06–13–2025 LETTING ITEM 015

FOR INDEX OF SHEETS, SEE SHEET NO. 2

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	1
	ILLINOIS	CONTRACT NO. 62W90		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED
HIGHWAY PLANS

VARIOUS LOCATIONS IN MCHENRY, LAKE AND COOK COUNTY
SECTION: 2024–965–TS
ITS & TRAFFIC SIGNAL INTERCONNECT
MCHENRY, LAKE, COOK COUNTY

C-91-237-24

FOR LOCATION MAP
SEE SHEET NO. 3–5

D-91-196-24

LOCATION OF SECTION INDICATED THUS:

TRAFFIC DATA

US RTE 12 (FORMER EAGLE 9L)
ADT (2023) = 11500

IL RTE 120 (ELM ST) (FORMER EAGLE 4O)
ADT (2023) = 30300

IL RTE 120 (BELVIDERE RD) (FORMER EAGLE 1C)
ADT (2023) = 26300

LAKE COOK (FORMER EAGLE 1D)
ADT (2022) = 16900

US RTE 45 (FORMER 1H)
ADT (2023) = 33400

US RTE 45 (LAKE ST) (FORMER 1J)
ADT (2023) = 21600

US RTE 41 (FORMER EAGLE 1K)
ADT (2023) = 24500

US RTE 45 (FORMER 4C)
ADT (2023) 22500

IL RTE 132 (FORMER EAGLE 4E)
ADT (2023) = 24900

IL RTE 176 (FORMER EAGLE 4F)
ADT (2023) = 19200

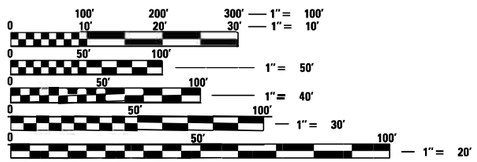
IL RTE 60 (FORMER EAGLE 4J)
ADT (2023) = 32800

US RTE 45 (FORMER EAGLE 4L)
ADT (2023) = 27700

IL RTE 131 (FORMER EAGLE 4P)
ADT (2023) = 25600

IL RTE 83 (FORMER EAGLE 7O)
ADT (2023) = 17900

IL RTE 59
ADT (2023) = 15400



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 ENGINEER: KAMIL A. KOBYLKA, (847) 705–4734

CONTRACT NO. 62W90

LICENSED PROFESSIONAL ENGINEER
ERICA SALUTZ
062-064688
OF ILLINOIS
11/30/2025

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED March 28th 2025
REGIONAL ENGINEER

May 9 2025
ENGINEER OF DESIGN AND ENVIRONMENT

May 9 2025
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

REV-SEP

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IDOT HIGHWAY STANDARDS

000001-08	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS	
280001-07	TEMPORARY EROSION CONTROL SYSTEMS	
701001-02	OFF-RD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5m) AWAY	
701006-05	OFF-RD OPERATIONS, 2L, 2W, 15' (4.5m) TO 24" (600mm) FROM PAVEMENT EDGE	
701101-05	OFF-RD OPERATIONS, MULITLANE, 15' TO 24" FROM PAVEMENT EDGE	
701106-02	OFF-RD OPERATIONS, MULITLANE, MORE THAN 15' (4.5m) AWAY	
701301-04	LANE CLOSURE, 2L, 2W, SHORT TERM OPERATIONS	
701426-09	LANE CLOSURE, MULILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS ≥	45 MPH
701427-05	LANE CLOSURE, MULILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS ≤	40 MPH
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED	
701502-09	URBAN LANE CLOSURE, 2L, 2W, WITH BIDIRECTIONAL LEFT TURN LANE	
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	
701901-10	TRAFFIC CONTROL DEVICES	
873001-02	TRAFFIC SIGNAL GROUNDING AND BONDING	
886001-01	DETECTOR LOOP INSTALLATIONS	

GENERAL NOTES

1. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT (800)-892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED UTILITIES (48 HOURS NOTIFICATION IS REQUIRED).

2. THE CONTRACTOR SHALL CONTACT KALPANA KANNAN-HOSADURGA THE TRAFFIC CONTROL SUPERVISOR AT KALPANA.KANNAN-HOSADURGA@ILLINOIS.GOV 72 HOURS IN ADVANCE OF BEGINNING WORK.

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

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

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

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

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

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

9. PARTIAL PAYMENT AS DESCRIBED IN ARTICLE 109.07(b) OF THE STANDARD SPECIFICATIONS WILL NOT BE ALLOWED FOR ITEMS INCLUDED IN THIS CONTRACT.

10. ALL EXISTING ROW SHOWN IS APPROXIMATE AND MAY NEED TO BE VERIFIED IN THE FIELD. ANY ROW CONFLICTS SHALL BE COORDINATED WITH THE RESIDENT ENGINEER.

11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND AND SURFACE UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE RESTORED TO A CONDITION EQUAL TO THAT EXISTING BEFORE THE DAMAGE INCURRED. THIS WORK SHALL BE AT THE CONTRACTOR'S EXPENSE.

12. THE CONTRACTOR SHALL TAKE CARE TO PROTECT ALL SIGNS ALONG THE ROUTE OF CONSTRUCTION. SIGNS THAT 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.

13. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.

14. LOCATION OF ALL UTILITIES AND PRIVATELY OWNED FACILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO THE INSTALLATION OF ANY COMPONENTS.

15. 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.

16. THE EXISTING TRAFFIC SIGNALS SHALL REMAIN IN OPERATION DURING THE CONSTRUCTION OF THE PROPOSED CONDUIT AND FIBER OPTIC CABLE.

17. POTHOLING TO LOCATE EXISTING UNDERGROUND UTILITIES SHALL BE INCLUDED IN THE CONTRACT BID PRICE FOR THE CONDUIT PAY ITEMS.

18. 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.

19. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR PLACING CONDUIT AT GREATER THAN THE REQUIRED MINIMUM DEPTH TO AVOID OBSTACLES SUCH AS UNDERGROUND UTILITIES.

20. 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.

GENERAL NOTES

21. THE LOCATION OF THE PROPOSE CONDUIT SHOW ON THE PLAN SHEETS IS APPROXIMATE AND NOT DRAWN TO SCALE.

22. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY MOWING AND BRUSH/SHRUB REMOVAL REQUIRED TO INSTALL THE PROPOSED CONDUIT AND HANDHOLES.

23. THE CONTRACTOR SHALL PLAN AND CONDUCT CONDUIT AND FIBER INSTALLATION OPERATIONS TO MINIMUZE 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.

24. MAINTENANCE OF TRAFFIC SHALL CONFORM TO THE APPLICABLE HIGHWAY AND DISTRICT STANDARDS.

25. THE CONTRACTOR SHALL MINIMIZE THE IMPACT OF THE WORK BY UTILIZING OFF-ROAD OPERATIONS WHERE POSSIBLE.

26. AT WORK AREAS THAT IMPACT PEDESTRIANS AND/OR SIDEWALK, STANDARD 701801 SHALL BE USED. CONTRACTOR SHALL MINIMIZE WORK AREAS AND DISRUPTION TO SIDEWALK WHEREVER POSSIBLE.

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

28. THE CONTRACTOR SHALL COORDINATE WITH IDOT, CCDOT, AND EQUIPMENT VENDORS FOR THE BEST LOCATION AND ORIENTATION OF EACH PROPOSED PTZ CAMERA PRIOR TO CAMERA INSTALLATION.

29. THE CONTRACTOR SHALL MARK THE RECORD DRAWINGS TO REFLECT ANY CHANGES TO THE PLANS. THE RECORD DRAWINGS REQUIREMENTS ARE IDENTIFIED IN SECTION 801.16 OF THE STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

30. THE QUANTITY FOR THE ROD AND CLEAN EXISTING CONDUIT IS FOR USE WITH EXISTING CONDUITS WHICH HAVE ALL EXISTING CABLES REMOVED. THE QUANTITY PROVIDED IS A NOMINAL QUANTITY AND SHALL BE USED AS NEEDED OR AS DETERMINED BY THE ENGINEER BASED ON FIELD CONDITIONS.

31. THE QUANTITY FOR TEMPORARY INFORMATION SIGNING IS FOR USE WITH DISTRICT DETAIL ARTERIAL ROAD INFORMATION SIGN (TC22). ONE SIGN IS TO BE USED FOR EACH END OF EACH INTERCONNECT CORRIDOR, MAIN ROUTE, OR ZONE.

32. ALL EXISTING R.O.W. SHOWN IS APPROXIMATE AND MAY NEED TO BE VERIFIED IN THE FIELD. ANY R.O.W. CONFLICTS SHALL BE COORDINATED WITH THE RESIDENT ENGINEER. ALL PROPOSED WORK SHALL TAKE PLACE WITHIN EXISTING R.O.W. WITHIN EXISTING FACILITIES INCLUDING HANDHOLES, CONDUITS, OR TRAFFIC SIGNAL CABINETS.

33. THESE PLANS USE EXISTING RECORD DRAWINGS AS A BACKGROUND FOR 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.

34. THE WORK IN THIS CONTRACT IS LIMITED TO THE INSTALLATION OF THE HANDHOLES, CONDUITS, TRACER CABLE, PTZ CAMERAS, SWITCHES, CONTROLLERS, AND FIBER OPTIC CABLE AS WELL AS ANY OTHER COMPONENTS AS SPECIFIED IN THE SCHEDULE OF QUANTITIES. THERE ARE NO PHASE CHANGES. PLANS USE EXISTING RECORD DRAWINGS WHICH SHOW PROPOSED EQUIPMENT FROM PREVIOUS CONTRACTS. WORK SHALL ONLY INCLUDE WHAT IS SPECIFIED IN THE SCHEDULE OF QUANTITIES. PHASING FOR THE NEW CONTROLLERS SHALL BE REPLICATED FROM EXISTING CONTROLLERS.

35. MAINLINE AND SIDE ROAD "ROAD CONSTRUCTION AHEAD" SIGNS SHALL REMAIN INSTALLED AT LOCATIONS WHERE ROADWAY HAZARDS WITHIN THE WORK ZONE WILL REMAIN OVERNIGHT.

RLR NOTES

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

US RTE 45 AT PETERSON RD
VILLAGE OF LIBERYVILLE - 118 W. COOK AVE, LIBERVILLE, IL 60048
GATSO-USA - 8341 E. EVANS RD, SUITE 104 SCOTTSDALE, AZ 85260

US RTE 12 / IL RTE 59 AT IL RTE 120
VILLAGE OF ROUND LAKE - 442 N CEDAR LAKE RD, ROUND LAKE, IL 60073

IL RTE 132 AT DILLEY'S RD
VILLAGE OF GURNEE - 325 N O'PLANE RD, GURNEE, IL 60031-2636

IL RTE 131 (GREEN BAY RD) AT IL RTE 120 (BELIVDERE RD)
IL RTE 131 (GREEN BAY RD) AT WASHINGTON ST
IL RTE 131 (GREEN BAY RD) AT IL RTE 132 (GRAND AVE)
CITY OF WAUKEGAN - 100 N MLK AVE, WAUKEGAN, IL 60085

FILE NAME: M:\ 2019\3 CH\13-03-3500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 233 62W90\CAD\62W90 Sheet 02 Sheet General Notes.dgn

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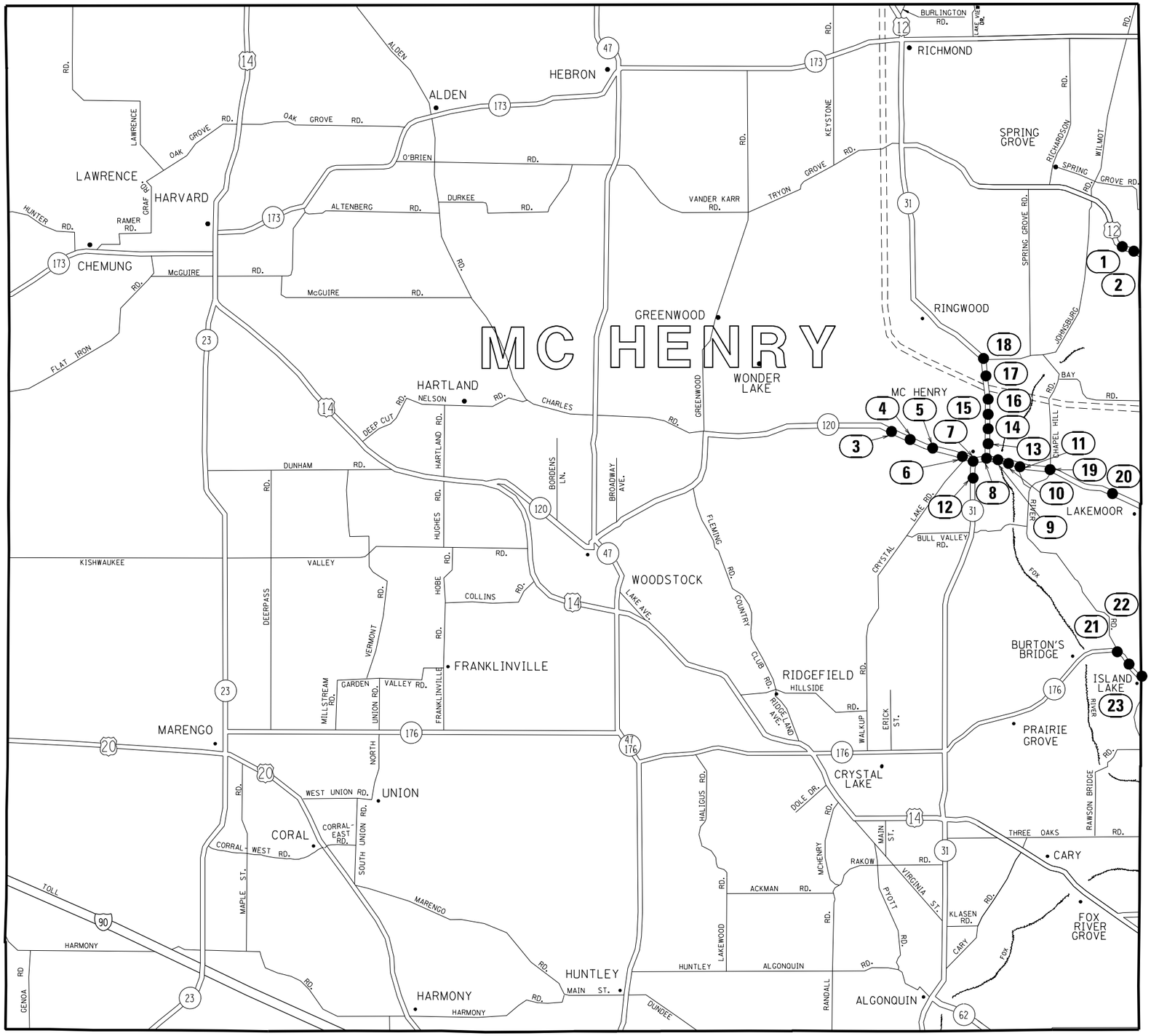
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED - 05/08/2025	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INDEX OF SHEETS, HIGHWAY STANDARDS, AND GENERAL NOTES INTERCONNECT CONTRACT	
	DRAWN - KATHLEEN MURPHY	REVISED -			
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -		SCALE: NTS SHEET OF SHEETS STA. TO STA.	
PLOT DATE = 5/5/2025	DATE - 12/20/2024	REVISED -			

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	2
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

REV-SEP



LOC. NO.	TS NO.	INTERSECTION NAME	MUNICIPALITY	COUNTY
1	7220	US RTE 12 & FOX LAKE RD	SPRING GROVE	MCHENRY
2	11945	US RTE 12 & STATE PARK RD/EAST ST	SPRING GROVE	MCHENRY
3	11900	IL RTE 120 (ELM ST) & RINGWOOD RD/CURRAN RD	MCHENRY	MCHENRY
4	11905	IL RTE 120 (ELM ST) & MEADOW LN	MCHENRY	MCHENRY
5	11910	IL RTE 120 (ELM ST) & OAK DR	MCHENRY	MCHENRY
6	11915	IL RTE 120 (ELM ST) CRYSTAL LAKE RD	MCHENRY	MCHENRY
7	7285	IL RTE 120 (ELM ST) & IL RTE 31 (FRONT ST)	MCHENRY	MCHENRY
8	7290	IL RTE 120 (ELM ST) & IL RTE 31 (RICHMOND RD)	MCHENRY	MCHENRY
9	11920	IL RTE 120 (ELM ST) & GREEN ST	MCHENRY	MCHENRY
10	11925	IL RTE 120 (ELM ST) & RIVERSIDE DR	MCHENRY	MCHENRY
11	7340	IL RTE 120 (ELM ST) & RIVER RD	MCHENRY	MCHENRY
12	11890	IL RTE 31 (FRONT ST) & LILLIAN ST/GROVE AVE	MCHENRY	MCHENRY
13	11885	IL RTE 31 (RICHMOND RD) & PEARL ST	MCHENRY	MCHENRY
14	11895	IL RTE 31 (RICHMOND RD) & MCCULLOM LAKE RD	MCHENRY	MCHENRY
15	11897	IL RTE 31 (RICHMOND RD) & BLAKE RD	MCHENRY	MCHENRY
16	11896	IL RTE 31 (RICHMOND RD) & DIAMOND RD	MCHENRY	MCHENRY
17	7311	IL RTE 31 (RICHMOND RD) & RUNNING BROOK FARM BLVD	JOHNSBURG	MCHENRY
18	7310	IL RTE 31 (RICHMOND RD) & JOHNSBURG RD	JOHNSBURG	MCHENRY
19	7335	IL RTE 120 & CHAPEL HILL RD	MCHENRY	MCHENRY
20	22100	IL RTE 120 & LILY LAKE RD	LAKEMOOR	MCHENRY
21	7740	IL RTE 176 & RIVER RD	ISLAND LAKE	MCHENRY
22	7741	IL RTE 176 & NEWPORT CT	ISLAND LAKE	MCHENRY
23	11880	IL RTE 176 & ROBERTS RD/MIDWAY DR	ISLAND LAKE	MCHENRY

FILE NAME: M:\2019\3 CMR\18-03-5500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203 62W90\CAD\62W90_Sheet_02 Sheet General Notes.dgn

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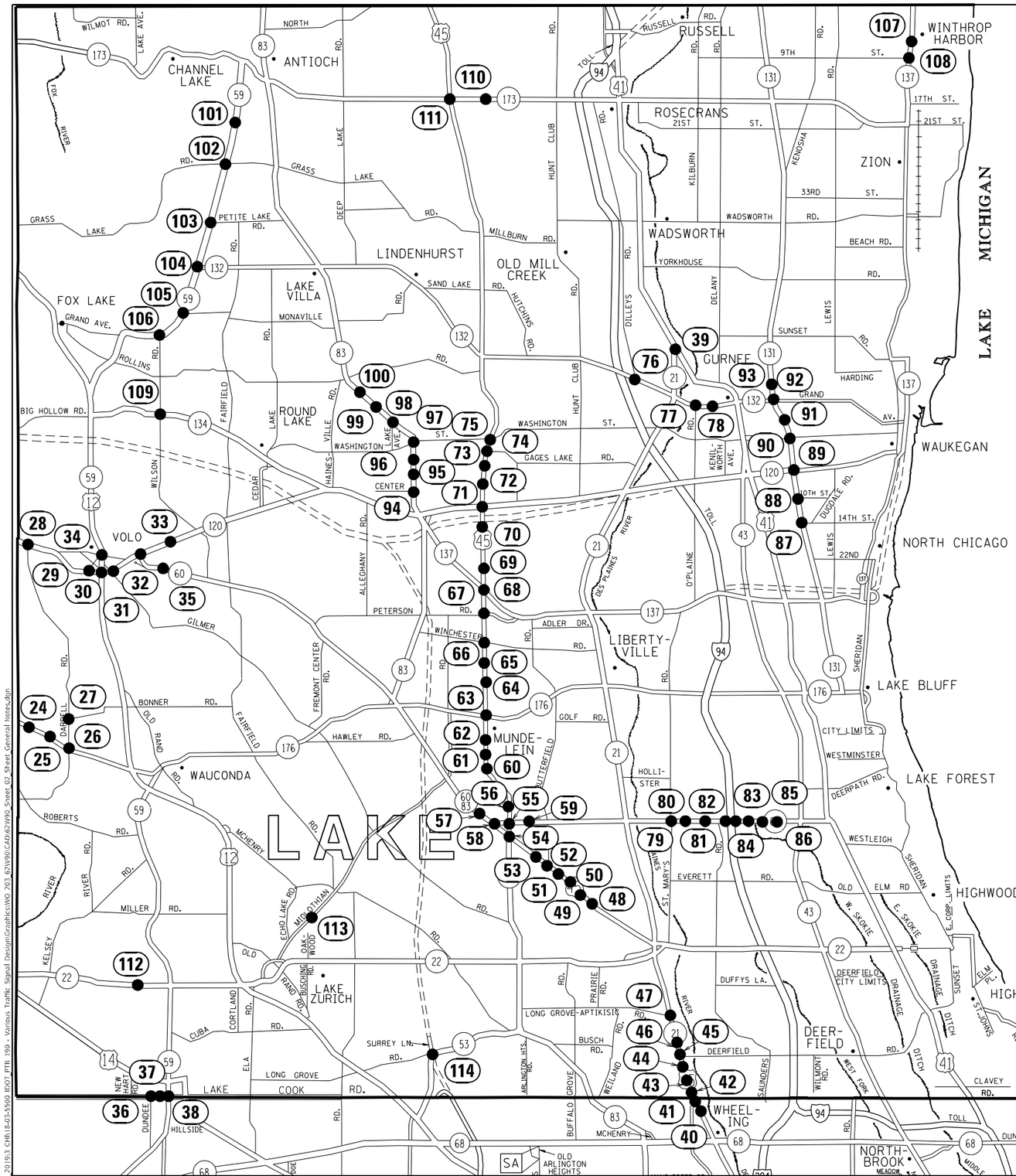
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LOCATION MAP
MCHENRY COUNTY

SCALE: NTS | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	3
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		



LOC. NO.	TS NO.	INTERSECTION NAME	MUNICIPALITY	COUNTY
24	7139	IL RTE 176 & BEECH ST/EASTWAY DR	ISLAND LAKE	LAKE
25	7137	IL RTE 176 & WESTRIDGE DR	ISLAND LAKE	LAKE
26	7135	IL RTE 176 & DARRELL RD	ISLAND LAKE	LAKE
27	876	DARRELL RD & BONNER RD	ISLAND LAKE	LAKE
28	22102	IL RTE 120 (BELVIDERE RD) & DARRELL RD	LAKEMOOR	LAKE
29	22104	IL RTE 120 (BELVIDERE RD) & COMMERCIAL ENTRANCE	ROUND LAKE	LAKE
30	6510	IL RTE 120 (BELVIDERE RD) & US RTE 12 / IL RTE 59	ROUND LAKE	LAKE
31	21940	IL RTE 120 (BELVIDERE RD) & GILMER RD	ROUND LAKE	LAKE
32	22010	IL RTE 120 & IL RTE 60	VOLO	LAKE
33	21942	IL RTE 120 & FISH LAKE RD	VOLO	LAKE
34	6511	US RTE 12 / IL RTE 59 & VOLO VILLAGE RD	VOLO	LAKE
35	22015	IL RTE 60 & FISH LAKE RD	VOLO	LAKE
36	21845	MAIN ST (LAKE-COOK RD) & DUNDEE AVE	BARRINGTON	LAKE
37	11282	MAIN ST (LAKE-COOK RD) & APPLEBEE	BARRINGTON	LAKE
38	11280	MAIN ST (LAKE-COOK RD) & IL RTE 59	BARRINGTON	LAKE
39	6535	US RTE 41 (SKOKIE HWY) & IL RTE 21 (RIVERSIDE DR)	WARREN TWP	LAKE
40	1730	US RTE 45 / IL RTE 21 (MILWAUKEE AVE) & WOLF RD	WHEELING	COOK
41	1724	US RTE 45 / IL RTE 21 (MILWAUKEE AVE) & LAKE-COOK RD - EB RAMPS	WHEELING	COOK
42	1726	US RTE 45 / IL RTE 21 (MILWAUKEE AVE) & LAKE-COOK RD - WB RAMPS	BUFFALO GROVE	LAKE
43	20995	US RTE 45 / IL RTE 21 (MILWAUKEE AVE) & COLUMBUS PKWY / RIVERWALK DR	BUFFALO GROVE	LAKE
44	6660	US RTE 45 / IL RTE 21 (MILWAUKEE AVE) & INVERRARY LN	RIVERWOODS	LAKE
45	6650	US RTE 45 / IL RTE 21 (MILWAUKEE AVE) & DEERFIELD RD	RIVERWOODS	LAKE
46	6680	US RTE 45 / IL RTE 21 (MILWAUKEE AVE) & BUSCH PKWY	DEERFIELD	LAKE
47	6630	US RTE 45 / IL RTE 21 (MILWAUKEE AVE) & APTAKISIC	DEERFIELD	LAKE
48	6658	US RTE 45 & BUFFALO GROVE RD / FAIRWAY DR	LINCOLNSHIRE	LAKE
49	6657	US RTE 45 & RANNEY AVE/COMMUTER PARKING LOT ENT	VERNON HILLS	LAKE
50	6655	US RTE 45 & DEERPATH DR	VERNON HILLS	LAKE
51	21070	US RTE 45 & EVERGREEN DR	VERNON HILLS	LAKE
52	6640	US RTE 45 & BUTTERFIELD RD	VERNON HILLS	LAKE
53	6641	US RTE 45 & OAKWOOD RD	INDIAN CREEK	LAKE
54	6610	US RTE 45 & IL RTE 83	MUNDELEIN	LAKE
55	6605	US RTE 45 (LAKE ST) & IL RTE 60 (TOWNLINE RD)	MUNDELEIN	LAKE
56	21975	US RTE 45 (LAKE ST) & TOWNLINE SQ	MUNDELEIN	LAKE
57	6920	IL RTE 60-83 & DIAMOND LAKE RD	MUNDELEIN	LAKE
58	6935	IL RTE 60-83 & IL RTE 60 / WILLOW SPRING RD	MUNDELEIN	LAKE
59	6905	IL RTE 60 & OAK CREEK PLZ / MEDLINE PL	MUNDELEIN	LAKE
60	14372	US RTE 45 (LAKE ST) & COURTLAND ST	MUNDELEIN	LAKE
61	14345	US RTE 45 (LAKE ST) & DIVISION ST	MUNDELEIN	LAKE
62	14350	US RTE 45 (LAKE ST) & HAWLEY ST	MUNDELEIN	LAKE
63	6625	US RTE 45 (LAKE ST) & IL RTE 176 (MAPLE AVE)	MUNDELEIN	LAKE
64	21420	US RTE 45 (LAKE ST) & DUNBAR RD	MUNDELEIN	LAKE
65	21260	US RTE 45 (LAKE ST) & INNOVATION WAY	LIBERTYVILLE	LAKE
66	12330	US RTE 45 (LAKE ST) & WINCHESTER RD	LIBERTYVILLE	LAKE
67	6675	US RTE 45 (LAKE ST) & PETERSON RD	LIBERTYVILLE	LAKE
68	21660	US RTE 45 & IL RTE 137 (BUCKLEY RD)	LIBERTYVILLE	LAKE
69	21663	US RTE 45 & CASEY RD	GRAYSLAKE	LAKE
70	21885	US RTE 45 & ARBOR BLVD / JONES POINT RD	GRAYSLAKE	LAKE
71	12305	US RTE 45 & IL RTE 120 (BELVIDERE RD)	GRAYSLAKE	LAKE
72	6645	US RTE 45 & CENTER ST / DEERPATH RD	GRAYSLAKE	LAKE
73	6635	US RTE 45 & BRAE LOCH RD	GRAYSLAKE	LAKE
74	21655	US RTE 45 & GAGES LAKE RD	GAGES LAKE	LAKE
75	6685	US RTE 45 & WASHINGTON ST	LAKE VILLA	LAKE
76	7085	IL RTE 132 (GRAND AVE) & DILLEY'S RD	GURNEE	LAKE
77	7065	IL RTE 132 (GRAND AVE) & OPLAINE	GURNEE	LAKE
78	6551	IL RTE 132 (GRAND AVE) & 1ST ST	GURNEE	LAKE
79	6895	IL RTE 60 (TOWNLINE RD) & ST MARY'S RD	METTAWA	LAKE
80	11701	IL RTE 60 (TOWNLINE RD) & GRAINGER ENTRANCE	METTAWA	LAKE
81	11700	IL RTE 60 (TOWNLINE RD) & RIVERWOODS RD	METTAWA	LAKE
82	11706	IL RTE 60 (TOWNLINE RD) & I-94 W RAMP	METTAWA	LAKE
83	11705	IL RTE 60 (TOWNLINE RD) & I-94 E RAMP	METTAWA	LAKE
84	20530	IL RTE 60 (TOWNLINE RD) & SAUNDERS RD / FIELD DR	LAKE FOREST	LAKE
85	11707	IL RTE 60 (KENNEDY RD) & CONWAY FARMS DR / FIELD CT	LAKE FOREST	LAKE
86	11708	IL RTE 60 (KENNEDY RD) & ACADEMY DR	LAKE FOREST	LAKE
87	9375	IL RTE 131 (GREEN BAY RD) & 14TH ST	NORTH CHICAGO	LAKE
88	7045	IL RTE 131 (GREEN BAY RD) & 10TH ST	WAUKEGAN	LAKE
89	7820	IL RTE 131 (GREEN BAY RD) & IL RTE 120 (BELVIDERE RD)	WAUKEGAN	LAKE
90	7035	IL RTE 131 (GREEN BAY RD) & WASHINGTON ST	WAUKEGAN	LAKE
91	15022	IL RTE 131 (GREEN BAY RD) & BROOKSIDE AVE	WAUKEGAN	LAKE
92	15020	IL RTE 131 (GREEN BAY RD) & IL RTE 132 (GRAND AVE)	WAUKEGAN	LAKE
93	20485	IL RTE 131 (GREEN BAY RD) & CRESCENT AVE	WAUKEGAN	LAKE
94	13740	IL RTE 83 & CENTER ST	GRAYSLAKE	LAKE
95	13739	IL RTE 83 & LIBRARY LN	GRAYSLAKE	LAKE
96	13741	IL RTE 83 & FREDERICK RD	GRAYSLAKE	LAKE
97	12315	IL RTE 83 & WASHINGTON ST	GRAYSLAKE	LAKE
98	21990	IL RTE 83 & LAKE ST	GRAYSLAKE	LAKE
99	21993	IL RTE 83 & SHOREWOOD RD	GRAYSLAKE	LAKE
100	12317	IL RTE 83 & BRIGHTON LN / KNIGHT WAY	ROUND LAKE BEACH	LAKE
101	6857	IL RTE 59 & BEACH GROVE RD	ANTIOCH TWP	LAKE
102	6855	IL RTE 59 (FOX LAKE RD) & GRASS LAKE RD	ANTIOCH TWP	LAKE

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED - 05/08/2025	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 5/7/2025	DATE - 12/20/2024	REVISED -	

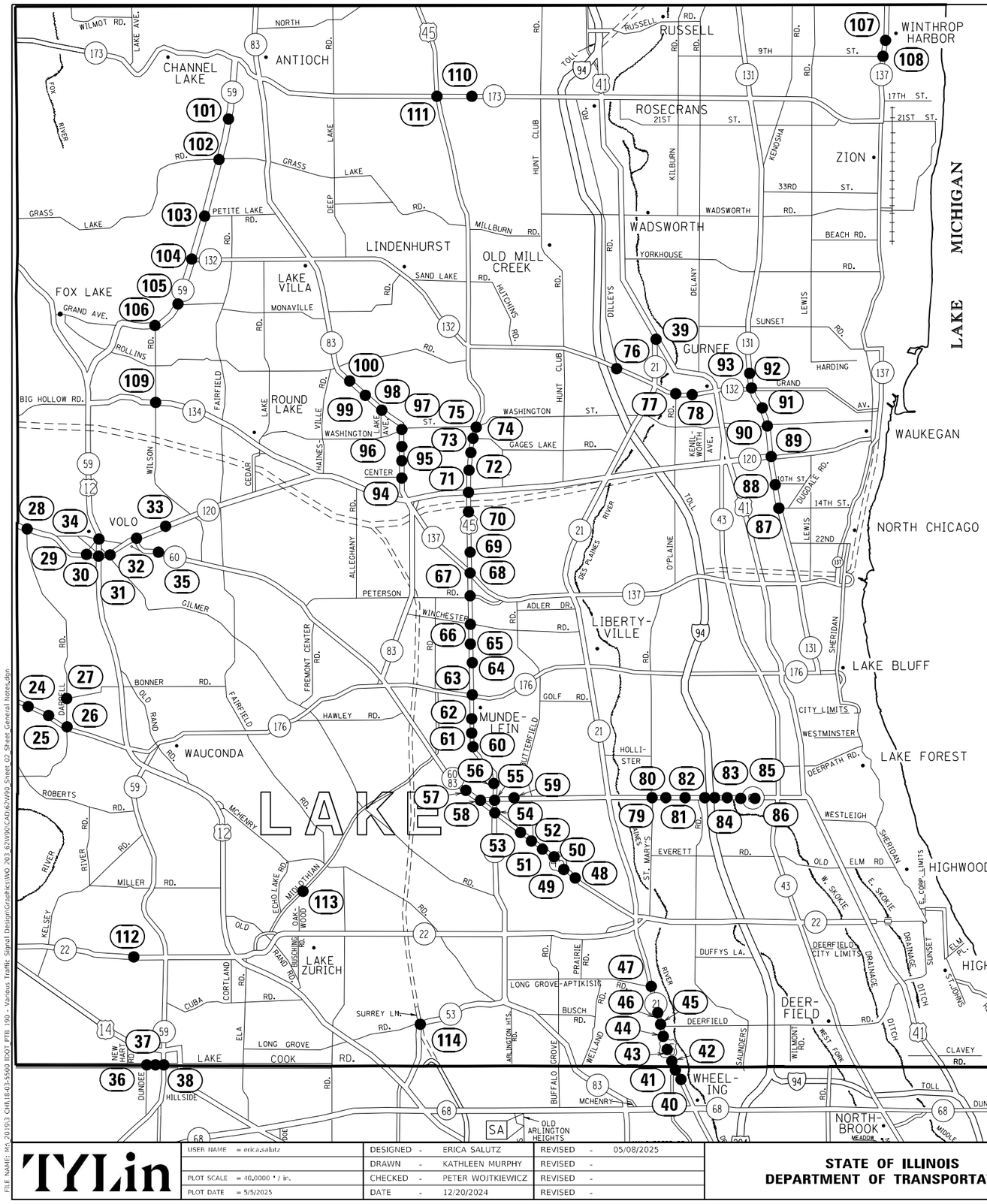
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LOCATION MAP
LAKE AND NORTHERN COOK COUNTY

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	4
		CONTRACT NO. 62W90		
		ILLINOIS	FED. AID PROJECT	

FILE NAME: M:\2019\3 CMI\18-03-5500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203 62W90\CAD\62W90_Sheet_02 Sheet General Notes.dgn



LOC. NO.	TS NO.	INTERSECTION NAME	MUNICIPALITY	COUNTY
103	21635	IL RTE 59 (FOX LAKE RD) & PETITE LAKE RD	LAKE VILLA	LAKE
104	6840	IL RTE 59 (FOX LAKE RD) & IL RTE 132 (GRAND AVE)	LAKE VILLA	LAKE
105	717	IL RTE 59 (GRAND AVE) & MONAVILLE RD	LAKE VILLA	LAKE
106	11940	IL RTE 59 (GRAND AVE) & WILSON	INGLESIDE	LAKE
107	12145	IL RTE 137 (SHERIDAN RD) & 7TH ST	WINTHROP HARBOR	LAKE
108	8795	IL RTE 137 (SHERIDAN RD) & 9TH ST	WINTHROP HARBOR	LAKE
109	557	IL RTE 134 & WILSON RD	LONG LAKE	LAKE
110	6622	IL RTE 173 & GREGORY DR	ANTIOCH	LAKE
111	6620	US RTE 45 & IL RTE 173	ANTIOCH TWP	LAKE
112	6742	IL RTE 22 & OLD BARRINGTON RD	NORTH BARRINGTON	LAKE
113	6753	MIDLOTHIAN RD & OAKWOOD RD / LAKEWOOD LN	LAKE ZURICH	LAKE
114	966	IL RTE 53 & LONG GROVE RD	LONG GROVE	LAKE

TYLin

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	DRAWN -	KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED -	PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 5/5/2025	DATE -	12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LOCATION MAP
LAKE AND NORTHERN COOK COUNTY

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	5
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

FILE NAME: MA-20193 CHI 18-03-5500 IDOT FTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_02_Sheet_General Notes.dgn

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				100% STATE COOK COUNTY	100% STATE LAKE COUNTY	100% STATE MCHENRY COUNTY
				INTERCONNECT	INTERCONNECT	INTERCONNECT
				0021	0021	0021
				URBAN	URBAN	URBAN
67100100	MOBILIZATION	L SUM	1	0.25	0.5	0.25
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1	0.25	0.5	0.25
70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1	0.25	0.5	0.25
70102622	TRAFFIC CONTROL AND PROTECTION, STANDARD 701502	L SUM	1	0.25	0.5	0.25
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	0.25	0.5	0.25
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	0.25	0.5	0.25
70102632	TRAFFIC CONTROL AND PROTECTION, STANDARD 701602	L SUM	1	0.25	0.5	0.25
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	0.25	0.5	0.25
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	117	2	92	23
85100500	PAINT NEW TRAFFIC SIGNAL POST	EACH	1	0	0	1
87300925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	46734	0	43640	3094
87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	812	0	550	262
88500100	INDUCTIVE LOOP DETECTOR	EACH	129	0	118	11
89501100	RELOCATE EXISTING TRAFFIC SIGNAL CONTROLLER	EACH	2	0	2	0
89501250	RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	9	0	8	1
89501410	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	13	0	12	1
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	92620	0	86380	6240
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	95	2	73	20

FILE NAME: M1_2019.3 CH0.18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graph-cs\WO 203 62W90\CAD\62W90 Sheet 03 500.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
ITS & TRAFFIC SIGNAL INTERCONNECT

SCALE: NTS | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	6
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

REV-SEP

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				100% STATE COOK COUNTY	100% STATE LAKE COUNTY	100% STATE MCHENRY COUNTY
				INTERCONNECT	INTERCONNECT	INTERCONNECT
				0021	0021	0021
				URBAN	URBAN	URBAN
X0324599	ROD AND CLEAN EXISTING CONDUIT	FOOT	36159	0	33602	2557
X0325922	CELLULAR MODEM	EACH	15	0	12	3
X0327117	ATMS SYSTEM INTEGRATION	LSUM	1	0	1	0
X1400102	OUTDOOR RATED NETWORK CABLE	FOOT	4410	0	2906	1504
X1400215	REMOTE CONTROLLED VIDEO SYSTEM	EACH	23	0	16	7
X1400216	LAYER II (DATALINK) SWITCH	EACH	26	0	25	1
X1400217	TERMINATE FIBER IN CABINET	EACH	836	24	580	232
X8710317	SPLICE FIBER IN CABINET	EACH	325	4	225	96
X1400335	WIRELESS TRANSMISSION SYSTEM POINT TO POINT	EACH	4	0	4	0
X8891009	VIDEO VEHICLE DETECTION SYSTEM, SINGLE APPROACH	EACH	6	0	6	0
X1400436	FIBER OPTIC JUMPER, SINGLE MODE	EACH	3	0	3	0
X1400460	LAYER III (NETWORK) SWITCH	EACH	2	0	0	2
X6700407	ENGINEER'S FIELD OFFICE, TYPE A (D1)	CAL MO	12	0	12	0
X1400511	LAYER III FIBER OPTIC TRANSCEIVER MODULE, SFP TYPE,	EACH	10	0	6	4
X8570215	LONG DISTANCE	EACH	67	2	49	16

FULLY ACTUATED CONTROLLER WITH EXISTING CABINET

FILE NAME: M1_20193 CH118-03-5500 TDOT PTB 190 - Various Traffic Signal Design\Graph-cs\WO 203 62W90\CAD\62W90 Sheet 03 500.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
ITS & TRAFFIC SIGNAL INTERCONNECT

SCALE: NTS | SHEET OF SHEETS | STA. | TO STA.

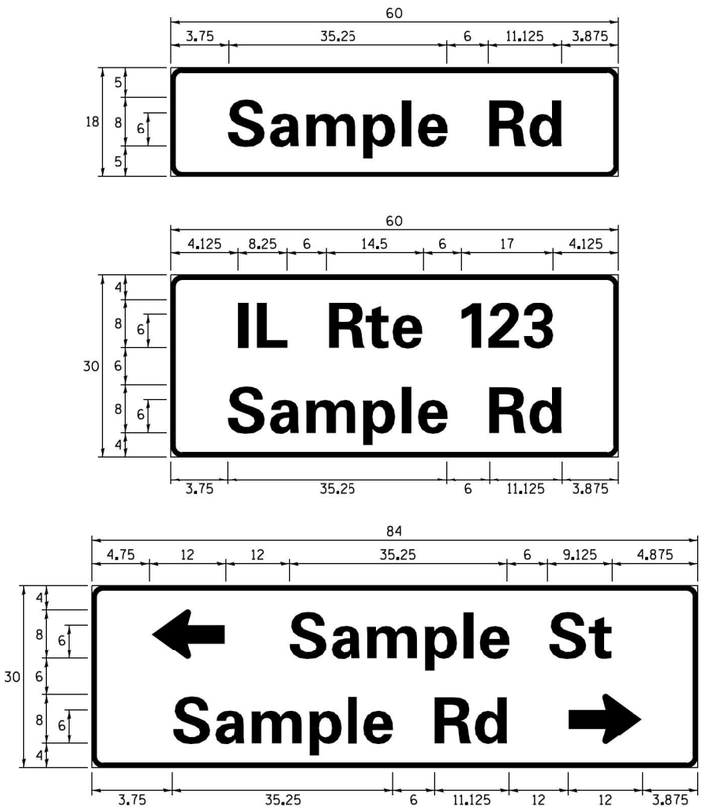
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	7
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

REV-SEP

				CONSTRUCTION CODE		
				100% STATE COOK COUNTY	100% STATE LAKE COUNTY	100% STATE MCHENRY COUNTY
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	INTERCONNECT 0021 URBAN	INTERCONNECT 0021 URBAN	INTERCONNECT 0021 URBAN
X8570226	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	4	0	3	1
X8570227	FULL-ACTUATED CONTROLLER AND TYPE IV STRETCHED CABINET, SPECIAL	EACH	9	0	9	0
X8620200	UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	12	0	12	0
X8620310	REMOVE AND REPLACE BATTERIES FOR UNINTERRUPTABLE POWER SUPPLY	EACH	6	0	0	6
X8710029	FIBER OPTIC CABLE 24 FIBERS, SINGLE MODE	FOOT	47254	0	44108	3146
X8710049	POWER OVER ETHERNET EXTENDER	EACH	6	0	3	3
X8710070	FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	25	0	19	6
X8710094	FIBER OPTIC INTERCONNECT CENTER, 48 PORT	EACH	2	0	2	0
Z0010688	CAMERA MOUNTING ASSEMBLY	EACH	16	0	12	4
X7200061	TEMPORARY INFORMATION SIGNING	SQ FT	436.9	25.7	308.4	102.8
Z0033056	OPTIMIZE TRAFFIC SIGNAL SYSTEM	EACH	13	0	11	2
X8103404	UNDERGROUND CONDUIT, UNI-DUCT, 1.25" SDR (11)	FOOT	6026	0	6026	0
X8710504	RELOCATE EX LAYER II (DATALINK) SWITCH FROM INVENTORY	EACH	26	1	10	15
Ø Z0076604	TRAINEES - TRAINING PROGRAM GRADUATE	HOUR	500	500		

Ø 0042

SIGN PANEL – TYPE 1 OR TYPE 2



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D OR C	-	1 OR 2	ZZ	-

ALL DIMENSIONS ARE IN INCHES EXCEPT NOTED OTHERWISE

COMMON STREET NAME ABBREVIATIONS AND WIDTHS

NAME	ABBREVATION	WIDTH (INCH)	
		SERIES "C"	SERIES "D"
AVENUE	Ave	15.000	18.250
BOULEVARD	Blvd	17.125	20.000
CIRCLE	Cir	11.125	13.000
COURT	Ct	8.250	9.625
DRIVE	Dr	8.625	10.125
HIGHWAY	Hwy	18.375	22.000
ILLINOIS	IL	7.000	8.250
LANE	Ln	9.125	10.750
PARKWAY	Pkwy	23.375	27.375
PLACE	Pl	7.125	7.750
ROAD	Rd	9.625	11.125
ROUTE	Rte	12.625	14.500
STREET	St	8.000	9.125
TERRACE	Ter	12.625	14.625
TRAIL	Tr	7.750	9.125
UNITED STATES	US	10.375	12.250

GENERAL NOTES

1. WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 877001, 877002, 877006, 877011 AND 877012, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" x 8'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS FOR 80 M.P.H. WIND VELOCITY.

2. ALL SIGNS SHALL CONSIST OF A WHITE LEGEND AND BORDER (TYPE ZZ SHEETING) ON A GREEN BACKGROUND (TYPE ZZ SHEETING)

3. THE SIGN LENGTH SHALL BE IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHALL NOT EXCEED 8'-0". ALL BORDERS SHALL BE ¾" WIDE. CORNER RADIUS SHALL BE 1-7/8". THE SPACING BETWEEN THE WORDS SHOULD BE 6", IF POSSIBLE, BUT MAY BE REDUCED TO 5" WHEN SPACING IS CRITICAL. A MINIMUM OF 2-1/2" SHALL BE INCLUDED BETWEEN THE WORD AND THE RIGHT AND LEFT EDGES OF THE SIGN.

4. A PREFERRED METHOD FOR THE SIGN DESIGN IS TO USE SERIES "D" LETTER ON A ONE-LINE SIGN 18" IN HEIGHT AND A MAXIMUM OF 8'-0" IN WIDTH. IF SERIES "D" DOES NOT FIT ON A 8"-0" SIGN, THEN SERIES "C" SHOULD BE TRIED. IF SERIES "C" DOES NOT FIT ON A 8'-0" SIGN, A 30" HIGH TWO-LINE SIGN CAN BE USED. THE CROSSROAD DESIGNATION AS TO STREET, AVENUE, ETC. SHOULD BE SPELLED OUT ON THE SECOND LINE. IF THE ABBREVIATION CANNOT FIT ON THE FIRST LINE.

5. LED ILLUMINATED STREET NAME SIGNS CAN BE USED IN PLACE OF REGULAR SIGN PANELS BUT ANY SPECIAL WORDING AND SYMBOLOGY MUST BE APPROVED BY THE DEPARTMENT. GENERAL DESIGN REQUIREMENT AS LISTED ABOVE (COLOR, FONT, SIZE, ETC.) MUST BE FOLLOWED.

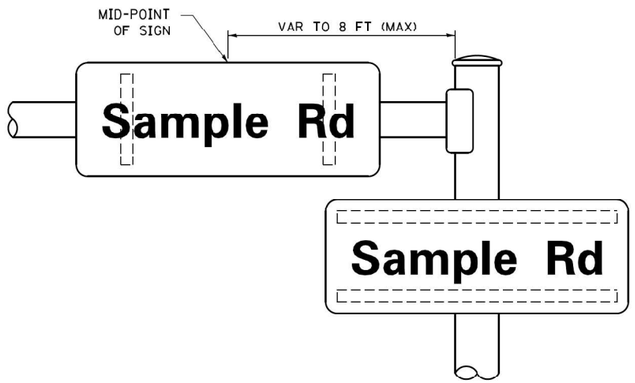
6. SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS.

LOCAL SUPPLIERS:	PARTS LISTING:	
- J.O. HERBERT COMPANY, INC MIDLOTHIAN, VA	SIGN CHANNEL	PART #HPN053 (MED. CHANNEL)
	SIGN SCREWS	1/4" x 14 x 1" H.W.H. #3 SELF TAPPING WITH NEOPRENE WASHER
- WESTERN REMAC, INC. WOODRIDGE, IL	BRACKETS	PART #HPN034 (UNIVERSAL) CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING

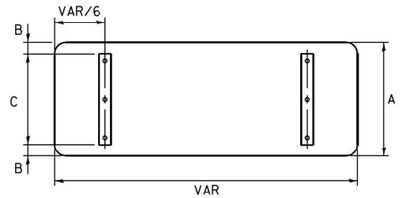
OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BRACKET OF THE ABOVE PRODUCT.

MOUNTING LOCATION

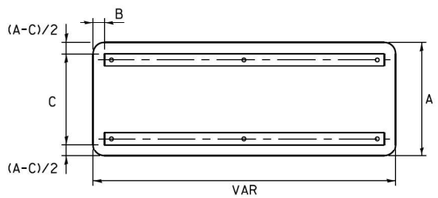
ARM OR POLE MOUNTED



SUPPORTING CHANNELS



A	B	C
18"	2"	14"
30"	2"	24"



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

STANDARD ALPHABETS SPACING CHART

(8") UPPER CASE AND (6") LOWER CASE

FHWA SERIES "C"				FHWA SERIES "D"			
CHARACTER	LEFT SPACING (INCH)	WIDTH (INCH)	RIGHT SPACING (INCH)	CHARACTER	LEFT SPACING (INCH)	WIDTH (INCH)	RIGHT SPACING (INCH)
A	0.240	5.122	0.240	A	0.240	6.804	0.240
B	0.880	4.432	0.480	B	0.960	5.446	0.400
C	0.720	4.432	0.720	C	0.800	5.446	0.800
D	0.880	4.432	0.720	D	0.960	5.446	0.800
E	0.880	4.082	0.480	E	0.960	4.962	0.400
F	0.880	4.082	0.240	F	0.960	4.962	0.240
G	0.720	4.432	0.720	G	0.800	5.446	0.800
H	0.880	4.432	0.880	H	0.960	5.446	0.960
I	0.880	1.120	0.880	I	0.960	1.280	0.960
J	0.240	4.082	0.880	J	0.240	5.122	0.960
K	0.880	4.432	0.480	K	0.960	5.604	0.400
L	0.880	4.082	0.240	L	0.960	4.962	0.240
M	0.880	5.284	0.880	M	0.960	6.244	0.960
N	0.880	4.432	0.880	N	0.960	5.446	0.960
O	0.720	4.722	0.720	O	0.800	5.684	0.800
P	0.880	4.432	0.720	P	0.960	5.446	0.240
Q	0.720	4.722	0.720	Q	0.800	5.684	0.800
R	0.880	4.432	0.480	R	0.960	5.446	0.400
S	0.480	4.432	0.480	S	0.400	5.446	0.400
T	0.240	4.082	0.240	T	0.240	4.962	0.240
U	0.880	4.432	0.880	U	0.960	5.446	0.960
V	0.240	4.952	0.240	V	0.240	6.084	0.240
W	0.240	6.084	0.240	W	0.240	7.124	0.240
X	0.240	4.722	0.240	X	0.400	5.446	0.400
Y	0.240	5.122	0.240	Y	0.240	6.884	0.240
Z	0.480	4.432	0.480	Z	0.400	5.446	0.400
a	0.320	3.842	0.640	a	0.400	4.562	0.720
b	0.720	4.082	0.480	b	0.800	4.802	0.480
c	0.480	4.002	0.240	c	0.480	4.722	0.240
d	0.480	4.082	0.720	d	0.480	4.802	0.800
e	0.480	4.082	0.320	e	0.480	4.722	0.320
f	0.320	2.480	0.160	f	0.320	2.882	0.160
g	0.480	4.082	0.720	g	0.480	4.802	0.800
h	0.720	4.082	0.640	h	0.800	4.722	0.720
i	0.720	1.120	0.720	i	0.800	1.280	0.800
j	0.000	2.320	0.720	j	0.000	2.642	0.800
k	0.720	4.322	0.160	k	0.800	5.122	0.160
l	0.720	1.120	0.720	l	0.800	1.280	0.800
m	0.720	6.724	0.640	m	0.800	7.926	0.720
n	0.720	4.082	0.640	n	0.800	4.722	0.720
o	0.480	4.082	0.480	o	0.480	4.882	0.480
p	0.720	4.082	0.480	p	0.800	4.802	0.480
q	0.480	4.082	0.720	q	0.480	4.802	0.800
r	0.720	2.642	0.160	r	0.800	3.042	0.160
s	0.320	3.362	0.240	s	0.320	3.762	0.240
t	0.080	2.882	0.080	t	0.080	3.202	0.080
u	0.640	4.082	0.720	u	0.720	4.722	0.800
v	0.160	4.722	0.160	v	0.160	5.684	0.160
w	0.160	7.524	0.160	w	0.160	9.046	0.160
x	0.000	5.202	0.000	x	0.000	6.244	0.000
y	0.160	4.952	0.160	y	0.160	6.004	0.160
z	0.240	3.362	0.240	z	0.240	4.002	0.240
1	0.720	1.680	0.880	1	0.800	2.000	0.960
2	0.480	4.432	0.480	2	0.800	5.446	0.800
3	0.480	4.432	0.480	3	1.440	5.446	0.800
4	0.240	4.952	0.720	4	0.160	6.004	0.960
5	0.480	4.432	0.480	5	0.800	5.446	0.800
6	0.720	4.432	0.720	6	0.800	5.446	0.800
7	0.240	4.432	0.720	7	0.560	5.446	0.560
8	0.480	4.432	0.480	8	0.800	5.446	0.800
9	0.480	4.432	0.480	9	0.800	5.446	0.800
0	0.720	4.722	0.720	0	0.800	5.684	0.800
-	0.240	2.802	0.240	-	0.240	2.802	0.240

TS SHT NO. 01

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
MAST ARM MOUNTED STREET NAME SIGNS

SCALE: | SHEET | OF | SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	9
	TS-02	CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

ts02.dgn 7/31/2015 11:37:05 AM User:drivakosgn

TRAFFIC SIGNAL LEGEND

(NOT TO SCALE)

ITEM	EXISTING	PROPOSED
CONTROLLER CABINET		
COMMUNICATION CABINET	ECC	CC
MASTER CONTROLLER	EMC	MC
MASTER MASTER CONTROLLER	EMMC	MMC
UNINTERRUPTABLE POWER SUPPLY		
SERVICE INSTALLATION -(P) POLE MOUNTED	P	P
SERVICE INSTALLATION -(G) GROUND MOUNTED -(GM) GROUND MOUNTED METERED	G GM	G GM
TELEPHONE CONNECTION	ET	T
STEEL MAST ARM ASSEMBLY AND POLE		
ALUMINUM MAST ARM ASSEMBLY AND POLE		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE		
SIGNAL POST -(BM) BARREL MOUNTED - TEMPORARY		BM
WOOD POLE		
GUY WIRE		
SIGNAL HEAD		
SIGNAL HEAD WITH BACKPLATE		
SIGNAL HEAD OPTICALLY PROGRAMMED	P P	P P
FLASHER INSTALLATION -(FS) SOLAR POWERED	F FS F FS	F FS F FS
PEDESTRIAN SIGNAL HEAD		
PEDESTRIAN PUSH BUTTON -(APS) ACCESSIBLE PEDESTRIAN PUSH BUTTON	APS	APS
RADAR DETECTION SENSOR	R	R
VIDEO DETECTION CAMERA	V	V
RADAR/VIDEO DETECTION ZONE		
PAN, TILT, ZOOM (PTZ) CAMERA	PTZ	PTZ
EMERGENCY VEHICLE LIGHT DETECTOR		
CONFIMATION BEACON		
WIRELESS INTERCONNECT		
WIRELESS INTERCONNECT RADIO REPEATER	ERR	RR

ITEM	EXISTING	PROPOSED
HANDHOLE -SQUARE -ROUND		
HEAVY DUTY HANDHOLE -SQUARE -ROUND	H	H
DOUBLE HANDHOLE		
JUNCTION BOX		
RAILROAD CANTILEVER MAST ARM		
RAILROAD FLASHING SIGNAL		
RAILROAD CROSSING GATE		
RAILROAD CROSSBUCK		
RAILROAD CONTROLLER CABINET		
UNDERGROUND CONDUIT (UC), GALVANIZED STEEL		
TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE		
SYSTEM ITEM	S	SP
INTERSECTION ITEM	I	IP
REMOVE ITEM		R
RELOCATE ITEM		RL
ABANDON ITEM		A
CONTROLLER CABINET AND FOUNDATION TO BE REMOVED		RCF
MAST ARM POLE AND FOUNDATION TO BE REMOVED		RMF
SIGNAL POST AND FOUNDATION TO BE REMOVED		RPF
DETECTOR LOOP, TYPE I		
PREFORMED DETECTOR LOOP	P	P
SAMPLING (SYSTEM) DETECTOR	S	S
INTERSECTION AND SAMPLING (SYSTEM) DETECTOR	IS	IS
QUEUE AND SAMPLING (SYSTEM) DETECTOR	QS	QS
WIRELESS DETECTOR SENSOR	W	W
WIRELESS ACCESS POINT		

ITEM	EXISTING	PROPOSED
SIGNAL HEAD -(P) PROGRAMMABLE SIGNAL HEAD	R Y G ◄Y ◄G (P)	R Y G ◄Y ◄G (P)
SIGNAL HEAD WITH BACKPLATE -(P) PROGRAMMABLE SIGNAL HEAD -(RB) RETROREFLECTIVE BACKPLATE	R Y G ◄Y ◄G (P) (RB)	R Y G ◄Y ◄G (P) (RB)
PEDESTRIAN SIGNAL HEAD AT RAILROAD INTERSECTIONS		
PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER	C D	C D
ILLUMINATED SIGN "NO LEFT TURN"/"NO RIGHT TURN"		
NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE. ALL DETECTOR LOOP CABLE TO BE SHIELDED	5	5
GROUND CABLE IN CONDUIT, NO. 6 SOLID COPPER (GREEN)	1#6	1#6
ELECTRIC CABLE IN CONDUIT, TRACER NO. 14 1/C	1	1
COAXIAL CABLE	C	C
VENDOR CABLE	V	V
COPPER INTERCONNECT CABLE, NO. 18, 3 PAIR TWISTED, SHIELDED	6#18	6#18
FIBER OPTIC CABLE -NO. 62.5/125, MM12F -NO. 62.5/125, MM12F SM12F -NO. 62.5/125, MM12F SM24F	12F 24F 36F	12F 24F 36F
GROUND ROD -(C) CONTROLLER -(M) MAST ARM -(P) POST -(S) SERVICE	C M P S	C M P S

TS SHT NO. 02

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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.
VAR	2024-965-TS	VARIOUS	262	10
	TS-05	CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

ts05.dgn 9/29/2016 2:58:13 PM User:leyse

LOOP DETECTOR NOTES

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

2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.

3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.

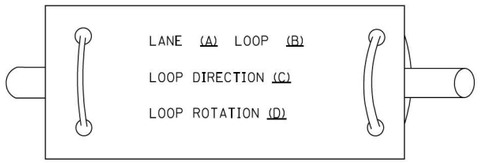
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.

5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.

6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.

7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

LOOP LEAD-IN CABLE TAG

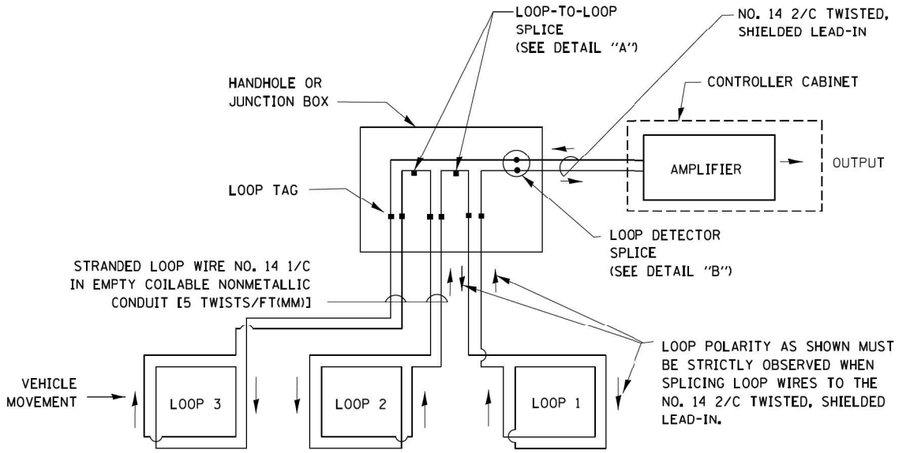


A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY

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

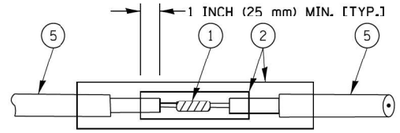
C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".

D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

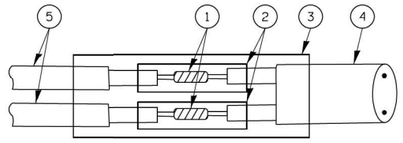


DETECTOR LOOP WIRING SCHEMATIC

- LOOPS SHALL BE SPLICED IN SERIES.
- SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm). IF IN CONCRETE, THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.

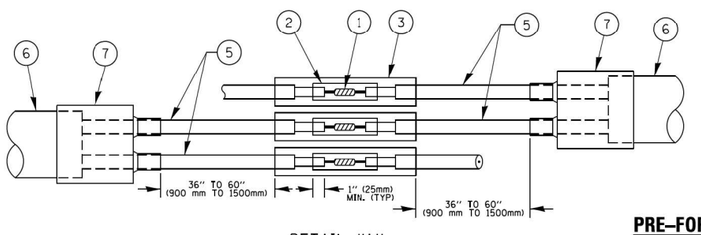


DETAIL "A"
LOOP-TO-LOOP SPLICE



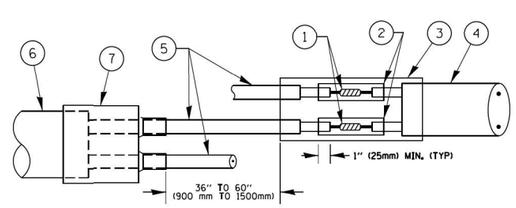
DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A"
LOOP-TO-LOOP SPLICE

PRE-FORMED LOOP



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

LOOP DETECTOR SPLICE

(1) WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH. 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 LENGHT 6" (150 mm), UNDERWATER GRADE.

(4) NO. 14 2/C TWISTED, SHIELDED CABLE.

(5) LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.

(6) PRE-FORMED LOOP

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

TS SHT NO. 03

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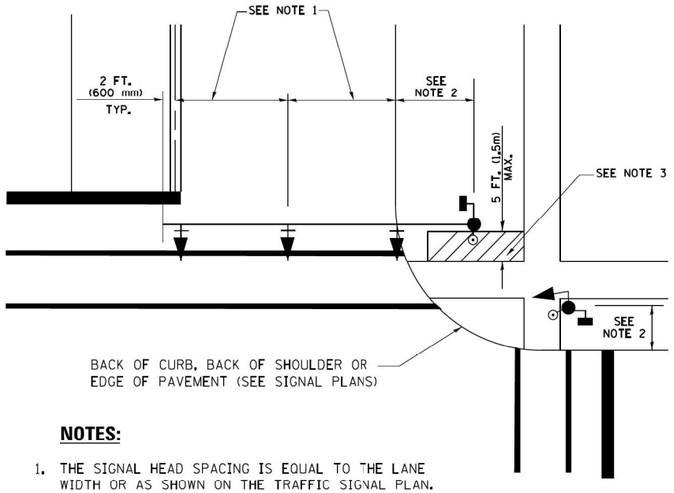
	PLOT SCALE = 50.0000 ' / in.	DRAWN - BCK	REVISED -			VAR	2024-965-TS	VARIOUS	262	11
	PLOT DATE = 1/13/2014	CHECKED - DAD	REVISED -				TS-05	CONTRACT NO. 62W90		
		DATE - 10-28-09	REVISED -		SCALE: NONE SHEET NO. 2 OF 7 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

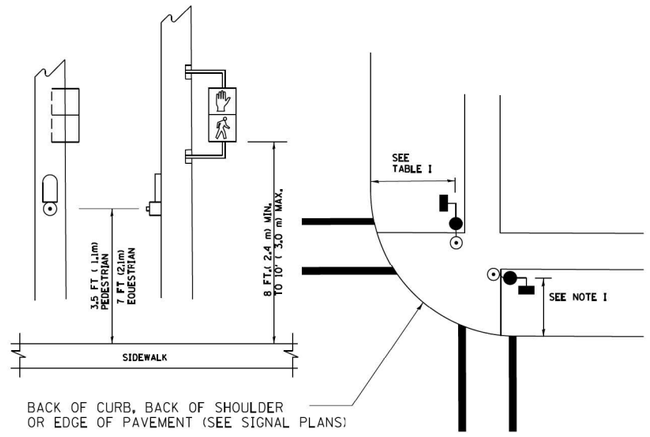
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



NOTES:

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

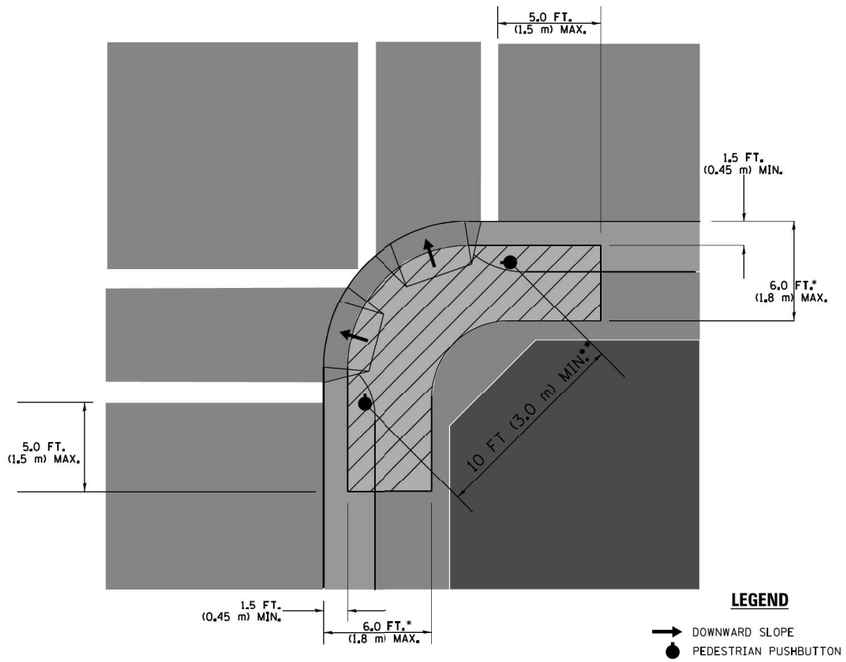
PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST



NOTES:

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

RECOMMENDED PUSHBUTTON LOCATIONS



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

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

NOTES:

1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) OF A VEHICULAR SIGNAL FACE THAT IS NOT LOCATED OVER A HIGHWAY SHALL BE AT LEAST 8 FT (2.4 m) BUT NOT MORE THAN 19 FT (5.8 m) ABOVE THE SIDEWALK OR, IF THERE IS NO SIDEWALK, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY.
3. THE BOTTOM OF THE SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001, 877002, 877006, 877011 AND 877012 WITH A MINIMUM OF 16 FT (5.0 m) AND A MAXIMUM OF 18 FT. (5.5 m) FROM THE HIGHEST POINT OF PAVEMENT.
4. THE BOTTOM OF THE TEMPORARY SPAN WIRE MOUNTED SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARD 880001 WITH A MINIMUM OF 17 FT (5.18 m) FROM THE HIGHEST POINT OF PAVEMENT.
5. THE TOP OF THE SIGNAL HOUSING OF A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL NOT BE MORE THAN 25.6 FT (7.8 m) ABOVE THE PAVEMENT.

TRAFFIC SIGNAL EQUIPMENT OFFSET

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

NOTES:

1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TOTHE 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. 04

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET NO. 3 OF 7 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	12
	TS-05	CONTRACT NO. 62W90		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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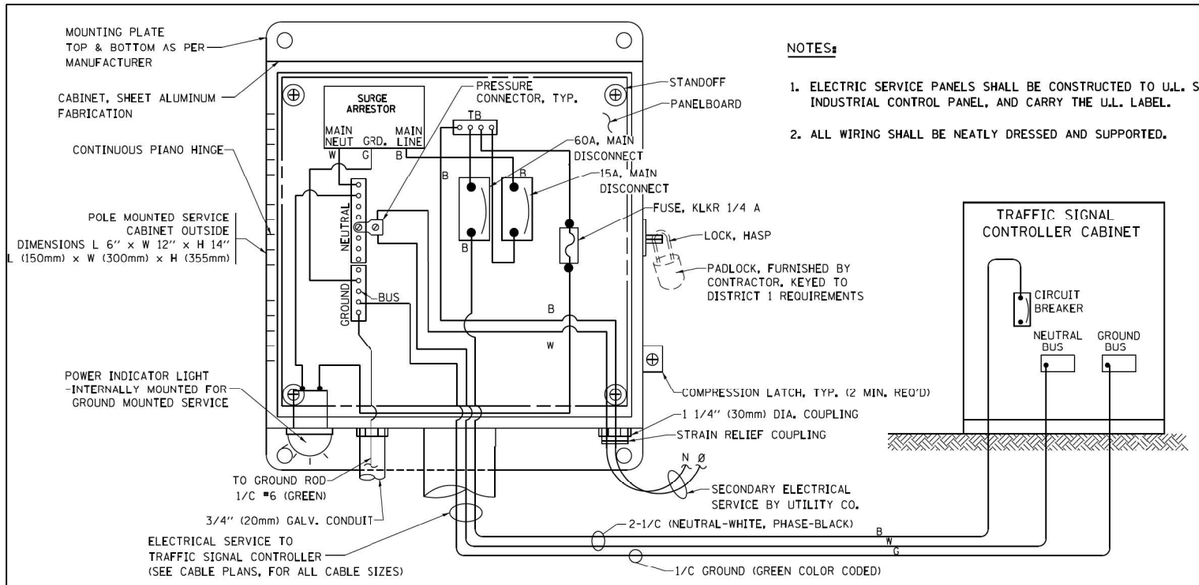
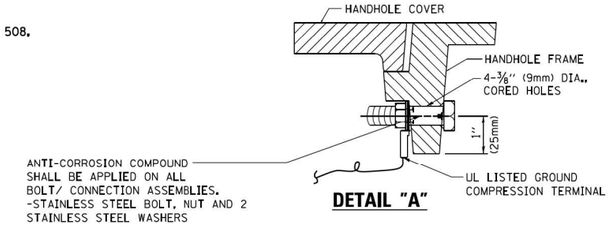


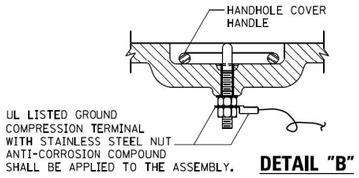
NOTES:

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

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



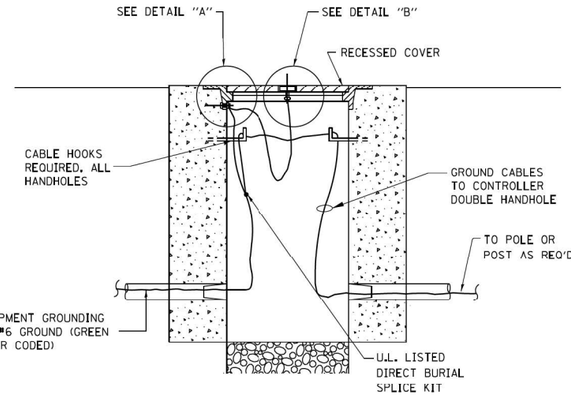
DETAIL "A"



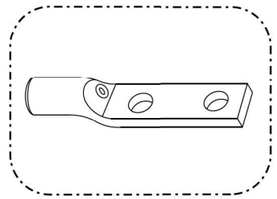
DETAIL "B"

NOTES:
GROUNDING SYSTEM

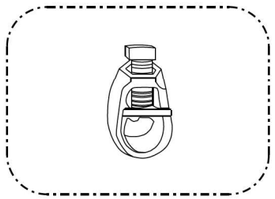
1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE,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



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



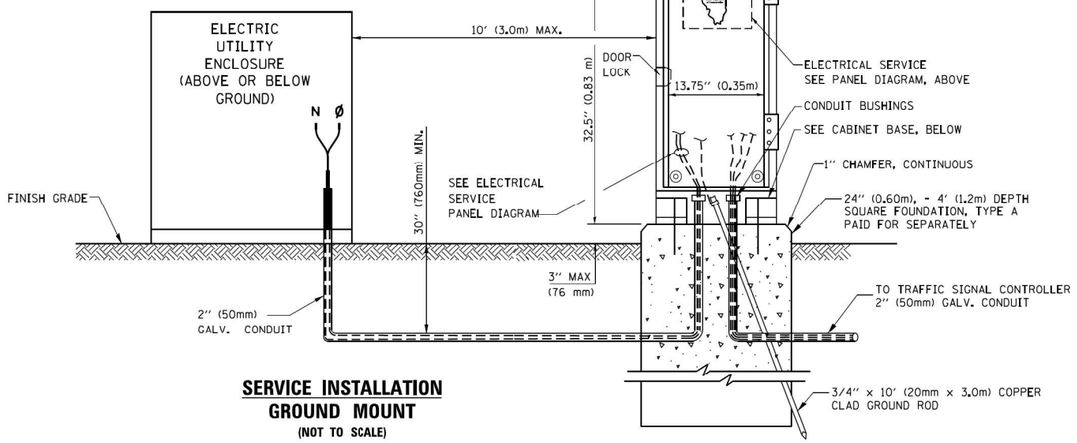
HEAVY-DUTY COMPRESSION TERMINAL (BURNDY TYPE YGHA OR APPROVED EQUAL)



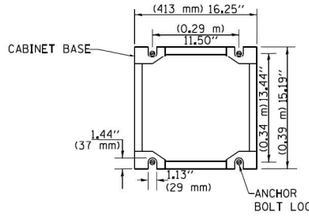
¾" (20mm) HEAVY-DUTY GROUND ROD CLAMP (BURNDY TYPE GRC OR APPROVED EQUAL)

NOTES:

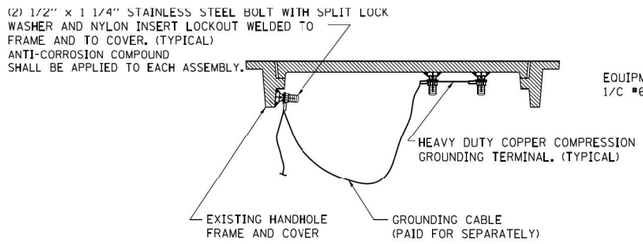
- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
- GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



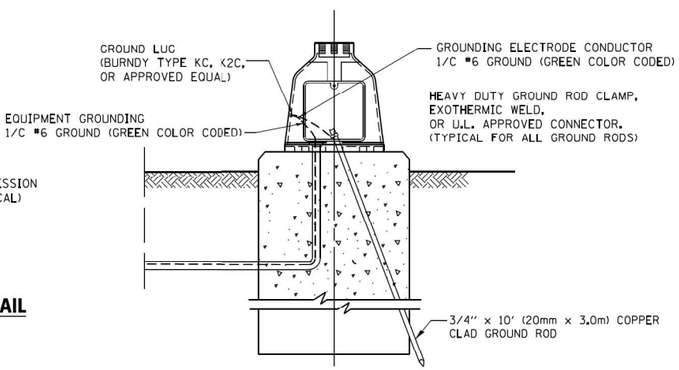
SERVICE INSTALLATION GROUND MOUNT
(NOT TO SCALE)



CABINET – BASE BOLT PATTERN
(NOT TO SCALE)



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



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

TS SHT NO. 05

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		DATE - 10-28-09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET NO. 4 OF 7 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	13
	TS-05	CONTRACT NO. 62W90		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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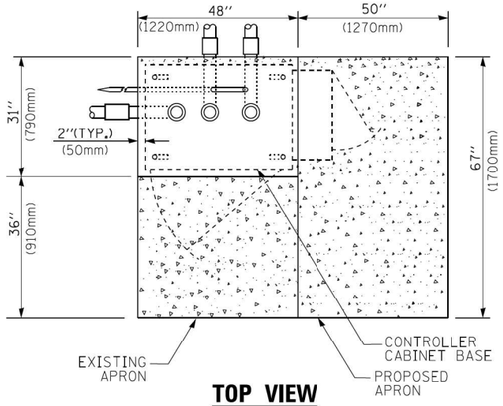
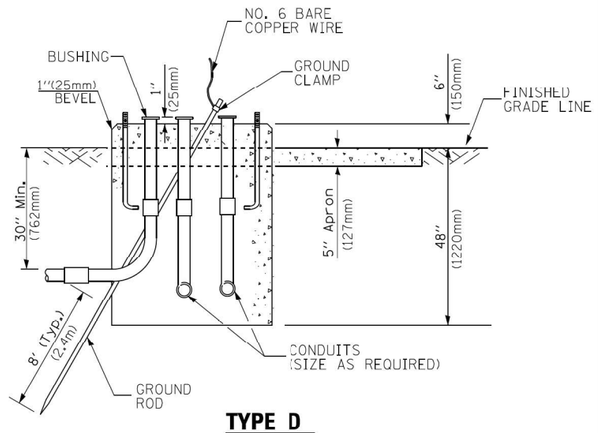
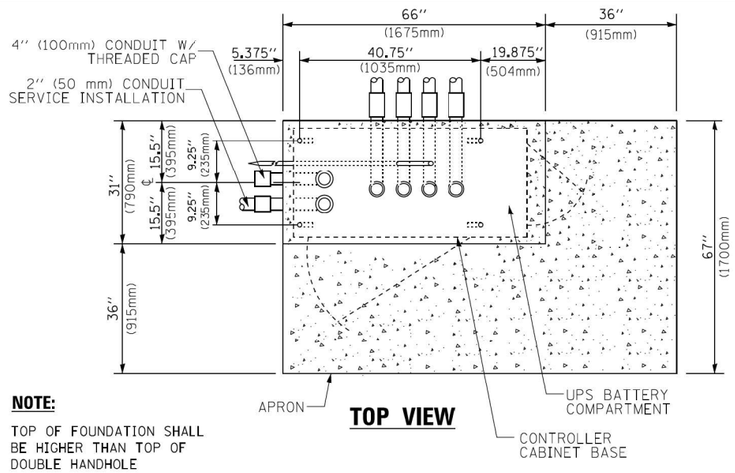


TOP VIEW



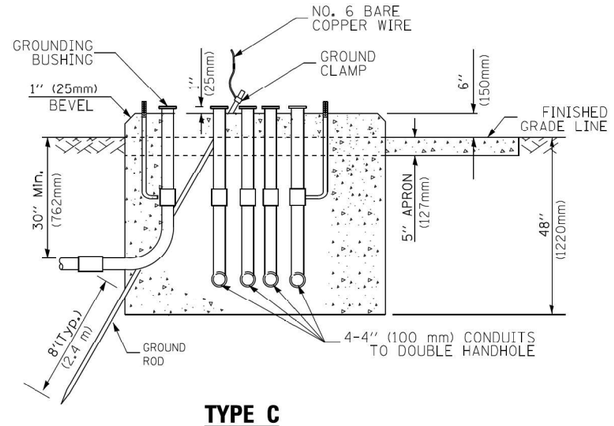
TYPE D
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET



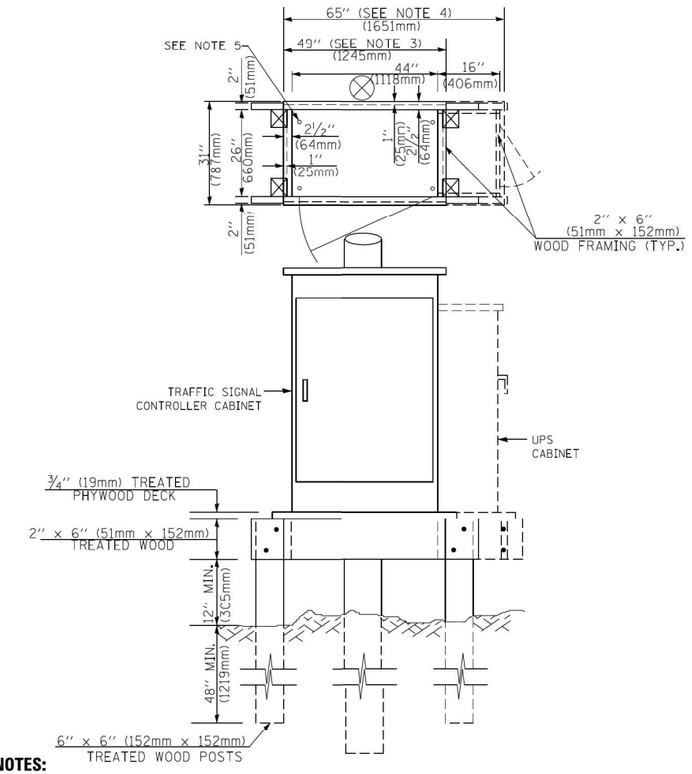
TOP VIEW

NOTE:

TOP OF FOUNDATION SHALL BE HIGHER THAN TOP OF DOUBLE HANDHOLE



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



NOTES:

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

TEMPORARY SIGNAL CONTROLLER
WOOD SUPPORT PLATFORM

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

CABLE SLACK

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

VERTICAL CABLE LENGTH

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

DEPTH OF FOUNDATION

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

NOTES:

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

DEPTH OF MAST ARM FOUNDATIONS, TYPE E

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET NO. 5 OF 7 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	14
	TS-05	CONTRACT NO. 62W90		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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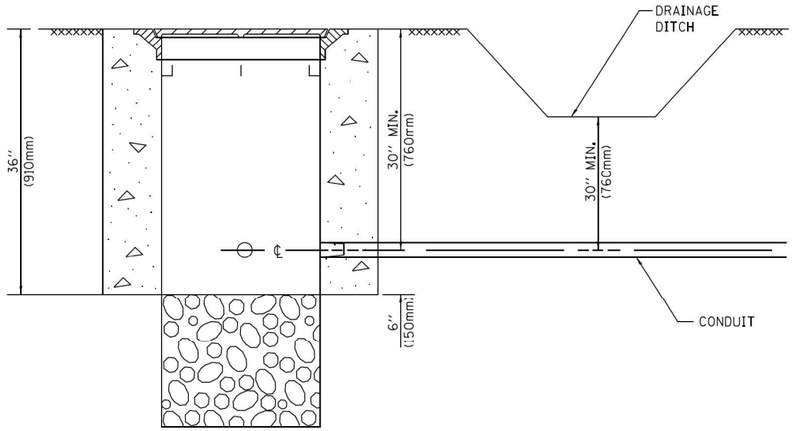
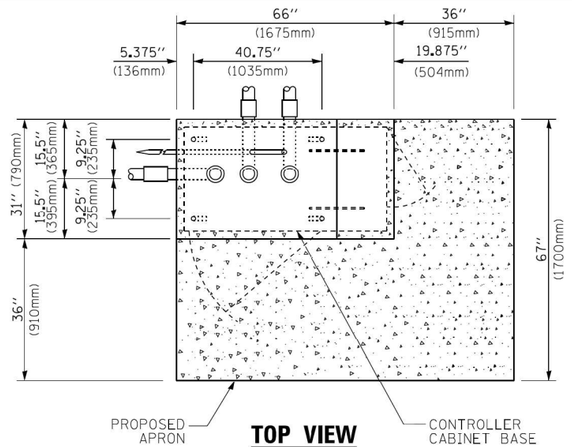


NOTES:

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.

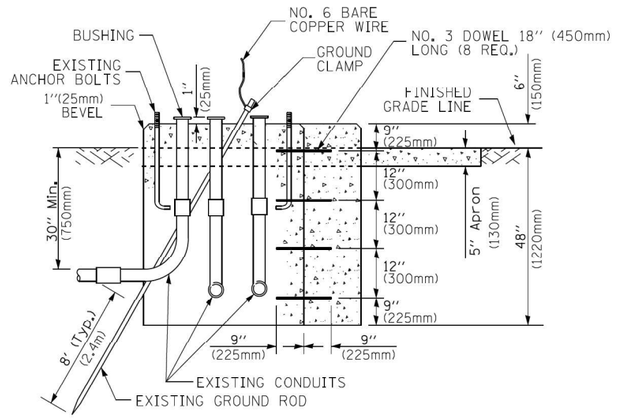
HANDHOLE WITH MINIMUM CONDUIT DEPTH

(NOT TO SCALE)



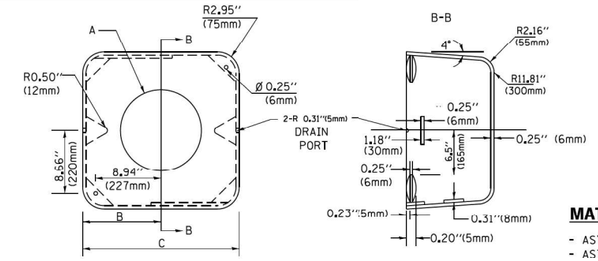
TOP VIEW

(NOT TO SCALE)



MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION

(NOT TO SCALE)



MATERIAL:

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

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

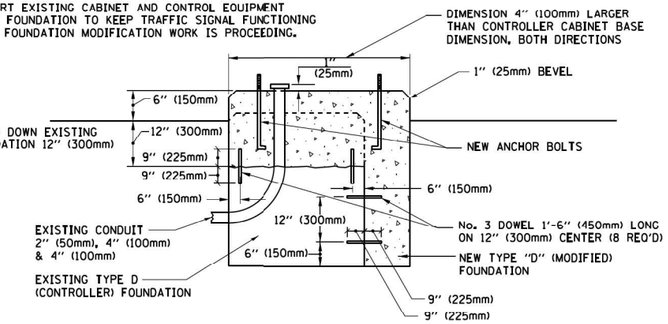
SHROUD

NOTES:

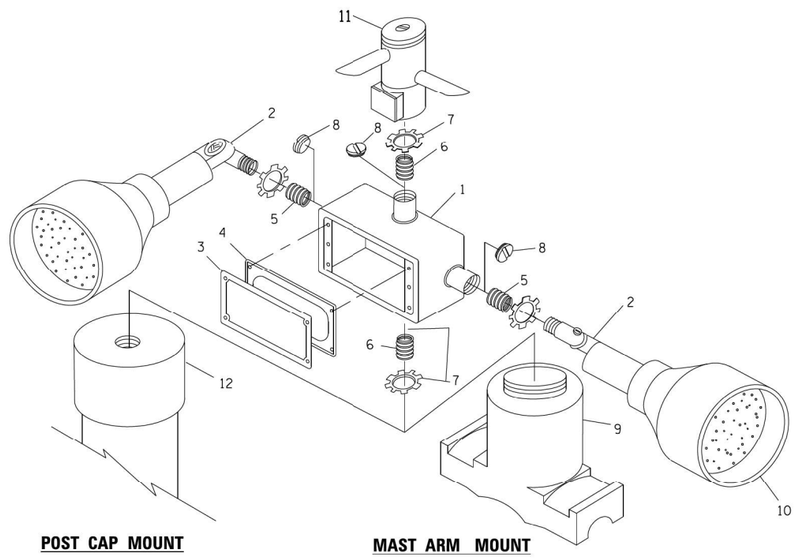
1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
2. THE SUPPLIER SHALL VERIFIED THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE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

NOTE:

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



MODIFY EXISTING TYPE "D" FOUNDATION



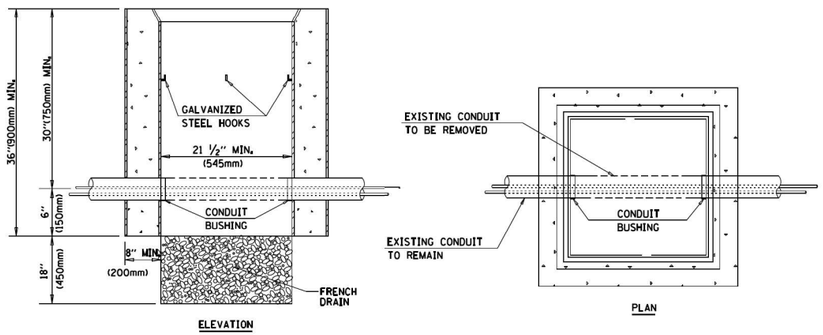
POST CAP MOUNT **MAST ARM MOUNT**

EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL

ITEM NO.	IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU.IN. (0.000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	¾"(19 mm) CLOSE NIPPLE
7	¾"(19 mm) LOCKNUT
8	¾"(19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

NOTES:

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



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

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET NO. 6 OF 7 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	15
	TS-05	CONTRACT NO. 62W90		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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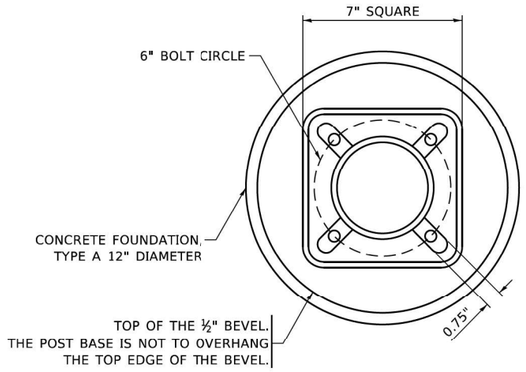
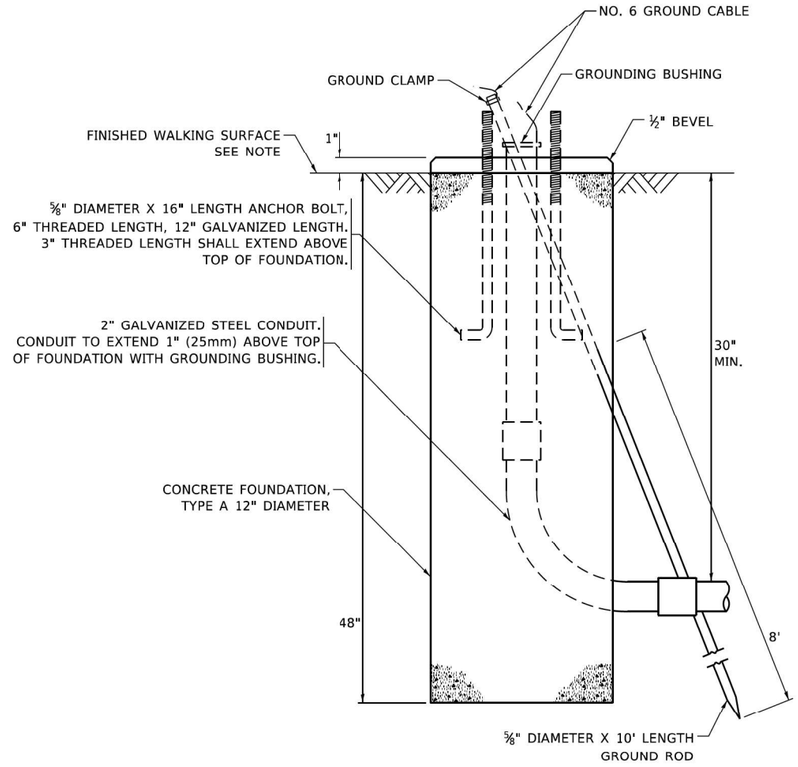


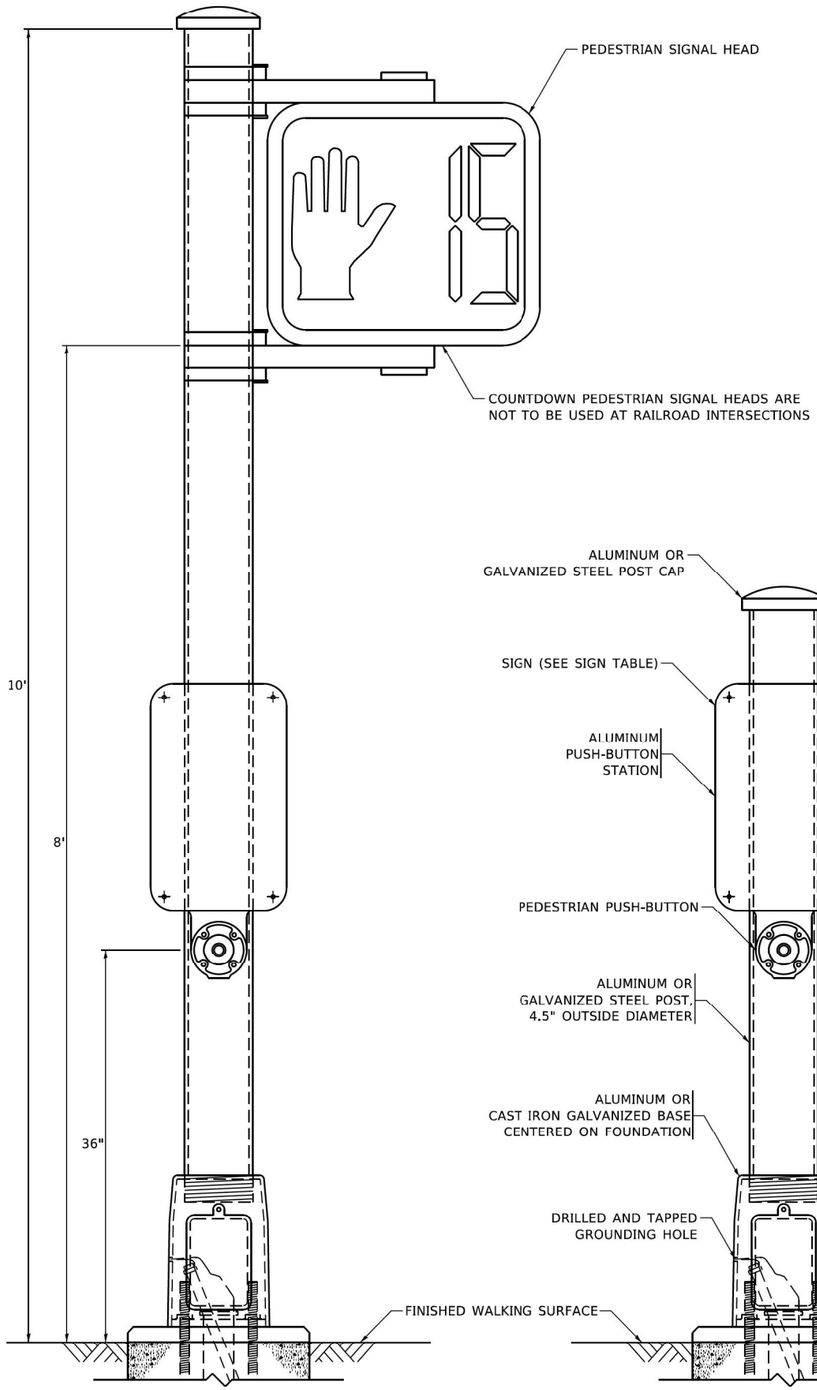
BOLT PATTERN

NOTE:

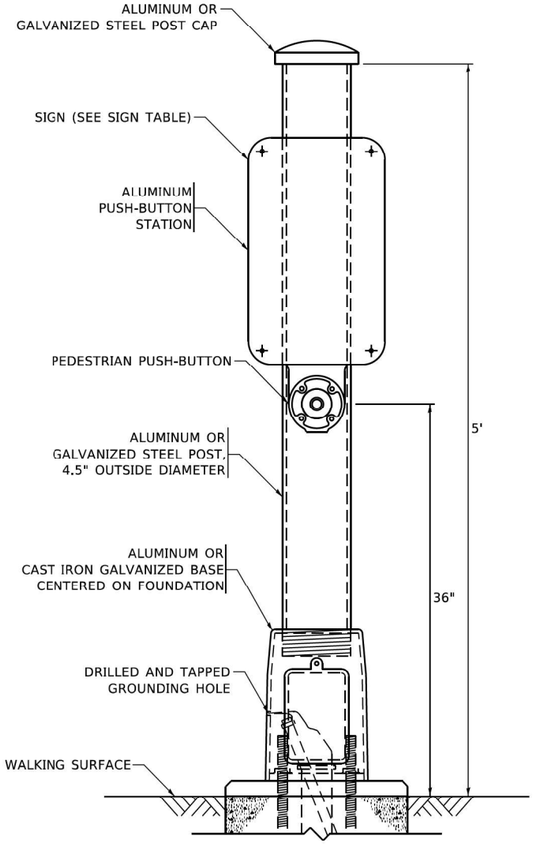
1. IF THE PEDESTRIAN SIGNAL POST FOUNDATION IS INSTALLED WITHIN OR BEHIND A BARRIER CURB, THE TOP OF THE FOUNDATION SHALL BE INSTALLED FLUSH WITH THE TOP OF THE BARRIER CURB.



CONCRETE FOUNDATION, TYPE A 12–INCH DIAMETER



PEDESTRIAN SIGNAL POST, 10 FT.



PEDESTRIAN SIGNAL POST, 5 FT.

R10–3b

R10–3d

R10–3e

SIGN TABLE

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

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. 08

MODEL: Default
FILE NAME: pw:\\dalarroom.dot.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\Dist\Std22x34\CADData\CADSheets\ts05.dgn

USER NAME = gaglianobt	DESIGNED - IP	REVISED - 10-15-2020	
	DRAWN - IP	REVISED -	
PLOT SCALE = 100.0000 ' / in.	CHECKED - LP	REVISED -	
PLOT DATE = 11/23/2020	DATE - 10-15-2018	REVISED -	

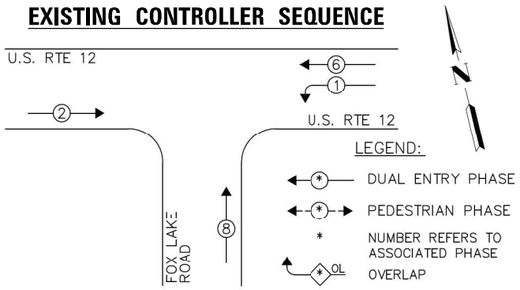
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

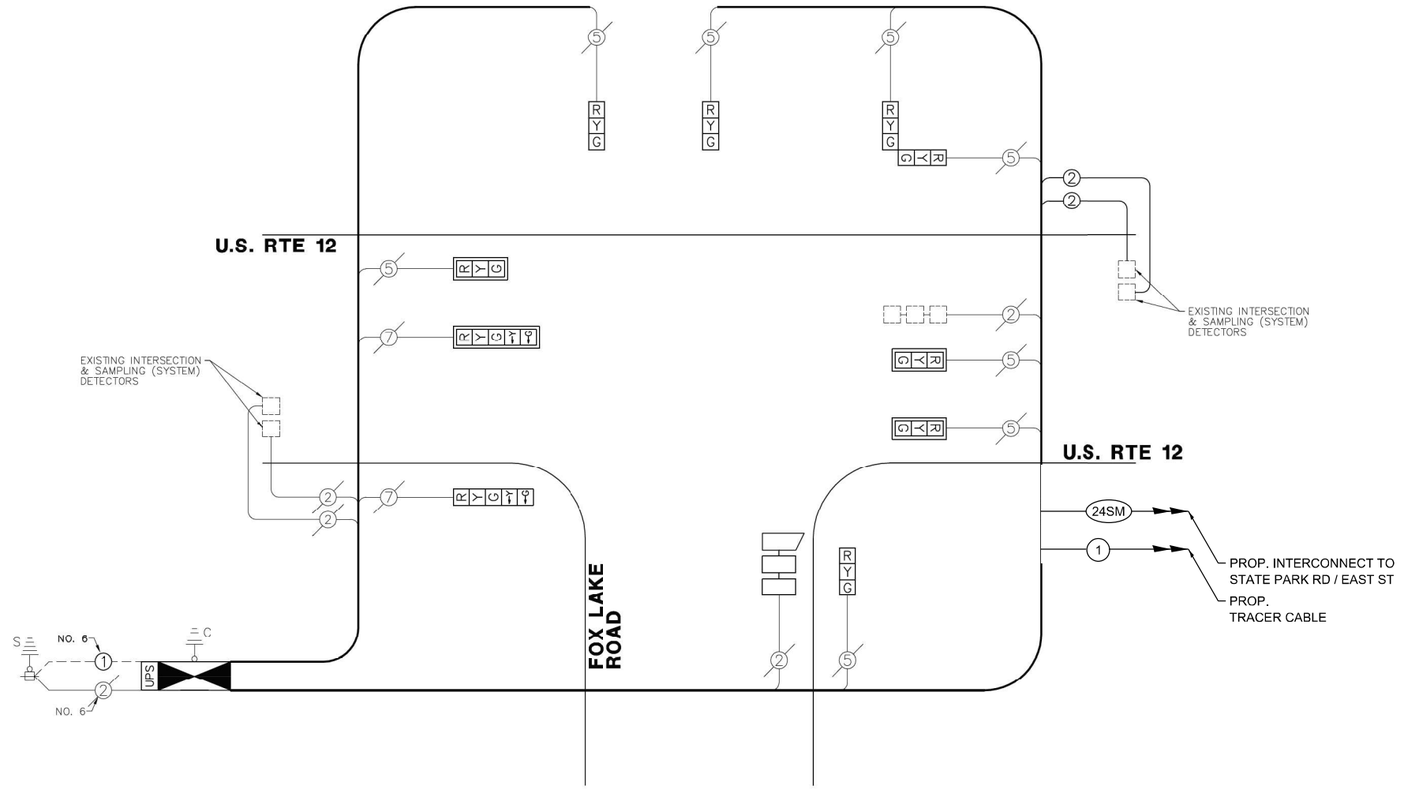
SCALE: NONE | SHEET 7 OF 7 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	16
	TS–05	CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

EXISTING CONTROLLER SEQUENCE



PROPOSED
PHASE DESIGNATION DIAGRAM



CABLE PLAN

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	8	11	88
4 - SECTION	-	14	-
5 - SECTION	2	13	26
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			324
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			929

ENERGY COSTS TO:
ILLINOIS DEPT OF TRANSPORTATION
201 W. CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER
1 EACH TRANSCEIVER FIBER OPTIC

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
TERMINATE FIBER IN CABINET	EACH	6
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1
RELOCATE EX LAYER II (DATALINK) SWITCH FROM INVENTORY	EACH	1

TS 7220
LCDOT TACTICS
FORMER EAGLE 9L

TS SHT NO. 09

FILE NAME: M:\2019\3 Cnty\18-03-5500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203-62W90\CAD\62W90_Sheet 05_Eagle9L.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM AND SCHEDULE OF QUANTITIES
LOCATION 1 – US RTE 12 AT FOX LAKE RD

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	17
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

NOTES:

1. THIS SYSTEM WILL NEED TO COMMUNICATE TO LCDOT SYSTEM THROUGH GRASS LAKE AT STATE PARK.

REMOVAL AND RELOCATION NOTES:

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF IDOT. THE CONTRACTOR SHALL SAFELY REMOVE AND REINSTALL AT THE INTERSECTIONS INDICATED BELOW.

1 EACH CELL MODEM RELOCATED TO TS 7290 - IL 120 (ELM ST) & IL 31 (RICHMOND RD)

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

1 EACH TRANSCIEVER FIBER OPTIC

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF IDOT. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR THE PICK UP OF ALL THE EQUIPMENT TO BE RETURNED TO IDOT.

1 EACH MASTER CONTROLLER

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

LAKE COUNTY
DIVISION OF TRANSPORTATION
TMC MANAGER
847-377-7000

1 EACH BLUETOOTH DETECTOR WITH CABLE AND ASSOCIATED EQUIPMENT

SCHEDULE OF QUANTITIES

	ITEM DESCRIPTION	UNITS	TOTAL QTY
*	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
	RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
	TERMINATE FIBER IN CABINET	EACH	6
	FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1

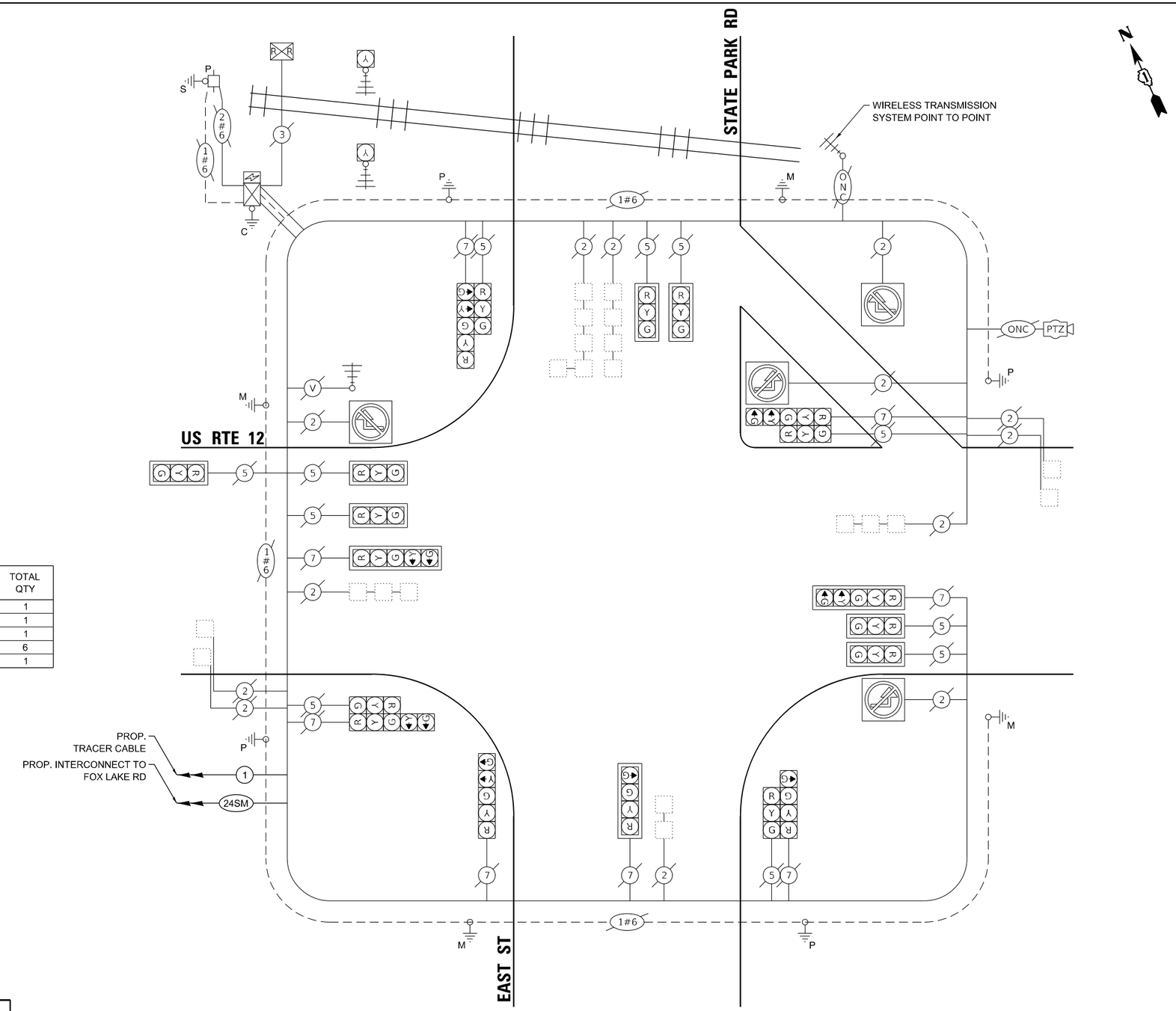
* SOLAR POWERED FLASHERS TO BE MAINTAINED AS PART OF SIGNAL MAINTENANCE (2 SB)

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	11	11	121
4 - SECTION	2	14	28
5 - SECTION	6	13	78
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	4	25	100
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			537
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	-
PTZ CAMERA	1	75	75
TOTAL SERVICE WIRE SIZING =			1217

ENERGY COSTS TO:
ILLINOIS DEPT OF TRANSPORTATION
201 W. CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---



CABLE PLAN

TS SHT NO. 10

TS 11945
LCDOT TACTICS
FORMER EAGLE 9L

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	05/08/2025
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 5/5/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM AND SCHEDULE OF QUANTITIES
LOCATION 2 – US RTE 12 AT STATE PARK RD /EAST ST
SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	18
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

FILE NAME: H:\2019\3 CH\13-03-5500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet 03_Eagle9L.dgn

SEQUENCE OF OPERATION

MOVEMENT		N	OL 5 1	6 1	OL 5 2	2 6	4 8	FLASH
PHASE			1+5	1+6	2+5	2+6	4+8	
INTERVAL		1	2	3	4	5	6	7	8	9	10A	10B	11	12A	12B	
CHANGE TO			1+6	2+5	2+6		2+6		2+6		4+8			1+5,1+6 2+5,2+6		
US 12 - NEAR LEFT, NEAR RIGHT, FAR RIGHT, AND FAR MIDDLE MAST ARM SIGNALS	E/B	R	R	R	R	R	R	G	G	G	Y	R	R	R	R	R
US 12 FAR LEFT AND END MAST ARM SIGNALS	E/B	R ←G	R ←Y	R ←G	R ←Y	R	R	G ←G	G ←Y	G	Y	R	R	R	R	R
US 12 - NEAR RIGHT, FAR RIGHT, AND FAR MIDDLE MAST ARM SIGNALS	W/B	R	R	R	R	G	G	R	R	G	Y	R	R	R	R	R
US 12 FAR LEFT AND END MAST ARM SIGNALS	W/B	R ←G	R ←G	R ←Y	R ←Y	G ←G	G ←Y	R	R	G	Y	R	R	R	R	R
EAST STREET ALL SIGNALS	N/B	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	R
STATE PARK ROAD NEAR RIGHT AND FAR RIGHT SIGNALS	S/B	R G→	R Y→	R G→	R Y→	R	R	R G→	R Y→	R	R	R	G	Y	R	R
STATE PARK ROAD FAR LEFT AND END MAST ARM SIGNALS	S/B	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	R
STATE PARK ROAD FLASHING BEACONS	S/B	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	DARK	FL Y	FL Y	FL Y

PHASES 2+6 SHALL BE PLACED ON RECALL

Created: 12/12/2024 AK
Revised:

RAILROAD PREEMPTION SEQUENCE OF OPERATION

											PREEMPTER NUMBER 2				
CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER		1	5		7		9		11						
RAILROAD PREEMPTION INTERVAL		1A	1B	1C	1D	1E	1F	1G	1H	1J	2	3	4	5	CLEAR TO NORMAL SEQUENCE
CHANGE TO RAILROAD PREEMPTION SEQUENCE INTERVAL NUMBER		2	1C	2	1E	2	1G	2	1J	2	3	4	5		
US 12 - NEAR LEFT, NEAR RIGHT, FAR RIGHT, AND FAR MIDDLE MAST ARM SIGNALS	E/B	R	R	R	Y	R	Y	R	R	R	R	R	R	G	Δ
US 12 FAR LEFT AND END MAST ARM SIGNALS	E/B	R ←Y	R	R	Y	R	Y	R	R	R	R	R	R	G	Δ
US 12 - NEAR RIGHT, FAR RIGHT, AND FAR MIDDLE MAST ARM SIGNALS	W/B	R	Y	R	R	R	Y	R	R	R	R	R	R	G	Δ
US 12 FAR LEFT AND END MAST ARM SIGNALS	W/B	R ←Y	Y	R	R	R	Y	R	R	R	R	R	R	G	Δ
EAST STREET ALL SIGNALS	N/B	R	R	R	R	R	R	R	Y	R	R	R	R	R	Δ
STATE PARK ROAD NEAR RIGHT AND FAR RIGHT SIGNALS	S/B	R G→	R	R	R G→	R G→	R	R	G	G	G	Y	R	R	Δ
STATE PARK ROAD FAR LEFT AND END MAST ARM SIGNALS	S/B	R	R	R	R	R	R	R	G	G	G ←G	Y	R	R	Δ
STATE PARK ROAD FLASHING BEACONS	S/B	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	Δ
CRYSTAL LAKE RD ILLUMINATED NRT SIGNS	W/B	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	Δ
DRIVEWAY ILLUMINATED NLT SIGNS	E/B	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	Δ
														HOLD	

Δ RAILROAD PREEMPTION SEQUENCE SHALL PROVIDE THE PROPER CLEARANCE INTERVAL TO RESUME THE NORMAL SEQUENCE OF OPERATION AFTER RAILROAD PREEMPTION INTERVAL 5 IS TERMIANTED.

NRT = NO RIGHT TURN
NLT = NO LEFT TURN

Created: 12/12/2024 AK
Revised:

TS SHT NO. 11

TS 11945
LCDOT TACTICS
FORMER EAGLE 9L

FILE NAME: M:\2019\3 CHI\18-03-5560 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203 #2W90\CAD\62W90_Sheet 03 Eq#9L.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

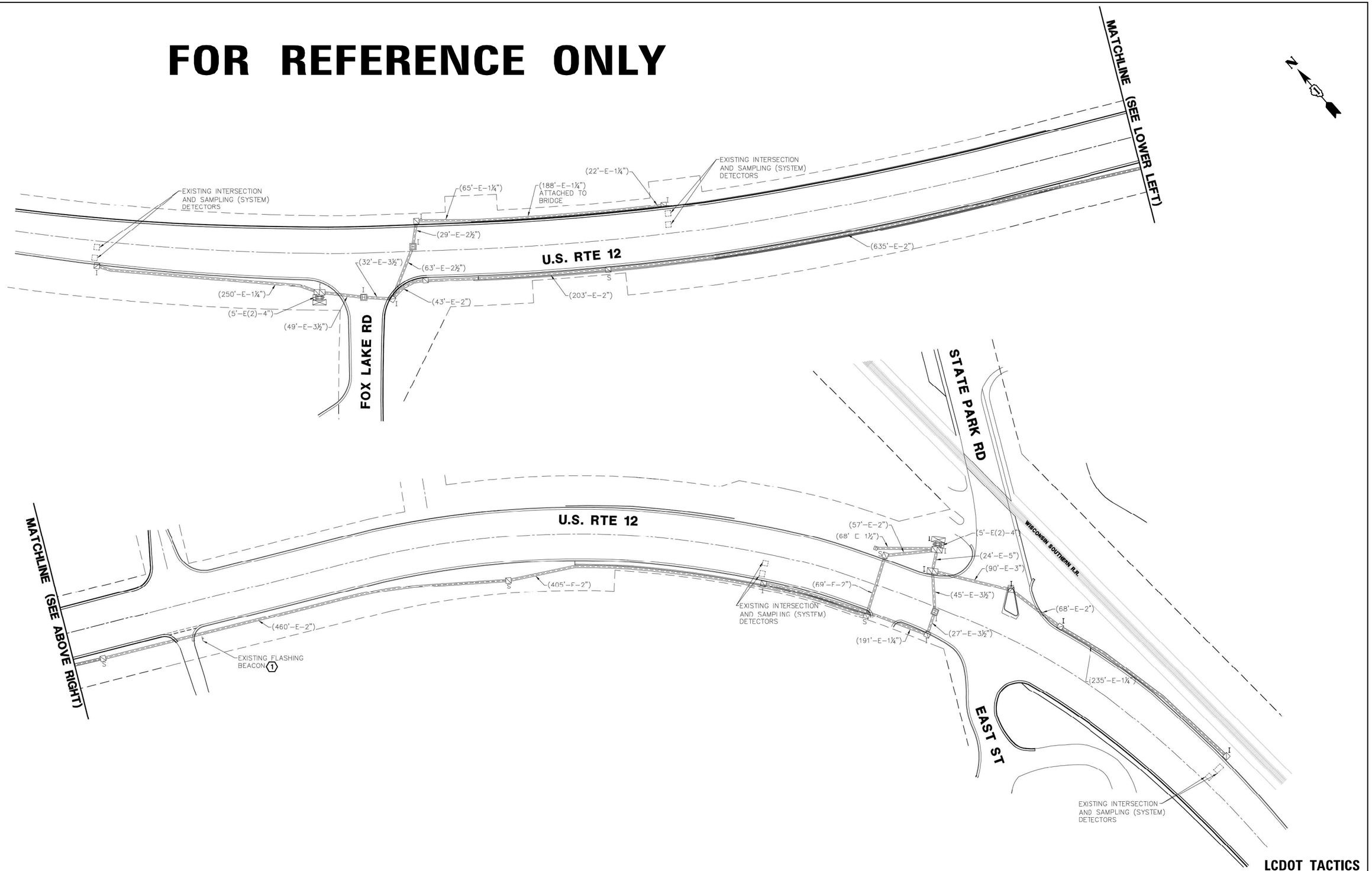
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SEQUENCE OF OPERATIONS AND RAILROAD PREEMPTION SEQUENCE OF OPERATION
LOCATION 2 – US RTE 12 AT STATE PARK RD /EAST ST

SCALE: | SHEET OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	19
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

FOR REFERENCE ONLY



LCDOT TACTICS
FORMER EAGLE 9L

TS SHT NO. 12

FILE NAME: MS-20193 CHI-18-02-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eagle9L.dgn

TYLin

USER NAME = erica.salutz	DESIGNED -	ERICA SALUTZ	REVISED -		
	DRAWN -	KATHLEEN MURPHY	REVISED -		
PLOT SCALE = 40.0000 ' / in.	CHECKED -	PETER WOJTKIEWICZ	REVISED -		
PLOT DATE = 3/30/2025	DATE -	12/20/2024	REVISED -		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN
US RTE 12 FROM FOX LAKE RD TO STATE PARK RD /EAST ST

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	20
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

SCHEDULE OF QUANTITIES

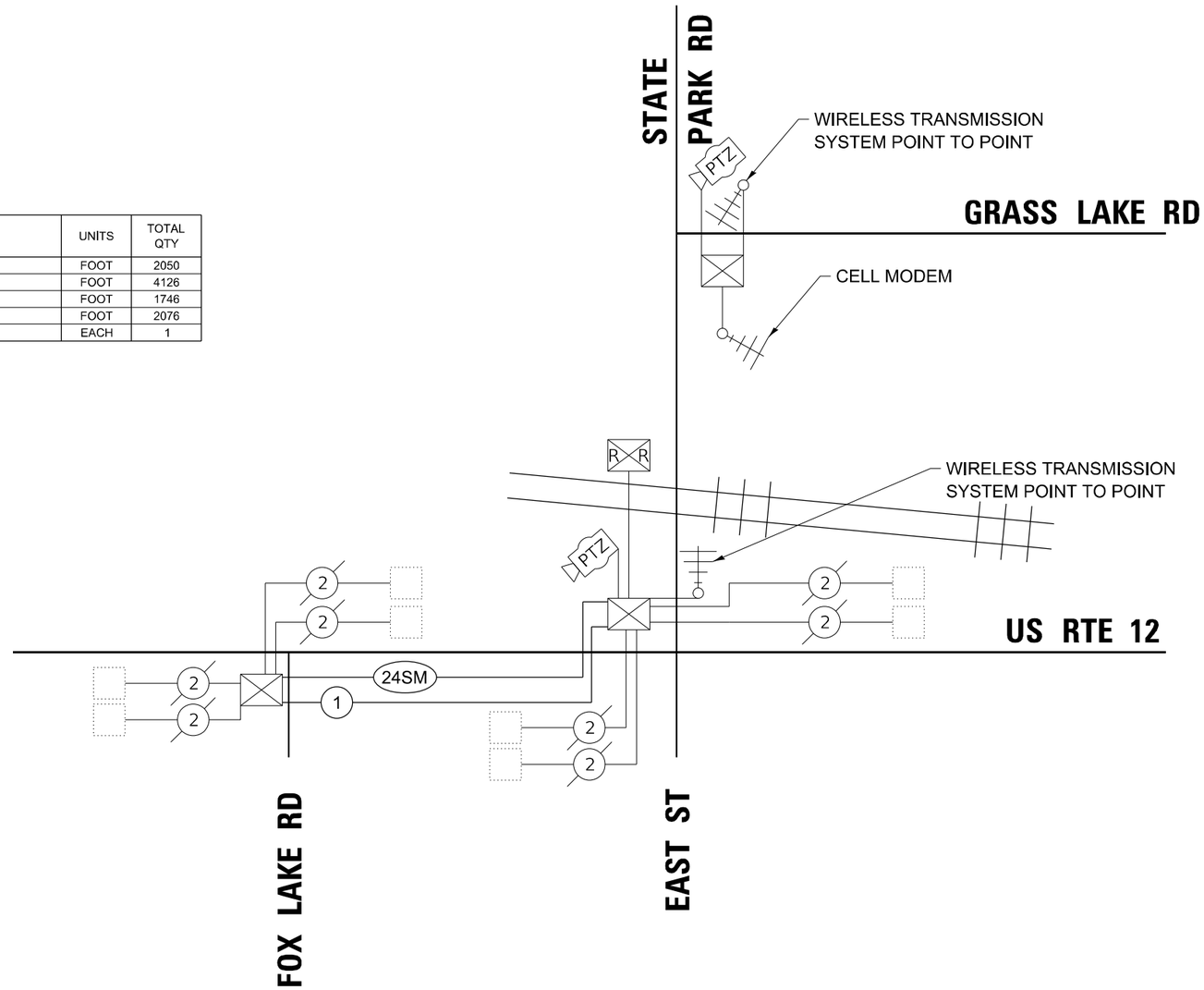
	ITEM DESCRIPTION	UNITS	TOTAL QTY
	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	2050
	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	4126
*	ROD AND CLEAN EXISTING CONDUIT	FOOT	1746
	FIBER OPTIC CABLE 24 FIBERS, SINGLE MODE	FOOT	2076
	OPTIMIZE TRAFFIC SIGNAL SYSTEM	EACH	1

* NOMINAL QUANTITY TO BE USED AS NEEDED AND AS APPROVED BY THE ENGINEER

NOTES:

1. OPTIMIZATION TO INCLUDE INTERSECTIONS FROM FORMER 9L SYSTEM.

US RTE 12 AT FOX LAKE RD
US RTE 12 AT STATE PARK RD / EAST ST



LCDOT TACTICS
FORMER EAGLE 9L

TS SHT NO. 13

FILE NAME: MS_20193 CHI:18-03-5500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eagle9L.dgn

TYLin

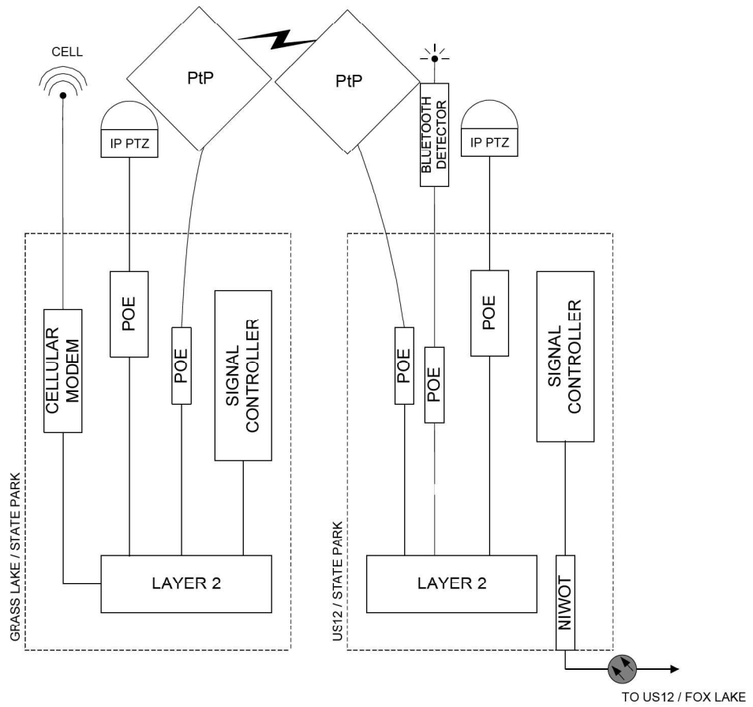
USER NAME = erica.salutz	DESIGNED -	ERICA SALUTZ	REVISED -	
	DRAWN -	KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED -	PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE -	12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT SCHEMATIC
US RTE 12 FROM FOX LAKE RD TO STATE PARK RD /EAST ST

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	21
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			



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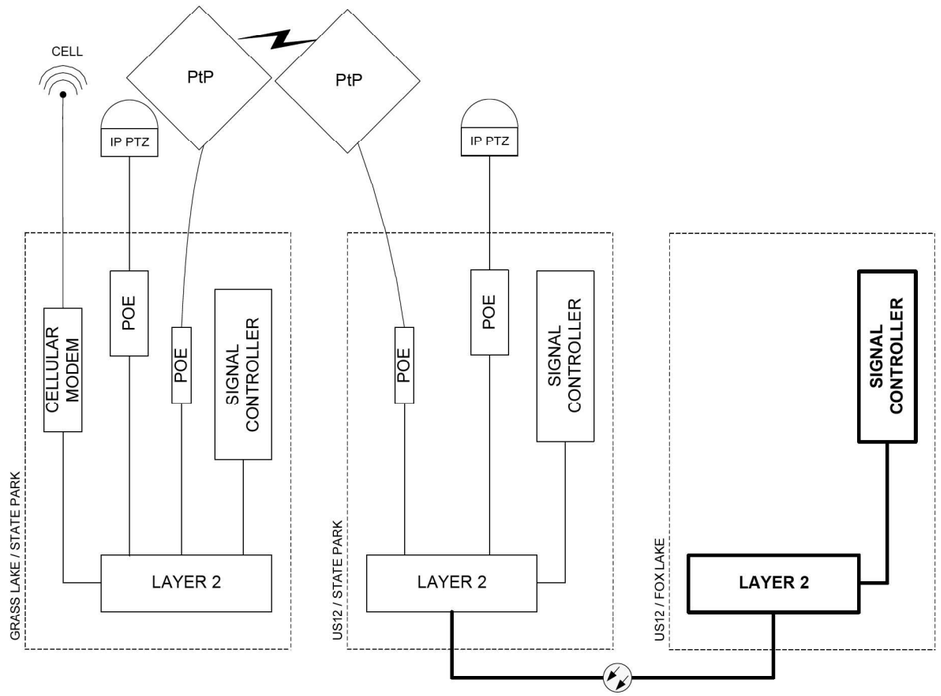


PROPOSED

LCDOT TACTICS
FORMER EAGLE 9L

TS SHT NO. 14

FILE NAME: M62_20193 CHI.18-03-5500 IDOT_PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90.C4D\62W90_Sheet_03_Eagle9L.dgn

PARSONS

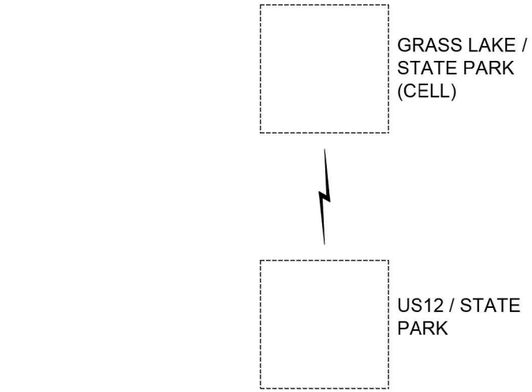
USER NAME = erica.salutz	DESIGNED - RL / DG	REVISED -	
	DRAWN - RL / DG	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - RL / DG	REVISED -	
PLOT DATE = 3/30/2025	DATE - 2025.02.20	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABINET DETAIL
US RTE 12 FROM FOX LAKE RD TO STATE PARK RD /EAST ST

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	22
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		



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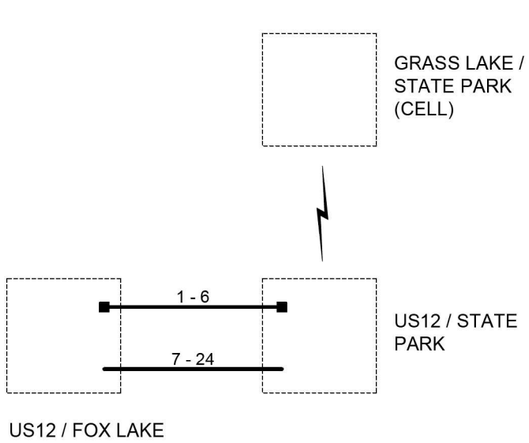


PROPOSED

LCDOT TACTICS
FORMER EAGLE 9L

TS SHT NO. 15

FILE NAME: M62_20193 CHI18403-5500 IDOT_PTB_190 - Various Traffic Signal Design\Graphics\WO 203_62W90.CAD\62W90_Sheet_03_Eagle9L.dgn

PARSONS

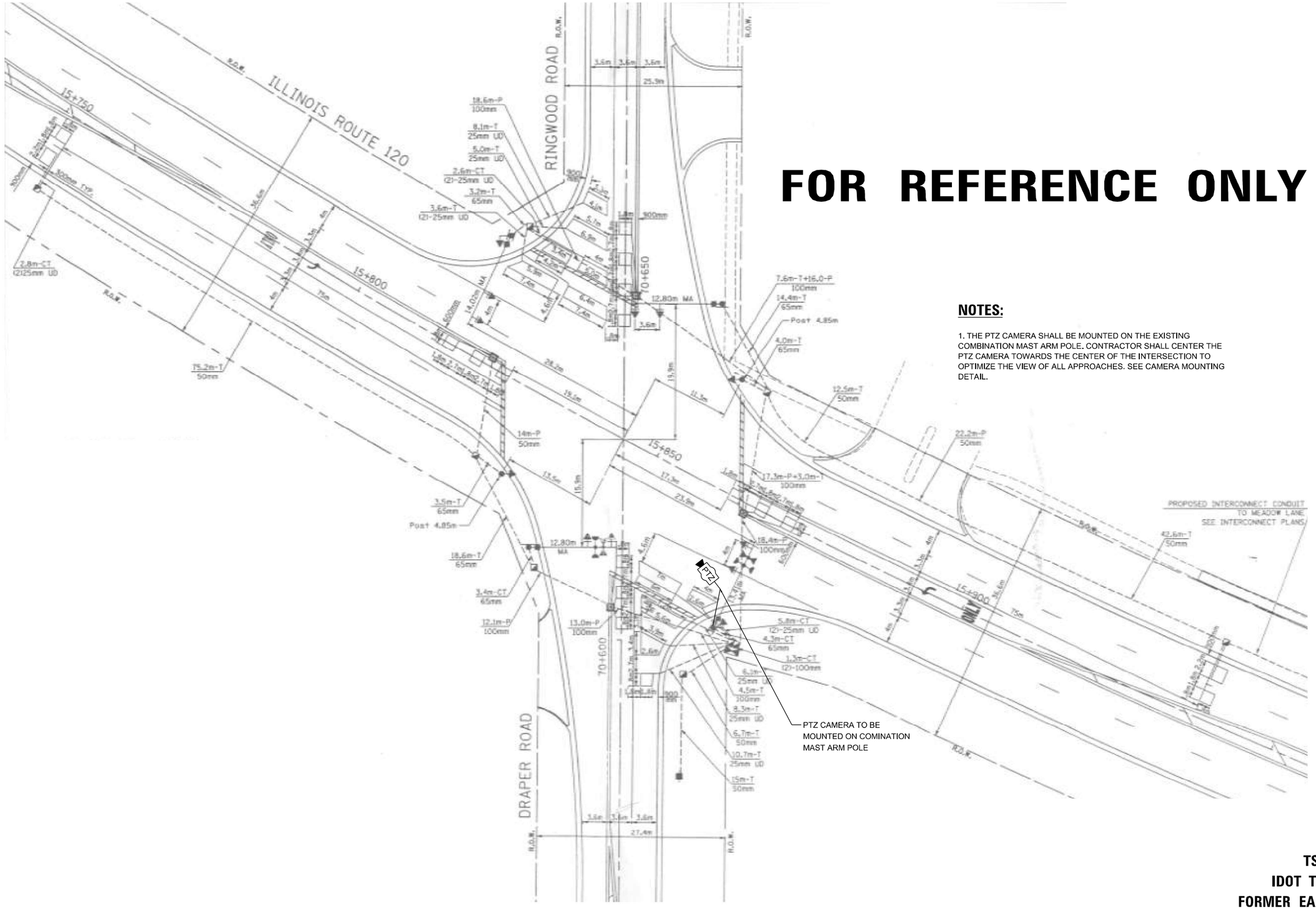
USER NAME = erica.salutz	DESIGNED - RL / DG	REVISED -	
	DRAWN - RL / DG	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - RL / DG	REVISED -	
PLOT DATE = 3/30/2025	DATE - 2025.02.20	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIBER SPLICE DIAGRAM
US RTE 12 FROM FOX LAKE RD TO STATE PARK RD /EAST ST

SCALE: | SHEET OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	23
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			



FOR REFERENCE ONLY

NOTES:

1. THE PTZ CAMERA SHALL BE MOUNTED ON THE EXISTING COMBINATION MAST ARM POLE. CONTRACTOR SHALL CENTER THE PTZ CAMERA TOWARDS THE CENTER OF THE INTERSECTION TO OPTIMIZE THE VIEW OF ALL APPROACHES. SEE CAMERA MOUNTING DETAIL.

TS 11900
IDOT TACTICS
FORMER EAGLE 40

TS SHT NO. 16

FILE NAME: M:\2019\3 Cntl\18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203 62W90\CAD\62W90 Sheet 05 Eagle40.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED - 05/08/2025	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 5/5/2025	DATE - 12/20/2024	REVISED -	

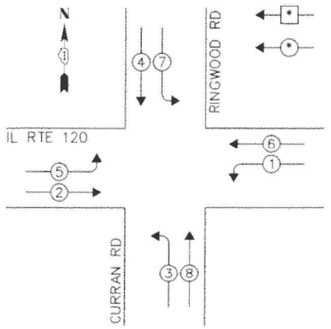
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGNAL PLAN
LOCATION 3 – IL RTE 120 AT RINGWOOD RD /CURRAN RD

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	24
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

CONTROLLER SEQUENCE



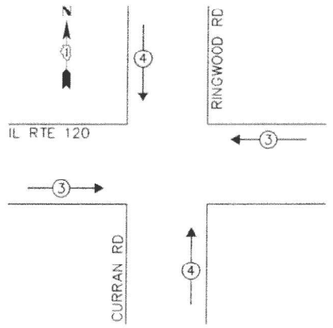
LEGEND:

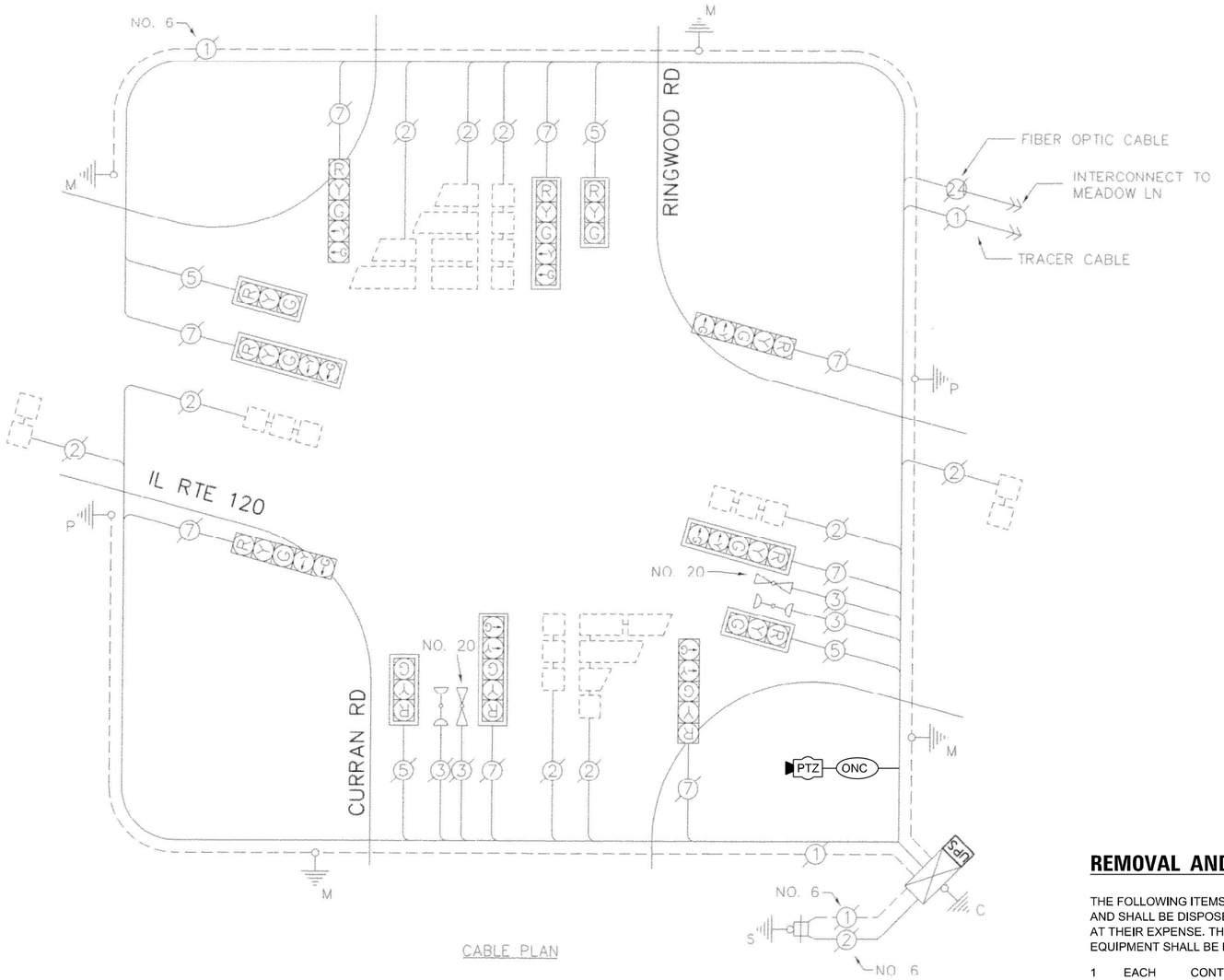
SINGLE ENTRY PHASE

DUAL ENTRY PHASE

PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE





CABLE PLAN

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	4	11	44
4 - SECTION	-	14	-
5 - SECTION	8	13	104
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			358
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	-
PTZ CAMERA	1	75	75
TOTAL SERVICE WIRE SIZING =			1038

ENERGY COSTS TO:
CITY OF McHENRY
333 SOUTH GREEN STREET
McHENRY, IL 60050

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	87
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
TERMINATE FIBER IN CABINET	EACH	12
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
RELOCATE EX LAYER II (DATALINK) SWITCH FROM INVENTORY	EACH	1

TS 11900
IDOT TACTICS
FORMER EAGLE 40

TS SHT NO. 17

FILE NAME: M:\2019\3 CMI\18-43-5500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 263_62W90\CAD\62W90_Sheet_03_Eqp&40.dgn

TYLin

USER NAME = erica.salutz		DESIGNED -	ERICA SALUTZ	REVISED -	05/08/2025
		DRAWN -	KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.		CHECKED -	PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 5/5/2025		DATE -	12/20/2024	REVISED -	

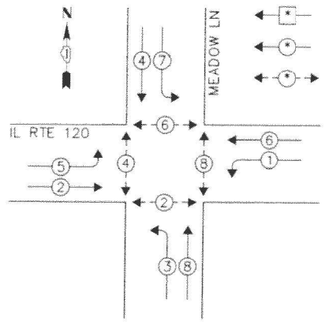
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 3 – IL RTE 120 AT RINGWOOD RD /CURRAN RD

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	25
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

CONTROLLER SEQUENCE

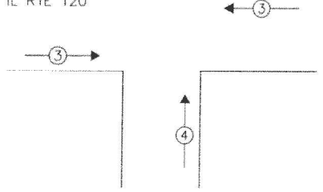


LEGEND:

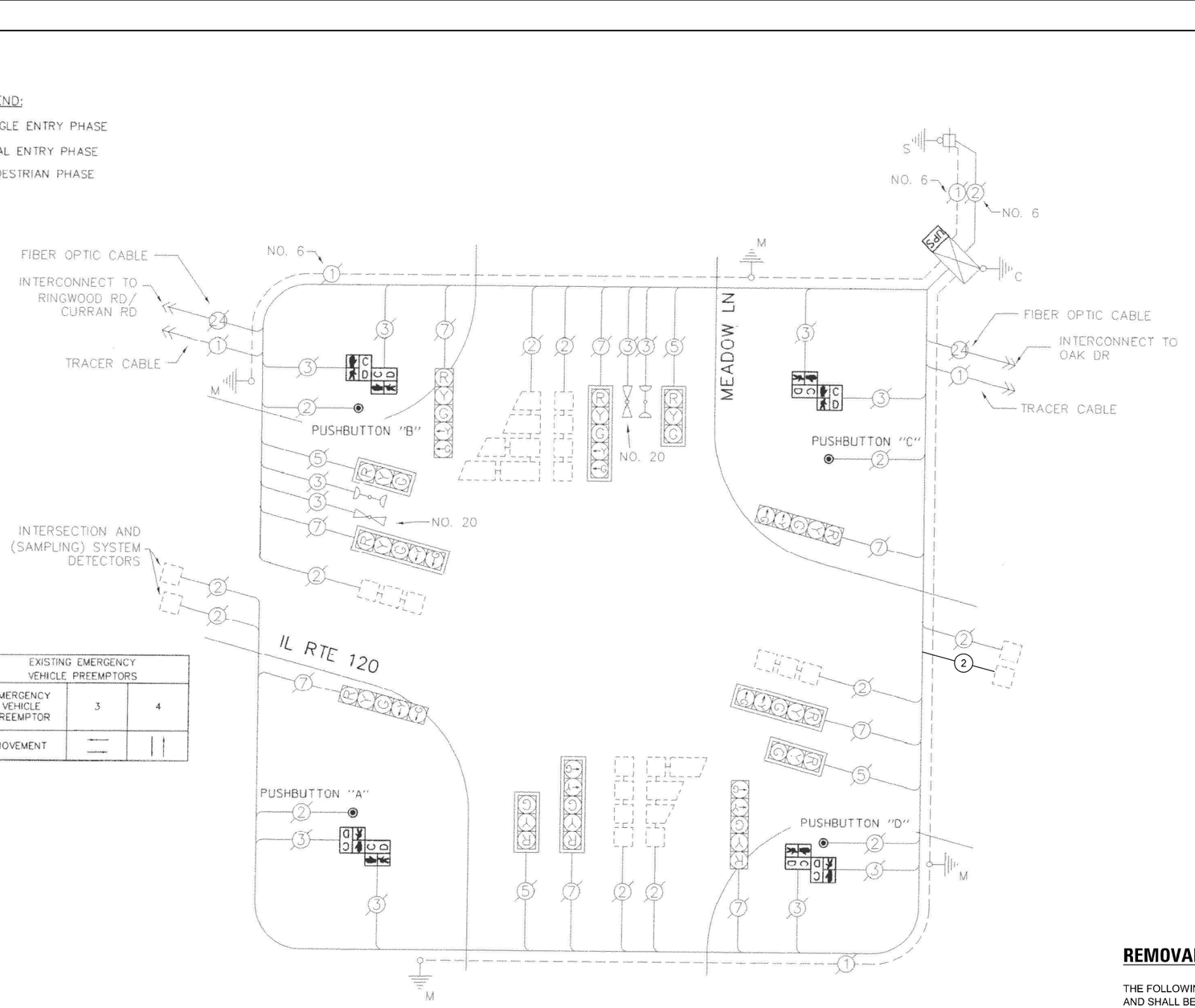
- SINGLE ENTRY PHASE
- DUAL ENTRY PHASE
- PEDESTRIAN PHASE

PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT		



CABLE PLAN

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	4	11	44
4 - SECTION	-	14	-
5 - SECTION	8	13	104
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	8	15	120
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			478
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			1083

ENERGY COSTS TO:
CITY OF McHENRY
333 SOUTH GREEN STREET
McHENRY, IL 60050

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	262
INDUCTIVE LOOP DETECTOR	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
TERMINATE FIBER IN CABINET	EACH	8
SPLICE FIBER IN CABINET	EACH	8
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
RELOCATE EX LAYER II (DATALINK) SWITCH FROM INVENTORY	EACH	1

REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER

TS 11905
IDOT TACTICS
FORMER EAGLE 40

TS SHT NO. 18

FILE NAME: Mst_20193_CMH_8of3-5500_IDOT_PFR_190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet 05_EqNo40.dgn

TYLin

USER NAME = erica.salutz		DESIGNED - ERICA SALUTZ	REVISED -	05/08/2025
		DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.		CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 5/5/2025		DATE - 12/20/2024	REVISED -	

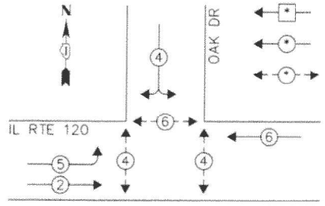
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 4 – IL RTE 120 AT MEADOW LN

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	26
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

CONTROLLER SEQUENCE

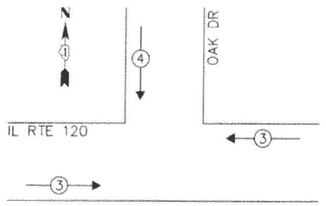


LEGEND:

- SINGLE ENTRY PHASE
- DUAL ENTRY PHASE
- PEDESTRIAN PHASE

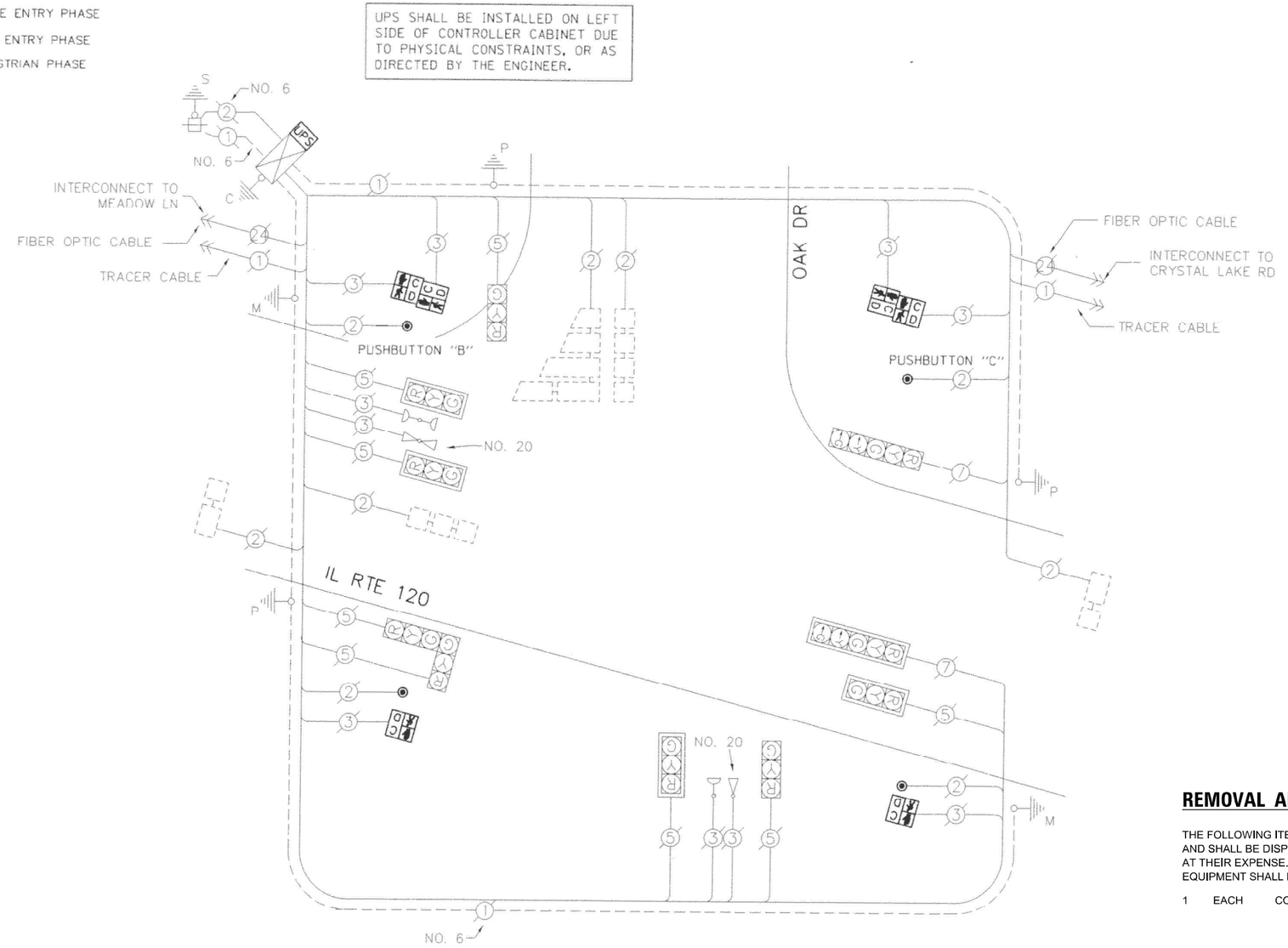
PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	—	|

UPS SHALL BE INSTALLED ON LEFT SIDE OF CONTROLLER CABINET DUE TO PHYSICAL CONSTRAINTS, OR AS DIRECTED BY THE ENGINEER.



CABLE PLAN

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	8	11	88
4 - SECTION	-	14	-
5 - SECTION	2	13	26
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	6	15	90
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			414
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			1019

ENERGY COSTS TO:
CITY OF McHENRY
333 SOUTH GREEN STREET
McHENRY, IL 60050

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
TERMINATE FIBER IN CABINET	EACH	8
SPLICE FIBER IN CABINET	EACH	8
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
RELOCATE EX LAYER II (DATALINK) SWITCH FROM INVENTORY	EACH	1

TS 11910
IDOT TACTICS
FORMER EAGLE 40

TS SHT NO. 19

FILE NAME: MA-20193 CHI-18-02-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Esk#40.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED - 05/08/2025
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 5/5/2025	DATE - 12/20/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 5 – IL RTE 120 AT OAK DR

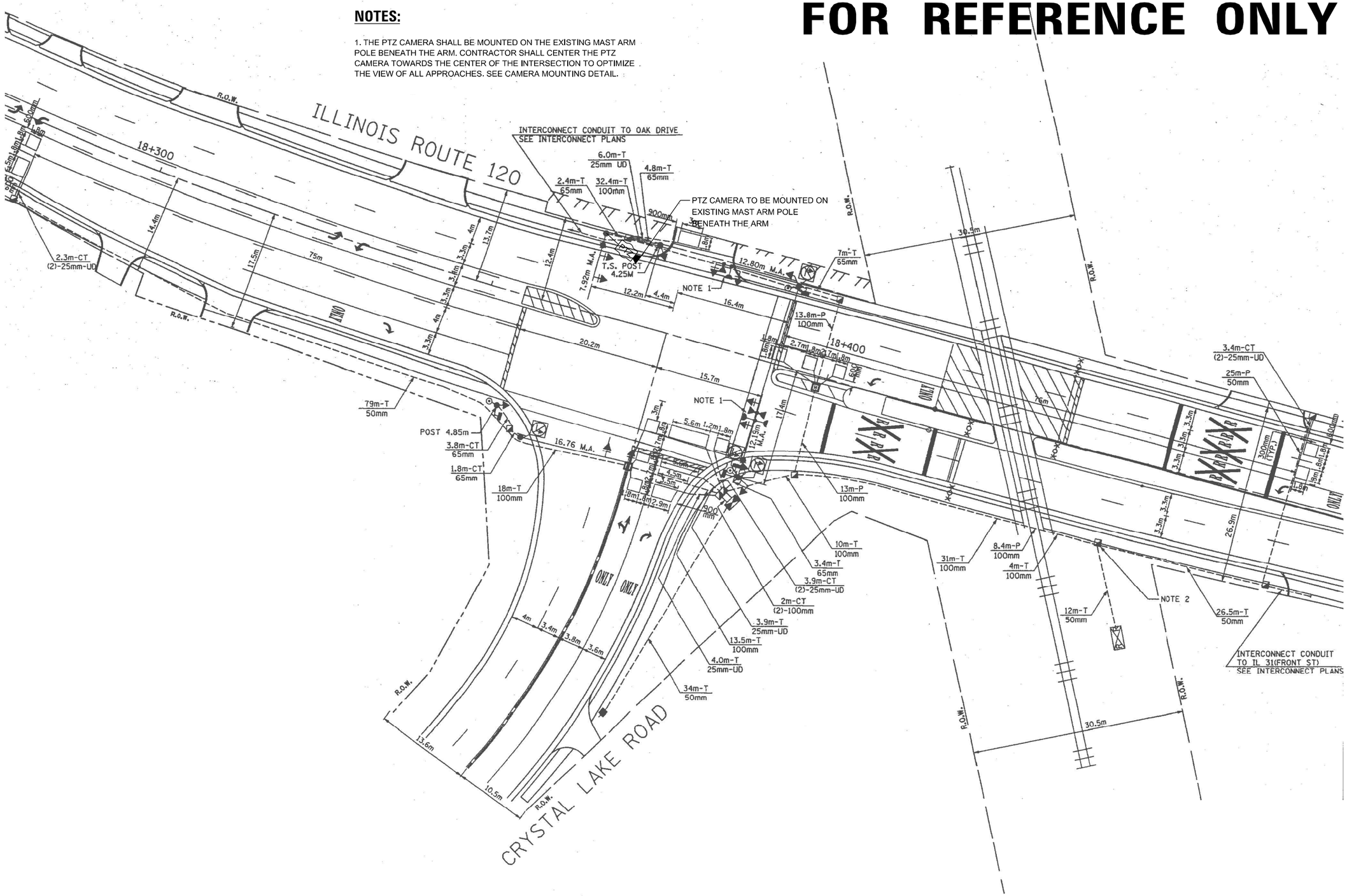
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	27
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

FOR REFERENCE ONLY

NOTES:

1. THE PTZ CAMERA SHALL BE MOUNTED ON THE EXISTING MAST ARM POLE BENEATH THE ARM. CONTRACTOR SHALL CENTER THE PTZ CAMERA TOWARDS THE CENTER OF THE INTERSECTION TO OPTIMIZE THE VIEW OF ALL APPROACHES. SEE CAMERA MOUNTING DETAIL.



TS 11915
IDOT TACTICS
FORMER EAGLE 40

TS SHT NO. 20

FILE NAME: M:\2019\3 Cnt\18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203-62W90\CAD\62W90 Sheet 05 Eagle40.dgn

TYLin	USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED - 05/08/2025	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SIGNAL PLAN LOCATION 6 – IL RTE 120 AT CRYSTAL LAKE RD
		DRAWN - KATHLEEN MURPHY	REVISED -		
	PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -		
	PLOT DATE = 5/5/2025	DATE - 12/20/2024	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	28
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

SCHEDULE OF QUANTITIES

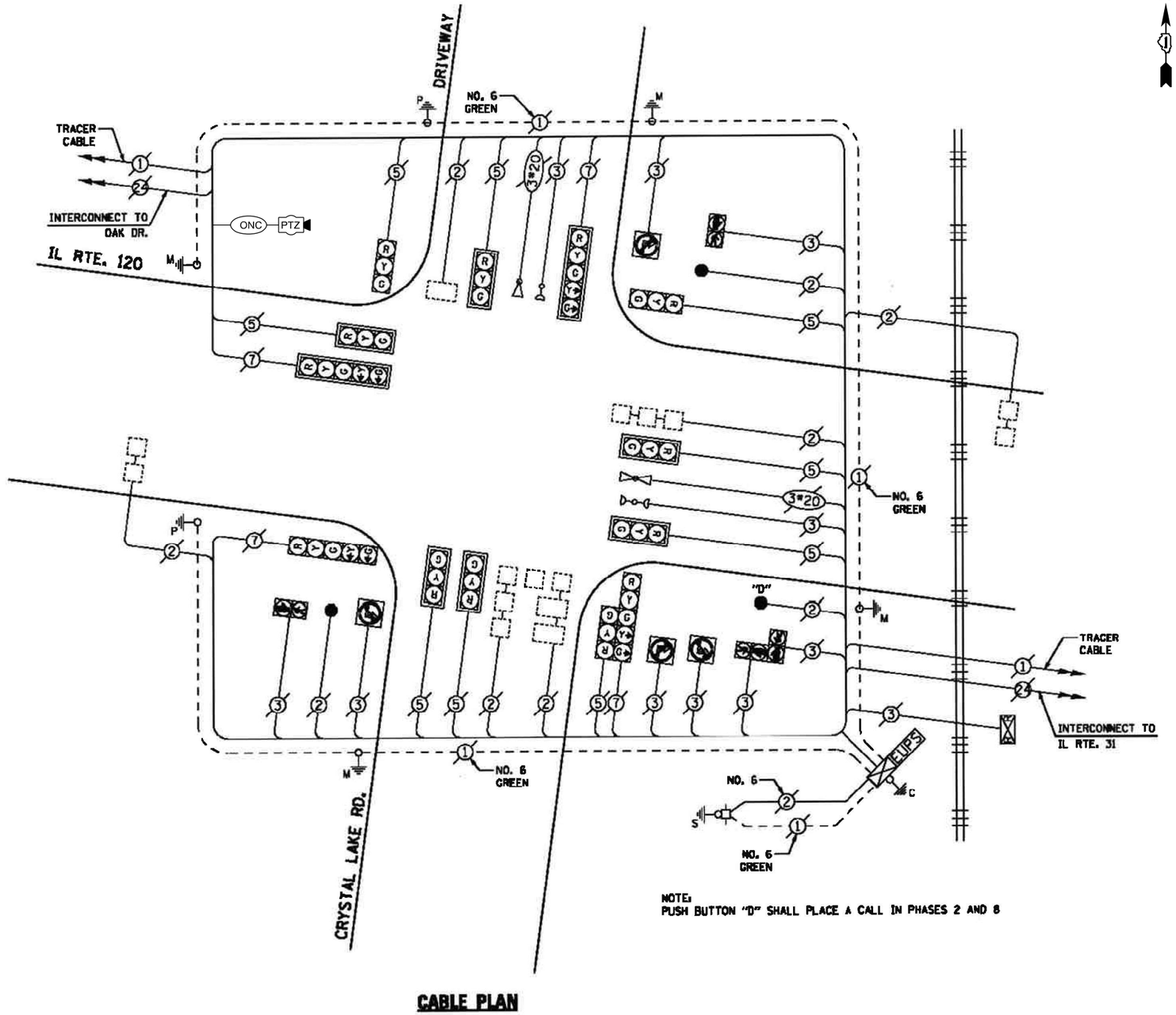
ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
CELLULAR MODEM	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	329
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
TERMINATE FIBER IN CABINET	EACH	24
LAYER III (NETWORK) SWITCH	EACH	1
REMOVE AND REPLACE BATTERIES FOR UNINTERRUPTABLE POWER SUPPLY	EACH	1
POWER OVER ETHERNET EXTENDER	EACH	1

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	9	11	99
4 - SECTION	-	14	-
5 - SECTION	4	13	52
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	4	15	60
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	4	25	100
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	1	15	15
TOTAL UPS SIZING =			536
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	-
PTZ CAMERA	1	75	75
TOTAL SERVICE WIRE SIZING =			1216

ENERGY COSTS TO:
ILLINOIS DEPT OF TRANSPORTATION
201 W. CENTER COURT
SCHAUMBURG, IL 60196

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---



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

CABLE PLAN

TS 11915
IDOT TACTICS
FORMER EAGLE 40

TS SHT NO. 21

FILE NAME: Mst_20193_CMR_8-03-5500_IDOT_PFR_190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet 05_FagMe40.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	05/08/2025
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 5/5/2025	DATE - 12/20/2024	REVISED -	

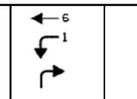
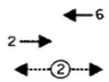
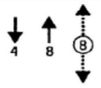
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN
AND SCHEDULE OF QUANTITIES
LOCATION 6 – IL RTE 120 AT CRYSTAL LAKE RD

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	29
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

SEQUENCE OF OPERATION

MOVEMENT	N ↑											FLASH
PHASE		1+6		2+6				4+8				
INTERVAL		1	2	3	4	5A	5B	6	7	8A	8B	
CHANGE TO		\	2+6	\	\	4+8		\	\	1+6 2+6		
IL 120 FAR LEFT AND END MOUNT MAST ARM SIGNALS	E/B	R	R	G	G	Y	R	R	R	R	R	R
IL 120 FAR RIGHT MAST ARM SIGNAL	E/B	R	R	G	G	Y	R	R	R	R	R	R
IL 120 FAR LEFT AND END MOUNT MAST ARM SIGNALS	W/B	G ←G	G ←Y	G	G	Y	R	R	R	R	R	R
IL 120 FAR RIGHT MAST ARM SIGNAL	W/B	G	G	G	G	Y	R	R	R	R	R	R
CRYSTAL LAKE RD END MOUNT MAST ARM AND FAR LEFT SIGNALS	N/B	R	R	R	R	R	R	G	G	Y	R	R
CRYSTAL LAKE RD NEAR AND FAR RIGHT MAST ARM SIGNALS	N/B	R G→	R Y→	R	R	R	R	G	G	Y	R	R
DRIVEWAY ALL SIGNALS	S/B	R	R	R	R	R	R	G	G	Y	R	R
PEDESTRIAN CROSSING CRYSTAL LAKE RD ON THE SOUTH SIDE OF IL 120		H	H	P *	FH **	H	H	H	H	H	H	DARK
PEDESTRIAN CROSSING IL 120 ON THE EAST SIDE OF CRYSTAL LAKE RD		H	H	H	H	H	H	P *	FH **	H	H	

PHASES 2+6 SHALL BE PLACED ON RECALL
* TO APPEAR ONLY UPON PUSHBUTTON ACTUATION
**FLASHING HAND IS TO TERMINATE AT THE COMPLETION OF THE PEDESTRIAN INTERVAL CLEARANCE

WALK AND FLASHING DON'T WALK TIMINGS TO BE SET ONLY ON PHASES WHERE WALK AND FLASHING DON'T WALK ARE INDICATED IN THE SEQUENCE OF OPERATION

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

Created: 12/28/2017 AK
Revised:

EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION

												PREEMPTER NUMBER 3	PREEMPTER NUMBER 4	
CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER		1	1		3	3			6		6	\	\	CLEAR TO NORMAL SEQUENCE
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 OF OPERATION INTERVAL NUMBER		2	1C	3	2	1F	1G	3	1J	1K	2	3	\	\	<>
IL 120 FAR LEFT AND END MOUNT MAST ARM SIGNALS	E/B	R	R	R	G	G	Y	R	R	R	R	R	G	R	<>
IL 120 FAR RIGHT MAST ARM SIGNAL	E/B	R	R	R	G	G	Y	R	R	R	R	R	G	R	<>
IL 120 FAR LEFT AND END MOUNT MAST ARM SIGNALS	W/B	G ←Y	Y	R	G	G	Y	R	R	R	R	R	G	R	<>
IL 120 FAR RIGHT MAST ARM SIGNAL	W/B	G	Y	R	G	G	Y	R	R	R	R	R	G	R	<>
CRYSTAL LAKE RD END MOUNT MAST ARM AND FAR LEFT SIGNALS	N/B	R	R	R	R	R	R	R	G	Y	R	G	R	G	<>
CRYSTAL LAKE RD NEAR AND FAR RIGHT MAST ARM SIGNALS	N/B	R Y→	R Y→	R	R	R	R	R	G	Y	R	G	R	G	<>
DRIVEWAY ALL SIGNALS	S/B	R	R	R	R	R	R	R	G	Y	R	G	R	G	<>
PEDESTRIAN CROSSING CRYSTAL LAKE RD ON THE SOUTH SIDE OF IL 120		H	H	H	FH	FH	H	H	H	H	H	H	H	H	<>
PEDESTRIAN CROSSING IL 120 ON THE EAST SIDE OF CRYSTAL LAKE RD		H	H	H	H	H	H	H	FH	H	H	FH	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.

Created: 12/28/2017 AK
Revised:

RAILROAD PREEMPTION SEQUENCE OF OPERATION

																PREEMPTER NUMBER 2	
CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER		1		3		6										\	CLEAR TO NORMAL SEQUENCE
CHANGE FROM EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER		\		\		\		2		3						\	
RAILROAD PREEMPTION INTERVAL		1A	1B	1C	1D	1E	1F	1G	1H	1J	2	3	4	5			
CHANGE TO RAILROAD PREEMPTION SEQUENCE INTERVAL NUMBER		2	1C	2	1E	2	1G	2	1J	2	3	4	5	\			
IL 120 FAR LEFT AND END MOUNT MAST ARM SIGNA	E/B	R	Y	R	R	R	Y	R	R	R	R	R	R	R	Δ		
IL 120 FAR RIGHT MAST ARM SIGNAL	E/B	R	Y	R	R	R	Y	R	R	R	R	R	R	R	Δ		
IL 120 FAR LEFT AND END MOUNT MAST ARM SIGNA	W/B	G	G	G	R	R	G	G	R	R	G	Y	R	R	Δ		
IL 120 FAR RIGHT MAST ARM SIGNAL	W/B	G ←G	G	G	R	R	G	G	R	R	G ←G	Y	R	R	Δ		
CRYSTAL LAKE RD END MOUNT MAST ARM AND FAR LEFT SIGNA	N/B	R Y→	R	R	Y	R	R	R	Y	R	R	R	R	G	Δ		
CRYSTAL LAKE RD NEAR AND FAR RIGHT MAST ARM SIGNALS	N/B	R	R	R	Y	R	R	R	Y	R	R	R	R	G	Δ		
DRIVEWAY ALL SIGNALS	S/B	R	R	R	Y	R	R	R	Y	R	R	R	R	G	Δ		
PEDESTRIAN CROSSING CRYSTAL LAKE RD ON THE SOUTH SIDE OF IL 120		H	FH	H	H	H	H	H	H	H	H	H	H	H	Δ		
PEDESTRIAN CROSSING IL 120 ON THE EAST SIDE OF CRYSTAL LAKE RD		H	H	H	FH	H	H	H	H	H	H	H	H	H	Δ		
CRYSTAL LAKE RD ILLUMINATED NRT SIGNS	N/B	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	Δ		
DRIVEWAY ILLUMINATED NLT SIGNS	S/B	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	Δ		
														HOLD			

Δ 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.

NRT = NO RIGHT TURN
NLT = NO LEFT TURN

Created: 12/28/2017 AK
Revised:

TS 11915
IDOT TACTICS
FORMER EAGLE 40

TS SHT NO. 22

FILE NAME: M:\20193 CHL\18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eagle40.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SEQUENCE OF OPERATION AND RAILROAD PREEMPTION SEQUENCE OF OPERATION LOCATION 6 – IL RTE 120 AT CRYSTAL LAKE RD
	DRAWN - KATHLEEN MURPHY	REVISED -		
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -		
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.

