

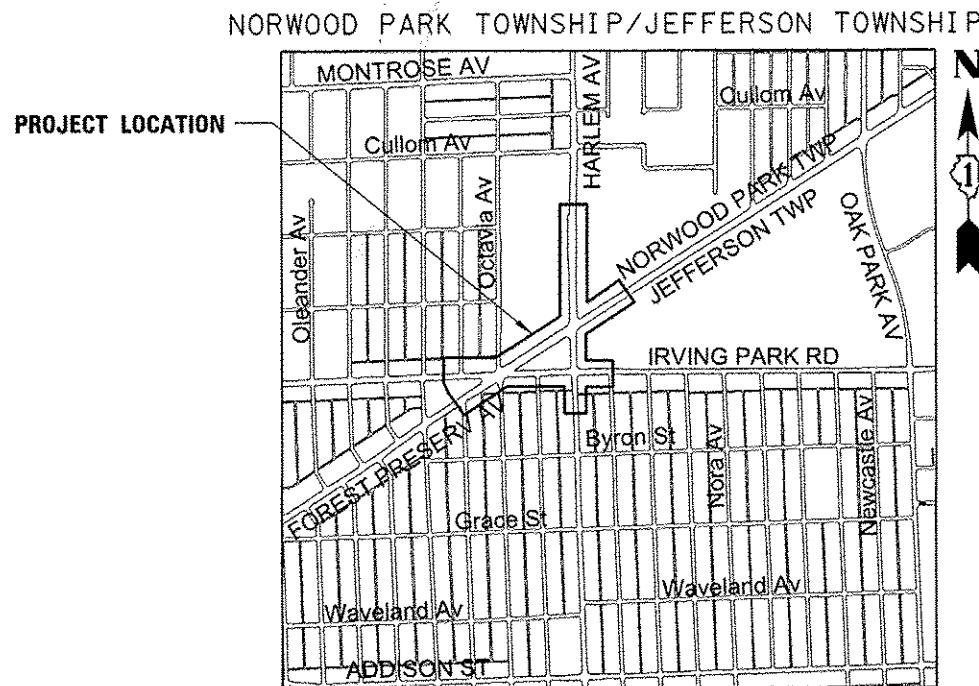
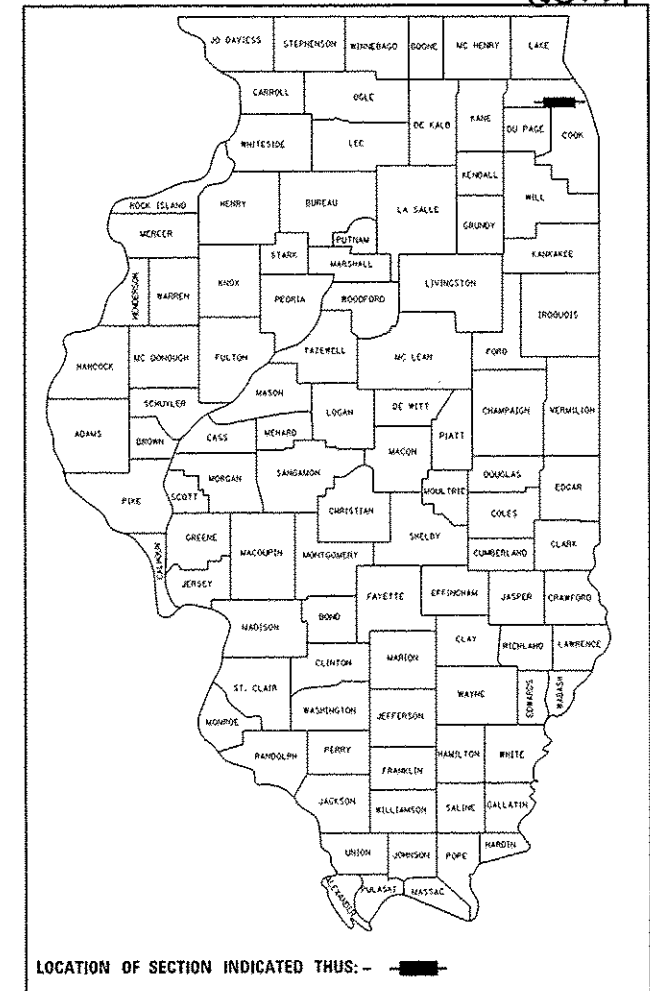
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
**PLANS FOR PROPOSED
 FEDERAL AID HIGHWAY**

DISTRICT 1
 HIGHWAY SAFETY IMPROVEMENT PROJECT
 PROJECT: HSIP-0348(050)

IL ROUTE 19 (IRVING PARK ROAD)
 IL ROUTE 43 (HARLEM AVENUE) TO
 FOREST PRESERVE DRIVE /OCTAVIA AVENUE
 F.A.P. ROUTE 348
 SECTION 2012-041TS
 COOK COUNTY

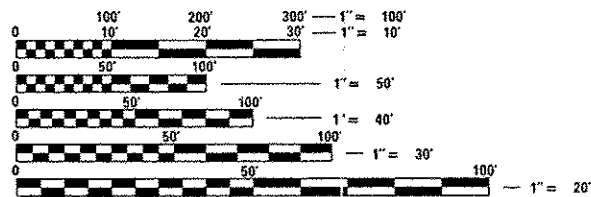
C-91-077-12

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	2012-041TS	COOK	34	1



LOCATION MAP

IMPROVEMENTS LOCATED IN THE VILLAGE OF NORRIDGE AND THE CITY OF CHICAGO



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.

PREPARED BY: _____
 TRAFFIC ENGINEER DATE

CONTRACT NO. 60T97

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

FOR UNDERGROUND UTILITY LOCATIONS

Call Before You Dig
JULIE
 ILLINOIS ONE-CALL SYSTEM
 (800) 892-0123 OR 811



SIGNED:
 JOSEPH EMBRY, P.E. IL LIC. NO. 062-057496 EXPIRES 11-30-2013
 DATE: 3/21/13

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

SUBMITTED: March 22 2013

 JOHN F. BARANZOLI, P.E.
 DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

May 10 2013

 JOHN D. BARANZOLI, P.E.
 acting ENGINEER OF DESIGN AND ENVIRONMENT

May 10 2013

 OMAR 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 SOG, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

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

THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" 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.

LIST OF STATE STANDARDS


STD. NO.	TITLE
000001-06	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
424001-07	PERPENDICULAR CURB RAMPS FOR SIDEWALKS
424006-01	DIAGONAL CURB RAMPS FOR SIDEWALKS
424011-01	CORNER PARALLEL CURB RAMPS FOR SIDEWALKS
424021-01	DEPRESSED CORNER FOR SIDEWALK
606001-05	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
606301-04	PC CONCRETE ISLANDS AND MEDIANS
606306-03	CORRUGATED PC CONCRETE MEDIANS
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701701-08	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-05	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-02	TRAFFIC CONTROL DEVICES
720001-01	SIGN PANEL MOUNTING DETAILS
780001-03	TYPICAL PAVEMENT MARKINGS
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'
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

90% FED. / 10% STATE
URBAN

CODED PAY ITEM NO.	ITEM	UNIT	TOTAL QUANTITY	0021 TRAFFIC SIGNALS			
				IL ROUTE 19/ FOREST PRESERVE /OCTAVIA	IL ROUTE 19/ IL ROUTE 43	IL ROUTE 43/ FOREST PRESERVE	INTERCONNECT
31101200	SUBBASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	760	412	150	198	
42001300	PROTECTIVE COAT	SQ YD	868	431	190	247	
42400200	PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH	SQ FT	5600	2475	1350	1775	
42400800	DETECTABLE WARNINGS	SQ FT	395	186	90	119	
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	676	355	142	179	
44000600	SIDEWALK REMOVAL	SQ FT	5600	2475	1350	1775	
44003100	MEDIAN REMOVAL	SQ FT	1044	1044			
60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	676	355	142	179	
60618300	CONCRETE MEDIAN SURFACE, 4 INCH	SQ FT	399	399			
60624600	CORRUGATED MEDIAN	SQ FT	564	564			
67100100	MOBILIZATION	L SUM	1				
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1				
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1				
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1				
* 72000200	SIGN PANEL - TYPE 2	SQ FT	166	58	60	48	
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	110	110			
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	420	420			
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	2182	1077	346	759	
* 78000500	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	34	34			
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	44	44			
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	251	52	199		
78300100	PAVEMENT MARKING REMOVAL	SQ FT	1821	888	561	372	
80500020	SERVICE INSTALLATION - POLE MOUNTED	EACH	3	1	1	1	
81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	3108	719	656	893	840
81028210	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	221	88	52	81	
81028220	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	140	39	48	53	
81028240	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	1783	935	372	476	
81400100	HANDHOLE	EACH	15	6	4	4	1
81400200	HEAVY-DUTY HANDHOLE	EACH	13	5	4	4	
81400300	DOUBLE HANDHOLE	EACH	8	4	2	2	

* 66900200 NON-SPECIAL WASTE DISPOSAL CUYD 110 37 30 37
 * 66900400 SPECIAL WASTE GROUNDWATER DISPOSAL GAL 1850 617 616 617
 * 66900450 SPECIAL WASTE PLANS AND REPORTS L SUM 1 0.34 0.33 0.33
 * 66900530 SOIL DISPOSAL ANALYSIS EACH 4 2 1 1

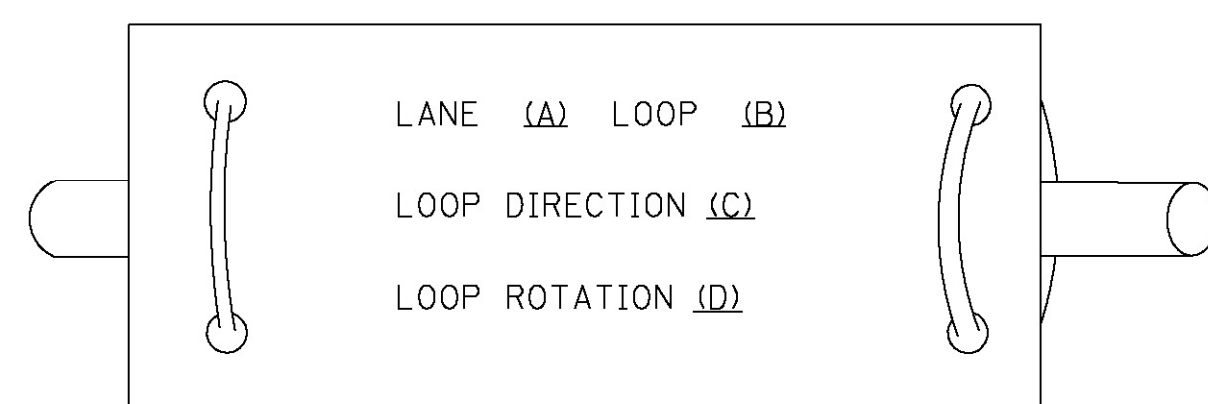
*Specialty Items Rev.

	USER NAME - jmh	DESIGNED - BRD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES			F.A.P. RTE. 0348	SECTION 2012-041TS	COUNTY COOK	TOTAL SHEETS	SHEET NO.
	PLOT SCALE - 40,0000 1" = 100'	DRAWN - MFB	REVISED -		IL ROUTE 19 (IRVING PARK RD.) / IL ROUTE 43 (HARLEM AV.) FOREST PRESERVE DRIVE						34	3
	PLOT DATE - 3/28/2013	CHECKED - JJE	REVISED -		NO SCALE SHEET NO. 1 OF 3 SHEETS STA. TO STA.						CONTRACT NO. 60197	
	DATE - 03/21/2013	REVISED -		ILLINOIS FED. AID PROJECT								

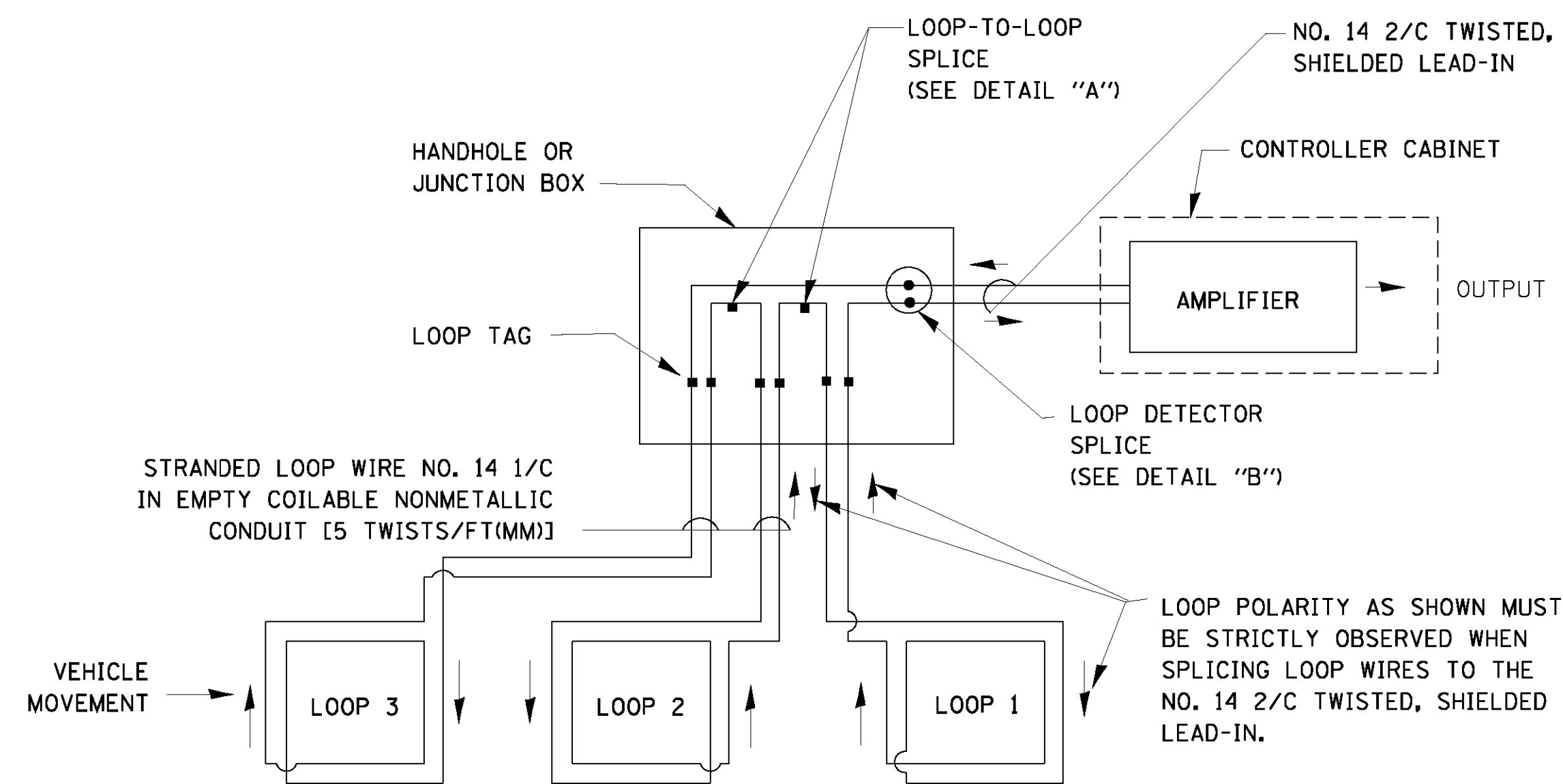
LOOP DETECTOR NOTES

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

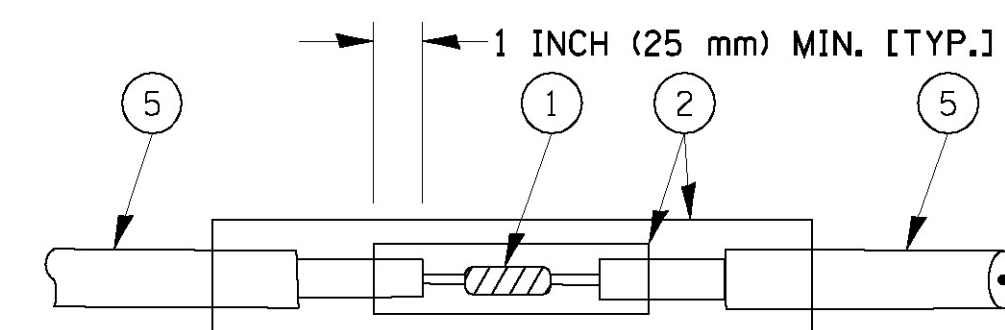


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

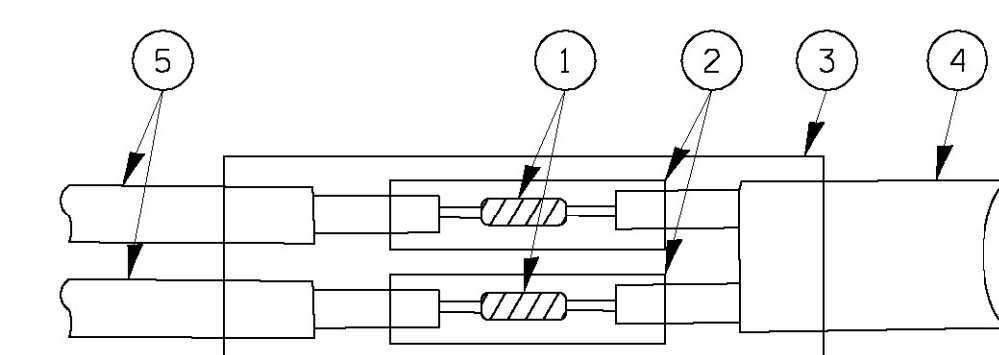


DETECTOR LOOP WIRING SCHEMATIC

- 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.

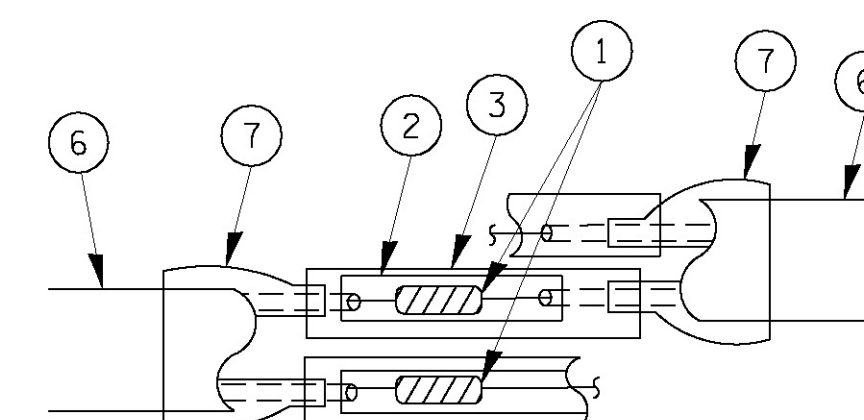


**DETAIL "A"
LOOP-TO-LOOP SPLICE**

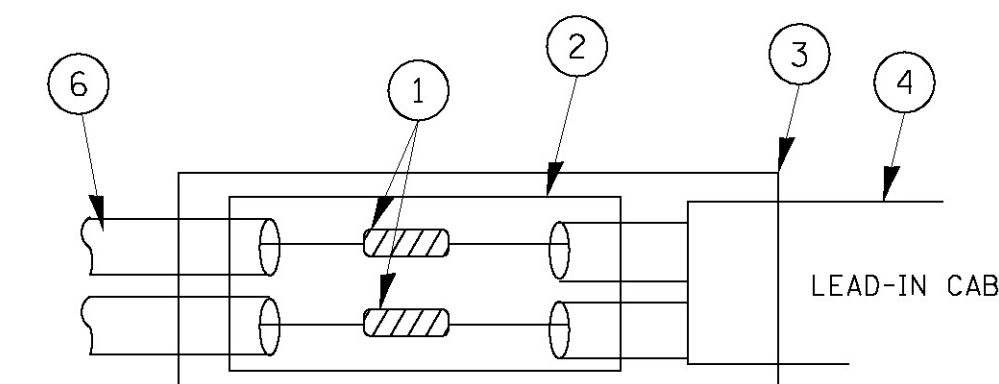


**DETAIL "B"
LOOP-TO-CONTROLLER SPLICE**

TYPE I LOOP



**DETAIL "A"
LOOP-TO-LOOP SPLICE**



**DETAIL "B"
LOOP-TO-CONTROLLER SPLICE**

LOOP DETECTOR SPLICE

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

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	PLOT DATE = 10/6/2009	DATE - 10/28/09	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

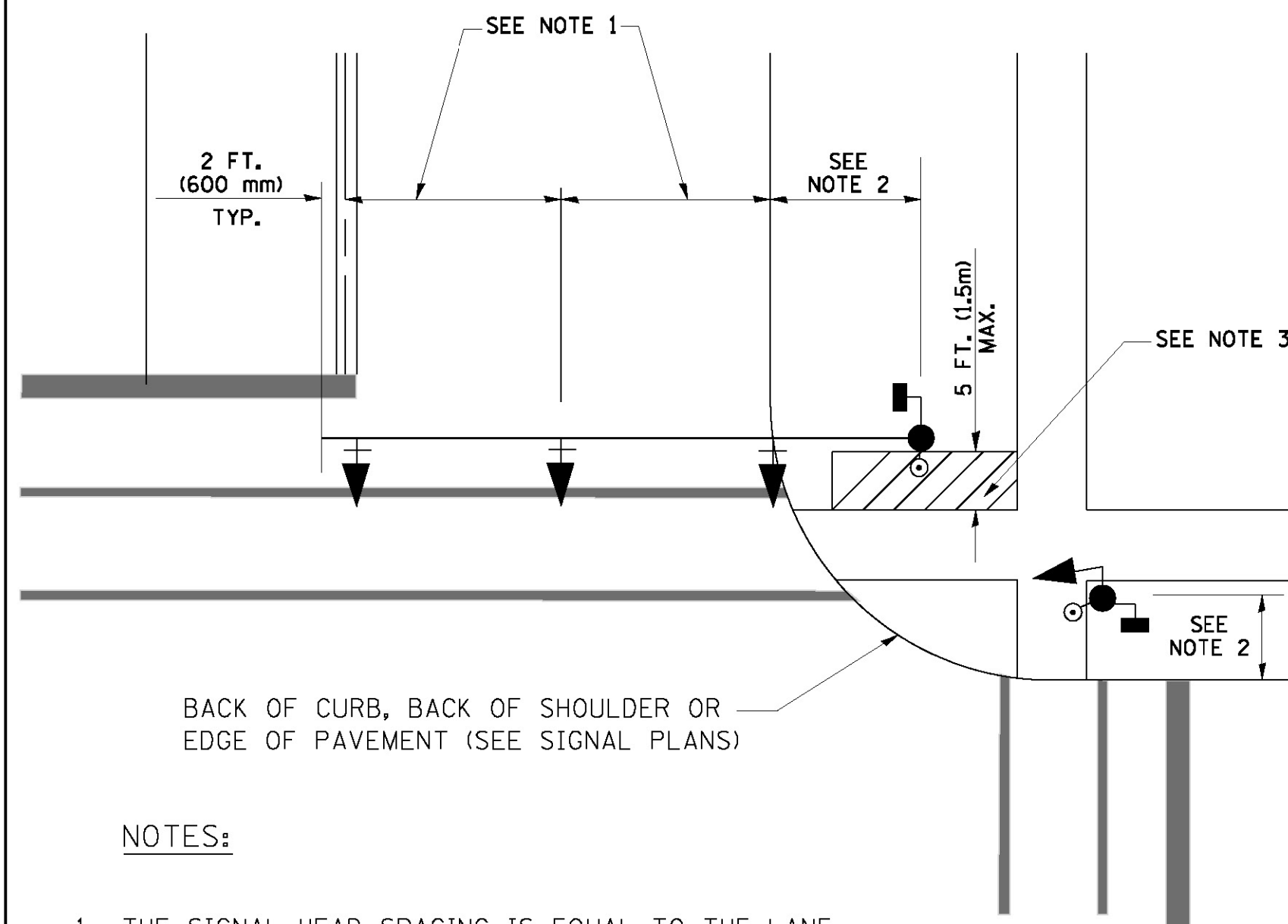
**DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: SHEET NO. 1 OF 6 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0348	2012-041TS	COOK	34	6
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 60T97	

TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

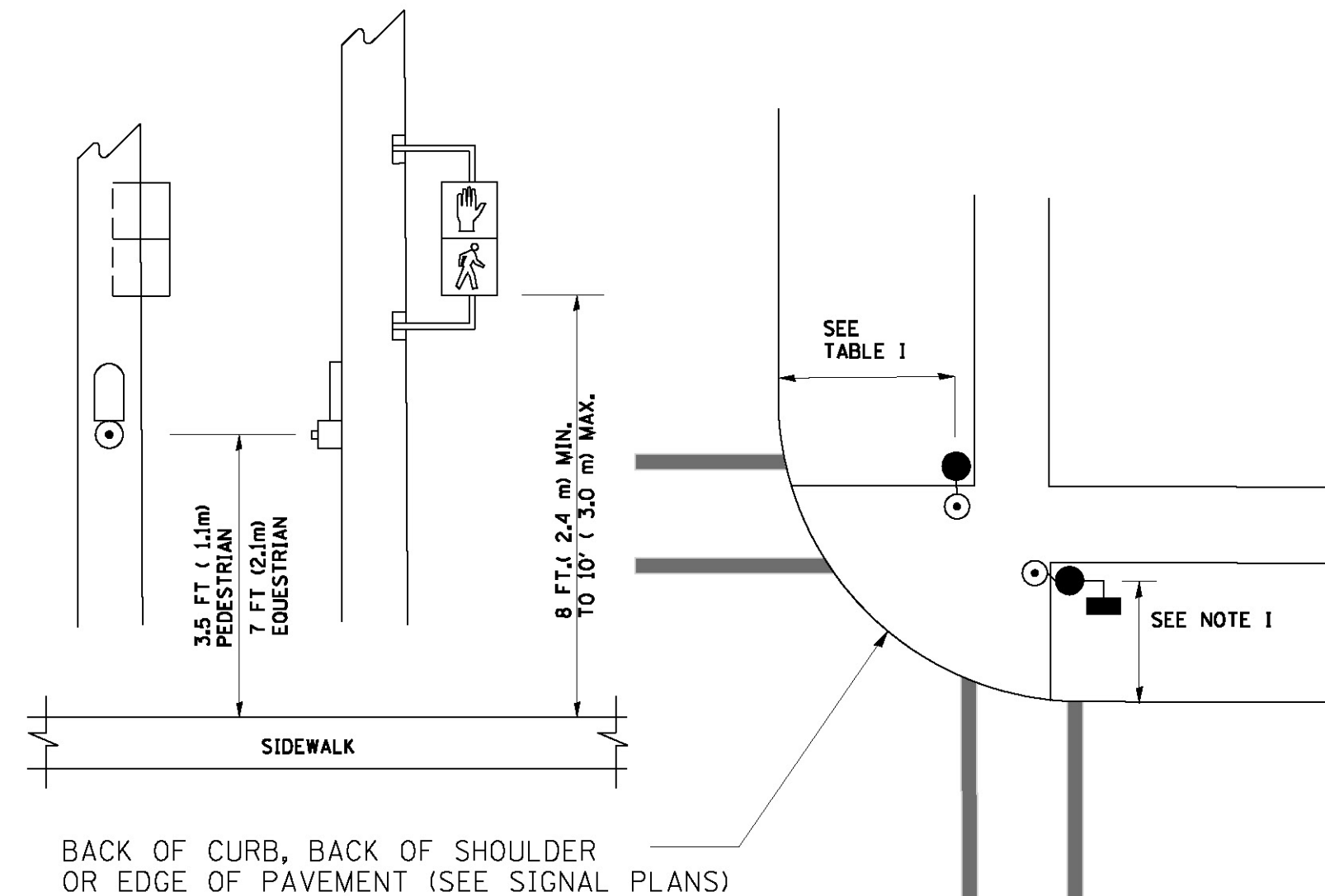
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



NOTES:

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

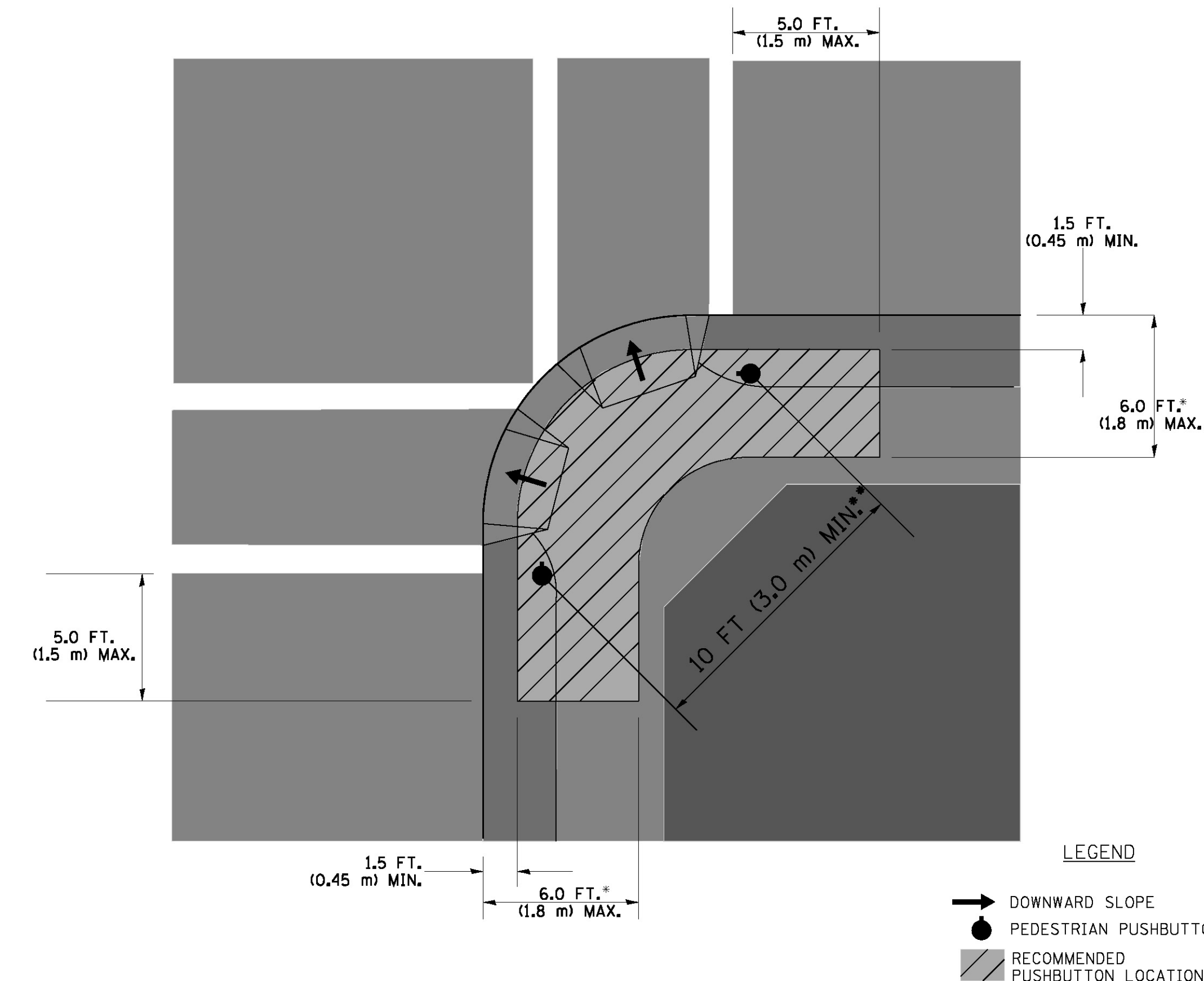
PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST



NOTES:

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

RECOMMENDED PUSHBUTTON LOCATIONS



- WHERE THERE ARE CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5 FT (0.45 m) AND 6 FT (1.8 m) FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT, IT SHOULD NOT BE FURTHER THAN 10 FT (3 m) FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
- WHERE THERE ARE CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT IMPRACTICAL TO PROVIDE THE 10 FT (3 m) SEPERATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

