

FOR INDEX OF SHEETS, HIGHWAY STANDARDS, AND DETAILS SEE SHEET NO. 2

09-18-2015 LETTING ITEM 009

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

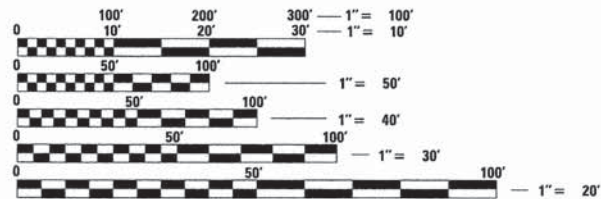
FAU 2552 (WASHINGTON STREET)
ROYCE ROAD TO WARRENVILLE ROAD
FAU 1522 (AURORA AVENUE)
WEST STREET TO WASHINGTON STREET
FAU 2546 (WEST STREET)
MARTIN AVENUE TO AURORA AVENUE
FAU 1487 (CHICAGO AVENUE)
WASHINGTON STREET TO ELLSWORTH STREET
TRAFFIC SIGNAL INTERCONNECT
SECTION: 13-00158-00-TL
PROJECT NO.: CMM-M-4003(229)
DuPAGE AND WILL COUNTY
JOB NO.: C-91-027-14

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2552, 1522, 1487 & 2546	13-00158-00-TL	DUPAGE & WILL	84	1
FED. ROAD DIST. NO.	ILLINOIS CONTRACT NO. 61B84			



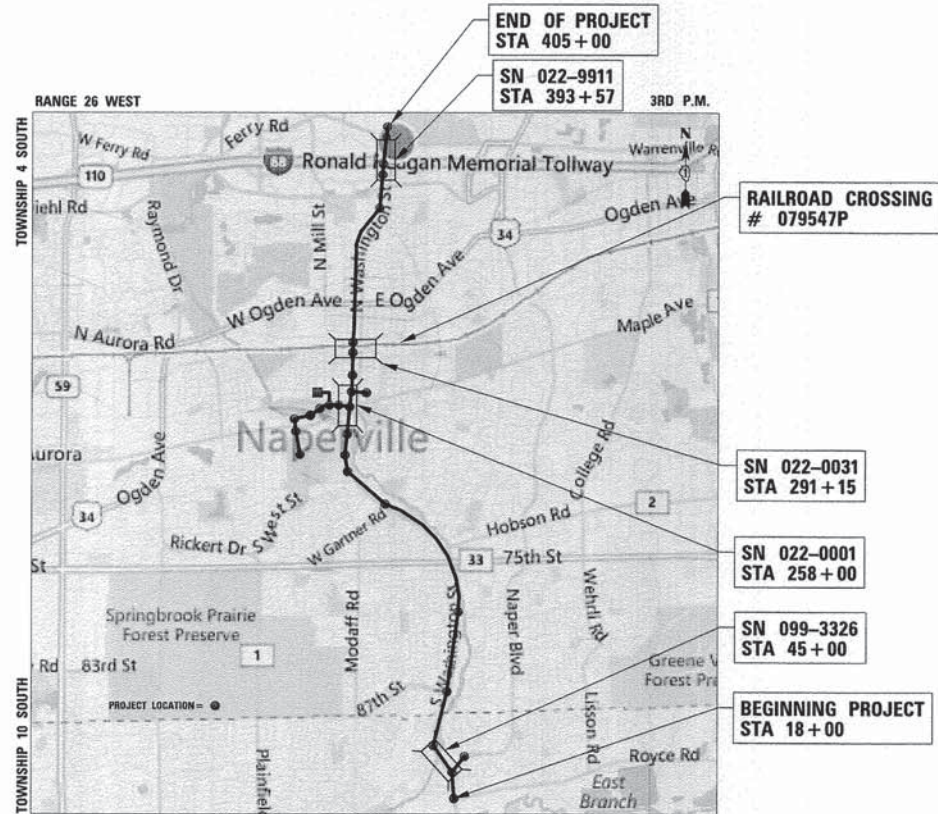
TRAFFIC DATA

FAU NUMBERS	ROUTE SEGMENT	SPEED (MPH)	ADT (2012)	CLASSIFICATION
2552	WASHINGTON STREET ROYCE ROAD TO NAPER BOULEVARD	45	26,900	URBAN 4 LANE, OTHER PRINCIPAL ARTERIAL
	WASHINGTON STREET - NAPER BLVD. TO DUPAGE/WILL COUNTY LINE	45	19,700	URBAN 4 LANE, MINOR ARTERIAL
	WASHINGTON STREET - DUPAGE/ WILL COUNTY LINE TO 75TH STREET	40	22,600	URBAN 4 LANE, MINOR ARTERIAL
	WASHINGTON STREET - 75TH STREET TO AURORA AVENUE	30/35/40	28,500	URBAN 4 LANE, MINOR ARTERIAL
	WASHINGTON STREET AURORA AVENUE TO US ROUTE 34	25/30	22,000	URBAN 4 LANE, MINOR ARTERIAL
	WASHINGTON STREET - US ROUTE 34 TO WARRENVILLE ROAD	30/35	16,000	URBAN 4 LANE, MINOR ARTERIAL
1522	AURORA AVENUE - WEST STREET TO WASHINGTON STREET	30	18,100	URBAN 4 LANE, MINOR ARTERIAL
2546	WEST STREET - MARTIN AVENUE TO AURORA AVENUE	30	17,000	URBAN 4 LANE, MINOR ARTERIAL
1487	CHICAGO AVENUE - WASHINGTON STREET TO ELLSWORTH STREET	30	12,800	URBAN 4 LANE, MINOR ARTERIAL



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 EXCAVATION
1-800-892-0123
OR 811



NAPERVILLE, LISLE AND DUPAGE TOWNSHIP
NET LENGTH = 14,170 FEET (2.68 MILES)
GROSS LENGTH = 45,400 FEET (8.60 MILES)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

APPROVED June 22, 2015
Anderson Hayes
CITY OF NAPERVILLE REPRESENTATIVE

PASSED July 7, 2015
C. Holt CHRISTOPHER HOLT
DISTRICT ONE ENGINEER OF LOCAL ROADS & STREETS

RELEASING FOR BID
BASED ON LIMITED
REVIEW July 7, 2015
John Fortman
DEPUTY DIRECTOR OF HIGHWAYS, REGION 1 ENGINEER

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

George M. Ziegler 6/20/2015
ENGINEER DATE
GEORGE M. ZIEGLER
ILLINOIS REGISTRATION No. 062-045853
EXPIRATION DATE: 11-30-2015

FEDERAL AID PROGRAM ENGINEER: FAWAD AQUEEL, P.E. (847) 705-4021, SCHAUMBURG, IL

CB CHRISTOPHER B. BURKE ENGINEERING, LTD.
9575 W. Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

CONTRACT NO. 61B84

INDEX OF SHEETS

1	TITLE SHEETS	34	SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE WASHINGTON STREET AND IROQUOIS AVENUE
2	INDEX OF SHEETS AND HIGHWAY STANDARDS	35	TRAFFIC SIGNAL MODIFICATION PLAN WASHINGTON STREET AND DIEHL ROAD
3	GENERAL NOTES AND LOCATION MAP	36	SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE WASHINGTON STREET AND DIEHL ROAD
4-7	SUMMARY OF QUANTITIES	37	SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE WASHINGTON STREET AND SHUMAN BLVD
8	SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE WASHINGTON STREET AND ROYCE ROAD/ PARK DISTRICT ENT.	38	SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE WASHINGTON STREET AND BIG HORN ROAD
9	TRAFFIC SIGNAL MODIFICATION PLAN WASHINGTON STREET AND NAPER BOULEVARD.	39	SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE WASHINGTON STREET AND WARRENVILLE ROAD
10	SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE WASHINGTON STREET AND NAPER BLVD.	40	SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE WEST STREET AND MARTIN AVENUE/PARKING ENTRANCE
11	SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE NAPER BOULEVARD AND RIVERWOODS DRIVE	41	SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE WEST STREET AND HILLSIDE ROAD
12	SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE WASHINGTON STREET AND RING ROAD/ PARK DISTRICT ENT.	42	TRAFFIC SIGNAL MODIFICATION PLAN AURORA AVENUE AND WEST STREET
13	SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE WASHINGTON STREET AND 87th STREET	43	SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE AURORA AVENUE AND WEST STREET
14	SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE WASHINGTON STREET AND BAILEY ROAD	44	SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE AURORA AVENUE AND NCHS PARKING LOT
15	TRAFFIC SIGNAL MODIFICATION PLAN WASHINGTON STREET AND 75th STREET	45	SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE AURORA AVENUE AND EAGLE STREET
16	SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE WASHINGTON STREET AND 75th STREET	46	SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE AURORA AVENUE AND WEBSTER STREET
17	SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE WASHINGTON STREET AND HOBSON ROAD	47	SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE AURORA AVENUE AND MAIN STREET
18	SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE WASHINGTON STREET AND GARTNER ROAD	48	TRAFFIC SIGNAL MODIFICATION PLAN CHICAGO AVENUE AND ELLSWORTH STREET
19	SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE WASHINGTON STREET AND OSLER DRIVE	49	SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE CHICAGO AVENUE AND ELLSWORTH STREET
20	SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE WASHINGTON STREET AND MARTIN AVENUE	50-64	INTERCONNECT PLAN WASHINGTON STREET FROM ROYCE ROAD TO WARRENVILLE ROAD
21	SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE WASHINGTON STREET AND HILLSIDE ROAD	65	INTERCONNECT PLAN WEST STREET FROM MARTIN AVENUE TO AURORA AVENUE
22	TRAFFIC SIGNAL MODIFICATION PLAN WASHINGTON STREET AND AURORA AVENUE	66-67	INTERCONNECT PLAN AURORA AVENUE FROM WEST STREET TO WASHINGTON STREET
23	SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE WASHINGTON STREET AND AURORA AVENUE	68	INTERCONNECT PLAN CHICAGO AVENUE FROM WASHINGTON STREET TO ELLSWORTH STREET
24	SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE WASHINGTON STREET AND CHICAGO AVENUE	69-71	INTERCONNECT SCHEMATIC FROM ROYCE ROAD TO WARRENVILLE ROAD
25	SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE WASHINGTON STREET AND JEFFERSON AVENUE	72-73	FIBER TERMINATION/FIBER SPLICING/CABINET DETAIL
26	SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE WASHINGTON STREET AND VAN BUREN AVENUE	74	ETHERNET COMMUNICATION NETWORK SCHEMATIC
27	SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE WASHINGTON STREET AND BENTON AVENUE	75	PTZ CAMERA MOUNTING DETAIL AND FIBER OPTIC DROP CABLE
28	SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE WASHINGTON STREET AND SCHOOL STREET	76	TRAFFIC CONTROL PROTECTION FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS
29	SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE WASHINGTON STREET AND NORTH AVENUE	77	ARTERIAL ROAD INFORMATION SIGN
30	SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE WASHINGTON STREET AND 5th AVENUE	78-84	DISTRICT 1 STANDARD TRAFFIC SIGNAL DETAILS
31	TRAFFIC SIGNAL MODERNIZATION PLAN WASHINGTON STREET AND U.S. RTE. 34 (OGDEN AVE.)		
32	SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE WASHINGTON STREET AND US ROUTE 34 (OGDEN AVE.)		
33	SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE WASHINGTON STREET AND BAUER AVENUE		

HIGHWAY STANDARDS

STD. No.	DESCRIPTION
000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001006	DECIMAL OF AN INCH AND OF A FOOT
701101-04	OFF-RD OPERATIONS, MULTILANE, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
701606-10	URBAN SINGLE LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701701-09	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-05	SIDEWALK, CORNER, OR CROSSWALK CLOSURE
701901-04	TRAFFIC CONTROL DEVICES
728001-01	TELESCOPING STEEL SIGN SUPPORT
805001-01	ELECTRICAL SERVICE INSTALLATION DETAILS
814001-03	HANDHOLES
814006-02	DOUBLE HANDHOLES
857001-01	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
873001-02	TRAFFIC SIGNAL GROUNDING & BONDING
878001-10	CONCRETE FOUNDATION DETAILS

DATE	BY	DATE	BY
DATE	BY	DATE	BY

PROFILE
 SURVEYED BY: _____
 GRADES CHECKED BY: _____
 E.M. NOTED BY: _____
 STRUCTURE NOTATIONS: _____
 NOTE BOOK NO. _____
 FILE NAME: _____

PLAN
 SURVEYED BY: _____
 ALIGNMENT CHECKED BY: _____
 RT. OF WAY CHECKED BY: _____
 JOB FILE NAME: _____
 NOTE BOOK NO. _____
 FILE NAME: _____

CHRISTOPHER B. BURKE ENGINEERING LTD.
 9075 West Higgins Road, Suite 600
 Chicago, Illinois 60618
 (847) 823-0850

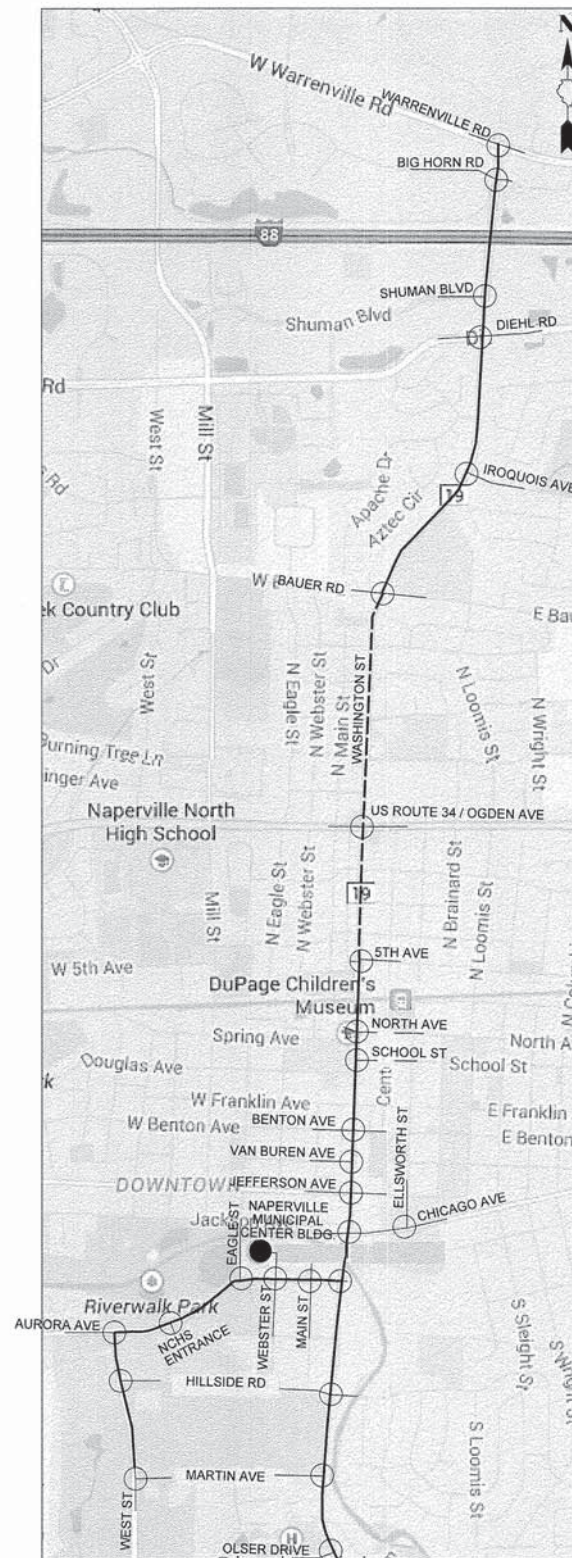
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GENERAL NOTES

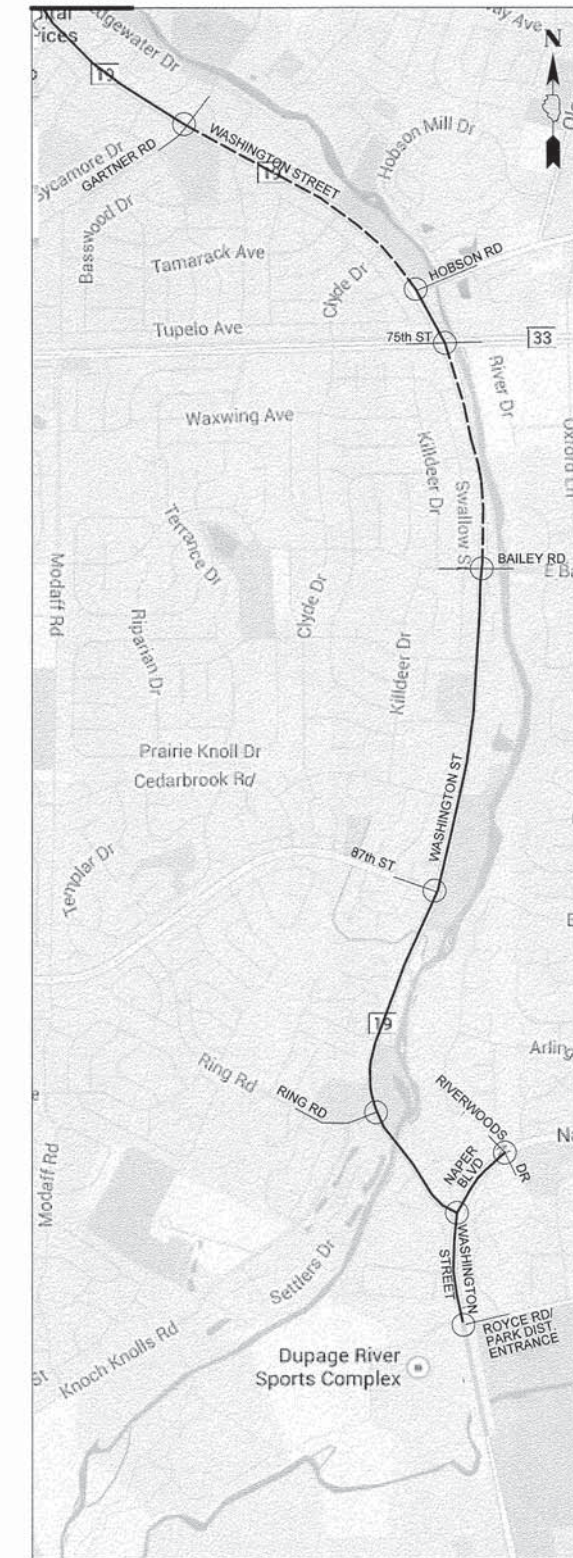
- ALL CONSTRUCTION SHALL CONFORM TO THE CITY OF NAPERVILLE DESIGN MANUAL AND STANDARD SPECIFICATIONS (CURRENT EDITION), IDOT'S STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (SSRBC), AND SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS; ADOPTED JANUARY 1, 2015 BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION AND ALL AMENDMENTS THERETO; IN CASE OF CONFLICT, THE MORE RESTRICTIVE PROVISIONS SHALL APPLY. ANY REFERENCE TO STANDARDS IN THE PLANS OR SPECIAL PROVISIONS SHALL BE INTERPRETED TO BE LATEST STANDARDS OF THE DEPARTMENT.
- THE CITED STANDARD SPECIFICATIONS, CODES AND PERMITS, WITH THESE CONSTRUCTION PLANS AND DETAILS, ARE ALL TO BE CONSIDERED PART OF THE CONTRACT.
- ITEMS OR ACCESSORIES NECESSARY TO COMPLETE THE WORK MAY NOT BE SPECIFICALLY NOTED BUT ARE CONSIDERED A PART OF THE RELATED PAY ITEM.
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, LOCAL GOVERNMENT AGENCIES AND IDOT.
- 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. THE CONTRACTOR SHALL CALL "JULIE" AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED UTILITIES (48 HOURS NOTIFICATION REQUIRED). ALL UTILITY COORDINATION SHALL BE IN ACCORDANCE WITH ARTICLES 105.07 AND 107.31 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (SSRBC) AND APPLICABLE SECTIONS OF THE SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS; ADOPTED JANUARY 1, 2015 BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION. THE CONTRACTOR SHALL LOCATE ALL UTILITIES IN THE AREA OF CONSTRUCTION, JULIE, LOCATE, PROTECT, AND HAND DIG AS REQUIRED TO PROTECT EXISTING NDPU-E FACILITIES. NDPU-E WILL NOT RELOCATE FACILITIES DUE TO THIS PROJECT. THE CONTRACTOR SHALL CONTACT RON RITTER AT 630-420-4183 TO COORDINATE ANY UTILITY RELATED ISSUES.
- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR SAFETY ON THE JOB PER OSHA REGULATIONS. THE CONTRACTOR SHALL GIVE NOTICES AND COMPLY WITH APPLICABLE LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ALL PUBLIC AUTHORITIES BEARING ON SAFETY OF PERSONS OR PROPERTY OR THEIR PROTECTION FROM DAMAGE, INJURY OR LOSS.
- TRAFFIC CONTROL MUST BE PROVIDED FOR ANY ACTIVITY THAT IMPACTS TRAFFIC FLOW. THIS INCLUDES, BUT IS NOT LIMITED TO, ROAD CLOSURES REQUIRING DETOURS, DAILY LANE CLOSURES, LONG TERM LANE CLOSURES, NARROW LANES, AND CONSTRUCTION VEHICLES ENTERING AND EXITING THE PUBLIC ROADWAY. ALL TRAFFIC CONTROL SETUPS MAY BE INSPECTED BY THE CITY OF NAPERVILLE TO ENSURE THAT THEY ARE PROVIDING POSITIVE GUIDANCE TO MOTORISTS AND ARE NOT IN THEMSELVES PRESENTING A HAZARDOUS SITUATION. A REPRESENTATIVE OF THE CONTRACTOR MUST PROVIDE PHONE NUMBERS AT WHICH THEY CAN BE REACHED 24 HOURS A DAY AND ON WEEKENDS SO THAT THEY CAN MAINTAIN TRAFFIC CONTROL DEVICES. THE CONTRACTOR SHALL EMPLOY THE APPROPRIATE METHODS OF TRAFFIC CONTROL IN ACCORDANCE WITH THE PLANS, SPECIFICATIONS AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, SUCH THAT THE SAFETY OF VEHICLES, AND PEDESTRIANS IS PRESERVED AT ALL TIMES. THE ERECTION AND MAINTENANCE OF THE TRAFFIC CONTROL DEVICES SHALL BE TO THE SATISFACTION OF THE AGENCY OF JURISDICTION AND THE CITY ENGINEER.
- THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK AT THE WASHINGTON STREET AND US ROUTE 34 (OGDEN AVENUE) INTERSECTION.

- ANY TEMPORARY OPEN HOLES SHOULD BE BARRICADED AND PROTECTED IN ACCORDANCE WITH APPLICABLE STANDARDS.
- LANE CLOSURES ON ARTERIAL ROADWAYS WITHIN THE CITY OF NAPERVILLE ARE NOT PERMITTED BETWEEN THE HOURS OF 6AM-9AM AND 3PM-7PM MONDAY THROUGH FRIDAY, UNLESS OTHERWISE PERMITTED BY THE CITY ENGINEER. LANE CLOSURES ON ARTERIAL STREETS ARE PERMITTED BETWEEN 7AM AND 7PM ON WEEKENDS, UNLESS OTHERWISE PERMITTED BY THE CITY ENGINEER. ARTERIAL ROADWAYS ARE DEFINED AS BOTH MAJOR AND MINOR ARTERIAL ROADWAYS AS DESIGNATED ON THE CITY'S MASTER THOROUGHFARE PLAN, LATEST EDITION. ANY WORK THAT IMPACTS A TRAFFIC LANE ON AN ARTERIAL ROADWAY REQUIRES AN ARROWBOARD AS PART OF THE TRAFFIC CONTROL. AT THE END OF EACH DAY OF WORK, THE ROADWAY MUST BE COMPLETELY REOPENED TO TRAFFIC. ANY OPEN HOLES MUST BE PLATED OR COLD PATCHED; THE CITY WILL NOT ALLOW THE HOLES TO BE FILLED WITH GRAVEL.
- THE CONTRACTOR SHALL CHECK THE PROPOSED TRAFFIC SIGNAL EQUIPMENT LOCATIONS FOR OVERHEAD UTILITY CONFLICTS. THE CONTRACTOR SHALL COORDINATE ANY CONFLICTS WITH THE UTILITY COMPANIES AND THE RESIDENT ENGINEER BEFORE ORDERING MATERIALS.
- 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 ARMS LENGTHS.
- ALL COSTS RELATED TO MODIFYING EXISTING CONTROLLER CABINETS FOR CABINET RELATED PAY ITEMS AS SHOWN ON THE PLANS SHALL BE INCLUDED IN SUCH PAY ITEMS. THIS INCLUDES COSTS FOR FURNISHING ALL CABINET MATERIALS, HARDWARE, WIRING, CONTROLLER SOFTWARE UPGRADES, LOAD SWITCHES, AND LABOR REQUIRED. NO ADDITIONAL COMPENSATION SHALL BE GIVEN FOR THIS WORK.
- RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE COST FOR THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

LOCATION MAP



MATCHLINE



LEGEND:

- = SIGNALIZED INTERSECTION WITHIN PROJECT LIMITS
- = NAPERVILLE MUNICIPAL CENTER BUILDING
- = PROJECT LIMITS
- = PROPOSED TRAFFIC SIGNAL INTERCONNECT

DATE	BY	REVISIONS
		1. REVISED
		2. PLOTTED
		3. ALIGNED
		4. CHECKED
		5. APPROVED
		6. FILE NAME
		7. NO.
DATE	BY	REVISIONS
		1. REVISED
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		5. APPROVED
		6. FILE NAME
		7. NO.

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 6075 West Higgins Road, Suite 600
 Naperville, IL 60563
 (847) 823-0500



DATE	BY	REVISIONS
		1. REVISED
		2. PLOTTED
		3. ALIGNED
		4. CHECKED
		5. APPROVED
		6. FILE NAME
		7. NO.

FILE NAME =	USER NAME = fboriss	DESIGNED - LJ / TS	REVISED -
N:\Naperville\138319\Traffic\NOT_138319.dwg		DRAWN - FPB / FCP	REVISED -
		CHECKED - GMZ	REVISED -
		DATE - 3/13/2015	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

GENERAL NOTES AND LOCATION MAP

SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2552, 1522 & 2546	13-00158-00-TL	DUPAGE & WILL	84	3
CONTRACT NO. 61B84			ILLINOIS FED. AID PROJECT	

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL	CONSTRUCTION CODE: 0021								
				STP FUNDS (75% FEDERAL / 25% LOCAL); CMAQ FUNDS (80% FEDERAL / 20% LOCAL)								
				Washington Street @ Royce Road	Washington Street @ Naper Boulevard	Naper Boulevard @ River Woods Drive	Washington Street @ Ring Road	Washington Street @ 87th Street	Washington Street @ Bailey Road	Washington Street @ 75th Street	Washington Street @ Hobson Road	
31101200	SUBBASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	42									
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	375									
44000600	SIDEWALK REMOVAL	SQ FT	400									
67100100	MOBILIZATION	L SUM	1									
70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1									
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1									
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1									
81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	9,905									
81400100	HANDHOLE	EACH	16									
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	35	1	1	1	1	1	1	1	1	1
87300925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	43,550									
87900200	DRILL EXISTING HANDHOLE	EACH	7									
X0324599	ROD AND CLEAN EXISTING CONDUIT	FOOT	26,000									
X8570215	FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	25									
XX004913	REMOVE FIBER OPTIC CABLE FROM CONDUIT	FOOT	26,350									
XX005940	REMOTE CONTROLLED VIDEO SYSTEM	EACH	6		1						1	
XX006655	LAYER II (DATALINK) SWITCH	EACH	30	1		1	1	1	1	1	1	
XX006597	WIRELESS INTERCONNECT SYSTEM	L SUM	1									
XX007018	LAYER III (NETWORK) SWITCH	EACH	5		1							
XX007991	CENTRALIZED TRANSPORTATION MANAGEMENT SYSTEM	L SUM	1									
XX007993	CENTRALIZED SYSTEM FIELD INTEGRATION/ SETUP	L SUM	1									
XX008246	FIBER OPTIC CABLE IN CONDUIT, 24 SINGLE MODE	FOOT	43,888									
XX008256	UPGRADE EXISTING CONTROLLER TO NTCIP SPECIAL	EACH	6	1	1	1	1	1	1	1		
XX008392	OUTDOOR RATED NETWORK CABLE	FOOT	1,575		140						85	
XX009034	FIBER OPTIC TERMINATIONS 12 FIBER	EACH	36	1	1	1	1	1	1	1	1	
Z0013798	CONSTRUCTION LAYOUT	L SUM	1									
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	257									
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1									
Z0076600	TRAINEES	HOURLY	500									
Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOURLY	500									

△ Construction code for TRAINEES and TRAINEES TRAINING PROGRAM GRADUATE pay items: 0042

PROFILE: DESIGNED, PLOTTED, GRADES CHECKED, STATIONING CHECKED, NOTE BOOK NO. DATE BY:

PLAN: SURVEYED, ALIGNED, CHECKED, PLOTTED, NOTE BOOK NO., DATE BY:

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 (630) 223-0500

SUMMARY OF QUANTITIES

PROFILE: DRAWN BY: DATE:
 GRADES CHECKED: PLOTTED BY:
 STRUCTURE: NOTATION: CHKD:
 NOTE BOOK NO.:
 PLAN: NO.
 CONSTRUCTION CODE:
 CHECKED:
 DATE:
 FILE NAME:

CHRISTOPHER B. BURKE ENGINEERING LTD.
 9275 MacArthur Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-0500

CODE NO.	ITEM	UNIT	TOTAL	CONSTRUCTION CODE: 0021									
				STP FUNDS (75% FEDERAL / 25% LOCAL); CMAQ FUNDS (80% FEDERAL / 20% LOCAL)									
				Washington Street @ Gartner Road	Washington Street @ Osler Drive	Washington Street @ Martin Avenue	Washington Street @ Hillside Road	Washington Street @ Aurora Avenue	Washington Street @ Chicago Avenue	Washington Street @ Jefferson Avenue	Washington Street @ Van Buren Avenue	Washington Street @ Benton Avenue	Washington Street @ School Street
31101200	SUBBASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	42										
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	375										
44000600	SIDEWALK REMOVAL	SQ FT	400										
67100100	MOBILIZATION	L SUM	1										
70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1										
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1										
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1										
81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	9,905										
81400100	HANDHOLE	EACH	16										
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	35	1	1	1	1	1	1	1	1	1	1
87300925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	43,550										
87900200	DRILL EXISTING HANDHOLE	EACH	7										
X0324599	ROD AND CLEAN EXISTING CONDUIT	FOOT	26,000										
X8570215	FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	25	1	1	1	1	1	1	1	1	1	1
XX004913	REMOVE FIBER OPTIC CABLE FROM CONDUIT	FOOT	26,350										
XX005940	REMOTE CONTROLLED VIDEO SYSTEM	EACH	6					1					
XX006655	LAYER II (DATALINK) SWITCH	EACH	30	1	1	1	1	1		1	1	1	1
XX006597	WIRELESS INTERCONNECT SYSTEM	L SUM	1										
XX007018	LAYER III (NETWORK) SWITCH	EACH	5						1				
XX007991	CENTRALIZED TRANSPORTATION MANAGEMENT SYSTEM	L SUM	1										
XX007993	CENTRALIZED SYSTEM FIELD INTEGRATION SETUP	L SUM	1										
XX008246	FIBER OPTIC CABLE IN CONDUIT, 24 SINGLE MODE	FOOT	43,888										
XX008256	UPGRADE EXISTING CONTROLLER TO NTCP SPECIAL	EACH	6										
XX008392	OUTDOOR RATED NETWORK CABLE	FOOT	1,575					215					
XX009034	FIBER OPTIC TERMINATIONS 12 FIBER	EACH	36	1	1	1	1	1	1	1	1	1	1
Z0013798	CONSTRUCTION LAYOUT	L SUM	1										
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	257										
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1										
Z0076600	TRAINEES	HOUR	500										
Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOUR	500										

△ Construction code for TRAINEES and TRAINEES TRAINING PROGRAM GRADUATE pay items: 0042

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL	CONSTRUCTION CODE: 0021									
				STP FUNDS (75% FEDERAL / 25% LOCAL); CMAQ FUNDS (80% FEDERAL / 20% LOCAL)									
				Aurora Avenue @ West Street	Aurora Avenue @ NCHS Entrance	Aurora Avenue @ Eagle Street	Aurora Avenue @ Webster Street	Aurora Avenue @ Main Street	West Street @ Martin Avenue	West Street @ Hillside Road	Chicago Avenue @ Ellsworth Street	Interconnect	
31101200	SUBBASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	42										42
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	375										375
44000600	SIDEWALK REMOVAL	SQ FT	400										400
67100100	MOBILIZATION	L SUM	1										
70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1										
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1										
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1										
81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	9,905										9,905
81400100	HANDHOLE	EACH	16										16
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	35	1	1	1	1	1	1	1	1	1	
87300925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	43,550										43,550
87900200	DRILL EXISTING HANDHOLE	EACH	7										7
X0324599	ROD AND CLEAN EXISTING CONDUIT	FOOT	26,000										26,000
X8570215	FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	25	1	1	1		1	1	1	1	1	
XX004913	REMOVE FIBER OPTIC CABLE FROM CONDUIT	FOOT	26,350										26,350
XX005940	REMOTE CONTROLLED VIDEO SYSTEM	EACH	6	1									
XX006655	LAYER II (DATALINK) SWITCH	EACH	30	1	1	1	1	1	1	1	1	1	
XX006597	WIRELESS INTERCONNECT SYSTEM	L SUM	1										1
XX007018	LAYER III (NETWORK) SWITCH	EACH	5										1
XX007991	CENTRALIZED TRANSPORTATION MANAGEMENT SYSTEM	L SUM	1										1
XX007993	CENTRALIZED SYSTEM FIELD INTEGRATION/ SETUP	L SUM	1										1
XX008246	FIBER OPTIC CABLE IN CONDUIT, 24 SINGLE MODE	FOOT	43,888										43,888
XX008256	UPGRADE EXISTING CONTROLLER TO NTCIP SPECIAL	EACH	6										
XX008392	OUTDOOR RATED NETWORK CABLE	FOOT	1,575	210									400
XX009034	FIBER OPTIC TERMINATIONS 12 FIBER	EACH	36	1	1	1	1	1	1	1	1	1	
Z0013798	CONSTRUCTION LAYOUT	L SUM	1										
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	257										
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1										1
Z0076600	TRAINEES	HOUR	500										
Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOUR	500										

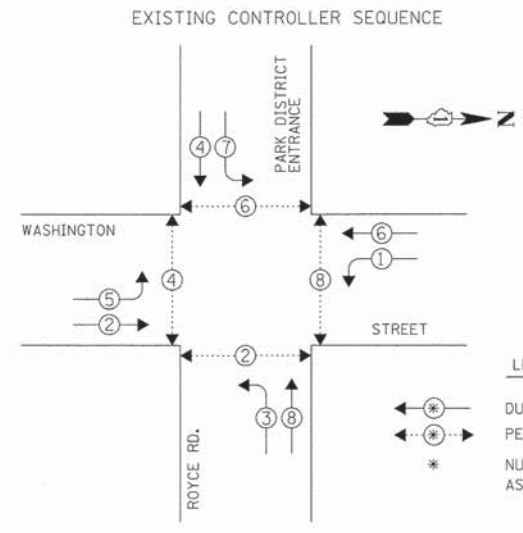
△ Construction code for TRAINEES and TRAINEES TRAINING PROGRAM GRADUATE pay items: 0042

PROFILE SURVEYED BY: DATE: [] BY: []
 PLAN SURVEYED BY: DATE: [] BY: []
 NOTE BOOK NO. []
 CHECKED BY: []
 DATE: []
 CHECKED BY: []
 DATE: []
 CHECKED BY: []
 DATE: []

CHRISTOPHER B. BURKE
 ENGINEERING LTD.
 8975 West Higgins Road, Suite 600
 Chicago, IL 60631
 (847) 823-0800

PROFILE SURVEYED BY: DATE: [] BY: []
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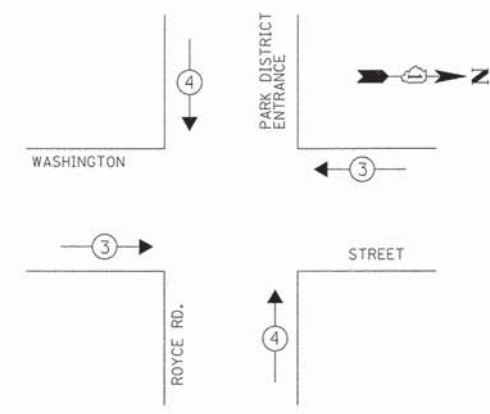
DATE: _____ BY: _____
 SURVEYED: _____
 I.T. OF: _____
 CAD FILE NAME: _____
 PLAN: _____
 NOTE BOOK NO.: _____
 NO. _____
CHRISTOPHER B. BURKE ENGINEERING LTD.
 9575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 383-9500
 DATE: _____ BY: _____
 SURVEYED: _____
 I.T. OF: _____
 CAD FILE NAME: _____
 PROFILE: _____
 NOTE BOOK NO.: _____
 NO. _____



LEGEND
 ←*→ DUAL ENTRY PHASE
 ←...*→ PEDESTRIAN PHASE
 * NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

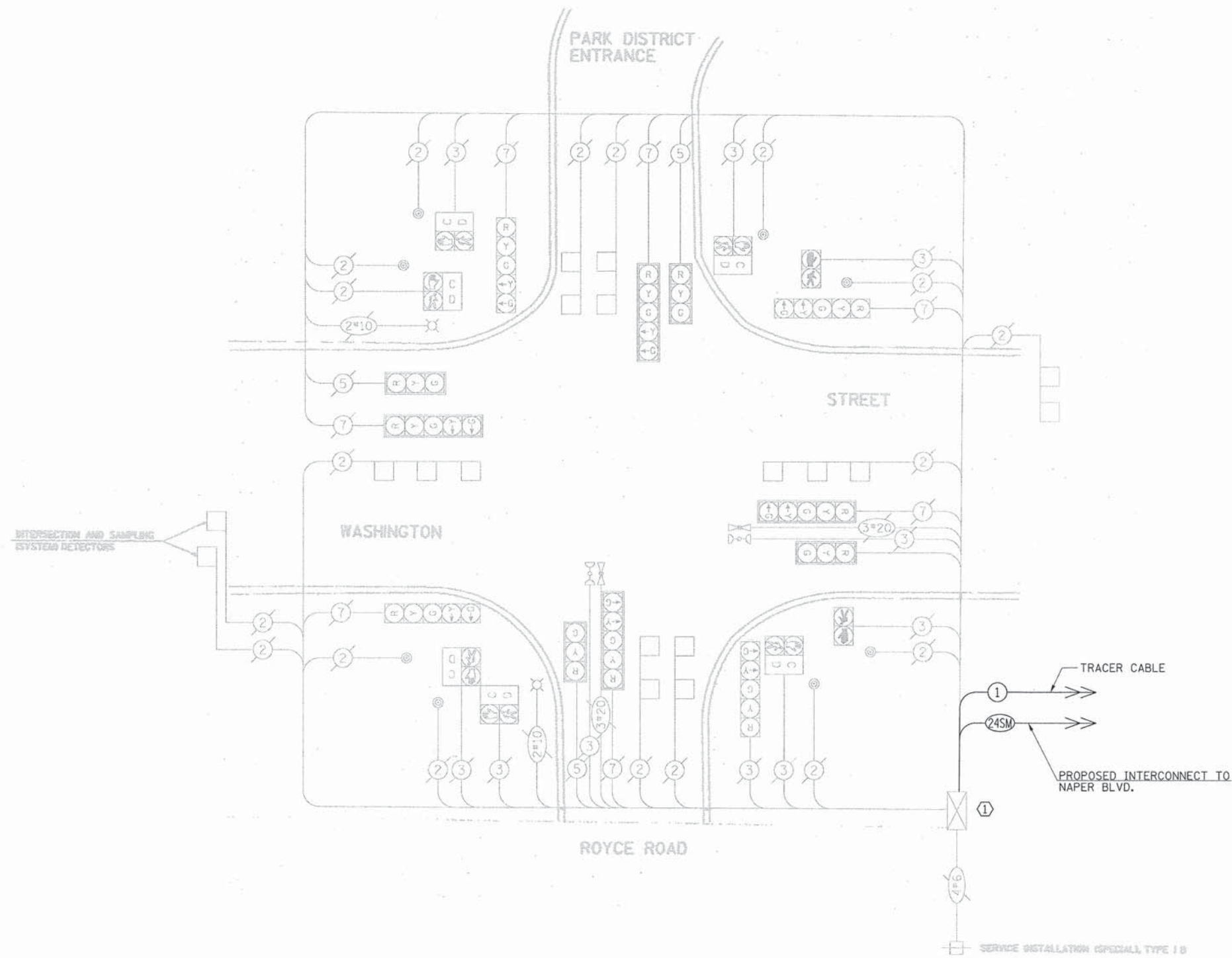
EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE INCAND.	LED	% OPERATION	
SIGNAL (RED)	12		17	0.50	102.0
(YELLOW)	12		25	0.25	75.0
(GREEN)	12		15	0.25	45.0
ARROW	16		12	0.10	19.2
PED. SIGNAL	8		25	1.00	200.00
CONTROLLER	1		100	1.00	100.00
ILLUMINATED SIGN	-	25		0.05	-
VIDEO SYSTEM	-	150		1.00	-
LUMINAIRE	2	250		0.50	250.0
BATTERY BACKUP	-	25		1.00	-
FLASHER				0.50	-
ENERGY COSTS TO:					TOTAL = 791.2

CITY OF NAPERVILLE
 400 SOUTH EAGLE STREET
 NAPERVILLE, ILLINOIS 60540
 ENERGY SUPPLY: CONTACT: NEW BUSINESS
 PHONE: 1-800-334-7661
 COMPANY: COMED



SCHEDULE OF QUANTITIES		
ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
UPGRADE EXISTING CONTROLLER TO NTCIP SPECIAL	EACH	1
FIBER OPTIC TERMINATIONS 12 FIBER	EACH	1

CONSTRUCTION NOTE:
 ① THE CONTRACTOR SHALL UPGRADE THE EXISTING CONTROLLER TO THE LATEST VERSION OF NTCIP SOFTWARE, AND INSTALL A LAYER II SWITCH.

FILE NAME: N:\Naperville\130319\Traffic\TS01_Royce...cab.dgn	USER NAME: fbariso	DESIGNED: LJ / TS	REVISED: -
PLOT SCALE: 20'		DRAWN: FPB / FCP	REVISED: -
PLOT DATE: 6/22/2015		CHECKED: GMZ	REVISED: -
		DATE: 3/13/2015	REVISED: -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE			
SCALE:	SHEET NO.	OF SHEETS	STA. TO STA.

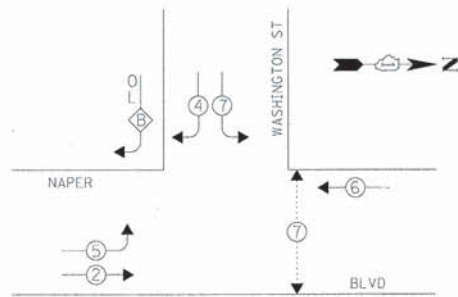
F.A.U. RTE. 2552, 1522 & 2546	SECTION 13-00158-00-TL	COUNTY DuPAGE & WILL	TOTAL SHEETS 84	SHEET NO. 8
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

DATE BY DATE BY DATE BY
 SURVEYED BY: []
 CHECKED BY: []
 DATE: []

CHRISTOPHER B. BURKE ENGINEERING LTD.
 8675 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-9500

PROFILE
 SURVEYED BY: []
 CHECKED BY: []
 DATE: []

EXISTING CONTROLLER SEQUENCE



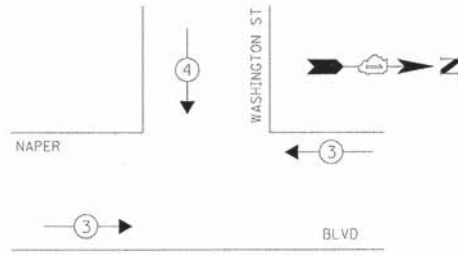
- LEGEND
- DUAL ENTRY PHASE
 - OVERLAP
 - PEDESTRIAN PHASE
 - NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
B	= 4	+ 5

EMERGENCY VEHICLE PREEMPTION SEQUENCE



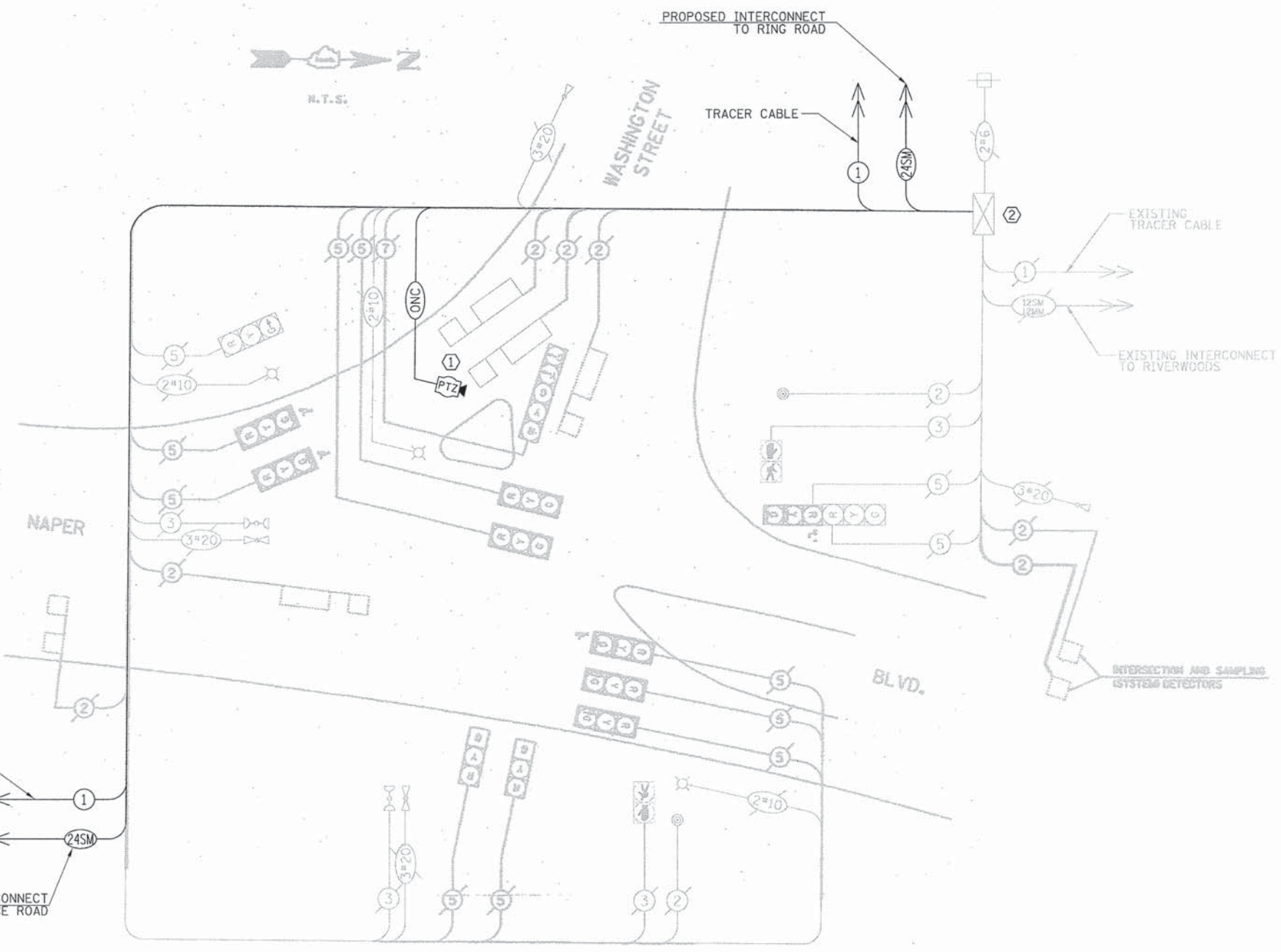
EXISTING EMERGENCY VEHICLE PREEMPTORS

EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	←	↓

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

TYPE	NO. OF LAMPS	WATTAGE		% OPERATION	TOTAL WATTAGE
		X INCAND.	LED		
SIGNAL (RED)	13		17	0.50	110.5
(YELLOW)	13		25	0.25	81.25
(GREEN)	13		15	0.25	48.25
ARROW	2		12	0.10	2.4
PED. SIGNAL	2		25	1.00	50.0
CONTROLLER	1		100	1.00	100.00
ILLUMINATED SIGN	-	25		0.05	-
VIDEO SYSTEM	-	150		1.00	-
LUMINAIRE	2	250		0.50	250.0
BATTERY BACKUP	-	25		1.00	-
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	542.9

CITY OF NAPERVILLE
 400 SOUTH EAGLE STREET
 NAPERVILLE, ILLINOIS 60540
 ENERGY SUPPLY: CONTACT: NEW BUSINESS
 PHONE: 1-800-334-7661
 COMPANY: COMED



- CONSTRUCTION NOTES:
- ① THE CONTRACTOR SHALL INSTALL THE PROPOSED PAN, TILT, ZOOM CAMERA ON THE SHAFT OF THE EXISTING COMBINATION MAST ARM. THE CAMERA SHALL BE MOUNTED ADJACENT TO THE LUMINAIRE ARM.
 - ② THE CONTRACTOR SHALL UPGRADE THE EXISTING CONTROLLER TO THE LATEST VERSION OF NTCIP SOFTWARE, AND INSTALL A LAYER III SWITCH.

