

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023-SIGNALS-03	COOK/LAKE	67	1
		ILLINOIS	CONTRACT NO. 62R84	

LOCATION B
US 41 – CHURCH STREET TO NILES CENTER ROAD

LOCATION C
US 41 – MAIN STREET TO OAKTON STREET

LOCATION E
IL 43 – IL 64 TO ARMITAGE AVENUE

LOCATION F
IL 131 – IL 137 TO SARATOGA STREET

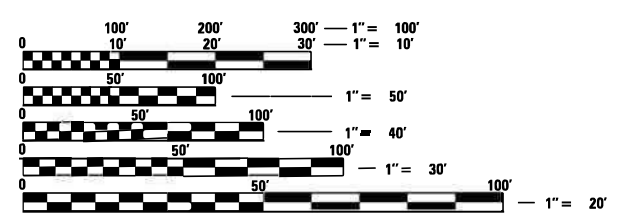
LOCATION G
IL 131 – MLK DRIVE TO ARGONNE DRIVE

LOCATION H
DEVON AVENUE – IL 50 TO KENTON / LEMONT AVENUE

- DESIGN DESIGNATION**
- IL131 /DEVON AVENUE – MINOR ARTERIAL
 - 26TH STREET – MAJOR COLLECTOR
 - US41 /IL43 – OTHER PRINCIPAL ARTERIAL (PAS)
 - CHURCH STREET – MAJOR COLLECTOR
 - OAKTON STREET – MINOR ARTERIAL
 - IL-50 – OTHER PRINCIPAL ARTERIAL (PAS)

TRAFFIC DATA

US 41 ADT (2021) = 14600 VPD POSTED SPEED = 35 MPH	IL 131 ADT (2021) = 11900 VPD POSTED SPEED = 45 MPH	CHURCH STREET ADT (2022) = 8700 VPD POSTED SPEED = 30 MPH
US 41 ADT (2021) = 17700 VPD POSTED SPEED = 35 MPH	DEVON AVENUE ADT (2021) = 25200 VPD POSTED SPEED = 35 MPH	OAKTON STREET ADT (2022) = 13200 VPD POSTED SPEED = 25 MPH
IL 43 ADT (2021) = 20300 VPD POSTED SPEED = 30 MPH	IL 131 ADT (2021) = 11900 VPD POSTED SPEED = 35 MPH	IL-50 ADT (2021) = 19900 VPD POSTED SPEED = 40 MPH



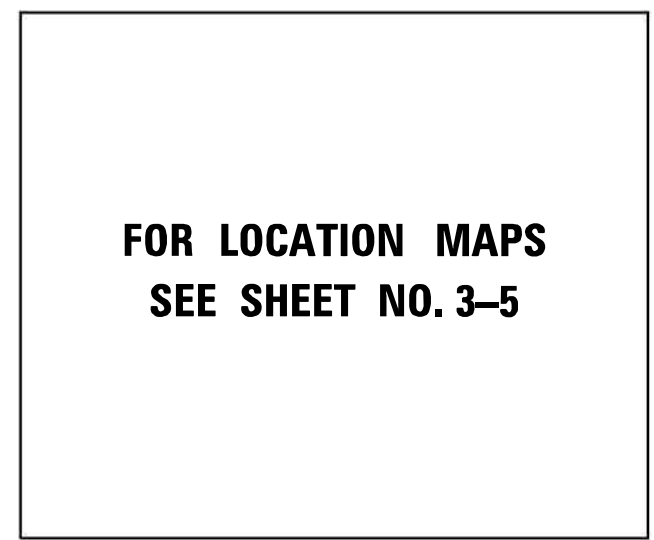
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

PROJECT MANAGER: NICK BUTLER (847) 705-4420
PROJECT ENGINEER: KAMIL KOBYLKA (847) 705-4734
CONTRACT NO. 62R84

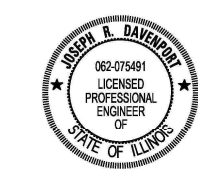
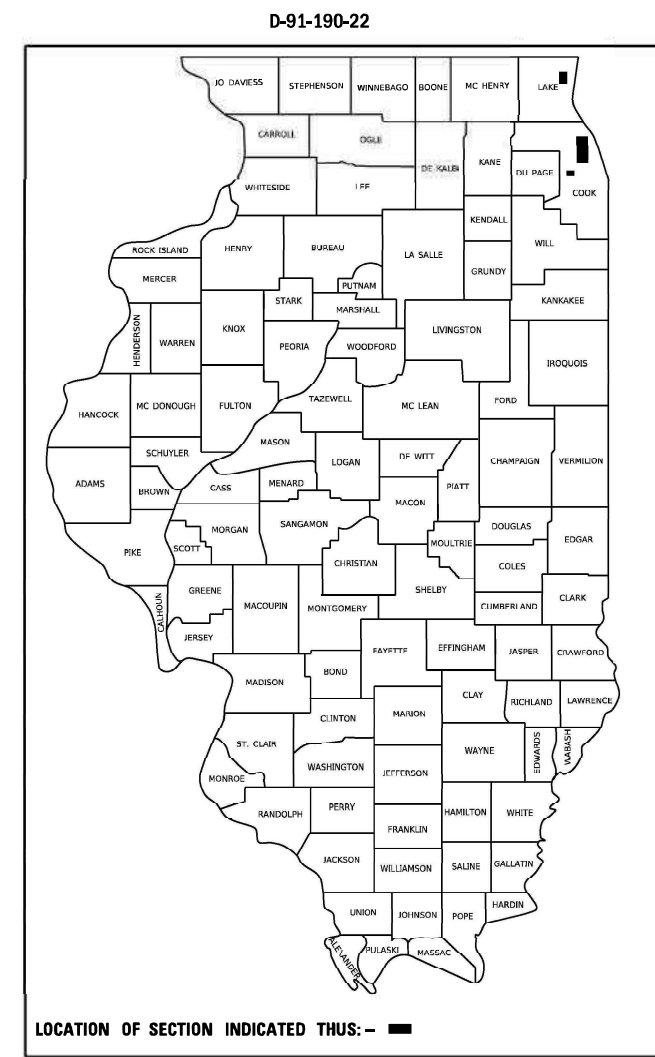
**PROPOSED
HIGHWAY PLANS**

ROUTE: VARIOUS
SECTION: 2023 SIGNALS 03
PROJECT: CMAQ-L2HA(083)
CMAQ TRAFFIC SIGNAL INTERCONNECT
COOK & LAKE COUNTY
C-91-253-22



FOR LOCATION MAPS
SEE SHEET NO. 3-5

VARIOUS TOWNSHIPS



JOSEPH R. DAVENPORT, P.E.
NO. 062-075491
EXP. DATE 11/30/2025
TRANSYSTEMS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED March 19 2024
Joseph R. Davenport
REGIONAL ENGINEER

May 10, 2024 [Signature]
ENGINEER OF DESIGN AND ENVIRONMENT

May 10, 2024 [Signature]
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

**PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS**

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MAINTENANCE OF TRAFFIC

1. MAINTENANCE OF TRAFFIC SHALL CONFORM TO THE APPLICABLE HIGHWAY AND DISTRICT STANDARDS.
2. THE CONTRACTOR SHALL MINIMIZE THE IMPACT OF THE WORK BY UTILIZING OFF-ROAD OPERATIONS WHERE POSSIBLE.
3. IN THE EVENT OF REQUIRED LANE CLOSURES, THE CONTRACTOR SHALL MINIMIZE THE DURATION OF THE CLOSURE BY ONLY IMPLEMENTING WHEN WORK IS BEING PERFORMED AT THE LOCATION. ALL MAINTENANCE OF TRAFFIC SHALL BE REMOVED AFTER THE CONTRACTOR HAS COMPLETED WORK. ONLY TEMPORARY DAYTIME OFF PEAK CLOSURES WILL BE PERMITTED.
4. CONTRACTOR SHALL MINIMIZE IMPACT TO PARKING AND SHALL BE RESPONSIBLE FOR COORDINATING ADVANCED NOTIFICATION OF PARKING SPACES THAT ARE IMPACTED BY THE WORK.
5. AT WORK AREAS THAT IMPACT PEDESTRIANS AND/OR SIDEWALK, STANDARD 701801 SHALL BE USED. CONTRACTOR SHALL MINIMIZE WORK AREAS AND DISRUPTION TO SIDEWALK WHENEVER POSSIBLE. CONTRACTOR SHALL NOT IMPACT ANY ADA CURB RAMPS WITHOUT PRIOR AUTHORIZATION FROM ENGINEER.
6. THE CONTRACTOR SHALL CONTACT KALPANA KANNAN-HOSADURGA, THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR, AT KALPANA.KANNAN-HOSADURGA@ILLINOIS.GOV A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

GENERAL NOTES

1. ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE LATEST EDITION.
2. THE CONTRACTOR SHALL CONTACT J.U.L.I.E. (1-800-892-0123) 48 HOURS PRIOR TO ANY WORK IN THE RIGHT OF WAY OR EASEMENTS TO LOCATE UTILITIES, AND CONTACT THE OWNER'S REPRESENTATIVE SHOULD PUBLIC UTILITIES APPEAR TO BE IN CONFLICT WITH THE PROPOSED IMPROVEMENTS.
3. INFORMATION PROVIDED IN PLANS ARE FROM EXISTING DRAWINGS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION.
4. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
5. THE CONTRACTOR SHALL TAKE CARE TO PROTECT ALL SIGNS ALONG THE ROUTE OF CONSTRUCTION. SIGNS SHALL BE REMOVED IF THEY ARE IN CONFLICT WITH PROPOSED WORK, AND APPROVED BY ENGINEER. ALL LABOR NECESSARY TO COMPLY WITH THE RELOCATION OF SIGNS SHALL BE INCLUDED IN THE CONTRACT WITHOUT ANY EXTRA COMPENSATION ALLOWED TO THE CONTRACTOR ACCORDING TO ART. 107.25, UNLESS MARKED ON PLANS.
6. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
7. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
8. PRUNE TREE LIMBS THAT MIGHT BE DAMAGED BY EQUIPMENT OPERATIONS AT LEAST ONE WEEK PRIOR TO THE START OF CONSTRUCTION BY A CERTIFIED ARBORIST. ANY TREE LIMBS THAT ARE BROKEN BY CONSTRUCTION EQUIPMENT AFTER THE INITIAL PRUNING MUST BE PRUNED CORRECTLY WITHIN 72 HOURS.
9. ALL TREE PROTECTION, TREE REMOVAL, PRUNING, AND ROOT PRUNING SHALL BE COMPLETED BEFORE CONSTRUCTION OPERATIONS COMMENCE IN ANY AREA. AT NO TIME SHALL THE CONTRACTOR PRUNE OR REMOVE ANY TREES UNLESS SPECIFICALLY DIRECTED BY THE ENGINEER.
10. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE MUNICIPALITIES INDICATED ON THE TITLE SHEET.
11. LOCATION OF ALL UTILITIES AND PRIVATELY OWNED FACILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO THE INSTALLATION OF ANY COMPONENTS.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING EXISTING IDOT ELECTRICAL FACILITIES AT HIS/HER OWN EXPENSE IF REQUIRED. THE CONTRACTOR SHALL ALSO BE LIABLE FOR ANY DAMAGE TO IDOT FACILITIES RESULTING FROM INACCURATE LOCATING.
13. ELECTRICAL WORK SHALL CONFORM WITH NATIONAL, STATE, AND LOCAL CODES.
14. THE LOCATIONS FOR HANDHOLES AND JUNCTION BOXES ARE PROVIDED FOR REFERENCE ONLY. THE ENGINEER SHALL BE NOTIFIED FOR LOCATION VERIFICATION BEFORE INSTALLATION.
15. THE EXISTING TRAFFIC SIGNALS SHALL REMAIN IN OPERATION DURING THE CONSTRUCTION OF THE PROPOSED CONDUIT AND FIBER OPTIC CABLE.
16. THE CONTRACTOR SHALL PROVIDE FIBER OPTIC CABLE SLACK IN ACCORDANCE WITH THE SPECIFICATIONS.
17. ELECTRICAL CABLE WILL MEASURED FOR PAYMENT IN ACCORDANCE WITH ARTICLE 871.05 & 871.06.
18. POTHOLING TO LOCATE EXISTING UNDERGROUND UTILITIES SHALL BE INCLUDED IN THE CONTRACT BID PRICE FOR THE CONDUIT PAY ITEMS.
19. REMOVAL AND REPLACEMENT OF EXISTING SIDEWALK, PAVEMENT, AND ISLANDS FOR UTILITY LOCATING PURPOSES SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE BID UNIT PRICE FOR THE CONDUIT PAY ITEMS.
20. THERE SHALL BE NO ADDITIONAL SPLICES IN THE FIBER OPTIC CABLE EXCEPT WHERE NOTED IN THE PLANS, OR UPON APPROVAL OF THE TRAFFIC ENGINEER.
21. ALL SURPLUS MATERIALS SHALL BE DISPOSED OF IN ACCORDANCE WITH ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS. THE CONTRACTOR SHALL DISPOSE OF ALL REMOVED ITEMS OFF OF THE SITE EXCEPT WHERE NOTED IN THE PLANS.
22. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR PLACING CONDUIT AT GREATER THAN THE REQUIRED MINIMUM DEPTH TO AVOID OBSTACLES SUCH AS UNDERGROUND UTILITIES.
23. THE CONTRACTOR IS RESPONSIBLE FOR THE COST OF UNCOVERING OR HAND DIGGING AROUND UTILITIES AS NECESSARY. THE COST OF THIS WORK SHALL BE INCLUDED IN THE BID UNIT PRICE FOR THE CONDUITS.
24. THE LOCATION OF THE PROPOSED CONDUIT AS SHOWN ON THE PLAN SHEETS IS APPROXIMATE AND NOT DRAWN TO SCALE.
25. THE CONDUIT SHALL BE INSTALLED AT A MINIMUM DEPTH EXCEPT WHEN CROSSING WATERWAYS AND FLOW LINES WHERE IT SHALL BE INSTALLED AT A 60" DEPTH OR RAILROAD CROSSINGS WHERE IT SHALL BE INSTALLED AT 66" DEPTH.
26. ALL CONDUIT ATTACHMENT BRACKETS/HARDWARE SHALL BE STAINLESS STEEL.

27. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL ITEMS REQUIRED TO ATTACH THE CONDUITS AND JUNCTION BOXES TO THE STRUCTURES, INCLUDING, BUT NOT LIMITED TO STRUT, BRACKETS. SEAL-TITE, LBS, EXPANSION-DEFLECTION COUPLINGS, FITTINGS, HARDWARE, AND OTHER MISCELLANEOUS ITEMS, THESE ITEMS WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE BID UNIT PRICE FOR THE CONDUIT ATTACHED TO STRUCTURE PAY ITEM.
28. THE CONTRACTOR SHALL INSTALL THREAD LOCKER ON ALL STRUCTURE-ATTACHED CONDUIT THREADED CONNECTIONS TO PREVENT LOOSENING THROUGH VIBRATION.
29. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING FIELD TILE, UNDERDRAIN. AND DRAINAGE STRUCTURE LOCATIONS.
30. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY MOWING AND BRUSH/SHRUB REMOVAL REQUIRED TO INSTALL THE PROPOSED CONDUIT AND HANDHOLES.
31. THE CONTRACTOR SHALL PLAN AND CONDUCT CONDUIT AND FIBER INSTALLATION OPERATIONS TO MINIMIZE THE NUMBER OF ROADWAY LANE CLOSURES AND TO MINIMIZE TRAFFIC DISRUPTIONS AND DELAYS FOR THE MOTORING PUBLIC. THE CONTRACTOR SHALL OBTAIN ALL PERMITS ALONG STATE, COUNTY AND TOWNSHIP ROADWAYS.
32. THE CONTRACTOR SHALL VERIFY FIELD CONDITIONS PRIOR TO BIDDING. THERE WILL BE NO ADDITIONAL COMPENSATION PAID FOR CLAIMS THAT ARISE FROM A FAILURE TO FULLY INVESTIGATE EXISTING FIELD CONDITIONS.
33. THE CONTRACTOR SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR 72 HOURS IN ADVANCE OF BEGINNING WORK.
34. PARTIAL PAYMENT AS DESCRIBED IN ARTICLE 109.07(b) OF THE STANDARD SPECIFICATIONS WILL NOT BE ALLOWED FOR ITEMS INCLUDED IN THIS CONTRACT.

* 35. THESE PLANS USE EXISTING RECORD DRAWINGS AS BACKGROUND FOR THE PROPOSED PLAN. CONTRACTOR SHALL USE CARE IN CORRECTLY DISTINGUISHING PROPOSED WORK. CERTAIN RECORD DRAWINGS SHEETS HAVE BEEN INCLUDED FOR INFORMATION ONLY FOR BETTER UNDERSTANDING OF THE ENTIRE SYSTEM WHICH UTILIZES BOTH EXISTING AND PROPOSED FIBER INFRASTRUCTURE.

36. THE WORK IN THIS CONTRACT IS LIMITED TO THE INSTALLATION OF HANDHOLES, CONDUITS, TRACER AND FIBER OPTIC CABLES, PTZ CAMERAS, SWITCHES, AND CONTROLLERS AS WELL AS ANY OTHER COMPONENTS AS SPECIFIED IN THE SCHEDULE OF QUANTITIES. PLANS USE EXISTING RECORD DRAWINGS WHICH SHOW PROPOSED EQUIPMENT FROM PREVIOUS CONTRACTS. WORK SHALL ONLY INCLUDE WHAT IS SPECIFIED IN THE SCHEDULE OF QUANTITIES.

HIGHWAY /DISTRICT STANDARDS

000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
701001-02	OFF-RD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5 m) AWAY
701006-05	OFF-RD OPERATIONS, 2L, 2W, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
701101-05	OFF-RD OPERATIONS, MULTILANE, 15' TO 24" FROM PAVEMENT EDGE
701106-02	OFF-RD OPERATIONS, MULTILANE, MORE THAN 15' (4.5 m) AWAY
701301-04	LANE CLOSURE, 2L, 2W, SHORT TERM OPERATIONS
701426-09	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS ≥ 45 MPH
701427-05	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS ≤ 40 MPH
701601-09	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSE MEDIAN
701602-10	URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE
701606-10	URBAN SINGLE LANE CLOSURE MULTILANE, 2W WITH MOUNTABLE MEDIAN
701701-10	URBAN LANE CLOSURE MULTILANE INTERSECTION
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-09	TRAFFIC CONTROL DEVICES
814001-03	HANDHOLES
814006-03	DOUBLE HANDHOLES
857001-01	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
857006-01	SUPERVISED RAILROAD INTERCONNECT CIRCUIT
862001-01	UNINTERRUPTABLE POWER SUPPLY (UPS)
873001-02	TRAFFIC SIGNAL GROUNDING & BONDING
878001-11	CONCRETE FOUNDATION DETAILS
886001-01	DETECTOR LOOP INSTALLATIONS
886006-01	TYPICAL LAYOUTS FOR DETECTION LOOPS
TC-10	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS INTERSECTIONS AND DRIVEWAYS
TC-14	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)
TC-22	ARTERIAL ROAD INFORMATION SIGN

RLR NOTES

DUE TO THE PRESENCE OF A RED LIGHT RUNNING (RLR) CAMERA FOR THE BELOW LISTED LOCATIONS, CONTRACTOR SHALL NOTIFY THE MUNICIPALITY AND RLR CAMERA COMPANY PRIOR TO THE START OF CONSTRUCTION. THE MUNICIPALITY OR THE RLR CAMERA COMPANY SHALL MAKE THE 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.

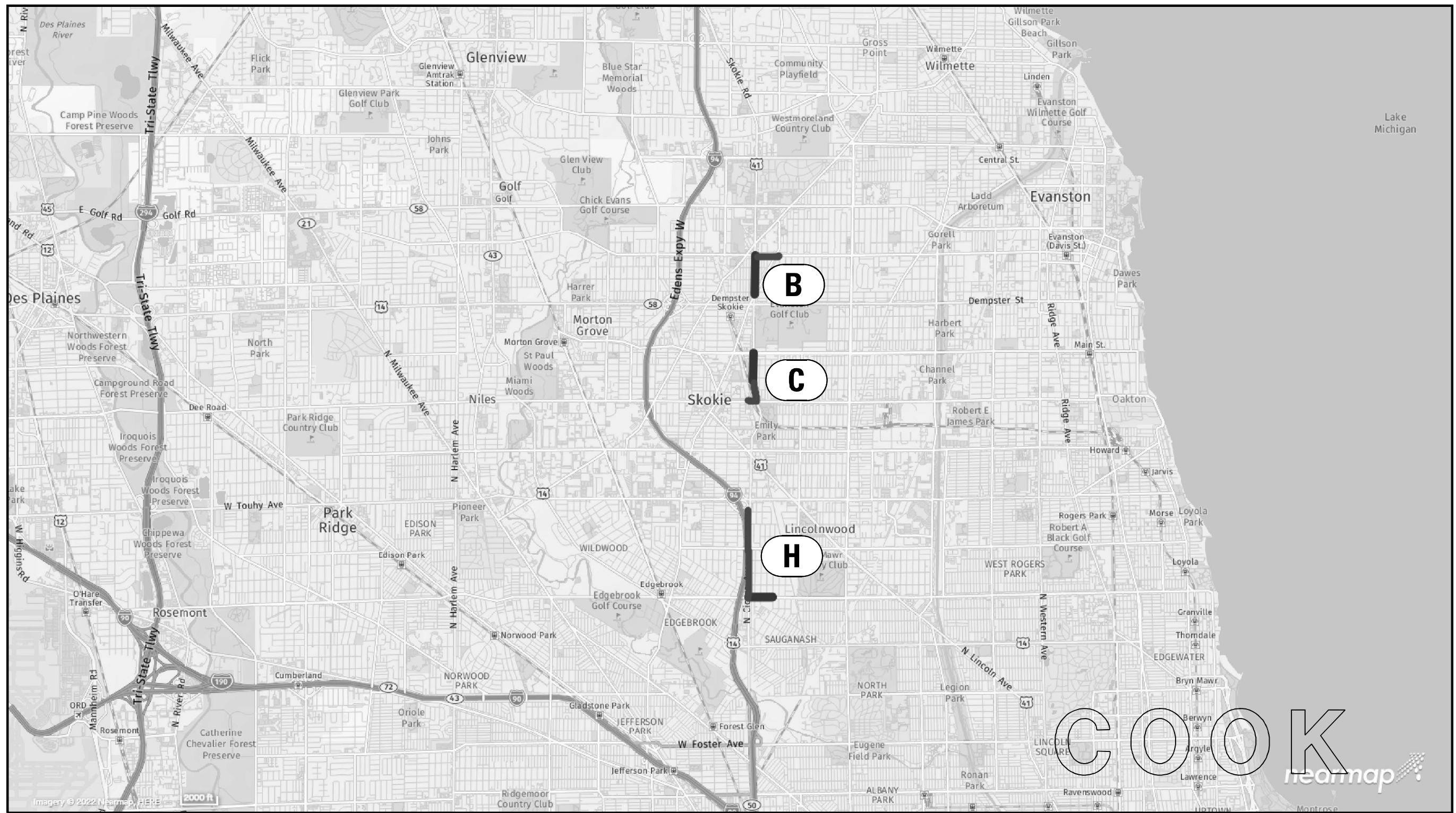
RLR CAMERA LOCATION:
 TS 2095: IL-64 (NORTH AVE)/IL-43 (HARLEM AVE) (TWO) TS 7015: IL-137 (BUCKLEY RD)/IL-131 (GREEN BAY RD)
 VENDOR: VERRA MOBILITY, RED SPEED LLC VENDOR: REDFLEX
 VENDOR CONTACT: VENDOR CONTACT: 5651 TALAVI BLVD SUITE 200, GLENDALE, AZ 85306
 VERRA MOBILITY: 1150 N ALMA SCHOOL RD MESA, AZ 85201 MUNICIPALITY: NORTH CHICAGO
 RED SPEED LLC: 400 EISENHOWER LANE LOMBARD, IL 60148 MUNICIPALITY CONTACT: 1850 LEWIS AVE NORTH CHICAGO, IL 60064,
 MUNICIPALITY: ELMWOOD PARK, RIVER FOREST (847) 596-8870
 MUNICIPALITY CONTACT:
 ELMWOOD PARK: 11 CONTI PKWY ELMWOOD PARK, IL 60707,
 (708) 452-3946
 RIVER FOREST: PARK AVE RIVER FOREST, IL 60305,
 (708) 714-3551

CORRIDOR	# LANES	SPEED LIMIT	NOTES
US 41 (CHURCH TO NILES CENTER)	4	35 MPH	SIDEWALK, ON-STREET PARKING
US 41 (MAIN TO SEARLE PKWY)	4	35 MPH	SIDEWALK
IL 43	2	30 MPH	SIDEWALK, ON-STREET PARKING
IL 131 (IL 137 TO SARATOGA)	4	45 MPH	SIDEWALK AT INTERSECTIONS
DEVON AVENUE	4	35 MPH	PARTIAL SIDEWALK
IL 131 (MLK TO ARGONNE)	4	35 MPH	SIDEWALK

TS SHT NO. 2

MODEL: Default
FILE NAME: General Notes - Contract 3

TRANSYSTEMS	USER NAME = jrdavenport	DESIGNED - GR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INDEX OF SHEETS, HIGHWAY STANDARDS, AND GENERAL NOTES			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - JRD	REVISED -		VAR	2024-SIGNALS-03	COOK/LAKE	67	2			
	PLOT SCALE = 2.0000 / 1 in.	CHECKED - BS	REVISED -		SCALE: NONE	SHEET 2	OF 67 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT		
	PLOT DATE = 3/15/2024	DATE - 03-15-2024	REVISED -									



COOK
 hearmap

TS SHT NO. 3

MODEL: Default
 FILE NAME: Location Maps-Contract 3

LOC. NO.	SYSTEM	NAME	COUNTY
B	ECON 17 / ECON 2	US 41: CHURCH STREET TO NILES CENTER ROAD	COOK
C	IDOT TACTICS (FORMER EAGLE 6P)	US 41: MAIN STREET TO SEARLE PARKWAY	COOK
H	EAGLE 1L	IL-50: ESTES TO DEVON AND LEMONT AVE	COOK

TRANSYSTEMS

USER NAME = jrdavenport	DESIGNED - GR	REVISED -
	DRAWN - JRD	REVISED -
PLOT SCALE = 2,000' / in.	CHECKED - BS	REVISED -
PLOT DATE = 3/15/2024	DATE - 03-15-2024	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**LOCATION MAP
 COOK COUNTY - SHEET 1 OF 3**

SCALE: NONE SHEET 3 OF 67 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-SIGNALS-03	COOK	67	3
CONTRACT NO.62R84				
ILLINOIS FED. AID PROJECT				



LOC. NO.	SYSTEM	NAME	COUNTY
E	IDOT CENTRACS (FORMER ECON 100)	IL 43: IL 64 TO ARMITAGE AVENUE	COOK

TRANSYSTEMS

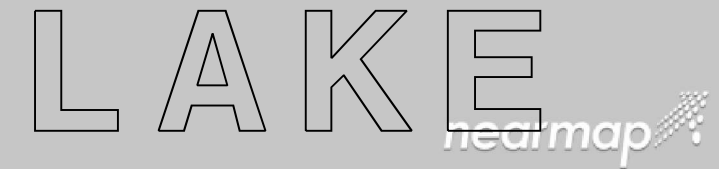
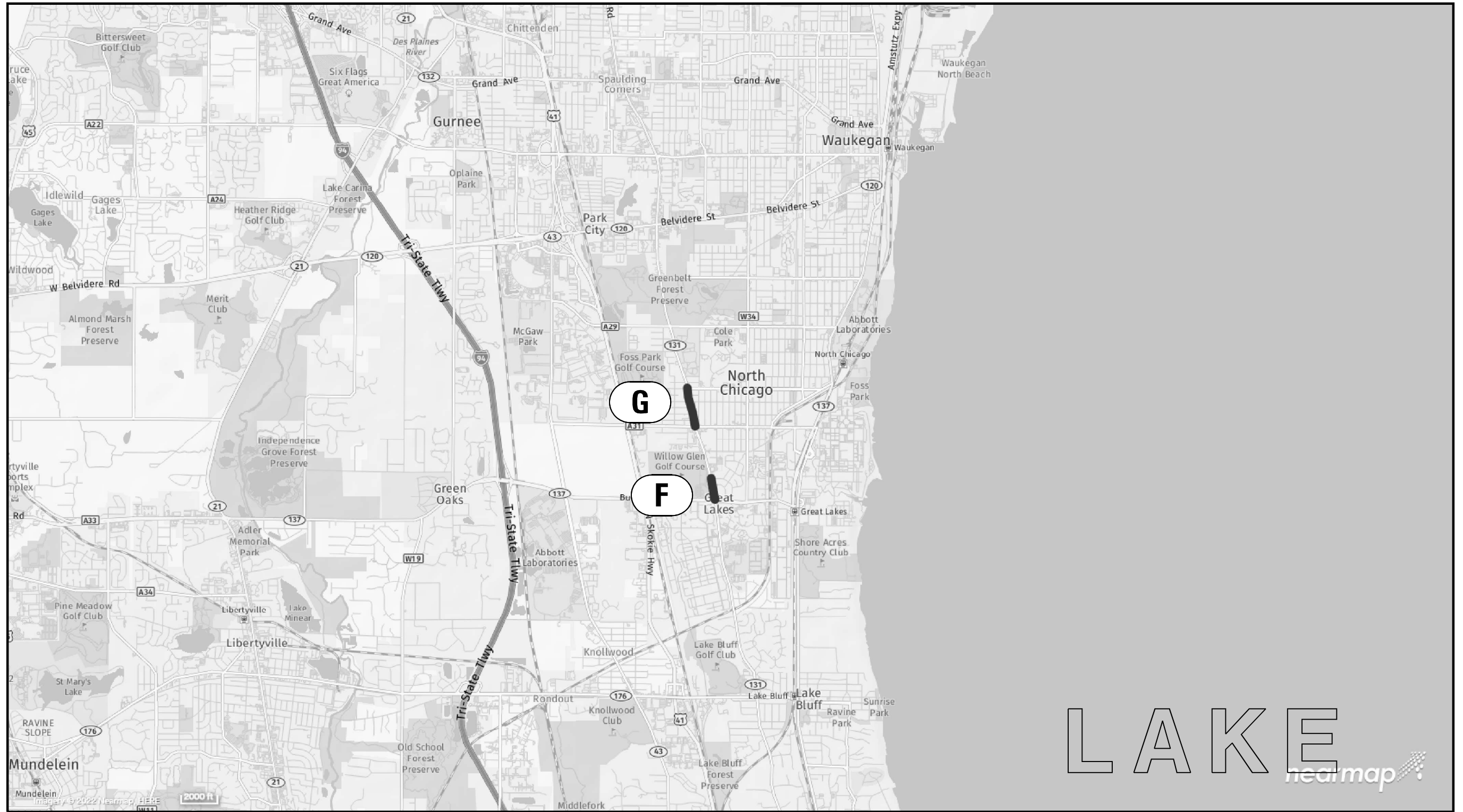
USER NAME = jrdavenport	DESIGNED - GR	REVISED -
PLOT SCALE = 2,000' / in.	DRAWN - JRD	REVISED -
PLOT DATE = 3/15/2024	CHECKED - BS	REVISED -
	DATE - 03-15-2024	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**LOCATION MAP
COOK COUNTY - SHEET 2 OF 3**

SCALE: NONE SHEET 4 OF 67 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-SIGNALS-03	COOK	67	4
CONTRACT NO.62R84				
ILLINOIS FED. AID PROJECT				



LOC. NO.	SYSTEM	NAME	COUNTY
F	LCDOT CENTRACS (FORMER ECON 20)	IL 131: IL 137 TO SARATOGA STREET	LAKE
G	LCDOT CENTRACS	IL 131: MLK DRIVE TO ARGONNE DRIVE	LAKE



USER NAME = jrdavenport	DESIGNED - GR	REVISED -
	DRAWN - JRD	REVISED -
PLOT SCALE = 2,000' / in.	CHECKED - BS	REVISED -
PLOT DATE = 3/15/2024	DATE - 03-15-2024	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**LOCATION MAP
LAKE COUNTY - SHEET 3 OF 3**

SCALE: NONE SHEET 5 OF 67 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-SIGNALS-03	LAKE	67	5
CONTRACT NO.62R84				
ILLINOIS FED. AID PROJECT				

TS SHT NO. 6

MODEL Default
FILE NAME: S03 - Contract 3

CODE NO.	PAY ITEM NAME	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				80% FED 20% STATE COOK COUNTY	80% FED 20% STATE LAKE COUNTY	100% VILLAGE OF SKOKIE COOK COUNTY
				INTERCONNECT	INTERCONNECT	INTERCONNECT
				0021	0021	0021
				URBAN	URBAN	URBAN
* 66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	65.0	48.5	16.5	0.0
* 66900530	SOIL DISPOSAL ANALYSIS	EACH	8	6	2	0
* 66901001	REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN	L SUM	1	0.7	0.3	0.0
* 66901003	REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT	L SUM	1	0.7	0.3	0.0
* 66901006	REGULATED SUBSTANCES MONITORING	CAL DA	6	4	2	0
67100100	MOBILIZATION	L SUM	1	0.7	0.3	0.0
70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1	0.7	0.3	0.0
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	0.7	0.3	0.0
70102632	TRAFFIC CONTROL AND PROTECTION, STANDARD 701602	L SUM	1	0.7	0.3	0.0
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	0.7	0.3	0.0
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	0.7	0.3	0.0
81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	7,665	5,940	1,725	0
81028240	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	250	250	0	0
81400100	HANDHOLE	EACH	15	13	2	0

* SPECIALTY ITEM



USER NAME = jrdavenport	DESIGNED - GR	REVISED -
PLOT SCALE = 2,0000' / in.	DRAWN - JRD	REVISED -
PLOT DATE = 3/15/2024	CHECKED - BS	REVISED -
	DATE - 03-15-2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
SHEET 1 OF 4

SCALE: NONE SHEET 6 OF 67 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-SIGNALS-03	COOK/LAKE	67	6
CONTRACT NO.62R84			ILLINOIS FED. AID PROJECT	

TS SHT NO. 7

MODEL: Default
FILE NAME: S03 - Contract 3

TRANSYSTEMS

USER NAME = jrdavenport
PLOT SCALE = 2,0000' / in.
PLOT DATE = 3/15/2024

DESIGNED - GR
DRAWN - JRD
CHECKED - BS
DATE - 03-15-2024

REVISED -
REVISED -
REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES
SHEET 2 OF 4**

SCALE: NONE SHEET 7 OF 67 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-SIGNALS-03	COOK/LAKE	67	7
ILLINOIS FED. AID PROJECT			CONTRACT NO.62R84	

CODE NO.	PAY ITEM NAME	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				80% FED 20% STATE COOK COUNTY	80% FED 20% STATE LAKE COUNTY	100% VILLAGE OF SKOKIE COOK COUNTY
				INTERCONNECT	INTERCONNECT	INTERCONNECT
				0021	0021	0021
				URBAN	URBAN	URBAN
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	18	13	4	1
86400100	TRANSCEIVER - FIBER OPTIC	EACH	4	4	0	0
87300925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	19,330	15,615	3,715	0
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1,175	0	0	1,175
87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	11,402	7,345	4,057	0
87900200	DRILL EXISTING HANDHOLE	EACH	18	16	2	0
88500100	INDUCTIVE LOOP DETECTOR	EACH	91	60	31	0
88700200	LIGHT DETECTOR	EACH	4	0	0	4
88700300	LIGHT DETECTOR AMPLIFIER	EACH	2	0	0	2
89501410	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	4	4	0	0
89502210	MODIFY EXISTING CONTROLLER CABINET	EACH	2	2	0	0
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	4,370	2,800	1,570	0
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	13	10	3	0
X0324085	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	1,175	0	0	1,175

TS SHT NO. 8

MODEL: Default
FILE NAME: 303 - Contract 3

TRANSYSTEMS

USER NAME = jrdavenport	DESIGNED - GR	REVISED -
	DRAWN - JRD	REVISED -
PLOT SCALE = 2.0000 / in.	CHECKED - BS	REVISED -
PLOT DATE = 3/15/2024	DATE - 03-15-2024	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES
SHEET 3 OF 4**

SCALE: NONE SHEET 8 OF 67 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-SIGNALS-03	COOK/LAKE	67	8
			CONTRACT NO. 62R84	
ILLINOIS FED. AID PROJECT				

CODE NO.	PAY ITEM NAME	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				80% FED 20% STATE COOK COUNTY	80% FED 20% STATE LAKE COUNTY	100% VILLAGE OF SKOKIE COOK COUNTY
				INTERCONNECT	INTERCONNECT	INTERCONNECT
				0021	0021	0021
				URBAN	URBAN	URBAN
X0324599	ROD AND CLEAN EXISTING CONDUIT	FOOT	1,700	860	840	0
X0325922	CELLULAR MODEM	EACH	1	1	0	0
X1400102	OUTDOOR RATED NETWORK CABLE	FOOT	100	100	0	0
X1400215	REMOTE CONTROLLED VIDEO SYSTEM	EACH	1	1	0	0
X1400216	LAYER II (DATALINK) SWITCH	EACH	8	5	2	1
X1400217	TERMINATE FIBER IN CABINET	EACH	132	84	36	12
X1400219	SPLICE FIBER IN CABINET	EACH	24	12	12	0
X1400221	UPGRADE EXISTING CONTROLLER TO NTCIP SPECIAL	EACH	1	0	0	1
X8891009	VIDEO VEHICLE DETECTION SYSTEM, SINGLE APPROACH	EACH	4	4	0	0
X1400512	FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	9	5	3	1
X6700407	ENGINEER'S FIELD OFFICE, TYPE A (D1)	CAL MO	12	8	4	0
X8570215	FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	5	5	0	0
X8570226	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET (SPECIAL)	EACH	7	5	2	0
X8620200	UNINTERRUPTABLE POWER SUPPLY (SPECIAL)	EACH	8	5	3	0

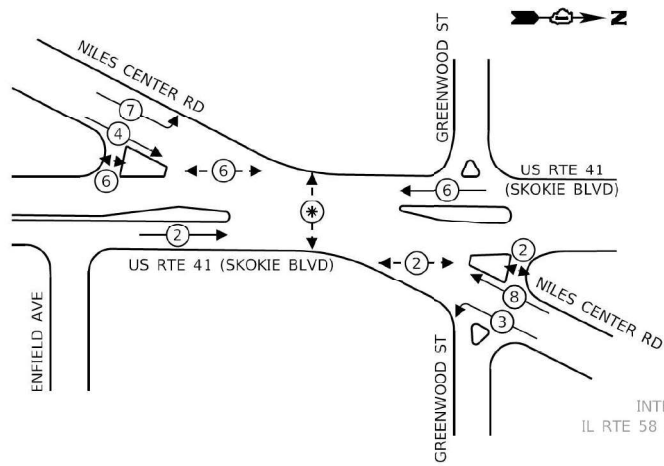
REV-SEP

CODE NO.	PAY ITEM NAME	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				80% FED 20% STATE COOK COUNTY	80% FED 20% STATE LAKE COUNTY	100% VILLAGE OF SKOKIE COOK COUNTY
				INTERCONNECT	INTERCONNECT	INTERCONNECT
				0021	0021	0021
				URBAN	URBAN	URBAN
X8620310	REMOVE AND REPLACE BATTERIES FOR UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	4	3	1	0
X8710024	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F	FOOT	9,790	9,790	0	0
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	411.2	308.4	102.8	0.0
Z0033046	RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 2	EACH	14	10	4	0
Z0033056	OPTIMIZE TRAFFIC SIGNAL SYSTEM	EACH	1	1	0	0
X8710058	UNDERGROUND CONDUIT, MULTI-DUCT, 3 WAY - 22MM (2), 1.25" SDR 11 (1) MICRODUCTS	FOOT	4,945	4,945	0	0
X8101099	FIBER OPTIC CABLE, MICRO, 24 FIBERS, SINGLE MODE	FOOT	9,720	5,970	3,750	0

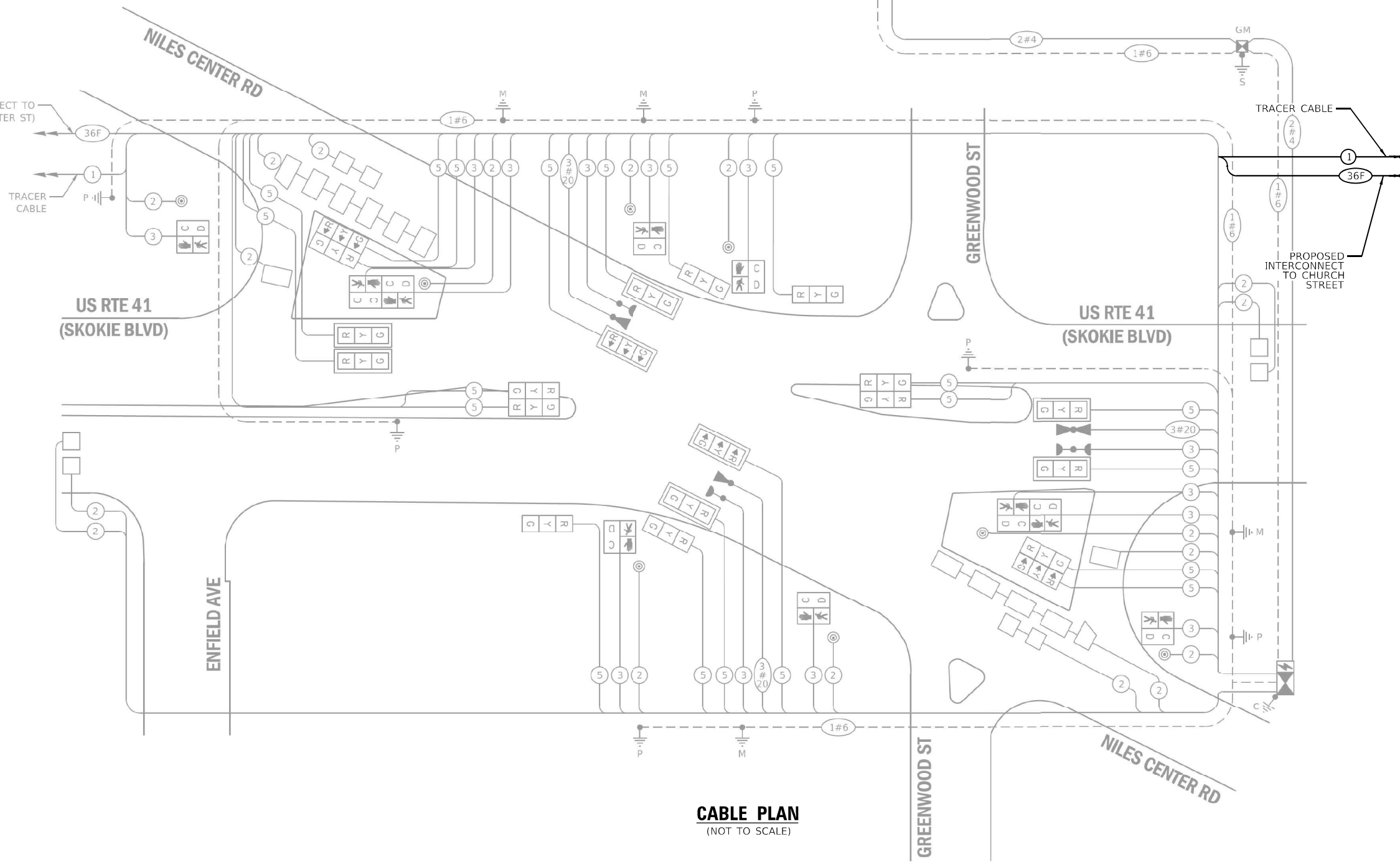
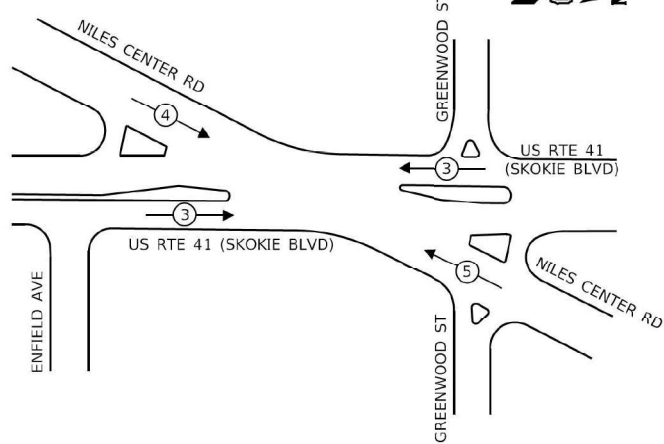
USER NAME = jrdavenport	DESIGNED - GR	REVISED -
PLOT SCALE = 2.0000 / in.	DRAWN - JRD	REVISED -
PLOT DATE = 3/15/2024	CHECKED - BS	REVISED -
	DATE - 03-15-2024	REVISED -

F.A RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-SIGNALS-03	COOK/LAKE	67	9
			CONTRACT NO. 62R84	
ILLINOIS FED. AID PROJECT				

CONTROLLER SEQUENCE



**EMERGENCY VEHICLE
PREEMPTION SEQUENCE**



CABLE PLAN
(NOT TO SCALE)

SCHEDULE OF QUANTITIES

Item	Unit	SUBTOTAL
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1

**TRAFFIC SIGNAL
ELECTRICAL SERVICE REQUIREMENTS**

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	20	11	220
4-SECTION	-	14	-
5-SECTION	-	13	-
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL	10	15	150
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR OR VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	-	35	-
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING			545
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING			1,150

ENERGY COSTS TO:
 VILLAGE OF SKOKIE
 5127 OAKTON ST
 SKOKIE, IL 60077

ENERGY SUPPLY: CONTACT: NEW BUSINES DEPT
 PHONE: (866)-639-3532
 COMPANY: COMED
 ACCOUNT NUMBER: 74910-55038
 METER NUMBER: ---

TS SHT NO. 10

TRANSYSTEMS

USER NAME = jrdavenport	DESIGNED - GR	REVISED -
PLOT SCALE = 40,0000 * / in.	DRAWN - JRD	REVISED -
PLOT DATE = 3/15/2024	CHECKED - BS	REVISED -
	DATE - 03-15-2024	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

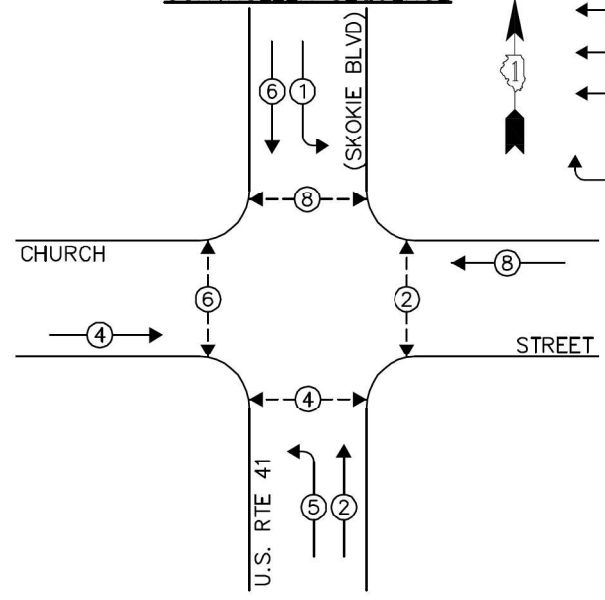
**CABLE PLAN, PHASE DESIGNATION DIAGRAM,
AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
NILES CENTER ROAD AND US 41 (SKOKIE BLVD.) - LOCATION B**

SCALE: NONE SHEET 10 OF 67 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2024-SIGNALS-03	COOK	67	10
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62R84	

**TS 1570
ECON 17**

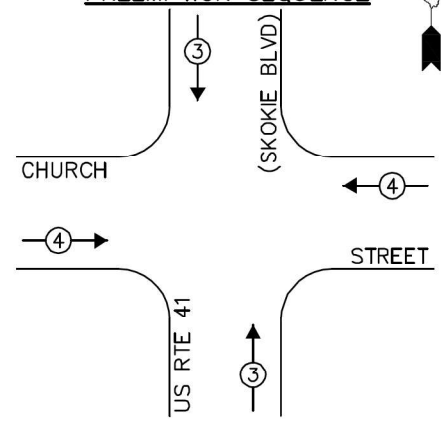
CONTROLLER SEQUENCE



LEGEND:

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

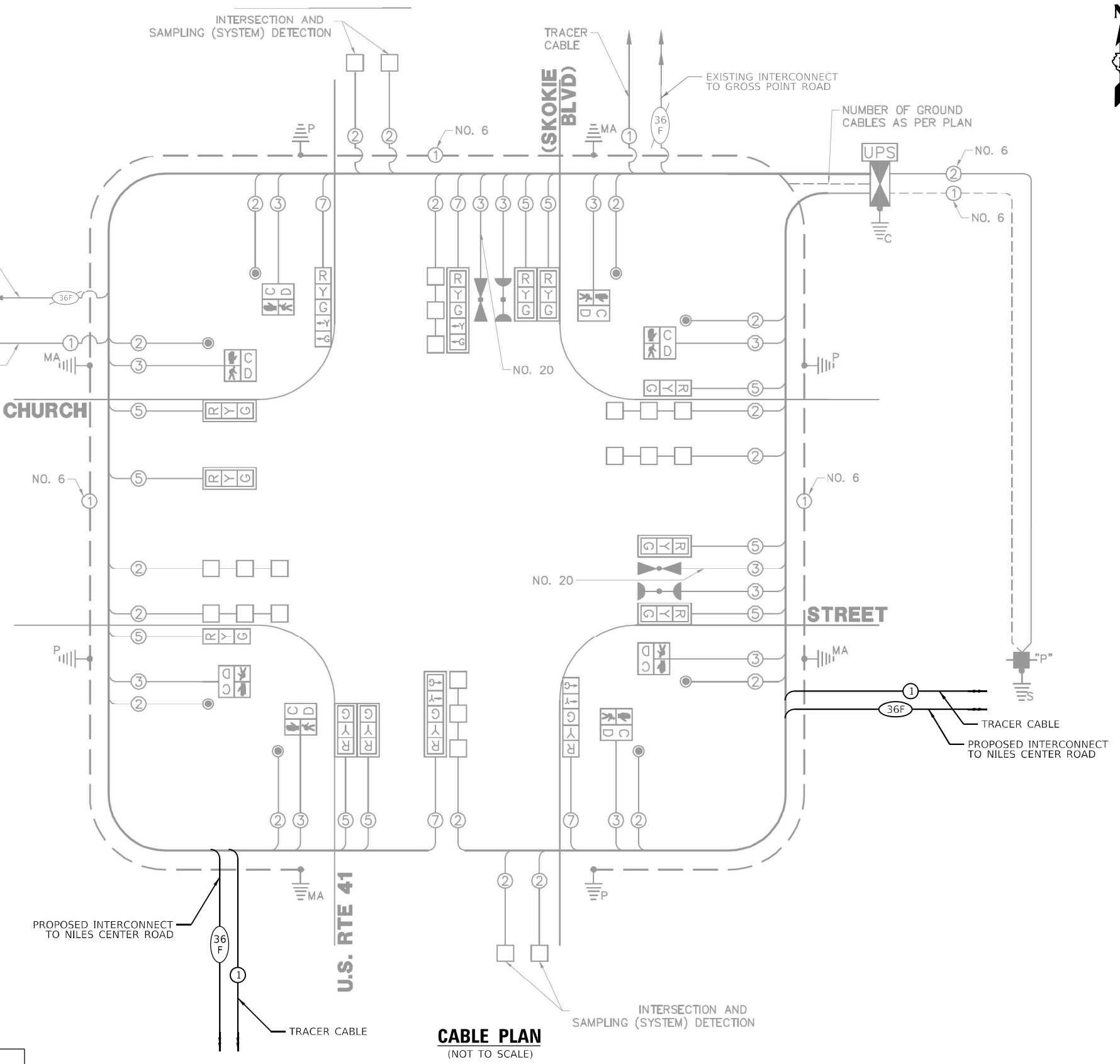


EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	↑	→

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	10	11	110
4-SECTION		14	
5-SECTION	4	13	52
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL	8	15	120
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
WIRELESS INTERCONNECT	1	115	115
BLANK-OUT SIGN		25	
NETWORK SWITCH II OR III		35	
CELLULAR MODEM		15	
TOTAL UPS SIZING			572
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING			1,177

ENERGY COSTS TO:
 ILLINOIS DEPARTMENT OF TRANSPORTATION
 201 CENTER CT
 SCHAUMBURG, IL 60196
 ENERGY SUPPLY: CONTACT: NEW BUSINES DEPT
 PHONE: (866)-639-3532
 COMPANY: COMED
 ACCOUNT NUMBER: 09690-89138
 METER NUMBER: ---



SCHEDULE OF QUANTITIES

Item	Unit	SUBTOTAL
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1

TS SHT NO. 11

TRANSYSTEMS

USER NAME = jrdavenport	DESIGNED - GR	REVISED -
PLOT SCALE = 40,0000' / in.	DRAWN - JRD	REVISED -
PLOT DATE = 3/15/2024	CHECKED - BS	REVISED -
	DATE - 03-15-2024	REVISED -

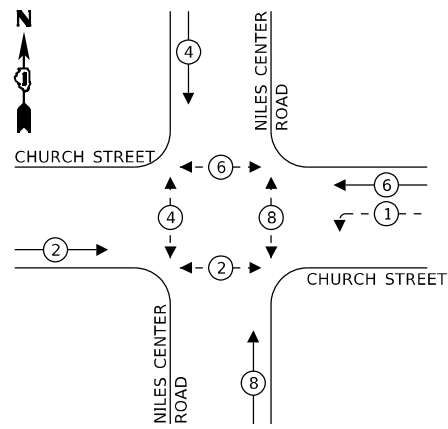
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**CABLE PLAN, PHASE DESIGNATION DIAGRAM,
 AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
 US RTE. 41 (SKOKIE BLVD.) AND CHURCH STREET - LOCATION B**

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-SIGNALS-03	COOK	67	11
CONTRACT NO. 62R84				
ILLINOIS FED. AID PROJECT				

**TS 1495
 ECON 2**

EXISTING AND PROPOSED CONTROLLER SEQUENCE



LEGEND:

- ← (⊛) ← PROTECTED PHASE
- ← (⊛) - - PROTECTED/PERMITTED PHASE
- ← (⊛) → PEDESTRIAN PHASE

REMOVAL NOTES

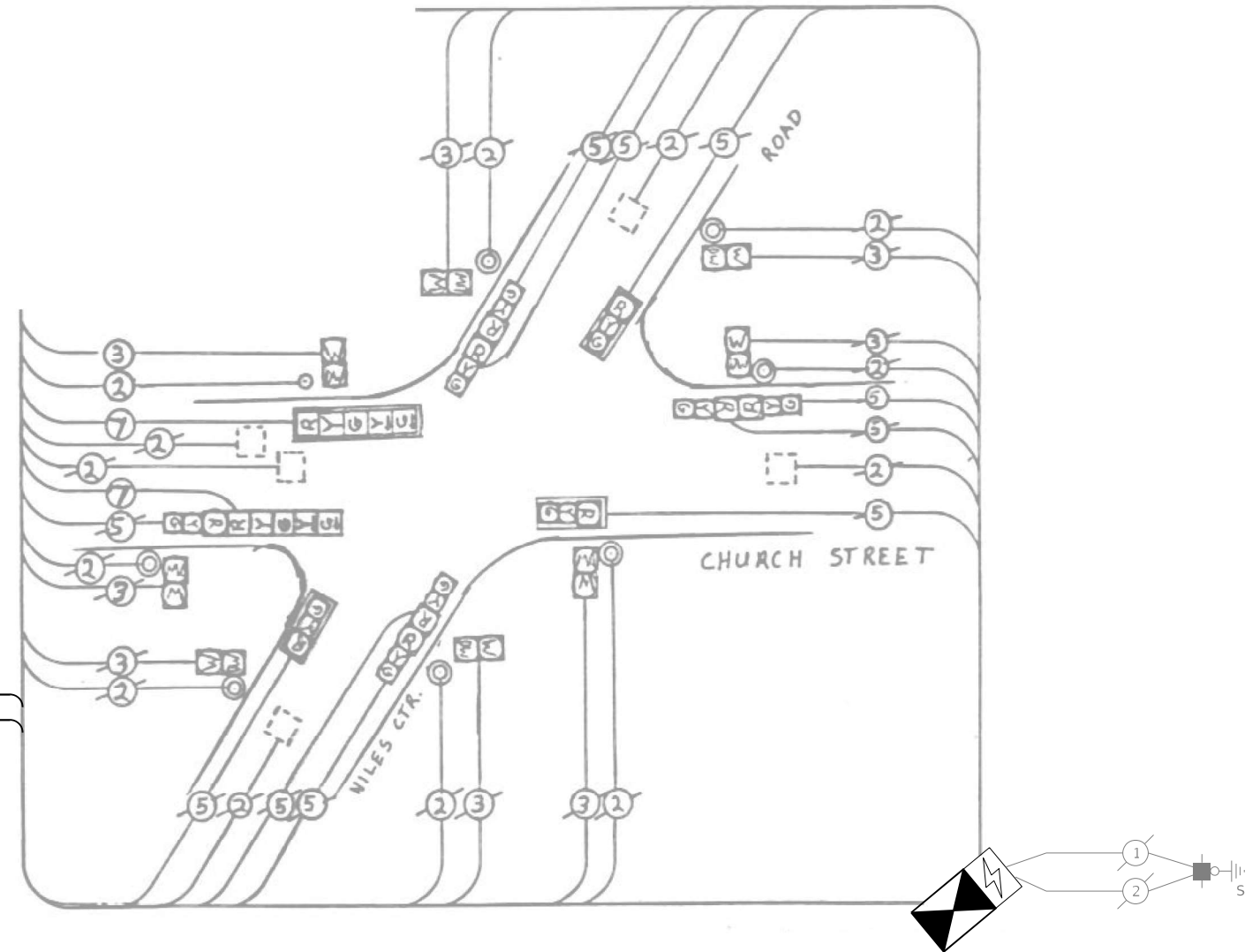
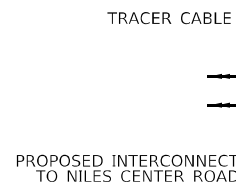
THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE OF THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 1 EACH CONTROLLER ONLY

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	9	11	99
4-SECTION		14	
5-SECTION	2	13	26
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL	8	15	120
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
WIRELESS INTERCONNECTION	1	115	115
BLANK-OUT SIGN		25	
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM		15	
TOTAL UPS SIZING			510
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING			710

ENERGY COSTS TO:
 VILLAGE OF SKOKIE
 5127 OAKTON ST
 SKOKIE, IL 60077
 ENERGY SUPPLY: CONTACT: NEW BUSINES DEPT
 PHONE: (866)-639-3532
 COMPANY: COMED
 ACCOUNT NUMBER: 74910-55038
 METER NUMBER: ---



CABLE PLAN
(NOT TO SCALE)

SCHEDULE OF QUANTITIES

Item	Unit	SUBTOTAL
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1

TS SHT NO. 12

MODEL: Default
FILE NAME: Location B Cable Plan

TRANSYSTEMS

USER NAME = jrdavenport
 PLOT SCALE = 40,0000 * / in.
 PLOT DATE = 3/15/2024

DESIGNED - GR
 DRAWN - JRD
 CHECKED - BS
 DATE - 03-15-2024

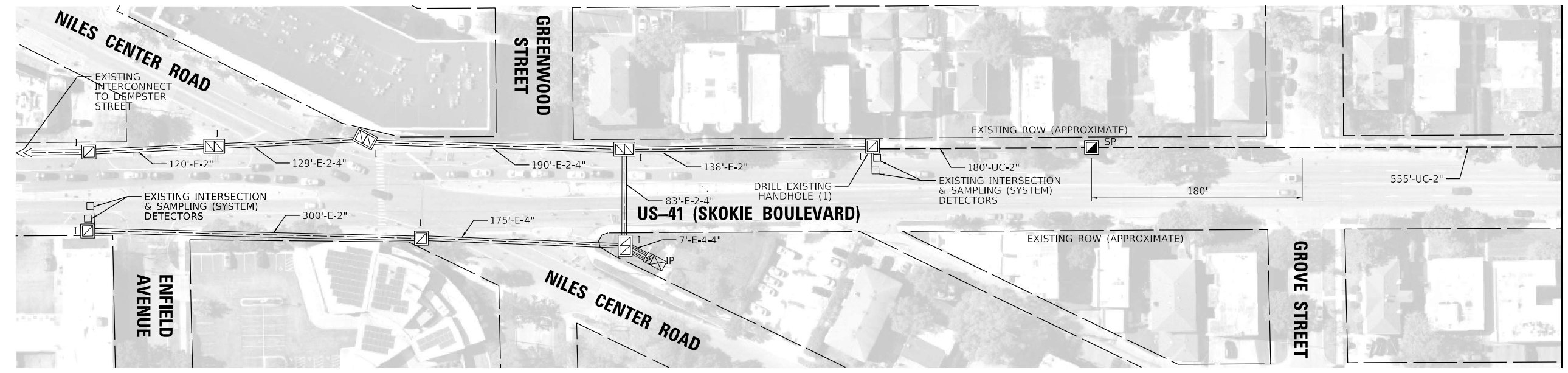
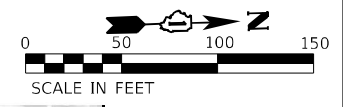
REVISED -
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

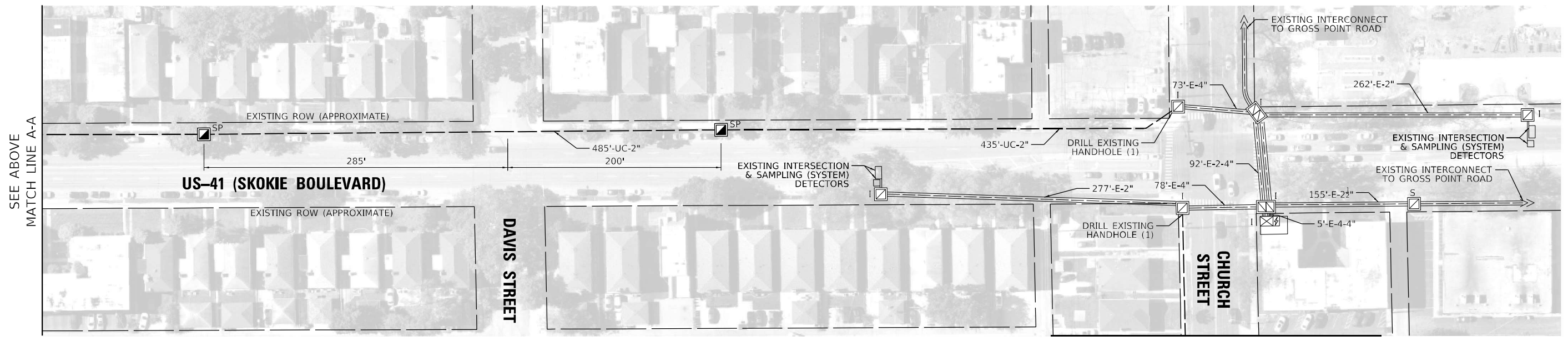
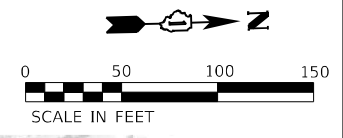
**CABLE PLAN, PHASE DESIGNATION DIAGRAM,
 AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
 CHURCH STREET AND NILES CENTER ROAD - LOCATION B**
 SCALE: NONE SHEET 12 OF 67 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-SIGNALS-03	COOK	67	12
CONTRACT NO. 62R84				
ILLINOIS FED. AID PROJECT				

**TS 4870
 ECON 2**



MATCH LINE STATION A-A
SEE BELOW



SEE ABOVE
MATCH LINE A-A

MATCH LINE STATION B-B
SEE SHEET 14

NOTE:
DIMENSIONS PROVIDED ARE FROM THE MIDDLE OF CROSS STREET OR DRIVEWAY TO CENTER OF PROPOSED HANDHOLE. THESE DIMENSIONS ARE APPROXIMATE AND CONTRACTOR SHALL VERIFY HANDHOLE LOCATIONS WITH ENGINEER PRIOR TO CONSTRUCTION.

ECON 17 /ECON 2

TS SHT NO. 13
MODEL: Default
FILE NAME: PR IC 03-15-2024 Location B-1

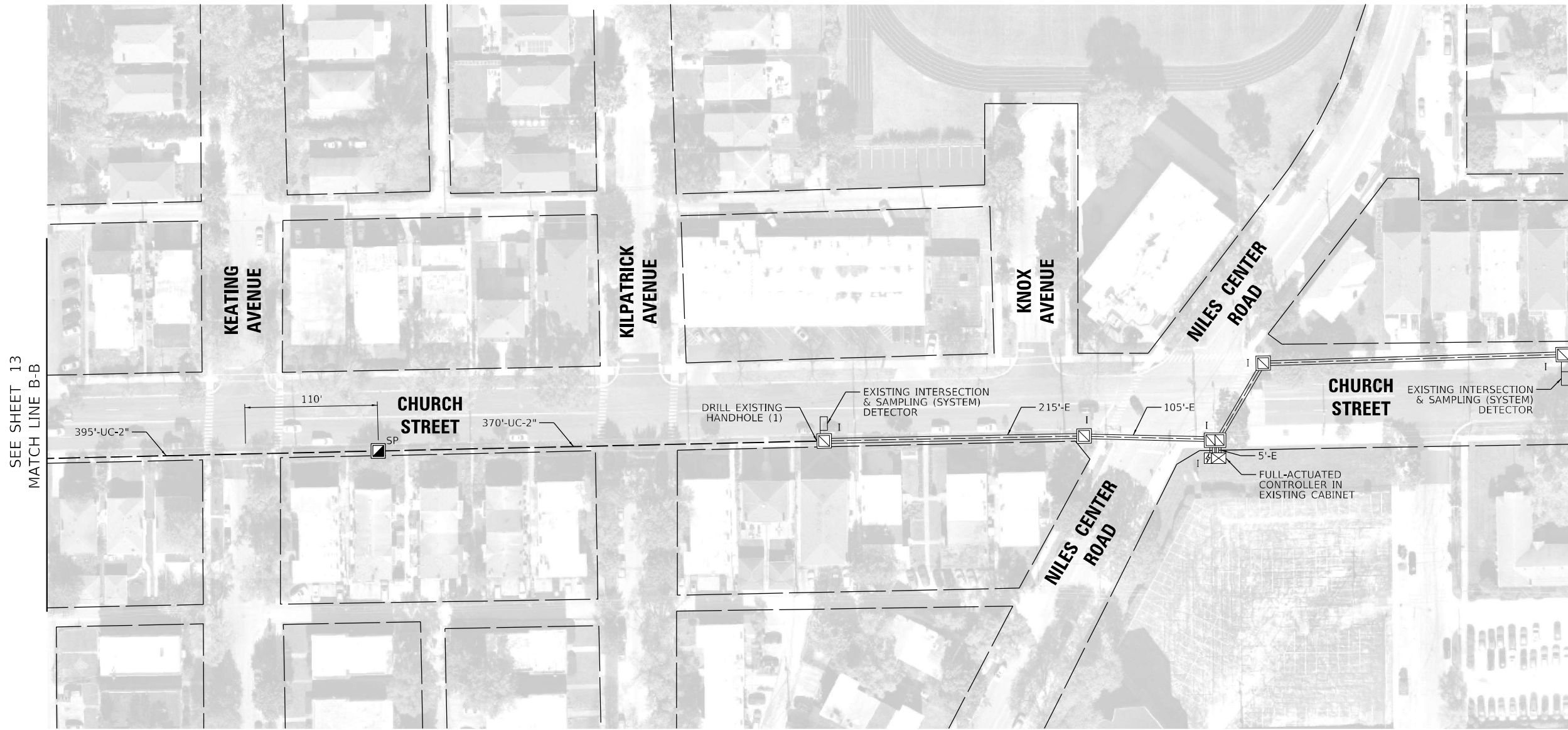


USER NAME = jrdavenport	DESIGNED - GR	REVISED -
DRAWN - JRD	REVISOR -	
PLOT SCALE = 100,0000' / in.	CHECKED - BS	REVISED -
PLOT DATE = 3/15/2024	DATE - 03-15-2024	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

PROPOSED INTERCONNECT PLAN US 41 (SKOKIE BOULEVARD) – LOCATION B	
SCALE: 1"=50	SHEET 13 OF 67 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-SIGNALS-03	COOK	67	13
CONTRACT NO.62R84				
ILLINOIS FED. AID PROJECT				



SEE SHEET 13
MATCH LINE B-B

NOTE:

DIMENSIONS PROVIDED ARE FROM THE MIDDLE OF CROSS STREET OR DRIVEWAY TO CENTER OF PROPOSED HANDHOLE. THESE DIMENSIONS ARE APPROXIMATE AND CONTRACTOR SHALL VERIFY HANDHOLE LOCATIONS WITH ENGINEER PRIOR TO CONSTRUCTION.

TS SHT NO. 14

MODEL: Default
FILE NAME: PR UC Plan Location B-2



USER NAME = jrdavenport	DESIGNED - GR	REVISED -
DRAWN - JRD	REVISIONS -	
PLOT SCALE = 100,0000' / in.	CHECKED - BS	REVISED -
PLOT DATE = 3/15/2024	DATE - 03-15-2024	REVISED -

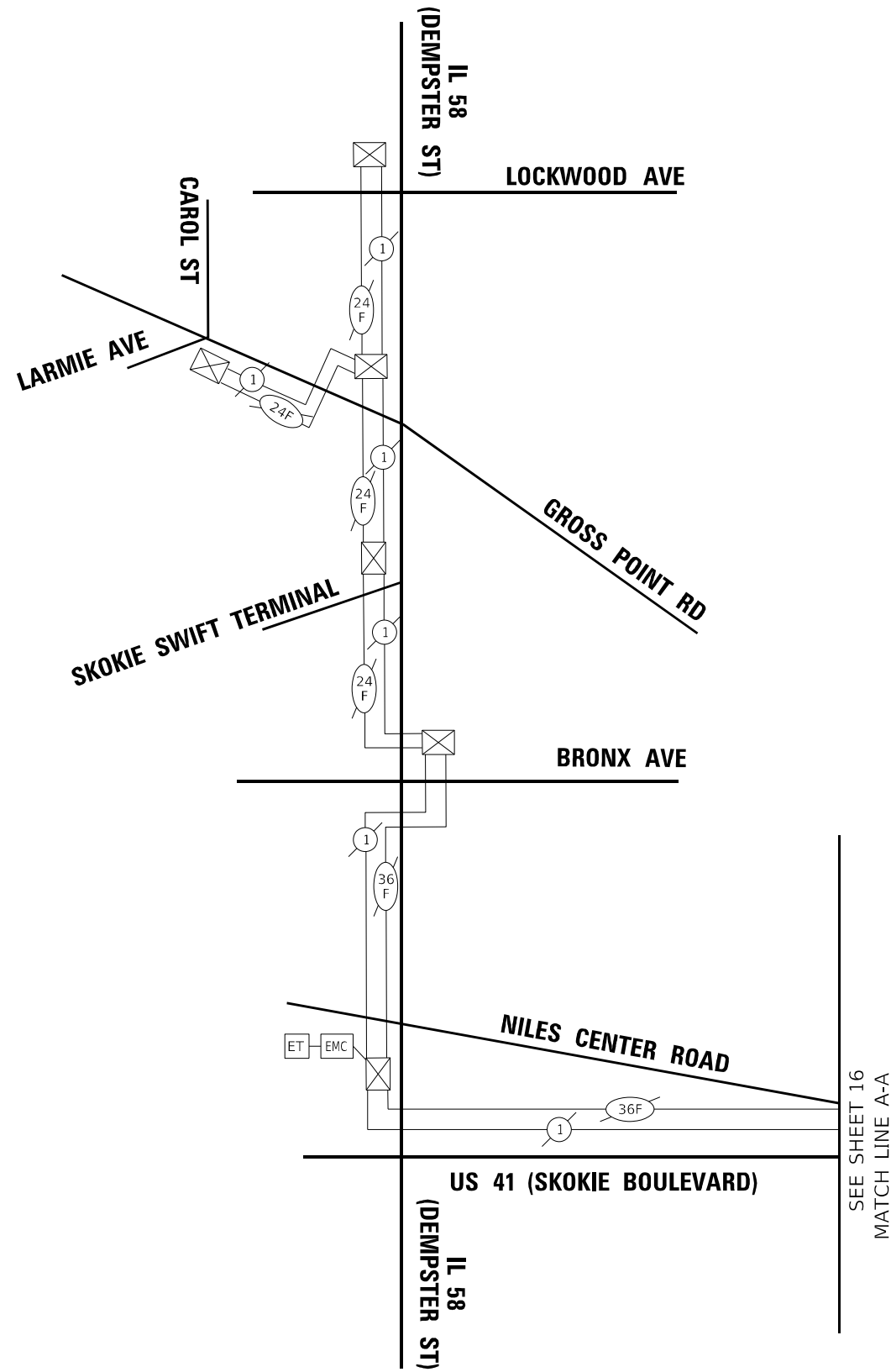
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PROPOSED INTERCONNECT PLAN
CHURCH STREET - LOCATION B**

SCALE: 1"=50 SHEET 14 OF 67 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-SIGNALS-03	COOK	67	14
CONTRACT NO.62R84				
ILLINOIS FED. AID PROJECT				

ECON 2



TS SHT NO. 15

MODEL: D:\ts\h
FILE NAME: 003-41c-TS031

TRANSYSTEMS

USER NAME = jrdavenport	DESIGNED - GR	REVISED -
	DRAWN - JRD	REVISED -
PLOT SCALE = 100,4129' / in.	CHECKED - BS	REVISED -
PLOT DATE = 3/15/2024	DATE - 03-15-2024	REVISED -

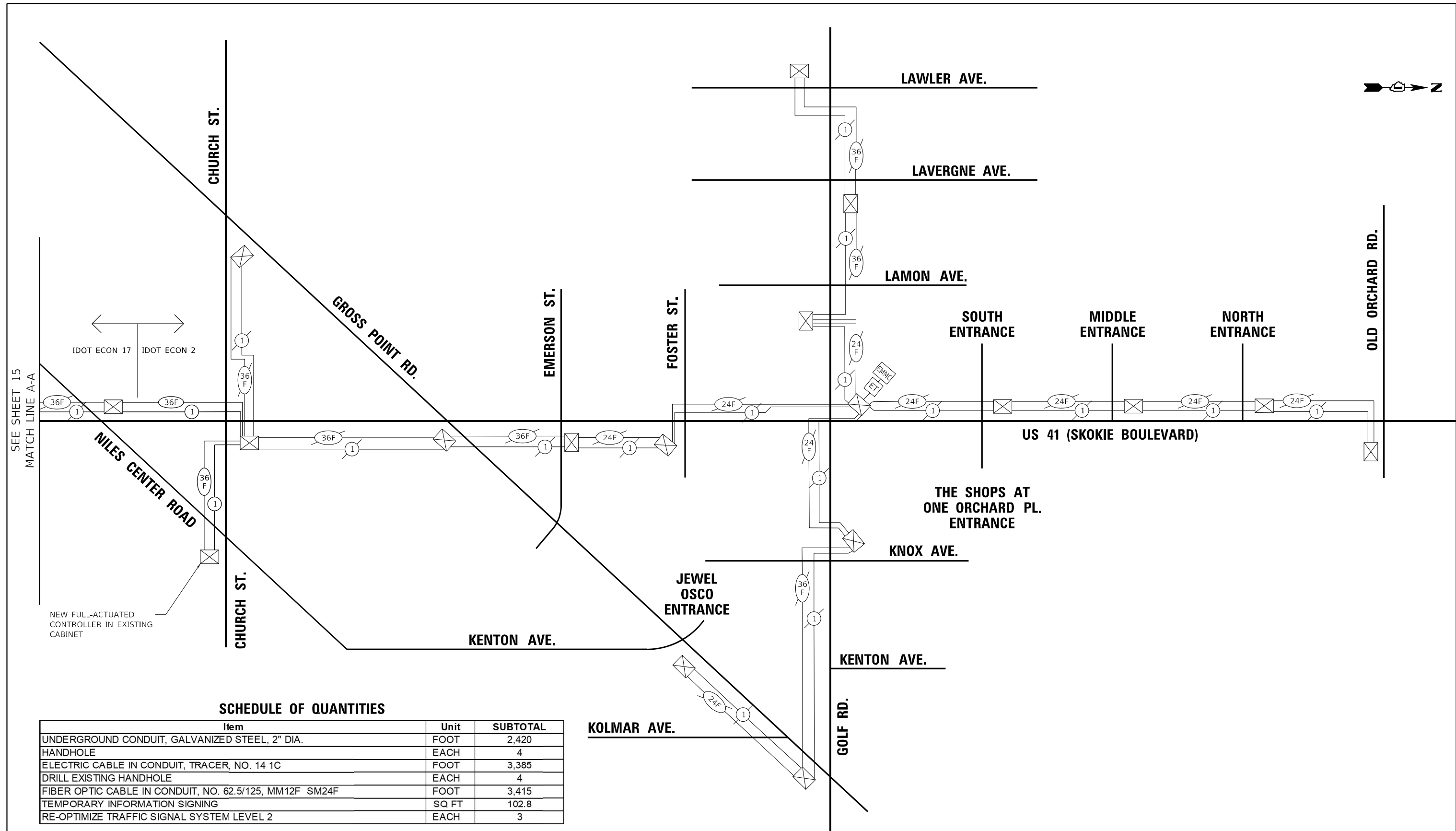
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PROPOSED INTERCONNECT SCHEMATIC AND SCHEDULE OF QUANTITIES
LOCATION B - US 41 (SKOKIE BOULEVARD)**

SCALE: NONE SHEET 15 OF 67 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-SIGNALS-03	COOK	67	15
CONTRACT NO.62R84			ILLINOIS FED. AID PROJECT	

ECON 17



SCHEDULE OF QUANTITIES

Item	Unit	SUBTOTAL
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	2,420
HANDHOLE	EACH	4
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	3,385
DRILL EXISTING HANDHOLE	EACH	4
FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F	FOOT	3,415
TEMPORARY INFORMATION SIGNING	SQ FT	102.8
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 2	EACH	3

RE-OPTIMIZATION OF TRAFFIC SIGNAL SYSTEM SHALL CONSIST OF TS 1570, TS 1495, AND TS 4870 INTO ECON 2 AND ECON 17 SYSTEMS.

TS SHT NO. 16

MODEL: Default
FILE NAME: Interconnect Schematic Location B

TRANSYSTEMS

USER NAME = jrdavenport	DESIGNED - GR	REVISED -
PLOT SCALE = 100,4129' / in.	DRAWN - JRD	REVISED -
PLOT DATE = 3/15/2024	CHECKED - BS	REVISED -
	DATE - 03-15-2024	REVISED -

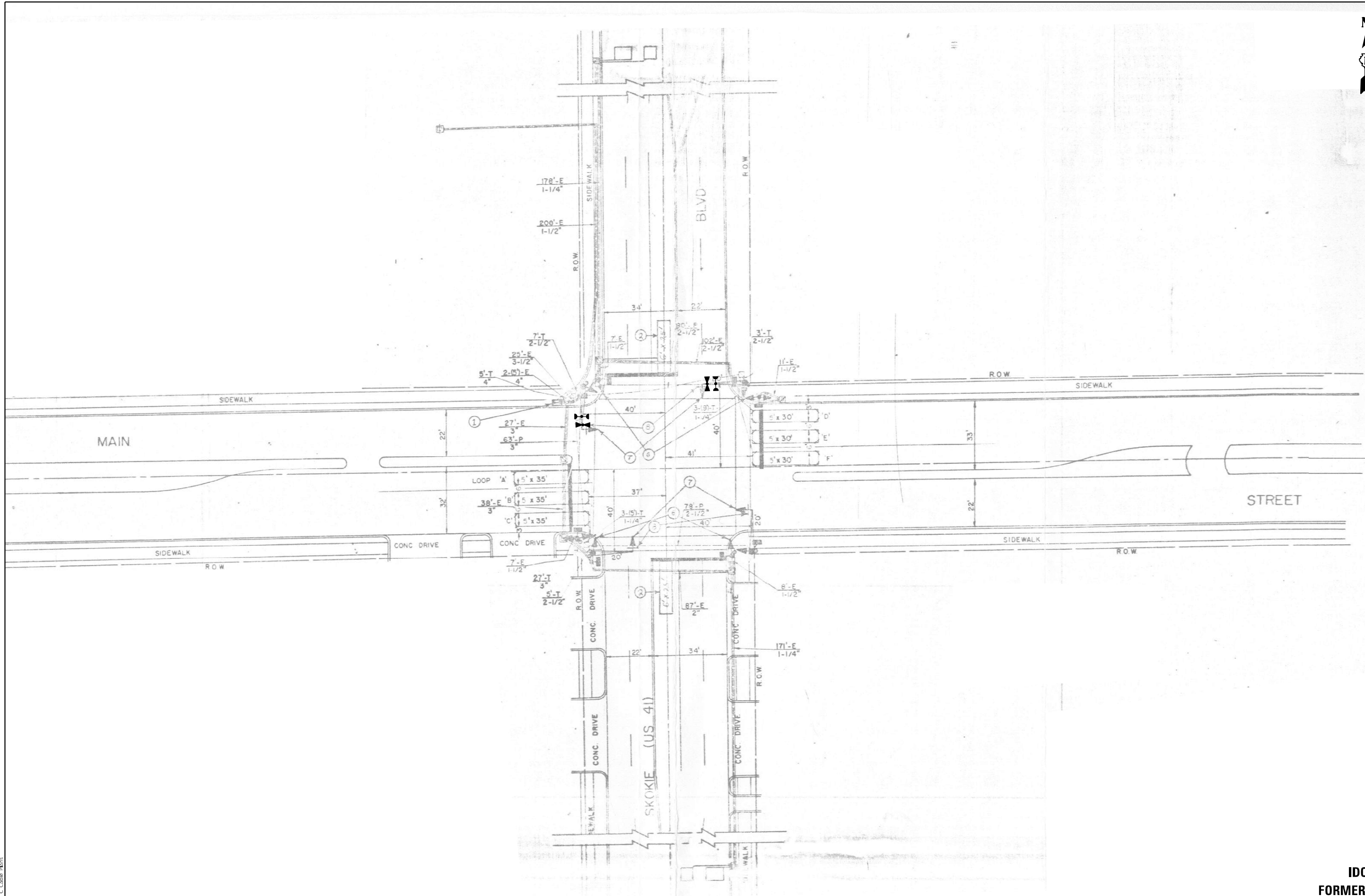
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PROPOSED INTERCONNECT SCHEMATIC AND SCHEDULE OF QUANTITIES
LOCATION B - US 41 (SKOKIE BOULEVARD)**

SCALE: NONE SHEET 16 OF 67 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-SIGNALS-03	COOK	67	16
CONTRACT NO.62R84			ILLINOIS FED. AID PROJECT	

ECON 2



TS SHT NO. 17

MODEL: Default
FILE NAME: Location C Cable Plans

TRANSYSTEMS

USER NAME = jrdavenport	DESIGNED - GR	REVISED -
	DRAWN - JRD	REVISED -
PLOT SCALE = 40,0000 * / in.	CHECKED - BS	REVISED -
PLOT DATE = 3/15/2024	DATE - 03-15-2024	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

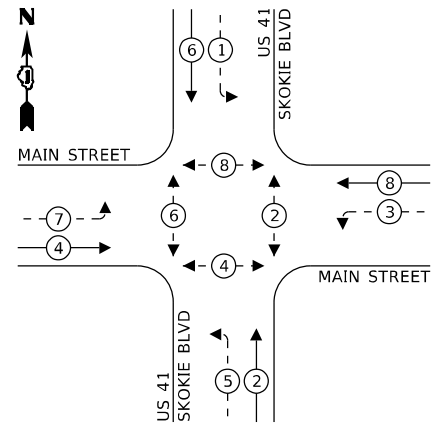
**INTERSECTION PLAN
US RTE. 41 (SKOKIE BLVD.) AND MAIN STREET - LOCATION C**

SCALE: NONE SHEET 17 OF 67 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-SIGNALS-03	COOK	67	17
			CONTRACT NO. 62R84	
ILLINOIS FED. AID PROJECT				

**TS 1560
IDOT TACTICS
FORMER EAGLE 6P**

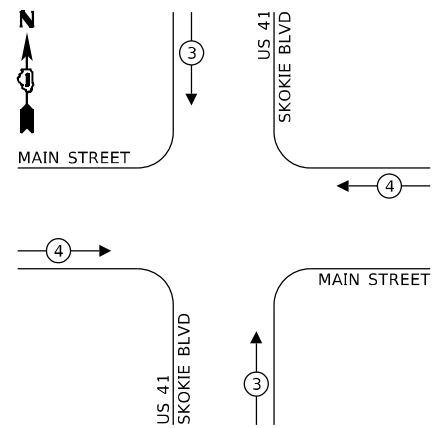
EXISTING AND PROPOSED CONTROLLER SEQUENCE



LEGEND:

- ← (⊛) ← PROTECTED PHASE
- ← (⊛) - PROTECTED/PERMITTED PHASE
- ← (⊛) → PEDESTRIAN PHASE

PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

REMOVAL NOTES

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

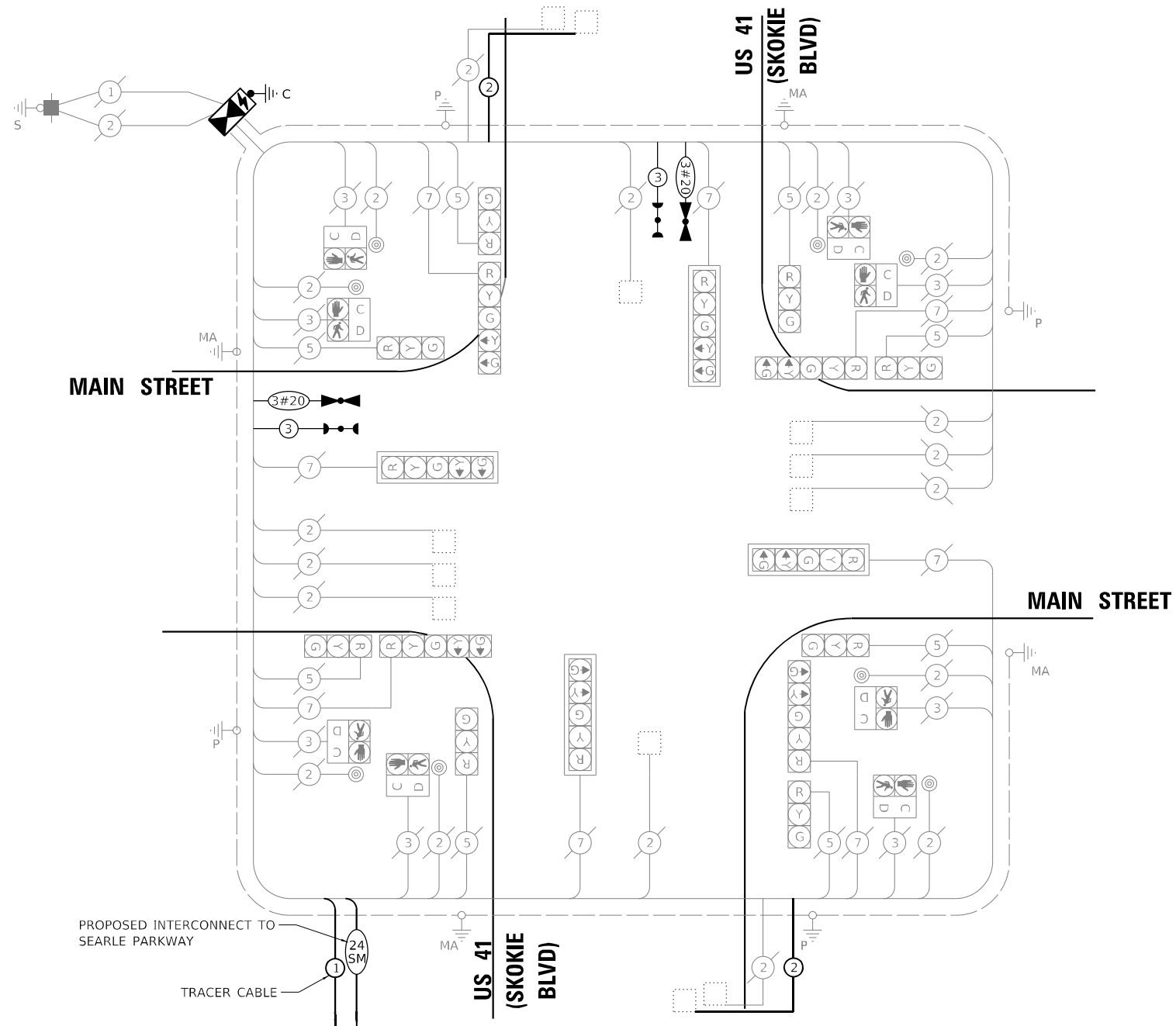
- 1 EACH CONTROLLER AND CABINET (COMPLETE)
- 1 EACH UNINTERRUPTIBLE POWER SUPPLY

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	8	11	88
4-SECTION		14	
5-SECTION	8	13	104
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR OR VIDEO	-	20	-
BLANK-OUT SIGN		25	
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM		15	
TOTAL UPS SIZING			522
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING			1,127

ENERGY COSTS TO:
VILLAGE OF SKOKIE
 5127 OAKTON ST
 SKOKIE, IL 60077

ENERGY SUPPLY: CONTACT: NEW BUSINES DEPT
 PHONE: (866)-639-3532
 COMPANY: COMED
 ACCOUNT NUMBER: 74910-55038
 METER NUMBER: ---



CABLE PLAN
(NOT TO SCALE)

SCHEDULE OF QUANTITIES

Item	Unit	SUBTOTAL
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
** ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	260
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	599
INDUCTIVE LOOP DETECTOR	EACH	12
** LIGHT DETECTOR	EACH	1
** LIGHT DETECTOR AMPLIFIER	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
** EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	260
LAYER II (DATALINK) SWITCH	EACH	1
TERMINATE FIBER IN CABINET	EACH	12
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1
* TACTICS LICENSE EXPANSION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET (SPECIAL)	EACH	1
UNINTERRUPTIBLE POWER SUPPLY (SPECIAL)	EACH	1

* TACTICS LICENSE WILL BE PROVIDED BY IDOT TRAFFIC.
 ** COST TO VILLAGE OF SKOKIE.

TS SHT NO. 18

MODEL: Default
 FILE NAME: 2024-03-15-2024_Cables.dwg

TRANSYSTEMS

USER NAME = jrdavenport
 PLOT SCALE = 40,0000 * / in.
 PLOT DATE = 3/15/2024

DESIGNED - GR
 DRAWN - JRD
 CHECKED - BS
 DATE - 03-15-2024

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**CABLE PLAN, PHASE DESIGNATION DIAGRAM,
 AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
 US RTE. 41 (SKOKIE BLVD.) AND MAIN STREET - LOCATION C**

SCALE: NONE SHEET 18 OF 67 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-SIGNALS-03	COOK	67	18
CONTRACT NO. 62R84				
ILLINOIS FED. AID PROJECT				

**TS 1560
 IDOT TACTICS
 FORMER EAGLE 6P**

SCHEDULE OF QUANTITIES

Item	Unit	SUBTOTAL
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
TERMINATE FIBER IN CABINET	EACH	12
SPLICE FIBER IN CABINET	EACH	6
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1
* TACTICS LICENSE EXPANSION	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
REMOVE AND REPLACE BATTERIES FOR UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1

* TACTICS LICENSE WILL BE PROVIDED BY IDOT TRAFFIC.

REMOVAL NOTES

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

- 1 EACH CONTROLLER ONLY
- 1 EACH TRANSCEIVER - FIBER OPTIC
- 1 EACH BATTERIES FROM UNINTERRUPTABLE POWER SUPPLY

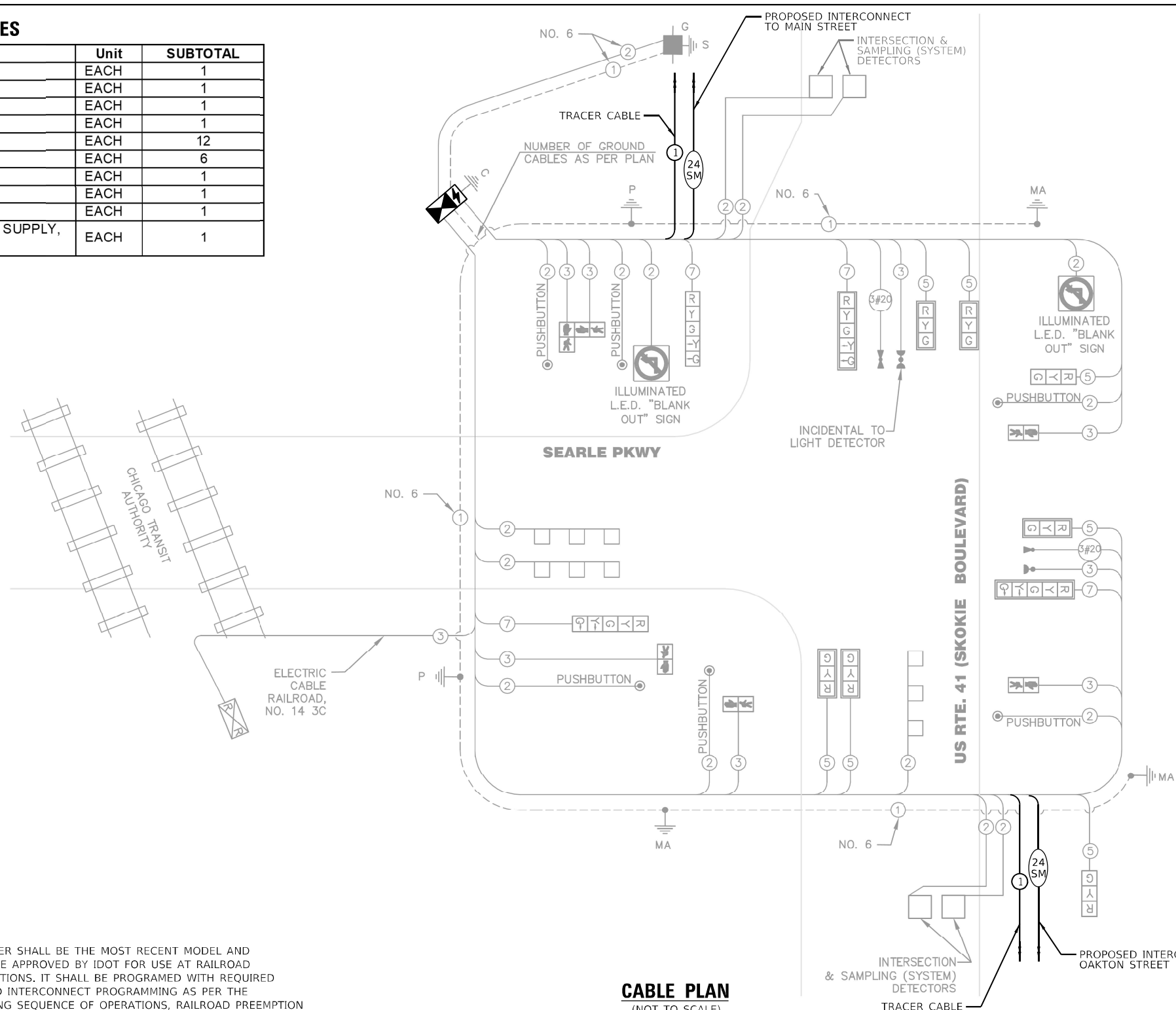
TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	7	11	77
4-SECTION	-	14	-
5-SECTION	4	13	52
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR OR VIDEO	-	20	-
BLANK-OUT SIGN	2	25	50
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING		479	
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING		1,084	

NOTES

- CONTROLLER SHALL BE THE MOST RECENT MODEL AND SOFTWARE APPROVED BY IDOT FOR USE AT RAILROAD INTERSECTIONS. IT SHALL BE PROGRAMED WITH REQUIRED RAILROAD INTERCONNECT PROGRAMMING AS PER THE FOLLOWING SEQUENCE OF OPERATIONS, RAILROAD PREEMPTION SEQUENCE OF OPERATIONS, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATIONS TABLES.
- CONTROLLER SHALL BE SHOP TESTED BY ICC AND IDOT PRIOR TO INSTALLATION.

ENERGY COSTS TO:
 VILLAGE OF SKOKIE
 5127 OAKTON ST
 SKOKIE, IL 60077
 ENERGY SUPPLY: CONTACT: NEW BUSINES DEPT
 PHONE: (866)-639-3532
 COMPANY: COMED
 ACCOUNT NUMBER: 74910-55038
 METER NUMBER: ---



CABLE PLAN
(NOT TO SCALE)

TS SHT NO. 19

MODEL: Default
 FILE NAME: Location C Cable Plans

TRANSYSTEMS

USER NAME = jrdavenport	DESIGNED - GR	REVISED -
PLOT SCALE = 40,0000 * 1/ in.	DRAWN - JRD	REVISED -
PLOT DATE = 3/15/2024	CHECKED - BS	REVISED -
	DATE - 03-15-2024	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE			
US RTE. 41 (SKOKIE BLVD.) AND SEARLE PARKWAY - LOCATION C			
SCALE: NONE	SHEET 19 OF 67 SHEETS	STA. TO STA.	


F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2024-SIGNALS-03	COOK	67	19
CONTRACT NO. 62R84				
ILLINOIS FED. AID PROJECT				

**TS 1577
 IDOT TACTICS
 FORMER EAGLE 6P**



PROPOSED SEQUENCE OF OPERATION

MOVEMENT	2 + 5		2 + 6				4+7				F L A S H
PHASE	2 + 5		2 + 6				4+7				
INTERVAL	1	2	3	4	5A	5B	6	7	8A	8B	
CHANGE TO		2+6			4 + 7				2 + 5 2 + 6		H
U.S. RTE. 41 (SKOKIE BOULEVARD) N/B END MAST ARM & FAR LEFT SIGNALS	G ←G	G ←Y	G	G	Y	R	R	R	R	R	R
U.S. RTE. 41 (SKOKIE BOULEVARD) N/B MID & RIGHT MAST ARM SIGNALS	G	G	G	G	Y	R	R	R	R	R	R
U.S. RTE. 41 (SKOKIE BOULEVARD) S/B MAST ARM SIGNALS & FAR LEFT SIGNAL	R	R	G	G	Y	R	R	R	R	R	R
SEARLE PARKWAY E/B END MAST ARM & FAR LEFT SIGNALS	R	R	R	R	R	R	G	G	Y	R	R
SEARLE PARKWAY E/B NEAR RIGHT & RIGHT MAST ARM SIGNALS	R G→	R Y→	R	R	R	R	G	G	Y	R	R
PEDESTRIAN SIGNALS CROSSING U.S. RTE. 41 ON NORTHSIDE OF SEARLE PKWY	H	H	H	H	H	H	*P	**FH	H	H	D
PEDESTRIAN SIGNALS CROSSING U.S. RTE 41 ON SOUTHSIDE OF SEARLE PKWY	H	H	H	H	H	H	*P	**FH	H	H	A
PEDESTRIAN SIGNALS CROSSING SEARLE PKWY ON WESTSIDE OF U.S. RTE. 41	H	H	*P	**FH	H	H	H	H	H	H	K

- * TO APPEAR ONLY UPON PLSHBUTTON ACTUATION
- ** FLASHING  IS TO TERMINATE AT THE COMPLETION OF THE PEDESTRIAN INTERVAL.