NOTES:

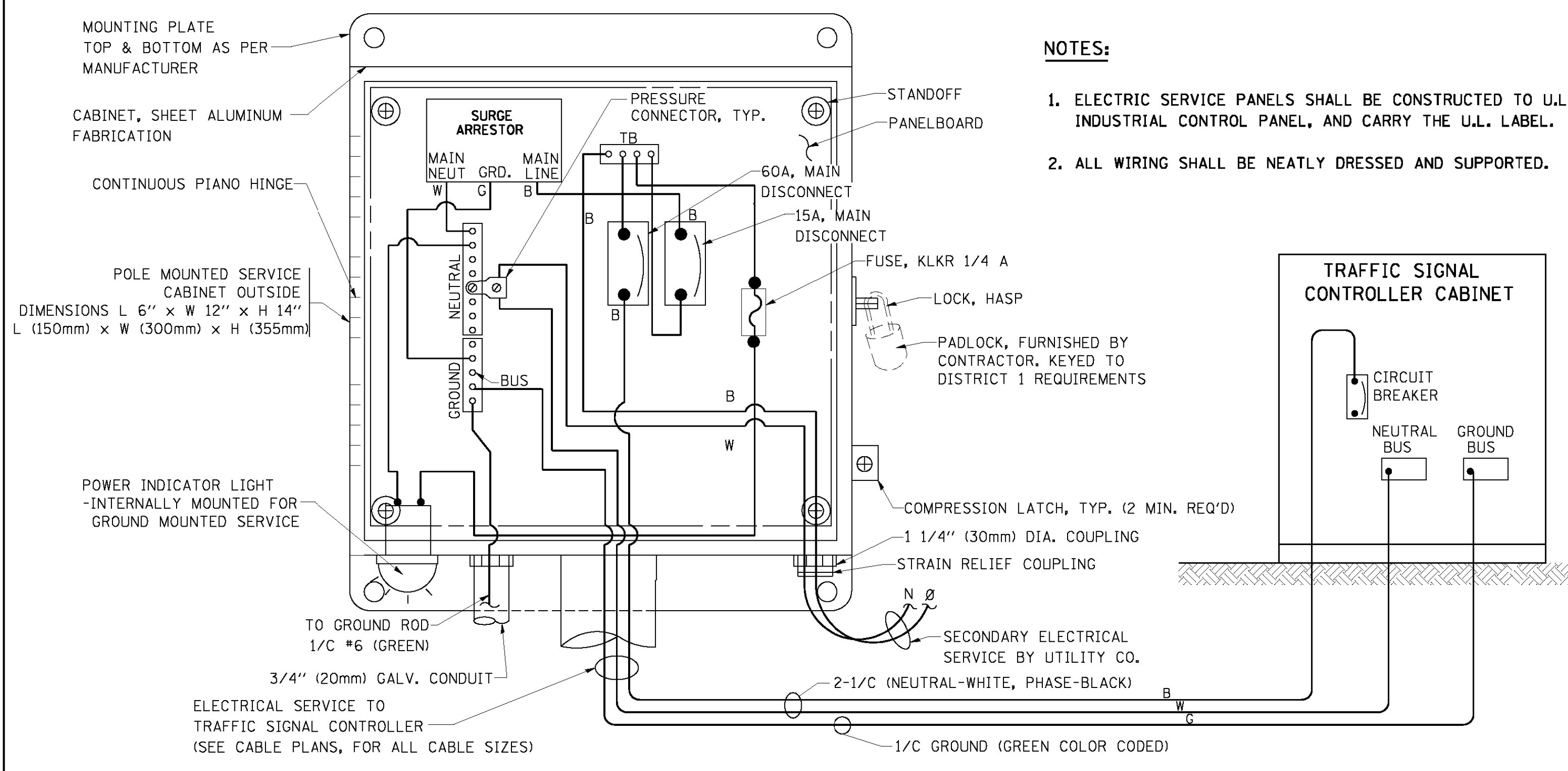
1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM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

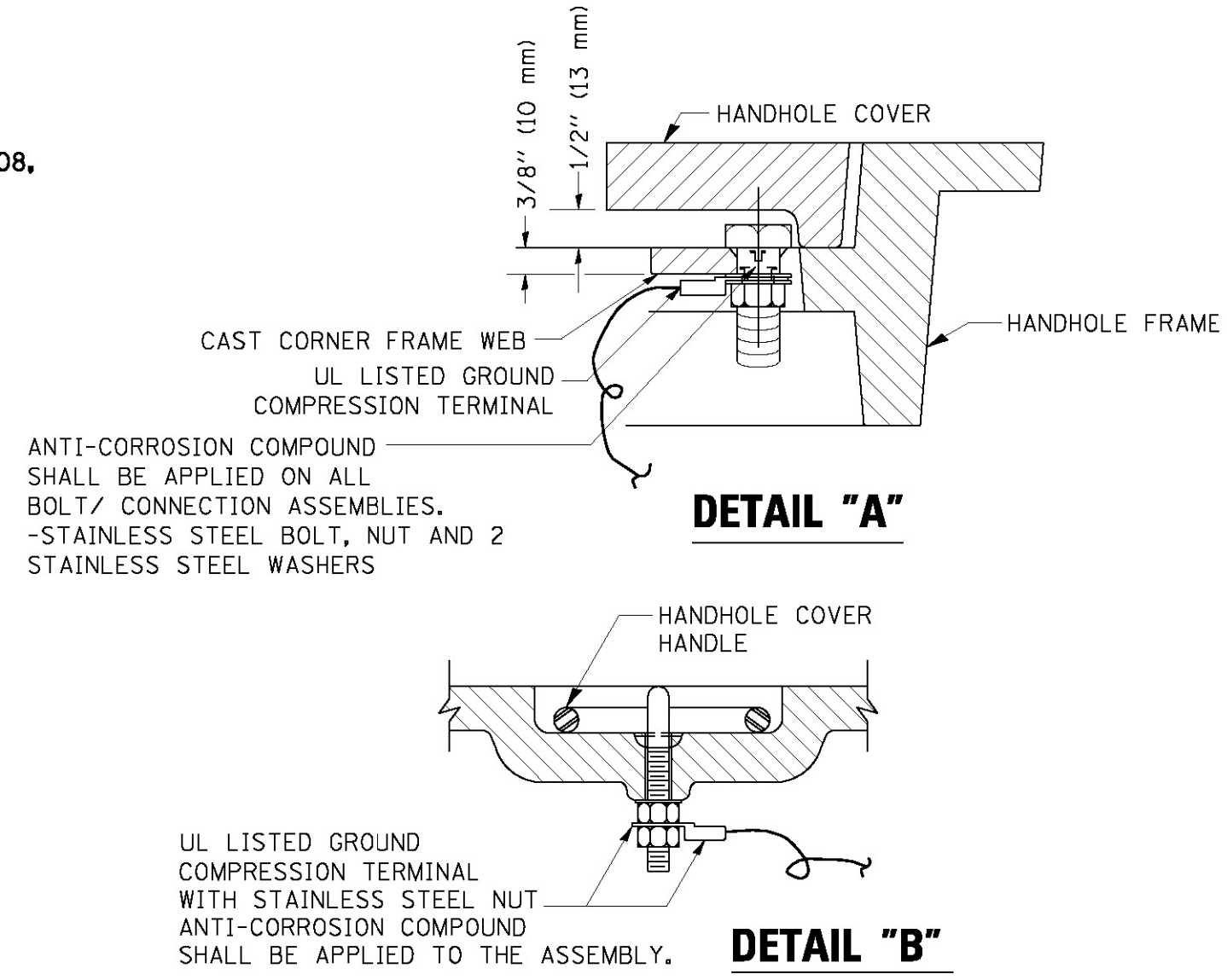
NOTES:

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.



NOTES:

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



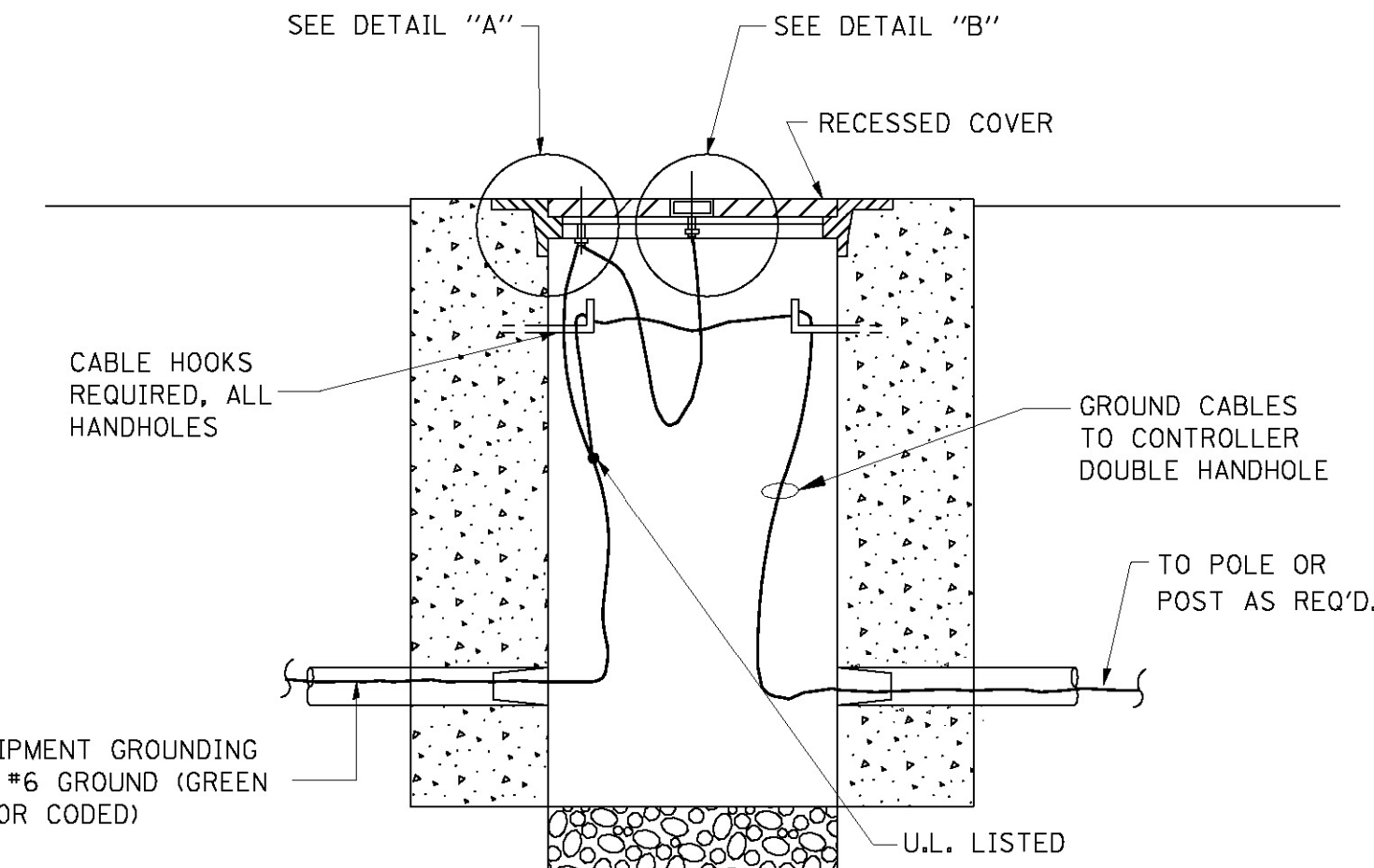
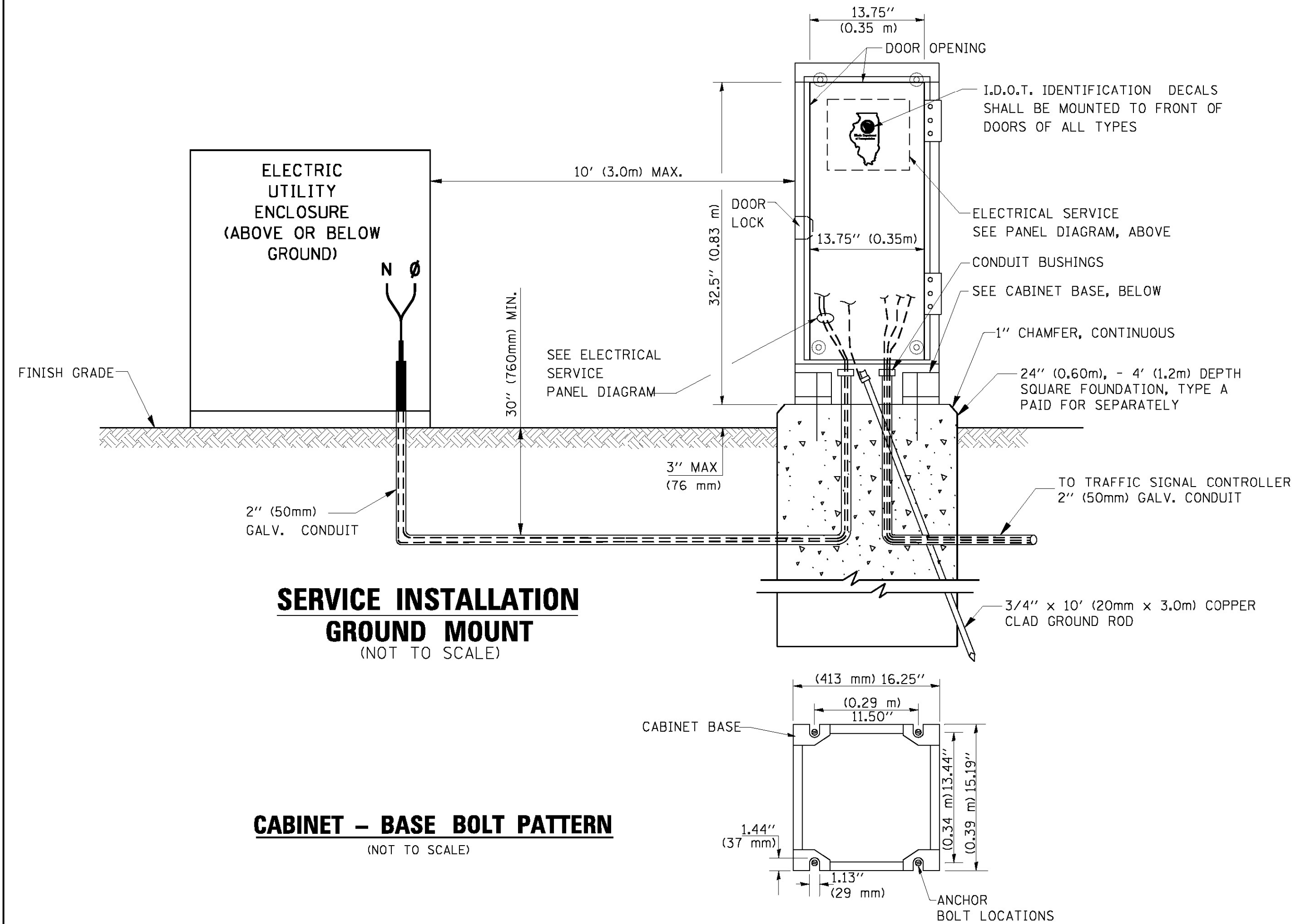
NOTES:

GROUNDING SYSTEM

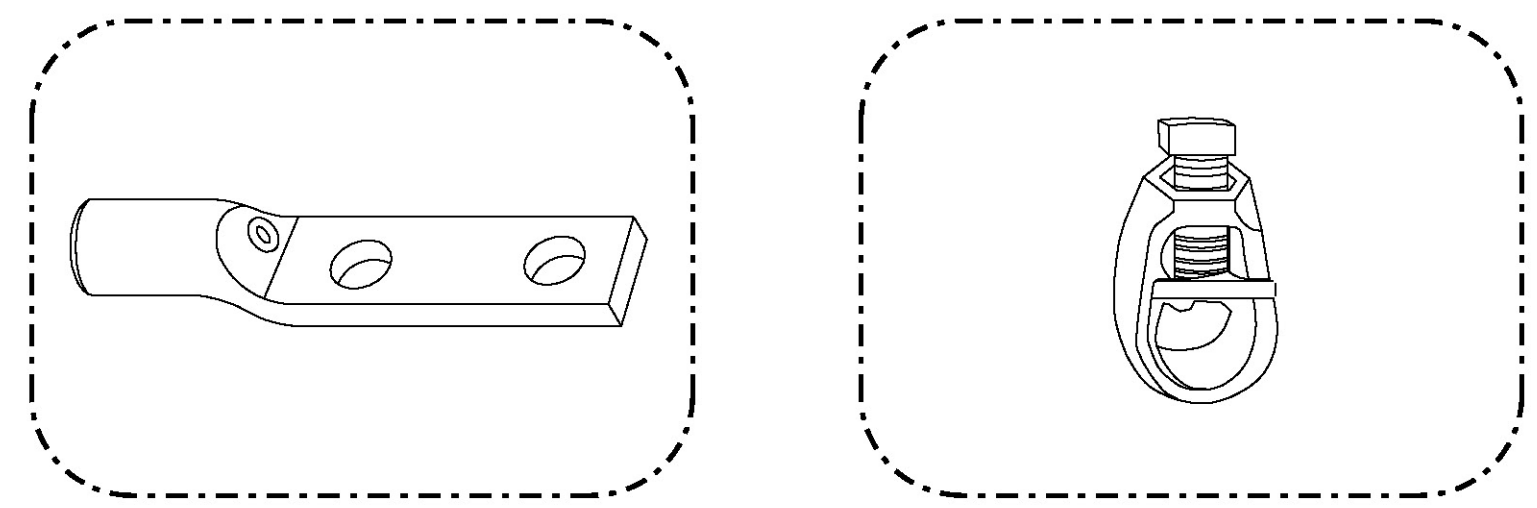
1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE,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

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

SERVICE INSTALLATION POLE MOUNT (SHOWN) (NOT TO SCALE)



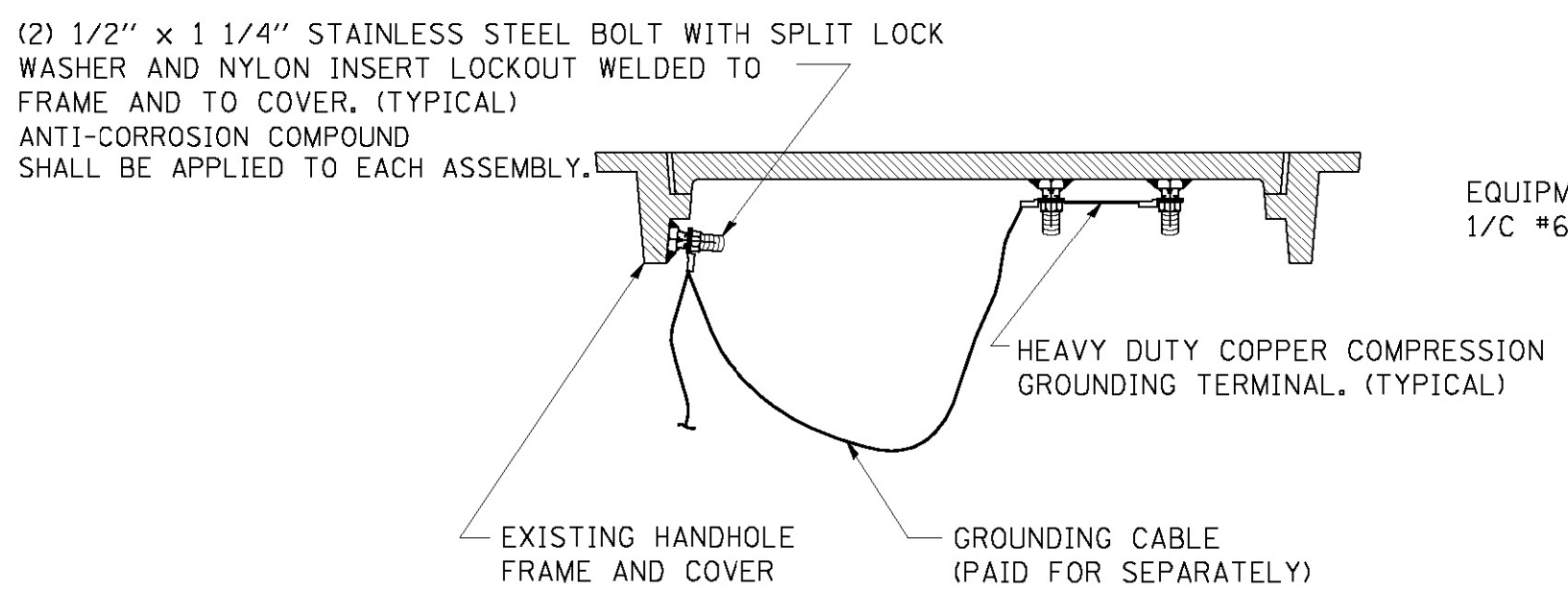
HANDHOLE COVER & FRAME - GROUNDING DETAIL (NOT TO SCALE)



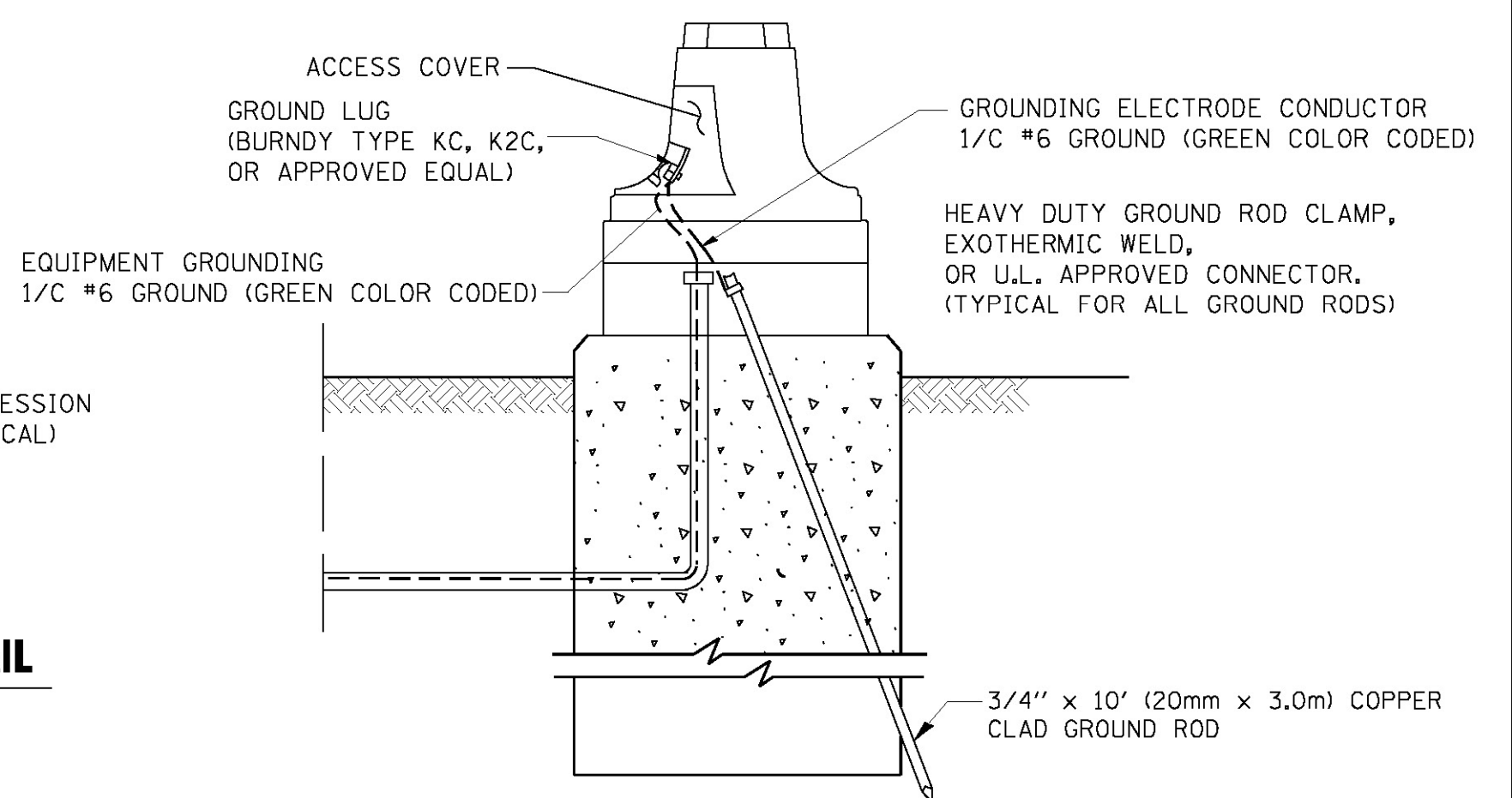
HEAVY-DUTY COMPRESSION TERMINAL (BURNDY TYPE YGHA OR APPROVED EQUAL) 3/4" (20mm) HEAVY-DUTY GROUND ROD CLAMP (BURNDY TYPE GRC OR APPROVED EQUAL)

NOTES:

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



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



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

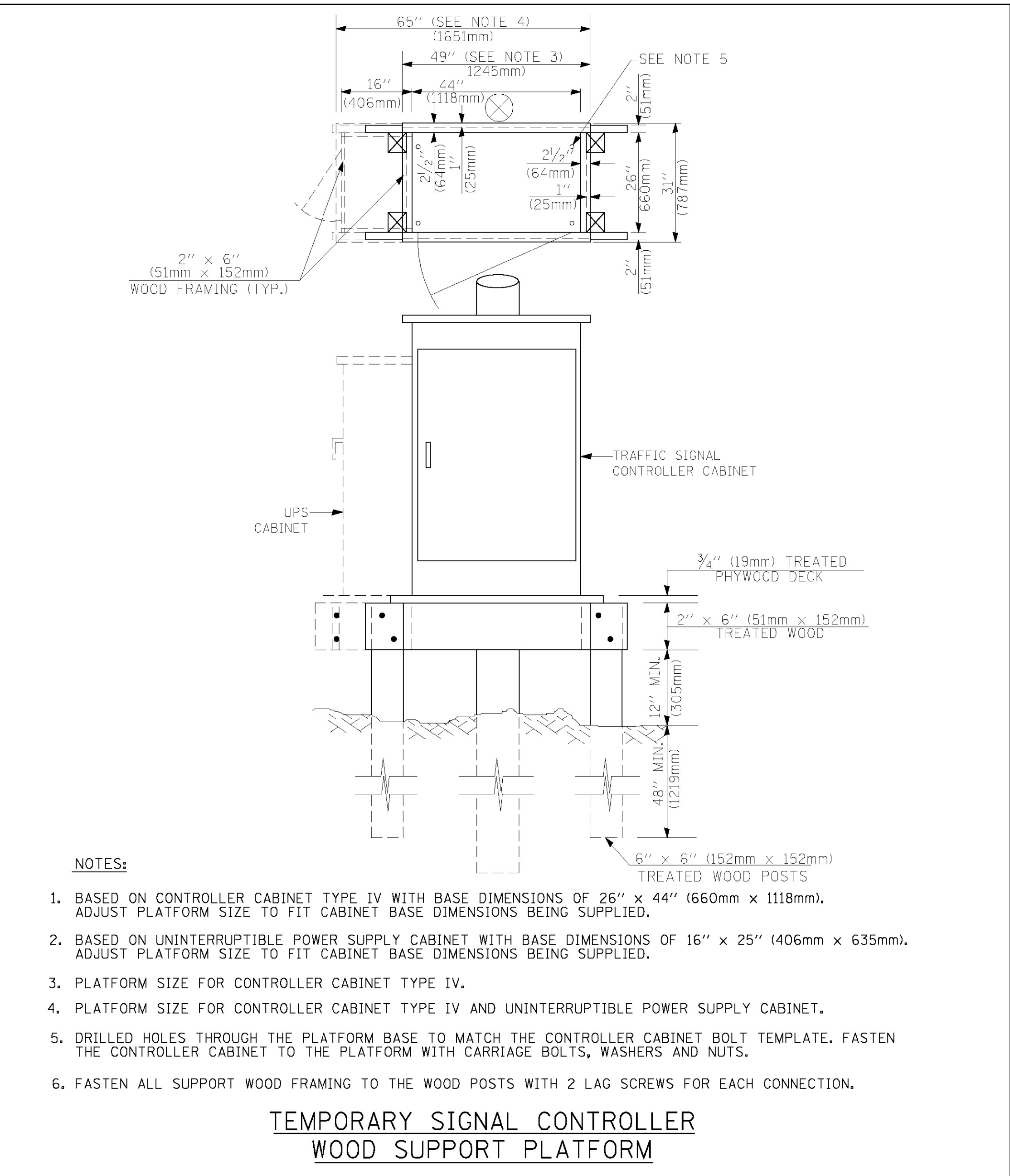
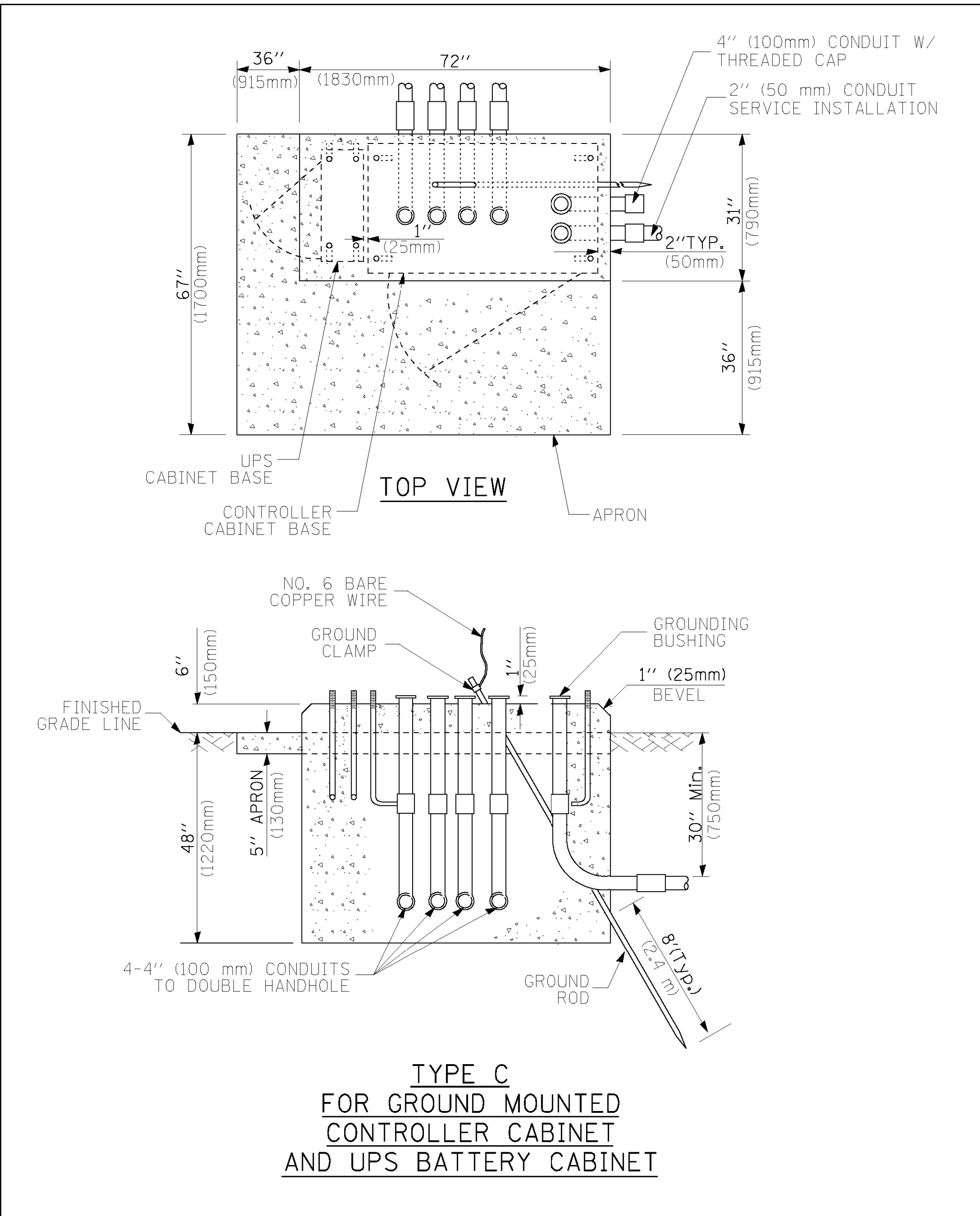
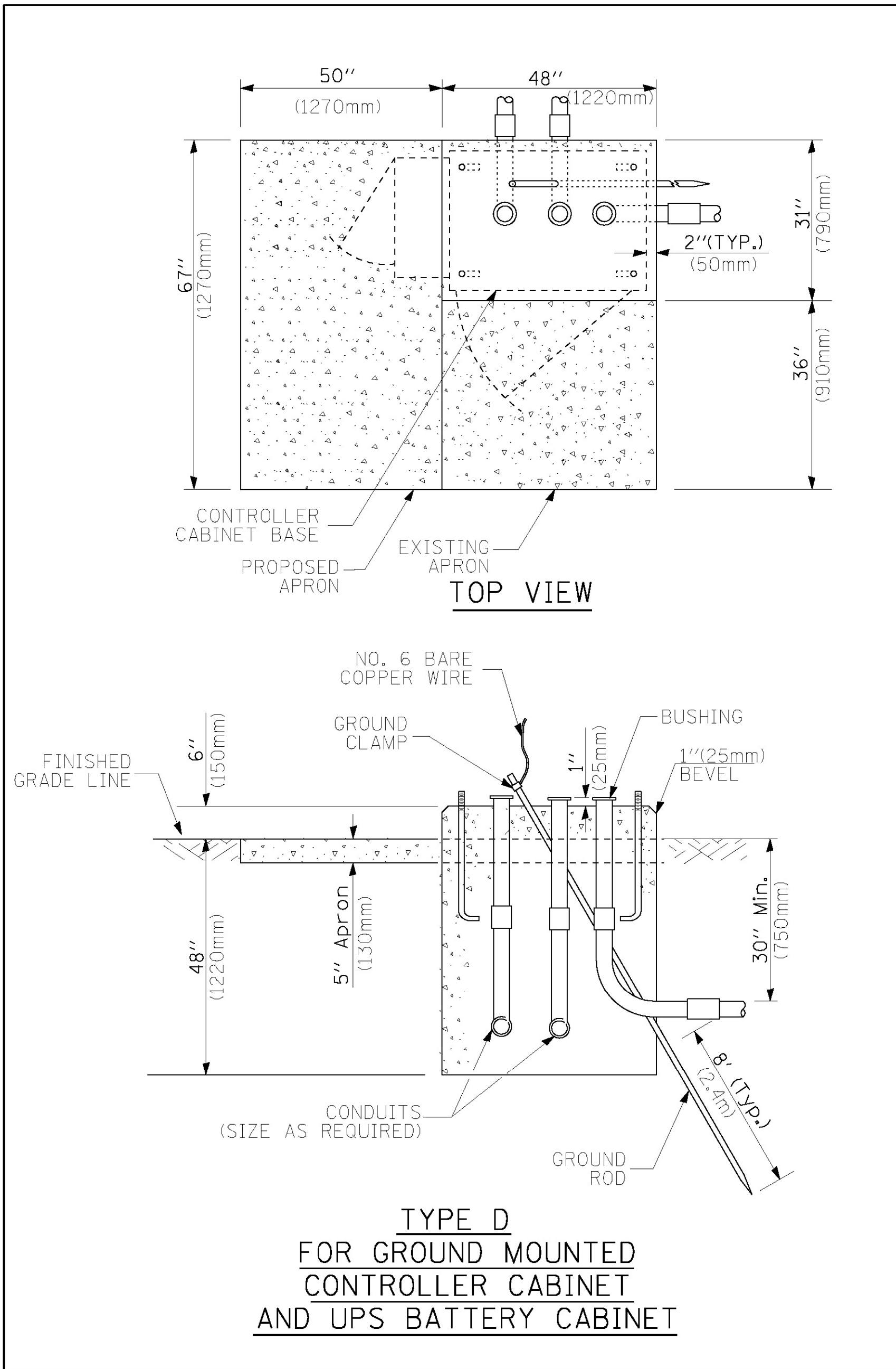
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	PLOT DATE = 10/6/2009	DATE - 10/28/09	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT 1
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: SHEET NO. 3 OF 6 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0348	2012-041TS	COOK	34	8
CONTRACT NO. 60T97				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



