STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION PLANS FOR

FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROPOSED FEDERAL AID HIGHWAY

F.A.P ROUTE 339 /F.A.U. ROUTE 3514 (ALGONQUIN ROAD) IL ROUTE 53 TO ARLINGTON HEIGHTS ROAD

STREET LIGHTING

SECTION 09-00100-00-LT PROJECT NO: ARA-M-9003(472)

CITY OF ROLLING MEADOWS

VILLAGE OF ARLINGTON HEIGHTS

COOK COUNTY BEGIN PROJECT

BEGIN PROJECT

STA. 501 + 80



CENTRAL RD **(62)** WHITE OAK ST

> T 41N, R 11E (ELK GROVE TOWNSHIP) BEGIN PROJECT 3rd P.M. LOCATION MAP

09-00100-00-LT COOK 64 1 339 ILLINOIS CONTRACT NO. 63426 FED. ROAD DIST. NO. 1

SECTION



STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS Firel A.Va, & Fred A. Vogt CITY OF ROLLING MEADOWS, DIRECTOR OF PUBLIC WORKS ULLY 14, 2010

CHEUSTONIATE
DISTRICT'S ENGINEER OF LOCAL ROAD & STREETS JULY 15, 2010 Diane M. O'Kenfor of Disputs Region 1 ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

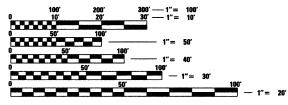
TRAFFIC DATA

ALGONQUIN ROAD 2006 ADT - 32,700 POSTED SPEED LIMIT - 35 MPH **DESIGN DESIGNATION: PRINCIPAL ARTERIAL**

THESE IMPROVEMENTS ARE LOCATED WITHIN THE CITY OF ROLLING MEADOWS AND VILLAGE OF ARLINGTON HEIGHTS

> 2006 ADT - 35,000 POSTED SPEED LIMIT - 40 MPH DESIGN DESIGNATION: PRINCIPAL ARTERIAL

NEW WILKE ROAD 2006 ADT - 20,200 POSTED SPEED LIMIT - 30 MPH **DESIGN DESIGNATION: URBAN COLLECTOR**



ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-0123

Ciorba Group, Inc.

DESIGN FIRM REGISTRATION NUMBER

184-001016

CONSULTING ENGINEERS
SUITE 402, 5507 NORTH CUMBERLAND AVE CHICAGO, ILLINOIS 60656 :: (773) 775-4009

CONTRACT NO. 63426

OR 811

END PROJECT 90 STA. 548 + 63 END PROJECT STA. 226 + 70 **63** ¥ 68) (58) GOLF RD (53) ✓LICENSED¹

GROSS AND NET LENGTH OF PROJECT = 21,750 FT = 4.12 MI

1" = 2,000'

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LIST OF HIGHWAY STANDARDS

000001-05 STANDARD SYMBOLS. ABBREVIATIONS AND PATTERNS

701602-04 URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE

701606-06 URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN

701801-04 LANE CLOSURE MULTILANE 1W OR 2W CROSSWALK OR SIDEWALK CLOSURE

701901-01 TRAFFIC CONTROL DEVICES

814001-02 HANDHOLES

GENERAL NOTES

ALL CONSTRUCTION SHALL BE COMPLETED IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS AS WELL AS:

ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AS ADOPTED JANUARY 1, 2007.

ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (LATEST EDITION IN EFFECT ON THE DATE OF INVITATION FOR BIDS)

NATIONAL ELECTRIC CODE, 2008 EDITION.

DISTRICT ONE RECURRING SPECIAL PROVISIONS FOR ROADWAY LIGHTING, ADOPTED: JANUARY 1, 2010.

2. ALL UNDERGROUND UTILITY LOCATIONS, INCLUDING SANITARY SEWERS, STORM SEWERS, WATER MAINS, AND THEIR SERVICE LINES SHOWN ON THE PLANS ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO HAVE THE RESPECTIVE UTILITY COMPANIES FIELD-LOCATE ALL UTILITIES, ASCERTAIN THEIR STATUS AND ADJUST OR RELOCATE THESE UTILITIES, AS NECESSARY, PRIOR TO STARTING CONSTRUCTION. THIS WORK SHALL BE CONSIDERED INCLUDED IN THE CONTRACT, THE CONTRACTOR SHALL BE CONSIDERED INCLUDED BY THE CONTRACTOR STALL NOTIFY ALL PUBLIC AND PRIVATE UTILITIES BEFORE STARTING CONSTRUCTION, INCLUDING, BUT NOT LIMITED TO:

NICOR GAS 1844 FERRY ROAD NAPERVILLE, IL 60563 (630) 388-2362

COMCAST 688 INDUSTRIAL DRIVE ELMHURST, IL 60126

1500 FRANKLIN BLVD LIBERTYVILLE, IL 60048 (630) 437-2236

2004 MINER STREET DES PLAINES, IL 60016

(847) 759-5581

CITY OF ROLLING MEADOWS PUBLIC WORKS 3900 BERDNICK STREET ROLLING MEADOWS, IL 60008

VILLAGE OF ARLINGTON HEIGHTS PUBLIC WORKS 33 SOUTH ARLINGTON HEIGHTS ROAD ARLINGTON HEIGHTS, IL 60005

- 3. THE MUNICIPALITIES' DEPARTMENT OF PUBLIC WORKS SHALL BE NOTIFIED AT LEAST 48 HOURS PRIOR TO COMMENCING CONSTRUCTION.
- 4. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO COMMENCING CONSTRUCTION.
- 5. THE DIMENSIONS AND LOCATIONS OF UTILITY FACILITIES AS SHOWN ON THESE PLANS ARE AN ESTIMATE FOR DESIGN PURPOSES ONLY, AND ARE NOT INTENDED FOR USE AS FIELD LOCATIONS FOR CONSTRUCTION. BEFORE BEGINNING ANY DIGGING OR EXCAVATION, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT J.U.L.I.E. AT 1-800-892-0123 TO VERIFY UTILITY LOCATIONS.
- 6. THE CONTRACTOR SHALL MAINTAIN A SET OF CONSTRUCTION RECORD DRAWINGS NOTING ALL CHANGES TO THE PLANS AND THE LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES ENCOUNTERED. A MYLAR REPRODUCIBLE AS-BUILT DRAWING AND TWO (2) PAPER SETS MUST BE SUBMITTED TO EACH DEPARTMENT OF PUBLIC WORKS FOR REVIEW AND APPROVAL UPON COMPLETION OF THE PROJECT. THIS WORK WILL BE CONSIDERED INCLUDED IN THE COST OF MOBILIZATION.
- 7. ANY SIGN LOCATED IN THE PUBLIC RIGHT-OF-WAY WHICH INTERFERES WITH THE CONSTRUCTION OF THE PROPOSED LIGHTING SYSTEM SHALL BE REMOVED AND RE-ERECTED. ALL WORK INVOLVING SIGN REMOVAL AND RE-ERECTION SHALL BE GOVERNED BY THE FOLLOWING REQUIREMENTS:
- A. A SIGN LOG SHALL BE CREATED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. A COPY SHALL BE GIVEN TO THE ENGINEER FOR REVIEW. UPON REVIEW BY THE ENGINEER, THE CONTRACTOR SHALL PROVIDE A COPY TO IDOT AND EACH MUNICIPALITY.
- B. REMOVAL AND RE-ERECTION SHALL BE COORDINATED WITH IDOT.
- C. SIGNS SHALL NOT BE MOVED UNTIL PROGRESS OF WORK NECESSITATES IT.
- EVERY SIGN REMOVED MUST BE RE-ERECTED AT A TEMPORARY LOCATION IN A WORKMANLIKE MANNER AND BE VISIBLE TO TRAFFIC FOR WHICH IT WAS INTENDED. ALL SUCH SIGNS MUST BE MAINTAINED STRAIGHT AND CLEAN FOR THE DURATION OF THE
- E. ALL SIGNS SHALL BE RE-ERECTED IN THE ORIGINAL LOCATION AS THE IMPROVEMENTS
- F. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY SIGNS DAMAGED BY HIS/HER CONSTRUCTION ACTIVITIES AND WILL REPLACE THEM AT NO COST TO THE MUNICIPALITY. THIS WORK SHALL BE INCLUDED IN THE CONTRACT.
- G. STREET SIGNS TEMPORARILY RELOCATED DURING CONSTRUCTION MAY BE ATTACHED TO THE NEW STREET LIGHTS WITH THE APPROVAL OF THE MUNICIPALITY.

- 8. THE CONTRACTOR WILL CONFINE HIS OPERATIONS TO WITHIN THE AREAS DESIGNATED BY THE ENGINEER IN THE FIELD. DAMAGE TO PROPERTY OUTSIDE OF THESE LIMITS WILL BE RESTORED TO THE CONDITION THAT EXISTED PRIOR TO THE PROJECT AND SHALL BE INCLUDED IN THE CONTRACT. ANY AREAS WITHIN THE MUNICIPALITY RIGHT OF WAY SHALL BE REPLACED WITH SOD.
- 9. THE CONTRACTOR SHALL PROTECT ALL TREES AND SHRUBS ADJACENT TO THE PROJECT DURING CONSTRUCTION OPERATIONS, IN ACCORDANCE WITH SECTION 201 OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS AND AS INDICATED ON THE PLAN. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT BE CONSIDERED INCLUDED IN THE CONTRACT.
- 10. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN SATISFACTORY DRAINAGE OF THE PROJECT SITE AND THOSE AREAS THAT PRESENTLY DRAIN THROUGH THE PROJECT SITE AT ALL TIMES DURING THE CONSTRUCTION PERIOD. THE COST OF PROVIDING, INSTALLING AND MAINTAINIG THESE MEASURES SHALL BE INCLUDED IN THE COST OF THE CONTRACT.
- 11. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CLEAN ALL DRAINAGE STRUCTURES OF ALL DEBRIS ACCUMULATED DURING CONSTRUCTION OPERATIONS. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCLUDED IN THE CONTRACT.
- 12. NO CONSTRUCTION MATERIALS OR EQUIPMENT SHALL BE STORED IN OR MOVED THROUGH THE DRIPLINE OF ANY PARKWAY TREE. IF THIS CLEARANCE CANNOT BE MAINTAINED, THE FORESTRY SUPERINTENDANT MUST BE NOTIFIED PRIOR TO CONSTRUCTION.
- 13. THE RESIDENT ENGINEER SHALL CONTACT WALTER CZARNY AT 847-715-8419AT LEAST (2) WEEKS PRIOR TO PLACING PERMANENT PAVEMENT MARKINGS.

ROADWAY LIGHTING NOTES

- 1. THE ATTENTION OF THE CONTRACTOR IS DIRECTED TO ARTICLE 801.04 OF THE STANDARD SPECIFICATIONS REGARDING THE PROPOSED LOCATIONS OF THE LIGHTING SYSTEM. ADDITIONALLY, THE UNIT DUCT ROUTING SHOWN ON THE PLANS IS MAINLY INTENDED TO SHOW ELECTRICAL CIRCUITRY. AN EFFORT HAS BEEN MADE TO AVOID UTILITY CONFLICTS BUT THE EXACT LOCATION OF ELECTRICAL CABLES AND CONDUITS SHOULD BE APPROVED BY THE ENGINEER AFTER THE UNDERGROUND UTILITIES HAVE BEEN LOCATED BY ITS OWNER.
- 2. ALL PROPOSED LIGHT POLE LOCATIONS SHALL BE STAKED BY THE CONTRACTOR
 AND BE APPROVED BY THE MUNICIPALITIES PRIOR TO EXCAVATION. NO ADDITIONAL COMPENSATION SHALL BE PROVIDED FOR THIS STAKING.
- 3. THE CONTRACTOR SHALL KEEP DEVIATIONS FROM THE UNIT DUCT ROUTING SHOWN ON THE PLANS TO A MINIMUM. MAJOR DEVIATIONS SHALL BE REPORTED TO AND APPROVED BY THE ENGINEER BEFORE INSTALLATION.
- 4. SHORT RUNS OF UNIT DUCT (FOR ROADWAY LIGHTING) MAY BE TRENCHED AT THE DISCRETION OF THE MUNICIPALITY, NO ADDITIONAL COMPENSATION SHALL BE PROVIDED FOR TRENCHING THE UNIT DUCT.
- WEEKDAY CONSTRUCTION ACTIVITY THAT WILL NECESSITATE LANE CLOSURES IN ACCORDANCE WITH STANDARD 701606 OR STANDARD 701801 MUST BE LIMITED TO THE HOURS BETWEEN 9:00 A.M. AND 3:00 P.M. IN ORDER TO AVOID THE PEAK RUSH
- 6. THE REMOVAL LIMITS OF SIDEWALK SHOULD BE LOCATED AT AN EXISTING JOINT.
- 7. REMOVAL OF THE EXISTING LIGHTING SYSTEM SHALL NOT BEGIN BEFORE THE PROPOSED LIGHTING SYSTEM IS OPERATIONAL. THE CONTRACTOR SHALL NOTIFY COMMONWEALTH EDISON WHEN THE PROPOSED LIGHTING SYSTEM WILL BE OPERATIONAL SO REMOVAL OF COMMONWEALTH EDISON LUMINAIRES AND MAST ARMS MAY COMMENCE.
- 8. THE ENGINEER SHALL APPROVE THE LOCATION OF ALL PUSH PITS. NO POLES SHALL BE ERECTED UNTIL THE RESPECTIVE CONCRETE FOUNDATIONS HAVE CURED. NO LINDERGROUND SPLICES ARE ALLOWED.
- 9. ALL LIGHT POLE FOUNDATIONS SHALL HAVE A MINIMUM OF TWO RACEWAYS, EVEN IF ONLY ONE UNIT DUCT CONNECTION IS SHOWN ON THE PLANS. THE ADDITION OF A THIRD RACEWAY TO A FOUNDATION SHALL BE INCLUDED IN THE COST OF THE
- 10, SPLICES TO EXISTING CONDUCTORS SHALL BE INCLUDED IN THE COST OF UNIT DUCT.
- 11. THE CONTRACTOR SHALL REQUEST THAT THE CITY/VILLAGE REMOVE BANNERS FROM THE EXISTING POLES 48 HOURS BEFORE REMOVAL OF THE POLES.
- 12. UNDERGROUND SPLICES ARE NOTE ALLOWED.

TATE OF HILIDIOIS		ALGONQUIN ROAD LIGHTIN	G IMPROVEMENTS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TATE OF ILLINOIS	IND	EX OF SHEETS, STATE STANDA	RDS & GENERAL NOTES	339	09-00100-00-LT	СООК	64	2
NT OF TRANSPORTATION			4 0			CONTRACT	NO. 63	3426
	SCALE.	SHEET NO 2 OF 64 SHEETS	AT2 OT AT2	EED DO	AD DICT NO 1 THE THOTO FOR A	ID DDO IFOT		



DESIGNED -R.IR REVISED DRAWN REVISED CHECKED JMV REVISED DATE 6/16/2010 REVISED

STA **DEPARTMEN**

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	CODE NO.	DESCRIPTION	UNIT	TOTAL QUANTITI	LIGHTING (YO30-1D
	21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	4,400	4400
	25000400	NITROGEN FERTILIZER NUTRIENT	POUND	55	55
	25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	55	55
	25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	55	55
	25200100	SODDING	SQ YD	4,400	4400
	25200200	SUPPLEMENTAL WATERING	UNIT	14	14
*	35100700	AGGREGATE BASE COURSE, TYPE A 8"	SQ YD	500	500
*	40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	45	45
*	40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	25	25
*	42300400	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH	SQ YD	250	250
*	42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	5,100	5100
*	42400800	DETECTABLE WARNINGS	SQ FT	50	50
*	44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	500	500
*	44000600	SIDEWALK REMOVAL	SQ FT	5,100	5100
*	66900205	SPECIAL WASTE DISPOSAL	CU YD	50	50
	67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	12	12
	67100100	MOBILIZATION	L SUM	1	1
	70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1	1
	70102632	TRAFFIC CONTROL AND PROTECTION, STANDARD 701602	L SUM	1	1
,	70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1 .	1
	80400100	ELECTRIC SERVICE INSTALLATION	EACH	3	3
	80400200	ELECTRIC UTILITY SERVICE CONNECTION	L SUM	1	1
	81018600	CONDUIT PUSHED, 2 1/2" DIA., GALVANIZED STEEL	FOOT	350	350
	81018700	CONDUIT PUSHED, 3" DIA., GALVANIZED STEEL	FOOT	8,400	8400
	81400100	HANDHOLE	EACH	8	8
٠	81603215	UNIT DUCT, 600V, 4-1C NO.2, 1/C NO.4 GROUND, (EPR-TYPE RHW), 1 1/2" DIA. POLYETHYLENE	FOOT	41,300	41300
	81700125	ELECTRIC CABLE IN CONDUIT, 600V (EPR-TYPE RHW) 1/C NO.	FOOT .	3,400	3400
	81700130	ELECTRIC CABLE IN CONDUIT, 600V (EPR-TYPE RHW) 1/C NO. 2	FOOT	17,000	17000
	81702170	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 2/0	FOOT	1,200	1200
	81702200	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C 250MCM	FOOT	900	900

	CODE NO.	DESCRIPTION	UNIT	TOTAL QUANTITY	LIGHTING (Y030-1D
	82102150	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 150 WATT	EACH	21	21
	82102400	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 400 WATT	EACH	188	188
	82500505	LIGHTING CONTROLLER, SPECIAL	EACH	3	3
	83006300	LIGHT POLE, ALUMINUM, 30 FT. M.H., 8 FT. MAST ARM	EACH	3	3
	83006500	LIGHT POLE, ALUMINUM, 30 FT. M.H., 12 FT. MAST ARM	EACH	12	12
	83050800	LIGHT POLE, ALUMINUM, 47.5 FT. M.H., 12 FT. MAST ARM	EACH	188	188
	83013100	LIGHT POLE, ALUMINUM, 30 FT. M.H., TENON MOUNT - TWIN	EACH	1	. 1
	83600200	LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	180	180
	83600215	LIGHT POLE FOUNDATION, 24" DIAMETER, OFFSET	FOOT	720	720
	83800505	BREAKAWAY DEVICE, COUPLING, WITH ALUMINUM SKIRT	EACH	204	204
	84200500	REMOVAL OF EXISTING LIGHTING UNIT, SALVAGE	EACH	22	22
	84200600	REMOVAL OF EXISTING LIGHTING UNIT, NO SALVAGE	EACH	19	19
	8420080 4	REMOVAL OF POLE FOUNDATION.	EACH	43	43
	84500110	REMOVAL OF LIGHTING CONTROLLER	EACH	3	3
	84500120	REMOVAL OF ELECTRIC SERVICE INSTALLATION	EACH	6	6
	84500130	REMOVAL OF LIGHTING CONTROLLER FOUNDATION	EACH	3	3
	85000300	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	L SUM	1	1
	89502380	REMOVE EXISTING HANDHOLE	EACH	1	1
	X0321631	REMOVAL OF LUMINAIRE	EACH	8	8
	z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	250	250
	Z0033028	MAINTENANCE OF LIGHTING SYSTEM	CAL MO	12	12
	X0325335.	CONDUIT INSTALLED, 1 1/2" DIA., NON-METALLIC	FOOT	3,400	3400
	X8050050	SERVICE INSTALLATION, TYPE C (SPECIAL)	EACH	1	1
	X8210405	LUMINAIRE SHIELD	EACH	25	25
	X8360360	LIGHT POLE FOUNDATION METAL, 15" BOLT CIRCLE, 10" X 8'	EACH	122	122
	X8950130	MODIFY EXISTING LIGHTING CONTROLLER	EACH	1	1
	XX003338	TEST HOLE	EACH	204	204
	XX007488	LIGHT POLE FOUNDATION METAL, 11.5" BOLT CIRCLE, 8" X 6'	EACH	15	15
	Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1
7	Z0076600	TRAINEES	HOUR	500	500