P = ILLUMINATED PERSON = WALK
 FH = ILLUMINATED FLASHING HAND = FLASHING DON'T WALK
 H = ILLUMINATED SOLID HAND = DON'T WALK
 PHASES 2+6 SHALL BE PLACED ON RECALL

PROPOSED RAILROAD PREEMPTION SEQUENCE OF OPERATION

	PREEMPTOR NUMBER 3					PREEMPTOR NUMBER 4			PREEMPTOR NUMBER 2				
CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER	1	3				6							
CHANGE FROM EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER						2			3				
RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1A	1B	1C	1D	1E	1F	1G	1H	2	3	4	5	CLEAR TO NORMAL SEQUENCE
CHANGE TO RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1B	2	1D	2	2	1G	2	2	3	4	5		
U.S. RTE. 41 (SKOKIE BOULEVARD) N/B END MAST ARM & FAR LEFT SIGNALS	Y	R	Y	R	R	Y	R	R	R	R	R	G	△
U.S. RTE. 41 (SKOKIE BOULEVARD) N/B MID & RIGHT MAST ARM SIGNALS	Y	R	Y	R	R	Y	R	R	R	R	R	G	△
U.S. RTE. 41 (SKOKIE BOULEVARD) S/B MAST ARM SIGNALS & FAR LEFT SIGNAL	R	R	Y	R	R	Y	R	R	R	R	R	G	△
SEARLE PARKWAY E/B END MAST ARM & FAR LEFT SIGNALS	R	R	R	R	G	R	R	G	G	Y	R	R	△
SEARLE PARKWAY E/B NEAR RIGHT & RIGHT MAST ARM SIGNALS	R Y→	R	R	R	G	R	R	G	G	Y	R	R	△
PEDESTRIAN SIGNALS CROSSING U.S. RTE. 41 ON NORTHSIDE OF SEARLE PKWY	H	H	H	H	FH	H	H	H	H	H	H	H	△
PEDESTRIAN SIGNALS CROSSING U.S. RTE 41 ON SOUTHSIDE OF SEARLE PKWY	H	H	H	H	FH	H	H	H	H	H	H	H	△
PEDESTRIAN SIGNALS CROSSING SEARLE PKWY ON WESTSIDE OF U.S. RTE. 41	H	H	FH	H	H	H	H	H	H	H	H	H	△
INTERNALLY ILLUMINATED NLT SIGN	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	△

△ RAILROAD PREEMPTION SEQUENCE SHALL PROVIDE THE PROPER CLEARANCE INTERVAL TO RESUME THE NORMAL SEQUENCE OF OPERATION OR PROPER CLEARANCE INTERVAL TO DISPLAY AN EMERGENCY VEHICLE INTERVAL (IF APPLICABLE) AFTER RAILROAD PREEMPTION INTERVAL 5 IS TERMINATED.

NLT = "NO LEFT TURN" OR 

TS SHT NO. 20

MODEL: Default
 FILE NAME: Location_C Cable 08.rvt



USER NAME = jrdavenport	DESIGNED - GR	REVISED -
	DRAWN - JRD	REVISED -
PLOT SCALE = 40,0000 * / in.	CHECKED - BS	REVISED -
PLOT DATE = 3/15/2024	DATE - 03-15-2024	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM,
 AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
 US RTE. 41 (SKOKIE BLVD.) AND SEARLE PARKWAY - LOCATION C
 SCALE: NONE SHEET 20 OF 67 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-SIGNALS-03	COOK	67	20
CONTRACT NO.62R84				
ILLINOIS FED. AID PROJECT				

TS 1577
 IDOT TACTICS
 FORMER EAGLE 6P

PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION

	1		3		3			6			6			PREEMPTOR NUMBER 3	PREEMPTOR NUMBER 4	CLEAR TO NORMAL SEQUENCE
CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER	1A	1B	1C	1D	1E	1F	1G	1H	1J	1K	1L	2	3			
EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1A	1B	1C	1D	1E	1F	1G	1H	1J	1K	1L	2	3			
CHANGE TO EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	2	1C	3	2	1F	1G	3	1J	1K	2	3					
U.S. RTE. 41 (SKOKIE BOULEVARD) N/B END MAST ARM & FAR LEFT SIGNALS	G →Y	Y	R	G	G	Y	R	R	R	R	R	G	R	◇		
U.S. RTE. 41 (SKOKIE BOULEVARD) N/B MID & RIGHT MAST ARM SIGNALS	G	Y	R	G	G	Y	R	R	R	R	R	G	R	◇		
U.S. RTE. 41 (SKOKIE BOULEVARD) S/B MAST ARM SIGNALS & FAR LEFT SIGNAL	R	R	R	G	G	Y	R	R	R	R	R	G	R	◇		
SEARLE PARKWAY E/B END MAST ARM & FAR LEFT SIGNALS	R	R	R	R	R	R	R	G	Y	R	G	R	G	◇		
SEARLE PARKWAY E/B NEAR RIGHT & RIGHT MAST ARM SIGNALS	R Y→	R Y→	R	R	R	R	R	G	Y	R	G	R	G	◇		
PEDESTRIAN SIGNALS CROSSING U.S. RTE. 41 ON NORTHSIDE OF SEARLE PKWY	H	H	H	H	H	H	H	FH	H	H	FH	H	H	◇		
PEDESTRIAN SIGNALS CROSSING U.S. RTE 41 ON SOUTHSIDE OF SEARLE PKWY	H	H	H	H	H	H	H	FH	H	H	FH	H	H	◇		
PEDESTRIAN SIGNALS CROSSING SEARLE PKWY ON WESTSIDE OF U.S. RTE. 41	H	H	H	FH	FH	H	H	H	H	H	H	H	H	◇		

◇ EMERGENCY VEHICLE SEQUENCE SHALL PROVIDE THE PROPER CLEARANCE INTERVAL TO RESUME THE NORMAL SEQUENCE OF OPERATION OR PROPER CLEARANCE INTERVAL TO DISPLAY A DIFFERENT EMERGENCY INTERVAL AFTER EMERGENCY VEHICLE INTERVAL 2 OR 3 IS TERMINATED.

P = ILLUMINATED PERSON = WALK
 FH = ILLUMINATED FLASHING HAND = FLASHING DON'T WALK
 H = ILLUMINATED SOLID HAND = DON'T WALK

TS SHT NO. 21

MODEL: Default
 FILE NAME: Location_C Cable Plans

TRANSYSTEMS

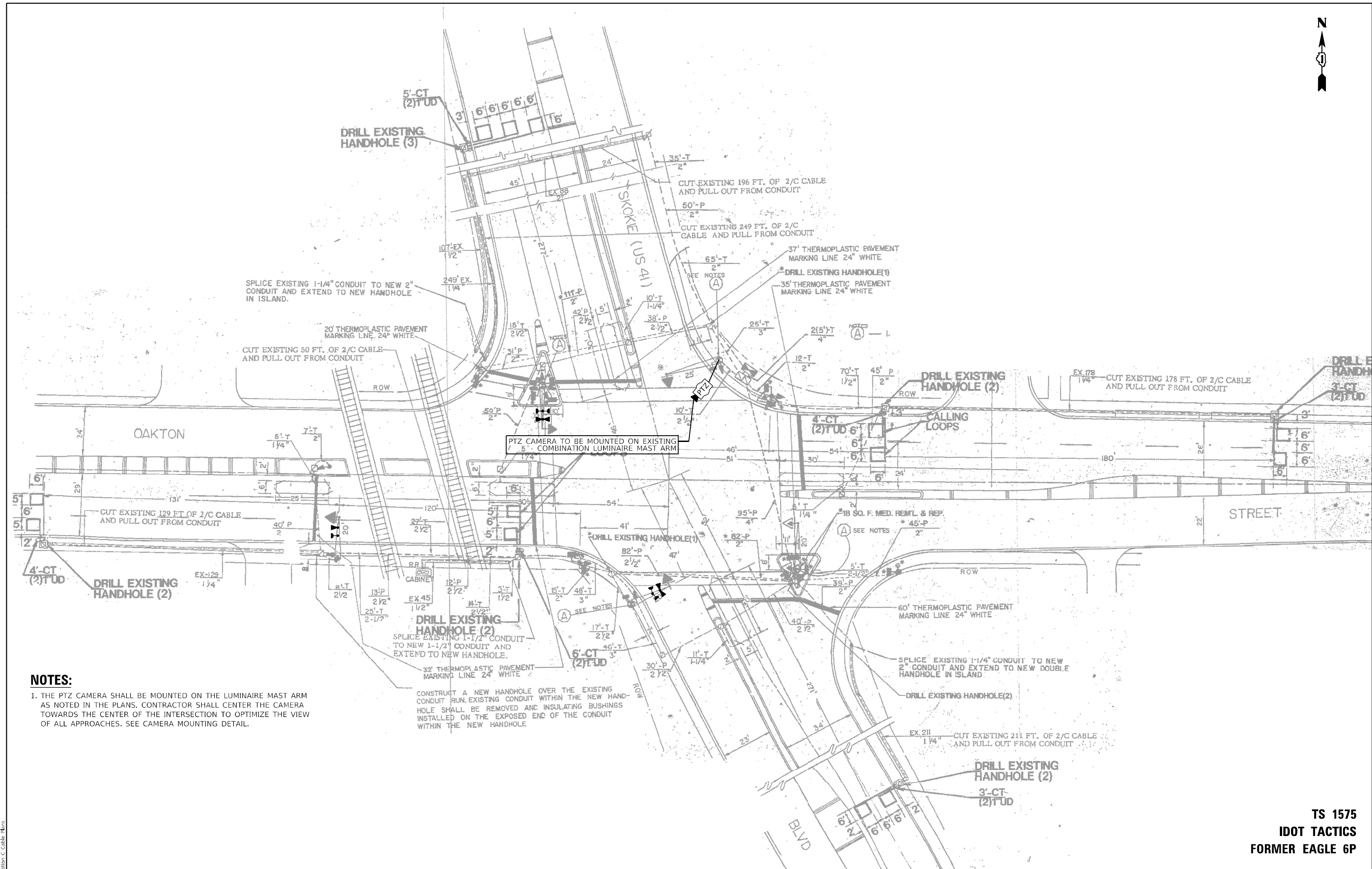
USER NAME = jrdavenport	DESIGNED - GR	REVISED -
	DRAWN - JRD	REVISED -
PLOT SCALE = 40,0000 */ in.	CHECKED - BS	REVISED -
PLOT DATE = 3/15/2024	DATE - 03-15-2024	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE	
US RTE. 41 (SKOKIE BLVD.) AND SEARLE PARKWAY - LOCATION C	
SCALE: NONE	SHEET 21 OF 67 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-SIGNALS-03	COOK	67	21
CONTRACT NO.62R84			ILLINOIS FED. AID PROJECT	

**TS 1577
 IDOT TACTICS
 FORMER EAGLE 6P**



NOTES:

1. THE PTZ CAMERA SHALL BE MOUNTED ON THE LUMINAIRE MAST ARM AS NOTED IN THE PLANS. CONTRACTOR SHALL CENTER THE CAMERA TOWARDS THE CENTER OF THE INTERSECTION TO OPTIMIZE THE VIEW OF ALL APPROACHES. SEE CAMERA MOUNTING DETAIL.

CONSTRUCT A NEW HANDHOLE OVER THE EXISTING CONDUIT RUN. EXISTING CONDUIT WITHIN THE NEW HANDHOLE SHALL BE REMOVED AND INSULATING BUSHINGS INSTALLED ON THE EXPOSED END OF THE CONDUIT WITHIN THE NEW HANDHOLE

TS SHT NO. 22

TRANSYSTEMS

USER NAME = jrdavenport	DESIGNED - GR	REVISED -
PLOT SCALE = 40,0000' / in.	DRAWN - JRD	REVISED -
PLOT DATE = 3/15/2024	CHECKED - BS	REVISED -
	DATE - 03-15-2024	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**INTERSECTION PLAN VIEW
US RTE. 41 (SKOKIE BLVD.) AND OAKTON STREET - LOCATION C**

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-SIGNALS-03	COOK	67	22
CONTRACT NO. 62R84				
ILLINOIS FED. AID PROJECT				

**TS 1575
IDOT TACTICS
FORMER EAGLE 6P**

SCHEDULE OF QUANTITIES

Item	Unit	SUBTOTAL
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
** ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	915
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1,250
INDUCTIVE LOOP DETECTOR	EACH	3
** LIGHT DETECTOR	EACH	3
** LIGHT DETECTOR AMPLIFIER	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
** EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	915
CELLULAR MODEM	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	100
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
TERMINATE FIBER IN CABINET	EACH	24
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1
* TACTICS LICENSE EXPANSION	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
REMOVE AND REPLACE BATTERIES FOR UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1

* TACTICS LICENSE WILL BE PROVIDED BY IDOT TRAFFIC.
 ** COST TO VILLAGE OF SKOKIE.

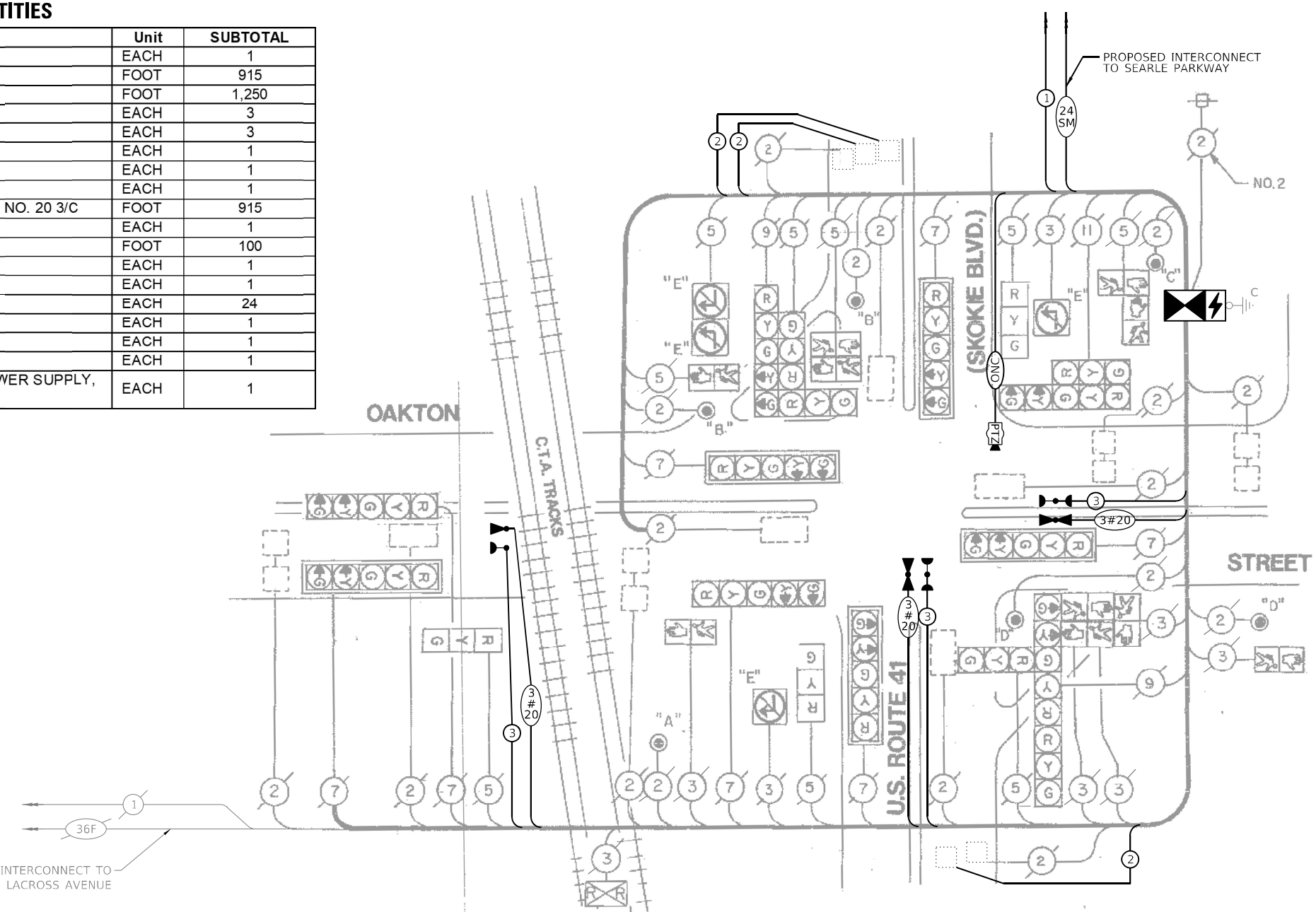
REMOVAL NOTES

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE STATE OF ILLINOIS, AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE STATE STOCK.

- 1 EACH MASTER CONTROLLER
- 1 EACH CONTROLLER ONLY

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

- 1 EACH TRANSCEIVER FIBER OPTIC
- 1 EACH TELEPHONE LINE
- 1 EACH BATTERIES FROM UNINTERRUPTABLE POWER SUPPLY



CABLE PLAN
(NOT TO SCALE)

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	8	11	88
4-SECTION	-	14	-
5-SECTION	10	13	130
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL	10	15	150
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	-	25	-
PTZ VIDEO SYSTEMS	1	115	115
BLANK-OUT SIGN	4	25	100
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING			768
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING			1,373

NOTES

- CONTROLLER SHALL BE THE MOST RECENT MODEL AND SOFTWARE APPROVED BY IDOT FOR USE AT RAILROAD INTERSECTIONS. IT SHALL BE PROGRAMED WITH REQUIRED RAILROAD INTERCONNECT PROGRAMMING AS PER THE FOLLOWING SEQUENCE OF OPERATIONS, RAILROAD PREEMPTION SEQUENCE OF OPERATIONS, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATIONS TABLES.
- CONTROLLER SHALL BE SHOP TESTED BY ICC AND IDOT PRIOR TO INSTALLATION.
- THE TELEPHONE LINE AND SERVICE SHOULD BE REMOVED AND DISCONNECTED UPON PROJECT COMPLETION AND SIGNAL BEING ADDED TO TACTICS.

ENERGY COSTS TO:
 VILLAGE OF SKOKIE
 5127 OAKTON ST
 SKOKIE, IL 60077

ENERGY SUPPLY: CONTACT: NEW BUSINES DEPT
 PHONE: (866)-639-3532
 COMPANY: COMED
 ACCOUNT NUMBER: 74910-55038
 METER NUMBER: ---

TS SHT NO. 23

MODEL: Default
 FILE NAME: 2024-03-15-2024_Cables.dwg

TRANSYSTEMS

USER NAME = jrdavenport
 PLOT SCALE = 40,0000 * / in.
 PLOT DATE = 3/15/2024

DESIGNED - GR
 DRAWN - JRD
 CHECKED - BS
 DATE - 03-15-2024

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**CABLE PLAN, PHASE DESIGNATION DIAGRAM,
 AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
 BUS RTE. 41 (SKOKIE BLVD.) AND OAKTON STREET - LOCATION C**

SCALE: NONE SHEET 23 OF 67 SHEETS STA. TO STA.

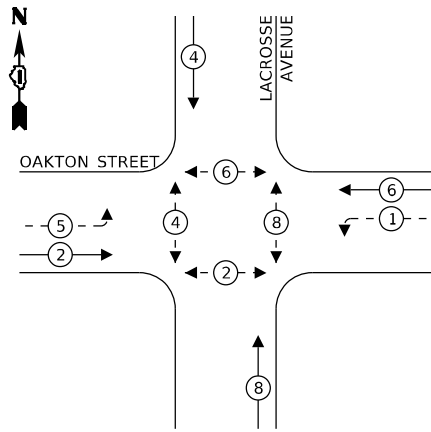
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-SIGNALS-03	COOK	67	23

CONTRACT NO. 62R84
 ILLINOIS FED. AID PROJECT

**TS 1575
 IDOT TACTICS
 FORMER EAGLE 6P**



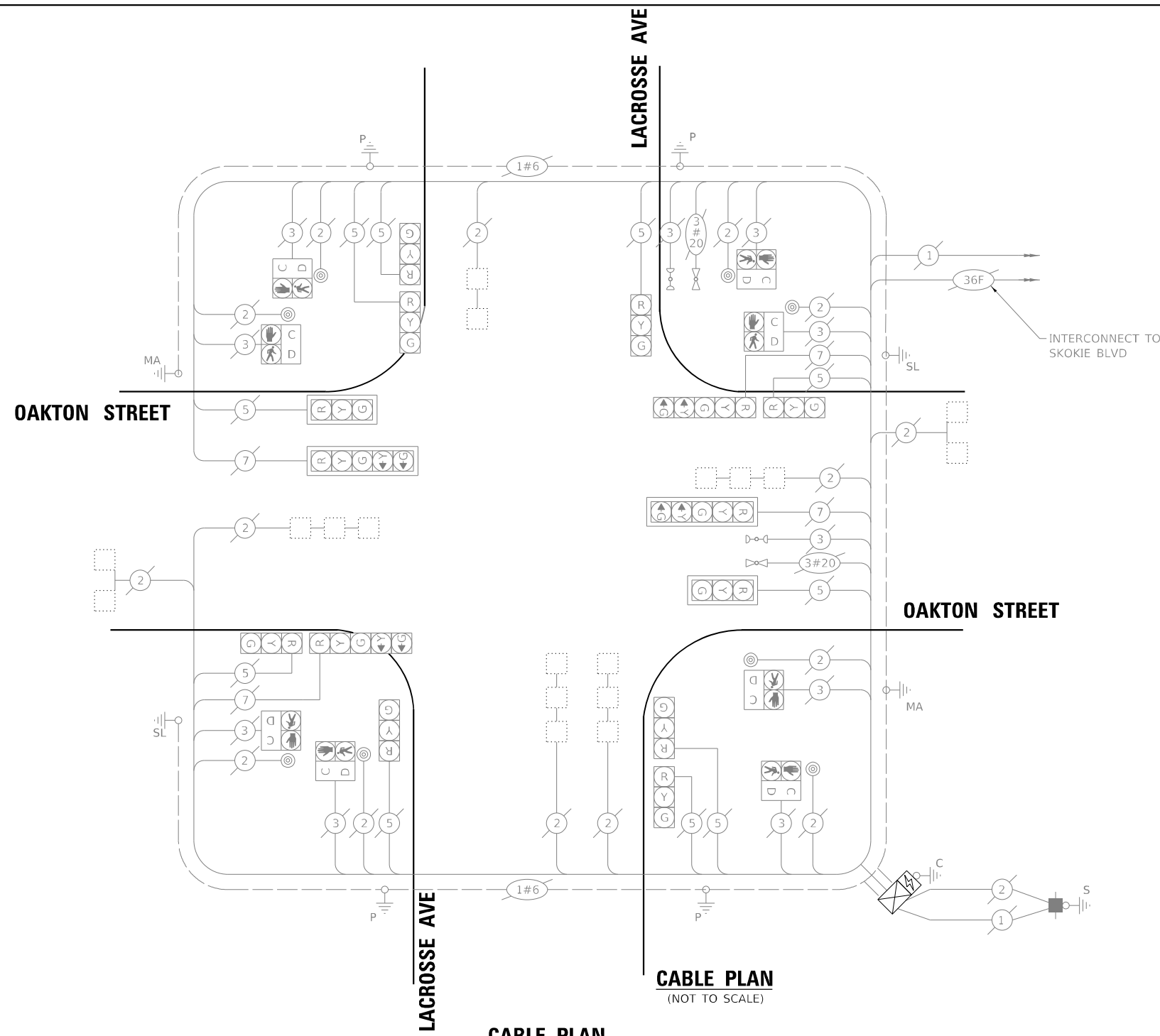
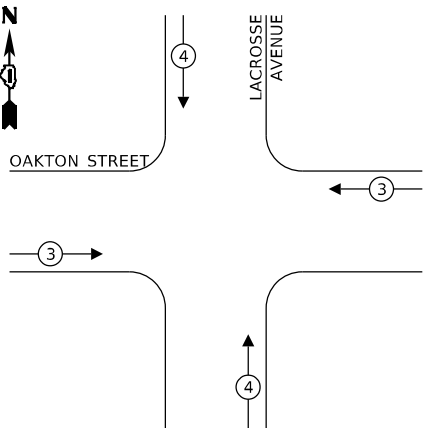
EXISTING CONTROLLER SEQUENCE



LEGEND:

- ← (*) PROTECTED PHASE
- ← - (*) - PROTECTED/PERMITTED PHASE
- ← - (*) → PEDESTRIAN PHASE

**EXISTING EMERGENCY VEHICLE
PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL
ELECTRICAL SERVICE REQUIREMENTS**

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	10	11	110
4-SECTION		14	
5-SECTION	4	13	52
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL	8	15	120
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR OR VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING			492
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING			1,097

ENERGY COSTS TO:
 VILLAGE OF SKOKIE
 5127 OAKTON ST
 SKOKIE, IL 60077

ENERGY SUPPLY: CONTACT: NEW BUSINESS DEPT
 PHONE: (866)-639-3532
 COMPANY: COMED
 ACCOUNT NUMBER: 74910-55038
 METER NUMBER: ---

SCHEDULE OF QUANTITIES

Item	Unit	SUBTOTAL
** MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
** LAYER II (DATALINK) SWITCH	EACH	1
** TERMINATE FIBER IN CABINET	EACH	12
** UPGRADE EXISTING CONTROLLER TO NTCIP SPECIAL	EACH	1
** FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1
* TACTICS LICENSE EXPANSION	EACH	1

* TACTICS LICENSE WILL BE PROVIDED BY IDOT TRAFFIC.
 ** COST TO VILLAGE OF SKOKIE.

TS SHT NO. 25
 MODEL: Default
 FILE NAME: Location_C Cable Plan



USER NAME = jrdavenport	DESIGNED - GR	REVISED -
PLOT SCALE = 40,0000 * / in.	DRAWN - JRD	REVISED -
PLOT DATE = 3/15/2024	CHECKED - BS	REVISED -
	DATE - 03-15-2024	REVISED -

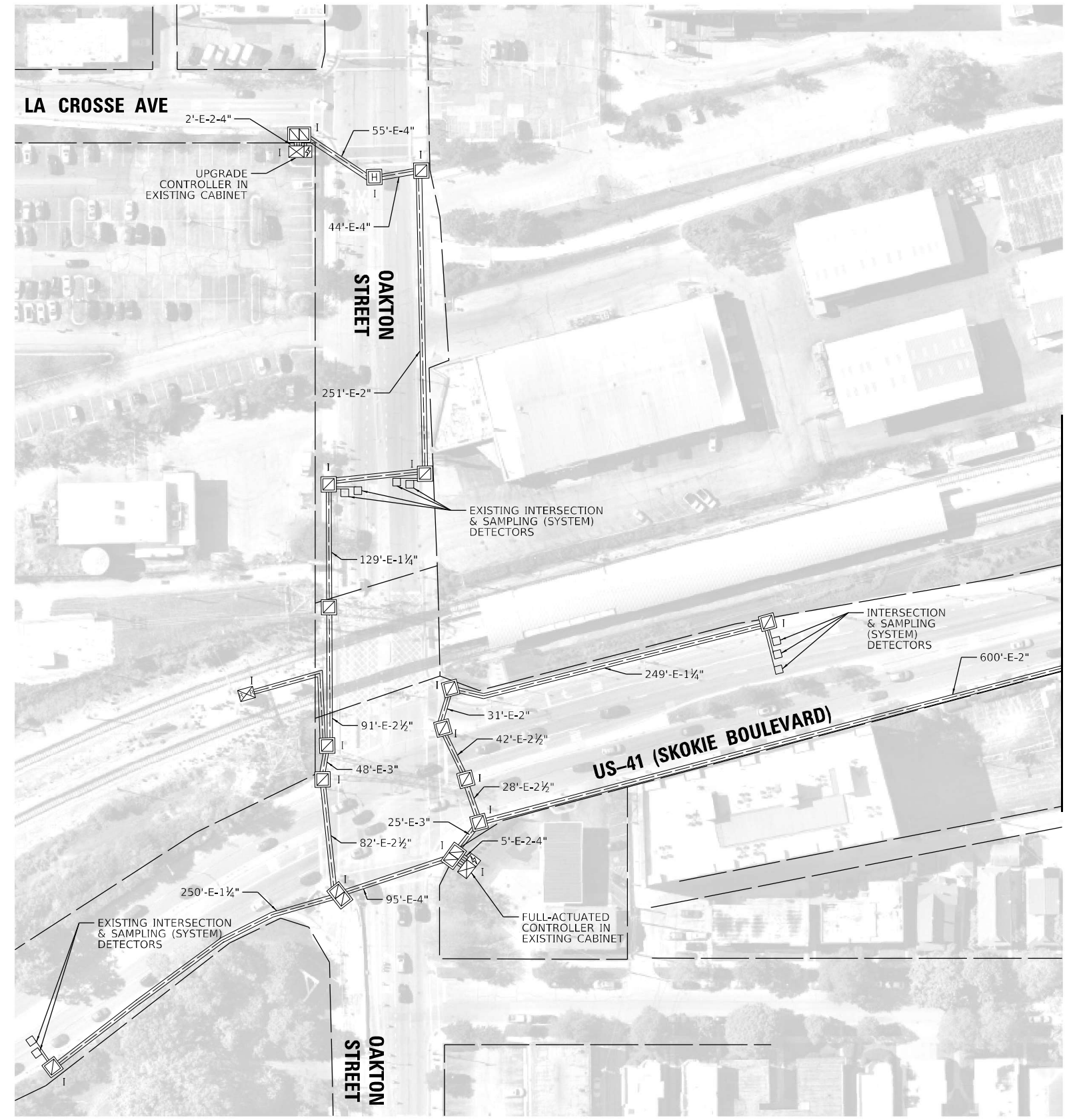
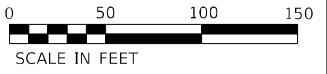
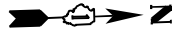
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**CABLE PLAN, PHASE DESIGNATION DIAGRAM,
 AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
 OAKTON STREET AND LACROSSE STREET - LOCATION C**

SCALE: NONE SHEET 25 OF 67 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-SIGNALS-03	COOK	67	25
CONTRACT NO.62R84				
ILLINOIS FED. AID PROJECT				

**TSS-1
 IDOT TACTICS
 FORMER EAGLE 6P**



MATCH LINE STATION A-A
SEE SHEET 27

NOTE:
DIMENSIONS PROVIDED ARE FROM THE MIDDLE OF CROSS STREET OR DRIVEWAY TO CENTER OF PROPOSED HANDHOLE. THESE DIMENSIONS ARE APPROXIMATE AND CONTRACTOR SHALL VERIFY HANDHOLE LOCATIONS WITH ENGINEER PRIOR TO CONSTRUCTION.

TS SHT NO. 26
MODEL: Default
FILE NAME: PR IC Plan Location C-1

**IDOT TACTICS
FORMER EAGLE 6P**



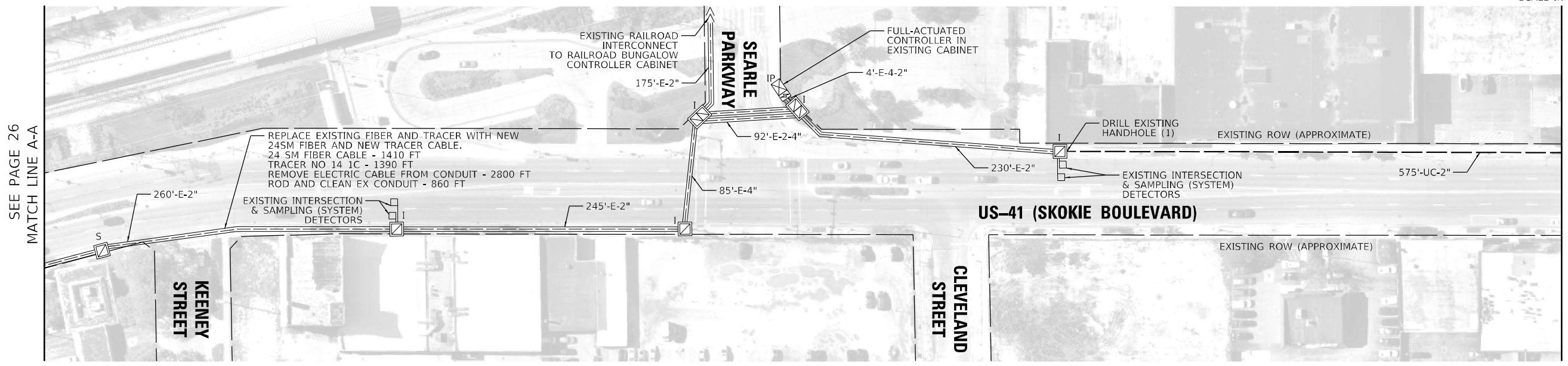
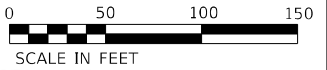
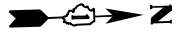
USER NAME = jrdavenport	DESIGNED - GR	REVISED -
	DRAWN - JRD	REVISED -
PLOT SCALE = 100,0000' / in.	CHECKED - BS	REVISED -
PLOT DATE = 3/15/2024	DATE - 03-15-2024	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

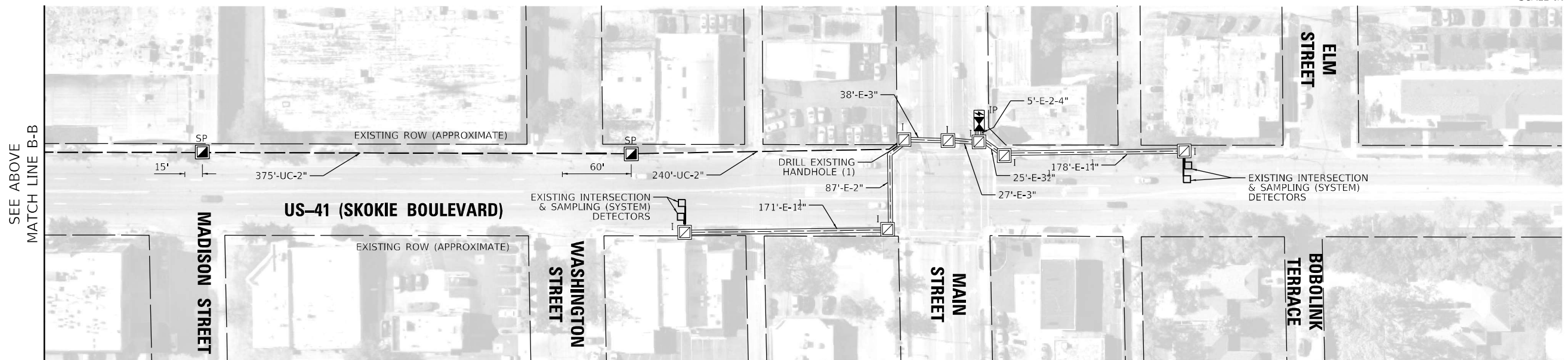
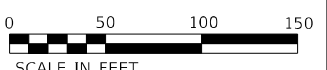
**PROPOSED INTERCONNECT PLAN
LOCATION C - US 41 (SKOKIE BOULEVARD) - SHEET 1 OF 2**

SCALE: 1"=50 SHEET 26 OF 67 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2024-SIGNALS-03	COOK	67	26
CONTRACT NO.62R84				
ILLINOIS FED. AID PROJECT				



MATCH LINE B-B
SEE BELOW



SEE ABOVE
MATCH LINE B-B

NOTE:
DIMENSIONS PROVIDED ARE FROM THE MIDDLE OF CROSS STREET OR DRIVEWAY TO CENTER OF PROPOSED HANDHOLE. THESE DIMENSIONS ARE APPROXIMATE AND CONTRACTOR SHALL VERIFY HANDHOLE LOCATIONS WITH ENGINEER PRIOR TO CONSTRUCTION.

**IDOT TACTICS
FORMER EAGLE 6P**

TS SHT NO. 27



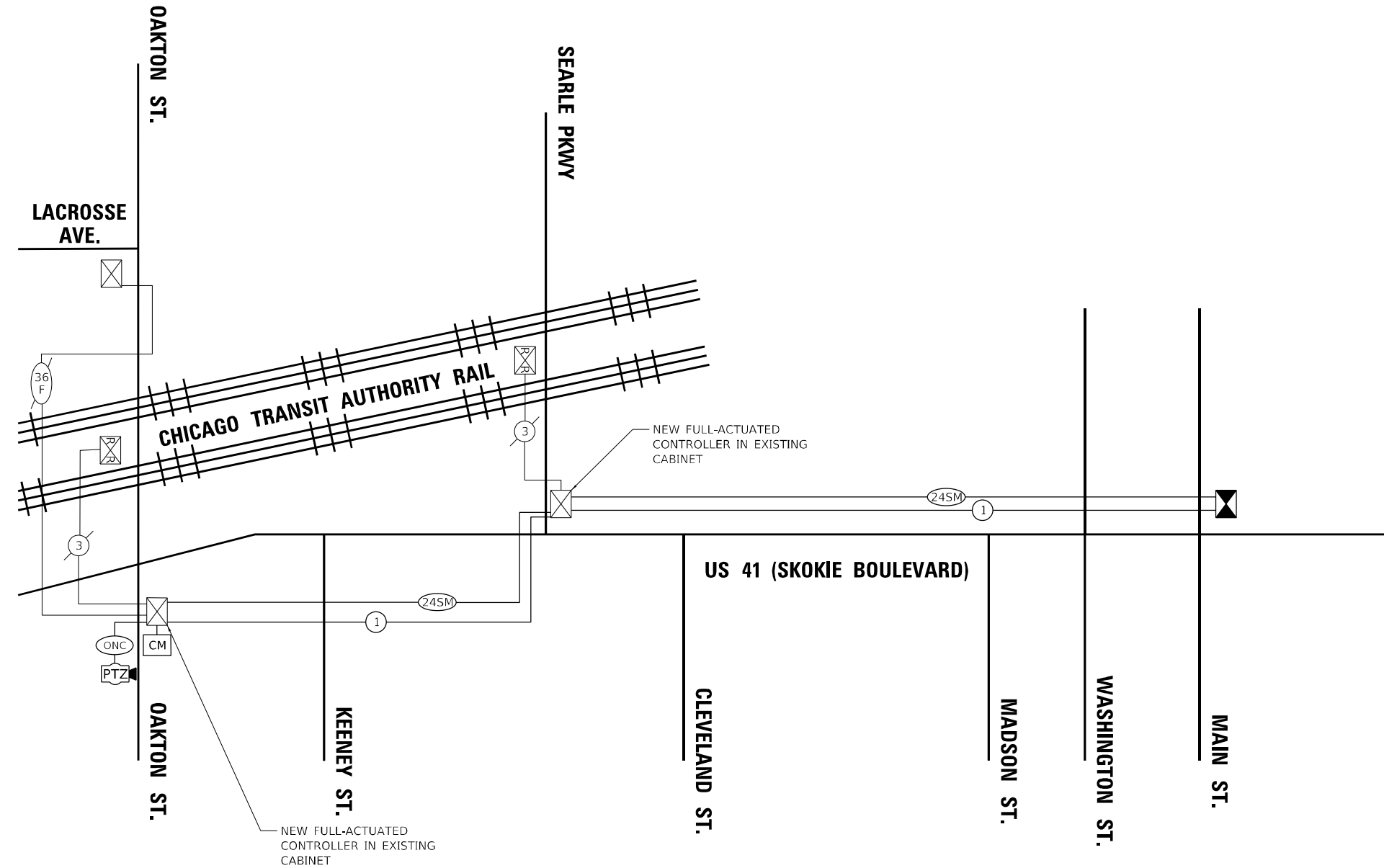
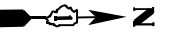
USER NAME = jrdavenport	DESIGNED - GR	REVISED -
PLOT SCALE = 100,0000' / in.	DRAWN - JRD	REVISED -
PLOT DATE = 3/15/2024	CHECKED - BS	REVISED -
	DATE - 03-15-2024	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PROPOSED INTERCONNECT PLAN
LOCATION C - US 41 (SKOKIE BOULEVARD) - SHEET 2 OF 2**

SCALE: 1"=50 SHEET 27 OF 67 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-SIGNALS-03	COOK	67	27
CONTRACT NO.62R84				
ILLINOIS FED. AID PROJECT				



SCHEDULE OF QUANTITIES

Item	Unit	SUBTOTAL
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	1,190
HANDHOLE	EACH	2
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	2,945
DRILL EXISTING HANDHOLE	EACH	2
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	2,800
ROD AND CLEAN EXISTING CONDUIT	FOOT	860
TEMPORARY INFORMATION SIGNING	SQ FT	51.4
OPTIMIZE TRAFFIC SIGNAL SYSTEM	EACH	1
FIBER OPTIC CABLE, MICRO, 24 FIBERS, SINGLE MODE	FOOT	2,980

TS SHT NO. 28

MODEL: Default
FILE NAME: Interconnect Schematic Location C

TRANSYSTEMS

USER NAME = jrdavenport	DESIGNED - GR	REVISED -
PLOT SCALE = 100,4137' / in.	DRAWN - JRD	REVISED -
PLOT DATE = 3/15/2024	CHECKED - BS	REVISED -
	DATE - 03-15-2024	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

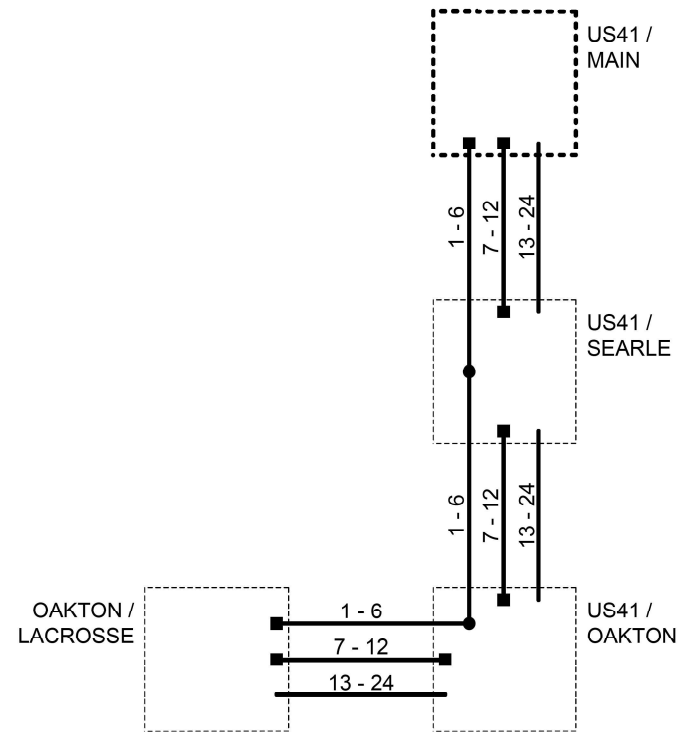
**PROPOSED INTERCONNECT SCHEMATIC AND SCHEDULE OF QUANTITIES
LOCATION C - US 41 (SKOKIE BOULEVARD)**

SCALE: NONE SHEET 28 OF 67 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-SIGNALS-03	COOK	67	28
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62R84	

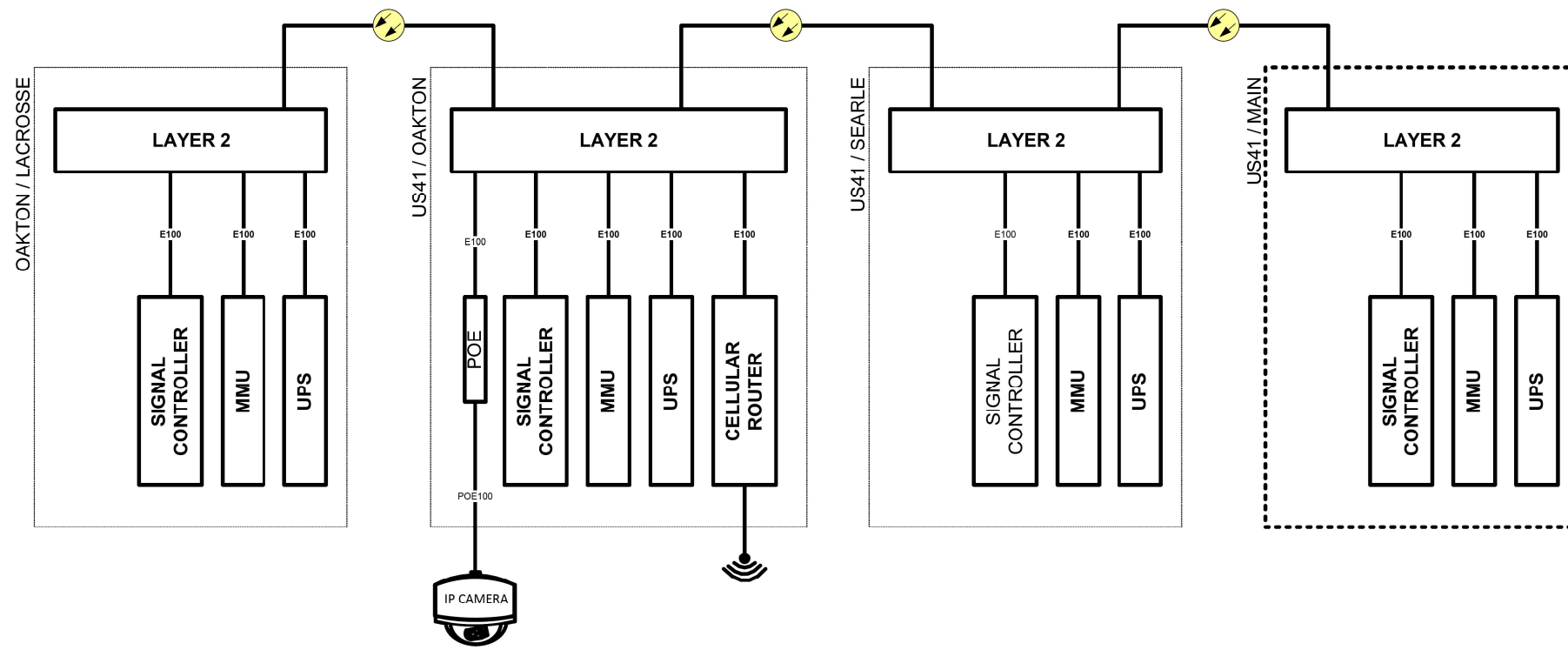
**IDOT TACTICS
FORMER EAGLE 6P**

- EXISTING CONNECTOR / EXISTING FIBER
- NEW CONNECTOR / EXISTING FIBER
- EXISTING FUSION SPLICE / EXISTING FIBER
- NEW FUSION SPLICE / EXISTING FIBER
- NEW CONNECTOR / NEW FIBER
- NEW FUSION SPLICE / NEW FIBER



IDOT TACTICS
FORMER EAGLE 6P

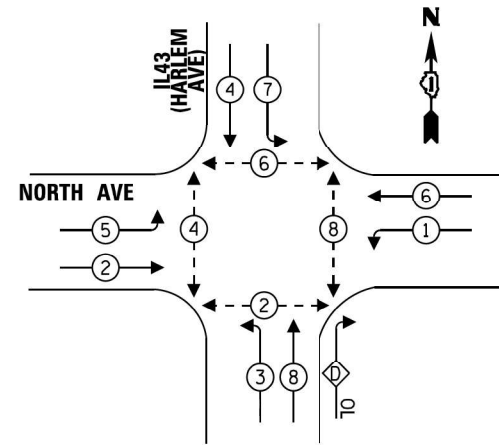
DESIGNED - DG	REVISED -	ILLINOIS DEPARTMENT OF TRANSPORTATION	EAGLE 6P		ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
DRAWN - YM	REVISED -		US41 MAIN to OAKTON FIBER SPLICING DIAGRAM		VAR		2024-SIGNALS-03	29	67
CHECKED - DG	REVISED -		SCALE N/A						
DATE 2023.10.26	REVISED -								



IDOT TACTICS
FORMER EAGLE 6P

DESIGNED - DG	REVISED -	ILLINOIS DEPARTMENT OF TRANSPORTATION	EAGLE 6P		ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
DRAWN - YM	REVISED -		US41 MAIN to OAKTON CABINET DETAIL		VAR		2024-SIGNALS-03	30	67
CHECKED - DG	REVISED -		SCALE N/A						
DATE 2023.10.26	REVISED -								

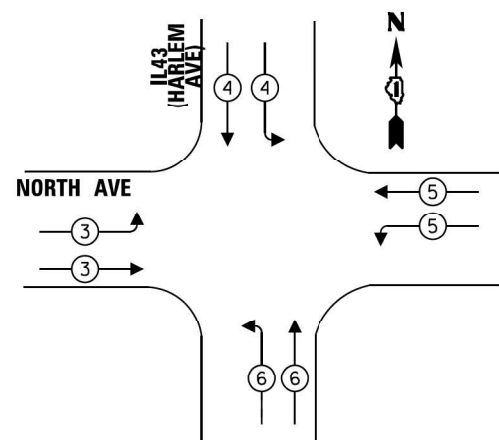
EXISTING CONTROLLER SEQUENCE



**RIGHT TURN OVERLAP
PHASE DESIGNATION:**

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
D	= 8	+ 1

**EXISTING EMERGENCY VEHICLE
PREEMPTION SEQUENCE**

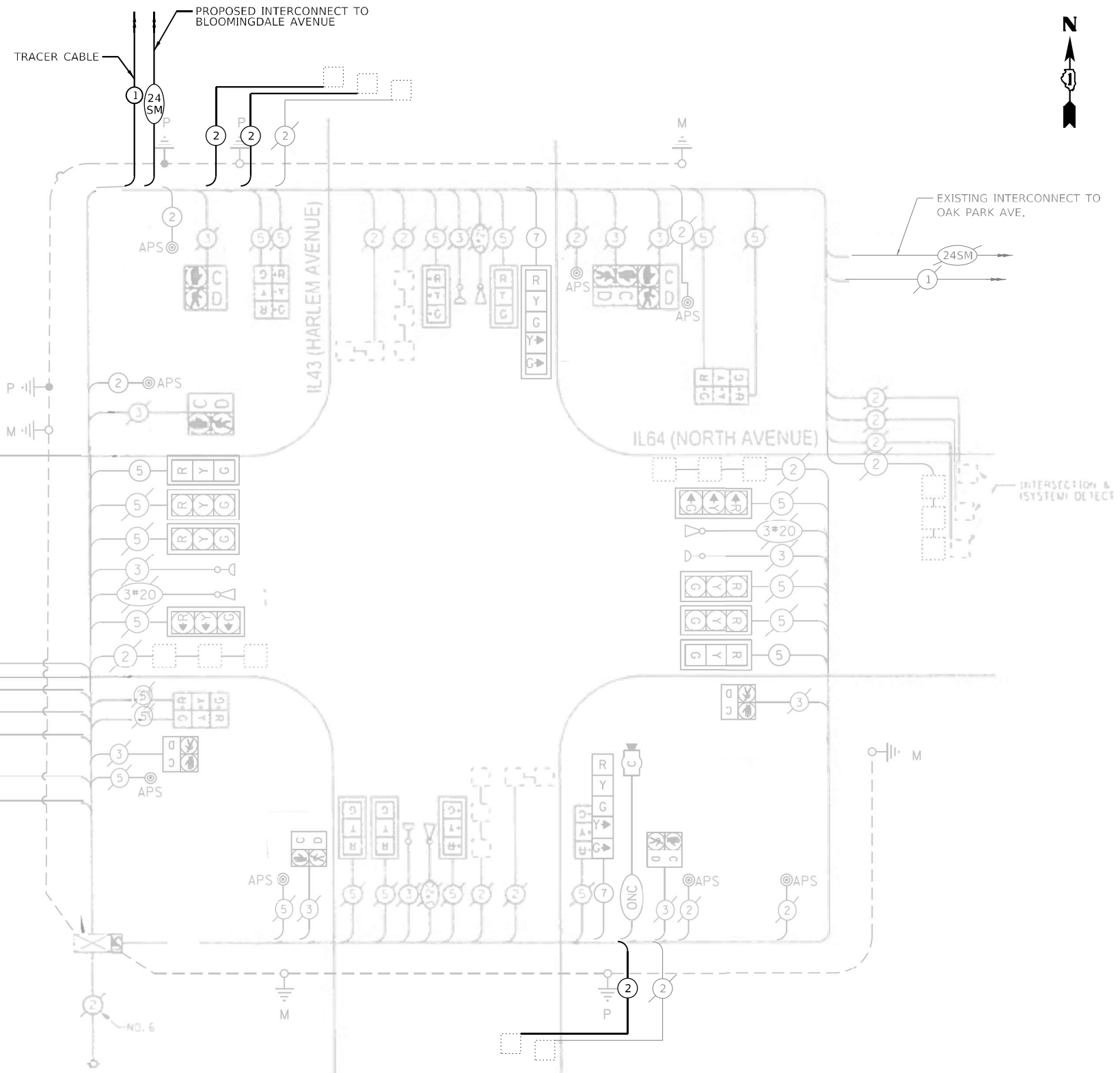


LEGEND:

- ← ⊙ ← PROTECTED PHASE
- ← ⊙ ← PROTECTED/PERMITTED PHASE
- ← ⊙ ← PEDESTRIAN PHASE
- ← ⊙ ← OL OVERLAP
- ← ⊙ ← FF FREE FLOW

SECTION & SAMPLING TEMI DETECTORS

EXISTING INTERCONNECT TO 76TH ST / LATHROP AVE



CABLE PLAN

(NOT TO SCALE)

SCHEDULE OF QUANTITIES

Item	Unit	SUBTOTAL
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1,285
INDUCTIVE LOOP DETECTOR	EACH	3
TERMINATE FIBER IN CABINET	EACH	12

NOTE

- CONTRACTOR MIGHT NEED TO COORDINATE WORK WITH WORK UNDER CONTRACT 62N40. CONTRACT 62N40 IS NEAR COMPLETION AND SHOULD BE COMPLETED PRIOR TO CONTRACT 62R84. ONLY THEN CAN THE WORK ON THIS CONTRACT BE INITIATED. CONTRACTOR TO PLAN WORK ACCORDINGLY.