SCHEDULE OF QUANTITIES

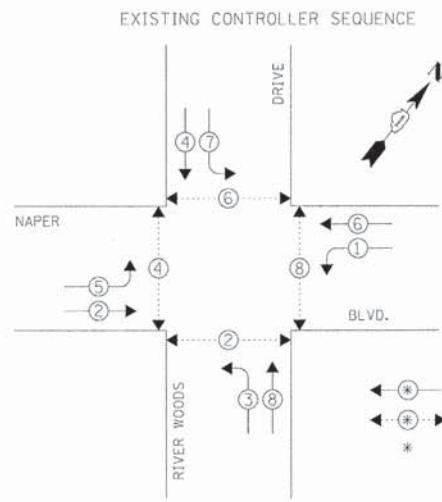
ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
LAYER III (NETWORK) SWITCH	EACH	1
UPGRADE EXISTING CONTROLLER TO NTCIP SPECIAL	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	140
FIBER OPTIC TERMINATIONS 12 FIBER	EACH	1

DATE: _____ BY: _____
 DATE: _____ BY: _____
 DATE: _____ BY: _____
 DATE: _____ BY: _____
 DATE: _____ BY: _____

PROFILE SUBMITTED _____
 PLOTTED _____
 GRADES CHECKED _____
 STRUCTURE NOTATIONS CHKD _____

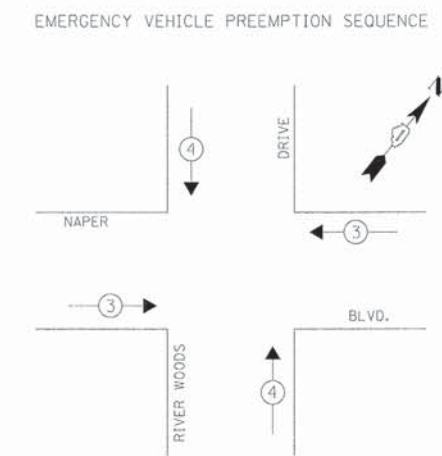
PLAN SUBMITTED _____
 NOTE BOOK NO. _____
 CAD FILE NAME _____

CHRISTOPHER B. BURKE ENGINEERING LTD.
 9675 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-0500



EXISTING CONTROLLER SEQUENCE

LEGEND
 * DUAL ENTRY PHASE
 PEDESTRIAN PHASE
 * NUMBER REFERS TO ASSOCIATED PHASE

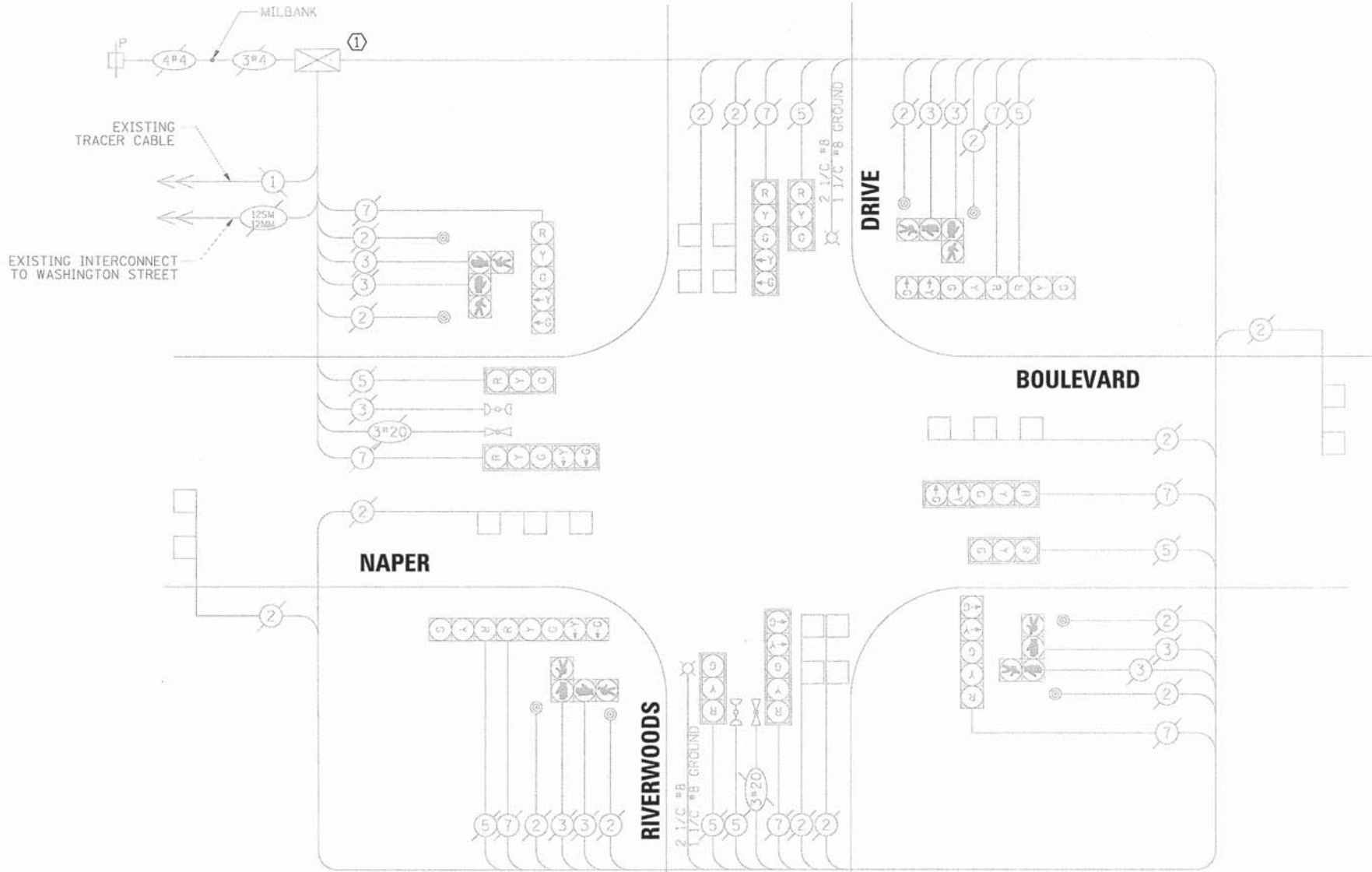


EMERGENCY VEHICLE PREEMPTION SEQUENCE

EXISTING EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT		

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	14		17	0.50	119.0
(YELLOW)	14		25	0.25	87.5
(GREEN)	14		15	0.25	52.5
ARROW	16		12	0.10	19.2
PED. SIGNAL	8		25	1.00	200.00
CONTROLLER	1		100	1.00	100.00
ILLUMINATED SIGN	-	25		0.05	-
VIDEO SYSTEM	-	150		1.00	-
LUMINAIRE	2	250		0.50	250.0
BATTERY BACKUP	-	25		1.00	-
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 828.2

CITY OF NAPERVILLE
 400 SOUTH EAGLE STREET
 NAPERVILLE, ILLINOIS 60540
 ENERGY SUPPLY CONTACT: NEW BUSINESS
 PHONE: 1-800-334-7661
 COMPANY: COMED



CONSTRUCTION NOTE:
 ① THE CONTRACTOR SHALL UPGRADE THE EXISTING CONTROLLER TO THE LATEST VERSION OF NTCIP SOFTWARE, AND INSTALL A LAYER II SWITCH.

SCHEDULE OF QUANTITIES	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
UPGRADE EXISTING CONTROLLER TO NTCIP SPECIAL	EACH	1
FIBER OPTIC TERMINATIONS 12 FIBER	EACH	1

FILE NAME = N:\Naperville\130319\Traffic\TS83_Naper-Riverwoods.sht1-cab.dgn	USER NAME = fbariso	DESIGNED - LJ / TS	REVISED -
PLOT SCALE = 20'	CHECKED - GMZ	DRAWN - FPB / FCP	REVISED -
PLOT DATE = 6/22/2015	DATE - 3/13/2015	CHECKED - GMZ	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

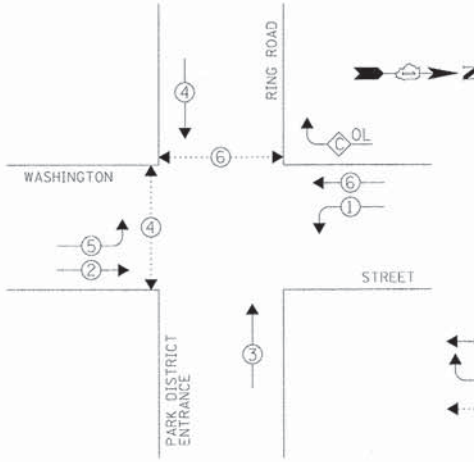
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
 NAPER BOULEVARD AND RIVERWOODS DRIVE

F.A.U. RTE. 8592, 1522 & 2546	SECTION 13-00158-00-TL	COUNTY DuPAGE & WILL	TOTAL SHEETS 84	SHEET NO. 11
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 61B84	

DATE	BY	PROF. FILE	SURVEYED	GRADING	NOTED	NOTES	CHECKED	DATE
DATE	BY	PLAN	NOTE BOOK NO.	ALIGNED	CHECKED	FILE NAME		

CHRISTOPHER B. BURKE ENGINEERING LTD.
 9675 West Higgins Road, Suite 800
 Rosemont, Illinois 60018
 (847) 823-8800

EXISTING CONTROLLER SEQUENCE



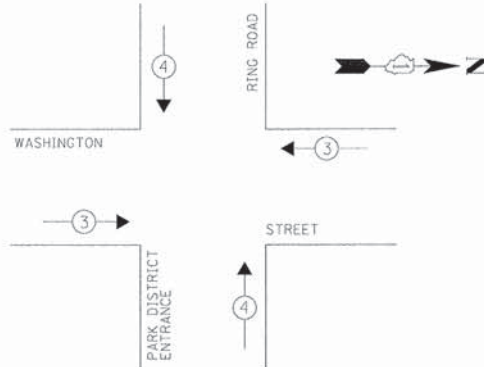
- LEGEND
- DUAL ENTRY PHASE
 - OVERLAP
 - PEDESTRIAN PHASE
 - NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
C	6	4

EMERGENCY VEHICLE PREEMPTION SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTORS

EMERGENCY VEHICLE PREEMPTOR	MOVEMENT
3	← →
4	↑ ↓

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

TYPE	NO. OF LAMPS	WATTAGE			TOTAL WATTAGE
		X INCOND.	LED	× % OPERATION	
SIGNAL (RED)	13		17	0.50	110.5
(YELLOW)	13		25	0.25	81.25
(GREEN)	15		15	0.25	56.25
ARROW	8		12	0.10	9.6
PED. SIGNAL	4		25	1.00	100.0
CONTROLLER	1		100	1.00	100.0
ILLUMINATED SIGN	-	25		0.05	-
VIDEO SYSTEM	-	150		1.00	-
LUMINAIRE	2	250		0.50	250.0
BATTERY BACKUP	-	25		1.00	-
FLASHER				0.50	-
ENERGY COSTS TO:					TOTAL = 607.6

CITY OF NAPERVILLE

400 SOUTH EAGLE STREET
 NAPERVILLE, ILLINOIS 60540
 ENERGY SUPPLY: CONTACT: NEW BUSINESS
 PHONE: 1-800-334-7661
 COMPANY: COMED

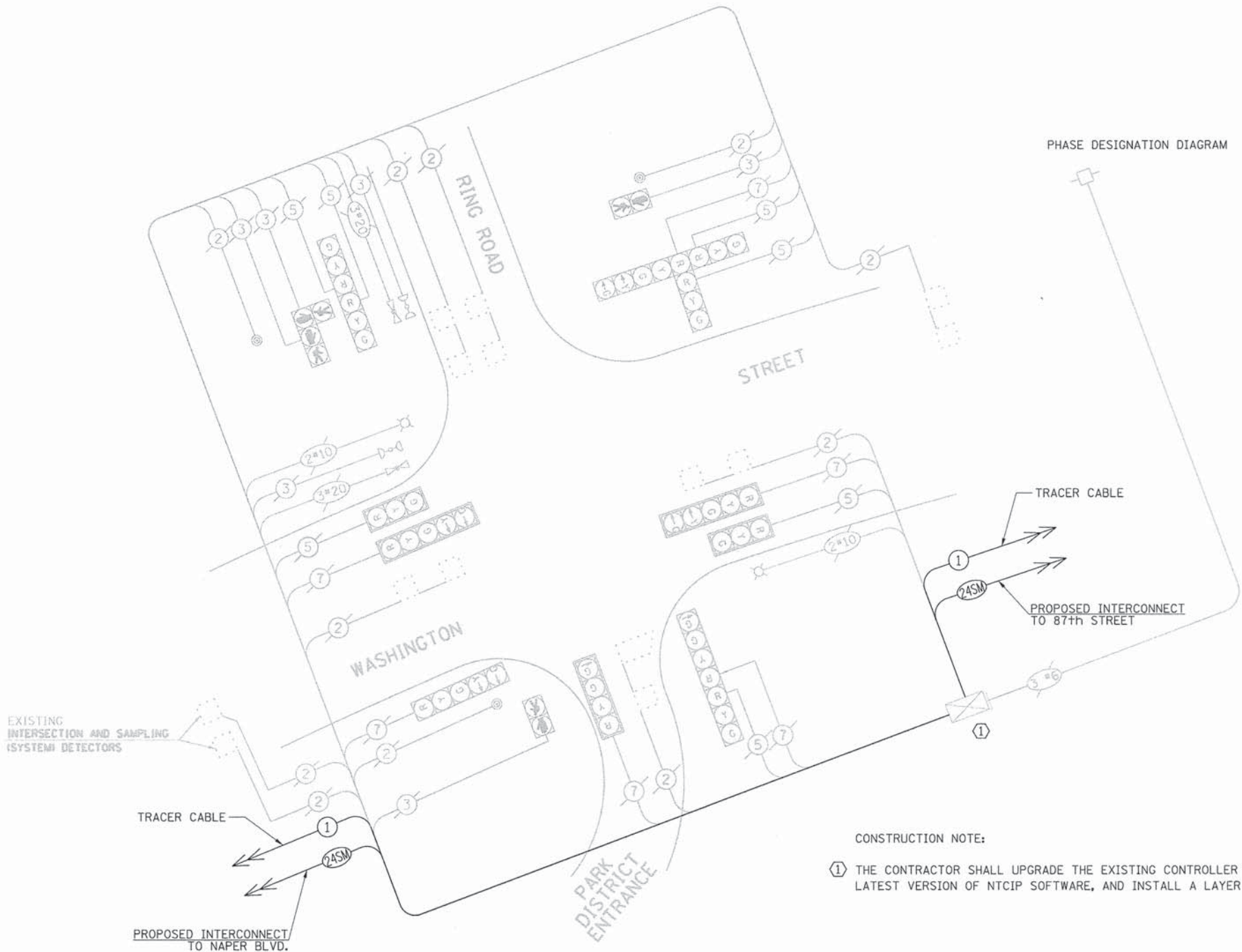
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	PLOT SCALE = 28"	CHECKED - GMZ	REVISED -
	PLOT DATE = 6/22/2015	DATE - 3/13/2015	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE WASHINGTON STREET AND RING ROAD/PARK DISTRICT ENT.

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
UPGRADE EXISTING CONTROLLER TO NTCIP SPECIAL	EACH	1
FIBER OPTIC TERMINATIONS 12 FIBER	EACH	1

PHASE DESIGNATION DIAGRAM



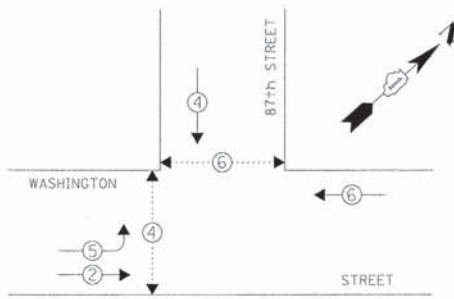
CONSTRUCTION NOTE:

(1) THE CONTRACTOR SHALL UPGRADE THE EXISTING CONTROLLER TO THE LATEST VERSION OF NTCIP SOFTWARE, AND INSTALL A LAYER II SWITCH.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2552, 1522 & 2546	13-00158-00-TL	DUPAGE & WILL	84	12
CONTRACT NO. 61B84				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

DATE: _____ BY: _____
 SURVEYED: _____ GRADES CHECKED: _____
 I.T. OF WAY CHECKED: _____
 EDD FILE NAME: _____
 PLAN: _____ NOTE BOOK NO.: _____
 ENGINEERING LTD. 6075 West Higgins Road, Suite 600
 Rosemont, Illinois 60018 (847) 525-6600
CB
 DATE: _____ BY: _____
 SURVEYED: _____ GRADES CHECKED: _____
 I.T. OF WAY CHECKED: _____
 EDD FILE NAME: _____
 PROFILE: _____ NOTE BOOK NO.: _____
 STRUCTURE NOTATIONS: CHFD

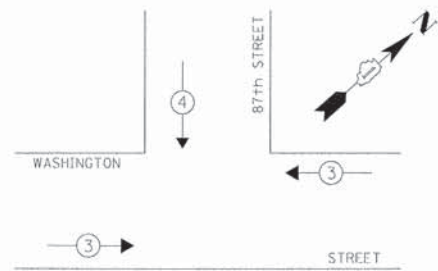
EXISTING CONTROLLER SEQUENCE



LEGEND
 * DUAL ENTRY PHASE
 * PEDESTRIAN PHASE
 * NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

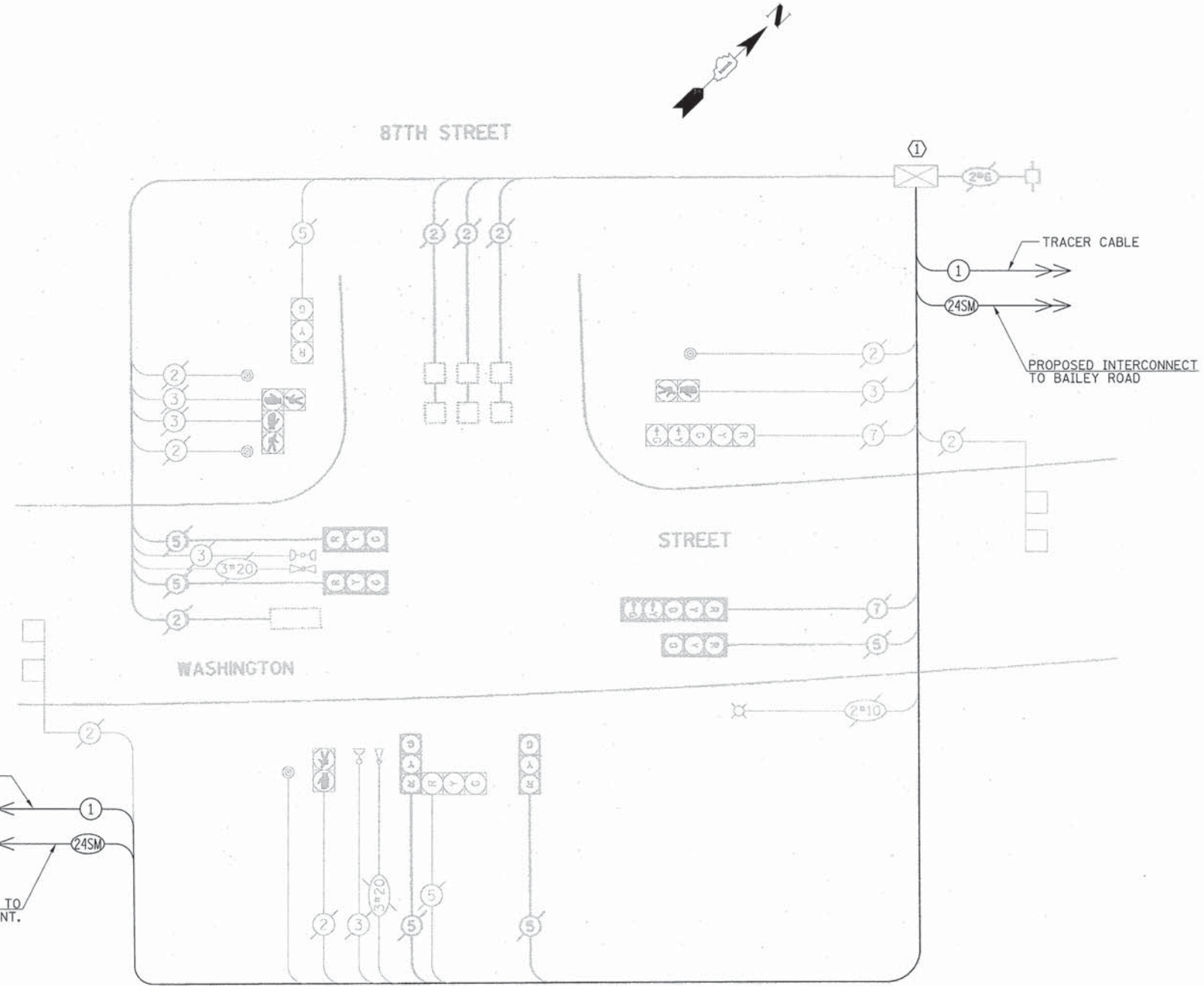
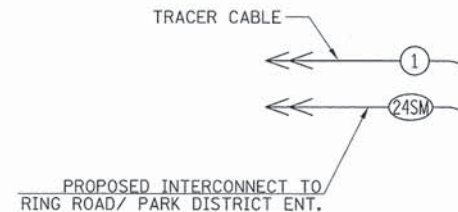
EMERGENCY VEHICLE PREEMPTION SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	←	↘

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE	
TYPE	NO. OF LAMPS	WATTAGE	INCAND.	LED	% OPERATION	
SIGNAL (RED)	9	17			0.50	76.5
(YELLOW)	9	25			0.25	56.25
(GREEN)	9	15			0.25	33.75
ARROW	4	12			0.10	4.8
PED. SIGNAL	4	25			1.00	100.0
CONTROLLER	1	100			1.00	100.0
ILLUMINATED SIGN	-	25			0.05	-
VIDEO SYSTEM	-	150			1.00	-
LUMINAIRE	1	250			0.50	125.0
BATTERY BACKUP	-	25			1.00	-
FLASHER	-				0.50	-
ENERGY COSTS TO:					TOTAL =	396.3

CITY OF NAPERVILLE
 400 SOUTH EAGLE STREET
 NAPERVILLE, ILLINOIS 60540
 ENERGY SUPPLY: CONTACT: NEW BUSINESS
 PHONE: 1-800-334-7661
 COMPANY: COMED



CONSTRUCTION NOTE:
 ① THE CONTRACTOR SHALL UPGRADE THE EXISTING CONTROLLER TO THE LATEST VERSION OF NTCIP SOFTWARE, AND INSTALL A LAYER II SWITCH.

SCHEDULE OF QUANTITIES		
ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
UPGRADE EXISTING CONTROLLER TO NTCIP SPECIAL	EACH	1
FIBER OPTIC TERMINATIONS 12 FIBER	EACH	1

FILE NAME: N:\naperville\130319\Traffic\TS05_87th.spl	USER NAME: fbariso	DESIGNED: LJ / TS	REVISED: -
PLOT SCALE: 20'	DATE: 6/22/2015	DRAWN: FPB / FCP	REVISED: -
		CHECKED: GMZ	REVISED: -
		DATE: 3/13/2015	REVISED: -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE WASHINGTON STREET AND 87th STREET			
SCALE:	SHEET NO.	OF SHEETS	STA. TO STA.

F.A.U. RTE. 2552, 1522 & 2546	SECTION 13-00158-00-TL	COUNTY DuPAGE & WILL	TOTAL SHEETS 84	SHEET NO. 13
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 61B84	

DATE: _____ BY: _____
 DATE: _____ BY: _____
 DATE: _____ BY: _____

PROFILE SUBMITTED
 PLOTTED
 NOTE BOOK CHECKED
 NO. _____

PLAN NOTE BOOK
 NO. _____

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 ENGINEERING LTD.
 9675 West Higgins Road, Suite 800
 Rosemont, Illinois 60018
 (847) 853-0500

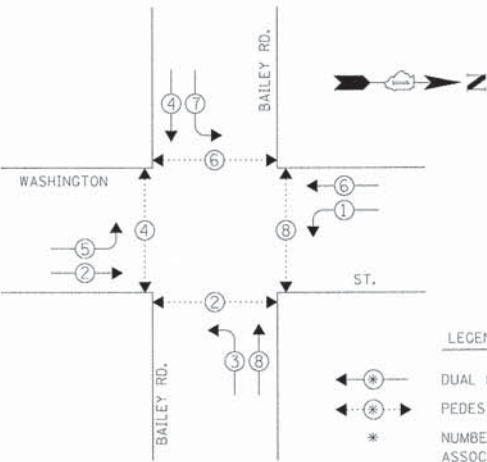
DATE: _____ BY: _____
 DATE: _____ BY: _____
 DATE: _____ BY: _____

PROFILE SUBMITTED
 PLOTTED
 NOTE BOOK CHECKED
 NO. _____

PLAN NOTE BOOK
 NO. _____

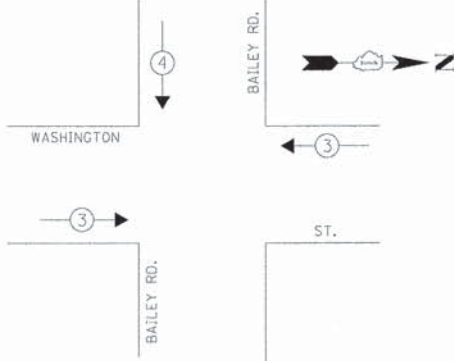
DATE: _____ BY: _____
 DATE: _____ BY: _____
 DATE: _____ BY: _____

EXISTING CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



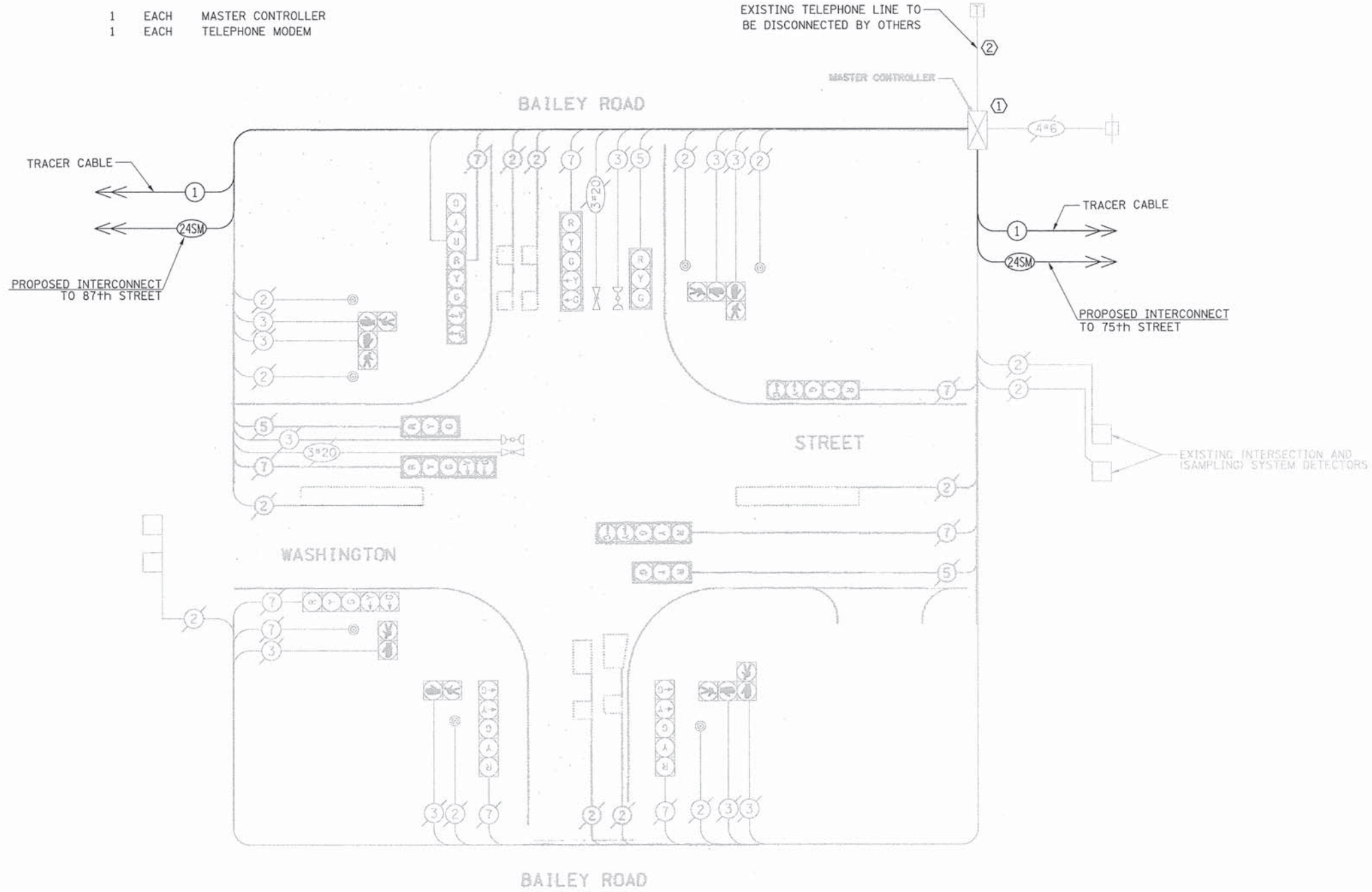
EXISTING EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↑ ↓

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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 PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: CITY OF NAPERVILLE

- 1 EACH MASTER CONTROLLER
- 1 EACH TELEPHONE MODEM



I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND. LED	X % OPERATION		
SIGNAL (RED)	12	17	0.50	102.0	
(YELLOW)	12	25	0.25	75.0	
(GREEN)	12	15	0.25	45.0	
ARROW	16	12	0.10	19.2	
PED. SIGNAL	8	25	1.00	200.0	
CONTROLLER	1	100	1.00	100.0	
ILLUMINATED SIGN	-	25	0.05	-	
VIDEO SYSTEM	-	150	1.00	-	
LUMINAIRE	-	250	0.50	-	
BATTERY BACKUP	-	25	1.00	-	
FLASHER	-	-	0.50	-	
ENERGY COSTS TO:	TOTAL =			441.2	

CITY OF NAPERVILLE
 400 SOUTH EAGLE STREET
 NAPERVILLE, ILLINOIS 60540
 ENERGY SUPPLY: CONTACT: NEW BUSINESS
 PHONE: 1-800-334-7661
 COMPANY: COMED

SCHEDULE OF QUANTITIES		
ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
UPGRADE EXISTING CONTROLLER TO NTCIP SPECIAL	EACH	1
FIBER OPTIC TERMINATIONS 12 FIBER	EACH	1

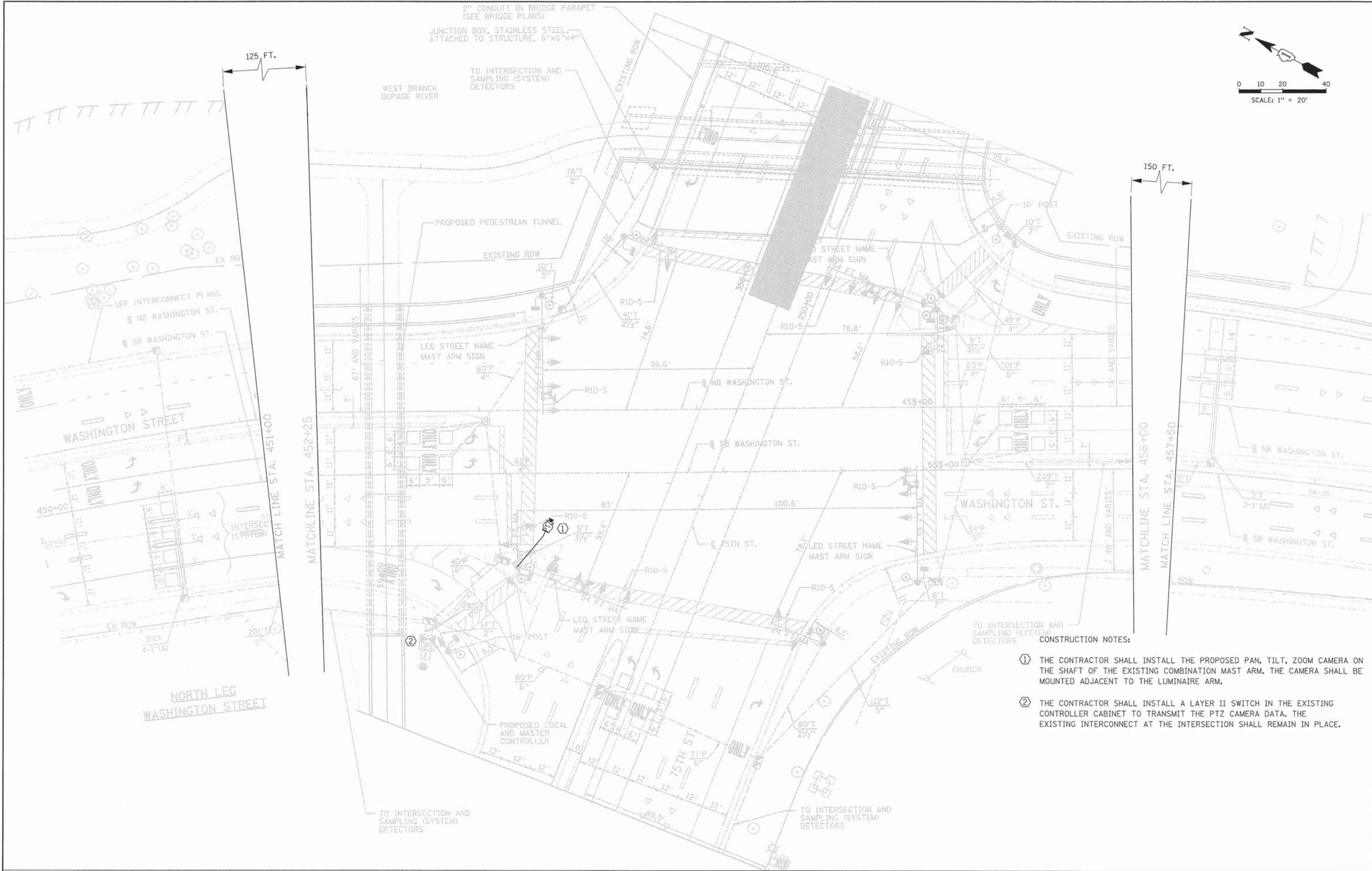
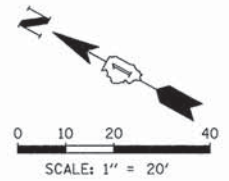
- CONSTRUCTION NOTES:
- ① THE CONTRACTOR SHALL UPGRADE THE EXISTING CONTROLLER TO THE LATEST VERSION OF NTCIP SOFTWARE, AND INSTALL A LAYER II SWITCH.
 - ② THE CONTRACTOR SHALL COORDINATE WITH THE CITY REGARDING THE DISCONNECTION OF THE EXISTING TELEPHONE LINE.

DATE	BY	DATE	BY
DATE	BY	DATE	BY

CHRISTOPHER B. BURKE ENGINEERING LTD.
 9674 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 623-0500



DATE	BY	DATE	BY



- CONSTRUCTION NOTES:**
- ① THE CONTRACTOR SHALL INSTALL THE PROPOSED PAN, TILT, ZOOM CAMERA ON THE SHAFT OF THE EXISTING COMBINATION MAST ARM. THE CAMERA SHALL BE MOUNTED ADJACENT TO THE LUMINAIRE ARM.
 - ② THE CONTRACTOR SHALL INSTALL A LAYER II SWITCH IN THE EXISTING CONTROLLER CABINET TO TRANSMIT THE PTZ CAMERA DATA. THE EXISTING INTERCONNECT AT THE INTERSECTION SHALL REMAIN IN PLACE.

FILE NAME =	USER NAME = fbariso	DESIGNED - LJ / TS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODIFICATION PLAN WASHINGTON STREET AND 75th STREET	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
N:\Naperville\130319\Traffic\TS07_75th.dwg		DRAWN - FPB / FCP	REVISED -			2552, 1522 & 2446	13-00158-00-TL	DuPAGE & WILL	84	15
		CHECKED - GMZ	REVISED -			FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	CONTRACT NO. 61B84		
		DATE - 3/13/2015	REVISED -			SCALE:	SHEET NO. OF SHEETS	STA. TO STA.		

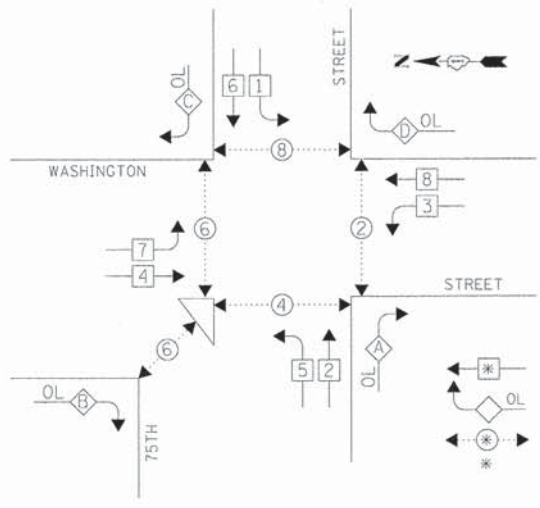
DATE: _____ BY: _____
 DATE: _____ BY: _____
 DATE: _____ BY: _____

PROFILE SURVEYED AT: _____
 NOTE BOOK GRADES CHECKED: _____
 NO. STRUCTURE NOTATIONS: _____

PLAN SURVEYED AT: _____
 NOTE BOOK ALIGNMENT CHECKED: _____
 NO. RT. OF WAY CHECKED: _____
 NO. CADD FILE NAME: _____

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 9075 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 853-8000

EXISTING CONTROLLER SEQUENCE

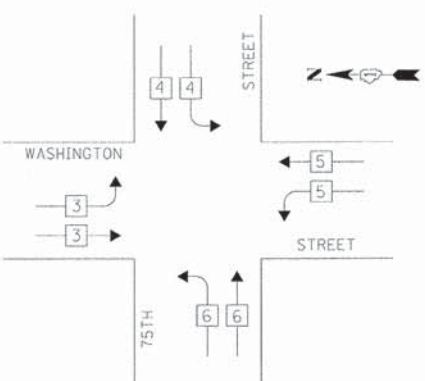


PHASE DESIGNATION DIAGRAM

RIGHT TURN OVERLAP PHASE DESIGNATION

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

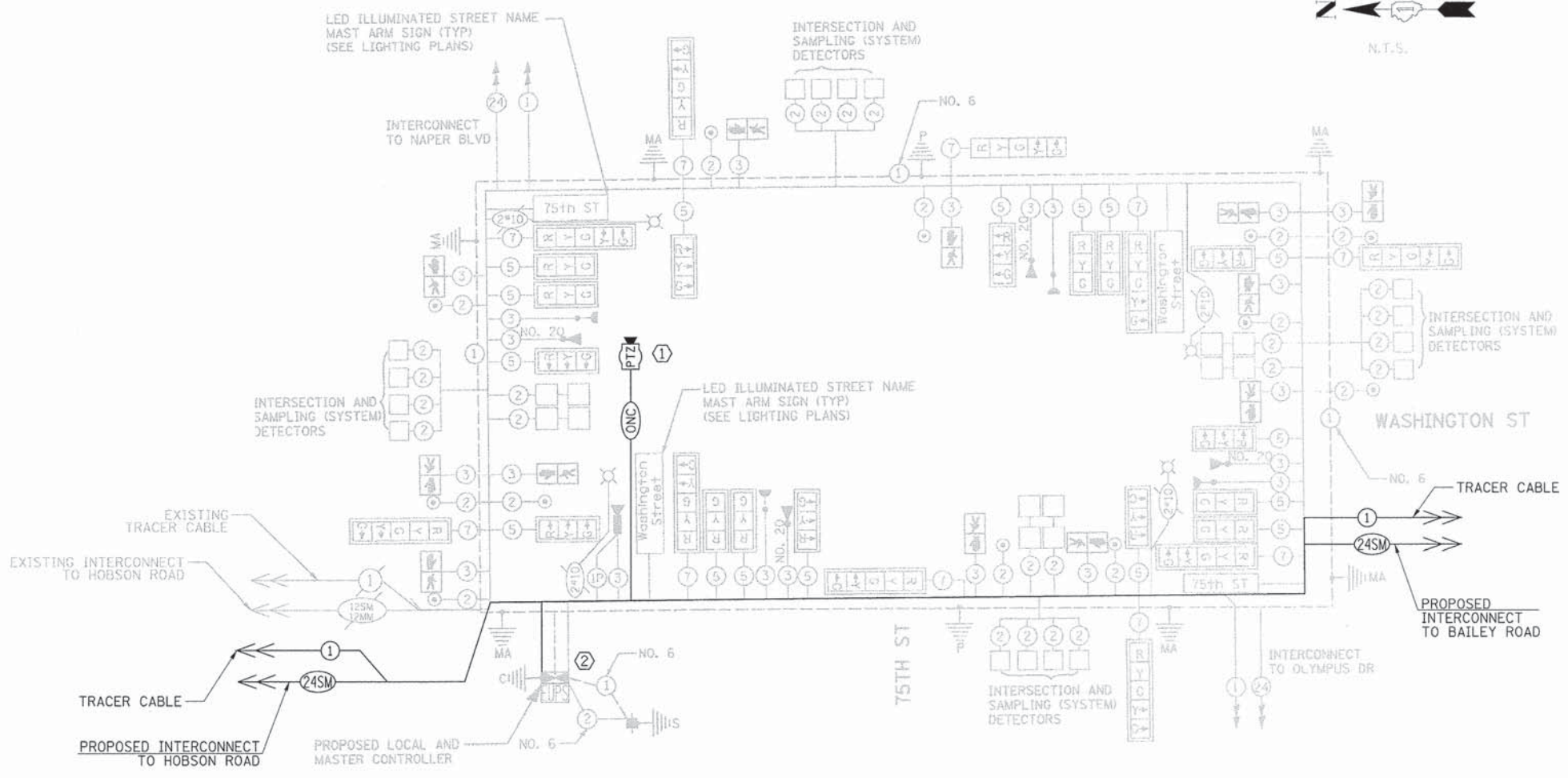


EXISTING EMERGENCY VEHICLE PREEMPTORS				
EMERGENCY VEHICLE PREEMPTOR	3	4	5	6
MOVEMENT	→	↓	←	↑

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND. LED	% OPERATION		
SIGNAL (RED)	26	17	0.50	221.0	
(YELLOW)	26	25	0.25	162.5	
(GREEN)	26	15	0.25	97.5	
ARROW	20	12	0.10	24.0	
PED. SIGNAL	11	25	1.00	275.0	
CONTROLLER	1	100	1.00	100.0	
ILLUMINATED SIGN	-	25	0.05	-	
VIDEO SYSTEM	-	150	1.00	-	
LUMINAIRE	4	250	0.50	500.0	
BATTERY BACKUP	1	25	1.00	25.0	
FLASHER	-	-	0.50	-	
ENERGY COSTS TO:	TOTAL =			1405.0	

CITY OF NAPERVILLE
 400 SOUTH EAGLE STREET
 NAPERVILLE, ILLINOIS 60540
 ENERGY SUPPLY: CONTACT: NEW BUSINESS
 PHONE: 1-800-334-7661
 COMPANY: COMED

LED ILLUMINATED STREET NAME MAST ARM SIGN (TYP) (SEE LIGHTING PLANS)



CONSTRUCTION NOTES:

- THE CONTRACTOR SHALL INSTALL THE PROPOSED PAN, TILT, ZOOM CAMERA ON THE SHAFT OF THE EXISTING COMBINATION MAST ARM. THE CAMERA SHALL BE MOUNTED ADJACENT TO THE LUMINAIRE ARM.
- THE CONTRACTOR SHALL INSTALL A LAYER II SWITCH IN THE EXISTING CONTROLLER CABINET TO TRANSMIT THE PTZ CAMERA DATA. THE EXISTING INTERCONNECT AT THE INTERSECTION SHALL REMAIN IN PLACE.

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	85
FIBER OPTIC TERMINATIONS 12 FIBER	EACH	1

DATE: _____ BY: _____
 SURVEYED: _____ ALIGNED: _____ CHECKED: _____
 NOTE BOOK: _____ RT. OF WAY: _____ CHECKED: _____
 NO.: _____ FILE NAME: _____

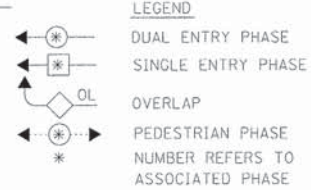
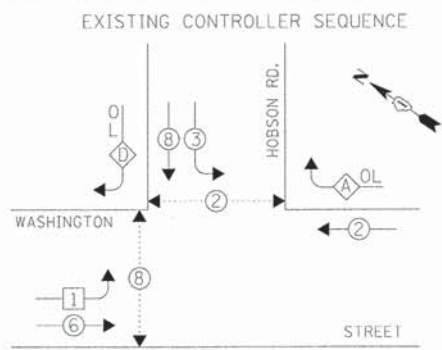
PLAN: _____
 SURVEYED: _____ ALIGNED: _____ CHECKED: _____
 NOTE BOOK: _____ RT. OF WAY: _____ CHECKED: _____
 NO.: _____ FILE NAME: _____

DATE: _____ BY: _____
 SURVEYED: _____ ALIGNED: _____ CHECKED: _____
 NOTE BOOK: _____ RT. OF WAY: _____ CHECKED: _____
 NO.: _____ FILE NAME: _____

CHRISTOPHER B. BURKE ENGINEERING LTD.
 9975 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-9500



DATE: _____ BY: _____
 SURVEYED: _____ ALIGNED: _____ CHECKED: _____
 NOTE BOOK: _____ RT. OF WAY: _____ CHECKED: _____
 NO.: _____ FILE NAME: _____

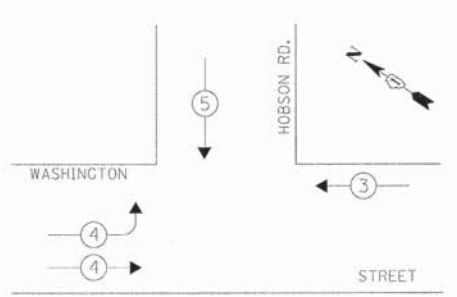


PHASE DESIGNATION DIAGRAM

RIGHT TURN OVERLAP PHASE DESIGNATION

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

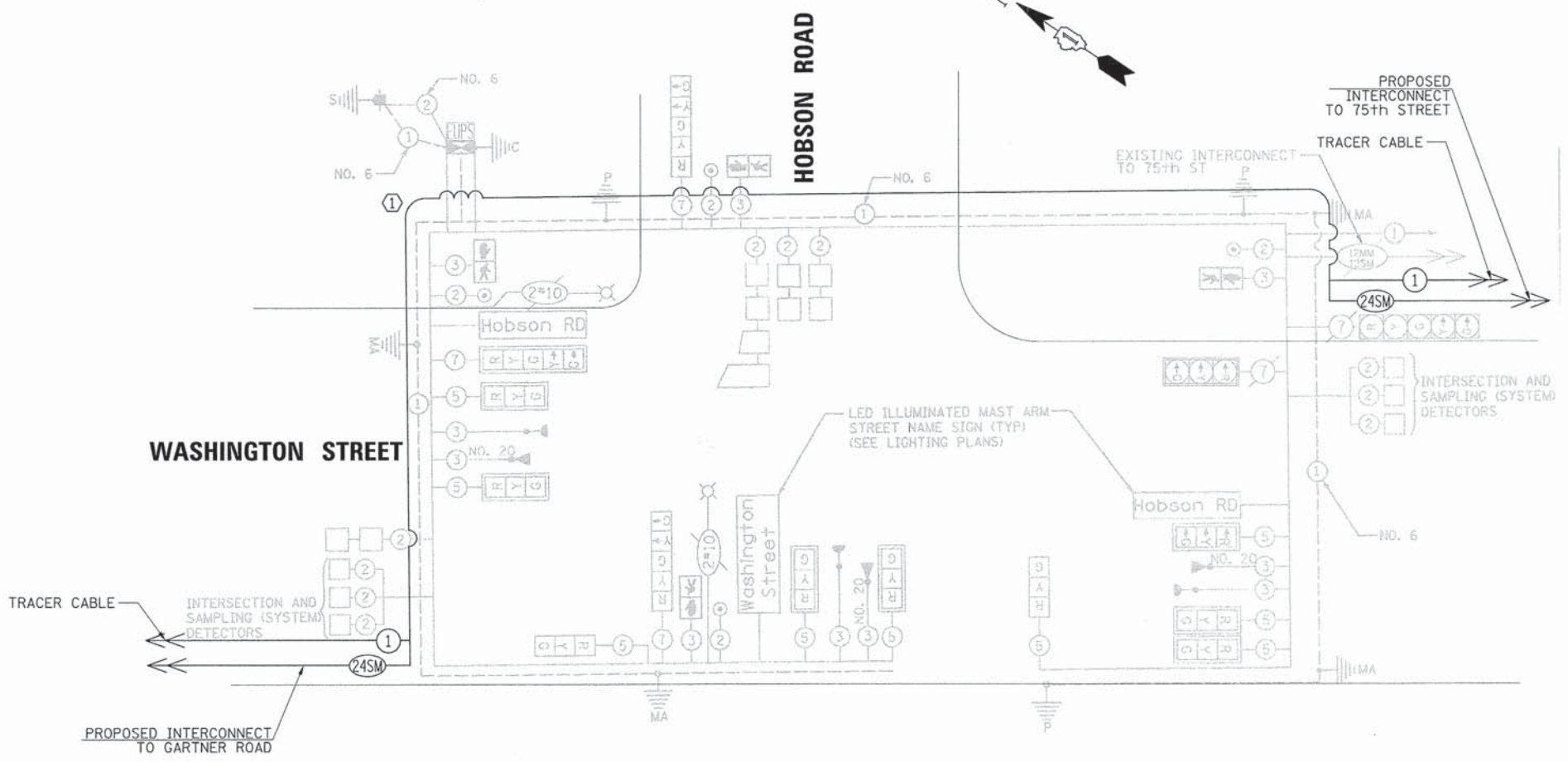
EMERGENCY VEHICLE PREEMPTION SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT	←	→	↓

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED X % OPERATION		
SIGNAL (RED)	14	17	0.50		119.0
(YELLOW)	14	25	0.25		87.5
(GREEN)	14	15	0.25		52.5
ARROW	8	12	0.10		9.6
PED. SIGNAL	4	25	1.00		100.0
CONTROLLER	1	100	1.00		100.0
ILLUMINATED SIGN	-	25	0.05		-
VIDEO SYSTEM	-	150	1.00		-
LUMINAIRE	2	250	0.50		250.0
BATTERY BACKUP	1	25	1.00		25.0
FLASHER			0.50		
ENERGY COSTS TO:					TOTAL = 743.6

CITY OF NAPERVILLE
 400 SOUTH EAGLE STREET
 NAPERVILLE, ILLINOIS 60540
 ENERGY SUPPLY: CONTACT: NEW BUSINESS
 PHONE: 1-800-334-7661
 COMPANY: COMED



CONSTRUCTION NOTE:
 ① THE CONTRACTOR SHALL INSTALL THE PROPOSED INTERCONNECT CABLE GOING THROUGH THE CONTROLLER CABINET'S DOUBLE HANDHOLE AND PROVIDE AN ADDITIONAL 50 FEET OF CABLE SLACK FOR FUTURE USE. THE EXISTING INTERCONNECT AT THE INTERSECTION SHALL REMAIN IN PLACE.

