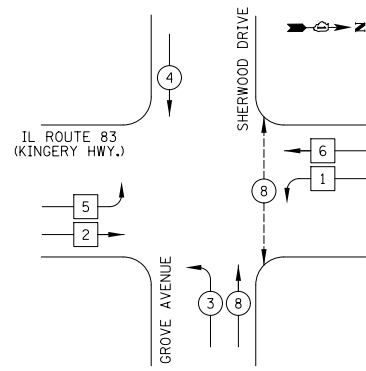
**TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVAL PLAN  
IL ROUTE 83 (KINGERY HWY.) AT GROVE AVENUE /SHERWOOD DRIVE**

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

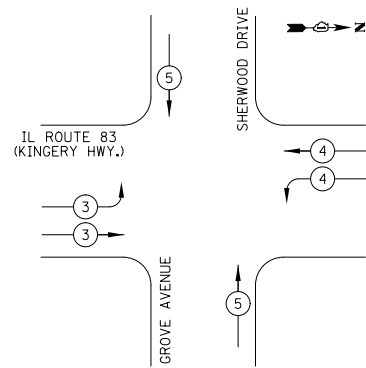
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2013-063TS	DUPAGE	68	29
CONTRACT NO. 60X35				
ILLINOIS FED. AID PROJECT				



**TEMPORARY CONTROLLER SEQUENCE**



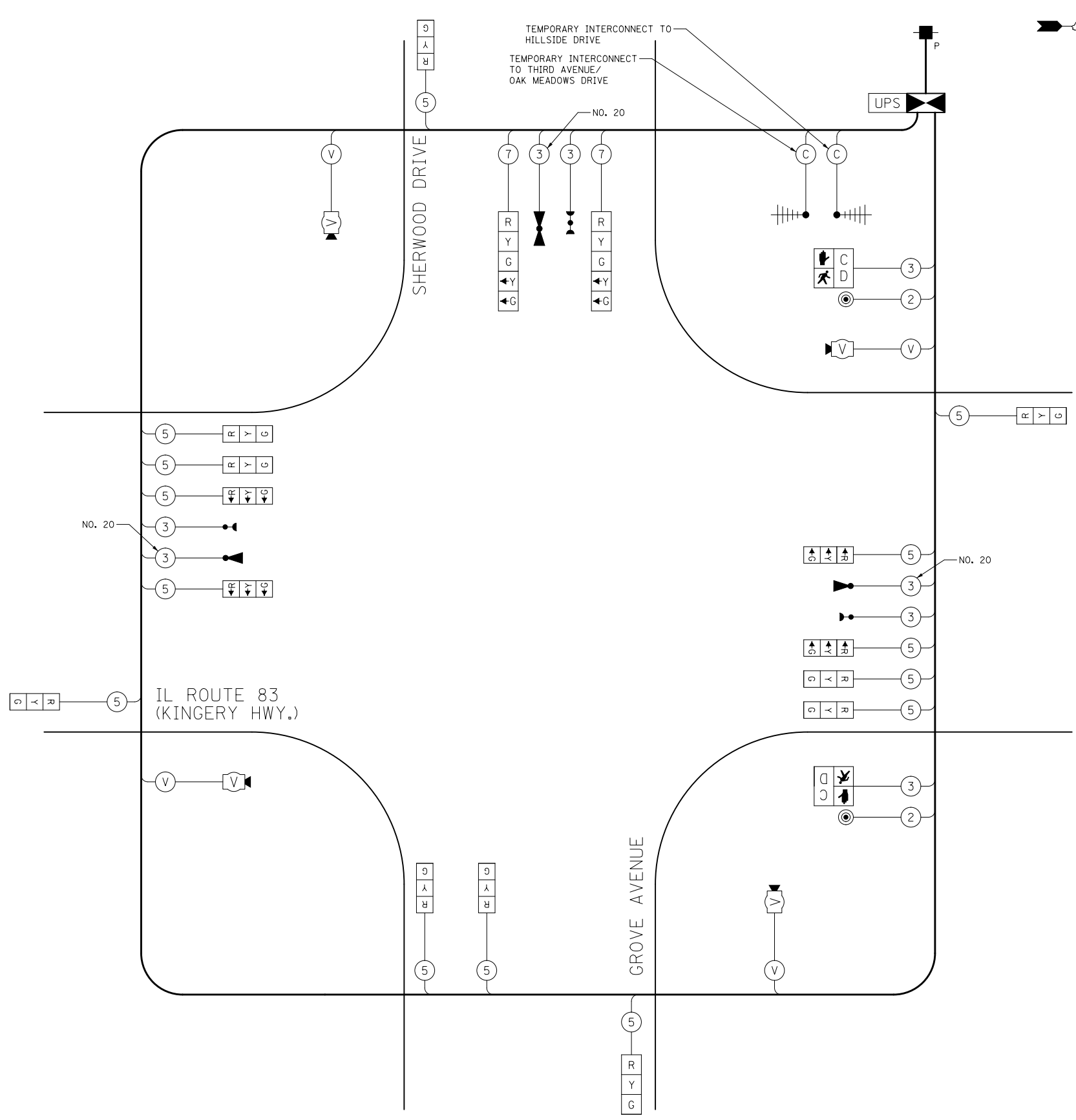
**TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE**



TEMPORARY EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT			

**LEGEND**

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



TEMPORARY CABLE PLAN  
NOT TO SCALE

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE		% OPERATION	
		INCAND.	LED		
SIGNAL (RED)	16		17	0.50	136
(YELLOW)	16		25	0.25	100
(GREEN)	16		15	0.25	60
ARROW	4		12	0.10	5
PED. SIGNAL	2		25	1.00	50
CONTROLLER	1		100	1.00	100
VIDEO SYSTEM	1		150	1.00	150
FLASHER				0.50	
TOTAL =					541

ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION  
201 WEST CENTER COURT  
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY: CONTACT: TED ZAWISLAK  
PHONE: (630) 691-4861  
COMPANY: COM ED

USER NAME = jrt	DESIGNED - BRD	REVISED -
PLOT SCALE = 40.0000' / in.	DRAWN - JRT	REVISED -
PLOT DATE = 1/29/2014	CHECKED - JJE	REVISED -
	DATE - 01/30/2014	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION DIAGRAM,  
AND TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE  
IL ROUTE 83 (KINGERY HWY.) AT GROVE AVENUE / SHERWOOD DRIVE**

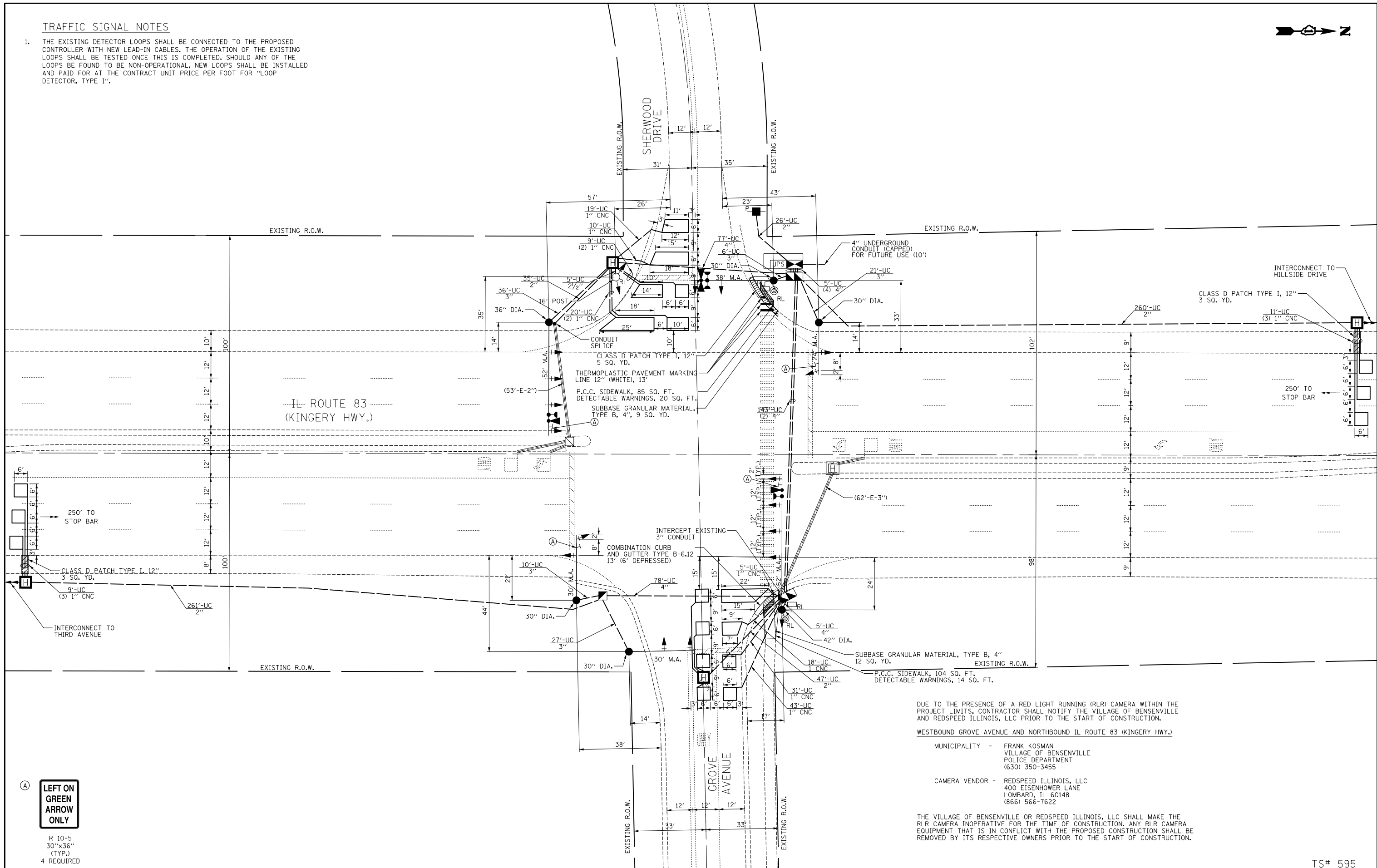
F.A.P. RTE. 344	SECTION 2013-063TS	COUNTY	TOTAL SHEETS 68	SHEET NO. 30
			CONTRACT NO. 60X35	
ILLINOIS FED. AID PROJECT				

TS# 595



**TRAFFIC SIGNAL NOTES**

- THE EXISTING DETECTOR LOOPS SHALL BE CONNECTED TO THE PROPOSED CONTROLLER WITH NEW LEAD-IN CABLES. THE OPERATION OF THE EXISTING LOOPS SHALL BE TESTED ONCE THIS IS COMPLETED. SHOULD ANY OF THE LOOPS BE FOUND TO BE NON-OPERATIONAL, NEW LOOPS SHALL BE INSTALLED AND PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR "LOOP DETECTOR, TYPE 1".



DUE TO THE PRESENCE OF A RED LIGHT RUNNING (RLR) CAMERA WITHIN THE PROJECT LIMITS, CONTRACTOR SHALL NOTIFY THE VILLAGE OF BENSenville AND REDSPEED ILLINOIS, LLC PRIOR TO THE START OF CONSTRUCTION.

WESTBOUND GROVE AVENUE AND NORTHBOUND IL ROUTE 83 (KINGERY HWY.)

MUNICIPALITY - FRANK KOSMAN  
VILLAGE OF BENSenville  
POLICE DEPARTMENT  
(630) 350-3455

CAMERA VENDOR - REDSPEED ILLINOIS, LLC  
400 EISENHOWER LANE  
LOMBARD, IL 60148  
(866) 566-7622

THE VILLAGE OF BENSenville OR REDSPEED ILLINOIS, LLC SHALL MAKE THE RLR CAMERA INOPERATIVE FOR THE TIME OF CONSTRUCTION. ANY RLR CAMERA EQUIPMENT THAT IS IN CONFLICT WITH THE PROPOSED CONSTRUCTION SHALL BE REMOVED BY ITS RESPECTIVE OWNERS PRIOR TO THE START OF CONSTRUCTION.

**(A) LEFT ON GREEN ARROW ONLY**  
R 10-5  
30"x36"  
(TYP.)  
4 REQUIRED

TS# 595



USER NAME = jrt	DESIGNED - BRD	REVISED -
	DRAWN - JRT	REVISED -
PLOT SCALE = 40.0000' / in.	CHECKED - JJE	REVISED -
PLOT DATE = 1/29/2014	DATE - 01/30/2014	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

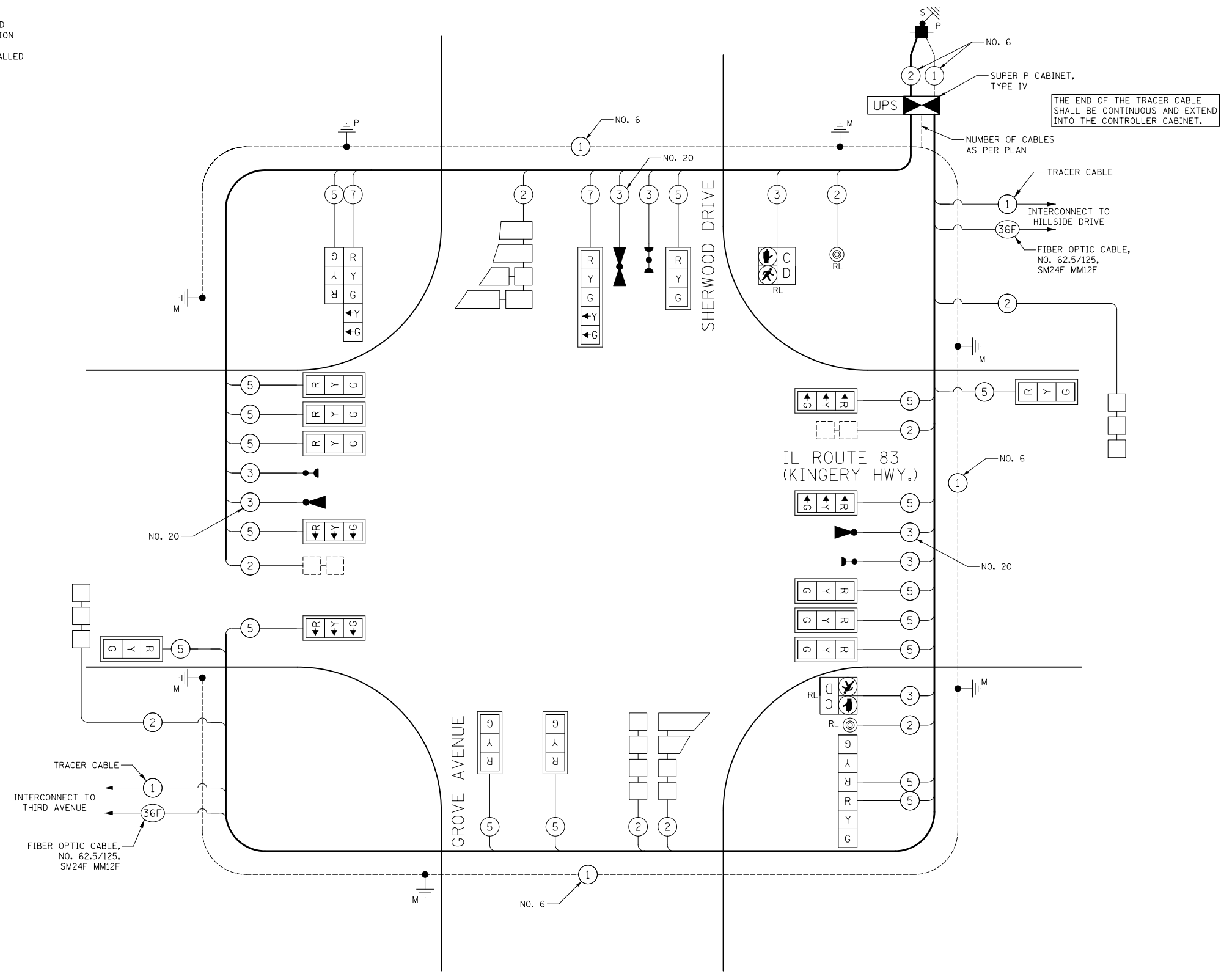
**TRAFFIC SIGNAL MODERNIZATION PLAN  
IL ROUTE 83 (KINGERY HWY.) AT GROVE AVENUE /SHERWOOD DRIVE**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2013-063TS	DUPAGE	68	31
<b>CONTRACT NO. 60X35</b>				
ILLINOIS FED. AID PROJECT				

CABLE PLAN NOTES

- THE EXISTING DETECTOR LOOPS SHALL BE CONNECTED TO THE PROPOSED CONTROLLER WITH INSTALLATION OF NEW LEAD-IN CABLES. THE OPERATION OF THE EXISTING LOOPS SHALL THEN BE TESTED. SHOULD ANY OF THE LOOPS BE FOUND TO BE NON-OPERATIONAL, NEW LOOPS SHALL BE INSTALLED AND PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR "LOOP DETECTOR, TYPE 1".



I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE		% OPERATION	
		INCAND.	LED		
SIGNAL (RED)	20		17	0.50	170
(YELLOW)	20		25	0.25	125
(GREEN)	20		15	0.25	75
ARROW	4		12	0.10	5
PED. SIGNAL	2		25	1.00	50
CONTROLLER	1		100	1.00	100
TOTAL =					525
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					
ENERGY SUPPLY: CONTACT: TED ZAWISLAK PHONE: (630) 691-4861 COMPANY: COM ED					

CABLE PLAN  
NOT TO SCALE

TS# 595

	USER NAME = jrt	DESIGNED - BRD	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>CABLE PLAN</b> <b>IL ROUTE 83 (KINGERY HWY.) AT GROVE AVENUE /SHERWOOD DRIVE</b>		F.A.P. RTE. 344	SECTION 2013-063TS	COUNTY	TOTAL SHEETS 68	SHEET NO. 32
	PLOT SCALE = 40.0000' / in.	CHECKED - JJE	REVISED -		NOT TO SCALE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	CONTRACT NO. 60X35 ILLINOIS FED. AID PROJECT			
	PLOT DATE = 1/29/2014	DATE - 01/30/2014	REVISED -								

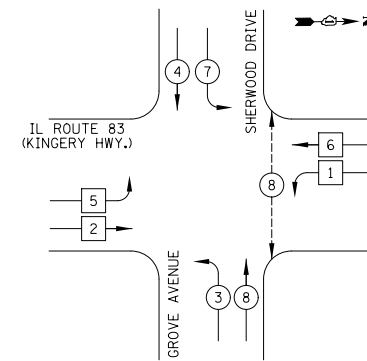


SCHEDULE OF QUANTITIES

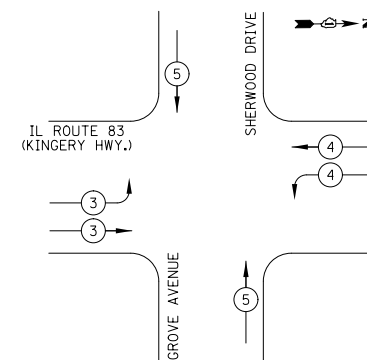
PAY ITEM	UNIT	QNTY.
SUBBASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	21
PROTECTIVE COAT	SQ YD	24
PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH	SQ FT	189
DETECTABLE WARNINGS	SQ FT	34
COMBINATION CURB AND GUTTER REMOVAL	FOOT	13
SIDEWALK REMOVAL	SQ FT	76
CLASS D PATCHES, TYPE I, 12 INCH	SQ YD	11
COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	13
ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	2
CHANGEABLE MESSAGE SIGN	CAL MO	1
SIGN PANEL - TYPE 1	SQ FT	30
SIGN PANEL - TYPE 2	SQ FT	68
THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	13
PAVEMENT MARKING REMOVAL	SQ FT	13
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	629
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	5
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	100
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	476
HANDHOLE	EACH	1
HEAVY-DUTY HANDHOLE	EACH	4
DOUBLE HANDHOLE	EACH	2
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	234
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	817
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	3899
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	219
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1784
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	46
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	760
STEEL MAST ARM ASSEMBLY AND POLE 24 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE 30 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE 38 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE 52 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE 62 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	4
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	51
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	15
CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	21
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	15
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	1
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	1
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	16
INDUCTIVE LOOP DETECTOR	EACH	7
DETECTOR LOOP, TYPE I	FOOT	818
* LIGHT DETECTOR	EACH	3
* LIGHT DETECTOR AMPLIFIER	EACH	1
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
RELOCATE EXISTING PEDESTRIAN SIGNAL HEAD	EACH	2
RELOCATE EXISTING PEDESTRIAN PUSH-BUTTON	EACH	2
RELOCATE EXISTING TRAFFIC SIGNAL POST	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1358
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	8
REMOVE EXISTING DOUBLE HANDHOLE	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	11
* EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	566
CONDUIT SPLICE	EACH	1
** FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
UNINTERRUPTABLE POWER SUPPLY SPECIAL	EACH	1
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
TRAINEES	HOURS	170

\* 100% COST TO THE VILLAGE OF BENSENVILLE  
 \*\* SUPER P CABINET

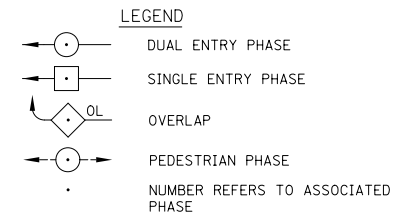
PROPOSED CONTROLLER SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT			



TS# 595

**TEMPORARY TRAFFIC SIGNAL NOTES**

- 73' OF THIS CONDUIT RUN SHALL BE CAPPED AND MAINTAINED FOR USE IN THE PERMANENT TRAFFIC SIGNAL INSTALLATION. EXISTING CABLES SHALL BE REMOVED FROM THE CONDUIT.
- 61' OF THIS CONDUIT RUN SHALL BE CAPPED AND MAINTAINED FOR USE IN THE PERMANENT TRAFFIC SIGNAL INSTALLATION. EXISTING CABLES SHALL BE REMOVED FROM THE CONDUIT.
- THESE SIGNAL POSTS SHALL BE RELOCATED TO THE PROPOSED TRAFFIC SIGNAL INSTALLATION.

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.

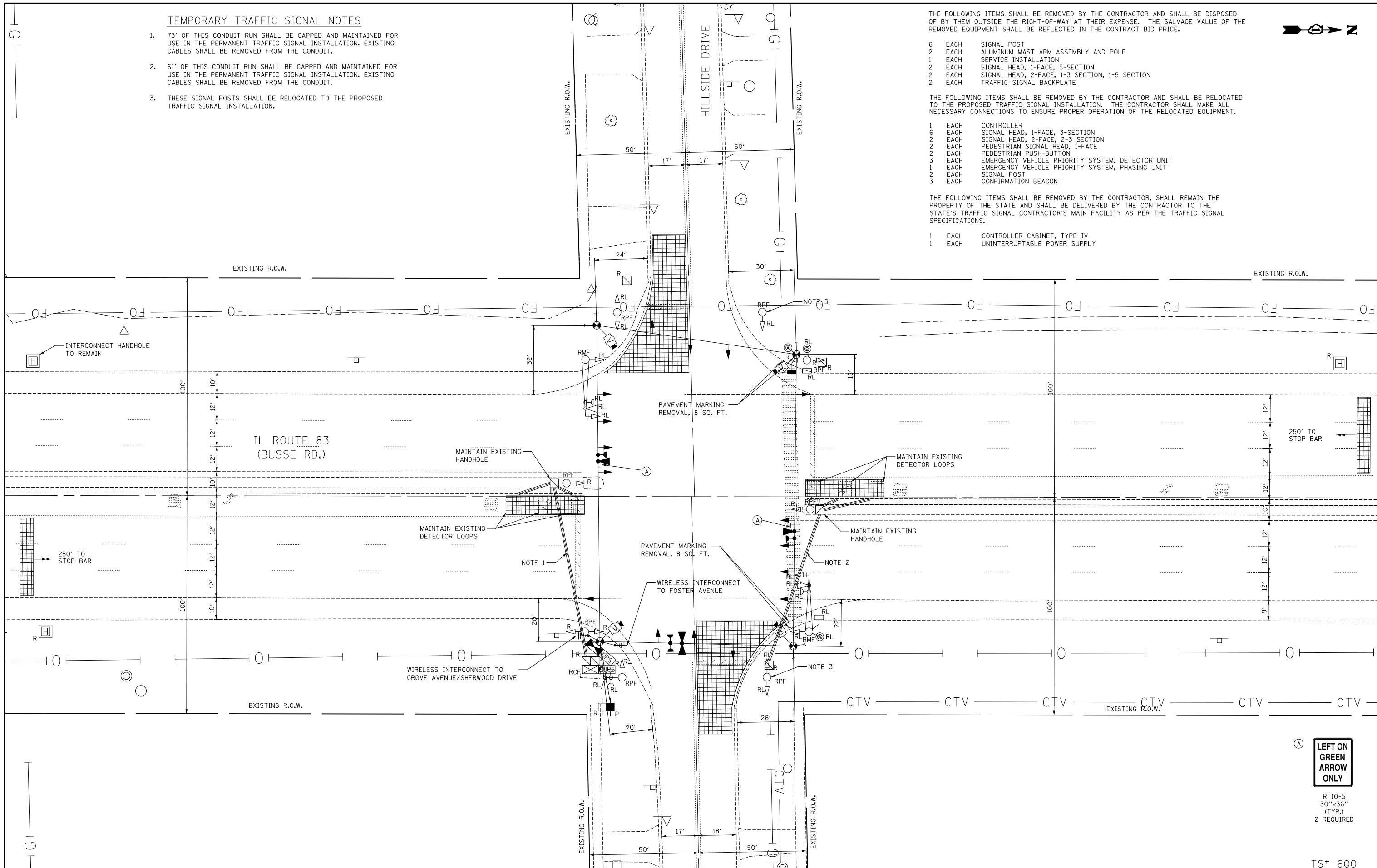
- 6 EACH SIGNAL POST
- 2 EACH ALUMINUM MAST ARM ASSEMBLY AND POLE
- 1 EACH SERVICE INSTALLATION
- 2 EACH SIGNAL HEAD, 1-FACE, 5-SECTION
- 2 EACH SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION
- 2 EACH TRAFFIC SIGNAL BACKPLATE

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE RELOCATED TO THE PROPOSED TRAFFIC SIGNAL INSTALLATION. THE CONTRACTOR SHALL MAKE ALL NECESSARY CONNECTIONS TO ENSURE PROPER OPERATION OF THE RELOCATED EQUIPMENT.