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

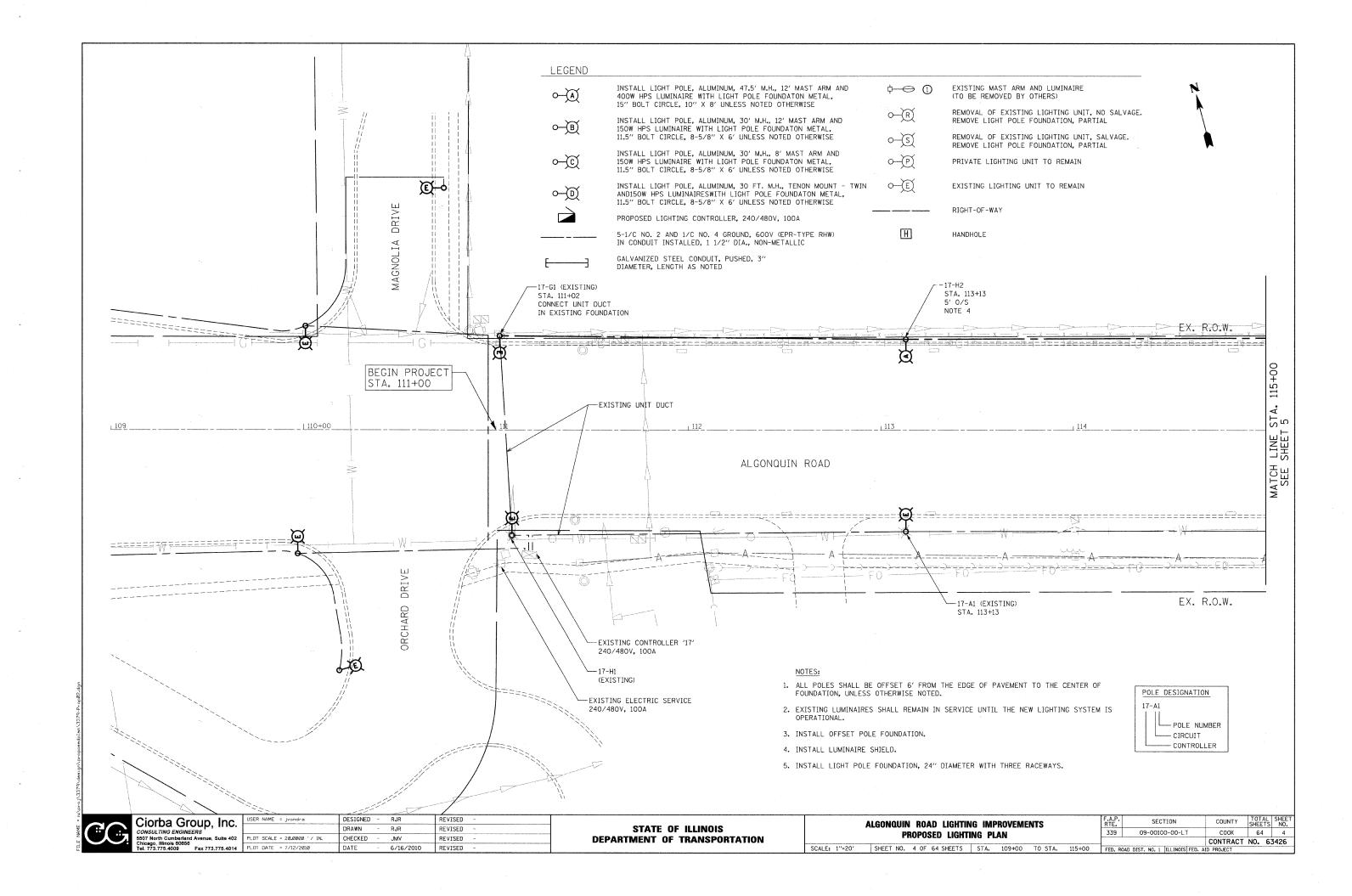
ALGONQUIN ROAD LIGHTING IMPROVEMENTS
SUMMARY OF QUANTITIES

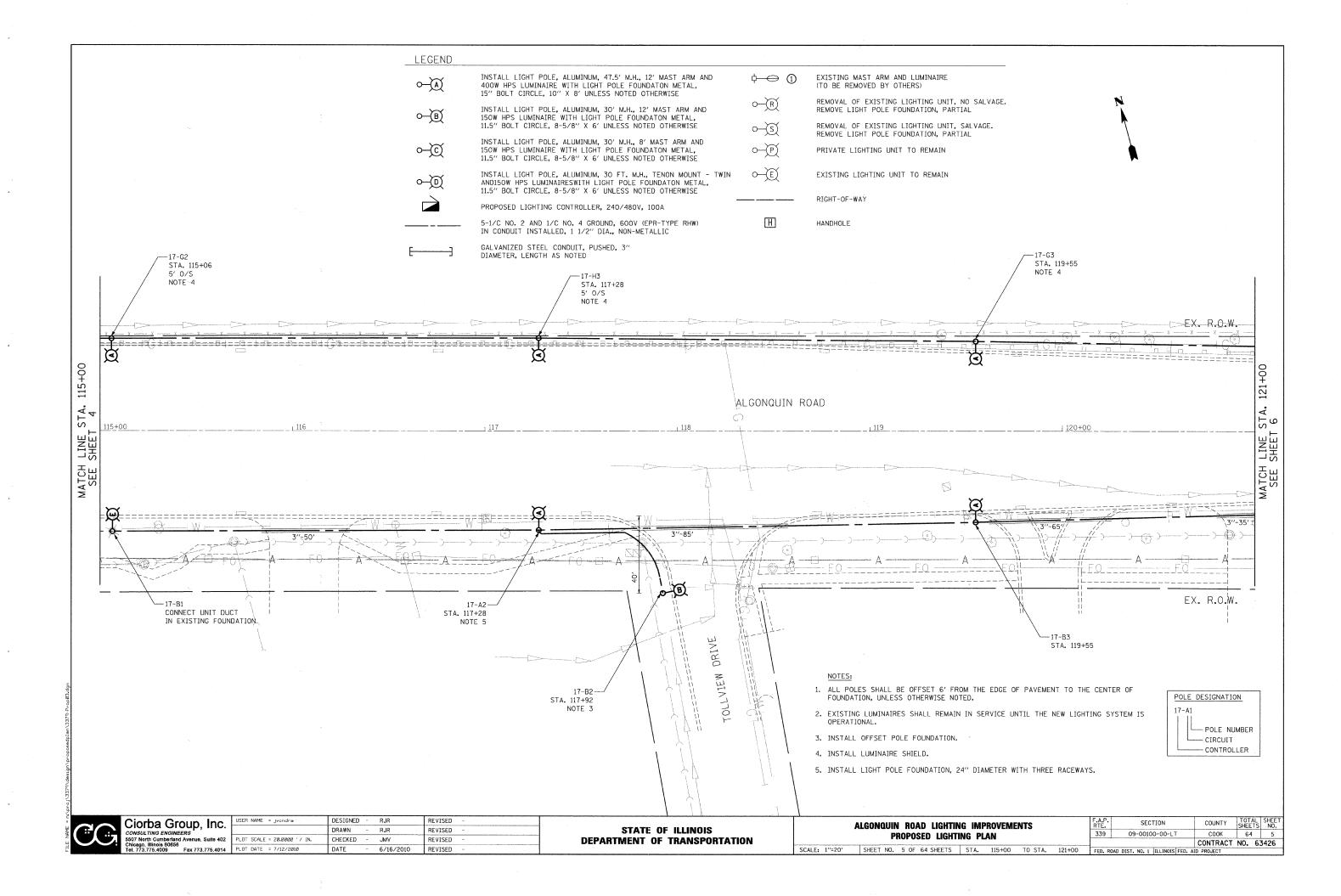
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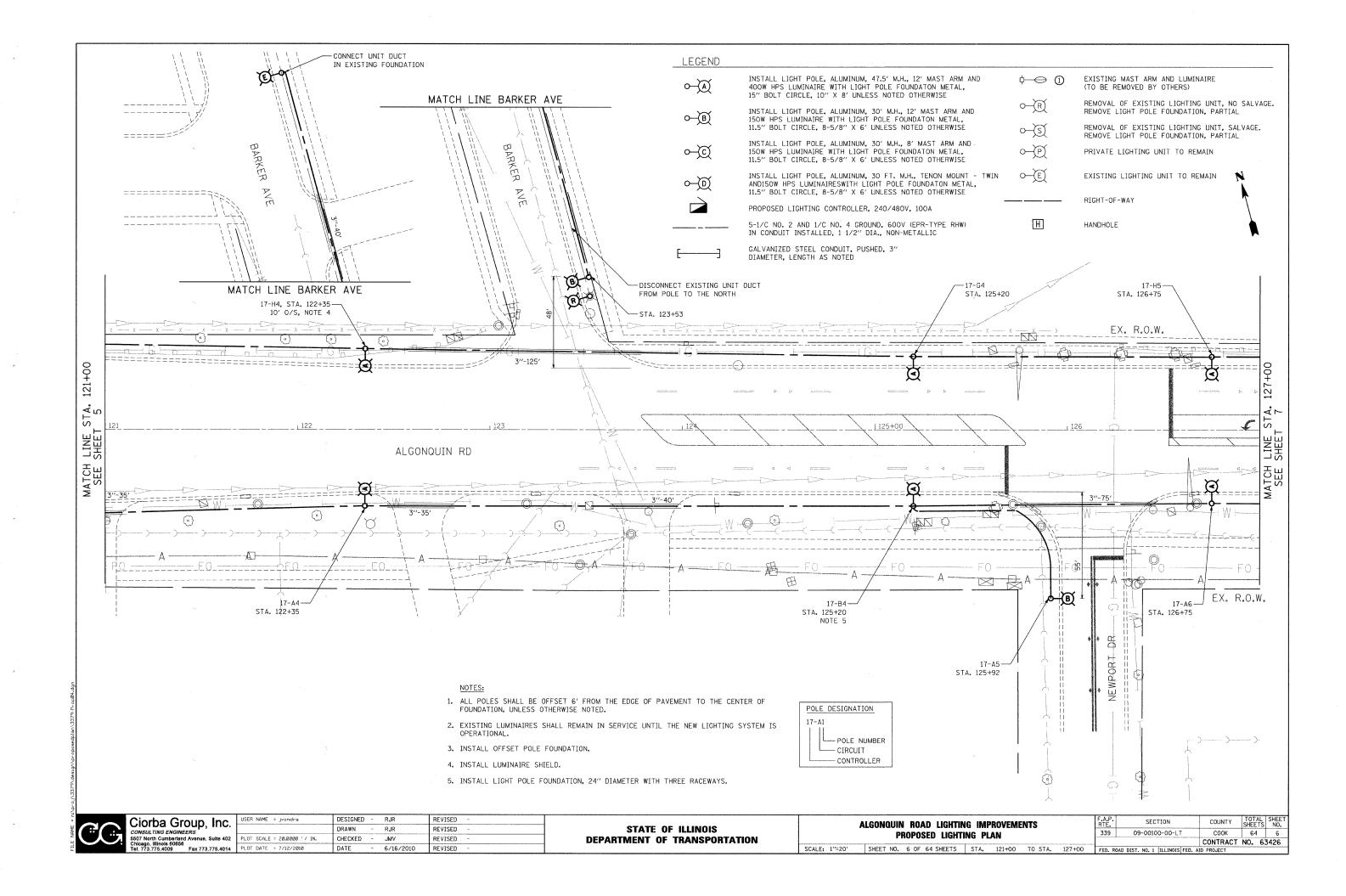
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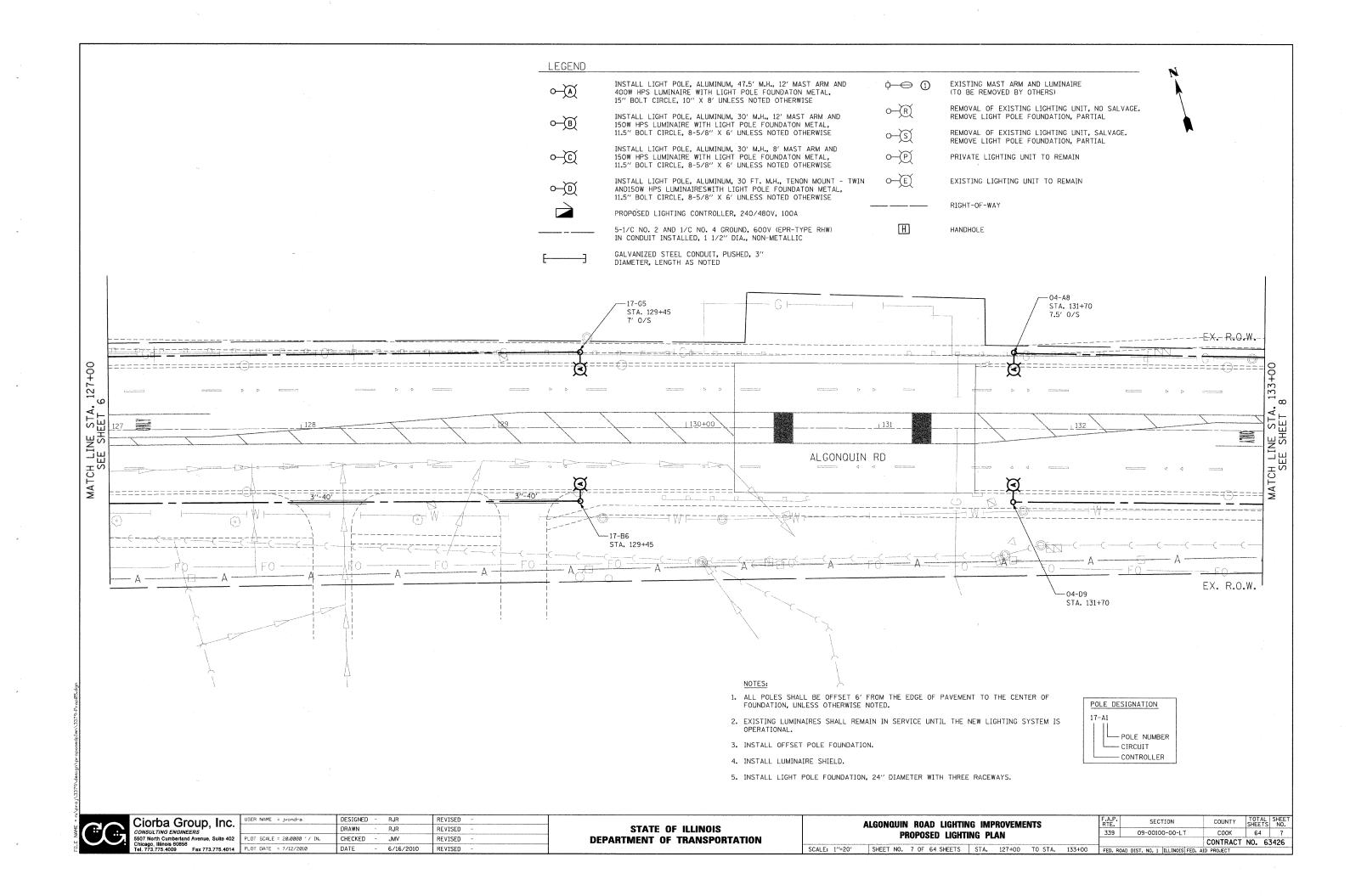
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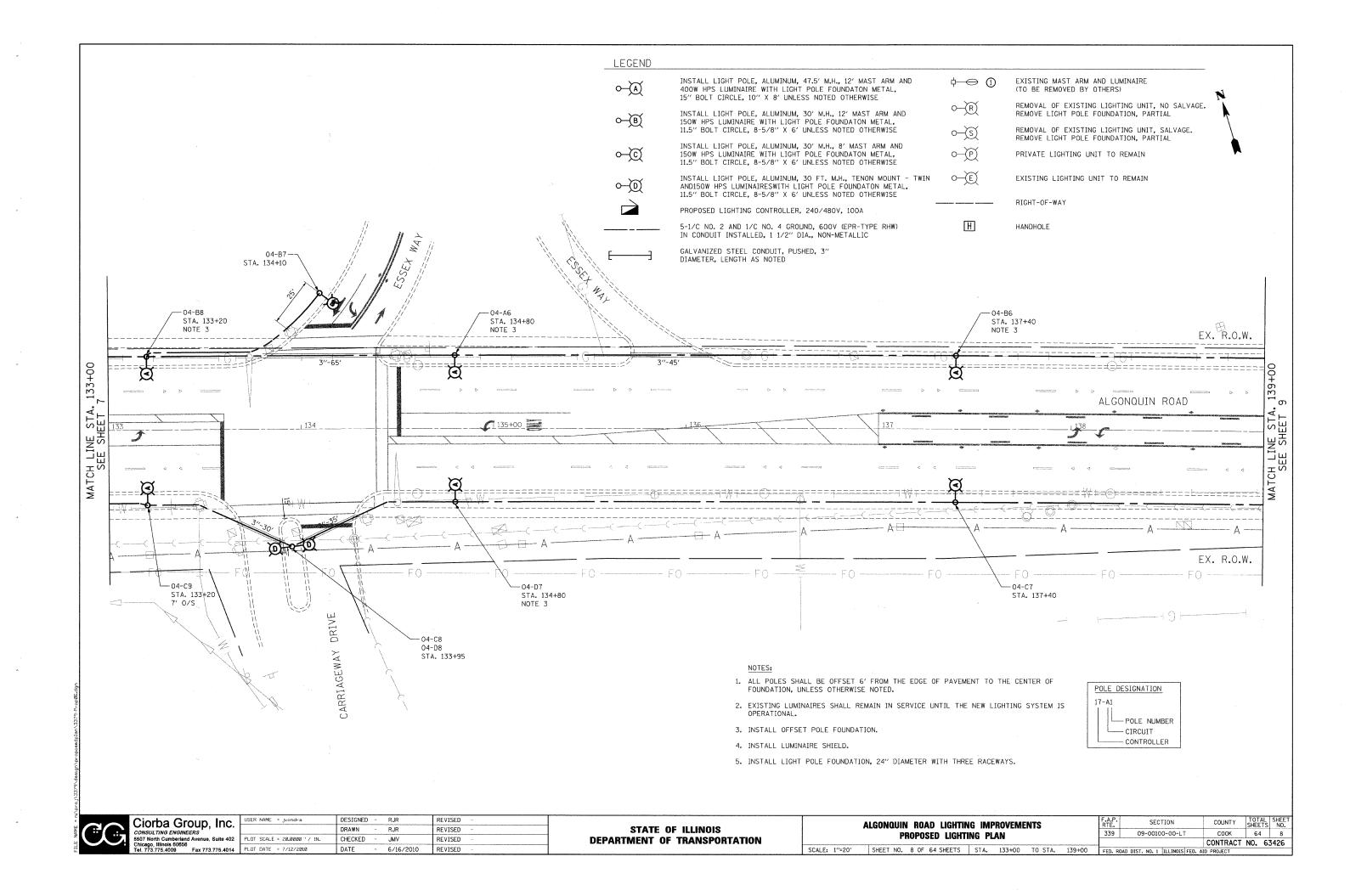
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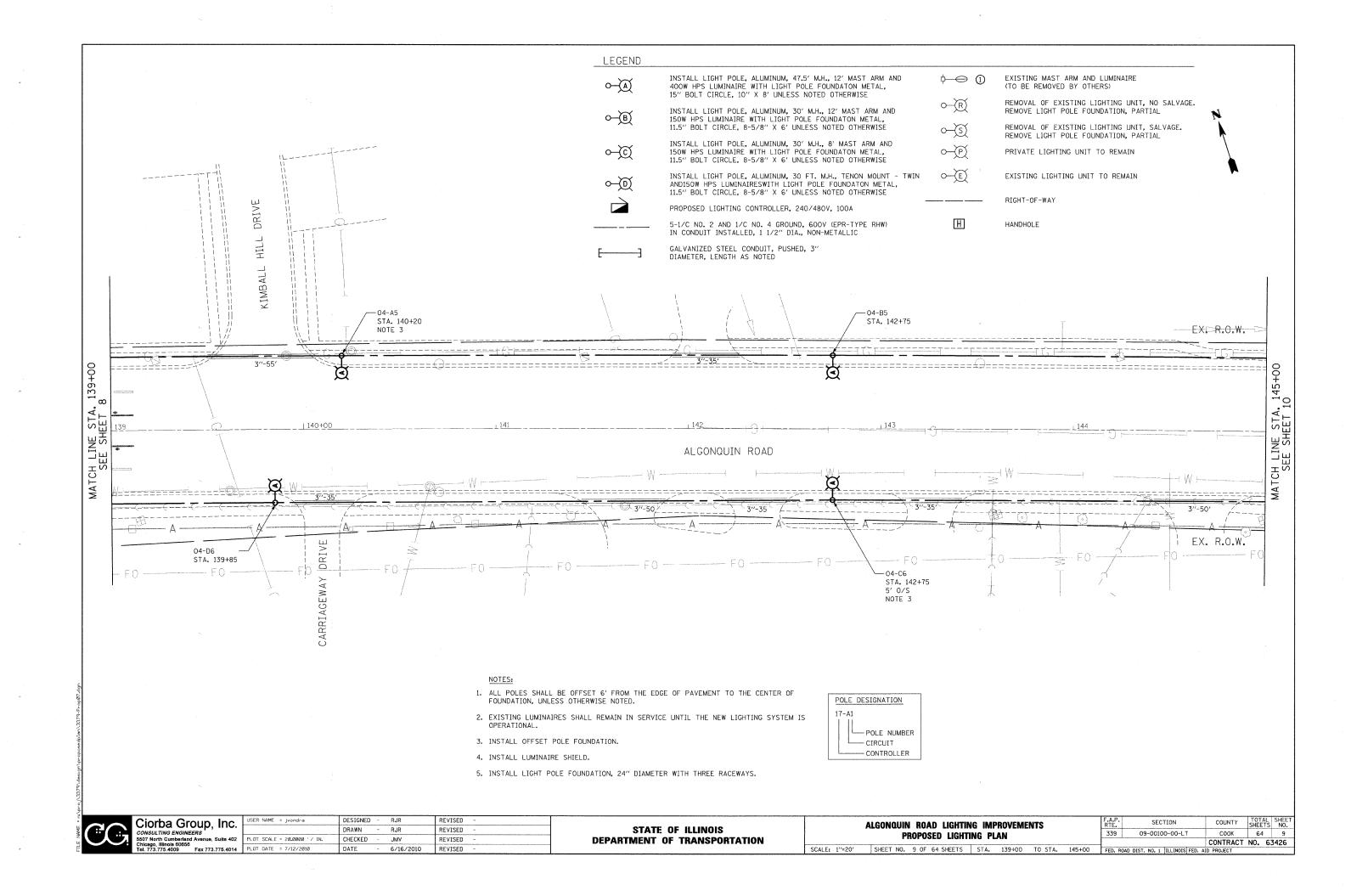


