

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIES	2012-070 I	DuPAGE	103	1
		ILLINOIS	CONTRACT NO. 60V80	

FOR INDEX OF SHEETS, SEE SHEET NO. 2

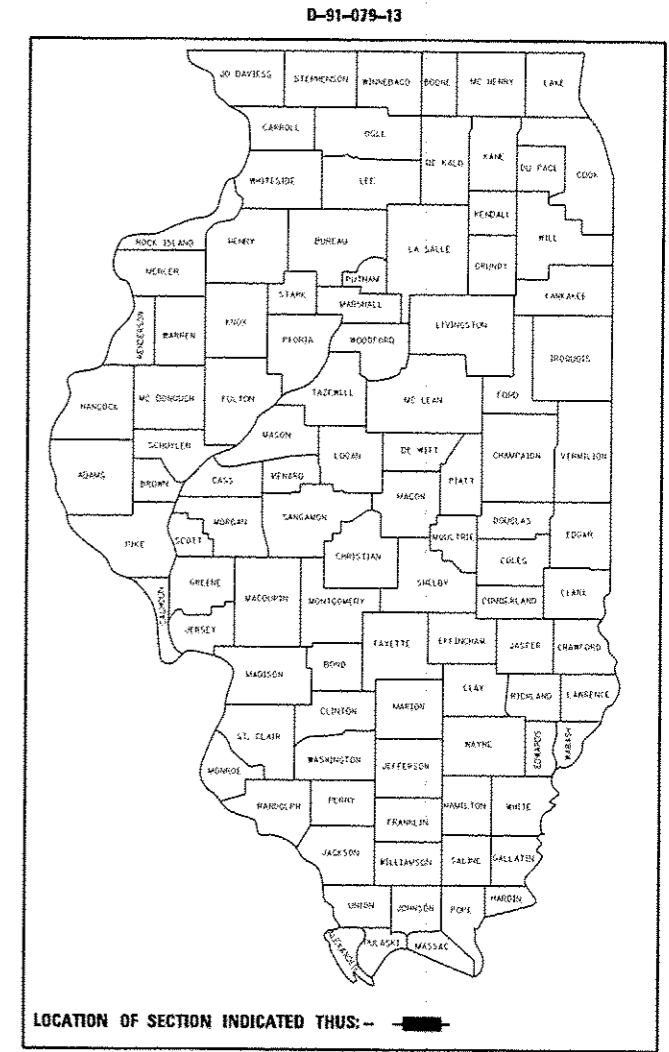
**PROPOSED
HIGHWAY PLANS**

**VARIOUS LOCATIONS IN NORTH DuPAGE COUNTY
LIGHT EMITTING DIODE (LED) INSTALLATION
SECTION 2012-070 I
DuPAGE COUNTY
C-91-079-13**

HIGHWAY STANDARDS

- 701006-04 OFF-ROAD OPERATIONS 2L, 2W, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
- 701101-03 OFF-ROAD OPERATIONS MULTILANE, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
- 701701-08 URBAN LNE CLOSURE MULTILANE INTERSECTION
- 701901-02 TRAFFIC CONTROL DEVICES
- 857001-01 STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
- 862001-01 UNINTERRUPTABLE POWER SUPPLY (UPS)
- 880006-01 TRAFFIC SIGNAL MOUNTING DETAILS
- 880001-01 SPAN WIRE MOUNTED SIGNALS AND FLASHING BEACON INSTALLATION

FINAL



SIGNED: *Kevin L. Belgrave*
KEVIN L. BELGRAVE, EXP. 11/30/2013
DATE: *Dec 19, 2012*

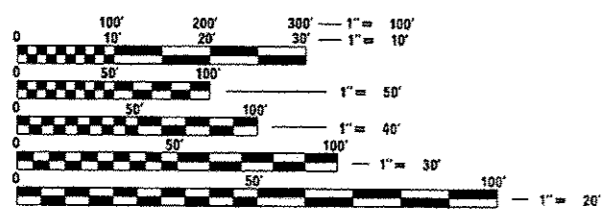
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED *Dec 20 2012*
John Lockman
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

Feb 1 2013
John D. Baumgardner, P.E.
acting ENGINEER OF DESIGN AND ENVIRONMENT

Feb 1 2013
Omer Osman, P.E.
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

DuPAGE COUNTY
LOCATION MAP
SEE SHEET NO. 3



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

DISTRICT 1 - TRAFFIC SIGNAL DESIGN - SUDAD MAHMOUD (847) 705-4420

TRAFFIC SIGNAL PLANS

NO.	TS *	MUNICIPALITY	INTERSECTION NAME
1.	6043	ADDISON	U.S. 20 AT GREENBRIAR DRIVE
2.	11105	ADDISON	U.S. 20 AT SWIFT ROAD
3.	12513	ADDISON	U.S. 20 AT MARCUS CINEMA DRIVE
4.	12505	ADDISON	U.S. 20 AT LOMBARD ROAD / FOXDALE ROAD
5.	12500	ADDISON	U.S. 20 AT ITASCA ROAD
6.	12510	ADDISON	U.S. 20 AT MILL ROAD
7.	12515	ADDISON	U.S. 20 AT JOHN F. KENNEDY DRIVE
8.	6020	ADDISON	U.S. 20 AT ADDISON ROAD
9.	6070	ADDISON	U.S. 20 AT WOOD DALE ROAD / VILLA AVENUE
10.	6015	ADDISON	U.S. 20 AT IL 83 WEST RAMP (A&B)
11.	6495	ADDISON	IL 64 AT WESTWOOD AVENUE / LINCOLN AVENUE
12.	12520	ADDISON	IL 53 AT FULLERTON AVENUE / COLLINS AVENUE
13.	6378	BARTLETT	IL 59 AT APPLE VALLEY DRIVE
14.	6377	BARTLETT	IL 59 AT STRUCKMAN BOULEVARD
15.	6379	BARTLETT	IL 59 AT WOODLAND HILLS PARKWAY
16.	22125	BARTLETT	IL 59 AT SCHICK ROAD
17.	6160	BENSENVILLE	IL 19 AT SPRUCE AVENUE
18.	6140	BENSENVILLE	IL 19 AT MARSHALL ROAD
19.	12065	BENSENVILLE	IL 19 AT CHURCH ROAD
20.	610	BENSENVILLE	IL 83 AT MARK STREET
21.	650	BENSENVILLE	IL 83 AT THORNDALE AVENUE
22.	590	BENSENVILLE	IL 83 AT FOSTER AVENUE
23.	600	BENSENVILLE	IL 83 AT HILLSIDE DRIVE
24.	595	BENSENVILLE	IL 83 AT GROVE AVENUE / SHERWOOD DRIVE
25.	545	BENSENVILLE	IL 83 AT THIRD AVENUE
26.	6085	BLOOMINGDALE	U.S. 20 AT ROSEDALE AVENUE
27.	4600	BLOOMINGDALE	U.S. 20 AT BLOOMINGDALE ROAD
28.	4610	BLOOMINGDALE	U.S. 20 AT SPRINGBROOK CENTER / SUNRISE DRIVEWAY
29.	4595	BLOOMINGDALE	U.S. 20 AT FAIRFIELD WAY
30.	4605	BLOOMINGDALE	U.S. 20 AT CIRCLE DRIVE
31.	6037	BLOOMINGDALE	U.S. 20 AT EUCLID DRIVE / LAKEVIEW DRIVE
32.	6035	BLOOMINGDALE	U.S. 20 AT GLEN ELLYN ROAD
33.	6045	BLOOMINGDALE	U.S. 20 AT MEDINAH ROAD
34.	12376	CAROL STREAM	IL 64 AT FAIR OAKS ROAD / ANCIENT OAKS ROAD
35.	6425	CAROL STREAM	IL 64 AT COUNTY FARM ROAD
36.	6445	CAROL STREAM	IL 64 AT KUHN ROAD
37.	6435	CAROL STREAM	IL 64 AT GARY AVENUE
38.	6465	CAROL STREAM	IL 64 AT SCHMALE ROAD
39.	21395	CAROL STREAM	IL 64 AT PRESIDENT STREET / FIRESIDE DRIVE
40.	6420	GLENDALE HEIGHTS	IL 64 AT BLOOMINGDALE ROAD
41.	11390	GLENDALE HEIGHTS	IL 64 AT GLENDALE SQUARE MENARD'S
42.	6450	GLENDALE HEIGHTS	IL 64 AT GLEN ELLYN ROAD / MAIN STREET
43.	21910	HANOVER PARK	U.S. 20 AT ELGIN / O'HARE EXPRESSWAY RAMP "D"
44.	13770	HANOVER PARK	U.S. 20 AT GREENBROOK BOULEVARD
45.	7870	HANOVER PARK	U.S. 20 AT BARTELS ROAD / ARLINGTON DRIVE
46.	6163	ITASCA	IL 19 AT CATALPA AVENUE
47.	6164	ITASCA	IL 19 AT BLOOMINGDALE ROAD
48.	6456	LOMBARD	IL 64 AT LOMBARD ROAD
49.	6455	LOMBARD	IL 64 AT MAIN STREET - LOMBARD
50.	6440	LOMBARD	IL 64 AT GRACE STREET
51.	12320	LOMBARD	IL 38 AT FINLEY ROAD
52.	12325	LOMBARD	IL 38 AT MAIN STREET
53.	14065	LOMBARD	IL 38 AT HIGHLAND AVENUE
54.	11180	LOMBARD	IL 38 AT FAIRFIELD ROAD
55.	11415	LOMBARD	IL 38 AT LOMBARD SHOPPING CENTER
56.	6310	LOMBARD	IL 56 AT FAIRFIELD AVENUE
57.	21870	LOMBARD	IL 56 AT TECHNOLOGY DRIVE / MAXANT DRIVE
58.	6293	LOMBARD	IL 56 AT FOUNTAIN SQUARE DRIVE
59.	22135	LOMBARD	IL 53 AT SIDNEY AVENUE
60.	6215	LOMBARD	IL 53 AT IL 64
61.	6235	LOMBARD	IL 53 AT ST. CHARLES ROAD
62.	9037	ROSELLE	IL 19 AT LAWRENCE AVENUE
63.	9100	ROSELLE	IL 19 AT MAPLE AVENUE
64.	6145	ROSELLE	IL 19 AT MEDINAH ROAD
65.	6030	ROSELLE	U.S. 20 AT GARY AVENUE
66.	7875	ROSELLE	U.S. 20 AT BRYN MAWR AVENUE
67.	22025	ROSELLE	U.S. 20 AT RODENBURG ROAD
68.	6065	ROSELLE	U.S. 20 AT SPRINGFIELD DRIVE
69.	6365	WAYNE	IL 59 AT ARMY TRAIL ROAD
70.	6366	WAYNE	IL 59 AT SMITH ROAD
71.	12375	WEST CHICAGO	IL 64 AT PRINCE CROSSING
72.	6185	WEST CHICAGO	IL 38 AT KRESS ROAD
73.	6175	WEST CHICAGO	IL 38 AT FABYAN PARKWAY / WASHINGTON STREET
74.	6180	WEST CHICAGO	IL 38 AT JOLIET STREET
75.	22115	WEST CHICAGO	IL 59 AT DIVERSEY PARKWAY
76.	6355	WEST CHICAGO	IL 64 AT IL 59
77.	22110	WEST CHICAGO	IL 59 AT INGLATON AVENUE
78.	8853	WEST CHICAGO	IL 59 AT HAWTHORNE LANE
79.	8850	WEST CHICAGO	IL 59 AT JAMES AVENUE
80.	6390	WEST CHICAGO	IL 59 AT FOREST AVENUE
81.	12020	WEST CHICAGO	IL 59 AT JOLIET STREET / EDGEWOOD WALK
82.	6170	WOOD DALE	IL 19 AT PROSPECT AVENUE
83.	15090	WOOD DALE	IL 19 AT ADDISON ROAD
84.	15100	WOOD DALE	IL 19 AT WOOD DALE ROAD

FILE NAME : 60V88-084-gennote.dgn	USER NAME : zwilston	DESIGNED - JRD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	LOCATION MAP INTERSECTION NUMBERS				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Default	PLOT SCALE : 1:20	DRAWN - ZCW	REVISED -		SCALE: NONE	SHEET	OF	SHEETS	STA.	TO STA.	DUPAGE	103	4
	PLOT DATE : 12/28/2012	CHECKED - KLB	REVISED -										
		DATE - 12-20-12	REVISED -										

GHA #4085.887

ILLINOIS FED. AID PROJECT

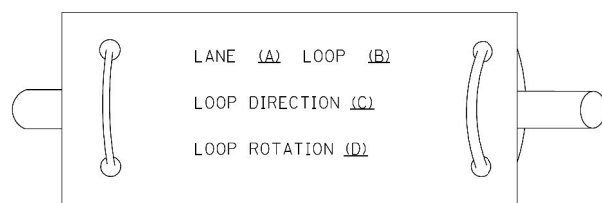
SUMMARY OF QUANTITIES		CONSTRUCTION CODE																																		35	36	
		TRAFFIC SIGNAL																																				
		URBAN																																				
CODE NO.	ITEM	UNIT	TOTAL	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
89500100	RELOCATE EXISTING SIGNAL HEAD	EACH	12																																			4
89502210	MODIFY EXISTING CONTROLLER CABINET	EACH	70	6	2	12	1	1	1	1	7		3	1	2	3	1	1	1	1	1	7	1	2	1	2	1	1	4	2	1			1		1		
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	57	3	1	11			1		5	1	2	3	3	3		1	1		1	1	5		1	2		1	3	1	1	1	1		1	1		
X8570226	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	10	1		3								2	1																			1	1	1		
X8570231	FULL-ACTUATED CONTROLLER AND TYPE V CABINET, SPECIAL	EACH	1																																			
X8600105	MASTER CONTROLLER (SPECIAL)	EACH	1																																			
X8620050	UNINTERRUPTABLE POWER SUPPLY, GROUND MOUNTED	EACH	1			1																																
X8620200	UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	81	7	2	14	1	1	1	1	7		3	3	3	3	1	1	1		1	1	7	1	2	1	2	1	1	5	2	1	1	1	1	1		
X8800025	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, SPAN WIRE MOUNTED, RETROFIT	EACH	4																																		4	
X8800046	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, SPAN WIRE MOUNTED, RETROFIT	EACH	8																																		8	
X8803040	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED, RETROFIT	EACH	27	2	1	16			1							2																				2	2	
X8803050	SIGNAL HEAD, LED, 3-FACE, 1-3 SECTION, 2-5 SECTION, BRACKET MOUNTED, RETROFIT	EACH	4										2																								2	
X8803060	SIGNAL HEAD, LED, 3-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	2	1												1																						
X8803082	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	37	11	2	3							3		11	2																				2	2	1

Rev. GHA #4085.887

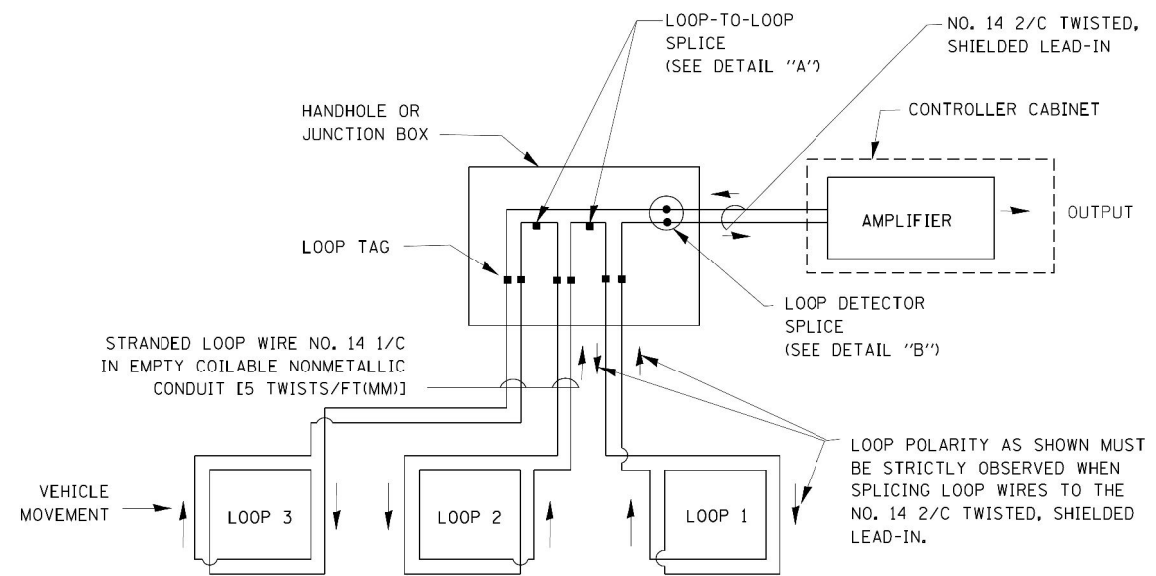
LOOP DETECTOR NOTES

1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

LOOP LEAD-IN CABLE TAG

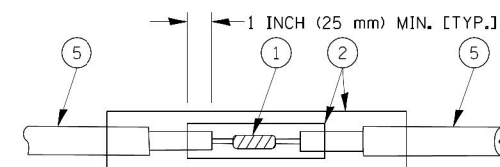


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

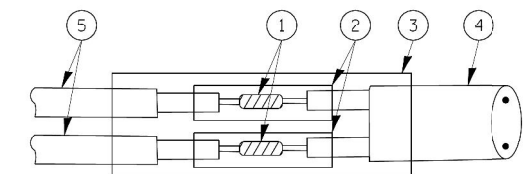


DETECTOR LOOP WIRING SCHEMATIC

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

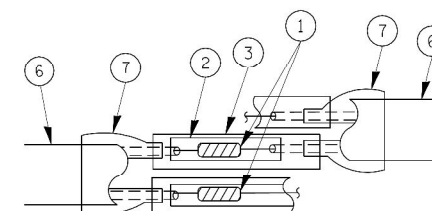


**DETAIL "A"
LOOP-TO-LOOP SPLICE**

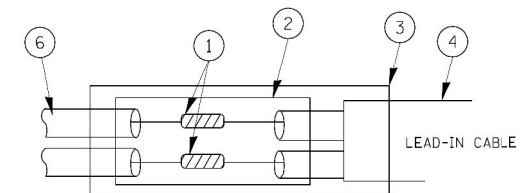


**DETAIL "B"
LOOP-TO-CONTROLLER SPLICE**

TYPE I LOOP



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



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

LOOP DETECTOR SPLICE

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

FILE NAME = 60V80-011-intersec.dgn	USER NAME = zwallsten	DESIGNED - DAD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - BCK	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - DAD	REVISED -
		DATE - 10-28-09	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

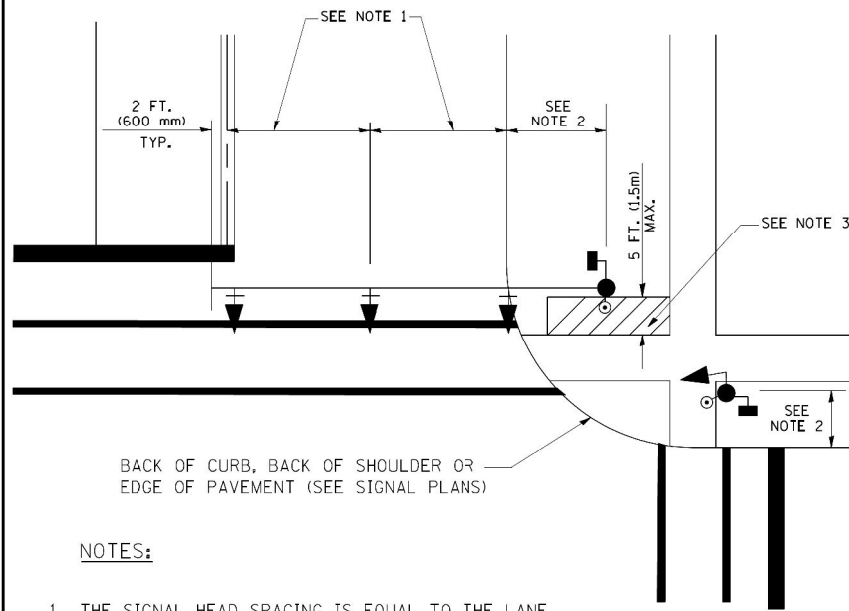
DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS			
SCALE: NONE	SHEET 1	OF 6 SHEETS	STA. TO STA.

F.A. RTÉ.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIES	2012-070 1	WILL	103	11
TS-05			CONTRACT NO. 60V80	
ILLINOIS FED. AID PROJECT				

GHA #4085.887

TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

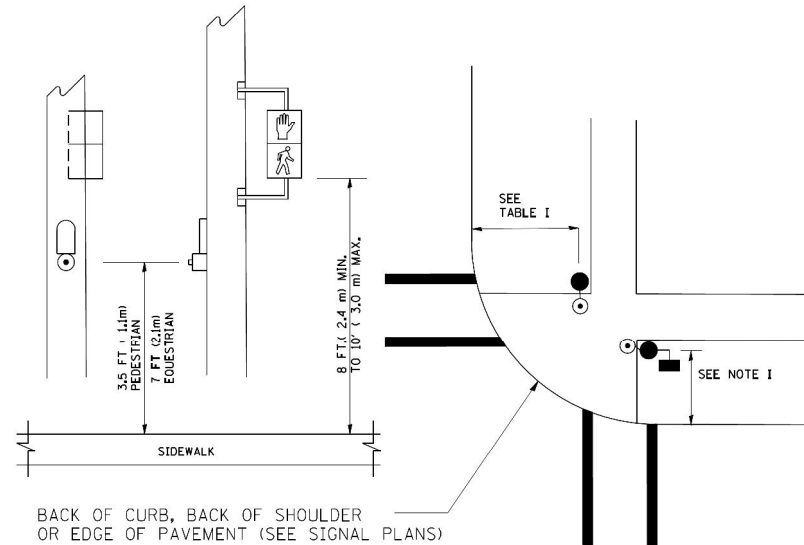
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



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."

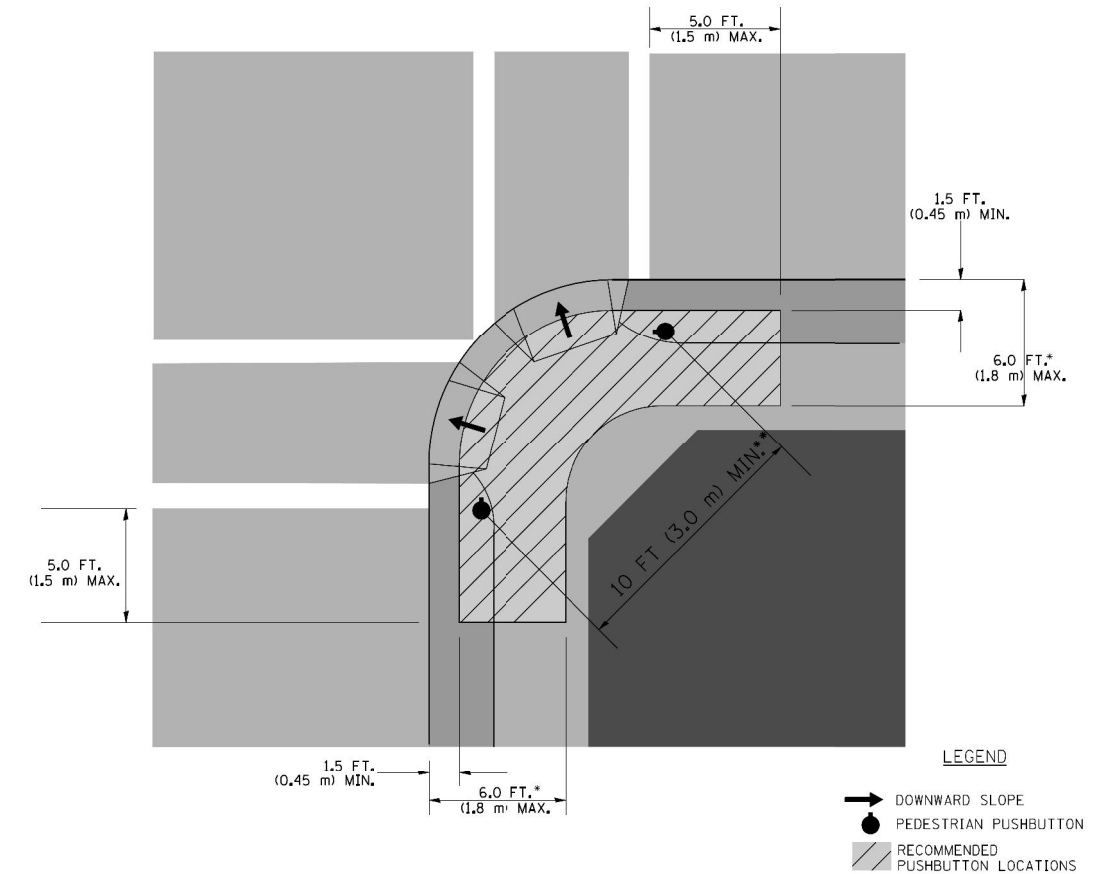
PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST



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.

FILE NAME = 60V80-012-intersec.dgn
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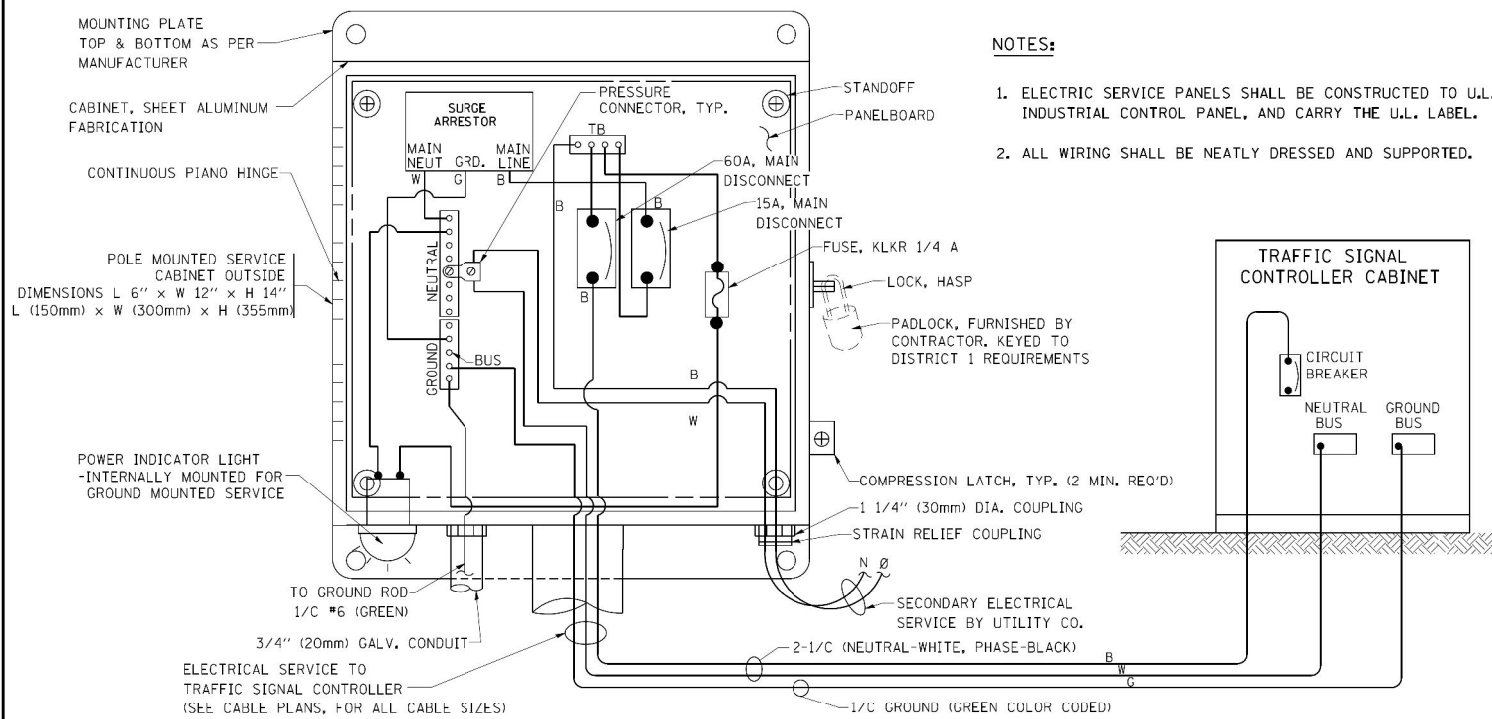
USER NAME = zwallsten
DESIGNED - DAD
DRAWN - BCK
CHECKED - DAD
DATE - 10-28-09

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

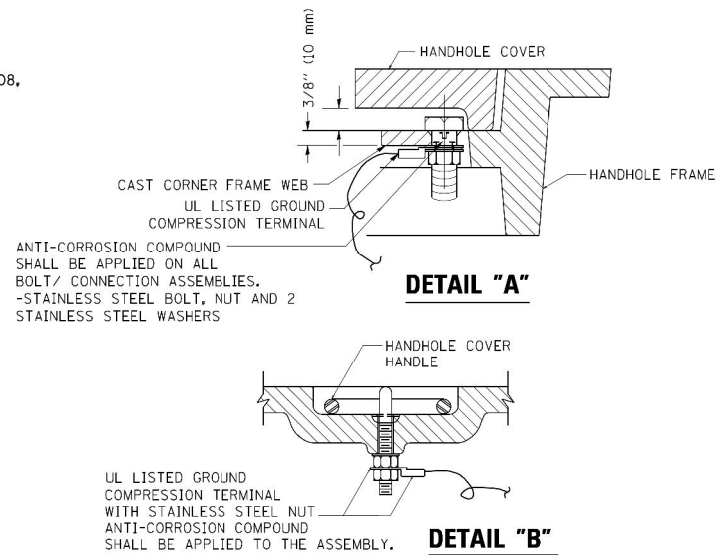
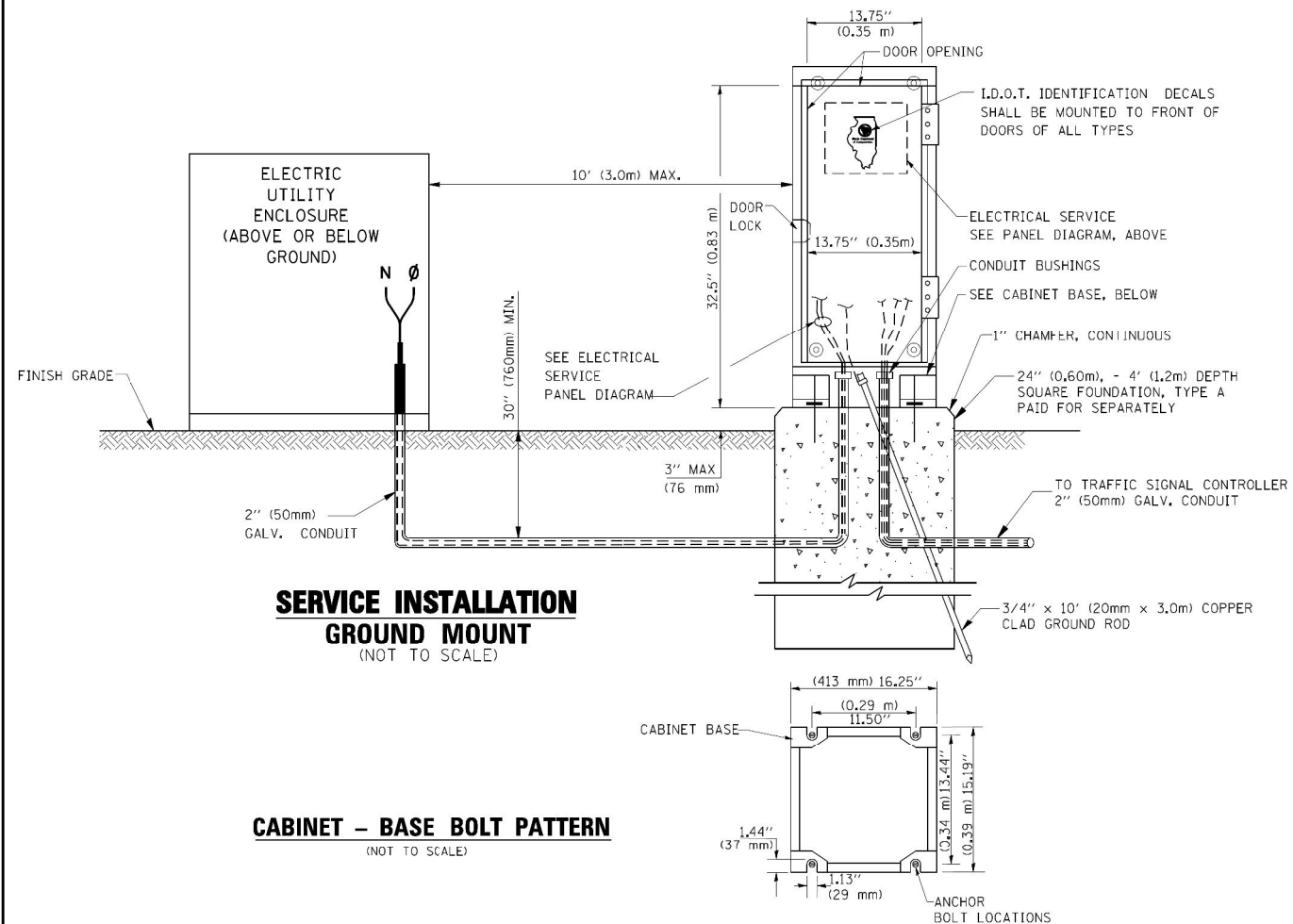
**DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**
SCALE: NONE SHEET 2 OF 6 SHEETS STA. TO STA.

GHA #4085,887
F.A. RTÉ. SECTION COUNTY TOTAL SHEETS SHEET NO.
VARIES 2012-070 1 WILL 103 12
TS-05 CONTRACT NO. 60V80
ILLINOIS FED. AID PROJECT



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

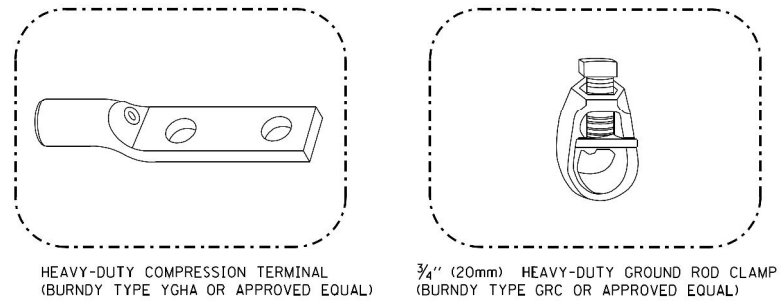
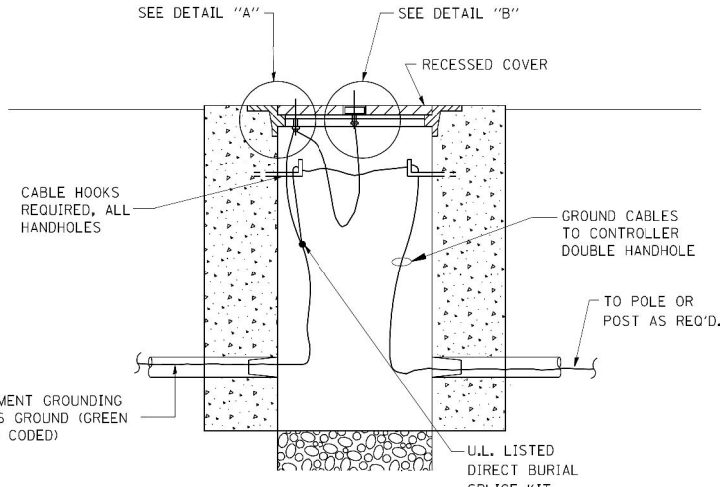
SERVICE INSTALLATION POLE MOUNT (SHOWN)
(NOT TO SCALE)



NOTES:

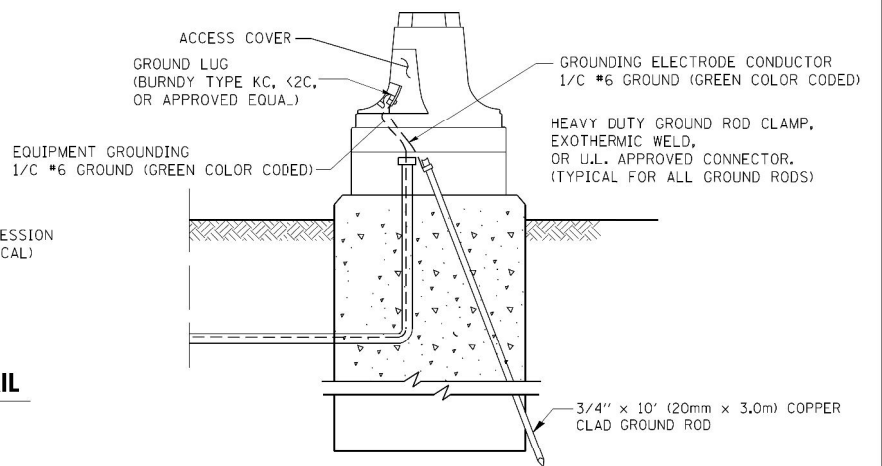
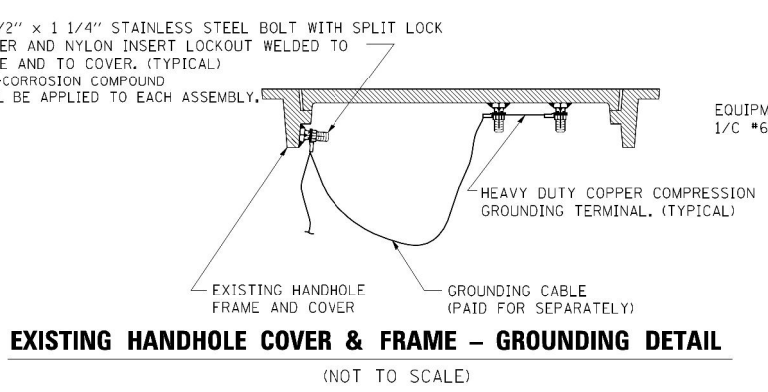
GROUNDING SYSTEM

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



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.



FILE NAME = 60V80-013-intersec.dgn	USER NAME = zwallsten	DESIGNED - DAD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - BCK	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - DAD	REVISED -
		DATE - 10-28-09	REVISED -

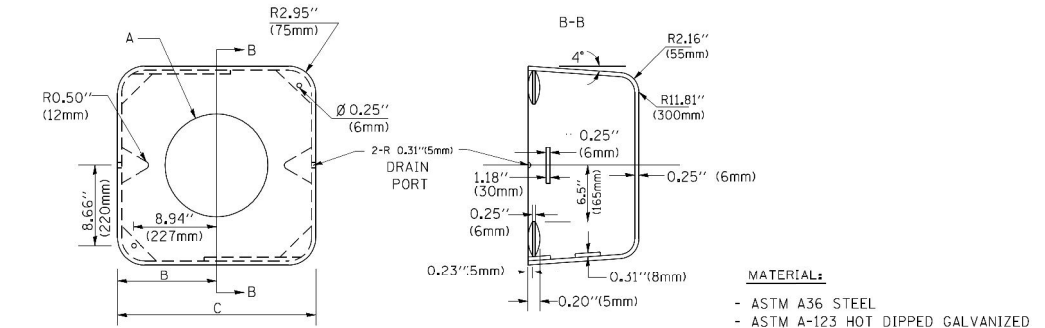
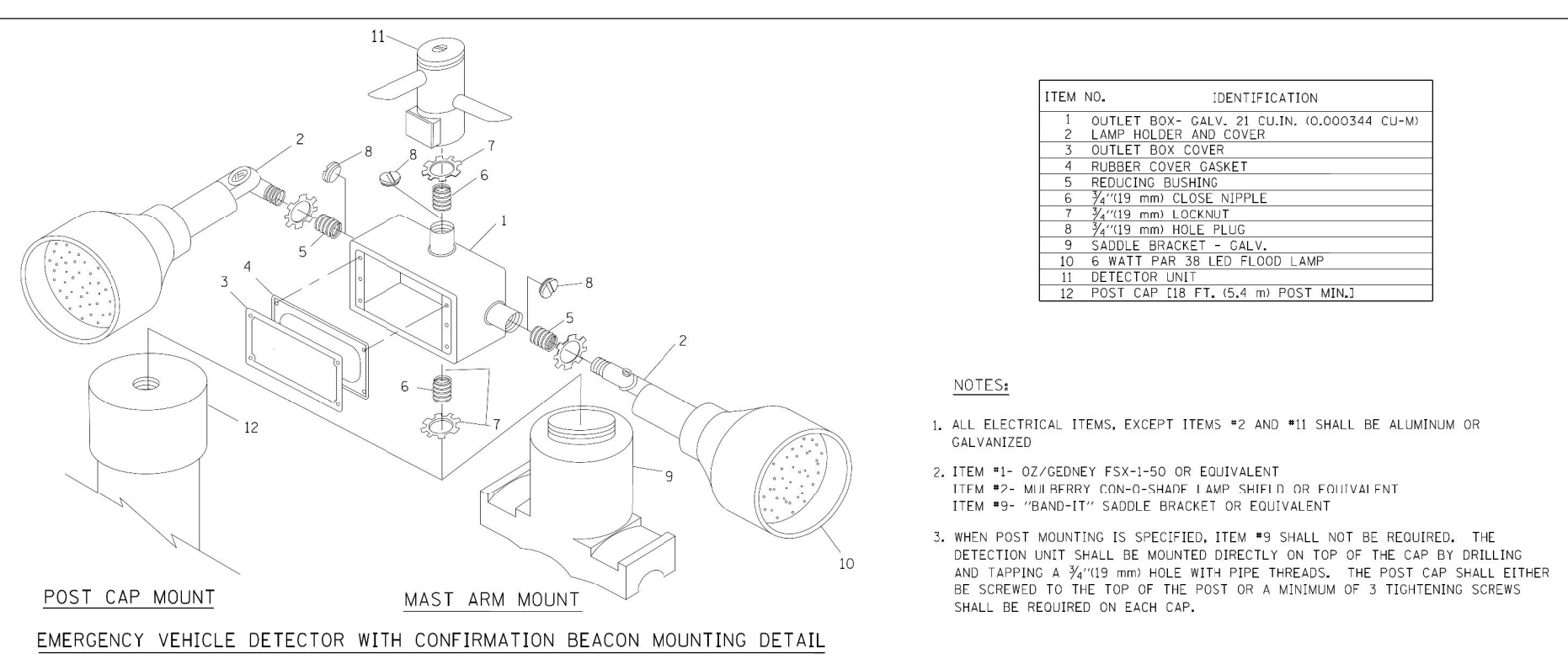
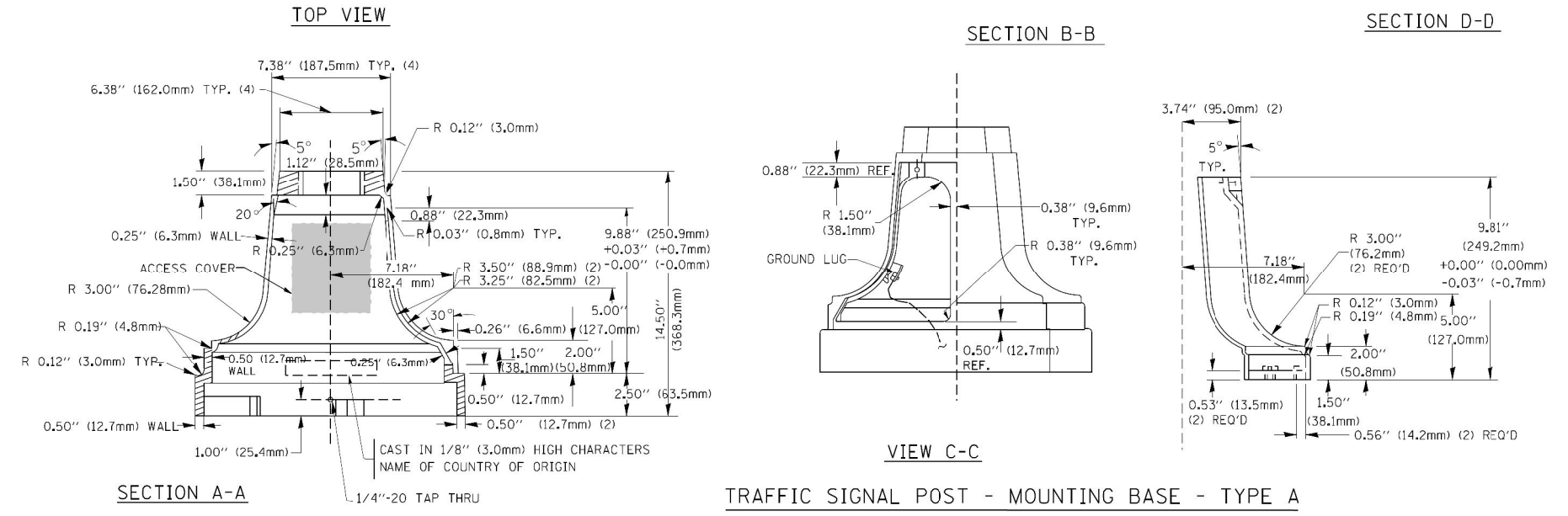
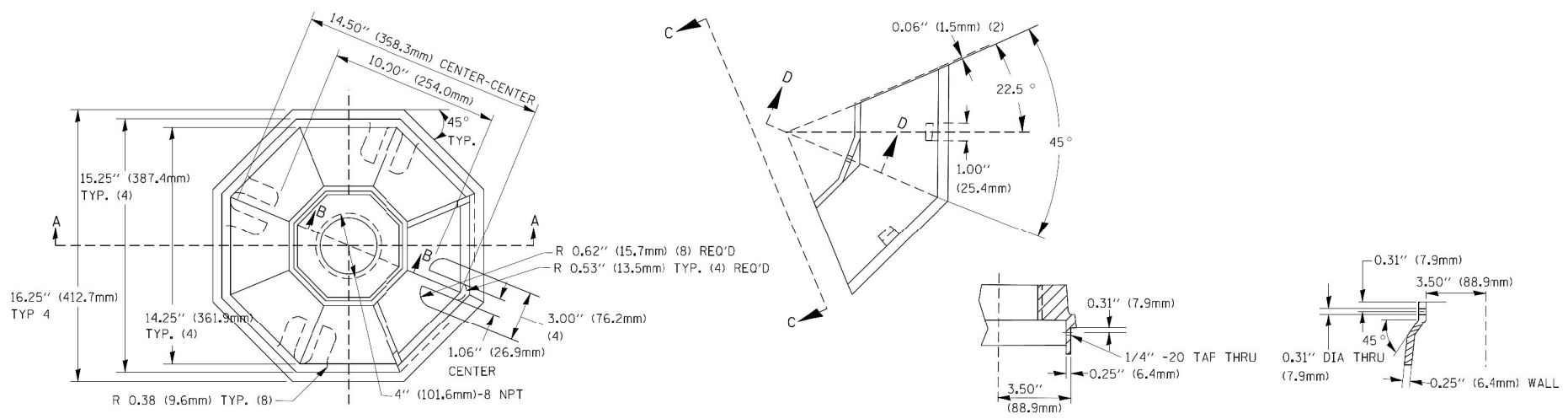
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: NONE SHEET 3 OF 6 SHEETS STA. TO STA.

F.A. RTÉ. VARIES	SECTION 2012-070 I TS-05	COUNTY WILL	TOTAL SHEETS 103	SHEET NO. 13
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60V80	

GHA #4085.887

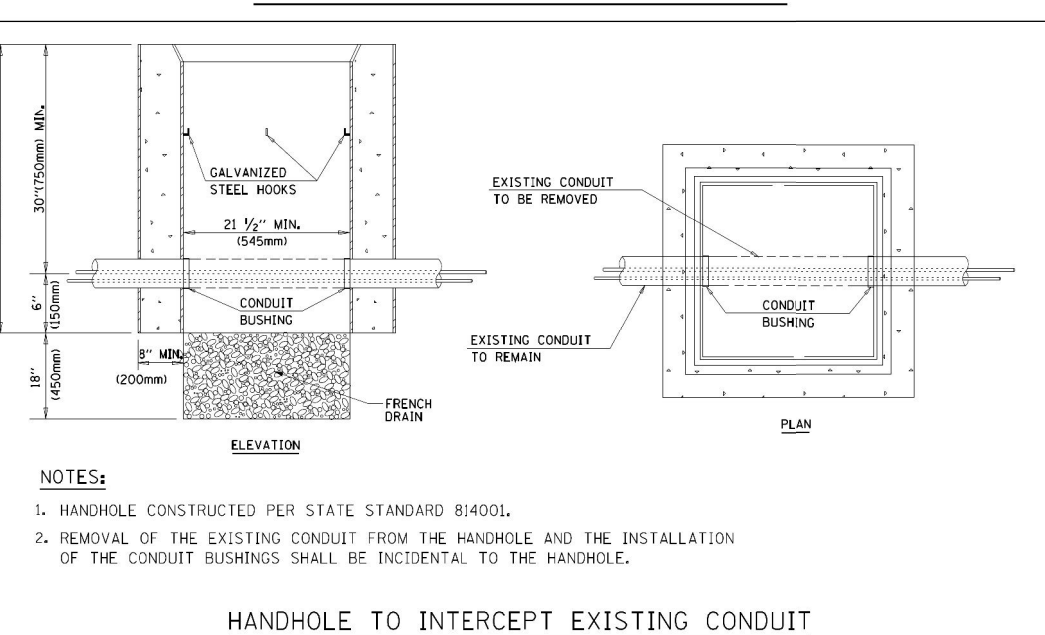
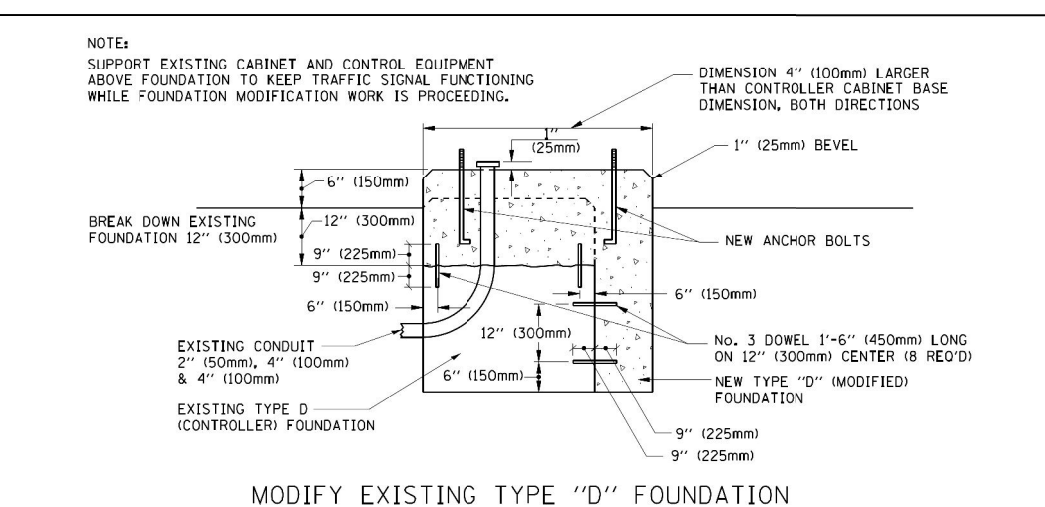


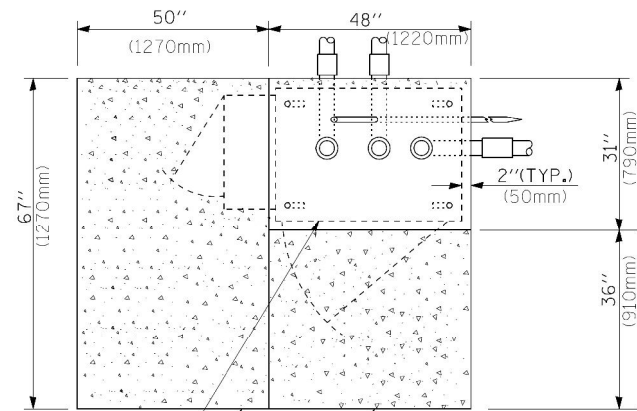
A	B	C	HEIGHT	WEIGHT
VARIABLES	9.5\"(241mm)	19\"(483mm)	7\"(178mm) - 12\"(300mm)	53 lbs (24kg)
VARIABLES	10.75\"(273mm)	21.5\"(546mm)	7\"(178mm) - 12\"(300mm)	68 lbs (31 kg)
VARIABLES	13.0\"(330mm)	26\"(660mm)	7\"(178mm) - 12\"(300mm)	81 lbs (37 kg)
VARIABLES	18.5\"(470mm)	37\"(940mm)	7\"(178mm) - 12\"(300mm)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

SHROUD

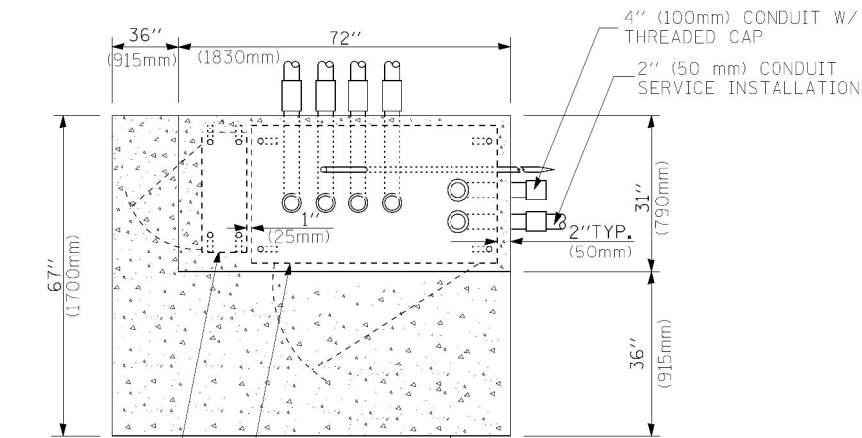
NOTES:

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

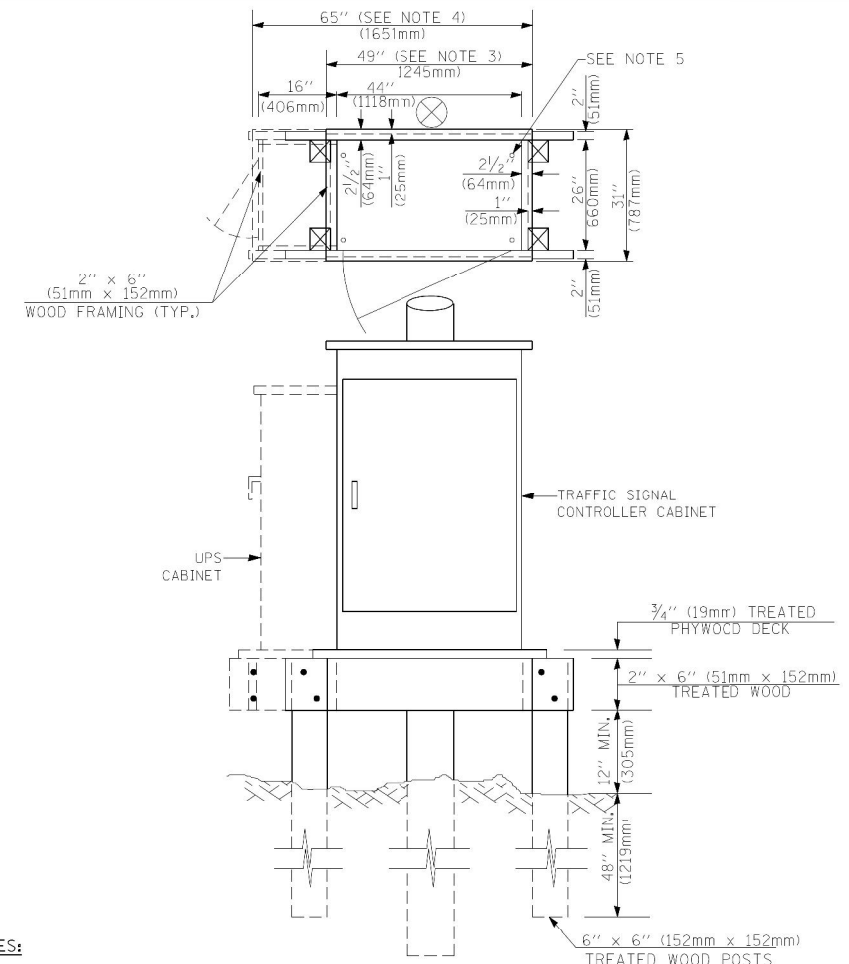




TOP VIEW



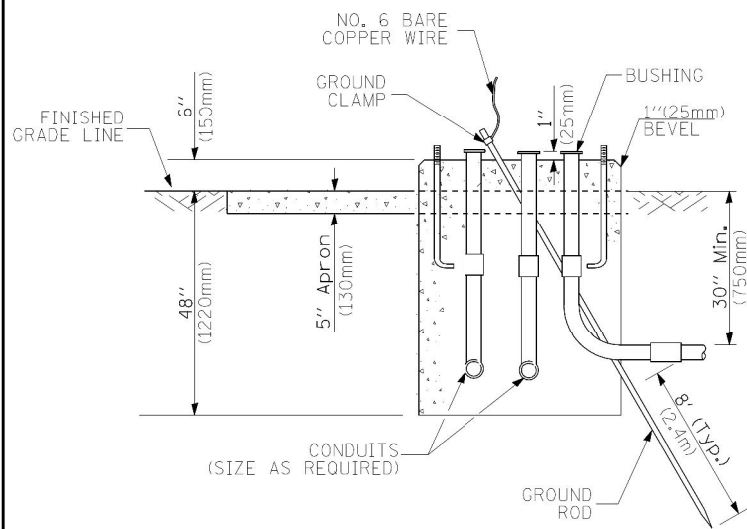
TOP VIEW



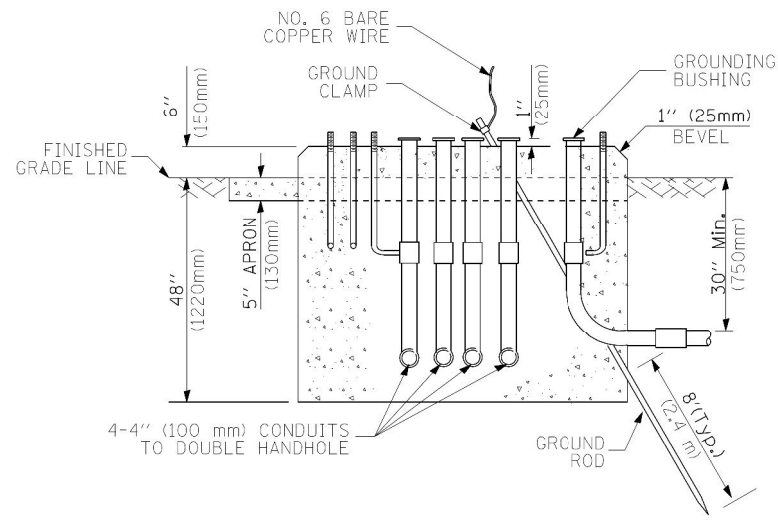
NOTES:

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



TYPE D FOR GROUND MOUNTED CONTROLLER CABINET AND UPS BATTERY CABINET



TYPE C FOR GROUND MOUNTED CONTROLLER CABINET AND UPS BATTERY CABINET

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

CABLE SLACK

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

VERTICAL CABLE LENGTH

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

DEPTH OF FOUNDATION

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

NOTES:

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

DEPTH OF MAST ARM FOUNDATIONS, TYPE E

FILE NAME = 60V80-015-intersec.dgn	USER NAME = zwallsten	DESIGNED - DAD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - BCK	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - DAD	REVISED -
		DATE - 10-28-09	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE SHEET 5 OF 6 SHEETS STA. TO STA.

F.A. RTE. VARIES	SECTION 2012-070 I TS-05	COUNTY WILL	TOTAL SHEETS 103	SHEET NO. 15	CONTRACT NO. 60V80
ILLINOIS FED. AID PROJECT					

GHA #4085.887

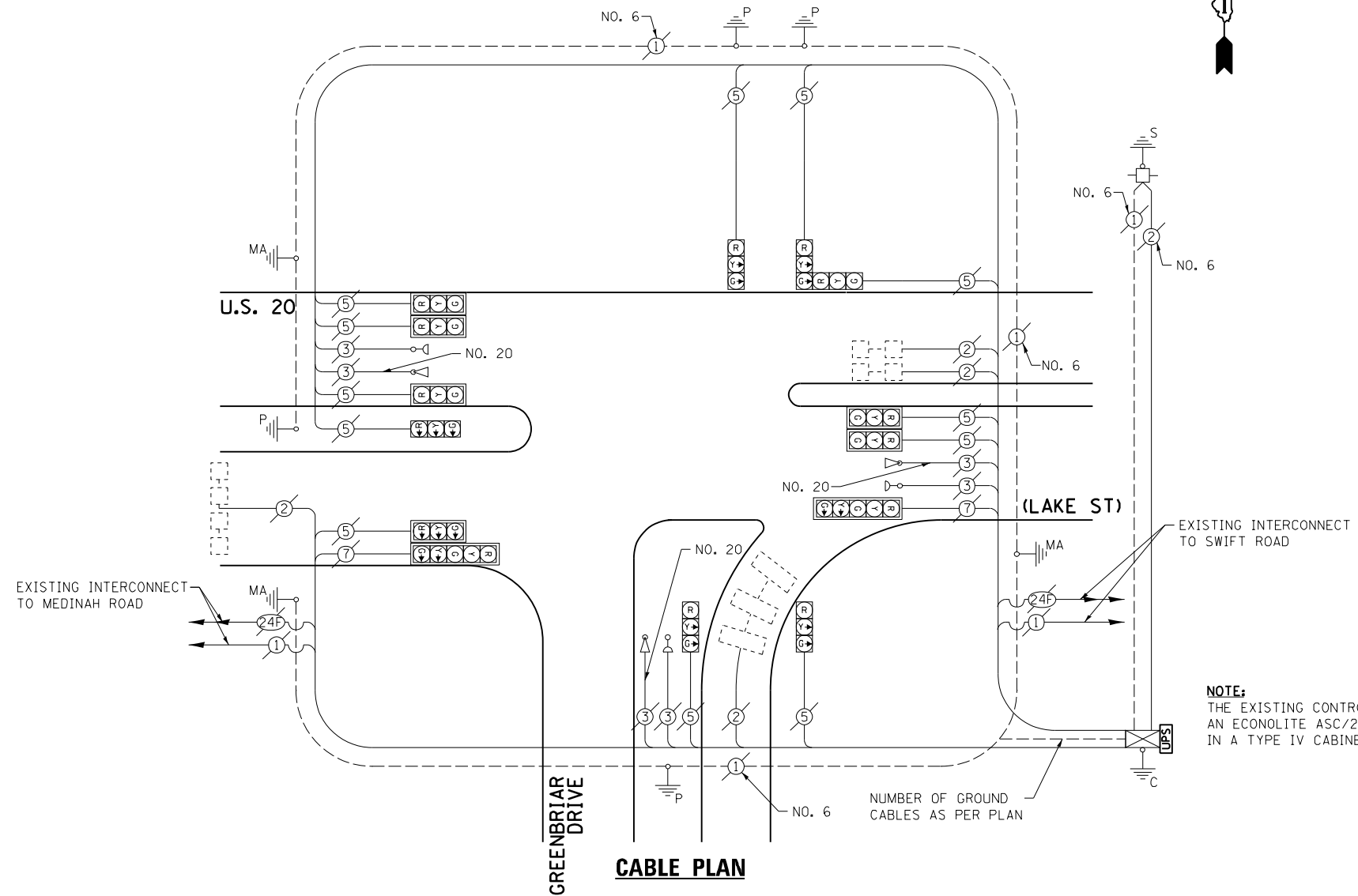
TRAFFIC SIGNAL LEGEND

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

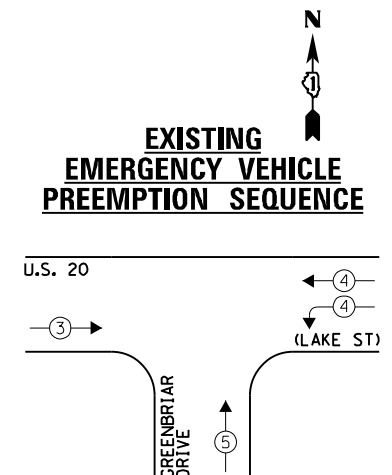
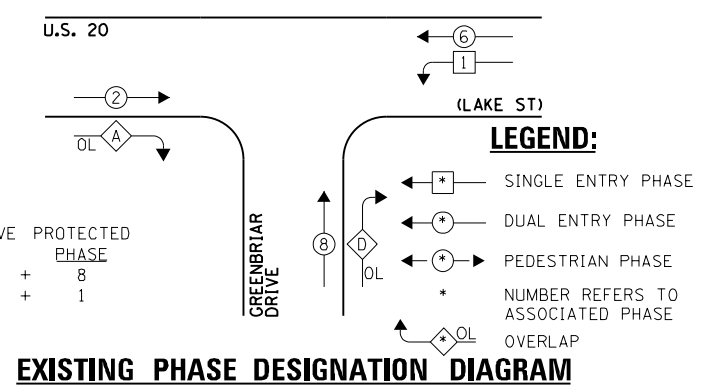
SCHEDULE OF QUANTITIES
U. S. 20 (LAKE ST) AT GREENBRIAR DRIVE

TS 6043

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
3.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL



NOTE:
THE EXISTING CONTROLLER IS AN ECONOLITE ASC/25-1000 IN A TYPE IV CABINET.



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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE	
TYPE	NO. LAMPS	WATTAGE	OPERATION		
		INCAND.	L.E.D.		
SIGNAL (RED)	14	135	17	0.50	119.0
SIGNAL (YELLOW)	14	135	25	0.25	87.5
SIGNAL (GREEN)	14	135	15	0.25	52.5
ARROW	4	135	12	0.10	4.8
PED. SIGNAL	-	90	25	1.00	-
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					388.8

ENERGY COSTS - BILLED TO: VILLAGE OF ADDISON
(ADDRESS) ONE FRIENDSHIP PLAZA
(ADDRESS) ADDISON, IL 60101-2766

ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

FILE NAME =	USER NAME = #USER*	DESIGNED - JRD	REVISED -
#FILE#		DRAWN - ZCW	REVISED -
Default		CHECKED - KLB	REVISED -
	PLOT DATE = \$DATE*	DATE - 12-20-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION
DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
U. S. 20 (LAKE ST) AT GREENBRIAR DRIVE

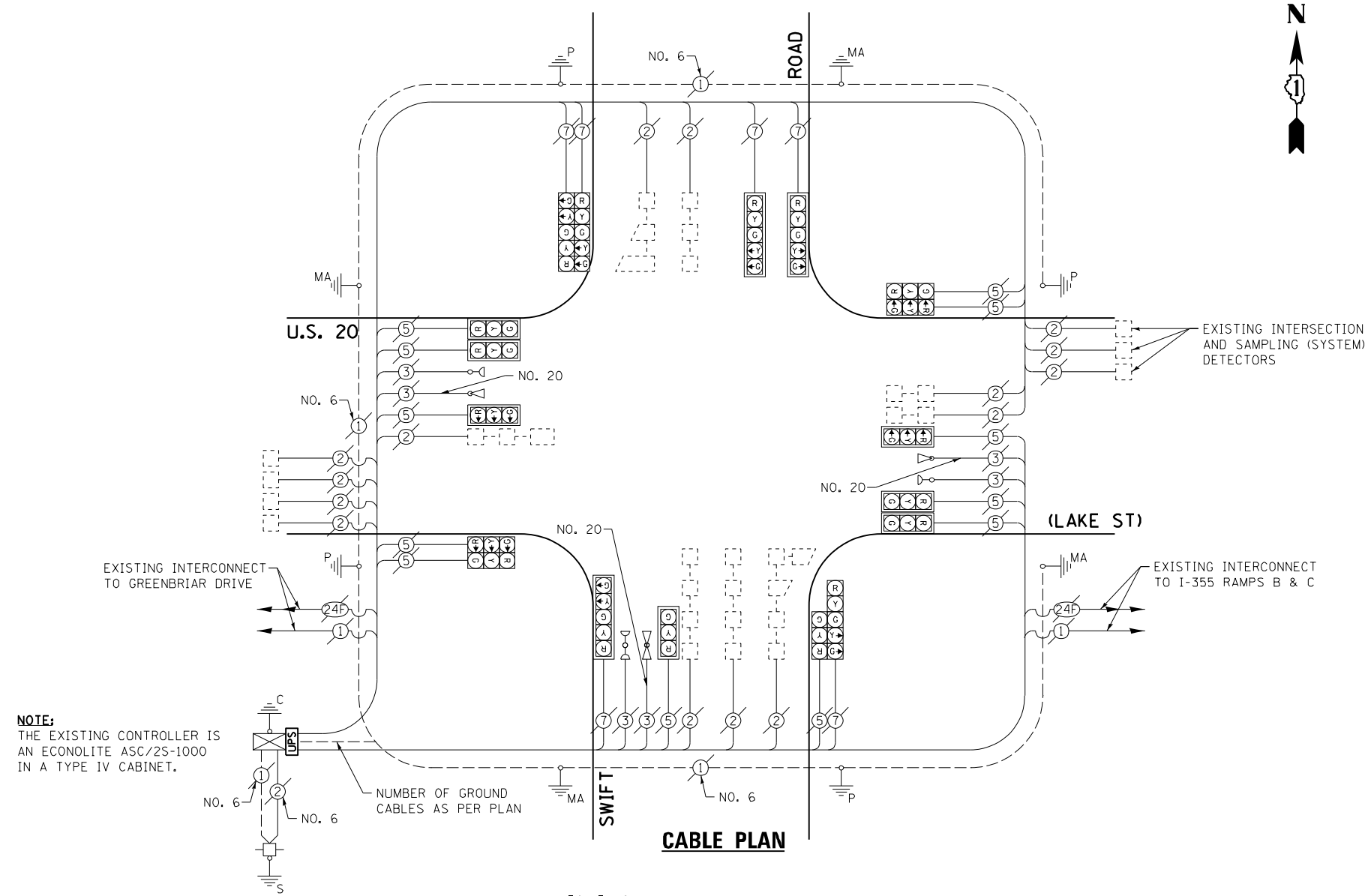
SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIES	2012-070 I	DuPAGE	103	17
			CONTRACT NO.	60V80
ILLINOIS FED. AID PROJECT				

GHA #4085.887

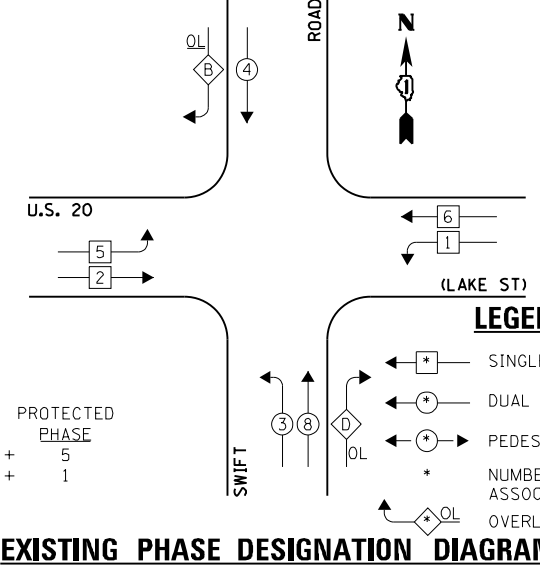
SCHEDULE OF QUANTITIES
U.S. 20 (LAKE ST) AT SWIFT ROAD

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
3.	1	EACH	UNINTERRUPTIBLE POWER SUPPLY, SPECIAL

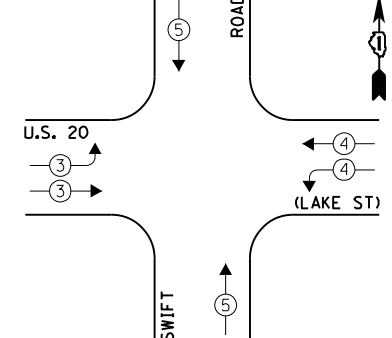


NOTE:
THE EXISTING CONTROLLER IS AN ECONOLITE ASC/2S-1000 IN A TYPE IV CABINET.

EXISTING CONTROLLER SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT			

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND. L.E.D.	OPERATION	
SIGNAL (RED)	18	135 17	0.50	153.0
SIGNAL (YELLOW)	18	135 25	0.25	112.5
SIGNAL (GREEN)	18	135 15	0.25	67.5
ARROW	12	135 12	0.10	14.4
PED. SIGNAL	-	90 25	1.00	-
CONTROLLER	1	- 100	1.00	100.0
LUMINAIRE	-	- 250	0.50	-
L.E.D. ST. NAME SIGN	-	- 64	0.50	-
VIDEO SYSTEM	-	- 150	1.00	-
BATTERY BACKUP	1	- 25	1.00	25.0
ILLUMINATED SIGN	-	- 25	0.05	-
TOTAL =				472.4

ENERGY COSTS - BILLED TO: VILLAGE OF ADDISON
(ADDRESS) ONE FRIENDSHIP PLAZA
(ADDRESS) ADDISON, IL 60101-2766
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 427-5704
COMPANY: CQM-ED

FILE NAME = 60V80-018-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

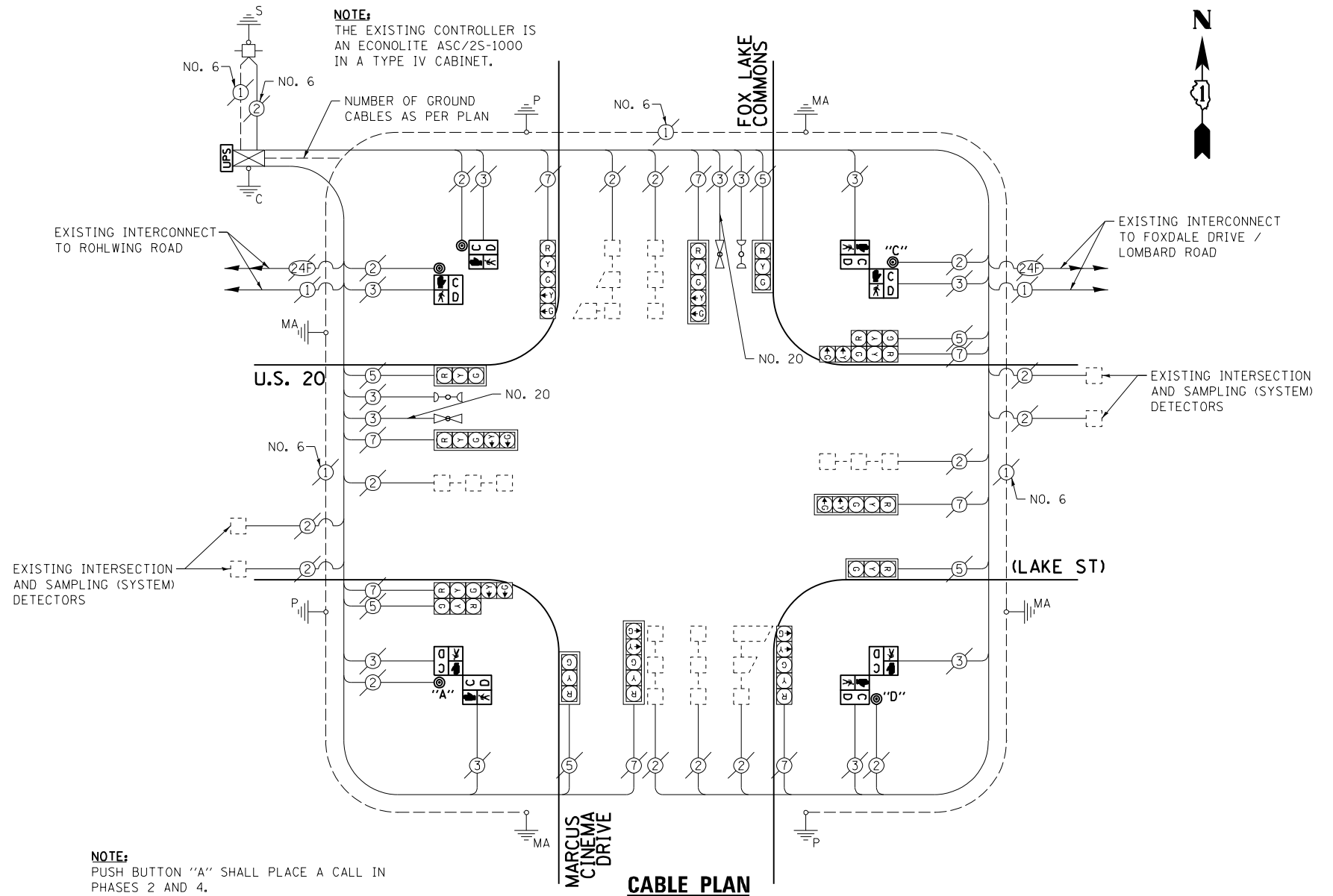
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
U.S. 20 (LAKE ST) AT SWIFT ROAD
SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTÉ. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 18
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60V80	

SCHEDULE OF QUANTITIES
U.S. 20 AT MARCUS CINEMA DRIVE

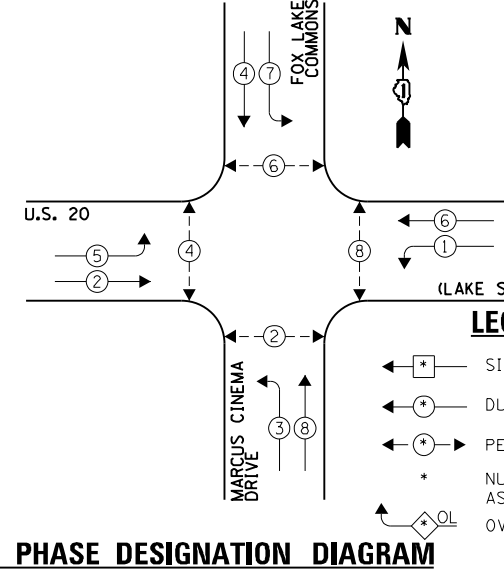
TS 12513

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
3.	3	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
4.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
5.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
6.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
7.	5	EACH	PEDESTRIAN PUSH-BUTTON, NON-LATCHING

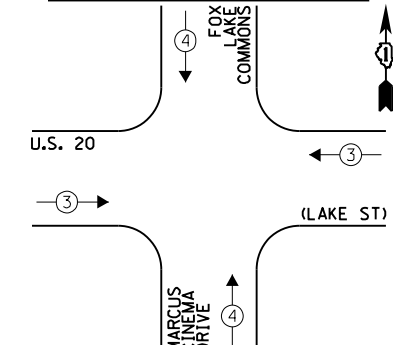


NOTE:
PUSH BUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4.
PUSH BUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8.
PUSH BUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8.

EXISTING CONTROLLER SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTORS	
EMERGENCY VEHICLE PREEMPTOR	3
MOVEMENT	4

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.

- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 3 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE
- 5 EACH PEDESTRIAN PUSH-BUTTON

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND. L.E.D.	OPERATION	
SIGNAL (RED)	14	135 17	0.50	119.0
SIGNAL (YELLOW)	14	135 25	0.25	87.5
SIGNAL (GREEN)	14	135 15	0.25	52.5
ARROW	16	135 12	0.10	19.2
PED. SIGNAL	8	90 25	1.00	200.0
CONTROLLER	1	- 100	1.00	100.0
LUMINAIRE	-	- 250	0.50	-
L.E.D. ST. NAME SIGN	-	- 64	0.50	-
VIDEO SYSTEM	-	- 150	1.00	-
BATTERY BACKUP	1	- 25	1.00	25.0
ILLUMINATED SIGN	-	- 25	0.05	-
TOTAL =				603.2

ENERGY COSTS - BILLED TO: VILLAGE OF ADDISON
(ADDRESS) ONE FRIENDSHIP PLAZA
(ADDRESS) ADDISON, IL 60101-2766
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 427-5704
COMPANY: CQM-ED

FILE NAME = 60V80-019-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

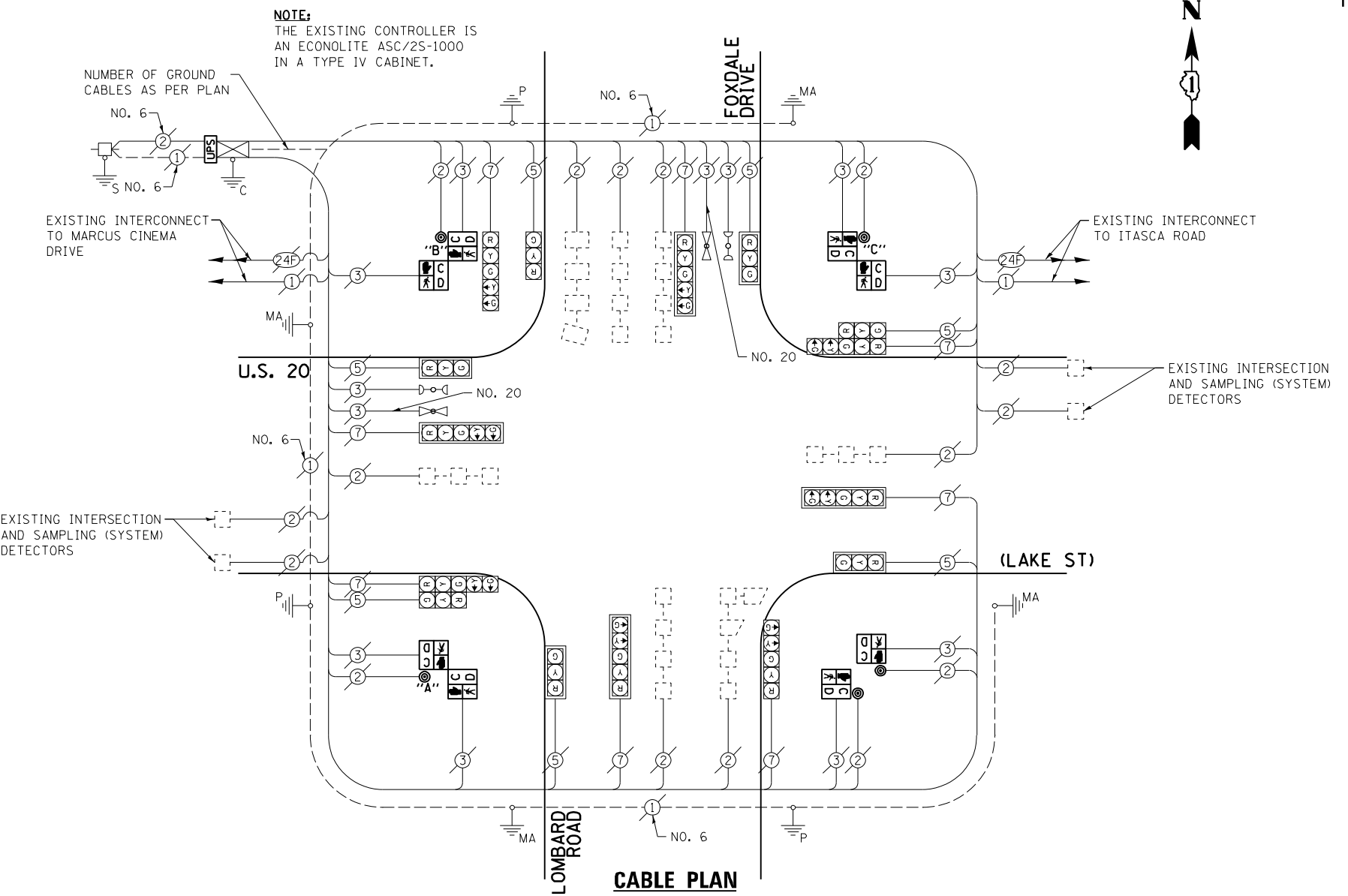
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE			
U.S. 20 (LAKE ST) AT MARCUS CINEMA DRIVE / FOX LAKE COMMONS			
SCALE: NONE	SHEET	OF SHEETS	STA. TO STA.

F.A. RTE. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 19
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60V80	

GHA #4085.887

SCHEDULE OF QUANTITIES
U.S. 20 (LAKE ST) AT LOMBARD ROAD / FOXDALE DRIVE

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
3.	3	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
4.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
5.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
6.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
7.	5	EACH	PEDESTRIAN PUSH-BUTTON, NON-LATCHING



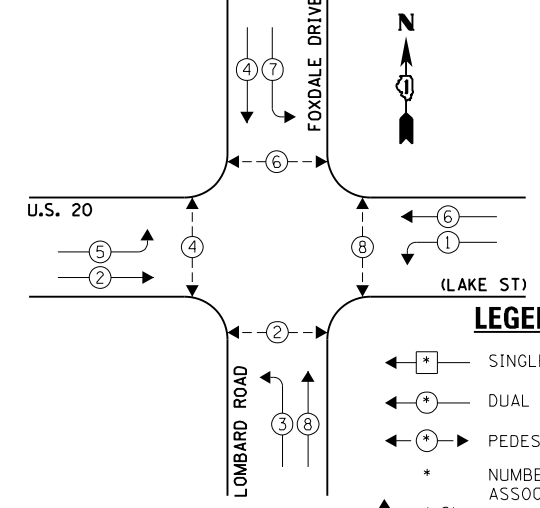
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 3 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE
- 5 EACH PEDESTRIAN PUSH-BUTTON

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	INCAND.	L.E.D.	OPERATION	
SIGNAL (RED)	15	135	17	0.50	127.5
SIGNAL (YELLOW)	15	135	25	0.25	93.75
SIGNAL (GREEN)	15	135	15	0.25	56.25
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	8	90	25	1.00	200.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					621.7

ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHALMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

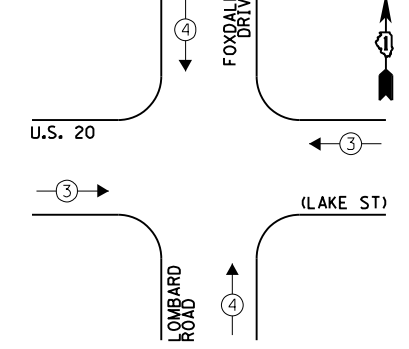
EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM

- NOTE:
PUSH BUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4.
PUSH BUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6.
PUSH BUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8.

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTORS	
EMERGENCY VEHICLE PREEMPTOR	3
MOVEMENT	4

FILE NAME = 60V80-020-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
U.S. 20 (LAKE ST) AT LOMBARD ROAD / FOXDALE DRIVE

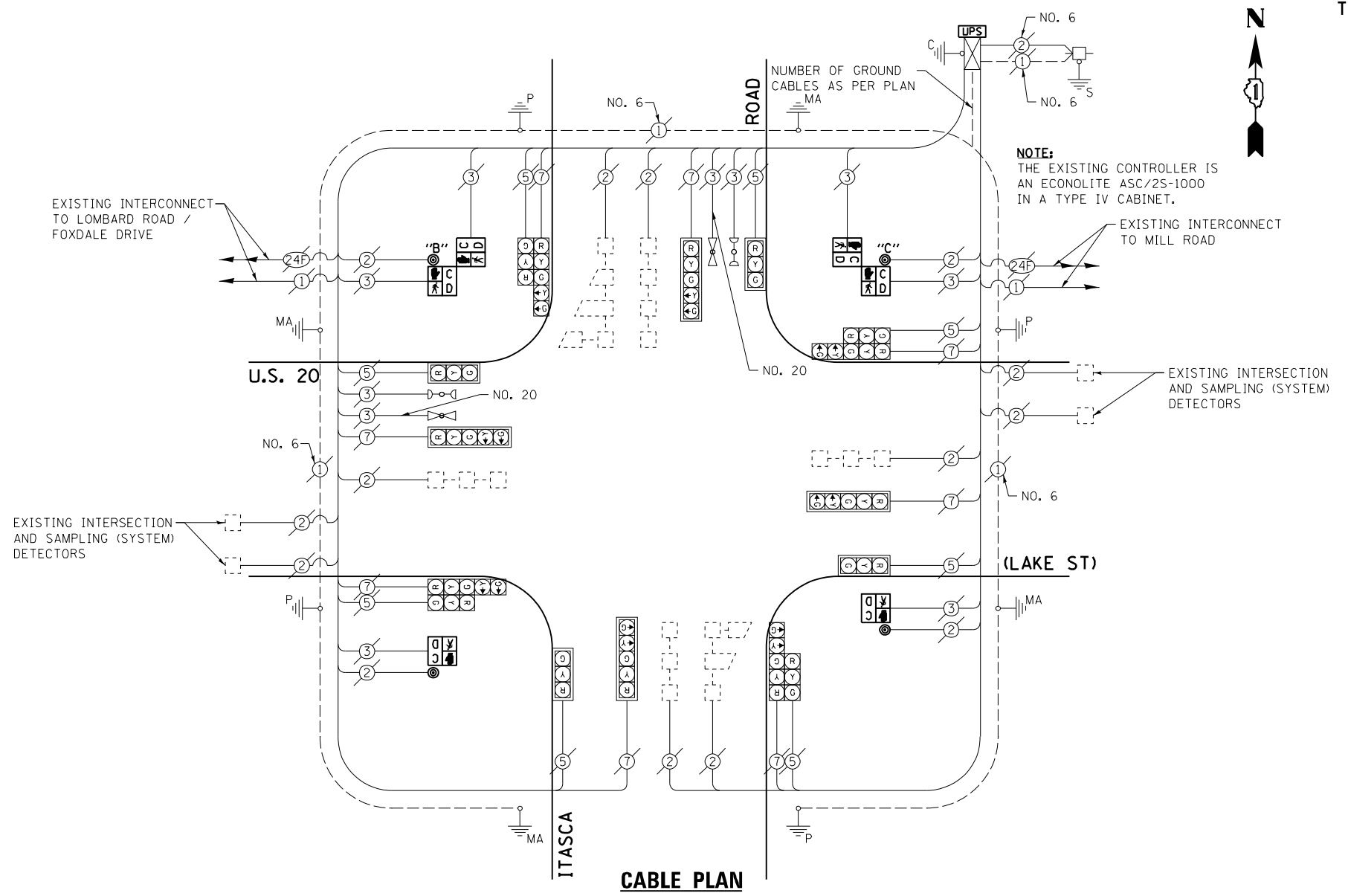
SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 20
			CONTRACT NO. 60V80	
ILLINOIS FED. AID PROJECT				

GHA #4085.887

SCHEDULE OF QUANTITIES
U. S. 20 (LAKE ST) AT ITASCA ROAD

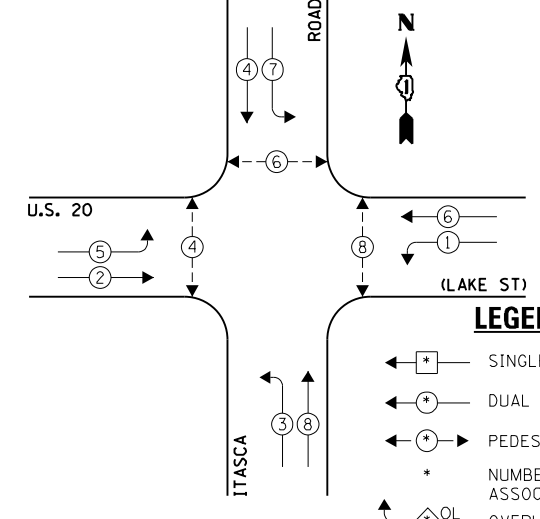
NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
3.	2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
4.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
5.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
6.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
7.	4	EACH	PEDESTRIAN PUSH-BUTTON, NON-LATCHING



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.

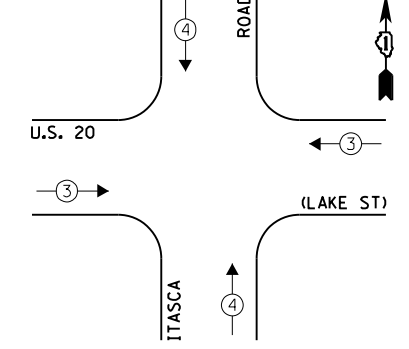
- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 2 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE
- 4 EACH PEDESTRIAN PUSH-BUTTON

EXISTING CONTROLLER SEQUENCE



NOTES:
PUSH BUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6.
PUSH BUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8.

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTORS	
EMERGENCY VEHICLE PREEMPTOR	3
MOVEMENT	4

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE	
TYPE	NO. LAMPS	WATTAGE INCAND. L.E.D.	OPERATION		
SIGNAL (RED)	16	135	17	0.50	136.0
SIGNAL (YELLOW)	16	135	25	0.25	100.0
SIGNAL (GREEN)	16	135	15	0.25	60.0
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	6	90	25	1.00	150.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					590.2

ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHALMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

FILE NAME = 60V80-021-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

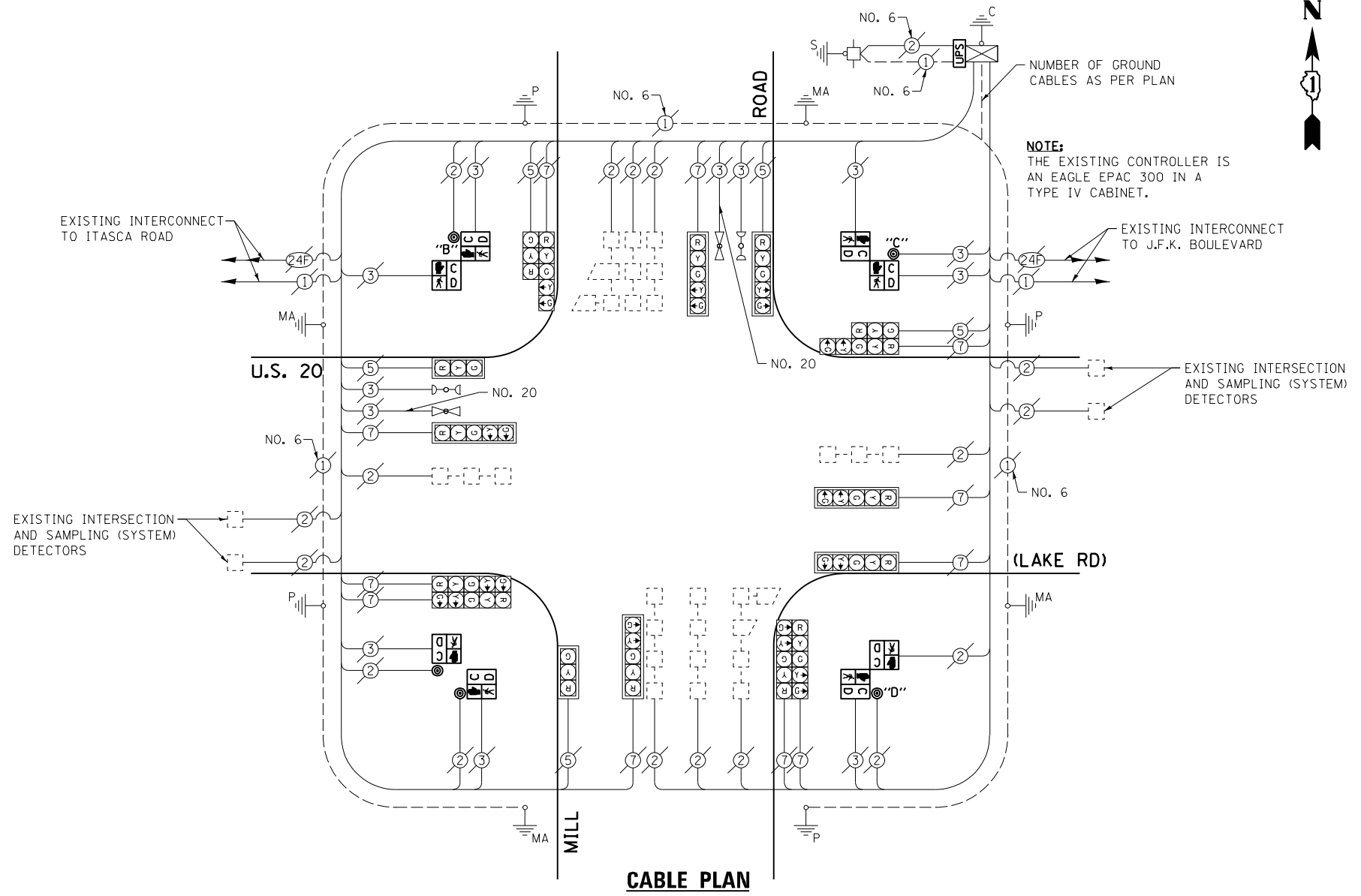
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
U.S. 20 (LAKE ST) AT ITASCA ROAD
SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 21
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60V80	

SCHEDULE OF QUANTITIES
U.S. 20 (LAKE ST) AT MILL ROAD

TS 12510

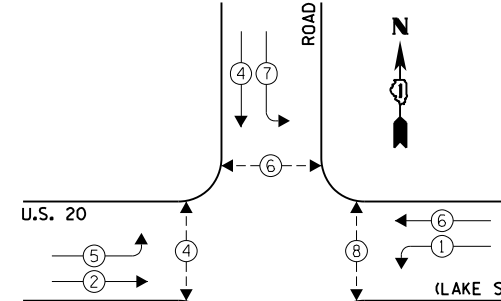
NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
3.	3	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
4.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
5.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
6.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
7.	5	EACH	PEDESTRIAN PUSH-BUTTON, NON-LATCHING



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.

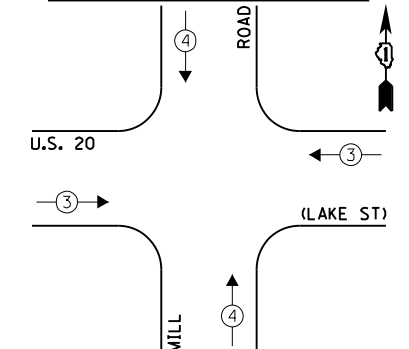
- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 3 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE
- 5 EACH PEDESTRIAN PUSH-BUTTON

EXISTING CONTROLLER SEQUENCE



- NOTE:
- PUSH BUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6.
 - PUSH BUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8.
 - PUSH BUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8.

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



LEGEND:

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

EXISTING PHASE DESIGNATION DIAGRAM

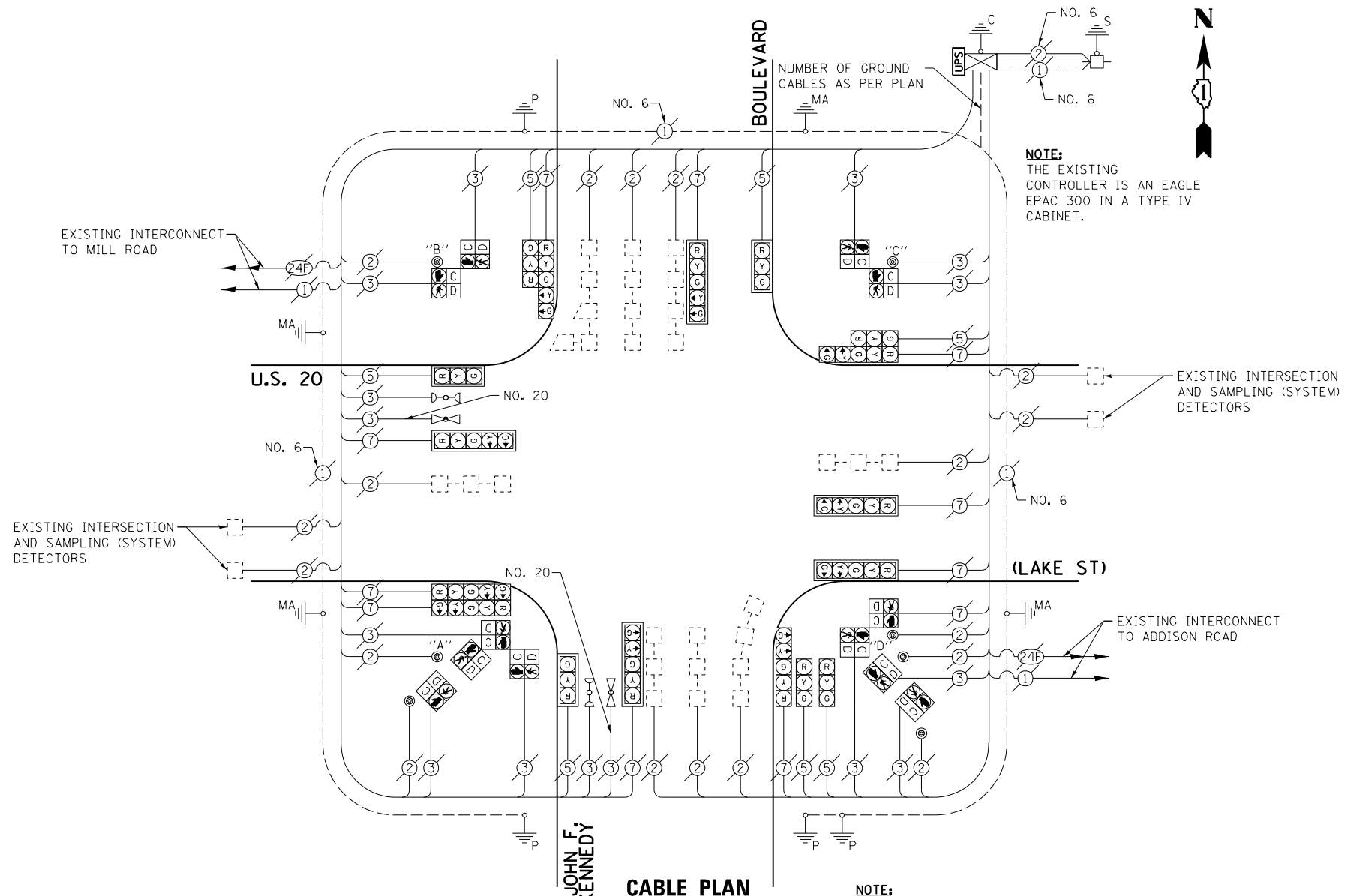
I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE	
TYPE	NO. LAMPS	WATTAGE INCAND.	L.E.D.	OPERATION	
SIGNAL (RED)	16	135	17	0.50	136.0
SIGNAL (YELLOW)	16	135	25	0.25	100.0
SIGNAL (GREEN)	16	135	15	0.25	60.0
ARROW	24	135	12	0.10	28.8
PED. SIGNAL	8	90	25	1.00	200.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =				657.0	

ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SHALMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

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

SCHEDULE OF QUANTITIES
U.S. 20 (LAKE ST) AT JOHN F. KENNEDY BOULEVARD

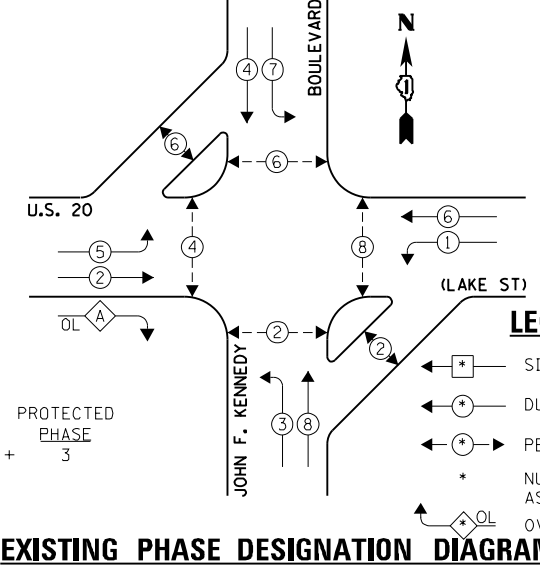
NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
3.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL



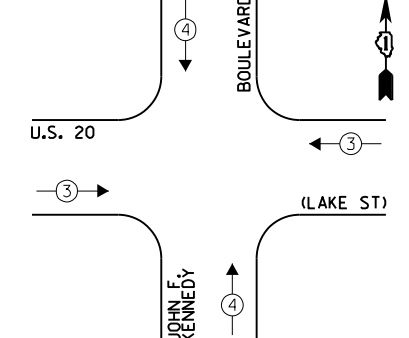
NOTE:
THE EXISTING CONTROLLER IS AN EAGLE EPAC 300 IN A TYPE IV CABINET.

NOTE:
PUSH BUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4.
PUSH BUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6.
PUSH BUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8.
PUSH BUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8.

EXISTING CONTROLLER SEQUENCE



EXISTING 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. LAMPS	WATTAGE INCAND. L.E.D.	OPERATION	
SIGNAL (RED)	17	135 17	0.50	144.50
SIGNAL (YELLOW)	17	135 25	0.25	106.25
SIGNAL (GREEN)	17	135 15	0.25	63.75
ARROW	20	135 12	0.10	24.0
PED. SIGNAL	12	90 25	1.00	300.0
CONTROLLER	1	- 100	1.00	100.0
LUMINAIRE	-	- 250	0.50	-
L.E.D. ST. NAME SIGN	-	- 64	0.50	-
VIDEO SYSTEM	-	- 150	1.00	-
BATTERY BACKUP	1	- 25	1.00	25.0
ILLUMINATED SIGN	-	- 25	0.05	-
TOTAL =				763.50

ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHALMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

FILE NAME = 60VB0-023-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - JPW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

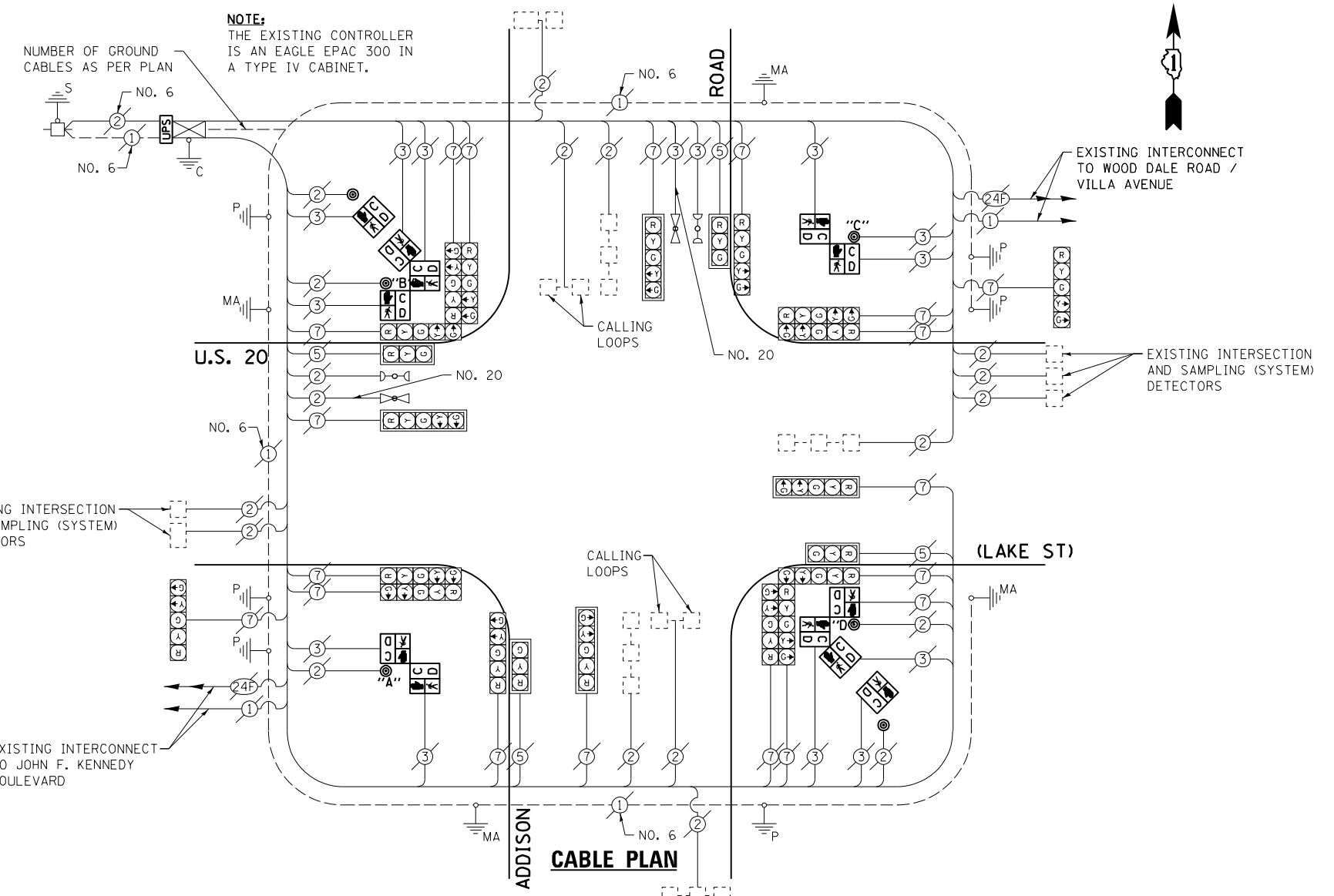
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION
DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
U.S. 20 (LAKE ST) AT JOHN F. KENNEDY BOULEVARD

F.A. RTE. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 23
SCALE: NONE			CONTRACT NO. 60VB0	
ILLINOIS FED. AID PROJECT				

GHA #4085.887

SCHEDULE OF QUANTITIES
U.S. 20 (LAKE ST) AT ADDISON ROAD

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
3.	2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
4.	2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 3-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
5.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
6.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
7.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
8.	6	EACH	PEDESTRIAN PUSH-BUTTON, NON-LATCHING

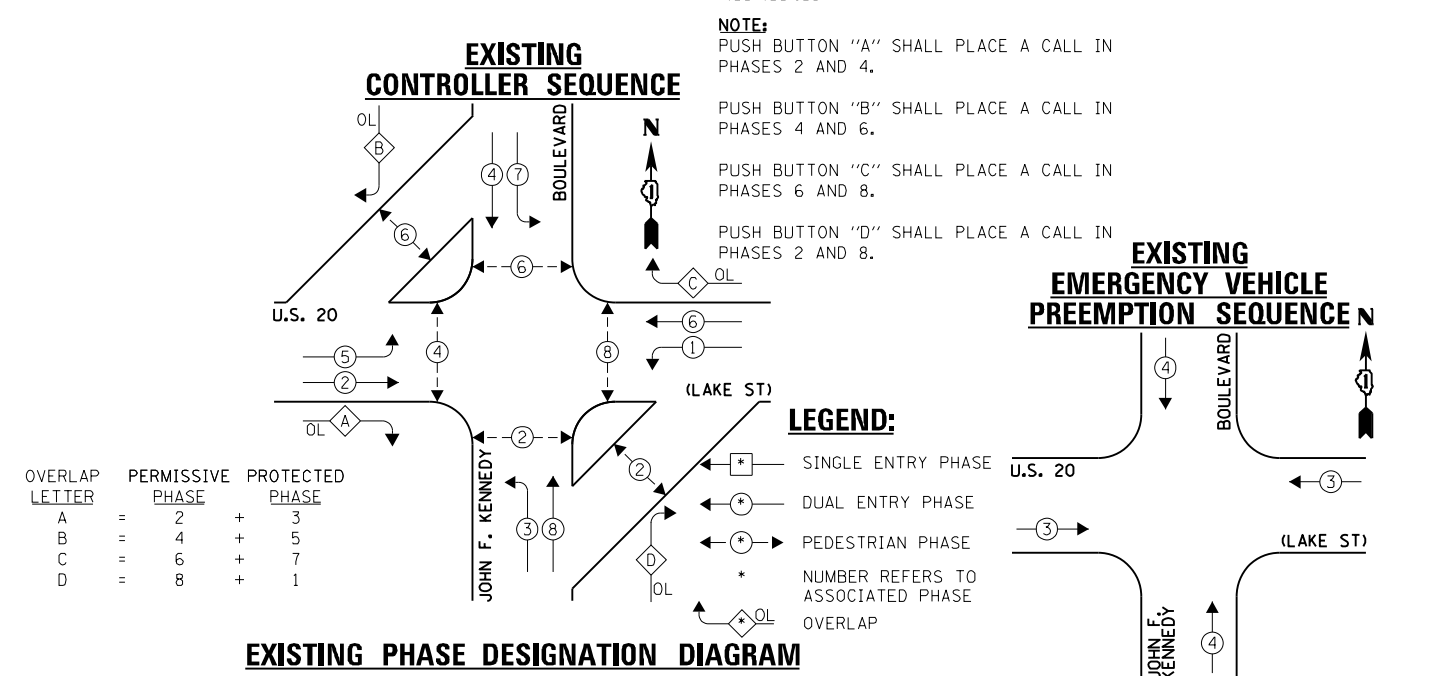


THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 2 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE
- 2 EACH PEDESTRIAN SIGNAL HEAD, 3-FACE
- 6 EACH PEDESTRIAN PUSH-BUTTON

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	INCAND.	L.E.D.	OPERATION	
SIGNAL (RED)	22	135	17	0.50	187.0
SIGNAL (YELLOW)	22	135	25	0.25	137.5
SIGNAL (GREEN)	22	135	15	0.25	82.5
ARROW	36	135	12	0.10	43.2
PED. SIGNAL	12	90	25	1.00	300.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					875.2

ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHALMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED



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

FILE NAME = 60V80-024-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
U.S. 20 (LAKE ST) AT ADDISON ROAD

SCALE: NONE SHEET OF SHEETS STA. TO STA.

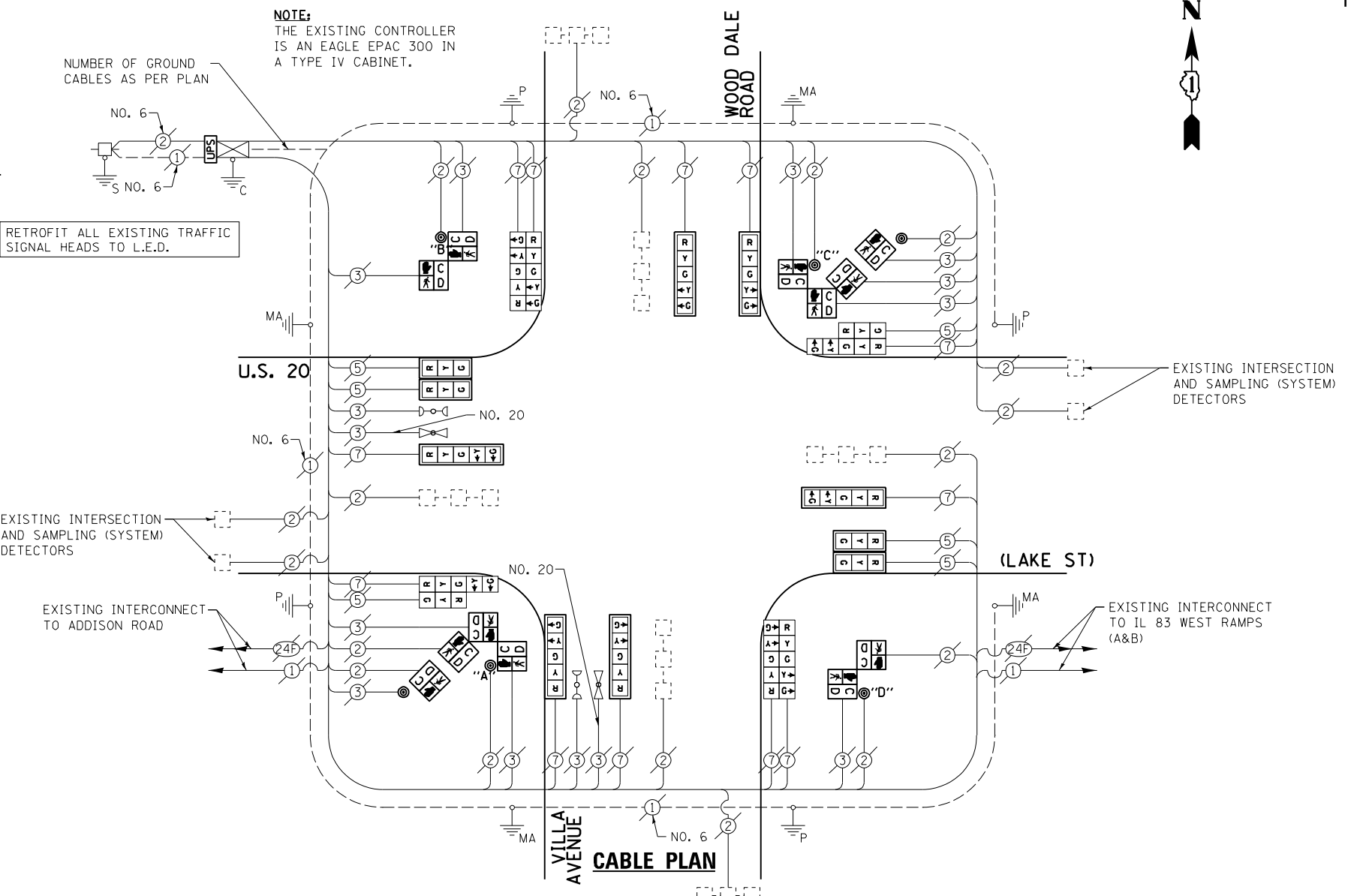
F.A. RTE. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 24
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60V80	

GHA #4085.887

EXISTING EMERGENCY VEHICLE PREEMPTORS	
EMERGENCY VEHICLE PREEMPTOR	3
MOVEMENT	4

SCHEDULE OF QUANTITIES
U.S. 20 (LAKE ST) AT WOOD DALE ROAD / VILLA AVENUE

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
3.	2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
4.	2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 3-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
5.	10	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
6.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
7.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
8.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
9.	2	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED, RETROFIT
10.	4	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT
11.	6	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT
12.	2	EACH	SIGNAL HEAD, LED, 2 FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT
13.	6	EACH	PEDESTRIAN PUSH-BUTTON, NON-LATCHING



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.

- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 2 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE
- 2 EACH PEDESTRIAN SIGNAL HEAD, 3-FACE
- 6 EACH PEDESTRIAN PUSH-BUTTON
- 10 EACH TRAFFIC SIGNAL BACKPLATE

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	INCAND.	L.E.D.	OPERATION	
SIGNAL (RED)	18	135	17	0.50	153.0
SIGNAL (YELLOW)	18	135	25	0.25	112.5
SIGNAL (GREEN)	18	135	15	0.25	67.5
ARROW	24	135	12	0.10	28.8
PED. SIGNAL	12	90	25	1.00	300.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					786.8

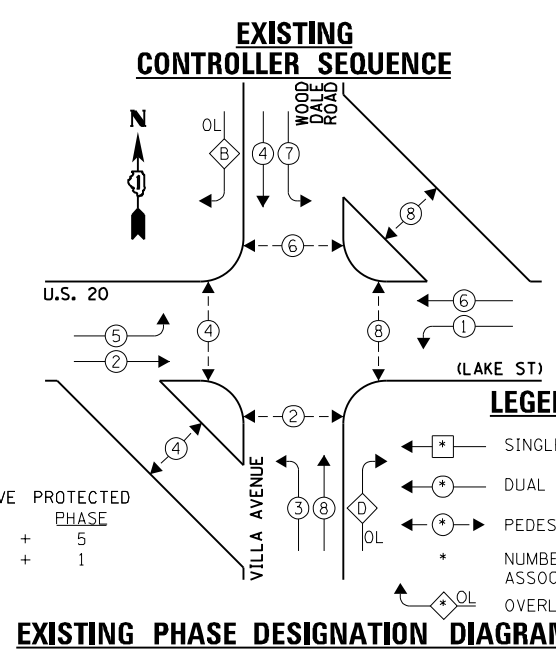
ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHALMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

FILE NAME = 60V80-025-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

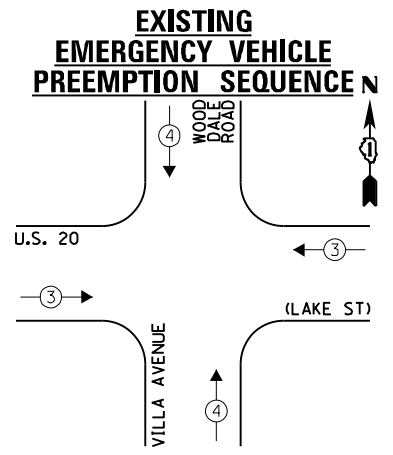
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
U.S. 20 (LAKE ST) AT WOOD DALE ROAD / VILLA AVENUE

F.A. RTE. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 25
SCALE: NONE			CONTRACT NO. 60V80	
ILLINOIS FED. AID PROJECT				



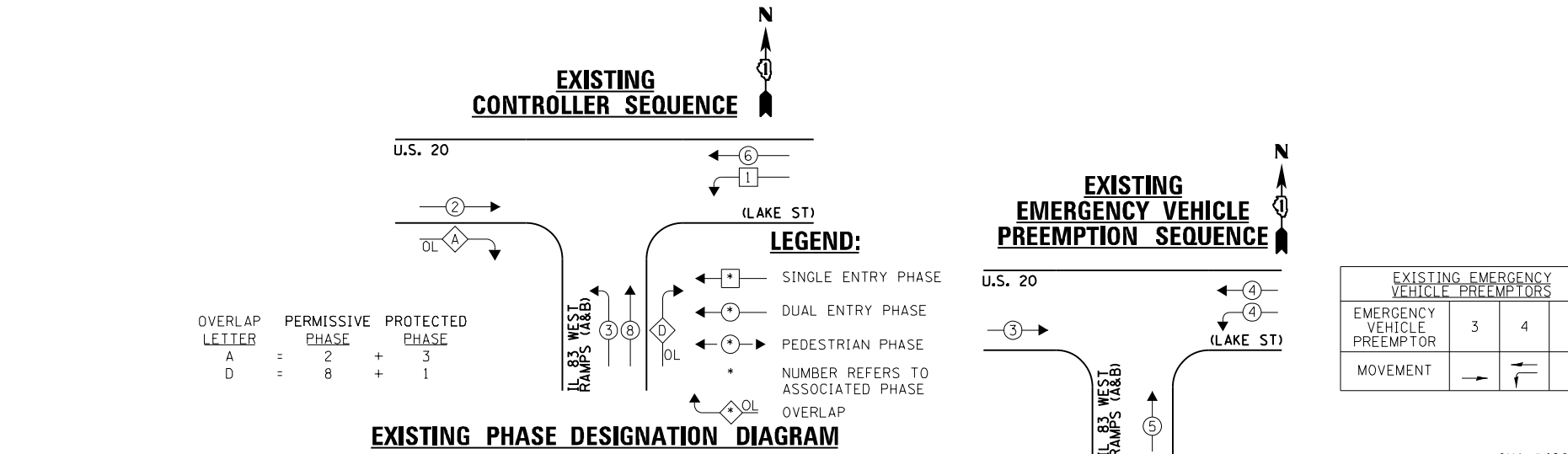
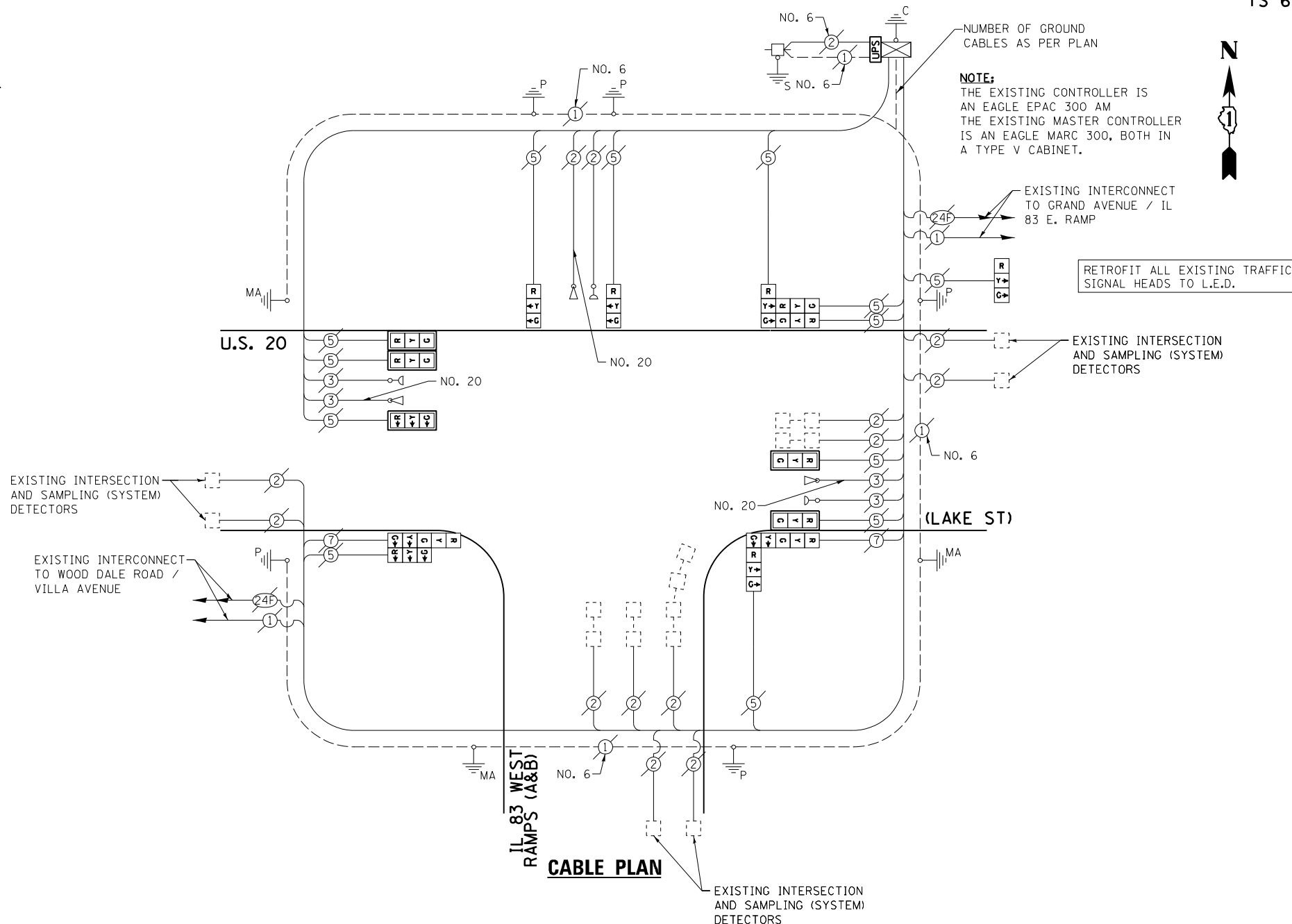
NOTE: PUSH BUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4.
PUSH BUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6.
PUSH BUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8.
PUSH BUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8.



EXISTING EMERGENCY VEHICLE PREEMPTORS	
EMERGENCY VEHICLE PREEMPTOR	3
MOVEMENT	4

SCHEDULE OF QUANTITIES
U.S. 20 (LAKE ST) AT IL 83 WEST RAMPS (A&B)

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
3.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
4.	2	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED, RETROFIT
5.	1	EACH	SIGNAL HEAD, LED, 3-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT
6.	3	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT
7.	5	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT



I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	INCAND.	L.E.D.	OPERATION	
SIGNAL (RED)	15	135	17	0.50	127.50
SIGNAL (YELLOW)	15	135	25	0.25	93.75
SIGNAL (GREEN)	15	135	15	0.25	56.25
ARROW	4	135	12	0.10	4.8
PED. SIGNAL	-	90	25	1.00	-
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					407.3

ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHALMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

FILE NAME = 60V80-026-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

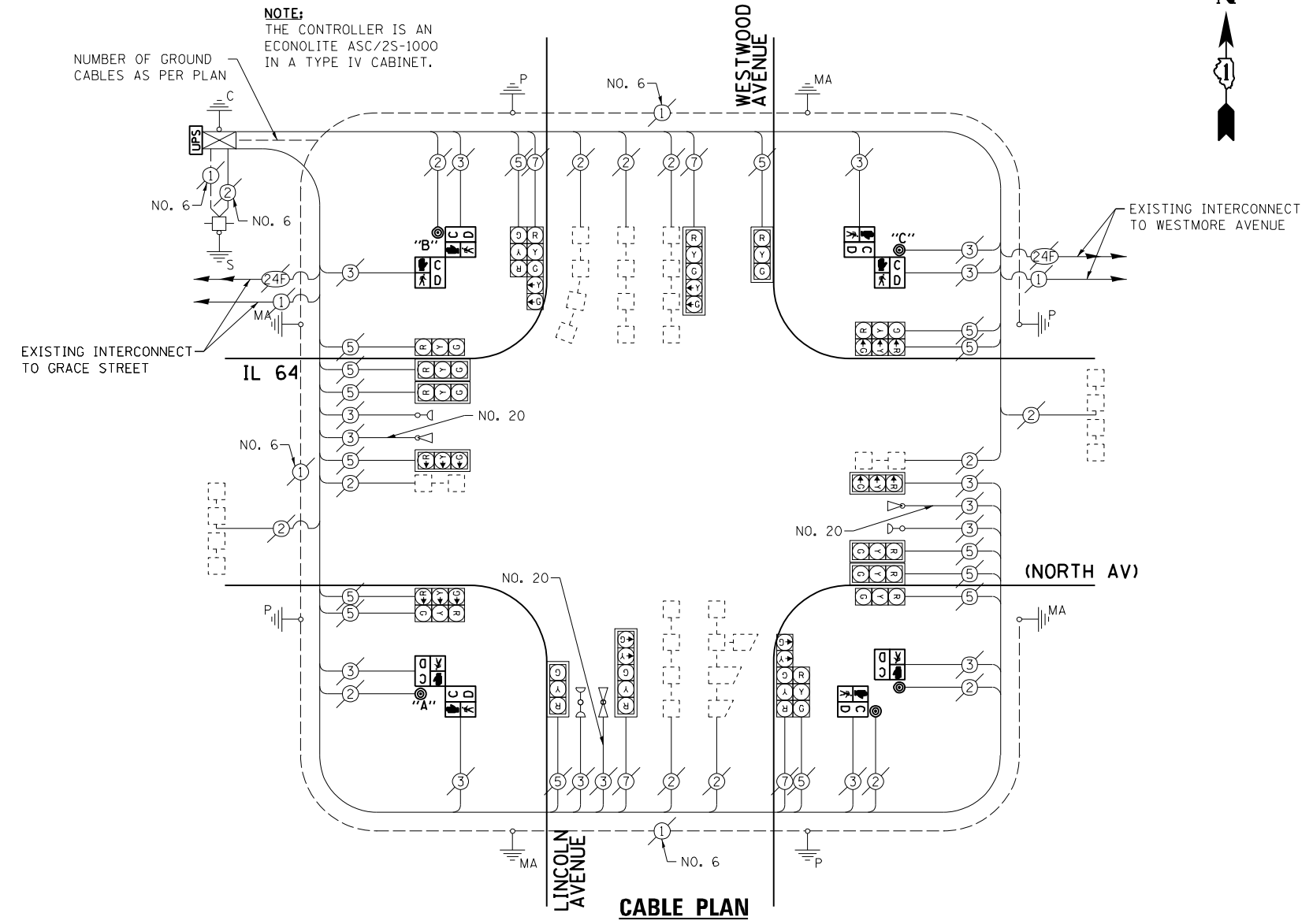
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
U.S. 20 (LAKE ST) AT IL 83 WEST RAMPS (A&B)

F.A. RTE. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 26
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60V80	

GHA #4085.887

SCHEDULE OF QUANTITIES
IL 64 (NORTH AV) AT WESTWOOD AVENUE / LINCOLN AVENUE

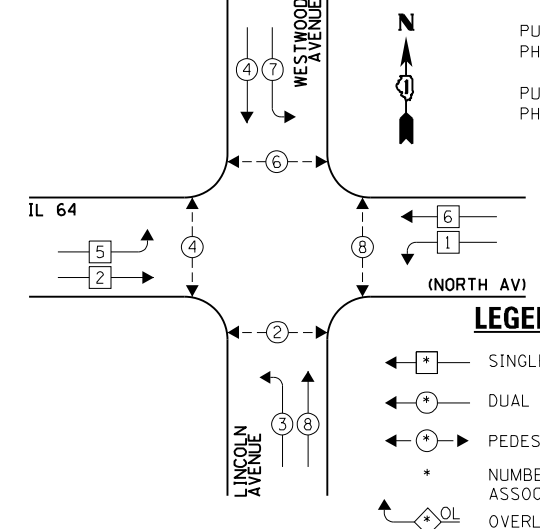
NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
3.	3	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
4.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
5.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
6.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
7.	5	EACH	PEDESTRIAN PUSH-BUTTON, NON-LATCHING



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.

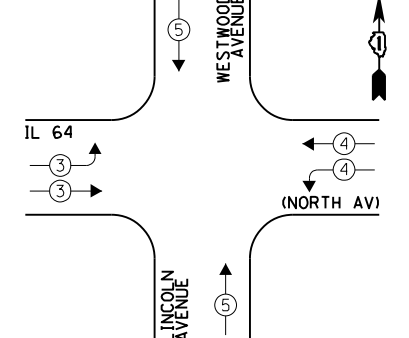
- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 3 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE
- 5 EACH PEDESTRIAN PUSH-BUTTON

EXISTING CONTROLLER SEQUENCE



NOTE:
PUSH BUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4.
PUSH BUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6.
PUSH BUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8.

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT	→	↔	↑

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND. L.E.D.	OPERATION	
SIGNAL (RED)	20	135 17	0.50	170.0
SIGNAL (YELLOW)	20	135 25	0.25	125.0
SIGNAL (GREEN)	20	135 15	0.25	75.0
ARROW	8	135 12	0.10	9.6
PED. SIGNAL	8	90 25	1.00	200.0
CONTROLLER	1	- 100	1.00	100.0
LUMINAIRE	-	- 250	0.50	-
L.E.D. ST. NAME SIGN	-	- 64	0.50	-
VIDEO SYSTEM	-	- 150	1.00	-
BATTERY BACKUP	1	- 25	1.00	25.0
ILLUMINATED SIGN	-	- 25	0.05	-
TOTAL =				704.6

ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHALMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

EXISTING PHASE DESIGNATION DIAGRAM

FILE NAME = 60V80-027-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 64 (NORTH AV) AT WESTWOOD AVENUE / LINCOLN AVENUE
SCALE: NONE SHEET OF SHEETS STA. TO STA.

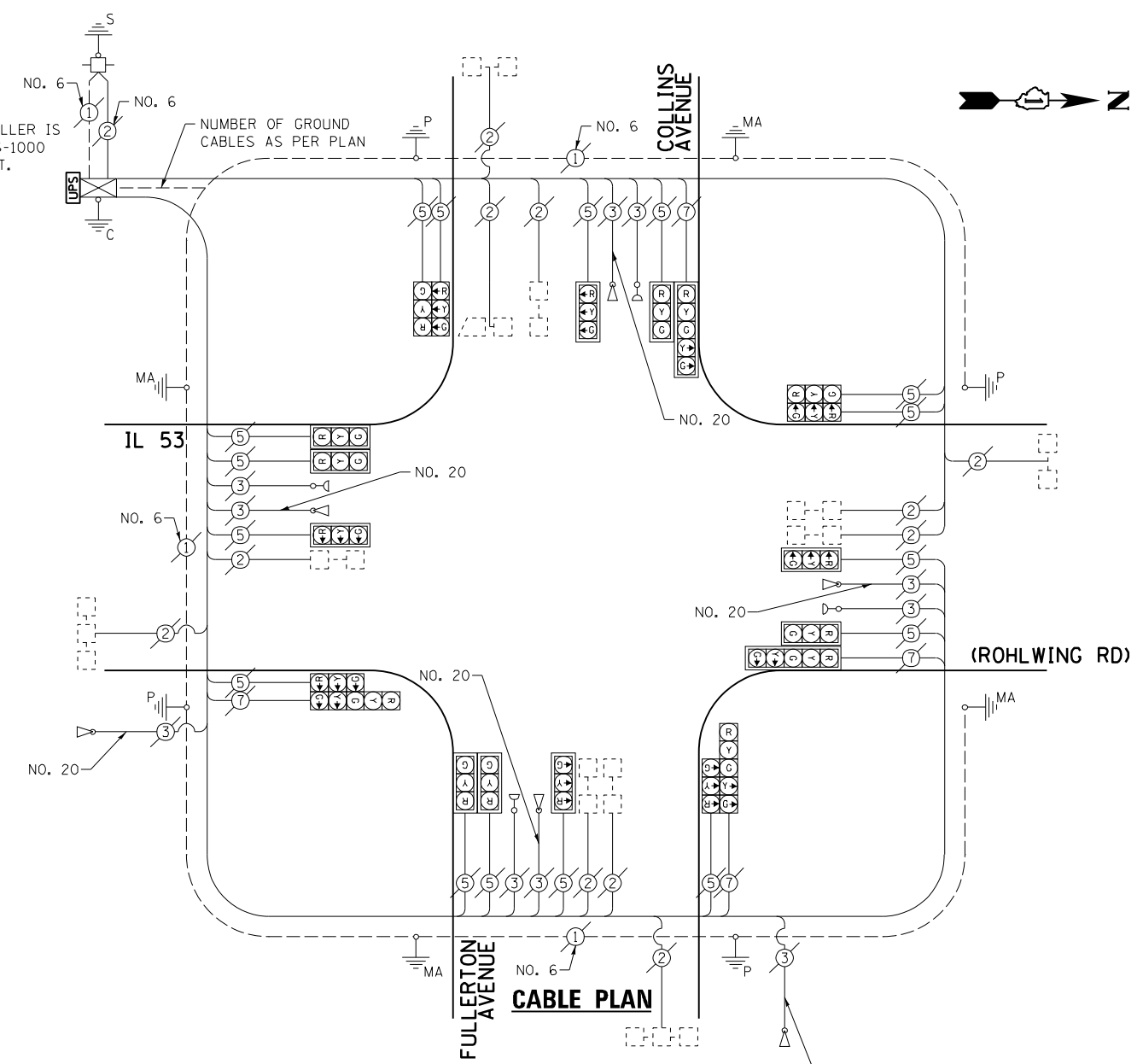
F.A. RTE. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 27
			CONTRACT NO. 60V80	
ILLINOIS FED. AID PROJECT				

SCHEDULE OF QUANTITIES

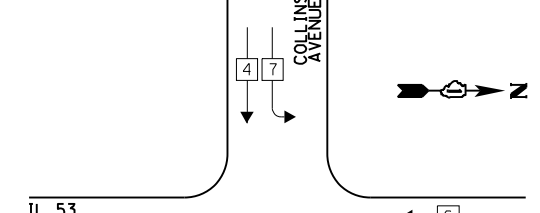
IL 53 (ROHLWING RD) AT FULLERTON AVENUE / COLLINS AVENUE

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
3.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL

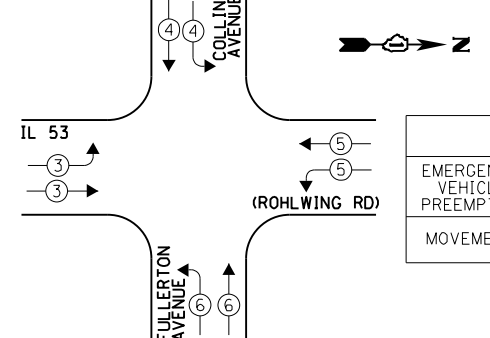
NOTE:
THE EXISTING CONTROLLER IS AN ECONOLITE ASC/25-1000 IN A TYPE IV CABINET.



EXISTING CONTROLLER SEQUENCE



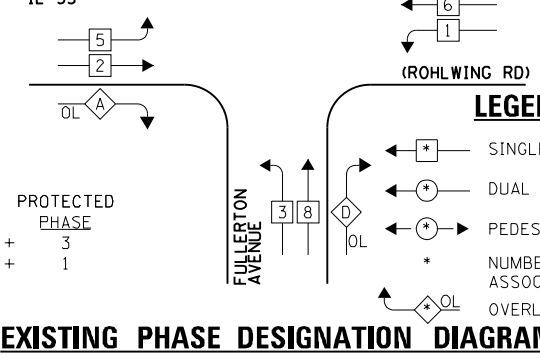
EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



LEGEND:

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

EXISTING PHASE DESIGNATION DIAGRAM



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. LAMPS	WATTAGE INCAND.	OPERATION L.E.D.		
SIGNAL (RED)	20	135	17	0.50	170.0
SIGNAL (YELLOW)	20	135	25	0.25	125.0
SIGNAL (GREEN)	20	135	15	0.25	75.0
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	-	90	25	1.00	-
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					504.6

ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION
 (ADDRESS) 201 W. CENTER COURT
 (ADDRESS) SCHALMBURG, IL 60196-1096
 ENERGY SUPPLY - CONTACT: JOE STACHO
 PHONE: (630) 424-5704
 COMPANY: CQM-ED

FILE NAME = 60V80-028-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

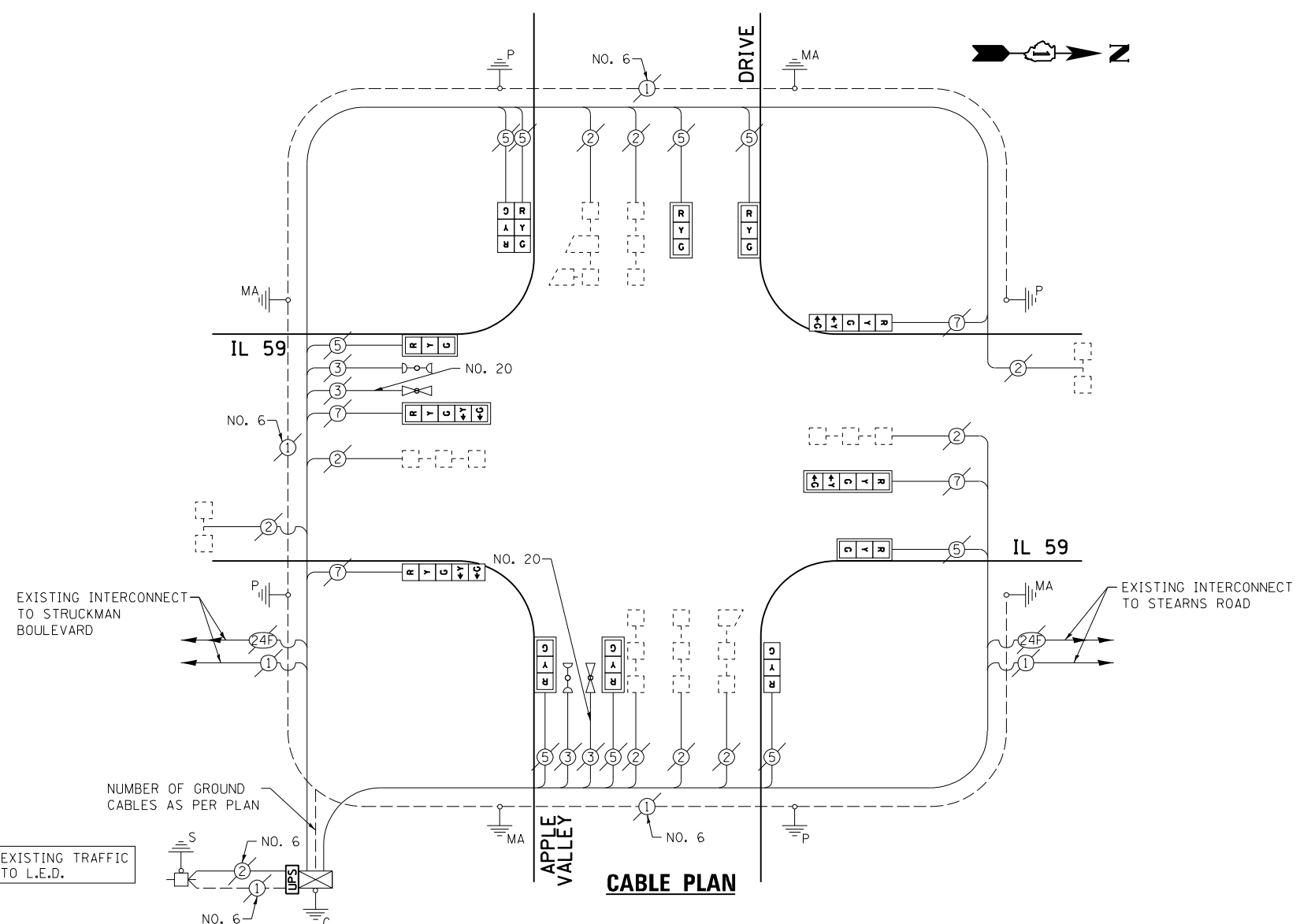
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
 IL 53 (ROHLWING RD) AT FULLERTON AVENUE / COLLINS AVENUE
 SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 28
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60V80	

SCHEDULE OF QUANTITIES
IL 59 AT APPLE VALLEY DRIVE

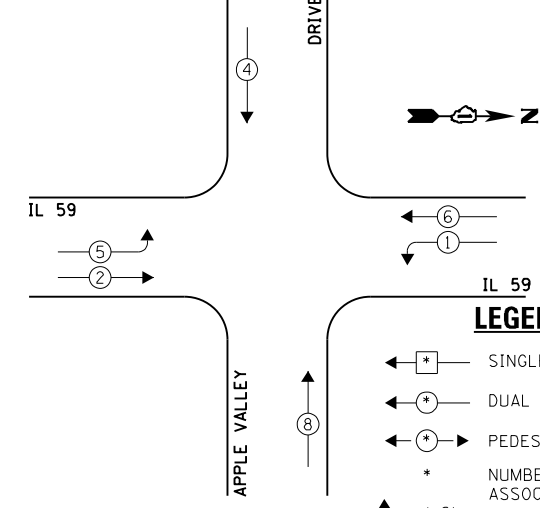
NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	8	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
3.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
4.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
5.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
6.	1	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT
7.	6	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT
8.	2	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT
9.	1	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT
10.	2	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT



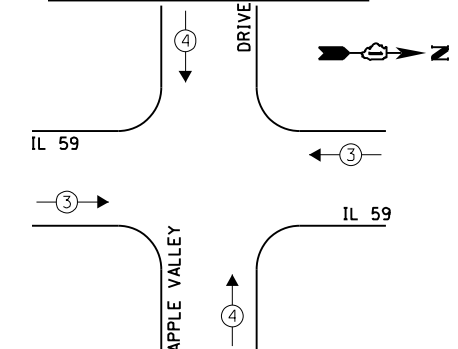
RETROFIT ALL EXISTING TRAFFIC SIGNAL HEADS TO L.E.D.

NOTE:
THE EXISTING CONTROLLER IS AN ECONOLITE ASC/2S-1000 IN A TYPE IV CABINET.

EXISTING CONTROLLER SEQUENCE

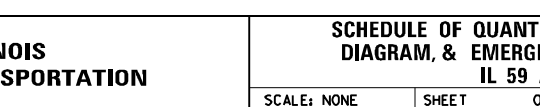


EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTORS	
EMERGENCY VEHICLE PREEMPTOR	3
MOVEMENT	4

EXISTING PHASE DESIGNATION DIAGRAM



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

8 EACH TRAFFIC SIGNAL BACKPLATE

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	INCAND.	L.E.D.	OPERATION	
SIGNAL (RED)	13	135	17	0.50	110.5
SIGNAL (YELLOW)	13	135	25	0.25	81.25
SIGNAL (GREEN)	13	135	15	0.25	48.75
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	-	90	25	1.00	-
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					375.1

ENERGY COSTS - BILLED TO: VILLAGE OF BARTLETT
(ADDRESS) 228 SOUTH MAIN STREET
(ADDRESS) BARTLETT, IL 60103
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

FILE NAME = 60V80-029-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 59 AT APPLE VALLEY DRIVE

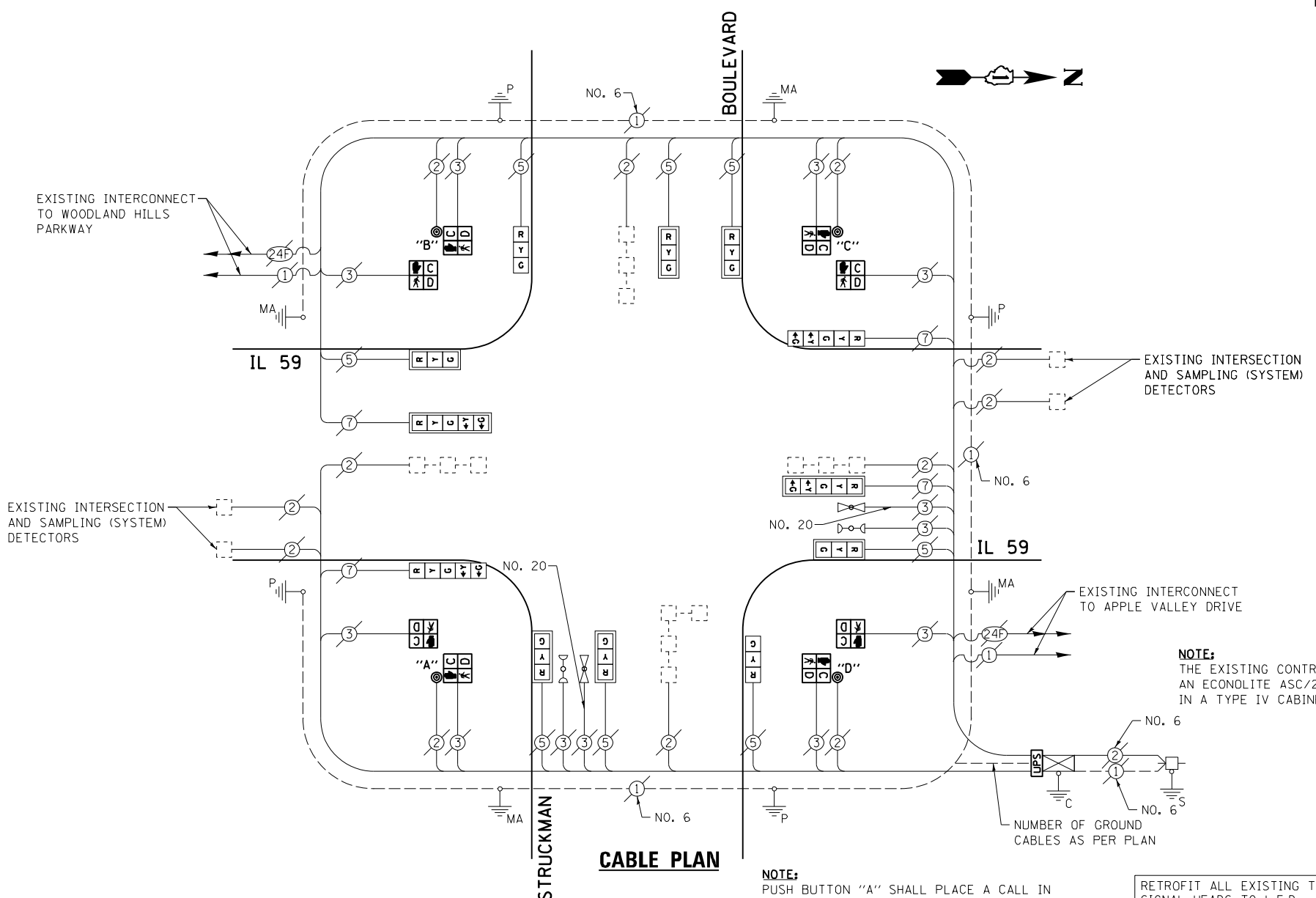
SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 29
			CONTRACT NO. 60V80	
ILLINOIS FED. AID PROJECT				

GHA #4085.887

SCHEDULE OF QUANTITIES
IL 59 AT STRUCKMAN BOULEVARD

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	8	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
3.	8	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
4.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
5.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
6.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
7.	2	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT
8.	6	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT
9.	2	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT
10.	2	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT
11.	4	EACH	PEDESTRIAN PUSH-BUTTON, NON-LATCHING



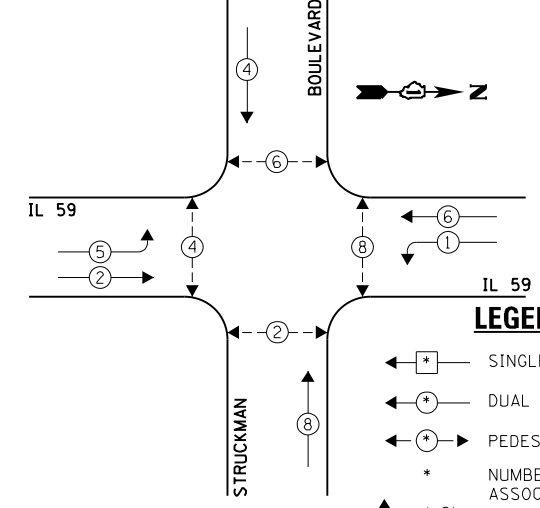
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 8 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 8 EACH TRAFFIC SIGNAL BACKPLATE
- 4 EACH PEDESTRIAN PUSH-BUTTON

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	INCAND.	L.E.D.	OPERATION	
SIGNAL (RED)	12	135	17	0.50	102.0
SIGNAL (YELLOW)	12	135	25	0.25	75.0
SIGNAL (GREEN)	12	135	15	0.25	45.0
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	8	90	25	1.00	200.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					556.6

ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHALMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

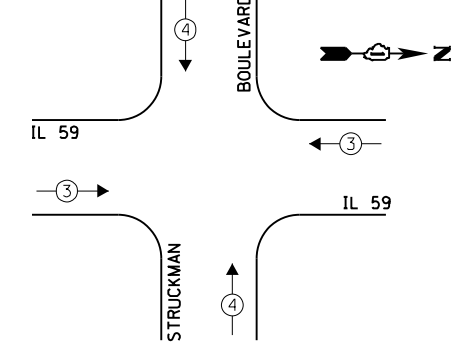
EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM

- NOTE: PUSH BUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4.
PUSH BUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6.
PUSH BUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8.
PUSH BUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8.

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTORS	
EMERGENCY VEHICLE PREEMPTOR	3
MOVEMENT	4

FILE NAME = 60V80-030-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

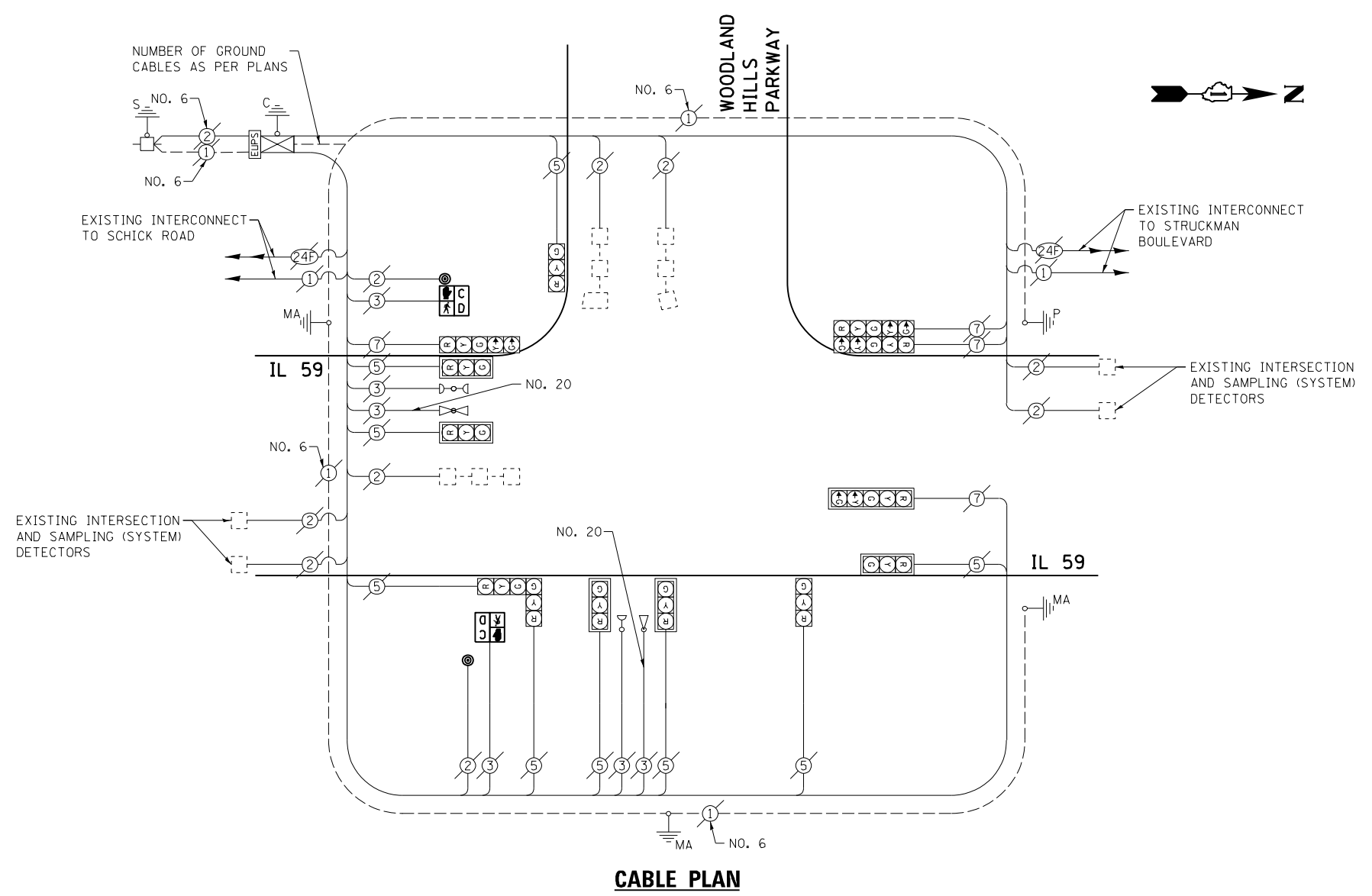
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 59 AT STRUCKMAN BOULEVARD
SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTÉ. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 30
			CONTRACT NO. 60V80	
ILLINOIS FED. AID PROJECT				

SCHEDULE OF QUANTITIES
IL 59 AT WOODLAND HILLS PARKWAY

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
3.	2	EACH	PEDESTRIAN PUSH-BUTTON
4.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT



CABLE PLAN

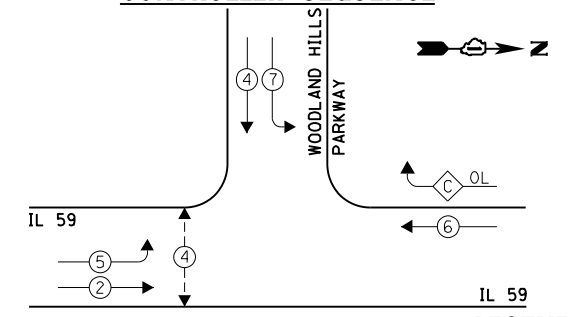
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

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

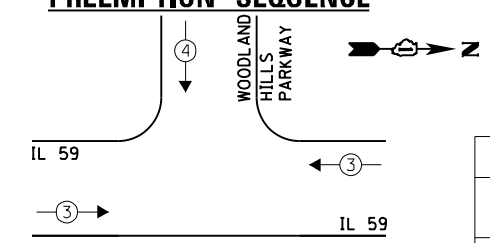
I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	INCAND.	L.E.D.	OPERATION	
SIGNAL (RED)	13	135	17	0.50	110.5
SIGNAL (YELLOW)	13	135	25	0.25	81.25
SIGNAL (GREEN)	13	135	15	0.25	48.75
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	2	90	25	1.00	50.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					425.1

ENERGY COSTS - BILLED TO: VILLAGE OF BARTLETT
(ADDRESS) 228 SOUTH MAIN STREET
(ADDRESS) BARTLETT, IL 60103
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

EXISTING CONTROLLER SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



LEGEND:

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

OVERLAP LETTER C = PERMISSIVE PHASE 6 + PROTECTED PHASE 7

EXISTING PHASE DESIGNATION DIAGRAM

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

FILE NAME = 60V80-031-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 59 AT WOODLANDS HILLS PARKWAY

SCALE: NONE SHEET OF SHEETS STA. TO STA.