- 1 EACH CONTROLLER
- 6 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 2 EACH SIGNAL HEAD, 2-FACE, 2-3 SECTION
- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 2 EACH PEDESTRIAN PUSH-BUTTON
- 3 EACH EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT
- 1 EACH EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT
- 2 EACH SIGNAL POST
- 3 EACH CONFIRMATION BEACON

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE STATE AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE STATE'S TRAFFIC SIGNAL CONTRACTOR'S MAIN FACILITY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

- 1 EACH CONTROLLER CABINET, TYPE IV
- 1 EACH UNINTERRUPTIBLE POWER SUPPLY



**A LEFT ON GREEN ARROW ONLY**

R 10-5  
30"x36"  
(TYP.)  
2 REQUIRED

TS# 600



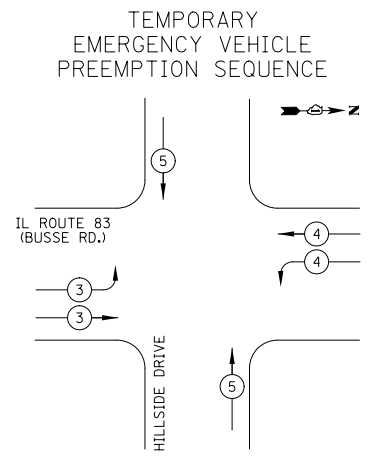
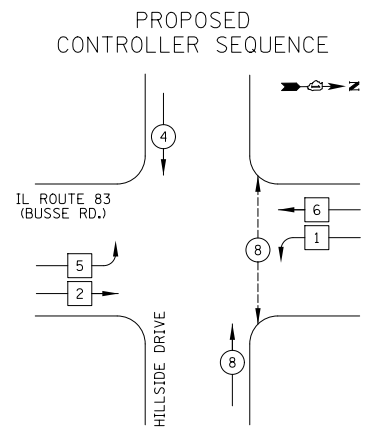
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	DRAWN - JRT	REVISED -
PLOT SCALE = 40.0000' / in.	CHECKED - JJE	REVISED -
PLOT DATE = 1/29/2014	DATE - 01/30/2014	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

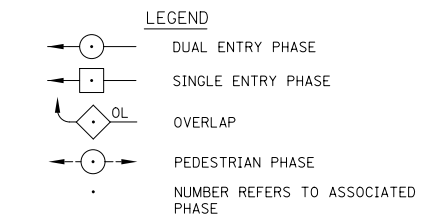
**TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVAL PLAN  
IL ROUTE 83 (BUSSE RD.) AT HILLSIDE DRIVE**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2013-063TS	DUPAGE	68	34
<b>CONTRACT NO. 60X35</b>				
ILLINOIS FED. AID PROJECT				



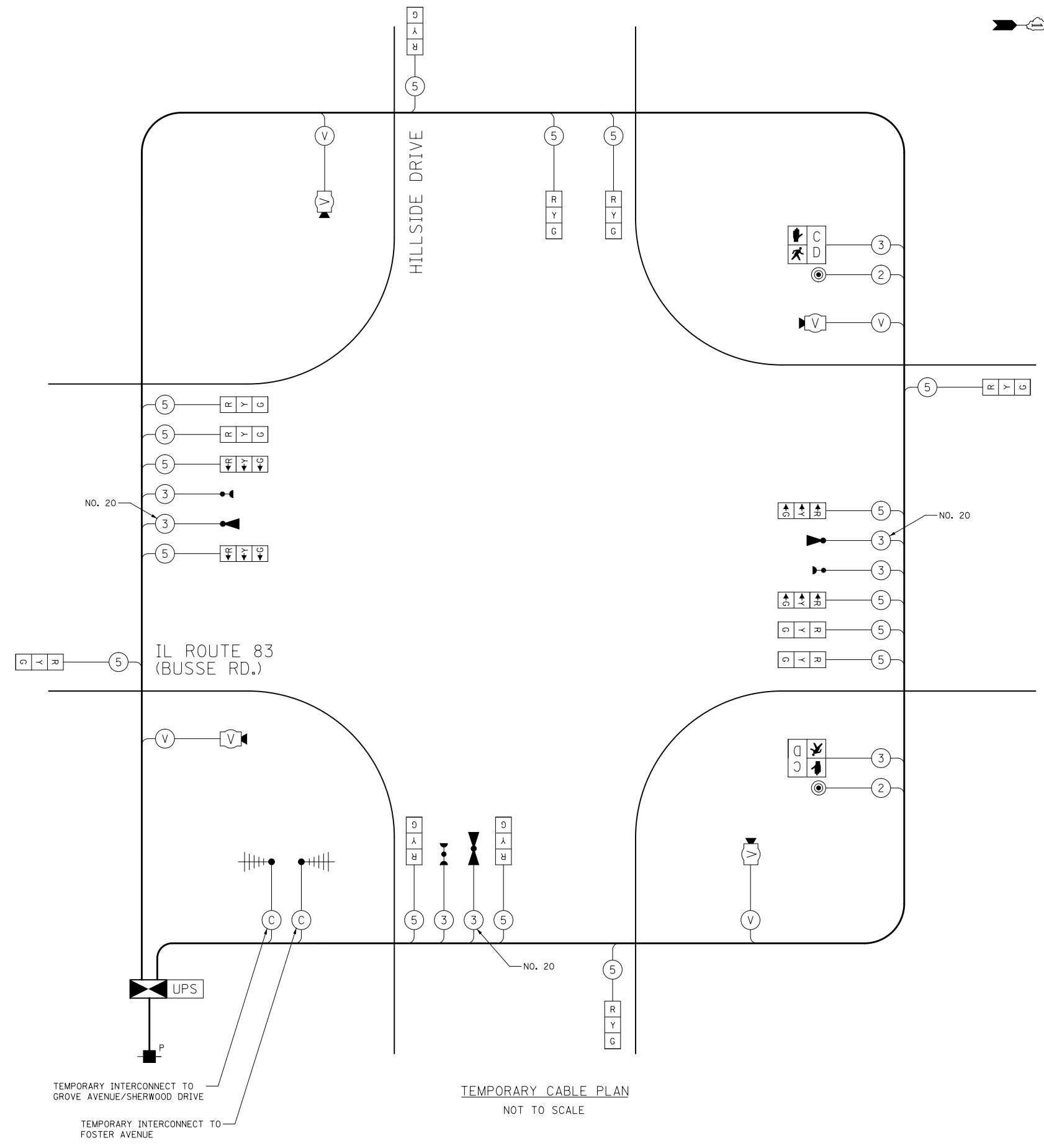
TEMPORARY EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT			



I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE		% OPERATION	
SIGNAL (RED)	16	INCAND.	17	0.50	136
(YELLOW)	16		25	0.25	100
(GREEN)	16		15	0.25	60
ARROW	0		12	0.10	0
PED. SIGNAL	2		25	1.00	50
CONTROLLER	1		100	1.00	100
VIDEO SYSTEM	1		150	1.00	150
TOTAL =					596

ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION  
201 WEST CENTER COURT  
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY: CONTACT: TED ZAWISLAK  
PHONE: (630) 691-4861  
COMPANY: COM ED



TEMPORARY CABLE PLAN  
NOT TO SCALE

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION DIAGRAM,  
AND TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE  
IL ROUTE 83 (BUSSE RD.) AT HILLSIDE DRIVE**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2013-063TS	DUPAGE	68	35
CONTRACT NO. 60X35				

ILLINOIS FED. AID PROJECT



USER NAME = jrt  
DESIGNED - BRD  
DRAWN - JRT  
CHECKED - JJE  
PLOT SCALE = 40.0000' / in.  
PLOT DATE = 1/29/2014

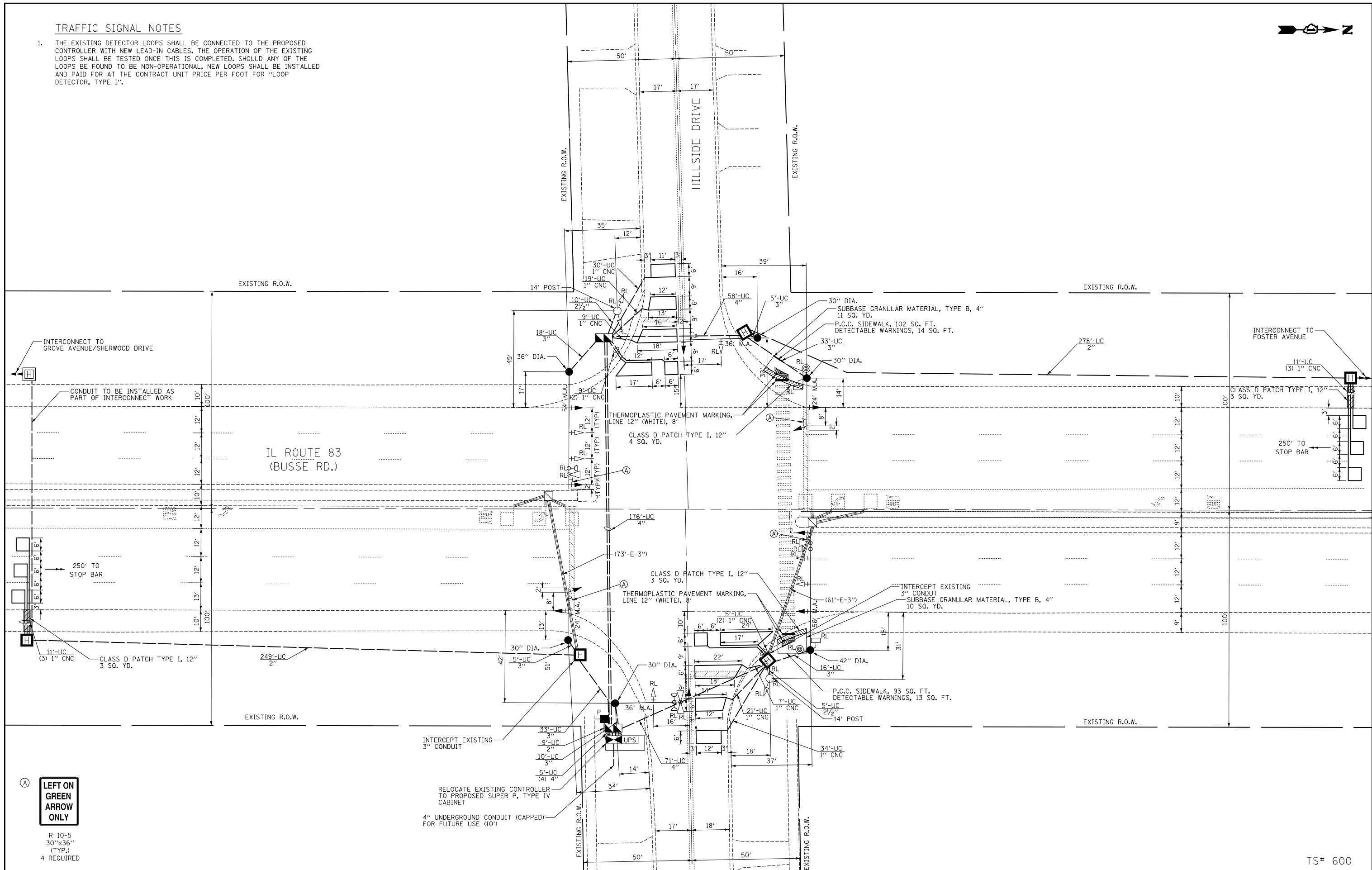
REVISIED -  
REVISIED -  
REVISIED -  
REVISIED -  
DATE - 01/30/2014

NOT TO SCALE | SHEET NO. 1 OF 1 SHEETS | STA. TO STA.

TS# 600

**TRAFFIC SIGNAL NOTES**

- THE EXISTING DETECTOR LOOPS SHALL BE CONNECTED TO THE PROPOSED CONTROLLER WITH NEW LEAD-IN CABLES. THE OPERATION OF THE EXISTING LOOPS SHALL BE TESTED ONCE THIS IS COMPLETED. SHOULD ANY OF THE LOOPS BE FOUND TO BE NON-OPERATIONAL, NEW LOOPS SHALL BE INSTALLED AND PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR "LOOP DETECTOR, TYPE 1".



**A** LEFT ON GREEN ARROW ONLY

R 10-5  
30"x36"  
(TYP.)  
4 REQUIRED



USER NAME = jrt	DESIGNED - BRD	REVISED -
	DRAWN - JRT	REVISED -
PLOT SCALE = 40.0000' / in.	CHECKED - JJE	REVISED -
PLOT DATE = 1/29/2014	DATE - 01/30/2014	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL MODERNIZATION PLAN  
IL ROUTE 83 (BUSSE RD.) AT HILLSIDE DRIVE**

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

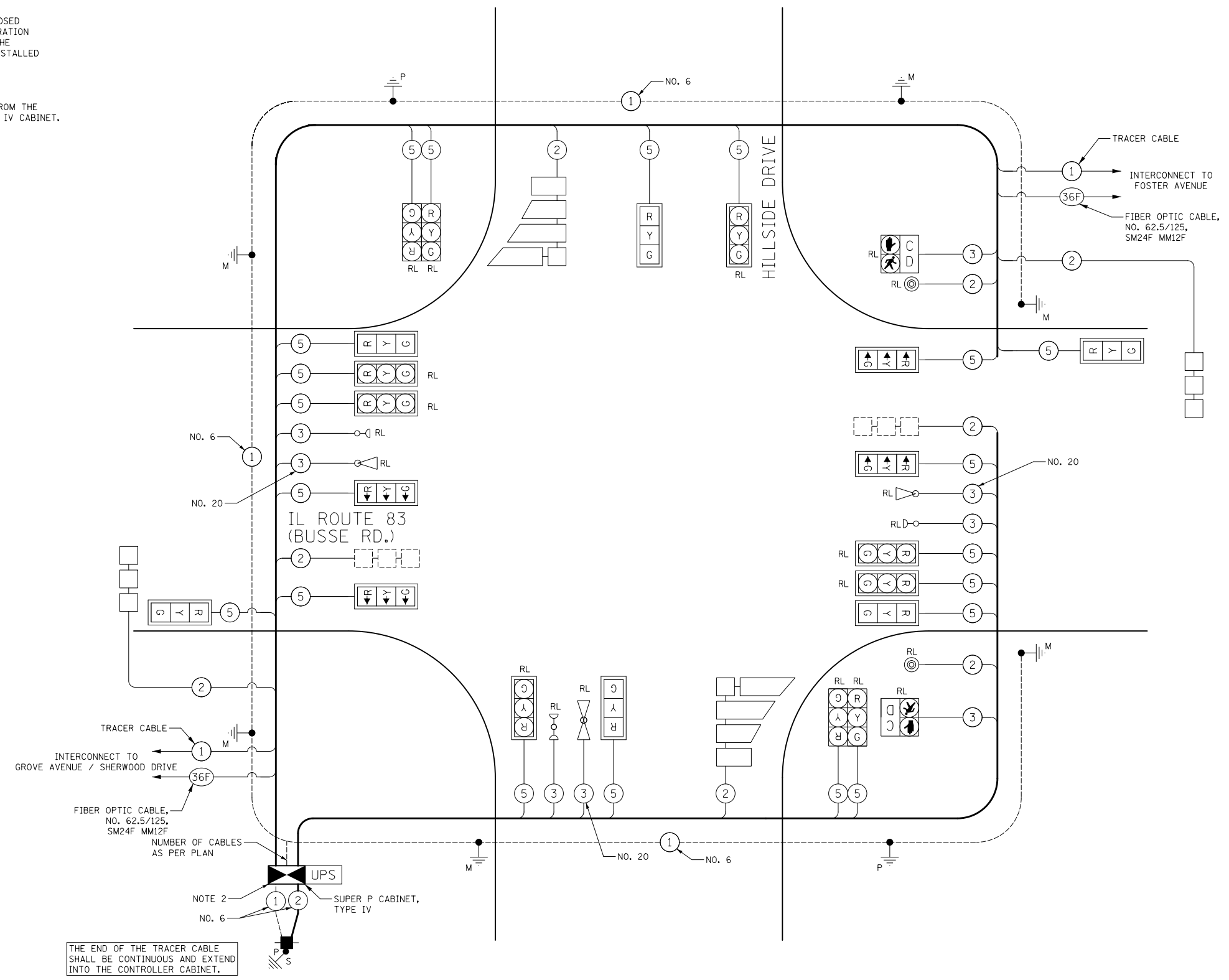
F.A.P. RTE. 344	SECTION 2013-063TS	COUNTY DUPAGE	TOTAL SHEETS 68	SHEET NO. 36
CONTRACT NO. 60X35				
ILLINOIS FED. AID PROJECT				

TS# 600



**CABLE PLAN NOTES**

1. THE EXISTING DETECTOR LOOPS SHALL BE CONNECTED TO THE PROPOSED CONTROLLER WITH INSTALLATION OF NEW LEAD-IN CABLES. THE OPERATION OF THE EXISTING LOOPS SHALL THEN BE TESTED. SHOULD ANY OF THE LOOPS BE FOUND TO BE NON-OPERATIONAL, NEW LOOPS SHALL BE INSTALLED AND PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR "LOOP DETECTOR, TYPE I".
2. THE EXISTING TRAFFIC SIGNAL CONTROLLER SHALL BE RELOCATED FROM THE EXISTING CONTROLLER CABINET TO THE PROPOSED SUPER "P", TYPE IV CABINET.



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

CABLE PLAN  
NOT TO SCALE

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	% OPERATION	
SIGNAL (RED)	20		17	0.50	170
(YELLOW)	20		25	0.25	125
(GREEN)	20		15	0.25	75
ARROW	0		12	0.10	0
PED. SIGNAL	2		25	1.00	50
CONTROLLER	1		100	1.00	100
TOTAL =					520
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					
ENERGY SUPPLY: CONTACT: TED ZAWISLAK PHONE: (630) 691-4861 COMPANY: COM ED					

NUMBER OF CABLES AS PER PLAN

NOTE 2  
NO. 6

UPS  
SUPER P CABINET,  
TYPE IV



USER NAME = jrt	DESIGNED - BRD	REVISED -
PLOT SCALE = 40.0000' / in.	DRAWN - JRT	REVISED -
PLOT DATE = 1/29/2014	CHECKED - JJE	REVISED -
	DATE - 01/30/2014	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CABLE PLAN IL ROUTE 83 (BUSSE RD.) AT HILLSIDE DRIVE	
NOT TO SCALE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE. 344	SECTION 2013-063TS	COUNTY	TOTAL SHEETS 68	SHEET NO. 37
CONTRACT NO. 60X35				
ILLINOIS FED. AID PROJECT				

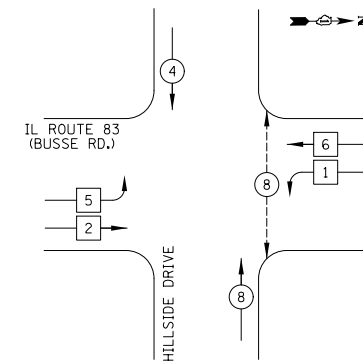
TS# 600

SCHEDULE OF QUANTITIES

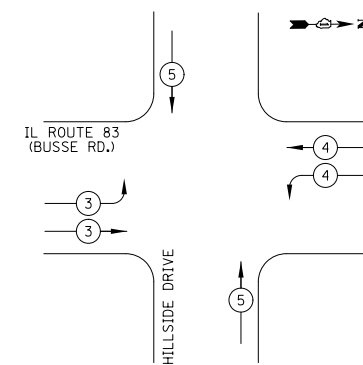
PAY ITEM	UNIT	QNTY.
SUBBASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	22
PROTECTIVE COAT	SQ YD	22
PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH	SQ FT	195
DETECTABLE WARNINGS	SQ FT	27
CLASS D PATCHES, TYPE 1, 12 INCH	SQ YD	13
ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	2
CHANGEABLE MESSAGE SIGN	CAL MO	1
SIGN PANEL - TYPE 1	SQ FT	45
SIGN PANEL - TYPE 2	SQ FT	23
THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	16
PAVEMENT MARKING REMOVAL	SQ FT	16
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	536
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	15
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	121
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	511
HEAVY-DUTY HANDHOLE	EACH	5
DOUBLE HANDHOLE	EACH	2
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	447
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1048
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	4341
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1499
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	29
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	828
STEEL MAST ARM ASSEMBLY AND POLE 24 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE 36 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE 54 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE 56 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	8
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	47
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	15
CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	21
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	10
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	16
INDUCTIVE LOOP DETECTOR	EACH	6
DETECTOR LOOP, TYPE I	FOOT	697
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
RELOCATE EXISTING SIGNAL HEAD	EACH	8
RELOCATE EXISTING PEDESTRIAN SIGNAL HEAD	EACH	2
RELOCATE EXISTING PEDESTRIAN PUSH-BUTTON	EACH	2
RELOCATE EXISTING TRAFFIC SIGNAL CONTROLLER	EACH	1
RELOCATE EXISTING TRAFFIC SIGNAL POST	EACH	2
* RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	3
* RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
MODIFY EXISTING CONTROLLER	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1641
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	5
REMOVE EXISTING DOUBLE HANDHOLE	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	11
* EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	587
UNINTERRUPTABLE POWER SUPPLY SPECIAL	EACH	1
** CONTROLLER CABINET, TYPE IV, SPECIAL	EACH	1
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
TRAINEES	HOURS	170

\* 100% COST TO THE VILLAGE OF BENSENVILLE  
 \*\* SUPER P CABINET

PROPOSED CONTROLLER SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT			

LEGEND

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

TS# 600

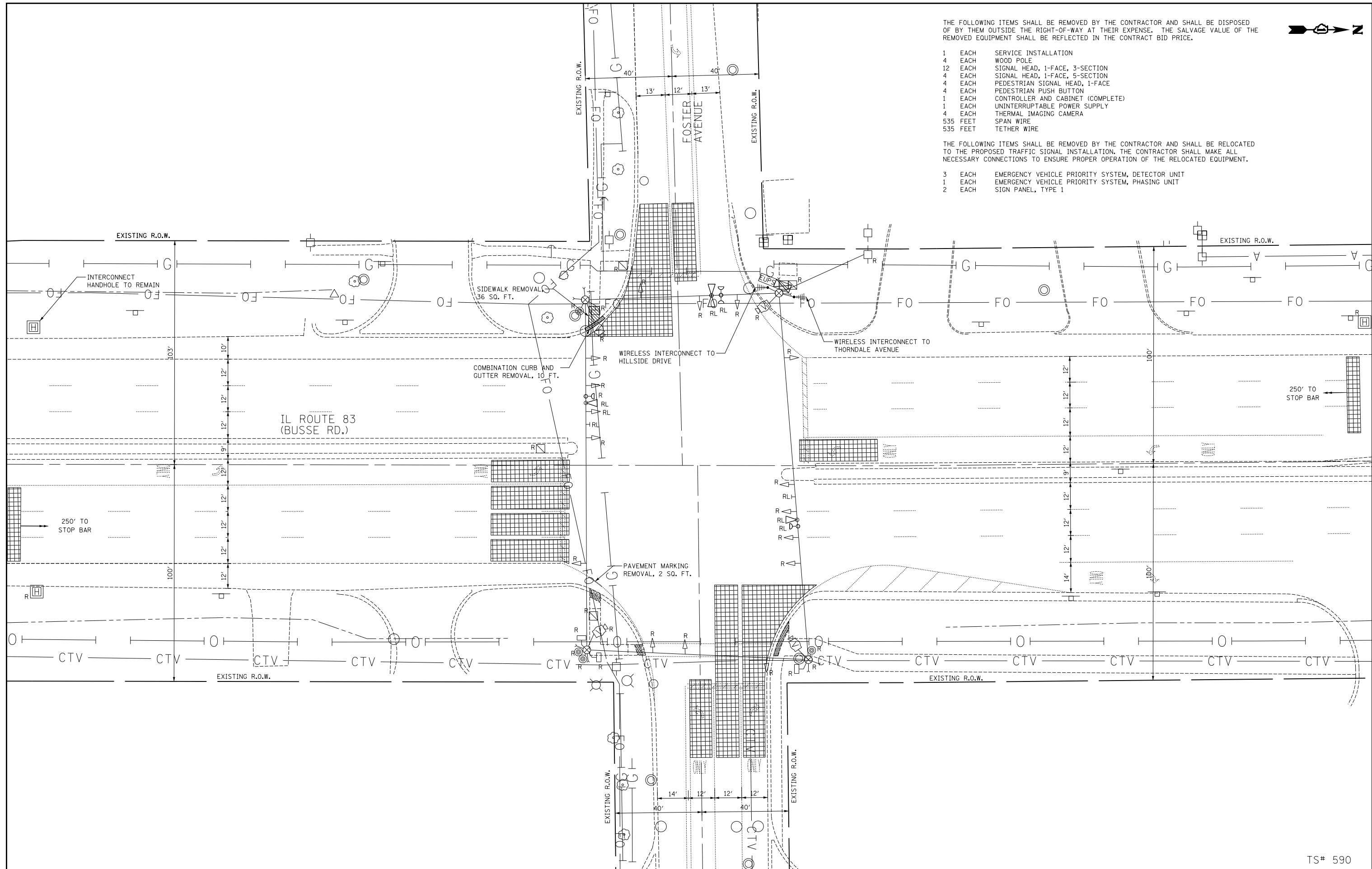


THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 1 EACH SERVICE INSTALLATION
- 4 EACH WOOD POLE
- 12 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 4 EACH SIGNAL HEAD, 1-FACE, 5-SECTION
- 4 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 4 EACH PEDESTRIAN PUSH BUTTON
- 1 EACH CONTROLLER AND CABINET (COMPLETED)
- 1 EACH UNINTERRUPTIBLE POWER SUPPLY
- 4 EACH THERMAL IMAGING CAMERA
- 535 FEET SPAN WIRE
- 535 FEET TETHER WIRE

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE RELOCATED TO THE PROPOSED TRAFFIC SIGNAL INSTALLATION. THE CONTRACTOR SHALL MAKE ALL NECESSARY CONNECTIONS TO ENSURE PROPER OPERATION OF THE RELOCATED EQUIPMENT.