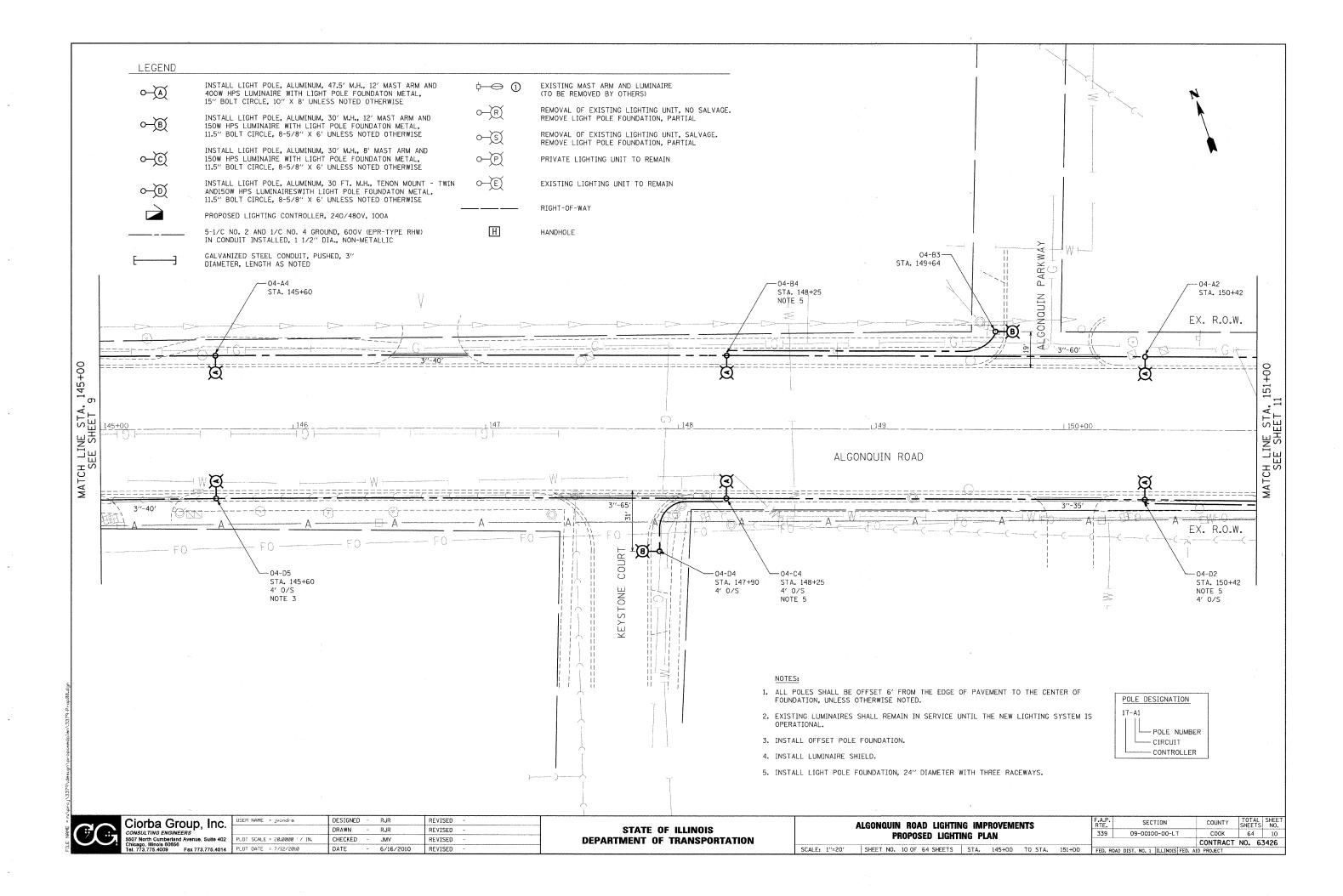


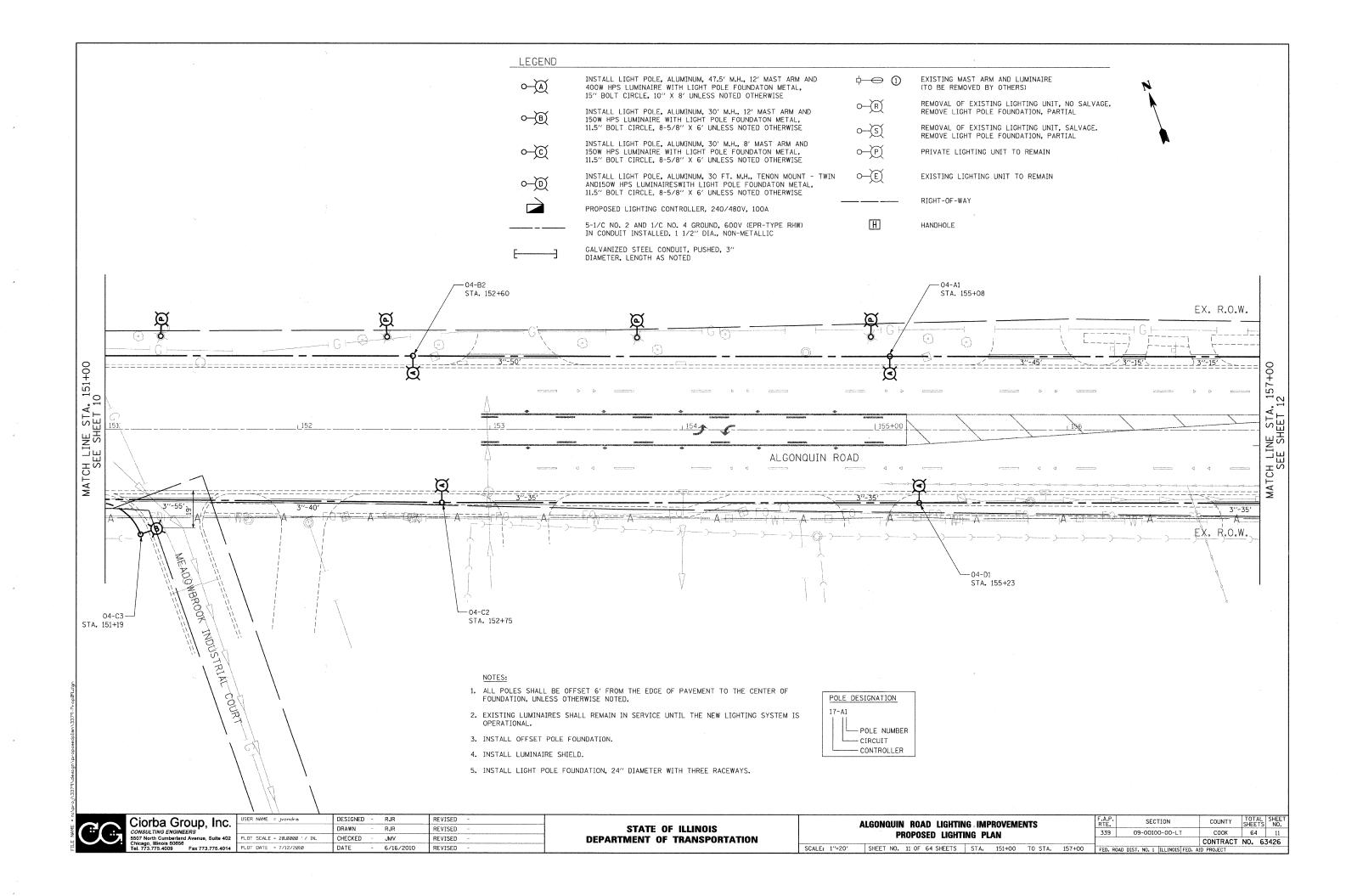


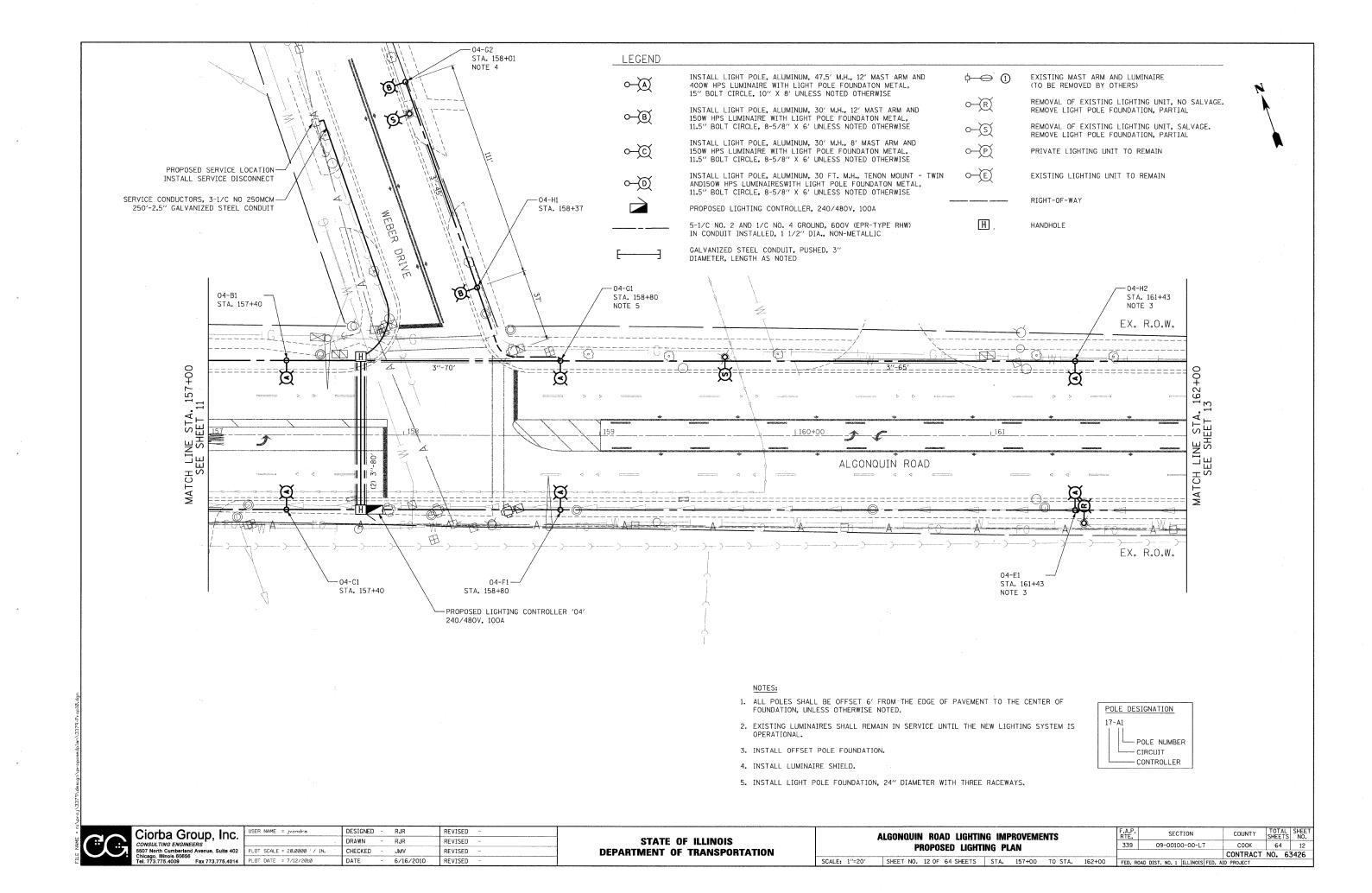


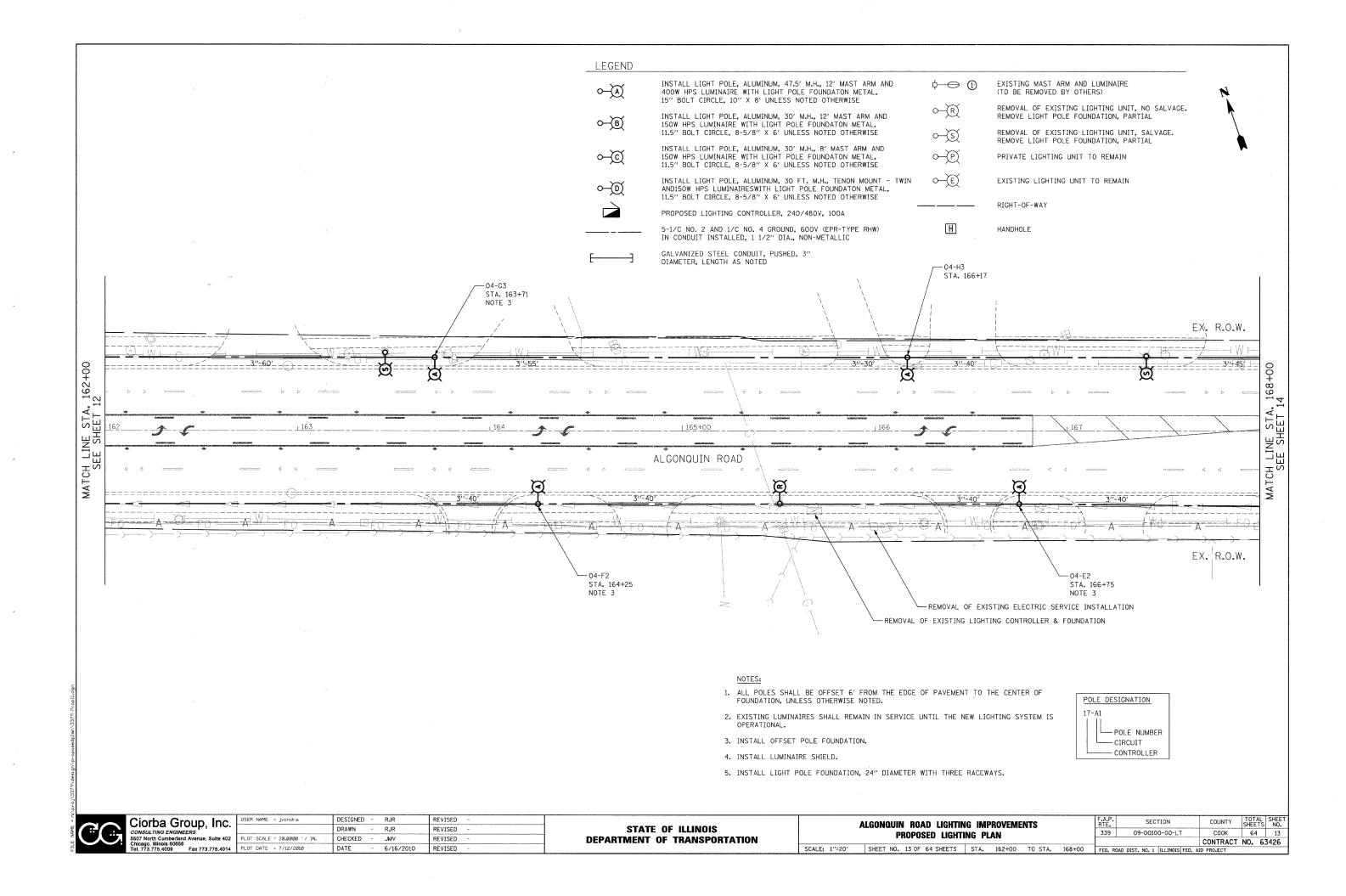


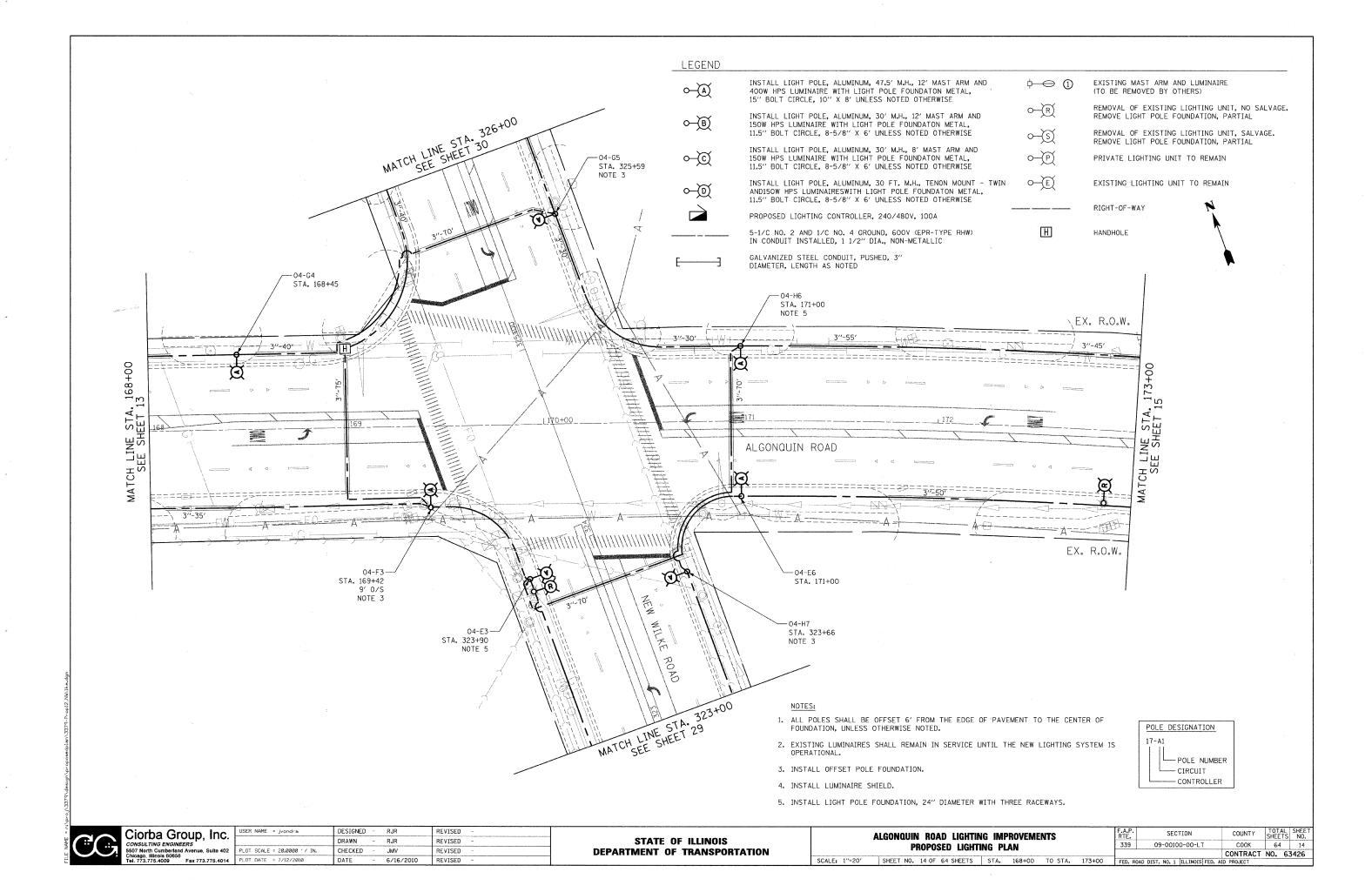


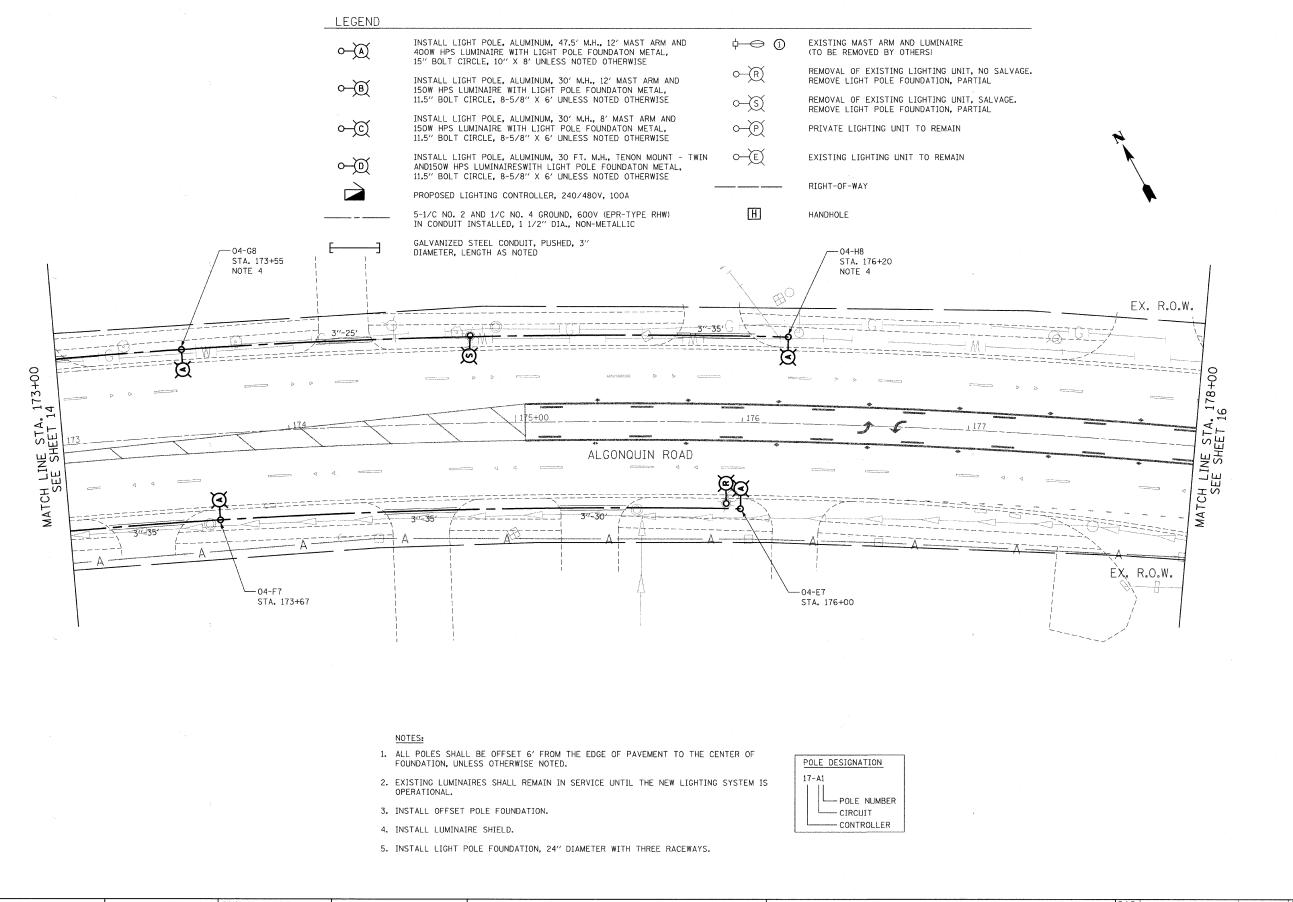










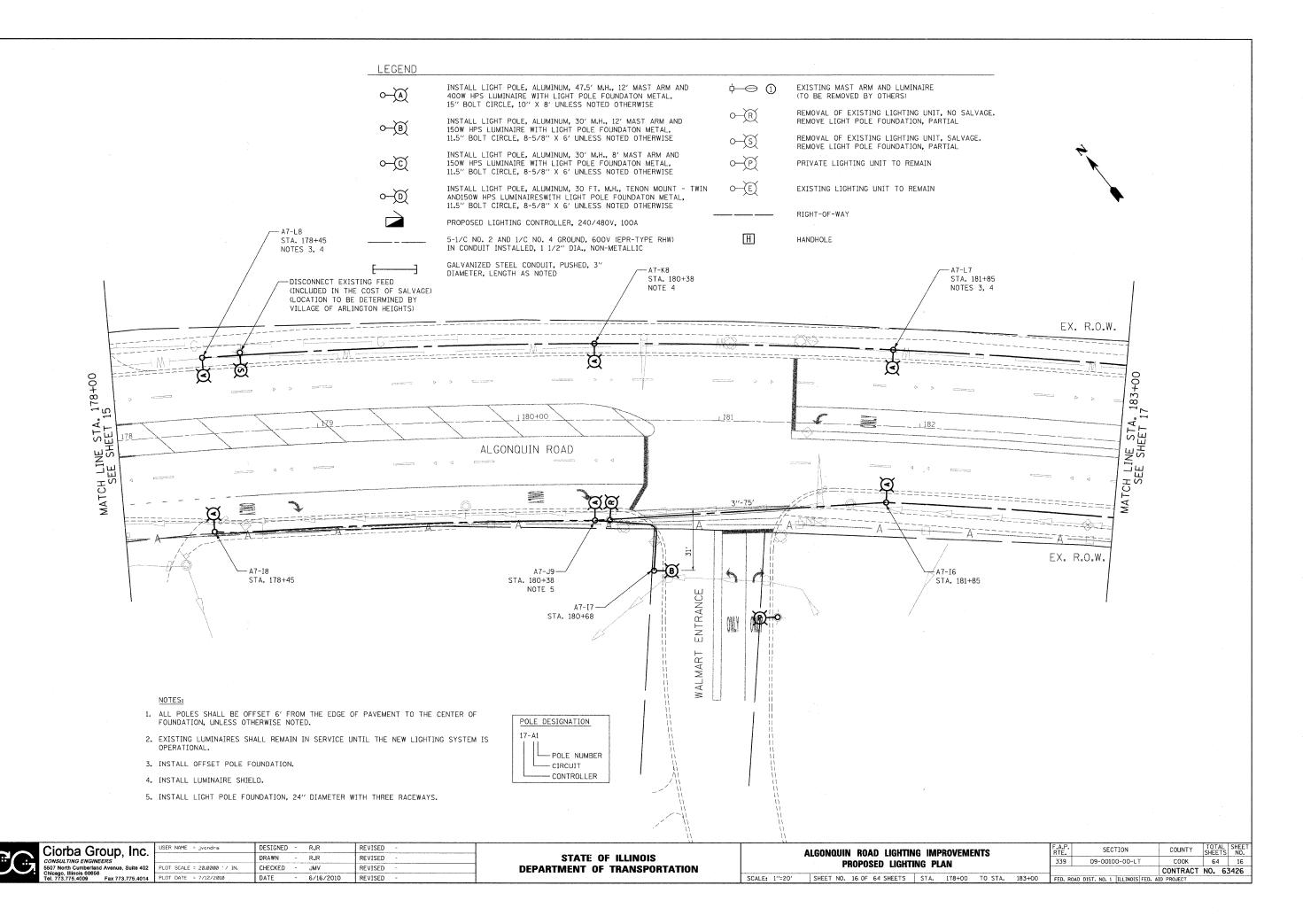


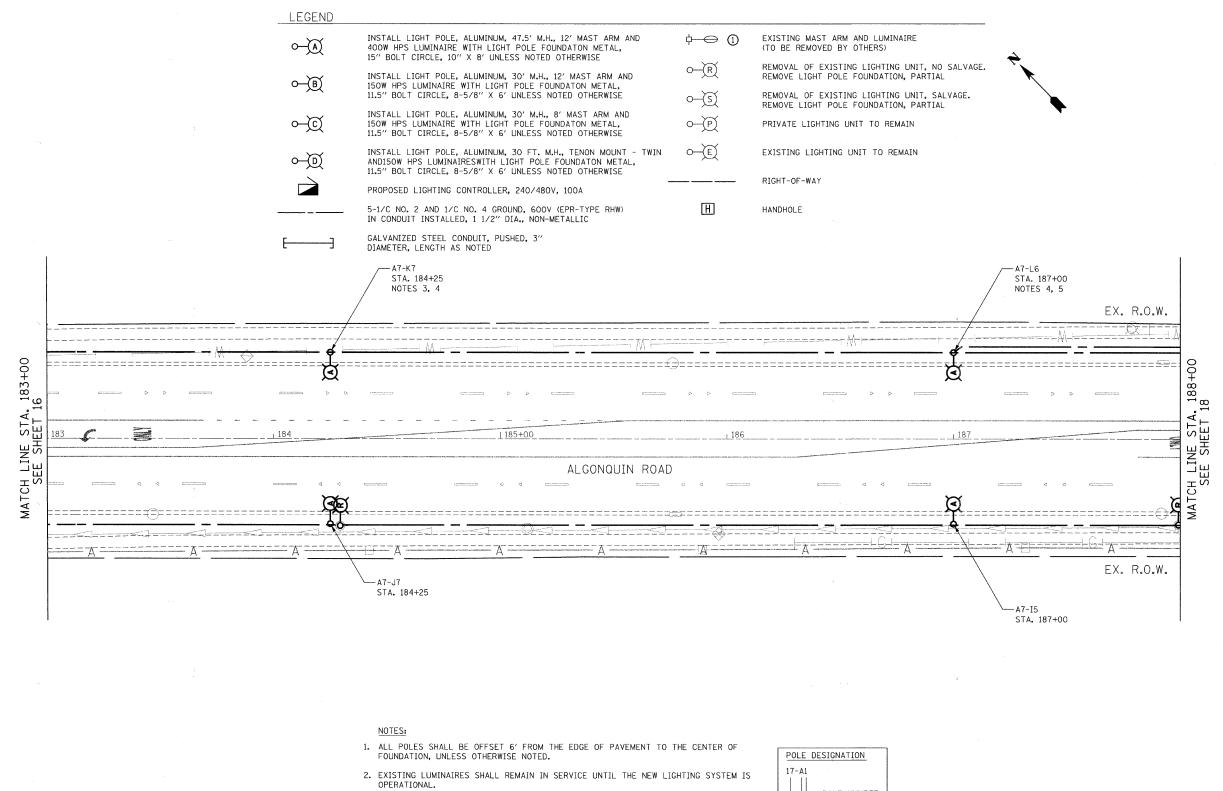


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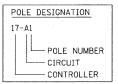
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

A	LGONQUIN ROAD LIGHT	NG IMPROV	EMENTS		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PROPOSED LIGH	TING PLAN	339	09-00100-00-LT	COOK	64	15		
	7			-	CONTRACT	NO. 6	3426		
· ·	SHEET NO. 15 OF 64 SHEETS	STA. 173-	+OO TO STA.	178+00	FED. RO	DAD DIST. NO. 1 ILLINOIS FED. A	ID PROJECT		





- 3. INSTALL OFFSET POLE FOUNDATION.
- 4. INSTALL LUMINAIRE SHIELD.
- 5. INSTALL LIGHT POLE FOUNDATION, 24" DIAMETER WITH THREE RACEWAYS.



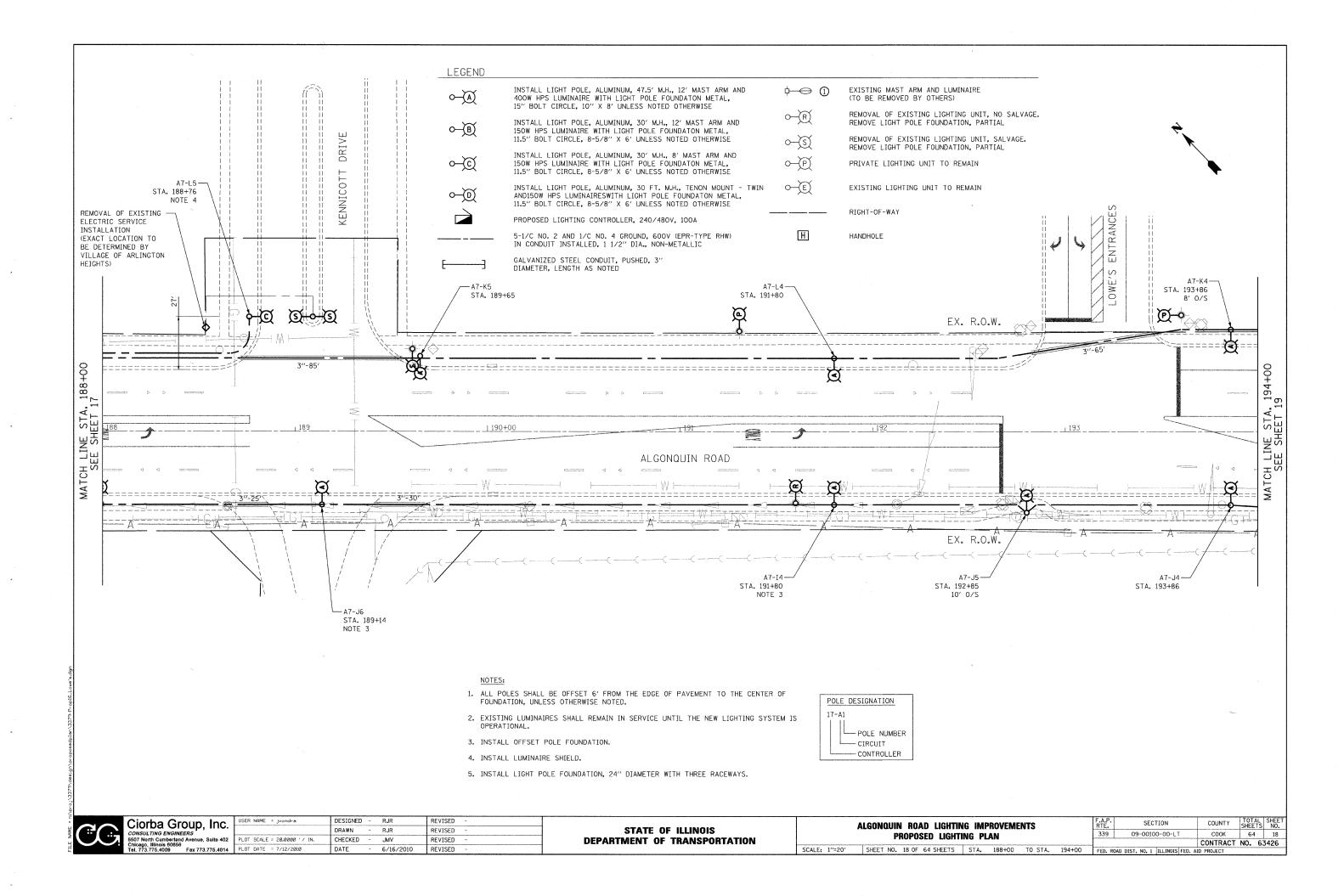
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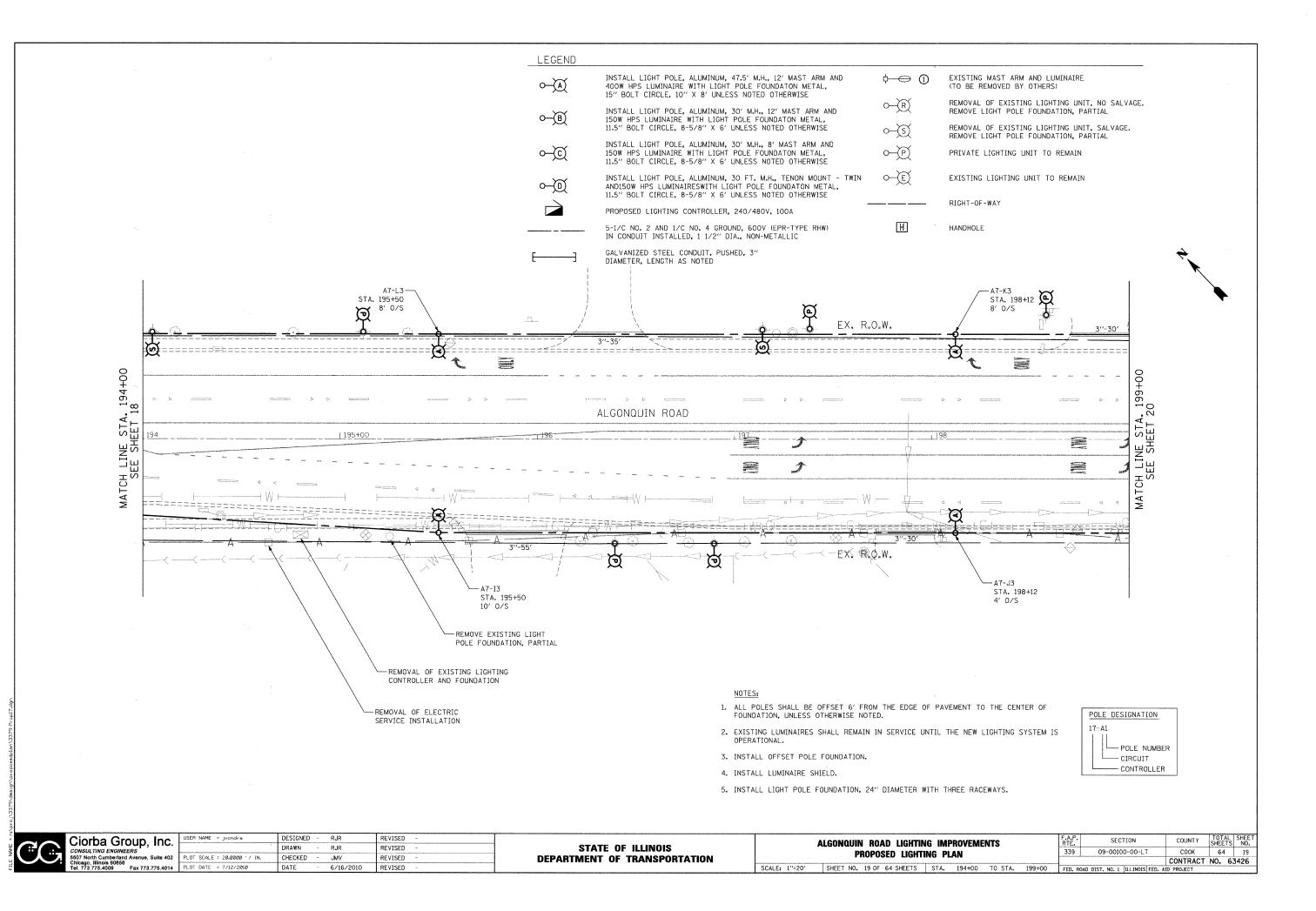