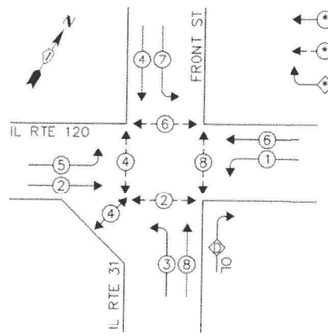
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	30
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

CONTROLLER SEQUENCE

LEGEND:

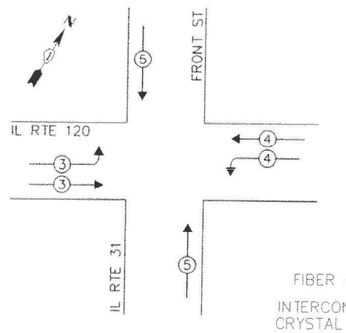
- SINGLE ENTRY PHASE
- DUAL ENTRY PHASE
- PEDESTRIAN PHASE
- OL — OVERLAP

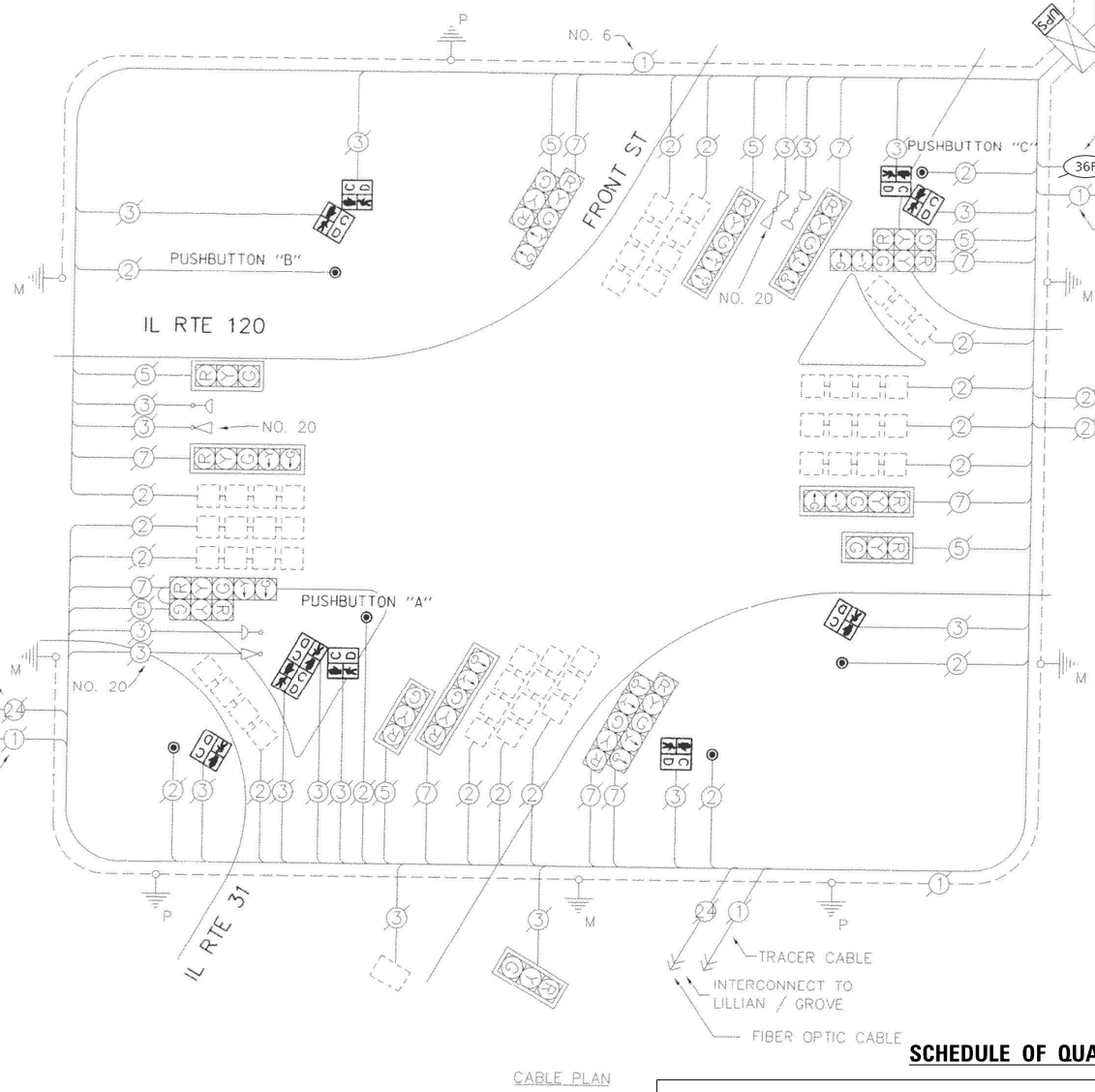
OVERLAP LETTER		PERMISSIVE PHASE		PROTECTED PHASE
D	=	8	+	1



PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE





CABLE PLAN

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	7	11	77
4 - SECTION	-	14	-
5 - SECTION	10	13	130
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	10	15	150
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			567
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			1172

ENERGY COSTS TO:
CITY OF McHENRY
333 SOUTH GREEN STREET
McHENRY, IL 60050

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

NOTES:

1. THE TELEPHONE LINE AND SERVICE SHOULD BE REMOVED AND DISCONNECTED UPON PROJECT COMPLETION AND SIGNAL BEING ADDED TO TACTICS.

REMOVAL AND RELOCATION NOTES:

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

1	EACH	CONTROLLER
1	EACH	MASTER CONTROLLER
1	EACH	PHONE LINE

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
TERMINATE FIBER IN CABINET	EACH	8
SPLICE FIBER IN CABINET	EACH	12
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
RELOCATE EX LAYER II (DATALINK) SWITCH FROM INVENTORY	EACH	1

TS 7285
IDOT TACTICS
FORMER EAGLE 40

TS SHT NO. 23

FILE NAME: M:\2019\3 CHI\18-03500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203 - EW90\CAD\62W90_Sheet 03_Eagle40.dgn

TYLin

USER NAME = erica.salutz		DESIGNED -	ERICA SALUTZ	REVISED -	05/08/2025
		DRAWN -	KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.		CHECKED -	PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 5/5/2025		DATE -	12/20/2024	REVISED -	

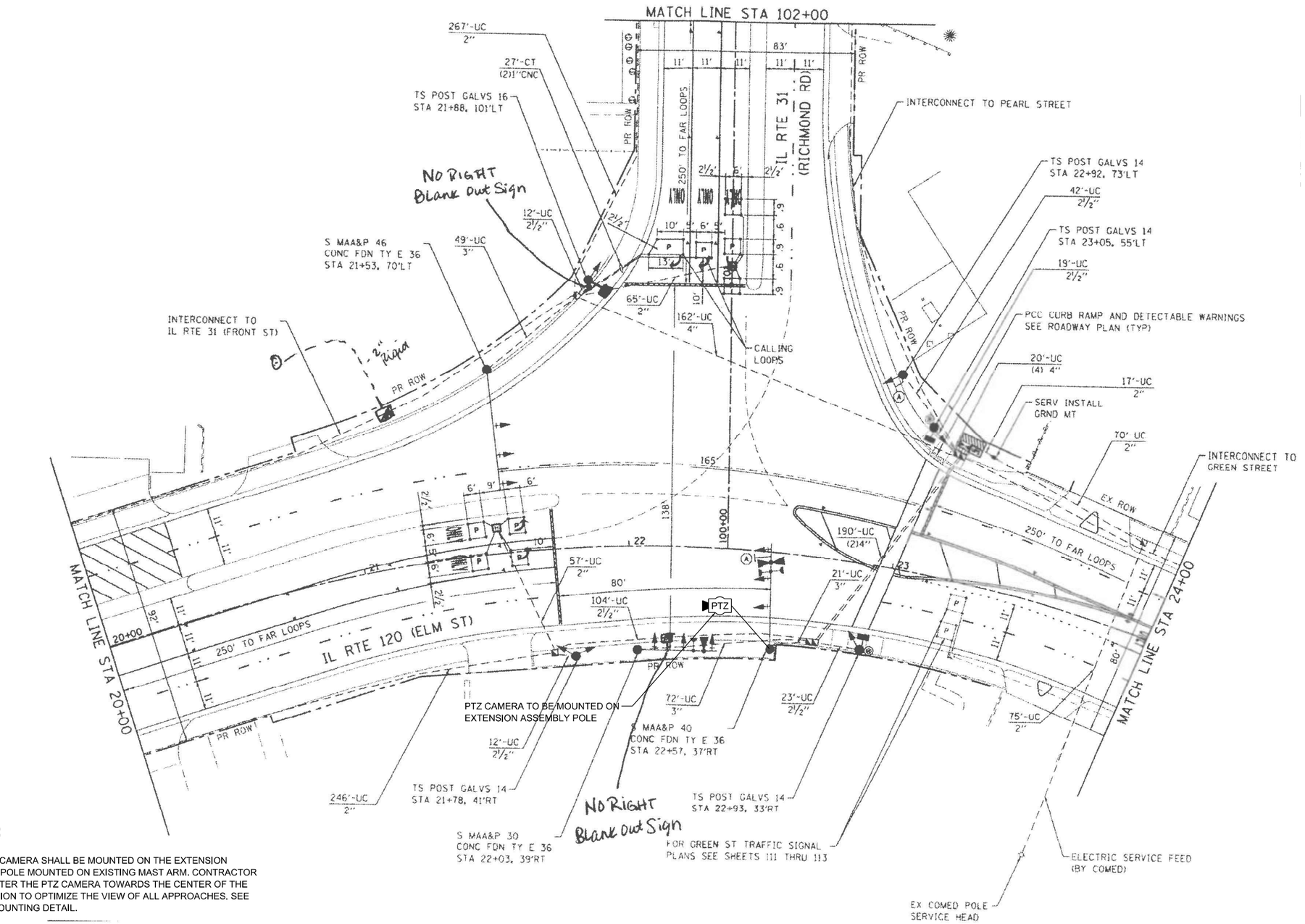
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 7 – IL RTE 31 /FRONT ST AND IL RTE 120

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	31
		CONTRACT NO. 62W90		
		ILLINOIS	FED. AID PROJECT	

FOR REFERENCE ONLY



NOTES:

1. THE PTZ CAMERA SHALL BE MOUNTED ON THE EXTENSION ASSEMBLY POLE MOUNTED ON EXISTING MAST ARM. CONTRACTOR SHALL CENTER THE PTZ CAMERA TOWARDS THE CENTER OF THE INTERSECTION TO OPTIMIZE THE VIEW OF ALL APPROACHES. SEE CAMERA MOUNTING DETAIL.

TS 7290
IDOT TACTICS
FORMER EAGLE 40

TS SHT NO. 24

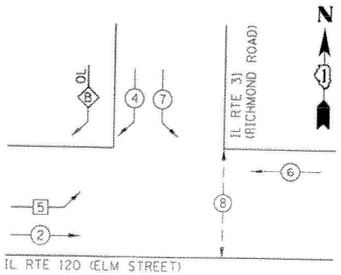
FILE NAME: M:\...\20193 CHIL18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_03_Eqlk40.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED - 05/08/2025	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**SIGNAL PLAN** **LOCATION 8 – IL RTE 31 (RICHMOND RD) AT IL RTE 120 (ELM ST)**	
	DRAWN - KATHLEEN MURPHY	REVISED -			
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -			
PLOT DATE = 5/5/2025	DATE - 12/20/2024	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.	

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	32
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

CONTROLLER SEQUENCE



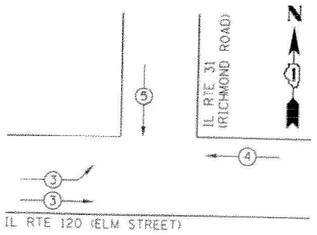
OVERLAP PHASE		PERMISSIVE PHASE		PROTECTED PHASE
B	+	4	+	5

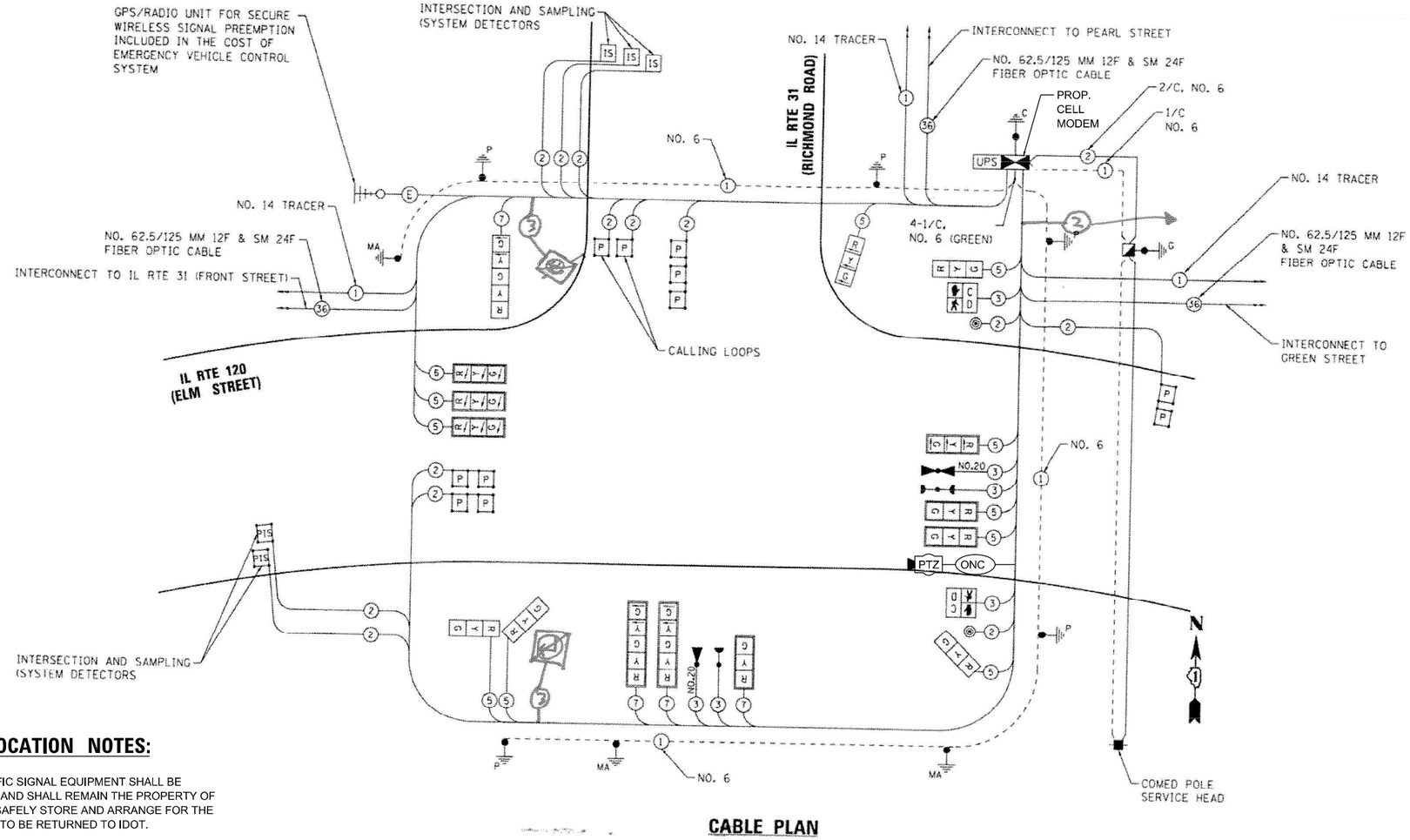
CONTROLLER SEQUENCE LEGEND

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

PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE





CABLE PLAN

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	12	11	132
4 - SECTION	-	14	-
5 - SECTION	3	13	39
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	2	15	30
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	2	25	50
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	1	15	15
TOTAL UPS SIZING =			476
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	-
PTZ CAMERA	1	75	75
TOTAL SERVICE WIRE SIZING =			1156

ENERGY COSTS TO:
ILLINOIS DEPT OF TRANSPORTATION
201 W. CENTER COURT
SCHAUMBURG, IL 60196

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

REMOVAL AND RELOCATION NOTES:

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF IDOT. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR THE PICK UP OF ALL THE EQUIPMENT TO BE RETURNED TO IDOT.

1 EACH CONTROLLER .....

INSTALL CELL MODEM FROM TS 11945 - US RTE 12 at STATE PARK RD

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
PAINT NEW TRAFFIC SIGNAL POST	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	312
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
TERMINATE FIBER IN CABINET	EACH	36
LAYER III (NETWORK) SWITCH	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
REMOVE AND REPLACE BATTERIES FOR UNINTERRUPTABLE POWER SUPPLY	EACH	1
POWER OVER ETHERNET EXTENDER	EACH	1
CAMERA MOUNTING ASSEMBLY	EACH	1

TS SHT NO. 25

TS 7290
IDOT TACTICS
FORMER EAGLE 40

FILE NAME: M:_20193 CHI\18-03-5500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eagle40.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED - 05/08/2025
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 5/5/2025	DATE - 12/20/2024	REVISED -

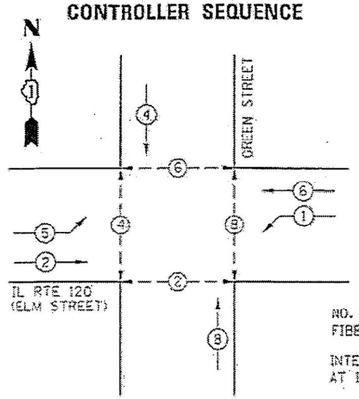
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 8 – IL RTE 31 (RICHMOND RD) AT IL RTE 120 (ELM ST)

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	33
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

CONTROLLER SEQUENCE

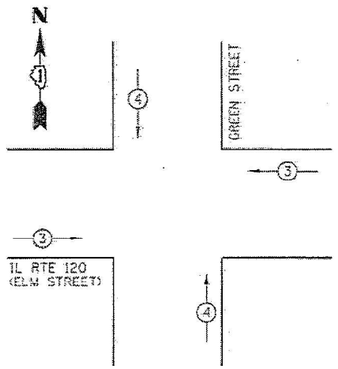


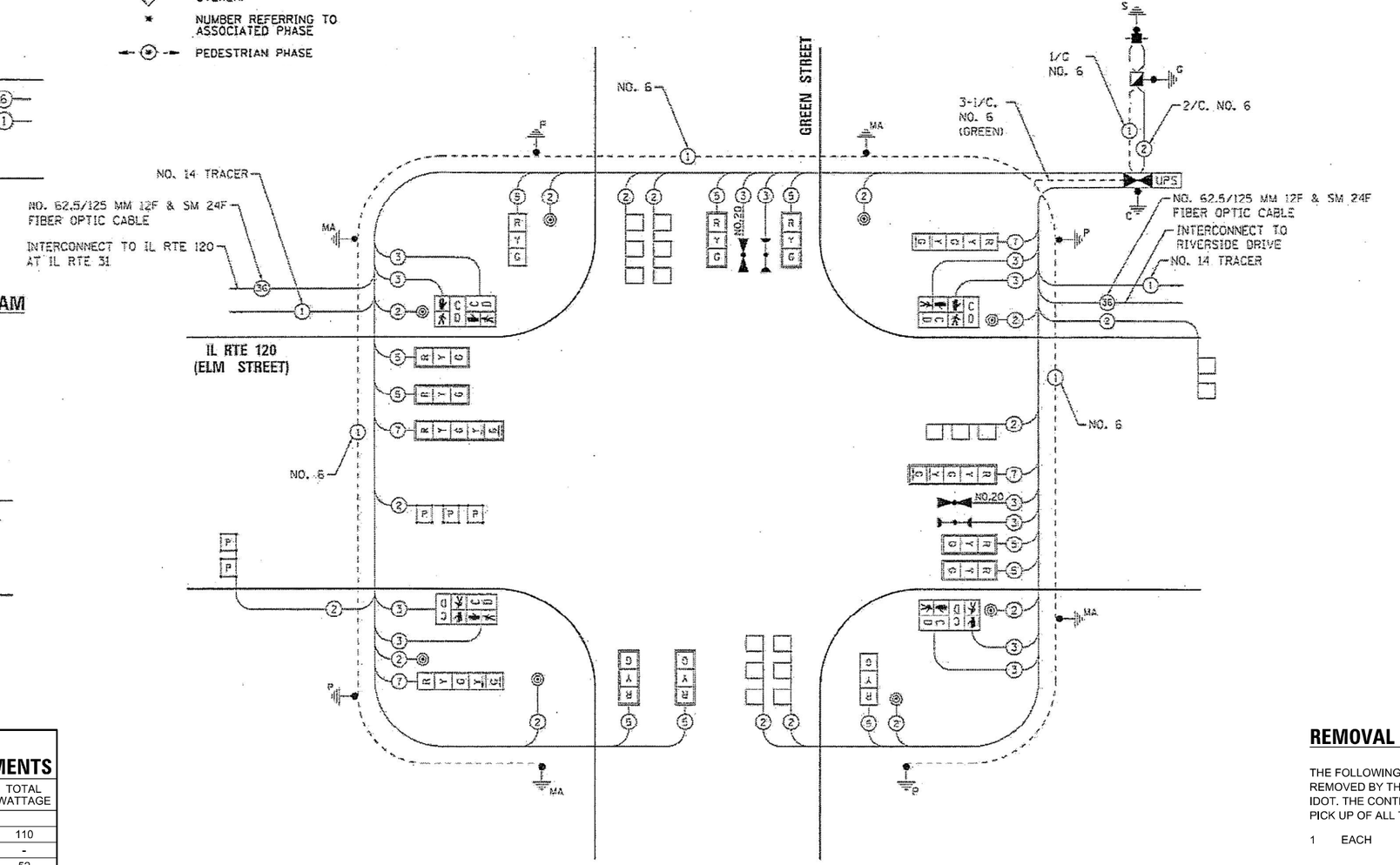
CONTROLLER SEQUENCE LEGEND

- DUAL ENTRY PHASE
- SINGLE ENTRY PHASE
- OL — OVERLAP
- NUMBER REFERRING TO ASSOCIATED PHASE
- PEDESTRIAN PHASE

PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE





CABLE PLAN

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	10	11	110
4 - SECTION	-	14	-
5 - SECTION	4	13	52
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	8	15	120
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			1097

ENERGY COSTS TO:
ILLINOIS DEPT OF TRANSPORTATION
201 W. CENTER COURT
SCHAUMBURG, IL 60196

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

REMOVAL AND RELOCATION NOTES:

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF IDOT. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR THE PICK UP OF ALL THE EQUIPMENT TO BE RETURNED TO IDOT.

1 EACH CONTROLLER

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
TERMINATE FIBER IN CABINET	EACH	8
Ssplice FIBER IN CABINET	EACH	8
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
REMOVE AND REPLACE BATTERIES FOR UNINTERRUPTABLE POWER SUPPLY	EACH	1
RELOCATE EX LAYER II (DATALINK) SWITCH FROM INVENTORY	EACH	1

TS 11920
IDOT TACTICS
FORMER EAGLE 40

TS SHT NO. 26

FILE NAME: ttt: 20 19:3 CMI:18-03-5500 IDOT_PTB_199 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eagle40.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED - 05/08/2025
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 5/5/2025	DATE - 12/20/2024	REVISED -

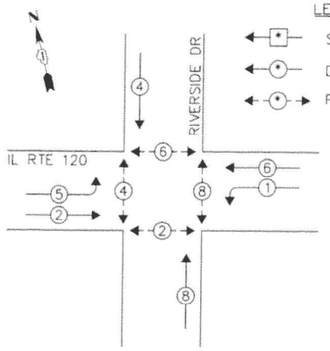
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 9 – IL RTE 120 AT GREEN ST

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	34
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

CONTROLLER SEQUENCE

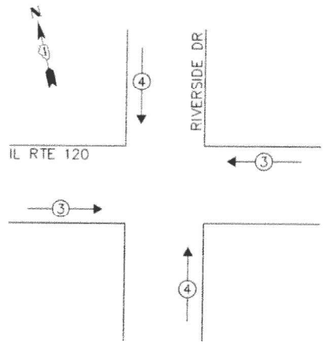


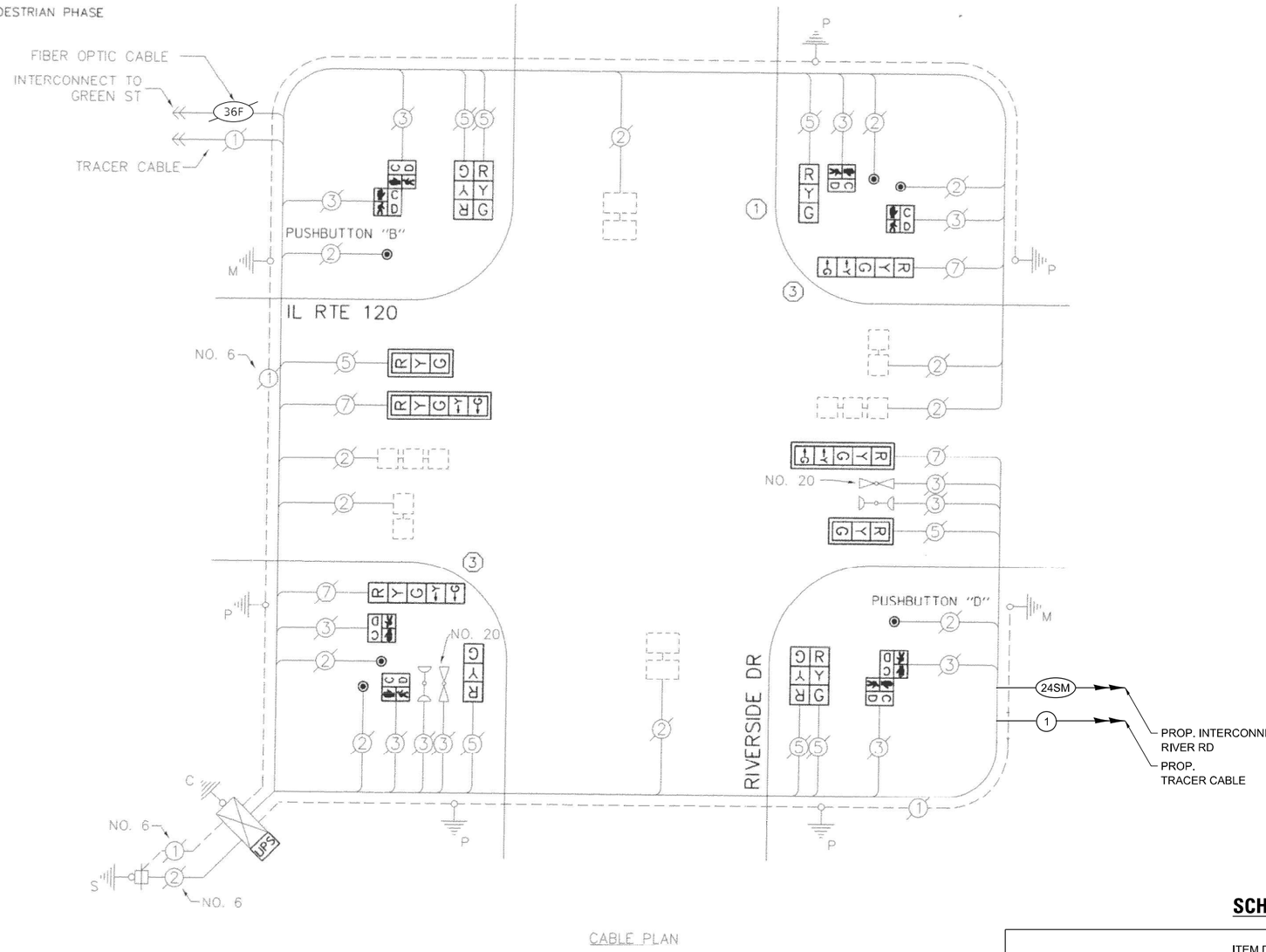
LEGEND:

- SINGLE ENTRY PHASE
- DUAL ENTRY PHASE
- PEDESTRIAN PHASE

PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE





CABLE PLAN

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	8	11	88
4 - SECTION	-	14	-
5 - SECTION	4	13	52
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	8	15	120
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			470
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			1075

ENERGY COSTS TO:
CITY OF McHENRY
333 SOUTH GREEN STREET
McHENRY, IL 60050

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER
1 EACH TRANSCEIVER FIBER OPTIC

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
TERMINATE FIBER IN CABINET	EACH	8
SPLICE FIBER IN CABINET	EACH	8
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
REMOVE AND REPLACE BATTERIES FOR UNINTERRUPTABLE POWER SUPPLY	EACH	1
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1
RELOCATE EX LAYER II (DATALINK) SWITCH FROM INVENTORY	EACH	1

TS 11925
IDOT TACTICS
FORMER EAGLE 40

TS SHT NO. 27

FILE NAME: Mst_20193_CMH.18-03-5500_IDOT_PFB_190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet 05_EqNo40.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED - 05/08/2025
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 5/5/2025	DATE - 12/20/2024	REVISED -

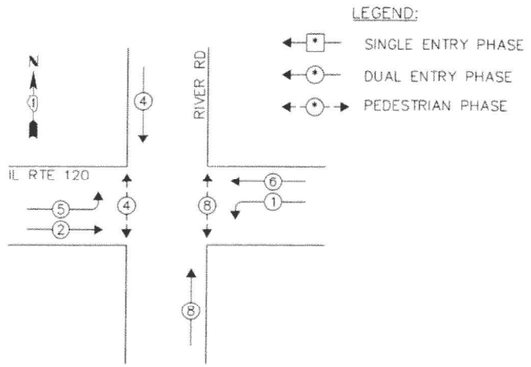
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 10 – IL RTE 120 AT RIVERSIDE DR

SCALE: | SHEET OF SHEETS | STA. | TO STA.

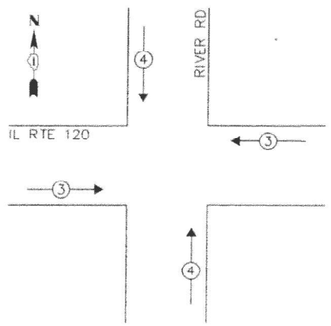
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	35
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE

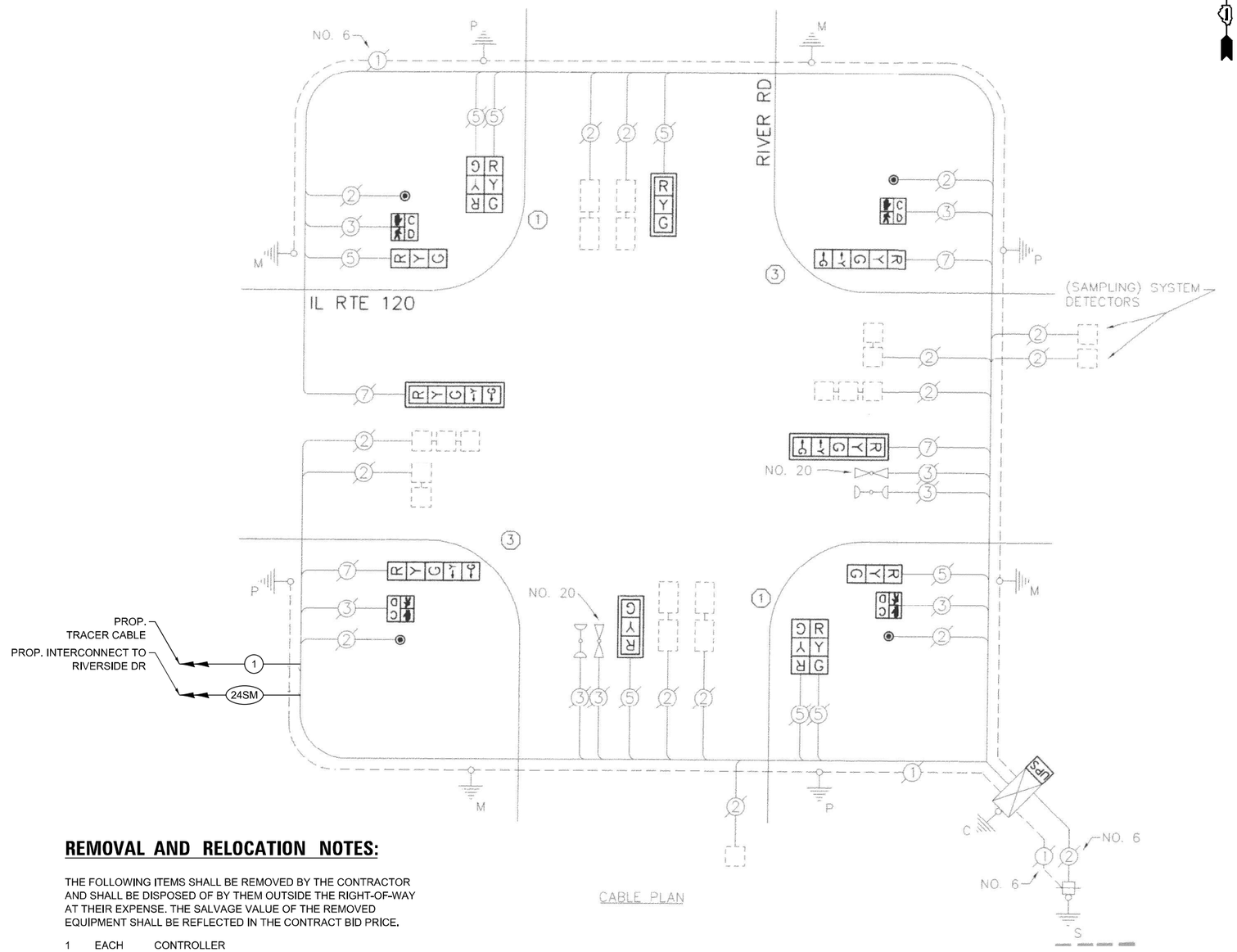


TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	8	11	88
4 - SECTION	-	14	-
5 - SECTION	4	13	52
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	4	15	60
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			1015

ENERGY COSTS TO:
CITY OF McHENRY
333 SOUTH GREEN STREET
McHENRY, IL 60050

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---



CABLE PLAN

REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER
1 EACH TRANSCEIVER FIBER OPTIC

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
TERMINATE FIBER IN CABINET	EACH	12
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1
RELOCATE EX LAYER II (DATALINK) SWITCH FROM INVENTORY	EACH	1

TS 7340
IDOT TACTICS
FORMER EAGLE 40

TS SHT NO. 28

FILE NAME: NH: 2019\3 CMI\18-03-5580 IDOT_PTB 199 - Various Traffic Signal Design\Graphics\WO 263_62W90\CAD\62W90_Sheet 05 Eagle40.dgn

TYLin

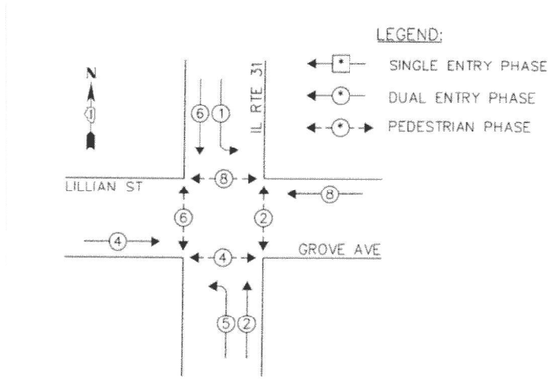
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 11 – IL RTE 120 AT RIVER RD

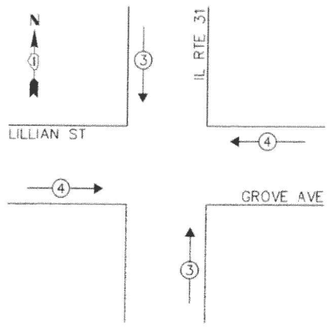
SCALE: | SHEET OF SHEETS | STA. | TO STA.

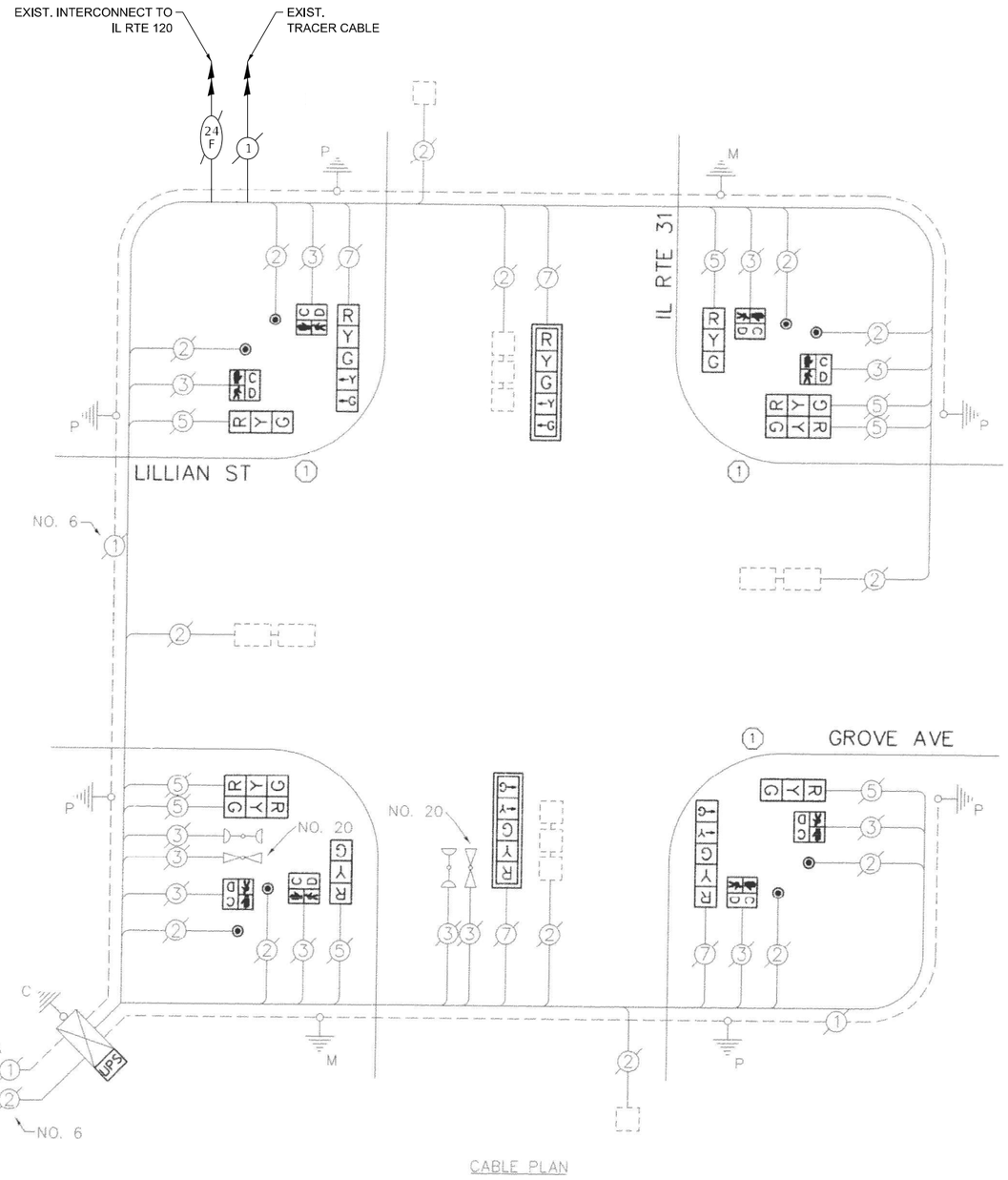
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	36
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		



PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE





TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	8	11	88
4 - SECTION	-	14	-
5 - SECTION	4	13	52
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	8	15	120
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	1	15	15
TOTAL UPS SIZING =			470
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			1075

ENERGY COSTS TO:
CITY OF McHENRY
333 SOUTH GREEN STREET
McHENRY, IL 60050

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
TERMINATE FIBER IN CABINET	EACH	8
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
RELOCATE EX LAYER II (DATALINK) SWITCH FROM INVENTORY	EACH	1

TS 11890
IDOT TACTICS
FORMER EAGLE 40

TS SHT NO. 29

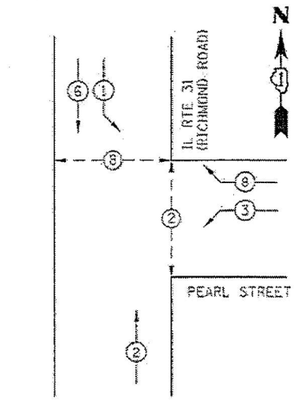
FILE NAME: MH_20193 CHI18-03-5500 IDOT PTB 190 - Various Traffic Signal Design Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Esch40.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED - 05/08/2025	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES LOCATION 12 – IL RTE 31 AT LILLIAN ST /GROVE AVE	
	DRAWN - KATHLEEN MURPHY	REVISED -			
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.	
PLOT DATE = 5/5/2025	DATE - 12/20/2024	REVISED -			

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	37
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

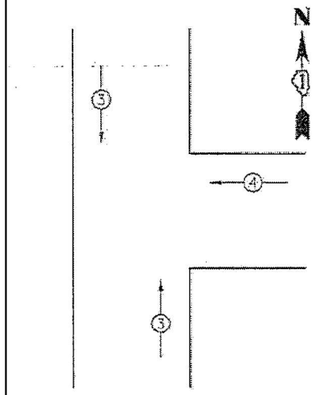
CONTROLLER SEQUENCE

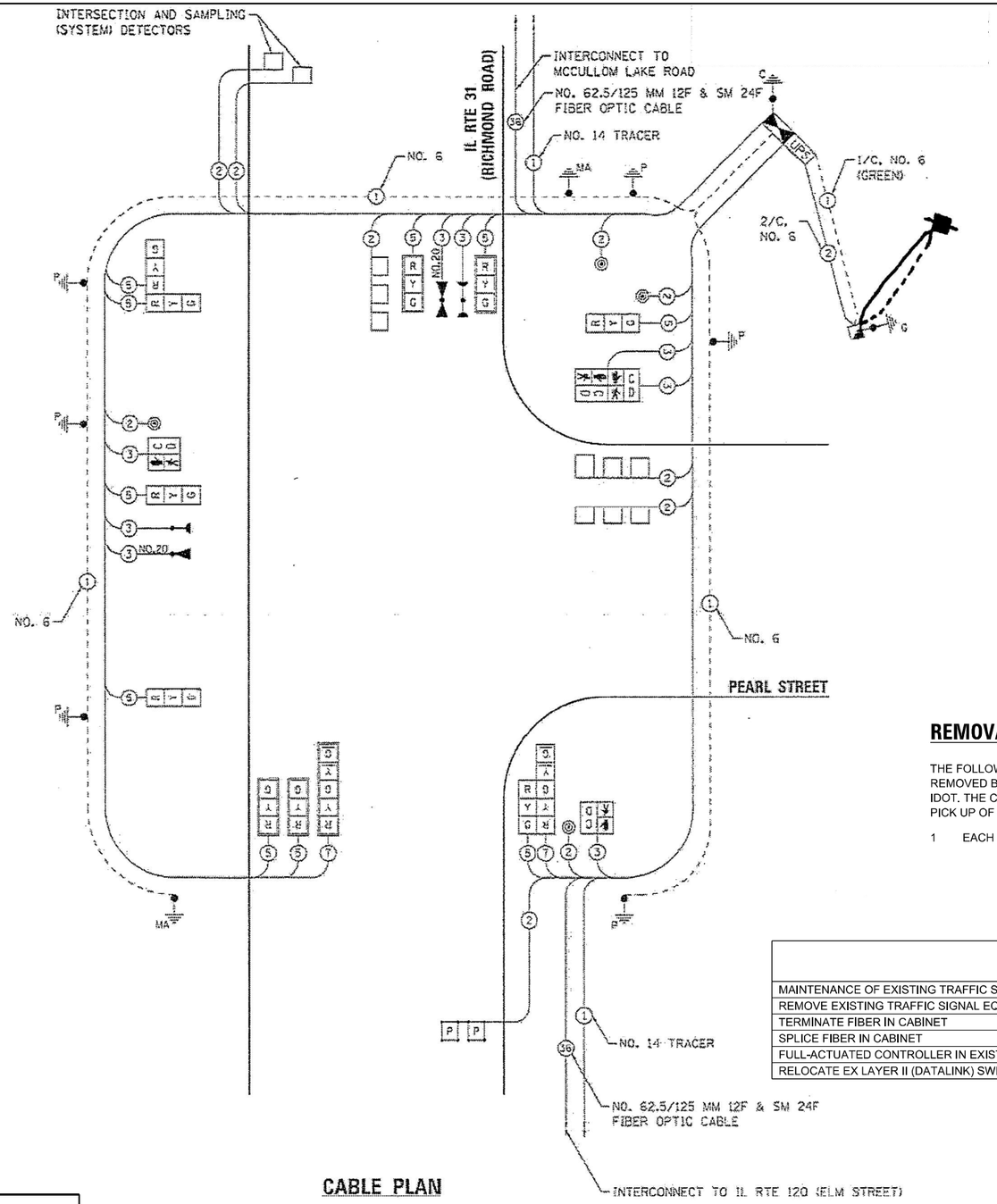


CONTROLLER SEQUENCE LEGEND

- DUAL ENTRY PHASE
- SINGLE ENTRY PHASE
- OVERLAP (OL)
- NUMBER REFERRING TO ASSOCIATED PHASE
- PEDESTRIAN PHASE

EMERGENCY VEHICLE PREEMPTION SEQUENCE





CABLE PLAN

REMOVAL AND RELOCATION NOTES:

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF IDOT. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR THE PICK UP OF ALL THE EQUIPMENT TO BE RETURNED TO IDOT.

1 EACH CONTROLLER

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
TERMINATE FIBER IN CABINET	EACH	8
SPLICE FIBER IN CABINET	EACH	8
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
RELOCATE EX LAYER II (DATALINK) SWITCH FROM INVENTORY	EACH	1

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	10	11	110
4 - SECTION	-	14	-
5 - SECTION	2	13	26
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	4	15	60
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			406
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			1011

ENERGY COSTS TO:
ILLINOIS DEPT OF TRANSPORTATION
201 W. CENTER CT
SCHAUMBURG, IL 60196

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

TS 11885
IDOT TACTICS
FORMER EAGLE 40

TS SHT NO. 30

FILE NAME: M:\2019\3 Civil\18-03-5500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203-62W90\CAD\62W90_Sheet_05_Eagle40.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	05/08/2025
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 5/5/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 13 – IL RTE 31 AT PEARL ST

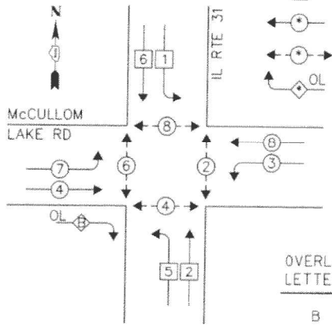
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	38
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

CONTROLLER SEQUENCE

LEGEND:

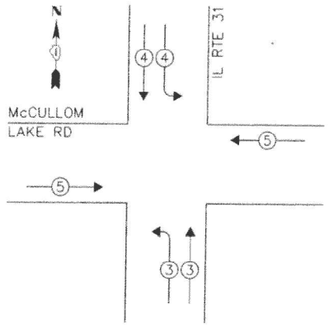
- SINGLE ENTRY PHASE
- DUAL ENTRY PHASE
- PEDESTRIAN PHASE
- OVERLAP

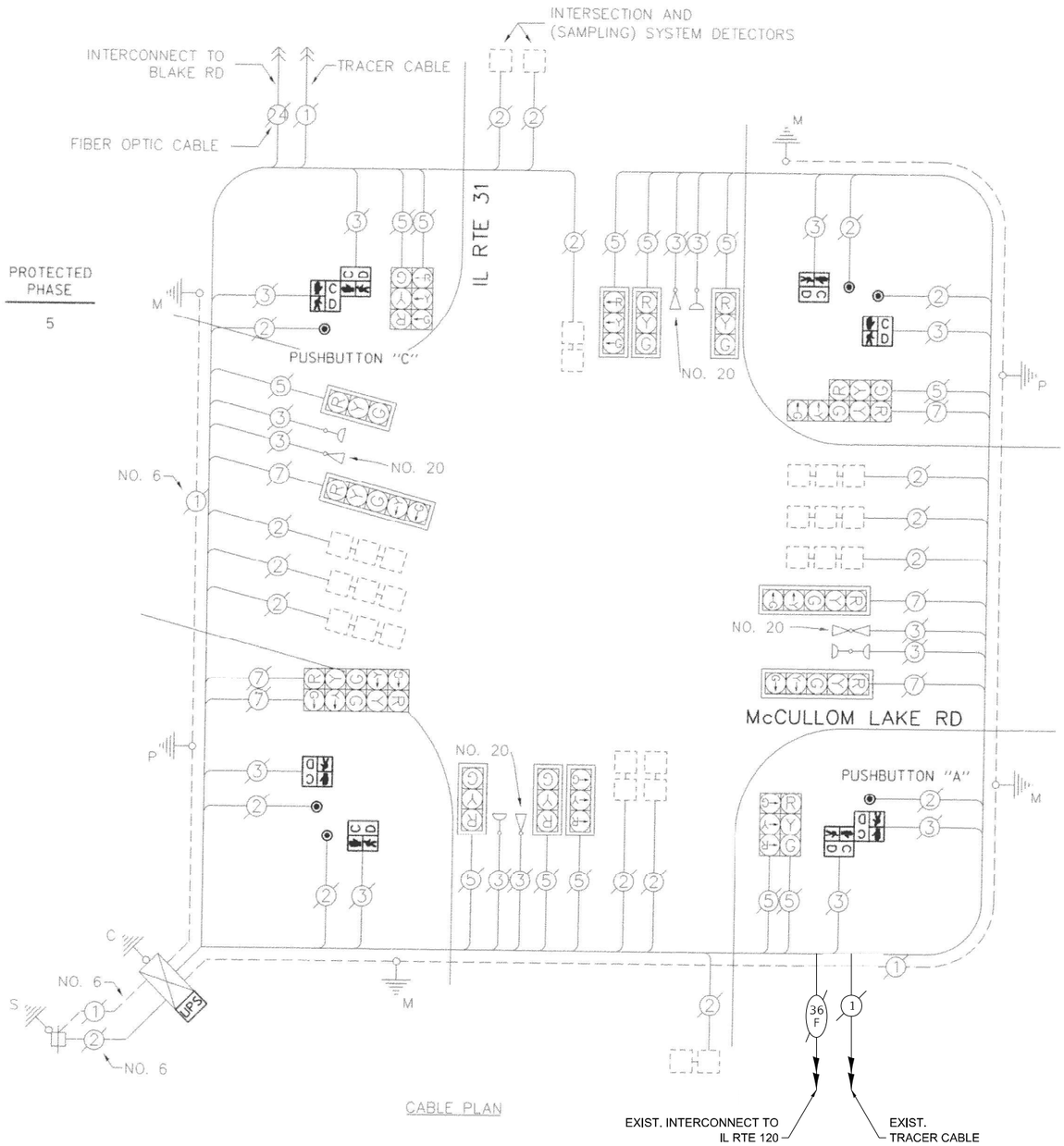


OVERLAP LETTER		PERMISSIVE PHASE		PROTECTED PHASE
B	=	4	+	5

PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE





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REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	12	11	132
4 - SECTION	-	14	-
5 - SECTION	6	13	78
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	8	15	120
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			540
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			1145

ENERGY COSTS TO:
CITY OF McHENRY
333 SOUTH GREEN STREET
McHENRY, IL 60050

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
TERMINATE FIBER IN CABINET	EACH	8
SPLICE FIBER IN CABINET	EACH	8
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
REMOVE AND REPLACE BATTERIES FOR UNINTERRUPTABLE POWER SUPPLY	EACH	1
RELOCATE EX LAYER II (DATALINK) SWITCH FROM INVENTORY	EACH	1

TS 11895
IDOT TACTICS
FORMER EAGLE 40

TS SHT NO. 31

FILE NAME: MA_20193 CHN18-03-5500 IDOT PTB 190 - Various Traffic Signal Design Graphics\WO 203 62W90 CAD\62W90_Sheet_05_Esq40.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED - 05/08/2025
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 5/5/2025	DATE - 12/20/2024	REVISED -

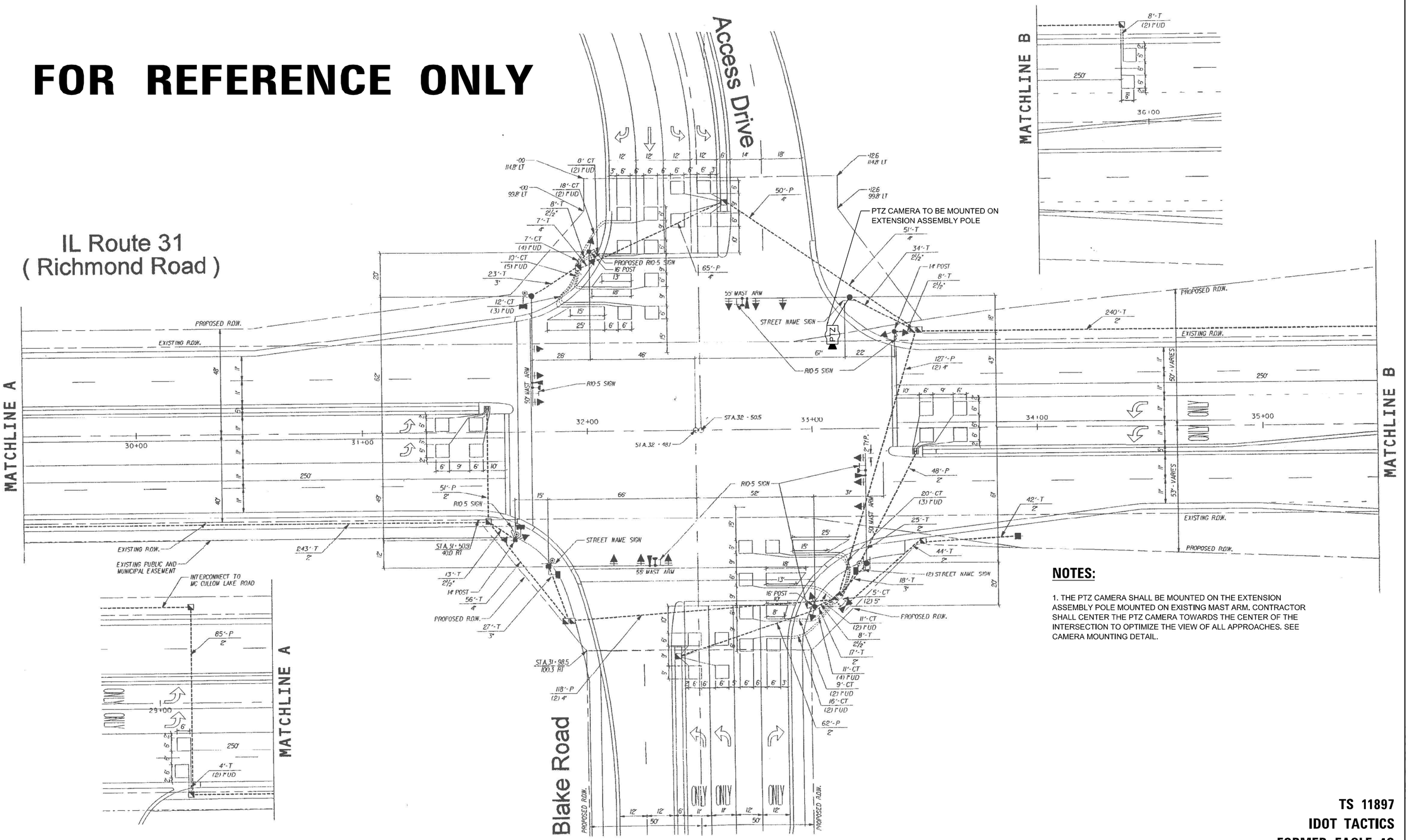
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 14 – IL RTE 31 AT MCCULLOM LAKE RD

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	39
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

FOR REFERENCE ONLY



NOTES:

1. THE PTZ CAMERA SHALL BE MOUNTED ON THE EXTENSION ASSEMBLY POLE MOUNTED ON EXISTING MAST ARM. CONTRACTOR SHALL CENTER THE PTZ CAMERA TOWARDS THE CENTER OF THE INTERSECTION TO OPTIMIZE THE VIEW OF ALL APPROACHES. SEE CAMERA MOUNTING DETAIL.

TS 11897
IDOT TACTICS
FORMER EAGLE 40

TS SHT NO. 32

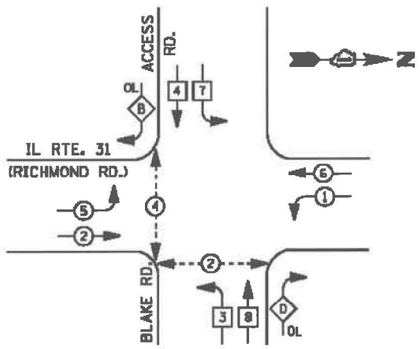
FILE NAME: MH_20193 CHR18-03-5500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Exist40.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED - 05/08/2025	**STATE OF ILLINOIS**	**SIGNAL PLAN**	
	DRAWN - KATHLEEN MURPHY	REVISED -	**DEPARTMENT OF TRANSPORTATION**	**LOCATION 15 – IL RTE 31 AT BLAKE RD**	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -		SCALE:	SHEET OF SHEETS STA. TO STA.
PLOT DATE = 5/5/2025	DATE - 12/20/2024	REVISED -			

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	40
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

CONTROLLER SEQUENCE



LEGEND

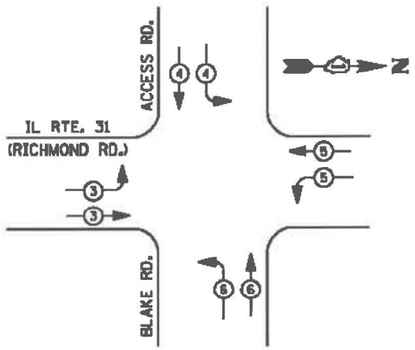
- DUAL ENTRY PHASE
- PEDESTRIAN PHASE
- SINGLE ENTRY PHASE
- OVERLAP

NUMBER REFERS TO ASSOCIATED PHASE

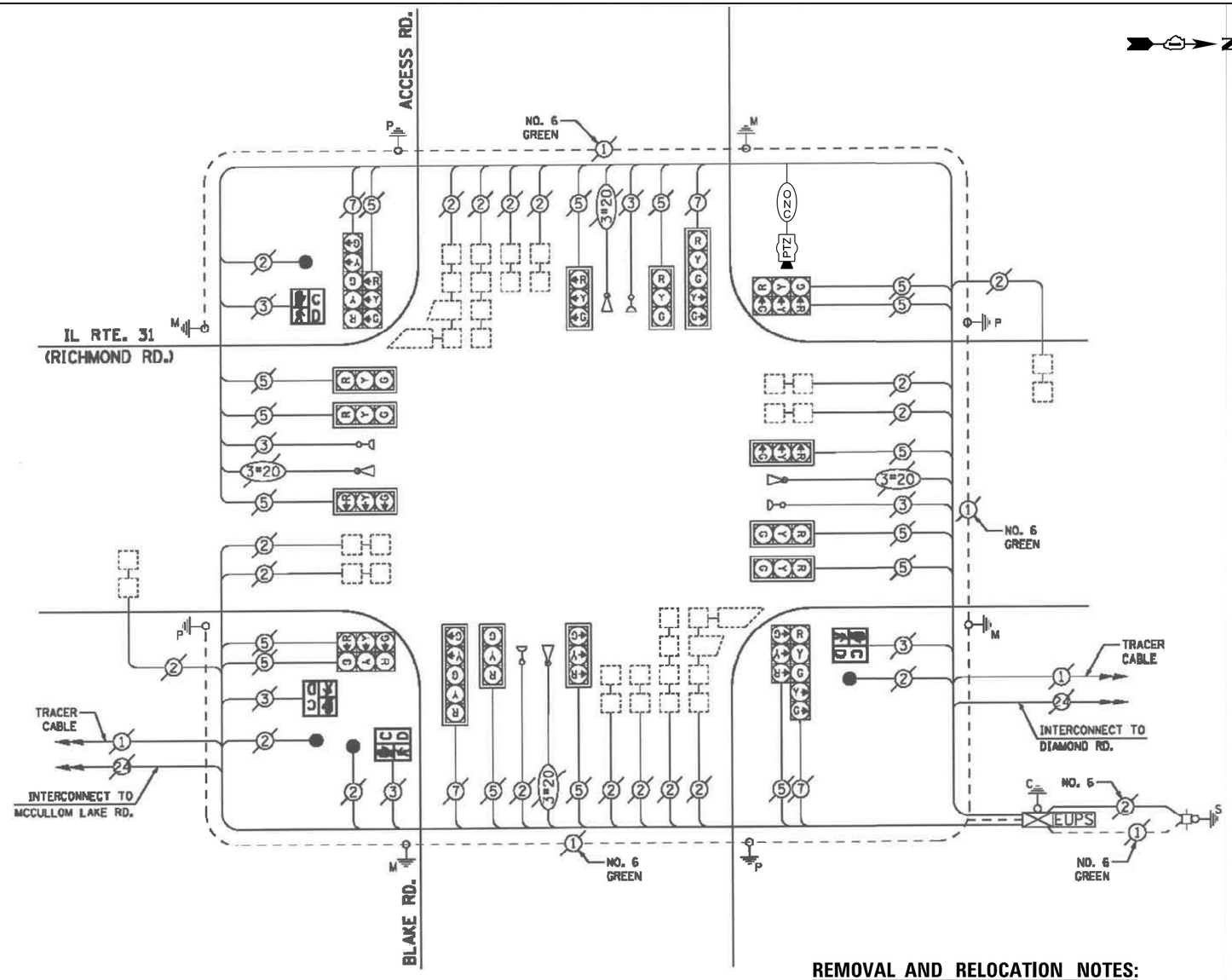
RIGHT TURN OVERLAP PHASE DESIGNATION

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

PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTION SEQUENCE



CABLE PLAN

REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	16	11	176
4 - SECTION	-	14	-
5 - SECTION	4	13	78
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	4	15	60
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			498
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	-
PTZ CAMERA	1	75	75
TOTAL SERVICE WIRE SIZING =			1178

ENERGY COSTS TO:
ILLINOIS DEPT OF TRANSPORTATION
201 W. CENTER CT
SCHAUMBURG, IL 60196

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	247
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
TERMINATE FIBER IN CABINET	EACH	8
SPLICE FIBER IN CABINET	EACH	8
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
CAMERA MOUNTING ASSEMBLY	EACH	1
RELOCATE EX LAYER II (DATALINK) SWITCH FROM INVENTORY	EACH	1

TS 11897
IDOT TACTICS
FORMER EAGLE 40

TS SHT NO. 33

FILE NAME: M:\2019\3 CMR\18-03-5500 IDOT_PFB_190 - Various Traffic Signal Design\Graphics\WO 203_62\V90\CAD\62V90_Sheet 05 Eq#40.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED - 05/08/2025
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 5/5/2025	DATE - 12/20/2024	REVISED -

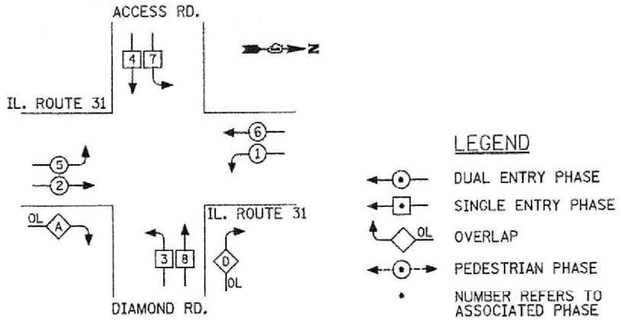
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 15 – IL RTE 31 AT BLAKE RD

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	41
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

CONTROLLER SEQUENCE



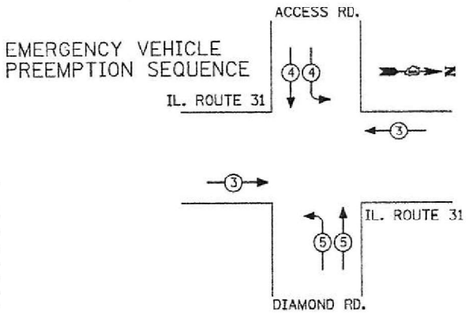
LEGEND

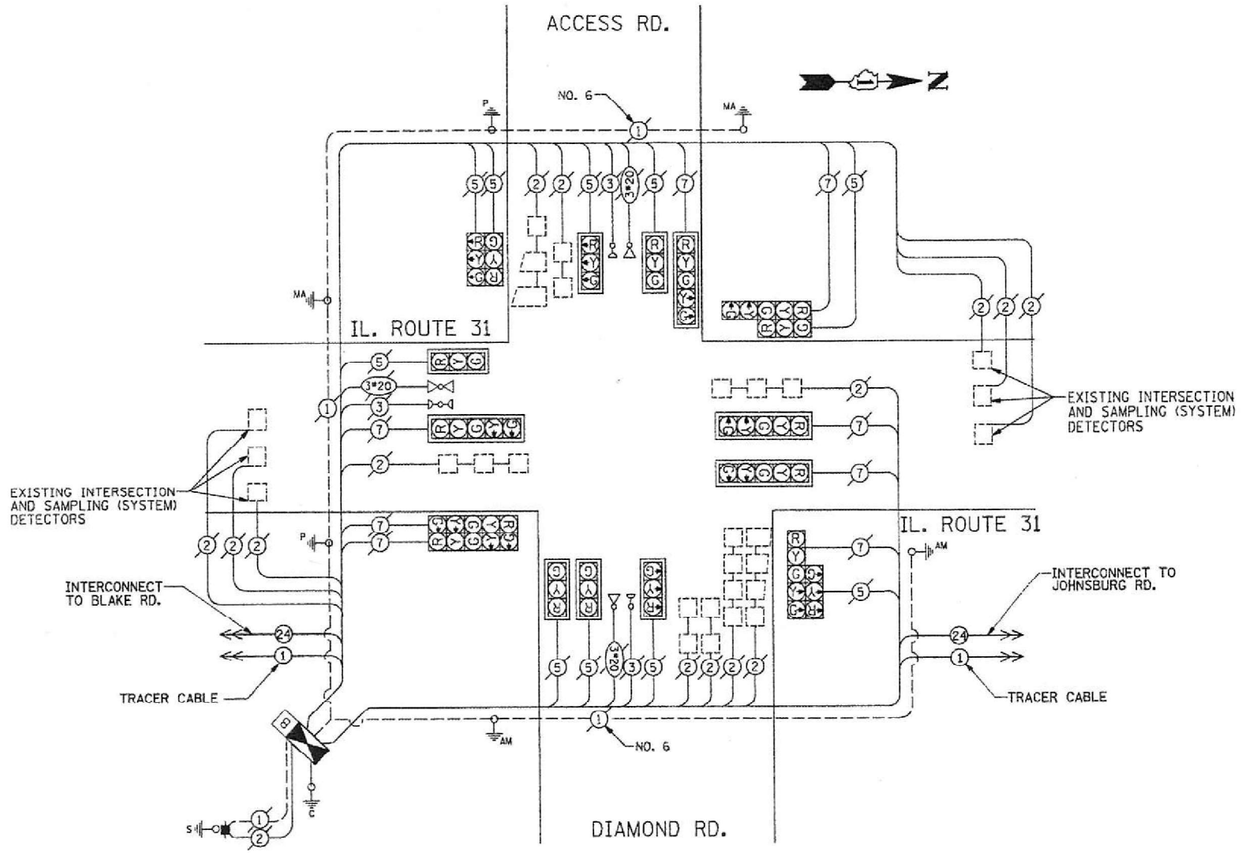
- DUAL ENTRY PHASE
- SINGLE ENTRY PHASE
- OVERLAP
- PEDESTRIAN PHASE
- NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE





TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	10	11	110
4 - SECTION	-	14	-
5 - SECTION	8	13	104
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	1	15	-
TOTAL UPS SIZING =			424
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			1029

ENERGY COSTS TO:
CITY OF McHENRY
333 SOUTH GREEN STREET
McHENRY, IL 60050

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TERMINATE FIBER IN CABINET	EACH	8
SPLICE FIBER IN CABINET	EACH	8
RELOCATE EX LAYER II (DATALINK) SWITCH FROM INVENTORY	EACH	1

TS 11896
IDOT TACTICS
FORMER EAGLE 40

TS SHT NO. 34

FILE NAME: M:_20\103_CHI\18-03-5500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eagle40.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED - 05/08/2025
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 5/5/2025	DATE - 12/20/2024	REVISED -

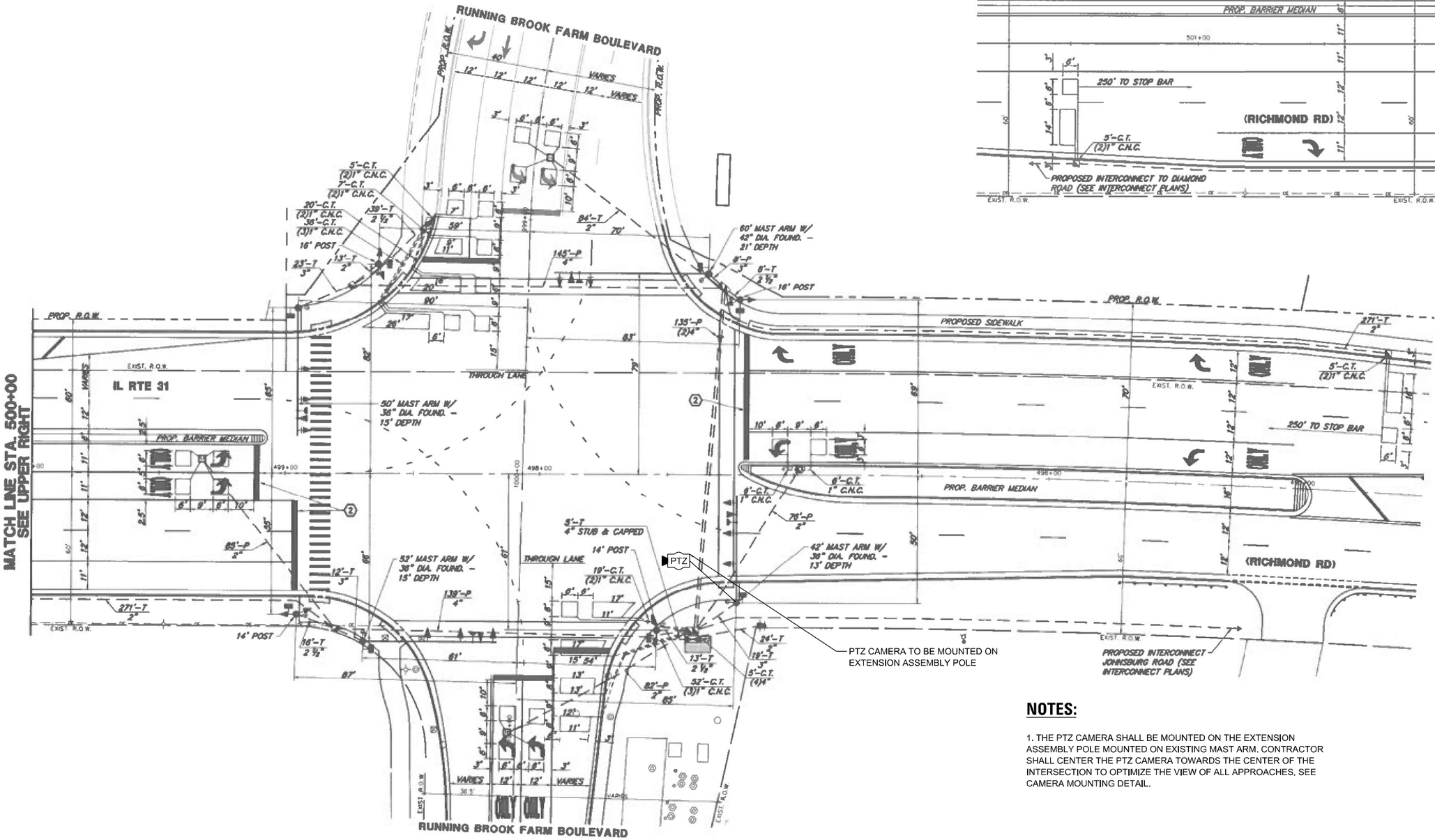
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 16 – IL RTE 31 AT DIAMOND RD

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	42
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

FOR REFERENCE ONLY



NOTES:

1. THE PTZ CAMERA SHALL BE MOUNTED ON THE EXTENSION ASSEMBLY POLE MOUNTED ON EXISTING MAST ARM. CONTRACTOR SHALL CENTER THE PTZ CAMERA TOWARDS THE CENTER OF THE INTERSECTION TO OPTIMIZE THE VIEW OF ALL APPROACHES. SEE CAMERA MOUNTING DETAIL.

TS 7311
IDOT TACTICS
FORMER EAGLE 40

TS SHT NO. 35

FILE NAME: MA-20193 CHI-18-03-5500 IDOT PTB 190 - Various Traffic Signal Design Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eagle40.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED - 05/08/2025	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES LOCATION 17 – IL RTE 31 AT RUNNING BROOK FARM BLVD	
	DRAWN - KATHLEEN MURPHY	REVISED -			
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -			
PLOT DATE = 5/5/2025	DATE - 12/20/2024	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.	

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	43
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER

SCHEDULE OF QUANTITIES

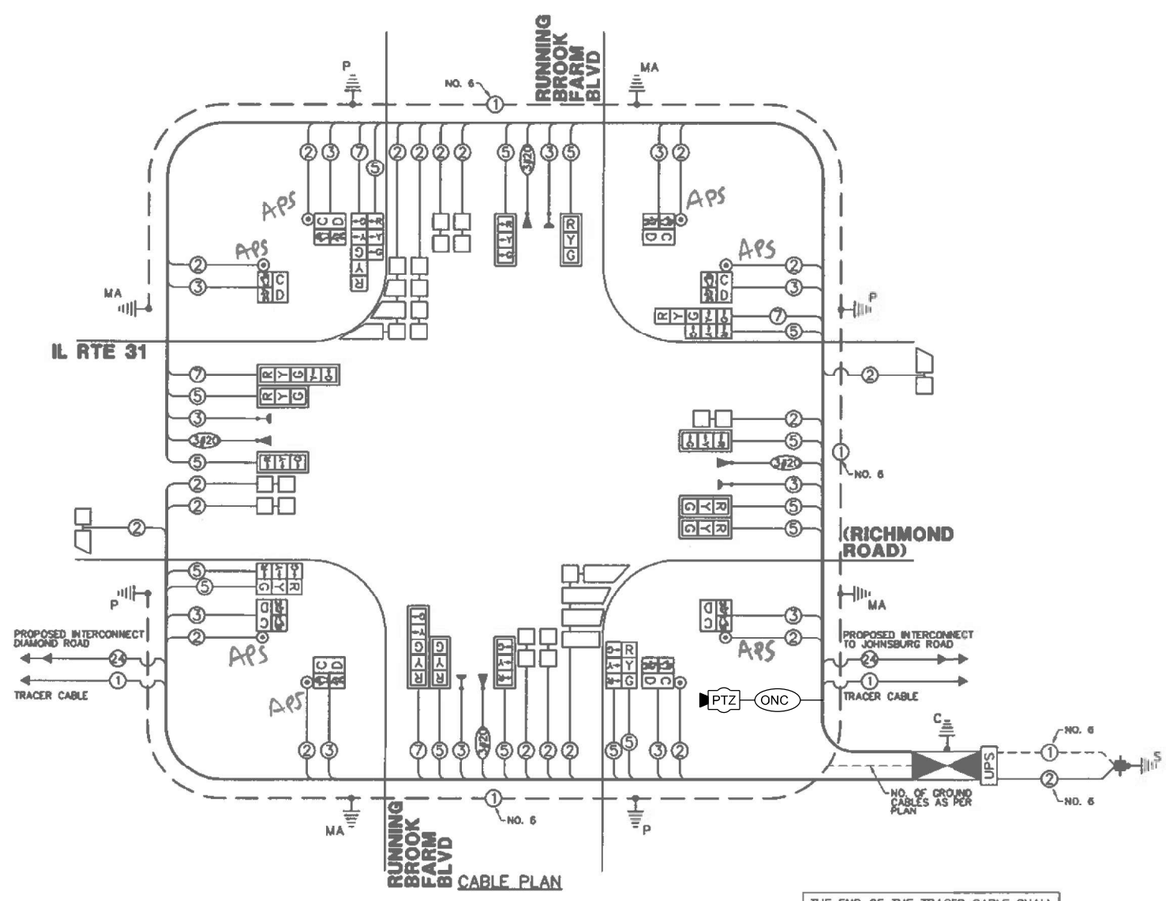
ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	92
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
TERMINATE FIBER IN CABINET	EACH	8
SPLICE FIBER IN CABINET	EACH	8
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
CAMERA MOUNTING ASSEMBLY	EACH	1
RELOCATE EX LAYER II (DATALINK) SWITCH FROM INVENTORY	EACH	1

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	15	11	165
4 - SECTION	-	14	-
5 - SECTION	4	13	52
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	8	15	120
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			547
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	-
PTZ CAMERA	1	75	75
TOTAL SERVICE WIRE SIZING =			1227

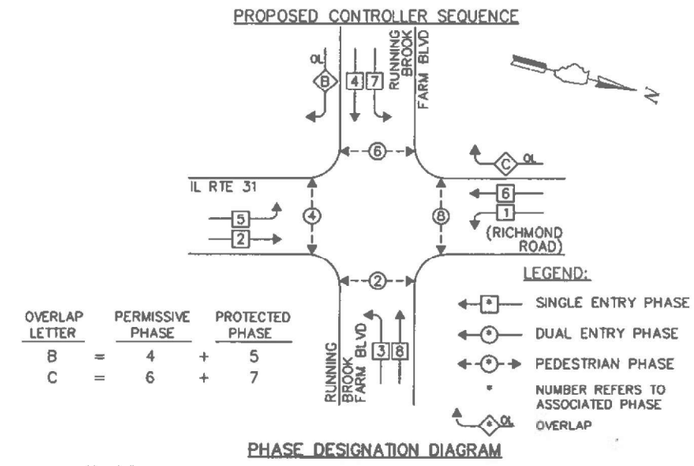
ENERGY COSTS TO:
VILLAGE OF JOHNSBURG
1515 W. CHANNEL BEACH AVE.
JOHNSBURG, IL 60050

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---



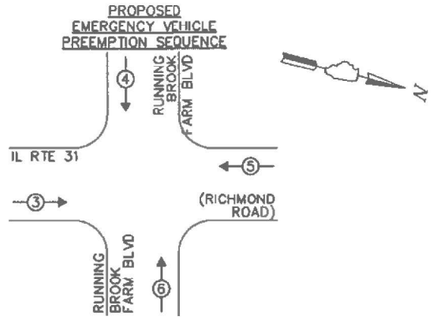
CABLE PLAN

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



OVERLAP LETTER		PERMISSIVE PHASE		PROTECTED PHASE
B	=	4	+	5
C	=	6	+	7

PHASE DESIGNATION DIAGRAM



TS 7311
IDOT TACTICS
FORMER EAGLE 40

TS SHT NO. 36

FILE NAME: MA_20193_CHI18-02-5500 IDOT_FTB_190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eagle40.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED - 05/08/2025
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 5/5/2025	DATE - 12/20/2024	REVISED -

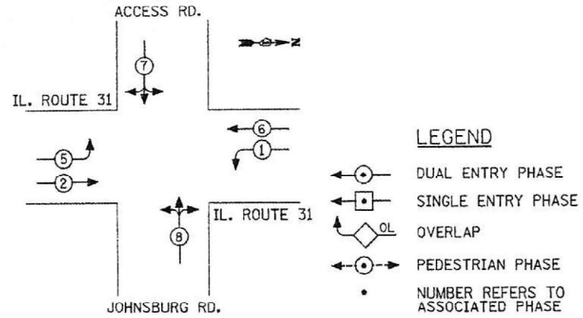
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 17 – IL RTE 31 AT RUNNING BROOK FARM BLVD

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	44
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

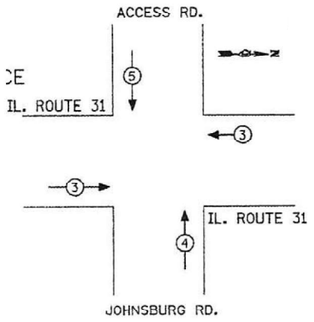
CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

DUAL ENTRY - ALL LEGS
PROTECTED/ PERMITTED LEFT TURN PHASING

NOTE: E/W SPLIT Ø



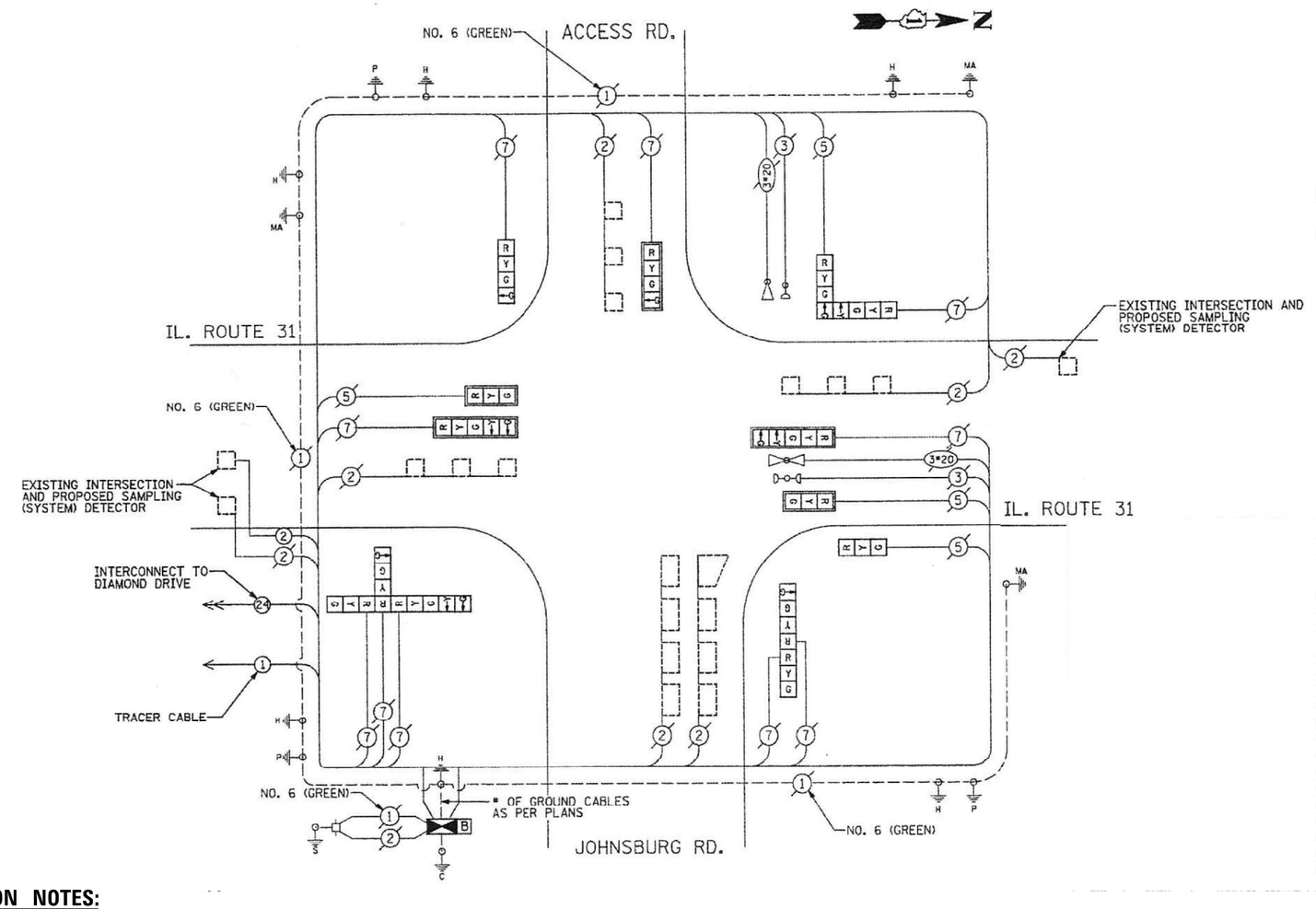
TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	6	11	66
4 - SECTION	4	14	56
5 - SECTION	4	13	52
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			384
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			989

ENERGY COSTS TO:
CITY OF McHENRY
333 SOUTH GREEN STREET
McHENRY, IL 60050

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

PROPOSED CABLE PLAN



REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
TERMINATE FIBER IN CABINET	EACH	12
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
REMOVE AND REPLACE BATTERIES FOR UNINTERRUPTABLE POWER SUPPLY	EACH	1
RELOCATE EX LAYER II (DATALINK) SWITCH FROM INVENTORY	EACH	1

TS 7310
IDOT TACTICS
FORMER EAGLE 40

TS SHT NO. 37

FILE NAME: M:_2019\3 CHI\18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90 Sheet_05 Eagle40.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 18 – IL RTE 31 AT JOHNSBURG RD

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	45
		CONTRACT NO. 62W90		
		ILLINOIS	FED. AID PROJECT	

N

NOTES:

1. IN CONDUITS SHOWN
   REMOVE EXISTING FIBER AND TRACER CABLE.
   ROD AND CLEAN AS DIRECTED BY THE ENGINEER.
   INSTALL NEW FIBER AND TRACER CABLE

IDOT TACTICS
FORMER EAGLE 40

TS SHT NO. 38

FILE NAME: MS_20193 CHIL18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_03_Eagle40.dgn

TYLin

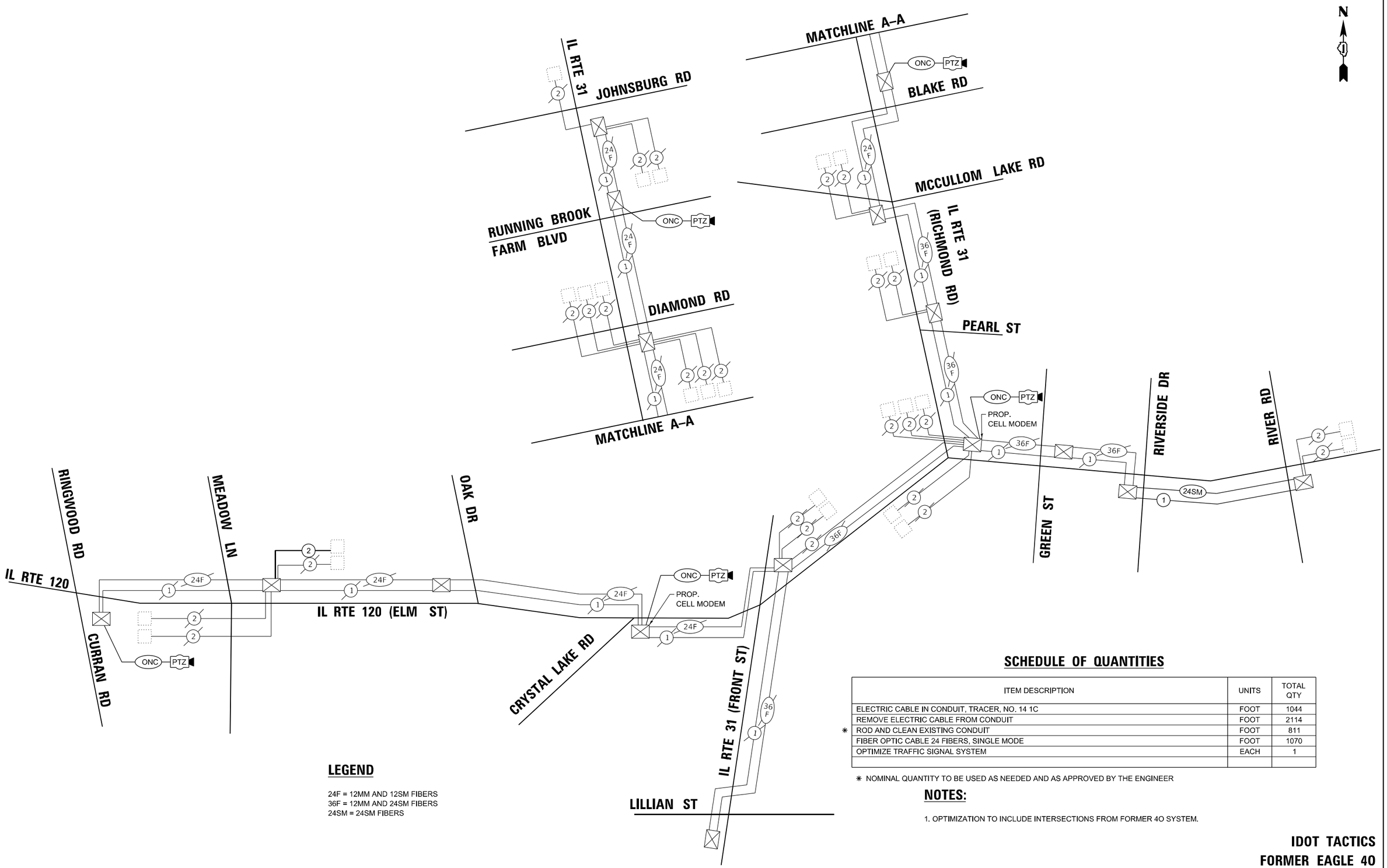
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN
IL RTE 120 AND IL RTE 31 – RIVERSIDE DR TO RIVER RD

SCALE: | SHEET OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	46
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		



LEGEND

24F = 12MM AND 12SM FIBERS
36F = 12MM AND 24SM FIBERS
24SM = 24SM FIBERS

SCHEDULE OF QUANTITIES

	ITEM DESCRIPTION	UNITS	TOTAL QTY
	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	1044
	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	2114
*	ROD AND CLEAN EXISTING CONDUIT	FOOT	811
	FIBER OPTIC CABLE 24 FIBERS, SINGLE MODE	FOOT	1070
	OPTIMIZE TRAFFIC SIGNAL SYSTEM	EACH	1

* NOMINAL QUANTITY TO BE USED AS NEEDED AND AS APPROVED BY THE ENGINEER

NOTES:

1. OPTIMIZATION TO INCLUDE INTERSECTIONS FROM FORMER 4O SYSTEM.

IDOT TACTICS
FORMER EAGLE 40

TS SHT NO. 39

FILE NAME: M:_20193 CHI\18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_0S_Eagle40.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT SCHEMATIC
IL RTE 120 AND IL RTE 31 – RINGWOOD RD TO RIVER RD

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	47
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

EXISTING CONNECTOR / EXISTING FIBER

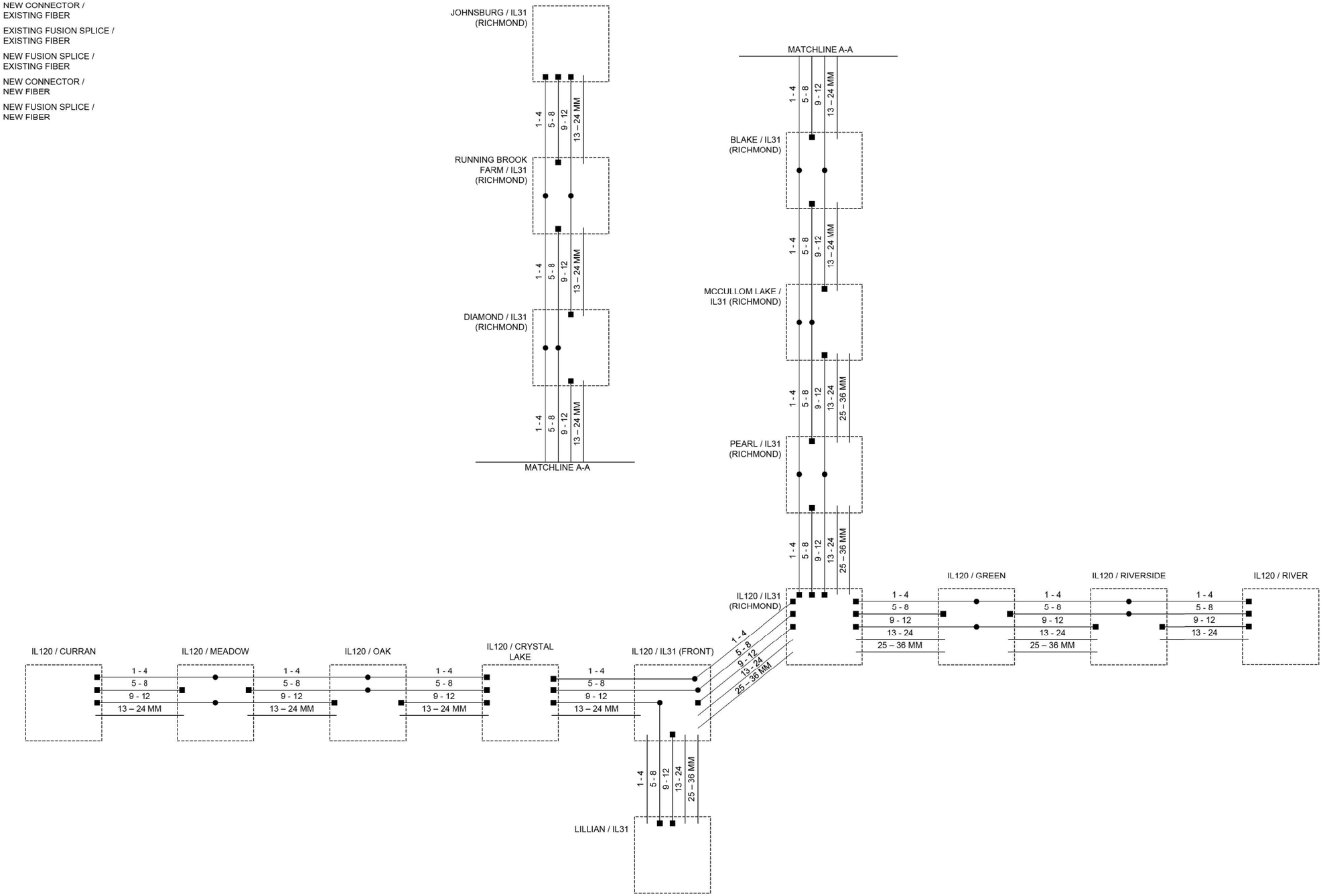
NEW CONNECTOR / EXISTING FIBER

EXISTING FUSION SPLICE / EXISTING FIBER

NEW FUSION SPLICE / EXISTING FIBER

NEW CONNECTOR / NEW FIBER

NEW FUSION SPLICE / NEW FIBER



IDOT TACTICS
FORMER EAGLE 40

TS SHT NO. 40

FILE NAME: MX-20193 CHIL18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eagle40.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

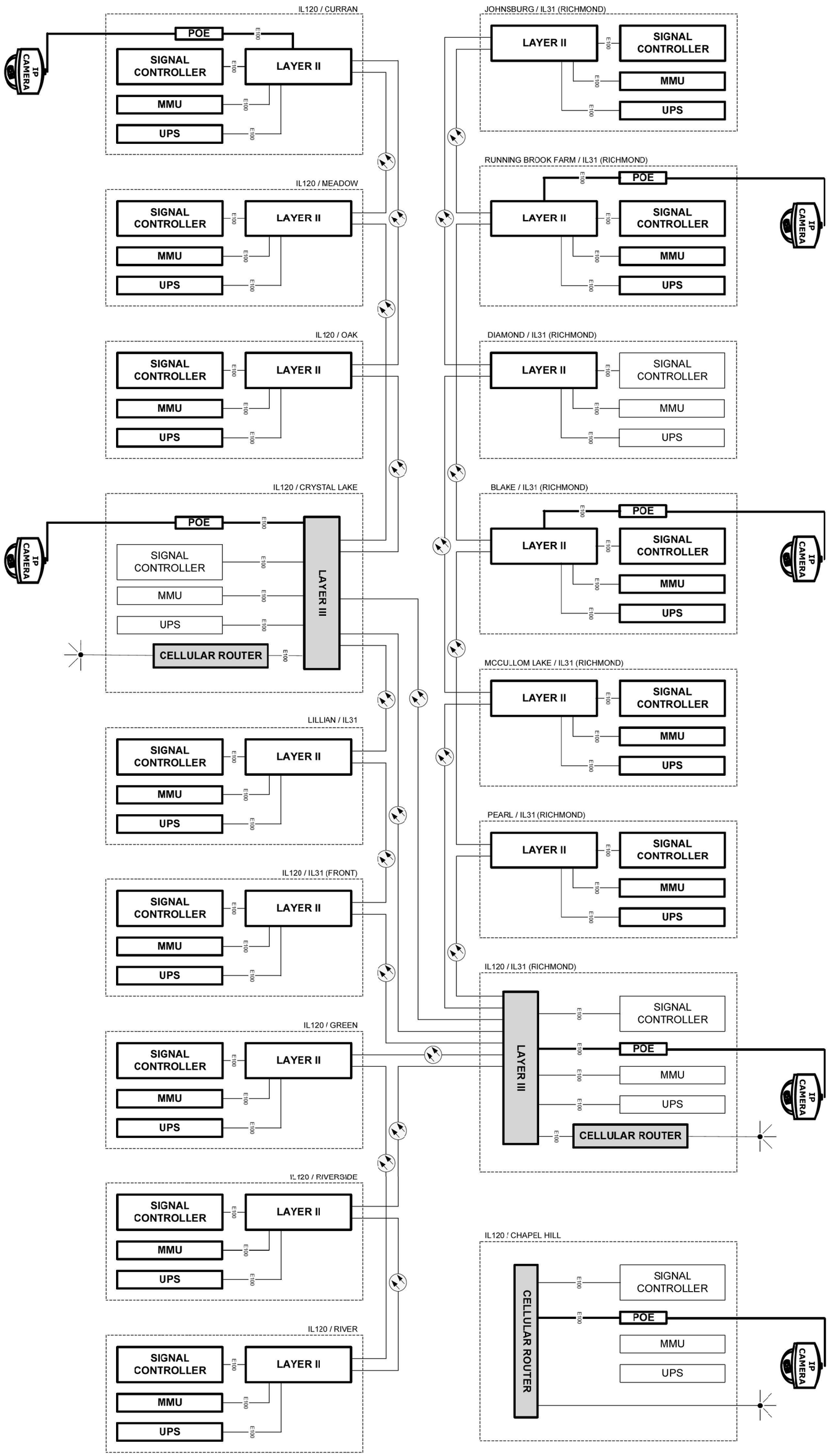
FIBER SPLICE DIAGRAM
IL RTE 120 AND IL RTE 31 – MEADOW LN TO RIVER RD

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	48
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

TS SHT NO. 41

FILE NAME: M:_2019\3 CHI\18-03-5500 IDOT_PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eagle40.dgn



TYLin

USER NAME	= eheckathorn
PLOT SCALE	= 40.0000 ' / in.
PLOT DATE	= 3/10/2025

DESIGNED	-	ERICA SALUTZ
DRAWN	-	KATHLEEN MURPHY
CHECKED	-	PETER WOJTKIEWICZ
DATE	-	12/20/2024

REVISED	-
REVISED	-
REVISED	-
REVISED	-

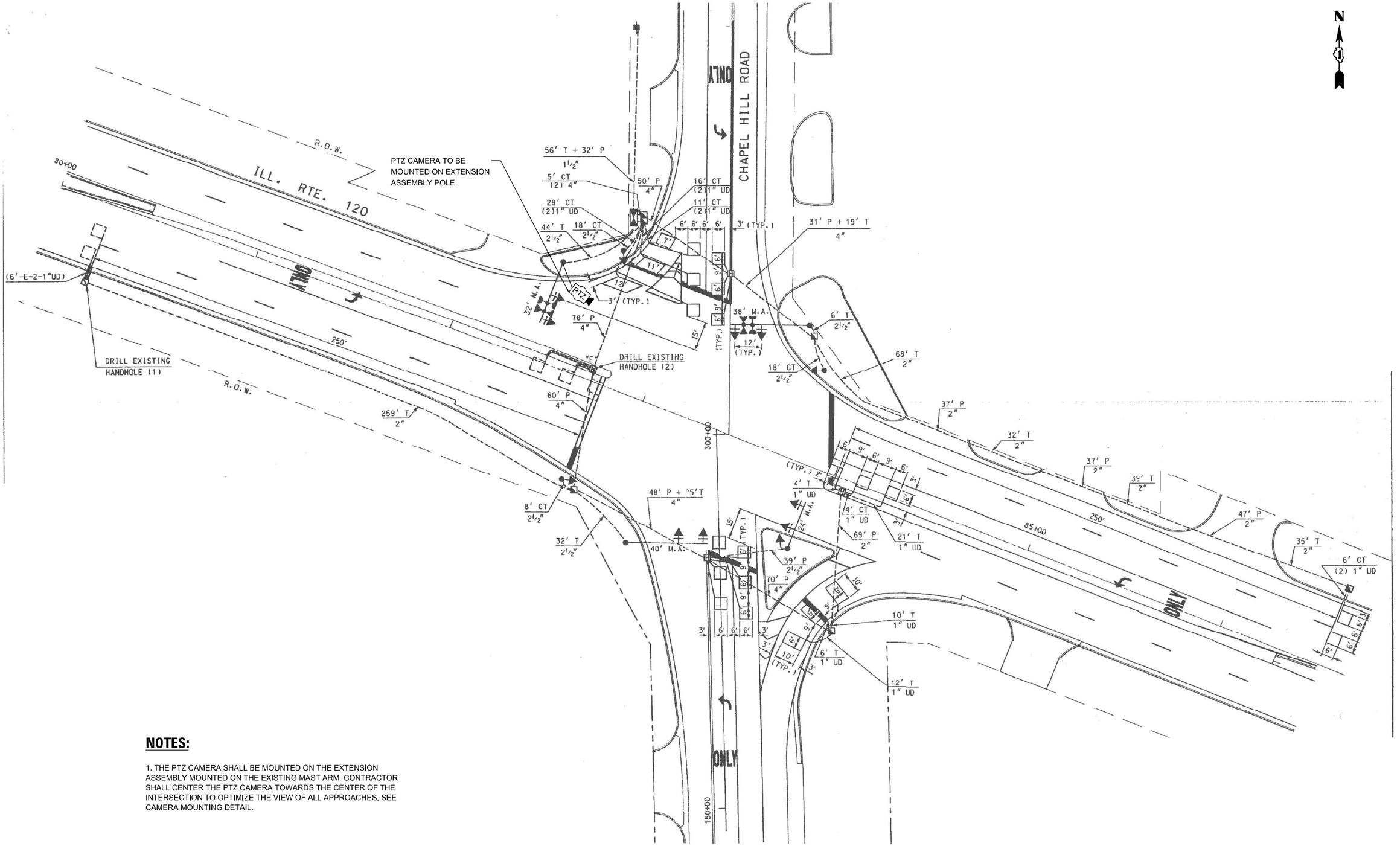
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABINET DETAIL
IL RTE 120 AND IL RTE 31 – MEADOW LN TO RIVER RD

SCALE: | SHEET | OF | SHEETS | STA. | TO STA.

IDOT TACTICS
FORMER EAGLE 40

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2024-085-TS	VARIOUS	262	49
ILLINOIS	FED. AID PROJECT	CONTRACT NO. 62W90		



NOTES:

1. THE PTZ CAMERA SHALL BE MOUNTED ON THE EXTENSION ASSEMBLY MOUNTED ON THE EXISTING MAST ARM. CONTRACTOR SHALL CENTER THE PTZ CAMERA TOWARDS THE CENTER OF THE INTERSECTION TO OPTIMIZE THE VIEW OF ALL APPROACHES. SEE CAMERA MOUNTING DETAIL.

TS 7335

IDOT TACTICS

TS SHT NO. 42

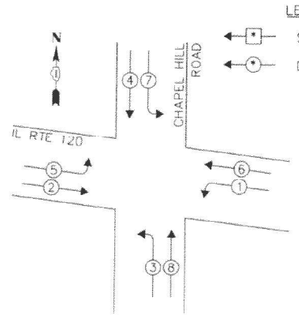
FILE NAME: M:_2019\3 CHI\18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_ADJ_40.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED - 05/08/2025	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES LOCATION 19 – IL RTE 120 AT CHAPEL HILL RD**	
	DRAWN - KATHLEEN MURPHY	REVISED -			
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -			
PLOT DATE = 5/5/2025	DATE - 12/20/2024	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.	

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	50
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

CONTROLLER SEQUENCE



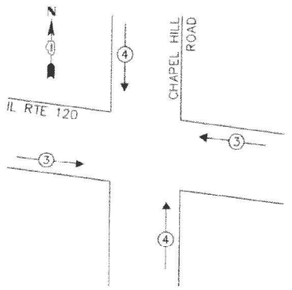
LEGEND.

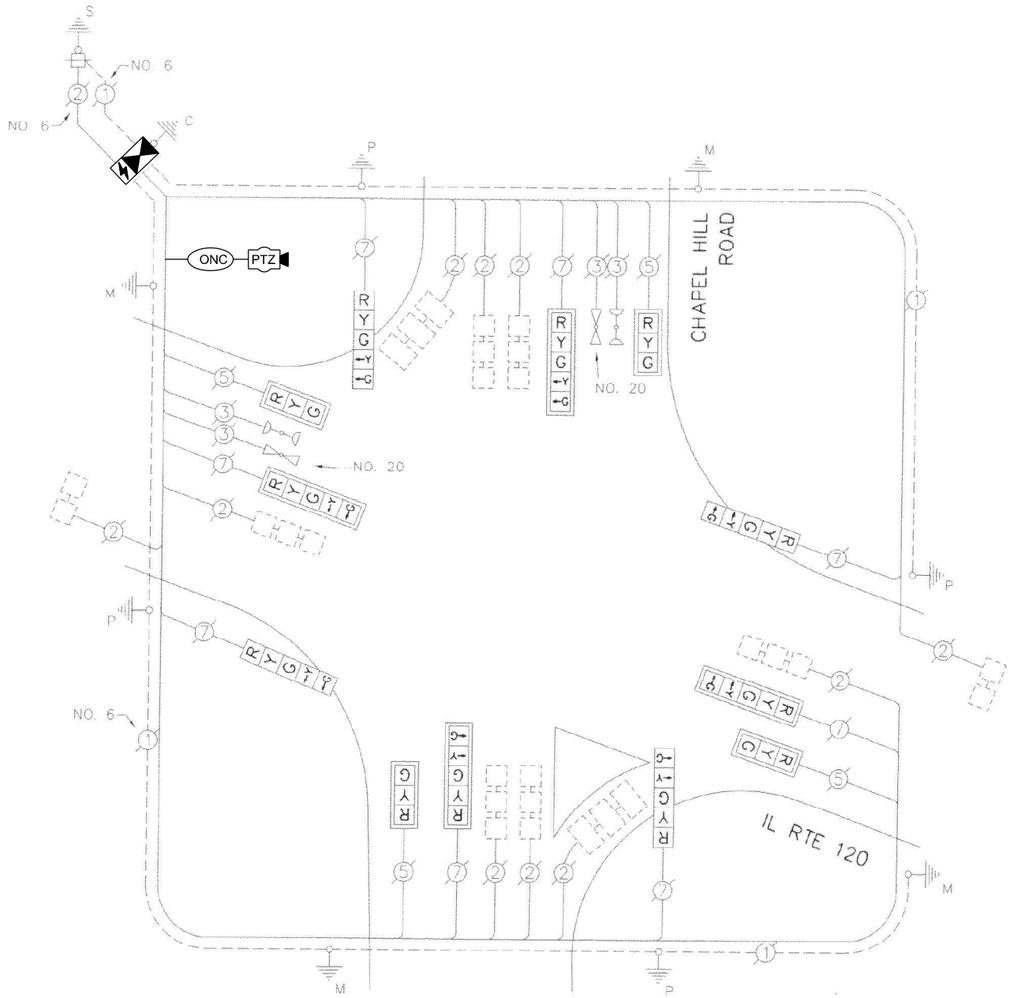
SINGLE ENTRY PHASE

DUAL ENTRY PHASE

PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE





CABLE PLAN

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	4	11	44
4 - SECTION	-	14	-
5 - SECTION	8	13	104
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	-	35	-
CELLULAR MODEM	1	15	15
TOTAL UPS SIZING =			338
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	-
PTZ CAMERA	1	75	75
TOTAL SERVICE WIRE SIZING =			1018

ENERGY COSTS TO:
CITY OF MCHENRY
333 S GREEN ST
MCHENRY, IL 60050

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER AND CABINET

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACJ	1
INDUCTIVE LOOP DETECTOR	EACH	10
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
CELLULAR MODEM	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	118
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
CAMERA MOUNTING ASSEMBLY	EACH	1

TS SHT NO. 43

TS 7335
IDOT TACTICS

FILE NAME: M:\2019\3 Chtl\18-03-5500 IDOT RTE 190 - Various Traffic Signal Design\Graphics\WO 203-62W90\CAD\62W90 Sheet 05 Add 40.dgn

TYLin

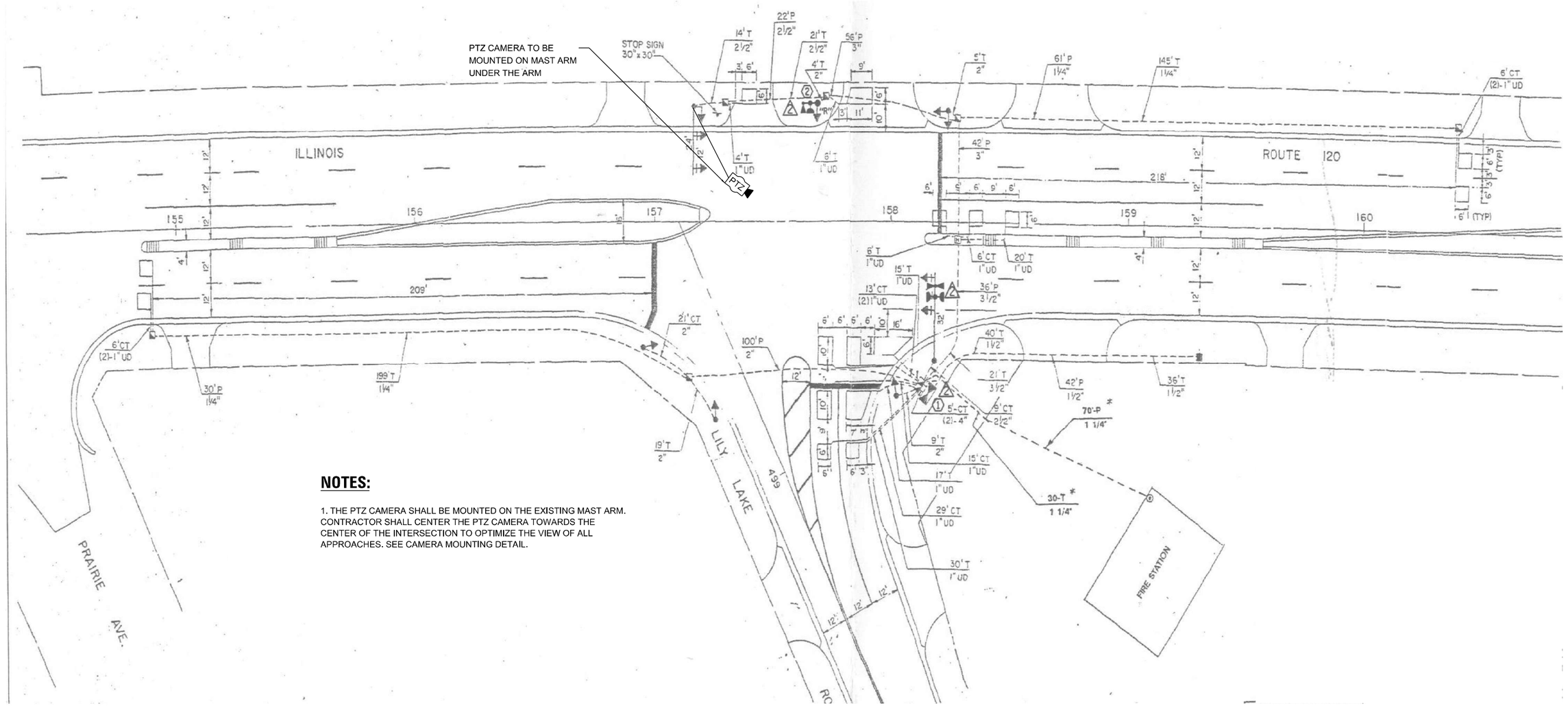
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 19 – IL RTE 120 AT CHAPEL HILL RD

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	51
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		



NOTES:

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

TS 22100
LAKE COUNTY TACTICS

TS SHT NO. 44

FILE NAME: MH_20193 CHI:18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_ADJ 40.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED - 05/08/2025	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 5/5/2025	DATE - 12/20/2024	REVISED -	

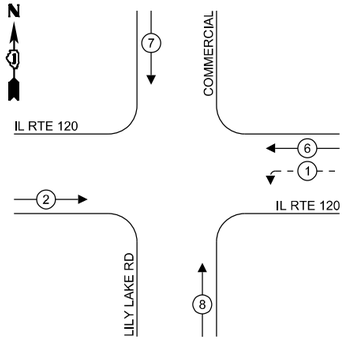
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGNAL PLAN
LOCATION 20 – IL RTE 120 AT LILY LAKE RD

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	52
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

EXISTING CONTROLLER SEQUENCE



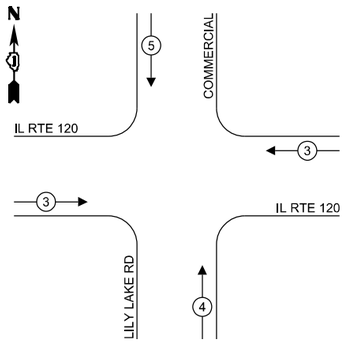
LEGEND:

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

RIGHT TURN OVERLAP PHASE DESIGNATION:

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

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

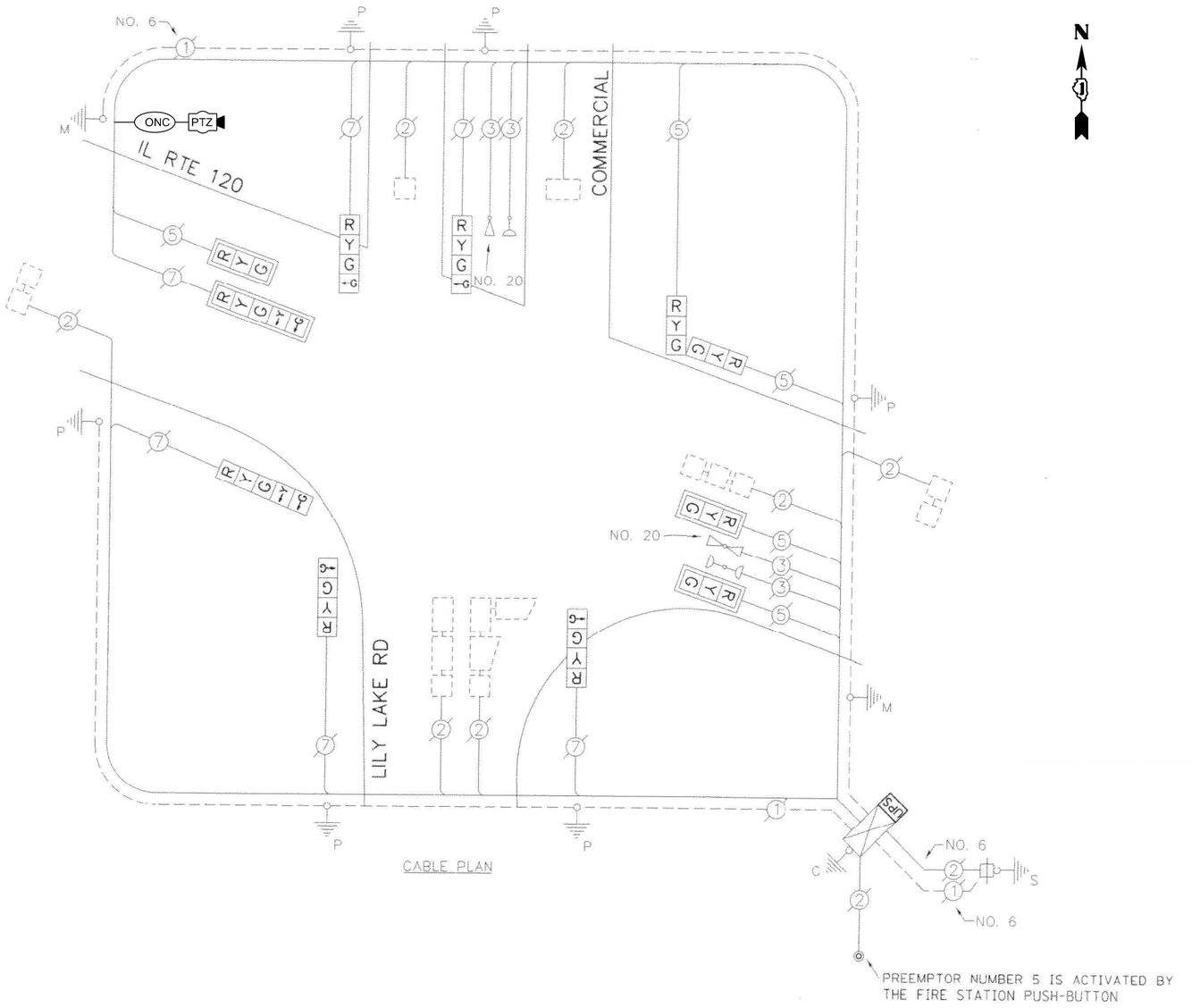


TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	4	11	44
4 - SECTION	4	14	56
5 - SECTION	2	13	269
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	-	35	-
CELLULAR MODEM	1	15	15
TOTAL UPS SIZING =			316
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	-
PTZ CAMERA	1	75	75
TOTAL SERVICE WIRE SIZING =			996

ENERGY COSTS TO:
ILLINOIS DEPT OF TRANSPORTATION
201 CENTER CT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---



CABLE PLAN

REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
CELLULAR MODEM	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	319
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
POWER OVER ETHERNET EXTENDER	EACH	1

TS 22100

LAKE COUNTY TACTICS

TS SHT NO. 45

FILE NAME: MA_20193 CHN.18-03-5500 IDOT FTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_ADJ_40.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0001 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -

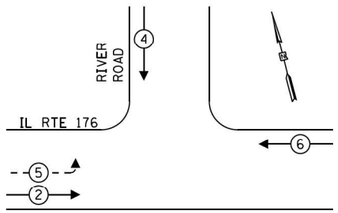
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 20 – IL RTE 120 AT LILY LAKE RD

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	53
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

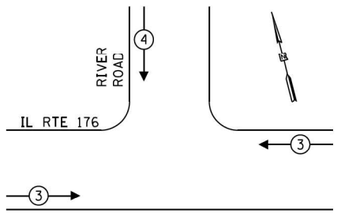
EXISTING CONTROLLER SEQUENCE

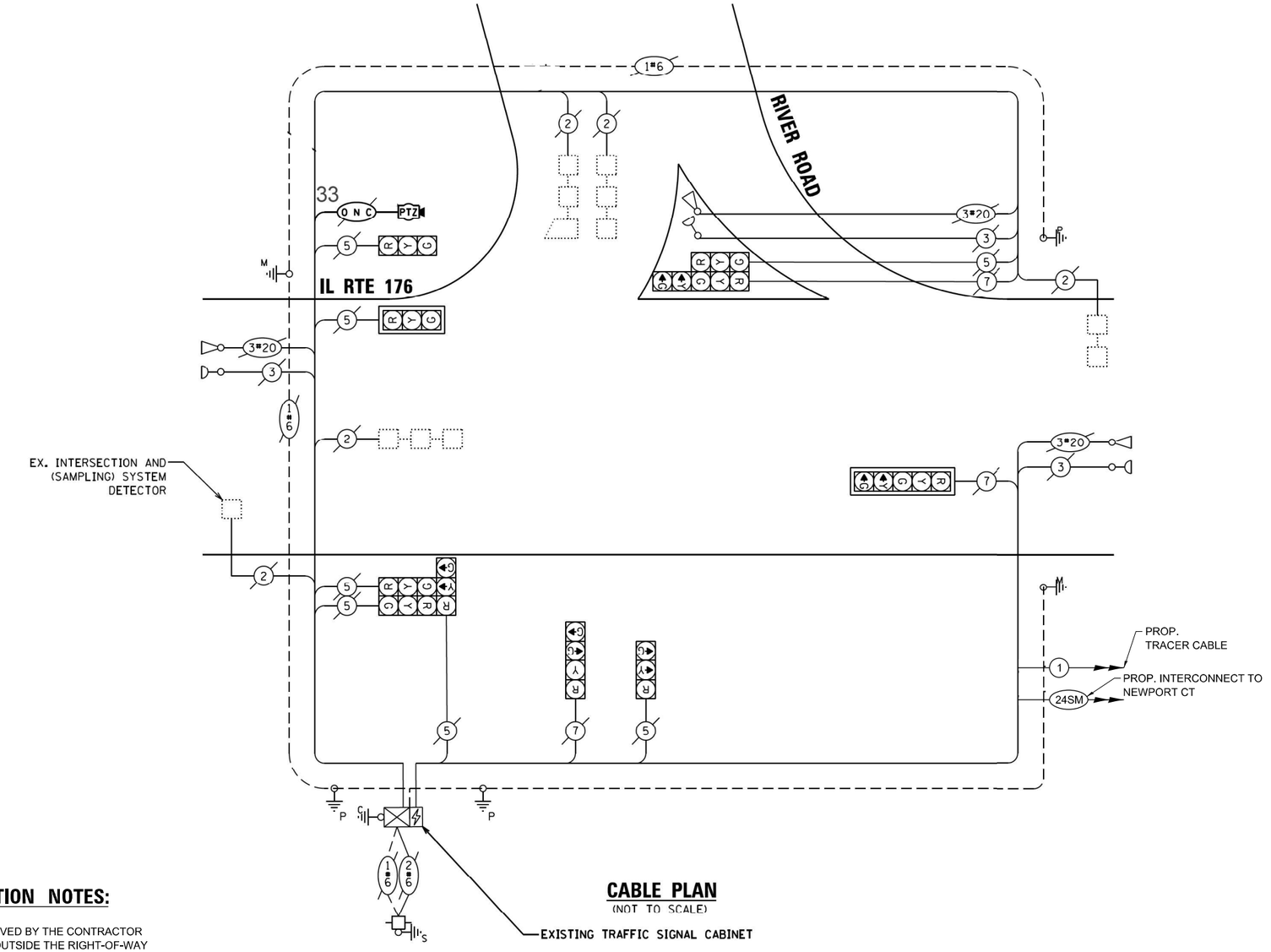


LEGEND:

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

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE





CABLE PLAN
(NOT TO SCALE)

REMOVAL AND RELOCATION NOTES:

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

1 EACH TRANSCEIVER FIBER OPTIC

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	7	11	77
4 - SECTION	1	14	14
5 - SECTION	2	13	26
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			327
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	-
PTZ CAMERA	1	75	75
TOTAL SERVICE WIRE SIZING =			1007

ENERGY COSTS TO:
VILLAGE OF ISLAND LAKE
3720 GREENLEAF AVE
ISLAND LAKE, IL 60042

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
TERMINATE FIBER IN CABINET	EACH	12
LAYER III FIBER OPTIC TRANSCEIVER MODULE, SFP TYPE, LONG DISTANCE	EACH	2
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1

TS SHT NO. 46

FILE NAME: M:\2019\3 Cnt\18-03-5500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203 62W90\CAD\62W90_Sheet_05_Eagle4f.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED - 05/08/2025	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 5/5/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

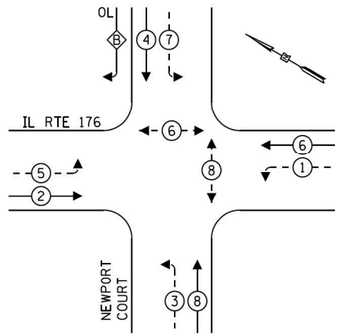
CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 21 – IL RTE 176 AT RIVER RD

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	54
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

TS 7740
FORMER EAGLE 4F
LAKE COUNTY TACTICS

EXISTING CONTROLLER SEQUENCE



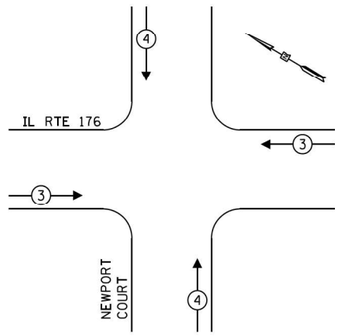
LEGEND:

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

RIGHT TURN OVERLAP PHASE DESIGNATION:

OVERLAP LETTER		PERMISSIVE PHASE		PROTECTED PHASE
B	=	4	+	5

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

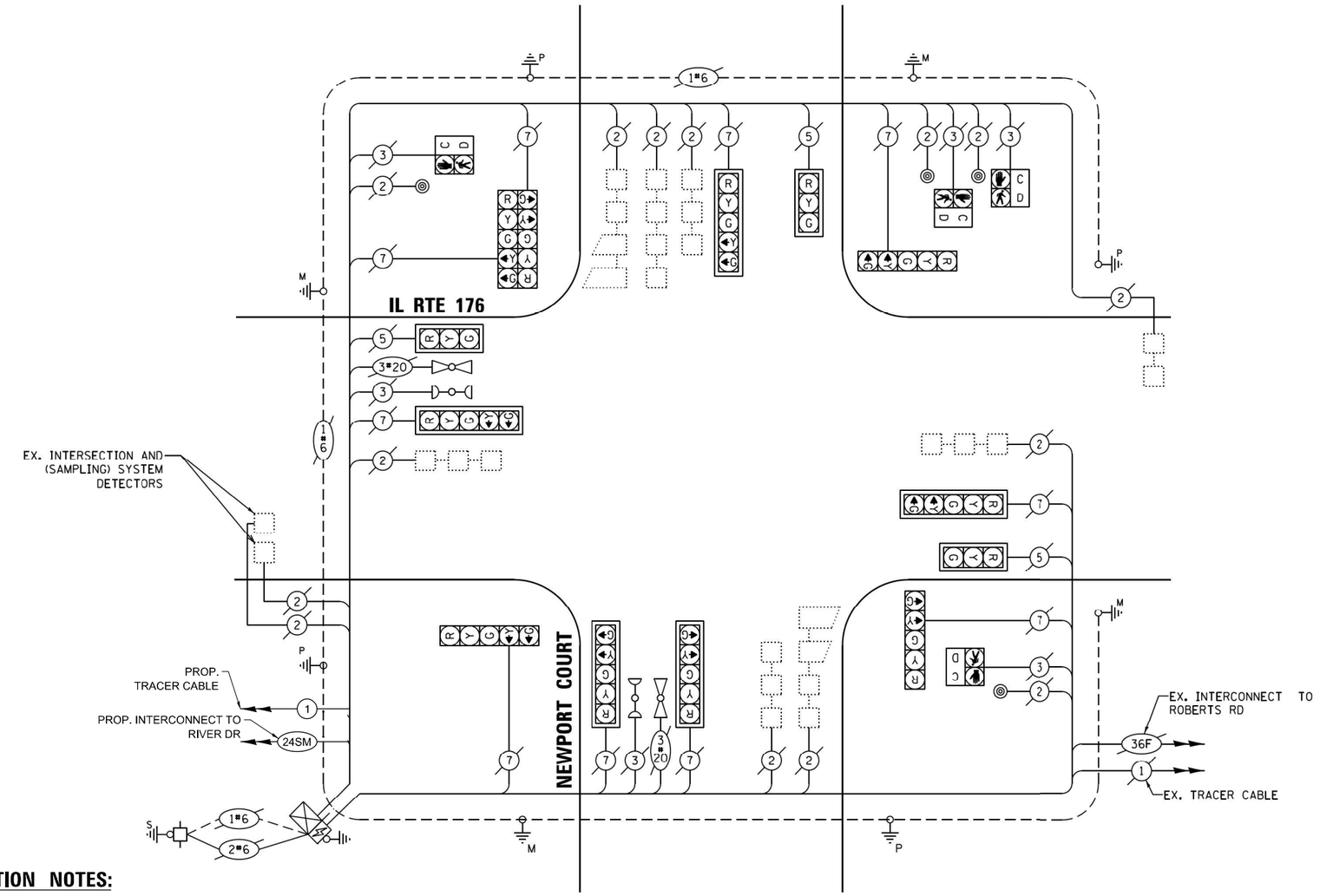


TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	3	11	33
4 - SECTION	-	14	-
5 - SECTION	10	13	130
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	4	15	60
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			423
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			1038

ENERGY COSTS TO:
VILLAGE OF ISLAND LAKE
3720 GREENLEAF AVE
ISLAND LAKE, IL 60042

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---



CABLE PLAN
(NOT TO SCALE)

REMOVAL AND RELOCATION NOTES:

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

1 EACH TRANSCEIVER FIBER OPTIC

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	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

TS 7741
FORMER EAGLE 4F
LAKE COUNTY TACTICS

TS SHT NO. 47

FILE NAME: M:_20\103_CHI\18-03-5500 ITOO_PTB 199 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eagle4F.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -

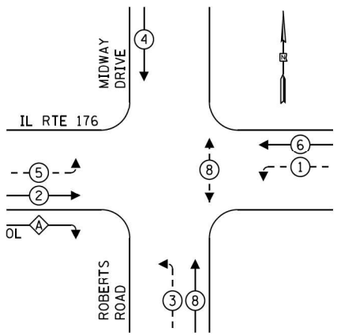
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 22 – IL RTE 176 AT NEWPORT CT

SCALE: | SHEET OF SHEETS | STA. | TO STA.

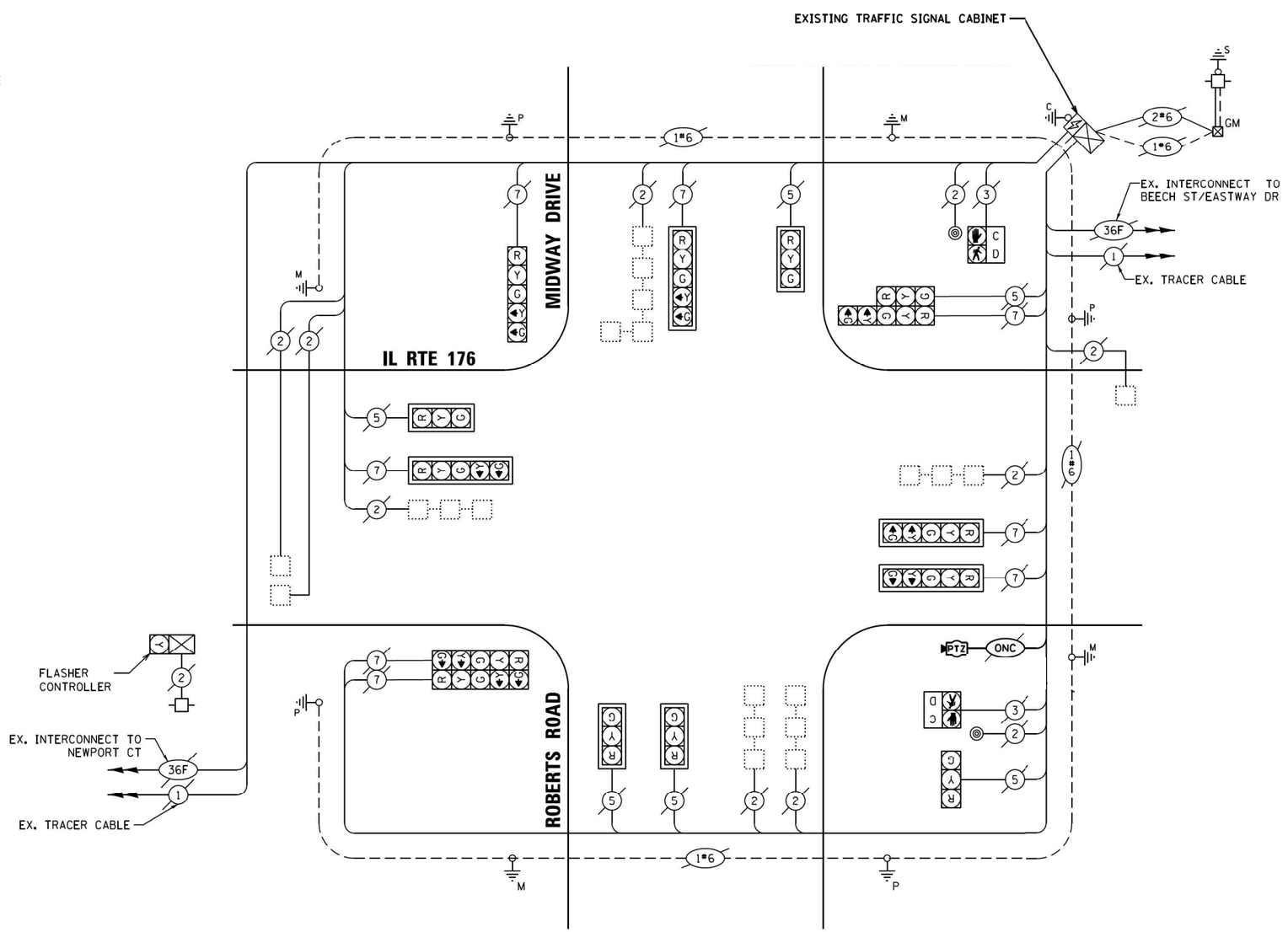
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	55
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

EXISTING CONTROLLER SEQUENCE



LEGEND:

- PROTECTED PHASE
- PROTECTED/PERMITTED PHASE
- PEDESTRIAN PHASE
- OVERLAP



CABLE PLAN
(NOT TO SCALE)

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	6	11	66
4 - SECTION	-	14	-
5 - SECTION	8	13	104
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	2	15	30
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
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	-
PTZ CAMERA	1	75	75
TOTAL SERVICE WIRE SIZING =			1090

ENERGY COSTS TO:
VILLAGE OF ISLAND LAKE
3720 GREENLEAF AVE
ISLAND LAKE, IL 60042

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TERMINATE FIBER IN CABINET	EACH	12
SPLICE FIBER IN CABINET	EACH	6
LAYER III FIBER OPTIC TRANSCEIVER MODULE, SFP TYPE, LONG DISTANCE	EACH	2

TS 11880
FORMER EAGLE 4F
LAKE COUNTY TACTICS

TS SHT NO. 48

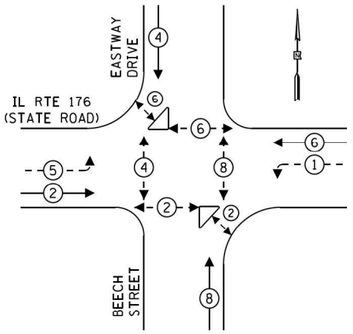
FILE NAME: M:\2019\3 Civil\18-03-5560 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90 Sheet_05 Eagle4f.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED - 05/08/2025	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES LOCATION 23 – IL RTE 176 AT ROBERTS RD /MIDWAY DR
	DRAWN - KATHLEEN MURPHY	REVISED -		
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.
PLOT DATE = 5/5/2025	DATE - 12/20/2024	REVISED -		

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	56
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

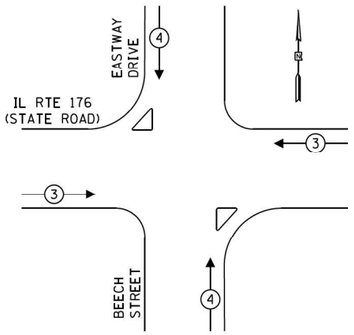
EXISTING CONTROLLER SEQUENCE

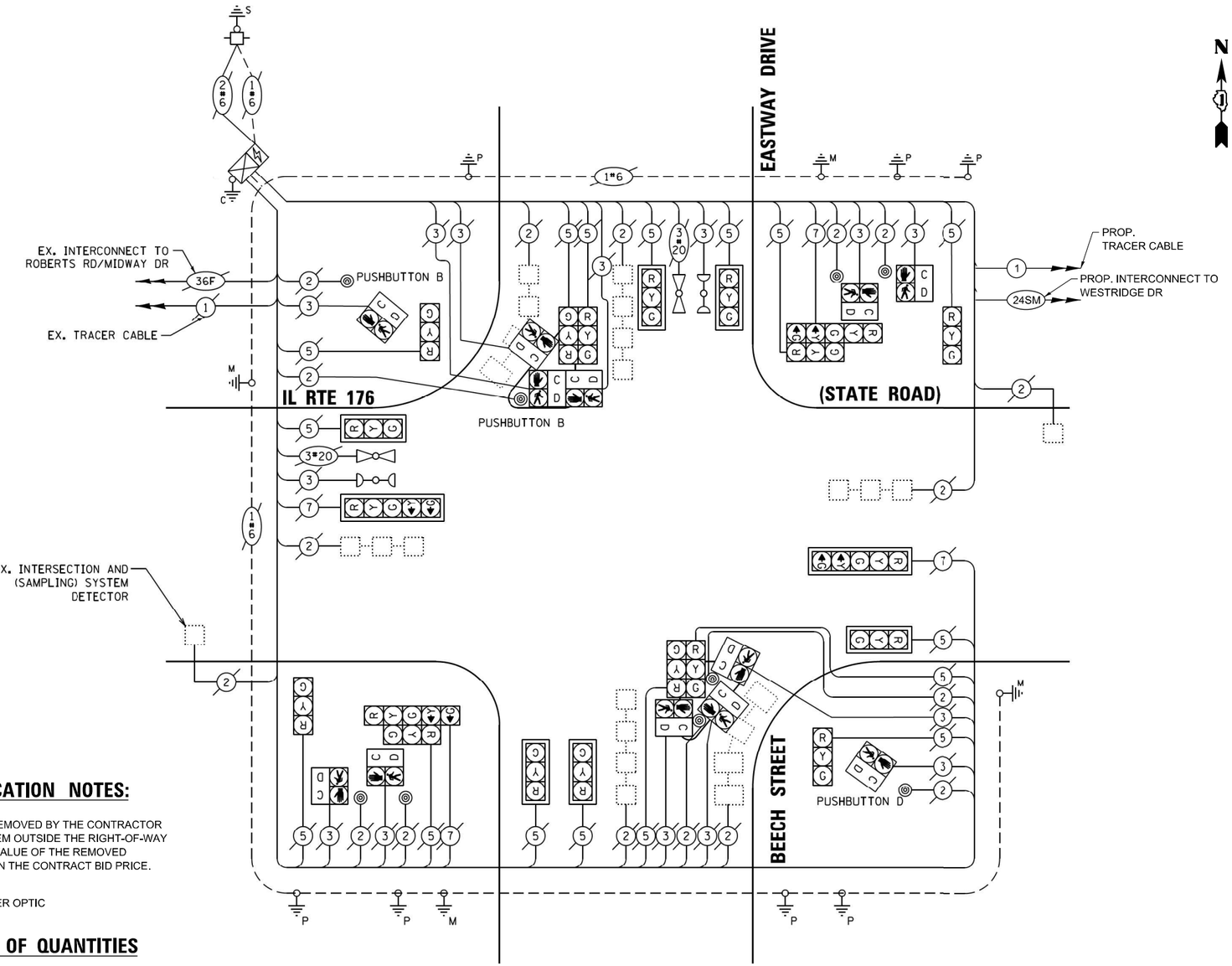


LEGEND:

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

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE





TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	16	11	176
4 - SECTION	-	14	-
5 - SECTION	4	13	52
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	12	15	180
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			618
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			1223

ENERGY COSTS TO:
VILLAGE OF ISLAND LAKE
3720 GREENLEAF AVE
ISLAND LAKE, IL 60042

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

REMOVAL AND RELOCATION NOTES:

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

1 EACH TELEPHONE LINE
1 EACH TRANSCEIVER FIBER OPTIC

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	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

CABLE PLAN
(NOT TO SCALE)

PUSHBUTTON NOTES

1. PUSHBUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6.
2. PUSHBUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8.

TS SHT NO. 49

TS 7139
FORMER EAGLE 4F
LAKE COUNTY TACTICS

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

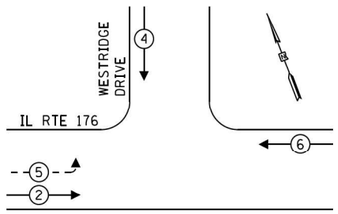
CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 24 – IL RTE 176 AT BEECH ST/EASTWAY DR

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	57
		CONTRACT NO. 62W90		
		ILLINOIS	FED. AID PROJECT	

FILE NAME: M:\2019\3 CMI\18-03-5500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_03_EagleB4F.dgn

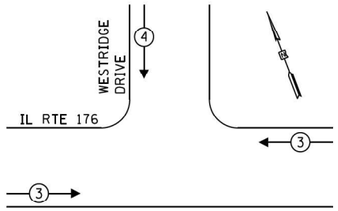
EXISTING CONTROLLER SEQUENCE

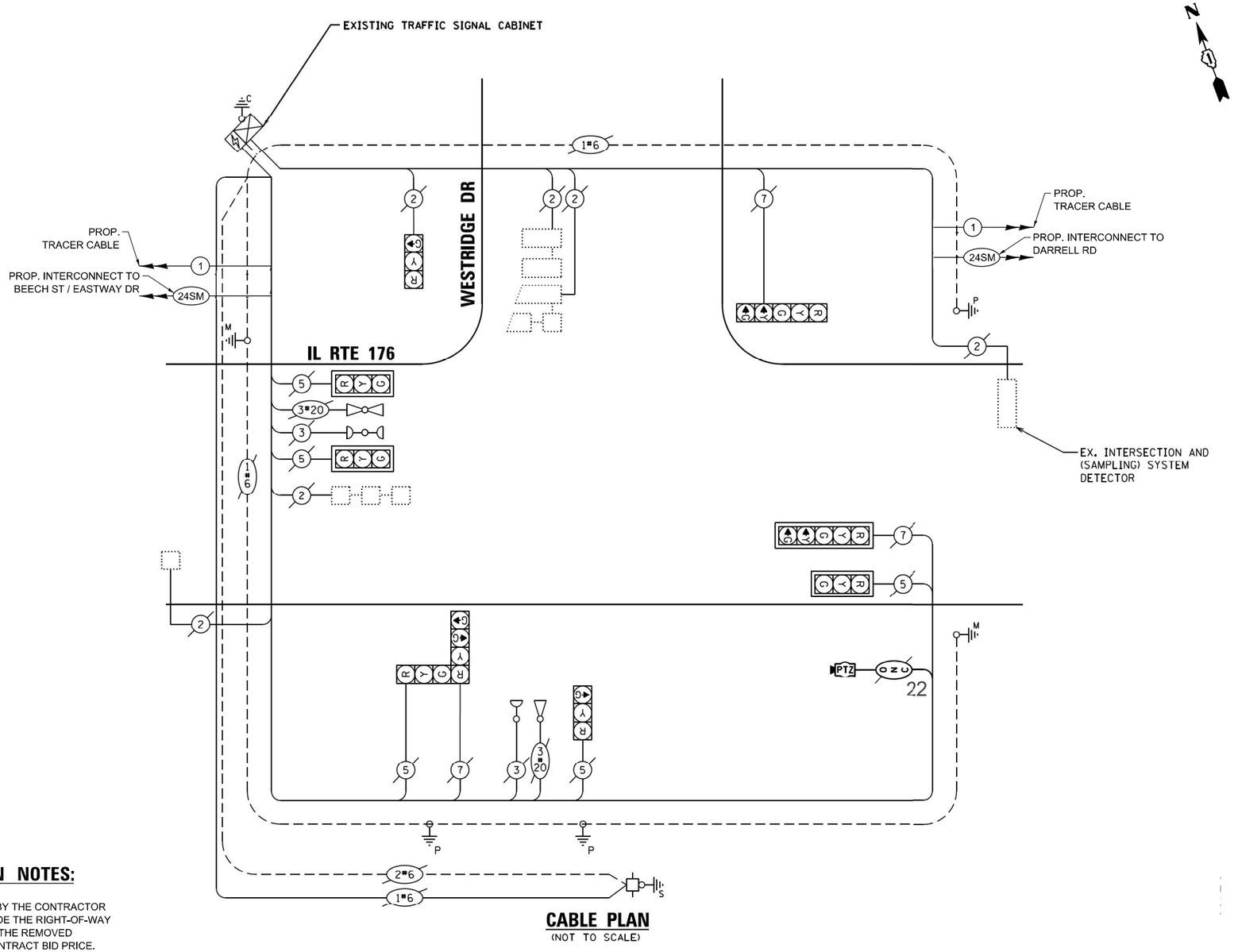


LEGEND:

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

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE





CABLE PLAN
(NOT TO SCALE)

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	6	11	66
4 - SECTION	1	14	14
5 - SECTION	2	13	26
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			316
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	-
PTZ CAMERA	1	75	75
TOTAL SERVICE WIRE SIZING =			996

REMOVAL AND RELOCATION NOTES:

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

1 EACH TRANSCEIVER FIBER OPTIC

ENERGY COSTS TO:
VILLAGE OF ISLAND LAKE
3720 GREENLEAF AVE
ISLAND LAKE, IL 60042

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
TERMINATE FIBER IN CABINET	EACH	12
SPLICE FIBER IN CABINET	EACH	6
LAYER III FIBER OPTIC TRANSCEIVER MODULE, SFP TYPE, LONG DISTANCE	EACH	2
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1

TS SHT NO. 50

FILE NAME: M:\...\2019\3 CMI\18-03-5500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203 - 62W90\CAD\62W90_Sheet_03_Equip4F.dgn

TYLin

USER NAME = erica.salutz		DESIGNED - ERICA SALUTZ	REVISED -	05/08/2025
		DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.		CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 5/5/2025		DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

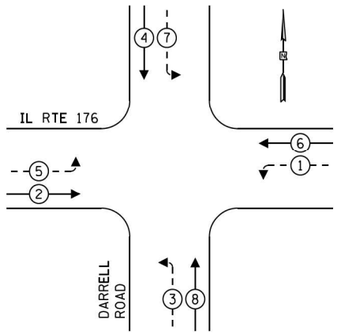
CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 25 – IL RTE 176 AT WESTRIDGE DR

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	58
		CONTRACT NO. 62W90		
		ILLINOIS	FED. AID PROJECT	

TS 7137
FORMER EAGLE 4F
LAKE COUNTY TACTICS

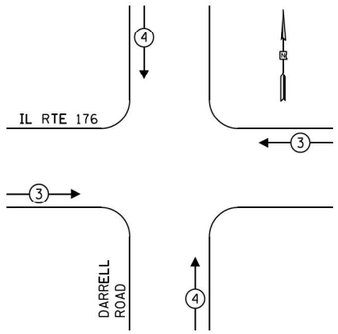
EXISTING CONTROLLER SEQUENCE

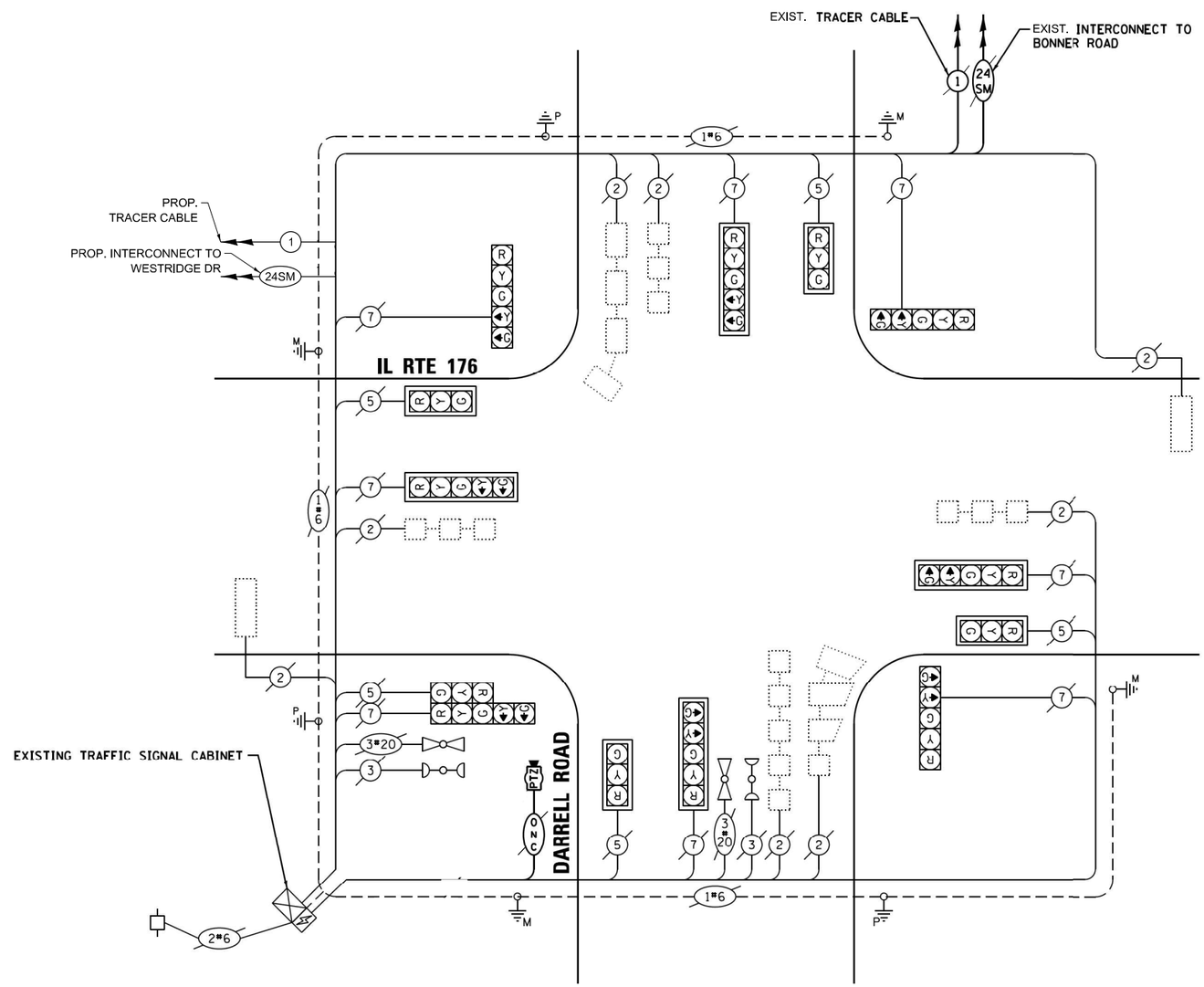


LEGEND:

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

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE





CABLE PLAN
(NOT TO SCALE)

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	5	11	55
4 - SECTION	-	14	-
5 - SECTION	8	13	104
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
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	-
PTZ CAMERA	1	75	75
TOTAL SERVICE WIRE SIZING =			1049

ENERGY COSTS TO:
VILLAGE OF ISLAND LAKE
3720 GREENLEAF AVE
ISLAND LAKE, IL 60042

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

REMOVAL AND RELOCATION NOTES:

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

1 EACH TRANSCEIVER FIBER OPTIC

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
TERMINATE FIBER IN CABINET	EACH	6
SPLICE FIBER IN CABINET	EACH	6
LAYER III FIBER OPTIC TRANSCEIVER MODULE, SFP TYPE, LONG DISTANCE	EACH	1
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1

TS SHT NO. 51

TS 7135
FORMER EAGLE 4F
LAKE COUNTY TACTICS

FILE NAME: NH_20193 CMN18-03-5590 IDOT_PTB_199 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eagle4F.dgn

TYLin

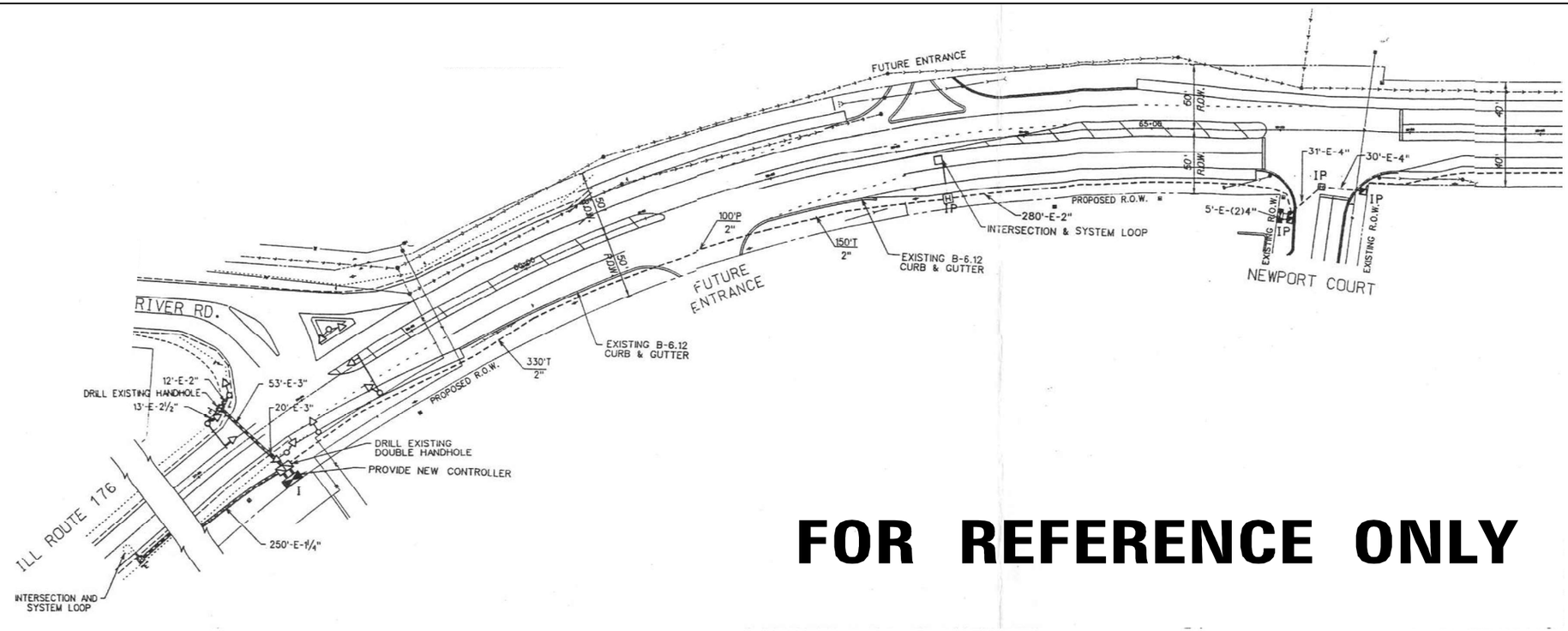
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	05/08/2025
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 5/5/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

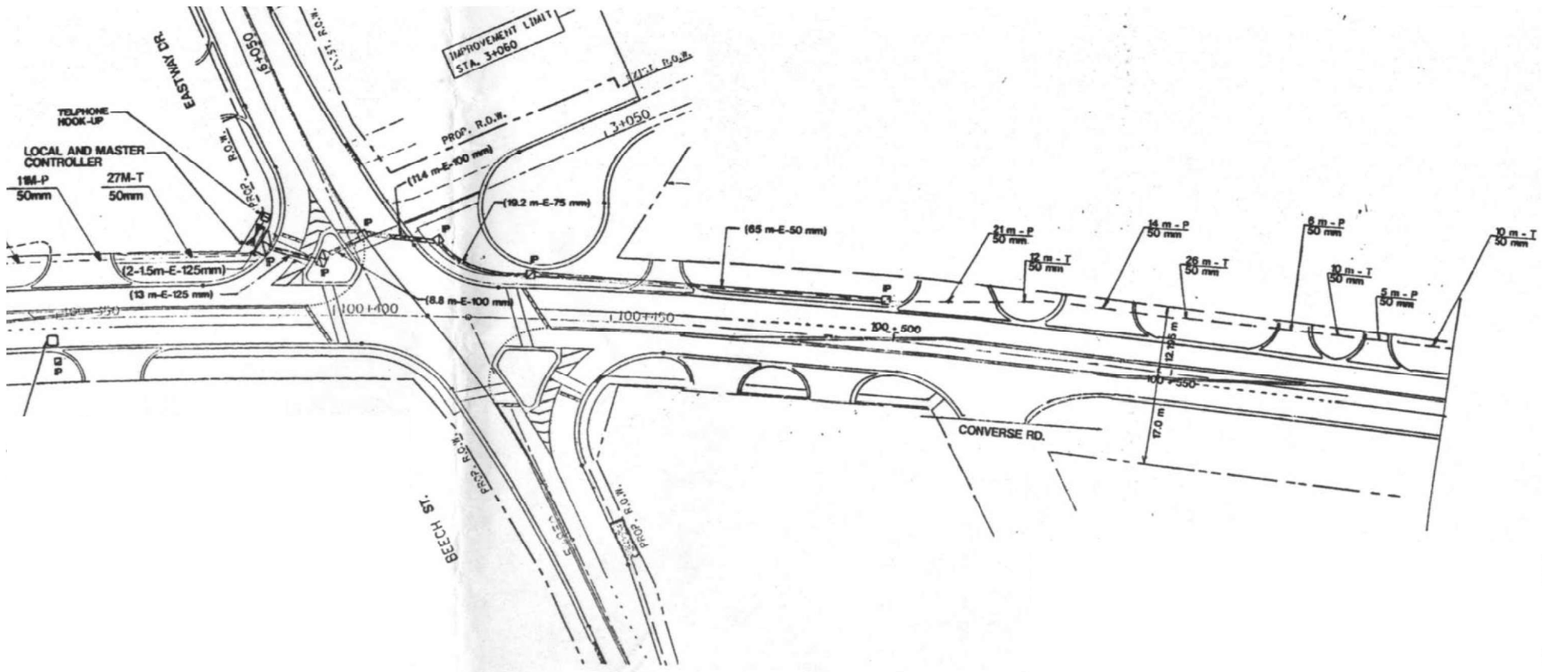
CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 26 – IL RTE 176 AT DARRELL RD

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	59
		CONTRACT NO. 62W90		
		ILLINOIS	FED. AID PROJECT	



FOR REFERENCE ONLY



FORMER EAGLE 4F
LAKE COUNTY TACTICS

TS SHT NO. 52

FILE NAME: Mst-20193 CMH.8403-5500 IDOT_PTB 190 - Various Traffic Signal Design\Graphics\WO 203 62W90\CAD\62W90_Sheet 05 Eagle4F.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

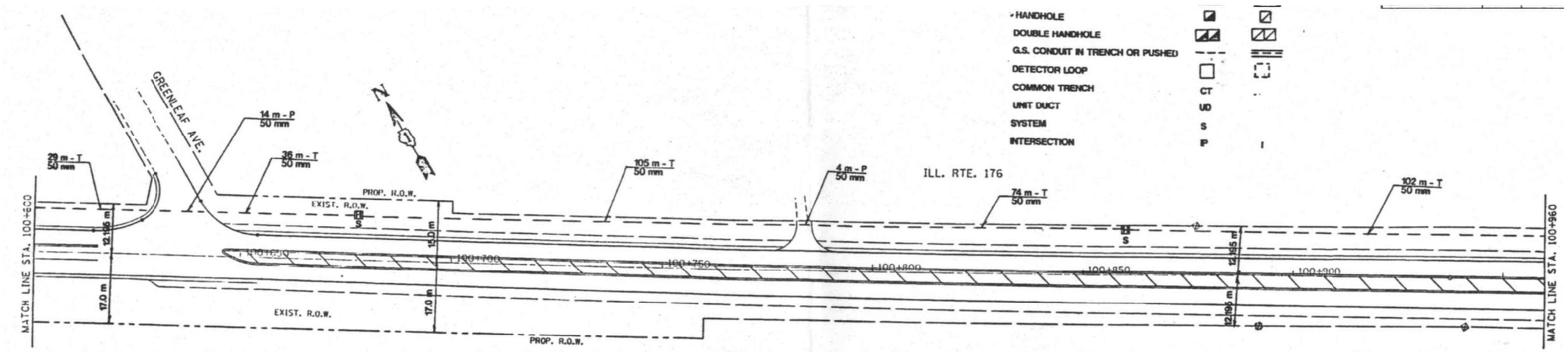
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

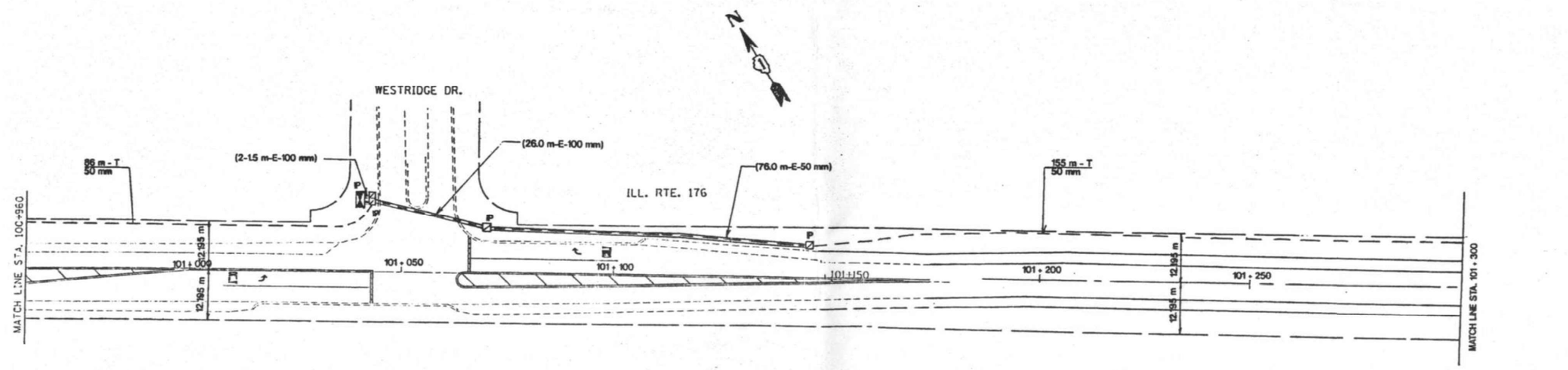
INTERCONNECT PLAN
IL RTE 176 – RIVER RD TO DARRELL RD

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	60
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

FOR REFERENCE ONLY





FORMER EAGLE 4F
LAKE COUNTY TACTICS

TS SHT NO. 53

FILE NAME: Mst-20193 CMH.8-03-5500 IDOT_PTB 190 - Various Traffic Signal Design\Graphics\WO 203-62W90\CAD\62W90_Sheet 05 EagleF.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

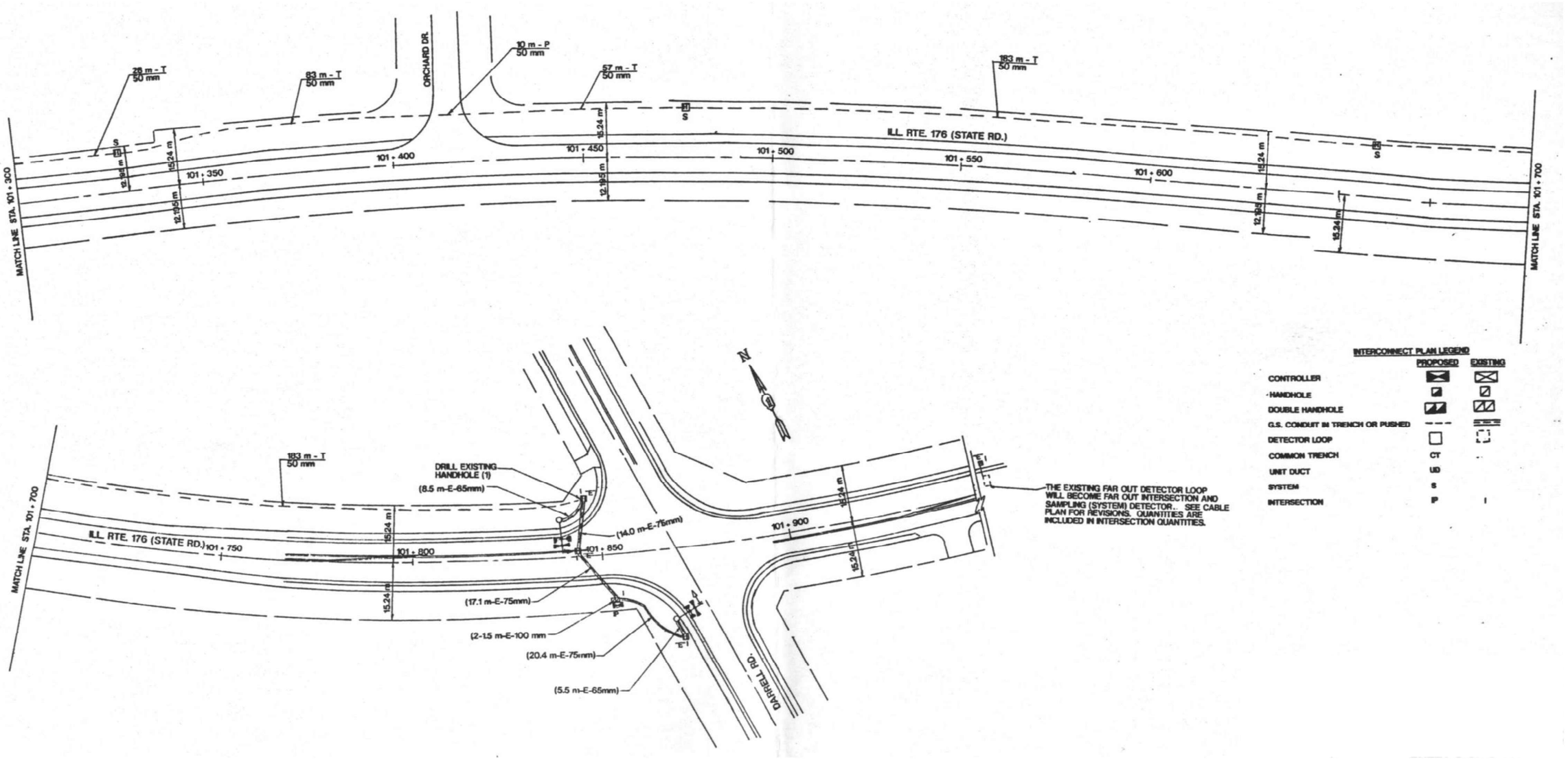
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN
IL RTE 176 – RIVER RD TO DARRELL RD

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	61
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

FOR REFERENCE ONLY



FORMER EAGLE 4F
LAKE COUNTY TACTICS

TS SHT NO. 54

FILE NAME: M:_2019\3 CHI\18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_EastMF.dgn

TYLin

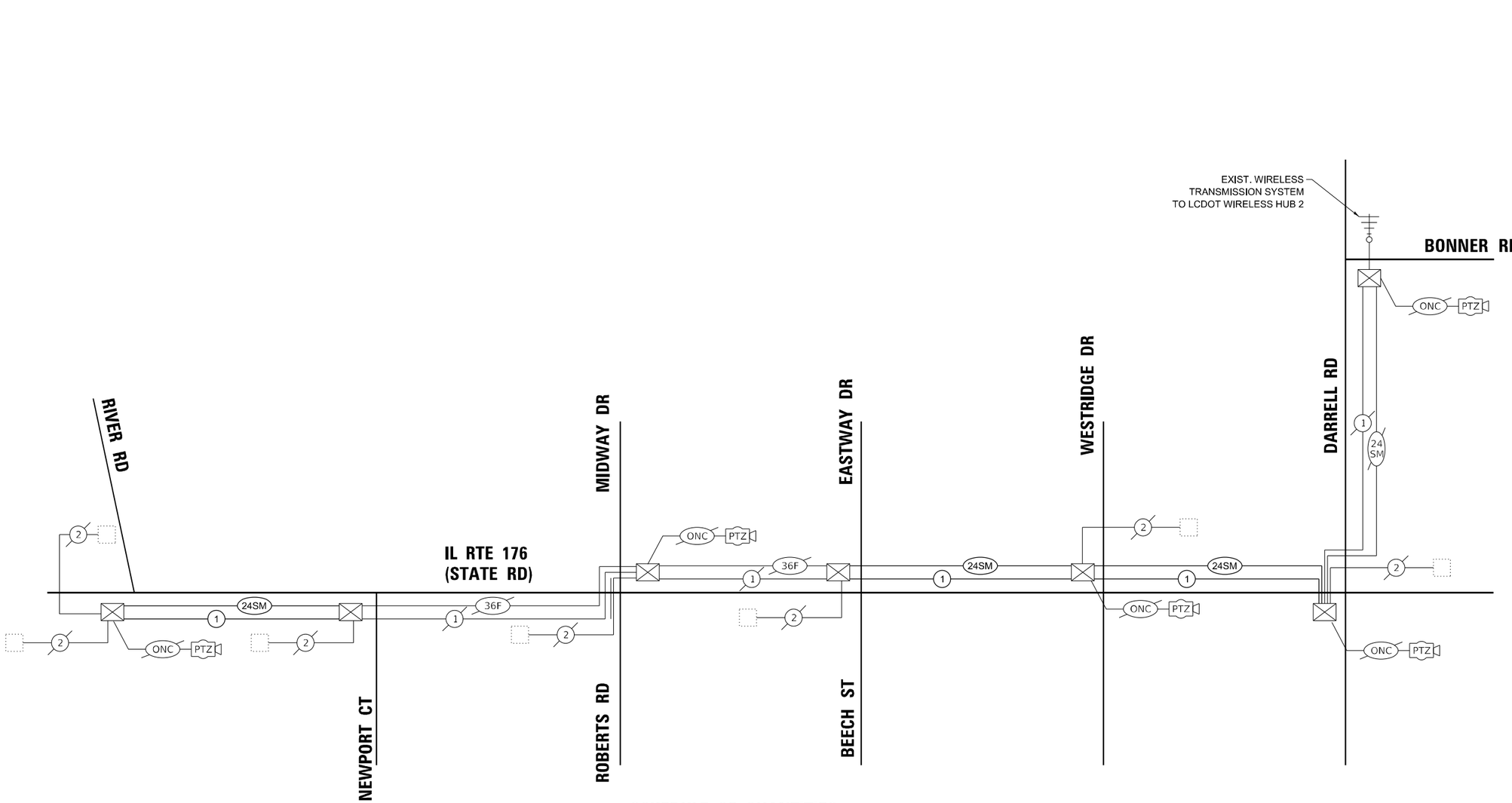
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0001 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN
IL RTE 176 – RIVER RD TO DARRELL RD

SCALE: | SHEET OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	62
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			



SCHEDULE OF QUANTITIES

	ITEM DESCRIPTION	UNITS	TOTAL QTY
✱ ✱	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	5934
	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	11475
✱	ROD AND CLEAN EXISTING CONDUIT	FOOT	4691
✱ ✱	LAYER III FIBER OPTIC TRANSCEIVER MODULE, SFP TYPE, LONG DISTANCE	EACH	1
	FIBER OPTIC CABLE 24 FIBERS, SINGLE MODE	FOOT	6012
	OPTIMIZE TRAFFIC SIGNAL SYSTEM	EACH	1

✱ NOMINAL QUANTITY TO BE USED AS NEEDED AND AS APPROVED BY THE ENGINEER
✱ ✱ WORK TO BE COMPLETED AT DARRELL RD AND BONNER RD

NOTES:

1. OPTIMIZATION TO INCLUDE INTERSECTIONS FROM FORMER 4F SYSTEM.
   IL RTE 176 AT RIVER RD
   IL RTE 176 AT NEWPORT CT
   IL RTE 176 AT ROBERTS RD / MIDWAY DR
   IL RTE 176 AT BEECH ST / EASTWAY DR
   IL RTE 176 AT WESTRIDGE DR
   IL RTE 176 AT DARRELL RD
   DARRELL RD AT BONNER RD

FORMER EAGLE 4F
LAKE COUNTY TACTICS

TS SHT NO. 55

FILE NAME: Mo_20193 CMI18-03-5560 IDOT PTB 193 - Various Traffic Signal Design\Graphics\WO 203 #2W90\CAD\62W90_Sheet_03_Eag4F.dgn

TYLin

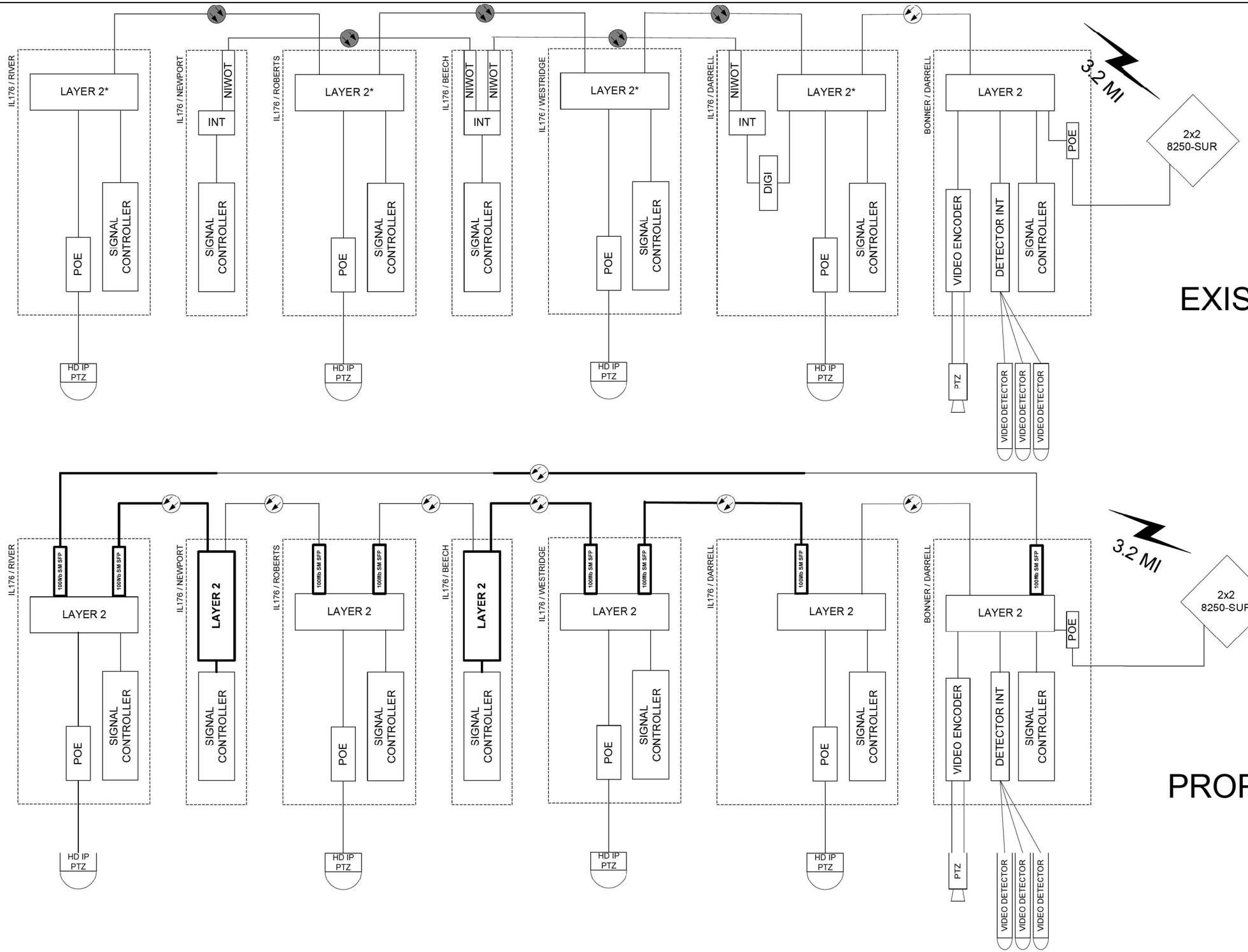
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED - 05/08/2025	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 5/5/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT SCHEMATIC
IL RTE 176 – RIVER RD TO DARRELL RD

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	63
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		



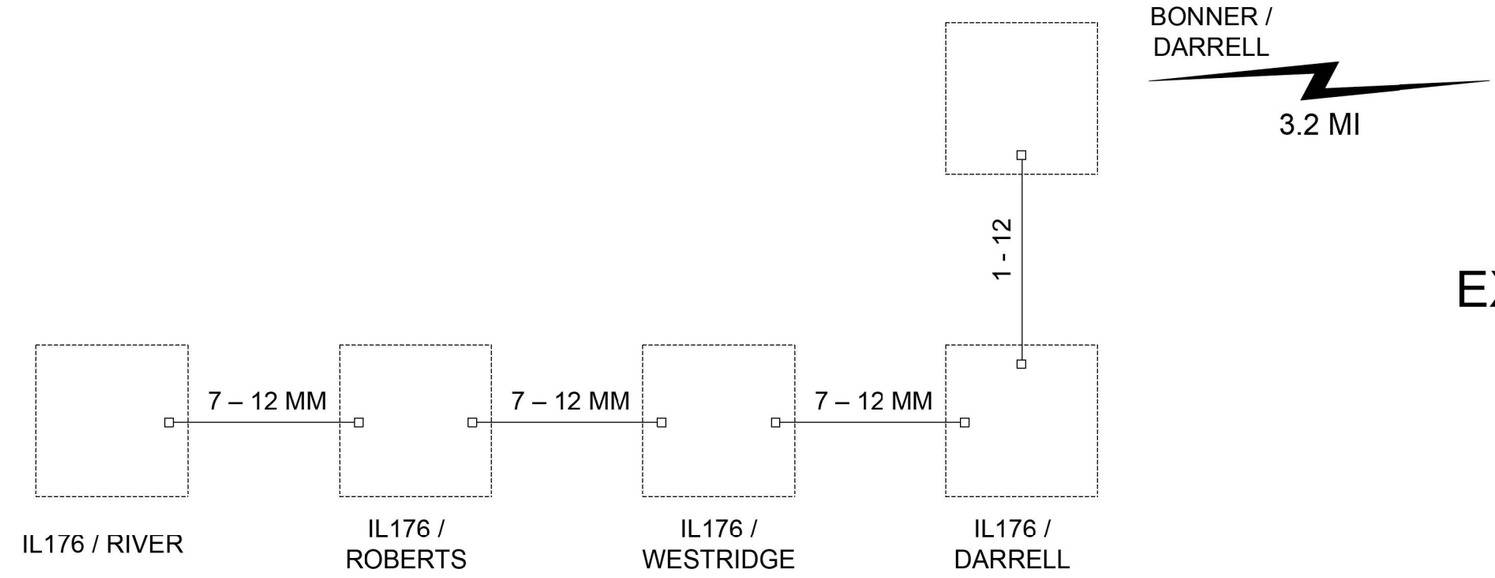
FORMER EAGLE 4F
LAKE COUNTY TACTICS

TS SHT NO. 56

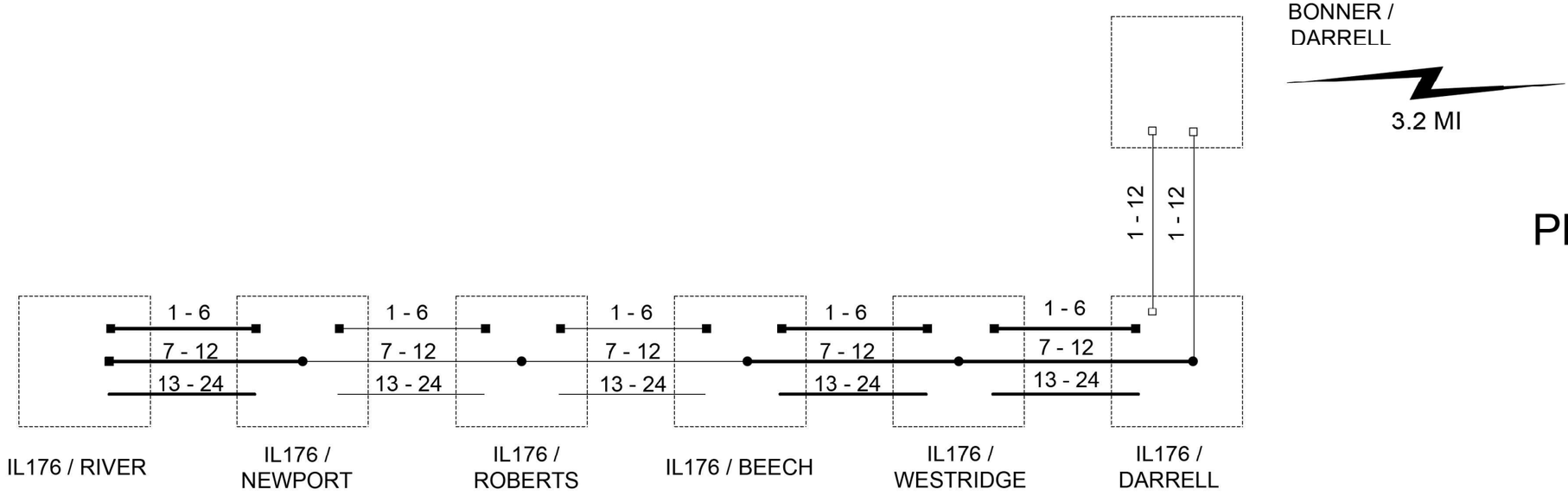
FILE NAME: M:\20193 Cntl\18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203-62W90\CAD\62W90_Sheet_05_Eagle4F.dgn

PARSONS					
	USER NAME = erica.salatz	DESIGNED - RL / DG	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**CABINET DETAIL**
		DRAWN - RL / DG	REVISED -		**IL RTE 176 – RIVER RD TO DARRELL RD**
	PLOT SCALE = 40.0000 ' / in.	CHECKED - RL / DG	REVISED -		
	PLOT DATE = 3/30/2025	DATE - 2025.02.20	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	64
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		



EXISTING



PROPOSED

FORMER EAGLE 4F
LAKE COUNTY TACTICS

TS SHT NO. 57

FILE NAME: Mst_20193_CHI.18-03-5500_IDOT_PTB_190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_FiberMap_4F.dgn

PARSONS

USER NAME = erica.salutz	DESIGNED - RL / DG	REVISED -	
	DRAWN - RL / DG	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - RL / DG	REVISED -	
PLOT DATE = 3/30/2025	DATE - 2025.02.20	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

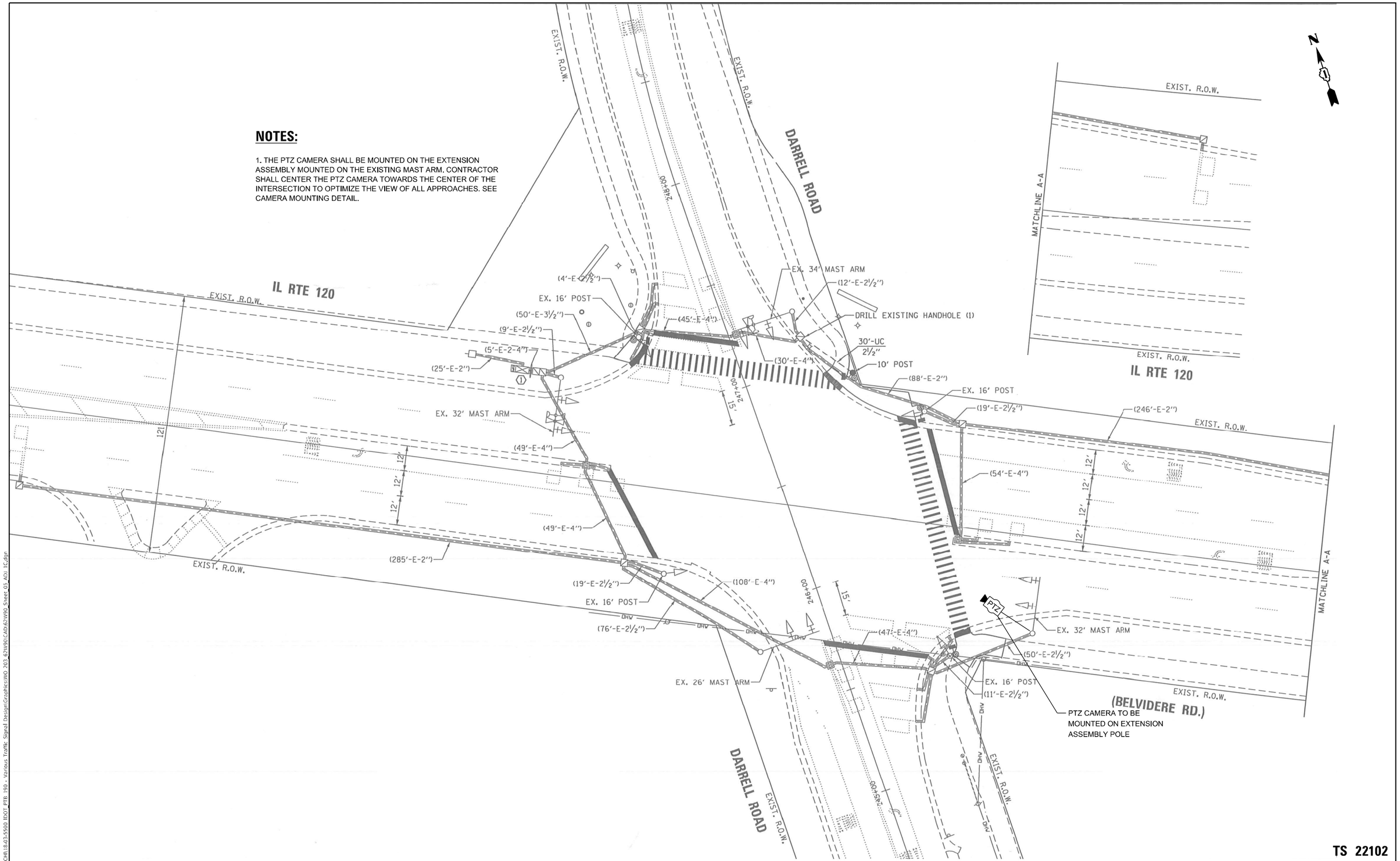
FIBER SPLICE DIAGRAM
IL RTE 176 – RIVER RD TO DARRELL RD

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	65
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

NOTES:

1. THE PTZ CAMERA SHALL BE MOUNTED ON THE EXTENSION ASSEMBLY MOUNTED ON THE EXISTING MAST ARM. CONTRACTOR SHALL CENTER THE PTZ CAMERA TOWARDS THE CENTER OF THE INTERSECTION TO OPTIMIZE THE VIEW OF ALL APPROACHES. SEE CAMERA MOUNTING DETAIL.