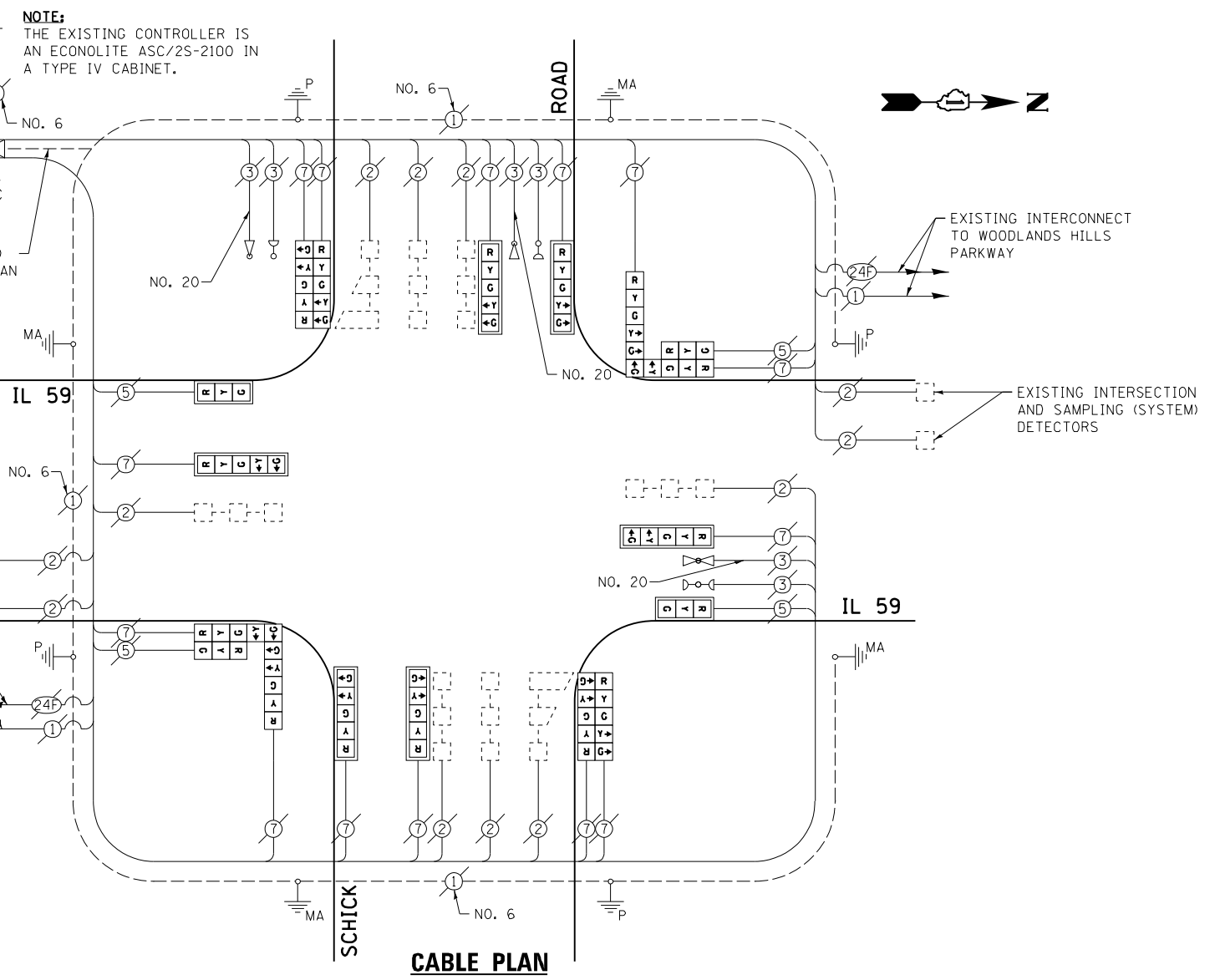
F.A. RTE. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 31
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60V80	

SCHEDULE OF QUANTITIES
IL 59 AT SCHICK ROAD

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
3.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
4.	2	EACH	SIGNAL HEAD, LED, 3-FACE, 1-3 SECTION, 2-5 SECTION, BRACKET MOUNTED, RETROFIT
5.	2	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT
6.	6	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT

RETROFIT ALL EXISTING TRAFFIC SIGNAL HEADS TO L.E.D.

NUMBER OF GROUND CABLES AS PER PLAN



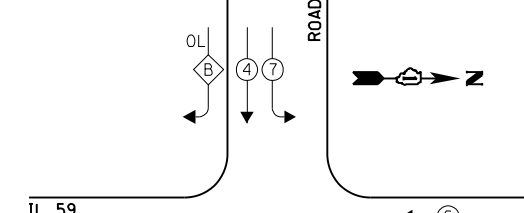
EXISTING INTERSECTION AND SAMPLING (SYSTEM) DETECTORS

EXISTING INTERCONNECT TO ARMY TRAIL ROAD

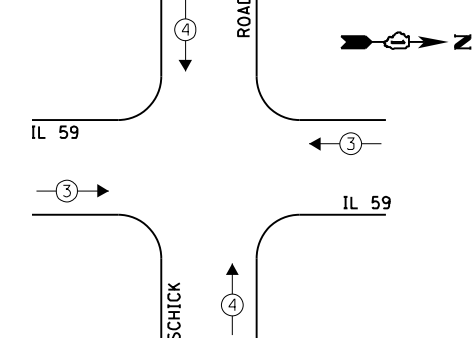
EXISTING INTERCONNECT TO WOODLANDS HILLS PARKWAY

EXISTING INTERSECTION AND SAMPLING (SYSTEM) DETECTORS

EXISTING CONTROLLER SEQUENCE



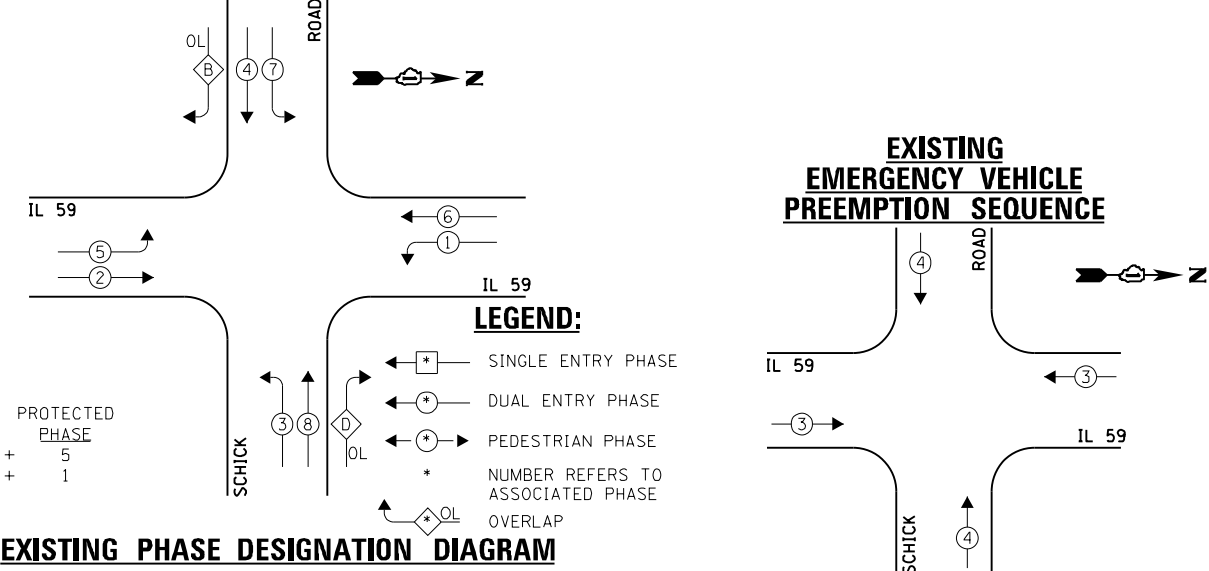
EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



LEGEND:

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

EXISTING PHASE DESIGNATION DIAGRAM



EXISTING EMERGENCY VEHICLE PREEMPTORS	
EMERGENCY VEHICLE PREEMPTOR	3
MOVEMENT	4

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE	
TYPE	NO. LAMPS	INCAND.	L.E.D.	OPERATION	
SIGNAL (RED)	18	135	17	0.50	153.0
SIGNAL (YELLOW)	18	135	25	0.25	112.5
SIGNAL (GREEN)	18	135	15	0.25	67.5
ARROW	28	135	12	0.10	33.6
PED. SIGNAL	-	90	25	1.00	-
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =				491.6	

ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHALMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

FILE NAME = 60V80-032-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

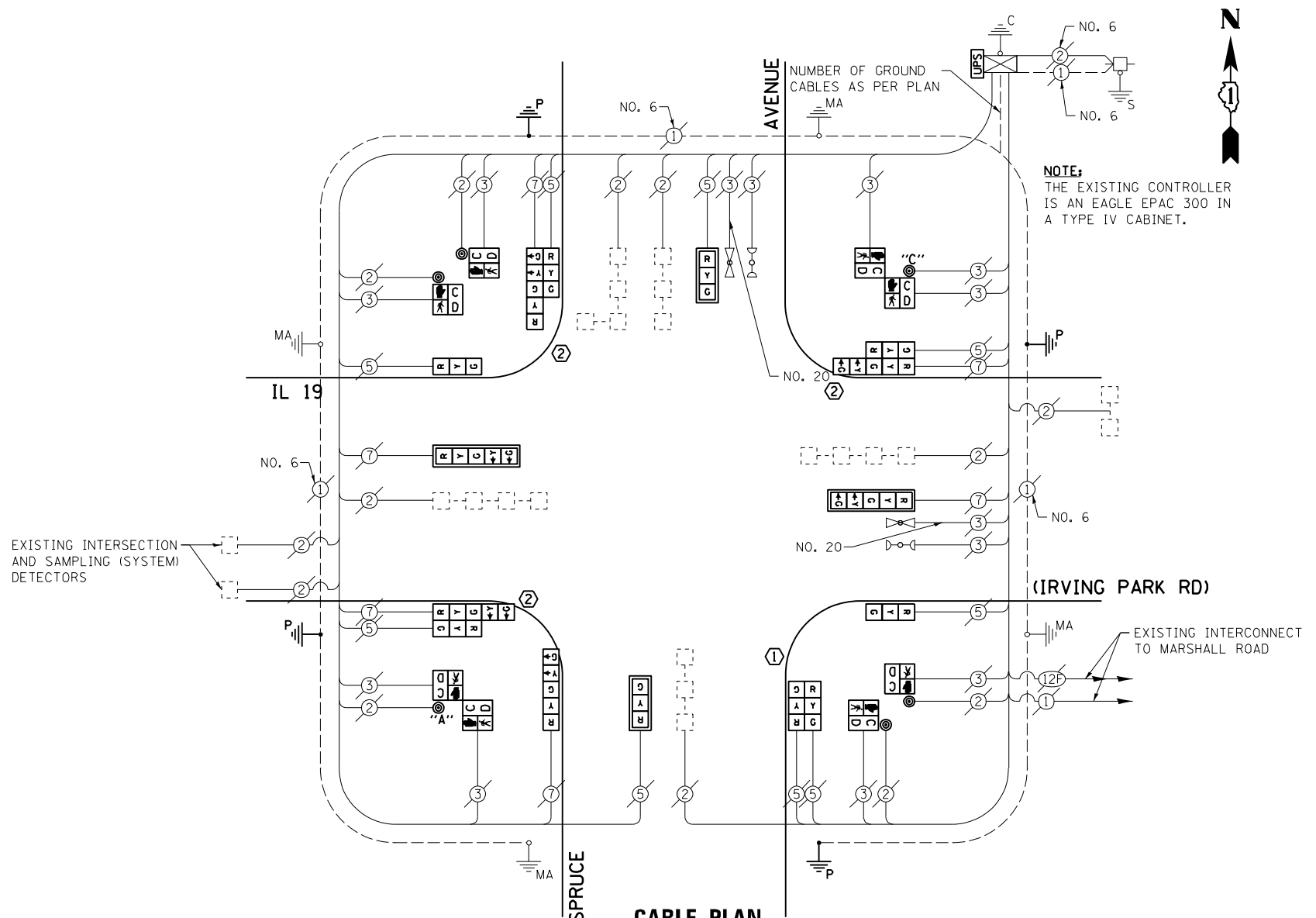
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 59 AT SCHICK ROAD

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 32
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60V80	

SCHEDULE OF QUANTITIES
IL 19 (IRVING PARK RD) AT SPRUCE AVENUE

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	1	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.
3.	3	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
4.	2	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
5.	1	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
6.	1	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED
7.	2	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED
8.	1	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED
9.	3	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
10.	4	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
11.	2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
12.	4	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
13.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
14.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
15.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
16.	6	EACH	PEDESTRIAN PUSH-BUTTON, NON-LATCHING



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

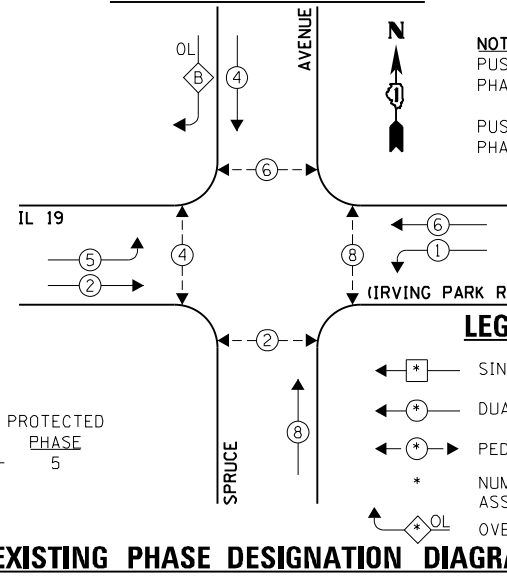
- 4 EACH TRAFFIC SIGNAL HEAD, 1-FACE, 3-SECTION
- 3 EACH TRAFFIC SIGNAL HEAD, 1-FACE, 5-SECTION
- 1 EACH TRAFFIC SIGNAL HEAD, 2-FACE, 3-SECTION
- 3 EACH TRAFFIC SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION
- 4 EACH TRAFFIC SIGNAL POST
- 4 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 2 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE
- 4 EACH TRAFFIC SIGNAL BACKPLATE
- 6 EACH PEDESTRIAN PUSH-BUTTON

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE	
TYPE	NO. LAMPS	INCAND. L.E.D.	OPERATION		
SIGNAL (RED)	15	135	17	0.50	127.5
SIGNAL (YELLOW)	15	135	25	0.25	93.75
SIGNAL (GREEN)	15	135	15	0.25	56.25
ARROW	12	135	12	0.10	14.4
PED. SIGNAL	8	90	25	1.00	200.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					616.9

ENERGY COSTS - BILLED TO: IL DEPARTMENT OF TRANSPORTATION (ADDRESS) 201 W. CENTER COURT (ADDRESS) SCHALMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO (PHONE) (630) 424-5704 (COMPANY) CQM-ED

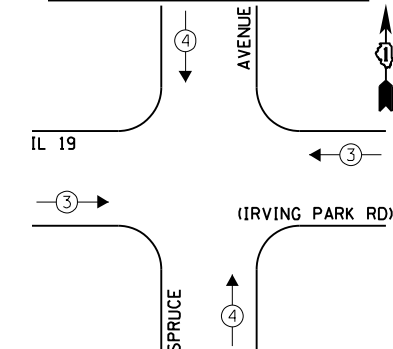
- CONSTRUCTION NOTE:**
- ① REMOVE EXISTING SIGNAL HEADS AND REPLACE EXISTING 14 FOOT PAINTED POST. INSTALL NEW SIGNAL HEADS ON NEW 14 FOOT GALVANIZED STEEL POST. REUSE EXISTING TYPE "A" CONCRETE FOUNDATION AND EXISTING CABLES.
 - ② REMOVE EXISTING SIGNAL HEADS AND REPLACE EXISTING 16 FOOT PAINTED POST. INSTALL NEW SIGNAL HEADS ON NEW 16 FOOT GALVANIZED STEEL POST. REUSE EXISTING TYPE "A" CONCRETE FOUNDATION AND EXISTING CABLES.

EXISTING CONTROLLER SEQUENCE



NOTE:
PUSH BUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4.
PUSH BUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8.

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTORS	
EMERGENCY VEHICLE PREEMPTOR	3
MOVEMENT	4

FILE NAME = 60V80-033-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 19 (IRVING PARK RD) AT SPRUCE AVENUE

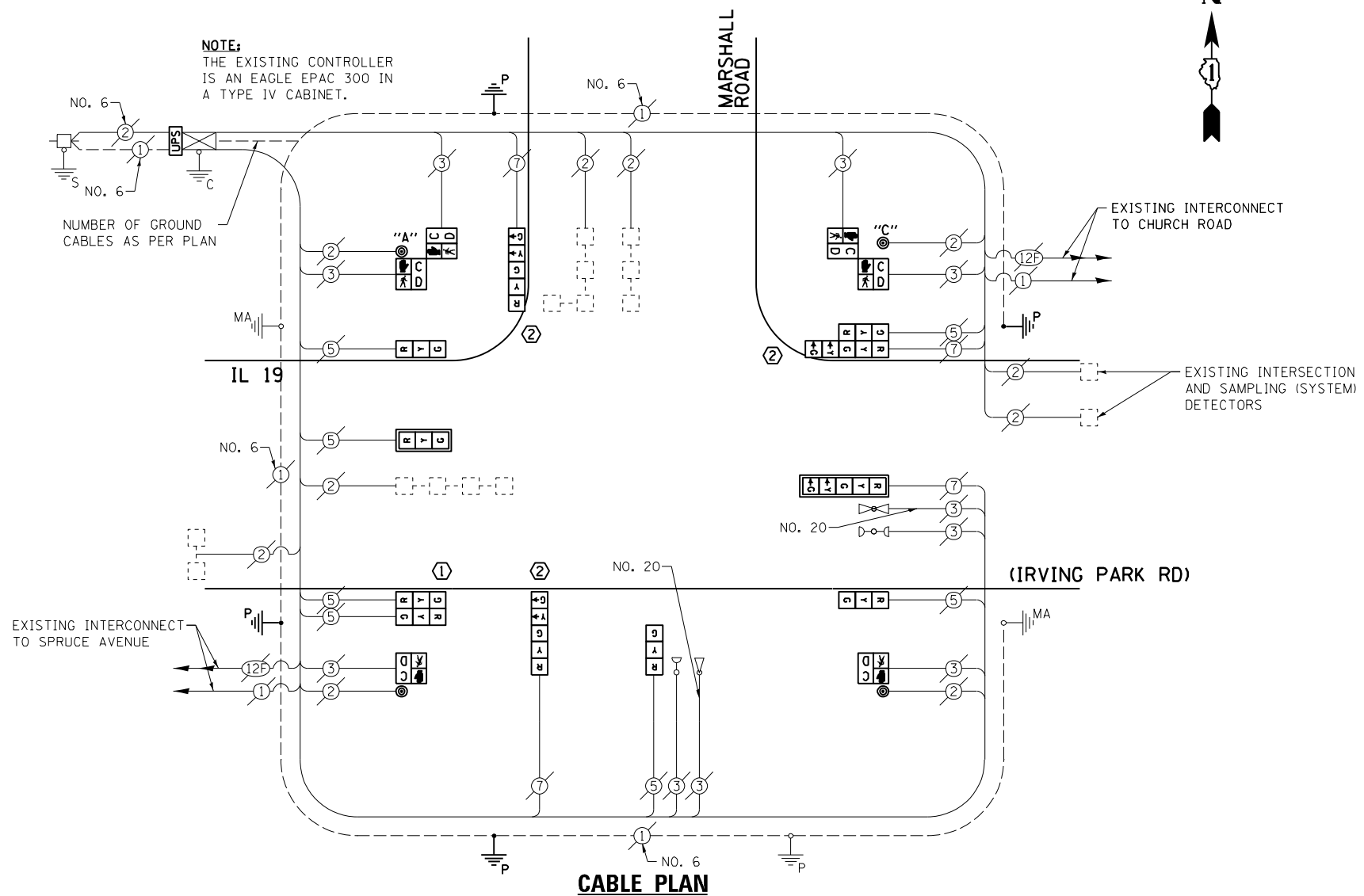
SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 33
CONTRACT NO. 60V80			ILLINOIS FED. AID PROJECT	

GHA #4085.887

SCHEDULE OF QUANTITIES
IL 19 (IRVING PARK RD) AT MARSHALL ROAD

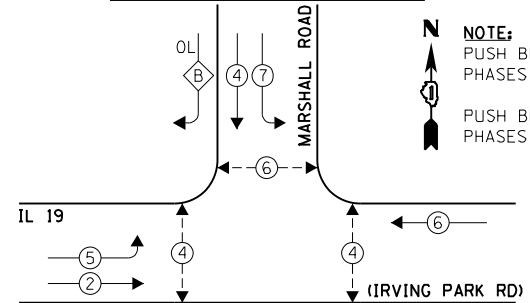
NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	1	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.
3.	3	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
4.	1	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
5.	3	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
6.	2	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED
7.	1	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED
8.	1	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED
9.	1	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
10.	2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
11.	2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
12.	2	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
13.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
14.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
15.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
16.	4	EACH	PEDESTRIAN PUSH-BUTTON, NON-LATCHING



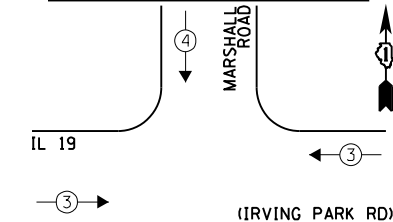
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 4 EACH TRAFFIC SIGNAL HEAD, 1-FACE, 3-SECTION
- 3 EACH TRAFFIC SIGNAL HEAD, 1-FACE, 5-SECTION
- 1 EACH TRAFFIC SIGNAL HEAD, 2-FACE, 3-SECTION
- 1 EACH TRAFFIC SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION
- 4 EACH TRAFFIC SIGNAL POST
- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 2 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE
- 2 EACH TRAFFIC SIGNAL BACKPLATE
- 4 EACH PEDESTRIAN PUSH-BUTTON

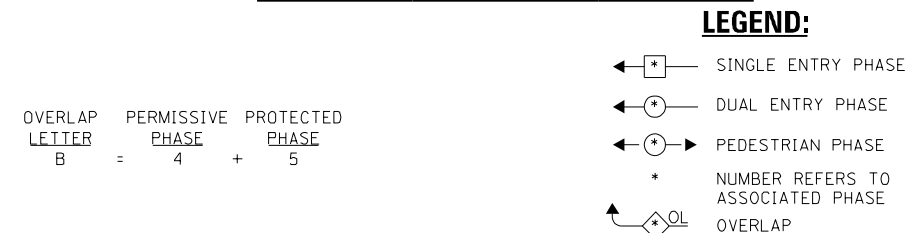
EXISTING CONTROLLER SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



- CONSTRUCTION NOTE:**
- ① REMOVE EXISTING SIGNAL HEADS AND REPLACE EXISTING 14 FOOT PAINTED POST. INSTALL NEW SIGNAL HEADS ON NEW 14 FOOT GALVANIZED STEEL POST. REUSE EXISTING TYPE "A" CONCRETE FOUNDATION AND EXISTING CABLES.
 - ② REMOVE EXISTING SIGNAL HEADS AND REPLACE EXISTING 16 FOOT PAINTED POST. INSTALL NEW SIGNAL HEADS ON NEW 16 FOOT GALVANIZED STEEL POST. REUSE EXISTING TYPE "A" CONCRETE FOUNDATION AND EXISTING CABLES.



EXISTING PHASE DESIGNATION DIAGRAM

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE	
TYPE	NO. LAMPS	INCAND. L.E.D.	OPERATION		
SIGNAL (RED)	11	135	17	0.50	93.5
SIGNAL (YELLOW)	11	135	25	0.25	68.75
SIGNAL (GREEN)	11	135	15	0.25	41.25
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	6	90	25	1.00	150.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =				488.1	

ENERGY COSTS - BILLED TO: IL DEPARTMENT OF TRANSPORTATION (ADDRESS) 201 W. CENTER COURT (ADDRESS) SCHAMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO (PHONE) (630) 424-5704 (COMPANY) CQM-ED

FILE NAME = 60V80-034-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

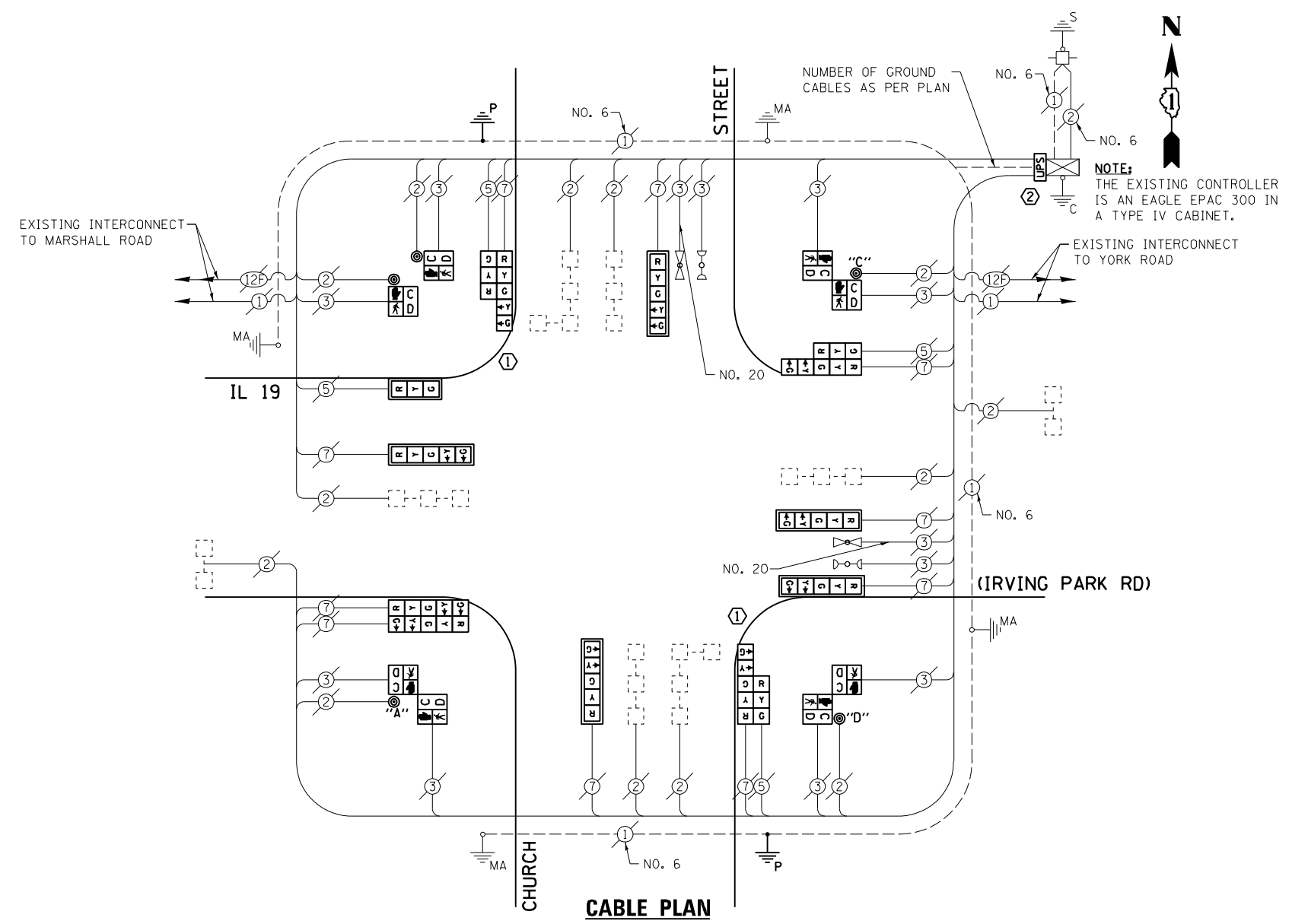
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 19 (IRVING PARK RD) AT MARSHALL ROAD

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 34
CONTRACT NO. 60V80			ILLINOIS FED. AID PROJECT	

SCHEDULE OF QUANTITIES
IL 19 (IRVING PARK RD) AT CHURCH ROAD

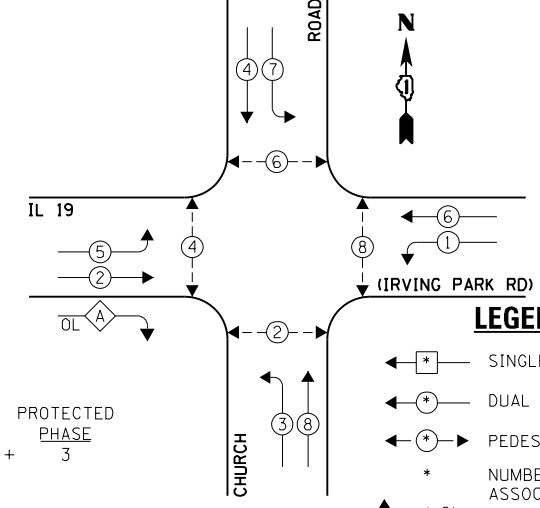
NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	2	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
3.	1	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
4.	5	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED
5.	1	EACH	SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED
6.	3	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
7.	2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
8.	3	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
9.	6	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
10.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
11.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
12.	1	EACH	UNINTERRUPTIBLE POWER SUPPLY, SPECIAL
13.	5	EACH	PEDESTRIAN PUSH-BUTTON, NON-LATCHING



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.

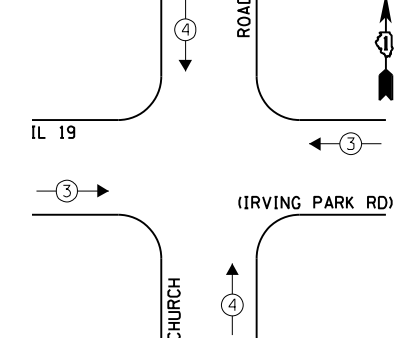
- 1 EACH TRAFFIC SIGNAL HEAD, 1-FACE, 3-SECTION
- 5 EACH TRAFFIC SIGNAL HEAD, 1-FACE, 5-SECTION
- 1 EACH TRAFFIC SIGNAL HEAD, 2-FACE, 5-SECTION
- 3 EACH TRAFFIC SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION
- 2 EACH TRAFFIC SIGNAL POST
- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 3 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE
- 6 EACH TRAFFIC SIGNAL BACKPLATE
- 5 EACH PEDESTRIAN PUSH-BUTTON

EXISTING CONTROLLER SEQUENCE



- NOTE:
- PUSH BUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4.
 - PUSH BUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8.
 - PUSH BUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8.

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTORS	
EMERGENCY VEHICLE PREEMPTOR	3
MOVEMENT	4

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE	
TYPE	NO. LAMPS	INCAND. L.E.D.	OPERATION		
SIGNAL (RED)	14	135	17	0.50	119.0
SIGNAL (YELLOW)	14	135	25	0.25	87.5
SIGNAL (GREEN)	14	135	15	0.25	52.5
ARROW	20	135	12	0.10	24.0
PED. SIGNAL	8	90	25	1.00	200.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =				608.0	

ENERGY COSTS - BILLED TO: VILLAGE OF BENSENVILLE
(ADDRESS) 12 SOUTH CENTER STREET
(ADDRESS) BENSENVILLE, IL 60106
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

- CONSTRUCTION NOTES:
- REMOVE EXISTING SIGNAL HEADS AND REPLACE EXISTING 16 FOOT PAINTED POST. INSTALL NEW SIGNAL HEADS ON NEW 16 FOOT GALVANIZED STEEL POST. REUSE EXISTING TYPE "A" CONCRETE FOUNDATION AND EXISTING CABLES.
 - ALL WORK TO CLEAR WAY FOR INSTALLATION OF THE UPS SHALL BE INCLUDED IN THE COST OF THE PAY ITEM "UNINTERRUPTIBLE POWER SUPPLY, SPECIAL."

OVERLAP LETTER A = PERMISSIVE PHASE 2 + PROTECTED PHASE 3

EXISTING PHASE DESIGNATION DIAGRAM



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 19 (IRVING PARK RD) AT CHURCH ROAD

FILE NAME = 60V80-035-ts.dgn
Default

USER NAME = zwallsten
PLOT SCALE = 1:20
PLOT DATE = 12/20/2012

DESIGNED - JRD
DRAWN - ZCW
CHECKED - KLB
DATE - 12-20-12

REVISED -
REVISED -
REVISED -
REVISED -

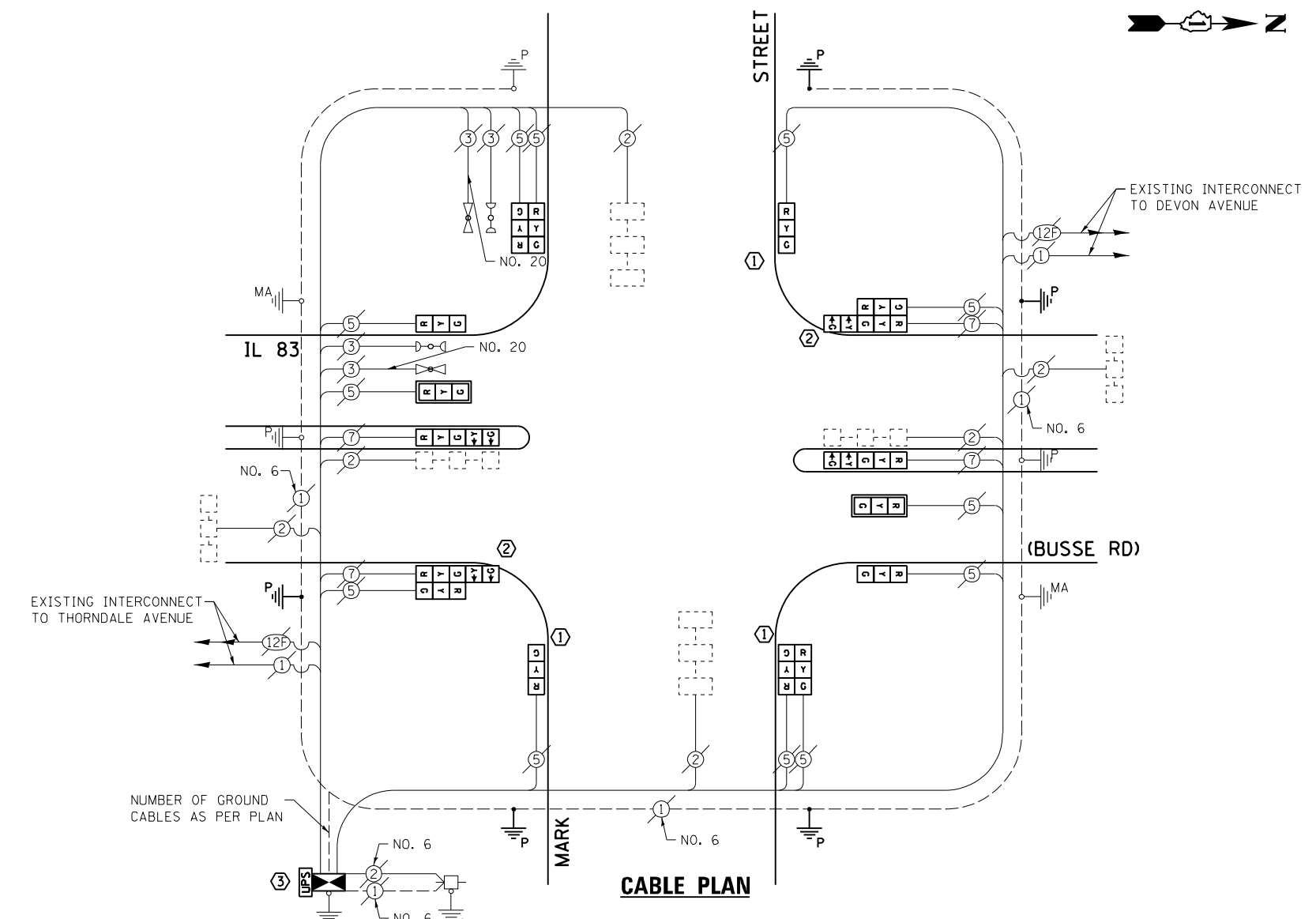
F.A. RTÉ. VARIES
SECTION 2012-070 I
COUNTY DuPAGE
TOTAL SHEETS 103
SHEET NO. 35
CONTRACT NO. 60V80

SCALE: NONE
SHEET OF SHEETS STA. TO STA.

ILLINOIS FED. AID PROJECT

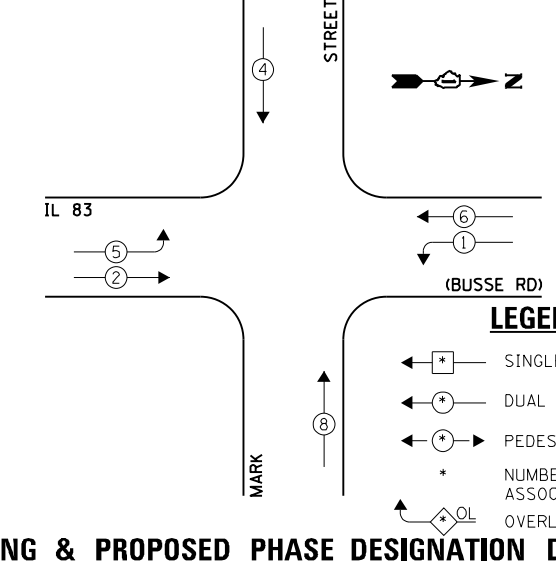
SCHEDULE OF QUANTITIES
IL 83 (BUSSE RD) AT MARK STREET

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	1	EACH	TRANSCEIVER - FIBER OPTIC
3.	3	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.
4.	2	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
5.	2	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
6.	4	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
7.	2	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED
8.	2	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED
9.	2	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
10.	2	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
11.	6	EACH	INDUCTIVE LOOP DETECTOR
12.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
13.	1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
14.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL



NOTE:
THE EXISTING CONTROLLER IS AN ECONOLITE ASC/25-1000 IN A TYPE IV CABINET.

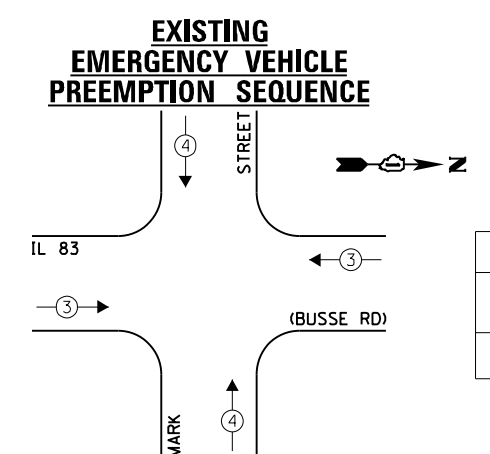
EXISTING & PROPOSED CONTROLLER SEQUENCE



LEGEND:

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

EXISTING & PROPOSED PHASE DESIGNATION DIAGRAM



EXISTING EMERGENCY VEHICLE PREEMPTORS	
EMERGENCY VEHICLE PREEMPTOR	3
MOVEMENT	4

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

- 1 EACH CABINET AND CONTROLLER (COMPLETE)
- 6 EACH TRAFFIC SIGNAL HEAD, 1-FACE, 3-SECTION
- 2 EACH TRAFFIC SIGNAL HEAD, 1-FACE, 5-SECTION
- 2 EACH TRAFFIC SIGNAL HEAD, 2-FACE, 3-SECTION
- 2 EACH TRAFFIC SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION
- 5 EACH TRAFFIC SIGNAL POST
- 2 EACH TRAFFIC SIGNAL BACKPLATE

- CONSTRUCTION NOTES:**
- ① REMOVE EXISTING SIGNAL HEADS AND REPLACE EXISTING 14 FOOT PAINTED POST. INSTALL NEW SIGNAL HEADS ON NEW 14 FOOT GALVANIZED STEEL POST. REUSE EXISTING TYPE "A" CONCRETE FOUNDATION AND EXISTING CABLES.
 - ② REMOVE EXISTING SIGNAL HEADS AND REPLACE EXISTING 16 FOOT PAINTED POST. INSTALL NEW SIGNAL HEADS ON NEW 16 FOOT GALVANIZED STEEL POST. REUSE EXISTING TYPE "A" CONCRETE FOUNDATION AND EXISTING CABLES.
 - ③ RELOCATION OF THE EXISTING PHASING UNIT FOR THE EMERGENCY VEHICLE PRE-EMPTION SYSTEM IS TO BE INCLUDED IN THE COST OF THE PAY ITEM "FULL ACTUATED CONTROLLER AND CABINET OF THE TYPE SPECIFIED."

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	INCAND.	L.E.D.	OPERATION	
SIGNAL (RED)	16	135	17	0.50	136.0
SIGNAL (YELLOW)	16	135	25	0.25	100.0
SIGNAL (GREEN)	16	135	15	0.25	60.0
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	-	90	25	1.00	-
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					430.6

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

ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHALMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

FILE NAME = 60V80-036-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISIONS -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISIONS -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISIONS -
		DATE - 12-20-12	REVISIONS -

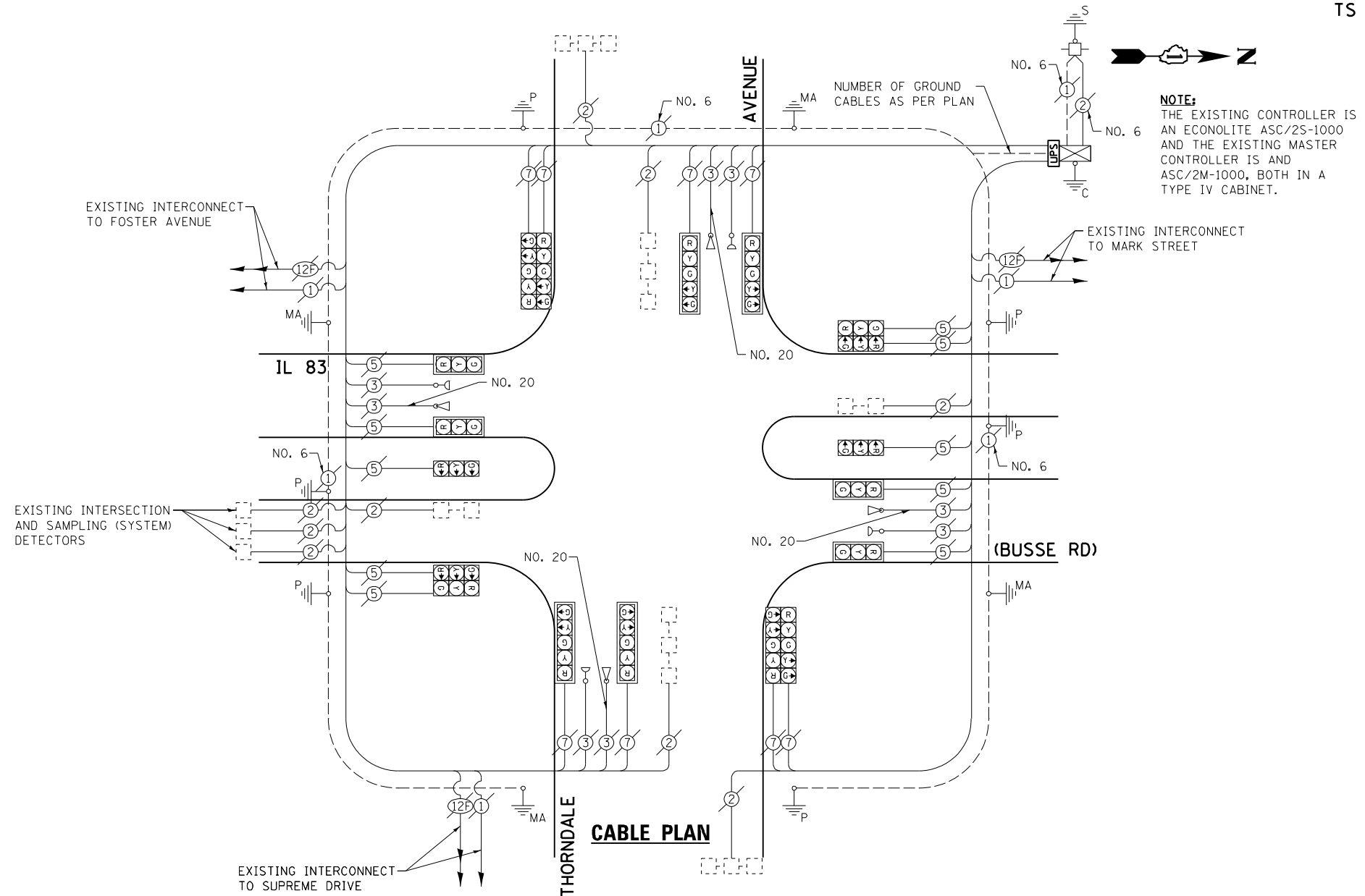
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE			
IL 83 (BUSSE RD) AT MARK STREET			
SCALE: NONE	SHEET	OF SHEETS	STA. TO STA.

F.A. RTE. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 36
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60V80	

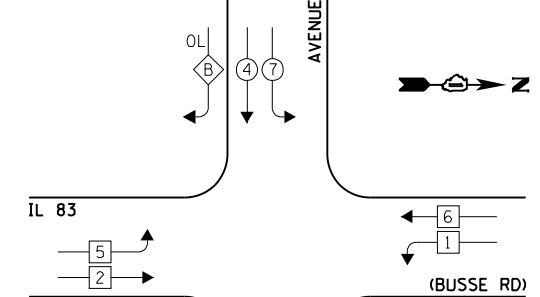
SCHEDULE OF QUANTITIES
IL 83 (BUSSE RD) AT THORNDALE AVENUE

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
3.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL

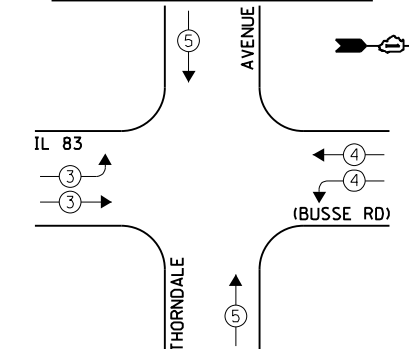


NOTE:
THE EXISTING CONTROLLER IS AN ECONOLITE ASC/2S-1000 AND THE EXISTING MASTER CONTROLLER IS AN ASC/2M-1000, BOTH IN A TYPE IV CABINET.

EXISTING CONTROLLER SEQUENCE



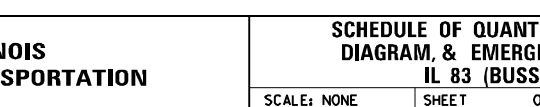
EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



LEGEND:

- ← + → SINGLE ENTRY PHASE
 - ← + + → DUAL ENTRY PHASE
 - ← + → PEDESTRIAN PHASE
 - + NUMBER REFERS TO ASSOCIATED PHASE
 - OL OVERLAP
- OVERLAP LETTER PERMISSIVE PHASE PROTECTED PHASE
- B = 4 + 5
- D = 8 + 1

EXISTING 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. LAMPS	WATTAGE INCAND.	OPERATION L.E.D.		
SIGNAL (RED)	18	135	17	0.50	153.0
SIGNAL (YELLOW)	18	135	25	0.25	112.5
SIGNAL (GREEN)	18	135	15	0.25	67.5
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	-	90	25	1.00	-
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					477.2

ENERGY COSTS - BILLED TO: IL DEPARTMENT OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHALMBURG, IL 60196-1096

ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

FILE NAME = 60V80-037-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

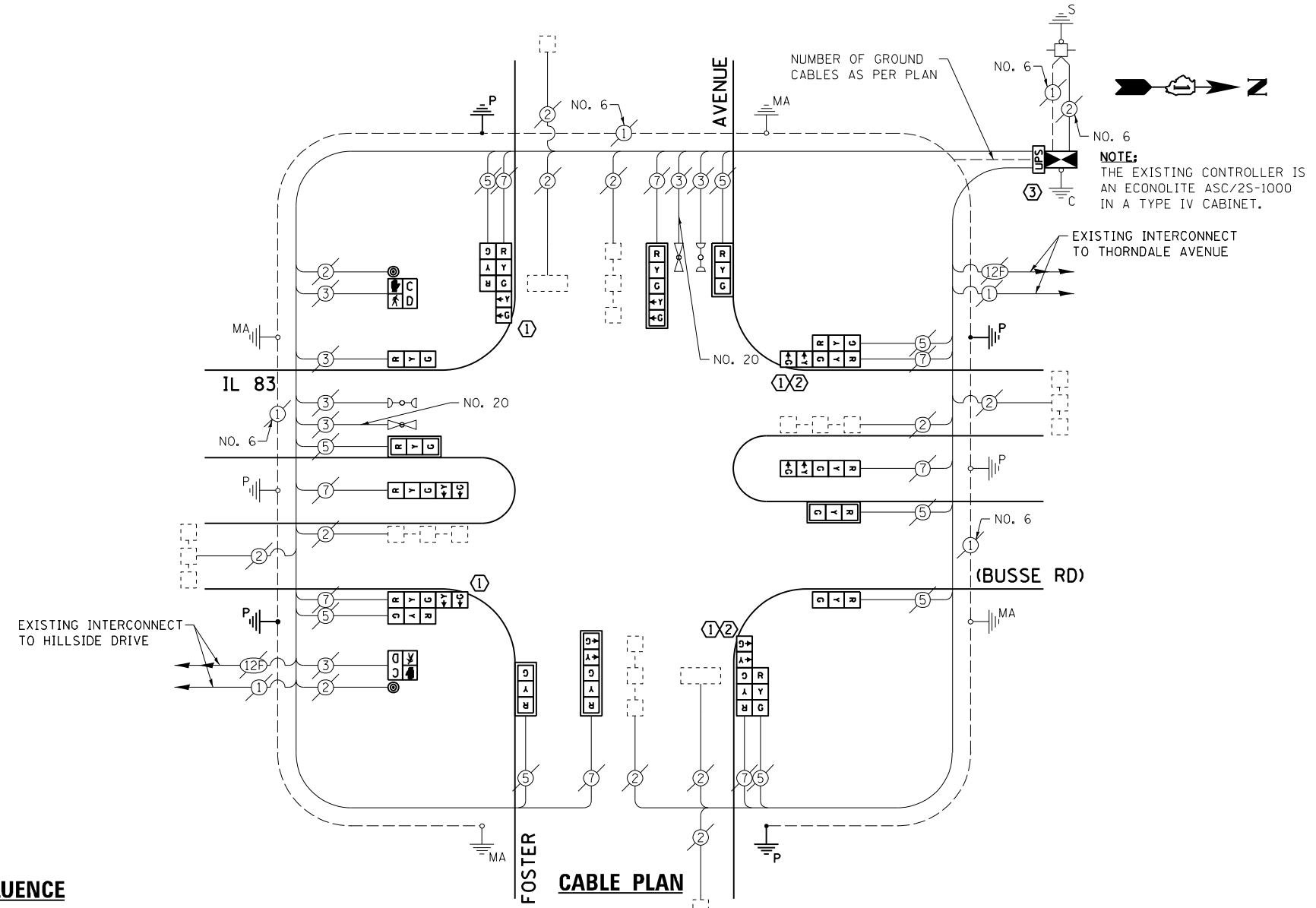
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 83 (BUSSE RD) AT THORNDALE AVENUE

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 37
CONTRACT NO. 60V80			ILLINOIS FED. AID PROJECT	

SCHEDULE OF QUANTITIES
IL 83 (BUSSE RD) AT FOSTER AVENUE

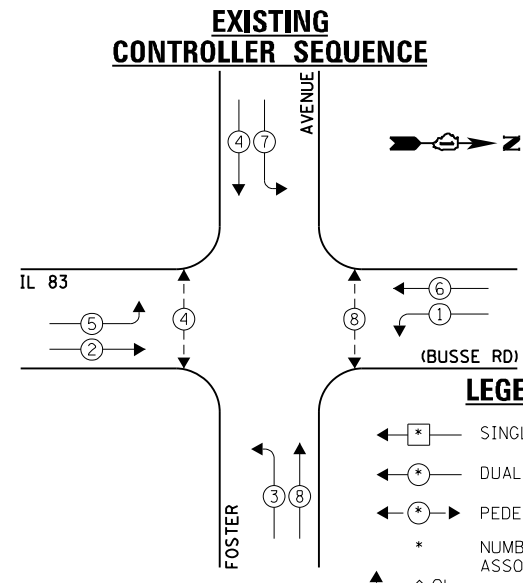
NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	1	EACH	TRANSCEIVER - FIBER OPTIC
3.	4	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
4.	4	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
5.	2	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
6.	2	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED
7.	2	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED
8.	4	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
9.	2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
10.	6	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
11.	10	EACH	INDUCTIVE LOOP DETECTOR
12.	2	EACH	PEDESTRIAN PUSH-BUTTON
13.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
14.	1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
15.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL



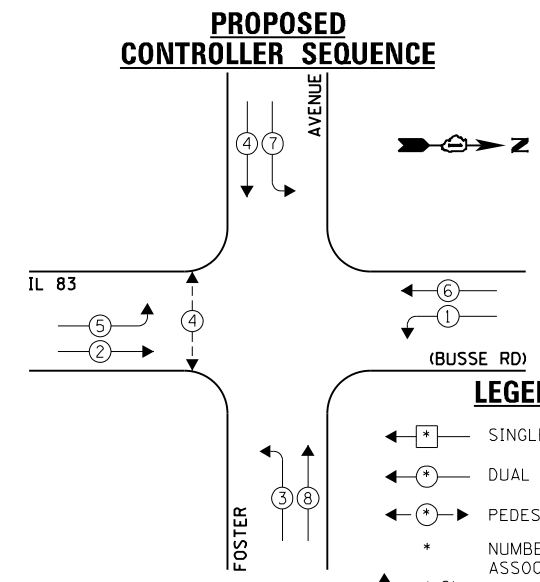
- CONSTRUCTION NOTES:**
- ① REMOVE EXISTING SIGNAL HEADS AND REPLACE EXISTING 16 FOOT PAINTED POST. INSTALL NEW SIGNAL HEADS ON NEW 16 FOOT GALVANIZED STEEL POST. REUSE EXISTING TYPE "A" CONCRETE FOUNDATION AND EXISTING CABLES.
 - ② REMOVE EXISTING PEDESTRIAN SIGNAL HEAD AND PUSH-BUTTON AND ABANDON ALL EXISTING CABLES.
 - ③ RELOCATION OF THE EXISTING PHASING UNIT FOR THE EMERGENCY VEHICLE PRE-EMPTION SYSTEM IS TO BE INCLUDED IN THE COST OF THE PAY ITEM "FULL ACTUATED CONTROLLER AND CABINET OF THE TYPE SPECIFIED."

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

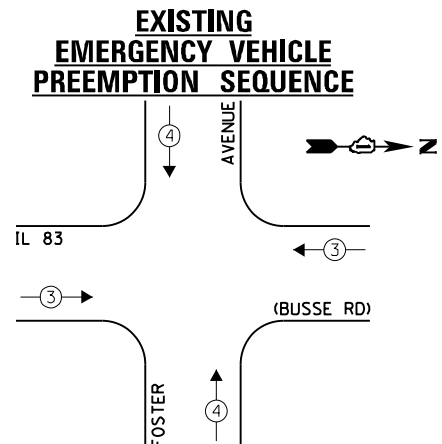
- 1 EACH CONTROLLER AND CABINET (COMPLETE)
- 6 EACH TRAFFIC SIGNAL HEAD, 1-FACE, 3-SECTION
- 4 EACH TRAFFIC SIGNAL HEAD, 1-FACE, 5-SECTION
- 4 EACH TRAFFIC SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION
- 4 EACH TRAFFIC SIGNAL POST
- 4 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 6 EACH TRAFFIC SIGNAL BACKPLATE
- 4 EACH PEDESTRIAN PUSH-BUTTON



EXISTING PHASE DESIGNATION DIAGRAM



PROPOSED PHASE DESIGNATION DIAGRAM



EXISTING EMERGENCY VEHICLE PREEMPTORS	
EMERGENCY VEHICLE PREEMPTOR	3
MOVEMENT	4

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	INCAND.	L.E.D.	OPERATION	
SIGNAL (RED)	18	135	17	0.50	153.0
SIGNAL (YELLOW)	18	135	25	0.25	112.5
SIGNAL (GREEN)	18	135	15	0.25	67.5
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	2	90	25	1.00	50.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					527.2

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

ENERGY COSTS - BILLED TO: IL DEPARTMENT OF TRANSPORTATION (ADDRESS) 201 W. CENTER COURT (ADDRESS) SCHAMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO (PHONE: (630) 424-5704) COMPANY: CQM-ED

FILE NAME = 60V80-038-ts.dgn
USER NAME = zwallsten
DESIGNED - JRD
DRAWN - ZCW
PLOT SCALE = 1:20
PLOT DATE = 12/20/2012

REVISOR -
REVISION -
CHECKED - KLB
DATE - 12-20-12

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 83 (BUSSE RD) AT FOSTER AVENUE
SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTÉ. VARIES SECTION 2012-070 I COUNTY DuPAGE TOTAL SHEETS 103 SHEET NO. 38 CONTRACT NO. 60V80 ILLINOIS FED. AID PROJECT

SCHEDULE OF QUANTITIES
IL 83 (BUSSE RD) AT HILLSIDE DRIVE

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	1	EACH	TRANSCEIVER - FIBER OPTIC
3.	2	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.
4.	3	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
5.	2	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
6.	4	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
7.	2	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED
8.	2	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED
9.	2	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
10.	2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
11.	2	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
12.	8	EACH	INDUCTIVE LOOP DETECTOR
13.	2	EACH	PEDESTRIAN PUSH-BUTTON
14.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
15.	1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
16.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL

- CONSTRUCTION NOTES:**
- REMOVE EXISTING SIGNAL HEADS AND REPLACE EXISTING 14 FOOT PAINTED POST. INSTALL NEW SIGNAL HEADS ON NEW 14 FOOT GALVANIZED STEEL POST. REUSE EXISTING TYPE "A" CONCRETE FOUNDATION AND EXISTING CABLES.
 - REMOVE EXISTING SIGNAL HEADS AND REPLACE EXISTING 16 FOOT PAINTED POST. INSTALL NEW SIGNAL HEADS ON NEW 16 FOOT GALVANIZED STEEL POST. REUSE EXISTING TYPE "A" CONCRETE FOUNDATION AND EXISTING CABLES.
 - REMOVE EXISTING PEDESTRIAN SIGNAL HEAD AND PUSH-BUTTON AND ABANDON ALL EXISTING CABLES.
 - RELOCATION OF THE EXISTING PHASING UNIT FOR THE EMERGENCY VEHICLE PRE-EMPTION SYSTEM IS TO BE INCLUDED IN THE COST OF THE PAY ITEM "FULL ACTUATED CONTROLLER AND CABINET OF THE TYPE SPECIFIED."

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

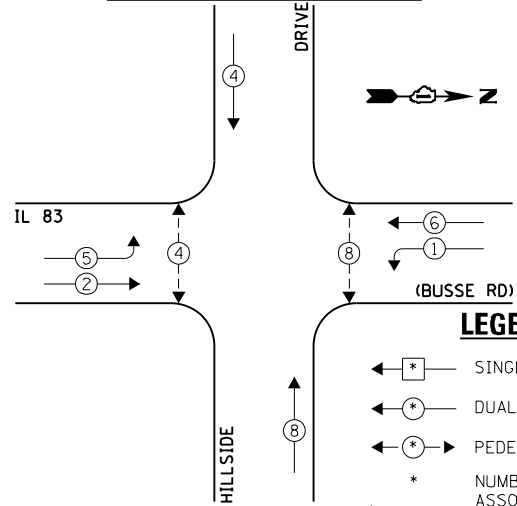
- 1 EACH CONTROLLER AND CABINET (COMPLETE)
- 6 EACH TRAFFIC SIGNAL HEAD, 1-FACE, 3-SECTION
- 2 EACH TRAFFIC SIGNAL HEAD, 1-FACE, 5-SECTION
- 2 EACH TRAFFIC SIGNAL HEAD, 2-FACE, 3-SECTION
- 2 EACH TRAFFIC SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION
- 5 EACH TRAFFIC SIGNAL POST
- 4 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 2 EACH TRAFFIC SIGNAL BACKPLATE
- 4 EACH PEDESTRIAN PUSH-BUTTON

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	INCAND.	L.E.D.	OPERATION	
SIGNAL (RED)	16	135	17	0.50	136.0
SIGNAL (YELLOW)	16	135	25	0.25	100.0
SIGNAL (GREEN)	16	135	15	0.25	60.0
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	2	90	25	1.00	50.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					480.6

ENERGY COSTS - BILLED TO: IL DEPARTMENT OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHALMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

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

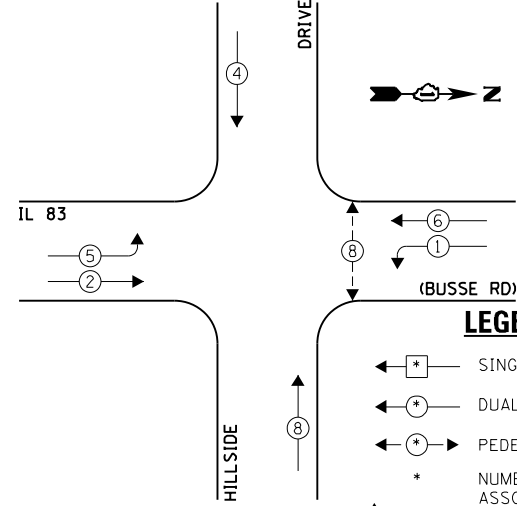
EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM

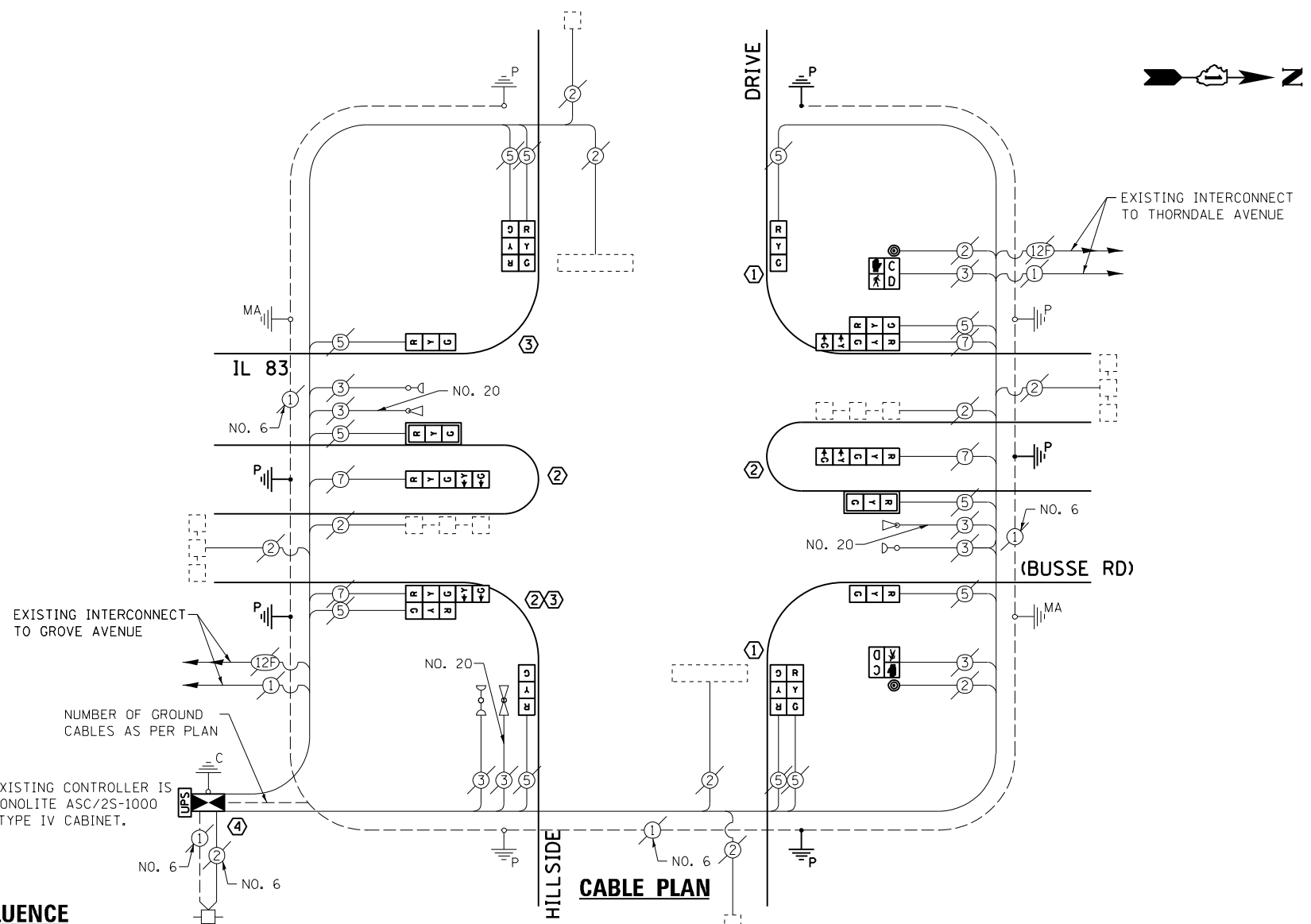
- LEGEND:**
- ← * → SINGLE ENTRY PHASE
 - ← * DUAL ENTRY PHASE
 - ← * → PEDESTRIAN PHASE
 - * NUMBER REFERS TO ASSOCIATED PHASE
 - ← * OL → OVERLAP

PROPOSED CONTROLLER SEQUENCE

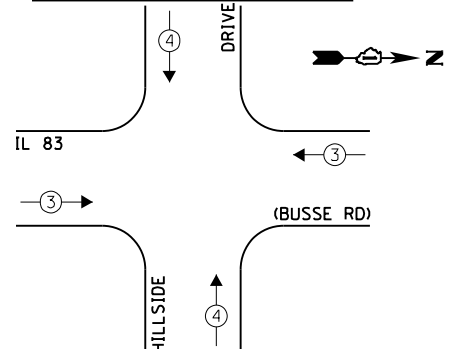


PROPOSED PHASE DESIGNATION DIAGRAM

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



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTORS	
EMERGENCY VEHICLE PREEMPTOR	3
MOVEMENT	4

FILE NAME = 60V80-039-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 83 (BUSSE RD) AT HILLSIDE DRIVE

SCALE: NONE SHEET OF SHEETS STA. TO STA.

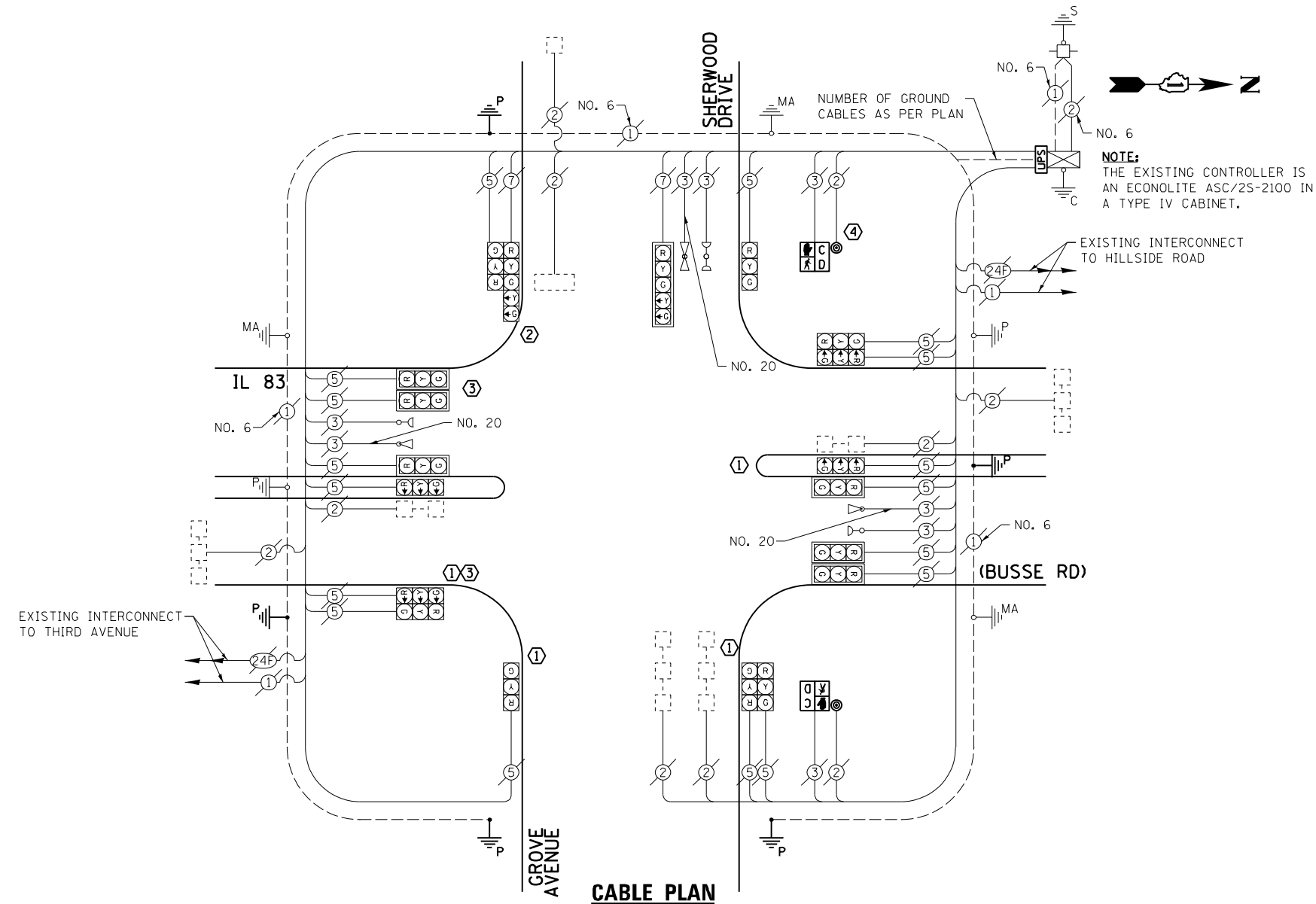
F.A. RTÉ. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 39
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60V80	

SCHEDULE OF QUANTITIES
IL 83 (BUSSE RD) AT GROVE AVENUE / SHERWOOD DRIVE

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	4	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.
3.	1	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
4.	2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
5.	2	EACH	PEDESTRIAN PUSH-BUTTON
6.	8	EACH	RELOCATE EXISTING SIGNAL HEAD
7.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
8.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
9.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL

CONSTRUCTION NOTES:

- ① REMOVE EXISTING SIGNAL HEADS AND REPLACE EXISTING 14 FOOT PAINTED POST. INSTALL EXISTING SIGNAL HEADS ON NEW 14 FOOT GALVANIZED STEEL POST. REUSE EXISTING TYPE "A" CONCRETE FOUNDATION AND EXISTING CABLES.
- ② REMOVE EXISTING SIGNAL HEADS AND REPLACE EXISTING 16 FOOT PAINTED POST. INSTALL EXISTING SIGNAL HEADS ON NEW 16 FOOT GALVANIZED STEEL POST. REUSE EXISTING TYPE "A" CONCRETE FOUNDATION AND EXISTING CABLES.
- ③ REMOVE EXISTING PEDESTRIAN SIGNAL HEAD AND PUSH-BUTTON AND ABANDON ALL EXISTING CABLES.
- ④ REMOVE THE EXISTING PEDESTRIAN PUSH-BUTTON FROM THE POST AND INSTALL A NEW PEDESTRIAN PUSH-BUTTON ON MAST ARM USING SLACK FROM THE EXISTING ELECTRIC CABLE. ALL WORK TO PROPERLY INSTALL THE PEDESTRIAN PUSH-BUTTON ON THE MAST ARM ASSEMBLY SHALL BE INCLUDED IN THE COST OF THE PAY ITEM "PEDESTRIAN PUSH BUTTON"

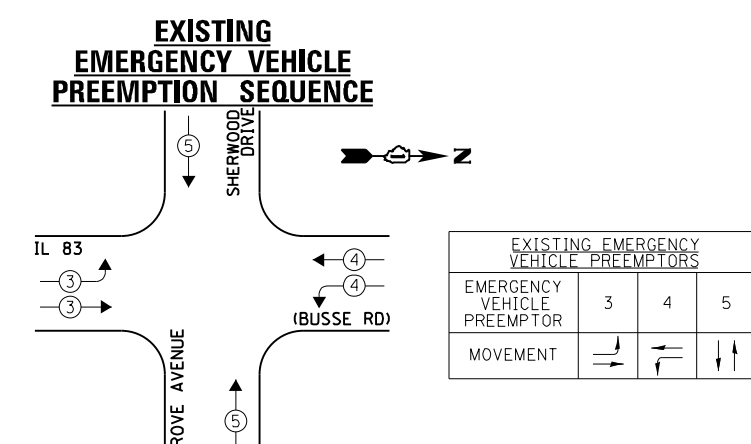
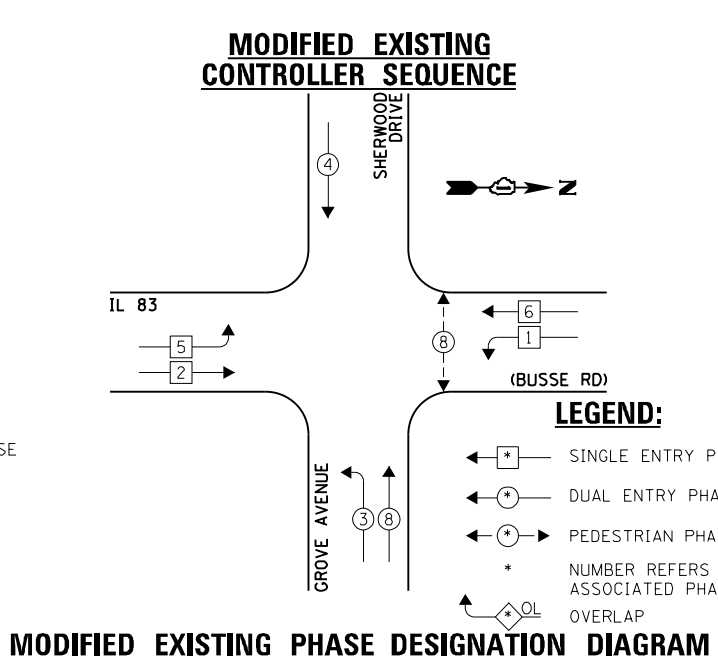
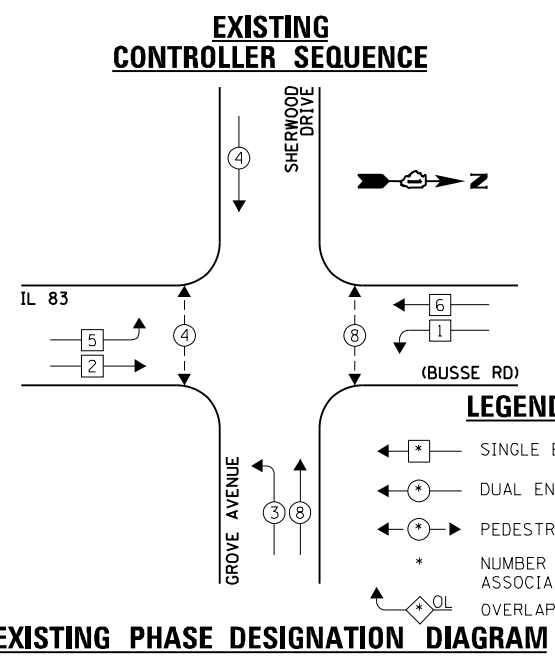


THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 5 EACH TRAFFIC SIGNAL POST
- 4 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 4 EACH PEDESTRIAN PUSH-BUTTON

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	INCAND.	L.E.D.	OPERATION	
SIGNAL (RED)	19	135	17	0.50	161.5
SIGNAL (YELLOW)	19	135	25	0.25	118.75
SIGNAL (GREEN)	19	135	15	0.25	71.25
ARROW	4	135	12	0.10	4.8
PED. SIGNAL	2	90	25	1.00	50.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					531.3

ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHALMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED



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

FILE NAME = 60V80-040-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE			
IL 83 (BUSSE RD) AT GROVE AVENUE / SHERWOOD DRIVE			
SCALE: NONE	SHEET	OF SHEETS	STA. TO STA.

F.A. RTE. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 40
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60V80	

SCHEDULE OF QUANTITIES
IL 83 (BUSSE RD) AT THIRD AVENUE

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	1	EACH	TRANSCEIVER - FIBER OPTIC
3.	2	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.
4.	2	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
5.	4	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
6.	2	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
7.	3	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED
8.	2	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED
9.	1	EACH	SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED
10.	1	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
11.	2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
12.	7	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
13.	9	EACH	INDUCTIVE LOOP DETECTOR
14.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
15.	1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
16.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
17.	2	EACH	PEDESTRIAN PUSH-BUTTON, NON-LATCHING

- CONSTRUCTION NOTES:**
- ① REMOVE EXISTING SIGNAL HEADS AND REPLACE EXISTING 14 FOOT PAINTED POST. INSTALL NEW SIGNAL HEADS ON NEW 14 FOOT GALVANIZED STEEL POST. REUSE EXISTING TYPE "A" CONCRETE FOUNDATION AND EXISTING CABLES.
 - ② REMOVE EXISTING SIGNAL HEADS AND REPLACE EXISTING 16 FOOT PAINTED POST. INSTALL NEW SIGNAL HEADS ON NEW 16 FOOT GALVANIZED STEEL POST. REUSE EXISTING TYPE "A" CONCRETE FOUNDATION AND EXISTING CABLES.
 - ③ REMOVE EXISTING PEDESTRIAN SIGNAL HEAD AND PUSH-BUTTON AND ABANDON ALL EXISTING CABLES.
 - ④ RELOCATION OF THE EXISTING PHASING UNIT FOR THE EMERGENCY VEHICLE PRE-EMPTION SYSTEM IS TO BE INCLUDED IN THE COST OF THE PAY ITEM "FULL ACTUATED CONTROLLER AND CABINET OF THE TYPE SPECIFIED."