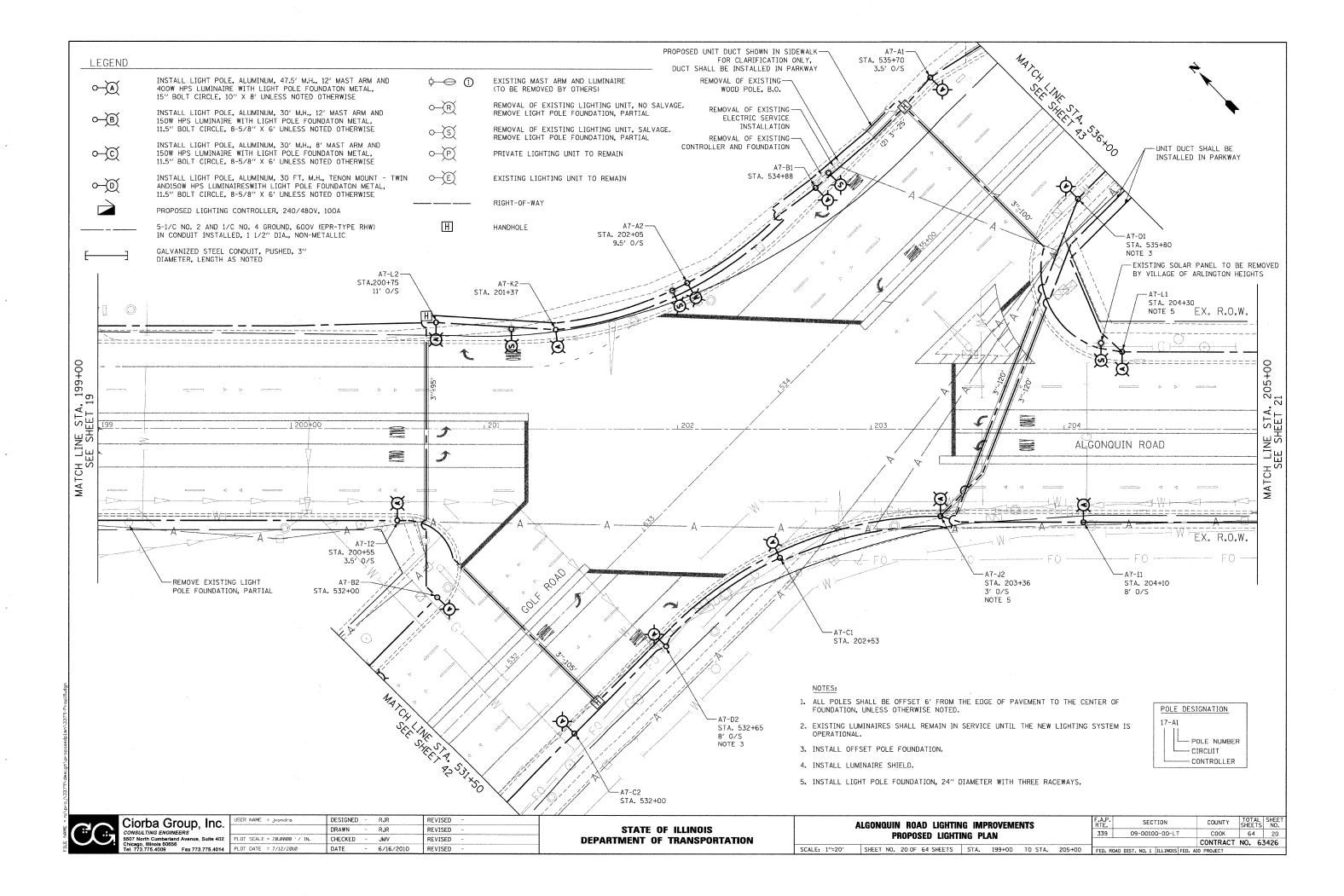
	USER NAME = jvondra	DESIGNED	-	RJR	REVISED	-
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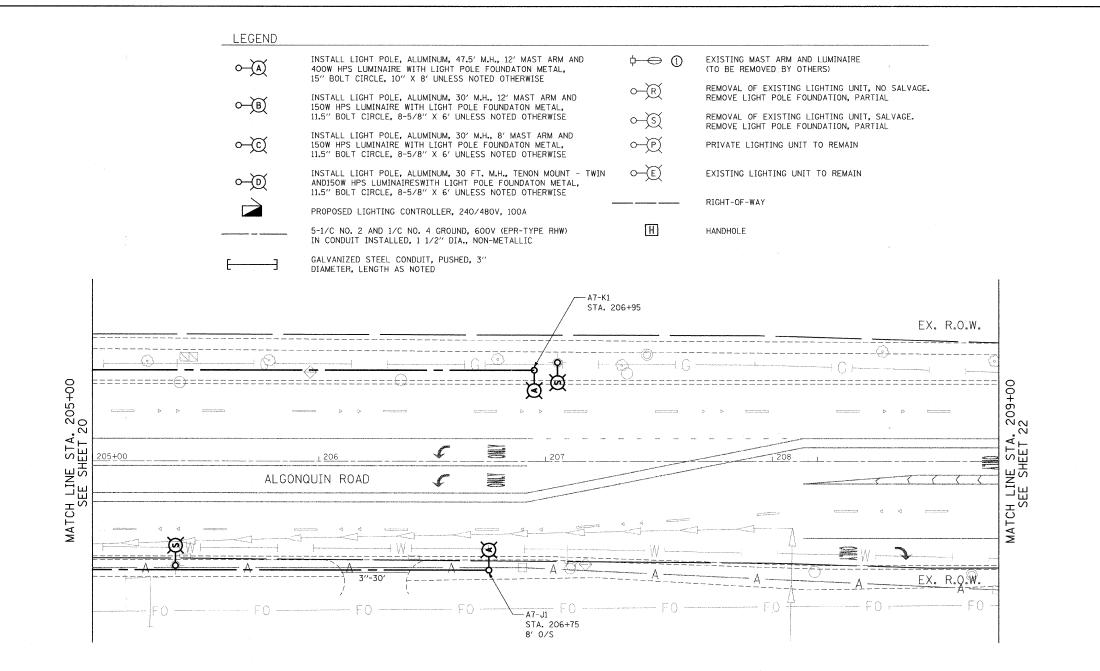
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DEPARTMENT	0F	TRANSPORTATION

Α	ALGONQUIN ROAD LIGHTING IMPROVEMENTS										SECTION	COUNTY	TOTAL	SHEET NO.
	PROPOSED LIGHTING PLAN								339	339 09-00100-00-LT COOF		64	17	
	I HOI VOLD LIGHTHAU I LAR										CONTRACT	NO. 6	3426	
	SHEET NO. 17 OF 64 SHEETS STA. 183+00 TO STA. 188+00									FED. RO	DAD DIST. NO. 1 ILLINOIS FED. A	ID PROJECT		



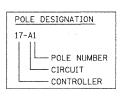






NOTES:

- 1. ALL POLES SHALL BE OFFSET 6' FROM THE EDGE OF PAVEMENT TO THE CENTER OF FOUNDATION, UNLESS OTHERWISE NOTED.
- 2. EXISTING LUMINAIRES SHALL REMAIN IN SERVICE UNTIL THE NEW LIGHTING SYSTEM IS OPERATIONAL.
- 3. INSTALL OFFSET POLE FOUNDATION.
- 4. INSTALL LUMINAIRE SHIELD.
- 5. INSTALL LIGHT POLE FOUNDATION, 24" DIAMETER WITH THREE RACEWAYS.



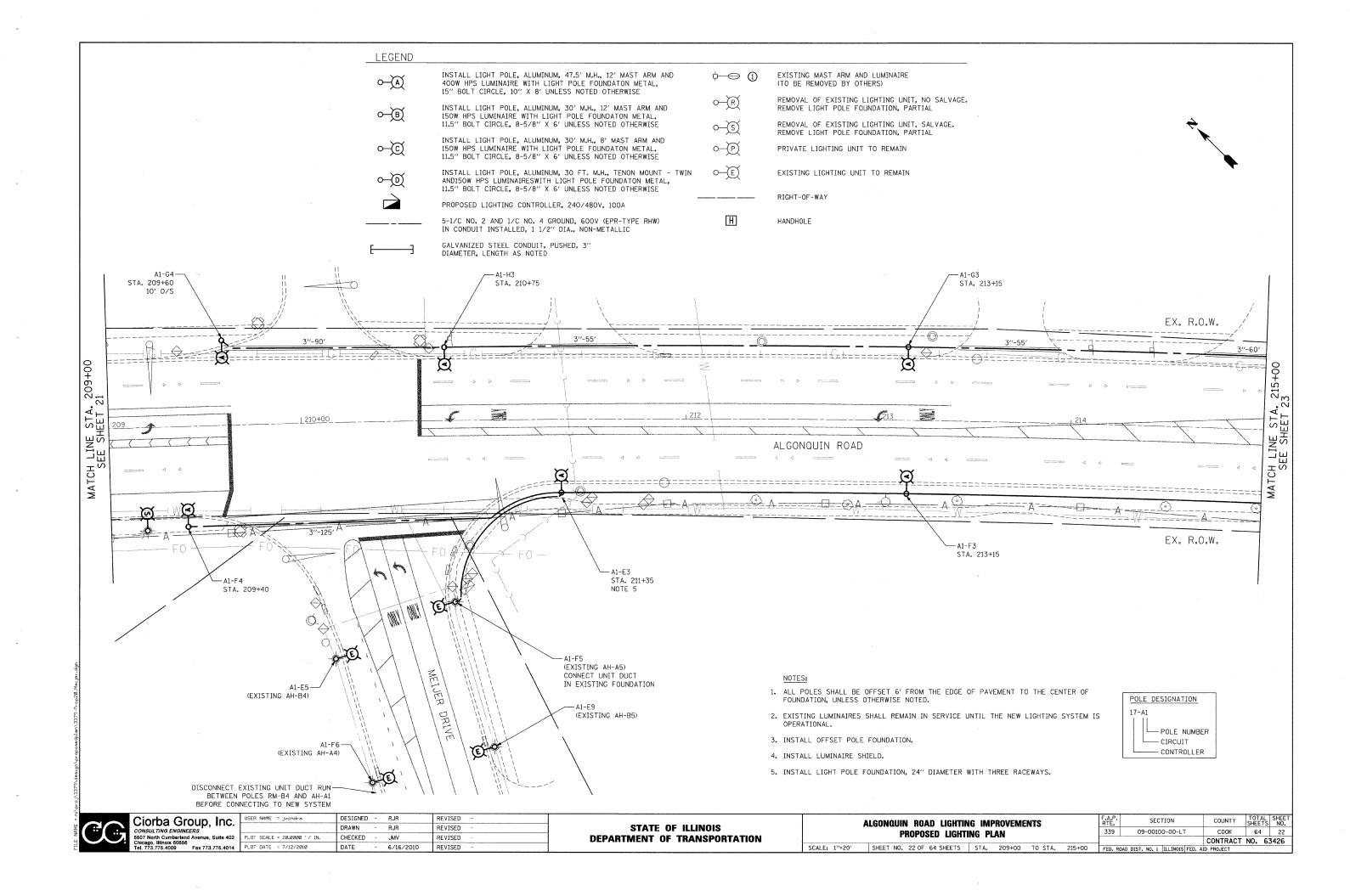
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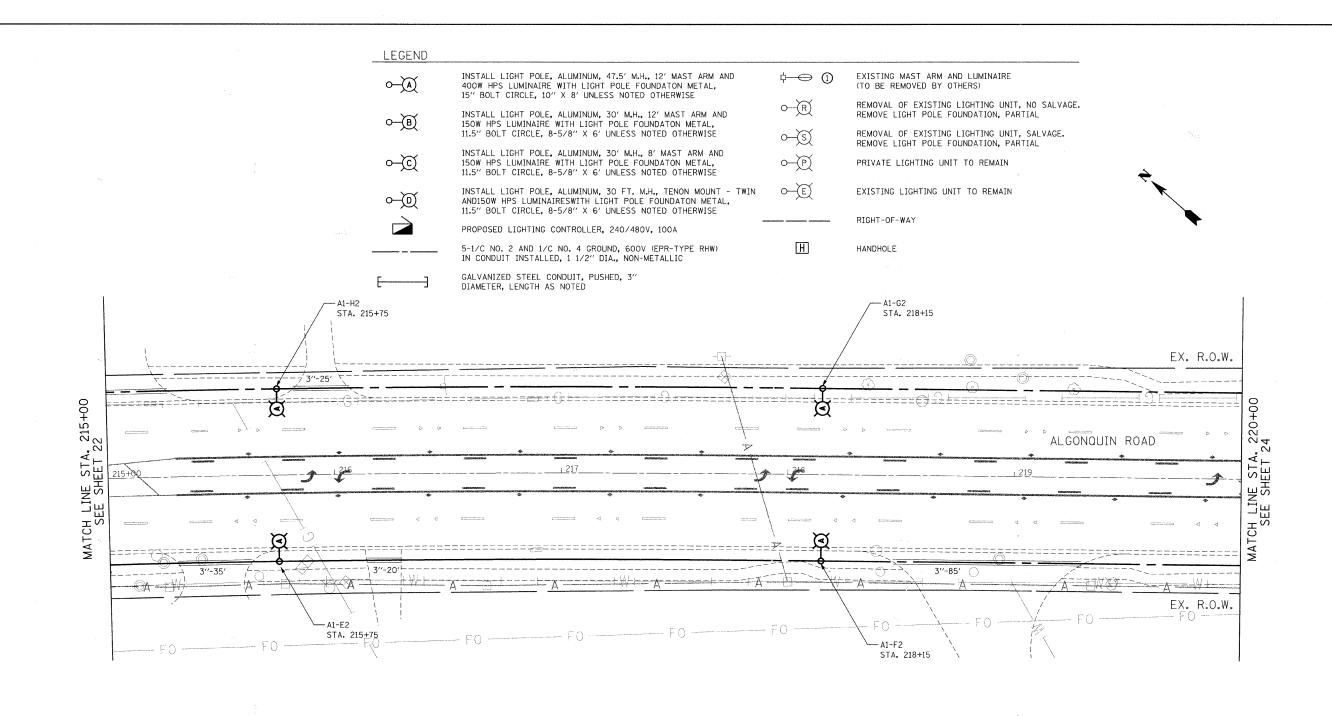


_					
	USER NAME = jvondra	DESIGNED	-	RJR	REVISED -
		DRAWN	-	RJR	REVISED -
	PLOT SCALE = 20.00000 ' / IN.	CHECKED	-	JMV	REVISED -
	PLOT DATE = 7/12/2010	DATE	-	6/16/2010	REVISED ~

STATE	: OF	ILLINOIS
DEPARTMENT	OF	TRANSPORTATION

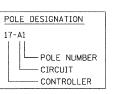
A	LGONQUIN	I ROAD I	LIGHTIN	G IMP	ROVEME	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
PROPOSED LIGHTING PLAN								339	09-00100-00-LT	COOK	64	21
THO OULD EIGHTHIG I WHI										CONTRACT	NO. 6	3426
	SHEET NO.	21 OF 64 S	SHEETS	STA.	205+00	TO STA.	209+00	FED. RC	DAD DIST. NO. 1 ILLINOIS FED. A	D PROJECT		





NOTES

- ALL POLES SHALL BE OFFSET 6' FROM THE EDGE OF PAVEMENT TO THE CENTER OF FOUNDATION, UNLESS OTHERWISE NOTED.
- 2. EXISTING LUMINAIRES SHALL REMAIN IN SERVICE UNTIL THE NEW LIGHTING SYSTEM IS OPERATIONAL.
- 3. INSTALL OFFSET POLE FOUNDATION.
- 4. INSTALL LUMINAIRE SHIELD.
- 5. INSTALL LIGHT POLE FOUNDATION, 24" DIAMETER WITH THREE RACEWAYS.



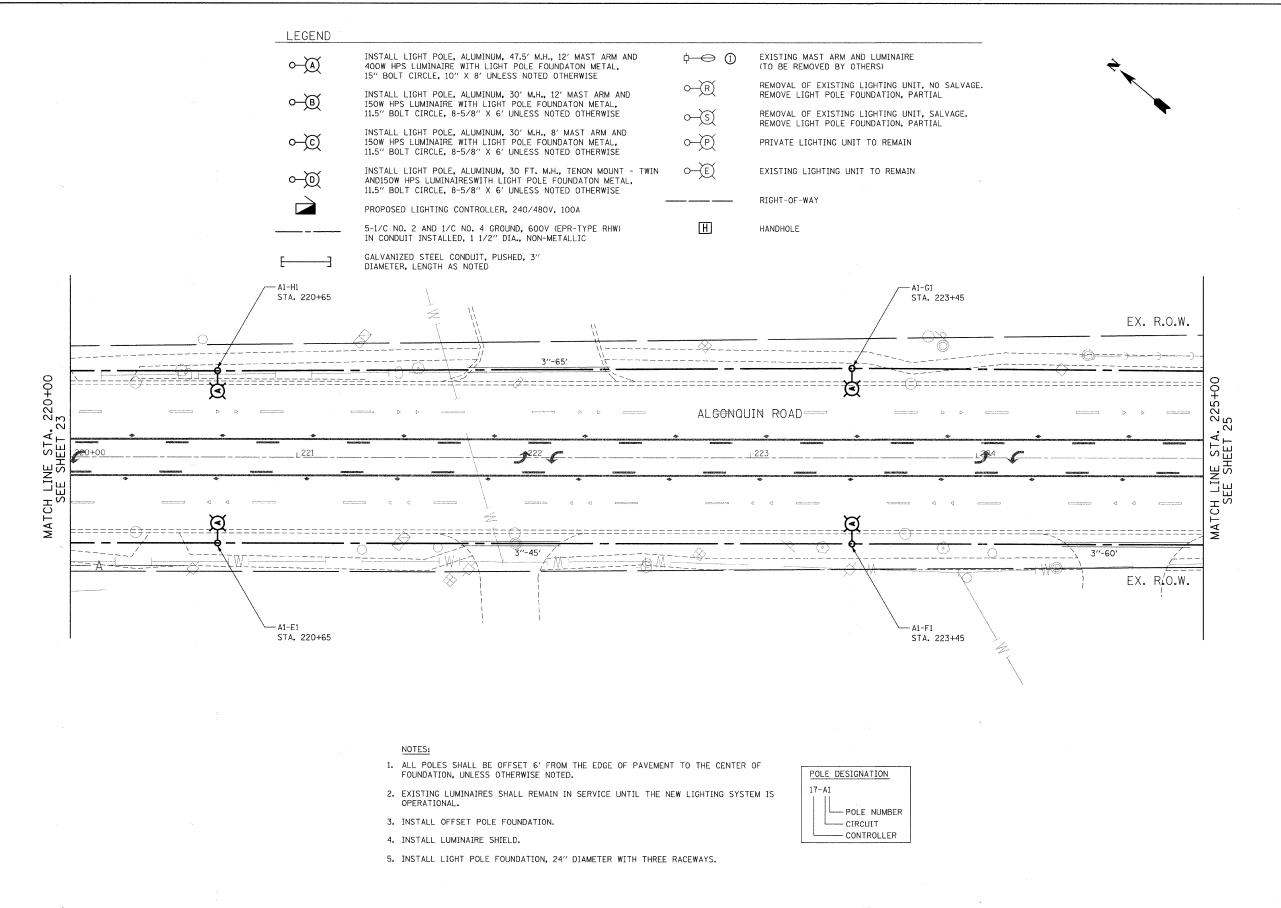
SCALE: 1"=20"



	USER NAME = jvondra	DESIGNED	-	RJR	REVISED	-
		DRAWN	-	RJR	REVISED	·
2	PLOT SCALE = 20.0000 '/ IN.	CHECKED	-	JMV	REVISED	-
4	PLOT DATE = 7/12/2010	DATE	-	6/16/2010	REVISED	**

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ALGONQUIN ROAD LIGHTING IMPROVEMENTS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PROPOSED LIGHTING PLAN	339	09-00100-00-LT	COOK	64	23
1 HOT OOLD LIGHTHING I WIN			CONTRACT	NO. 6	3426
SHEET NO. 23 OF 64 SHEETS STA. 215+00 TO STA. 220+00	FFD, R	OAD DIST, NO. 1 ILLINOIS FED. AL	D PROJECT		

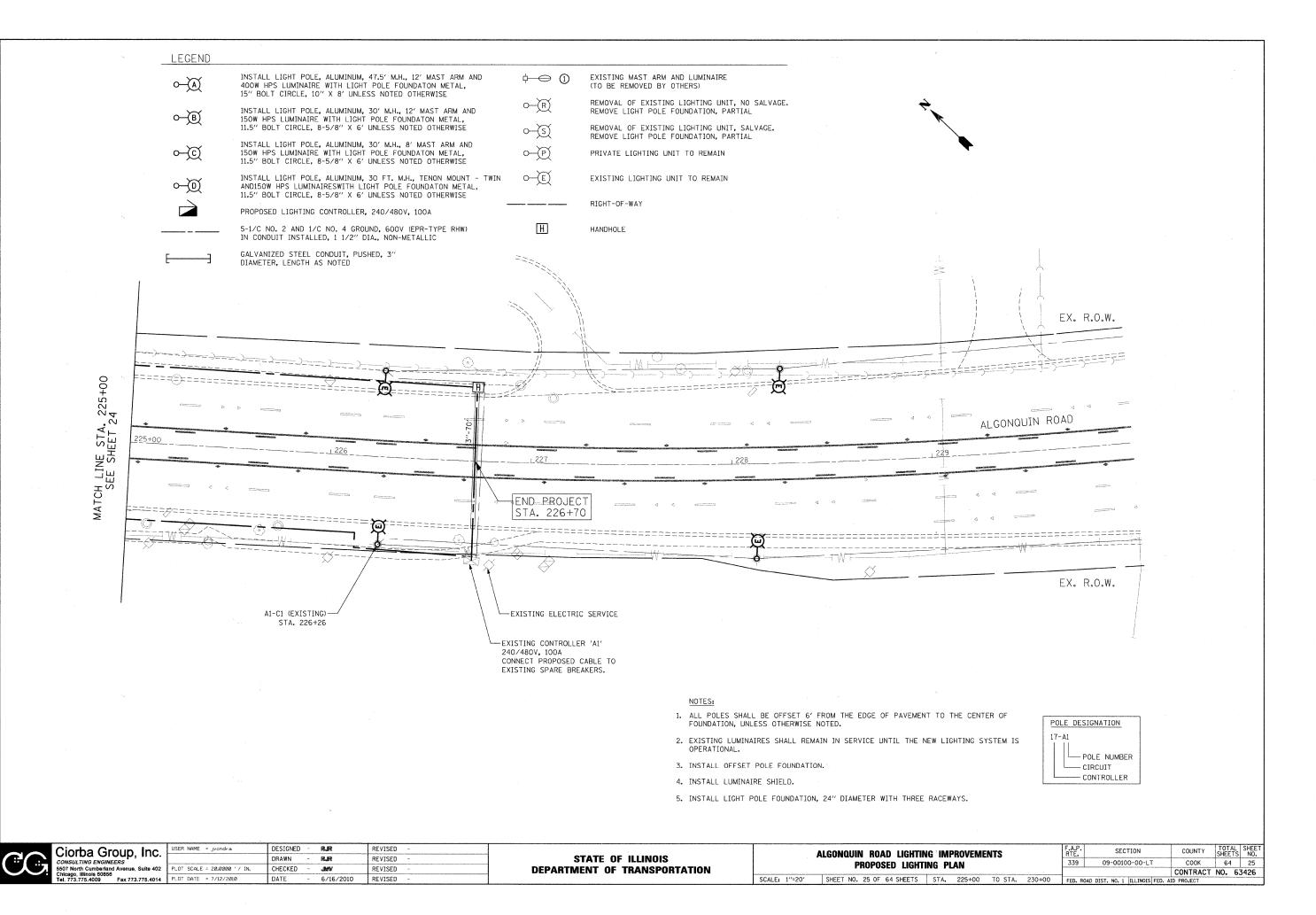


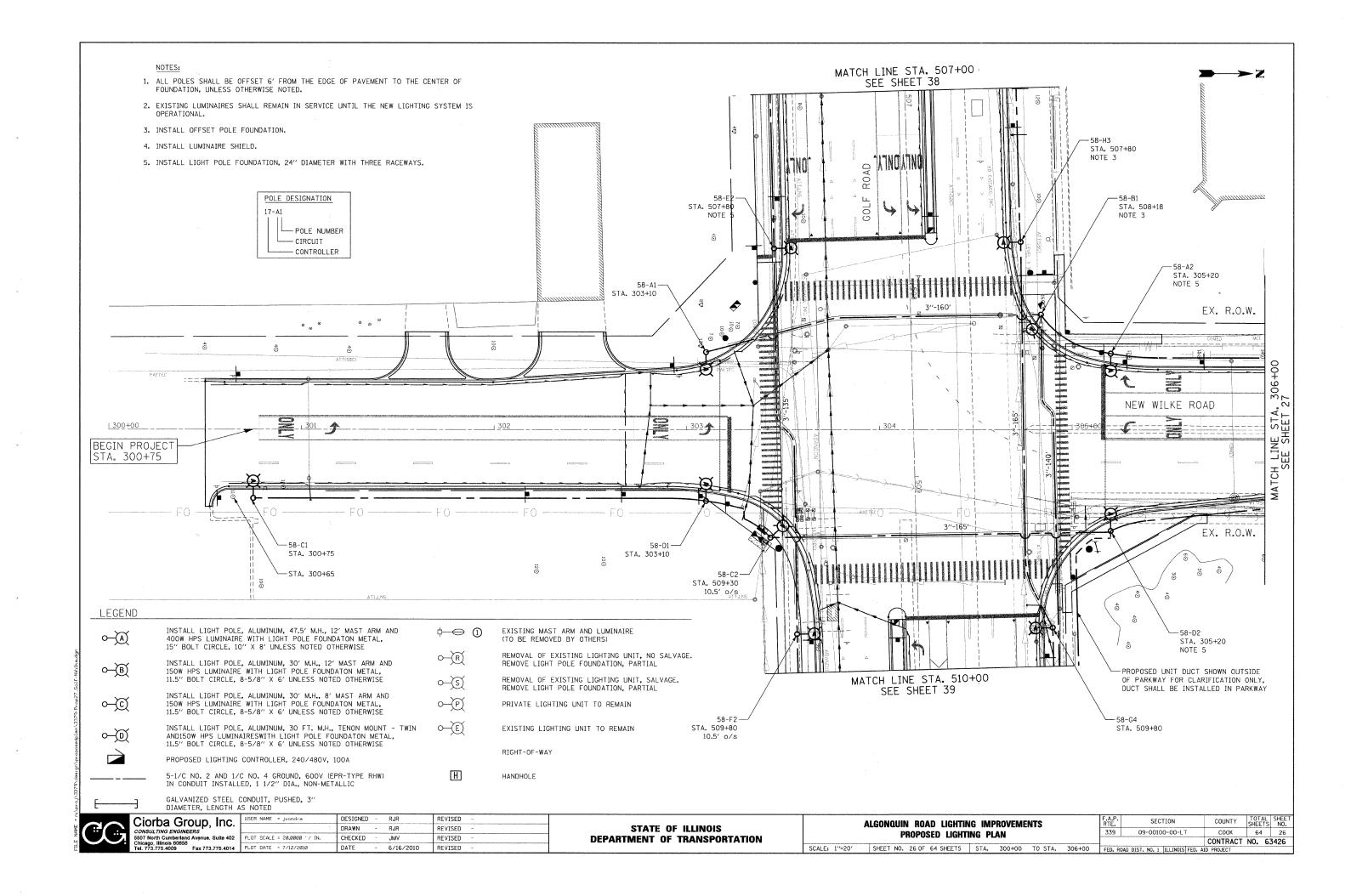
Ciorba Group, Inc.							
5507 North Cumberta Chicago, Illinois 6065	nd Avenue, Suite 402 8						
Tel. 773.775.4009	Fax 773.775.4014						

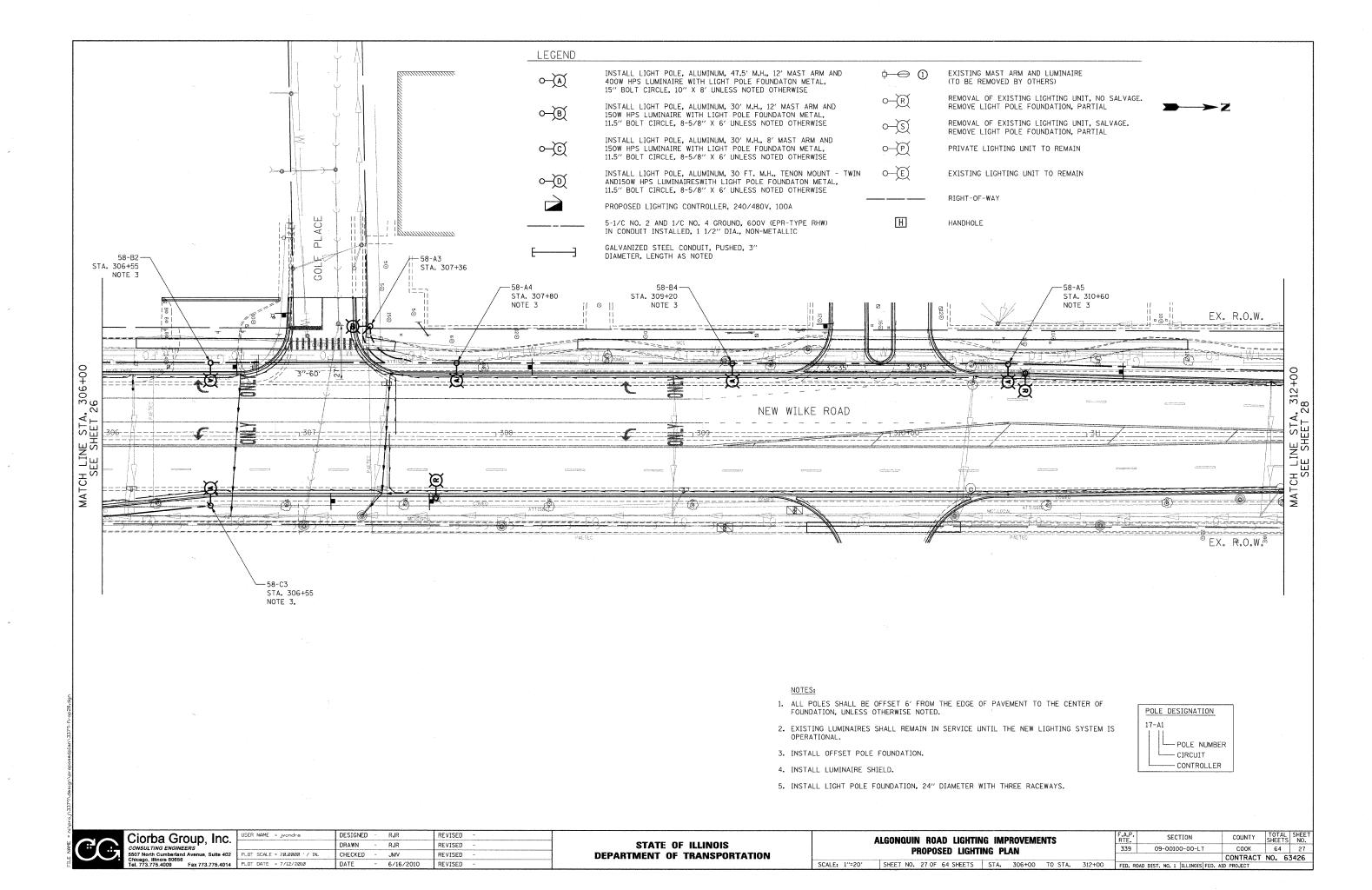
USER NAME ≈ jvondra	DESIGNED	_	RJR	REVISED	-
	DRAWN	-	RJR	REVISED	
PLOT SCALE = 20.0000 ' / IN.	CHECKED	-	JMV	REVISED	-
PLOT DATE = 7/12/2010	DATE	-	6/16/2010	REVISED	_