SCHEDULE OF QUANTITIES			
ITEM	UNIT	QUANTITY	
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1	

FILE NAME =	USER NAME = fbariso	DESIGNED - LJ / TS	REVISED -
N:\Naperville\130319\Traffic\TS08_Hobson	sh1-cab.dgn	DRAWN - FPB / FCP	REVISED -
	PLOT SCALE = 20'	CHECKED - GMZ	REVISED -
	PLOT DATE = 6/22/2015	DATE - 3/13/2015	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE WASHINGTON STREET AND HOBSON ROAD			
SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	

F.A.I. RTE. 2552, 1522 & 2546	SECTION 13-00158-00-TL	COUNTY DuPAGE & WILL	TOTAL SHEETS 84	SHEET NO. 17
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		CONTRACT NO. 61B84		

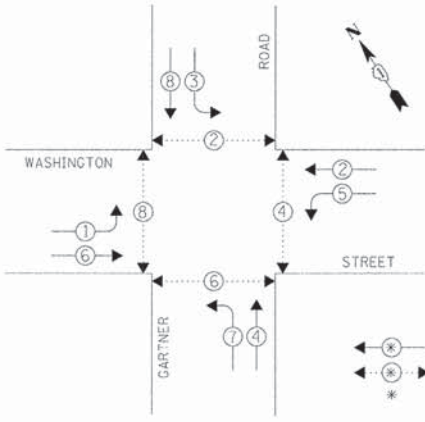
DATE	BY	REVISION
DATE	BY	REVISION
DATE	BY	REVISION

PROFILE
 CHECKED: _____
 GRADES CHECKED: _____
 STRUCTURE NOTATIONS: _____
 NOTE BOOK NO. _____
 PLANNING CHECKED: _____
 ELECTRICAL CHECKED: _____
 CIVIL CHECKED: _____
 ADD FILE NAME: _____

PLAN
 NOTE BOOK NO. _____
 CHECKED: _____
 DATE: _____

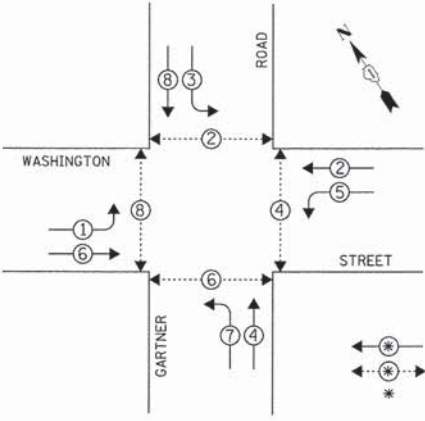
ENGINEERING LTD.
 6705 West Higgins Road, Suite 600
 Naperville, Illinois 60563
 (847) 823-9500

EXISTING CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

PROPOSED CONTROLLER SEQUENCE

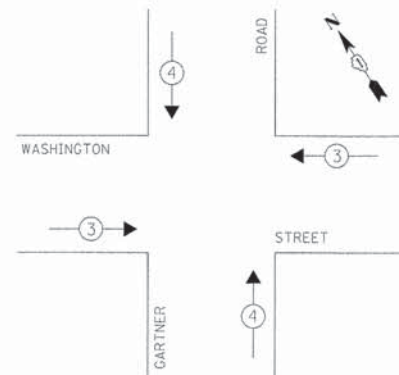


PHASE DESIGNATION DIAGRAM

LEGEND
 DUAL ENTRY PHASE
 PEDESTRIAN PHASE
 NUMBER REFERS TO ASSOCIATED PHASE

LEGEND
 DUAL ENTRY PHASE
 PEDESTRIAN PHASE
 NUMBER REFERS TO ASSOCIATED PHASE

EMERGENCY VEHICLE PREEMPTION SEQUENCE

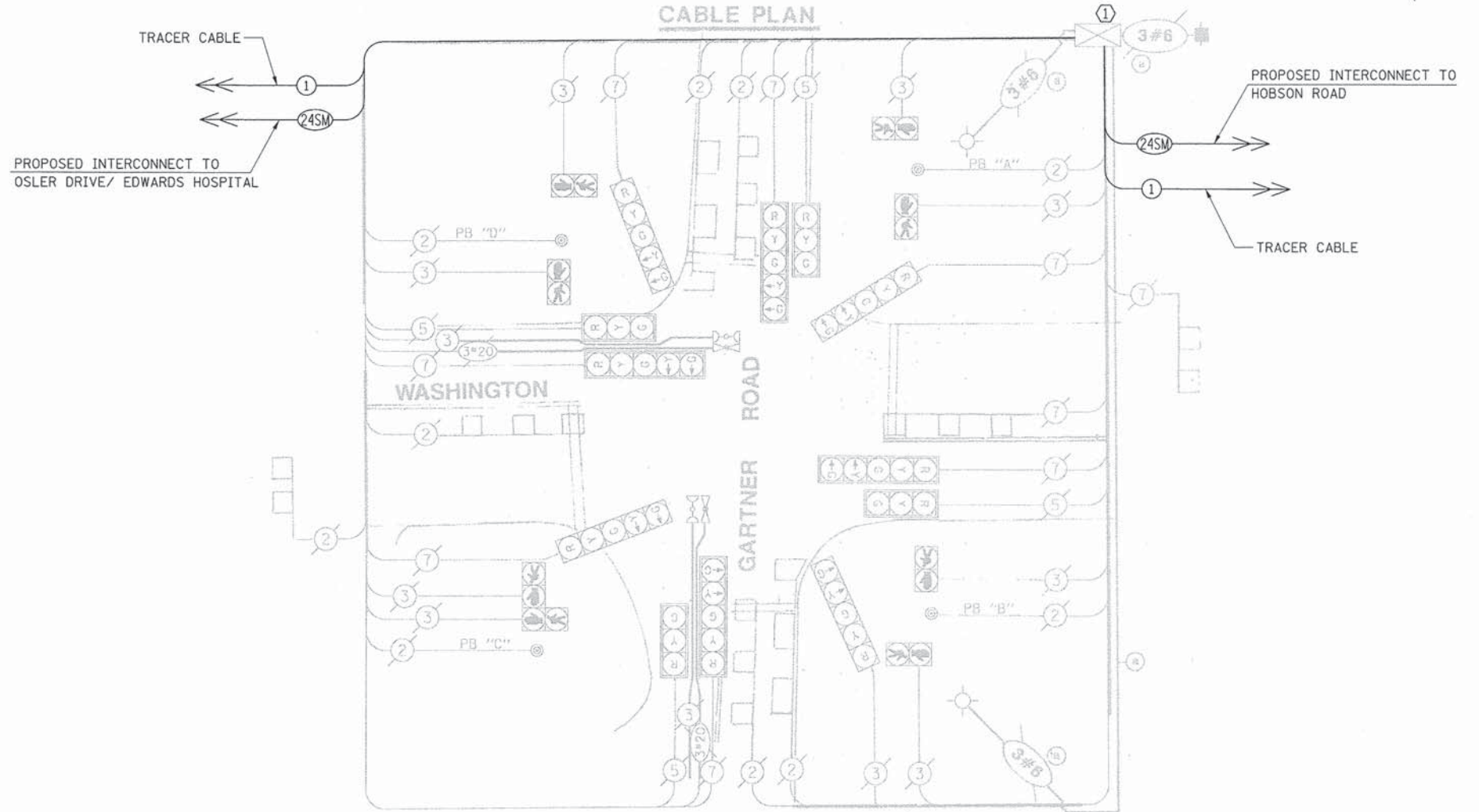


EXISTING EMERGENCY VEHICLE PREEMPTORS

EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↑ ↓

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS						TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	X % OPERATION		
SIGNAL (RED)	12		17	0.50		102.0
(YELLOW)	12		25	0.25		75.0
(GREEN)	12		15	0.25		45.0
ARROW	16		12	0.10		19.2
PED. SIGNAL	8		25	1.00		200.0
CONTROLLER	1		100	1.00		100.0
ILLUMINATED SIGN	-	25		0.05		-
VIDEO SYSTEM	-	150		1.00		-
LUMINAIRE	2	250		0.50		250.0
BATTERY BACKUP	-	25		1.00		-
FLASHER				0.50		-
ENERGY COSTS TO:					TOTAL =	791.2
CITY OF NAPERVILLE 400 SOUTH EAGLE STREET NAPERVILLE, ILLINOIS 60540 ENERGY SUPPLY: CONTACT: NEW BUSINESS PHONE: 1-800-334-7661 COMPANY: COMED						

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



NOTE:
 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.

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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 TRAFFIC SIGNAL CONTROLLER

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
FIBER OPTIC TERMINATIONS 12 FIBER	EACH	1

CONSTRUCTION NOTE:

① THE CONTRACTOR SHALL INSTALL A LAYER II SWITCH AND A NEW CONTROLLER WITH THE LATEST NTCIP SOFTWARE IN THE EXISTING CABINET. ALL COSTS RELATED TO WIRING AND CONNECTING THE PROPOSED CONTROLLER FOR PROPER OPERATION SHALL BE INCLUDED IN THE PAY ITEM: FULL ACTUATED CONTROLLER IN EXISTING CABINET

FILE NAME =	USER NAME = fbariso	DESIGNED - LJ / TS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE WASHINGTON STREET AND GARTNER ROAD	F.A.U. RTE. 2692, 1522 & 2546	SECTION 13-00158-00-TL	COUNTY DuPAGE & WILL	TOTAL SHEETS 84	SHEET NO. 18	
N:\naperville\130319\Traffic\15209.Gartner	_sh1-coob.dgn	DRAWN - FPB / FCP	REVISED -			SCALE:	SHEET NO. OF SHEETS STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	CONTRACT NO. 61B84	
		CHECKED - GMZ	REVISED -								
		DATE - 3/13/2015	REVISED -								

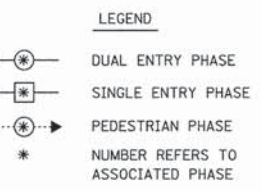
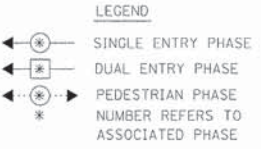
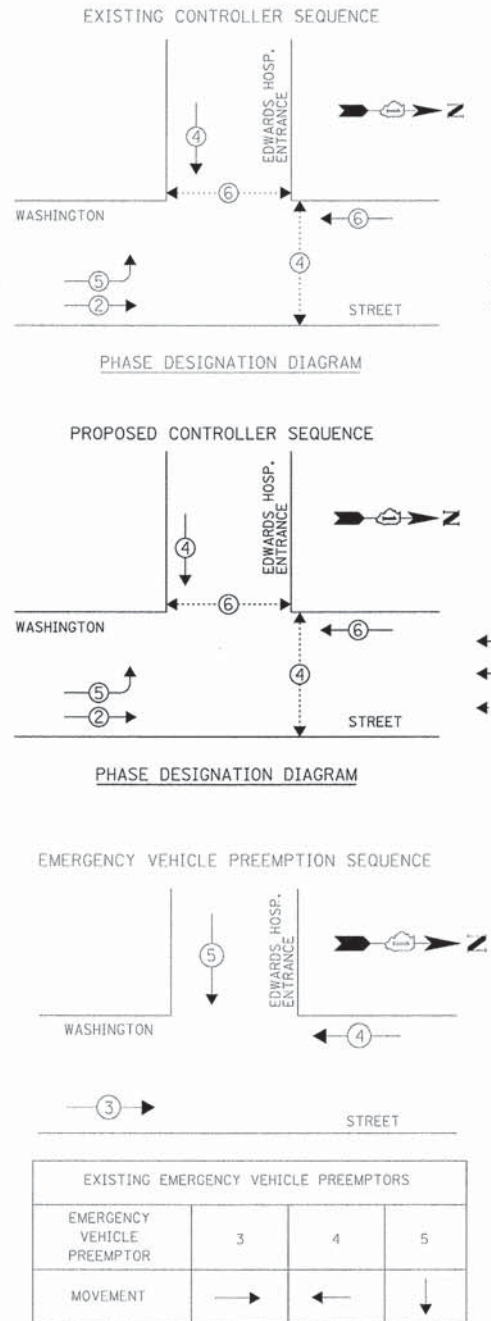
DATE: _____ BY: _____
 SURVEYED: _____
 ALLOWED: _____
 CHECKED: _____
 NO. OF REV. CHECKED: _____
 FILE NAME: _____

PLAN: _____
 NOTE BOOK: _____
 NO.: _____

ENGINEERING LTD.
 CHRISTOPHER B. BURKE
 3575 West Higgins Road, Suite 600
 Naperville, IL 60563
 (630) 823-0800

DATE: _____ BY: _____
 SURVEYED: _____
 CHECKED: _____
 NO. OF REV. CHECKED: _____
 FILE NAME: _____

PROFILE: _____
 NOTE BOOK: _____
 NO.: _____



EXISTING EMERGENCY VEHICLE PREEMPTORS

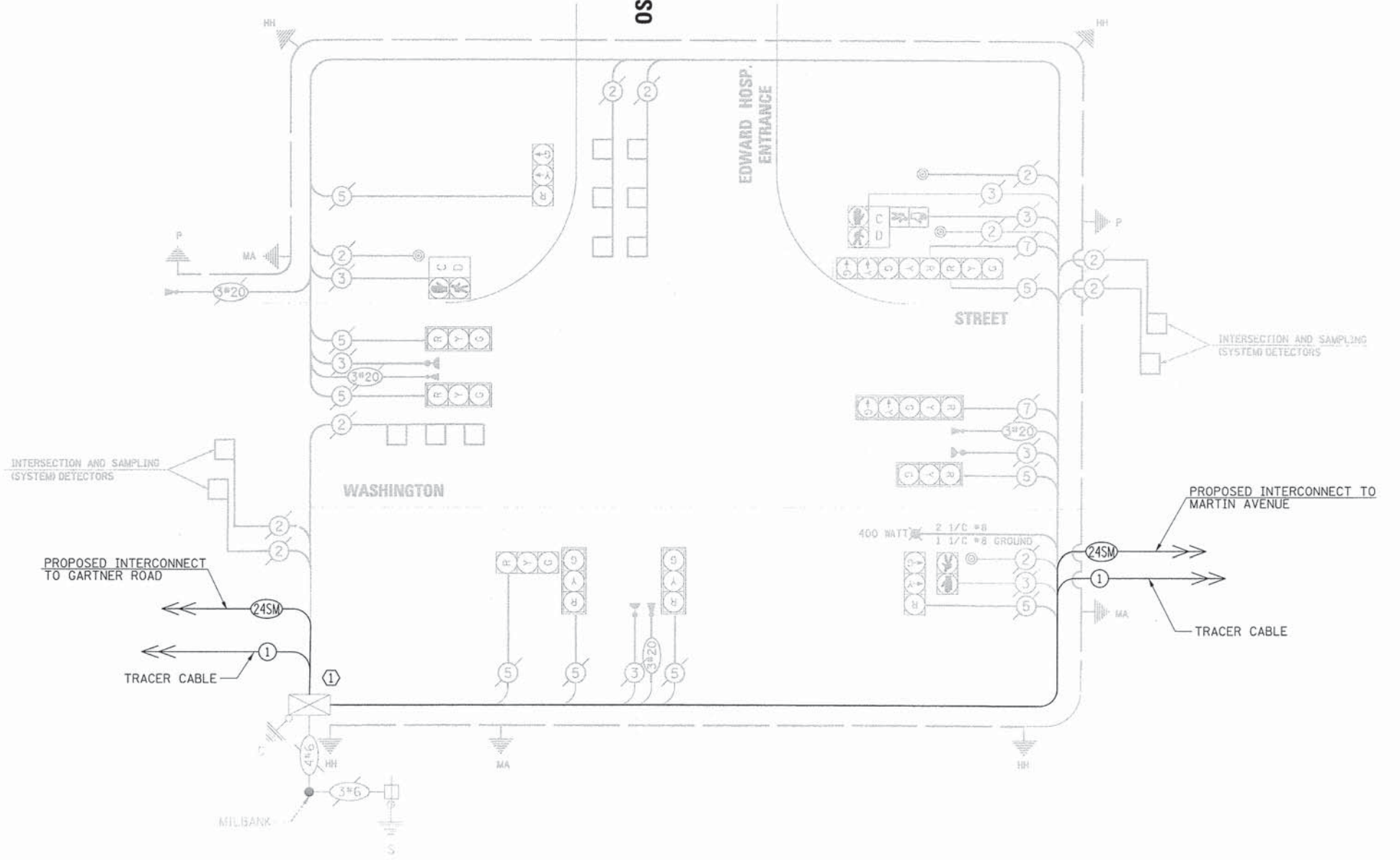
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT	→	←	↓

CONSTRUCTION NOTE:

① THE CONTRACTOR SHALL INSTALL A LAYER II SWITCH AND A NEW CONTROLLER WITH THE LATEST NTCIP SOFTWARE IN THE EXISTING CABINET. ALL COSTS RELATED TO WIRING AND CONNECTING THE PROPOSED CONTROLLER FOR PROPER OPERATION SHALL BE INCLUDED IN THE PAY ITEM: FULL ACTUATED CONTROLLER IN EXISTING CABINET.



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



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

TYPE	NO. OF LAMPS	WATTAGE	INCAND.	LED	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	11	17	0.50			93.5
(YELLOW)	11	25	0.25			68.75
(GREEN)	11	15	0.25			41.25
ARROW	4	12	0.10			4.8
PED. SIGNAL	4	25	1.00			100.0
CONTROLLER	1	100	1.00			100.0
ILLUMINATED SIGN	-	25	0.05			-
VIDEO SYSTEM	-	150	1.00			-
LUMINAIRE	-	250	0.50			125.0
BATTERY BACKUP	-	25	1.00			-
FLASHER	-	-	0.50			-
ENERGY COSTS TO:						TOTAL = 533.3

CITY OF NAPERVILLE
 400 SOUTH EAGLE STREET
 NAPERVILLE, ILLINOIS 60540
 ENERGY SUPPLY: CONTACT: NEW BUSINESS
 PHONE: 1-800-334-7661
 COMPANY: COMED

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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 TRAFFIC SIGNAL CONTROLLER

SCHEDULE OF QUANTITIES

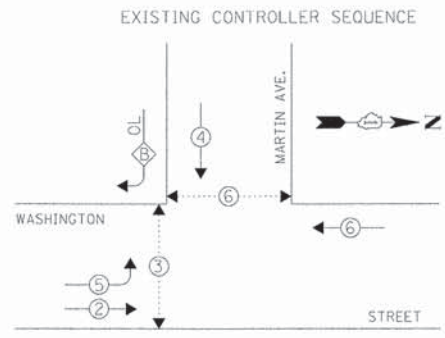
ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
FIBER OPTIC TERMINATIONS 12 FIBER	EACH	1

DATE: _____ BY: _____
 DATE: _____ BY: _____
 DATE: _____ BY: _____

PROFILE: _____
 GRADES CHECKED: _____
 STRUCTURE: _____
 NOTATIONS: _____

PLAN: _____
 NOTE BOOK NO.: _____
 CHECKED: _____
 DATE: _____

ENGINEER: **CHRISTOPHER B. BURKE**
 ENGINEERING LTD.
 607 N. HIGHWAY 150
 ROLLINGVIEW, ILLINOIS 60018
 (847) 823-0500

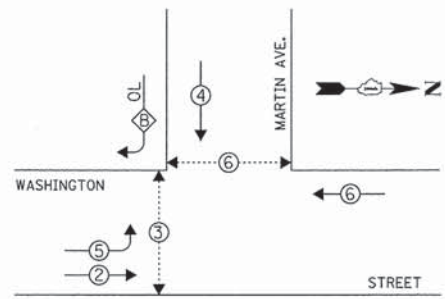


PHASE DESIGNATION DIAGRAM

RIGHT TURN OVERLAP PHASE DESIGNATION

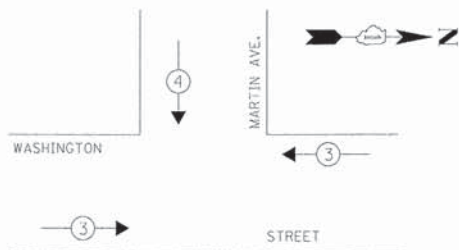
OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
B	= 4	+ 5

PROPOSED CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	10		17	0.50	85.0
(YELLOW)	10		25	0.25	62.5
(GREEN)	10		15	0.25	37.5
ARROW	8		12	0.10	9.6
PED. SIGNAL	4		25	1.00	100.0
CONTROLLER	1		100	1.00	100.0
ILLUMINATED SIGN	-	25		0.05	-
VIDEO SYSTEM	-	150		1.00	-
LUMINAIRE	-	250		0.50	-
BATTERY BACKUP	-	25		1.00	-
FLASHER	-			0.50	-
ENERGY COSTS TO:				TOTAL =	394.6

CITY OF NAPERVILLE

400 SOUTH EAGLE STREET
 NAPERVILLE, ILLINOIS 60540

ENERGY SUPPLY: CONTACT: NEW BUSINESS
 PHONE: 1-800-334-7661
 COMPANY: COMED

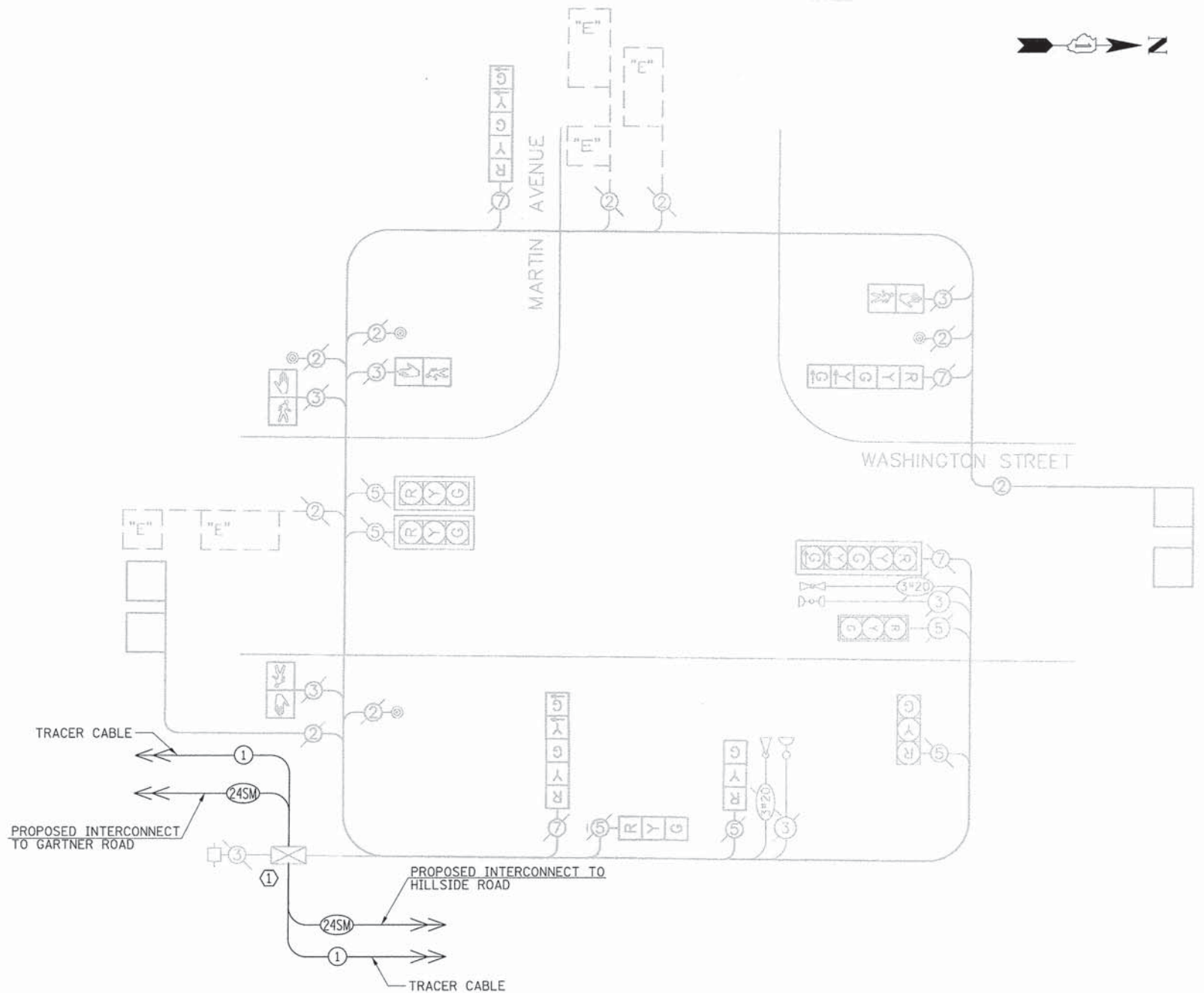
REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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 TRAFFIC SIGNAL CONTROLLER

CONSTRUCTION NOTE:

- 1 THE CONTRACTOR SHALL INSTALL A LAYER II SWITCH AND A NEW CONTROLLER WITH THE LATEST NTCIP SOFTWARE IN THE EXISTING CABINET. ALL COSTS RELATED TO WIRING AND CONNECTING THE PROPOSED CONTROLLER FOR PROPER OPERATION SHALL BE INCLUDED IN THE PAY ITEM: FULL ACTUATED CONTROLLER IN EXISTING CABINET

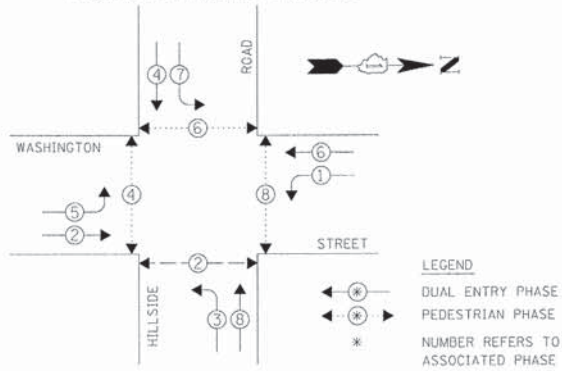


NOTE:
 THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

SCHEDULE OF QUANTITIES		
ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
FIBER OPTIC TERMINATIONS 12 FIBER	EACH	1

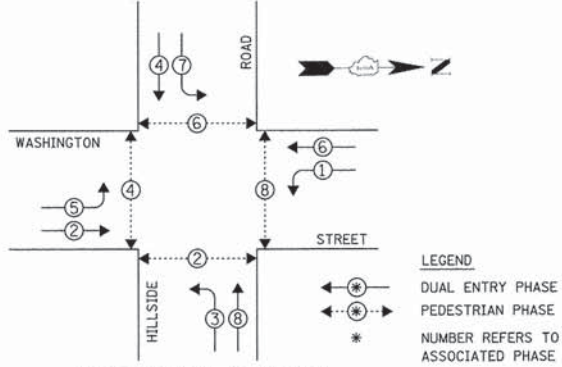
PROFILE
 DATE: _____
 BY: _____
 CHECKED: _____
 DATE: _____
 BY: _____
 PLAN
 DATE: _____
 BY: _____
 CHECKED: _____
 DATE: _____
 BY: _____
CHRISTOPHER B. BURKE
 ENGINEERING LTD.
 9575 West Higgins Road, Suite 600
 Chicago, IL 60631
 (847) 823-6500
 C.B. ENGINEERING

EXISTING CONTROLLER SEQUENCE



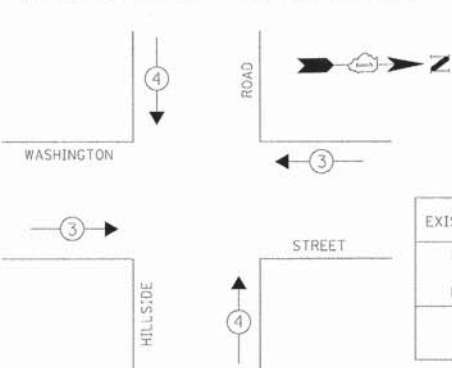
PHASE DESIGNATION DIAGRAM

PROPOSED CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

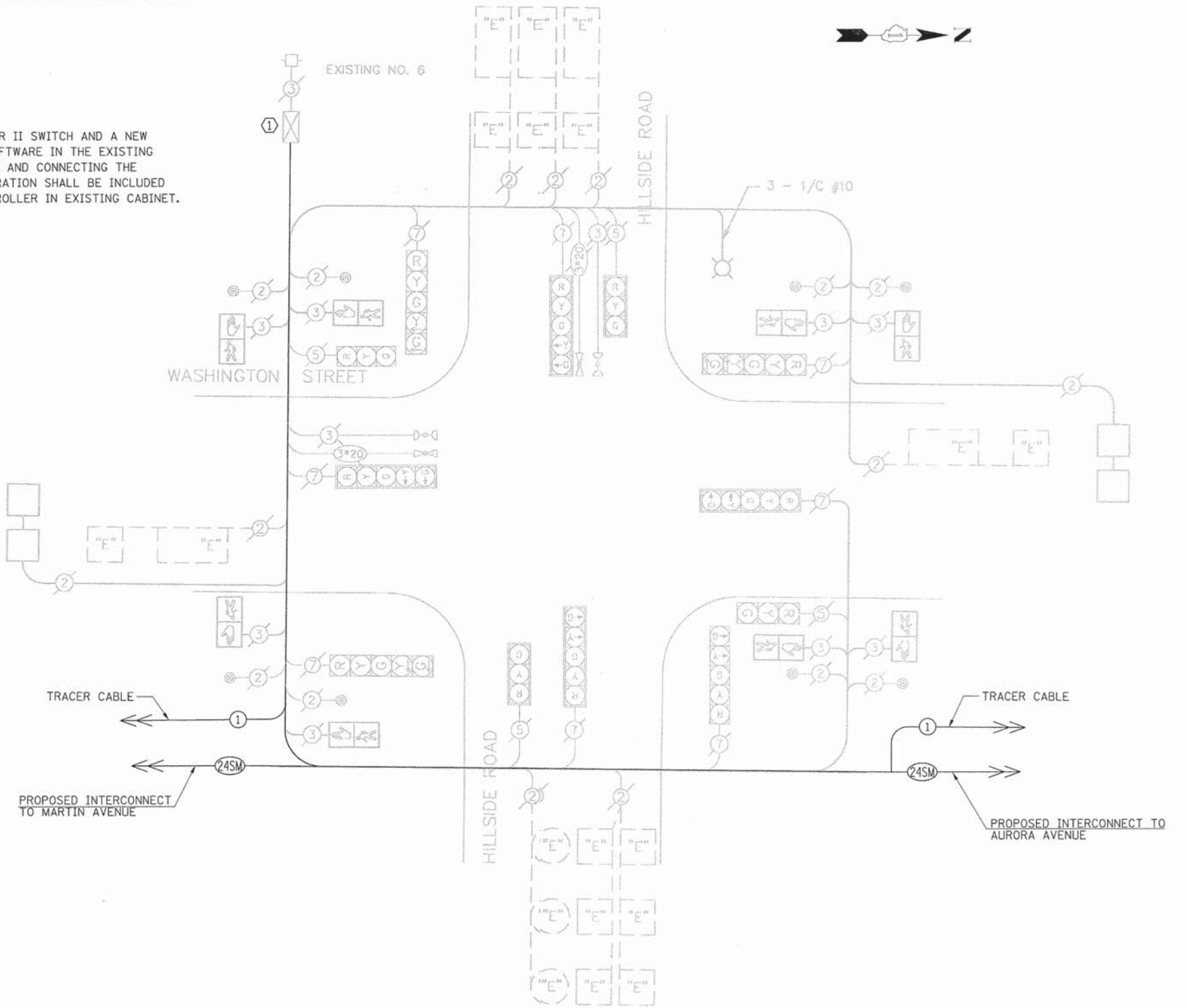
REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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 TRAFFIC SIGNAL CONTROLLER

CONSTRUCTION NOTE:

- 1 THE CONTRACTOR SHALL INSTALL A LAYER II SWITCH AND A NEW CONTROLLER WITH THE LATEST NTCIP SOFTWARE IN THE EXISTING CABINET. ALL COSTS RELATED TO WIRING AND CONNECTING THE PROPOSED CONTROLLER FOR PROPER OPERATION SHALL BE INCLUDED IN THE PAY ITEM: FULL ACTUATED CONTROLLER IN EXISTING CABINET.



I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE INCAND.	LED	% OPERATION	
SIGNAL (RED)	12		17	0.50	102.0
(YELLOW)	12		25	0.25	75.0
(GREEN)	12		15	0.25	45.0
ARROW	16		12	0.10	19.2
PED. SIGNAL	8		25	1.00	200.0
CONTROLLER	1		100	1.00	100.0
ILLUMINATED SIGN	-	25		0.05	-
VIDEO SYSTEM	-	150		1.00	-
LUMINAIRE	1	250		0.50	125.0
BATTERY BACKUP	-	25		1.00	-
FLASHER				0.50	-
ENERGY COSTS TO:					TOTAL = 666.2

CITY OF NAPERVILLE

400 SOUTH EAGLE STREET
NAPERVILLE, ILLINOIS 60540

ENERGY SUPPLY: CONTACT: NEW BUSINESS
PHONE: 1-800-334-7661
COMPANY: COMED

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

SCHEDULE OF QUANTITIES		
ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
FIBER OPTIC TERMINATIONS 12 FIBER	EACH	1

FILE NAME =	USER NAME = fbariso	DESIGNED - LJ / TS	REVISED -
N:\Naperville\130319\Traffic\TS12.Hillside	shj-cab.dgn	DRAWN - FPB / FCP	REVISED -
	PLOT SCALE = 28"	CHECKED - GMZ	REVISED -
	PLOT DATE = 6/22/2015	DATE - 3/13/2015	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION
DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
WASHINGTON STREET AND HILLSIDE ROAD**

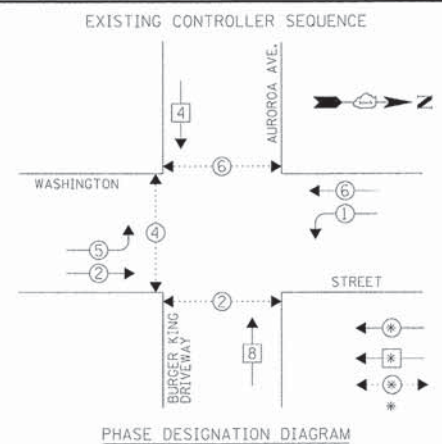
SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RTE. 2552, 1522 & 2546	SECTION 13-00158-00-TL	COUNTY DUPAGE & WILL	TOTAL SHEETS 84	SHEET NO. 21
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 61B84	

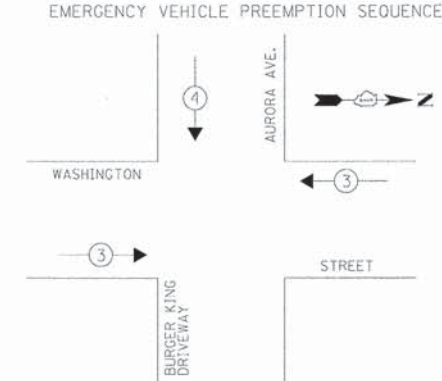
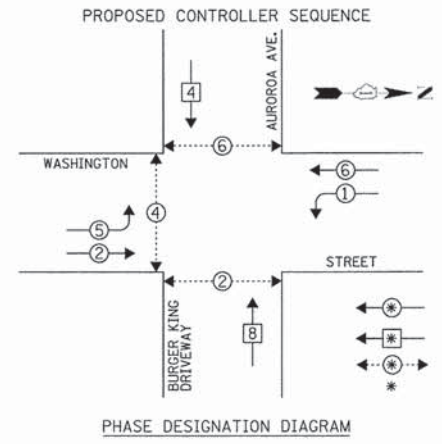
DATE: _____ BY: _____
 PROFILE SURVEYED: _____ CHECKED: _____
 NOTE BOOK NO.: _____
 STRUCTURE NOTES: _____

CHRISTOPHER B. BURKE ENGINEERING LTD.
 9875 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-0600

DATE: _____ BY: _____
 PROFILE SURVEYED: _____ CHECKED: _____
 NOTE BOOK NO.: _____
 STRUCTURE NOTES: _____



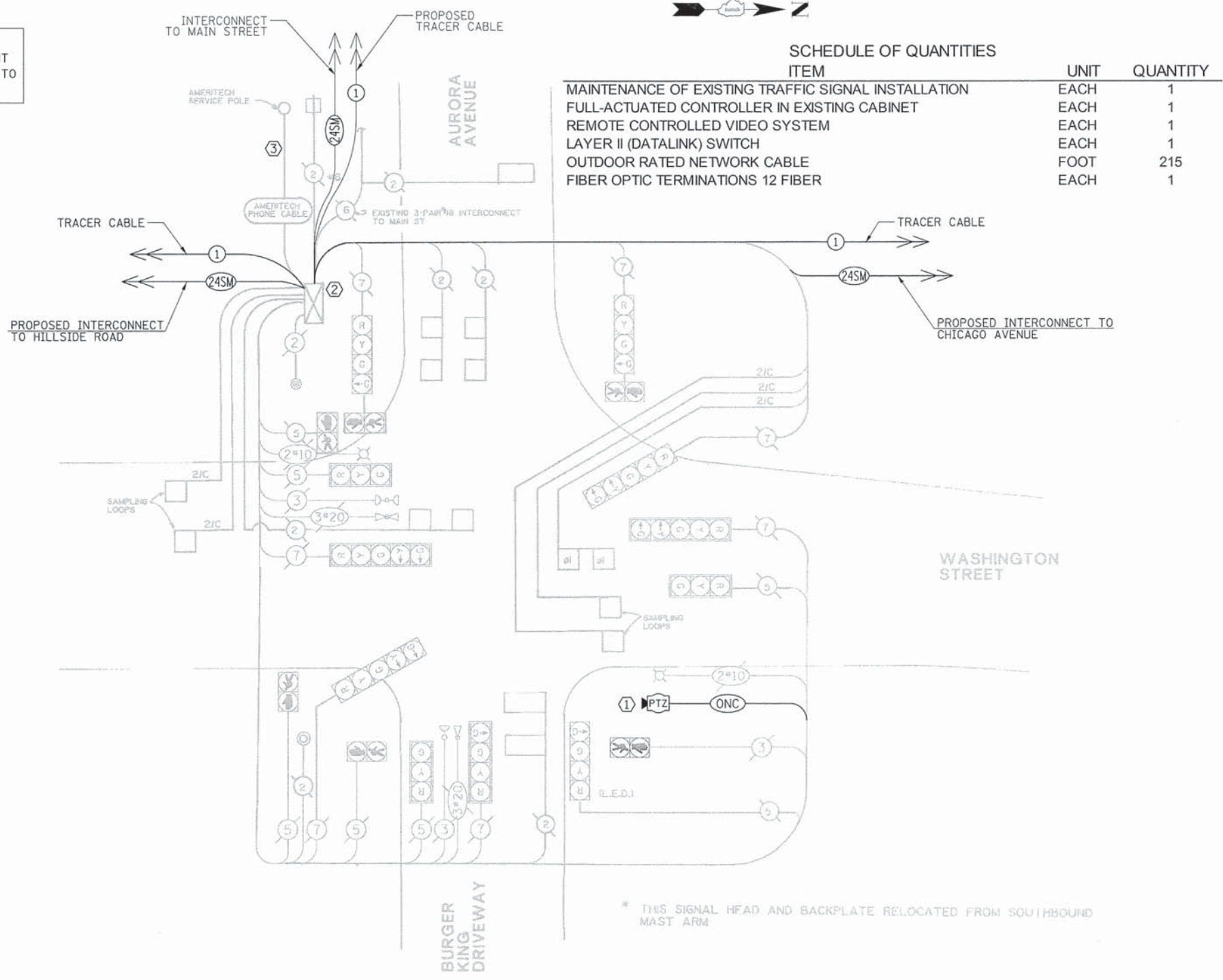
NOTE:
 THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.



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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	11		17	0.50	93.5
(YELLOW)	11		25	0.25	68.75
(GREEN)	15		15	0.25	56.25
ARROW	8		12	0.10	9.6
PED. SIGNAL	6		25	1.00	150.0
CONTROLLER	1		100	1.00	100.00
ILLUMINATED SIGN	-	25		0.05	-
VIDEO SYSTEM	-	150		1.00	-
LUMINAIRE	2	250		0.50	250.0
BATTERY BACKUP	-	25		1.00	-
FLASHER				0.50	-
ENERGY COSTS TO:					TOTAL = 728.1

CITY OF NAPERVILLE
 400 SOUTH EAGLE STREET
 NAPERVILLE, ILLINOIS 60540
 ENERGY SUPPLY: CONTACT: NEW BUSINESS
 PHONE: 1-800-334-7661
 COMPANY: COMED



SCHEDULE OF QUANTITIES		
ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	215
FIBER OPTIC TERMINATIONS 12 FIBER	EACH	1

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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 PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: CITY OF NAPERVILLE

1	EACH	MASTER CONTROLLER
1	EACH	TRAFFIC SIGNAL CONTROLLER
1	EACH	TELEPHONE MODEM

CONSTRUCTION NOTES:

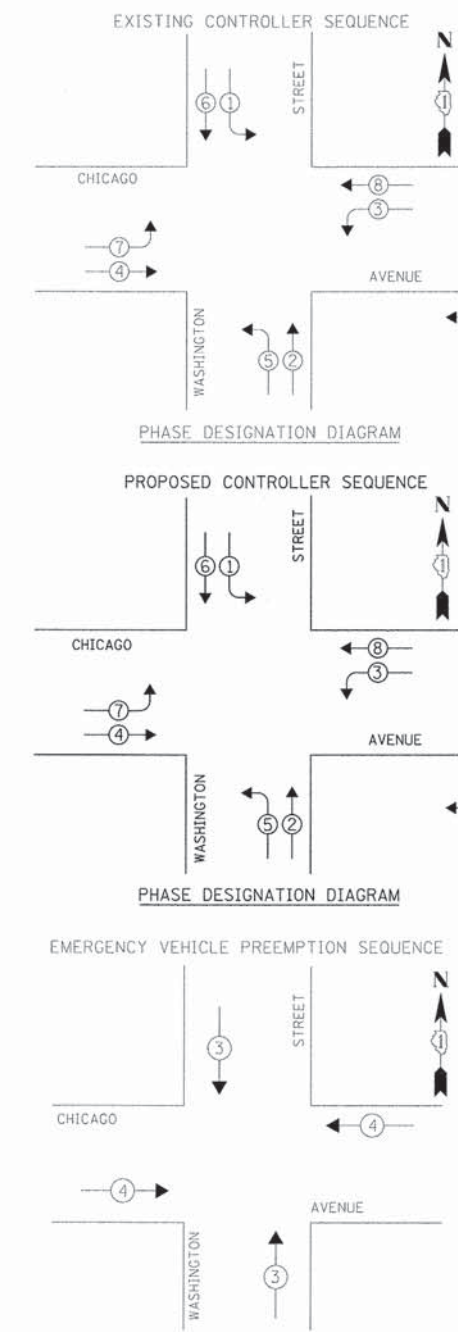
- THE CONTRACTOR SHALL INSTALL THE PROPOSED PAN, TILT, ZOOM CAMERA ON THE SHAFT OF THE EXISTING COMBINATION MAST ARM. THE CAMERA SHALL BE MOUNTED ADJACENT TO THE LUMINAIRE ARM.
- THE CONTRACTOR SHALL INSTALL A LAYER II SWITCH AND A NEW CONTROLLER WITH THE LATEST NTCIP SOFTWARE IN THE EXISTING CABINET. ALL COSTS RELATED TO WIRING AND CONNECTING THE PROPOSED CONTROLLER FOR PROPER OPERATION SHALL BE INCLUDED IN THE PAY ITEM: FULL ACTUATED CONTROLLER IN EXISTING CABINET.
- THE CONTRACTOR SHALL COORDINATE WITH THE CITY REGARDING THE DISCONNECTION OF THE EXISTING TELEPHONE LINE.

DATE: _____ BY: _____
 DATE: _____ BY: _____
 DATE: _____ BY: _____
 DATE: _____ BY: _____
 DATE: _____ BY: _____

PROFILE REVISIONS
 1. DATE: 6/22/2015
 2. DATE: 6/22/2015
 3. DATE: 6/22/2015
 4. DATE: 6/22/2015
 5. DATE: 6/22/2015
 6. DATE: 6/22/2015
 7. DATE: 6/22/2015
 8. DATE: 6/22/2015
 9. DATE: 6/22/2015
 10. DATE: 6/22/2015

FILE NAME =
 USER NAME = fbariso
 DESIGNED - LJ / TS
 DRAWN - FPB / FCP
 CHECKED - GMZ
 DATE - 3/13/2015

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION



LEGEND
 DUAL ENTRY PHASE
 NUMBER REFERS TO ASSOCIATED PHASE

LEGEND
 DUAL ENTRY PHASE
 NUMBER REFERS TO ASSOCIATED PHASE

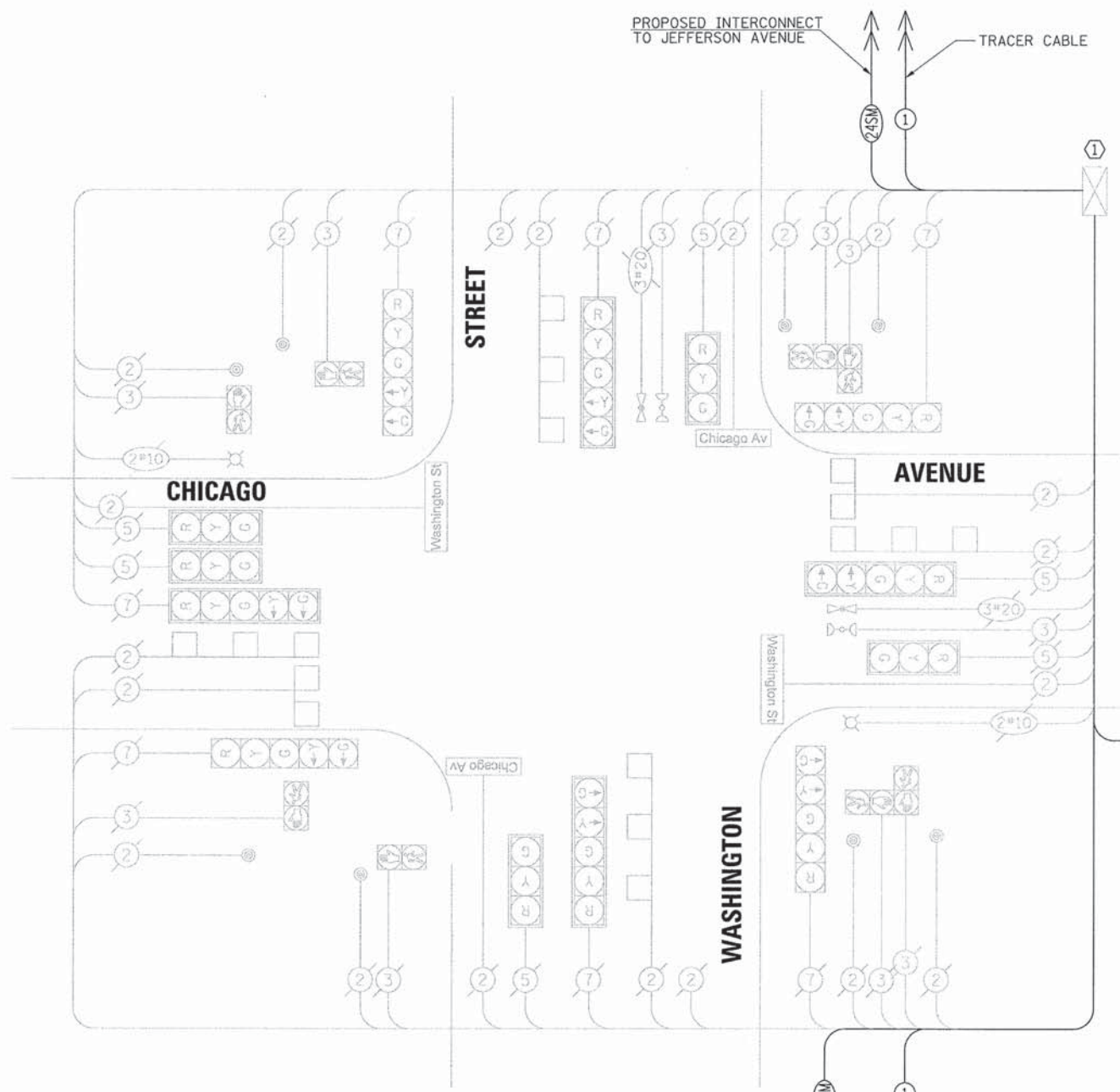
EXISTING EMERGENCY VEHICLE PREEMPTORS

EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↓ ↑

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

TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED X % OPERATION	TOTAL WATTAGE
SIGNAL (RED)	13		17 0.50	110.5
(YELLOW)	13		25 0.25	81.25
(GREEN)	13		15 0.25	48.75
ARROW	16		12 0.10	19.2
PED. SIGNAL	8		25 1.00	200.0
CONTROLLER	1		100 1.00	100.0
ILLUMINATED SIGN	-	25	0.05	-
VIDEO SYSTEM	-	150	1.00	-
LUMINAIRE	2	250	0.50	250.0
BATTERY BACKUP	-	25	1.00	-
FLASHER			0.50	
ENERGY COSTS TO:				TOTAL = 809.7

CITY OF NAPERVILLE
 400 SOUTH EAGLE STREET
 NAPERVILLE, ILLINOIS 60540
 ENERGY SUPPLY: CONTACT: NEW BUSINESS
 PHONE: 1-800-334-7661
 COMPANY: COMED



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

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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 TRAFFIC SIGNAL CONTROLLER
- 2 EACH WIRELESS SERIAL RADIO INTERCONNECT (COMPLETE)

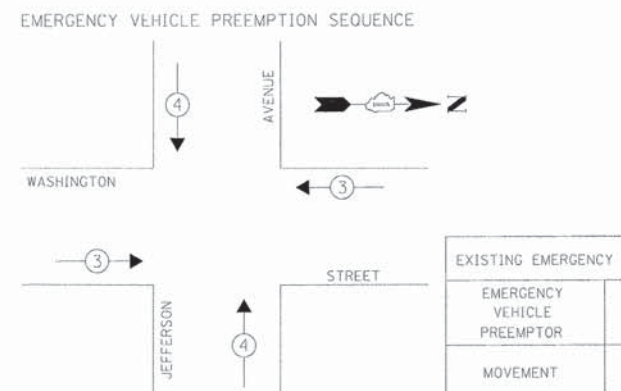
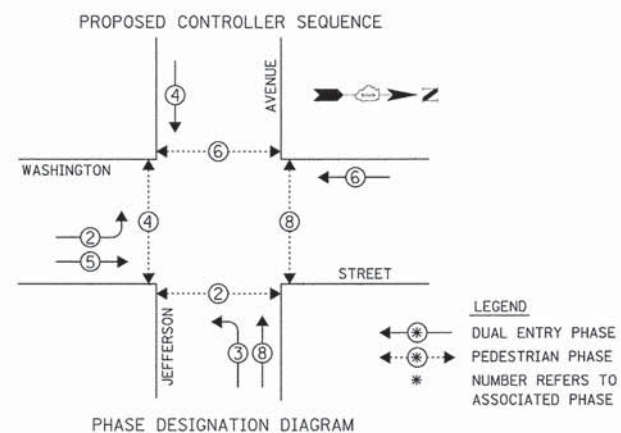
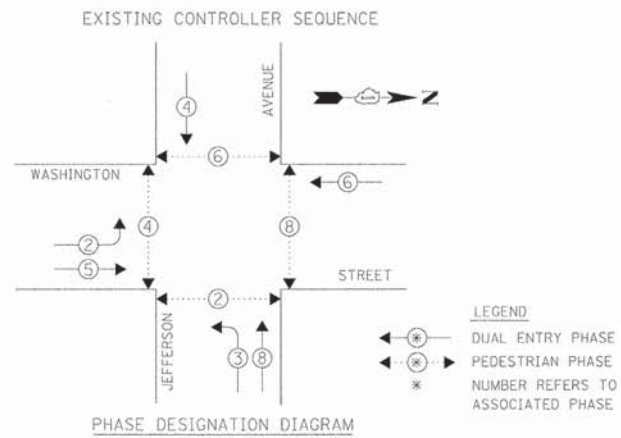
CONSTRUCTION NOTE:

- ① THE CONTRACTOR SHALL INSTALL A LAYER III SWITCH AND A NEW CONTROLLER WITH THE LATEST NTCIP SOFTWARE IN THE EXISTING CABINET. ALL COSTS RELATED TO WIRING AND CONNECTING THE PROPOSED CONTROLLER FOR PROPER OPERATION SHALL BE INCLUDED IN THE PAY ITEM: FULL ACTUATED CONTROLLER IN EXISTING CABINET.
- ② THE CONTRACTOR SHALL REMOVE THE EXISTING WIRELESS SERIAL RADIO EQUIPMENT AND INSTALL THE PROPOSED WIRELESS ETHERNET SYSTEM AS SHOWN ON THE PLANS.