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

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

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

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)

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)	24" (600mm)	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 up to 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:**
1. These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average unconfined compressive strength (Qu) > 1.0 tsf (100 kpa). This strength shall be verified by boring data prior to construction or with testing by the Engineer during foundation drilling. The Bureau of Bridges & Structures should be contacted for a revised design if other conditions are encountered.
 2. Combination mast arm assemblies under 55 feet (16.8 m) shall use 36" (900 mm) diameter foundations.
 3. Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm) diameter foundations.
 4. For mast arm assemblies with dual arms refer to state standard 878001.

CABLE SLACK

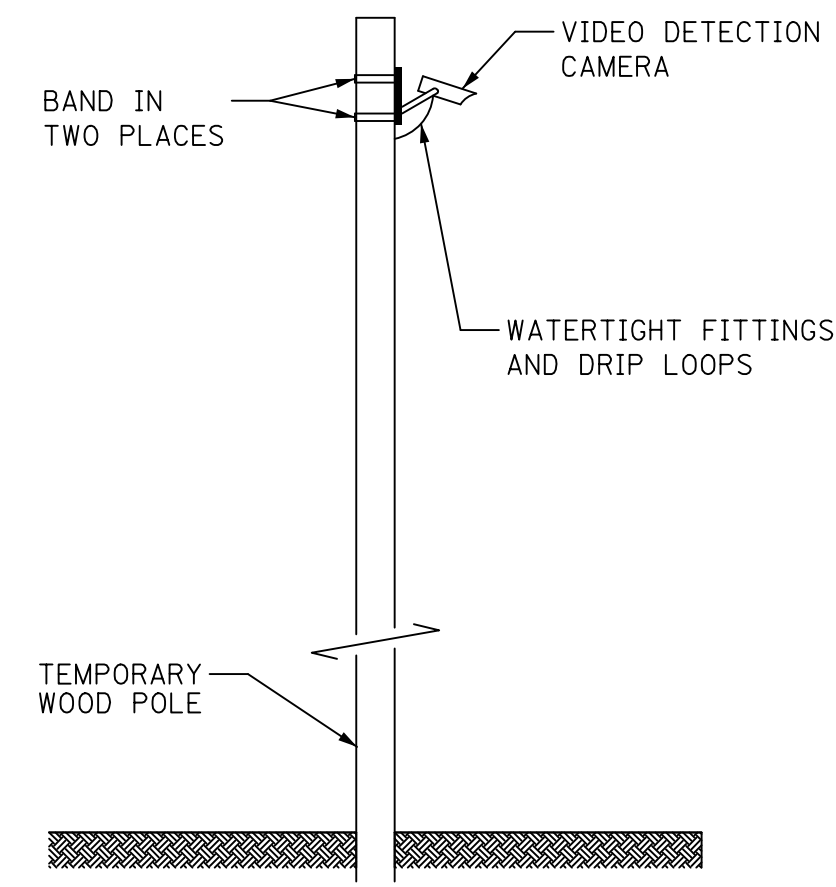
VERTICAL CABLE LENGTH

DEPTH OF FOUNDATION

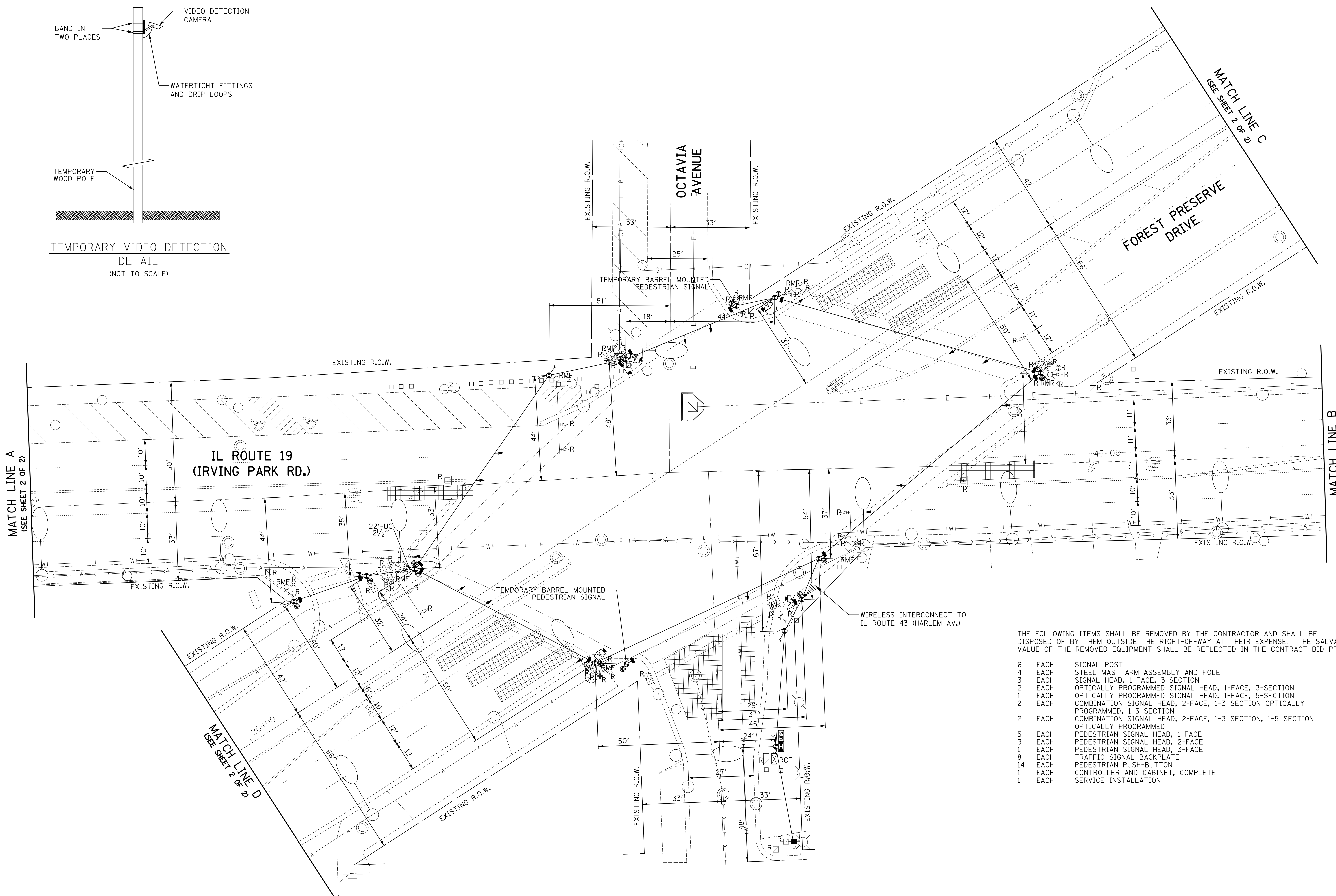
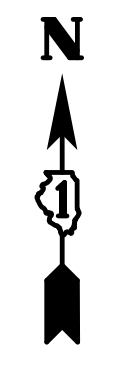
DEPTH OF MAST ARM FOUNDATIONS, TYPE E

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																					
UNINTERRUPTIBLE POWER SUPPLY				JUNCTION BOX				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM12F																					
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT				GALVANIZED STEEL CONDUIT IN TRENCH (T) OR PUSHED (P)				FIBER OPTIC CABLE NO. 62.5/125, MM12F 24F																					
TELEPHONE CONNECTION (P) POLE OR (G) GROUND MOUNT				TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE				FIBER OPTIC CABLE NO. 62.5/125, MM12F 24F																					
STEEL MAST ARM ASSEMBLY AND POLE				COMMON TRENCH				FIBER OPTIC CABLE NO. 62.5/125, (NUMBER OF FIBERS & TYPE TO BE NOTED ON PLANS)																					
ALUMINUM MAST ARM ASSEMBLY AND POLE				COILABLE NONMETALLIC CONDUIT (EMPTY)				GROUND ROD AT (C) CONTROLLER, (H) HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE																					
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE				SYSTEM ITEM				CONTROLLER CABINET AND FOUNDATION TO BE REMOVED																					
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH PTZ CAMERA				INTERSECTION ITEM				STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED																					
SIGNAL POST				REMOVE ITEM				ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED																					
TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM				RELOCATE ITEM				STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE AND FOUNDATION TO BE REMOVED																					
GUY WIRE				ABANDON ITEM				SIGNAL POST AND FOUNDATION TO BE REMOVED																					
SIGNAL HEAD				12" (300mm) TRAFFIC SIGNAL SECTION				INTERSECTION & SAMPLING (SYSTEM) DETECTOR																					
SIGNAL HEAD CONSTRUCTION STAGES (NUMBERS INDICATE THE CONSTRUCTION STAGE)				12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE				SAMPLING (SYSTEM) DETECTOR																					
SIGNAL HEAD WITH BACKPLATE				SIGNAL FACE				EXISTING INTERSECTION LOOP DETECTOR																					
SIGNAL HEAD OPTICALLY PROGRAMMED				SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD				PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR																					
FLASHER INSTALLATION (S DENOTES SOLAR POWER)				12" (300mm) PEDESTRIAN SIGNAL HEAD WALK/DON'T WALK SYMBOL				EXISTING PREFORMED INTERSECTION LOOP DETECTOR																					
PEDESTRIAN SIGNAL HEAD				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, OUTLINED				PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR																					
PEDESTRIAN PUSHBUTTON DETECTOR				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, SOLID				PREFORMED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR																					
ACCESSIBLE PEDESTRIAN PUSHBUTTON DETECTOR				PEDESTRIAN SIGNAL HEAD, INTERNATIONAL SYMBOL, WITH COUNTDOWN TIMER				PREFORMED SAMPLING (SYSTEM) DETECTOR																					
ILLUMINATED SIGN "NO LEFT TURN"				RADIO INTERCONNECT				<h2 style="margin: 0;">RAILROAD SYMBOLS</h2> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;"></th> <th style="width: 25%; text-align: center;">EXISTING</th> <th style="width: 25%; text-align: center;">PROPOSED</th> </tr> </thead> <tbody> <tr> <td>RAILROAD CONTROL CABINET</td> <td></td> <td></td> </tr> <tr> <td>RAILROAD CANTILEVER MAST ARM</td> <td></td> <td></td> </tr> <tr> <td>FLASHING SIGNAL</td> <td></td> <td></td> </tr> <tr> <td>CROSSING GATE</td> <td></td> <td></td> </tr> <tr> <td>CROSSBUCK</td> <td></td> <td></td> </tr> </tbody> </table>					EXISTING	PROPOSED	RAILROAD CONTROL CABINET			RAILROAD CANTILEVER MAST ARM			FLASHING SIGNAL			CROSSING GATE			CROSSBUCK		
	EXISTING	PROPOSED																											
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FLASHING SIGNAL																													
CROSSING GATE																													
CROSSBUCK																													
ILLUMINATED SIGN "NO RIGHT TURN"				RADIO REPEATER																									
DETECTOR LOOP, TYPE I				DENOTES NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE, ALL DETECTOR LOOP CABLE TO BE SHIELDED																									
PREFORMED DETECTOR LOOP				GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)																									
MICROWAVE VEHICLE SENSOR																													
VIDEO DETECTION CAMERA																													
VIDEO DETECTION ZONE																													
PAN, TILT, ZOOM CAMERA																													
WIRELESS DETECTOR SENSOR																													
WIRELESS ACCESS POINT																													



TEMPORARY VIDEO DETECTION
DETAIL
(NOT TO SCALE)



- 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 |
| 4 | EACH | STEEL MAST ARM ASSEMBLY AND POLE |
| 3 | EACH | SIGNAL HEAD, 1-FACE, 3-SECTION |
| 2 | EACH | OPTICALLY PROGRAMMED SIGNAL HEAD, 1-FACE, 3-SECTION |
| 1 | EACH | OPTICALLY PROGRAMMED SIGNAL HEAD, 1-FACE, 5-SECTION |
| 2 | EACH | COMBINATION SIGNAL HEAD, 2-FACE, 1-3 SECTION OPTICALLY PROGRAMMED, 1-3 SECTION |
| 2 | EACH | COMBINATION SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION OPTICALLY PROGRAMMED |
| 5 | EACH | PEDESTRIAN SIGNAL HEAD, 1-FACE |
| 3 | EACH | PEDESTRIAN SIGNAL HEAD, 2-FACE |
| 1 | EACH | PEDESTRIAN SIGNAL HEAD, 3-FACE |
| 8 | EACH | TRAFFIC SIGNAL BACKPLATE |
| 14 | EACH | PEDESTRIAN PUSH-BUTTON |
| 1 | EACH | CONTROLLER AND CABINET, COMPLETE |
| 1 | EACH | SERVICE INSTALLATION |



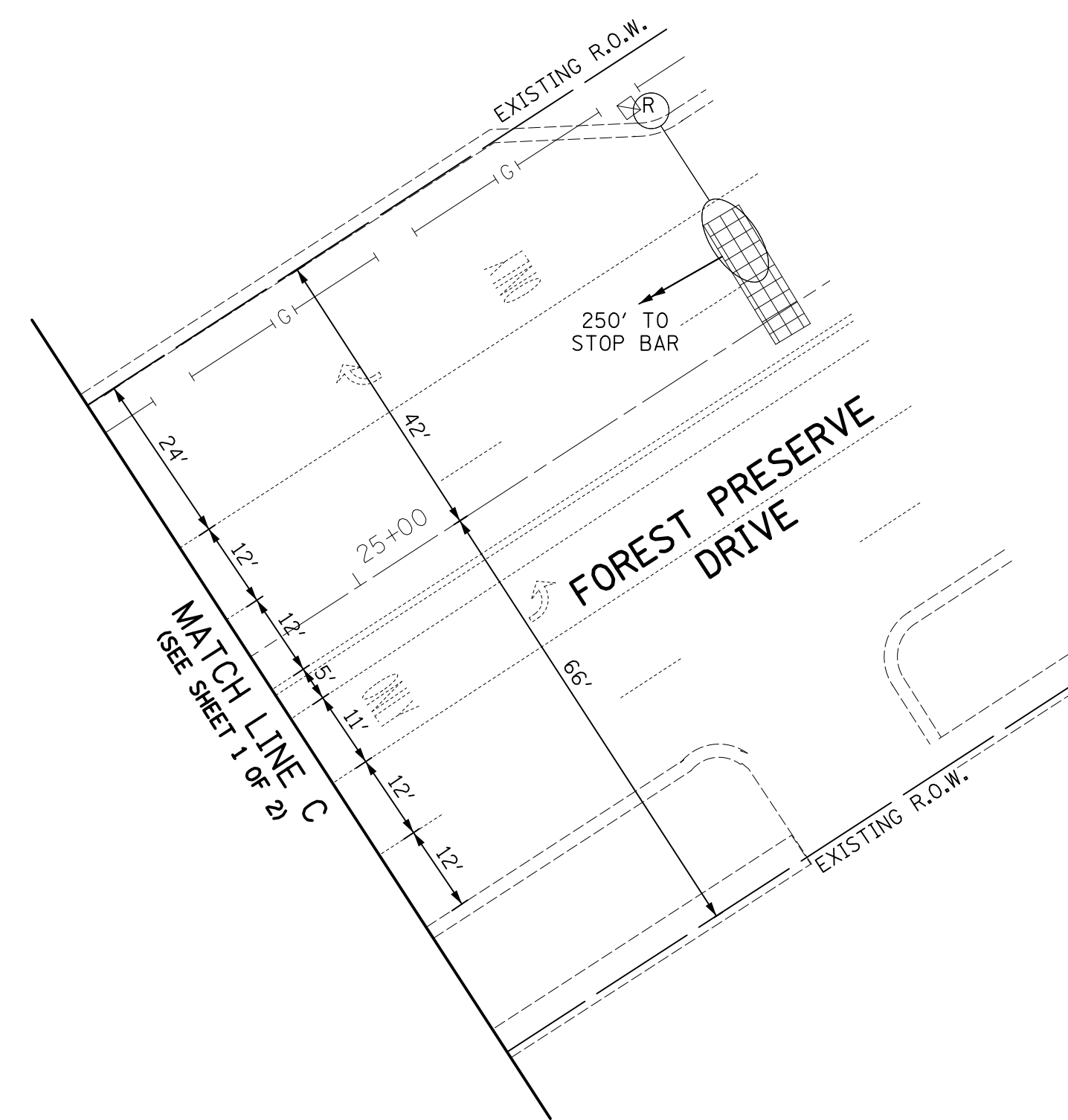
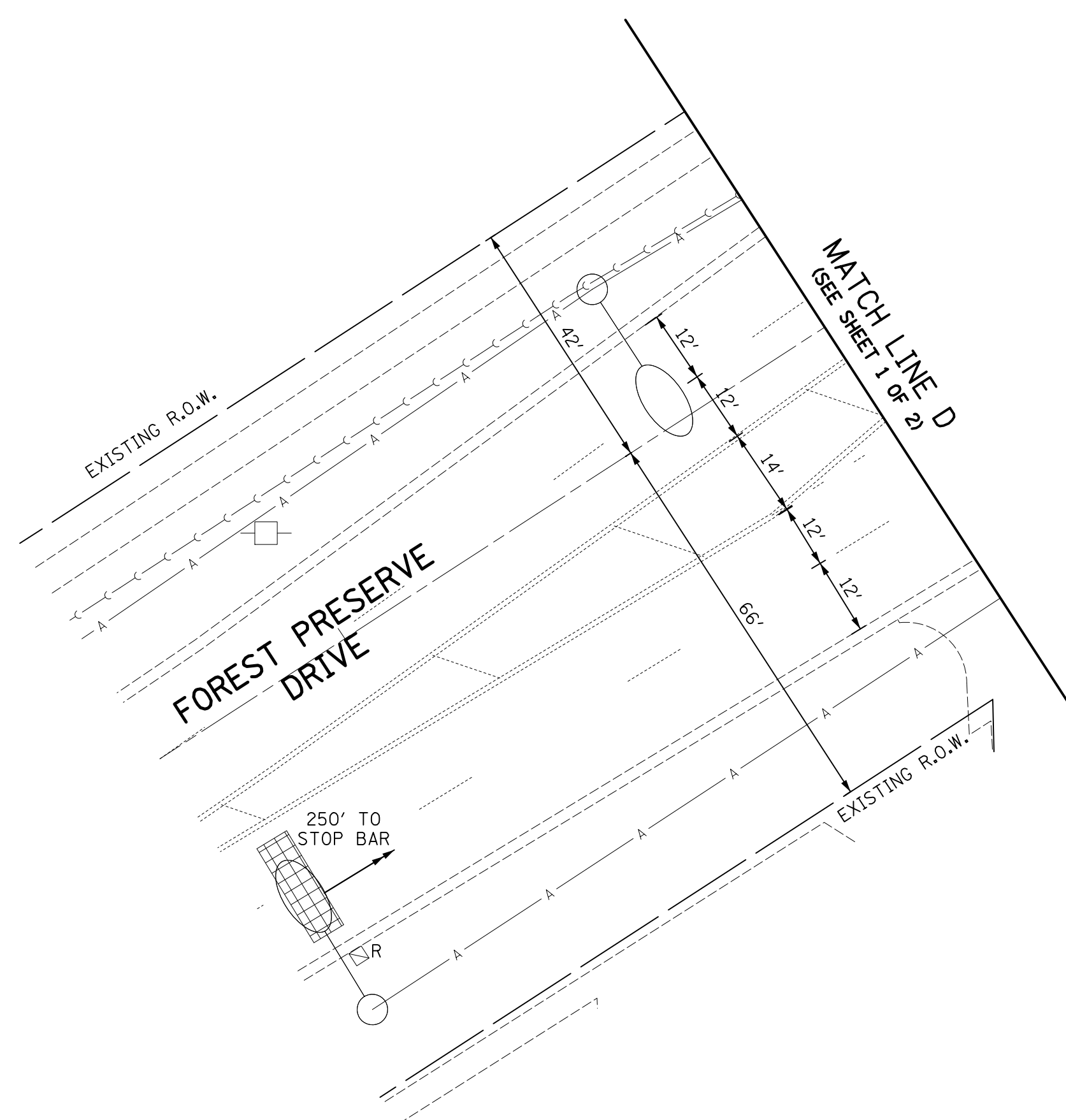
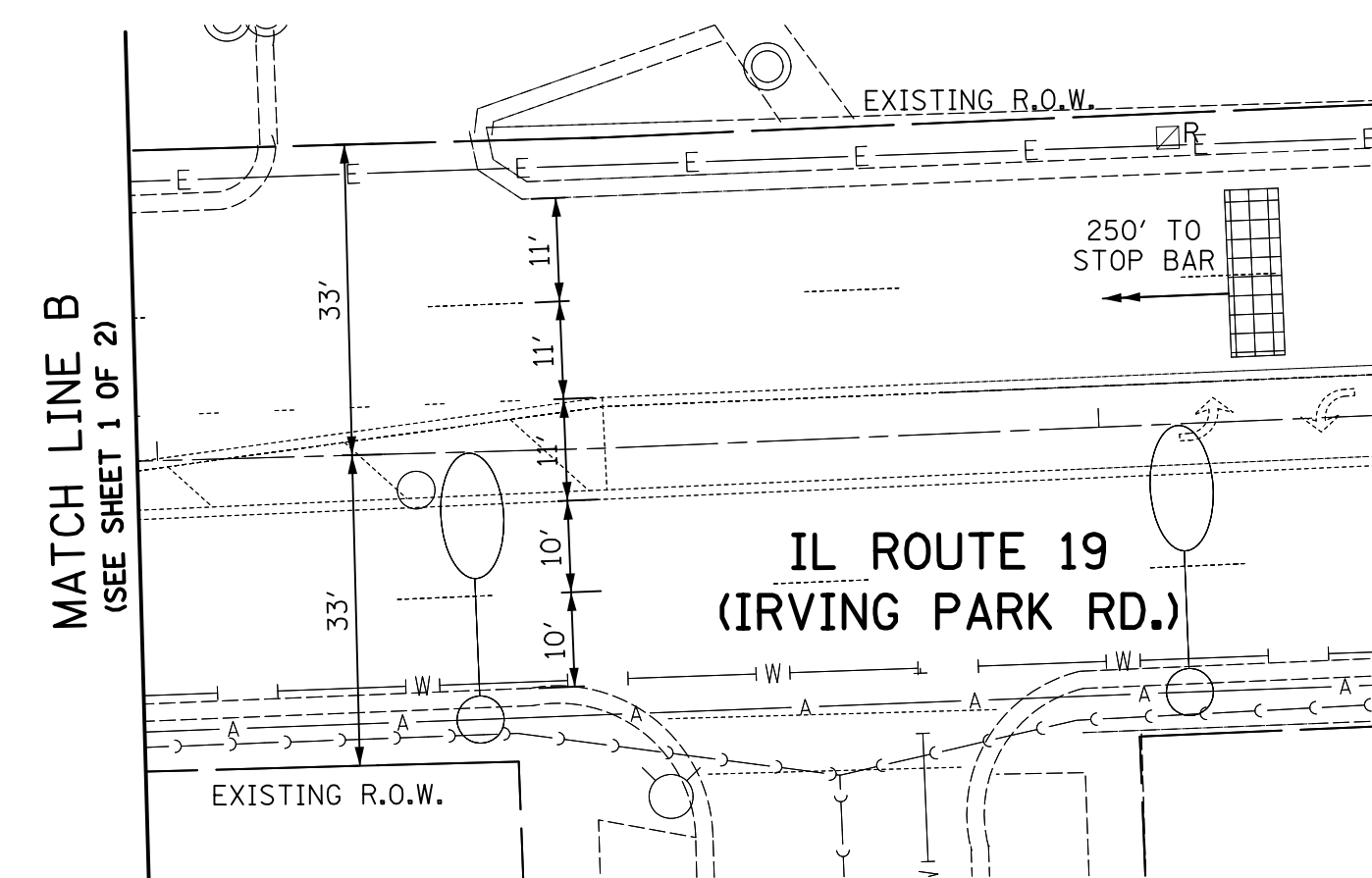
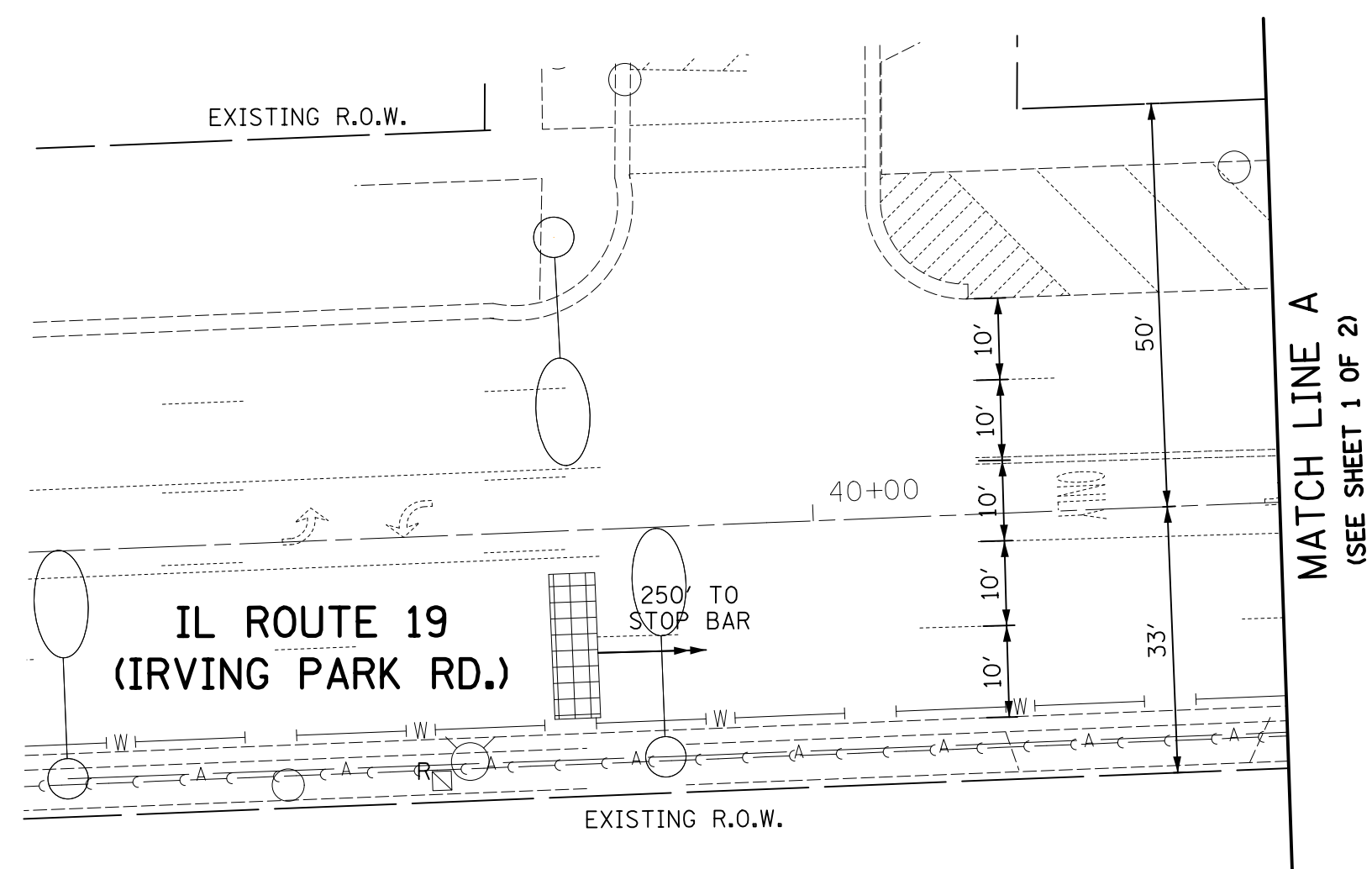
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PLOT SCALE = 20.0000' / 1" =	DRAWN - MFB	REVISED -
PLOT DATE = 3/20/2013	CHECKED - JJE	REVISED -
	DATE - 03/21/2013	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN AND REMOVAL PLAN
IL ROUTE 19 (IRVING PARK RD.) AT FOREST PRESERVE DRIVE /
OCTAVIA AVENUE