- 3 EACH EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT
- 1 EACH EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT
- 2 EACH SIGN PANEL, TYPE 1



TS# 590



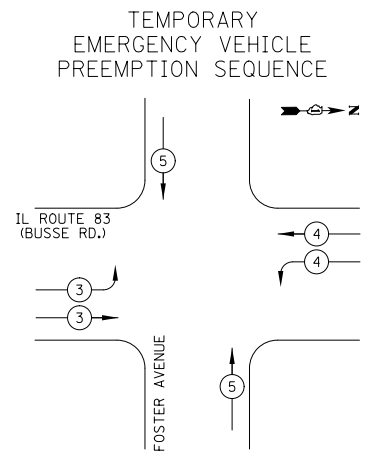
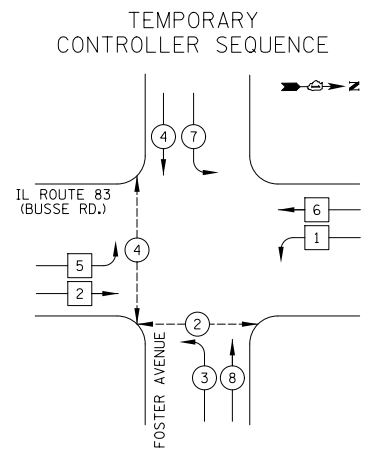
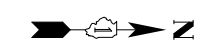
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	DRAWN - JRT	REVISED -
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PLOT DATE = 1/29/2014	DATE - 01/30/2014	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

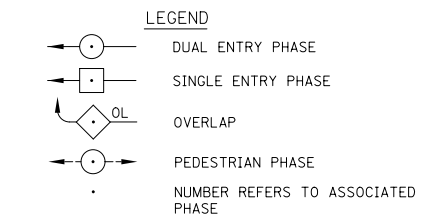
**TEMPORARY TRAFFIC SIGNAL REMOVAL PLAN  
IL ROUTE 83 (BUSSE RD.) AT FOSTER AVENUE**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2013-063TS	DUPAGE	68	39
<b>CONTRACT NO. 60X35</b>				
ILLINOIS FED. AID PROJECT				



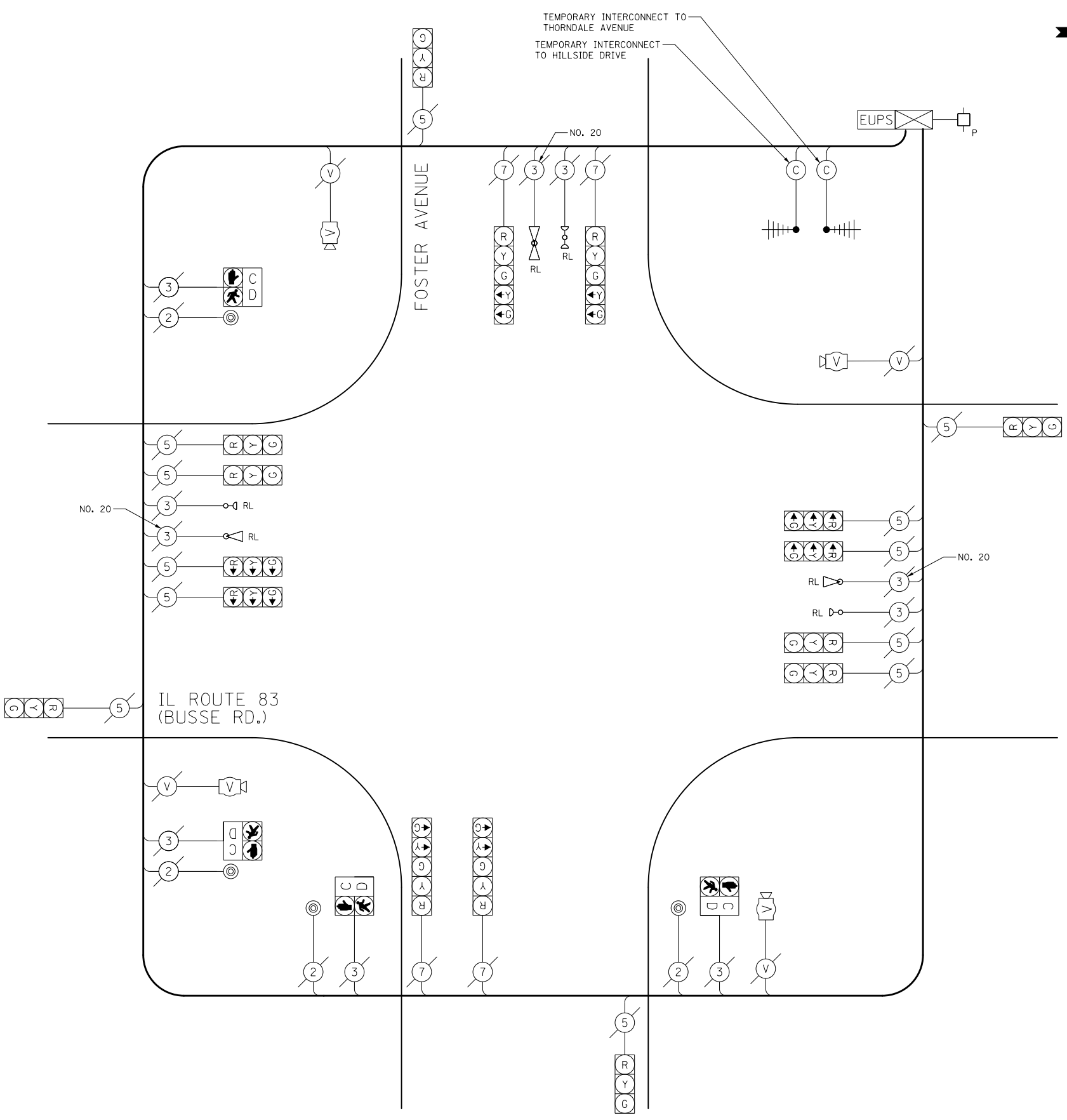
TEMPORARY EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT			



I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE		% OPERATION	
SIGNAL (RED)	16	INCAND.	17	0.50	136
(YELLOW)	16		25	0.25	100
(GREEN)	16		15	0.25	60
ARROW	8		12	0.10	10
PED. SIGNAL	4		25	1.00	100
CONTROLLER	1		100	1.00	100
VIDEO SYSTEM	1		150	1.00	150
TOTAL =					656

ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION  
201 WEST CENTER COURT  
SCHAUMBURG, IL 60196-1096

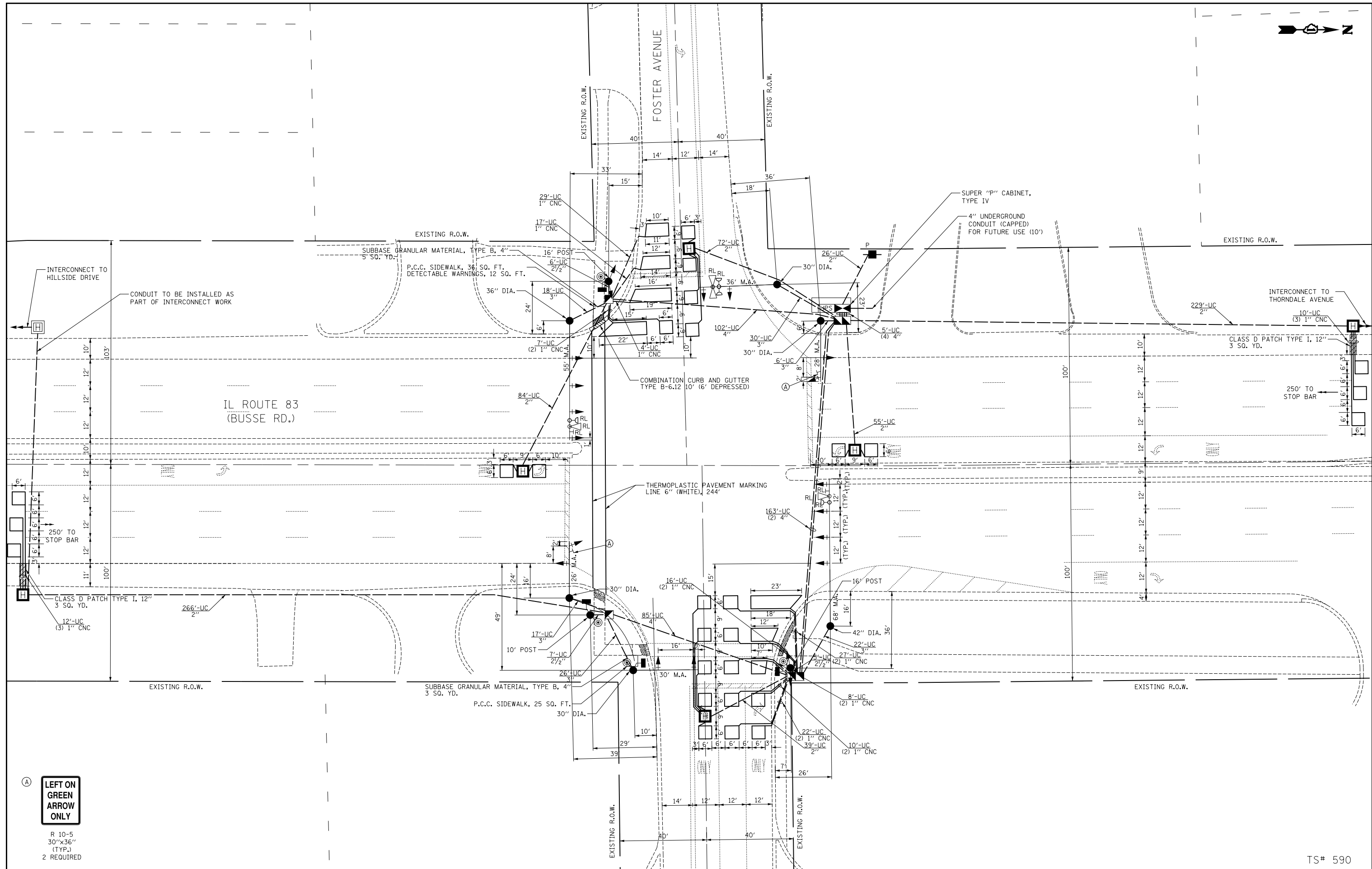
ENERGY SUPPLY: CONTACT: TED ZAWISLAK  
PHONE: (630) 691-4861  
COMPANY: COM ED



TEMPORARY CABLE PLAN  
NOT TO SCALE


TS# 590

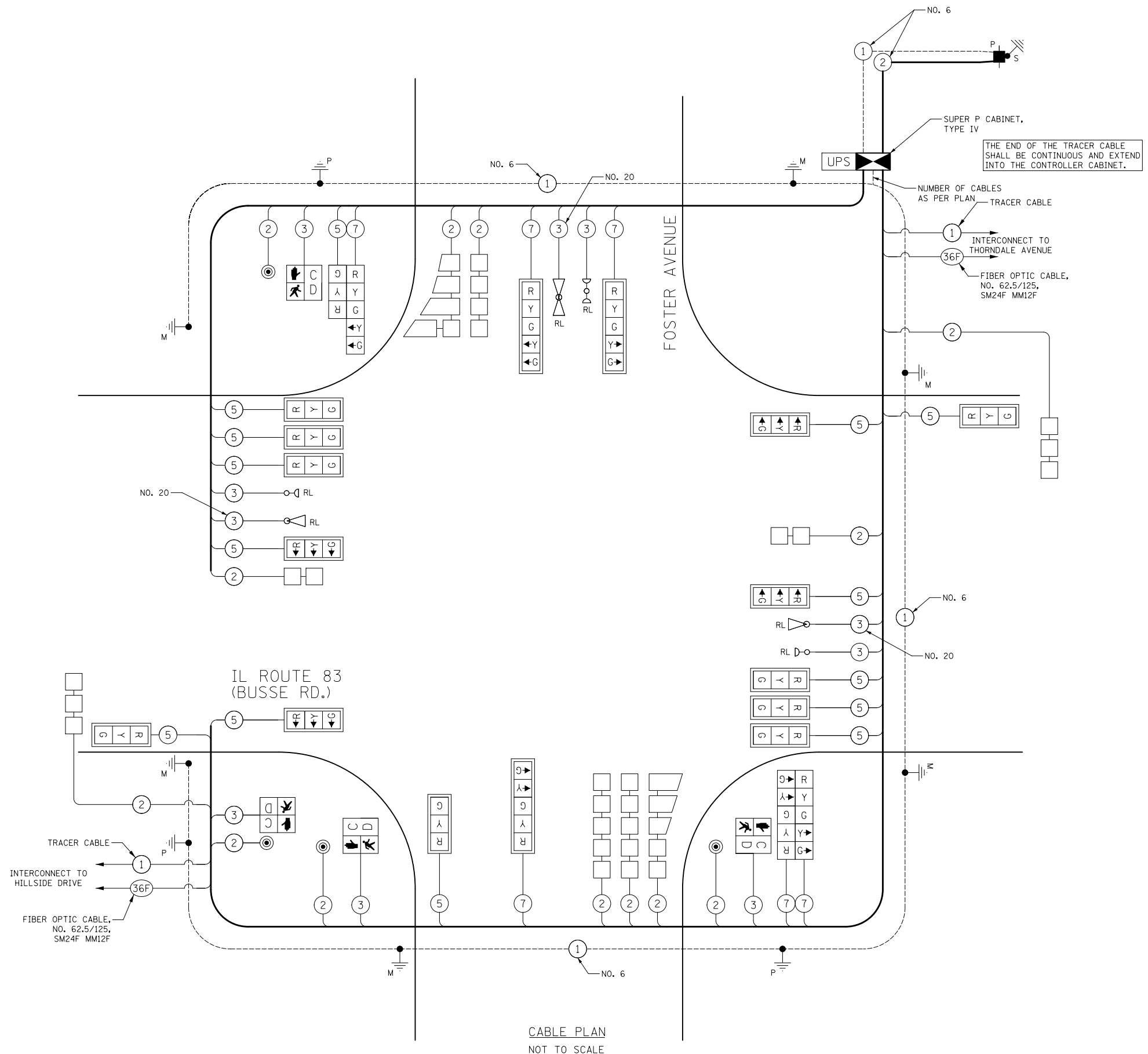




**A** LEFT ON GREEN ARROW ONLY  
 R 10-5  
 30"x36"  
 (TYP.)  
 2 REQUIRED

TS# 590

	USER NAME = jrt	DESIGNED - BRD	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC SIGNAL MODERNIZATION PLAN</b> <b>IL ROUTE 83 (BUSSE RD.) AT FOSTER AVENUE</b>	F.A.P. RTE. = 344	SECTION = 2013-063TS	COUNTY = DUPAGE	TOTAL SHEETS = 68	SHEET NO. = 41		
	PLOT SCALE = 40.0000' / in.	CHECKED - JJE	REVISED -			SCALE: 1" = 20'	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	<b>CONTRACT NO. 60X35</b>			
	PLOT DATE = 1/29/2014	DATE = 01/30/2014	REVISED -			ILLINOIS FED. AID PROJECT						



I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE		% OPERATION	
SIGNAL (RED)	20	INCAND.	17	0.50	170
(YELLOW)	20		25	0.25	125
(GREEN)	20		15	0.25	75
ARROW	12		12	0.10	14
PED. SIGNAL	4		25	1.00	100
CONTROLLER	1		100	1.00	100
TOTAL =					584
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					
ENERGY SUPPLY: CONTACT: TED ZAWISLAK PHONE: (630) 691-4861 COMPANY: COM ED					



USER NAME = jrt  
 DRAWN - JRT  
 CHECKED - JJE  
 DATE - 01/30/2014  
 PLOT SCALE = 40.0000' / in.  
 PLOT DATE = 1/29/2014

DESIGNED - BRD  
 DRAWN - JRT  
 CHECKED - JJE  
 DATE - 01/30/2014  
 REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**CABLE PLAN  
IL ROUTE 83 (BUSSE RD.) AT FOSTER AVENUE**  
 NOT TO SCALE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

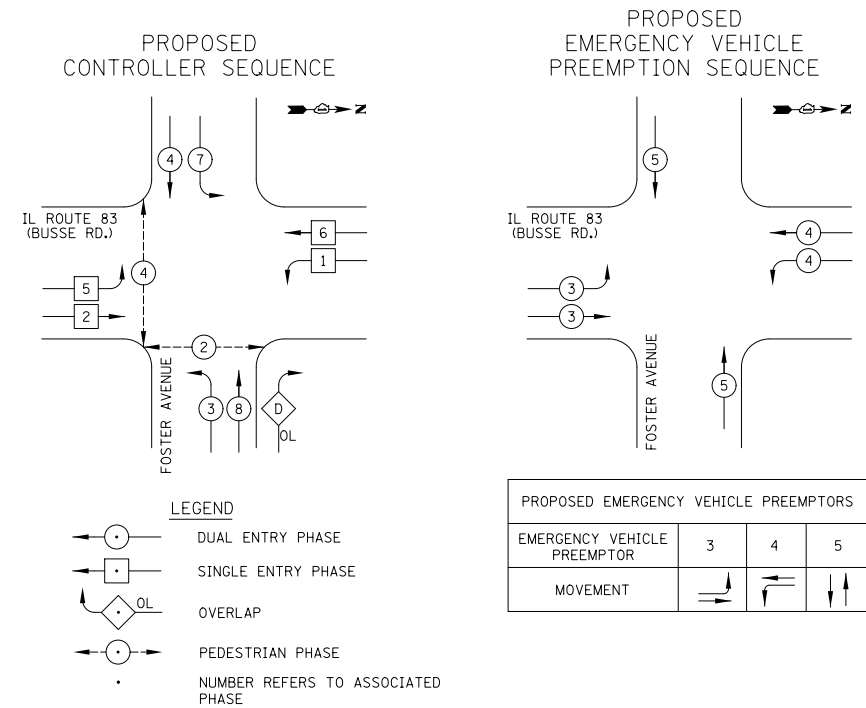
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2013-063TS	DUPAGE	68	42
CONTRACT NO. 60X35				
ILLINOIS FED. AID PROJECT				

TS# 590

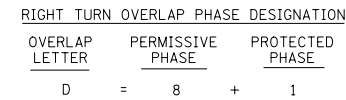
SCHEDULE OF QUANTITIES

PAY ITEM	UNIT	QNTY.
SUBBASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	7
PROTECTIVE COAT	SQ YD	9
PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH	SQ FT	61
DETECTABLE WARNINGS	SQ FT	12
COMBINATION CURB AND GUTTER REMOVAL	FOOT	10
SIDEWALK REMOVAL	SQ FT	36
CLASS D PATCHES, TYPE I, 12 INCH	SQ YD	6
COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	10
ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	2
CHANGEABLE MESSAGE SIGN	CAL MO	1
SIGN PANEL - TYPE 1	SQ FT	30
SIGN PANEL - TYPE 2	SQ FT	23
RELOCATE SIGN PANEL - TYPE 1	SQ FT	15
THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	244
PAVEMENT MARKING REMOVAL	SQ FT	2
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	771
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	18
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	119
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	543
HANDHOLE	EACH	2
HEAVY-DUTY HANDHOLE	EACH	6
DOUBLE HANDHOLE	EACH	2
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	998
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1671
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	3377
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1178
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1999
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	46
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	878
TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE 26 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE 28 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE 30 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE 36 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE 55 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE 68 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	12
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	47
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	15
CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	25
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	13
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	3
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 2-FACE, 5-SECTION BRACKET MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	16
INDUCTIVE LOOP DETECTOR	EACH	9
DETECTOR LOOP, TYPE I	FOOT	1331
PEDESTRIAN PUSH-BUTTON	EACH	4
* RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	3
* RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	5
REMOVE EXISTING DOUBLE HANDHOLE	EACH	1
* EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	645
TEMPORARY WIRELESS INTERCONNECT, COMPLETE	EACH	1
** FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
UNINTERRUPTABLE POWER SUPPLY SPECIAL	EACH	1
TEMPORARY INFORMATION SIGNING	SQ FT	26
TRAINEES	HOURS	170

\* 100% COST TO THE VILLAGE OF BENSENVILLE  
 \*\* SUPER P CABINET



PHASE DESIGNATION DIAGRAM



TS# 590

**TEMPORARY TRAFFIC SIGNAL NOTES**

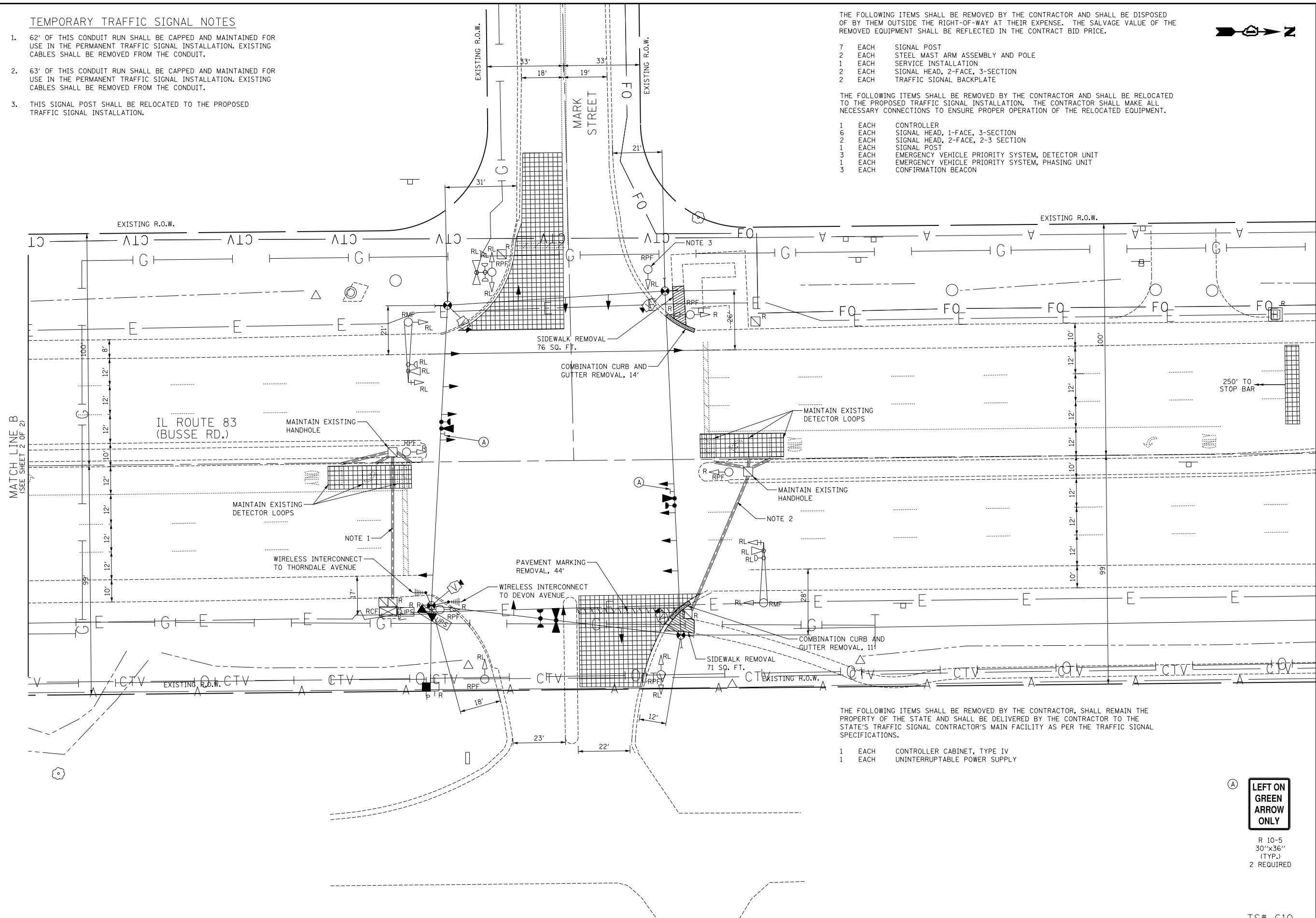
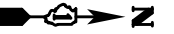
- 62' OF THIS CONDUIT RUN SHALL BE CAPPED AND MAINTAINED FOR USE IN THE PERMANENT TRAFFIC SIGNAL INSTALLATION. EXISTING CABLES SHALL BE REMOVED FROM THE CONDUIT.
- 63' OF THIS CONDUIT RUN SHALL BE CAPPED AND MAINTAINED FOR USE IN THE PERMANENT TRAFFIC SIGNAL INSTALLATION. EXISTING CABLES SHALL BE REMOVED FROM THE CONDUIT.
- THIS SIGNAL POST SHALL BE RELOCATED TO THE PROPOSED TRAFFIC SIGNAL INSTALLATION.