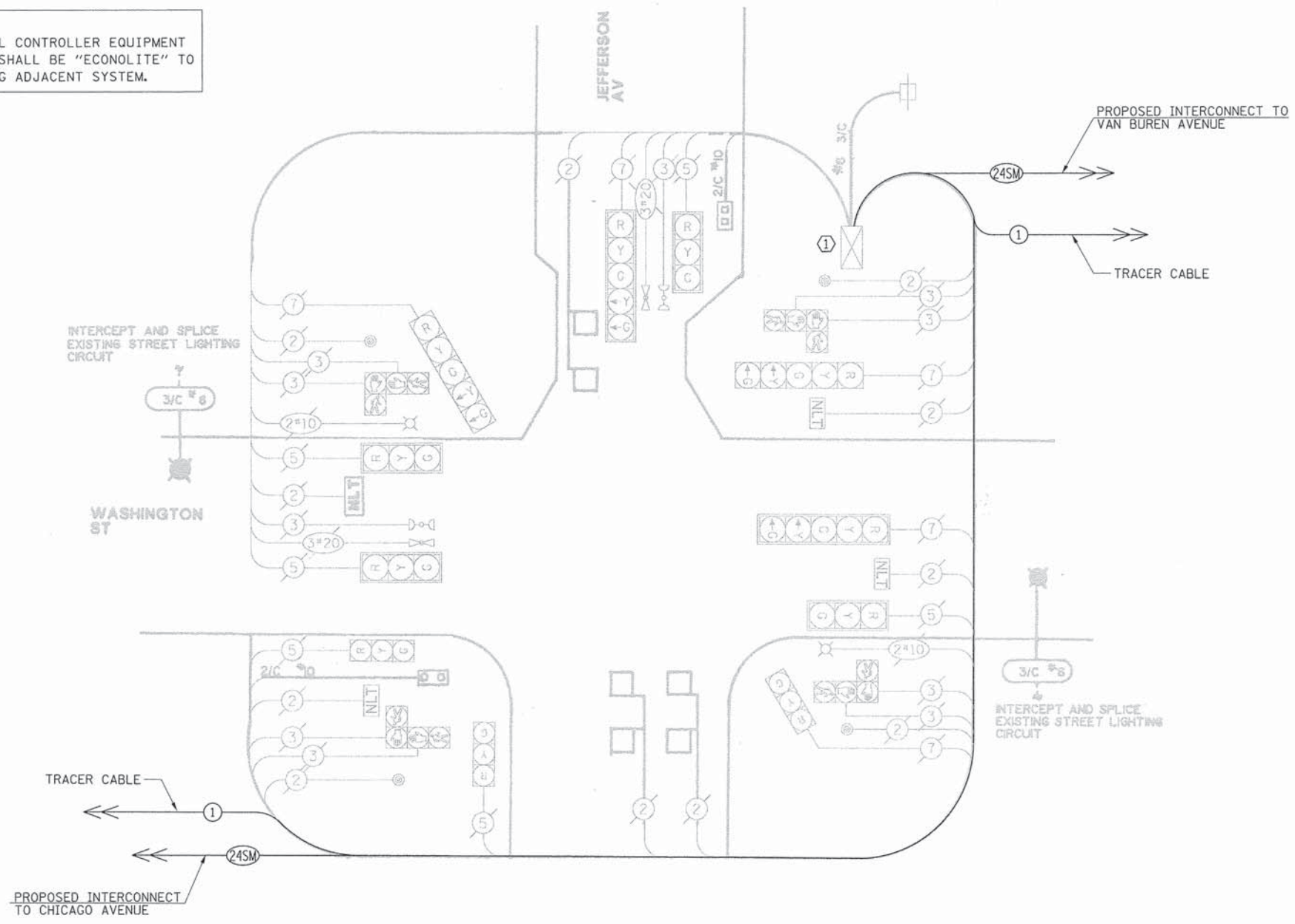
SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
LAYER III (NETWORK) SWITCH	EACH	1
FIBER OPTIC TERMINATIONS 12 FIBER	EACH	1

PROFILE
 DATE: _____
 BY: _____
 CHECKED: _____
 DATE: _____
 BY: _____
 PLAN
 DATE: _____
 BY: _____
 CHECKED: _____
 DATE: _____
 BY: _____
CHRISTOPHER B. BURKE
 ENGINEERING LTD.
 5975 West Higgins Road, Suite 600
 Naperville, IL 60563
 (847) 823-0500
 CB
 PROFILE
 DATE: _____
 BY: _____
 CHECKED: _____
 DATE: _____
 BY: _____
 PLAN
 DATE: _____
 BY: _____
 CHECKED: _____
 DATE: _____
 BY: _____



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



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

TYPE	NO. OF LAMPS	WATTAGE X INCAND. LED X % OPERATION	TOTAL WATTAGE
SIGNAL (RED)	11	17	93.5
(YELLOW)	11	25	68.75
(GREEN)	11	15	41.25
ARROW	10	12	12.0
PED. SIGNAL	8	25	200.0
CONTROLLER	1	100	100.0
ILLUMINATED SIGN	4	25	5.0
VIDEO SYSTEM	-	150	1.00
LUMINAIRE	4	250	500.0
BATTERY BACKUP	-	25	1.00
FLASHER			0.50
ENERGY COSTS TO:		TOTAL =	1020.50

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT
 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 TRAFFIC SIGNAL CONTROLLER

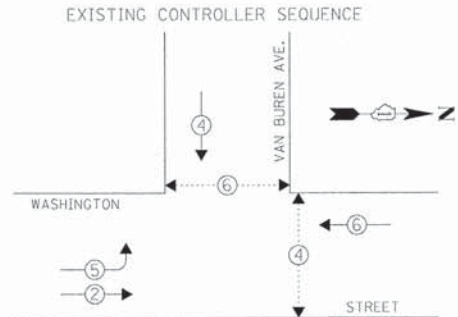
CONSTRUCTION NOTE:
 ① THE CONTRACTOR SHALL INSTALL A LAYER II SWITCH AND A NEW CONTROLLER WITH THE LATEST NTCIP SOFTWARE IN THE EXISTING CABINET. ALL COSTS RELATED TO WIRING AND CONNECTING THE PROPOSED CONTROLLER FOR PROPER OPERATION SHALL BE INCLUDED IN THE PAY ITEM: FULL ACTUATED CONTROLLER IN EXISTING CABINET.

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
FIBER OPTIC TERMINATIONS 12 FIBER	EACH	1

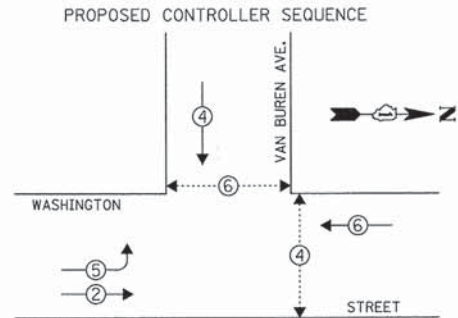
DATE BY DATE BY
 PROFILE SURVEYED BY DATE BY
 NOTE BOOK NO. DATE BY
 I.S.M. NOTED BY DATE BY
 STRUCTURE NOTATIONS: G/F/D

CHRISTOPHER B. BURKE ENGINEERING LTD.
 9575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 952-0580



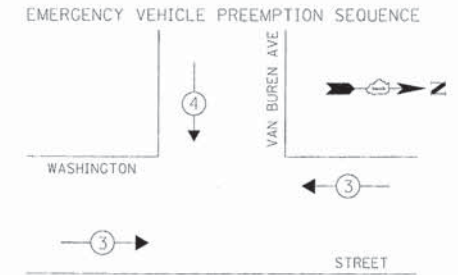
PHASE DESIGNATION DIAGRAM

LEGEND
 ← ⊗ → DUAL ENTRY PHASE
 ← ⊗ → PEDESTRIAN PHASE
 * NUMBER REFERS TO ASSOCIATED PHASE



PHASE DESIGNATION DIAGRAM

LEGEND
 ← ⊗ → DUAL ENTRY PHASE
 ← ⊗ → PEDESTRIAN PHASE
 * NUMBER REFERS TO ASSOCIATED PHASE



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

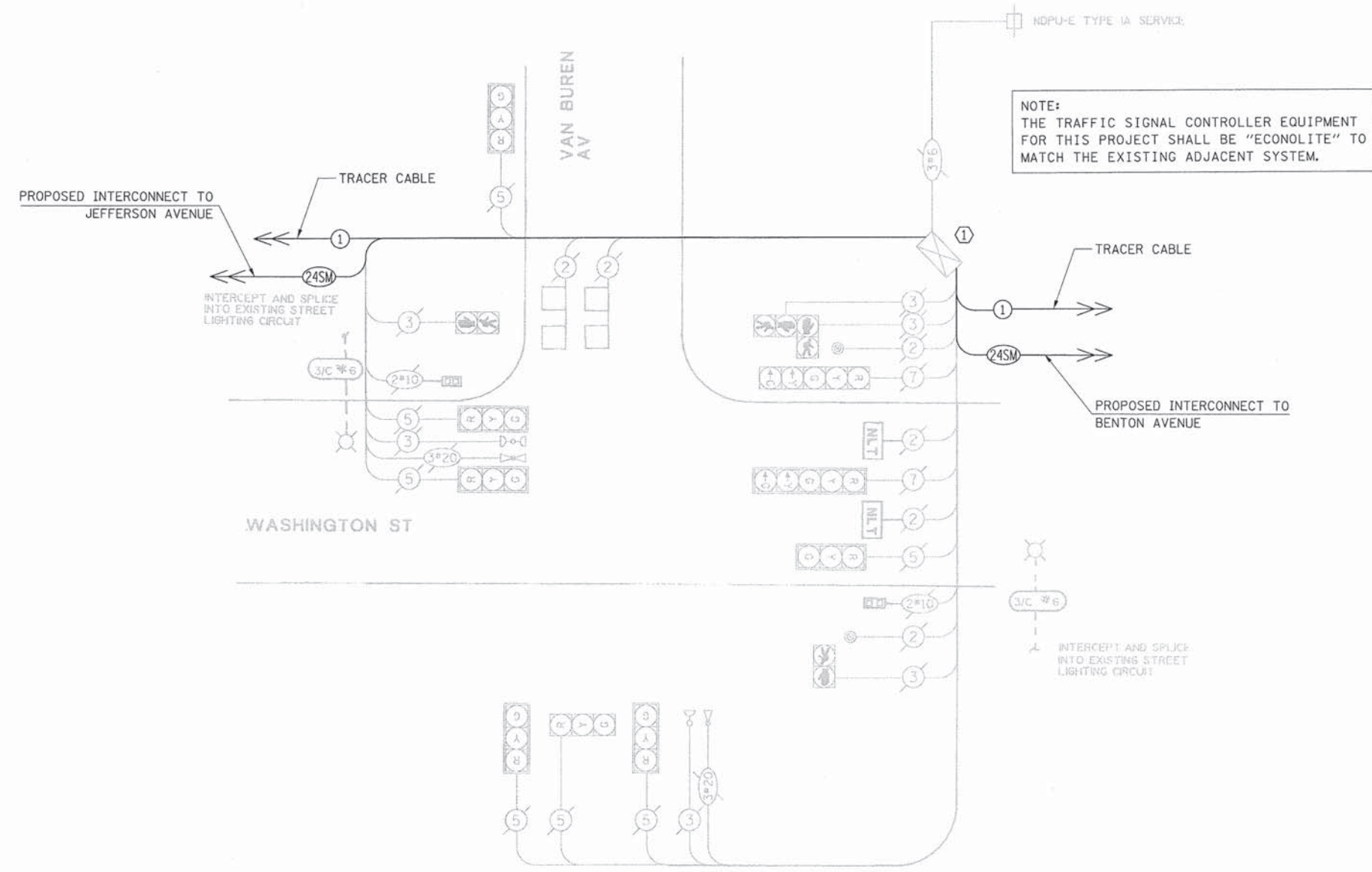
I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS						TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION		
SIGNAL (RED)	9		17	0.50		76.5
(YELLOW)	9		25	0.25		56.25
(GREEN)	9		15	0.25		33.75
ARROW	4		12	0.10		4.8
PED. SIGNAL	4		25	1.00		100.0
CONTROLLER	1		100	1.00		100.0
ILLUMINATED SIGN	2	25		0.05		2.5
VIDEO SYSTEM	-	150		1.00		
LUMINAIRE	2	250		0.50		250.0
BATTERY BACKUP	-	25		1.00		
FLASHER				0.50		
ENERGY COSTS TO:					TOTAL =	623.8

CITY OF NAPERVILLE
 400 SOUTH EAGLE STREET
 NAPERVILLE, ILLINOIS 60540
 ENERGY SUPPLY: CONTACT: NEW BUSINESS
 PHONE: 1-800-334-7661
 COMPANY: COMED

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT
 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 TRAFFIC SIGNAL CONTROLLER

CONSTRUCTION NOTE:
 ① THE CONTRACTOR SHALL INSTALL A LAYER II SWITCH AND A NEW CONTROLLER WITH THE LATEST NTCIP SOFTWARE IN THE EXISTING CABINET. ALL COSTS RELATED TO WIRING AND CONNECTING THE PROPOSED CONTROLLER FOR PROPER OPERATION SHALL BE INCLUDED IN THE PAY ITEM: FULL ACTUATED CONTROLLER IN EXISTING CABINET.



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

PROPOSED CABLE PLAN

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
FIBER OPTIC TERMINATIONS 12 FIBER	EACH	1

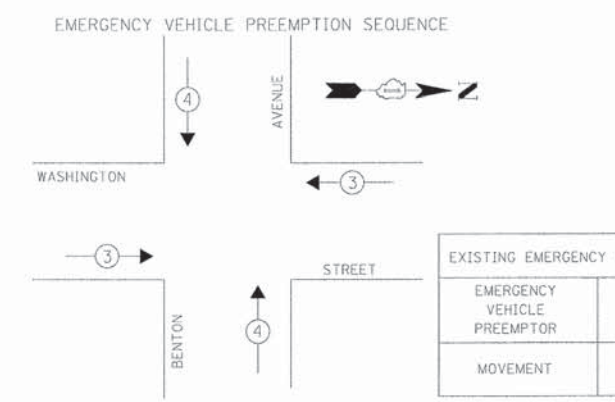
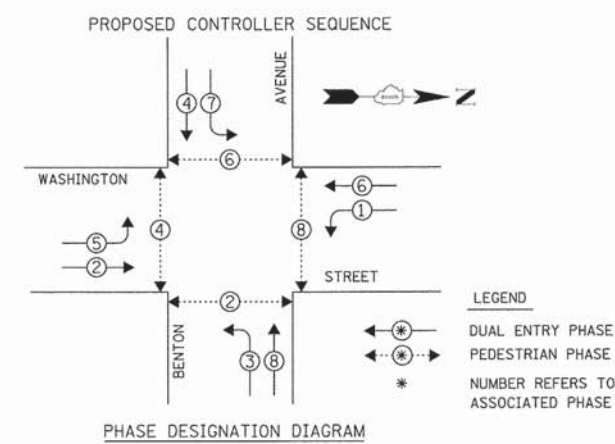
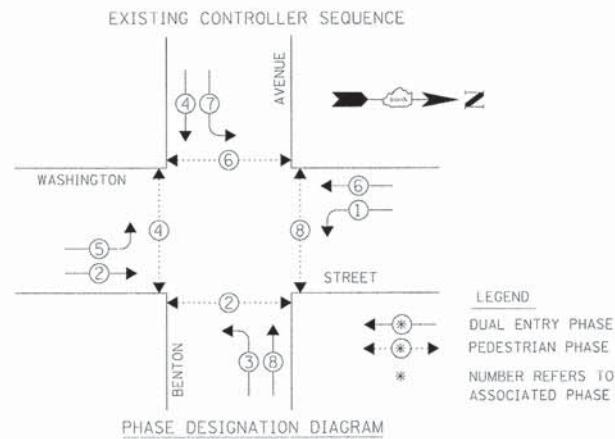
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PLOT SCALE = 20'		CHECKED - GMZ	REVISED -
PLOT DATE = 6/22/2015		DATE - 3/13/2015	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
 WASHINGTON STREET AND VAN BUREN AVENUE

F.A.U. RTE. 2502, 1922 A 2545	SECTION 13-00158-00-TL	COUNTY DuPAGE & WILL	TOTAL SHEETS 84	SHEET NO. 26
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		CONTRACT NO. 61B84		

PROFILE
 DATE: _____
 BY: _____
 CHECKED: _____
 DATE: _____
 BY: _____
 PLAN
 DATE: _____
 BY: _____
 CHECKED: _____
 DATE: _____
 BY: _____
CHRISTOPHER B. BURKE
 ENGINEERING LTD.
 9675 West Higgins Road, Suite 600
 Naperville, Illinois 60563
 (630) 334-8800
 (630) 334-8800



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

TYPE	NO. OF LAMPS	WATTAGE INCAND. LED	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	17	0.50	102.0
(YELLOW)	12	25	0.25	75.0
(GREEN)	12	15	0.25	45.0
ARROW	16	12	0.10	19.2
PED. SIGNAL	8	25	1.00	200.0
CONTROLLER	1	100	1.00	100.0
ILLUMINATED SIGN	-	25	0.05	-
VIDEO SYSTEM	-	150	1.00	-
LUMINAIRE	2	250	0.50	250.0
BATTERY BACKUP	-	25	1.00	-
FLASHER	-	-	0.50	-
ENERGY COSTS TO:	TOTAL =			791.2

CITY OF NAPERVILLE
 400 SOUTH EAGLE STREET
 NAPERVILLE, ILLINOIS 60540
 ENERGY SUPPLY: CONTACT: NEW BUSINESS
 PHONE: 1-800-334-7661
 COMPANY: COMED

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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 TRAFFIC SIGNAL CONTROLLER

CONSTRUCTION NOTE:

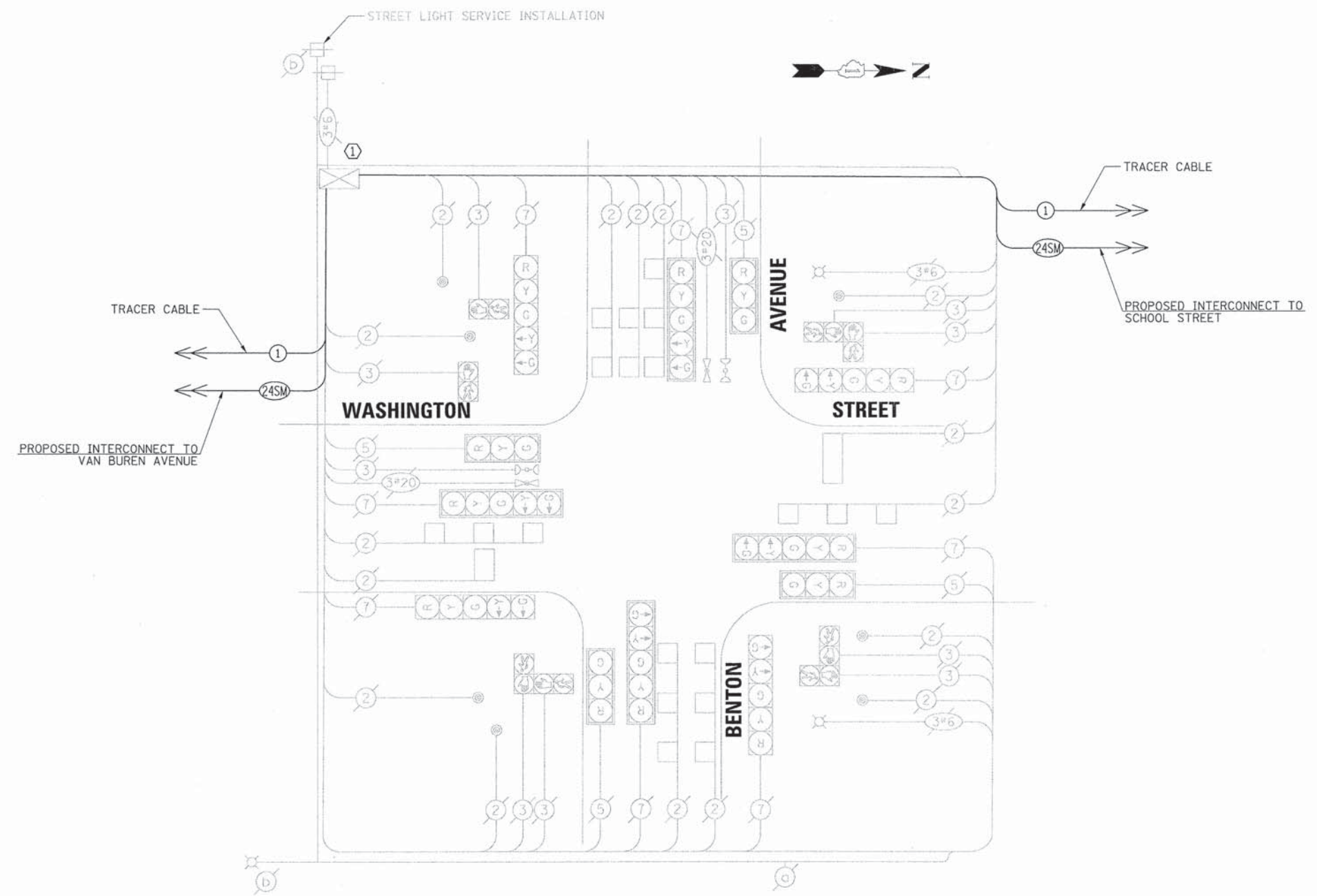
① THE CONTRACTOR SHALL INSTALL A LAYER II SWITCH AND A NEW CONTROLLER WITH THE LATEST NTCIP SOFTWARE IN THE EXISTING CABINET. ALL COSTS RELATED TO WIRING AND CONNECTING THE PROPOSED CONTROLLER FOR PROPER OPERATION SHALL BE INCLUDED IN THE PAY ITEM: FULL ACTUATED CONTROLLER IN EXISTING CABINET.

NOTE:

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

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
FIBER OPTIC TERMINATIONS 12 FIBER	EACH	1



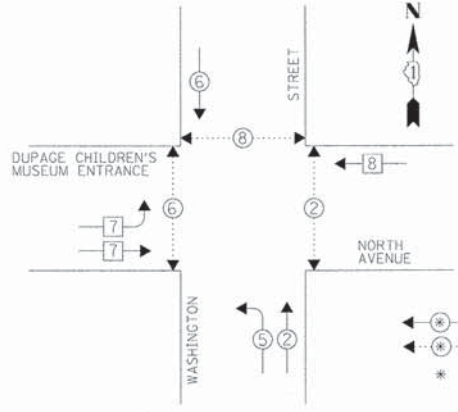
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 SURVIVED: _____
 PLAN: _____
 NOTE BOOK: _____
 NO. _____

DATE: _____ BY: _____
 SURVIVED: _____
 PLAN: _____
 NOTE BOOK: _____
 NO. _____

CHRISTOPHER B. BURKE ENGINEERING LTD.
 9875 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 623-9500

DATE: _____ BY: _____
 SURVIVED: _____
 PLAN: _____
 NOTE BOOK: _____
 NO. _____

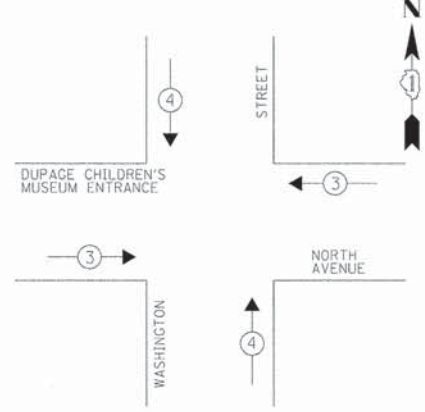
EXISTING CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

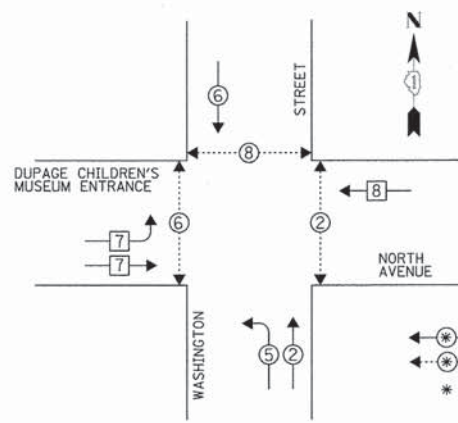
LEGEND
 * DUAL ENTRY PHASE
 ◀▶ PEDESTRIAN PHASE
 * NUMBER REFERS TO ASSOCIATED PHASE

EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

PROPOSED CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

LEGEND
 * DUAL ENTRY PHASE
 ◀▶ PEDESTRIAN PHASE
 * NUMBER REFERS TO ASSOCIATED PHASE

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	13		17	0.50	110.5
(YELLOW)	14		25	0.25	87.5
(GREEN)	14		15	0.25	52.5
ARROW	6		12	0.10	7.2
PED. SIGNAL	6		25	1.00	150.0
CONTROLLER	1		100	1.00	100.0
ILLUMINATED SIGN	-	25		0.05	-
VIDEO SYSTEM	-	150		1.00	-
LUMINAIRE	2	250		0.50	250.0
BATTERY BACKUP	-	25		1.00	-
FLASHER				0.50	-
ENERGY COSTS TO:					TOTAL = 757.7

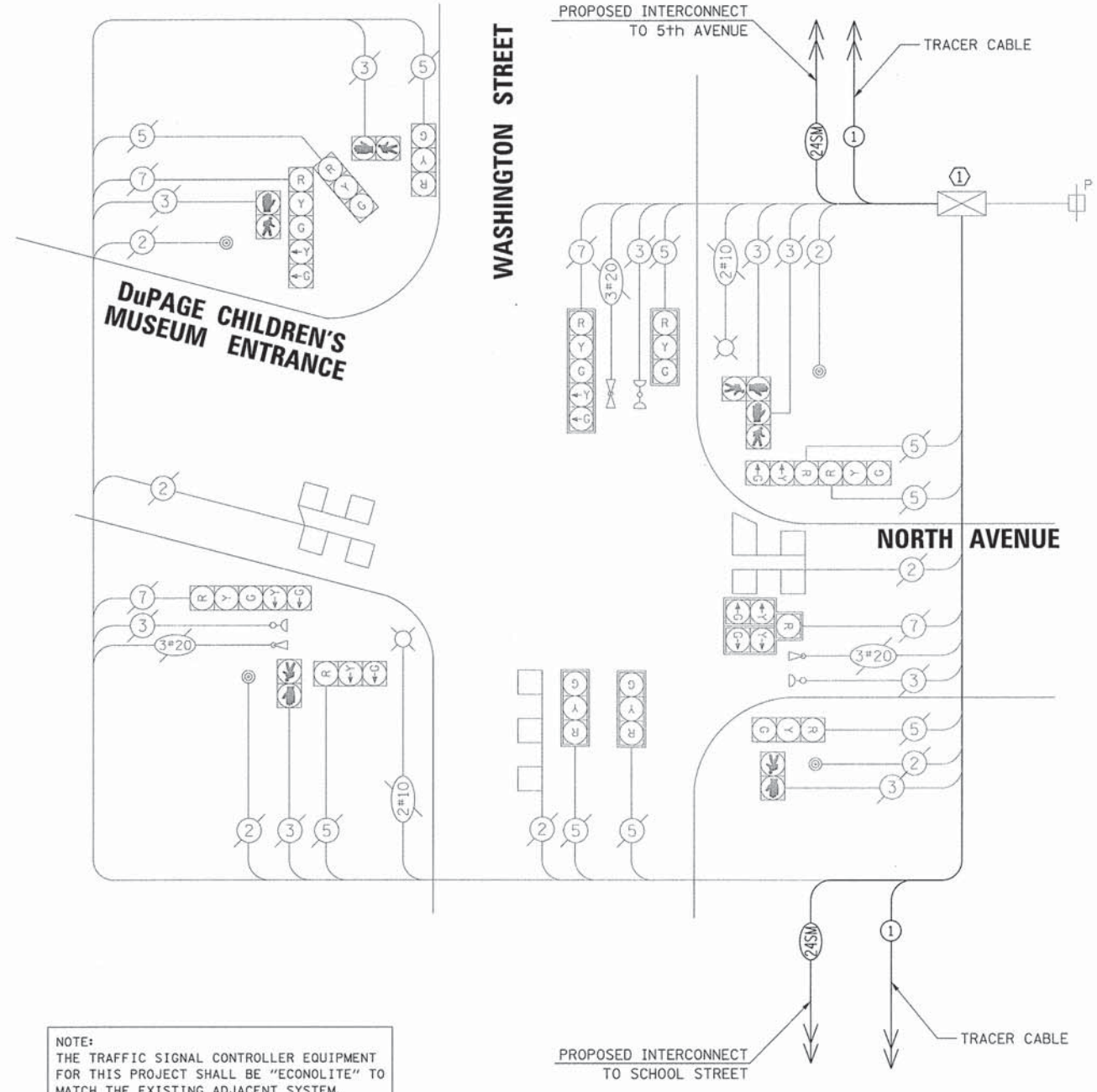
CITY OF NAPERVILLE
 400 SOUTH EAGLE STREET
 NAPERVILLE, ILLINOIS 60540
 ENERGY SUPPLY: CONTACT: NEW BUSINESS
 PHONE: 1-800-334-7661
 COMPANY: COMED

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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 PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: CITY OF NAPERVILLE
 1 EACH TRAFFIC SIGNAL CONTROLLER

CONSTRUCTION NOTE:
 ① THE CONTRACTOR SHALL INSTALL A LAYER II SWITCH AND A NEW CONTROLLER WITH THE LATEST NTCIP SOFTWARE IN THE EXISTING CABINET. ALL COSTS RELATED TO WIRING AND CONNECTING THE PROPOSED CONTROLLER FOR PROPER OPERATION SHALL BE INCLUDED IN THE PAY ITEM: FULL ACTUATED CONTROLLER IN EXISTING CABINET.



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

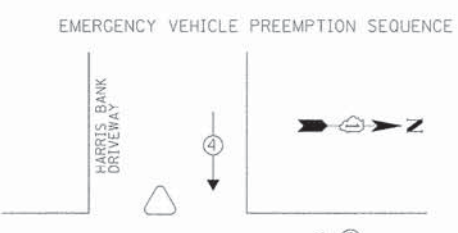
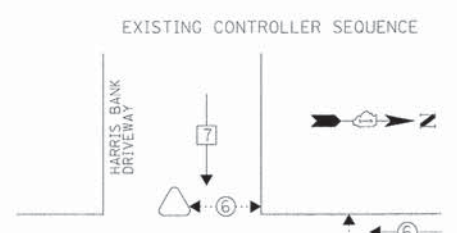
SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
FIBER OPTIC TERMINATIONS 12 FIBER	EACH	1

DATE: _____ BY: _____
 SURVEYED: _____
 PLAN: _____
 NOTE BOOK: _____
 NO. _____
 CHECKED: _____
 RT. OF WAY: _____
 FILE NAME: _____
 DATE: _____ BY: _____
 SURVEYED: _____
 PLAN: _____
 NOTE BOOK: _____
 NO. _____
 CHECKED: _____
 RT. OF WAY: _____
 FILE NAME: _____

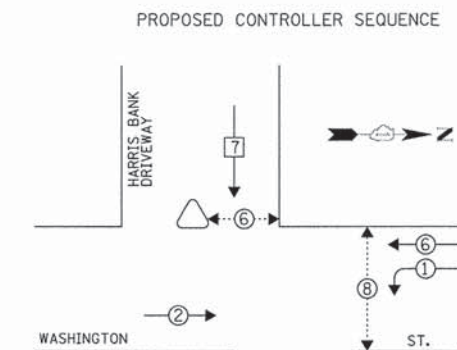
CHRISTOPHER B. BURKE ENGINEERING LTD.
 9275 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (647) 623-9500

DATE: _____ BY: _____
 SURVEYED: _____
 PLAN: _____
 NOTE BOOK: _____
 NO. _____
 CHECKED: _____
 RT. OF WAY: _____
 FILE NAME: _____



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

PHASE DESIGNATION DIAGRAM



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

PHASE DESIGNATION DIAGRAM

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

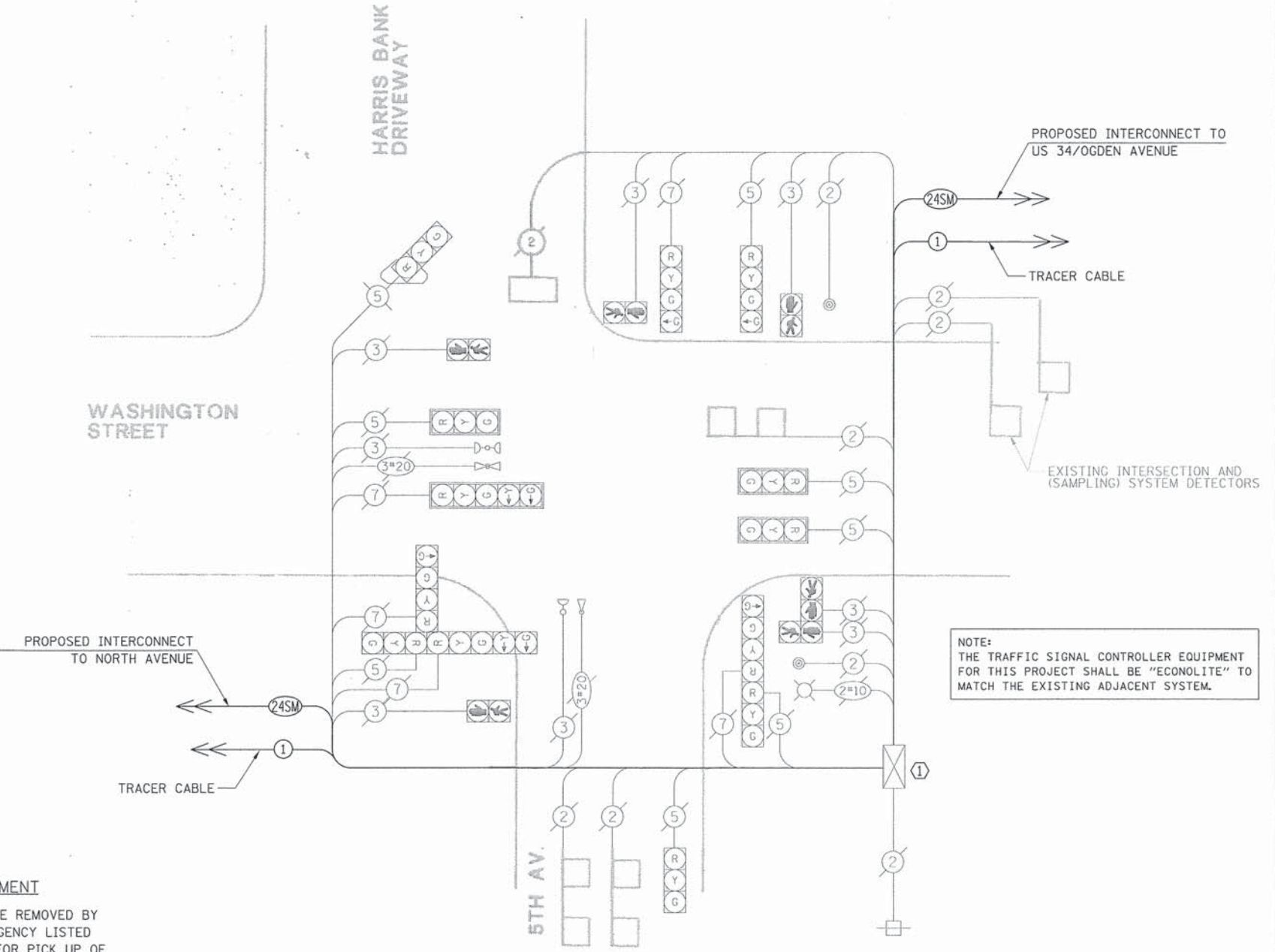
I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	13		17	0.50	110.5
(YELLOW)	13		25	0.25	81.25
(GREEN)	17		15	0.25	63.75
ARROW	4		12	0.10	4.8
PED. SIGNAL	6		25	1.00	150.0
CONTROLLER	1		100	1.00	100.0
ILLUMINATED SIGN	-	25		0.05	-
VIDEO SYSTEM	-	150		1.00	-
LUMINAIRE	1	250		0.50	125.0
BATTERY BACKUP	-	25		1.00	-
FLASHER				0.50	-
ENERGY COSTS TO:				TOTAL =	535.3

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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 PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: CITY OF NAPERVILLE
 1 EACH TRAFFIC SIGNAL CONTROLLER

CONSTRUCTION NOTE:
 ① THE CONTRACTOR SHALL INSTALL A LAYER II SWITCH AND A NEW CONTROLLER WITH THE LATEST NTCIP SOFTWARE IN THE EXISTING CABINET. ALL COSTS RELATED TO WIRING AND CONNECTING THE PROPOSED CONTROLLER FOR PROPER OPERATION SHALL BE INCLUDED IN THE PAY ITEM: FULL ACTUATED CONTROLLER IN EXISTING CABINET.



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

CABLE PLAN (N.T.S.)

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
LAYER II (DATALINK) SWITCH	FOOT	1
FIBER OPTIC TERMINATIONS 12 FIBER	EACH	1

FILE NAME =	USER NAME = fbariso	DESIGNED - LJ / TS	REVISED -
No:\naperville\130319\Traffic\TS20_5th.shd-cab.dgn		DRAWN - FPB / FCP	REVISED -
		CHECKED - GMZ	REVISED -
		DATE - 3/13/2015	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

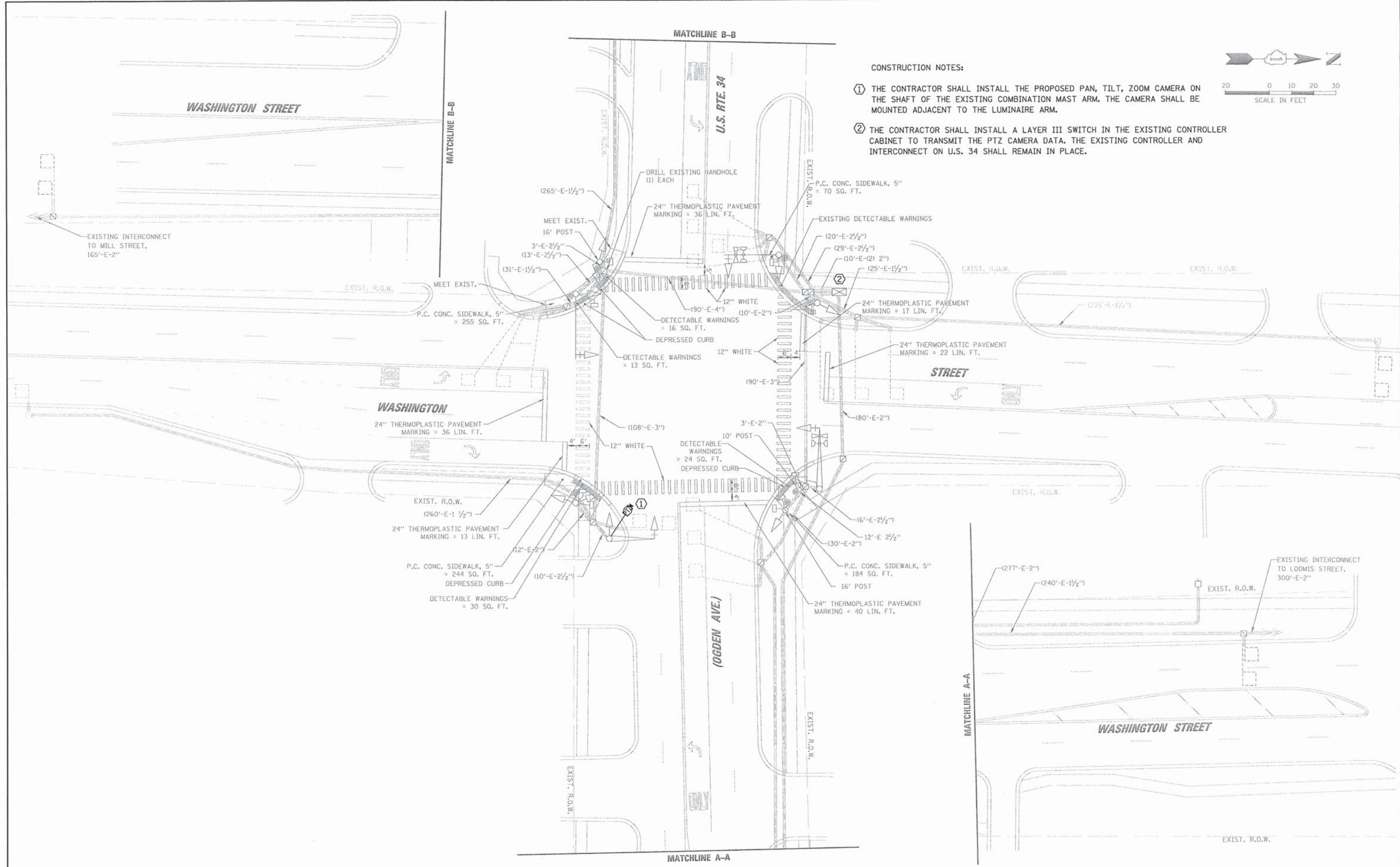
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE WASHINGTON STREET AND 5th AVENUE

F.A.I.U. RT. 2552, 1522 & 2546	SECTION 13-00158-00-TL	COUNTY DuPAGE & WILL	TOTAL SHEETS 84	SHEET NO. 30
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT	CONTRACT NO. 61B84			

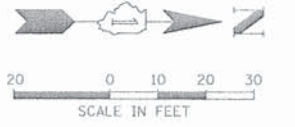
PROFILE SURVEYED
 NOTE BOOK
 NO. _____
 DATE _____
 BY _____
 STRUCTURE NOTATIONS CHKD
 DATE _____
 BY _____

CHRISTOPHER B. BURKE ENGINEERING LTD.
 8675 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-6500

PLAN SURVEYED
 NOTE BOOK
 NO. _____
 DATE _____
 BY _____
 ALIGNED CHECKED
 RT. OF WAY CHECKED
 PLOTTING FILE NAME

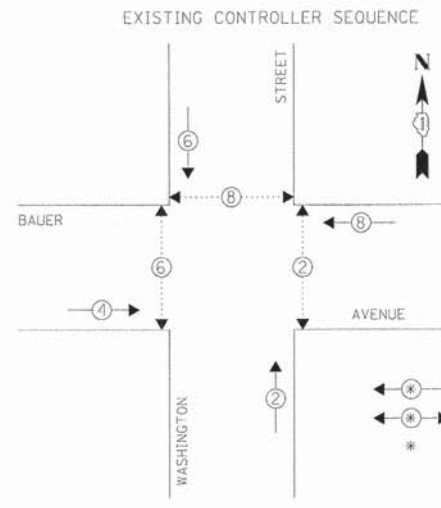


- CONSTRUCTION NOTES:**
- THE CONTRACTOR SHALL INSTALL THE PROPOSED PAN, TILT, ZOOM CAMERA ON THE SHAFT OF THE EXISTING COMBINATION MAST ARM. THE CAMERA SHALL BE MOUNTED ADJACENT TO THE LUMINAIRE ARM.
 - THE CONTRACTOR SHALL INSTALL A LAYER III SWITCH IN THE EXISTING CONTROLLER CABINET TO TRANSMIT THE PTZ CAMERA DATA. THE EXISTING CONTROLLER AND INTERCONNECT ON U.S. 34 SHALL REMAIN IN PLACE.