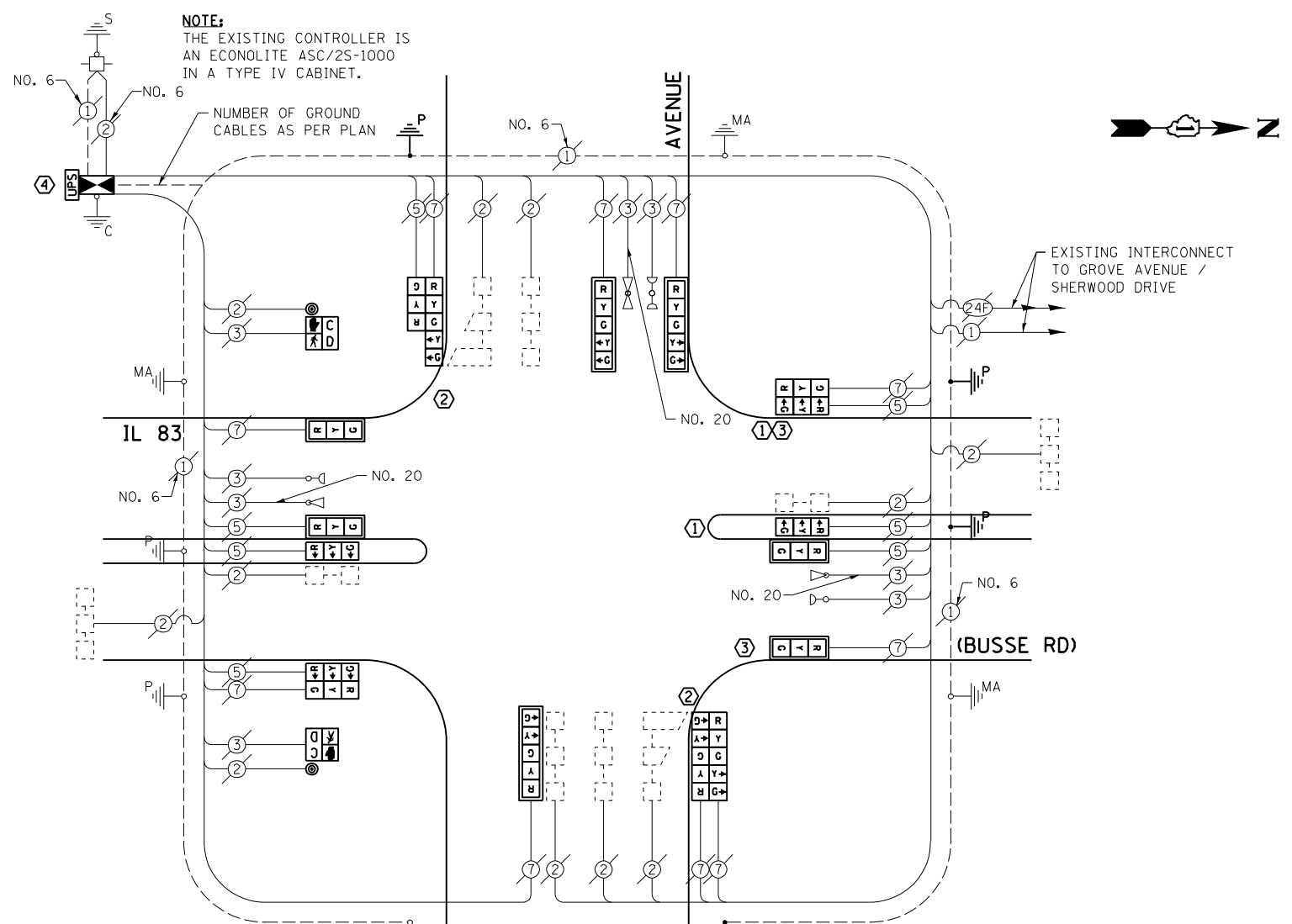
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 1 EACH CONTROLLER AND CABINET (COMPLETE)
- 4 EACH TRAFFIC SIGNAL HEAD, 1-FACE, 3-SECTION
- 2 EACH TRAFFIC SIGNAL HEAD, 1-FACE, 4-SECTION
- 3 EACH TRAFFIC SIGNAL HEAD, 1-FACE, 5-SECTION
- 2 EACH TRAFFIC SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-4 SECTION
- 1 EACH TRAFFIC SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION
- 1 EACH TRAFFIC SIGNAL HEAD, 2-FACE, 2-5 SECTION
- 4 EACH TRAFFIC SIGNAL POST
- 4 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 7 EACH TRAFFIC SIGNAL BACKPLATE
- 4 EACH PEDESTRIAN PUSH-BUTTON

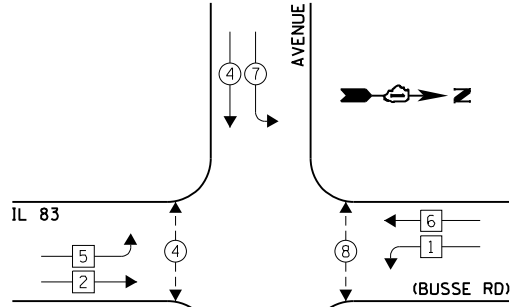
I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE	
TYPE	NO. LAMPS	WATTAGE INCAND. L.E.D.	OPERATION		
SIGNAL (RED)	17	135	17	0.50	144.5
SIGNAL (YELLOW)	17	135	25	0.25	106.25
SIGNAL (GREEN)	17	135	15	0.25	63.75
ARROW	12	135	12	0.10	14.4
PED. SIGNAL	4	90	25	1.00	100.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					553.9

ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHALMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

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



EXISTING CONTROLLER SEQUENCE

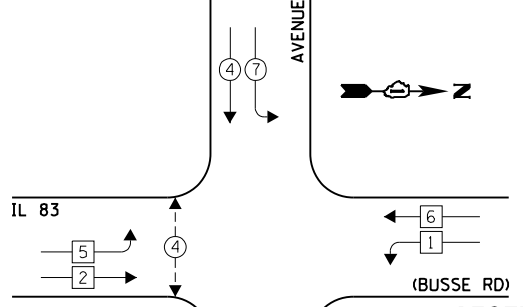


- LEGEND:**
- ← * → SINGLE ENTRY PHASE
 - ← * → DUAL ENTRY PHASE
 - ← * → PEDESTRIAN PHASE
 - * NUMBER REFERS TO ASSOCIATED PHASE
 - ← * OL → OVERLAP

EXISTING PHASE DESIGNATION DIAGRAM

OVERLAP LETTER D = PERMISSIVE PHASE 8 + PROTECTED PHASE 1

PROPOSED CONTROLLER SEQUENCE

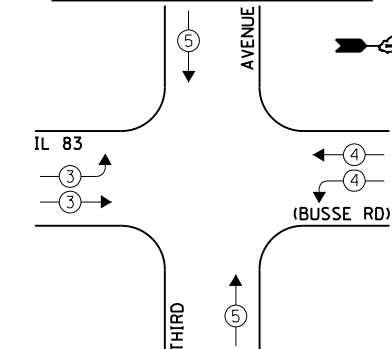


- LEGEND:**
- ← * → SINGLE ENTRY PHASE
 - ← * → DUAL ENTRY PHASE
 - ← * → PEDESTRIAN PHASE
 - * NUMBER REFERS TO ASSOCIATED PHASE
 - ← * OL → OVERLAP

PROPOSED PHASE DESIGNATION DIAGRAM

OVERLAP LETTER D = PERMISSIVE PHASE 8 + PROTECTED PHASE 1

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

FILE NAME = 60V08-041-ts.dgn
Default

USER NAME = zwallsten
PLOT SCALE = 1:20
PLOT DATE = 12/20/2012

DESIGNED - JRD
DRAWN - ZCW
CHECKED - KLB
DATE - 12-20-12

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

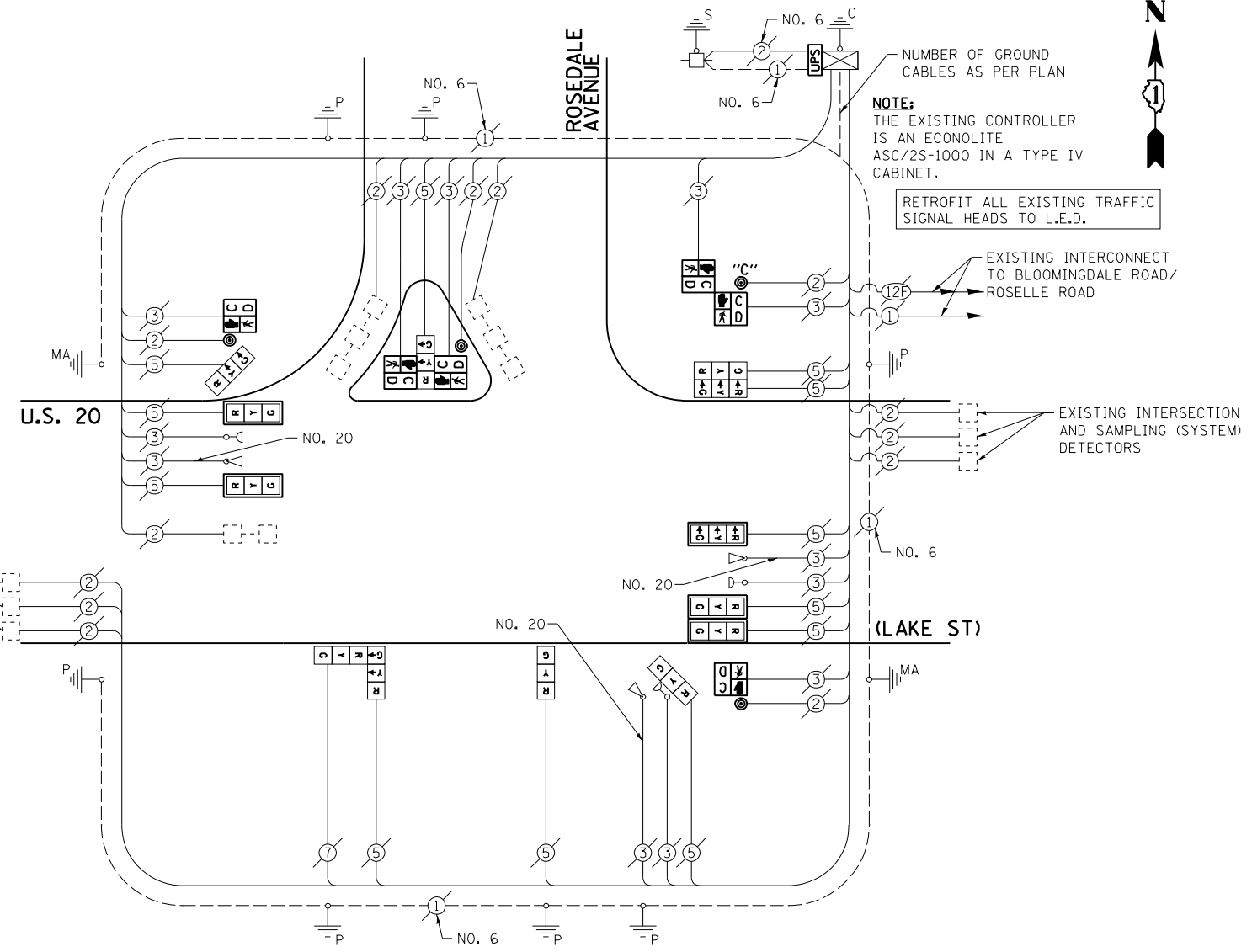
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 83 (BUSSE RD) AT THIRD AVENUE

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTÉ.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIES	2012-070 I	DuPAGE	103	41
			CONTRACT NO. 60V80	
ILLINOIS FED. AID PROJECT				

SCHEDULE OF QUANTITIES
U. S. 20 (LAKE ST) AT ROSEDALE AVENUE

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
3.	2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
4.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
5.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
6.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
7.	4	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT
8.	5	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT
9.	2	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT
10.	4	EACH	PEDESTRIAN PUSH-BUTTON, NON-LATCHING

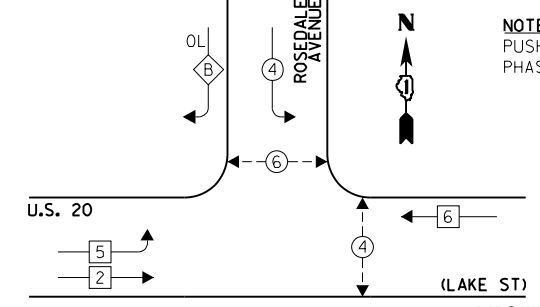


CABLE PLAN

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.

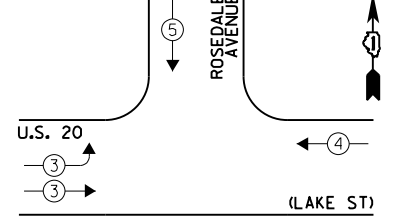
- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 2 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE
- 4 EACH PEDESTRIAN PUSH-BUTTON

EXISTING CONTROLLER SEQUENCE



NOTE: PUSH BUTTON "C" SHALL PLACE A CALL IN PHASES 4 AND 6.

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



LEGEND:

- ← * → SINGLE ENTRY PHASE
 - ← * → DUAL ENTRY PHASE
 - ← * → PEDESTRIAN PHASE
 - * NUMBER REFERS TO ASSOCIATED PHASE
 - ← * → OVERLAP
- OVERLAP LETTER B = PERMISSIVE PHASE 4 + PROTECTED PHASE 5

EXISTING PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT	↔	↔	↕

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	INCAND.	L.E.D.	OPERATION	
SIGNAL (RED)	13	135	17	0.50	110.5
SIGNAL (YELLOW)	13	135	25	0.25	81.25
SIGNAL (GREEN)	13	135	15	0.25	48.75
ARROW	-	135	12	0.10	-
PED. SIGNAL	6	90	25	1.00	150.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					515.5

ENERGY COSTS - BILLED TO: ILL. DEPARTMENT OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHALMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

FILE NAME = 60V80-042-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

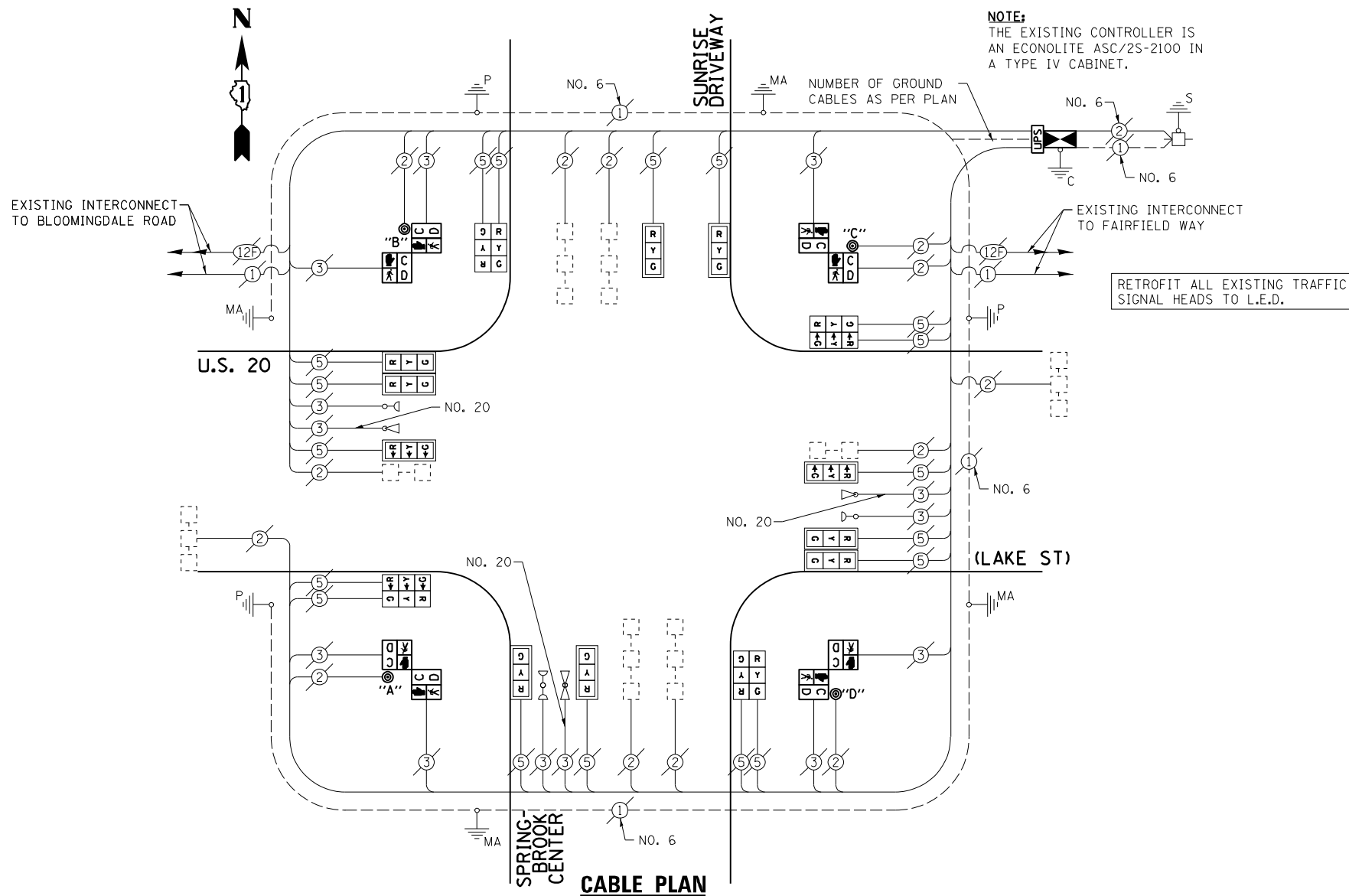
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
U.S. 20 (LAKE ST) AT ROSEDALE AVENUE

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTÉ. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 42
			CONTRACT NO. 60V80	
ILLINOIS FED. AID PROJECT				

SCHEDULE OF QUANTITIES
U.S. 20 (LAKE ST) AT SPRINGBROOK CENTER

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	4	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
3.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
4.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
5.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
6.	10	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT
7.	4	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT
8.	4	EACH	PEDESTRIAN PUSH-BUTTON, NON-LATCHING



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

- 4 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE
- 4 EACH PEDESTRIAN PUSH-BUTTON

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	INCAND.	L.E.D.	OPERATION	
SIGNAL (RED)	18	135	17	0.50	153.0
SIGNAL (YELLOW)	18	135	25	0.25	112.5
SIGNAL (GREEN)	18	135	15	0.25	67.5
ARROW	-	135	12	0.10	-
PED. SIGNAL	8	90	25	1.00	200.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					658.0

ENERGY COSTS - BILLED TO: VILLAGE OF BLOOMINGDALE (ADDRESS) 2001 S. BLOOMINGDALE ROAD (ADDRESS) BLOOMINGDALE, IL 60104
ENERGY SUPPLY - CONTACT: JOE STACHO (PHONE) (630) 424-5704 (COMPANY) CQM-ED

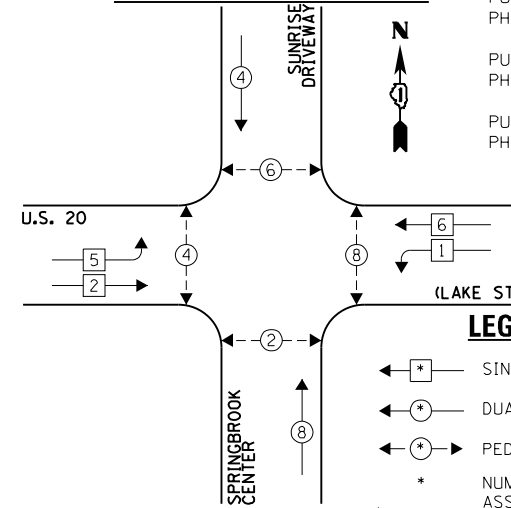
FILE NAME = 60V80-044-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
U.S. 20 (LAKE ST) AT SPRINGBROOK CENTER / SUNRISE DRIVEWAY

SCALE: NONE SHEET OF SHEETS STA. TO STA.

EXISTING CONTROLLER SEQUENCE

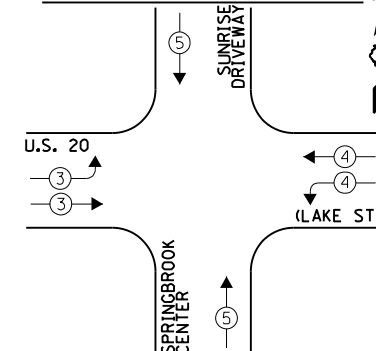


- NOTE:
PUSH BUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4.
PUSH BUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6.
PUSH BUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8.
PUSH BUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8.

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

EXISTING PHASE DESIGNATION DIAGRAM

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



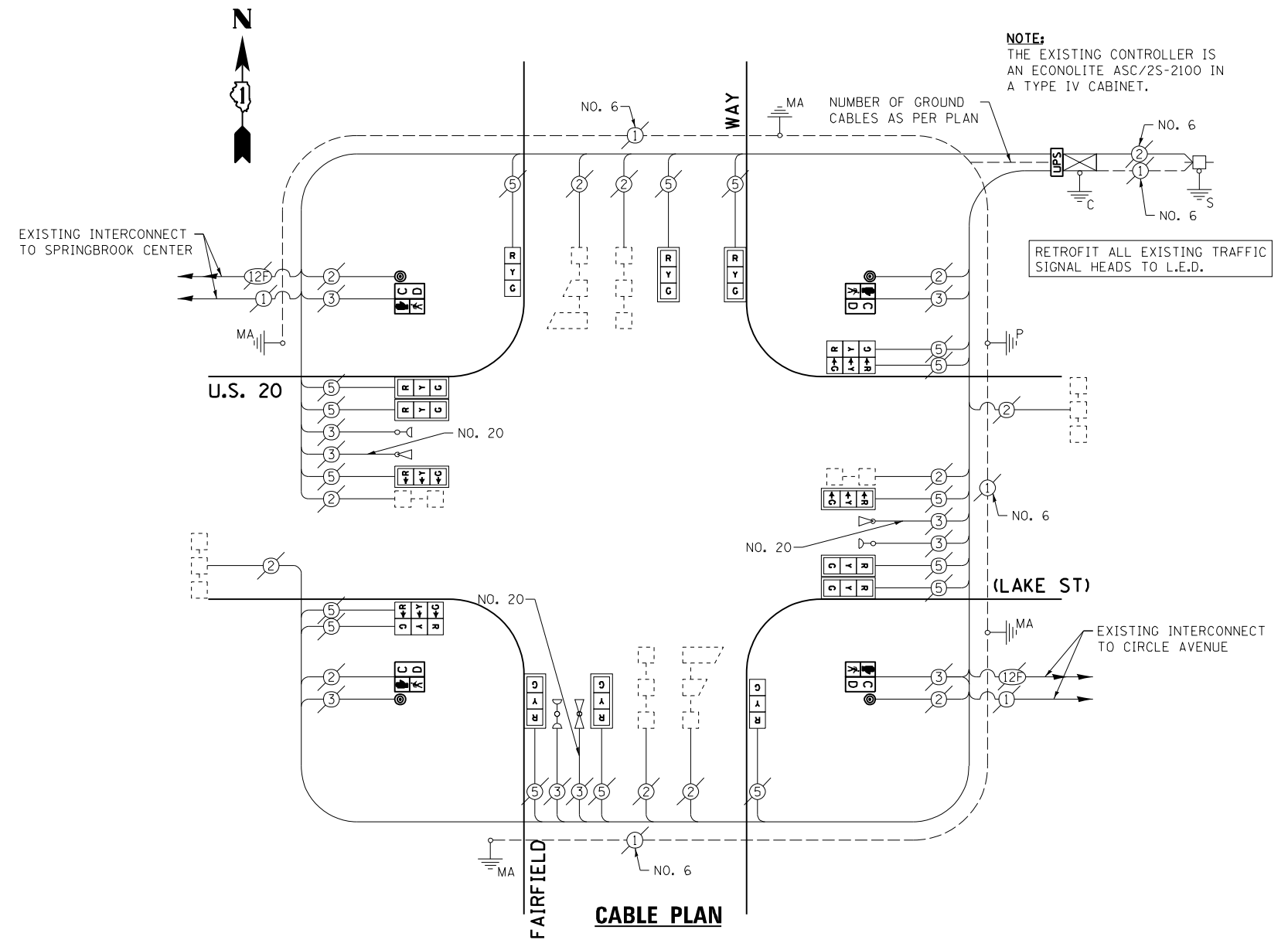
EXISTING EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	↔	↕

GHA #4085.887

F.A. RTE. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 44
			CONTRACT NO. 60V80	
ILLINOIS FED. AID PROJECT				

SCHEDULE OF QUANTITIES
U.S. 20 (LAKE ST) AT FAIRFIELD WAY

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	4	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
3.	4	EACH	PEDESTRIAN PUSH-BUTTON
4.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
5.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
6.	1	EACH	UNINTERRUPTIBLE POWER SUPPLY, SPECIAL
7.	2	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT
8.	10	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT
9.	2	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT

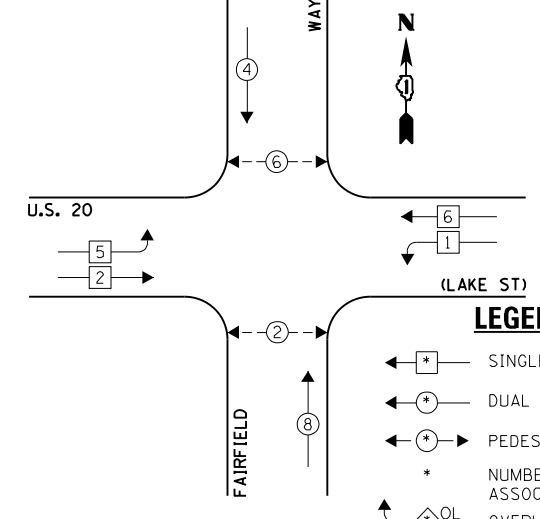


NOTE:
THE EXISTING CONTROLLER IS AN ECONOLITE ASC/2S-2100 IN A TYPE IV CABINET.

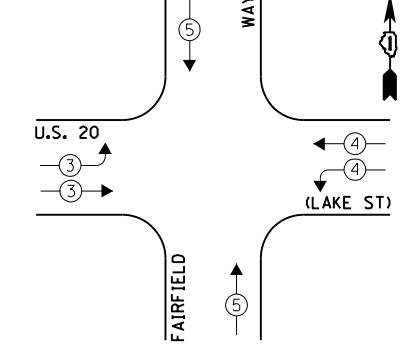
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 4 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 4 EACH PEDESTRIAN PUSH-BUTTON

EXISTING CONTROLLER SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



LEGEND:

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

EXISTING 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. LAMPS	INCAND.	L.E.D.	OPERATION	
SIGNAL (RED)	16	135	17	0.50	136.0
SIGNAL (YELLOW)	16	135	25	0.25	100.0
SIGNAL (GREEN)	16	135	15	0.25	60.0
ARROW	-	135	12	0.10	-
PED. SIGNAL	4	90	25	1.00	100.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					521.0

ENERGY COSTS - BILLED TO: VILLAGE OF BLOOMINGDALE
(ADDRESS) 201 S. BLOOMINGDALE ROAD
(ADDRESS) BLOOMINGDALE, IL 60104
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

FILE NAME = 60V80-045-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
U.S. 20 (LAKE ST) AT FAIRFIELD WAY

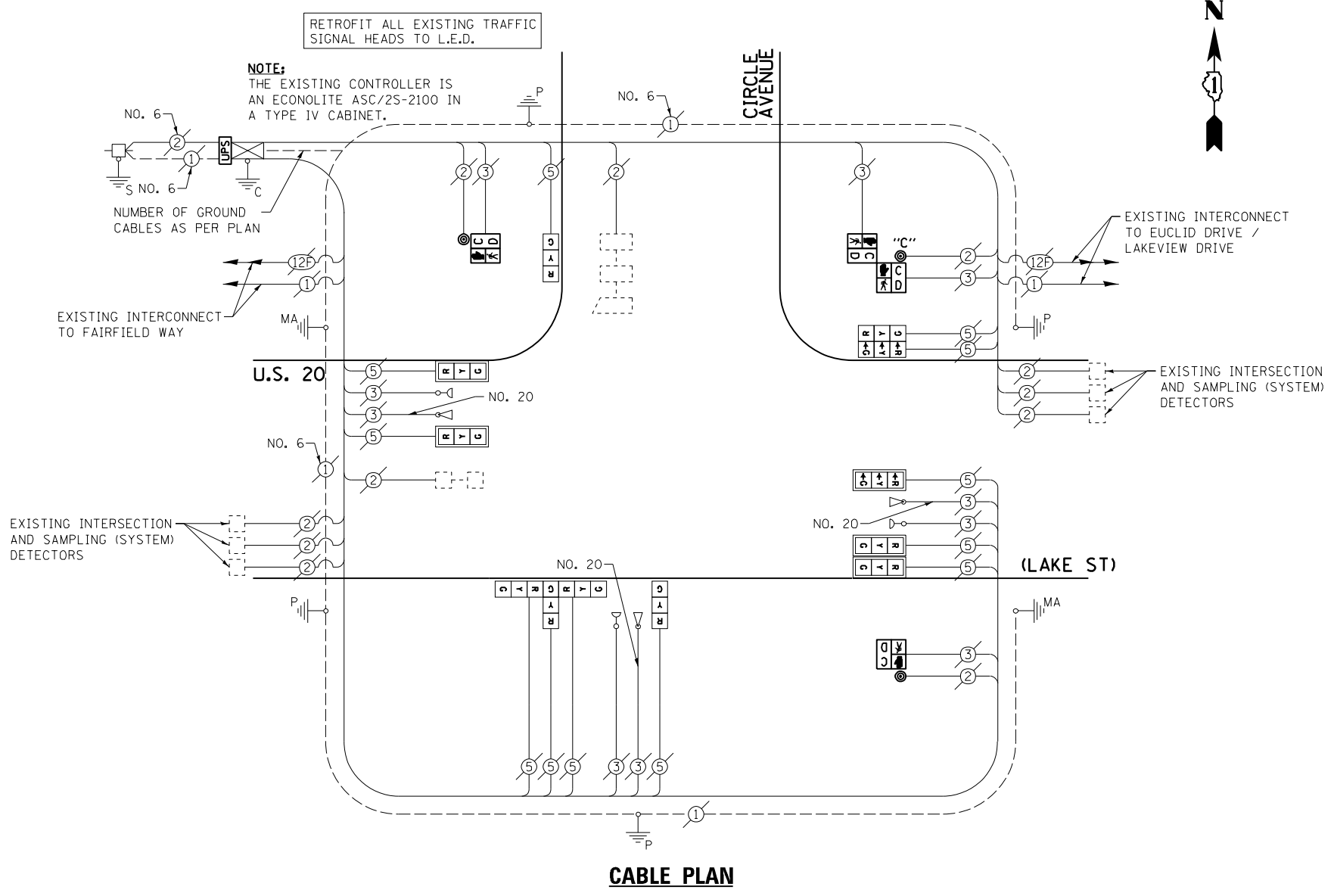
SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 45
			CONTRACT NO. 60V80	
ILLINOIS FED. AID PROJECT				

GHA #4085.887

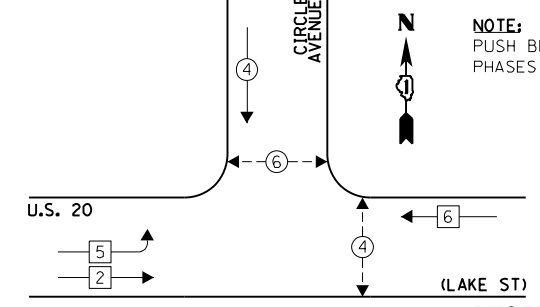
SCHEDULE OF QUANTITIES
U.S. 20 (LAKE ST) AT CIRCLE AVENUE

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
3.	1	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
4.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
5.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
6.	1	EACH	UNINTERRUPTIBLE POWER SUPPLY, SPECIAL
7.	1	EACH	SIGNAL HEAD, LED, 3-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT
8.	2	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT
9.	5	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT
10.	1	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT
11.	3	EACH	PEDESTRIAN PUSH-BUTTON, NON-LATCHING



CABLE PLAN

EXISTING CONTROLLER SEQUENCE

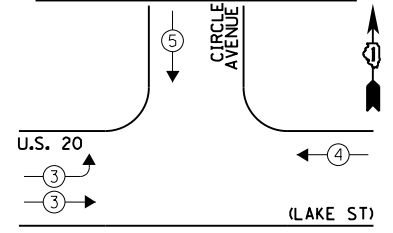


LEGEND:

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

EXISTING PHASE DESIGNATION DIAGRAM

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

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.

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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE L.E.D.	OPERATION	
SIGNAL (RED)	12	135	17	0.50	102.0
SIGNAL (YELLOW)	12	135	25	0.25	75.0
SIGNAL (GREEN)	2	135	15	0.25	45.0
ARROW	-	135	12	0.10	-
PED. SIGNAL	4	90	25	1.00	100.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					447.0

ENERGY COSTS - BILLED TO: ILLINOIS DEPARTMENT OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHALMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

FILE NAME = 60V08-046-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

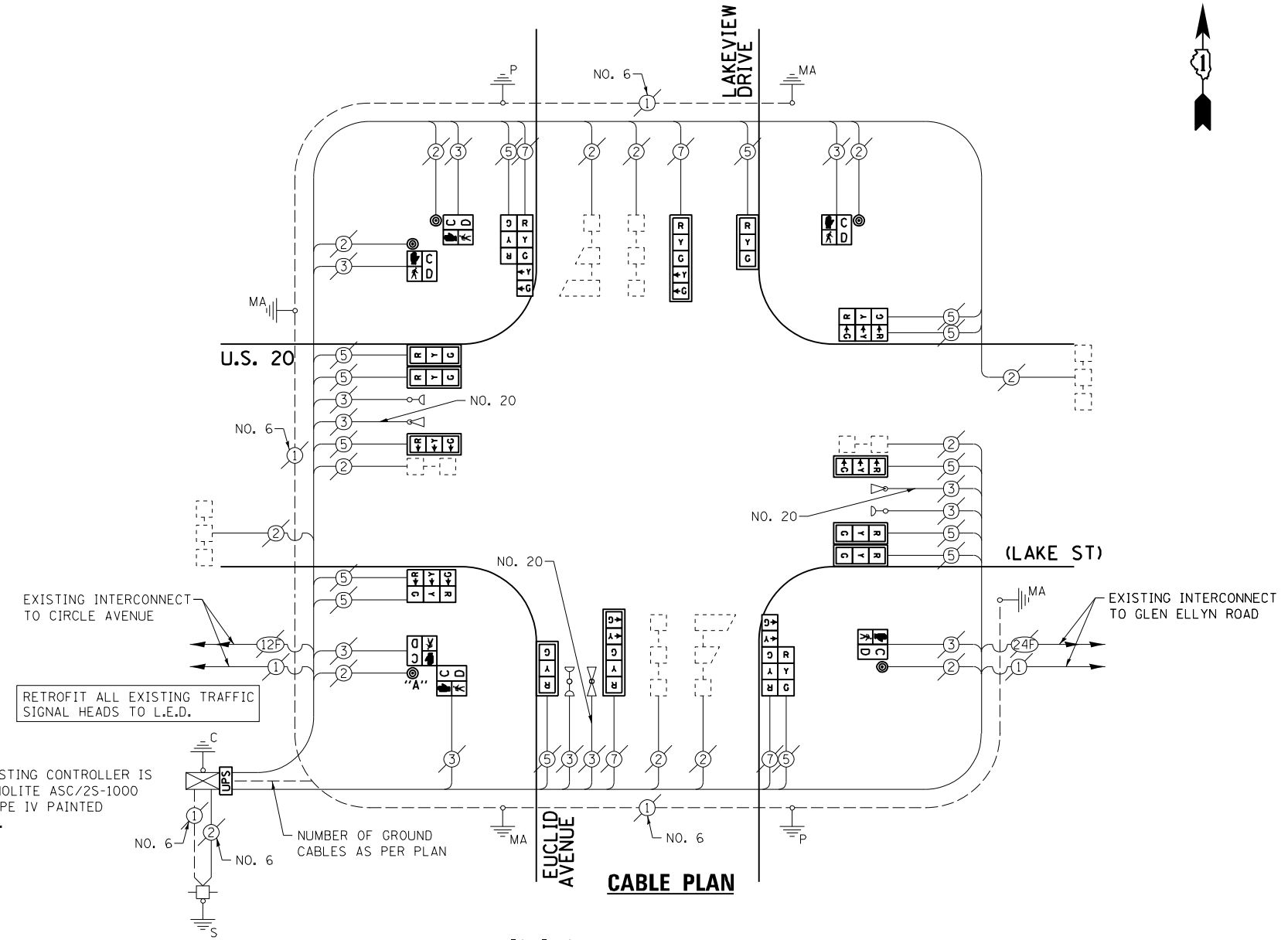
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
U.S. 20 (LAKE ST) AT CIRCLE AVENUE

SCALE: NONE SHEET OF SHEETS STA. TO STA.

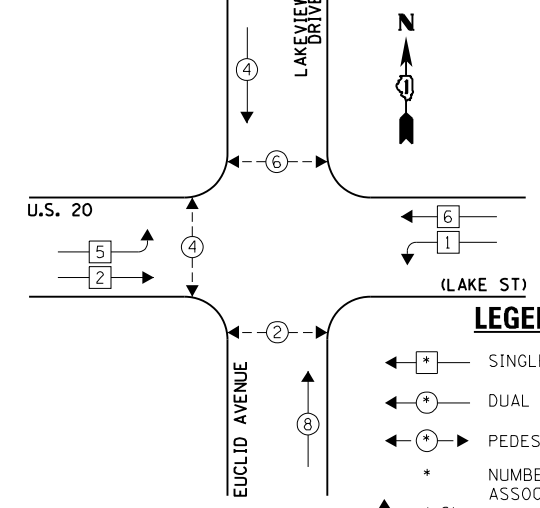
F.A. RTÉ. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 46
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60V80	

SCHEDULE OF QUANTITIES
U.S. 20 (LAKE ST) AT EUCLID DRIVE / LAKEVIEW DRIVE

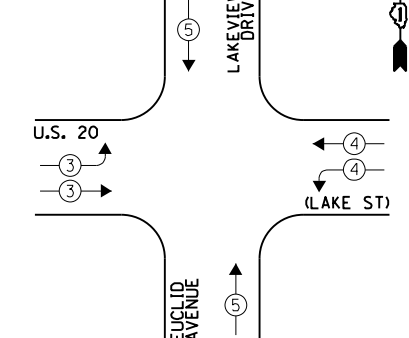
NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	4	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
3.	1	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
4.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
5.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
6.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
7.	2	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED, RETROFIT
8.	8	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT
9.	2	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT
10.	2	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT
11.	5	EACH	PEDESTRIAN PUSH-BUTTON, NON-LATCHING



EXISTING CONTROLLER SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT	→	↔	↑

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

- 4 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 1 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	INCAND.	L.E.D.	OPERATION	
SIGNAL (RED)	18	135	17	0.50	153.0
SIGNAL (YELLOW)	18	135	25	0.25	112.5
SIGNAL (GREEN)	18	135	15	0.25	67.5
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	6	90	25	1.00	150.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					617.6

ENERGY COSTS - BILLED TO: IL DEPARTMENT OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHALMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

FILE NAME = 60V80-047-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
U.S. 20 (LAKE ST) AT EUCLID DRIVE / LAKEVIEW DRIVE

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTÉ. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 47
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60V80	

SCHEDULE OF QUANTITIES
U. S. 20 (LAKE ST) AT GLEN ELLYN ROAD

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	1	EACH	TRANSCEIVER - FIBER OPTIC
3.	1	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
4.	6	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
5.	7	EACH	INDUCTIVE LOOP DETECTOR
6.	6	EACH	PEDESTRIAN PUSH-BUTTON
7.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
8.	1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
9.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
10.	5	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT
11.	5	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT
12.	2	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT

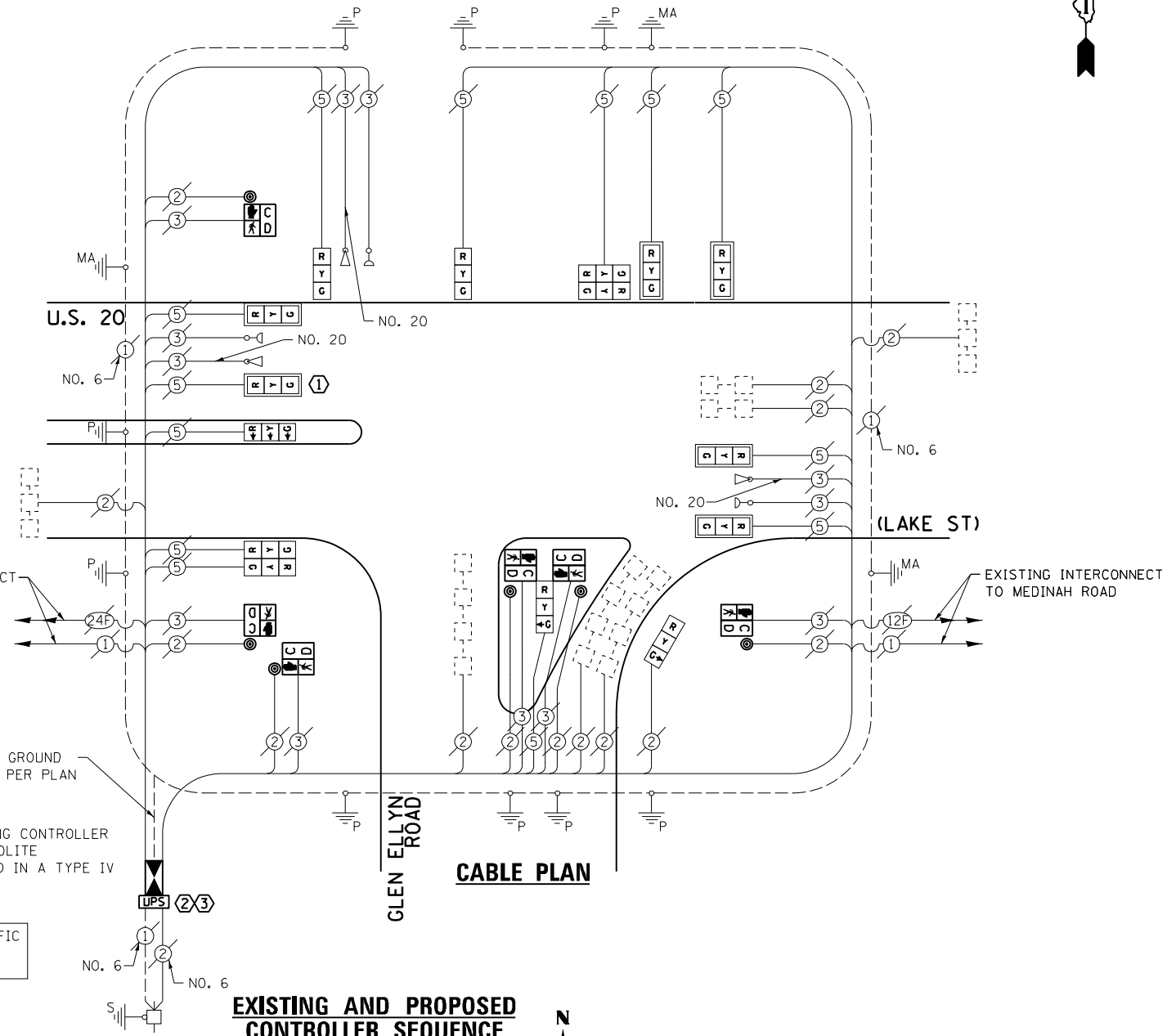
- CONSTRUCTION NOTES:**
- REMOVE THE EXISTING PROGRAMMABLE TRAFFIC SIGNAL HEAD AND REPLACE WITH NEW SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED. REINSTALL EXISTING BACKPLATE AND REUSE ALL EXISTING CABLES.
 - ALL WORK TO CLEAR AWAY FOR INSTALLATION OF THE UPS SHALL BE INCLUDED IN THE COST OF THE PAY ITEM "UNINTERRUPTABLE POWER SUPPLY, SPECIAL."
 - RELOCATION OF THE EXISTING PHASING UNIT FOR THE EMERGENCY VEHICLE PRE-EMPTION SYSTEM IS TO BE INCLUDED IN THE COST OF THE PAY ITEM "FULL ACTUATED CONTROLLER AND CABINET OF THE TYPE SPECIFIED."

EXISTING INTERCONNECT TO EUCLID AVENUE / LAKEVIEW DRIVE

NUMBER OF GROUND CABLES AS PER PLAN

NOTE:
THE EXISTING CONTROLLER IS AN ECONOLITE ASC/25-2100 IN A TYPE IV CABINET.

RETROFIT ALL EXISTING TRAFFIC SIGNAL HEADS TO L.E.D. (SEE CONSTRUCTION NOTE 1)



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

- 1 EACH CONTROLLER AND CABINET (COMPLETE)
- 1 EACH TRAFFIC SIGNAL HEAD, 1-FACE, 3-SECTION
- 6 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 6 EACH PEDESTRIAN PUSH-BUTTON

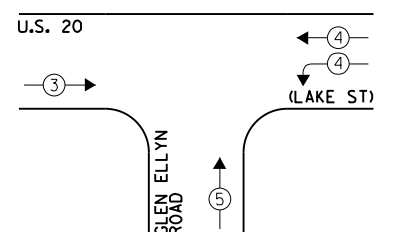
EXISTING AND PROPOSED CONTROLLER SEQUENCE

OVERLAP PERMISSIVE PROTECTED
LETTER PHASE PHASE
D = 8 + 1
U.S. 20

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

EXISTING AND PROPOSED PHASE DESIGNATION DIAGRAM

EXISTING 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. LAMPS	WATTAGE INCAND. L.E.D.	OPERATION		
SIGNAL (RED)	15	135	17	0.50	127.5
SIGNAL (YELLOW)	15	135	25	0.25	93.75
SIGNAL (GREEN)	15	135	15	0.25	56.25
ARROW	-	135	12	0.10	-
PED. SIGNAL	6	90	25	1.00	150.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					552.5

ENERGY COSTS - BILLED TO: VILLAGE OF BLOOMINGDALE
(ADDRESS) 201 S. BLOOMINGDALE ROAD
(ADDRESS) BLOOMINGDALE, IL 60104
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

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

FILE NAME = 60V80-048-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
U.S. 20 (LAKE ST) AT GLEN ELLYN ROAD

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTÉ. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 48
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60V80	

SCHEDULE OF QUANTITIES
U.S. 20 (LAKE ST) AT MEDINAH ROAD

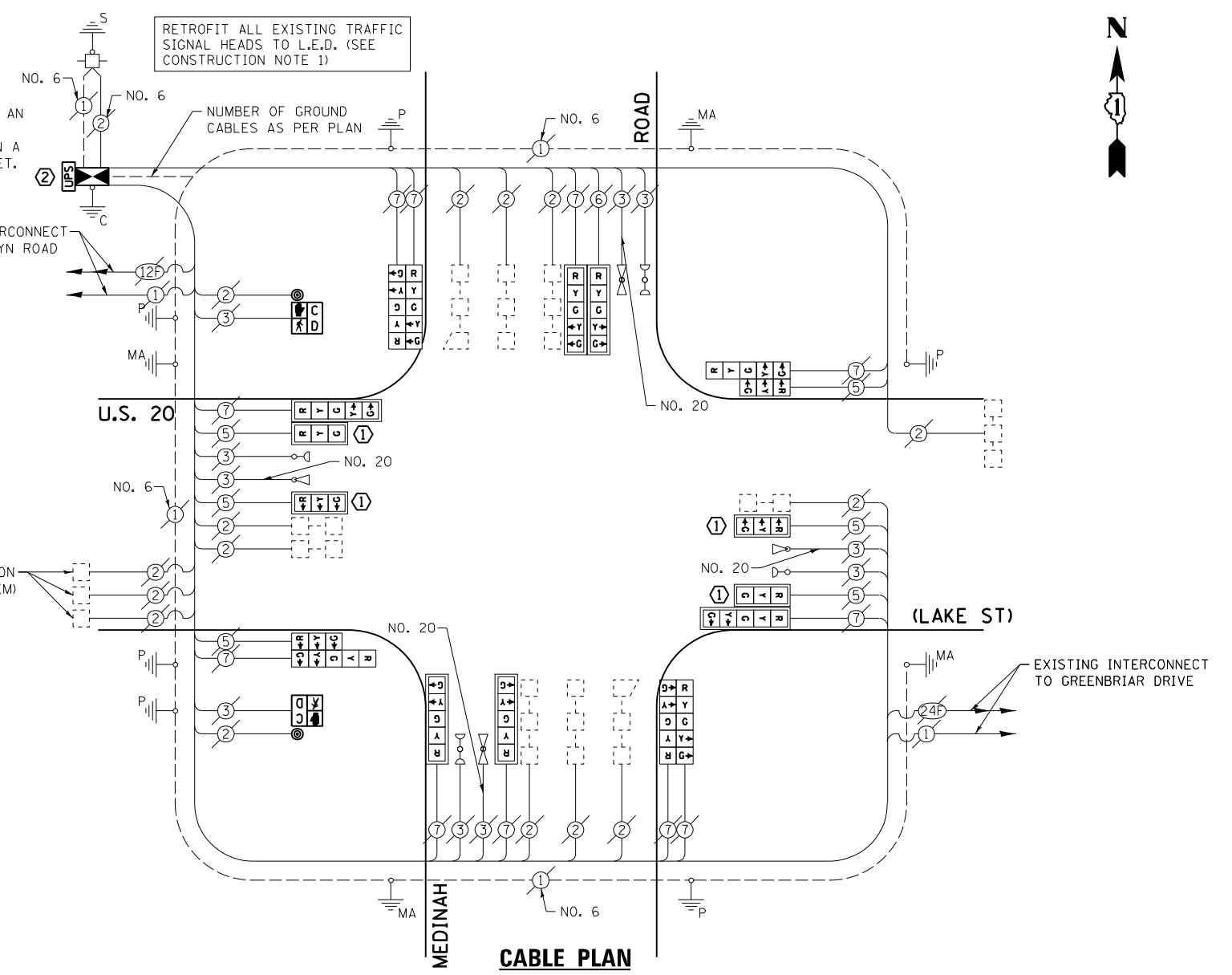
NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	1	EACH	TRANSCIEVER - FIBER OPTIC
3.	4	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
4.	2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
5.	13	EACH	INDUCTIVE LOOP DETECTOR
6.	2	EACH	PEDESTRIAN PUSH-BUTTON
7.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
8.	1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
9.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
10.	2	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED, RETROFIT
11.	6	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT
12.	2	EACH	SIGNAL HEAD, LED, 2 FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT

NOTE:
THE EXISTING CONTROLLER IS AN ECONOLITE ASC/2S-2100 IN A TYPE IV CABINET.

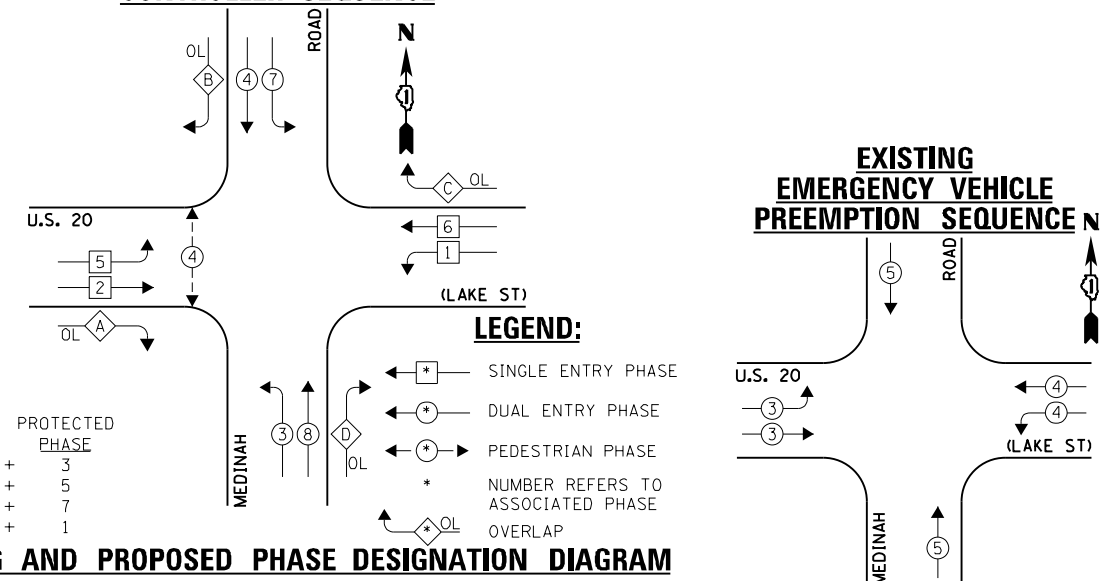
EXISTING INTERCONNECT TO GLENN ELLYN ROAD

EXISTING INTERSECTION AND SAMPLING (SYSTEM) DETECTORS

- CONSTRUCTION NOTES:**
- ① REMOVE THE EXISTING PROGRAMMABLE TRAFFIC SIGNAL HEAD AND REPLACE WITH NEW SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED. REINSTALL EXISTING BACKPLATE AND REUSE ALL EXISTING CABLES.
 - ② RELOCATION OF THE EXISTING PHASING UNIT FOR THE EMERGENCY VEHICLE PRE-EMPTION SYSTEM IS TO BE INCLUDED IN THE COST OF THE PAY ITEM "FULL ACTUATED CONTROLLER AND CABINET OF THE TYPE SPECIFIED."



EXISTING AND PROPOSED CONTROLLER SEQUENCE



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

- 1 EACH CONTROLLER AND CABINET (COMPLETE)
- 4 EACH TRAFFIC SIGNAL HEAD, 1-FACE, 3-SECTION
- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 2 EACH PEDESTRIAN PUSH-BUTTON

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE L.E.D.	OPERATION	
SIGNAL (RED)	18	135	17	0.50	153.0
SIGNAL (YELLOW)	18	135	25	0.25	112.5
SIGNAL (GREEN)	18	135	15	0.25	67.5
ARROW	24	135	12	0.10	28.8
PED. SIGNAL	2	90	25	1.00	50.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					536.8

ENERGY COSTS - BILLED TO: VILLAGE OF BLOOMINGDALE (ADDRESS) 201 BLOOMINGDALE ROAD (ADDRESS) BLOOMINGDALE, IL 60104
ENERGY SUPPLY - CONTACT: JOE STACHO (PHONE: (630) 424-5704) COMPANY: CQM-ED

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

FILE NAME = 60V80-049-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:200	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
U.S. 20 (LAKE ST) AT MEDINAH ROAD

SCALE: NONE SHEET OF SHEETS STA. TO STA.

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

GHA #4085.887

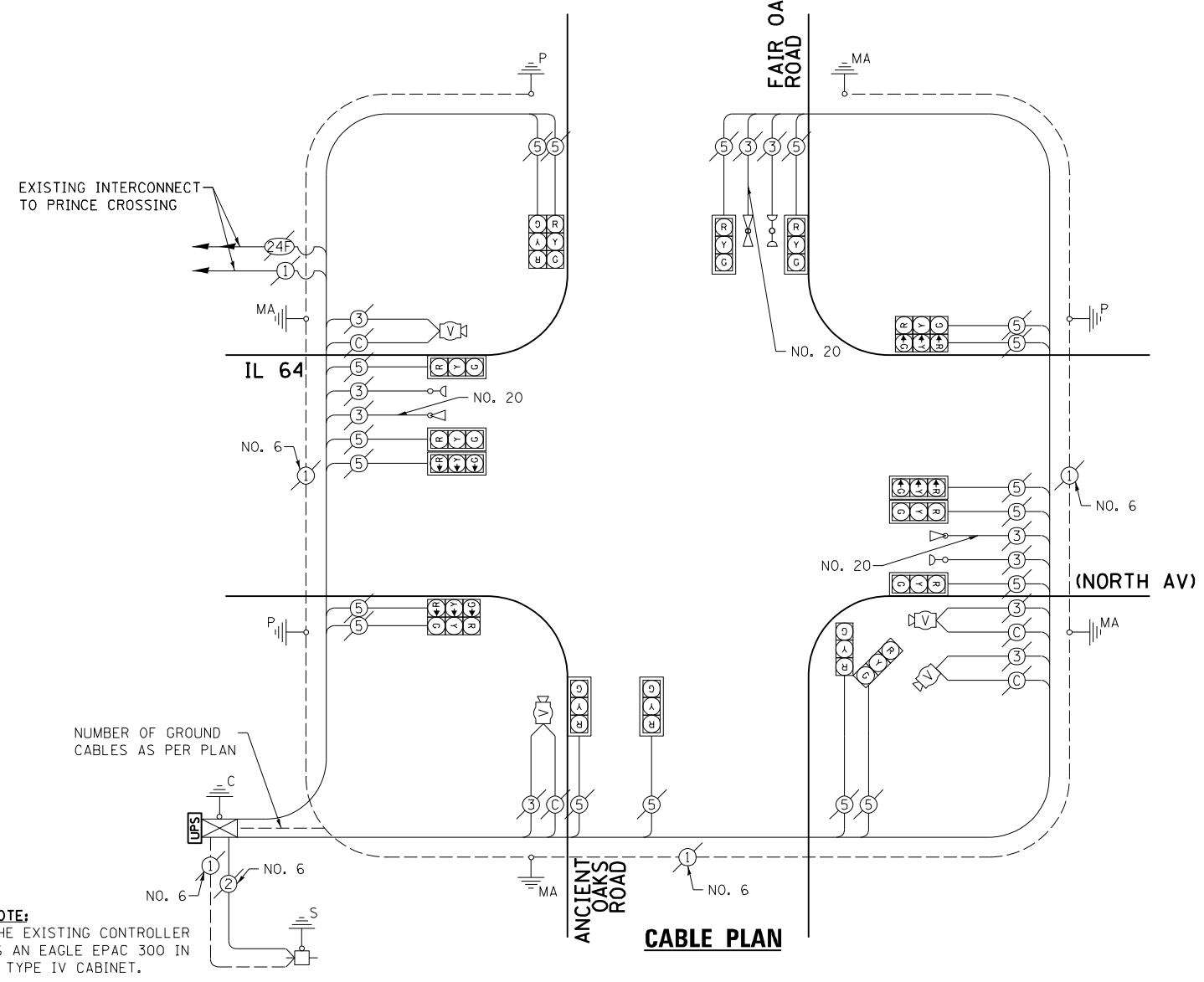
F.A. RTÉ.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIABLES	2012-070 I	DuPAGE	103	49
			CONTRACT NO. 60V80	
ILLINOIS FED. AID PROJECT				



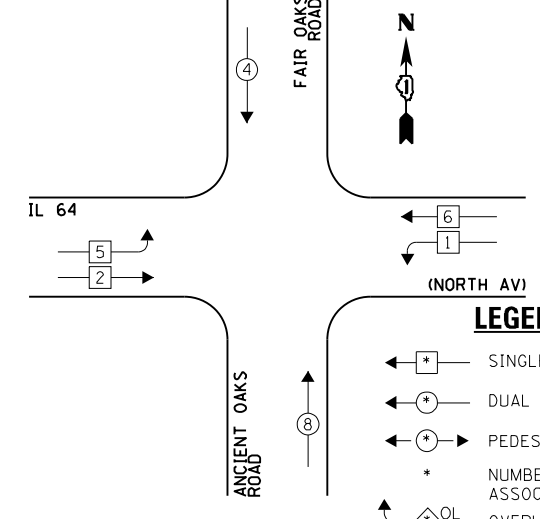
SCHEDULE OF QUANTITIES

IL 64 (NORTH AV) AT FAIR OAKS ROAD / ANCIENT OAKS ROAD

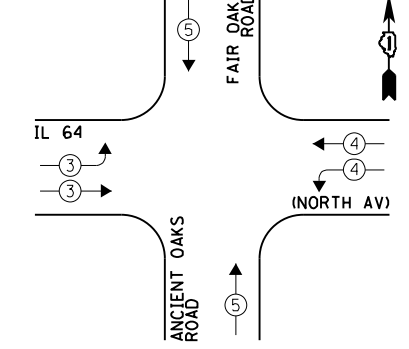
NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
3.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL



EXISTING CONTROLLER SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



LEGEND:

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

EXISTING 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. LAMPS	INCAND.	L.E.D.	OPERATION	
SIGNAL (RED)	18	135	17	0.50	153.0
SIGNAL (YELLOW)	18	135	25	0.25	112.5
SIGNAL (GREEN)	18	135	15	0.25	67.5
ARROW	-	135	12	0.10	-
PED. SIGNAL	-	90	25	1.00	-
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	1	-	150	1.00	150.0
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =				608.0	

ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION
 (ADDRESS) 201 W. CENTER COURT
 (ADDRESS) SCHALMBURG, IL 60196-1096
 ENERGY SUPPLY - CONTACT: JOE STACHO
 PHONE: (630) 424-5704
 COMPANY: CQM-ED

FILE NAME = 60V80-050-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

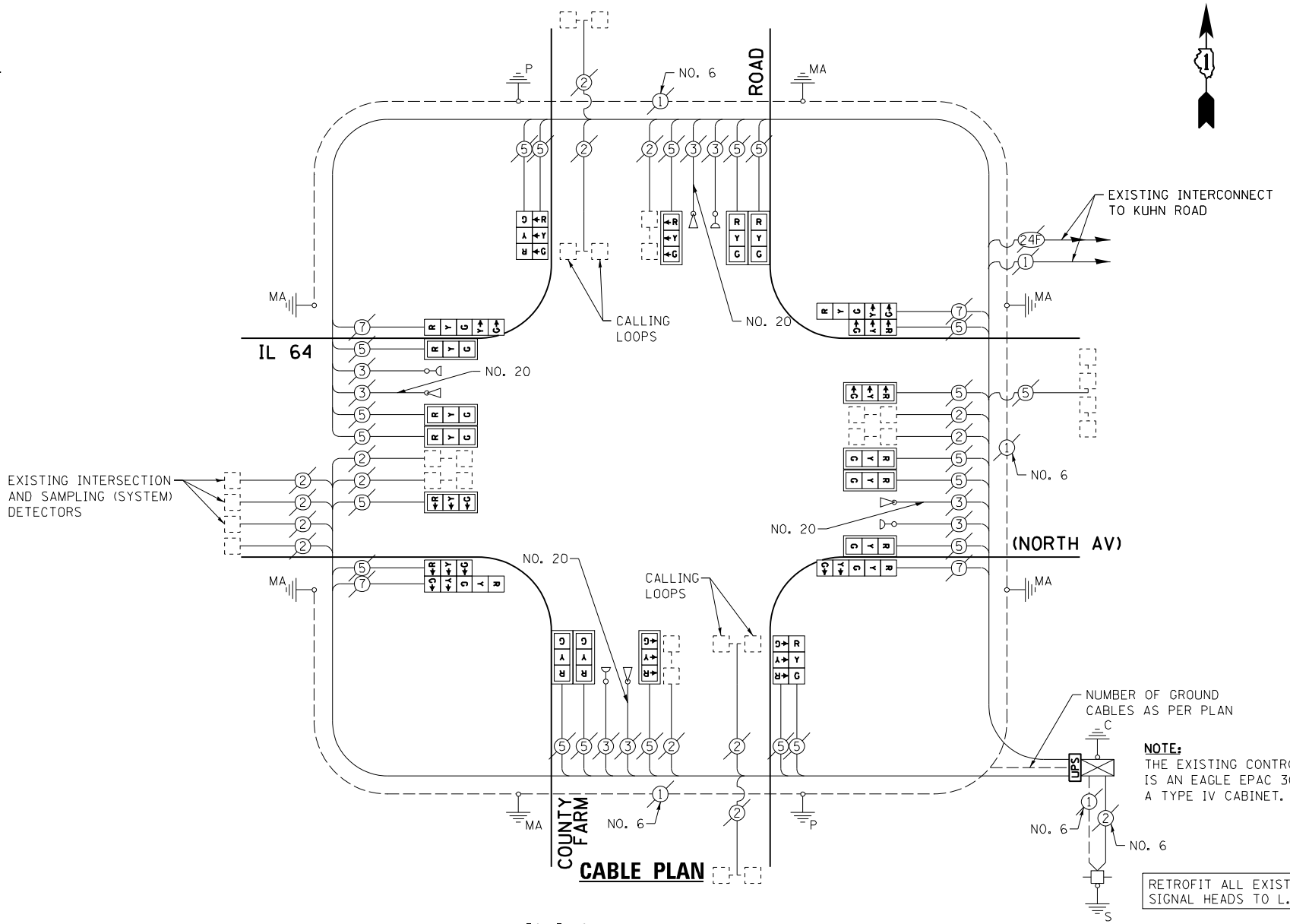
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
 IL 64 (NORTH AV) AT FAIR OAKS ROAD / ANCIENT OAKS ROAD
 SCALE: NONE SHEET OF SHEETS STA. TO STA.

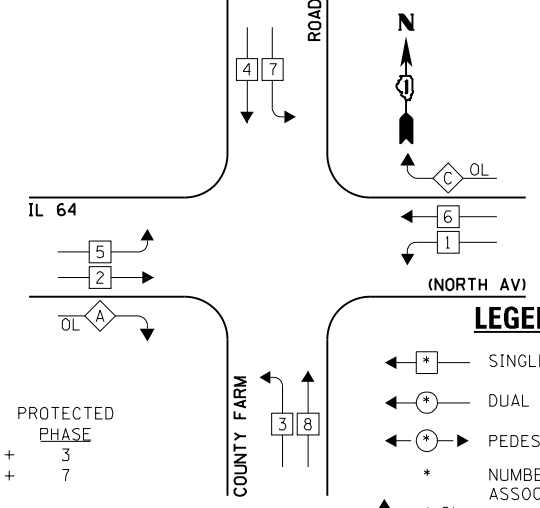
F.A. RTE. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 50
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60V80	

SCHEDULE OF QUANTITIES
IL 64 (NORTH AV) AT COUNTY FARM ROAD

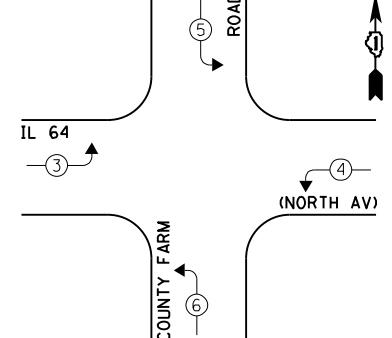
NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
3.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
4.	2	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED, RETROFIT
5.	14	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT
6.	2	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT
7.	2	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT



EXISTING CONTROLLER SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM

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

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. LAMPS	INCAND.	L.E.D.	OPERATION	
SIGNAL (RED)	24	135	17	0.50	204.0
SIGNAL (YELLOW)	24	135	25	0.25	150.0
SIGNAL (GREEN)	24	135	15	0.25	90.0
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	-	90	25	1.00	-
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =				578.6	

ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHALMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

FILE NAME = 60V80-051-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

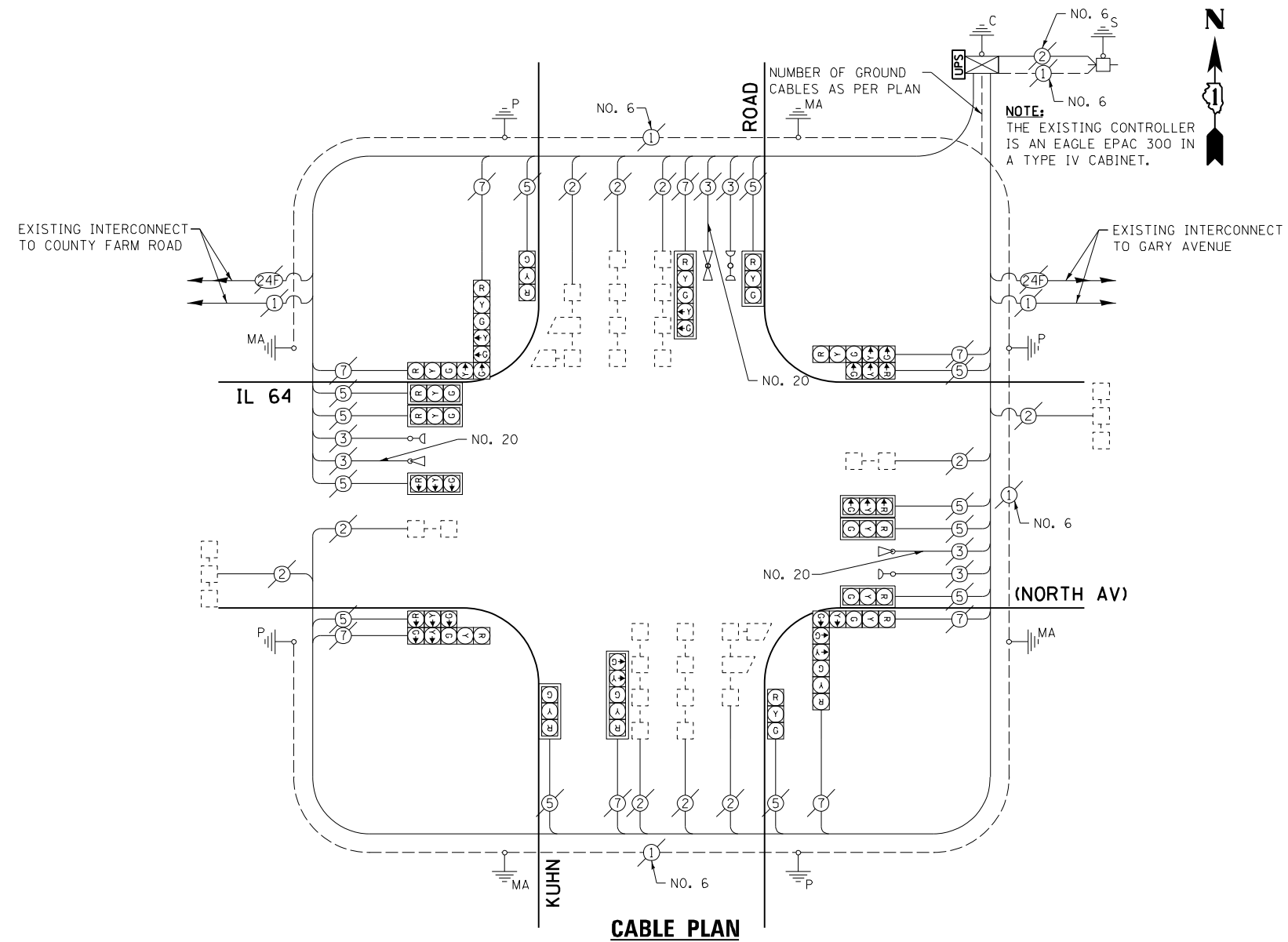
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 64 (NORTH AV) AT COUNTY FARM ROAD
SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTÉ. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 51
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60V80	

SCHEDULE OF QUANTITIES
IL 64 (NORTH AV) AT KUHN ROAD

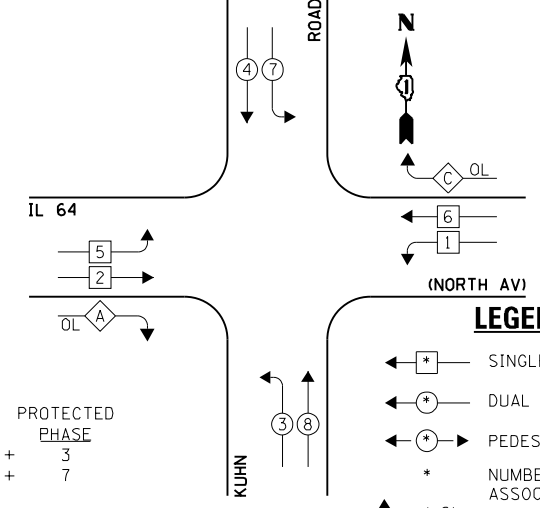
TS 6445

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
3.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL

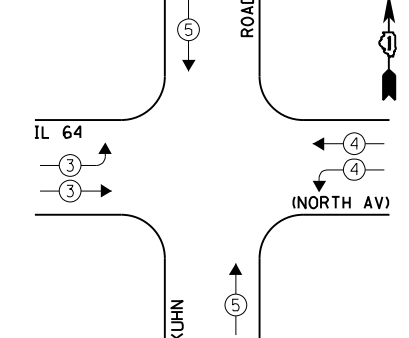


NOTE:
THE EXISTING CONTROLLER IS AN EAGLE EPAC 300 IN A TYPE IV CABINET.

EXISTING CONTROLLER SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM

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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE	
TYPE	NO. LAMPS	INCAND.	L.E.D.	OPERATION	
SIGNAL (RED)	20	135	17	0.50	170.0
SIGNAL (YELLOW)	20	135	25	0.25	125.0
SIGNAL (GREEN)	20	135	15	0.25	75.0
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	-	90	25	1.00	-
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =				514.2	

ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHALMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

EXISTING EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	↔	↕

FILE NAME = 60VB0-052-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 64 (NORTH AV) AT KUHN ROAD

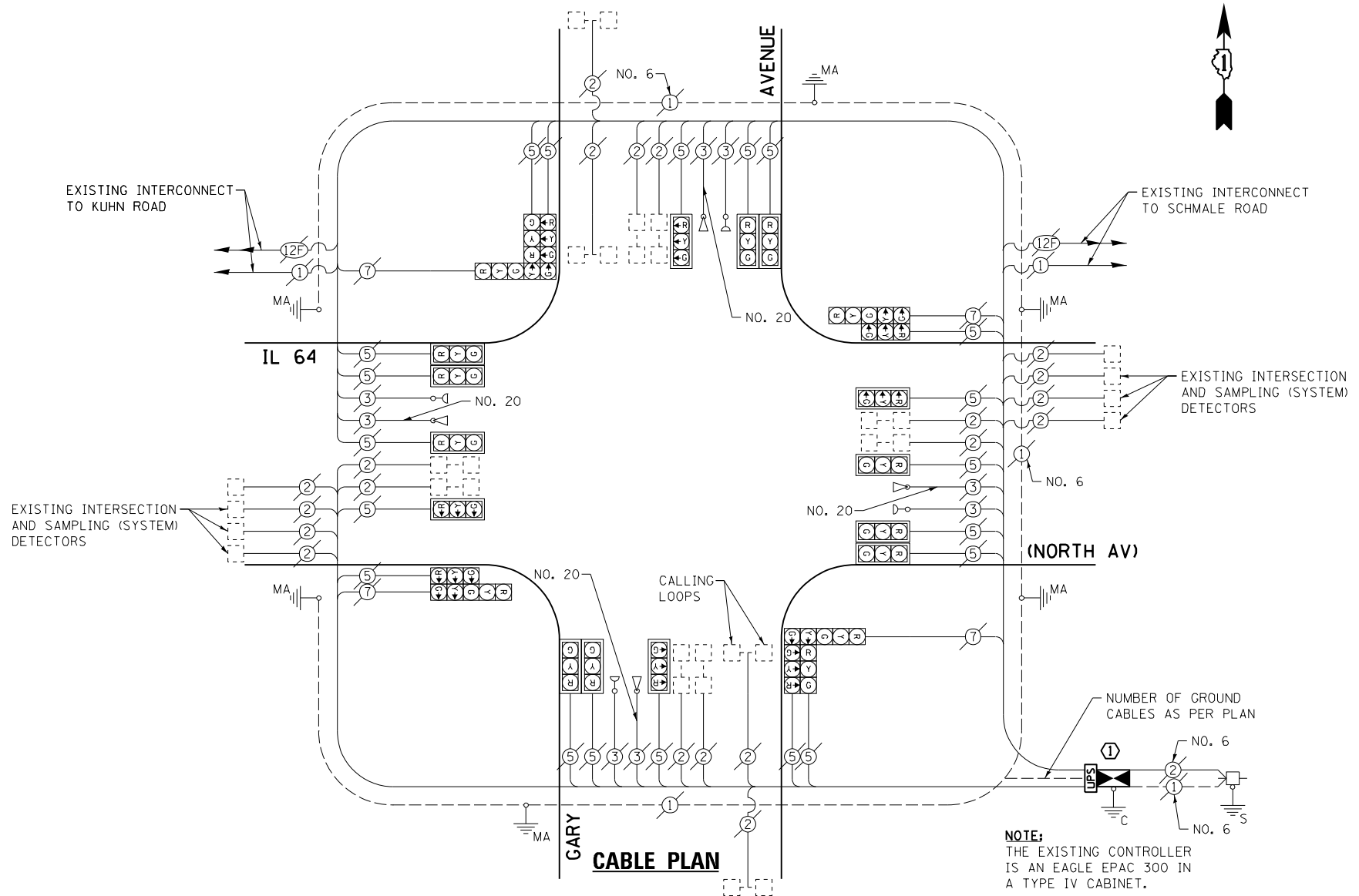
F.A. RTÉ. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 52
SCALE: NONE SHEET OF SHEETS STA. TO STA.			CONTRACT NO. 60VB0	
ILLINOIS FED. AID PROJECT				

GHA #4085.887

SCHEDULE OF QUANTITIES
IL 64 (NORTH AV) AT GARY AVENUE

TS 6435

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	1	EACH	TRANSCEIVER - FIBER OPTIC
3.	20	EACH	INDUCTIVE LOOP DETECTOR
4.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
5.	1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
6.	1	EACH	UNINTERRUPTIBLE POWER SUPPLY, SPECIAL



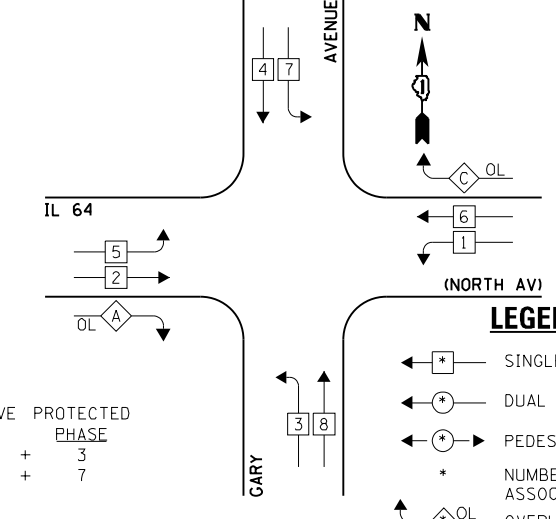
NOTE:
THE EXISTING CONTROLLER IS AN EAGLE EPAC 300 IN A TYPE IV CABINET.