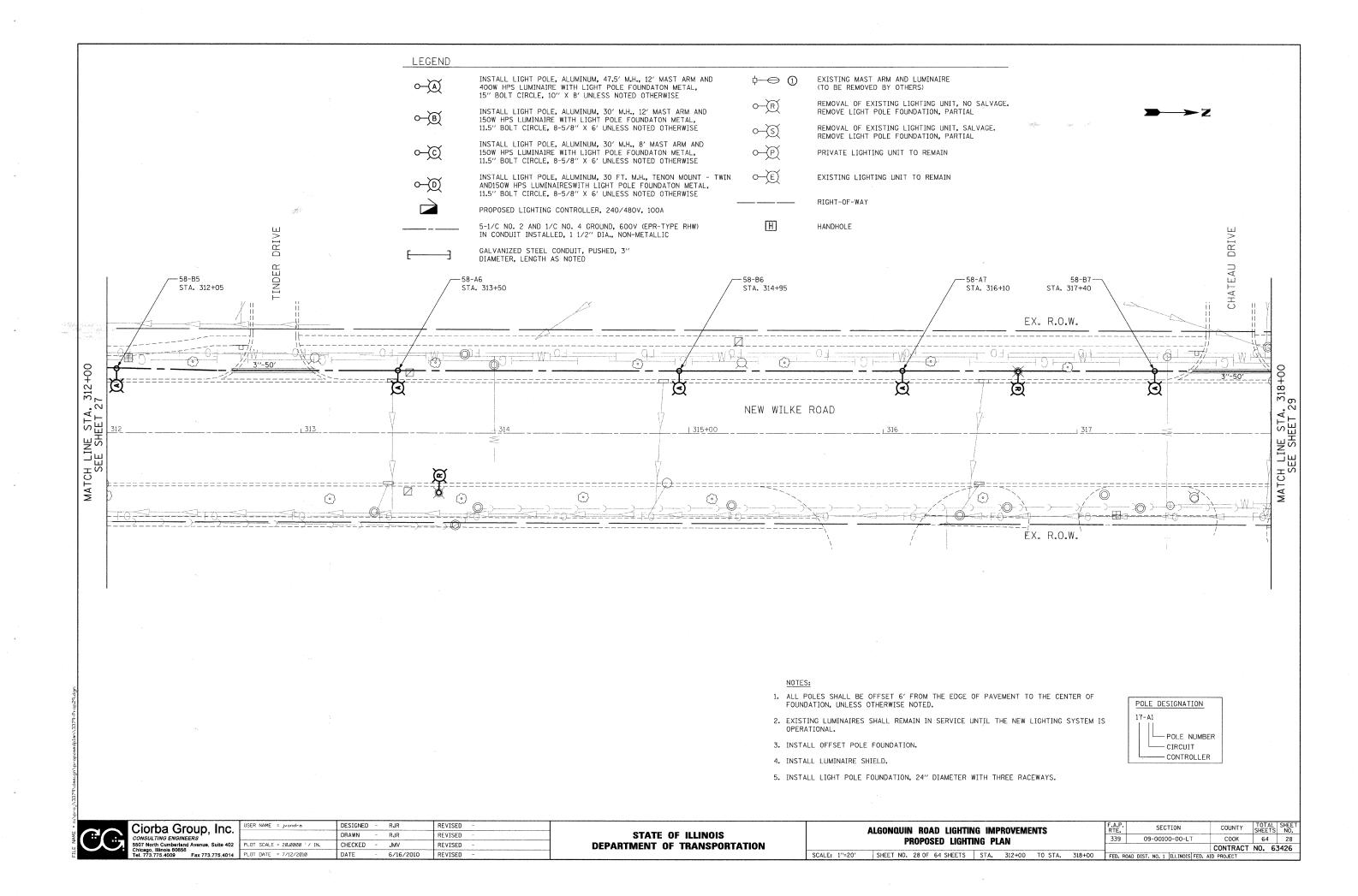
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

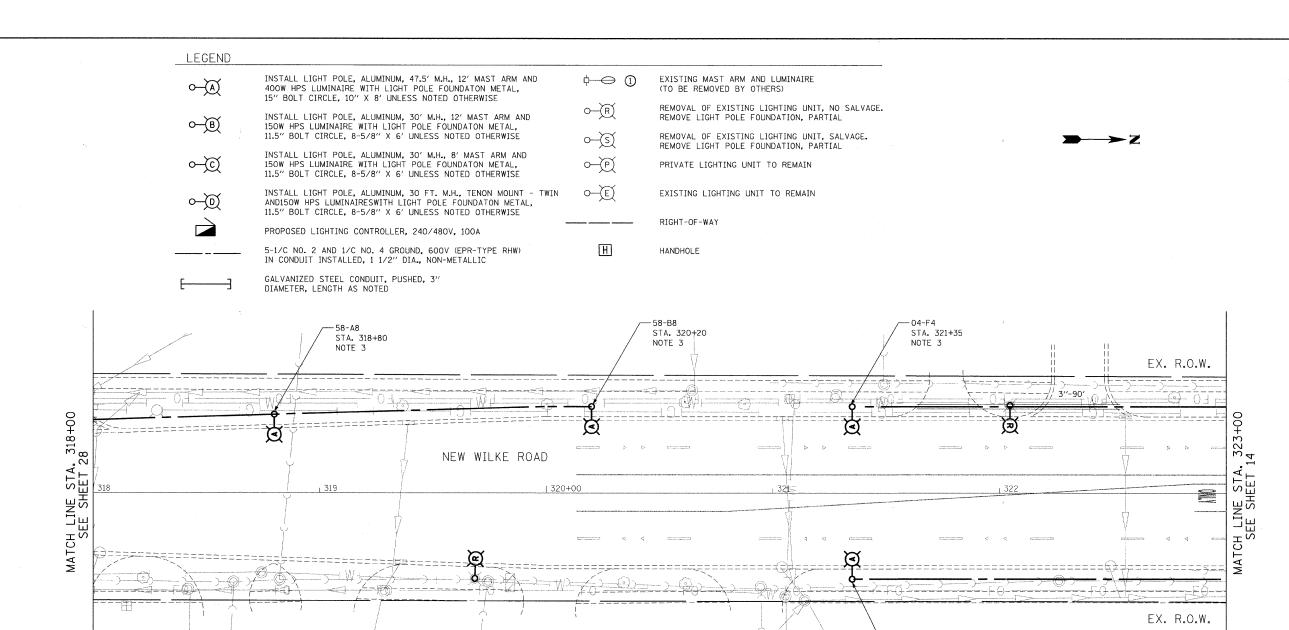
	* **									
ALGONQUIN ROAD LIGHTING IMPROVEMENTS PROPOSED LIGHTING PLAN							F.A.P. SECTION		TOTAL SHEETS	SHEET NO.
							339 09-00100-00-LT		64	24
***************************************	·			CONTRACT	NO. 6	3426				
SCALE: 1"=20"	SHEET NO. 24 OF 64 SHEETS	STA.	220+00	TO STA.	225+00	FED. RC	DAD DIST. NO. 1 ILLINOIS FED. A	ID PROJECT		











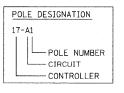
NOTES:

- 1. ALL POLES SHALL BE OFFSET 6' FROM THE EDGE OF PAVEMENT TO THE CENTER OF FOUNDATION, UNLESS OTHERWISE NOTED.
- 2. EXISTING LUMINAIRES SHALL REMAIN IN SERVICE UNTIL THE NEW LIGHTING SYSTEM IS OPERATIONAL.
- 3. INSTALL OFFSET POLE FOUNDATION.
- 4. INSTALL LUMINAIRE SHIELD.

SCALE: 1"=20"

5. INSTALL LIGHT POLE FOUNDATION, 24" DIAMETER WITH THREE RACEWAYS.

-04-G7 STA. 321+35

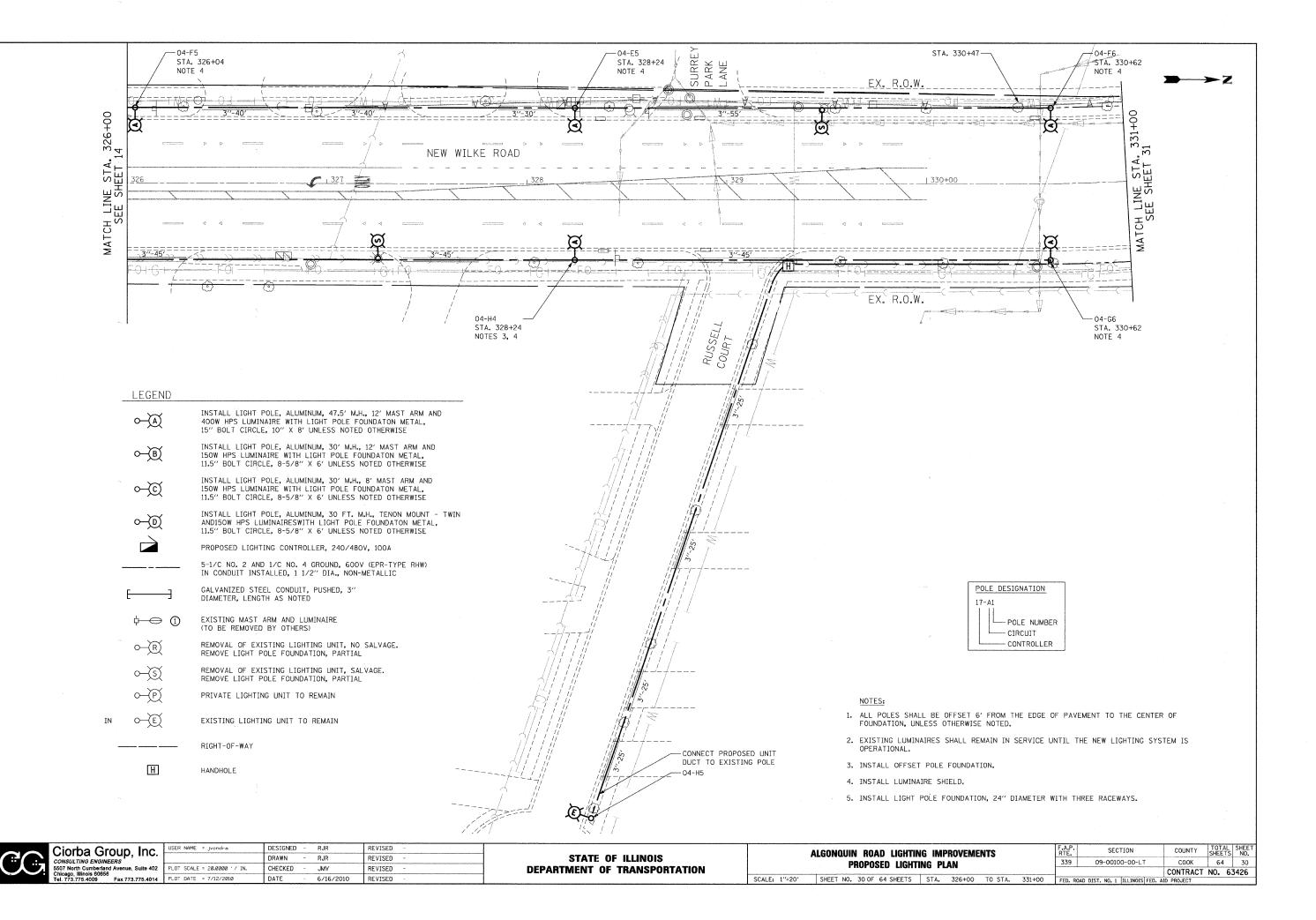


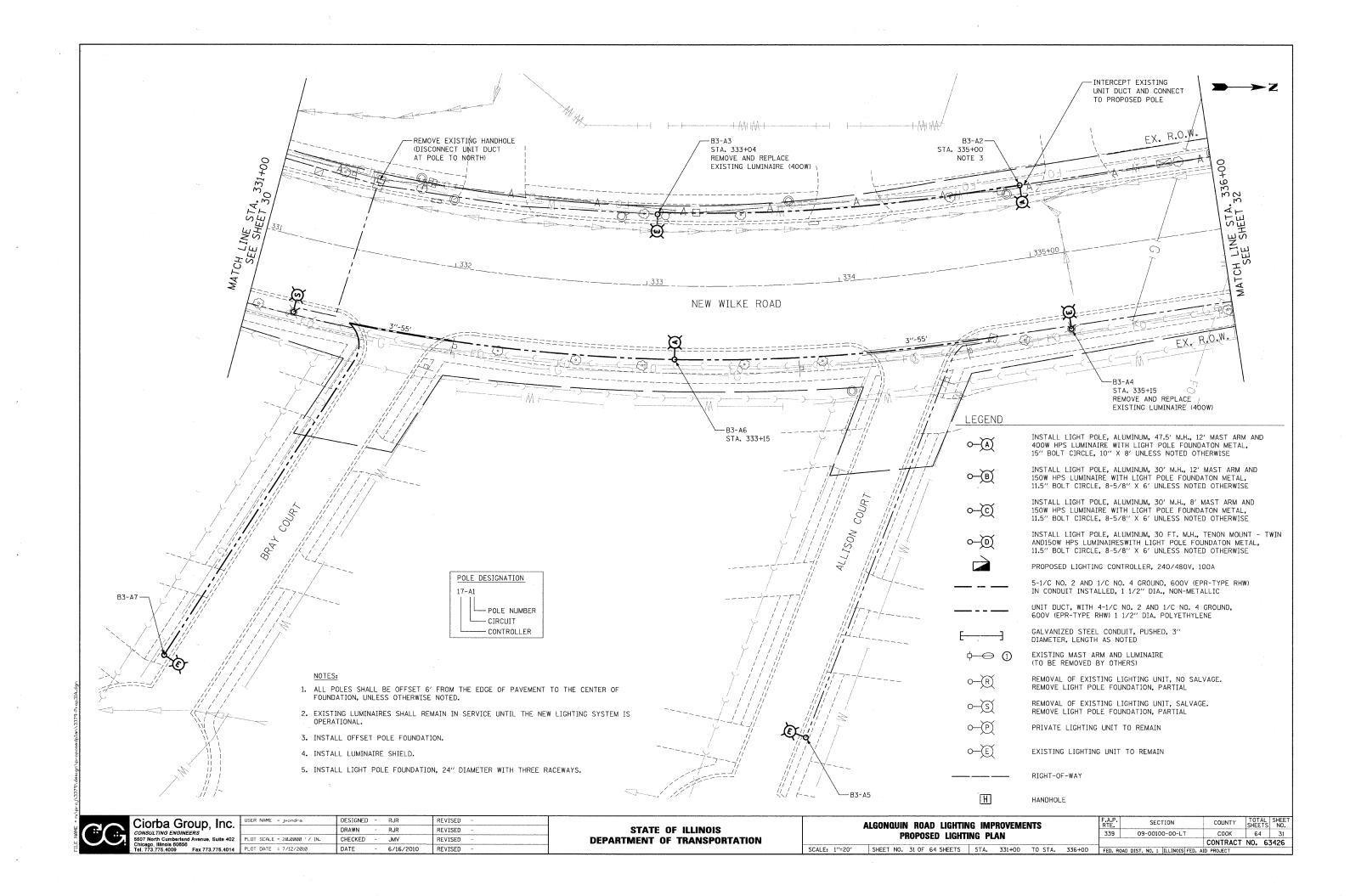
	Ciorba Group, Inc.
	CONSULTING ENGINEERS
に入り	5507 North Cumberland Avenue, Suite 402
	Chicago, Illinois 60656
	Tel. 773.775.4009 Fax 773.775.4014

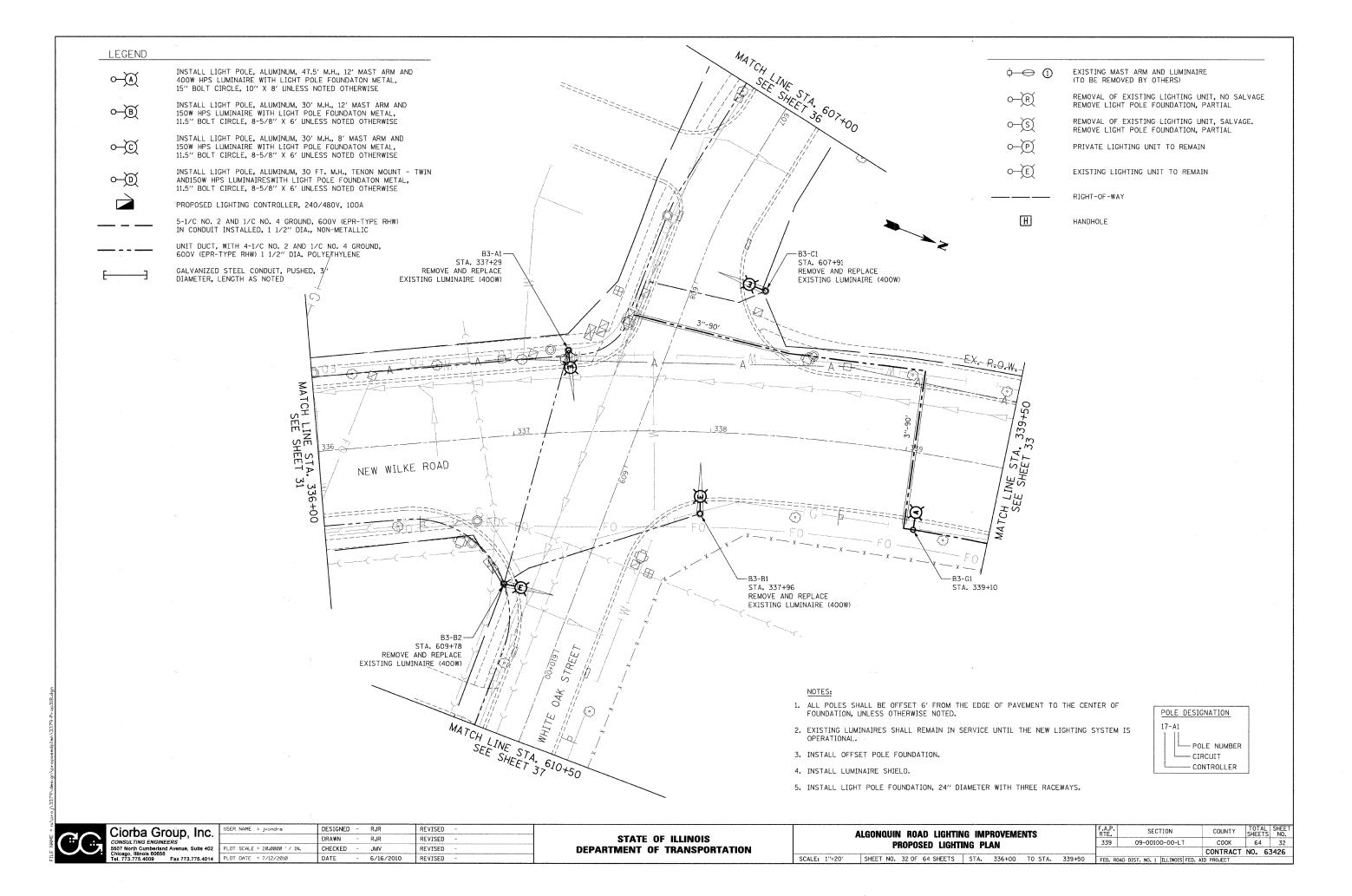
	USER NAME = jvondra	DESIGNED	-	RJR	REVISED	-
	*	DRAWN	-	RJR	REVISED	7
	PLOT SCALE = 20.00000 '/ IN.	CHECKED	-	JMV	REVISED	-
	PLOT DATE = 7/12/2010	DATE	-	6/16/2010	REVISED	-
_						

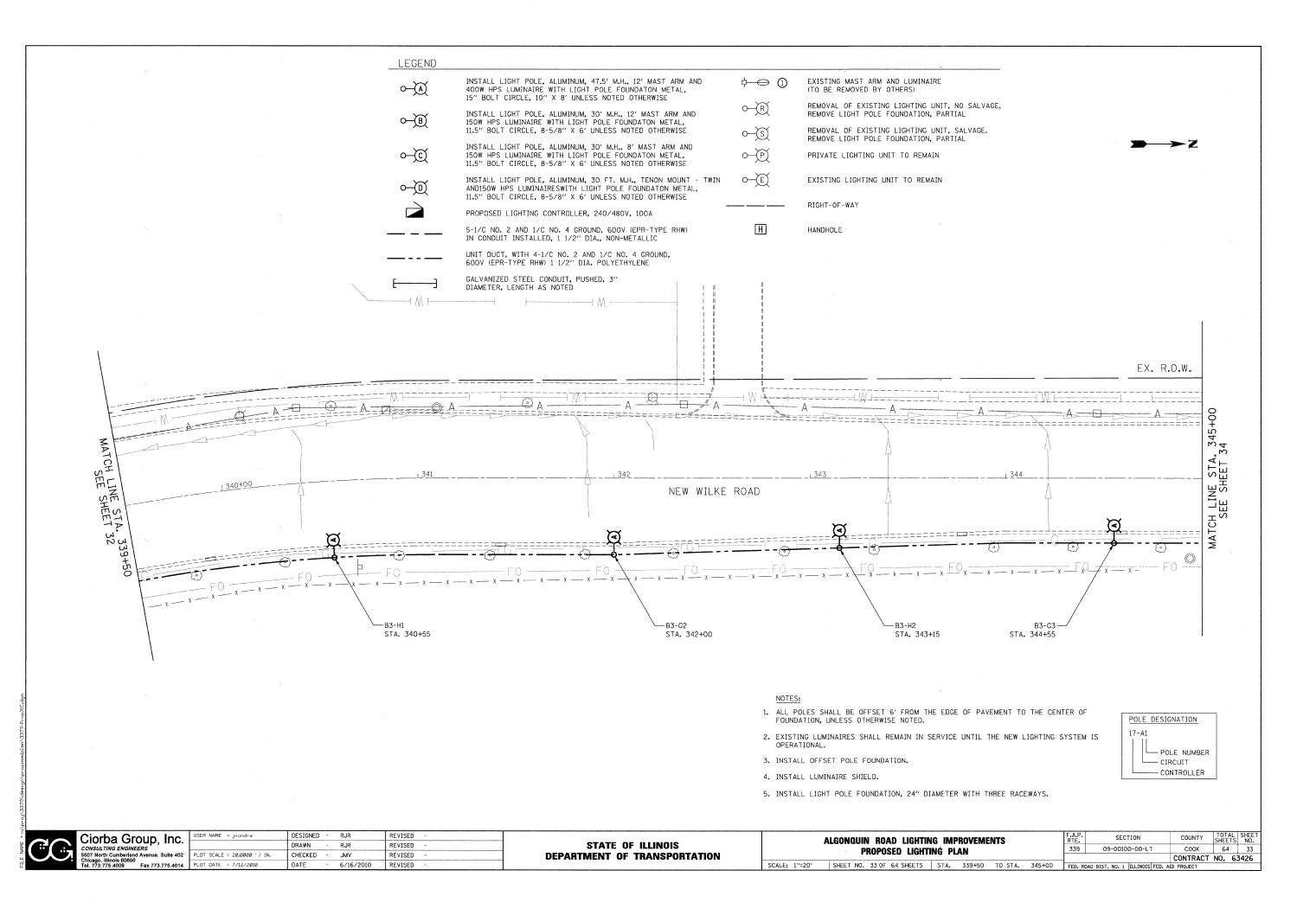
STATE	: OF	ILLINOIS
DEPARTMENT	OF	TRANSPORTATION

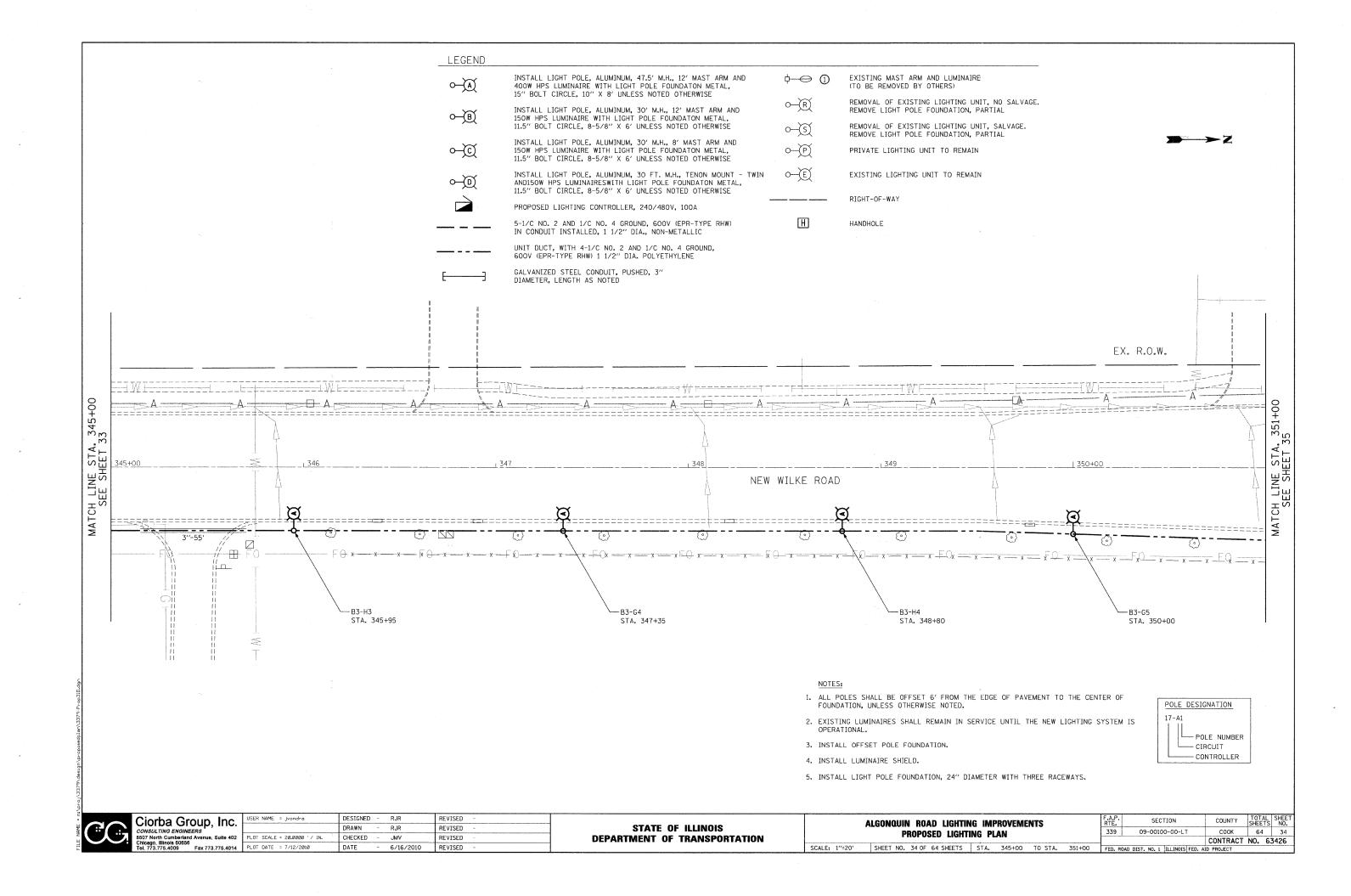
A	ALGONQUIN ROAD LIGHTING IMPROVEMENTS						SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PROPOSED LIGHTING PLAN						339	09-00100-00-LT	COOK	64	29
				CONTRACT	NO. 6	3426				
	SHEET NO. 29 OF 64 SHEETS	STA. 318	+00	TO STA.	323+00	FED. R	DAD DIST. NO. 1 ILLINOIS FED. A	ID PROJECT		