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.

- 7 EACH SIGNAL POST
- 2 EACH STEEL MAST ARM ASSEMBLY AND POLE
- 1 EACH SERVICE INSTALLATION
- 2 EACH SIGNAL HEAD, 2-FACE, 3-SECTION
- 2 EACH TRAFFIC SIGNAL BACKPLATE

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE RELOCATED TO THE PROPOSED TRAFFIC SIGNAL INSTALLATION. THE CONTRACTOR SHALL MAKE ALL NECESSARY CONNECTIONS TO ENSURE PROPER OPERATION OF THE RELOCATED EQUIPMENT.

- 1 EACH CONTROLLER
- 6 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 2 EACH SIGNAL HEAD, 2-FACE, 2-3 SECTION
- 1 EACH SIGNAL POST
- 3 EACH EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT
- 1 EACH EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT
- 3 EACH CONFIRMATION BEACON



THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE STATE AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE STATE'S TRAFFIC SIGNAL CONTRACTOR'S MAIN FACILITY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

- 1 EACH CONTROLLER CABINET, TYPE IV
- 1 EACH UNINTERRUPTABLE POWER SUPPLY

**LEFT ON GREEN ONLY**

R 10-5  
30"x36"  
(TYP.)  
2 REQUIRED

TS# 610



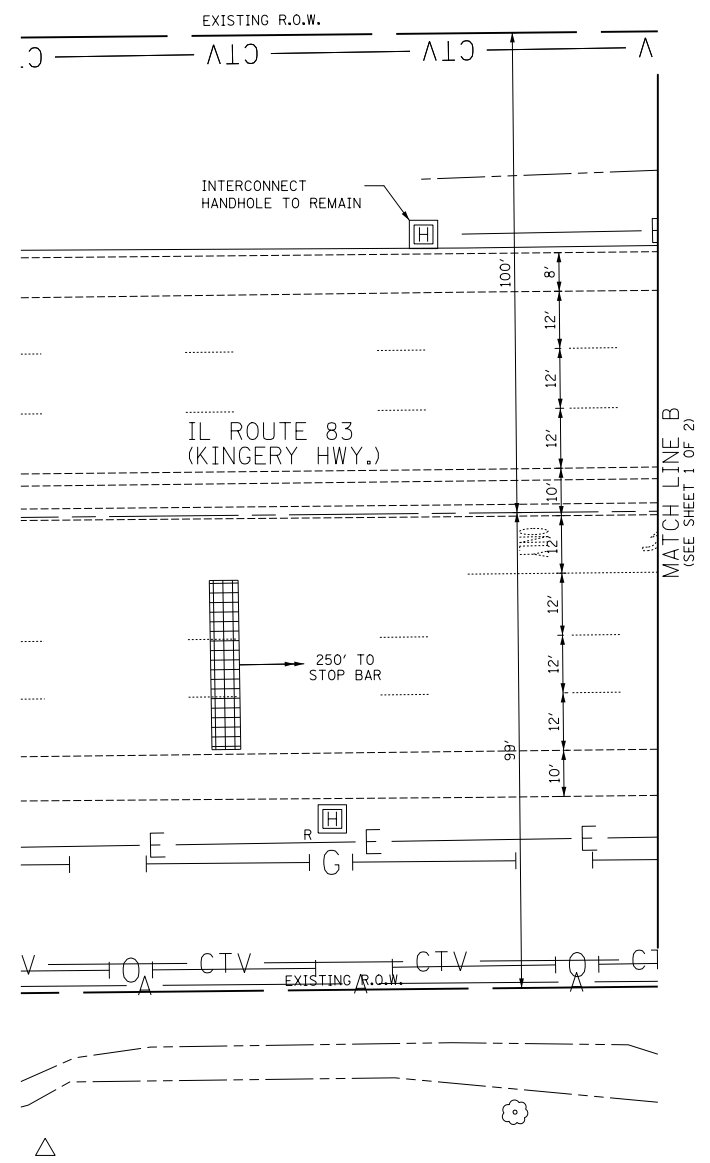
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PLOT SCALE = 40.0000' / in.	DRAWN - JRT	REVISED -
PLOT DATE = 1/29/2014	CHECKED - JJE	REVISED -
	DATE - 01/30/2014	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN AND REMOVAL PLAN  
IL ROUTE 83 (BUSSE RD.) AT MARK STREET**

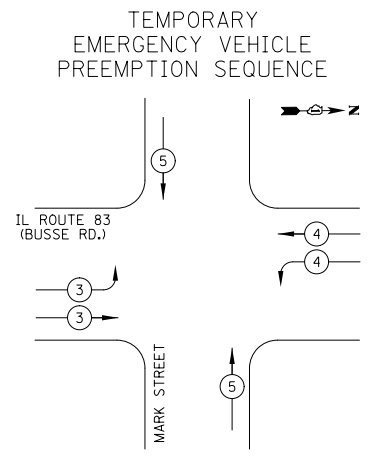
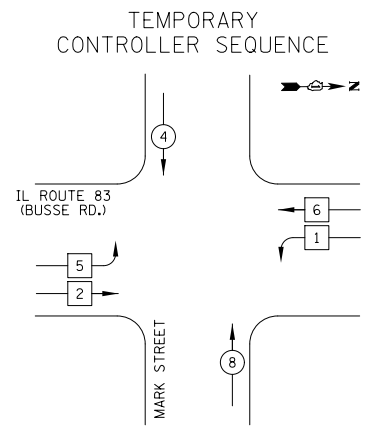
SCALE: 1" = 20' SHEET NO. 1 OF 2 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2013-063TS		68	44
CONTRACT NO. 60X35				
ILLINOIS FED. AID PROJECT				

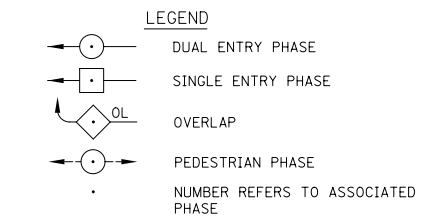


TS# 610

	USER NAME = jrt	DESIGNED - BRD	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN AND REMOVAL PLAN</b> <b>IL ROUTE 83 (BUSSE RD.) AT MARK STREET</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 40.0000' / in.	DRAWN - JRT	REVISED -			344	2013-063TS	DUPAGE	68	45
	PLOT DATE = 1/29/2014	CHECKED - JJE	REVISED -			CONTRACT NO. 60X35				
	DATE - 01/30/2014	REVISED -		SCALE: 1" = 20'	SHEET NO. 2 OF 2 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT		



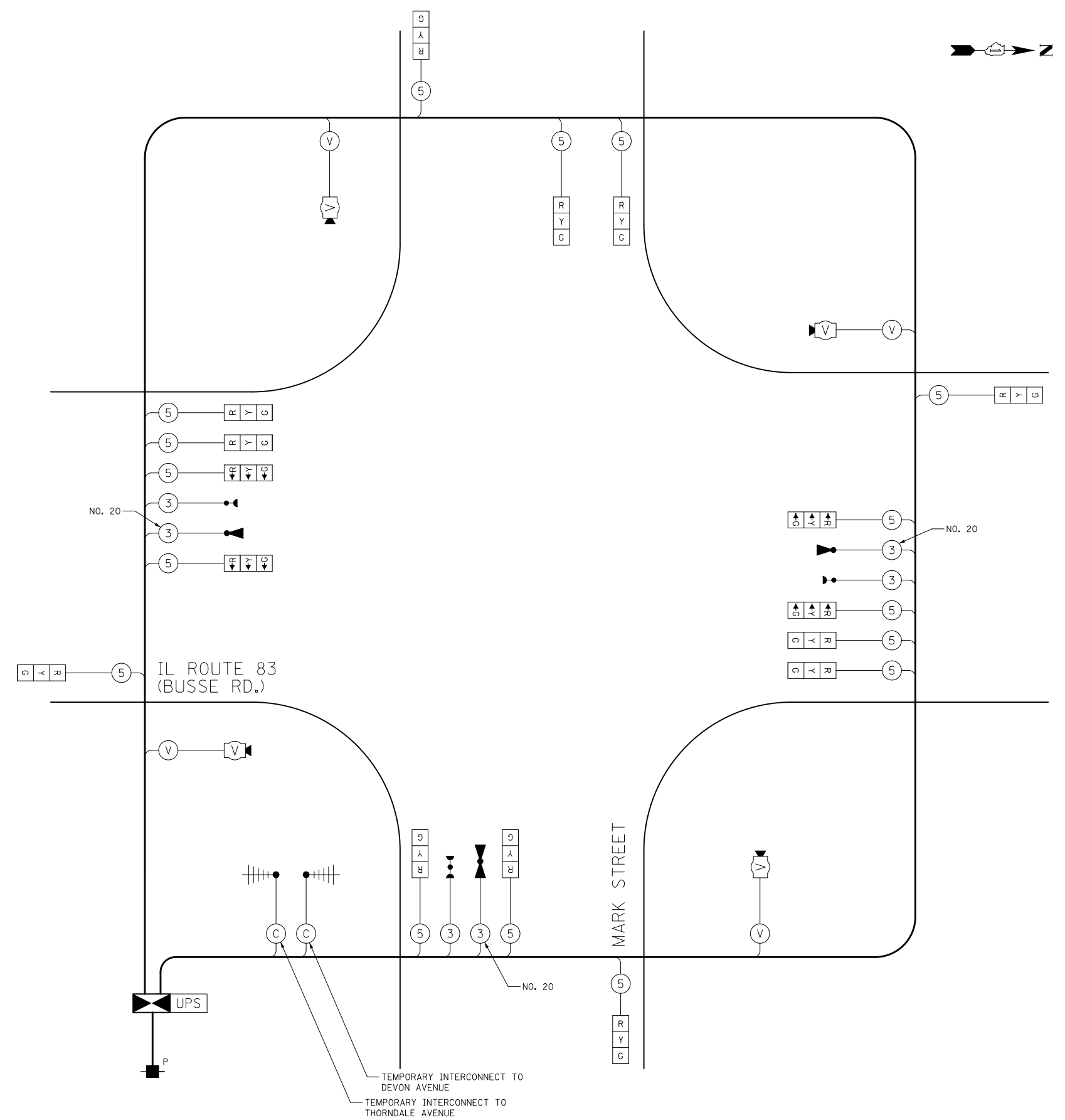
TEMPORARY EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT			



I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE		% OPERATION	
		INCAND.	LED		
SIGNAL (RED)	16		17	0.50	136
(YELLOW)	16		25	0.25	100
(GREEN)	16		15	0.25	60
ARROW	0		12	0.10	0
CONTROLLER	1		100	1.00	100
VIDEO SYSTEM	1		150	1.00	150
TOTAL =					546

ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION  
201 WEST CENTER COURT  
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY: CONTACT: TED ZAWISLAK  
PHONE: (630) 691-4861  
COMPANY: COM ED



TEMPORARY CABLE PLAN  
NOT TO SCALE



USER NAME = jrt	DESIGNED - BRD	REVISED -
PLOT SCALE = 40.0000' / in.	DRAWN - JRT	REVISED -
PLOT DATE = 1/29/2014	CHECKED - JJE	REVISED -
	DATE - 01/30/2014	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

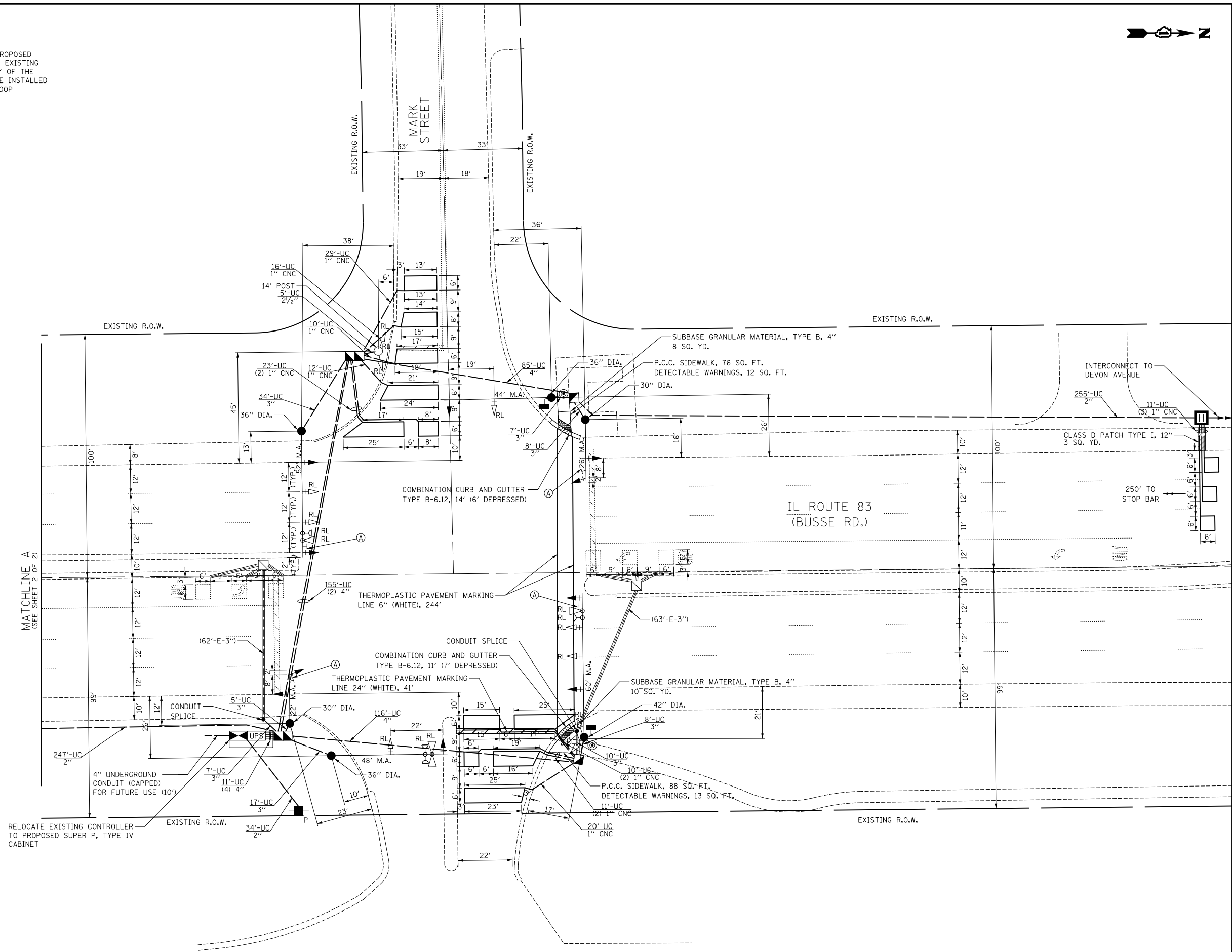
TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION DIAGRAM,  
AND TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE  
IL ROUTE 83 AT MARK STREET

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2013-063TS	DUPAGE	68	46
CONTRACT NO. 60X35				
ILLINOIS FED. AID PROJECT				

TS# 610

**TRAFFIC SIGNAL NOTES**

- THE EXISTING DETECTOR LOOPS SHALL BE CONNECTED TO THE PROPOSED CONTROLLER WITH NEW LEAD-IN CABLES. THE OPERATION OF THE EXISTING LOOPS SHALL BE TESTED ONCE THIS IS COMPLETED. SHOULD ANY OF THE LOOPS BE FOUND TO BE NON-OPERATIONAL, NEW LOOPS SHALL BE INSTALLED AND PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR "LOOP DETECTOR, TYPE 1".



**(A)** LEFT ON GREEN ARROW ONLY

R 10-5  
30"x36"  
(TYP.)  
4 REQUIRED



USER NAME = jrt	DESIGNED - BRD	REVISED -
	DRAWN - JRT	REVISED -
PLOT SCALE = 40.0000' / in.	CHECKED - JJE	REVISED -
PLOT DATE = 1/29/2014	DATE - 01/30/2014	REVISED -

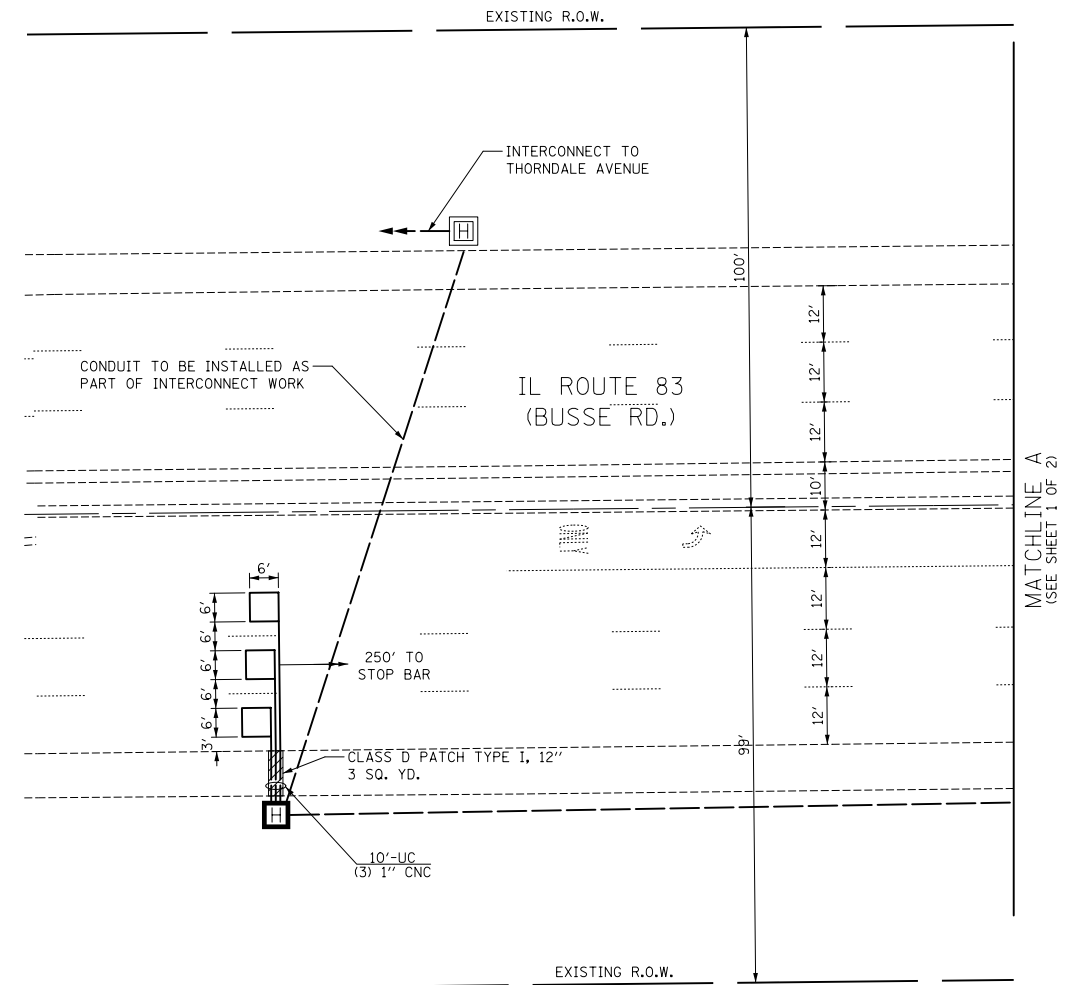
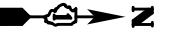
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL MODERNIZATION PLAN  
IL ROUTE 83 (BUSSE RD.) AT MARK STREET**

SCALE: 1" = 20' SHEET NO. 1 OF 2 SHEETS STA. TO STA.

F.A.P. RTE. 344	SECTION 2013-063TS	COUNTY	TOTAL SHEETS 68	SHEET NO. 47
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60X35	

TS# 610



TS# 610

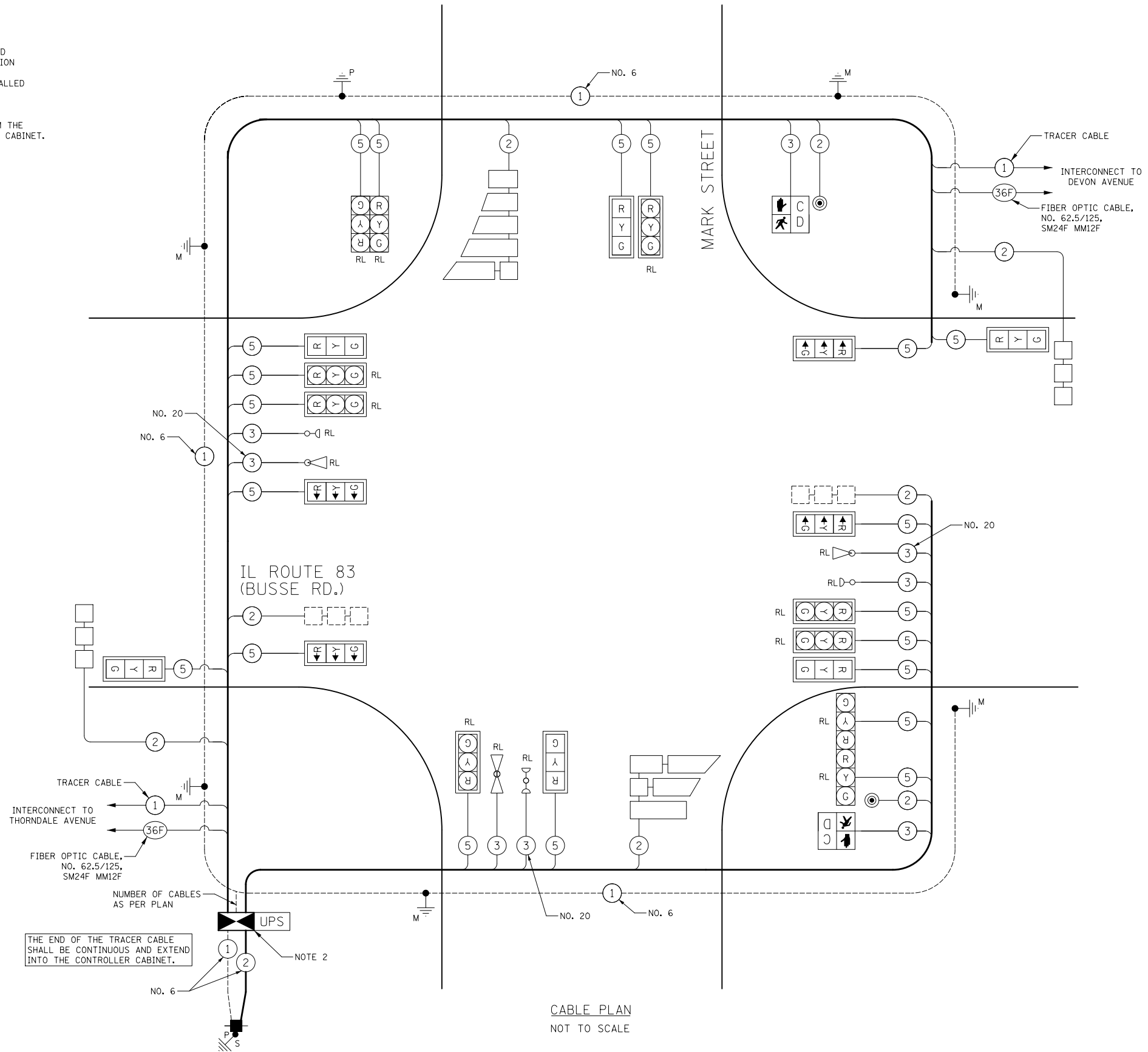
	USER NAME = jrt	DESIGNED - BRD	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC SIGNAL MODERNIZATION PLAN IL ROUTE 83 (BUSSE RD.) AT MARK STREET</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 40.0000' / in.	DRAWN - JRT	REVISED -			344	2013-063TS	DUPAGE	68	48
	PLOT DATE = 1/29/2014	CHECKED - JJE	REVISED -			CONTRACT NO. 60X35			ILLINOIS FED. AID PROJECT	
	DATE - 01/30/2014	REVISED -		SCALE: 1" = 20'	SHEET NO. 2 OF 2 SHEETS	STA.	TO STA.			





**CABLE PLAN NOTES**

1. THE EXISTING DETECTOR LOOPS SHALL BE CONNECTED TO THE PROPOSED CONTROLLER WITH INSTALLATION OF NEW LEAD-IN CABLES. THE OPERATION OF THE EXISTING LOOPS SHALL THEN BE TESTED. SHOULD ANY OF THE LOOPS BE FOUND TO BE NON-OPERATIONAL, NEW LOOPS SHALL BE INSTALLED AND PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR "LOOP DETECTOR, TYPE I".
2. THE EXISTING TRAFFIC SIGNAL CONTROLLER SHALL BE RELOCATED FROM THE EXISTING CONTROLLER CABINET TO THE PROPOSED SUPER "P", TYPE IV CABINET.