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

F.A.P. RTE. 0348	SECTION 2012-041TS	COUNTY COOK	TOTAL SHEETS 34	SHEET NO. 12
ILLINOIS FED. AID PROJECT				CONTRACT NO. 60T97



USER NAME = mfb	DESIGNED - BRD	REVISED -
	DRAWN - MFB	REVISED -
PLOT SCALE = 20.0000' / 1"	CHECKED - JJE	REVISED -
PLOT DATE = 3/20/2013	DATE - 03/21/2013	REVISED -

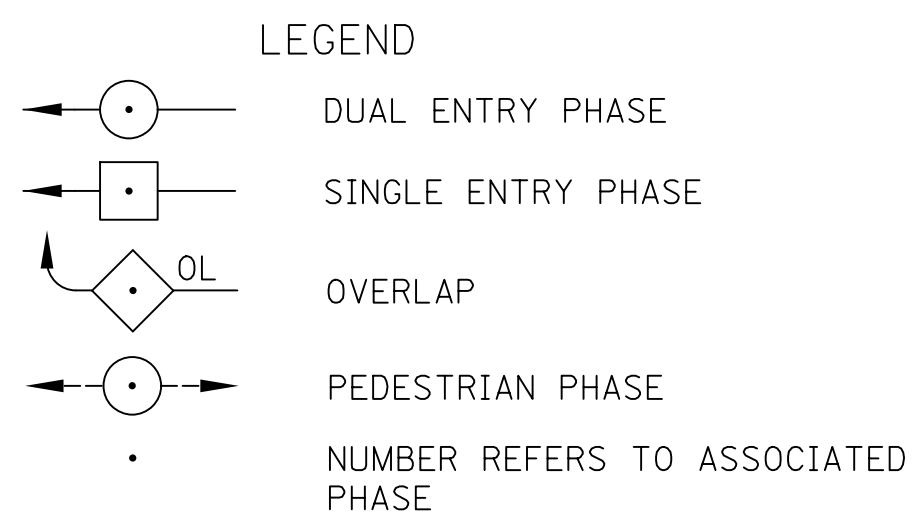
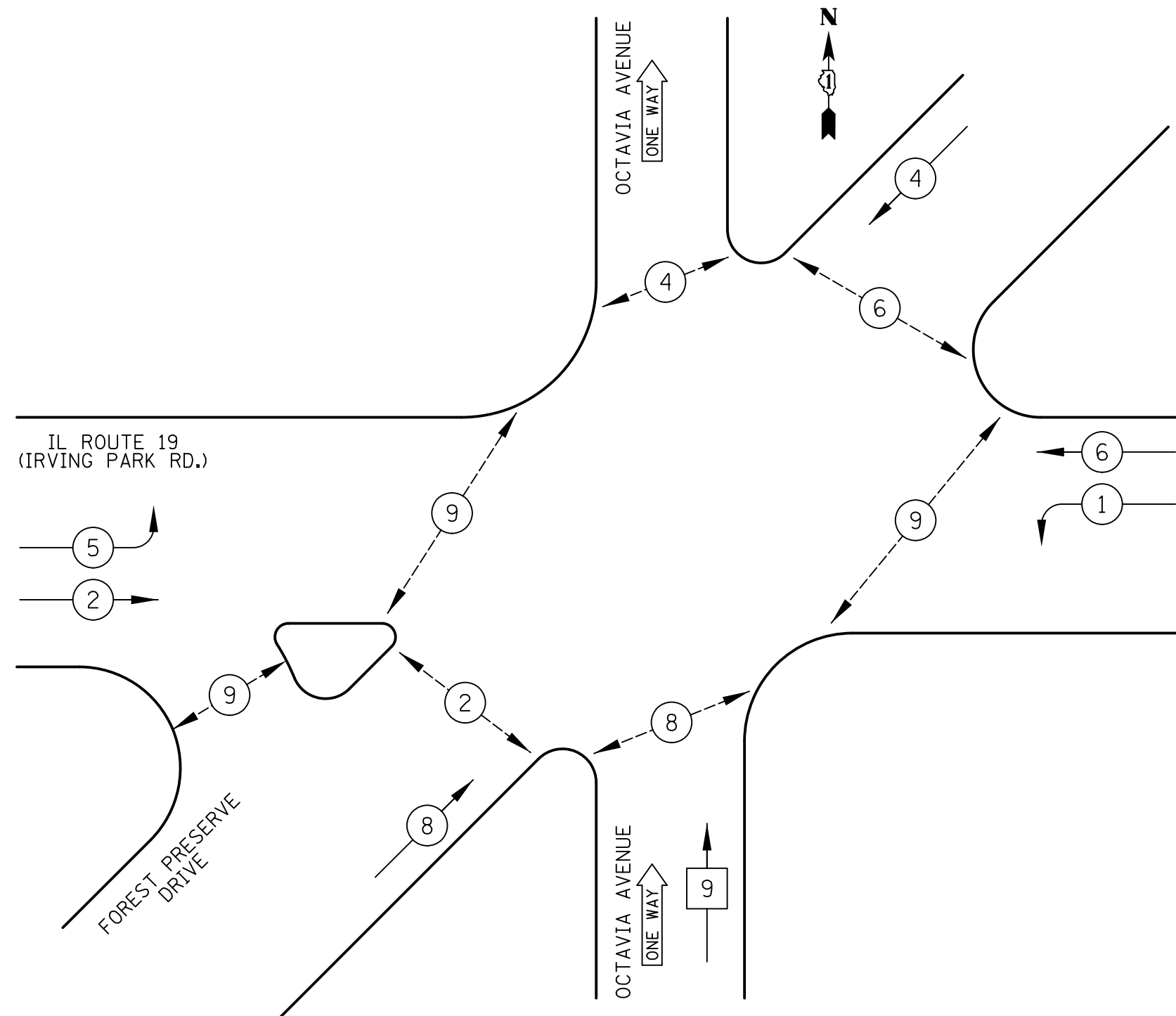
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN AND REMOVAL PLAN
IL ROUTE 19 (IRVING PARK RD.) AT FOREST PRESERVE DRIVE /
OCTAVIA AVENUE**

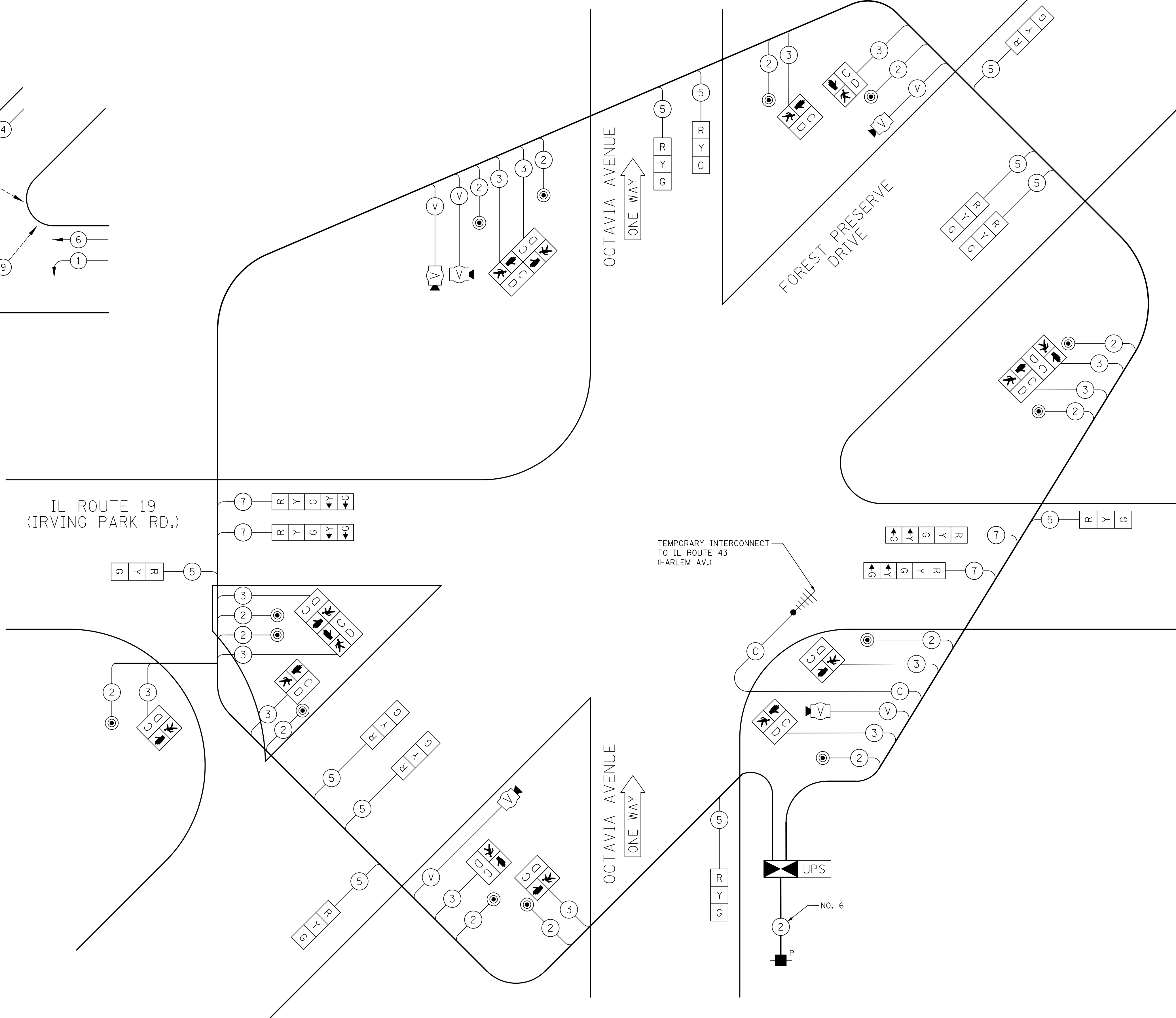
SCALE: 1" = 20' SHEET NO. 2 OF 2 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0348	2012-041TS	COOK	34	13
				CONTRACT NO. 60T97
ILLINOIS FED. AID PROJECT				

TEMPORARY CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM



TEMPORARY CABLE PLAN
NOT TO SCALE

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	% OPERATION	
SIGNAL (RED)	15		17	0.50	128
(YELLOW)	15		25	0.25	94
(GREEN)	15		15	0.25	56
ARROW	8		12	0.10	10
PED. SIGNAL	14		25	1.00	350
VIDEO SYSTEM	1		150	1.00	150
CONTROLLER	1		100	1.00	100
TOTAL =					888

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

ENERGY SUPPLY: CONTACT:
PHONE:
COMPANY:



USER NAME = mfb
PLOT SCALE = 20.0000' / 1" IN.
PLOT DATE = 3/20/2013

DESIGNED - BRD
DRAWN - MFB
CHECKED - JJE
DATE - 03/21/2013

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

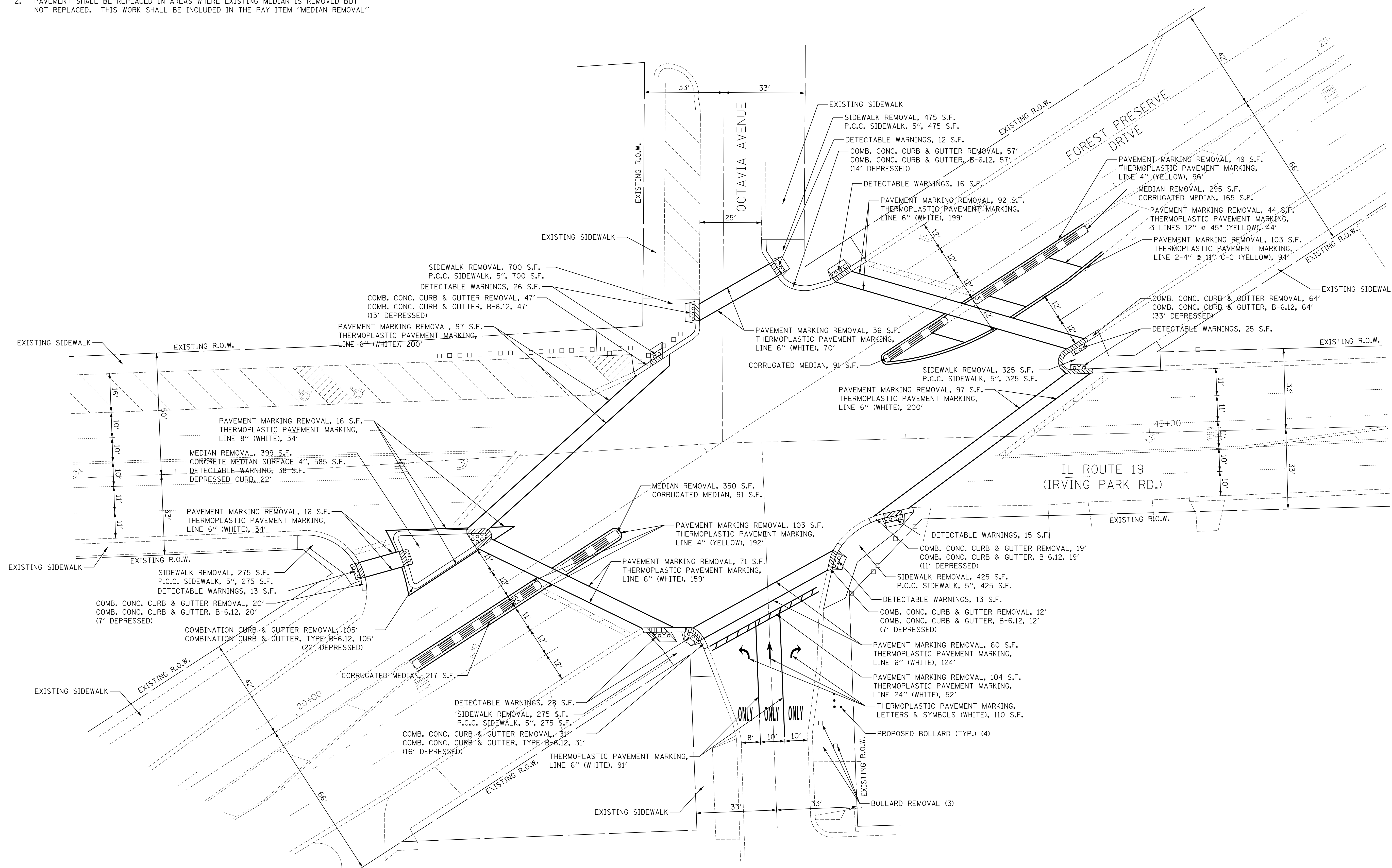
TEMPORARY CABLE PLAN AND TEMPORARY PHASE DESIGNATION DIAGRAM,
IL ROUTE 19 (IRVING PARK RD.) AT FOREST PRESERVE DRIVE/
OCTAVIA AVENUE

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

F.A.P. RTE. 0348	SECTION 2012-041TS	COUNTY COOK	TOTAL SHEETS 34	SHEET NO. 14
CONTRACT NO. 60T97				
ILLINOIS FED. AID PROJECT				

GENERAL NOTES

1. THE EXISTING PIPE BOLLARDS LOCATED WITHIN THE SIDEWALK ON THE NORTHWEST CORNER SHALL BE MAINTAINED DURING CONSTRUCTION. ANY DAMAGE TO EXISTING BOLLARDS SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER AT NO ADDITIONAL COST TO THE CONTRACT.
2. PAVEMENT SHALL BE REPLACED IN AREAS WHERE EXISTING MEDIAN IS REMOVED BUT NOT REPLACED. THIS WORK SHALL BE INCLUDED IN THE PAY ITEM "MEDIAN REMOVAL"



USER NAME = mfb
 PLOT SCALE = 20.0000' / 1" =
 PLOT DATE = 3/20/2013

DESIGNED - BRD
 DRAWN - MFB
 CHECKED - JJE
 DATE - 03/21/2013

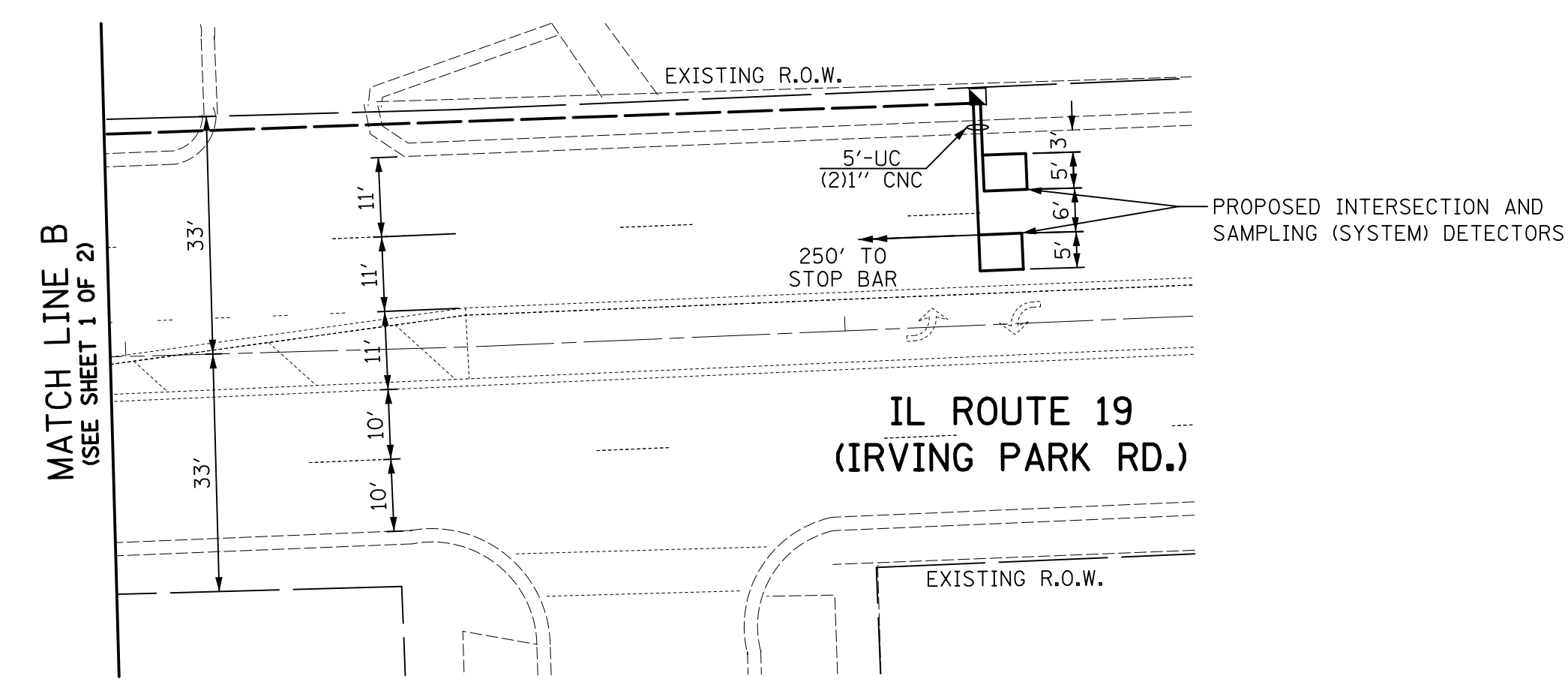
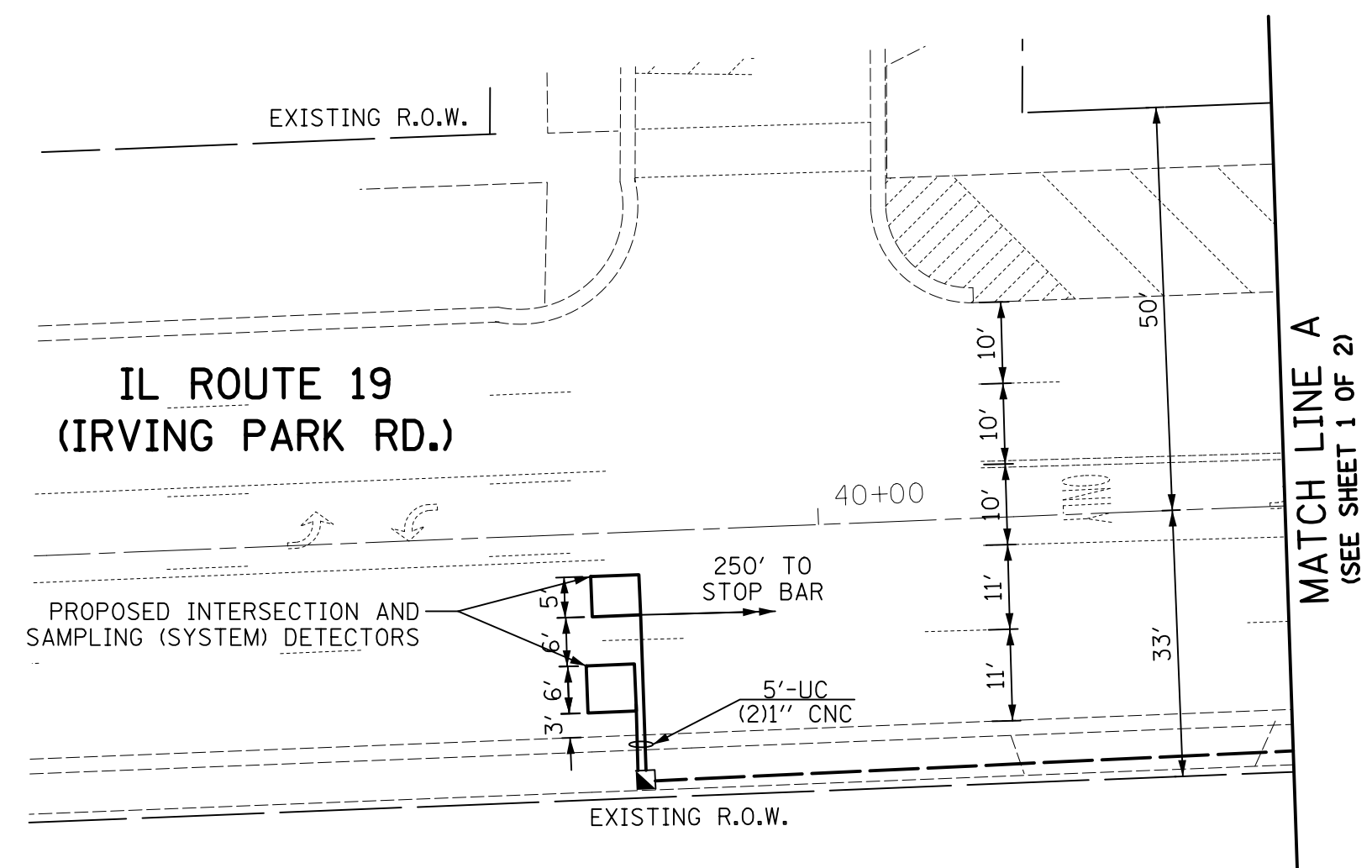
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**INTERSECTION MODIFICATION PLAN
 IL ROUTE 19 (IRVING PARK RD.) AT FOREST PRESERVE DRIVE/
 OCTAVIA AVENUE**

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

F.A.P. RTE. 0348	SECTION 2012-041TS	COUNTY COOK	TOTAL SHEETS 34	SHEET NO. 15
CONTRACT NO. 60T97				ILLINOIS FED. AID PROJECT



USER NAME = mfb	DESIGNED - BRD	REVISED -
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PLOT SCALE = 20.0000' / 1" =	CHECKED - JJE	REVISED -
PLOT DATE = 3/20/2013	DATE - 03/21/2013	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL MODERNIZATION PLAN
IL ROUTE 19 (IRVING PARK RD.) AT FOREST PRESERVE DRIVE /
OCTAVIA AVENUE**

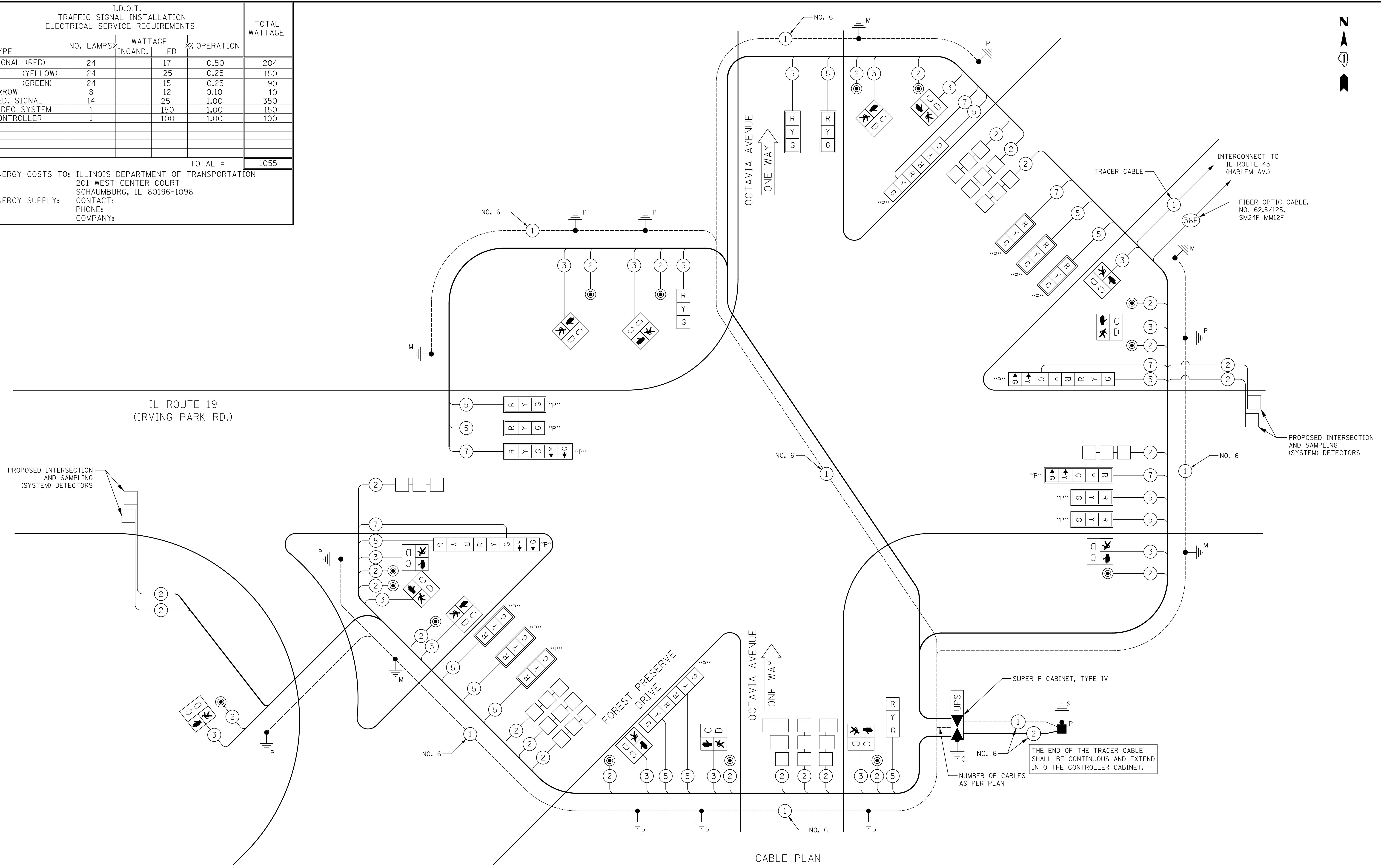
SCALE: 1" = 20' SHEET NO. 2 OF 2 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0348	2012-041TS	COOK	34	17
CONTRACT NO. 60T97				
ILLINOIS FED. AID PROJECT				

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE		% OPERATION	
SIGNAL (RED)	24	INCAND.	17	0.50	204
(YELLOW)	24		25	0.25	150
(GREEN)	24		15	0.25	90
ARROW	8		12	0.10	10
PED. SIGNAL	14		25	1.00	350
VIDEO SYSTEM	1		150	1.00	150
CONTROLLER	1		100	1.00	100
TOTAL =					1055

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

ENERGY SUPPLY: CONTACT:
PHONE:
COMPANY:



CABLE PLAN
NOT TO SCALE

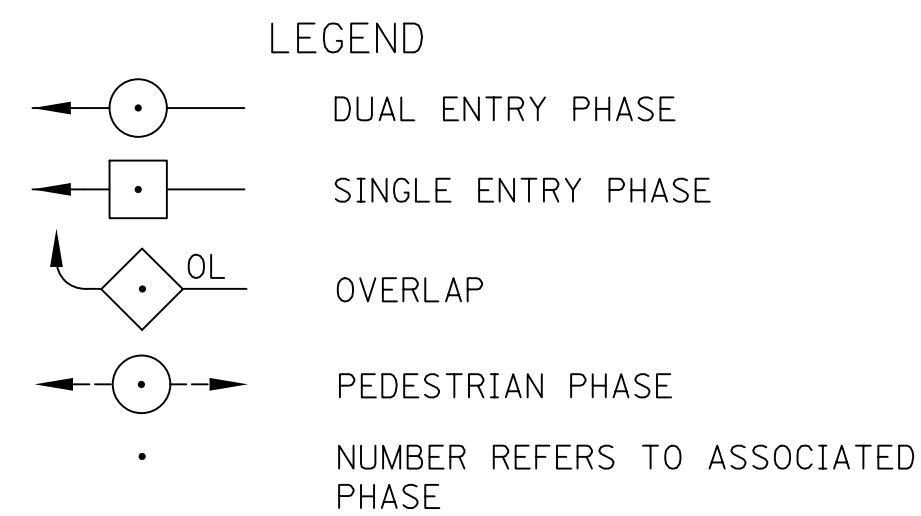
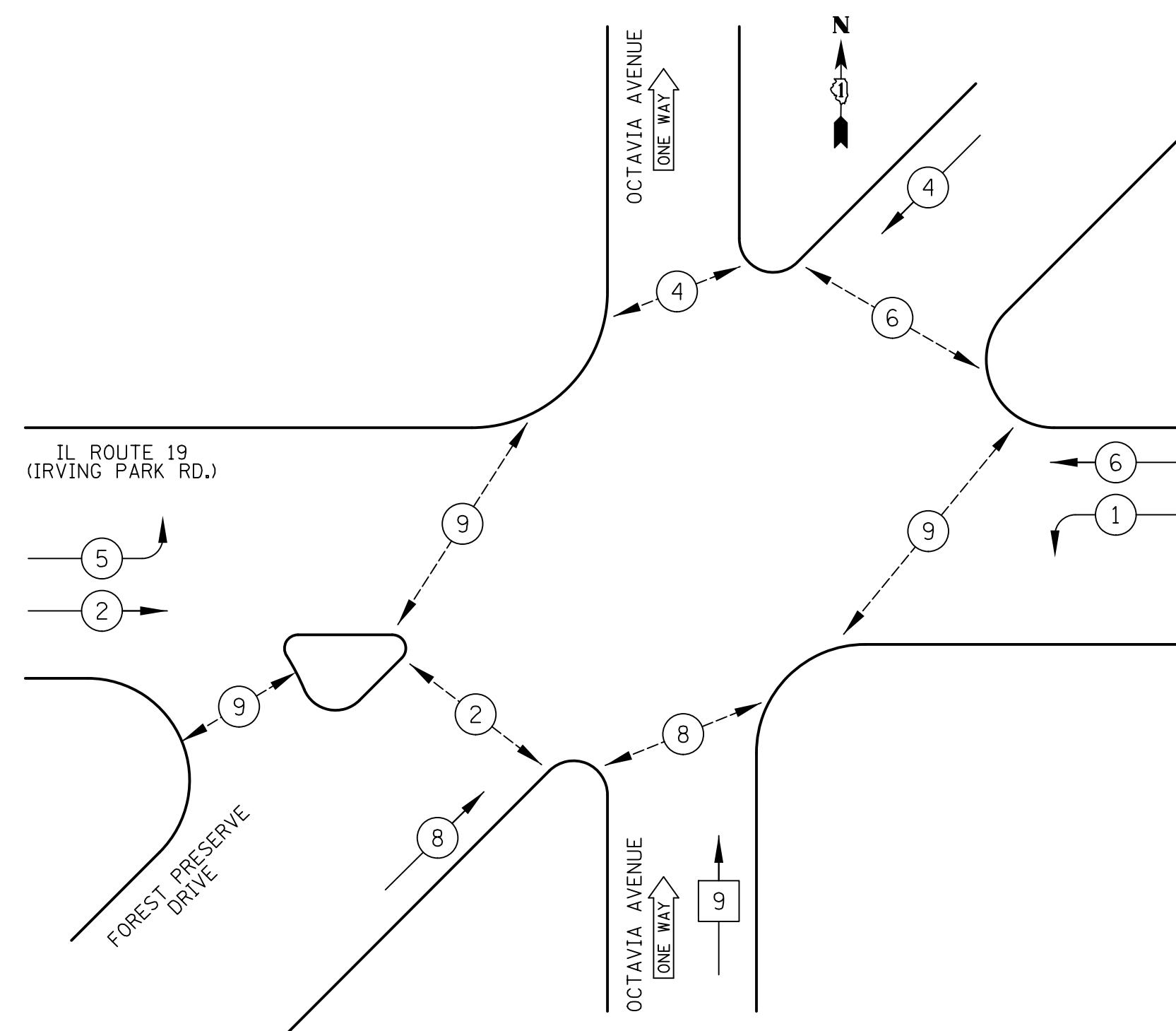
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	PLOT DATE = 3/20/2013	CHECKED - JJE	REVISED -
		DATE - 03/21/2013	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
IL ROUTE 19 (IRVING PARK RD.) AT FOREST PARK DRIVE / OCTAVIA AVENUE		0348	2012-041TS	COOK	34	18
NOT TO SCALE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.		CONTRACT NO. 60T97	