TS SHT NO. 58

TS 22102

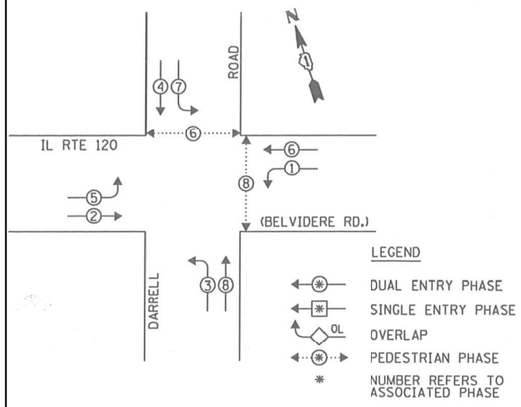
LAKE COUNTY TACTICS

TYLin	USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED - 05/08/2025	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SIGNAL PLAN LOCATION 28 – IL RTE 120 (BELVIDERE RD) AT DARRELL RD
		DRAWN - KATHLEEN MURPHY	REVISED -		
	PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.
	PLOT DATE = 5/6/2025	DATE - 12/20/2024	REVISED -		

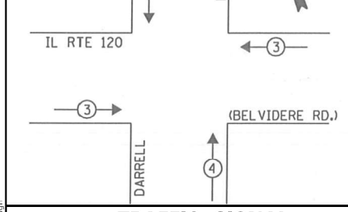
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	66
		CONTRACT NO. 62W90		
		ILLINOIS	FED. AID PROJECT	

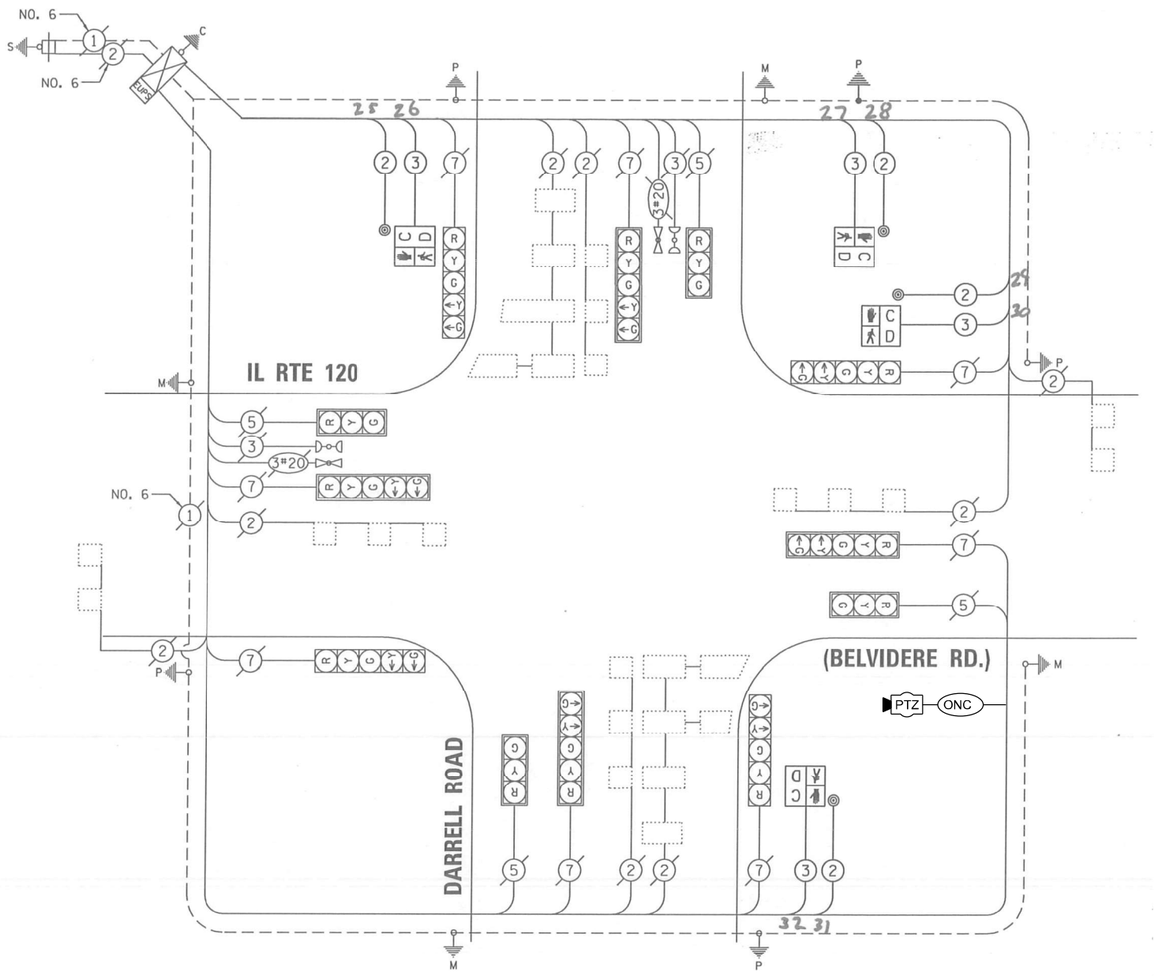
FILE NAME: M:\2019\3 CHI\18-03-5500 IDOT_PTB 199 - Various Traffic Signal Design\Graphics\WO 203 - 62W90\CAD\62W90_Sheet 05_ADJ 1C.dgn

EXISTING CONTROLLER SEQUENCE



EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE





TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	4	11	44
4 - SECTION	-	14	-
5 - SECTION	8	13	104
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	4	15	60
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	1	15	15
TOTAL UPS SIZING =			433
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	-
PTZ CAMERA	1	75	75
TOTAL SERVICE WIRE SIZING =			1113

ENERGY COSTS TO:
VILLAGE OF LAKEMOOR
28874 W. IL RTE 120, SUITE C & D
LAKEMOOR, IL 60051

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER
1 EACH UNINTERRUPTABLE POWER SUPPLY

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
CELLULAR MODEM	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	402
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
POWER OVER ETHERNET EXTENDER	EACH	1
CAMERA MOUNTING ASSEMBLY	EACH	1

TS SHT NO. 59

TS 22102
LAKE COUNTY TACTICS

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

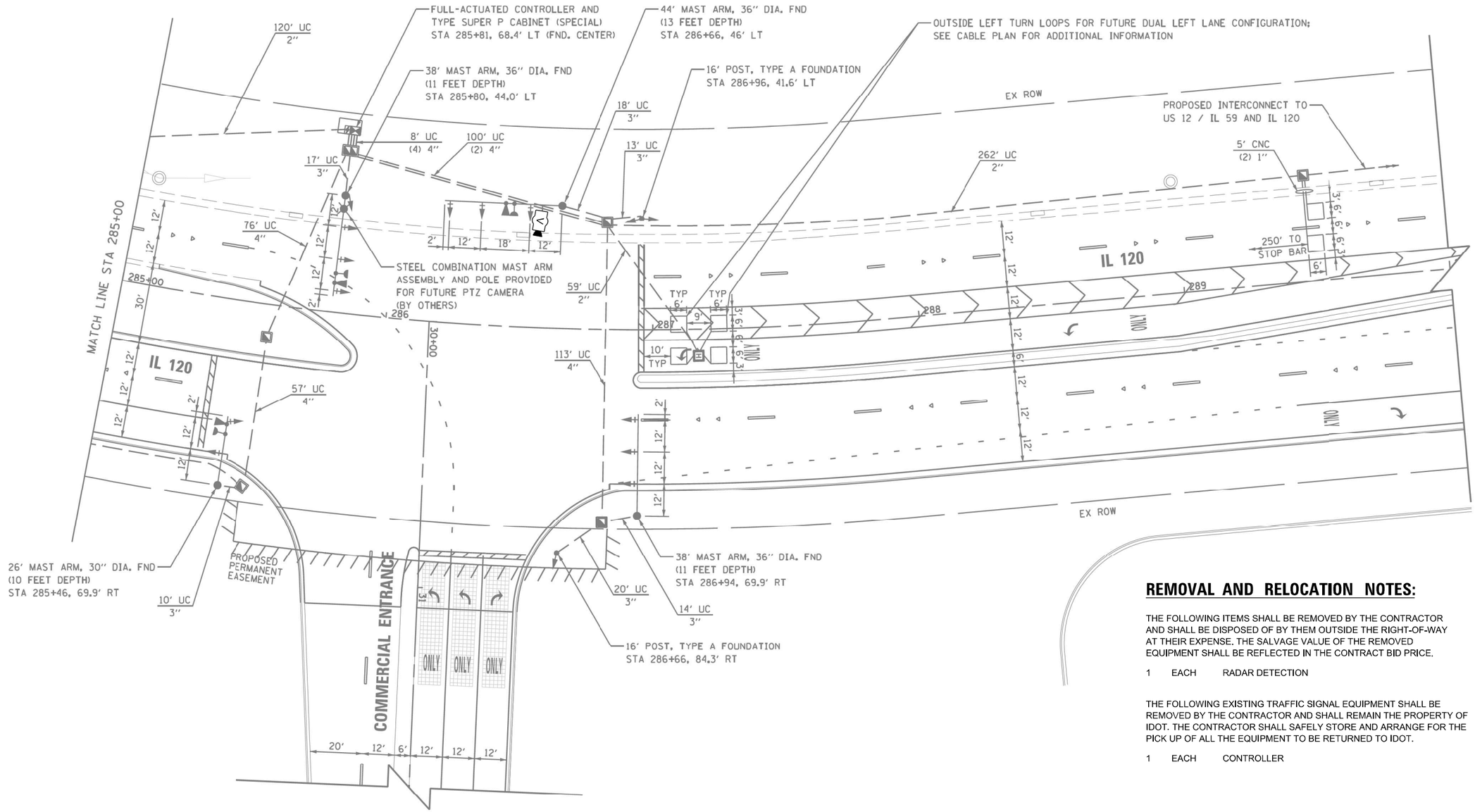
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 28 – IL RTE 120 (BELVIDERE RD) AT DARRELL RD

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	67
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

FILE NAME: M:\2019\3 CHI\18-03-5500 IDOT_FTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_ADJ TC.dgn



REMOVAL AND RELOCATION NOTES:

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

1 EACH RADAR DETECTION

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF IDOT. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR THE PICK UP OF ALL THE EQUIPMENT TO BE RETURNED TO IDOT.

1 EACH CONTROLLER

TS 22104
FORMER EAGLE 1C
LAKE COUNTY TACTICS

TS SHT NO. 60

FILE NAME: M4_20193 CH18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eagle1C.dgn

TYLin

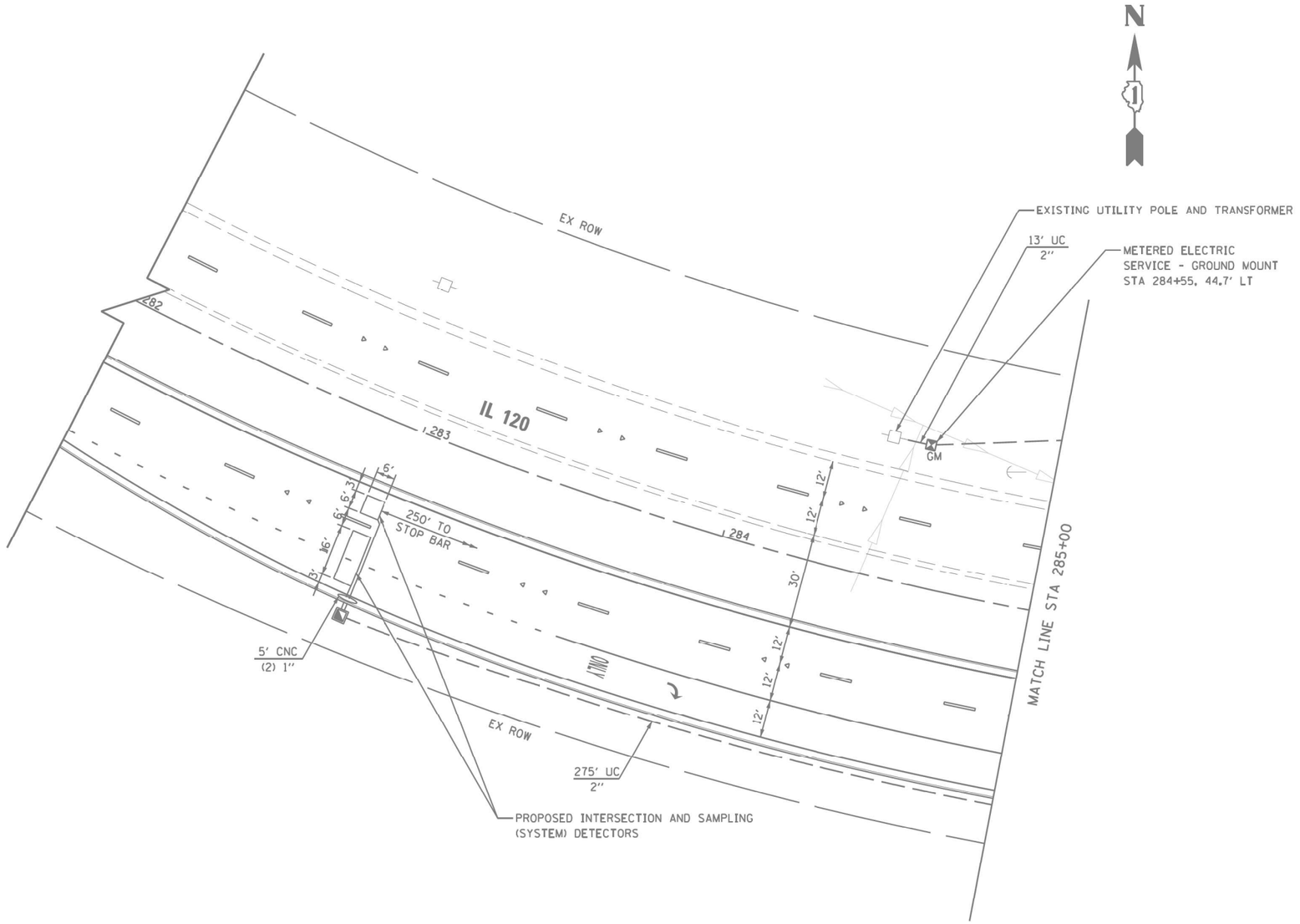
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0001 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL PLANS AND REMOVAL NOTES
LOCATION 29 – IL RTE 120 AT COMMERCIAL ENTRANCE

SCALE: | SHEET OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	68
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			



TS SHT NO. 61

FILE NAME: M61_20193 CHI.18403-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90 CAD\62W90_Sheet 03 Eagle1C.dgn

TS 22104
FORMER EAGLE 1C
LAKE COUNTY TACTICS

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0001 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

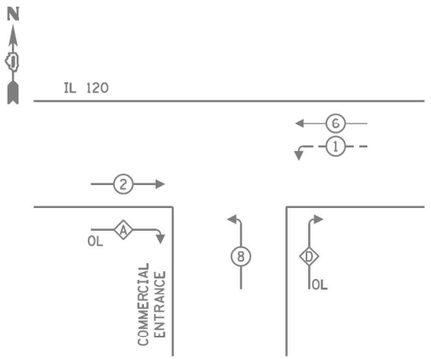
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL PLANS AND REMOVAL NOTES
LOCATION 29 – IL RTE 120 AT COMMERCIAL ENTRANCE

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	69
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

EXISTING CONTROLLER SEQUENCE



LEGEND:

PROTECTED PHASE

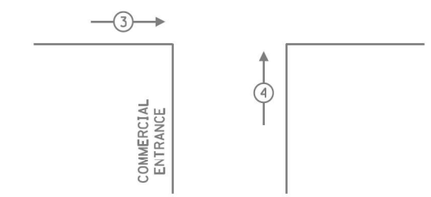
PROTECTED/PERMITTED PHASE

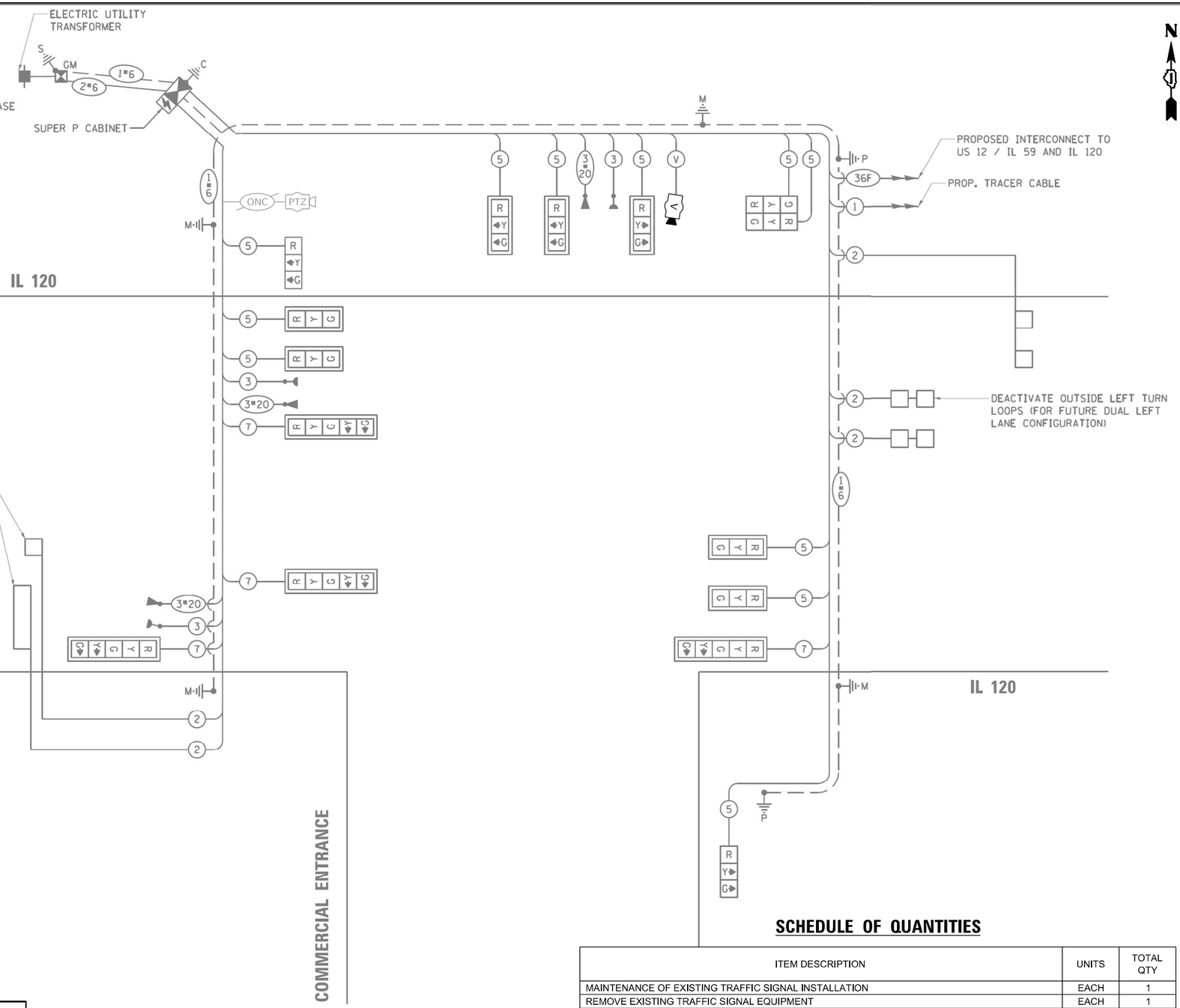
OL OVERLAP

RIGHT TURN OVERLAP PHASE DESIGNATION:

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

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE





TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	11	11	121
4 - SECTION	-	14	-
5 - SECTION	4	13	52
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	1	20	20
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			403
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	-
PTZ CAMERA	1	75	75
TOTAL SERVICE WIRE SIZING =			1083

ENERGY COSTS TO:
ILLINOIS DEPT OF TRANSPORTATION
201 CENTER CT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

CABLE PLAN
(NOT TO SCALE)

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
VIDEO VEHICLE DETECTION SYSTEM, SINGLE APPROACH	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1

TS 22104
FORMER EAGLE 1C
LAKE COUNTY TACTICS

TS SHT NO. 62

FILE NAME: MI_20193 Cntl_18-03-5500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203-62W90\CAD\62W90_Sheet_05_Eagle 1C.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0001 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -

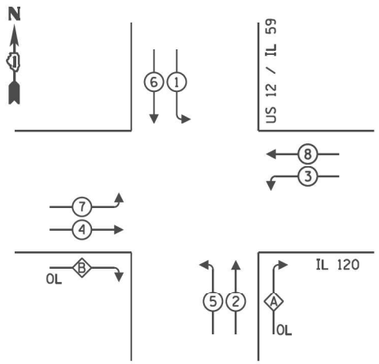
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 29 – IL RTE 120 AT COMMERCIAL ENTRANCE

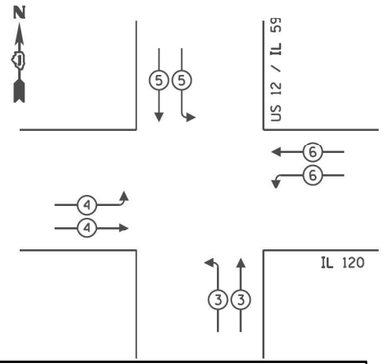
SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	70
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

EXISTING CONTROLLER SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	17	11	187
4 - SECTION	-	14	-
5 - SECTION	4	13	52
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			449
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	-
PTZ CAMERA	1	75	75
TOTAL SERVICE WIRE SIZING =			1129

ENERGY COSTS TO:
ILLINOIS DEPT OF TRANSPORTATION
201 CENTER CT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

LEGEND:

PROTECTED PHASE
PROTECTED/PERMITTED PHASE
OL OVERLAP

RIGHT TURN OVERLAP PHASE DESIGNATION:

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

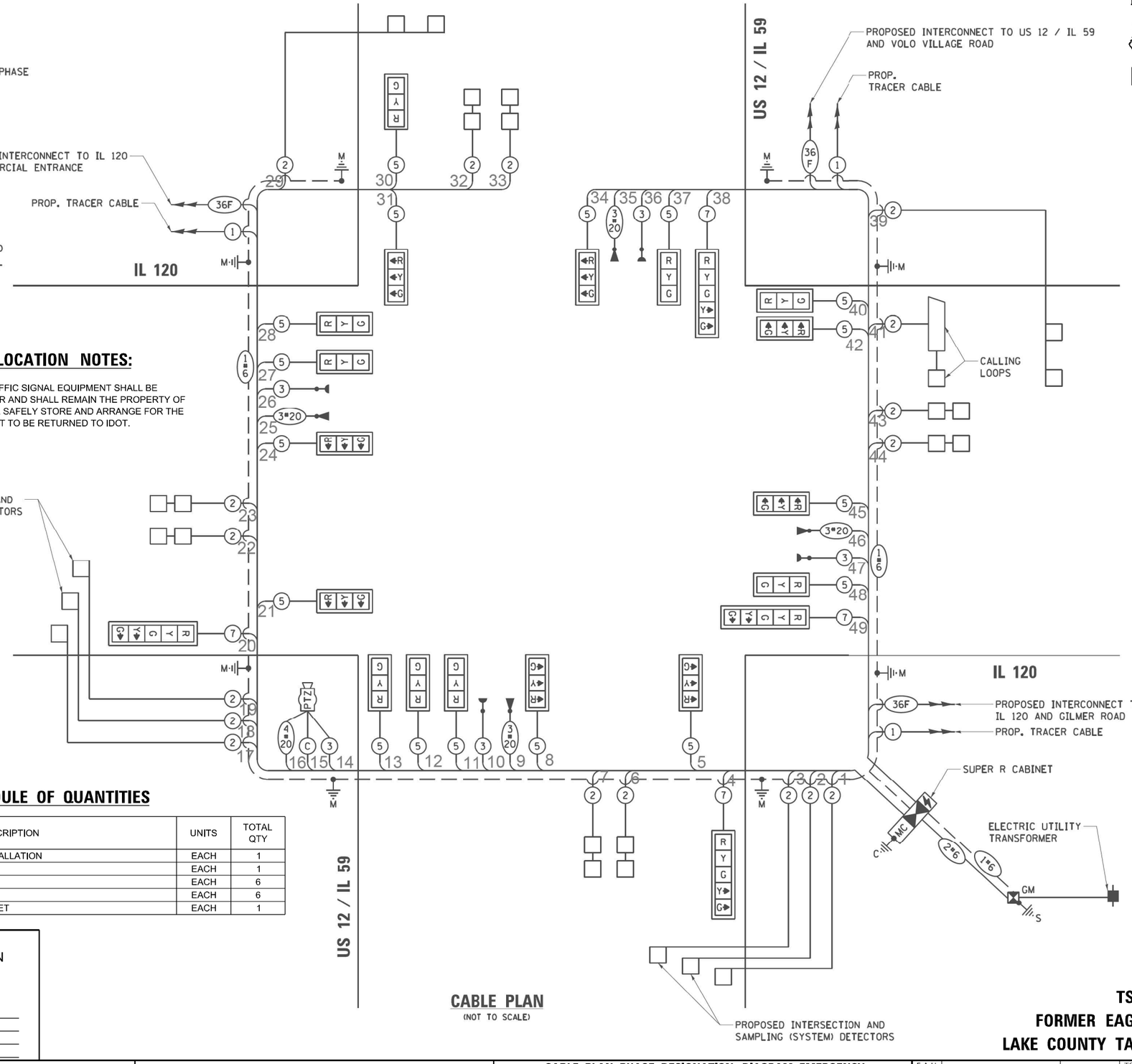
REMOVAL AND RELOCATION NOTES:

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF IDOT. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR THE PICK UP OF ALL THE EQUIPMENT TO BE RETURNED TO IDOT.

1 EACH CONTROLLER

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
TERMINATE FIBER IN CABINET	EACH	6
SPLICE FIBER IN CABINET	EACH	6
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1



CABLE PLAN
(NOT TO SCALE)

TS 6510
FORMER EAGLE 1C
LAKE COUNTY TACTICS

TS SHT NO. 63

FILE NAME: MA-20193 CHI18-02-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eagle1C.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0001 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -

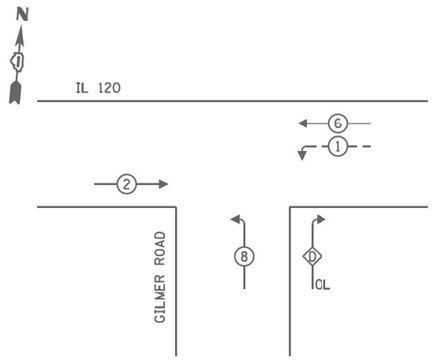
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 30 – IL RTE 120 AT US RTE 12 /IL RTE 59

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	71
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

EXISTING CONTROLLER SEQUENCE



LEGEND:

PROTECTED PHASE

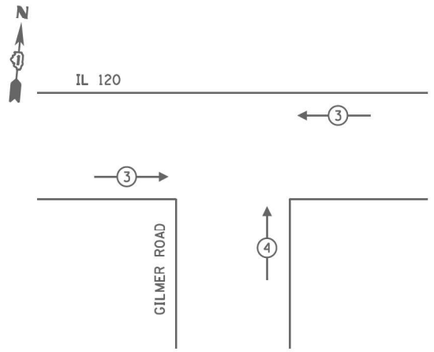
PROTECTED/PERMITTED PHASE

OL OVERLAP

RIGHT TURN OVERLAP PHASE DESIGNATION:

OVERLAP LETTER		PERMISSIVE PHASE		PROTECTED PHASE
D	=	8	+	1

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



SCHEDULE OF QUANTITIES

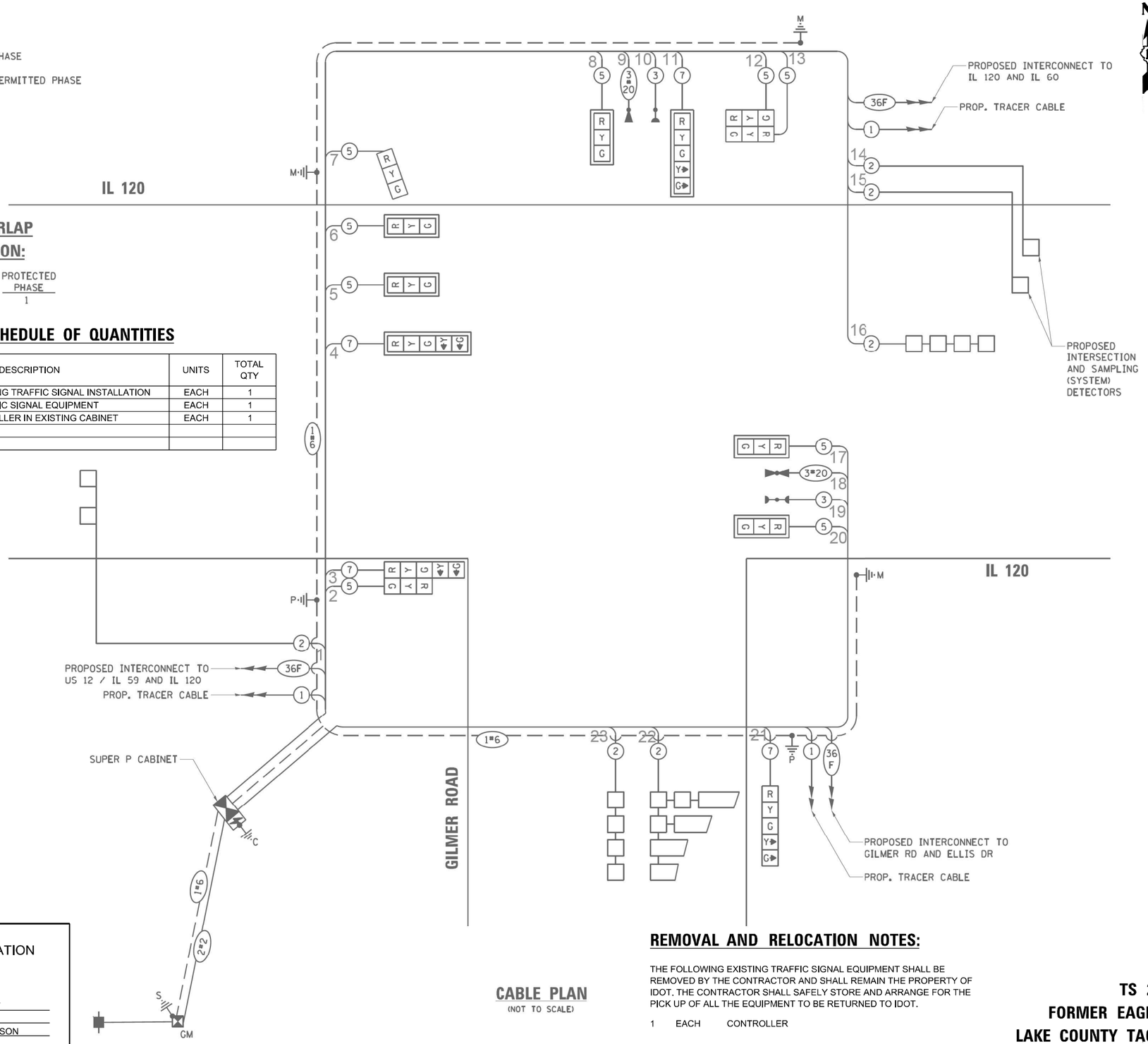
ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	9	11	99
4 - SECTION	-	14	-
5 - SECTION	4	13	52
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			361
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			966

ENERGY COSTS TO:
ILLINOIS DEPT OF TRANSPORTATION
201 CENTER CT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---



CABLE PLAN
(NOT TO SCALE)

REMOVAL AND RELOCATION NOTES:

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF IDOT. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR THE PICK UP OF ALL THE EQUIPMENT TO BE RETURNED TO IDOT.

1 EACH CONTROLLER

TS 21940
FORMER EAGLE 1C
LAKE COUNTY TACTICS

TS SHT NO. 64

FILE NAME: M:\...\2093 CHIL18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_03_EagleIC.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0001 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 31 – IL RTE 120 AT GILMER RD

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	72
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER

SCHEDULE OF QUANTITIES

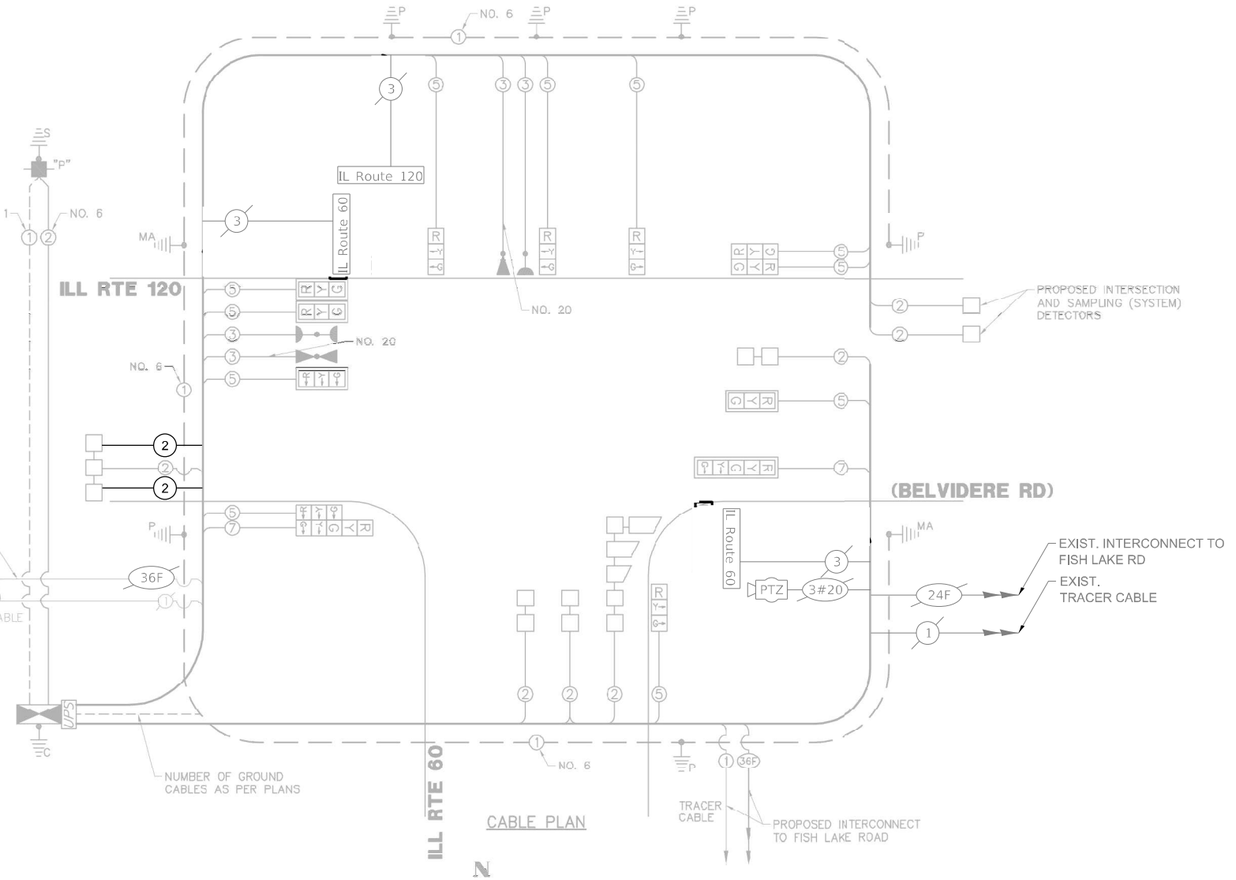
ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	550
INDUCTIVE LOOP DETECTOR	EACH	2
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
TERMINATE FIBER IN CABINET	EACH	6
SPLICE FIBER IN CABINET	EACH	12
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

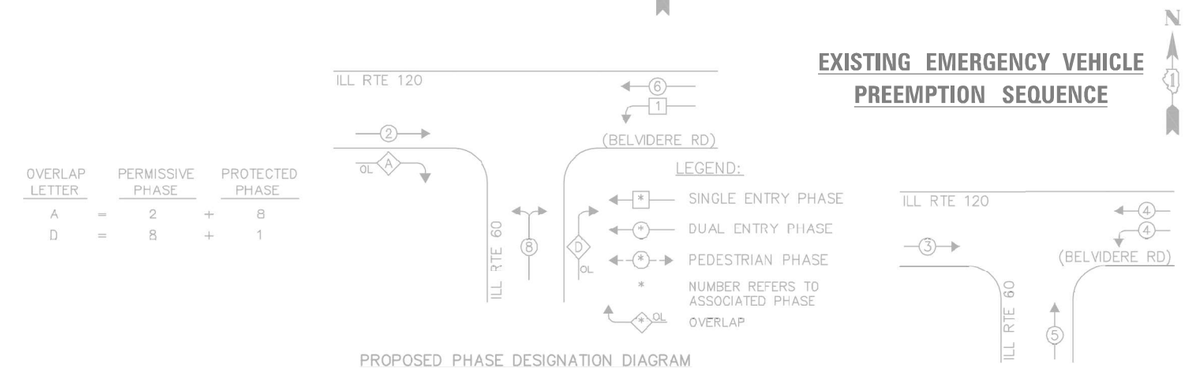
TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	11	11	121
4 - SECTION	-	14	-
5 - SECTION	2	13	26
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			357
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	3	120	360
LUMINAIRE	-	240	-
PTZ CAMERA	1	75	75
TOTAL SERVICE WIRE SIZING =			1397

ENERGY COSTS TO:
ILLINOIS DEPT OF TRANSPORTATION
201 CENTER CT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---



CABLE PLAN



TS 22010
FORMER EAGLE 1C
LAKE COUNTY TACTICS

TS SHT NO. 65

FILE NAME: Mst_20193_CMR_8-03-5500_IDOT_PFR_190 - Various Traffic Signal Design\Graphics\WO 203_62W90_CAD\62W90_Sheet_05_EqMetric.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

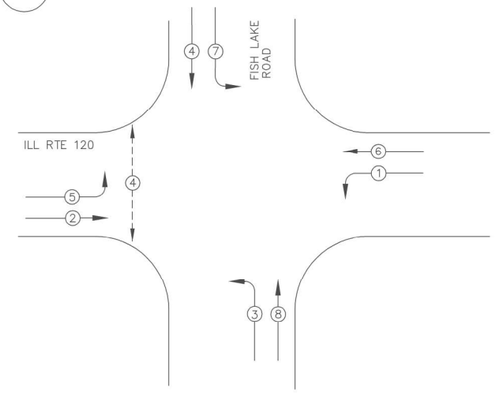
CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 32 – IL RTE 120 AT IL RTE 60

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	73
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

NORTH

CONTROLLER SEQUENCE

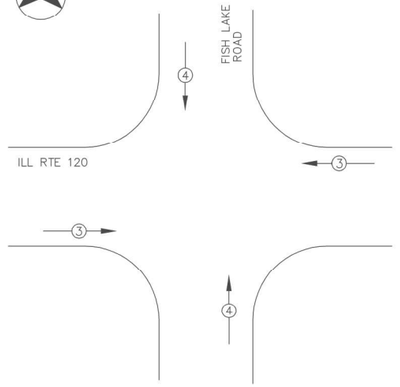


PHASE DESIGNATION DIAGRAM

LEGEND

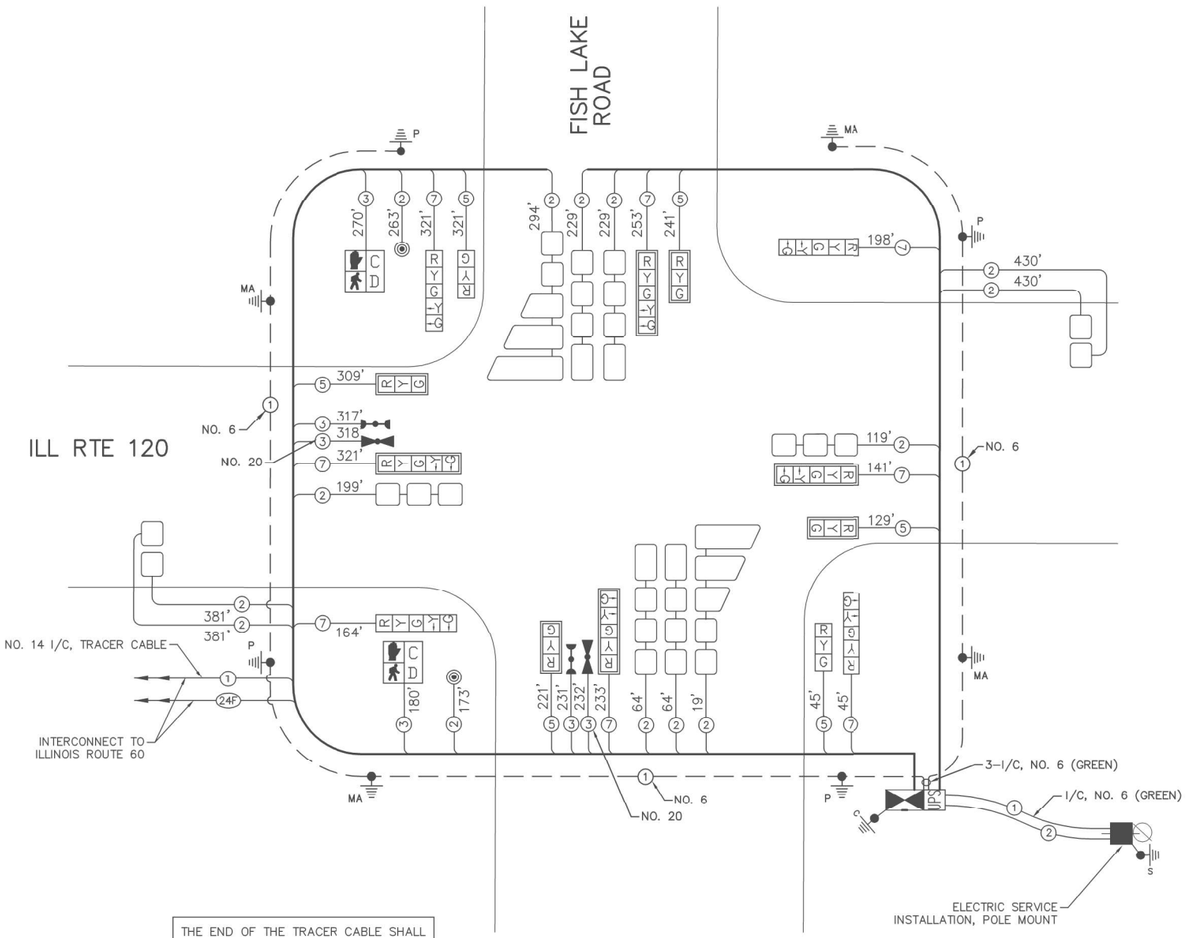
- DUAL ENTRY PHASE
- SINGLE ENTRY PHASE
- OL — OVERLAP
- PEDESTRIAN PHASE
- * — NUMBER REFERS TO ASSOCIATED PHASE

NORTH



EMERGENCY VEHICLE PREEMPTION SEQUENCE

N



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

CABLE PLAN

N.T.S.

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	6	11	66
4 - SECTION	-	14	-
5 - SECTION	8	13	104
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	2	15	30
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			454
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			1059

ENERGY COSTS TO:
VILLAGE OF VOLO
500 S. FISH LAKE RD
VOLO, ILLINOIS 60073

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
TERMINATE FIBER IN CABINET	EACH	12
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1

TS 21942
FORMER EAGLE 1C
LAKE COUNTY TACTICS

TS SHT NO. 66

FILE NAME: M:\2019\3 Ch\18-03-5500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eagle1C.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

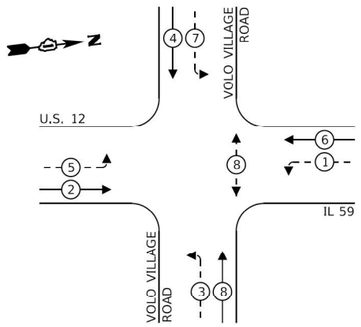
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 33 – IL RTE 120 AT FISH LAKE RD

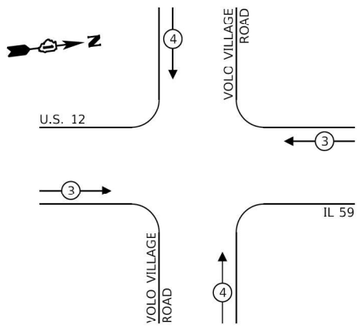
SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	74
		CONTRACT NO. 62W90		
		ILLINOIS	FED. AID PROJECT	

EXISTING CONTROLLER SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



LEGEND:

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

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
TERMINATE FIBER IN CABINET	EACH	12
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1

REMOVAL AND RELOCATION NOTES:

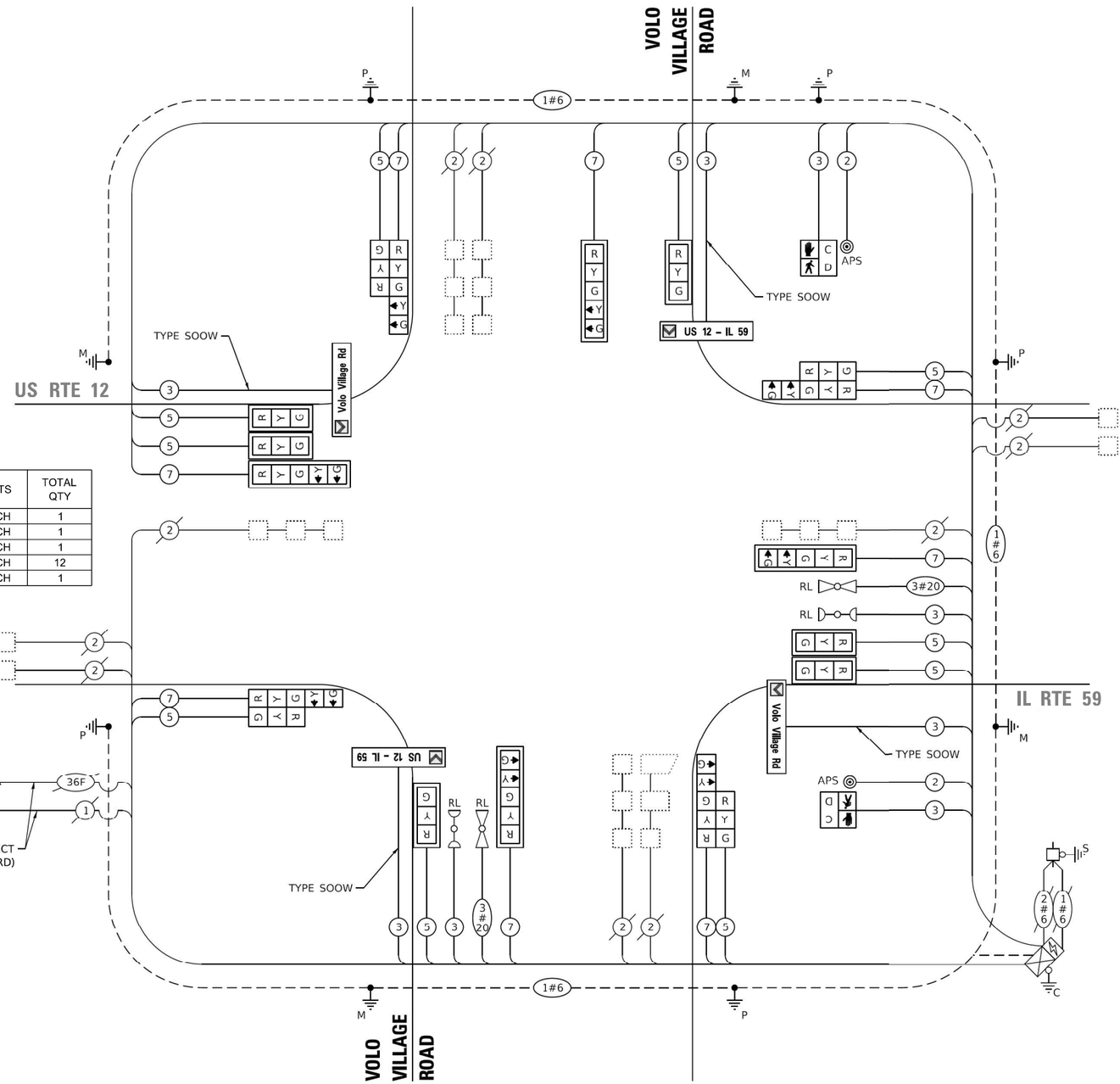
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

1 EACH CONTROLLER

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	10	11	110
4 - SECTION	-	14	-
5 - SECTION	8	13	104
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	2	15	30
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			454
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			1059

ENERGY COSTS TO:
ILLINOIS DEPT OF TRANSPORTATION
201 CENTER CT
SCHAUMBURG, IL 60196-1096
ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---



CABLE PLAN
(NOT TO SCALE)

TS 6511
FORMER EAGLE 1C
LAKE COUNTY TACTICS

TS SHT NO. 67

FILE NAME: M:\2019\3 Chrl\18-03-5500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203 #2\W90\CAD\62W90_Sheet 03_Eagle1C.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

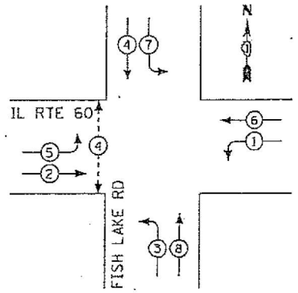
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 34 – US RTE 12 /IL RTE 59 AT VOLO VILLAGE RD

SCALE: | SHEET OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	75
		CONTRACT NO. 62W90		
		ILLINOIS	FED. AID PROJECT	

CONTROLLER SEQUENCE

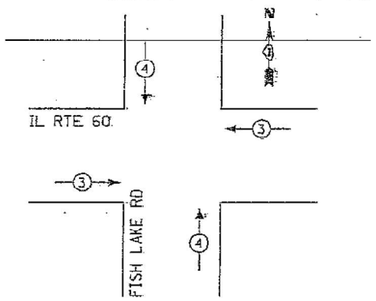


PHASE DESIGNATION DIAGRAM

LEGEND

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

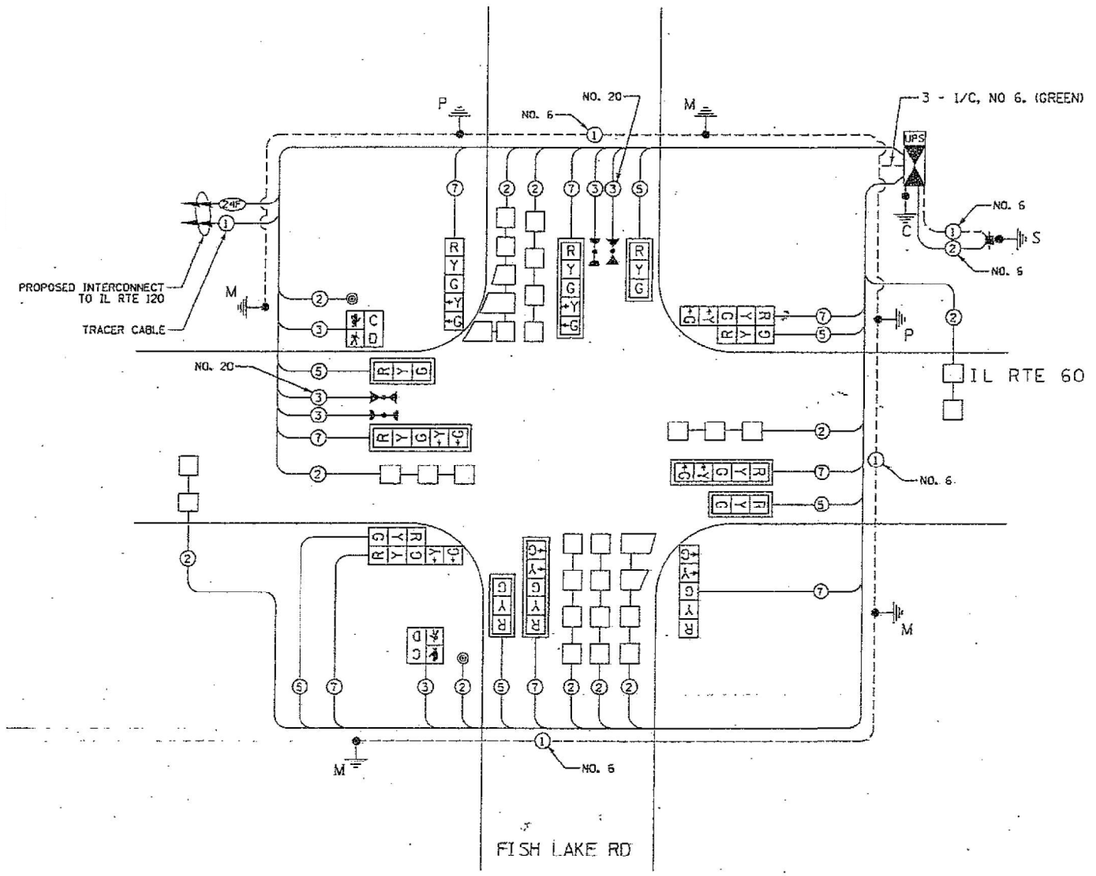


TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	6	11	66
4 - SECTION	-	14	-
5 - SECTION	8	13	104
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	2	15	30
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			454
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			1059

ENERGY COSTS TO:
VILLAGE OF VOLO
500 S. FISH LAKE RD
VOLO, ILLINOIS 60073

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---



CABLE PLAN
(NOT TO SCALE)

REMOVAL AND RELOCATION NOTES:

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF IDOT. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR THE PICK UP OF ALL THE EQUIPMENT TO BE RETURNED TO IDOT.

1 EACH CONTROLLER

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
TERMINATE FIBER IN CABINET	EACH	12
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1

TS 22015
FORMER EAGLE 1C
LAKE COUNTY TACTICS

TS SHT NO. 68

FILE NAME: MA 2019\3 CMI\18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203 62W90\CAD\62W90_Sheet 05_Eagle1C.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -

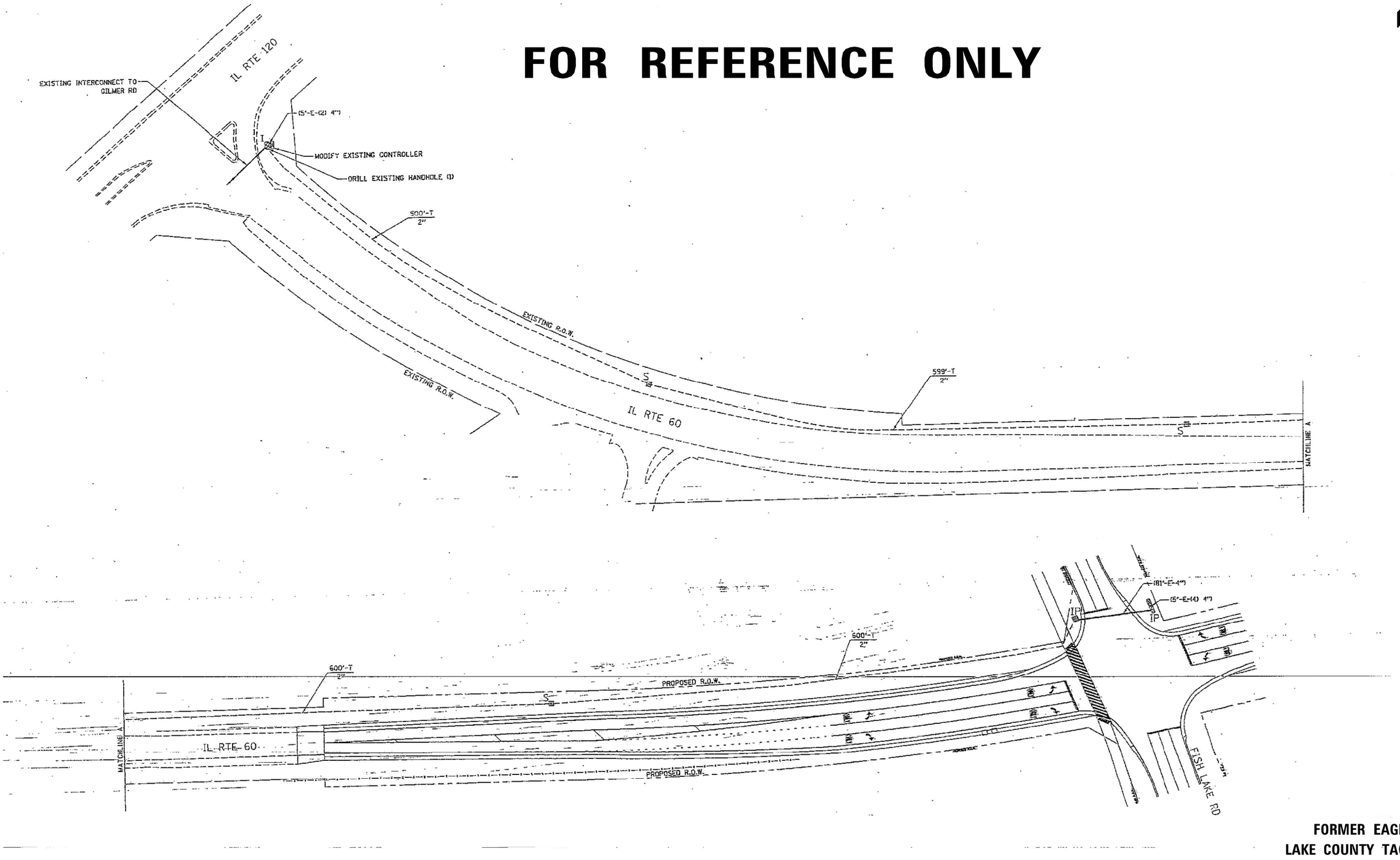
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 35 – IL RTE 60 AT FISH LAKE RD

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	76
		CONTRACT NO. 62W90		
		ILLINOIS	FED. AID PROJECT	

FOR REFERENCE ONLY



FORMER EAGLE 1C
LAKE COUNTY TACTICS

TS SHT NO. 69

FILE NAME: Mst-20193 CMH.8-03-5500 IDOT_PTB 190 - Various Traffic Signal Design\Graphics\WO 203 62W90\CAD\62W90_Sheet 05 Equip Loc.dgn

TYLin

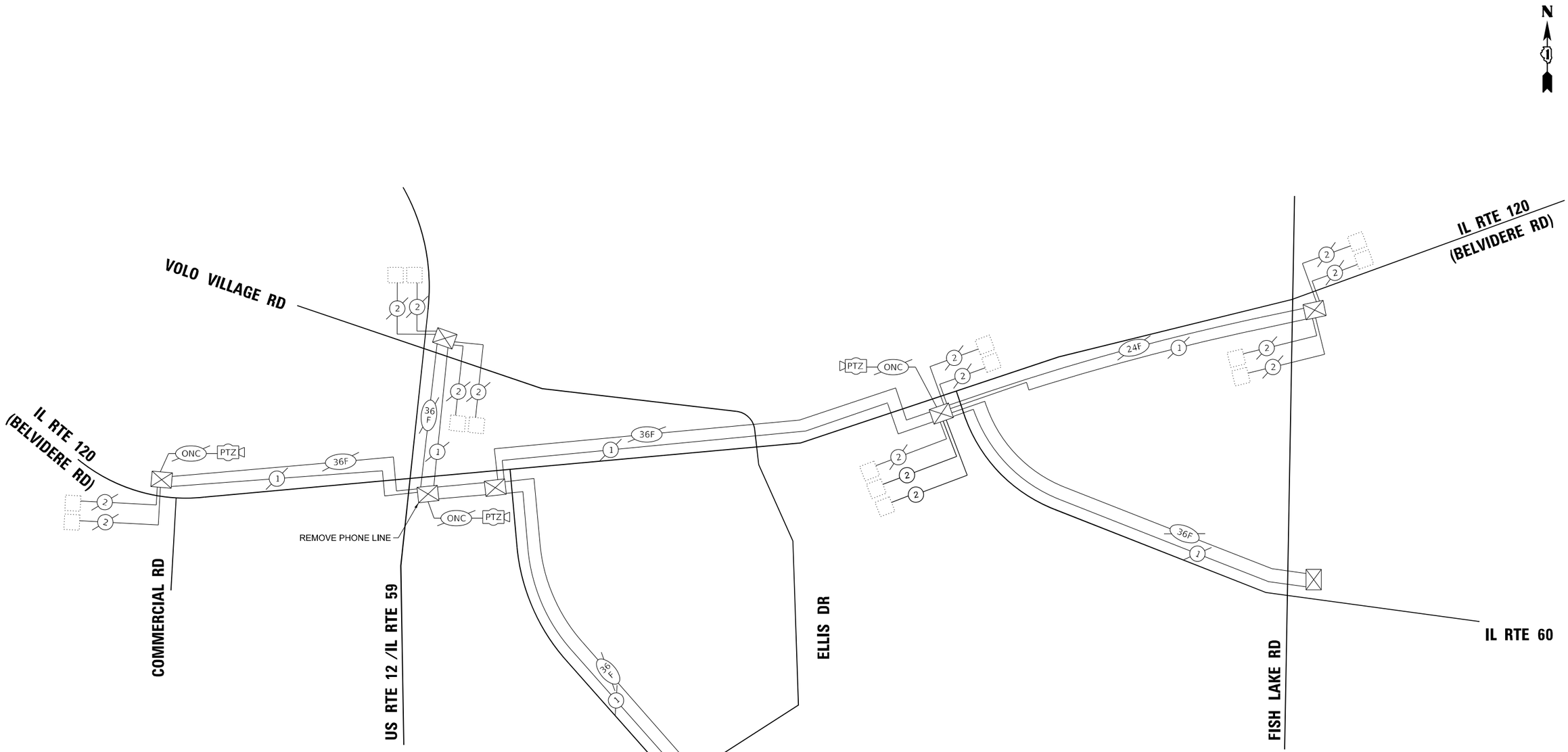
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN
IL RTE 120 – US RTE 12 /IL RTE 59 TO FISH LAKE RD

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	77
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			



SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
OPTIMIZE TRAFFIC SIGNAL SYSTEM	EACH	1

NOTES:

1. OPTIMIZATION TO INCLUDE INTERSECTIONS FROM FORMER 1C SYSTEM.
   IL RTE 120 (BELVIDERE) & US RTE 12-IL RTE 59
   IL RTE 120 (BELVIDERE) & GILMER
   IL RTE 120 (BELVIDERE) & IL RTE 60
   IL RTE 120 (BELVIDERE) & FISH LAKE RD
   US RTE12-IL RTE 59 & VOLO VILLAGE
   IL RTE 60 & FISH LAKE RD
   IL RTE 120 & COMMERCIAL

FORMER EAGLE 1C
LAKE COUNTY TACTICS

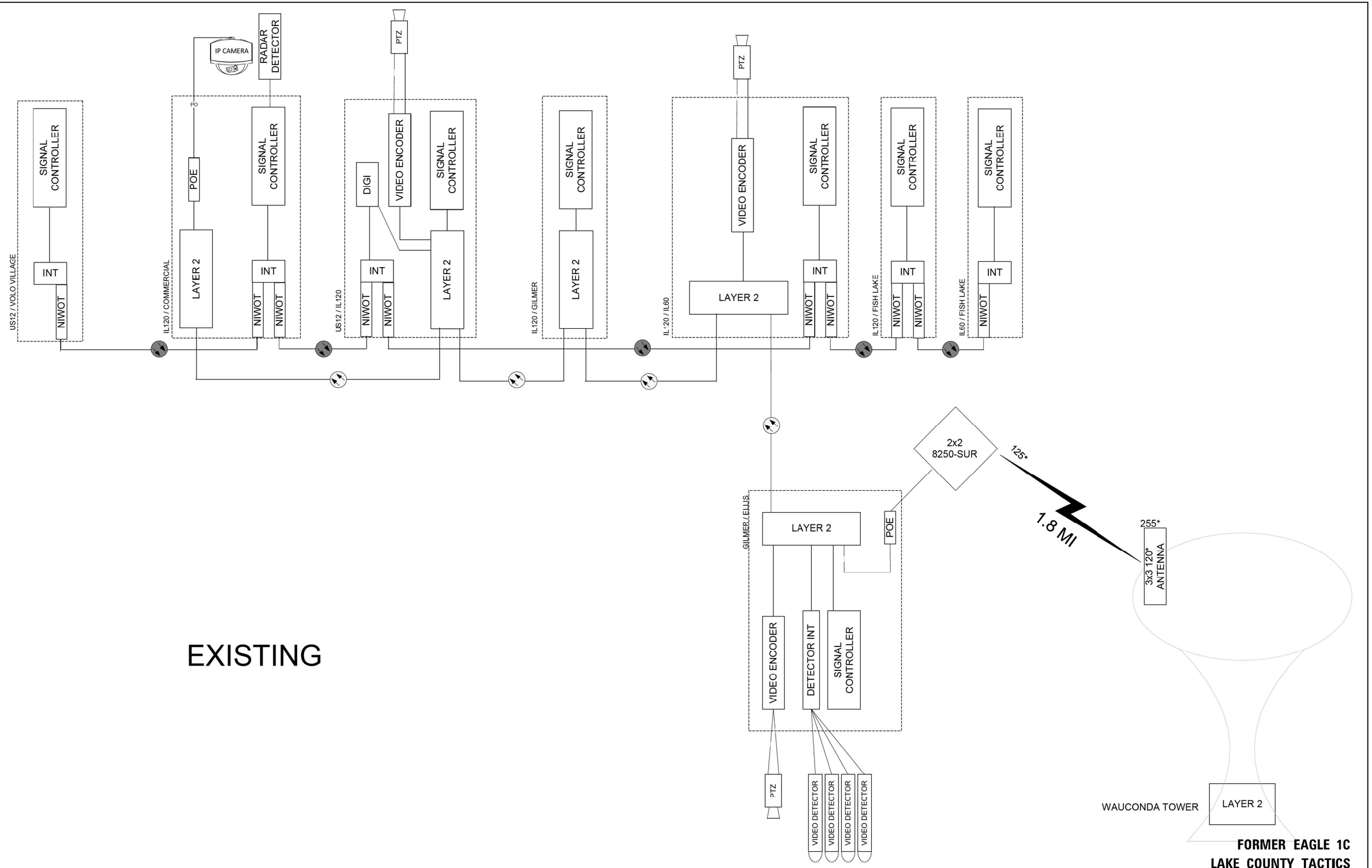
TS SHT NO. 70

FILE NAME: M:\2019\3 CMR\18-03-5500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203 62W90\CAD\62W90_Sheet_05_Eagle1C.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED - 05/08/2025	**STATE OF ILLINOIS**	**INTERCONNECT SCHEMATIC**	
	DRAWN - KATHLEEN MURPHY	REVISED -	**DEPARTMENT OF TRANSPORTATION**	**IL RTE 120 – US RTE 12 /IL RTE 59 TO FISH LAKE RD**	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -		SCALE:	SHEET OF SHEETS STA. TO STA.
PLOT DATE = 5/5/2025	DATE - 12/20/2024	REVISED -			

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	78
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		



EXISTING

FORMER EAGLE 1C
LAKE COUNTY TACTICS

TS SHT NO. 71

FILE NAME: M:\20193 CHI\18-03-5500 IDOT_PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eagle1c.dgn

PARSONS	USER NAME = erica.salutz	DESIGNED - RL / DG	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		DRAWN - RL / DG	REVISED -	EXISTING CABINET DETAIL IL RTE 120 – US RTE 12 /IL RTE 59 TO FISH LAKE RD
	PLOT SCALE = 40.0000 ' / in.	CHECKED - RL / DG	REVISED -	SCALE: SHEET OF SHEETS STA. TO STA.
	PLOT DATE = 3/30/2025	DATE - 2025.02.20	REVISED -	

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	79
		CONTRACT NO. 62W90		
		ILLINOIS	FED. AID PROJECT	

IL120 / COMMERCIAL

IP CAMERA

POE

SIGNAL CONTROLLER

LAYER 2

US12 / VOLO VILLAGE

SIGNAL CONTROLLER

LAYER 2

US12 / IL120

PTZ

VIDEO ENCODER

SIGNAL CONTROLLER

LAYER 2

IL120 / GILMER

SIGNAL CONTROLLER

LAYER 2

IL120 / IL60

PTZ

VIDEO ENCODER

SIGNAL CONTROLLER

LAYER 2

IL120 / FISH LAKE

SIGNAL CONTROLLER

LAYER 2

IL60 / FISH LAKE

SIGNAL CONTROLLER

LAYER 2

2x2
8250-SUR

125*

1.8 MI

255*

3x3 120* ANTENNA

SECTOR ANTENNA

SECTOR ANTENNA

3x3 BSU

RADIO

WAUCONDA TOWER

LAYER 2

GILMER / ELLIS

LAYER 2

POE

VIDEO ENCODER

DETECTOR INT

SIGNAL CONTROLLER

PTZ

VIDEO DETECTOR

VIDEO DETECTOR

VIDEO DETECTOR

VIDEO DETECTOR

PROPOSED

FORMER EAGLE 1C
LAKE COUNTY TACTICS

TS SHT NO. 72

FILE NAME: M:_2019\3 CHI\18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eagle1C.dgn

PARSONS

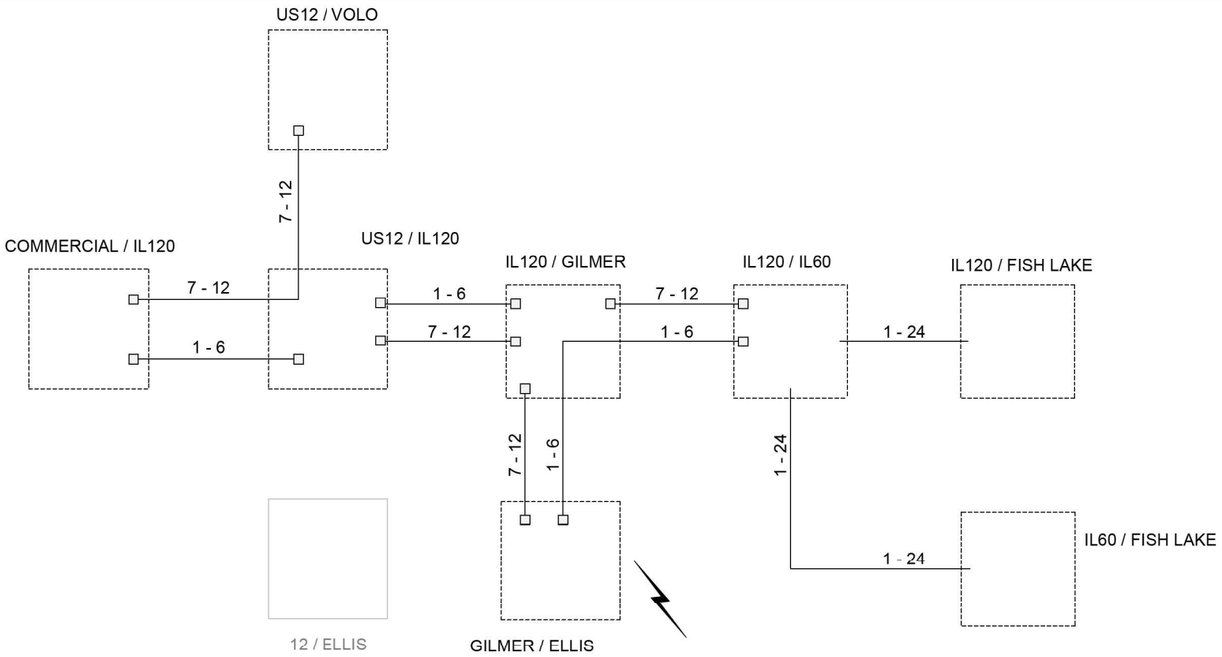
USER NAME = erica.salatz	DESIGNED - RL / DG	REVISED -	
	DRAWN - RL / DG	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - RL / DG	REVISED -	
PLOT DATE = 3/30/2025	DATE - 2025.02.20	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

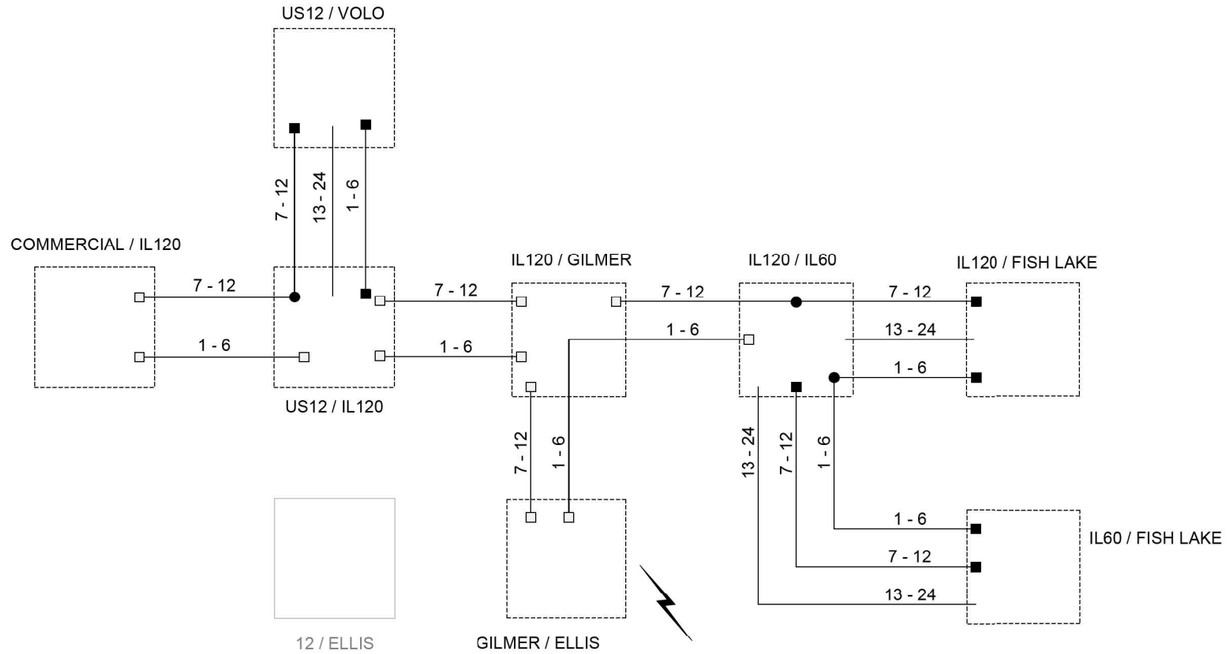
PROPOSED CABINET DETAIL
IL RTE 120 – US RTE 12 /IL RTE 59 TO FISH LAKE RD

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	80
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			



EXISTING



PROPOSED

FORMER EAGLE 1C
LAKE COUNTY TACTICS

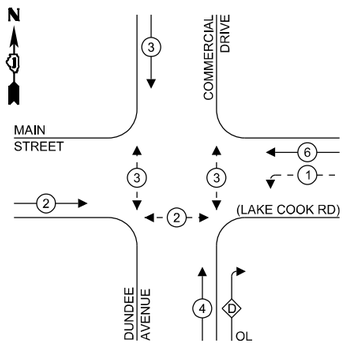
TS SHT NO. 73

FILE NAME: M:_2019\3 CHI\18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_65_Eagle1C.dgn

PARSONS	USER NAME = erica.salatz	DESIGNED - RL / DG	REVISED -	**STATE OF ILLINOIS** **DEPARTMENT OF TRANSPORTATION**	**SPLICING DIAGRAM** **IL RTE 120 – US RTE 12 /IL RTE 59 TO FISH LAKE RD**
		DRAWN - RL / DG	REVISED -		
	PLOT SCALE = 40.0001 ' / in.	CHECKED - RL / DG	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.
	PLOT DATE = 5/5/2025	DATE - 2025.02.20	REVISED -		

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	81
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

EXISTING CONTROLLER SEQUENCE



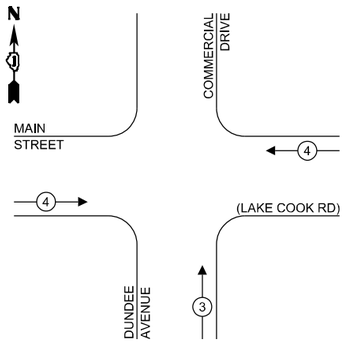
LEGEND:

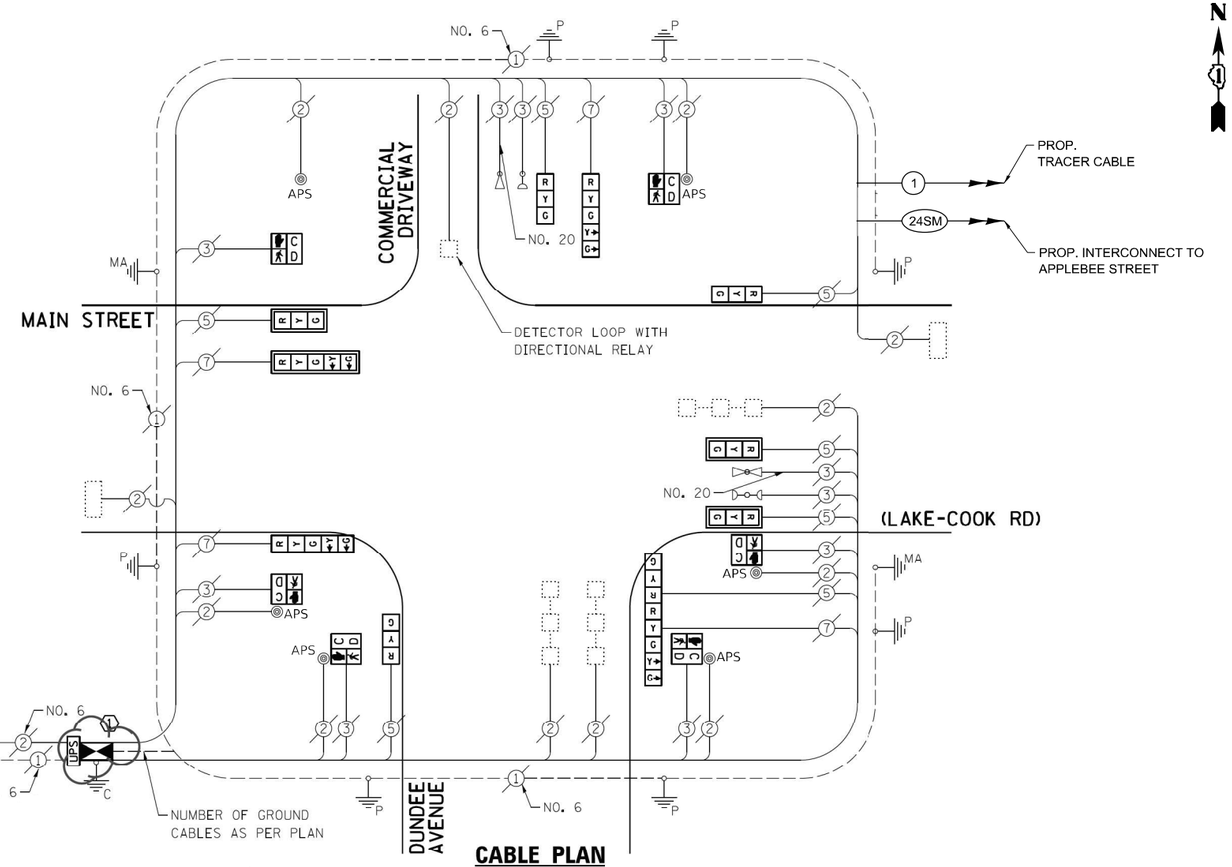
- PROTECTED PHASE
- PROTECTED/PERMITTED PHASE
- PEDESTRIAN PHASE
- OL — OVERLAP

RIGHT TURN OVERLAP PHASE DESIGNATION:

OVERLAP LETTER		PERMISSIVE PHASE		PROTECTED PHASE
D	=	4	+	1

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE





CABLE PLAN

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	7	11	77
4 - SECTION	-	14	-
5 - SECTION	4	13	52
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	6	15	90
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			429
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			1034

ENERGY COSTS TO:
ILLINOIS DEPT OF TRANSPORTATION
201 CENTER CT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

REMOVAL AND RELOCATION NOTES:

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

1 EACH TRANSCEIVER FIBER OPTIC

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF IDOT. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR THE PICK UP OF ALL THE EQUIPMENT TO BE RETURNED TO IDOT.

1 EACH CONTROLLER

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
TERMINATE FIBER IN CABINET	EACH	12
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1

TS SHT NO. 74

TS 21845
FORMER EAGLE 1D
LAKE COUNTY TACTICS

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

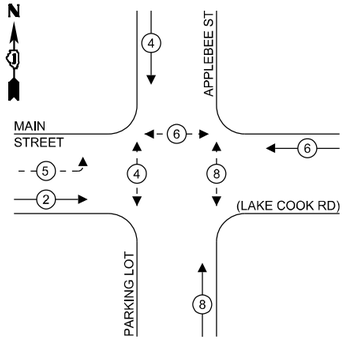
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 36 – MAIN STREET (LAKE–COOK RD) AT DUNDEE AVENUE
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	82
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

FILE NAME: Mst_20193_CMR-843-5500_IDOT_PFR_190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet 05_EagleID.dgn

EXISTING CONTROLLER SEQUENCE



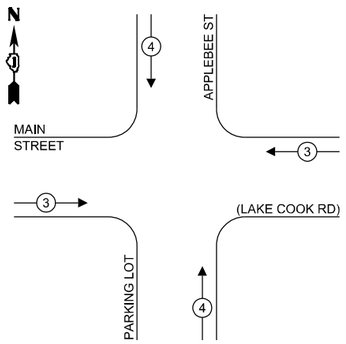
LEGEND:

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

RIGHT TURN OVERLAP PHASE DESIGNATION:

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
D	4	1

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

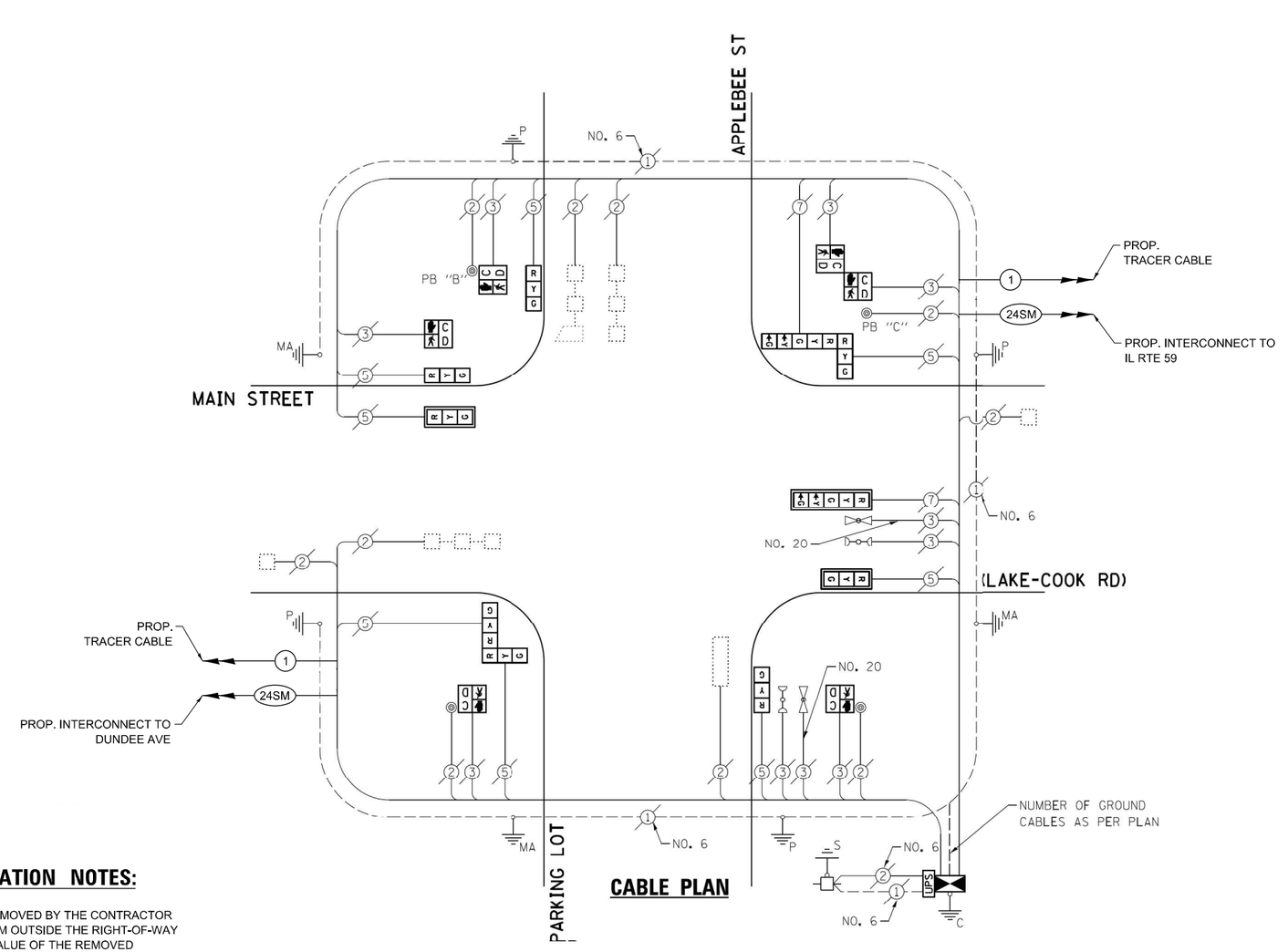


TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	8	11	88
4 - SECTION	-	14	-
5 - SECTION	2	13	26
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	6	15	90
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			414
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			1019

ENERGY COSTS TO:
ILLINOIS DEPT OF TRANSPORTATION
201 CENTER CT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---



CABLE PLAN

REMOVAL AND RELOCATION NOTES:

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

1 EACH TRANSCEIVER FIBER OPTIC

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF IDOT. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR THE PICK UP OF ALL THE EQUIPMENT TO BE RETURNED TO IDOT.

1 EACH CONTROLLER

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	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
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1

TS 11282
FORMER EAGLE 1D
LAKE COUNTY TACTICS

TS SHT NO. 75

FILE NAME: M:\2019\3 Chtl\18-03-5500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203-62W90\CAD\62W90_Sheet_05_Eagle1D.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 37 – MAIN ST (LAKE–COOK RD) AT APPLEBEE ST

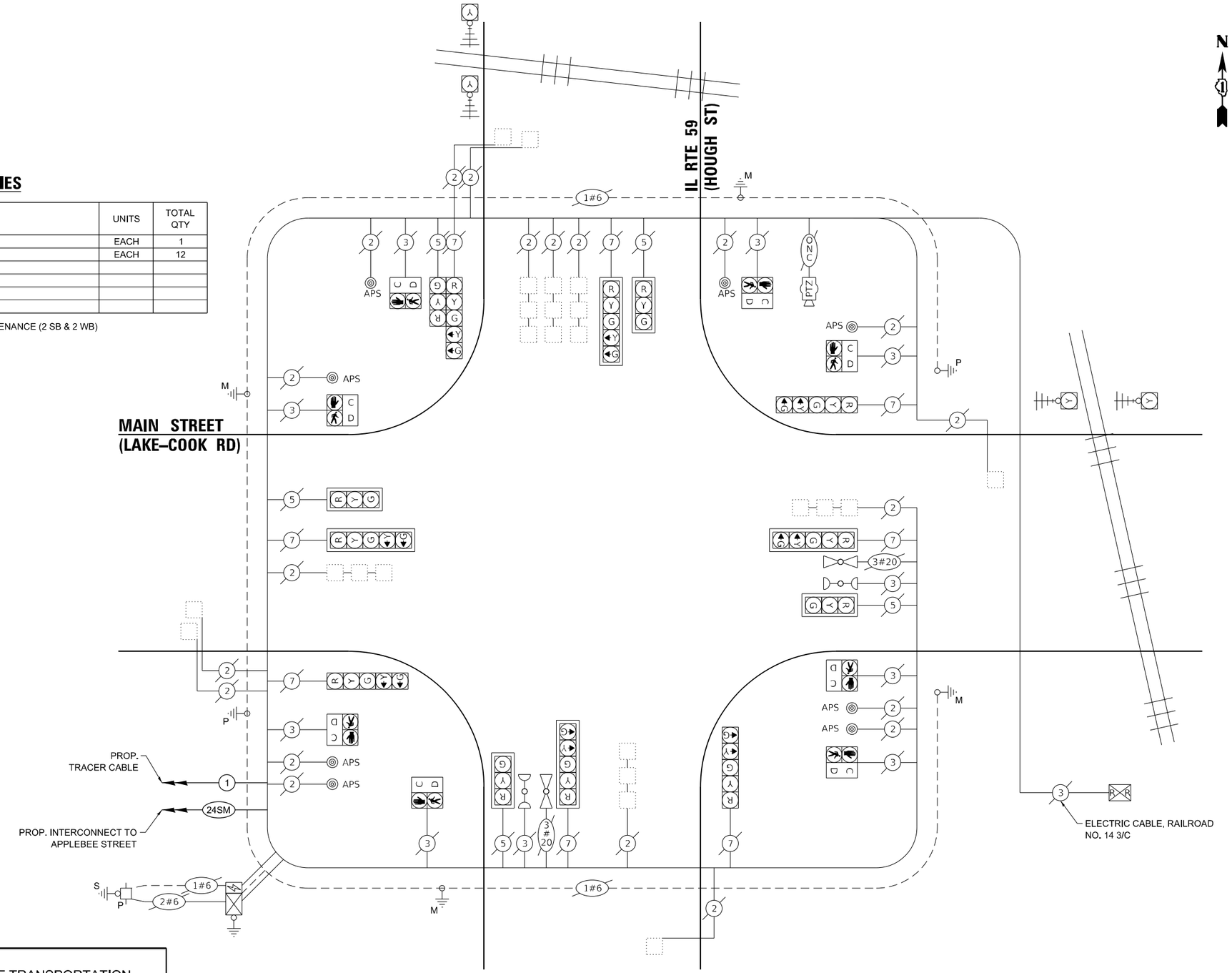
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	83
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

SCHEDULE OF QUANTITIES

	ITEM DESCRIPTION	UNITS	TOTAL QTY
*	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
	TERMINATE FIBER IN CABINET	EACH	12

* SOLAR POWERED FLASHERS TO BE MAINTAINED AS PART OF SIGNAL MAINTENANCE (2 SB & 2 WB)



CABLE PLAN
(NOT TO SCALE)

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	5	11	55
4 - SECTION	-	14	-
5 - SECTION	8	13	104
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	8	15	120
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	1	20	20
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	1	15	15
TOTAL UPS SIZING =			524
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 =			1129

ENERGY COSTS TO:
ILLINOIS DEPT OF TRANSPORTATION
201 W CENTER CT
SCHAUMBERG, IL 60196

ENERGY SUPPLY:
CONTACT: DAVE SCHACHT
PHONE: (630) 437-2129
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

TS 11280
FORMER EAGLE 1D
LAKE COUNTY TACTICS

TS SHT NO. 76

FILE NAME: MS_20 93 CHL18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet 03_Exist ID.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	05/08/2025
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 5/7/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 38 – MAIN ST (LAKE–COOK RD) AT IL RTE 59

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	84
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

SEQUENCE OF OPERATION

MOVEMENT	N	5 1	6 6 1	5 2 2	6 6 2 2	7 3	3 8 8	4 7 4	4 8 8	FLASH
PHASE		1+5	1+6	2+5	2+6	3+7	3+8	4+7	4+8	
INTERVAL		1 2 3 4	5 6 7	8 9 10	11 12 13A 13B	14 15 16 17	18 19 20 21A 21B	22 23 24 25A 25B	26 27 28A 28B	
CHANGE TO		1+6 2+5 2+6	θ θ 2+6	θ θ 2+6	3+7,4+7 3+8,4+8	3+8 4+7 1+5 1+6 2+5 2+6 4+8	θ θ 4+8 1+5 1+6 2+5 2+6	θ θ 4+8 1+5 1+6 2+5 2+6	1+5,1+6 2+5,2+6	
Main St (Lake Cook Rd) FAR RIGHT SIGNALS	E/B	R R R R	R R R	G G G	G G Y R	R R R R	R R R R R	R R R R R	R R R R	R
Main St (Lake Cook Rd) END MAST ARM AND FAR LEFT SIGNALS	E/B	R ←G R ←Y R ←G R ←Y	R R R	G ←G G ←G G ←Y	G G Y R	R R R R	R R R R R	R R R R R	R R R R	R
Main St (Lake Cook Rd) FAR RIGHT SIGNALS	W/B	R R R R	G G G	R R R	G G Y R	R R R R	R R R R R	R R R R R	R R R R	R
Main St (Lake Cook Rd) END MAST ARM AND FAR LEFT SIGNALS	W/B	R ←G R ←G R ←Y R ←Y	G ←G G ←G G ←Y	R R R	G G Y R	R R R R	R R R R R	R R R R R	R R R R	R
IL 59 (Hough St) NEAR RIGHT AND FAR RIGHT SIGNALS	S/B	R R R R	R R R	R R R	R R R R	R R R R	R R R R R	G G G Y R	G G Y R	R
IL 59 (Hough St) END MAST ARM AND FAR LEFT SIGNALS	S/B	R R R R	R R R	R R R	R R R R	R ←G R ←Y R ←G R ←Y	R R R R R	G ←G G ←G G ←Y Y R	G G Y R	R
IL 59 (Hough St) FAR RIGHT SIGNALS	N/B	R R R R	R R R	R R R	R R R R	R R R R	G G G Y R	R R R R R	G G Y R	R
IL 59 (Hough St) END MAST ARM AND FAR LEFT SIGNALS	N/B	R R R R	R R R	R R R	R R R R	R ←G R ←G R ←Y R ←Y	G ←G G ←G G ←Y Y R	R R R R R	G G Y R	R
PEDESTRIAN SIGNALS CROSSING Main St (Lake Cook Rd) ON EAST SIDE OF IL 59 (Hough St)		H H H H	H H H	H H H	H H H H	H H H H	P * FH ** H H H	H H H H H	P * FH ** H H	
PEDESTRIAN SIGNALS CROSSING Main St (Lake Cook Rd) ON WEST SIDE OF IL 59 (Hough St)		H H H H	H H H	H H H	H H H H	H H H H	H H H H H	P * FH ** H H H	P * FH ** H H	DARK
PEDESTRIAN SIGNALS CROSSING IL 59 (Hough St) ON SOUTH SIDE OF Main St (Lake Cook Rd)		H H H H	H H H	P * FH ** H	P * FH ** H H	H H H H	H H H H H	H H H H H	H H H H	
PEDESTRIAN SIGNALS CROSSING IL 59 (Hough St) ON NORTH SIDE OF Main St (Lake Cook Rd)		H H H H	P * FH ** H	H H H	P * FH ** H H	H H H H	H H H H H	H H H H H	H H H H	

PHASES 2+6 SHALL BE PLACED ON RECALL
* TO APPEAR ONLY UPON PUSHBUTTON ACTUATION
**FLASHING HAND IS TO TERMINATE AT THE COMPLETION OF THE PEDESTRIAN INTERVAL CLEARANCE

θ THE WALK OR FLASHING DON'T WALK INTERVAL MAY FINISH TIMING IN THE BIDIRECTIONAL STRAIGHT THROUGH MOVEMENT IF THE LEFT ARROW TIME IS NOT SUFFICIENT TO COMPLETE WALK OR FLASHING DON'T WALK INTERVALS

WALK AND FLASHING DON'T WALK TIMINGS TO BE SET ONLY ON PHASES WHERE WALK AND FLASHING DON'T WALK ARE INDICATED IN THE SEQUENCE OF OPERATION

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

TS SHT NO. 77

TS 11280
FORMER EAGLE 1D
LAKE COUNTY TACTICS

FILE NAME: M:\2019\3 CH\18-03-5560 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203 #2W90\CAD\62W90_Sheet_03_Eagle1D.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED RAILROAD PREEMPTION SEQUENCE OF OPERATION AND EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION
LOCATION 38 – MAIN ST AT IL 59 (HOUGH ST) – SHEET 1 OF 3

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	85
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION

																														PREEMPTOR NUMBER 3	PREEMPTOR NUMBER 4	
CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER		1	5		5			8		8			11		11			14		18			18		22			22			26		26			
EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER		1A	1B	1C	1D	1E	1F	1G	1H	1J	1K	1L	1M	1P	1Q	1R	1S	1T	1U	1V	1W	1X	1Z	1AA	1BB	1CC	1DD	1EE	1FF	1GG	1HH	2	3	CLEAR TO NORMAL SEQUENCE
CHANGE TO EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER		2 OR 3	1C	2	1E	1F	3	1H	2	1K	1L	3	2	1Q	1R	3	2 OR 3	1U	1V	2	1X	3	1AA	1BB	2	1DD	3	1FF	1GG	2	3			◊
Main St (Lake Cook Rd) FAR RIGHT SIGNALS	E/B	R	R	R	R	R	R	G	G	G	Y	R	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	R	◊
Main St (Lake Cook Rd) END MAST ARM AND FAR LEFT SIGNALS	E/B	R ←Y	R	R	R	R	R	G ←G	G ←Y	G ←G	Y	R	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	R	◊
Main St (Lake Cook Rd) FAR RIGHT SIGNALS	W/B	R	G	G	G	Y	R	R	R	R	R	R	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	R	◊
Main St (Lake Cook Rd) END MAST ARM AND FAR LEFT SIGNALS	W/B	R ←Y	G ←G	G ←Y	G ←G	Y	R	R	R	R	R	R	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	R	◊
IL 59 (Hough St) NEAR RIGHT AND FAR RIGHT SIGNALS	S/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	G	G	G	Y	R	G	R	G	◊
IL 59 (Hough St) END MAST ARM AND FAR LEFT SIGNALS	S/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R ←Y	R	R	R	R	R	G ←G	Y	R	G ←G	G ←Y	G	Y	R	G	R	G	◊
IL 59 (Hough St) FAR RIGHT SIGNALS	N/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	G	G	R	R	R	R	R	G	Y	R	G	R	G	◊
IL 59 (Hough St) END MAST ARM AND FAR LEFT SIGNALS	N/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R ←Y	G ←G	Y	R	G ←G	G ←Y	R	R	R	R	R	G	Y	R	G	R	G	◊
PEDESTRIAN SIGNALS CROSSING Main St (Lake Cook Rd) ON EAST SIDE OF IL 59 (Hough St)		H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	FH	H	H	FH	H	H	H	H	H	H	FH	H	H	FH	H	H	◊
PEDESTRIAN SIGNALS CROSSING Main St (Lake Cook Rd) ON WEST SIDE OF IL 59 (Hough St)		H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	FH	H	H	FH	H	FH	H	H	FH	H	H	◊
PEDESTRIAN SIGNALS CROSSING IL 59 (Hough St) ON SOUTH SIDE OF Main St (Lake Cook Rd)		H	H	H	H	H	H	FH	H	FH	H	H	FH	FH	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	◊
PEDESTRIAN SIGNALS CROSSING IL 59 (Hough St) ON NORTH SIDE OF Main St (Lake Cook Rd)		H	FH	H	FH	H	H	H	H	H	H	H	FH	FH	H	H	H	H	H	H	H	H	H	H	H	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 VEHICLE PREEMPTION INTERVAL AFTER EMERGENCY VEHICLE PREEMPTION INTI

Revised:

TS SHT NO. 78

FILE NAME: M:_2019\3 CHI\18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eagle1D.dgn

TS 11280
FORMER EAGLE 1D
LAKE COUNTY TACTICS

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED RAILROAD PREEMPTION SEQUENCE OF OPERATION AND EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION
LOCATION 38 – MAIN ST AT IL 59 (HOUGH ST) – SHEET 2 OF 3

SCALE: | SHEET OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	86
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

RAILROAD PREMPTION SEQUENCE OF OPERATION
FOR FUTURE RAILROAD INTERCONNECTION ACTIVATION

RAILROAD PREEMPTION SEQUENCE OF OPERATION

															PREEMPTOR NUMBER 3		PREEMPTOR NUMBER 4		PREEMPTOR NUMBER 2				
CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER		1	5		8		11		14	18		22		26										
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	1I	1J	1K	1L	1M	1N	1O	1P	1Q	1R	2	3	4	5	CLEAR TO NORMAL SEQUENCE
CHANGE TO RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER		2	1C	2	1E	2	1G	2	2	1J	2	1L	2	1N	2	1P	2	1R	2	3	4	5	Ø	
Main St (Lake Cook Rd) FAR RIGHT SIGNALS	E/B	R	R	R	Y	R	Y	R	R	R	R	R	R	R	R	Y	R	R	R	R	R	R	R	Δ
Main St (Lake Cook Rd) END MAST ARM AND FAR LEFT SIGNALS	E/B	R ←Y	R	R	Y	R	Y	R	R	R	R	R	R	R	R	Y	R	R	R	R	R	R	R	Δ
Main St (Lake Cook Rd) FAR RIGHT SIGNALS	W/B	R	Y	R	R	R	Y	R	R	R	R	R	R	R	R	Y	R	R	R	R	R	R	G	Δ
Main St (Lake Cook Rd) END MAST ARM AND FAR LEFT SIGNALS	W/B	R ←Y	Y	R	R	R	Y	R	R	R	R	R	R	R	R	Y	R	R	R	R	R	R	G ←G	Δ
IL 59 (Hough St) NEAR RIGHT AND FAR RIGHT SIGNALS	S/B	R	R	R	R	R	R	R	R	R	R	Y	R	Y	R	R	R	G	G	G	Y	R	R	Δ
IL 59 (Hough St) END MAST ARM AND FAR LEFT SIGNALS	S/B	R	R	R	R	R	R	R	R ←G	R	R	Y	R	Y	R	R	R	G	G	G ←G	Y	R	R	Δ
IL 59 (Hough St) FAR RIGHT SIGNALS	N/B	R	R	R	R	R	R	R	R	Y	R	R	R	Y	R	R	R	Y	R	R	R	R	R	Δ
IL 59 (Hough St) END MAST ARM AND FAR LEFT SIGNALS	N/B	R	R	R	R	R	R	R	R ←Y	Y	R	R	R	Y	R	R	R	Y	R	R	R	R	R	Δ
PEDESTRIAN SIGNALS CROSSING Main St (Lake Cook Rc ON EAST SIDE OF IL 59 (Hough St)		H	H	H	H	H	H	H	H	FH	H	H	H	FH	H	H	H	H	H	H	H	H	H	Δ
PEDESTRIAN SIGNALS CROSSING Main St (Lake Cook Rc ON WEST SIDE OF IL 59 (Hough St)		H	H	H	H	H	H	H	H	H	H	FH	H	FH	H	H	H	H	H	H	H	H	H	Δ
PEDESTRIAN SIGNALS CROSSING IL 59 (Hough St) ON SOUTH SIDE OF Main St (Lake Cook Rd)		H	H	H	FH	H	FH	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	Δ
PEDESTRIAN SIGNALS CROSSING IL 59 (Hough St) ON NORTH SIDE OF Main St (Lake Cook Rd)		H	FH	H	H	H	FH	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	Δ
																							HOLD	

Δ RAILROAD PREEMPTION SEQUENCE SHALL PROVIDE THE PROPER CLEARANCE INTERVAL TO RESUME THE NORMAL SEQUENCE OF OPERATION AFTER RAILROAD PREEMPTION INTERVAL 5 IS TERMINATED.

Ø RAILROAD PREEMPTION SEQUENCE SHALL BE CAPABLE OF CYCLING BETWEEN PHASES 3+7, 4+7 AND 1+6 UNTIL RAILROAD PREEMPTION IS TERMINATED.

TS SHT NO. 79

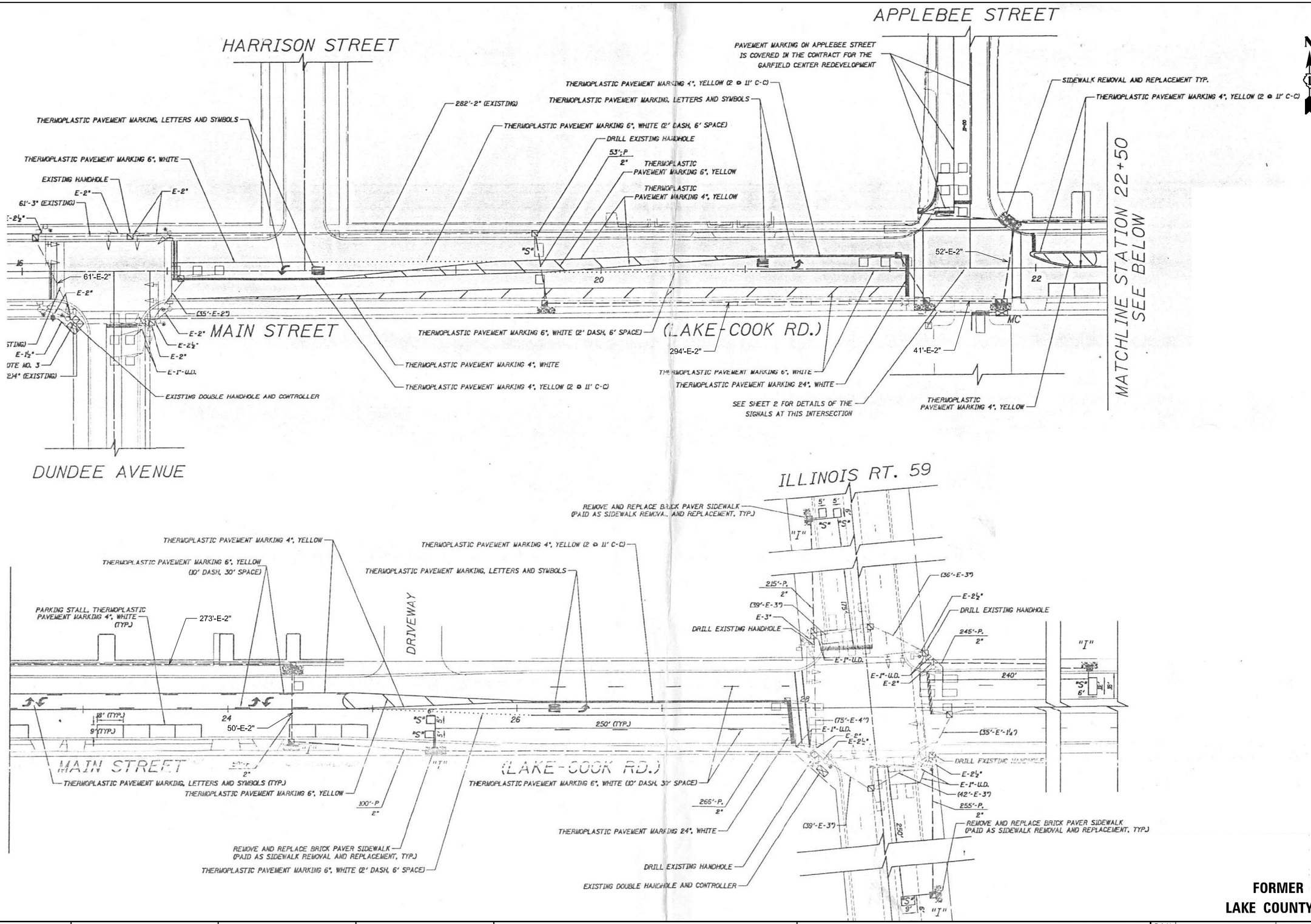
TS 11280
FORMER EAGLE 1D
LAKE COUNTY TACTICS

FILE NAME: MS-20193 CHI18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eagle1D.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED - 05/08/2025	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PROPOSED RAILROAD PREEMPTION SEQUENCE OF OPERATION AND EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION LOCATION 38 – MAIN ST AT IL 59 (HOUGH ST) – SHEET 3 OF 3
	DRAWN - KATHLEEN MURPHY	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -		
PLOT DATE = 5/6/2025	DATE - 12/20/2024	REVISED -		

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	87
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			



TS SHT NO. 80

FILE NAME: M:\2019\3 CMI\18-03-5500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203 62W90\CAD\62W90_Sheet_05 Eagle1D.dgn

FORMER EAGLE 1D
LAKE COUNTY TACTICS

TYLin

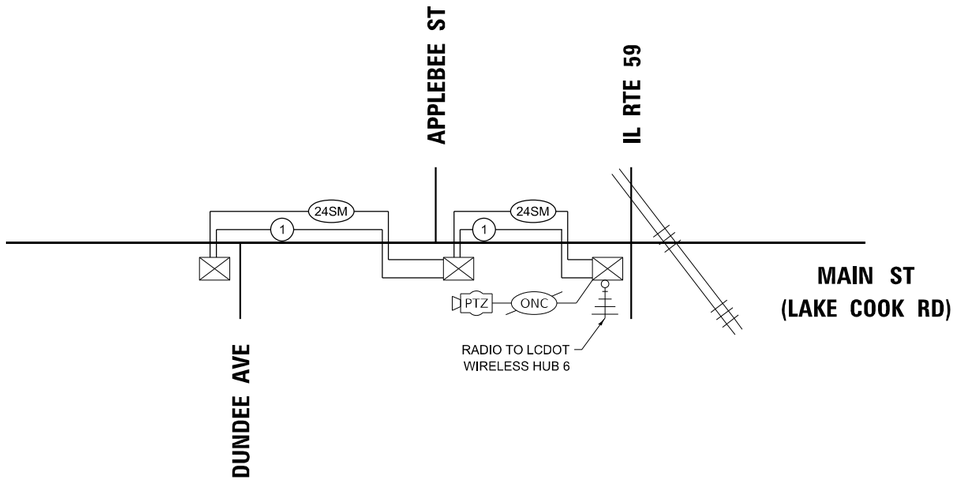
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN
MAIN ST (LAKE–COOK RD) – DUNDEE AVE TO IL RTE 59

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	88
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			



NOTES:

1. OPTIMIZATION TO INCLUDE INTERSECTIONS FROM FORMER 1D SYSTEM.
   MAIN ST (LAKE-COOK) & DUNDEE AVE
   MAIN ST (LAKE-COOK) & APPLEBEE ST
   MAIN ST (LAKE-COOK) & IL RTE 59

SCHEDULE OF QUANTITIES

	ITEM DESCRIPTION	UNITS	TOTAL QTY
	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	1682
	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	3416
*	ROD AND CLEAN EXISTING CONDUIT	FOOT	758
	FIBER OPTIC CABLE 24 FIBERS, SINGLE MODE	FOOT	1734
	OPTIMIZE TRAFFIC SIGNAL SYSTEM	EACH	1

* NOMINAL QUANTITY TO BE USED AS NEEDED AND AS APPROVED BY THE ENGINEER

FORMER EAGLE 1D
LAKE COUNTY TACTICS

TS SHT NO. 81

FILE NAME: M:_20193 CHI\18-03-5500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eagle1D.dgn

TYLin

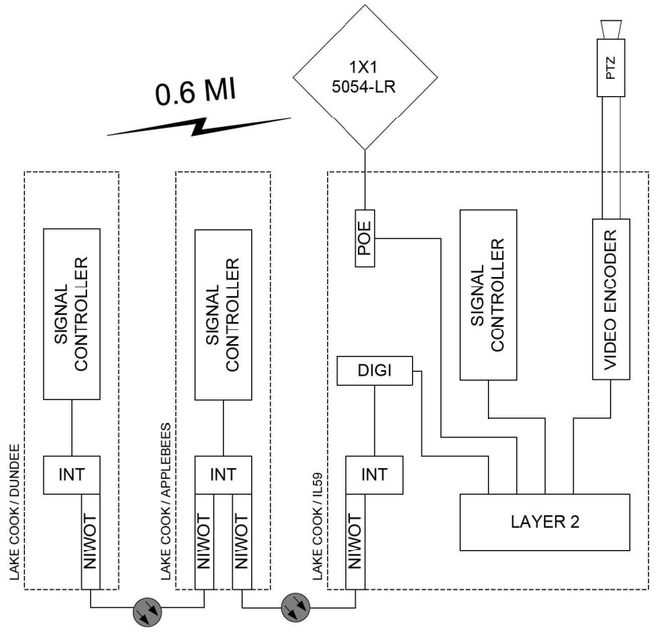
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED - 05/08/2025	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 5/6/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

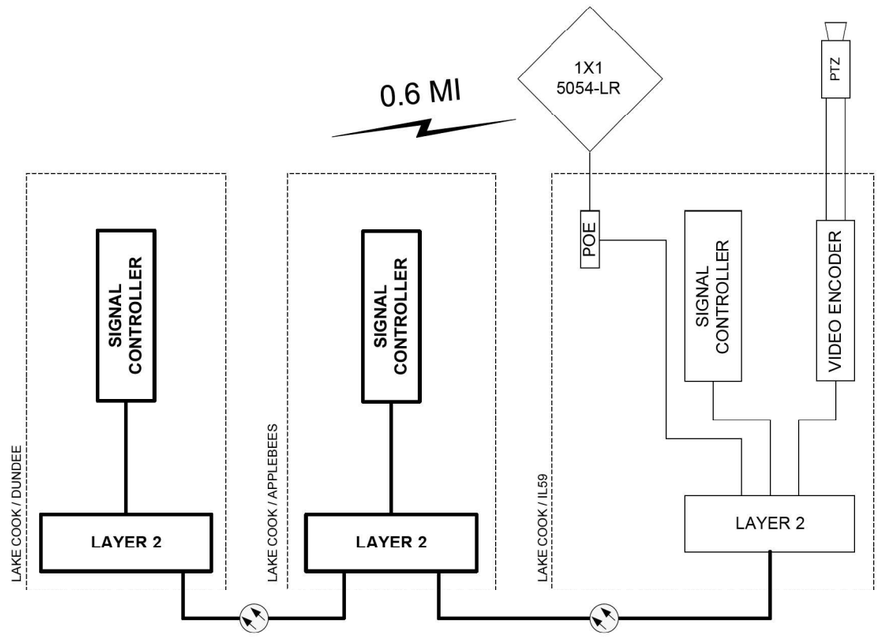
INTERCONNECT SCHEMATIC
MAIN ST (LAKE–COOK RD) – DUNDEE AVE TO IL RTE 59

SCALE: | SHEET OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	89
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			



EXISTING



PROPOSED

FORMER EAGLE 1D
LAKE COUNTY TACTICS

TS SHT NO. 82

FILE NAME: MX-20193 CHI\18-03-5500 IDOT_PTB_190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_65_Eagle1D.dgn

PARSONS

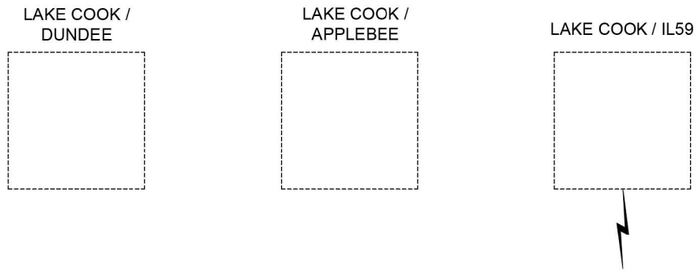
USER NAME = erica.salutz	DESIGNED - RL / DG	REVISED -	
	DRAWN - RL / DG	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - RL / DG	REVISED -	
PLOT DATE = 3/30/2025	DATE - 2025.02.20	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABINET DETAIL
MAIN ST (LAKE–COOK RD) – DUNDEE AVE TO IL RTE 59

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	90
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		



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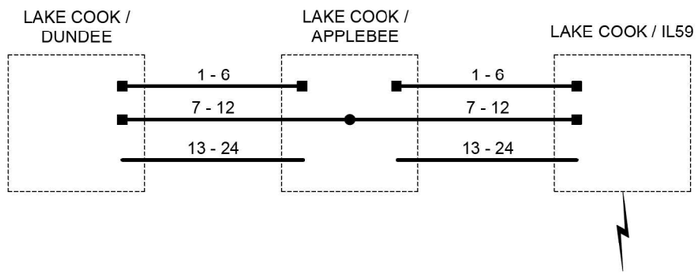


PROPOSED

FORMER EAGLE 1D
LAKE COUNTY TACTICS

TS SHT NO. 83

FILE NAME: Mst-20193 CMH.8-03-5500 IDOT_PTB_190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_EagleID.dgn

PARSONS	USER NAME = erica.salutz	DESIGNED - RL / DG	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		DRAWN - RL / DG	REVISED -	
	PLOT SCALE = 40.0000 ' / in.	CHECKED - RL / DG	REVISED -	
	PLOT DATE = 3/30/2025	DATE - 2025.02.20	REVISED -	

FIBER SPLICE DIAGRAM
MAIN ST (LAKE–COOK RD) – DUNDEE AVE TO IL RTE 59

SCALE: | SHEET OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	91
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

REMOVAL AND RELOCATION NOTES:

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

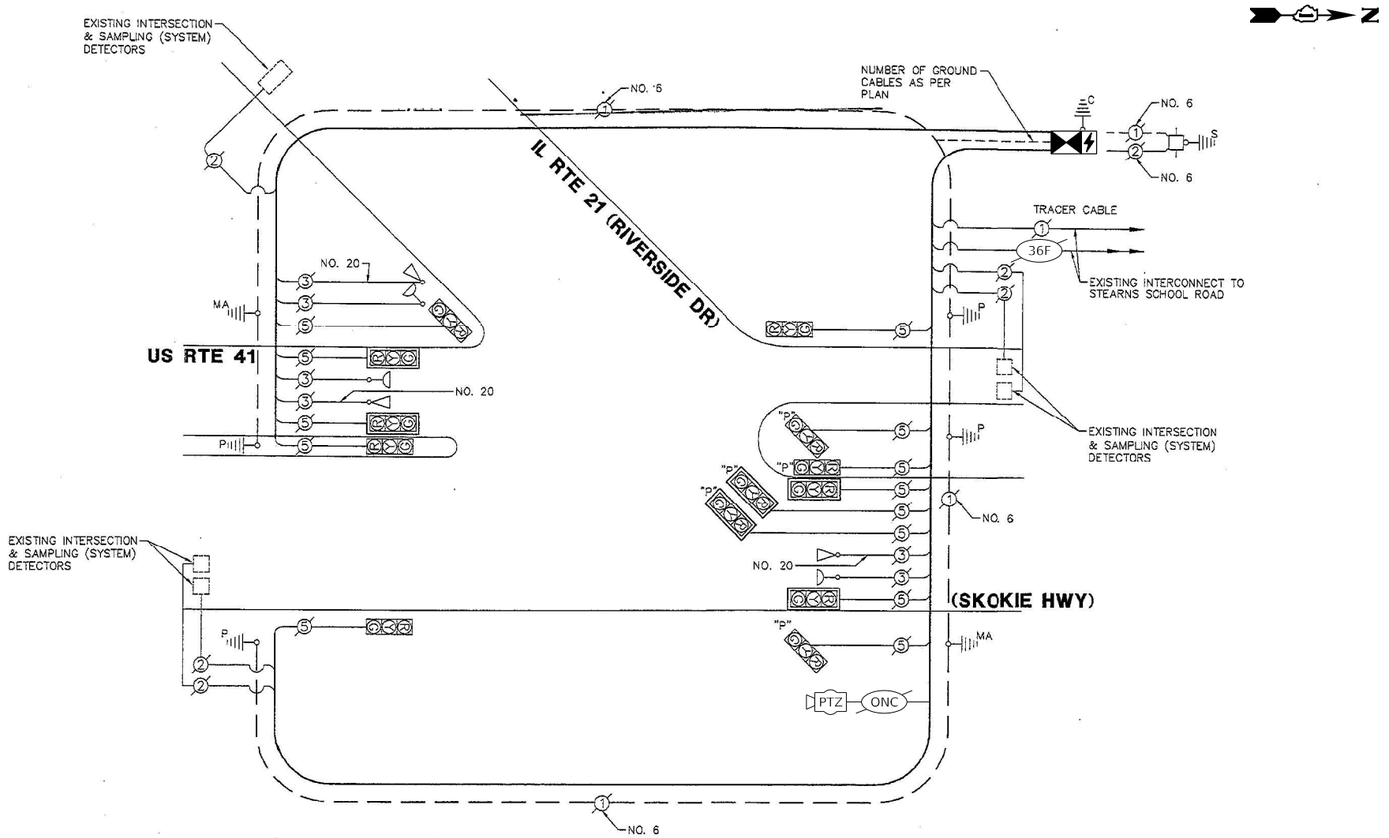
1	EACH	CONTROLLER AND CABINET (COMPLETE)
1	EACH	TELEPHONE LINE
1	EACH	FIBER OPTIC INTERCONNECT PORT 24
5	ACH	INDUCTIVE LOOP DETECTORS

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, AND RELOCATED TO THE TRAFFIC SIGNAL CABINET:

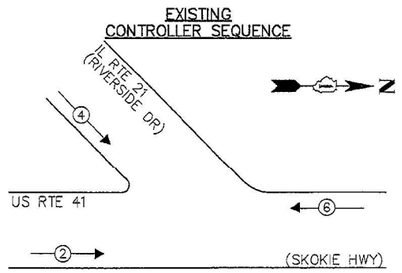
1	EACH	LAYER 2 SWITCH
1	EACH	VIDEO ENCODER
1	EACH	EVP PHASING UNIT

SCHEDULE OF QUANTITIES

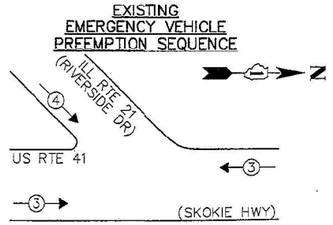
ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
INDUCTIVE LOOP DETECTOR	EACH	5
RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1



EXISTING CABLE PLAN



EXISTING PHASE DESIGNATION DIAGRAM



EXISTING EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	—	\

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	13	11	143
4 - SECTION	-	14	-
5 - SECTION	-	13	-
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			353
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			958

ENERGY COSTS TO:
ILLINOIS DEPT OF TRANSPORTATION
201 CENTER CT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

TS 6535
FORMER EAGLE 1K
LAKE COUNTY TACTICS

TS SHT NO. 84

FILE NAME: M:\2019\3 CIM\18-43-5500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203 - 62W90\CAD\62W90_Sheet_05_Exhibit.dgn

TYLin

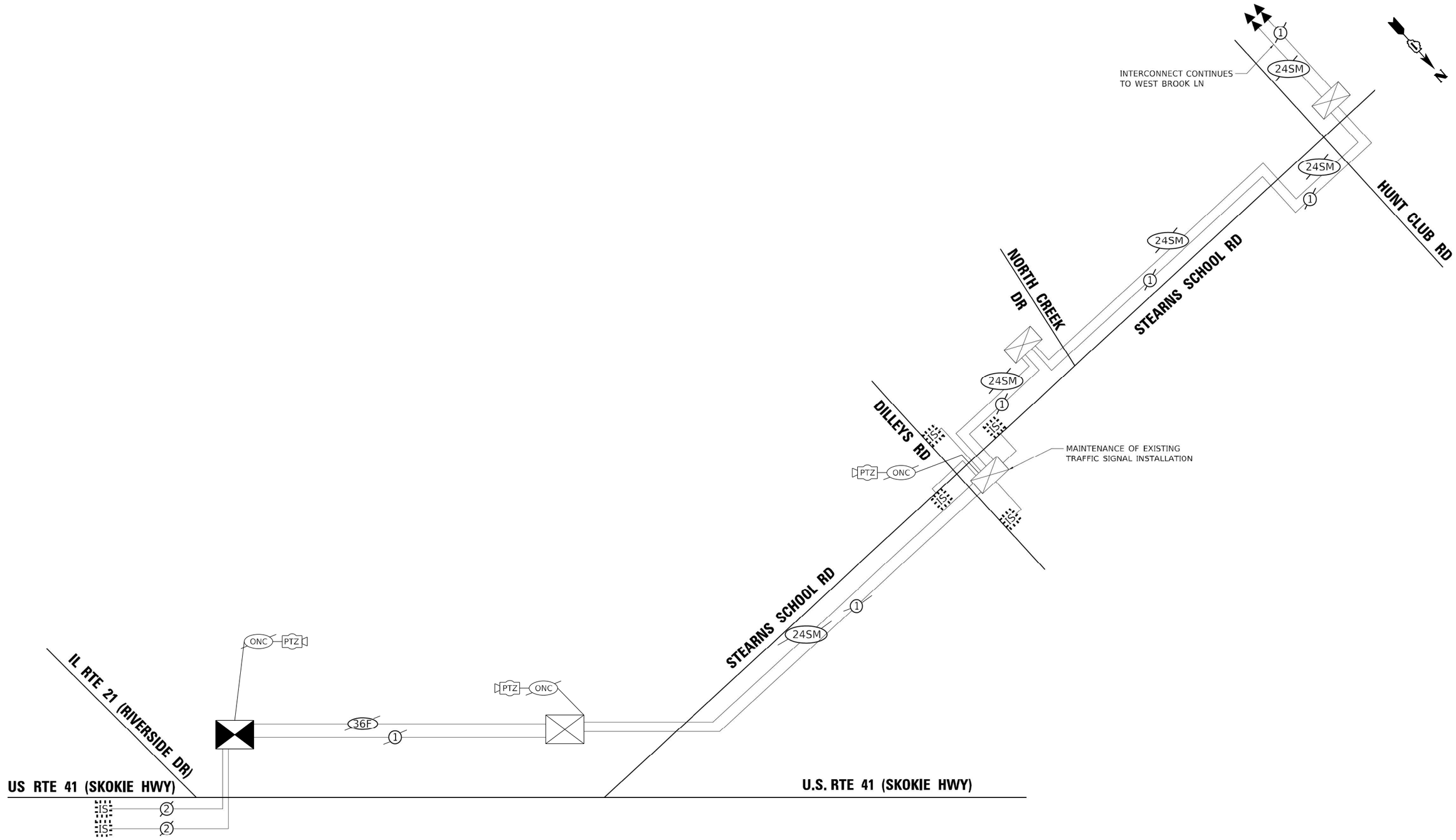
USER NAME = erica.salutz		DESIGNED -	ERICA SALUTZ	REVISED -	
		DRAWN -	KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.		CHECKED -	PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025		DATE -	12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 39 – US RTE 41 AT IL RTE 21

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	92
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		



FOR REFERENCE ONLY

FORMER EAGLE 1K
LAKE COUNTY TACTICS

TS SHT NO. 85

FILE NAME: MA-20193 CHI18403-5500 IDOT FTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_GS_Eagle1K.dgn

TYLin

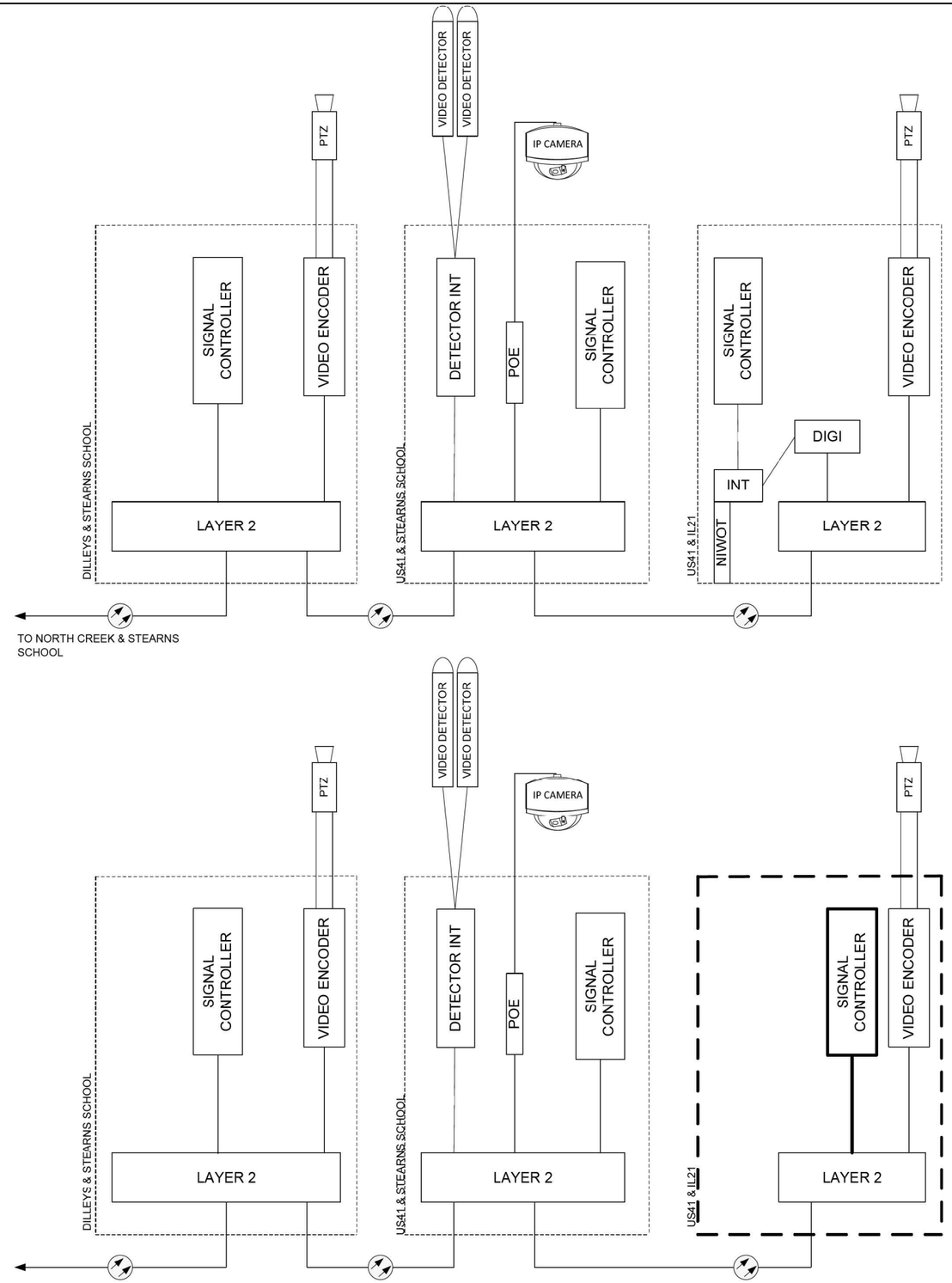
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT SCHEMATIC
US RTE 41 – IL RTE 21 TO STEARNS SCHOOL RD

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	93
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			



CONTROLLER ONLY, NO FIBER WORK

FORMER EAGLE 1K
LAKE COUNTY TACTICS

TS SHT NO. 86

FILE NAME: MS_20193 CHI18-03-5500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eagle1K.dgn

PARSONS

USER NAME = erica.salutz	DESIGNED - RL / DG	REVISED -	
	DRAWN - RL / DG	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - RL / DG	REVISED -	
PLOT DATE = 3/30/2025	DATE - 2025.02.20	REVISED -	

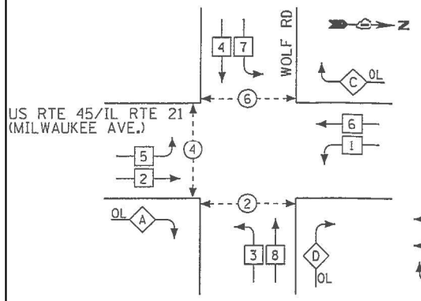
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIBER SPLICE DIAGRAM
US RTE 41 – IL RTE 21 TO STEARNS SCHOOL RD

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	94
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

EXISTING CONTROLLER SEQUENCE



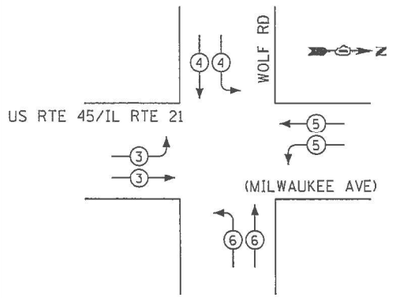
PHASE DESIGNATION DIAGRAM

LEGEND

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

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

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

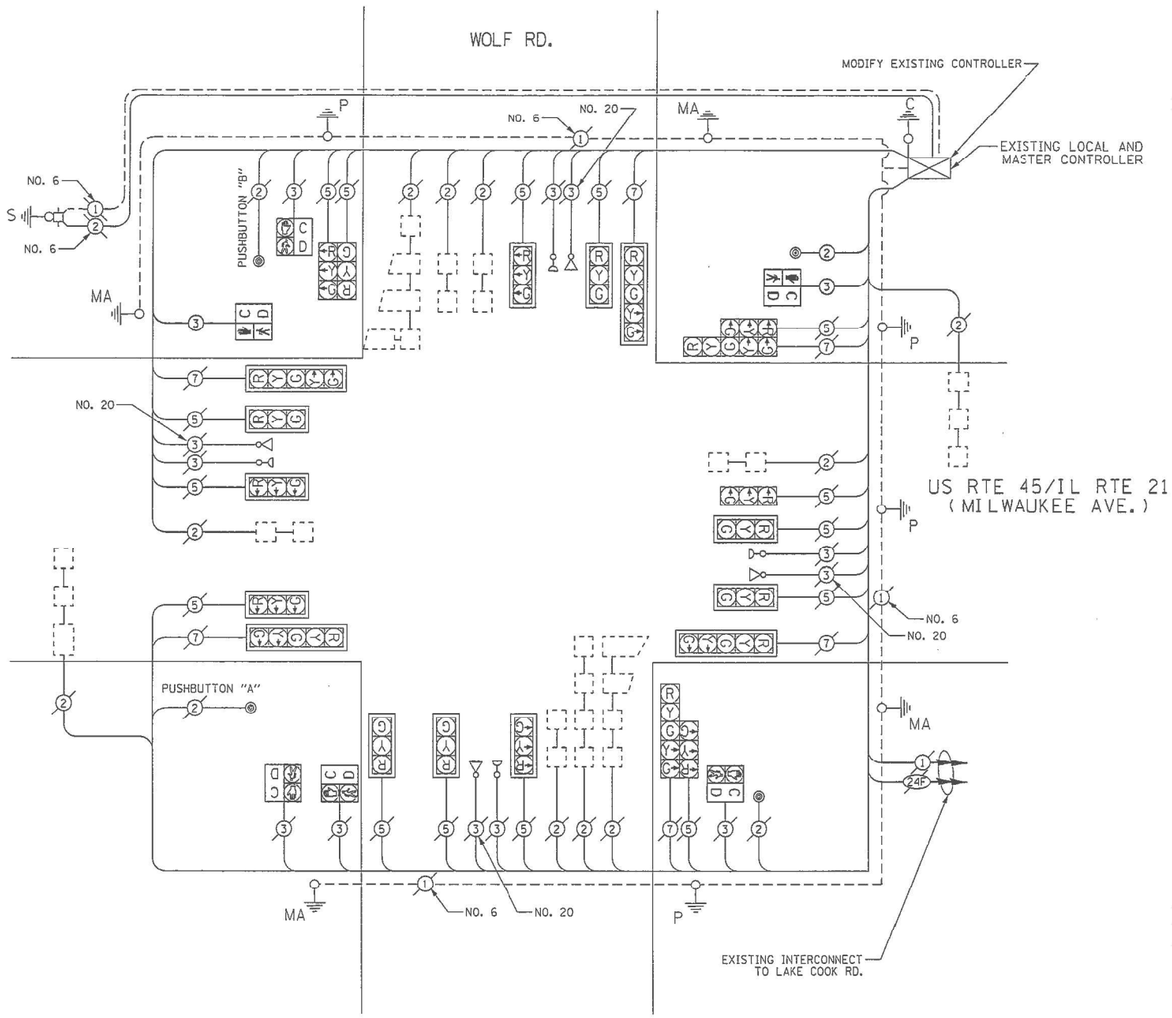


TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	15	11	165
4 - SECTION	-	14	-
5 - SECTION	6	13	78
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	6	15	90
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	-	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			543
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			1148

ENERGY COSTS TO:
VILLAGE OF WHEELING
2 COMMUNITY BOULVARD
WHEELING, IL 60090

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---



CABLE PLAN
(NOT TO SCALE)

REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
TERMINATE FIBER IN CABINET	EACH	12
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
RELOCATE EX LAYER II (DATALINK) SWITCH FROM INVENTORY	EACH	1

TS 1730
FORMER EAGLE 1H
LAKE COUNTY TACTICS

TS SHT NO. 87

FILE NAME: MA_20193 CHI\18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203 62W90\CAD\62W90_Sheet_GS_Eagle1H.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -

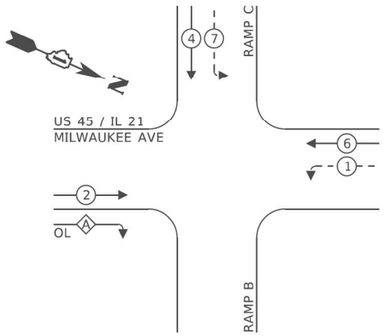
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 40 – US RTE 45/IL RTE 21 AT WOLF RD

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	95
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

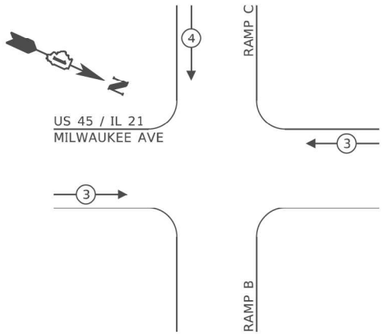
EXISTING CONTROLLER SEQUENCE



LEGEND:

- PROTECTED PHASE
- PROTECTED/PERMITTED PHASE
- PEDESTRIAN PHASE
- OVERLAP

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	14	11	154
4 - SECTION	-	14	-
5 - SECTION	2	13	26
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			390
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			995

ENERGY COSTS TO:
VILLAGE OF WHEELING
2 COMMUNITY BOULVARD
WHEELING, IL 60090

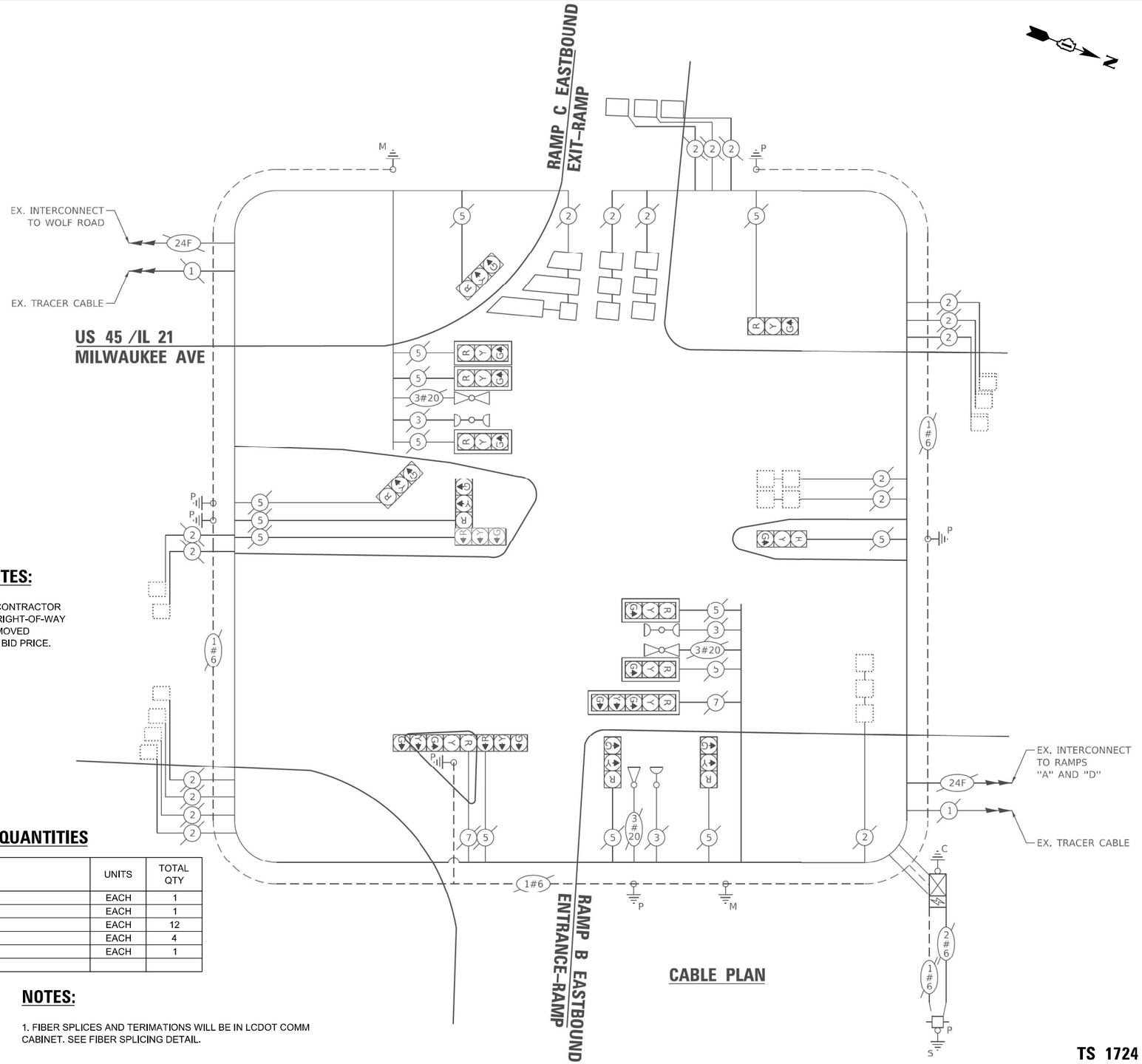
ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
TERMINATE FIBER IN CABINET	EACH	12
SPLICE FIBER IN CABINET	EACH	4
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1

NOTES:

1. FIBER SPLICES AND TERIMATIONS WILL BE IN LCDOT COMM CABINET. SEE FIBER SPLICING DETAIL.



CABLE PLAN

TS 1724
FORMER EAGLE 1H
LAKE COUNTY TACTICS

TS SHT NO. 88

FILE NAME: MH_20193 CHI(18-03-5500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eagle1H.dgn

TYLin

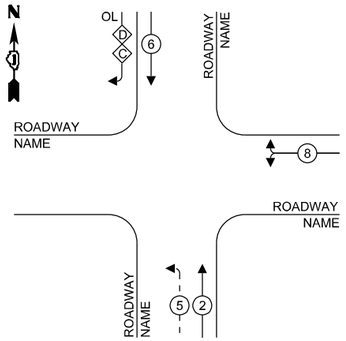
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 41 – US RTE 45/IL RTE 21 AT LAKE–COOK RD EB RAMPS (B–C)
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	96
		CONTRACT NO. 62W90		
		ILLINOIS	FED. AID PROJECT	

EXISTING CONTROLLER SEQUENCE



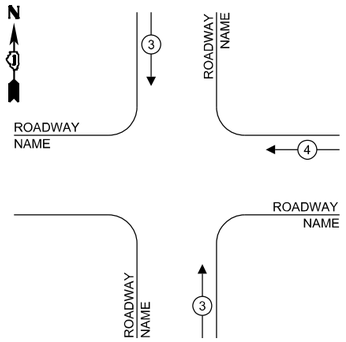
LEGEND:

- PROTECTED PHASE
- PROTECTED/PERMITTED PHASE
- PEDESTRIAN PHASE
- OVERLAP (OL)

RIGHT TURN OVERLAP PHASE DESIGNATION:

OVERLAP LETTER		PERMISSIVE PHASE		PROTECTED PHASE
OLC	=	6	+	8 (3 SEC)
OLD	=	6	+	8 - 6Y

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

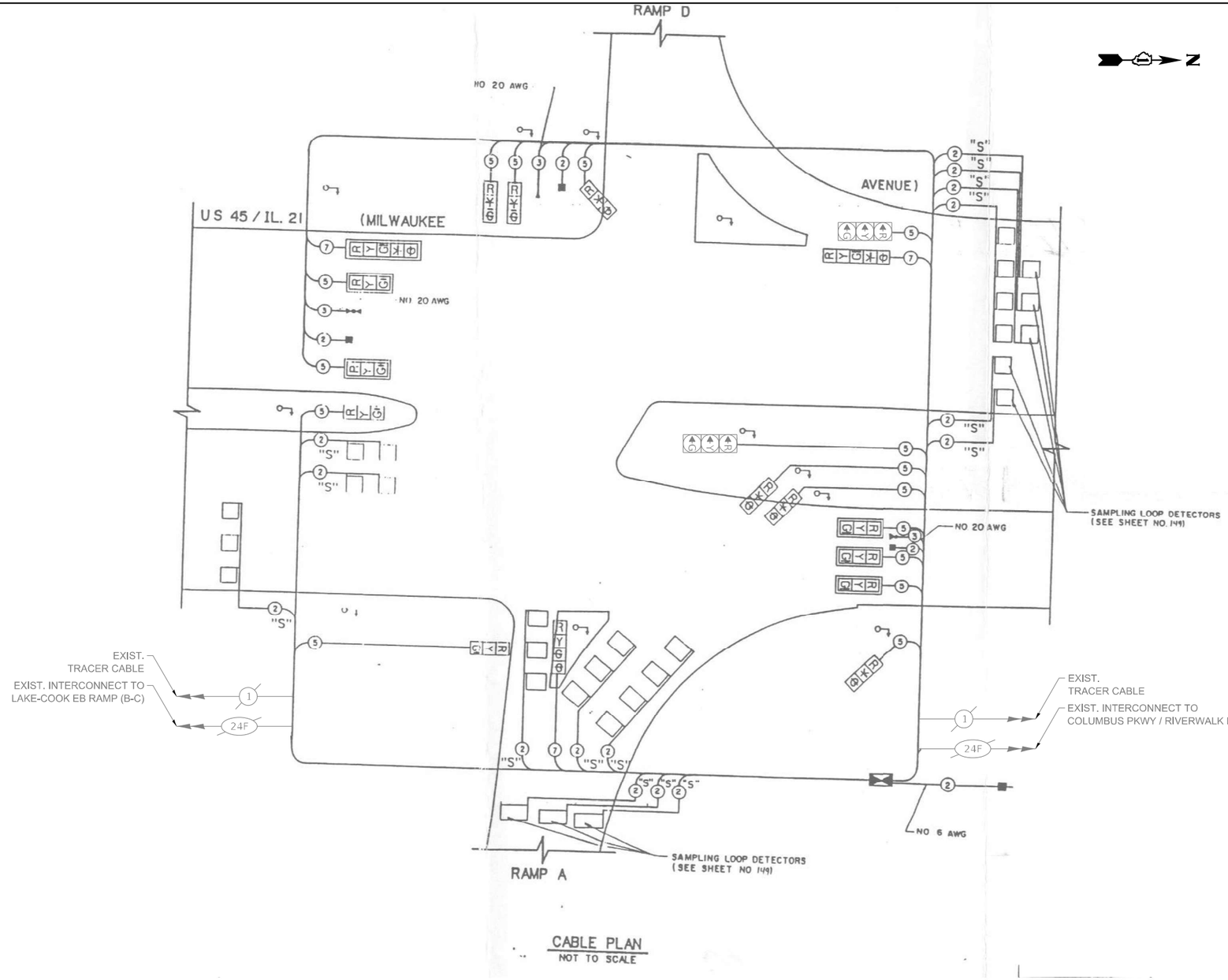


TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	15	11	165
4 - SECTION	1	14	14
5 - SECTION	2	13	26
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			415
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			1020

ENERGY COSTS TO:
VILLAGE OF WHEELING
2 COMMUNITY BOULVARD
WHEELING, IL 60090

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---



CABLE PLAN
NOT TO SCALE

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
TERMINATE FIBER IN CABINET	EACH	8
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
RELOCATE EX LAYER II (DATALINK) SWITCH FROM INVENTORY	EACH	1

REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER

TS 1726
FORMER EAGLE 1H
LAKE COUNTY TACTICS

TS SHT NO. 89

FILE NAME: M:\2019\3 CMI\18-03-5560 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203-62W90\CAD\62W90_Sheet_05_Eagle1H.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -

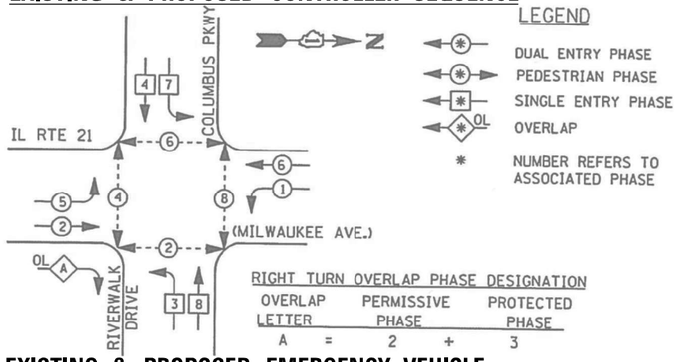
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 42 – US RTE 45/IL RTE 21 AT LAKE-COOK RD WB RAMPS (A–D)

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	97
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

EXISTING & PROPOSED CONTROLLER SEQUENCE



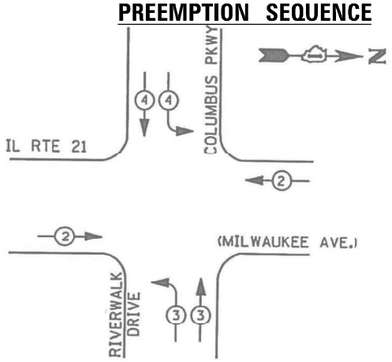
LEGEND

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

RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER		PERMISSIVE PHASE		PROTECTED PHASE
A	=	2	+	3

EXISTING & PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMPTION SEQUENCE

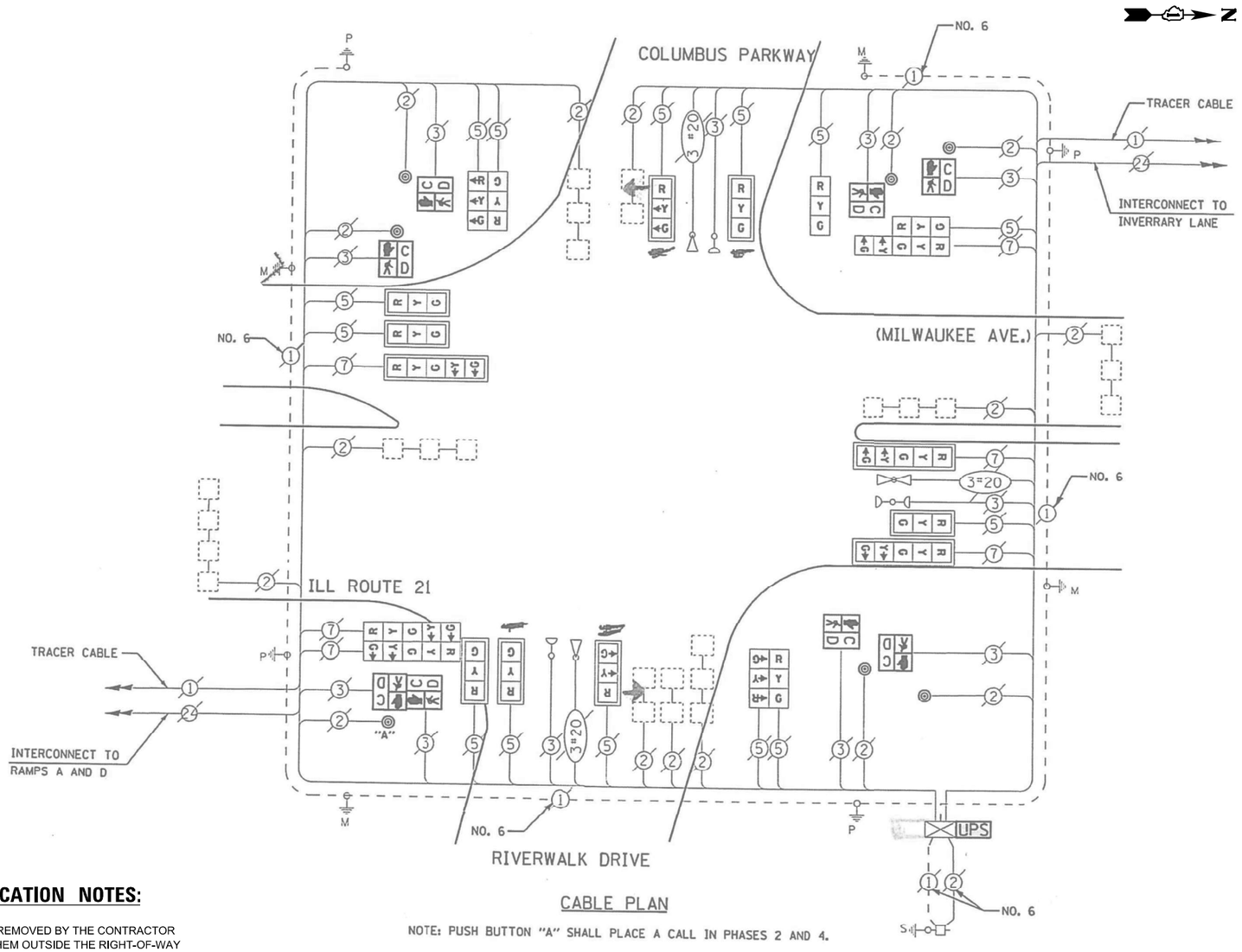
EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	2	3	4
MOVEMENT	← →	↑ →	↓ →

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	14	11	154
4 - SECTION	-	14	-
5 - SECTION	6	13	78
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	8	15	120
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			562
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			1167

ENERGY COSTS TO:
VILLAGE OF BUFFALO GROVE
50 RAUPP BLVD
BUFFALO GROVE, IL 60089

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---



CABLE PLAN

NOTE: PUSH BUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4.

REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
TERMINATE FIBER IN CABINET	EACH	8
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
RELOCATE EX LAYER II (DATALINK) SWITCH FROM INVENTORY	EACH	1

TS SHT NO. 90

TS 20995
FORMER EAGLE 1H
LAKE COUNTY TACTICS

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

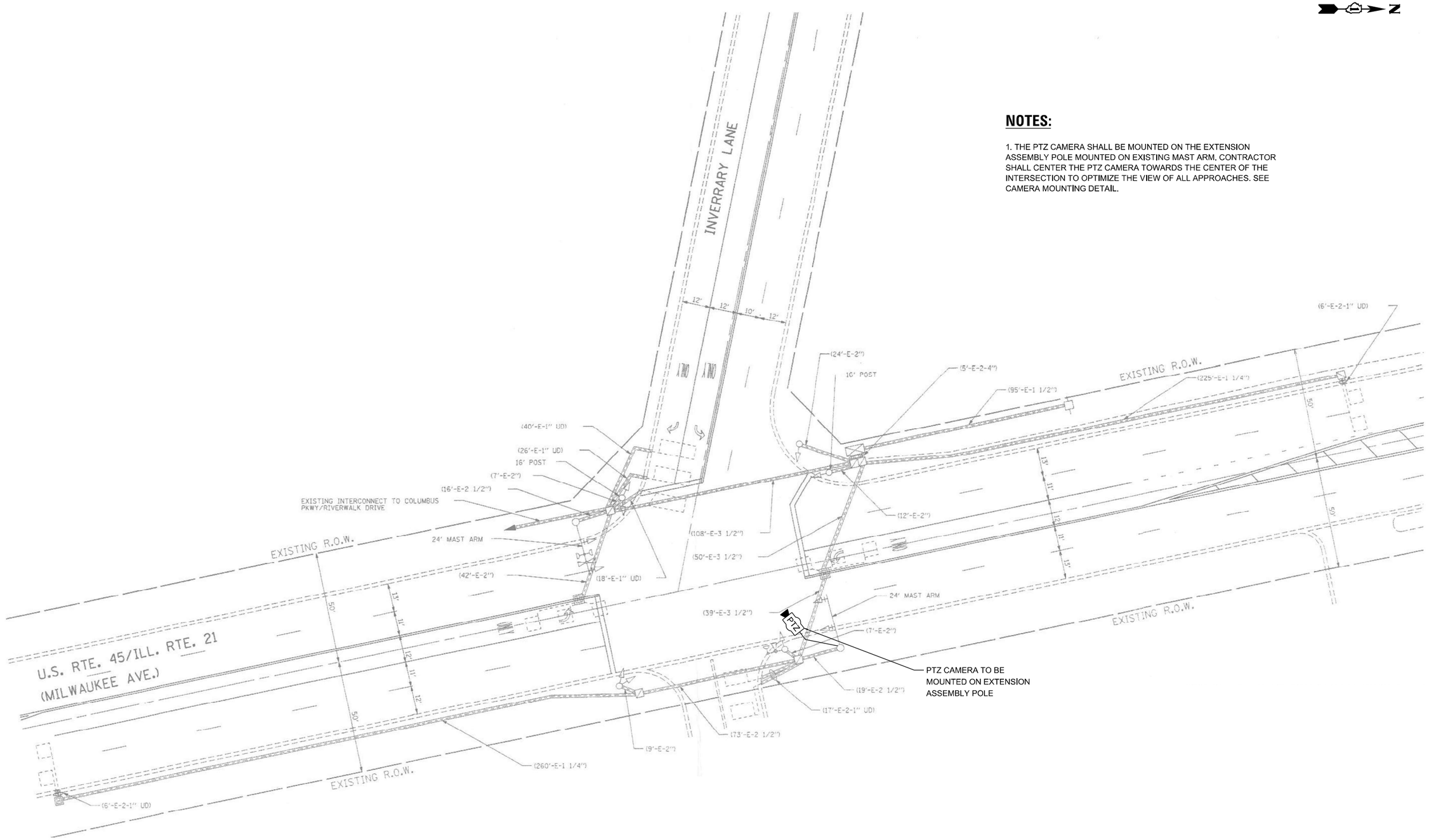
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 43 – US RTE 45/IL RTE 21 AT COLUMBUS PKWY/RIVERWALK DR

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	98
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

FILE NAME: //dc1-prod-fs01/Projects/2019/3 Chtl/19-03-5500 IDOT PTB 199 - Various Traffic Signal Design/Graphics/WO 203 #2W90/CAD/62W90_Sheet_03_Eagle1H.dgn



NOTES:

1. THE PTZ CAMERA SHALL BE MOUNTED ON THE EXTENSION ASSEMBLY POLE MOUNTED ON EXISTING MAST ARM. CONTRACTOR SHALL CENTER THE PTZ CAMERA TOWARDS THE CENTER OF THE INTERSECTION TO OPTIMIZE THE VIEW OF ALL APPROACHES. SEE CAMERA MOUNTING DETAIL.

TS 6660
FORMER EAGLE 1H
LAKE COUNTY TACTICS

TS SHT NO. 91

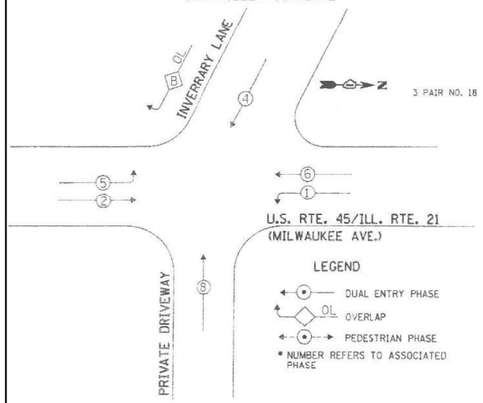
FILE NAME: M:_20193 CHI\18-03-5500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eagle1H.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED - 05/08/2025	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**SIGNAL PLAN** **LOCATION 44 – US RTE 45/IL RTE 21 AT INVERRARY LN**	
	DRAWN - KATHLEEN MURPHY	REVISED -			
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -			
PLOT DATE = 5/6/2025	DATE - 12/20/2024	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.	

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	99
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

CONTROLLER SEQUENCE

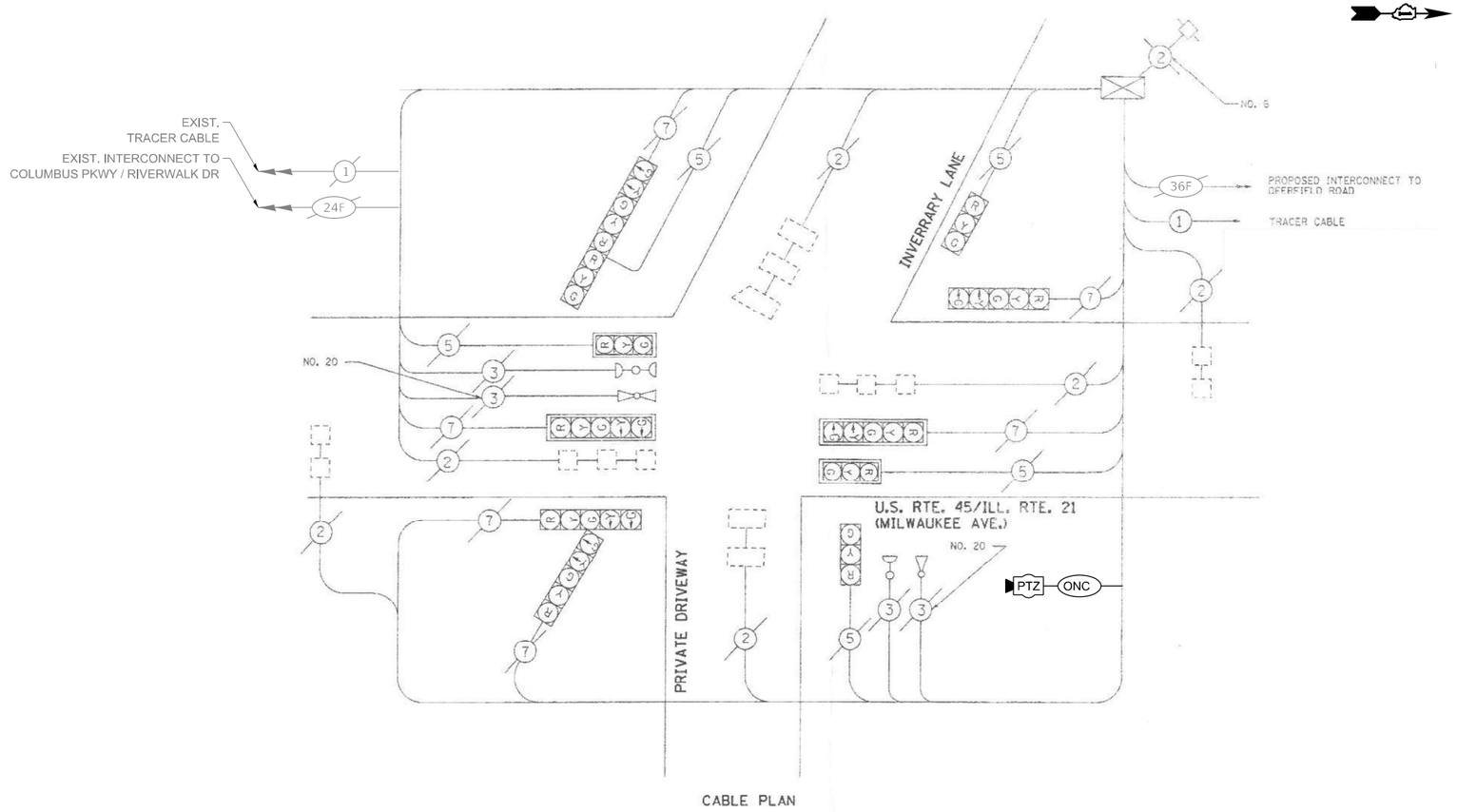


EXISTING PHASE DESIGNATION DIAGRAM

OVERLAP LETTER	=	PERMISSIVE PHASE	+	PROTECTED PHASE
B	=	4	+	5

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

PROPOSED EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	⟶	↓



CABLE PLAN

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	4	11	44
4 - SECTION	-	14	-
5 - SECTION	6	13	78
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			332
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			937

ENERGY COSTS TO:
VILLAGE OF WHEELING
2 COMMUNITY BOULVARD
WHEELING, IL 60090

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	194
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
TERMINATE FIBER IN CABINET	EACH	8
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
CAMERA MOUNTING ASSEMBLY	EACH	1
RELOCATE EX LAYER II (DATALINK) SWITCH FROM INVENTORY	EACH	1

TS SHT NO. 92

TS 6660
FORMER EAGLE 1H
LAKE COUNTY TACTICS

FILE NAME: MX_20193 CHI:18403-5500 IDOT_PTB_190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_65_EagleHH.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -

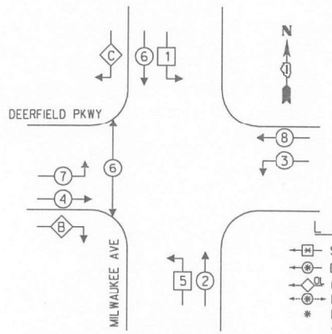
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 44 – US RTE 45/IL RTE 21 AT INVERRARY LN

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	100
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

CONTROLLER SEQUENCE



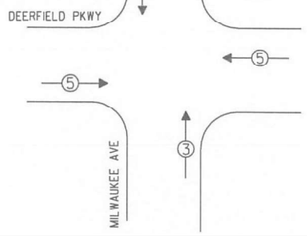
LEGEND

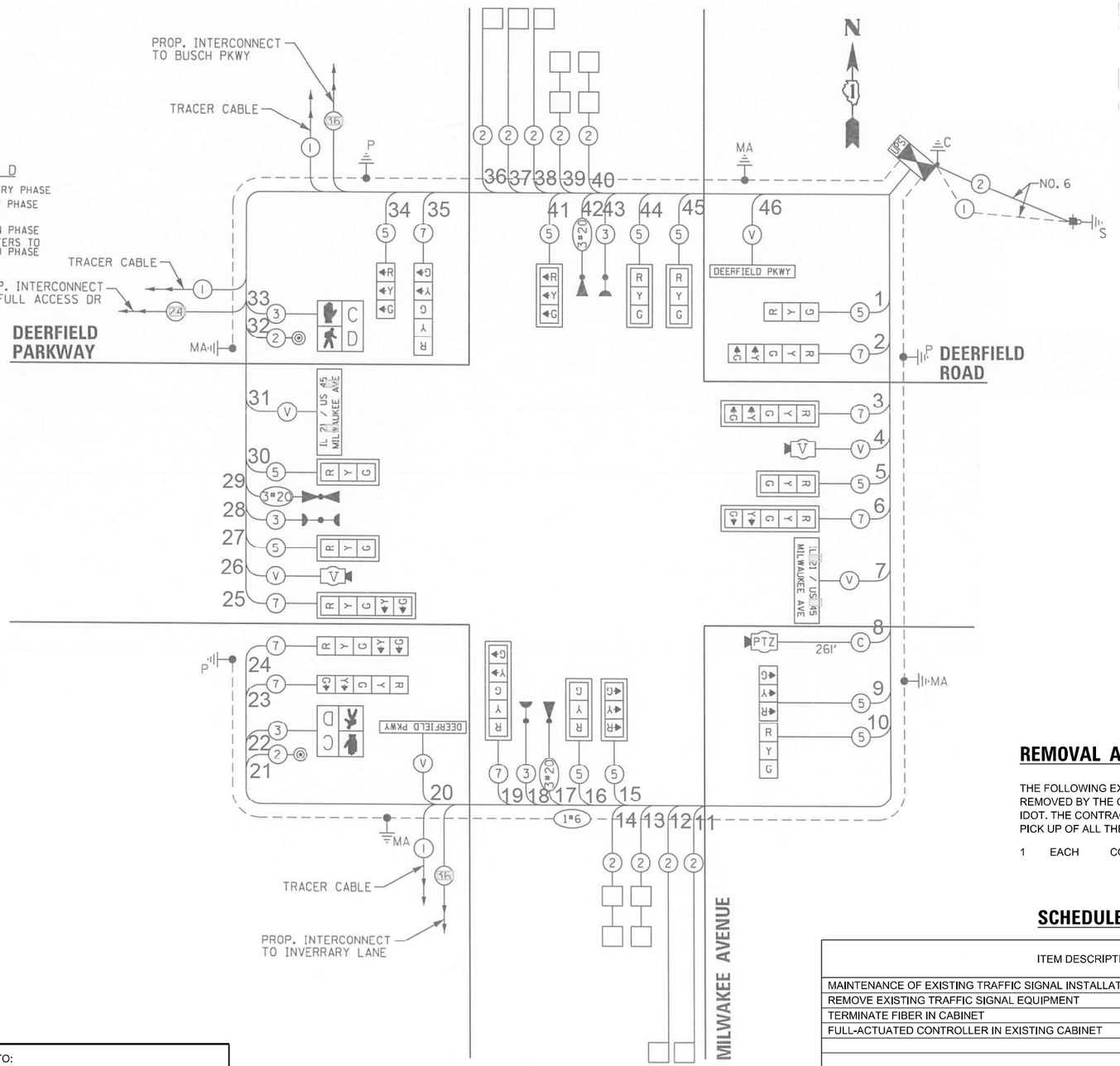
- SINGLE ENTRY PHASE
- DUAL ENTRY PHASE
- OVERLAP
- PEDESTRIAN PHASE
- * NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

OVERLAP LETTER		PERMISIVE PHASE		PROTECTED PHASE
B	=	4	+	5
C	=	6	+	7

EMERGENCY VEHICLE PREEMPTION SEQUENCE





CABLE PLAN

NOT TO SCALE

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	12	11	132
4 - SECTION	-	14	-
5 - SECTION	8	13	104
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	2	15	30
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	2	20	40
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			332
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			937

ENERGY COSTS TO:
VILLAGE OF BUFFALO GROVE
50 RAUPP BLVD
BUFFALO GROVE, IL 60089

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

REMOVAL AND RELOCATION NOTES:

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF IDOT. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR THE PICK UP OF ALL THE EQUIPMENT TO BE RETURNED TO IDOT.

1 EACH CONTROLLER

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
TERMINATE FIBER IN CABINET	EACH	10
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1

TS SHT NO. 93

TS 6650
FORMER EAGLE 1H
LAKE COUNTY TACTICS

FILE NAME: M:\2019\3 CHI\18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90 Sheet_05_Eagle1H.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -

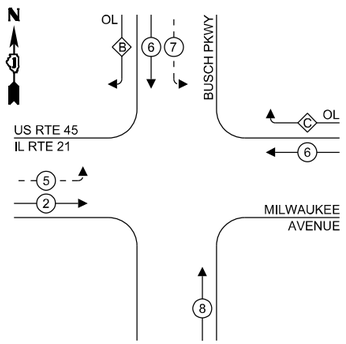
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 45 – US RTE 45&1L RTE 21 AT DEERFIELD ROAD

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	101
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

EXISTING CONTROLLER SEQUENCE



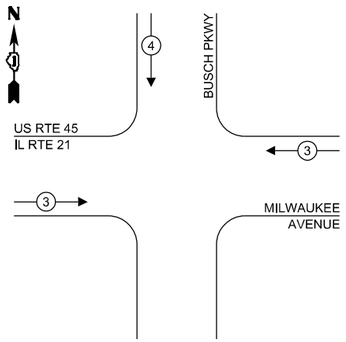
LEGEND:

- PROTECTED PHASE
- PROTECTED/PERMITTED PHASE
- PEDESTRIAN PHASE
- OVERLAP

RIGHT TURN OVERLAP PHASE DESIGNATION:

OVERLAP LETTER		PERMISSIVE PHASE		PROTECTED PHASE
B	=	7	+	5
C	=	6	+	7

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

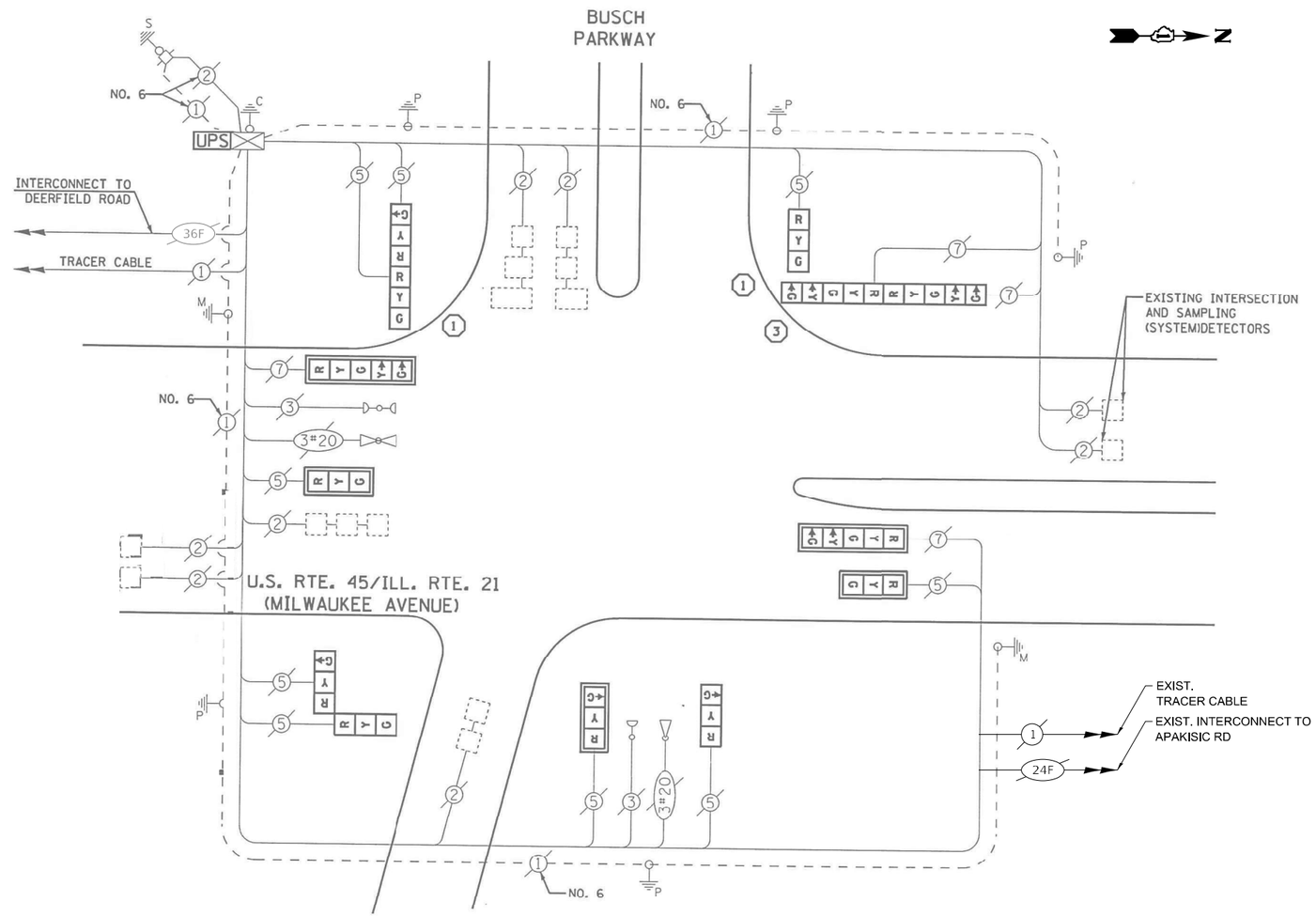


TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	9	11	99
4 - SECTION	-	14	-
5 - SECTION	4	13	52
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			361
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			966

ENERGY COSTS TO:
VILLAGE OF WHEELING
2 COMMUNITY BOULVARD
WHEELING, IL 60090

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---



SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
TERMINATE FIBER IN CABINET	EACH	8
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
RELOCATE EX LAYER II (DATALINK) SWITCH FROM INVENTORY	EACH	1

REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER

TS 6680
FORMER EAGLE 1H
LAKE COUNTY TACTICS

TS SHT NO. 94

FILE NAME: M:\ 20\93 CHI\18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_03_EagleTH.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED - 05/08/2025
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 5/6/2025	DATE - 12/20/2024	REVISED -

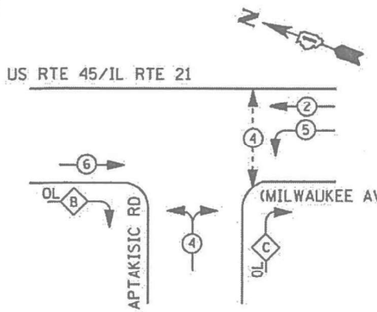
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 46 – US RTE 45/IL RTE 21 AT BUSCH PKWY

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	102
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

CONTROLLER SEQUENCE



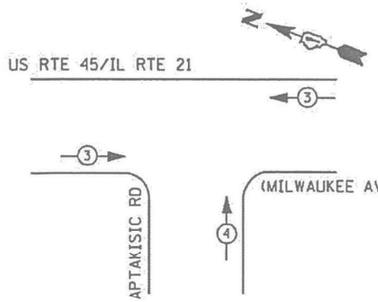
PHASE DESIGNATION DIAGRAM

LEGEND

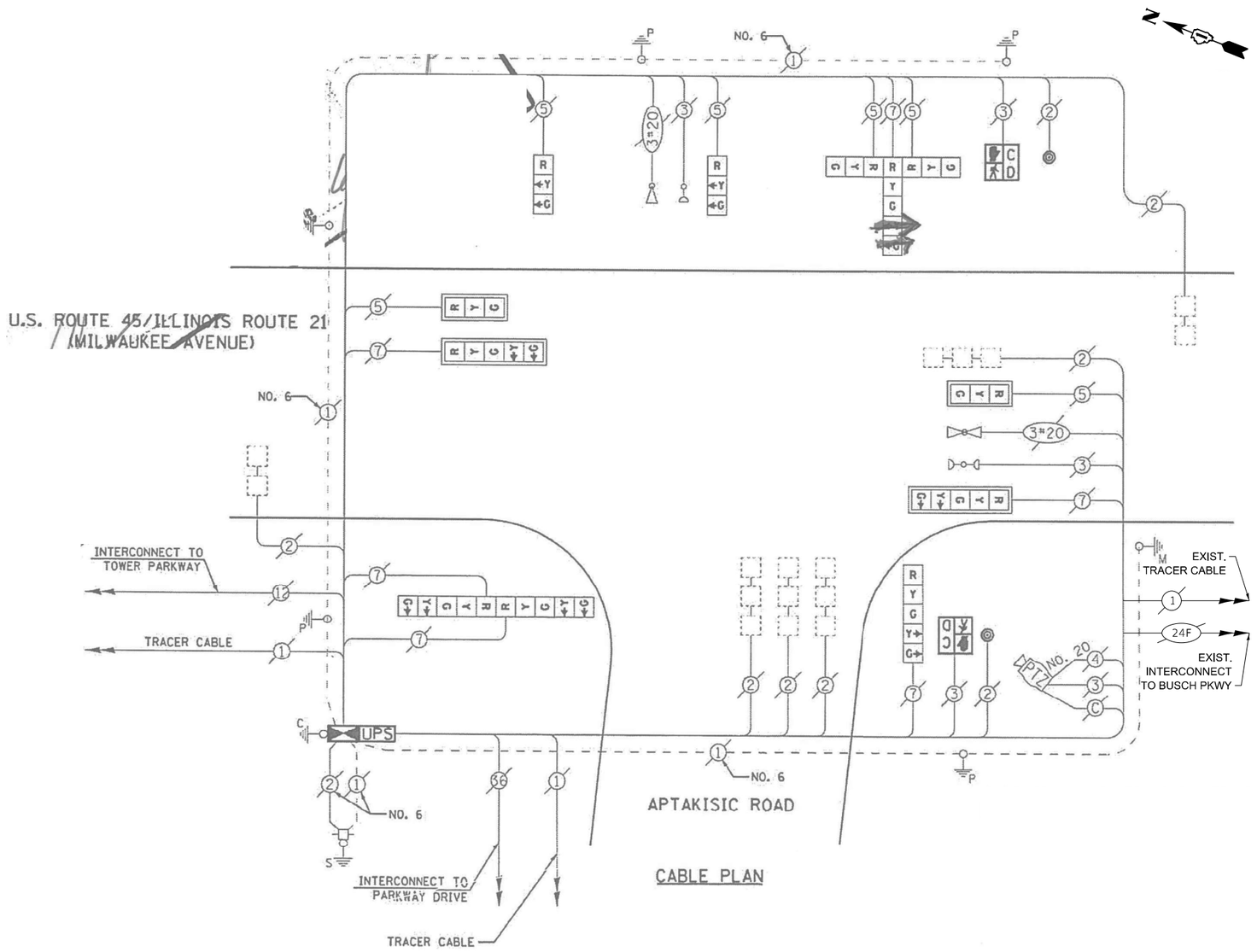
- DUAL ENTRY PHASE
- PEDESTRIAN PHASE
- SINGLE ENTRY PHASE
- OVERLAP
- * NUMBER REFERS TO ASSOCIATED PHASE

RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER		PERMISSIVE PHASE		PROTECTED PHASE
B	=	6	+	
C	=	4	+	5



EMERGENCY VEHICLE PREEMPTION SEQUENCE



TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	6	11	66
4 - SECTION	-	14	-
5 - SECTION	6	13	78
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	2	15	30
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			384
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	-
PTZ CAMERA	1	75	75
TOTAL SERVICE WIRE SIZING =			1064

ENERGY COSTS TO:
VILLAGE OF WHEELING
2 COMMUNITY BOULVARD
WHEELING, IL 60090

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TERMINATE FIBER IN CABINET	EACH	10

TS 6630
FORMER EAGLE 1H
LAKE COUNTY TACTICS

TS SHT NO. 95

FILE NAME: M:\2019\3 CH\18-43-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203 - 62W90\CAD\62W90_Sheet_03_Eagle1H.dgn

TYLin

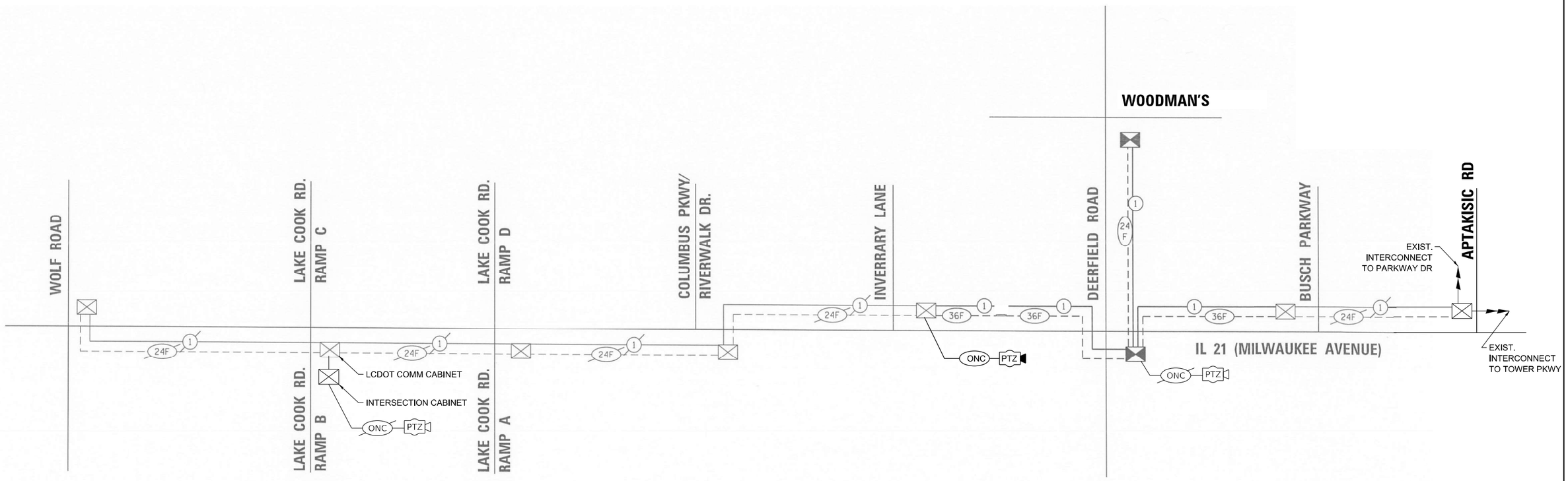
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 47 – US RTE 45/L RTE 21 AT APTAKISIC RD

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	103
		CONTRACT NO. 62W90		
		ILLINOIS	FED. AID PROJECT	



NOTES:

1. OPTIMIZATION TO INCLUDE INTERSECTIONS FROM FORMER 9L SYSTEM.

US 45-IL 21 (MILWAUKEE) & WOLF RD
US 45-IL 21 (MILWAUKEE) & LAKE-COOK S RAMP B-C
US 45-IL 21 (MILWAUKEE) & LAKE-COOK N RAMP A-D
US 45-IL 21 & COLUMBUS PKWY/RIVERWALK DR
US 45-IL 21 (MILWAUKEE) & INVERRARY LN
US 45-IL 21 (MILWAUKEE) & DEERFIELD LK
US 45-IL 21 (MILWAUKEE) & BUSCH PKWY
US 45-IL 21 (MILWAUKEE) & APTAKISIC RD

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
OPTIMIZE TRAFFIC SIGNAL SYSTEM	EACH	1

FORMER EAGLE 1H
LAKE COUNTY TACTICS

TS SHT NO. 96

FILE NAME: Mp 2019.3 CHN 18-03-5500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203 #2W90\CAD\62W90_Sheet_03_Eagle1H.dgn

TYLin

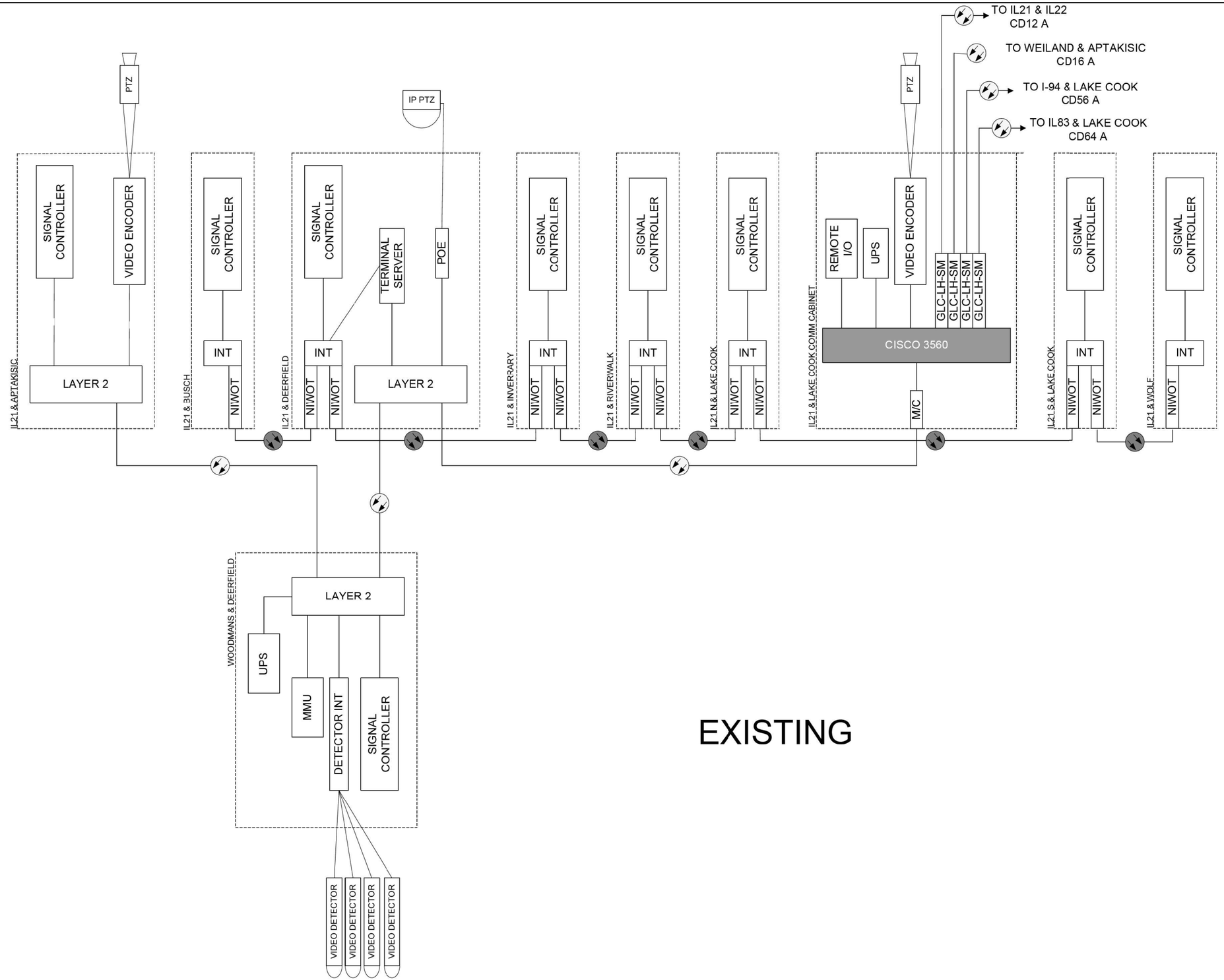
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED - 05/08/2025	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 5/6/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT SCHEMATIC
US RTE 45 /IL RTE 21 – WOLF RD TO APTAKISIC RD

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	104
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		



EXISTING

TS SHT NO. 97

FILE NAME: Mst_20193_CHI_18-03-5500_IDOT_PTB_190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eagle H.dgn

FORMER EAGLE 1H
LAKE COUNTY TACTICS

PARSONS

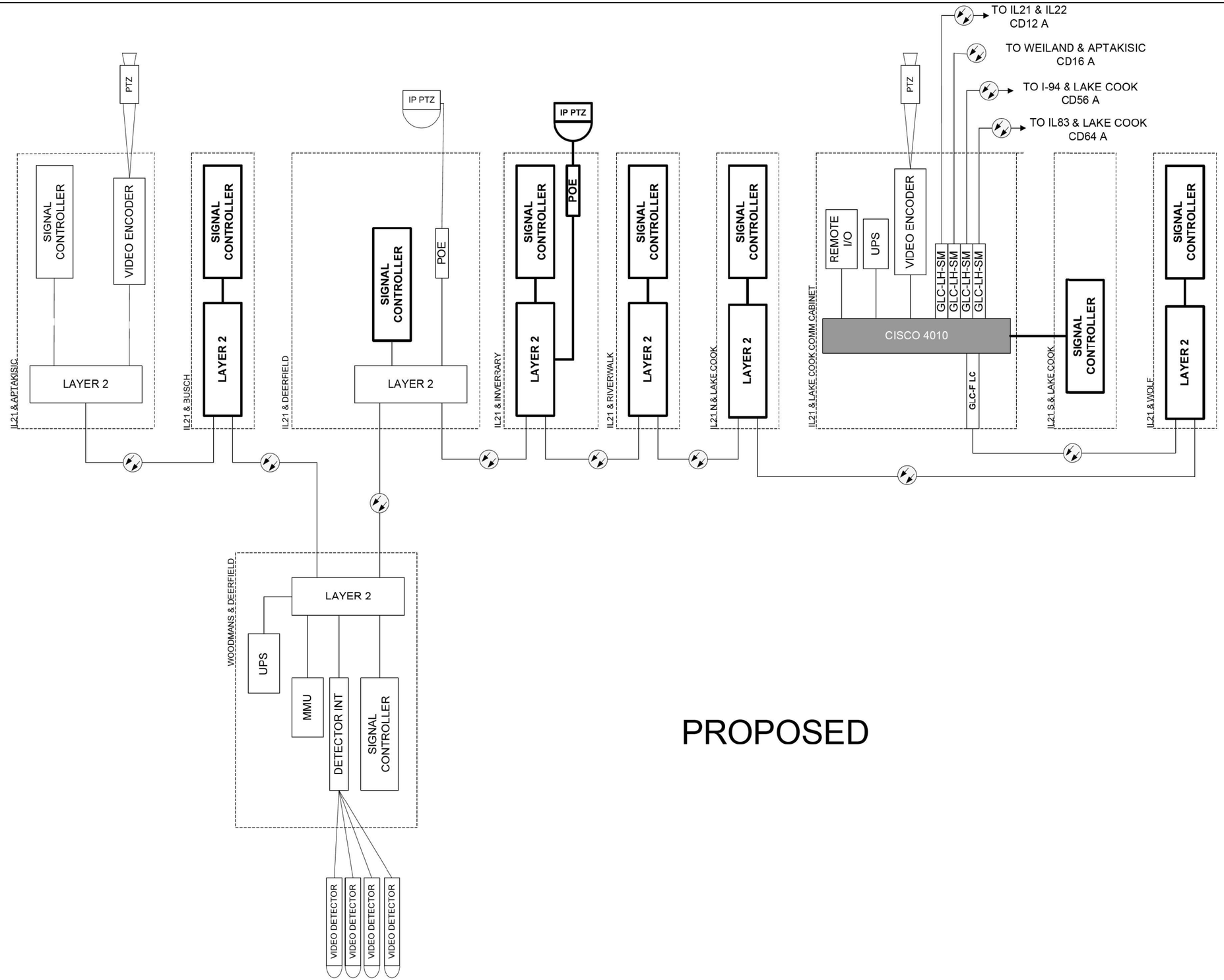
USER NAME = erica.salutz	DESIGNED - RL / DG	REVISED -	
	DRAWN - RL / DG	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - RL / DG	REVISED -	
PLOT DATE = 3/30/2025	DATE - 2025.02.20	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABINET DETAIL
US RTE 45 /IL RTE 21 – WOLF RD TO BUSCH PKWY

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	105
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			



PROPOSED

FORMER EAGLE 1H
LAKE COUNTY TACTICS

TS SHT NO. 98

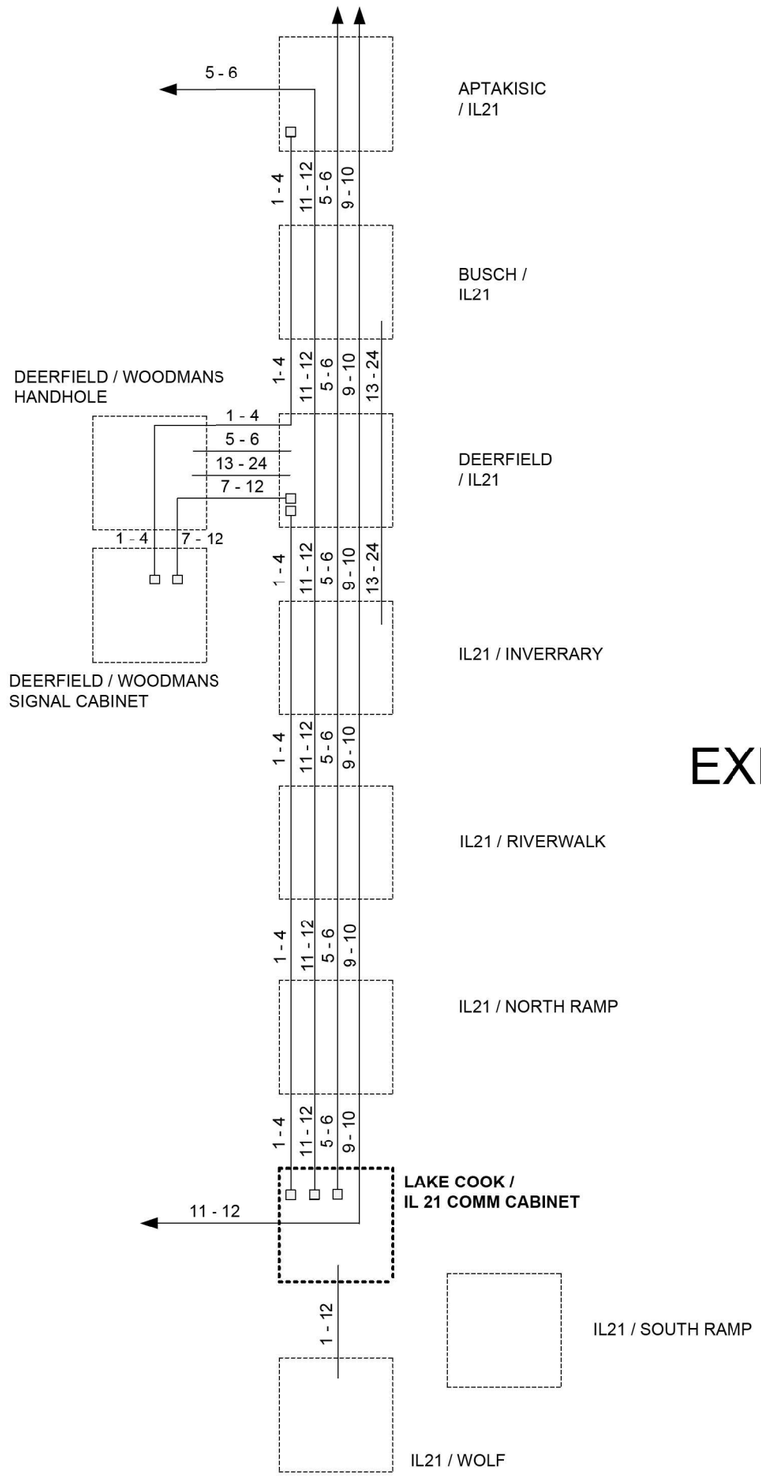
FILE NAME: Mst_20193_CHI.18-03-5500_IDOT_PTB_190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eagle1H.dgn

PARSONS	USER NAME = erica.salutz	DESIGNED - RL / DG	REVISED -	**STATE OF ILLINOIS** **DEPARTMENT OF TRANSPORTATION**
		DRAWN - RL / DG	REVISED -	
	PLOT SCALE = 40.0000 ' / in.	CHECKED - RL / DG	REVISED -	
	PLOT DATE = 3/30/2025	DATE - 2025.02.20	REVISED -	

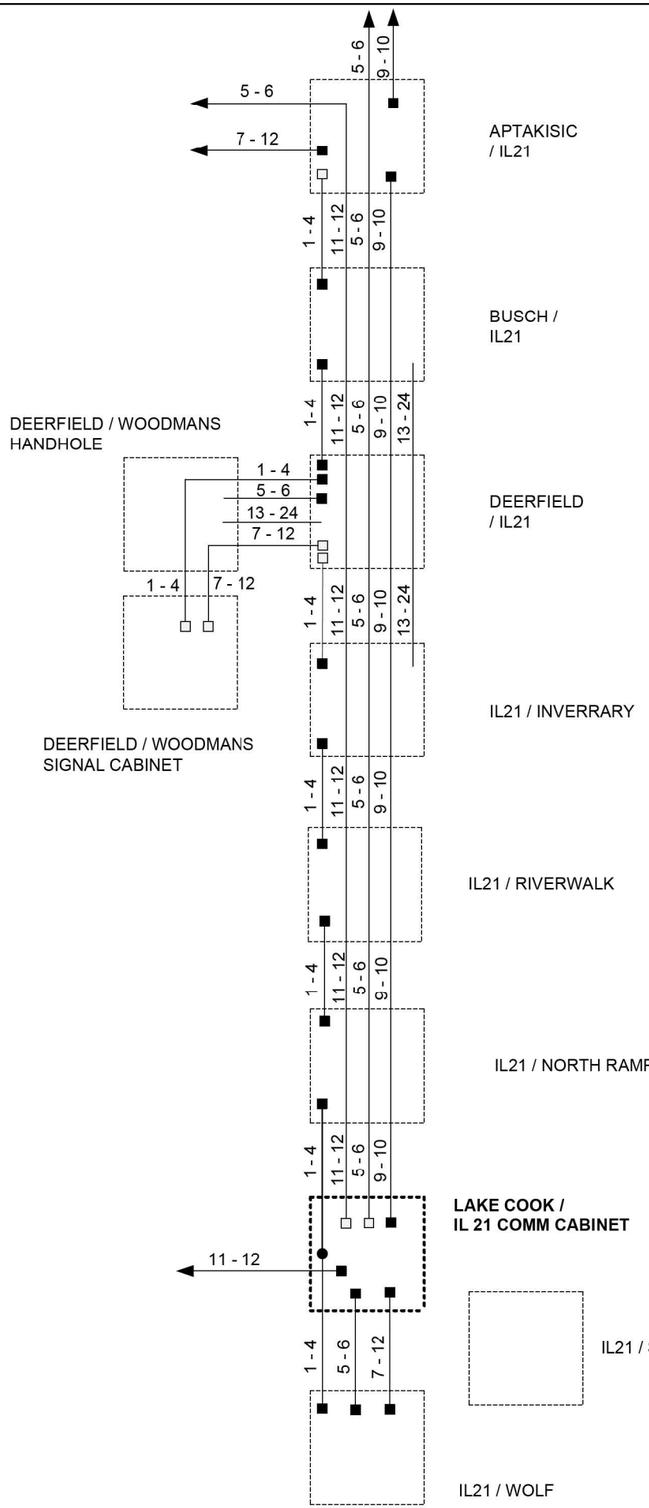
CABINET DETAIL
US RTE 45 /IL RTE 21 – WOLF RD TO BUSCH PKWY

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	106
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		



EXISTING



PROPOSED

FORMER EAGLE 1H
LAKE COUNTY TACTICS

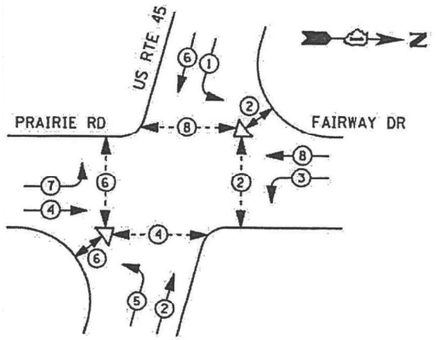
TS SHT NO. 99

FILE NAME: NS_20193 CMIL18-03-5500 IDOT_PTB_199 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eagle1H.dgn

PARSONS	USER NAME = erica.salutz	DESIGNED - RL / DG	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FIBER SPLICE DIAGRAM US RTE 45 /IL RTE 21 – WOLF RD TO BUSCH PKWY
		DRAWN - RL / DG	REVISED -		
	PLOT SCALE = 40.0000 ' / in.	CHECKED - RL / DG	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.
	PLOT DATE = 3/30/2025	DATE - 2025.02.20	REVISED -		

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	107
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

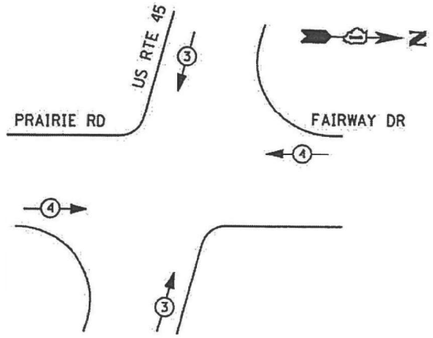
CONTROLLER SEQUENCE



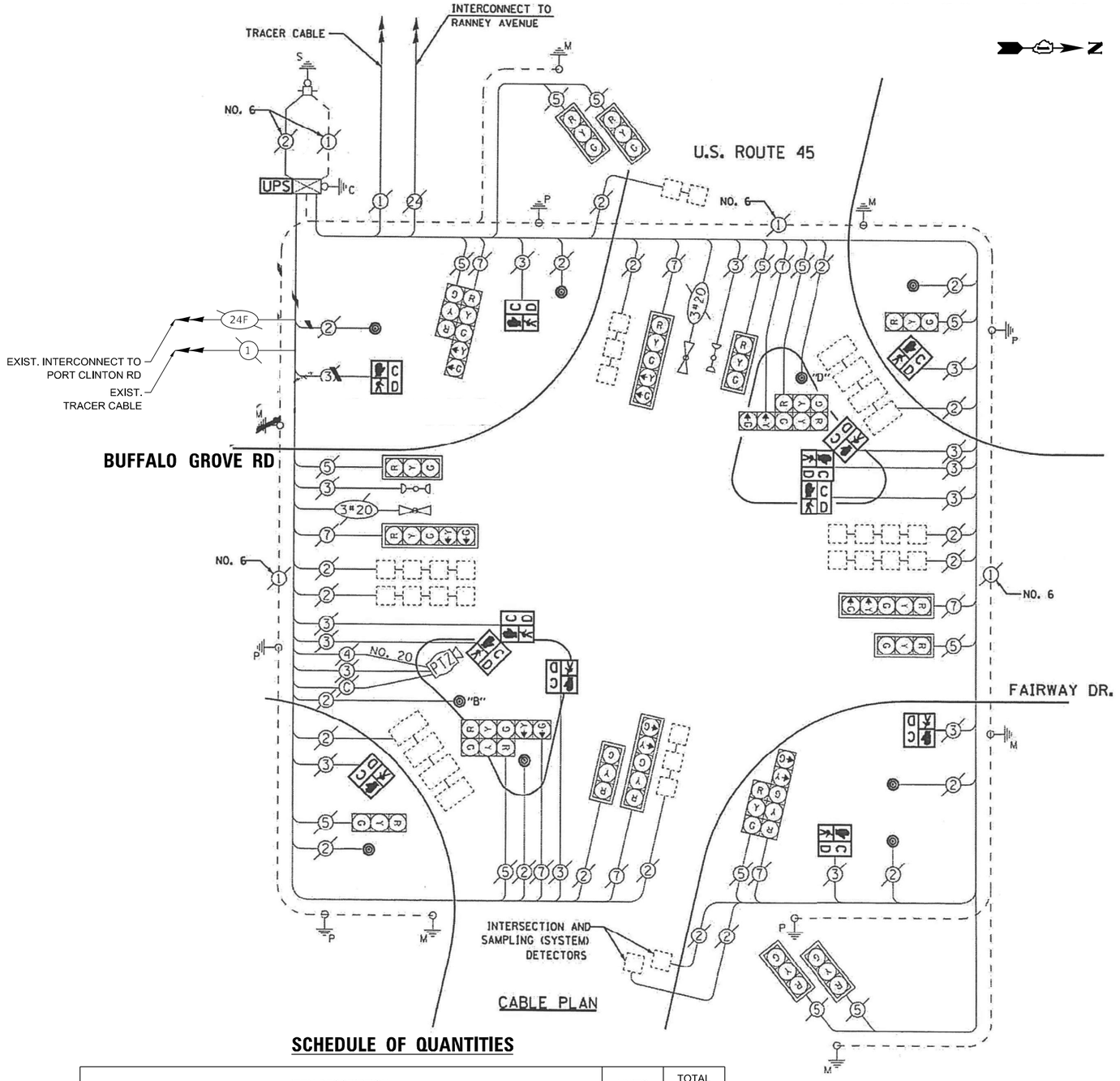
LEGEND

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

PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTION SEQUENCE



CABLE PLAN

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	14	11	154
4 - SECTION	-	14	-
5 - SECTION	8	13	104
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	12	15	180
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			648
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			1253

REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER

ENERGY COSTS TO:
VILLAGE OF VERNON HILLS
290 EVERGREEN DRIVE
VERNON HILLS, IL 60061

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1

NOTES:
PUSH BUTTON "B" SHALL PLACE A CALL IN PHASED 4 AND 6
PUSH BUTTON "D" SHALL PLACE A CALL IN PHASED 2 AND 8

TS 6658
FORMER EAGLE 4M
LAKE COUNTY TACTICS

TS SHT NO. 100

FILE NAME: M:_20193 CHR\18-03-5500 ROOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90 Sheet 05 Esh.dgn

TYLin

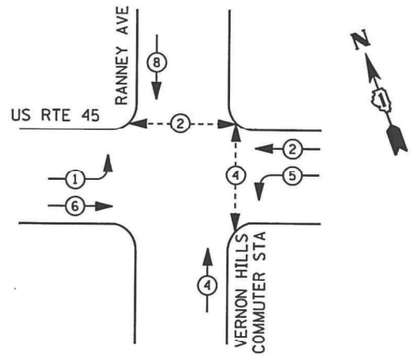
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 48 – US RTE 45 AT BUFFALO GROVE RD /FAIRWAY DR
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	108
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

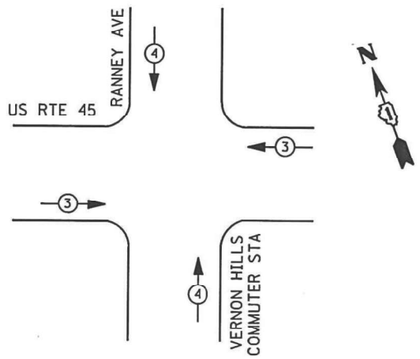
CONTROLLER SEQUENCE



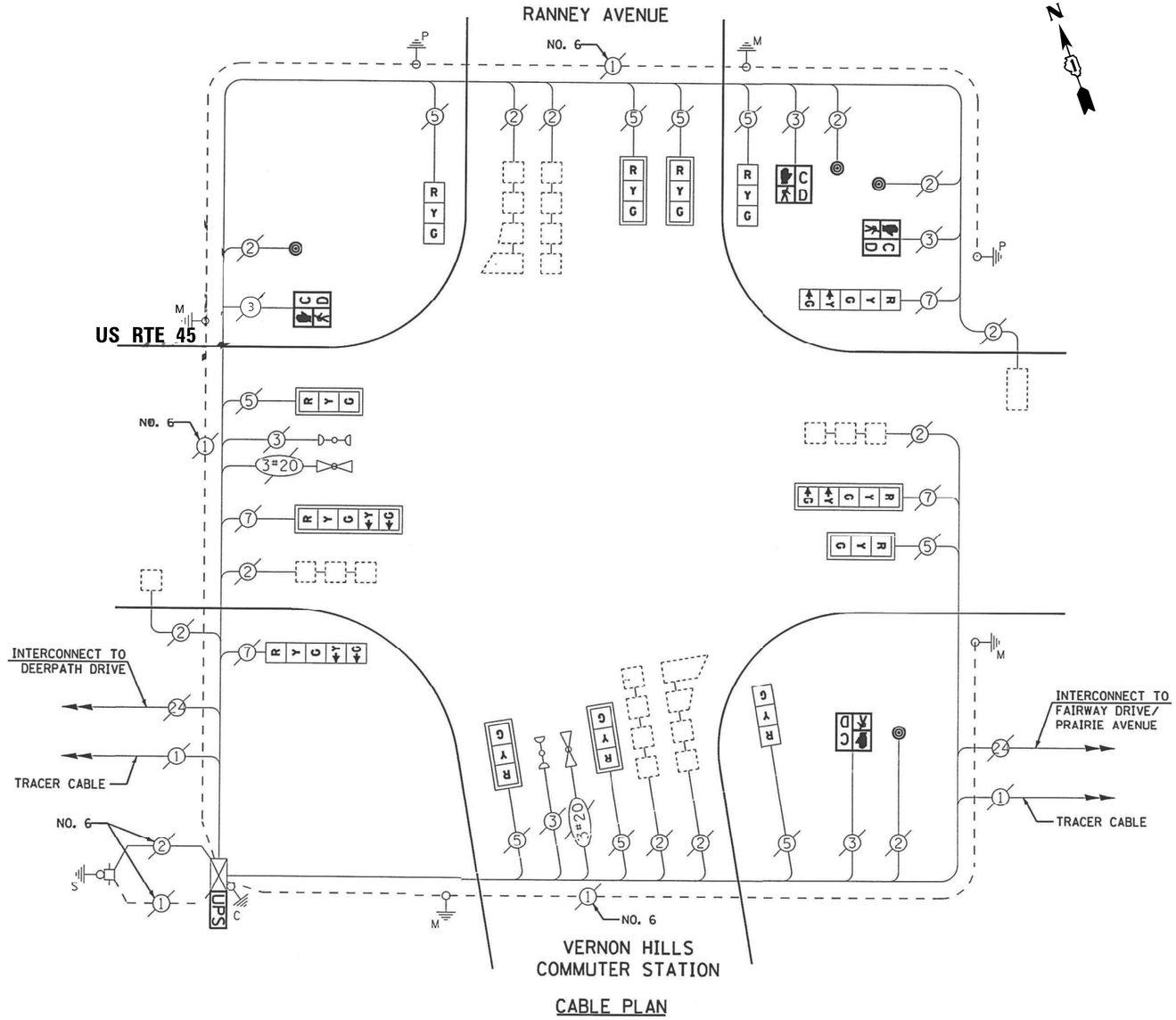
LEGEND

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

PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTION SEQUENCE



TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	9	11	99
4 - SECTION	-	14	-
5 - SECTION	4	13	52
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	4	15	60
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			421
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			1026

ENERGY COSTS TO:
VILLAGE OF VERNON HILLS
290 EVERGREEN DRIVE
VERNON HILLS, IL 60061

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TERMINATE FIBER IN CABINET	EACH	12
RELOCATE EX LAYER II (DATALINK) SWITCH FROM INVENTORY	EACH	1

TS 6657
FORMER EAGLE 4M
LAKE COUNTY TACTICS

TS SHT NO. 101

FILE NAME: MA-20193 CHI:18-02-5500 DOC: PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Esd4M.dgn

TYLin

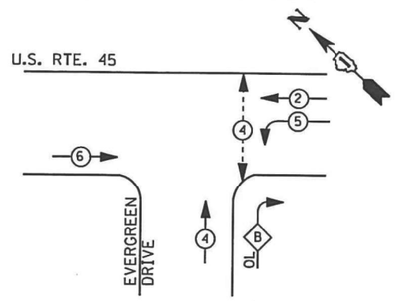
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 49 – US RTE 45 AT RANNEY AVE /COMMUTER PARKING LOT
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	109
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

CONTROLLER SEQUENCE



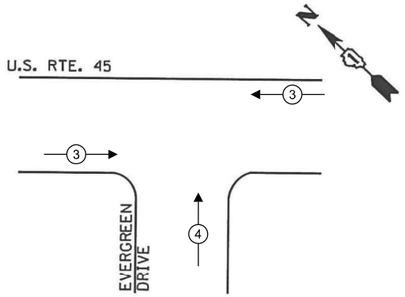
LEGEND

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

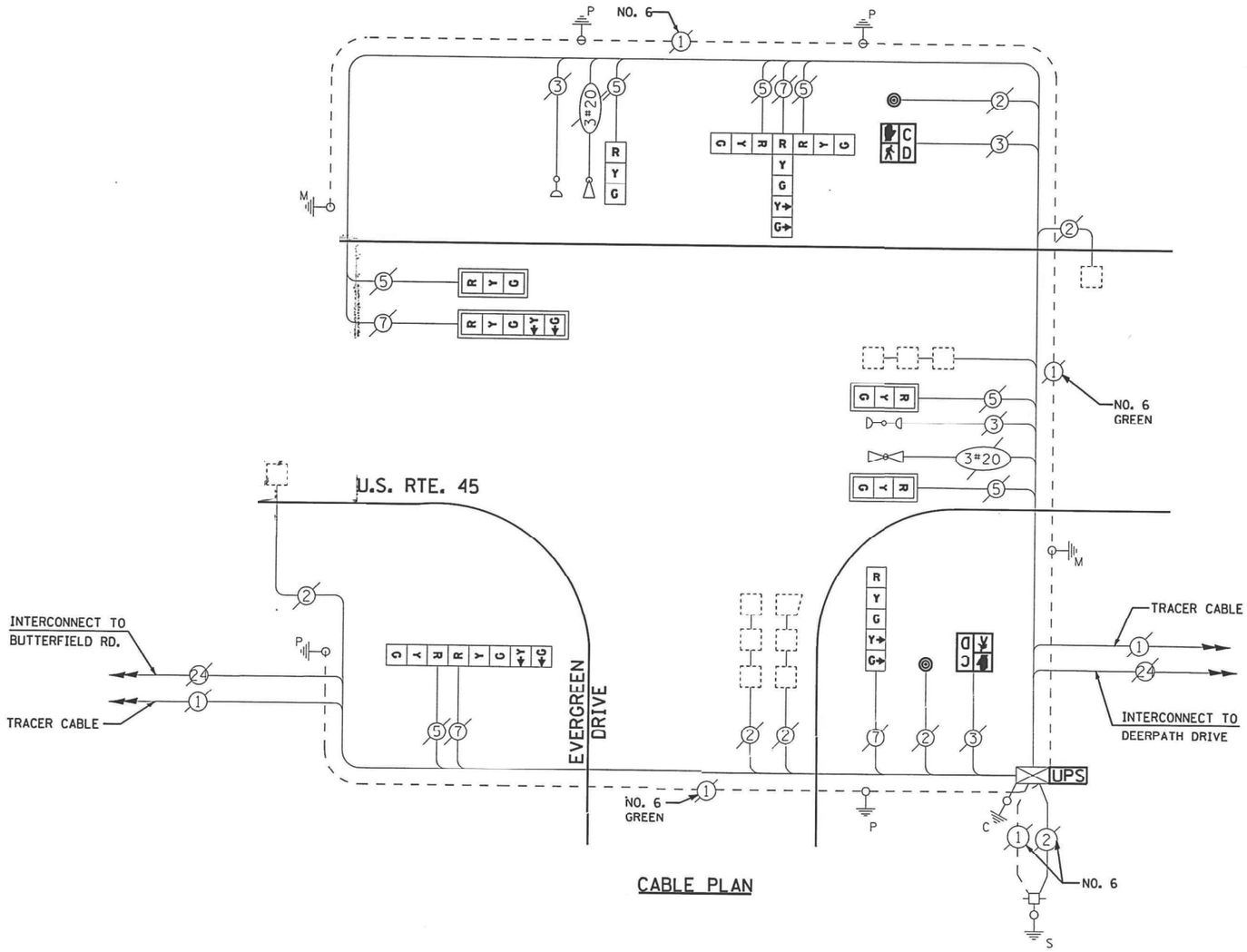
RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER		PERMISSIVE PHASE		PROTECTED PHASE	DISPLAY
B	=	4	+	5	- 4

PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTION SEQUENCE



CABLE PLAN

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	7	11	77
4 - SECTION	-	14	-
5 - SECTION	4	13	52
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	2	15	30
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			648
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			1253

ENERGY COSTS TO:
VILLAGE OF VERNON HILLS
290 EVERGREEN DRIVE
VERNON HILLS, IL 60061

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TERMINATE FIBER IN CABINET	EACH	12
RELOCATE EX LAYER II (DATALINK) SWITCH FROM INVENTORY	EACH	1

TS SHT NO. 102

TS 21070
FORMER EAGLE 4M
LAKE COUNTY TACTICS

FILE NAME: Mst-20193 CMH:8-03-5500 IDOT_PFB_190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet 05_Eq#k4h.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -

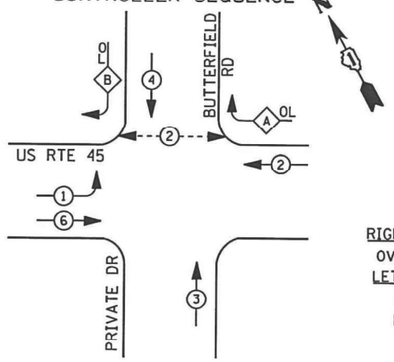
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 51 – US RTE 45 AT EVERGREEN DR

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	110
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

CONTROLLER SEQUENCE



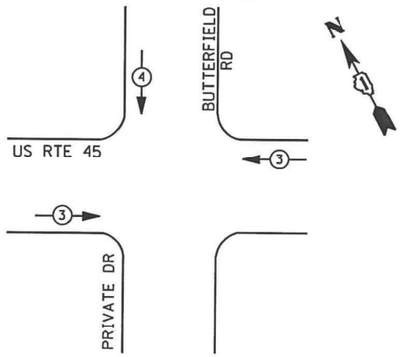
LEGEND

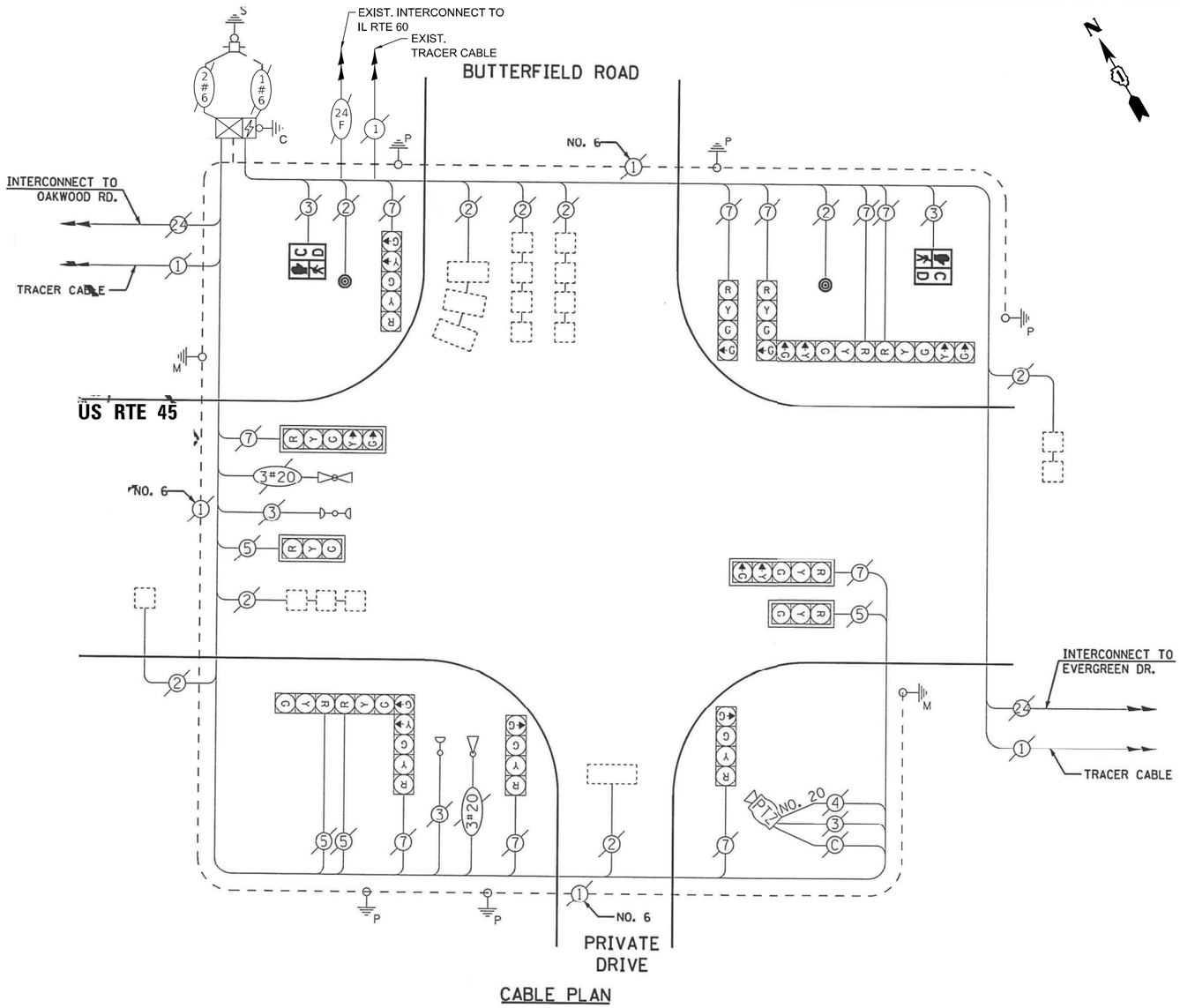
- DUAL ENTRY PHASE
- PEDESTRIAN PHASE
- SINGLE ENTRY PHASE
- OVERLAP
- * NUMBER REFERS TO ASSOCIATED PHASE

RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER		PERMISSIVE PHASE		PROTECTED PHASE
A	=	2	+	4
B	=	4	+	1

PHASE DESIGNATION DIAGRAM





CABLE PLAN

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	4	11	44
4 - SECTION	4	14	56
5 - SECTION	6	13	78
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	5	15	30
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			418
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	-
PTZ CAMERA	1	75	75
TOTAL SERVICE WIRE SIZING =			1098

REMOVAL AND RELOCATION NOTES:

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

1 EACH TELEPHONE LINE

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF IDOT. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR THE PICK UP OF ALL THE EQUIPMENT TO BE RETURNED TO IDOT.

1 EACH MASTER CONTROLLER

ENERGY COSTS TO:
ILLINOIS DEPT OF TRANSPORTATION
201 CENTER CT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
TERMINATE FIBER IN CABINET	EACH	6
SPLICE FIBER IN CABINET	EACH	6

TS 6640
FORMER EAGLE 4M
LAKE COUNTY TACTICS

TS SHT NO. 103

FILE NAME: MA-20193 CHI:18-02-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Esk44h.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -

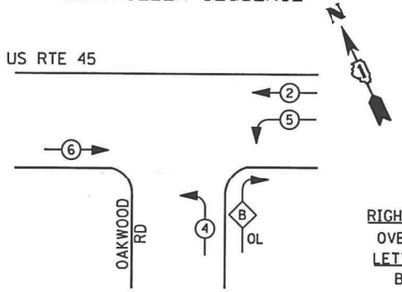
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 52 – US RTE 45 AT BUTTERFIELD RD

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	111
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

CONTROLLER SEQUENCE



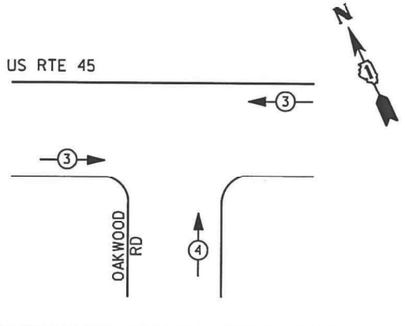
LEGEND

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

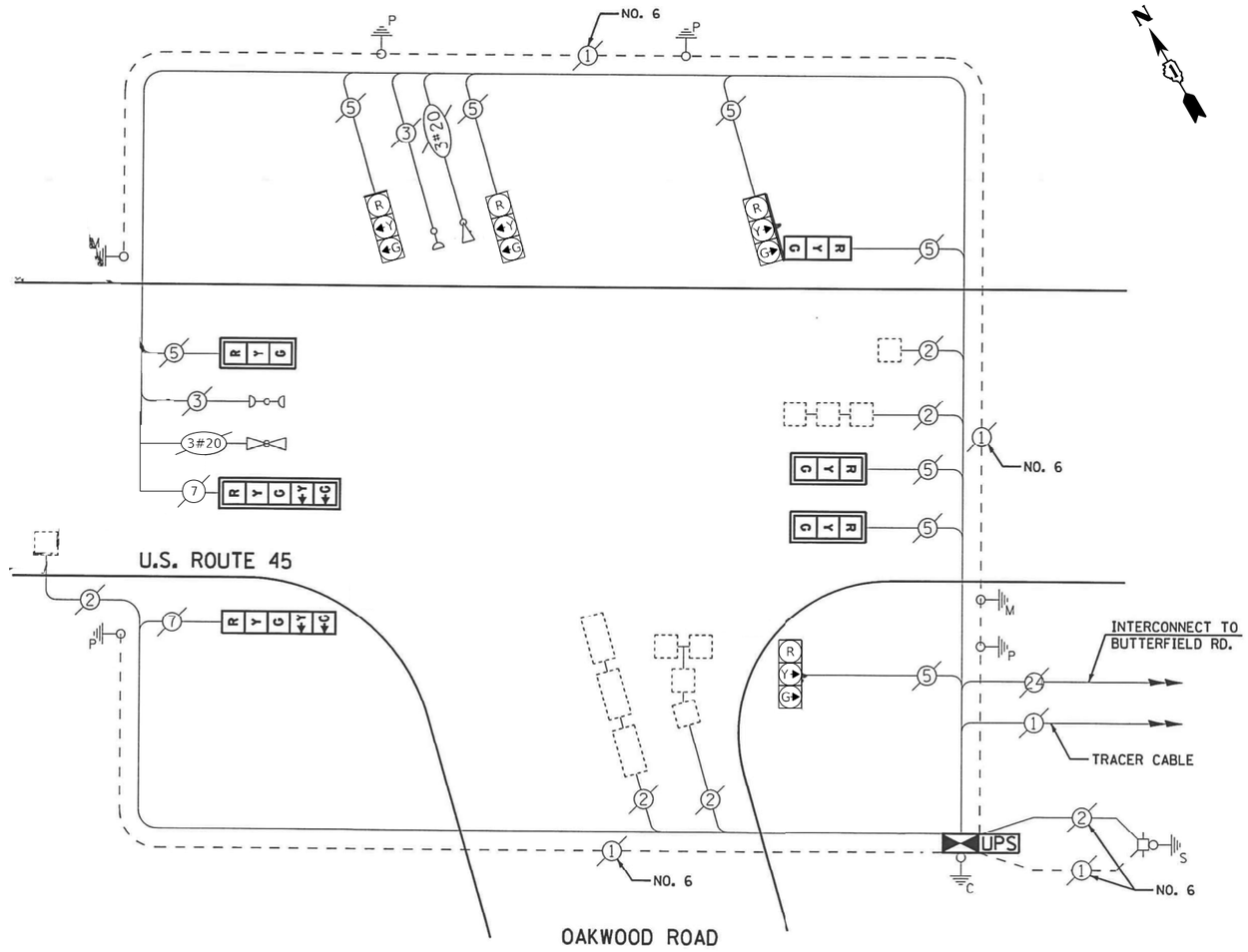
RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER		PERMISSIVE PHASE		PROTECTED PHASE
B	=	4	+	5

PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTION SEQUENCE



CABLE PLAN

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	8	11	88
4 - SECTION	-	14	-
5 - SECTION	2	13	26
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			324
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			929

REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER

ENERGY COSTS TO:
VILLAGE OF VERNON HILLS
290 EVERGREEN DRIVE
VERNON HILLS, IL 60061

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
TERMINATE FIBER IN CABINET	EACH	12
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
RELOCATE EX LAYER II (DATALINK) SWITCH FROM INVENTORY	EACH	1

TS 6641
FORMER EAGLE 4M
LAKE COUNTY TACTICS

TS SHT NO. 104

FILE NAME: M:\2019\3 CMI\18-03-5500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203 #2W90\CAD\62W90_Sheet_03_Eq#4M.dgn

TYLin

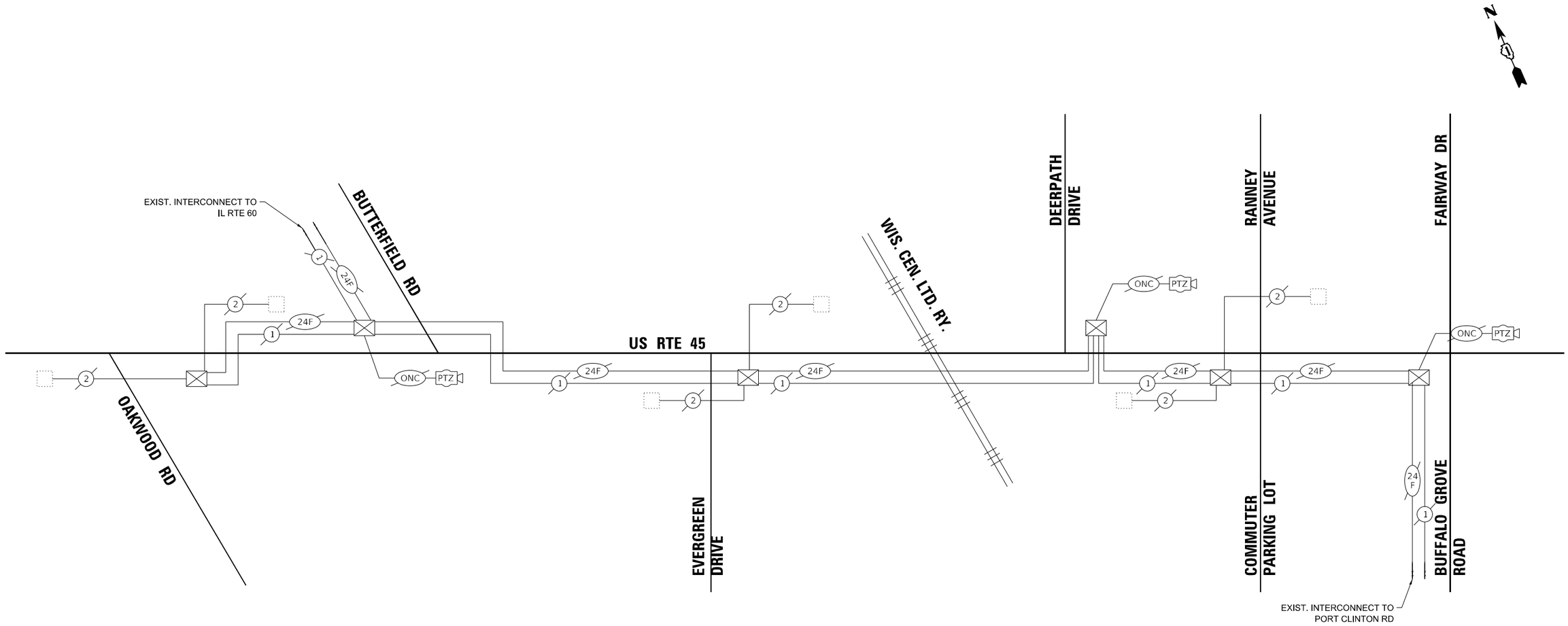
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 53 – US RTE 45 AT OAKWOOD RD

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	112
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		



SCHEDULE OF QUANTITIES

	ITEM DESCRIPTION	UNITS	TOTAL QTY	IL 21/ IL 60	IL 60 / LAKEVIEW	IL 60 / BUTTERFIELD
*	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	3	1	1	1
*	SPLICE FIBER IN CABINET	EACH	3	0	0	3
*	FIBER OPTIC JUMPER, SINGLE MODE	EACH	3	0	3	0
*	LAYER III FIBER OPTIC TRANSCEIVER MODULE, SFP TYPE, LONG DISTANCE	EACH	1	1	0	0
	OPTIMIZE TRAFFIC SIGNAL SYSTEM	EACH	1	0	0	0

* WORK AT NEARBY INTERSECTIONS REQUIRED FOR THIS SYSTEM CONNECTION.

NOTES:

1. OPTIMIZATION TO INCLUDE INTERSECTIONS FROM FORMER 4M SYSTEM.
   US RTE 45 & BUFFALO GROVE RD / FAIRWAY DR
   US RTE 45 & RANNEY AVE/COMMUTER PARKING LOT ENT
   US RTE 45 & DEERPATH DR
   US RTE 45 & EVERGREEN DR
   US RTE 45 & BUTTERFIELD RD
   US RTE 45 & OAKWOOD RD

2. COORDINATE SYSTEM WITH FORMER 4L AND ECON 24 SYSTEMS FOR MOST EFFICIENT TRAFFIC PROGRESSION.

FORMER EAGLE 4M
LAKE COUNTY TACTICS

TS SHT NO. 105

FILE NAME: M5_20193 CHIL18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_03_Eagle4M.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT SCHEMATIC
US RTE 45 – BUFFALO GROVE RD TO OAKWOOD RD

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	113
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

TS SHT NO. 106

EXISTING

FORMER EAGLE 4M
LAKE COUNTY TACTICS

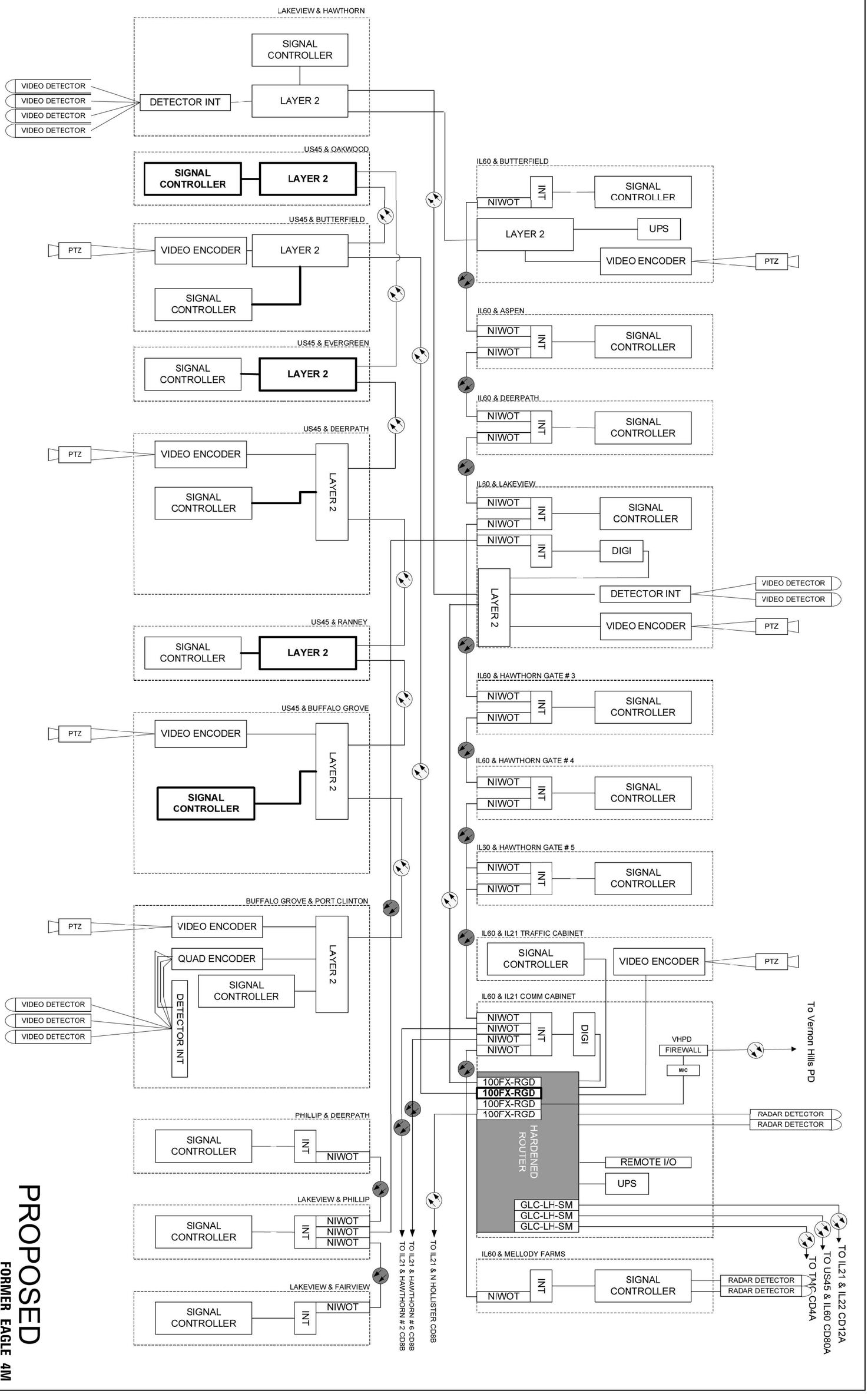
FILE NAME: M:_20193 CHI\18-03-5500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eagle4M.dgn

PARSONS	USER NAME = erica.salatz	DESIGNED - RL / DG	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FIBER SPLICE DIAGRAM US RTE 45 – BUFFALO GROVE RD TO OAKWOOD RD
		DRAWN - RL / DG	REVISED -		
	PLOT SCALE = 40.0000 ' / in.	CHECKED - RL / DG	REVISED -		
	PLOT DATE = 3/30/2025	DATE - 2025.02.20	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	114
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

TS SHT NO. 107

FILE NAME: M:_2019\3 CHI\18-03-5500 IDOT_PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eagle4M.dgn



PARSONS

PLOT DATE = 3/10/2025
PLOT SCALE = 40.0000 ' / in.
USER NAME = efeckabir

	DESIGNED	REVISED
DRAWN	RL / DG	REVISED
CHECKED	RL / DG	REVISED
DATE	2025.02.20	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

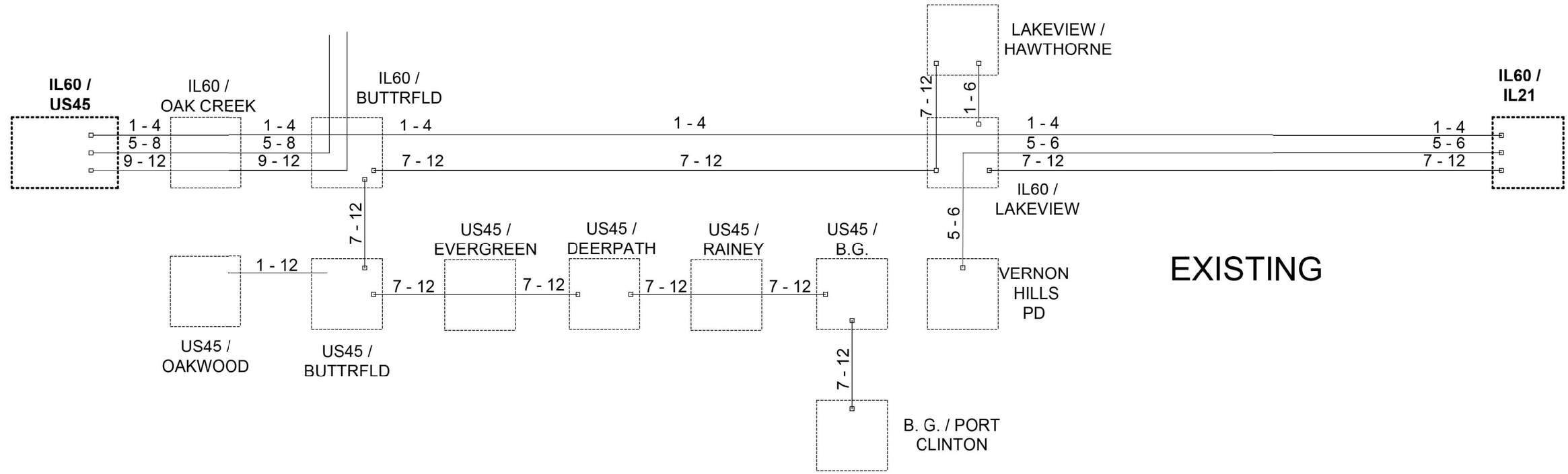
PROPOSED
FORMER EAGLE 4M
LAKE COUNTY TACTICS

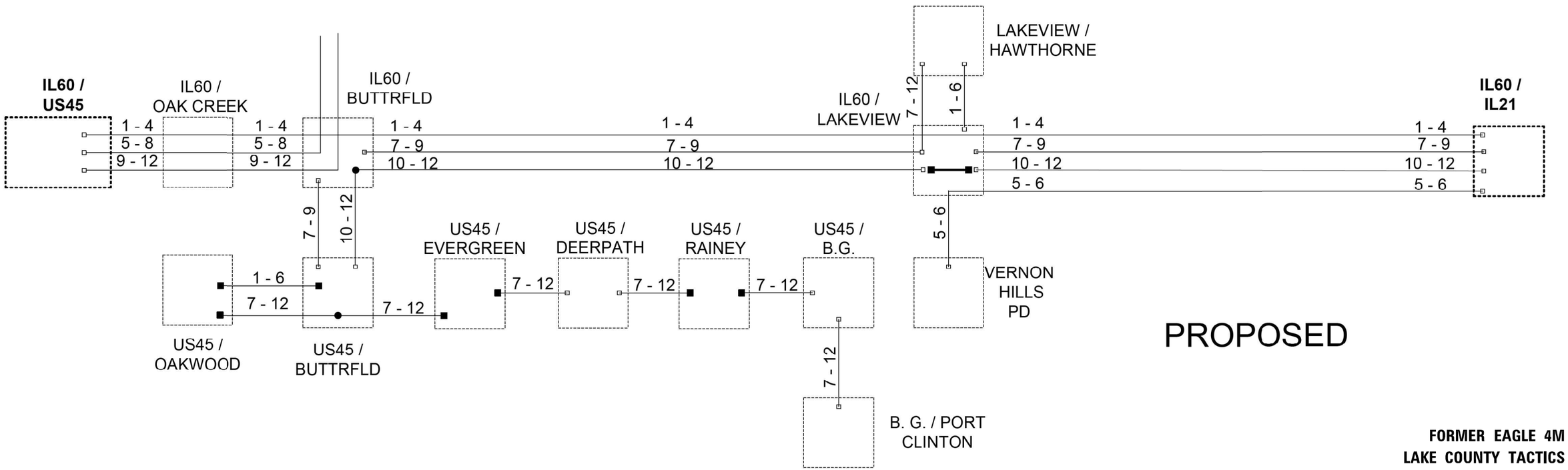
CABINET DETAIL
US RTE 45 – BUFFALO GROVE RD TO OAKWOOD RD

SCALE:

SHEET	OF	SHEETS	STA.	TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-085-TS	VARIOUS	262	115
ILLINOIS FED. AID PROJECT		CONTRACT NO. 62W90		





FORMER EAGLE 4M
LAKE COUNTY TACTICS

TS SHT NO. 108

FILE NAME: Mst-20193 CMH.8-03-5500 IDOT_PTB_190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eag4M.dgn

PARSONS				
	USER NAME = erica.salatz	DESIGNED - RL / DG	REVISED -	
		DRAWN - RL / DG	REVISED -	
	PLOT SCALE = 40.0000 ' / in.	CHECKED - RL / DG	REVISED -	
	PLOT DATE = 3/30/2025	DATE - 2025.02.20	REVISED -	

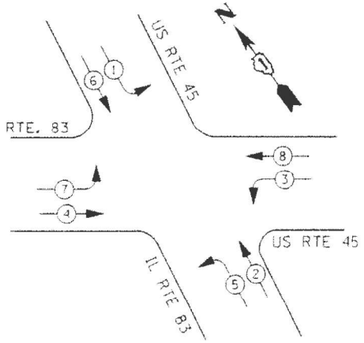
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABINET DETAIL
US RTE 45 – BUFFALO GROVE RD TO OAKWOOD RD

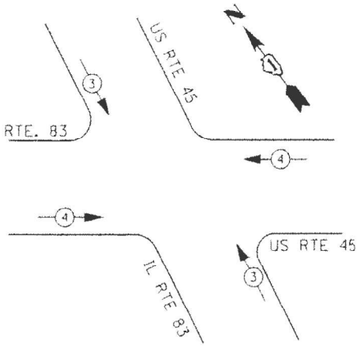
SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	116
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

CONTROLLER SEQUENCE



EXISTING AND PROPOSED PHASE DESIGNATION DIAGRAM



LEGEND

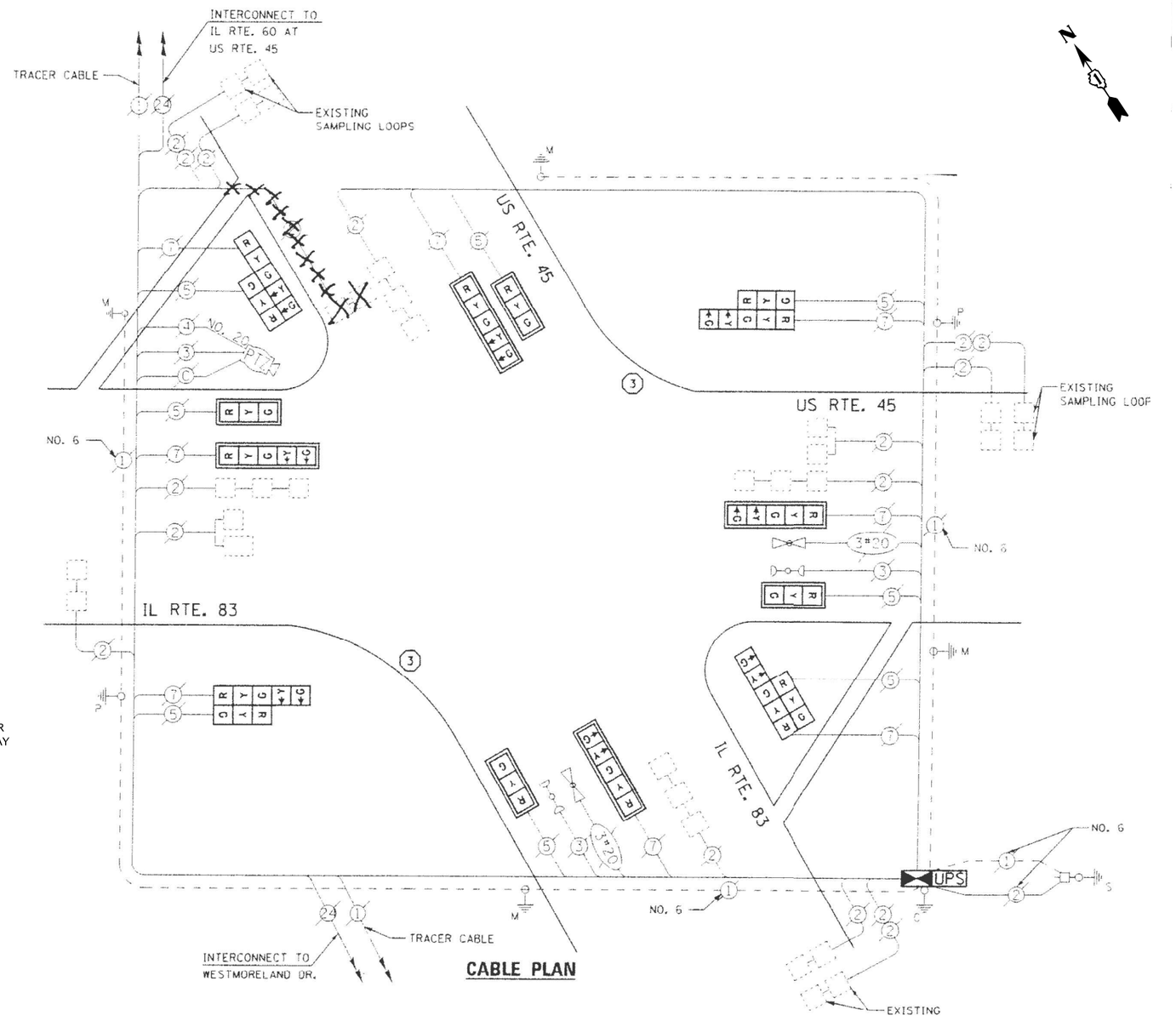
- DUAL ENTRY PHASE
- PEDESTRIAN PHASE
- SINGLE ENTRY PHASE
- OVERLAP
- * NUMBER REFERS TO ASSOCIATED PHASE

EMERGENCY VEHICLE PREEMPTION SEQUENCE

REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER



CABLE PLAN

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	8	11	88
4 - SECTION	-	14	-
5 - SECTION	8	13	104
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			402
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			1007

ENERGY COSTS TO:
ILLINOIS DEPT OF TRANSPORTATION
201 CENTER CT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1

TS 6610
FORMER EAGLE 4L
LAKE COUNTY TACTICS

TS SHT NO. 109

FILE NAME: MA-20193 CHI18-02-5500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Exist.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -

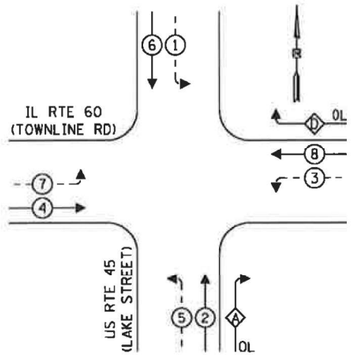
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 54 – US RTE 45 AT IL RTE 83

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	117
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

EXISTING CONTROLLER SEQUENCE



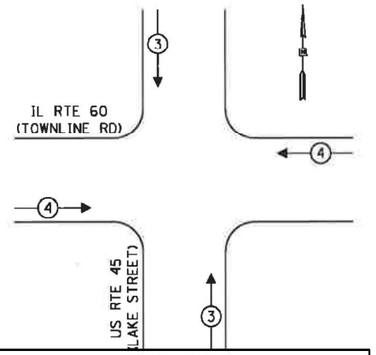
LEGEND:

- PROTECTED PHASE
- PROTECTED/PERMITTED PHASE
- PEDESTRIAN PHASE
- OVERLAP

RIGHT TURN OVERLAP PHASE DESIGNATION:

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

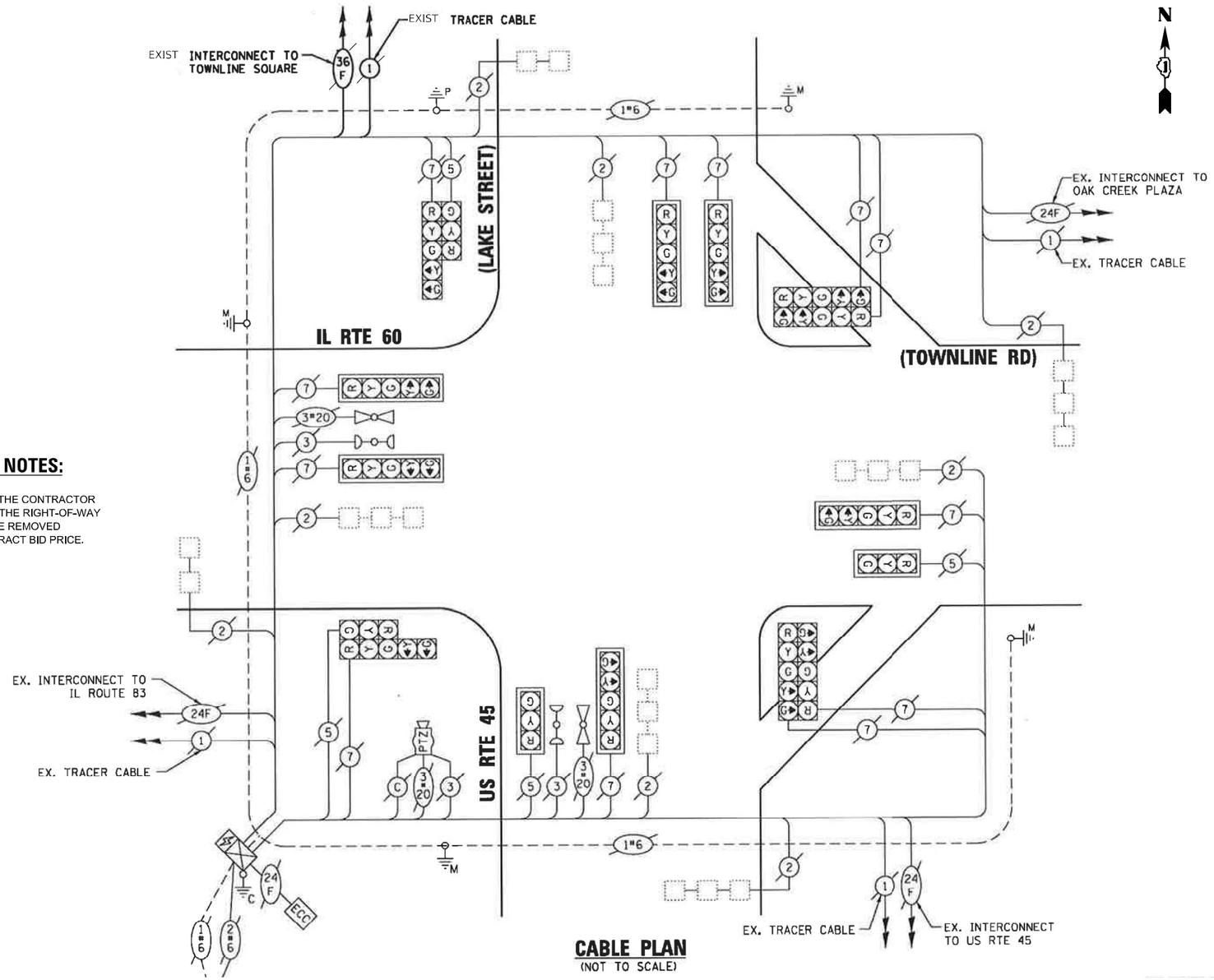
EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER



CABLE PLAN
(NOT TO SCALE)

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	4	11	44
4 - SECTION	-	14	-
5 - SECTION	12	13	156
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
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	-
PTZ CAMERA	1	75	75
TOTAL SERVICE WIRE SIZING =			1090

ENERGY COSTS TO:
ILLINOIS DEPT OF TRANSPORTATION
201 CENTER CT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1

TS 6605
FORMER EAGLE 4L
LAKE COUNTY TACTICS

TS SHT NO. 110

FILE NAME: MH: 20193 CHK18-03-5500 ROOT: PTB 190 - Various Traffic Signal Design Graphics\WO 203_62W90\CAD\62W90 Sheet 05 Eq&Cal.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -

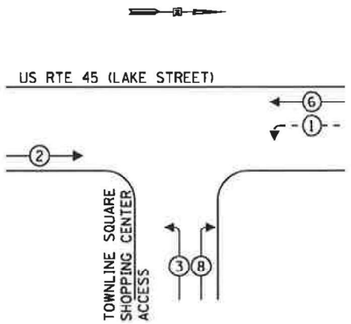
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 55 – US RTE 45 AT IL RTE 60

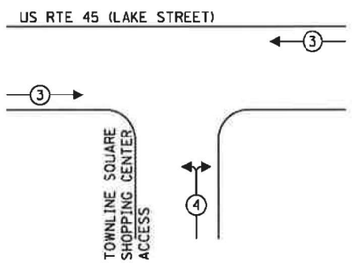
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	118
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

EXISTING CONTROLLER SEQUENCE

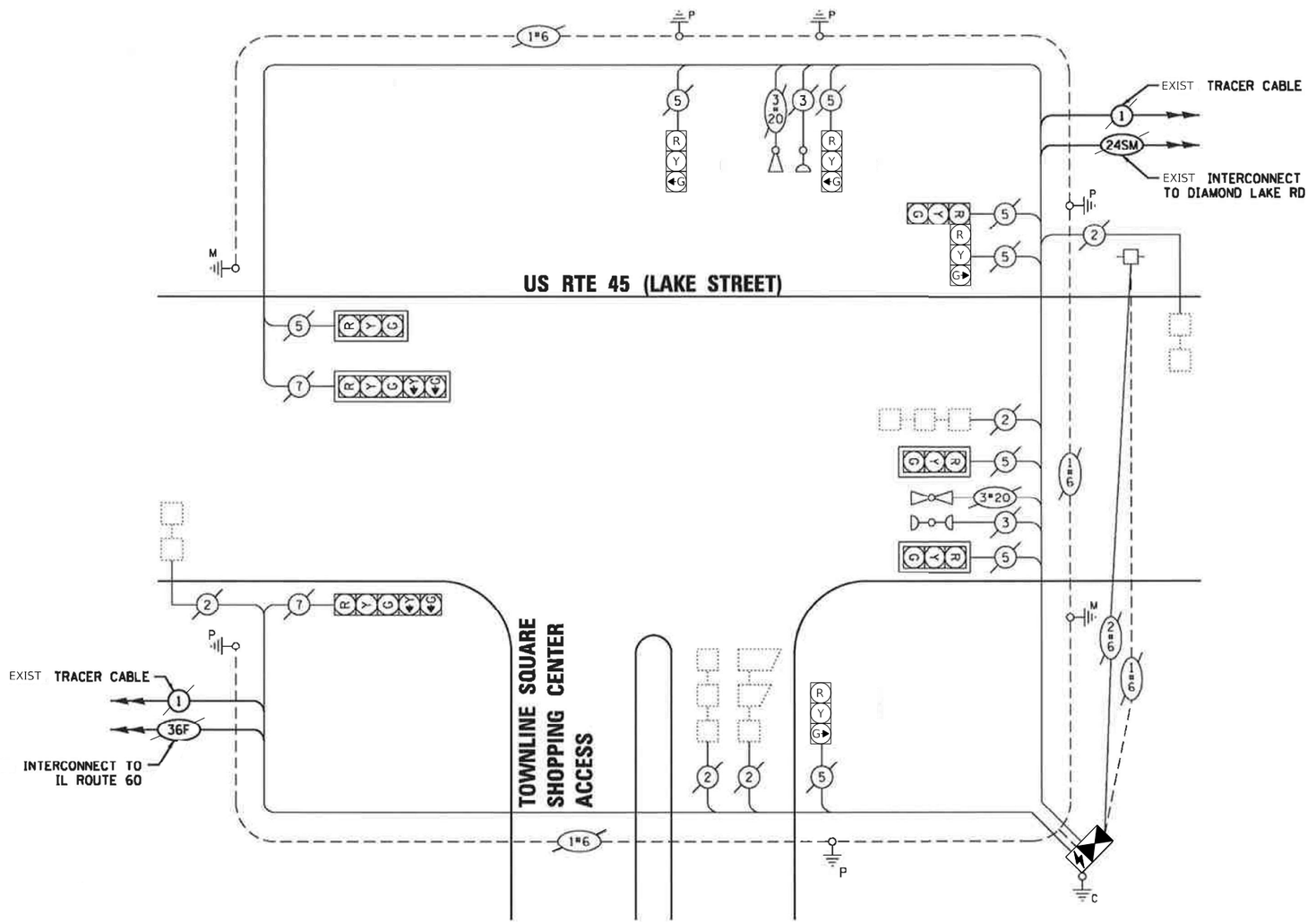


EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



LEGEND:

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



CABLE PLAN
(NOT TO SCALE)

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	7	11	77
4 - SECTION	-	14	-
5 - SECTION	2	13	26
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			313
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			918

REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER AND CABINET (COMPLETE)

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

1 EACH PTZ CAMERA
1 EACH LIGHT DETECTOR AMPLIFIER

ENERGY COSTS TO:
ILLINOIS DEPT OF TRANSPORTATION
201 CENTER CT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
INDUCTIVE LOOP DETECTOR	EACH	5
RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
TERMINATE FIBER IN CABINET	EACH	12
FULL-ACTUATED CONTROLLER AND TYPE IV STRETCHED CABINET, SPECIAL	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1
RELOCATE EX LAYER II (DATALINK) SWITCH FROM INVENTORY	EACH	1

TS 21975
FORMER EAGLE 4L
LAKE COUNTY TACTICS

TS SHT NO. 111

FILE NAME: Mst_201913_CMR_18-03-24500_IDOT_PFR_190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet 05_Equip4L.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

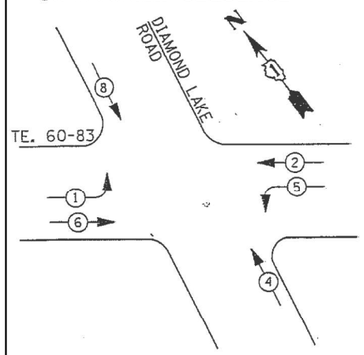
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 56 – US RTE 45 AT TOWNLINE SQ

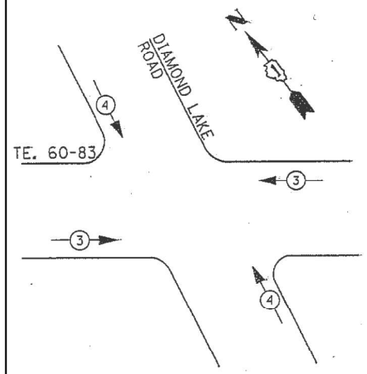
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	119
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

CONTROLLER SEQUENCE



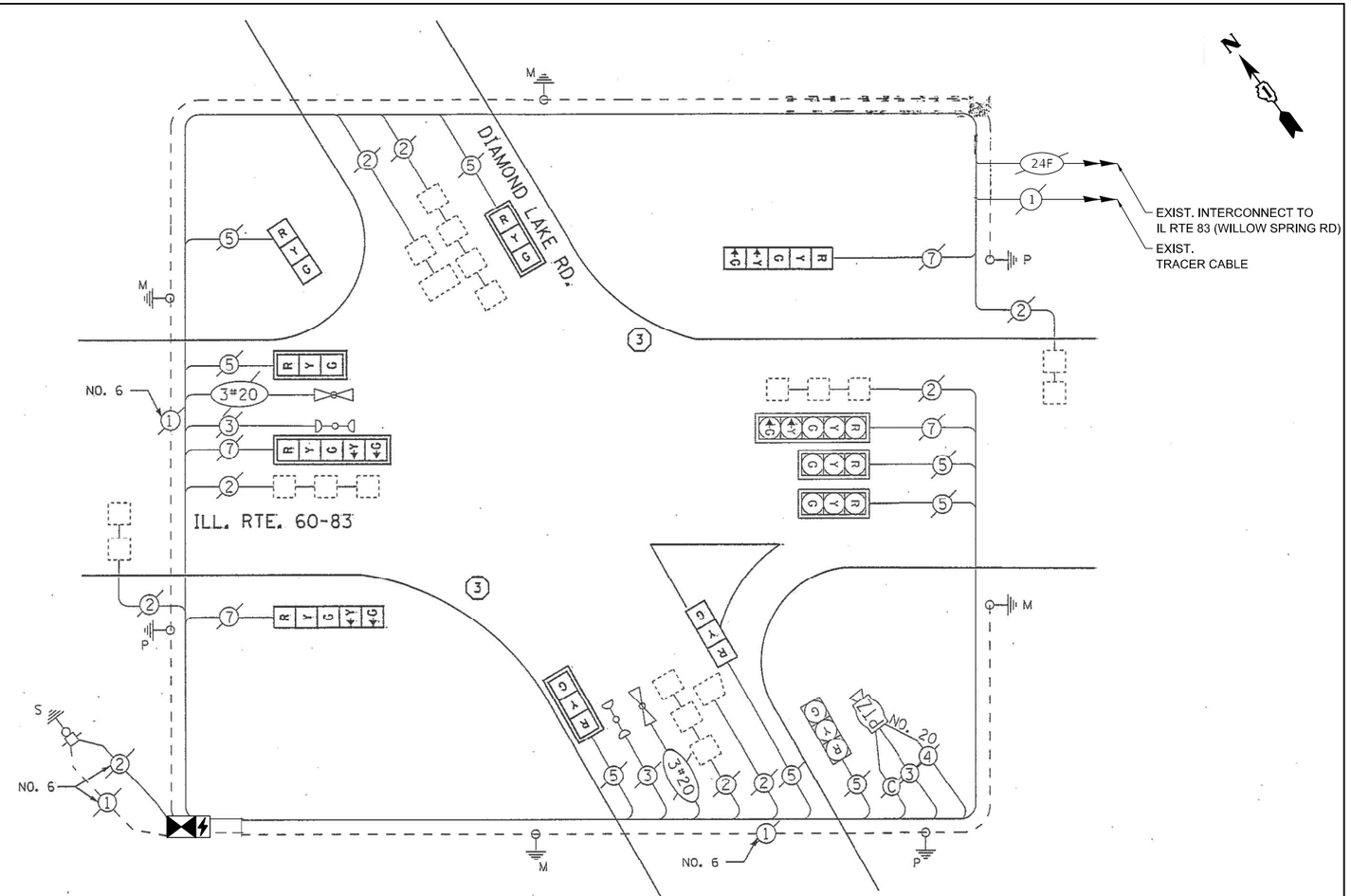
PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTION SEQUENCE

LEGEND

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



CABLE PLAN

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	8	11	88
4 - SECTION	-	14	-
5 - SECTION	4	13	52
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			350
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	-
PTZ CAMERA	1	75	75
TOTAL SERVICE WIRE SIZING =			1030

REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER AND CABINET (COMPLETE)

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

1 EACH PTZ CAMERA
1 EACH LIGHT DETECTOR AMPLIFIER
1 EACH LAYER II (DATALINK) SWITCH

ENERGY COSTS TO:
ILLINOIS DEPT OF TRANSPORTATION
201 CENTER CT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
INDUCTIVE LOOP DETECTOR	EACH	8
RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV STRETCHED CABINET, SPECIAL	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1

TS SHT NO. 112

TS 6920
FORMER EAGLE 4L
LAKE COUNTY TACTICS

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

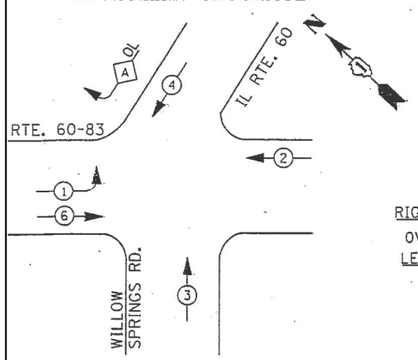
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 57 – IL RTE 60–83 AT DIAMOND LAKE RD
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	120
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

FILE NAME: MA_20193 CHI18-02-5500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eagle4L.dgn

CONTROLLER SEQUENCE



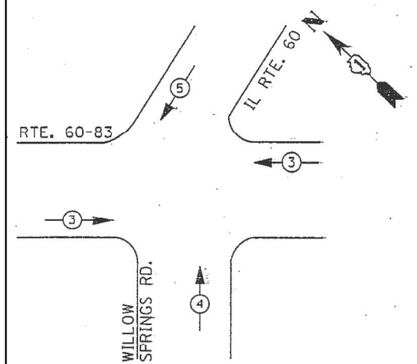
LEGEND

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

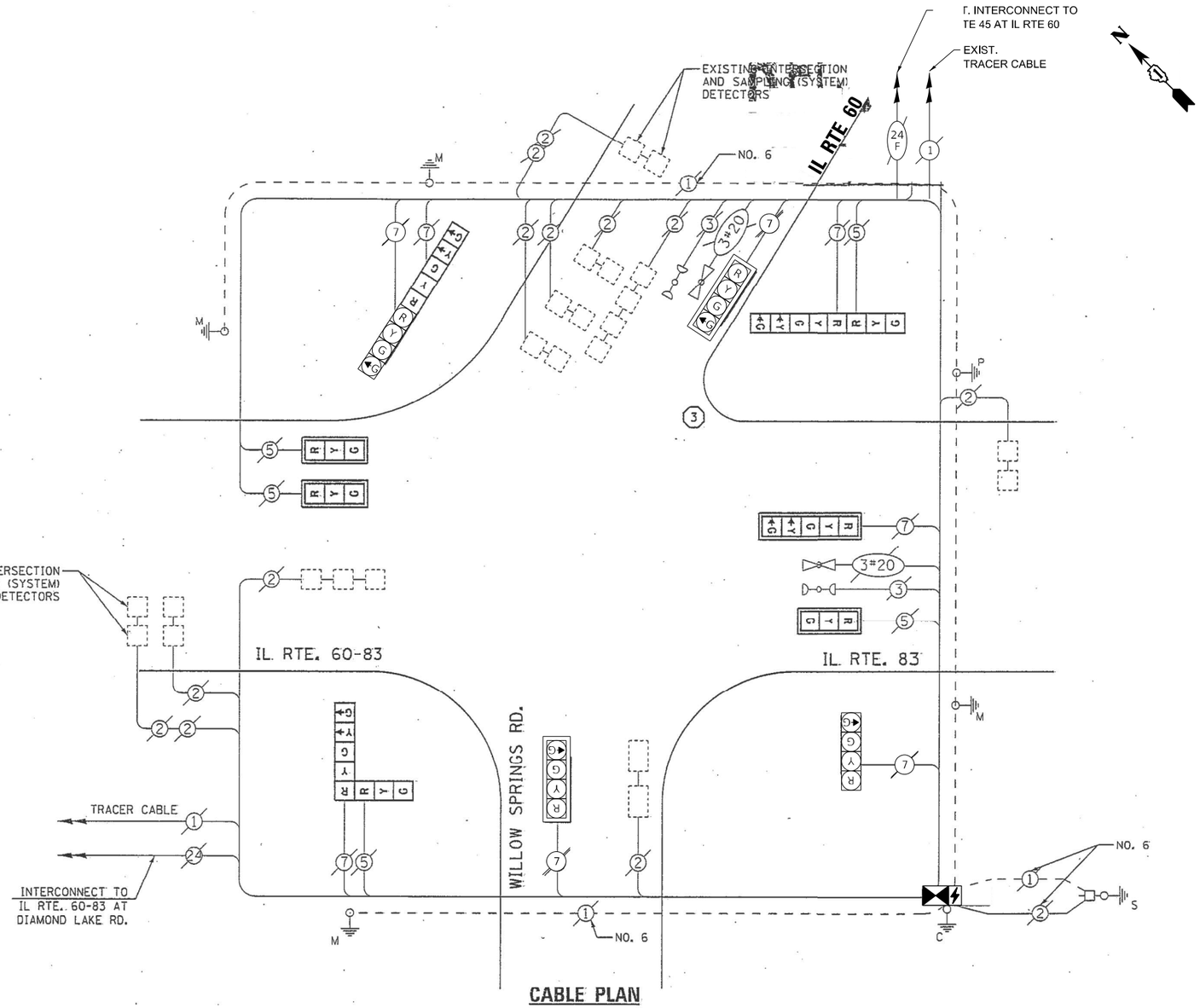
RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER		PERMISSIVE PHASE		PROTECTED PHASE
A	=	4	+	1

PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTION SEQUENCE



CABLE PLAN

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	9	11	99
4 - SECTION	-	14	-
5 - SECTION	4	13	52
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			361
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			966

REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER AND CABINET (COMPLETE)

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

1 EACH LIGHT DETECTOR AMPLIFIER

ENERGY COSTS TO:
VILLAGE OF MUDELEIN
400 E. HAWLEY ST
MUNDELEIN, IL 60060

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
INDUCTIVE LOOP DETECTOR	EACH	12
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
TERMINATE FIBER IN CABINET	EACH	12
FULL-ACTUATED CONTROLLER AND TYPE IV STRETCHED CABINET, SPECIAL	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1
RELOCATE EX LAYER II (DATALINK) SWITCH FROM INVENTORY	EACH	1

TS 6935
FORMER EAGLE 4L
LAKE COUNTY TACTICS

TS SHT NO. 113

FILE NAME: MA_20193_CHI18-02-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Exist.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -

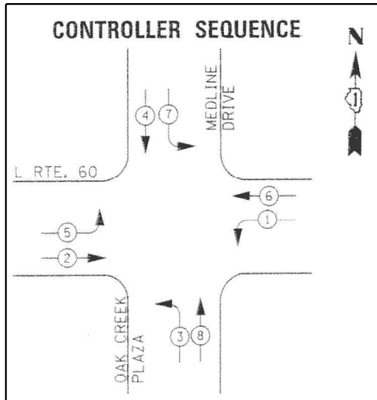
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 58 – IL RTE 60–83 AT IL RTE 60 /WILLOW SPRINGS RD

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	121
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

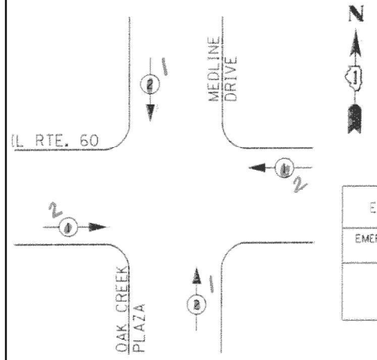
CONTROLLER SEQUENCE



LEGEND

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

PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	A 2	B 1
MOVEMENT	← →	↓ ↑

EMERGENCY VEHICLE PREEMPTION SEQUENCE

NOTES:

1. ISNTALL BATTERY BACKUP ON LEFT SIDE TO MATCH EXISTING.

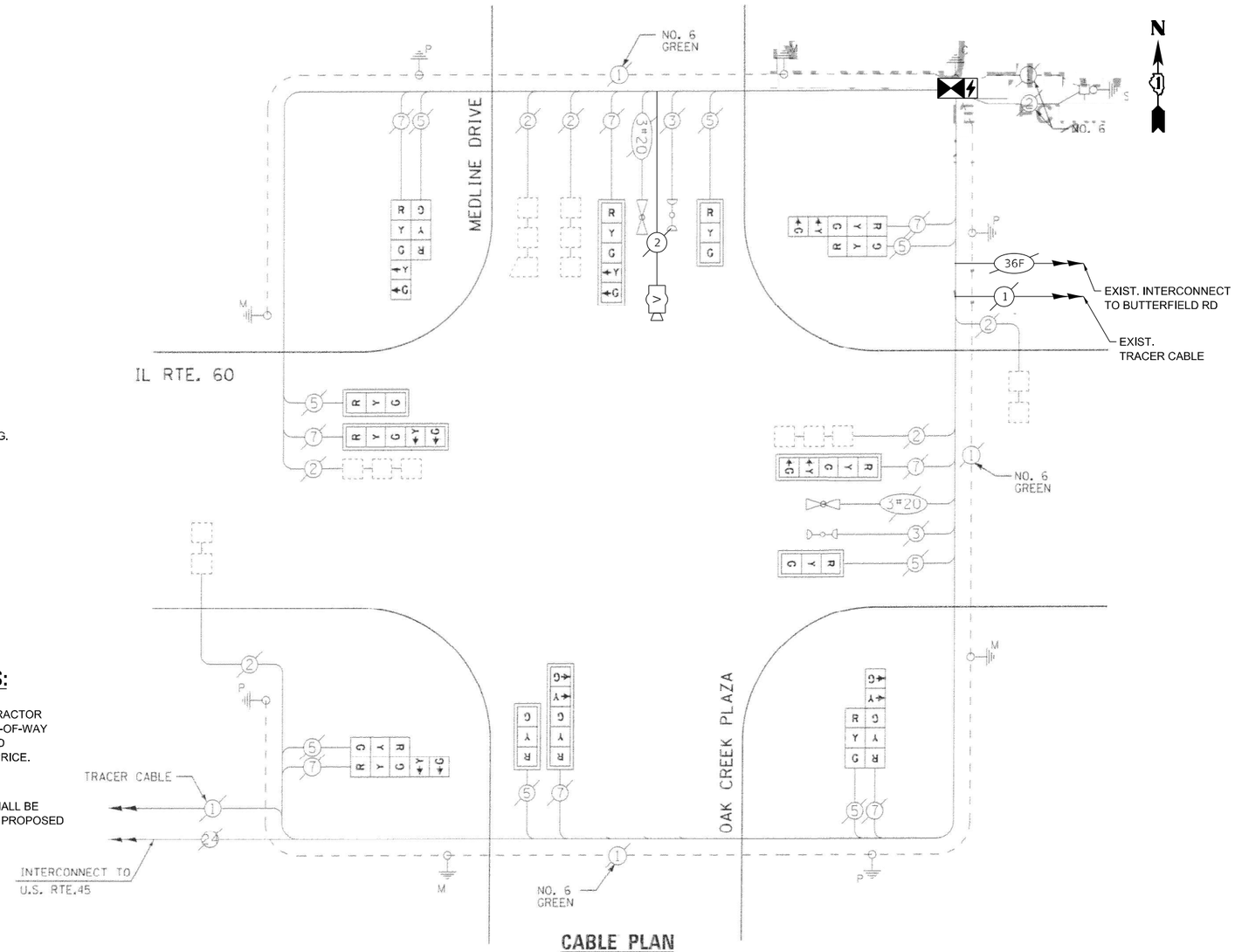
REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER AND CABINET (COMPLETE)

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

1 EACH LIGHT DETECTOR AMPLIFIER



CABLE PLAN

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	8	11	88
4 - SECTION	-	14	-
5 - SECTION	8	13	104
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			102
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			1007

ENERGY COSTS TO:
ILLINOIS DEPT OF TRANSPORTATION
201 CENTER CT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
INDUCTIVE LOOP DETECTOR	EACH	9
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
TERMINATE FIBER IN CABINET	EACH	8
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1
RELOCATE EX LAYER II (DATALINK) SWITCH FROM INVENTORY	EACH	1

TS SHT NO. XM

TS 6905
FORMER EAGLE 4L
LAKE COUNTY TACTICS

TYLin

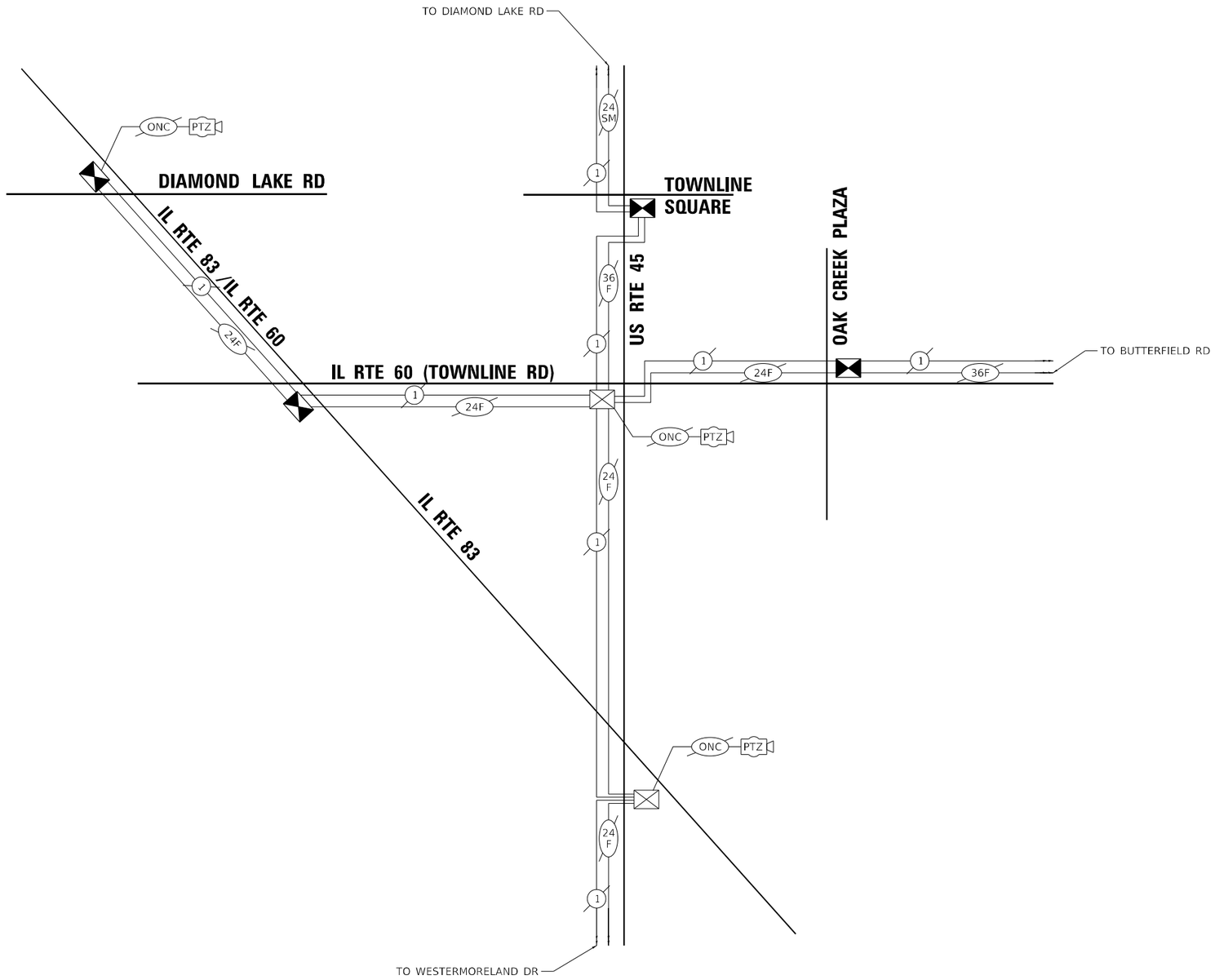
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 59 – IL RTE 60 AT OAK CREEK PLZ/MEDLINE PL
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	122
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

FILE NAME: M63_20 93 CHI.18-03-5500 IDOT_PTR 190 - Various Traffic Signal Design\GraphicsWO 203_62W90 C4D62V90_Sheet 03- Eagle4L.dgn



TS SHT NO. 115

FILE NAME: Mo 2019.3 CHI 18-03-5560 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203 #2W90\CAD\62W90_Sheet 03 Eagle4L.dgn

FORMER EAGLE 4L
LAKE COUNTY TACTICS

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT SCHEMATIC
US RTE 45 – IL RTE 83 TO TOWNLINE SQ
IL RTE 60 /IL RTE 83 – DIAMOND LAKE RD TO OAK CREEK PLAZA

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	123
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

TO US45 & WINCHESTER CD84A

TO IL60 & IL21 CD8A

TO IL83 & IL22 CD 76A

IL60-IL83 & DIAMOND LK

PTZ
SIGNAL CONTROLLER
VIDEO ENCODER
INT
NIWOT
LAYER 2

IL60-IL83 & WILLOW SPRINGS

PTZ
SIGNAL CONTROLLER
INT
NIWOT
NIWOT

US45 & TOWNLINE SQ

PTZ
SIGNAL CONTROLLER
INT
NIWOT

US45 & IL60 TRAFFIC CABINET

PTZ
SIGNAL CONTROLLER
INT
NIWOT
NIWOT
NIWOT
NIWOT

US45 & IL60 COMM CABINET

DIGI
UPS
REMOTE I/O
VIDEO ENCODER
GLC-LH-SM
GLC-LH-SM
GLC-LH-SM
CISCO 4010
GLC-FE-100LX
GLC-FE-100LX
GLC-FE-100LX
GLC-FE-100LX
GLC-FE-100LX
GLC-FE-100LX
GLC-FE-100LX

IL60 & OAK CREEK

PTZ
SIGNAL CONTROLLER
INT
NIWOT

US45 & IL83

PTZ
VIDEO ENCODER
SIGNAL CONTROLLER
LAYER 2
INT
NIWOT

IL83 & WESTMORELAND

PTZ
VIDEO ENCODER
SIGNAL CONTROLLER
LAYER 2

TO MUNDELEIN PD CD 80C
TO US45 & DIAMOND LK CD 80C
TO US45 & HAWLEY CD 80C
TO CHEVY CHASE & HAWLEY CD 80B

BUTTERFIELD & IL176

LAYER 2
DETECTOR INT
SIGNAL CONTROLLER
MMU
UPS
RADAR DETECTOR
RADAR DETECTOR
RADAR DETECTOR
RADAR DETECTOR
IP CAMERA

BUTTERFIELD & CRANE

LAYER 2
DETECTOR INT
SIGNAL CONTROLLER
MMU
UPS
VIDEO DETECTOR
VIDEO DETECTOR
VIDEO DETECTOR
VIDEO DETECTOR
IP CAMERA

BUTTERFIELD & GOLF

LAYER 2
DETECTOR INT
SIGNAL CONTROLLER
MMU
UPS
VIDEO DETECTOR
VIDEO DETECTOR
VIDEO DETECTOR
VIDEO DETECTOR
IP CAMERA

BUTTERFIELD & HUNTINGTON

LAYER 2
DETECTOR INT
SIGNAL CONTROLLER
MMU
UPS
VIDEO DETECTOR
VIDEO DETECTOR
VIDEO DETECTOR
VIDEO DETECTOR
IP CAMERA

BUTTERFIELD & ALLANSON

LAYER 2
DETECTOR INT
SIGNAL CONTROLLER
MMU
UPS
VIDEO DETECTOR
VIDEO DETECTOR
VIDEO DETECTOR
VIDFO DETECTOR
IP CAMERA

BUTTERFIELD & HAWTHORNE

LAYER 2
DETECTOR INT
SIGNAL CONTROLLER
IP CAMERA
RADAR DETECTOR
RADAR DETECTOR
RADAR DETECTOR
RADAR DETECTOR

EXISTING

FORMER EAGLE 4L

LAKE COUNTY TACTICS

TS SHT NO. 116

FILE NAME: M3_20193_CM1.8-03-5500 IDOT_PTB_193 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_03_Eqpt4L.dgn

PARSONS

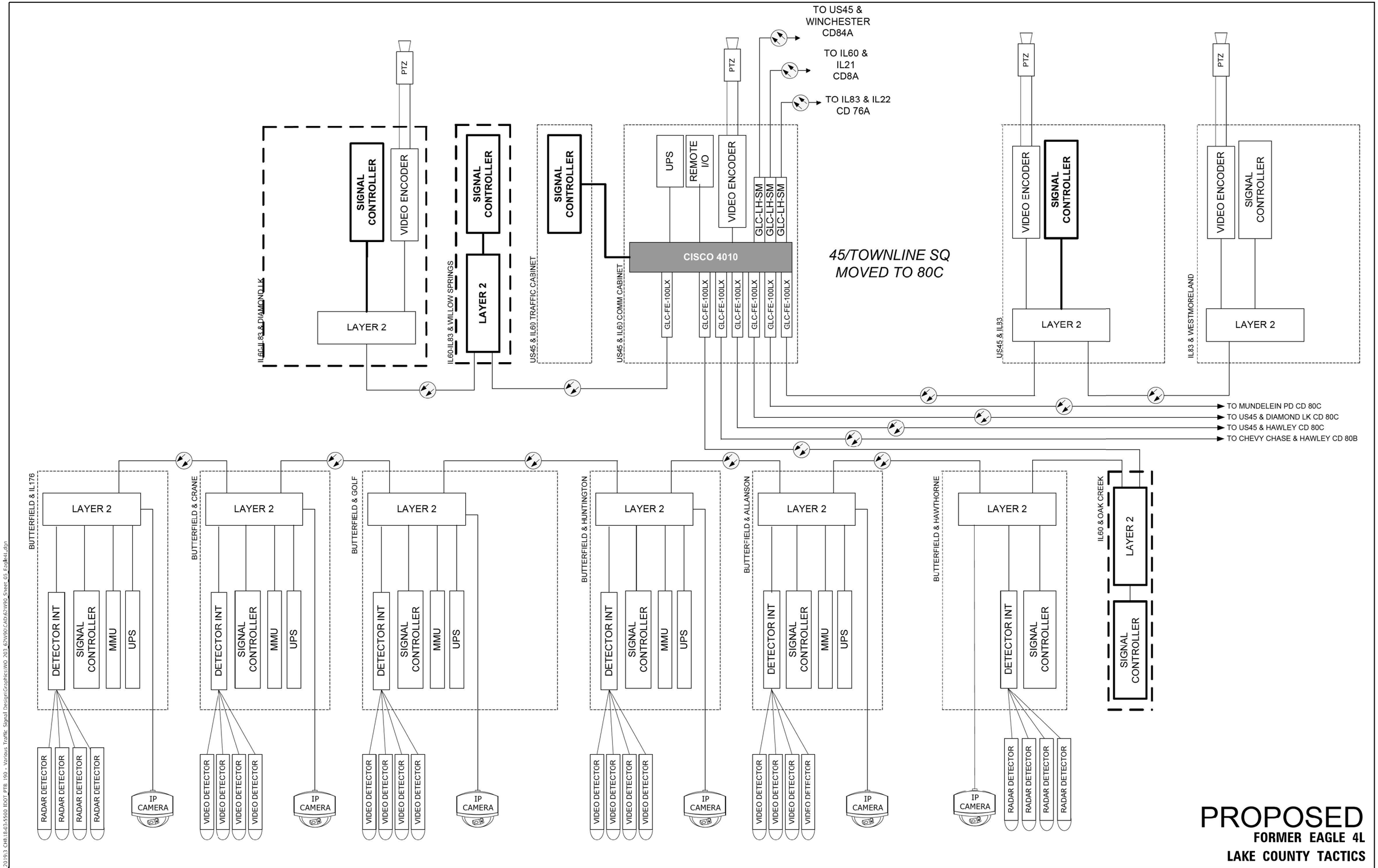
USER NAME = erica.salutz	DESIGNED - RL / DG	REVISED -	
	DRAWN - RL / DG	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - RL / DG	REVISED -	
PLOT DATE = 3/30/2025	DATE - 2025.02.20	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABINET DETAIL
US RTE 45 – IL RTE 83 TO TOWNLINE SQ
IL RTE 60 /IL RTE 83 – DIAMOND LAKE RD TO OAK CREEK PLAZA

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	124
		CONTRACT NO. 62W90		
		ILLINOIS	FED. AID PROJECT	



TS SHT NO. 117

PROPOSED

FORMER EAGLE 4L

LAKE COUNTY TACTICS

PARSONS	USER NAME = erica.salutz	DESIGNED - RL / DG	REVISED -
		DRAWN - RL / DG	REVISED -
	PLOT SCALE = 40.0000 ' / in.	CHECKED - RL / DG	REVISED -
	PLOT DATE = 3/30/2025	DATE - 2025.02.20	REVISED -

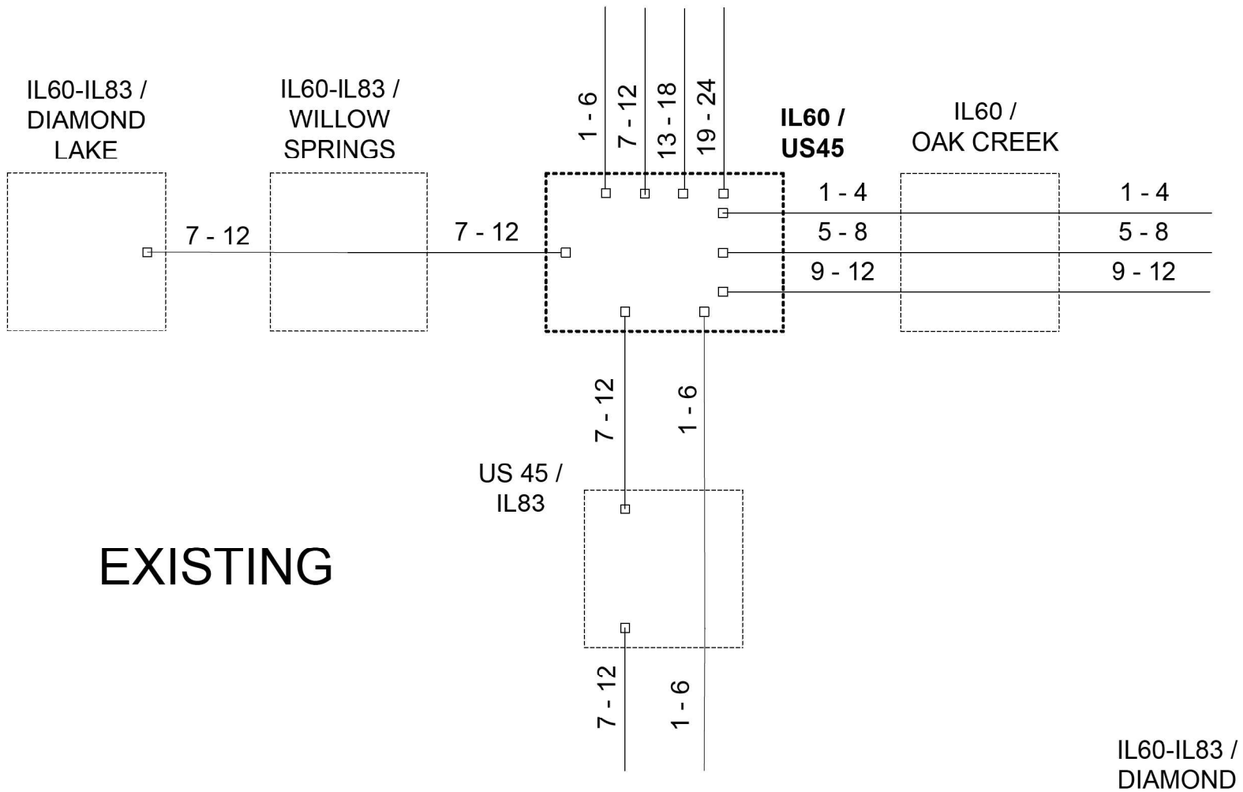
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABINET DETAIL
US RTE 45 – IL RTE 83 TO TOWNLINE SQ
IL RTE 60 /IL RTE 83 – DIAMOND LAKE RD TO OAK CREEK PLAZA

SCALE: | SHEET OF SHEETS | STA. | TO STA.

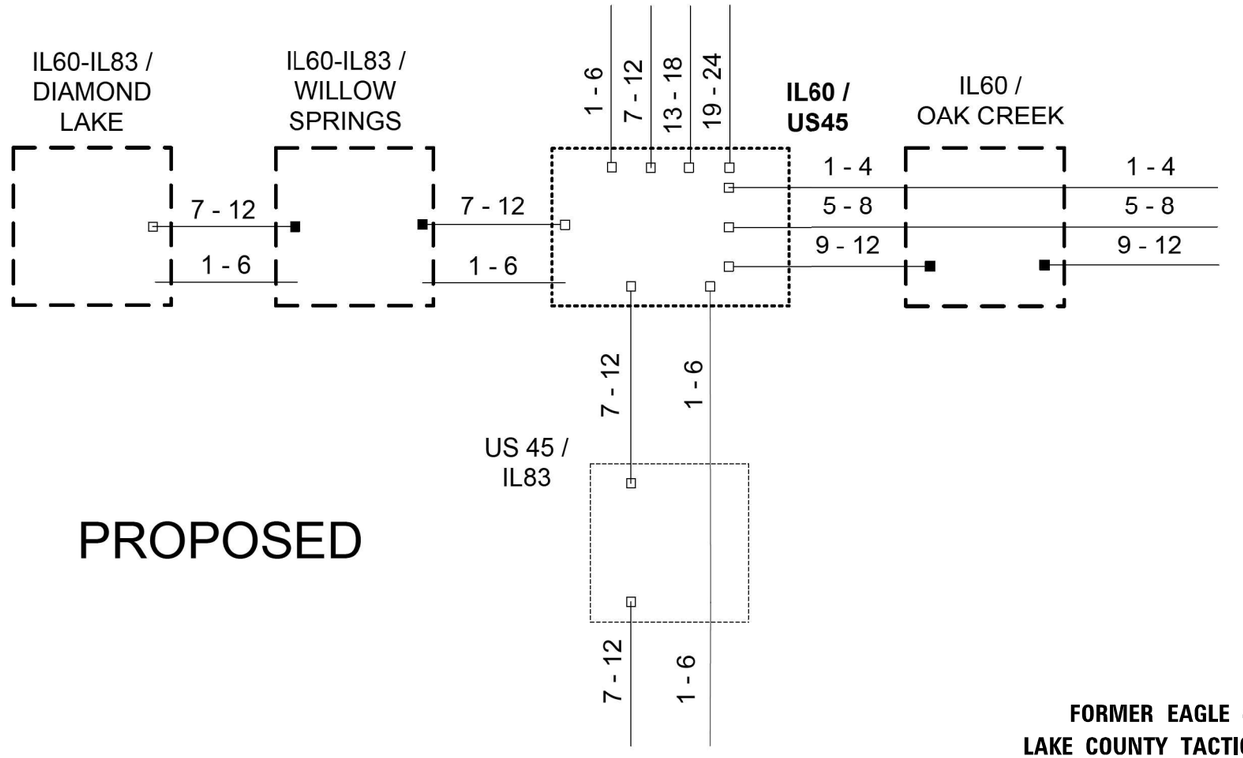
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	125
		CONTRACT NO. 62W90		
		ILLINOIS	FED. AID PROJECT	

FILE NAME: M3_20193 CMI.18-03-5500 IDOT PTB 193 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet 03_Eqpk4.dgn



EXISTING

45/TOWNLINE SQ
MOVED TO 80C



PROPOSED

FORMER EAGLE 4L
LAKE COUNTY TACTICS

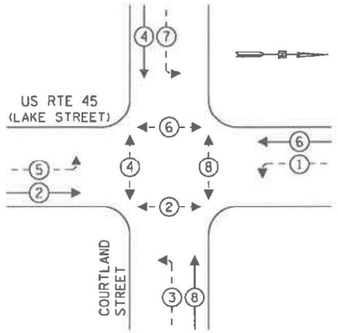
TS SHT NO. 118

FILE NAME: M5_20193 CHIL18-03-5500 IDOT_PTB_190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_03_Exhibit.dgn

PARSONS	USER NAME = erica.salutz	DESIGNED - RL / DG	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FIBER SPLICE DIAGRAM US RTE 45 – IL RTE 83 TO TOWNLINE SQ IL RTE 60 /IL RTE 83 – DIAMOND LAKE RD TO OAK CREEK PLAZA
		DRAWN - RL / DG	REVISED -		
	PLOT SCALE = 40.0000 ' / in.	CHECKED - RL / DG	REVISED -		
	PLOT DATE = 3/30/2025	DATE - 2025.02.20	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	126
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

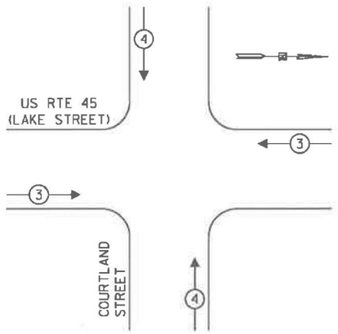
EXISTING CONTROLLER SEQUENCE

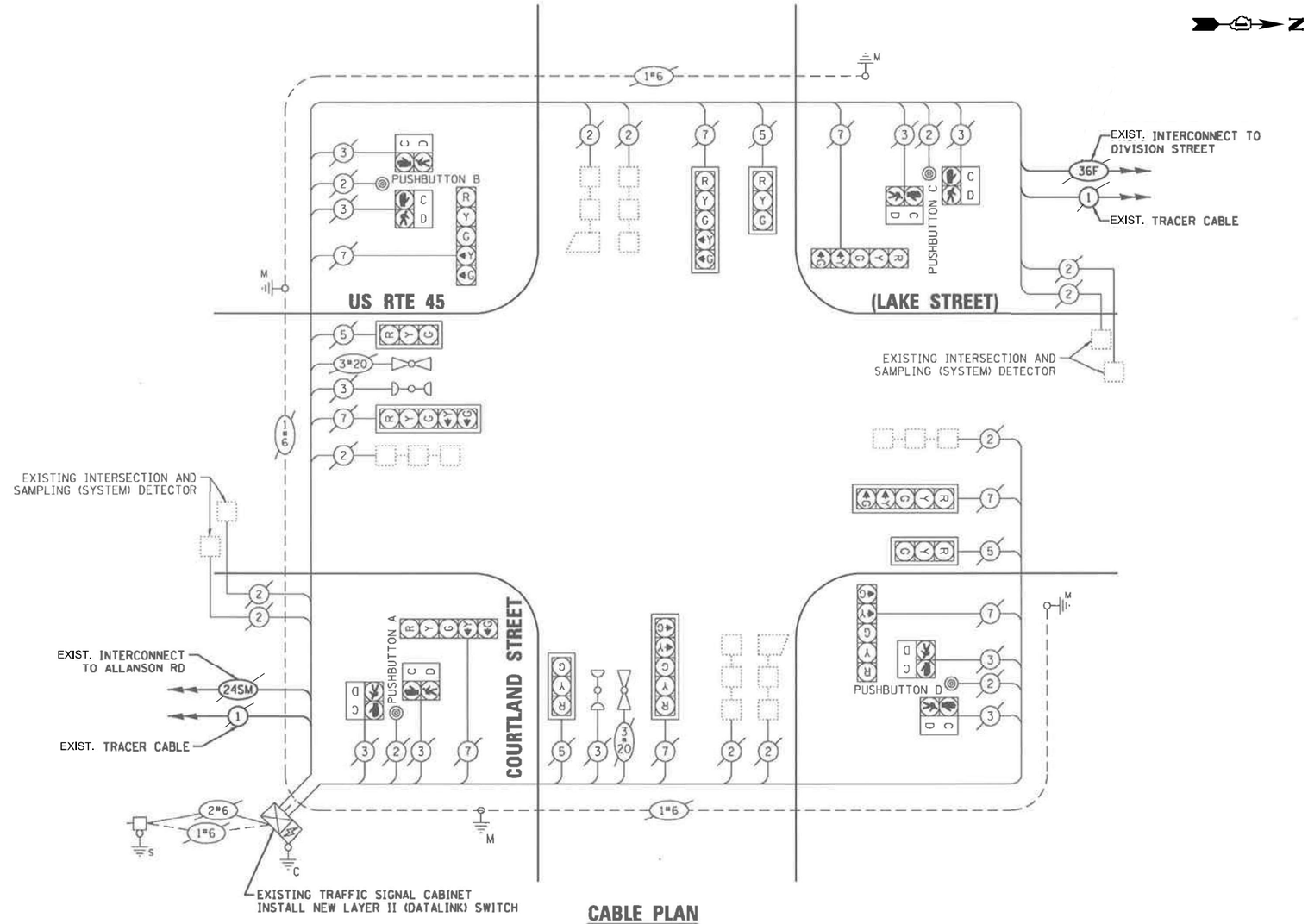


LEGEND:

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

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE





CABLE PLAN
(NOT TO SCALE)

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	4	11	44
4 - SECTION	-	14	-
5 - SECTION	8	13	104
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	8	15	120
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			478
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			1083

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TERMINATE FIBER IN CABINET	EACH	12
LAYER II (DATALINK) SWITCH	EACH	1

ENERGY COSTS TO:
VILLAGE OF MUDELEIN
300 PLAZA CIRCLE
MUNDELEIN, ILLINOIS 60060

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

TS SHT NO. 119

TS 14372
FORMER EAGLE 1J
LAKE COUNTY TACTICS

FILE NAME: NH_20193 CMN18-03-5560 IDOT_PTB_199 - Various Traffic Signal Design\Graphics\WO 263_62W90\CAD\62W90_Sheet_05_Eagle1J.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED - 05/08/2025
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 5/7/2025	DATE - 12/20/2024	REVISED -

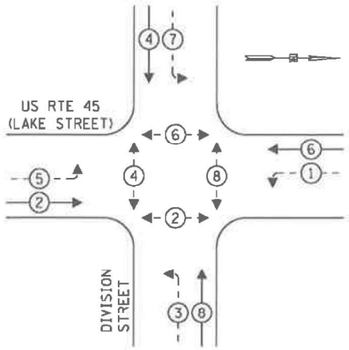
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 60 – US RTE 45 (LAKE ST) AT COURTLAND ST

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	127
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

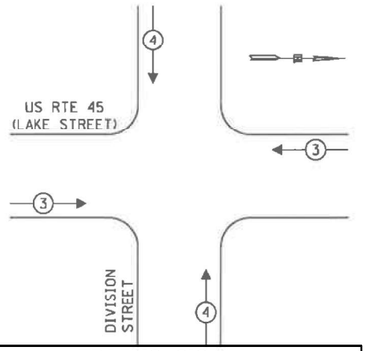
EXISTING CONTROLLER SEQUENCE



LEGEND:

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

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



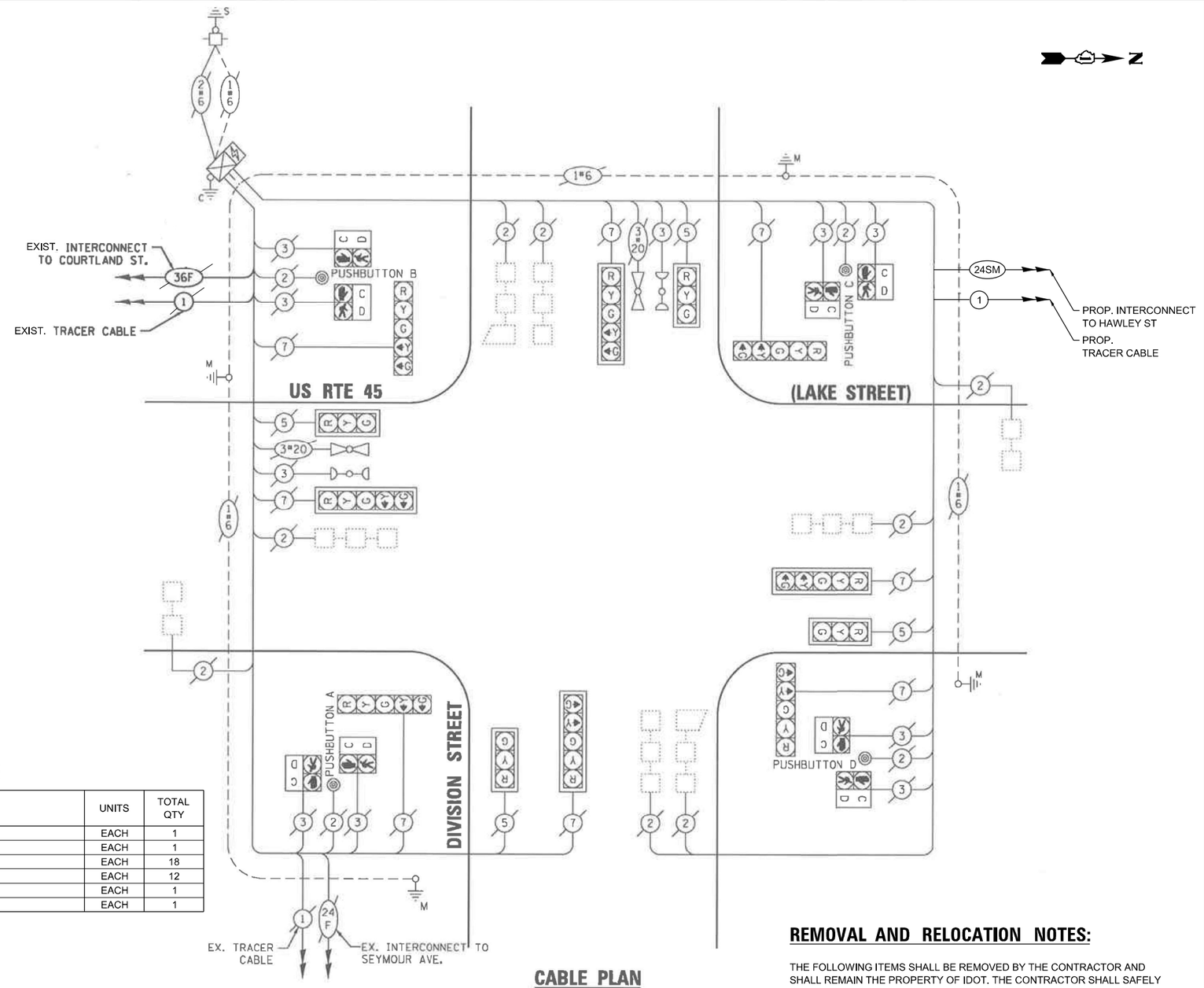
TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	4	11	44
4 - SECTION	-	14	-
5 - SECTION	8	13	104
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	8	15	120
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			478
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			1083

ENERGY COSTS TO:
VILLAGE OF MUDELEIN
300 PLAZA CIRCLE
MUNDELEIN, ILLINOIS 60060
ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
TERMINATE FIBER IN CABINET	EACH	18
SPLICE FIBER IN CABINET	EACH	12
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1



CABLE PLAN
(NOT TO SCALE)

PUSHBUTTON NOTES

1. PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4.
2. PUSHBUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6.
3. PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8.
4. PUSHBUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8.

REMOVAL AND RELOCATION NOTES:

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF IDOT. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR THE PICK UP OF ALL THE EQUIPMENT TO BE RETURNED TO IDOT.

1 EACH CONTROLLER

TS 14345
FORMER EAGLE 1J
LAKE COUNTY TACTICS

TS SHT NO. 120

FILE NAME: MX-20193 CHI:18-03-5500 IDOT_PTB_190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_65_Eag1J.dgn

TYLin

USER NAME = erica.salutz	DESIGNED -	ERICA SALUTZ	REVISED -	05/08/2025
	DRAWN -	KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED -	PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 5/7/2025	DATE -	12/20/2024	REVISED -	

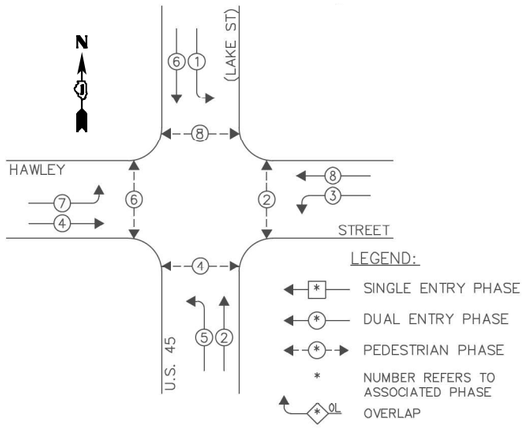
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 61 – US RTE 45 (LAKE ST) AT DIVISION ST

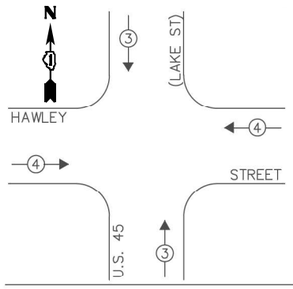
SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	128
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

EXISTING CONTROLLER SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

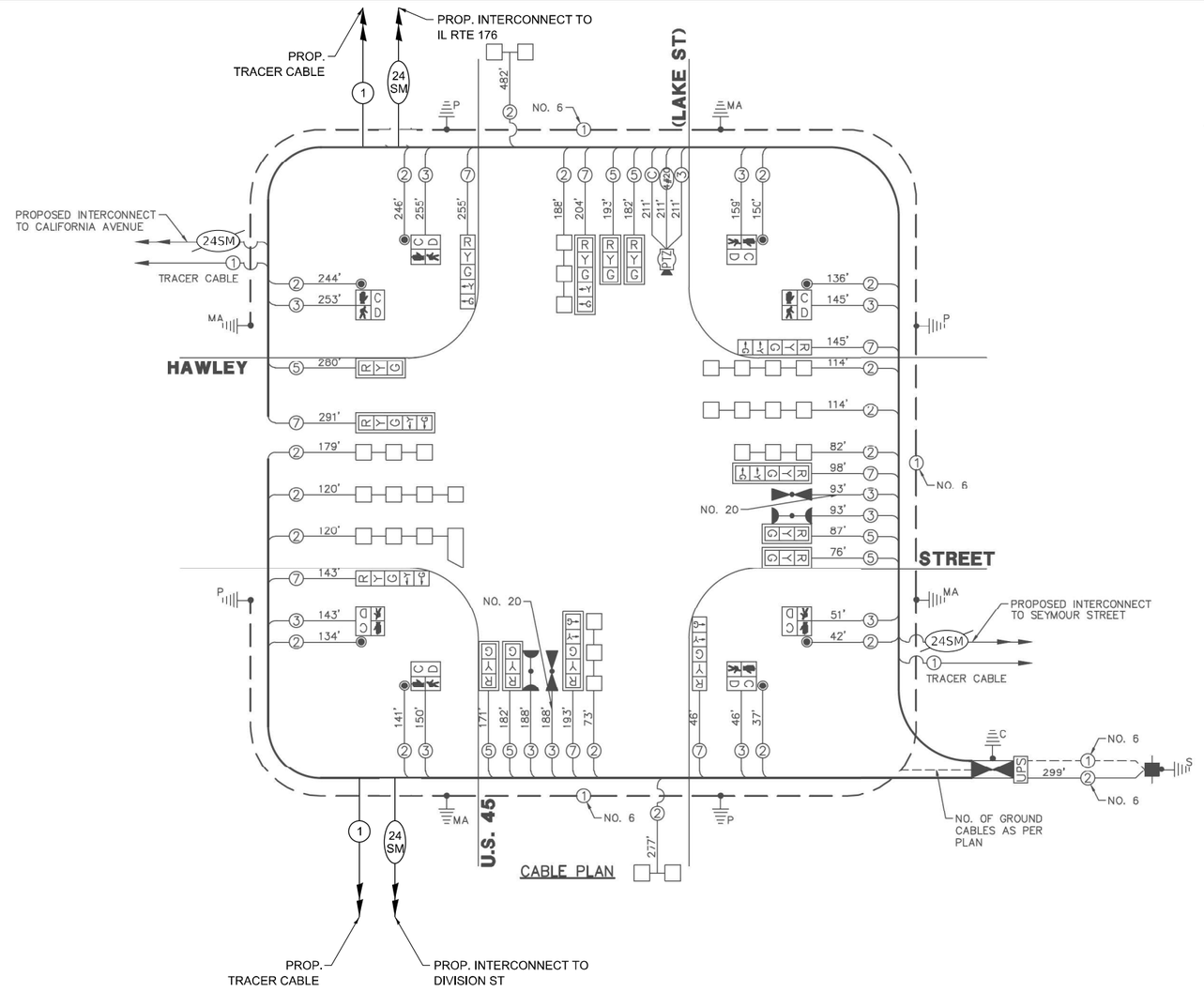


PROPOSED EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT		

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	7	11	77
4 - SECTION	-	14	-
5 - SECTION	8	13	104
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	8	15	120
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			511
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	-
PTZ CAMERA	1	75	75
TOTAL SERVICE WIRE SIZING =			1191

ENERGY COSTS TO:
VILLAGE OF MUDELEIN
300 PLAZA CIRCLE
MUNDELEIN, ILLINOIS 60060
ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---



REMOVAL AND RELOCATION NOTES:

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF IDOT. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR THE PICK UP OF ALL THE EQUIPMENT TO BE RETURNED TO IDOT.