① **CONSTRUCTION NOTE:**
RELOCATION OF THE EXISTING PHASING UNIT FOR THE EMERGENCY VEHICLE PRE-EMPTION SYSTEM IS TO BE INCLUDED IN THE COST OF THE PAY ITEM "FULL ACTUATED CONTROLLER AND CABINET OF THE TYPE SPECIFIED."

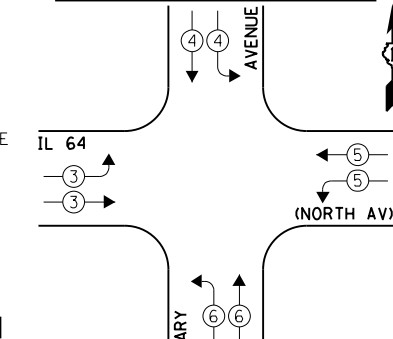
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

1 EACH CONTROLLER AND CABINET (COMPLETE)

EXISTING AND PROPOSED CONTROLLER SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMPTOR	3	4	5	6
MOVEMENT	→	↘	↗	←

EXISTING AND PROPOSED PHASE DESIGNATION DIAGRAM

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	INCAND.	L.E.D.	OPERATION	
SIGNAL (RED)	24	135	17	0.50	204.0
SIGNAL (YELLOW)	24	135	25	0.25	150.0
SIGNAL (GREEN)	24	135	15	0.25	90.0
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	-	90	25	1.00	-
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					578.6

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

FILE NAME = 60V80-053-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 64 (NORTH AV) AT GARY AVENUE
SCALE: NONE SHEET OF SHEETS STA. TO STA.

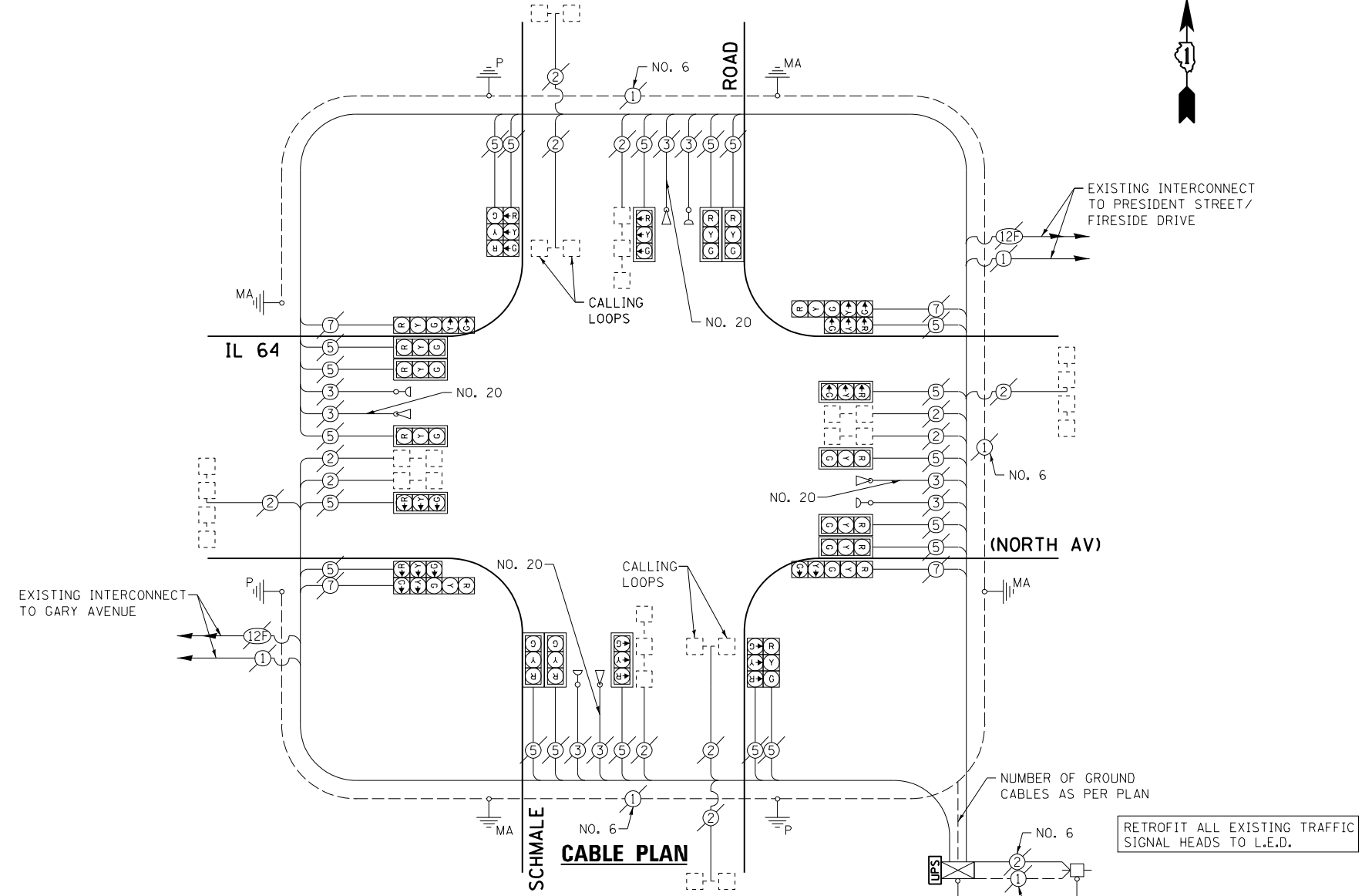
F.A. RTÉ. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 53
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60V80	

GHA #4085.887

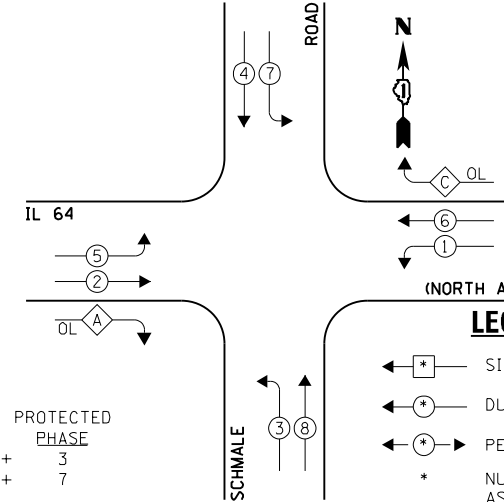
SCHEDULE OF QUANTITIES
IL 64 (NORTH AV) AT SCHMALE ROAD

TS 6465

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
3.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
4.	2	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED, RETROFIT
5.	14	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT
6.	2	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT
7.	2	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT



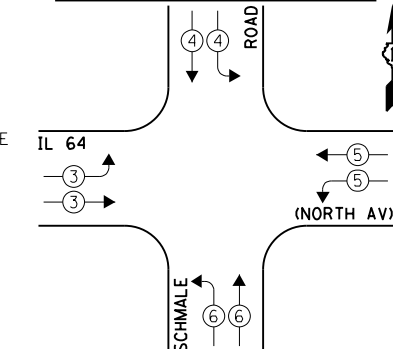
EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM

NOTE:
THE EXISTING CONTROLLER IS AN EAGLE EPAC 300 IN A TYPE IV CABINET.

EXISTING 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. LAMPS	INCAND.	L.E.D.	OPERATION	
SIGNAL (RED)	24	135	17	0.50	204.0
SIGNAL (YELLOW)	24	135	25	0.25	150.0
SIGNAL (GREEN)	24	135	15	0.25	90.0
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	-	90	25	1.00	-
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					578.6

ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHALMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

FILE NAME = 60V80-054-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 64 (NORTH AV) AT SCHMALE ROAD

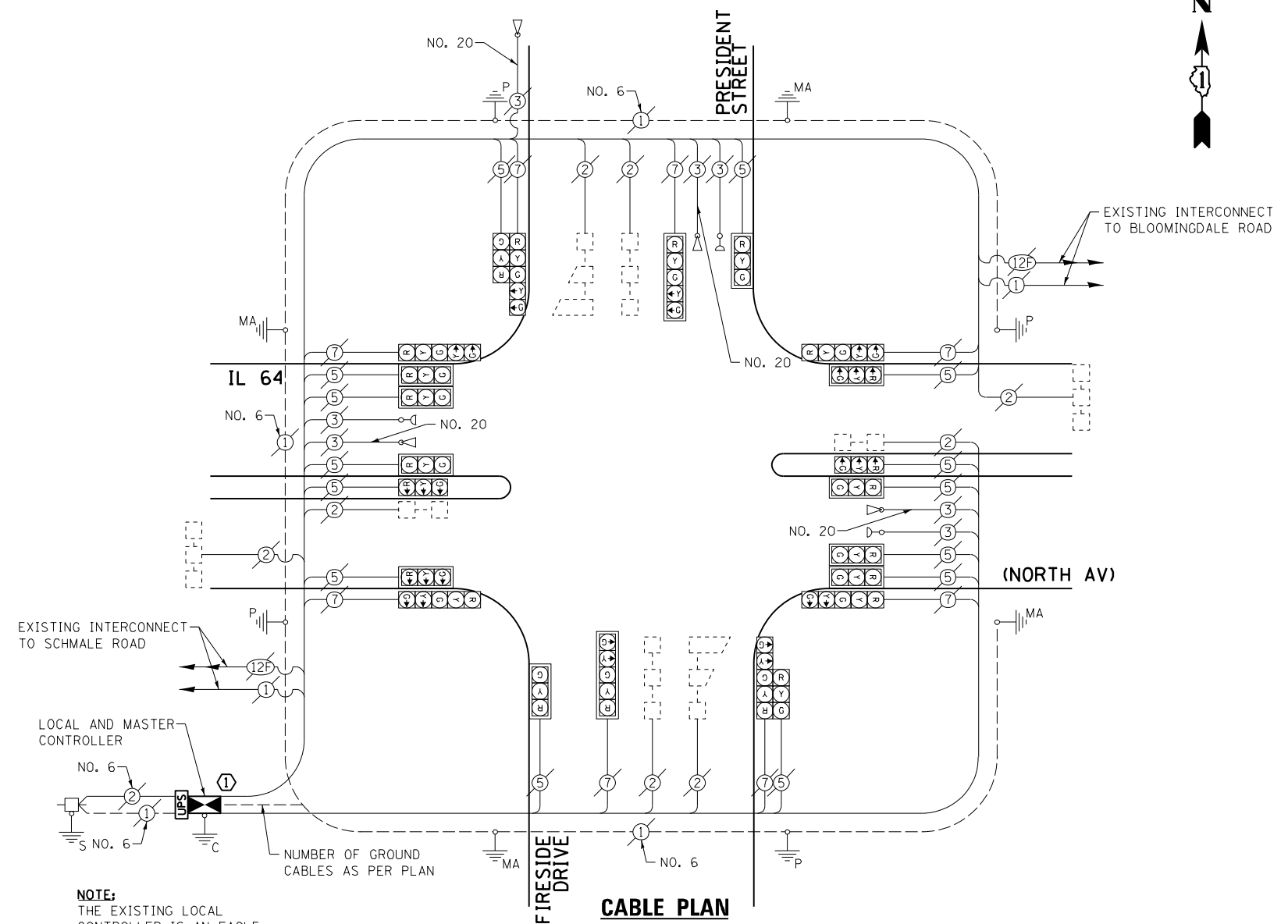
SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTÉ. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 54
			CONTRACT NO. 60V80	
ILLINOIS FED. AID PROJECT				

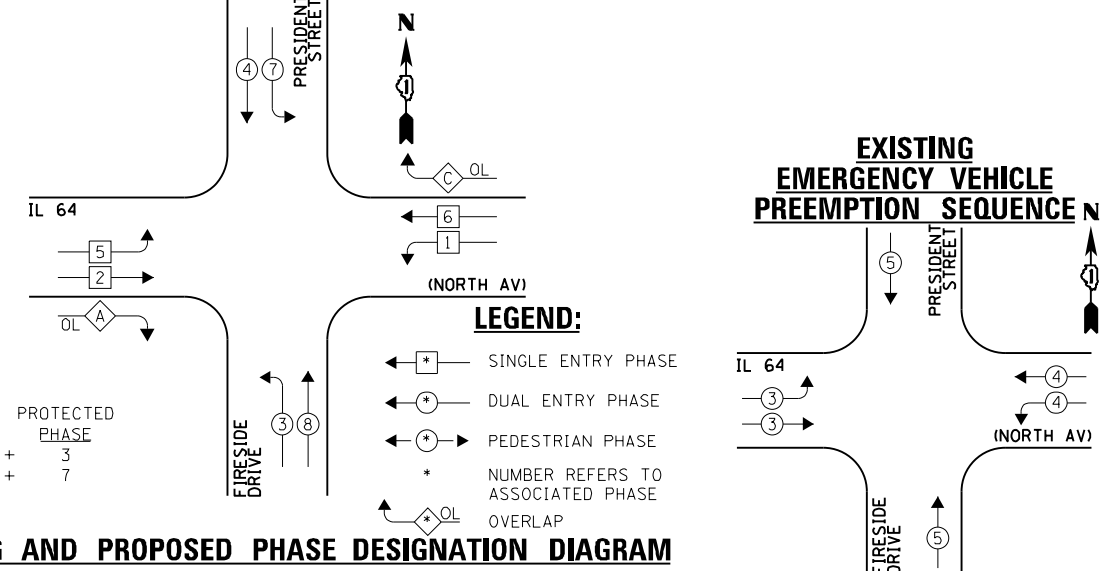
GHA #4085.887

SCHEDULE OF QUANTITIES
IL 64 (NORTH AV) AT PRESIDENT STREET / FIRESIDE DRIVE

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	1	EACH	TRANSCEIVER - FIBER OPTIC
3.	8	EACH	INDUCTIVE LOOP DETECTOR
4.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
5.	1	EACH	FULL-ACTUATED CONTROLLER AND TYPE V CABINET, SPECIAL
6.	1	EACH	MASTER CONTROLLER (SPECIAL)
7.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL



EXISTING AND PROPOSED CONTROLLER SEQUENCE



EXISTING AND PROPOSED PHASE DESIGNATION DIAGRAM

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

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

- 1 EACH CONTROLLER AND CABINET (COMPLETE)
- 1 EACH MASTER CONTROLLER

CONSTRUCTION NOTE:
RELOCATION OF THE EXISTING PHASING UNIT FOR THE EMERGENCY VEHICLE PRE-EMPTION SYSTEM IS TO BE INCLUDED IN THE COST OF THE PAY ITEM "FULL ACTUATED CONTROLLER AND CABINET OF THE TYPE SPECIFIED."

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	INCAND.	L.E.D.	OPERATION	
SIGNAL (RED)	22	135	17	0.50	187.0
SIGNAL (YELLOW)	22	135	25	0.25	137.5
SIGNAL (GREEN)	22	135	15	0.25	82.5
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	-	90	25	1.00	-
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					551.2

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

ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHALMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

FILE NAME	USER NAME	DESIGNED	REVISIONS
60V80-055-ts.dgn	zwallsten	JRD	
Default		ZCW	
		KLB	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 64 (NORTH AV) AT PRESIDENT STREET / FIRESIDE DRIVE

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIES	2012-070 I	DuPAGE	103	55

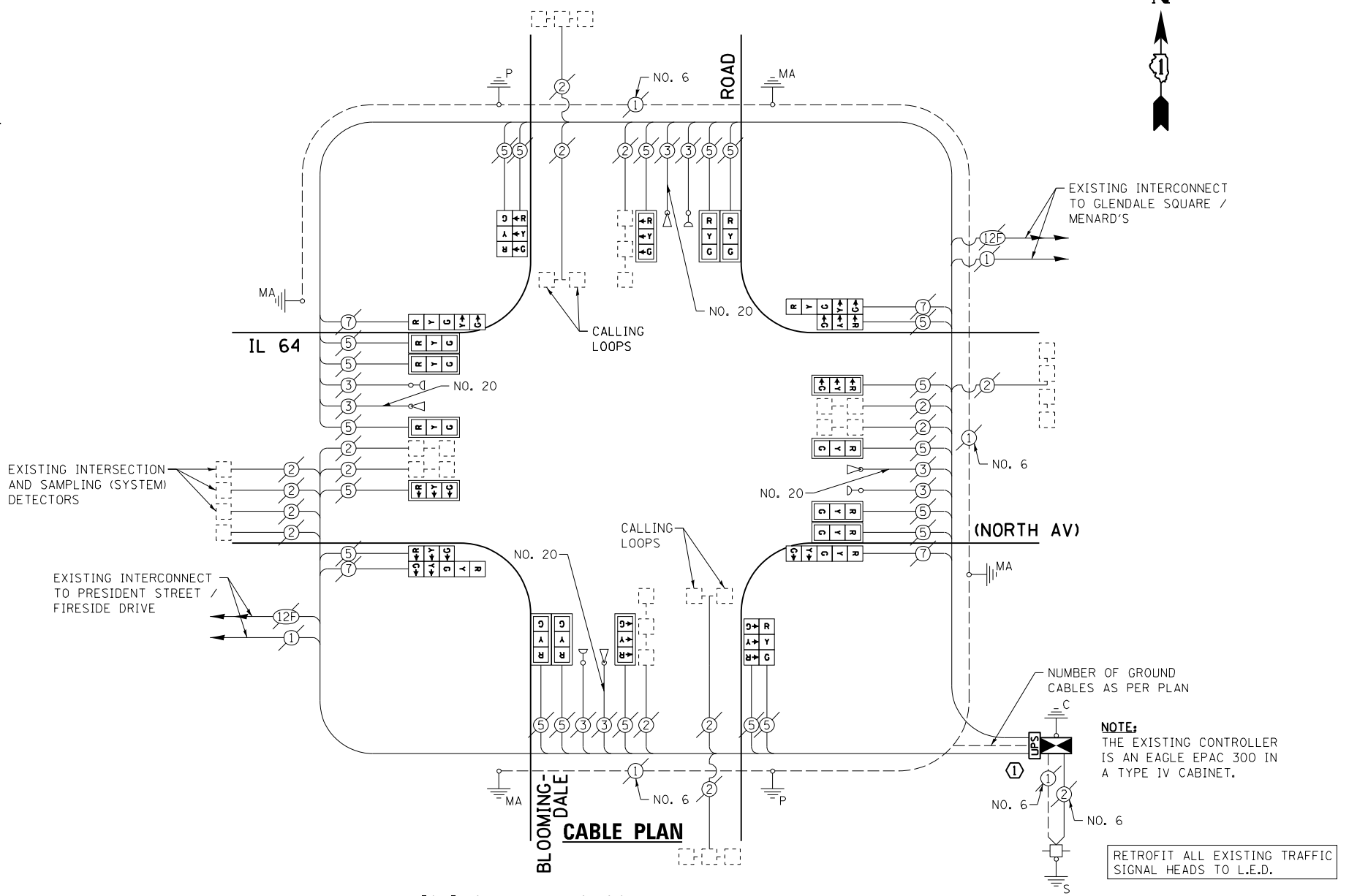
SCALE: NONE SHEET OF SHEETS STA. TO STA.

CONTRACT NO. 60V80

ILLINOIS FED. AID PROJECT

SCHEDULE OF QUANTITIES
IL 64 (NORTH AV) AT BLOOMINGDALE ROAD

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	1	EACH	TRANSCEIVER - FIBER OPTIC
3.	15	EACH	INDUCTIVE LOOP DETECTOR
4.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
5.	1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
6.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
7.	2	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED, RETROFIT
8.	14	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT
9.	2	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT
10.	2	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT



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

1 EACH CONTROLLER AND CABINET (COMPLETE)

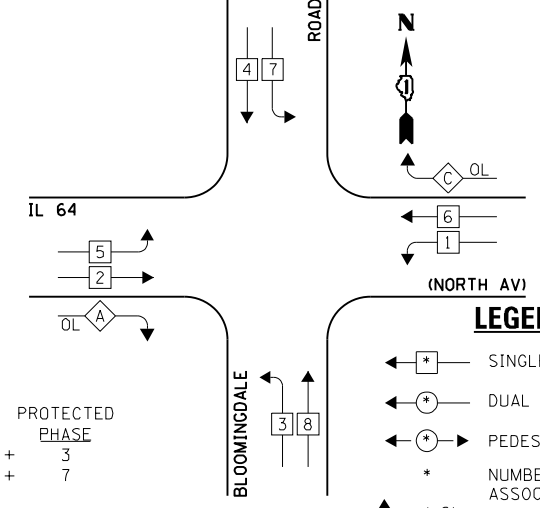
CONSTRUCTION NOTE:
RELOCATION OF THE EXISTING PHASING UNIT FOR THE EMERGENCY VEHICLE PRE-EMPTION SYSTEM IS TO BE INCLUDED IN THE COST OF THE PAY ITEM "FULL ACTUATED CONTROLLER AND CABINET OF THE TYPE SPECIFIED."

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	INCAND.	L.E.D.	OPERATION	
SIGNAL (RED)	24	135	17	0.50	204.0
SIGNAL (YELLOW)	24	135	25	0.25	150.0
SIGNAL (GREEN)	24	135	15	0.25	90.0
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	-	90	25	1.00	-
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					578.6

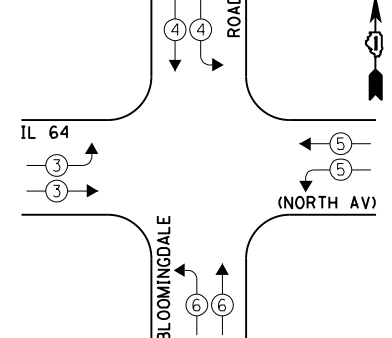
ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION (ADDRESS) 201 W. CENTER COURT (ADDRESS) SCHALMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO (PHONE: (630) 424-5704) COMPANY: CQM-ED

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

EXISTING AND PROPOSED CONTROLLER SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTORS				
EMERGENCY VEHICLE PREEMPTOR	3	4	5	6
MOVEMENT	→	↘	↗	←

EXISTING AND PROPOSED PHASE DESIGNATION DIAGRAM

FILE NAME = 60VB0-056-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

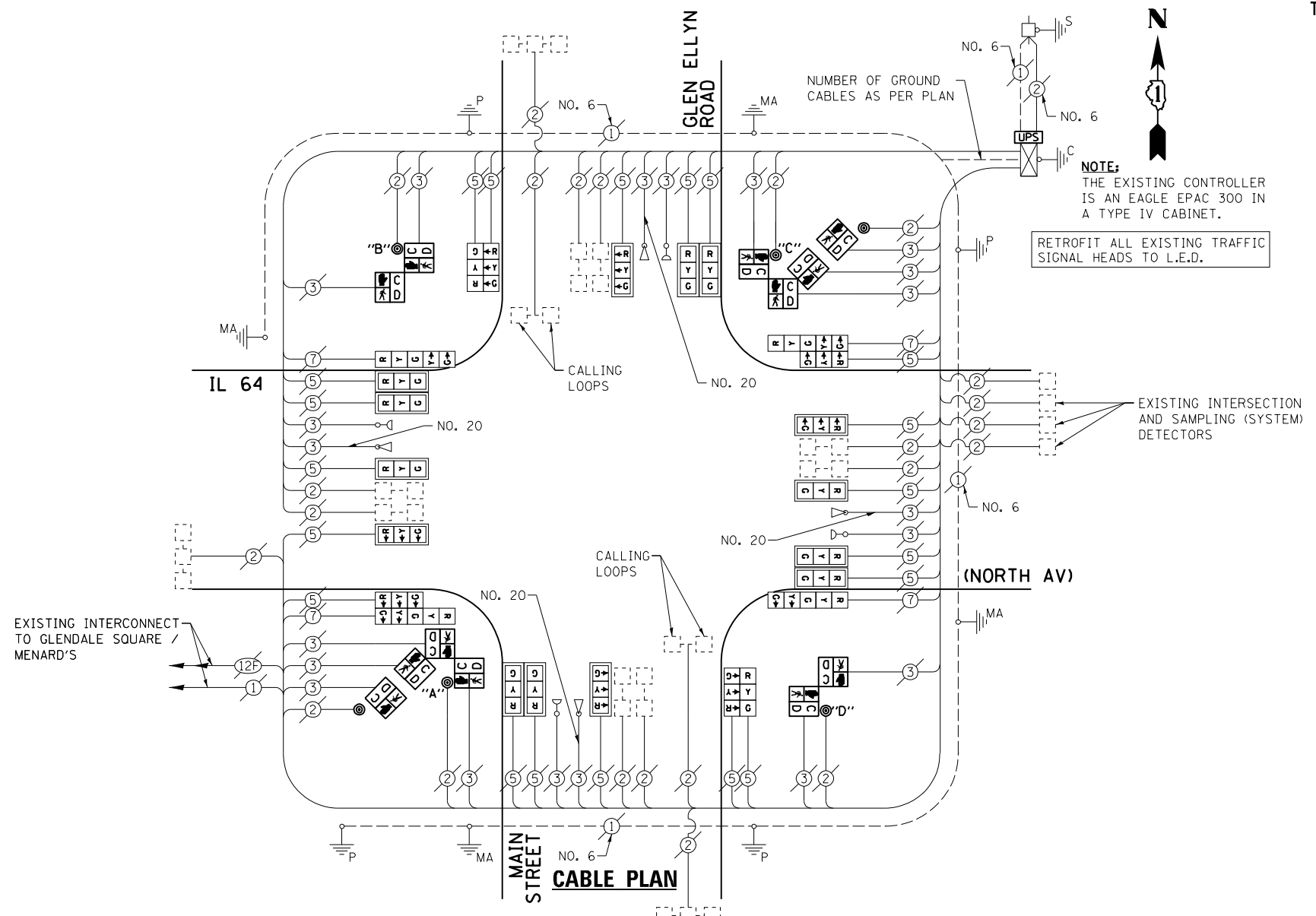
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 64 (NORTH AV) AT BLOOMINGDALE ROAD
SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTÉ. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 56
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60VB0	

SCHEDULE OF QUANTITIES
IL 64 (NORTH AV) AT GLEN ELLYN ROAD / MAIN STREET

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
3.	2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
4.	2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 3-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
5.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
6.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
7.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
8.	2	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED, RETROFIT
9.	14	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT
10.	2	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT
11.	2	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT
12.	6	EACH	PEDESTRIAN PUSH-BUTTON, NON-LATCHING



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.

- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 2 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE
- 2 EACH PEDESTRIAN SIGNAL HEAD, 3-FACE
- 6 EACH PEDESTRIAN PUSH-BUTTON

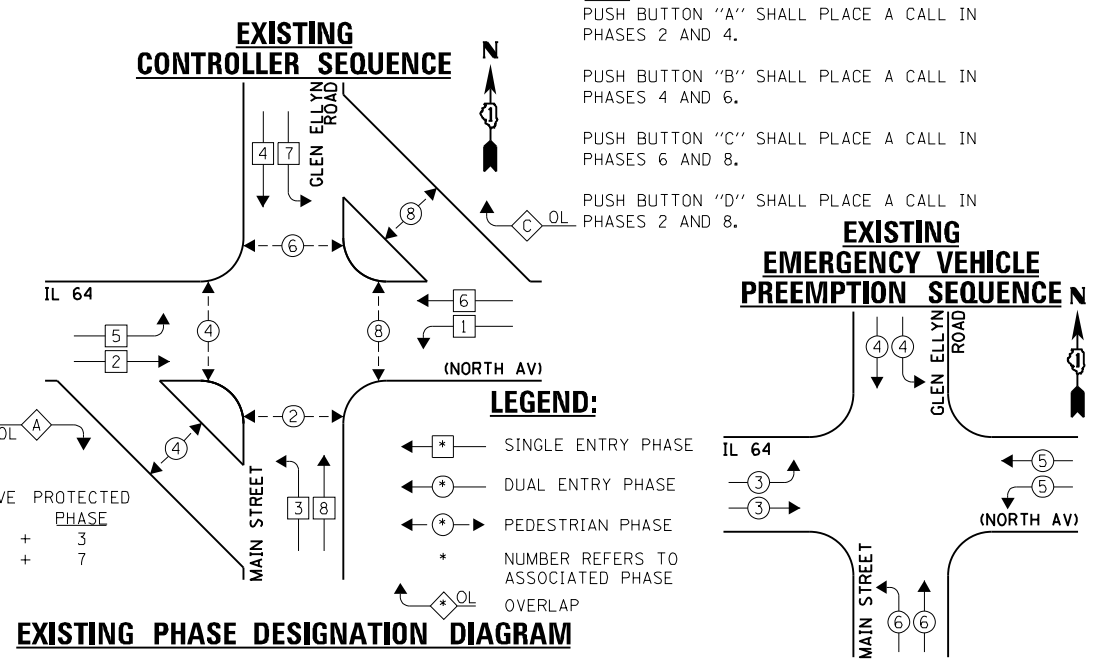
I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND. L.E.D.	OPERATION	
SIGNAL (RED)	24	135 17	0.50	204.0
SIGNAL (YELLOW)	24	135 25	0.25	150.0
SIGNAL (GREEN)	24	135 15	0.25	90.0
ARROW	8	135 12	0.10	9.6
PED. SIGNAL	12	90 25	1.00	300.0
CONTROLLER	1	- 100	1.00	100.0
LUMINAIRE	-	- 250	0.50	-
L.E.D. ST. NAME SIGN	-	- 64	0.50	-
VIDEO SYSTEM	-	- 150	1.00	-
BATTERY BACKUP	1	- 25	1.00	25.0
ILLUMINATED SIGN	-	- 25	0.05	-
TOTAL =				878.6

ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHAMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

FILE NAME = 60V80-058-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/21/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 64 (NORTH AV) AT GLEN ELLYN ROAD /MAIN STREET
SCALE: NONE SHEET OF SHEETS STA. TO STA.

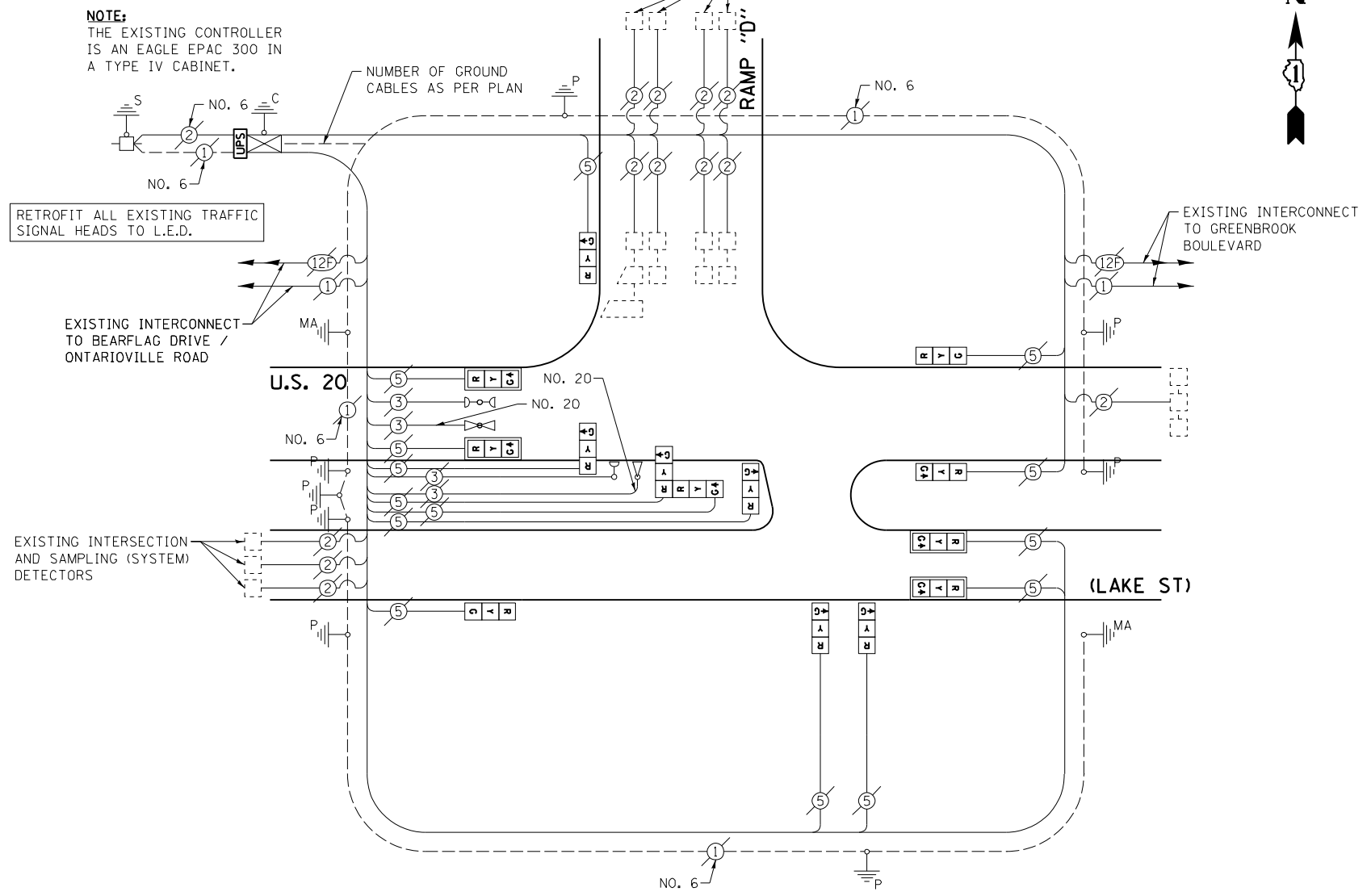


EXISTING EMERGENCY VEHICLE PREEMPTORS				
EMERGENCY VEHICLE PREEMPTOR	3	4	5	6
MOVEMENT	→	↘	↗	←

F.A. RTÉ. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 58
			CONTRACT NO. 60V80	
ILLINOIS FED. AID PROJECT				

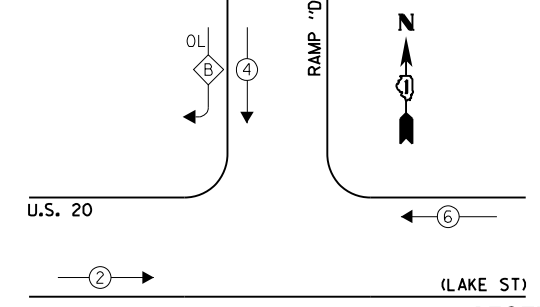
SCHEDULE OF QUANTITIES
U.S. 20 (LAKE ST) AT ELGIN-O'HARE EXPRESSWAY RAMP "D"

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
3.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
4.	8	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT
5.	4	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT
6.	1	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT

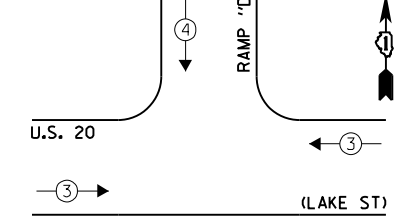


CABLE PLAN

EXISTING CONTROLLER SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



LEGEND:

- ← * → SINGLE ENTRY PHASE
 - ← * → DUAL ENTRY PHASE
 - ← * → PEDESTRIAN PHASE
 - * NUMBER REFERS TO ASSOCIATED PHASE
 - ← * → OVERLAP
- OVERLAP LETTER B = 4 + 5
- RAMP "D" RIGHT TURN LANE LOOPS PLACE A CALL TO DUMMY PHASE 5

EXISTING PHASE DESIGNATION DIAGRAM

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	INCAND.	L.E.D.	OPERATION	
SIGNAL (RED)	14	135	17	0.50	119.0
SIGNAL (YELLOW)	14	135	25	0.25	87.5
SIGNAL (GREEN)	14	135	15	0.25	52.5
ARROW	-	135	12	0.10	-
PED. SIGNAL	-	90	25	1.00	-
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					384.0

ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHALMBURG, IL 60196-1096

ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

FILE NAME = 60V80-059-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

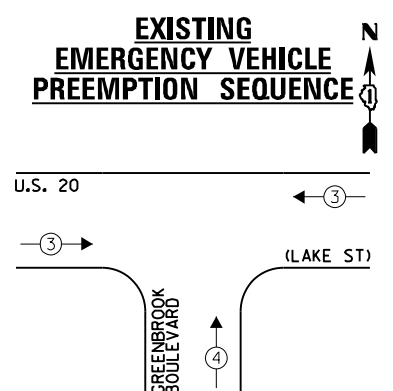
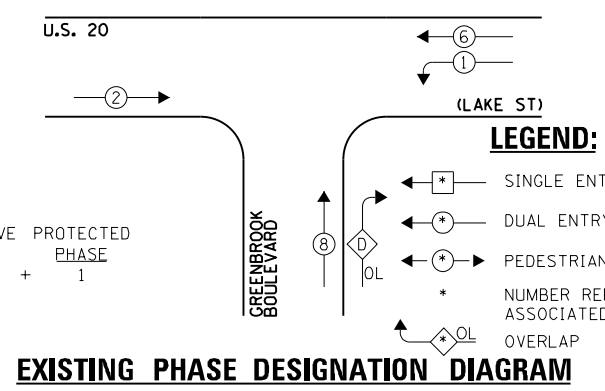
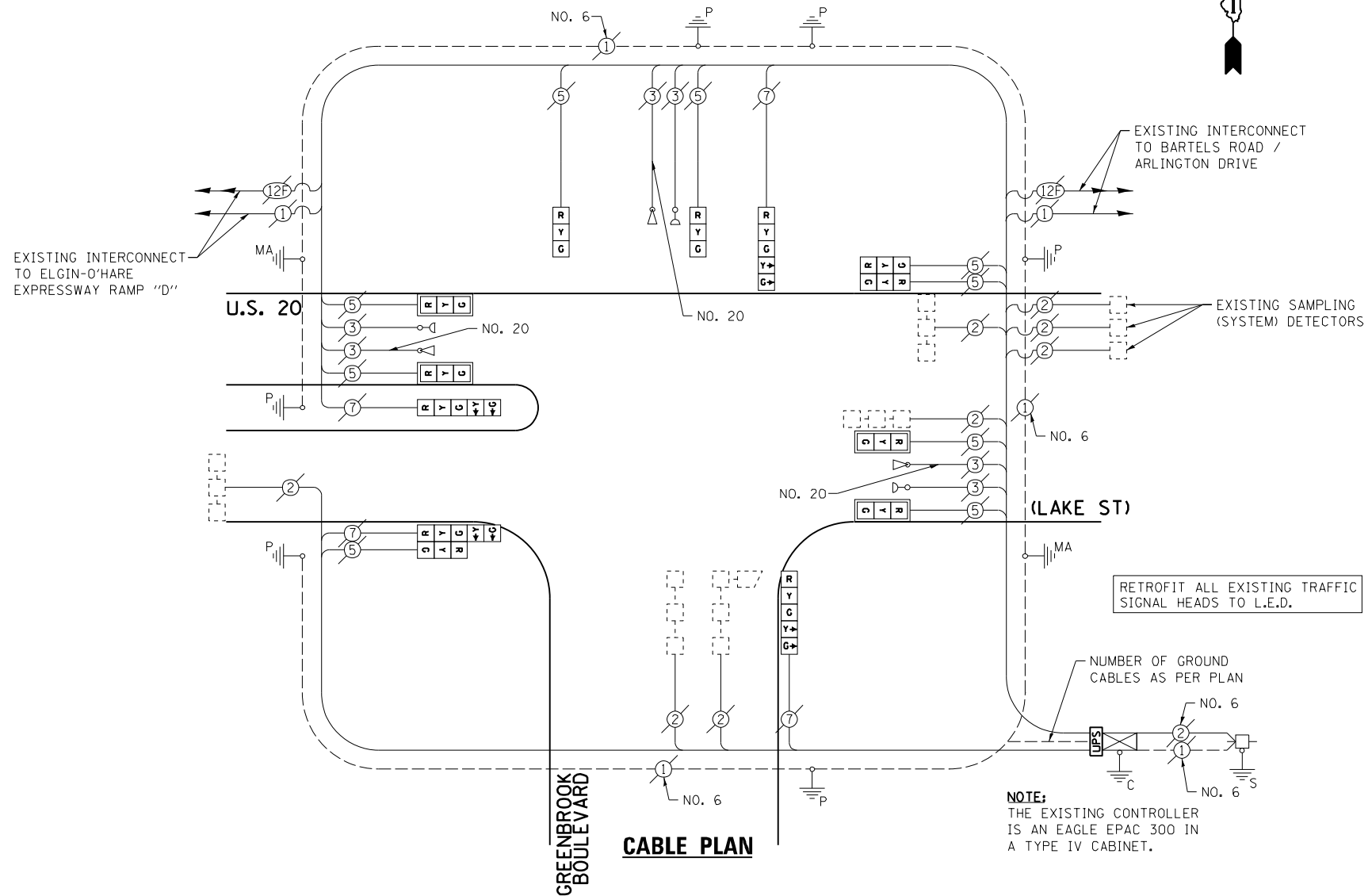
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
U.S. 20 (LAKE ST) AT ELGIN-O'HARE EXPRESSWAY RAMP "D"

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 59
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60V80	

SCHEDULE OF QUANTITIES
U.S. 20 (LAKE ST) AT GREENBROOK BOULEVARD

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
3.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
4.	1	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED, RETROFIT
5.	2	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT
6.	4	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT
7.	1	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT
8.	3	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT



EXISTING EMERGENCY VEHICLE PREEMPTORS	
EMERGENCY VEHICLE PREEMPTOR	3
MOVEMENT	4

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE	
TYPE	NO. LAMPS	INCAND.	L.E.D.	OPERATION	
SIGNAL (RED)	13	135	17	0.50	110.5
SIGNAL (YELLOW)	13	135	25	0.25	81.25
SIGNAL (GREEN)	13	135	15	0.25	48.75
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	-	90	25	1.00	-
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					375.1

ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHALMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

FILE NAME = 60V80-060-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

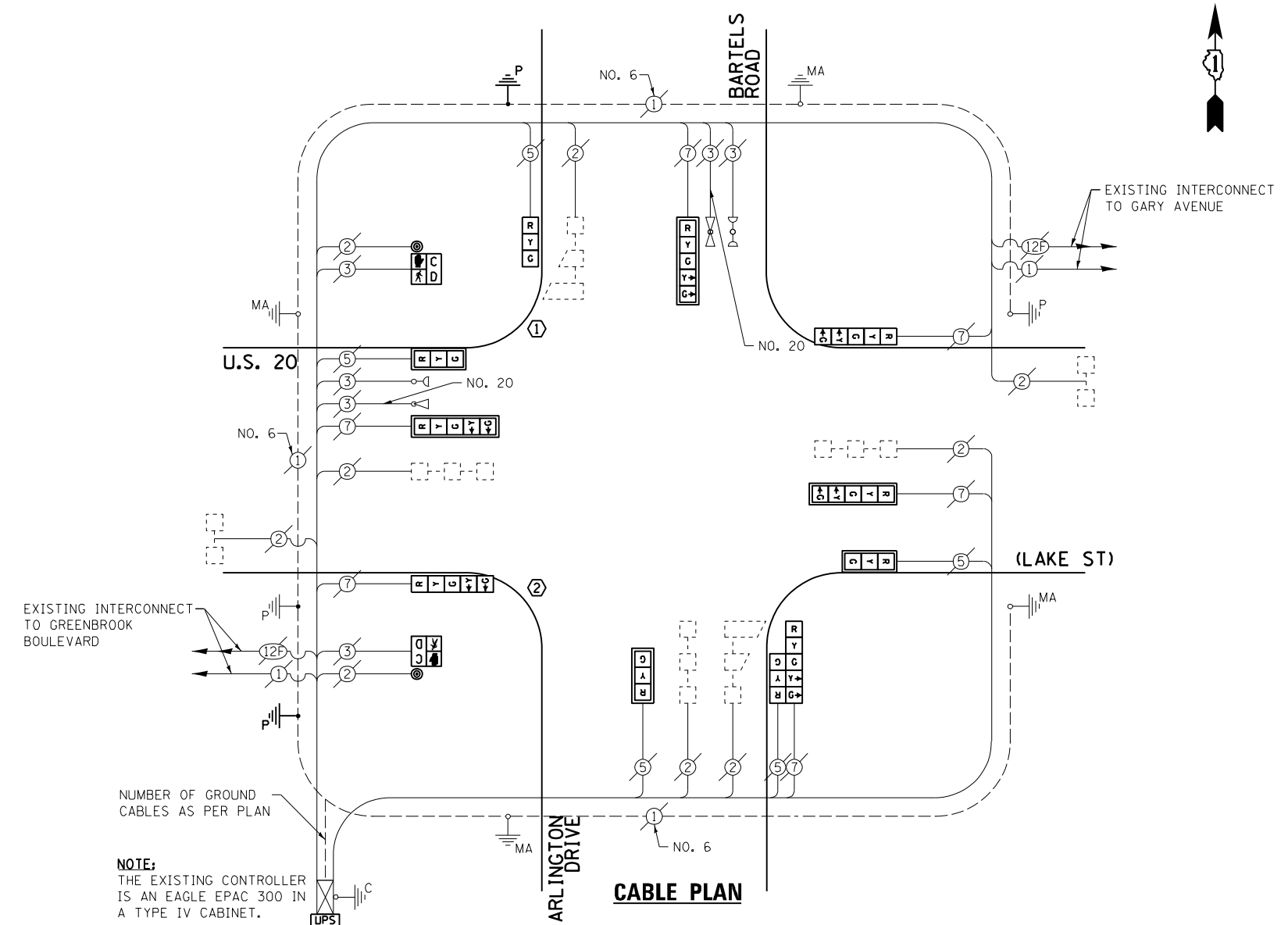
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
U.S. 20 (LAKE ST) AT GREENBROOK BOULEVARD

F.A. RTÉ. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 60
SCALE: NONE			CONTRACT NO. 60V80	
ILLINOIS FED. AID PROJECT				

SCHEDULE OF QUANTITIES
U.S. 20 (LAKE ST) AT BARTELS ROAD / ARLINGTON DRIVE

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	1	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.
3.	1	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
4.	3	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
5.	1	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
6.	2	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED
7.	3	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED
8.	1	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
9.	2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
10.	6	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
11.	2	EACH	PEDESTRIAN PUSH-BUTTON
12.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
13.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
14.	1	EACH	UNINTERRUPTIBLE POWER SUPPLY, SPECIAL



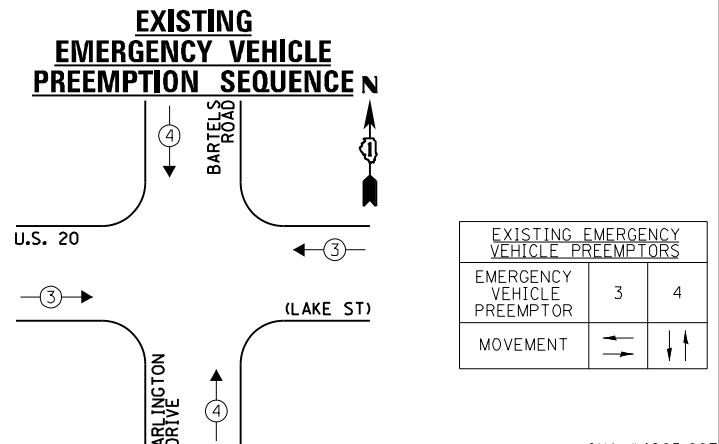
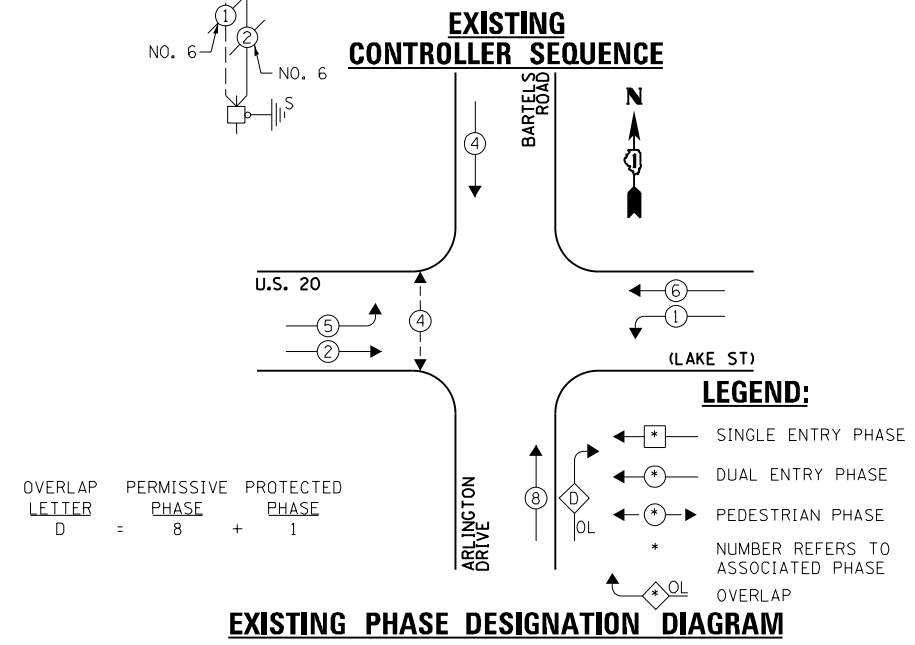
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 4 EACH TRAFFIC SIGNAL HEAD, 3-SECTION
- 5 EACH TRAFFIC SIGNAL HEAD, 5-SECTION
- 1 EACH TRAFFIC SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION
- 6 EACH TRAFFIC SIGNAL BACKPLATE
- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 2 EACH PEDESTRIAN PUSH-BUTTON
- 2 EACH TRAFFIC SIGNAL POST

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	INCAND.	L.E.D.	OPERATION	
SIGNAL (RED)	11	135	17	0.50	93.5
SIGNAL (YELLOW)	11	135	25	0.25	68.75
SIGNAL (GREEN)	11	135	15	0.25	41.25
ARROW	12	135	12	0.10	14.4
PED. SIGNAL	2	90	25	1.00	50.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					392.9

ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHALMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

- CONSTRUCTION NOTE:**
- ① REMOVE EXISTING SIGNAL HEADS AND REPLACE EXISTING 14 FOOT PAINTED POST. INSTALL NEW SIGNAL HEADS ON NEW 14 FOOT GALVANIZED STEEL POST. REUSE EXISTING TYPE "A" CONCRETE FOUNDATION AND EXISTING CABLES.
 - ② REMOVE EXISTING SIGNAL HEADS AND REPLACE EXISTING 16 FOOT PAINTED POST. INSTALL NEW SIGNAL HEADS ON NEW 16 FOOT GALVANIZED STEEL POST. REUSE EXISTING TYPE "A" CONCRETE FOUNDATION AND EXISTING CABLES.



FILE NAME = 60V80-061-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

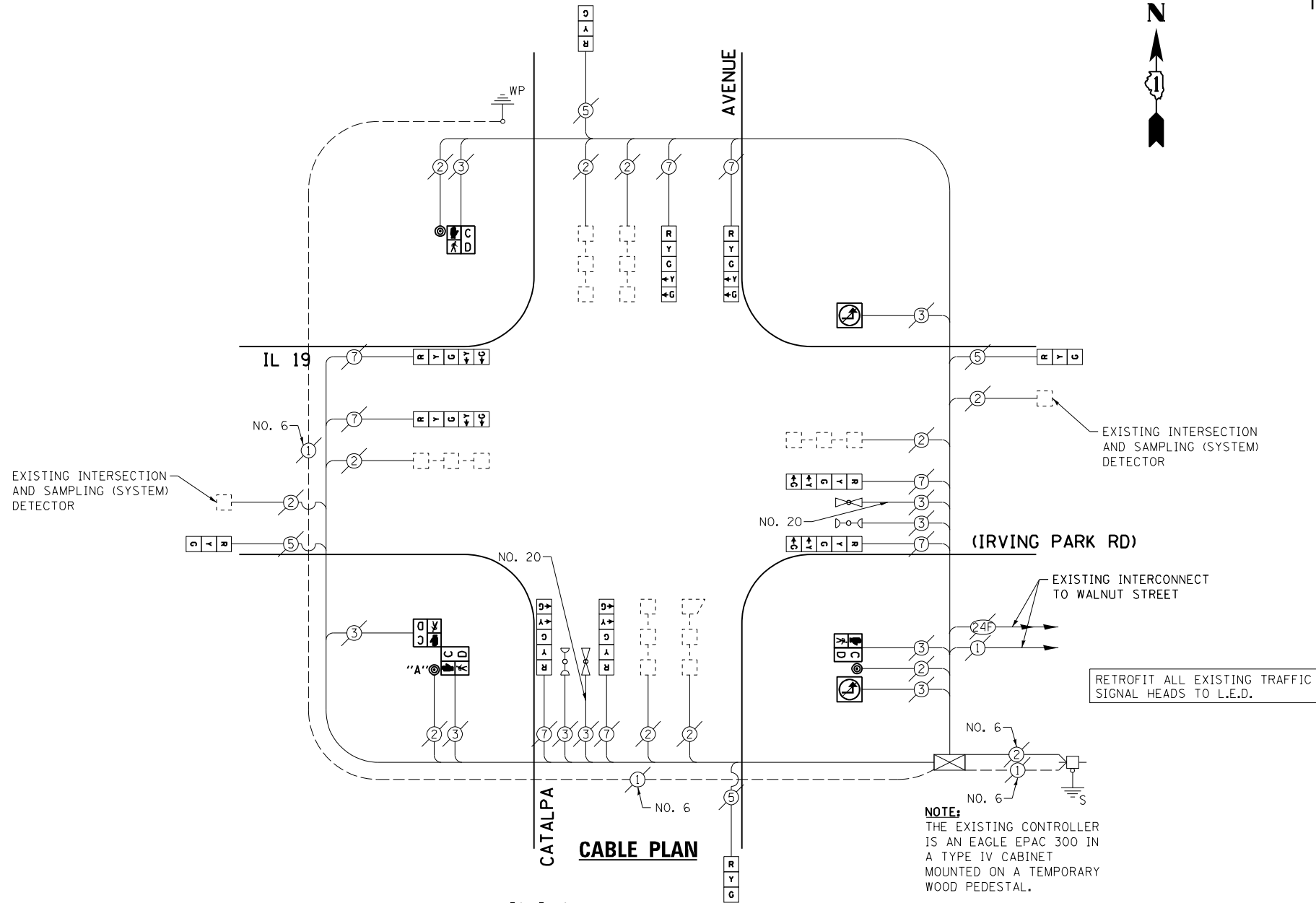
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
U.S. 20 (LAKE ST) AT BARTELS ROAD / ARLINGTON DRIVE
SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 61
CONTRACT NO. 60V80			ILLINOIS FED. AID PROJECT	

SCHEDULE OF QUANTITIES
IL 19 (IRVING PARK RD) AT CATALPA AVENUE

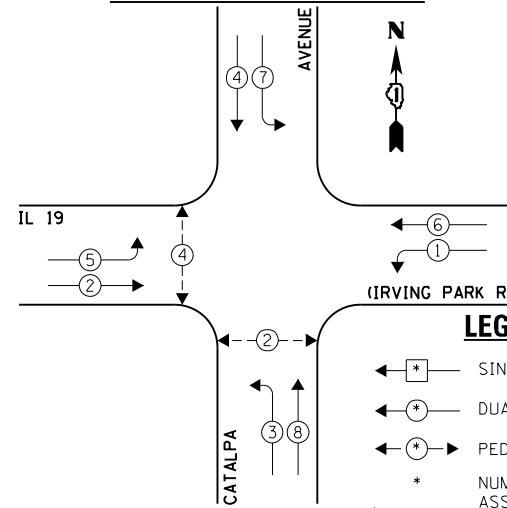
NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
3.	1	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
4.	2	EACH	ILLUMINATED SIGN, LED
5.	4	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, SPAN WIRE MOUNTED, RETROFIT
6.	8	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, SPAN WIRE MOUNTED, RETROFIT
7.	3	EACH	PEDESTRIAN PUSH-BUTTON, NON-LATCHING



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.

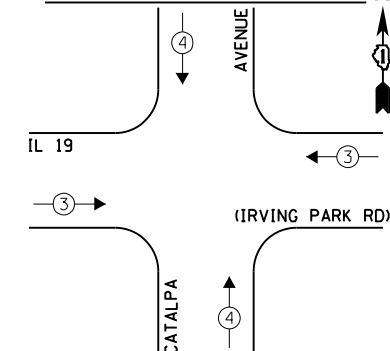
- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 1 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE
- 3 EACH PEDESTRIAN PUSH-BUTTON
- 2 EACH ILLUMINATED SIGN, FIBER OPTIC

EXISTING CONTROLLER SEQUENCE



NOTE:
PUSH BUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



LEGEND:

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

EXISTING PHASE DESIGNATION DIAGRAM

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND. L.E.D.	OPERATION	
SIGNAL (RED)	12	135 17	0.50	102.0
SIGNAL (YELLOW)	12	135 25	0.25	75.0
SIGNAL (GREEN)	12	135 15	0.25	45.0
ARROW	16	135 12	0.10	19.2
PED. SIGNAL	4	90 25	1.00	100.0
CONTROLLER	1	- 100	1.00	100.0
LUMINAIRE	-	- 250	0.50	-
L.E.D. ST. NAME SIGN	-	- 64	0.50	-
VIDEO SYSTEM	-	- 150	1.00	-
BATTERY BACKUP	-	- 25	1.00	-
ILLUMINATED SIGN	2	- 25	0.05	2.5
TOTAL =				443.7

ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHALMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

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

FILE NAME = 60V80-062-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

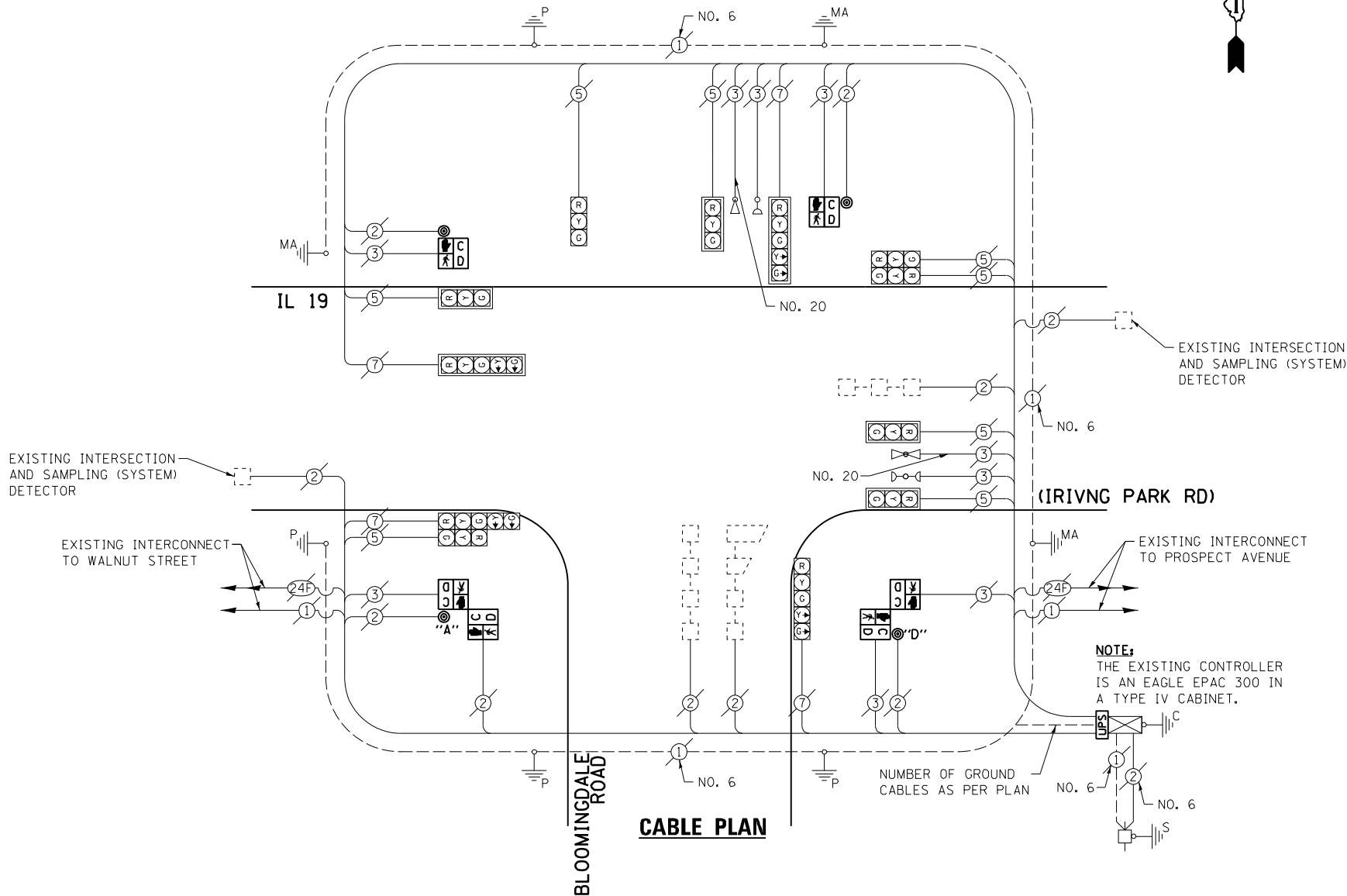
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 19 (IRVING PARK RD) AT CATALPA AVENUE

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTÉ. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 62
			CONTRACT NO. 60V80	
GHA #4085.887				
ILLINOIS FED. AID PROJECT				

SCHEDULE OF QUANTITIES
IL 19 (IRVING PARK RD) AT BLOOMINGDALE ROAD

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
3.	2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
4.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
5.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
6.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
7.	4	EACH	PEDESTRIAN PUSH-BUTTON, NON-LATCHING



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.

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

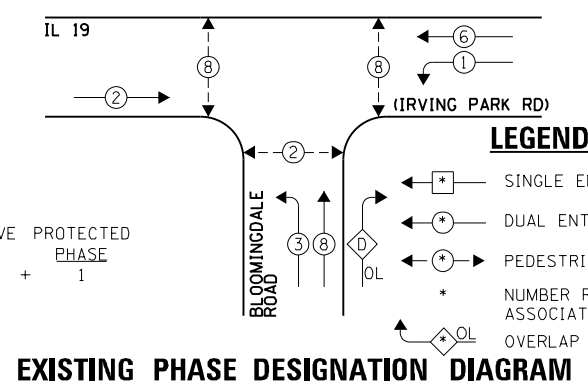
EXISTING CONTROLLER SEQUENCE

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

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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND. L.E.D.	OPERATION	
SIGNAL (RED)	12	135 17	0.50	102.0
SIGNAL (YELLOW)	12	135 25	0.25	75.0
SIGNAL (GREEN)	12	135 15	0.25	45.0
ARROW	8	135 12	0.10	9.6
PED. SIGNAL	6	90 25	1.00	150.0
CONTROLLER	1	- 100	1.00	100.0
LUMINAIRE	-	- 250	0.50	-
L.E.D. ST. NAME SIGN	-	- 64	0.50	-
VIDEO SYSTEM	-	- 150	1.00	-
BATTERY BACKUP	1	- 25	1.00	25.0
ILLUMINATED SIGN	-	- 25	0.05	-
TOTAL =				506.6

ENERGY COSTS - BILLED TO: VILLAGE OF ITASCA
(ADDRESS) 550 W. IRVING PARK ROAD
(ADDRESS) ITASCA, IL 60143-1795
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

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

FILE NAME = 60V80-063-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 19 (IRVING PARK RD) AT BLOOMINGDALE ROAD

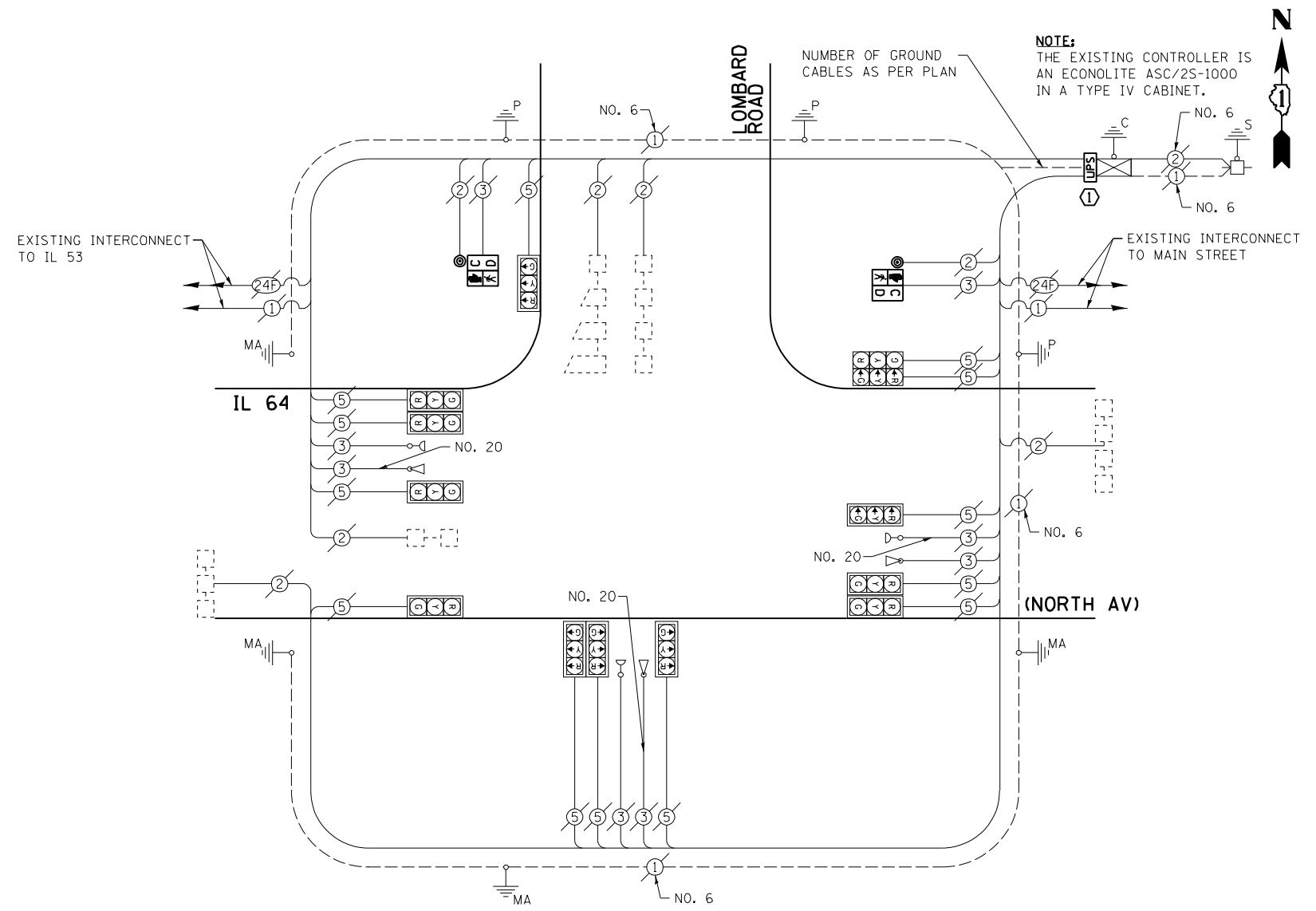
SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTÉ. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 63
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60V80	

GHA #4085.887

SCHEDULE OF QUANTITIES
IL 64 (NORTH AV) AT LOMBARD ROAD

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
3.	2	EACH	PEDESTRIAN PUSH-BUTTON
4.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
5.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
6.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL



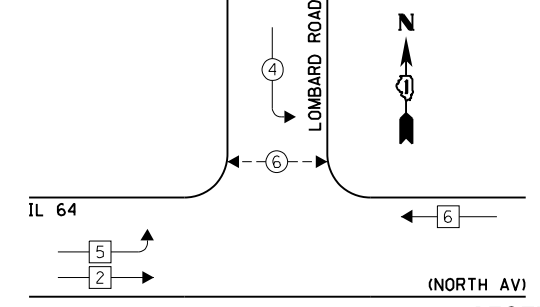
CABLE PLAN

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.

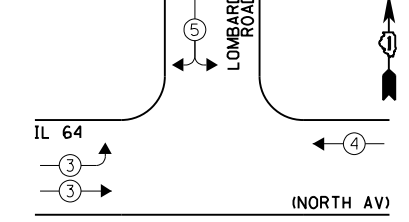
- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 2 EACH PEDESTRIAN PUSH-BUTTON

CONSTRUCTION NOTE:
① ALL WORK TO CLEAR AWAY FOR INSTALLATION OF THE UPS SHALL BE INCLUDED IN THE COST OF THE PAY ITEM "UNINTERRUPTABLE POWER SUPPLY, SPECIAL."

EXISTING CONTROLLER SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



LEGEND:

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

EXISTING 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. LAMPS	INCAND.	L.E.D.	OPERATION	
SIGNAL (RED)	13	135	17	0.50	110.5
SIGNAL (YELLOW)	13	135	25	0.25	81.25
SIGNAL (GREEN)	13	135	15	0.25	48.75
ARROW	-	135	12	0.10	-
PED. SIGNAL	2	90	25	1.00	50.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					415.5

ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHALMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

FILE NAME = 60V80-064-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

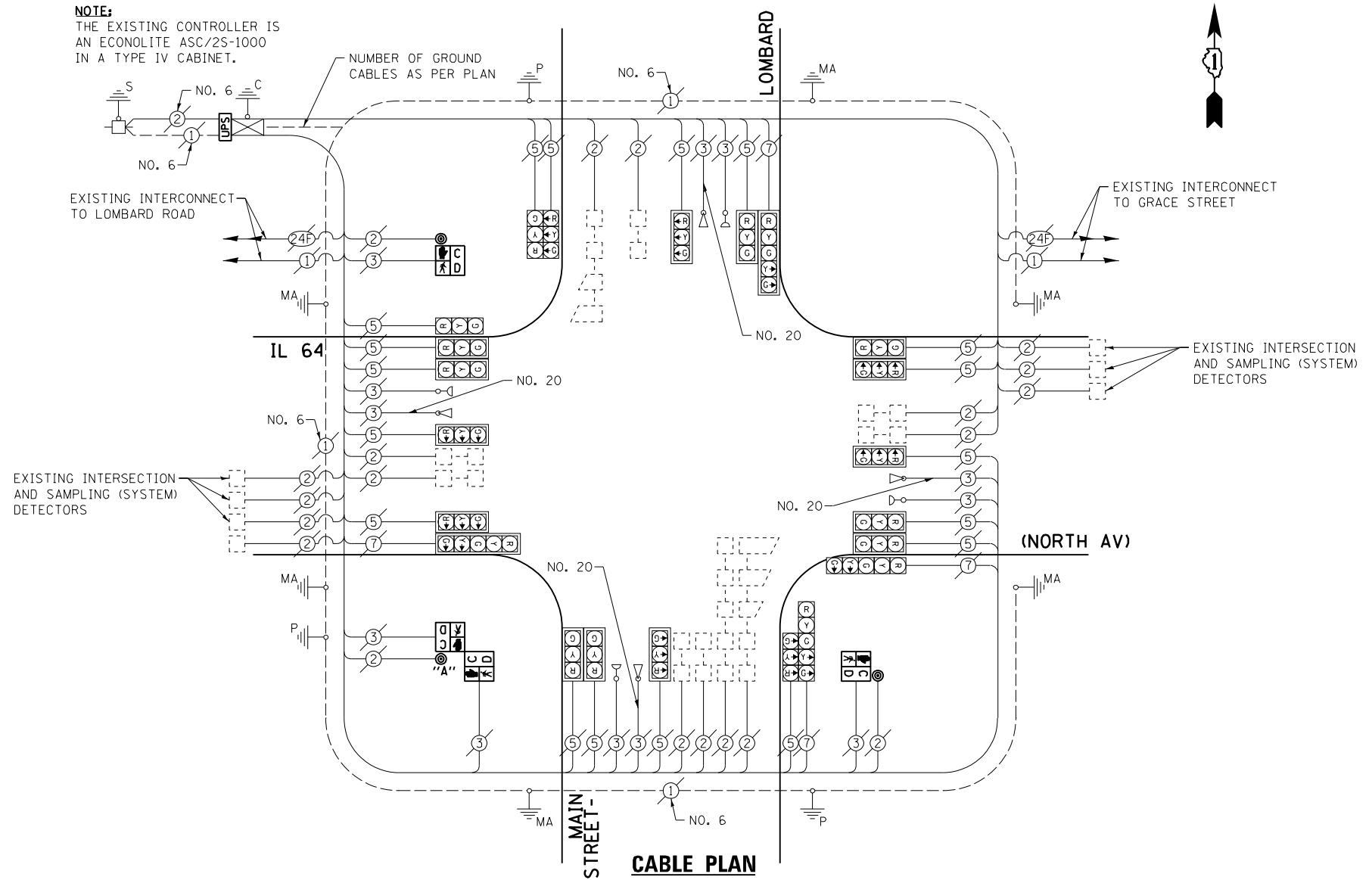
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 64 (NORTH AV) AT LOMBARD ROAD
SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 64
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60V80	

SCHEDULE OF QUANTITIES
IL 64 (NORTH AV) AT MAIN STREET-LOMBARD

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
3.	1	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
4.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
5.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
6.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
7.	3	EACH	PEDESTRIAN PUSH-BUTTON, NON-LATCHING

NOTE:
THE EXISTING CONTROLLER IS AN ECONOLITE ASC/2S-1000 IN A TYPE IV CABINET.



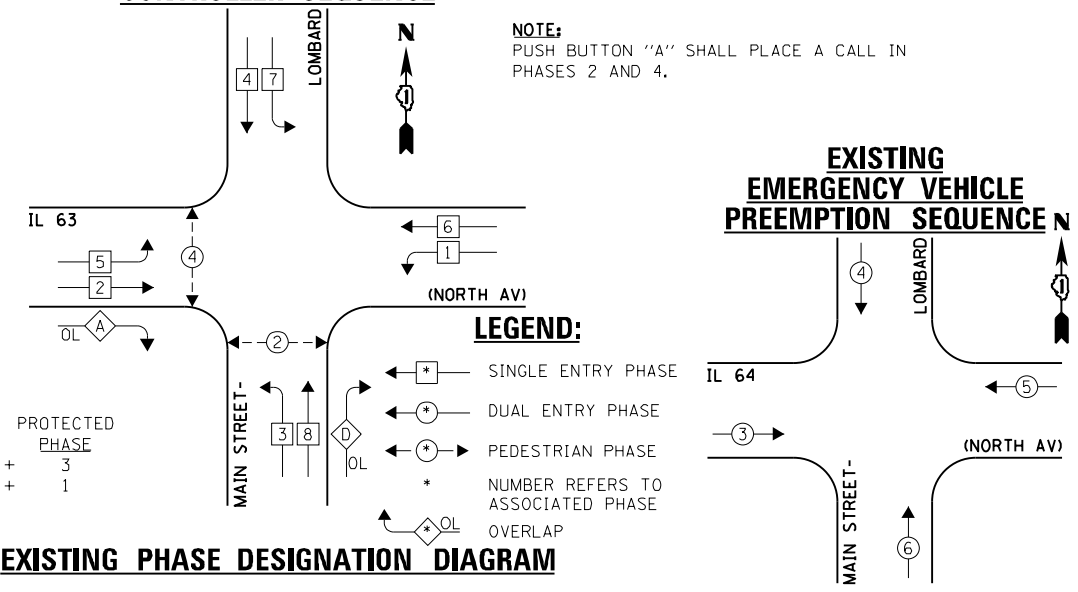
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	INCAND.	L.E.D.	OPERATION	
SIGNAL (RED)	22	135	17	0.50	187.0
SIGNAL (YELLOW)	22	135	25	0.25	137.5
SIGNAL (GREEN)	22	135	15	0.25	82.5
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	4	90	25	1.00	100.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					641.6

ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHALMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

EXISTING CONTROLLER SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

EXISTING EMERGENCY VEHICLE PREEMPTORS				
EMERGENCY VEHICLE PREEMPTOR	3	4	5	6
MOVEMENT	→	↘	←	↙

FILE NAME = 60V80-065-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

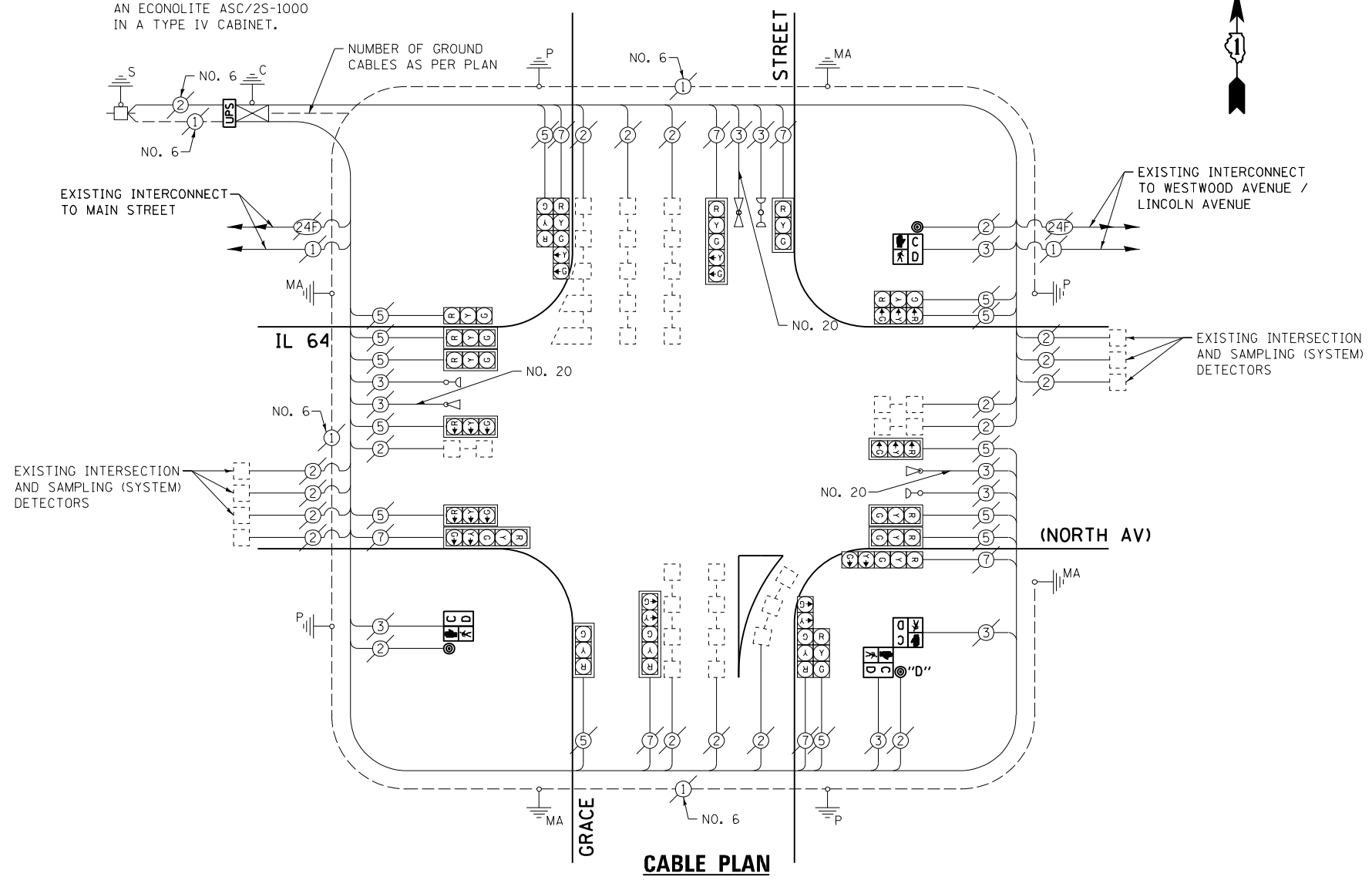
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 64 (NORTH AV) AT MAIN STREET-LOMBARD
SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTÉ. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 65
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60V80	

SCHEDULE OF QUANTITIES
IL 64 (NORTH AV) AT GRACE STREET

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
3.	1	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
4.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
5.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
6.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
7.	3	EACH	PEDESTRIAN PUSH-BUTTON, NON-LATCHING

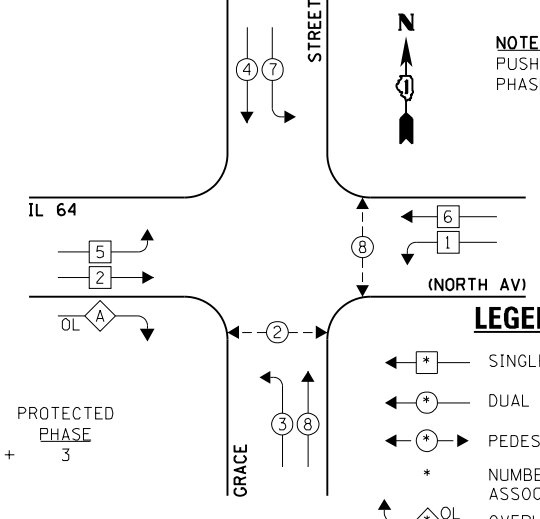
NOTE:
THE EXISTING CONTROLLER IS AN ECONOLITE ASC/2S-1000 IN A TYPE IV CABINET.