ILLINOIS FED. AID PROJECT					
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PROPOSED
CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

SCHEDULE OF QUANTITIES

PAY ITEM	UNIT	QNTY.
SUBBASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	412
PROTECTIVE COAT	SQ YD	431
PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH	SQ FT	2475
DETECTABLE WARNINGS	SQ FT	186
COMBINATION CURB AND GUTTER REMOVAL	FOOT	355
SIDEWALK REMOVAL	SQ FT	2475
MEDIAN REMOVAL	SQ FT	1044
COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	355
CONCRETE MEDIAN SURFACE, 4 INCH	SQ FT	399
CORRUGATED MEDIAN	SQ FT	564
SIGN PANEL - TYPE 2	SQ FT	58
THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	110
THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	420
THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	1077
THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	34
THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	44
THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	52
PAVEMENT MARKING REMOVAL	SQ FT	888
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	719
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	88
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	39
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	935
HANDHOLE	EACH	6
HEAVY-DUTY HANDHOLE	EACH	5
DOUBLE HANDHOLE	EACH	4
TRANSCIEVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	3842
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	3940
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	5193
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1759
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	4585
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	68
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	1358
TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	2
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	4
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 24 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 32 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 46 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	32
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	51
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	13
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	10
OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	2
COMBINATION SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION OPTICALLY PROGRAMMED, 1-3 SECTION, BRACKET MOUNTED	EACH	2
COMBINATION SIGNAL HEAD, LED, 2-FACE, 1-5 SECTION OPTICALLY PROGRAMMED, 1-3 SECTION, BRACKET MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	12
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	1
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	14
INDUCTIVE LOOP DETECTOR	EACH	15
DETECTOR LOOP, TYPE I	FOOT	1269
PEDESTRIAN PUSH-BUTTON	EACH	14
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	11
REMOVE EXISTING DOUBLE HANDHOLE	EACH	5
REMOVE EXISTING CONCRETE FOUNDATION	EACH	11
BOLLARD REMOVAL	EACH	3
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
BOLLARDS	EACH	4
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1

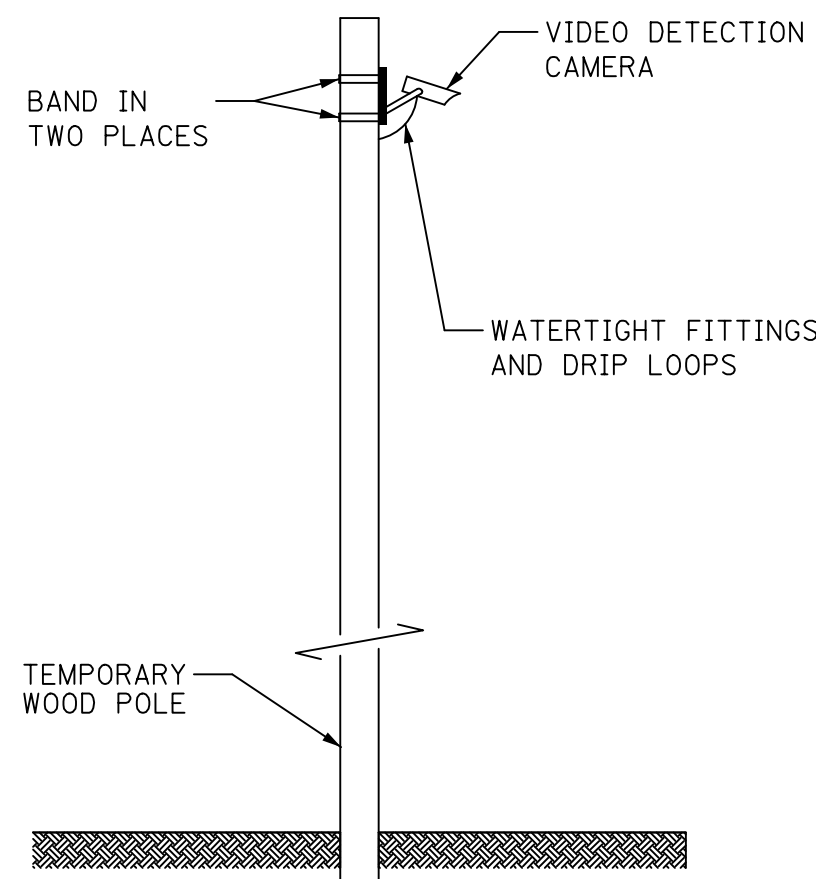


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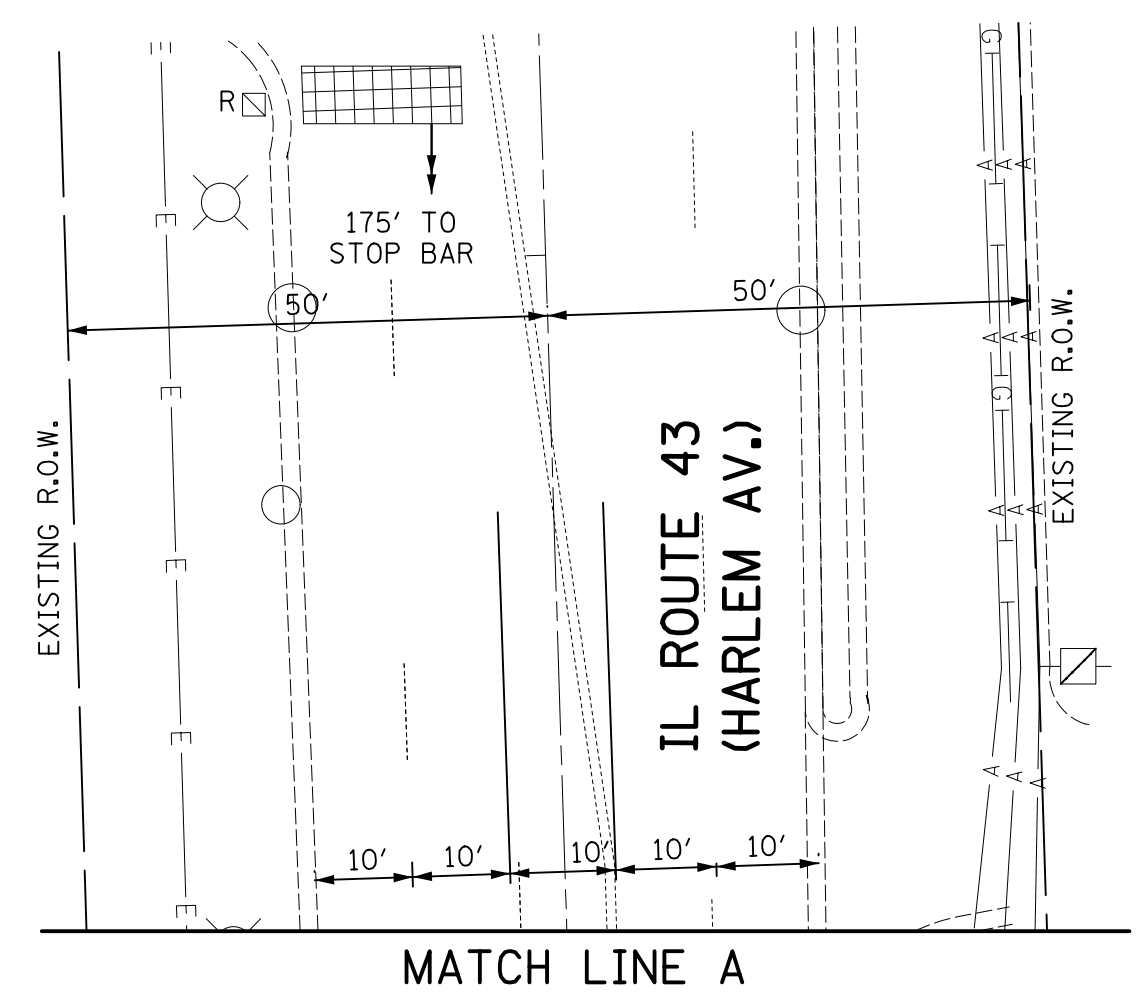
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SEQUENCE OF OPERATION AND SCHEDULE OF QUANTITIES			
IL ROUTE 19 (IRVING PARK RD.) AT FOREST PRESERVE DRIVE / OCTAVIA AVENUE			
NOT TO SCALE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

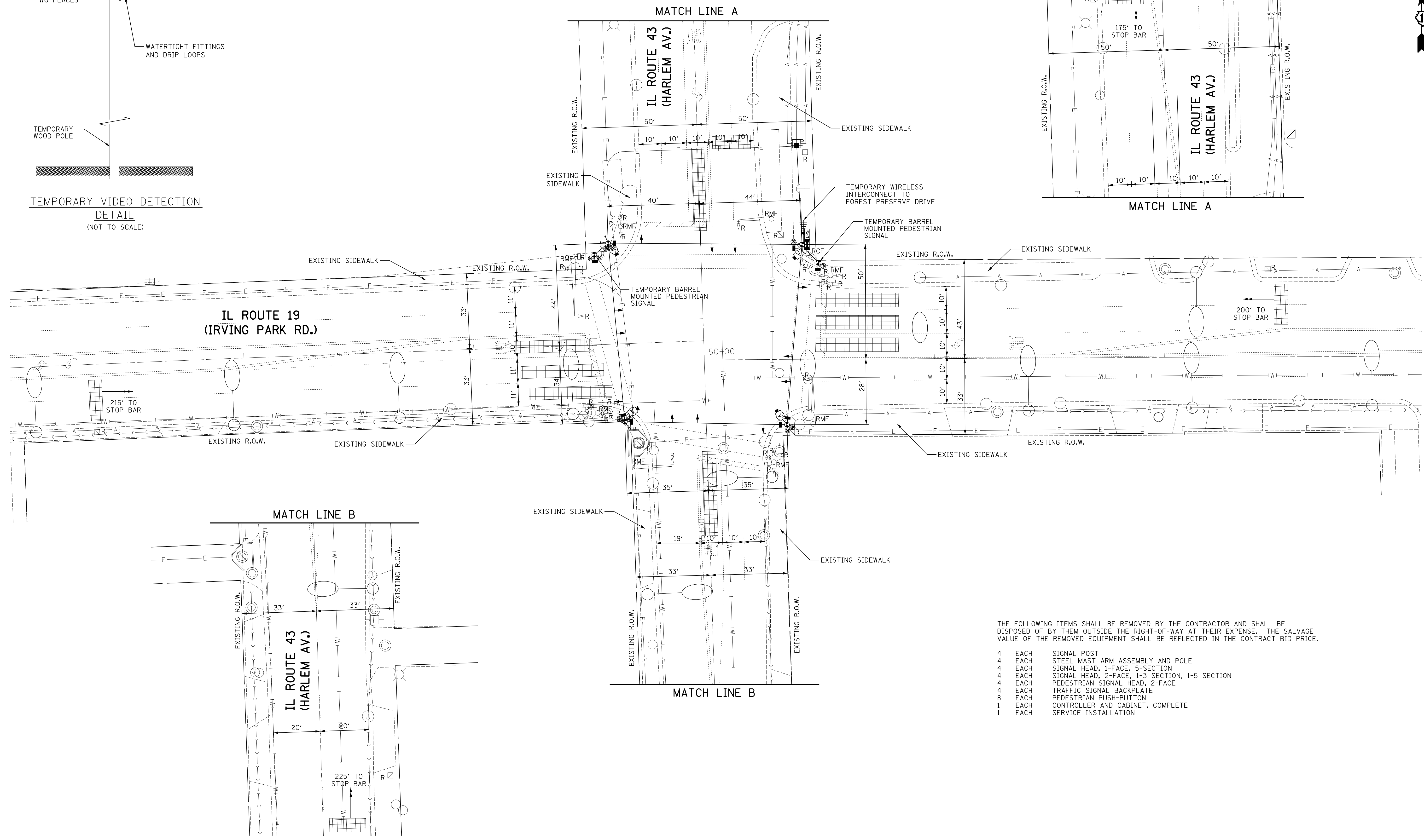
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0348	2012-041TS	COOK	34	19
ILLINOIS FED. AID PROJECT				
CONTRACT NO. 60T97				



TEMPORARY VIDEO DETECTION
DETAIL
(NOT TO SCALE)



MATCH LINE A



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
- 4 EACH SIGNAL HEAD, 1-FACE, 5-SECTION
- 4 EACH SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION
- 4 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE
- 4 EACH TRAFFIC SIGNAL BACKPLATE
- 8 EACH PEDESTRIAN PUSH-BUTTON
- 1 EACH CONTROLLER AND CABINET, COMPLETE
- 1 EACH SERVICE INSTALLATION



USER NAME = mfb	DESIGNED - BRD	REVISED -
PLOT SCALE = 20.0000' / 1"	DRAWN - MFB	REVISED -
PLOT DATE = 3/20/2013	CHECKED - JJE	REVISED -
	DATE - 03/21/2013	REVISED -

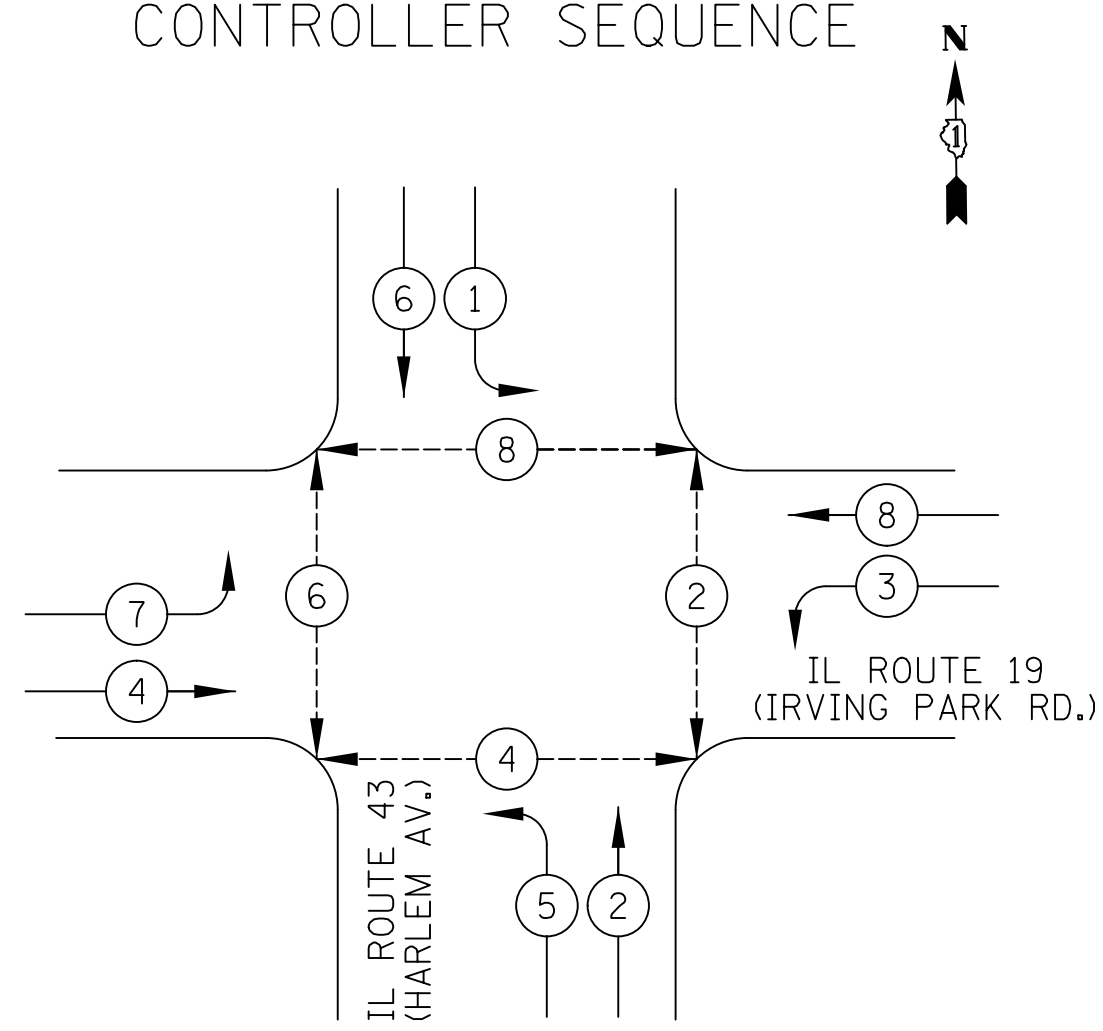
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN AND REMOVAL PLAN
IL ROUTE 19 (IRVING PARK RD.) AT IL ROUTE 43 (HARLEM AV.)

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

F.A.P. RTE. 0348	SECTION 2012-041TS	COUNTY COOK	TOTAL SHEETS 34	SHEET NO. 20
				CONTRACT NO. 60T97
ILLINOIS FED. AID PROJECT				

TEMPORARY
CONTROLLER SEQUENCE



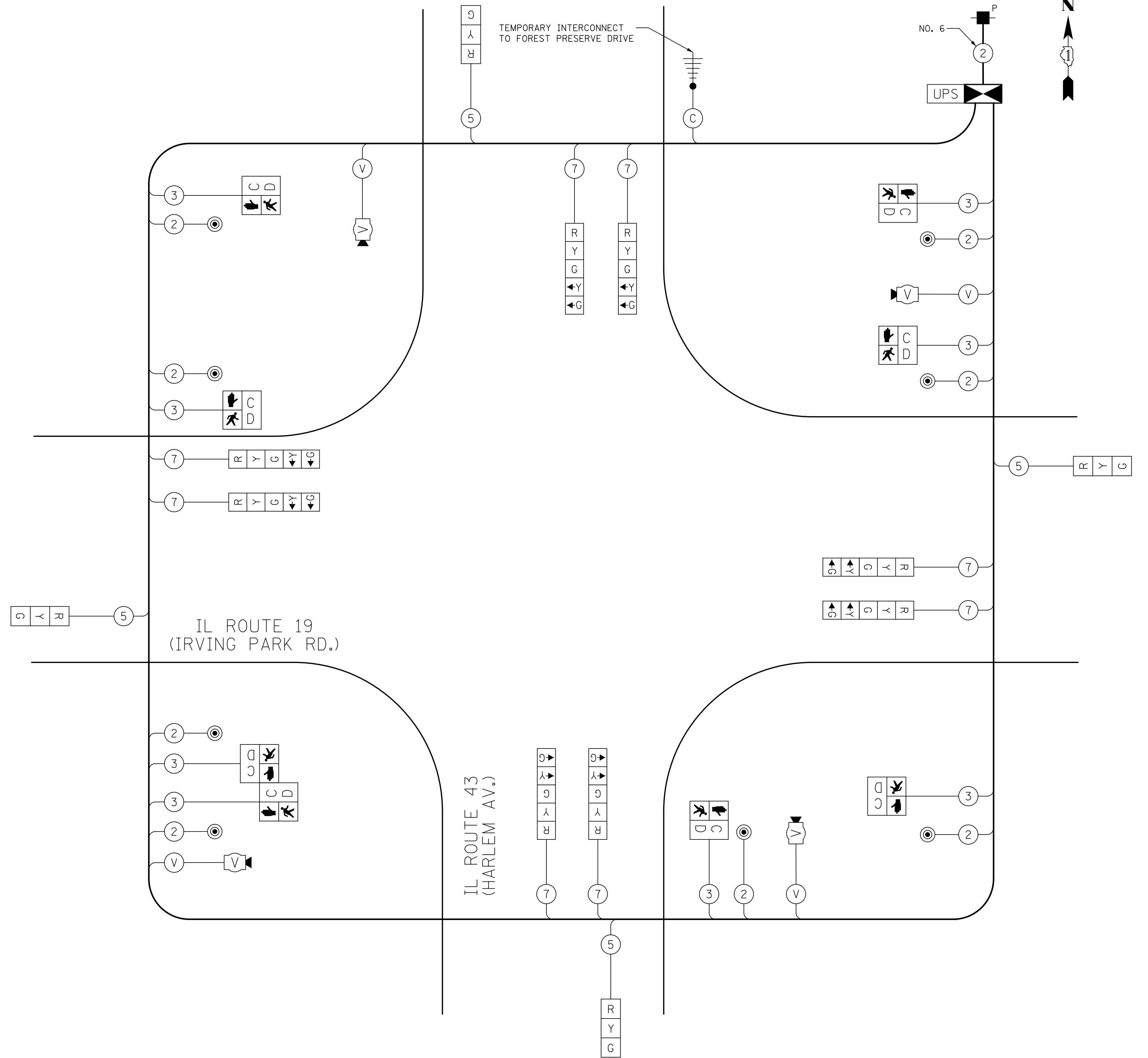
LEGEND

- 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	
		INCAND.	LED		
SIGNAL (RED)	12		17	0.50	102
(YELLOW)	12		25	0.25	75
(GREEN)	12		15	0.25	45
ARROW	16		12	0.10	19
PED. SIGNAL	8		25	1.00	200
VIDEO SYSTEM	1		150	1.00	150
CONTROLLER	1		100	1.00	100
TOTAL =					691

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

ENERGY SUPPLY: CONTACT:
PHONE:
COMPANY:



TEMPORARY CABLE PLAN
NOT TO SCALE

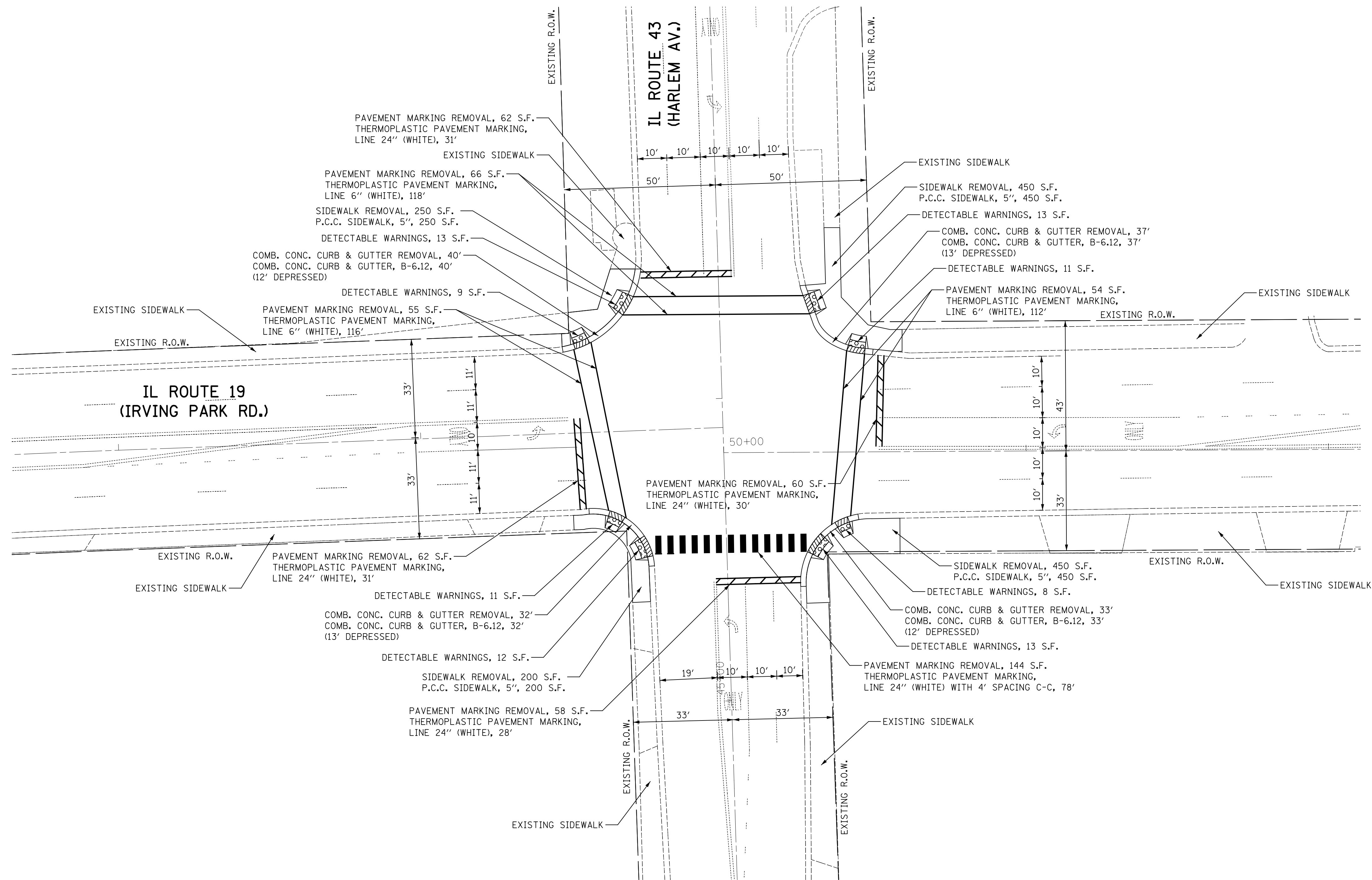
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	PLOT DATE = 3/20/2013	CHECKED - JJE	REVISED -
		DATE - 03/21/2013	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CABLE PLAN AND TEMPORARY PHASE DESIGNATION DIAGRAM
IL ROUTE 19 (IRVING PARK RD.) AT IL ROUTE 43 (HARLEM AV.)