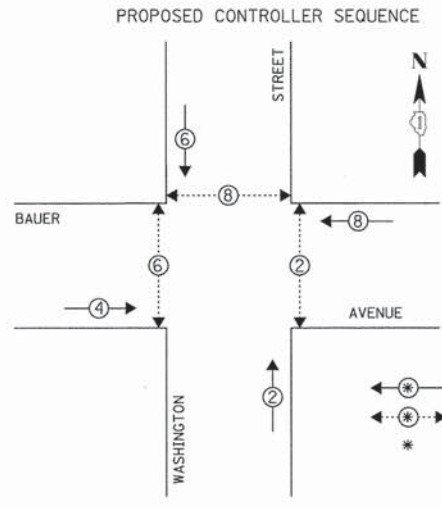


FILE NAME =	USER NAME = fbariso	DESIGNED - LJ / TS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODERNIZATION PLAN WASHINGTON STREET AND U.S. RTE. 34 (OGDEN AVE.)	F.A.U. RTE. 2552, 1522 & 2546	SECTION 13-00158-00-TL	COUNTY DUPAGE & WILL	TOTAL SHEETS 84	SHEET NO. 31		
NO:\naperville\130319\Traffic\TS21.Ogden.tbl-sig.dgn		DRAWN - FPB / FCP	REVISED -			SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	CONTRACT NO. 61B84			
PLOT SCALE = 20'		CHECKED - GMZ	REVISED -						FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			
PLOT DATE = 6/22/2015		DATE - 3/13/2015	REVISED -									

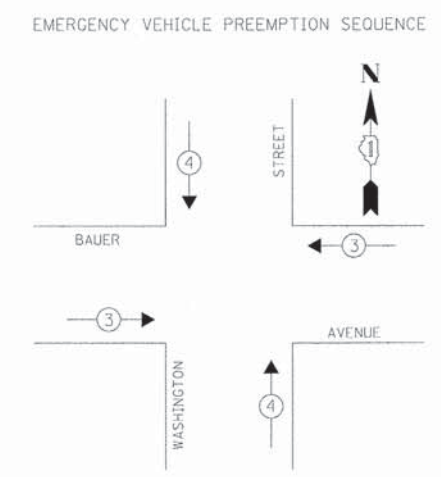
DATE: _____ BY: _____
 SURVEYED: _____ ALIGNED: _____ CHECKED: _____
 PLAN: _____ NOTE BOOK: _____ NO. _____
CHRISTOPHER B. BURKE ENGINEERING LTD.
 9575 West Higgins Road, Suite 600
 Naperville, Illinois 60563
 (630) 333-6500
 DATE: _____ BY: _____
 PROFILE: _____ GRADES CHECKED: _____
 NOTE BOOK: _____ STRUCTURE NOTATIONS: _____



LEGEND
 * DUAL ENTRY PHASE
 * PEDESTRIAN PHASE
 * NUMBER REFERS TO ASSOCIATED PHASE



LEGEND
 * DUAL ENTRY PHASE
 * PEDESTRIAN PHASE
 * NUMBER REFERS TO ASSOCIATED PHASE

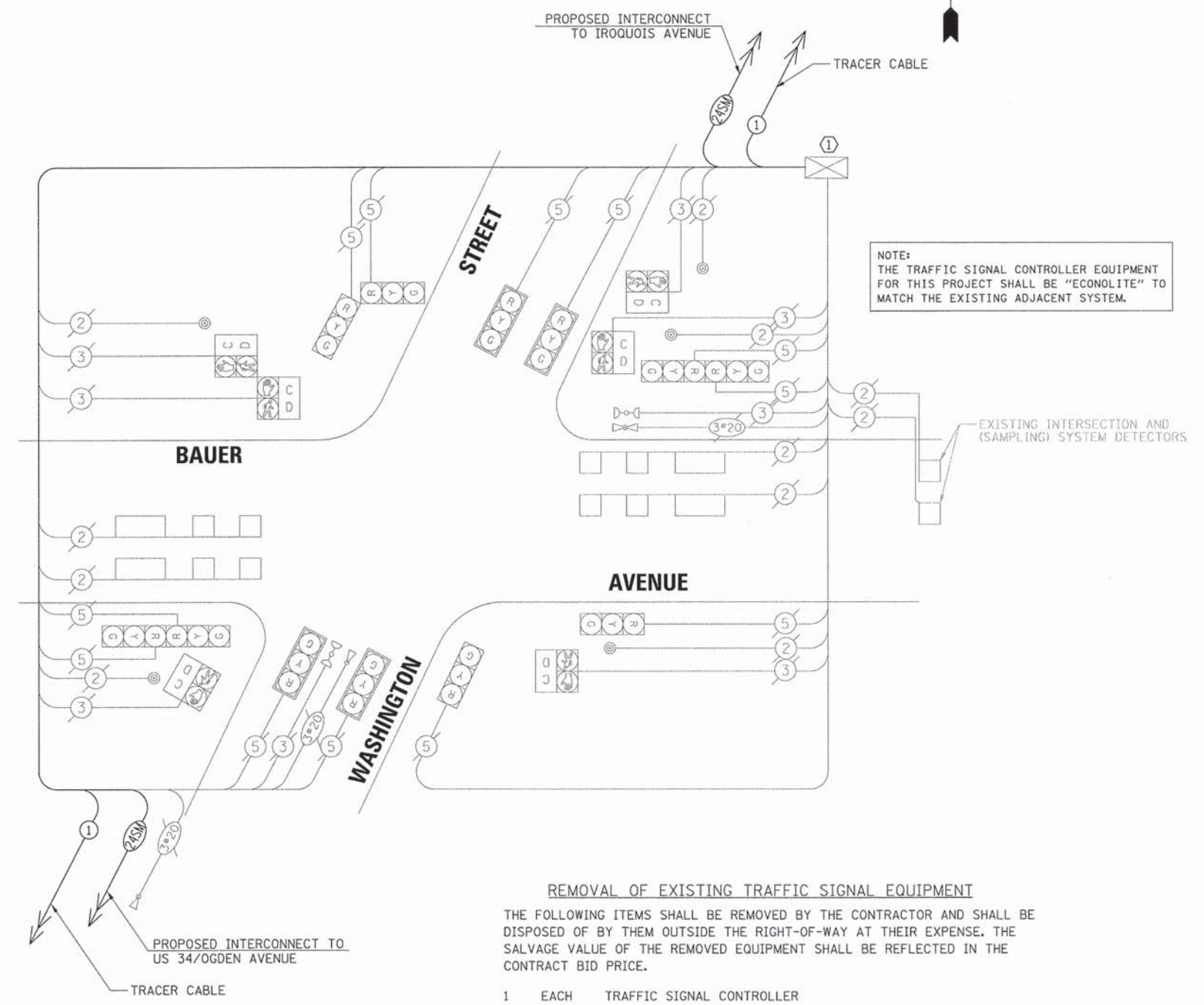


EXISTING EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	
MOVEMENT	← →	↑ ↓	

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE INCAND.	LED	% OPERATION	
SIGNAL (RED)	12		17	0.50	102.0
(YELLOW)	12		25	0.25	75.0
(GREEN)	12		15	0.25	45.0
ARROW	-		12	0.10	-
PED. SIGNAL	6		25	1.00	150.0
CONTROLLER	1		100	1.00	100.0
ILLUMINATED SIGN	-	25		0.05	-
VIDEO SYSTEM	-	150		1.00	-
LUMINAIRE	-	250		0.50	-
BATTERY BACKUP	-	25		1.00	-
FLASHER	-			0.50	-
ENERGY COSTS TO:					TOTAL = 472.0

CITY OF NAPERVILLE
 400 SOUTH EAGLE STREET
 NAPERVILLE, ILLINOIS 60540
 ENERGY SUPPLY: CONTACT: NEW BUSINESS
 PHONE: 1-800-334-7661
 COMPANY: COMED

SCHEDULE OF QUANTITIES		
ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
LAYER II (DATALINK) SWITCH	FOOT	1
FIBER OPTIC TERMINATIONS 12 FIBER	EACH	1



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

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT
 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 TRAFFIC SIGNAL CONTROLLER

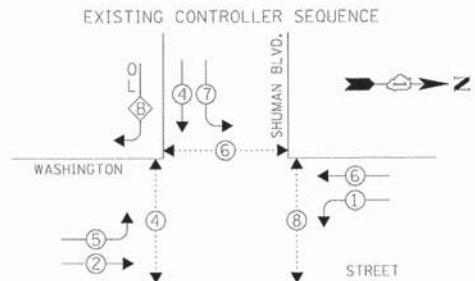
CONSTRUCTION NOTE:
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FILE NAME =	USER NAME = fbariso	DESIGNED - LJ / TS	REVISED -
N:\Naperville\130319\Traffic\TS22.Bauer	htl-cab.dgn	DRAWN - FPB / FCP	REVISED -
	PLOT SCALE = 20'	CHECKED - GMZ	REVISED -
	PLOT DATE = 6/22/2015	DATE = 3/13/2015	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

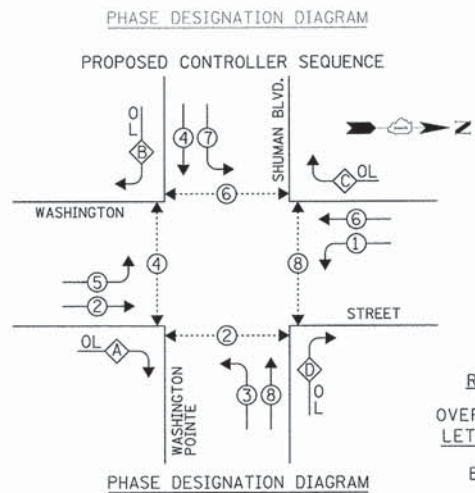
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
WASHINGTON STREET AND BAUER AVENUE

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2552, 1522 & 2546	13-00158-00-TL	DuPAGE & WILL	84	33
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 61B84	



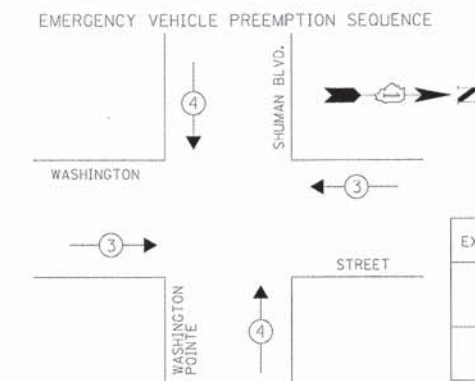
RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
B	= 4	+ 5



RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
B	= 4	+ 5



EXISTING EMERGENCY VEHICLE PREEMPTORS

EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↓ ↑

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

TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED X % OPERATION	TOTAL WATTAGE
SIGNAL (RED)	17	17	0.50	144.5
(YELLOW)	17	25	0.25	106.25
(GREEN)	17	15	0.25	63.75
ARROW	20	12	0.10	24.0
PED. SIGNAL	8	25	1.00	200.0
CONTROLLER	1	100	1.00	100.0
ILLUMINATED SIGN	-	25	0.05	-
VIDEO SYSTEM	-	150	1.00	-
LUMINAIRE	-	250	0.50	-
BATTERY BACKUP	-	25	1.00	-
FLASHER	-	-	0.50	-
ENERGY COSTS TO:	TOTAL =			638.5

CITY OF NAPERVILLE
 400 SOUTH EAGLE STREET
 NAPERVILLE, ILLINOIS 60540
 ENERGY SUPPLY: CONTACT: NEW BUSINESS
 PHONE: 1-800-334-7661
 COMPANY: COMED

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

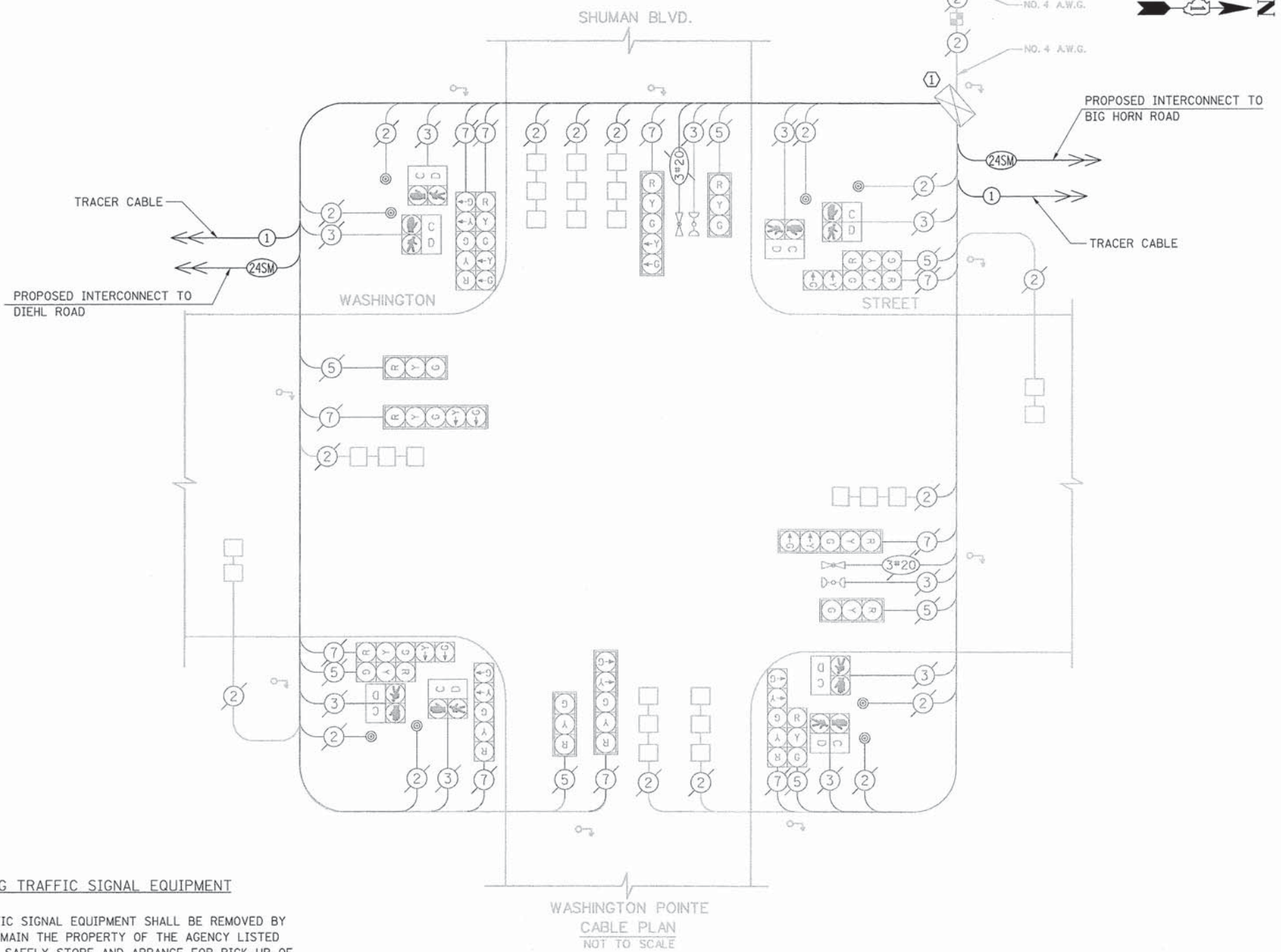
THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: CITY OF NAPERVILLE

1 EACH TRAFFIC SIGNAL CONTROLLER

CONSTRUCTION NOTE:
 ① THE CONTRACTOR SHALL INSTALL A LAYER II SWITCH AND A NEW CONTROLLER WITH THE LATEST NTCIP SOFTWARE IN THE EXISTING CABINET. ALL COSTS RELATED TO WIRING AND CONNECTING THE PROPOSED CONTROLLER FOR PROPER OPERATION SHALL BE INCLUDED IN THE PAY ITEM: FULL ACTUATED CONTROLLER IN EXISTING CABINET.

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



SCHEDULE OF QUANTITIES

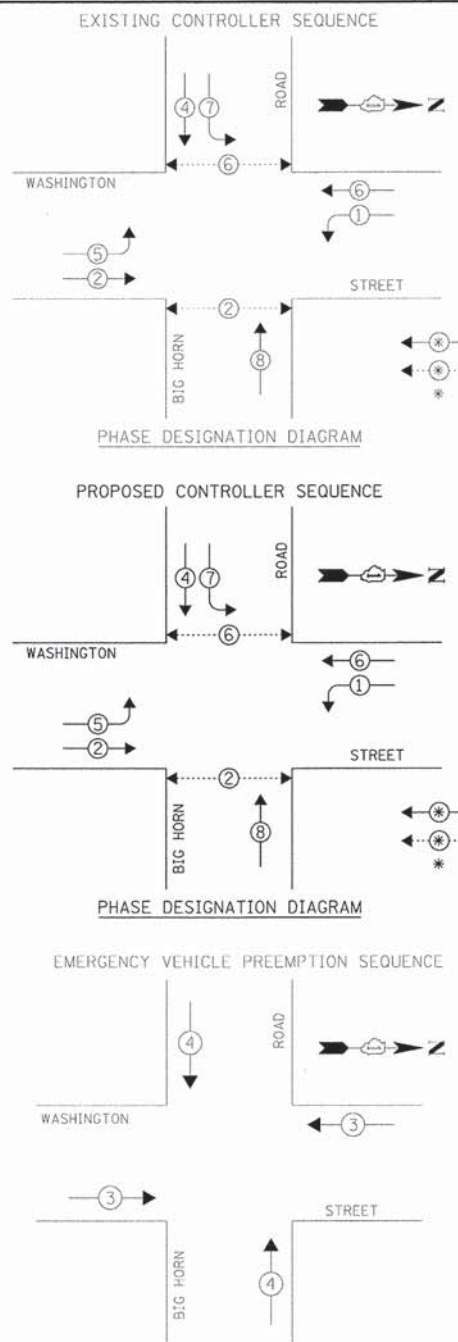
ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
FIBER OPTIC TERMINATIONS 12 FIBER	EACH	1

BY: DATE:
 PLAN: SERVED BY:
 NOTE BOOK NO.:
 CHECKED BY:
 DATE:
 FILE NAME:
 PROJECT:
 DRAWING:
 DATE:
 FILE NAME:
 PROJECT:
 DRAWING:
 DATE:

CHRISTOPHER B. BURKE ENGINEERING LTD.
 9675 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-0000

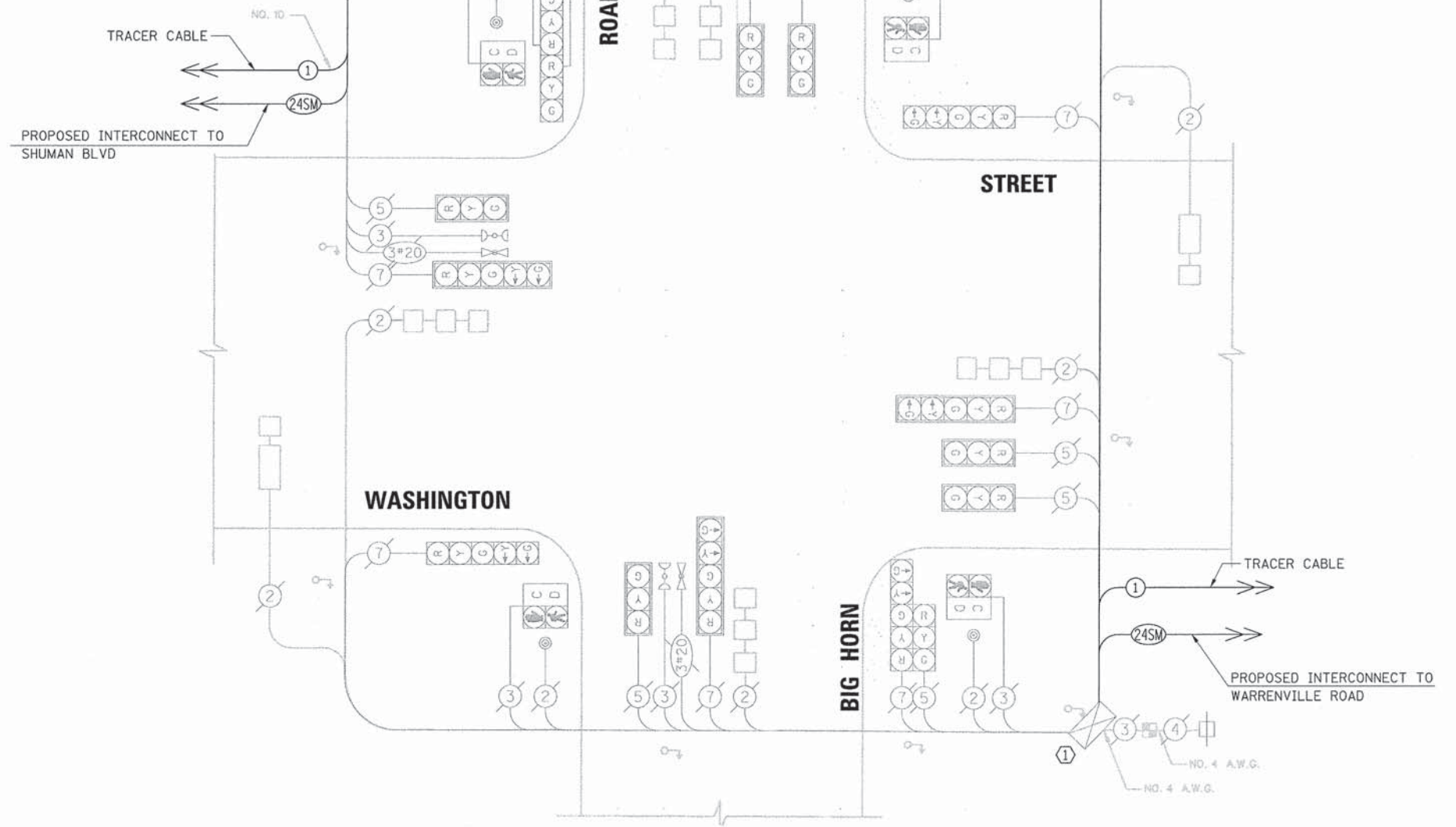


DATE:
 BY:
 SERVED BY:
 CHECKED BY:
 DATE:
 FILE NAME:
 PROJECT:
 DRAWING:
 DATE:



EXISTING EMERGENCY VEHICLE PREEMPTORS

EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↑ ↓



CABLE PLAN
NOT TO SCALE

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

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

TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED X % OPERATION	TOTAL WATTAGE
SIGNAL (RED)	15	17	0.50	127.5
(YELLOW)	15	25	0.25	93.75
(GREEN)	15	15	0.25	56.25
ARROW	12	12	0.10	14.4
PED. SIGNAL	4	25	1.00	100.0
CONTROLLER	1	100	1.00	100.0
ILLUMINATED SIGN	-	25	0.05	-
VIDEO SYSTEM	-	150	1.00	-
LUMINAIRE	-	250	0.50	-
BATTERY BACKUP	-	25	1.00	-
FLASHER	-	-	0.50	-
ENERGY COSTS TO:	TOTAL =			391.9

CITY OF NAPERVILLE
 400 SOUTH EAGLE STREET
 NAPERVILLE, ILLINOIS 60540
 ENERGY SUPPLY: CONTACT: NEW BUSINESS
 PHONE: 1-800-334-7661
 COMPANY: COMED

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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 PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: CITY OF NAPERVILLE

1 EACH TRAFFIC SIGNAL CONTROLLER

CONSTRUCTION NOTE:

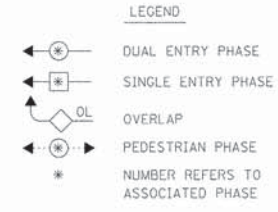
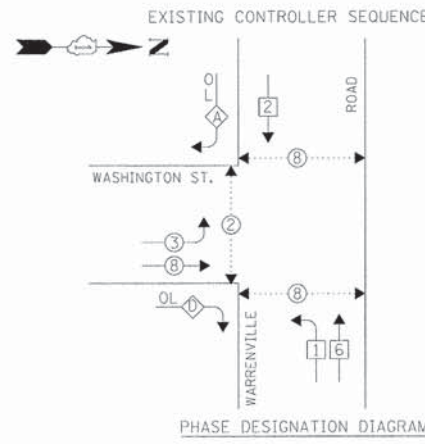
- ① THE CONTRACTOR SHALL INSTALL A LAYER II SWITCH AND A NEW CONTROLLER WITH THE LATEST NTCIP SOFTWARE IN THE EXISTING CABINET. ALL COSTS RELATED TO WIRING AND CONNECTING THE PROPOSED CONTROLLER FOR PROPER OPERATION SHALL BE INCLUDED IN THE PAY ITEM: FULL ACTUATED CONTROLLER IN EXISTING CABINET.

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
FIBER OPTIC TERMINATIONS 12 FIBER	EACH	1

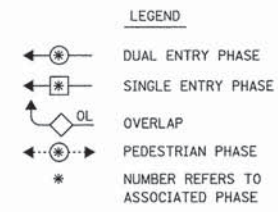
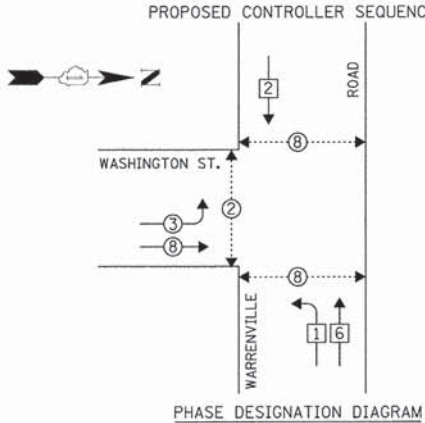
DATE: _____ BY: _____
 SURVEYED: _____ ALIGNED: _____ CHECKED: _____
 PLAN: _____ RT. OF WAY: _____
 NOTE BOOK NO. _____
 DATE: _____ BY: _____
 SURVEYED: _____ ALIGNED: _____ CHECKED: _____
 PROFILE: _____ GRADE: _____
 NOTE BOOK NO. _____
 DATE: _____ BY: _____
 SURVEYED: _____ ALIGNED: _____ CHECKED: _____
 STRUCTURE: _____ NOTATIONS: _____

CHRISTOPHER B. BURKE
 ENGINEERING LTD.
 9675 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (647) 623-0500



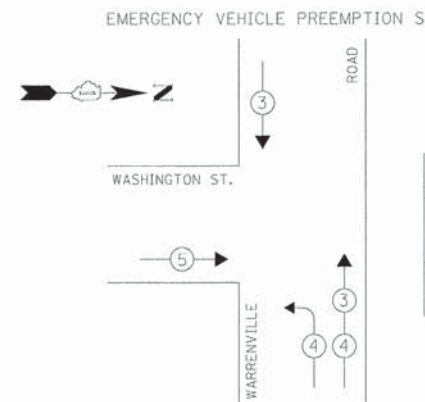
RIGHT TURN OVERLAP PHASE DESIGNATION

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



RIGHT TURN OVERLAP PHASE DESIGNATION

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



EXISTING EMERGENCY VEHICLE PREEMPTORS

EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT	↓	↑	→

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

TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED X % OPERATION	TOTAL WATTAGE
SIGNAL (RED)	13	17	0.50	110.5
(YELLOW)	13	25	0.25	81.25
(GREEN)	13	15	0.25	48.75
ARROW	8	12	0.10	9.6
PED. SIGNAL	6	25	1.00	150.0
CONTROLLER	1	100	1.00	100.0
ILLUMINATED SIGN	-	25	0.05	-
VIDEO SYSTEM	-	150	1.00	-
LUMINAIRE	-	250	0.50	-
BATTERY BACKUP	-	25	1.00	-
FLASHER	-	0.50	-	-
ENERGY COSTS TO:	TOTAL =			500.1

CITY OF NAPERVILLE
 400 SOUTH EAGLE STREET
 NAPERVILLE, ILLINOIS 60540
 ENERGY SUPPLY: CONTACT: **NEW BUSINESS**
 PHONE: 1-800-334-7661
 COMPANY: **COMED**

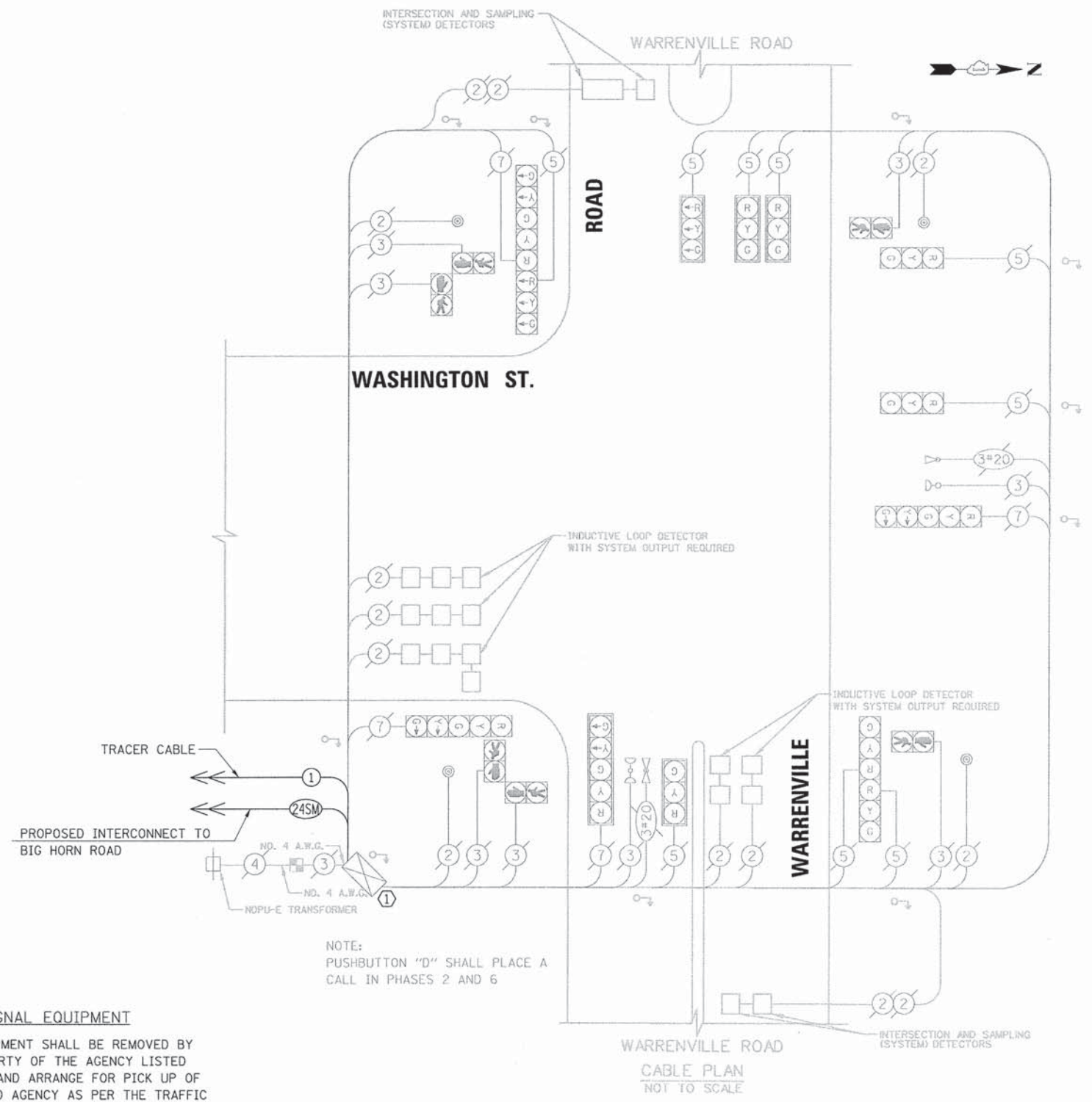
REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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 PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: DuPAGE D.O.T.
 1 EACH TRAFFIC SIGNAL CONTROLLER

CONSTRUCTION NOTE:

- ① THE CONTRACTOR SHALL INSTALL A LAYER III SWITCH AND A NEW CONTROLLER WITH THE LATEST NTCIP SOFTWARE IN THE EXISTING CABINET. ALL COSTS RELATED TO WIRING AND CONNECTING THE PROPOSED CONTROLLER FOR PROPER OPERATION SHALL BE INCLUDED IN THE PAY ITEM: FULL ACTUATED CONTROLLER IN EXISTING CABINET.



NOTE: PUSHBUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 6

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

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
LAYER III (NETWORK) SWITCH	EACH	1
FIBER OPTIC TERMINATIONS 12 FIBER	EACH	1

FILE NAME	USER NAME	DESIGNED	REVISION
No:\naperville\130319\Traffic\TS27-Warrenville-akt-cab.dgn	fbariso	LJ / TS	-
		FPB / FCP	-
		GMZ	-
		3/13/2015	-

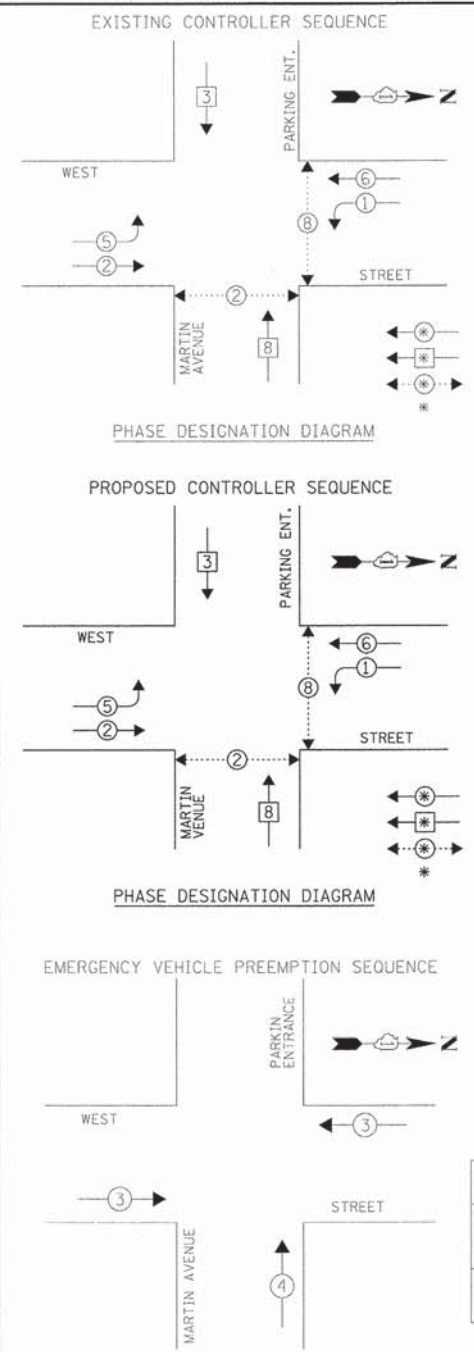
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE WASHINGTON STREET AND WARRENVILLE ROAD

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2502, 1520 & 2546	13-00158-00-TL	DuPAGE & WILL	84	39

CONTRACT NO. 61B84

DATE: _____ BY: _____
 SURVEYED: _____ ALIGNED: _____ CHECKED: _____
 PLAN: _____ NOTE BOOK: _____ NO. _____
CHRISTOPHER B. BURKE ENGINEERING LTD.
 9575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-0600
 PROFILE: _____ DATE: _____ BY: _____
 SURVEYED: _____ ALIGNED: _____ CHECKED: _____
 NOTE BOOK: _____ NO. _____
 STRUCTURE: _____ NOTATIONS: _____



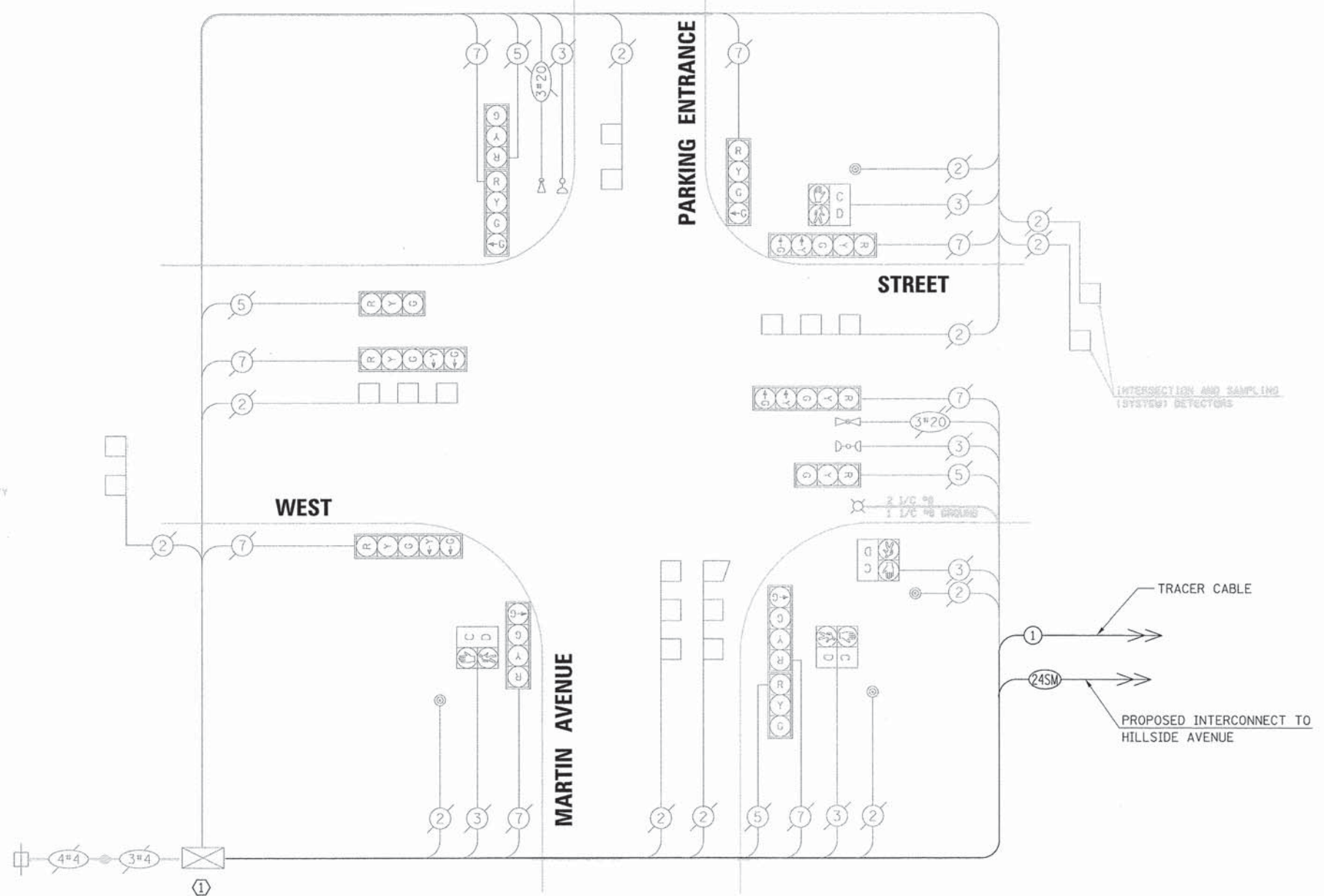
LEGEND
 DUAL ENTRY PHASE
 SINGLE ENTRY PHASE
 PEDESTRIAN PHASE
 NUMBER REFERS TO ASSOCIATED PHASE

LEGEND
 DUAL ENTRY PHASE
 SINGLE ENTRY PHASE
 PEDESTRIAN PHASE
 NUMBER REFERS TO ASSOCIATED PHASE

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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	12		17	0.50	102.0
(YELLOW)	12		25	0.25	75.0
(GREEN)	16		15	0.25	60.0
ARROW	8		12	0.10	9.6
PED. SIGNAL	4		25	1.00	100.0
CONTROLLER	1		100	1.00	100.0
ILLUMINATED SIGN	-	25		0.05	-
VIDEO SYSTEM	-	150		1.00	-
LUMINAIRE	-	250		0.50	-
BATTERY BACKUP	-	25		1.00	-
FLASHER	-			0.50	-
ENERGY COSTS TO:					TOTAL = 346.6

CITY OF NAPERVILLE
 400 SOUTH EAGLE STREET
 NAPERVILLE, ILLINOIS 60540
 ENERGY SUPPLY: CONTACT: NEW BUSINESS
 PHONE: 1-800-334-7661
 COMPANY: COMED



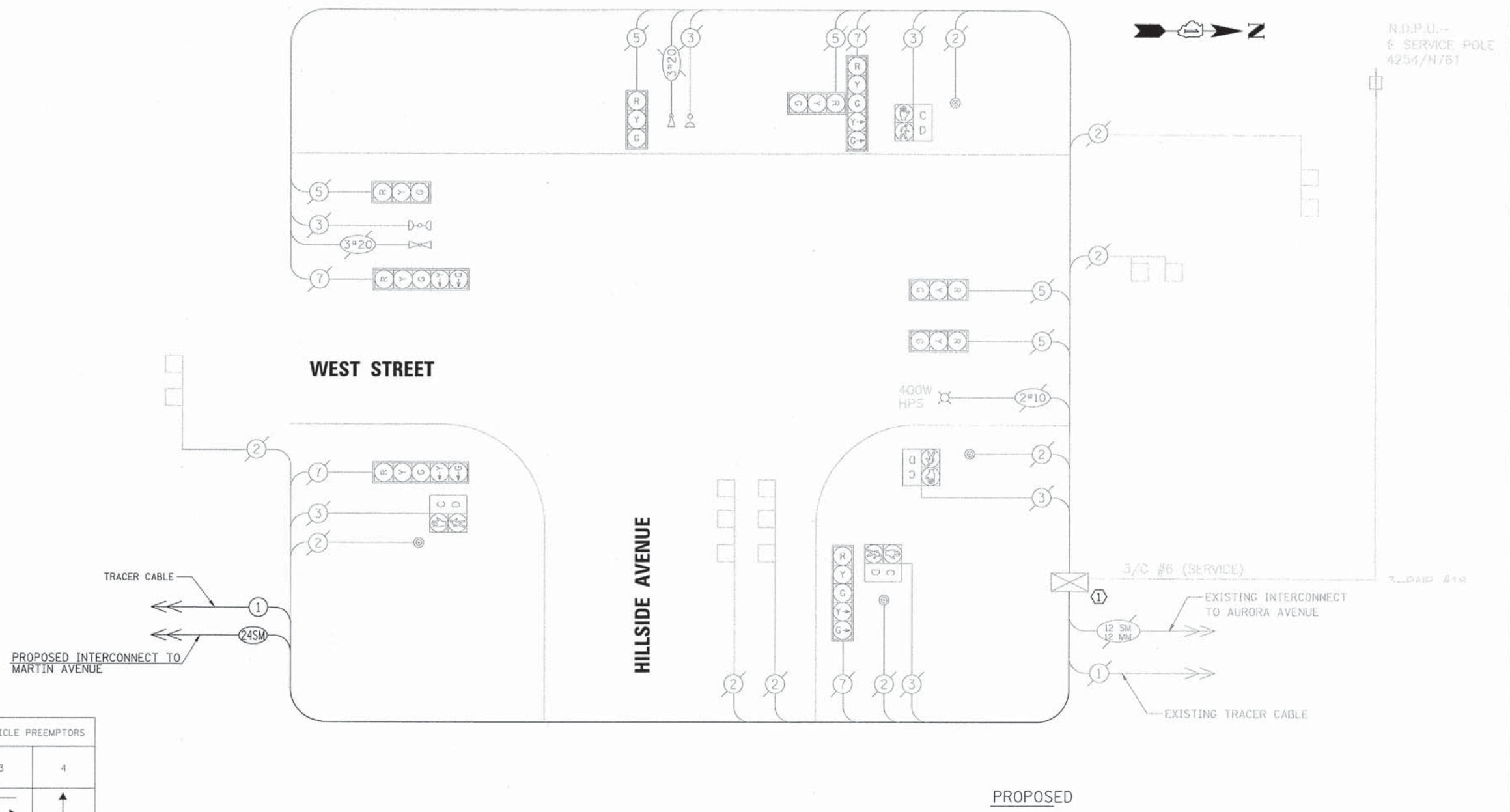
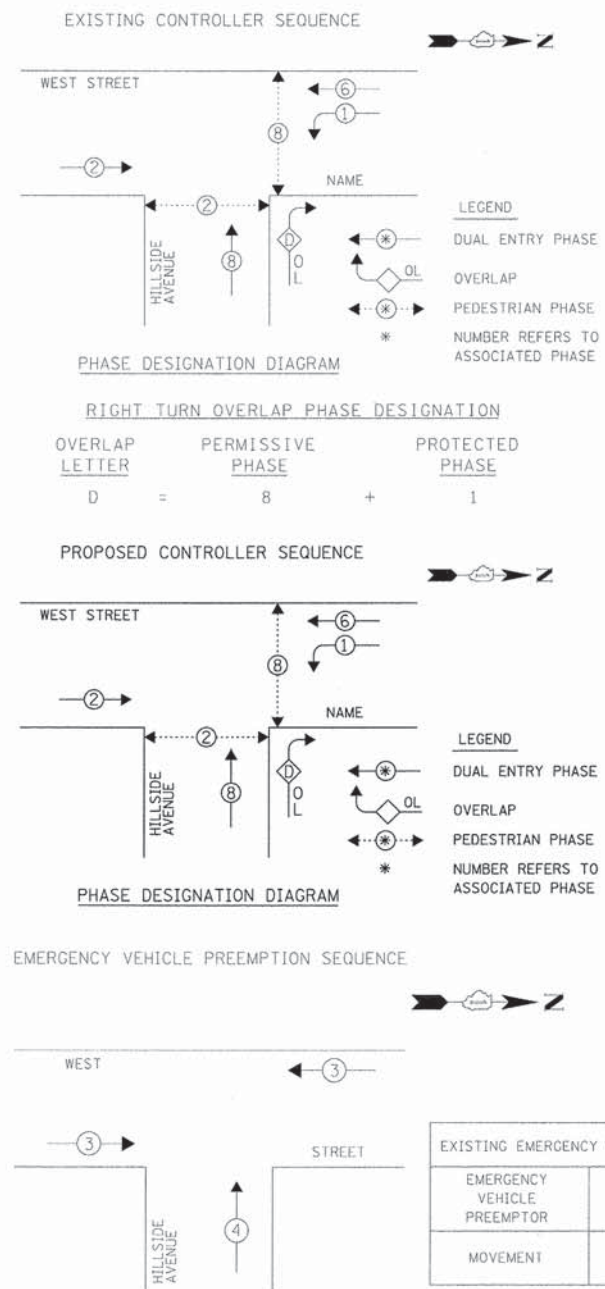
REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT
 THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.
 1 EACH TRAFFIC SIGNAL CONTROLLER

CONSTRUCTION NOTE:
 ① THE CONTRACTOR SHALL INSTALL A LAYER II SWITCH AND A NEW CONTROLLER WITH THE LATEST NTCIP SOFTWARE IN THE EXISTING CABINET. ALL COSTS RELATED TO WIRING AND CONNECTING THE PROPOSED CONTROLLER FOR PROPER OPERATION SHALL BE INCLUDED IN THE PAY ITEM: FULL ACTUATED CONTROLLER IN EXISTING CABINET.

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

SCHEDULE OF QUANTITIES			
ITEM	UNIT	QUANTITY	
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1	
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1	
LAYER II (DATALINK) SWITCH	EACH	1	
FIBER OPTIC TERMINATIONS 12 FIBER	EACH	1	

DATE: _____ BY: _____
 SURVEYED: _____ GRADES CHECKED: _____
 PLAN: _____ ALIGNED: _____
 NOTE BOOK: _____ NO. OF WAY CHECKED: _____
 NO. _____ CADD FILE NAME: _____
CHRISTOPHER B. BURKE ENGINEERING LTD.
 9575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (617) 923-6600
CB
 DATE: _____ BY: _____
 SURVEYED: _____ GRADES CHECKED: _____
 PROFILE: _____ ALIGNED: _____
 NOTE BOOK: _____ NO. OF WAY CHECKED: _____
 NO. _____ CADD FILE NAME: _____



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

TYPE	NO. OF LAMPS	WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	9	17	0.50	76.5
(YELLOW)	9	25	0.25	56.25
(GREEN)	9	15	0.25	33.75
ARROW	8	12	0.10	9.6
PED. SIGNAL	4	25	1.00	100.0
CONTROLLER	1	100	1.00	100.0
ILLUMINATED SIGN	-	25	0.05	-
VIDEO SYSTEM	-	150	1.00	-
LUMINAIRE	1	400	0.50	200.0
BATTERY BACKUP	-	25	1.00	-
FLASHER	-	-	0.50	-
ENERGY COSTS TO:				TOTAL = 576.1

CITY OF NAPERVILLE
 400 SOUTH EAGLE STREET
 NAPERVILLE, ILLINOIS 60540
 ENERGY SUPPLY: CONTACT: NEW BUSINESS
 PHONE: 1-800-334-7661
 COMPANY: COMED

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT
 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 TRAFFIC SIGNAL CONTROLLER

CONSTRUCTION NOTE:
 ① THE CONTRACTOR SHALL INSTALL A LAYER II SWITCH AND A NEW CONTROLLER WITH THE LATEST NTCIP SOFTWARE IN THE EXISTING CABINET. ALL COSTS RELATED TO WIRING AND CONNECTING THE PROPOSED CONTROLLER FOR PROPER OPERATION SHALL BE INCLUDED IN THE PAY ITEM: FULL ACTUATED CONTROLLER IN EXISTING CABINET.

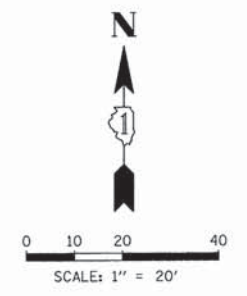
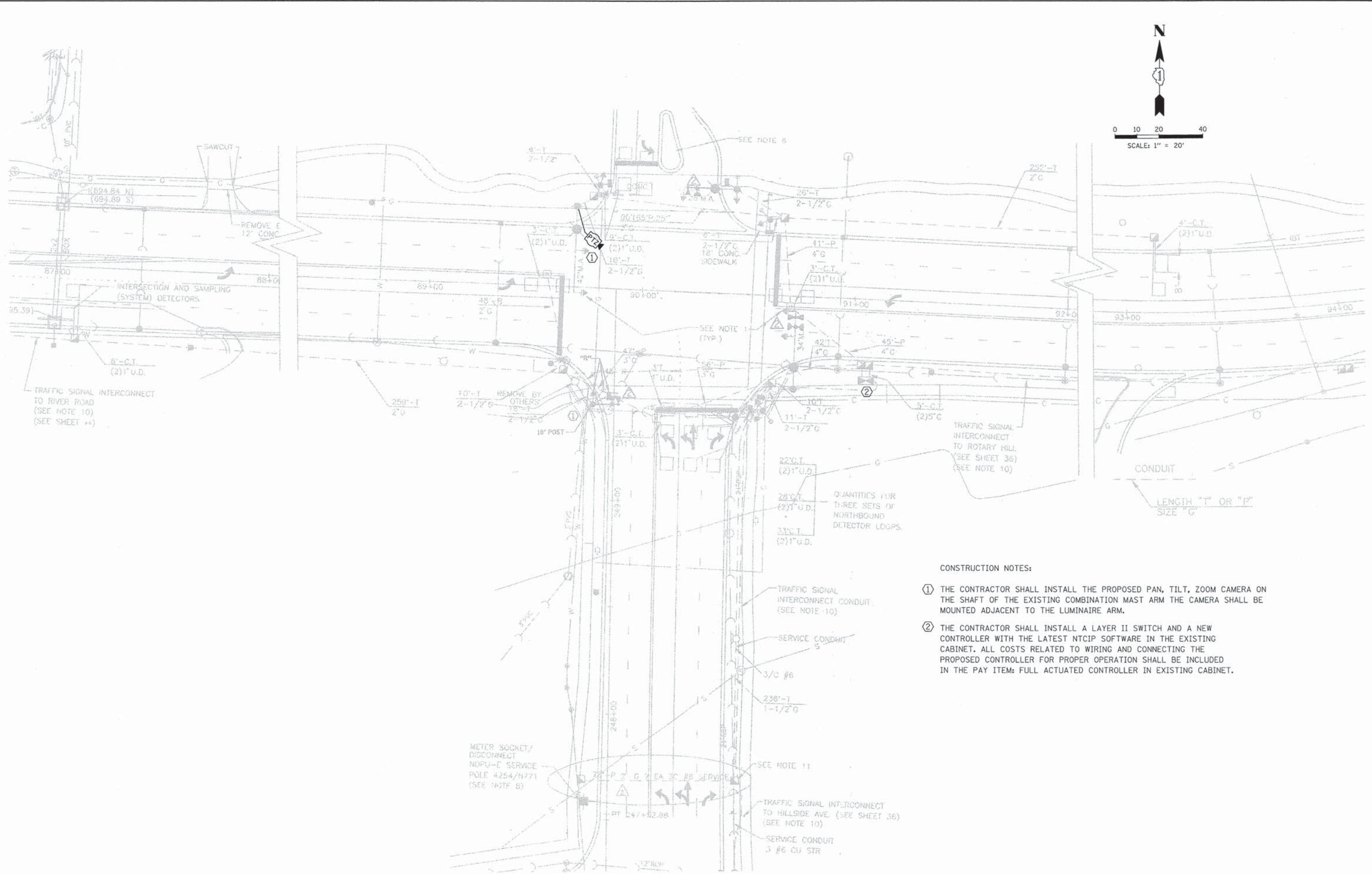
NOTE:
 THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
FIBER OPTIC TERMINATIONS 12 FIBER	EACH	1

DATE	BY	DATE	BY
FILE NAME	USER NAME = fbariso	DESIGNED - LJ / TS	REVISED -
PROFILE	DRAWN - FPB / FCP	CHECKED - GMZ	REVISED -
NO. _____	DATE = 3/13/2015	DATE = 3/13/2015	REVISED -
NO. _____			

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 9675 West Higgins Road, Suite 800
 Rosemont, Illinois 60018
 (847) 823-0500



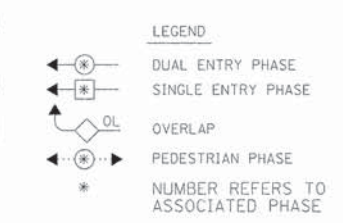
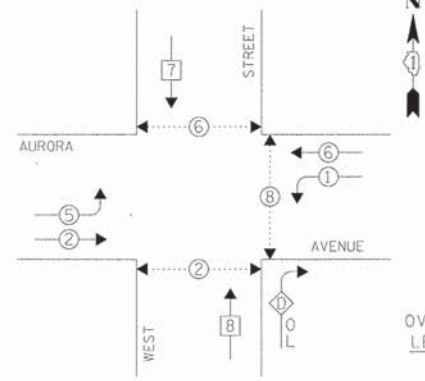
- CONSTRUCTION NOTES:
- ① THE CONTRACTOR SHALL INSTALL THE PROPOSED PAN, TILT, ZOOM CAMERA ON THE SHAFT OF THE EXISTING COMBINATION MAST ARM THE CAMERA SHALL BE MOUNTED ADJACENT TO THE LUMINAIRE ARM.
 - ② THE CONTRACTOR SHALL INSTALL A LAYER II SWITCH AND A NEW CONTROLLER WITH THE LATEST NTCIP SOFTWARE IN THE EXISTING CABINET. ALL COSTS RELATED TO WIRING AND CONNECTING THE PROPOSED CONTROLLER FOR PROPER OPERATION SHALL BE INCLUDED IN THE PAY ITEM: FULL ACTUATED CONTROLLER IN EXISTING CABINET.

FILE NAME =	USER NAME = fbariso	DESIGNED - LJ / TS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODIFICATION PLAN AURORA AVENUE AND WEST STREET	F.A.U. RTE. 255, 1522 & 256	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
No\Naperville\130319\Traffic\TS30_Aurora	West.shd-sig.dgn	DRAWN - FPB / FCP	REVISED -			13-00158-00-TL	DuPAGE & WILL	84	42	
PLOT SCALE = 28"		CHECKED - GMZ	REVISED -			CONTRACT NO. 61B84				
PLOT DATE = 6/22/2015		DATE = 3/13/2015	REVISED -			FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT				
SCALE:						SHEET NO. OF SHEETS		STA. TO STA.		