ENERGY COSTS TO:

ILLINOIS DEPARTMENT OF TRANSPORTATION
201 CENTER CT
SCHAUMBURG, IL 60196

ENERGY SUPPLY: CONTACT: NEW BUSINES DEPT
PHONE: (866)-639-3532
COMPANY: COMED
ACCOUNT NUMBER: 12031-50208
METER NUMBER: ---

**TRAFFIC SIGNAL
ELECTRICAL SERVICE REQUIREMENTS**

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	20	11	220
4-SECTION		14	
5-SECTION	2	13	26
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL	8	15	120
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
PTZ VIDEO SYSTEMS	1	115	115
BLANK-OUT SIGN		25	
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM		15	
TOTAL UPS SIZING		691	
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING		1,296	

TS SHT NO. 31

MODEL: Default
FILE NAME: 2024-03-15-2024_E_Cable Plan

TRANSYSTEMS

USER NAME = jrdavenport
PLOT SCALE = 40,0000 * / in.
PLOT DATE = 3/15/2024

DESIGNED - GR
DRAWN - JRD
CHECKED - BS
DATE - 03-15-2024

REVISED -
REVISED -
REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

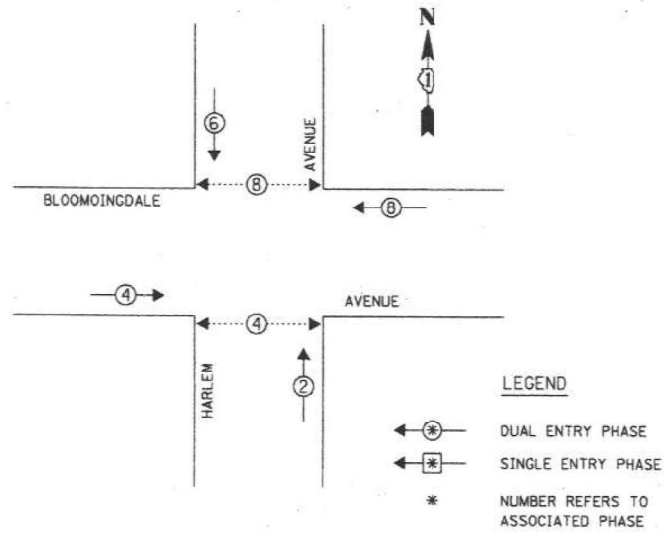
**CABLE PLAN, PHASE DESIGNATION DIAGRAM,
AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 43 (HARLEM AVE.) AND IL 64 (NORTH AVE.) - LOCATION E**

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2024-SIGNALS-03	COOK	67	31
CONTRACT NO. 62R84				
ILLINOIS FED. AID PROJECT				

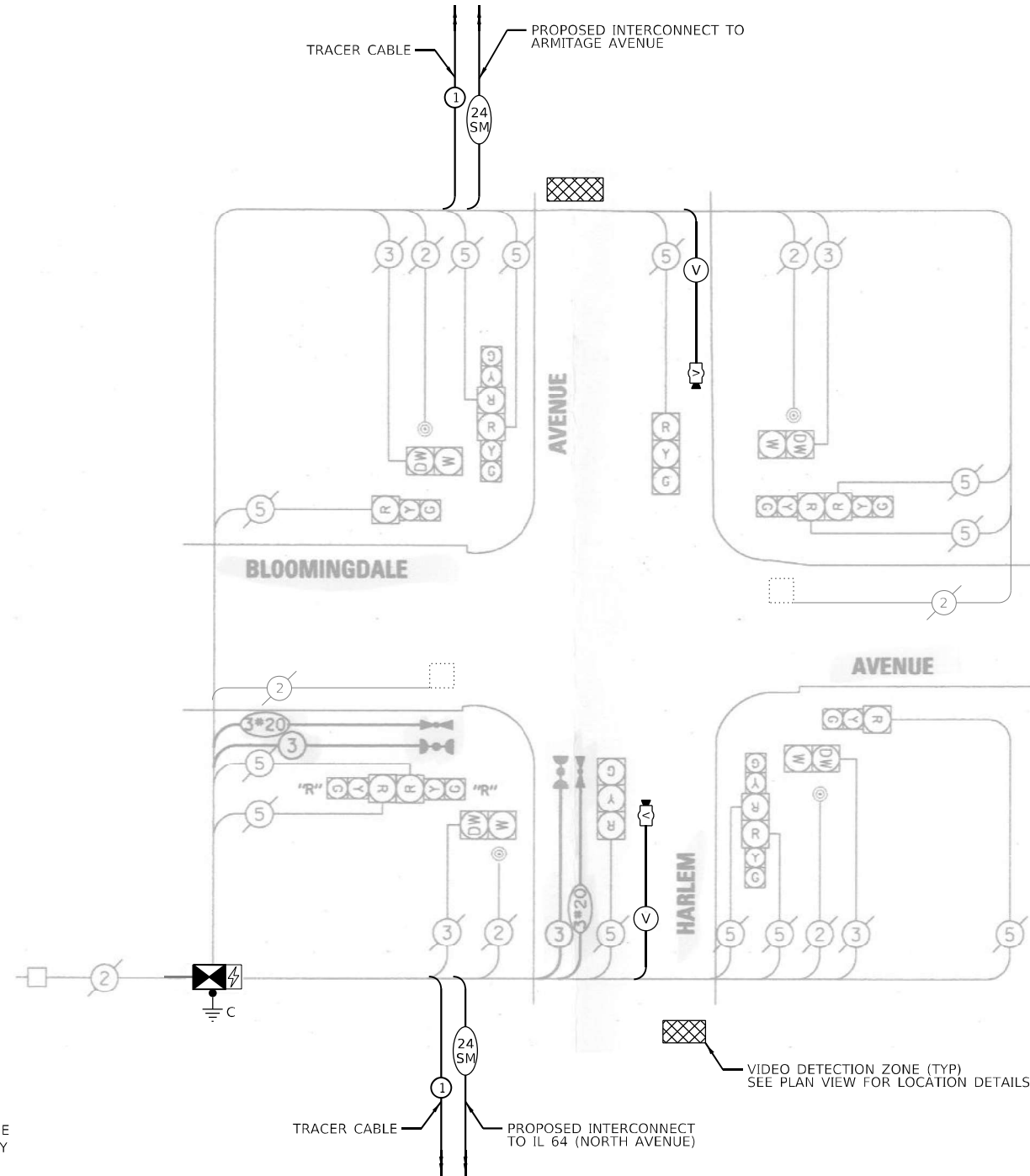
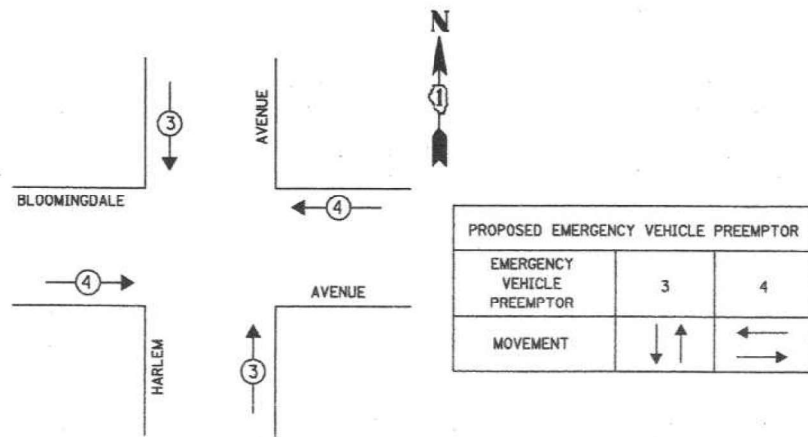
**TS 2095
IDOT CENTRACS
SYSTEM 100**

SCALE: NONE SHEET 31 OF 67 SHEETS STA. TO STA.

EXISTING AND PROPOSED CONTROLLER SEQUENCE



EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



CABLE PLAN
(NOT TO SCALE)

SCHEDULE OF QUANTITIES

Item	Unit	SUBTOTAL
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
INDUCTIVE LOOP DETECTOR	EACH	2
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
CENTRACS LICENSE EXPANSION	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
TERMINATE FIBER IN CABINET	EACH	12
SPLICE FIBER IN CABINET	EACH	6
VIDEO VEHICLE DETECTION SYSTEM, SINGLE APPROACH	EACH	2
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1

* CENTRACS LICENSE WILL BE PROVIDED BY IDOT TRAFFIC.

REMOVAL AND RELOCATION NOTES

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

- 1 EACH CONTROLLER ONLY
- 1 EACH TRANSCEIVER - FIBER OPTIC

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND RELOCATED TO THE PROPOSED TRAFFIC SIGNAL CONTROLLER AND CABINET.

- 1 EACH LIGHT DETECTOR AMPLIFIER

ENERGY COSTS TO:

VILLAGE OF ELMWOOD PARK
11 CONTI PARKWAY
ELMWOOD PARK, IL 60707

ENERGY SUPPLY: CONTACT: NEW BUSINES DEPT
PHONE: (866)-639-3532
COMPANY: COMED
ACCOUNT NUMBER: 07071-46058
METER NUMBER: ---

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	12	11	132
4-SECTION	-	14	-
5-SECTION	-	13	-
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL CONTROLLER	4	15	60
MASTER CONTROLLER	1	150	150
UPS	1	25	25
DETECTION RADAR OR VIDEO	1	20	20
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING		422	
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING		1,027	

TS SHT NO. 32

MODEL: Default
FILE NAME: 2024-03-15-2024_E_Cable Plan

TRANSYSTEMS

USER NAME = jrdavenport
PLOT SCALE = 40,0000 * / in.
PLOT DATE = 3/15/2024

DESIGNED - GR
DRAWN - JRD
CHECKED - BS
DATE - 03-15-2024

REVISED -
REVISED -
REVISED -
REVISED -

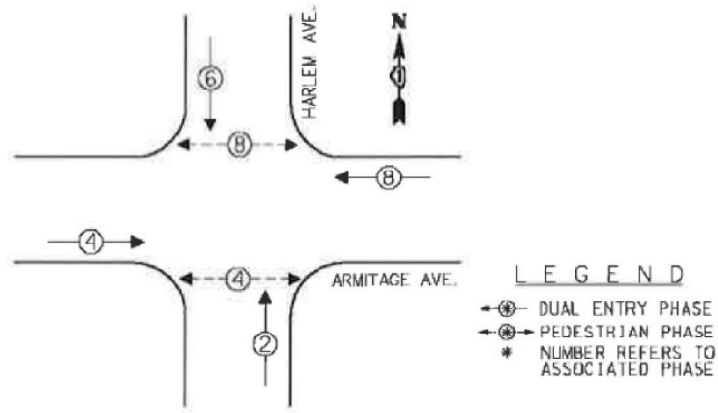
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

CABLE PLAN, PHASE DESIGNATION DIAGRAM,
AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
HARLEM AVE. AND BLOOMINGDALE AVE. - LOCATION E
SCALE: NONE SHEET 32 OF 67 SHEETS STA. TO STA.

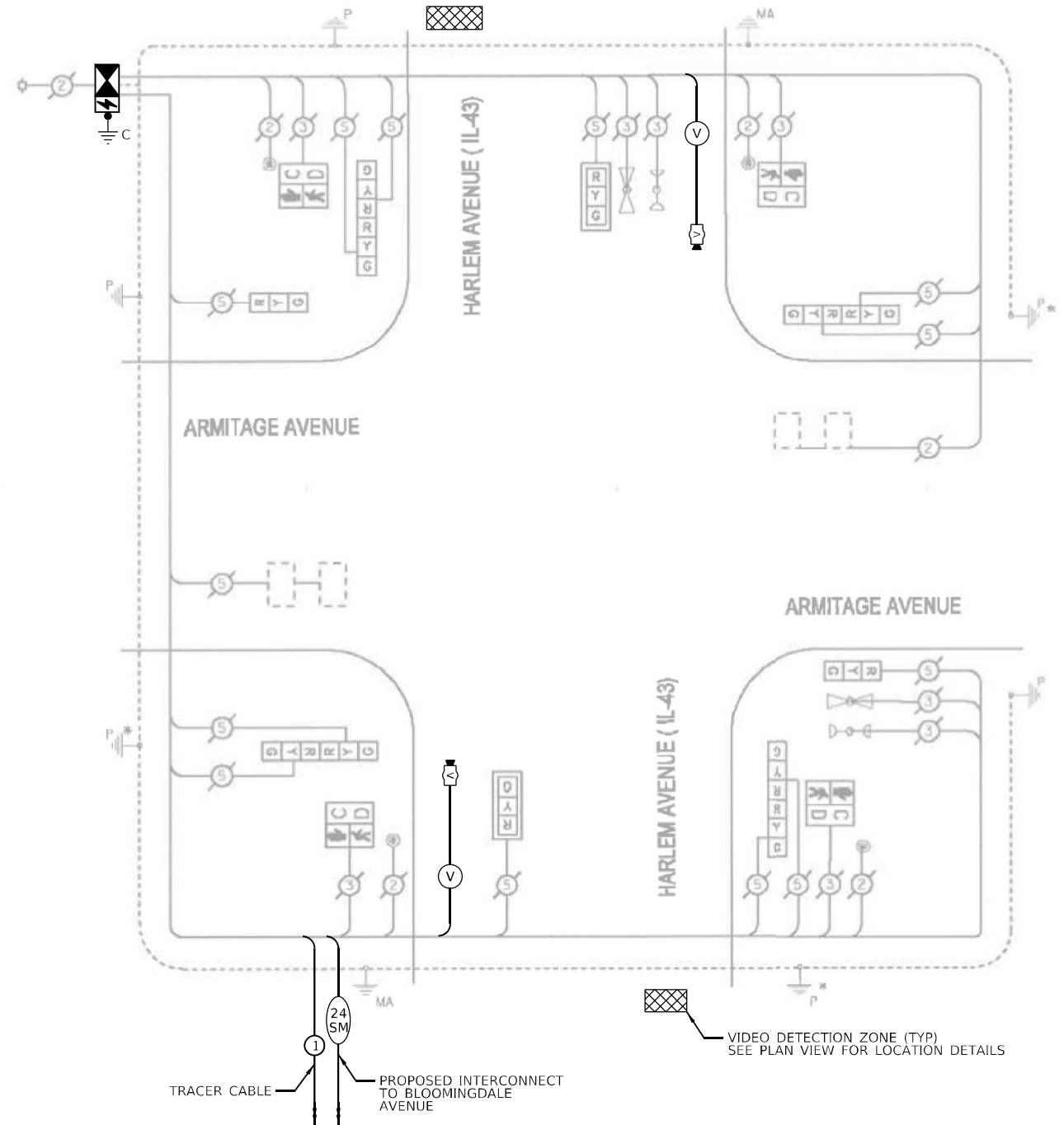
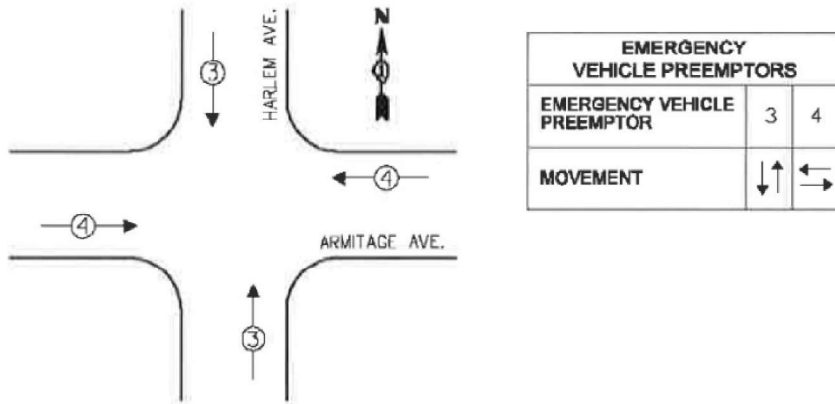
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-SIGNALS-03	COOK	67	32
CONTRACT NO. 62R84				
ILLINOIS FED. AID PROJECT				

**TS 2275
IDOT CENTRACS
SYSTEM 100**

EXISTING AND PROPOSED CONTROLLER SEQUENCE



EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



CABLE PLAN

(NOT TO SCALE)

SCHEDULE OF QUANTITIES

Item	Unit	SUBTOTAL
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
INDUCTIVE LOOP DETECTOR	EACH	2
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
* CENTRACS LICENSE EXPANSION	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
TERMINATE FIBER IN CABINET	EACH	12
VIDEO VEHICLE DETECTION SYSTEM, SINGLE APPROACH	EACH	2
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET (SPECIAL)	EACH	1
UNINTERRUPTABLE POWER SUPPLY (SPECIAL)	EACH	1

* CENTRACS LICENSE WILL BE PROVIDED BY IDOT TRAFFIC.

REMOVAL AND RELOCATION NOTES

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

- 1 EACH CONTROLLER AND CABINET (COMPLETE)
- 1 EACH UNINTERRUPTIBLE POWER SUPPLY

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND RELOCATED TO THE PROPOSED TRAFFIC SIGNAL CONTROLLER AND CABINET.

- 1 EACH LIGHT DETECTOR AMPLIFIER

ENERGY COSTS TO:

VILLAGE OF ELMWOOD PARK
11 CONTI PARKWAY
ELMWOOD PARK, IL 60707

ENERGY SUPPLY: CONTACT: NEW BUSINES DEPT
PHONE: (866)-639-3532
COMPANY: COMED
ACCOUNT NUMBER: 07071-46058
METER NUMBER: ---

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	12	11	132
4-SECTION	-	14	-
5-SECTION	-	13	-
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL CONTROLLER	4	15	60
MASTER CONTROLLER	1	150	150
UPS	-	100	-
DETECTION RADAR OR VIDEO	1	25	25
BLANK-OUT SIGN	1	25	25
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING		422	
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING		1,027	

TS SHT NO. 33

MODEL: Default
FILE NAME: 2024-03-15-2024 E Cable Plan

TRANSYSTEMS

USER NAME = jrdavenport
PLOT SCALE = 40,0000 * / in.
PLOT DATE = 3/15/2024

DESIGNED - GR
DRAWN - JRD
CHECKED - BS
DATE - 03-15-2024

REVISED -
REVISED -
REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

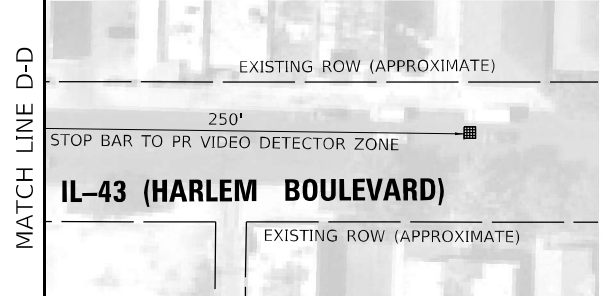
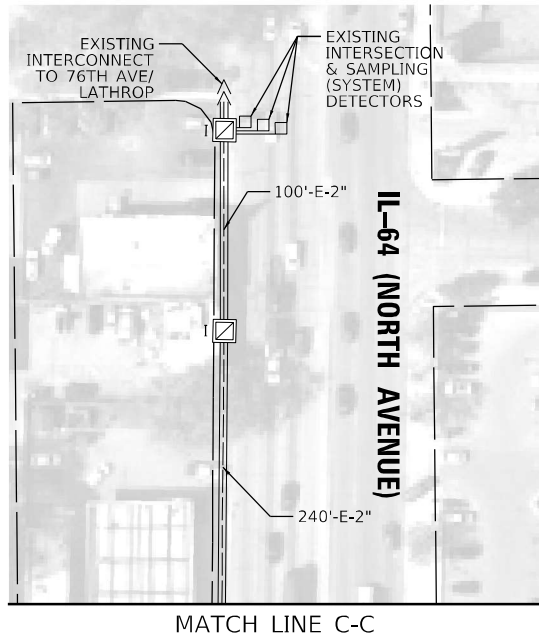
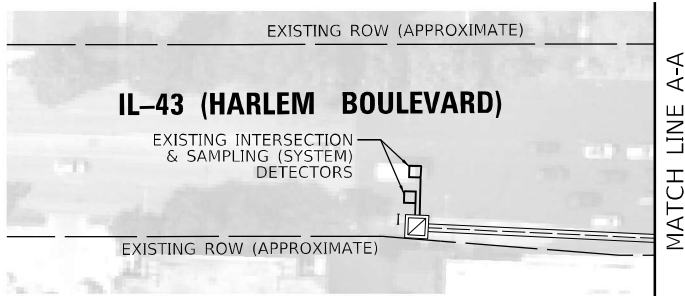
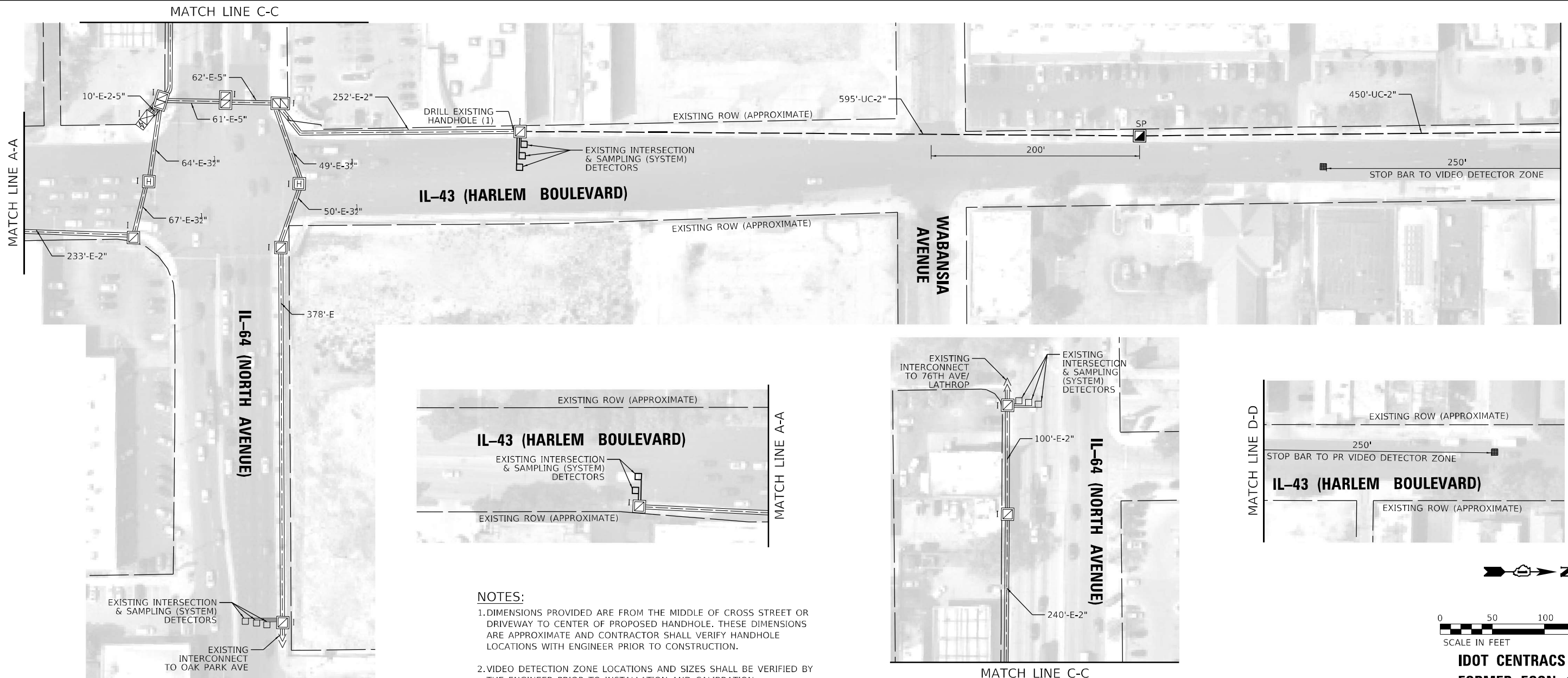
**CABLE PLAN, PHASE DESIGNATION DIAGRAM,
AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 43 (HARLEM AVE.) AND ARMITAGE AVE. - LOCATION E**

SCALE: NONE SHEET 33 OF 67 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-SIGNALS-03	COOK	67	33
CONTRACT NO.62R84				
ILLINOIS FED. AID PROJECT				

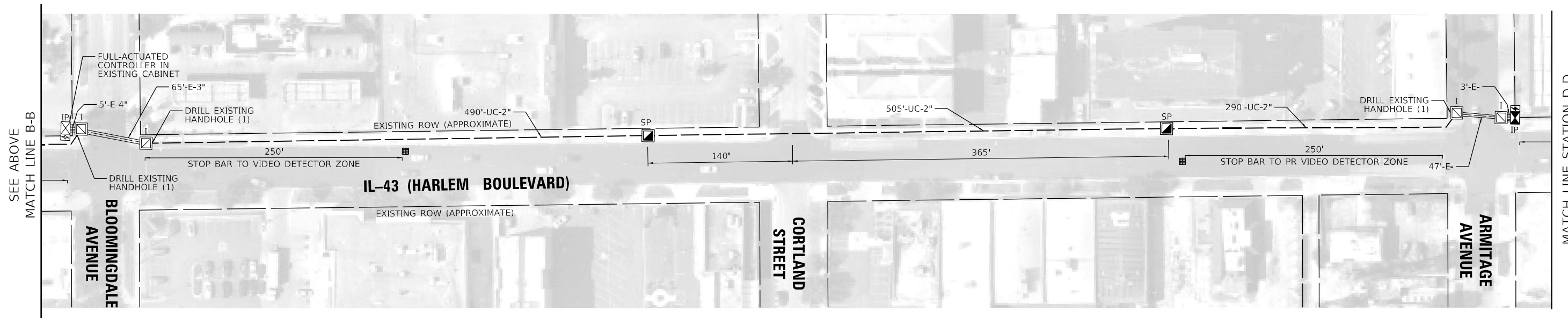
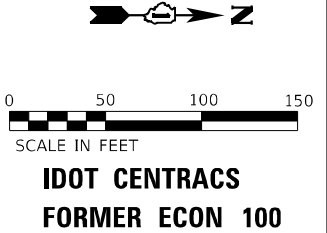
**TS 2265
IDOT CENTRACS
SYSTEM 100**





NOTES:

1. DIMENSIONS PROVIDED ARE FROM THE MIDDLE OF CROSS STREET OR DRIVEWAY TO CENTER OF PROPOSED HANDHOLE. THESE DIMENSIONS ARE APPROXIMATE AND CONTRACTOR SHALL VERIFY HANDHOLE LOCATIONS WITH ENGINEER PRIOR TO CONSTRUCTION.
2. VIDEO DETECTION ZONE LOCATIONS AND SIZES SHALL BE VERIFIED BY THE ENGINEER PRIOR TO INSTALLATION AND CALIBRATION.



TS SHT NO. 34

MODEL: Default
FILE NAME: PR_IC_Rtrn_Location_E-1

TRANSYSTEMS

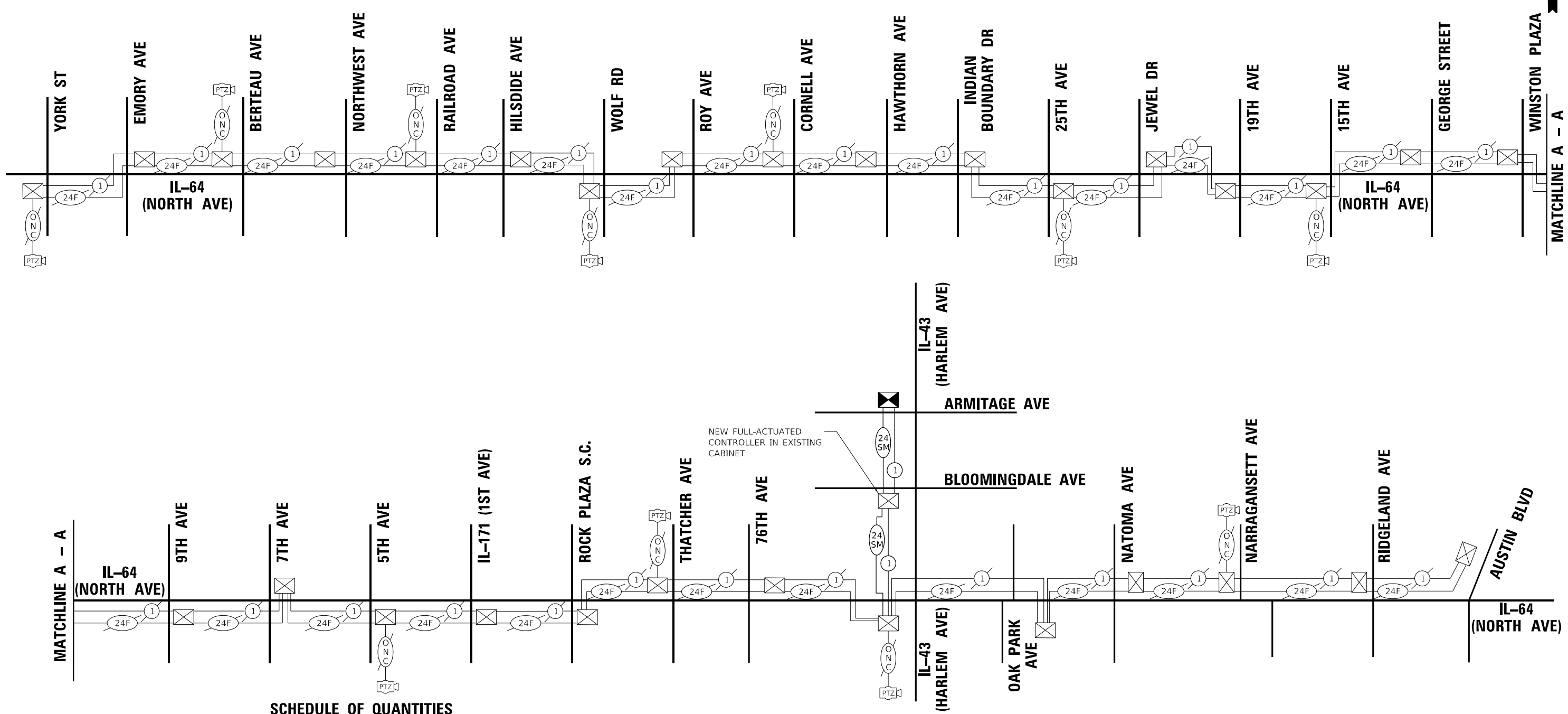
USER NAME = jrdavenport	DESIGNED - GR	REVISED -
DRAWN - JRD	REVISED -	
PLOT SCALE = 100,0000' / in.	CHECKED - BS	REVISED -
PLOT DATE = 3/15/2024	DATE - 03-15-2024	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PROPOSED INTERCONNECT PLAN
LOCATION E - IL 43 (HARLEM AVENUE)**

SCALE: 1"=50 SHEET 34 OF 67 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-SIGNALS-03	COOK	67	34
CONTRACT NO. 62R84				
ILLINOIS FED. AID PROJECT				



SCHEDULE OF QUANTITIES

Item	Unit	SUBTOTAL
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	2,330
HANDHOLE	EACH	3
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	2,960
DRILL EXISTING HANDHOLE	EACH	4
TEMPORARY INFORMATION SIGNING	SQ FT	51.4
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 2	EACH	3
FIBER OPTIC CABLE, MICRO, 24 FIBERS, SINGLE MODE	FOOT	2,990

RE-OPTIMIZATION OF TRAFFIC SIGNAL SYSTEM SHALL CONSIST OF SIGNALS ALONG IL-43 (HARLEM AVE).

EXISTING ECON 100 BEING RECONFIGURED AS PART OF A SEPERATE MODERNIZATION CONTRACT 62N40. CONTRACTOR SHALL COORDINATE WORK AS NECESSARY.

TS SHT NO. 35

MODEL: Default
FILE NAME: Interconnect Schematic Location E

TRANSYSTEMS

USER NAME = jrdavenport	DESIGNED - GR	REVISED -
	DRAWN - JRD	REVISED -
PLOT SCALE = 100,4127' / in.	CHECKED - BS	REVISED -
PLOT DATE = 3/15/2024	DATE - 03-15-2024	REVISED -







**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

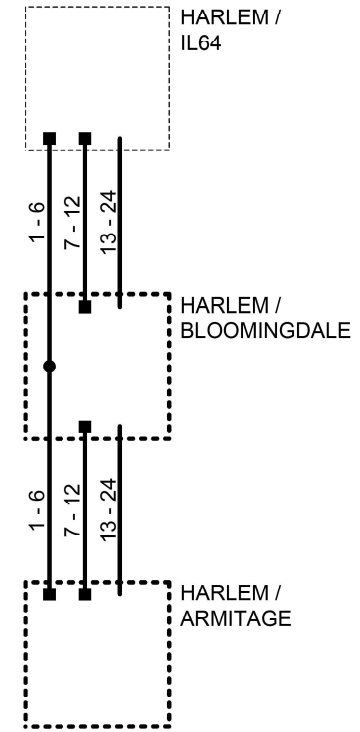
**PROPOSED INTERCONNECT SCHEMATIC AND SCHEDULE OF QUANTITIES
LOCATION E - IL 43 (HARLEM AVENUE)**

SCALE: NONE SHEET 35 OF 67 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-SIGNALS-03	COOK	67	35
CONTRACT NO.62R84				
ILLINOIS FED. AID PROJECT				

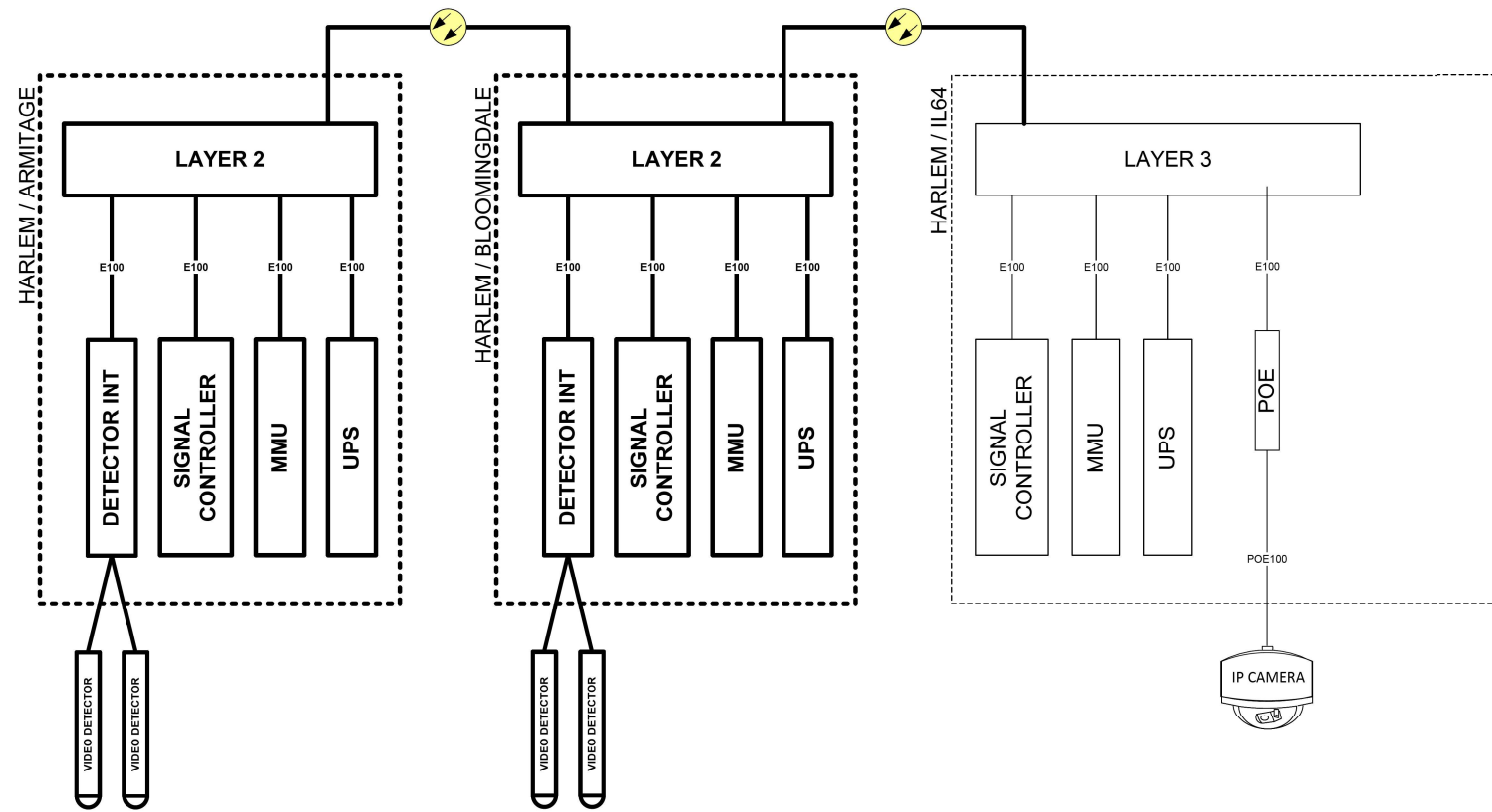
**IDOT CENTRACS
FORMER ECON 100**

-  EXISTING CONNECTOR / EXISTING FIBER
-  NEW CONNECTOR / EXISTING FIBER
-  EXISTING FUSION SPLICE / EXISTING FIBER
-  NEW FUSION SPLICE / EXISTING FIBER
-  NEW CONNECTOR / NEW FIBER
-  NEW FUSION SPLICE / NEW FIBER



IDOT CENTRACS
FORMER ECON100

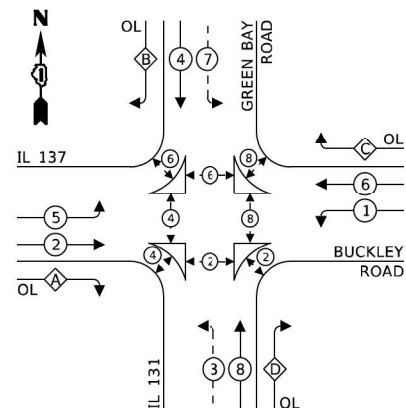
	DESIGNED - DG	REVISED -	ILLINOIS DEPARTMENT OF TRANSPORTATION	ECON100		ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
	DRAWN - YM	REVISED -		HARLEM IL64 TO ARMITAGE FIBER SPLICING DIAGRAM		VAR		2024-SIGNALS-03	36	67
	CHECKED - DG	REVISED -		SCALE N/A						
	DATE 2023.10.26	REVISED -								



IDOT CENTRACS
FORMER ECON100

DESIGNED - DG	REVISED -	ILLINOIS DEPARTMENT OF TRANSPORTATION	ECON100		ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
DRAWN - YM	REVISED -		HARLEM IL64 TO ARMITAGE CABINET DETAIL		VAR		2024-SIGNALS-03	37	67
CHECKED - DG	REVISED -		SCALE N/A						
DATE 2023.10.26	REVISED -								

EXISTING AND PROPOSED CONTROLLER SEQUENCE



RIGHT TURN OVERLAP

PHASE DESIGNATION:

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2	+ 3
B	= 4	+ 5
C	= 6	+ 7
D	= 8	+ 1

LEGEND:

- ⊙ — PROTECTED PHASE
- ⊙ — — PROTECTED/PERMITTED PHASE
- ⊙ — ⊙ — PEDESTRIAN PHASE
- ⊙ — OL — OVERLAP

SCHEDULE OF QUANTITIES

Item	Unit	SUBTOTAL
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1,760
INDUCTIVE LOOP DETECTOR	EACH	15
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
TERMINATE FIBER IN CABINET	EACH	6
SPLICE FIBER IN CABINET	EACH	6
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET (SPECIAL)	EACH	1
UNINTERRUPTABLE POWER SUPPLY (SPECIAL)	EACH	1

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	10	11	110
4-SECTION		14	
5-SECTION	12	13	156
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL	16	15	240
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
PTZ VIDEO SYSTEMS	1	115	115
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING		831	
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING		1,436	

REMOVAL AND RELOCATION NOTES

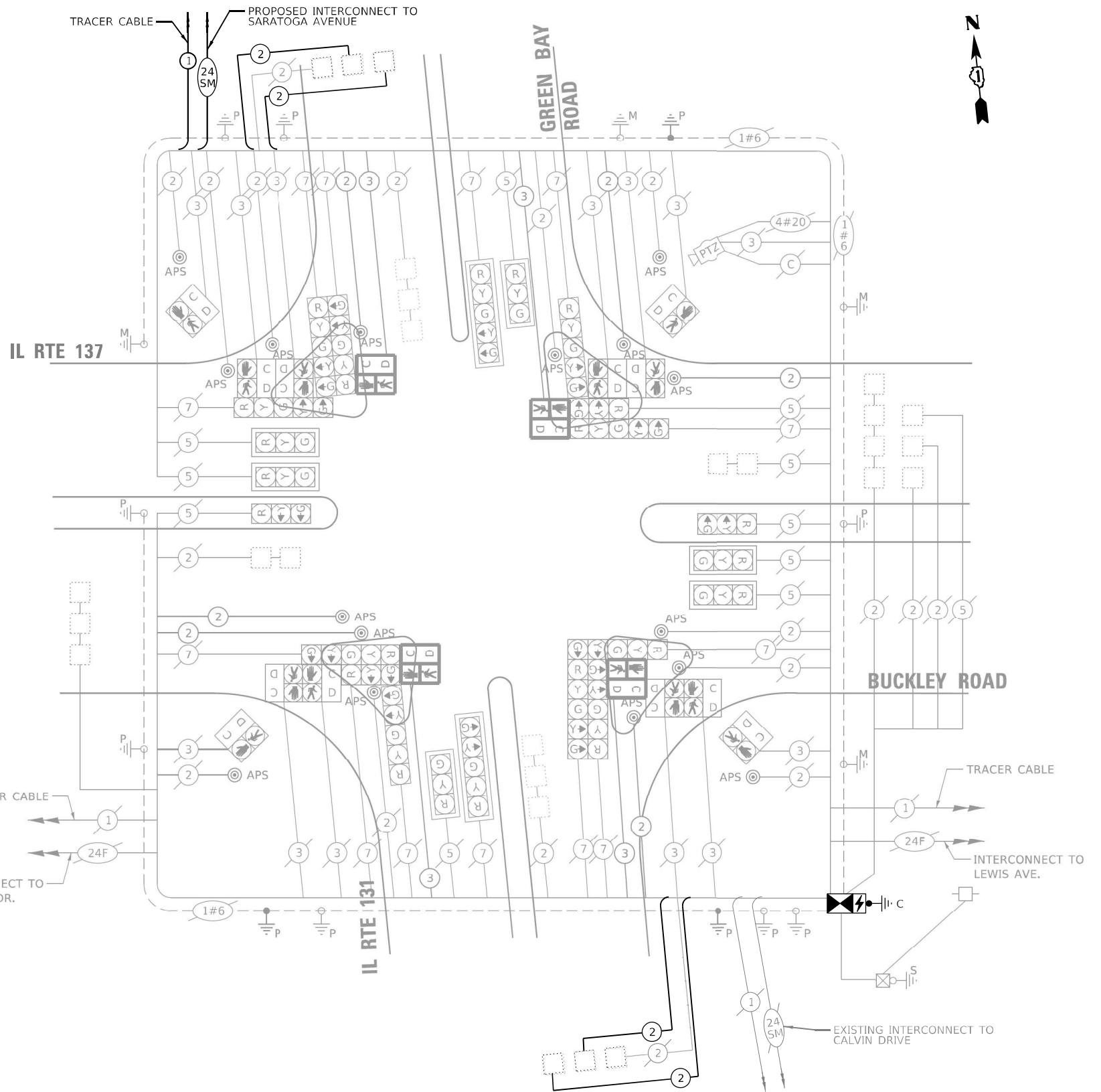
THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE OF THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 1 EACH CONTROLLER AND CABINET (COMPLETE)
- 1 EACH UNINTERRUPTIBLE POWER SUPPLY

ENERGY COSTS TO:

ILLINOIS DEPARTMENT OF TRANSPORTATION
201 CENTER CT
SCHAUMBURG, IL 60196

ENERGY SUPPLY: CONTACT: NEW BUSINES DEPT
PHONE: (866)-639-3532
COMPANY: COMED
ACCOUNT NUMBER: 73470-68078
METER NUMBER: ---



CABLE PLAN
(NOT TO SCALE)

TS SHT NO. 38

MODEL: Default
FILE NAME: Location F Cable Plan

TRANSYSTEMS

USER NAME = jrdavenport	DESIGNED - GR	REVISED -
PLOT SCALE = 40,0000 * / in.	DRAWN - JRD	REVISED -
PLOT DATE = 3/15/2024	CHECKED - BS	REVISED -
	DATE - 03-15-2024	REVISED -