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

F.A.P. RTE. 0348	SECTION 2012-041TS	COUNTY COOK	TOTAL SHEETS 34	SHEET NO. 21
CONTRACT NO. 60T97				
ILLINOIS FED. AID PROJECT				



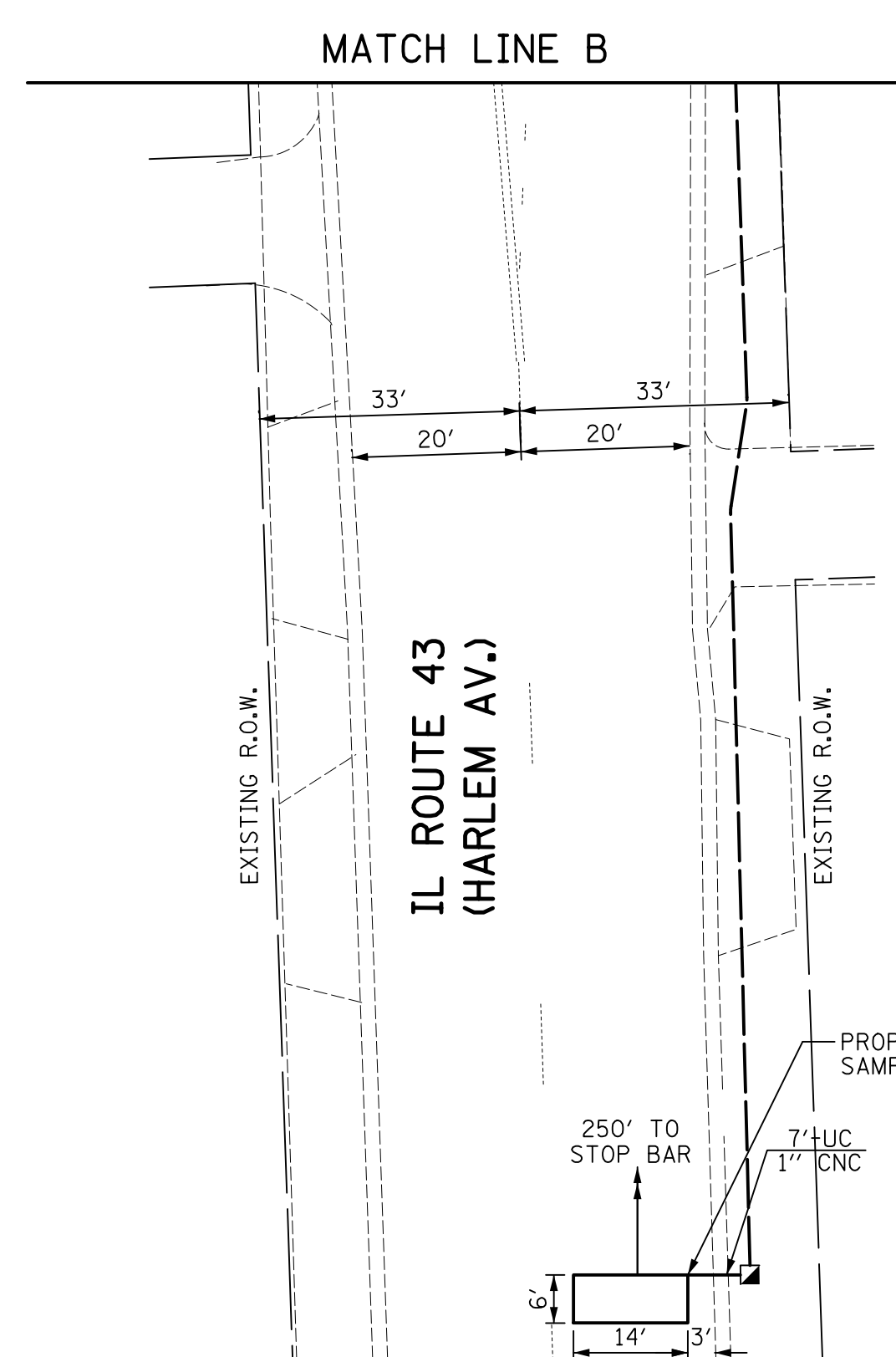
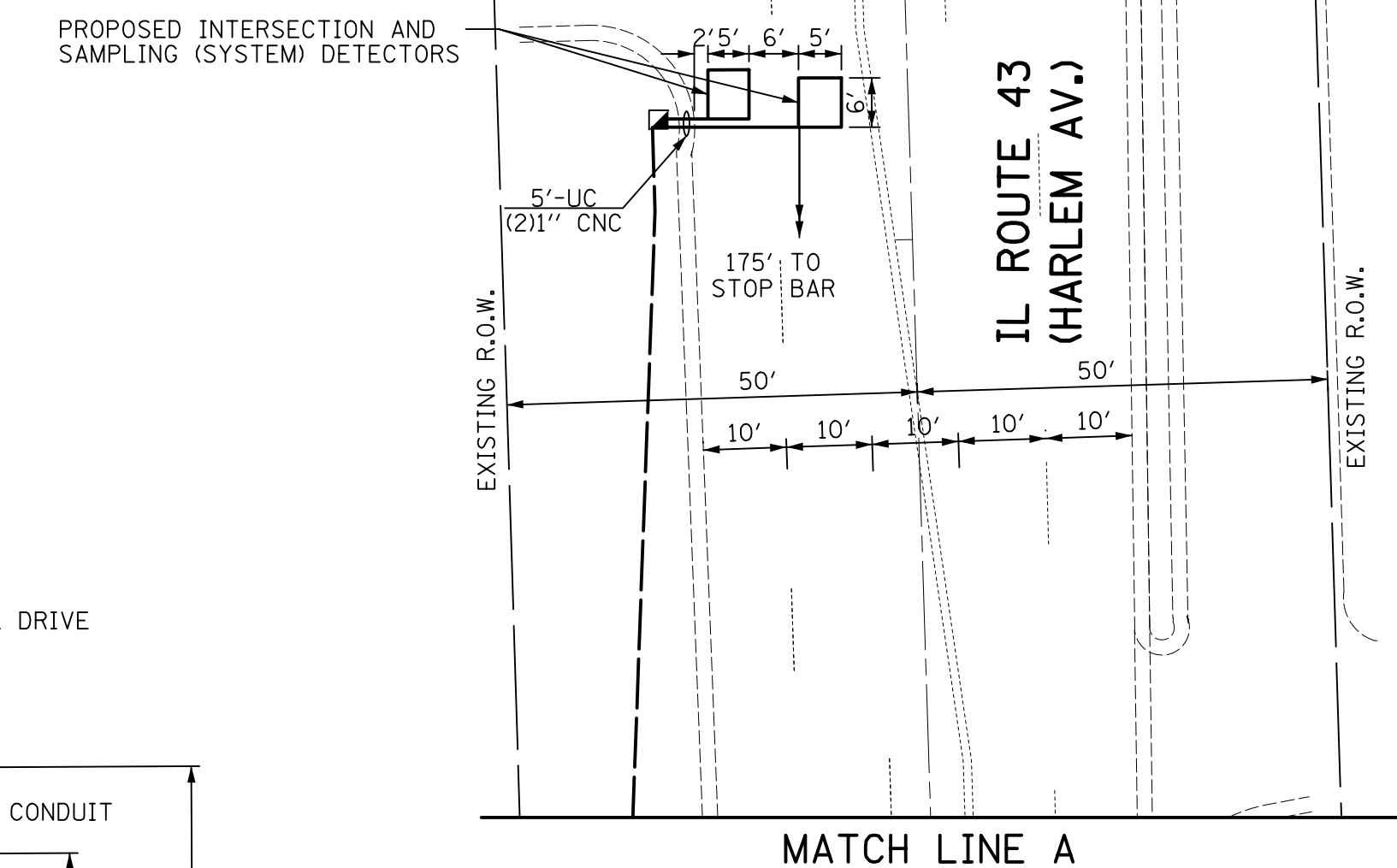
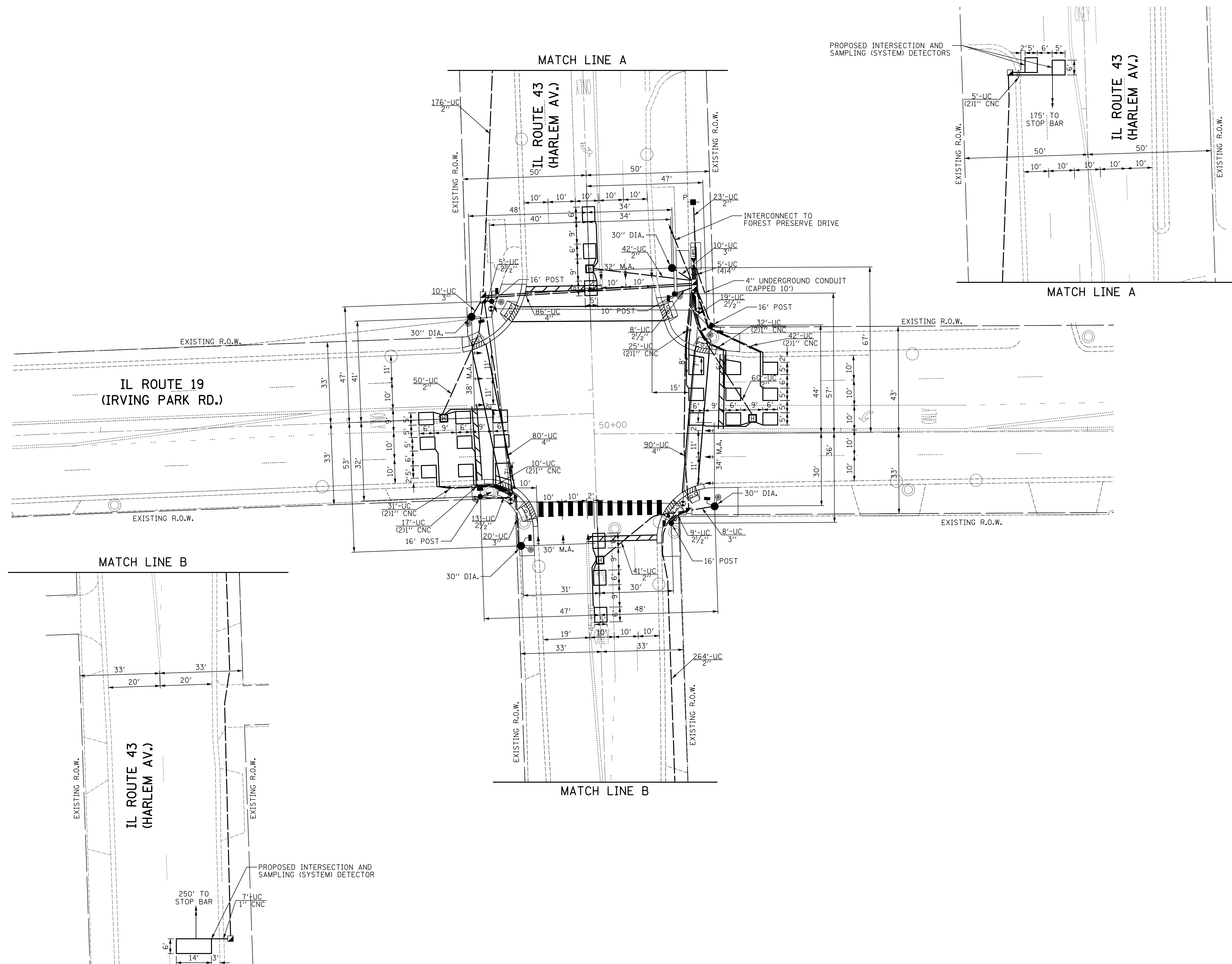
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	DRAWN - MFB	REVISED -
PLOT SCALE = 20.0000' / 1"	CHECKED - JJE	REVISED -
PLOT DATE = 3/20/2013	DATE - 03/21/2013	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**INTERSECTION MODIFICATION PLAN
IL ROUTE 19 (IRVING PARK RD.) AT IL ROUTE 43 (HARLEM AV.)**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0348	2012-041TS	COOK	34	22
CONTRACT NO. 60T97				
ILLINOIS FED. AID PROJECT				



USER NAME = mfb	DESIGNED - BRD	REVISED -
PLOT SCALE = 20.0000' / 1"	DRAWN - MFB	REVISED -
PLOT DATE = 3/20/2013	CHECKED - JJE	REVISED -
	DATE - 03/21/2013	REVISED -

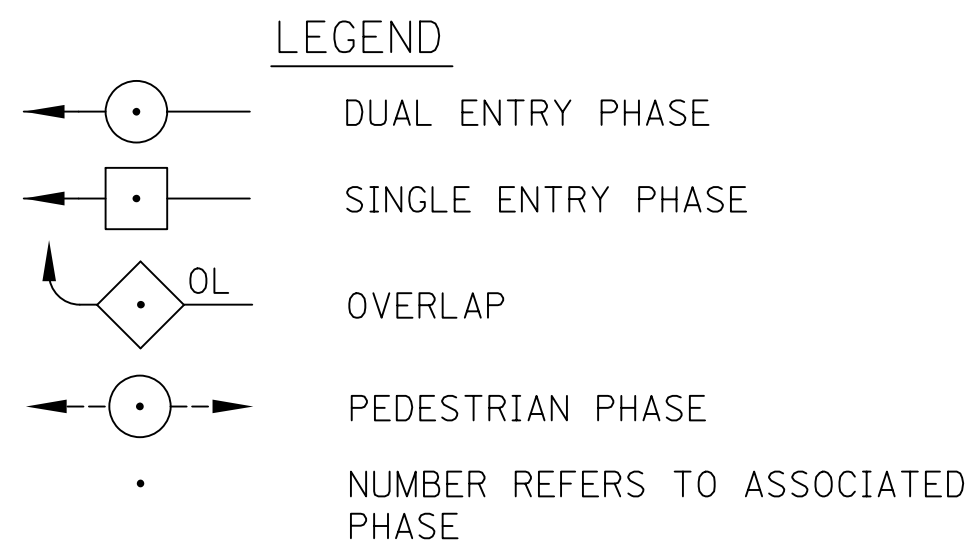
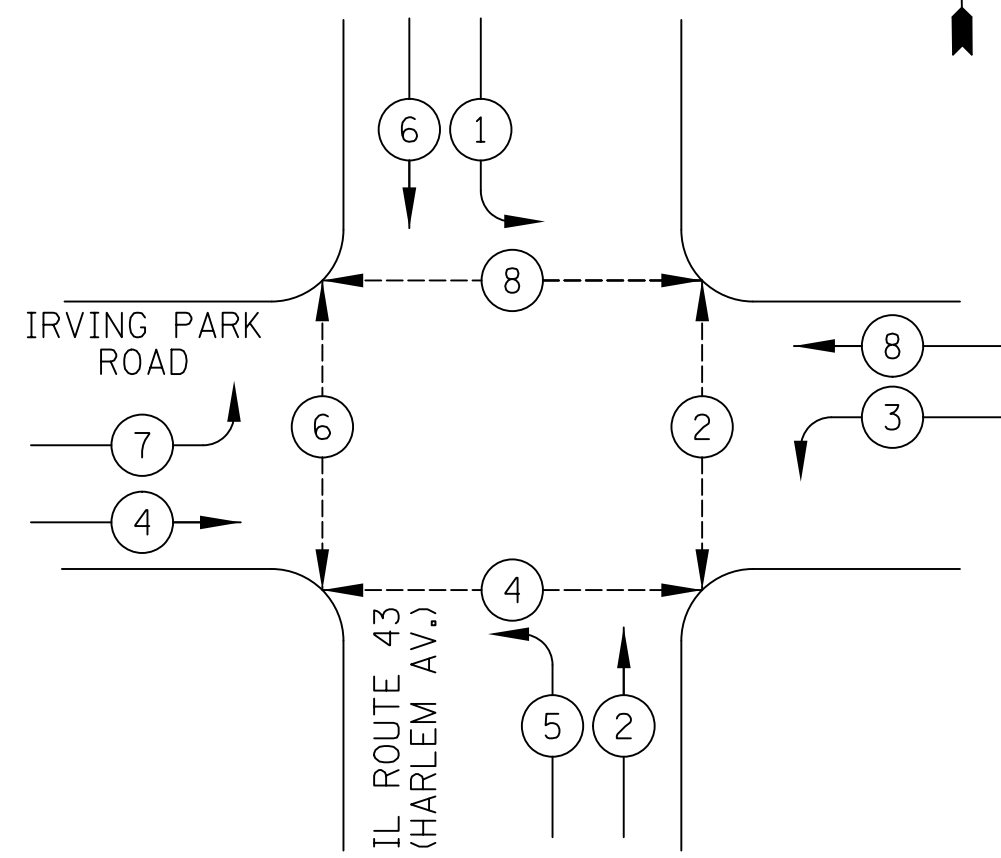
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL MODERNIZATION PLAN
IL ROUTE 19 (IRVING PARK RD.) AT IL ROUTE 43 (HARLEM AV.)**

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

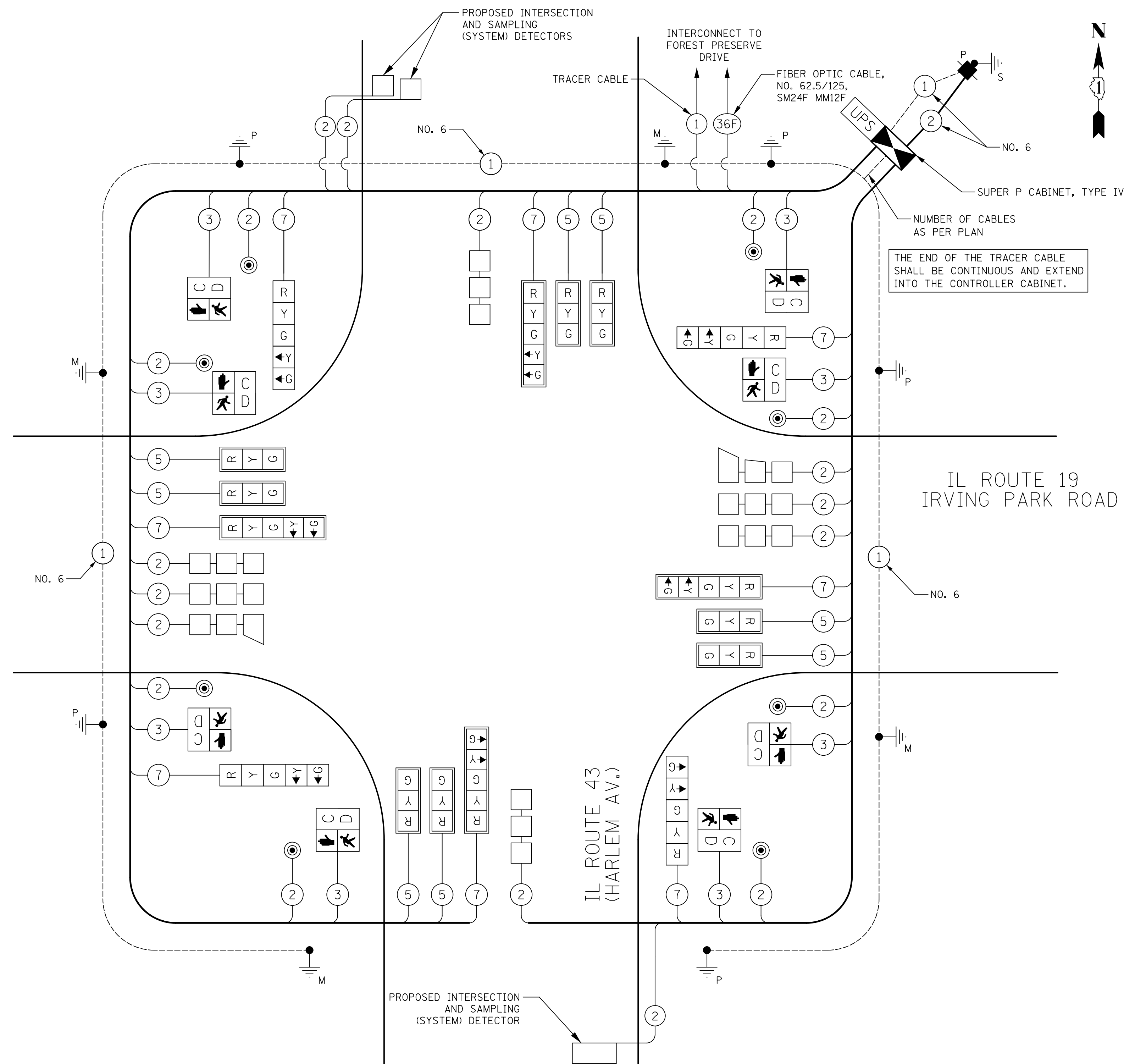
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0348	2012-041TS	COOK	34	23
CONTRACT NO. 60T97				
ILLINOIS FED. AID PROJECT				

PROPOSED CONTROLLER SEQUENCE



SCHEDULE OF QUANTITIES

PAY ITEM	UNIT	QNTY.
SUBBASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	150
PROTECTIVE COAT	SQ YD	190
PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH	SQ FT	1350
DETECTABLE WARNINGS	SQ FT	90
COMBINATION CURB AND GUTTER REMOVAL	FOOT	142
SIDEWALK REMOVAL	SQ FT	1350
COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	142
SIGN PANEL - TYPE 2	SQ FT	60
THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	346
THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	199
PAVEMENT MARKING REMOVAL	SQ FT	561
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	656
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	52
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	48
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	372
HANDHOLE	EACH	4
HEAVY-DUTY HANDHOLE	EACH	4
DOUBLE HANDHOLE	EACH	2
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1122
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1178
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1364
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1334
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1963
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	43
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	669
TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	4
STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 32 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	20
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	54
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	8
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	12
INDUCTIVE LOOP DETECTOR	EACH	11
DETECTOR LOOP, TYPE I	FOOT	829
PEDESTRIAN PUSH-BUTTON	EACH	8
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	8
REMOVE EXISTING DOUBLE HANDHOLE	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	9
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1



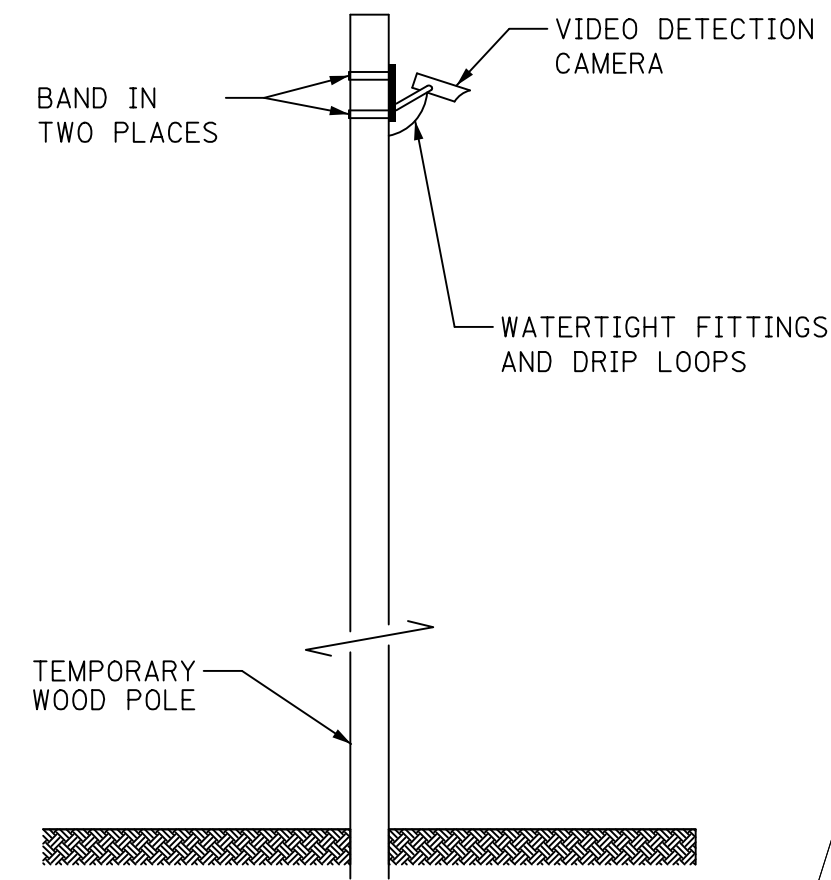
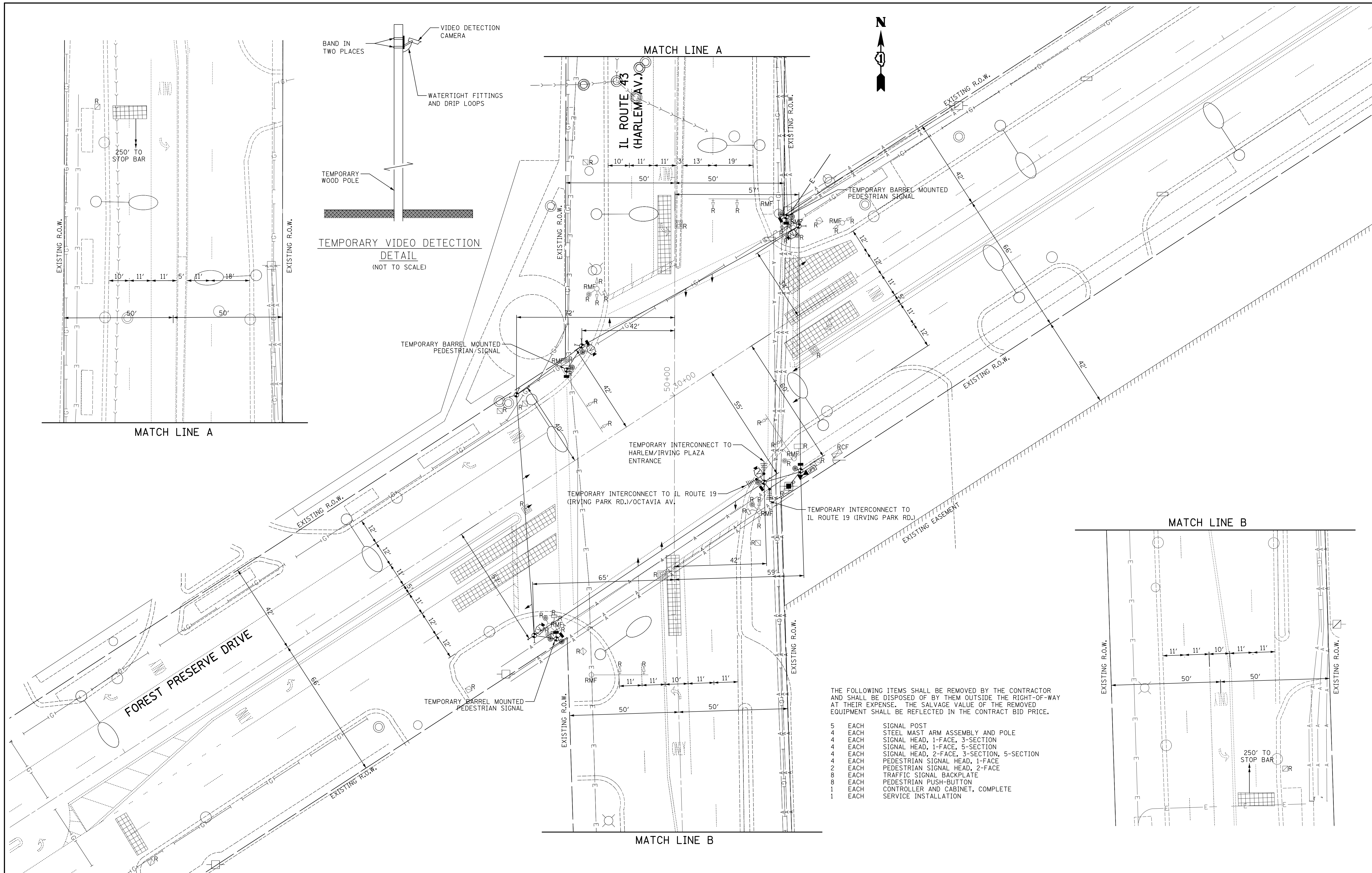
CABLE PLAN
NOT TO SCALE

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

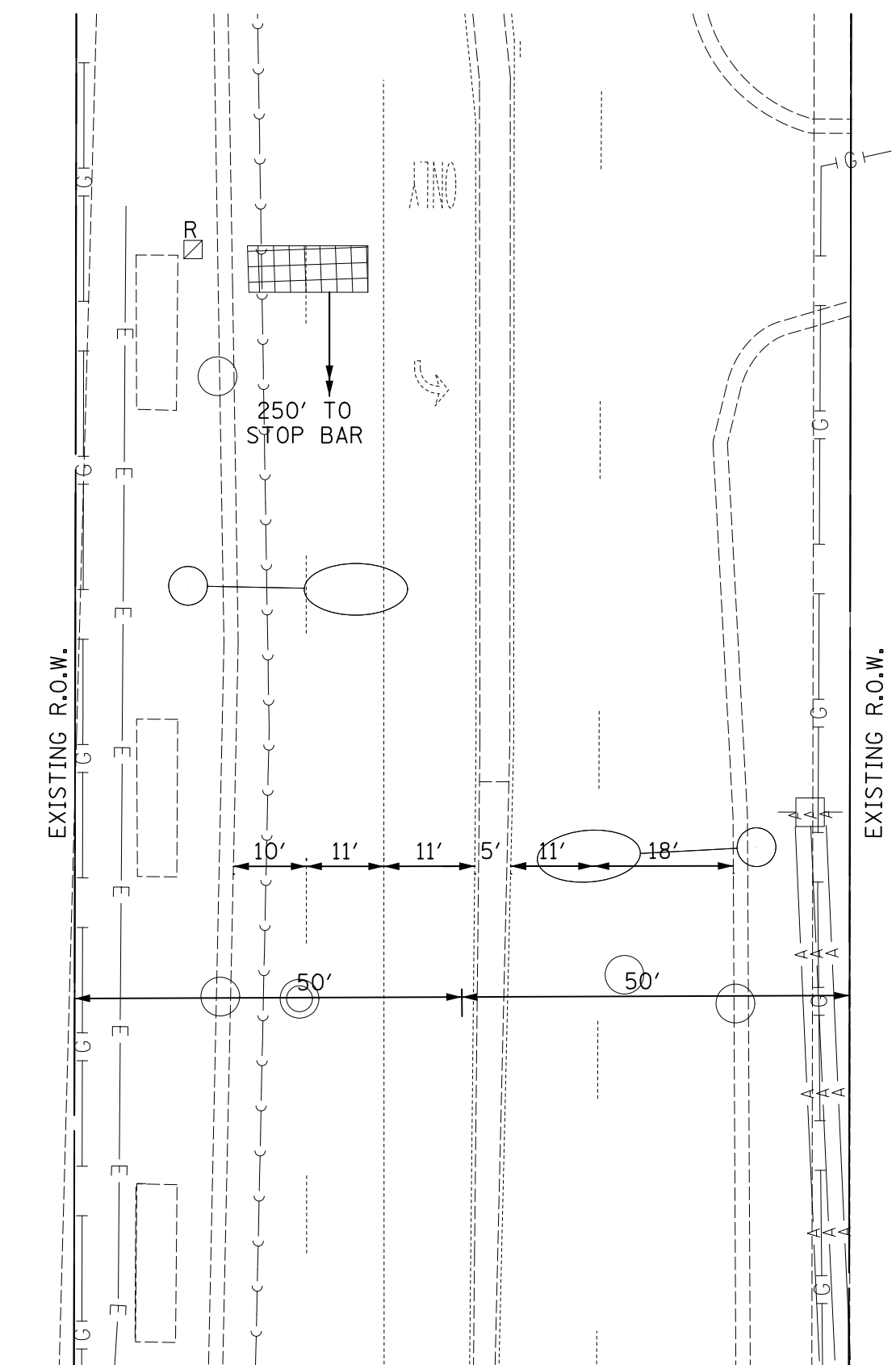
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16		17	0.50	136
(YELLOW)	16		25	0.25	100
(GREEN)	16		15	0.25	60
ARROW	16		12	0.10	19
PED. SIGNAL	8		25	1.00	200
VIDEO SYSTEM	1		150	1.00	150
CONTROLLER	1		100	1.00	100
TOTAL =					765

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

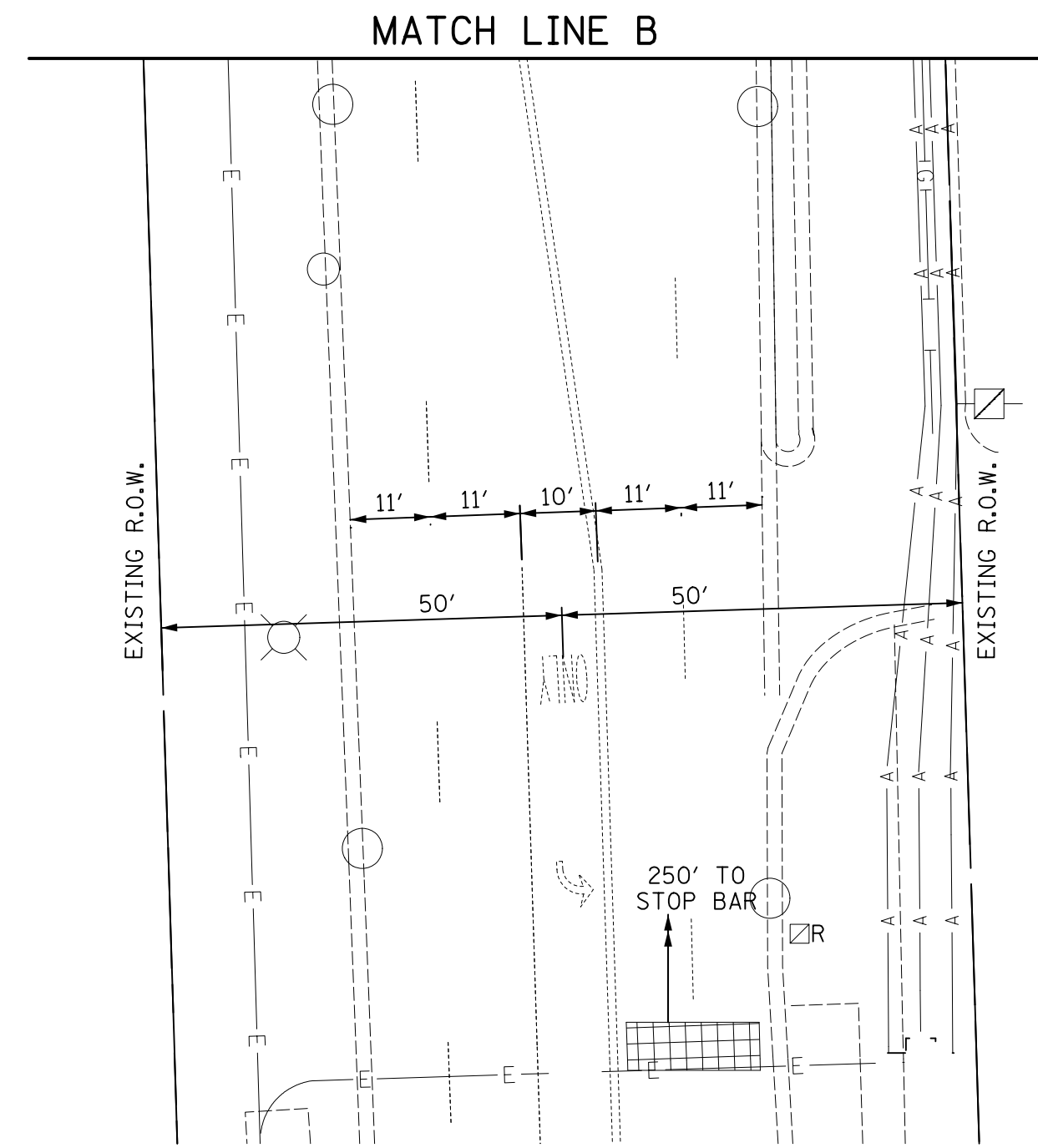
ENERGY SUPPLY: CONTACT:
PHONE:
COMPANY:



TEMPORARY VIDEO DETECTION
DETAIL
(NOT TO SCALE)



MATCH LINE A



MATCH LINE B

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.