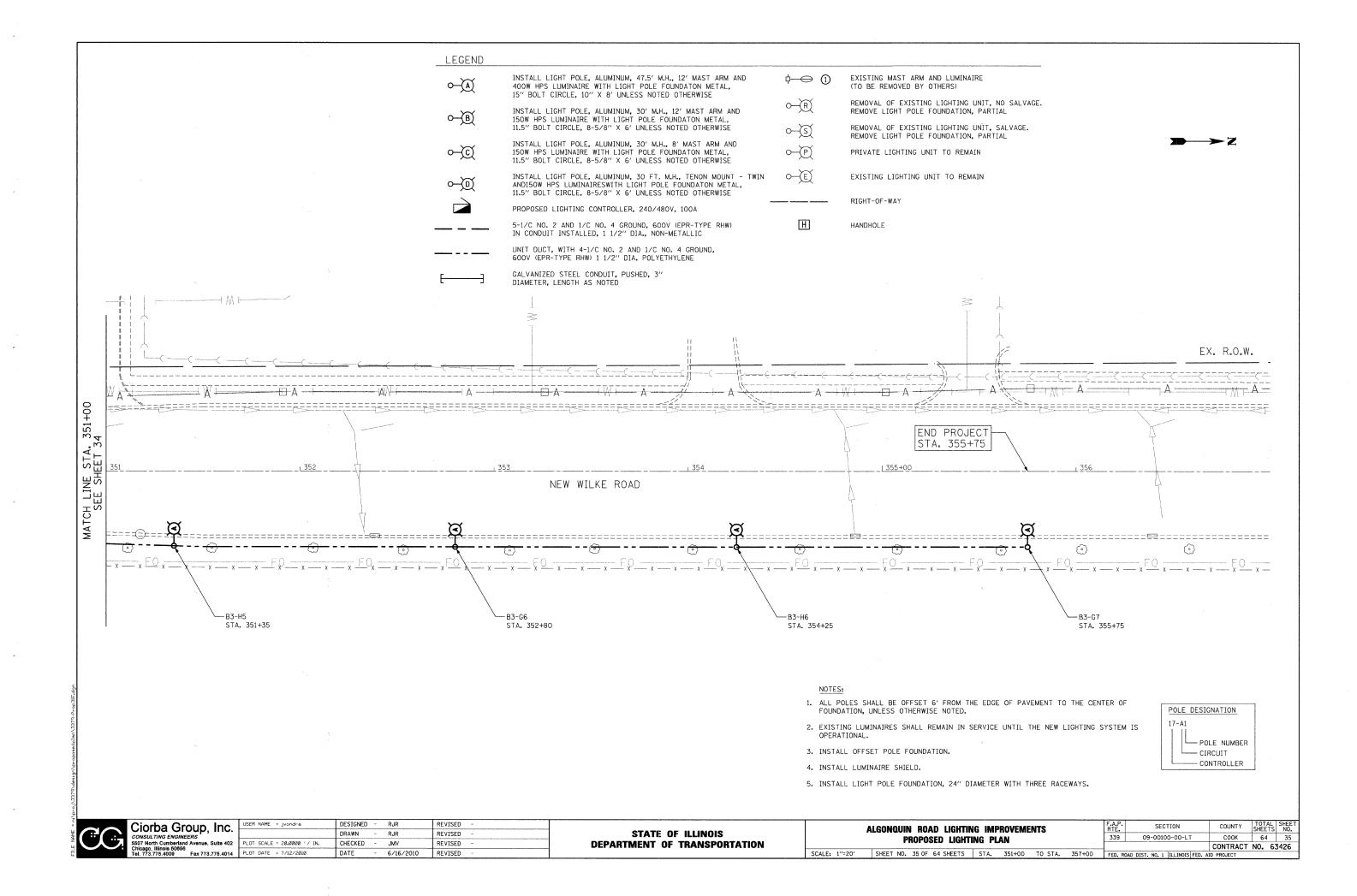


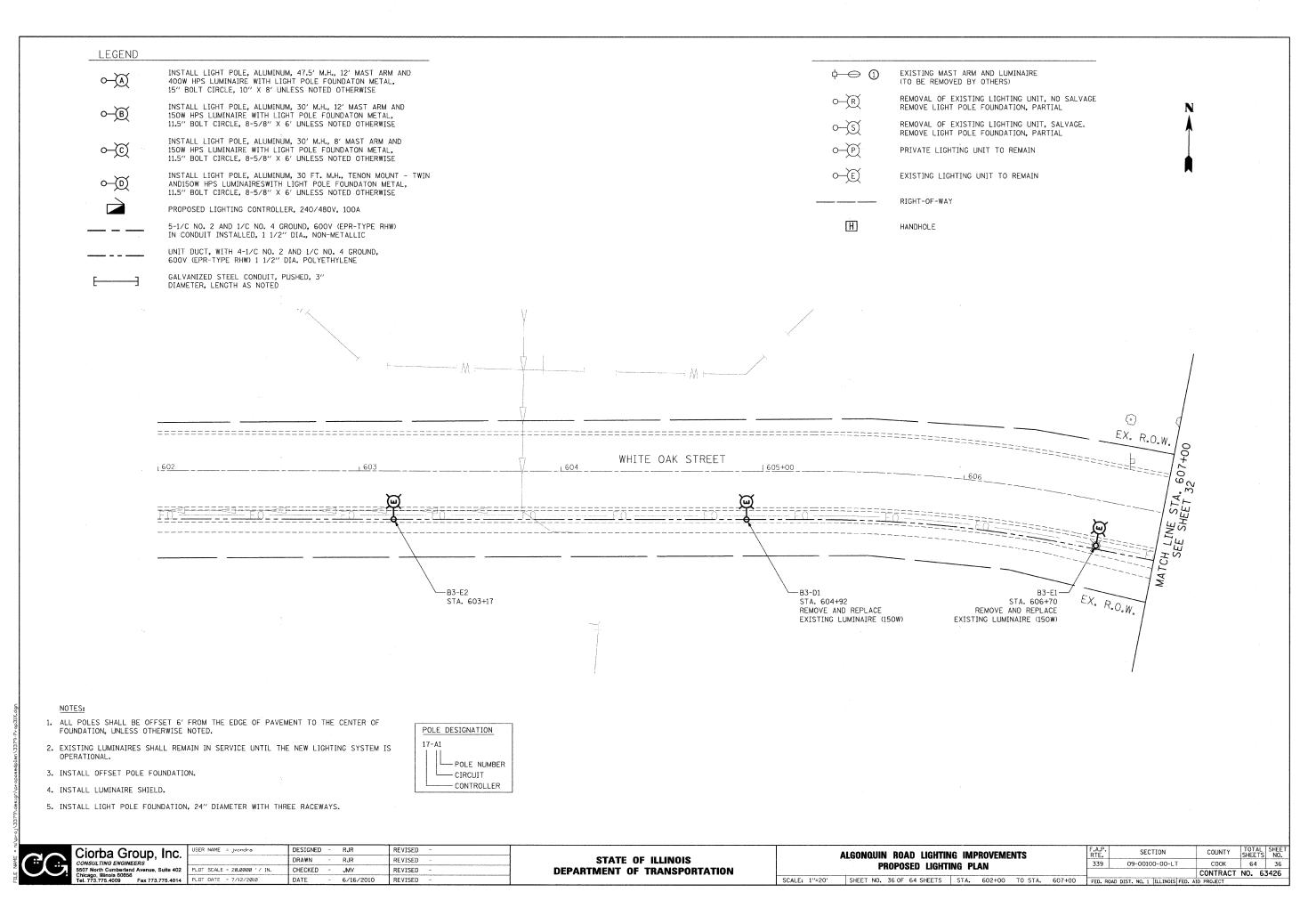


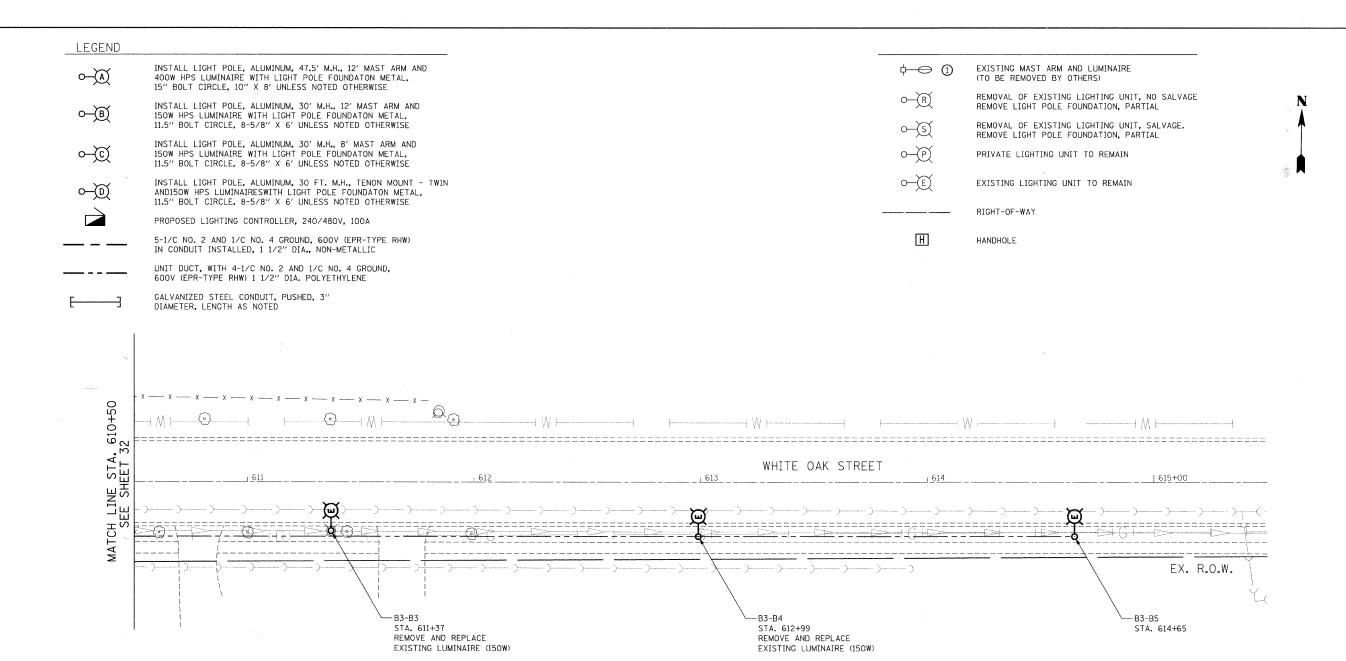






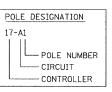






NOTES

- 1. ALL POLES SHALL BE OFFSET 6' FROM THE EDGE OF PAVEMENT TO THE CENTER OF FOUNDATION, UNLESS OTHERWISE NOTED.
- 2. EXISTING LUMINAIRES SHALL REMAIN IN SERVICE UNTIL THE NEW LIGHTING SYSTEM IS
- 3. INSTALL OFFSET POLE FOUNDATION.
- 4. INSTALL LUMINAIRE SHIELD.
- 5. INSTALL LIGHT POLE FOUNDATION, 24" DIAMETER WITH THREE RACEWAYS.

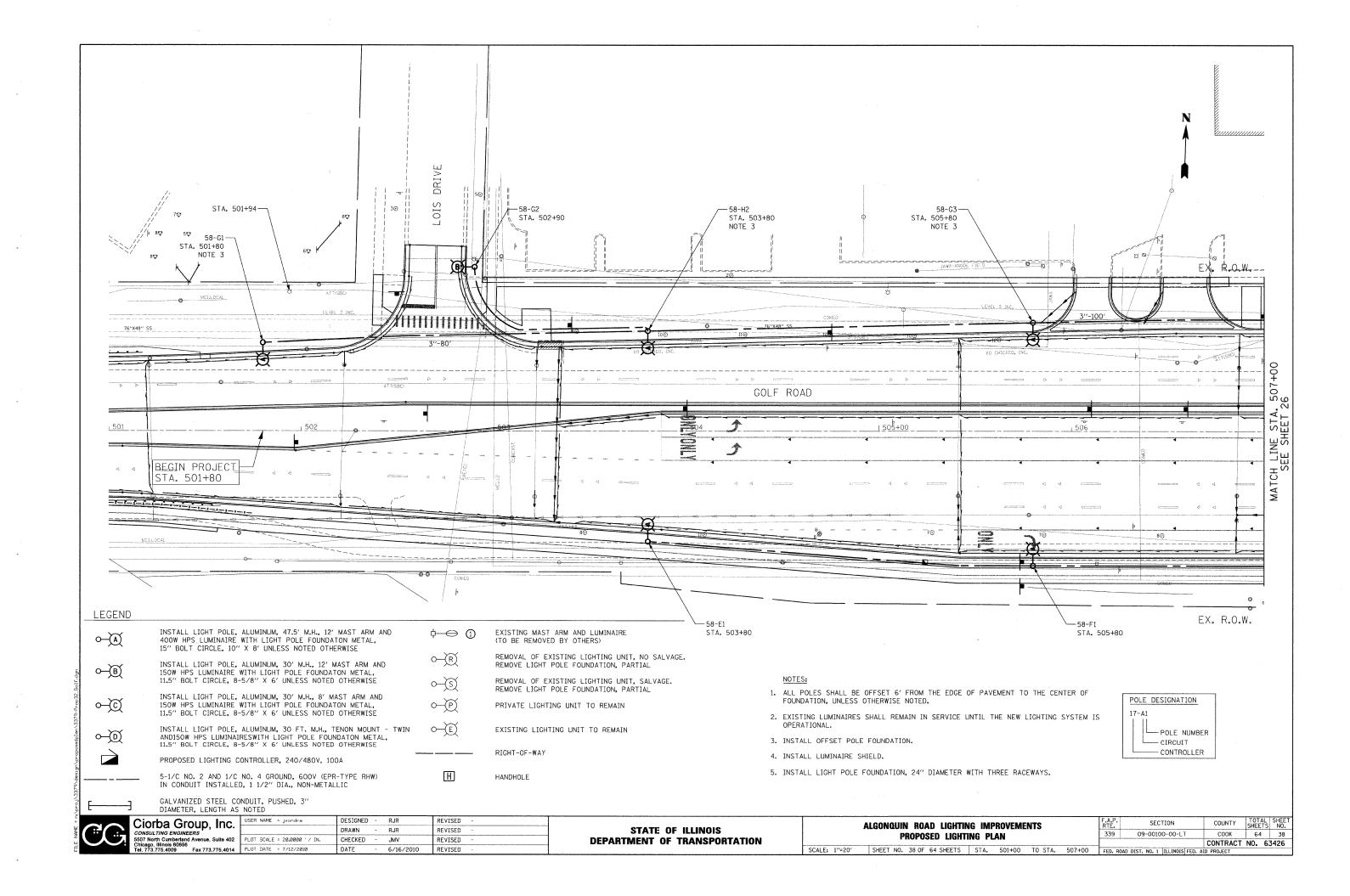


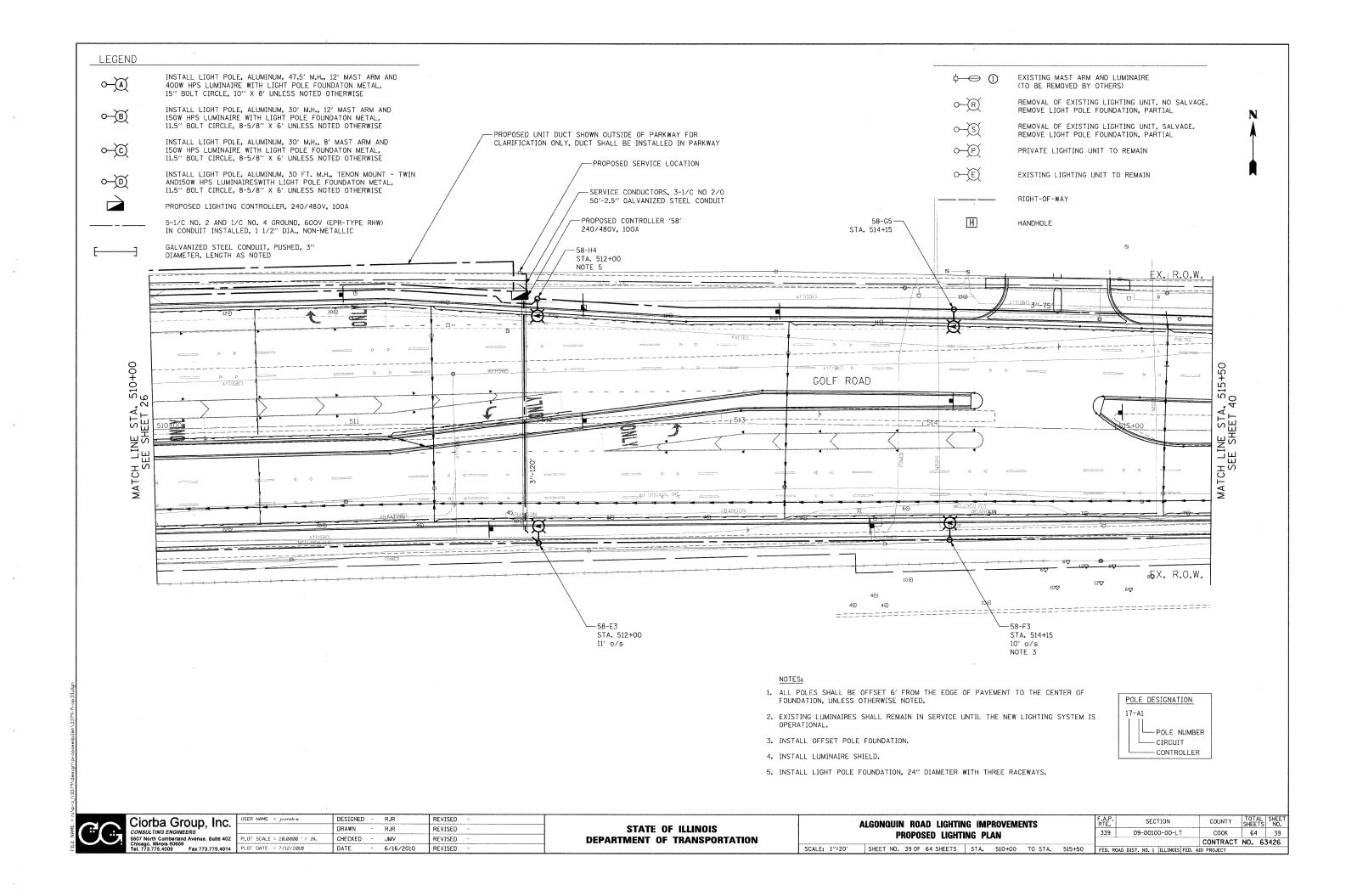
was as a likelyawas.				
and the second	Ciorba Group, Inc.	USER NAME = jvondra	DESIGNED - RJR	REVISED -
	CONSULTING ENGINEERS		DRAWN - RJR	REVISED -
U	5507 North Cumberland Avenue, Suite 402 Chicago, Illinois 60656	PLOT SCALE = 20.00000 ' / IN.	CHECKED - JMV	REVISED -
	Tel. 773.775.4009 Fax 773.775.4014	PLOT DATE = 7/12/2010	DATE - 6/16/2010	REVISED -

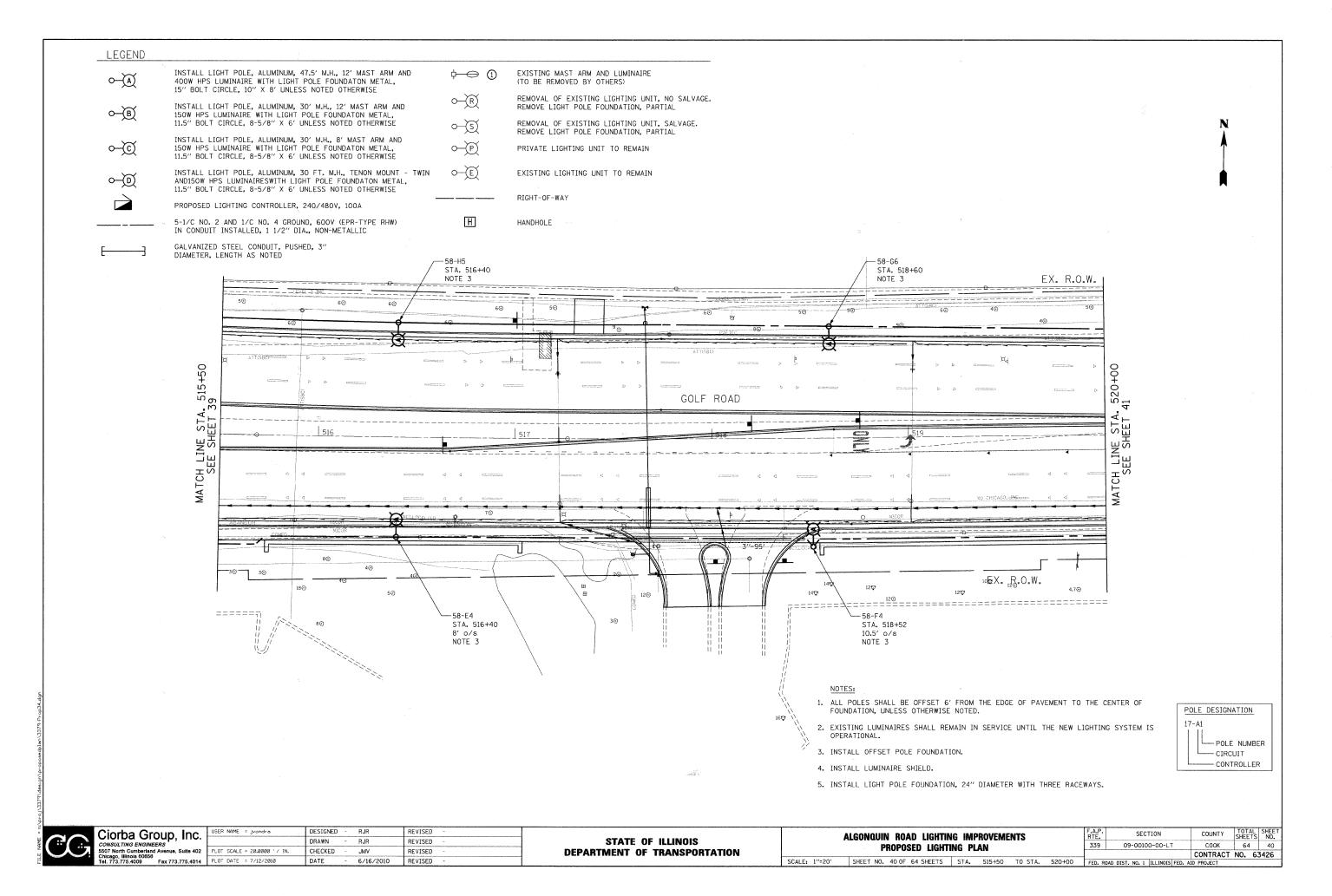
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