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.

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

EXISTING CONTROLLER SEQUENCE

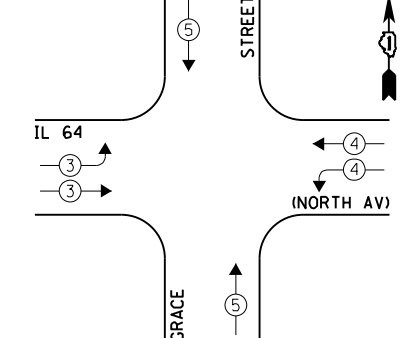


NOTE:
PUSH BUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8.

EXISTING PHASE DESIGNATION DIAGRAM

OVERLAP LETTER = PERMISSIVE PHASE + PROTECTED PHASE
A = 2 + 3

EXISTING 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. LAMPS	INCAND.	L.E.D.	OPERATION	
SIGNAL (RED)	20	135	17	0.50	170.0
SIGNAL (YELLOW)	20	135	25	0.25	125.0
SIGNAL (GREEN)	20	135	15	0.25	75.0
ARROW	12	135	12	0.10	14.4
PED. SIGNAL	4	90	25	1.00	100.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					609.4

ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHALMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

FILE NAME = 60V80-066-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

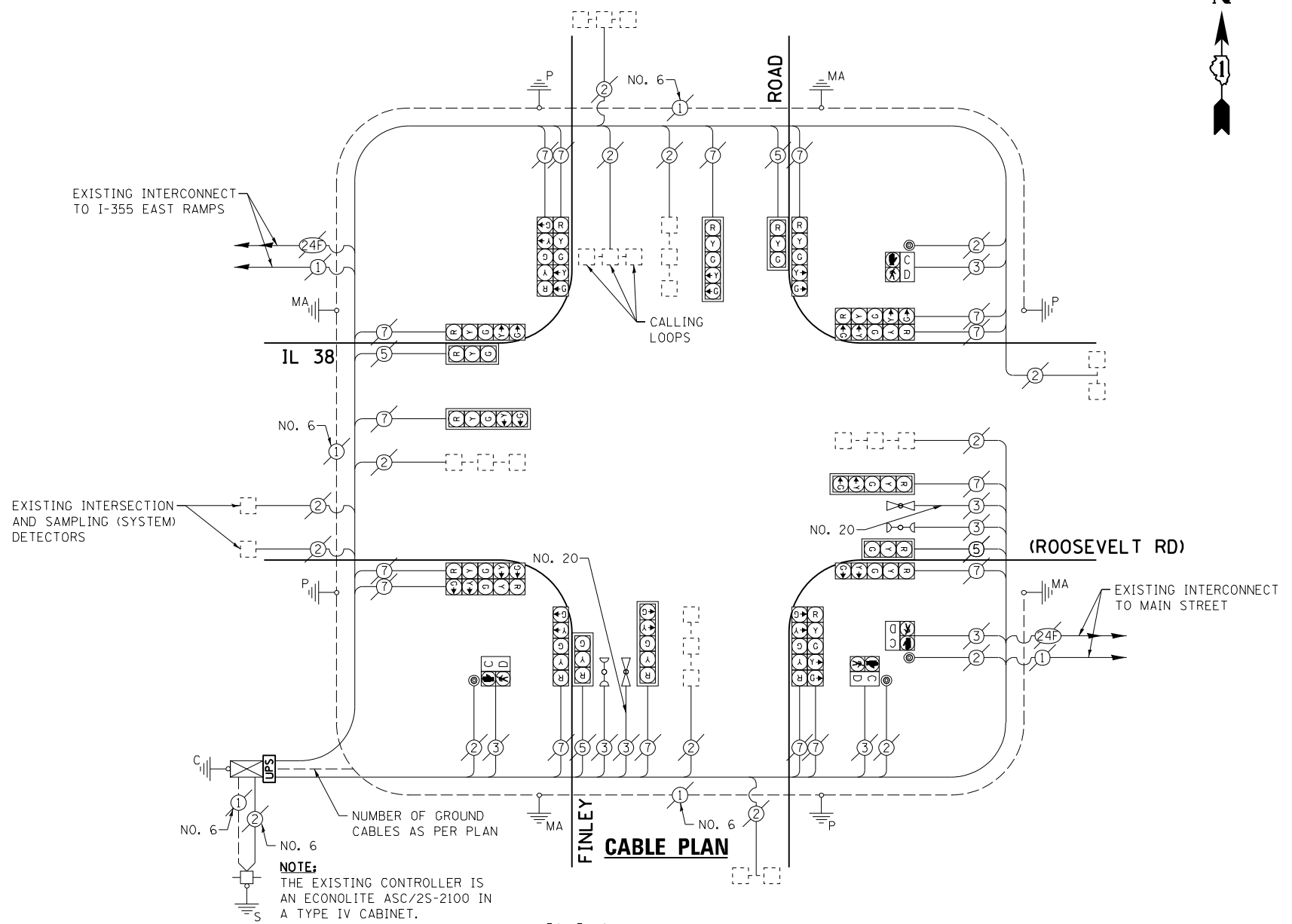
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 64 (NORTH AV) AT GRACE STREET
SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTÉ. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 66
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60V80	

SCHEDULE OF QUANTITIES
IL 38 (ROOSEVELT RD) AT FINLEY ROAD

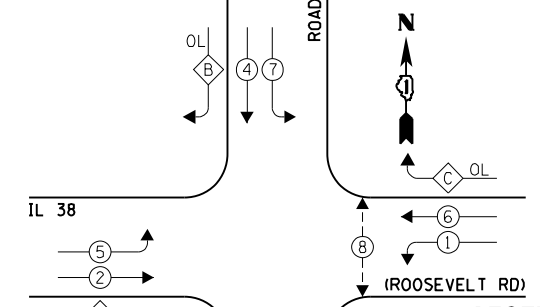
NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
3.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
4.	1	EACH	UNINTERRUPTIBLE POWER SUPPLY, SPECIAL
5.	4	EACH	PEDESTRIAN PUSH-BUTTON, NON-LATCHING



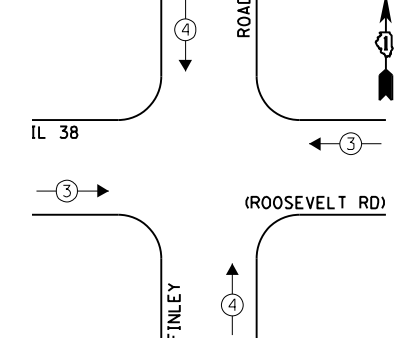
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

4 EACH PEDESTRIAN PUSH-BUTTON

EXISTING CONTROLLER SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



LEGEND:

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

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

EXISTING PHASE DESIGNATION DIAGRAM

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	INCAND.	L.E.D.	OPERATION	
SIGNAL (RED)	20	135	17	0.50	170.0
SIGNAL (YELLOW)	20	135	25	0.25	125.0
SIGNAL (GREEN)	20	135	15	0.25	75.0
ARROW	32	135	12	0.10	38.4
PED. SIGNAL	4	90	25	1.00	100.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					633.4

ENERGY COSTS - BILLED TO: VILLAGE OF LOMBARD
(ADDRESS) 255 E. WILSON AVENUE
(ADDRESS) LOMBARD, IL 60148-3969
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

EXISTING EMERGENCY VEHICLE PREEMPTORS	
EMERGENCY VEHICLE PREEMPTOR	3
MOVEMENT	4

FILE NAME = 60V80-067-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

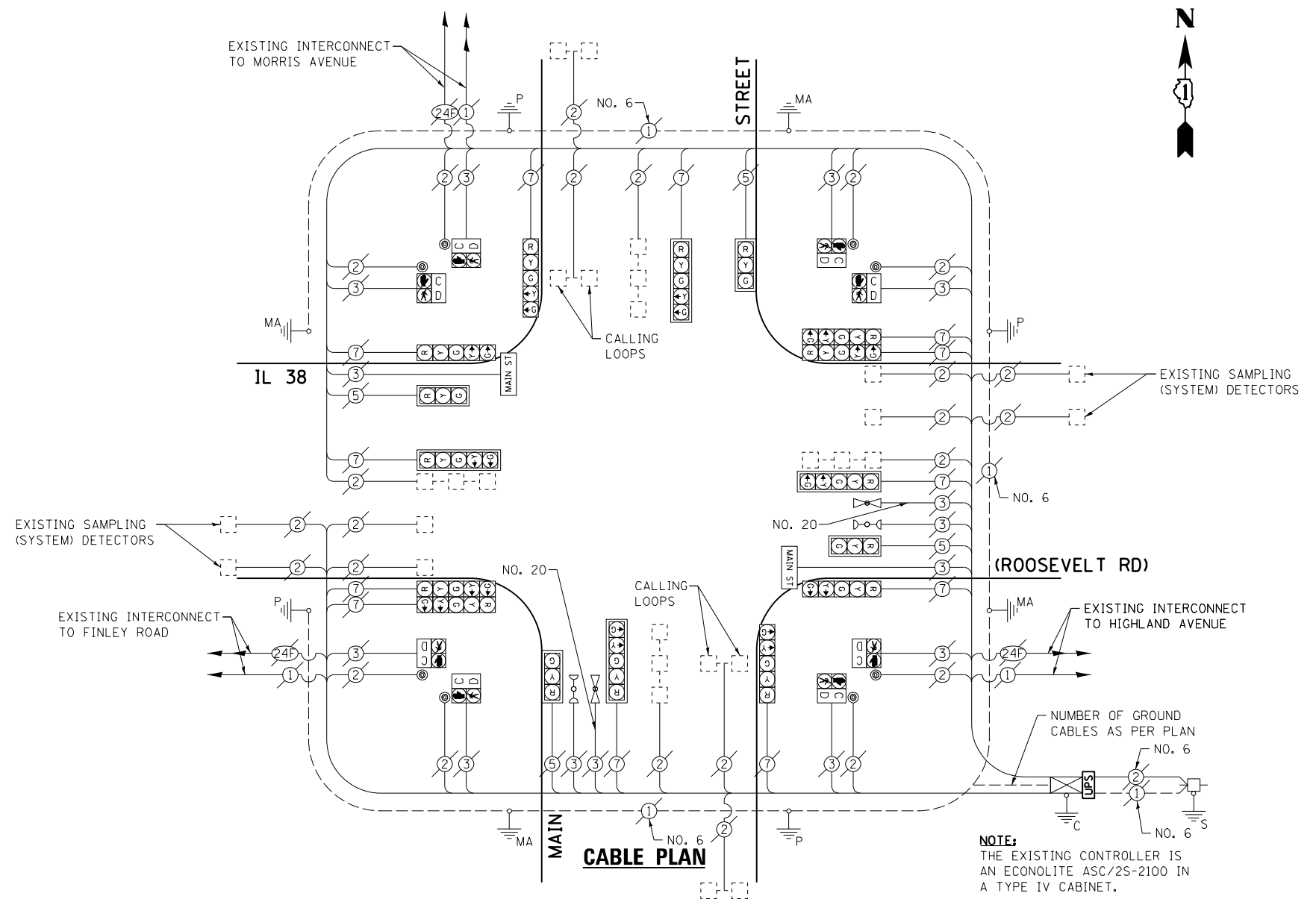
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 38 (ROOSEVELT RD) AT FINLEY ROAD

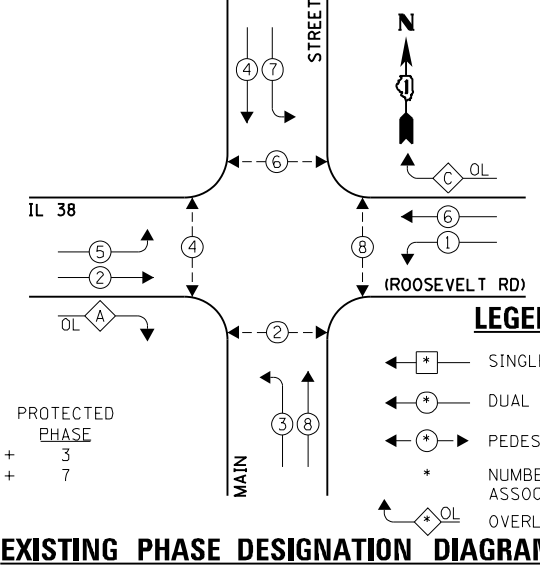
F.A. RTE. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 67
SCALE: NONE			SHEET OF SHEETS STA. TO STA.	
CONTRACT NO. 60V80				

SCHEDULE OF QUANTITIES
IL 38 (ROOSEVELT RD) AT MAIN STREET

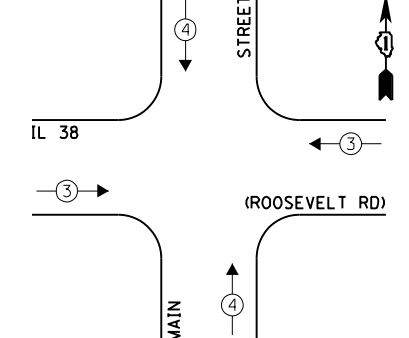
NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
3.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL



EXISTING CONTROLLER SEQUENCE



EXISTING 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. LAMPS	INCAND.	L.E.D.	OPERATION	
SIGNAL (RED)	16	135	17	0.50	136.0
SIGNAL (YELLOW)	16	135	25	0.25	100.0
SIGNAL (GREEN)	16	135	15	0.25	60.0
ARROW	24	135	12	0.10	28.8
PED. SIGNAL	8	90	25	1.00	200.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	2	-	64	0.50	64.0
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					713.8

ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHALMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

FILE NAME = 60VB0-068-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

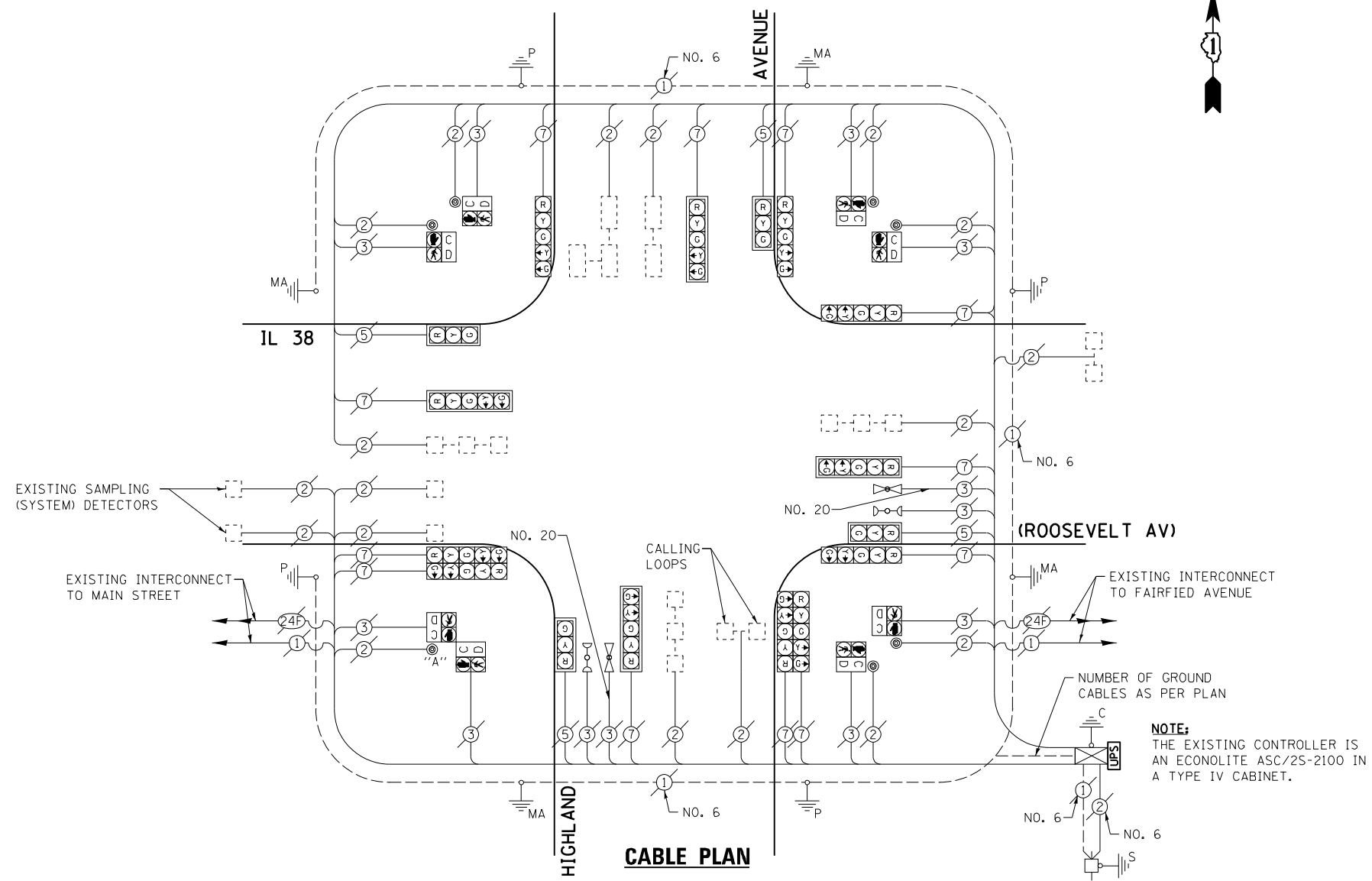
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 38 (ROOSEVELT RD) AT MAIN STREET
SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTÉ. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 68
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60VB0	

SCHEDULE OF QUANTITIES
IL 38 (ROOSEVELT RD) AT HIGHLAND AVENUE

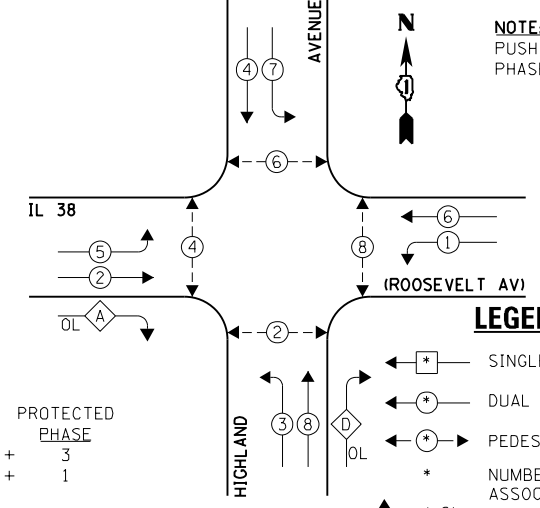
NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
3.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
4.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
5.	7	EACH	PEDESTRIAN PUSH-BUTTON, NON-LATCHING



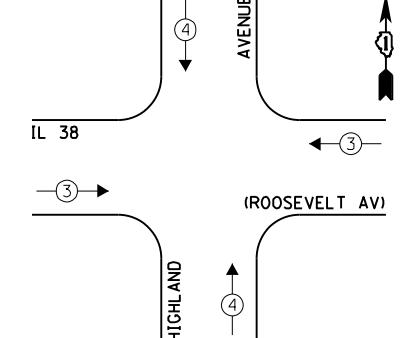
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

7 EACH PEDESTRIAN PUSH-BUTTON

EXISTING CONTROLLER SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



LEGEND:

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

EXISTING PHASE DESIGNATION DIAGRAM

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	INCAND.	L.E.D.	OPERATION	
SIGNAL (RED)	16	135	17	0.50	136.0
SIGNAL (YELLOW)	16	135	25	0.25	100.0
SIGNAL (GREEN)	16	135	15	0.25	60.0
ARROW	24	135	12	0.10	28.8
PED. SIGNAL	8	90	25	1.00	200.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					649.8

ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHALMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

EXISTING EMERGENCY VEHICLE PREEMPTORS	
EMERGENCY VEHICLE PREEMPTOR	3
MOVEMENT	4

FILE NAME = 60V80-069-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

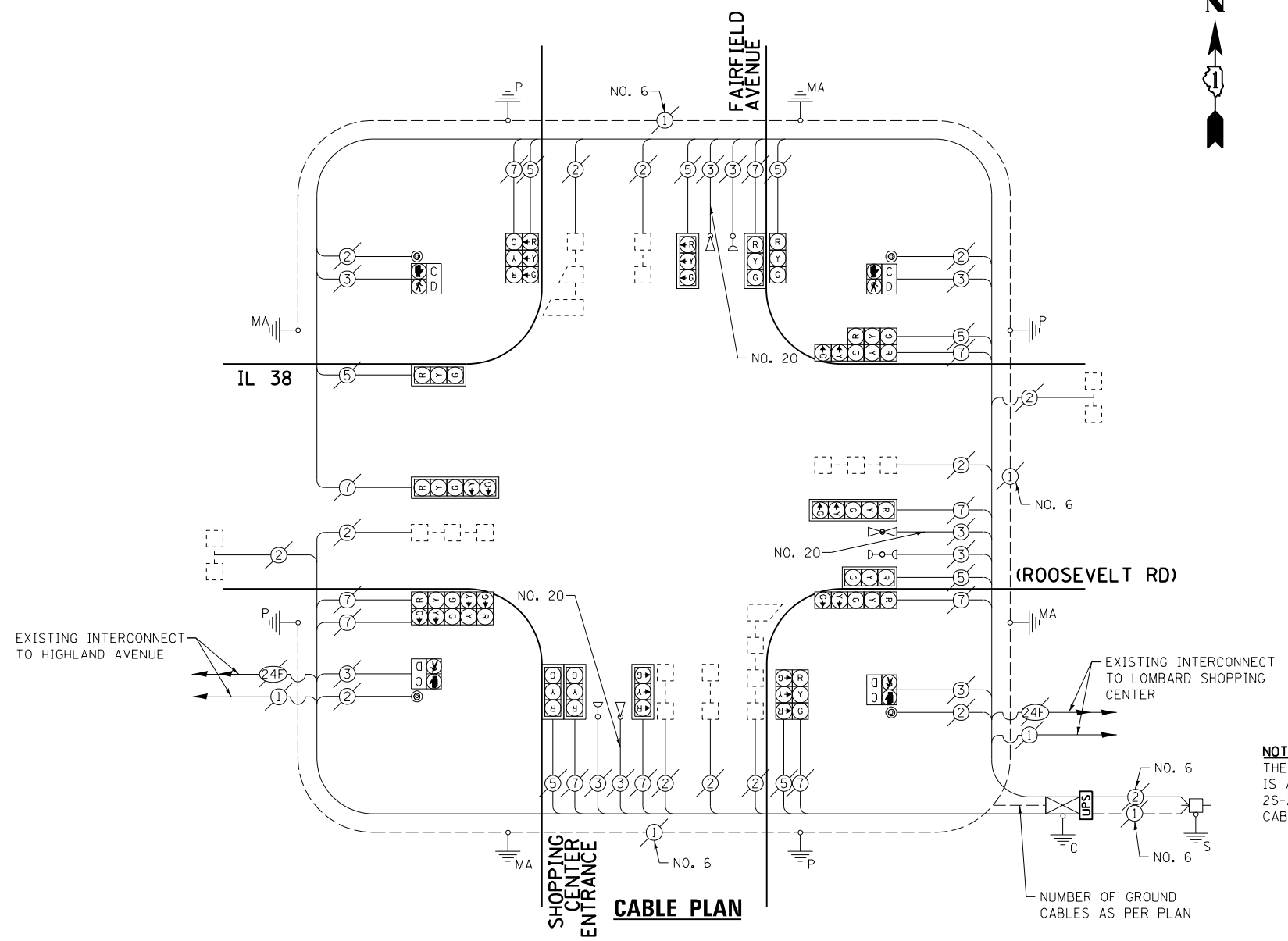
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 38 (ROOSEVELT AV) AT HIGHLAND AVENUE
SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 69
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60V80	

SCHEDULE OF QUANTITIES
IL 38 (ROOSEVELT RD) AT FAIRFIELD AVENUE

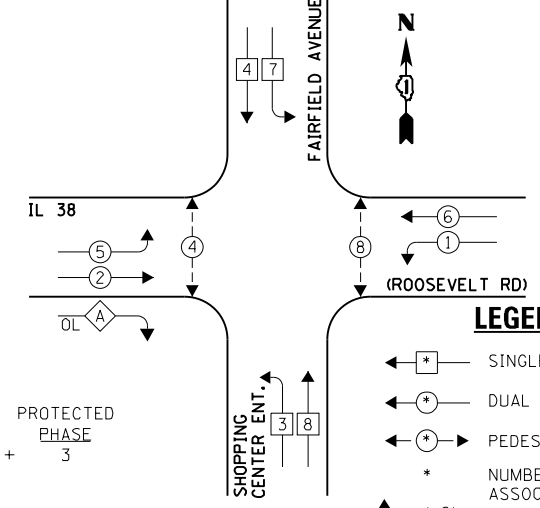
NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
3.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL



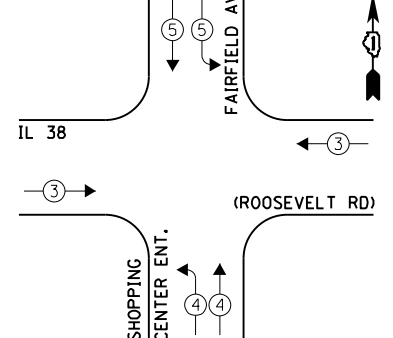
NOTE:
THE EXISTING CONTROLLER IS AN ECONOLITE ASC/2S-2100 IN A TYPE IV CABINET.

NUMBER OF GROUND CABLES AS PER PLAN

EXISTING CONTROLLER SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT	→	↑	↓

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE	
TYPE	NO. LAMPS	INCAND.	L.E.D.	OPERATION	
SIGNAL (RED)	19	135	17	0.50	161.5
SIGNAL (YELLOW)	19	135	25	0.25	118.75
SIGNAL (GREEN)	19	135	15	0.25	71.25
ARROW	12	135	12	0.10	14.4
PED. SIGNAL	4	90	25	1.00	100.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =				590.9	

ENERGY COSTS - BILLED TO: VILLAGE OF LOMBARD
(ADDRESS) 255 E. WILSON AVENUE
(ADDRESS) LOMBARD, IL 60148-3969
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

EXISTING PHASE DESIGNATION DIAGRAM

OVERLAP LETTER A = PERMISSIVE PHASE 2 + PROTECTED PHASE 3

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 38 (ROOSEVELT RD) AT FAIRFIELD AVENUE

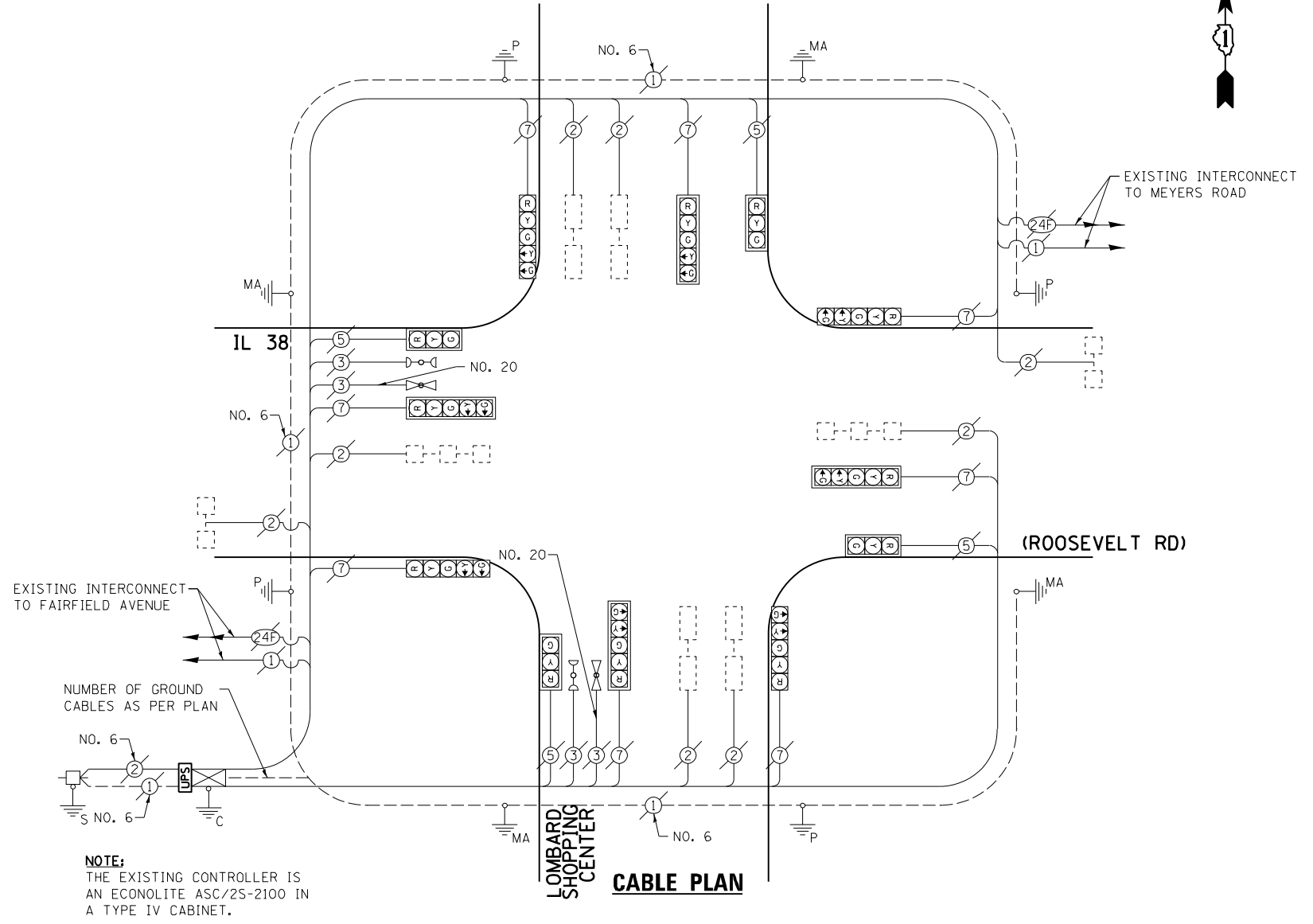
FILE NAME = 60V80-070-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

F.A. RTE. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 70
SCALE: NONE			CONTRACT NO. 60V80	
ILLINOIS FED. AID PROJECT				

GHA #4085.887

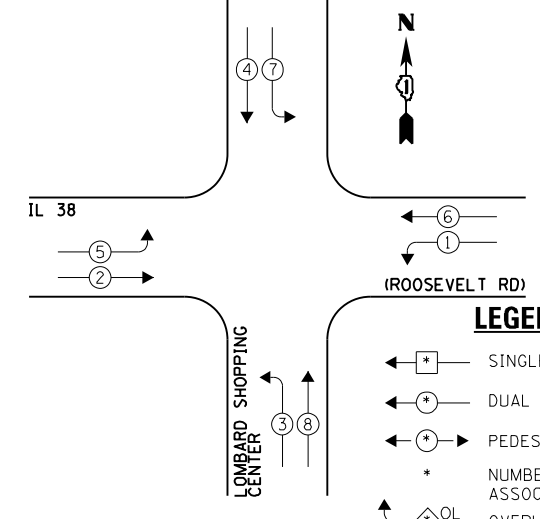
SCHEDULE OF QUANTITIES
IL 38 (ROOSEVELT RD) AT LOMBARD SHOPPING CENTER

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
3.	1	EACH	UNINTERRUPTIBLE POWER SUPPLY, SPECIAL

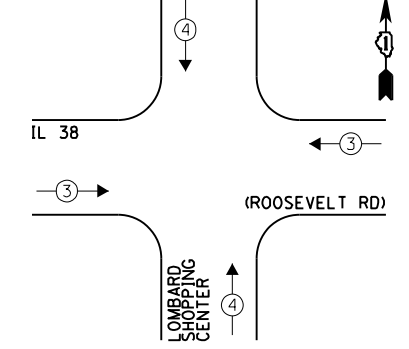


NOTE:
THE EXISTING CONTROLLER IS AN ECONOLITE ASC/25-2100 IN A TYPE IV CABINET.

EXISTING CONTROLLER SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



LEGEND:

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

EXISTING 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. LAMPS	WATTAGE INCAND. L.E.D.	OPERATION	
SIGNAL (RED)	12	135 17	0.50	102.0
SIGNAL (YELLOW)	12	135 25	0.25	75.0
SIGNAL (GREEN)	12	135 15	0.25	45.0
ARROW	16	135 12	0.10	19.2
PED. SIGNAL	-	90 25	1.00	-
CONTROLLER	1	- 100	1.00	100.0
LUMINAIRE	-	- 250	0.50	-
L.E.D. ST. NAME SIGN	-	- 64	0.50	-
VIDEO SYSTEM	-	- 150	1.00	-
BATTERY BACKUP	1	- 25	1.00	25.0
ILLUMINATED SIGN	-	- 25	0.05	-
TOTAL =				366.2

ENERGY COSTS - BILLED TO: VILLAGE OF LOMBARD
(ADDRESS) 255 E. WILSON AVENUE
(ADDRESS) LOMBARD, IL 60148-3969
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

FILE NAME = 60V80-071-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

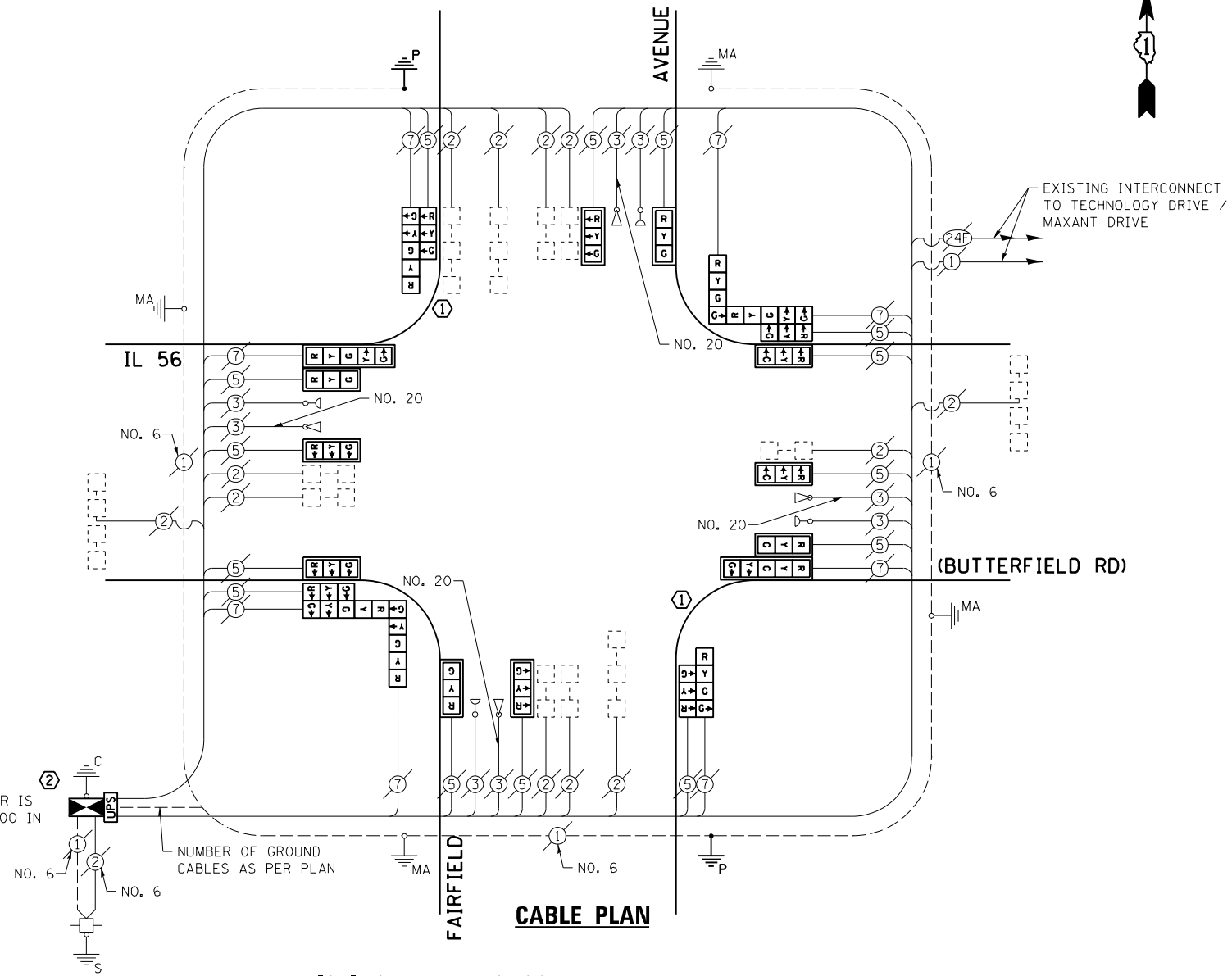
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 38 (ROOSEVELT RD) AT LOMBARD SHOPPING CENTER

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 71
			CONTRACT NO. 60V80	
ILLINOIS FED. AID PROJECT				

SCHEDULE OF QUANTITIES
IL 56 (BUTTERFIELD RD) AT FAIRFIELD AVENUE

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	1	EACH	TRANSCIVER - FIBER OPTIC
3.	2	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
4.	10	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
5.	2	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED
6.	1	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-4 SECTION, BRACKET MOUNTED
7.	1	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
8.	1	EACH	SIGNAL HEAD, LED, 3-FACE, 1-3 SECTION, 2-5 SECTION BRACKET MOUNTED
9.	1	EACH	SIGNAL HEAD, LED, 3-FACE, 1-3 SECTION, 1-4 SECTION, 1-5 SECTION BRACKET MOUNTED
10.	12	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
11.	12	EACH	INDUCTIVE LOOP DETECTOR
12.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
13.	1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
14.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL



NOTE:
THE EXISTING CONTROLLER IS AN ECONOLITE ASC/2S-2100 IN A TYPE IV CABINET.

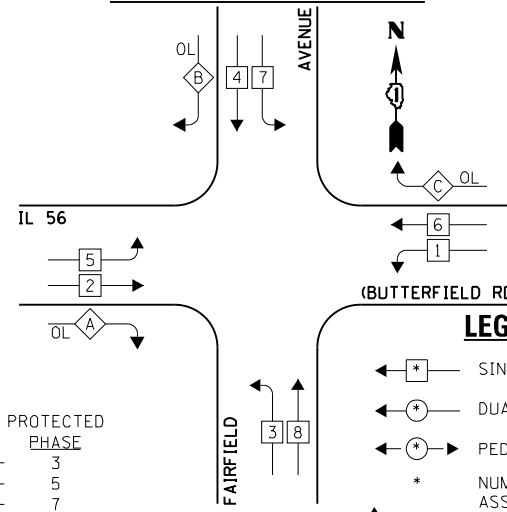
NUMBER OF GROUND CABLES AS PER PLAN

CABLE PLAN

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

- 1 EACH CONTROLLER AND CABINET (COMPLETE)
- 10 EACH TRAFFIC SIGNAL HEAD, 1-FACE, 3-SECTION
- 2 EACH TRAFFIC SIGNAL HEAD, 1-FACE, 5-SECTION
- 1 EACH TRAFFIC SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-4 SECTION
- 1 EACH TRAFFIC SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION
- 1 EACH TRAFFIC SIGNAL HEAD, 3-FACE, 1-3 SECTION, 2-5 SECTION
- 1 EACH TRAFFIC SIGNAL HEAD, 3-FACE, 1-3 SECTION, 1-4 SECTION, 1-5 SECTION
- 12 EACH TRAFFIC SIGNAL BACKPLATE
- 2 EACH TRAFFIC SIGNAL POST

EXISTING AND PROPOSED CONTROLLER SEQUENCE

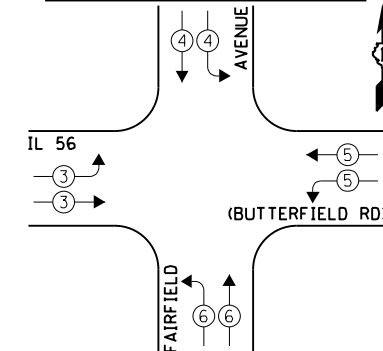


LEGEND:

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

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

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTORS				
EMERGENCY VEHICLE PREEMPTOR	3	4	5	6
MOVEMENT	→	↘	↙	←

- CONSTRUCTION NOTES:**
- ① REMOVE EXISTING SIGNAL HEADS AND REPLACE EXISTING 16 FOOT PAINTED POST. INSTALL NEW LED SIGNAL HEADS ON NEW 16 FOOT GALVANIZED STEEL POST. REUSE EXISTING TYPE "A" CONCRETE FOUNDATION AND EXISTING CABLES.
 - ② RELOCATION OF THE EXISTING PHASING UNIT FOR THE EMERGENCY VEHICLE PRE-EMPTION SYSTEM IS TO BE INCLUDED IN THE COST OF THE PAY ITEM "FULL ACTUATED CONTROLLER AND CABINET OF THE TYPE SPECIFIED."

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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE	
TYPE	NO. LAMPS	INCAND.	L.E.D.	OPERATION	
SIGNAL (RED)	22	135	17	0.50	187.0
SIGNAL (YELLOW)	22	135	25	0.25	137.5
SIGNAL (GREEN)	22	135	15	0.25	82.5
ARROW	14	135	12	0.10	16.8
PED. SIGNAL	-	90	25	1.00	-
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					548.8

ENERGY COSTS - BILLED TO: VILLAGE OF LOMBARD
(ADDRESS) 255 E. WILSON AVENUE
(ADDRESS) LOMBARD, IL 60148-3969
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

FILE NAME = 60V80-072-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

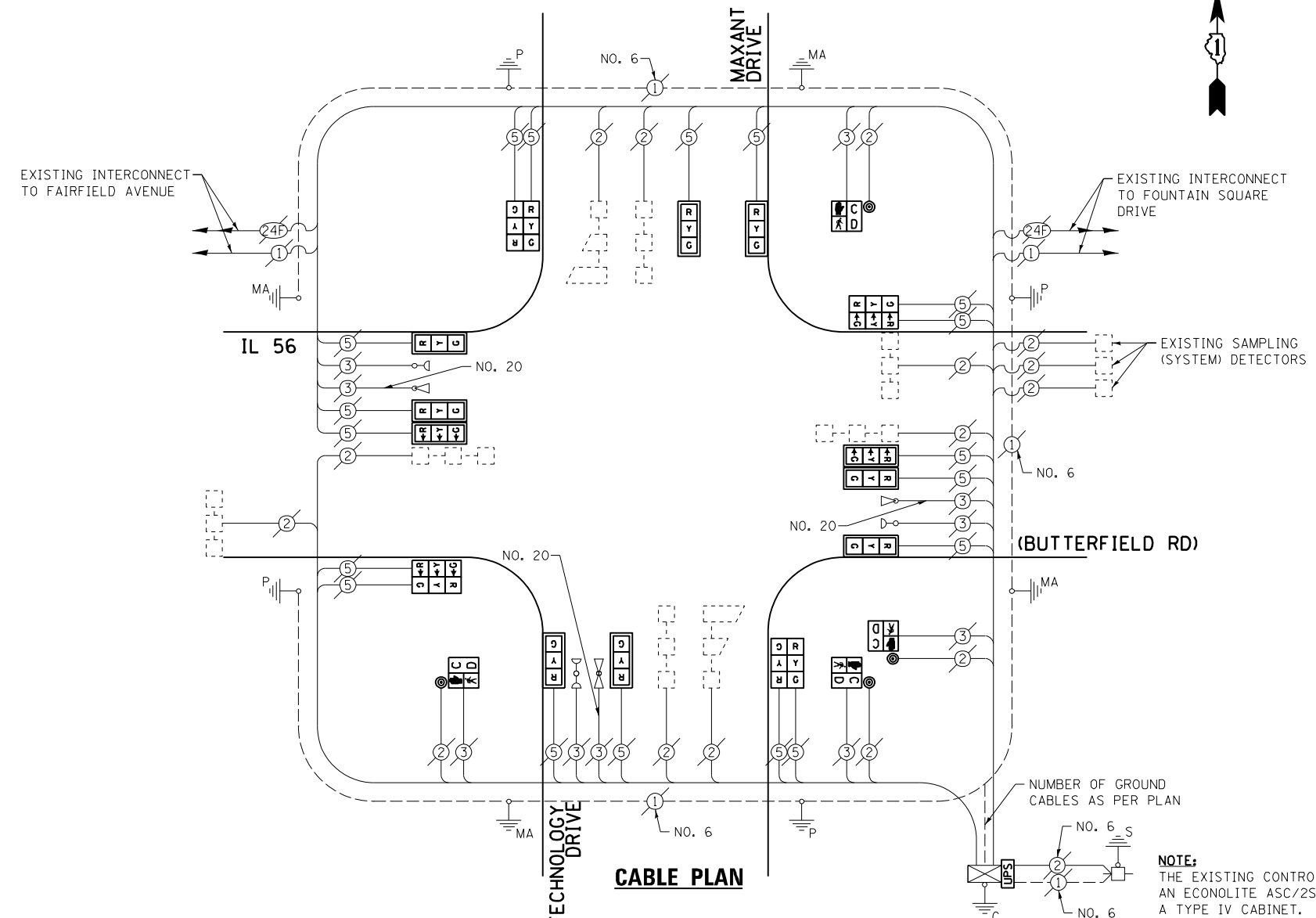
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 56 (BUTTERFIELD RD) AT FAIRFIELD AVENUE

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTÉ. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 72
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60V80	

SCHEDULE OF QUANTITIES
IL 56 (BUTTERFIELD RD) AT TECHNOLOGY DRIVE / MAXANT DRIVE

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	10	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
3.	4	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED
4.	4	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
5.	10	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
6.	4	EACH	PEDESTRIAN PUSH-BUTTON
7.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
8.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
9.	1	EACH	UNINTERRUPTIBLE POWER SUPPLY, SPECIAL



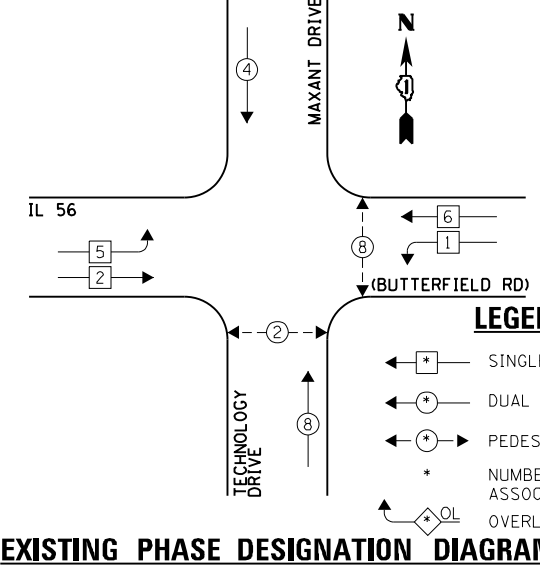
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 10 EACH TRAFFIC SIGNAL HEAD, 1-FACE, 3-SECTION
- 4 EACH TRAFFIC SIGNAL HEAD, 2-FACE, 3-SECTION
- 4 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 4 EACH PEDESTRIAN PUSH-BUTTON
- 10 EACH TRAFFIC SIGNAL BACKPLATE

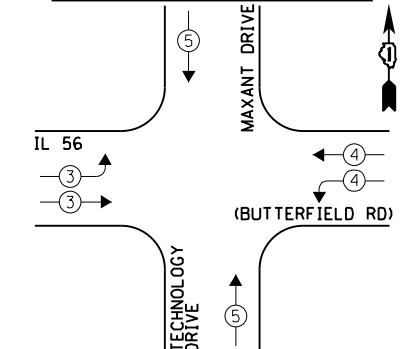
I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	INCAND.	L.E.D.	OPERATION	
SIGNAL (RED)	18	135	17	0.50	153.0
SIGNAL (YELLOW)	18	135	25	0.25	112.5
SIGNAL (GREEN)	18	135	15	0.25	67.5
ARROW	-	135	12	0.10	-
PED. SIGNAL	4	90	25	1.00	100.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					558.0

ENERGY COSTS - BILLED TO: VILLAGE OF LOMBARD
(ADDRESS) 255 E. WILSON AVENUE
(ADDRESS) LOMBARD, IL 60148-3969
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

EXISTING CONTROLLER SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	↔	↕

FILE NAME = 60V80-073-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

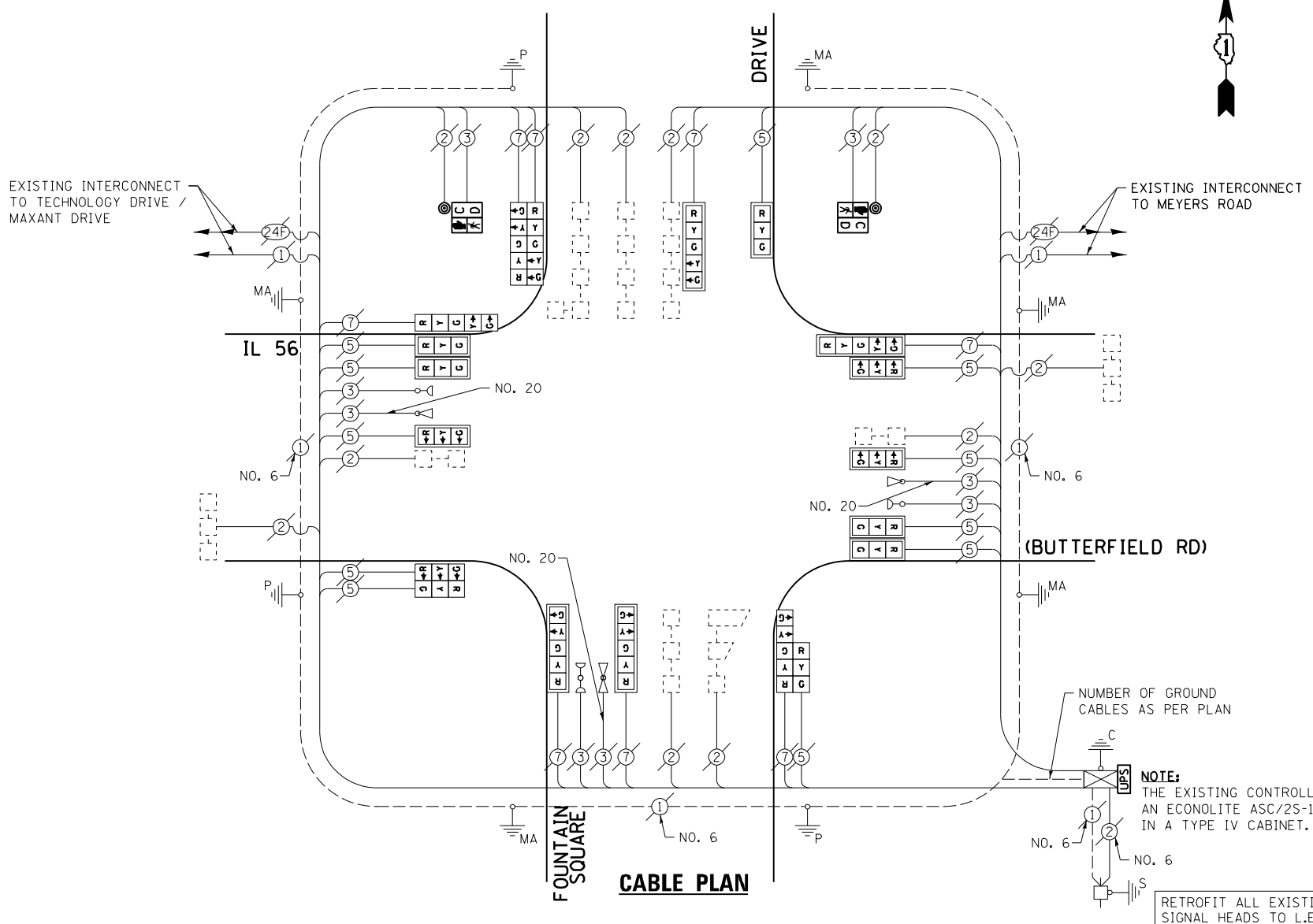
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 56 (BUTTERFIELD RD) AT TECHNOLOGY DRIVE / MAXANT DRIVE
SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 73
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60V80	

SCHEDULE OF QUANTITIES
IL 56 (BUTTERFIELD RD) AT FOUNTAIN SQUARE DRIVE

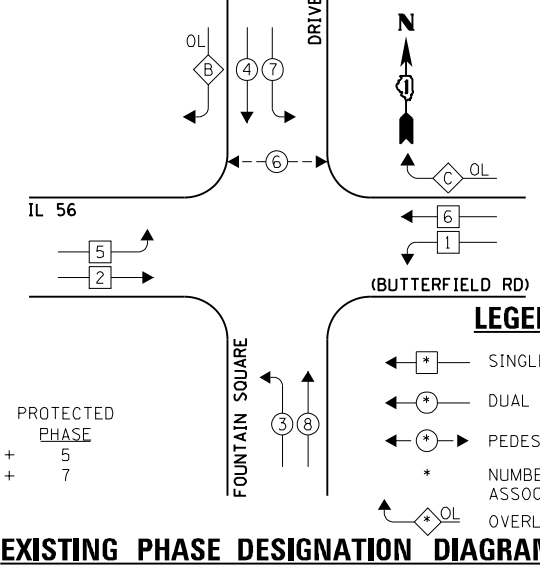
NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
3.	2	EACH	PEDESTRIAN PUSH-BUTTON
4.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
5.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
6.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
7.	1	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED, RETROFIT
8.	8	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT
9.	4	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT
10.	1	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT
11.	1	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT
12.	1	EACH	SIGNAL HEAD, LED, 2 FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT



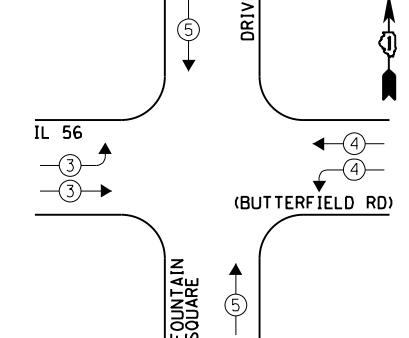
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

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

EXISTING CONTROLLER SEQUENCE



EXISTING 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. LAMPS	INCAND.	L.E.D.	OPERATION	
SIGNAL (RED)	19	135	17	0.50	161.5
SIGNAL (YELLOW)	19	135	25	0.25	118.75
SIGNAL (GREEN)	19	135	15	0.25	71.25
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	2	90	25	1.00	50.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =				545.7	

ENERGY COSTS - BILLED TO: VILLAGE OF LOMBARD
(ADDRESS) 255 E. WILSON AVENUE
(ADDRESS) LOMBARD, IL 60148-3969
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

FILE NAME = 60V80-074-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:200	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

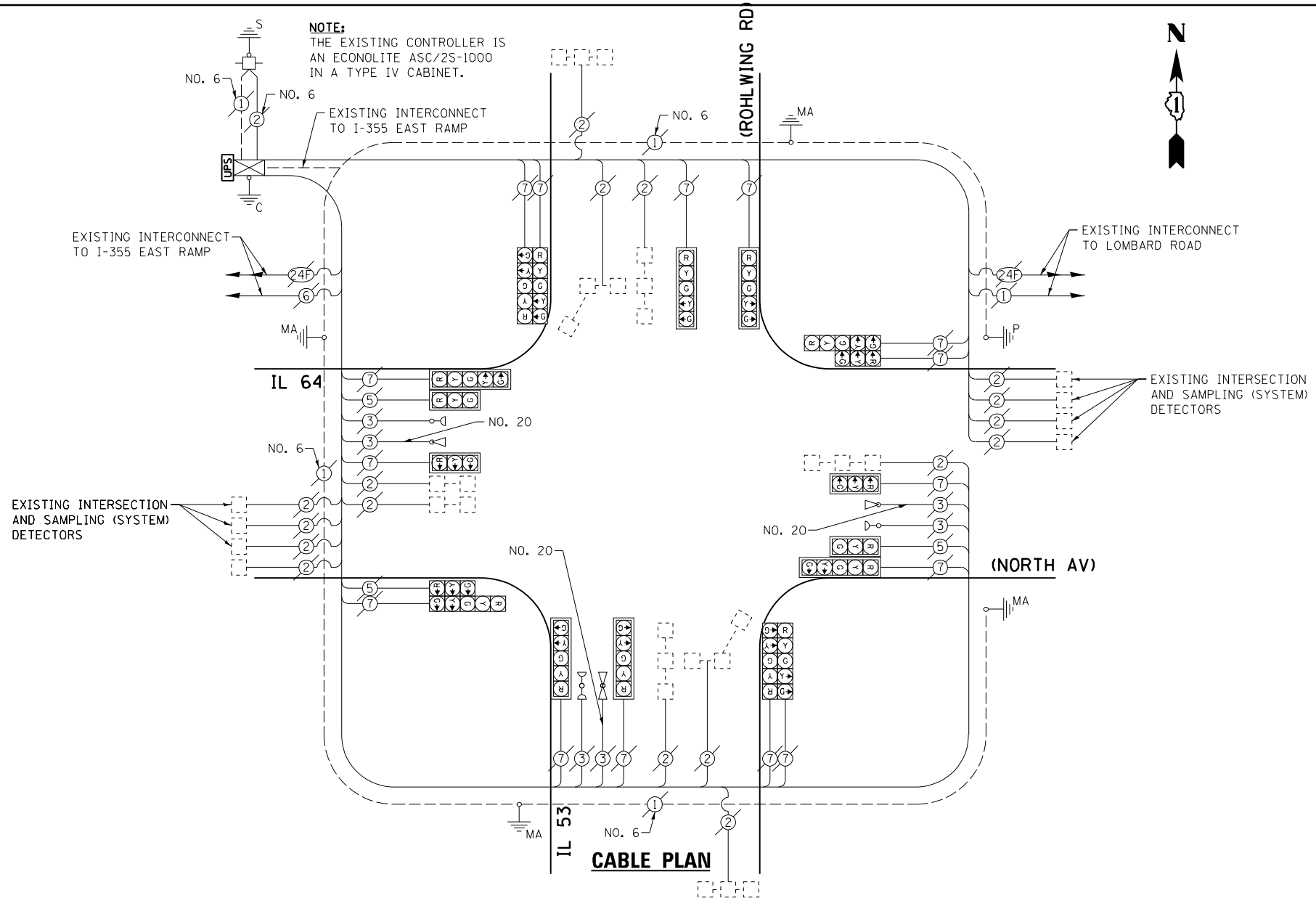
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 56 (BUTTERFIELD RD) AT FOUNTAIN SQUARE DRIVE

SCALE: NONE SHEET OF SHEETS STA. TO STA.

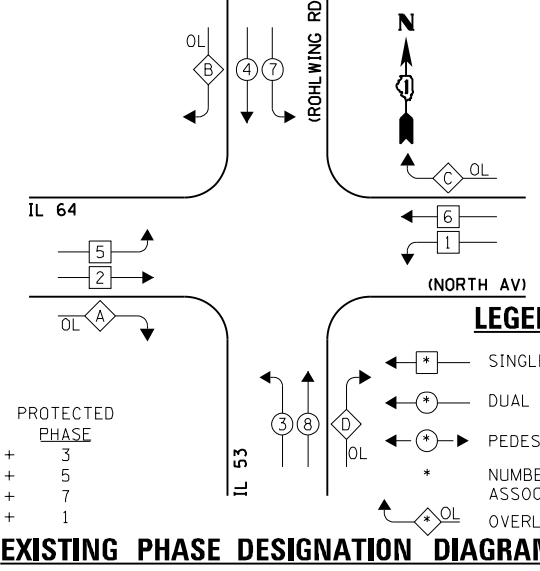
F.A. RTE. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 74
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60V80	

SCHEDULE OF QUANTITIES
IL 53 (ROHLWING RD) AT IL 64 (NORTH AV)

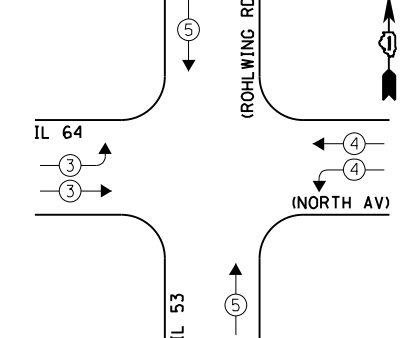
NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
3.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL



EXISTING CONTROLLER SEQUENCE



EXISTING 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. LAMPS	WATTAGE	OPERATION		
		INCAND. L.E.D.			
SIGNAL (RED)	18	135	17	0.50	153.0
SIGNAL (YELLOW)	18	135	25	0.25	112.5
SIGNAL (GREEN)	18	135	15	0.25	67.5
ARROW	24	135	12	0.10	28.8
PED. SIGNAL	-	90	25	1.00	-
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					486.8

ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHALMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

FILE NAME = 60V80-076-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

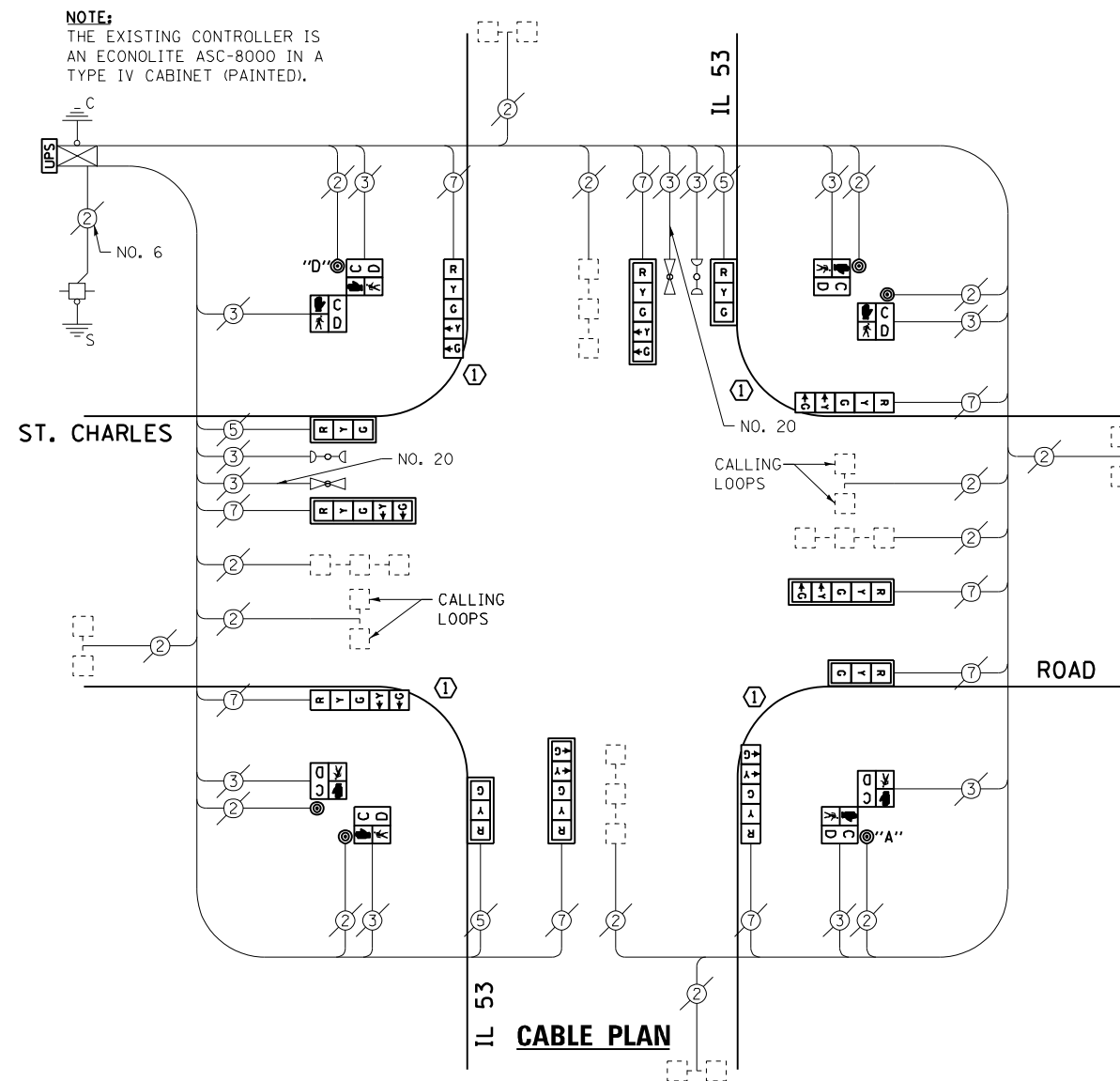
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 53 (ROHLWING RD) AT IL 64 (NORTH AV)
SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 76
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60V80	

SCHEDULE OF QUANTITIES
IL 53 AT ST. CHARLES ROAD

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	4	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
3.	4	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
4.	4	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED
5.	4	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED
6.	4	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
7.	2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
8.	8	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
9.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
10.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
11.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
12.	6	EACH	PEDESTRIAN PUSH-BUTTON, NON-LATCHING



NOTE:
THE EXISTING CONTROLLER IS AN ECONOLITE ASC-8000 IN A TYPE IV CABINET (PAINTED).



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

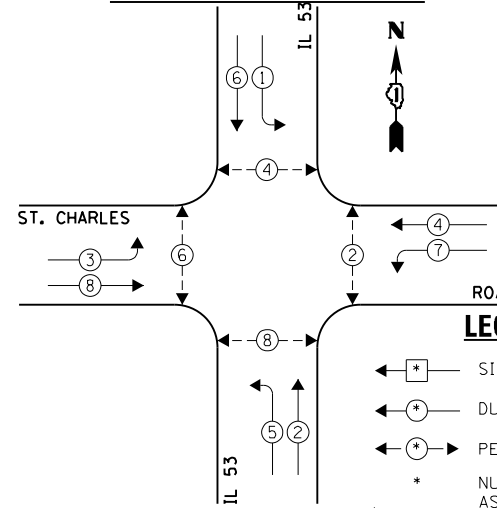
- 4 EACH TRAFFIC SIGNAL HEAD, 1-FACE, 3-SECTION
- 8 EACH TRAFFIC SIGNAL HEAD, 1-FACE, 5-SECTION
- 4 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 2 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE
- 6 EACH PEDESTRIAN PUSH-BUTTON
- 4 EACH TRAFFIC SIGNAL POST
- 8 EACH TRAFFIC SIGNAL BACKPLATE

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND. L.E.D.	OPERATION	
SIGNAL (RED)	12	135 17	0.50	102.0
SIGNAL (YELLOW)	12	135 25	0.25	75.0
SIGNAL (GREEN)	12	135 15	0.25	45.0
ARROW	16	135 12	0.10	19.2
PED. SIGNAL	8	90 25	1.00	200.0
CONTROLLER	1	- 100	1.00	100.0
LUMINAIRE	-	- 250	0.50	-
L.E.D. ST. NAME SIGN	-	- 64	0.50	-
VIDEO SYSTEM	-	- 150	1.00	-
BATTERY BACKUP	1	- 25	1.00	25.0
ILLUMINATED SIGN	-	- 25	0.05	-
TOTAL =				566.2

ENERGY COSTS - BILLED TO: VILLAGE OF LOMBARD
(ADDRESS) 255 E. WILSON AVENUE
(ADDRESS) LOMBARD, IL 60148-3969
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CDM-ED

CONSTRUCTION NOTE:
REMOVE EXISTING SIGNAL HEADS AND REPLACE EXISTING 16 FOOT PAINTED POST. INSTALL NEW LED SIGNAL HEADS ON NEW 16 FOOT GALVANIZED STEEL POST. REUSE EXISTING TYPE "A" CONCRETE FOUNDATION AND EXISTING CABLES.

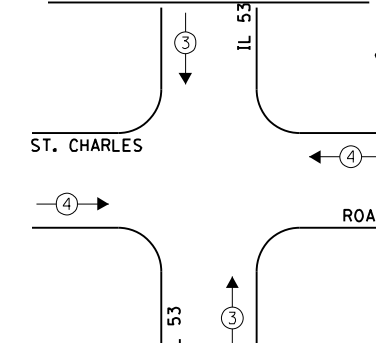
EXISTING CONTROLLER SEQUENCE



NOTE:
PUSH BUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 8.
PUSH BUTTON "D" SHALL PLACE A CALL IN PHASES 4 AND 6.

EXISTING PHASE DESIGNATION DIAGRAM

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

FILE NAME = 60V80-077-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:200	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

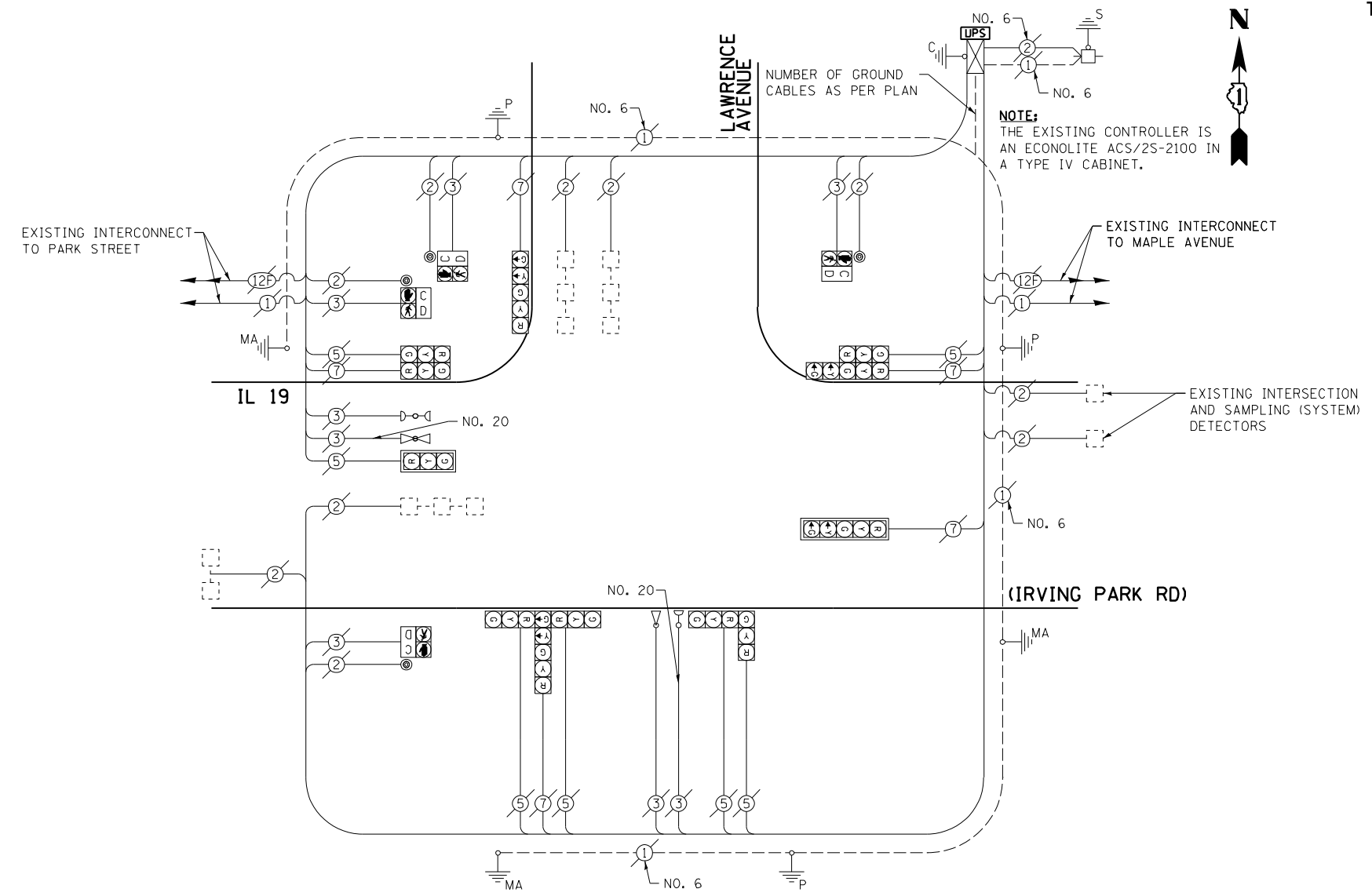
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 53 AT ST. CHARLES ROAD

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 77
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60V80	

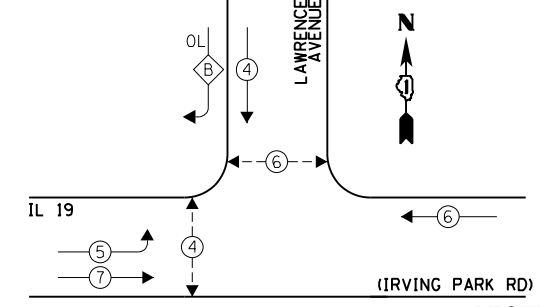
SCHEDULE OF QUANTITIES
IL 19 (IRVING PARK RD) AT LAWRENCE AVENUE

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
3.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL

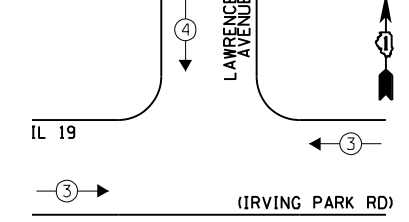


CABLE PLAN

EXISTING CONTROLLER SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



LEGEND:

- ← * → SINGLE ENTRY PHASE
 - ← * → DUAL ENTRY PHASE
 - ← * → PEDESTRIAN PHASE
 - * NUMBER REFERS TO ASSOCIATED PHASE
 - ← * OL → OVERLAP
- OVERLAP LETTER B = PERMISSIVE PHASE 4 + PROTECTED PHASE 5

EXISTING PHASE DESIGNATION DIAGRAM

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE	
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE L.E.D.	OPERATION	
SIGNAL (RED)	12	135	17	0.50	102.0
SIGNAL (YELLOW)	12	135	25	0.25	75.0
SIGNAL (GREEN)	12	135	15	0.25	45.0
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	4	90	25	1.00	100.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					456.6

ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHALMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

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

FILE NAME = 60V80-078-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

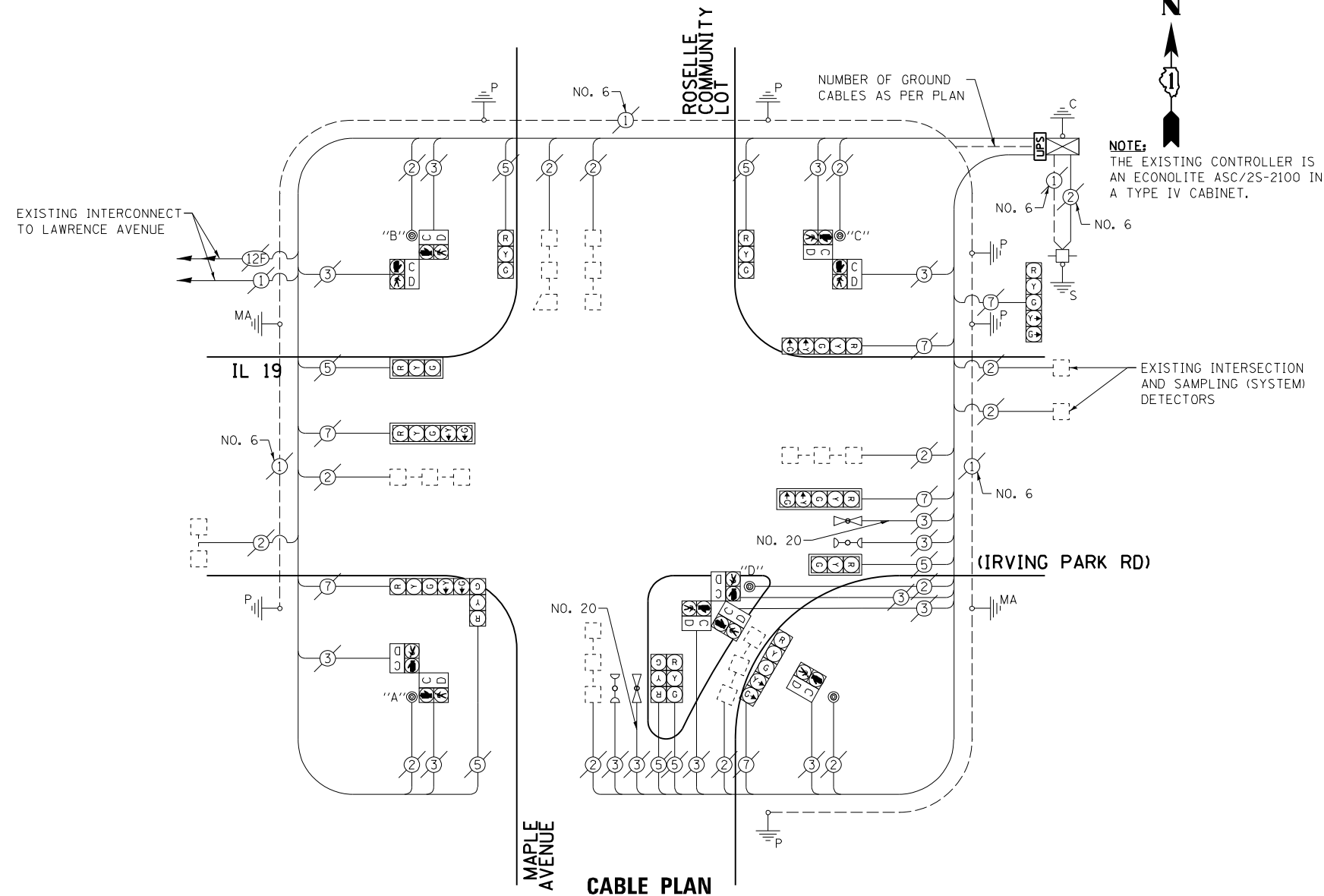
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 19 (IRVING PARK RD) AT LAWRENCE AVENUE
SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTÉ. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 78
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60V80	

SCHEDULE OF QUANTITIES
IL 19 (IRVING PARK RD) AT MAPLE AVENUE

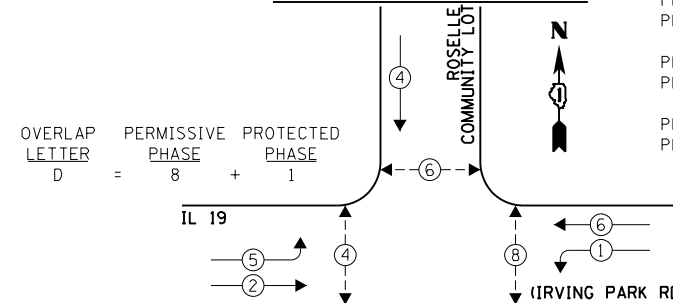
NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
3.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL



NOTE:
THE EXISTING CONTROLLER IS AN ECONOLITE ASC/2S-2100 IN A TYPE IV CABINET.