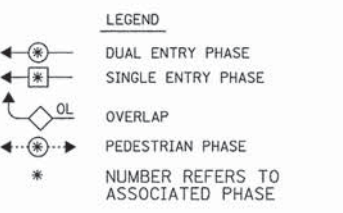
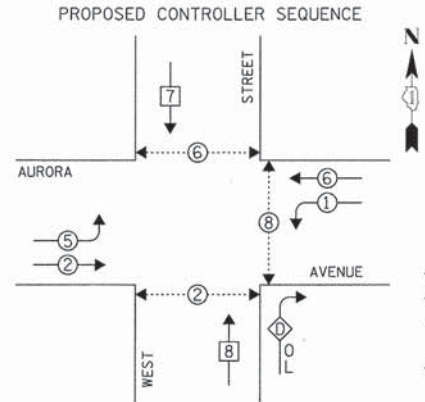
DATE: _____ BY: _____
 SURVEYED: _____ ADJUSTMENT CHECKED: _____
 NOTE BOOK: _____ RT. OF WAY CHECKED: _____
 NO. _____ CAD FILE NAME: _____
 PROFILE: _____ DATE: _____ BY: _____
 SURVEYED: _____ GRADES CHECKED: _____
 NOTE BOOK: _____ STRUCTURE NOTATIONS: _____
 NO. _____

CHRISTOPHER B. BURKE
 ENGINEERING LTD.
 8575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 923-0500

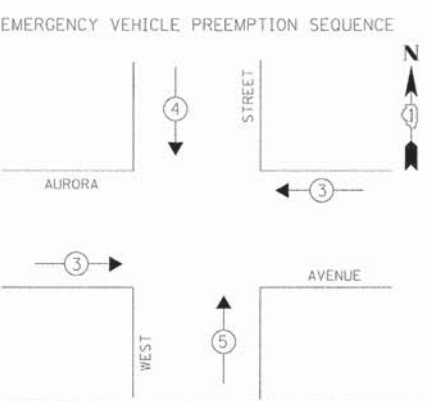
EXISTING CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM



PHASE DESIGNATION DIAGRAM



EXISTING EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT	←	↓	↑

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	210
FIBER OPTIC TERMINATIONS 12 FIBER	EACH	1

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

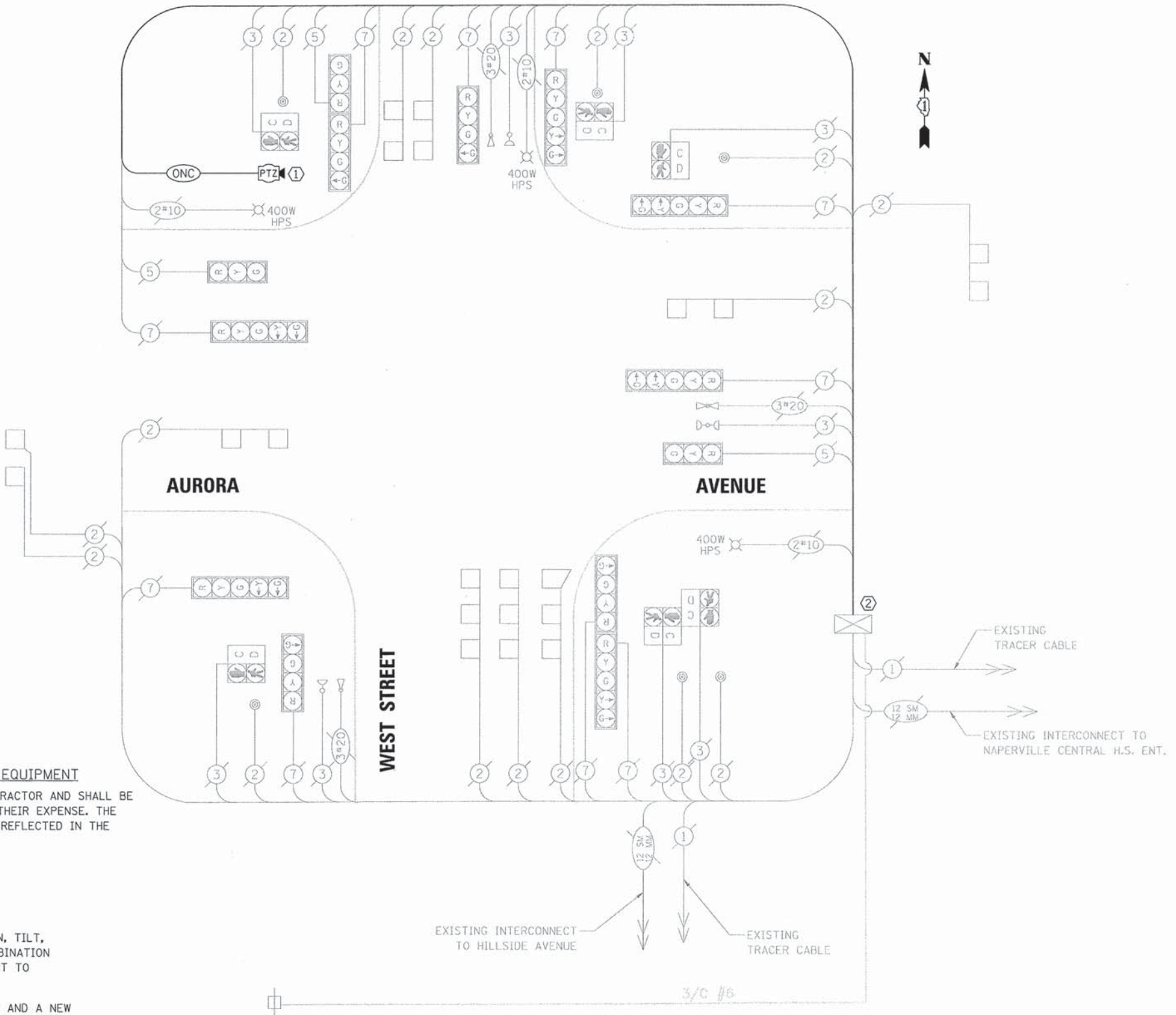
I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	WATTAGE X INCAND. LED	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	13	17	0.50	110.5
(YELLOW)	13	25	0.25	81.25
(GREEN)	17	15	0.25	63.75
ARROW	12	12	0.10	14.40
PED. SIGNAL	6	25	1.00	150.0
CONTROLLER	1	100	1.00	100.0
ILLUMINATED SIGN	-	25	0.05	-
VIDEO SYSTEM	-	150	1.00	-
LUMINAIRE	2	400	0.50	200.0
LUMINAIRE	1	250	0.50	125.0
FLASHER	-	-	0.50	-
ENERGY COSTS TO:	TOTAL =			844.9

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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 TRAFFIC SIGNAL CONTROLLER
- CONSTRUCTION NOTES:
- ① THE CONTRACTOR SHALL INSTALL THE PROPOSED PAN, TILT, ZOOM CAMERA ON THE SHAFT OF THE EXISTING COMBINATION MAST ARM THE CAMERA SHALL BE MOUNTED ADJACENT TO THE LUMINAIRE ARM.
- ② THE CONTRACTOR SHALL INSTALL A LAYER II SWITCH AND A NEW CONTROLLER WITH THE LATEST NTCIP SOFTWARE IN THE EXISTING CABINET. ALL COSTS RELATED TO WIRING AND CONNECTING THE PROPOSED CONTROLLER FOR PROPER OPERATION SHALL BE INCLUDED IN THE PAY ITEM: FULL ACTUATED CONTROLLER IN EXISTING CABINET.



CITY OF NAPERVILLE
 400 SOUTH EAGLE STREET
 NAPERVILLE, ILLINOIS 60540
 ENERGY SUPPLY: CONTACT: NEW BUSINESS
 PHONE: 1-800-334-7661
 COMPANY: COMED

FILE NAME	USER NAME	DESIGNED	REVISION
N:\Naperville\130319\Traffic\TS30_Aurora	fbariso	LJ / TS	-
		FPB / FCP	-
		GMZ	-
		DATE	3/13/2015

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
 AURORA AVENUE AND WEST STREET

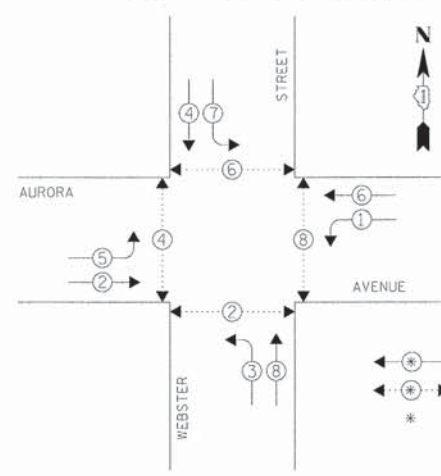
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2502, 1520, A 2546	13-00158-00-TL	DUPAGE & WILL	84	43
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

DATE: _____ BY: _____
 REVISIONS: _____
 PROFILE: _____
 DATE: _____ BY: _____
 REVISIONS: _____
 PLAN: _____
 DATE: _____ BY: _____
 REVISIONS: _____

CHRISTOPHER B. BURKE
 ENGINEERING LTD.
 6075 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-0500

REGISTERED PROFESSIONAL ENGINEER
 STATE OF ILLINOIS
 NO. 001234567

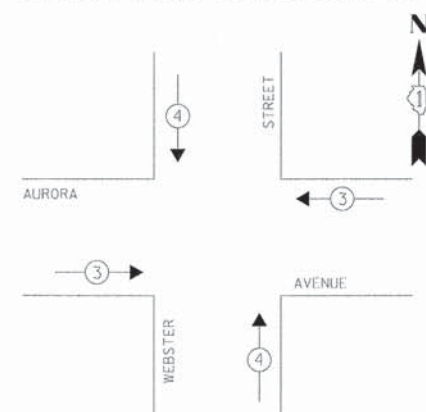
EXISTING CONTROLLER SEQUENCE



LEGEND
 ⊕ DUAL ENTRY PHASE
 ⊕ PEDESTRIAN PHASE
 * NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE

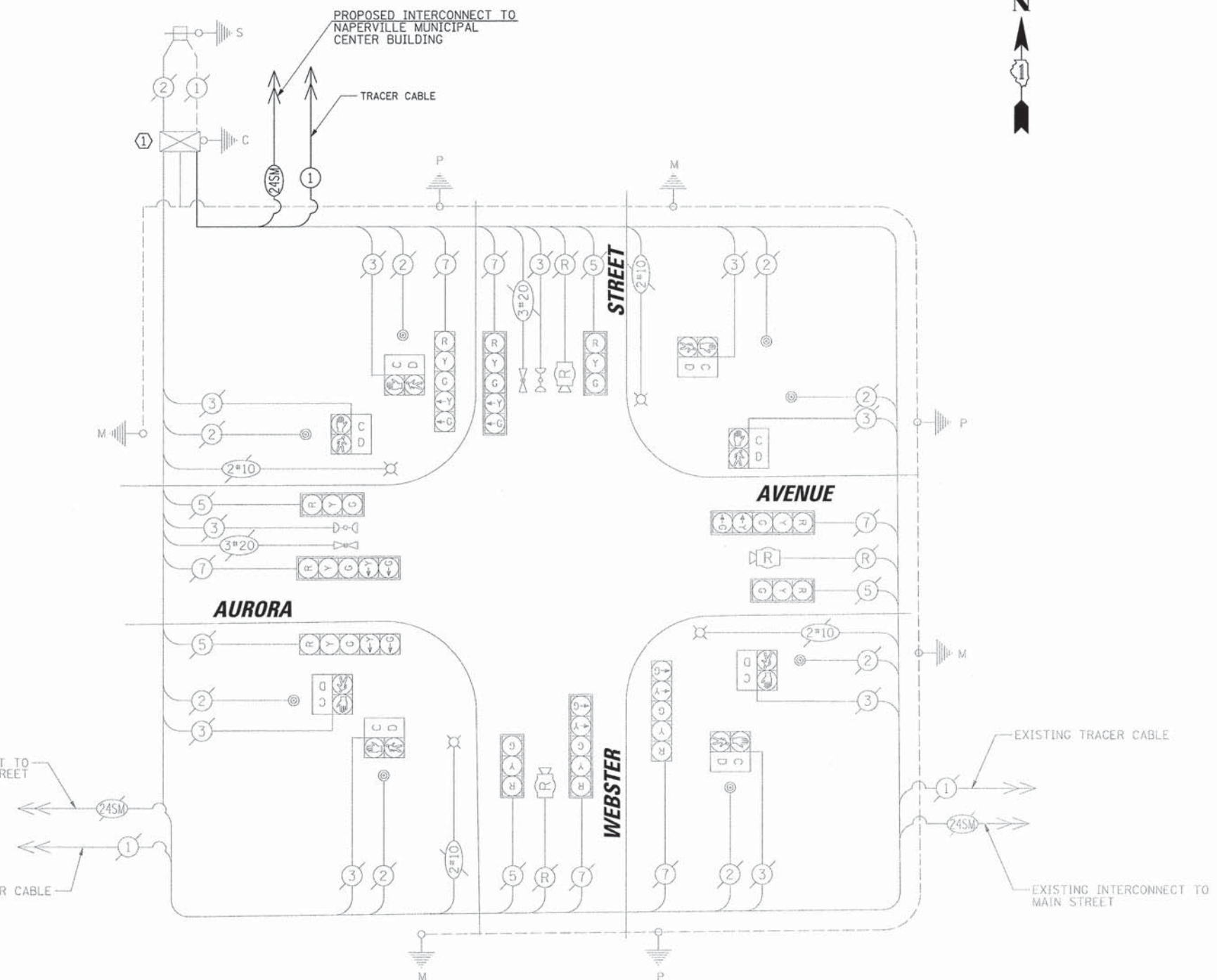


EXISTING EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	
MOVEMENT	←	↑	↓

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE			
		INCAND.	LED	% OPERATION	
SIGNAL (RED)	10		17	0.50	85.0
(YELLOW)	10		25	0.25	62.5
(GREEN)	10		15	0.25	37.5
ARROW	8		12	0.10	9.6
PED. SIGNAL	8		25	1.00	200.0
CONTROLLER	1		100	1.00	100.0
ILLUMINATED SIGN	-	25		0.05	-
VIDEO SYSTEM	-	150		1.00	-
LUMINAIRE	2	250		0.50	250.0
BATTERY BACKUP	-	25		1.00	-
FLASHER				0.50	-
ENERGY COSTS TO:					TOTAL = 635.0

CITY OF NAPERVILLE
 400 SOUTH EAGLE STREET
 NAPERVILLE, ILLINOIS 60540
 ENERGY SUPPLY: CONTACT: NEW BUSINESS
 PHONE: 1-800-334-7661
 COMPANY: COMED

FILE NAME = N:\Naperville\130319\Traffic\TS33_Aurora	USER NAME = fbariso	DESIGNED - LJ / TS	REVISED -
	Webster_shl-cab.dgn	DRAWN - FPB / FCP	REVISED -
	PLOT SCALE = 2"	CHECKED - GMZ	REVISED -
	PLOT DATE = 6/22/2015	DATE - 3/13/2015	REVISED -



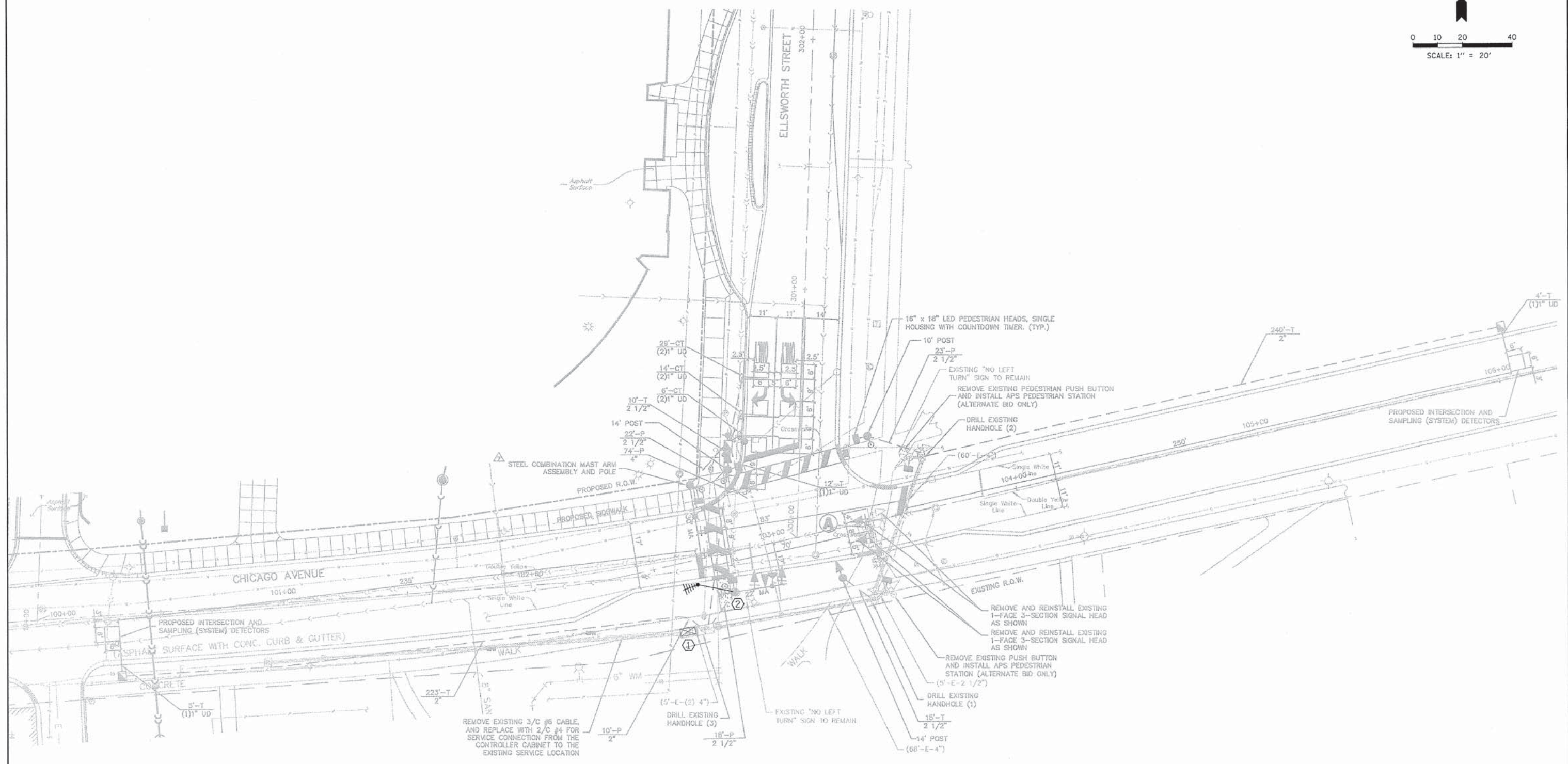
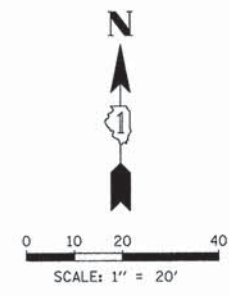
CONSTRUCTION NOTE:
 ① THE CONTRACTOR SHALL INSTALL A LAYER II SWITCH IN THE EXISTING CABINET.

SCHEDULE OF QUANTITIES			
ITEM	UNIT	QUANTITY	
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1	
LAYER II (DATALINK) SWITCH	EACH	1	
FIBER OPTIC TERMINATIONS 12 FIBER	EACH	1	

PROFILE	DATE	BY	DATE	BY	DATE
SAVED					
NOTE BOOK					
STRUCTURE NOTATIONS					
NO.					

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 5675 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 633-9600

PLAN	DATE	BY	DATE
SAVED			
NOTE BOOK			
NO.			

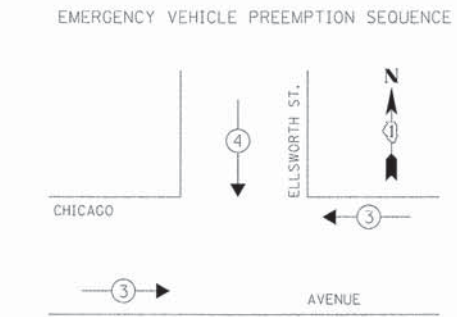
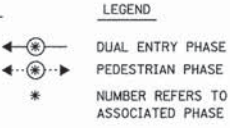
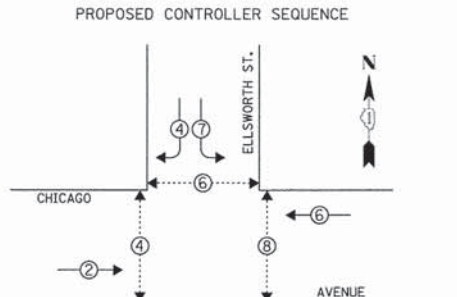
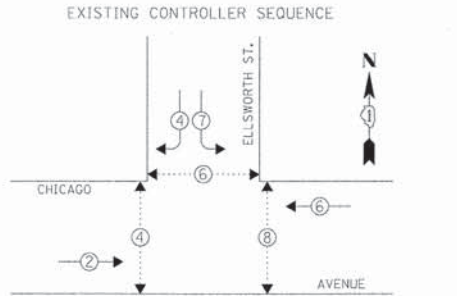


CONSTRUCTION NOTE:

- ① THE CONTRACTOR SHALL INSTALL A LAYER II SWITCH AND A NEW CONTROLLER WITH THE LATEST NTCIP SOFTWARE IN THE EXISTING CABINET. ALL COSTS RELATED TO WIRING AND CONNECTING THE PROPOSED CONTROLLER FOR PROPER OPERATION SHALL BE INCLUDED IN THE PAY ITEM; FULL ACTUATED CONTROLLER IN EXISTING CABINET.
- ② THE CONTRACTOR SHALL REMOVE THE EXISTING WIRELESS SERIAL RADIO EQUIPMENT AND INSTALL THE PROPOSED WIRELESS ETHERNET SYSTEM AS SHOWN ON THE PLANS.

FILE NAME =	USER NAME = fbariso	DESIGNED - LJ / TS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODIFICATION PLAN CHICAGO AVENUE AND ELLSWORTH STREET	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
No:\naperville\130319\Traffic\TS35.Chicago	Ellsworth.sh1-sig.dgn	DRAWN - FPB / FCP	REVISED -			2552, 1522 & 2546	13-00158-00-TL	DUPAGE & WILL	84	48	
	PLOT SCALE = 20'	CHECKED - GMZ	REVISED -			CONTRACT NO. 61B84					
	PLOT DATE = 6/22/2015	DATE - 3/13/2015	REVISED -			FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT					

DATE: _____ BY: _____
 SURVEYED: _____ ALIGNED: _____
 PLAN: _____ NOTE BOOK: _____
 ENGINEERING LTD. 9675 West Higgins Road, Suite 600
 Rosemont, Illinois 60018 (847) 623-9500
CB
 DATE: _____ BY: _____
 SURVEYED: _____ GRADES CHECKED: _____
 PLAN: _____ NOTE BOOK: _____
 ENGINEERING LTD. 9675 West Higgins Road, Suite 600
 Rosemont, Illinois 60018 (847) 623-9500



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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED x % OPERATION		
SIGNAL (RED)	13	17	0.50	110.5	
(YELLOW)	13	25	0.25	81.25	
(GREEN)	13	15	0.25	48.75	
ARROW	8	12	0.10	9.6	
PED. SIGNAL	6	25	1.00	150.0	
CONTROLLER	1	100	1.00	100.0	
ILLUMINATED SIGN	-	25	0.05	-	
VIDEO SYSTEM	-	150	1.00	-	
LUMINAIRE	-	250	0.50	-	
BATTERY BACKUP	-	25	1.00	-	
FLASHER	-		0.50	-	
ENERGY COSTS TO:	TOTAL =			500.1	

CITY OF NAPERVILLE
 400 SOUTH EAGLE STREET
 NAPERVILLE, ILLINOIS 60540
 ENERGY SUPPLY: CONTACT: NEW BUSINESS
 PHONE: 1-800-334-7661
 COMPANY: COMED

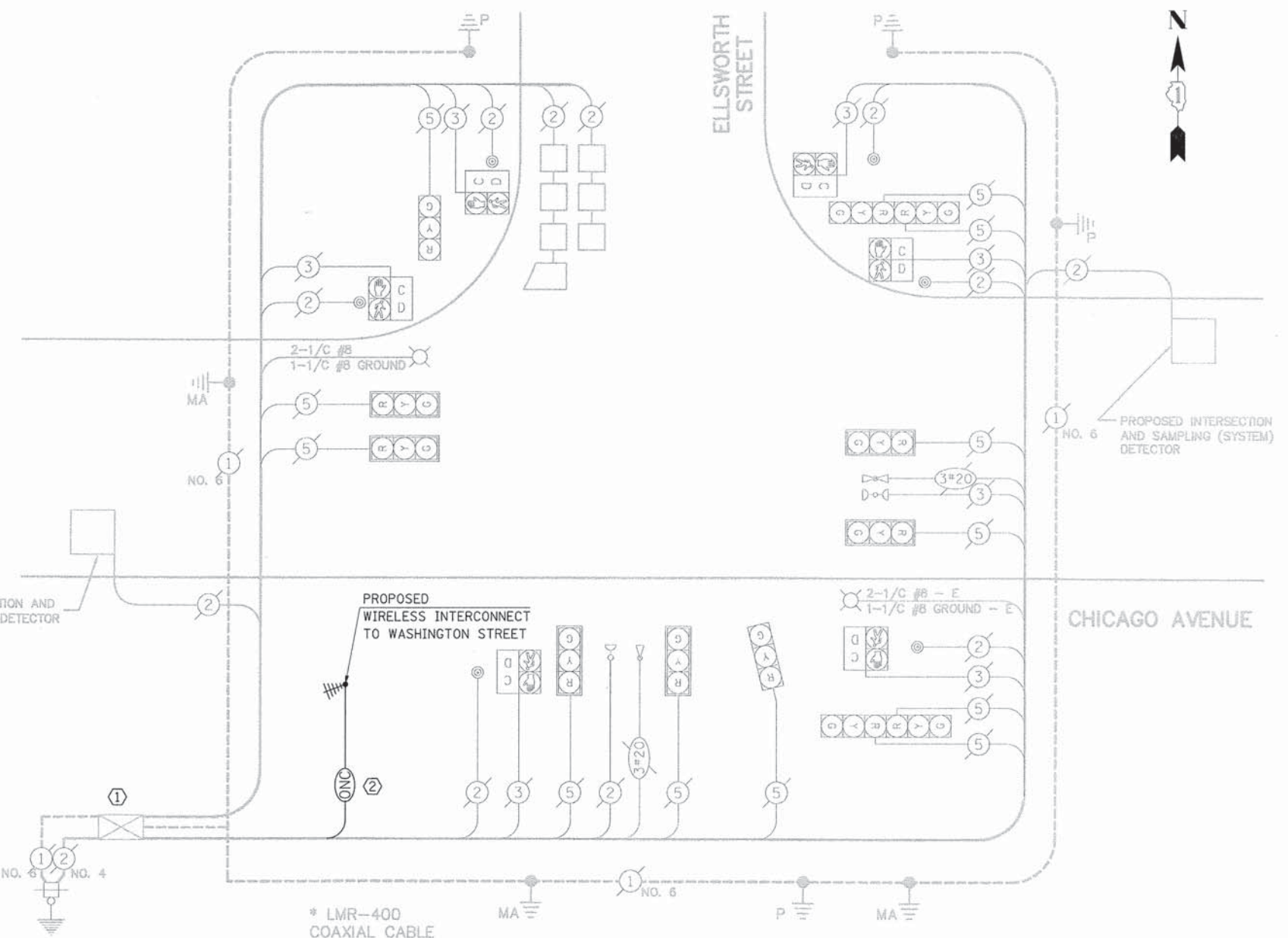
REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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 TRAFFIC SIGNAL CONTROLLER
- 2 EACH WIRELESS SERIAL RADIO INTERCONNECT (COMPLETE)

CONSTRUCTION NOTE:

- ① THE CONTRACTOR SHALL INSTALL A LAYER II SWITCH AND A NEW CONTROLLER WITH THE LATEST NTCIP SOFTWARE IN THE EXISTING CABINET. ALL COSTS RELATED TO WIRING AND CONNECTING THE PROPOSED CONTROLLER FOR PROPER OPERATION SHALL BE INCLUDED IN THE PAY ITEM: FULL ACTUATED CONTROLLER IN EXISTING CABINET.
- ② THE CONTRACTOR SHALL REMOVE THE EXISTING WIRELESS SERIAL RADIO EQUIPMENT AND INSTALL THE PROPOSED WIRELESS ETHERNET SYSTEM AS SHOWN ON THE PLANS.



CABLE PLAN

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

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1

FILE NAME =	USER NAME = fbariso	DESIGNED - LJ / TS	REVISED -
N:\Naperville\130319\Traffic\TS35.Chicago\Ellsworth_sh2-cab.dgn		DRAWN - FPB / FCP	REVISED -
		CHECKED - GMZ	REVISED -
		DATE - 3/13/2015	REVISED -

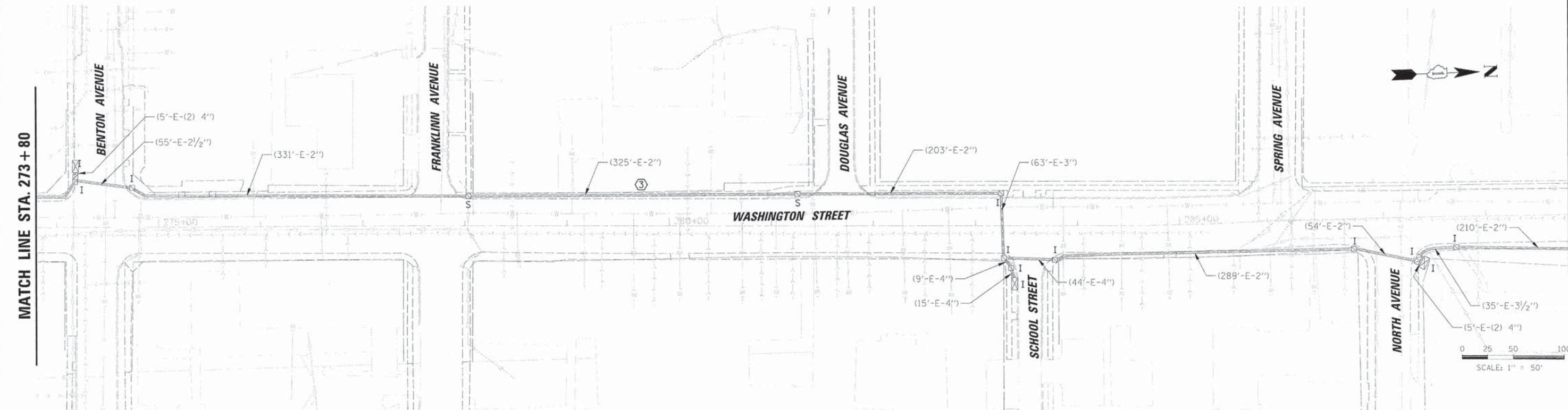
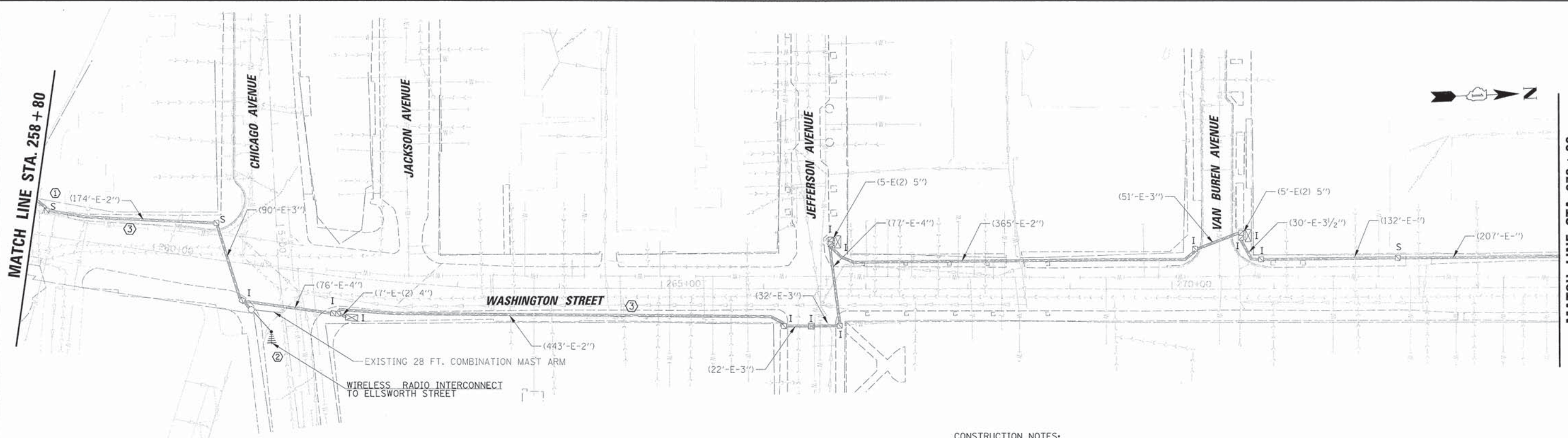
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
 CHICAGO AVENUE AND ELLSWORTH STREET

F.A.U. RTE. 2502, 1522 & 2546	SECTION 13-00158-00-TL	COUNTY DUPAGE & WILL	TOTAL SHEETS 84	SHEET NO. 49
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT			CONTRACT NO. 61B84	

PROFILE SURVEYED BY DATE
 CHECKED BY DATE
 NOTED BY DATE
 NO. DATE
 STRUCTURE NOTATIONS CHKD
 PLAN SURVEYED BY DATE
 CHECKED BY DATE
 NOTE BOOK NO. DATE
 NO. DATE
 CADD FILE NAME

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 ENGINEERING LTD.
 9675 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-0500



CONSTRUCTION NOTES:

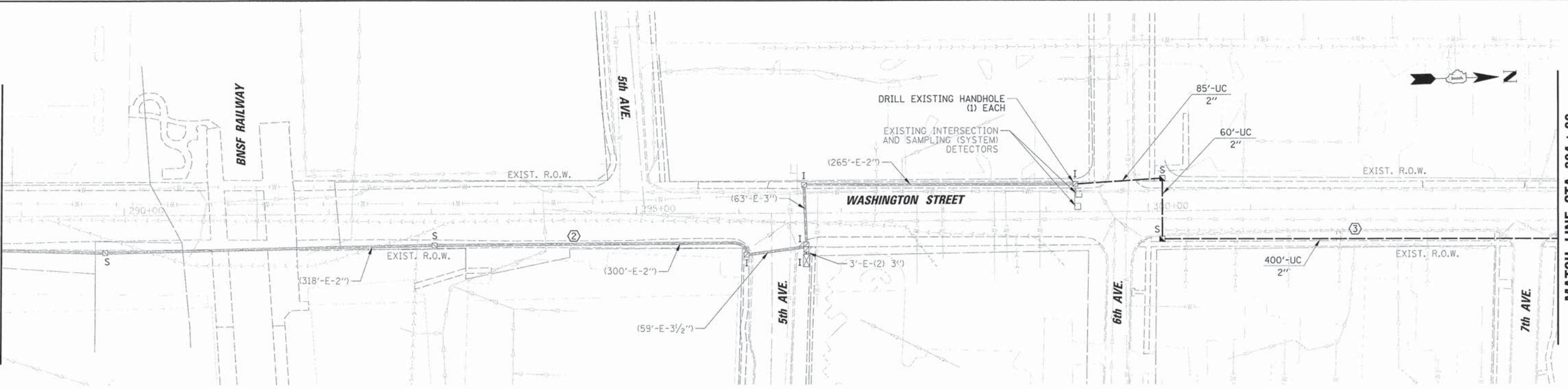
- ① THE CONTRACTOR SHALL INSTALL A TOTAL OF 50 FEET OF CABLE SLACK IN EACH OF THE 2 EXISTING HANDHOLES LOCATED ON EITHER SIDE OF THE BRIDGE.
- ② THE CONTRACTOR SHALL REMOVE THE EXISTING WIRELESS SERIAL RADIO EQUIPMENT AND INSTALL THE PROPOSED WIRELESS ETHERNET SYSTEM AS SHOWN ON THE PLANS.
- ③ THE EXISTING FIBER OPTIC CABLE AND TRACER CABLE WIRE SHALL BE REMOVED FROM THE EXISTING CONDUIT AND REPLACED BY THE CONTRACTOR WITH NEW (24 FIBER, SINGLE MODE) FIBER OPTIC CABLE AND NEW TRACER CABLE FROM GARTNER ROAD TO 6TH AVENUE.

FILE NAME =	USER NAME = fbariso	DESIGNED - LJ / TS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INTERCONNECT PLAN (SHEET 10 OF 15) WASHINGTON STREET FROM ROYCE ROAD TO WARRENVILLE ROAD			F.A.U. RT# 252, 152 & 256	SECTION 13-00158-00-TL	COUNTY DuPAGE & WILL	TOTAL SHEETS 84	SHEET NO. 59
No:\naperville\130319\Traffic\INT-10_Gar	to 5th.dgn	DRAWN - FPB / FCP	REVISED -		SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	CONTRACT NO. 61B84
		CHECKED - GMZ	REVISED -									
		DATE - 3/13/2015	REVISED -									

DATE	BY	DATE	BY
PROFILE	DATE	PROFILE	DATE
NO. 1		NO. 1	
NO. 2		NO. 2	
NO. 3		NO. 3	
NO. 4		NO. 4	
NO. 5		NO. 5	
NO. 6		NO. 6	
NO. 7		NO. 7	
NO. 8		NO. 8	
NO. 9		NO. 9	
NO. 10		NO. 10	
NO. 11		NO. 11	
NO. 12		NO. 12	
NO. 13		NO. 13	
NO. 14		NO. 14	
NO. 15		NO. 15	
NO. 16		NO. 16	
NO. 17		NO. 17	
NO. 18		NO. 18	
NO. 19		NO. 19	
NO. 20		NO. 20	
NO. 21		NO. 21	
NO. 22		NO. 22	
NO. 23		NO. 23	
NO. 24		NO. 24	
NO. 25		NO. 25	
NO. 26		NO. 26	
NO. 27		NO. 27	
NO. 28		NO. 28	
NO. 29		NO. 29	
NO. 30		NO. 30	
NO. 31		NO. 31	
NO. 32		NO. 32	
NO. 33		NO. 33	
NO. 34		NO. 34	
NO. 35		NO. 35	
NO. 36		NO. 36	
NO. 37		NO. 37	
NO. 38		NO. 38	
NO. 39		NO. 39	
NO. 40		NO. 40	
NO. 41		NO. 41	
NO. 42		NO. 42	
NO. 43		NO. 43	
NO. 44		NO. 44	
NO. 45		NO. 45	
NO. 46		NO. 46	
NO. 47		NO. 47	
NO. 48		NO. 48	
NO. 49		NO. 49	
NO. 50		NO. 50	

FILE NAME =	USER NAME = fbariso	DESIGNED - LJ / TS	REVISED -
N:\Naperville\130319\Traffic\INT-11.5th	Bauer.dgn	DRAWN - FPB / FCP	REVISED -
		CHECKED - GMZ	REVISED -
		DATE - 3/13/2015	REVISED -

MATCH LINE STA. 288 + 80

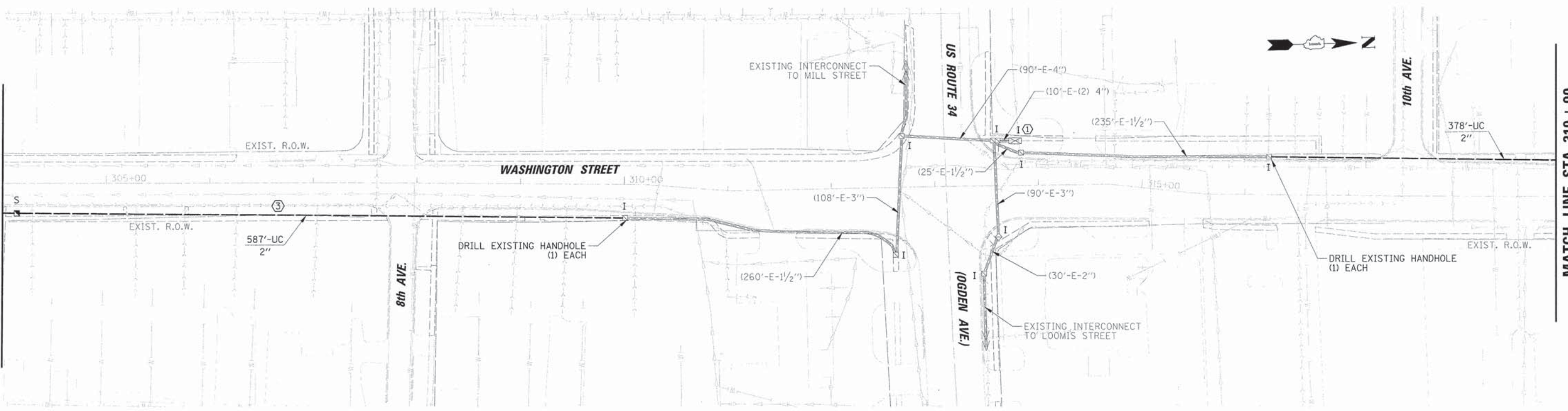


MATCH LINE STA. 304 + 00

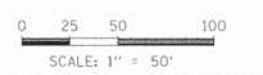
CONSTRUCTION NOTES:

- ① THE EXISTING INTERCONNECT FOR THE US 34 CORRIDOR REMAIN IN PLACE. THE CONTRACTOR SHALL INSTALL NEW FIBER OPTIC AND TRACER CABLE IN EXISTING CONDUIT BETWEEN THE NORTH AND SOUTH FARBACK HANDHOLES ALONG WASHINGTON STREET AND INSTALL A LAYER III SWITCH IN THE EXISTING CONTROLLER CABINET TO TRANSMIT THE PTZ CAMERA DATA.
- ② THE EXISTING FIBER OPTIC CABLE AND TRACER CABLE WIRE SHALL BE REMOVED FROM THE EXISTING CONDUIT AND REPLACED BY THE CONTRACTOR WITH NEW (24 FIBER, SINGLE MODE) FIBER OPTIC CABLE AND NEW TRACER CABLE FROM GARTNER ROAD TO 6TH AVENUE.
- ③ THE CONTRACTOR SHALL INSTALL NEW CONDUIT, FIBER OPTIC AND TRACER CABLE FROM 6TH AVENUE TO THE SOUTH FARBACK HANDHOLE AT US ROUTE 34 (OGDEN AVENUE). MAINTAIN A MINIMUM OF 3 FEET HORIZONTAL CLEARANCE BETWEEN THE PROPOSED UNDERGROUND CONDUIT AND EXISTING UTILITIES.

MATCH LINE STA. 304 + 00



MATCH LINE STA. 319 + 00



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN (SHEET 11 OF 15)
WASHINGTON STREET
FROM ROYCE ROAD TO WARRENVILLE ROAD

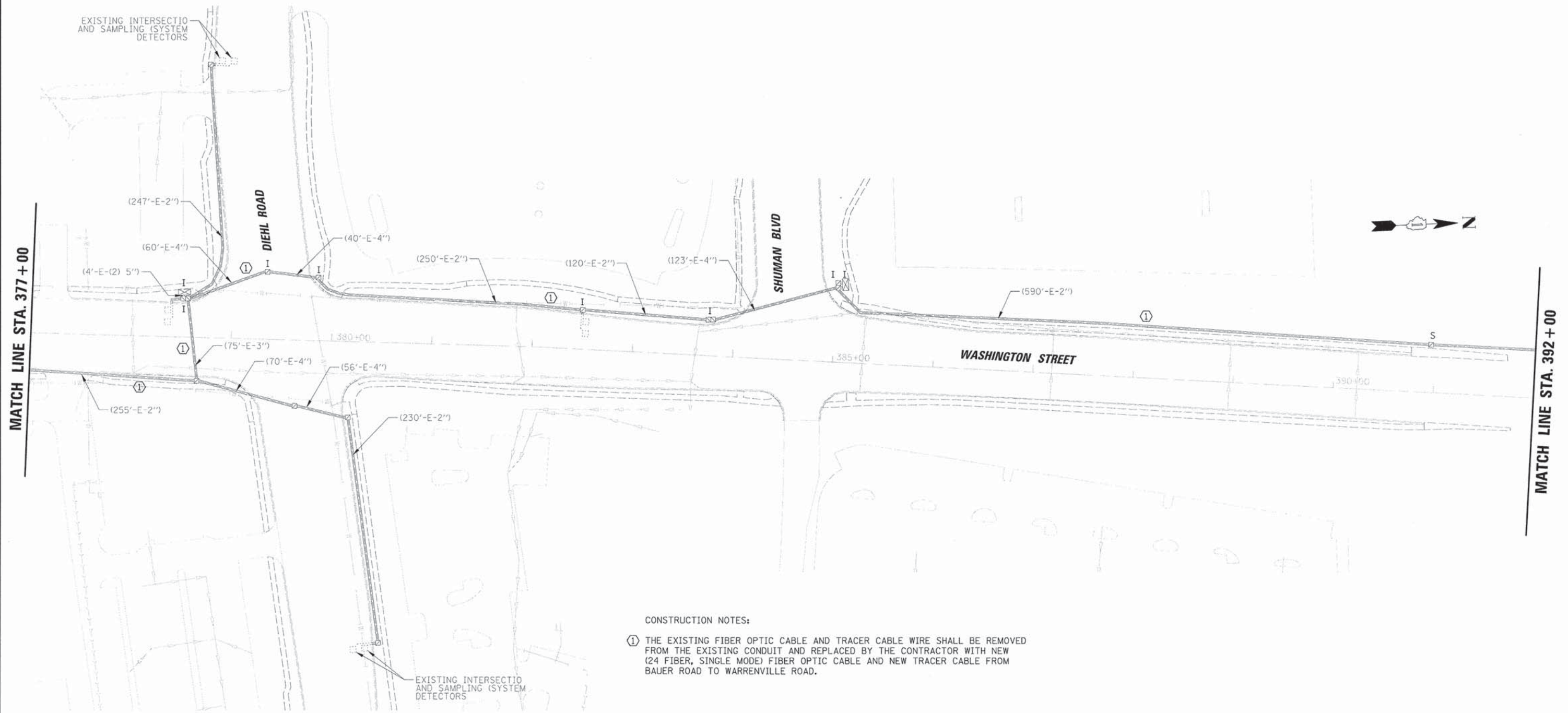
F.A.U. RTE. 2592, 3522 & 2546	SECTION 13-00158-00-TL	COUNTY DuPage & Will	TOTAL SHEETS 84	SHEET NO. 60
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

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

PROFILE	DESIGNED	DATE
NOTE BOOK	GRADES CHECKED	
NO.	STRUCTURE	NOTATION CHKD
PLAN	REVISIONS	DATE
NOTE BOOK	ALIGNMENT CHECKED	
NO.	FIELD FILE NAME	

CHRISTOPHER B. BURKE ENGINEERING LTD.
 6075 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-0520

PROFILE	DESIGNED	DATE
NOTE BOOK	GRADES CHECKED	
NO.	STRUCTURE	NOTATION CHKD
PLAN	REVISIONS	DATE
NOTE BOOK	ALIGNMENT CHECKED	
NO.	FIELD FILE NAME	

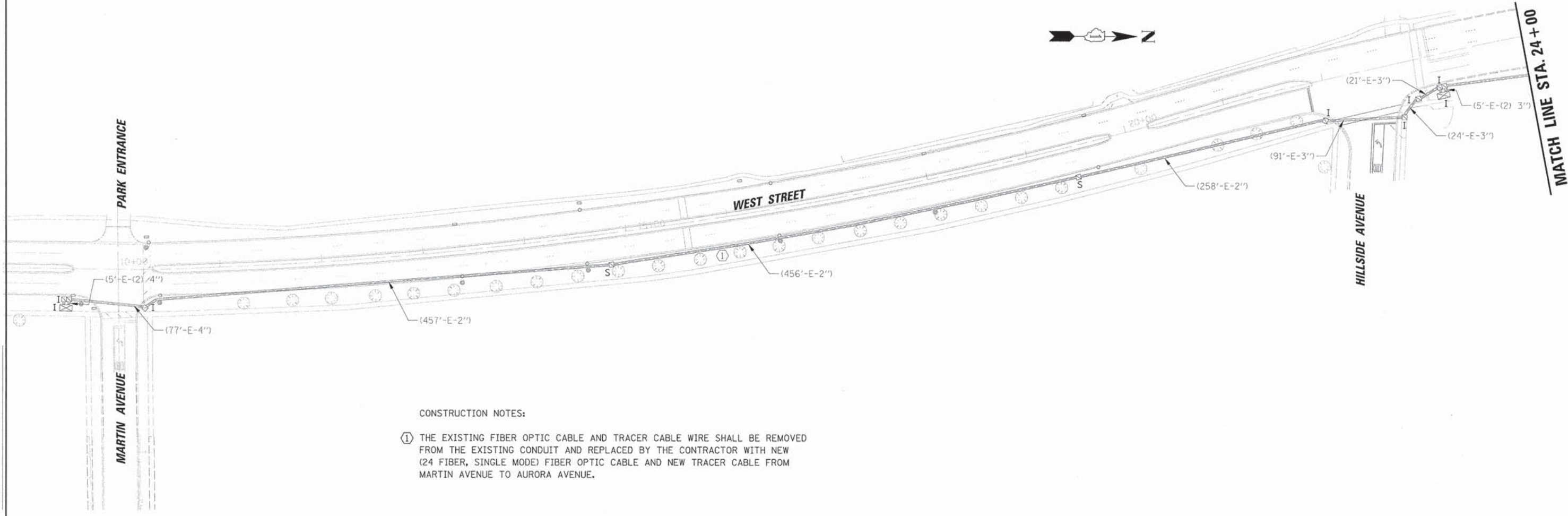


CONSTRUCTION NOTES:
 ① THE EXISTING FIBER OPTIC CABLE AND TRACER CABLE WIRE SHALL BE REMOVED FROM THE EXISTING CONDUIT AND REPLACED BY THE CONTRACTOR WITH NEW (24 FIBER, SINGLE MODE) FIBER OPTIC CABLE AND NEW TRACER CABLE FROM BAUER ROAD TO WARRENVILLE ROAD.

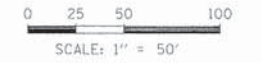
FILE NAME = N:\Naperville\130319\Traffic\INT-14_Bauer	USER NAME = fbariso	DESIGNED - LJ / TS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INTERCONNECT PLAN (SHEET 14 OF 15) WASHINGTON STREET FROM ROYCE ROAD TO WARRENVILLE ROAD	F.A.U. RTE. 130319	SECTION 13-00158-00-TL	COUNTY DuPAGE & WILL	TOTAL SHEETS 84	SHEET NO. 63	
	PLOT SCALE = 58'	DRAWN - FPB / FCP	REVISED -			SCALE:	SHEET NO. OF SHEETS STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	CONTRACT NO. 61B84	
	PLOT DATE = 6/22/2015	CHECKED - GMZ	REVISED -								
		DATE - 3/13/2015	REVISED -								

PROFILE	DESIGNED	BY	DATE
NOTE BOOK NO.	GRADES CHECKED		
	STRUCTURE NOTATIONS OK		
PLAN	DESIGNED	BY	DATE
NOTE BOOK NO.	ALIGNMENT CHECKED		
	PLANTING CHECKED		
	ADD FILE NAME		

CHRISTOPHER B. BURKE ENGINEERING LTD.
 2075 West Higgins Road, Suite 600
 Naperville, IL 60563
 (847) 823-0500



CONSTRUCTION NOTES:
 ① THE EXISTING FIBER OPTIC CABLE AND TRACER CABLE WIRE SHALL BE REMOVED FROM THE EXISTING CONDUIT AND REPLACED BY THE CONTRACTOR WITH NEW (24 FIBER, SINGLE MODE) FIBER OPTIC CABLE AND NEW TRACER CABLE FROM MARTIN AVENUE TO AURORA AVENUE.