1 EACH CONTROLLER

INSTALL CONTROLLER RELOCATED FROM TS 6625 - US RTE 45 AT IL RTE 176

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
TERMINATE FIBER IN CABINET	EACH	6
SPLICE FIBER IN CABINET	EACH	18

TS 14350
FORMER EAGLE 1J
LAKE COUNTY TACTICS

TS SHT NO. 121

FILE NAME: M:\...\TS 14350 CHI\18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_03_Eagle1J.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 62 – US RTE 45 (LAKE ST) AT HAWLEY ST
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	129
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

REMOVAL AND RELOCATION NOTES:

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF IDOT. THE CONTRACTOR SHALL SAFELY REMOVE AND REINSTALL AT THE INTERSECTIONS INDICATED BELOW.

1 EACH MASTER CONTROLLER RELOCATED TO TS 14350 - US RTE 45 AT HAWLEY AND REPROGRAMMED AS LOCAL CONTROLLER
1 EACH CELL MODEM RELOCATED TO TS 6622 - IL RTE 173 AT GREGORY

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

1 EACH PHONE LINE
1 EACH TRANSCEIVER FIBER OPTIC

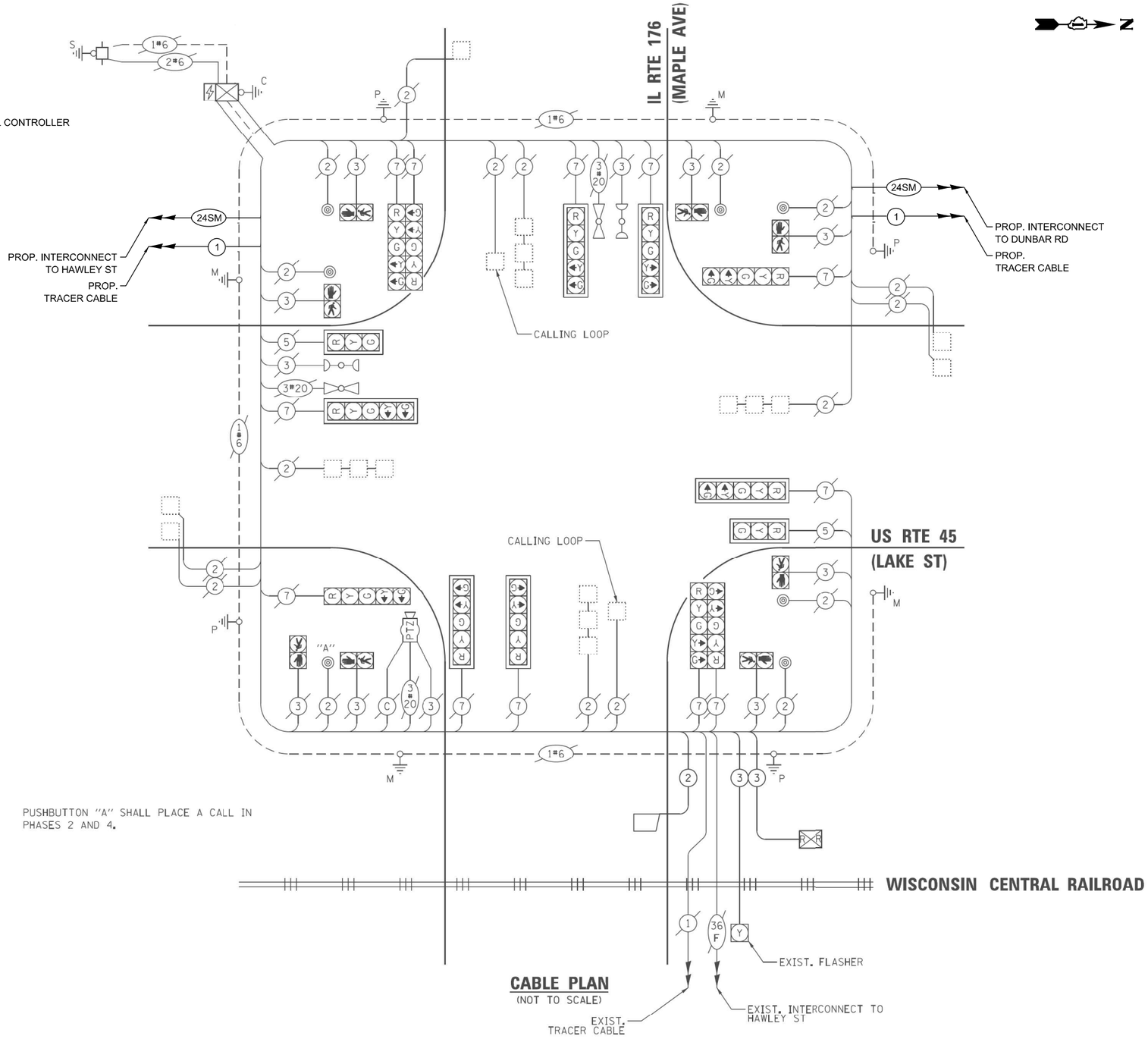
NOTES:

1. THE TELEPHONE LINE AND SERVICE SHOULD BE REMOVED AND DISCONNECTED UPON PROJECT COMPLETION AND SIGNAL BEING ADDED TO TACTICS.
2. ANTENNA IS TO REMAIN IN PLACE AND BE ABANDDOONED. CABLE TO BE COILED INSIDE CABINET.

SCHEDULE OF QUANTITIES

	ITEM DESCRIPTION	UNITS	TOTAL QTY
*	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
	RELOCATE EXISTING TRAFFIC SIGNAL CONTROLLER	EACH	1
	RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
	SPLICE FIBER IN CABINET	EACH	12
	FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1

* FLASHER TO BE MAINTAINED AS PART OF SIGNAL MAINTENANCE (1 WB)



PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4.

CABLE PLAN
(NOT TO SCALE)

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	2	11	22
4 - SECTION	-	14	-
5 - SECTION	12	13	156
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	8	15	120
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			508
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	-
PTZ CAMERA	1	75	75
TOTAL SERVICE WIRE SIZING =			1188

ENERGY COSTS TO:
ILLINOIS DEPT OF TRANSPORTATION
201 CENTER CT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

TS 6625
FORMER EAGLE 1J
LAKE COUNTY TACTICS

TS SHT NO. 122

FILE NAME: IM_20 913 CHI 18-03-5500 IDOT PTB 190 - Various Traffic Signal Design Graphics WO 203_62W90 CAD 62W90 Sheet_05 Eagle 1J.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED - 05/08/2025	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 5/6/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN AND SCHEDULE OF QUANTITIES
LOCATION 63 – US RTE 45 (LAKE ST) AT IL 176 (MAPLE AVE)

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	130
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

SEQUENCE OF OPERATION

MOVEMENT	N																														FLASH
PHASE		1+5							1+6			2+5			2+6							3			4						
INTERVAL		1	2A	2B	3A	3B	4A	4B	5	6A	6B	7	8A	8B	9	10A	10B	11A	11B	12A	12B	13	14A	14B	15	16A	16B	16C	16D		
CHANGE TO			1+6		2+5		2+6			2+6			2+6			1+5 3 4		1+6		2+5			1+5,1+6 2+5,2+6 4			1+5,1+6 2+5,2+6					
US ROUTE 45 END MAST ARM AND FAR LEFT SIGNALS	N/B	G ←	Y ←	R ←	G ←	G ←	Y ←	R ←	R ←	R ←	R ←	G ←	Y ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←
US ROUTE 45 FAR RIGHT, CENTER MAST ARM, AND NEAR RIGHT SIGNALS	N/B	R	R	R	R	R	R	R	R	R	R	G	G	G	G	Y	R	Y	R	G	G	R	R	R	R	R	R	R	R	R	R
US ROUTE 45 END MAST ARM AND FAR LEFT SIGNALS	S/B	G ←	G ←	G ←	Y ←	R ←	Y ←	R ←	G ←	Y ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←
US ROUTE 45 FAR RIGHT, CENTER MAST ARM, AND NEAR RIGHT SIGNALS	S/B	R	R	R	R	R	R	R	G	G	G	R	R	R	G	Y	R	G	G	Y	R	R	R	R	R	R	R	R	R	R	R
ST MARY'S DRIVEWAY END MAST ARM AND FAR LEFT SIGNALS	W/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G ←G	Y	R	R	R	R	R	R	R	R
ST MARY'S DRIVEWAY NEAR AND FAR RIGHT SIGNALS	W/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	R	R	R	R	R	R	R
DUNBAR ROAD (WEST OF TRACKS) ALL SIGNALS	E/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	R	R	R	R
DUNBAR ROAD (EAST OF TRACKS) END MAST ARM AND FAR LEFT SIGNALS	E/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G ←G	G ←G	G ←G	Y	R	R	R
DUNBAR ROAD (EAST OF TRACKS) FAR RIGHT MAST ARM SIGNAL	E/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	G	G	Y	R	R	R

PHASES 2+6 SHALL BE PLACED ON RECALL

Created: 12/13/24 AK
Revised:

RAILROAD PREEMPTION SEQUENCE OF OPERATION

CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER		1		5		7		9		13		15		PREEMPTER NUMBER 3		PREEMPTER NUMBER 4		PREEMPTER NUMBER 5		PREEMPTER NUMBER 6										
CHANGE FROM EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER														2		3		4		5											
RAILROAD PREEMPTION INTERVAL		1A	1B	1C	1D	1E	1F	1G	1H	1J	1K	1L	1M	1N	1P	1Q	1R	1S	1T	1U	1V	2	3	4	5							
CHANGE TO RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER		1R	2	1D	2	1F	2	1H	2	1K	2	1M	2	1P	2	1R	2	1T	2	1V	2	3	4	5								CLEAR TO NORMAL SEQUENCE
US ROUTE 45 END MAST ARM AND FAR LEFT SIGNALS	N/B	Y ←	R ←	R ←	R ←	Y ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	Y ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←							Δ
US ROUTE 45 FAR RIGHT, CENTER MAST ARM, AND NEAR RIGHT SIGNALS	N/B	R	R	R	R	Y	R	Y	R	R	R	R	R	Y	R	R	R	R	R	R	G	R	R	R	R							Δ
US ROUTE 45 END MAST ARM AND FAR LEFT SIGNALS	S/B	Y ←	R ←	Y ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	Y ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←							Δ
US ROUTE 45 FAR RIGHT, CENTER MAST ARM, AND NEAR RIGHT SIGNALS	S/B	R	R	Y	R	R	R	Y	R	R	R	R	R	R	R	R	R	Y	R	R	R	R	R	R	G							Δ
ST MARY'S DRIVEWAY END MAST ARM AND FAR LEFT SIGNALS	W/B	R	R	R	R	R	R	R	R	Y	R	R	R	R	R	R	R	R	R	Y	R	R	R	R	R							Δ
ST MARY'S DRIVEWAY NEAR AND FAR LEFT SIGNALS	W/B	R	R	R	R	R	R	R	R	Y	R	R	R	R	R	R	R	R	R	Y	R	R	R	R	R							Δ
DUNBAR ROAD (WEST OF TRACKS) ALL SIGNALS	E/B	R	R	R	R	R	R	R	R	R	R	Y	R	R	R	Y	R	R	R	R	R	R	R	R	R							Δ
DUNBAR ROAD (EAST OF TRACKS) END MAST ARM AND FAR LEFT SIGNALS	E/B	R	R	R	R	R	R	R	R	G ←G	G ←G	R	R	G ←G	G ←G	R	R	R	R	G ←G	Y	R	R	R	R							Δ
DUNBAR ROAD (EAST OF TRACKS) FAR RIGHT MAST ARM SIGNAL	E/B	R	R	R	R	R	R	G	G	R	R	G	G	R	R	G	G	R	R	R	Y	R	R	R	R							Δ
US ROUTE 45 NO RIGHT TURN SIGNS	S/B	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT							Δ
																									HOLD							

Δ 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 TERMIANTED.

Created: 12/13/2024 AK
Revised:

EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION

CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER		1		1		1		5		5	7		7		9		9		9		13		13		15				15	PREEMPTER NUMBER 3	PREEMPTER NUMBER 4	PREEMPTER NUMBER 5	PREEMPTER NUMBER 6	
EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER		1A	1B	1C	1D	1E	1F	1G	1H	1J	1K	1L	1M	1N	1P	1Q	1R	1S	1T	1U	1V	1W	1X	1Y	1Z	1AA	1BB	2	3	4	5	CLEAR TO NORMAL SEQUENCE
CHANGE TO EMERGENCY VEHICLE PREEMPTION OF OPERATION INTERVAL NUMBER		1B	2	1D	3 OR 5	1F	4	1H	2,3, OR 5	4	2	1M	3,4, OR 5	1P	2	1R	3 OR 5	1T	4	1V	2,3, OR 4	5	1Y	1Z	1AA	2,4, OR 5	3					<>
US ROUTE 45 END MAST ARM AND FAR LEFT SIGNALS	N/B	G ←	G ←	Y ←	R ←	Y ←	R ←	R ←	R ←	R ←	G ←	Y ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	G ←	R ←	R ←	R ←	<>
US ROUTE 45 FAR RIGHT, CENTER MAST ARM, AND NEAR RIGHT SIGNALS	N/B	R	R	R	R	R	R	R	R	R	G	Y	R	G	G	Y	R	Y	R	R	R	R	R	R	R	R	R	G	R	R	R	<>
US ROUTE 45 END MAST ARM AND FAR LEFT SIGNALS	S/B	Y ←	R ←	Y ←	R ←	G ←	G ←	Y ←	R ←	G ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	G ←	R ←	<>
US ROUTE 45 FAR RIGHT, CENTER MAST ARM, AND NEAR RIGHT SIGNALS	S/B	R	R	R	R	R	R	Y	R	G	R	R	R	Y	R	Y	R	G	G	R	R	R	R	R	R	R	R	G	R	R	G	<>
ST MARY'S DRIVEWAY END MAST ARM AND FAR LEFT SIGNALS	W/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Y	R	G ←G	R	R	R	R	R	R	R	R	G ←G	<>
ST MARY'S DRIVEWAY NEAR AND FAR RIGHT SIGNALS	W/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Y	R	G	R	R	R	R	R	R	R	R	G	<>
DUNBAR ROAD (WEST OF TRACKS) ALL SIGNALS	E/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Y	R	R	R	G	R	G	R	R	<>
DUNBAR ROAD (EAST OF TRACKS) END MAST ARM AND FAR LEFT SIGNALS	E/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G ←G	G ←G	Y	R	G ←G	R	G ←G	R	R	<>
DUNBAR ROAD (EAST OF TRACKS) FAR RIGHT MAST ARM SIGNAL	E/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	G	Y	R	G	R	G	R	R	<>

<> 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, 3, 4, OR 5 IS TERMINATED.

Created: 12/13/2024 AK
Revised:

TS SHT NO. 123

FILE NAME: M:_20193 CHI\18-03-5500 FDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eagle1J.dgn

TS 6625
FORMER EAGLE 1J
LAKE COUNTY TACTICS

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
LOCATION 63 – US RTE 45 (LAKE ST) AT IL 176 (MAPLE)

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	131
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

REMOVAL AND RELOCATION NOTES:

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

1 EACH TRANSCEIVER FIBER OPTIC

SCHEDULE OF QUANTITIES

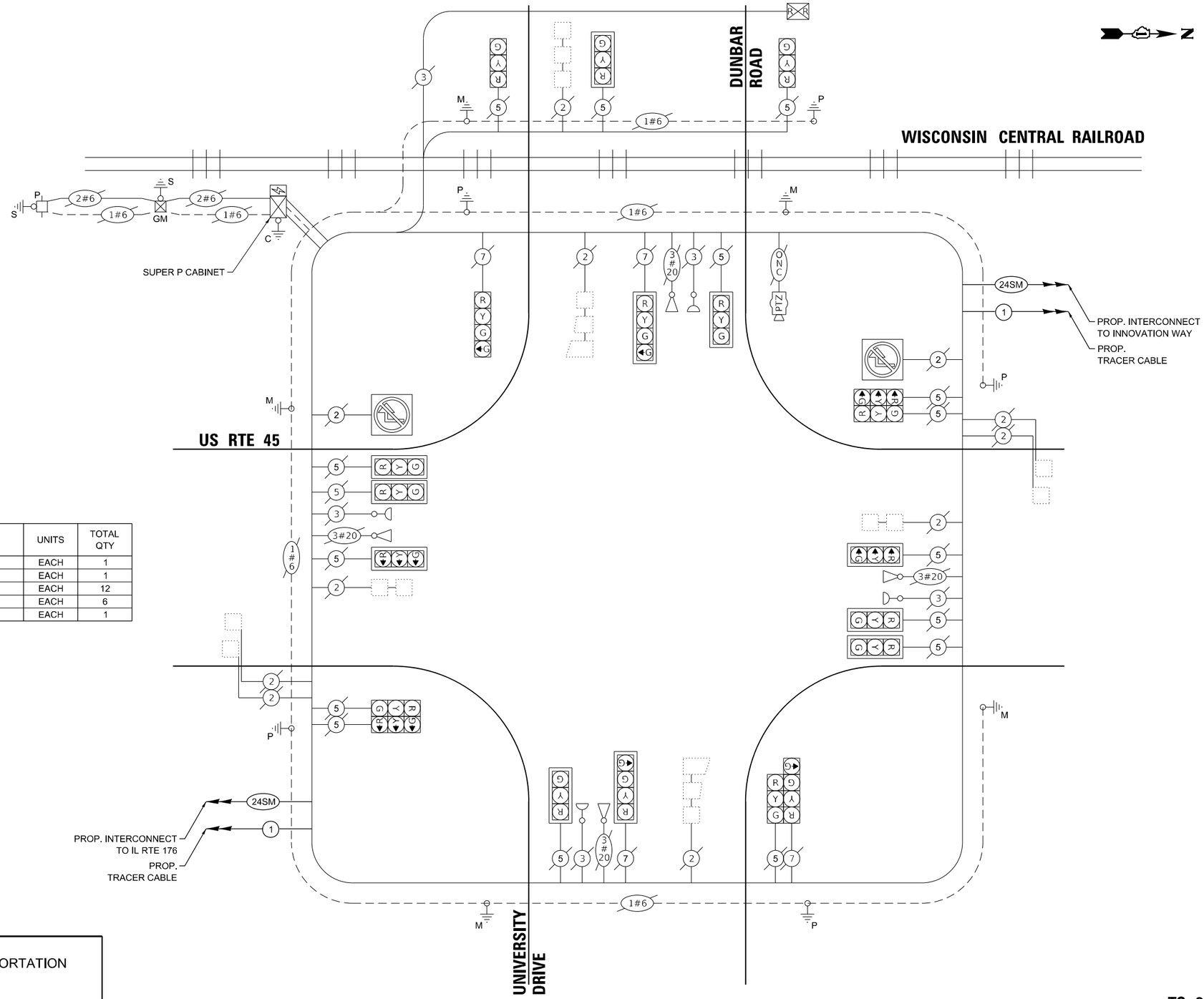
ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
TERMINATE FIBER IN CABINET	EACH	12
Ssplice FIBER IN CABINET	EACH	6
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	13	11	143
4 - SECTION	4	14	56
5 - SECTION	-	13	-
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			529
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	-
PTZ CAMERA	1	75	75
TOTAL SERVICE WIRE SIZING =			1209

ENERGY COSTS TO:
ILLINOIS DEPT OF TRANSPORTATION
201 CENTER CT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---



CABLE PLAN
(NOT TO SCALE)

TS 21420
FORMER EAGLE 1J
LAKE COUNTY TACTICS

TS SHT NO. 124

FILE NAME: M:_20 9\3 CHI\18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90 Sheet_05 Eagle1J.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN AND SCHEDULE OF QUANTITIES
LOCATION 64 – US RTE 45 (LAKE ST) AT DUNBAR RD

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	132
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

SEQUENCE OF OPERATION

MOVEMENT		5 → 1	6 → 1	5 → 2	6 → 2	3 → 4	→ 4	FLASH
PHASE		1 + 5	1 + 6	2 + 5	2 + 6	3	4	
INTERVAL		1 | 2A | 2B | 3A | 3B | 4A | 4B	5 | 6A | 6B	7 | 8A | 8B	9 | 10A | 10B | 11A | 11B | 12A | 12B	13 | 14A | 14B	15 | 16A | 16B | 16C | 16D	
CHANGE TO		1 | 1+6 | 2+5 | 3+4 | 2+6 | 1+4+5 | 1+4+6 | 2+4+5 | 2+4+6	1+6 | 2+6	2+5 | 2+6	3+4 | 1+4+5 | 1+4+6 | 2+4+5 | 2+4+6	4 | 1+4+5 | 1+4+6 | 2+4+5 | 2+4+6		
U.S. ROUTE 45 FAR RIGHT AND CENTER MAST ARM AND NEAR RIGHT SIGNALS	N/B	R R R R R R R R R G G G Y R Y R G G R R R R R R R R						
U.S. ROUTE 45 FAR LEFT AND END MAST ARM SIGNALS	N/B	◄G ◄Y ◄R ◄G ◄Y ◄R ◄R ◄R ◄R ◄G ◄Y ◄R ◄R ◄R ◄R ◄R ◄R ◄R ◄R ◄R ◄R ◄R ◄R ◄R ◄R						
U.S. ROUTE 45 FAR RIGHT AND CENTER MAST ARM AND NEAR RIGHT SIGNALS	S/B	R R R R R R R G G G R R R G Y R G Y R R R R R R R R						
U.S. ROUTE 45 FAR LEFT AND END MAST ARM SIGNALS	S/B	◄G ◄G ◄G ◄Y ◄R ◄Y ◄R ◄G ◄Y ◄R ◄R ◄R ◄R ◄R ◄R ◄R ◄R ◄R ◄R ◄R ◄R ◄R ◄R ◄R ◄R						
DUNBAR ROAD (WEST OF TRACKS) ALL-SIGNALS	E/B	R R R R R R R R R R R R R R R R R R R R R G Y R R R						
DUNBAR ROAD (EAST OF TRACKS) FAR RIGHT MAST ARM SIGNAL	E/B	R R R R R R R R R R R R R R R R R R R R R G G Y R R						
DUNBAR ROAD (EAST OF TRACKS) FAR LEFT AND END MAST ARM SIGNALS	E/B	R R R R R R R R R R R R R R R R R R R R R G G Y R R ◄G ◄G ◄G						
ST. MARY'S DRIVEWAY NEAR AND FAR RIGHT SIGNALS	W/B	R R R R R R R R R R R R R R R R R R R G Y R R R R R R						
ST. MARY'S DRIVEWAY FAR LEFT AND END MAST ARM SIGNALS	W/B	R R R R R R R R R R R R R R R R R R R G Y R R R R R ◄G ◄G						

RAILROAD PREEMPTION SEQUENCE OF OPERATION

								PREEMPTOR NUMBER 3	PREEMPTOR NUMBER 4	PREEMPTOR NUMBER 5	PREEMPTOR NUMBER 6	PREEMPTOR NUMBER 2	
CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER		1	5	7	9	13	15						
CHANGE FROM EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER								2	3	4	5		
RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER		1A	1B	1C	1D	1E	1F	1G	1H	1J	1K	1L	1M
CHANGE TO RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER		1B	2	1D	2	1F	2	1H	2	1K	2	1M	2
U.S. ROUTE 45 FAR RIGHT AND CENTER MAST ARM AND NEAR RIGHT SIGNALS	N/B	R	R	R	R	Y	R	Y	R	R	R	R	R
U.S. ROUTE 45 FAR LEFT AND END MAST ARM SIGNALS	N/B	◄Y	◄R	◄R	◄R	◄Y	◄R	◄R	◄R	◄R	◄R	◄R	◄R
U.S. ROUTE 45 FAR RIGHT AND CENTER MAST ARM AND NEAR RIGHT SIGNALS	S/B	R	R	Y	R	R	R	Y	R	R	R	R	R
U.S. ROUTE 45 FAR LEFT AND END MAST ARM SIGNALS	S/B	◄Y	◄R	◄Y	◄R	◄R	◄R	◄R	◄R	◄R	◄R	◄R	◄R
DUNBAR ROAD (WEST OF TRACKS) ALL-SIGNALS	E/B	R	R	R	R	R	R	R	R	R	R	R	R
DUNBAR ROAD (EAST OF TRACKS) FAR RIGHT MAST ARM SIGNAL	E/B	R	R	R	R	R	R	R	R	R	R	R	R
DUNBAR ROAD (EAST OF TRACKS) FAR LEFT AND END MAST ARM SIGNALS	E/B	R	R	R	R	R	R	R	R	R	R	R	R
ST. MARY'S DRIVEWAY NEAR AND FAR RIGHT SIGNALS	W/B	R	R	R	R	R	R	R	R	R	R	R	R
ST. MARY'S DRIVEWAY FAR LEFT AND END MAST ARM SIGNALS	W/B	R	R	R	R	R	R	R	R	R	R	R	R
U.S. ROUTE 45 ILLUMINATED NRT SIGNS	S/B	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT

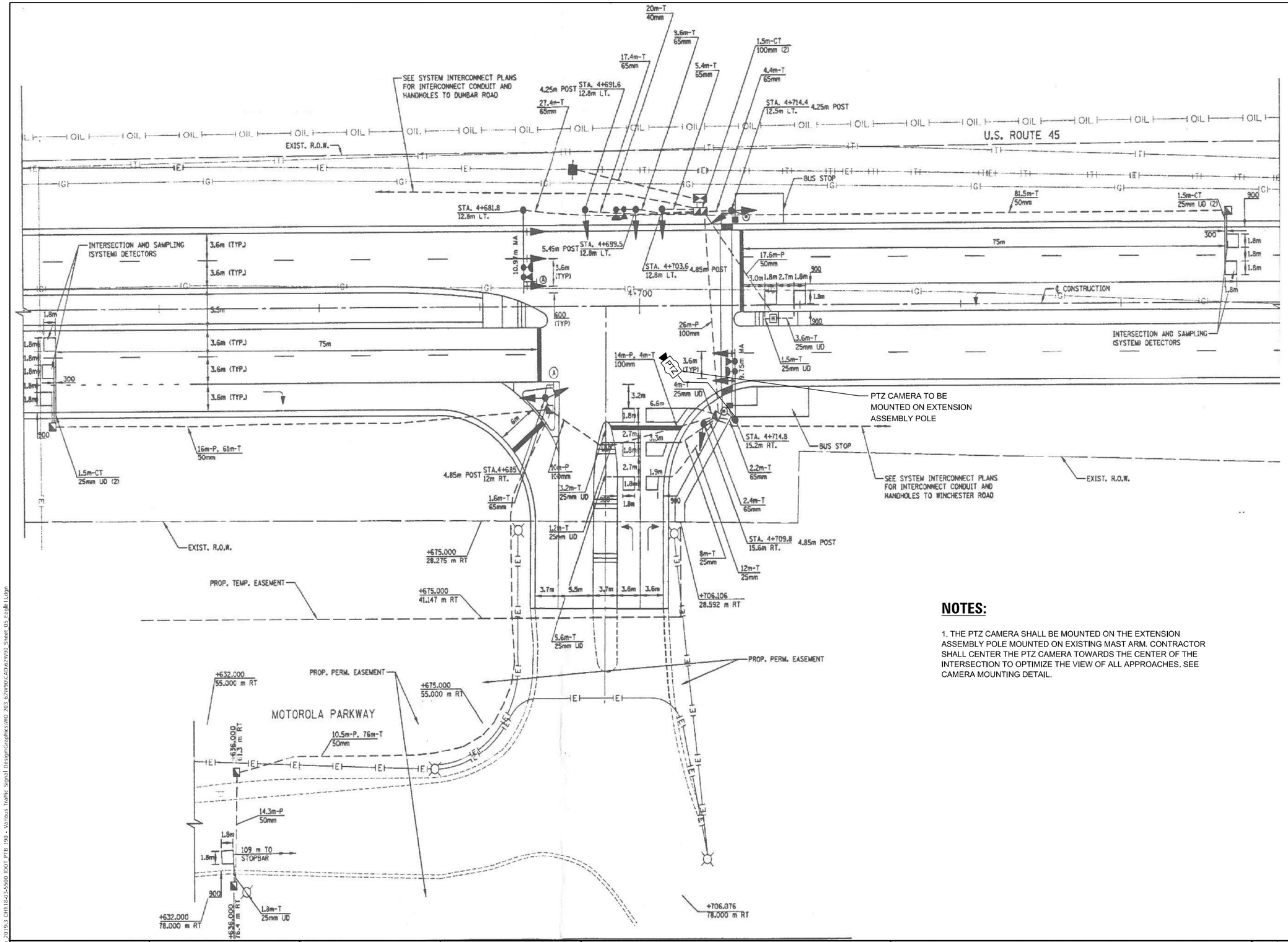
																								CLEAR TO NORMAL SEQUENCE
		1N	1P	1Q	1R	1S	1T	1U	1V	2	3	4	5											
		2	3	4	5																			
		1P	2	1P	2	1T	2	1V	2	3	4	5												
U.S. ROUTE 45 FAR RIGHT AND CENTER MAST ARM AND NEAR RIGHT SIGNALS	N/B	Y	R	R	R	R	R	R	R	R	R	R	G	Δ										
U.S. ROUTE 45 FAR LEFT AND END MAST ARM SIGNALS	N/B	◄Y	◄R	◄R	◄R	◄R	◄R	◄R	◄R	◄R	◄R	◄R	◄R	Δ										
U.S. ROUTE 45 FAR RIGHT AND CENTER MAST ARM AND NEAR RIGHT SIGNALS	S/B	R	Y	R	R	R	R	R	R	R	R	R	G	Δ										
U.S. ROUTE 45 FAR LEFT AND END MAST ARM SIGNALS	S/B	◄Y	◄R	◄Y	◄R	◄R	◄R	◄R	◄R	◄R	◄R	◄R	◄R	Δ										
DUNBAR ROAD (WEST OF TRACKS) ALL-SIGNALS	E/B	R	R	R	R	R	R	Y	R	R	R	R	R	Δ										
DUNBAR ROAD (EAST OF TRACKS) FAR RIGHT MAST ARM SIGNAL	E/B	R	R	R	R	R	R	G	G	R	R	R	G	Δ										
DUNBAR ROAD (EAST OF TRACKS) FAR LEFT AND END MAST ARM SIGNALS	E/B	R	R	R	R	R	R	G ◄C	C ◄C	R	R	R	G	Δ										
ST. MARY'S DRIVEWAY NEAR AND FAR RIGHT SIGNALS	W/B	R	R	R	R	R	R	Y	R	R	R	R	R	Δ										
ST. MARY'S DRIVEWAY FAR LEFT AND END MAST ARM SIGNALS	W/B	R	R	R	R	R	R	Y	R	R	R	R	R	Δ										
U.S. ROUTE 45 ILLUMINATED NRT SIGNS	S/B	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	Δ										

Λ 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.

NRT = "NO RIGHT TURN" OR

EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION

| | | | | | | | | | | | | | | | | | | |



NOTES:

1. THE PTZ CAMERA SHALL BE MOUNTED ON THE EXTENSION ASSEMBLY POLE MOUNTED ON EXISTING MAST ARM. CONTRACTOR SHALL CENTER THE PTZ CAMERA TOWARDS THE CENTER OF THE INTERSECTION TO OPTIMIZE THE VIEW OF ALL APPROACHES. SEE CAMERA MOUNTING DETAIL.

TS 21260
FORMER EAGLE 1J
LAKE COUNTY TACTICS

TS SHT NO. 126

FILE NAME: M:\2019\3 CMI\18-03-5500 IDOT-PTB 199 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eagle1J.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED - 05/08/2025	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 5/6/2025	DATE - 12/20/2024	REVISED -	

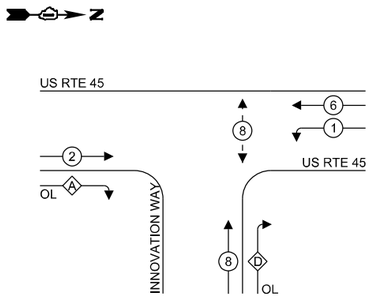
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 65 – US RTE 45 (LAKE ST) AT INNOVATION WAY

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	134
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

EXISTING CONTROLLER SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

LEGEND:

- PROTECTED PHASE
- PROTECTED/PERMITTED PHASE
- PEDESTRIAN PHASE
- OVERLAP (OL)

RIGHT TURN OVERLAP PHASE DESIGNATION:

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

REMOVAL AND RELOCATION NOTES:

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

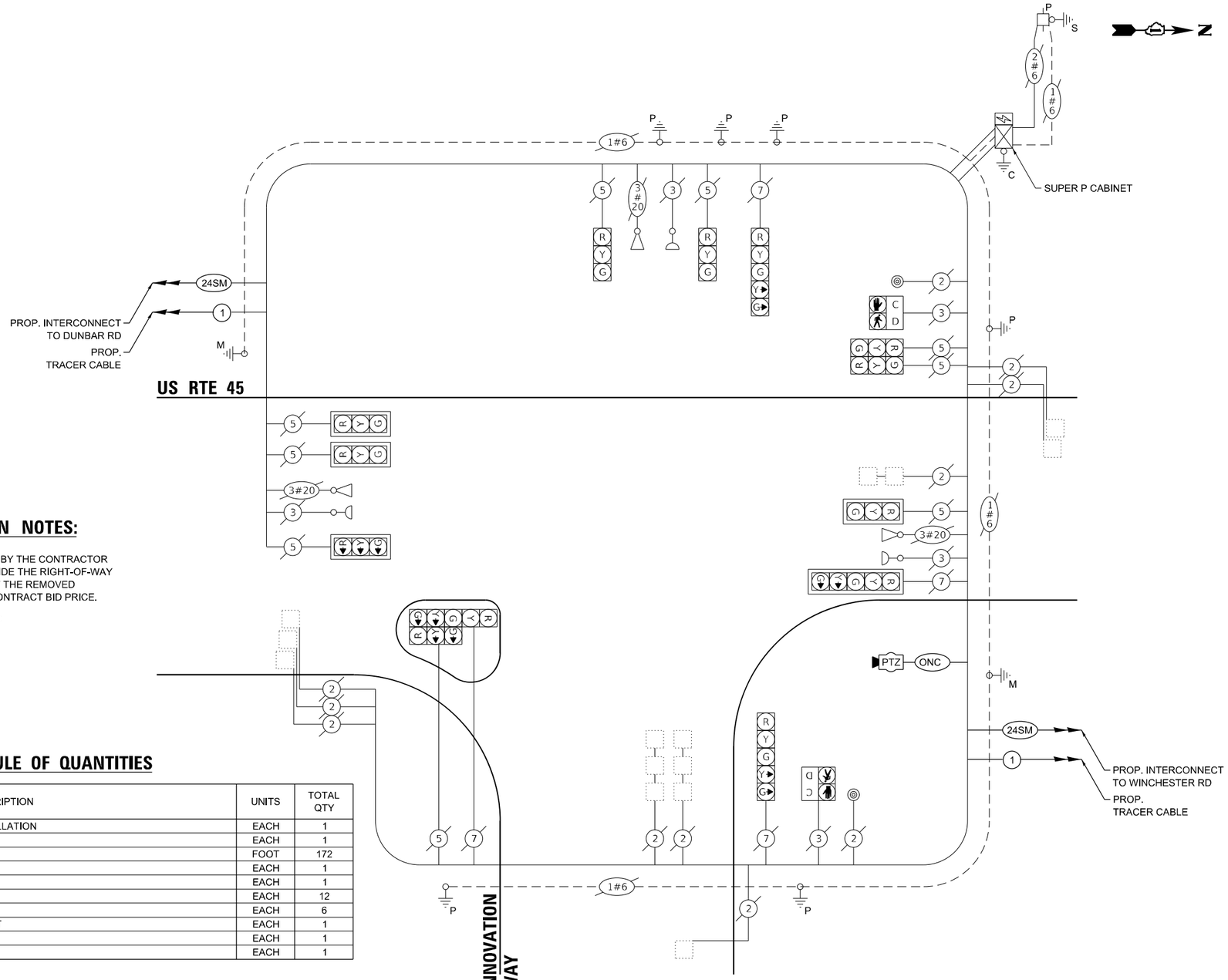
1 EACH TRANSCEIVER FIBER OPTIC
1 EACH CONTROLLER

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	9	11	9
4 - SECTION	-	14	-
5 - SECTION	4	13	52
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	2	15	30
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			391
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			996

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	172
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
TERMINATE FIBER IN CABINET	EACH	12
SPLICE FIBER IN CABINET	EACH	6
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1
CAMERA MOUNTING ASSEMBLY	EACH	1



CABLE PLAN
(NOT TO SCALE)

ENERGY COSTS TO:
VILLAGE OF MUDELEIN
300 PLAZA CIRCLE
MUNDELEIN, ILLINOIS 60060

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

TS 21260
FORMER EAGLE 1J
LAKE COUNTY TACTICS

TS SHT NO. 127

FILE NAME: M:\...\20193 CHIL1843-5500 IDOT PTR 190 - Various Traffic Signal Design\Graphics\WO 203 - 62W90\CAD\62W90_Sheet_03_Eagle1J.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 65 – US RTE 45 (LAKE ST) AT INNOVATION WAY
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	135
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

SCHEDULE OF QUANTITIES

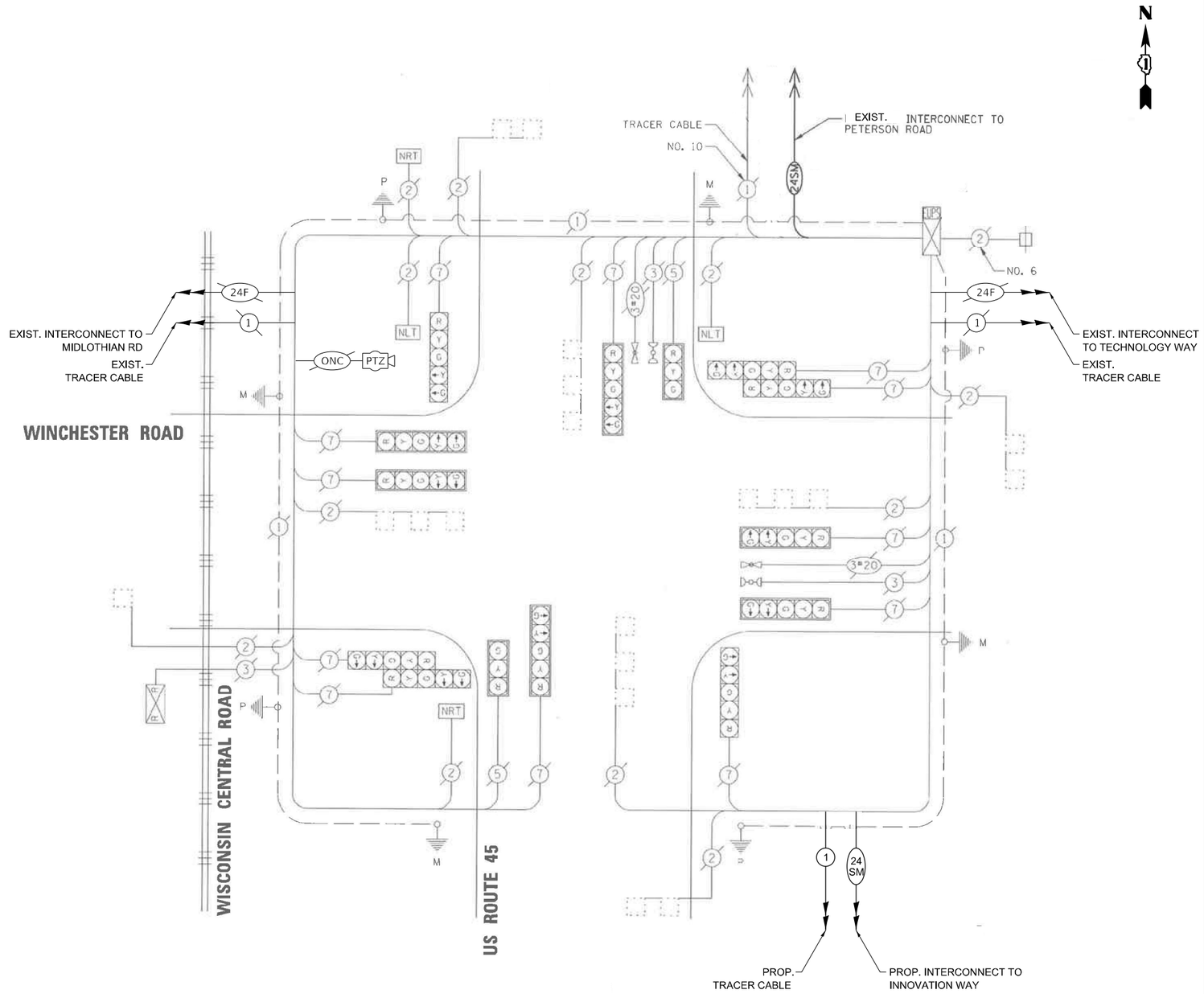
ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TERMINATE FIBER IN CABINET	EACH	12

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	2	11	22
4 - SECTION	-	14	-
5 - SECTION	12	13	156
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	4	25	100
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			488
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	-
PTZ CAMERA	1	75	75
TOTAL SERVICE WIRE SIZING =			1168

ENERGY COSTS TO:
VILLAGE OF LIBERTYVILLE
118 W COOK AVE
LIBERTYVILLE, IL 60048

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---



TS 12330
FORMER EAGLE 1J
LAKE COUNTY TACTICS

TS SHT NO. 128

FILE NAME: M61_20 93 CHI.18-03-5500 IDOT_PTB 190 - Various Traffic Signal Design\GraphHics\WO 203_62W90.CAD\62W90_Sheet 03- Eagle1J.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -

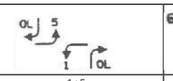
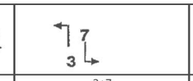
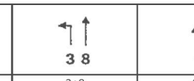
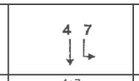
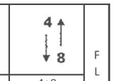
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN AND SCHEDULE OF QUANTITIES
LOCATION 66 – US RTE 45 (LAKE ST) AT WINCHESTER RD

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	136
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

SEQUENCE OF OPERATION

MOVEMENT → N																																			FLASH
PHASE	1+5						1+6			2+5			2+6			3+7							3+8					4+7					4+8			
INTERVAL	1	2A	2B	3A	3B	4A	4B	5	6A	6B	7	8A	8B	9	10A	10B	11	12A	12B	13A	13B	14A	14B	15	16A	16B	17A	17B	18	19A	19B	20A	20B	21	21A	21B	
CHANGE TO		1+6		2+5		2+6			2+6			2+6			3+7,3+8, 4+7,4+8			1+5,1+6, 2+5,2+6, 4+8			3+8			4+7			1+5,1+6 2+5,2+G			4+8			1+5,2+5, 1+G,2+G			4+8			1+5,1+6, 2+5,2+G			
US 45 N/B FAR RIGHT MAST ARM SIGNAL	R	R	R	R	R	R	R	R	R	R	G	G	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
US 45 N/B FAR LEFT AND END MAST ARM SIGNALS	R ←G	R ←Y	R	R ←G	R ←G	R ←Y	R	R	R	R	G ←G	G ←Y	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
US 45 S/B FAR RIGHT MAST ARM SIGNAL	R	R	R	R	R	R	R	G	G	G	R	R	R	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
US 45 S/B FAR LEFT AND END MAST ARM SIGNALS	R ←G	R ←G	R ←G	R ←Y	R	R ←Y	R	G ←G	G ←Y	G	R	R	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
WINCHESTER RD E/B NEAR RIGHT AND FAR RIGHT MAST ARM SIGNALS	R G→	R Y→	R	R G→	R G→	R Y→	R	R	R	R	R G→	R Y→	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	G	G	G	Y	R	R	R
WINCHESTER RD E/B FAR LEFT AND END MAST ARM SIGNALS	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R ←G	R ←Y	R	R ←Y	R	R ←G	R ←G	R	R	R	R	R	G ←G	Y	R	G ←Y	G	G	Y	R	R	R	R
WINCHESTER RD W/B NEAR RIGHT AND FAR RIGHT MAST ARM SIGNALS	R G→	R G→	R G→	R Y→	R	R Y→	R	R G→	R Y→	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	G	G	R	R	R	R	R	G	Y	R	R	R
WINCHESTER RD W/B FAR LEFT AND END MAST ARM SIGNALS	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R ←G	R ←Y	R	R ←G	R ←G	R ←Y	R	G ←G	Y	R	G ←Y	G	R	R	R	R	R	G	Y	R	R	R	R

PHASES 2+6 SHALL BE PLACED ON RECALL

RAILROAD PREEMPTION SEQUENCE OF OPERATION

																	PREEMPTER NUMBER 3	PREEMPTER NUMBER 4	PREEMPTER NUMBER 2				
CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER	1		5		7		9		11		15		18	21									
CHANGE FROM EMERGENCY VEHICLE PREEMPTION OF OPERATION INTERVAL NUMBER															2		3						
RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1A	1B	1C	1D	1E	1F	1G	1H	1J	1K	1L	1M	1N	1P	1Q	1R	1S	1T	1U	2	3	4	5	CLEAR TO NORMAL SEQUENCE
CHANGE TO RAILROAD PREEMPTION SEQUENCE INTERVAL NUMBER	1B	2	1D	2	1F	2	1H	2	1K	2	1M	2	2	1Q	2	1S	2	1U	2	3	4	5	Ø	
US 45 N/B FAR RIGHT MAST ARM SIGNAL	R	R	R	R	Y	R	Y	R	R	R	R	R	R	R	R	Y	R	R	R	R	R	R	G	Δ
US 45 N/B FAR LEFT AND END MAST ARM SIGNALS	R ←Y	R	R	R	Y	R	Y	R	R	R	R	R	R	R	R	Y	R	R	R	R	R	R	G	Δ
US 45 S/B FAR RIGHT MAST ARM SIGNAL	R	R	Y	R	R	R	Y	R	R	R	R	R	R	R	R	Y	R	R	R	R	R	R	G	Δ
US 45 S/B FAR LEFT AND END MAST ARM SIGNALS	R ←Y	R	Y	R	R	R	Y	R	R	R	R	R	R	R	R	Y	R	R	R	R	R	R	G	Δ
WINCHESTER RD E/B NEAR RIGHT AND FAR RIGHT MAST ARM SIGNALS	R Y→	R	R	R	R Y→	R	R	R	R	R	R	R	G	G	G	R	R	G	G	G	Y	R	R	Δ
WINCHESTER RD E/B FAR LEFT AND END MAST ARM SIGNALS	R	R	R	R	R	R	R	R	R	R	R	R	G ←G	G	G	R	R	G	G	G ←G	Y	R	R	Δ
WINCHESTER RD W/B NEAR RIGHT AND FAR RIGHT MAST ARM SIGNALS	R Y→	R	R Y→	R	R	R	R	R	R Y→	R	Y	R	R	Y	R	R	R	Y	R	R	R	R	R	Δ
WINCHESTER RD W/B FAR LEFT AND END MAST ARM SIGNALS	R	R	R	R	R	R	R	R	R	R	R	R	R	Y	R	R	R	Y	R	R	R	R	R	Δ
US 45 N/B ILLUMINATED NLT SIGN	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	Δ
US 45 S/B ILLUMINATED NRT SIGN	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	Δ

Revised: 12/7/2017 AK

Δ RAILROAD PREEMPTION SEQUENCE SHALL PROVIDE THE PROPER CLEARANCE INTERVAL TO RESUME THE NORMAL SEQUENCE OF OPERATION AFTER RAILROAD PREEMPTION INTERVAL 5 IS TERMIANTED.

Ø RAILROAD PREEMPTION SEQUENCE SHALL BE CAPABLE OF CYCLING BETWEEN PHASES 2+6 AND PHASE 3 UNTIL RAILROAD PREEMPTION IS TERMINATED.

EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION

																						PREEMPTER NUMBER 3	PREEMPTER NUMBER 4	
CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER	1		5		5		7		7		9		9		11		15		15		18		18		21		21			
EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1A	1B	1C	1D	1E	1F	1G	1H	1J	1K	1L	1M	1N	1P	1Q	1R	1S	1T	1U	1V	1W	1X	1Y	1Z	1AA	1BB	2		3		CLEAR TO NORMAL SEQUENCE
CHANGE TO EMERGENCY VEHICLE PREEMPTION OF OPERATION INTERVAL NUMBER	1B	2 OR 3	1D	2	1F	3	1H	2	1K	3	2	1N	3	1Q	2 OR 3	1S	2	1U	3	1W	2	1Y	3	1AA	2	3					<>
US 45 N/B FAR RIGHT MAST ARM SIGNAL	R	R	R	R	R	R	G	G	Y	R	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G		R		<>
US 45 N/B FAR LEFT AND END MAST ARM SIGNALS	R ←Y	R	R	R	R	R	G ←Y	G	Y	R	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G		R		<>
US 45 S/B FAR RIGHT MAST ARM SIGNAL	R	R	G	G	Y	R	R	R	R	R	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G		R		<>
US 45 S/B FAR LEFT AND END MAST ARM SIGNALS	R ←Y	R	G ←Y	G	Y	R	R	R	R	R	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G		R		<>
WINCHESTER RD E/B NEAR RIGHT AND FAR RIGHT MAST ARM SIGNALS	R Y→	R	R	R	R	R	R Y→	R	R Y→	R	R	R	R	R	R	R	R	R	R	Y	R	G	G	Y	R	G	R		G		<>
WINCHESTER RD E/B FAR LEFT AND END MAST ARM SIGNALS	R	R	R	R	R	R	R	R	R	R	R	R	R	R ←Y	R	R	R	R	R	Y	R	G ←Y	G	Y	R	G	R		G		<>
WINCHESTER RD W/B NEAR RIGHT AND FAR RIGHT MAST ARM SIGNALS	R Y→	R	R Y→	R	R Y→	R	R	R	R	R	R	R	R	R	R	R	Y	R	G	G	R	R	R	R	Y	R	G	R		G		<>
WINCHESTER RD W/B FAR LEFT AND END MAST ARM SIGNALS	R	R	R	R	R	R	R	R	R	R	R	R	R	R ←Y	R	R	Y	R	G ←Y	G	R	R	R	R	Y	R	G	R		G		<>

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

TS SHT NO. 129

FILE NAME: Mst_20193 CH0.18-03-5500 IDOT_PTB 193 - Various Traffic Signal Design\Graphics\WO 203 - 62W90\CAD\62W90_Sheet_03_Eagle1J.dgn

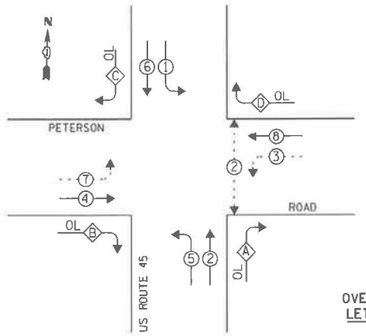
TS 12330
FORMER EAGLE 1J
LAKE COUNTY TACTICS

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE LOCATION 66 – US RTE 45 (LAKE ST) AT WINCHESTER RD
	DRAWN - KATHLEEN MURPHY	REVISED -		
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -		

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	137
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

EXISTING CONTROLLER SEQUENCE



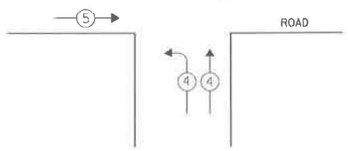
LEGEND:

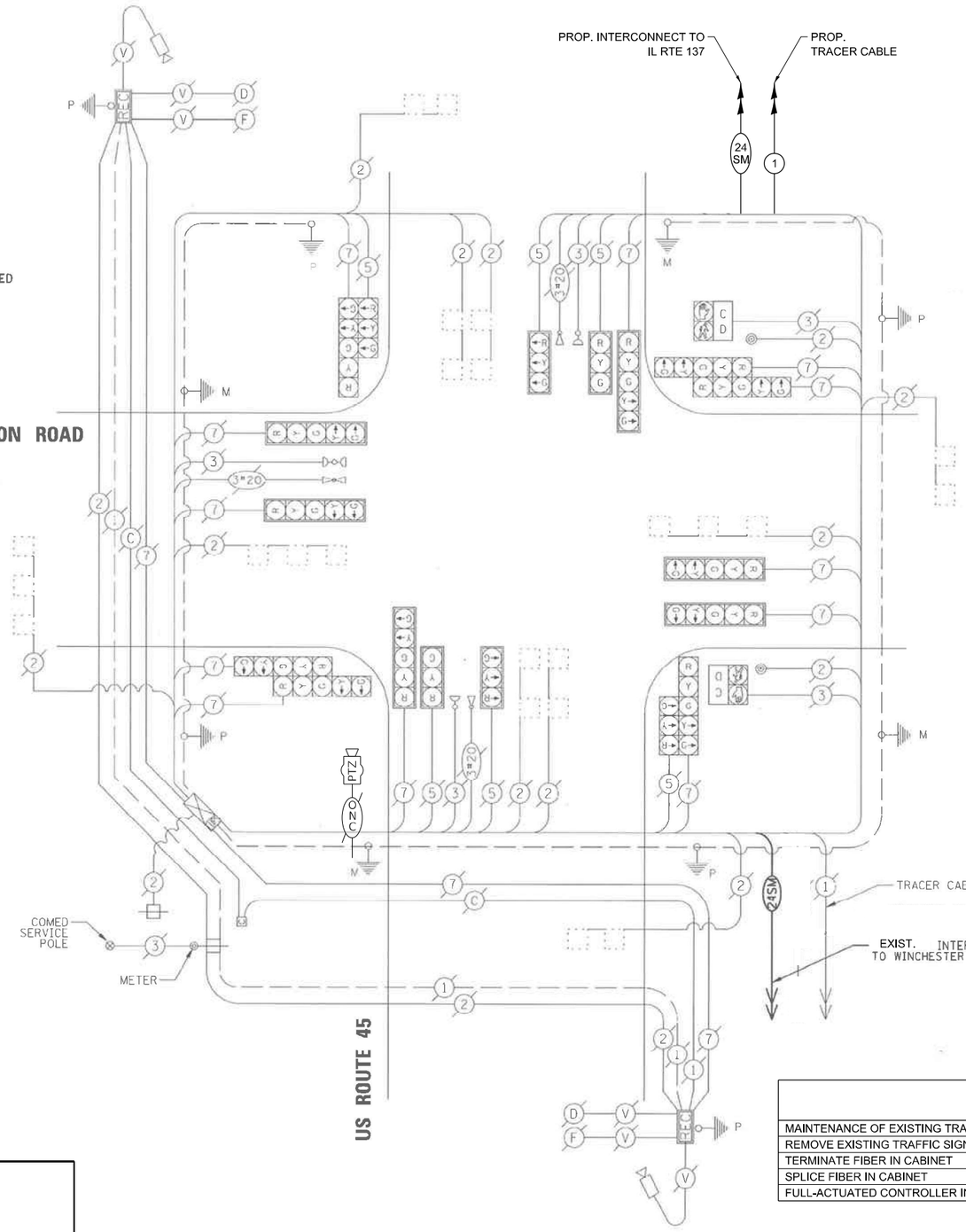
- PROTECTED PHASE
- PROTECTED/PERMITTED PHASE
- PEDESTRIAN PHASE
- OVERLAP

RIGHT TURN OVERLAP PHASE DESIGNATION

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

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE





N

REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
TERMINATE FIBER IN CABINET	EACH	4
SPLICE FIBER IN CABINET	EACH	20
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	6	11	66
4 - SECTION	-	14	-
5 - SECTION	12	13	156
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	2	15	30
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			462
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	-
PTZ CAMERA	1	75	75
TOTAL SERVICE WIRE SIZING =			1142

ENERGY COSTS TO:
VILLAGE OF LIBERTYVILLE
118 W COOK AVE
LIBERTYVILLE, IL 60048

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

TS SHT NO. 130

FILE NAME: MA_20193_CHI18-02-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eagle1J.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -

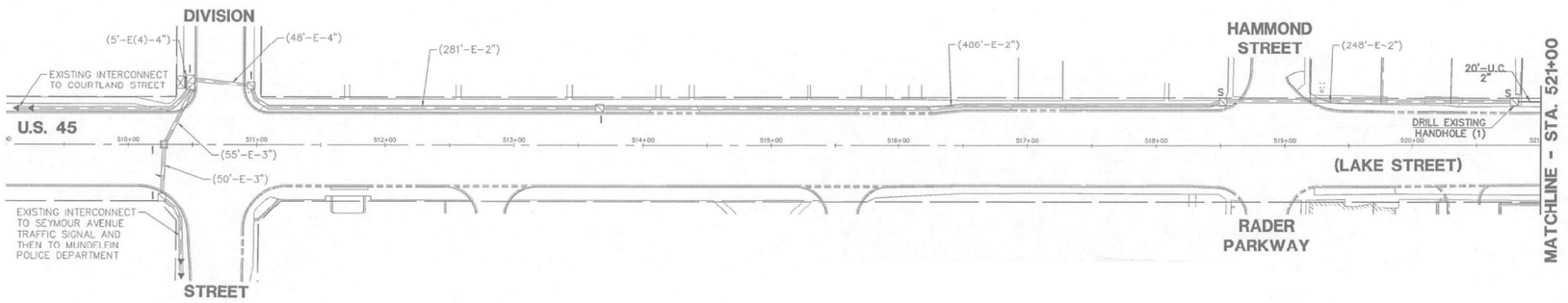
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 67 – US RTE 45 (LAKE ST) AT PETERSON RD

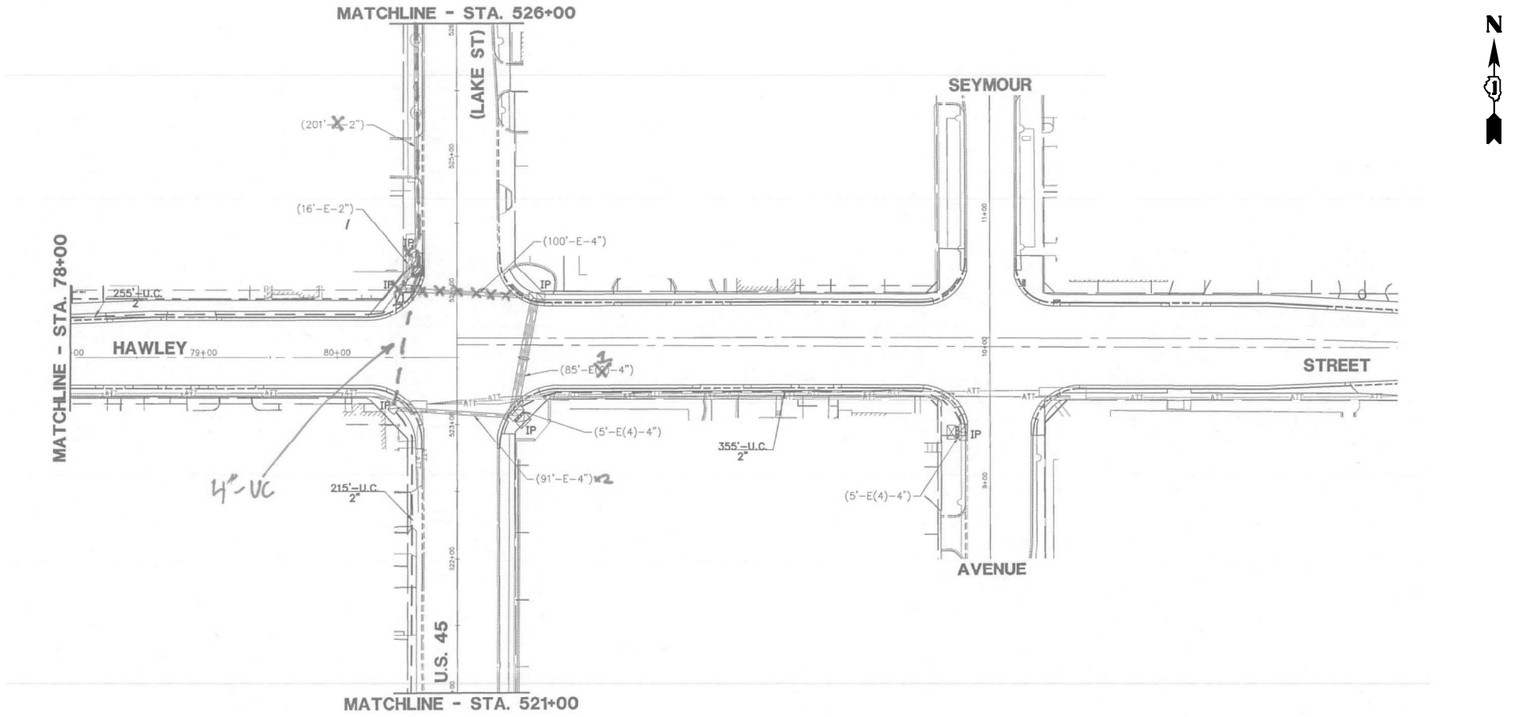
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	138
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

TS 6675
FORMER EAGLE 1J
LAKE COUNTY TACTICS



FOR REFERENCE ONLY



N

TS SHT NO. 131

FILE NAME: M:\2019\3 CMI\18-03-5500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203 62W90\CAD\62W90_Sheet_05_Eagle1J.dgn

FORMER EAGLE 1J
LAKE COUNTY TACTICS

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

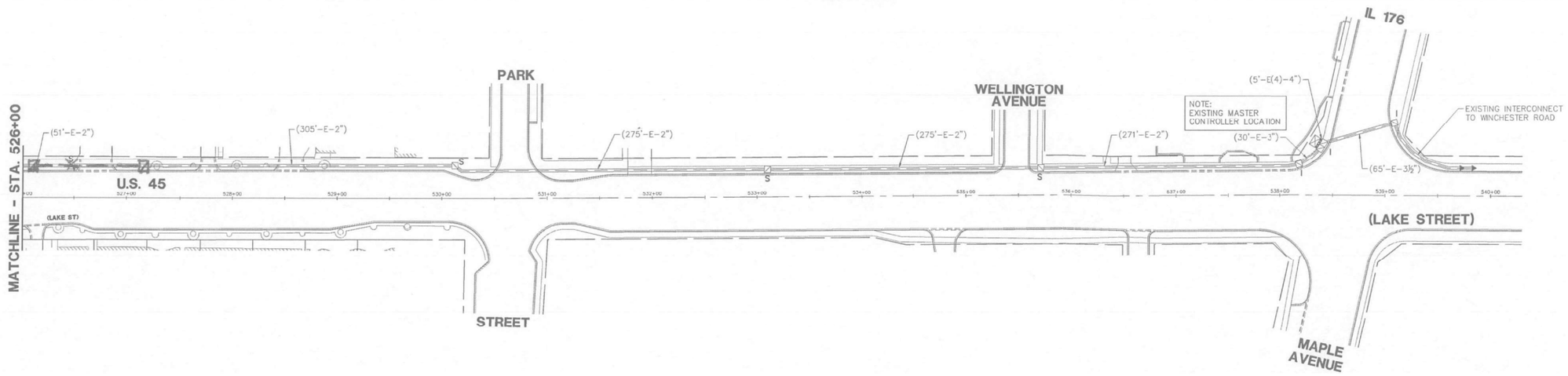
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN
US RTE 45 – COURTLAND ST TO PETERSON RD

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	139
		CONTRACT NO. 62W90		
		ILLINOIS	FED. AID PROJECT	

FOR REFERENCE ONLY



FORMER EAGLE 1J
LAKE COUNTY TACTICS

TS SHT NO. 132

FILE NAME: MS_20193 CHI\18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eagle1J.dgn

TYLin

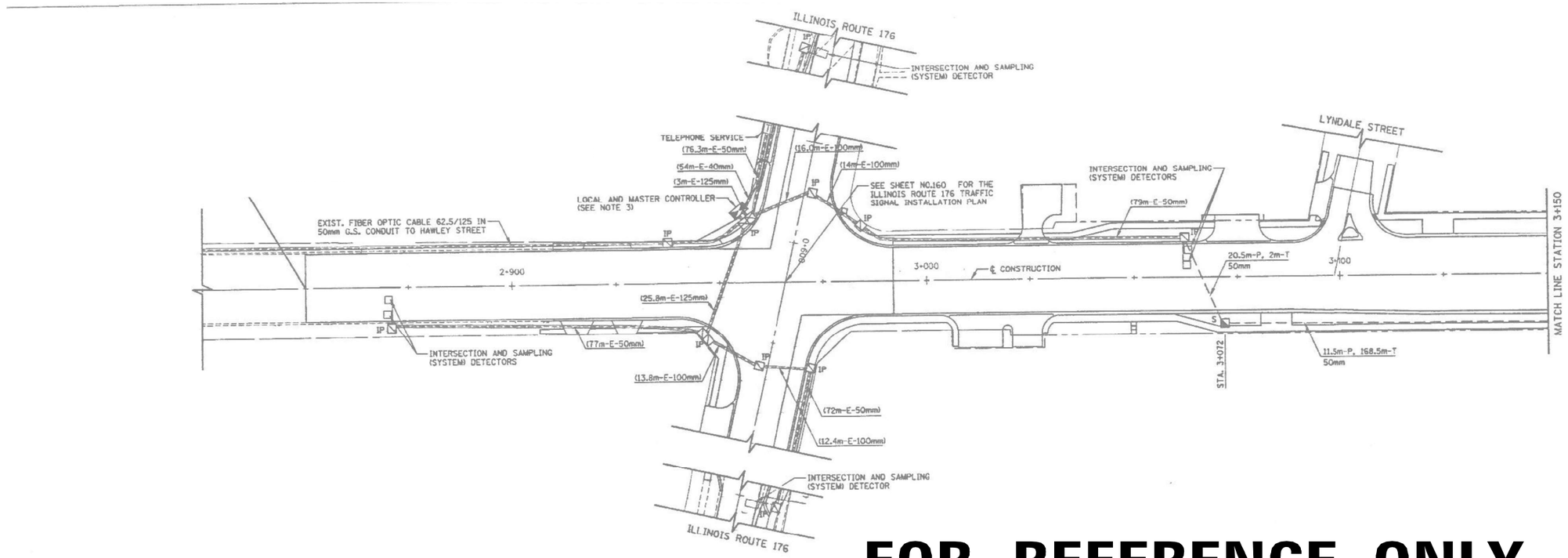
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

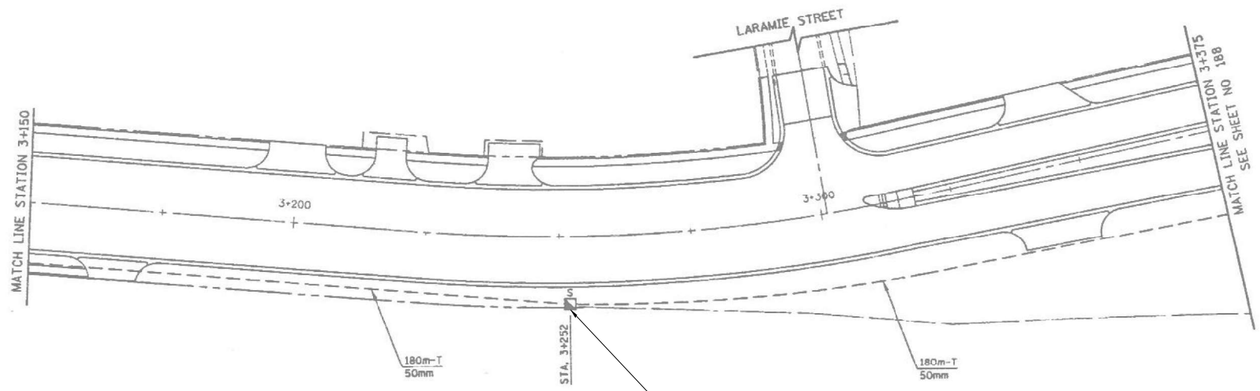
INTERCONNECT PLAN
US RTE 45 – COURTLAND ST TO PETERSON RD

SCALE: | SHEET OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	140
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			



FOR REFERENCE ONLY



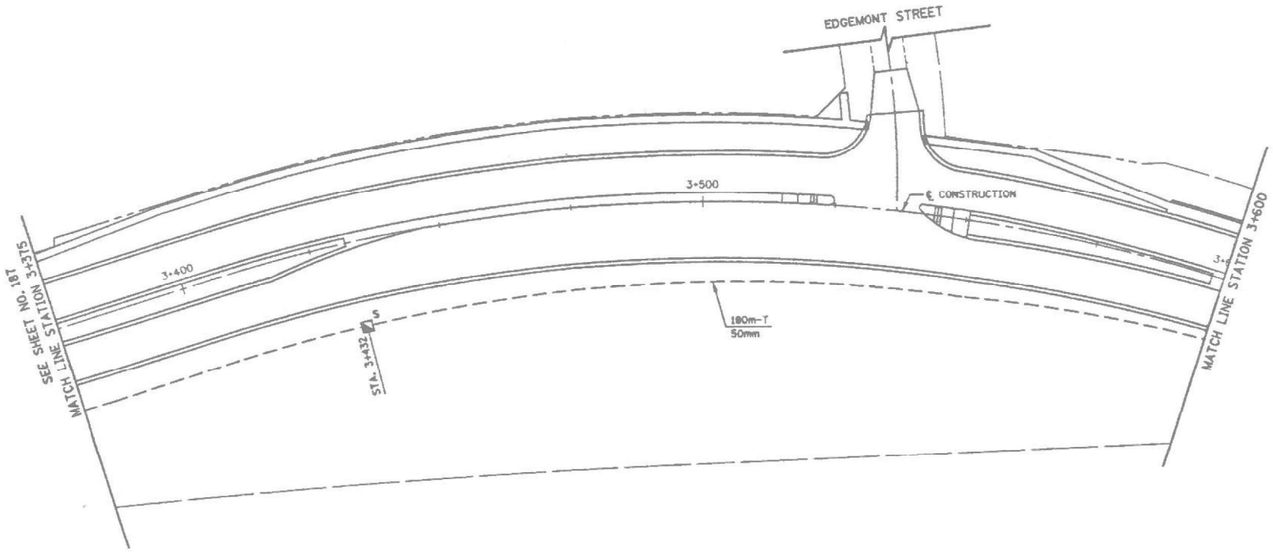
FORMER EAGLE 1J
LAKE COUNTY TACTICS

TS SHT NO. 133

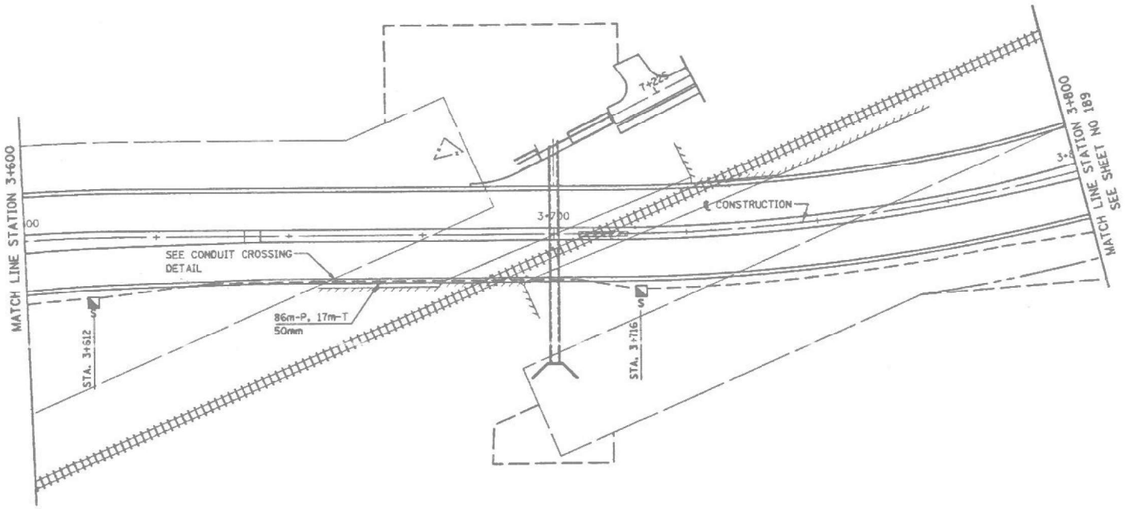
FILE NAME: MA-20193 CHI:18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203 62W90\CAD\62W90_Sheet_GS_Eagle1J.dgn

TYLin	USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**INTERCONNECT PLAN** US RTE 45 – COURTLAND ST TO PETERSON RD
		DRAWN - KATHLEEN MURPHY	REVISED -		
	PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -		
	PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	141
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			



FOR REFERENCE ONLY



FORMER EAGLE 1J
LAKE COUNTY TACTICS

TS SHT NO. 134

FILE NAME: Mst-70193 CHtl.8-03-5500 IDOT_PTB 190 - Various Traffic Signal Design\Graphics\WO 203 62W90\CAD\62W90_Sheet 05 Eagle1J.dgn

TYLin

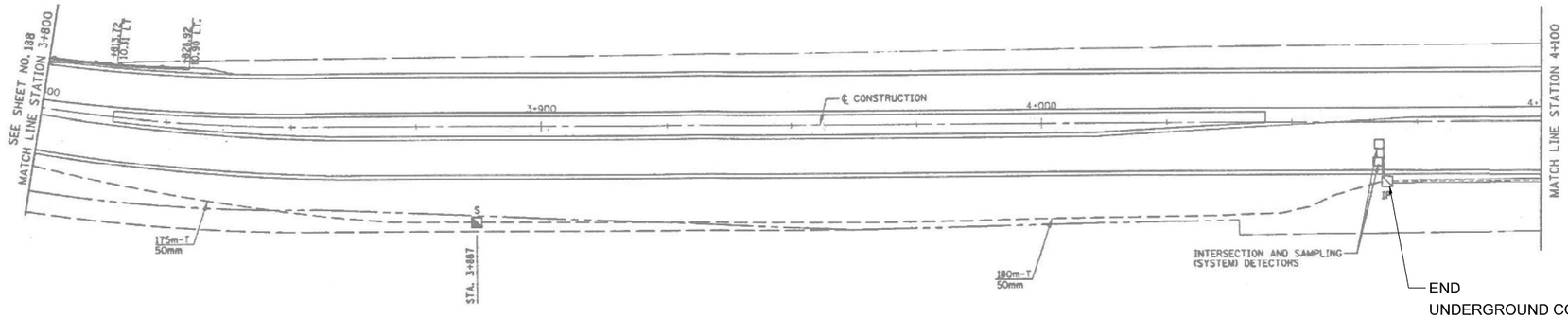
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

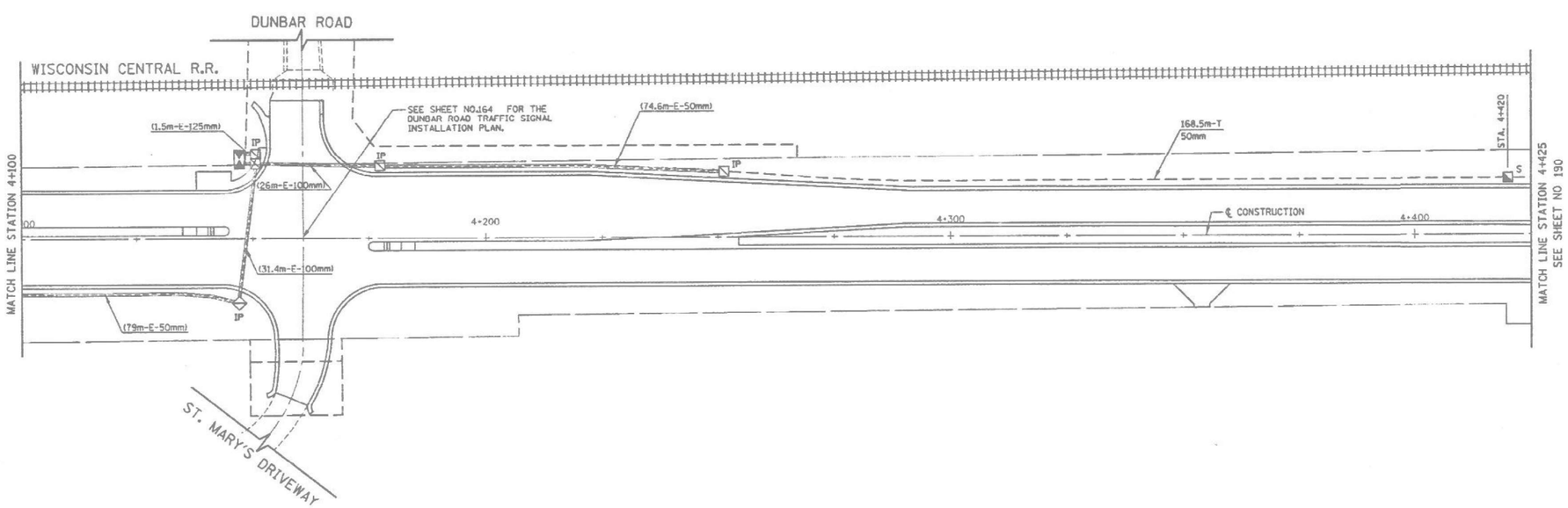
INTERCONNECT PLAN
US RTE 45 – COURTLAND ST TO PETERSON RD

SCALE: | SHEET OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	142
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		



FOR REFERENCE ONLY



FORMER EAGLE 1J
LAKE COUNTY TACTICS

TS SHT NO. 135

FILE NAME: NR: 20193 CMI\18-03-5500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203 62W90\CAD\62W90_Sheet 05 Eagle1J.dgn

TYLin

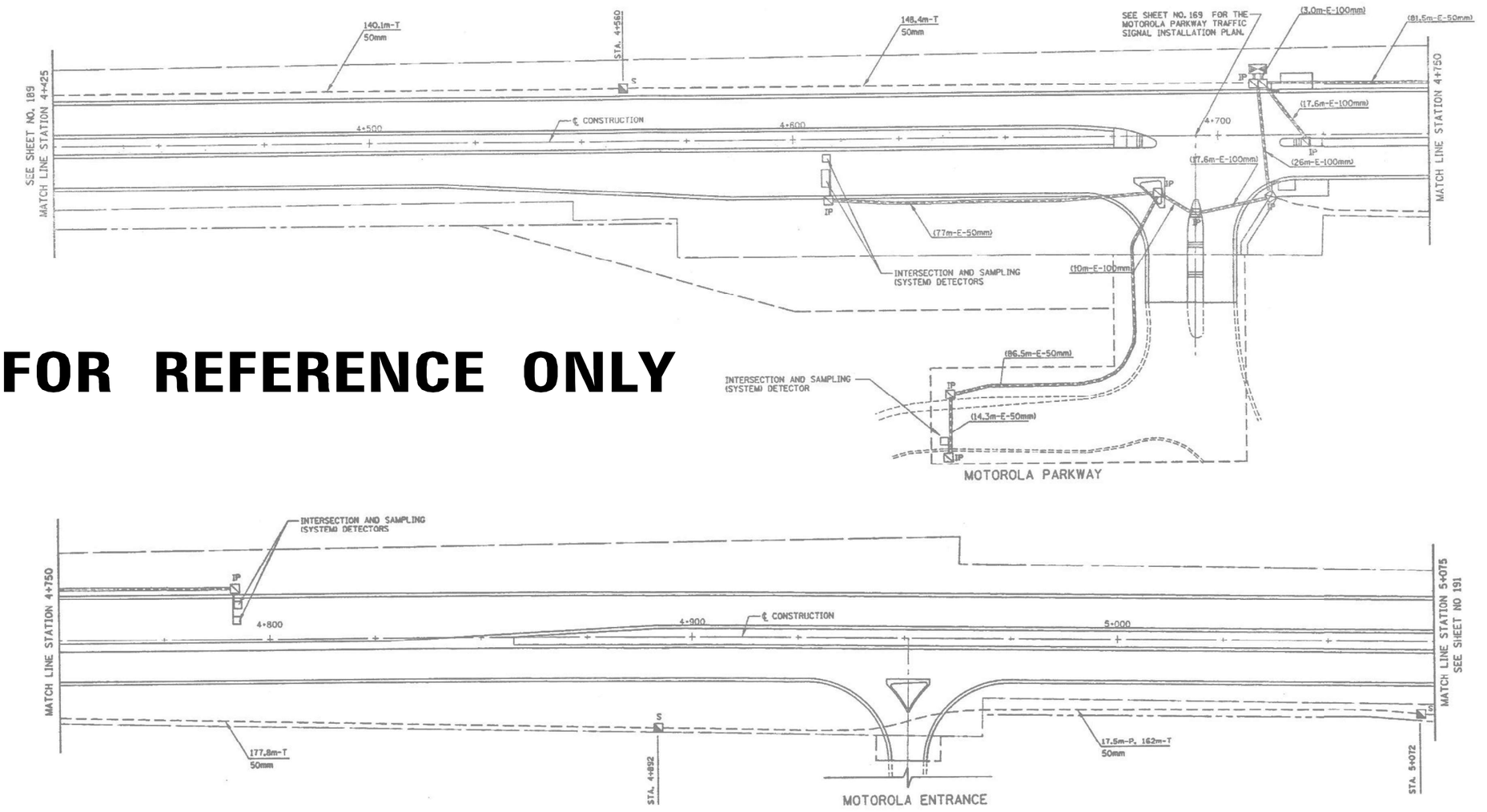
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN
US RTE 45 – COURTLAND ST TO PETERSON RD

SCALE: | SHEET OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	143
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		



FOR REFERENCE ONLY

TS SHT NO. 136

FILE NAME: MS_20193 CHI\18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203 62W90\CAD\62W90 Sheet 05 Eagle1J.dgn

FORMER EAGLE 1J
LAKE COUNTY TACTICS

TYLin

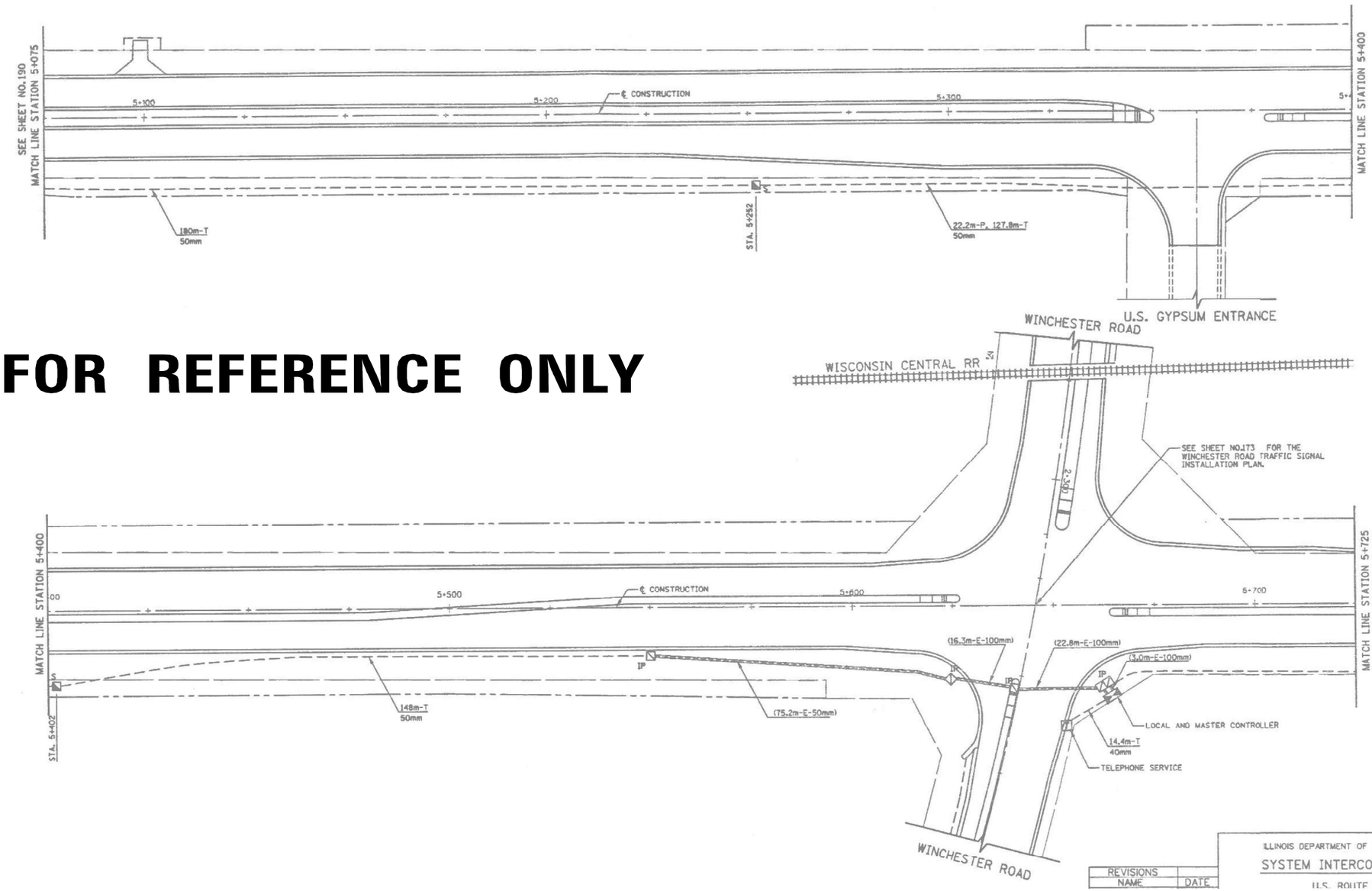
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN
US RTE 45 – COURTLAND ST TO PETERSON RD

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	144
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			



FOR REFERENCE ONLY

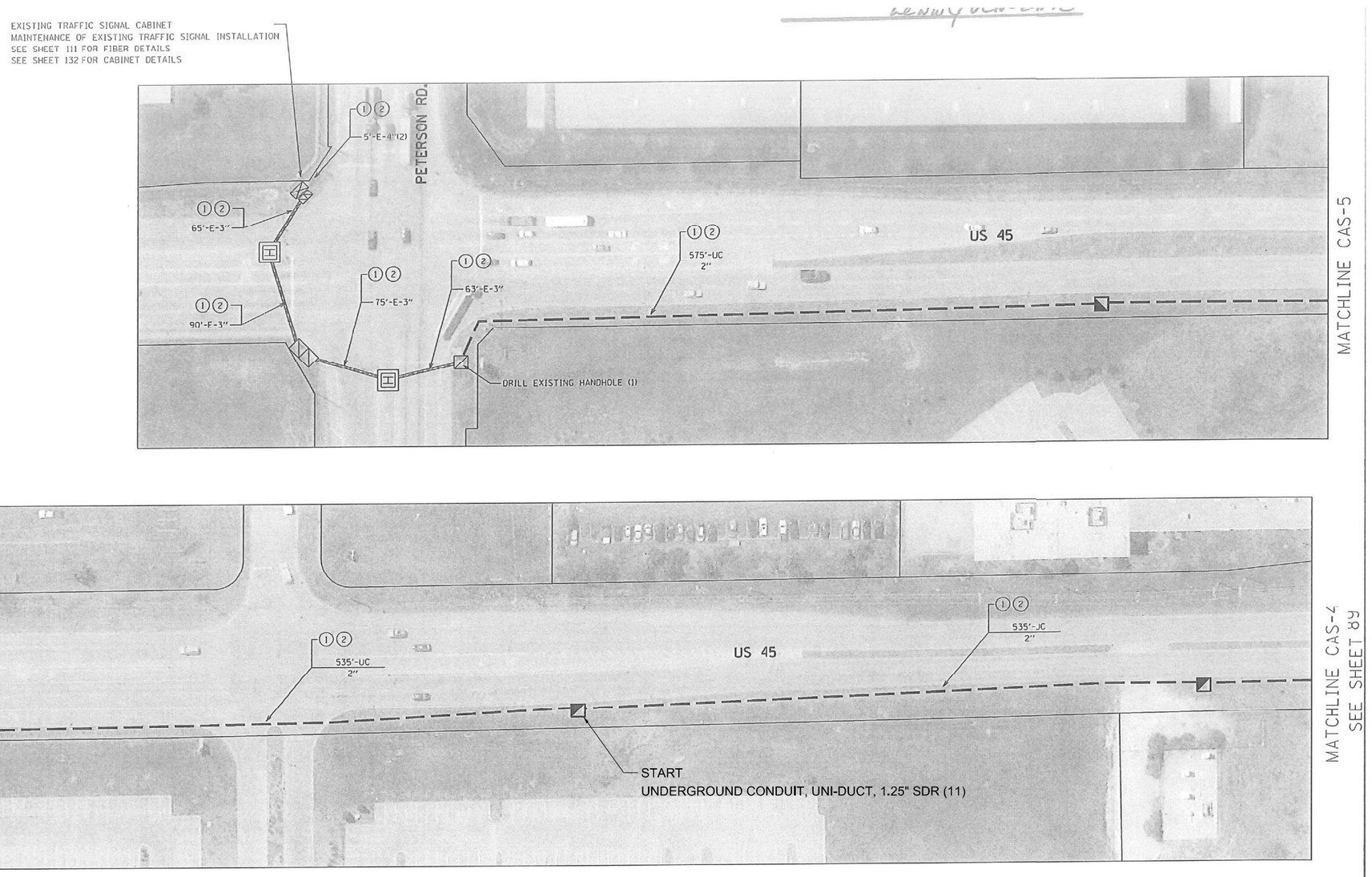
FORMER EAGLE 1J
LAKE COUNTY TACTICS

TS SHT NO. 137

FILE NAME: MA-20193 CHI 18-03-5500 IDOT PTB 190 - Various Traffic Signal Design Graphics\WO 203 62W90\CAD\62W90_Sheet_05_Eagle1J.dgn

TYLin	USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INTERCONNECT PLAN US RTE 45 – COURTLAND ST TO PETERSON RD
		DRAWN - KATHLEEN MURPHY	REVISED -		
	PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -		
	PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	145
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			



FORMER EAGLE 1J
LAKE COUNTY TACTICS

TS SHT NO. 138

FILE NAME: M61_20193_CH1.18-03-5500 IDOT_PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90 CAD\62W90_Sheet 03_Eagle1J.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

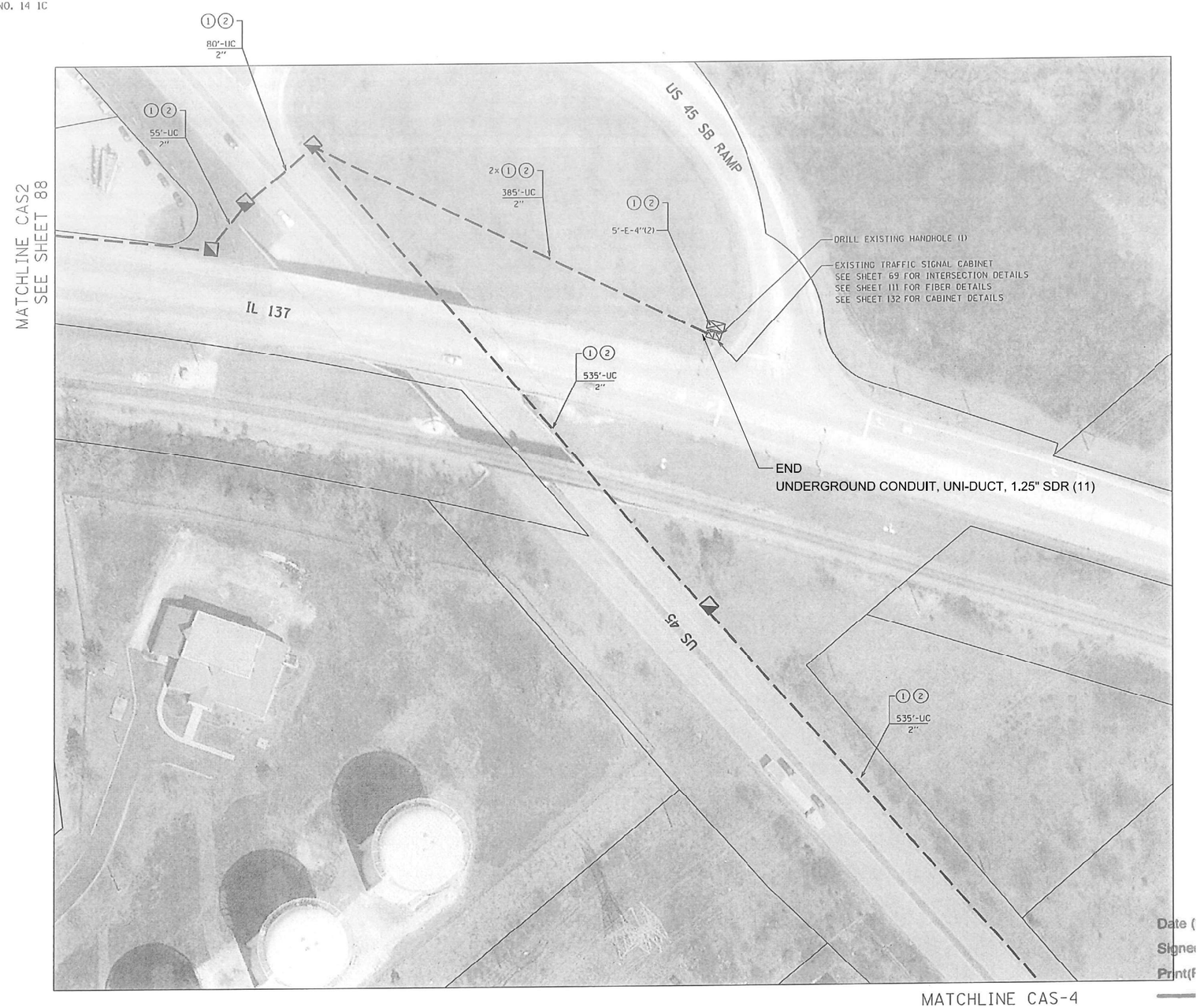
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN
US RTE 45 – COURTLAND ST TO PETERSON RD

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	146
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

NO. 14 IC



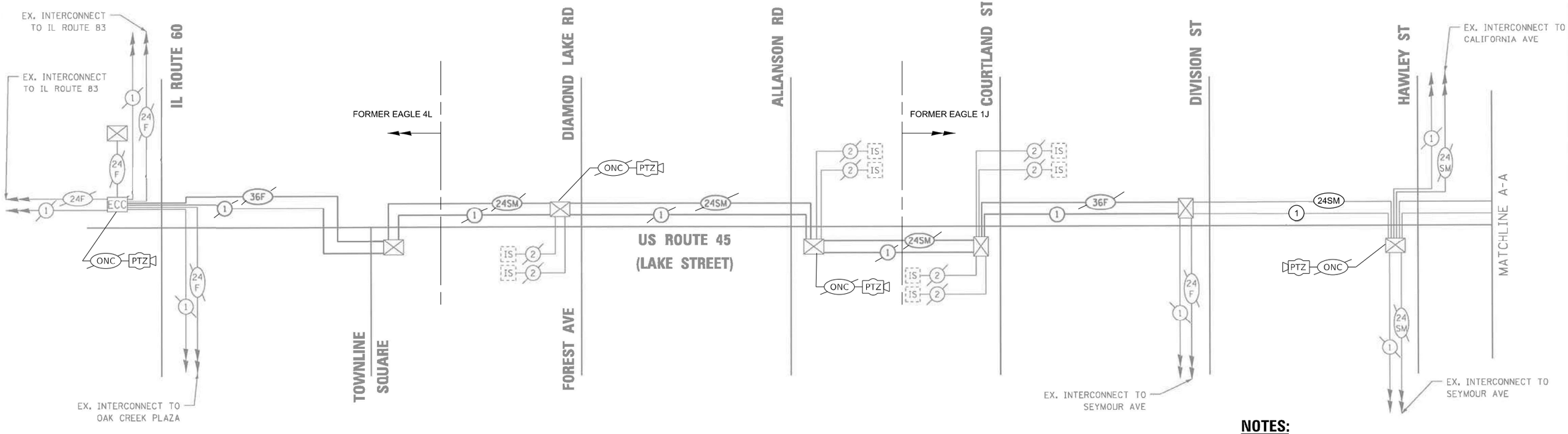
FORMER EAGLE 1J
LAKE COUNTY TACTICS

TS SHT NO. 139

FILE NAME: MX-20193 CHI\18-03-5500 IDOT_PTB_190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_65_Eagle1J.dgn

TYLin	USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INTERCONNECT PLAN US RTE 45 – COURTLAND ST TO PETERSON RD
		DRAWN - KATHLEEN MURPHY	REVISED -		
	PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.
	PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -		

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	147
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		



NOTES:

1. OPTIMIZATION TO INCLUDE THE FOLLOWING INTERSECTIONS AND FORMER EAGLE 4C SYSTEM. SEE INTERCONNECT SCHEMATIC FOR 4C.

FORMER 1J:
- US RTE 45 & IL RTE 60
- US RTE 45 & TOWNLINE SQ
- US RTE 45 & DIAMOND LAKE
- US RTE 45 & ALLASON RD
- US RTE 45 & COURTLAND ST
- US RTE 45 & DIVISION ST
- US RTE 45 & HAWLEY ST
- US RTE 45 & IL RTE 176
- US RTE 45 & DUNBAR RD
- US RTE 45 & INNOVATION WAY
- US RTE 45 & WINCHESTER RD
- US RTE 45 & PETERSON RD

SCHEDULE OF QUANTITIES

	ITEM DESCRIPTION	UNITS	TOTAL QTY
	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	16037
	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	32230
*	ROD AND CLEAN EXISTING CONDUIT	FOOT	13290
	FIBER OPTIC CABLE 24 FIBERS, SINGLE MODE	FOOT	16193
	OPTIMIZE TRAFFIC SIGNAL SYSTEM	EACH	1
	UNDERGROUND CONDUIT, UNI-DUCT, 1.25" SDR (11)	FOOT	4674

* NOMINAL QUANTITY TO BE USED AS NEEDED AND AS APPROVED BY THE ENGINEER

FORMER EAGLE 1J
LAKE COUNTY TACTICS

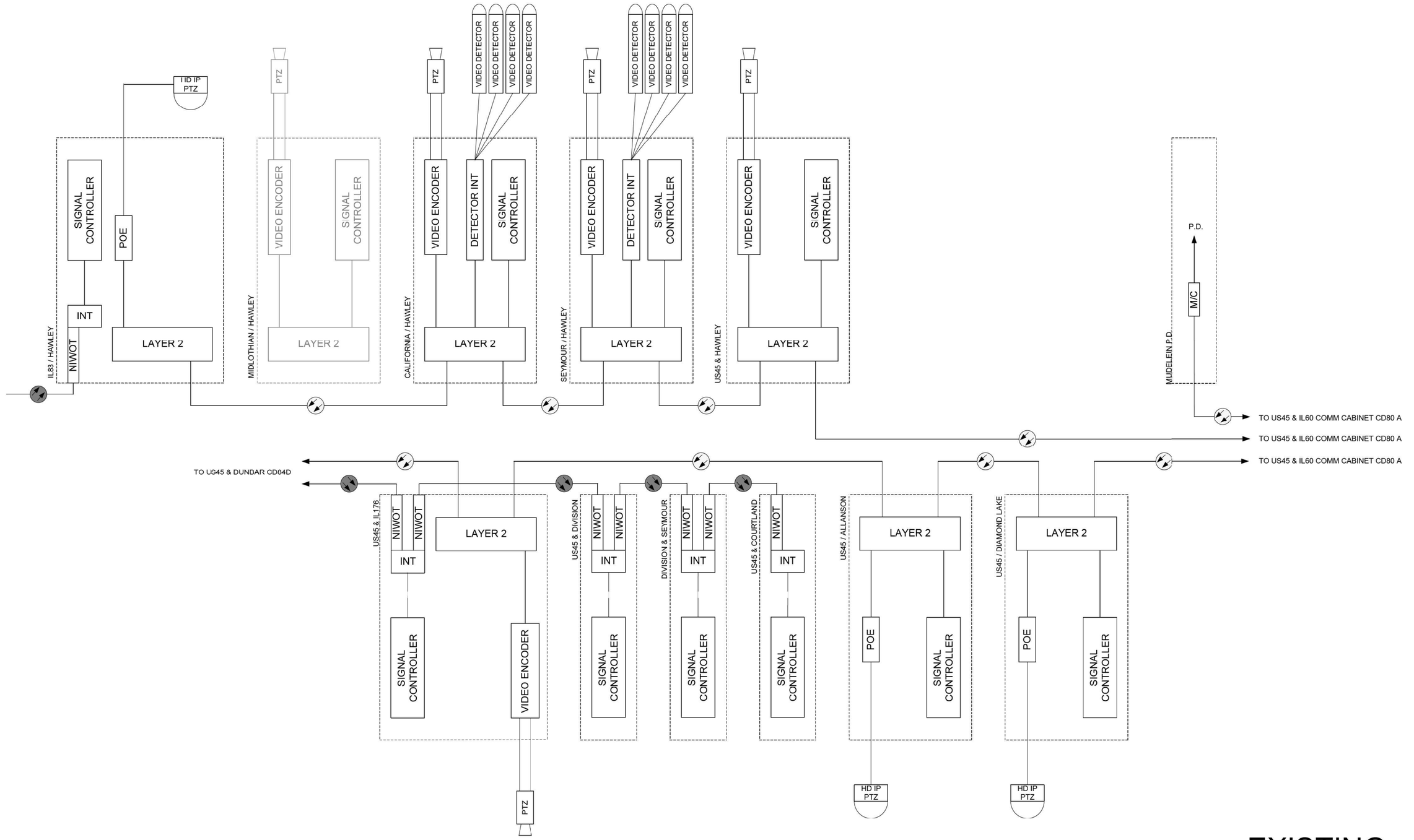
TS SHT NO. 140

FILE NAME: M:\2019\3 CH\18-03-5560 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eagle1J.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED - 05/08/2025	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INTERCONNECT SCHEMATIC US RTE 45 – COURTLAND ST TO PETERSON RD	
	DRAWN - KATHLEEN MURPHY	REVISED -			
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -			
PLOT DATE = 5/5/2025	DATE - 12/20/2024	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.	

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	148
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			



EXISTING

FORMER EAGLE 1J

LAKE COUNTY TACTICS

TS SHT NO. 141

FILE NAME: M:\ 2019\3 CMN\18-03-5500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203 62W90\CAD\62W90_Sheet_05_Eagle1J.dgn

PARSONS

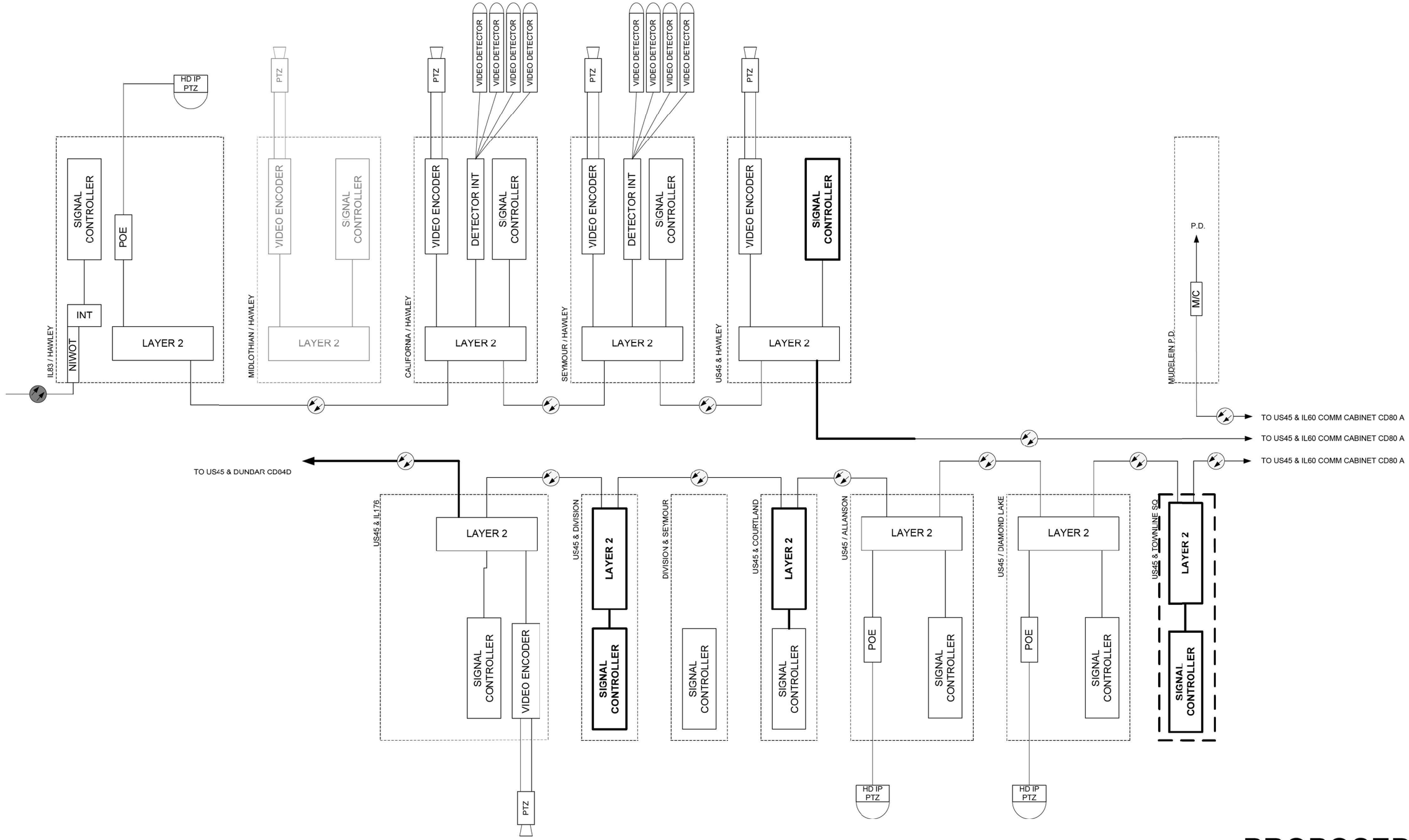
USER NAME = erica.salutz	DESIGNED - RL / DG	REVISED -	
	DRAWN - RL / DG	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - RL / DG	REVISED -	
PLOT DATE = 3/30/2025	DATE - 2025.02.20	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABINET DETAIL
US RTE 45 – COURTLAND ST TO PETERSON RD

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	149
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			



PROPOSED

FORMER EAGLE 1J

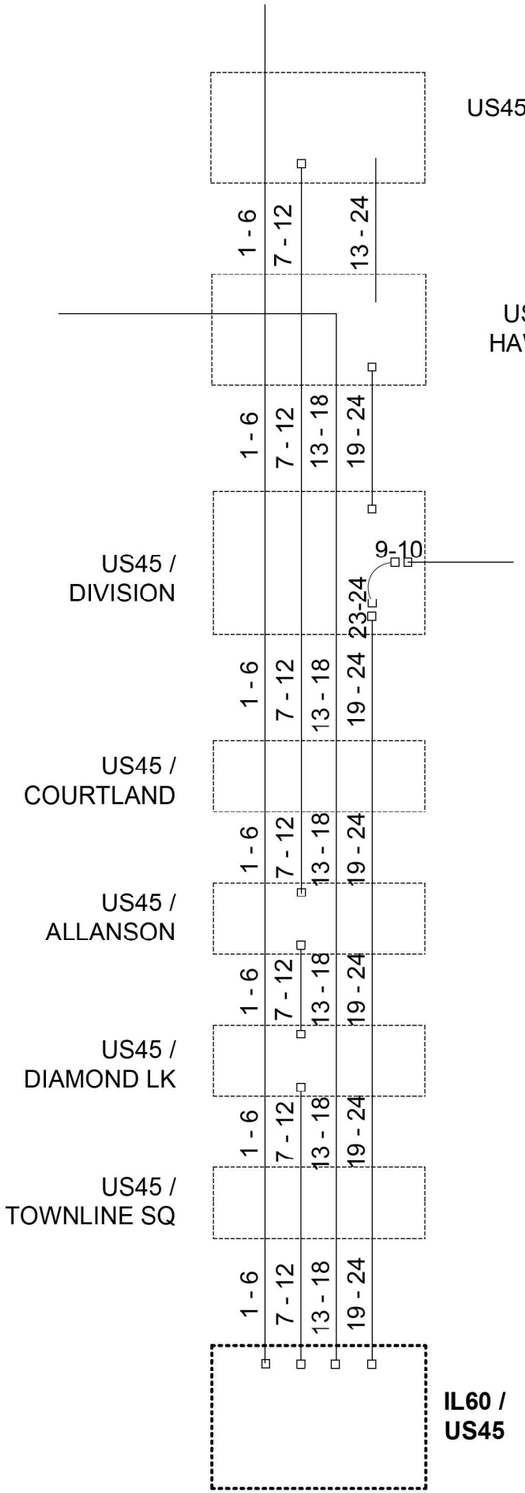
LAKE COUNTY TACTICS

TS SHT NO. 142

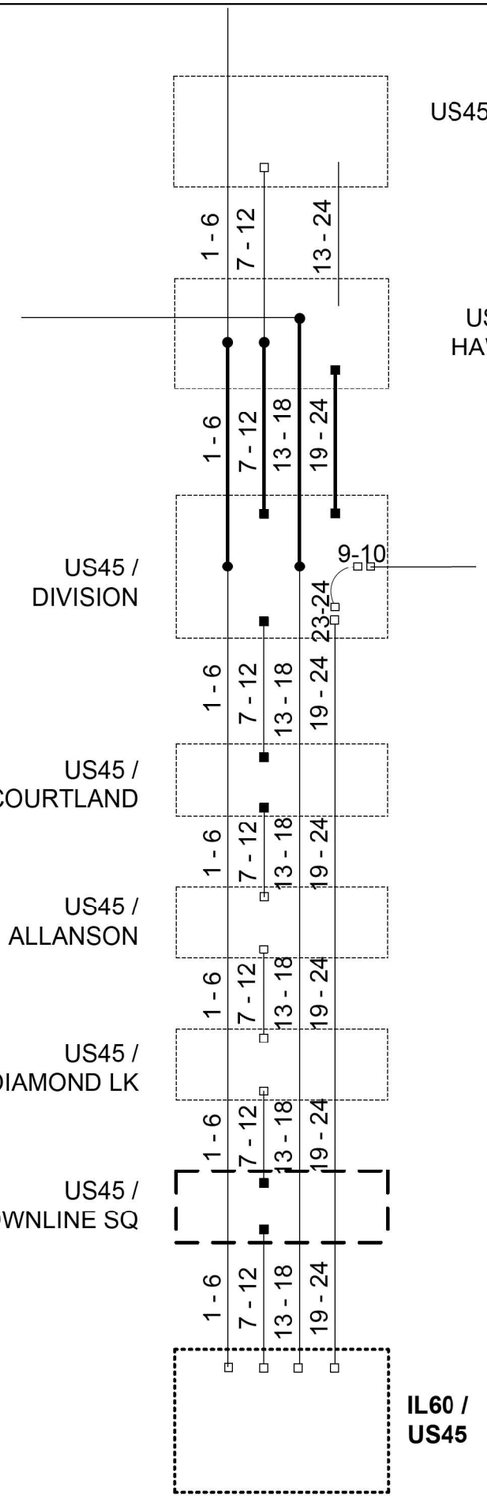
FILE NAME: H:\ 2019\3 CMN\18-03-5500 IDOT_PTB 199 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_03_Eagle1J.dgn

PARSONS	USER NAME = erica.salutz	DESIGNED - RL / DG	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CABINET DETAIL US RTE 45 – COURTLAND ST TO PETERSON RD
		DRAWN - RL / DG	REVISED -		
	PLOT SCALE = 40.0000 ' / in.	CHECKED - RL / DG	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.
	PLOT DATE = 3/30/2025	DATE - 2025.02.20	REVISED -		

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	150
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			



EXISTING



PROPOSED

FORMER EAGLE 1J
LAKE COUNTY TACTICS

TS SHT NO. 143

FILE NAME: H:\2019\3 CMH18-03-5500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203 62W90\CAD\62W90_Sheet_05_Eagle1J.dgn

PARSONS

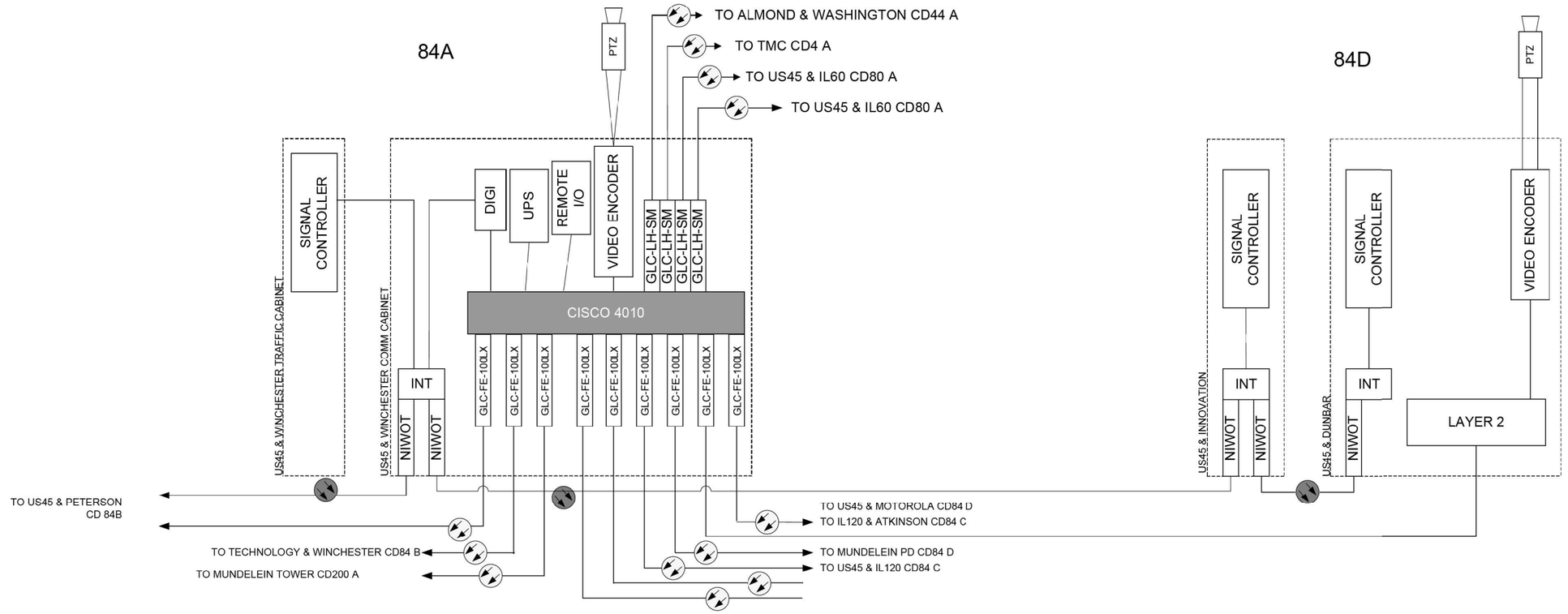
USER NAME = erica.salutz	DESIGNED - RL / DG	REVISED -	
	DRAWN - RL / DG	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - RL / DG	REVISED -	
PLOT DATE = 3/30/2025	DATE - 2025.02.20	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIBER SPLICE DIAGRAM
US RTE 45 – COURTLAND ST TO PETERSON RD

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	151
		CONTRACT NO. 62W90		
		ILLINOIS	FED. AID PROJECT	



EXISTING

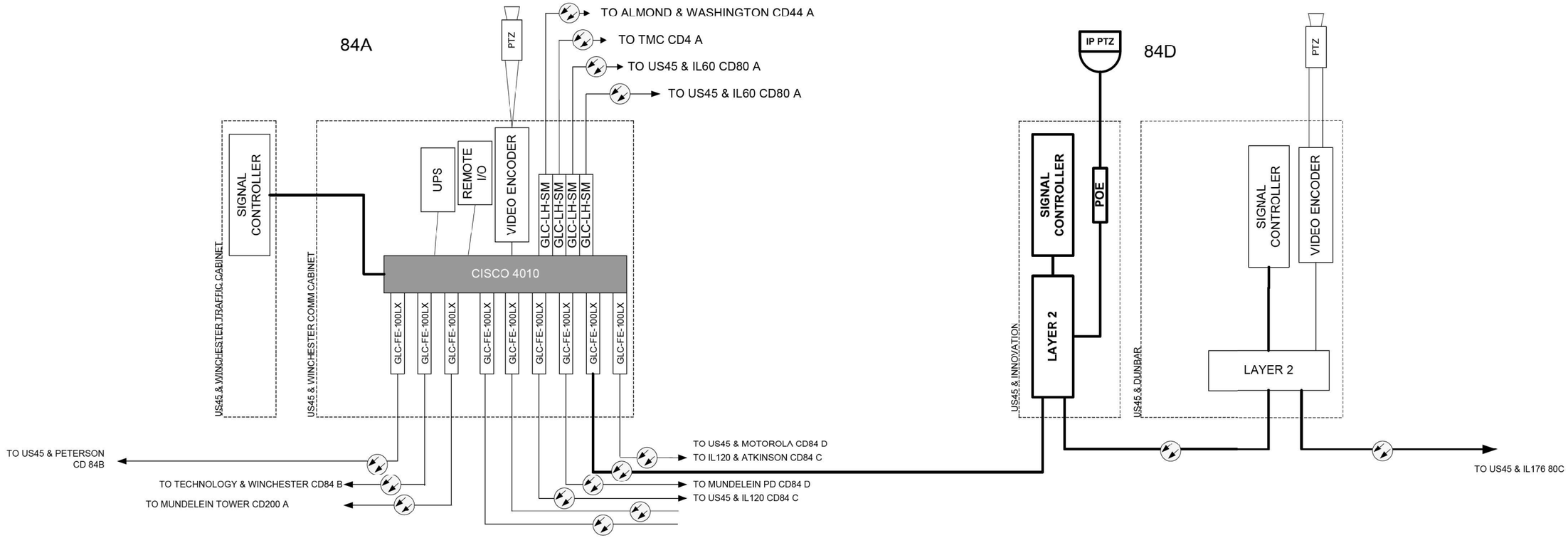
FORMER EAGLE 1J
LAKE COUNTY TACTICS

TS SHT NO. 144

FILE NAME: M:\2019\3 CMN\18-03-5500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203 62W90\CAD\62W90_Sheet_03_Eagle1J.dgn

PARSONS	USER NAME = erica.salutz	DESIGNED - RL / DG	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CABINET DETAIL US RTE 45 – COURTLAND ST TO PETERSON RD
		DRAWN - RL / DG	REVISED -		
	PLOT SCALE = 40.0000 ' / in.	CHECKED - RL / DG	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.
	PLOT DATE = 3/30/2025	DATE - 2025.02.20	REVISED -		

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	152
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			



PROPOSED

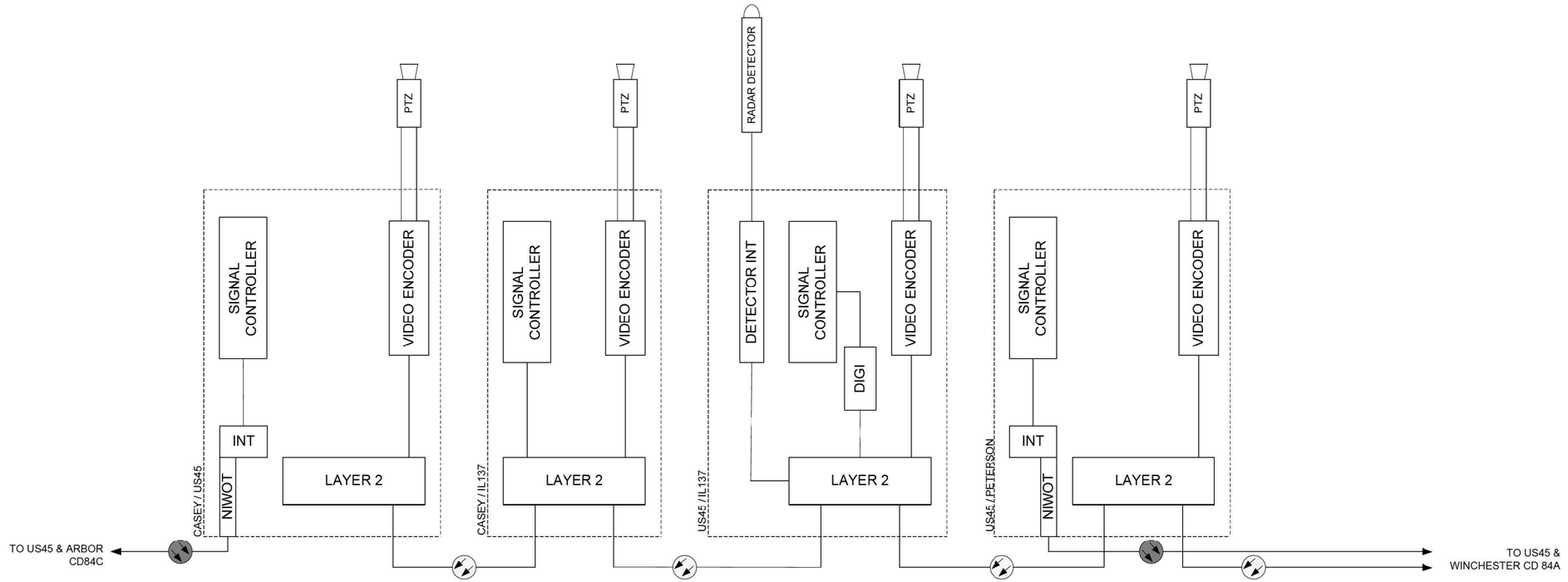
FORMER EAGLE 1J
LAKE COUNTY TACTICS

TS SHT NO. 145

FILE NAME: MA-20193 CHI:18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eagle1J.dgn

PARSONS	USER NAME = erica.salutz	DESIGNED - RL / DG	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CABINET DETAIL US RTE 45 – COURTLAND ST TO PETERSON RD
		DRAWN - RL / DG	REVISED -		
	PLOT SCALE = 40.0000 ' / in.	CHECKED - RL / DG	REVISED -		
	PLOT DATE = 3/30/2025	DATE - 2025.02.20	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	153
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			



EXISTING

FORMER EAGLE 1J

LAKE COUNTY TACTICS

TS SHT NO. 146

FILE NAME: MS_20193 CHI:18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eagle1J.dgn

PARSONS

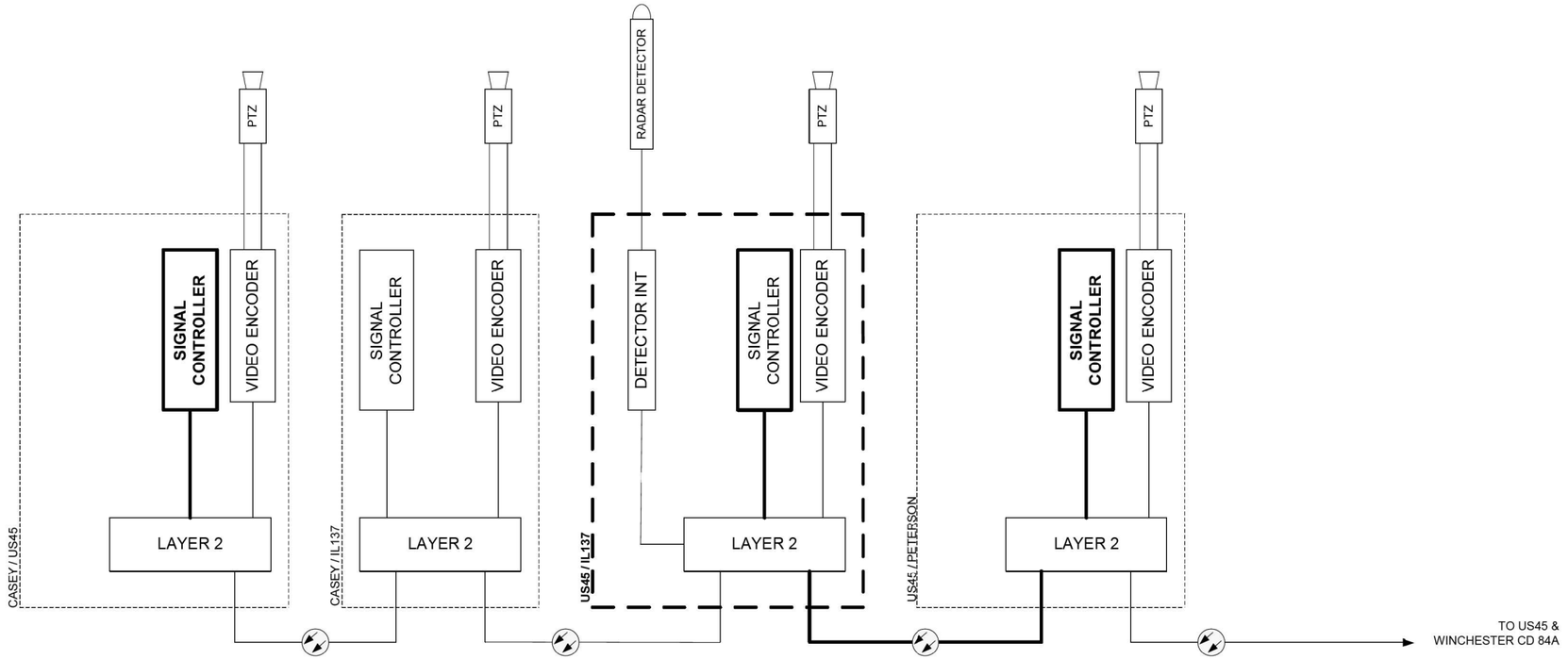
USER NAME = erica.salutz	DESIGNED - RL / DG	REVISED -	
	DRAWN - RL / DG	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - RL / DG	REVISED -	
PLOT DATE = 3/30/2025	DATE - 2025.02.20	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABINET DETAIL
US RTE 45 – COURTLAND ST TO PETERSON RD

SCALE: | SHEET OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	154
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			



TS SHT NO. 147

PROPOSED

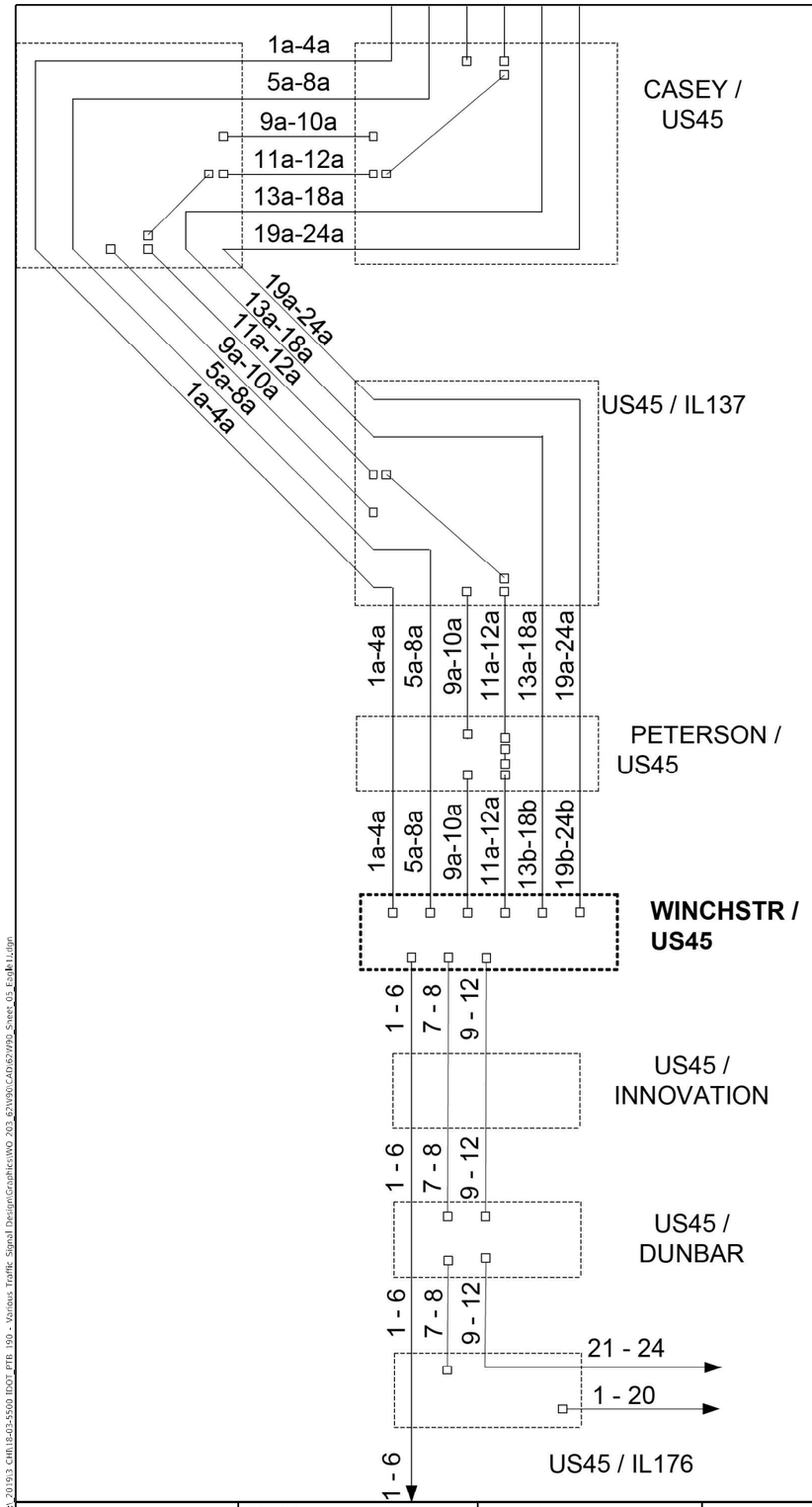
FORMER EAGLE IJ

LAKE COUNTY TACTICS

FILE NAME: M:\ 20193 CHI\18-03-5500 IDOT_PTB_190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_65_Eagle11.dgn

PARSONS	USER NAME = erica.salatz	DESIGNED - RL / DG	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CABINET DETAIL US RTE 45 – COURTLAND ST TO PETERSON RD
		DRAWN - RL / DG	REVISED -		
	PLOT SCALE = 40.0001 ' / in.	CHECKED - RL / DG	REVISED -		
	PLOT DATE = 3/30/2025	DATE - 2025.02.20	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	155
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		



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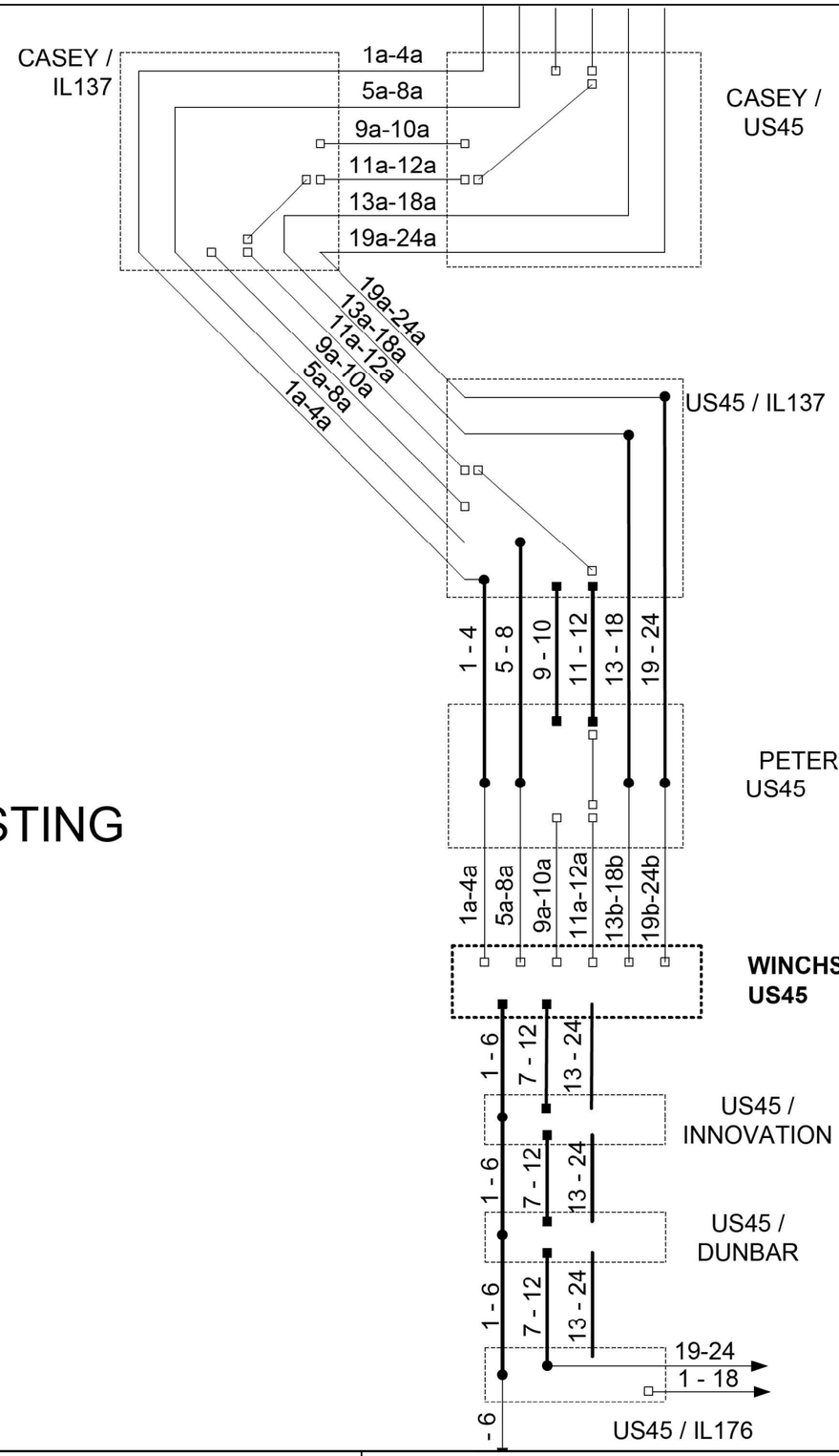


PROPOSED

FORMER EAGLE 1J
LAKE COUNTY TACTICS

TS SHT NO. 148

FILE NAME: MS-20193 CHI:18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eagle1J.dgn

PARSONS

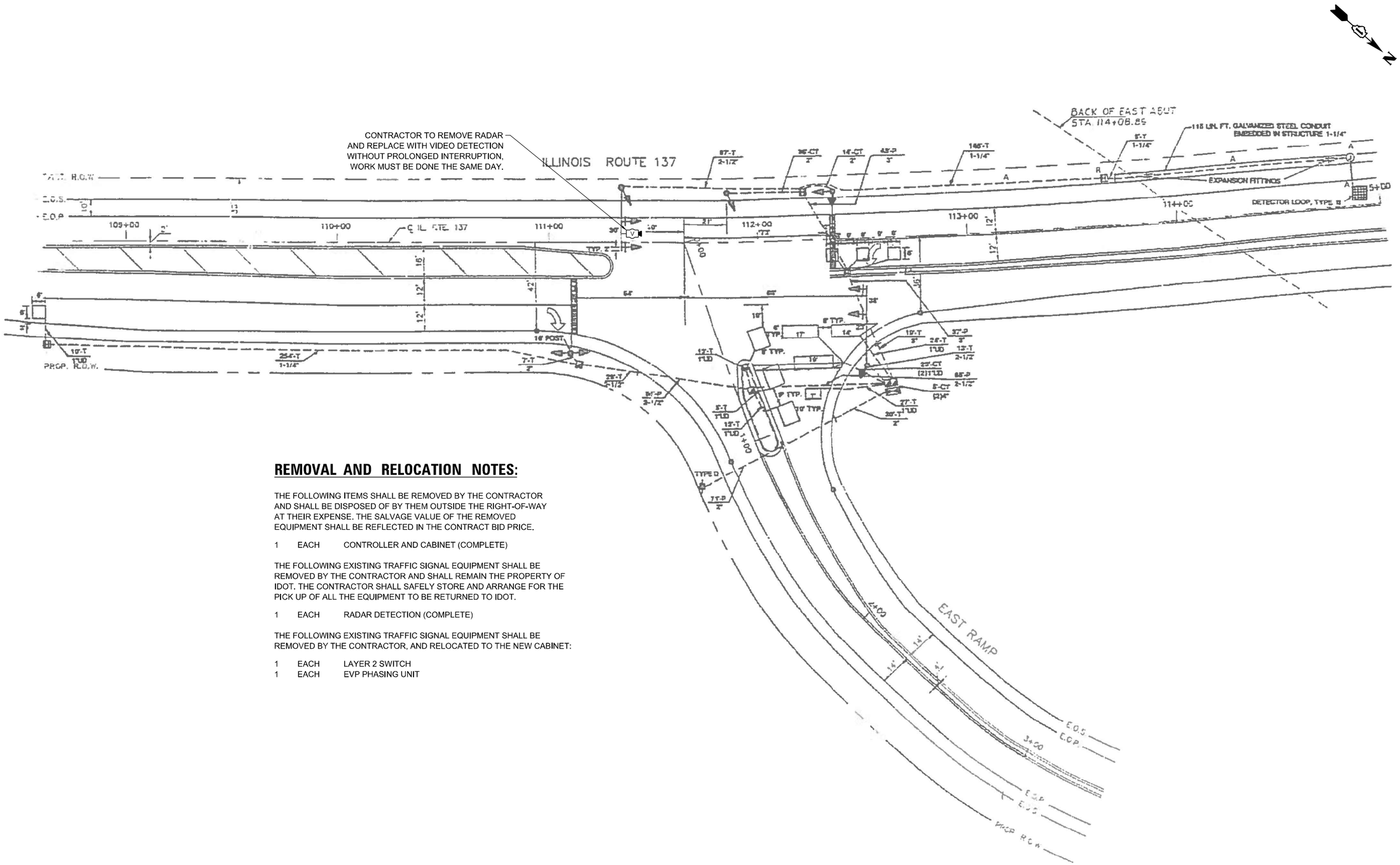
USER NAME = erica.salatz	DESIGNED - RL / DG	REVISED -	
	DRAWN - RL / DG	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - RL / DG	REVISED -	
PLOT DATE = 3/30/2025	DATE - 2025.02.20	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIBER SPLICE DIAGRAM
US RTE 45 – COURTLAND ST TO PETERSON RD

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	156
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			



REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER AND CABINET (COMPLETE)

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF IDOT. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR THE PICK UP OF ALL THE EQUIPMENT TO BE RETURNED TO IDOT.

1 EACH RADAR DETECTION (COMPLETE)

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, AND RELOCATED TO THE NEW CABINET:

1 EACH LAYER 2 SWITCH
1 EACH EVP PHASING UNIT

TS SHT NO. 149

TS 21660
LAKE COUNTY TACTICS

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED - 05/08/2025	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 5/6/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

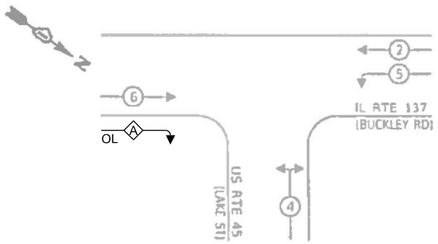
TRAFFIC SIGNAL PLANS AND REMOVAL NOTES
LOCATION 68 – US RTE 45 AT IL RTE 137

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	157
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

FILE NAME: Mst_20193_CHI1.8-03-5500_IDOT_PTB_190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet 05_Eagle_11 & 4C.dgn

PHASE DESIGNATION DIAGRAM

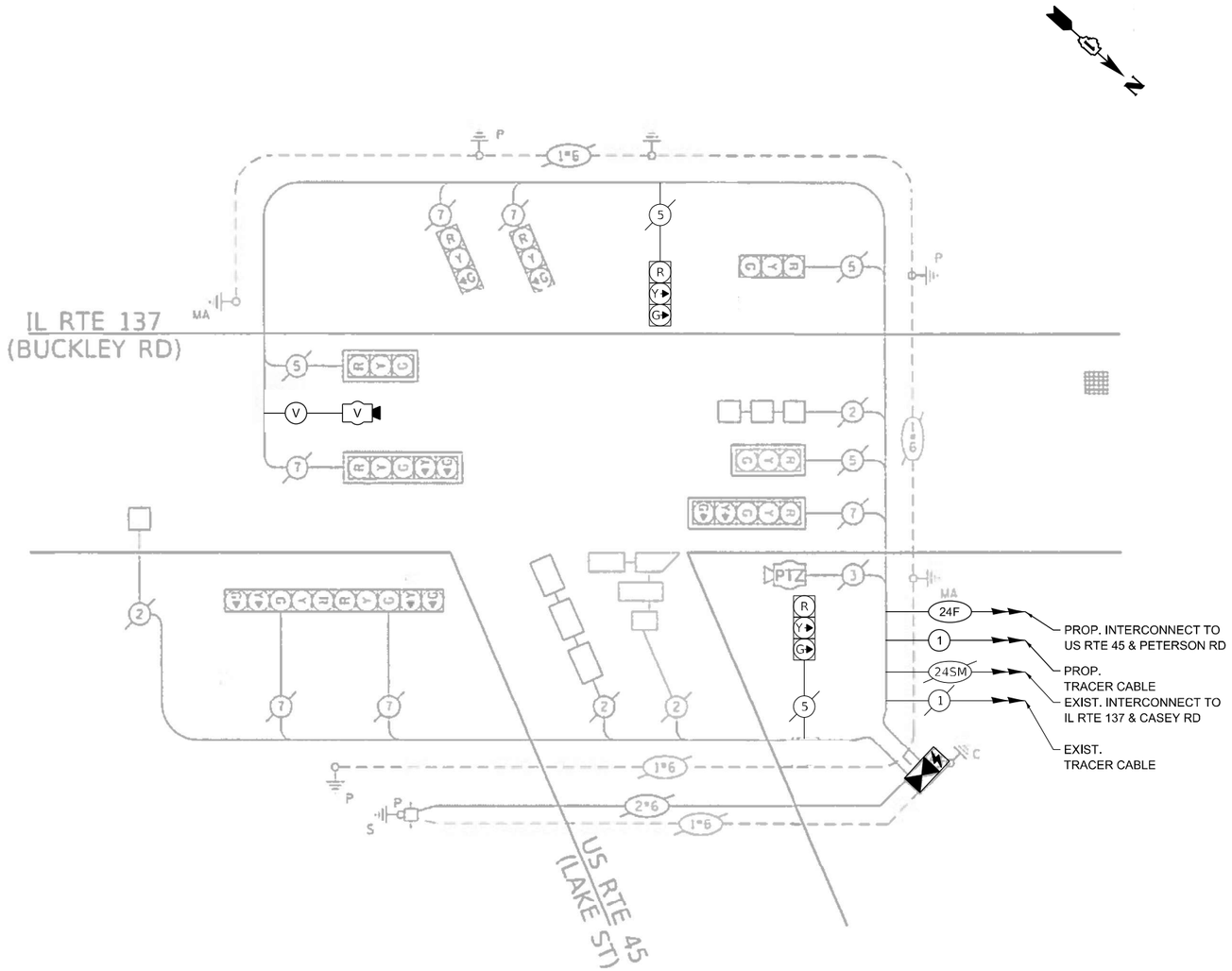


LEGEND:

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

RIGHT TURN OVERLAP PHASE DESIGNATION:

OVERLAP LETTER		PERMISSIVE PHASE		PROTECTED PHASE
A	=	6	+	4



CABLE PLAN
(NOT TO SCALE)

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	7	11	77
4 - SECTION	-	14	-
5 - SECTION	4	13	52
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	4	20	20
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			359
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	-
PTZ CAMERA	1	75	75
TOTAL SERVICE WIRE SIZING =			1039

ENERGY COSTS TO:
ILLINOIS DEPT OF TRANSPORTATION
201 CENTER CT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
INDUCTIVE LOOP DETECTOR	EACH	1
RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	4
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
TERMINATE FIBER IN CABINET	EACH	4
SPLICE FIBER IN CABINET	EACH	20
VIDEO VEHICLE DETECTION SYSTEM, SINGLE APPROACH	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV STRETCHED CABINET, SPECIAL	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1

TS 21660
LAKE COUNTY TACTICS

TS SHT NO. 150

FILE NAME: MA_20193_CHI18-02-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Esch_1_& 4C.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	05/08/2025
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 5/6/2025	DATE - 12/20/2024	REVISED -	

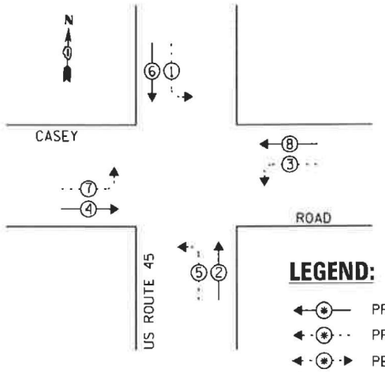
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 68 – US RTE 45 AT IL RTE 137

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	158
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

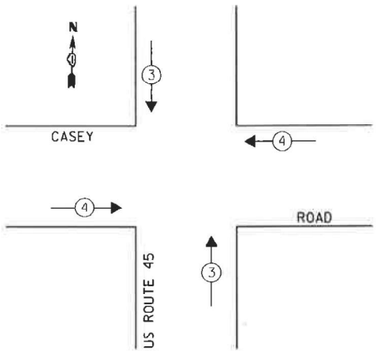
EXISTING CONTROLLER SEQUENCE



LEGEND:

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

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

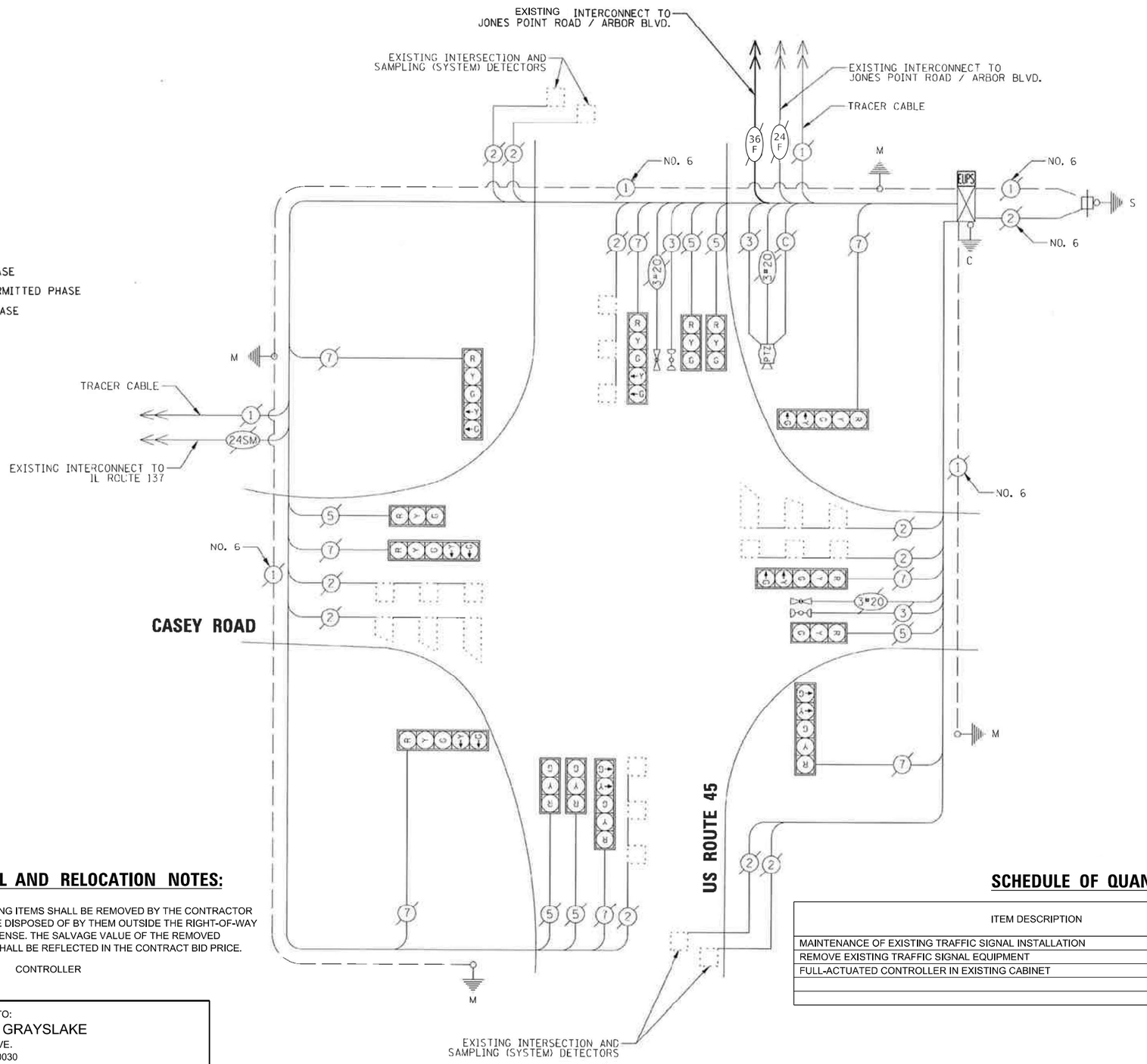


TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	6	11	66
4 - SECTION	-	14	-
5 - SECTION	8	13	104
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			380
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	-
PTZ CAMERA	1	75	75
TOTAL SERVICE WIRE SIZING =			1060

ENERGY COSTS TO:
VILLAGE OF GRAYSLAKE
10 S SEYMOUR AVE.
GRAYSLAKE, IL 60030

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---



REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1

TS 21663
LAKE COUNTY TACTICS

TS SHT NO. 151

FILE NAME: M:\2019\3 CMI\18-03-5500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203 62W90\CAD\62W90_Sheet_05_Eagle_11 & 4C.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

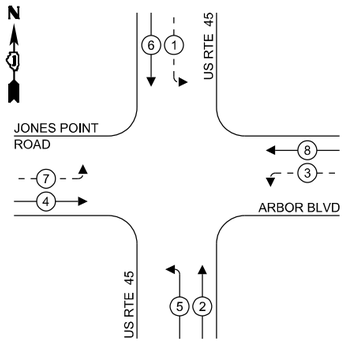
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 69 – US RTE 45 AT CASEY RD

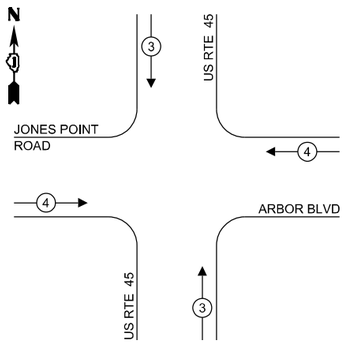
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	159
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

EXISTING CONTROLLER SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

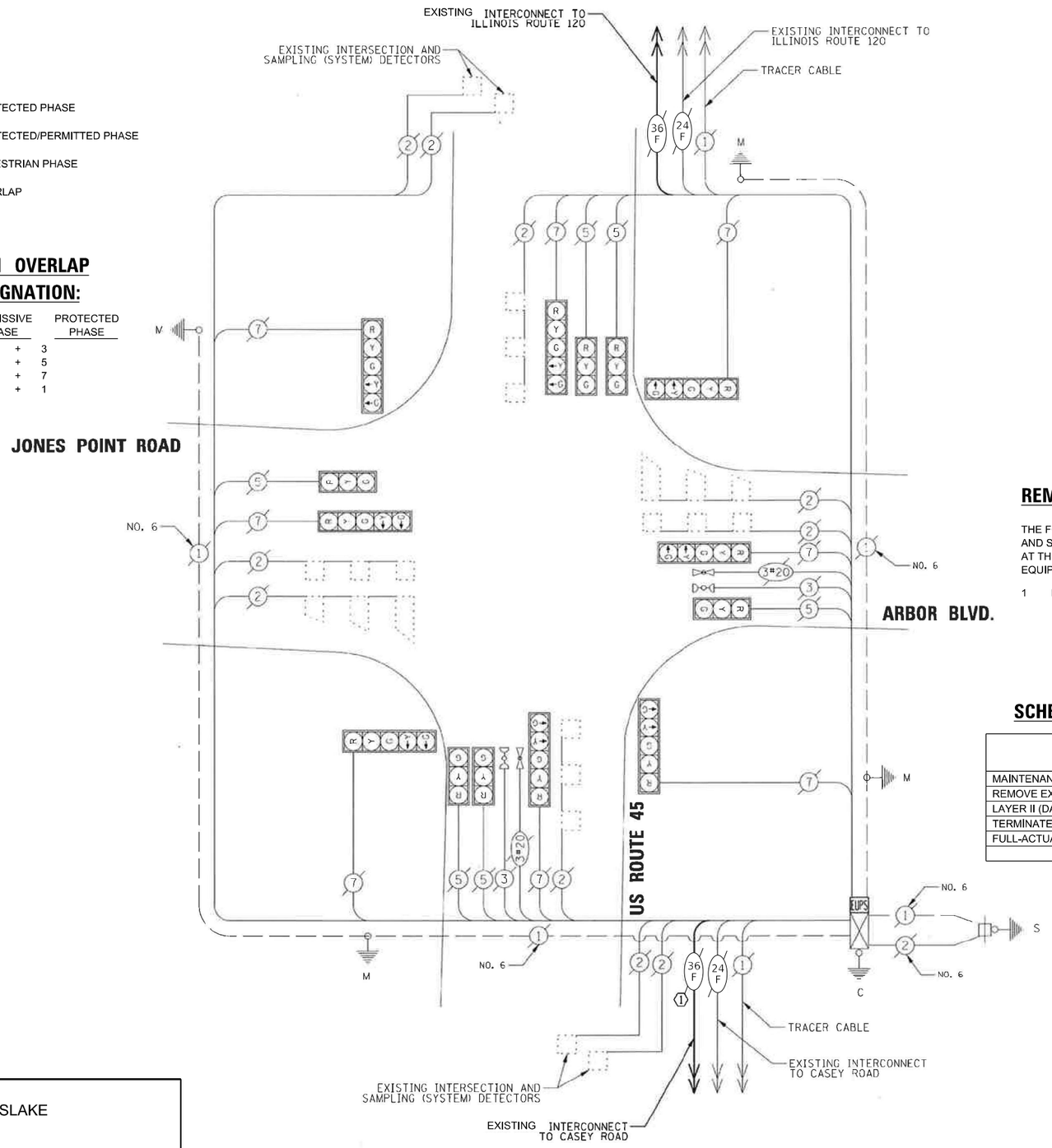


LEGEND:

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

RIGHT TURN OVERLAP PHASE DESIGNATION:

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



REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
TERMINATE FIBER IN CABINET	EACH	12
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	6	11	66
4 - SECTION	-	14	-
5 - SECTION	8	13	104
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			380
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			985

ENERGY COSTS TO:
VILLAGE OF GRAYSLAKE
10 S. SEYMOUR AVE.
GRAYSLAKE, IL 60030

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

TS SHT NO. 152

FILE NAME: MA-20193 CHI:18-02-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eagle4C.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

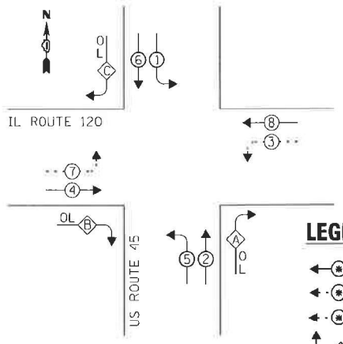
CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 70 – US RTE 45 AT ARBOR BLVD/JONES POINT RD

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	4C01A
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

TS 21885
FORMER EAGLE 4C
LAKE COUNTY TACTICS

EXISTING CONTROLLER SEQUENCE



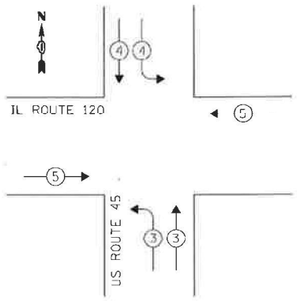
RIGHT TURN OVERLAP PHASE DESIGNATION

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

LEGEND:

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

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

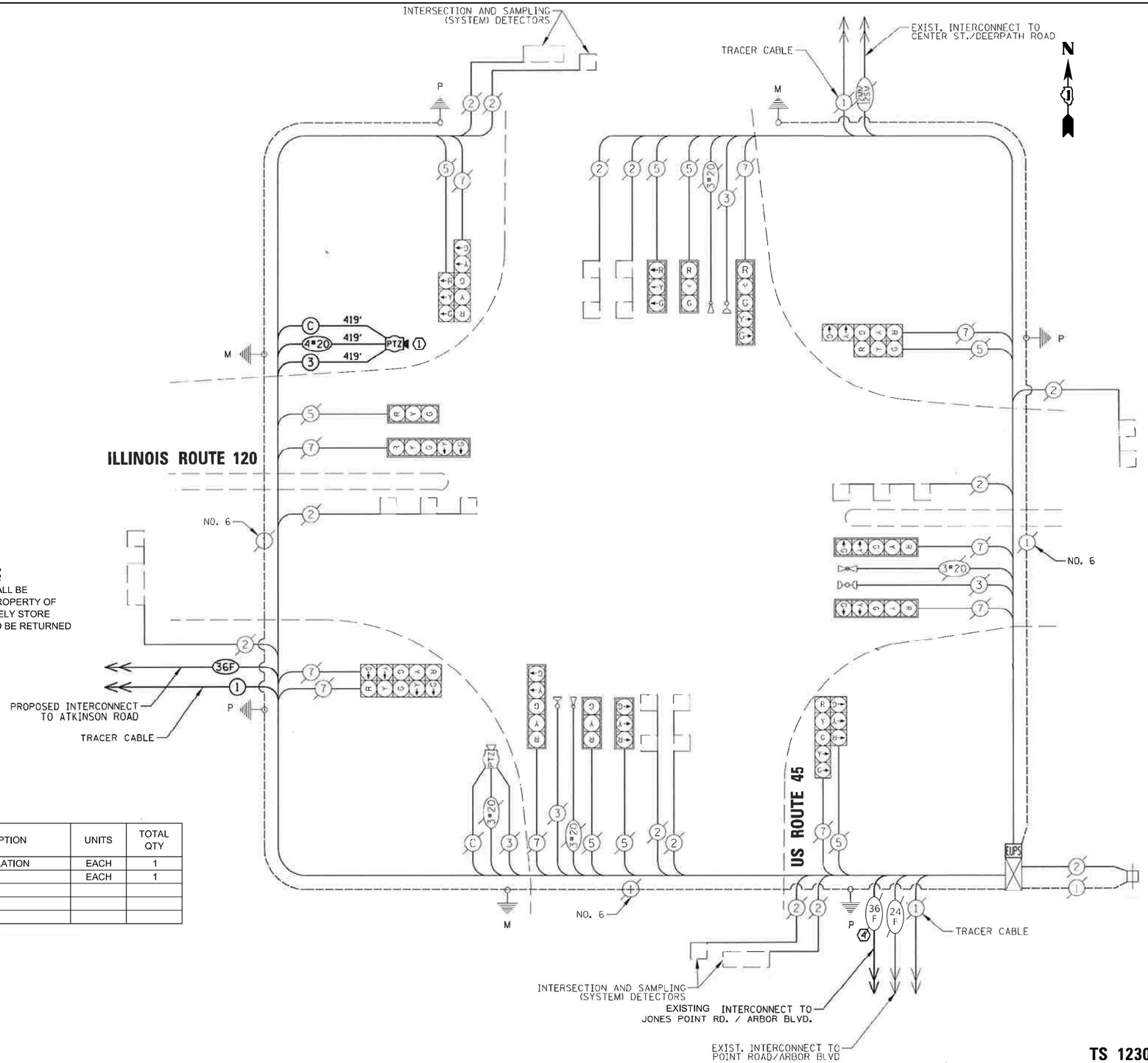


REMOVAL AND RELOCATION NOTES:

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

LAKE COUNTY
DIVISION OF TRANSPORTATION
TMC MANAGER
847-377-7000

1 EACH BLUETOOTH DEVICE (COMPLETE)



TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	8	11	88
4 - SECTION	-	14	-
5 - SECTION	10	13	130
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			428
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	-
PTZ CAMERA	2	75	150
TOTAL SERVICE WIRE SIZING =			1183

ENERGY COSTS TO:
VILLAGE OF GRAYSLAKE
10 S. SEYMOUR AVE.
GRAYSLAKE, IL 60030

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1

TS 12305
FORMER EAGLE 4C
LAKE COUNTY TACTICS

TS SHT NO. 153

FILE NAME: MX-20193 CHI.18-03-5500 IDOT FTB 190 - Various Traffic Signal Design\Graphics\WO 203 62W90\CAD\62W90_Sheet_05_Eag4C.dgn

TYLin

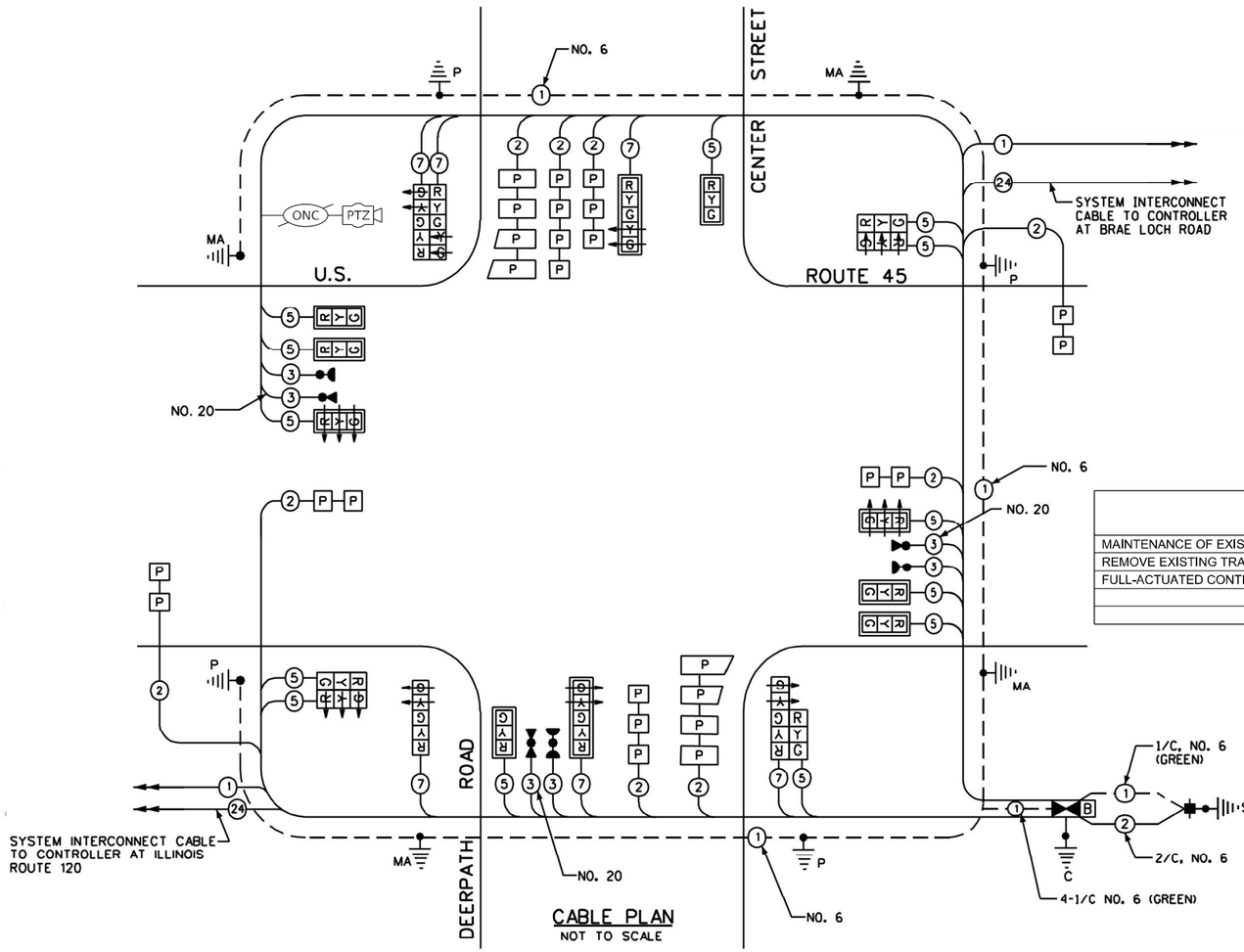
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 71 – US RTE 45 AT IL RTE 120 (BELVIDERE RD)