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



USER NAME = mfb	DESIGNED - BRD	REVISED -
PLOT SCALE = 20.0000' / 1" =	DRAWN - MFB	REVISED -
PLOT DATE = 3/20/2013	CHECKED - JJE	REVISED -
	DATE - 03/21/2013	REVISED -

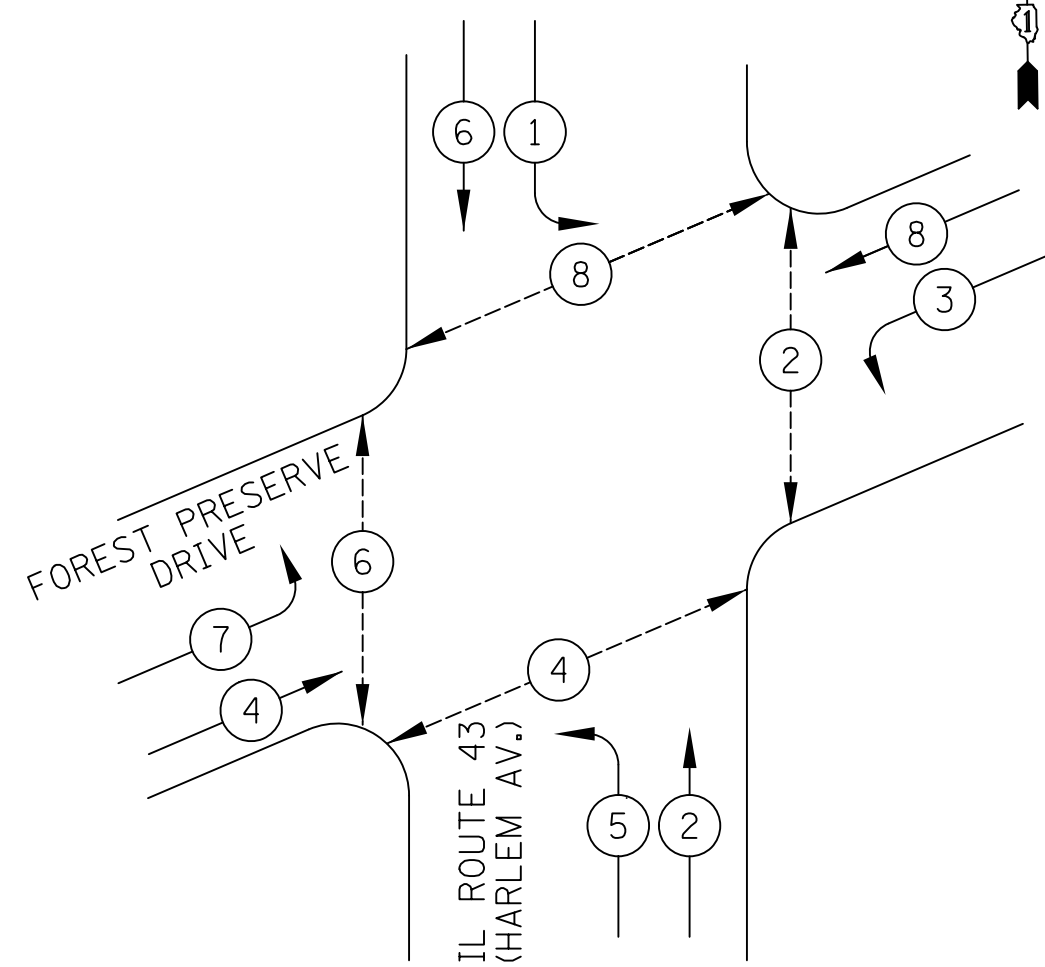
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN AND REMOVAL PLAN
IL ROUTE 43 (HARLEM AV.) AT FOREST PRESERVE DRIVE**

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

F.A.P. RTE. 0348	SECTION 2012-041TS	COUNTY COOK	TOTAL SHEETS 34	SHEET NO. 25
				CONTRACT NO. 60T97
ILLINOIS FED. AID PROJECT				

TEMPORARY
CONTROLLER SEQUENCE



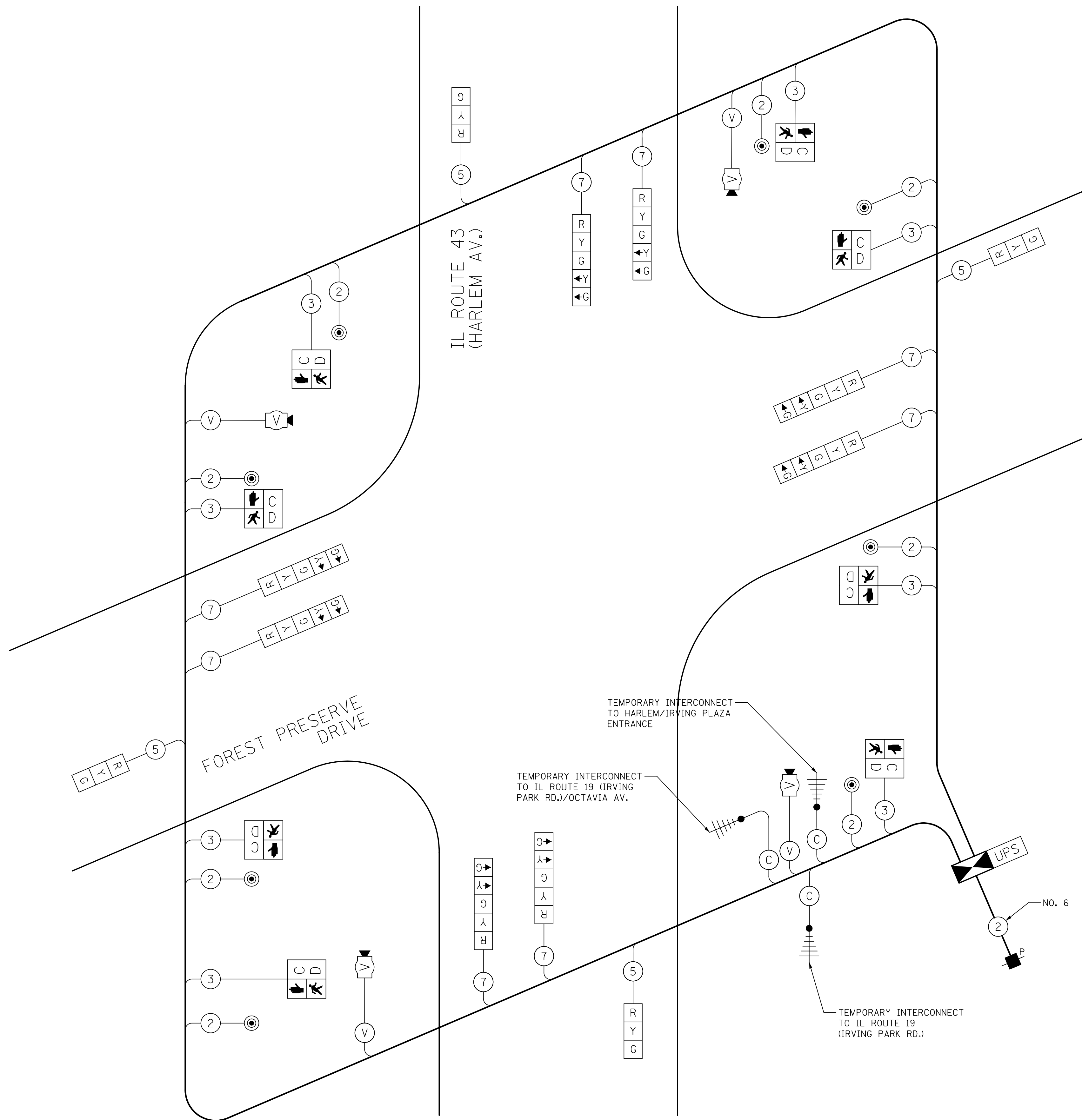
LEGEND

- 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)	12	INCAND.	17	0.50	102
(YELLOW)	12		25	0.25	75
(GREEN)	12		15	0.25	45
ARROW	16		12	0.10	19
PED. SIGNAL	8		25	1.00	200
VIDEO SYSTEM	1		150	1.00	150
CONTROLLER	1		100	1.00	100
TOTAL =					691

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

ENERGY SUPPLY: CONTACT:
PHONE:
COMPANY:



TEMPORARY CABLE PLAN
NOT TO SCALE

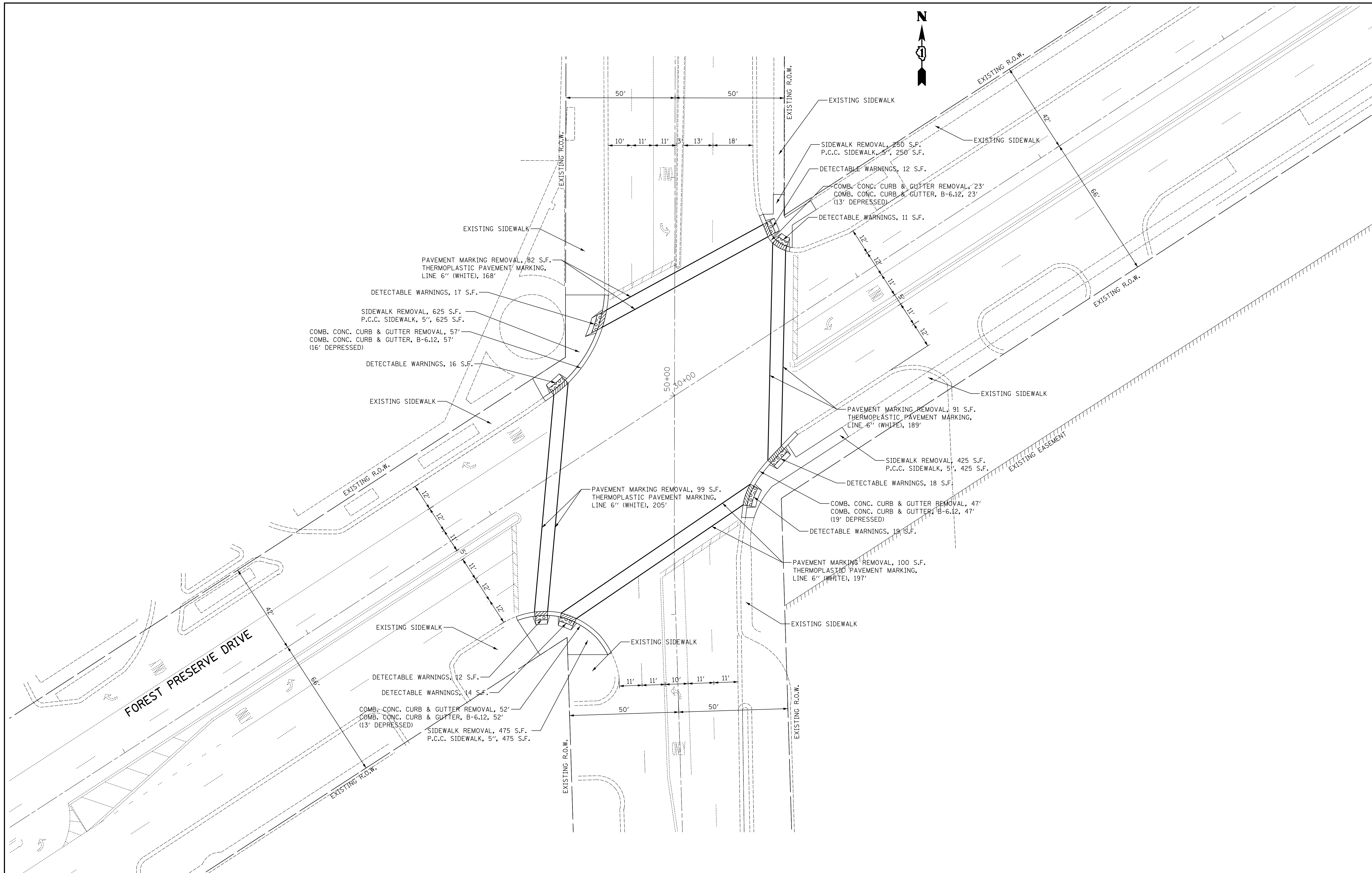
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	PLOT DATE = 3/20/2013	CHECKED - JJE	REVISED -
		DATE - 03/21/2013	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CABLE PLAN & TEMPORARY PHASE DESIGNATION DIAGRAM
IL ROUTE 43 (HARLEM AV.) AT FOREST PRESERVE DRIVE

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

F.A.P. RTE. 0348	SECTION 2012-041TS	COUNTY COOK	TOTAL SHEETS 34	SHEET NO. 26
CONTRACT NO. 60T97				
ILLINOIS FED. AID PROJECT				



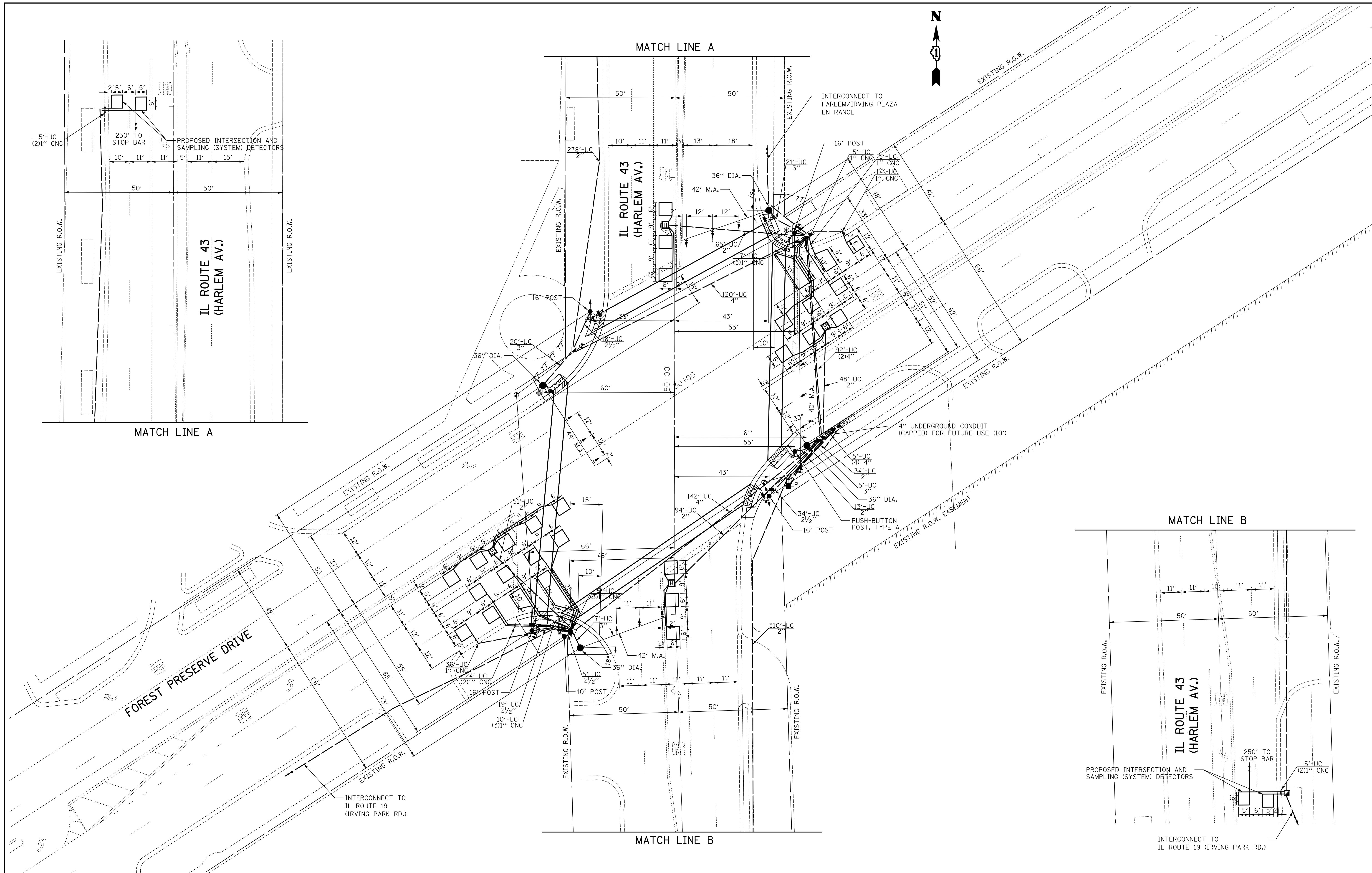
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PLOT DATE = 3/20/2013	CHECKED - JJE	REVISED -
	DATE - 03/21/2013	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**INTERSECTION MODIFICATION PLAN
IL ROUTE 43 (HARLEM AV.) AT FOREST PRESERVE DRIVE**

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

F.A.P. RTE. 0348	SECTION 2012-041TS	COUNTY COOK	TOTAL SHEETS 34	SHEET NO. 27
CONTRACT NO. 60T97				
ILLINOIS FED. AID PROJECT				



USER NAME = mfb
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 DRAWN - MFB
 CHECKED - JJE
 DATE - 03/21/2013
 PLOT SCALE = 20.0000' / 1"
 PLOT DATE = 3/20/2013

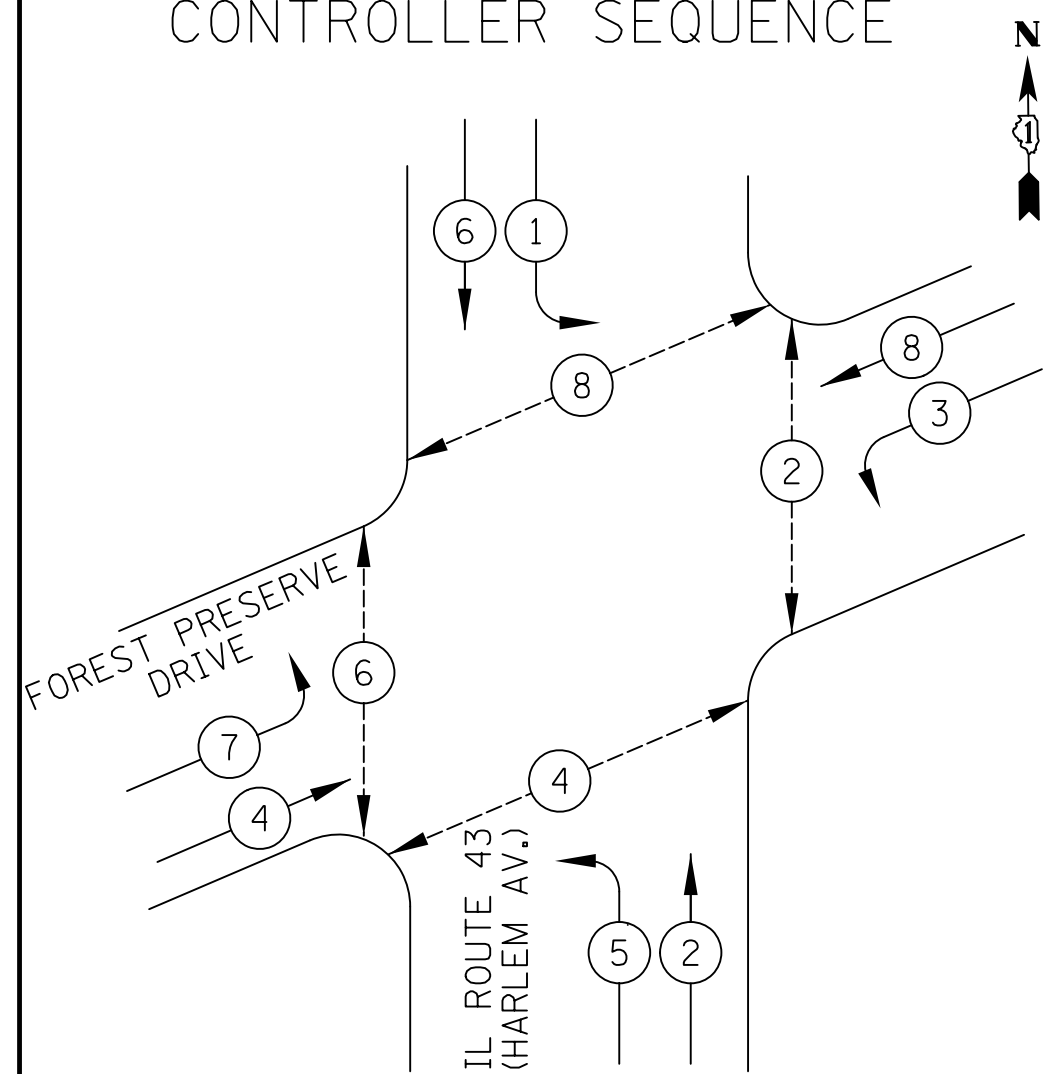
REVISED -
 REVISED -
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 REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

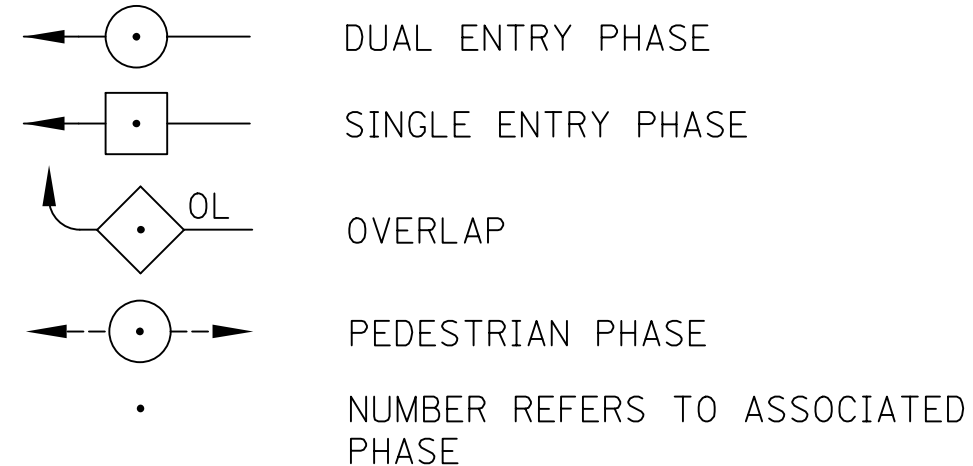
TRAFFIC SIGNAL MODERNIZATION PLAN
IL ROUTE 43 (HARLEM AV.) AT FOREST PRESERVE DRIVE
 SCALE: 1" = 20' SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0348	2012-041TS	COOK	34	28
CONTRACT NO. 60T97				
ILLINOIS FED. AID PROJECT				

PROPOSED CONTROLLER SEQUENCE



LEGEND



PHASE DESIGNATION DIAGRAM

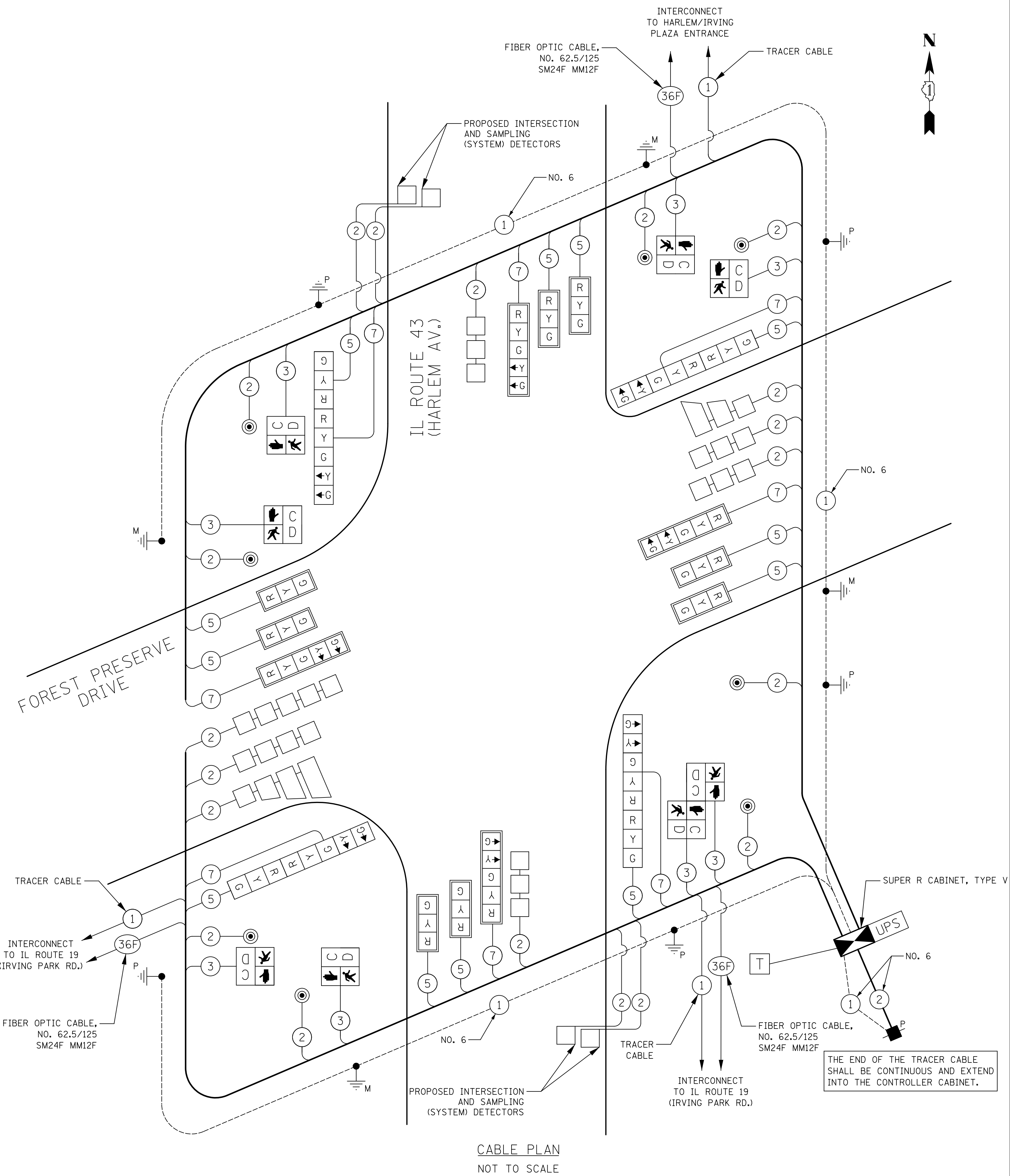
SCHEDULE OF QUANTITIES

PAY ITEM	UNIT	QNTY.
SUBBASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	198
PROTECTIVE COAT	SQ YD	247
PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH	SQ FT	1775
DETECTABLE WARNINGS	SQ FT	119
COMBINATION CURB AND GUTTER REMOVAL	FOOT	179
SIDEWALK REMOVAL	SQ FT	1775
COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	179
SIGN PANEL - TYPE 2	SQ FT	48
THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	759
PAVEMENT MARKING REMOVAL	SQ FT	372
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	893
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	81
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	53
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	476
HANDHOLE	EACH	4
HEAVY-DUTY HANDHOLE	EACH	4
DOUBLE HANDHOLE	EACH	2
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1373
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1429
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2335
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1611
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	2929
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	54
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	829
TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	4
STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 44 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	20
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	54
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	8
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	6
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	1
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	12
INDUCTIVE LOOP DETECTOR	EACH	12
DETECTOR LOOP, TYPE 1	FOOT	1221
PEDESTRIAN PUSH-BUTTON	EACH	8
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	14
REMOVE EXISTING DOUBLE HANDHOLE	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	10
FULL-ACTUATED CONTROLLER AND TYPE V CABINET, SPECIAL	EACH	1
MASTER CONTROLLER (SPECIAL)	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
PEDESTRIAN PUSHBUTTON POST, TYPE A	EACH	1

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	% OPERATION	
SIGNAL (RED)	20	17	0.50	170	
(YELLOW)	20	25	0.25	125	
(GREEN)	20	15	0.25	75	
ARROW	16	12	0.10	19	
PED. SIGNAL	8	25	1.00	200	
VIDEO SYSTEM	1	150	1.00	150	
CONTROLLER	1	100	1.00	100	
TOTAL =					839

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

ENERGY SUPPLY: CONTACT:
PHONE:
COMPANY:



CABLE PLAN NOT TO SCALE

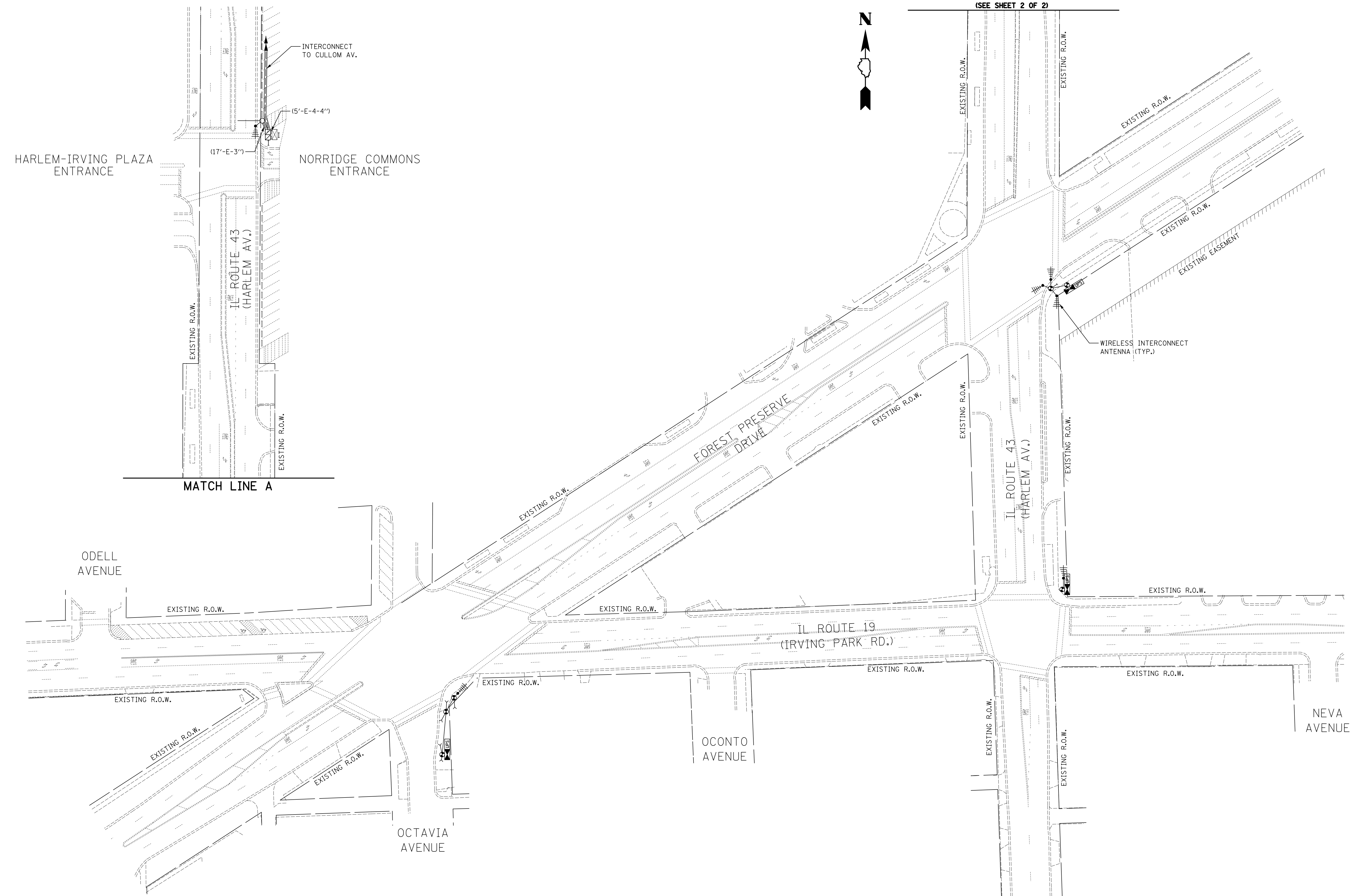
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		DATE - 03/21/2013	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM AND SCHEDULE OF QUANTITIES IL ROUTE 43 (HARLEM AV.) AT FOREST PRESERVE DRIVE			
NOT TO SCALE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	

F.A.P. RTE. 0348	SECTION 2012-041TS	COUNTY COOK	TOTAL SHEETS 34	SHEET NO. 29
ILLINOIS FED. AID PROJECT				CONTRACT NO. 60T97

MATCH LINE A
(SEE SHEET 2 OF 2)



MATCH LINE A

ODELL AVENUE

EXISTING R.O.W.