FILE NAME =	USER NAME = fbariso	DESIGNED - LJ / TS	REVISED -
N:\Naperville\138319\Traffic\INT-16_Martin to Aurora.dgn		DRAWN - FPB / FCP	REVISED -
	PLOT SCALE = 50'	CHECKED - GMZ	REVISED -
	PLOT DATE = 6/22/2015	DATE - 3/13/2015	REVISED -

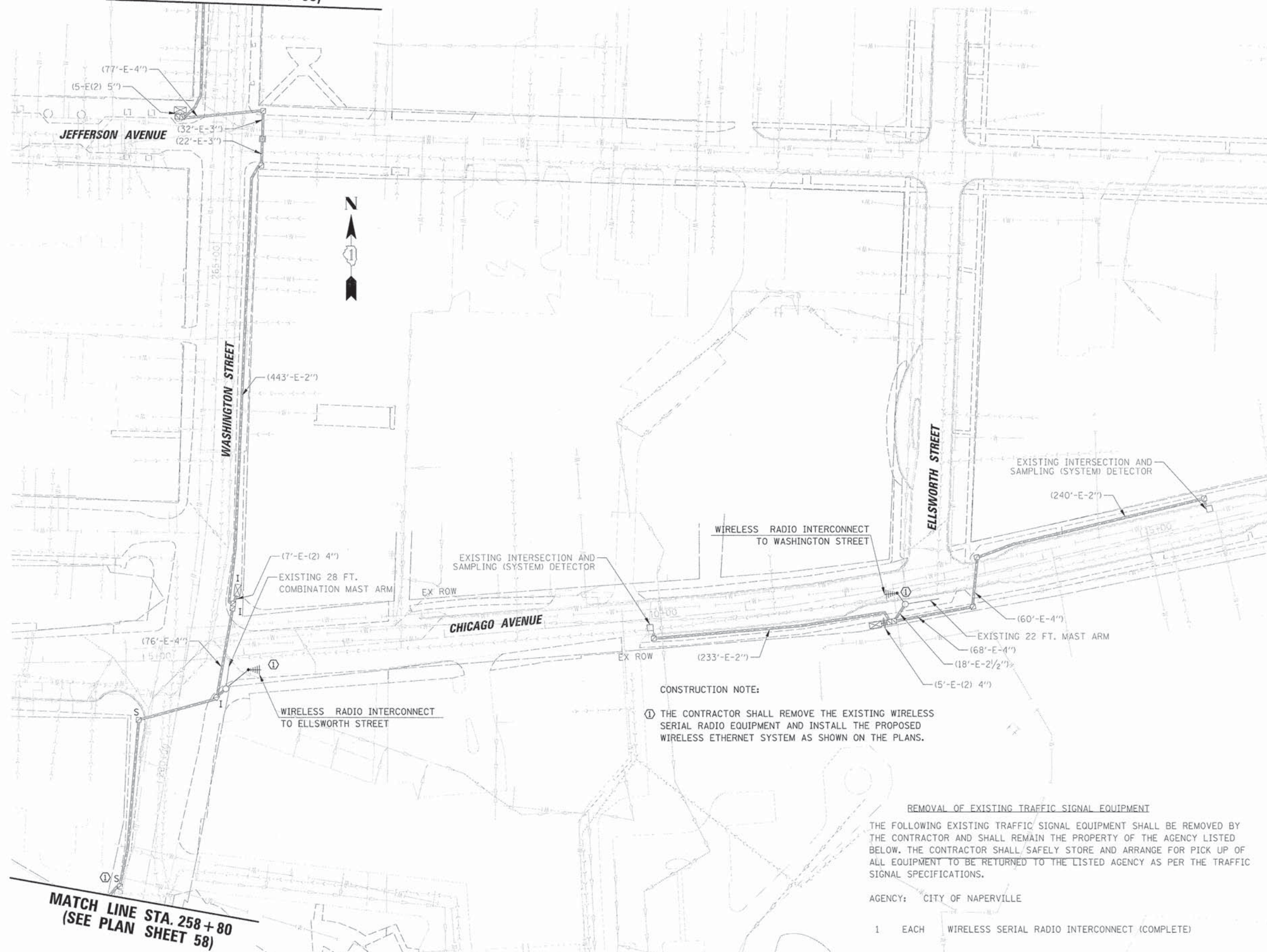
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN
WEST STREET
FROM MARTIN AVENUE TO AURORA AVENUE

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

F.A.U. P.T.E. 2550, 1522 & 2546	SECTION 13-00158-00-TL	COUNTY DuPAGE & WILL	TOTAL SHEETS 84	SHEET NO. 65
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	CONTRACT NO. 61B84		

(SEE PLAN SHEET 58)

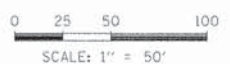


CONSTRUCTION NOTE:
 ① THE CONTRACTOR SHALL REMOVE THE EXISTING WIRELESS SERIAL RADIO EQUIPMENT AND INSTALL THE PROPOSED WIRELESS ETHERNET SYSTEM AS SHOWN ON THE PLANS.

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT
 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 PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: CITY OF NAPERVILLE

1 EACH WIRELESS SERIAL RADIO INTERCONNECT (COMPLETE)



PROFILE	ENGINEER	DATE
NOTE BOOK NO.	PLANNED	BY
NO.	NOTED	DATE
	GRADES CHECKED	
	STRUCTURE NOTATIONS CH'ND	
	PLANNED	DATE
	NOTE BOOK NO.	BY
	NO.	DATE

CHRISTOPHER B. BURKE ENGINEERING LTD.
 2575 West Higgins Road, Suite 600
 Naperville, IL 60563
 (630) 823-8500

PLAN	ENGINEER	DATE
NOTE BOOK NO.	PLANNED	BY
NO.	NOTED	DATE
	GRADES CHECKED	
	STRUCTURE NOTATIONS CH'ND	
	PLANNED	DATE
	NOTE BOOK NO.	BY
	NO.	DATE

FILE NAME =	USER NAME = fbariso	DESIGNED - LJ / TS	REVISED -
N:\Naperville\130319\Traffic\INT-19_Washington to Ellsworth.dgn		DRAWN - FPB / FCP	REVISED -
	PLOT SCALE = 50'	CHECKED - GMZ	REVISED -
	PLOT DATE = 6/22/2015	DATE - 3/13/2015	REVISED -

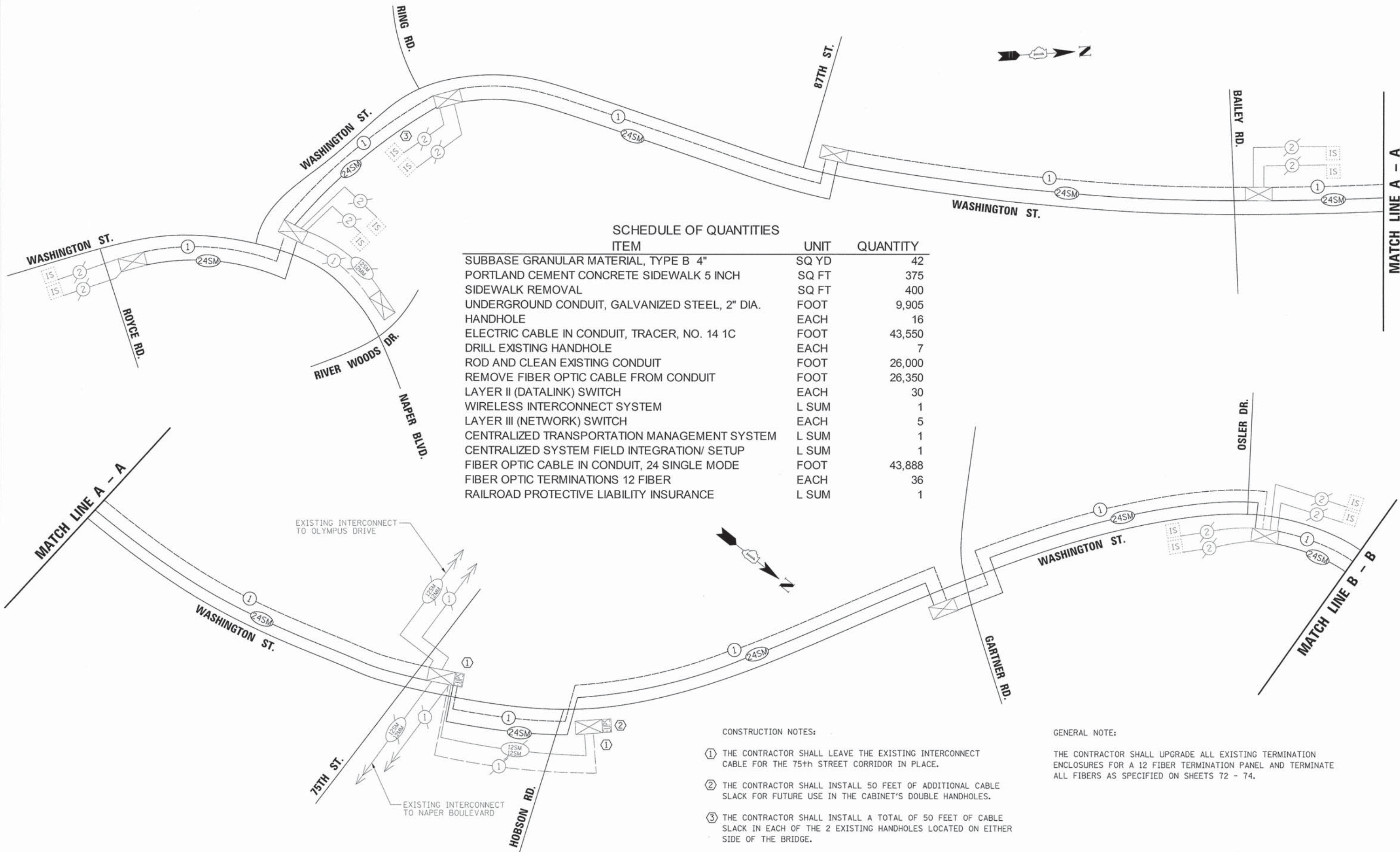
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**INTERCONNECT PLAN
 CHICAGO AVENUE
 FROM WASHINGTON STREET TO ELLSWORTH STREET**

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

F.A.U. RTE. 2552, 1522 & 2546	SECTION 13-00158-00-TL	COUNTY DuPAGE & WILL	TOTAL SHEETS 84	SHEET NO. 68
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	CONTRACT NO. 61B84		

PROFILE SURVEYED _____ DATE _____
 CHECKED _____
 BY _____
 DATE _____
 PLAN SURVEYED _____ DATE _____
 CHECKED _____
 BY _____
 DATE _____
 CHRISTOPHER B. BURKE ENGINEERING LTD.
 9575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 343-6630
 CB
 SURVEYED _____ DATE _____
 CHECKED _____
 BY _____
 DATE _____
 PLAN SURVEYED _____ DATE _____
 CHECKED _____
 BY _____
 DATE _____



SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
SUBBASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	42
PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	375
SIDEWALK REMOVAL	SQ FT	400
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	9,905
HANDHOLE	EACH	16
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	43,550
DRILL EXISTING HANDHOLE	EACH	7
ROD AND CLEAN EXISTING CONDUIT	FOOT	26,000
REMOVE FIBER OPTIC CABLE FROM CONDUIT	FOOT	26,350
LAYER II (DATALINK) SWITCH	EACH	30
WIRELESS INTERCONNECT SYSTEM	L SUM	1
LAYER III (NETWORK) SWITCH	EACH	5
CENTRALIZED TRANSPORTATION MANAGEMENT SYSTEM	L SUM	1
CENTRALIZED SYSTEM FIELD INTEGRATION/ SETUP	L SUM	1
FIBER OPTIC CABLE IN CONDUIT, 24 SINGLE MODE	FOOT	43,888
FIBER OPTIC TERMINATIONS 12 FIBER	EACH	36
RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1

- CONSTRUCTION NOTES:**
- ① THE CONTRACTOR SHALL LEAVE THE EXISTING INTERCONNECT CABLE FOR THE 75th STREET CORRIDOR IN PLACE.
 - ② THE CONTRACTOR SHALL INSTALL 50 FEET OF ADDITIONAL CABLE SLACK FOR FUTURE USE IN THE CABINET'S DOUBLE HANDHOLES.
 - ③ THE CONTRACTOR SHALL INSTALL A TOTAL OF 50 FEET OF CABLE SLACK IN EACH OF THE 2 EXISTING HANDHOLES LOCATED ON EITHER SIDE OF THE BRIDGE.

GENERAL NOTE:

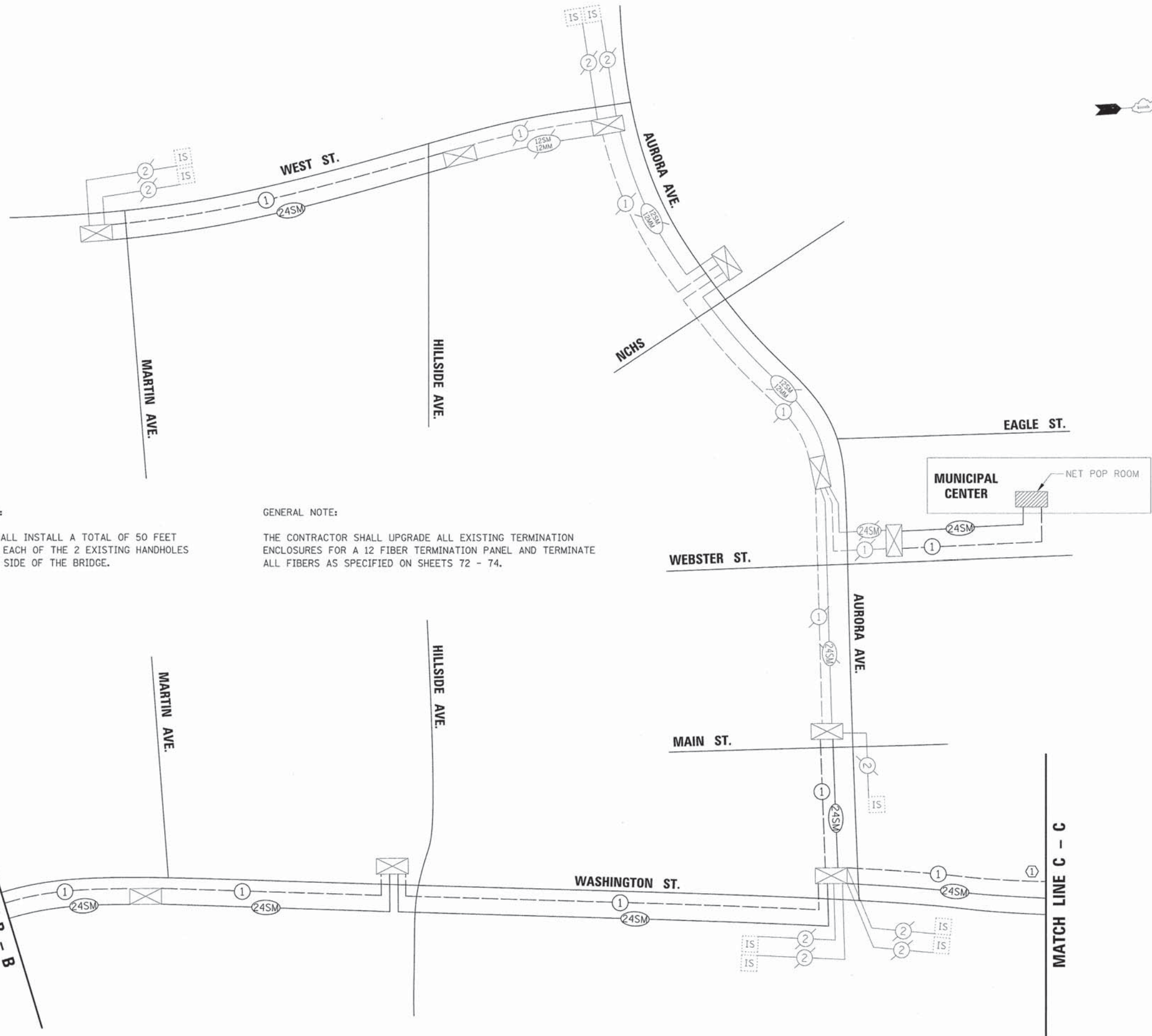
THE CONTRACTOR SHALL UPGRADE ALL EXISTING TERMINATION ENCLOSURES FOR A 12 FIBER TERMINATION PANEL AND TERMINATE ALL FIBERS AS SPECIFIED ON SHEETS 72 - 74.

PROFILE	DESIGNED	DATE
NOTE BOOK	PLOTTED	BY
NO.	DRAGES CHECKED	
	STRUCTURE NOTATIONS CHECKED	
PLAN	DESIGNED	DATE
NOTE BOOK	PLOTTED	BY
NO.	ALIGNMENT CHECKED	
	FILE NAME	
	ADD. FILE NAME	

CHRISTOPHER B. BURKE ENGINEERING LTD.
 5075 West Higgins Road, Suite 600
 Naperville, IL 60563
 (847) 823-0600



PROFILE	DESIGNED	DATE
NOTE BOOK	PLOTTED	BY
NO.	DRAGES CHECKED	
	STRUCTURE NOTATIONS CHECKED	
PLAN	DESIGNED	DATE
NOTE BOOK	PLOTTED	BY
NO.	ALIGNMENT CHECKED	
	FILE NAME	
	ADD. FILE NAME	



CONSTRUCTION NOTE:

- ① THE CONTRACTOR SHALL INSTALL A TOTAL OF 50 FEET OF CABLE SLACK IN EACH OF THE 2 EXISTING HANDHOLES LOCATED ON EITHER SIDE OF THE BRIDGE.

GENERAL NOTE:

THE CONTRACTOR SHALL UPGRADE ALL EXISTING TERMINATION ENCLOSURES FOR A 12 FIBER TERMINATION PANEL AND TERMINATE ALL FIBERS AS SPECIFIED ON SHEETS 72 - 74.

FILE NAME =	USER NAME = fbariss	DESIGNED - LJ / TS	REVISED -
N:\Naperville\130319\Traffic\SCH_sht2_130319.dgn		DRAWN - FPB / FCP	REVISED -
		CHECKED - GMZ	REVISED -
		DATE - 3/13/2015	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

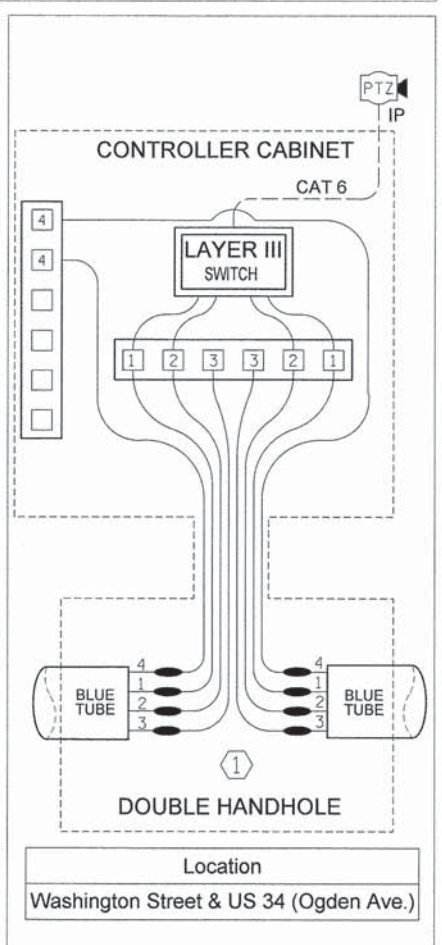
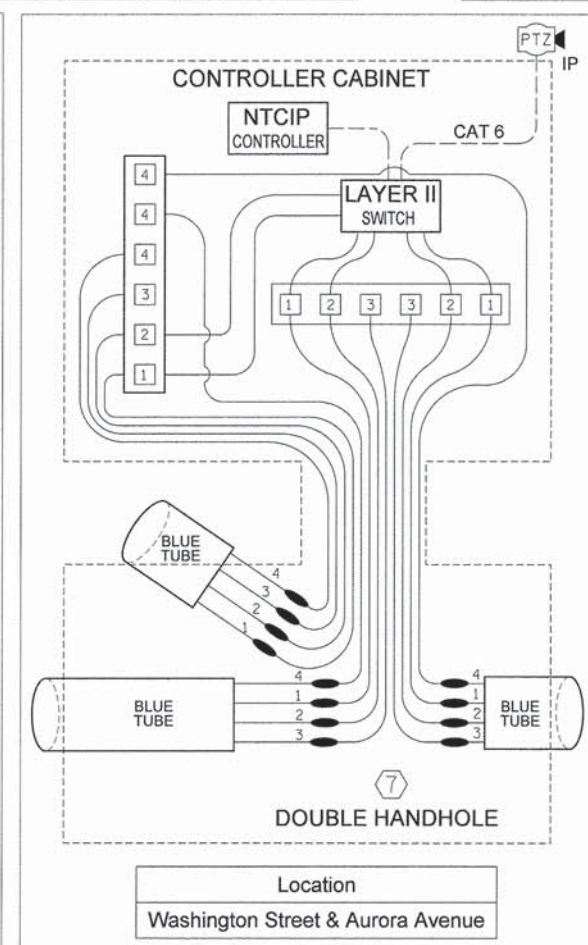
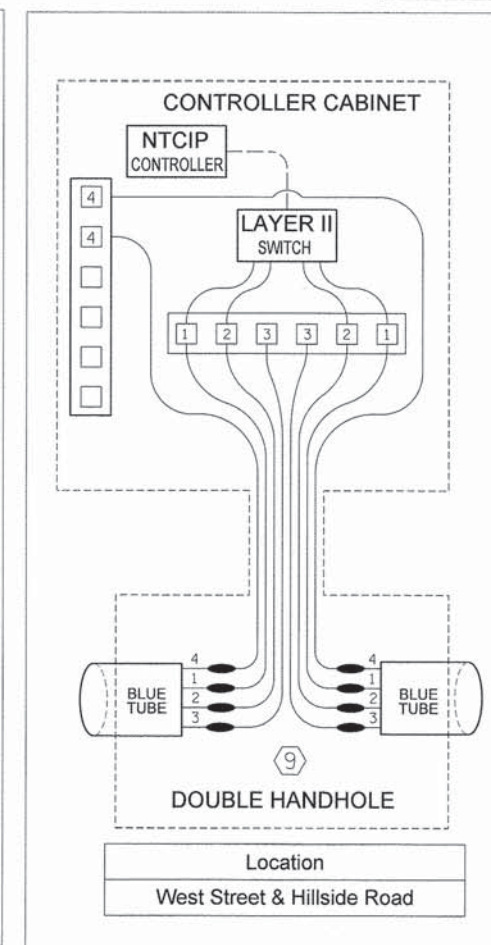
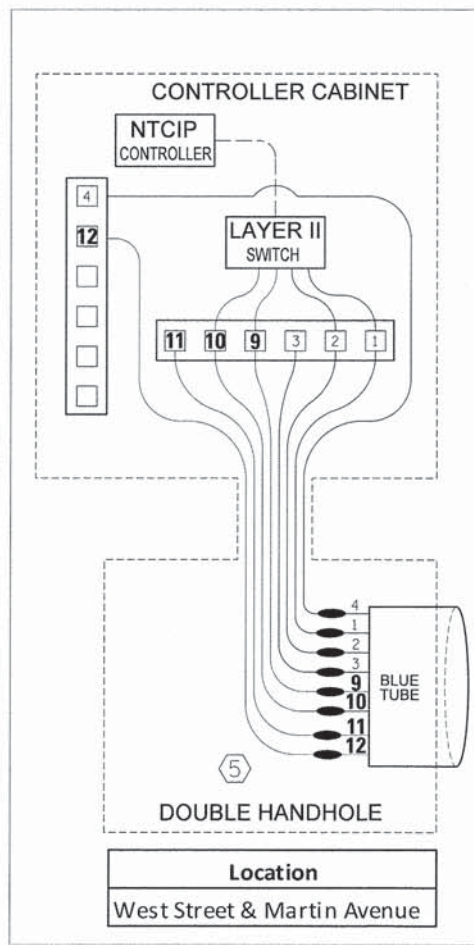
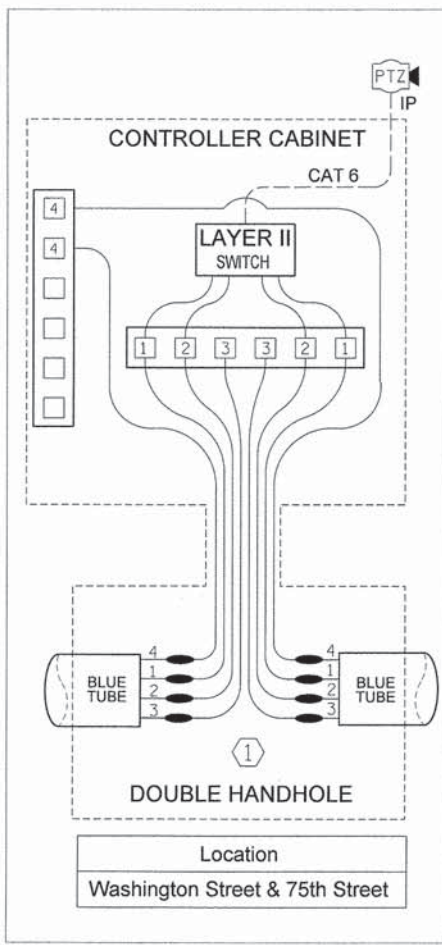
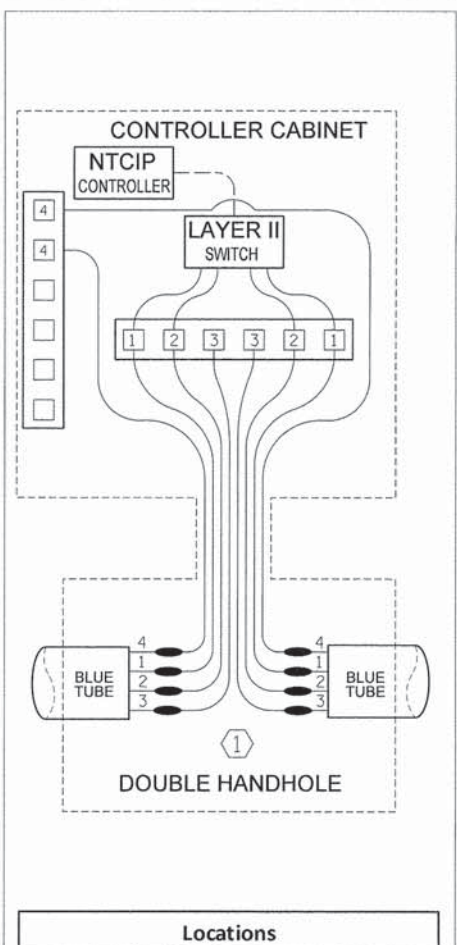
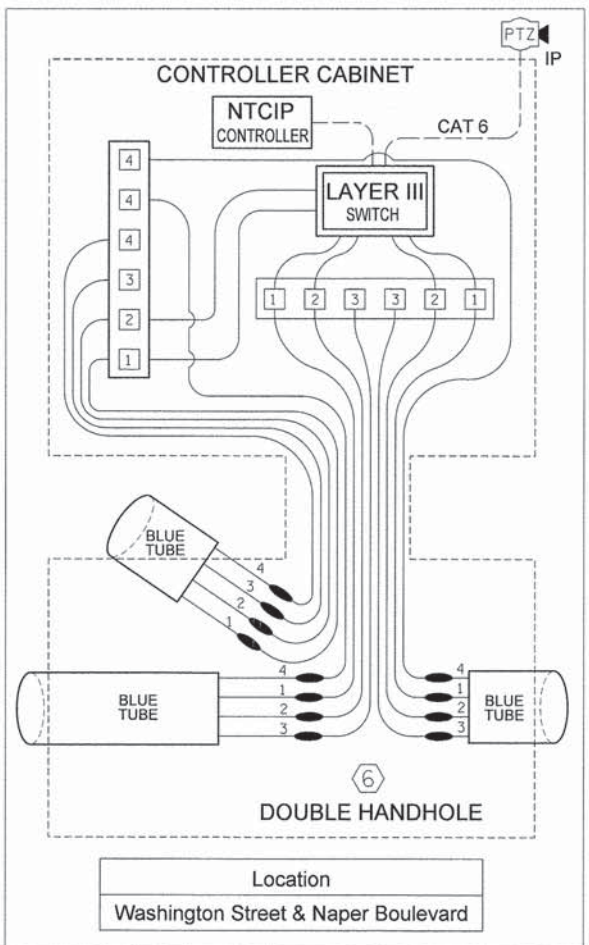
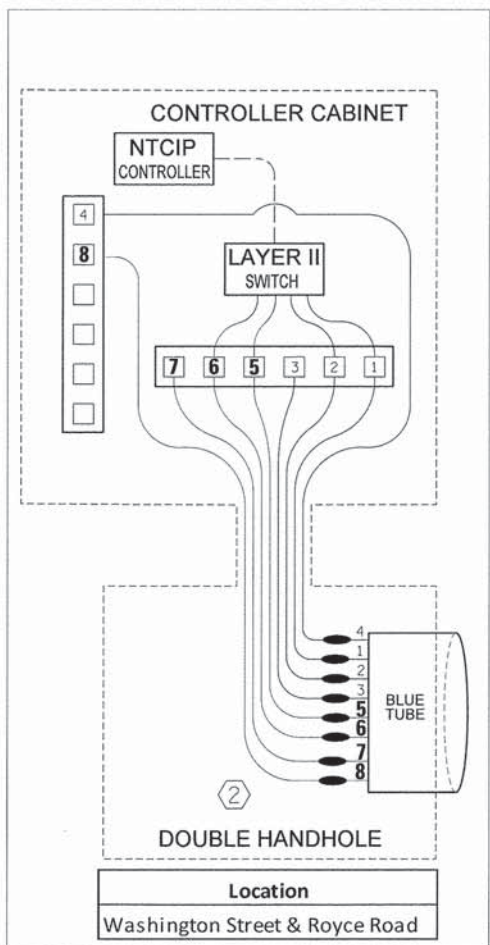
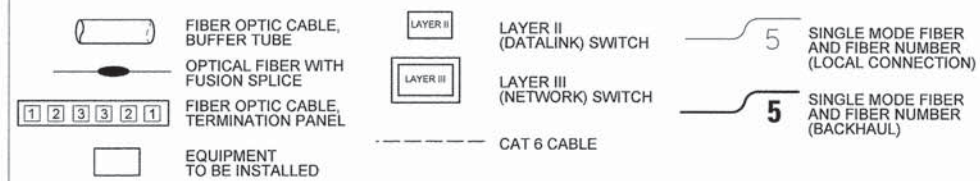
INTERCONNECT SCHEMATIC FROM ROYCE ROAD TO WARRENVILLE ROAD (SHEET 2 OF 3)			
SCALE:	SHEET NO.	OF SHEETS	STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2552, 1522 & 2946	13-00158-00-TL	DuPAGE & WILL	84	70
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	CONTRACT NO. 61B84		

CONSTRUCTION NOTES

- 1 SPLICE FIBERS 1 - 4 FROM THE MAINLINE CABLE TO THE DROP CABLE AND SPLICE THROUGH FIBERS 5 - 24 OF THE MAINLINE CABLE.
- 2 SPLICE FIBERS 1 - 8 FROM THE MAINLINE CABLE TO THE DROP CABLE AND CONNECTORIZE FIBERS 9 - 24 IN THE (DOUBLE HANDHOLE) SPICE TRAY.
- 3 SPLICE FIBERS 1 - 4 FROM THE MAINLINE CABLE TO THE DROP CABLE AND CONNECTORIZE FIBERS 5 - 24 IN THE (DOUBLE HANDHOLE) SPICE TRAY.
- 4 SPLICE FIBERS 1 - 4, 13 - 16 FROM THE MAINLINE CABLE TO THE DROP CABLE AND CONNECTORIZE FIBERS 5 - 12, 17 - 24 IN THE (DOUBLE HANDHOLE) SPICE TRAY.
- 5 SPLICE FIBERS 1 - 4, 9 - 12 FROM THE MAINLINE CABLE TO THE DROP CABLE AND CONNECTORIZE FIBERS 5 - 8, 13 - 24 IN THE (DOUBLE HANDHOLE) SPICE TRAY.
- 6 SPLICE FIBERS 1 - 4 FROM THE MAINLINE CABLE TO THE DROP CABLE AND SPLICE THROUGH FIBERS 5 - 24 OF THE MAINLINE CABLE (TO ROYCE ROAD).
- 7 SPLICE FIBERS 1 - 4 FROM THE MAINLINE CABLE TO THE DROP CABLE, SPLICE THROUGH FIBERS 5 - 8 (FROM THE SOUTH) AND FIBERS 13 - 16 (FROM THE NORTH) OF THE MAINLINE CABLE (ON WASHINGTON STREET) TO THE MAINLINE CABLE FROM THE WEST (ON AURORA AVENUE); AND CONNECTORIZE ALL REMAINING FIBERS IN THE (DOUBLE HANDHOLE) SPICE TRAY.
- 8 SPLICE FIBERS 1 - 4 FROM THE MAINLINE CABLE TO THE DROP CABLE, SPLICE THROUGH FIBERS 9 - 12 TO THE MAINLINE CABLE; AND CONNECTORIZE FIBERS 5 - 8 IN THE (DOUBLE HANDHOLE) SPICE TRAY.
- 9 SPLICE FIBERS 1 - 4 FROM THE MAINLINE CABLE TO THE DROP CABLE, SPLICE THROUGH FIBERS 9 - 12 TO THE MAINLINE CABLE; AND CONNECTORIZE FIBERS 5 - 8, 13 - 24 IN THE (DOUBLE HANDHOLE) SPICE TRAY.
- 10 SPLICE FIBERS 1 - 4 FROM THE (EAST/WEST) MAINLINE CABLE TO THE DROP CABLE, SPLICE THROUGH FIBERS 5 - 8, 13 - 16 (FROM THE EAST) AND FIBERS 9 - 12 (FROM THE WEST) OF THE MAINLINE CABLE (ON AURORA AVENUE) TO THE MAINLINE CABLE FROM THE NORTH (ON WEBSTER STREET); AND CONNECTORIZE ALL REMAINING FIBERS IN THE (DOUBLE HANDHOLE) SPICE TRAY.

LEGEND



Locations
Washington Street & Ring Road
Washington Street & 87th Street
Washington Street & Bailey Road
Washington Street & Gartner Road
Washington Street & Osler Drive
Washington Street & Martin Avenue
Washington Street & Hillside Road
Washington Street & Jefferson Avenue
Washington Street & Van Buren Avenue
Washington Street & Benton Avenue
Washington Street & School Street
Washington Street & North Avenue
Washington Street & 5th Avenue
Washington Street & Bauer Avenue
Washington Street & Iroquois Avenue
Washington Street & Shuman Boulevard
Washington Street & Big Horn Road
Aurora Avenue & Main Street

CHRISTOPHER B. BURKE ENGINEERING LTD.
 2575 West Higgins Road, Suite 600
 Naperville, IL 60563
 (847) 823-9500
 DATE: _____ BY: _____
 PROFILE: _____
 NOTE BOOK: _____
 CHECKED: _____
 DATE: _____
 FILE NAME: _____

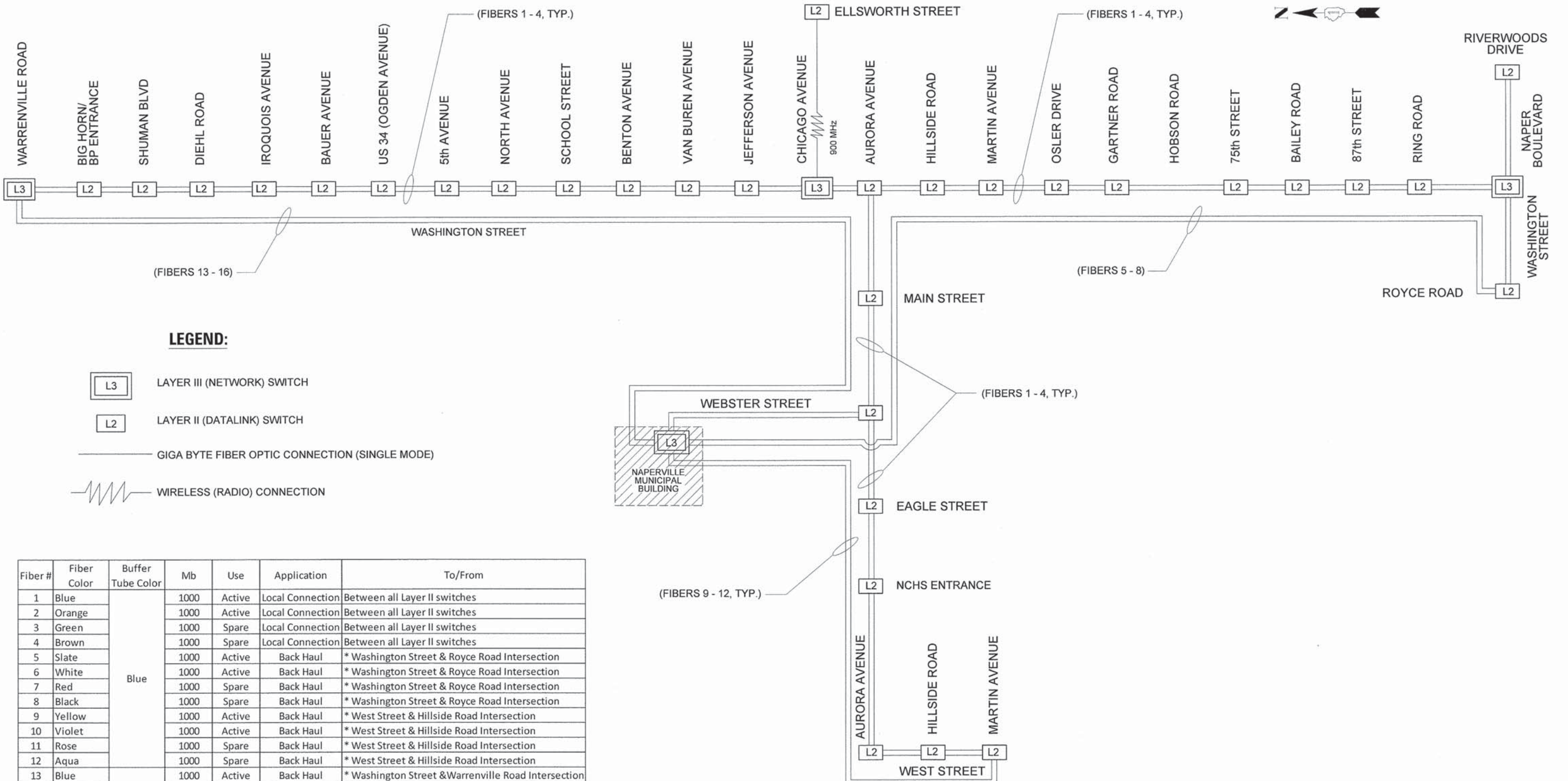
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 NOTE BOOK BAL. NOTED
 NO. _____ STRUCTURE NOTATION: C/F/K

DATE _____ BY _____
 DATE _____ BY _____

SURVEYED ALIGNED CHECKED
 RT. OF WAY CHECKED
 CADD FILE NAME _____

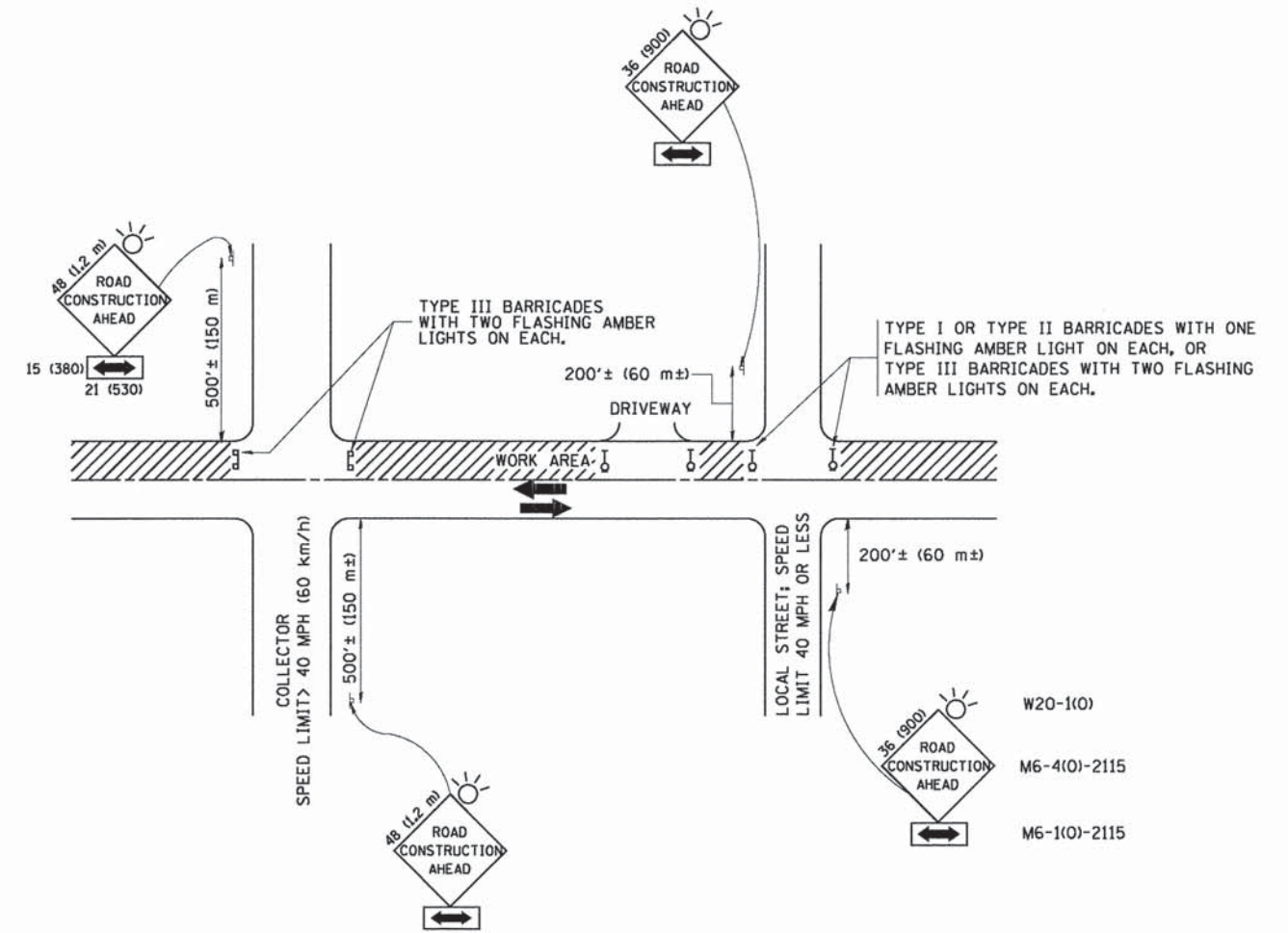
PLAN NO. _____
 NO. _____

CHRISTOPHER B. BURKE ENGINEERING LTD.
 9575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-9500



Fiber #	Fiber Color	Buffer Tube Color	Mb	Use	Application	To/From
1	Blue	Blue	1000	Active	Local Connection	Between all Layer II switches
2	Orange		1000	Active	Local Connection	Between all Layer II switches
3	Green		1000	Spare	Local Connection	Between all Layer II switches
4	Brown		1000	Spare	Local Connection	Between all Layer II switches
5	Slate		1000	Active	Back Haul	* Washington Street & Royce Road Intersection
6	White		1000	Active	Back Haul	* Washington Street & Royce Road Intersection
7	Red		1000	Spare	Back Haul	* Washington Street & Royce Road Intersection
8	Black		1000	Spare	Back Haul	* Washington Street & Royce Road Intersection
9	Yellow		1000	Active	Back Haul	* West Street & Hillside Road Intersection
10	Violet		1000	Active	Back Haul	* West Street & Hillside Road Intersection
11	Rose		1000	Spare	Back Haul	* West Street & Hillside Road Intersection
12	Aqua		1000	Spare	Back Haul	* West Street & Hillside Road Intersection
13	Blue	Orange	1000	Active	Back Haul	* Washington Street & Warrenville Road Intersection
14	Orange		1000	Active	Back Haul	* Washington Street & Warrenville Road Intersection
15	Green		1000	Spare	Back Haul	* Washington Street & Warrenville Road Intersection
16	Brown		1000	Spare	Back Haul	* Washington Street & Warrenville Road Intersection
17	Slate		-	Inactive	-	-
18	White		-	Inactive	-	-
19	Red		-	Inactive	-	-
20	Black		-	Inactive	-	-
21	Yellow		-	Inactive	-	-
22	Violet		-	Inactive	-	-
23	Rose		-	Inactive	-	-
24	Aqua		-	Inactive	-	-

* - Back Haul connects directly to Naper Municipal Building



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

NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
 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 AND FLAG 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. 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).
- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

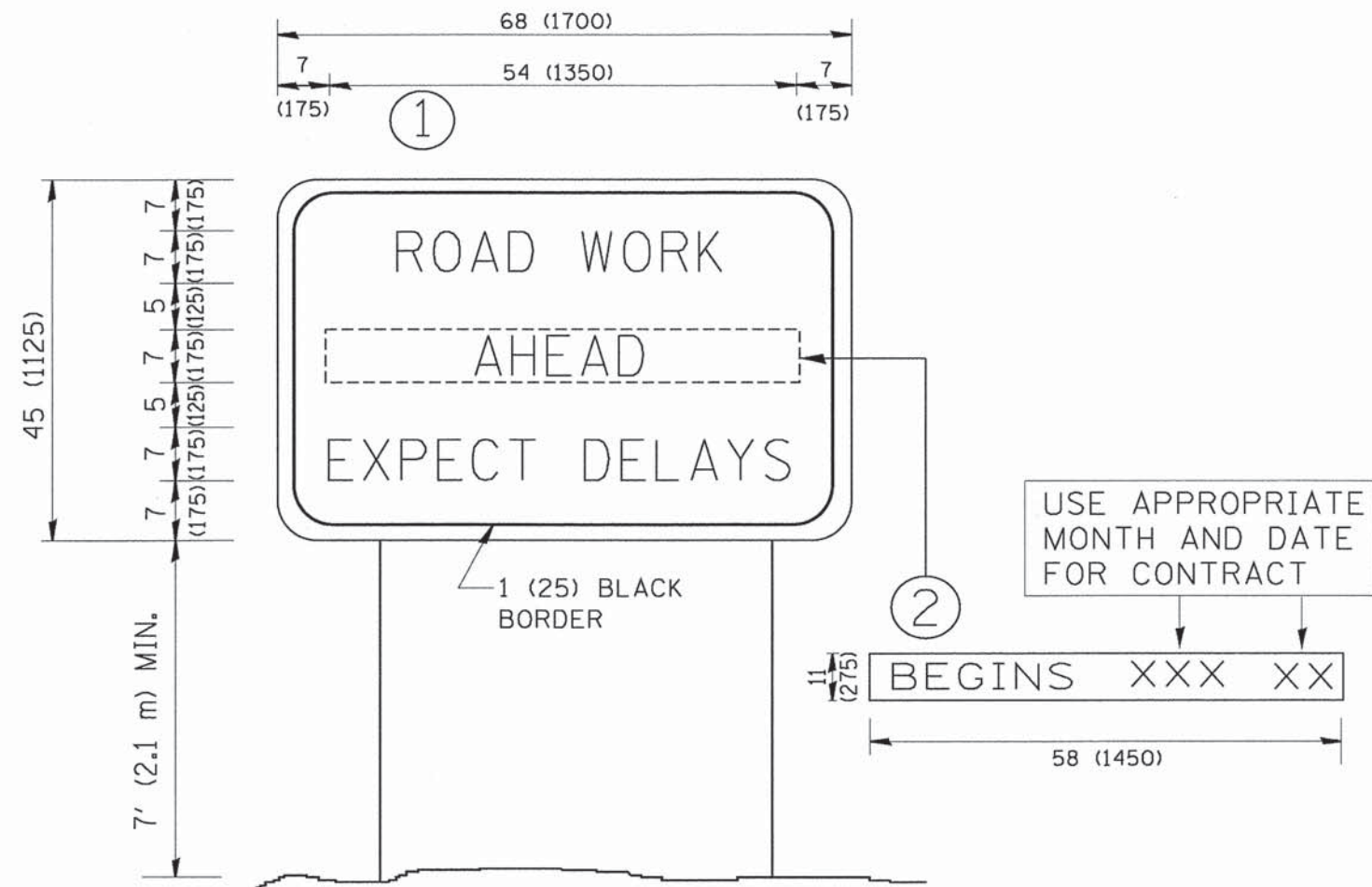
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		DRAWN -	REVISED - A. HOUSEH 03-06-96
		PLOT SCALE = 50.000' / IN.	REVISED - A. HOUSEH 10-15-96
		DATE = 06-89	REVISED - T. RAMMACHER 01-06-00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

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

F.A. RTE. 2552, 3529 & 2546	SECTION 13-00158-00-TL	COUNTY DuPAGE & WILL	TOTAL SHEETS 84	SHEET NO. 76
TC-10			CONTRACT NO. 61B84	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



NOTES:

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

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

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PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - T. RAMMACHER 02-02-99	SCALE: NONE		SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	TC-22	CONTRACT NO. 61B84		
PLOT DATE = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT								

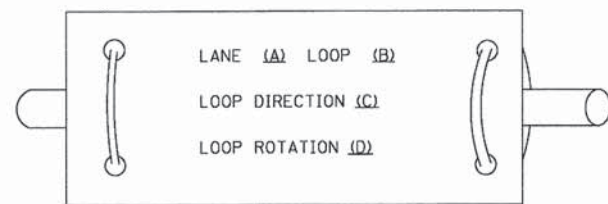
TRAFFIC SIGNAL LEGEND

ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED												
CONTROLLER CABINET				EMERGENCY VEHICLE LIGHT DETECTOR				ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1/C, UNLESS NOTED OTHERWISE															
RAILROAD CONTROL CABINET				CONFIRMATION BEACON				COAXIAL CABLE															
COMMUNICATIONS CABINET				HANDHOLE				VENDOR CABLE FOR CAMERA															
MASTER CONTROLLER				HEAVY DUTY HANDHOLE				COPPER INTERCONNECT CABLE, NO. 18 3 PAIR TWISTED, SHIELDED															
MASTER MASTER CONTROLLER				DOUBLE HANDHOLE				FIBER OPTIC CABLE NO. 62.5/125, MM12F															
UNINTERRUPTABLE POWER SUPPLY				JUNCTION BOX				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM12F															
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT				UNDERGROUND CONDUIT, GALVANIZED STEEL (UC)				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM24F															
TELEPHONE CONNECTION (P) POLE OR (G) GROUND MOUNT				TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM24F															
STEEL MAST ARM ASSEMBLY AND POLE				COMMON TRENCH				GROUND ROD AT (C) CONTROLLER, (H) HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE															
ALUMINUM MAST ARM ASSEMBLY AND POLE				COILABLE NONMETALLIC CONDUIT (EMPTY)				CONTROLLER CABINET AND FOUNDATION TO BE REMOVED															
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE				SYSTEM ITEM				STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED															
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH PTZ CAMERA				INTERSECTION ITEM				ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED															
SIGNAL POST				REMOVE ITEM				STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE AND FOUNDATION TO BE REMOVED															
TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM				RELOCATE ITEM				SIGNAL POST AND FOUNDATION TO BE REMOVED															
GUY WIRE				ABANDON ITEM				INTERSECTION & SAMPLING (SYSTEM) DETECTOR															
SIGNAL HEAD				12" (300mm) TRAFFIC SIGNAL SECTION				SAMPLING (SYSTEM) DETECTOR															
SIGNAL HEAD CONSTRUCTION STAGES (NUMBERS INDICATE THE CONSTRUCTION STAGE)				12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE				QUEUE DETECTOR															
SIGNAL HEAD WITH BACKPLATE				SIGNAL FACE				PREFORMED QUEUE DETECTOR															
SIGNAL HEAD OPTICALLY PROGRAMMED				SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD				PREFORMED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR															
FLASHER INSTALLATION (S DENOTES SOLAR POWER)				"RB" INDICATES REFLECTIVE BACKPLATE				PREFORMED SAMPLING (SYSTEM) DETECTOR															
PEDESTRIAN SIGNAL HEAD				12" (300mm) PEDESTRIAN SIGNAL HEAD WALK/DON'T WALK SYMBOL				<h2 style="margin: 0;">RAILROAD SYMBOLS</h2> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">EXISTING</th> <th style="width: 50%;">PROPOSED</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> </tbody> </table>				EXISTING	PROPOSED										
EXISTING	PROPOSED																						
PEDESTRIAN PUSHBUTTON DETECTOR				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, OUTLINED																			
ACCESSIBLE PEDESTRIAN PUSHBUTTON DETECTOR				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, SOLID																			
ILLUMINATED SIGN "NO LEFT TURN"				PEDESTRIAN SIGNAL HEAD, INTERNATIONAL SYMBOL, WITH COUNTDOWN TIMER																			
ILLUMINATED SIGN "NO RIGHT TURN"				RADIO INTERCONNECT																			
DETECTOR LOOP, TYPE I				RADIO REPEATER																			
PREFORMED DETECTOR LOOP				DENOTES NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE, ALL DETECTOR LOOP CABLE TO BE SHIELDED																			
MICROWAVE VEHICLE SENSOR				GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)																			
VIDEO DETECTION CAMERA																							
VIDEO DETECTION ZONE																							
PAN, TILT, ZOOM CAMERA																							
WIRELESS DETECTOR SENSOR																							
WIRELESS ACCESS POINT																							