I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE		% OPERATION	
SIGNAL (RED)	20	INCAND.	17	0.50	170
(YELLOW)	20		25	0.25	125
(GREEN)	20		15	0.25	75
ARROW	0		12	0.10	0
PED. SIGNAL	2		25	1.00	50
CONTROLLER	1		100	1.00	100
TOTAL =					520
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096					
ENERGY SUPPLY: CONTACT: TED ZAWISLAK PHONE: (630) 691-4861 COMPANY: COM ED					

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

CABLE PLAN  
NOT TO SCALE



USER NAME = jrt	DESIGNED - BRD	REVISED -
PLOT SCALE = 40.0000' / in.	DRAWN - JRT	REVISED -
PLOT DATE = 1/30/2014	CHECKED - JJE	REVISED -
	DATE - 01/30/2014	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CABLE PLAN	
IL ROUTE 83 (BUSSE RD.) AT MARK STREET	
NOT TO SCALE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2013-063TS	DUPAGE	68	49
CONTRACT NO. 60X35				
ILLINOIS FED. AID PROJECT				

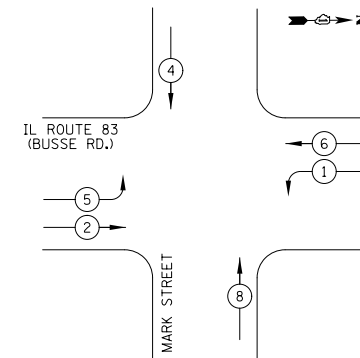
TS# 610

SCHEDULE OF QUANTITIES

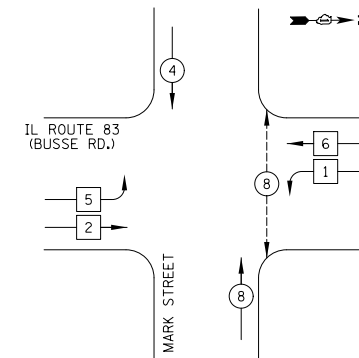
PAY ITEM	UNIT	QNTY.
SUBBASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	19
PROTECTIVE COAT	SQ YD	24
PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH	SQ FT	164
DETECTABLE WARNINGS	SQ FT	25
COMBINATION CURB AND GUTTER REMOVAL	FOOT	25
SIDEWALK REMOVAL	SQ FT	147
CLASS D PATCHES, TYPE I, 12 INCH	SQ YD	6
COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	25
ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	2
CHANGEABLE MESSAGE SIGN	CAL MO	1
SIGN PANEL - TYPE 1	SQ FT	42
SIGN PANEL - TYPE 2	SQ FT	23
THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	244
THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	41
PAVEMENT MARKING REMOVAL	SQ FT	88
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	536
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	5
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	96
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	565
HANDHOLE	EACH	2
HEAVY-DUTY HANDHOLE	EACH	2
DOUBLE HANDHOLE	EACH	2
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	476
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1148
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	4586
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1514
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	54
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1 C	FOOT	850
STEEL MAST ARM ASSEMBLY AND POLE 22 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE 26 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE 44 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE 48 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE 52 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE 60 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	4
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	20
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	41
CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	21
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	10
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	16
INDUCTIVE LOOP DETECTOR	EACH	6
DETECTOR LOOP, TYPE I	FOOT	853
PEDESTRIAN PUSH-BUTTON	EACH	2
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
RELOCATE EXISTING SIGNAL HEAD	EACH	8
RELOCATE EXISTING TRAFFIC SIGNAL CONTROLLER	EACH	1
RELOCATE EXISTING TRAFFIC SIGNAL POST	EACH	1
* RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	3
* RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
MODIFY EXISTING CONTROLLER	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1171
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	5
REMOVE EXISTING DOUBLE HANDHOLE	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	11
* EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	658
CONDUIT SPLICE	EACH	2
** UNINTERRUPTABLE POWER SUPPLY SPECIAL	EACH	1
CONTROLLER CABINET, TYPE IV, SPECIAL	EACH	1
TEMPORARY INFORMATION SIGNING	SQ FT	51
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
TRAINEES	HOURS	170

\* 100% COST TO THE VILLAGE OF BENSENVILLE  
 \*\* SUPER P CABINET

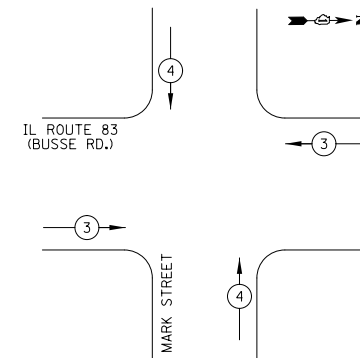
EXISTING CONTROLLER SEQUENCE



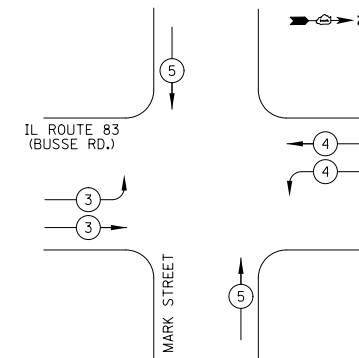
PROPOSED CONTROLLER SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

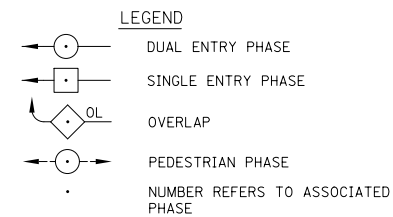


PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE

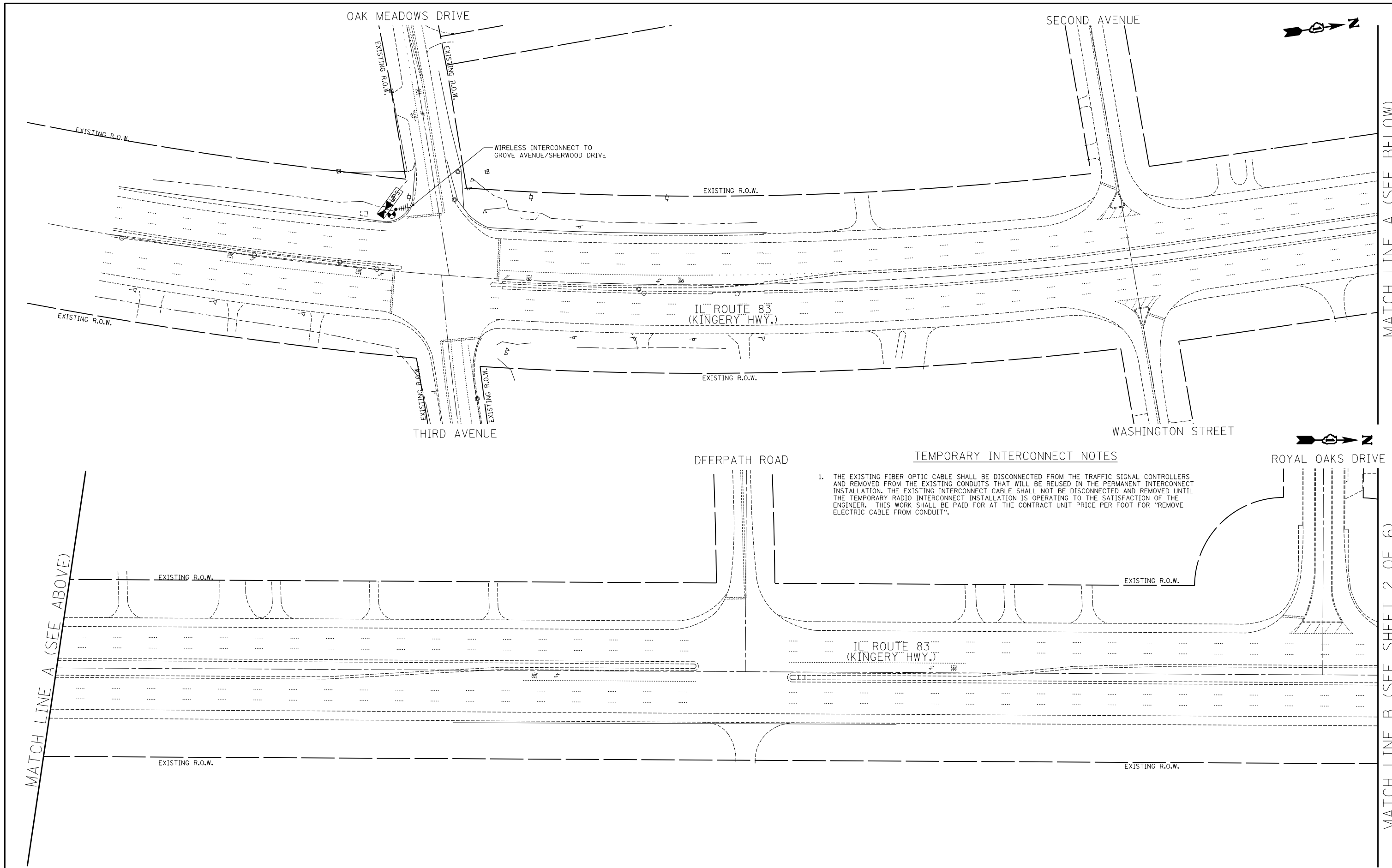


EXISTING EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↑ ↓

PROPOSED EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT	← →	← →	↑ ↓



TS# 610



**TEMPORARY INTERCONNECT NOTES**

1. THE EXISTING FIBER OPTIC CABLE SHALL BE DISCONNECTED FROM THE TRAFFIC SIGNAL CONTROLLERS AND REMOVED FROM THE EXISTING CONDUITS THAT WILL BE REUSED IN THE PERMANENT INTERCONNECT INSTALLATION. THE EXISTING INTERCONNECT CABLE SHALL NOT BE DISCONNECTED AND REMOVED UNTIL THE TEMPORARY RADIO INTERCONNECT INSTALLATION IS OPERATING TO THE SATISFACTION OF THE ENGINEER. THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR "REMOVE ELECTRIC CABLE FROM CONDUIT".



MATCH LINE A (SEE BELOW)

MATCH LINE B (SEE SHEET 2 OF 6)

ECON 111



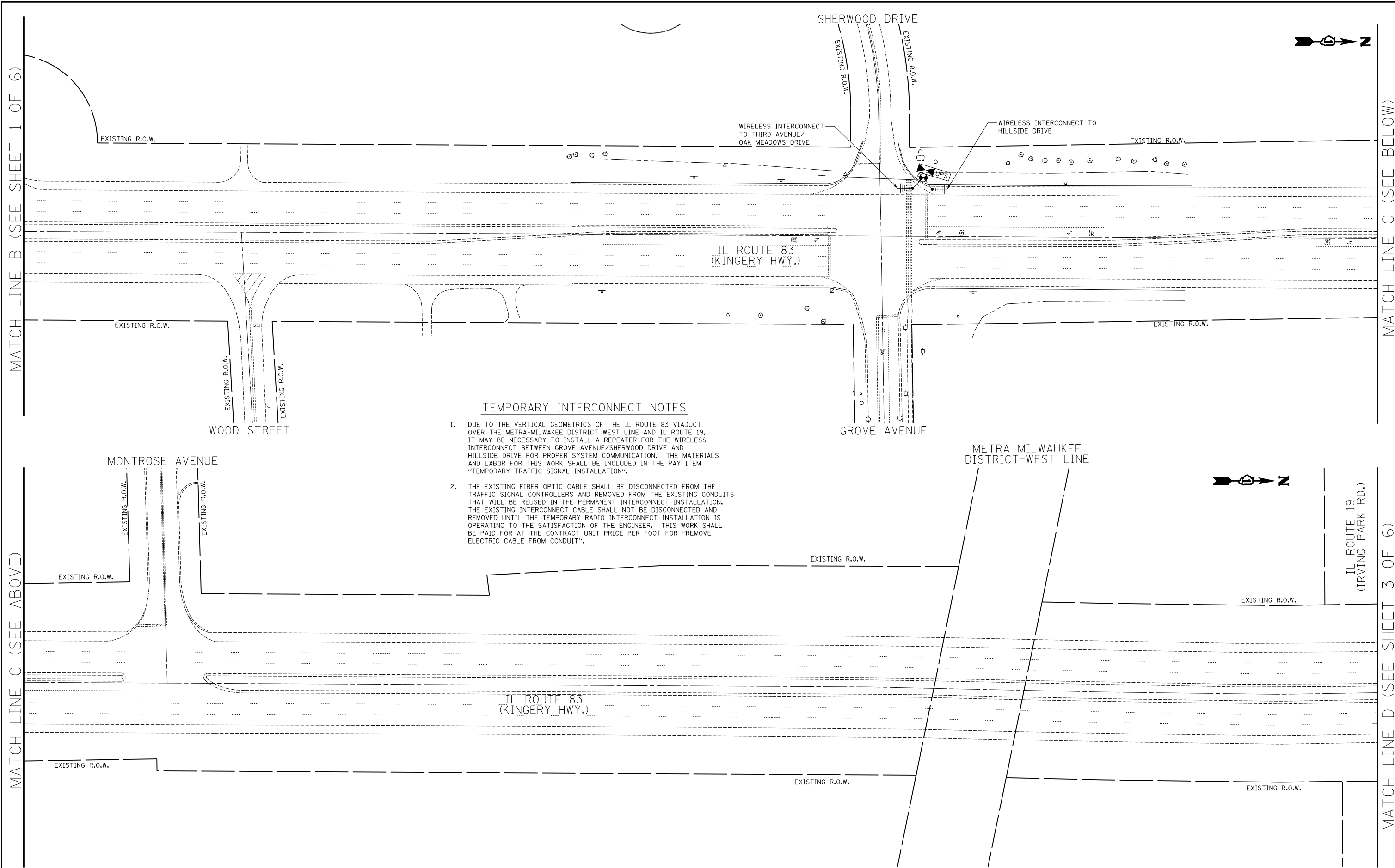
USER NAME = jrt	DESIGNED - BRD	REVISED -
	DRAWN - JRT	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED - JJE	REVISED -
PLOT DATE = 1/29/2014	DATE - 01/30/2014	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY INTERCONNECT PLAN  
IL ROUTE 83  
THIRD AVENUE /OAK MEADOWS DRIVE TO MARK STREET**

SCALE: 1" = 50'    SHEET NO. 1 OF 6 SHEETS    STA.    TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2013-063TS	DUPAGE	68	51
<b>CONTRACT NO. 60X35</b>				
<small>ILLINOIS FED. AID PROJECT</small>				



**TEMPORARY INTERCONNECT NOTES**

1. DUE TO THE VERTICAL GEOMETRICS OF THE IL ROUTE 83 VIADUCT OVER THE METRA-MILWAUKEE DISTRICT WEST LINE AND IL ROUTE 19, IT MAY BE NECESSARY TO INSTALL A REPEATER FOR THE WIRELESS INTERCONNECT BETWEEN GROVE AVENUE/SHERWOOD DRIVE AND HILLSIDE DRIVE FOR PROPER SYSTEM COMMUNICATION. THE MATERIALS AND LABOR FOR THIS WORK SHALL BE INCLUDED IN THE PAY ITEM "TEMPORARY TRAFFIC SIGNAL INSTALLATION".
2. THE EXISTING FIBER OPTIC CABLE SHALL BE DISCONNECTED FROM THE TRAFFIC SIGNAL CONTROLLERS AND REMOVED FROM THE EXISTING CONDUITS THAT WILL BE REUSED IN THE PERMANENT INTERCONNECT INSTALLATION. THE EXISTING INTERCONNECT CABLE SHALL NOT BE DISCONNECTED AND REMOVED UNTIL THE TEMPORARY RADIO INTERCONNECT INSTALLATION IS OPERATING TO THE SATISFACTION OF THE ENGINEER. THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR "REMOVE ELECTRIC CABLE FROM CONDUIT".

MATCH LINE B (SEE SHEET 1 OF 6)

MATCH LINE C (SEE BELOW)

MATCH LINE C (SEE ABOVE)

MATCH LINE D (SEE SHEET 3 OF 6)

ECON 111

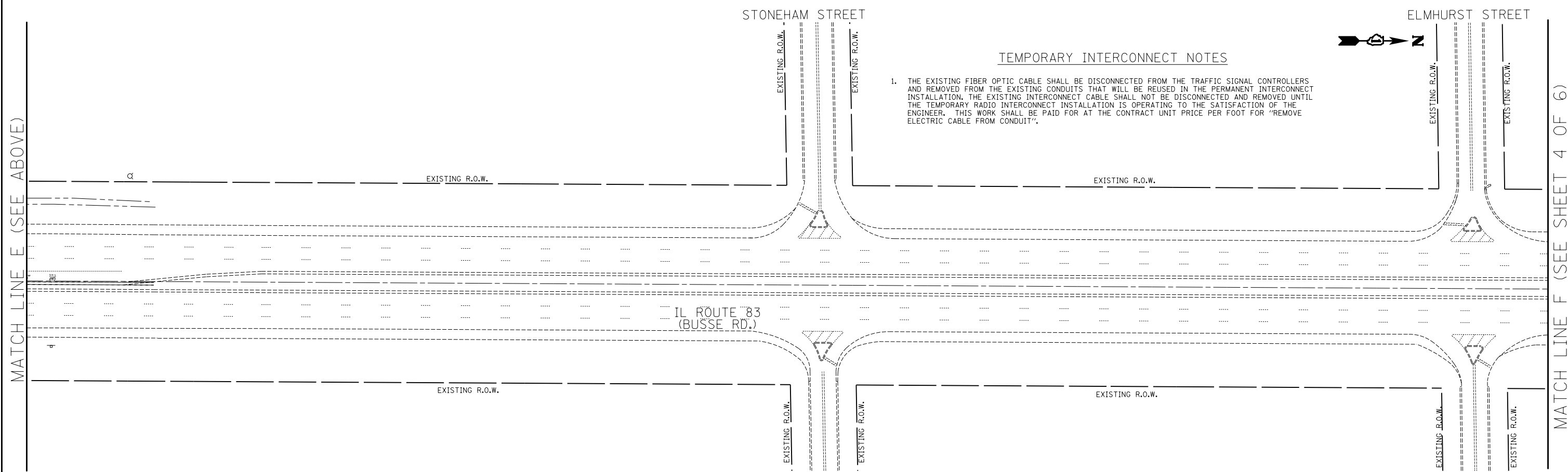
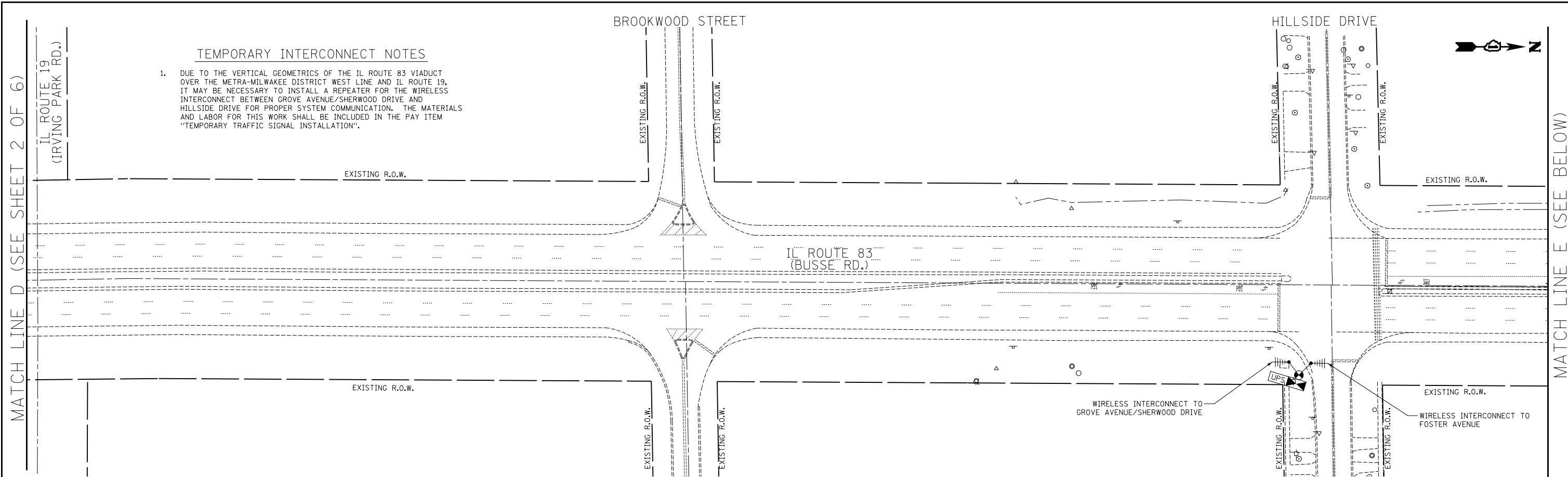


USER NAME = jrt	DESIGNED - BRD	REVISED -
	DRAWN - JRT	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED - JJE	REVISED -
PLOT DATE = 1/29/2014	DATE - 01/30/2014	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY INTERCONNECT PLAN  
IL ROUTE 83  
THIRD AVENUE /OAK MEADOWS DRIVE TO MARK STREET**  
SCALE: 1" = 50' SHEET NO. 2 OF 6 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2013-063TS	DUPAGE	68	52
<b>CONTRACT NO. 60X35</b>				
<small>ILLINOIS FED. AID PROJECT</small>				



USER NAME = jrt	DESIGNED - BRD	REVISED -
	DRAWN - JRT	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED - JJE	REVISED -
PLOT DATE = 1/29/2014	DATE - 01/30/2014	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>TEMPORARY INTERCONNECT PLAN</b>			
<b>IL ROUTE 83</b>			
<b>THIRD AVENUE /OAK MEADOWS DRIVE TO MARK STREET</b>			
SCALE: 1" = 50'	SHEET NO. 3 OF 6 SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2013-063TS	DUPAGE	68	53
<b>CONTRACT NO. 60X35</b>				
<small>ILLINOIS FED. AID PROJECT</small>				

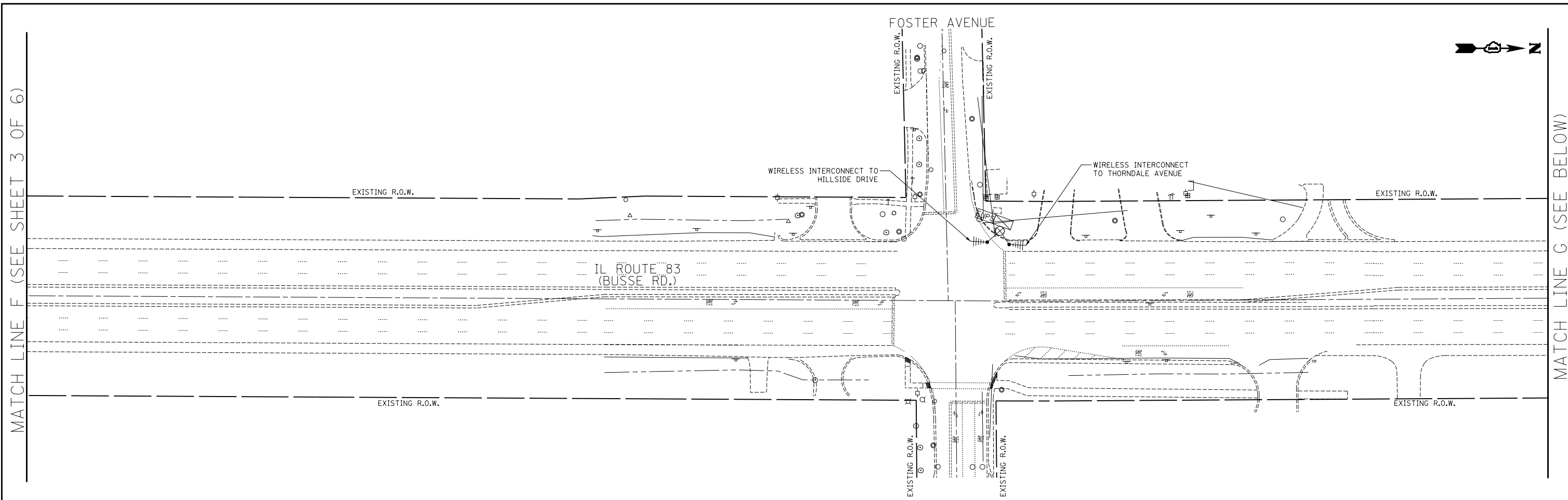
ECON 111

MATCH LINE F (SEE SHEET 3 OF 6)

MATCH LINE G (SEE ABOVE)

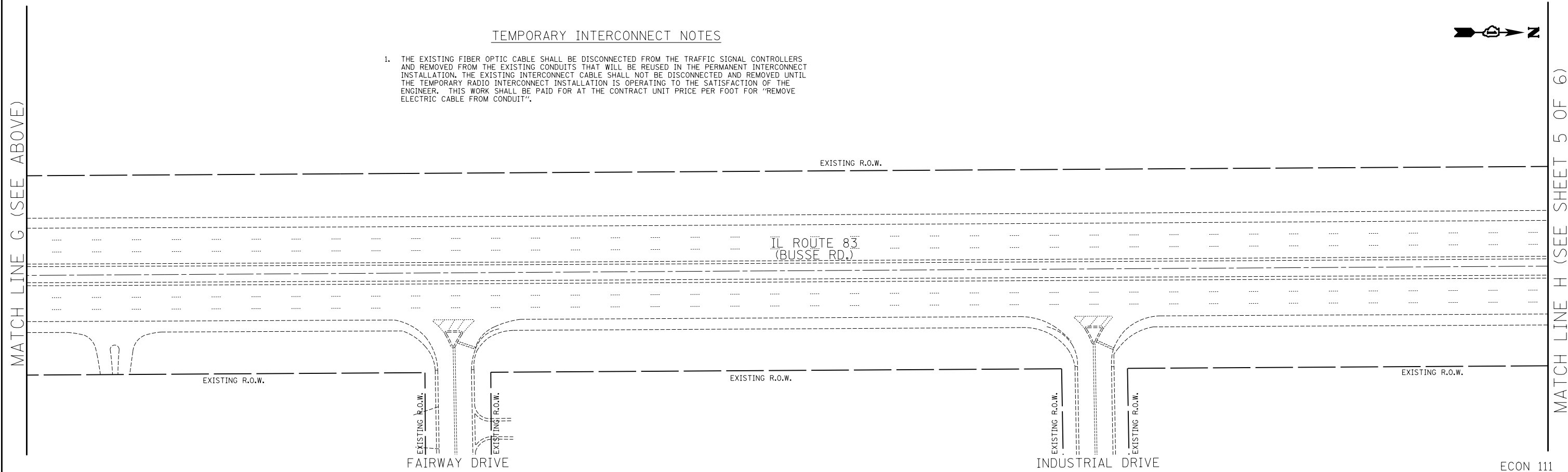
MATCH LINE G (SEE BELOW)

MATCH LINE H (SEE SHEET 5 OF 6)



TEMPORARY INTERCONNECT NOTES

1. THE EXISTING FIBER OPTIC CABLE SHALL BE DISCONNECTED FROM THE TRAFFIC SIGNAL CONTROLLERS AND REMOVED FROM THE EXISTING CONDUITS THAT WILL BE REUSED IN THE PERMANENT INTERCONNECT INSTALLATION. THE EXISTING INTERCONNECT CABLE SHALL NOT BE DISCONNECTED AND REMOVED UNTIL THE TEMPORARY RADIO INTERCONNECT INSTALLATION IS OPERATING TO THE SATISFACTION OF THE ENGINEER. THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR "REMOVE ELECTRIC CABLE FROM CONDUIT".