EXISTING R.O.W.

EXISTING R.O.W.

EXISTING R.O.W.

EXISTING R.O.W.

OCTAVIA AVENUE

EXISTING R.O.W.

OCONTO AVENUE

EXISTING R.O.W.

IL ROUTE 19
(IRVING PARK RD.)

EXISTING R.O.W.

EXISTING R.O.W.

NEVA AVENUE

EXISTING R.O.W.

EXISTING R.O.W.

EXISTING R.O.W.

IL ROUTE 43
(HARLEM AV.)

EXISTING R.O.W.

EXISTING R.O.W.

EXISTING R.O.W.

FOREST PRESERVE
DRIVE

EXISTING R.O.W.

HARLEM-IRVING PLAZA
ENTRANCE

(17'-E-3")

NORRIDGE COMMONS
ENTRANCE

(5'-E-4-4")

INTERCONNECT
TO CULLOM AV.

WIRELESS INTERCONNECT
ANTENNA (TYP.)

EXISTING EASEMENT

EXISTING R.O.W.

EXISTING R.O.W.

EXISTING R.O.W.



USER NAME = mfb
PLOT SCALE = 50.0000' / 1"
PLOT DATE = 3/20/2013

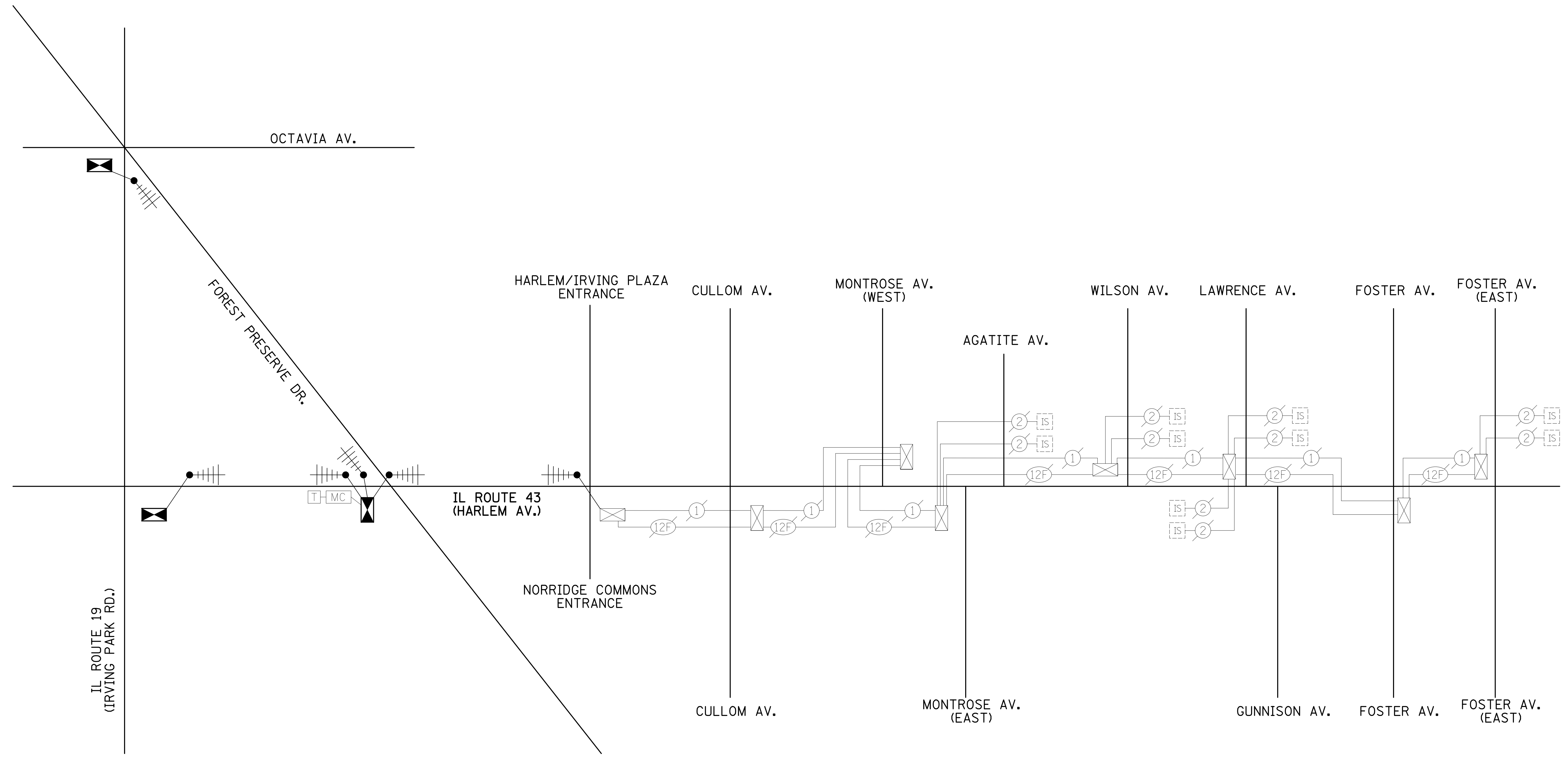
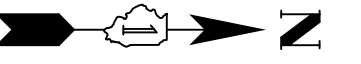
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DRAWN - MFB
CHECKED - JJE
DATE - 03/21/2013

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY INTERCONNECT PLAN
IL ROUTE 19 (IRVING PARK RD.), IL ROUTE 43 (HARLEM AV.) AND
FOREST PRESERVE DRIVE
SCALE: 1" = 50' SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0348	2012-041TS	COOK	34	30
CONTRACT NO. 60T97				
ILLINOIS FED. AID PROJECT				



USER NAME = mfb	DESIGNED - BRD	REVISED -
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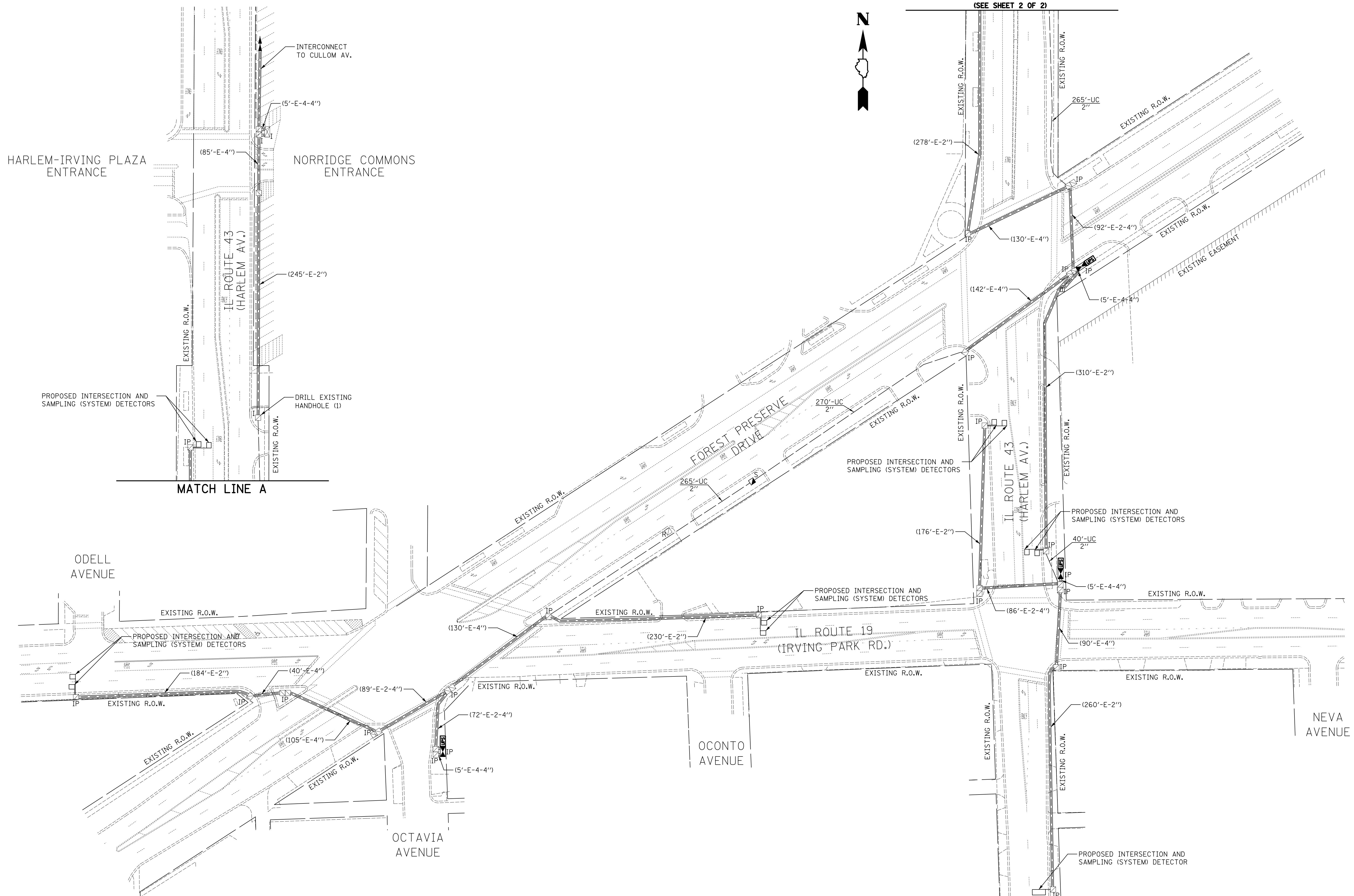
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY INTERCONNECT SCHEMATIC
IL ROUTE 43 (HARLEM AV.)
IL ROUTE 19 (IRVING PARK RD.) TO FOSTER AVENUE**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0348	2012-041TS	COOK	34	31
CONTRACT NO. 60T97				
ILLINOIS FED. AID PROJECT				

MATCH LINE A
(SEE SHEET 2 OF 2)



USER NAME = mfb
PLOT SCALE = 50.0000' / 1" = 1"
PLOT DATE = 3/20/2013

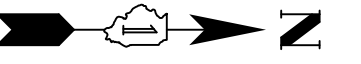
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DRAWN - MFB
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DATE - 03/21/2013

REVISED -
REVISED -
REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

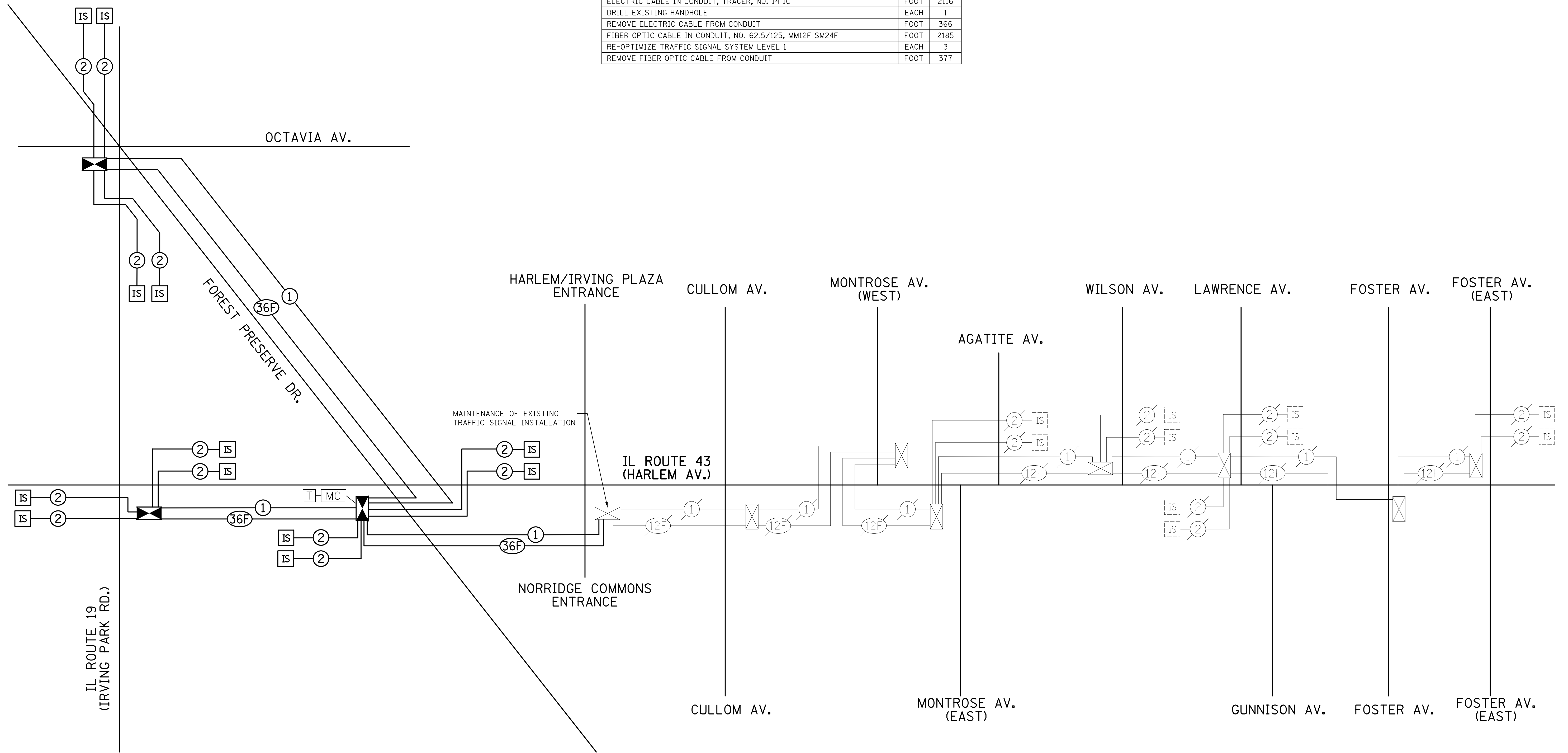
**INTERCONNECT PLAN
IL ROUTE 19 (IRVING PARK RD.), IL ROUTE 43 (HARLEM AV.) AND
FOREST PRESERVE DRIVE**
SCALE: 1" = 50' SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0348	2012-041TS	COOK	34	32
CONTRACT NO. 60T97				
ILLINOIS FED. AID PROJECT				



INTERCONNECT SCHEDULE OF QUANTITIES

PAY ITEM	UNIT	QNTY.
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	840
HANDHOLE	EACH	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	2116
DRILL EXISTING HANDHOLE	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	366
FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F	FOOT	2185
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 1	EACH	3
REMOVE FIBER OPTIC CABLE FROM CONDUIT	FOOT	377



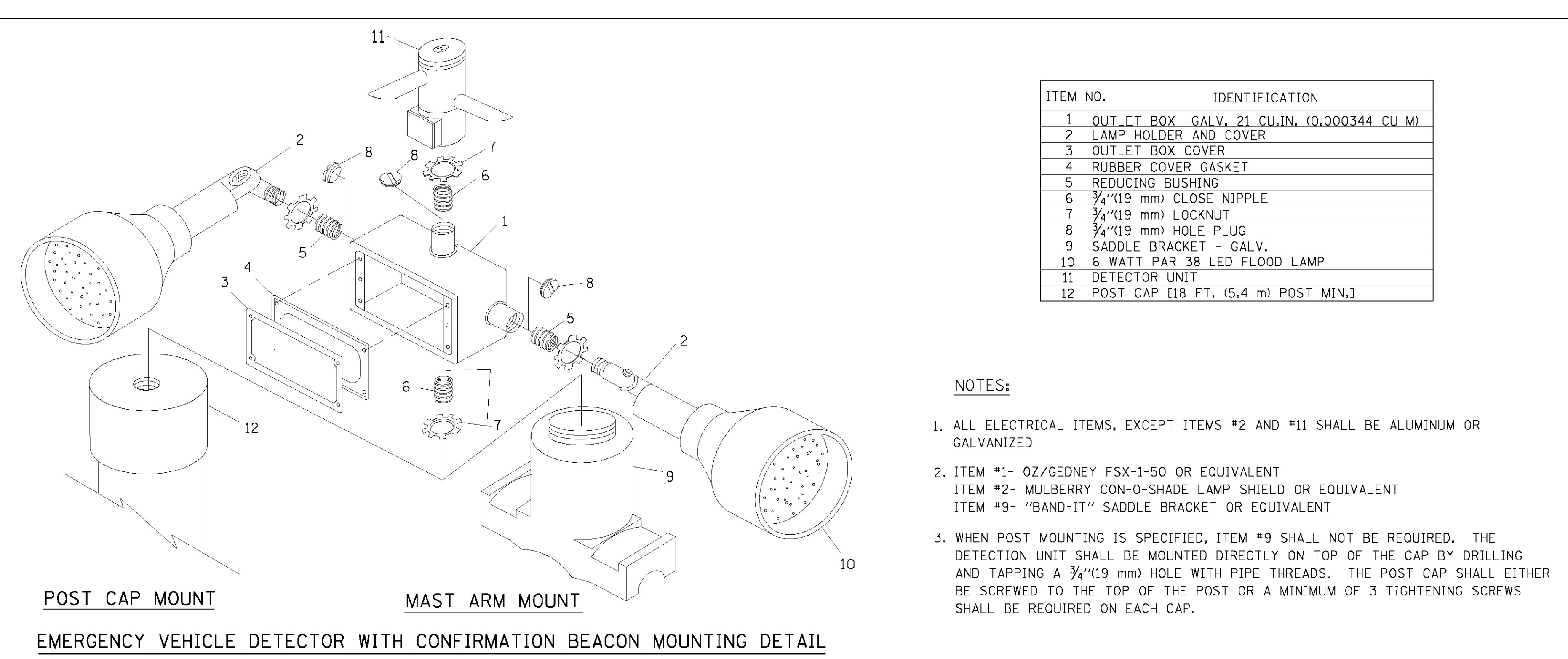
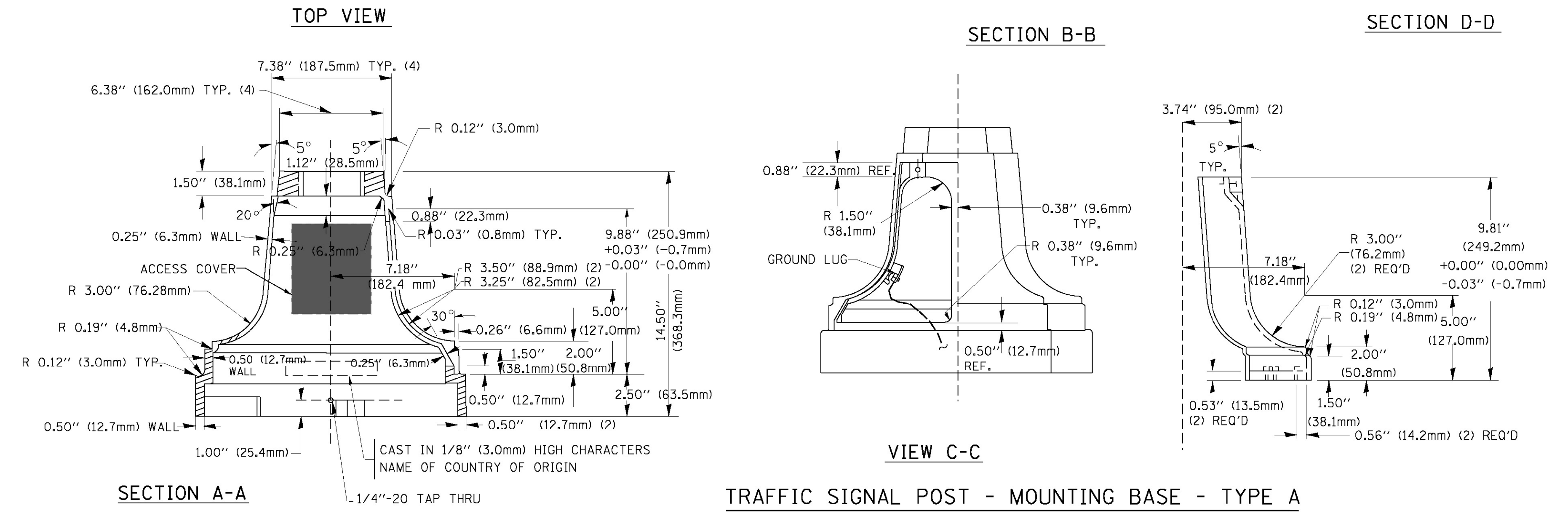
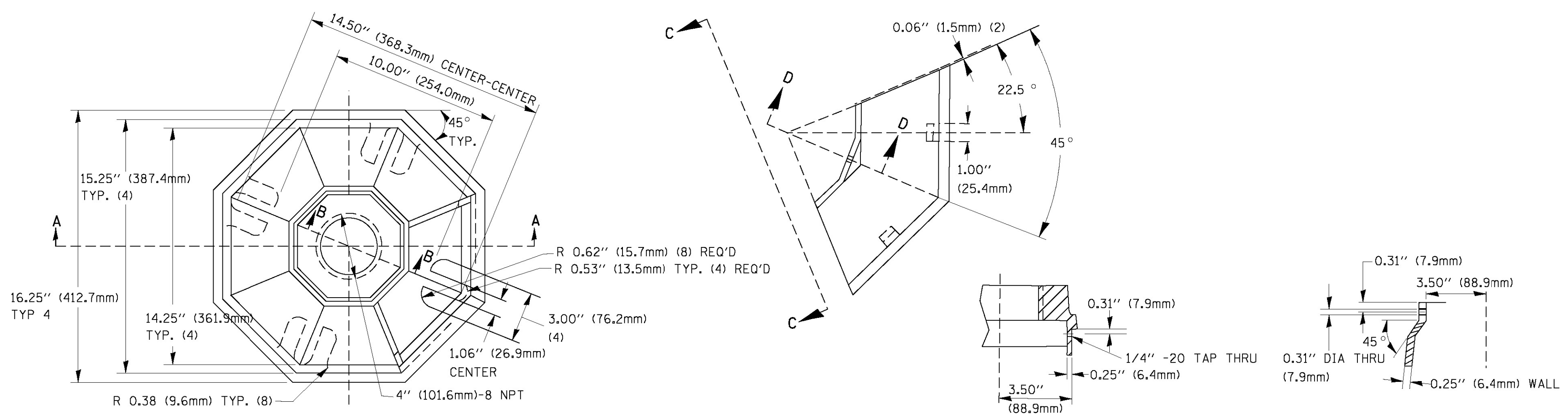
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PLOT DATE = 3/20/2013	CHECKED - JJE	REVISED -
	DATE - 03/21/2013	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT SCHEMATIC
IL ROUTE 43 (HARLEM AV.)
IL ROUTE 19 (IRVING PARK RD.) TO FOSTER AVENUE

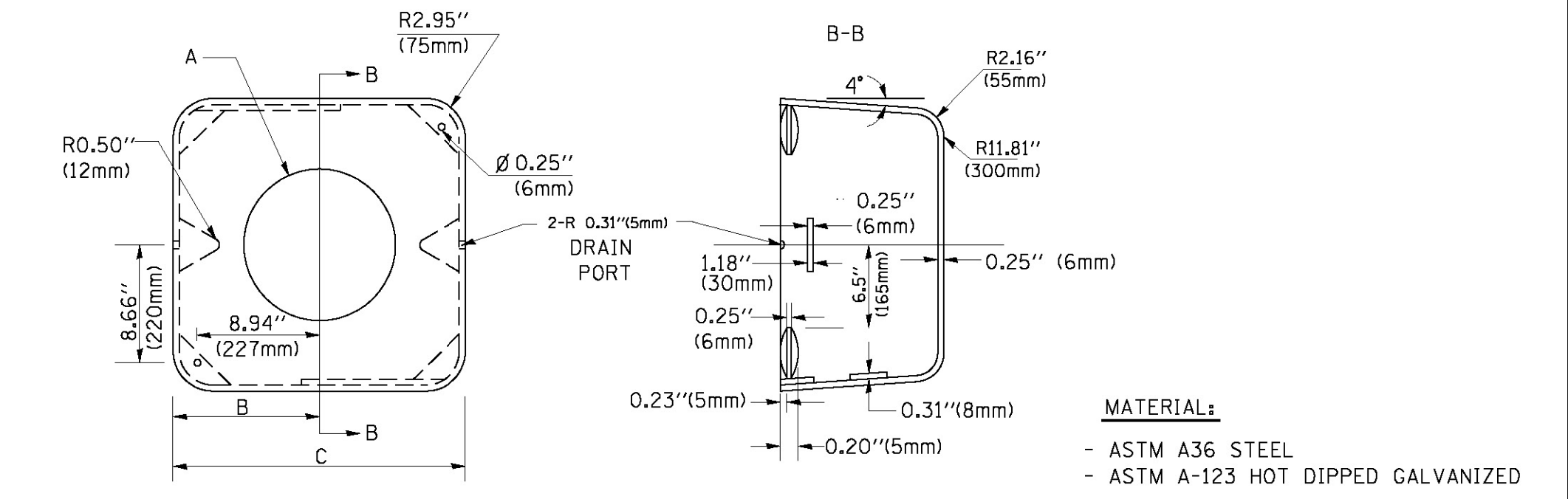
NO SCALE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE. 0348	SECTION 2012-041TS	COUNTY COOK	TOTAL SHEETS 34	SHEET NO. 33
CONTRACT NO. 60T97				ILLINOIS FED. AID PROJECT



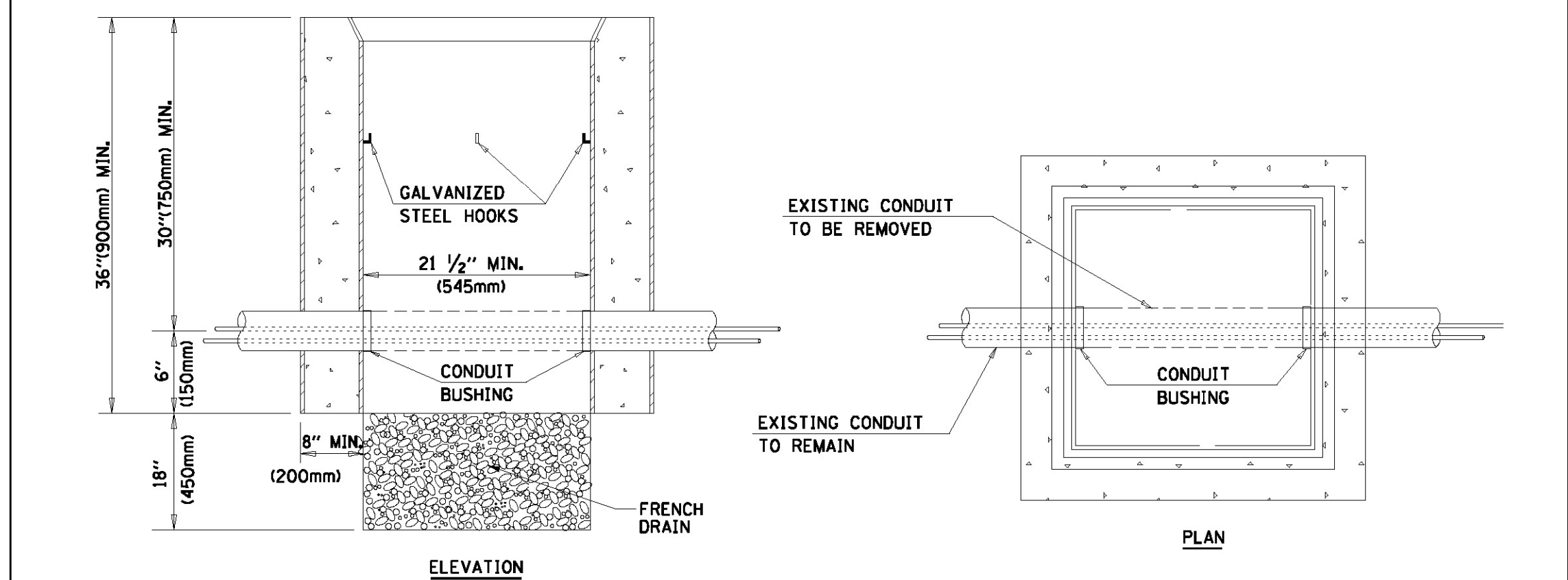
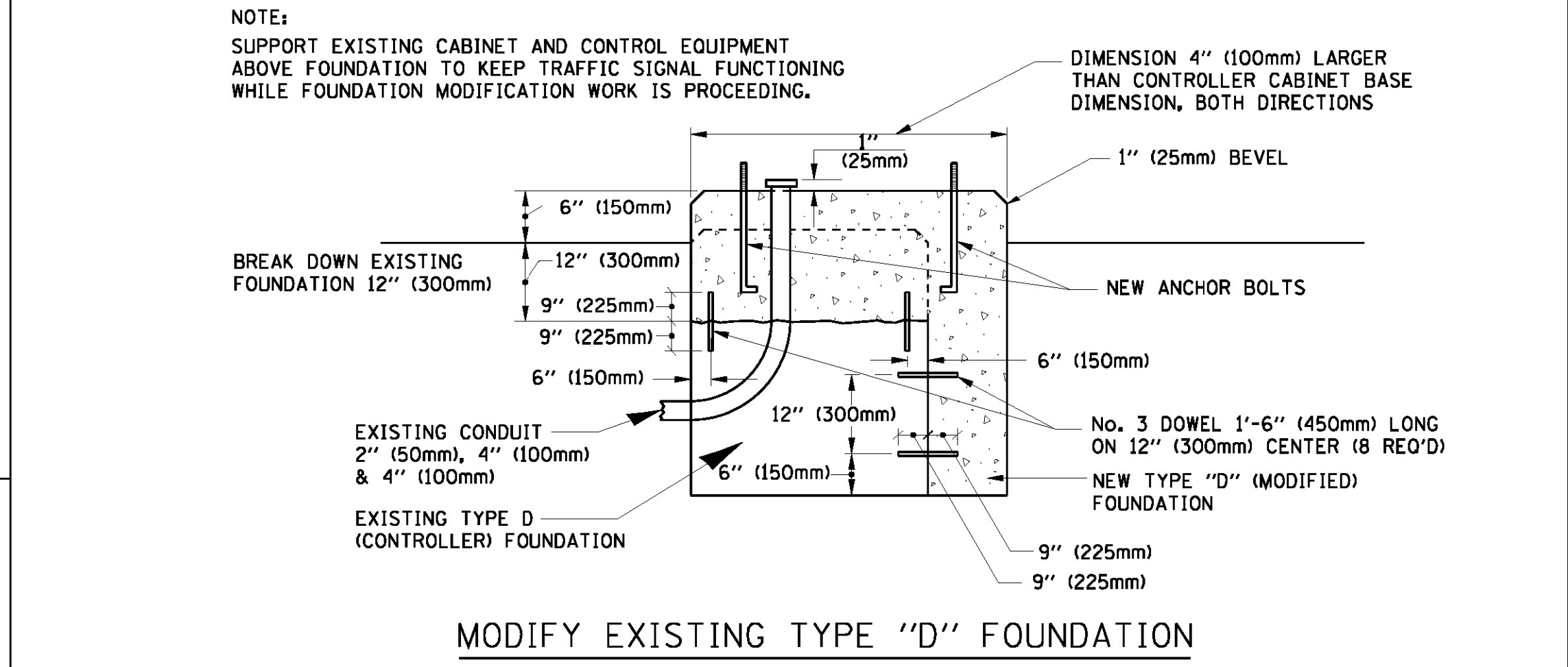
ITEM NO.	IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU.IN. (0.000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4\"(19 mm) CLOSE NIPPLE
7	3/4\"(19 mm) LOCKNUT
8	3/4\"(19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT
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.



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)

- 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.



- NOTES:**
- HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
 - REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCIDENTAL TO THE HANDHOLE.