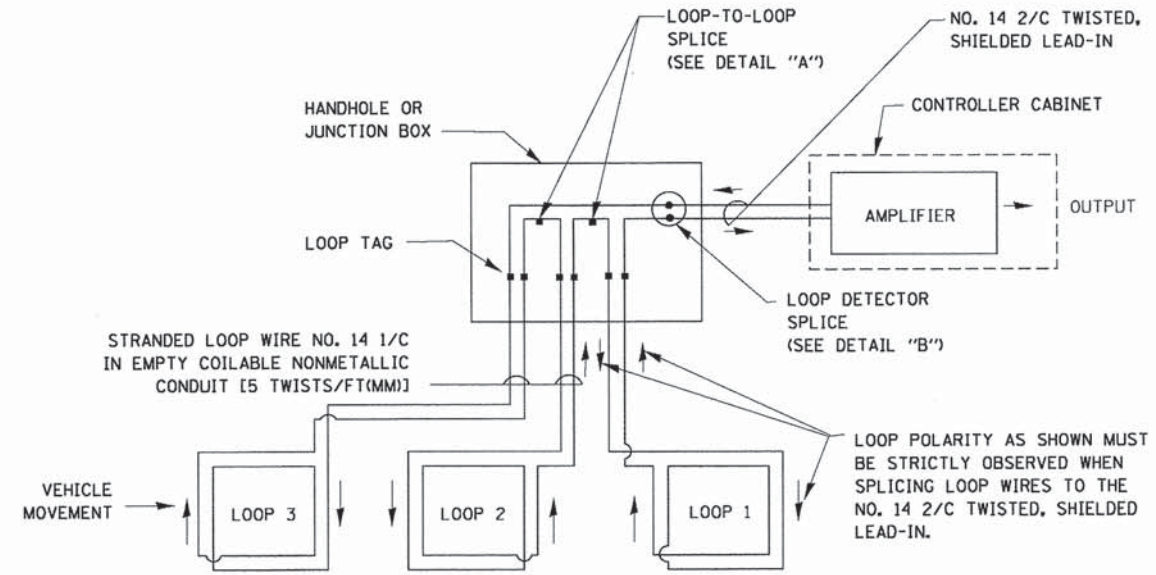
LOOP DETECTOR NOTES

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

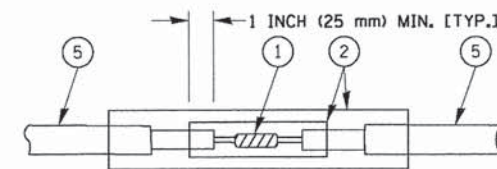


- LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

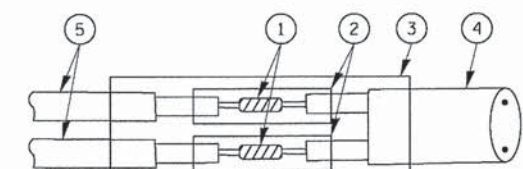


DETECTOR LOOP WIRING SCHEMATIC

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

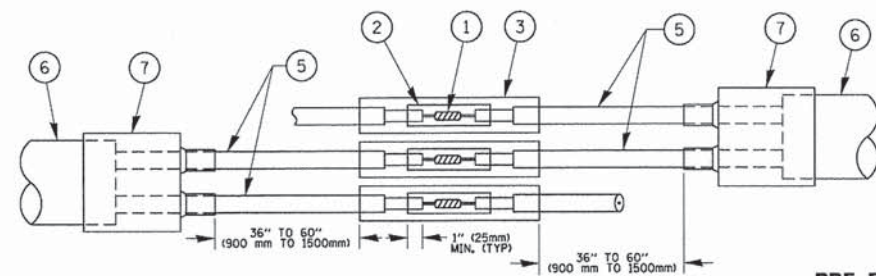


DETAIL "A"
LOOP-TO-LOOP SPLICE

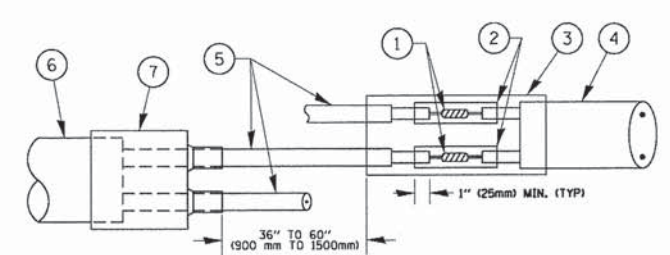


DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A"
LOOP-TO-LOOP SPLICE



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

PRE-FORMED LOOP

LOOP DETECTOR SPLICE

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

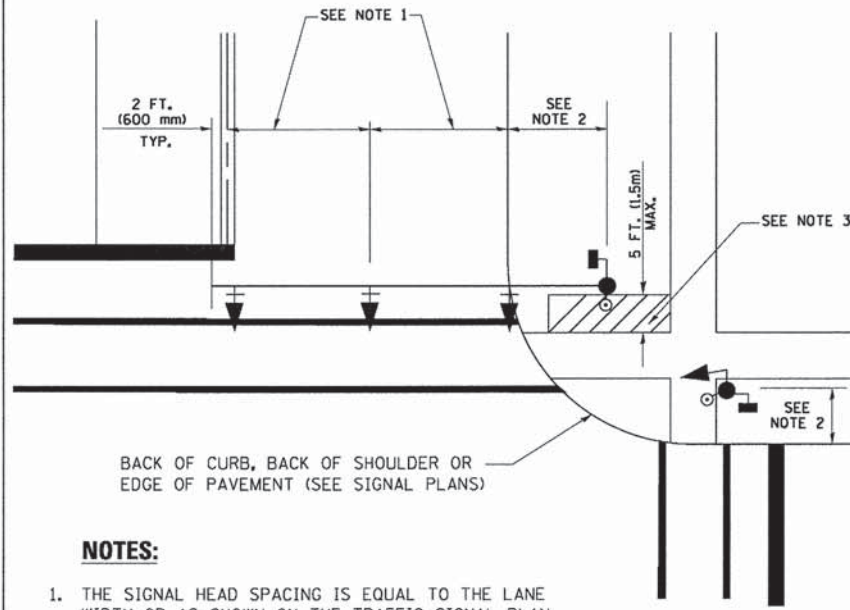
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PLOT SCALE = 58.0000' / 1"		CHECKED - DAD	REVISED -
PLOT DATE = 1/13/2014		DATE - 10-28-09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE	
STANDARD TRAFFIC SIGNAL DESIGN DETAILS	
SCALE: NONE	SHEET NO. 2 OF 7 SHEETS
STA.	TO STA.

F.A.U. RTE. 2552, 1527 & 2546	SECTION 13-00158-00-TL	COUNTY DuPAGE & WILL	TOTAL SHEETS 84	SHEET NO. 79
TS-05		CONTRACT NO. 61B84		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

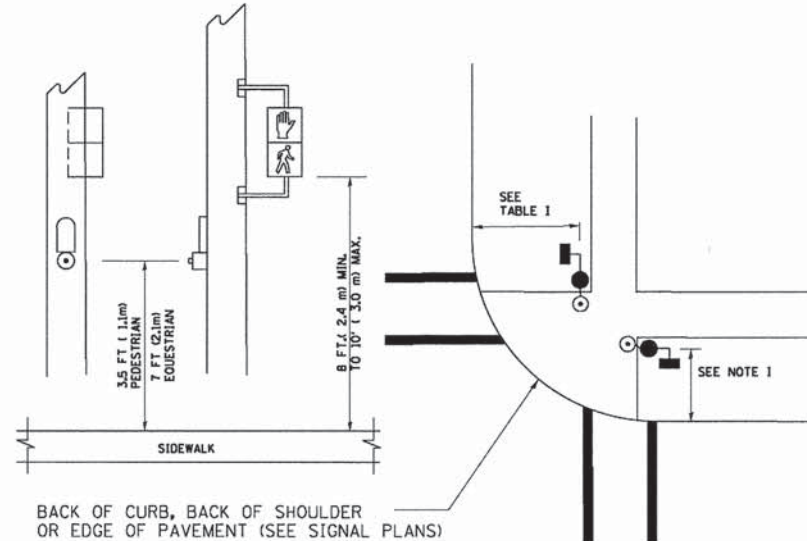
**TRAFFIC SIGNAL MAST ARM AND SIGNAL POST
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR
FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN
WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.**



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."

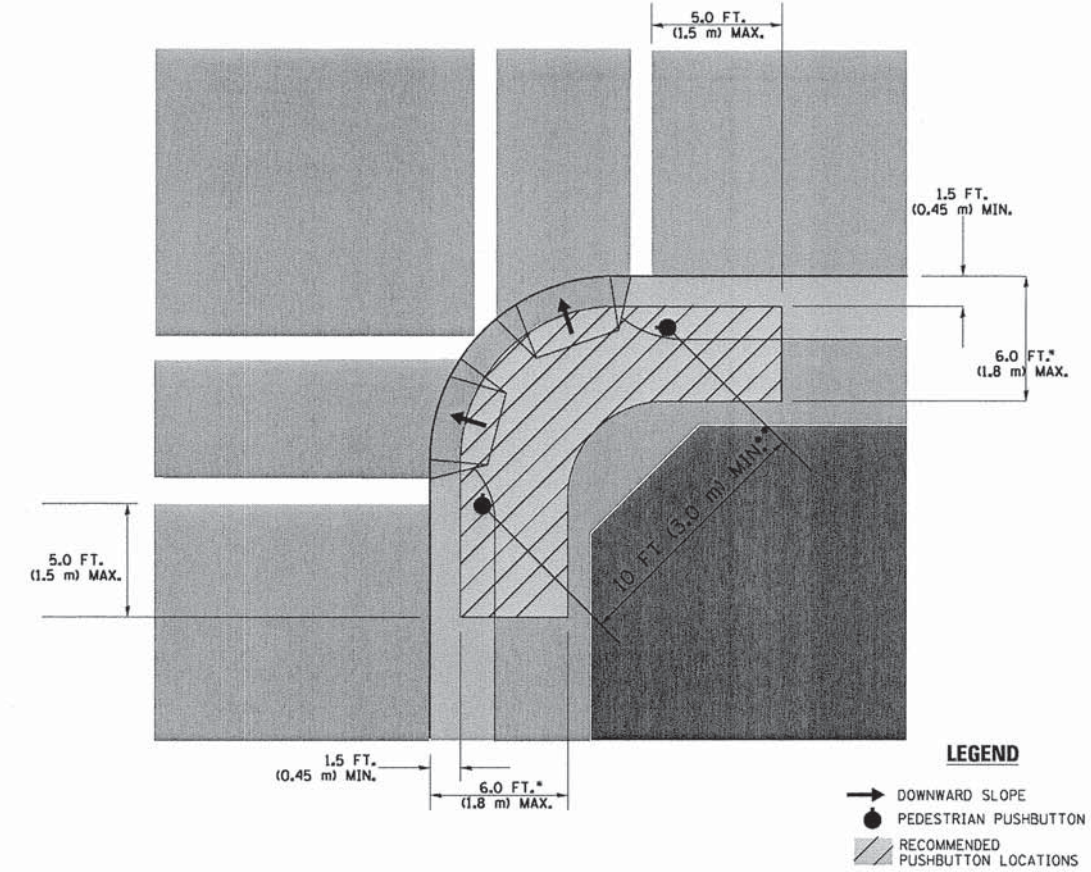
**PEDESTRIAN SIGNAL POST
AND
PEDESTRIAN PUSH BUTTON POST**



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:

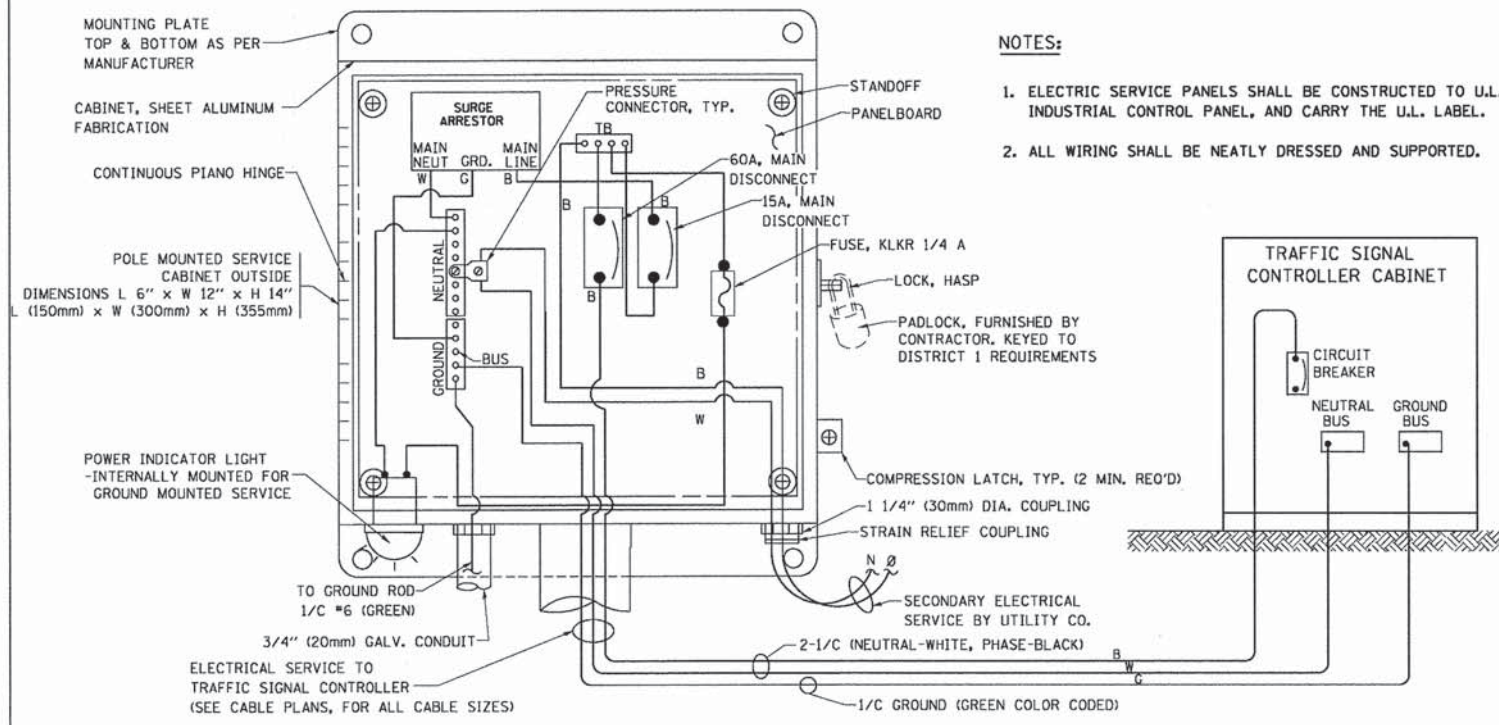
1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM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

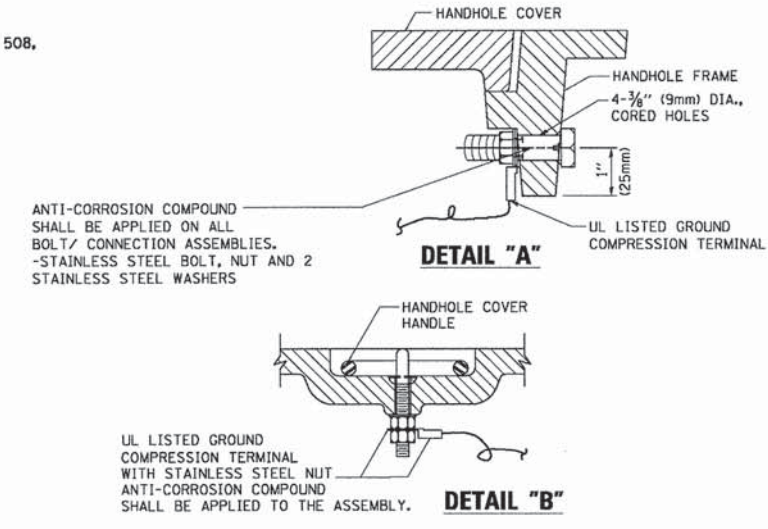
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 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 TO THE ROADWAY SIDE OF THE FOUNDATION.
4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS, FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" CHART AND THE TRAFFIC SIGNAL INSTALLATION PLAN, COULD EFFECT THE PLACEMENT OF THE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS AND THE PEDESTRIAN PUSHBUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL INSTALLATION PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE. THE PROPOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THE ABOVE REQUIREMENTS. THE PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS MUST MEET THE REQUIREMENTS UNDER THE DETAILS ON THIS SHEET.

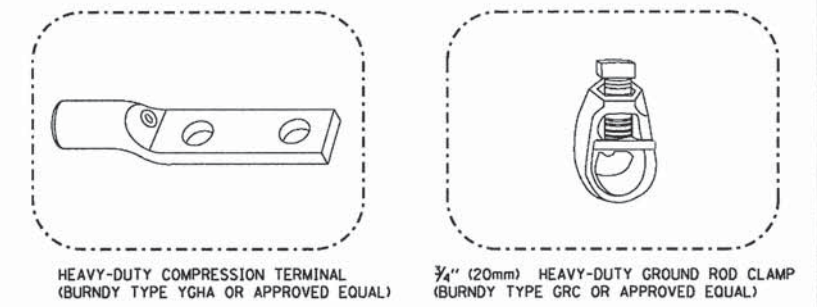
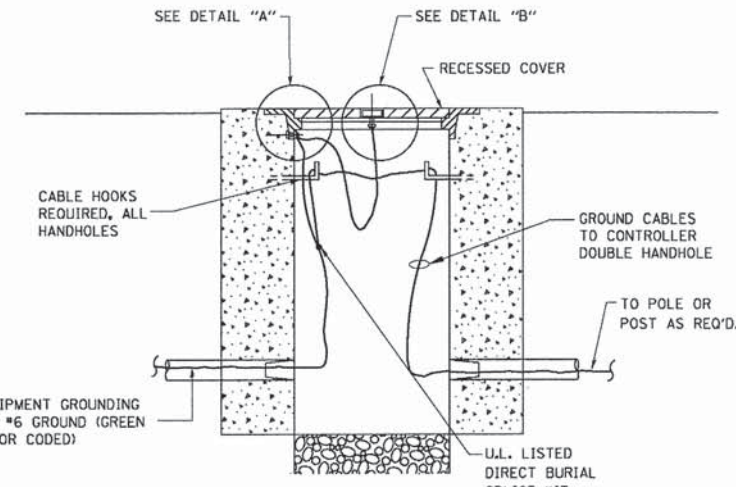


**ELECTRICAL SERVICE – PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)
SERVICE INSTALLATION POLE MOUNT (SHOWN)
(NOT TO SCALE)**

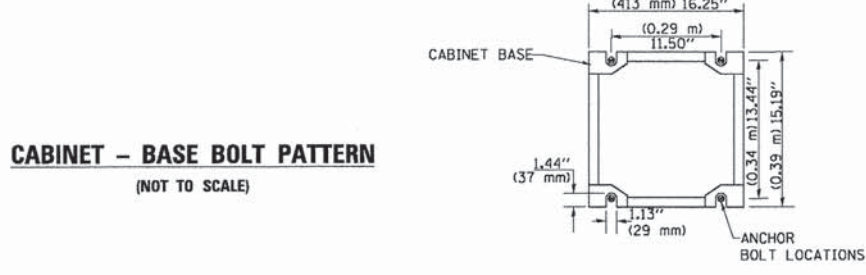
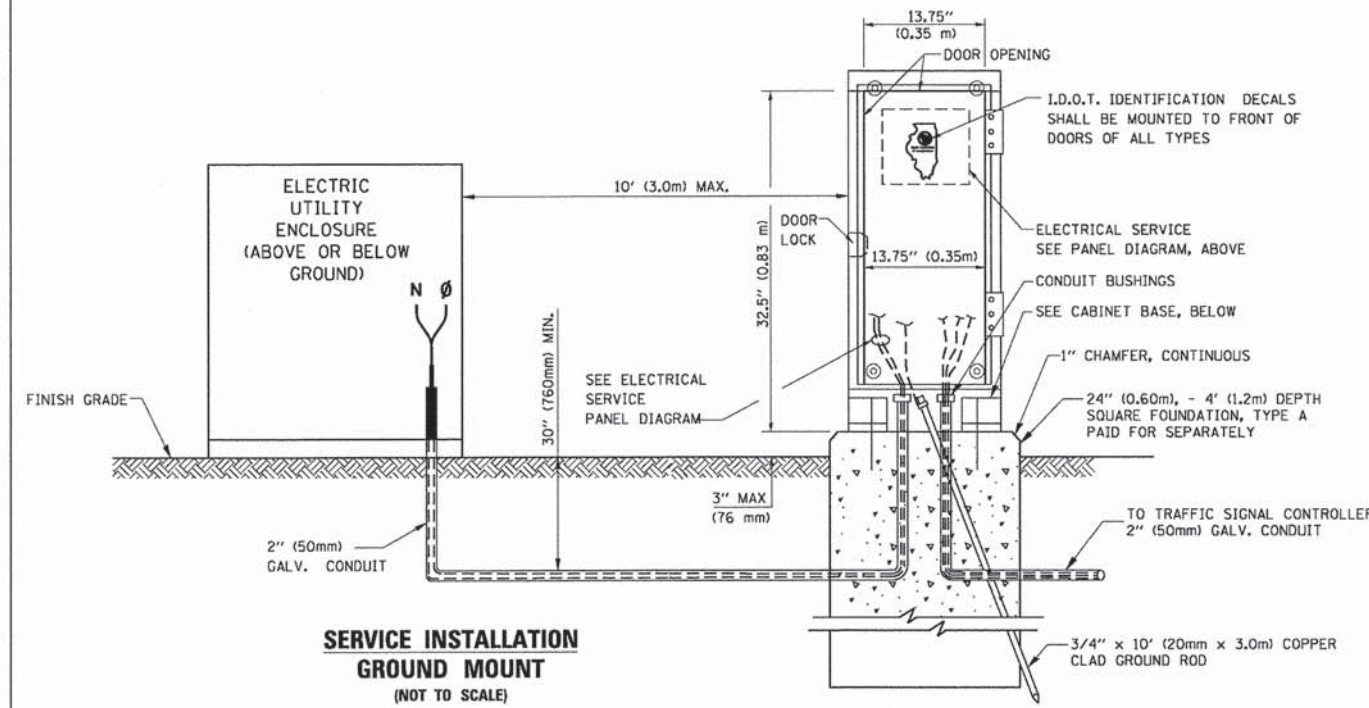
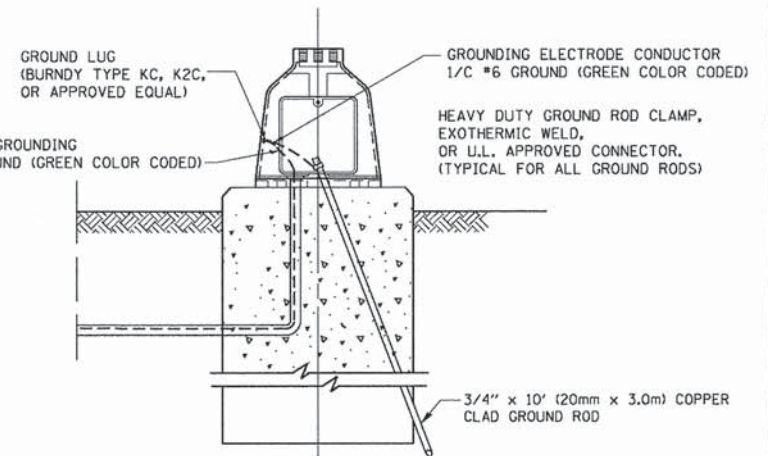
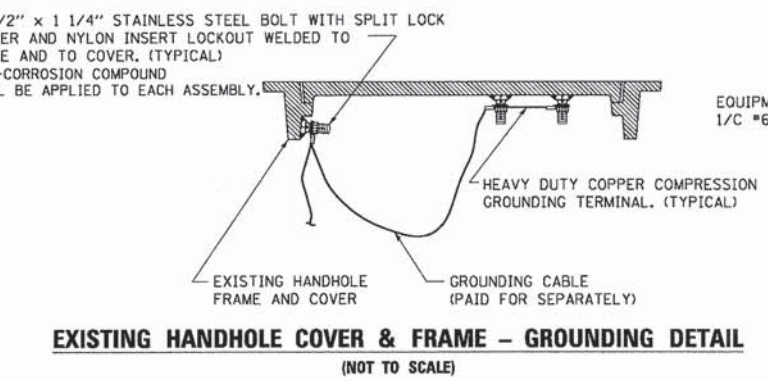


**NOTES:
GROUNDING SYSTEM**

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.



- 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.

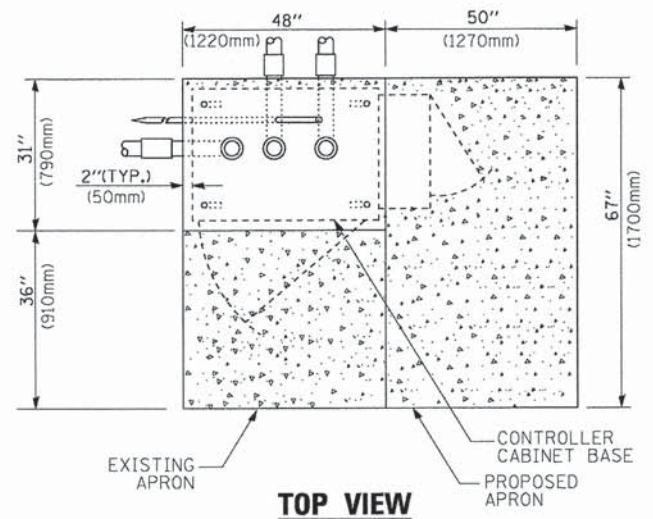


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		CHECKED - DAD	REVISED -
		DATE - 10-28-09	REVISED -

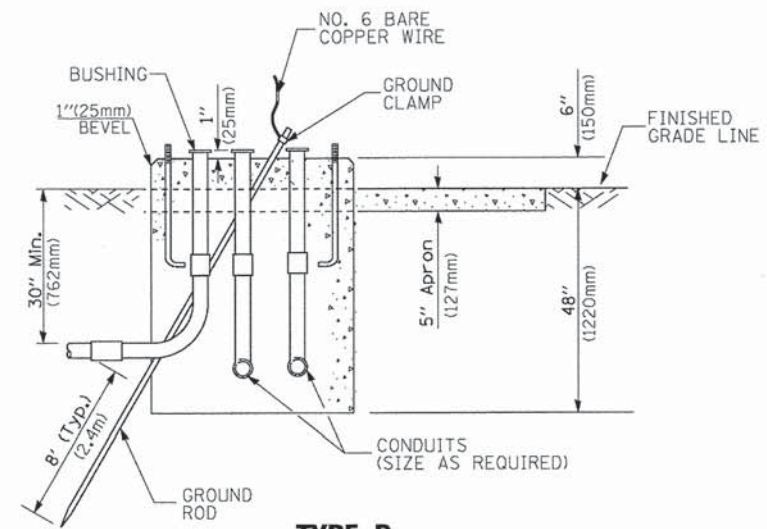
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

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

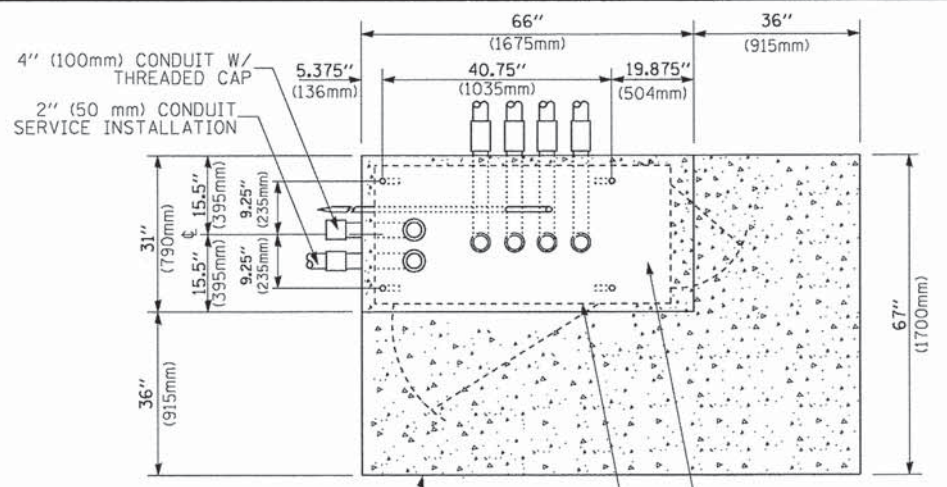
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2502, 1522 & 2546	13-00158-00-TL	DUPAGE & WILL.	84	81
	TS-05		CONTRACT NO. 61B84	
FED. ROAD DIST. NO. 1 (ILLINOIS) FED. AID PROJECT				



TOP VIEW

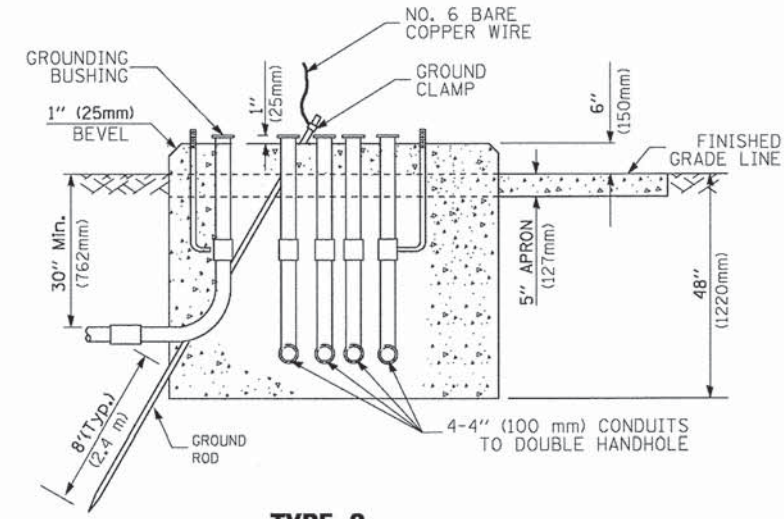


**TYPE D
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET**

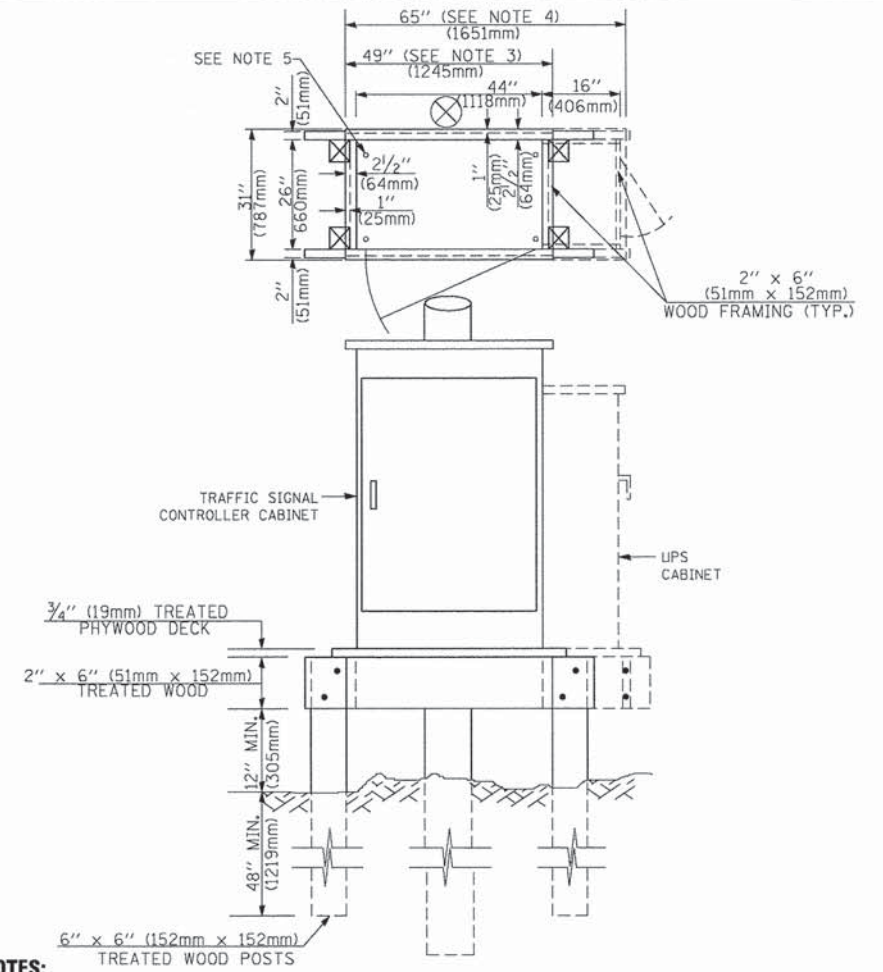


TOP VIEW

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



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



NOTES:

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

NOTES:

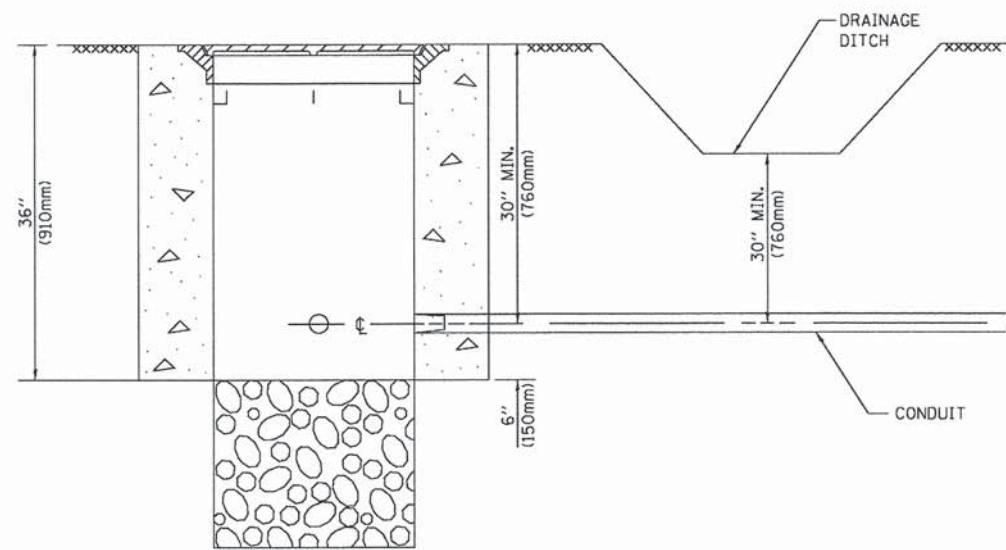
1. These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average Unconfined Compressive Strength (Qu) > 1.0 tsf (100 kpa). This strength shall be verified by boring data prior to construction or with testing by the Engineer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

DEPTH OF MAST ARM FOUNDATIONS, TYPE E

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

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

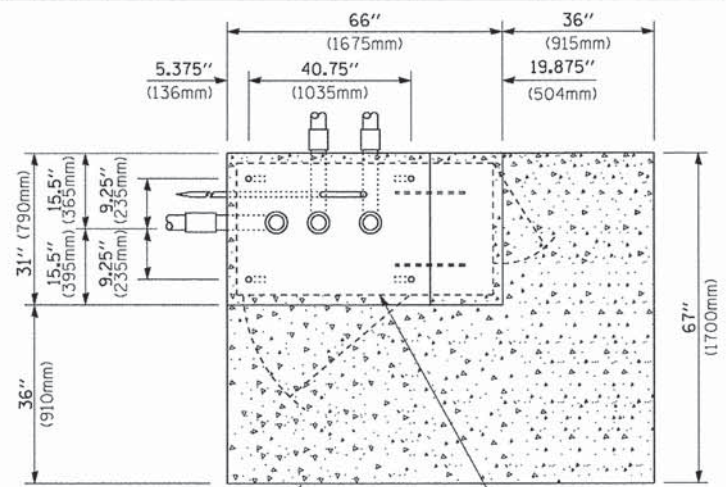
DISTRICT ONE		F.A.I.L. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STANDARD TRAFFIC SIGNAL DESIGN DETAILS		2552, 1522 & 2546	13-00158-00-TL	DUPAGE & WILL	84	82
SCALE: NONE		SHEET NO. 5 OF 7 SHEETS		STA. TO STA.	CONTRACT NO. 61B84	
		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



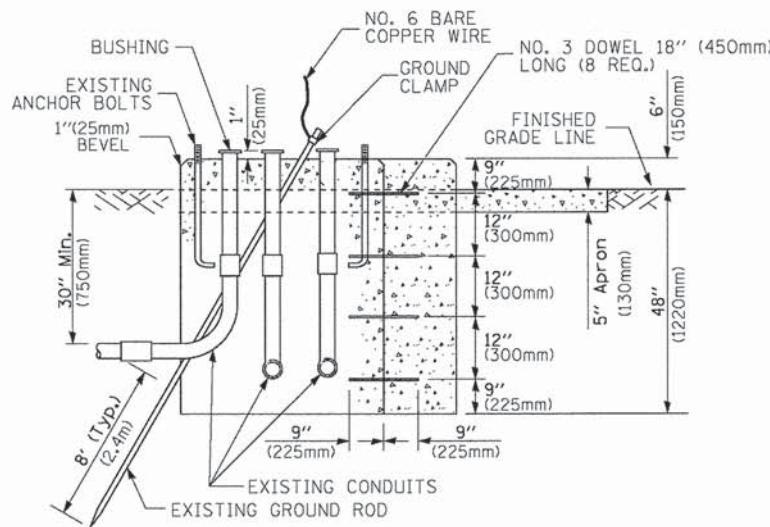
NOTES:

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

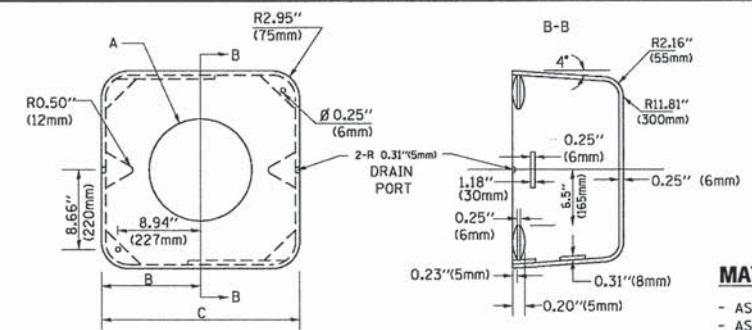
HANDHOLE WITH MINIMUM CONDUIT DEPTH
(NOT TO SCALE)



TOP VIEW
(NOT TO SCALE)



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



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)

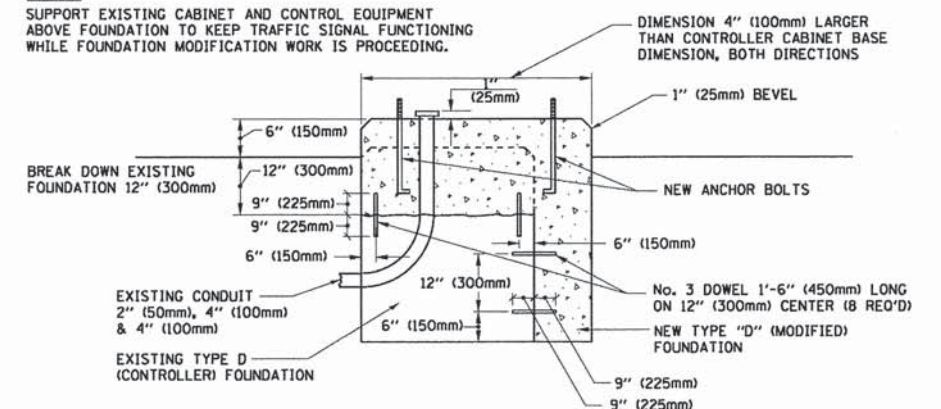
SHROUD

NOTES:

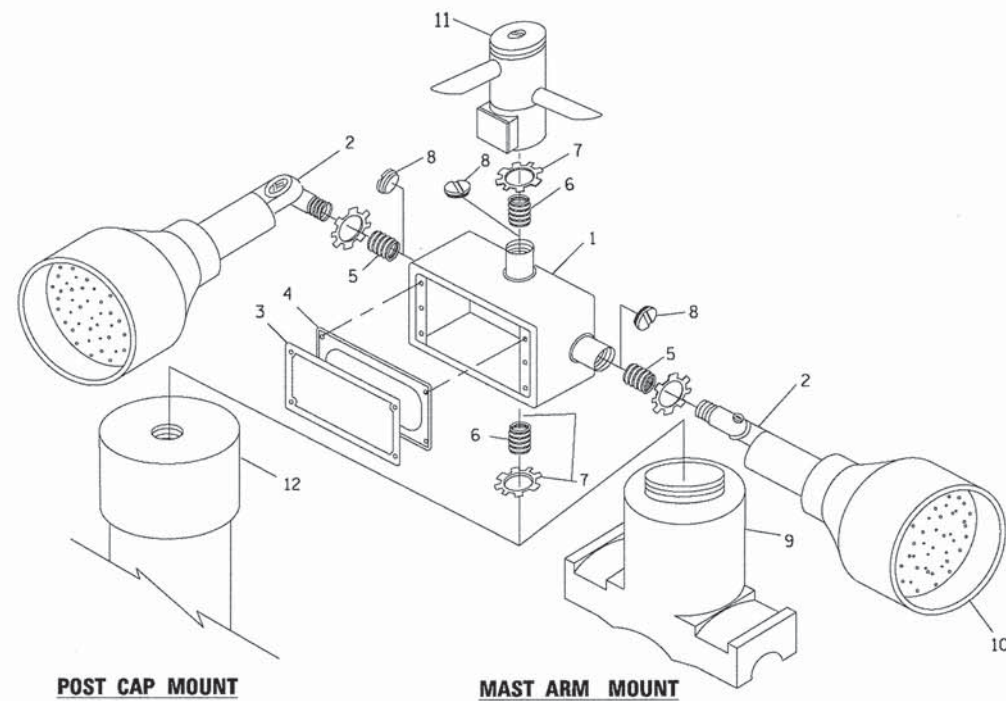
1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
2. THE SUPPLIER SHALL VERIFIED THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE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

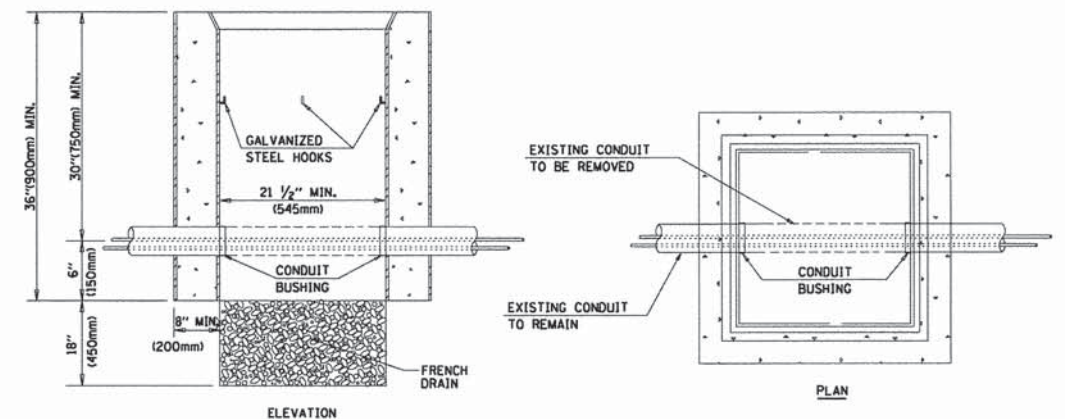


EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL

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	3/4" (19 mm) CLOSE NIPPLE
7	3/4" (19 mm) LOCKNUT
8	3/4" (19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

NOTES:

1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
2. ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT
ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT
ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
3. WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4" (19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.



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

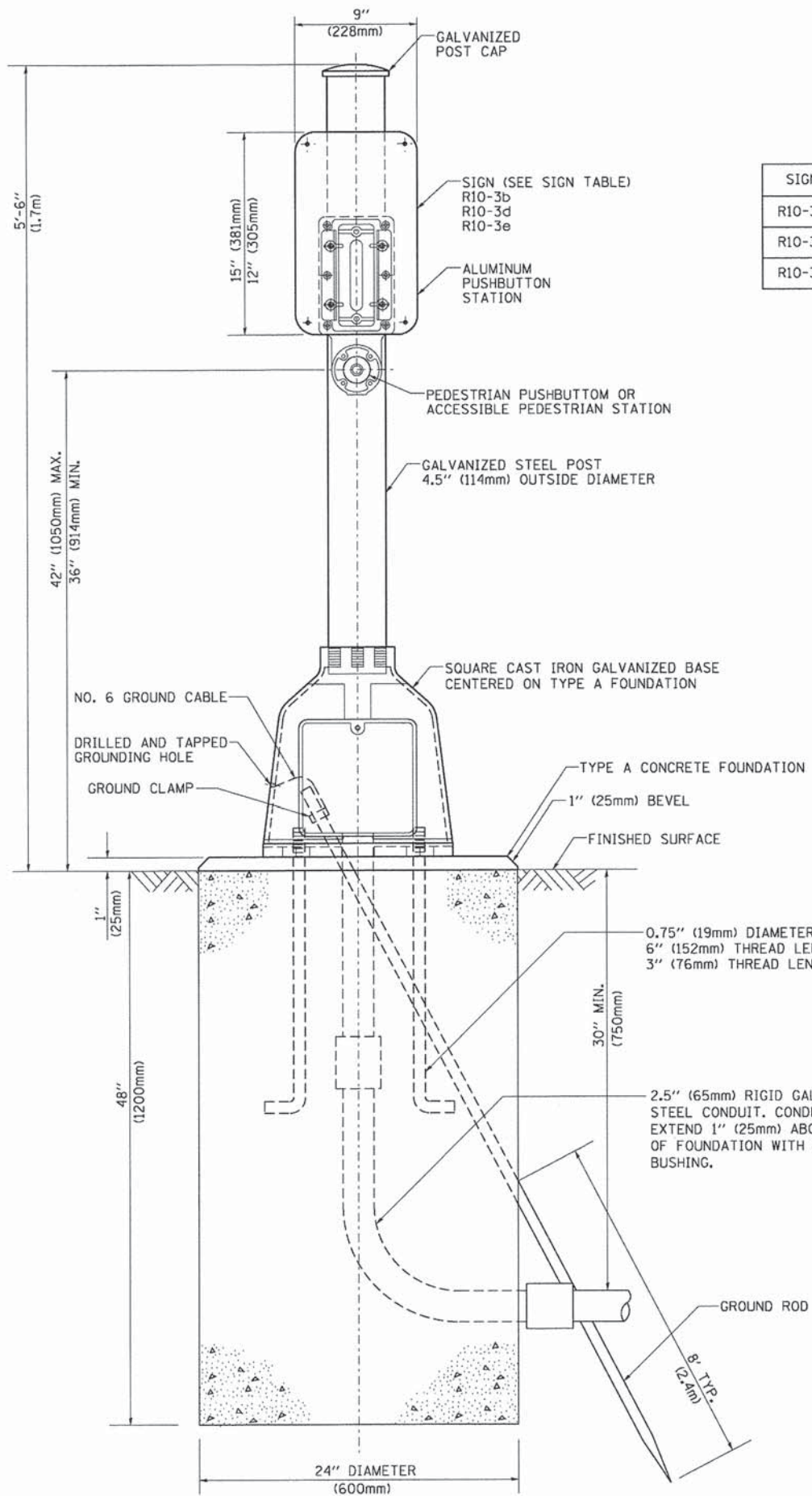
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		CHECKED - DAD	REVISED -
		DATE - 10-28-09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

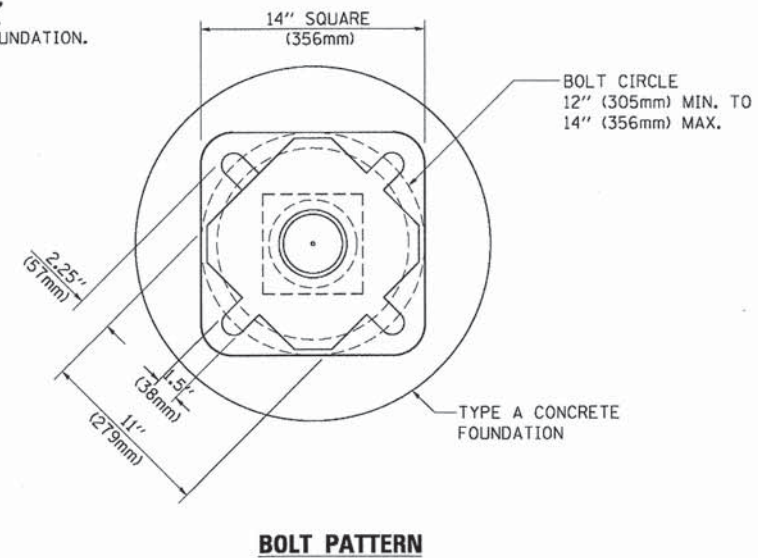
SCALE: NONE SHEET NO. 6 OF 7 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2550, 1522 & 2546	13-00158-00-TL	DUPAGE & WILL	84	83
	TS-05			CONTRACT NO. 61B84
FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT				



SIGN TABLE

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



BOLT PATTERN

PEDESTRIAN PUSH BUTTON POST, TYPE A

FILE NAME =	USER NAME = footemj	DESIGNED - DAG	REVISED - DAG 1-1-14
ca:\pwork\pwork\footemj\0108315\ts05.dgn		DRAWN - GND	REVISED -
PLOT SCALE = 50.0000' / 1"		CHECKED - DAD	REVISED -
PLOT DATE = 1/13/2014		DATE - 10/1/2012	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

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

F.A.I.L. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2552, 1522 & 2546	13-00158-00-TL	DUPAGE & WILL	84	84
TS-05		CONTRACT NO. 61B84		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				