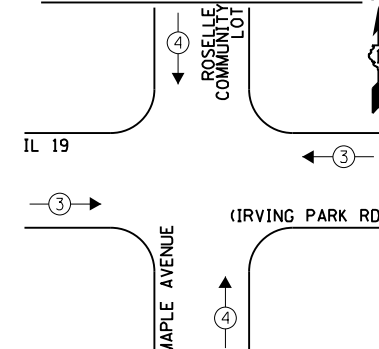
CABLE PLAN

EXISTING CONTROLLER SEQUENCE



NOTE:
PUSH BUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4.
PUSH BUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6.
PUSH BUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8.
PUSH BUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8.

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



LEGEND:

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

EXISTING PHASE DESIGNATION DIAGRAM

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND. L.E.D.	OPERATION	
SIGNAL (RED)	13	135 17	0.50	110.5
SIGNAL (YELLOW)	13	135 25	0.25	81.25
SIGNAL (GREEN)	13	135 15	0.25	48.75
ARROW	12	135 12	0.10	14.4
PED. SIGNAL	10	90 25	1.00	250.0
CONTROLLER	1	- 100	1.00	100.0
LUMINAIRE	-	- 250	0.50	-
L.E.D. ST. NAME SIGN	-	- 64	0.50	-
VIDEO SYSTEM	-	- 150	1.00	-
BATTERY BACKUP	1	- 25	1.00	25.0
ILLUMINATED SIGN	-	- 25	0.05	-
TOTAL =				629.9

ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHALMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

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

FILE NAME = 60V80-079-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 19 (IRVING PARK RD) AT MAPLE AVENUE

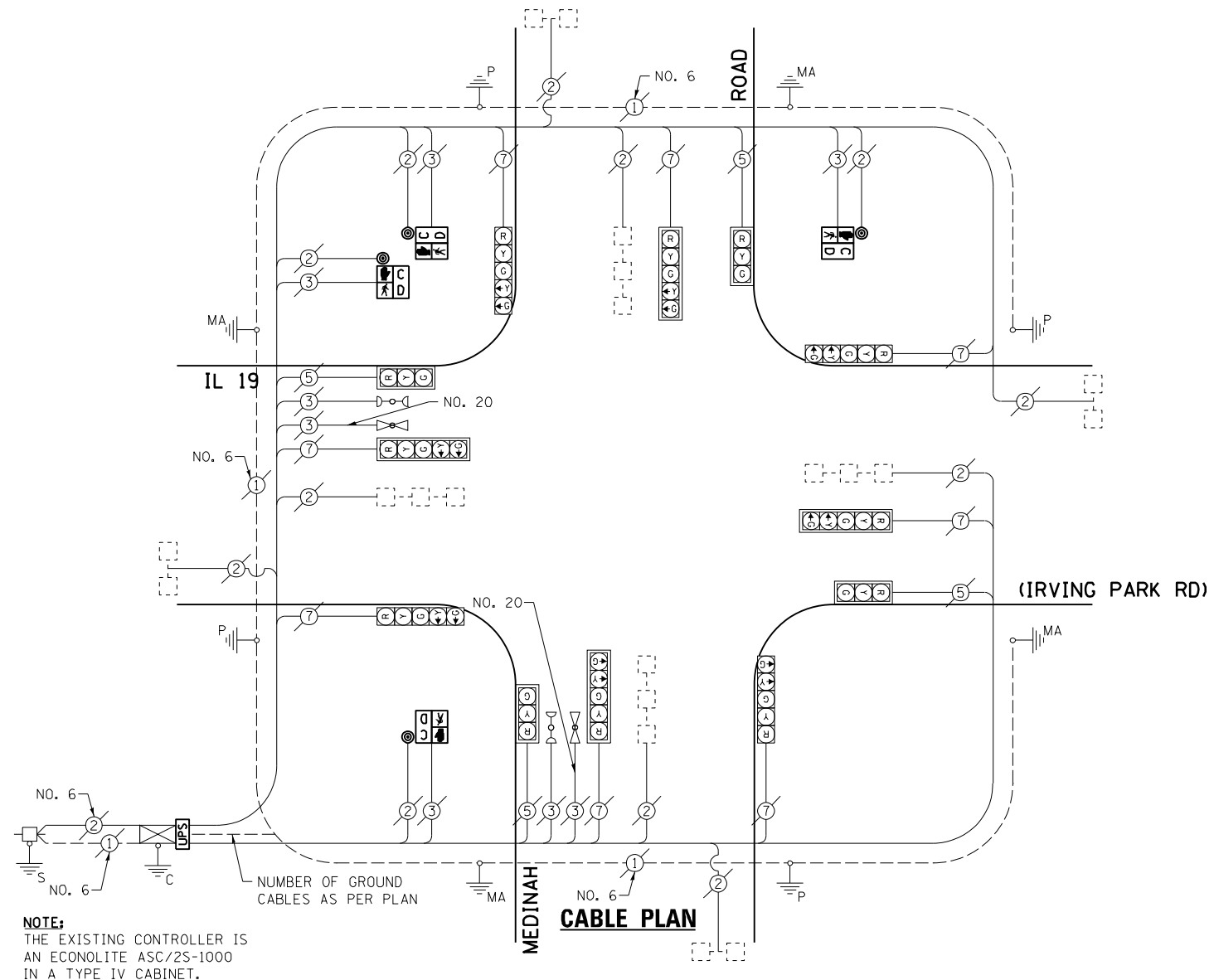
SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 79
			CONTRACT NO. 60V80	
ILLINOIS FED. AID PROJECT				

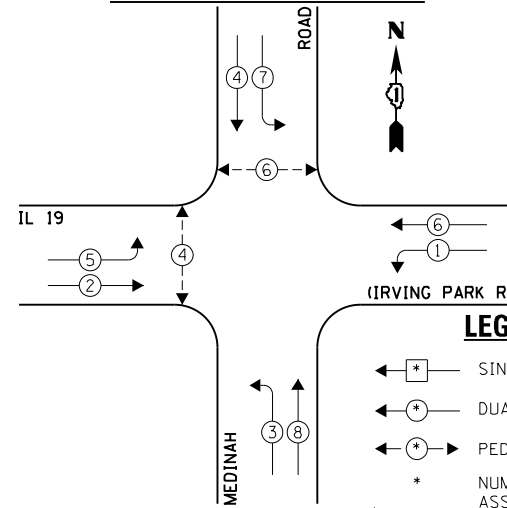
GHA #4085.887

SCHEDULE OF QUANTITIES
IL 19 (IRVING PARK RD) AT MEDINAH ROAD

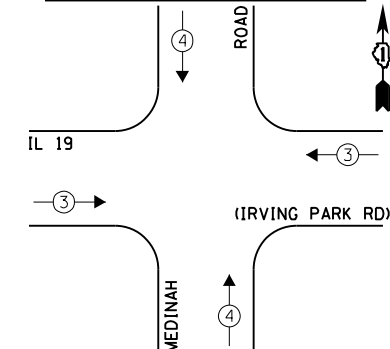
NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	4	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
3.	4	EACH	PEDESTRIAN PUSH-BUTTON
4.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
5.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
6.	1	EACH	UNINTERRUPTIBLE POWER SUPPLY, SPECIAL



EXISTING CONTROLLER SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTORS	
EMERGENCY VEHICLE PREEMPTOR	3
MOVEMENT	4

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

- 4 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 4 EACH PEDESTRIAN PUSH-BUTTON

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	INCAND.	L.E.D.	OPERATION	
SIGNAL (RED)	12	135	17	0.50	102.0
SIGNAL (YELLOW)	12	135	25	0.25	75.0
SIGNAL (GREEN)	12	135	15	0.25	45.0
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	4	90	25	1.00	100.0
CONTROLLER	1	-	100	1.00	-
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					366.2

ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHALMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

FILE NAME = 60V80-080-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

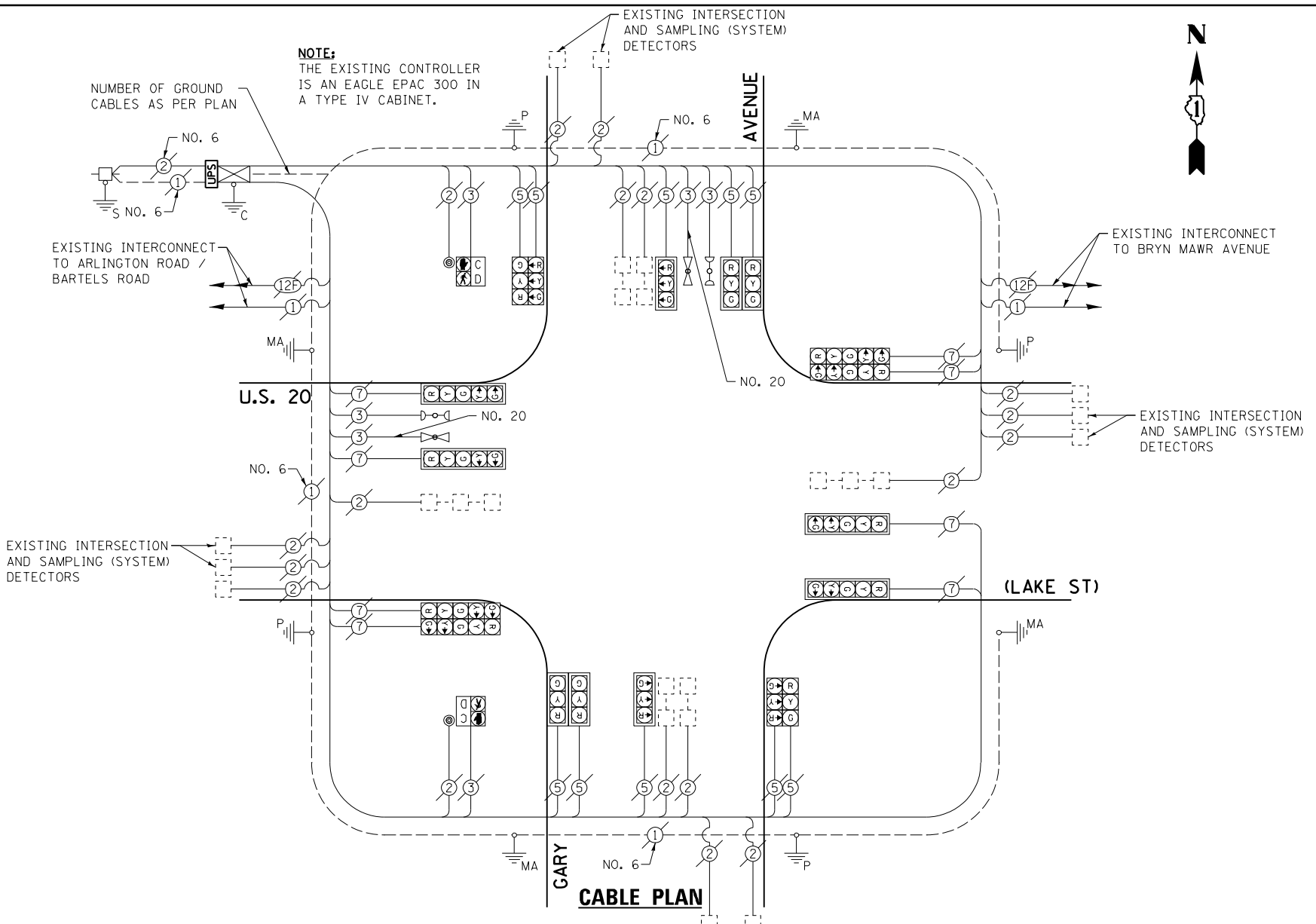
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 19 (IRVING PARK RD) AT MEDINAH ROAD

SCALE: NONE SHEET OF SHEETS STA. TO STA.

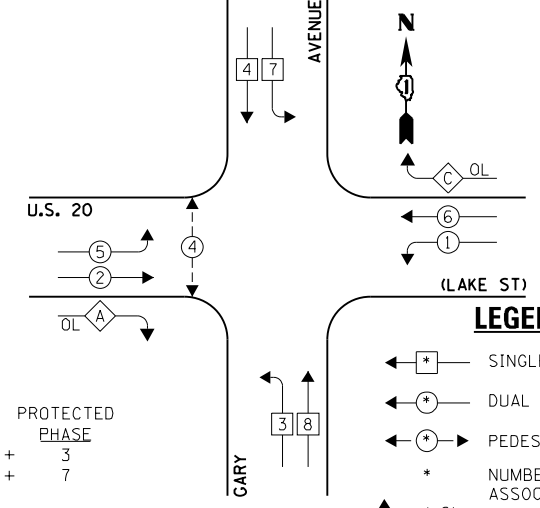
F.A. RTE. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 80
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60V80	

SCHEDULE OF QUANTITIES
U.S. 20 (LAKE ST) AT GARY AVENUE

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
3.	1	EACH	UNINTERRUPTIBLE POWER SUPPLY, SPECIAL

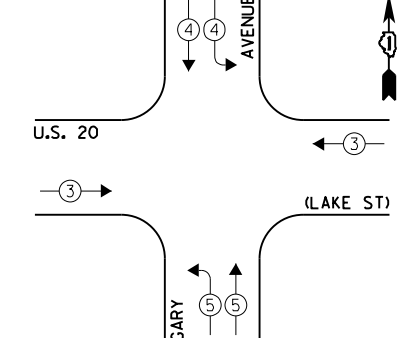


EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM

EXISTING 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. LAMPS	WATTAGE INCAND.	OPERATION L.E.D.		
SIGNAL (RED)	18	135	17	0.50	153.0
SIGNAL (YELLOW)	18	135	25	0.25	112.5
SIGNAL (GREEN)	18	135	15	0.25	67.5
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	2	90	25	1.00	50.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					527.2

ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHALMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

FILE NAME = 60V80-081-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

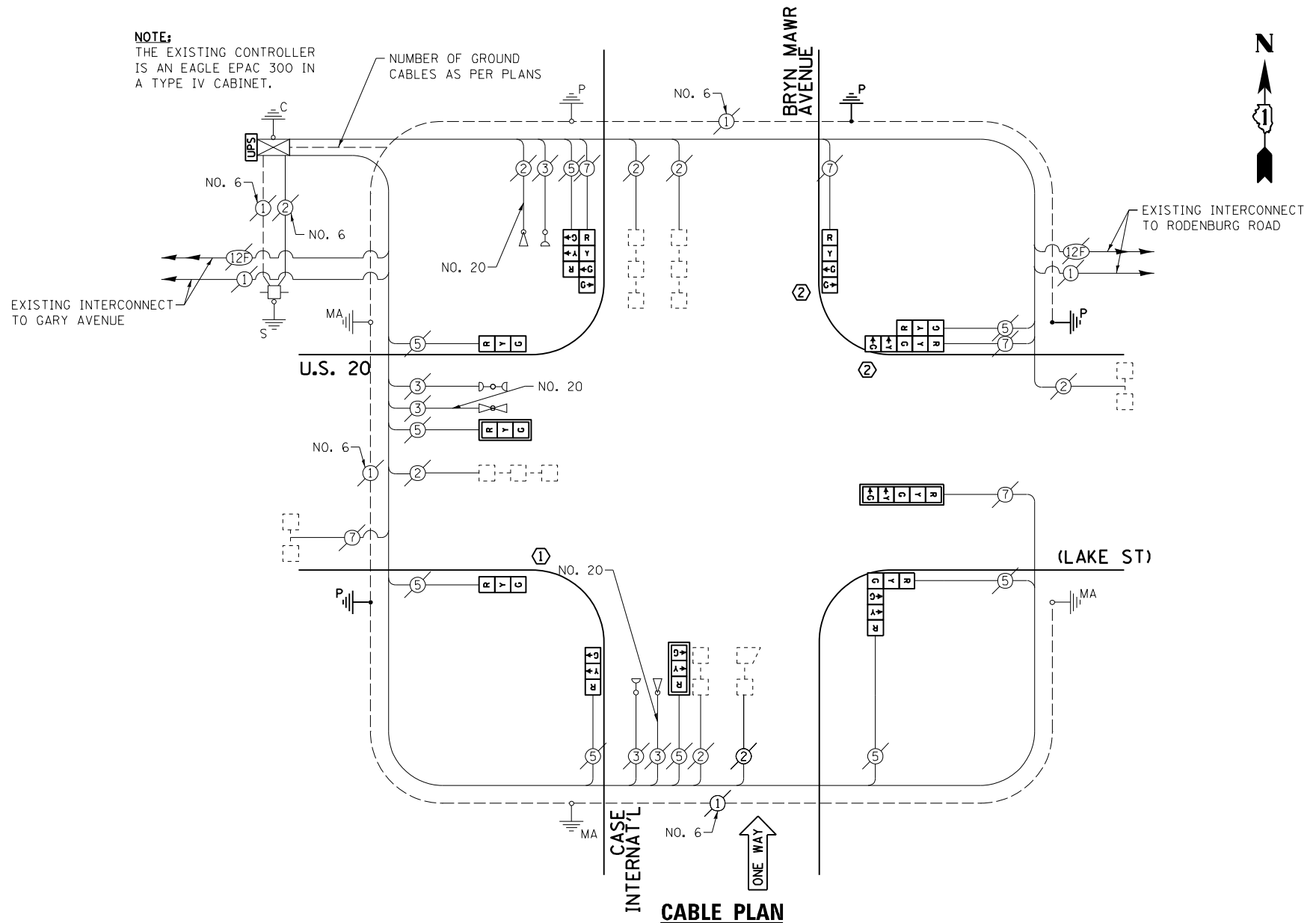
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
U.S. 20 (LAKE ST) AT GARY AVENUE
SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 81
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60V80	

SCHEDULE OF QUANTITIES
U. S. 20 (LAKE ST) AT BRYN MAWR AVENUE

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	1	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.
3.	2	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
4.	2	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
5.	3	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
6.	1	EACH	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED
7.	1	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED
8.	1	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED
9.	1	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-4 SECTION, BRACKET MOUNTED
10.	1	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
11.	3	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
12.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
13.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
14.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL

NOTE:
THE EXISTING CONTROLLER IS AN EAGLE EPAC 300 IN A TYPE IV CABINET.



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.

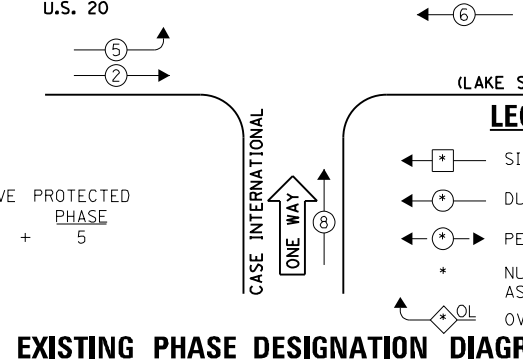
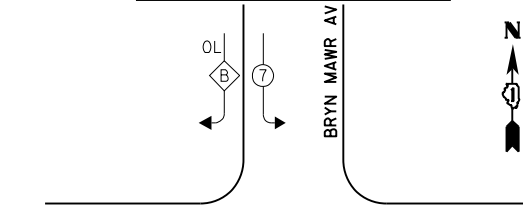
- 9 EACH TRAFFIC SIGNAL POST
- 5 EACH TRAFFIC SIGNAL HEAD, 1-FACE, 3-SECTION
- 1 EACH TRAFFIC SIGNAL HEAD, 1-FACE, 4-SECTION
- 1 EACH TRAFFIC SIGNAL HEAD, 1-FACE, 5-SECTION
- 1 EACH TRAFFIC SIGNAL HEAD, 2-FACE, 3-SECTION
- 1 EACH TRAFFIC SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-4 SECTION
- 1 EACH TRAFFIC SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION
- 3 EACH TRAFFIC SIGNAL BACKPLATE

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE	
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE L.E.D.	OPERATION	
SIGNAL (RED)	13	135	17	0.50	110.5
SIGNAL (YELLOW)	13	135	25	0.25	81.25
SIGNAL (GREEN)	15	135	15	0.25	56.25
ARROW	4	135	12	0.10	4.8
PED. SIGNAL	-	90	25	1.00	-
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =				377.8	

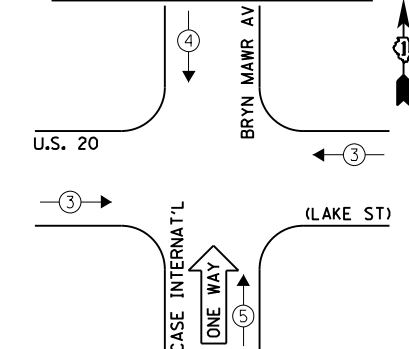
ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHALMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

- CONSTRUCTION NOTES:
- ① REMOVE EXISTING SIGNAL HEADS AND REPLACE EXISTING 14 FOOT PAINTED POST. INSTALL NEW LED SIGNAL HEADS ON NEW 14 FOOT GALVANIZED STEEL POST. REUSE EXISTING TYPE "A" CONCRETE FOUNDATION AND EXISTING CABLES.
 - ② REMOVE EXISTING SIGNAL HEADS AND REPLACE EXISTING 16 FOOT PAINTED POST. INSTALL NEW LED SIGNAL HEADS ON NEW 16 FOOT GALVANIZED STEEL POST. REUSE EXISTING TYPE "A" CONCRETE FOUNDATION AND EXISTING CABLES.

EXISTING CONTROLLER SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

FILE NAME = 60V80-082-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - JPW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
U.S. 20 (LAKE STREET) AT BRYN MAWR AVENUE

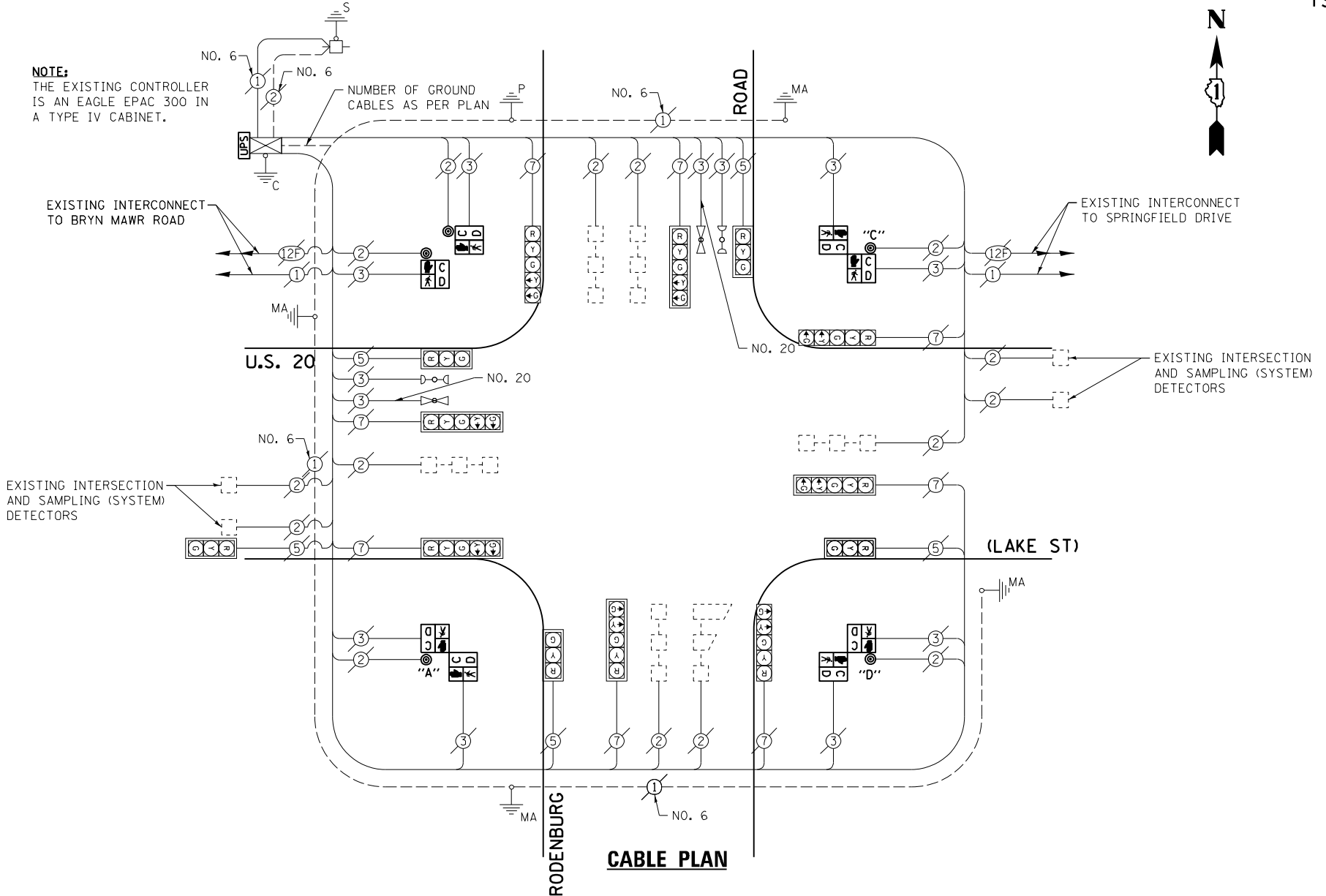
SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 82
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60V80	

SCHEDULE OF QUANTITIES
U. S. 20 (LAKE ST) AT RODENBURG ROAD

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
3.	3	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
4.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
5.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
6.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
7.	5	EACH	PEDESTRIAN PUSH-BUTTON, NON-LATCHING

NOTE:
THE EXISTING CONTROLLER IS AN EAGLE EPAC 300 IN A TYPE IV CABINET.

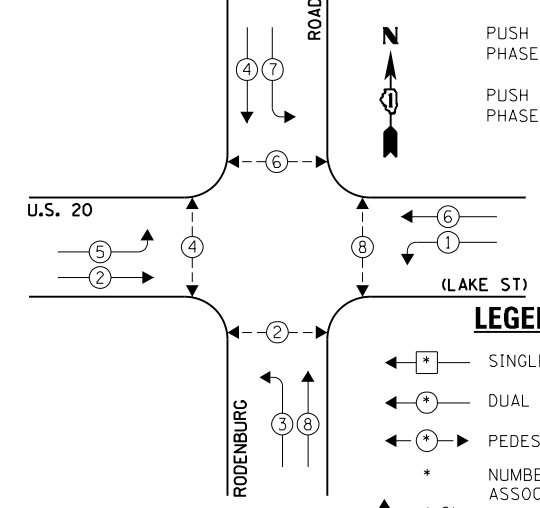


CABLE PLAN

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.

- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 3 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE
- 5 EACH PEDESTRIAN PUSH-BUTTON

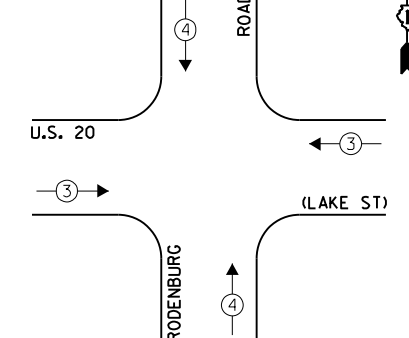
EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM

NOTE:
PUSH BUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4.
PUSH BUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8.
PUSH BUTTON "D" SHALL PLACE A CALL IN PHASES 8 AND 2.

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTORS	
EMERGENCY VEHICLE PREEMPTOR	3
MOVEMENT	4

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE	
TYPE	NO. LAMPS	WATTAGE INCAND. L.E.D.	OPERATION		
SIGNAL (RED)	13	135	17	0.50	110.5
SIGNAL (YELLOW)	13	135	25	0.25	81.25
SIGNAL (GREEN)	13	135	15	0.25	48.75
ARROW	24	135	12	0.10	28.8
PED. SIGNAL	8	90	25	1.00	200.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					594.3

ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHALMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

FILE NAME = 60V80-083-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:200	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

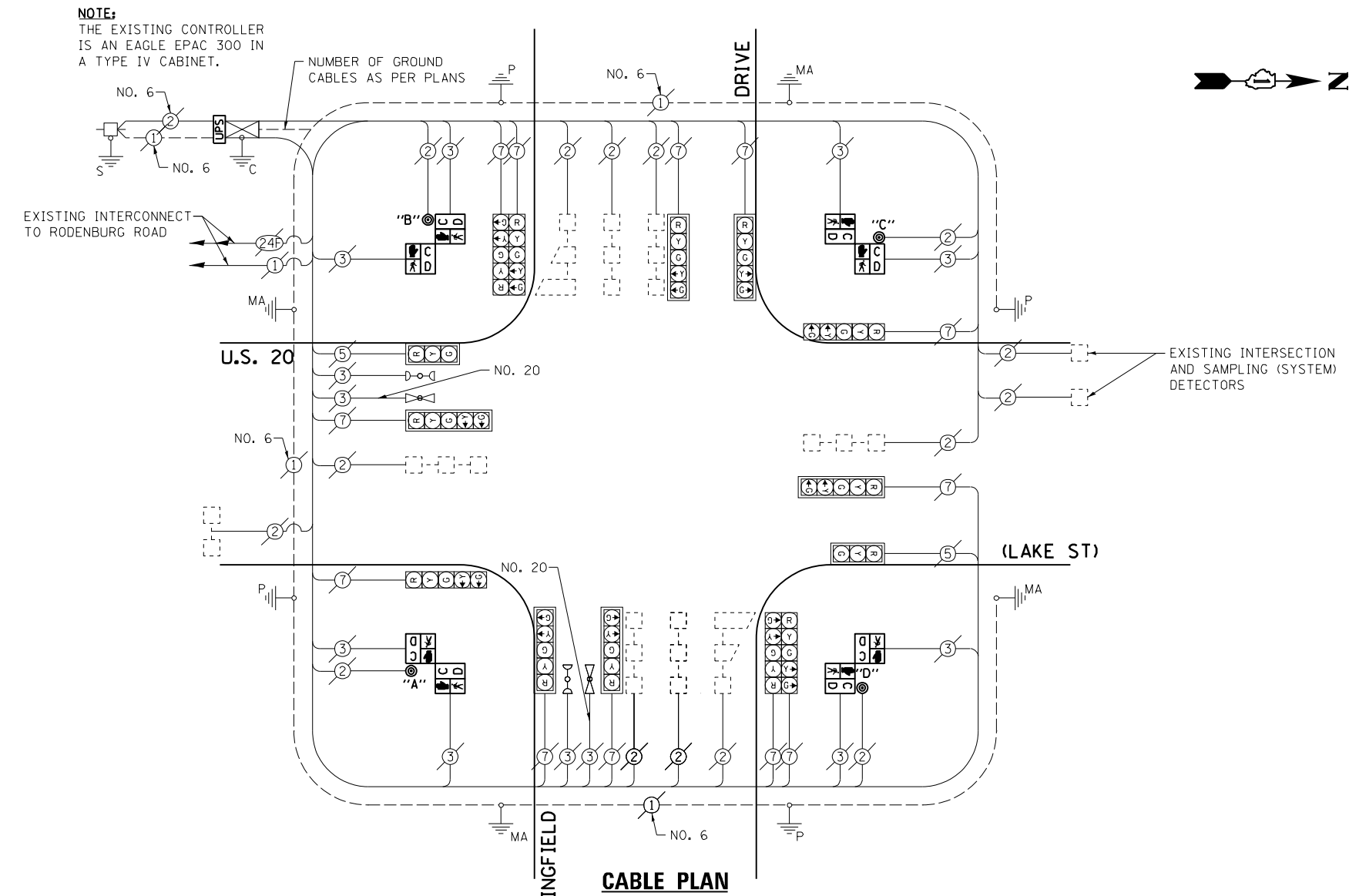
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
US 20 (LAKE STREET) AT RODENBURG ROAD

F.A. RTE. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 83
SCALE: NONE			CONTRACT NO. 60V80	
ILLINOIS FED. AID PROJECT				

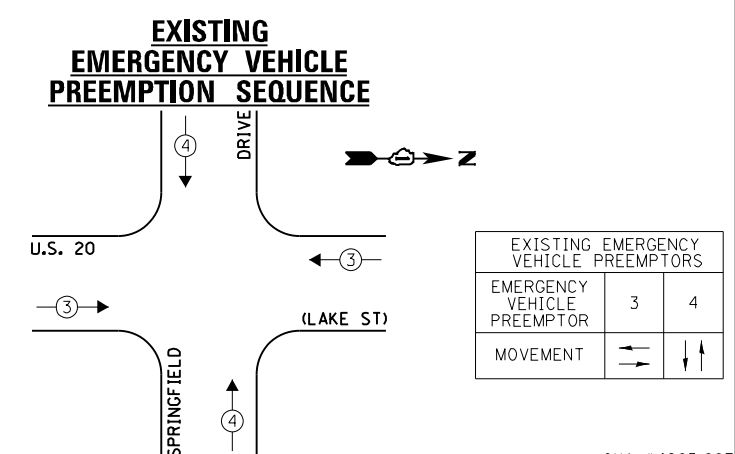
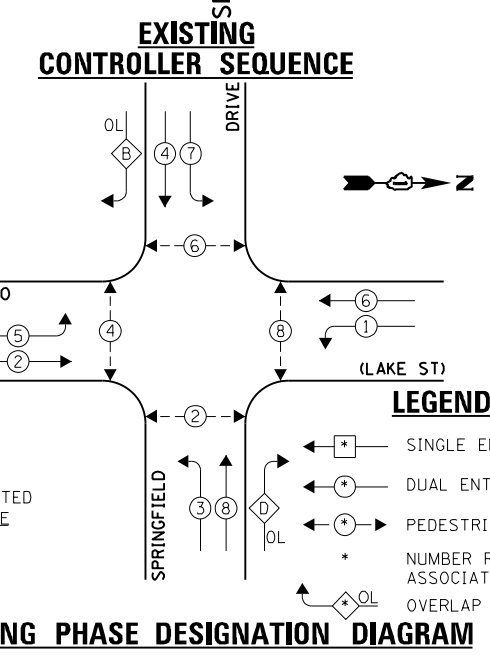
SCHEDULE OF QUANTITIES
U. S. 20 (LAKE ST) AT SPRINGFIELD ROAD

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	4	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
3.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
4.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
5.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
6.	4	EACH	PEDESTRIAN PUSH-BUTTON, NON-LATCHING



NOTE:
THE EXISTING CONTROLLER IS AN EAGLE EPAC 300 IN A TYPE IV CABINET.

NOTE:
PUSH BUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4.
PUSH BUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6.
PUSH BUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8.
PUSH BUTTON "D" SHALL PLACE A CALL IN PHASES 8 AND 2.



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

- 4 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE
- 4 EACH PEDESTRIAN PUSH-BUTTON

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE	
TYPE	NO. LAMPS	INCAND.	L.E.D.	OPERATION	
SIGNAL (RED)	14	135	17	0.50	119.0
SIGNAL (YELLOW)	14	135	25	0.25	87.5
SIGNAL (GREEN)	14	135	15	0.25	52.5
ARROW	24	135	12	0.10	28.8
PED. SIGNAL	8	90	25	1.00	200.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =				612.8	

ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHALMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

FILE NAME = 60V80-084-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - JPW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
U.S. 20 (LAKE STREET) AT SPRINGFIELD DRIVE

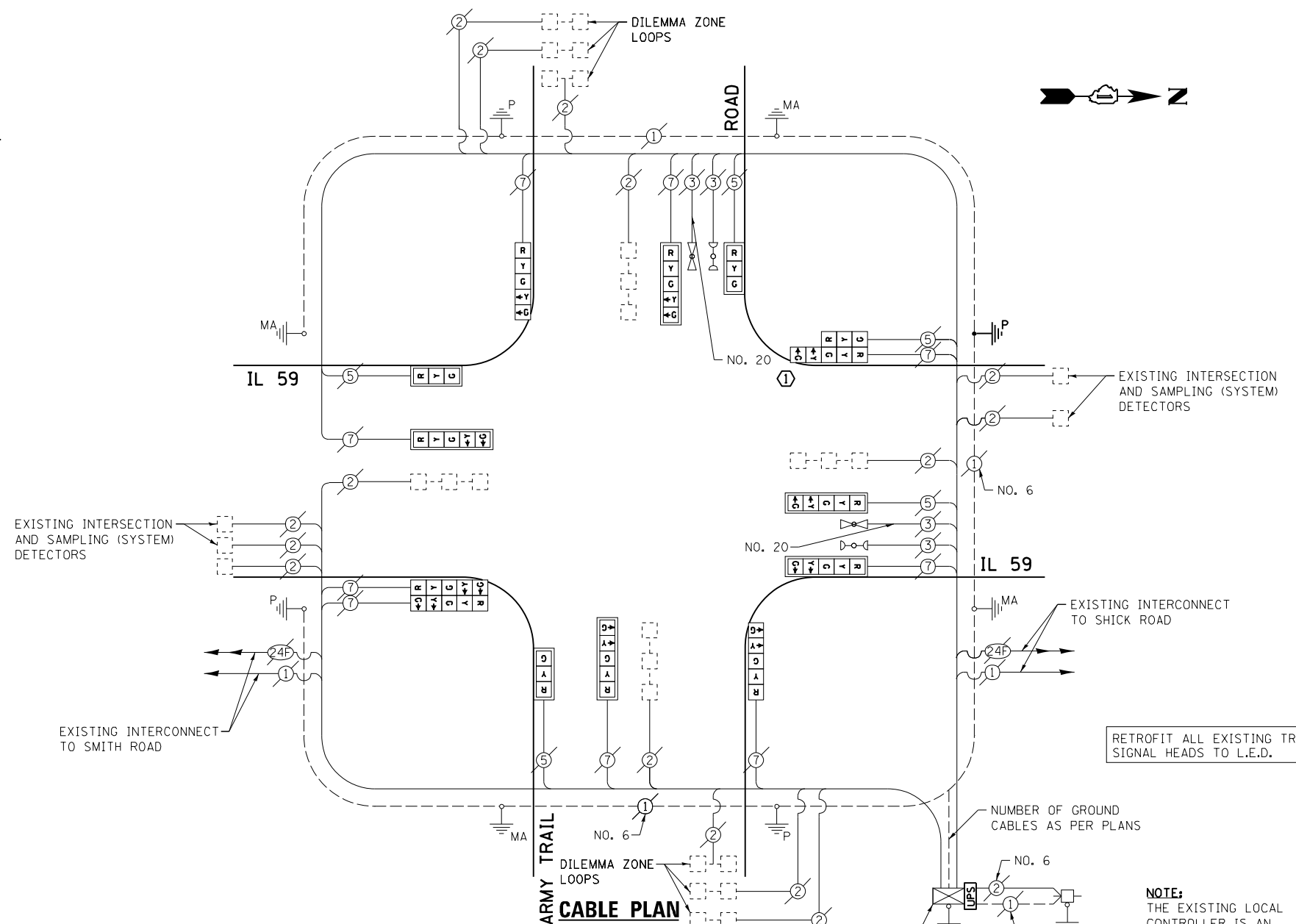
SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 84
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60V80	

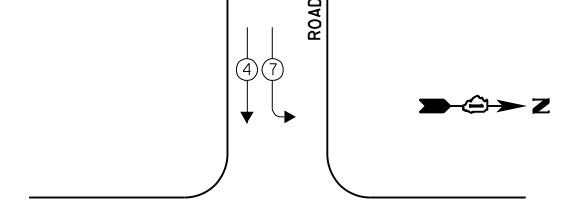
GHA #4085.887

SCHEDULE OF QUANTITIES
IL 59 AT ARMY TRAIL ROAD

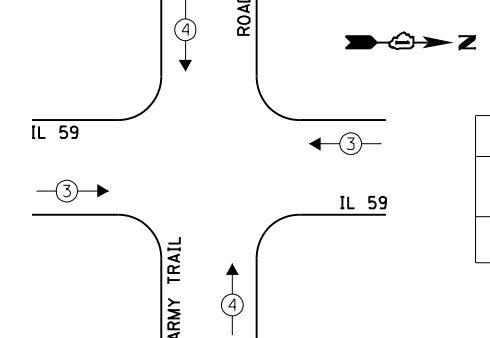
NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	1	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
3.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
4.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
5.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
6.	1	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED, RETROFIT
7.	3	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT
8.	5	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT
9.	2	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT
10.	1	EACH	SIGNAL HEAD, LED, 2 FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT



EXISTING CONTROLLER SEQUENCE



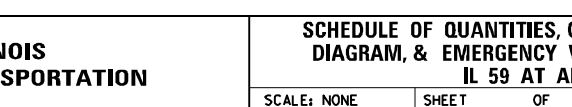
EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



LEGEND:

- ← * → SINGLE ENTRY PHASE
 - ← * → DUAL ENTRY PHASE
 - ← * → PEDESTRIAN PHASE
 - * NUMBER REFERS TO ASSOCIATED PHASE
 - ← * → OL OVERLAP
- OVERLAP LETTER PERMISSIVE PHASE PROTECTED PHASE
A = 2 + 3

EXISTING PHASE DESIGNATION DIAGRAM



NOTE:
THE EXISTING LOCAL CONTROLLER IS AN ECONOLITE ASC/2S-2100 AND THE EXISTING MASTER CONTROLLER IS AN ECONOLITE ASC/2M-1000, BOTH IN A TYPE V CABINET.

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 POST

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	INCAND.	L.E.D.	OPERATION	
SIGNAL (RED)	14	135	17	0.50	119.0
SIGNAL (YELLOW)	14	135	25	0.25	87.5
SIGNAL (GREEN)	14	135	15	0.25	52.5
ARROW	20	135	12	0.10	24.0
PED. SIGNAL	-	90	25	1.00	-
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					408.0

ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHAMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

CONSTRUCTION NOTE:
① REMOVE EXISTING SIGNAL HEADS AND REPLACE EXISTING 14 FOOT PAINTED POST. INSTALL RETROFITTED LED SIGNAL HEADS ON NEW 14 FOOT GALVANIZED STEEL POST. REUSE EXISTING TYPE "A" CONCRETE FOUNDATION AND EXISTING CABLES.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 59 AT ARMY TRAIL ROAD

FILE NAME = 60V80-085-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - JPW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

SCALE: NONE SHEET OF SHEETS STA. TO STA.

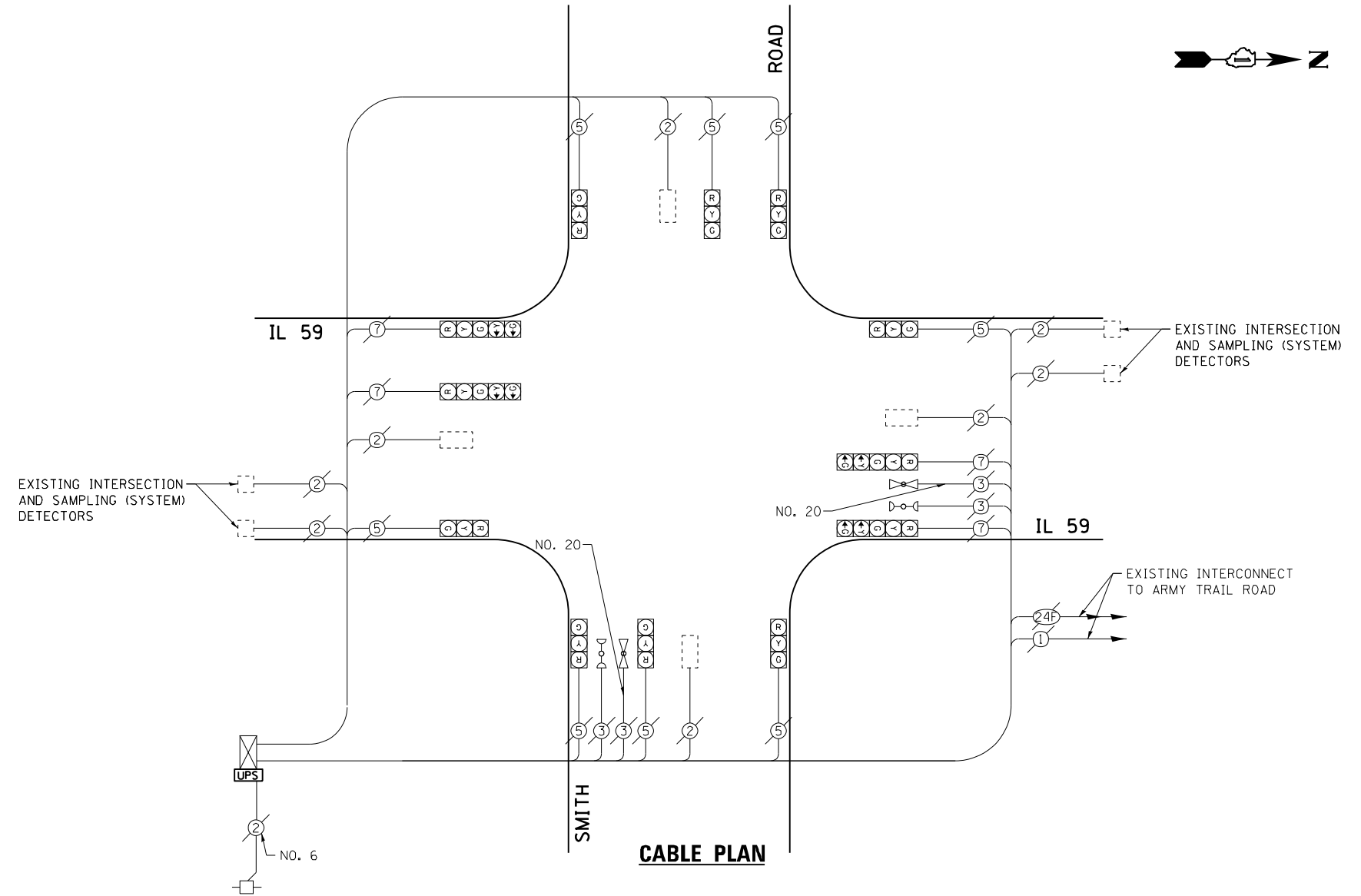
F.A. RTE. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 85
			CONTRACT NO. 60V80	
ILLINOIS FED. AID PROJECT				

GHA #4085.887

SCHEDULE OF QUANTITIES
IL 59 AT SMITH ROAD

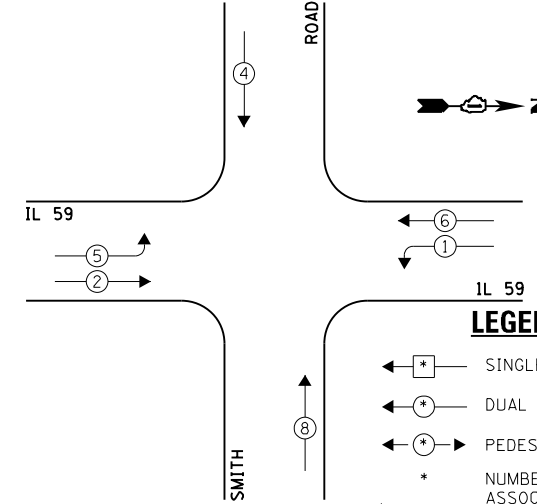
TS 6366

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
3.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL

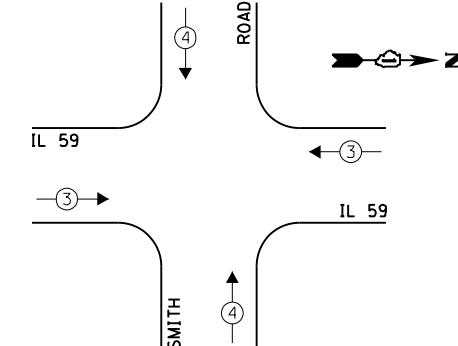


NOTE:
THE EXISTING CONTROLLER IS AN
ECONOLITE ASC/2S-1000
IN A TYPE IV CABINET.

**EXISTING
CONTROLLER SEQUENCE**



**EXISTING
EMERGENCY VEHICLE
PREEMPTION SEQUENCE**



LEGEND:

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

EXISTING PHASE DESIGNATION DIAGRAM



EXISTING EMERGENCY VEHICLE PREEMPTORS	
EMERGENCY VEHICLE PREEMPTOR	3
MOVEMENT	4

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND. L.E.D.	OPERATION	
SIGNAL (RED)	12	135 17	0.50	102.0
SIGNAL (YELLOW)	12	135 25	0.25	75.0
SIGNAL (GREEN)	12	135 15	0.25	45.0
ARROW	8	135 12	0.10	9.6
PED. SIGNAL	-	90 25	1.00	-
CONTROLLER	1	- 100	1.00	100.0
LUMINAIRE	-	- 250	0.50	-
L.E.D. ST. NAME SIGN	-	- 64	0.50	-
VIDEO SYSTEM	-	- 150	1.00	-
BATTERY BACKUP	1	- 25	1.00	25.0
ILLUMINATED SIGN	-	- 25	0.05	-
TOTAL =				356.6

ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHAMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

FILE NAME = 60V80-086-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - JPW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION
DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 59 AT SMITH ROAD

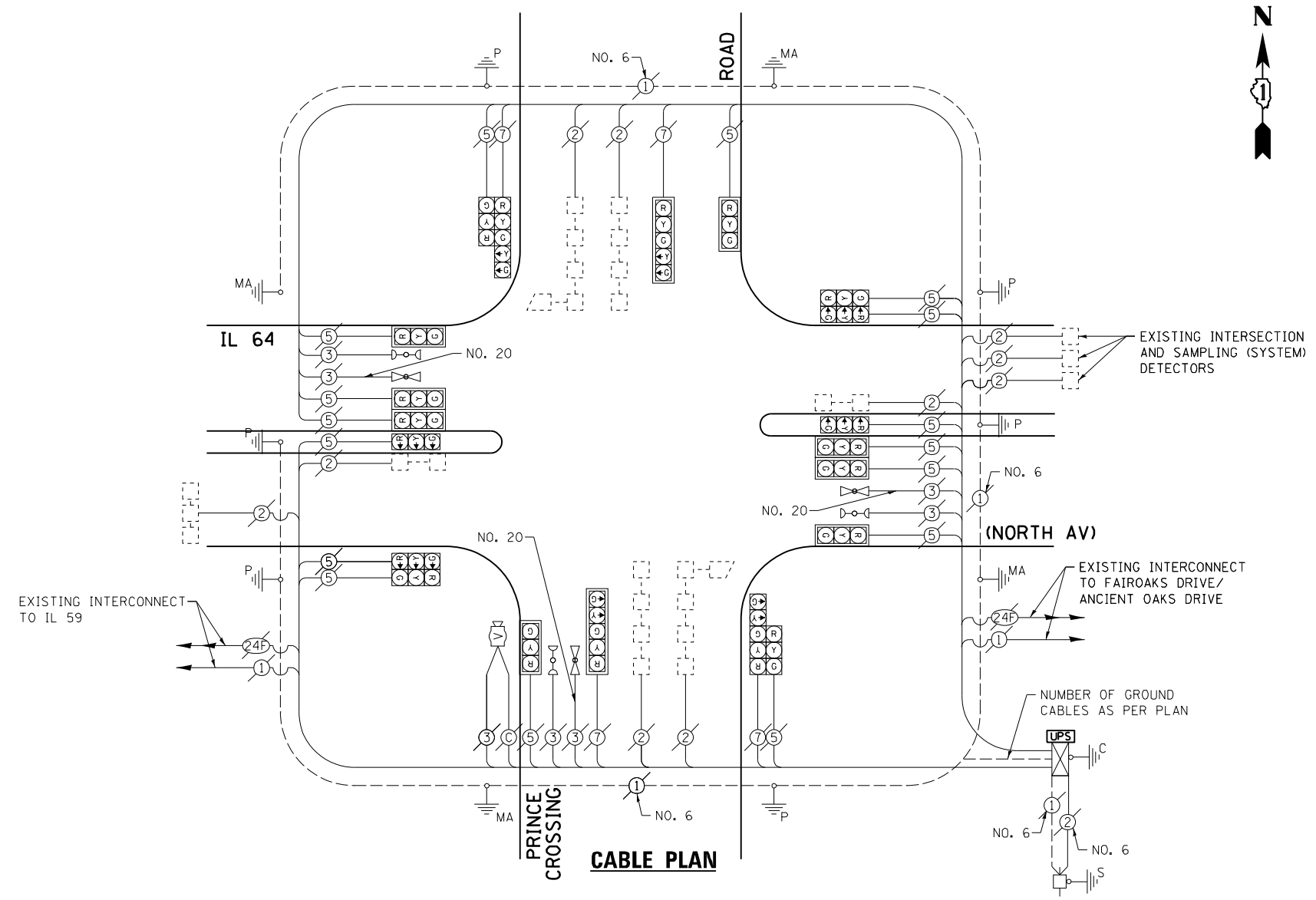
SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 86
			CONTRACT NO. 60V80	
ILLINOIS FED. AID PROJECT				

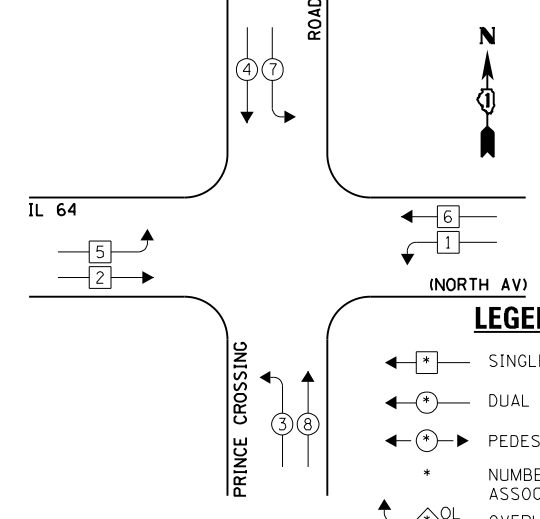
GHA #4085.887

SCHEDULE OF QUANTITIES
IL 64 (NORTH AV) AT PRINCE CROSSING ROAD

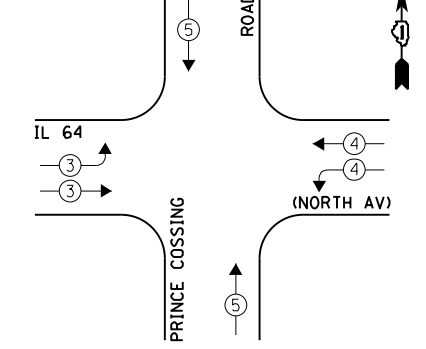
NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
3.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL



EXISTING CONTROLLER SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



LEGEND:

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

EXISTING PHASE DESIGNATION DIAGRAM

NOTE:
THE EXISTING CONTROLLER IS AN EAGLE EPAC 300 IN A TYPE IV CABINET.

EXISTING EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	↔	↕

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND. L.E.D.	OPERATION	
SIGNAL (RED)	20	135 17	0.50	70.0
SIGNAL (YELLOW)	20	135 25	0.25	125.0
SIGNAL (GREEN)	20	135 15	0.25	75.0
ARROW	8	135 12	0.10	9.6
PED. SIGNAL	-	90 25	1.00	-
CONTROLLER	1	- 100	1.00	100.0
LUMINAIRE	-	- 250	0.50	-
L.E.D. ST. NAME SIGN	-	- 64	0.50	-
VIDEO SYSTEM	1	- 150	1.00	150.0
BATTERY BACKUP	1	- 25	1.00	25.0
ILLUMINATED SIGN	-	- 25	0.05	-
TOTAL =				654.6

ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHALMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE SCACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

FILE NAME = 60V80-087-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - JPW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 64 (NORTH AV) AT PRINCE CROSSING ROAD

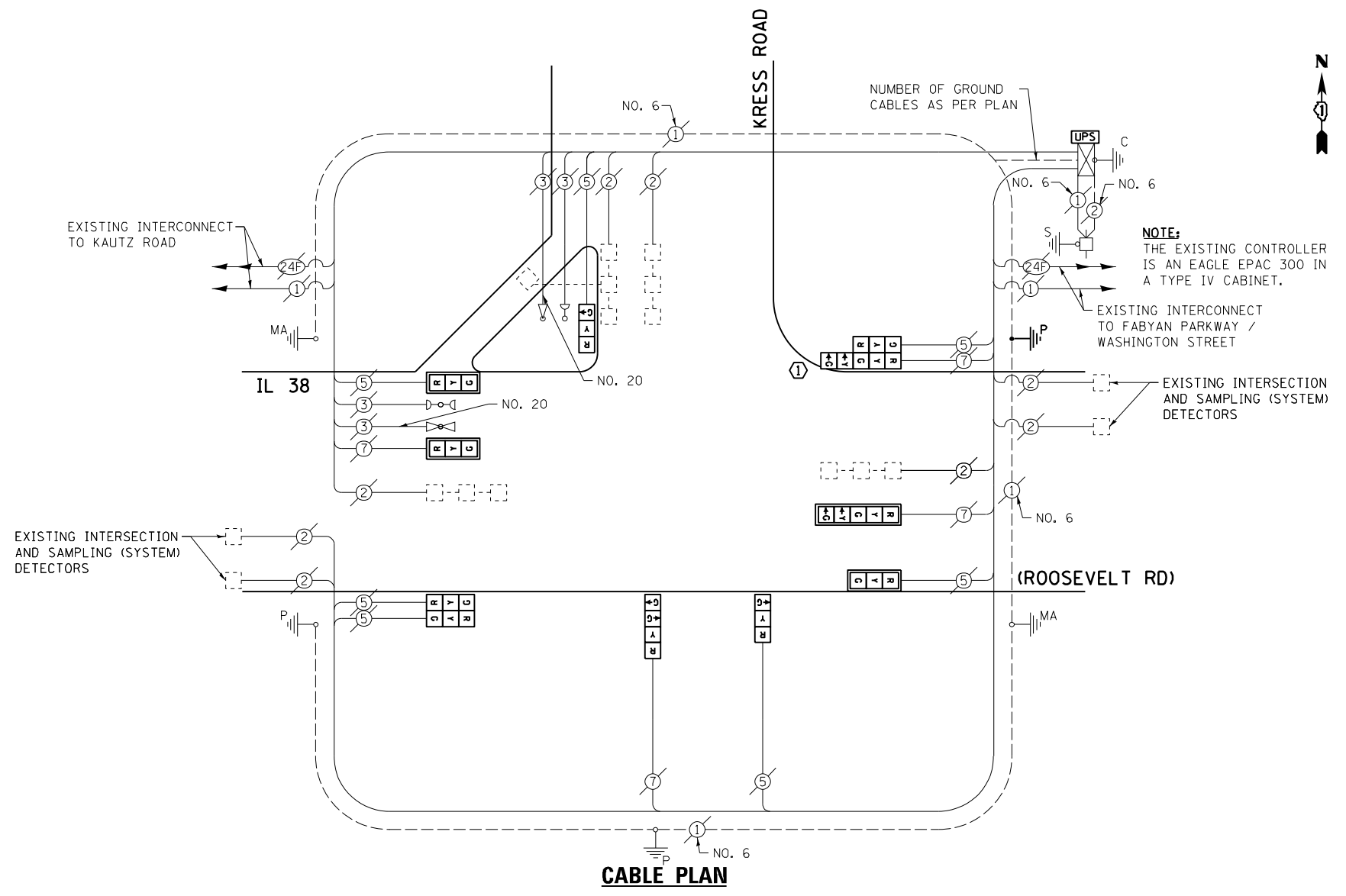
SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 87
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60V80	

GHA #4085.887

SCHEDULE OF QUANTITIES
IL 38 (ROOSEVELT RD) AT KRESS ROAD

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	1	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
3.	3	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
4.	2	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
5.	1	EACH	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED
6.	1	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED
7.	1	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED
8.	1	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
9.	4	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
10.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
11.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
12.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL



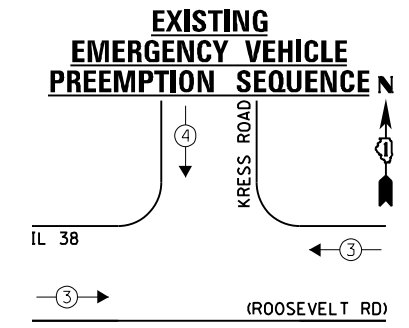
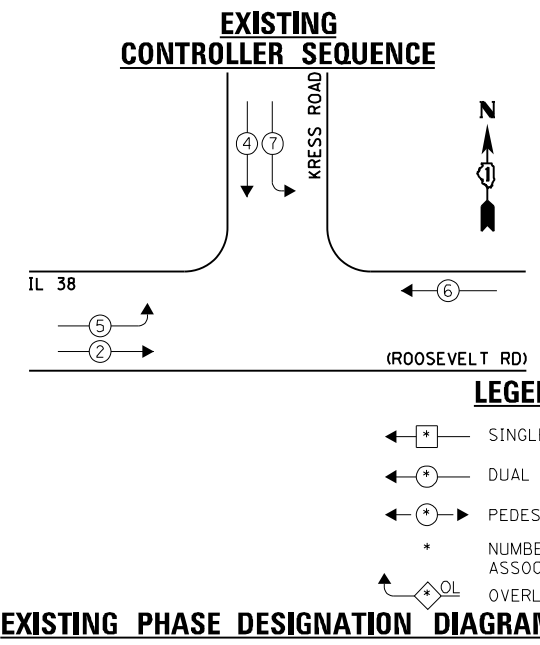
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 6 EACH TRAFFIC SIGNAL HEAD, 1-FACE, 3-SECTION
- 1 EACH TRAFFIC SIGNAL HEAD, 1-FACE, 4-SECTION
- 1 EACH TRAFFIC SIGNAL HEAD, 1-FACE, 5-SECTION
- 1 EACH TRAFFIC SIGNAL HEAD, 2-FACE, 3-SECTION
- 1 EACH TRAFFIC SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION
- 1 EACH TRAFFIC SIGNAL POST
- 4 EACH TRAFFIC SIGNAL BACKPLATE

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND. L.E.D.	OPERATION	
SIGNAL (RED)	11	135 17	0.50	93.5
SIGNAL (YELLOW)	11	135 25	0.25	68.75
SIGNAL (GREEN)	11	135 15	0.25	41.25
ARROW	4	135 12	0.10	4.8
PED. SIGNAL	-	90 25	1.00	-
CONTROLLER	1	- 100	1.00	100.0
LUMINAIRE	-	- 250	0.50	-
L.E.D. ST. NAME SIGN	-	- 64	0.50	-
VIDEO SYSTEM	-	- 150	1.00	-
BATTERY BACKUP	1	- 25	1.00	25.0
ILLUMINATED SIGN	-	- 25	0.05	-
TOTAL =				333.3

ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHAMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

CONSTRUCTION NOTE:
① REMOVE EXISTING SIGNAL HEADS AND REPLACE EXISTING 16 FOOT PAINTED POST. INSTALL NEW LED SIGNAL HEADS ON NEW 16 FOOT GALVANIZED STEEL POST. REUSE EXISTING TYPE "A" CONCRETE FOUNDATION AND EXISTING CABLES.



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

FILE NAME = 60V80-088-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - JPW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

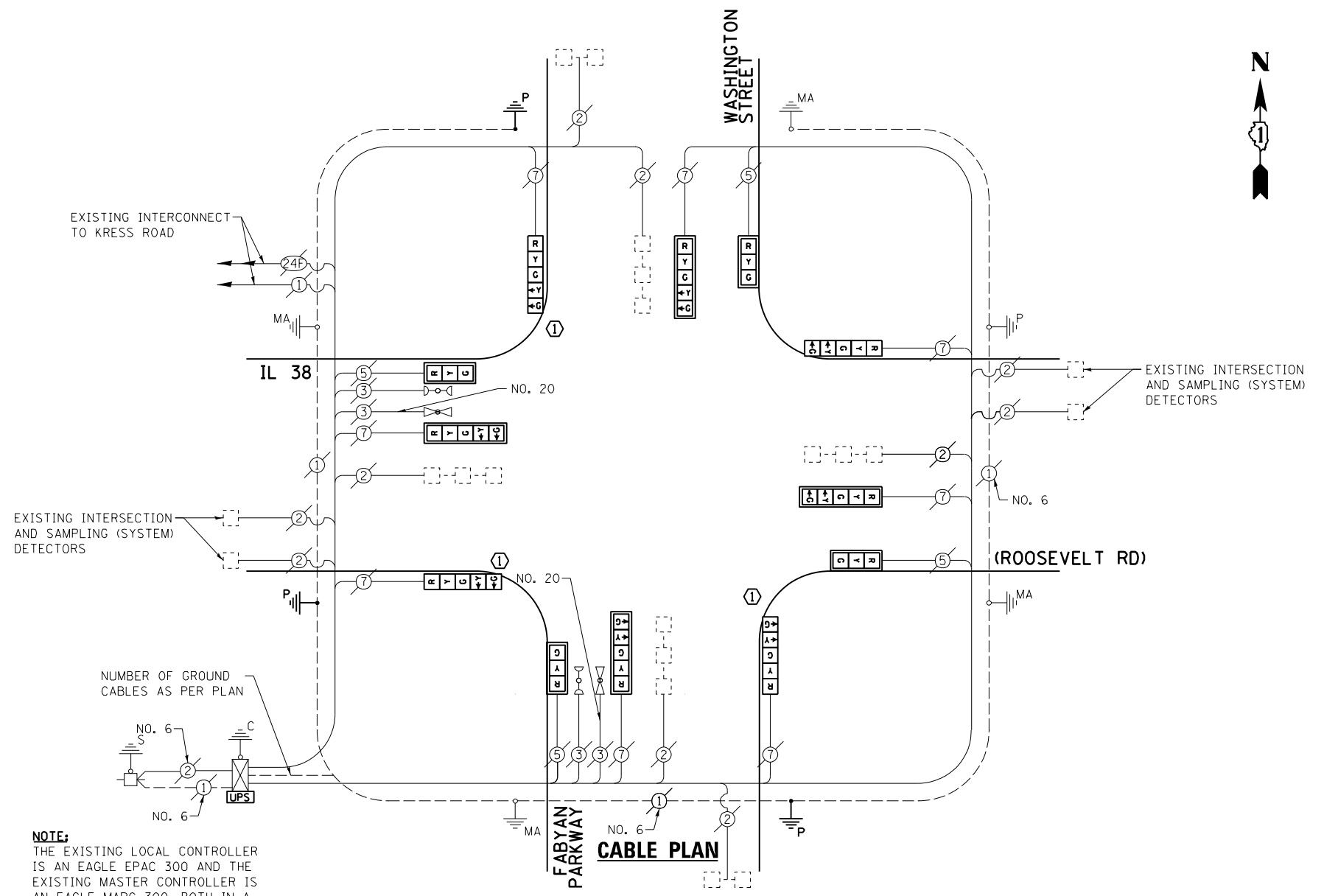
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 38 (ROOSEVELT RD) AT KRESS ROAD
SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 88
			CONTRACT NO. 60V80	
ILLINOIS FED. AID PROJECT				

SCHEDULE OF QUANTITIES
IL 38 (ROOSEVELT RD) AT FABYAN PARKWAY / WASHINGTON STREET

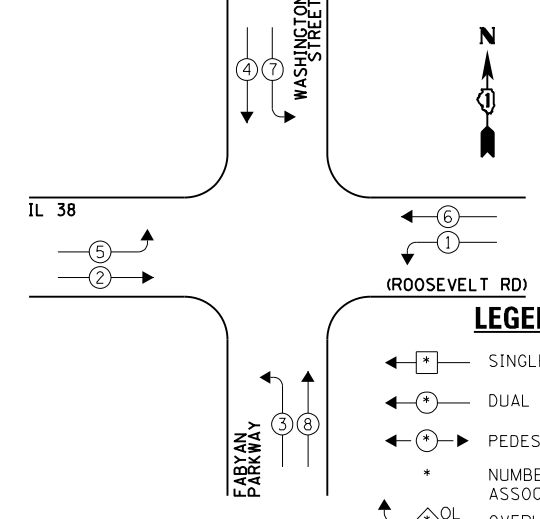
NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	3	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
3.	4	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
4.	4	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED
5.	4	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED
6.	8	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
7.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
8.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
9.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL



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

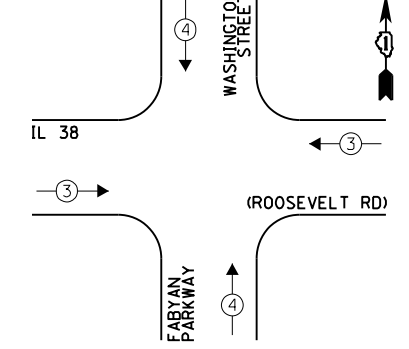
- 4 EACH TRAFFIC SIGNAL HEAD, 1-FACE, 3-SECTION
- 8 EACH TRAFFIC SIGNAL HEAD, 1-FACE, 5-SECTION
- 3 EACH TRAFFIC SIGNAL POST
- 8 EACH TRAFFIC SIGNAL BACKPLATE

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTORS	
EMERGENCY VEHICLE PREEMPTOR	3
MOVEMENT	4

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE	
TYPE	NO. LAMPS	WATTAGE INCAND. L.E.D.	OPERATION		
SIGNAL (RED)	12	135	17	0.50	102.0
SIGNAL (YELLOW)	12	135	25	0.25	75.0
SIGNAL (GREEN)	12	135	15	0.25	45.0
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	-	90	25	1.00	-
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					366.2

ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION
(ADDRESS) 201 W. CENTER STREET
(ADDRESS) SCHALMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

CONSTRUCTION NOTE:
① REMOVE EXISTING SIGNAL HEADS AND REPLACE EXISTING 16 FOOT PAINTED POST. INSTALL NEW LED SIGNAL HEADS ON NEW 16 FOOT GALVANIZED STEEL POST. REUSE EXISTING TYPE "A" CONCRETE FOUNDATION AND EXISTING CABLES.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION
DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 38 (ROOSEVELT RD) AT FABYAN PARKWAY / WASHINGTON STREET

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIES	2012-070 I	DuPAGE	103	89
			CONTRACT NO. 60V80	

SCALE: NONE SHEET OF SHEETS STA. TO STA.

FILE NAME	USER NAME	DESIGNED	REVISIONS
60V80-089-ts.dgn	zwallsten	JRD	-
Default		JPW	-
		KLB	-
			-

PLOT SCALE = 1:20
PLOT DATE = 12/20/2012
DATE = 12-20-12

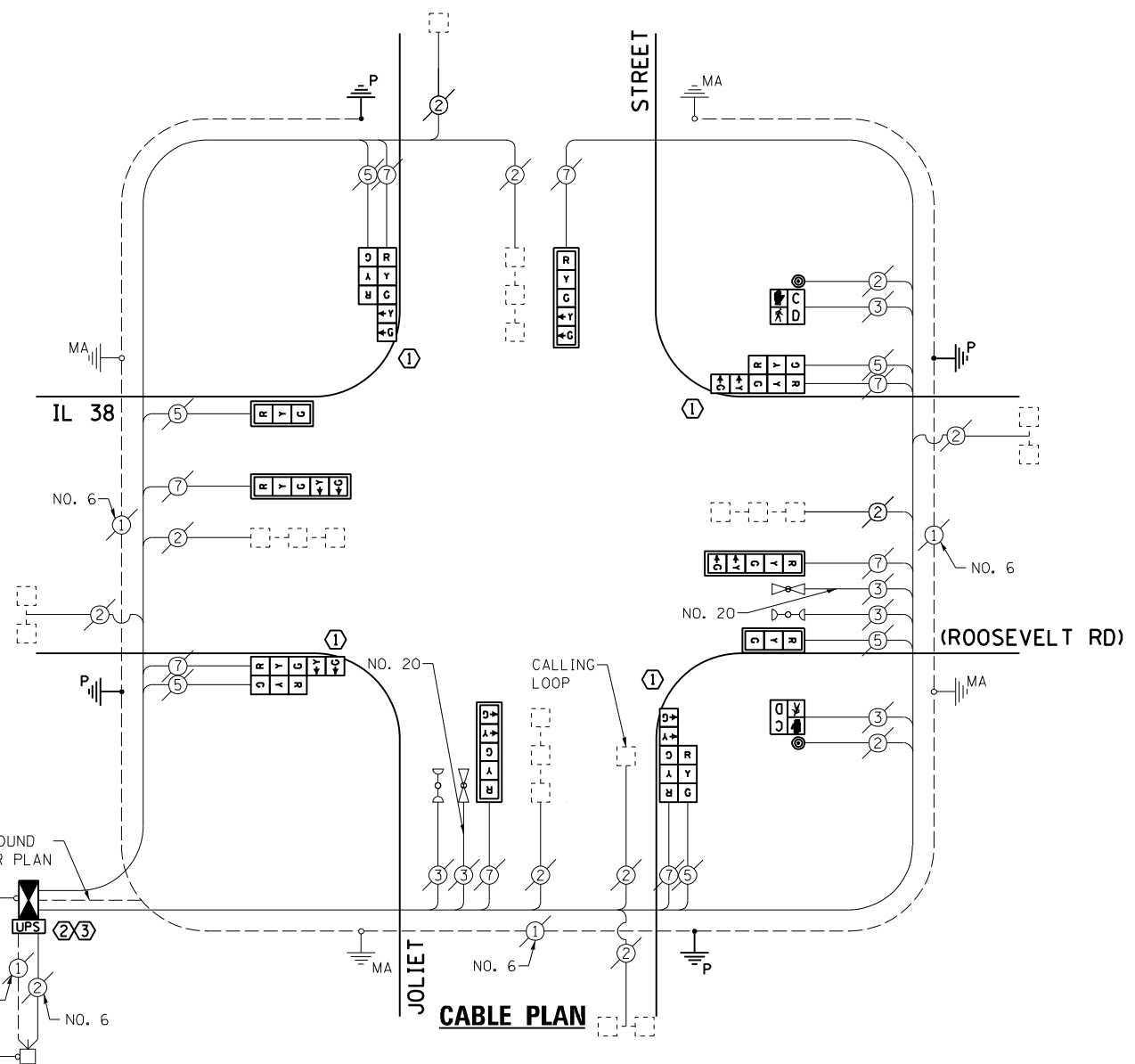
SCHEDULE OF QUANTITIES
IL 38 (ROOSEVELT RD) AT JOLIET STREET

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET
3.	4	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
4.	2	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
5.	4	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED
6.	4	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
7.	2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
8.	6	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
9.	9	EACH	INDUCTIVE LOOP DETECTOR
10.	2	EACH	PEDESTRIAN PUSH-BUTTON
11.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
12.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL

- CONSTRUCTION NOTES:**
- REMOVE EXISTING SIGNAL HEADS AND REPLACE EXISTING 16 FOOT PAINTED POST. INSTALL NEW LED SIGNAL HEADS ON NEW 16 FOOT GALVANIZED STEEL POST. REUSE EXISTING TYPE "A" CONCRETE FOUNDATION AND EXISTING CABLES.
 - RELOCATION OF THE EXISTING PHASING UNIT FOR THE EMERGENCY VEHICLE PRE-EMPTION SYSTEM IS TO BE INCLUDED IN THE COST OF THE PAY ITEM "FULL-ACTUATED CONTROLLER AND CABINET OF THE TYPE SPECIFIED."
 - ALL WORK TO CLEAR WAY FOR INSTALLATION UPS SHALL BE INCLUDED IN THE COST OF THE PAY ITEM "UNINTERRUPTABLE POWER SUPPLY, SYSTEM"

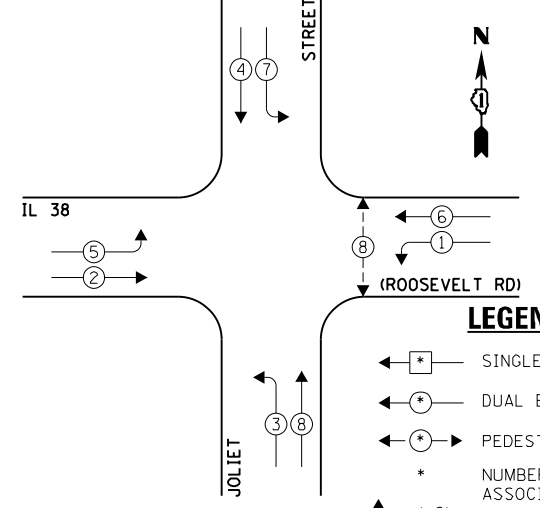
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- EACH CABINET AND CONTROLLER (COMPLETE)
- EACH TRAFFIC SIGNAL HEAD, 1-FACE, 3-SECTION
- EACH TRAFFIC SIGNAL HEAD, 1-FACE, 5-SECTION
- EACH TRAFFIC SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION
- EACH TRAFFIC SIGNAL POST
- EACH TRAFFIC SIGNAL BACKPLATE
- EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- EACH PEDESTRIAN PUSH-BUTTON



NOTE:
THE EXISTING CONTROLLER IS AN ECONOLITE ASC 2S/2100 IN A TYPE IV CABINET.