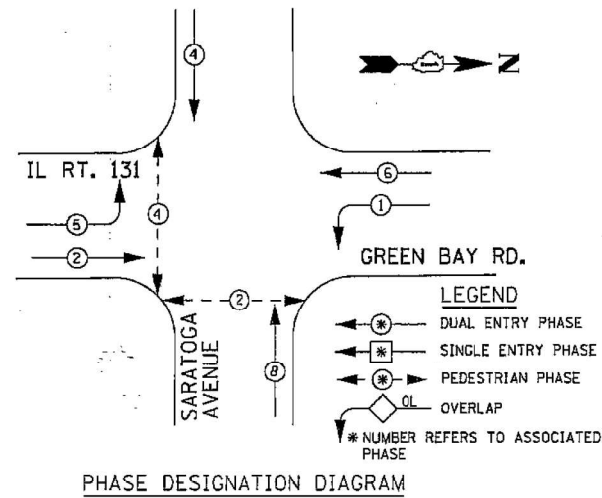
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE IL RT. 131/GREEN BAY RD. AND IL RT. 137/BUCKLEY RD. - LOCATION F			
SCALE: NONE	SHEET 38	OF 67 SHEETS	STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-SIGNALS-03	LAKE	67	38
CONTRACT NO. 62R84				
ILLINOIS FED. AID PROJECT				

**TS 7015
LCDOT CENTRACS**

CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

REMOVAL NOTES

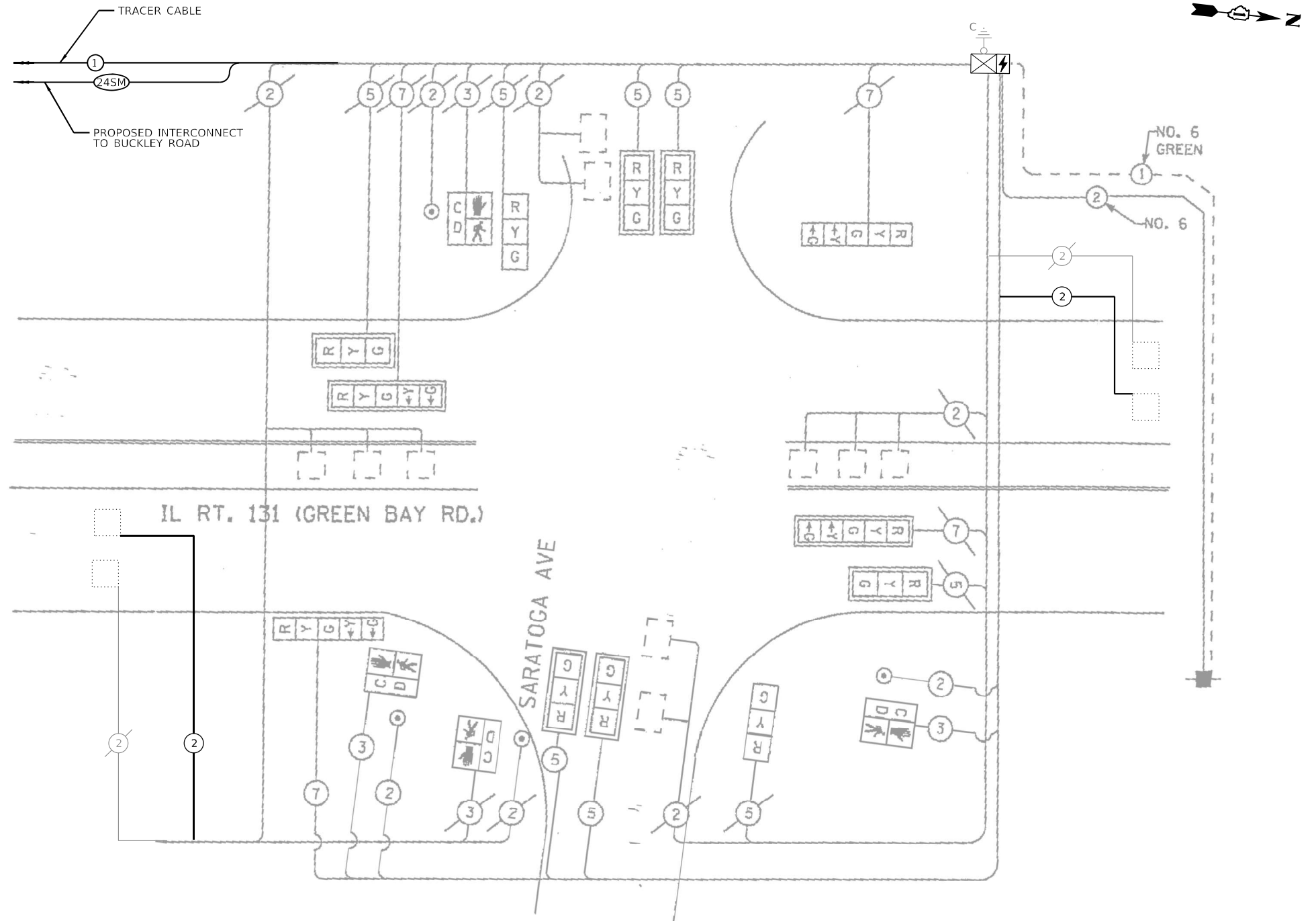
THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE OF THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 1 EACH UNINTERRUPTIBLE POWER SUPPLY

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	8	11	88
4-SECTION		14	
5-SECTION	4	13	52
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR OR VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING		410	
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING		1,015	

ENERGY COSTS TO:
 CITY OF NORTH CHICAGO
 1850 LEWIS AVE
 NORTH CHICAGO, IL 60064
 ENERGY SUPPLY: CONTACT: NEW BUSINES DEPT
 PHONE: (866)-639-3532
 COMPANY: COMED
 ACCOUNT NUMBER: 03310-68092
 METER NUMBER: ---



CABLE PLAN
(NOT TO SCALE)

SCHEDULE OF QUANTITIES

Item	Unit	SUBTOTAL
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	722
INDUCTIVE LOOP DETECTOR	EACH	2
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
TERMINATE FIBER IN CABINET	EACH	12
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1
UNINTERRUPTIBLE POWER SUPPLY (SPECIAL)	EACH	1

TS SHT NO. 39



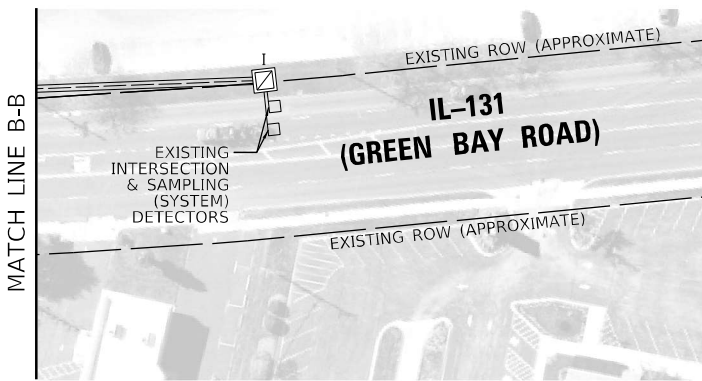
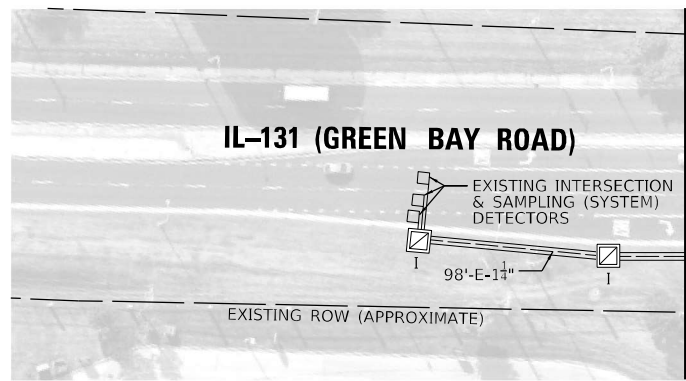
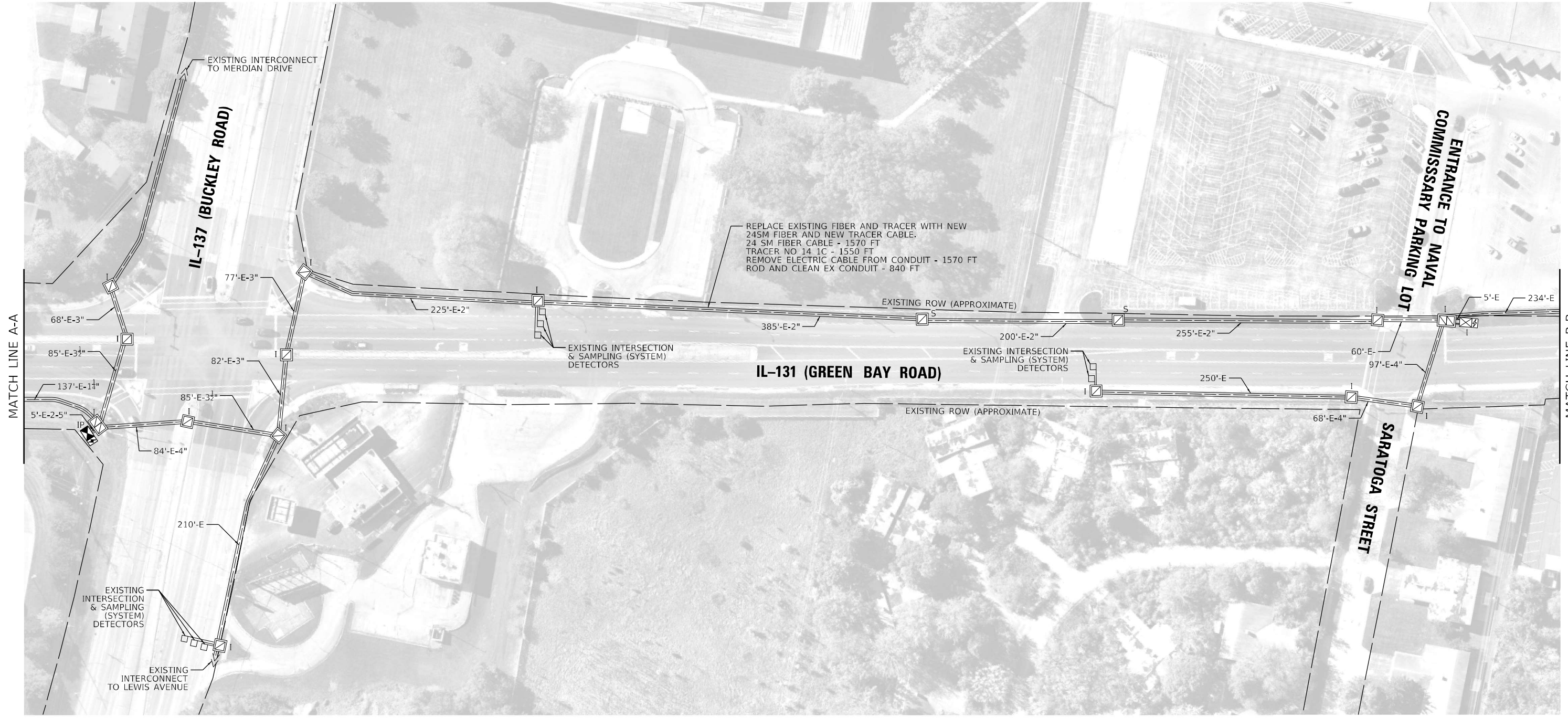
USER NAME = jrdavenport	DESIGNED - GR	REVISED -
PLOT SCALE = 40,0000 */ in.	DRAWN - JRD	REVISED -
PLOT DATE = 3/15/2024	CHECKED - BS	REVISED -
	DATE - 03-15-2024	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

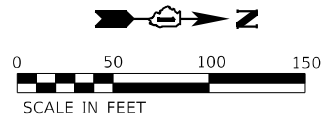
**CABLE PLAN, PHASE DESIGNATION DIAGRAM,
AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
SARATOGA AVE. AND IL RTE. 131 (GREEN BAY ROAD) - LOCATION F**
 SCALE: NONE SHEET 39 OF 67 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-SIGNALS-03	LAKE	67	39
CONTRACT NO. 62R84				
ILLINOIS FED. AID PROJECT				

**TS 9390
LCDOT CENTRACS
SECTION ECON 20**



NOTE:
 DIMENSIONS PROVIDED ARE FROM THE MIDDLE OF CROSS STREET OR DRIVEWAY TO CENTER OF PROPOSED HANDHOLE. THESE DIMENSIONS ARE APPROXIMATE AND CONTRACTOR SHALL VERIFY HANDHOLE LOCATIONS WITH ENGINEER PRIOR TO CONSTRUCTION.



LCDOT CENTRACS

TS SHT NO. 40

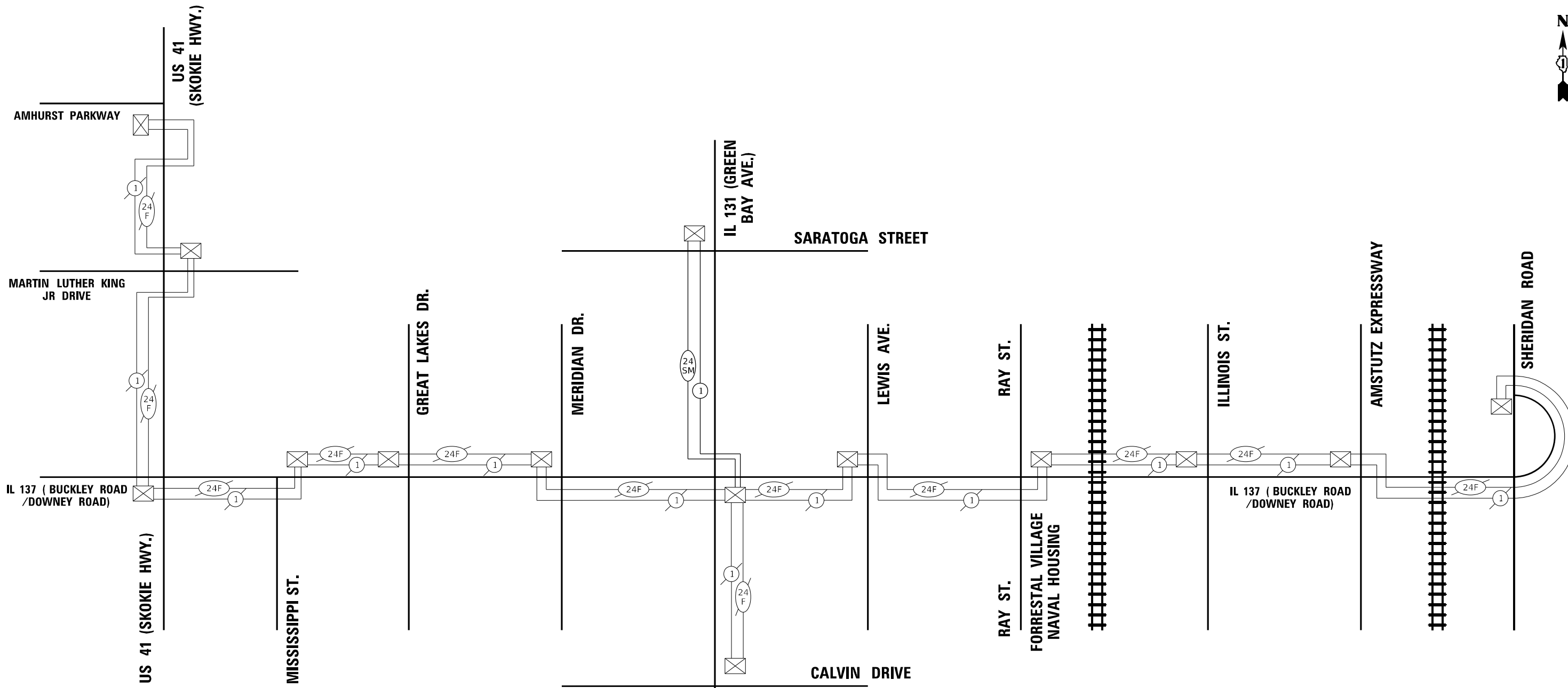
TRANSYSTEMS

USER NAME = jrdavenport	DESIGNED - GR	REVISED -
PLOT SCALE = 100,0000' / in.	DRAWN - JRD	REVISED -
PLOT DATE = 3/15/2024	CHECKED - BS	REVISED -
	DATE - 03-15-2024	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PROPOSED INTERCONNECT PLAN			
LOCATION F - IL 131 (GREEN BAY ROAD)			
SCALE: 1"=50	SHEET 40	OF 67 SHEETS	STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-SIGNALS-03	COOK	67	40
CONTRACT NO.62R84				
ILLINOIS FED. AID PROJECT				



SCHEDULE OF QUANTITIES

Item	Unit	SUBTOTAL
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	1,550
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1,570
ROD AND CLEAN EXISTING CONDUIT	FOOT	840
TEMPORARY INFORMATION SIGNING	SQ FT	51.4
RE-OPTIMIZE TRAFFIC SIGNAL LEVEL 2	EACH	2
FIBER OPTIC CABLE, MICRO, 24 FIBERS, SINGLE MODE	FOOT	1,570

RE-OPTIMIZE TRAFFIC SIGNALS SHALL CONSIST OF TS 9390 AND TS 7015 ONTO LCDOT CENTRACS.

NOTES

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

TS SHT NO. 41

MODEL: Default
FILE NAME: Interconnect Schematic Location F



USER NAME = jrdavenport	DESIGNED - GR	REVISED -
	DRAWN - JRD	REVISED -
PLOT SCALE = 100,4127' / in.	CHECKED - BS	REVISED -
PLOT DATE = 3/15/2024	DATE - 03-15-2024	REVISED -

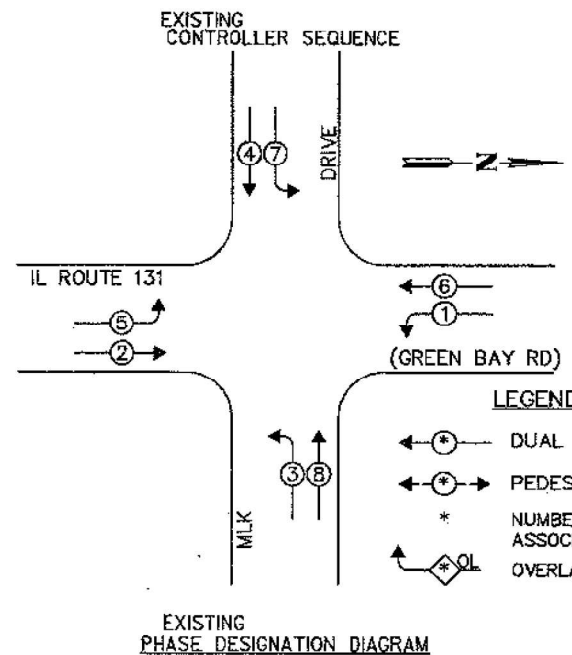
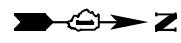
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED INTERCONNECT SCHEMATIC AND SCHEDULE OF QUANTITIES
LOCATION F - IL 131 (GREEN BAY ROAD)

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-SIGNALS-03	LAKE	67	41
CONTRACT NO.62R84				
ILLINOIS FED. AID PROJECT				

SCALE: NONE SHEET 41 OF 67 SHEETS STA. TO STA.

LCDOT CENTRACS



SCHEDULE OF QUANTITIES

Item	Unit	SUBTOTAL
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	789
INDUCTIVE LOOP DETECTOR	EACH	2
TERMINATE FIBER IN CABINET	EACH	6
SPLICE FIBER IN CABINET	EACH	6
REMOVE AND REPLACE BATTERIES FOR UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

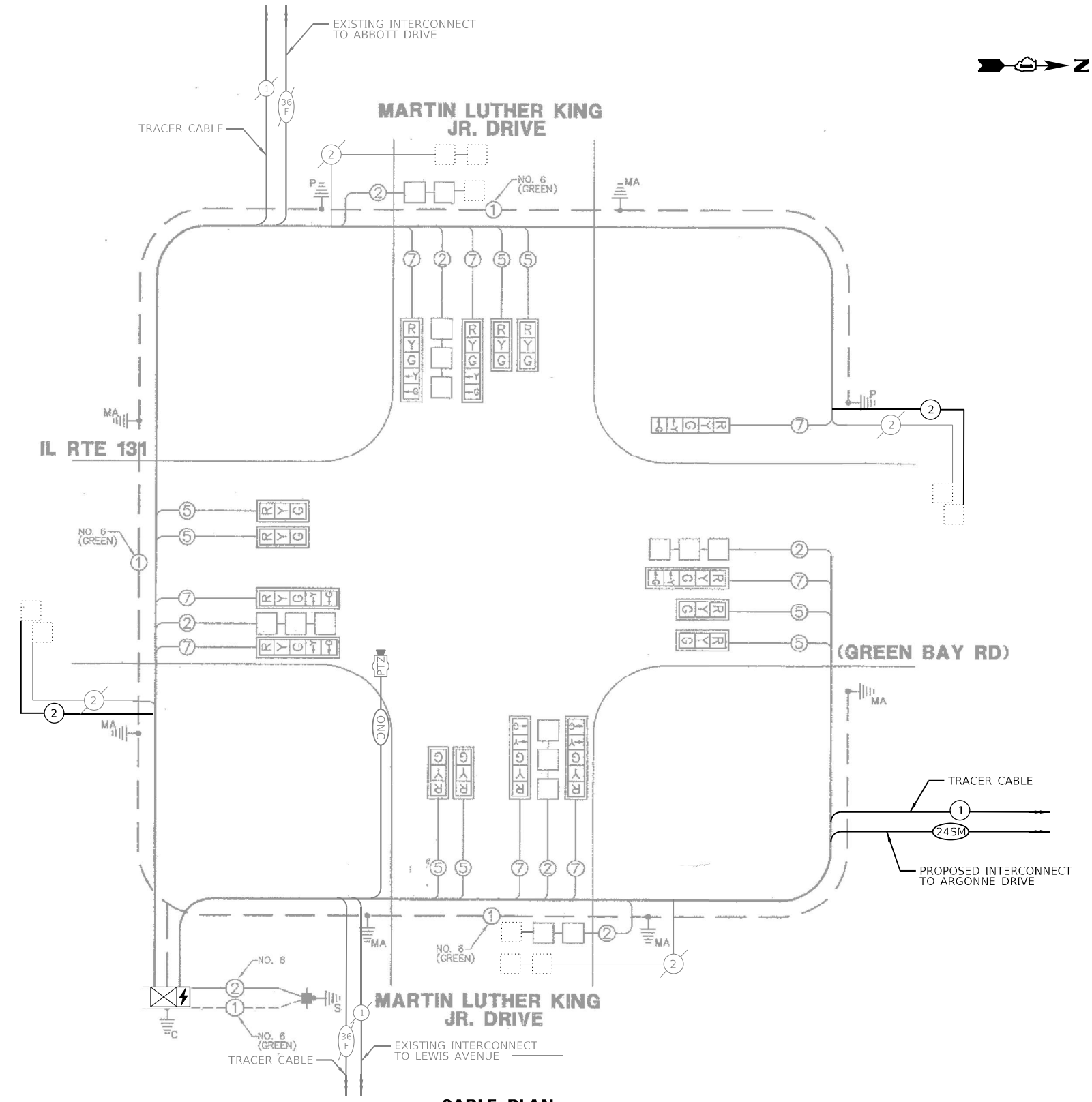
EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	8	11	88
4-SECTION		14	
5-SECTION	8	13	104
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR OR VIDEO	-	20	-
PTZ VIDEO SYSTEM	1	115	115
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM		15	
TOTAL UPS SIZING			517
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING			1,122

REMOVAL NOTES

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

- 1 EACH BATTERIES FOR UNINTERRUPTIBLE POWER SUPPLY

ENERGY COSTS TO:
 ILLINOIS DEPARTMENT OF TRANSPORTATION
 201 CENTER CT
 SCHAUMBURG, IL 60196
 ENERGY SUPPLY: CONTACT: NEW BUSINES DEPT
 PHONE: (866)-639-3532
 COMPANY: COMED
 ACCOUNT NUMBER: 73470-68078
 METER NUMBER: ---



CABLE PLAN
(NOT TO SCALE)

TS SHT NO. 42



USER NAME = jrdavenport	DESIGNED - GR	REVISED -
PLOT SCALE = 40,0000 * / in.	DRAWN - JRD	REVISED -
PLOT DATE = 3/15/2024	CHECKED - BS	REVISED -
	DATE - 03-15-2024	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

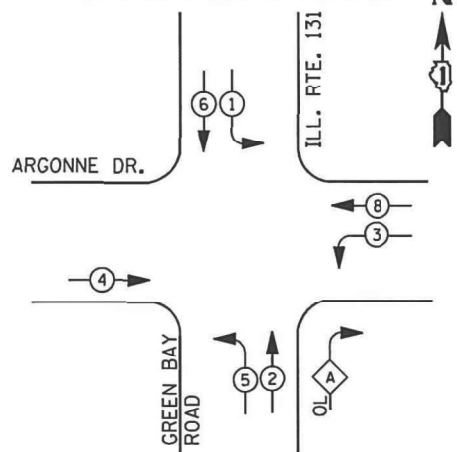
**CABLE PLAN, PHASE DESIGNATION DIAGRAM,
AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
MLK JR. DRIVE AND IL RTE. 131/GREEN BAY RD. - LOCATION G**
SCALE: NONE SHEET 42 OF 67 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-SIGNALS-03	LAKE	67	42
CONTRACT NO.62R84				
ILLINOIS FED. AID PROJECT				

**TS 9380
LCDOT CENTRACS**



EXISTING & PROPOSED CONTROLLER SEQUENCE



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

RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2	+ 3

PHASE DESIGNATION DIAGRAM

SCHEDULE OF QUANTITIES

Item	Unit	SUBTOTAL
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	786
INDUCTIVE LOOP DETECTOR	EACH	12
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
TERMINATE FIBER IN CABINET	EACH	12
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET (SPECIAL)	EACH	1
UNINTERRUPTABLE POWER SUPPLY (SPECIAL)	EACH	1

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	5	11	55
4-SECTION	-	14	-
5-SECTION	8	13	104
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR OR VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING		369	
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING		974	

REMOVAL NOTES

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE STATE OF ILLINOIS AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE STATE STOCK.

1 EACH CONTROLLER AND CABINET (COMPLETE)

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

1 EACH UNINTERRUPTIBLE POWER SUPPLY

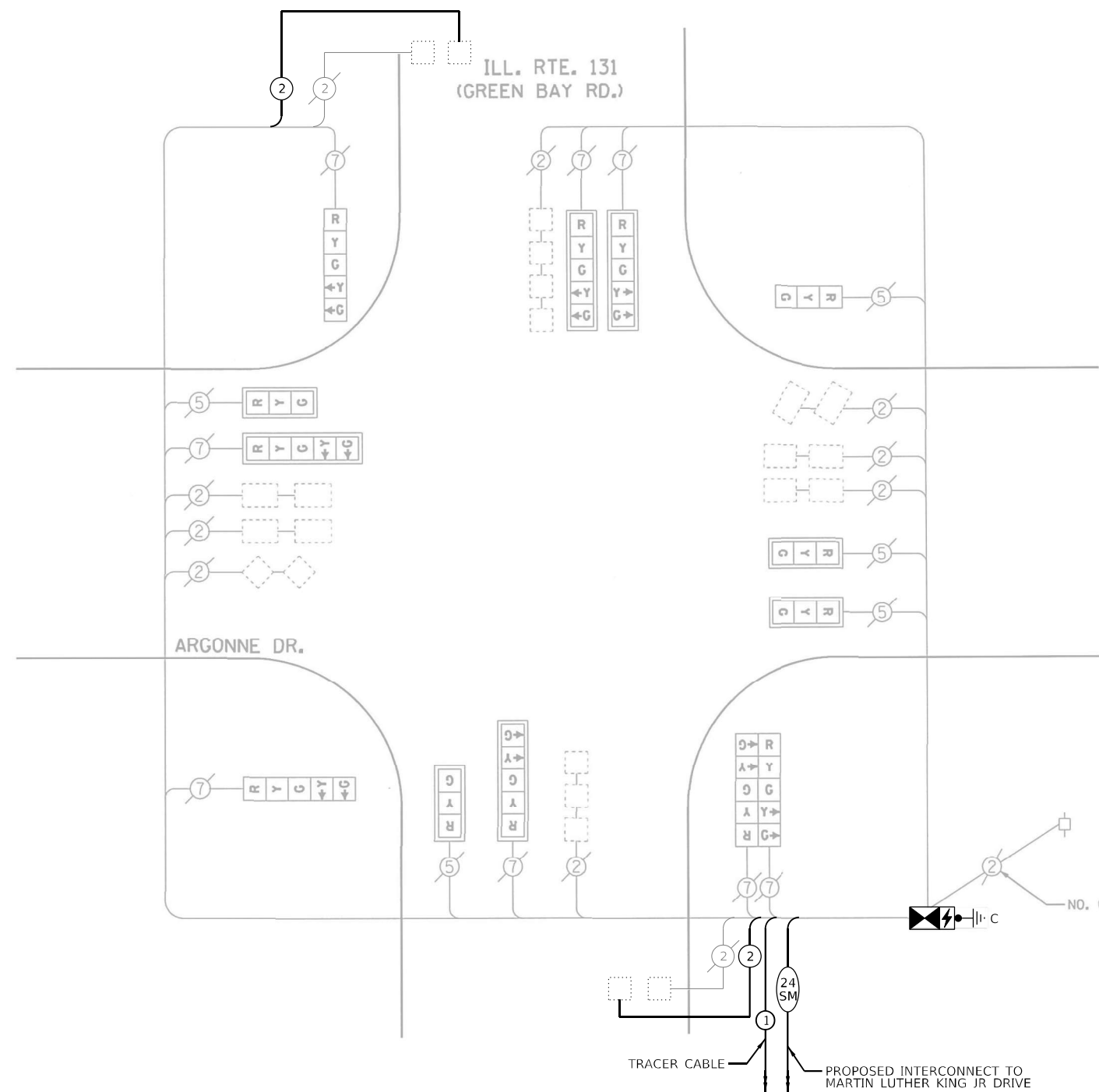
ENERGY COSTS TO:

CITY OF NORTH CHICAGO
55 E NORTH AVE
NORTHLAKE, IL 60164

ENERGY SUPPLY: CONTACT: NEW BUSINES DEPT
PHONE: (866)-639-3532
COMPANY: COMED
ACCOUNT NUMBER: 03310-68092
METER NUMBER: ---

NOTE

- CONTROLLER SHALL BE ECONOLITE TO MATCH ADJACENT SYSTEM.



CABLE PLAN
(NOT TO SCALE)

TS SHT NO. 43

MODEL: Default
FILE NAME: C:\Users\jrd\Documents\Cable Plans

TRANSYSTEMS

USER NAME = jrdavenport
PLOT SCALE = 40,0000 * / in.
PLOT DATE = 3/15/2024

DESIGNED - GR
DRAWN - JRD
CHECKED - BS
DATE - 03-15-2024

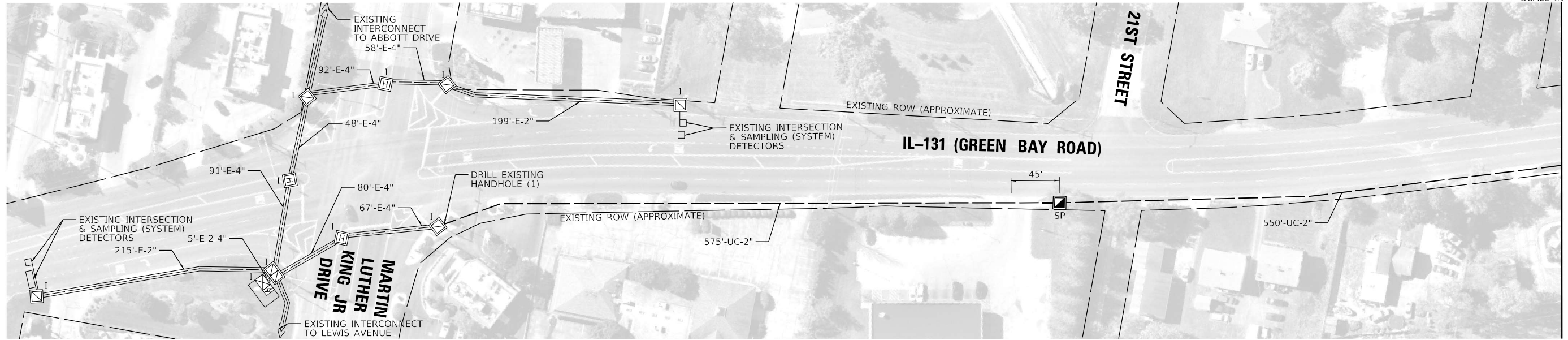
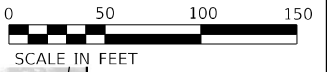
REVISED -
REVISED -
REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

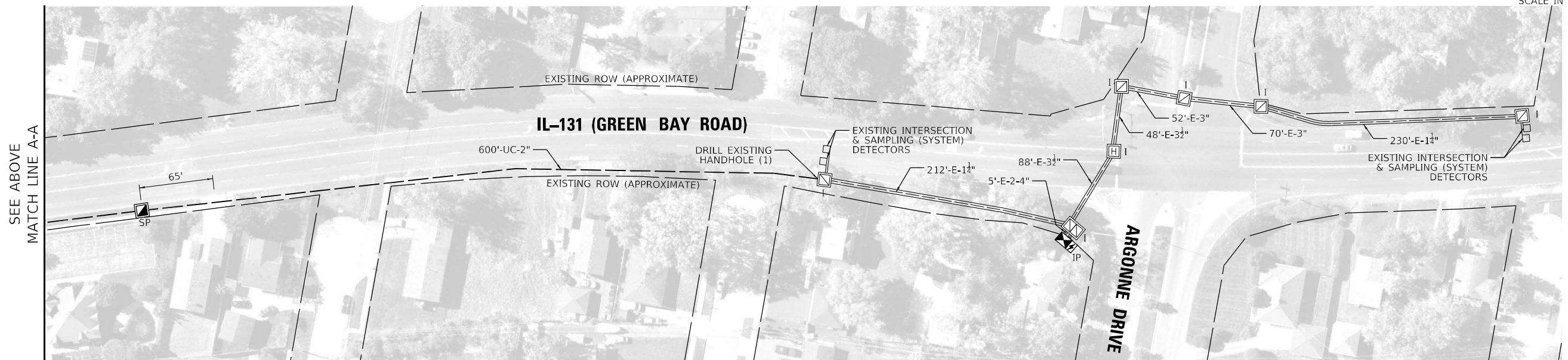
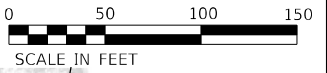
CABLE PLAN, PHASE DESIGNATION DIAGRAM,
AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
ILL. RTE. 131 (GREEN BAY RD.) AND ARGONNE DR. - LOCATION G
SCALE: NONE SHEET 43 OF 67 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-SIGNALS-03	LAKE	67	43
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62R84	

**TS 9385
LCDOT CENTRACS**



MATCH LINE STATION A-A
SEE BELOW



SEE ABOVE
MATCH LINE A-A

NOTE:
DIMENSIONS PROVIDED ARE FROM THE MIDDLE OF CROSS STREET OR DRIVEWAY TO CENTER OF PROPOSED HANDHOLE. THESE DIMENSIONS ARE APPROXIMATE AND CONTRACTOR SHALL VERIFY HANDHOLE LOCATIONS WITH ENGINEER PRIOR TO CONSTRUCTION.

TS SHT NO. 44
MODEL: Default
FILE: 20240315_P1_C_01_01_Location_G-1



USER NAME = jrdavenport	DESIGNED - GR	REVISED -
DRAWN - JRD	REVISIONS -	
PLOT SCALE = 100.0290' / in.	CHECKED - BS	REVISED -
PLOT DATE = 3/15/2024	DATE - 03-15-2024	REVISED -

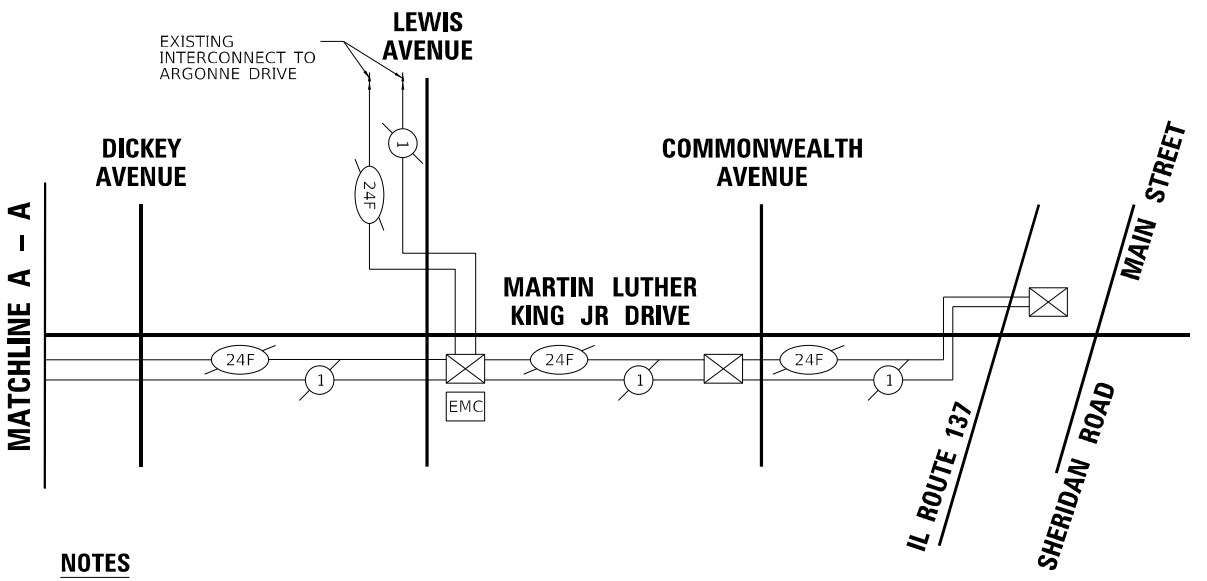
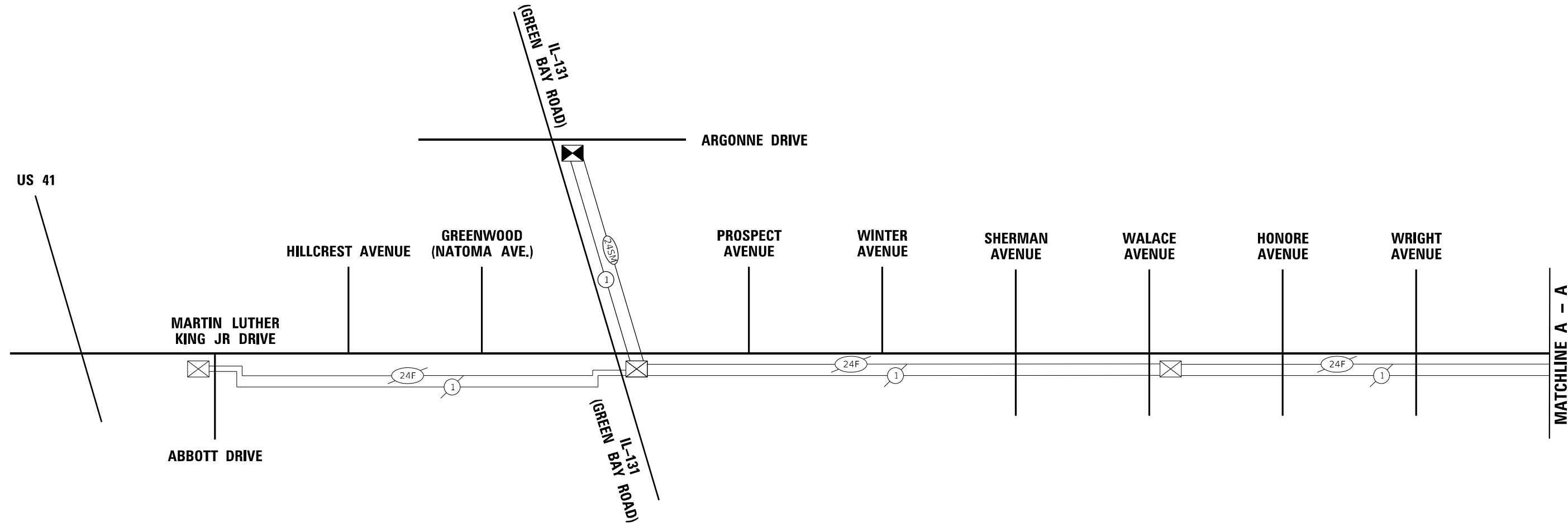
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED INTERCONNECT PLAN
LOCATION G - IL 131 (GREEN BAY ROAD)

SCALE: 1"=50 SHEET 44 OF 67 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-SIGNAL5-03	COOK	67	44
CONTRACT NO. 62R84				
ILLINOIS FED. AID PROJECT				

LCDOT CENTRACS



SCHEDULE OF QUANTITIES

Item	Unit	SUBTOTAL
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	1,725
HANDHOLE	EACH	2
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	2,165
DRILL EXISTING HANDHOLE	EACH	2
TEMPORARY INFORMATION SIGNING	SQ FT	51.4
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 2	EACH	2
FIBER OPTIC CABLE, MICRO, 24 FIBERS, SINGLE MODE	FOOT	2,180

RE-OPTIMIZE TRAFFIC SIGNALS SHALL CONSIST OF TS 9380 AND TS 9385.

NOTES

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

TS SHT NO. 45

MODEL: Default
FILE NAME: Interconnect Schematic Location G

TRANSYSTEMS

USER NAME = jrdavenport	DESIGNED - GR	REVISED -
	DRAWN - JRD	REVISED -
PLOT SCALE = 100,4127' / in.	CHECKED - BS	REVISED -
PLOT DATE = 3/15/2024	DATE - 03-15-2024	REVISED -







**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PROPOSED INTERCONNECT SCHEMATIC AND SCHEDULE OF QUANTITIES
LOCATION G - IL 131 (GREEN BAY ROAD)**

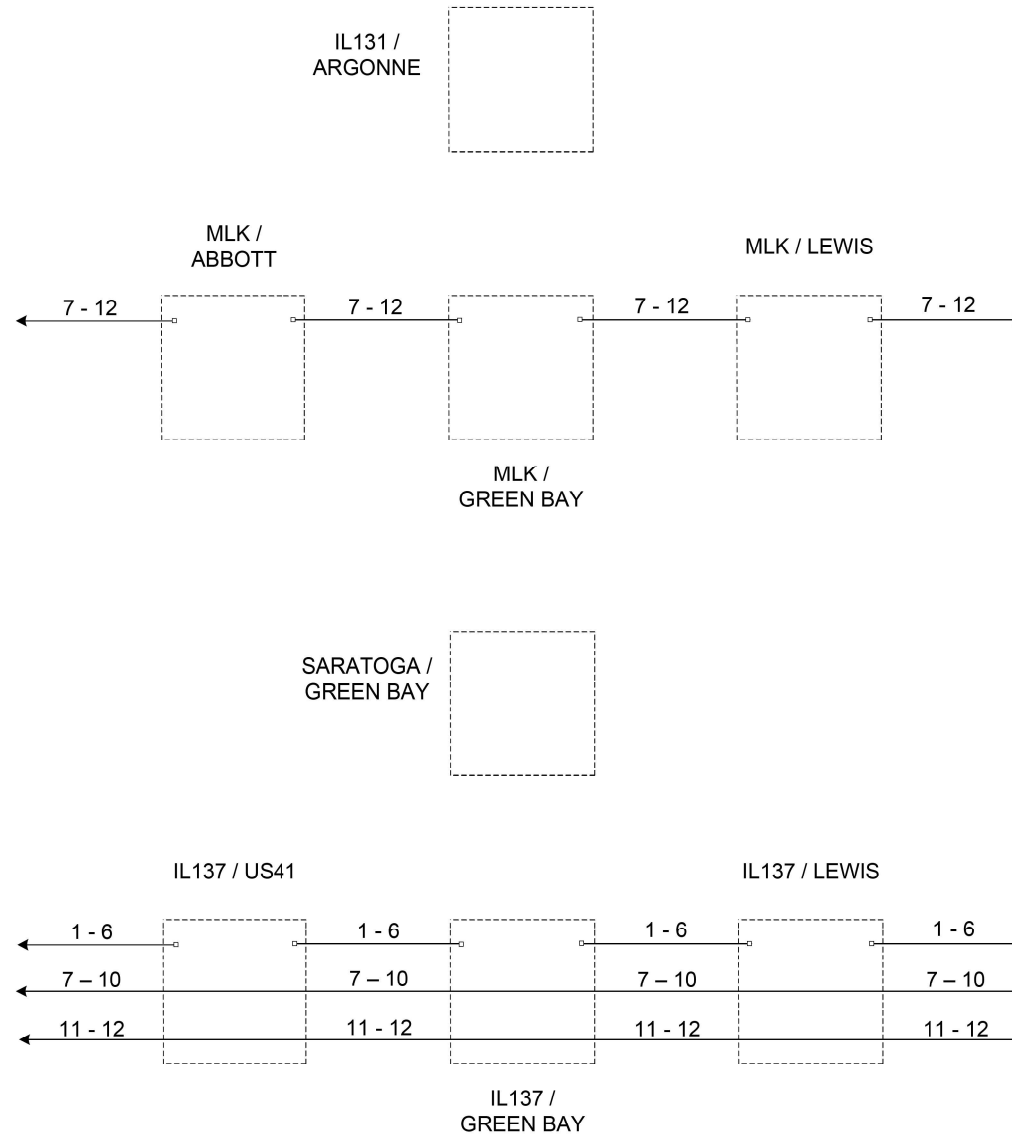
SCALE: NONE SHEET 45 OF 67 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-SIGNALS-03	LAKE	67	45
			CONTRACT NO.62R84	
		ILLINOIS FED. AID PROJECT		

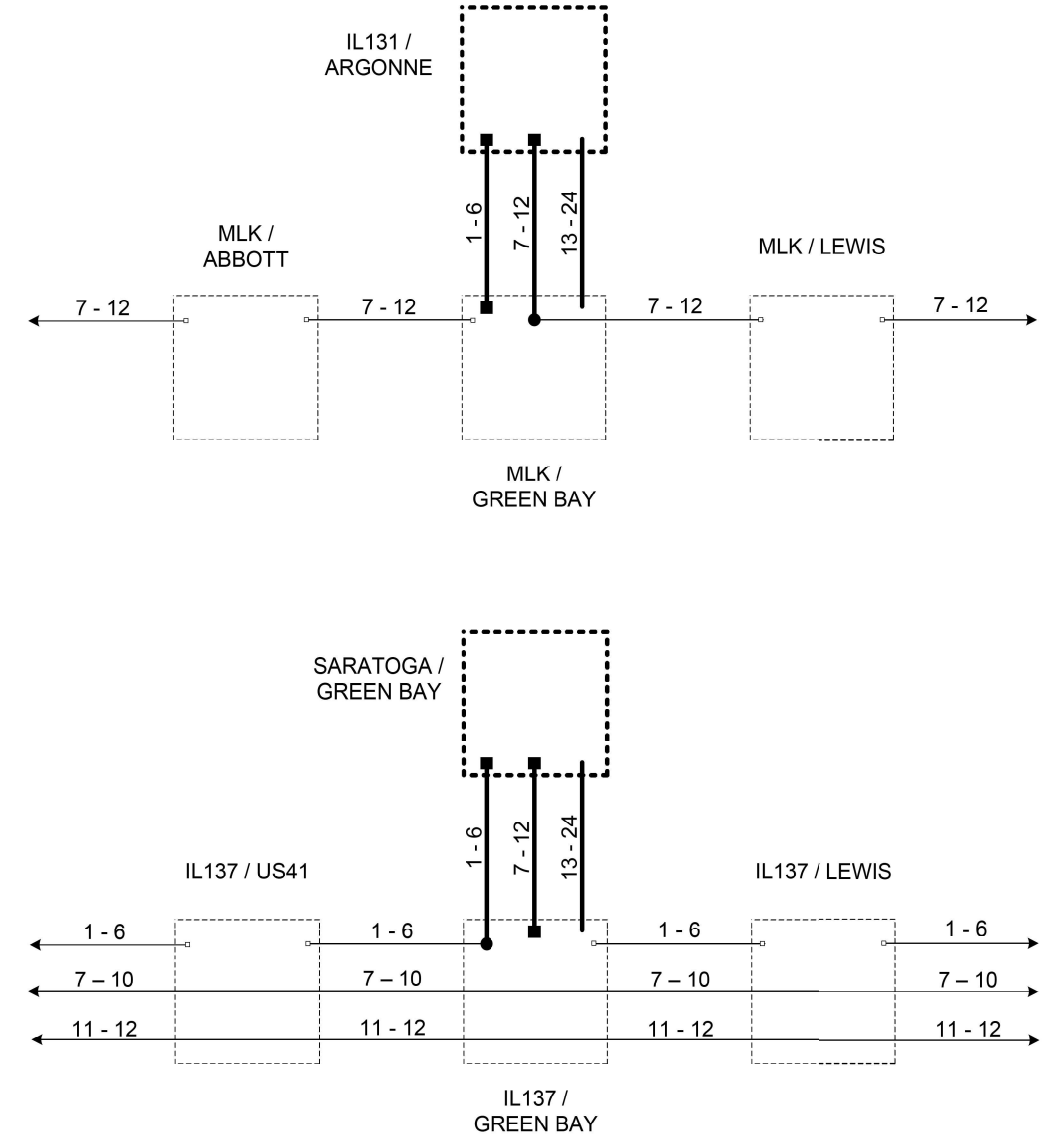
LCDOT CENTRACS

-  EXISTING CONNECTOR / EXISTING FIBER
-  NEW CONNECTOR / EXISTING FIBER
-  EXISTING FUSION SPLICE / EXISTING FIBER
-  NEW FUSION SPLICE / EXISTING FIBER
-  NEW CONNECTOR / NEW FIBER
-  NEW FUSION SPLICE / NEW FIBER