USER NAME = jrt	DESIGNED - BRD	REVISED -
	DRAWN - JRT	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED - JJE	REVISED -
PLOT DATE = 1/29/2014	DATE - 01/30/2014	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TEMPORARY INTERCONNECT PLAN  
IL ROUTE 83  
THIRD AVENUE / OAK MEADOWS DRIVE TO MARK STREET  
SCALE: 1" = 50' SHEET NO. 4 OF 6 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2013-063TS	DUPAGE	68	54
CONTRACT NO. 60X35				
ILLINOIS FED. AID PROJECT				

ECON 111

MATCH LINE H (SEE SHEET 4 OF 6)

MATCH LINE I (SEE ABOVE)

MATCH LINE J (SEE BELOW)

MATCH LINE J (SEE SHEET 6 OF 6)

BRYN MAWR AVENUE

IL ROUTE 83  
(BUSSE RD.)

EXISTING R.O.W.

EXISTING R.O.W.

EXISTING R.O.W.

EXISTING R.O.W.

TEMPORARY INTERCONNECT NOTES

1. THE EXISTING FIBER OPTIC CABLE SHALL BE DISCONNECTED FROM THE TRAFFIC SIGNAL CONTROLLERS AND REMOVED FROM THE EXISTING CONDUITS THAT WILL BE REUSED IN THE PERMANENT INTERCONNECT INSTALLATION. THE EXISTING INTERCONNECT CABLE SHALL NOT BE DISCONNECTED AND REMOVED UNTIL THE TEMPORARY RADIO INTERCONNECT INSTALLATION IS OPERATING TO THE SATISFACTION OF THE ENGINEER. THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR "REMOVE ELECTRIC CABLE FROM CONDUIT".

THORNDALE AVENUE

TOWER LANE

WIRELESS INTERCONNECT  
TO FOSTER AVENUE

WIRELESS INTERCONNECT  
TO MARK STREET  
(5'-E-2-5")

(20'-E-3")

IL ROUTE 83  
(BUSSE RD.)

EXISTING INTERCONNECT  
TO SUPREME DRIVE

(135'-E-5")

(66'-E-5")

(87'-E-5")

EXISTING R.O.W.

EXISTING R.O.W.

EXISTING R.O.W.

ECON 111



USER NAME = jrt	DESIGNED - BRD	REVISED -
PLOT SCALE = 100.0000' / in.	DRAWN - JRT	REVISED -
PLOT DATE = 1/29/2014	CHECKED - JJE	REVISED -
	DATE - 01/30/2014	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TEMPORARY INTERCONNECT PLAN

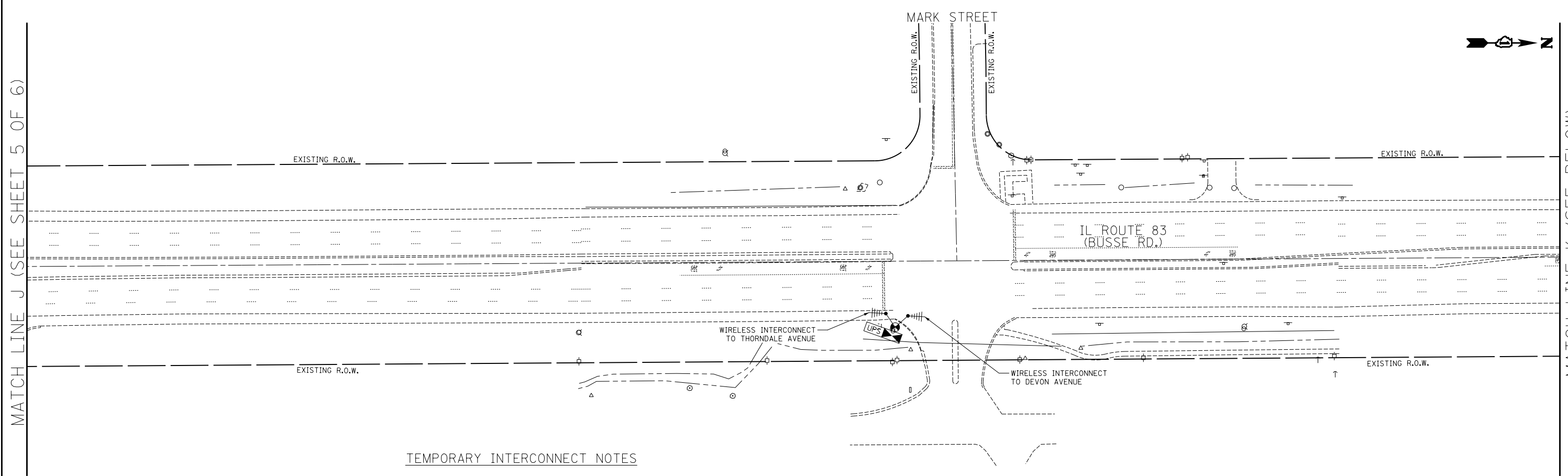
IL ROUTE 83  
THIRD AVENUE / OAK MEADOWS DRIVE TO MARK STREET

SCALE: 1" = 50' SHEET NO. 5 OF 6 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2013-063TS	DUPAGE	68	55
CONTRACT NO. 60X35				
ILLINOIS FED. AID PROJECT				

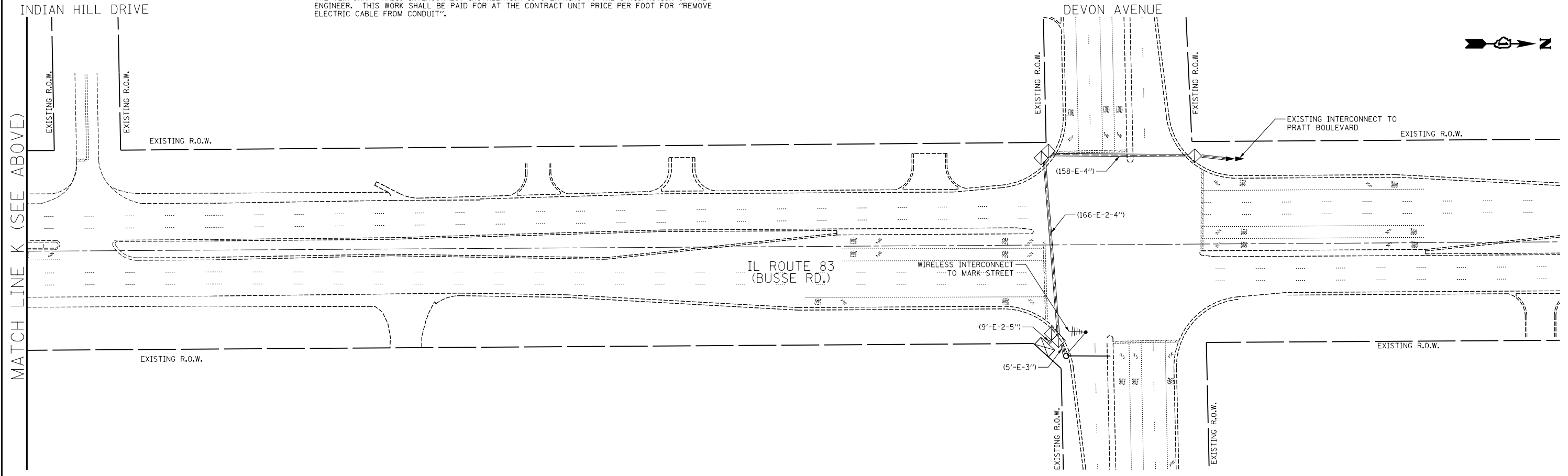
MATCH LINE J (SEE SHEET 5 OF 6)

MATCH LINE K (SEE BELOW)



TEMPORARY INTERCONNECT NOTES

1. THE EXISTING FIBER OPTIC CABLE SHALL BE DISCONNECTED FROM THE TRAFFIC SIGNAL CONTROLLERS AND REMOVED FROM THE EXISTING CONDUITS THAT WILL BE REUSED IN THE PERMANENT INTERCONNECT INSTALLATION. THE EXISTING INTERCONNECT CABLE SHALL NOT BE DISCONNECTED AND REMOVED UNTIL THE TEMPORARY RADIO INTERCONNECT INSTALLATION IS OPERATING TO THE SATISFACTION OF THE ENGINEER. THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR "REMOVE ELECTRIC CABLE FROM CONDUIT".



ECON 111



USER NAME = jrt	DESIGNED - BRD	REVISED -
	DRAWN - JRT	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED - JJE	REVISED -
PLOT DATE = 1/29/2014	DATE - 01/30/2014	REVISED -

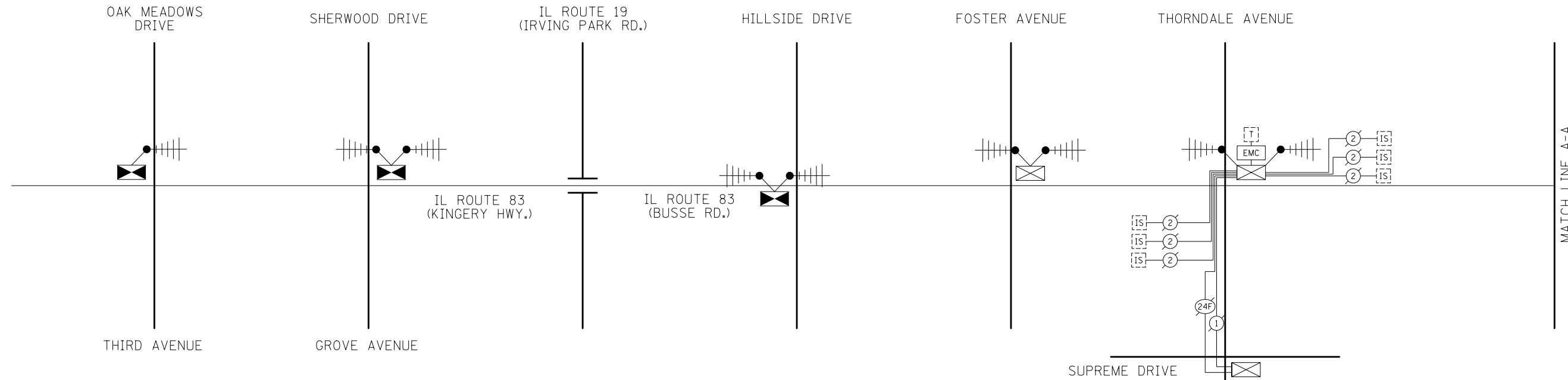
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**TEMPORARY INTERCONNECT PLAN**  
**IL ROUTE 83**  
**THIRD AVENUE /OAK MEADOWS DRIVE TO MARK STREET**  
 SCALE: 1" = 50' SHEET NO. 6 OF 6 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2013-063TS	DUPAGE	68	56
CONTRACT NO. 60X35				

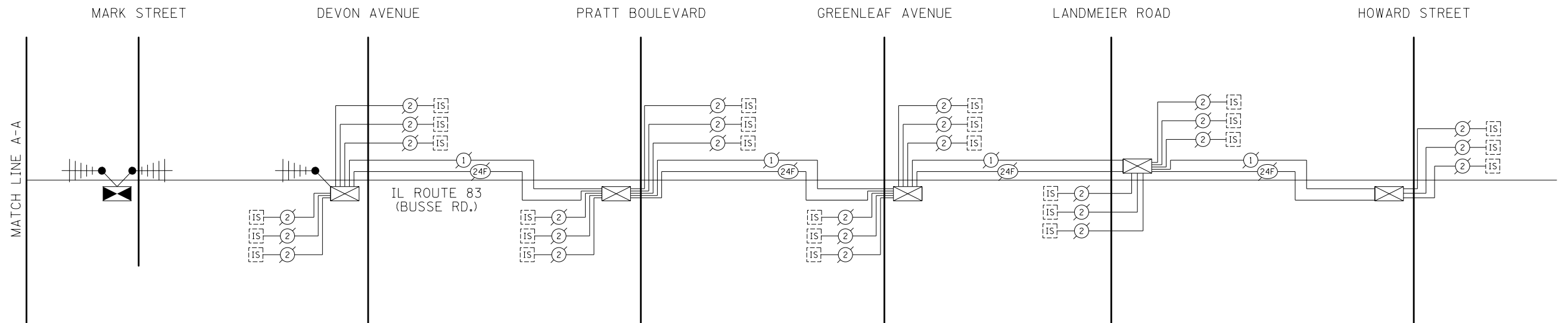
ILLINOIS FED. AID PROJECT





**TEMPORARY INTERCONNECT NOTES**

1. DUE TO THE VERTICAL GEOMETRICS OF THE IL ROUTE 83 VIADUCT OVER THE METRA-MILWAKEE DISTRICT WEST LINE AND IL ROUTE 19, IT MAY BE NECESSARY TO INSTALL A REPEATER FOR THE WIRELESS INTERCONNECT BETWEEN GROVE AVENUE/SHERWOOD DRIVE AND HILLSIDE DRIVE FOR PROPER SYSTEM COMMUNICATION. THE MATERIALS AND LABOR FOR THIS WORK SHALL BE INCLUDED IN THE PAY ITEM "TEMPORARY TRAFFIC SIGNAL INSTALLATION".



ECON 111



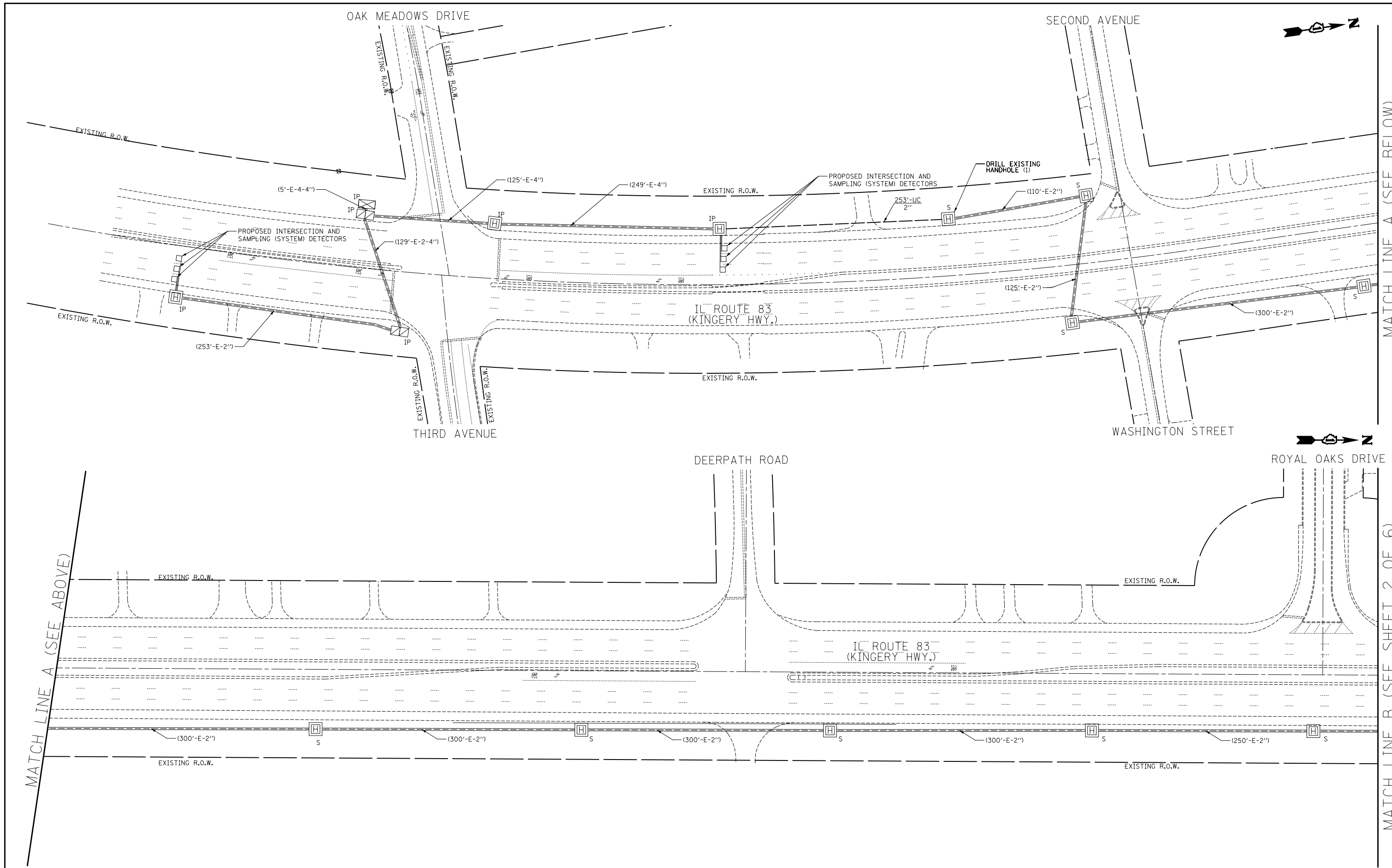
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	DRAWN - JRT	REVISED -
PLOT SCALE = 40.0000' / in.	CHECKED - JJE	REVISED -
PLOT DATE = 1/29/2014	DATE - 01/30/2014	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY INTERCONNECT SCHEMATIC  
IL ROUTE 83**

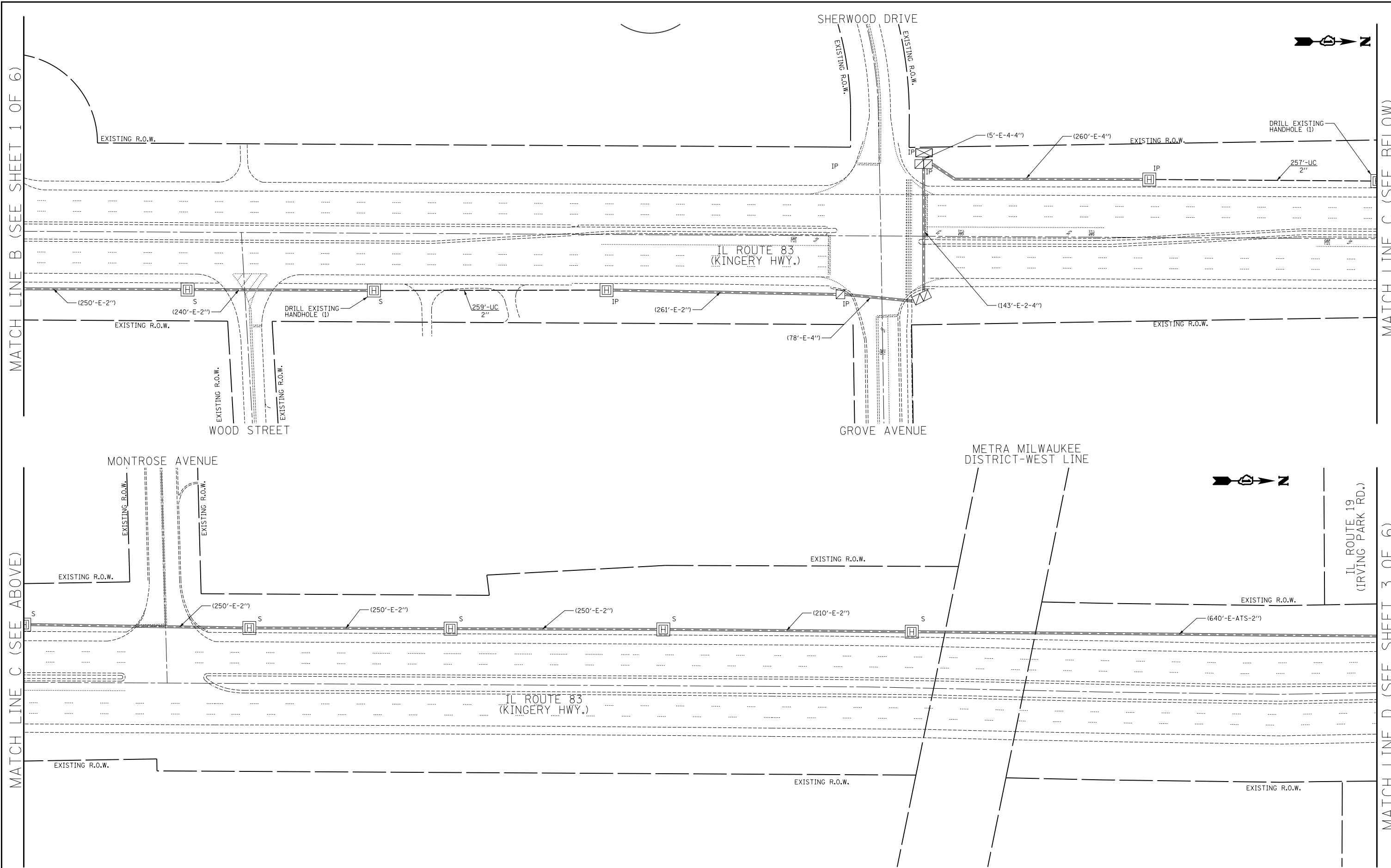
NO SCALE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2013-063TS	DUPAGE	68	57
<b>CONTRACT NO. 60X35</b>				
<small>ILLINOIS FED. AID PROJECT</small>				



ECON 111

	USER NAME = jrt	DESIGNED - BRD	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>INTERCONNECT PLAN</b> <b>IL ROUTE 83</b> <b>THIRD AVENUE /OAK MEADOWS DRIVE TO MARK STREET</b>		F.A.P. RTE. = 344	SECTION = 2013-063TS	COUNTY = DUPAGE	TOTAL SHEETS = 68	SHEET NO. = 58	
	PLOT SCALE = 100.0000' / in.	CHECKED - JJE	REVISED -				SCALE: 1" = 50'		SHEET NO. 1 OF 6 SHEETS		CONTRACT NO. 60X35	
	PLOT DATE = 1/29/2014	DATE = 01/30/2014	REVISED -				STA. TO STA.		ILLINOIS FED. AID PROJECT			



MATCH LINE B (SEE SHEET 1 OF 6)

MATCH LINE C (SEE BELOW)

MATCH LINE C (SEE ABOVE)

MATCH LINE D (SEE SHEET 3 OF 6)