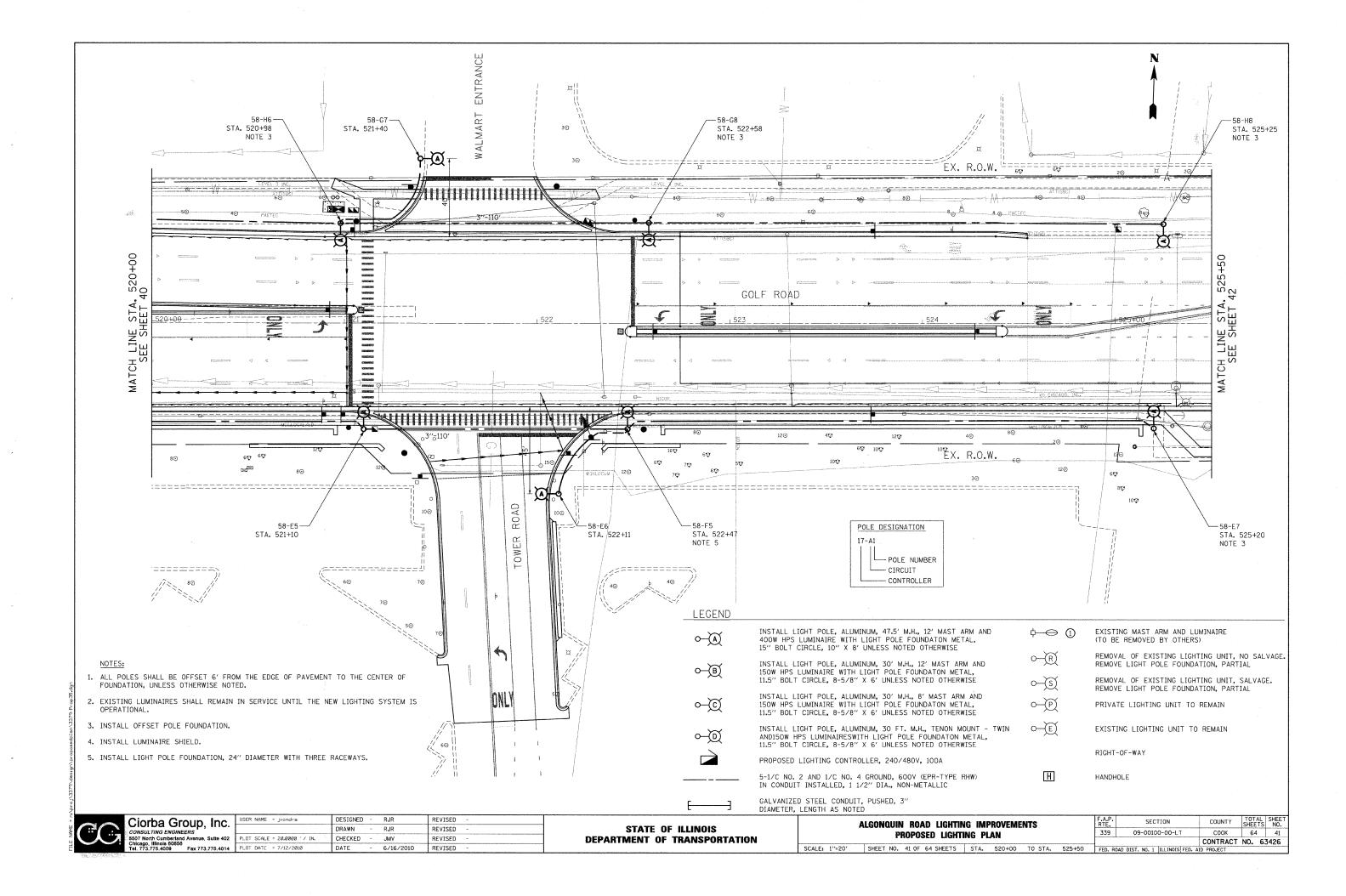
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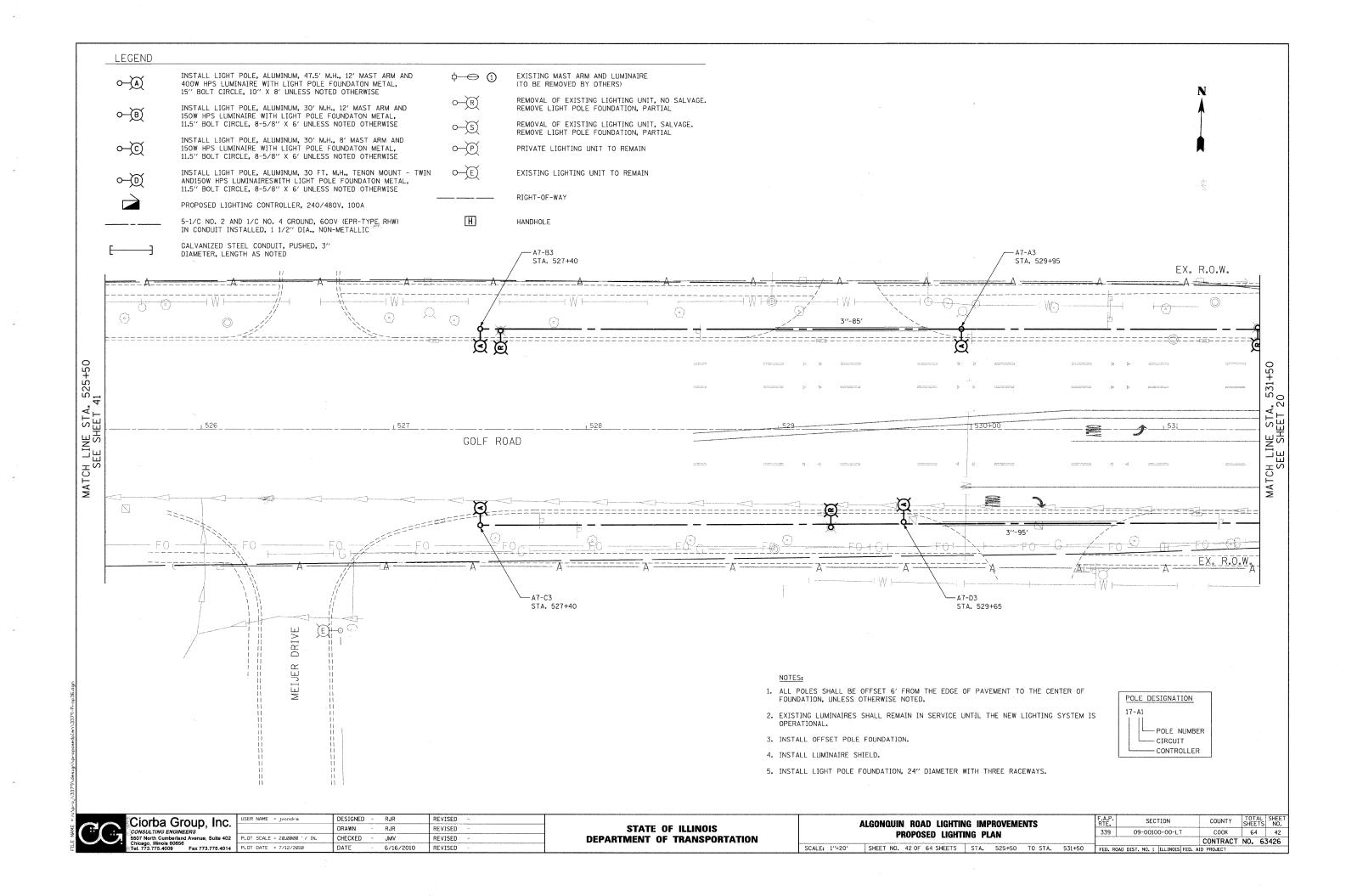
Α	LGONQUIN	ROA	D LIGHTIN	IG IMP	ROVEME	NTS		F.A.P. RTE.	SECT	LION	COUNTY	TOTAL	
	PR	ROPOS	ED LIGHTI	NG PI	ΔN			339	09-0010	0-00-LT	СООК	64	37
	,					**********					CONTRACT	NO. E	3426
	SHEET NO.	37 OF (64 SHEETS	STA.	610+50	TO STA.	615+50	FED. RO	DAD DIST. NO. 1	ILLINOIS FED. A	ID PROJECT		

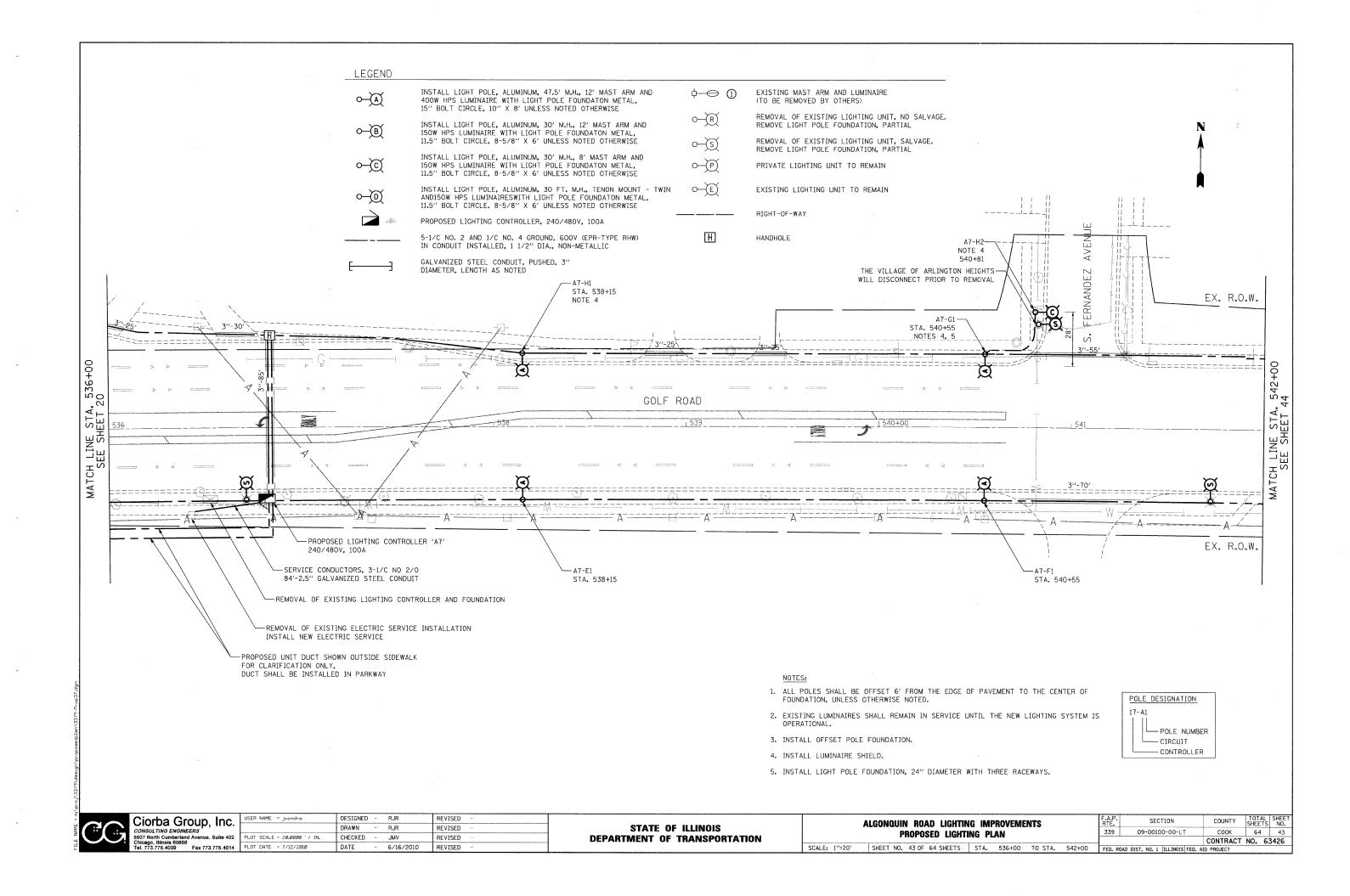


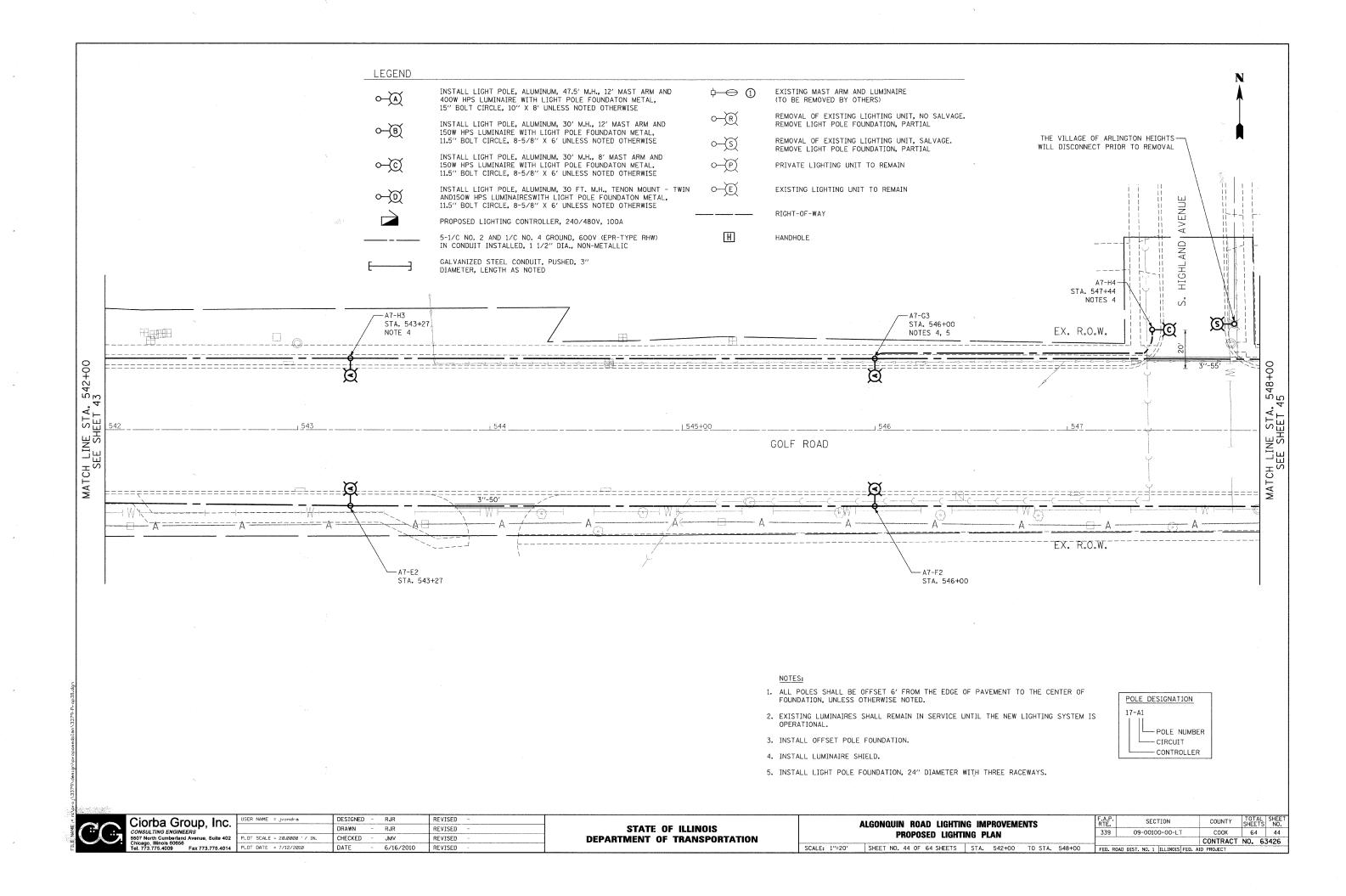


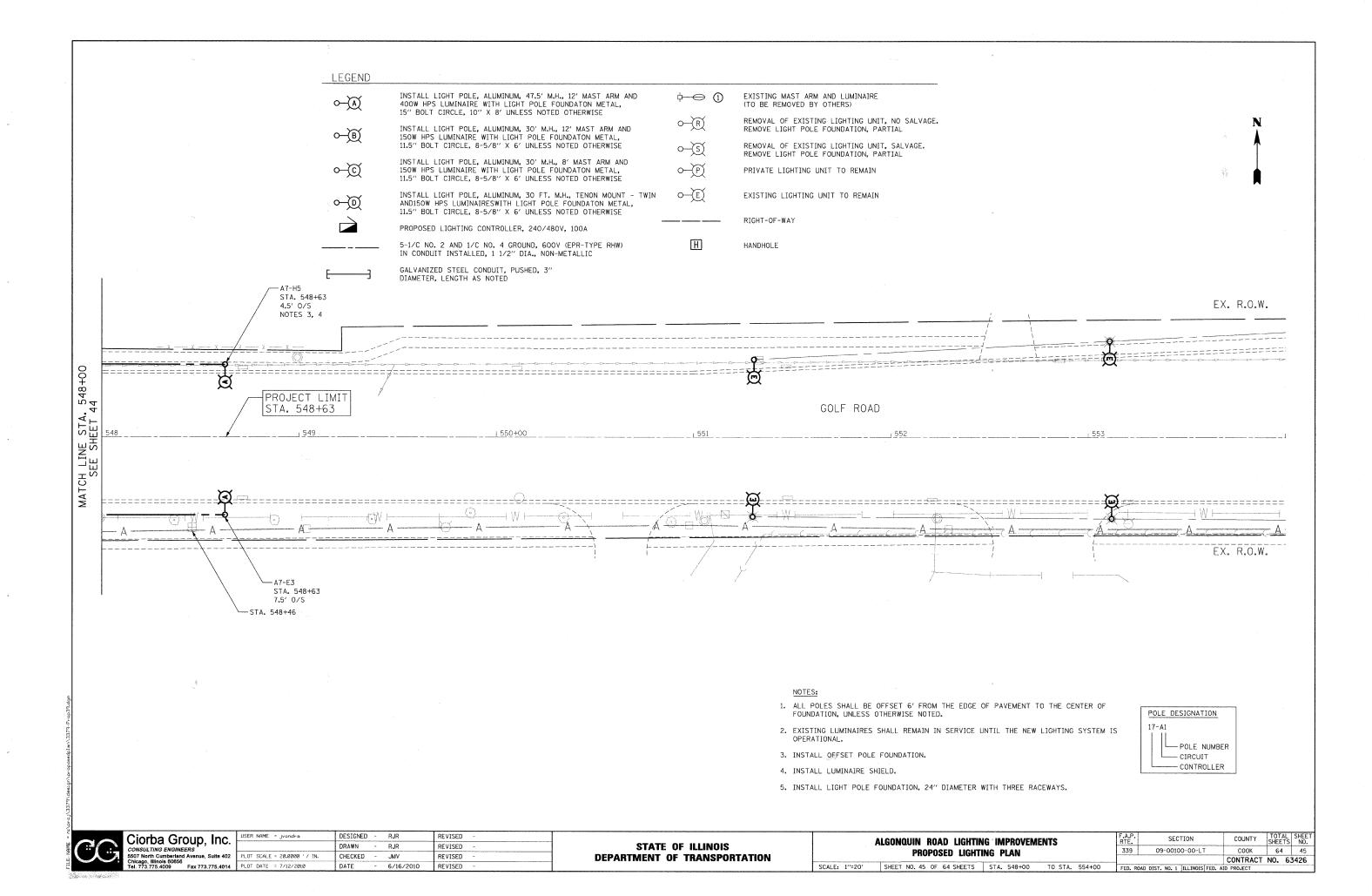


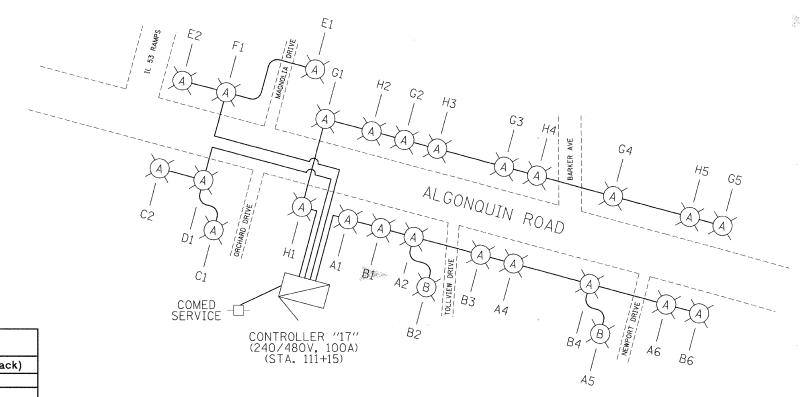






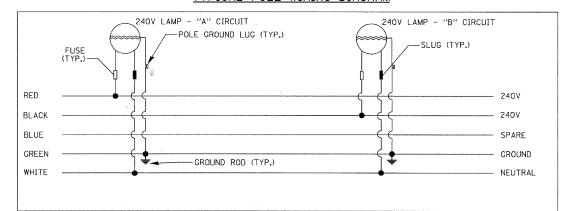






	Load Tabulation for Light	ing Controller 17	
		Phase A (Red)	Phase B (Black)
Ckt.#	Description	(watts)	(watts)
Α	1-150W, 4-400W	2100	
В	1-150W, 4-400W		2100
С	0-150W, 2-400W	960	
D	0-150W, 1-400W		480
Е	0-150W, 2-400W	960	
F	0-150W, 1-400W		480
G	0-150W, 5-400W	2400	
Н	0-150W, 5-400W		2400
	Totals	6420	5460

TYPICAL POLE WIRING DIAGRAM



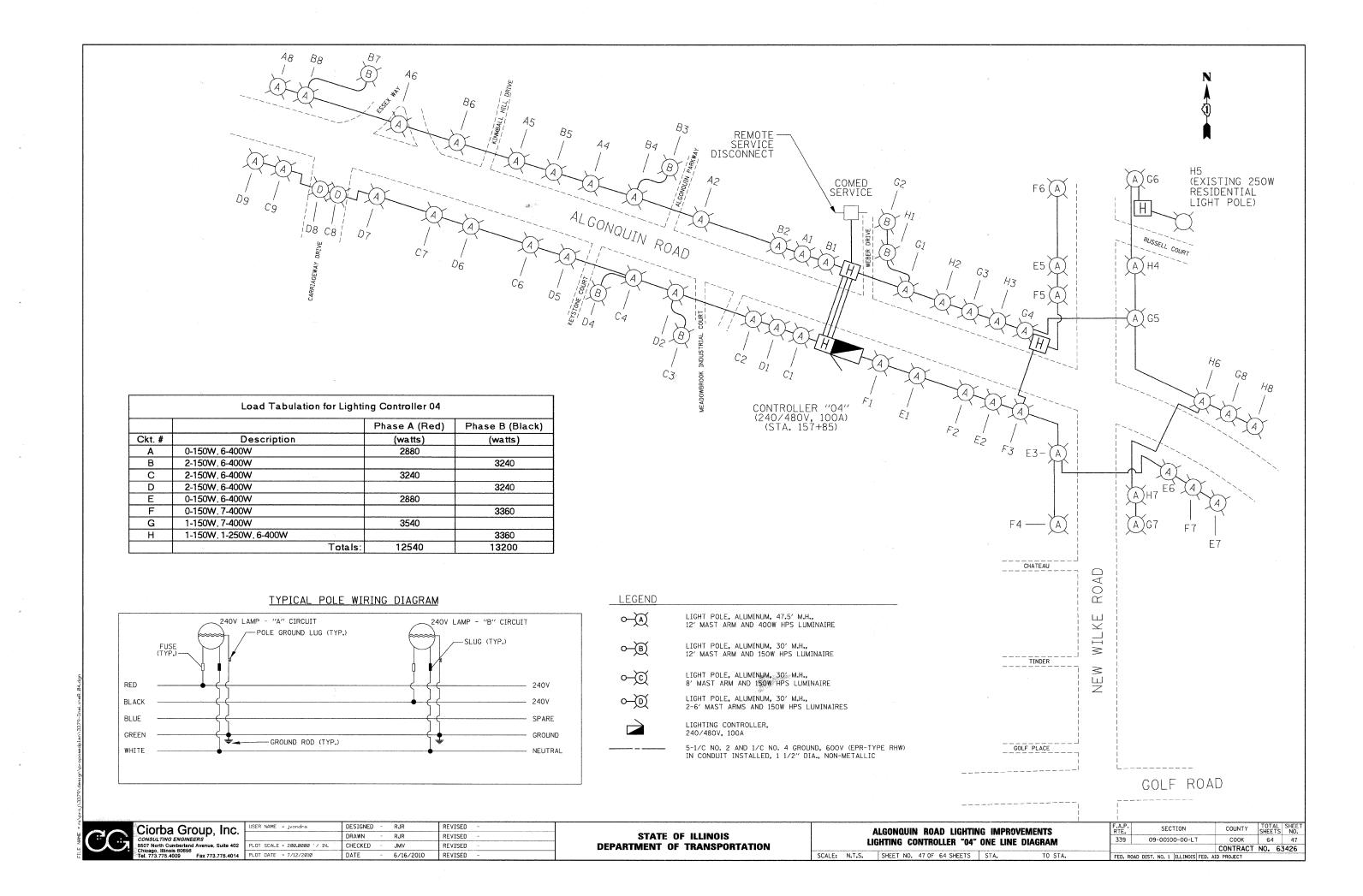
LEGEND	10 (10 (10 (10 (10 (10 (10 (10 (10 (10 (
0— <u>(A)</u>	LIGHT POLE, ALUMINUM, 47.5' M.H., 12' MAST ARM AND 400W HPS LUMINAIRE
o—B	LIGHT POLE, ALUMINUM, 30' M.H., 12' MAST ARM AND 150W HPS LUMINAIRE
⊕ ©	LIGHT POLE, ALUMINUM, 30' M.H., 8' MAST ARM AND 150W HPS LUMINAIRE
○	LIGHT POLE, ALUMINUM, 30' M.H., 2-6' MAST ARMS AND 150W HPS LUMINAIRES
	LIGHTING CONTROLLER, 240/480V, 100A
	5-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (EPR-TYPE RHW) IN CONDUIT INSTALLED, 1 1/2" DIA., NON-METALLIC

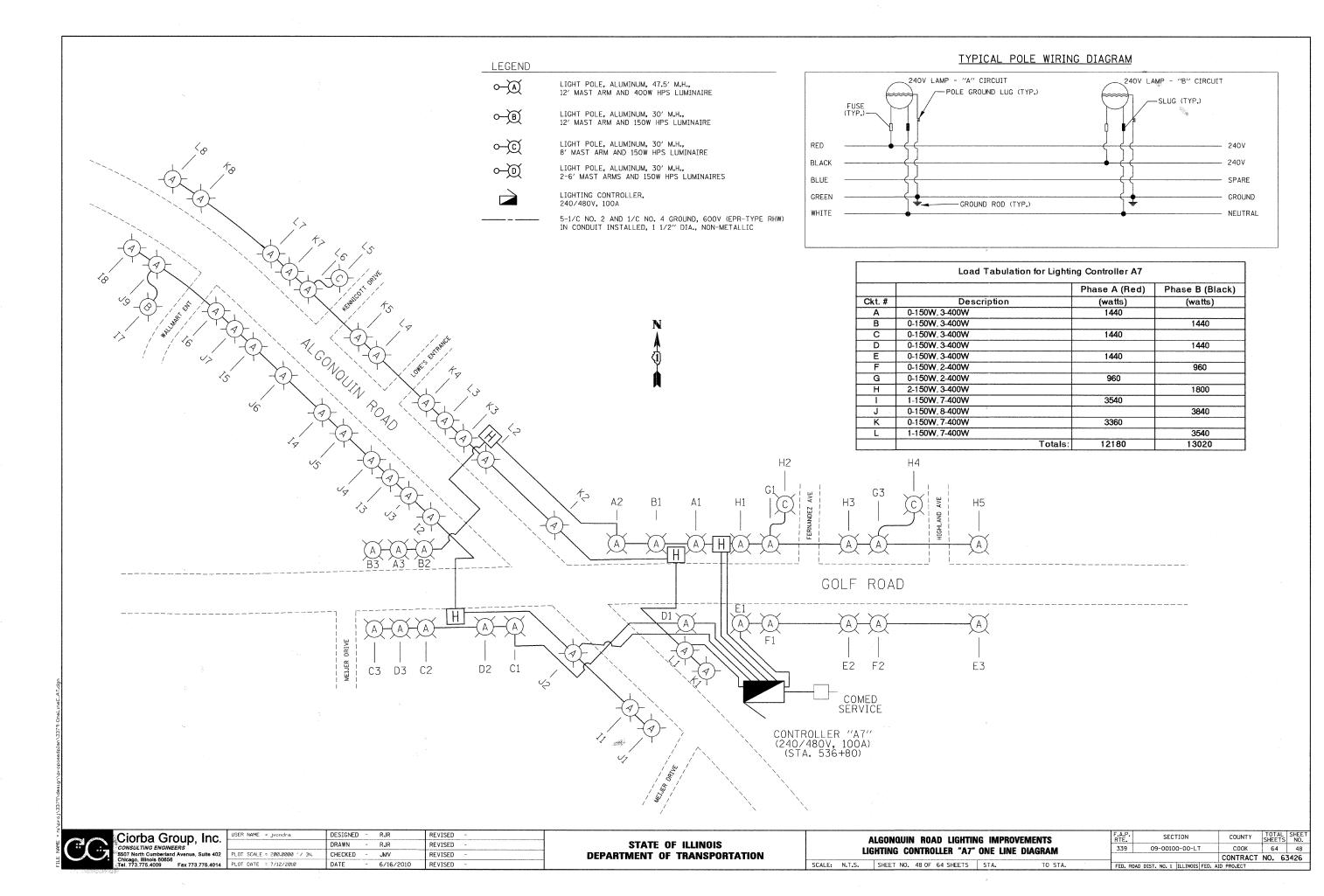
	Ciorba Gr	oup, Inc.
1 Gir Gir	CONSULTING ENGINE	ERS
	5507 North Cumberland	1 Avenue, Suite 402
200	Chicago, Illinois 60656	
	Tel. 773.775.4009	Fax 773.775.4014