EXISTING

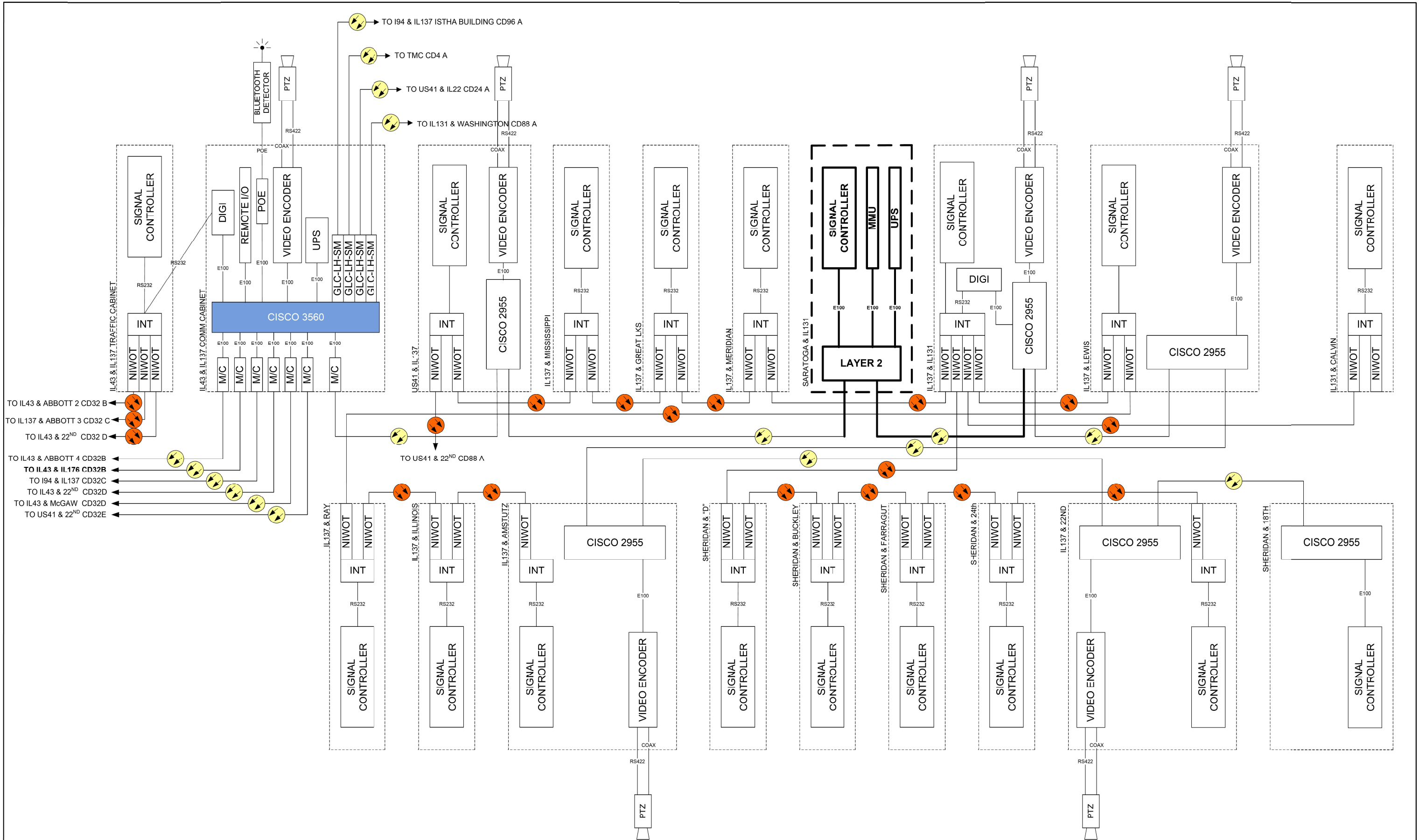


PROPOSED



TS SHT NO. 46

DESIGNED - DG	REVISED -	LAKE COUNTY DIVISION OF TRANSPORTATION	GREEN BAY ARGONNE AND SARATOGA FIBER SPLICING DIAGRAM		ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS	
DRAWN - YM	REVISED -				VAR		2024-SIGNALS-03	46	67	
CHECKED - DG	REVISED -				SCALE N/A					
DATE 2023.10.10	REVISED -									



IL137 & US41

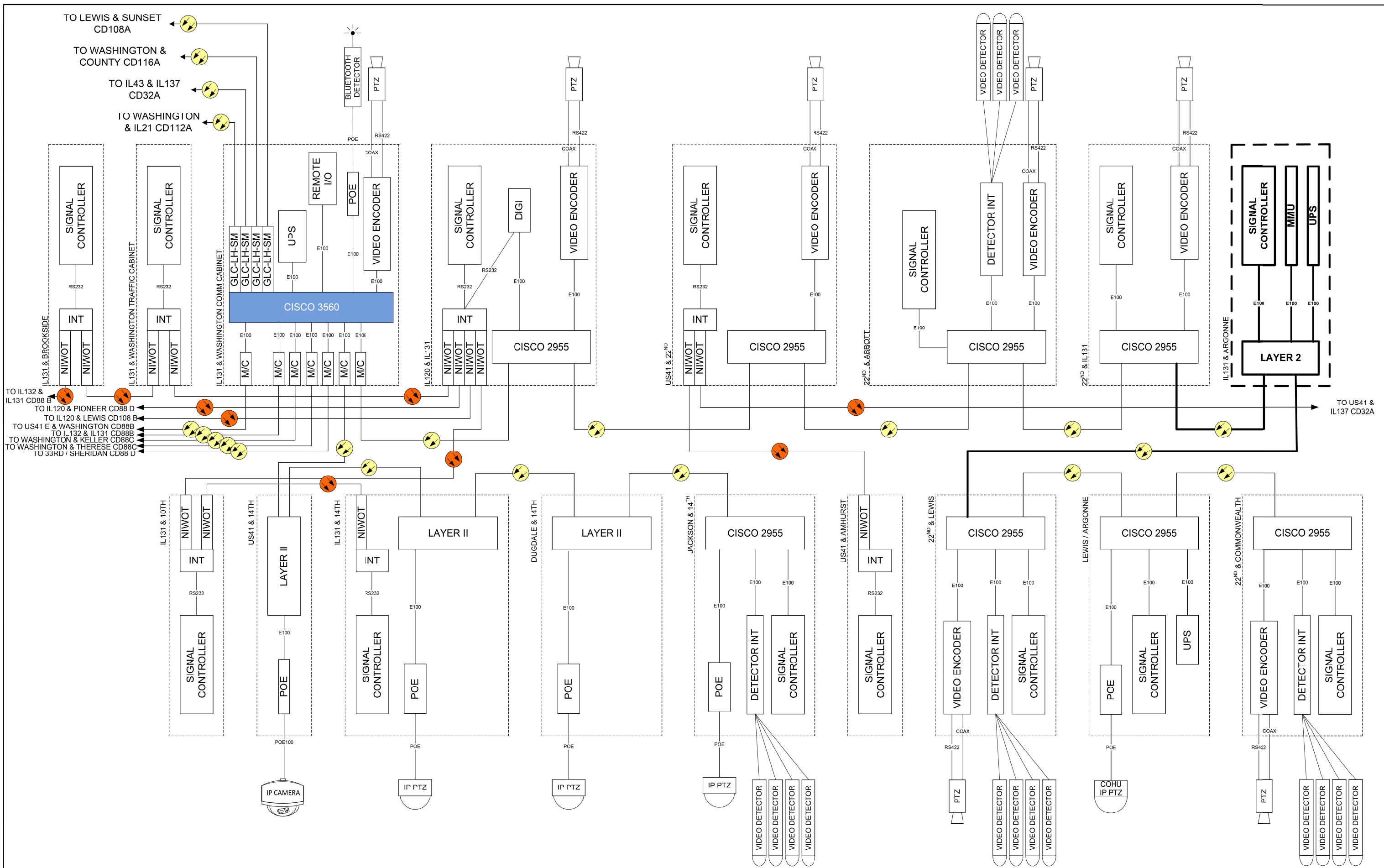
DESIGNED - DG	REVISED -
DRAWN - YM	REVISED -
CHECKED - DG	REVISED -
DATE 2023.10.10	REVISED -

LAKE COUNTY
DIVISION OF TRANSPORTATION

32A
IL137 / IL43

SCALE N/A

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
VAR		2024-SIGNAL5-03	47	67



DESIGNED - DG	REVISED -
DRAWN - YM	REVISED -
CHECKED - DG	REVISED -
DATE 2023.10.10	REVISED -

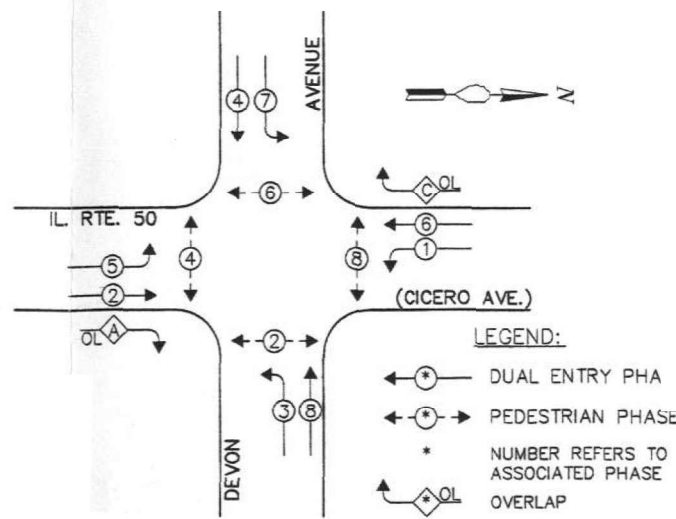
LAKE COUNTY
DIVISION OF TRANSPORTATION

88A
IL131 / WASHINGTON

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
VAR		2024-SIGNALS-03	48	67

SCALE N/A

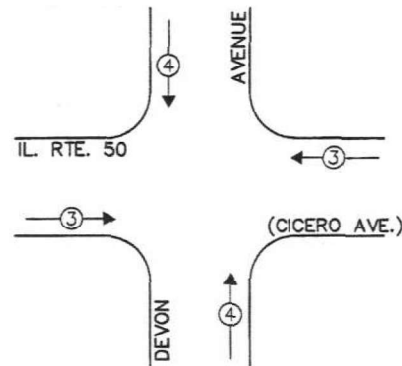
EXISTING AND PROPOSED CONTROLLER SEQUENCE



RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2	+ 3
C	= 6	+ 7

EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

REMOVAL AND RELOCATION NOTES

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE STATE OF ILLINOIS AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE STATE STOCK.

1 EACH CONTROLLER AND CABINET (COMPLETE)

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

1 EACH UNINTERRUPTIBLE POWER SUPPLY

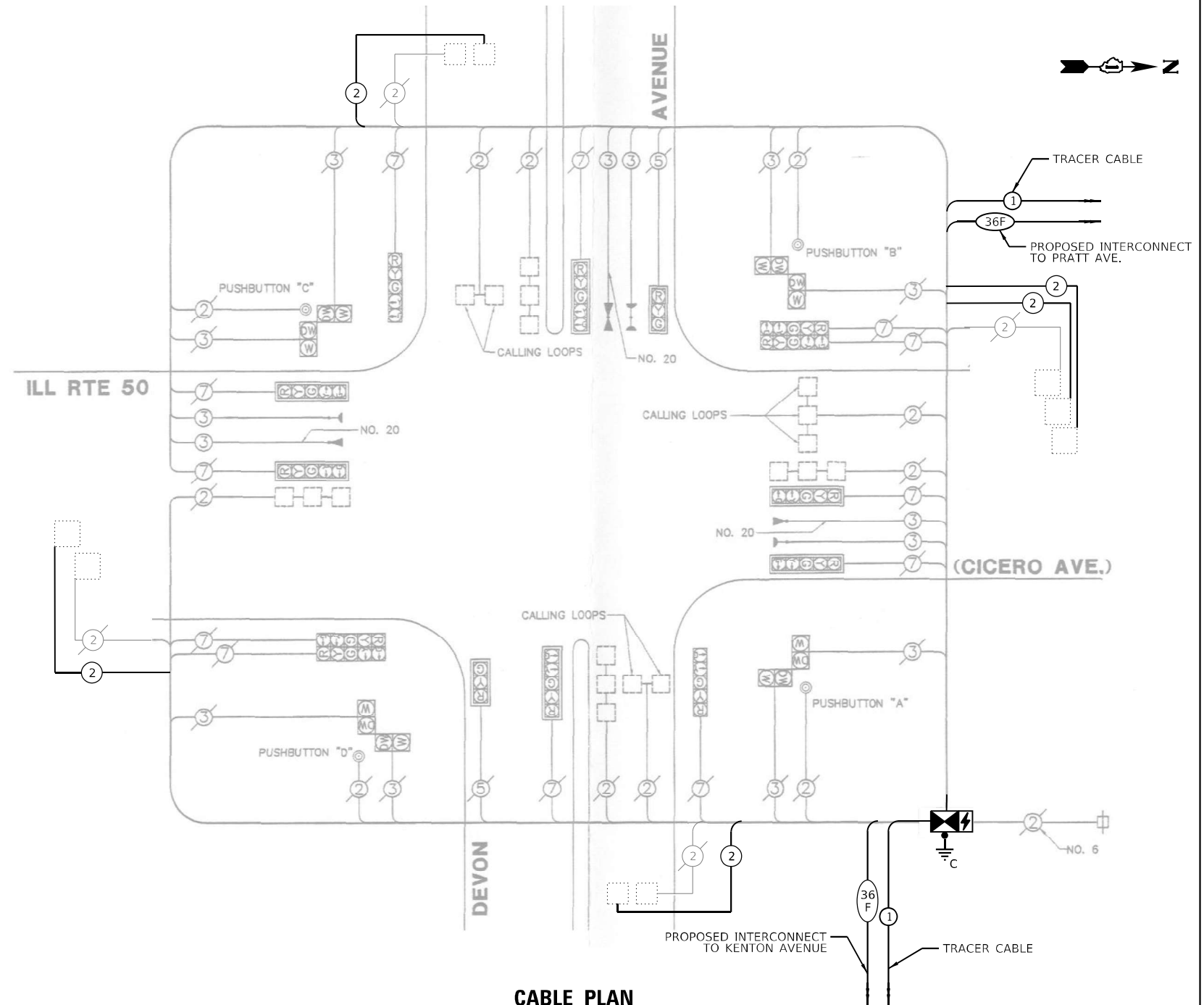
THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND RELOCATED TO THE PROPOSED TRAFFIC SIGNAL CONTROLLER AND CABINET.

1 EACH LIGHT DETECTOR AMPLIFIER

ENERGY COSTS TO:

ILLINOIS DEPARTMENT OF TRANSPORTATION
201 CENTER CT
SCHAUMBURG, IL 60196

ENERGY SUPPLY: CONTACT: NEW BUSINES DEPT
PHONE: (866)-639-3532
COMPANY: COMED
ACCOUNT NUMBER: 20731-18191
METER NUMBER: ---



CABLE PLAN
(NOT TO SCALE)

SCHEDULE OF QUANTITIES

Item	Unit	SUBTOTAL
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRANSCIEVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1,937
INDUCTIVE LOOP DETECTOR	EACH	16
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET (SPECIAL)	EACH	1
UNINTERRUPTABLE POWER SUPPLY (SPECIAL)	EACH	1

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	2	11	22
4-SECTION	-	14	-
5-SECTION	12	13	156
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL CONTROLLER	8	15	120
MASTER CONTROLLER	1	150	150
UPS	-	100	-
UPS	1	25	25
DETECTION RADAR OR VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	-	35	-
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING		473	
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING		1,078	

TS SHT NO. 49

MODEL: Default
FILE NAME: Location 11_Cable Plans

TRANSYSTEMS

USER NAME = jrdavenport
PLOT SCALE = 40,0000 * / in.
PLOT DATE = 3/15/2024

DESIGNED - GR
DRAWN - JRD
CHECKED - BS
DATE - 03-15-2024

REVISED -
REVISED -
REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

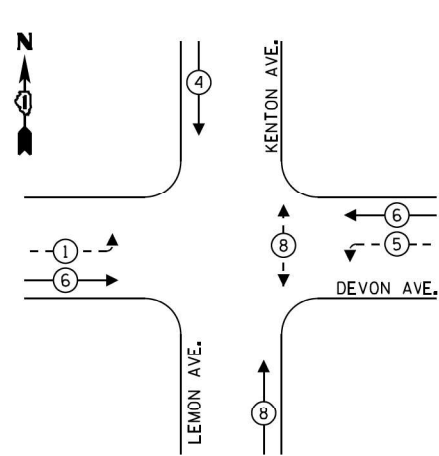
**CABLE PLAN, PHASE DESIGNATION DIAGRAM,
AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
DEVON AVE. AND IL RT. 50 /CICERO AVE. - LOCATION H**
SCALE: NONE SHEET 49 OF 67 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2024-SIGNALS-03	COOK	67	49

CONTRACT NO. 62R84
ILLINOIS FED. AID PROJECT

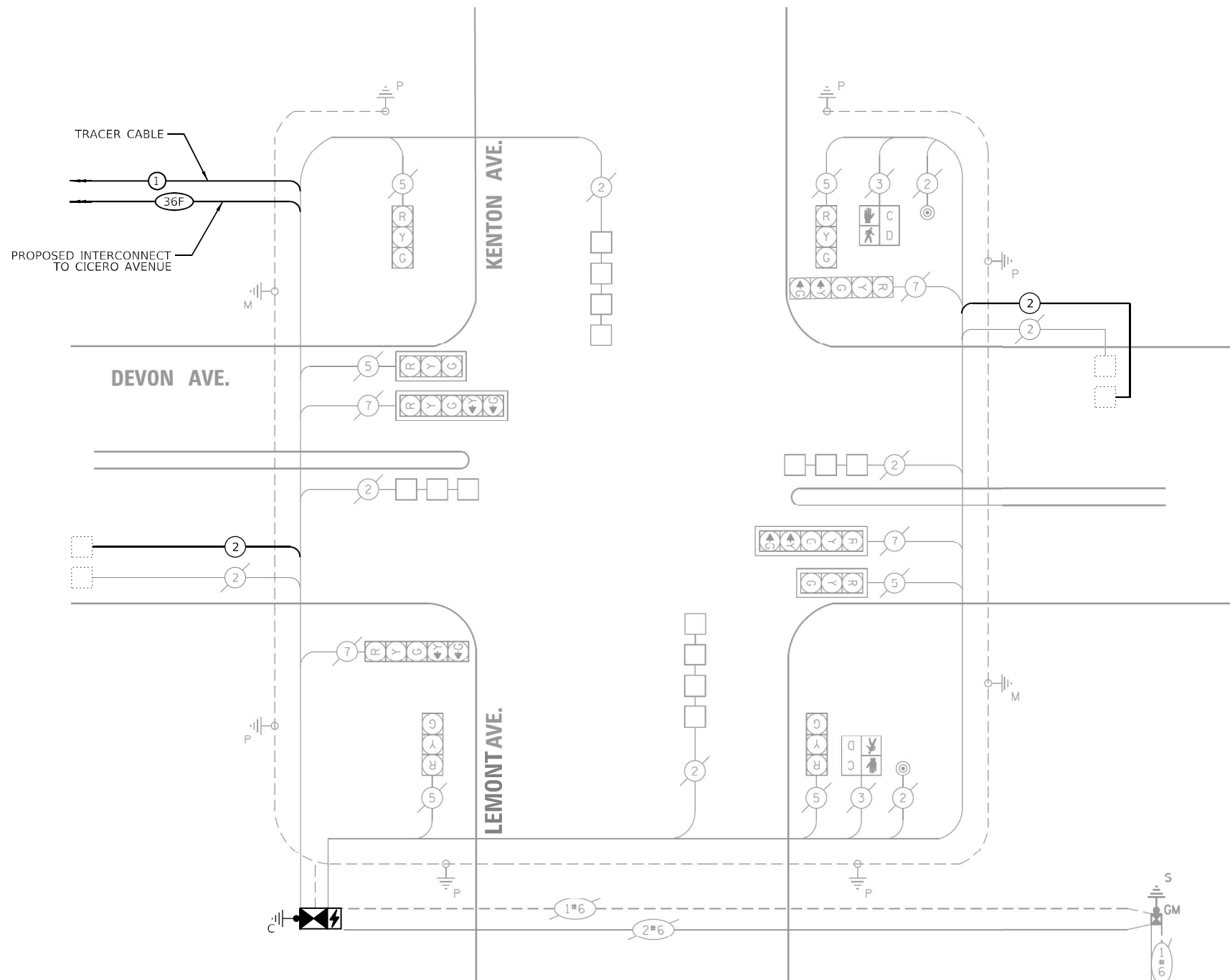
**TS 2590
EAGLE 1L**

EXISTING AND PROPOSED CONTROLLER SEQUENCE



LEGEND:

- ← (⊛) ← PROTECTED PHASE
- ← (⊛) - - PROTECTED/PERMITTED PHASE
- ← (⊛) → PEDESTRIAN PHASE
- ⊛ OL OVERLAP



CABLE PLAN
(NOT TO SCALE)

SCHEDULE OF QUANTITIES

Item	Unit	SUBTOTAL
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	714
INDUCTIVE LOOP DETECTOR	EACH	8
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET (SPECIAL)	EACH	1
UNINTERRUPTIBLE POWER SUPPLY (SPECIAL)	EACH	1

REMOVAL NOTES

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

- 1 EACH CONTROLLER AND CABINET (COMPLETE)
- 1 EACH UNINTERRUPTIBLE POWER SUPPLY

ENERGY COSTS TO:

VILLAGE OF LINCOLNWOOD
6900 LINCOLN AVE
LINCOLNWOOD, IL 60712

ENERGY SUPPLY: CONTACT: NEW BUSINES DEPT
PHONE: (866)-639-3532
COMPANY: COMED
ACCOUNT NUMBER: 21551-60028
METER NUMBER: ---

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	6	11	66
4-SECTION		14	
5-SECTION	4	13	52
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL CONTROLLER	2	15	30
MASTER CONTROLLER	1	150	150
UPS	1	25	25
DETECTION RADAR OR VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	-	35	-
CELLULAR MODEM		15	
TOTAL UPS SIZING		323	
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING		928	

TS SHT NO. 50

MODEL: Default
FILE NAME: Location 11_Cable Plans

TRANSYSTEMS

USER NAME = jr@davenport	DESIGNED - GR	REVISED -
PLOT SCALE = 40,0000 * / in.	DRAWN - JRD	REVISED -
PLOT DATE = 3/15/2024	CHECKED - BS	REVISED -
	DATE - 03-15-2024	REVISED -

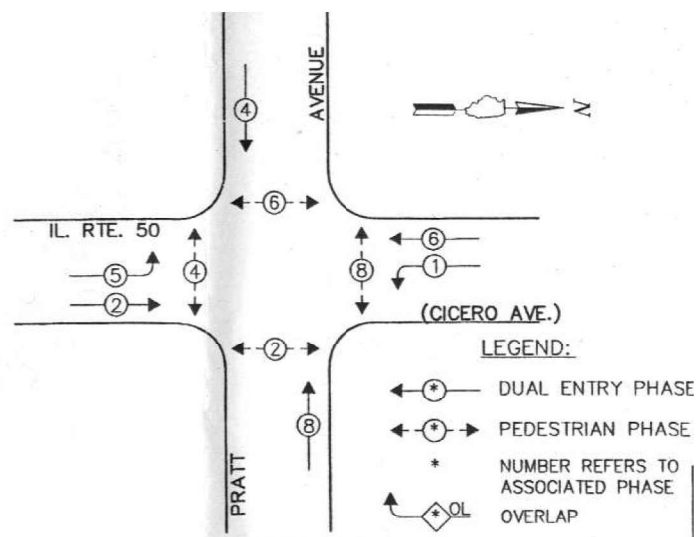
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE LEMONT AVE, KENTON AVE, AND DEVON AVE. - LOCATION H			
SCALE: NONE	SHEET 50 OF 67 SHEETS	STA. TO STA.	

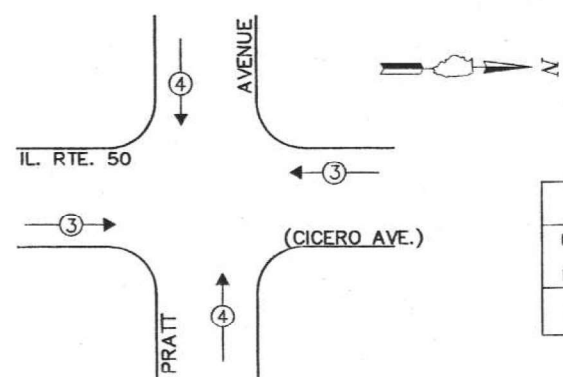
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-SIGNALS-03	COOK	67	50
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62R84	

**TS 11185
EAGLE 1L**

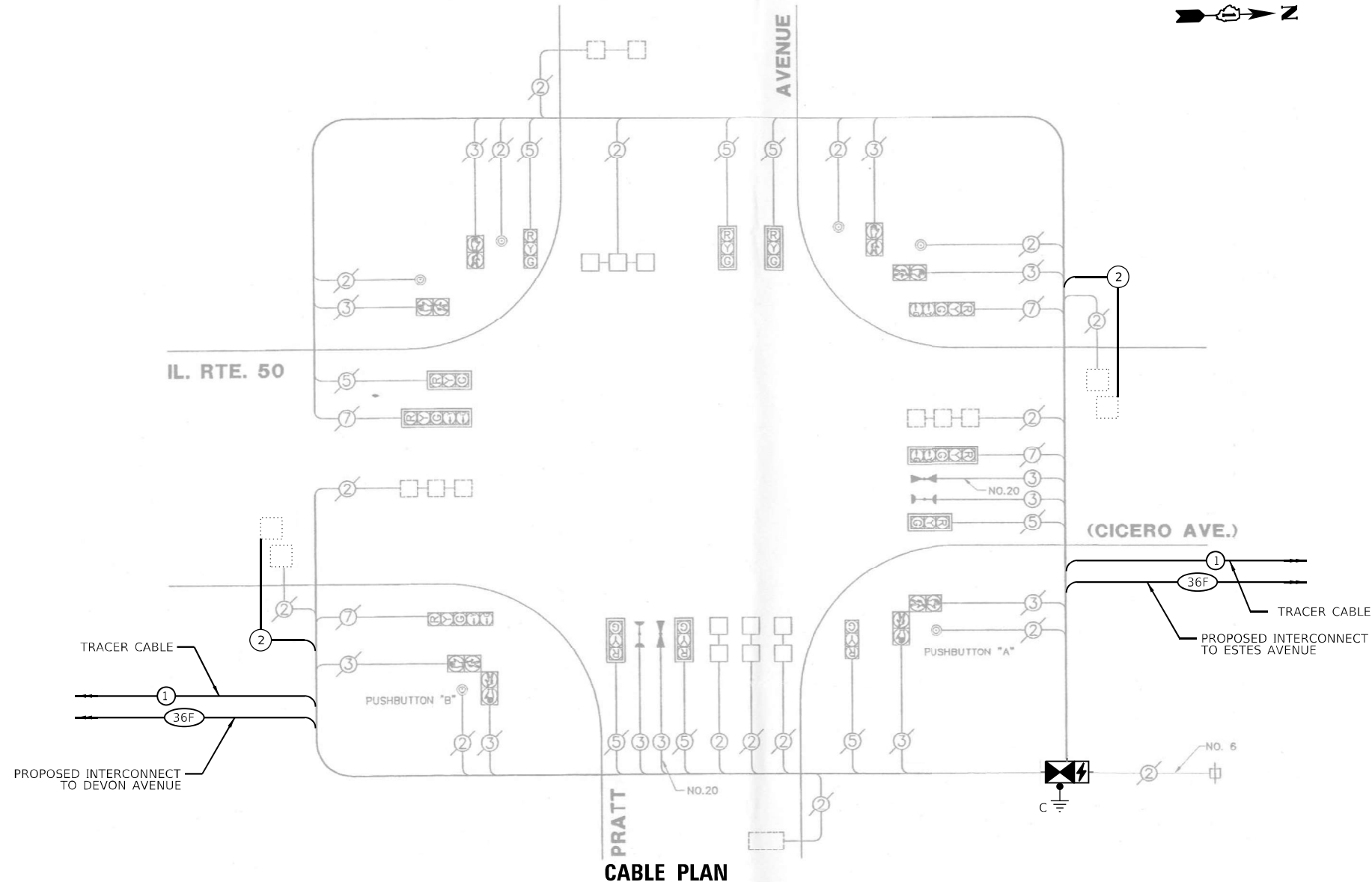
EXISTING AND PROPOSED CONTROLLER SEQUENCE



EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



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



SCHEDULE OF QUANTITIES

Item	Unit	SUBTOTAL
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	743
INDUCTIVE LOOP DETECTOR	EACH	12
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET (SPECIAL)	EACH	1
UNINTERRUPTIBLE POWER SUPPLY (SPECIAL)	EACH	1

REMOVAL NOTES

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

- 1 EACH CONTROLLER AND CABINET (COMPLETE)
- 1 EACH UNINTERRUPTIBLE POWER SUPPLY

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND RELOCATED TO THE PROPOSED TRAFFIC SIGNAL CONTROLLER AND CABINET.

- 1 EACH LIGHT DETECTOR AMPLIFIER

ENERGY COSTS TO:

ILLINOIS DEPARTMENT OF TRANSPORTATION
201 CENTER CT
SCHAUMBURG, IL 60196

ENERGY SUPPLY: CONTACT: NEW BUSINES DEPT
PHONE: (866)-639-3532
COMPANY: COMED
ACCOUNT NUMBER: 20731-18191
METER NUMBER: ---

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	8	11	88
4-SECTION	-	14	-
5-SECTION	4	13	52
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL CONTROLLER	8	15	120
MASTER CONTROLLER	1	150	150
UPS	1	25	25
DETECTION RADAR OR VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	-	35	-
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING		435	
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING		1,040	

TS SHT NO. 51

MODEL: Default
FILE NAME: Location_H_Cable_Plan

TRANSYSTEMS

USER NAME = jrdavenport
PLOT SCALE = 40,0000 * / in.
PLOT DATE = 3/15/2024

DESIGNED - GR
DRAWN - JRD
CHECKED - BS
DATE - 03-15-2024

REVISED -
REVISED -
REVISED -
REVISED -

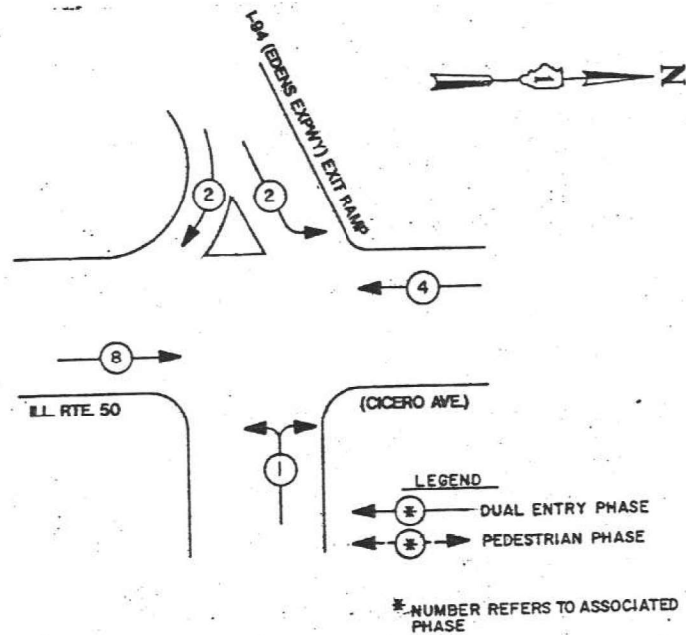
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE PRATT AVE. AND IL RTE. 50 /CICERO AVE. - LOCATION H
SCALE: NONE SHEET 51 OF 67 SHEETS STA. TO STA.

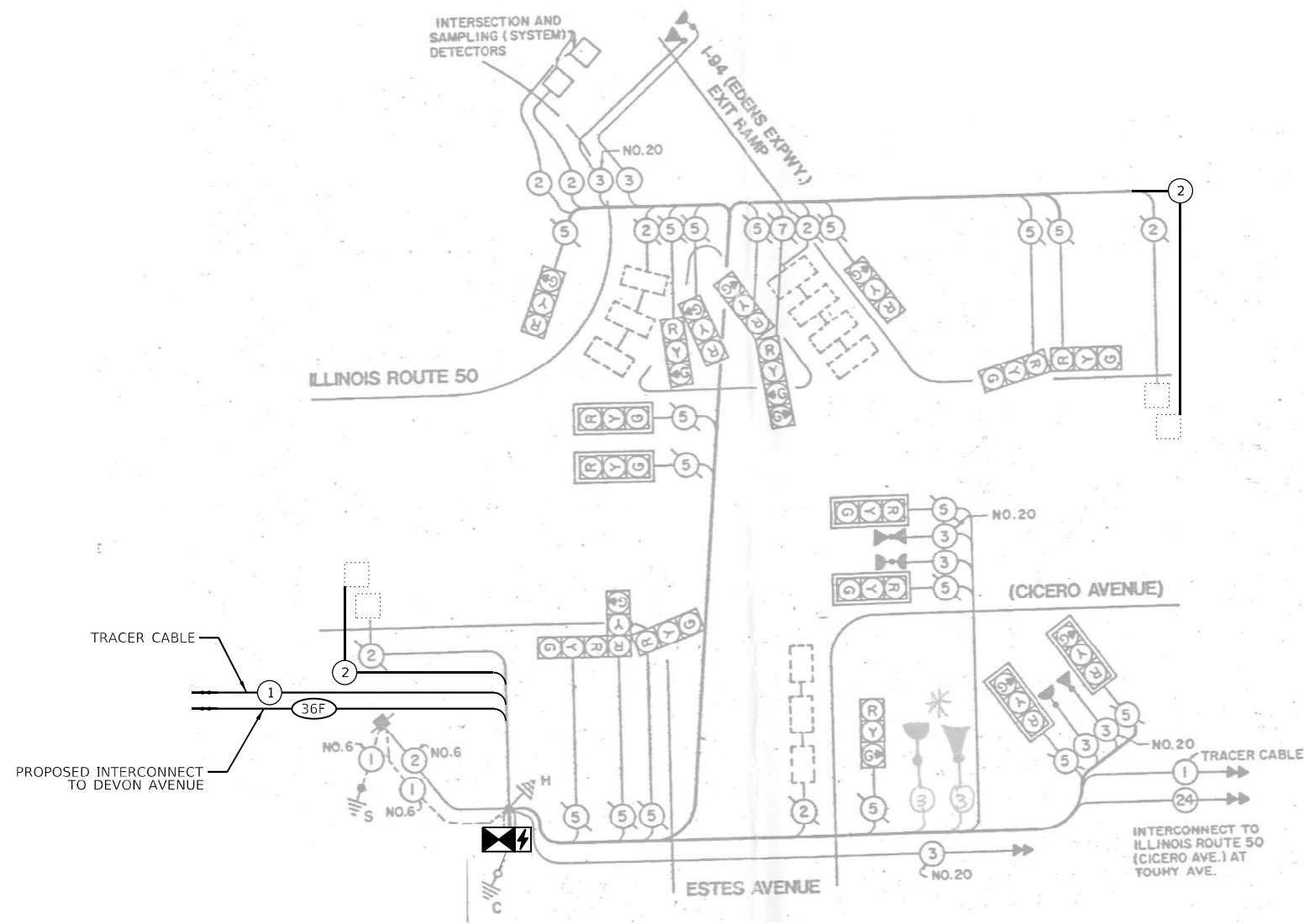
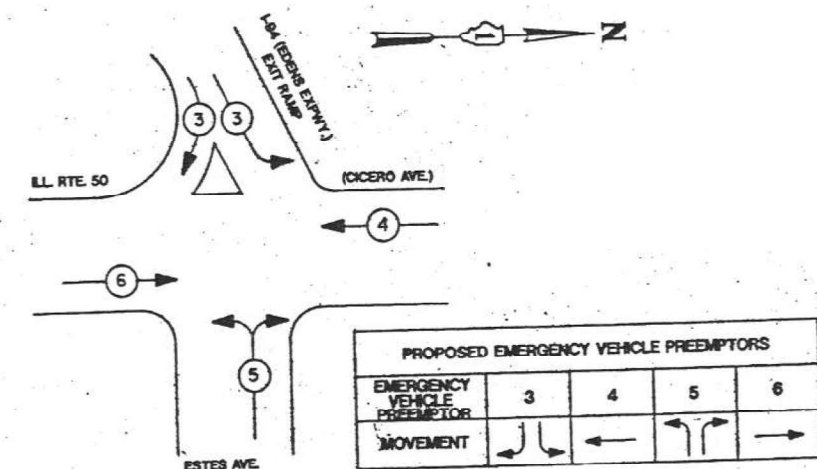
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-SIGNALS-03	COOK	67	51
CONTRACT NO.62R84				
ILLINOIS FED. AID PROJECT				

TS 2605 EAGLE 1L

EXISTING AND PROPOSED CONTROLLER SEQUENCE



EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



CABLE PLAN
(NOT TO SCALE)

SCHEDULE OF QUANTITIES

Item	Unit	SUBTOTAL
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	817
INDUCTIVE LOOP DETECTOR	EACH	2
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
REMOVE AND REPLACE BATTERIES FOR UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1

REMOVAL NOTES

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

1 EACH CONTROLLER (ONLY)
1 EACH BATTERIES FROM UNINTERRUPTIBLE POWER SUPPLY

ENERGY COSTS TO:
ILLINOIS DEPARTMENT OF TRANSPORTATION
201 CENTER CT
SCHAUMBURG, IL 60196

ENERGY SUPPLY: CONTACT: NEW BUSINES DEPT
PHONE: (866)-639-3532
COMPANY: COMED
ACCOUNT NUMBER: 20731-18191
METER NUMBER: ---

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	17	11	187
4-SECTION	1	14	14
5-SECTION	-	13	-
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR OR VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	-	35	-
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING		376	
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING		981	

TS SHT NO. 52

TRANSYSTEMS

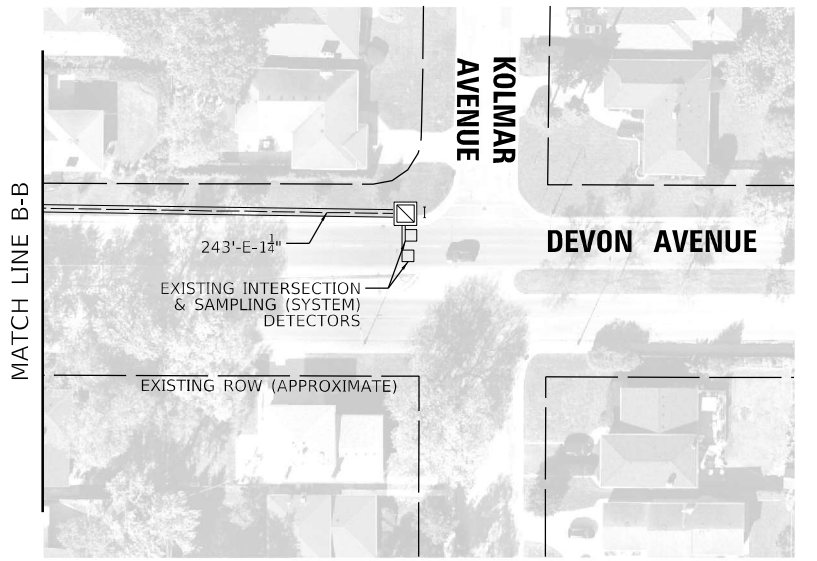
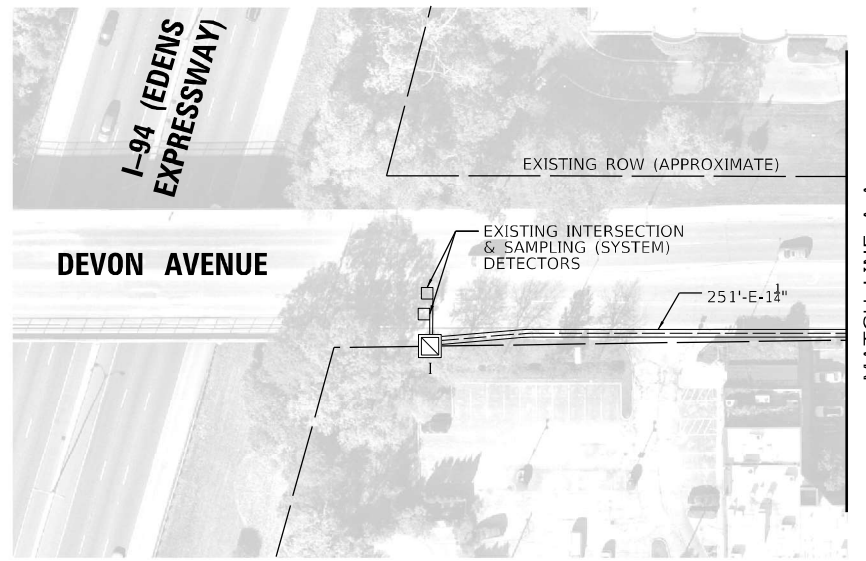
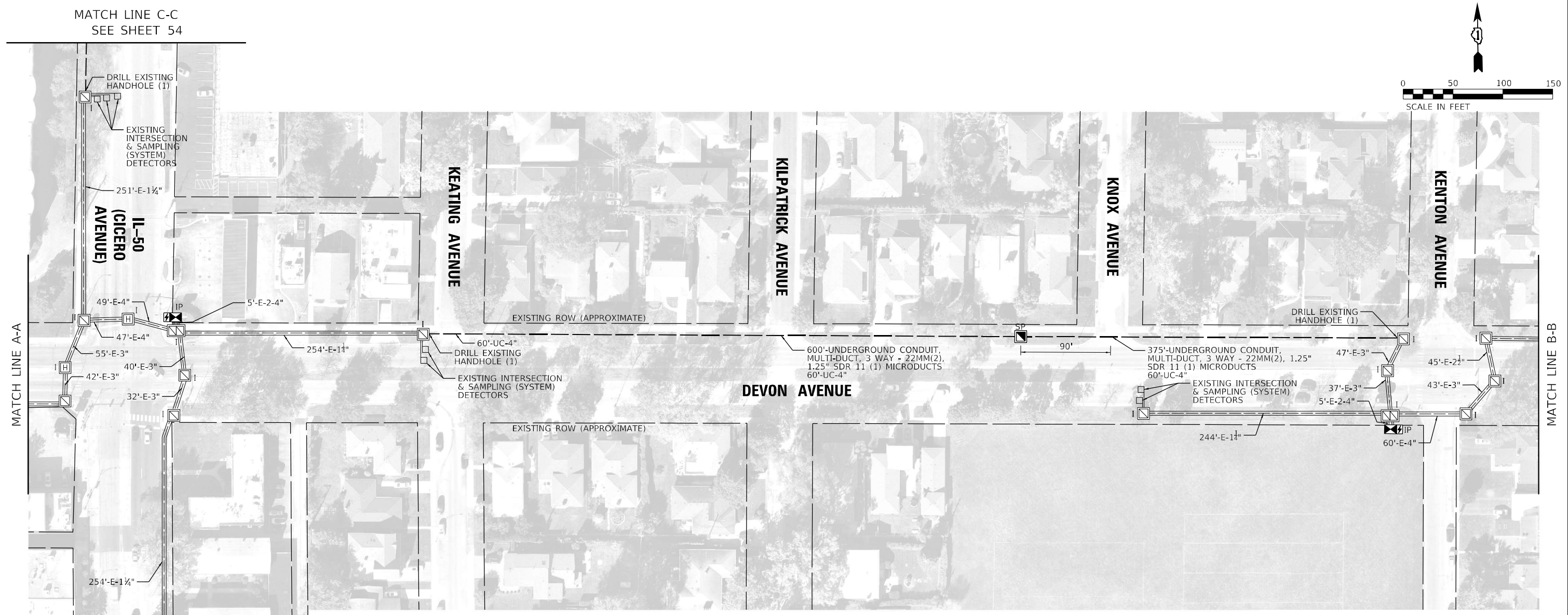
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	DATE - 03-15-2024	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
I-94 EXIT RAMP /ESTES AVE. AND IL RTE. 50 /CICERO AVE. - LOCATION H

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-SIGNALS-03	COOK	67	52
			CONTRACT NO.62R84	
ILLINOIS FED. AID PROJECT				

TS 65 EAGLE 1L



NOTE:
 DIMENSIONS PROVIDED ARE FROM THE MIDDLE OF CROSS STREET OR DRIVEWAY TO CENTER OF PROPOSED HANDHOLE. THESE DIMENSIONS ARE APPROXIMATE AND CONTRACTOR SHALL VERIFY HANDHOLE LOCATIONS WITH ENGINEER PRIOR TO CONSTRUCTION.