ECON 111



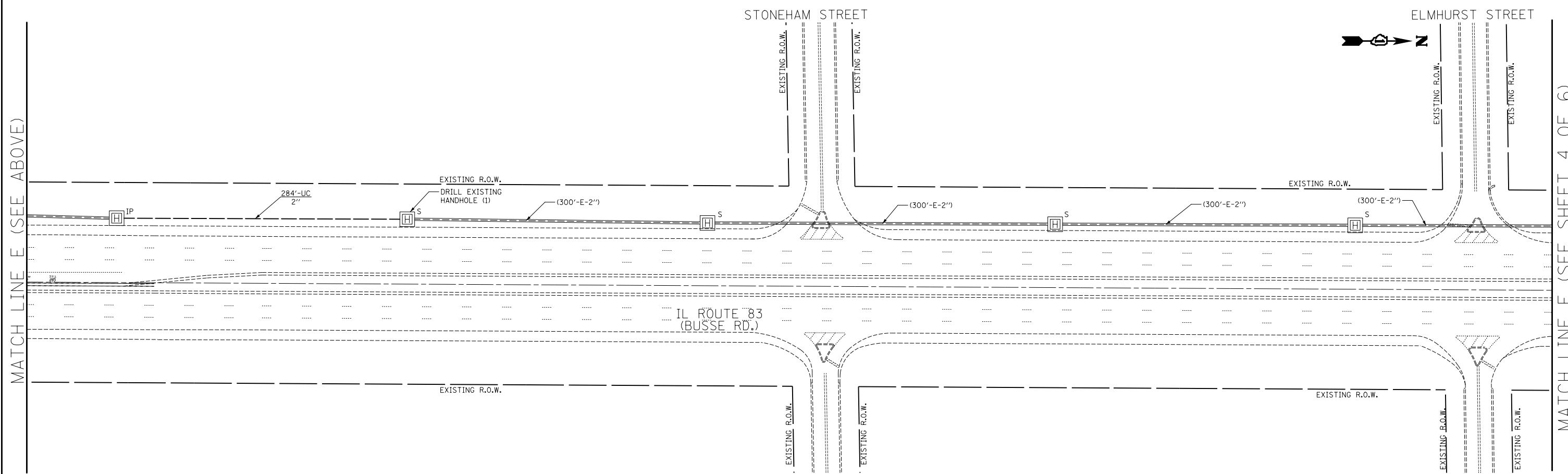
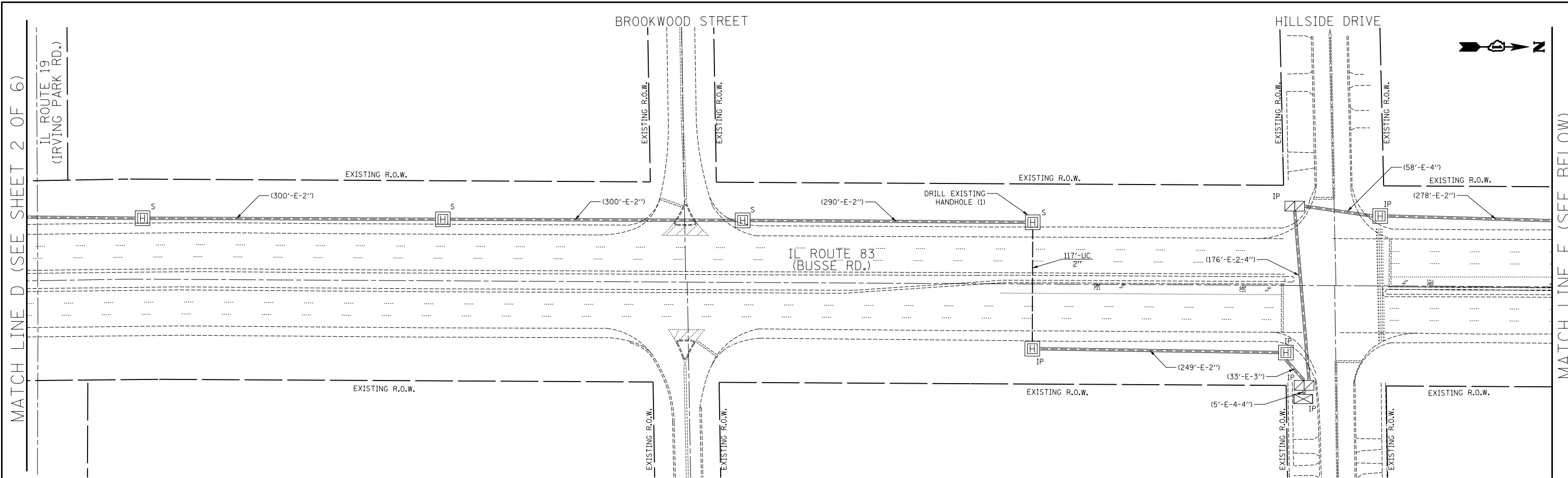
USER NAME = jrt	DESIGNED - BRD	REVISED -
	DRAWN - JRT	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED - JJE	REVISED -
PLOT DATE = 1/29/2014	DATE - 01/30/2014	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**INTERCONNECT PLAN  
IL ROUTE 83  
THIRD AVENUE / OAK MEADOWS DRIVE TO MARK STREET**

SCALE: 1" = 50'    SHEET NO. 2 OF 6 SHEETS    STA.    TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2013-063TS	DUPAGE	68	59
CONTRACT NO. 60X35				
ILLINOIS FED. AID PROJECT				



MATCH LINE D (SEE SHEET 2 OF 6)

MATCH LINE E (SEE BELOW)

MATCH LINE E (SEE ABOVE)

MATCH LINE F (SEE SHEET 4 OF 6)



USER NAME = jrt	DESIGNED - BRD	REVISED -
	DRAWN - JRT	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED - JJE	REVISED -
PLOT DATE = 1/29/2014	DATE - 01/30/2014	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**INTERCONNECT PLAN  
IL ROUTE 83  
THIRD AVENUE / OAK MEADOWS DRIVE TO MARK STREET**

SCALE: 1" = 50'    SHEET NO. 3 OF 6 SHEETS    STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2013-063TS	DUPAGE	68	60
CONTRACT NO. 60X35				
ILLINOIS FED. AID PROJECT				

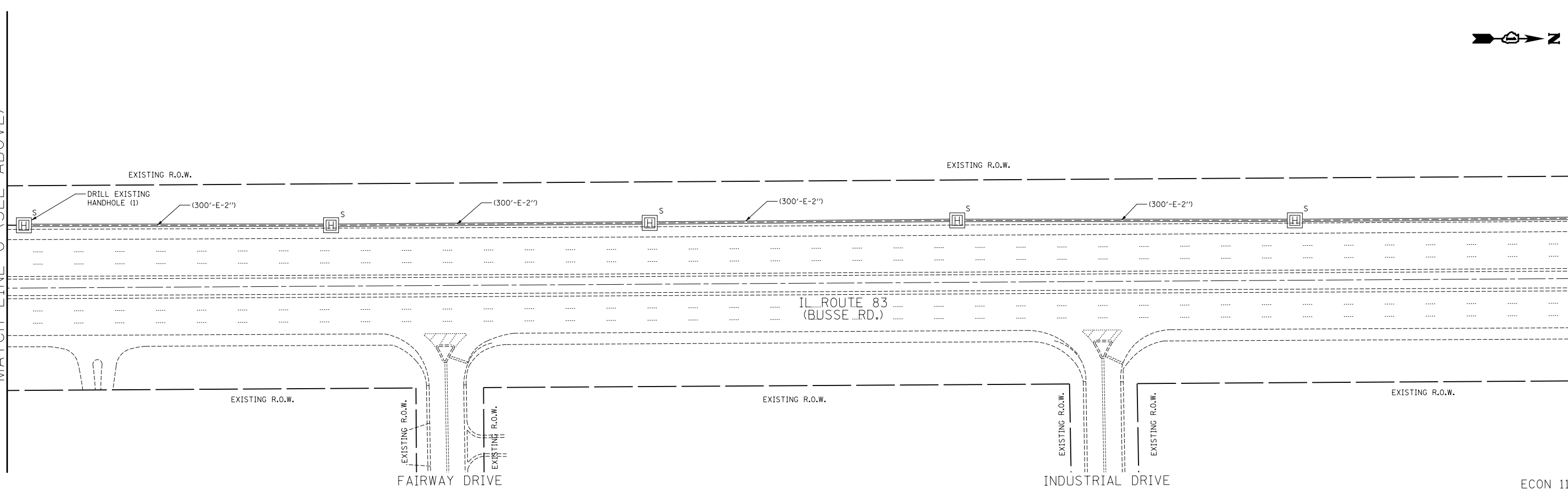
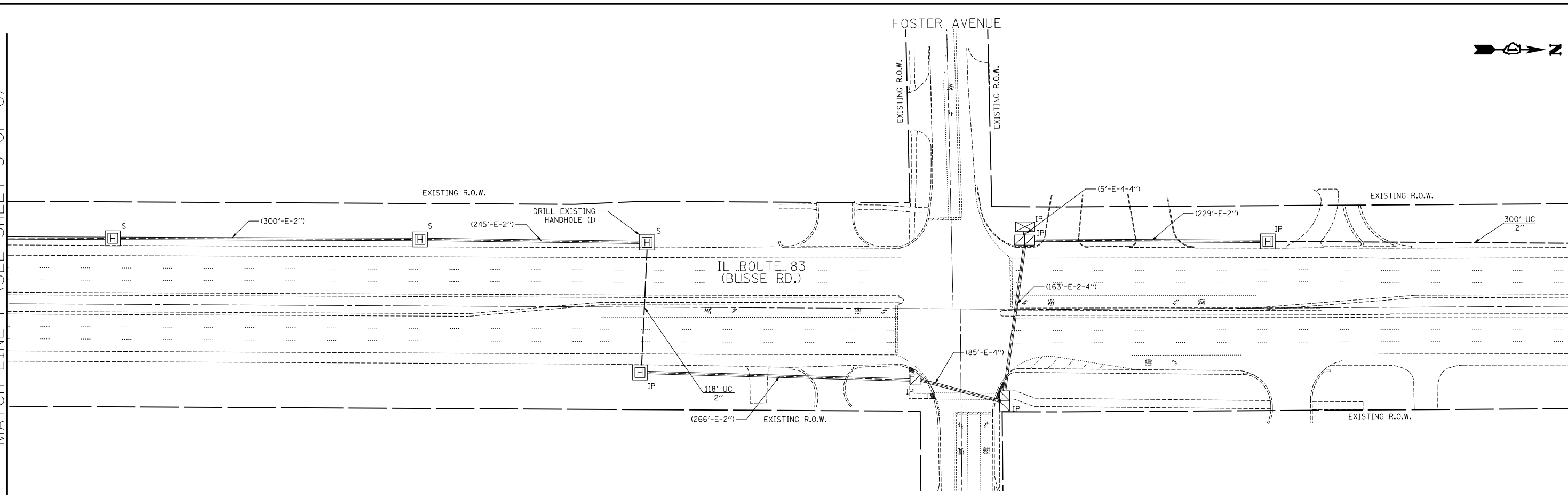
ECON 111

MATCH LINE F (SEE SHEET 3 OF 6)

MATCH LINE G (SEE ABOVE)

MATCH LINE G (SEE BELOW)

MATCH LINE H (SEE SHEET 5 OF 6)



USER NAME = jrt	DESIGNED - BRD	REVISED -
	DRAWN - JRT	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED - JJE	REVISED -
PLOT DATE = 1/29/2014	DATE - 01/30/2014	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**INTERCONNECT PLAN**  
**IL ROUTE 83**  
**THIRD AVENUE /OAK MEADOWS DRIVE TO MARK STREET**  
SCALE: 1" = 50' SHEET NO. 4 OF 6 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2013-063TS	DUPAGE	68	61
<b>CONTRACT NO. 60X35</b>				

ILLINOIS FED. AID PROJECT

ECON 111

MATCH LINE H (SEE SHEET 4 OF 6)

MATCH LINE I (SEE BELOW)

MATCH LINE I (SEE ABOVE)

MATCH LINE J (SEE SHEET 6 OF 6)

BRYN MAWR AVENUE

EXISTING R.O.W.

EXISTING R.O.W.

IL ROUTE 83  
(BUSSE RD.)

EXISTING R.O.W.

EXISTING R.O.W.

THORNDALE AVENUE

TOWER LANE

EXISTING R.O.W.

EXISTING R.O.W.

IL ROUTE 83  
(BUSSE RD.)

EXISTING R.O.W.

EXISTING R.O.W.

EXISTING INTERCONNECT  
TO SUPREME DRIVE



USER NAME = jrt	DESIGNED - BRD	REVISED -
PLOT SCALE = 100.0000' / in.	DRAWN - JRT	REVISED -
PLOT DATE = 1/29/2014	CHECKED - JJE	REVISED -
	DATE - 01/30/2014	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

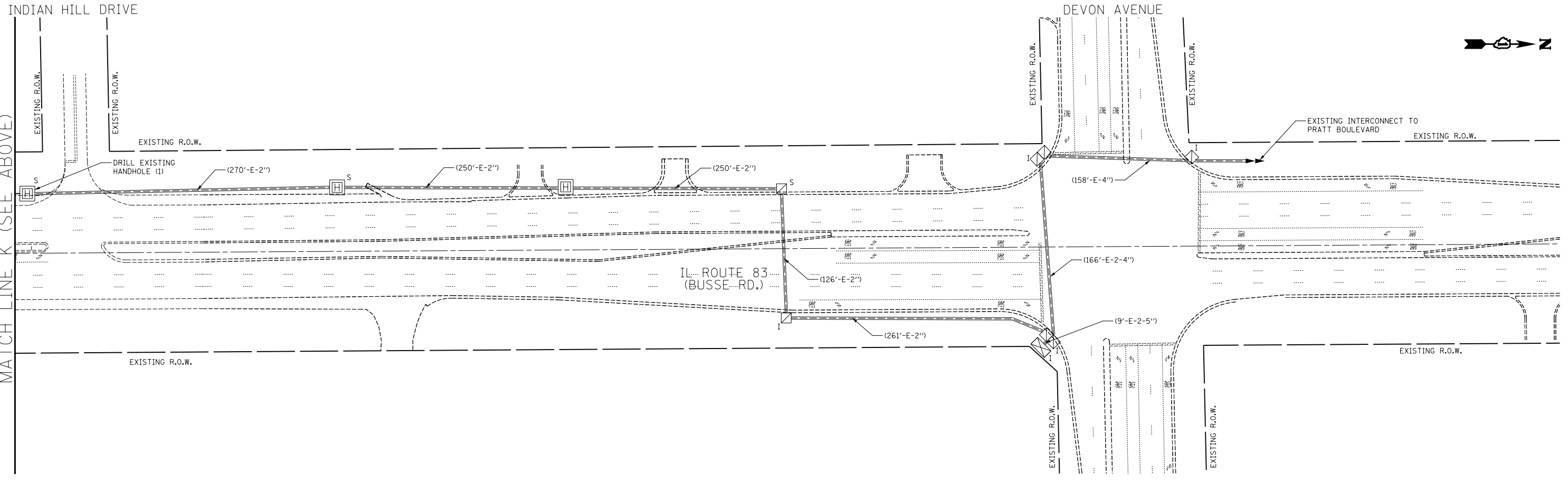
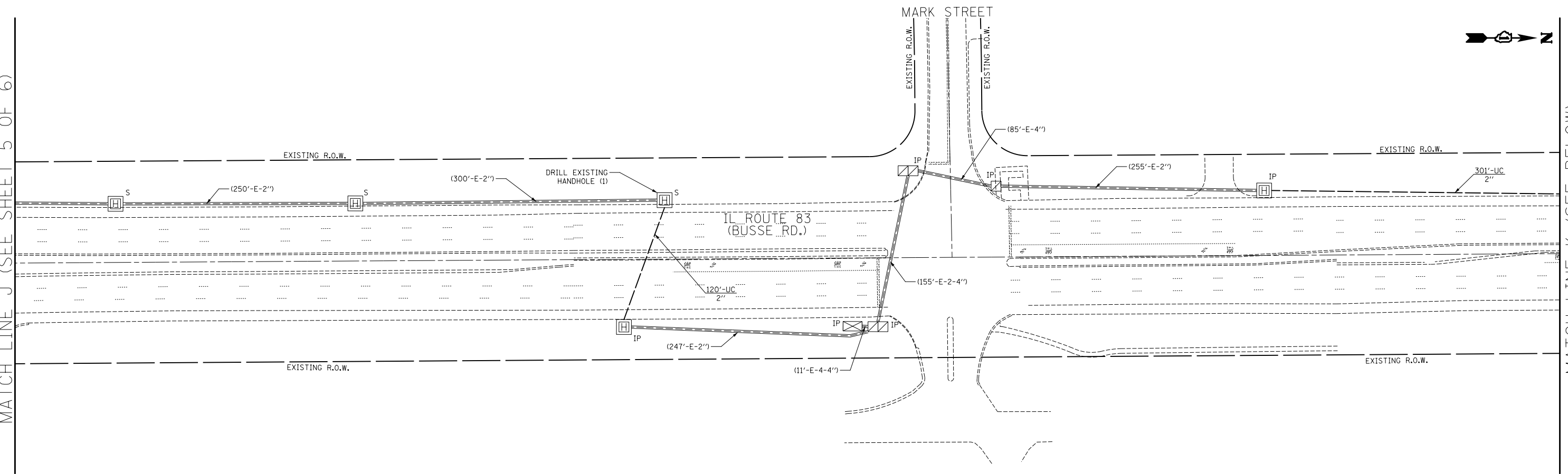
INTERCONNECT PLAN	
IL ROUTE 83	
THIRD AVENUE / OAK MEADOWS DRIVE TO MARK STREET	
SCALE: 1" = 50'	SHEET NO. 5 OF 6 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2013-063TS	DUPAGE	68	62
CONTRACT NO. 60X35				
ILLINOIS FED. AID PROJECT				

ECON 111

MATCH LINE J (SEE SHEET 5 OF 6)

MATCH LINE K (SEE BELOW)



USER NAME = jrt	DESIGNED - BRD	REVISED -
PLOT SCALE = 100.0000' / in.	DRAWN - JRT	REVISED -
PLOT DATE = 1/29/2014	CHECKED - JJE	REVISED -
	DATE - 01/30/2014	REVISED -

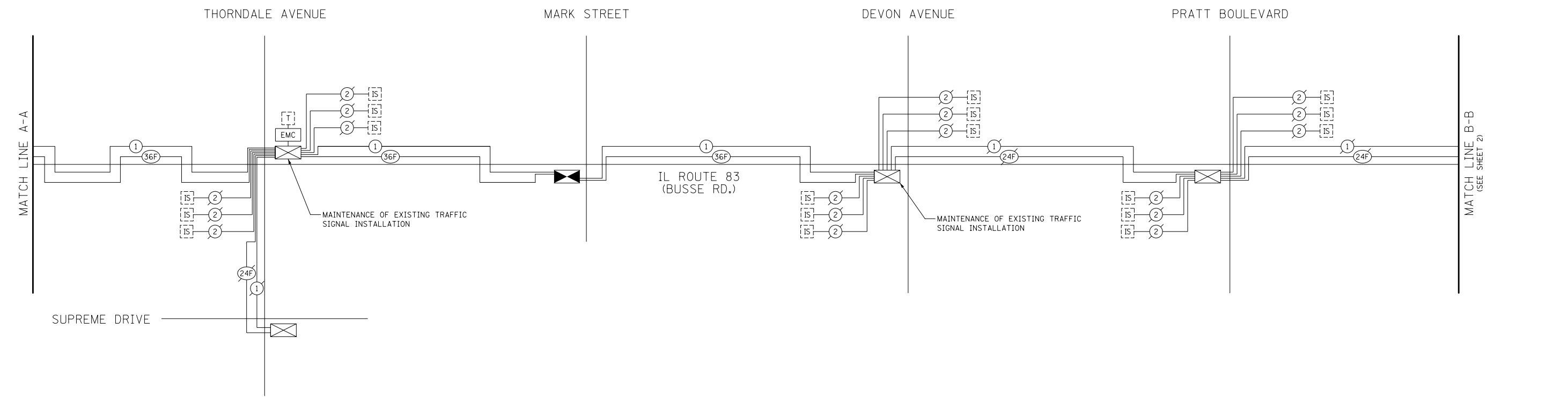
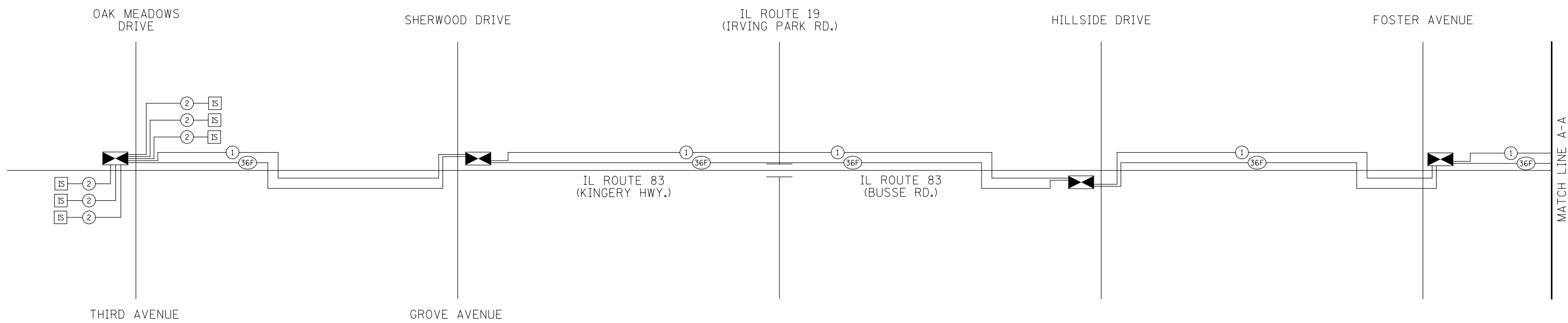
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**INTERCONNECT PLAN  
IL ROUTE 83  
THIRD AVENUE / OAK MEADOWS DRIVE TO MARK STREET**

SCALE: 1" = 50'    SHEET NO. 6 OF 6 SHEETS    STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2013-063TS	DUPAGE	68	63
CONTRACT NO. 60X35				
ILLINOIS FED. AID PROJECT				

ECON 111



ECON 111



USER NAME = jrt	DESIGNED - BRD	REVISED -
PLOT SCALE = 40.0000' / in.	DRAWN - JRT	REVISED -
PLOT DATE = 1/29/2014	CHECKED - JJE	REVISED -
	DATE - 01/30/2014	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

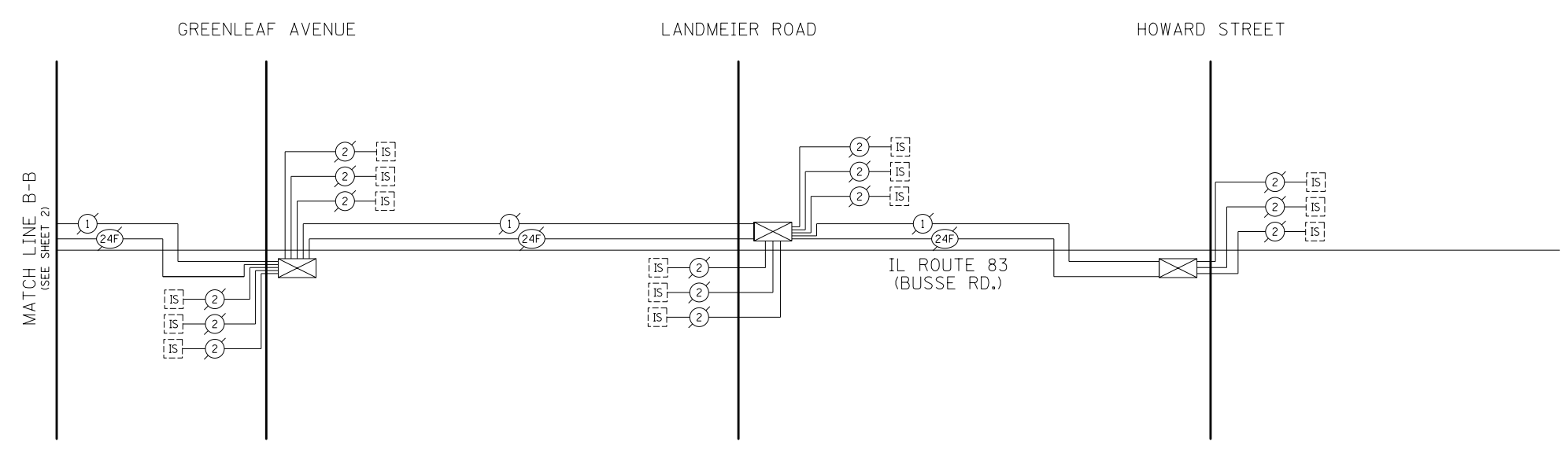
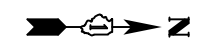
**INTERCONNECT SCHEMATIC  
IL ROUTE 83**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2013-063TS	DUPAGE	68	64
<b>CONTRACT NO. 60X35</b>				

NO SCALE SHEET NO. 1 OF 2 SHEETS STA. TO STA.

ILLINOIS FED. AID PROJECT





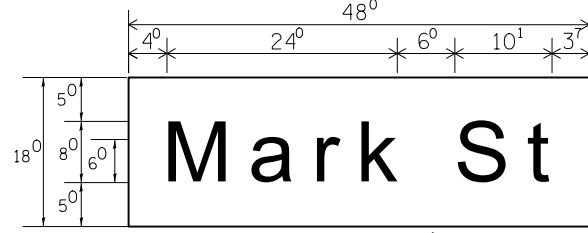
INTERCONNECT SCHEDULE OF QUANTITIES

PAY ITEM	UNIT	QNTY.
ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	2
CHANGEABLE MESSAGE SIGN	CAL MO	1
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	2009
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	2
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	19423
DRILL EXISTING HANDHOLE	EACH	9
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	28483
FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F	FOOT	19561
OPTIMIZE TRAFFIC SIGNAL SYSTEM	EACH	1
TRAINEES	HOURS	150

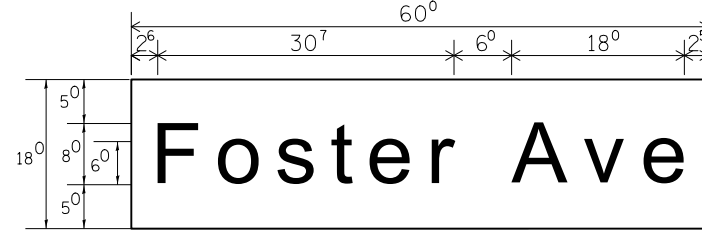
ECON 111

	USER NAME = jrt	DESIGNED - BRD	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>INTERCONNECT SCHEMATIC</b> <b>IL ROUTE 83</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 40.0000' / in.	CHECKED - JJE	REVISED -			344	2013-063TS	DUPAGE	68	65
PLOT DATE = 1/29/2014	DATE - 01/30/2014	REVISED -		NO SCALE    SHEET NO. 2 OF 2 SHEETS    STA.    TO STA.		ILLINOIS FED. AID PROJECT <b>CONTRACT NO. 60X35</b>				

PANEL SIGN DESIGN TYPE 1 OR TYPE 2

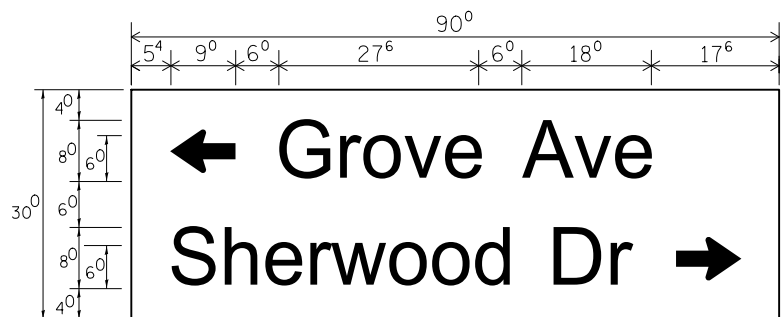


Sq. M. each  
6.00 Sq. Ft. each  
z Required  
Design Series D

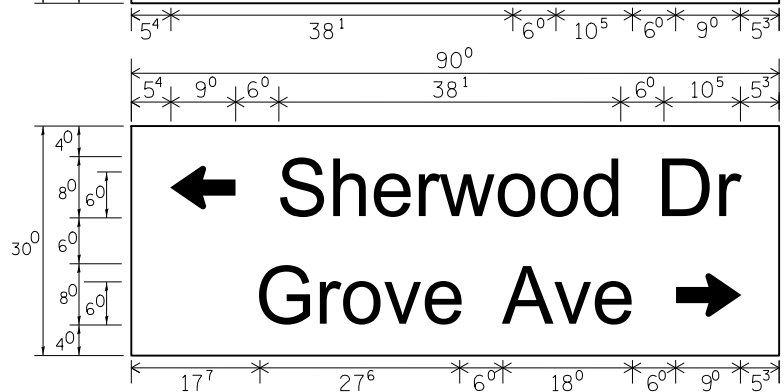


Sq. M. each  
7.50 Sq. Ft. each  
z Required  
Design Series D

PANEL SIGN DESIGN TYPE 2



Sq. M. each  
18.75 Sq. Ft. each  
1 Required  
Design Series D



Sq. M. each  
18.75 Sq. Ft. each  
1 Required  
Design Series D

NOTE: SIGN DIMENSIONS ARE IN ENGLISH UNITS

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 3/4" 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 1/4" 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/BACKET OF THE ABOVE PRODUCT.