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	161
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			



CABLE PLAN
NOT TO SCALE

REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	13	11	143
4 - SECTION	-	14	-
5 - SECTION	6	13	78
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			431
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	-
PTZ CAMERA	1	75	75
TOTAL SERVICE WIRE SIZING =			1111

ENERGY COSTS TO:
ILLINOIS DEPT OF TRANSPORTATION
201 CENTER CT
SCHAUMBURG, IL 60196-1096
ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

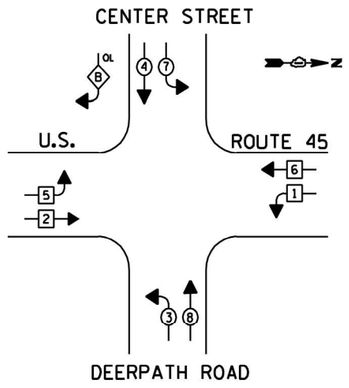
LEGEND

DUAL ENTRY PHASE

SINGLE ENTRY PHASE

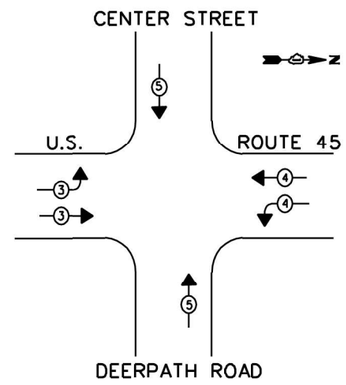
OVERLAP

CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



TS 6645
FORMER EAGLE 4C
LAKE COUNTY TACTICS

TS SHT NO. 154

FILE NAME: M:\ 20\9\3 CM\18-03-5500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203 62W90\CAD\62W90_Sheet_05_Eagle4C.dgn

TYLin

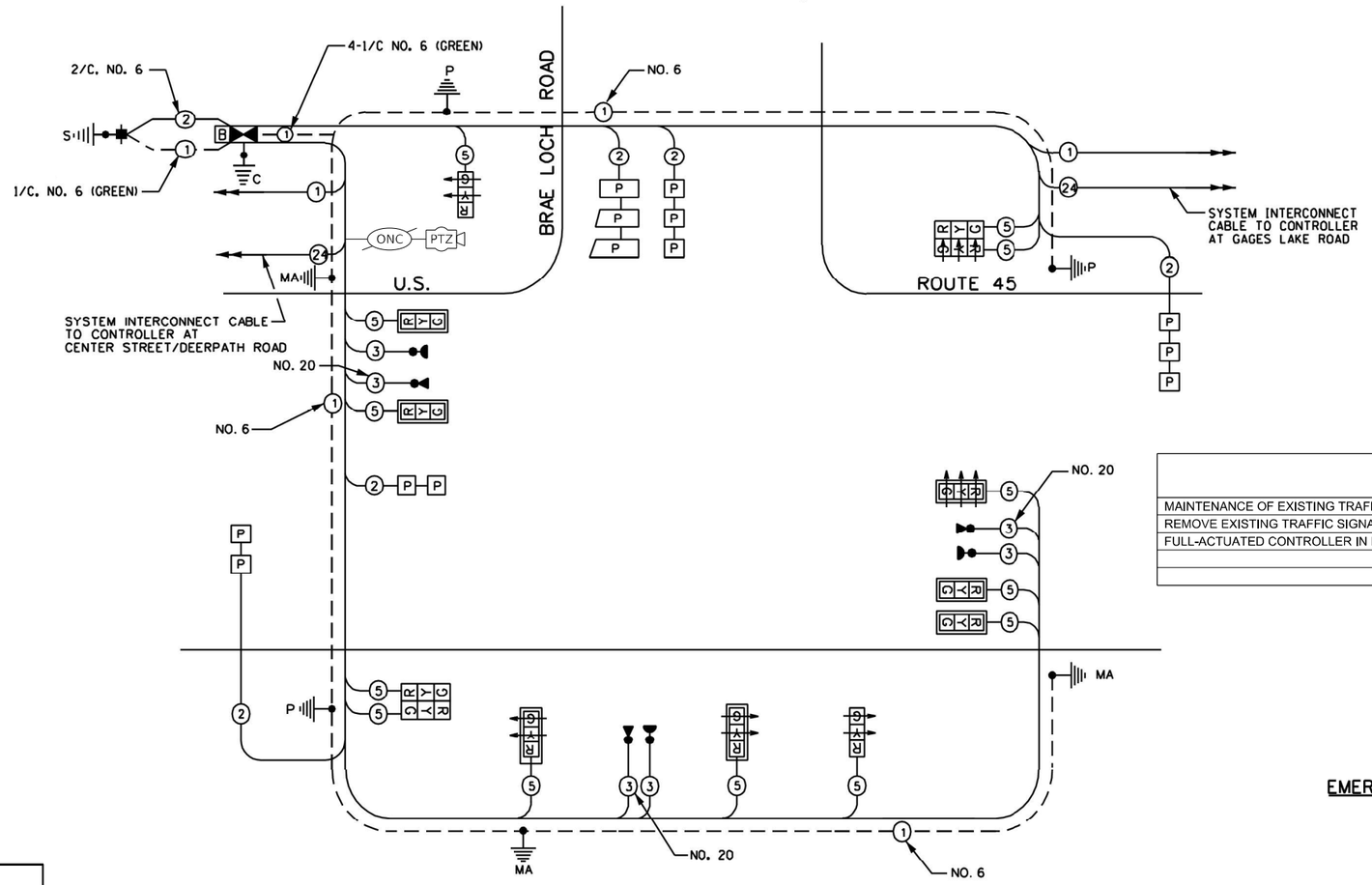
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 72 – US RTE 45 AT CENTER ST/DEERPATH RD

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	162
		CONTRACT NO. 62W90		
		ILLINOIS	FED. AID PROJECT	



CABLE PLAN
NOT TO SCALE

REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

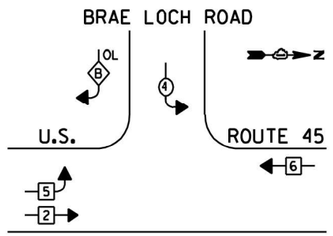
TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	13	11	143
4 - SECTION	-	14	-
5 - SECTION	-	13	-
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			353
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	-
PTZ CAMERA	1	75	75
TOTAL SERVICE WIRE SIZING =			1033

ENERGY COSTS TO:
ILLINOIS DEPT OF TRANSPORTATION
201 CENTER CT
SCHAUMBURG, IL 60196-1096
ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

LEGEND

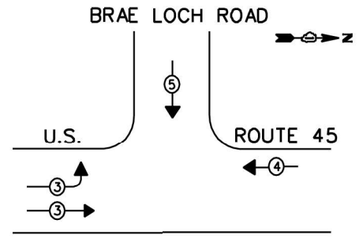
- DUAL ENTRY PHASE
- SINGLE ENTRY PHASE
- x NUMBER REFERS TO ASSOCIATED PHASE

CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



TS 6635
FORMER EAGLE 4C
LAKE COUNTY TACTICS

TS SHT NO. 155

FILE NAME: M:\...\20193_CHI1843-5500 IDOT_PTB 190 - Various Traffic Signal Design\GraphHcs\WO 203_62W90.C4D\62W90_Sheet_03_Eqlk4C.dgn

TYLin

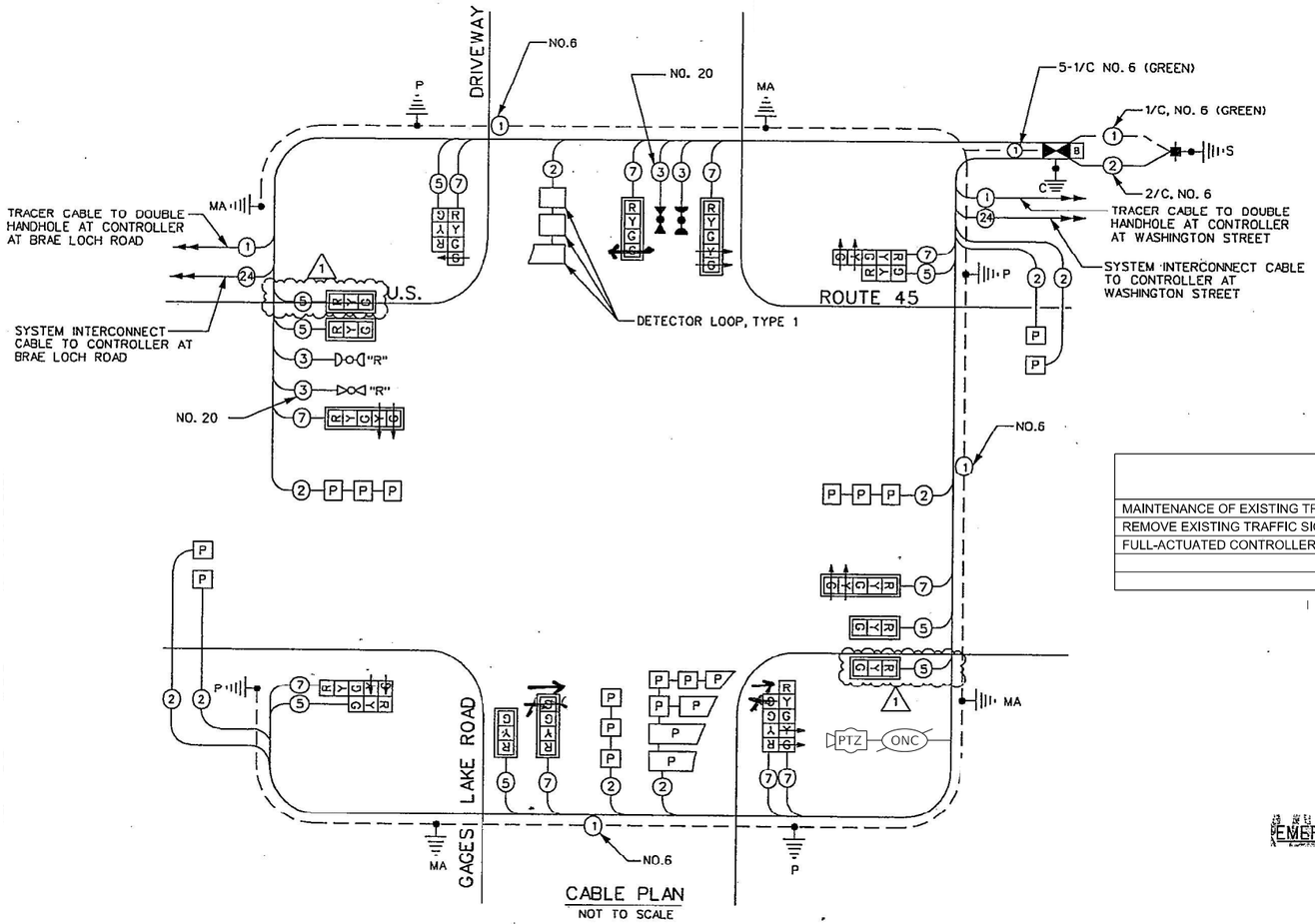
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 73 – US RTE 45 AT BRAE LOCH RD

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	163
		CONTRACT NO. 62W90		
		ILLINOIS	FED. AID PROJECT	



REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER

SCHEDULE OF QUANTITIES

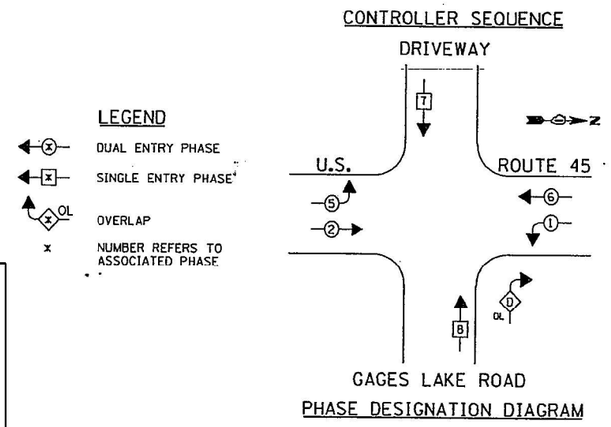
ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1

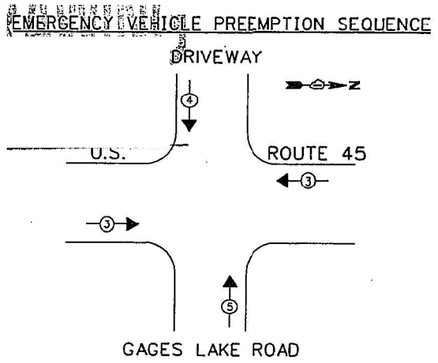
TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	8	11	88
4 - SECTION	4	14	56
5 - SECTION	6	13	78
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			432
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	-
PTZ CAMERA	1	75	75
TOTAL SERVICE WIRE SIZING =			1112

ENERGY COSTS TO:
ILLINOIS DEPT OF TRANSPORTATION
201 CENTER CT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---





TS 21655
FORMER EAGLE 4C
LAKE COUNTY TACTICS

TS SHT NO. 156

FILE NAME: MA-20193 CHI:18-02-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eagle4C.dgn

TYLin

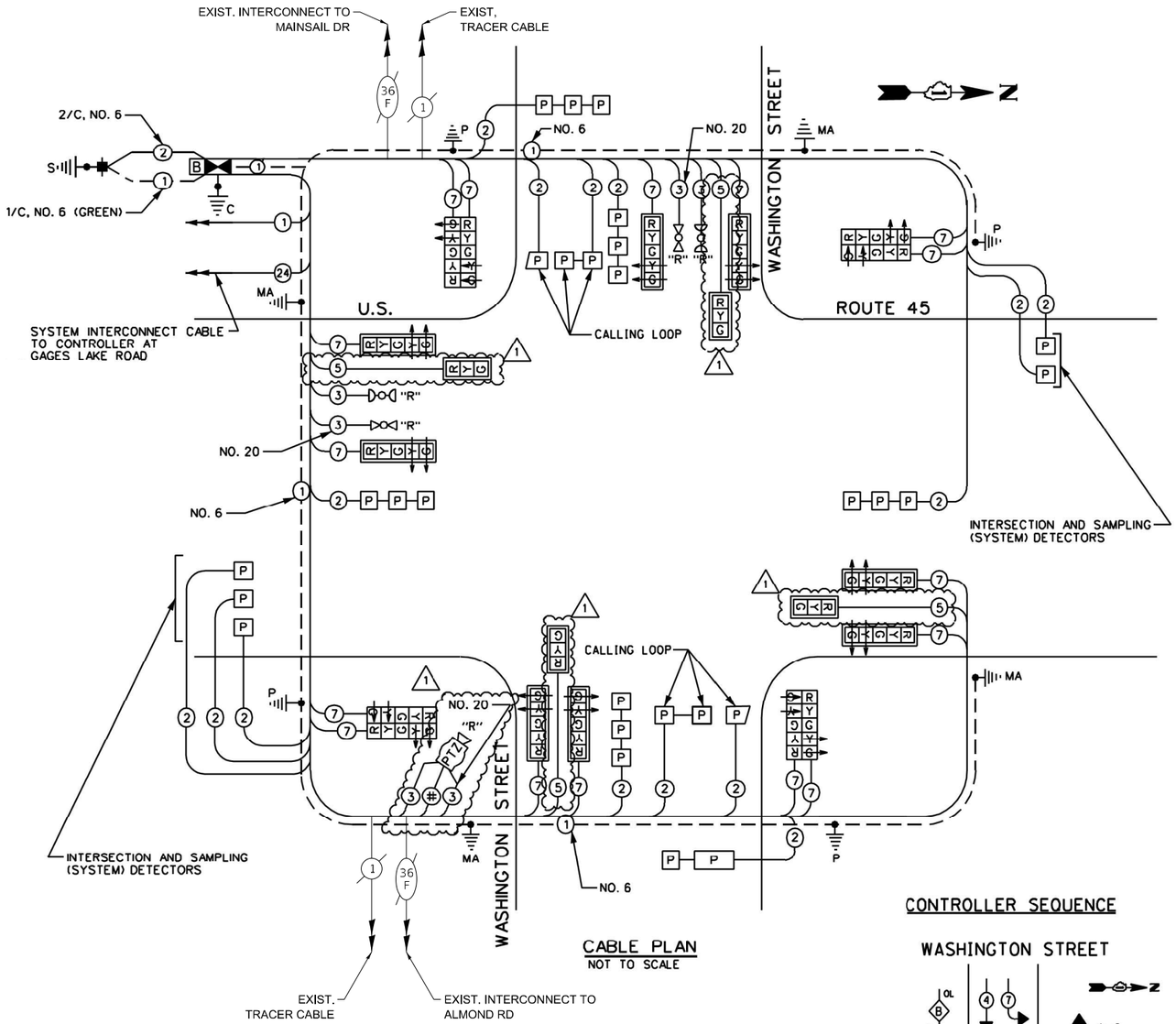
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 74 – US RTE 45 AT GAGES LAKE RD

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	164
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			



CABLE PLAN
NOT TO SCALE

LEGEND

- DUAL ENTRY PHASE
- OL OVERLAP
- x NUMBER REFERS TO ASSOCIATED PHASE

REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER

INSTALL CONTROLLER FROM TS 7085 - IL 132 AT DILLEYS RD

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

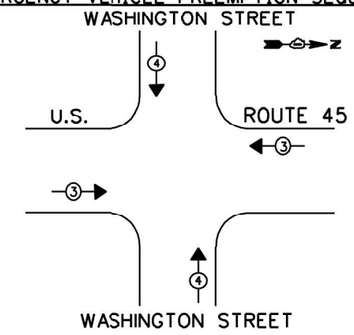
LAKE COUNTY
DIVISION OF TRANSPORTATION
TMC MANAGER
847-377-7000

1 EACH BLUETOOTH DEVICE (COMPLETE)

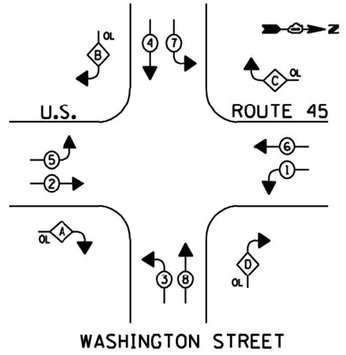
SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1

EMERGENCY VEHICLE PREEMPTION SEQUENCE



CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	4	11	44
4 - SECTION	-	14	-
5 - SECTION	16	13	208
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			462
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	-
PTZ CAMERA	1	75	75
TOTAL SERVICE WIRE SIZING =			1142

ENERGY COSTS TO:
ILLINOIS DEPT OF TRANSPORTATION
201 CENTER CT
SCHAUMBURG, IL 60196-1096
ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

TS SHT NO. 157

TS 6685
FORMER EAGLE 4C
LAKE COUNTY TACTICS

TYLin

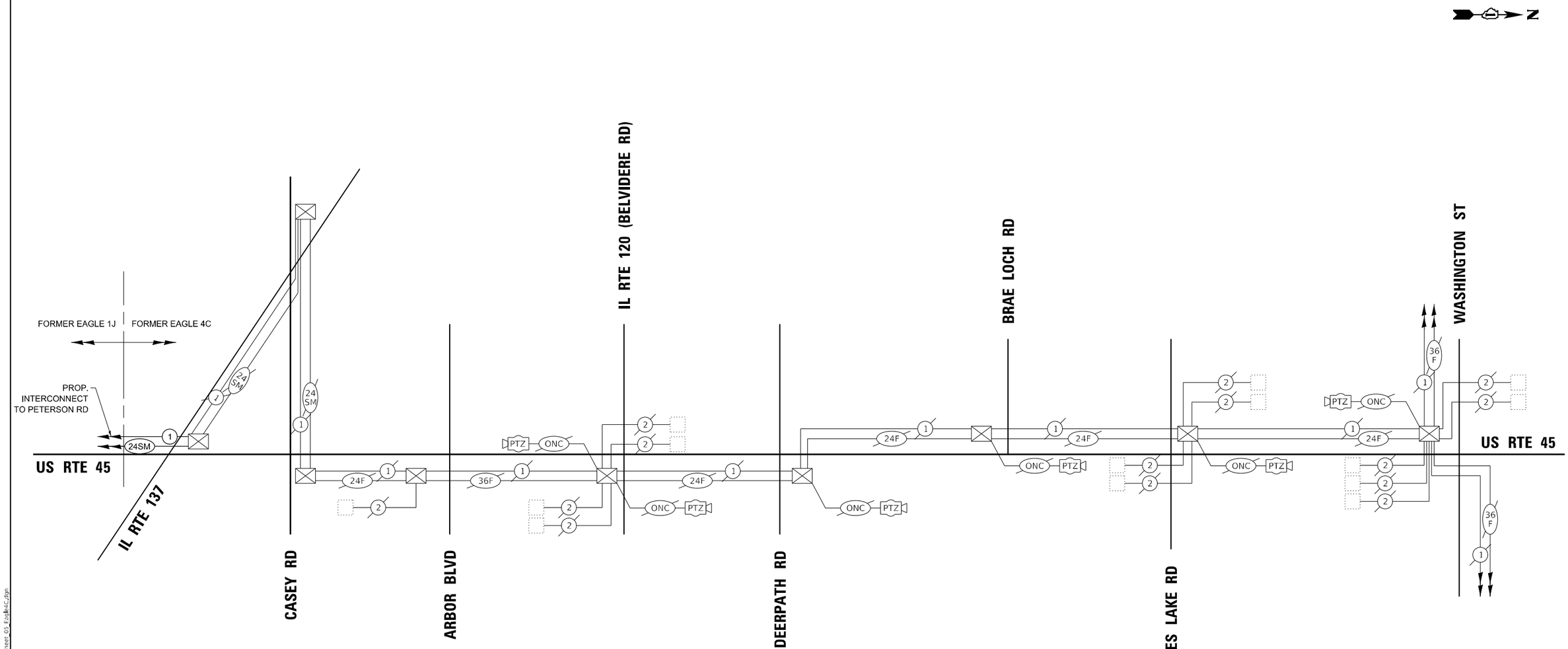
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 75 – US RTE 45 AT WASHINGTON ST
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	165
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

FILE NAME: ttst 20\9\3 CMh:8-03-5560 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203 62W90\CAD\62W90_Sheet_05_Eag4c4c.dgn



NOTES:

1. OPTIMIZATION TO INCLUDE INTERSECTIONS FROM FORMER 1J & 4C SYSTEM. SEE INTERCONNECT SCHEMATIC FOR 1J.

FORMER 4C:
- US RTE 45 & IL RTE 137
- US RTE 45 & CASEY RD
- US RTE 45 & ARBOR BLVD / JONES POINT RD
- US RTE 45 & IL RTE 120 (BELVIDERE RD)
- US RTE 45 & CENTER ST / DEERPATH RD
- US RTE 45 & BRAE LOCH RD
- US RTE 45 & GAGES LAKE RD
- US RTE 45 & WASHINGTON ST

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
OPTIMIZE TRAFFIC SIGNAL SYSTEM	EACH	1

FORMER EAGLE 4C
LAKE COUNTY TACTICS

TS SHT NO. 158

FILE NAME: MA-20193 CHI:18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eagle4C.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

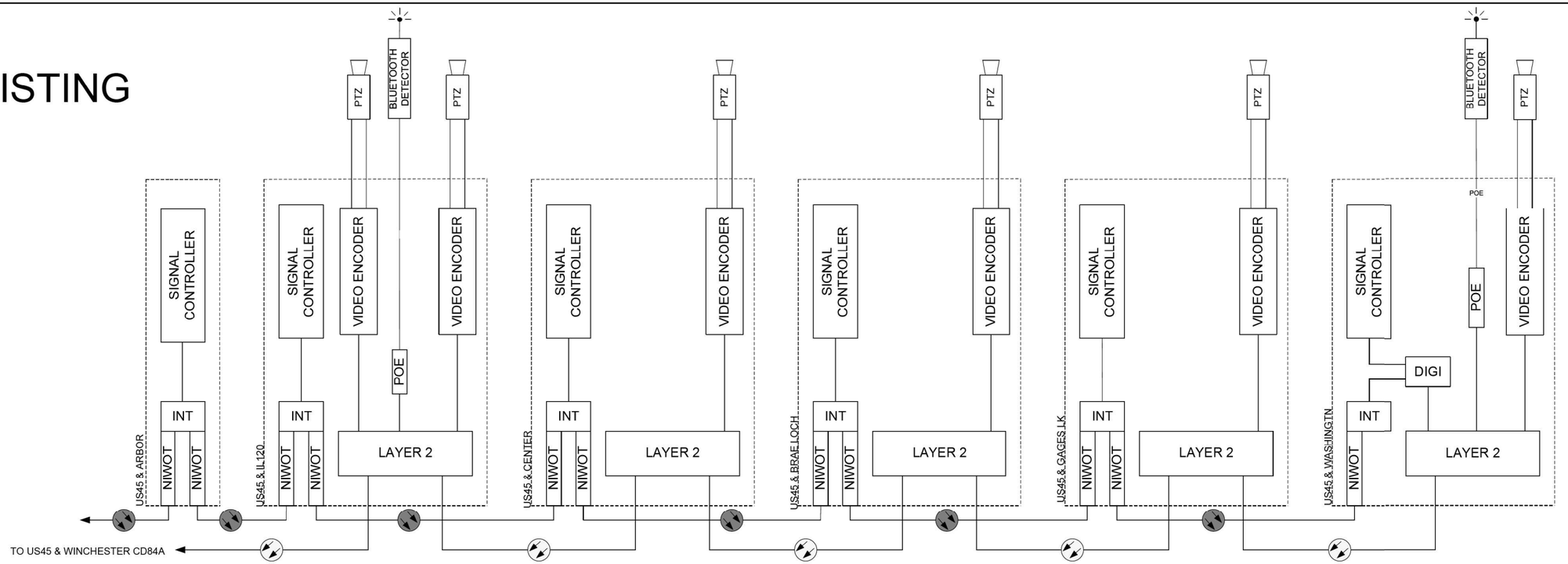
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT SCHEMATIC
US RTE 45 – ARBOR BLVD TO WASHINGTON ST

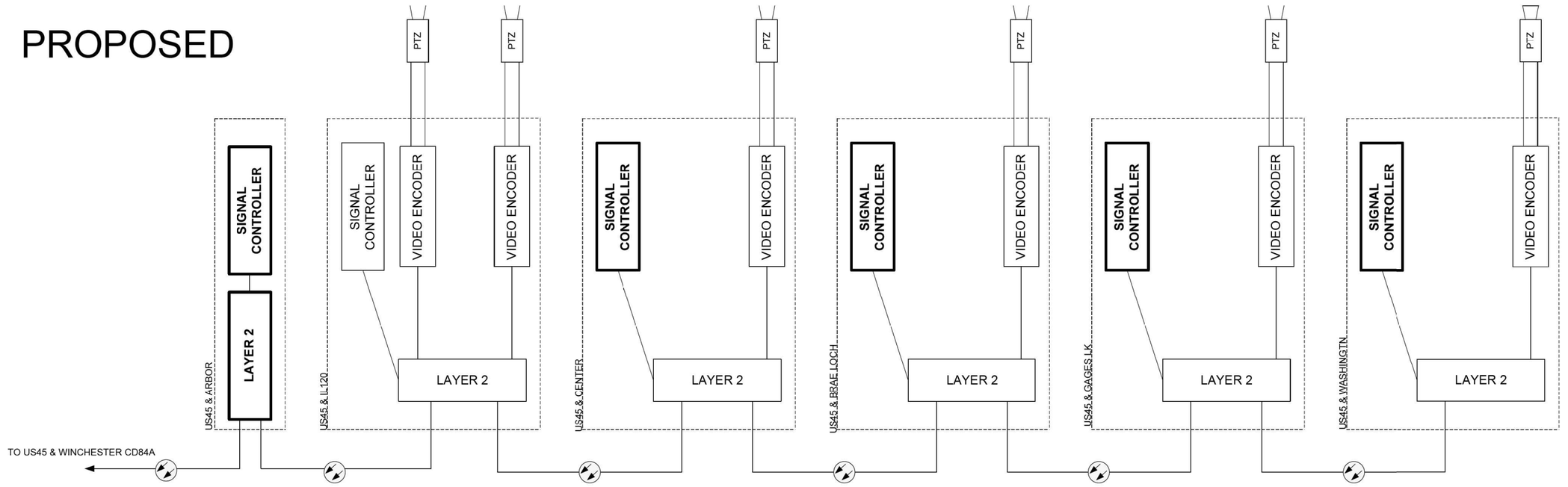
SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	166
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

EXISTING



PROPOSED



FORMER EAGLE 4C
LAKE COUNTY TACTICS

TS SHT NO. 159

FILE NAME: Mst-20193 CMH.8-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203 62W90\CAD\62W90_Sheet 05 EagleEC.dgn

PARSONS	USER NAME = erica.salatz	DESIGNED - RL / DG	REVISED -
		DRAWN - RL / DG	REVISED -
	PLOT SCALE = 40.0000 ' / in.	CHECKED - RL / DG	REVISED -
	PLOT DATE = 3/30/2025	DATE - 2025.02.20	REVISED -

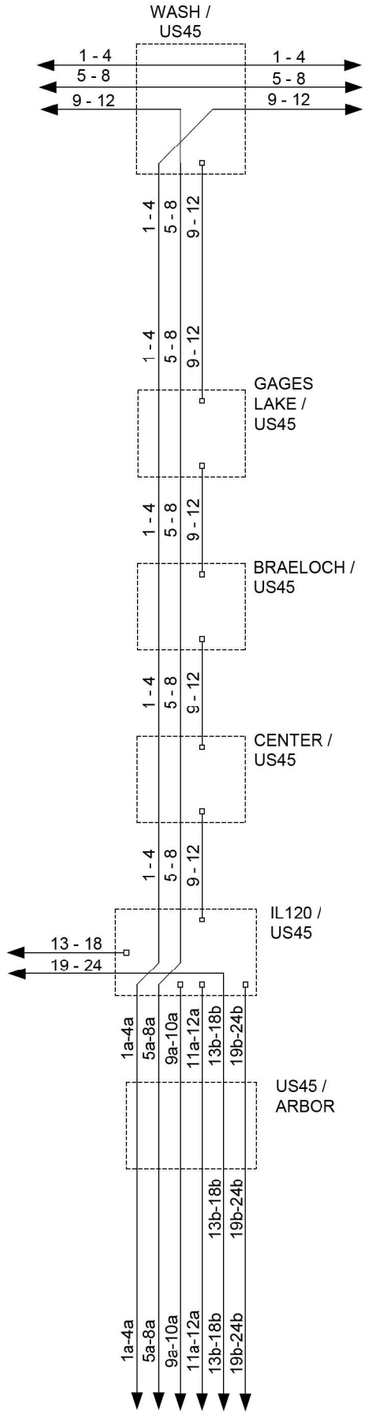
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABINET DETAIL
US RTE 45 – ARBOR BLVD TO WASHINGTON ST

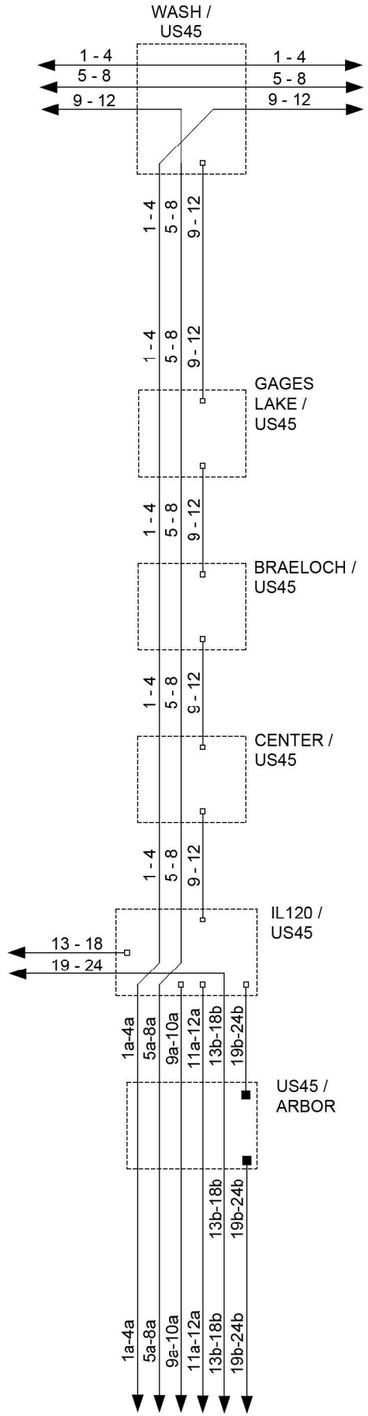
SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	167
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

EXISTING



PROPSED



FORMER EAGLE 4C
LAKE COUNTY TACTICS

TS SHT NO. 160

FILE NAME: M:\2019\3 CHI\18-03-5500 IDOT PTB 193 - Various Traffic Signal Design\Graphics\WO 203 - 62W90\CAD\62W90_Sheet_03_Eagle4c.dgn

PARSONS

USER NAME = erica.salutz	DESIGNED - RL / DG	REVISED -	
	DRAWN - RL / DG	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - RL / DG	REVISED -	
PLOT DATE = 3/30/2025	DATE - 2025.02.20	REVISED -	

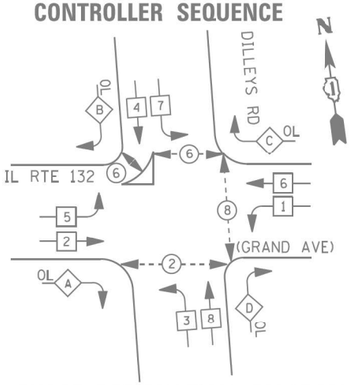
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIBER SPLICE DIAGRAM
US RTE 45 – ARBOR BLVD TO WASHINGTON ST

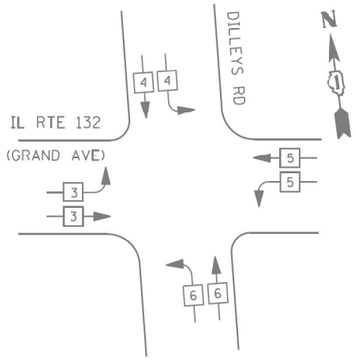
SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	168
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTION SEQUENCE

RIGHT TURN OVERLAP PHASE DESIGNATION

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

REMOVAL AND RELOCATION NOTES:

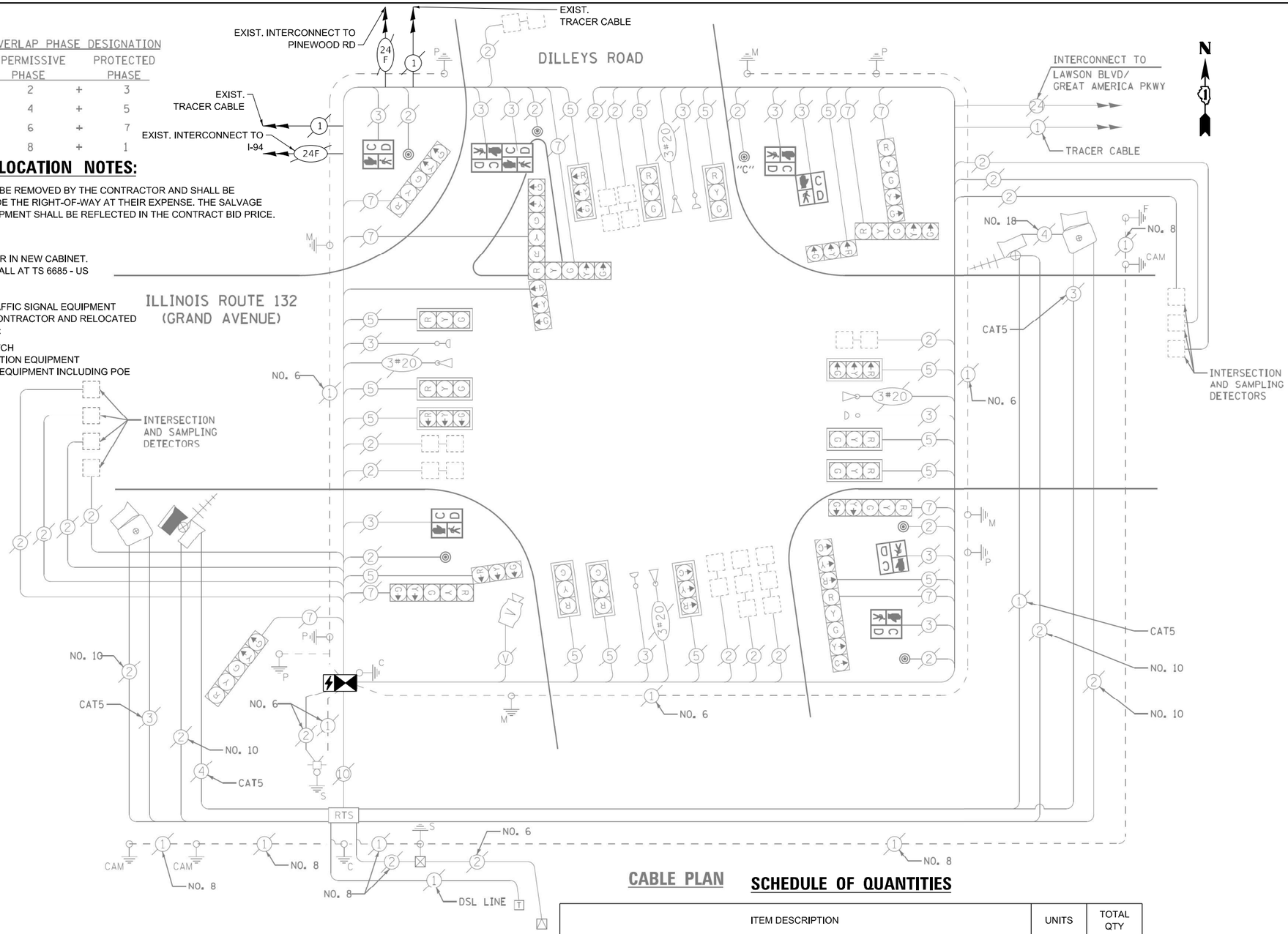
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

1 EACH CABINET

INSTALL EXISTING CONTROLLER IN NEW CABINET. NEW CONTROLLER TO BE INSTALL AT TS 6685 - US RTE 45 AT WASHINGTON.

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND RELOCATED TRAFFIC SIGNAL CONTROLLER:

1 EACH LAYER 2 SWITCH
1 EACH VIDEO DETECTION EQUIPMENT
1 EACH PTZ CAMERA EQUIPMENT INCLUDING POE



CABLE PLAN

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
INDUCTIVE LOOP DETECTOR	EACH	16
RELOCATE EXISTING TRAFFIC SIGNAL CONTROLLER	EACH	1
RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV STRETCHED CABINET, SPECIAL	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
FIBER OPTIC INTERCONNECT CENTER, 48 PORT	EACH	1

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	16	11	176
4 - SECTION	-	14	-
5 - SECTION	9	13	117
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	8	15	120
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			623
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	-
PTZ CAMERA	1	75	75
TOTAL SERVICE WIRE SIZING =			1303

ENERGY COSTS TO:
VILLAGE OF GURNEE
325 N. O'PLANE RD
GURNEE, IL 60031-2636

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

REMOVAL AND RELOCATION NOTES (CONT'D):

THE FOLLOWING ITEMS AS LABELED INSIDE THE SIGNAL CABINET IS PACE PROPERTY. CONTRACTOR TO CONTACT PACE AT 847-228-4287 OR 847-613-5889 FOR REMOVAL AND RELOCATION PRIOR TO ANY SIGNAL CABINET WORK. REFER TO SPECIAL PROVISION FOR PACE EQUIPMENT HANDLING.

1 EACH LAYER III SWITCH
1 EACH CELLULAR MODEM
1 EACH PRIORITY REQUEST SERVER
1 EACH 20A CIRCUIT BREAKER

TS 7085
FORMER EAGLE 4E
LAKE COUNTY TACTICS

TS SHT NO. 161

FILE NAME: M:_20\103 CHI\18-03-5500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Exist.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -

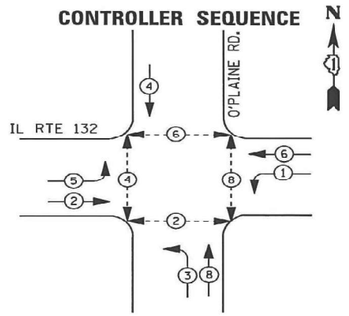
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 76 – IL RTE 132 AT DILLEY'S RD

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	169
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

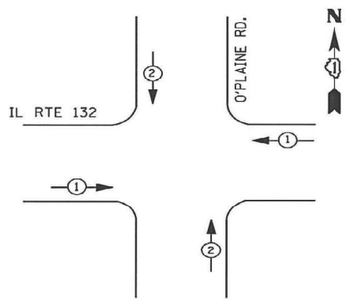
CONTROLLER SEQUENCE



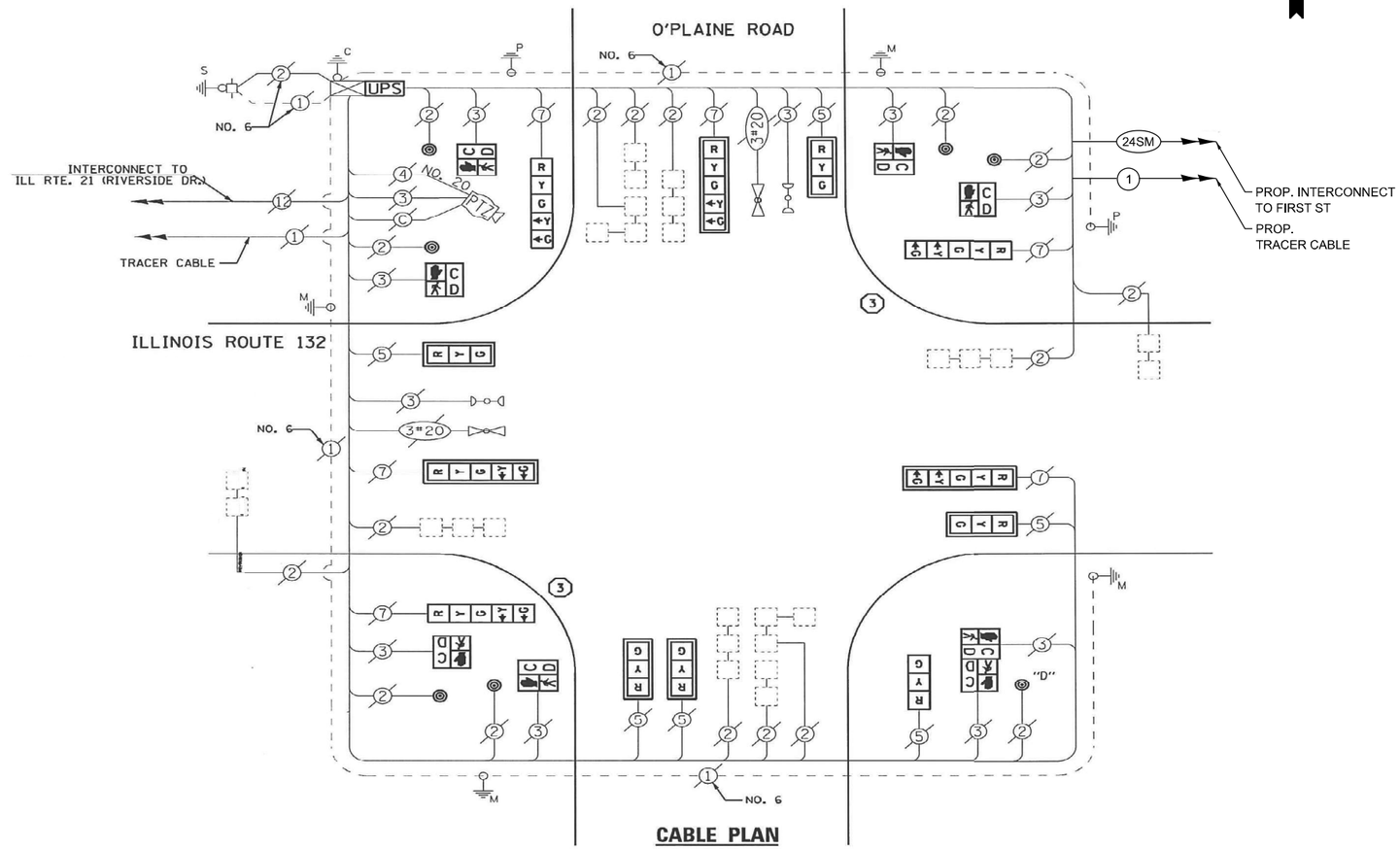
PHASE DESIGNATION DIAGRAM

LEGEND

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



EMERGENCY VEHICLE PREEMPTION SEQUENCE



CABLE PLAN

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	6	11	66
4 - SECTION	-	14	-
5 - SECTION	6	13	78
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	8	15	120
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	1	20	20
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			474
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	-
PTZ CAMERA	1	75	75
TOTAL SERVICE WIRE SIZING =			1154

ENERGY COSTS TO:
VILLAGE OF GURNEE
325 N. O'PLANE RD
GURNEE, IL 60031-2636

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TERMINATE FIBER IN CABINET	EACH	4
Ssplice FIBER IN CABINET	EACH	8

TS SHT NO. 162

FILE NAME: NH_20193 CMN18-03-5560 IDOT_PTB_199 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eagle4E.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

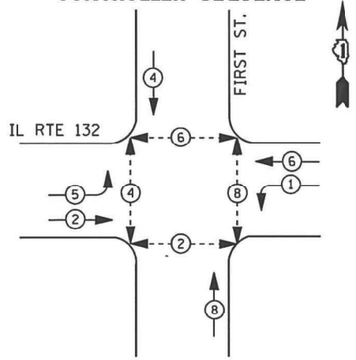
CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 77 – IL RTE 132 AT OPLAINE RD

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	4E01A
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

TS 7065
FORMER EAGLE 4E
LAKE COUNTY TACTICS

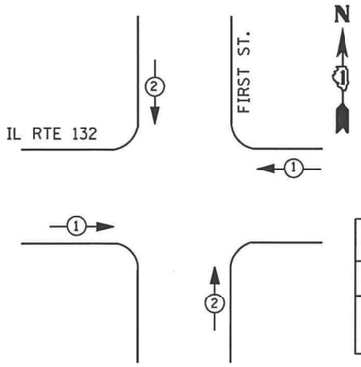
CONTROLLER SEQUENCE



LEGEND

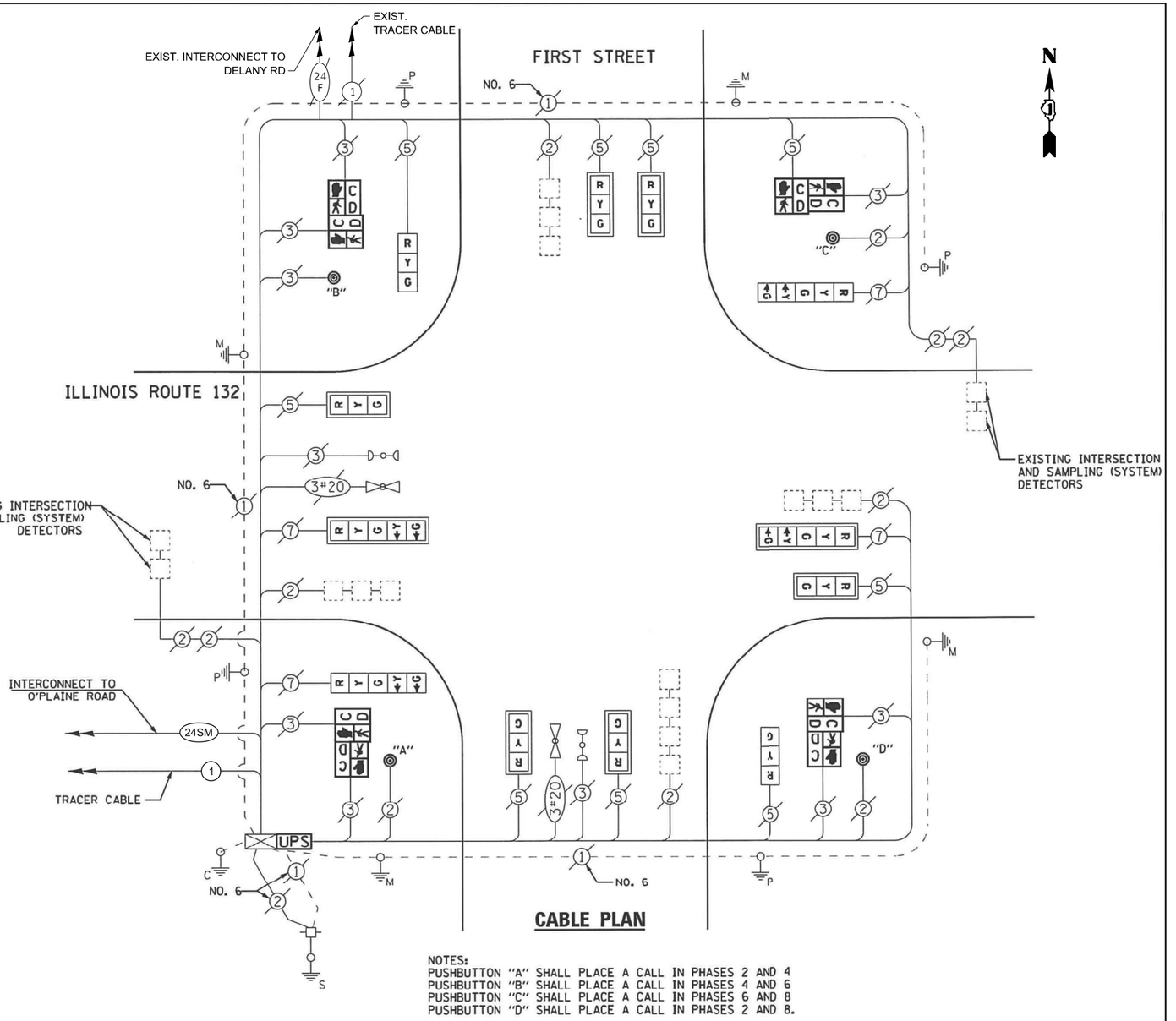
- DUAL ENTRY PHASE
- PEDESTRIAN PHASE
- SINGLE ENTRY PHASE
- OVERLAP
- * NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	1	2
MOVEMENT	← →	↓ ↑

EMERGENCY VEHICLE PREEMPTION SEQUENCE



CABLE PLAN

NOTES:
PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4
PUSHBUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6
PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8
PUSHBUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8.

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	8	11	88
4 - SECTION	-	14	-
5 - SECTION	4	13	52
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	8	15	120
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			470
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			1150

ENERGY COSTS TO:
VILLAGE OF GURNEE
325 N. O'PLANE RD
GURNEE, IL 60031-2636

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
TERMINATE FIBER IN CABINET	EACH	20
SPLICE FIBER IN CABINET	EACH	2

TS 6551
FORMER EAGLE 4E
LAKE COUNTY TACTICS

TS SHT NO. 163

FILE NAME: NH: 2019\3 CMT\18-03-5560 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203 62W90\CAD\62W90_Sheet_05_Eagle4E.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -

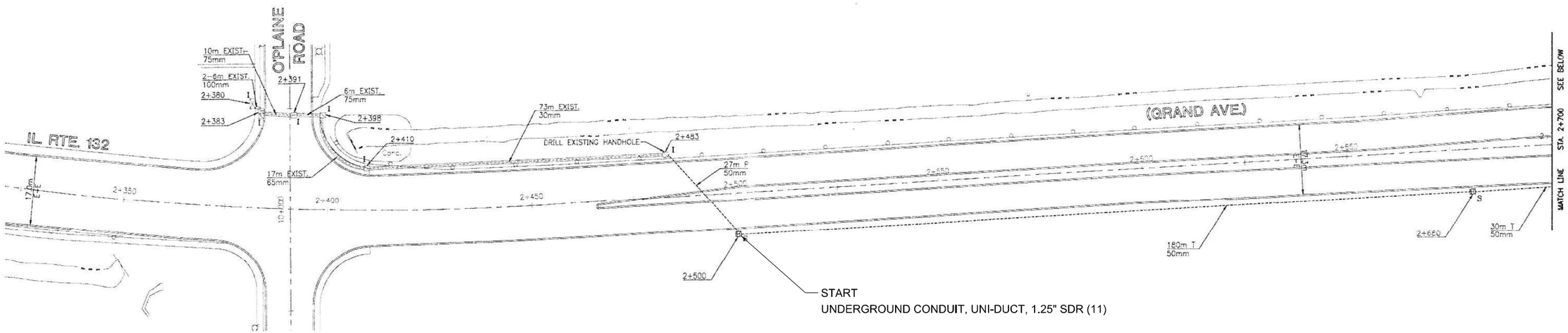
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

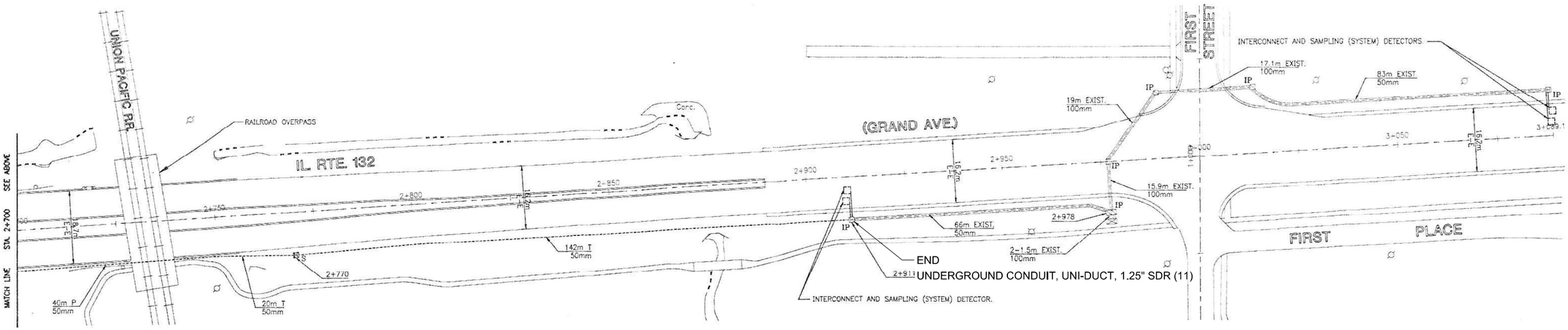
CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 78 – IL RTE 132 AT FIRST ST

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	171
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

FOR REFERENCE ONLY





FORMER EAGLE 4E
LAKE COUNTY TACTICS

TS SHT NO. 164

FILE NAME: Mst-20193 CM1.8-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203 62W90\CAD\62W90_Sheet 05 Eagle4E.dgn

TYLin

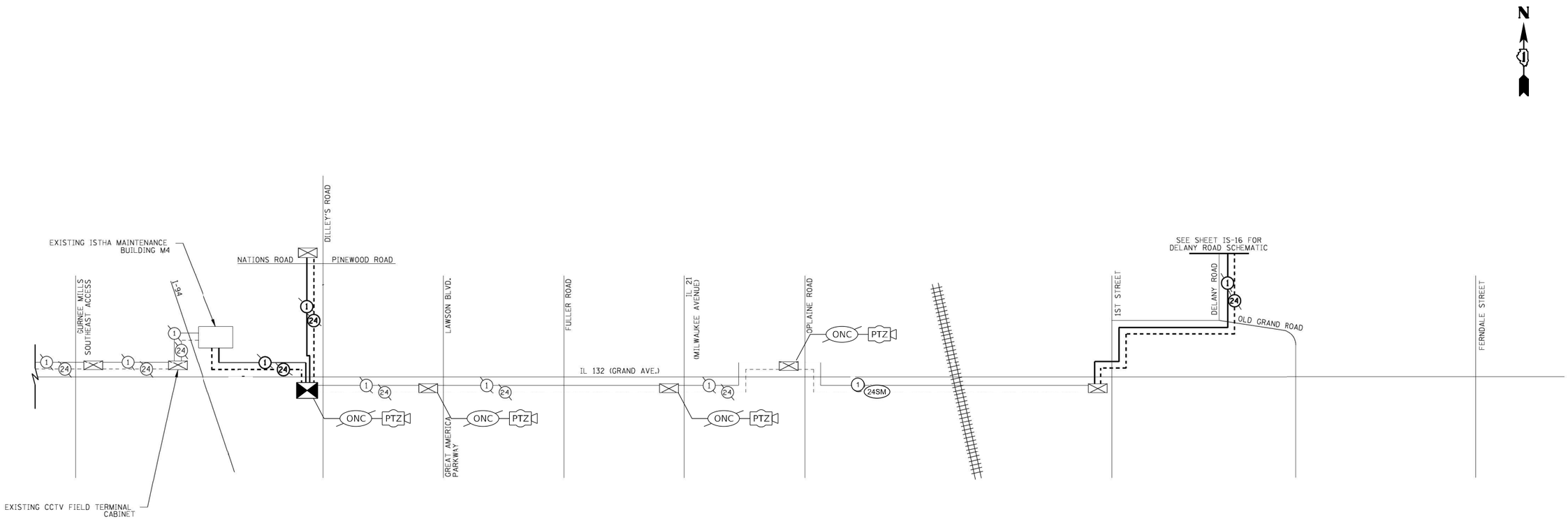
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN
IL RTE 132 – DILLEY'S RD TO FIRST ST

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	172
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			



SCHEDULE OF QUANTITIES

	ITEM DESCRIPTION	UNITS	TOTAL QTY
	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	2113
	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	4252
✳	ROD AND CLEAN EXISTING CONDUIT	FOOT	1441
	FIBER OPTIC CABLE 24 FIBERS, SINGLE MODE	FOOT	2139
	OPTIMIZE TRAFFIC SIGNAL SYSTEM	EACH	1
	UNDERGROUND CONDUIT, UNI-DUCT, 1.25" SDR (11)	FOOT	1352

✳ NOMINAL QUANTITY TO BE USED AS NEEDED AND AS APPROVED BY THE ENGINEER

NOTES:

1. OPTIMIZATION TO INCLUDE INTERSECTIONS FROM FORMER 4E SYSTEM.
   IL RTE 132 AT DILLEY'S RD
   IL RTE 132 AT LAWSON BLVD / 6 FLAGS PARKWAY
   IL RTE 132 AT IL RTE 21 (MILWAUKEE AVE)
   IL RTE 132 AT OPAINE RD
   IL RTE 132 AT FIRST ST

FORMER EAGLE 4E
LAKE COUNTY TACTICS

TS SHT NO. 165

FILE NAME: M4_20193 CHI.18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Est4E.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

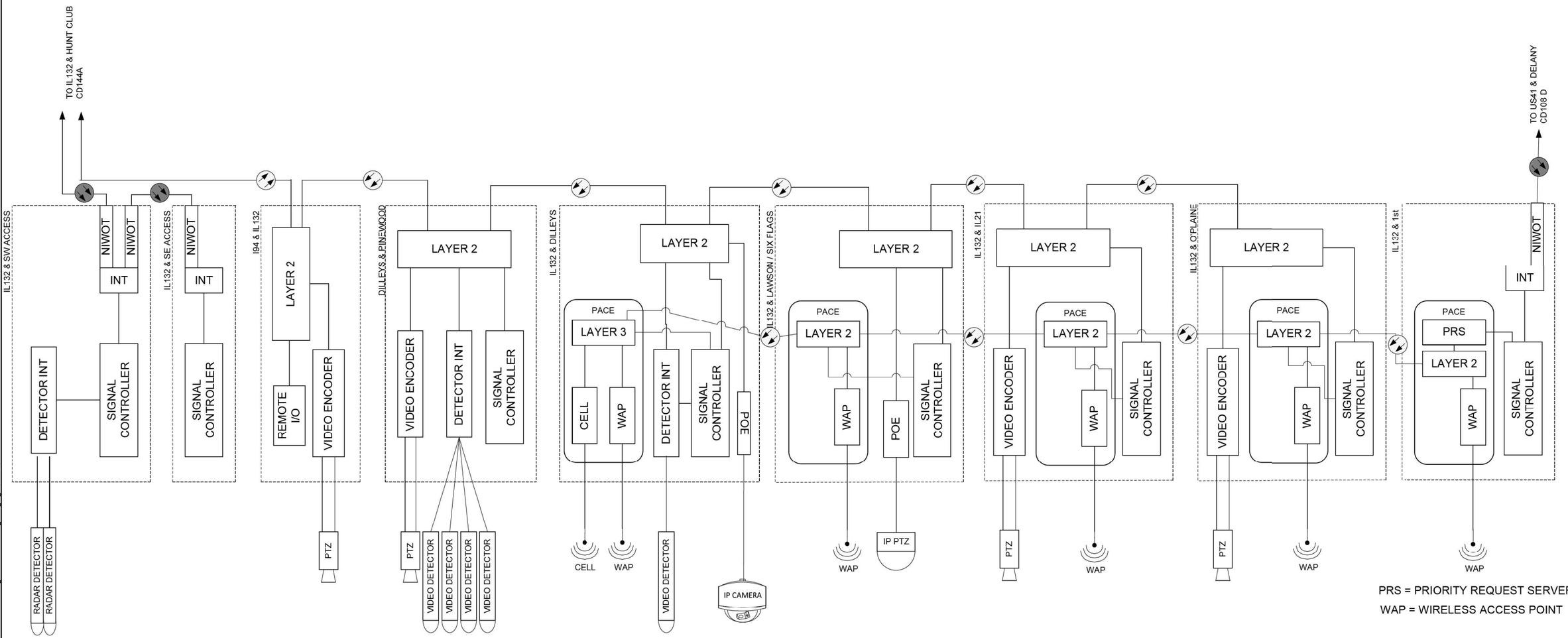
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT SCHEMATIC
IL RTE 132 – DILLEY'S RD TO FIRST ST

SCALE: | SHEET OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	173
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

EXISTING



PRS = PRIORITY REQUEST SERVER
WAP = WIRELESS ACCESS POINT

FORMER EAGLE 4E
LAKE COUNTY TACTICS

TS SHT NO. 166

FILE NAME: M:\2019\3 CMI\18-03-5500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203 62W90\CAD\62W90_Sheet_03_Eagle4E.dgn

PARSONS

USER NAME = erica.salutz	DESIGNED - RL / DG	REVISED -	
	DRAWN - RL / DG	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - RL / DG	REVISED -	
PLOT DATE = 3/30/2025	DATE - 2025.02.20	REVISED -	

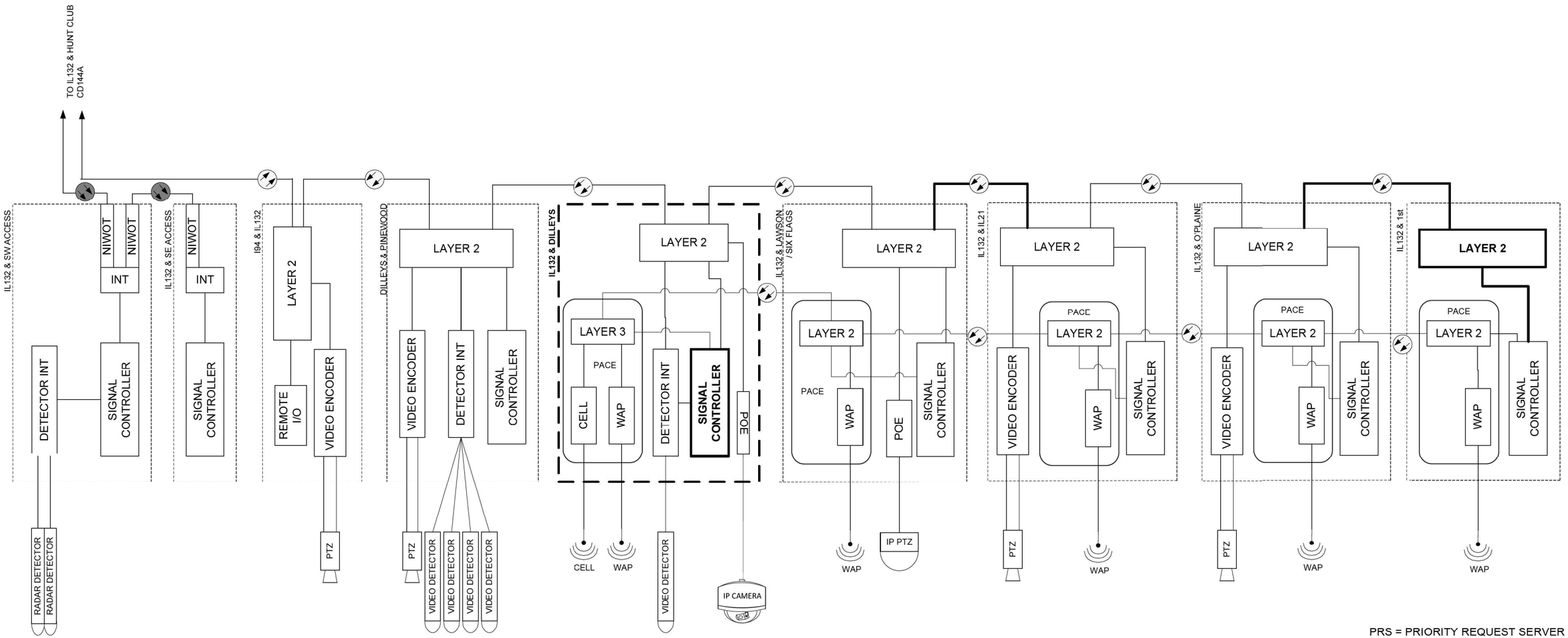
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABINET DETAIL
IL RTE 132 – DILLEY'S RD TO FIRST ST

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	174
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

PROPOSED



PRS = PRIORITY REQUEST SERVER
WAP = WIRELESS ACCESS POINT

FORMER EAGLE 4E
LAKE COUNTY TACTICS

TS SHT NO. 167

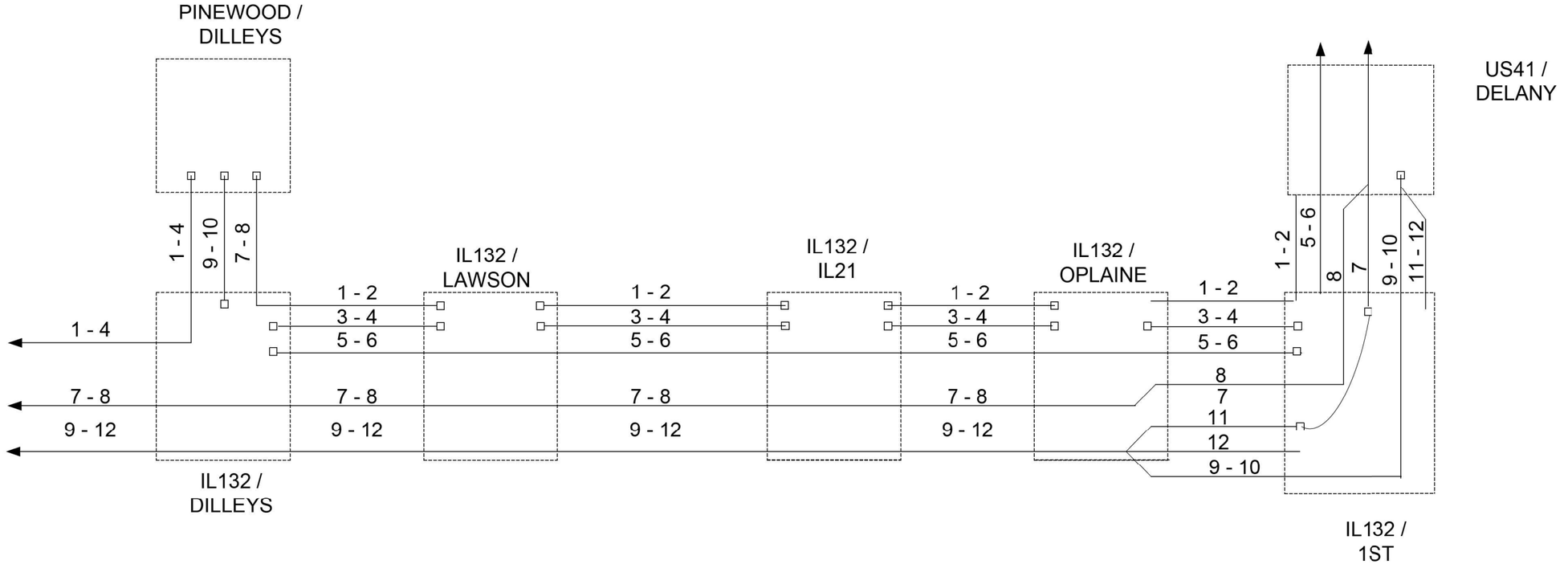
FILE NAME: Mst-20193 CHI.18-03-5500 IDOT_PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet 05 Eagle4E.dgn

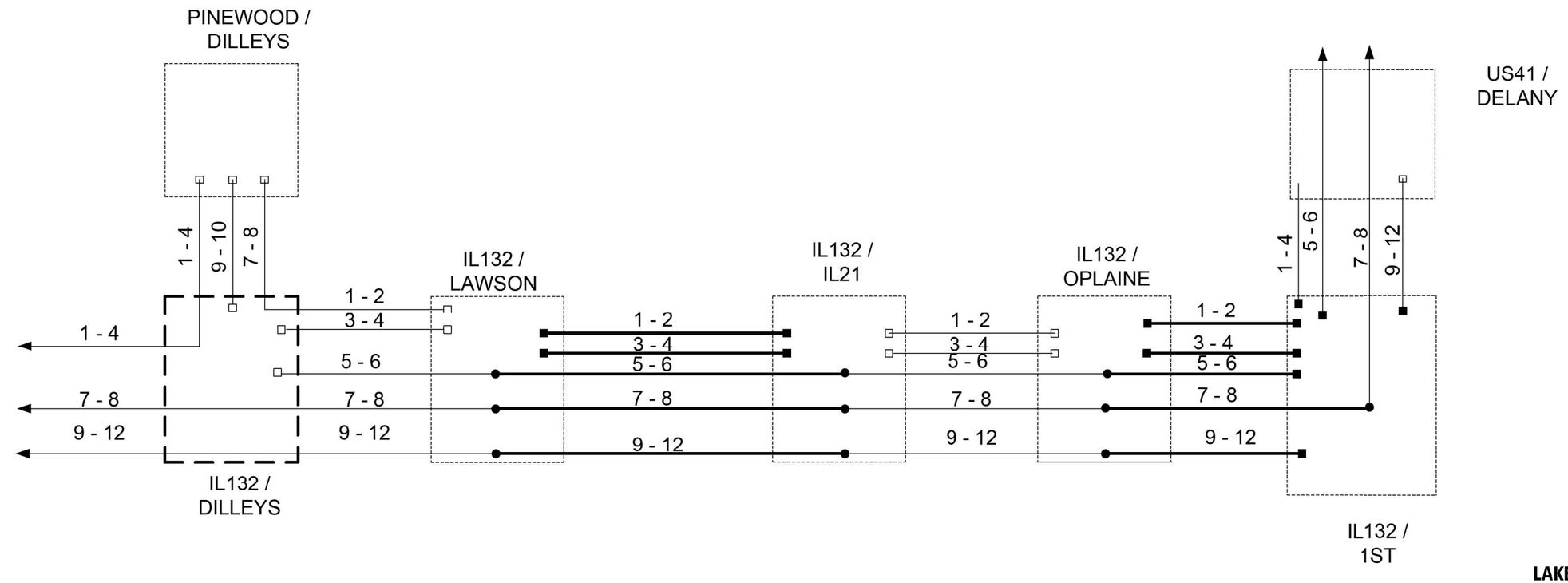
PARSONS	USER NAME = erica.salatz	DESIGNED - RL / DG	REVISED -	**STATE OF ILLINOIS** **DEPARTMENT OF TRANSPORTATION**
		DRAWN - RL / DG	REVISED -	
	PLOT SCALE = 40.0000 ' / in.	CHECKED - RL / DG	REVISED -	
	PLOT DATE = 3/30/2025	DATE - 2025.02.20	REVISED -	

CABINET DETAIL
IL RTE 132 – DILLEY'S RD TO FIRST ST

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	175
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		





FORMER EAGLE 4E
LAKE COUNTY TACTICS

TS SHT NO. 168

FILE NAME: M:\ 20193 CHI\18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eagle4E.dgn

PARSONS

USER NAME = erica.salatz		DESIGNED -	RL / DG	REVISED -
		DRAWN -	RL / DG	REVISED -
PLOT SCALE = 40.0000 ' / in.		CHECKED -	RL / DG	REVISED -
PLOT DATE = 3/30/2025		DATE -	2025.02.20	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIBER SPLICE DIAGRAM
IL RTE 132 – DILLEY'S RD TO FIRST ST

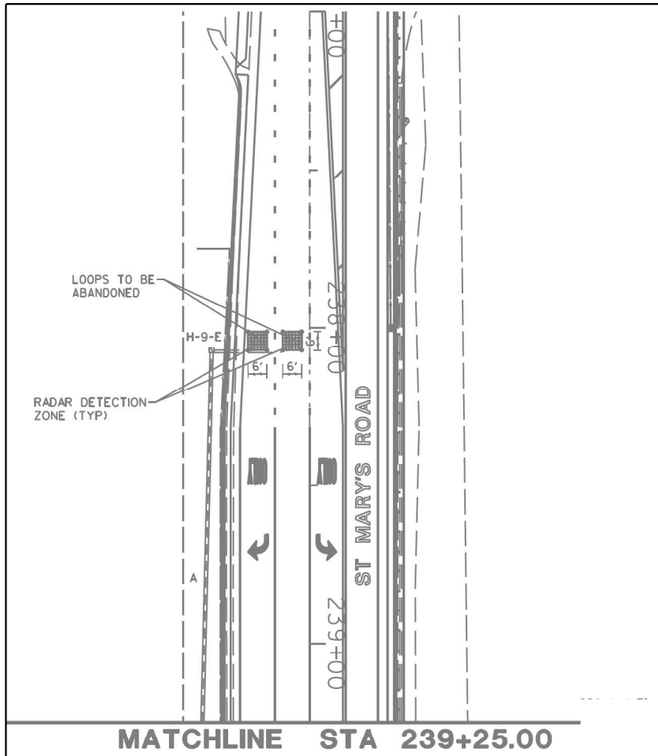
SCALE: | SHEET OF SHEETS | STA. | TO STA.

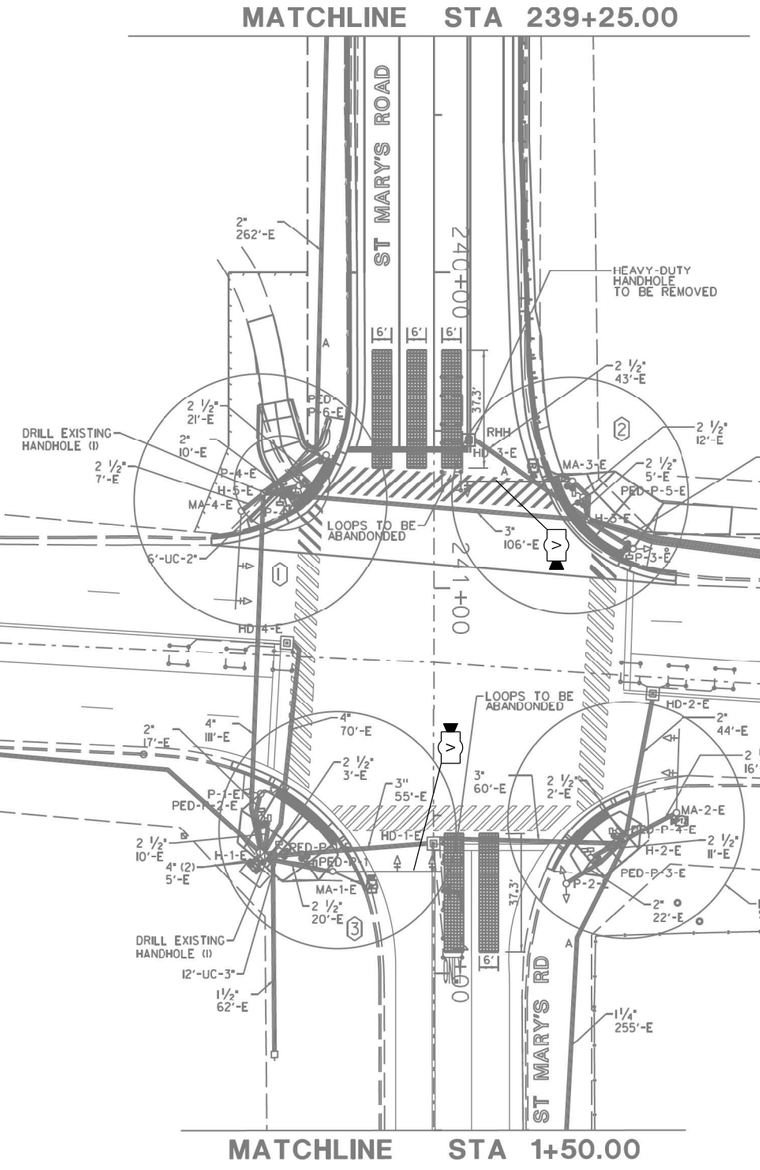
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	176
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

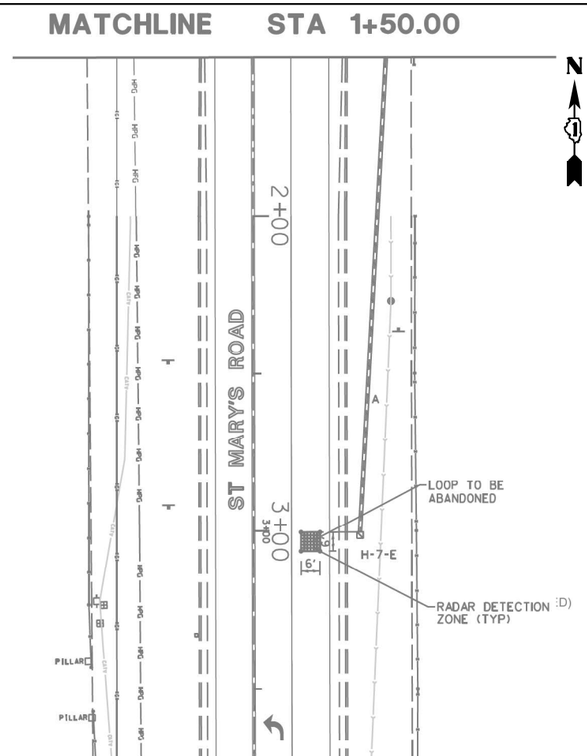
REMOVAL AND RELOCATION NOTES:

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

1 EACH RADAR DETECTION (COMPLETE)







TS 6895
FORMER EAGLE 4J
LAKE COUNTY TACTICS

TS SHT NO. 169

FILE NAME: MS_20193 CHI-18-03-5500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_GS_Eagle4J.dgn

TYLin

USER NAME = erica.salutz		DESIGNED -	ERICA SALUTZ	REVISED -	
		DRAWN -	KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.		CHECKED -	PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025		DATE -	12/20/2024	REVISED -	

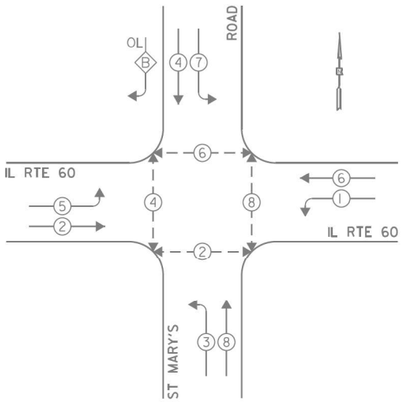
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGNAL PLAN
LOCATION 79 – IL RTE 60 AT ST MARY'S RD

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	177
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

CONTROLLER SEQUENCE

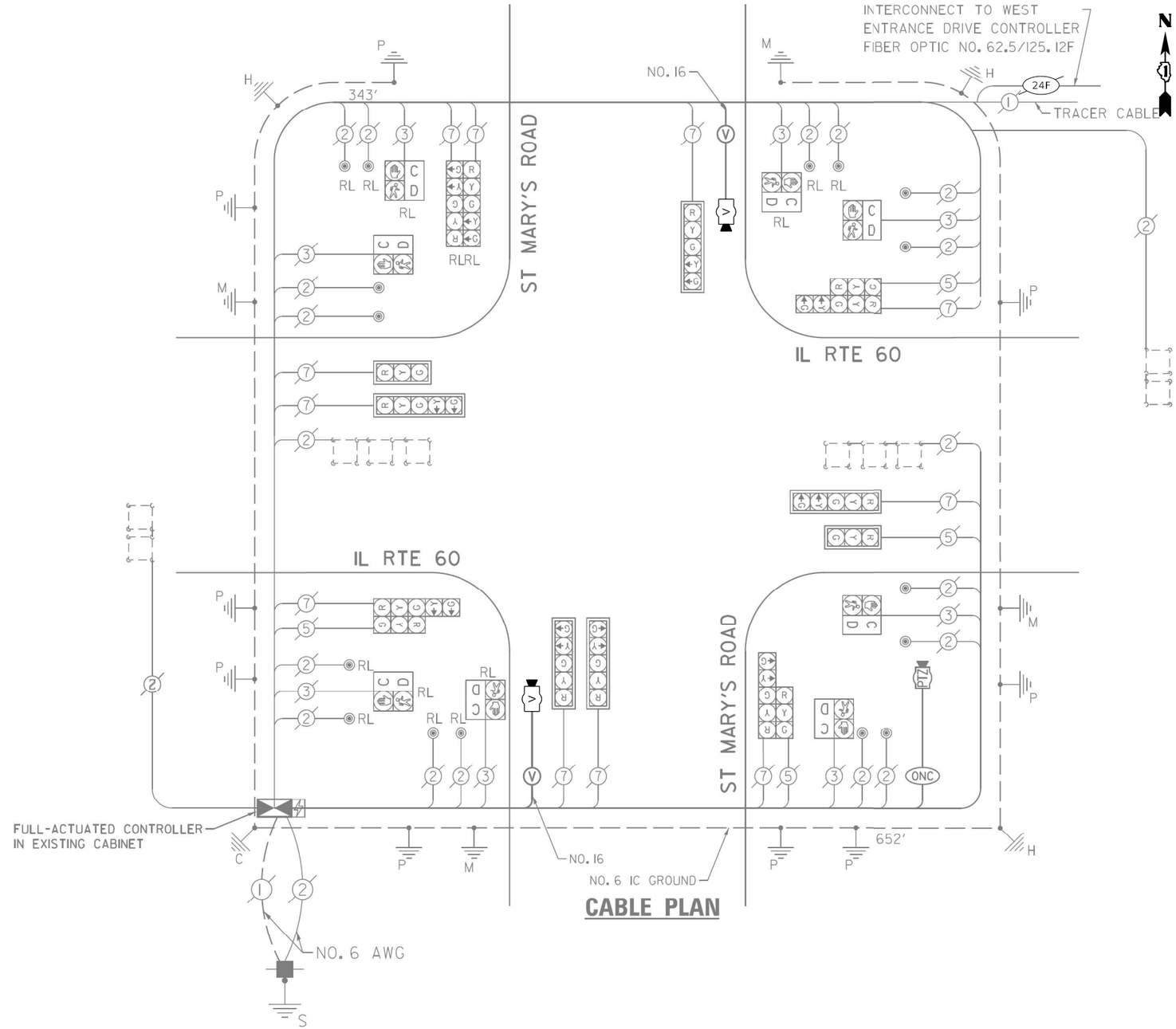


RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER		PERMISSIVE PHASE		PROTECTED PHASE
B	=	4	+	5

LEGEND:

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



CABLE PLAN

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	5	11	55
4 - SECTION	-	14	-
5 - SECTION	10	13	130
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	8	15	120
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	1	20	20
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			535
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	-
PTZ CAMERA	1	75	75
TOTAL SERVICE WIRE SIZING =			1215

ENERGY COSTS TO:
VILLAGE OF METTAWA
26225 N. RIVERWOODS BLVD
METTWA, IL 60045

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
TERMINATE FIBER IN CABINET	EACH	6
VIDEO VEHICLE DETECTION SYSTEM, SINGLE APPROACH	EACH	2

TS 6895
FORMER EAGLE 4J
LAKE COUNTY TACTICS

TS SHT NO. 170

FILE NAME: MH_20103 CHI\18-03-5500 ITOO1 PTB 199 - Various Traffic Signal Design\Graphics\WO 203_62W90 CAD\62W90_Sheet_05_Eagle4J.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	05/08/2025
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 5/5/2025	DATE - 12/20/2024	REVISED -	

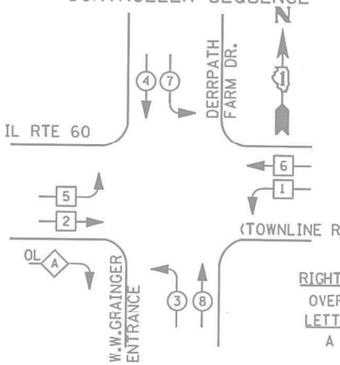
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 79 – IL RTE 60 AT ST MARY'S RD

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	178
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

CONTROLLER SEQUENCE



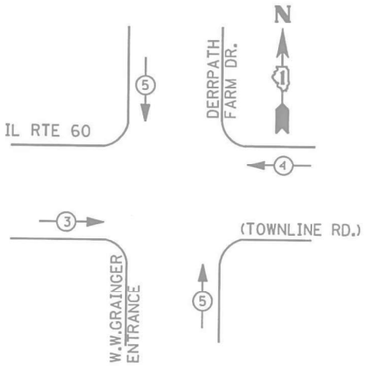
LEGEND

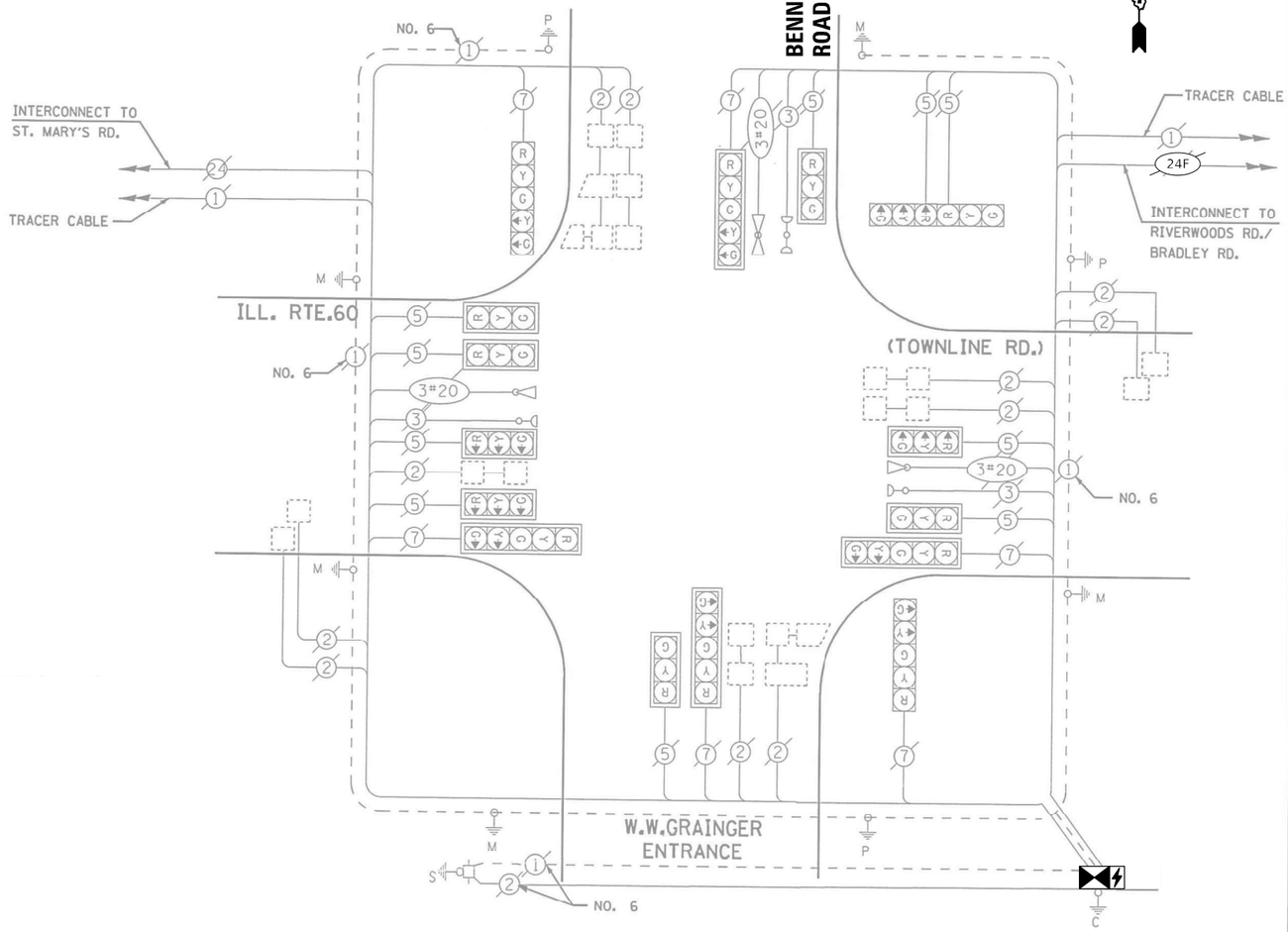
- DUAL ENTRY PHASE
- PEDESTRIAN PHASE
- SINGLE ENTRY PHASE
- OVERLAP
- * NUMBER REFERS TO ASSOCIATED PHASE

RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER		PERMISSIVE PHASE		PROTECTED PHASE		DISPLAY
A	=	2	+	3	-	2

PHASE DESIGNATION DIAGRAM





CABLE PLAN

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	10	11	110
4 - SECTION	-	14	-
5 - SECTION	6	13	78
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			398
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			1003

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
INDUCTIVE LOOP DETECTOR	EACH	11
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
TERMINATE FIBER IN CABINET	EACH	12
FULL-ACTUATED CONTROLLER AND TYPE IV STRETCHED CABINET, SPECIAL	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1

ENERGY COSTS TO:
VILLAGE OF METTAWA
26225 N. RIVERWOODS BLVD
METTWA, IL 60045
ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER AND CABINET (COMPLETE)

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

1 EACH EVP PHASING UNIT

TS 11701
FORMER EAGLE 4J
LAKE COUNTY TACTICS

TS SHT NO. 171

FILE NAME: Mo. 2019.3 CMH 18-03-5500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203 #2W90\CAD\62W90_Sheet_03_Eagle4.dgn

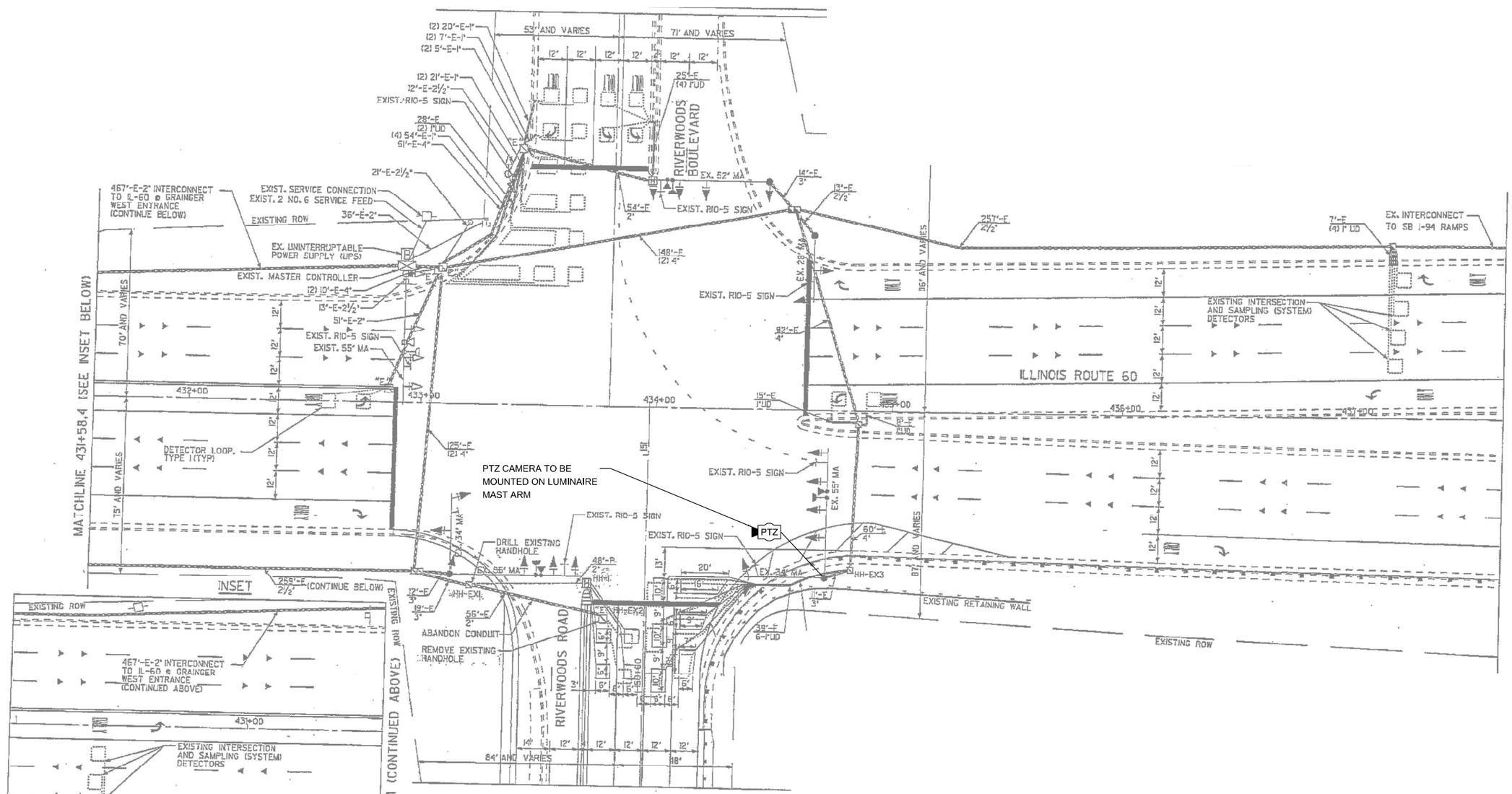
TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 80 – IL RTE 60 AT BENNETT RD /GRAINGER WEST ENTRANCE
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	179
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		



REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER

NOTES:

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

TS 11700
FORMER EAGLE 4J
LAKE COUNTY TACTICS

TS SHT NO. 172

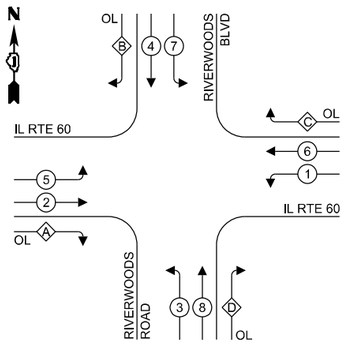
FILE NAME: MH_20193 CHR18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90 Sheet 05 Exist.dgn

TYLin

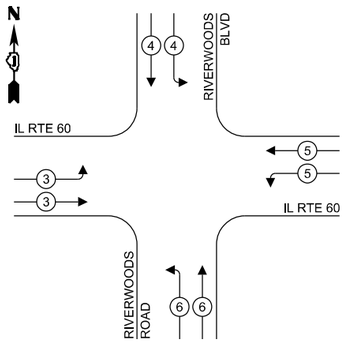
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED - 05/08/2025	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SIGNAL PLAN LOCATION 81 – IL RTE 60 AT RIVERWOODS RD
	DRAWN - KATHLEEN MURPHY	REVISED -		
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.
PLOT DATE = 5/6/2025	DATE - 12/20/2024	REVISED -		

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	180
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

EXISTING CONTROLLER SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

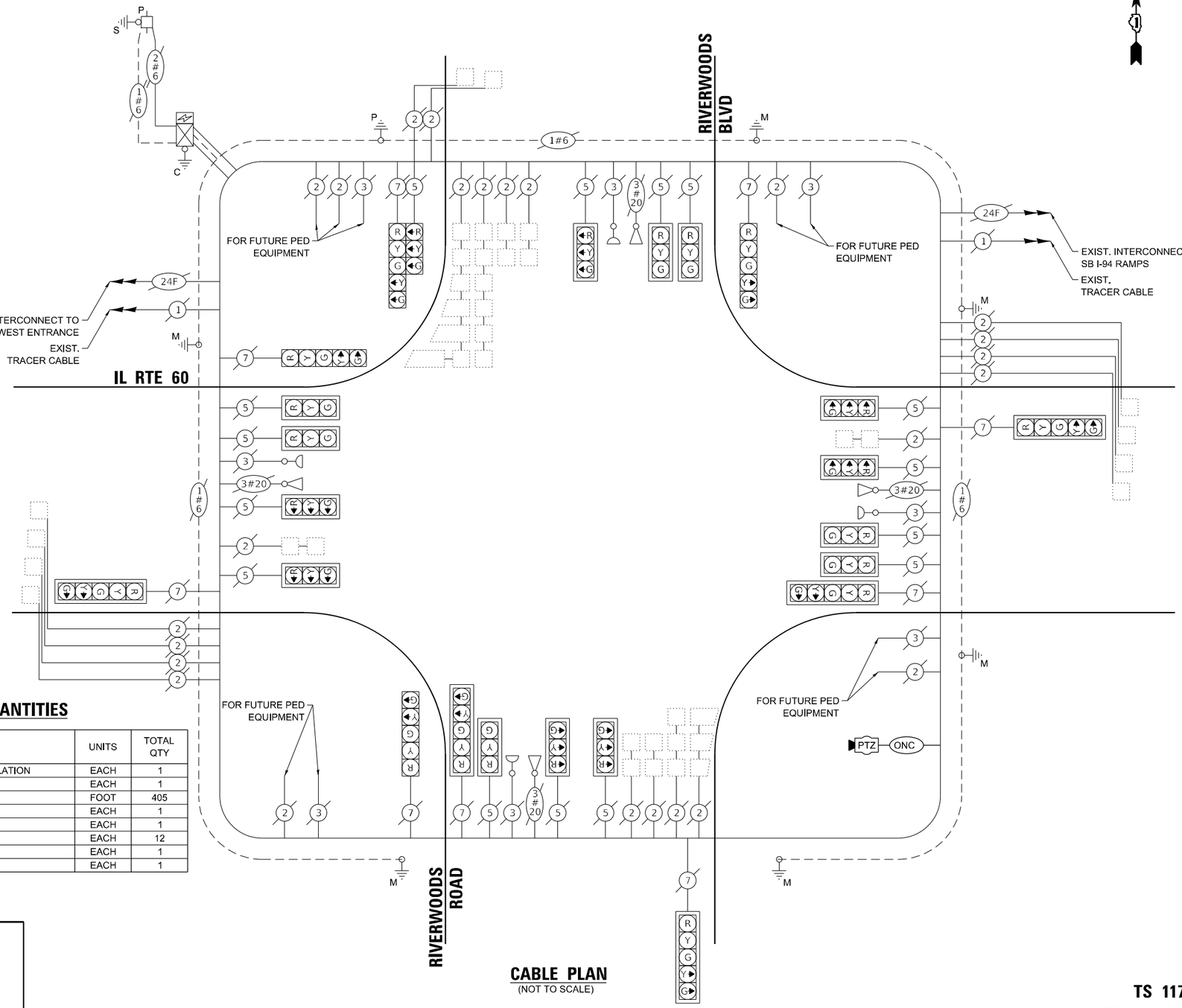


LEGEND:

- PROTECTED PHASE
- PROTECTED/PERMITTED PHASE
- PEDESTRIAN PHASE
- OVERLAP

RIGHT TURN OVERLAP PHASE DESIGNATION:

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



CABLE PLAN
(NOT TO SCALE)

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	15	11	165
4 - SECTION	-	14	-
5 - SECTION	9	13	117
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			1097

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	405
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
TERMINATE FIBER IN CABINET	EACH	12
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
POWER OVER ETHERNET EXTENDER	EACH	1

ENERGY COSTS TO:
ILLINOIS DEPT OF TRANSPORTATION
201 CENTER CT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

TS SHT NO. 173

TS 11700
FORMER EAGLE 4J
LAKE COUNTY TACTICS

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

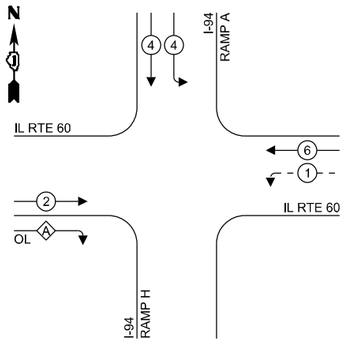
CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 81 – IL RTE 60 AT RIVERWOODS RD

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	181
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

FILE NAME: MX_20193 CHI;1843-5500 IDOT_PTB_190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Exh41.dgn

EXISTING CONTROLLER SEQUENCE



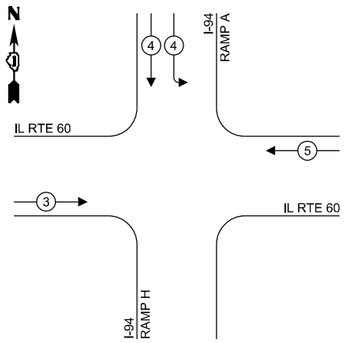
LEGEND:

- PROTECTED PHASE
- PROTECTED/PERMITTED PHASE
- PEDESTRIAN PHASE
- OVERLAP (OL)

RIGHT TURN OVERLAP PHASE DESIGNATION:

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

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

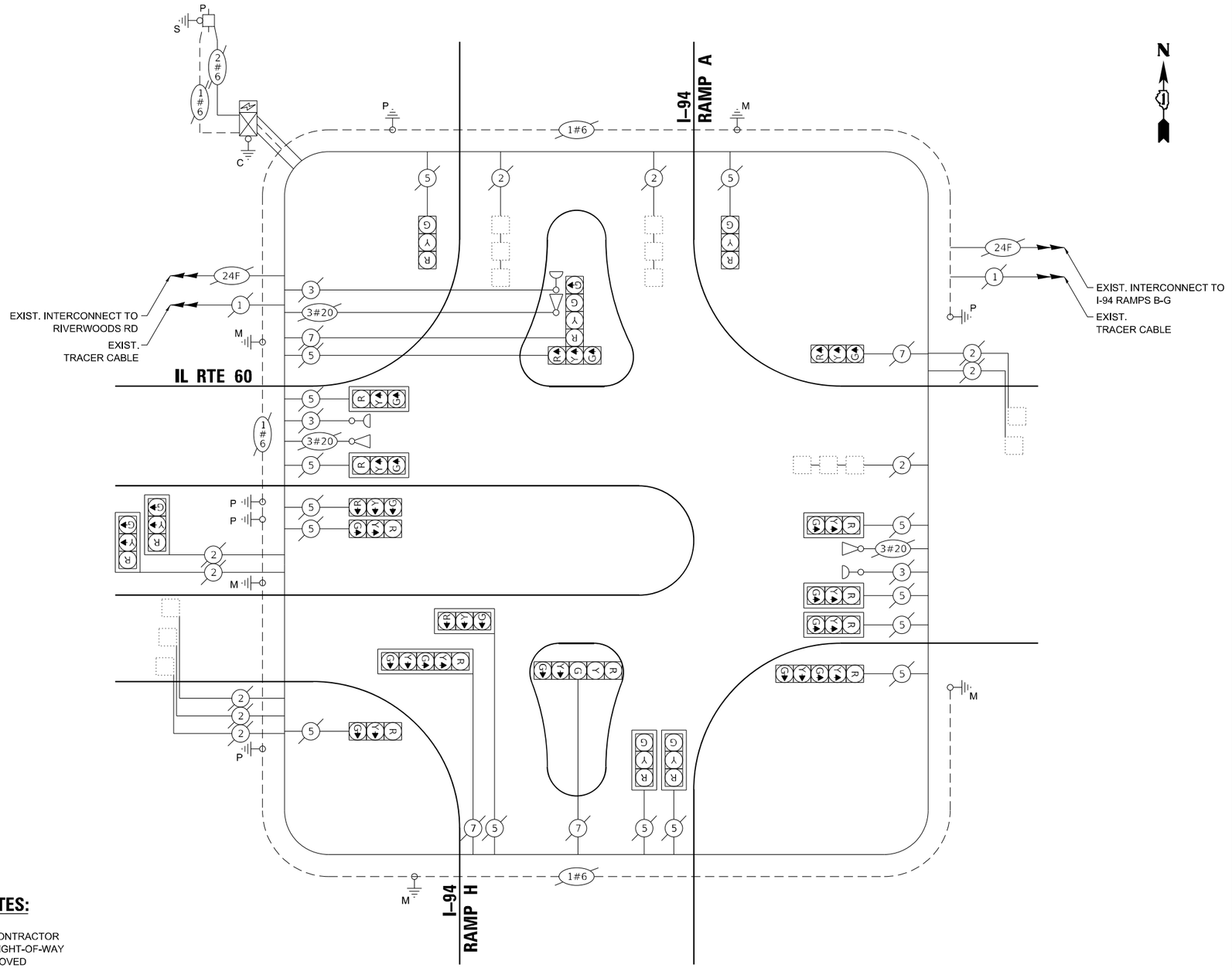


TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	17	11	187
4 - SECTION	1	14	14
5 - SECTION	3	13	39
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			450
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			1055

ENERGY COSTS TO:
ILLINOIS DEPT OF TRANSPORTATION
201 CENTER CT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---



CABLE PLAN
(NOT TO SCALE)

REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
TERMINATE FIBER IN CABINET	EACH	12
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1

TS 11706
FORMER EAGLE 4J
LAKE COUNTY TACTICS

TS SHT NO. 174

FILE NAME: MA_20193 CHI18-03-5500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO_203_62W90\CAD\62W90_Sheet_05_Eagle4J.dgn

TYLin

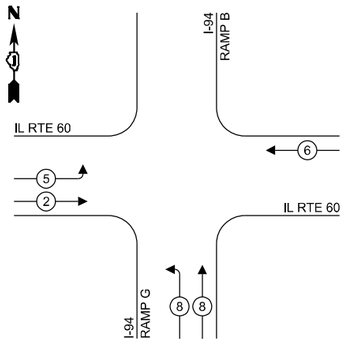
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 82 – IL RTE 60 AT I–94 WEST RAMPS A–H
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	182
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

EXISTING CONTROLLER SEQUENCE



LEGEND:

PROTECTED PHASE

PROTECTED/PERMITTED PHASE

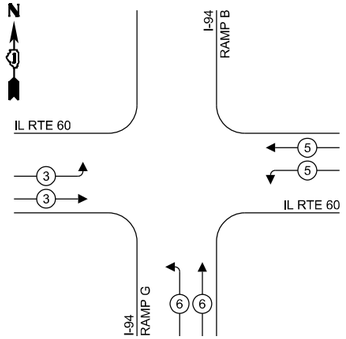
PEDESTRIAN PHASE

OL
OVERLAP

RIGHT TURN OVERLAP PHASE DESIGNATION:

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

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

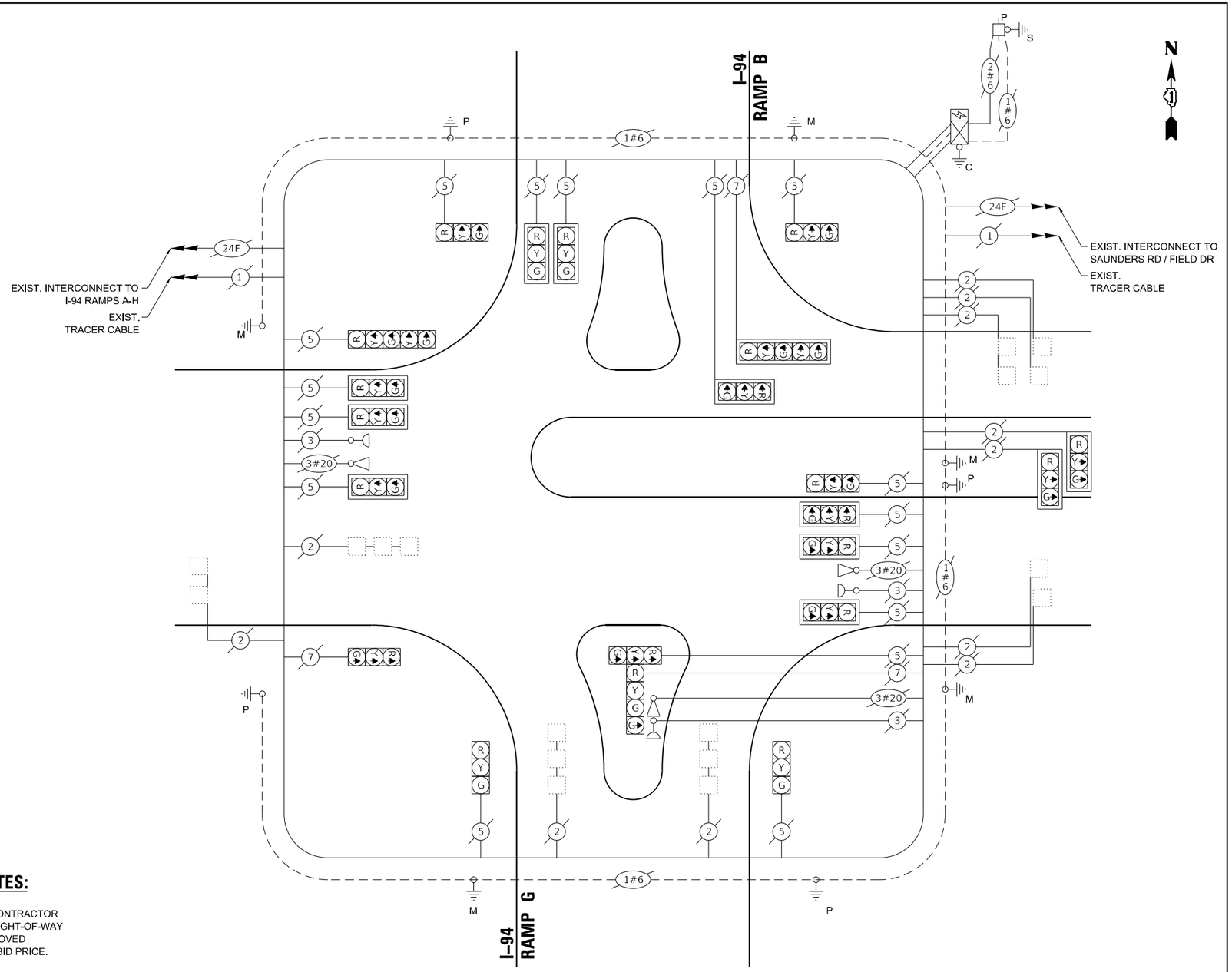


TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	18	11	198
4 - SECTION	1	14	14
5 - SECTION	2	13	26
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			448
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			1053

ENERGY COSTS TO:
ILLINOIS DEPT OF TRANSPORTATION
201 CENTER CT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---



REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
TERMINATE FIBER IN CABINET	EACH	12
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1

TS SHT NO. 175

TS 11705
FORMER EAGLE 4J
LAKE COUNTY TACTICS

FILE NAME: MX: 20193 CHI:1842-5500 IDOT_PTB_190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eagle4J.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -

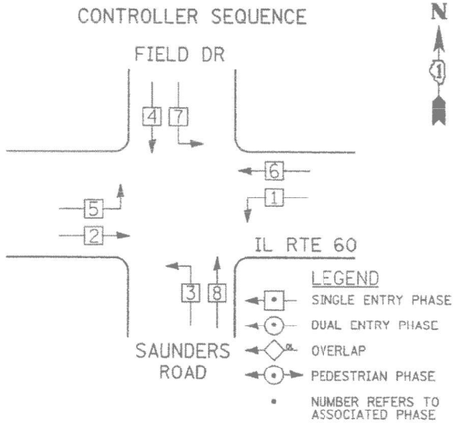
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 83 – IL RTE 60 AT I–94 EAST RAMPS B–G

SCALE: SHEET OF SHEETS STA. TO STA.

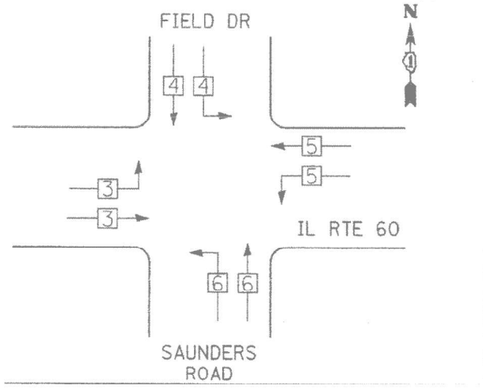
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	183
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

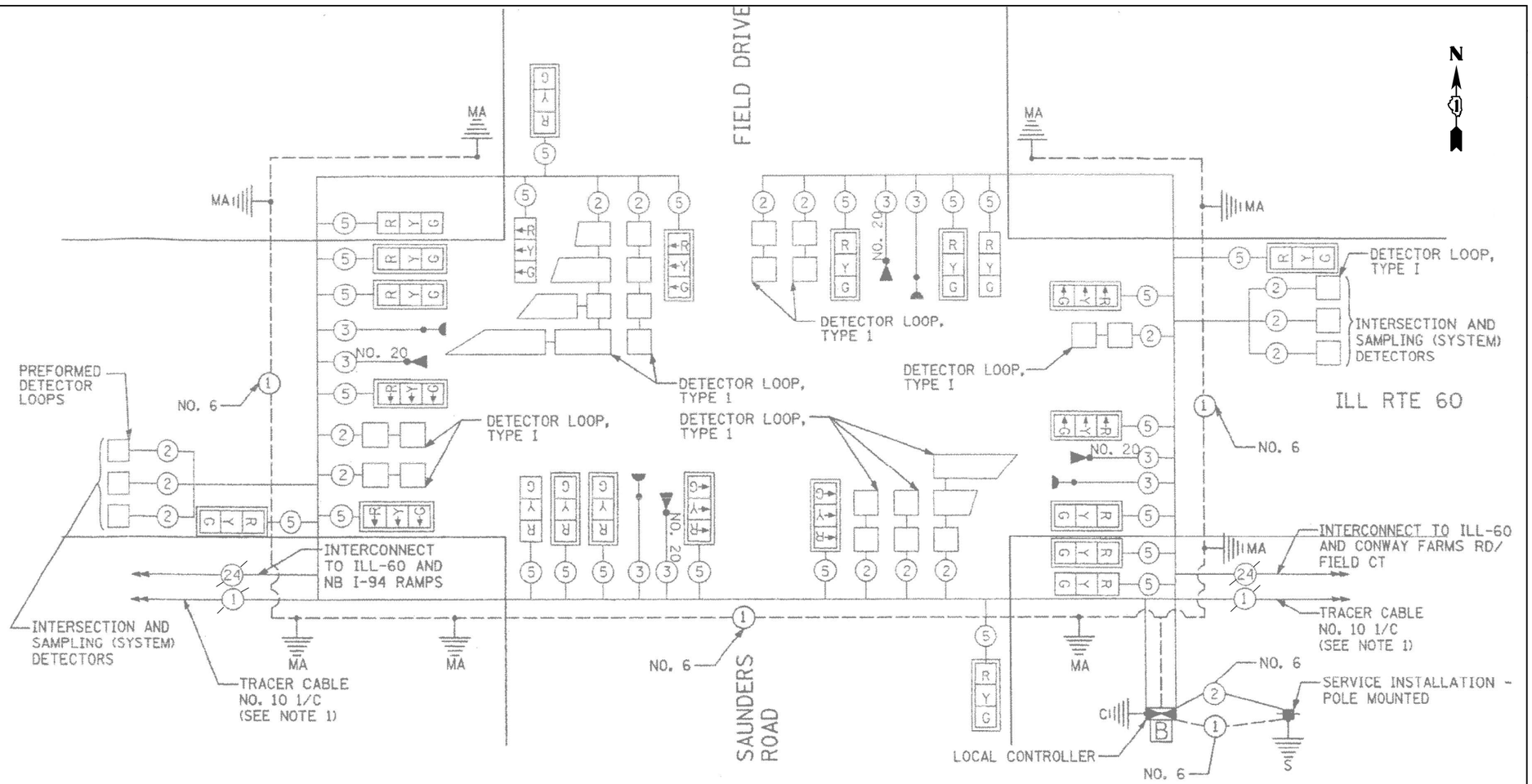
CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE





TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	24	11	264
4 - SECTION	-	14	X
5 - SECTION	-	13	-
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			474
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			1079

ENERGY COSTS TO:
ILLINOIS DEPT OF TRANSPORTATION
201 CENTER CT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
TERMINATE FIBER IN CABINET	EACH	12
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1

TS 20530
FORMER EAGLE 4J
LAKE COUNTY TACTICS

TS SHT NO. 176

FILE NAME: MA_20193 CHI(18-03-5500 IDOT PTB 190 - Various Traffic Signal Design Graphics\WO 203_62W90 CAD\62W90_Sheet_05_Eagle4J.dgn

TYLin

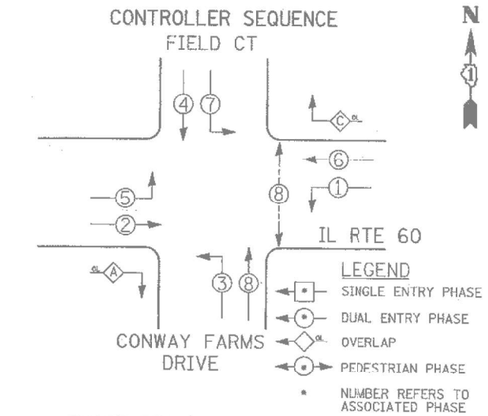
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 84 – IL RTE 60 AT SAUNDERS RD/FIELD DR

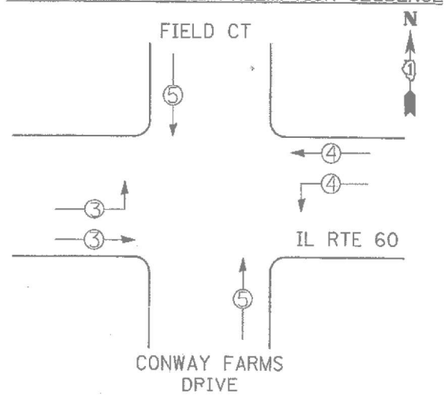
SCALE: SHEET OF SHEETS STA. TO STA.

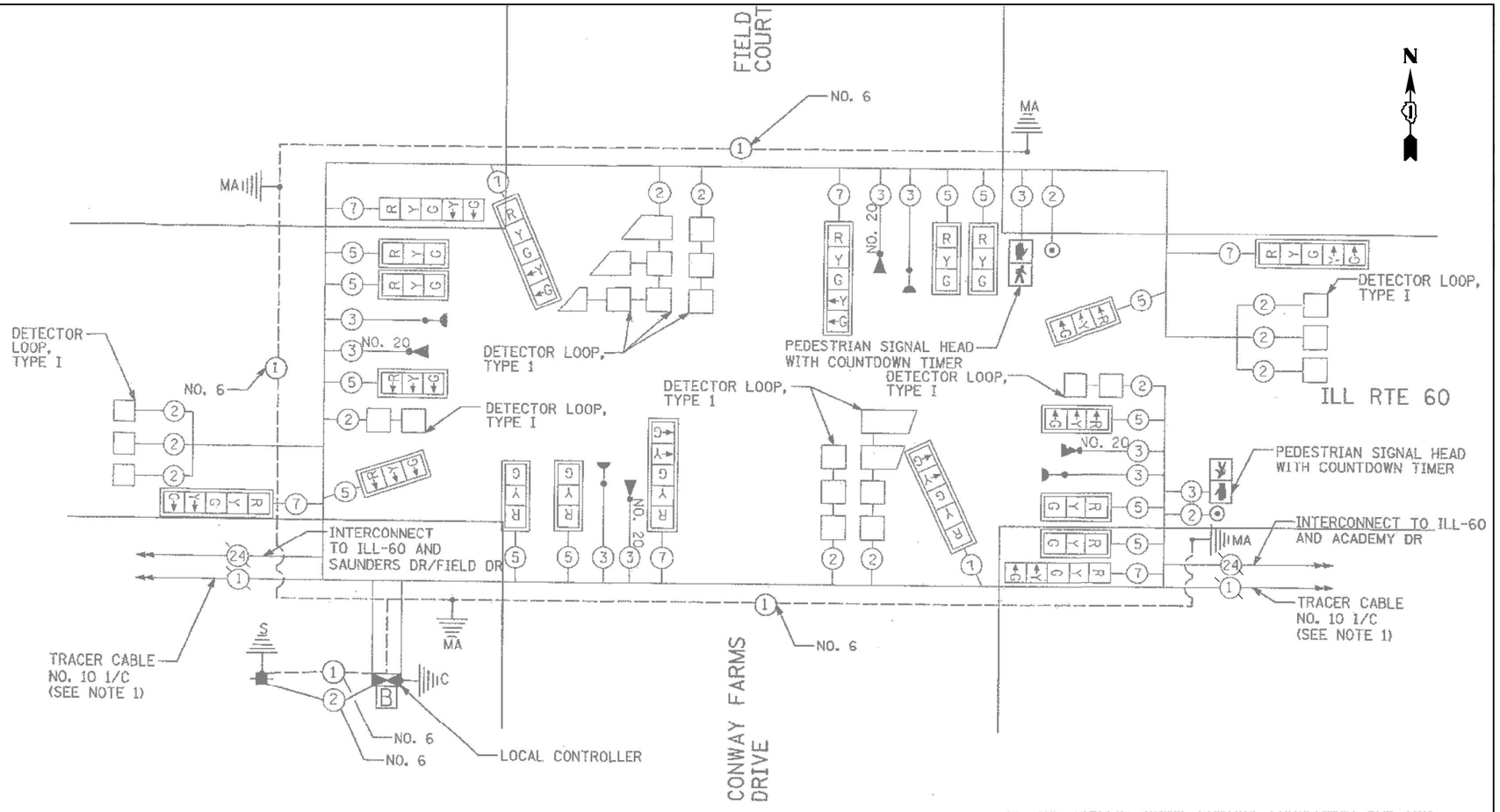
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	184
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			



PHASE DESIGNATION DIAGRAM

A = 2 + 3
C = 6 + 7





TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	12	11	132
4 - SECTION	-	14	-
5 - SECTION	8	13	104
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	2	15	30
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			476
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			1081

ENERGY COSTS TO:
ILLINOIS DEPT OF TRANSPORTATION
201 CENTER CT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
TERMINATE FIBER IN CABINET	EACH	12
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1

TS 11707
FORMER EAGLE 4J
LAKE COUNTY TACTICS

TS SHT NO. 177

FILE NAME: M:_2019\3 CHI\18-03-5500 ROOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Esch.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -

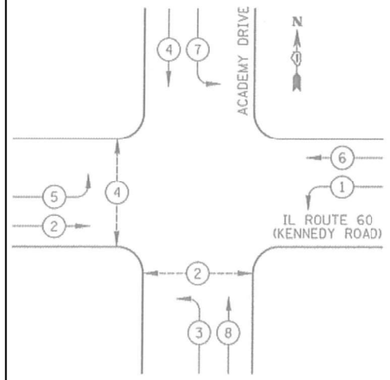
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 85 – IL RTE 60 AT CONWAY FARMS RD/FIELD CT

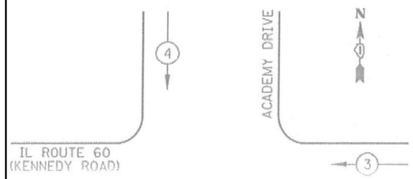
SCALE: SHEET OF SHEETS STA. TO STA.

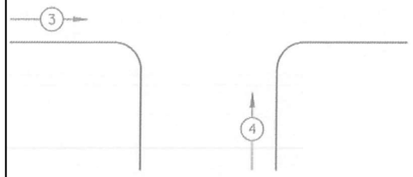
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	185
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

CONTROLLER SEQUENCE



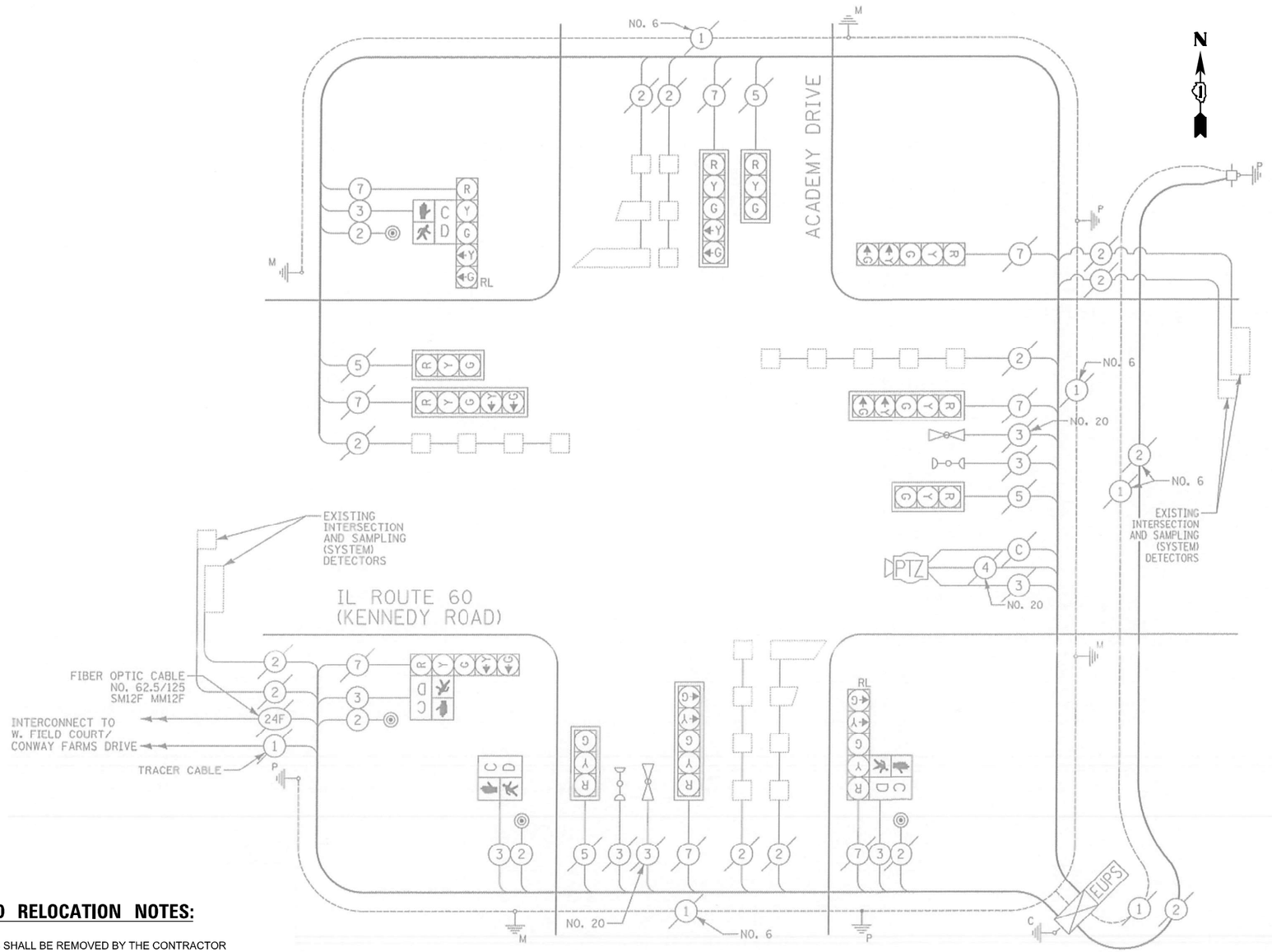
EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE





LEGEND

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



CABLE PLAN
NOT TO SCALE

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	4	11	44
4 - SECTION	-	14	-
5 - SECTION	8	13	104
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	4	15	60
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			418
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			1023

ENERGY COSTS TO:
CITY OF LAKE FOREST
220 E. DEERPATH
LAKE FOREST, IL 60045

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
TERMINATE FIBER IN CABINET	EACH	6
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1

TS 11708
FORMER EAGLE 4J
LAKE COUNTY TACTICS

TS SHT NO. 178

FILE NAME: M:\2019\3 CMI\18-03-5500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eagle4.dgn

TYLin

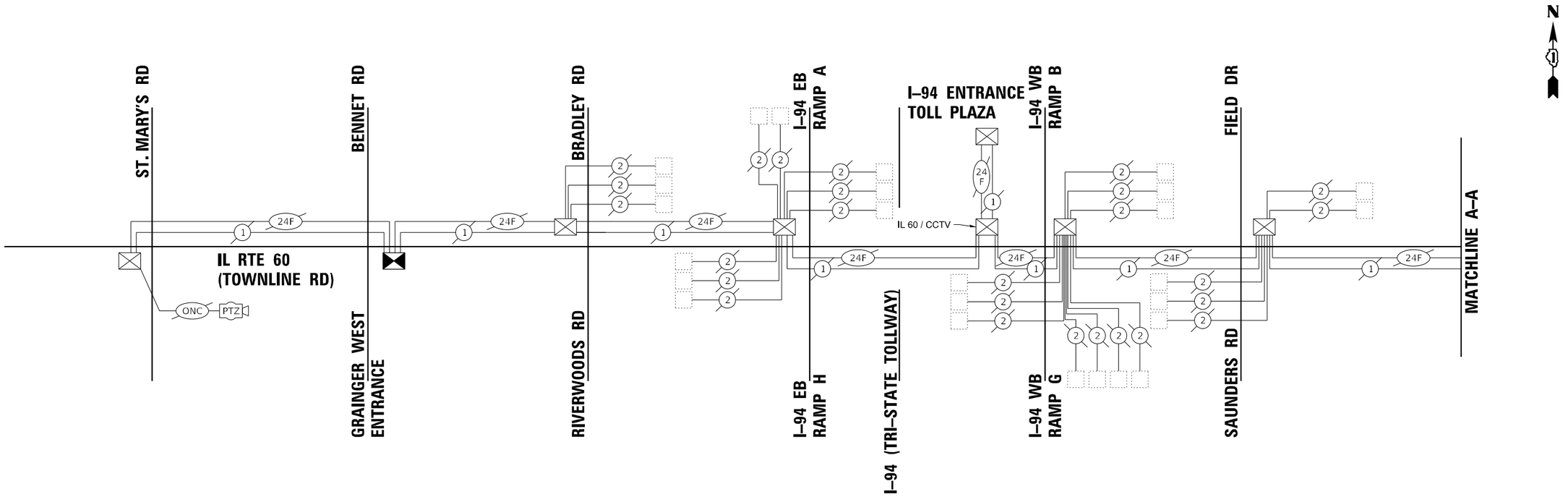
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -

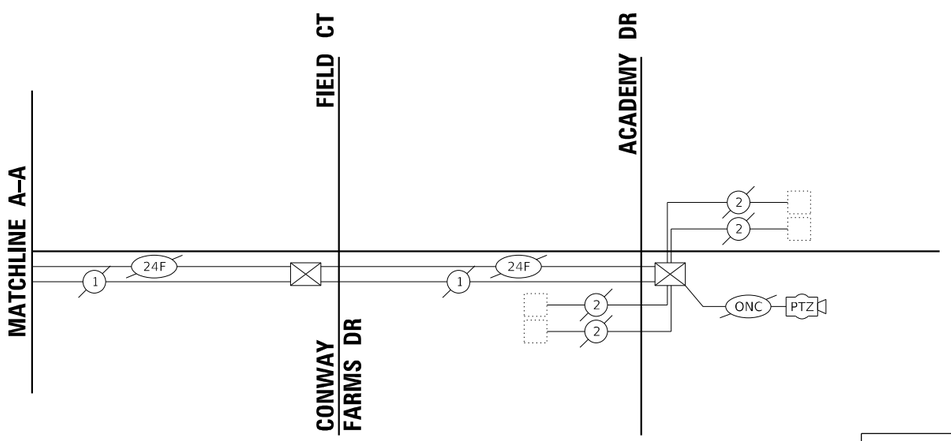
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 86 – IL RTE 60 AT ACADEMY DR

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	186
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		





SCHEDULE OF QUANTITIES

	ITEM DESCRIPTION	UNITS	TOTAL QTY
*	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
*	TERMINATE FIBER IN CABINET	EACH	12
*	SPLICE FIBER IN CABINET	EACH	6

* THIS WORK TO BE COMPLETED AT IL 60 / CCTV LOCATION

FORMER EAGLE 4J
LAKE COUNTY TACTICS

TS SHT NO. 179

FILE NAME: Mst_20193_CMH.8-03-5500_IDOT_PTB_190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eagle4.dgn

TYLin

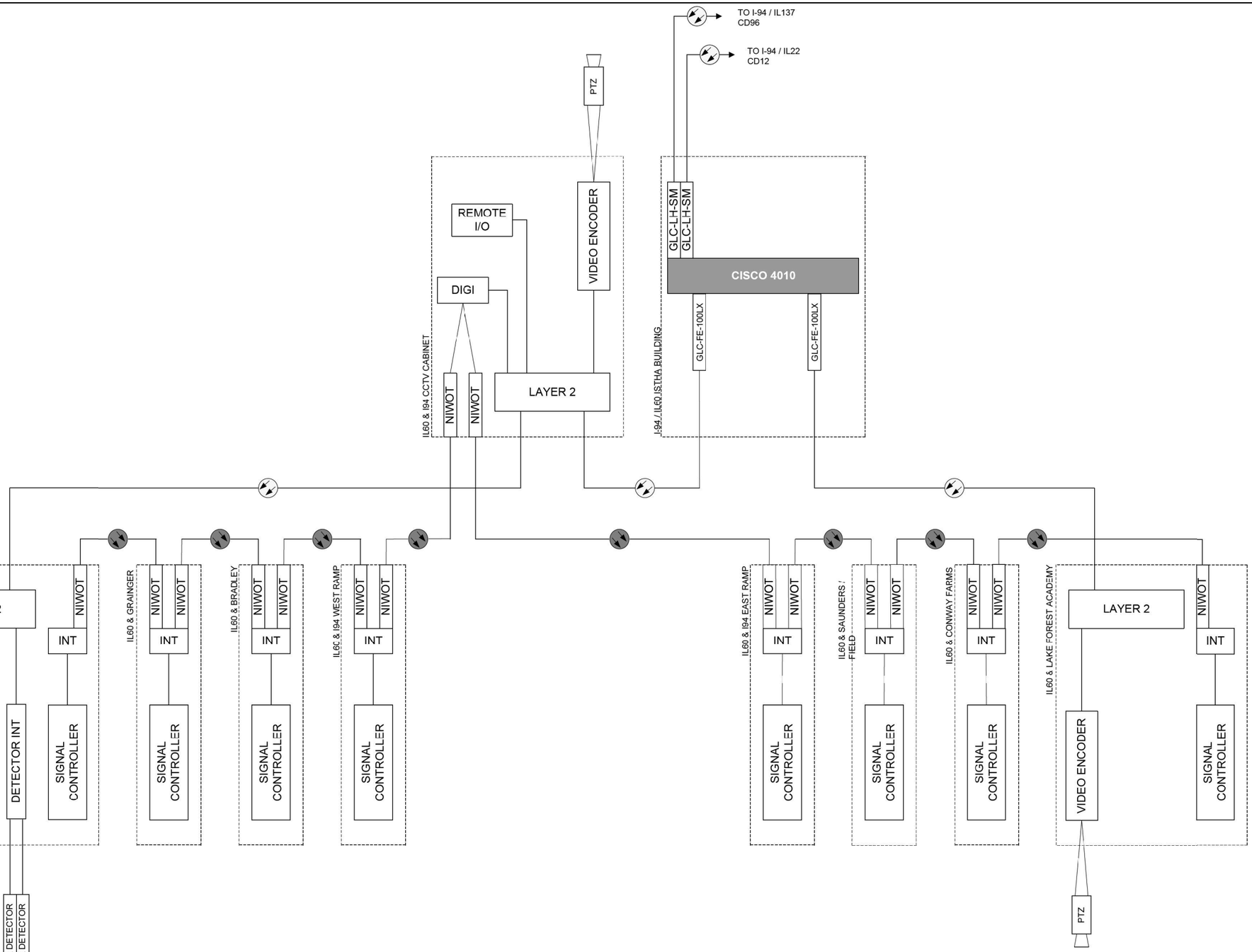
USER NAME = erica.salutz	DESIGNED -	ERICA SALUTZ	REVISED	-
	DRAWN -	KATHLEEN MURPHY	REVISED	-
PLOT SCALE = 40.0000 ' / in.	CHECKED -	PETER WOJTKIEWICZ	REVISED	-
PLOT DATE = 3/30/2025	DATE -	12/20/2024	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT SCHEMATIC
IL RTE 60 – GRAINGER WEST ENTRANCE TO LAKE FOREST ACADEMY DR

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	187
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		



EXISTING

FORMER EAGLE 4J
LAKE COUNTY TACTICS

TS SHT NO. 180

FILE NAME: Mp 2019.3 CMI 18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203 #2W90\CAD\62W90_Sheet_03_Eagle4.dgn

PARSONS

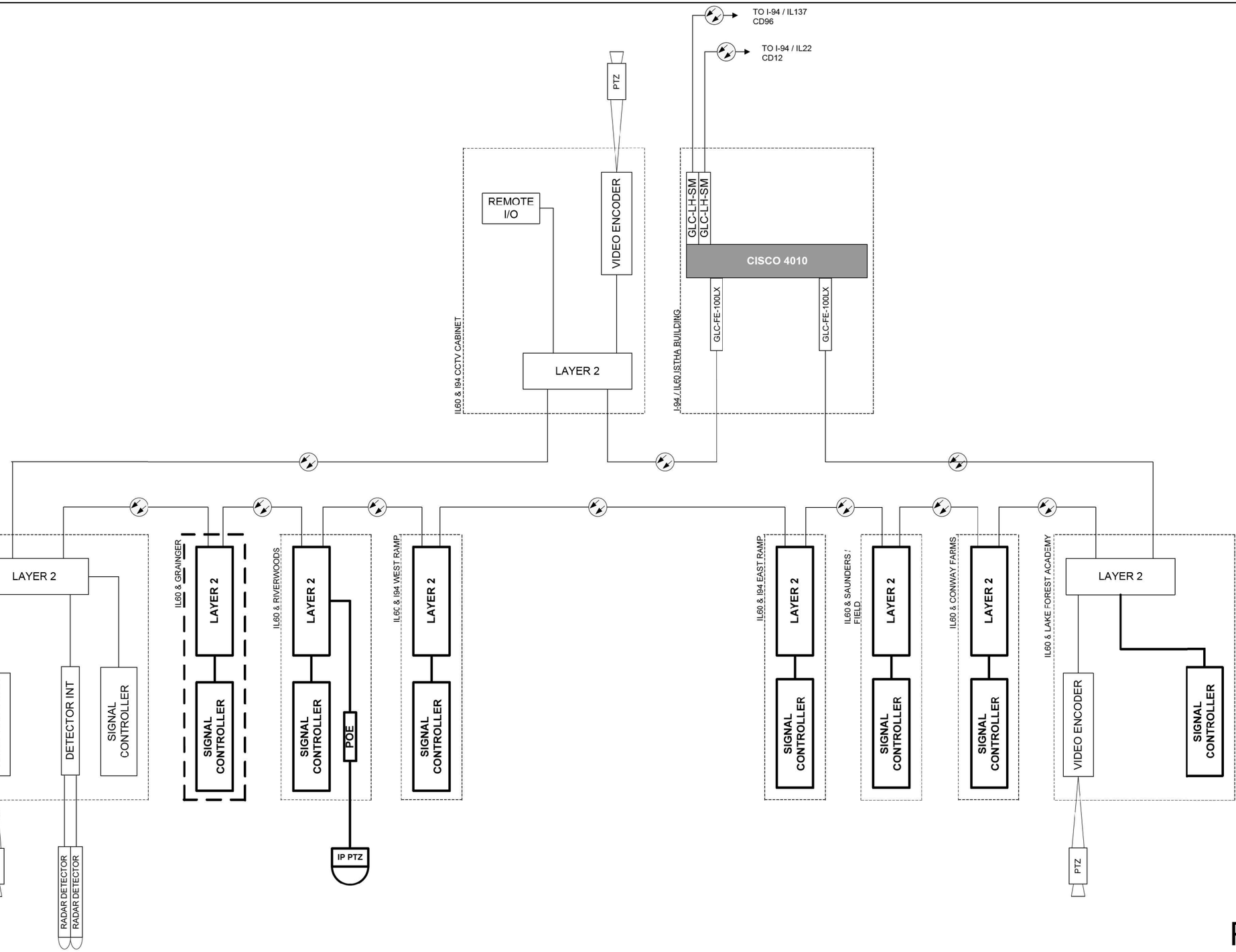
USER NAME = erica.salutz	DESIGNED - RL / DG	REVISED -	
	DRAWN - RL / DG	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - RL / DG	REVISED -	
PLOT DATE = 3/30/2025	DATE - 2025.02.20	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABINET DETAIL
IL RTE 60 – GRAINGER WEST ENTRANCE TO LAKE FOREST ACADEMY DR

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	188
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		



PROPOSED

FORMER EAGLE 4J
LAKE COUNTY TACTICS

TS SHT NO. 181

FILE NAME: M:_20193 CHI\18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eagle4J.dgn

PARSONS

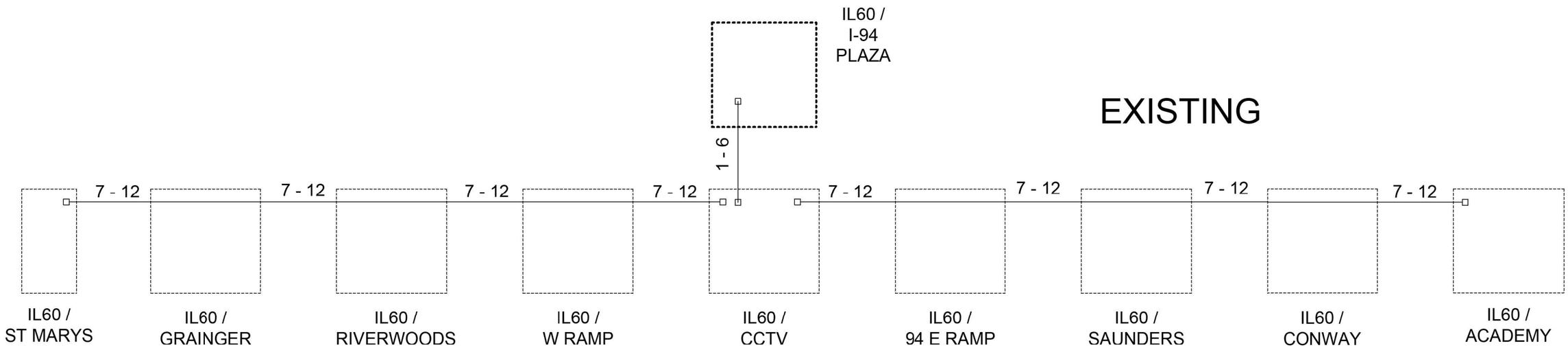
USER NAME = erica.salatz	DESIGNED - RL / DG	REVISED -	
	DRAWN - RL / DG	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - RL / DG	REVISED -	
PLOT DATE = 3/30/2025	DATE - 2025.02.20	REVISED -	

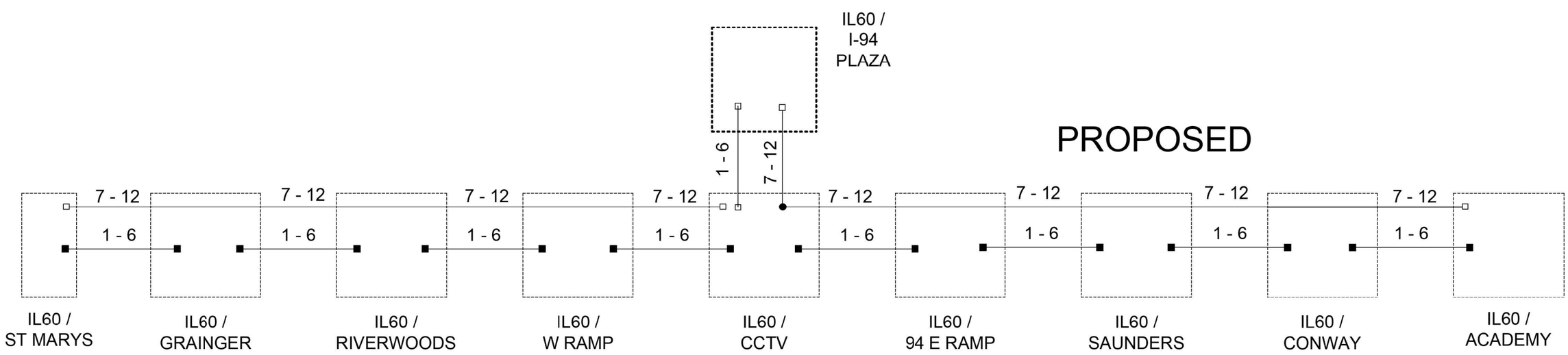
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABINET DETAIL
IL RTE 60 – GRAINGER WEST ENTRANCE TO LAKE FOREST ACADEMY DR

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	189
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		





FORMER EAGLE 4J
LAKE COUNTY TACTICS

TS SHT NO. 182

FILE NAME: Mst-20193 CMH.8-03-5500 IDOT_PTB_190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eagle4.dgn

PARSONS

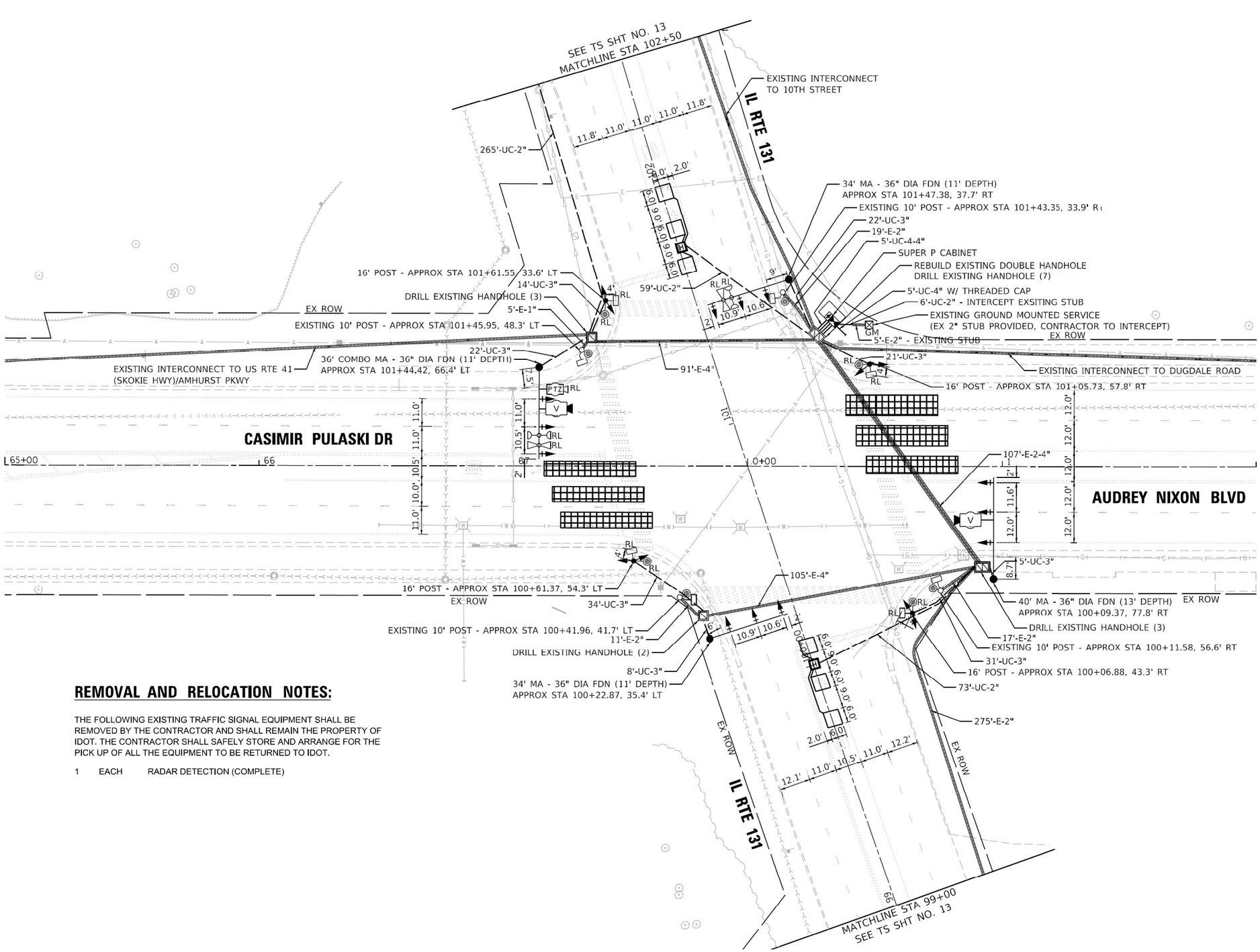
USER NAME = erica.salutz	DESIGNED - RL / DG	REVISED -	
	DRAWN - RL / DG	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - RL / DG	REVISED -	
PLOT DATE = 3/30/2025	DATE - 2025.02.20	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIBER SPLICE DIAGRAM
IL RTE 60 – GRAINGER WEST ENTRANCE TO LAKE FOREST ACADEMY DR

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	190
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		



REMOVAL AND RELOCATION NOTES:

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF IDOT. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR THE PICK UP OF ALL THE EQUIPMENT TO BE RETURNED TO IDOT.