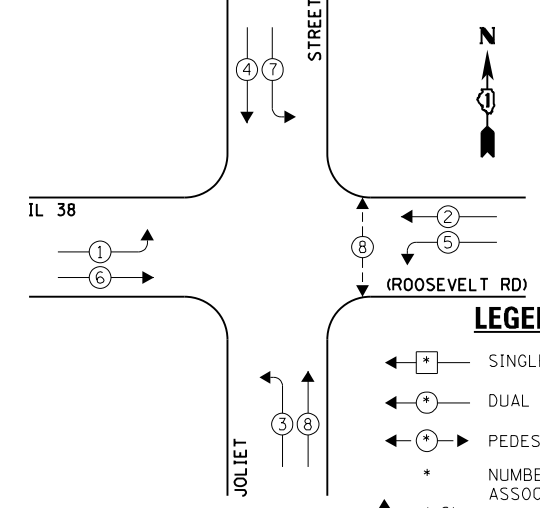
PROPOSED CONTROLLER SEQUENCE



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

PROPOSED PHASE DESIGNATION DIAGRAM

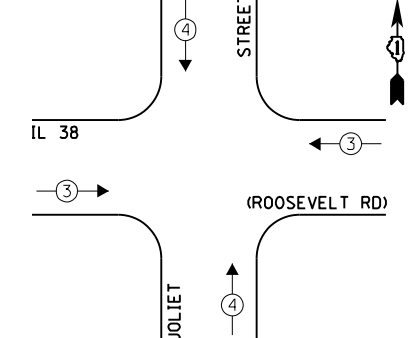
EXISTING CONTROLLER SEQUENCE



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

EXISTING PHASE DESIGNATION DIAGRAM

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTORS	
EMERGENCY VEHICLE PREEMPTOR	3
MOVEMENT	4

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	INCAND.	L.E.D.	OPERATION	
SIGNAL (RED)	14	135	17	0.50	119.0
SIGNAL (YELLOW)	14	135	25	0.25	87.5
SIGNAL (GREEN)	14	135	15	0.25	52.5
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	2	90	25	1.00	50.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					453.2

ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHALMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

FILE NAME = 60V80-090-ts.dgn
USER NAME = zwallsten
DESIGNED - JRD
DRAWN - JPW
PLOT SCALE = 1:20
PLOT DATE = 12/20/2012

REVISIONS:
REVISED -
CHECKED - KLB
DATE - 12-20-12

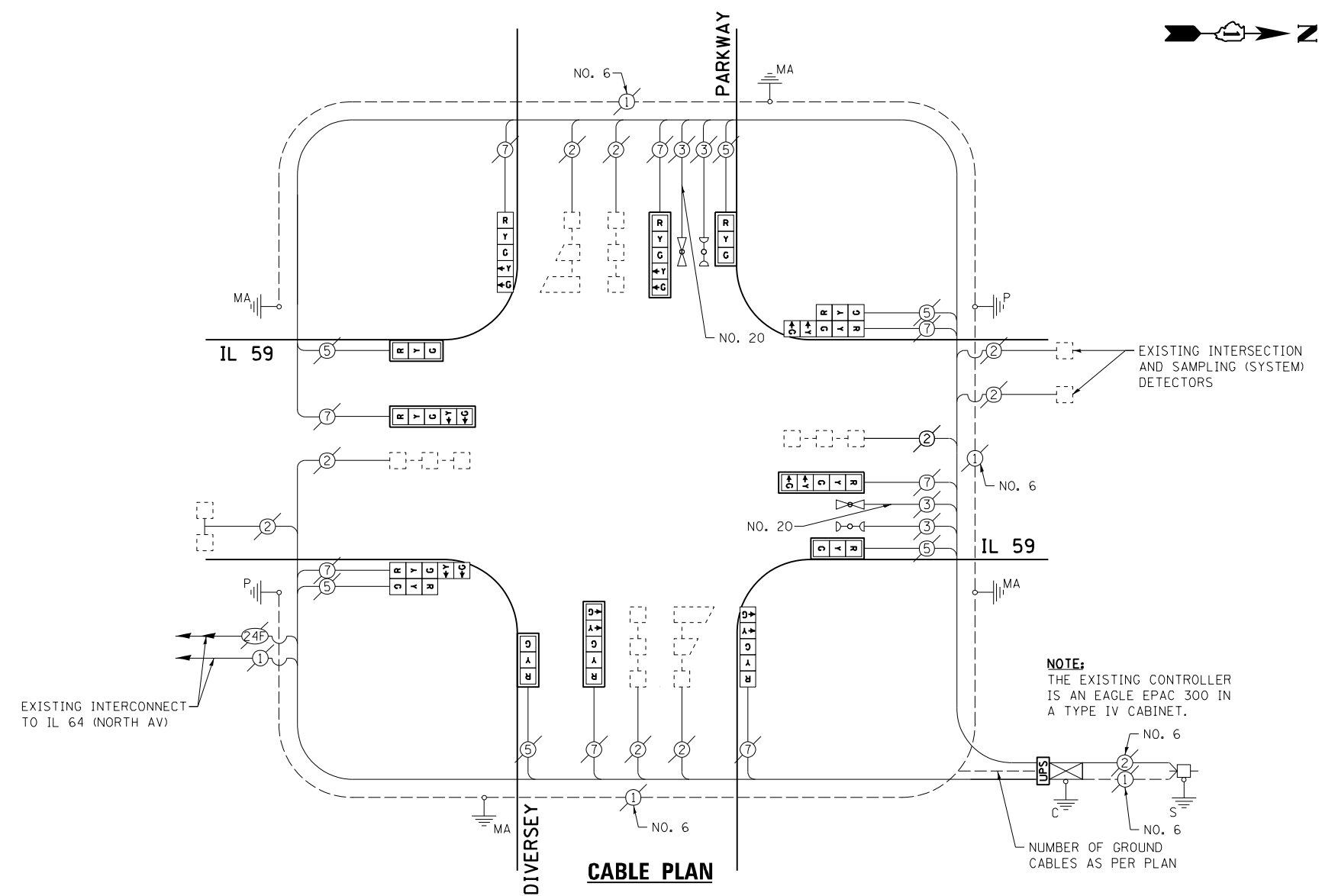
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 38 (ROOSEVELT RD) AT JOLIET STREET
SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTÉ. SECTION COUNTY TOTAL SHEETS SHEET NO.
VARIES 2012-070 I DuPAGE 103 90
CONTRACT NO. 60V80
ILLINOIS FED. AID PROJECT

SCHEDULE OF QUANTITIES
IL 59 AT DIVERSEY PARKWAY

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	8	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
3.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
4.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
5.	1	EACH	UNINTERRUPTIBLE POWER SUPPLY, SPECIAL
6.	2	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED, RETROFIT
7.	4	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT
8.	4	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT
9.	2	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT



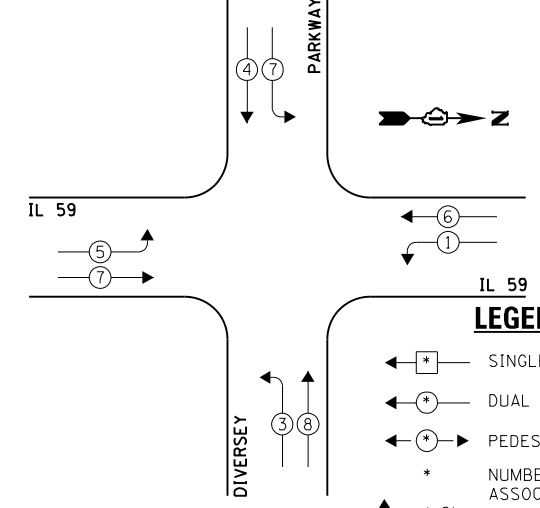
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

8 EACH TRAFFIC SIGNAL BACKPLATE

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	INCAND.	L.E.D.	OPERATION	
SIGNAL (RED)	14	135	17	0.50	119.0
SIGNAL (YELLOW)	14	135	25	0.25	87.5
SIGNAL (GREEN)	14	135	15	0.25	52.5
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	-	90	25	1.00	-
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					403.2

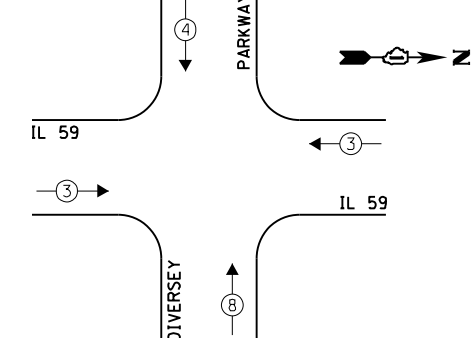
ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHALMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTORS	
EMERGENCY VEHICLE PREEMPTOR	3
MOVEMENT	4

FILE NAME = 60V80-091-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

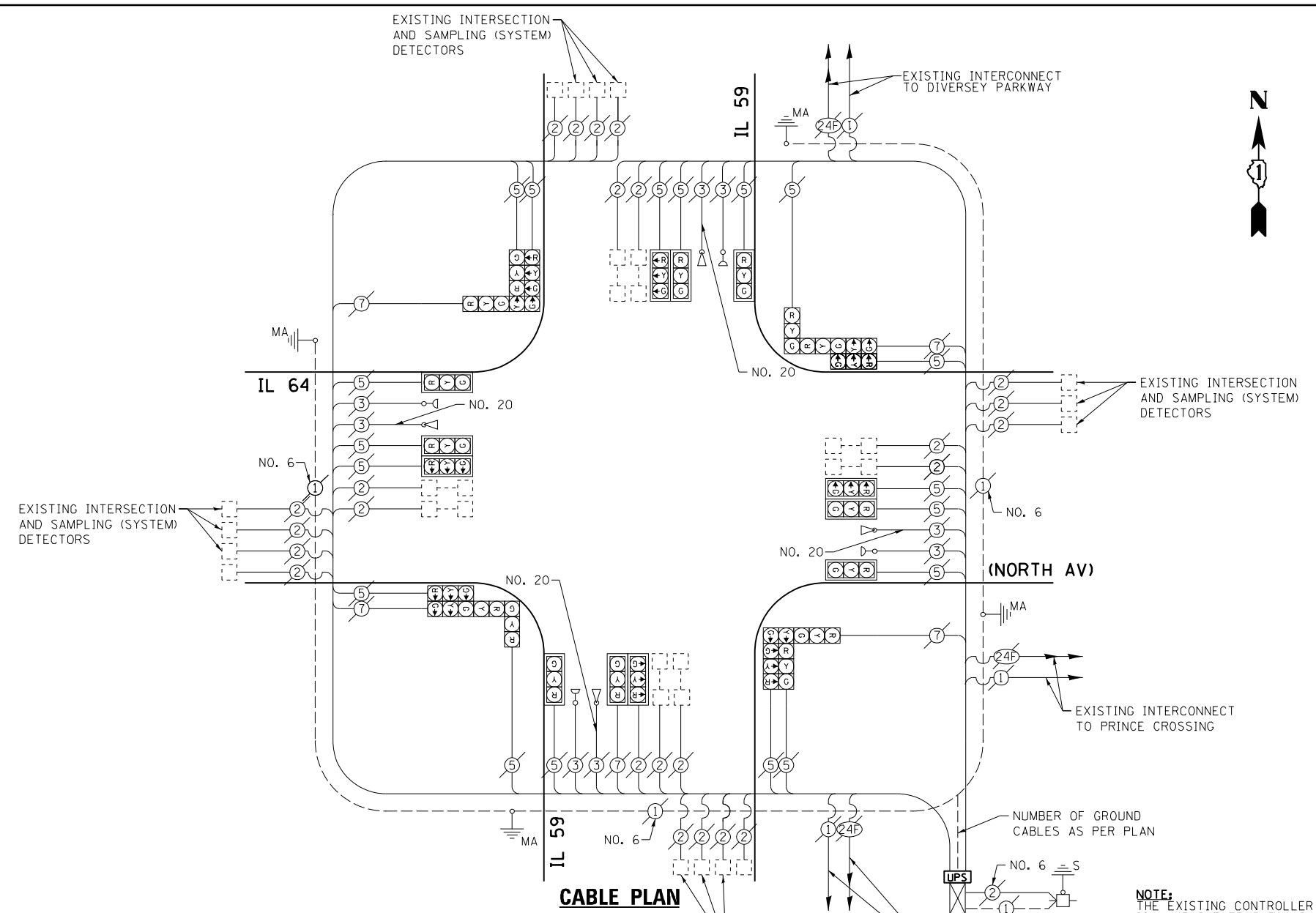
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 59 AT DIVERSEY PARKWAY
SCALE: NONE SHEET OF SHEETS STA. TO STA.

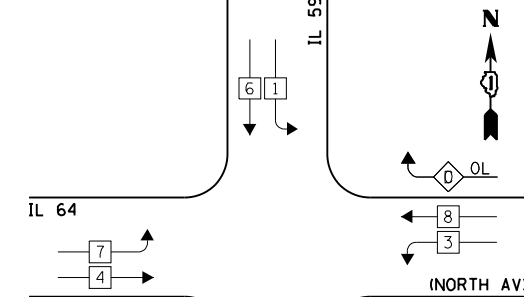
F.A. RTE. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 91
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60V80	

SCHEDULE OF QUANTITIES
IL 59 AT IL 64 (NORTH AV)

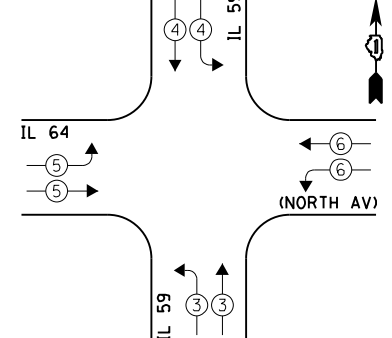
NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
3.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL



EXISTING CONTROLLER SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



LEGEND:

- ← * → SINGLE ENTRY PHASE
 - ← * → DUAL ENTRY PHASE
 - ← * → PEDESTRIAN PHASE
 - * NUMBER REFERS TO ASSOCIATED PHASE
 - OL OVERLAP
- OVERLAP LETTER PERMISSIVE PHASE PROTECTED PHASE
- B = 4 + 5
- D = 8 + 1

EXISTING PHASE DESIGNATION DIAGRAM

NOTE:
THE EXISTING CONTROLLER IS AN EAGLE EPAC 300 IN A TYPE IV CABINET

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	INCAND.	L.E.D.	OPERATION	
SIGNAL (RED)	24	135	17	0.50	204.0
SIGNAL (YELLOW)	24	135	25	0.25	50.0
SIGNAL (GREEN)	24	135	15	0.25	90.0
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	-	90	25	1.00	-
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					578.6

ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHALMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

EXISTING EMERGENCY VEHICLE PREEMPTORS				
EMERGENCY VEHICLE PREEMPTOR	3	4	5	6
MOVEMENT	↔	↕	↔	↕

FILE NAME = 60V80-092-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

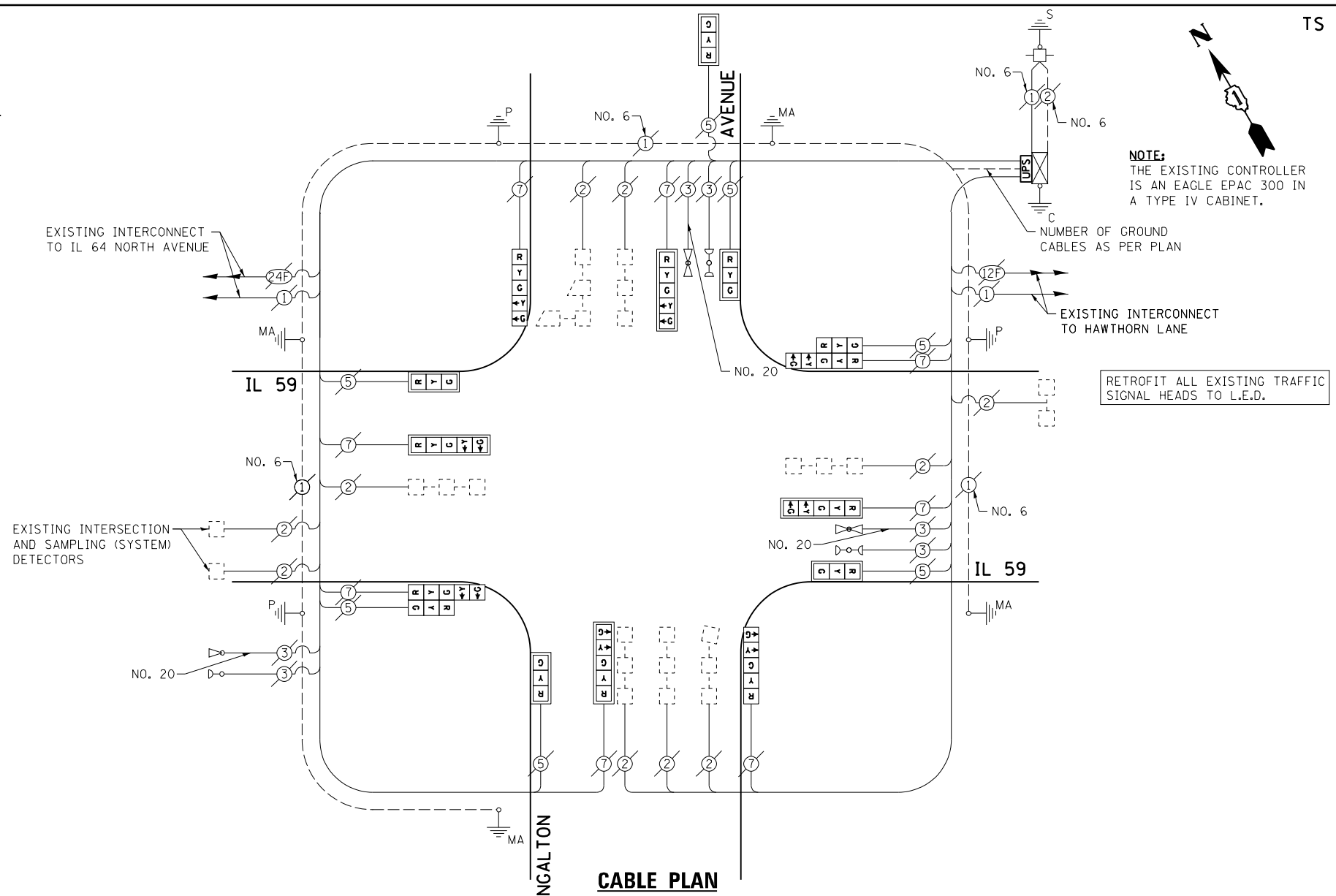
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 64 (NORTH AV) AT IL 59

F.A. RTÉ. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 92
SCALE: NONE			CONTRACT NO. 60V80	
SHEET OF SHEETS STA. TO STA.		ILLINOIS FED. AID PROJECT		

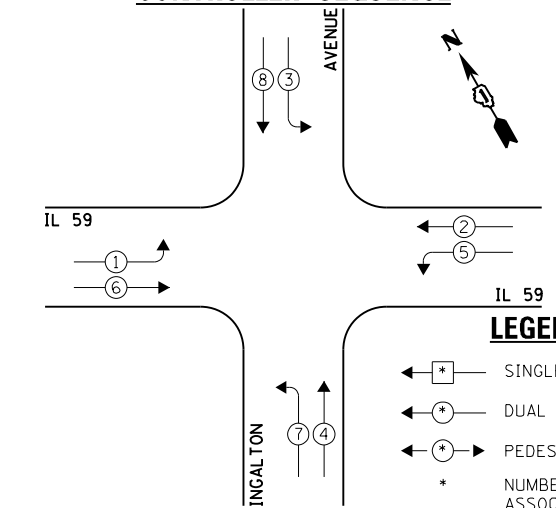
SCHEDULE OF QUANTITIES
IL 59 AT INGALTON AVENUE

TS 22110

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
3.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
4.	2	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED, RETROFIT
5.	5	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT
6.	4	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT
7.	2	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT

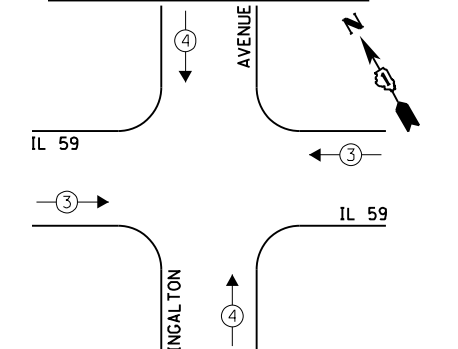


EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTORS	
EMERGENCY VEHICLE PREEMPTOR	3
MOVEMENT	4

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	INCAND.	L.E.D.	OPERATION	
SIGNAL (RED)	15	135	17	0.50	127.5
SIGNAL (YELLOW)	15	135	25	0.25	93.75
SIGNAL (GREEN)	15	135	15	0.25	56.25
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	-	90	25	1.00	-
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					421.7

ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHALMBURG, IL 60196-1096

ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

FILE NAME = 60V80-093-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION
DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 59 AT INGALTON AVENUE

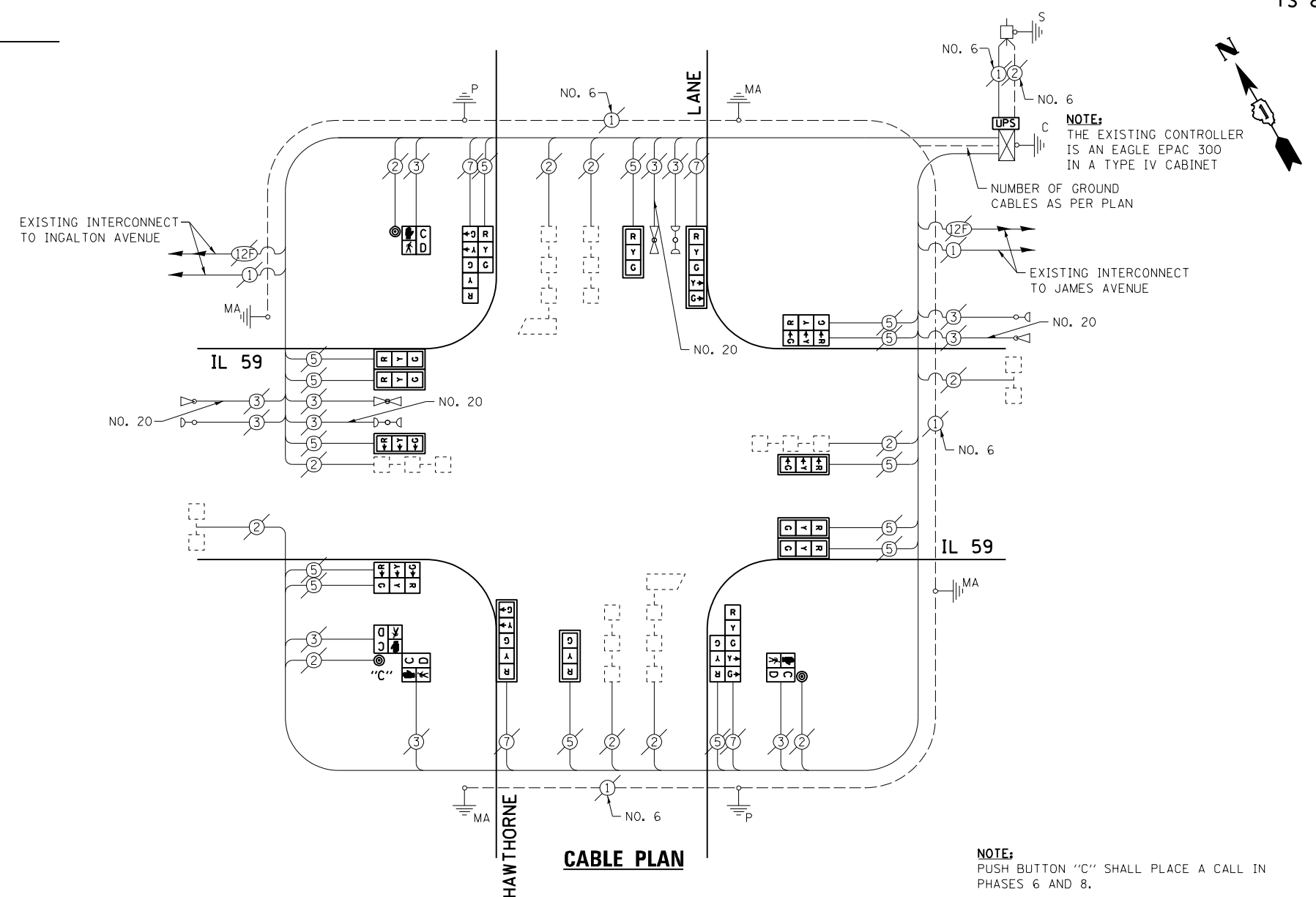
SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTÉ.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIES	2012-070 I	DuPAGE	103	93
			CONTRACT NO. 60V80	
ILLINOIS FED. AID PROJECT				

GHA #4085.887

SCHEDULE OF QUANTITIES
IL 59 AT HAWTHORNE LANE

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	8	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
3.	2	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED
4.	2	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED
5.	2	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
6.	2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
7.	1	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
8.	10	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
9.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
10.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
11.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
12.	3	EACH	PEDESTRIAN PUSH-BUTTON, NON-LATCHING



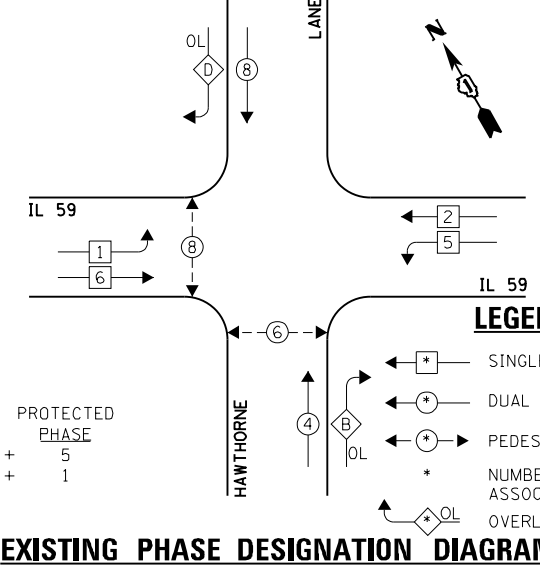
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 8 EACH TRAFFIC SIGNAL HEAD, 1-FACE, 3-SECTION
- 2 EACH TRAFFIC SIGNAL HEAD, 1-FACE, 5-SECTION
- 2 EACH TRAFFIC SIGNAL HEAD, 2-FACE, 3-SECTION
- 2 EACH TRAFFIC SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION
- 10 EACH TRAFFIC SIGNAL BACKPLATE
- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 1 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE
- 3 EACH PEDESTRIAN PUSH-BUTTON

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE	
TYPE	NO. LAMPS	WATTAGE INCAND. L.E.D.	OPERATION		
SIGNAL (RED)	18	135	17	0.50	153.0
SIGNAL (YELLOW)	18	135	25	0.25	112.5
SIGNAL (GREEN)	18	135	15	0.25	67.5
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	4	90	25	1.00	100.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	250	-	-	-
L.E.D. ST. NAME SIGN	-	64	0.50	-	-
VIDEO SYSTEM	-	150	1.00	-	-
BATTERY BACKUP	1	25	1.00	25.0	-
ILLUMINATED SIGN	-	25	0.05	-	-
TOTAL =					567.6

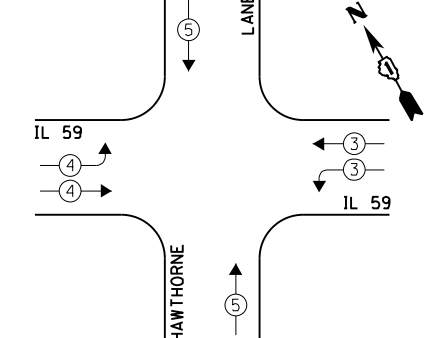
ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHALMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

FILE NAME = 60V80-094-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - JPW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

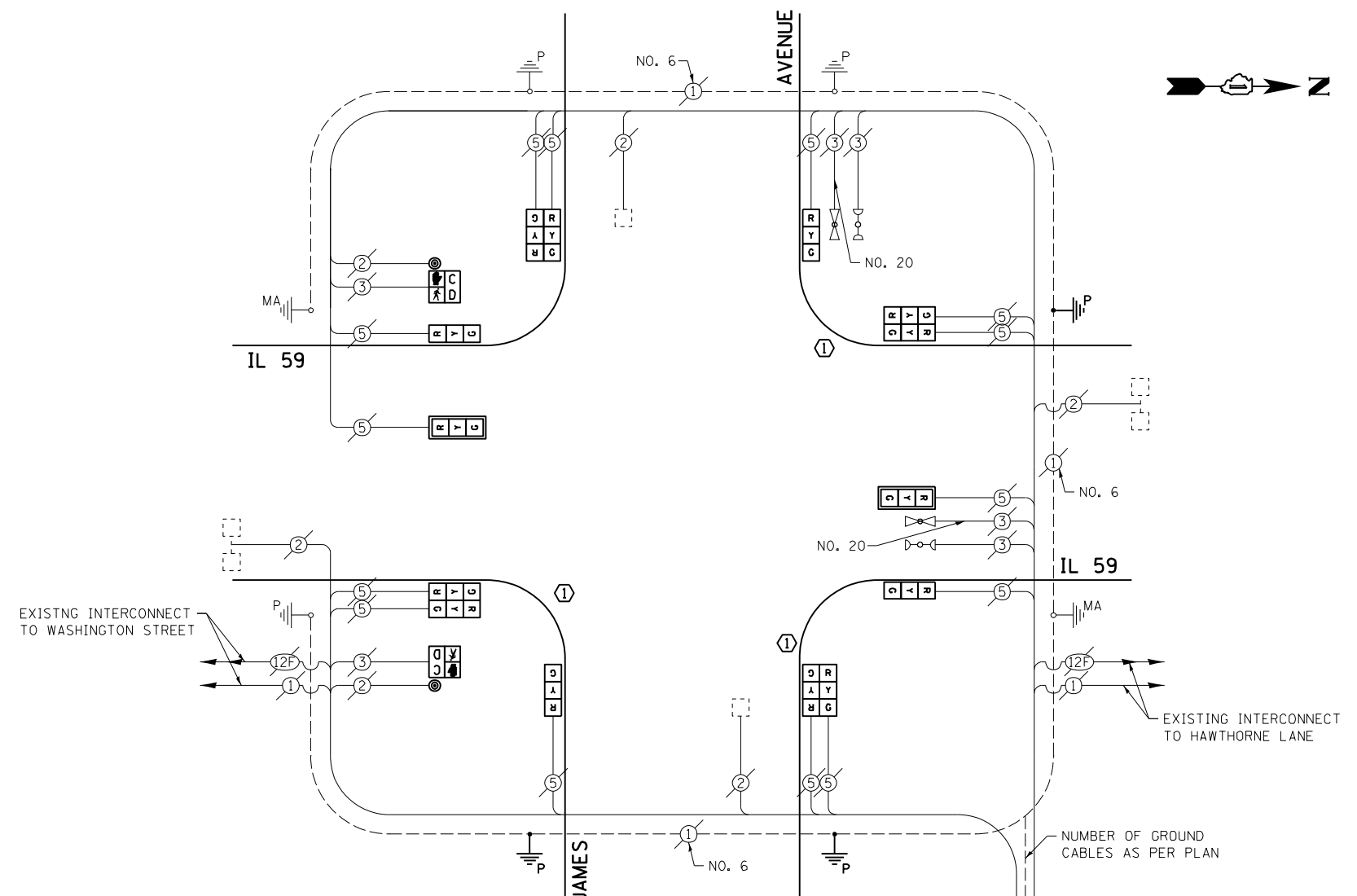
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION
DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 59 AT HAWTHORNE LANE

F.A. RTÉ. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 94
SCALE: NONE			CONTRACT NO. 60V80	
ILLINOIS FED. AID PROJECT				

SCHEDULE OF QUANTITIES
IL 59 AT JAMES AVENUE

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	3	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.
3.	2	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
4.	4	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
5.	4	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED
6.	2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
7.	2	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
8.	2	EACH	PEDESTRIAN PUSH-BUTTON
9.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
10.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
11.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL



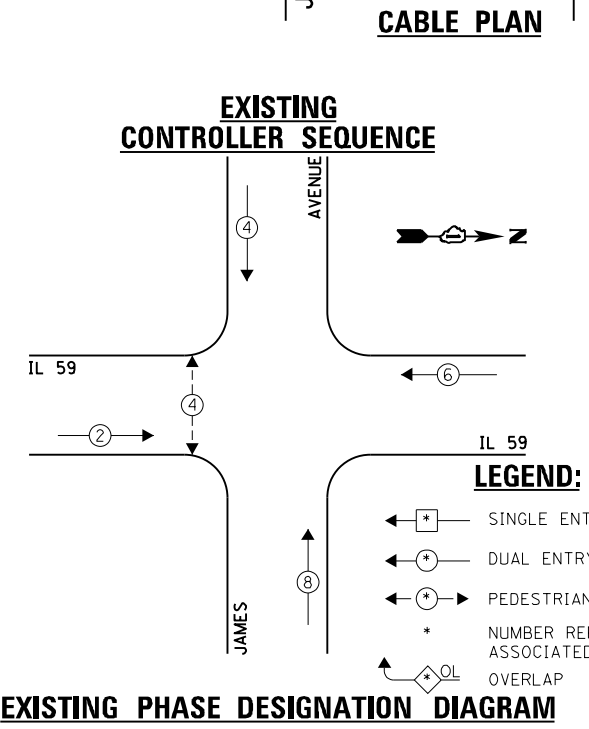
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 6 EACH TRAFFIC SIGNAL HEAD, 1-FACE, 3-SECTION
- 4 EACH TRAFFIC SIGNAL HEAD, 2-FACE, 3-SECTION
- 2 EACH TRAFFIC SIGNAL BACKPLATE
- 3 EACH TRAFFIC SIGNAL POST
- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 2 EACH PEDESTRIAN PUSH-BUTTON

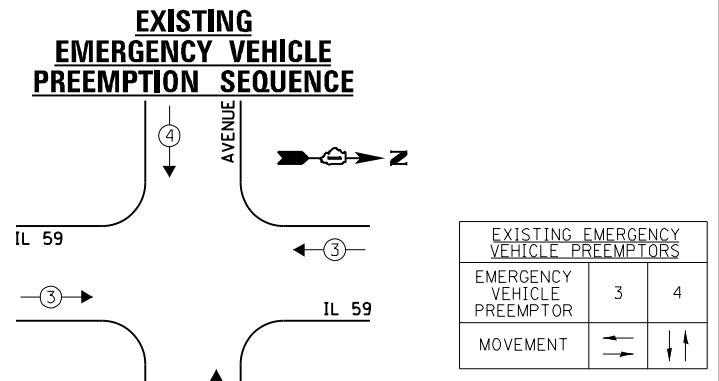
I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE	
TYPE	NO. LAMPS	INCAND. L.E.D.	OPERATION		
SIGNAL (RED)	14	135	17	0.50	119.0
SIGNAL (YELLOW)	14	135	25	0.25	87.5
SIGNAL (GREEN)	14	135	15	0.25	52.5
ARROW	-	135	12	0.10	-
PED. SIGNAL	2	90	25	1.00	50.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					434.0

ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHALMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

CONSTRUCTION NOTE:
① REMOVE EXISTING SIGNAL HEADS AND REPLACE EXISTING 14 FOOT PAINTED POST. INSTALL NEW LED SIGNAL HEADS ON NEW 14 FOOT GALVANIZED STEEL POST. REUSE EXISTING TYPE "A" CONCRETE FOUNDATION AND EXISTING CABLES.



NOTE:
THE EXISTING CONTROLLER IS AN EAGLE EPAC 300 IN A TYPE IV CABINET.



FILE NAME = 60VB0-095-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

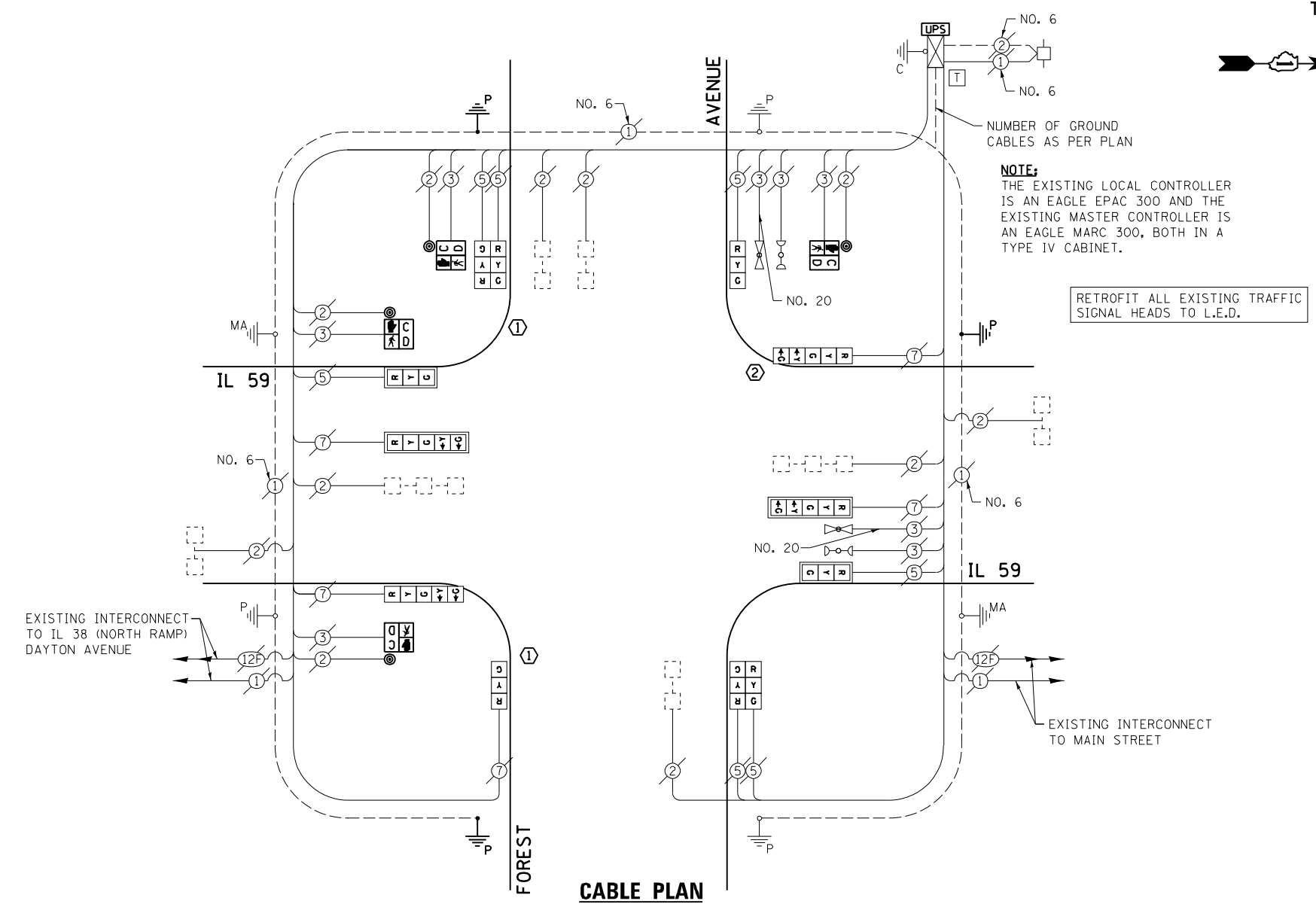
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE IL 59 AT JAMES AVENUE			
SCALE: NONE	SHEET	OF SHEETS	STA. TO STA.

F.A. RTE. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 95
			CONTRACT NO. 60VB0	
ILLINOIS FED. AID PROJECT				

SCHEDULE OF QUANTITIES
IL 59 AT FOREST AVENUE

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	2	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.
3.	1	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
4.	4	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
5.	4	EACH	PEDESTRIAN PUSH-BUTTON
6.	4	EACH	RELOCATE EXISTING SIGNAL HEAD
7.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
8.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
9.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
10.	2	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT
11.	2	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT
12.	2	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT
13.	2	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT
14.	2	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT



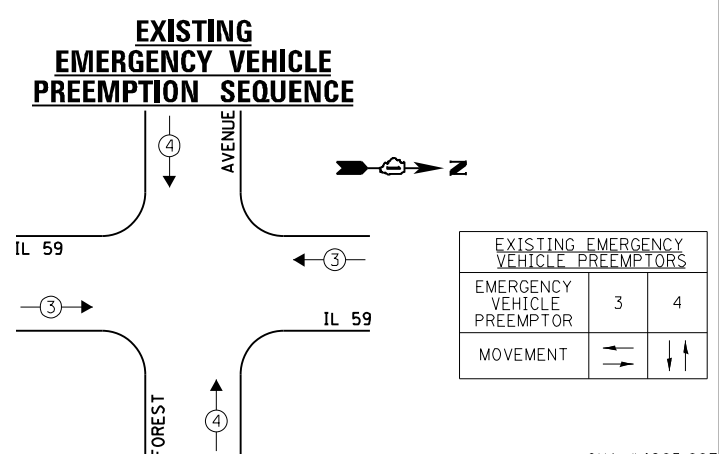
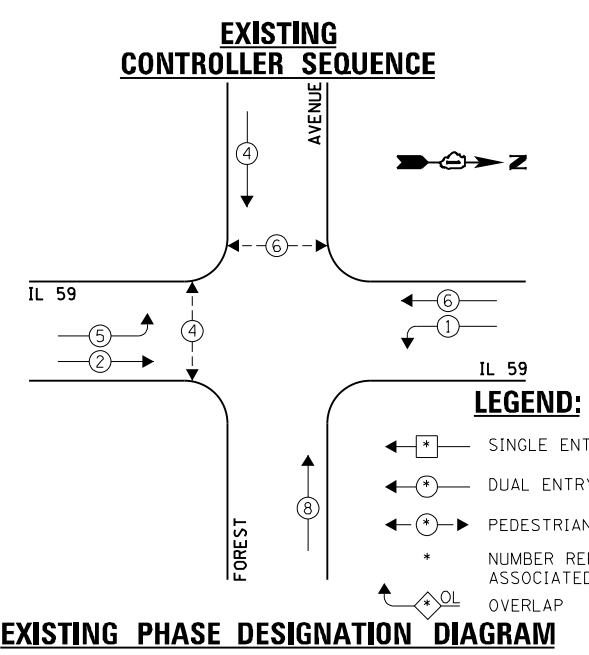
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 3 EACH TRAFFIC SIGNAL POST
- 4 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 4 EACH PEDESTRIAN PUSH-BUTTON

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE	
TYPE	NO. LAMPS	INCAND.	L.E.D.	OPERATION	
SIGNAL (RED)	12	135	17	0.50	102.0
SIGNAL (YELLOW)	12	135	25	0.25	75.0
SIGNAL (GREEN)	12	135	15	0.25	45.0
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	4	90	25	1.00	100.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					456.6

ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHALMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

- CONSTRUCTION NOTES:**
- REMOVE EXISTING SIGNAL HEADS AND REPLACE EXISTING 14 FOOT PAINTED POST. REINSTALL RETROFIT LED SIGNAL HEADS ON NEW 14 FOOT GALVANIZED STEEL POST. REUSE EXISTING TYPE "A" CONCRETE FOUNDATION AND EXISTING CABLES.
 - REMOVE EXISTING SIGNAL HEADS AND REPLACE EXISTING 16 FOOT PAINTED POST. REINSTALL RETROFIT LED SIGNAL HEADS ON NEW 16 FOOT GALVANIZED STEEL POST. REUSE EXISTING TYPE "A" CONCRETE FOUNDATION AND EXISTING CABLES.



FILE NAME = 60V80-096-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

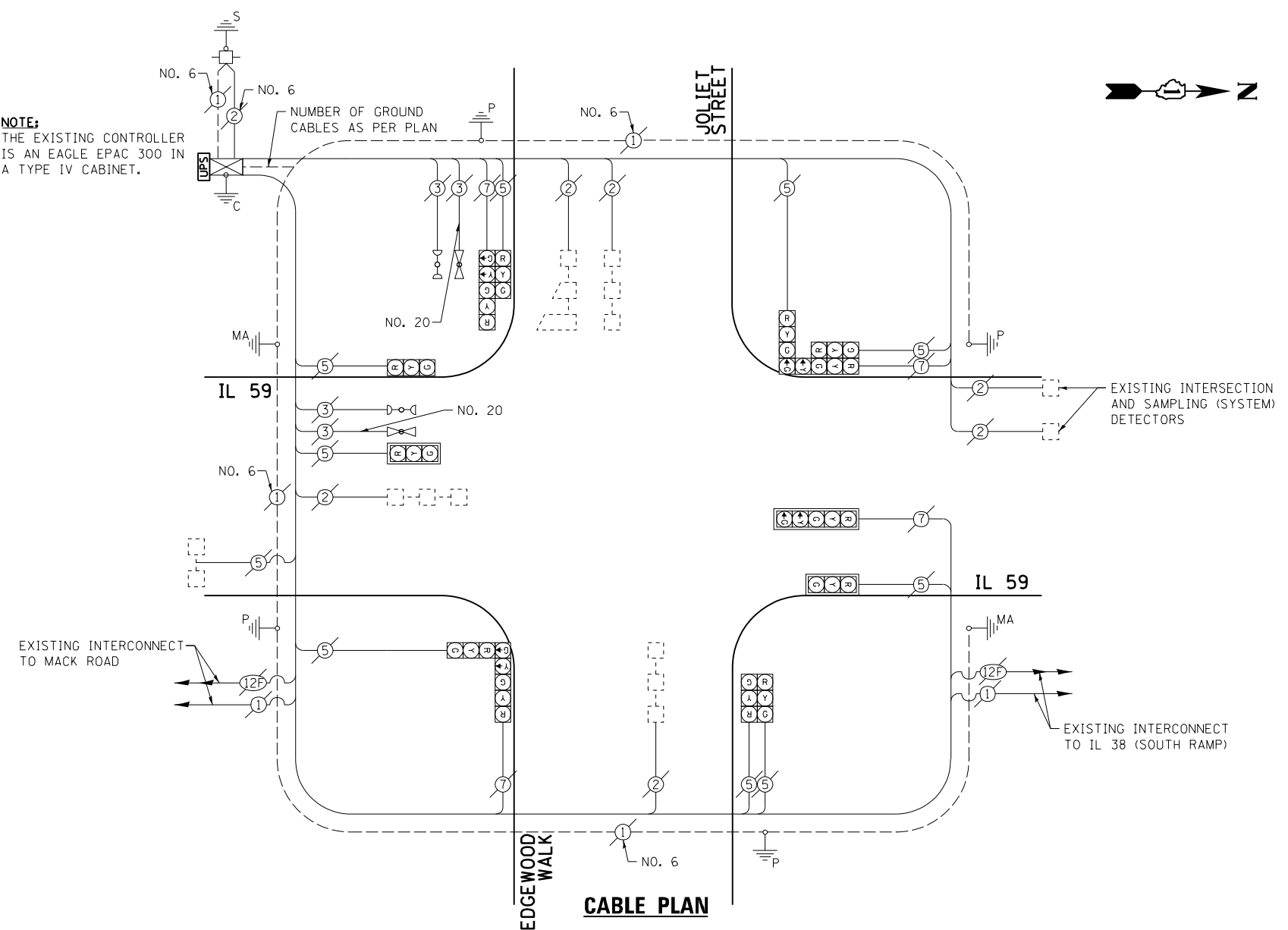
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 59 AT FOREST AVENUE

F.A. RTÉ.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIES	2012-070 I	DuPAGE	103	96
			CONTRACT NO.	60V80
ILLINOIS FED. AID PROJECT				

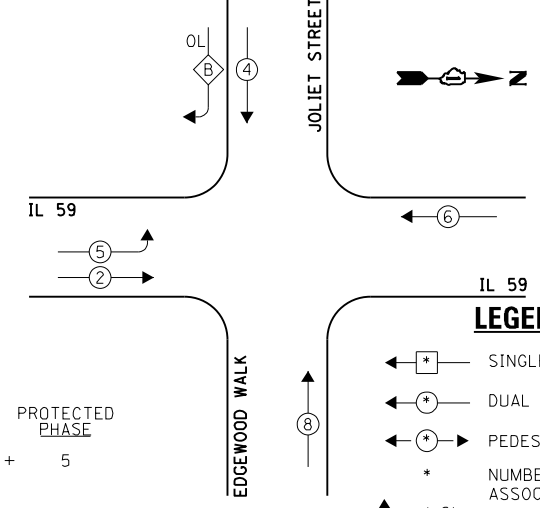
SCHEDULE OF QUANTITIES
IL 59 AT JOLIET STREET / EDGEWOOD WALK

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
3.	1	EACH	UNINTERRUPTIBLE POWER SUPPLY, SPECIAL

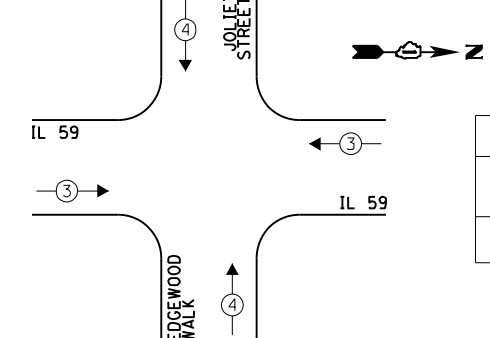
NOTE:
THE EXISTING CONTROLLER IS AN EAGLE EPAC 300 IN A TYPE IV CABINET.



EXISTING CONTROLLER SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



LEGEND:

OVERLAP LETTER B = 4 + 5
PERMISSIVE PHASE
PROTECTED PHASE

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

EXISTING PHASE DESIGNATION DIAGRAM

EXISTING EMERGENCY VEHICLE PREEMPTORS	
EMERGENCY VEHICLE PREEMPTOR	3
MOVEMENT	4

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE	
TYPE	NO. LAMPS	INCAND.	L.E.D.	OPERATION	
SIGNAL (RED)	13	135	17	0.50	110.5
SIGNAL (YELLOW)	13	135	25	0.25	81.25
SIGNAL (GREEN)	13	135	15	0.25	48.75
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	-	90	25	1.00	-
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					375.1

ENERGY COSTS - BILLED TO: VILLAGE OF WEST CHICAGO
(ADDRESS) 475 MAIN STREET
(ADDRESS) WEST CHICAGO, IL 60185
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

FILE NAME = 60V80-097-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - JPW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

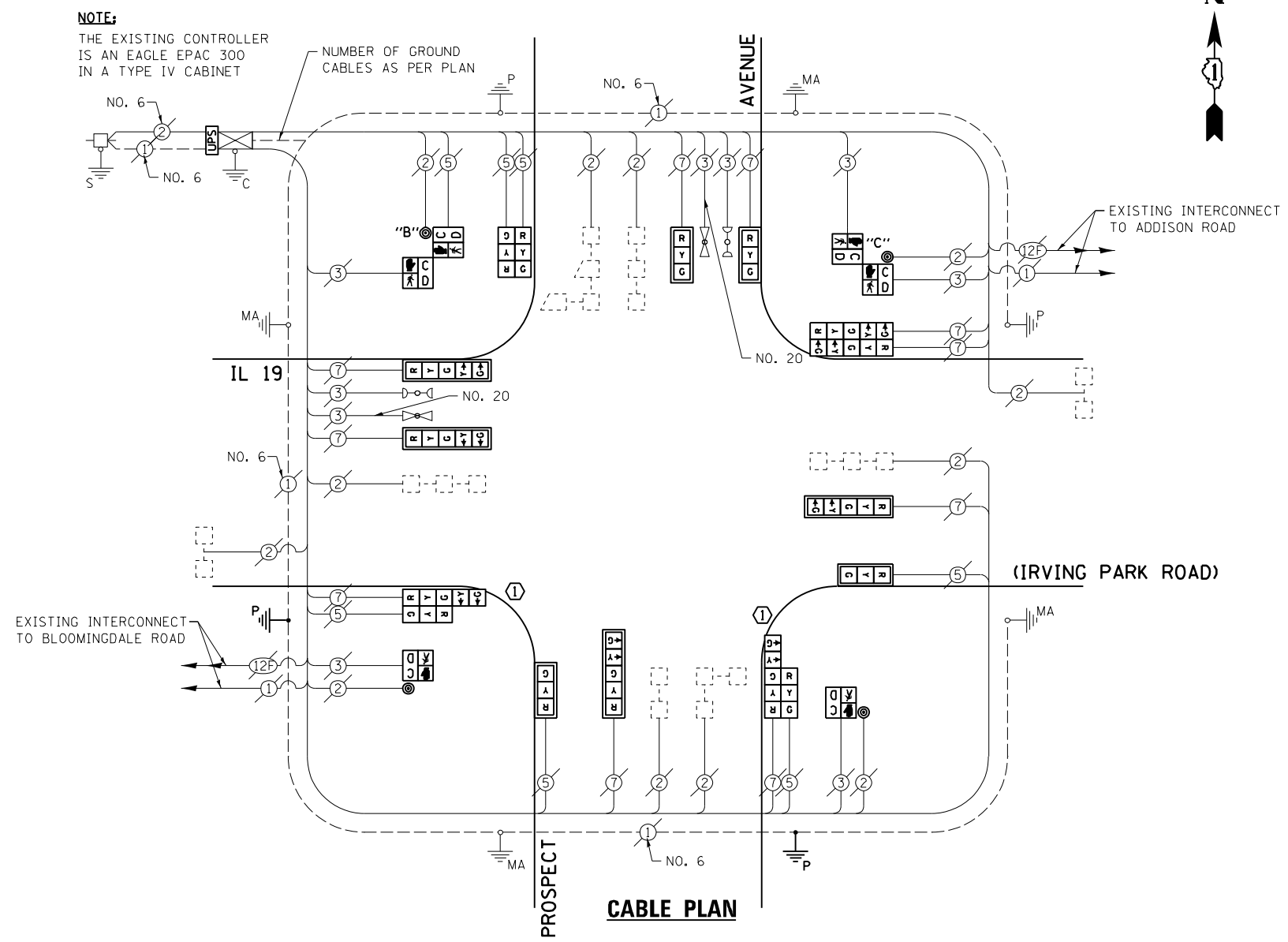
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 59 AT JOLIET STREET / EDGEWOOD WALK

F.A. RTE. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 97
SCALE: NONE			CONTRACT NO. 60V80	
ILLINOIS FED. AID PROJECT				

SCHEDULE OF QUANTITIES
IL 19 (IRVING PARK RD) AT PROSPECT AVENUE

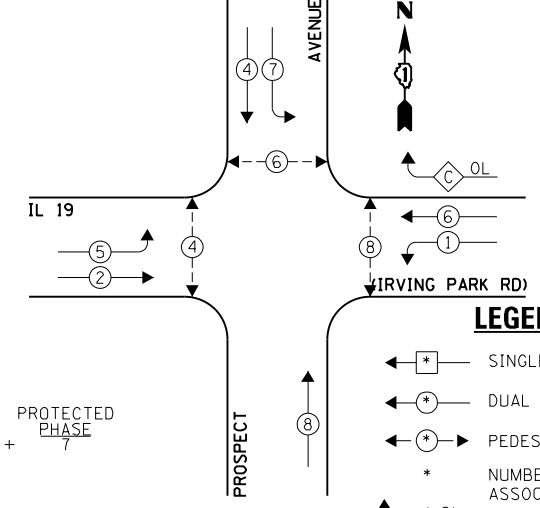
NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	2	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
3.	4	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
4.	4	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED
5.	1	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED
6.	1	EACH	SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED
7.	2	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
8.	2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
9.	2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
10.	8	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
11.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
12.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
13.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
14.	4	EACH	PEDESTRIAN PUSH-BUTTON, NON-LATCHING



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

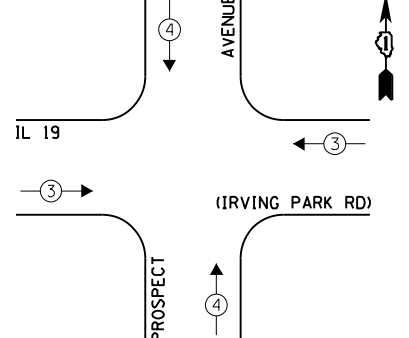
- 4 EACH TRAFFIC SIGNAL HEAD, 1-FACE, 3-SECTION
- 4 EACH TRAFFIC SIGNAL HEAD, 1-FACE, 5-SECTION
- 1 EACH TRAFFIC SIGNAL HEAD, 2-FACE, 3-SECTION
- 1 EACH TRAFFIC SIGNAL HEAD, 2-FACE, 5-SECTION
- 2 EACH TRAFFIC SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION
- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 2 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE
- 4 EACH PEDESTRIAN PUSH-BUTTON

EXISTING CONTROLLER SEQUENCE



NOTES:
PUSH BUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6.
PUSH BUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8.

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTORS	
EMERGENCY VEHICLE PREEMPTOR	3
MOVEMENT	4

EXISTING PHASE DESIGNATION DIAGRAM

CONSTRUCTION NOTE:
① REMOVE EXISTING SIGNAL HEADS AND REPLACE EXISTING 16 FOOT PAINTED POST. INSTALL NEW LED SIGNAL HEADS ON NEW 16 FOOT GALVANIZED STEEL POST. REUSE EXISTING TYPE "A" CONCRETE FOUNDATION AND EXISTING CABLES.

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE	
TYPE	NO. LAMPS	INCAND. L.E.D.	OPERATION		
SIGNAL (RED)	16	135	17	0.50	136.0
SIGNAL (YELLOW)	16	135	25	0.25	100.0
SIGNAL (GREEN)	16	135	15	0.25	60.0
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	6	90	25	1.00	150.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					590.2

ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHALMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

FILE NAME = 60V80-098-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:20	DRAWN - JPW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 19 (IRVING PARK RD) AT PROSPECT AVENUE
SCALE: NONE SHEET OF SHEETS STA. TO STA.

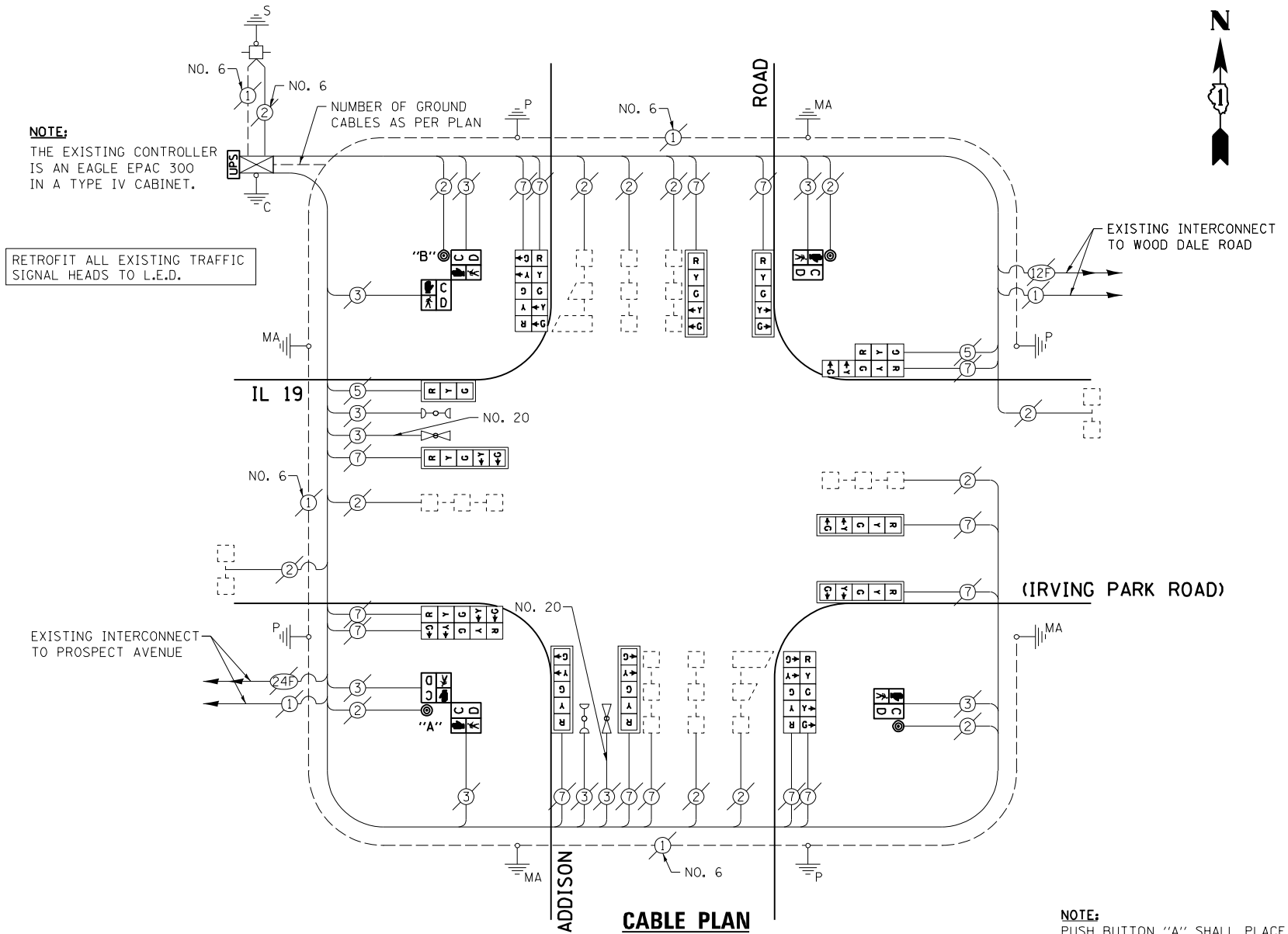
F.A. RTÉ. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 98
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60V80	

SCHEDULE OF QUANTITIES
IL 19 (IRVING PARK RD) AT ADDISON ROAD

NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
3.	2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
4.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
5.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
6.	1	EACH	UNINTERRUPTABLE POWER SUPPLY, SPECIAL
7.	1	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED, RETROFIT
8.	1	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT
9.	7	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT
10.	3	EACH	SIGNAL HEAD, LED, 2 FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT
11.	4	EACH	PEDESTRIAN PUSH-BUTTON, NON-LATCHING

NOTE:
THE EXISTING CONTROLLER IS AN EAGLE EPAC 300 IN A TYPE IV CABINET.

RETROFIT ALL EXISTING TRAFFIC SIGNAL HEADS TO L.E.D.

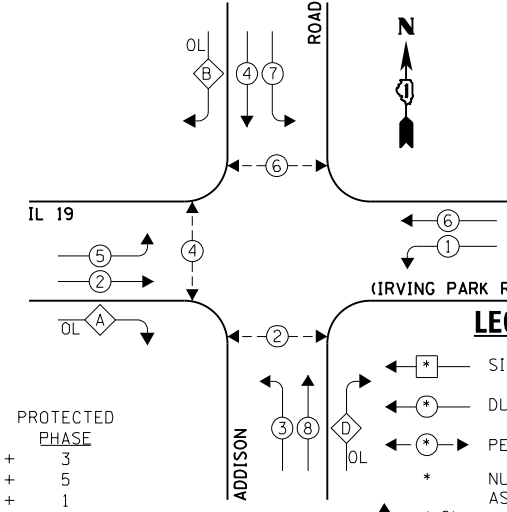


THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

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

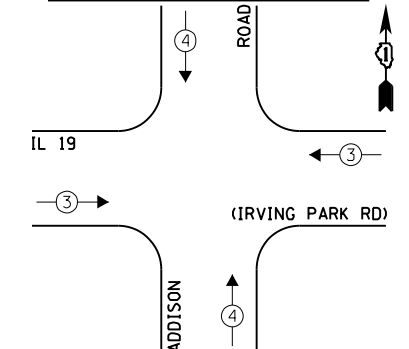
NOTE:
PUSH BUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4.
PUSH BUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6.

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTORS	
EMERGENCY VEHICLE PREEMPTOR	3
MOVEMENT	4

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE	OPERATION		
SIGNAL (RED)	16	135	17	0.50	136.0
SIGNAL (YELLOW)	16	135	25	0.25	100.0
SIGNAL (GREEN)	16	135	15	0.25	60.0
ARROW	28	135	12	0.10	33.6
PED. SIGNAL	6	90	25	1.00	150.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					604.6

ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHALMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

FILE NAME = 60V80-099-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:200	DRAWN - JPW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 19 (IRVING PARK RD) AT ADDISON ROAD
SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 99
			CONTRACT NO. 60V80	
ILLINOIS FED. AID PROJECT				

GHA #4085.887

SCHEDULE OF QUANTITIES
IL 19 (IRVING PARK RD) AT WOOD DALE ROAD

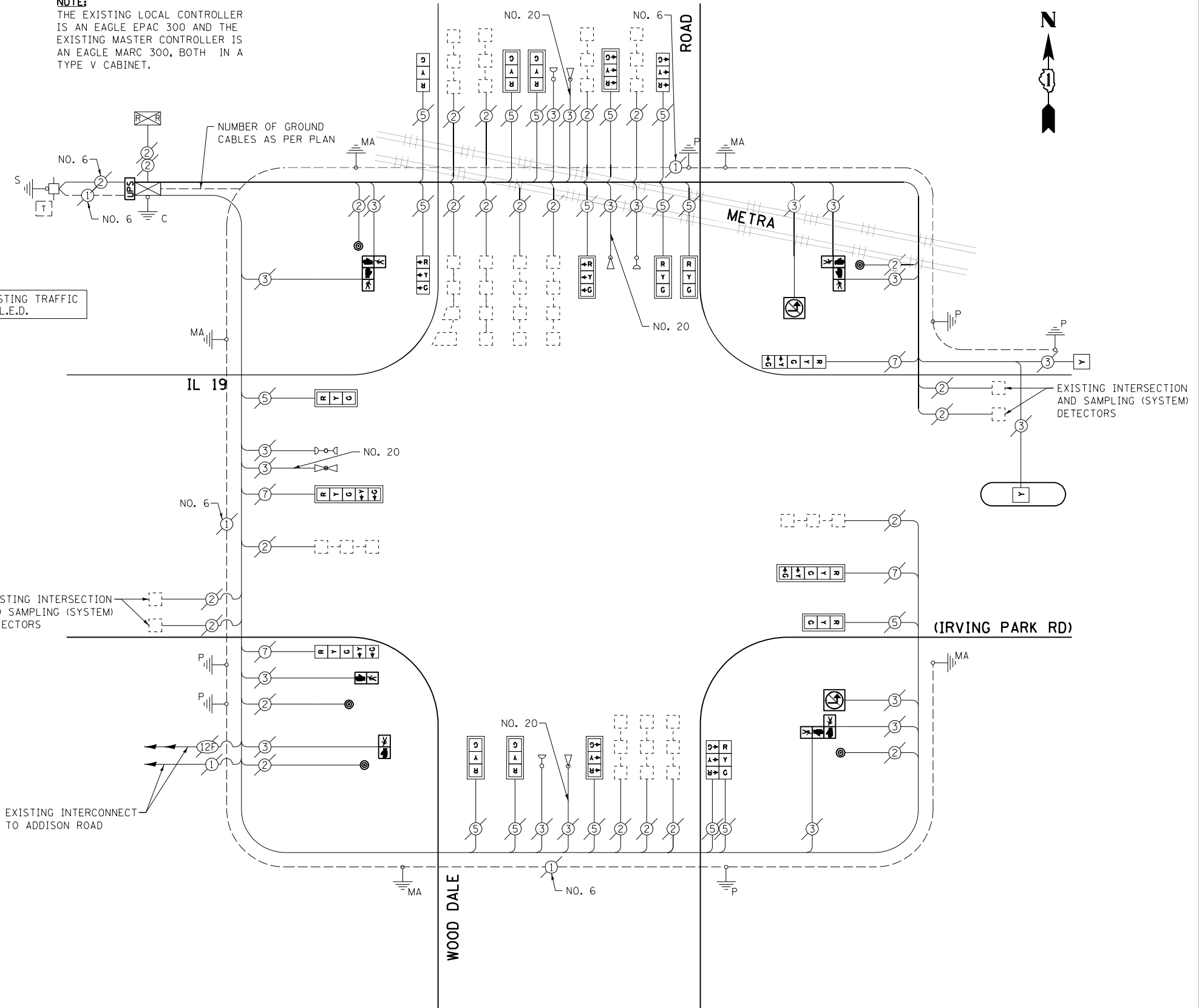
NO.	QUANT.	UNIT	DESCRIPTION
1.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED
3.	3	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED
4.	1	EACH	MODIFY EXISTING CONTROLLER CABINET
5.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
6.	1	EACH	UNINTERRUPTIBLE POWER SUPPLY, SPECIAL
7.	3	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT
8.	11	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT
9.	2	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT
10.	1	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT
11.	2	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT
12.	5	EACH	PEDESTRIAN PUSH-BUTTON, NON-LATCHING

NOTE:
THE EXISTING LOCAL CONTROLLER IS AN EAGLE EPAC 300 AND THE EXISTING MASTER CONTROLLER IS AN EAGLE MARC 300, BOTH IN A TYPE V CABINET.

RETROFIT ALL EXISTING TRAFFIC SIGNAL HEADS TO L.E.D.

EXISTING INTERSECTION AND SAMPLING (SYSTEM) DETECTORS

EXISTING INTERCONNECT TO ADDISON ROAD



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.

- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 3 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE
- 5 EACH PEDESTRIAN PUSH-BUTTON
- 2 EACH ILLUMINATED SIGN

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE		OPERATION	
		INCAND.	L.E.D.		
SIGNAL (RED)	20	135	17	0.50	170.0
SIGNAL (YELLOW)	22	135	25	0.25	137.5
SIGNAL (GREEN)	20	135	15	0.25	75.0
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	8	90	25	1.00	200.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	1	-	25	1.00	25.0
ILLUMINATED SIGN	2	-	25	0.05	2.5
TOTAL =					719.6

ENERGY COSTS - BILLED TO: IL DEPT. OF TRANSPORTATION
(ADDRESS) 201 W. CENTER COURT
(ADDRESS) SCHALMBURG, IL 60196-1096
ENERGY SUPPLY - CONTACT: JOE STACHO
PHONE: (630) 424-5704
COMPANY: CQM-ED

CABLE PLAN

FILE NAME = 60V80-100-ts.dgn	USER NAME = zwallsten	DESIGNED - JRD	REVISED -
Default	PLOT SCALE = 1:200	DRAWN - JPW	REVISED -
	PLOT DATE = 12/20/2012	CHECKED - KLB	REVISED -
		DATE - 12-20-12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION
DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL 19 (IRVING PARK RD) AT WOOD DALE ROAD

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTÉ. VARIES	SECTION 2012-070 I	COUNTY DuPAGE	TOTAL SHEETS 103	SHEET NO. 100
			CONTRACT NO. 60V80	
ILLINOIS FED. AID PROJECT				

GHA #4085.887

EXISTING SEQUENCE OF OPERATIONS

MOVEMENT																																							F H													
	1+5				1+6			2+5			2+6				3+7							3+8					4+7								4+8																	
INTERVAL	1	2	3	4	5	6	7	8	9	10	11	12	13A	13B	14	15A	15B	15C	15D	16A	16B	16C	16D	17A	17B	18	19	20A	20B	21A	21B	22	23	24A	24B	24C	24D	25A	25B	25C	25D	26	27	28A	28B	28C	28D					
CHANGE TO					Ø	Ø	2+6	Ø	Ø	2+6			3+7 3+8 4+7 4+8			1+5 1+6 2+5 2+6 4+8	3+8							4+7		Ø	Ø	1+5 1+6 2+5 2+6	4+8		Ø	Ø	1+5 1+6 2+5 2+6				4+8						1+5 1+6 2+5 2+6									
IL RTE. 19 (IRVING PARK RD.) END MAST ARM AND FAR LEFT SIGNALS	E/B	R ← G	R ← Y	R ← G	R ← Y	R	R	R	G ← G	G ← G	G ← Y	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R		
IL RTE. 19 (IRVING PARK RD.) FAR RIGHT SIGNALS	E/B	R	R	R	R	R	R	R	G	G	G	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R		
IL RTE. 19 (IRVING PARK RD.) END MAST ARM AND FAR LEFT SIGNALS	W/B	R ← G	R ← G	R ← Y	R ← Y	G ← G	G ← G	G ← Y	R	R	R	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R		
IL RTE. 19 (IRVING PARK RD.) FAR RIGHT SIGNALS	W/B	R	R	R	R	G	G	G	R	R	R	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R		
WOOD DALE ROAD (NORTH OF TRACKS) END MAST ARM AND NEAR LEFT SIGNALS	S/B	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←G	←Y	←R	←R	←R	←Y	←R	←R	←R	←G	←G	←R	←R	←R	←R	←R	←R	←G	←G	←Y	←R	←R	←G	←G	←Y	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R		
WOOD DALE ROAD (NORTH OF TRACKS) MID AND NEAR RIGHT SIGNALS	S/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	G	Y	R	R	R	R	G	G	G	G	G	G	Y	R	R	R	R		
WOOD DALE ROAD (SOUTH OF TRACKS) END MAST ARM AND FAR LEFT SIGNALS	S/B	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←G	←G	←G	←Y	←R	←G	←G	←Y	←R	←G	←G	←R	←R	←R	←R	←R	←R	←G	←G	←G	←G	←Y	←R	←G	←G	←Y	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	
WOOD DALE ROAD (SOUTH OF TRACKS) MID AND FAR RIGHT MAST ARM SIGNALS	S/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	G	G	G	Y	R	R	R	G	G	G	G	G	G	G	G	Y	R	R	
WOOD DALE ROAD END MAST ARM AND FAR LEFT SIGNALS	N/B	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←G	←Y	←R	←R	←R	←G	←G	←G	←G	←Y	←R	←G	←G	←Y	←R	←Y	←R	←G	←G	←Y	←R	←Y	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	
WOOD DALE ROAD MID & FAR RT MAST ARM AND NEAR RT SIGNALS	N/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	G	Y	R	G	G	R	R	R	R	R	R	R	R	R	R	R	R	R	R
PEDESTRIAN SIGNAL CROSSING WOOD DALE ROAD ON NORTHSIDE OF IL RTE. 19		H	H	H	H	* P	**FH	H	H	H	H	* P	**FH	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H		
PEDESTRIAN SIGNAL CROSSING WOOD DALE ROAD ON SOUTHSIDE OF IL RTE. 19		H	H	H	H	H	H	H	* P	**FH	H	* P	**FH	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H		
PEDESTRIAN SIGNAL CROSSING IL RTE. 19 ON EAST SIDE OF WOOD DALE ROAD		H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	* P	**FH	H	H	H	H	H	H	H	H	H	H	H	H	H	H	* P	**FH	H	H	H	H	H	H		
PEDESTRIAN SIGNALS CROSSING IL RTE. 19 ON WESTSIDE OF WOOD DALE ROAD		H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	* P	**FH	H	H	H	H	H	H	H	H	H	H	H	H	* P	**FH	H	H	H	H	H	H
IL RTE 19 (IRVING PARK RD) EAST SIDE OF TRACKS) FLASHING BEACONS	W/B	FL Y	FL Y	FL Y	FL Y	DARK	DARK	DARK	FL Y	FL Y	FL Y	DARK	DARK	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y		

NOTE: PHASE 2 AND 6 SHALL BE ON RECALL

* TO APPEAR ONLY UPON PUSH BUTTON ACTUATION
 ** FLASHING HAND IS TO TERMINATE AT THE COMPLETION OF THE PEDESTRIAN INTERVAL CLEARANCE
 Ø THIS PERSON (P) OR FLASHING HAND INTERVAL MAY FINISH TIMING IN THE BIDIRECTIONAL STRAIGHT THROUGH MOVEMENT IF THE LEFT ARROW TIME IS NOT SUFFICIENT TO COMPLETE PERSON (P) OR FLASHING HAND INTERVALS

 P = PERSON
 FH = FLASHING HAND INTERVAL
 H = HAND
 FL Y = FLASHING YELLOW

FOR INFORMATION ONLY

EXISTING RAILROAD PREEMPTION SEQUENCE OF OPERATION

															PREEMPTOR NUMBER 3	PREEMPTOR NUMBER 4	PREEMPTOR NUMBER 5	PREEMPTOR NUMBER 2								
CHANGE FROM NORMAL SEQUENCE OF OPERATIONS INTERVAL NUMBER	1	5	8	11	14	18	22	26																		
CHANGE FROM EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER																2	3	4								
RAILROAD PREEMPTION INTERVAL	1A	1B	1C	1D	1E	1F	1G	1H	1J	1K	1L	1M	1N	1P	1Q	1R	1S	1T	1U	1V	1W	2	3	4	5	CLEAR TO NORMAL SEQUENCE
CHANGE TO	Z	1C	2	1E	2	1G	2	1J	2	1L	2	1N	2	1O	2	1S	2	1U	2	1W	2	3	4	5		
IL. RTE. 19 (IRVING PARK RD) END MAST ARM AND FAR LEFT SIGNALS	E/B	R ← Y	R	R	Y	R	Y	R	R	R	R	R	R	R	R	Y	R	R	R	R	R	R	R	R	R	△
IL. RTE. 19 (IRVING PARK RD.) FAR RIGHT SIGNAL	E/B	R	R	R	Y	R	Y	R	R	R	R	R	R	R	R	Y	R	R	R	R	R	R	R	R	R	△
IL. RTE. 19 (IRVING PARK RD.) END MAST ARM AND FAR LEFT SIGNALS	W/B	R ← Y	Y	R	R	R	Y	R	R	R	R	R	R	R	R	Y	R	R	R	R	R	R	R	R	← G	△
IL. RTE. 19 (IRVING PARK RD.) FAR RIGHT SIGNAL	W/B	R	Y	R	R	R	Y	R	R	R	R	R	R	R	R	Y	R	R	R	R	R	R	R	R	G	△
WOOD DALE ROAD (NORTH OF TRACKS) END MAST ARM AND NEAR LEFT SIGNALS	S/B	← R	← R	← R	← R	← R	← R	← Y	← R	← R	← R	← Y	← R	← R	← R	← R	← R	← Y	← R	← R	← R	← R	← R	← R	← R	△
WOOD DALE ROAD (NORTH OF TRACKS) MID AND NEAR RIGHT SIGNALS	S/B	R	R	R	R	R	R	R	R	R	R	Y	R	Y	R	R	R	Y	R	R	R	R	R	R	R	△
WOOD DALE ROAD (SOUTH OF TRACKS) END MAST ARM AND FAR LEFT SIGNALS	S/B	← R	← R	← R	← R	← R	← R	← G	← G	← R	← R	← G	← G	← R	← R	← R	← R	← G	← G	← R	← R	← G	← Y	← R	← R	△
WOOD DALE ROAD (SOUTH OF TRACKS) MID AND FAR RIGHT MAST ARM SIGNALS	S/B	R	R	R	R	R	R	R	R	R	R	G	G	G	G	R	R	G	G	R	R	G	Y	R	R	△
WOOD DALE ROAD END MAST ARM AND FAR LEFT SIGNALS	N/B	← R	← R	← R	← R	← R	← R	← Y	← R	← Y	← R	← R	← R	← R	← R	← R	← R	← R	← R	← Y	← R	← R	← R	← R	← R	△
WOOD DALE ROAD MID AND FAR RIGHT MAST ARM AND NEAR RT SIGNALS	N/B	R	R	R	R	R	R	R	R	Y	R	R	R	Y	R	R	R	R	R	Y	R	R	R	R	R	△
PEDESTRIAN SIGNAL CROSSING WOOD DALE ROAD ON NORTHSIDE OF IL. RTE. 19		H	FH	H	H	H	FH	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	△
PEDESTRIAN SIGNAL CROSSING WOOD DALE ROAD ON SOUTH SIDE OF IL. RTE. 19		H	H	H	FH	H	FH	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	△
PEDESTRIAN SIGNAL CROSSING IL. RTE. 19 ON EAST SIDE OF WOOD DALE ROAD		H	H	H	H	H	H	H	H	FH	H	H	H	FH	H	H	H	H	H	H	H	H	H	H	H	△
PEDESTRIAN SIGNAL CROSSING IL. RTE. 19 ON WEST SIDE OF WOOD DALE ROAD		H	H	H	H	H	H	H	H	H	H	FH	H	FH	H	H	H	H	H	H	H	H	H	H	H	△
INTERNALLY ILLUMINATED NO LEFT TURN SIGNS		NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	△
IL RTE 19 (IRVING PARK RD) (EAST SIDE OF TRACKS) FLASHING BEACONS	W/B	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	FL Y	△

RAILROAD PREEMPTION IS TO OVERRIDE THE EMERGENCY VEHICLE SYSTEM HOLD

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

NRT = "NO RIGHT TURN" OR FLH = FLASHING "DON'T WALK"
 NLT = "NO LEFT TURN" OR H = "DON'T WALK"

FOR INFORMATION ONLY