SUPPORTING CHANNELS

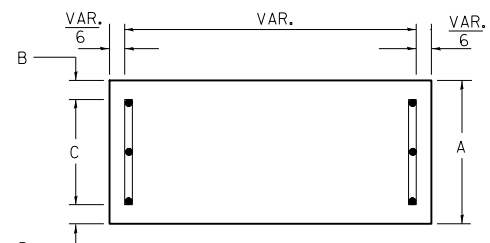
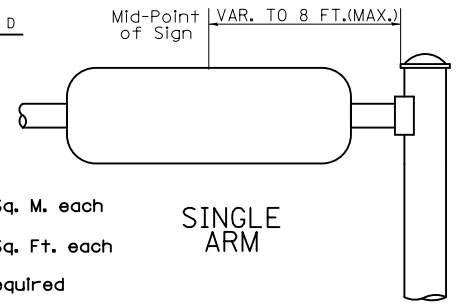


Table with 3 columns: A, B, C. Values: 18", 2", 14"



Sq. M. each  
18.75 Sq. Ft. each  
1 Required  
Design Series D

SUPPORTING CHANNELS

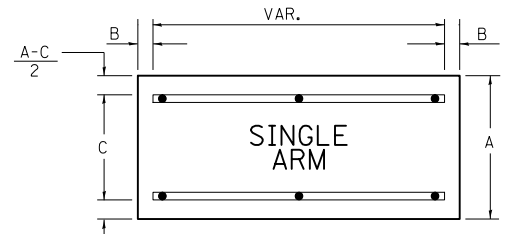
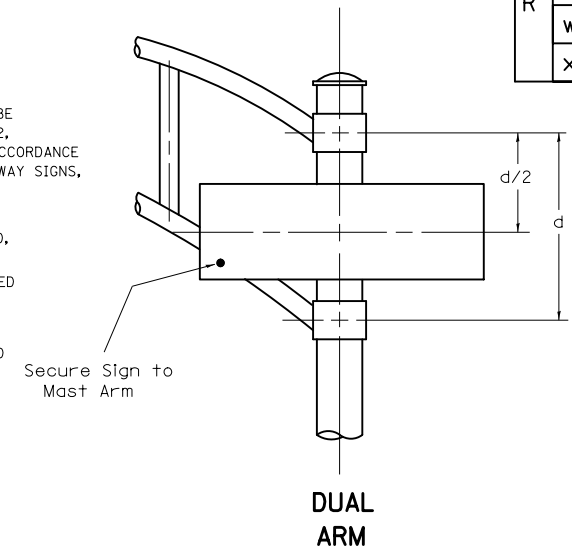


Table with 3 columns: A, B, C. Values: 18", 2", 12" and 30", 2", 22"

Sq. M. each  
18.75 Sq. Ft. each  
1 Required  
Design Series D



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

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

Spacing chart for 8-6 inch series showing letter widths for various combinations of first and second letters.

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

Spacing chart for 6 inch series showing letter widths for various combinations of first and second letters.

EXAMPLE, 2(3) DENOTES 3/8

UPPER AND LOWER CASE LETTER WIDTHS

Table showing letter widths for 6 inch upper and lower case letters, 8 inch upper case letters, and 6 inch lower case letters.

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

Spacing chart for 8 inch series showing letter widths for combinations of first and second numbers.

Table showing number widths for 6 inch and 8 inch series.

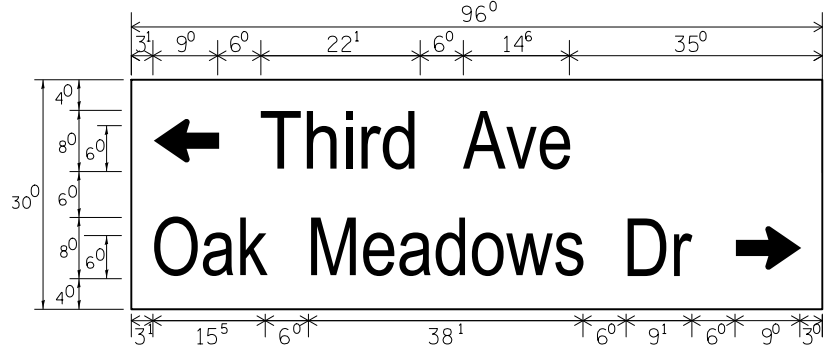
Revision and design log table with columns for FILE NAME, USER NAME, DESIGNED, DRAWN, PLOT SCALE, PLOT DATE, and REVISIONS.

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

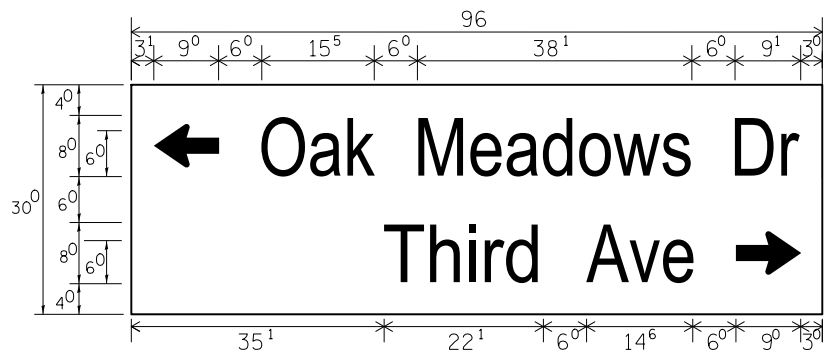
DISTRICT ONE MAST ARM MOUNTED STREET NAME SIGNS

Project information table including F.A.P. RTE., SECTION, COUNTY, TOTAL SHEETS, SHEET NO., and CONTRACT NO.

PANEL SIGN DESIGN TYPE 2



\_\_\_ Sq. M. each  
20.00 Sq. Ft. each  
1 Required  
Design Series C



\_\_\_ Sq. M. each  
20.00 Sq. Ft. each  
1 Required  
Design Series C

NOTE: SIGN DIMENSIONS ARE IN ENGLISH UNITS

GENERAL NOTES

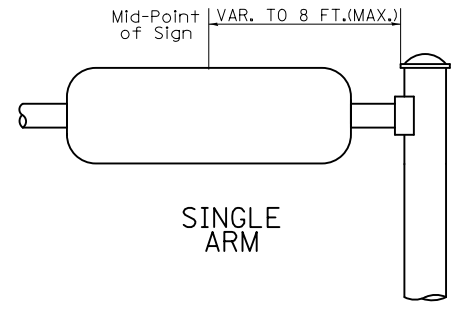
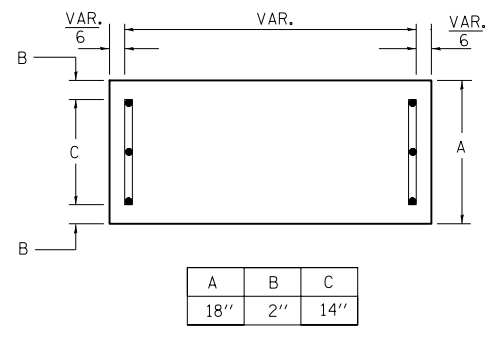
- WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 877001, 877002, 877006, 877011 AND 877012, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" x 8'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE 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.
- ALL SIGNS SHALL HAVE A WHITE REFLECTORIZED LEGEND AND BORDER ON A GREEN REFLECTORIZED BACKGROUND, TYPE A SHEETING.
- THE SIGN LENGTH SHOULD BE INCREASED IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHOULD NOT EXCEED 8'-0".
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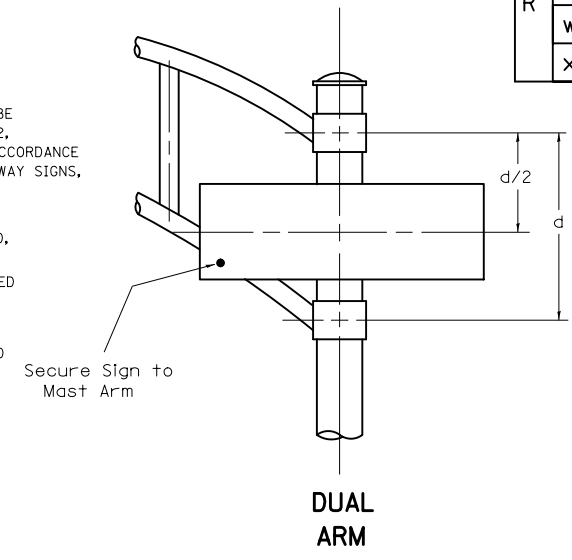
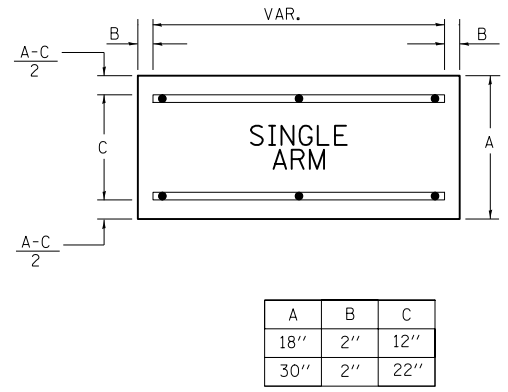
**PARTS LISTING:**  
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SIGN SCREWS 1/4" x 14 x 1" H.W.H. #3  
SELF TAPPING WITH NEOPRENE WASHER  
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SUPPORTING CHANNELS



SUPPORTING CHANNELS



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		b h i k l		f w		j		s t		v y		x		z							
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D						
A	W	X	12	14	14	15	12	14	06	10	11	14	06	10	11	12	12	14				
B	14	15	20	21	14	15	11	12	14	15	12	14	12	14	16	17						
C	E	G	14	15	20	21	12	14	06	10	12	14	12	14	14	15	14	15				
D	O	Q	R	14	15	20	21	14	15	06	10	12	14	12	14	14	15	14	15			
F	05	06	14	15	06	10	05	06	06	10	06	10	06	10	11	12						
H	I	M	N	20	21	22	24	20	21	14	15	16	17	16	17	20	21	20	21			
J	U	20	21	20	21	16	17	14	15	16	17	16	17	16	17	20	21					
K	L	11	12	16	17	11	12	05	06	11	12	11	12	11	12	12	14					
P	12	14	14	15	12	14	05	06	11	12	11	12	12	14	12	14						
S	12	14	16	17	12	14	06	10	12	14	12	14	12	14	12	14						
T	11	12	16	17	06	10	06	10	11	12	11	12	11	12	12	14						
V	06	10	14	15	11	12	06	10	12	14	12	14	12	14	12	14						
Y	05	06	14	15	06	10	05	06	05	07	05	06	06	10	11	12						
Z	16	17	22	24	16	17	12	14	16	17	16	17	16	17	20	21						

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

FIRST LETTER	SECOND LETTER																					
	a c d e		b h i k l		f w		j		s t		v y		x		z							
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D						
a	d	h	g	i	j	16	17	22	24	16	17	12	14	14	15	14	15	16	17	16	17	
b	f	k	o	p	s	12	14	16	17	11	12	05	06	11	12	11	12	12	14	12	14	
c	e	12	14	16	17	12	14	06	10	12	14	12	14	12	14	12	14	12	14			
r	06	10	12	14	06	10	03	03	05	06	05	06	06	10	06	10						
t	z	12	14	16	17	12	14	06	10	11	12	11	12	12	14	12	14					
v	y	11	12	14	15	11	12	05	06	06	10	06	10	11	12	11	12					
w	11	12	14	15	11	12	05	06	11	12	11	12	11	12	12	14						
x	12	14	16	17	11	12	05	06	11	12	11	12	11	12	12	14						

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

FIRST NUMBER	SECOND NUMBER																					
	0		1		2		3		4		5		6		7		8		9			
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D		
0	9	16	17	16	17	14	15	12	14	14	15	14	15	16	17	12	14	16	17	16	17	
1	20	21	20	21	20	21	16	17	14	15	20	21	20	21	14	15	20	21	20	21		
2	3	4	14	15	14	15	14	15	12	14	14	15	14	15	11	12	16	17	14	15		
5	14	15	14	15	14	15	11	12	11	12	14	15	14	15	11	12	14	15	14	15		
6	16	17	14	15	14	15	12	15	12	14	14	15	14	15	11	12	14	15	14	15		
7	12	14	12	14	14	15	12	15	05	06	12	14	14	15	11	12	14	15	12	14		
8	16	17	16	17	14	15	12	15	12	14	14	15	16	17	12	14	16	17	14	15		

EXAMPLE, 2<sup>(3)</sup> DENOTES 3/8

UPPER AND LOWER CASE LETTER WIDTHS

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

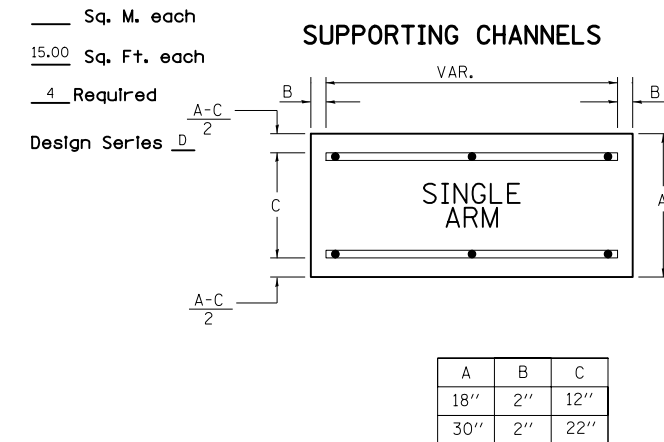
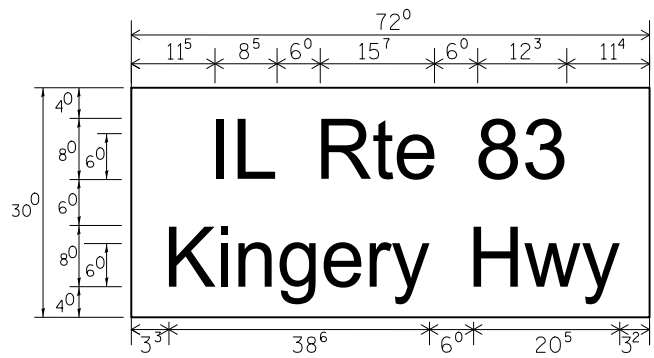
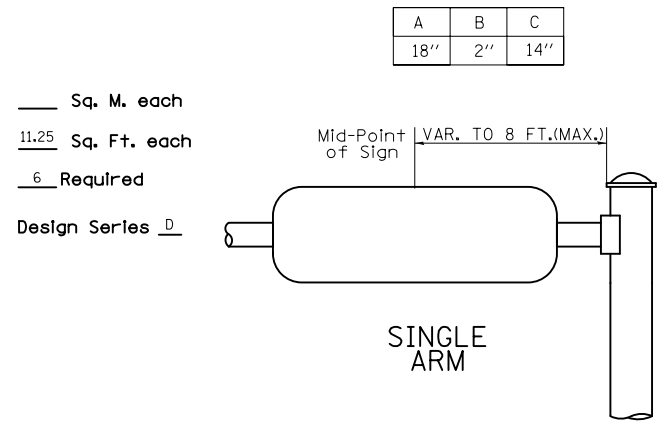
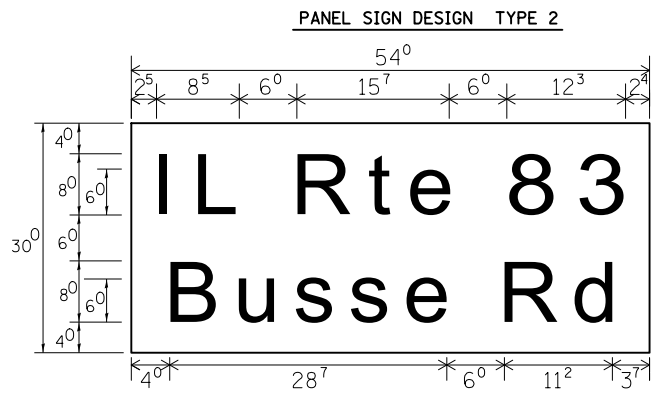
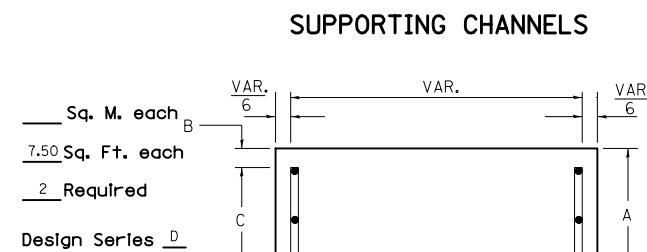
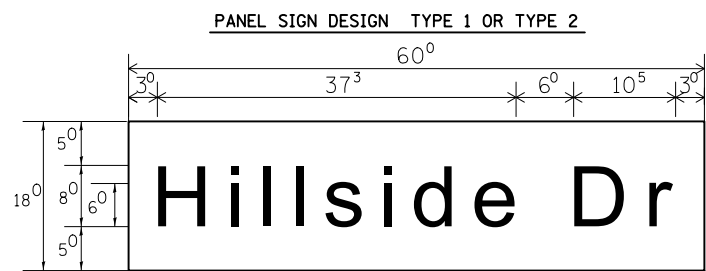
NUMBER	6 INCH SERIES		8 INCH SERIES	
	C	D	C	D
	1	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>5</sup>
2	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
3	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
4	3 <sup>5</sup>	4 <sup>3</sup>	4 <sup>7</sup>	5 <sup>7</sup>
5	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
6	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
7	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
8	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
9	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
0	3 <sup>4</sup>	4 <sup>2</sup>	4 <sup>5</sup>	5 <sup>5</sup>

FILE NAME = ...CAD\Sheets\60X35-067.dgn	USER NAME = jrt	DESIGNED - DAG/BCK	REVISED - DAG 10/28/09
		DRAWN - BCK	REVISED - LP 01/01/14
		CHECKED - DAG/DAD	REVISED -
		DATE - 03-15-09	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCALE: NONE	SHEET NO. 2 OF 3 SHEETS	DISTRICT ONE MAST ARM MOUNTED STREET NAME SIGNS	STA. TO STA.
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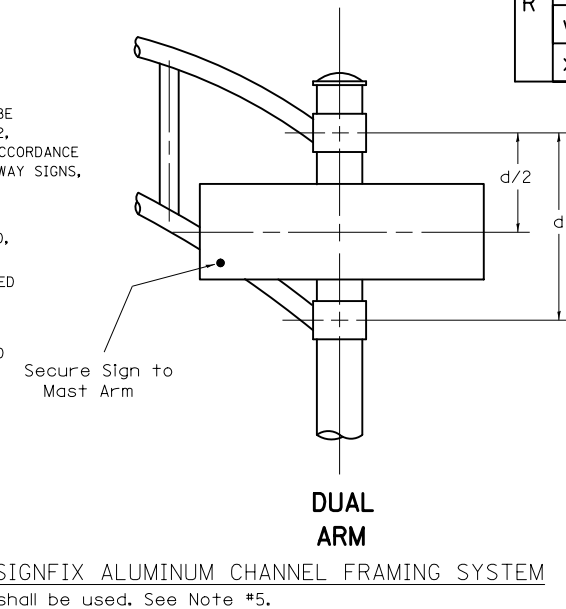
F.A.P. RTE. 344	SECTION 2013-063TS	COUNTY DUPAGE	TOTAL SHEETS 68	SHEET NO. 67
TS-02			CONTRACT NO. 60X35	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



**NOTE: SIGN DIMENSIONS ARE IN ENGLISH UNITS**

**GENERAL NOTES**

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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/BACKET OF THE ABOVE PRODUCT.



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

FIRST LETTER	SECOND LETTER															
	acde		bhikl		fw		j		st		vy		xz			
	g	o	q	m	n	p	r	u	f	w	j	s	t	v	y	x
AWX	12	14	14	15	12	14	06	10	11	14	06	10	11	12	12	14
B	14	15	20	21	14	15	11	12	14	15	12	14	12	14	16	17
CEG	14	15	20	21	12	14	06	10	12	14	12	14	14	15	14	15
DOQR	14	15	20	21	14	15	06	10	12	14	12	14	14	15	14	15
F	05	06	14	15	06	10	05	06	06	10	06	10	06	10	11	12
HIMN	20	21	22	24	20	21	14	15	16	17	16	17	20	21	20	21
JU	20	21	20	21	16	17	14	15	16	17	16	17	16	17	20	21
KL	11	12	16	17	11	12	05	06	11	12	11	12	11	12	12	14
P	12	14	14	15	12	14	05	06	11	12	11	12	12	14	12	14
S	12	14	16	17	12	14	06	10	12	14	12	14	12	14	12	14
T	11	12	16	17	06	10	06	10	11	12	11	12	11	12	12	14
V	06	10	14	15	11	12	06	10	12	14	12	14	12	14	12	14
Y	05	06	14	15	06	10	05	06	05	07	05	06	06	10	11	12
Z	16	17	22	24	16	17	12	14	16	17	16	17	16	17	20	21

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

FIRST LETTER	SECOND LETTER															
	acde		bhikl		fw		j		st		vy		xz			
	g	o	q	m	n	p	r	u	f	w	j	s	t	v	y	x
adhgi	16	17	22	24	16	17	12	14	14	15	14	15	16	17	16	17
lnqu																
bfkops	12	14	16	17	11	12	05	06	11	12	11	12	12	14	12	14
ce	12	14	16	17	12	14	06	10	12	14	12	14	12	14	12	14
r	06	10	12	14	06	10	03	03	05	06	05	06	06	10	06	10
tz	12	14	16	17	12	14	06	10	11	12	11	12	12	14	12	14
vy	11	12	14	15	11	12	05	06	06	10	06	10	11	12	11	12
w	11	12	14	15	11	12	05	06	11	12	11	12	11	12	12	14
x	12	14	16	17	11	12	05	06	11	12	11	12	11	12	12	14

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

FIRST NUMBER	SECOND NUMBER																			
	0		1		2		3		4		5		6		7		8		9	
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
09	16	17	16	17	14	15	12	14	14	15	14	15	16	17	12	14	16	17	16	17
1	20	21	20	21	20	21	16	17	14	15	20	21	20	21	14	15	20	21	20	21
234	14	15	14	15	14	15	12	14	12	14	14	15	14	15	11	12	16	17	14	15
5	14	15	14	15	14	15	11	12	11	12	14	15	14	15	11	12	14	15	14	15
6	16	17	14	15	14	15	12	15	12	14	14	15	14	15	11	12	14	15	14	15
7	12	14	12	14	14	15	12	15	05	06	12	14	14	15	11	12	14	15	12	14
8	16	17	16	17	14	15	12	15	12	14	14	15	16	17	12	14	16	17	14	15

EXAMPLE, 2 3 DENOTES 3/8

**UPPER AND LOWER CASE LETTER WIDTHS**

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

NUMBER	6 INCH SERIES		8 INCH SERIES	
	C	D	C	D
1	1 <sup>2</sup>	1 <sup>4</sup>	1 <sup>5</sup>	2 <sup>0</sup>
2	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
3	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
4	3 <sup>5</sup>	4 <sup>3</sup>	4 <sup>7</sup>	5 <sup>7</sup>
5	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
6	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
7	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
8	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
9	3 <sup>2</sup>	4 <sup>0</sup>	4 <sup>3</sup>	5 <sup>3</sup>
0	3 <sup>4</sup>	4 <sup>2</sup>	4 <sup>5</sup>	5 <sup>5</sup>