1 EACH RADAR DETECTION (COMPLETE)

TS SHT NO. 183

TS 9375
FORMER EAGLE 4P
LAKE COUNTY TACTICS

FILE NAME: M:\...\20193 CHIL18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203 - 62W90\CAD\62W90_Sheet_03_Eagle4P.dgn

TYLin

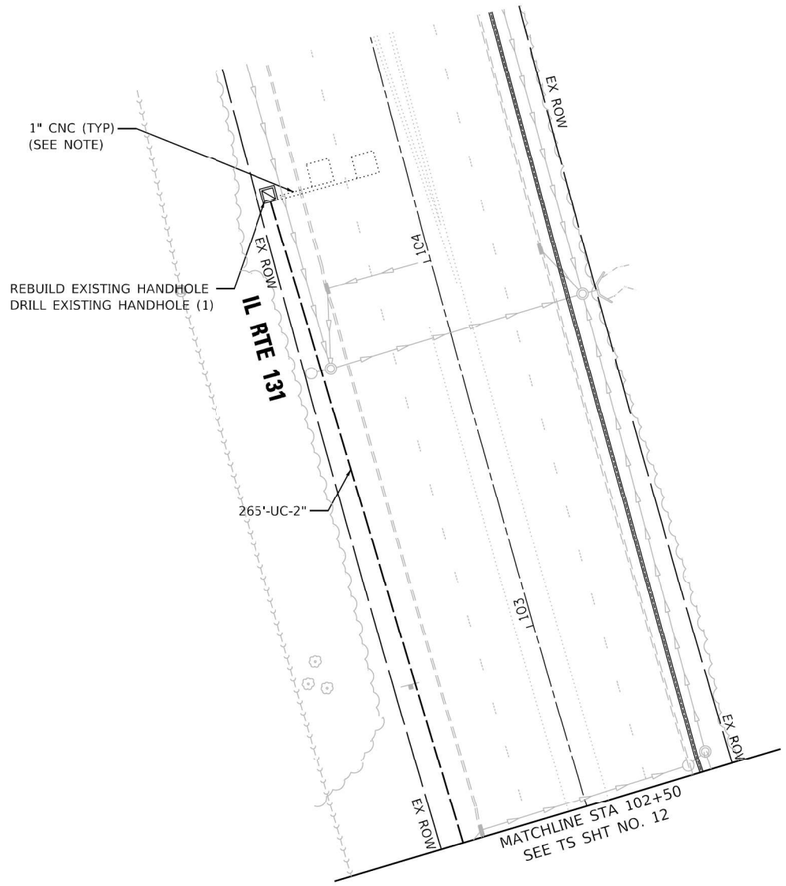
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

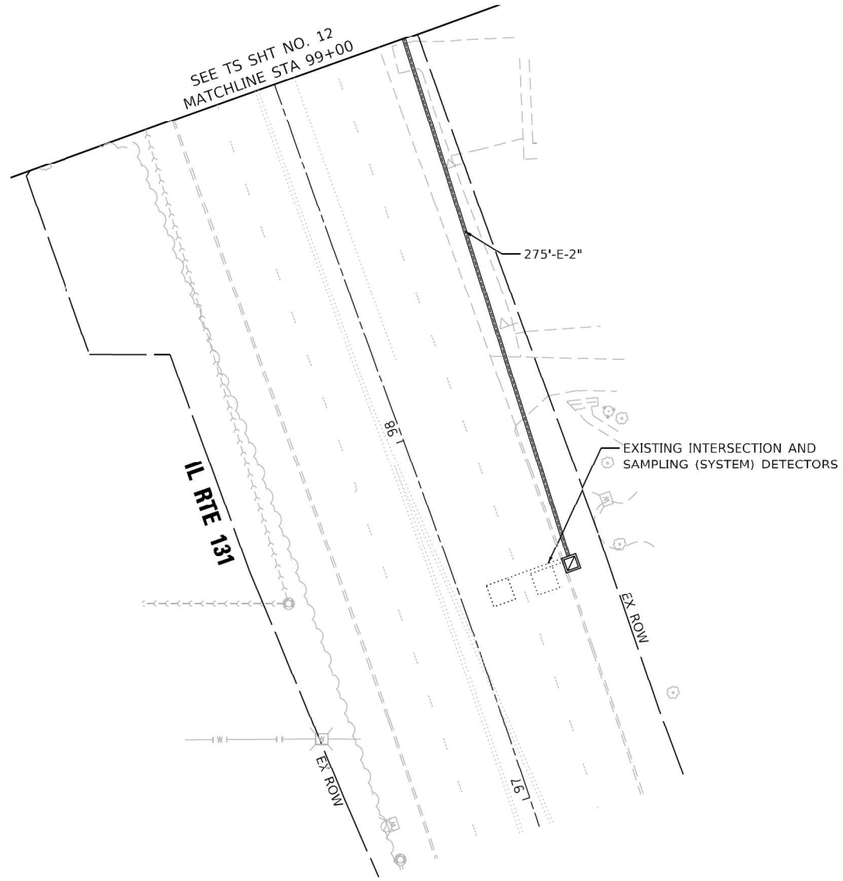
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGNAL PLAN
LOCATION 87 – IL RTE 131 (GREEN BAY RD) AT 14TH ST

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	191
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		





TS SHT NO. 184

TS 9375
FORMER EAGLE 4P
LAKE COUNTY TACTICS

FILE NAME: MA: 20193 CH1:18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eagle4P.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -

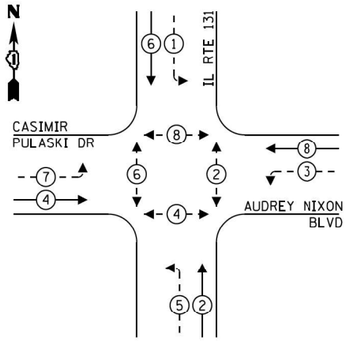
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGNAL PLAN
LOCATION 87 – IL RTE 131 (GREEN BAY RD) AT 14TH ST

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	192
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

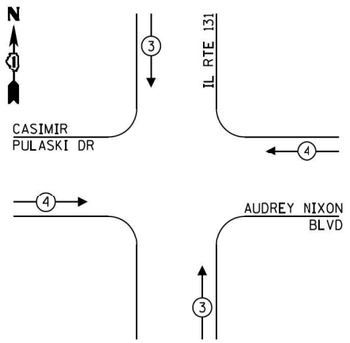
EXISTING AND PROPOSED CONTROLLER SEQUENCE

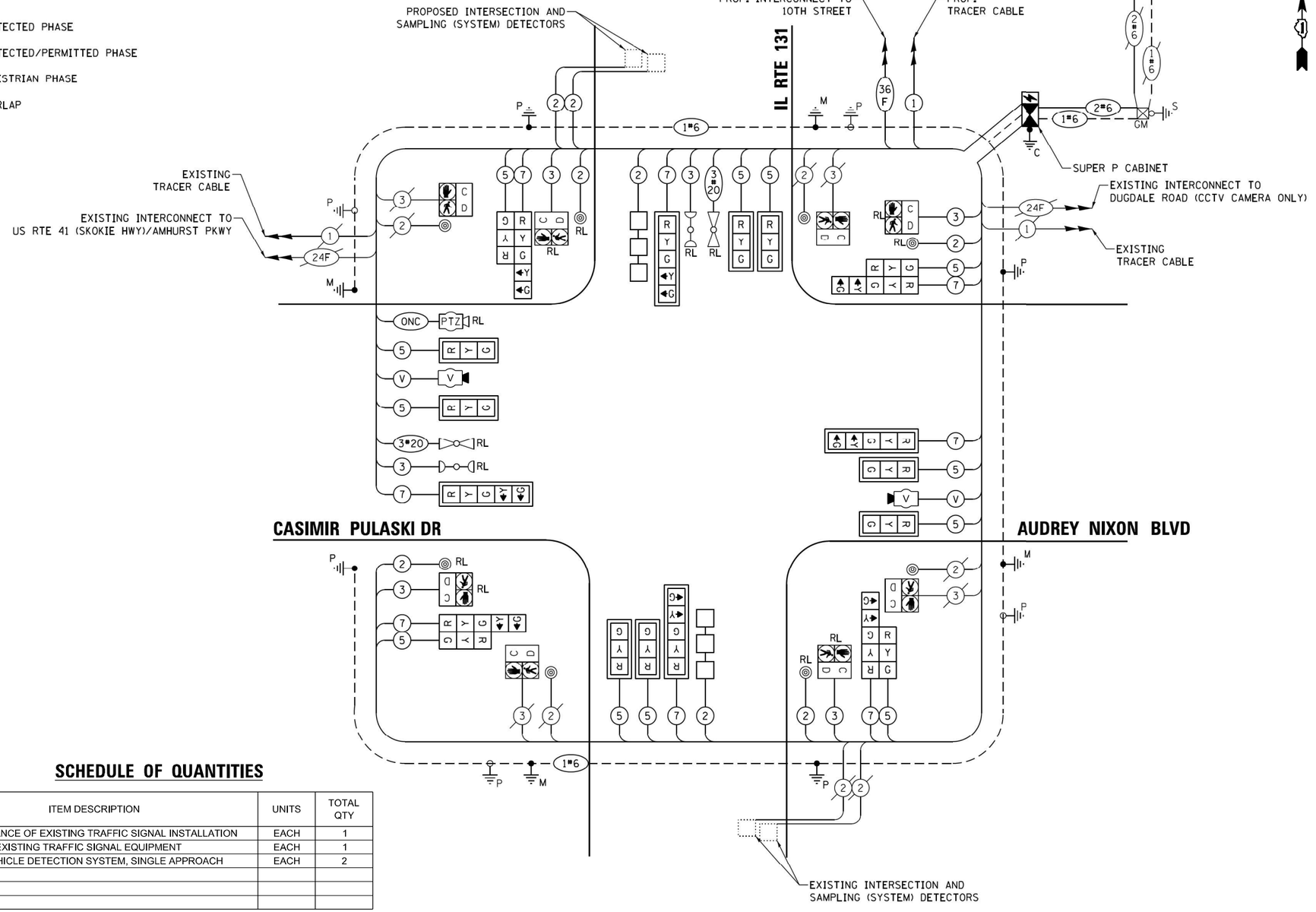


LEGEND:

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

EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE





TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	8	11	88
4 - SECTION	-	14	-
5 - SECTION	4	13	52
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	8	15	120
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	1	20	20
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			586
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	-
PTZ CAMERA	1	75	75
TOTAL SERVICE WIRE SIZING =			1266

ENERGY COSTS TO:
CITY OF WAUKEGAN
100 N. M.L.K. JR. AVE.
WAUKEGAN, IL 60085

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
VIDEO VEHICLE DETECTION SYSTEM, SINGLE APPROACH	EACH	2

CABLE PLAN
(NOT TO SCALE)

TS SHT NO. 185

TS 9375
FORMER EAGLE 4P
LAKE COUNTY TACTICS

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

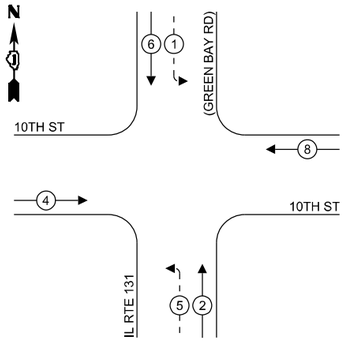
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 87 – IL RTE 131 (GREEN BAY RD) AT 14TH ST
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	193
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

FILE NAME: H:\2019\3 CHI\18-03-5560 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203 #2W90\CAD\62W90_Sheet_03_Eagle4P.dgn

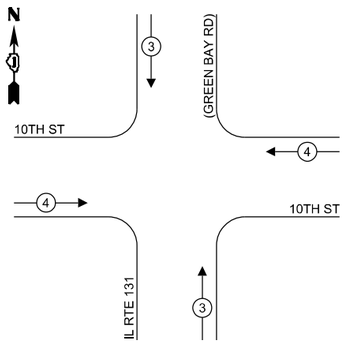
EXISTING CONTROLLER SEQUENCE



LEGEND:

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

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	8	11	88
4 - SECTION	-	14	-
5 - SECTION	4	13	52
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			350
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			955

ENERGY COSTS TO:
CITY OF WAUKEGAN
100 N. M.L.K. JR. AVE.
WAUKEGAN, IL 60085

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

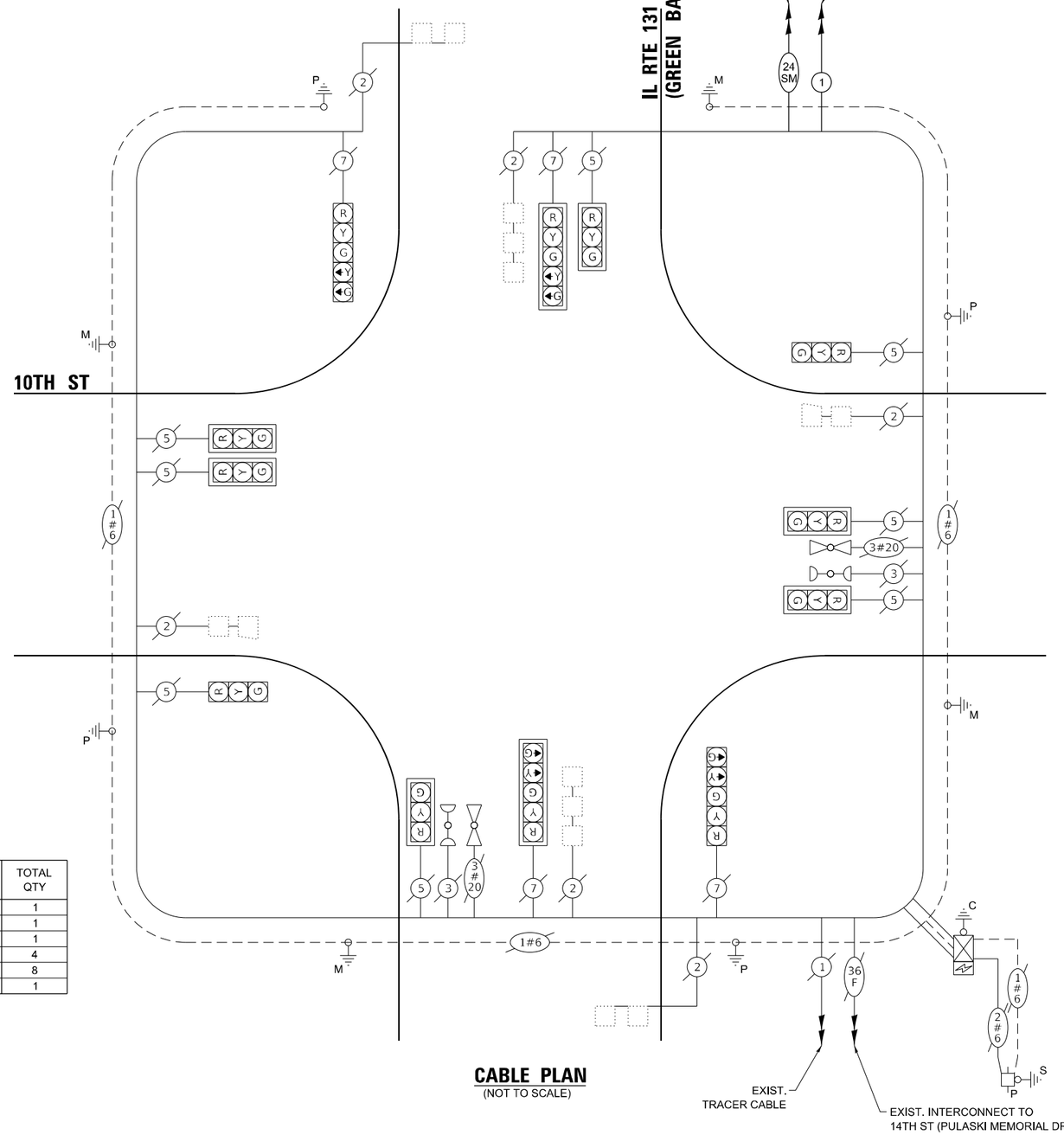
REMOVAL AND RELOCATION NOTES:

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

1 EACH TRANSCIEVER FIBER OPTIC

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
TERMINATE FIBER IN CABINET	EACH	4
SPLICE FIBER IN CABINET	EACH	8
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1



CABLE PLAN
(NOT TO SCALE)

TS 7045
FORMER EAGLE 4P
LAKE COUNTY TACTICS

TS SHT NO. 186

FILE NAME: H:\ 20\9\3 CMI\18-03-5500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203 62W90\CAD\62W90_Sheet_05_Eagle4P.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

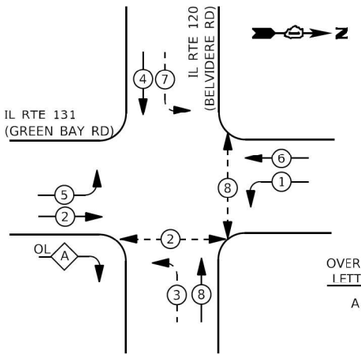
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 88 – IL RTE 131 (GREEN BAY RD) AT 10TH ST

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	194
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

EXISTING CONTROLLER SEQUENCE



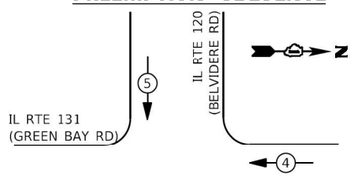
LEGEND:

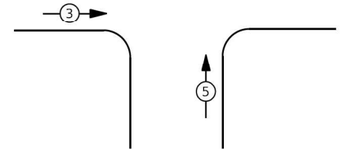
- PROTECTED PHASE
- PROTECTED/PERMITTED PHASE
- PEDESTRIAN PHASE
- OL OVERLAP

RIGHT TURN OVERLAP PHASE DESIGNATION:

OVERLAP LETTER		PERMISSIVE PHASE		PROTECTED PHASE
A	=	2	+	3

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE





REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER AND CABINET (COMPLETE)
1 EACH TELEPHONE LINE

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

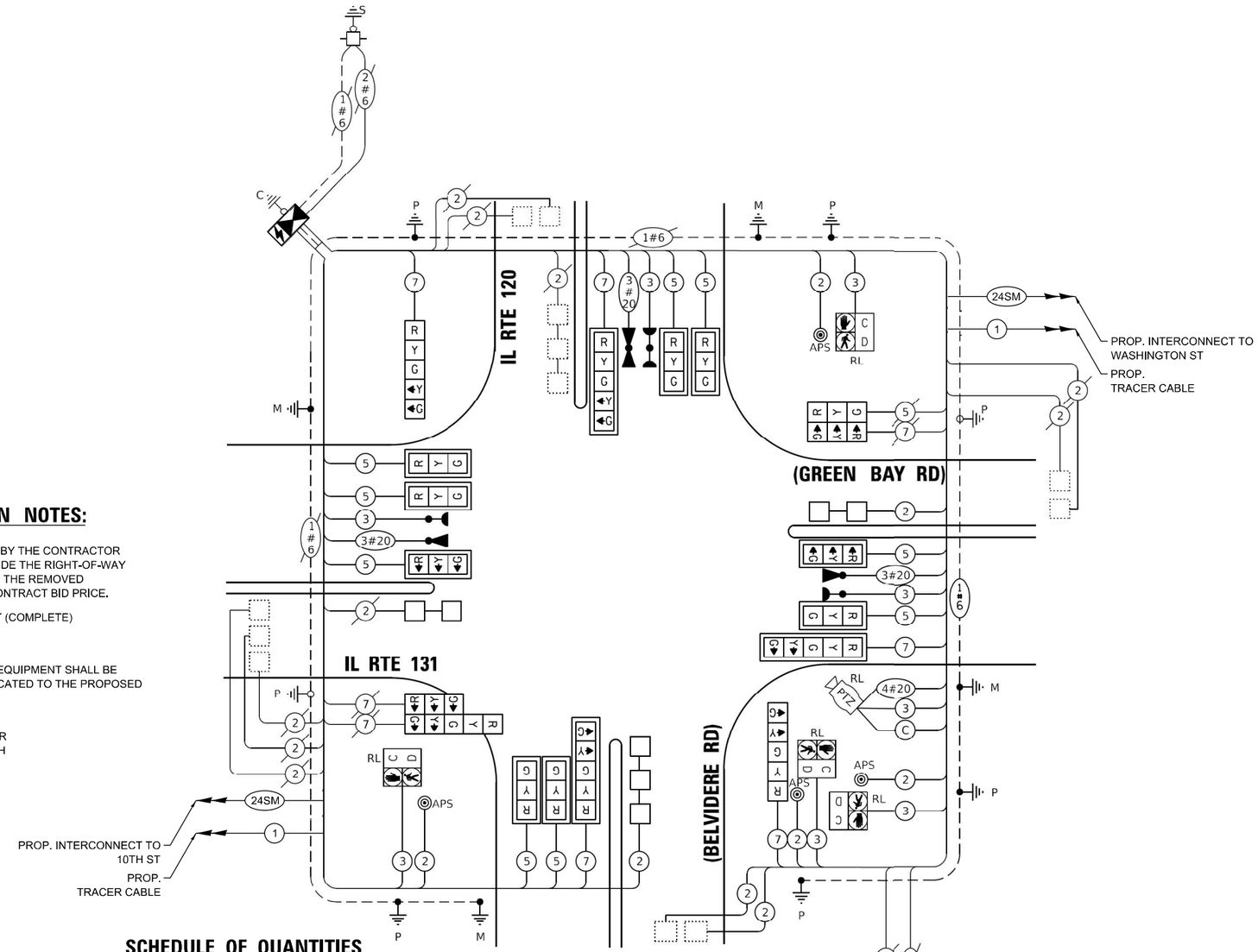
1 EACH PTZ VIDEO ENCODER
1 EACH LIGHT DETECTOR AMPLIFIER
1 EACH LAYER II (DATALINK) SWITCH

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	12	11	132
4 - SECTION	-	14	-
5 - SECTION	6	13	78
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			480
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	-
PTZ CAMERA	1	75	75
TOTAL SERVICE WIRE SIZING =			1160

ENERGY COSTS TO:
CITY OF WAUKEGAN
100 N. M.L.K. JR. AVE.
WAUKEGAN, IL 60085

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---



CABLE PLAN

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
INDUCTIVE LOOP DETECTOR	EACH	13
RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
TERMINATE FIBER IN CABINET	EACH	8
SPLICE FIBER IN CABINET	EACH	8
FULL-ACTUATED CONTROLLER AND TYPE IV STRETCHED CABINET, SPECIAL	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1

TS 7820
FORMER EAGLE 4P
LAKE COUNTY TACTICS

TS SHT NO. 187

FILE NAME: M:_20 913 CHI (8-03-5560 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO_203_62W90\CAD\62W90_Sheet_05_EagleMap.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -

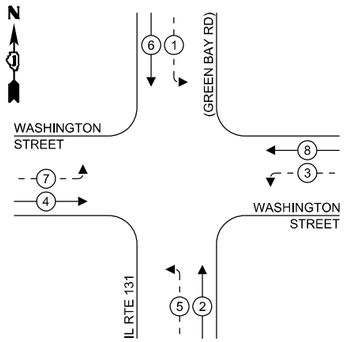
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 89 – IL RTE 131 (GREEN BAY RD) AT IL RTE 120 (BELVIDERE ST)

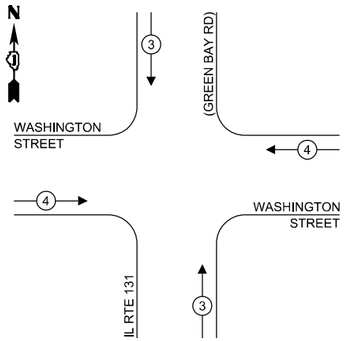
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	195
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

EXISTING CONTROLLER SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



LEGEND:

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

SCHEDULE OF QUANTITIES

	ITEM DESCRIPTION	UNITS	TOTAL QTY
	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
*	TERMINATE FIBER IN CABINET	EACH	32
*	SPLICE FIBER IN CABINET	EACH	4
*	LAYER III FIBER OPTIC TRANSCEIVER MODULE, SFP TYPE, LONG DISTANCE	EACH	1
	FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1

* WORK TO BE DONE AT LCDOT COMM CABINET

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	12	11	132
4 - SECTION	-	14	-
5 - SECTION	8	13	104
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			446
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	-
PTZ CAMERA	1	75	75
TOTAL SERVICE WIRE SIZING =			1126

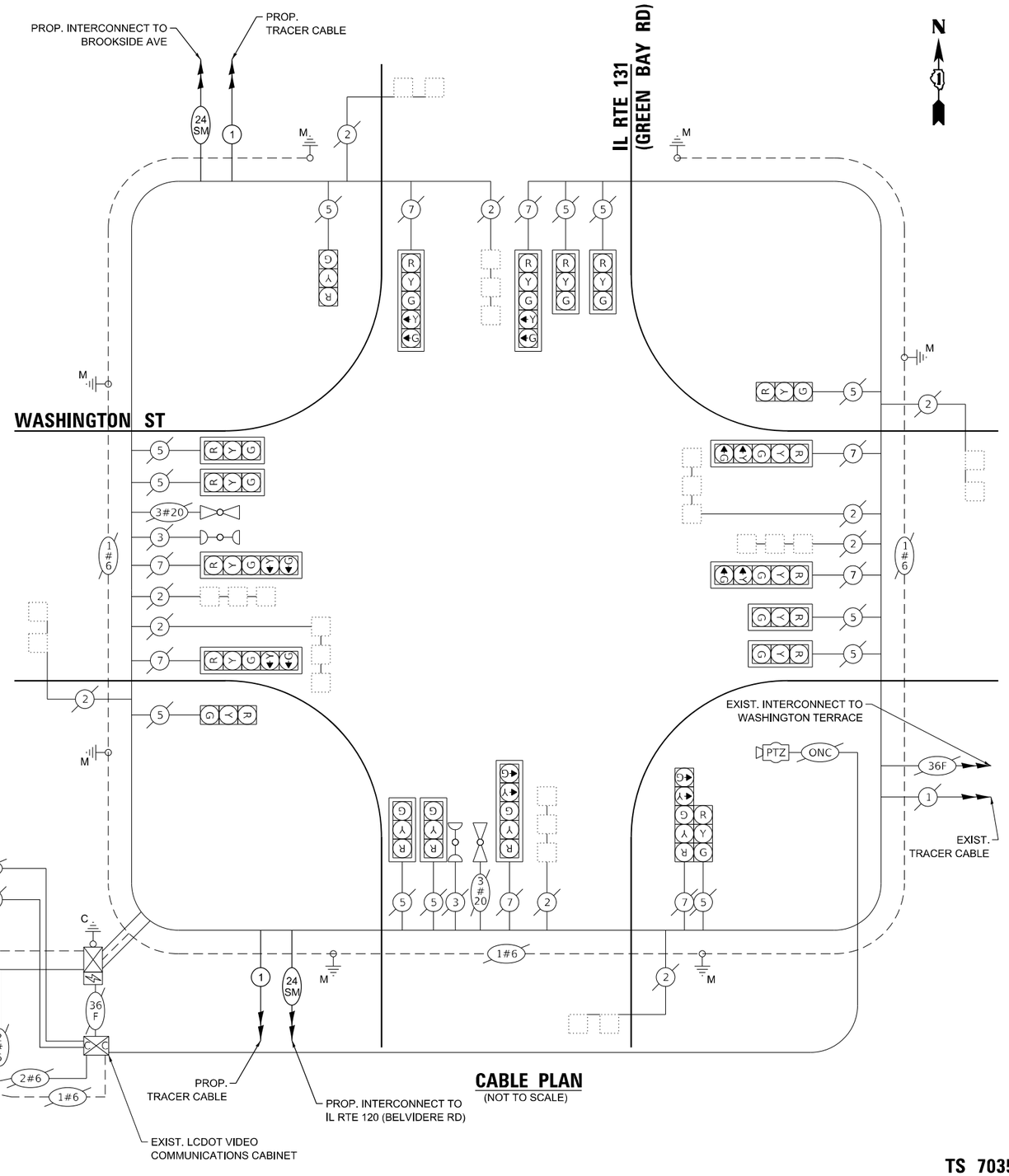
ENERGY COSTS TO:
CITY OF WAUKEGAN
100 N. M.L.K. JR. AVE.
WAUKEGAN, IL 60085

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER



CABLE PLAN
(NOT TO SCALE)

TS 7035
FORMER EAGLE 4P
LAKE COUNTY TACTICS

TS SHT NO. 188

FILE NAME: MA-20193 CHI:18-02-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Exist.dgn

TYLin

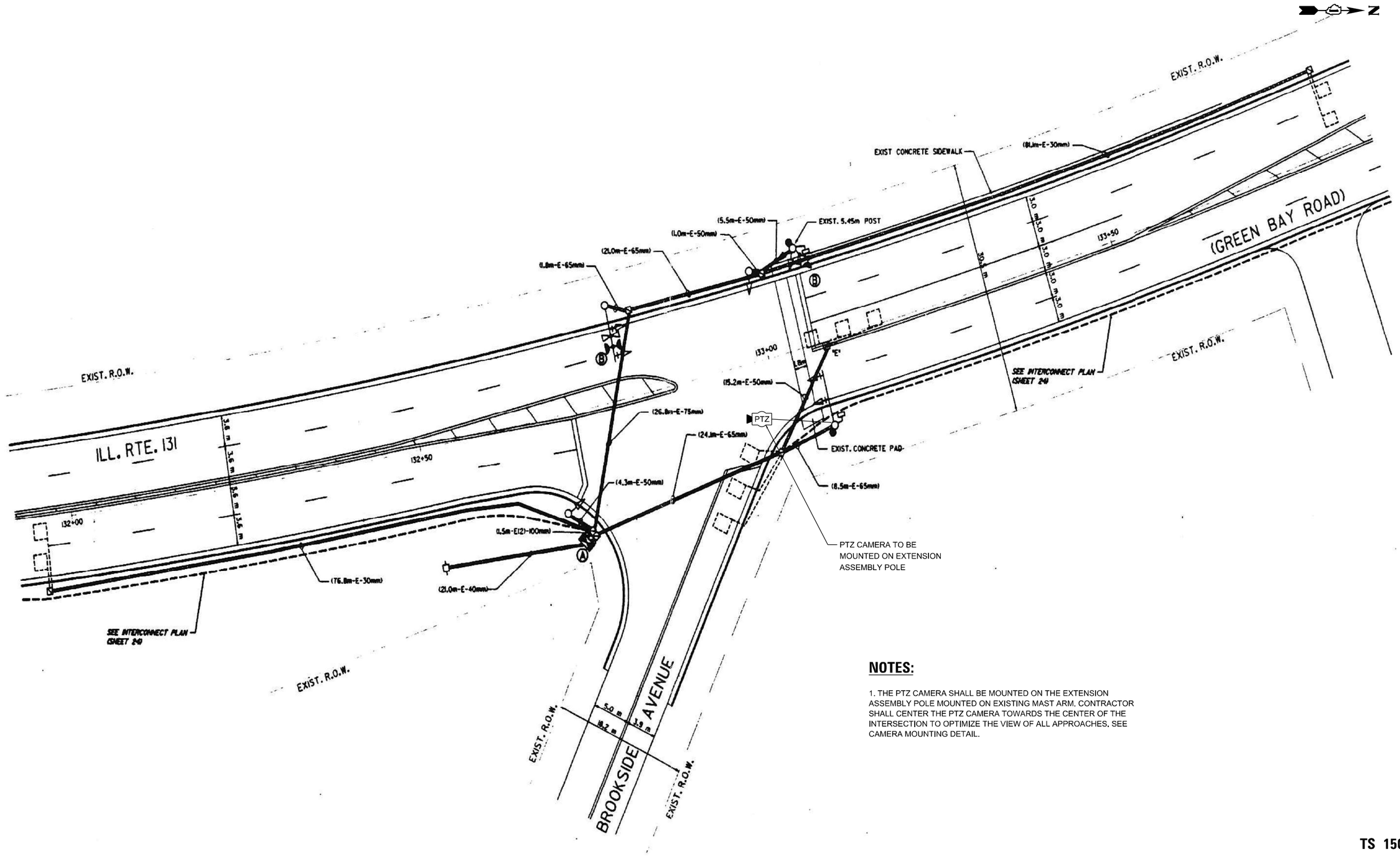
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 90 – IL RTE 131 (GREEN BAY RD) AT WASHINGTON ST

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	196
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			



NOTES:

1. THE PTZ CAMERA SHALL BE MOUNTED ON THE EXTENSION ASSEMBLY POLE MOUNTED ON EXISTING MAST ARM. CONTRACTOR SHALL CENTER THE PTZ CAMERA TOWARDS THE CENTER OF THE INTERSECTION TO OPTIMIZE THE VIEW OF ALL APPROACHES. SEE CAMERA MOUNTING DETAIL.

TS 15022
FORMER EAGLE 4P
LAKE COUNTY TACTICS

TS SHT NO. 189

FILE NAME: M5-20193 CHIL18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet 03 Eagle4P.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED - 05/08/2025	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 5/6/2025	DATE - 12/20/2024	REVISED -	

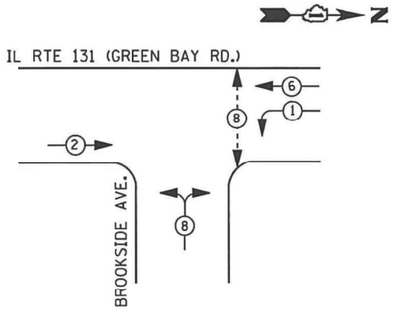
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 91 – IL RTE 131 (GREEN BAY RD) AT BROOKSIDE AVE

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	197
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

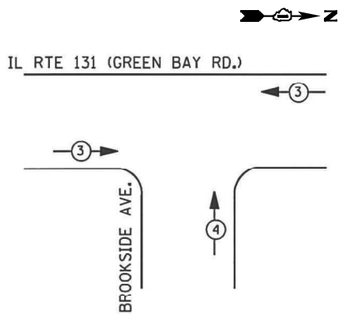
CONTROLLER SEQUENCE



LEGEND

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

PHASE DESIGNATION DIAGRAM

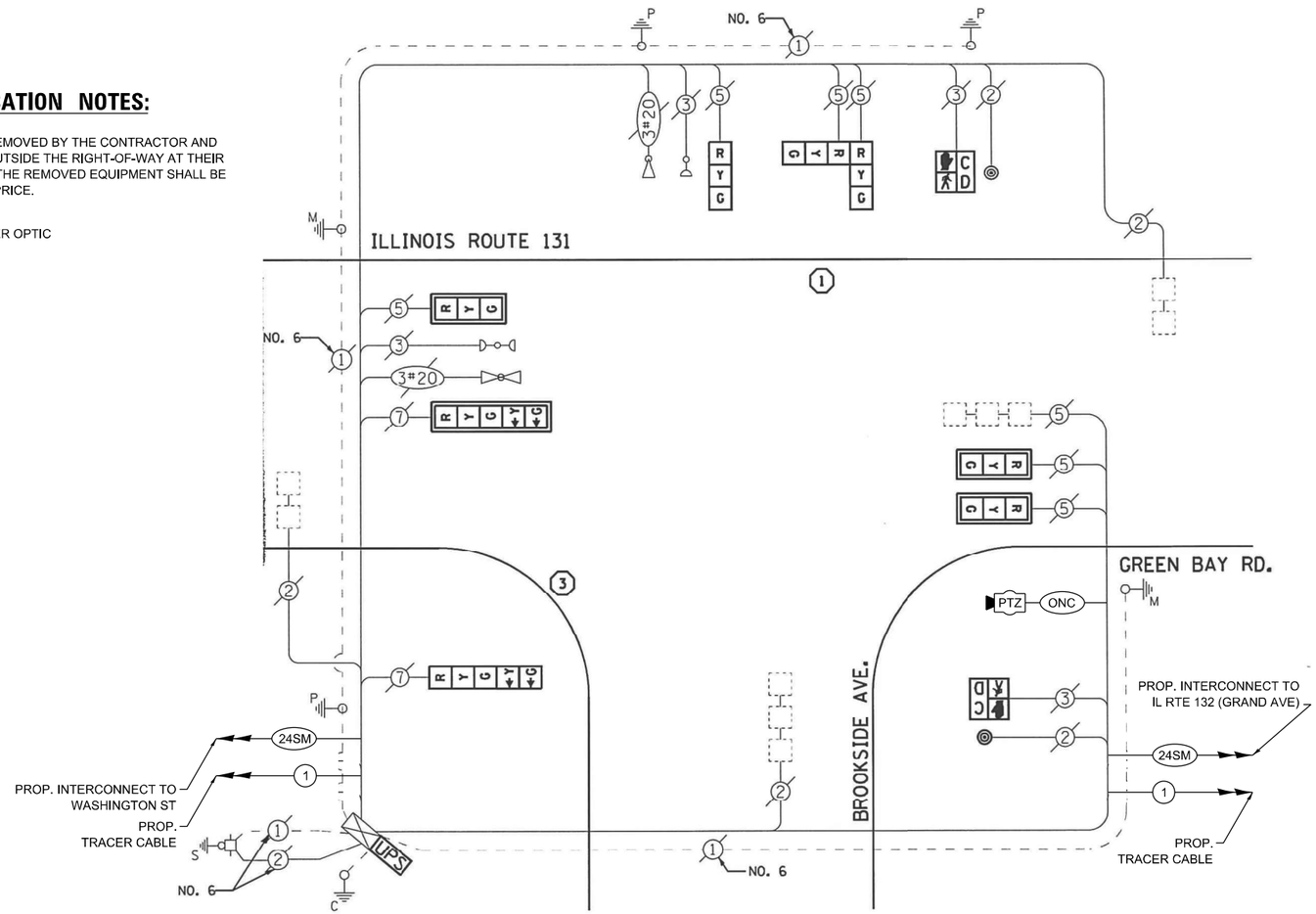


EMERGENCY VEHICLE PREEMPTION SEQUENCE

REMOVAL AND RELOCATION NOTES:

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

1	EACH	CONTROLLER
1	EACH	TRANSCIEVER FIBER OPTIC



CABLE PLAN

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	6	11	66
4 - SECTION	-	14	-
5 - SECTION	2	13	26
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	2	15	30
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			332
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			937

ENERGY COSTS TO:
CITY OF WAUKEGAN
100 N. M.L.K. JR. AVE.
WAUKEGAN, IL 60085

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	186
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
TERMINATE FIBER IN CABINET	EACH	12
SPLICE FIBER IN CABINET	EACH	18
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1
CAMERA MOUNTING ASSEMBLY	EACH	1

TS 15022
FORMER EAGLE 4P
LAKE COUNTY TACTICS

TS SHT NO. 190

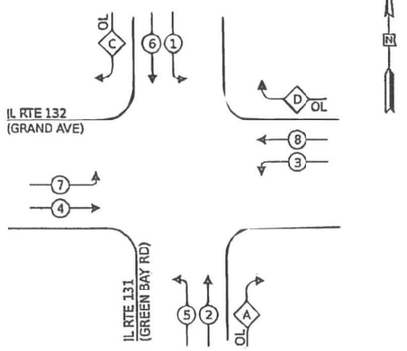
FILE NAME: MI_20193 CHI(18-03-5560 IDOT PTB 190 - Various Traffic Signal Design Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eagle4P.dgn

TYLin

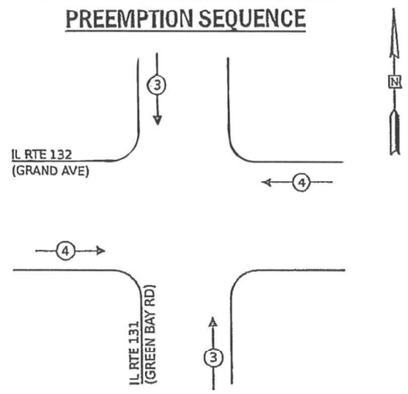
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED - 05/08/2025	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES LOCATION 91 – IL RTE 131 (GREEN BAY RD) AT BROOKSIDE AVE	
	DRAWN - KATHLEEN MURPHY	REVISED -			
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.	
PLOT DATE = 5/6/2025	DATE - 12/20/2024	REVISED -			

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	198
		CONTRACT NO. 62W90		
		ILLINOIS	FED. AID PROJECT	

EXISTING CONTROLLER SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

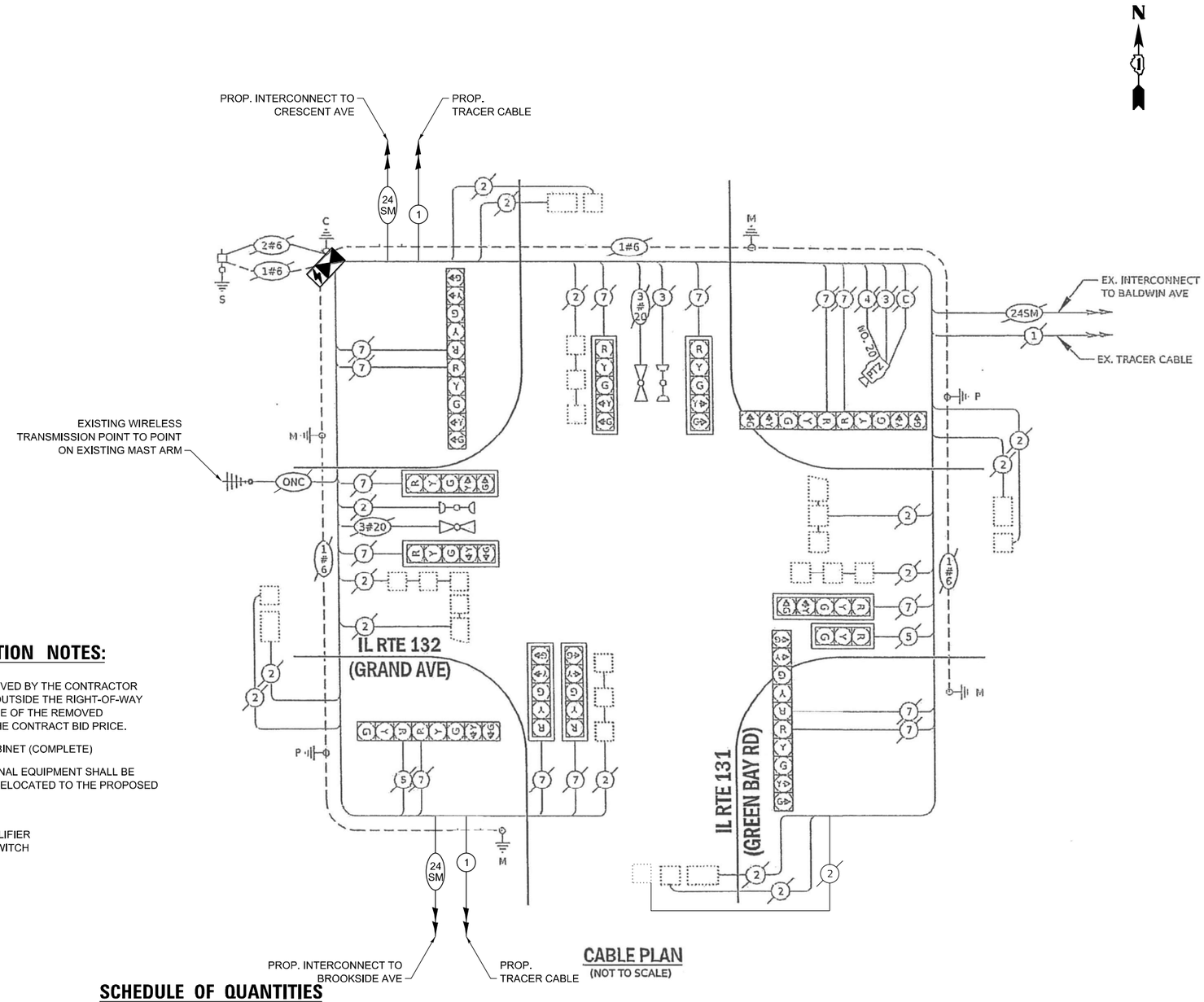


LEGEND:

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

RIGHT TURN OVERLAP PHASE DESIGNATION

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



CABLE PLAN (NOT TO SCALE)

REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER AND CABINET (COMPLETE)

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

1 EACH PTZ VIDEO ENCODER
1 EACH LIGHT DETECTOR AMPLIFIER
1 EACH LAYER II (DATALINK) SWITCH

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	2	11	22
4 - SECTION	-	14	-
5 - SECTION	14	13	182
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			414
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	-
PTZ CAMERA	1	75	75
TOTAL SERVICE WIRE SIZING =			1094

ENERGY COSTS TO:
ILLINOIS DEPT OF TRANSPORTATION
201 CENTER CT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
INDUCTIVE LOOP DETECTOR	EACH	15
RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
TERMINATE FIBER IN CABINET	EACH	12
SPLICE FIBER IN CABINET	EACH	18
FULL-ACTUATED CONTROLLER AND TYPE IV STRETCHED CABINET, SPECIAL	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
FIBER OPTIC INTERCONNECT CENTER, 48 PORT	EACH	1

TS 15020
FORMER EAGLE 4P
LAKE COUNTY TACTICS

TS SHT NO. 191

FILE NAME: M:\2019\3 CH\18-03-5500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203 #2\W90\CAD\62W90_Sheet 03_Eagle4P.dgn

TYLin

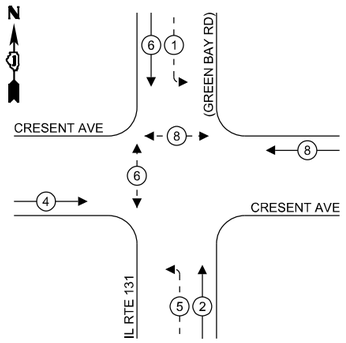
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 92 – IL RTE 131 (GREEN BAY RD) AT IL RTE 132 (GRAND AVE)
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	199
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

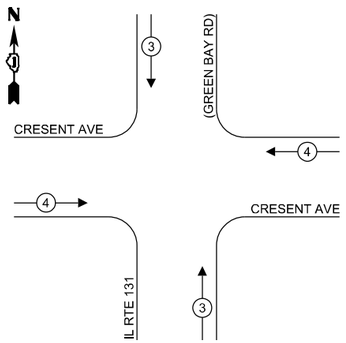
EXISTING CONTROLLER SEQUENCE



LEGEND:

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

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER
1 EACH TRANSCIEVER FIBER OPTIC

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

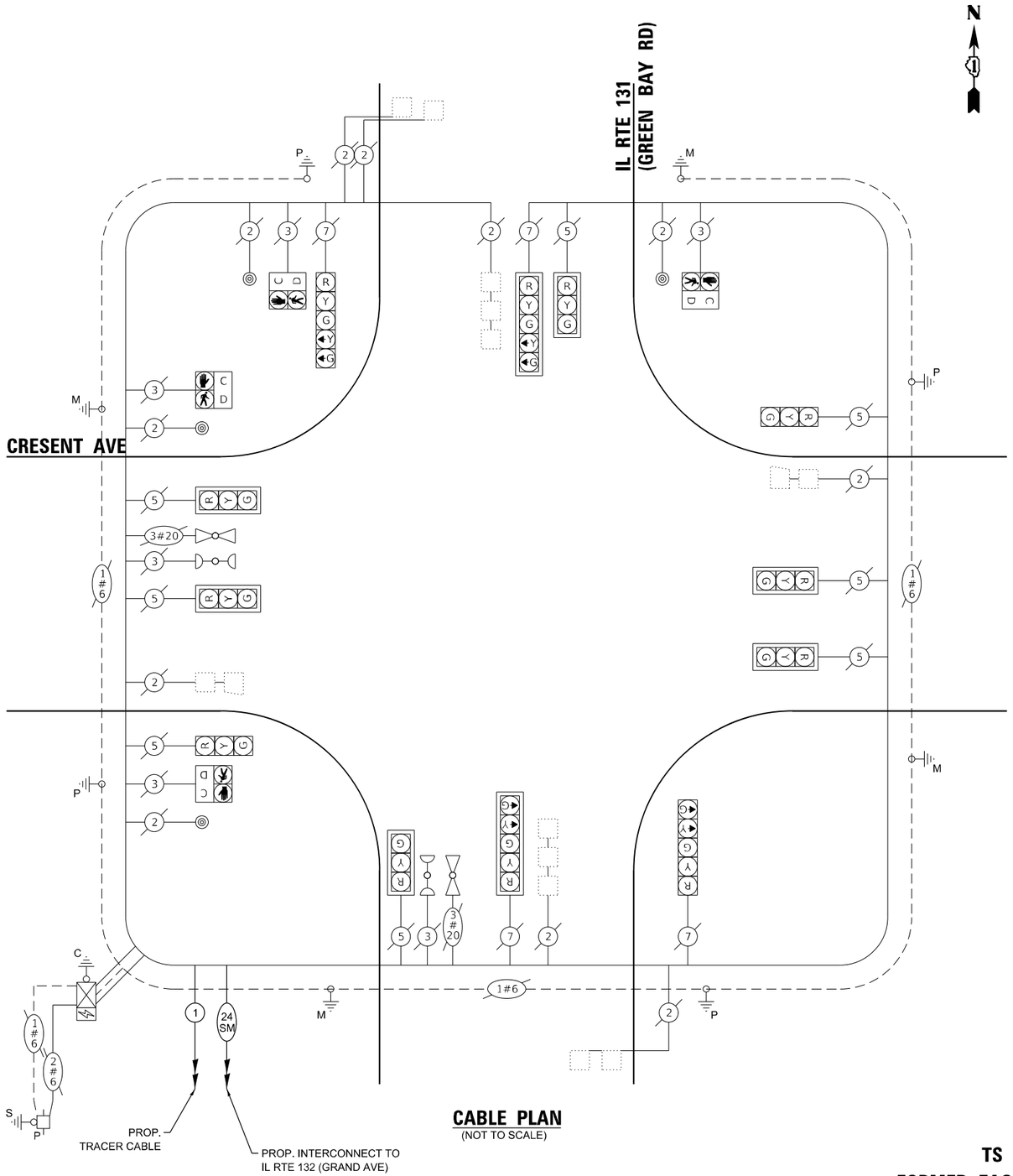
TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	8	11	88
4 - SECTION	-	14	-
5 - SECTION	4	13	52
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	4	15	60
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			1015

ENERGY COSTS TO:
CITY OF WAUKEGAN
100 N. M.L.K. JR. AVE.
WAUKEGAN, IL 60085

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
TERMINATE FIBER IN CABINET	EACH	12
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1



CABLE PLAN
(NOT TO SCALE)

TS 20485
FORMER EAGLE 4P
LAKE COUNTY TACTICS

TS SHT NO. 192

FILE NAME: MI_20193 CHI(18-03-5560 IDOT PTB 190 - Various Traffic Signal Design Graphics\WO_203_62W90\CAD\62W90_Sheet_05_EagleM.dgn

TYLin

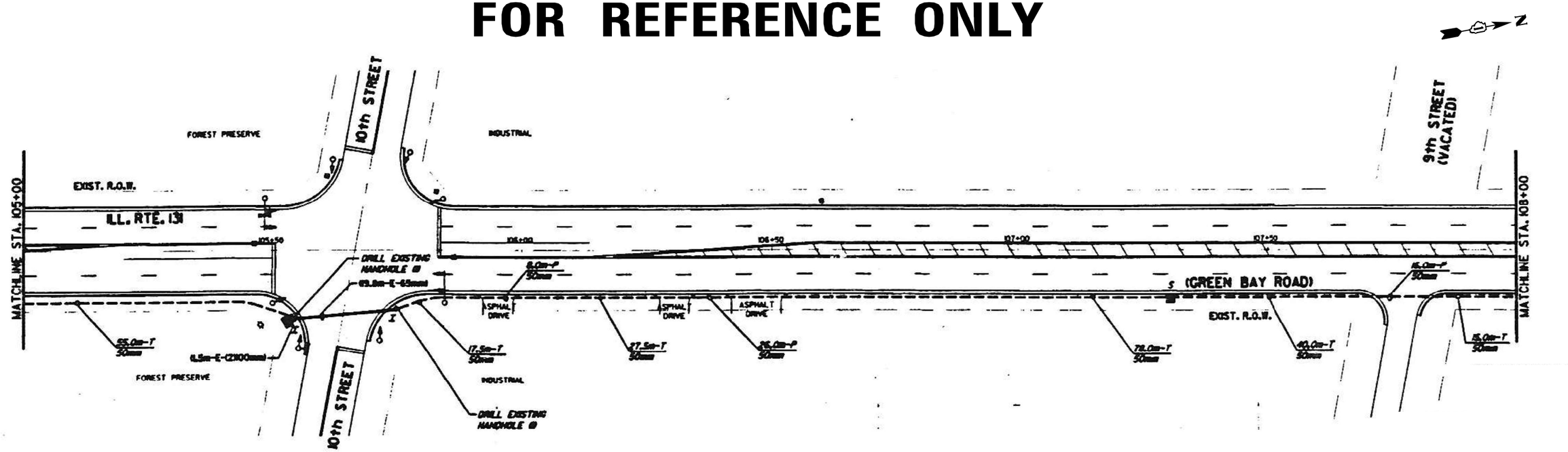
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

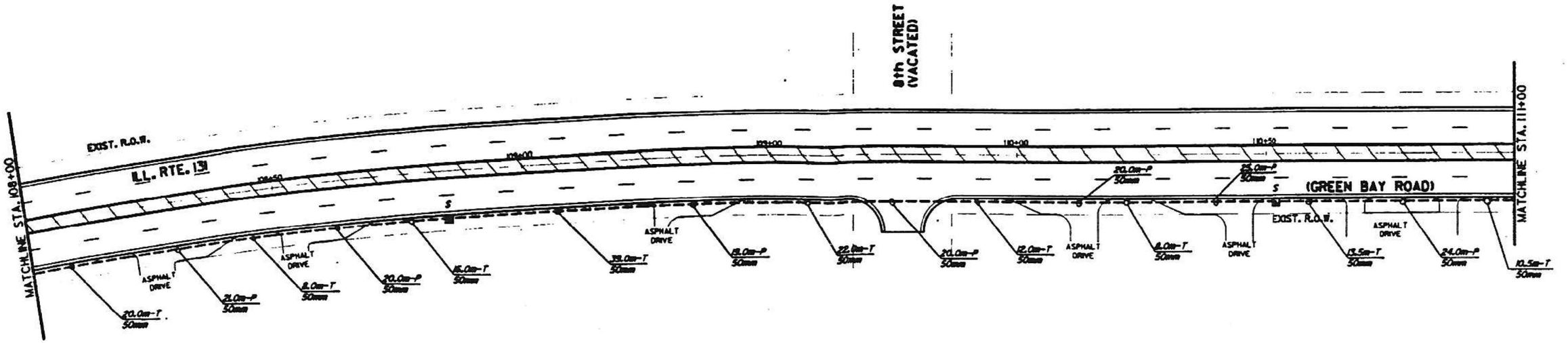
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 93 – IL RTE 131 (GREEN BAY RD) AT CRESCENT AVE
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	200
		CONTRACT NO. 62W90		
		ILLINOIS	FED. AID PROJECT	

FOR REFERENCE ONLY





FORMER EAGLE 4P
LAKE COUNTY TACTICS

TS SHT NO. 193

FILE NAME: Mst_20193_CMI_8-03-5500_IDOT_PTB_190 - Various Traffic Signal Design\Graphics\WO 203 62W90\CAD\62W90_Sheet 05 Eagle4P.dgn

TYLin

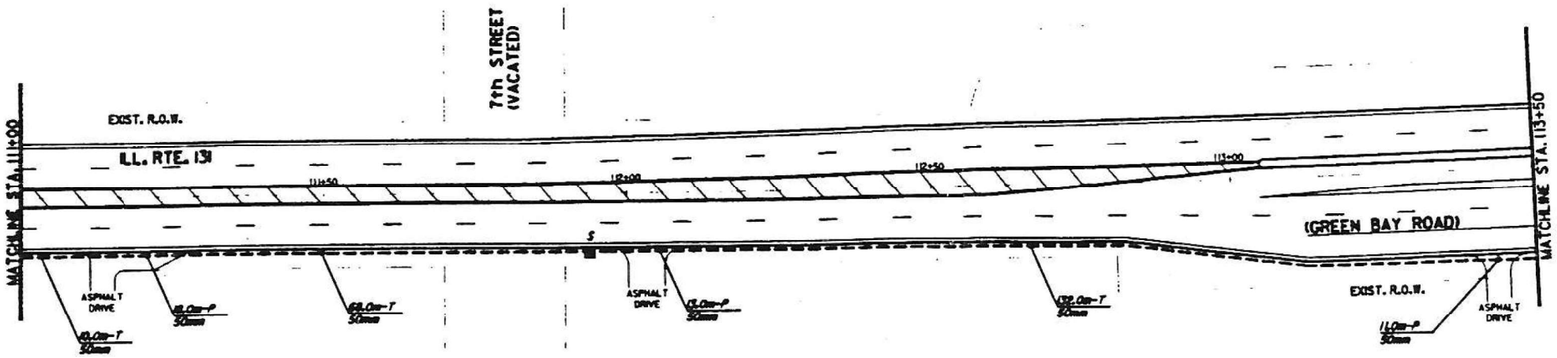
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

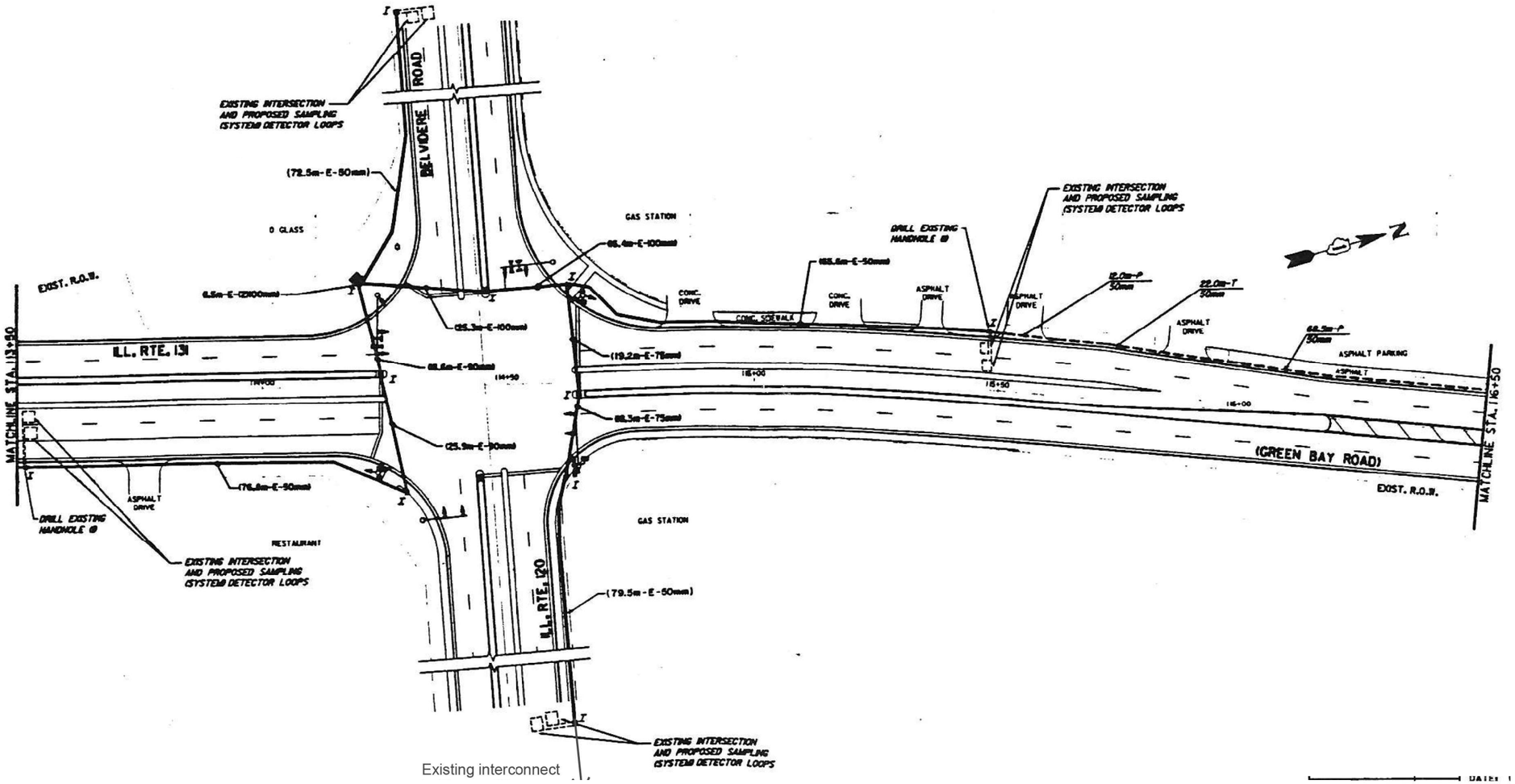
INTERCONNECT PLAN
US RTE 131 – 14TH ST/PULASKI MEMORIAL DR TO CRESCENT AVE

SCALE: | SHEET OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	201
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			



FOR REFERENCE ONLY



FORMER EAGLE 4P
LAKE COUNTY TACTICS

TS SHT NO. 194

FILE NAME: M:\20193 Cnt\18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203 62W90\CAD\62W90 Sheet 01 Eng Plan.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

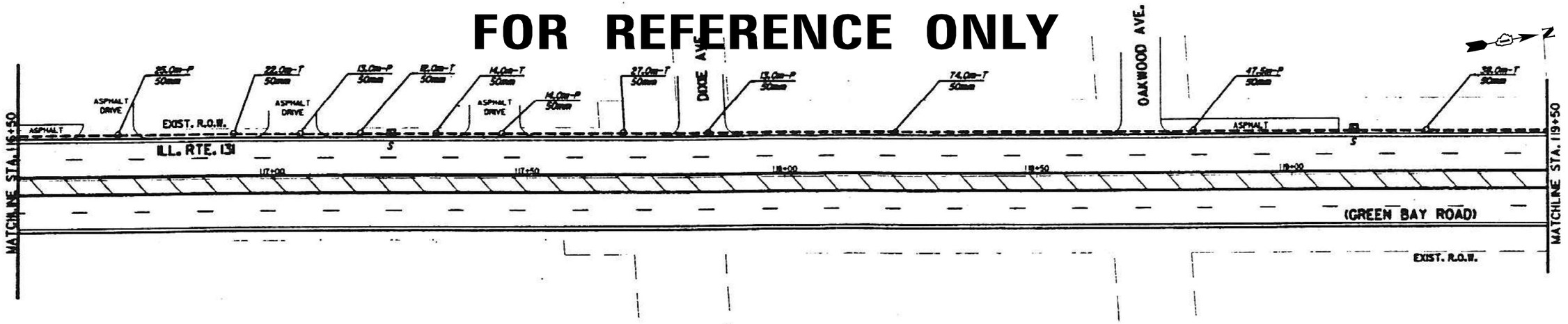
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

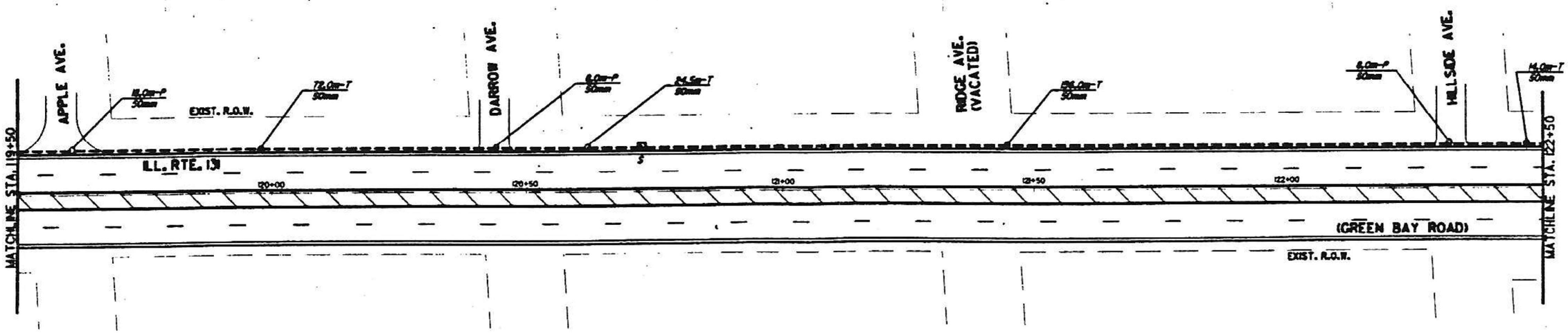
INTERCONNECT PLAN
US RTE 131 – 14TH STPULASKI MEMORIAL DR TO CRESCENT AVE

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	202
		CONTRACT NO. 62W90		
		ILLINOIS FED. AID PROJECT		

FOR REFERENCE ONLY





FORMER EAGLE 4P
LAKE COUNTY TACTICS

TS SHT NO. 195

FILE NAME: Mst: 20193 CMI:8-03-5500 IDOT PTB: 190 - Various Traffic Signal Design\Graphics\WO 203 62\V90\CAD\62V90_Sheet 05 Eng Map.dgn

TYLin

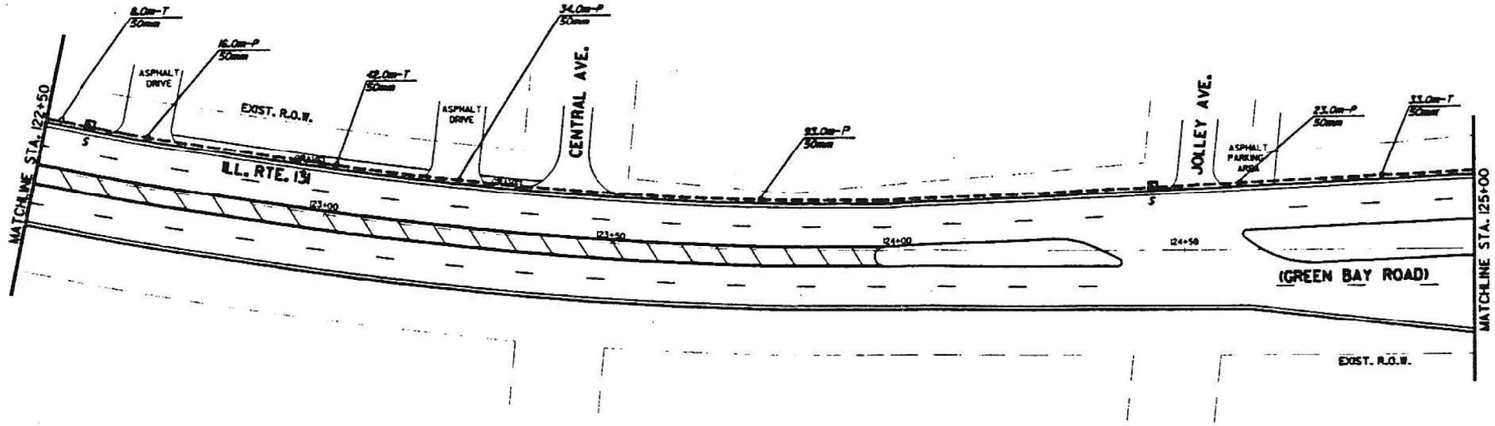
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

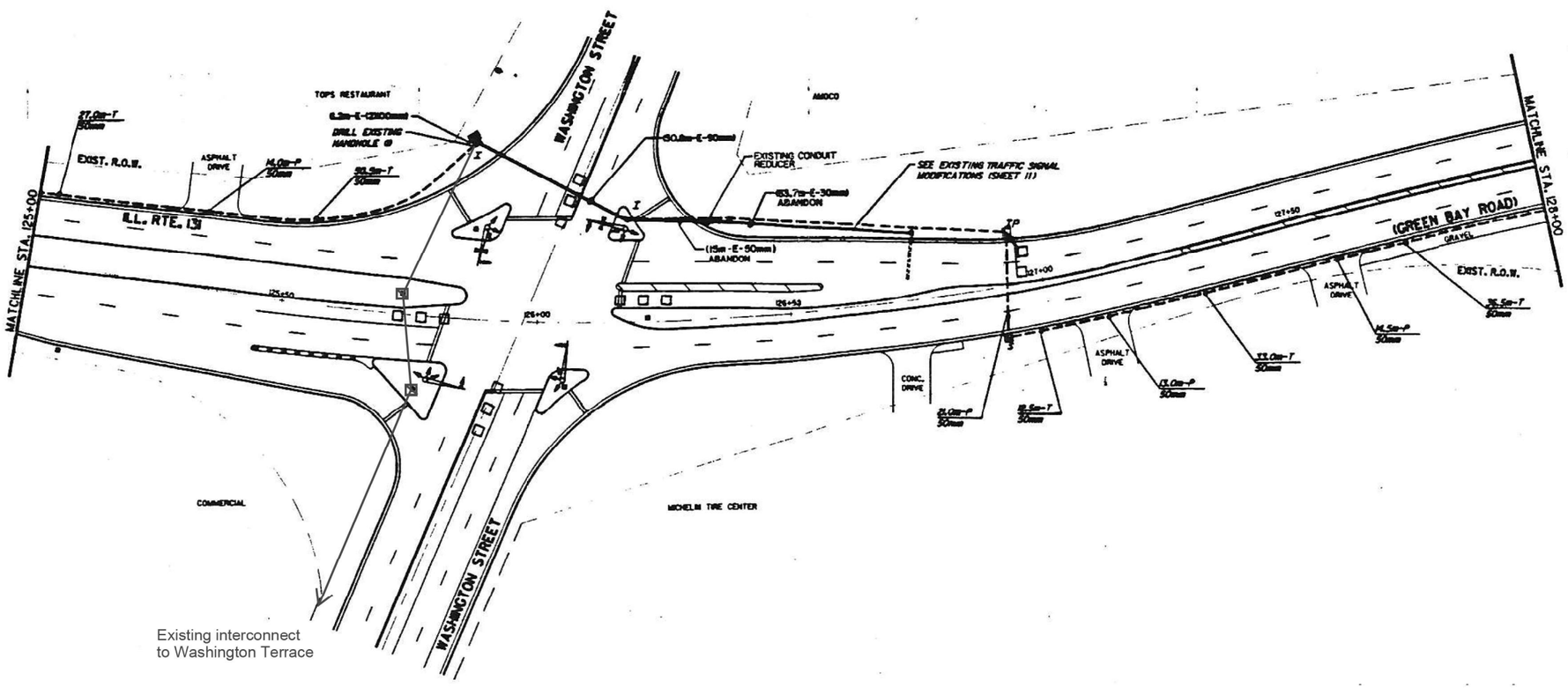
INTERCONNECT PLAN
US RTE 131 – 14TH ST/PULASKI MEMORIAL DR TO CRESCENT AVE

SCALE: | SHEET OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	203
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			



FOR REFERENCE ONLY



FORMER EAGLE 4P
LAKE COUNTY TACTICS

TS SHT NO. 196

FILE NAME: M:_2019\3 CHI\18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_EstMap.dgn

TYLin

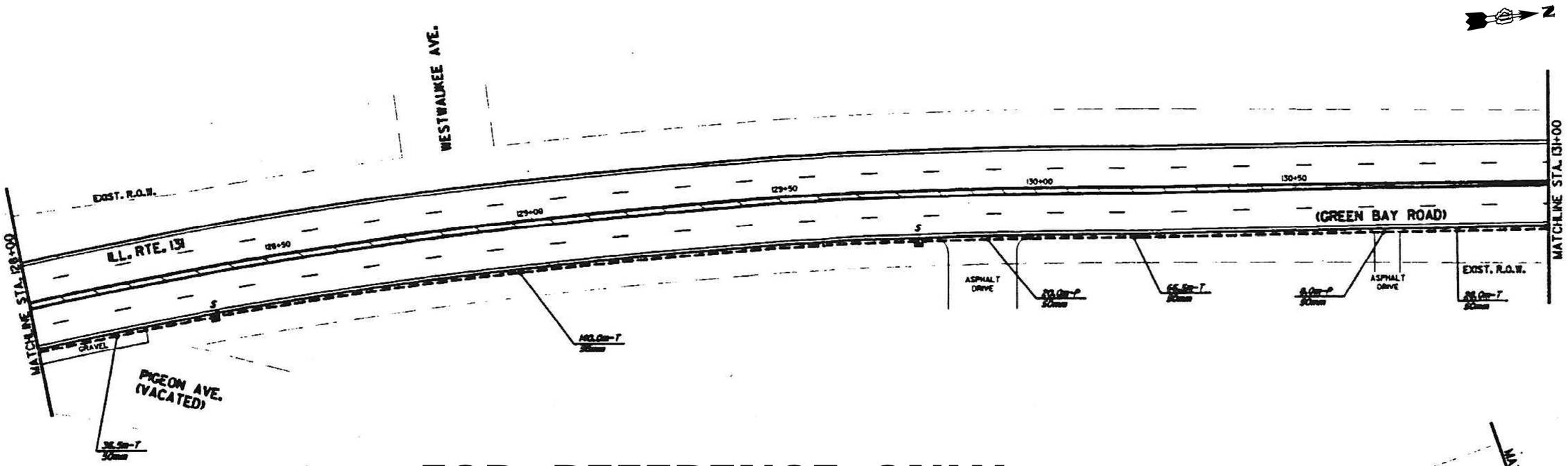
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

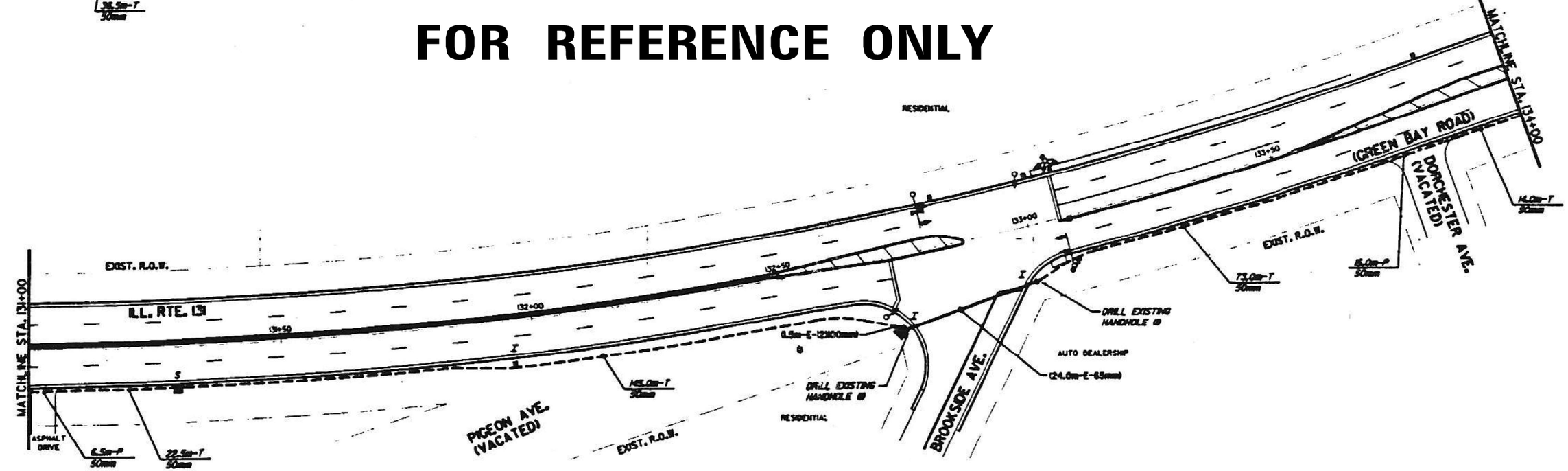
INTERCONNECT PLAN
US RTE 131 – 14TH ST/PULASKI MEMORIAL DR TO CRESCENT AVE

SCALE: | SHEET OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	204
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			



FOR REFERENCE ONLY



FORMER EAGLE 4P
LAKE COUNTY TACTICS

TS SHT NO. 197

FILE NAME: M:\2019\3 CMR\18-03-5500 IDOT_PTB 199 - Various Traffic Signal Design\Graphics\WO 203 62W90\CAD\62W90_Sheet_05_Eag14P.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

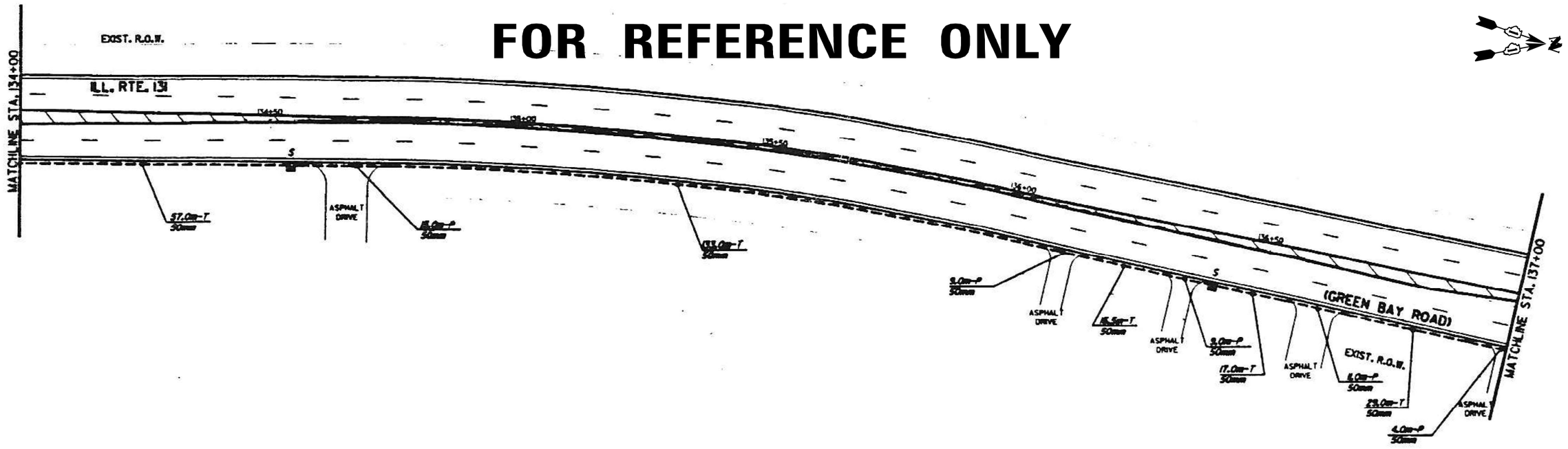
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

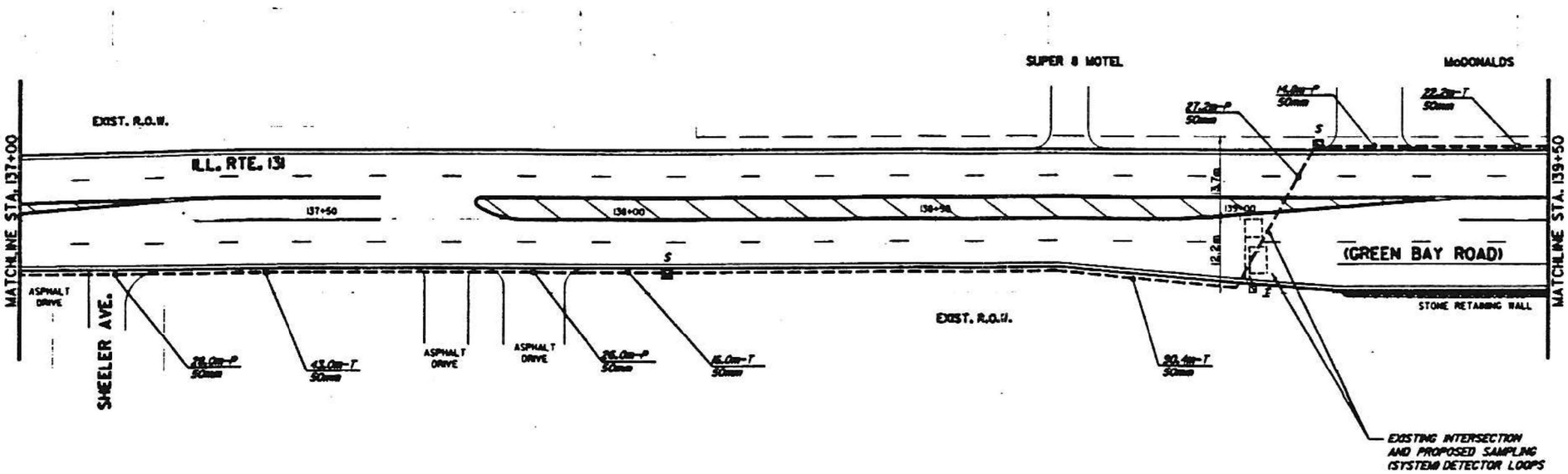
INTERCONNECT PLAN
US RTE 131 – 14TH STPULASKI MEMORIAL DR TO CRESCENT AVE

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	205
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

FOR REFERENCE ONLY





FORMER EAGLE 4P
LAKE COUNTY TACTICS

TS SHT NO. 198

FILE NAME: Mst_20193_CMH_8-03-5500_IDOT_PTB_190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_EagleFP.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

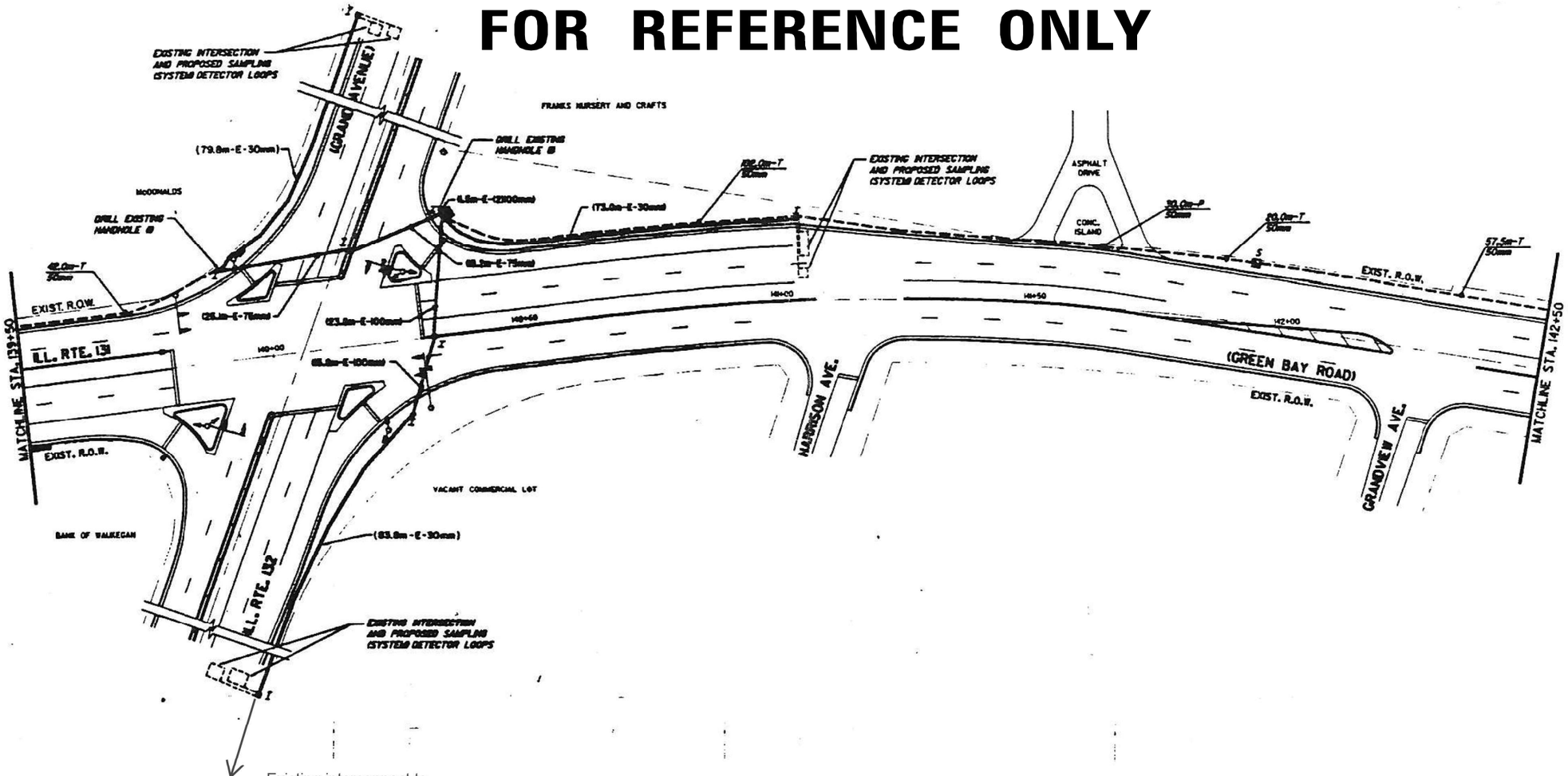
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN
US RTE 131 – 14TH ST/PULASKI MEMORIAL DR TO CRESCENT AVE

SCALE: | SHEET OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	206
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

FOR REFERENCE ONLY



FORMER EAGLE 4P
LAKE COUNTY TACTICS

TS SHT NO. 199

FILE NAME: M:\2019\3 CIM\18-03-5500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203 - 62W90\CAD\62W90_Sheet_01_Exhibit.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

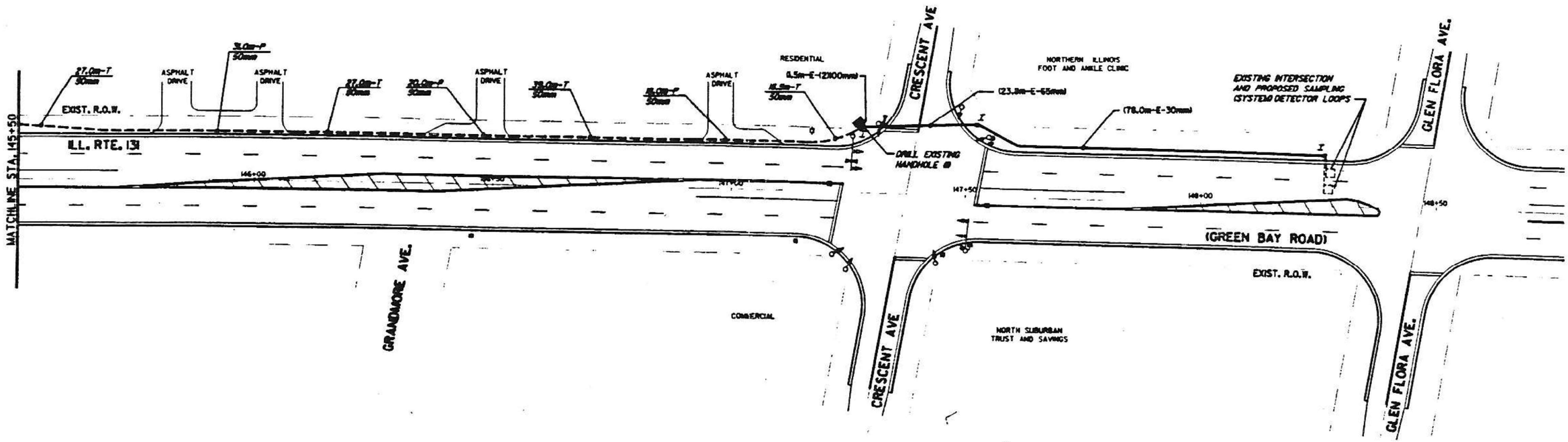
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN
US RTE 131 – 14TH ST/PULASKI MEMORIAL DR TO CRESCENT AVE

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	207
		CONTRACT NO. 62W90		
		ILLINOIS	FED. AID PROJECT	

FOR REFERENCE ONLY



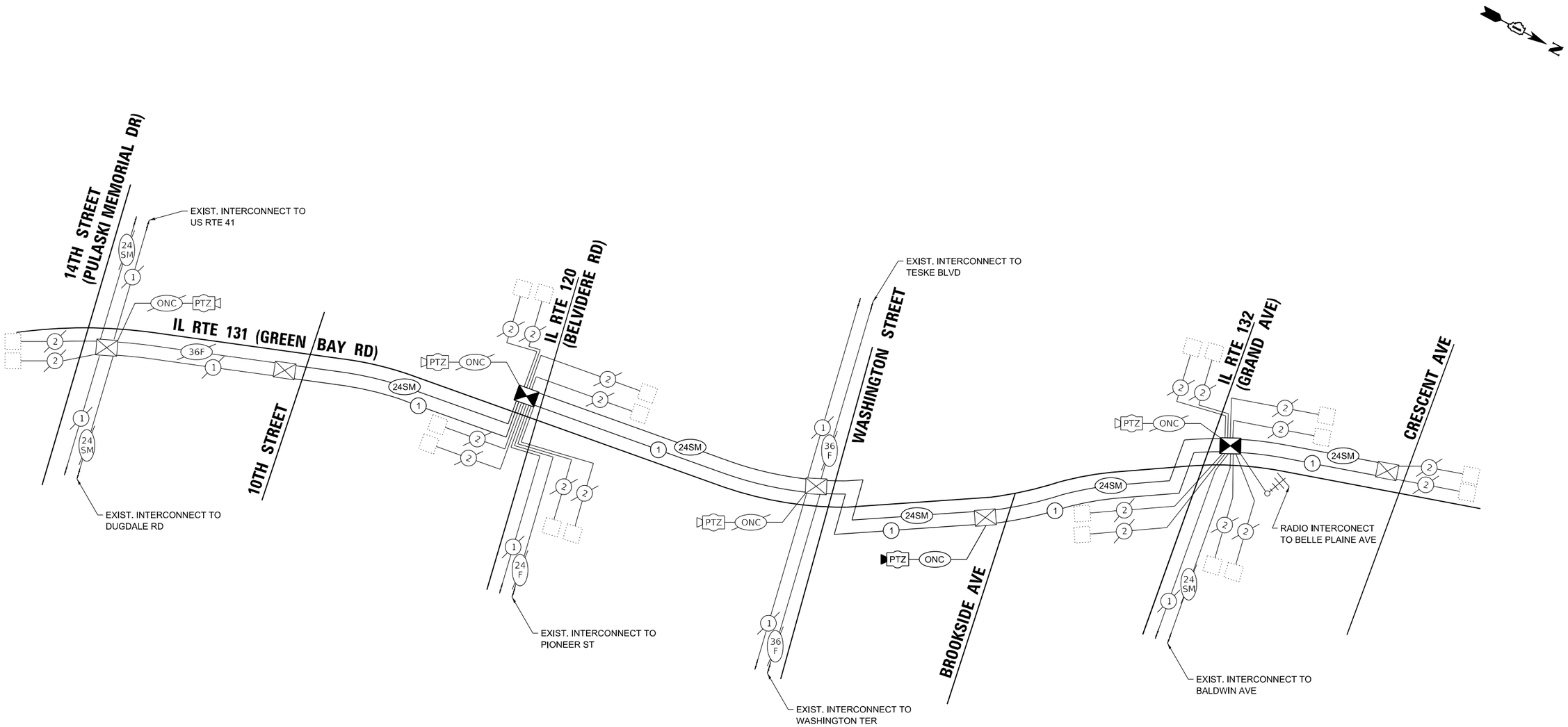
FORMER EAGLE 4P
LAKE COUNTY TACTICS

TS SHT NO. 200

FILE NAME: MX: 20193 CHIL18-03-5500 IDOT_PTB_190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_65_Eagle4P.dgn

TYLin	USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INTERCONNECT PLAN US RTE 131 – 14TH ST/PULASKI MEMORIAL DR TO CRESCENT AVE
		DRAWN - KATHLEEN MURPHY	REVISED -		
	PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.
	PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -		

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	208
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		



SCHEDULE OF QUANTITIES

	ITEM DESCRIPTION	UNITS	TOTAL QTY
	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	13433
	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	26099
*	ROD AND CLEAN EXISTING CONDUIT	FOOT	11633
	FIBER OPTIC CABLE 24 FIBERS, SINGLE MODE	FOOT	13563
	OPTIMIZE TRAFFIC SIGNAL SYSTEM	EACH	1

* NOMINAL QUANTITY TO BE USED AS NEEDED AND AS APPROVED BY THE ENGINEER

FORMER EAGLE 4P
LAKE COUNTY TACTICS

TS SHT NO. 201

FILE NAME: NH: 2019.3 CNH:18-03-5500 IDOT #TB - 199 - Various Traffic Signal Design\Graphics\WO 203-62W90\CAD\62W90_Sheet_05_Eagle4P.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT SCHEMATIC
US RTE 131 – 14TH ST/PULASKI MEMORIAL DR TO CRESCENT AVE

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	209
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

TS SHT NO. 202

TO LEWIS & SUNSET CD108A
TO WASHINGTON & COUNTY CD116A
TO IL43 & IL137 CD32A
TO WASHINGTON & IL21 CD112A

IL131 & BROOKSIDE: SIGNAL CONTROLLER, INT, NIWOT, NIWOT
IL131 & WASHINGTON TRAFFIC CABINET: SIGNAL CONTROLLER, INT, NIWOT, NIWOT
IL131 & WASHINGTON COMM CABINET: GLC-LH-SM, GLC-LH-SM, GLC-LH-SM, GLC-LH-SM, UPS, REMOTE I/O, POE, VIDEO ENCODER, CISCO 4010, GLC-FE-100LX x7
IL120 & IL131: SIGNAL CONTROLLER, DIGI, VIDEO ENCODER, INT, NIWOT x4, LAYER 2
US41 & 22ND: SIGNAL CONTROLLER, VIDEO ENCODER, INT, NIWOT, NIWOT, LAYER 2
22ND & ABBOTT: SIGNAL CONTROLLER, DETECTOR INT, VIDEO ENCODER, LAYER 2
22ND & L131: SIGNAL CONTROLLER, VIDEO ENCODER, LAYER 2
22ND (MLK) & IL131 (GREEN BAY): SIGNAL CONTROLLER, MMU, UPS, LAYER 2

BLUETOOTH DETECTOR
PTZ
VIDEO DETECTOR x3

TO IL132 & IL131 CD88 B
TO IL120 & PIONEER CD88 D
TO IL120 & LEWIS CD108 B
TO US41 & WASHINGTON CD88B
TO IL132 & IL131 CD88B
TO WASHINGTON & KELLER CD88C
TO WASHINGTON & THERESE CD88C
TO 33RD / SHERIDAN CD88 D
TO US41 & IL137 CD32A

IL131 & 10TH: NIWOT, NIWOT, INT, SIGNAL CONTROLLER
US41 & 14TH: LAYER 2, POE, IP CAMERA
IL131 & 14TH: NIWOT, INT, SIGNAL CONTROLLER, LAYER 2, POE, IP PTZ, DETECTOR INT, RADAR DETECTOR x2
DUGDALE & 14TH: LAYER 2, POE, IP PTZ
JACKSON & 14TH: LAYER 2, POE, IP PTZ, DETECTOR INT, SIGNAL CONTROLLER, VIDEO DETECTOR x4
US41 & AMHURST: NIWOT, INT, SIGNAL CONTROLLER
22ND & LEWIS: LAYER 2, VIDEO ENCODER, DETECTOR INT, SIGNAL CONTROLLER, PTZ, VIDEO DETECTOR x4
LEWIS / ARGONNE: LAYER 2, POE, SIGNAL CONTROLLER, UPS, COHU IP PTZ, VIDEO DETECTOR x4
22ND & COMMONWEALTH: LAYER 2, VIDEO ENCODER, DETECTOR INT, SIGNAL CONTROLLER, PTZ, VIDEO DETECTOR x4

EXISTING

FORMER EAGLE 4P
LAKE COUNTY TACTICS

FILE NAME: mp 2019.3 CHI18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203 #2W90\CAD\62W90_Sheet_03_Eag4P.dgn

PARSONS

USER NAME = erica.salutz	DESIGNED - RL / DG	REVISED -	
	DRAWN - RL / DG	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - RL / DG	REVISED -	
PLOT DATE = 3/30/2025	DATE - 2025.02.20	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIBER SPLICE DIAGRAM
US RTE 131 – 14TH ST/PULASKI MEMORIAL DR TO CRESCENT AVE

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	210
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

TO LEWIS & SUNSET CD108A

TO WASHINGTON & COUNTY CD116A

TO IL43 & IL137 CD32A

TO WASHINGTON & IL21 CD112A

IL131 & WASHINGTON TRAFFIC CABINET

SIGNAL CONTROLLER

IL131 & WASHINGTON COMM CABINET

GLC-LH-SM

GLC-LH-SM

GLC-LH-SM

GLC-LH-SM

UPS

REMOTE I/O

POE

VIDEO ENCODER

BLUETOOTH DETECTOR

PTZ

CISCO 4010

GLC-FE-100LX

GLC-FE-100LX

GLC-FE-100LX

GLC-FE-100LX

GLC-FE-100LX

GLC-FE-100LX

GLC-FE-100LX

GLC-FE-100LX

TO IL131 / BROOKSIDE CD88 B

TO IL120 & PIONEER CD88 D

TO IL120 & LEWIS CD108 B

TO US41 E & WASHINGTON CD88B

TO IL132 & MCAREE CD88B

TO WASHINGTON & KELLER CD88C

TO WASHINGTON & THERESE CD88C

TO 33RD / SHERIDAN CD88 D

IL120 & IL131

DIGI

INT

NIWOT

NIWOT

SIGNAL CONTROLLER

VIDEO ENCODER

LAYER 2

PTZ

US41 & 22ND

SIGNAL CONTROLLER

INT

NIWOT

NIWOT

VIDEO ENCODER

LAYER 2

PTZ

22ND & ABBOTT

SIGNAL CONTROLLER

DETECTOR INT

VIDEO ENCODER

LAYER 2

VIDEO DETECTOR

VIDEO DETECTOR

VIDEO DETECTOR

PTZ

22ND & L131

SIGNAL CONTROLLER

VIDEO ENCODER

LAYER 2

PTZ

22ND (MLK) & IL131 (GREEN BAY)

SIGNAL CONTROLLER

MMU

UPS

LAYER 2

TO US41 & IL137 CD32A

IL131 & 10TH

LAYER 2

SIGNAL CONTROLLER

US41 & 14TH

LAYER 2

POE

IP CAMERA

IL131 & 14TH

LAYER 2

POE

DETECTOR INT

SIGNAL CONTROLLER

IP PTZ

RADAR DETECTOR

RADAR DETECTOR

DUGDALE & 14TH

LAYER 2

POE

IP PTZ

JACKSON & 14TH

LAYER 2

POE

DETECTOR INT

SIGNAL CONTROLLER

IP PTZ

VIDEO DETECTOR

VIDEO DETECTOR

VIDEO DETECTOR

VIDEO DETECTOR

US41 & AMHURST

NIWOT

INT

SIGNAL CONTROLLER

22ND & LEWIS

LAYER 2

VIDEO ENCODER

DETECTOR INT

SIGNAL CONTROLLER

PTZ

VIDEO DETECTOR

VIDEO DETECTOR

VIDEO DETECTOR

VIDEO DETECTOR

LEWIS / ARGONNE

LAYER 2

POE

SIGNAL CONTROLLER

UPS

COHU IP PTZ

22ND & COMMONWEALTH

LAYER 2

VIDEO ENCODER

DETECTOR INT

SIGNAL CONTROLLER

PTZ

VIDEO DETECTOR

VIDEO DETECTOR

VIDEO DETECTOR

VIDEO DETECTOR

PROPOSED

FORMER EAGLE 4P

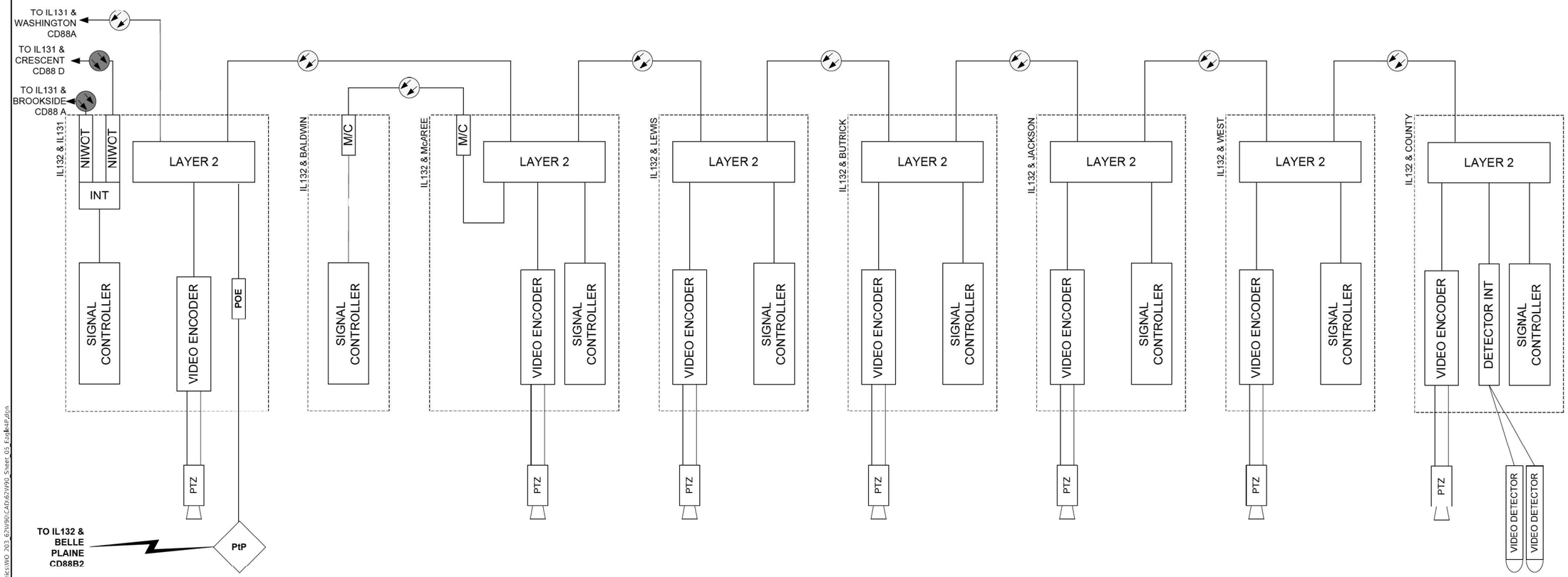
LAKE COUNTY TACTICS

TS SHT NO. 203

FILE NAME: NH: 20190.3 CMN:18-03-5500 IDOT - PTB - 199 - Various Traffic Signal Design Graphics WO 203- 62W90 CAD\62W90_Sheet_05_Eagle4P.dgn

PARSONS	USER NAME = erica.salutz	DESIGNED - RL / DG	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CABINET DETAIL US RTE 131 – 14TH ST/PULASKI MEMORIAL DR TO CRESCENT AVE
		DRAWN - RL / DG	REVISED -		
	PLOT SCALE = 40.0000 ' / in.	CHECKED - RL / DG	REVISED -		
	PLOT DATE = 3/30/2025	DATE - 2025.02.20	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	211
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		



EXISTING

FORMER EAGLE 4P

LAKE COUNTY TACTICS

TS SHT NO. 204

FILE NAME: M:\2019\3 CMN\18-03-5500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203 62W90\CAD\62W90_Sheet_05_Eagle4P.dgn

PARSONS

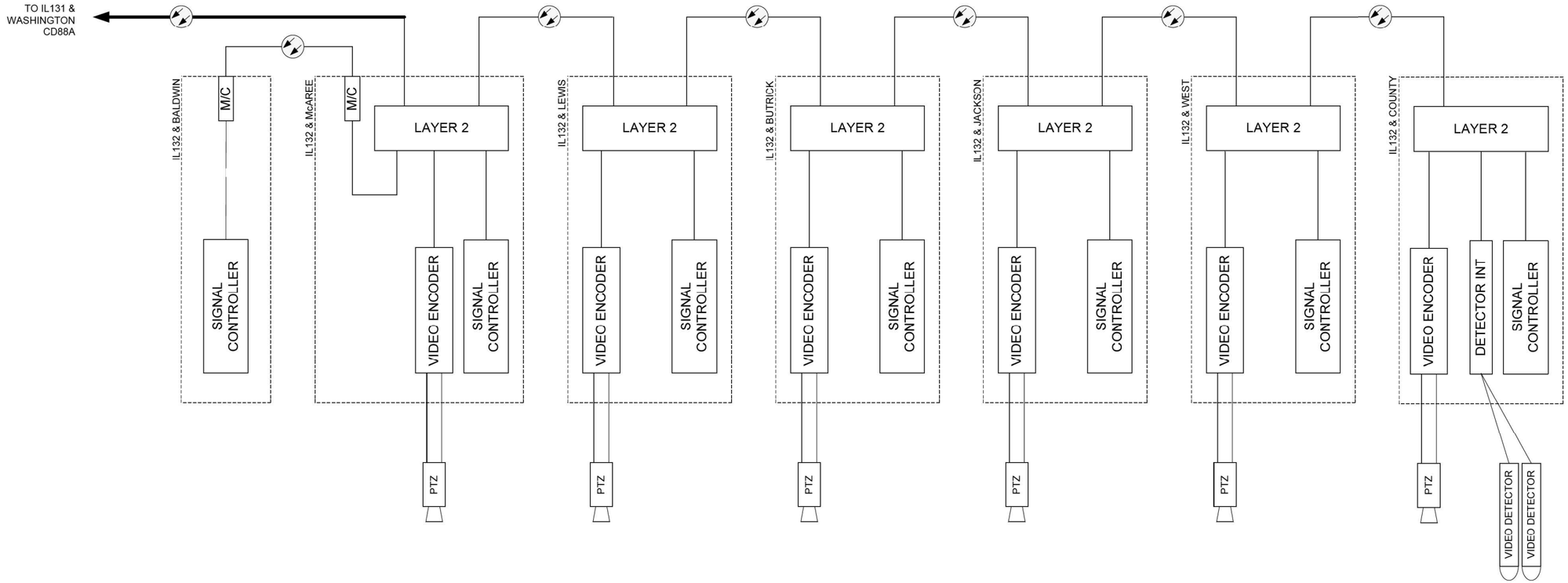
USER NAME = erica.salutz	DESIGNED - RL / DG	REVISED -	
	DRAWN - RL / DG	REVISED -	
PLOT SCALE = 40.0001 ' / in.	CHECKED - RL / DG	REVISED -	
PLOT DATE = 3/30/2025	DATE - 2025.02.20	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABINET DETAIL
US RTE 131 – 14TH ST/PULASKI MEMORIAL DR TO CRESCENT AVE

SCALE: | SHEET OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	212
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			



PROPOSED

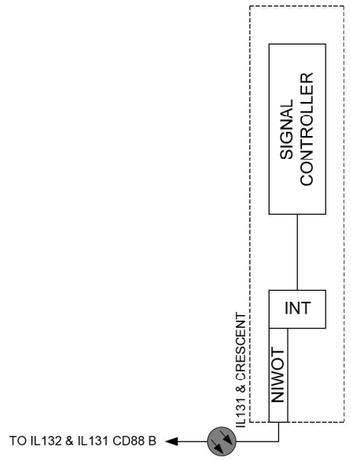
FORMER EAGLE 4P
LAKE COUNTY TACTICS

TS SHT NO. 205

FILE NAME: Mo 2019.3 CHI18-03-5500 IDOT_PTB 190 - Various Traffic Signal Design\Graphics\WO 203 #2W90\CAD\62W90_Sheet_03_Eagle4P.dgn

PARSONS	USER NAME = erica.salutz	DESIGNED - RL / DG	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**CABINET DETAIL** US RTE 131 – 14TH ST/PULASKI MEMORIAL DR TO CRESCENT AVE
		DRAWN - RL / DG	REVISED -		
	PLOT SCALE = 40.0001 ' / in.	CHECKED - RL / DG	REVISED -		
	PLOT DATE = 3/30/2025	DATE - 2025.02.20	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	213
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		



TS SHT NO. 206

FILE NAME: Mst-20193 CHI:18-03-5500 IDOT_PTB_190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_EqpMntPat.dgn

EXISTING

FORMER EAGLE 4P

LAKE COUNTY TACTICS

PARSONS

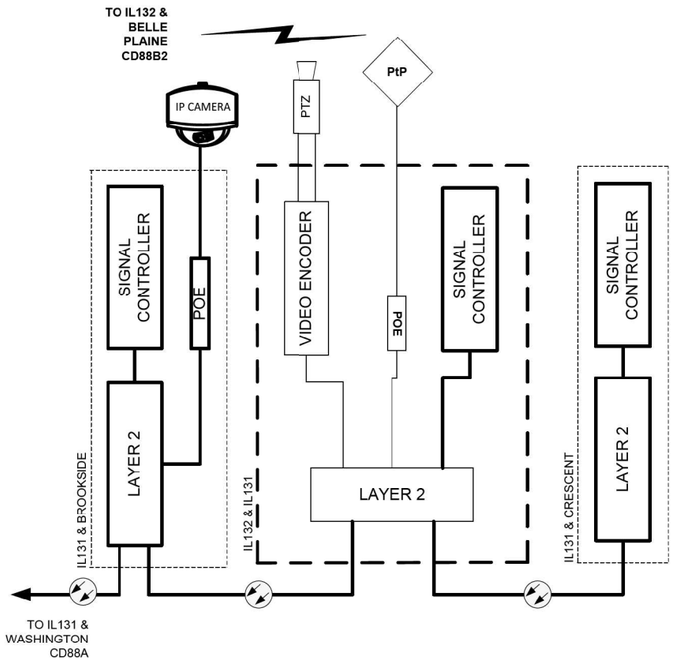
USER NAME = erica.salatz	DESIGNED - RL / DG	REVISED -	
	DRAWN - RL / DG	REVISED -	
PLOT SCALE = 40.0001 ' / in.	CHECKED - RL / DG	REVISED -	
PLOT DATE = 3/30/2025	DATE - 2025.02.20	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABINET DETAIL
US RTE 131 – 14TH ST/PULASKI MEMORIAL DR TO CRESCENT AVE

SCALE: | SHEET OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	214
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		



TS SHT NO. 207

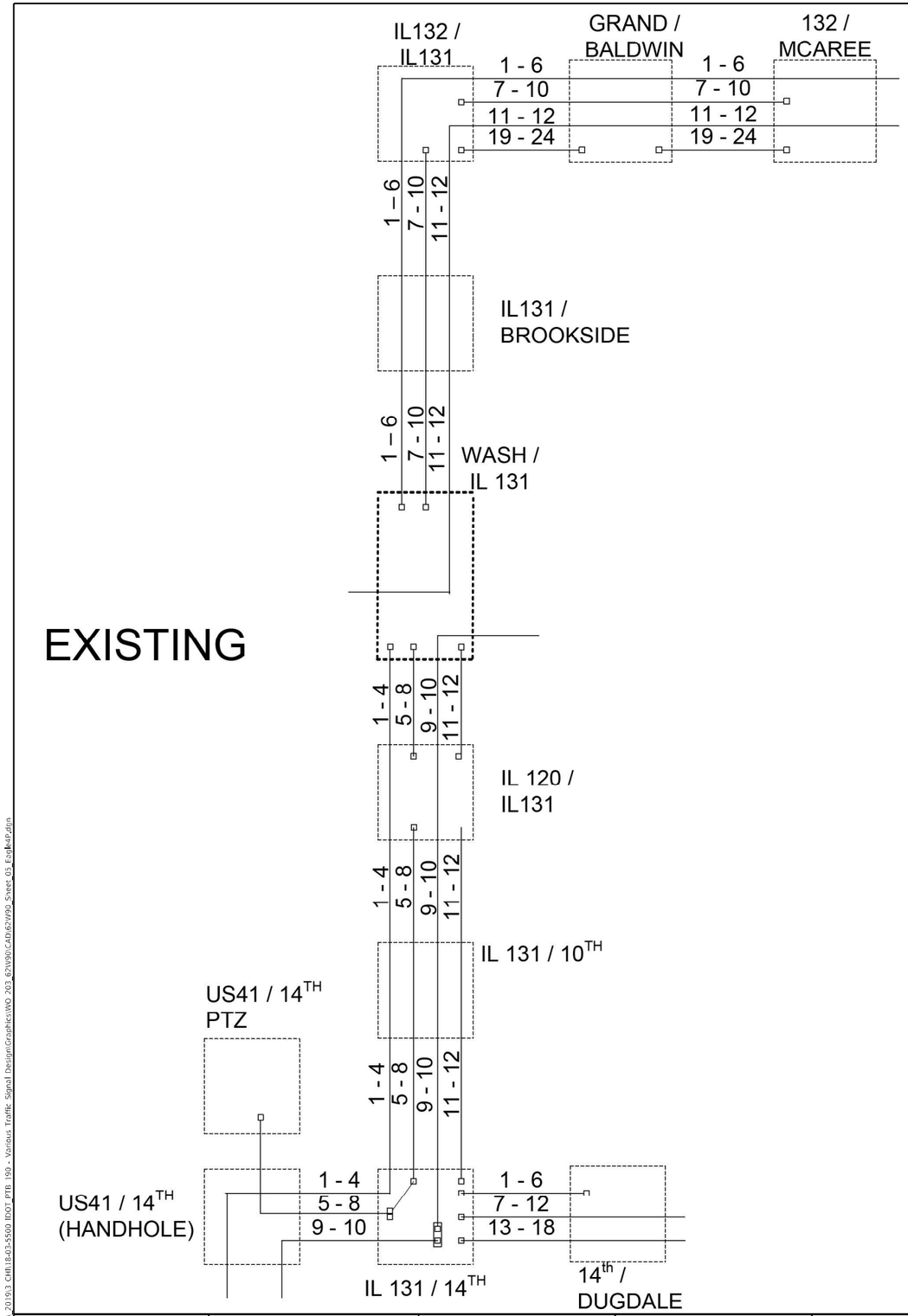
PROPOSED

FORMER EAGLE 4P
LAKE COUNTY TACTICS

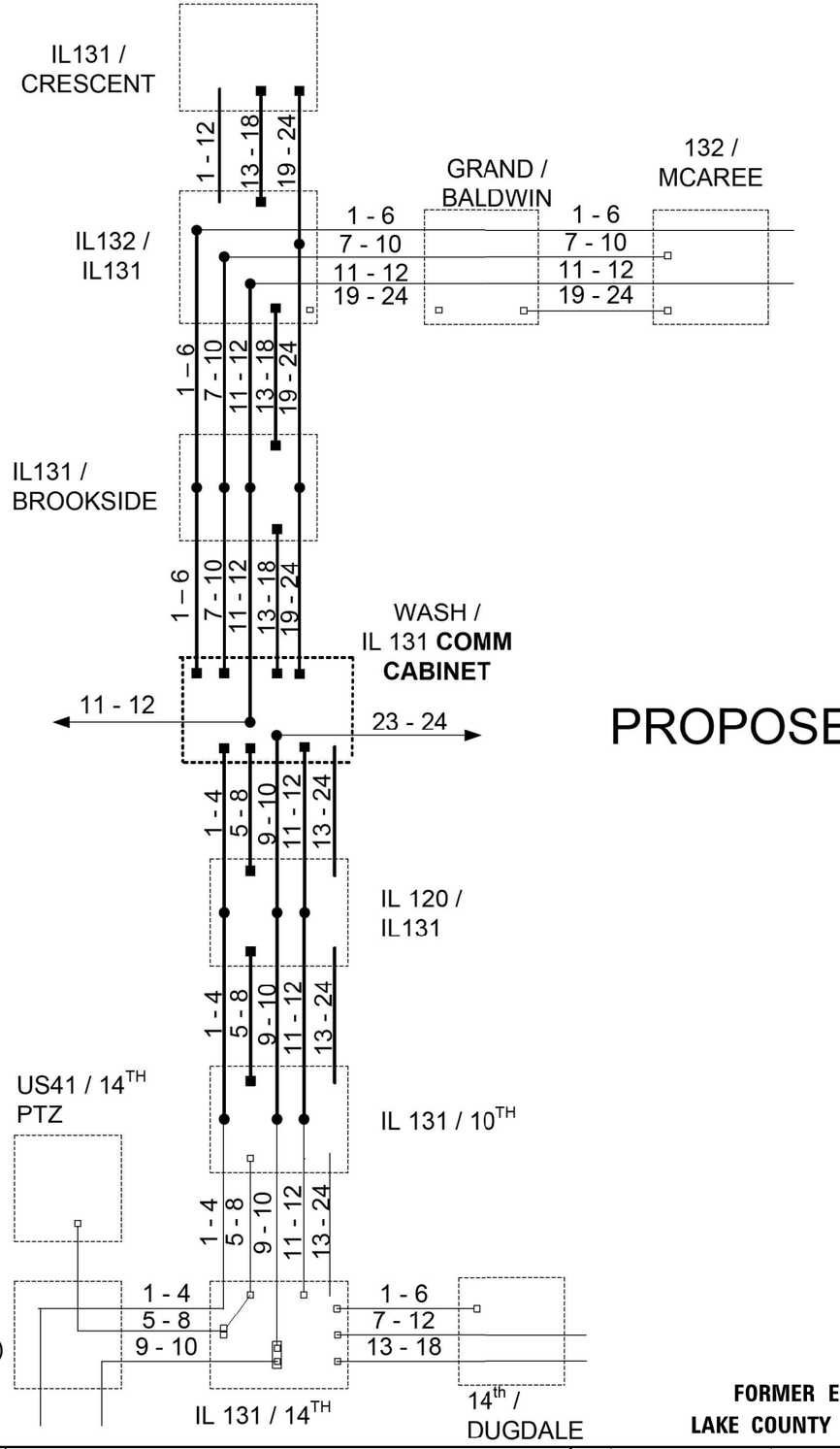
PARSONS	USER NAME = erica.salatz	DESIGNED - RL / DG	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CABINET DETAIL US RTE 131 – 14TH ST/PULASKI MEMORIAL DR TO CRESCENT AVE
		DRAWN - RL / DG	REVISED -		
	PLOT SCALE = 40.0001 ' / in.	CHECKED - RL / DG	REVISED -		
	PLOT DATE = 3/30/2025	DATE - 2025.02.20	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	215
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

FILE NAME: Mst_20193_CMH_8-03-5500_IDOT_PTB_190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_EagleP.dgn



EXISTING



PROPOSED

TS SHT NO. 208

FILE NAME: MS_20193 CHI(1403-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_GS_Eagle4P.dgn

FORMER EAGLE 4P
LAKE COUNTY TACTICS

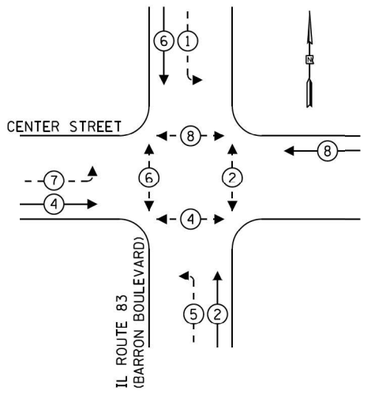
PARSONS	USER NAME = erica.salutz	DESIGNED - RL / DG	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		DRAWN - RL / DG	REVISED -	
	PLOT SCALE = 40.0000 ' / in.	CHECKED - RL / DG	REVISED -	
	PLOT DATE = 3/30/2025	DATE - 2025.02.20	REVISED -	

CABINET DETAIL
US RTE 131 – 14TH ST/PULASKI MEMORIAL DR TO CRESCENT AVE

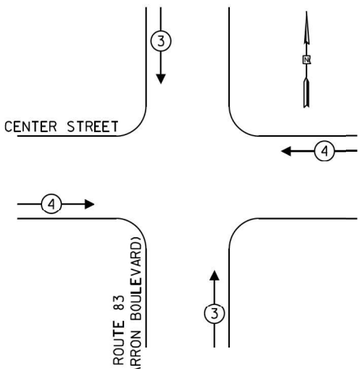
SCALE: | SHEET OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	216
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

EXISTING CONTROLLER SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



LEGEND:

- PROTECTED PHASE
- PROTECTED/PERMITTED PHASE
- PEDESTRIAN PHASE
- OVERLAP

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	5	11	55
4 - SECTION	-	14	-
5 - SECTION	6	13	78
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	8	15	120
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			463
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	-
PTZ CAMERA	1	75	75
TOTAL SERVICE WIRE SIZING =			1143

ENERGY COSTS TO:
ILLINOIS DEPT OF TRANSPORTATION
201 CENTER CT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

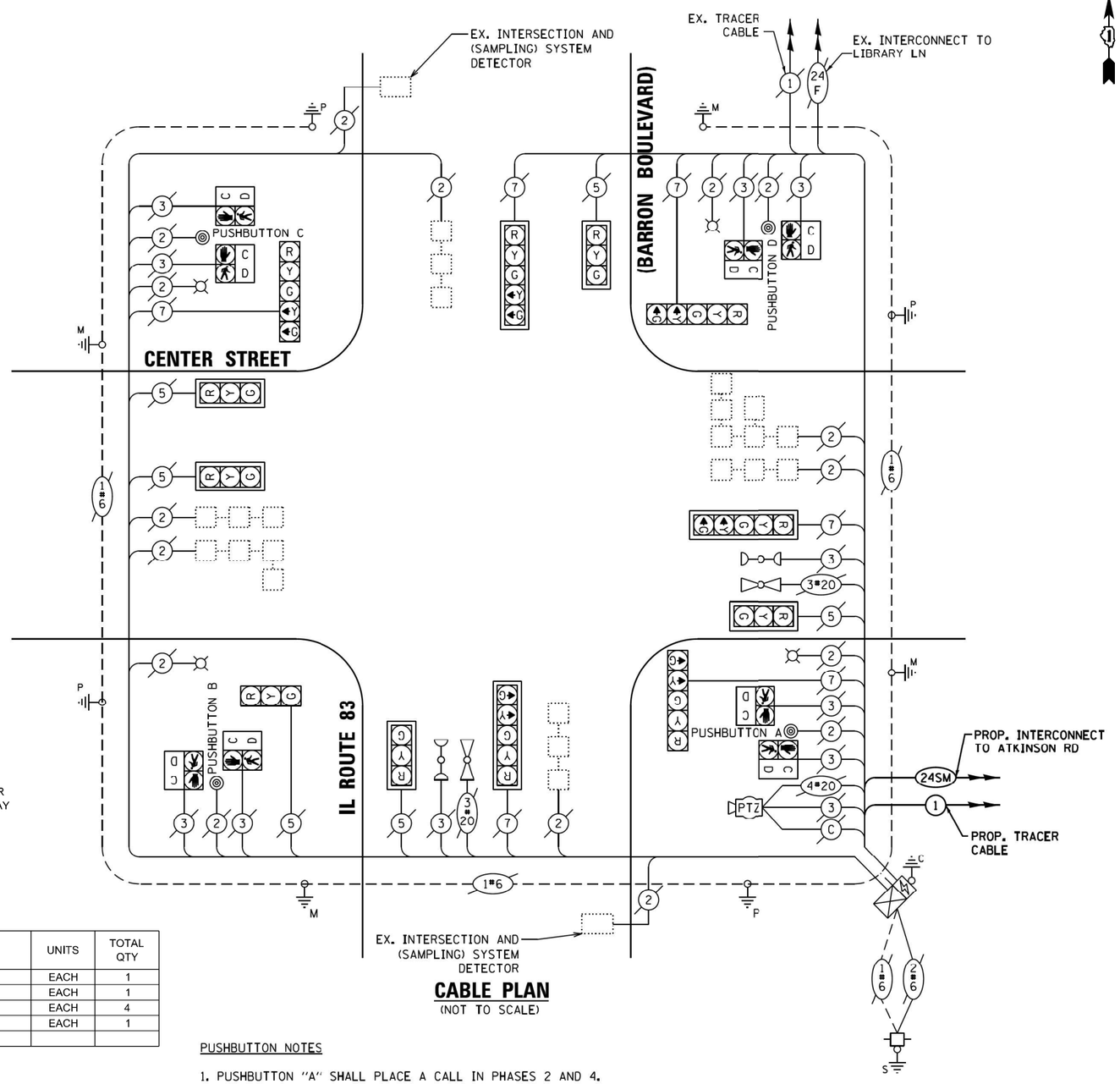
REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
TERMINATE FIBER IN CABINET	EACH	4
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1



CABLE PLAN
(NOT TO SCALE)

PUSHBUTTON NOTES

1. PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4.
2. PUSHBUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6.
3. PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8.
4. PUSHBUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8.

TS 13740
FORMER EAGLE 70
LAKE COUNTY TACTICS

TS SHT NO. 209

FILE NAME: ms: 20193 CHI\18-03-5500 ITOO1 PTB 199 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90 Sheet 05 Eagle70.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

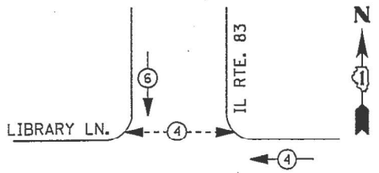
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 94 – IL RTE 83 AT CENTER ST

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	217
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

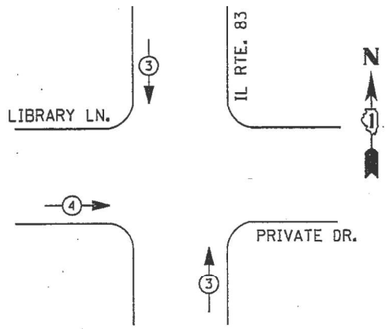
CONTROLLER SEQUENCE



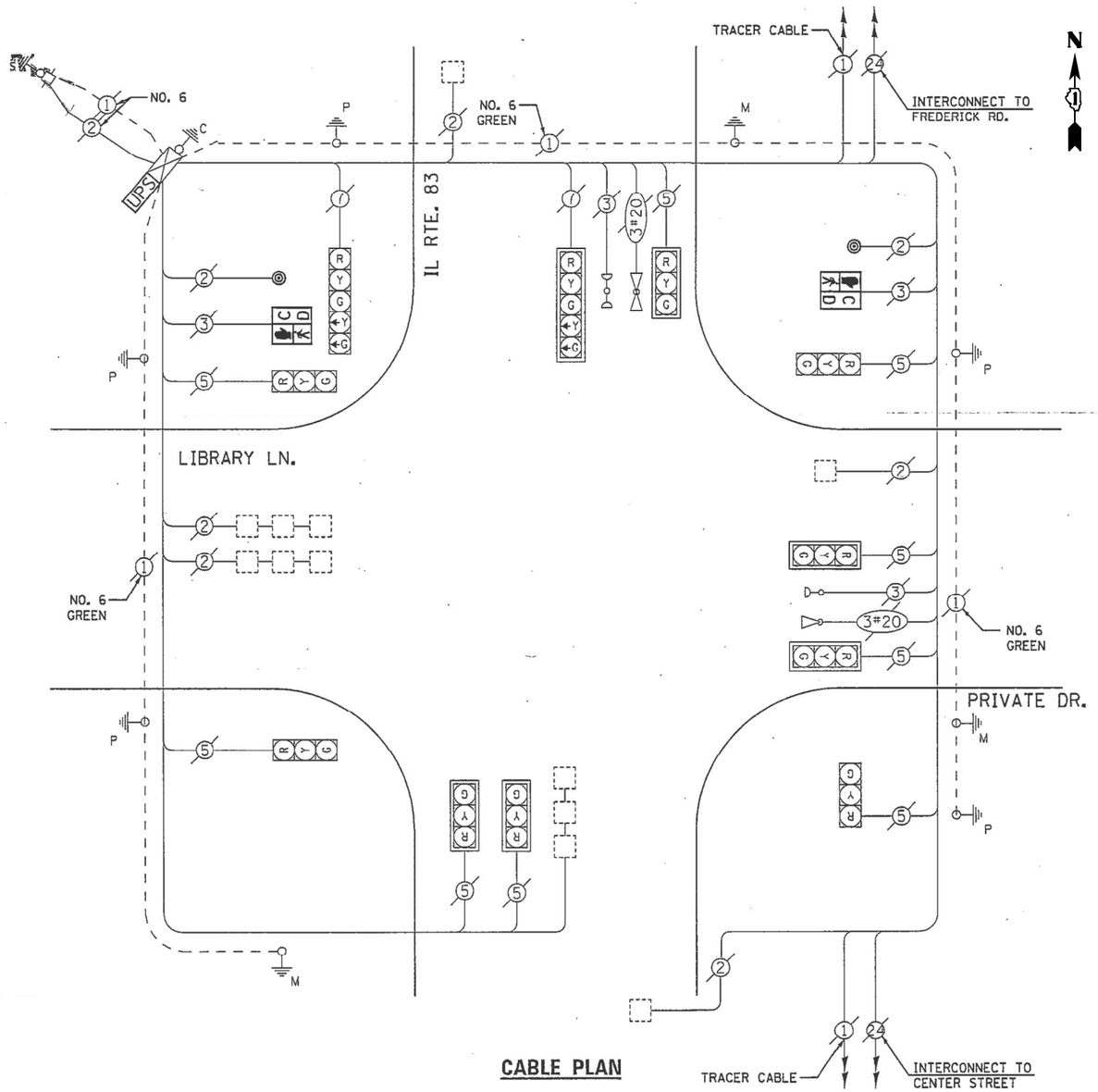
LEGEND

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

PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTION SEQUENCE



CABLE PLAN

REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	9	11	99
4 - SECTION	-	14	-
5 - SECTION	2	13	26
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	2	15	30
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			365
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			970

ENERGY COSTS TO:
VILLAGE OF GRAYSLAKE
10 SOUTH SEYMOUR AVE
GRAYSLAKE, IL 60030

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
TERMINATE FIBER IN CABINET	EACH	8
SPLICE FIBER IN CABINET	EACH	4
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1

TS 13739
FORMER EAGLE 70
LAKE COUNTY TACTICS

TS SHT NO. 210

FILE NAME: M:\2019\3 CMI\18-43-5500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203 - 62W90\CAD\62W90_Sheet_03_Eagle70.dgn

TYLin

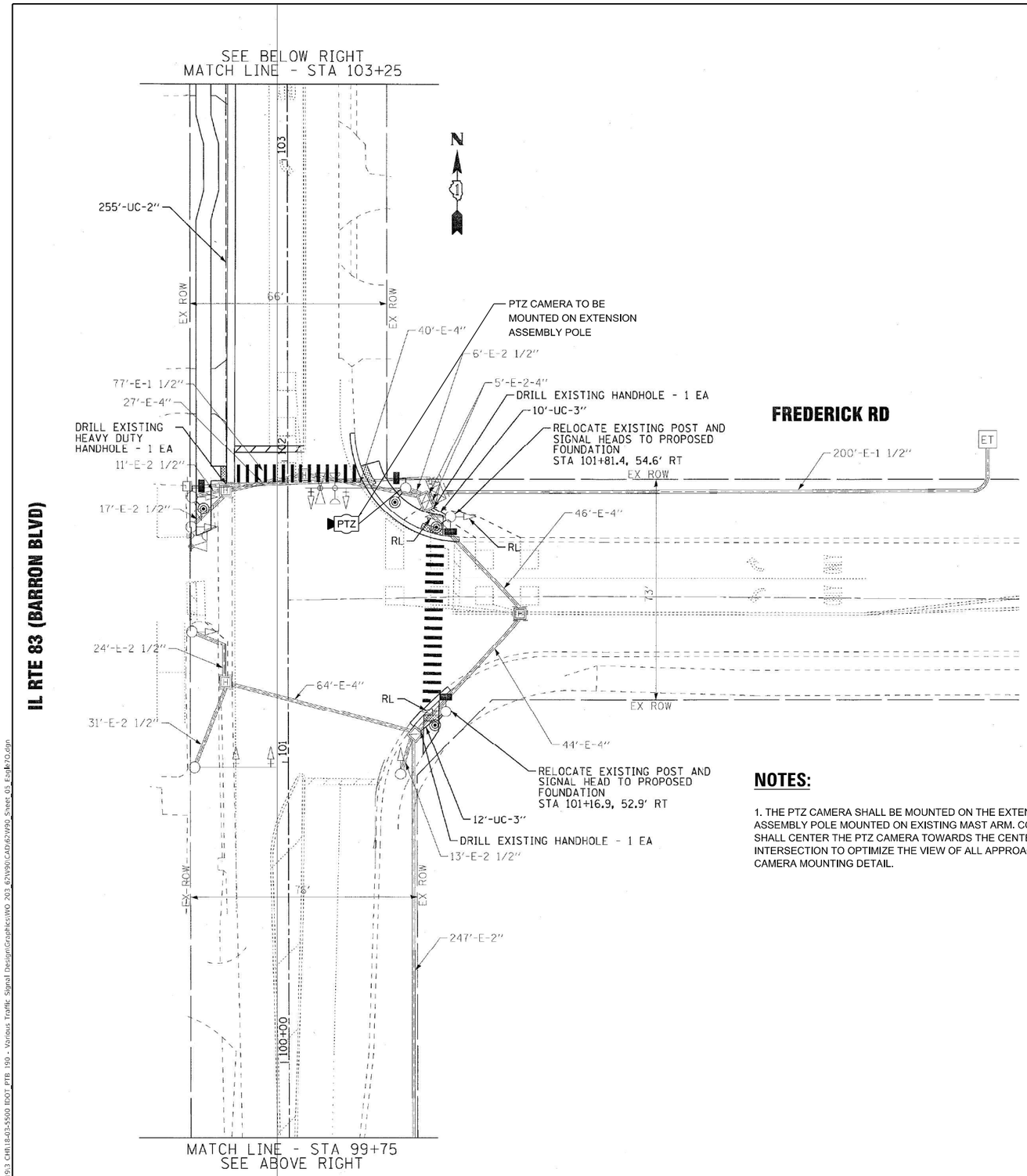
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

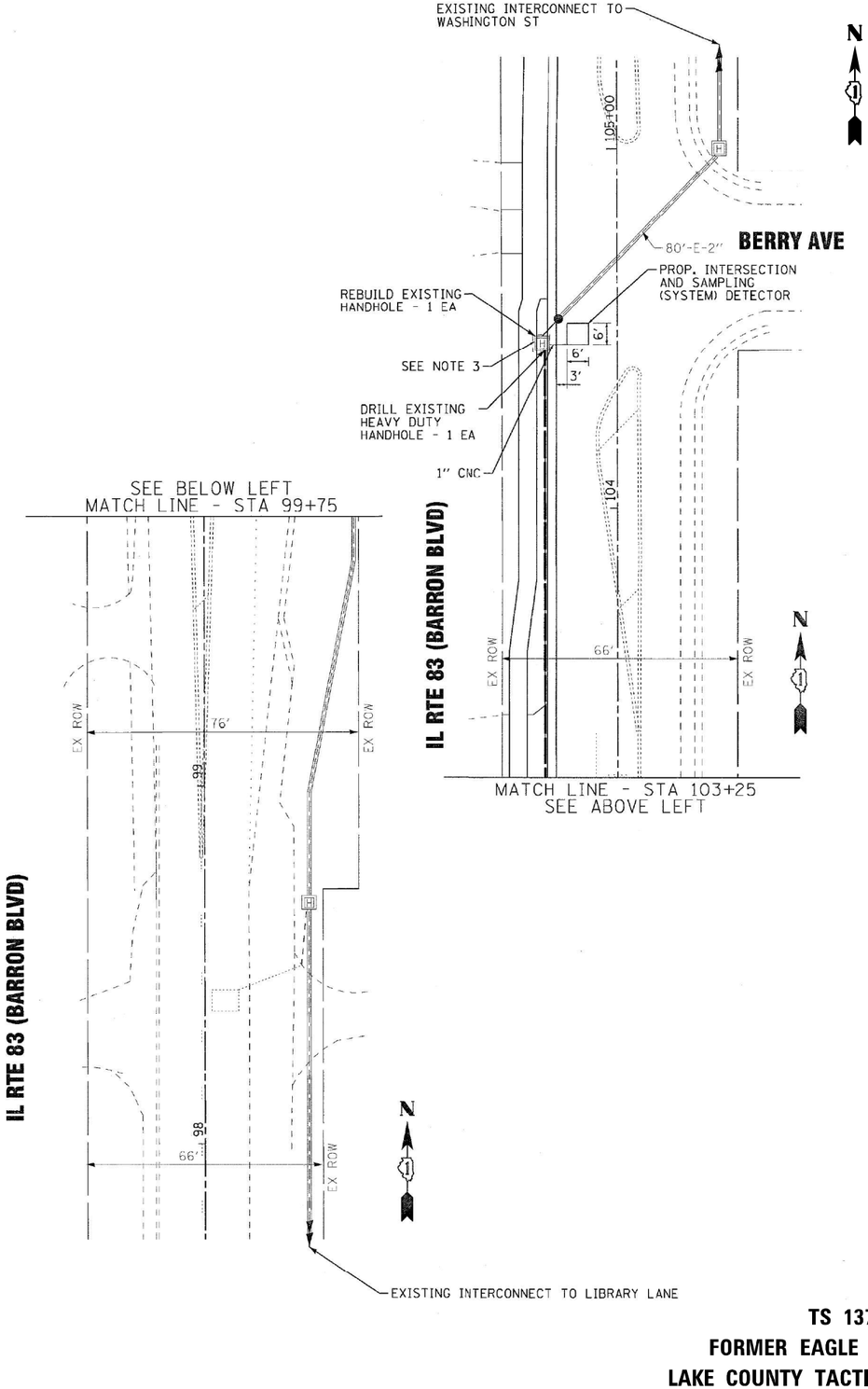
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 95 – IL RTE 83 AT LIBRARY LN

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	218
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		





NOTES:

1. THE PTZ CAMERA SHALL BE MOUNTED ON THE EXTENSION ASSEMBLY POLE MOUNTED ON EXISTING MAST ARM. CONTRACTOR SHALL CENTER THE PTZ CAMERA TOWARDS THE CENTER OF THE INTERSECTION TO OPTIMIZE THE VIEW OF ALL APPROACHES. SEE CAMERA MOUNTING DETAIL.

TS 13741
FORMER EAGLE 70
LAKE COUNTY TACTICS

TS SHT NO. 211

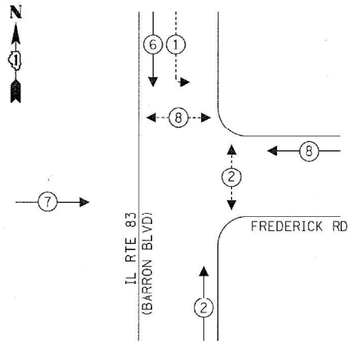
FILE NAME: Mst_20193_CH1.8-03-5500_IDOT_PTB_190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet 05_Eagle70.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED - 05/08/2025	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SIGNAL PLAN LOCATION 96 – IL RTE 83 AT FREDERICK RD
	DRAWN - KATHLEEN MURPHY	REVISED -		
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -		
PLOT DATE = 5/6/2025	DATE - 12/20/2024	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	219
		CONTRACT NO. 62W90		
		ILLINOIS	FED. AID PROJECT	

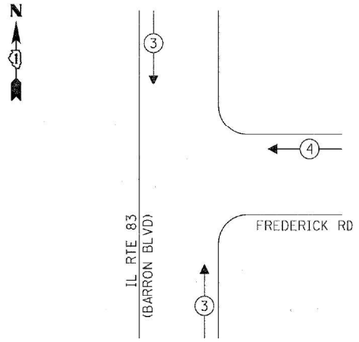
EXISTING CONTROLLER SEQUENCE



LEGEND:

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

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	10	11	110
4 - SECTION	-	14	-
5 - SECTION	2	13	26
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	4	15	60
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			406
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	-
PTZ CAMERA	1	75	75
TOTAL SERVICE WIRE SIZING =			1086

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	79
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
TERMINATE FIBER IN CABINET	EACH	8
Ssplice FIBER IN CABINET	EACH	4
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
CAMERA MOUNTING ASSEMBLY	EACH	1

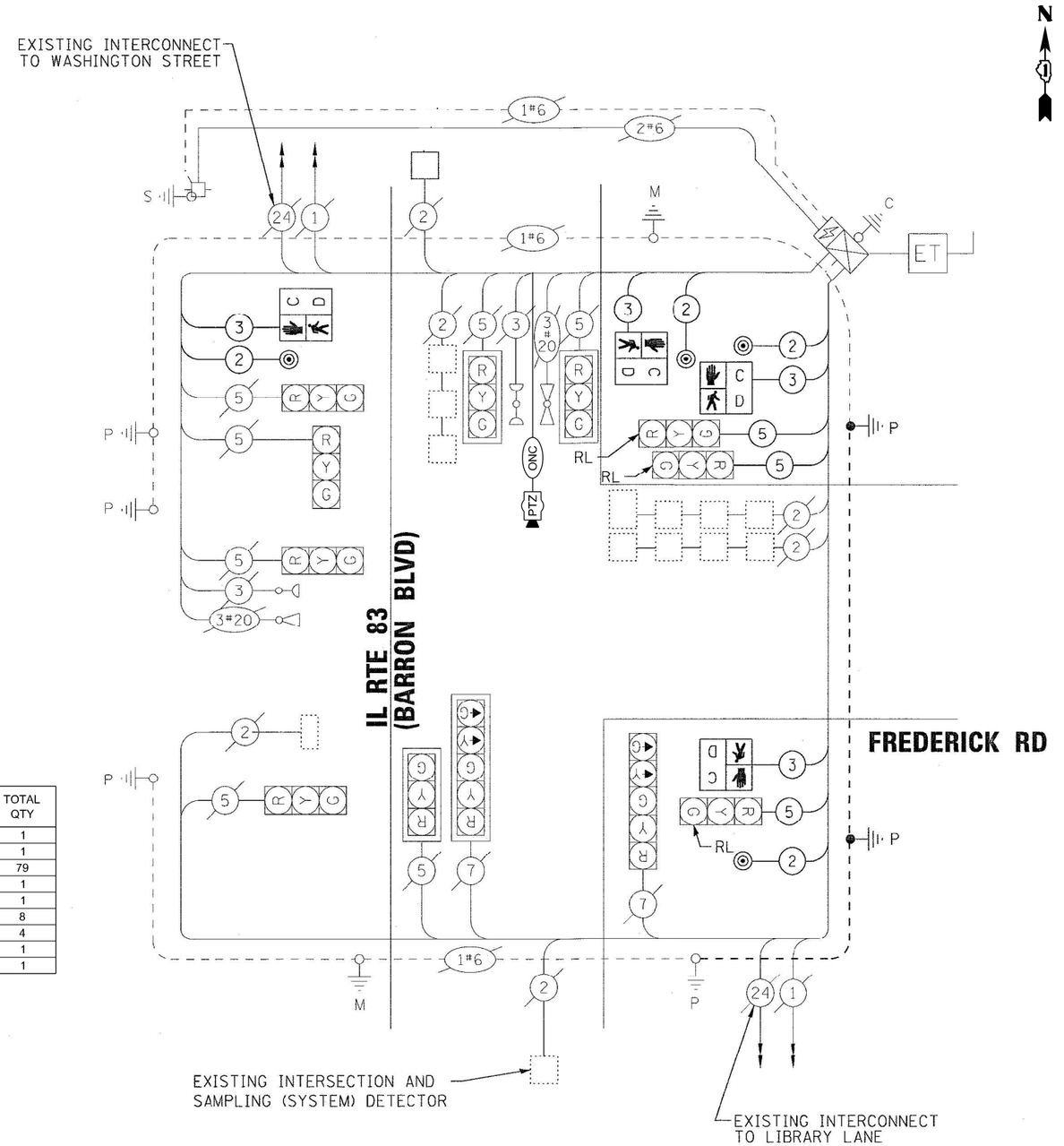
REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER

ENERGY COSTS TO:
VILLAGE OF GRAYSLAKE
10 SOUTH SEYMOUR AVE
GRAYSLAKE, IL 60030

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---



CABLE PLAN

TS 13741
FORMER EAGLE 70
LAKE COUNTY TACTICS

TS SHT NO. 212

FILE NAME: M:\...\Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet 03_Eqlk170.dgn
IDOT PTB 190 - CHI:1-800-5500

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

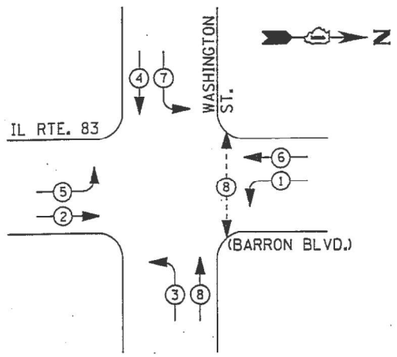
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 96 – IL RTE 83 AT FREDERICK RD

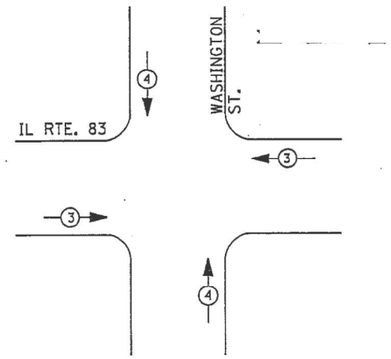
SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	220
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

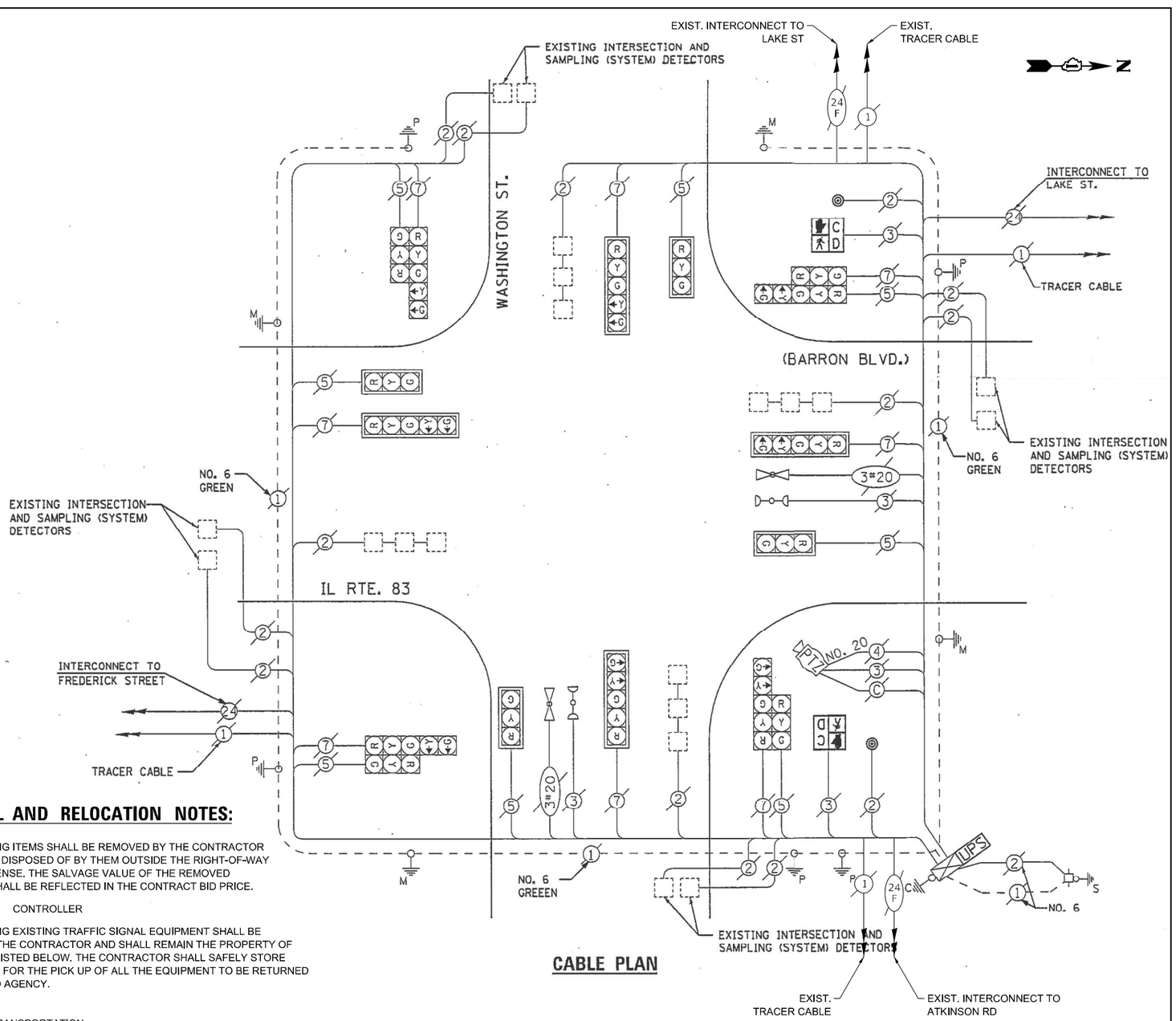
CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTION SEQUENCE



CABLE PLAN

REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER

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

LAKE COUNTY
DIVISION OF TRANSPORTATION
TMC MANAGER
847-377-7000

1 EACH BLUETOAD (COMPLETE)

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
TERMINATE FIBER IN CABINET	EACH	12
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	8	11	88
4 - SECTION	-	14	-
5 - SECTION	8	13	104
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	2	15	30
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			432
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	-
PTZ CAMERA	1	75	75
TOTAL SERVICE WIRE SIZING =			1112

ENERGY COSTS TO:
ILLINOIS DEPT OF TRANSPORTATION
201 CENTER CT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

TS SHT NO. 213

FILE NAME: MX-20193 CHI:18-03-5500 IDOT FTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eagle70.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

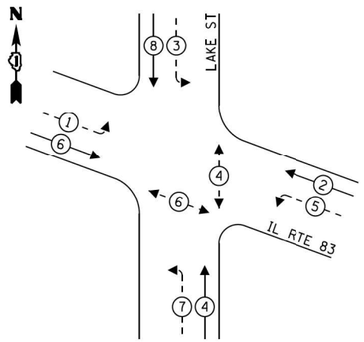
CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 97 – IL RTE 83 AT WASHINGTON ST

SCALE: | SHEET OF SHEETS | STA. | TO STA.

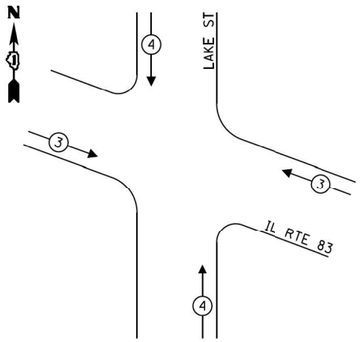
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	221
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

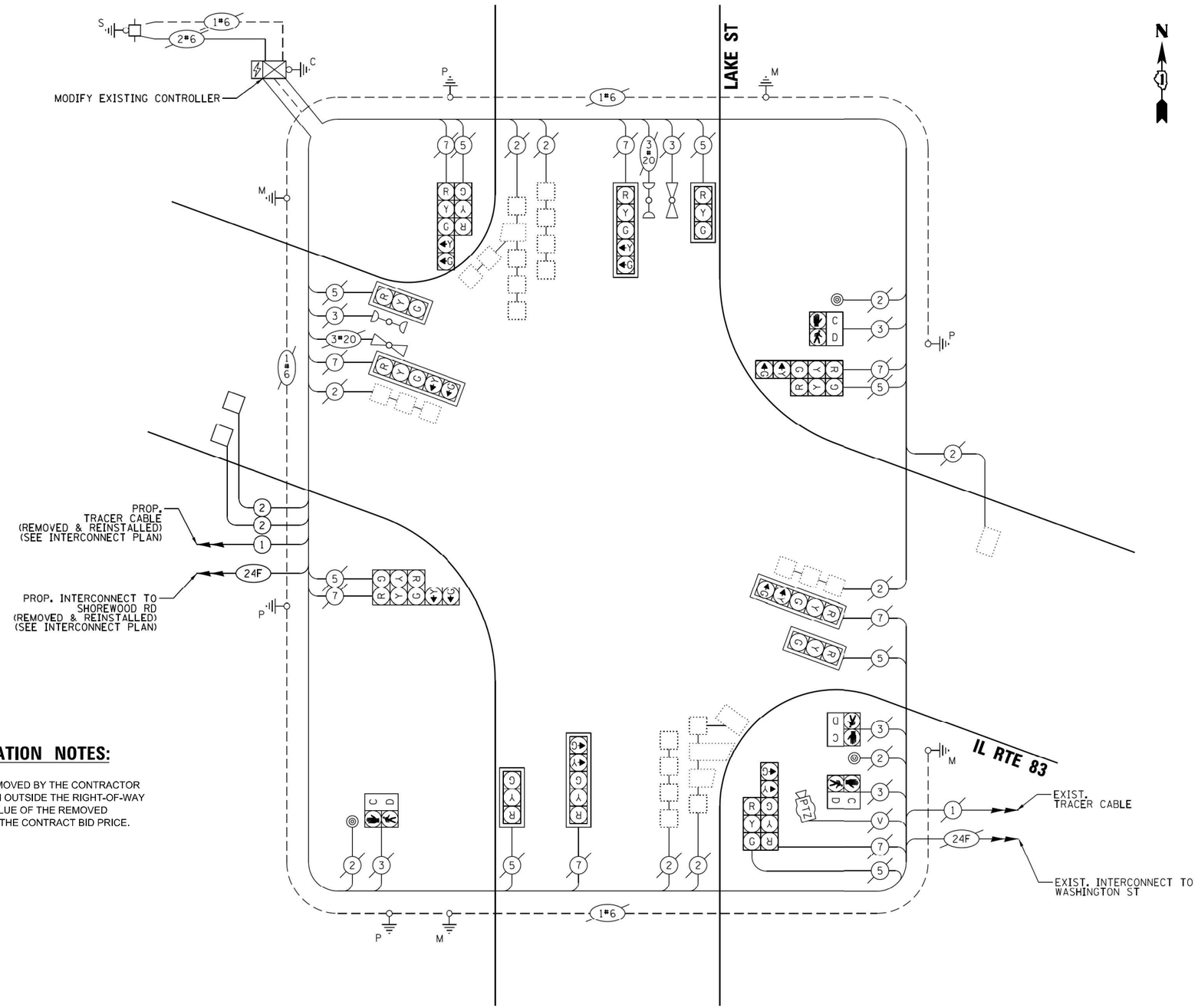
TS 12315
FORMER EAGLE 70
LAKE COUNTY TACTICS

EXISTING CONTROLLER SEQUENCE



EMERGENCY VEHICLE PREEMPTION SEQUENCE





TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	8	11	88
4 - SECTION	-	14	-
5 - SECTION	8	13	104
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	4	15	60
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			462
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	-
PTZ CAMERA	1	75	75
TOTAL SERVICE WIRE SIZING =			1142

ENERGY COSTS TO:
VILLAGE OF GRAYSLAKE
10 SOUTH SEYMOUR AVE
GRAYSLAKE, IL 60030

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
TERMINATE FIBER IN CABINET	EACH	4
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1

CABLE PLAN
(NOT TO SCALE)

TS 21990
FORMER EAGLE 70
LAKE COUNTY TACTICS

TS SHT NO. 214

FILE NAME: M:\...\Various Traffic Signal Design\Graphics\WO 203 #2W90\CAD\62W90_Sheet 03 Eagle70.dgn
10/3 CHH 18-03-5500 IDOT PTB 199

TYLin

USER NAME = erica.salutz		DESIGNED -	ERICA SALUTZ	REVISED -	
		DRAWN -	KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.		CHECKED -	PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025		DATE -	12/20/2024	REVISED -	

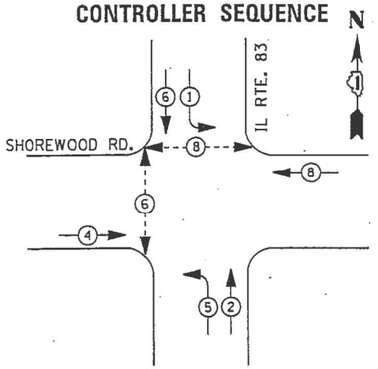
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 98 – IL RTE 83 AT LAKE ST

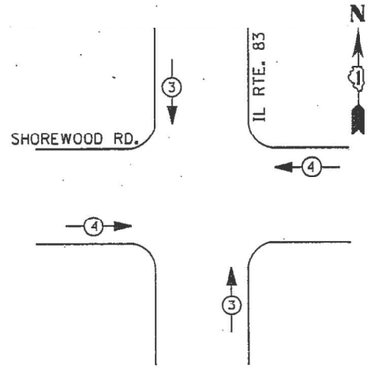
SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	222
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM



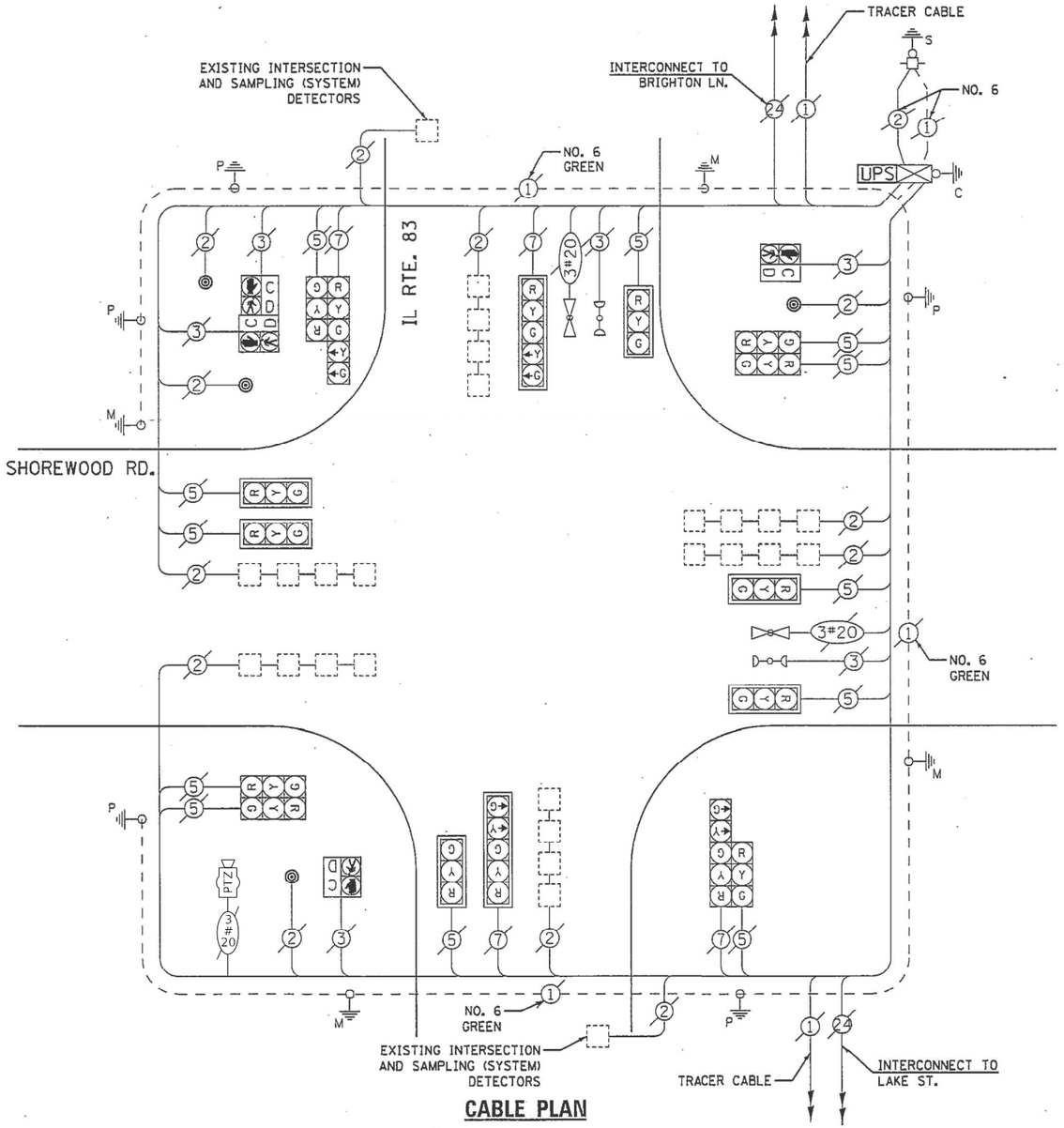
EMERGENCY VEHICLE PREEMPTION SEQUENCE

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	12	11	132
4 - SECTION	-	14	-
5 - SECTION	4	13	52
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	4	15	60
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			454
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	-
PTZ CAMERA	1	75	75
TOTAL SERVICE WIRE SIZING =			1134

ENERGY COSTS TO:
VILLAGE OF GRAYSLAKE
10 SOUTH SEYMOUR AVE
GRAYSLAKE, IL 60030

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---



CABLE PLAN

REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
TERMINATE FIBER IN CABINET	EACH	4
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1

TS 21993
FORMER EAGLE 70
LAKE COUNTY TACTICS

TS SHT NO. 2X5

FILE NAME: MA_20193 CHN:18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90 CAD\62W90_Sheet_05_Eagle70.dgn

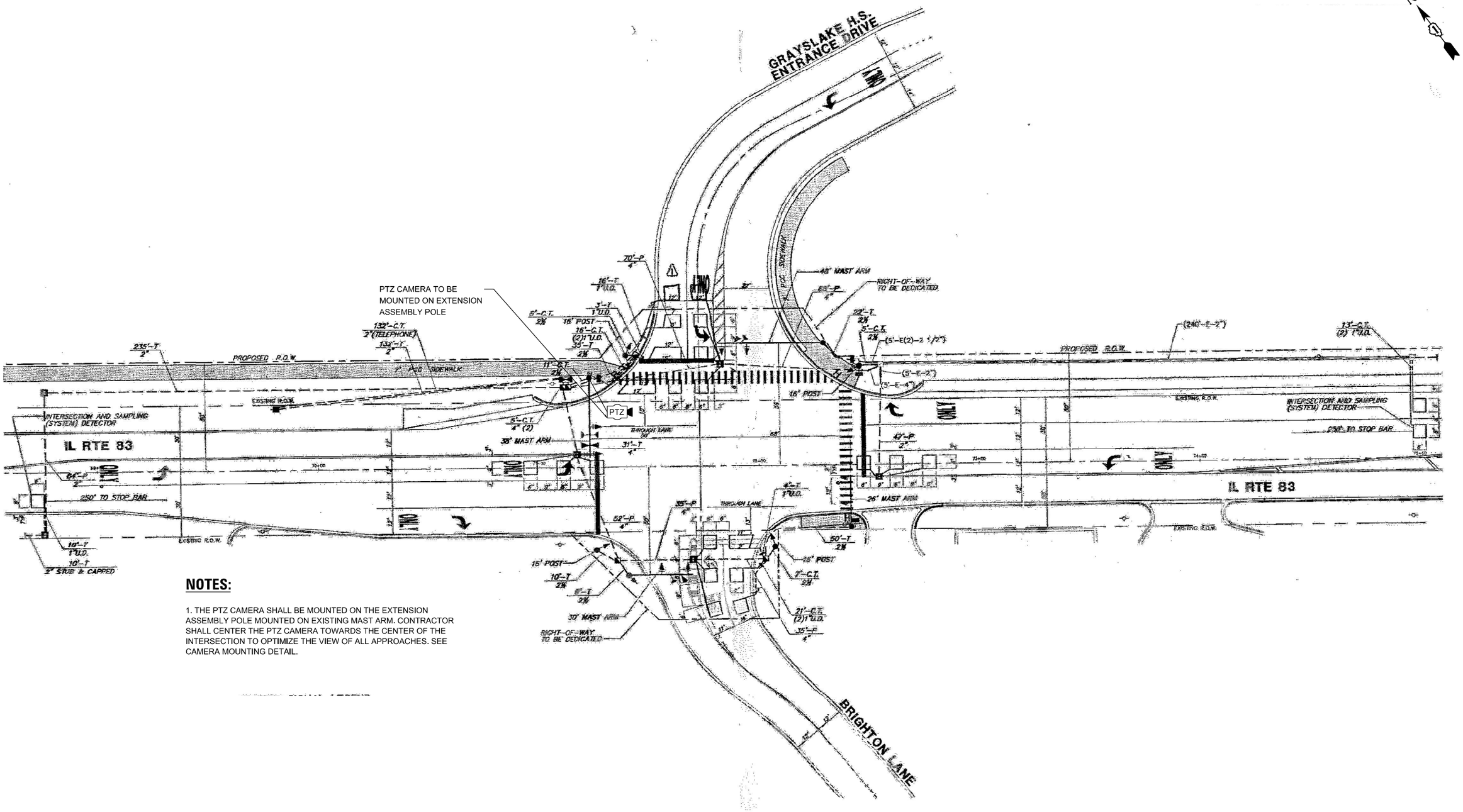
TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 99 – IL RTE 83 AT SHOREWOOD RD
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	223
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			



NOTES:

1. THE PTZ CAMERA SHALL BE MOUNTED ON THE EXTENSION ASSEMBLY POLE MOUNTED ON EXISTING MAST ARM. CONTRACTOR SHALL CENTER THE PTZ CAMERA TOWARDS THE CENTER OF THE INTERSECTION TO OPTIMIZE THE VIEW OF ALL APPROACHES. SEE CAMERA MOUNTING DETAIL.

TS 12317
FORMER EAGLE 70
LAKE COUNTY TACTICS

TS SHT NO. 216

FILE NAME: M:_2019\3 CHI\18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Exist70.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED - 05/08/2025	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 5/6/2025	DATE - 12/20/2024	REVISED -	

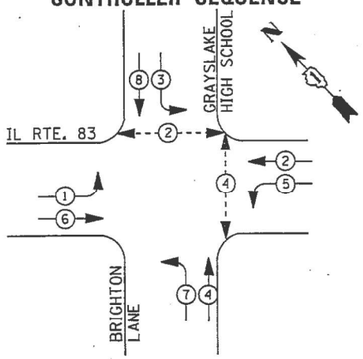
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGNAL PLAN
LOCATION 100 – IL RTE 83 AT BRIGHTON LN /KNIGHT WAY

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	224
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

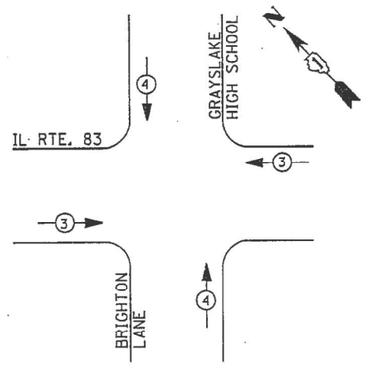
CONTROLLER SEQUENCE



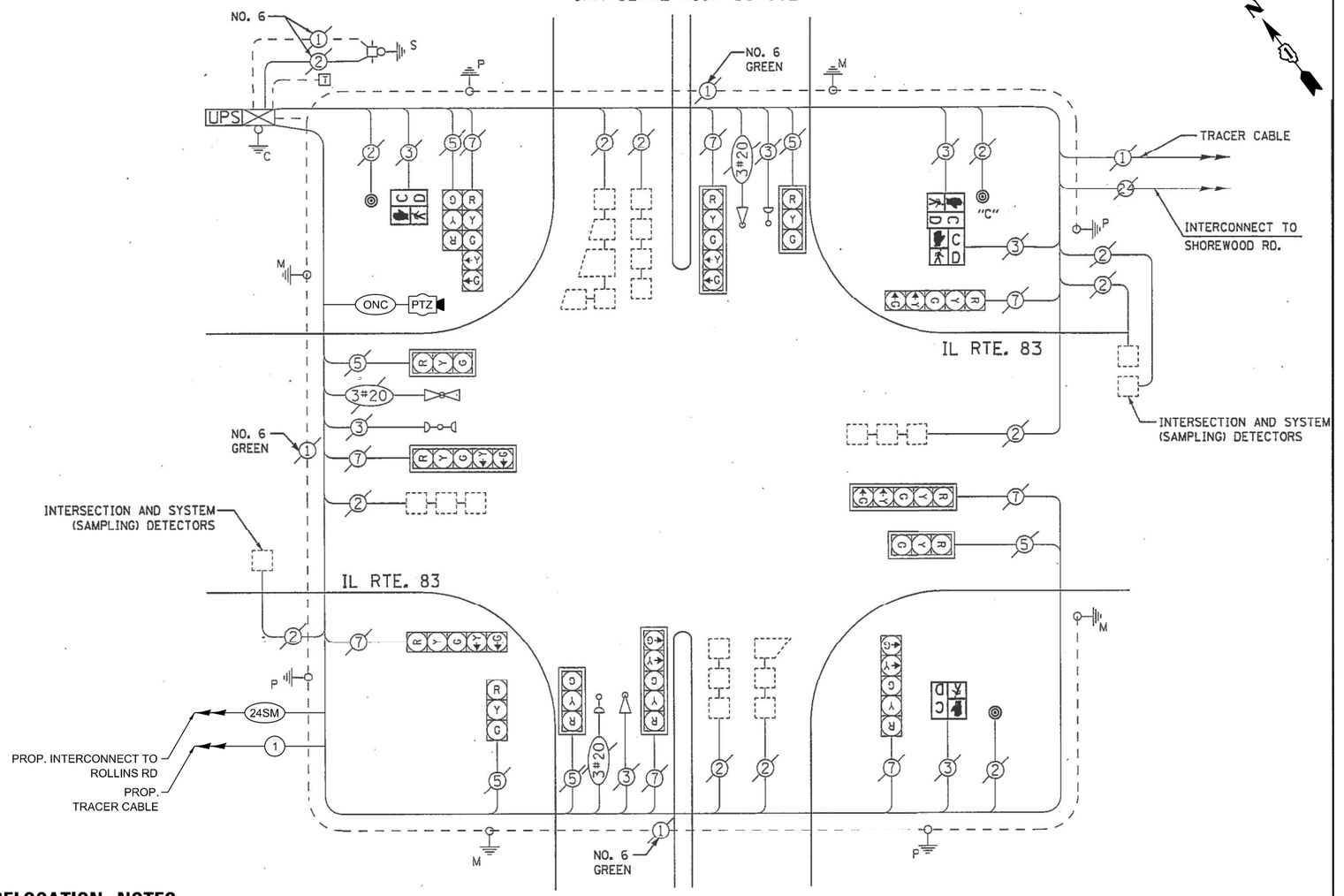
LEGEND

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

PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTION SEQUENCE



CABLE PLAN

NOTES:
PUSH BUTTON "C" SHALL PLACE A CALL IN PHASED 2 AND 4

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	6	11	66
4 - SECTION	-	14	-
5 - SECTION	8	13	104
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	4	15	60
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING =			440
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	-
PTZ CAMERA	1	75	75
TOTAL SERVICE WIRE SIZING =			1120

ENERGY COSTS TO:
VILLAGE OF ROUND LAKE BEACH
1937 N MUNICIPAL WAY
ROUND LAKE BEACH, IL 60073

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER
1 EACH TELEPHONE LINE

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	84
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
TERMINATE FIBER IN CABINET	EACH	8
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
CAMERA MOUNTING ASSEMBLY	EACH	1

TS SHT NO. 217

TS 12317
FORMER EAGLE 70
LAKE COUNTY TACTICS

FILE NAME: M:_2019\3 CHI\18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90 Sheet_01 Eagle70.dgn

TYLin

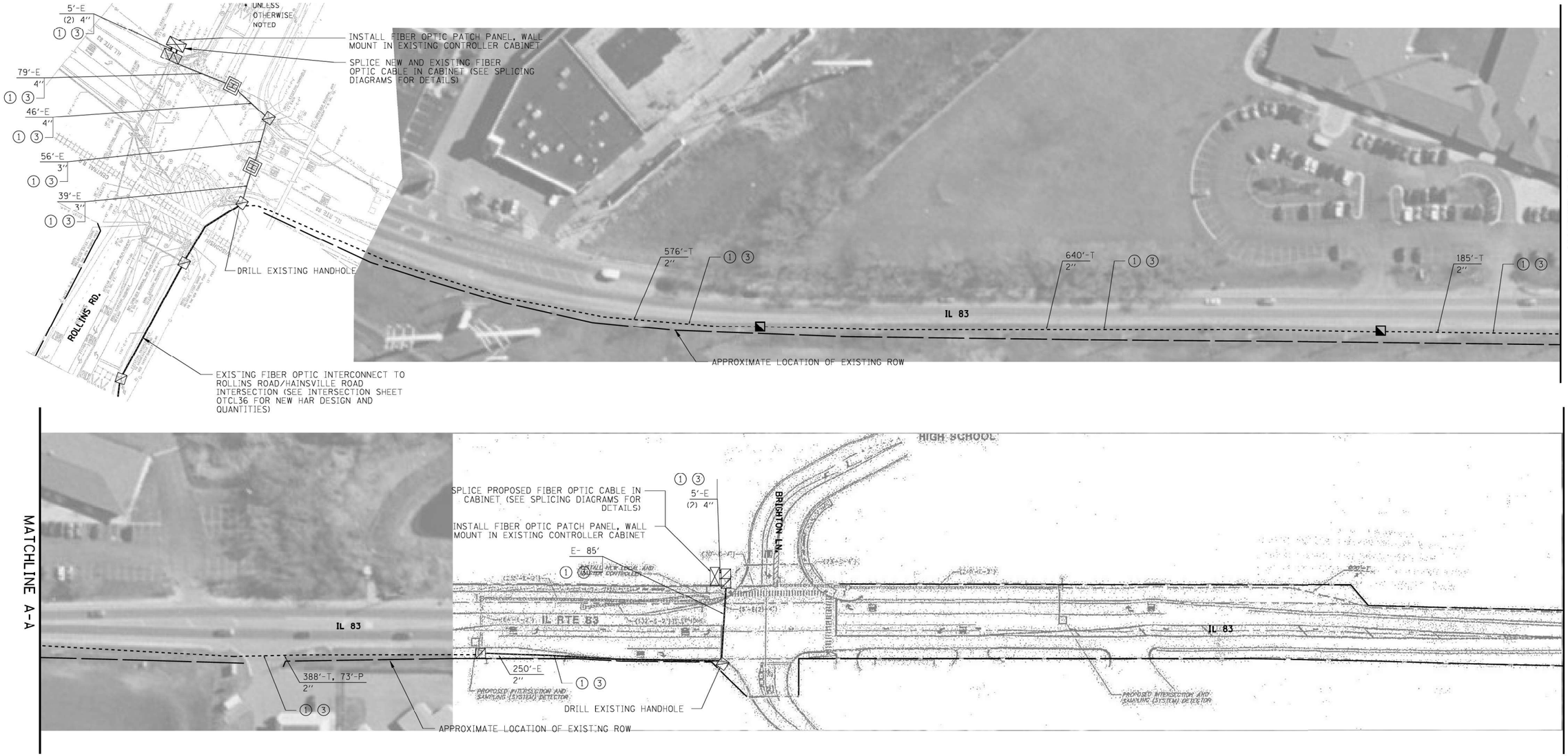
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 100 – IL RTE 83 AT BRIGHTON LN /KNIGHT WAY

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	225
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		



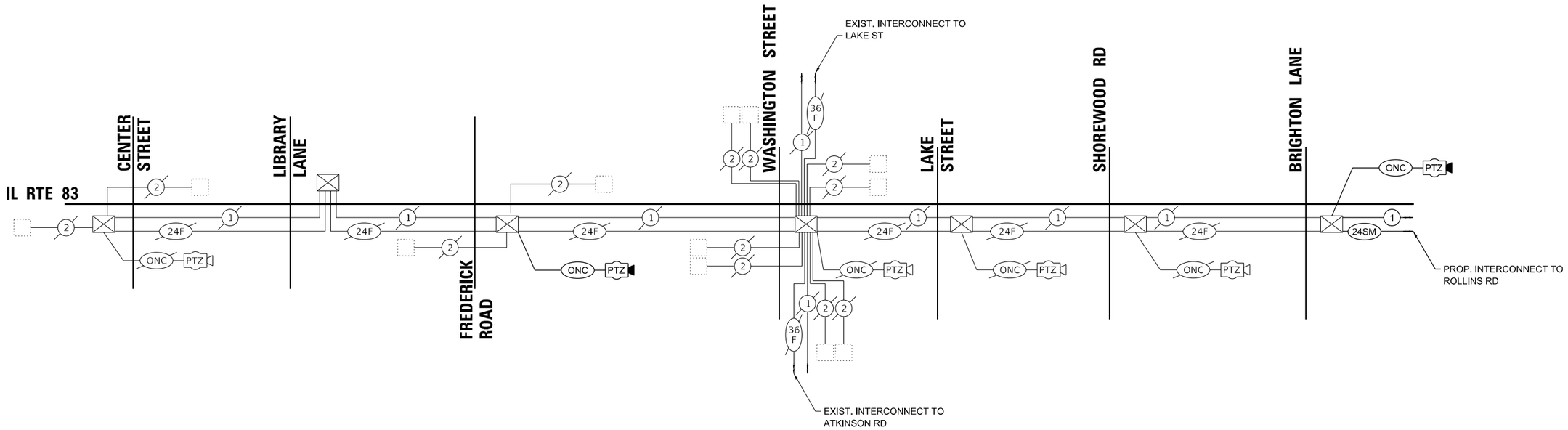
TS SHT NO. 218

FORMER EAGLE 70
LAKE COUNTY TACTICS

TYLin	USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INTERCONNECT PLAN IL RTE 83 – CENTER ST TO MILLSTONE DR
		DRAWN - KATHLEEN MURPHY	REVISED -		
	PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.
	PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -		

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	226
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

FILE NAME: M:\2019\3 CHL\18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203 62W90\CAD\62W90_Sheet_05_Eagle70.dgn



SCHEDULE OF QUANTITIES

	ITEM DESCRIPTION	UNITS	TOTAL QTY
	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	4441
	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	8908
*	ROD AND CLEAN EXISTING CONDUIT	FOOT	1789
	FIBER OPTIC CABLE 24 FIBERS, SINGLE MODE	FOOT	4467
	OPTIMIZE TRAFFIC SIGNAL SYSTEM	EACH	1

* NOMINAL QUANTITY TO BE USED AS NEEDED AND AS APPROVED BY THE ENGINEER

1. OPTIMIZATION TO INCLUDE INTERSECTIONS ALONG IL 83 FROM MONAVILLE TO IL RTE 120. INCLUDING THE FOLLOWING FROM FORMER 70 SYSTEM.