TS SHT NO. 53
MODEL: Default
 FILE NAME: PR UC 0301 Location H-1



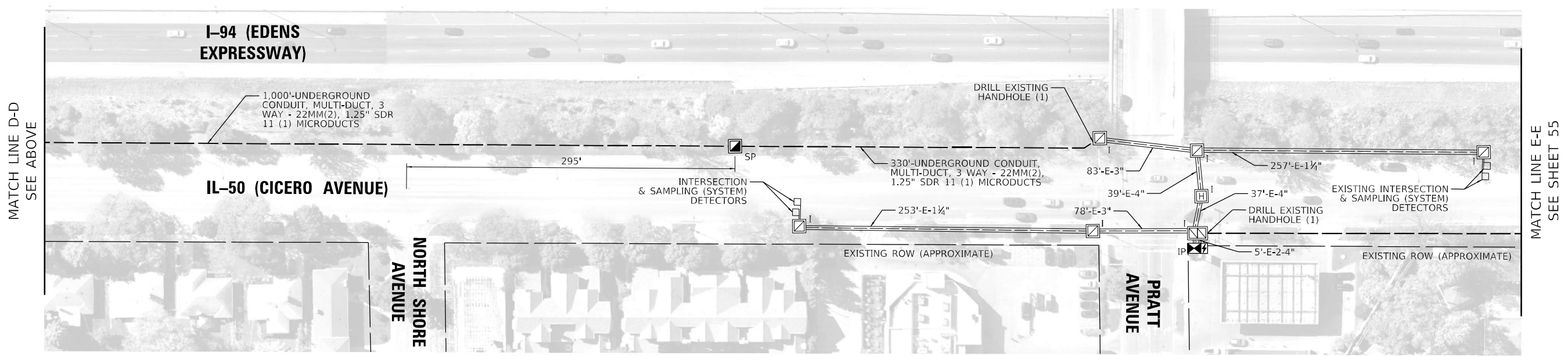
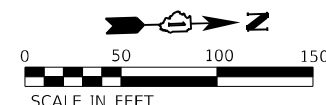
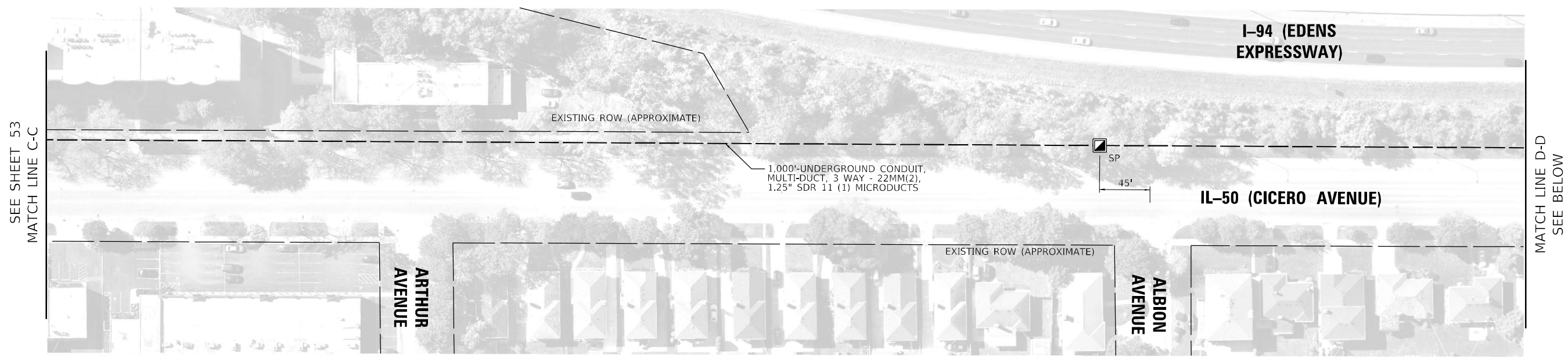
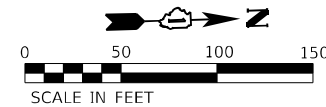
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	DATE - 03-15-2024	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

PROPOSED INTERCONNECT PLAN LOCATION H - DEVON AVENUE			
SCALE: 1"=50	SHEET 53	OF 67 SHEETS	STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-SIGNALS-03	COOK	67	53
CONTRACT NO.62R84				
ILLINOIS FED. AID PROJECT				

EAGLE 1L

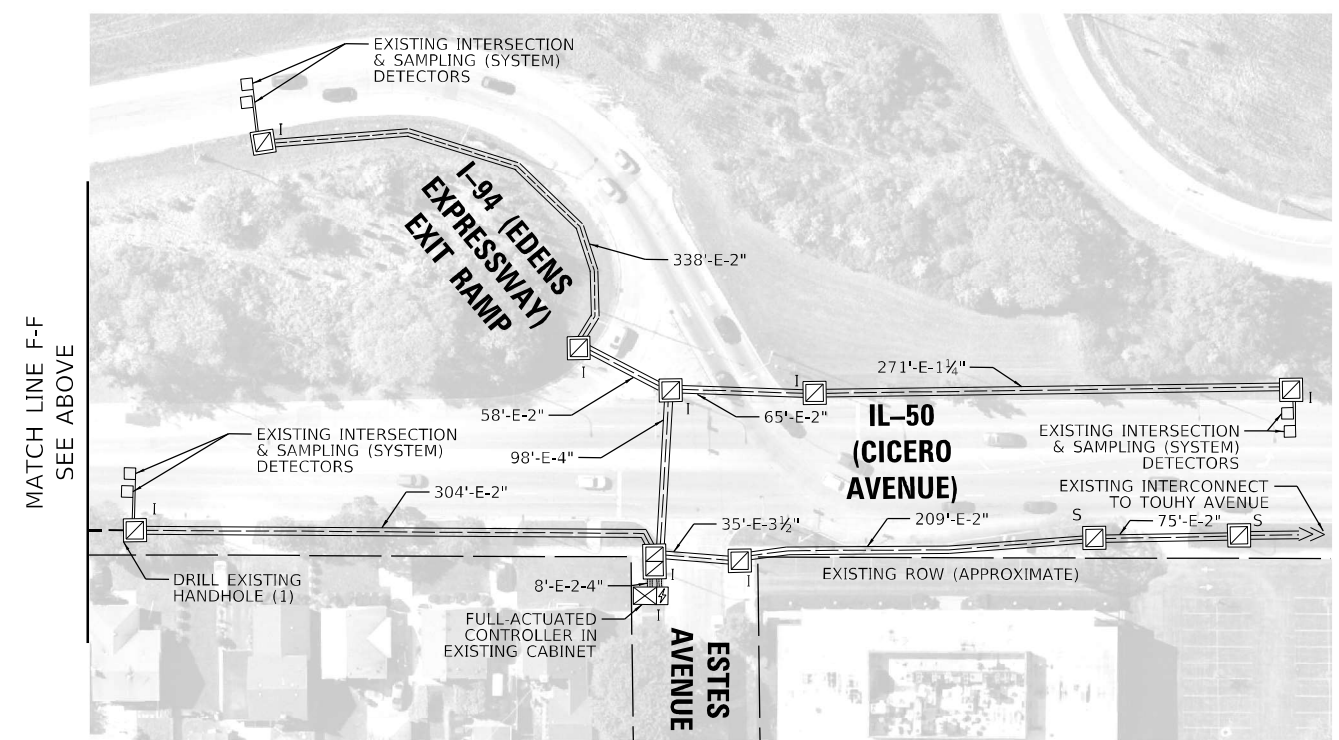
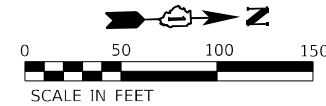
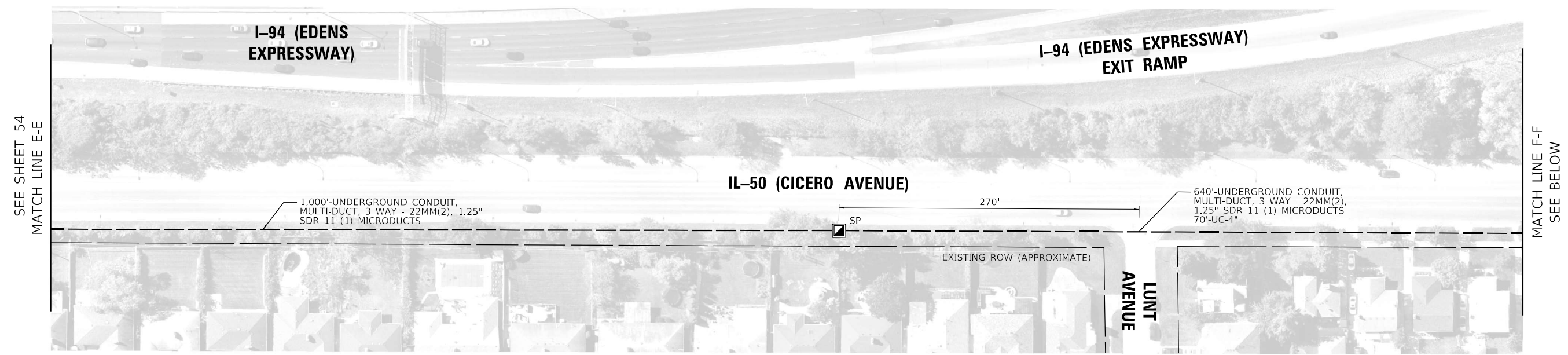
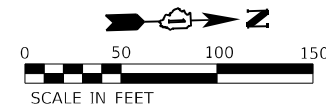


NOTE:
 DIMENSIONS PROVIDED ARE FROM THE MIDDLE OF CROSS STREET OR DRIVEWAY TO CENTER OF PROPOSED HANDHOLE. THESE DIMENSIONS ARE APPROXIMATE AND CONTRACTOR SHALL VERIFY HANDHOLE LOCATIONS WITH ENGINEER PRIOR TO CONSTRUCTION.

TS SHT NO. 54
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 FILE NAME: PR IC Plan Location H2

TRANSYSTEMS	USER NAME = jrdavenport	DESIGNED - GR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PROPOSED INTERCONNECT PLAN LOCATION H - IL-50 (CICERO AVENUE)			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	PLOT SCALE = 100,000' / in.	DRAWN - JRD	REVISED -		SCALE: 1"=50'	SHEET 54	OF 67 SHEETS	STA.	TO STA.	2024-SIGNALS-03	COOK	67	54
	PLOT DATE = 3/15/2024	CHECKED - BS	REVISED -					CONTRACT NO. 62R84			ILLINOIS FED. AID PROJECT		
	DATE - 03-15-2024	REVISED -											

EAGLE 1L



NOTE:
 DIMENSIONS PROVIDED ARE FROM THE MIDDLE OF CROSS STREET OR DRIVEWAY TO CENTER OF PROPOSED HANDHOLE. THESE DIMENSIONS ARE APPROXIMATE AND CONTRACTOR SHALL VERIFY HANDHOLE LOCATIONS WITH ENGINEER PRIOR TO CONSTRUCTION.

TS SHT NO. 55
MODEL: Default
 FILE NAME: PR IC Plan Location H-3

TRANSYSTEMS

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DRAWN - JRD	REVISIONS -	
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PLOT DATE = 3/15/2024	DATE - 03-15-2024	REVISED -

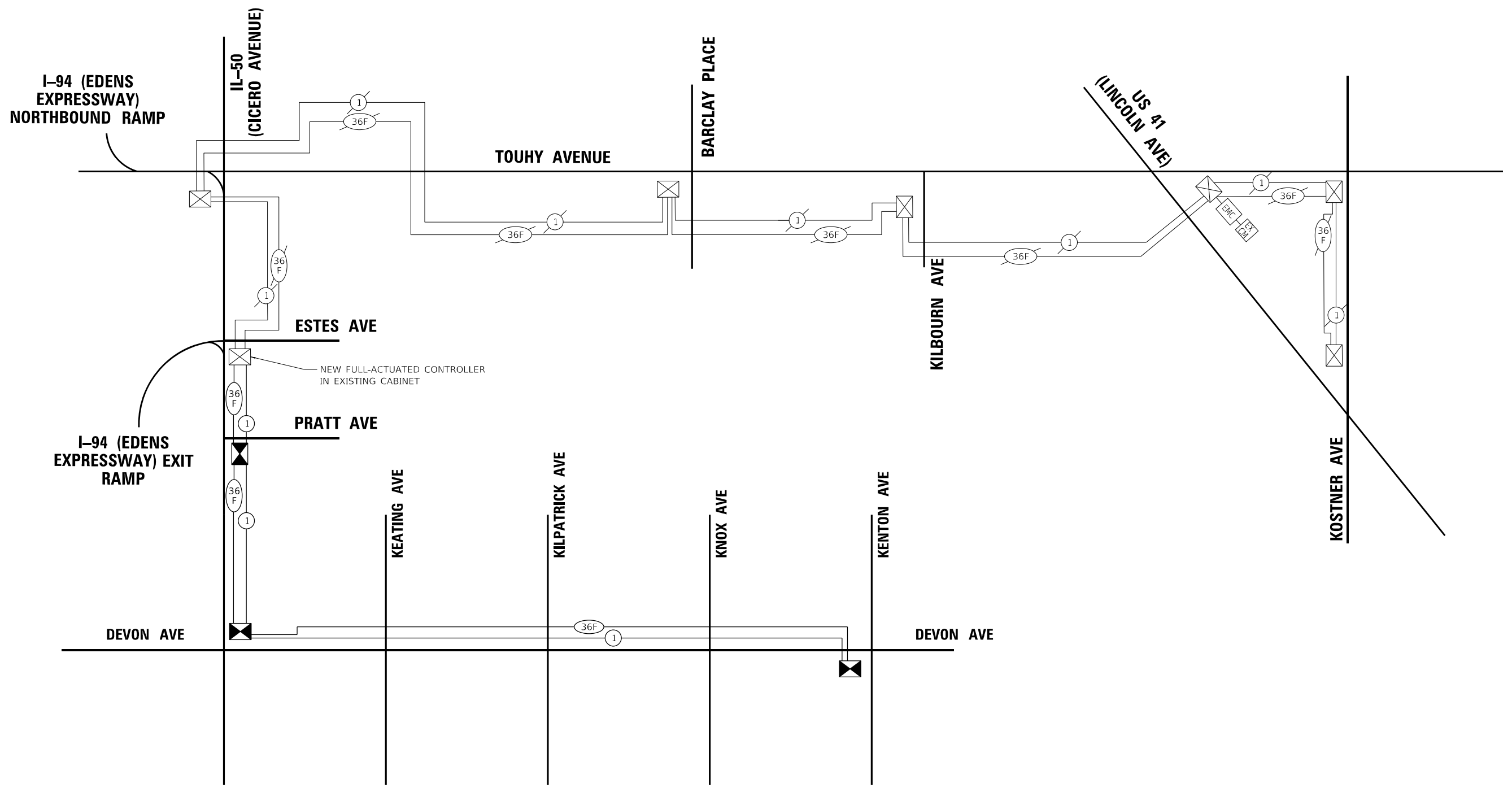
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**PROPOSED INTERCONNECT PLAN
 LOCATION H - IL-50 (CICERO AVENUE)**

SCALE: 1"=50' SHEET 55 OF 67 SHEETS STA. _____ TO STA. _____

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2024-SIGNALS-03	COOK	67	55
CONTRACT NO.62R84				
ILLINOIS FED. AID PROJECT				

EAGLE 1L



SCHEDULE OF QUANTITIES

Item	Unit	SUBTOTAL
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	250
HANDHOLE	EACH	4
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	6,325
DRILL EXISTING HANDHOLE	EACH	6
FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F	FOOT	6,375
TEMPORARY INFORMATION SIGNING	SQ FT	102.8
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 2	EACH	4
UNDERGROUND CONDUIT, MULTI-DUCT, 3 WAY - 22MM (2), 1.25" SDR 11 (1) MICRODUCTS	FOOT	4,945

RE-OPTIMIZE TRAFFIC SIGNALS SHALL CONSIST OF TS 65, TS 2590, TS 2605, AND TS 11185.

TS SHT NO. 56
 MODEL: Default
 FILE NAME: Interconnect Schematic Location 11



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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PROPOSED INTERCONNECT SCHEMATIC AND SCHEDULE OF QUANTITIES
LOCATION H - DEVON AVENUE**

SCALE: NONE SHEET 56 OF 67 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-SIGNALS-03	COOK	67	56
CONTRACT NO.62R84			ILLINOIS FED. AID PROJECT	

EAGLE 1L

TRAFFIC SIGNAL LEGEND

(NOT TO SCALE)

ITEM	EXISTING	PROPOSED	ITEM	EXISTING	PROPOSED	ITEM	EXISTING	PROPOSED
CONTROLLER CABINET			HANDHOLE -SQUARE -ROUND			SIGNAL HEAD -(P) PROGRAMMABLE SIGNAL HEAD		
COMMUNICATION CABINET			HEAVY DUTY HANDHOLE -SQUARE -ROUND			SIGNAL HEAD WITH BACKPLATE -(P) PROGRAMMABLE SIGNAL HEAD -(RB) RETROREFLECTIVE BACKPLATE		
MASTER CONTROLLER			DOUBLE HANDHOLE			PEDESTRIAN SIGNAL HEAD AT RAILROAD INTERSECTIONS		
MASTER MASTER CONTROLLER			JUNCTION BOX			PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER		
UNINTERRUPTABLE POWER SUPPLY			RAILROAD CANTILEVER MAST ARM			ILLUMINATED SIGN "NO LEFT TURN"/"NO RIGHT TURN"		
SERVICE INSTALLATION -(P) POLE MOUNTED			RAILROAD FLASHING SIGNAL			NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE, ALL DETECTOR LOOP CABLE TO BE SHIELDED		
SERVICE INSTALLATION -(G) GROUND MOUNTED -(GM) GROUND MOUNTED METERED			RAILROAD CROSSING GATE			GROUND CABLE IN CONDUIT, NO. 6 SOLID COPPER (GREEN)		
TELEPHONE CONNECTION			RAILROAD CROSSBUCK			ELECTRIC CABLE IN CONDUIT, TRACER NO. 14 1/C		
STEEL MAST ARM ASSEMBLY AND POLE			RAILROAD CONTROLLER CABINET			COAXIAL CABLE		
ALUMINUM MAST ARM ASSEMBLY AND POLE			UNDERGROUND CONDUIT (UC), GALVANIZED STEEL			VENDOR CABLE		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE			TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE			COPPER INTERCONNECT CABLE, NO. 18, 3 PAIR TWISTED, SHIELDED		
SIGNAL POST -(BM) BARREL MOUNTED - TEMPORARY			SYSTEM ITEM			FIBER OPTIC CABLE -NO. 62.5/125, MM12F -NO. 62.5/125, MM12F SM12F -NO. 62.5/125, MM12F SM24F		
WOOD POLE			INTERSECTION ITEM			GROUND ROD -(C) CONTROLLER -(M) MAST ARM -(P) POST -(S) SERVICE		
GUY WIRE			REMOVE ITEM					
SIGNAL HEAD			RELOCATE ITEM					
SIGNAL HEAD WITH BACKPLATE			ABANDON ITEM					
SIGNAL HEAD OPTICALLY PROGRAMMED			CONTROLLER CABINET AND FOUNDATION TO BE REMOVED					
FLASHER INSTALLATION -(FS) SOLAR POWERED			MAST ARM POLE AND FOUNDATION TO BE REMOVED					
PEDESTRIAN SIGNAL HEAD			SIGNAL POST AND FOUNDATION TO BE REMOVED					
PEDESTRIAN PUSH BUTTON -(APS) ACCESSIBLE PEDESTRIAN PUSH BUTTON			DETECTOR LOOP, TYPE I					
RADAR DETECTION SENSOR			PREFORMED DETECTOR LOOP					
VIDEO DETECTION CAMERA			SAMPLING (SYSTEM) DETECTOR					
RADAR/VIDEO DETECTION ZONE			INTERSECTION AND SAMPLING (SYSTEM) DETECTOR					
PAN, TILT, ZOOM (PTZ) CAMERA			QUEUE AND SAMPLING (SYSTEM) DETECTOR					
EMERGENCY VEHICLE LIGHT DETECTOR			WIRELESS DETECTOR SENSOR					
CONFIRMATION BEACON			WIRELESS ACCESS POINT					
WIRELESS INTERCONNECT								
WIRELESS INTERCONNECT RADIO REPEATER								

TS SHT NO. 57

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

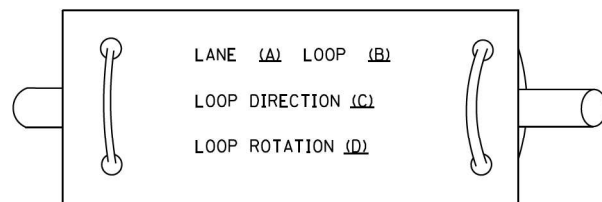
DISTRICT ONE			
STANDARD TRAFFIC SIGNAL DESIGN DETAILS			
SCALE: NONE	SHEET 1	OF 7 SHEETS	STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		COOK/LAKE	67	57
TS-05			DRAWING NO. TS0003	
ILLINOIS FED. AID PROJECT				

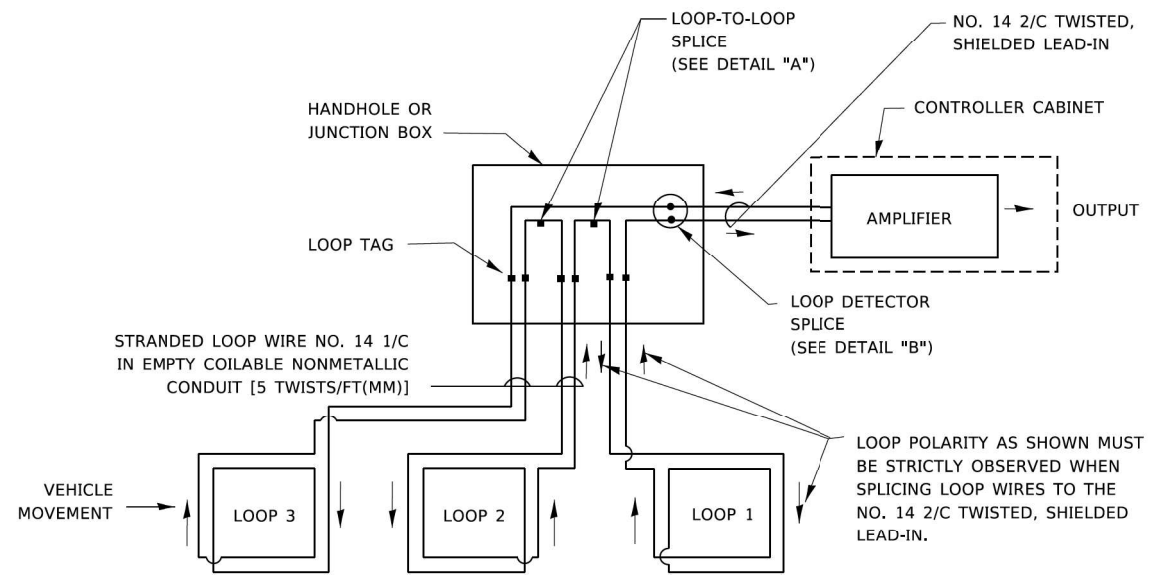
LOOP DETECTOR NOTES

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 DIVESHOLES 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

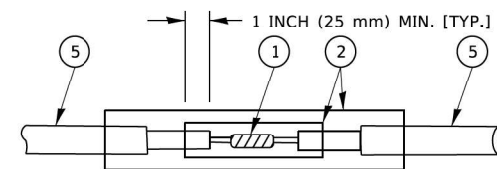


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

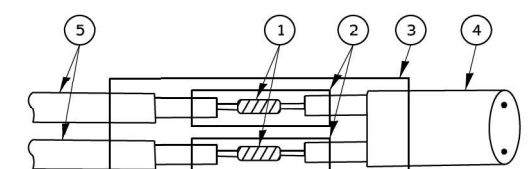


DETECTOR LOOP WIRING SCHEMATIC

- 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.

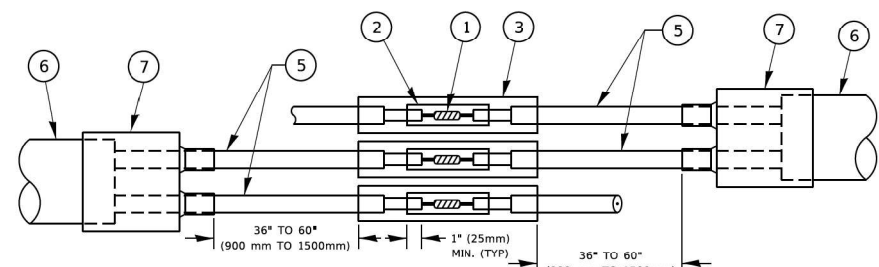


DETAIL "A"
LOOP-TO-LOOP SPLICE

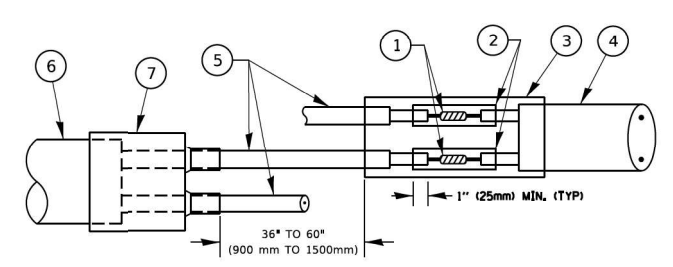


DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

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. PREFORMED LOOP
- 6 XL POLYOLEFIN 2 CONDUCTOR
- 7 BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

TS SHT NO. 58

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	DRAWN -	REVISED -
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PLOT DATE = 3/4/2019	DATE -	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

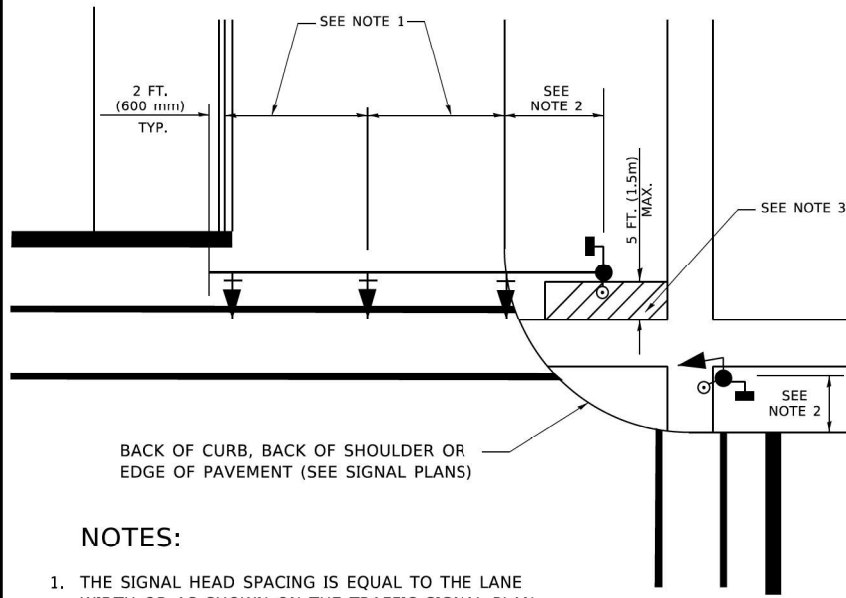
DISTRICT ONE
 STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE SHEET 2 OF 7 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	TS-05	COOK/LAKE	67	58
ILLINOIS FED. AID PROJECT			DRAWING NO. TS0004	

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.

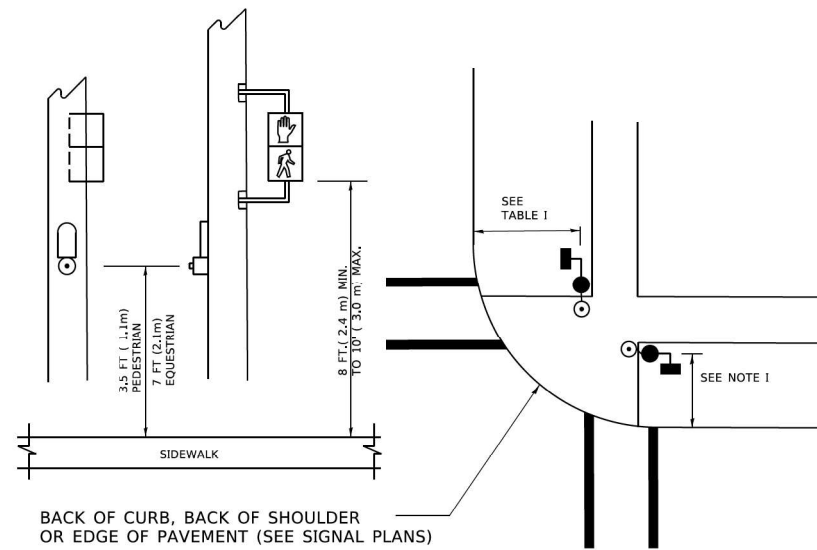


BACK OF CURB, BACK OF SHOULDER OR EDGE OF PAVEMENT (SEE SIGNAL PLANS)

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

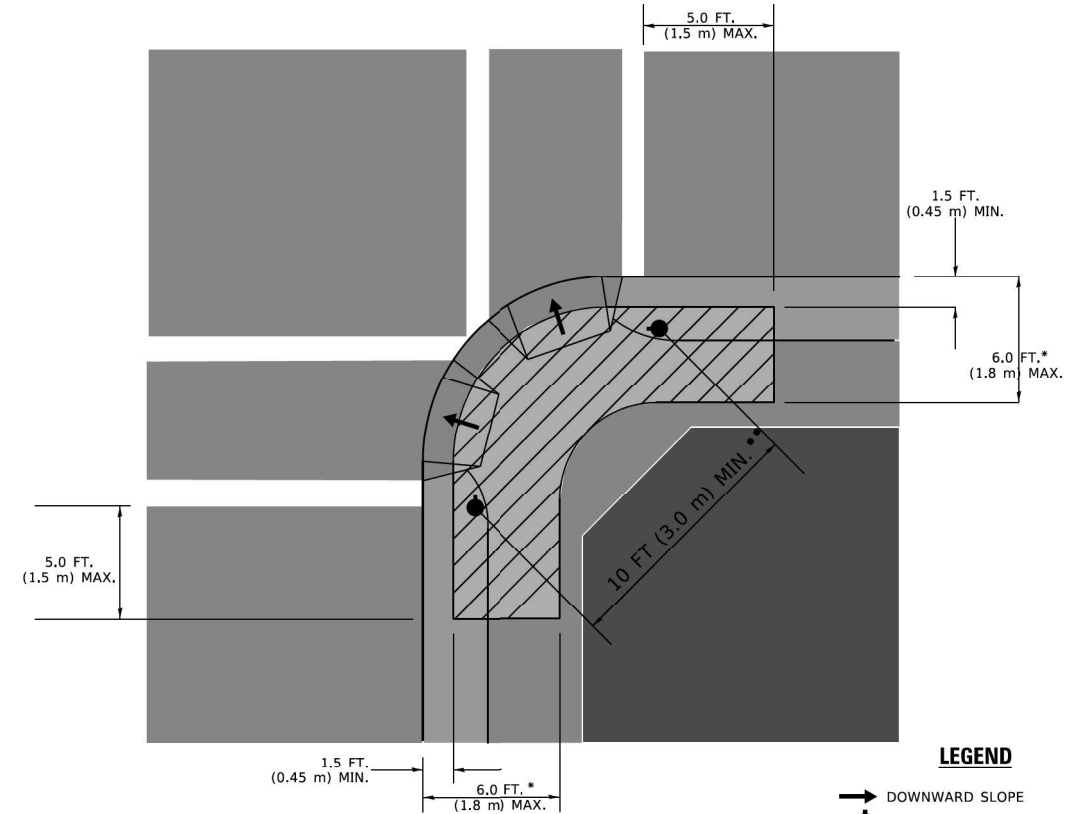


BACK OF CURB, BACK OF SHOULDER OR EDGE OF PAVEMENT (SEE SIGNAL PLANS)

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 (0.5m), MINIMUM 10 FT (3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.5m), MINIMUM 10 FT (3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.5m), MINIMUM 10 FT (3.0m)
PEDESTRIAN PUSHBUTTON POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.5m), MINIMUM 10 FT (3.0m)
TEMPORARY WOOD POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.5m), MINIMUM 10 FT (3.0m)
CONTROLLER CABINET	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.3m), 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 (1.3m), 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.

TS SHT NO. 59

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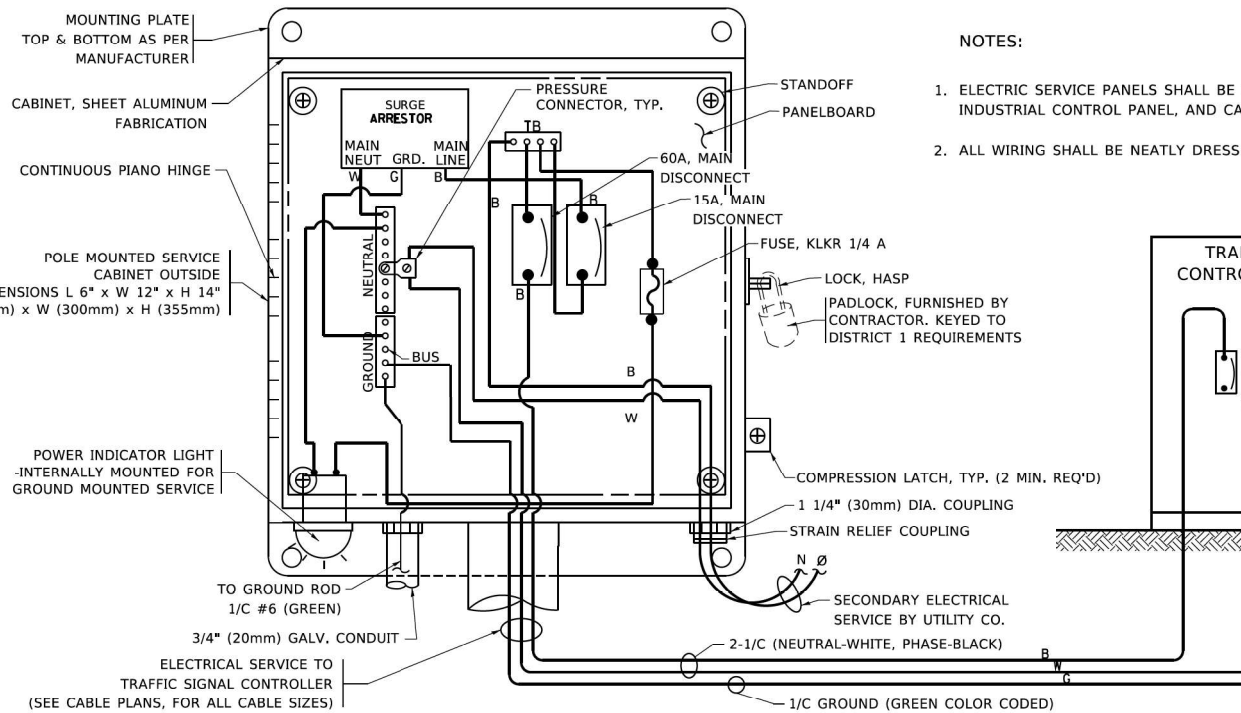
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

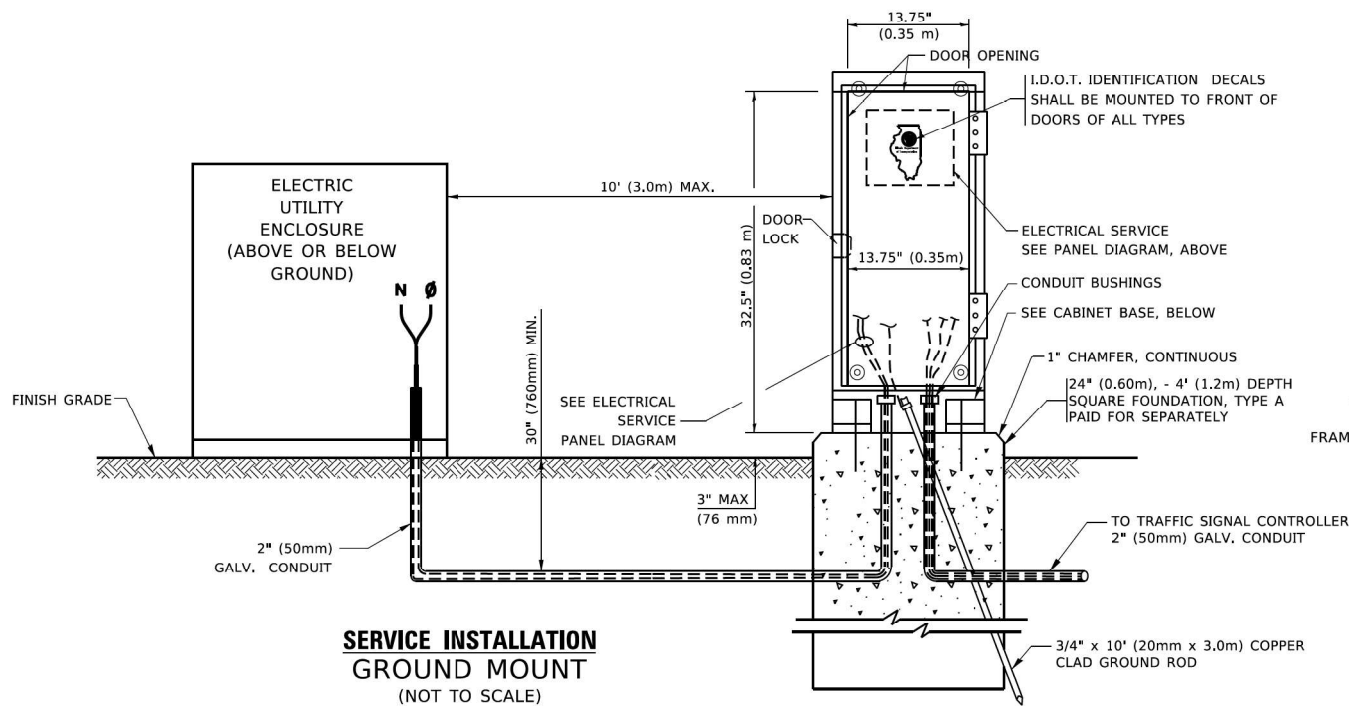
**DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

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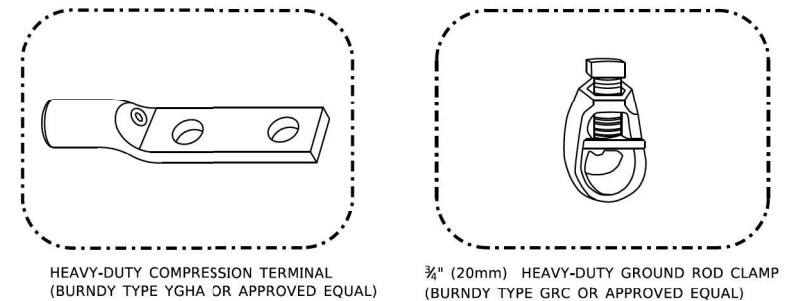
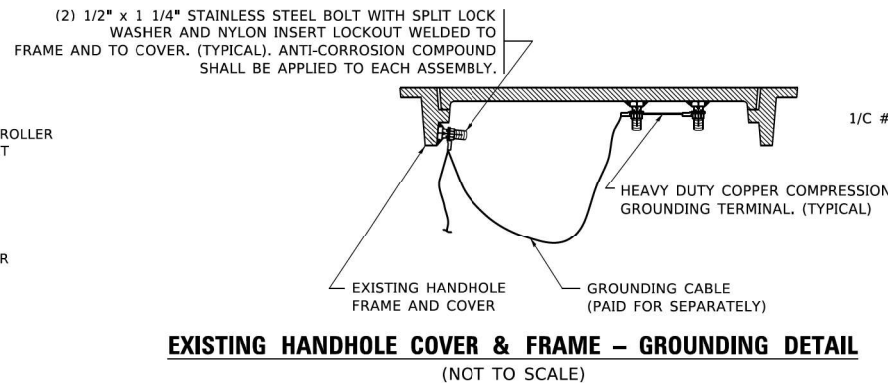
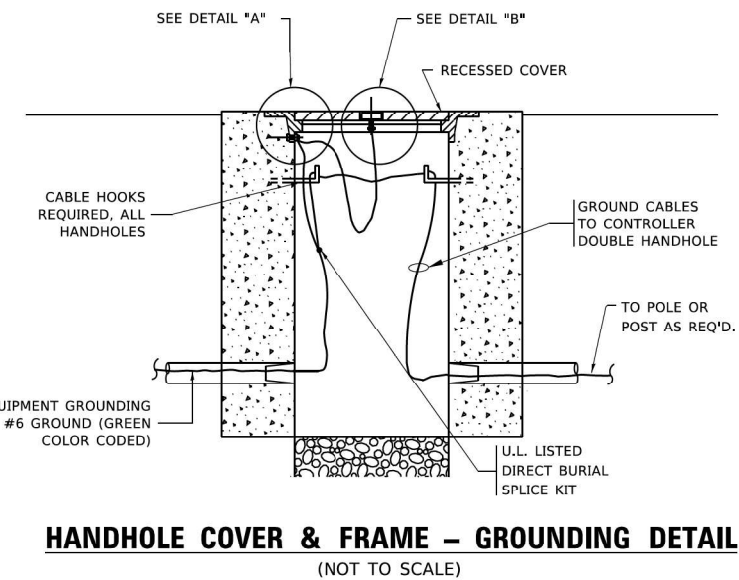
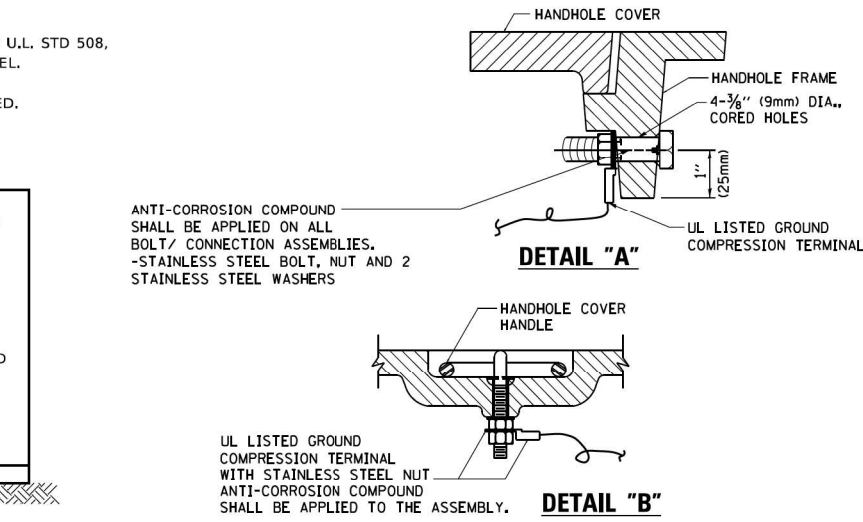
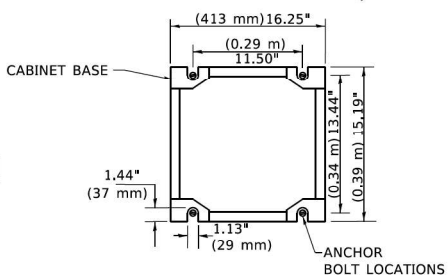
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		COOK/LAKE	67	59
TS-05		DRAWING NO. TS0005		
ILLINOIS FED. AID PROJECT				



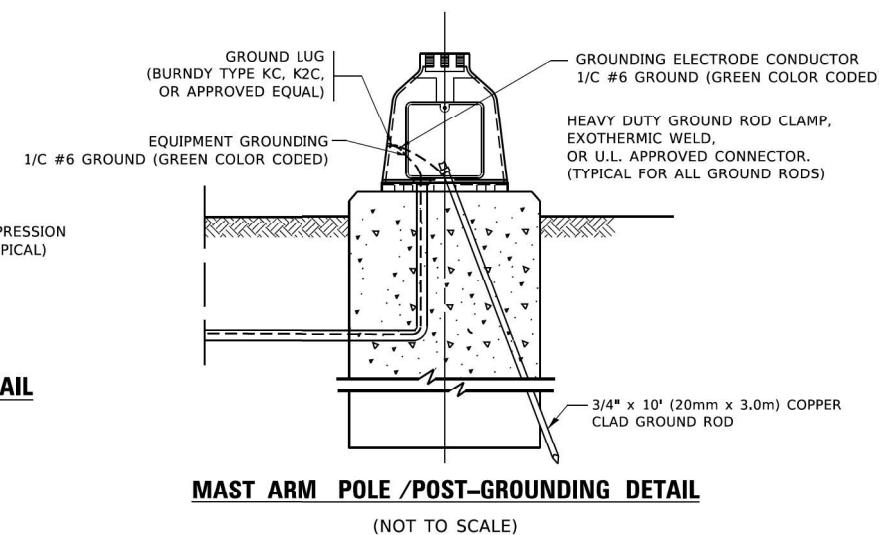
ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)
SERVICE INSTALLATION POLE MOUNT (SHOWN)
 (NOT TO SCALE)



CABINET - BASE BOLT PATTERN
 (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.



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.

TS SHT NO. 60

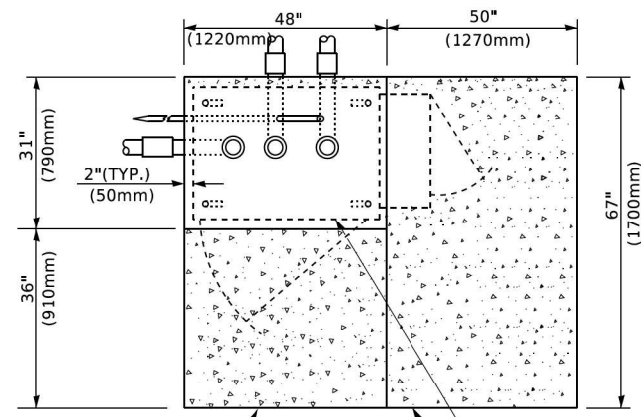
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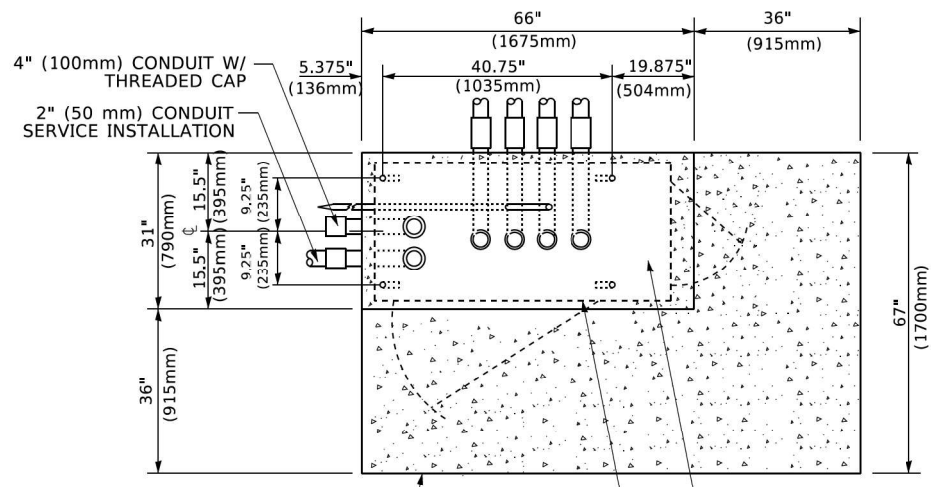
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE			
STANDARD TRAFFIC SIGNAL DESIGN DETAILS			
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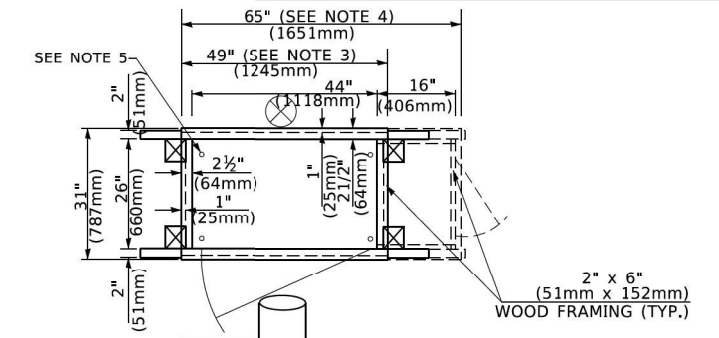
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TS-05		DRAWING NO. TS0006		
		ILLINOIS FED. AID PROJECT		



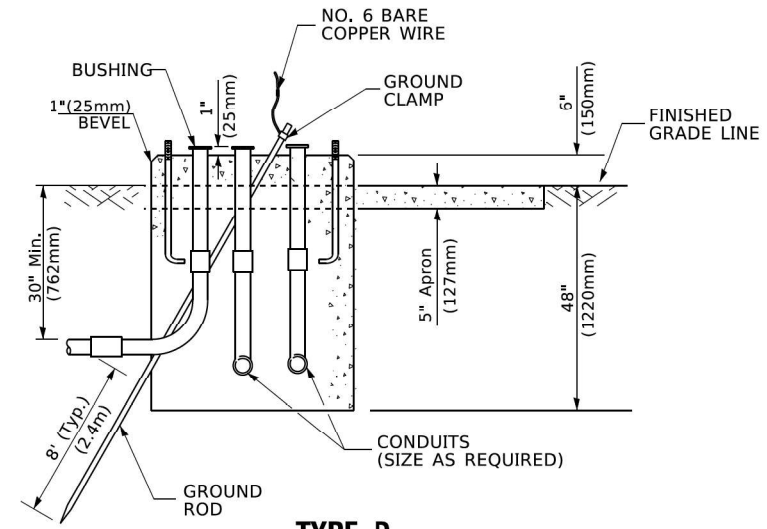
TOP VIEW



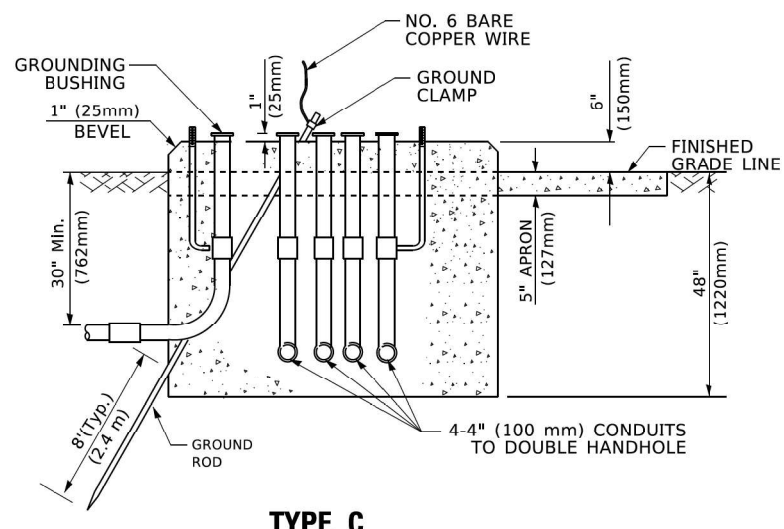
TOP VIEW



TEMPORARY SIGNAL CONTROLLER WOOD SUPPORT PLATFORM



TYPE D FOR GROUND MOUNTED CONTROLLER CABINET AND UPS BATTERY CABINET



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..