IL RTE 83 & CENTER ST
IL RTE 83 & LIBRARY LANE
IL RTE 83 & FREDERICK RD
IL RTE 83 & WASHINGTON ST
IL RTE 83 & LAKE ST
IL RTE 83 & SHOREWOOD RD
IL RTE 83 & BRIGHTON LANE

FORMER EAGLE 70
LAKE COUNTY TACTICS

TS SHT NO. 219

FILE NAME: M:\2019\3 CH\18-03-5900 IDOT_PTB 190 - Various Traffic Signal Design\Graphics\WO 203 62W90\CAD\62W90_Sheet_03_Eagle70.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

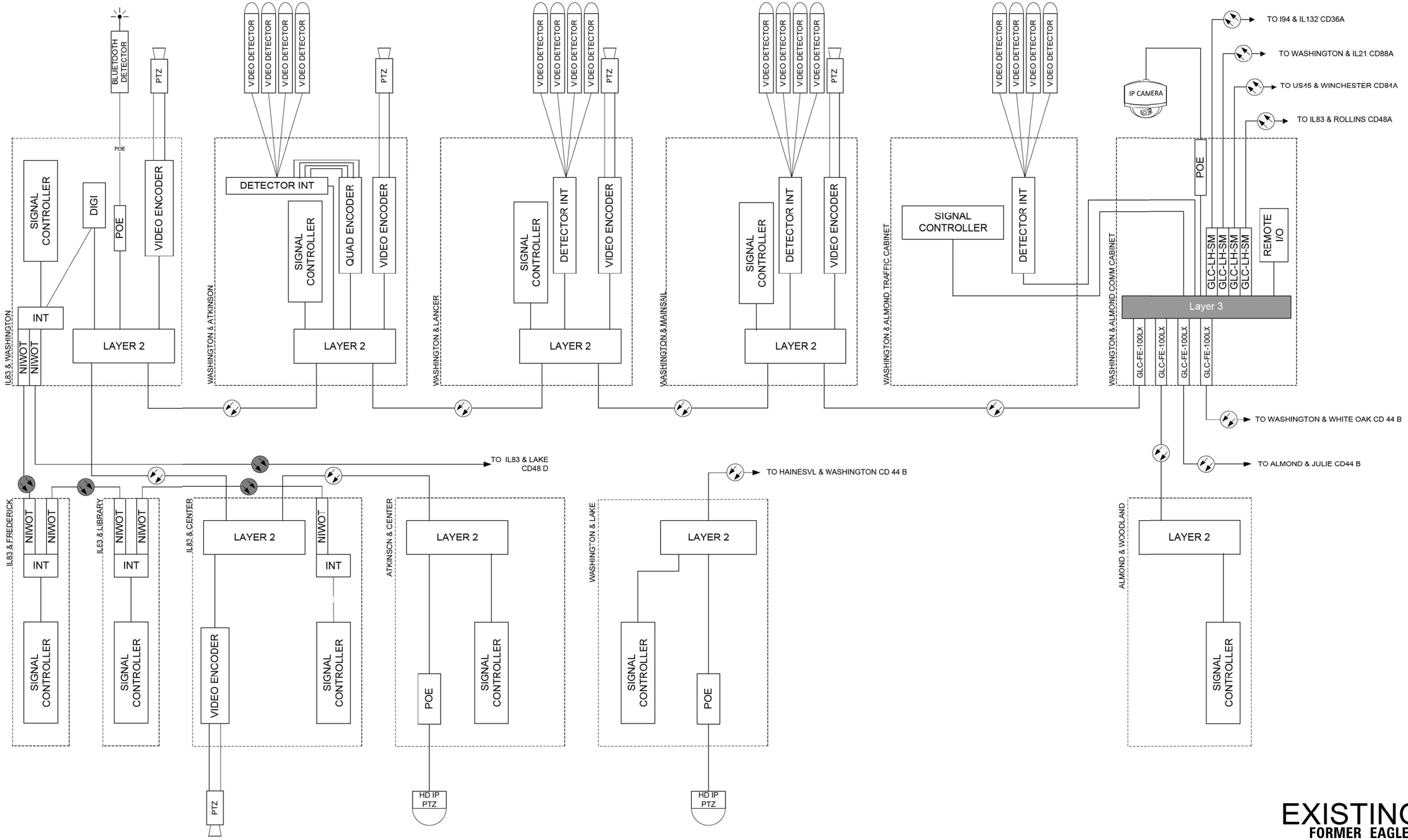
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT SCHEMATIC
IL RTE 83 – CENTER ST TO MILLSTONE DR

SCALE: | SHEET OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	227
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

TS SHT NO. 220



EXISTING
FORMER EAGLE 70
LAKE COUNTY TACTICS

FILE NAME: M3_20193 CMI.IB-03-5500 IDOT_PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet 03_Eagle70.dgn

PARSONS

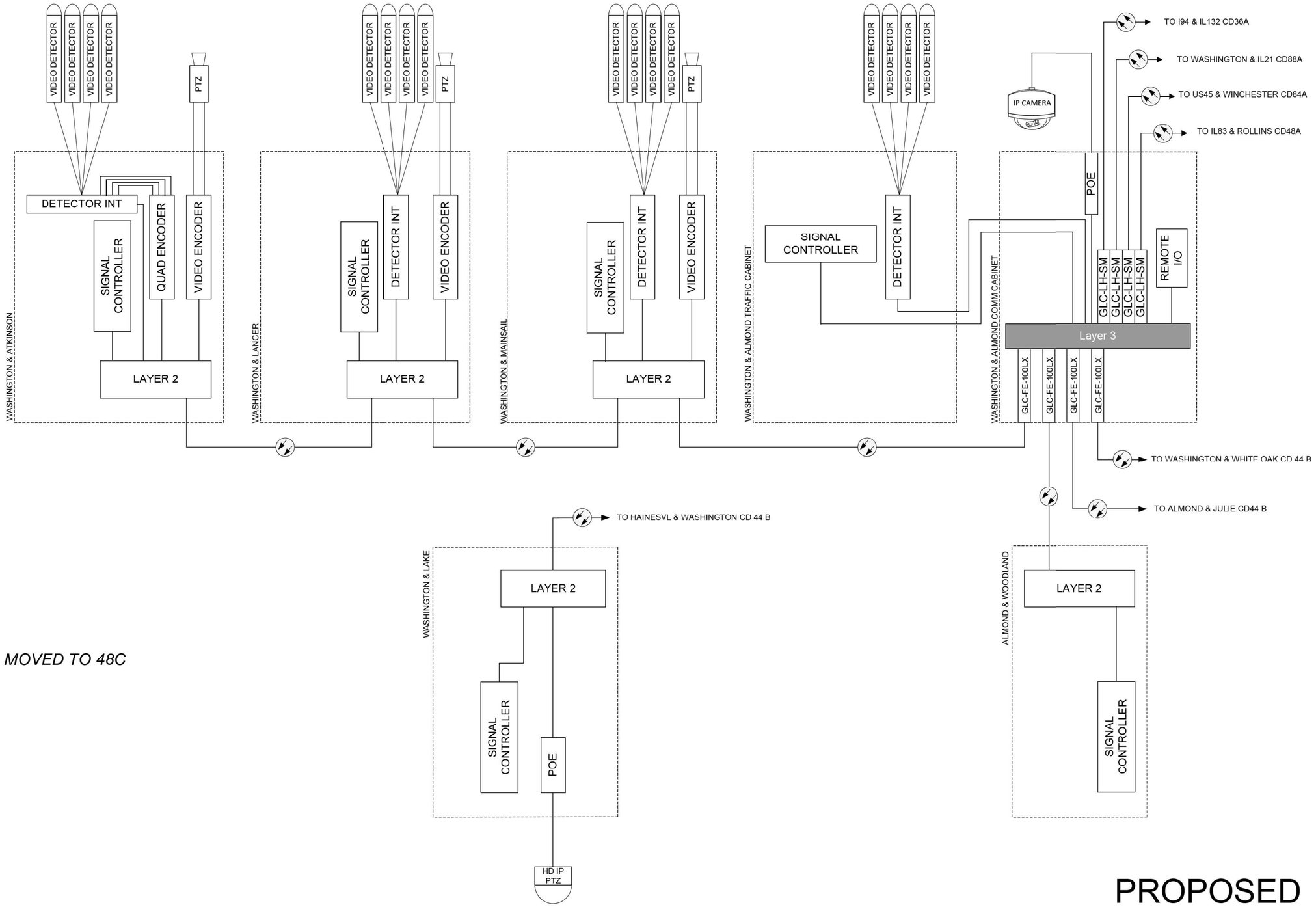
USER NAME = erica.salutz	DESIGNED - RL / DG	REVISED -	
	DRAWN - RL / DG	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - RL / DG	REVISED -	
PLOT DATE = 3/30/2025	DATE - 2025.02.20	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABINET DETAIL
IL RTE 83 – CENTER ST TO MILLSTONE DR

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	228
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			



MOVED TO 48C

PROPOSED

FORMER EAGLE 70
LAKE COUNTY TACTICS

TS SHT NO. 221

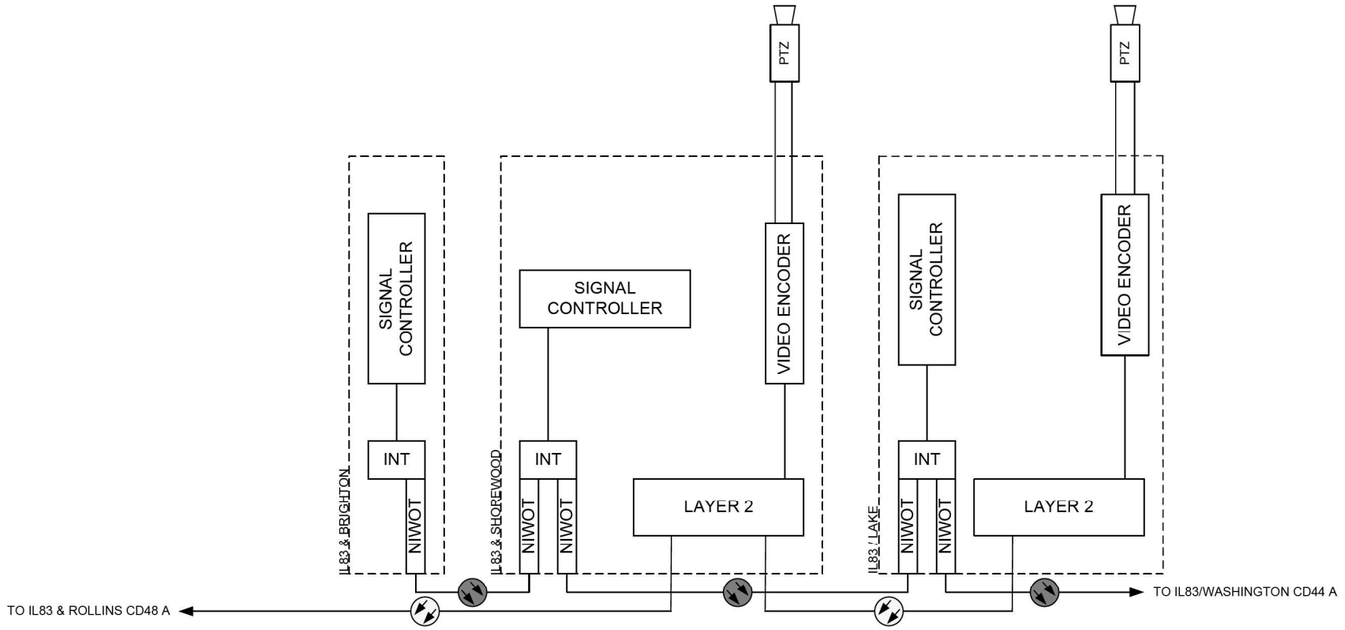
FILE NAME: M:\20193 CH\18-03-5560 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eagle70.dgn

PARSONS	USER NAME = erica.salatz	DESIGNED - RL / DG	REVISED -	**STATE OF ILLINOIS** **DEPARTMENT OF TRANSPORTATION**
		DRAWN - RL / DG	REVISED -	
	PLOT SCALE = 40.0000 ' / in.	CHECKED - RL / DG	REVISED -	
	PLOT DATE = 3/30/2025	DATE - 2025.02.20	REVISED -	

CABINET DETAIL
IL RTE 83 – CENTER ST TO MILLSTONE DR

SCALE: | SHEET OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	229
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		



EXISTING

FORMER EAGLE 70
LAKE COUNTY TACTICS

TS SHT NO. 222

FILE NAME: MS_20193 CHI:18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Eagle70.dgn

PARSONS

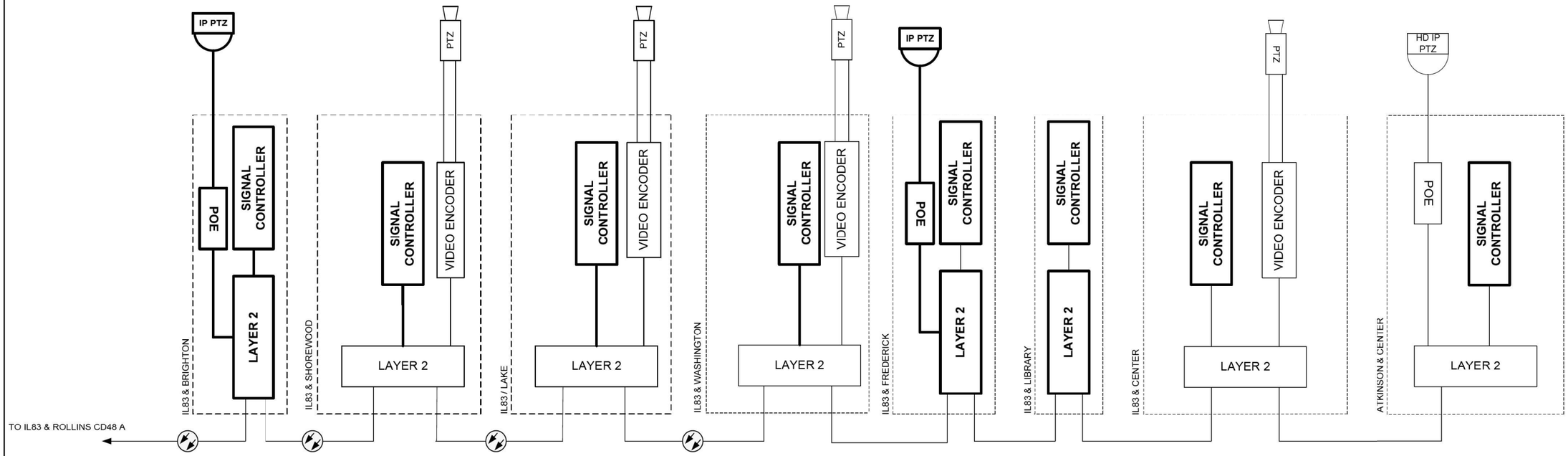
USER NAME = erica.salatz	DESIGNED - RL / DG	REVISED -	
	DRAWN - RL / DG	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - RL / DG	REVISED -	
PLOT DATE = 3/30/2025	DATE - 2025.02.20	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABINET DETAIL
IL RTE 83 – CENTER ST TO MILLSTONE DR

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	230
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			



TS SHT NO. 223

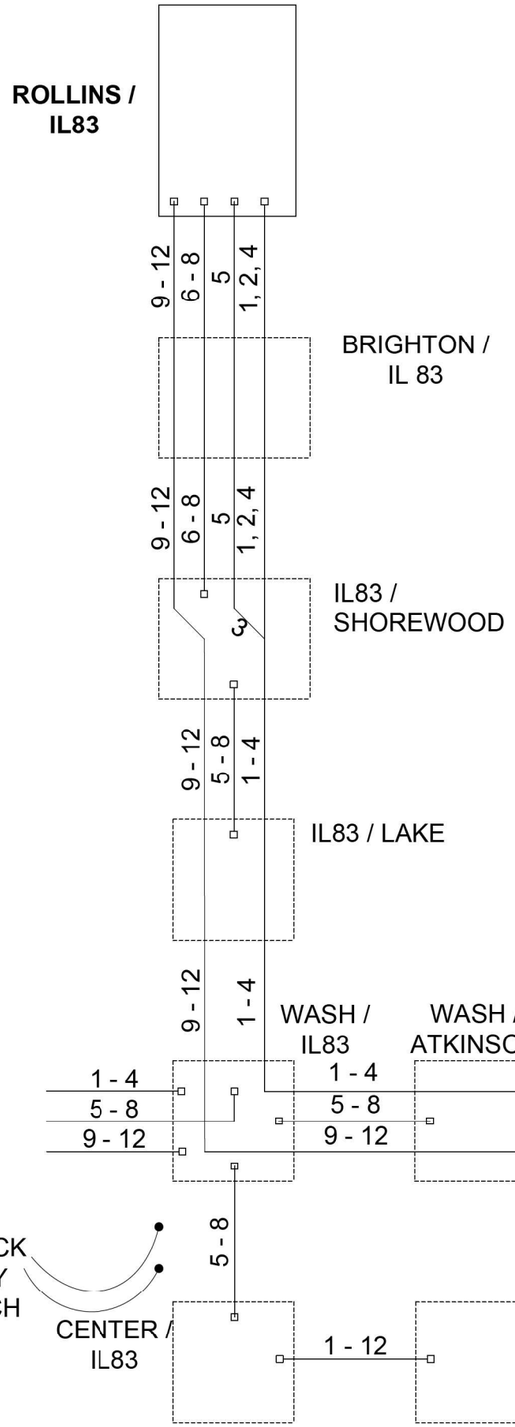
FILE NAME: Mst-20193 CHI:8403-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet 05 Eagle70.dgn

PROPOSED

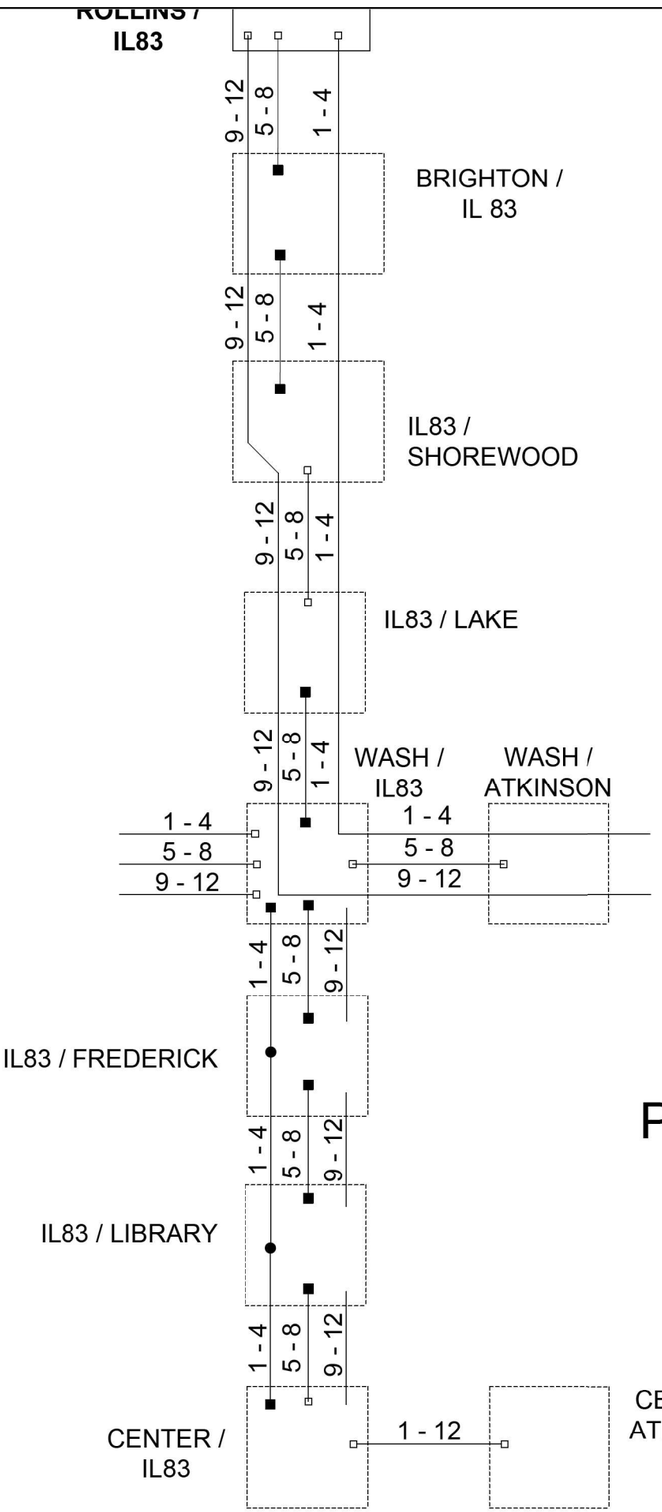
FORMER EAGLE 70
LAKE COUNTY TACTICS

PARSONS	USER NAME = erica.salutz	DESIGNED - RL / DG	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CABINET DETAIL IL RTE 83 – CENTER ST TO MILLSTONE DR
		DRAWN - RL / DG	REVISED -		
	PLOT SCALE = 40.0001 ' / in.	CHECKED - RL / DG	REVISED -		
	PLOT DATE = 3/30/2025	DATE - 2025.02.20	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	231
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		



EXISTING



PROPOSED

FORMER EAGLE 70
LAKE COUNTY TACTICS

TS SHT NO. 224

FILE NAME: M5_20193 CHIL18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_03_Folk70.dgn

PARSONS

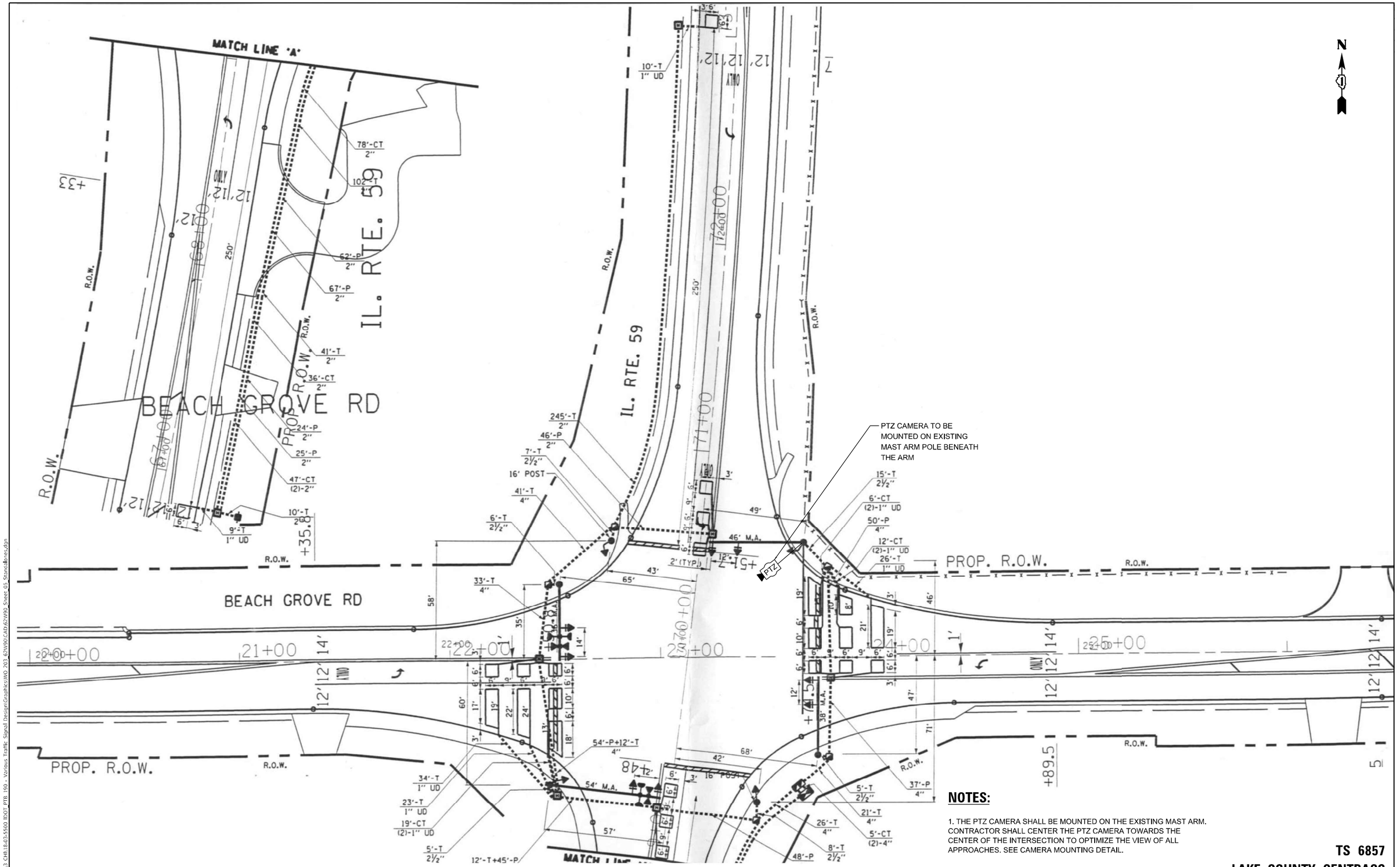
USER NAME = erica.salutz	DESIGNED - RL / DG	REVISED -	
	DRAWN - RL / DG	REVISED -	
PLOT SCALE = 40.0001 ' / in.	CHECKED - RL / DG	REVISED -	
PLOT DATE = 3/30/2025	DATE - 2025.02.20	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIBER SPLICE DIAGRAM
IL RTE 83 – CENTER ST TO MILLSTONE DR

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	232
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			


MATCH LINE "A"
IL. RTE. 59
BEACH GROVE RD
PROP. R.O.W.
R.O.W.
78'-CT 2"
102'-T 1"
62'-P 2"
67'-P 2"
41'-T 2"
36'-CT 2"
24'-P 2"
25'-P 2"
47'-CT (2)-2"
10'-T 1" UD
9'-T 1" UD
245'-T 2"
46'-P 2"
7'-T 2½"
16' POST
41'-T 4"
6'-T 2½"
33'-T 4"
34'-T 1" UD
23'-T 1" UD
19'-CT (2)-1" UD
5'-T 2½"
54'-P+12'-T 4"
54' M.A.
57'
12'-T+45'-P
MATCH LINE "B"
10'-T 1" UD
15'-T 2½"
6'-CT (2)-1" UD
50'-P 4"
12'-CT (2)-1" UD
26'-T 1" UD
46' M.A.
38' M.A.
37'-P 4"
5'-T 2½"
21'-T 4"
26'-T 4"
5'-CT (2)-4"
8'-T 2½"
48'-P
PTZ
PTZ CAMERA TO BE MOUNTED ON EXISTING MAST ARM POLE BENEATH THE ARM
ONLY
12' 12' 12'
12' 12' 14'
+33
+35.8
+51.2
+74.5
+89.5
16700
16800
16900
17000
17100
17200
17300
17400
17500
17600
17700
17800
17900
18000
18100
18200
18300
18400
18500
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19100
19200
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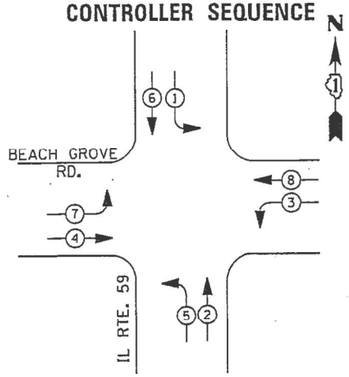
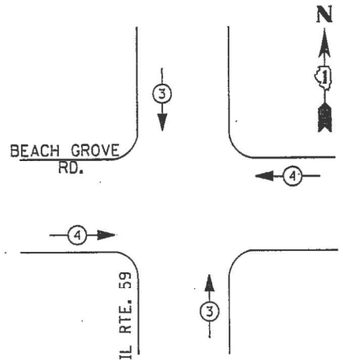
CONTROLLER SEQUENCE



LEGEND

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

PHASE DESIGNATION DIAGRAM



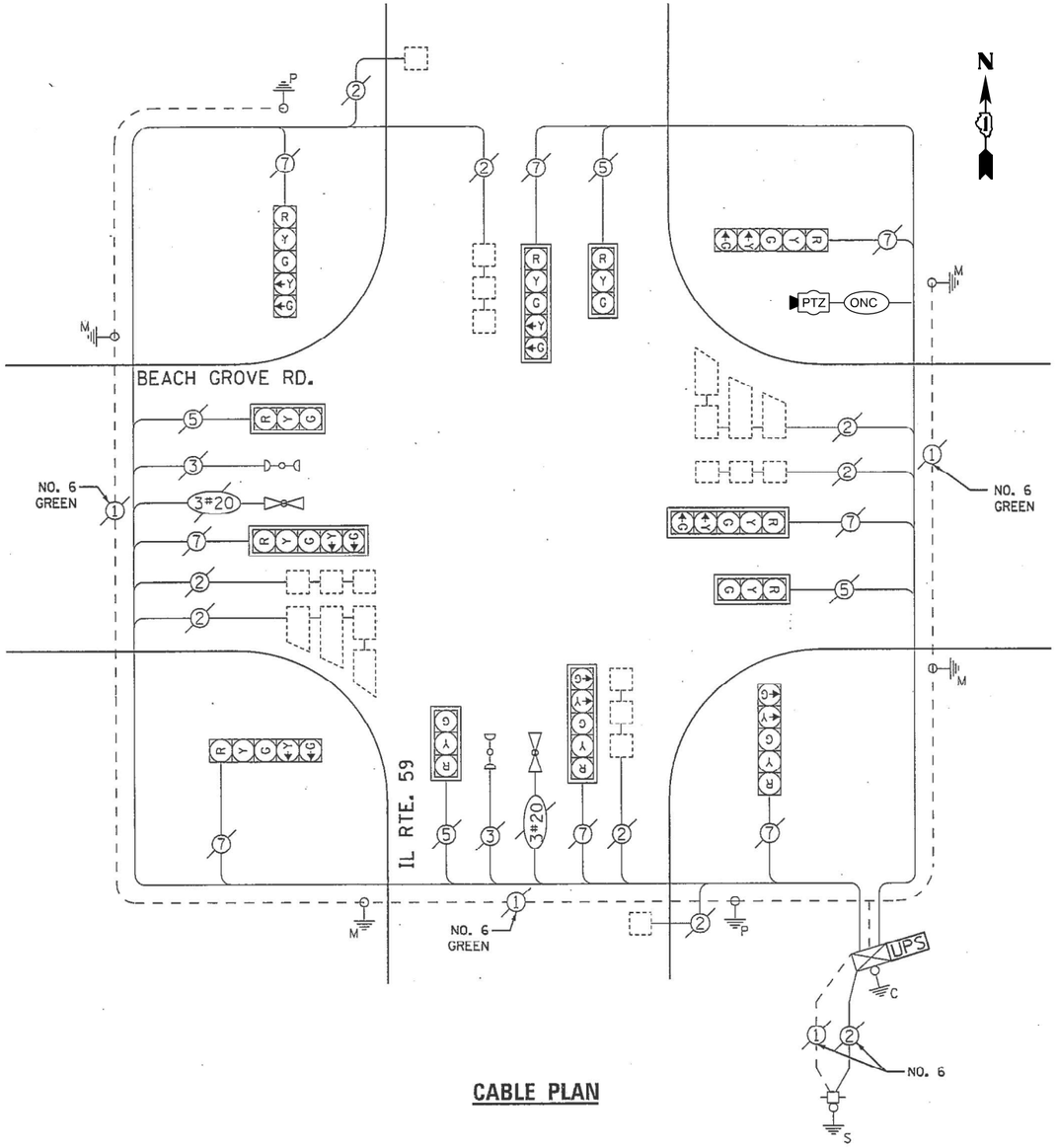
EMERGENCY VEHICLE PREEMPTION SEQUENCE

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	4	11	44
4 - SECTION	-	14	-
5 - SECTION	8	13	104
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	-
CELLULAR MODEM	1	15	15
TOTAL UPS SIZING =			338
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	-
PTZ CAMERA	1	75	75
TOTAL SERVICE WIRE SIZING =			1018

ENERGY COSTS TO:
ILLINOIS DEPT OF TRANSPORTATION
201 CENTER CT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---



CABLE PLAN

REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
CELLULAR MODEM	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	215
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1

TS SHT NO. 226

TS 6857
LAKE COUNTY CENTRACS

TYLin

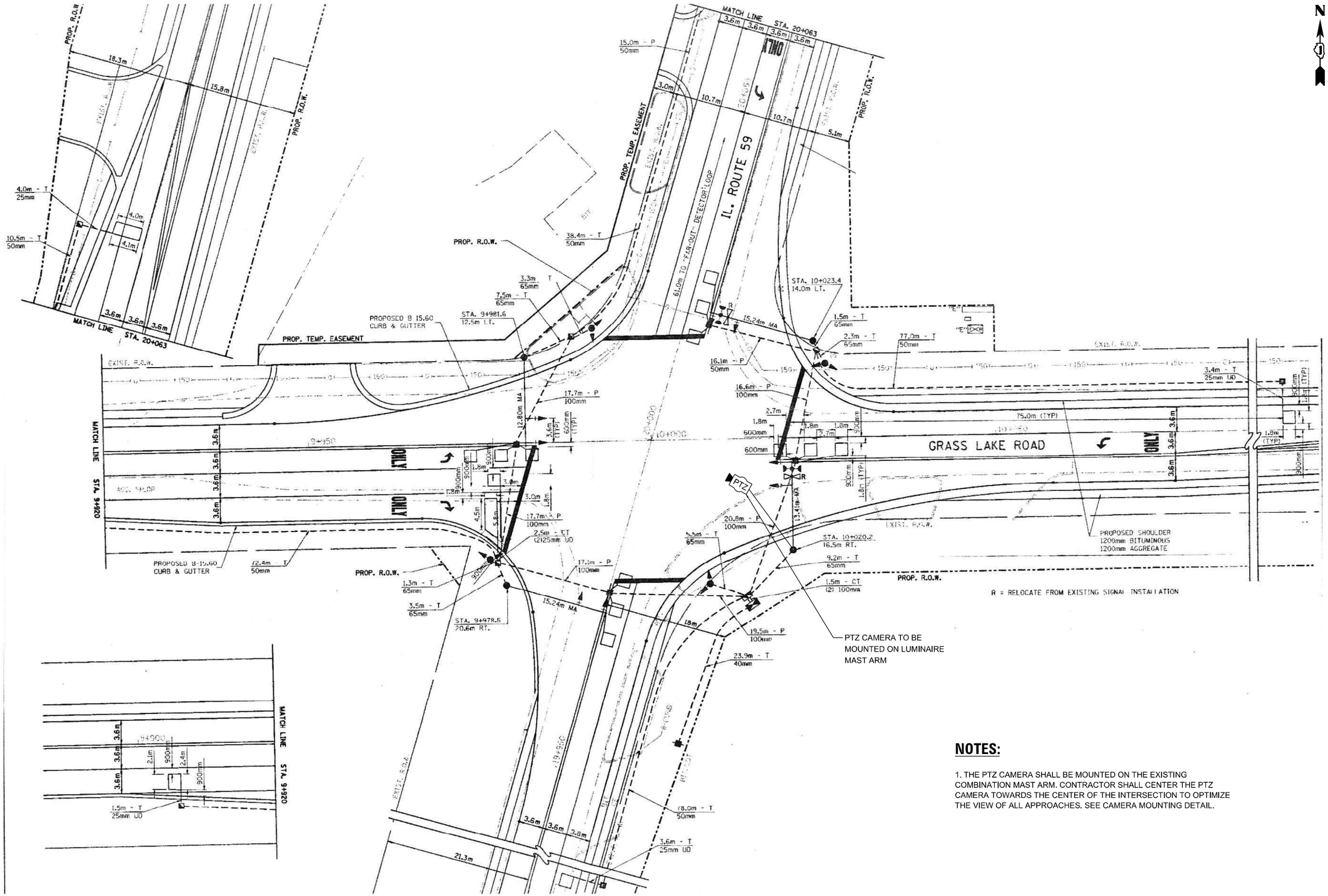
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 101 – IL RTE 59 AT BEACH GROVE RD
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	234
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

FILE NAME: ms 2019.3 CMI 18-03-5500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203 #2W90\CAD\62W90_Sheet 03_StandardNotes.dgn



NOTES:

1. THE PTZ CAMERA SHALL BE MOUNTED ON THE EXISTING COMBINATION MAST ARM. CONTRACTOR SHALL CENTER THE PTZ CAMERA TOWARDS THE CENTER OF THE INTERSECTION TO OPTIMIZE THE VIEW OF ALL APPROACHES. SEE CAMERA MOUNTING DETAIL.

TS 6855

LAKE COUNTY CENTRACS

TS SHT NO. 227

FILE NAME: M:\2019\3 Civil\18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203-62W90\CAD\62W90 Sheet 05 Standard.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED - 05/08/2025	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 5/6/2025	DATE - 12/20/2024	REVISED -	

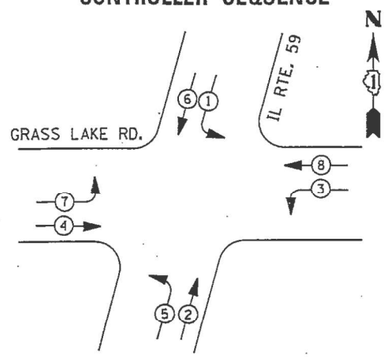
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGNAL PLAN
LOCATION 102 – IL RTE 59 AT GRASS LAKE RD

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	235
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

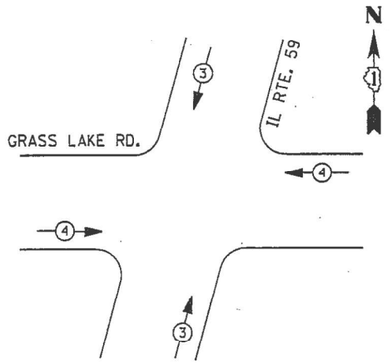
CONTROLLER SEQUENCE



LEGEND

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

PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTION SEQUENCE

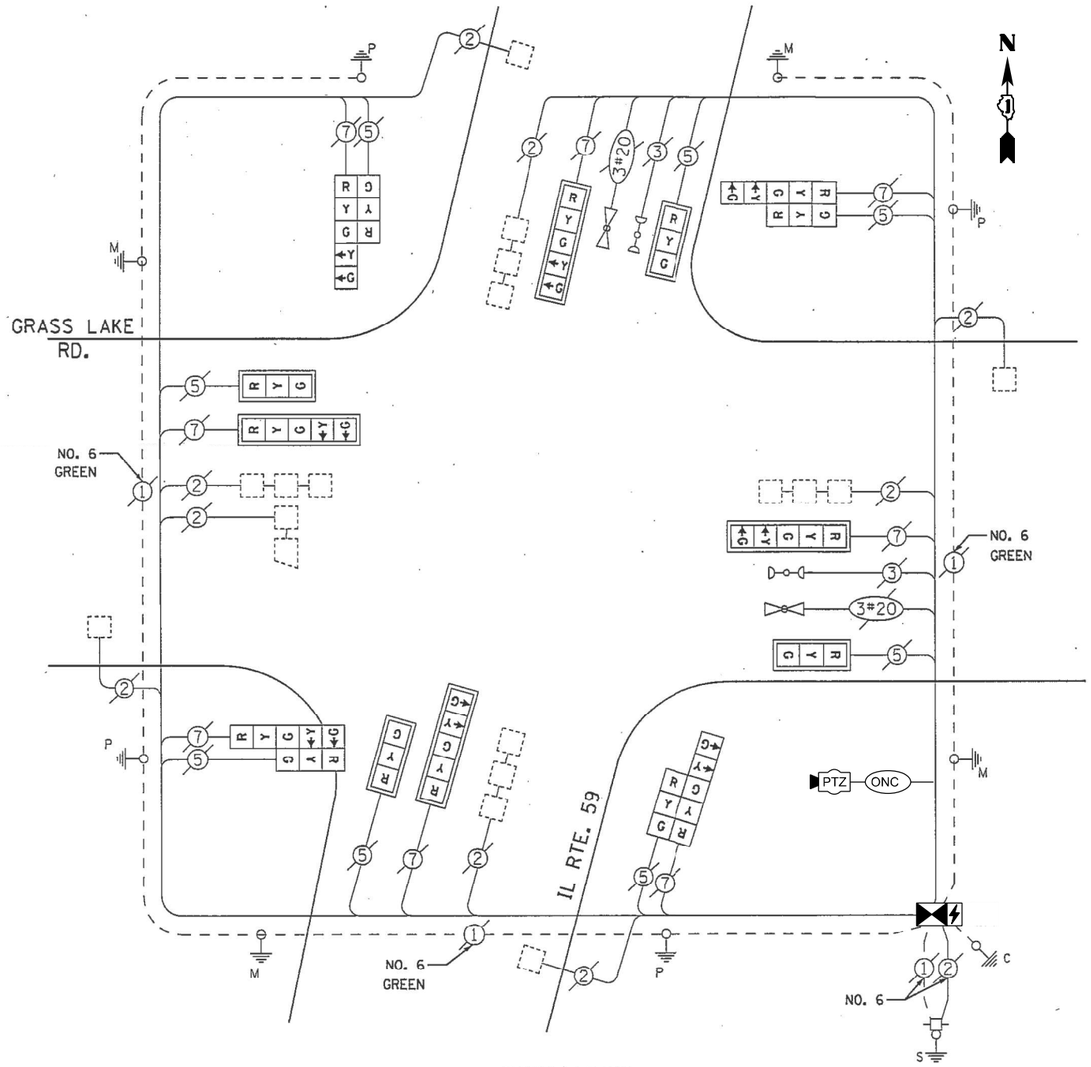
REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER AND CABINET (COMPLETE)

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

1 EACH LIGHT DETECTOR AMPLIFIER



CABLE PLAN

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	8	11	88
4 - SECTION	-	14	-
5 - SECTION	8	13	104
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	-	35	-
CELLULAR MODEM	1	15	15
TOTAL UPS SIZING =			382
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	-
PTZ CAMERA	1	75	75
TOTAL SERVICE WIRE SIZING =			1062

ENERGY COSTS TO:
ILLINOIS DEPT OF TRANSPORTATION
201 CENTER CT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
INDUCTIVE LOOP DETECTOR	EACH	9
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
CELLULAR MODEM	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	103
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV STRETCHED CABINET, SPECIAL	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1

TS 6855

LAKE COUNTY CENTRACS

TS SHT NO. 228

FILE NAME: IM_20 913 CHI 18-03-5560 IDOT PTB 190 - Various Traffic Signal Design Graphics\WO 203_62W90\CAD\62W90_Sheet_05_StandardIndex.dgn

TYLin

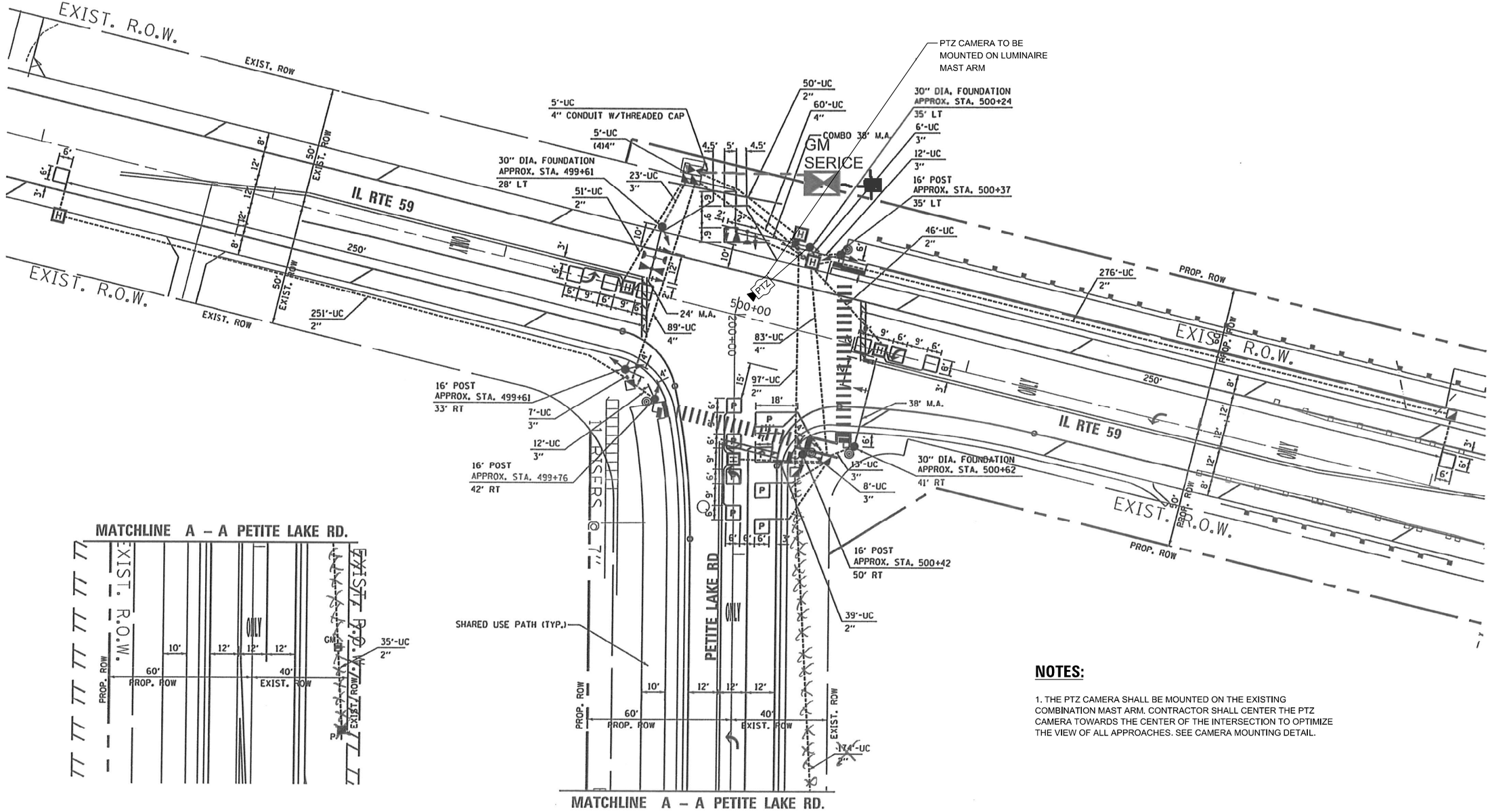
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 102 – IL RTE 59 AT GRASS LAKE RD

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	236
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		



NOTES:

1. THE PTZ CAMERA SHALL BE MOUNTED ON THE EXISTING COMBINATION MAST ARM. CONTRACTOR SHALL CENTER THE PTZ CAMERA TOWARDS THE CENTER OF THE INTERSECTION TO OPTIMIZE THE VIEW OF ALL APPROACHES. SEE CAMERA MOUNTING DETAIL.

TS 21635

LAKE COUNTY CENTRACS

TS SHT NO. 229

FILE NAME: M5_20193 CHIL18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_03_Stand-Alone.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED - 05/08/2025	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 5/6/2025	DATE - 12/20/2024	REVISED -	

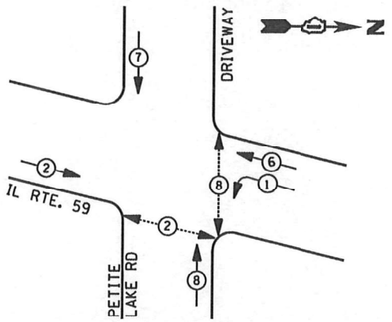
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGNAL PLAN
LOCATION 103 – IL RTE 59 AT PETITE LAKE RD

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	237
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

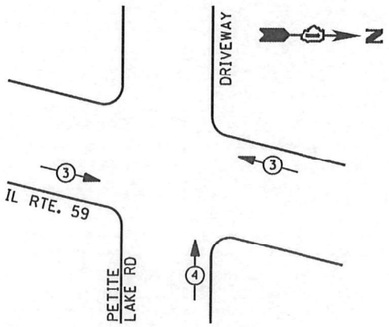
CONTROLLER SEQUENCE



LEGEND

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

PHASE DESIGNATION DIAGRAM

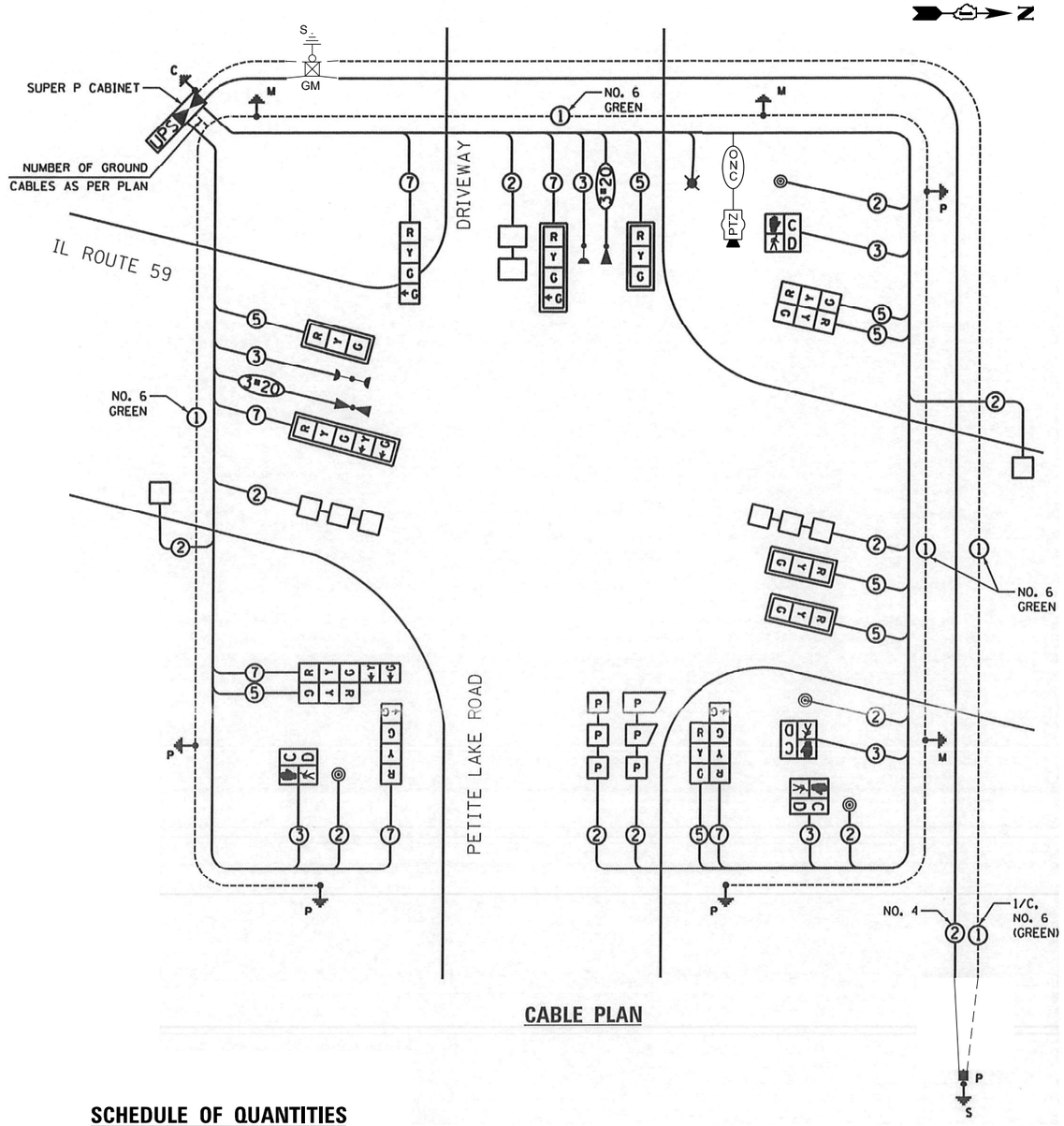


TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	8	11	88
4 - SECTION	4	14	56
5 - SECTION	2	13	26
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	4	15	60
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	-	35	-
CELLULAR MODEM	1	15	15
TOTAL UPS SIZING =			420
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	4	240	240
PTZ CAMERA	1	75	75
TOTAL SERVICE WIRE SIZING =			1340

ENERGY COSTS TO:
ILLINOIS DEPT OF TRANSPORTATION
201 CENTER CT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---



CABLE PLAN

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
CELLULAR MODEM	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	145
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1

TS 21635
LAKE COUNTY CENTRACS

TS SHT NO. 230

FILE NAME: M:\...\203-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet 03_Standalone.dgn

TYLin

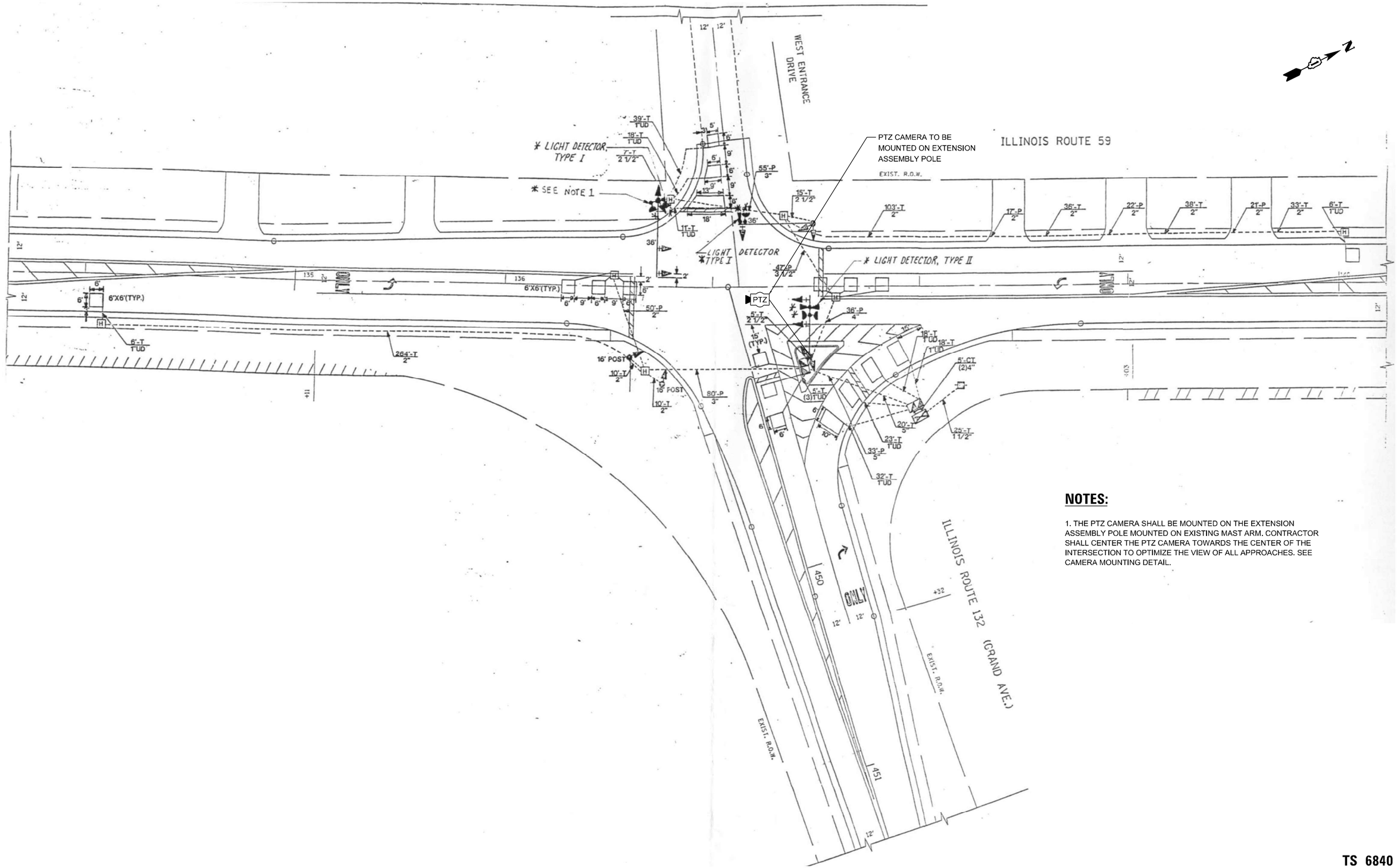
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 103 – IL RTE 59 AT PETITE LAKE RD

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	238
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		



NOTES:

1. THE PTZ CAMERA SHALL BE MOUNTED ON THE EXTENSION ASSEMBLY POLE MOUNTED ON EXISTING MAST ARM. CONTRACTOR SHALL CENTER THE PTZ CAMERA TOWARDS THE CENTER OF THE INTERSECTION TO OPTIMIZE THE VIEW OF ALL APPROACHES. SEE CAMERA MOUNTING DETAIL.

TS 6840

LAKE COUNTY CENTRACS

TS SHT NO. 231

FILE NAME: M5 20193 Cntl 18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203 62W90\CAD\62W90 Sheet 05 Standards.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED - 05/08/2025	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 5/6/2025	DATE - 12/20/2024	REVISED -	

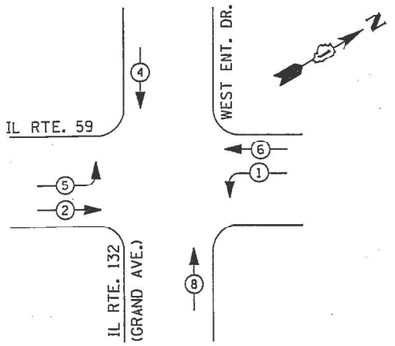
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGNAL PLAN
LOCATION 104 – IL RTE 59 AT IL RTE 132

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	239
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

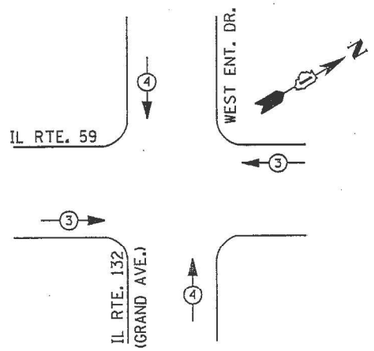
CONTROLLER SEQUENCE



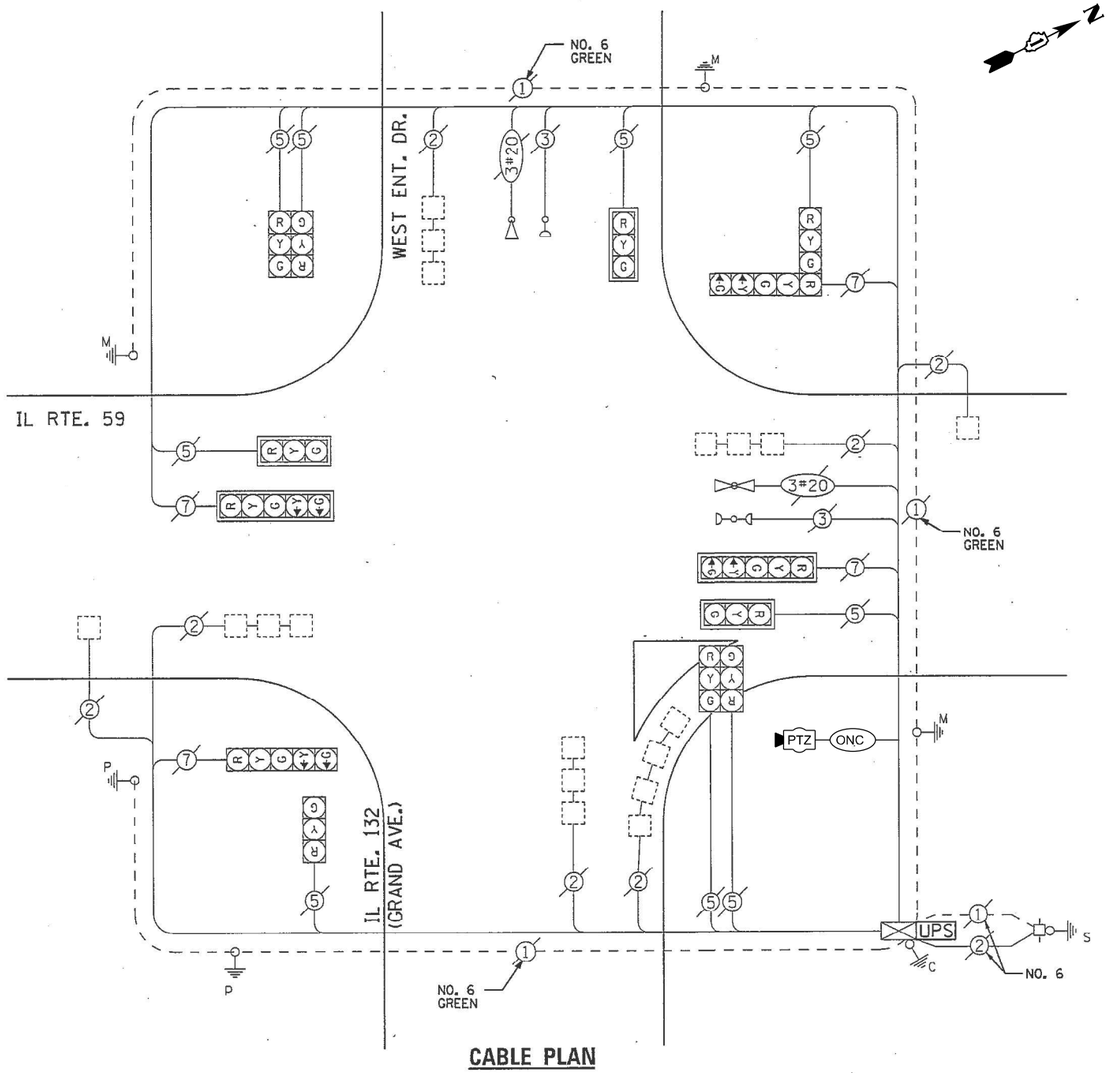
LEGEND

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

PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTION SEQUENCE



CABLE PLAN

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	9	11	99
4 - SECTION	-	14	-
5 - SECTION	4	13	52
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	-	35	-
CELLULAR MODEM	1	15	15
TOTAL UPS SIZING =			341
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	-
PTZ CAMERA	1	75	75
TOTAL SERVICE WIRE SIZING =			1021

ENERGY COSTS TO:
ILLINOIS DEPT OF TRANSPORTATION
201 CENTER CT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
CELLULAR MODEM	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	123
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
CAMERA MOUNTING ASSEMBLY	EACH	1

TS 6840
LAKE COUNTY CENTRACS

TS SHT NO. 232

FILE NAME: M:\...\20193 CHL18-03-5500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_03_StandAlone.dgn

TYLin

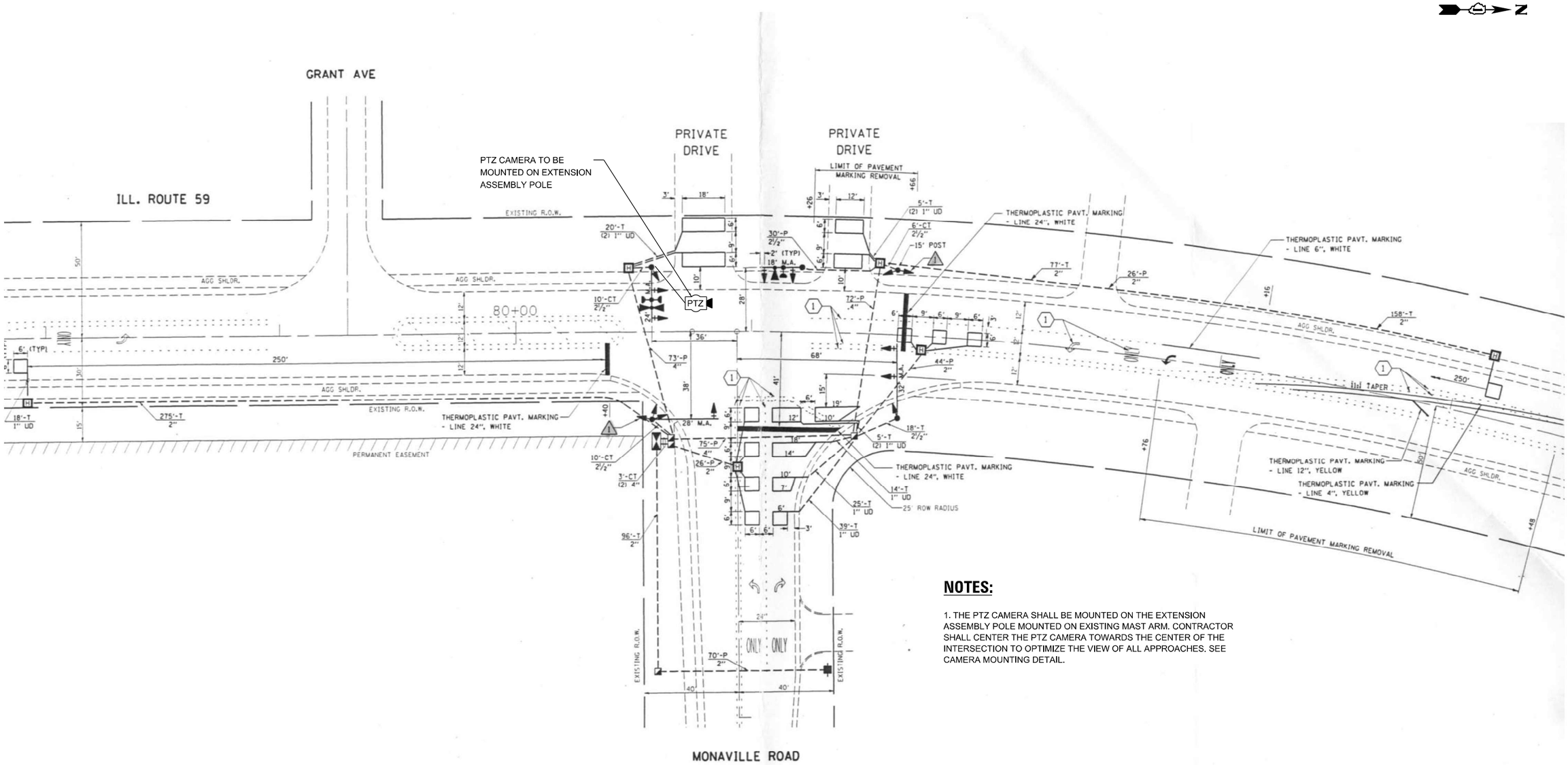
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 104 – IL RTE 59 AT IL RTE 132

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	240
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		



NOTES:

1. THE PTZ CAMERA SHALL BE MOUNTED ON THE EXTENSION ASSEMBLY POLE MOUNTED ON EXISTING MAST ARM. CONTRACTOR SHALL CENTER THE PTZ CAMERA TOWARDS THE CENTER OF THE INTERSECTION TO OPTIMIZE THE VIEW OF ALL APPROACHES. SEE CAMERA MOUNTING DETAIL.

TS SHT NO. 233

TS 717

LAKE COUNTY CENTRACS

FILE NAME: M:_20193 CHI\18-03-5500 IDOT PTB 199 - Various Traffic Signal Design Graphics\WO 203_62V90\CAD\62V90_Sheet_05_StandDetails.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	05/08/2025
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 5/6/2025	DATE - 12/20/2024	REVISED -	

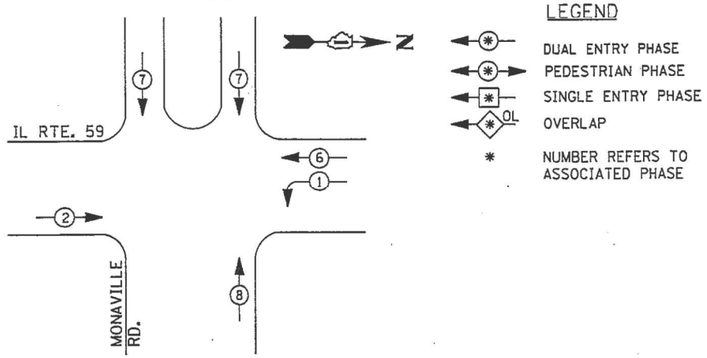
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGNAL PLAN
LOCATION 105 – IL RTE 59 AT MONAVILLE RD

SCALE: | SHEET OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	241
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

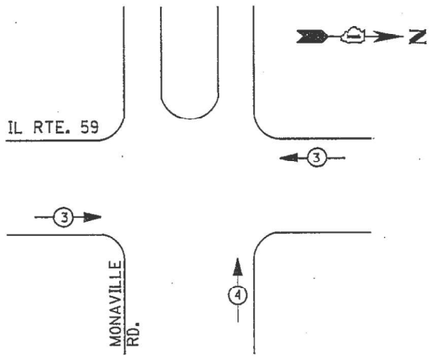
CONTROLLER SEQUENCE



LEGEND

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

PHASE DESIGNATION DIAGRAM

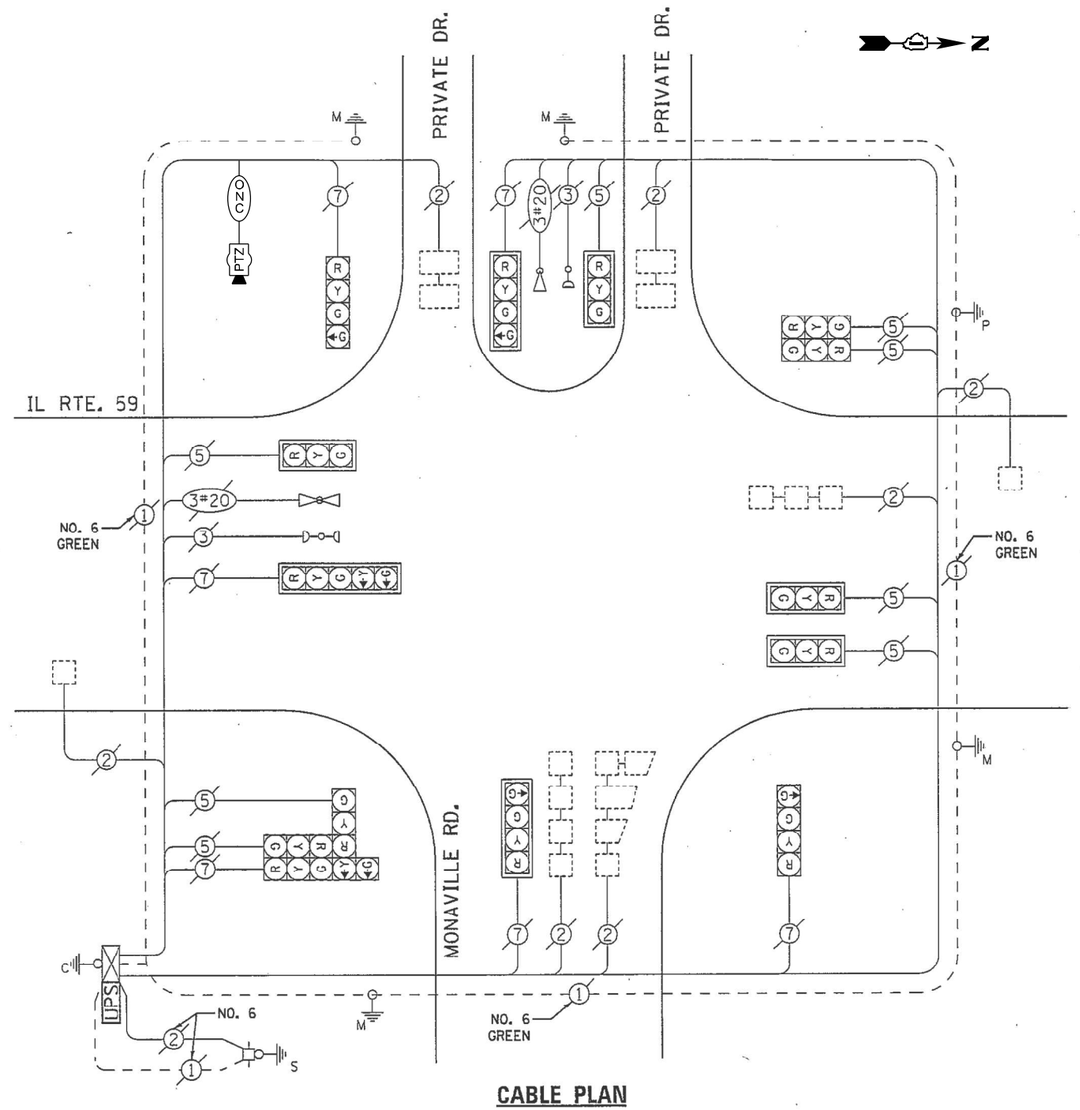


EMERGENCY VEHICLE PREEMPTION SEQUENCE

REMOVAL AND RELOCATION NOTES:

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF IDOT. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR THE PICK UP OF ALL THE EQUIPMENT TO BE RETURNED TO IDOT.

1 EACH CONTROLLER



CABLE PLAN

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	8	11	88
4 - SECTION	4	14	56
5 - SECTION	2	13	26
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	-	35	-
CELLULAR MODEM	1	15	15
TOTAL UPS SIZING =			360
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	-
PTZ CAMERA	1	75	75
TOTAL SERVICE WIRE SIZING =			1040

ENERGY COSTS TO:
ILLINOIS DEPT OF TRANSPORTATION
201 CENTER CT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
CELLULAR MODEM	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	160
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
CAMERA MOUNTING ASSEMBLY	EACH	1

TS SHT NO. 234

TS 717
LAKE COUNTY CENTRACS

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

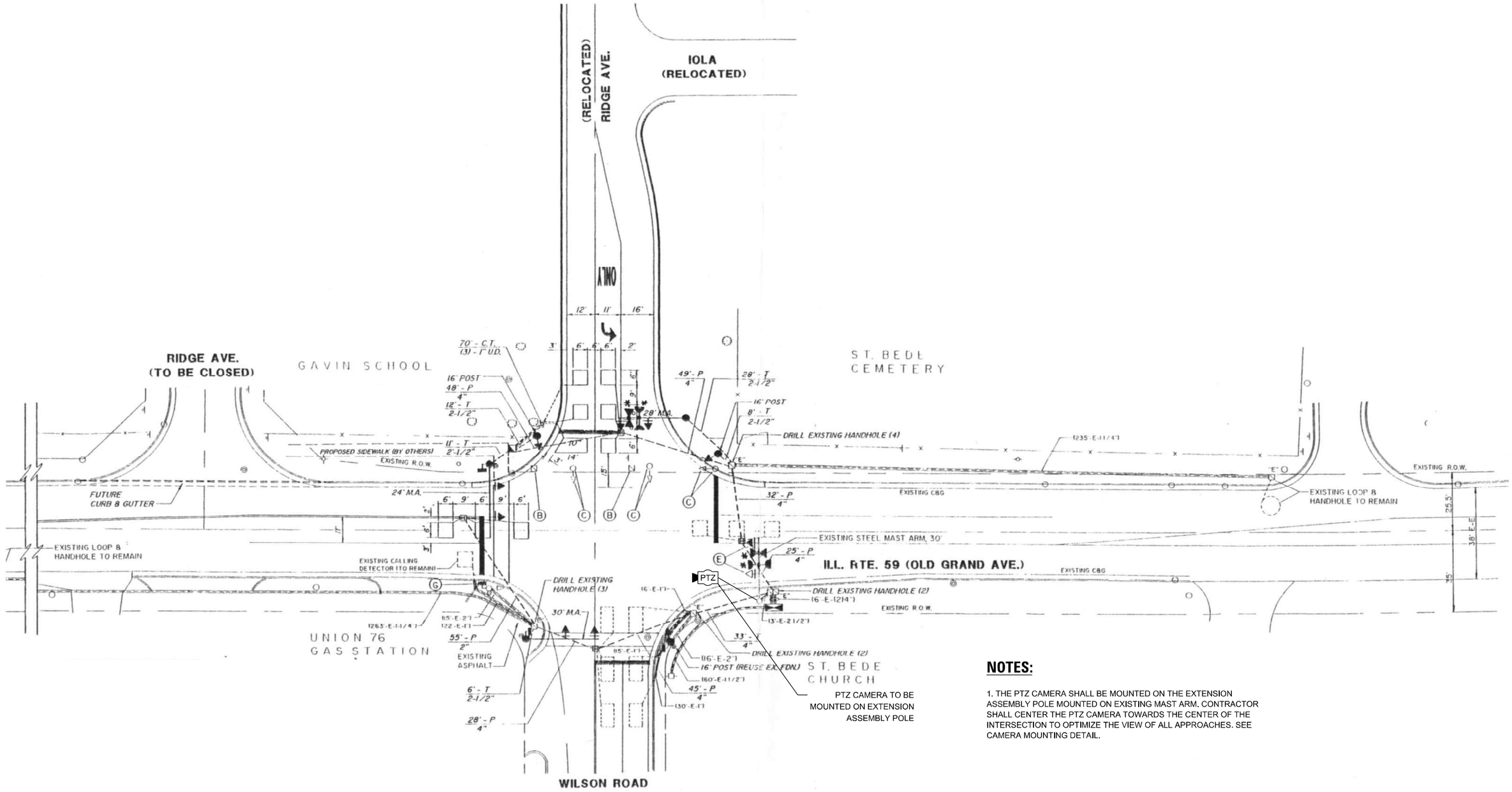
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 105 – IL RTE 59 AT MONAVILLE RD

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	242
		CONTRACT NO. 62W90		
		ILLINOIS	FED. AID PROJECT	

FILE NAME: M:\...\203_62W90 CAD\62W90_Sheet 03_Standalone.dgn



NOTES:

1. THE PTZ CAMERA SHALL BE MOUNTED ON THE EXTENSION ASSEMBLY POLE MOUNTED ON EXISTING MAST ARM. CONTRACTOR SHALL CENTER THE PTZ CAMERA TOWARDS THE CENTER OF THE INTERSECTION TO OPTIMIZE THE VIEW OF ALL APPROACHES. SEE CAMERA MOUNTING DETAIL.

TS 11940

LAKE COUNTY CENTRACS

TS SHT NO. 235

FILE NAME: M:_2019\3 CHI\18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_StandDetails.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED - 05/08/2025	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 5/6/2025	DATE - 12/20/2024	REVISED -	

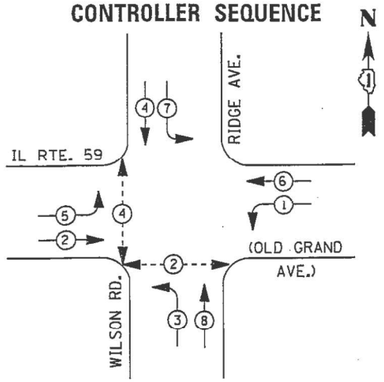
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGNAL PLAN
LOCATION 106 – IL RTE 59 AT WILSON RD

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	243
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

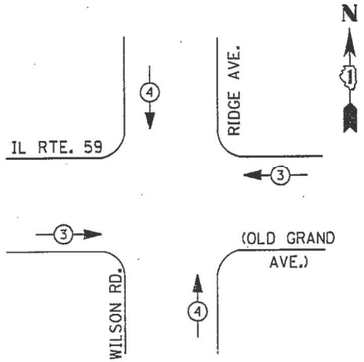
CONTROLLER SEQUENCE



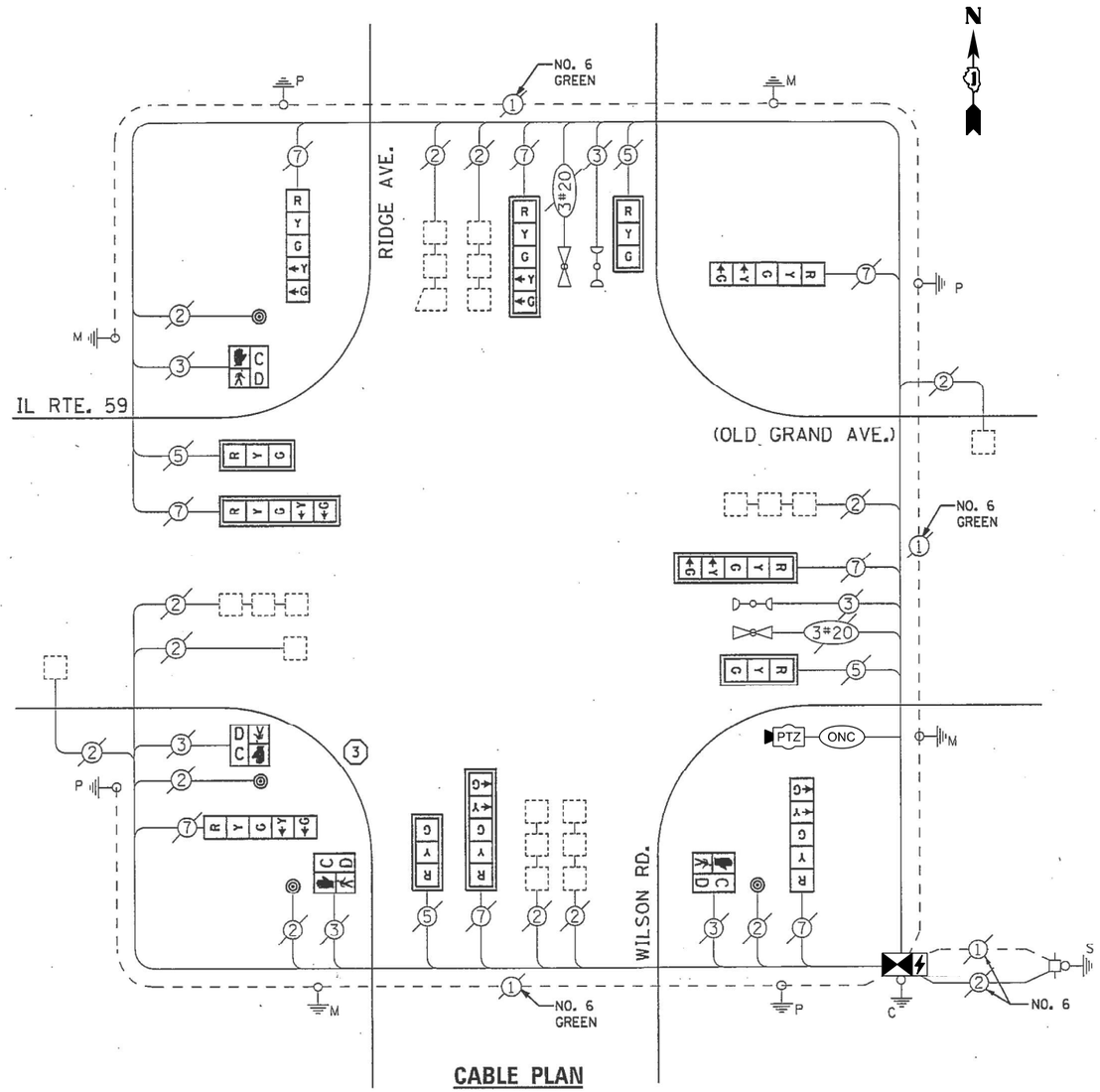
LEGEND

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

PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTION SEQUENCE



CABLE PLAN

REMOVAL AND RELOCATION NOTES:

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

1 EACH CABINET (COMPLETE)

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF IDOT. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR THE PICK UP OF ALL THE EQUIPMENT TO BE RETURNED TO IDOT.

1 EACH CONTROLLER

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

1 EACH LIGHT DETECTOR AMPLIFIER

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	44	11	4
4 - SECTION	-	14	-
5 - SECTION	8	13	104
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	4	15	60
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	-	35	-
CELLULAR MODEM	1	15	15
TOTAL UPS SIZING =			398
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	-
PTZ CAMERA	1	75	75
TOTAL SERVICE WIRE SIZING =			1078

ENERGY COSTS TO:
ILLINOIS DEPT OF TRANSPORTATION
201 CENTER CT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
INDUCTIVE LOOP DETECTOR	EACH	9
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
CELLULAR MODEM	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	96
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
CAMERA MOUNTING ASSEMBLY	EACH	1

TS 11940
LAKE COUNTY CENTRACS

TS SHT NO. 236

FILE NAME: M:\...\TS 11940 CHI\1843-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_03_StandAlone.dgn

TYLin

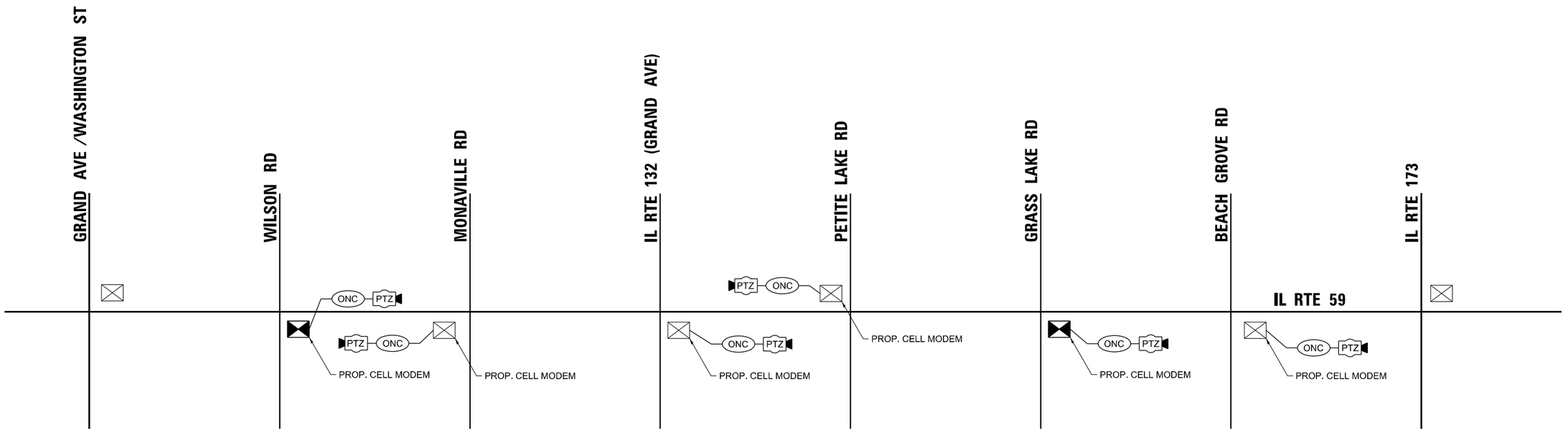
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 106 – IL RTE 59 AT WILSON RD

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	244
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		



SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
OPTIMIZE TRAFFIC SIGNAL SYSTEM	EACH	1

NOTES:

1. OPTIMIZATION TO INCLUDE INTERSECTIONS ALONG IL RTE 59 FROM WASHINGTON ST / GRAND AVE TO IL RTE 173.

TS SHT NO. 237

FILE NAME: Mst-20193 CHI:18-03-5500 IDOT_PTB 190 - Various Traffic Signal Design\Graphics\WO 203 62W90\CAD\62W90_Sheet 05_Standalones.dgn

LAKE COUNTY CENTRACS

TYLin

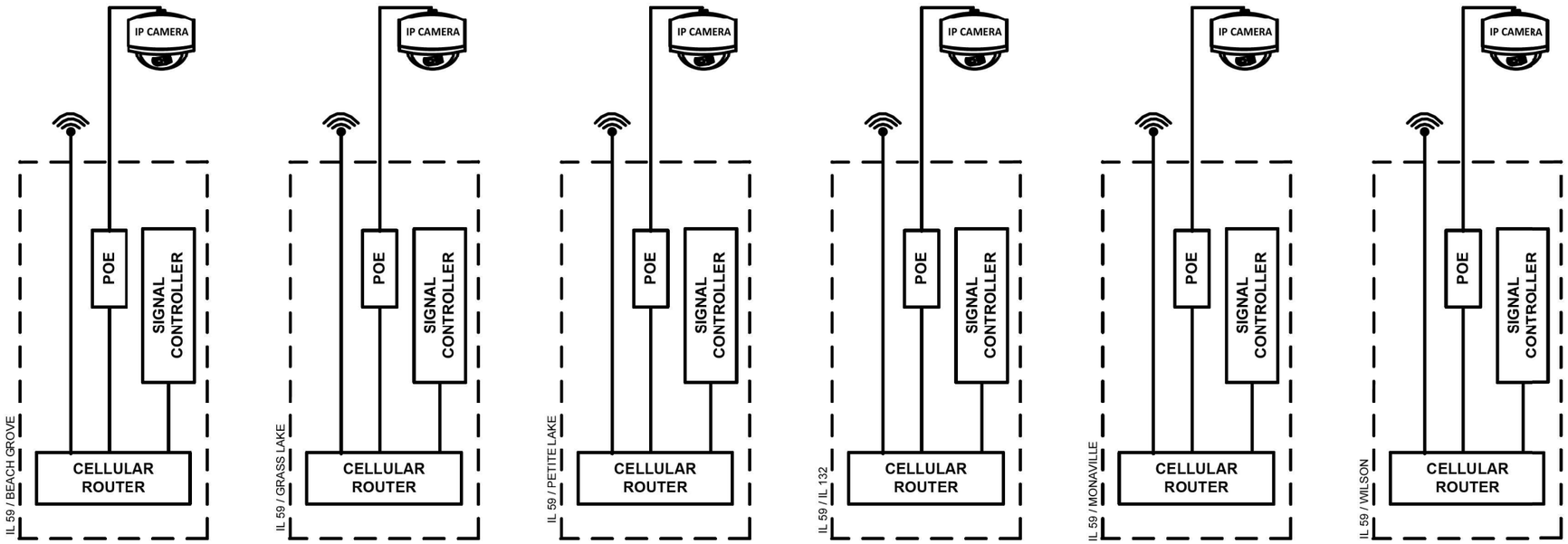
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	05/08/2025
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 5/5/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT SCHEMATIC
IL RTE 59 – WASHINGTON ST TO IL RTE 173

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	245
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		



PROPOSED

TS SHT NO. 238

LAKE COUNTY CENTRACS

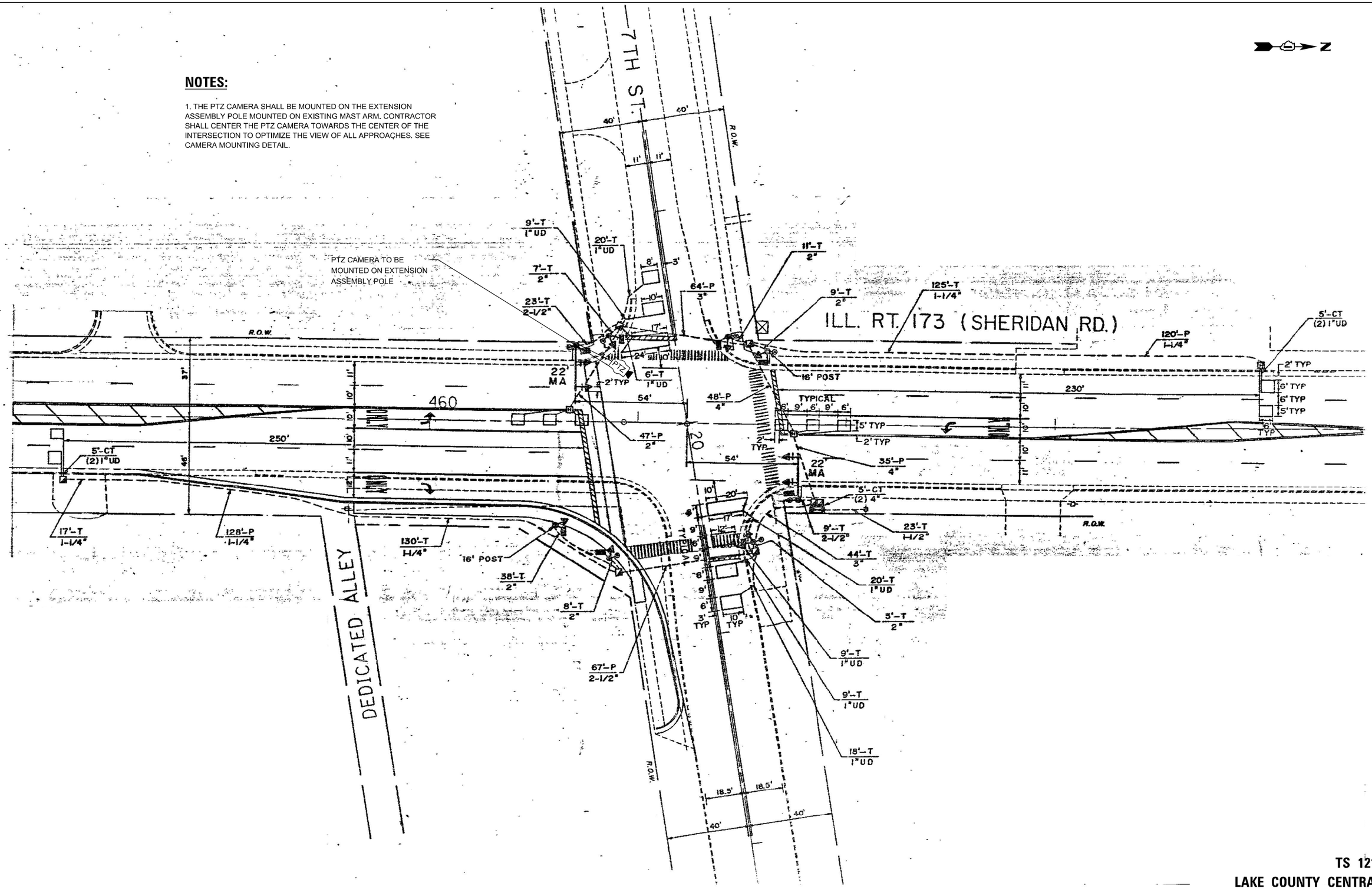
PARSONS	USER NAME = erica.salutz	DESIGNED - RL / DG	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**CABINET DETAIL**
		DRAWN - RL / DG	REVISED -		**IL RTE 59 – WASHINGTON ST TO IL RTE 173**
	PLOT SCALE = 40.0000 ' / in.	CHECKED - RL / DG	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.
	PLOT DATE = 3/30/2025	DATE - 2025.02.20	REVISED -		

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	246
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

FILE NAME: N:\2019\3 Cnt\18-03-5500 IDOT -PTB -199 - Various Traffic Signal\Design\Graphics\WO 203- 62W90\CAD\62W90_Sheet_03_StencilAnnex.dgn

NOTES:

1. THE PTZ CAMERA SHALL BE MOUNTED ON THE EXTENSION ASSEMBLY POLE MOUNTED ON EXISTING MAST ARM. CONTRACTOR SHALL CENTER THE PTZ CAMERA TOWARDS THE CENTER OF THE INTERSECTION TO OPTIMIZE THE VIEW OF ALL APPROAÇHES. SEE CAMERA MOUNTING DETAIL.



TS 12145

LAKE COUNTY CENTRACS

TS SHT NO. 239

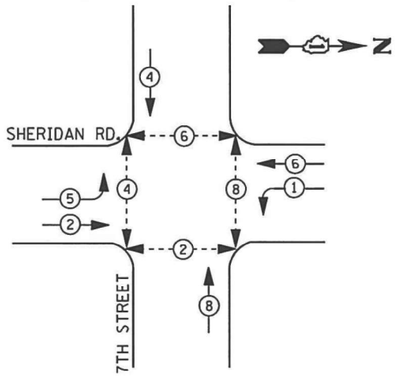
FILE NAME: M5_20193 CHIL18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_03_Additional.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED - 05/08/2025	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SIGNAL PLAN LOCATION 107 – IL RTE 137 (SHERIDAN RD) AT 7TH ST
	DRAWN - KATHLEEN MURPHY	REVISED -		
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.
PLOT DATE = 5/5/2025	DATE - 12/20/2024	REVISED -		

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	247
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

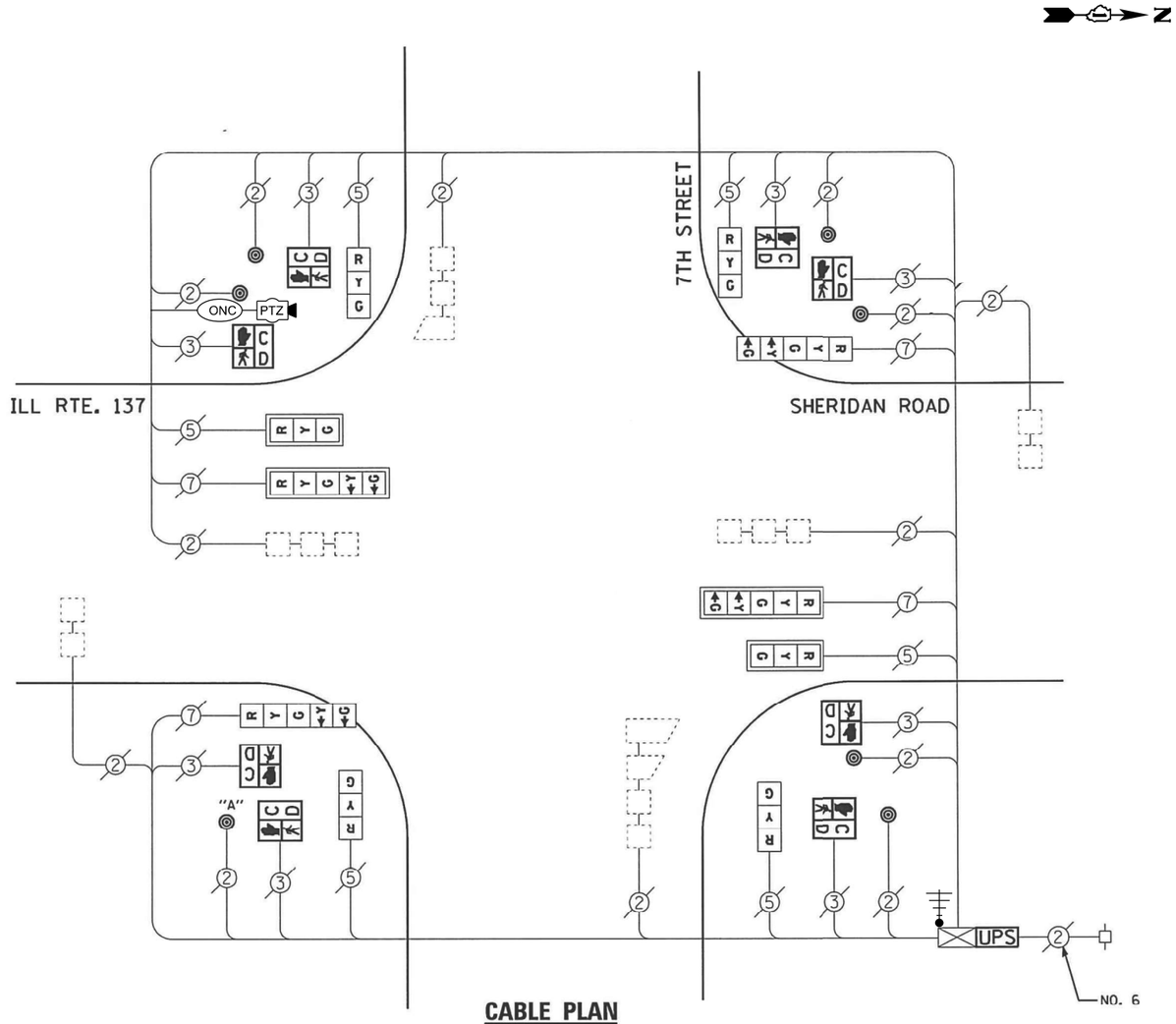
CONTROLLER SEQUENCE



LEGEND

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

PHASE DESIGNATION DIAGRAM



CABLE PLAN

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	6	11	66
4 - SECTION	-	14	-
5 - SECTION	4	13	52
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	8	15	120
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	1	15	15
TOTAL UPS SIZING =			463
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	-
PTZ CAMERA	1	75	75
TOTAL SERVICE WIRE SIZING =			1143

ENERGY COSTS TO:
VILLAGE OF WINTHROP HARBOR
830 SHERIDAN RD
WINTHROP HARBOR, IL 60096

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
CELLULAR MODEM	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	262
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
WIRELESS TRANSMISSION SYSTEM POINT TO POINT	EACH	1
POWER OVER ETHERNET EXTENDER	EACH	1
CAMERA MOUNTING ASSEMBLY	EACH	1

TS SHT NO. 240

TS 12145
LAKE COUNTY CENTRACS

FILE NAME: MA-20193 CHI:18-02-5500 IDOT FTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Additional.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED - 05/08/2025
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 5/5/2025	DATE - 12/20/2024	REVISED -

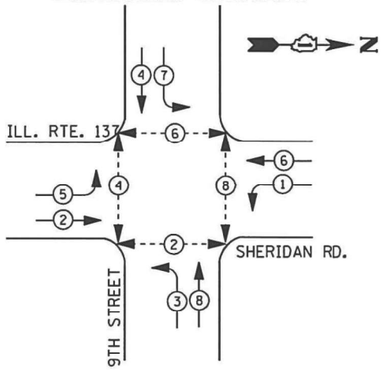
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 107 – IL RTE 137 (SHERIDAN RD) AT 7TH ST

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	248
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

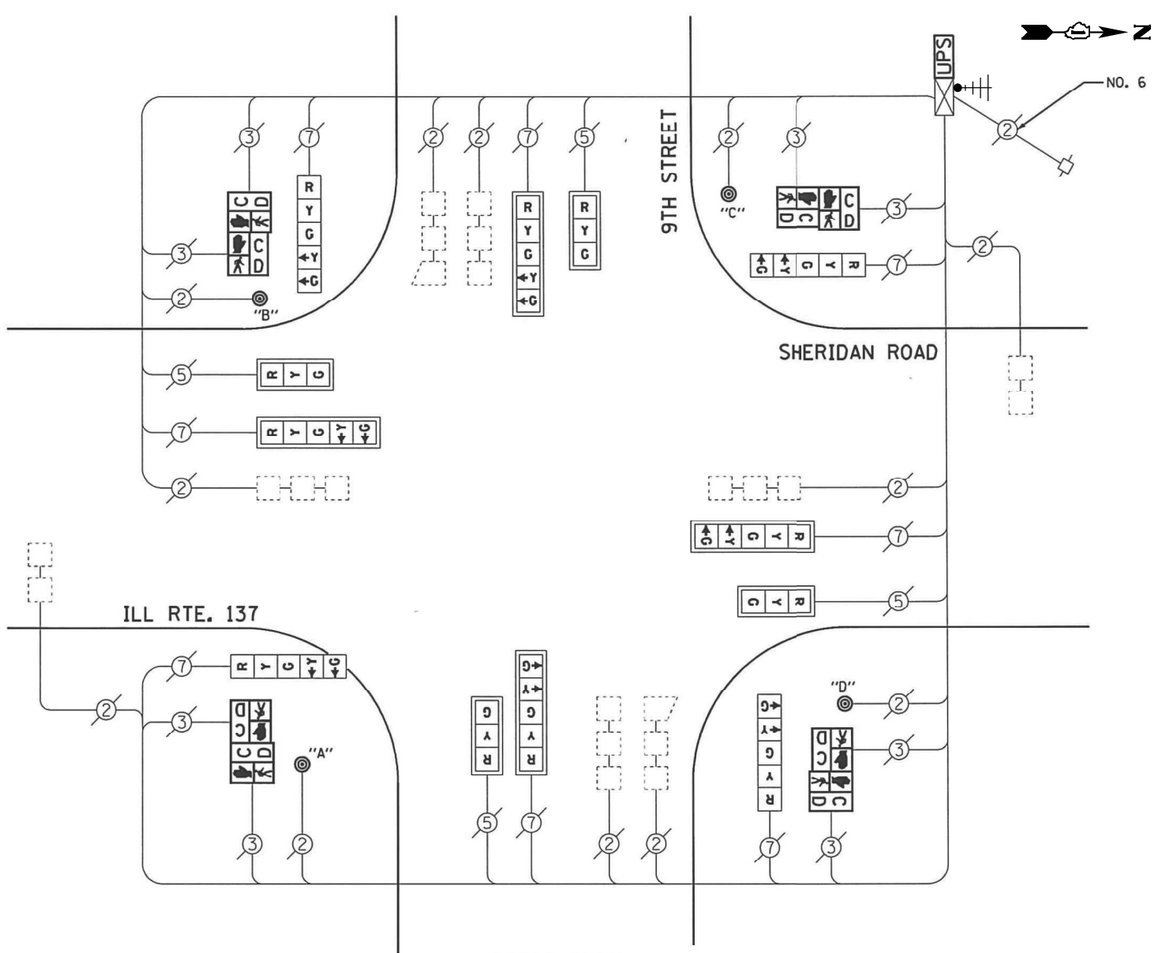
CONTROLLER SEQUENCE



LEGEND

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

PHASE DESIGNATION DIAGRAM



CABLE PLAN

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	4	11	44
4 - SECTION	-	14	-
5 - SECTION	8	13	104
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	8	15	120
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	1	15	15
TOTAL UPS SIZING =			493
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			1098

ENERGY COSTS TO:
VILLAGE OF WINTHROP HARBOR
830 SHERIDAN RD
WINTHROP HARBOR, IL 60096

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
WIRELESS TRANSMISSION SYSTEM POINT TO POINT	EACH	1

TS SHT NO. 241

TS 8795
LAKE COUNTY CENTRACS

FILE NAME: M:_20193 CHI\18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO_203_62W90\CAD\62W90_Sheet_05_Additional.dgn

TYLin

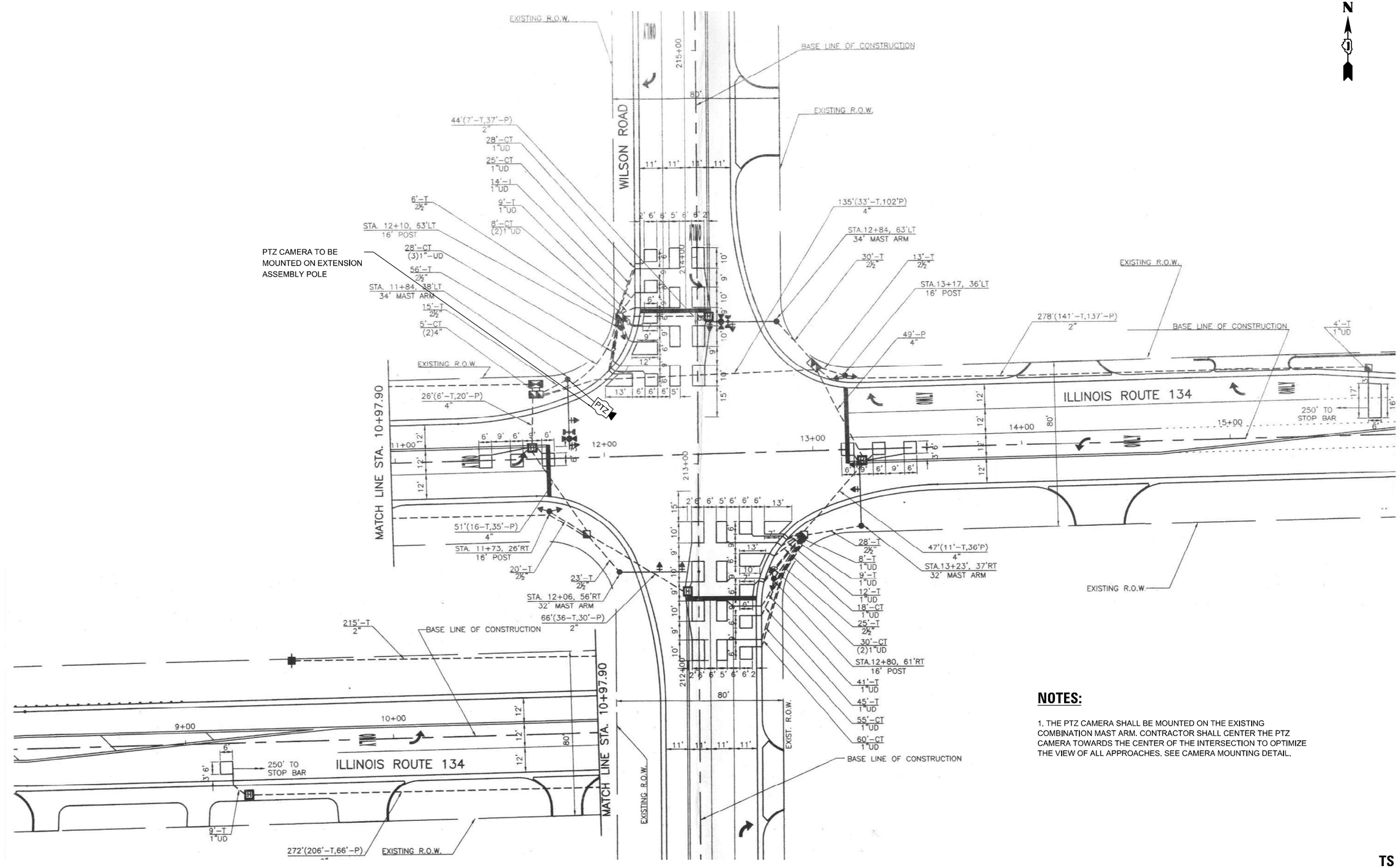
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	05/08/2025
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 5/5/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 108 – IL 137 (SHERIDAN RD) AT 9TH ST

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	249
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			



NOTES:

1. THE PTZ CAMERA SHALL BE MOUNTED ON THE EXISTING COMBINATION MAST ARM. CONTRACTOR SHALL CENTER THE PTZ CAMERA TOWARDS THE CENTER OF THE INTERSECTION TO OPTIMIZE THE VIEW OF ALL APPROACHES. SEE CAMERA MOUNTING DETAIL.

TS 557

LAKE COUNTY TACTICS

TS SHT NO. 242

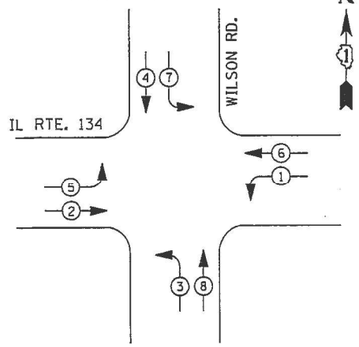
FILE NAME: M:_20193 CHI\18-03-5500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Additions.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED - 05/08/2025	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**SIGNAL PLAN LOCATION 109 – IL RTE 134 AT WILSON RD**	
	DRAWN - KATHLEEN MURPHY	REVISED -			
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -			
PLOT DATE = 5/5/2025	DATE - 12/20/2024	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.	

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	250
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

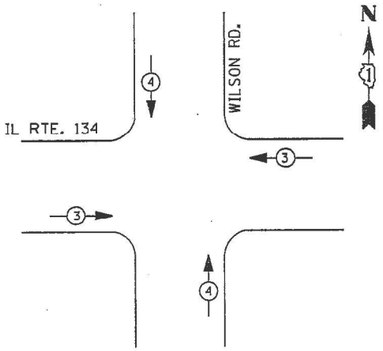
CONTROLLER SEQUENCE



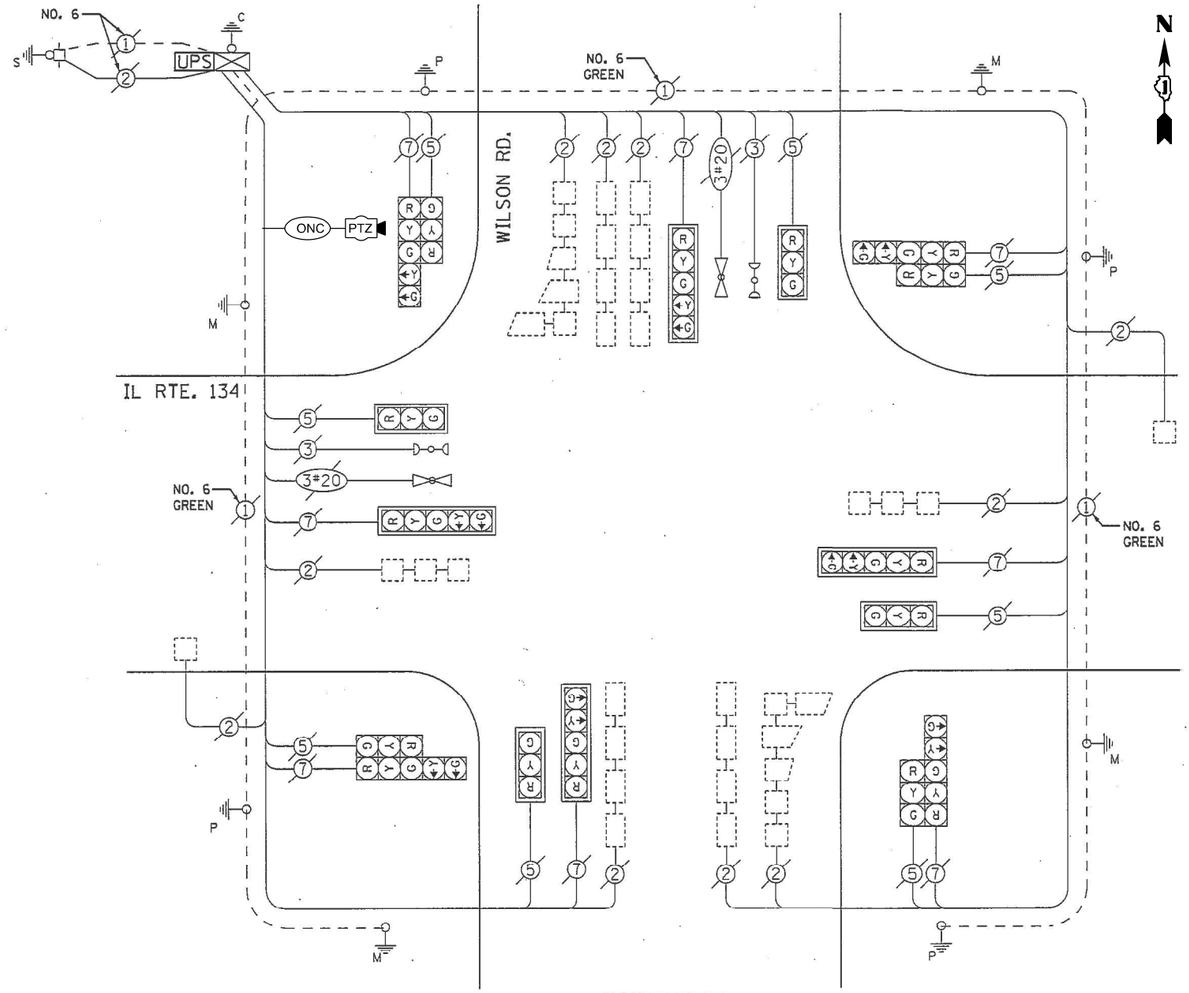
LEGEND

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

PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTION SEQUENCE



CABLE PLAN

REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
CELLULAR MODEM	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	88
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
CAMERA MOUNTING ASSEMBLY	EACH	1

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	8	11	88
4 - SECTION	-	14	-
5 - SECTION	8	13	104
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	1	15	15
TOTAL UPS SIZING =			417
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			1022

ENERGY COSTS TO:
ILLINOIS DEPT OF TRANSPORTATION
201 CENTER CT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

TS SHT NO. 243

FILE NAME: MH_20193 CHI 18-03-5500 IDOT PTB 199 - Various Traffic Signal Design Graphics\WO 203_62W90\CAD\62W90 Sheet_05_Additional.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

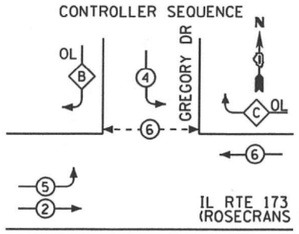
CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 109 – IL RTE 134 AT WILSON RD

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	251
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

TS 557
LAKE COUNTY TACTICS

CONTROLLER SEQUENCE



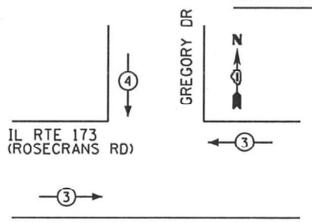
LEGEND

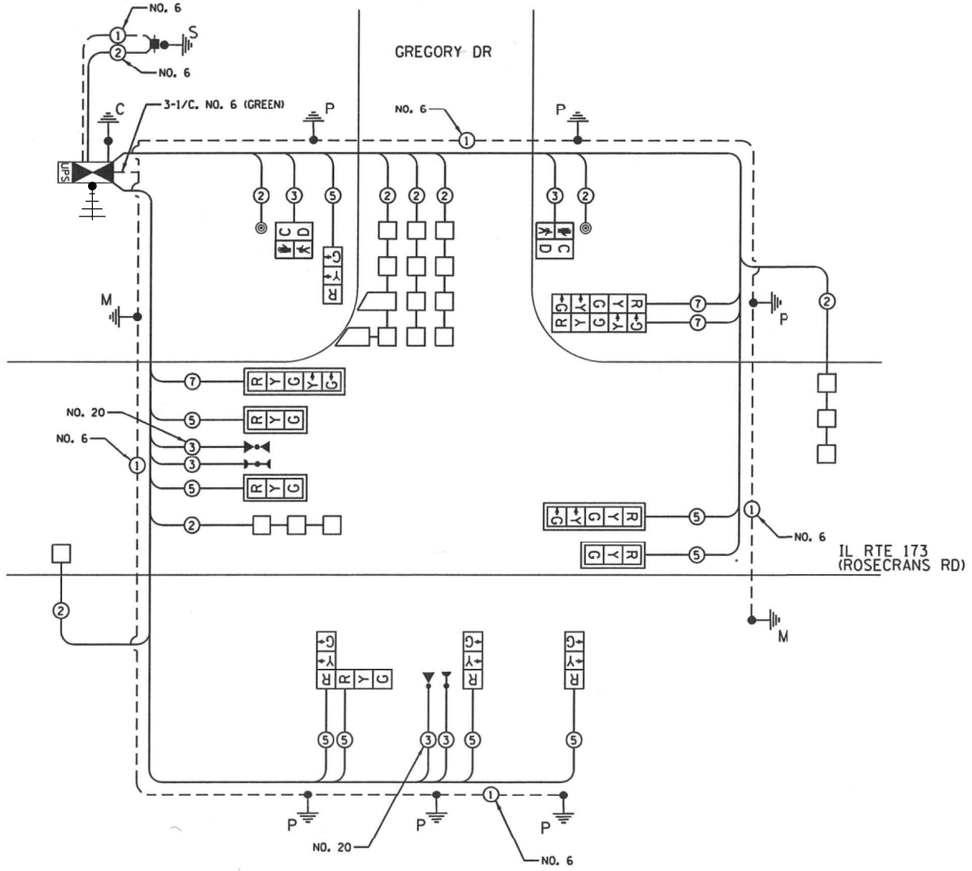
- DUAL ENTRY PHASE
- SINGLE ENTRY PHASE
- OL OVERLAP
- PEDESTRIAN PHASE
- NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

OVERLAP LETTER		PERMISSIVE PHASE		PROTECTED PHASE
B	=	4	+	5
C	=	6	+	4

EMERGENCY VEHICLE PREEMPTION SEQUENCE





TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	8	11	88
4 - SECTION	-	14	-
5 - SECTION	4	13	52
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	2	15	30
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	1	15	15
TOTAL UPS SIZING =			395
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			1000

ENERGY COSTS TO:
ILLINOIS DEPT OF TRANSPORTATION
201 CENTER CT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER

INSTALL CELL MODEM FROM TS 6625 - US RTE 45 AT IL RTE 176

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
WIRELESS TRANSMISSION SYSTEM POINT TO POINT	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1

TS SHT NO. 244

TS 6622
LAKE COUNTY CENTRACS

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED - 05/08/2025
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 5/5/2025	DATE - 12/20/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

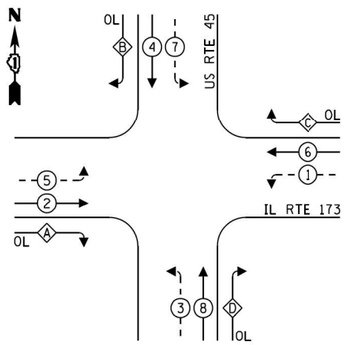
CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 110 – IL RTE 173 AT GREGORY DR

SCALE: | SHEET OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	252
		CONTRACT NO. 62W90		
		ILLINOIS	FED. AID PROJECT	

FILE NAME: M:\2019\3 CHI\18-03-14500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203 62W90\CAD\62W90_Sheet_03_Additional.dgn

PROPOSED CONTROLLER SEQUENCE



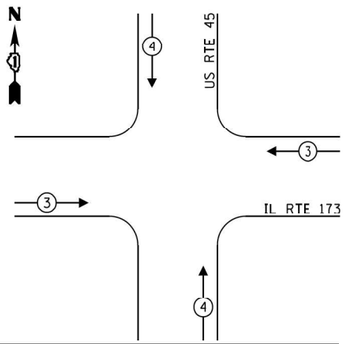
LEGEND:

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

RIGHT TURN OVERLAP PHASE DESIGNATION:

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

PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE

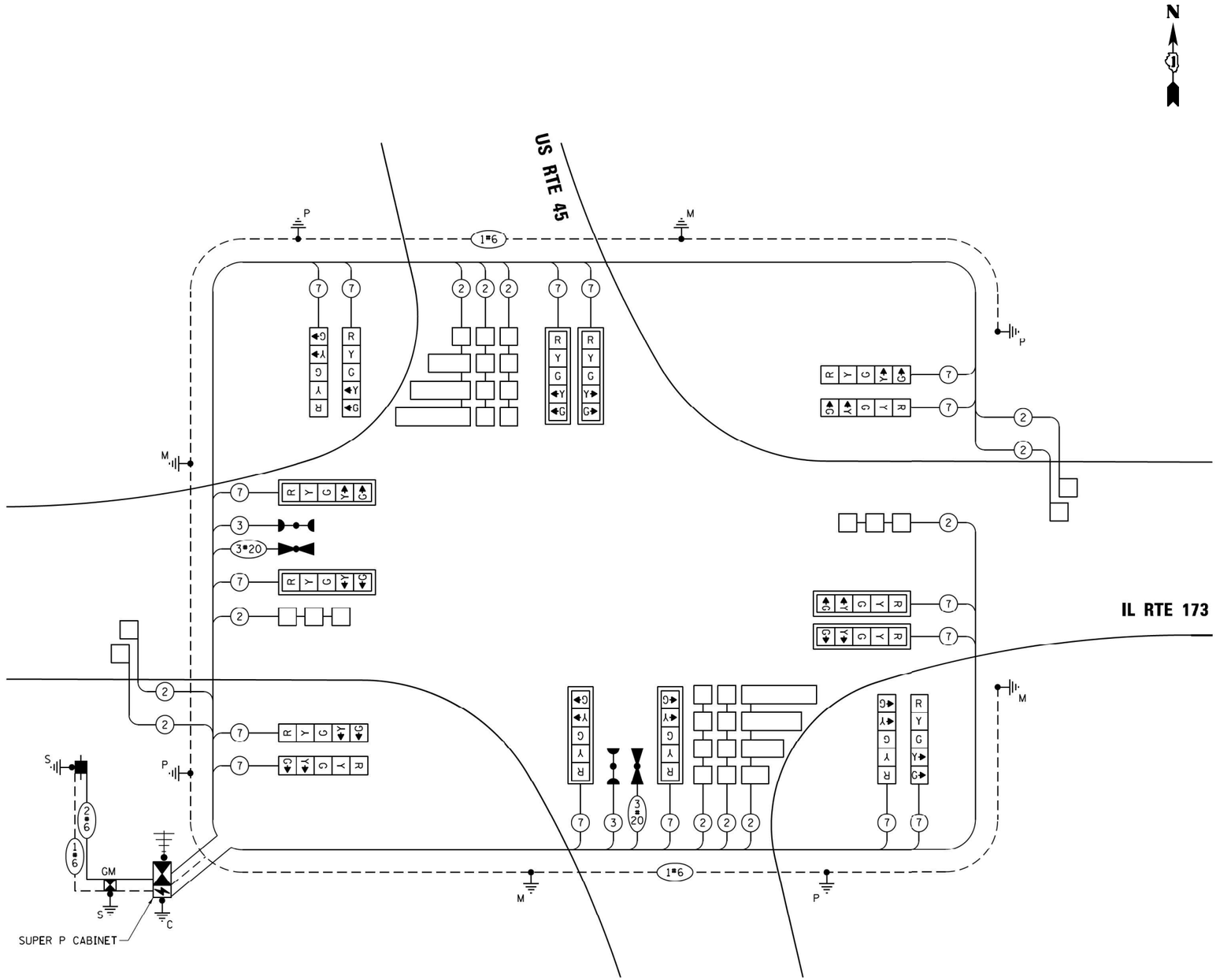


TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	-	11	-
4 - SECTION	-	14	-
5 - SECTION	16	13	208
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	1	15	15
TOTAL UPS SIZING =			433
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			1038

ENERGY COSTS TO:
VILLAGE OF NORTH BARRINGTON
111 OLD BARRINGTON RD
NORTH BARRINGTON, IL 60010

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---



SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
WIRELESS TRANSMISSION SYSTEM POINT TO POINT	EACH	1

TS SHT NO. 245

TS 6620
LAKE COUNTY CENTRACS

FILE NAME: Mst_20193_CMH_8d3-5500_IDOT_PFR_190 - Various Traffic Signal Design\Graphics\WO 203 62W90\CAD\62W90_Sheet 03_Additional.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED - 05/08/2025
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 5/5/2025	DATE - 12/20/2024	REVISED -

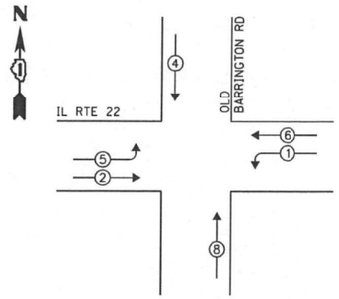
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 111 – US RTE 45 AT IL RTE 173

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	253
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

EXISTING CONTROLLER SEQUENCE

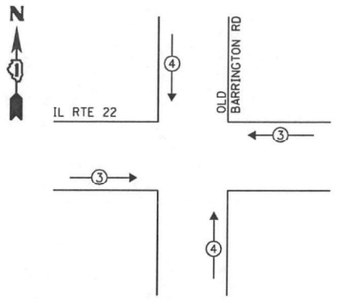


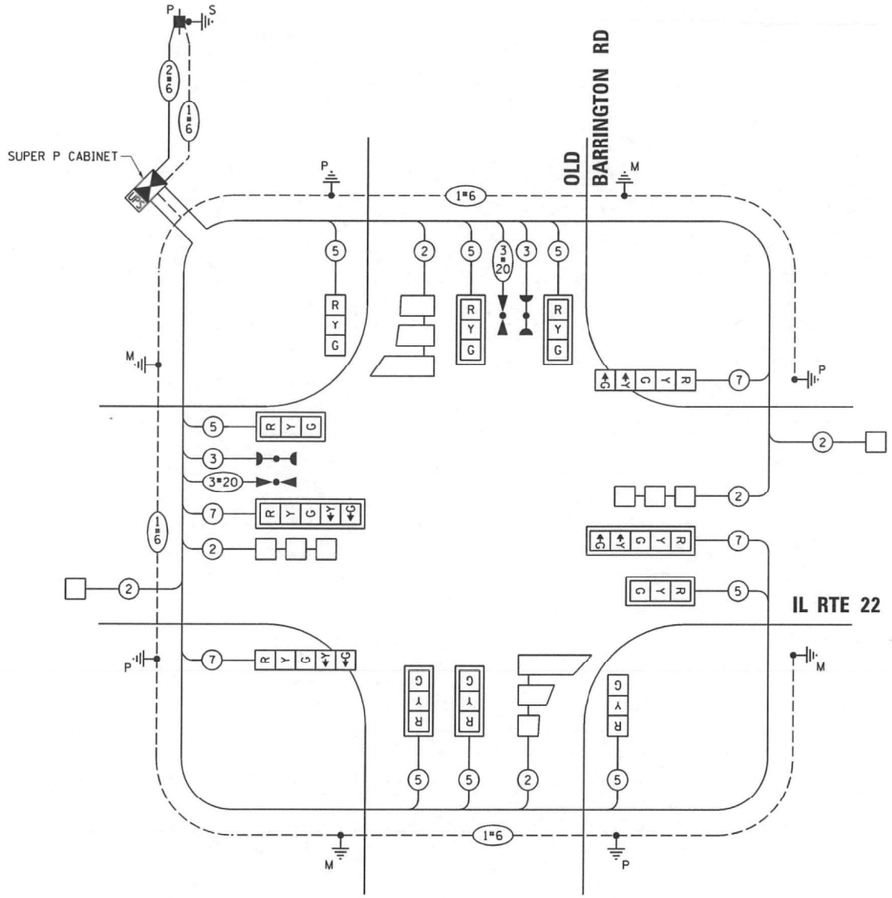
LEGEND:

- SINGLE ENTRY PHASE
- DUAL ENTRY PHASE
- PEDESTRIAN PHASE
- OVERLAP (OL)

PROPOSED PHASE DESIGNATION DIAGRAM

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE





CABLE PLAN
(NOT TO SCALE)

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	8	11	88
4 - SECTION	-	14	-
5 - SECTION	4	13	52
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	1	15	15
TOTAL UPS SIZING =			365
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	-
PTZ CAMERA	1	75	75
TOTAL SERVICE WIRE SIZING =			970

ENERGY COSTS TO:
VILLAGE OF NORTH BARRINGTON
111 OLD BARRINGTON RD
NORTH BARRINGTON, IL 60010

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
CELLULAR MODEM	EACH	1

TS SHT NO. 246

TS 6742
LAKE COUNTY CENTRACS

FILE NAME: H:\2019\3 CHI\18-03-5500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203 #2W90\CAD\62W90_Sheet_03_Additional.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

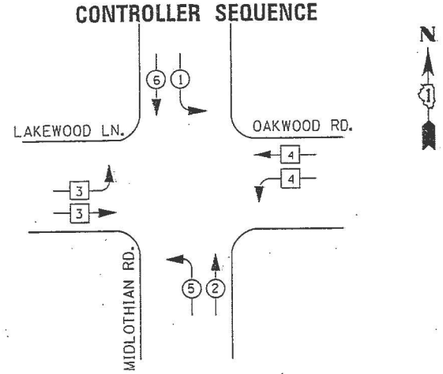
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 112 – IL RTE 22 AT OLD BARRINGTON RD

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	254
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

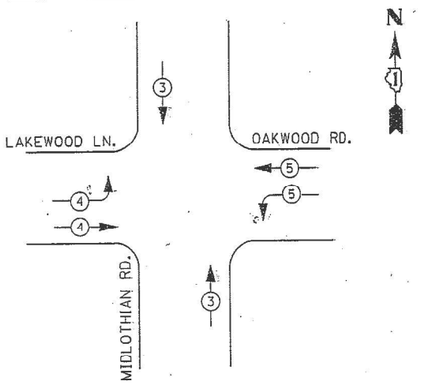
CONTROLLER SEQUENCE



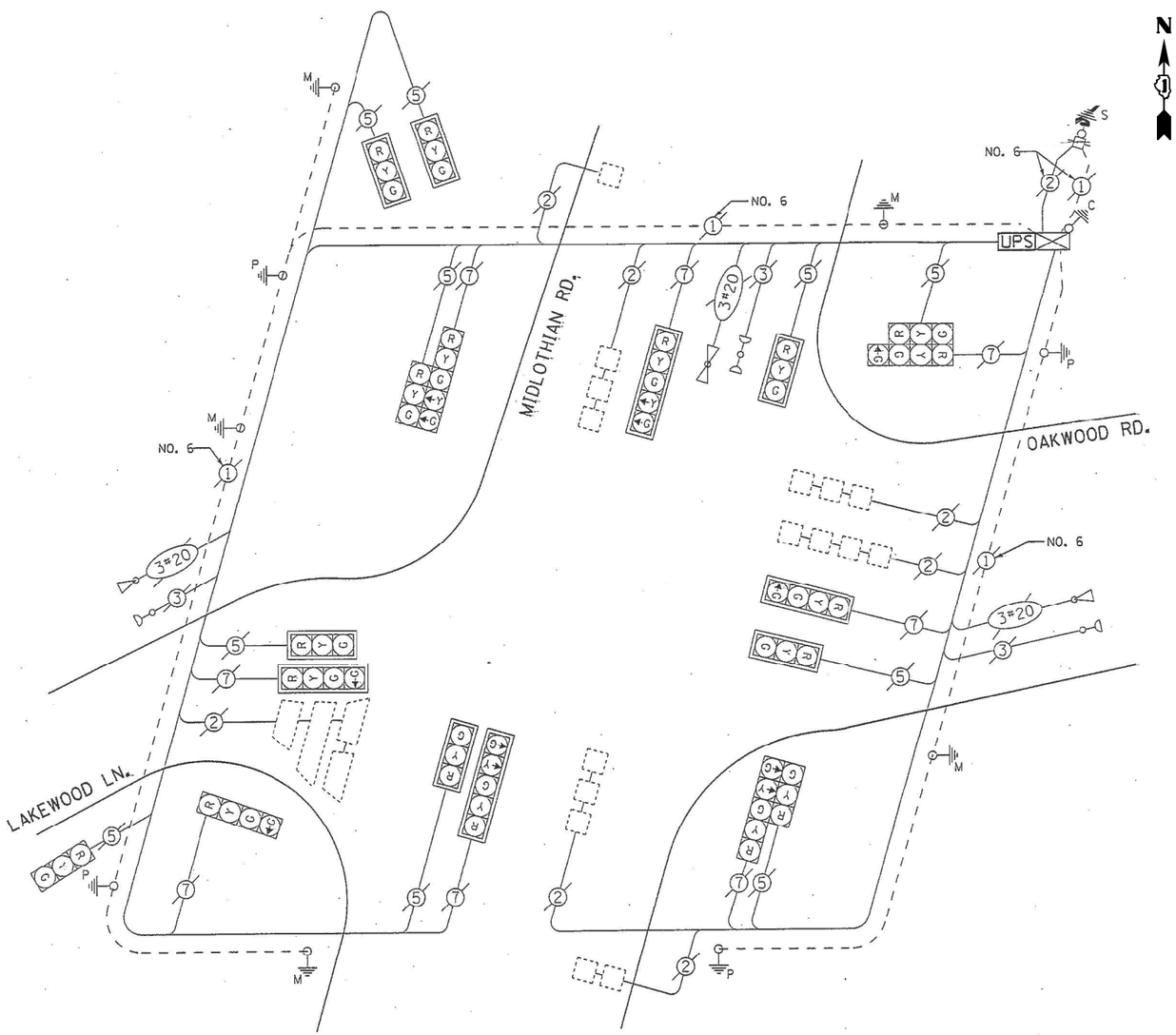
LEGEND

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

PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTION SEQUENCE



CABLE PLAN

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	10	11	110
4 - SECTION	4	14	56
5 - SECTION	4	13	52
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	1	15	15
TOTAL UPS SIZING =			443
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATE	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			1048

ENERGY COSTS TO:
VILLAGE OF LAKE ZURICH
70 EAST MAIN ST
LAKE ZURICH, IL 60047

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
CELLULAR MODEM	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1

REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER

TS 6753
LAKE COUNTY TACTICS

TS SHT NO. 247

FILE NAME: Mid_210-93_CHIL8403-5500_IDOT_PTB_190 - Various Traffic Signal Design\GraphHics\WO 203_62W90\C43\62W90_Sheet_03_Additions.dgn

TYLin

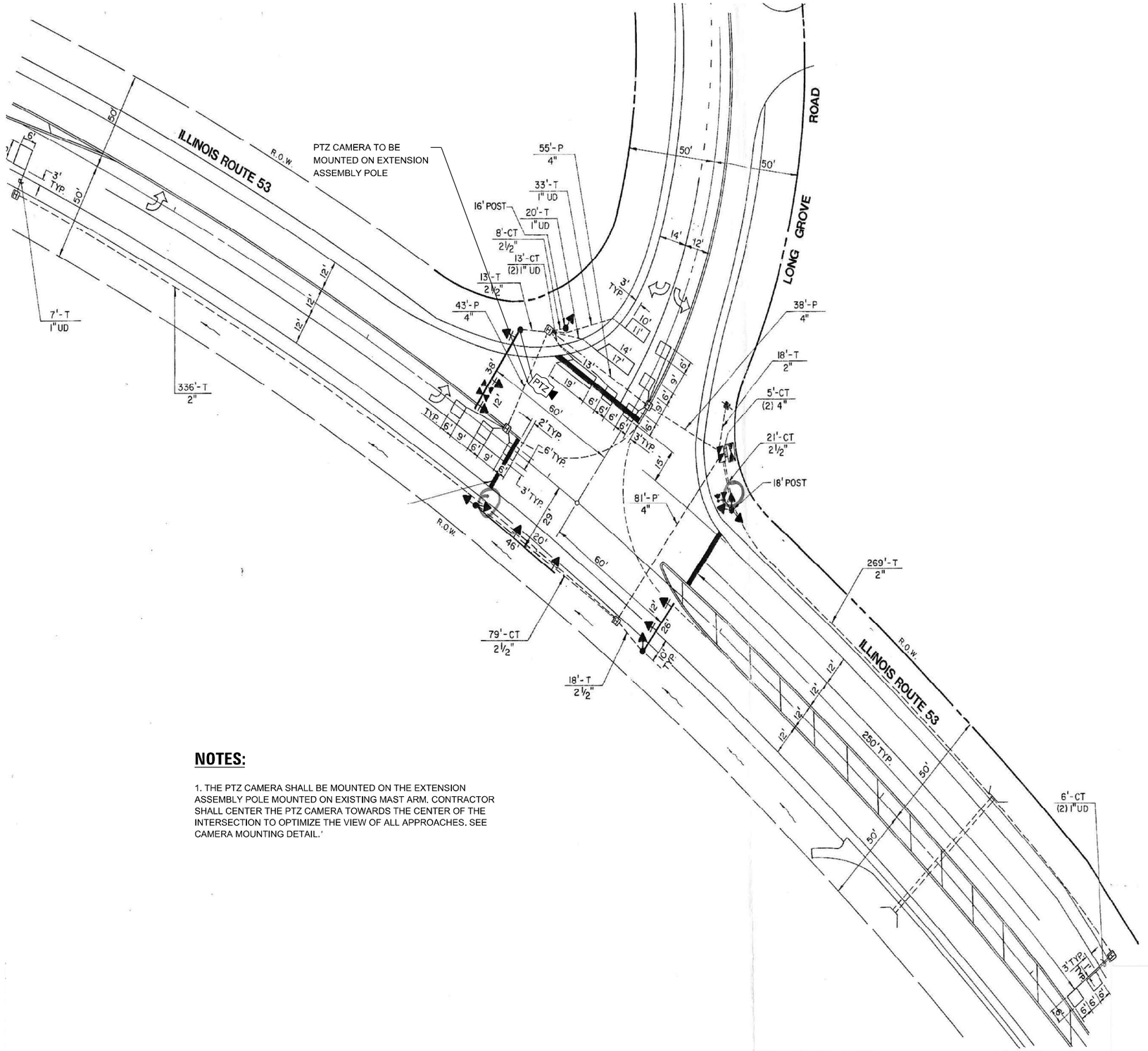
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -
	DRAWN - KATHLEEN MURPHY	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 113 – MIDLOTHIAN RD AT OAKWOOD RD /LAKEWOOD LN

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	255
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		



NOTES:

1. THE PTZ CAMERA SHALL BE MOUNTED ON THE EXTENSION ASSEMBLY POLE MOUNTED ON EXISTING MAST ARM. CONTRACTOR SHALL CENTER THE PTZ CAMERA TOWARDS THE CENTER OF THE INTERSECTION TO OPTIMIZE THE VIEW OF ALL APPROACHES. SEE CAMERA MOUNTING DETAIL.'

TS SHT NO. 248

TS 966

LAKE COUNTY TACTICS

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED - 05/08/2025	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 5/5/2025	DATE - 12/20/2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

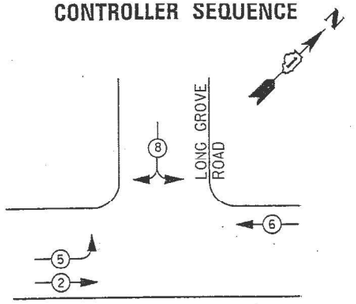
CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 114 – IL RTE 53 AT LONG GROVE RD

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	256
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

FILE NAME: NH 2019.3 CMN 18-03-5500 IDOT PTB 199 - Various Traffic Signal Design\Graphics\WO 203 62W90\CAD\62W90_Sheet 05 Additional.dgn

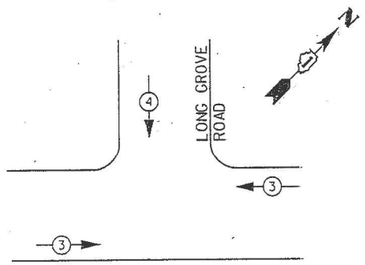
CONTROLLER SEQUENCE



LEGEND

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

PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTION SEQUENCE

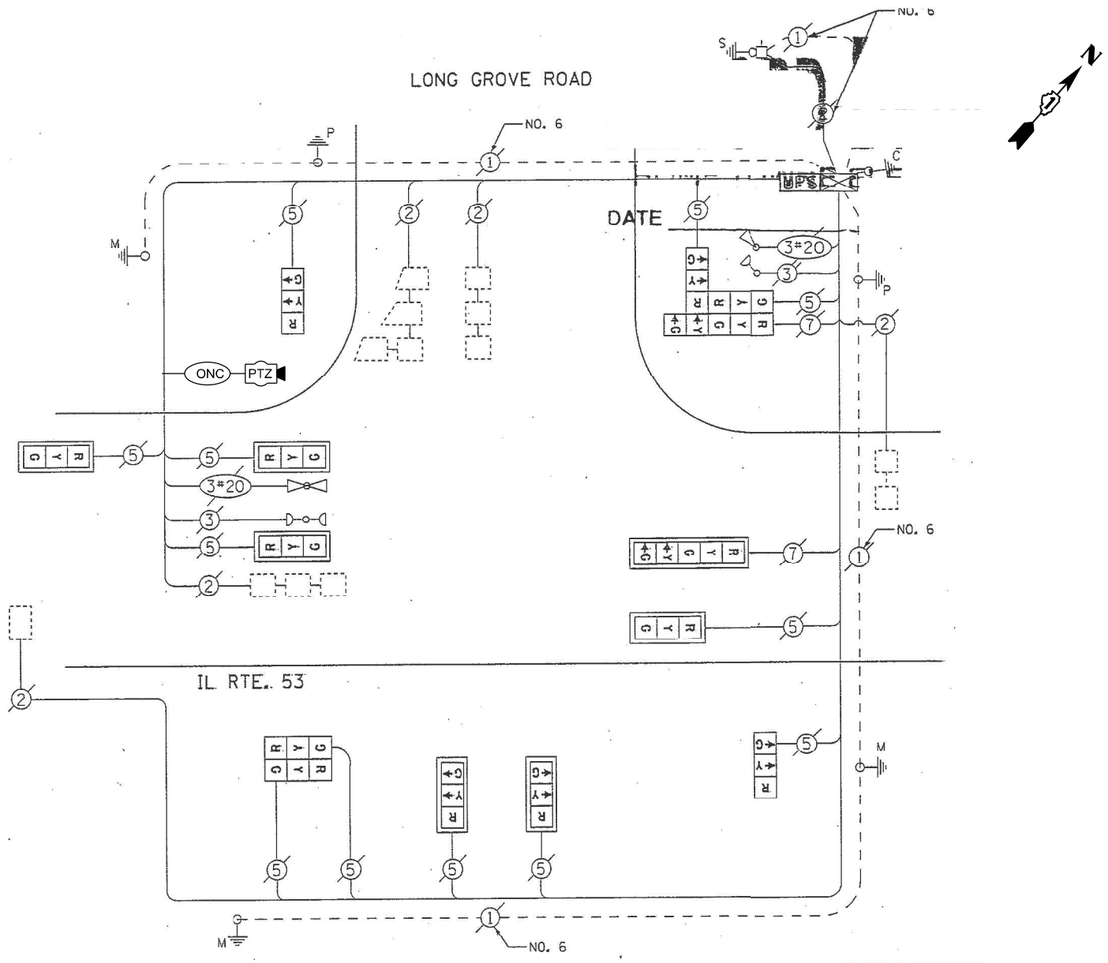
EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↖ ↗

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	TOTAL WATTAGE
SIGNAL HEAD			
3 - SECTION	12	11	132
4 - SECTION	-	14	-
5 - SECTION	2	13	26
PROGRAMMABLE SIGNALS			
3 - SECTION	-	22	-
4 - SECTION	-	32	-
5 - SECTION	-	28	-
PED. SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR	-	20	-
VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	1	15	15
TOTAL UPS SIZING =			383
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	-
PTZ CAMERA	-	75	-
TOTAL SERVICE WIRE SIZING =			988

ENERGY COSTS TO:
VILLAGE OF WINTHROP HARBOR
830 SHERIDAN RD
WINTHROP HARBOR, IL 60096

ENERGY SUPPLY:
CONTACT: NEW BUSINESS DEPT
PHONE: (866) 639-3532
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---



REMOVAL AND RELOCATION NOTES:

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

1 EACH CONTROLLER

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
CELLULAR MODEM	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	192
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
CAMERA MOUNTING ASSEMBLY	EACH	1

TS SHT NO. 249

TS 966
LAKE COUNTY TACTICS

TYLin

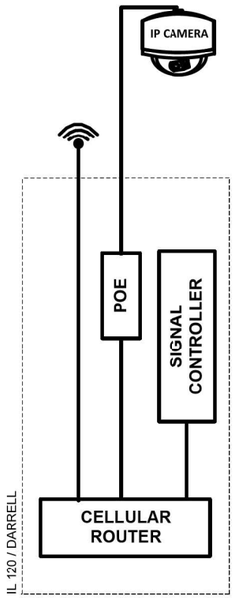
USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED -	
	DRAWN - KATHLEEN MURPHY	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -	
PLOT DATE = 3/30/2025	DATE - 12/20/2024	REVISED -	

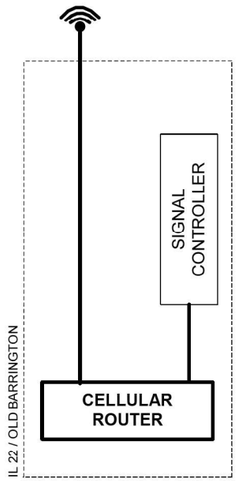
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

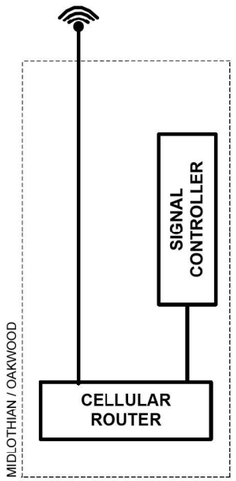
CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
LOCATION 114 – IL RTE 53 AT LONG GROVE RD
SCALE: SHEET OF SHEETS STA. TO STA.

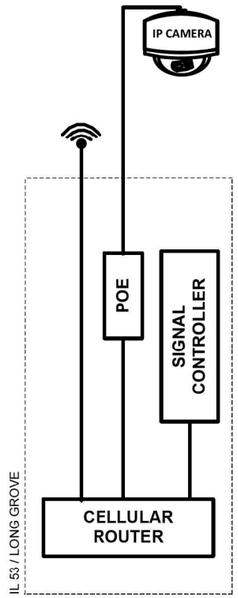
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	257
		CONTRACT NO. 62W90		
	ILLINOIS	FED. AID PROJECT		

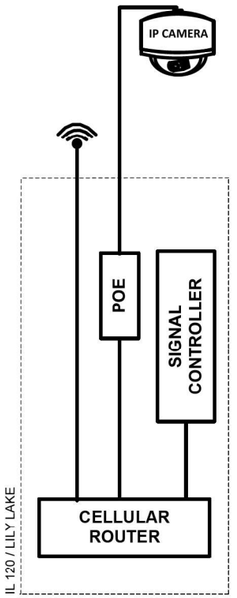
FILE NAME: M:\...\20193 CHI\18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_Additional.dgn











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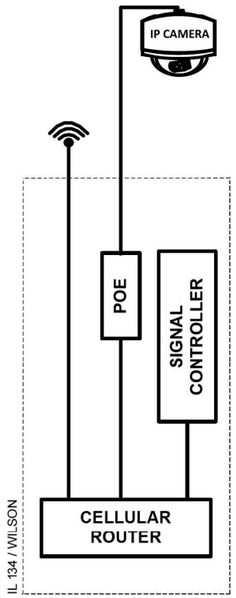
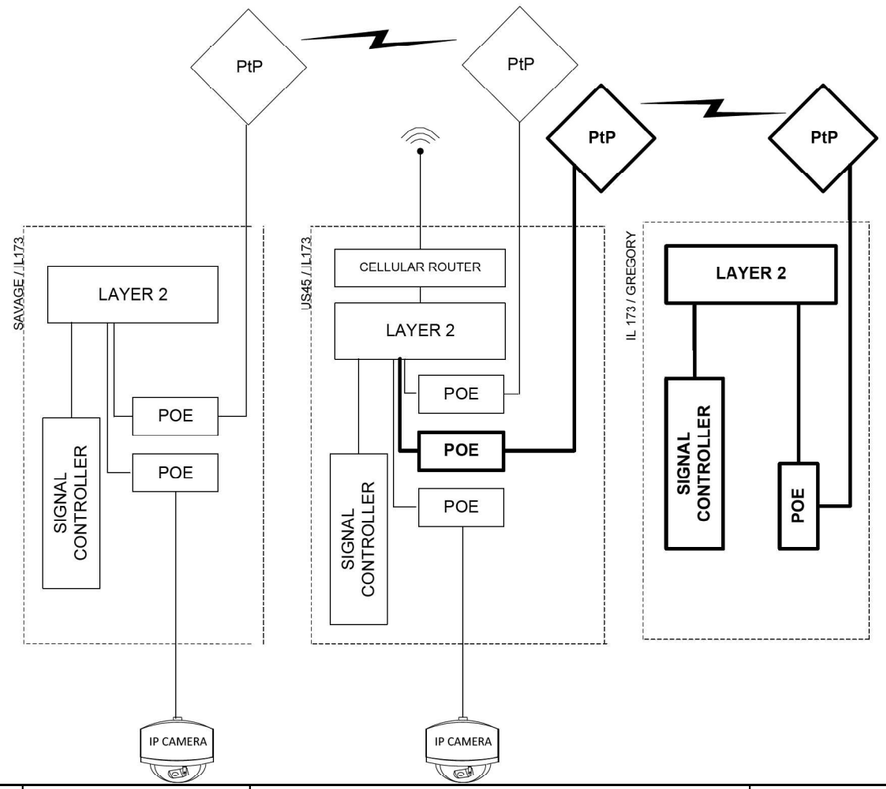
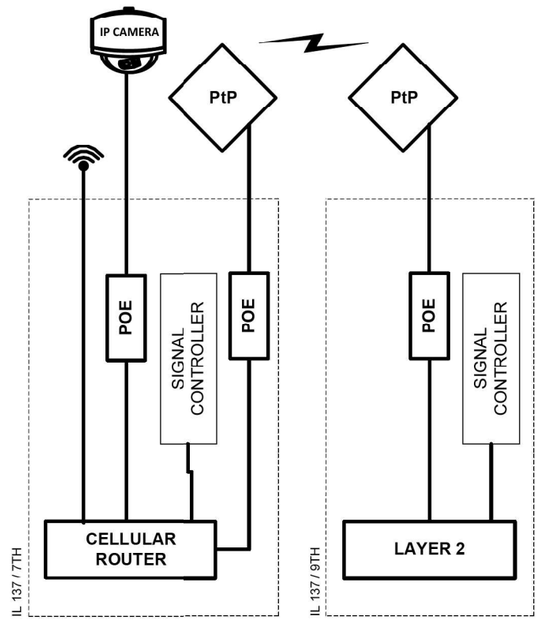






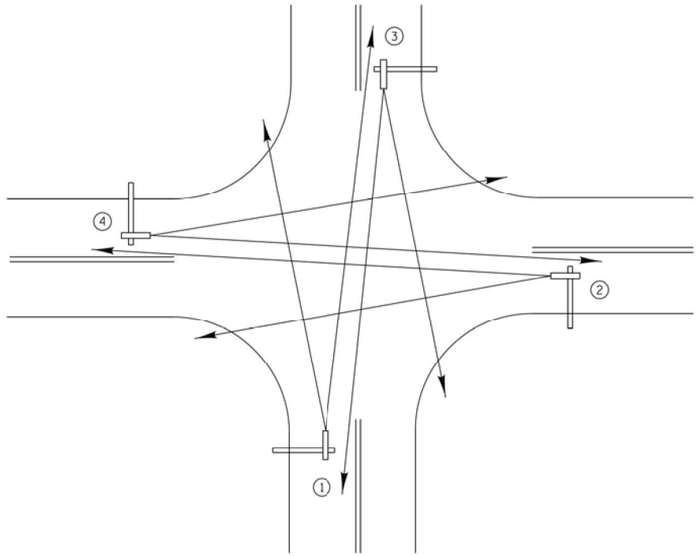
LAKE COUNTY CENTRACS

TS SHT NO. 250

FILE NAME: MS_20193 CHI\18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_05_StandDetails.dgn

PARSONS	USER NAME = erica.salutz	DESIGNED - RL / DG	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CABINET DETAIL IDOT CELL
		DRAWN - RL / DG	REVISED -		
	PLOT SCALE = 40.0000 ' / in.	CHECKED - RL / DG	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.
	PLOT DATE = 3/30/2025	DATE - 2025.02.20	REVISED -		

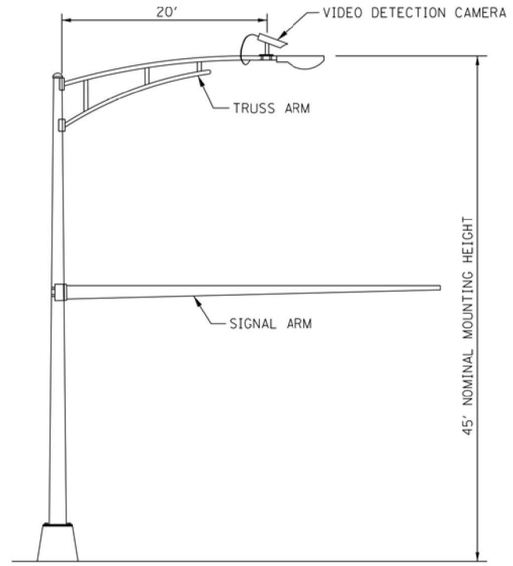
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	258
		CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			



TYPICAL VIDEO VEHICLE DETECTION SYSTEM

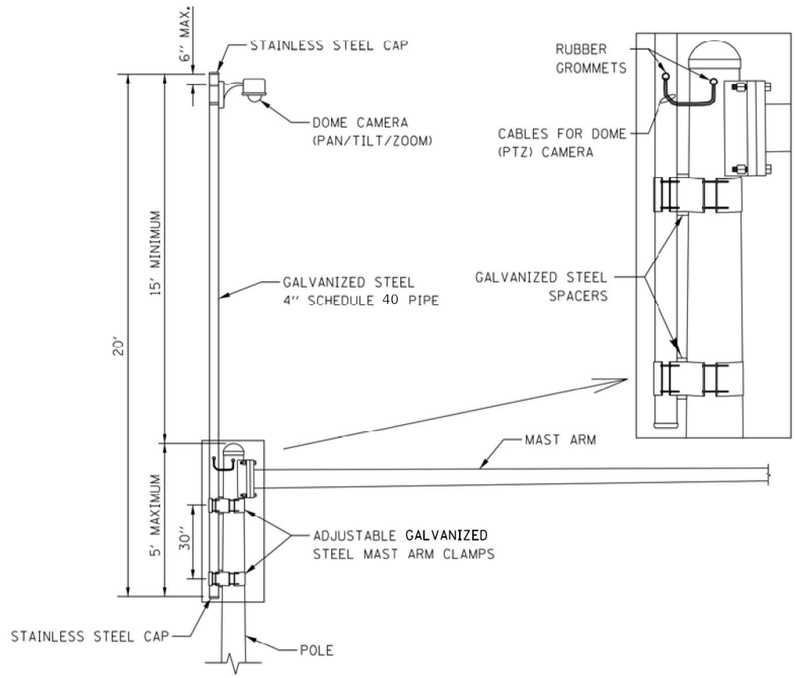
(NOT TO SCALE)

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



COMBINATION MAST ARM ASSEMBLY AND POLE DIMENSIONS

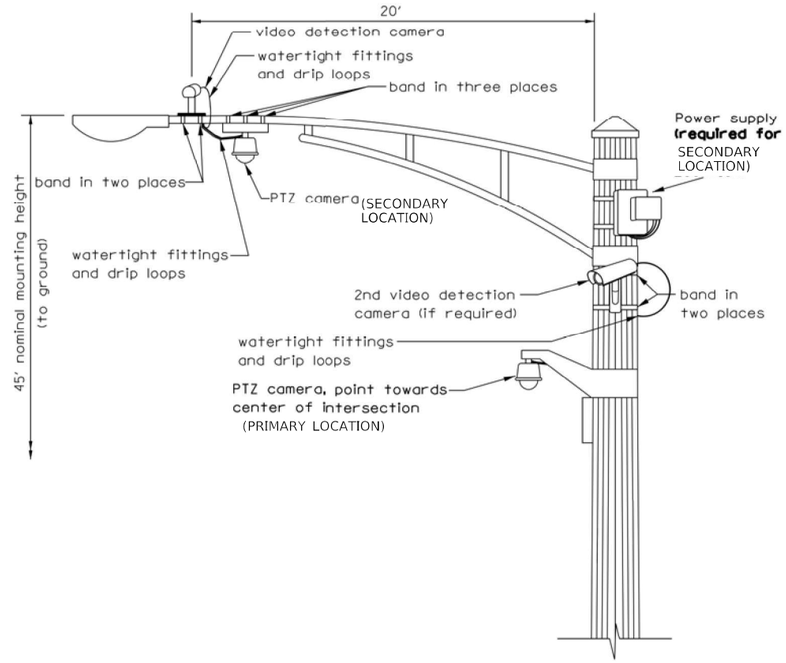
(NOT TO SCALE)



CAMERA MOUNTING ASSEMBLY DETAIL

(NOT TO SCALE)

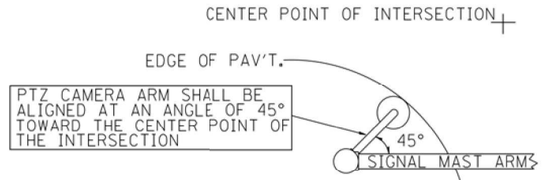
NOTES:
- THE MAST ARM IS TAPERED.
- INSTALL EXTENSION POLE VERTICAL AND PLUMB BY MODIFYING/INSTALLING BRACKETS AS NECESSARY. ADDITIONAL SPACERS REQUIRED ARE INCLUDED IN THE COST OF THE CAMERA MOUNTING ASSEMBLY OF THE TYPE SPECIFIED.
- SPACERS ARE TO BE INTEGRATED OR MANUFACTURED WITH THE MAST ARM BRACKETS



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)

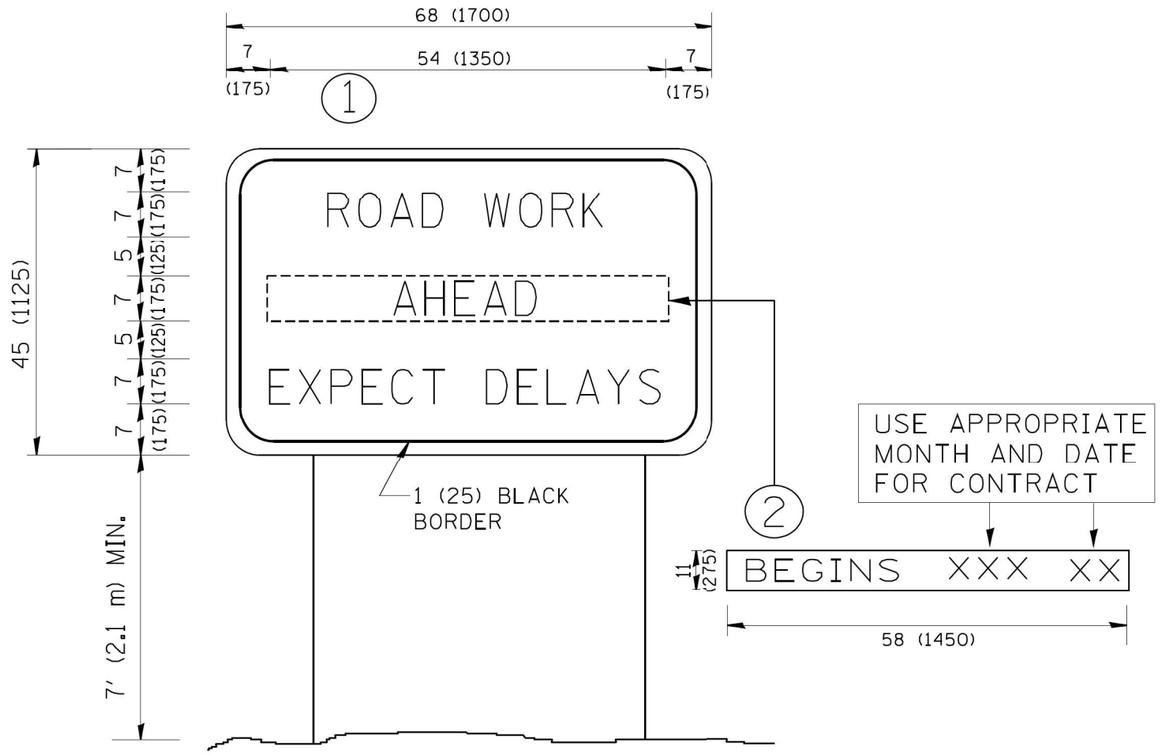
(NO SCALE)

FILE NAME: M:\2019\3 CHI\18-03-5500 IDOT PTB 190 - Various Traffic Signal Design\Graphics\WO 203_62W90\CAD\62W90_Sheet_06_Hwy_Standards.dgn

TYLin

USER NAME = erica.salutz	DESIGNED - ERICA SALUTZ	REVISED - 05/08/2025	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**CAMERA MOUNTING DETAIL**	
	DRAWN - KATHLEEN MURPHY	REVISED -			
PLOT SCALE = 40.0000 ' / in.	CHECKED - PETER WOJTKIEWICZ	REVISED -			
PLOT DATE = 5/5/2025	DATE - 12/20/2024	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.	

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	259
		CONTRACT NO. 62W90		
	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.

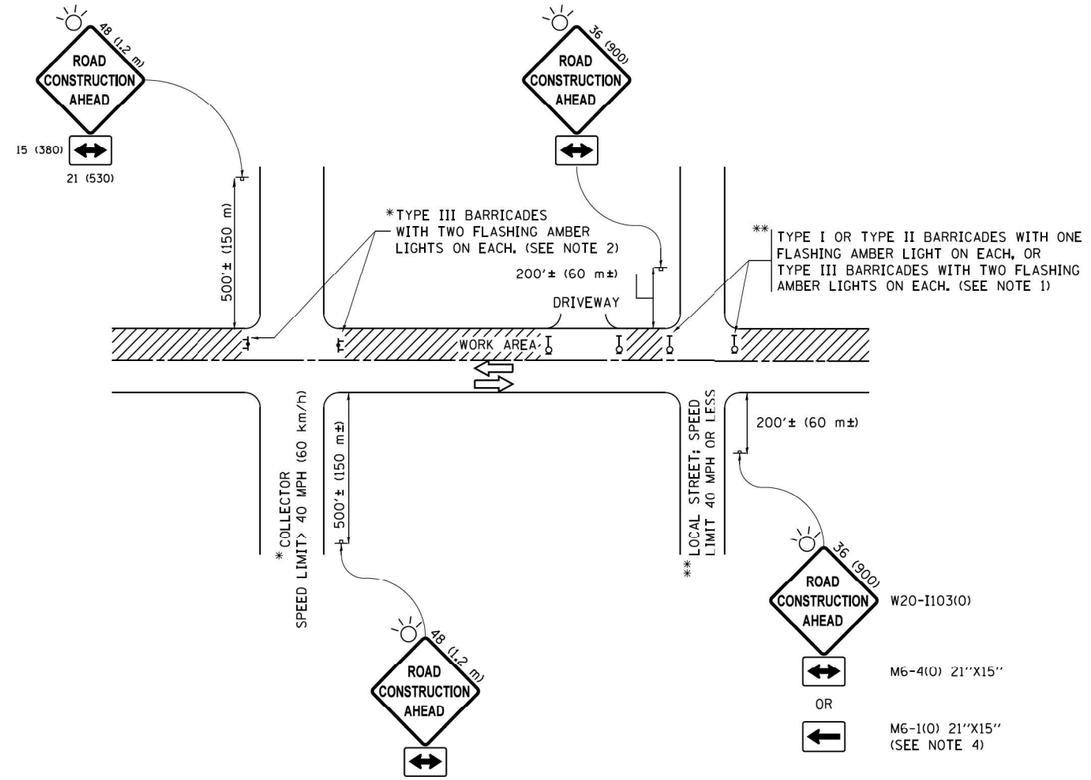
FILE NAME = W:\diststd\22x34\tc22.dgn	USER NAME = gaglianobt	DESIGNED -	REVISED - R. MIRS 09-15-97
		DRAWN -	REVISED - R. MIRS 12-11-97
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - T. RAMMACHER 02-02-99
	PLOT DATE = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ARTERIAL ROAD INFORMATION SIGN

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	262
	TC-22	**CONTRACT NO.** 62W90		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



NOTES:

1. 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:
   a) 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.
   b) 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.
2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
   a) 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.
   b) 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.
3. 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.
4. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
5. 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.
6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
7. 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.

FILE NAME = pw:\\IL084EBIDINTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\DistStds\CADData\CADsheets\tc10.dgn	USER NAME = footemj	DESIGNED - L.H.A.	REVISED - A. HOUSEH 10-15-96
	PLOT SCALE = 50.000 ' / in.	DRAWN -	REVISED -T. RAMMACHER 01-06-00
Default	PLOT DATE = 9/15/2016	CHECKED -	REVISED - A. SCHUETZE 07-01-13
		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.
			262	260
	TC-10	CONTRACT NO.		
	ILLINOIS FED. AID PROJECT			

tc10.dgn 9/15/2016 12:46:49 PM User:footemj

TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER

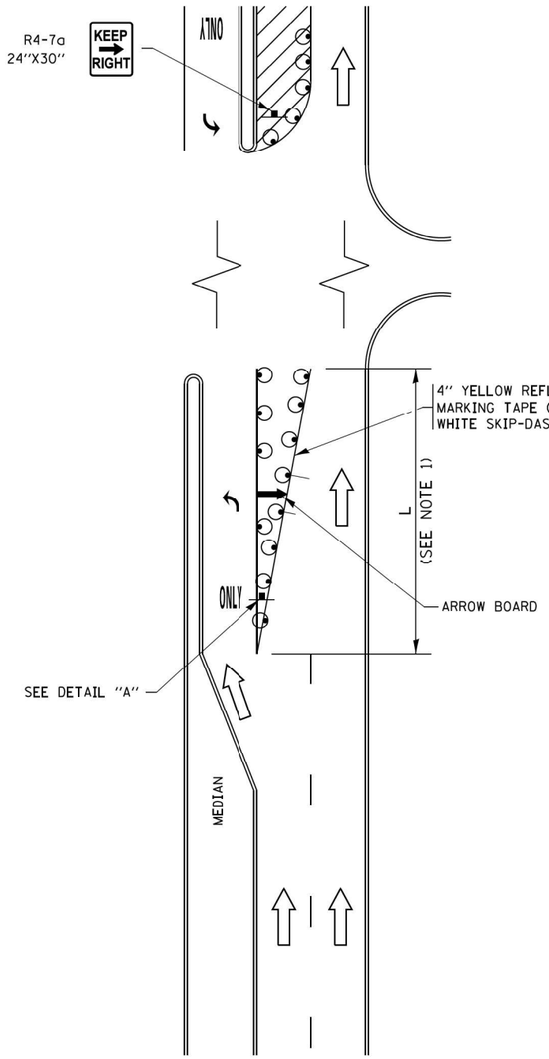


FIGURE 1

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-I10OR 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 PREQUIREMENTS.

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.

TURN BAY ENTRANCE WITHIN A LANE CLOSURE

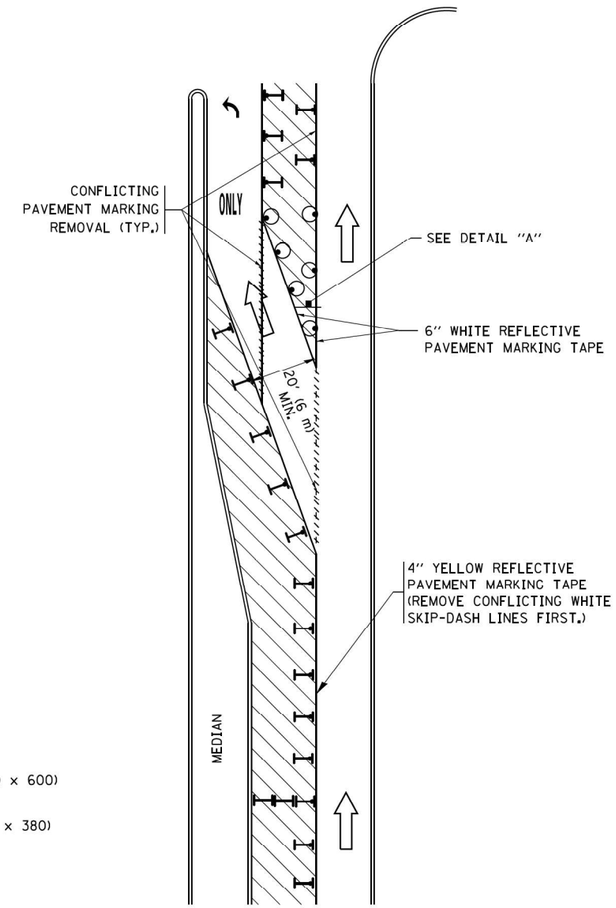
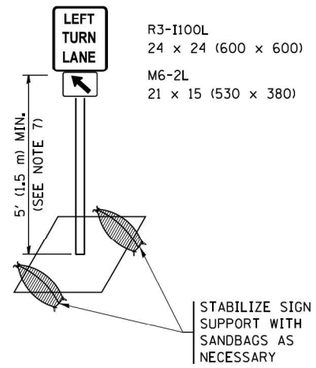


FIGURE 2



DETAIL A

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

FILE NAME = pw:\\IL084EBIDINTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\Dist Standards\ADData\CAD Standards\Default	USER NAME = footemj	REVISED -T. RAMMACHER 09-08-94	REVISED - R. BORO 09-14-09	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)
	PLOT SCALE = 50.0000 ' / in.	REVISED - A. HOUSEH 11-07-95	REVISED - A. SCHUETZE 07-01-13		
	PLOT DATE = 9/15/2016	REVISED - A. HOUSEH 10-12-96	REVISED - A. SCHUETZE 09-15-16		
		REVISED -T. RAMMACHER 01-06-00	REVISED -		

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2024-965-TS	VARIOUS	262	261
	TC-14	CONTRACT NO. 62W90		
	ILLINOIS FED. AID PROJECT			

tc14.dgn 9/15/2016 12:48:24 PM User:footemj