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 56' (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 (Q_u) > 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

TS SHT NO. 61

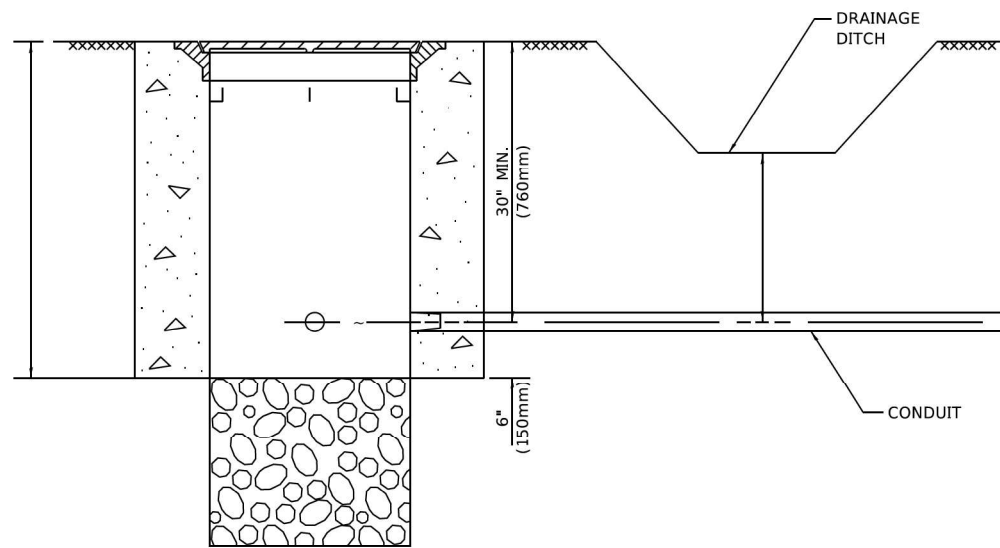
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STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT ONE			
STANDARD TRAFFIC SIGNAL DESIGN DETAILS			
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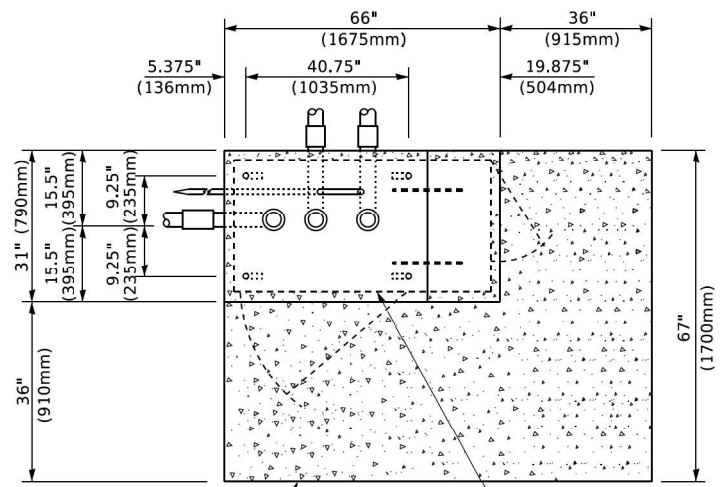
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TS-05		DRAWING NO. TS0007		
ILLINOIS		FED. AID PROJECT		



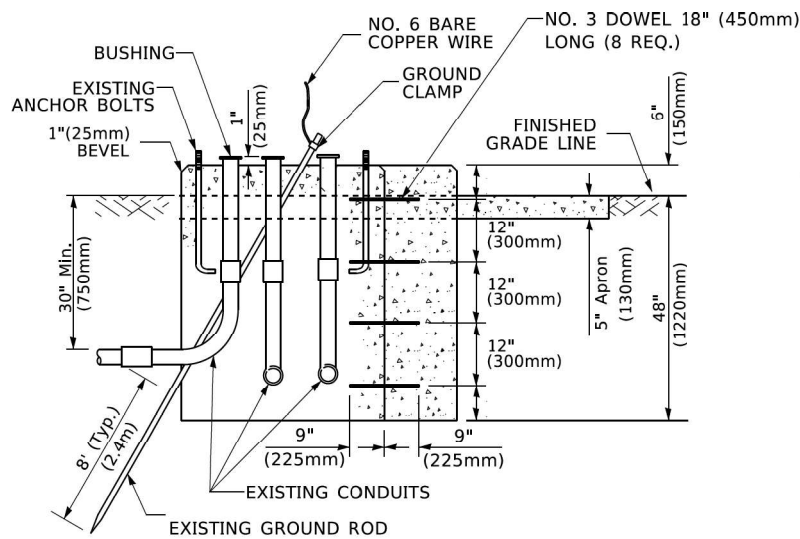
NOTES:

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

HANDHOLE WITH MINIMUM CONDUIT DEPTH
(NOT TO SCALE)



TOP VIEW
(NOT TO SCALE)

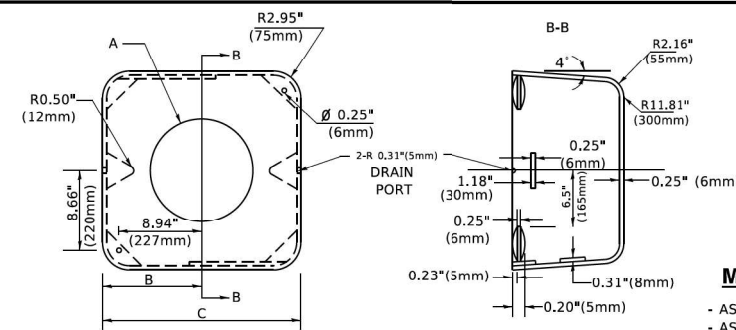


MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION
(NOT TO SCALE)

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:

1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
2. ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT
ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT
ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
3. WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 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)

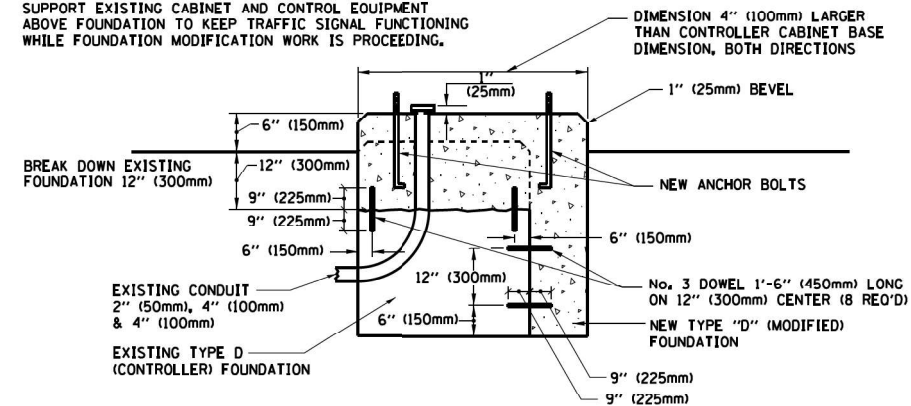
SHROUD

NOTES:

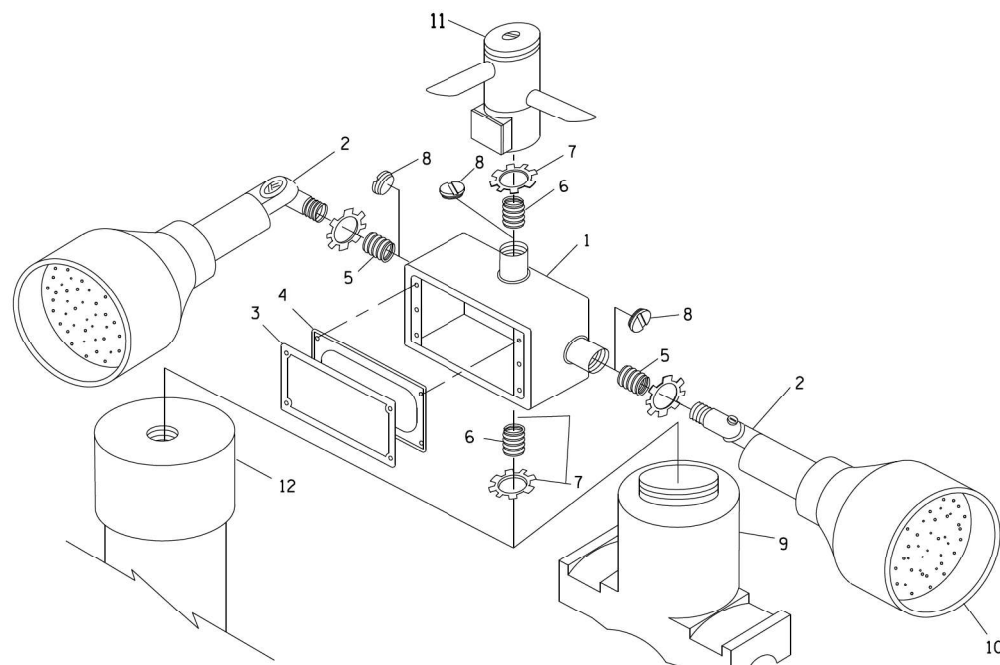
1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
2. THE SUPPLIER SHALL VERIFY THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.

NOTE:

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



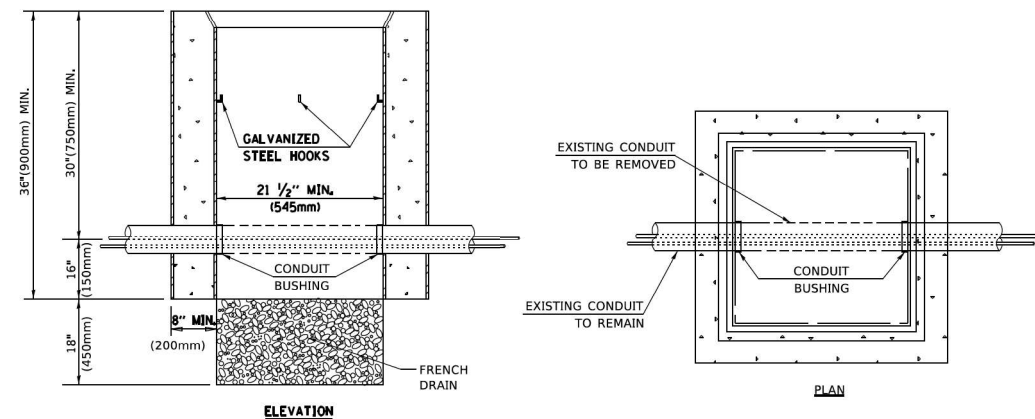
MODIFY EXISTING TYPE "D" FOUNDATION



POST CAP MOUNT

MAST ARM MOUNT

EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL



NOTES:

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

HANDHOLE TO INTERCEPT EXISTING CONDUIT

TS SHT NO. 62

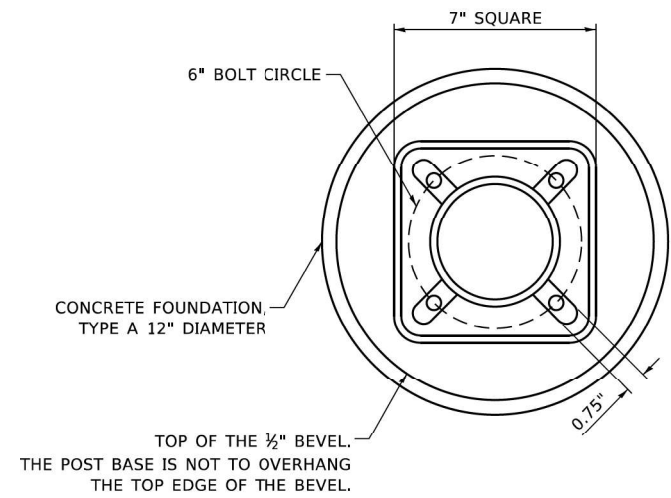
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

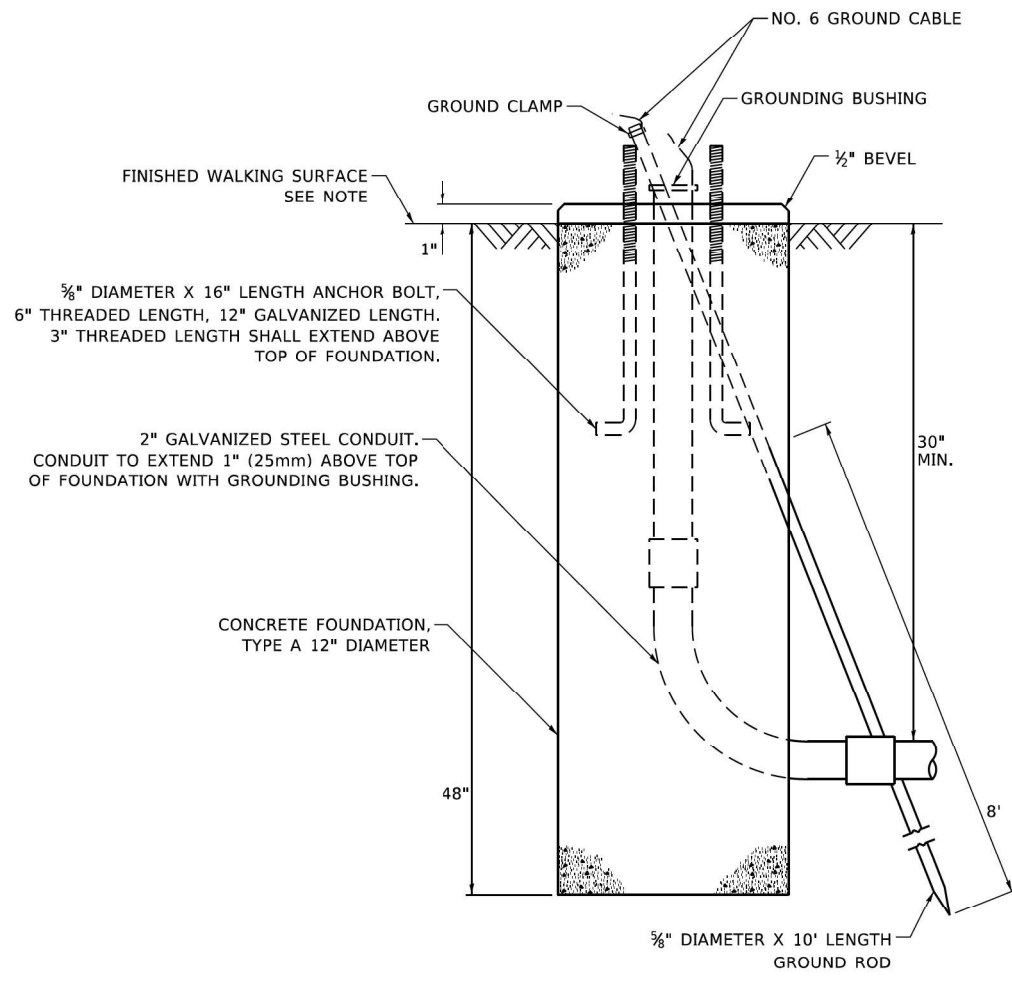
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		COOK/LAKE	67	62
TS-05		DRAWING NO. TS0008		
ILLINOIS FED. AID PROJECT				

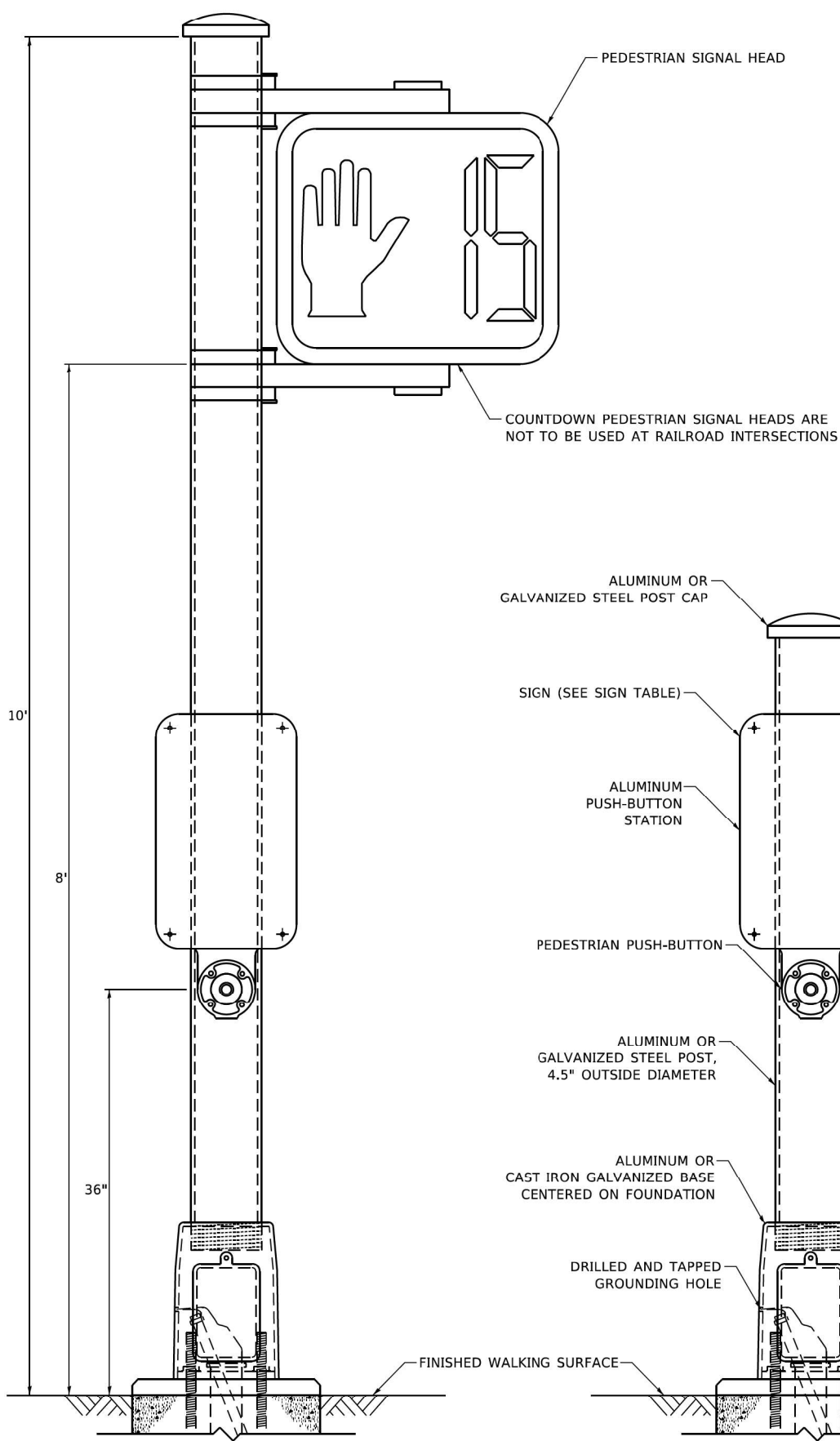


BOLT PATTERN

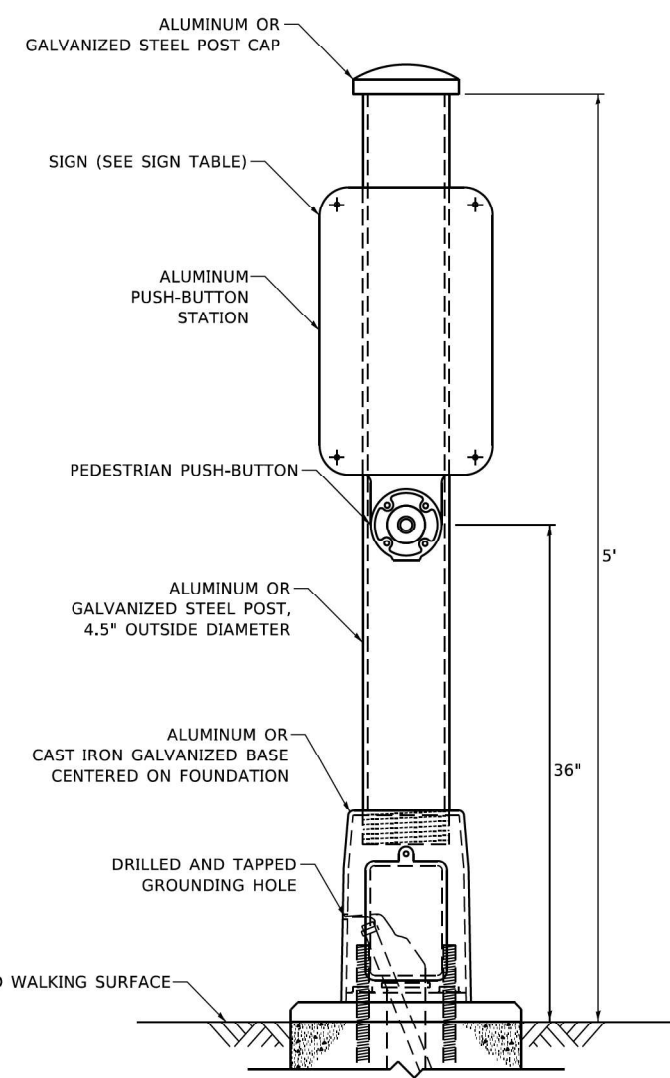
NOTE:
 1. IF THE PEDESTRIAN SIGNAL POST FOUNDATION IS INSTALLED WITHIN OR BEHIND A BARRIER CURB, THE TOP OF THE FOUNDATION SHALL BE INSTALLED FLUSH WITH THE TOP OF THE BARRIER CURB.



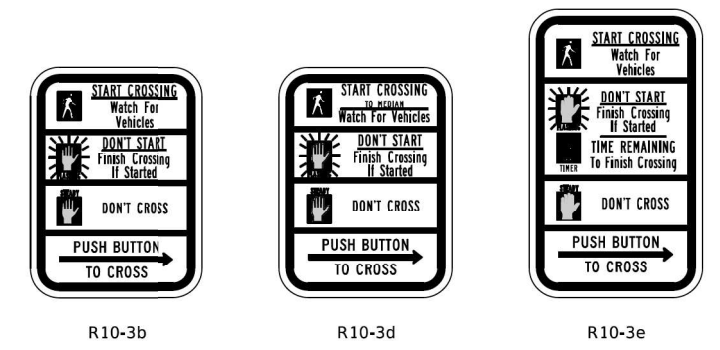
CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER



PEDESTRIAN SIGNAL POST, 10 FT.



PEDESTRIAN SIGNAL POST, 5 FT.



SIGN TABLE

SIGN	DIMENSIONS
R10-3b (RAILROAD ONLY)	9" X 12"
R10-3d (RAILROAD ONLY)	9" X 12"
R10-3e	9" X 15"

NOTES:
 1. THE SIGN PANELS SHALL BE TYPE AP SHEETING.
 2. THE ARROW ON SIGNS FOR PUSH-BUTTONS SERVING TWO DIRECTIONS ON THE SAME PHASE SHALL BE BI-DIRECTIONAL.
 3. THE SIGN FOR DUAL-CALL PUSH-BUTTONS SHALL HAVE NO ARROW.

TS SHT NO. 63

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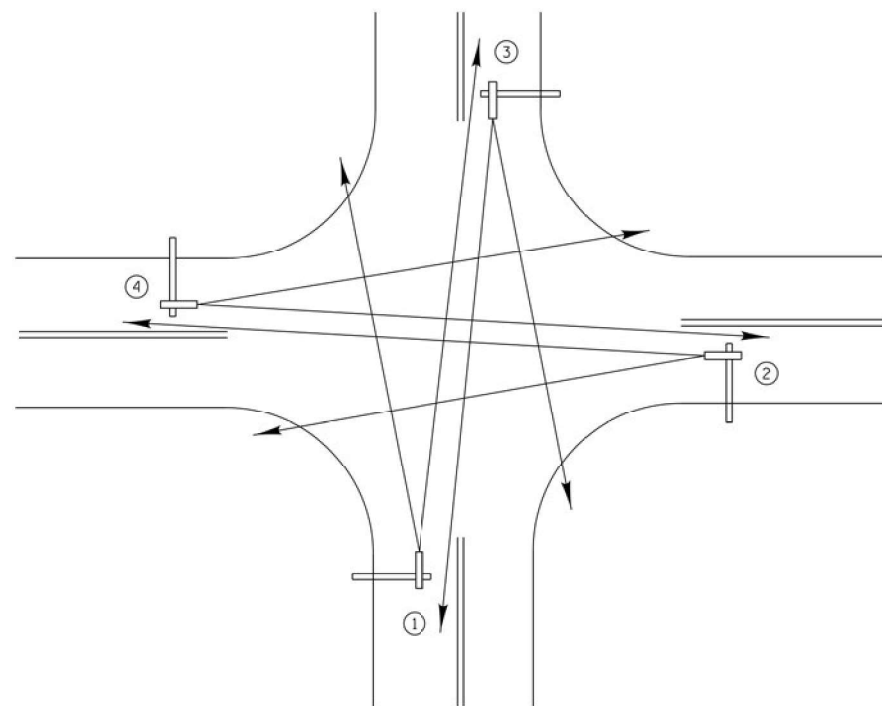
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
 STANDARD TRAFFIC SIGNAL DESIGN DETAILS
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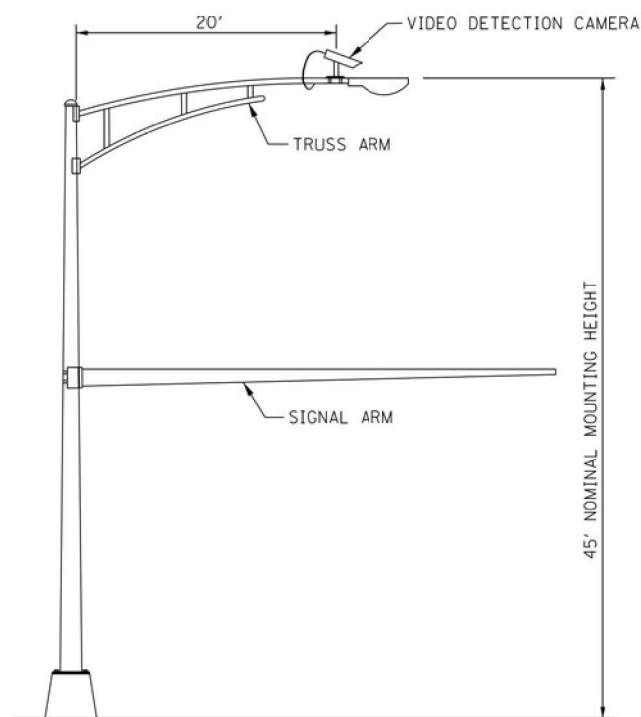
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		COOK/LAKE	67	63
TS-05		DRAWING NO. TS0009		
ILLINOIS FED. AID PROJECT				

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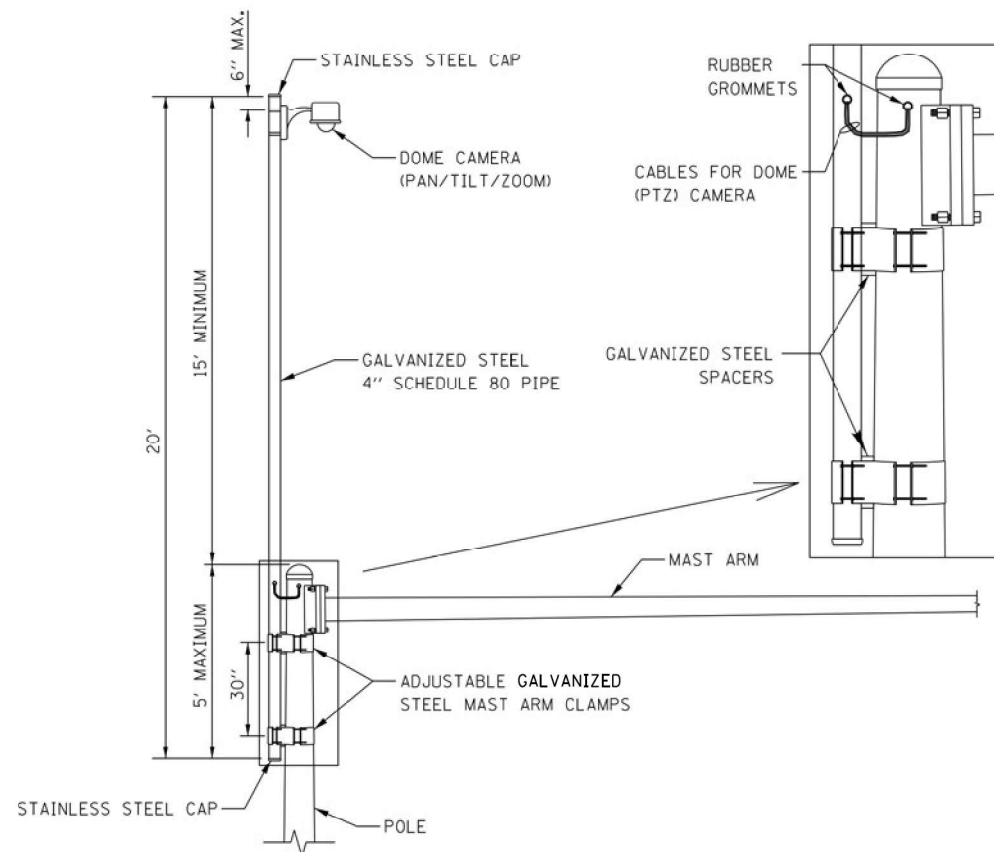


TYPICAL VIDEO VEHICLE
 DETECTION SYSTEM
 (NOT TO SCALE)

(4) VIDEO DETECTION CAMERA ASSEMBLIES AND BRACKETS ① ② ③ ④

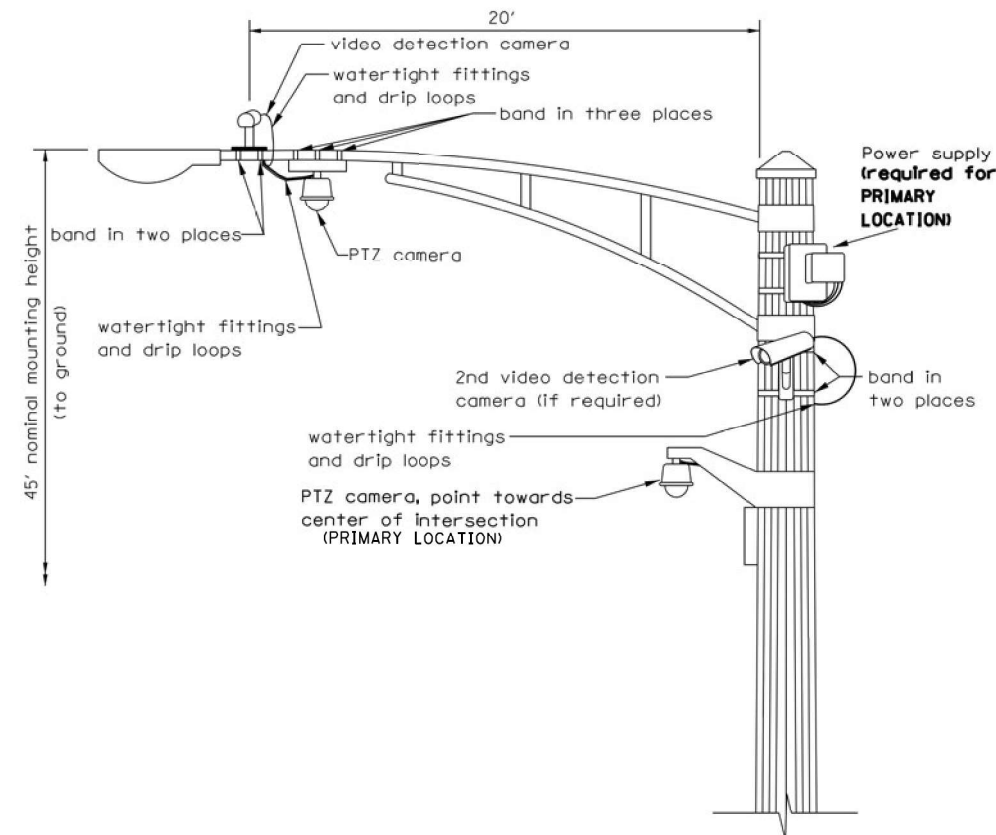


COMBINATION MAST ARM ASSEMBLY
 AND POLE DIMENSIONS
 (NOT TO SCALE)



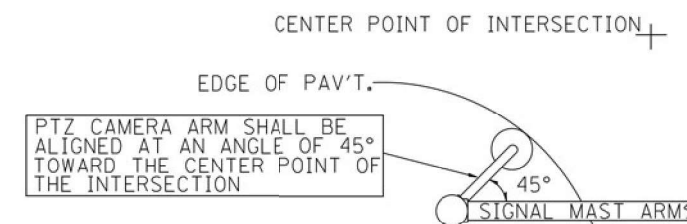
CAMERA MOUNTING ASSEMBLY DETAIL
 (NOT TO SCALE)

NOTES:
 - THE MAST ARM IS TAPERED.
 - INSTALL EXTENSION POLE VERTICAL AND PLUMB BY MODIFYING/INSTALLING BRACKETS AS NECESSARY. ADDITIONAL SPACERS REQUIRED ARE INCLUDED IN THE COST OF THE CAMERA MOUNTING ASSEMBLY OF THE TYPE SPECIFIED.
 - SPACERS ARE TO BE INTEGRATED OR MANUFACTURED WITH THE MAST ARM BRACKETS



VIDEO DETECTION CAMERA(S) AND
 DOME (PTZ) CAMERA MOUNTING DETAIL
 (NOT TO SCALE)

NOTES FOR SINGLE, DUAL AND MULTIPLE CAMERA MOUNTING:
 - MOUNT LUMINAIRE MOUNTING BRACKET AS HIGH AS POSSIBLE.
 - MOUNT VIDEO DETECTION CAMERA AIMING DOWN TOWARD THE DIRECTION OF TRAFFIC TO BE DETECTED.



PTZ CAMERA MOUNTING DETAILS
 (SECONDARY LOCATION)
 (NO SCALE)

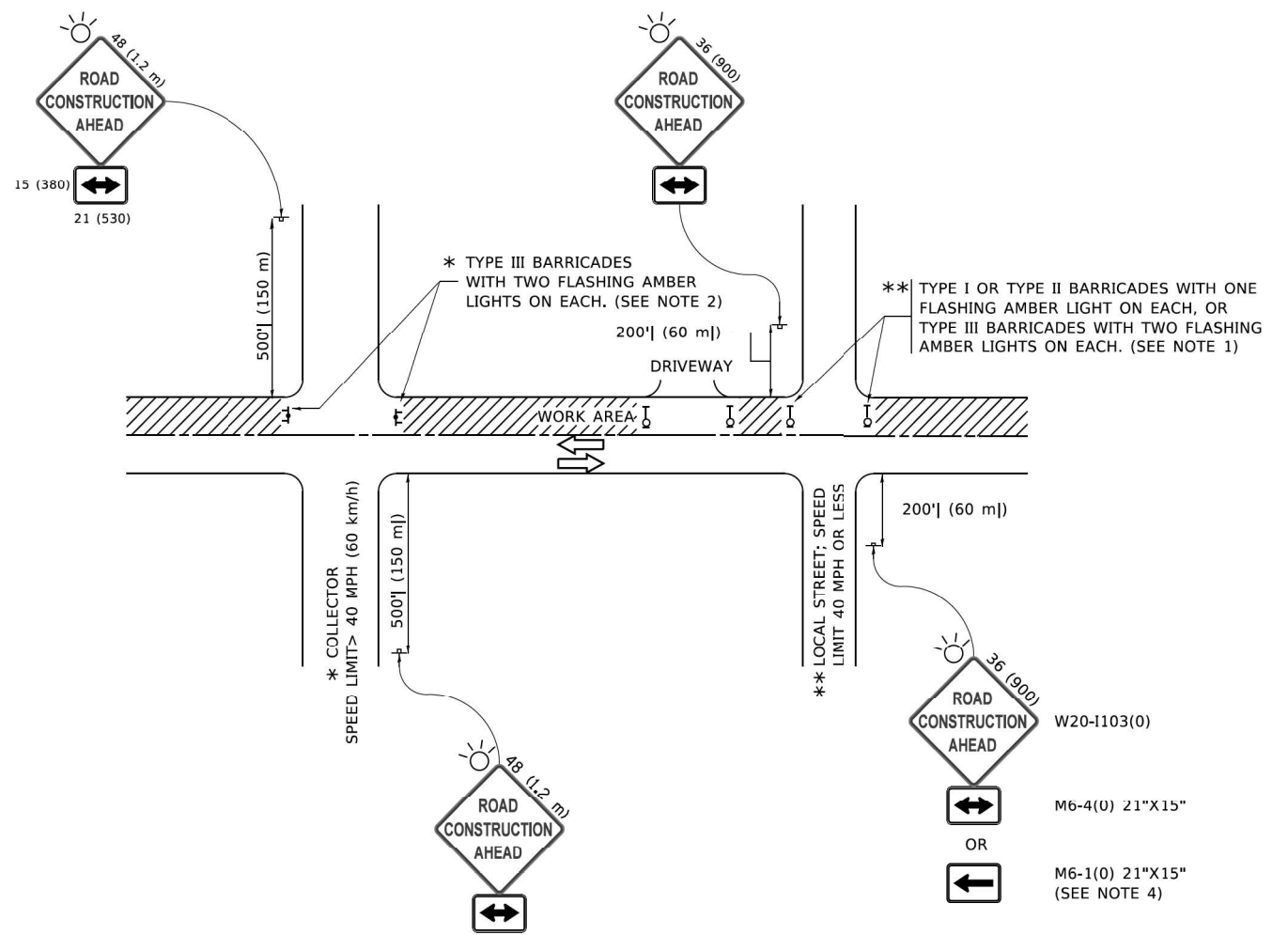
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DRAWN - KK	CHECKED - DD	REVISED -
PLOT SCALE = 48.0000' / 1in.	DATE - 06/30/2022	REVISED -
PLOT DATE = #DATE#		

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

CAMERA MOUNTING DETAIL

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR		COOK/LAKE	67	64
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				



NOTES:

- SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
 - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
 - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
- CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
- WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
- WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
- ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
- THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

USER NAME = footemj	DESIGNED - L.H.A.	REVISED - A. HOUSEH 10-15-96
	DRAWN -	REVISED - T. RAMMACHER 01-06-00
PLOT SCALE = 50,0000 ' / ft.	CHECKED -	REVISED - A. SCHUETZE 07-01-13
PLOT DATE = 3/4/2019	DATE - 06-89	REVISED - A. SCHUETZE 09-15-16

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND PROTECTION FOR
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		COOK/LAKE	67	65
TC-10			CONTRACT NO.	
ILLINOIS FED. AID PROJECT				

TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER

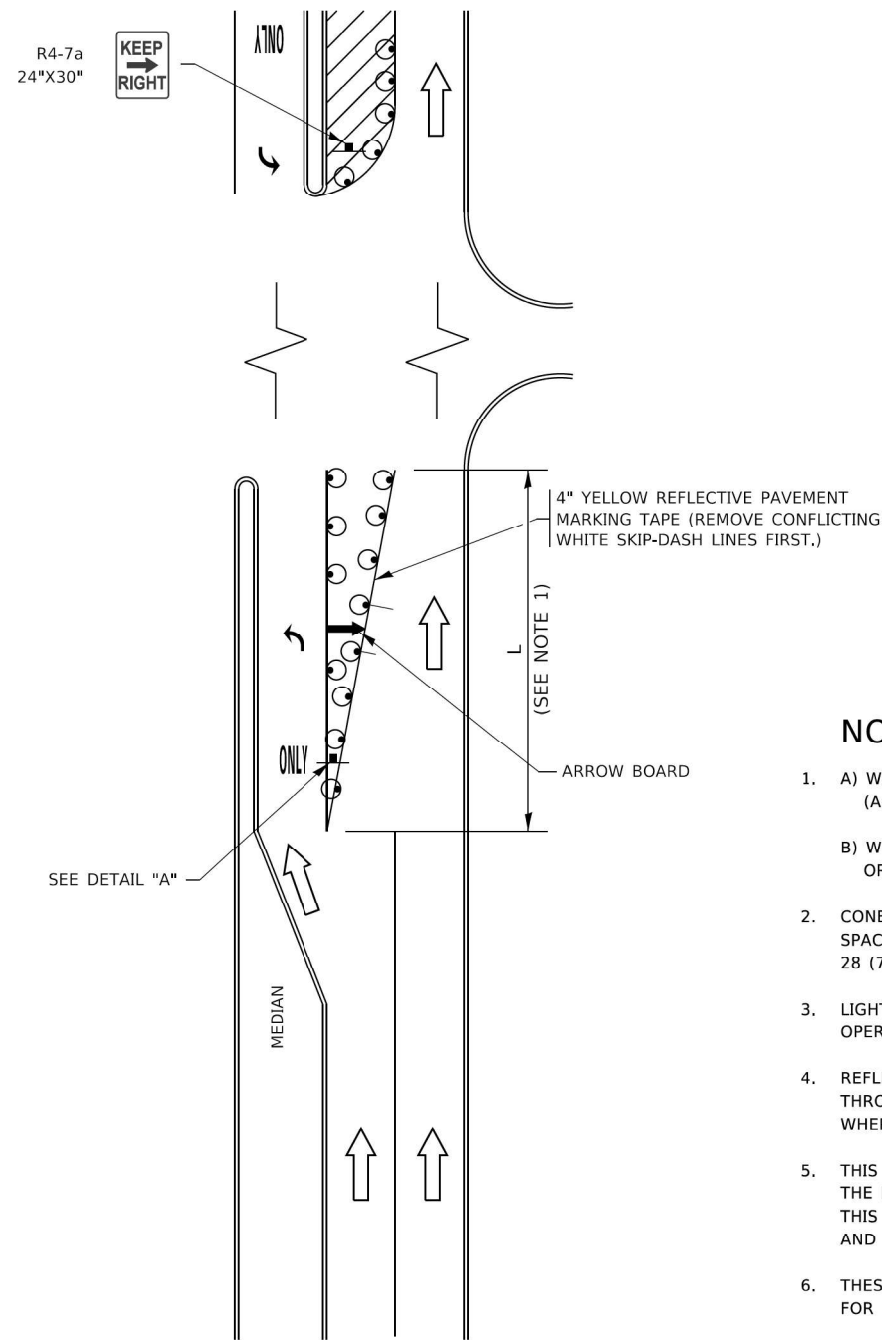


FIGURE 1

TURN BAY ENTRANCE WITHIN A LANE CLOSURE

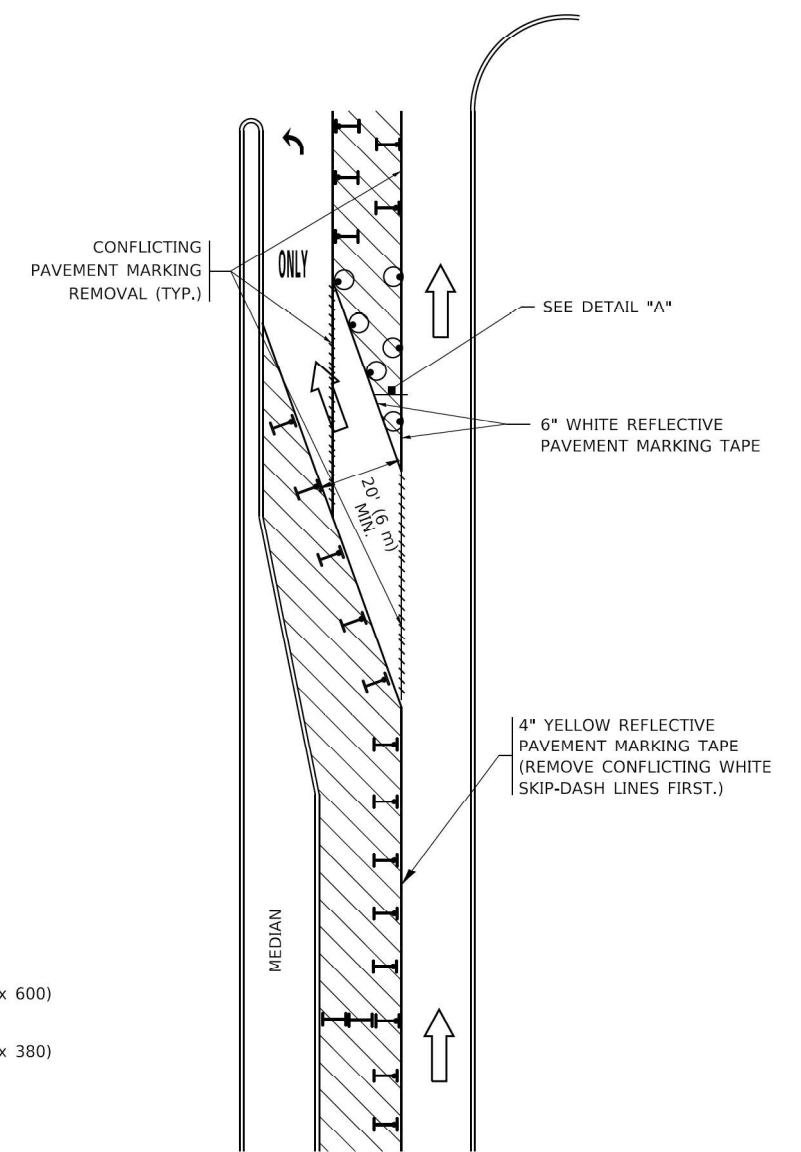


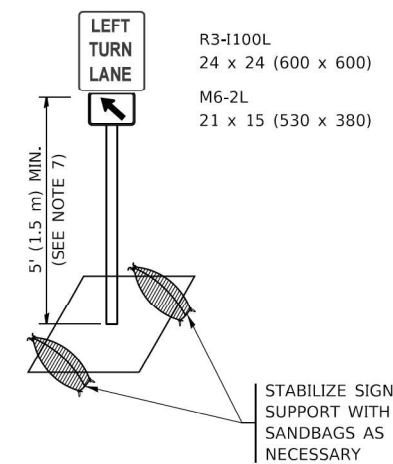
FIGURE 2

LEGEND

- WORK AREA
- LANE OPEN TO TRAFFIC
- ARROW BOARD
- TYPE I OR II BARRICADE OR DRUM WITH STEADY BURN LIGHT
- DRUM WITH STEADY BURN LIGHT
- SIGN ASSEMBLY
- TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

NOTES:

1. A) WHEN "L" IS ≤ THE STORAGE LENGTH OF THE TURN LANE (AS SHOWN IN FIG. 1), USE FIGURE 1.
 B) WHEN "L" IS > THE STORAGE LENGTH OF THE TURN LANE OR THE TURN LANE IS WITHIN THE LANE CLOSURE, USE FIGURE 2.
2. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
3. LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
4. REFLECTIVE TEMPORARY PAVEMENT MARKINGS SHALL BE PLACED THROUGHOUT THE BARRICADED AREAS OF EACH TURN BAY AS SHOWN WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN (14) DAYS.
5. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-1100R 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
6. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
7. THE SIGNS SHALL BE MOUNTED ABOVE THE BARRICADES/DRUMS ON SEPARATE SIGN SUPPORTS THAT MEET NCHRP 350 OR MASH REQUIREMENTS.
8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.



DETAIL A

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

TS SHT NO. 66

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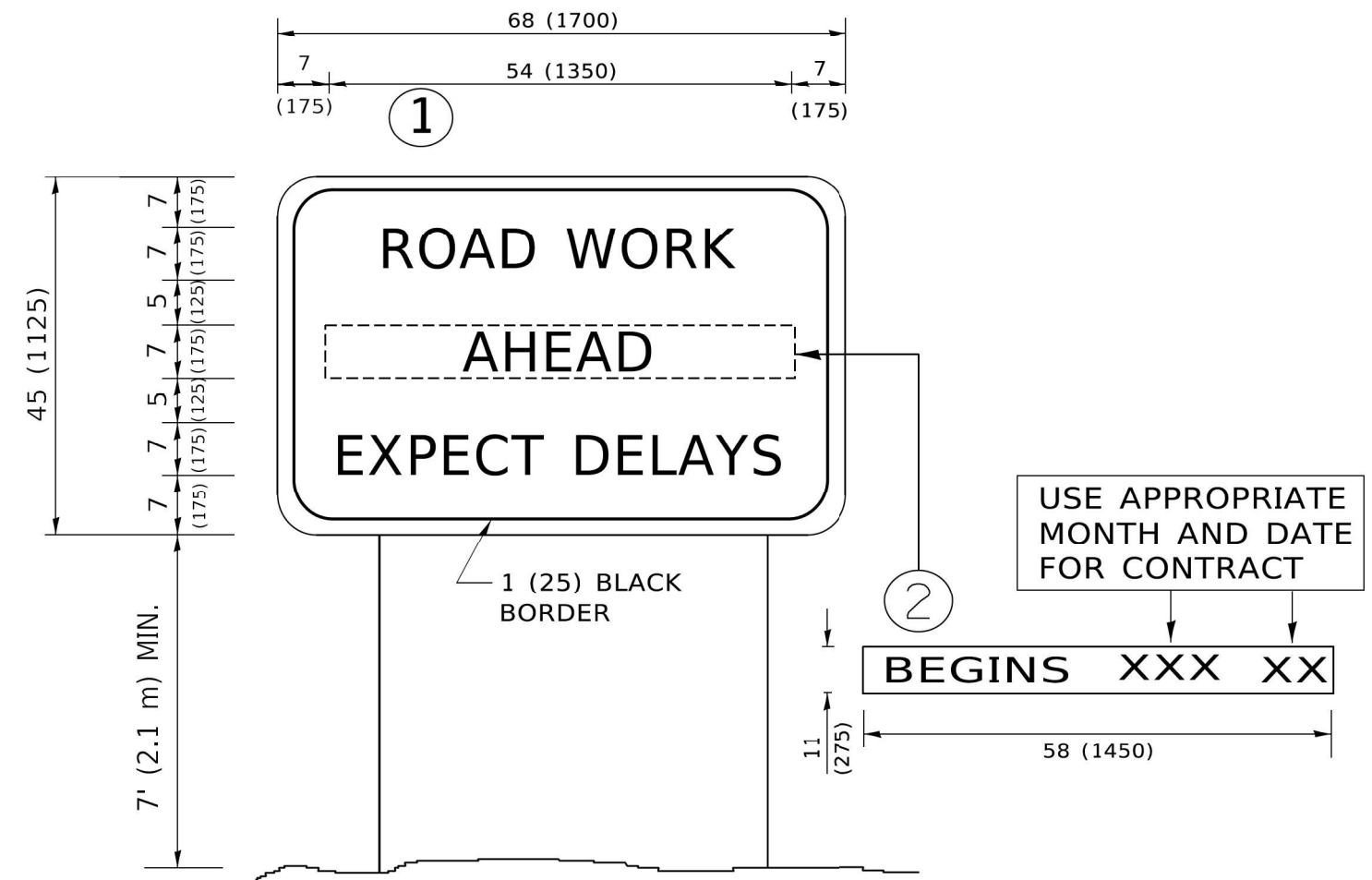
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	DRAWN - A. HOUSEH 11-07-95	REVISED - A. SCHUETZE 07-01-13
PLOT SCALE = 50,0000' / 1"	CHECKED - A. HOUSEH 10-12-96	REVISED - A. SCHUETZE 09-15-16
PLOT DATE = 3/4/2019	DATE - T. RAMMACHER 01-06-00	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

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

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	TC-14	COOK/LAKE	67	66
		CONTRACT NO.		
		ILLINOIS FED. AID PROJECT		



NOTES:

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

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

USER NAME = footemj	DESIGNED -	REVISED - R. MIRS 09-15-97
PLOT SCALE = 50,0000 ' / ft.	DRAWN -	REVISED - R. MIRS 12-11-97
PLOT DATE = 3/4/2019	CHECKED -	REVISED - T. RAMMACHER 02-02-99
	DATE -	REVISED - C. JUCIUS 01-31-07

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ARTERIAL ROAD
INFORMATION SIGN**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		COOK/LAKE	67	67
TC-22			CONTRACT NO.	
ILLINOIS FED. AID PROJECT				