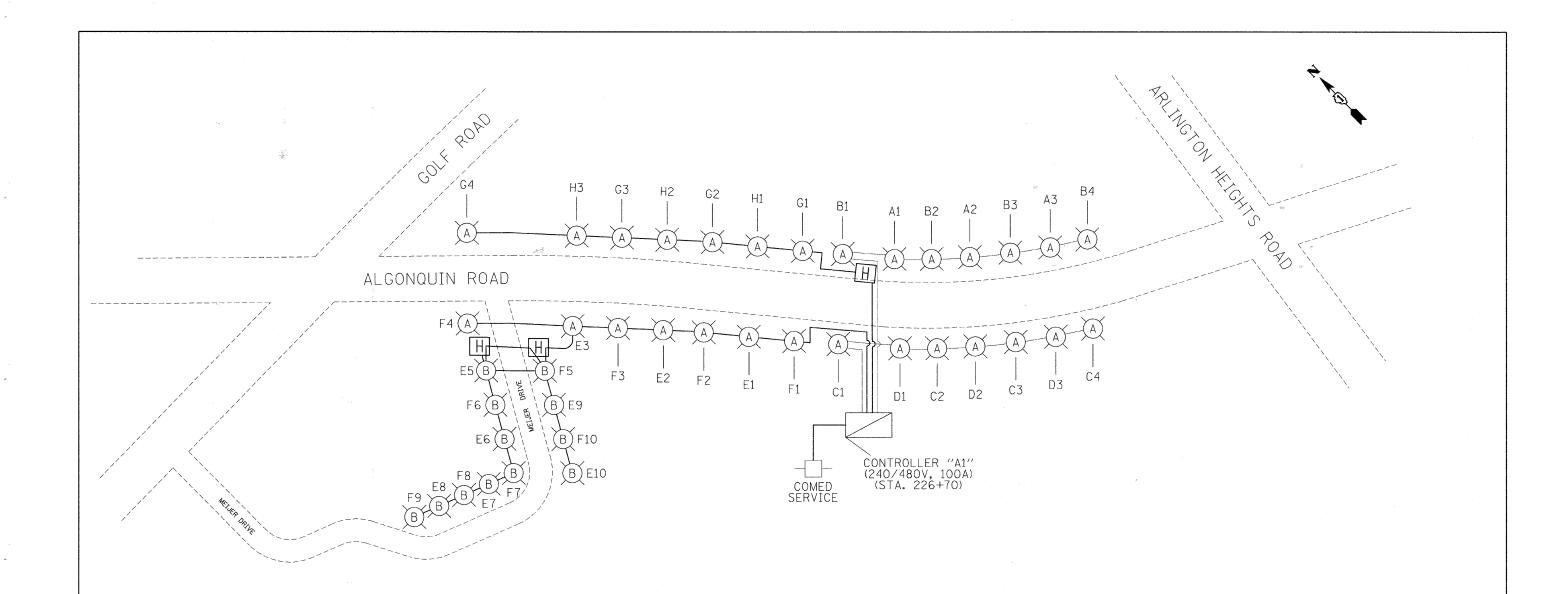
	USER NAME = jvondra	DESIGNED	-	RJR	REVISED	**
•	,	DRAWN	-	RJR	REVISED	-
2	PLOT SCALE = 200.0000 '/ IN.	CHECKED	-	JMV	REVISED	
4	PLOT DATE = 7/12/2010	DATE	-	6/16/2010	REVISED	-
			_			

STATE	OF	ILLINOIS
DEPARTMENT	0F	TRANSPORTATION

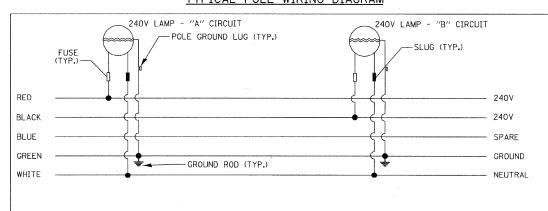
ALGONQUIN RO	AD LIGHTIN	IG IMPR	OVEMENTS	F.A.P. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
LIGHTING CONTR	OLLER "17"	ONE LIN	IF DIAGRAM	339	09-00100-00-LT	COOK	64	46
		,	L DIAGIDAM			CONTRACT	NO. E	3426
SCALE: N.T.S. SHEET NO. 46 0	F 64 SHEETS	STA.	TO STA.	FED. RO	OAD DIST. NO. 1 ILLINOIS FED. A	ID PROJECT		







TYPICAL POLE WIRING DIAGRAM



LEGEND

<u>~</u>©

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and the

O—XA LIGHT POLE, ALUMINUM, 47.5' M.H., 12' MAST ARM AND 400W HPS LUMINAIRE

LIGHT POLE, ALUMINUM, 30' M.H., 12' MAST ARM AND 150W HPS LUMINAIRE

LIGHT POLE, ALUMINUM, 30' M.H., 8' MAST ARM AND 150W HPS LUMINAIRE

LIGHT POLE, ALUMINUM, 30' M.H., 2-6' MAST ARMS AND 150W HPS LUMINAIRES

LIGHTING CONTROLLER, 240/480V, 100A

5-1/C NO. 2 AND 1/C NO. 4 GROUND, 600V (EPR-TYPE RHW) IN CONDUIT INSTALLED, 1 1/2" DIA., NON-METALLIC

SCALE: N.T.S.

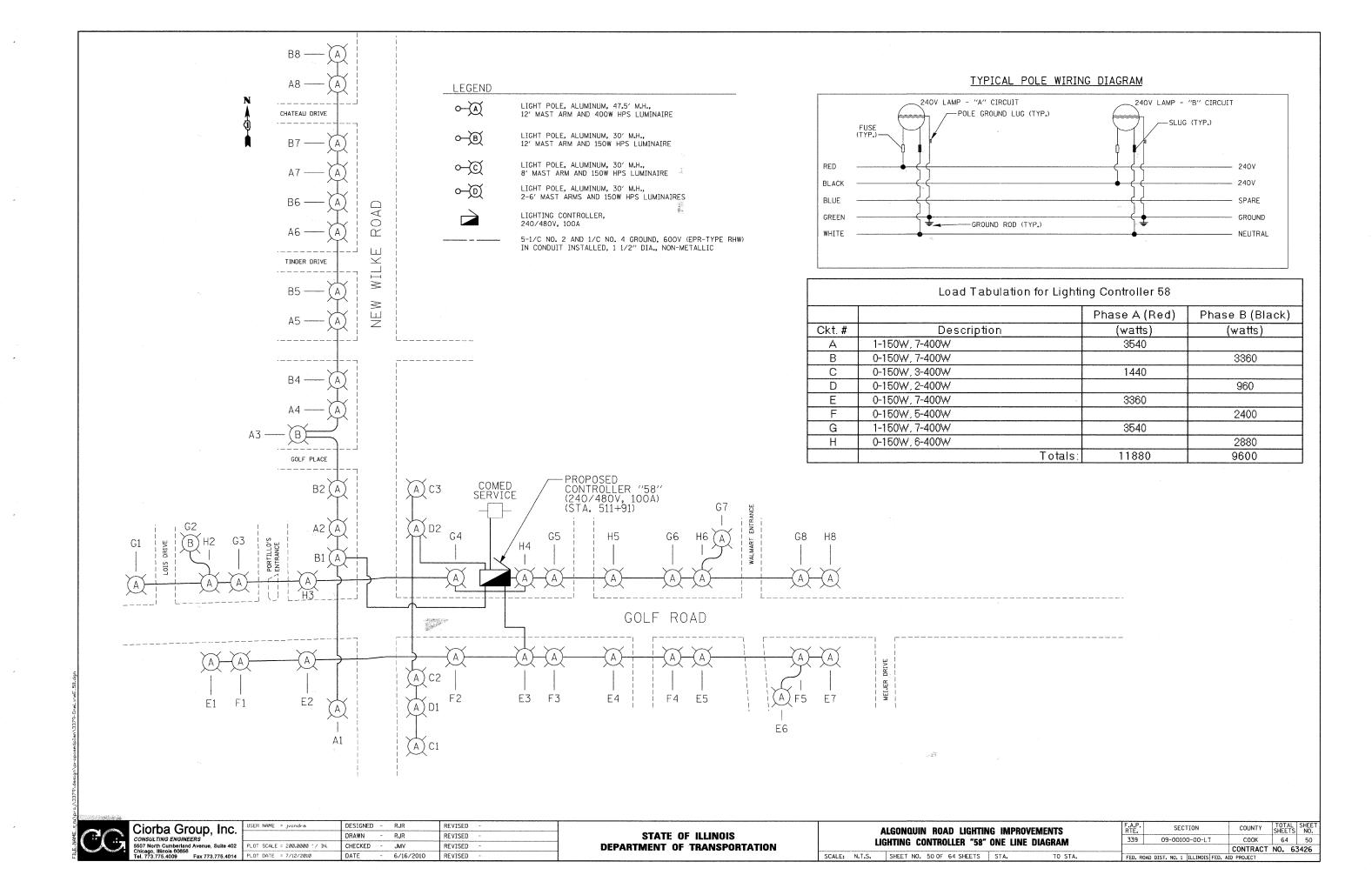
		Phase A (Red)	Phase B (Black)
Ckt.#	Description	(watts)	(watts)
Α	0-150W, 3-400W	1440	
В	0-150W, 4-400W		1920
С	0-150W, 4-400W	1920	
D	0-150W, 3-400W		1440
E	6-150W, 3-400W	2520	
F	6-150W, 4-400W		3000
G	0-150W, 4-400W	1920	
Н	0-150W, 3-400W		1440
	Totals:	7800	7800

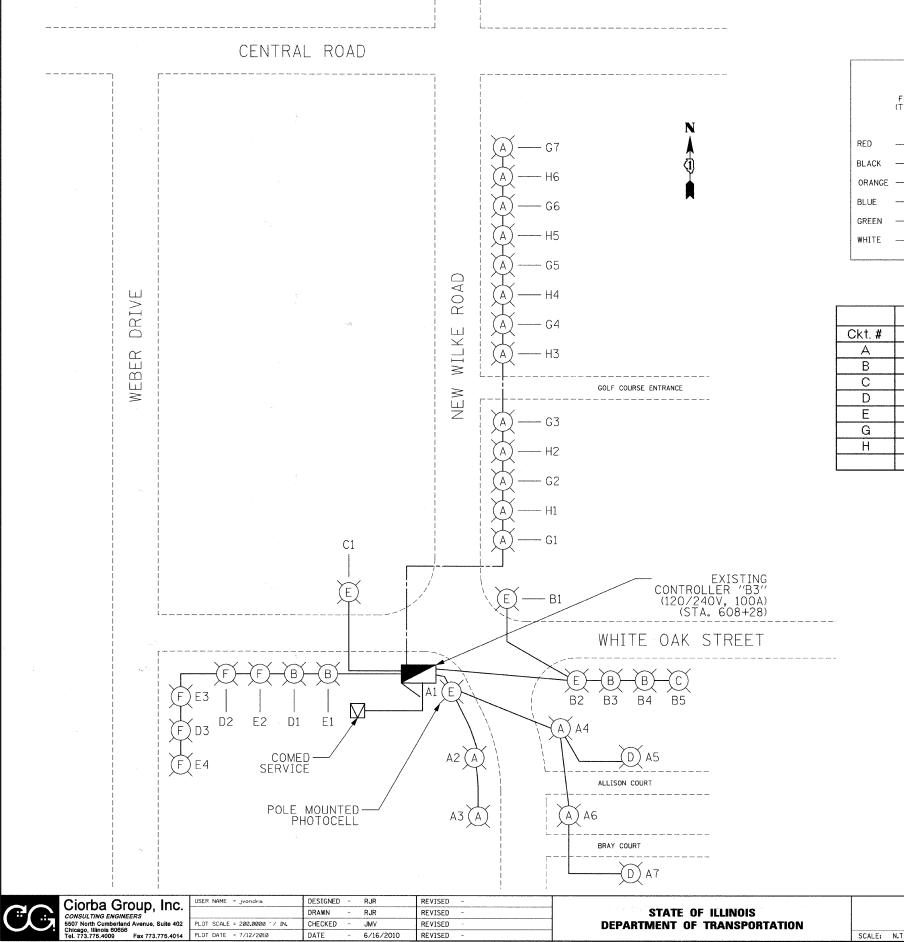
00	Ciorba Gr	
	5507 North Cumberlant Chicago, Illinois 60656	d Avenue, Suite 402
and the same of th	Tel. 773.775.4009	Fax 773.775.4014

,	USER NAME = jvondra	DESIGNED	-	RJR	REVISED -	
٠.		DRAWN	-	RJR	REVISED -	
02	PLOT SCALE = 200.0000 '/ IN.	CHECKED	-	JMV	REVISED -	
14	PLOT DATE = 7/12/2010	DATE	-	6/16/2010	REVISED -	

STATE	OF ILLINOIS
DEPARTMENT	OF TRANSPORTATION

ALGONQUIN ROAD LIGHTING IMPROVEMENTS		SECTION	COUNTY	TOTAL	SHEET NO.	
LIGHTING CONTROLLER "A1" ONE LINE DIAGRAM	339	09-00100-00-LT	COOK	64	49	
LIGHTING CONTROLLINE AT ONL LINE DIAGRAM			CONTRACT	NO. 6	3426	
SHEET NO. 49 OF 64 SHEETS STA. TO STA.	FED. RO	DAD DIST. NO. 1 ILLINOIS FED. A	D PROJECT			



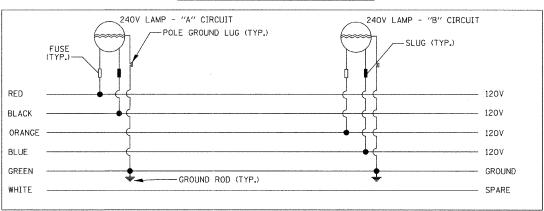


DATE

6/16/2010

REVISED

TYPICAL POLE WIRING DIAGRAM

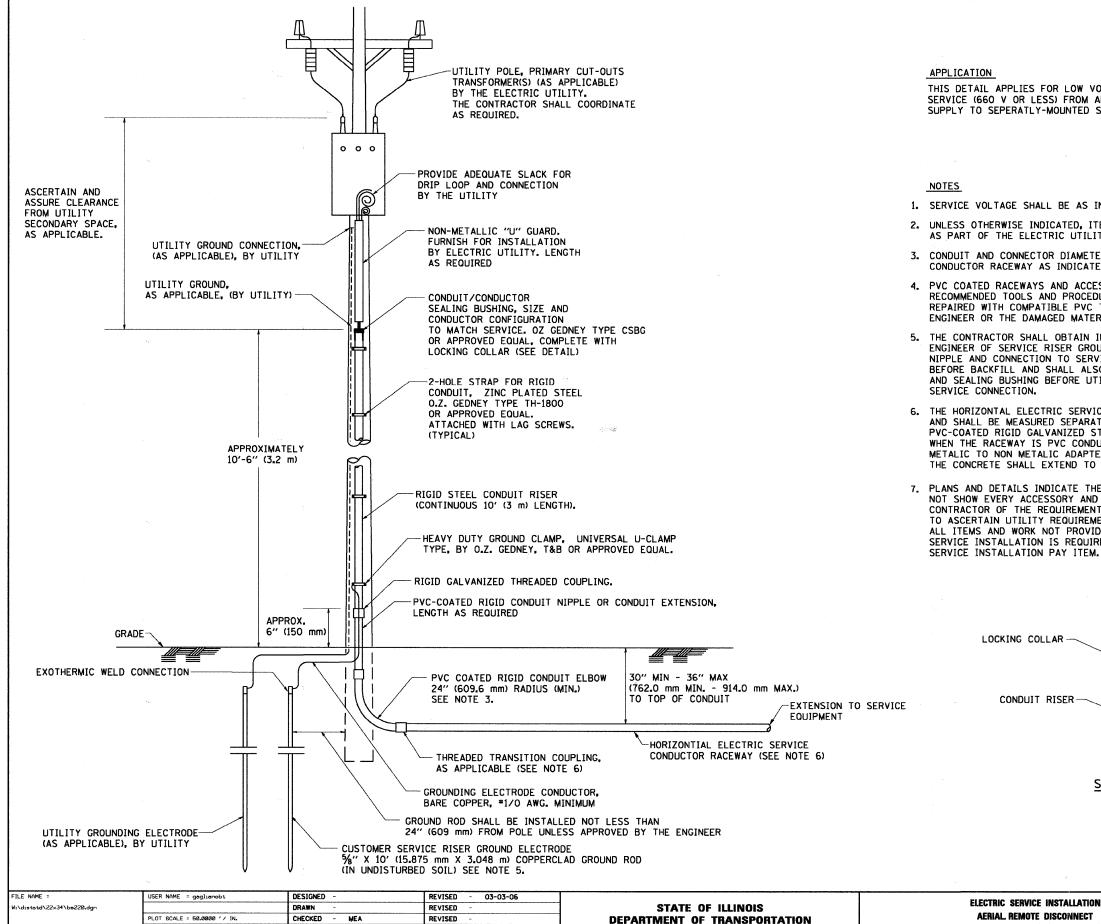


	*	Phase A (Red)	Phase B (Black)
Ckt.#	Description	(watts)	(watts)
Α	0-100W, 0-150W, 2-250W, 5-400W	3000	
В	0-100W, 2-150W, 1-250W, 2-400W		1620
С	0-100W, 0-150W, 0-250W, 1-400W	480	
D	2-100W, 1-150W, 0-250W, 0-400W		420
Е	3-100W, 1-150W, 0-250W, 0-400W	540	
G	0-100W, 0-150W, 0-250W, 7-400W	3360	·
Н	0-100W, 0-150W, 0-250W, 6-400W		2880
	Totals:	7380	4920

LEGEND	
○ —(A)	LIGHT POLE, ALUMINUM, 47.5' M.H., 12' MAST ARM AND 400W HPS LUMINAIRE
o—	LIGHT POLE, ALUMINUM, 30' M.H., 15' MAST ARM AND 150W HPS LUMINAIRE
·—(©	LIGHT POLE, ALUMINUM, 30' M.H., 15' MAST ARM AND 250W HPS LUMINAIRE
<u>~</u>	LIGHT POLE, CONCRETE, 30' M.H., 8' MAST ARM AND 250W HPS LUMINAIRES
0—Œ	COMBO POLE, 47.5′ M.H., 15′ MAST ARM AND 400W HPS LUMINAIRE
o—(F)	LIGHT POLE, 30' M.H., 15' MAST ARM AND 100W HPS LUMINAIRE
	LIGHTING CONTROLLER, 120/240V, 100A
	5-1/C NO. 2 AND 1/C NO. 4 GROUND, GOOV (EPR-TYPE RHW) IN CONDUIT INSTALLED, 1 1/2" DIA., NON-METALLIC
Annual Control of the	EXISTING CABLES, DIRECT BURIAL, UNKNOWN SIZE

ALGONQUIN ROAD LIGHT	ING IMPR	OVEMENTS	F.A.P. RTE.	SECTION		
LIGHTING CONTROLLER "B3" ONE LINE DIAGRAM				09-00100-00-LT		
 SHEET NO. 51 OF 64 SHEETS 	I SIA.	TO STA.	CCD D	OAD DICT NO 1 THINNIC EED .		

SCALE: N.T.S.



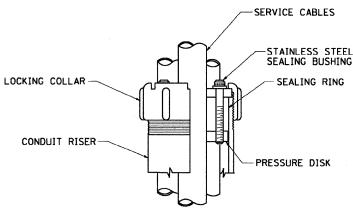
PLOT DATE = 1/4/2008

DATE

REVISED

THIS DETAIL APPLIES FOR LOW VOLTAGE ELECTRIC SERVICE (660 V OR LESS) FROM AN OVERHEAD UTILITY SUPPLY TO SEPERATLY-MOUNTED SERVICE EQUIPMENT.

- 1. SERVICE VOLTAGE SHALL BE AS INDICATED ELSEWHERE IN THE DRAWINGS.
- 2. UNLESS OTHERWISE INDICATED, ITEMS AND WORK SHALL BE INCLUDED AND PAID AS PART OF THE ELECTRIC UTILITY SERVICE INSTALLATION PAY ITEM.
- 3. CONDUIT AND CONNECTOR DIAMETER SHALL MATCH THE DIAMETER OF THE SERVICE CONDUCTOR RACEWAY AS INDICATED ON THE PLANS.
- 4. PVC COATED RACEWAYS AND ACCESSORIES SHALL BE CAREFULLY INSTALLED WITH MFR RECOMMENDED TOOLS AND PROCEDURES TO AVOID DAMAGE. ANY DAMAGE SHALL BE REPAIRED WITH COMPATIBLE PVC TOUCH-UP MATERIAL TO THE SATISFACTION OF THE ENGINEER OR THE DAMAGED MATERIAL SHALL BE REPLACED AT NO ADDITIONAL COST.
- 5. THE CONTRACTOR SHALL OBTAIN INSPECTION AND APPROVAL BY THE ENGINEER OF SERVICE RISER GROUND ELECTRODE, RISER ELBOW, NIPPLE AND CONNECTION TO SERVICE CONDUCTOR RACEWAY EXTENSION BEFORE BACKFILL AND SHALL ALSO OBTAIN INSPECTION OF SERVICE RISER AND SEALING BUSHING BEFORE UTILITY "U" GUARD INSTALLATION AND SERVICE CONNECTION.
- 6. THE HORIZONTAL ELECTRIC SERVICE CONDUCTOR RACEWAY SHALL BE AS INDICATED AND SHALL BE MEASURED SEPARATELY FOR PAYMENT. WHEN THE RACEWAY IS PVC-COATED RIGID GALVANIZED STEEL, THE COUPLING SHALL BE THE SAME. WHEN THE RACEWAY IS PVC CONDUIT (IN CONCRETE), THE COUPLING SHALL BE A METALIC TO NON METALIC ADAPTER. WHEN THE RACEWAY IS ENCASED IN CONCRETE, THE CONCRETE SHALL EXTEND TO COVER THE COUPLING.
- 7. PLANS AND DETAILS INDICATE THE GENERAL NATURE AND REQUIREMENTS. THEY DO NOT SHOW EVERY ACCESSORY AND ATTACHMENT, AND THEY DO NOT RELIEVE THE CONTRACTOR OF THE REQUIREMENTS OF THE SPECIFICATIONS AND SPECIAL PROVISIONS TO ASCERTAIN UTILITY REQUIREMENTS AND TO COORDINATE ACCORDINGLY, FURNISHING ALL ITEMS AND WORK NOT PROVIDED BY THE UTILITY, BUT NECESSARY FOR A COMPLETE SERVICE INSTALLATION IS REQUIRED AND SHALL BE INCLUDED IN THE ELECTRIC UTILITY SERVICE INSTALLATION PAY ITEM.



SEALING BUSHING DETAIL

SHEET NO. 1 OF 1 SHEETS STA.

TOTAL SHEETS NO.

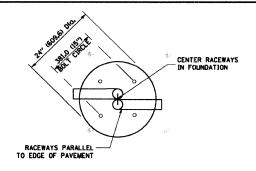
COUNTY

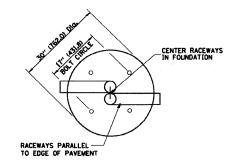
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CONTRACT NO.

SECTION

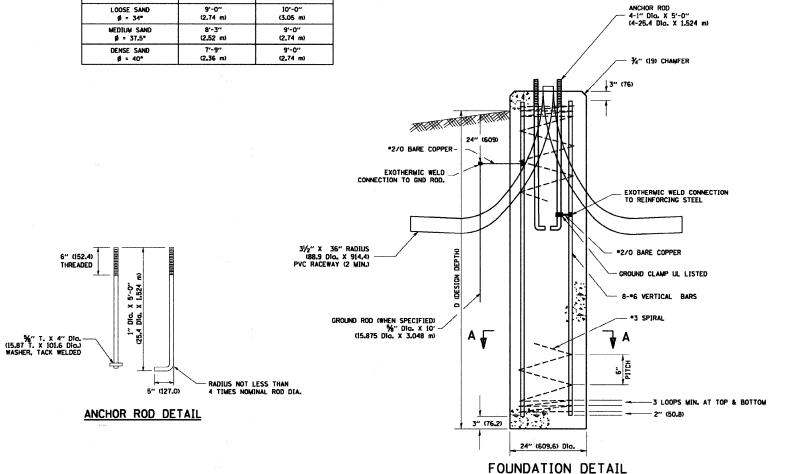
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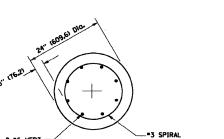


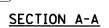


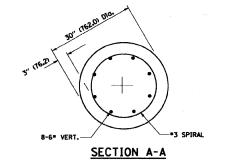
TOP VIEW

TOP VIEW









NOTES

- 1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- THE ANCHOR RODS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IN PLACED.
- 3. THE FOUNDATION SHALL NOT PROTRUDE MORE THAN 100MM (4 IN.) ABOVE THE FINISHED GRADE WITHIN A 60 IN. (1.5 m) CHORD ACROSS THE FOUNDATION, WITH ANCHOR RODS INCLUDED, IN ACCORDANCE WITH AASHTO GUIDELINES. IF THE FOUNDATION HEIGHT, INCLUDING ANCHOR RODS, EXTENDS BEYOND THESE SPECIFIED LIMITS, THE FOUNDATION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. SEE FOUNDATION EXTENSION DETAIL.
- 4. THE HOLE FOR THE FOUNDATION SHALL BE MADE BY DRILLING WITH AN AUGER, OF THE SAME DIAMETER AS THE FOUNDATION. IF SOIL CONDITIONS REQUIRE THE USE OF A LINER TO FORM THE HOLE, THE LINER SHALL BE WITHDRAWN AS THE CONCRETE IS DEPOSITED.
- 5. THE TOP OF THE FOUNDATION SHALL BE CONSTRUCTED LEVEL. A LINER OR FORM SHALL BE USED TO PRODUCE A UNIFORM SMOOTH SIDE TO THE TOP OF THE FOUNDATION. FOUNDATION TOP SHALL BE CHAMFERED 3/4-IN. (20 mm).
- THE CONCRETE SHALL BE CLASS SI. CONCRETE SHALL CURE ACCORDING TO ARTICLE 1020,13 BEFORE LIGHT POLES ARE INSTALLED.
- 7. THE ANCHOR ROD SHALL BE A HOOK ROD TYPE. COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER.
- THE ANCHOR RODS SHALL BE ACCORDING TO ASTM F1554 GRADE 725 (GRADE 105), NUTS SHALL BE HEXAGON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 DH, AND WASHERS SHALL BE ACCORDING TO ASTM F 436.
- 9. ANCHOR RODS, NUTS AND WASHERS SHALL BE COMPLETELY GALVANIZED BY EITHER THE HOT-DIPPED PROCESS CONFORMING WITH AASHTO M 232, THE MECHANICAL PLATING METHOD CONFORMING TO AASHTO M 298, CLASS 50 WITH A MAXIMUM COATING THICKNESS OF 150 UNK6 MILS) OR THE ELECTROLYTIC
- 10. THE ANCHOR RODS SHALL BE THREADED A MINIMUM OF 6 INCHES (150 mm) WITH A MINIMUM OF 3 INCHES (75 mm) OF THREADED ANCHOR ROD EMBEDDED IN THE FOUNDATION.
- 11. ANCHOR RODS SHALL PROJECT 2¾" (69.9 mm) ABOVE THE TOP OF THE FOUNDATION. IF BREAKAWAY COUPLINGS ARE SPECIFIED, THE CONTRACTOR SHALL CAREFULLY COORDINATE THE ANCHOR ROD PROJECTION WITH THE INSTALLATION REQUIREMENTS OF THE BREAKAWAY COUPLINGS.
- THE CONTRACTOR SHALL USE A "3 SPIRAL AT 6" (152.4 mm) PITCH OR MAY SUBSTITUTE "3 TIES AT 12" (304.8 mm) O.C. WITH THE APPROVAL OF THE ENGINEER.
- 13. THE CABLE TRENCHES AND FOUNDATION SHALL BE BACK FILLED AND COMPACTED AS SPECIFIED BEFORE THE LIGHT POLE IS ERECTED.
- 14. THE RACEWAYS SHALL PROJECT 1" (25.4 mm) ABOVE THE TOP OF THE FOUNDATION.

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USER NAME = gaglianobt	DESIGNED -	REVISED - 04-22-02
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PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED -
PLOT DATE = 1/4/2008	DATE -	REVISED -

GROUND LINE

LIGHT POLE FOUNDATION DEPTH TABLE 40 FT. (12.192 m) TO 47.5 FT. (14.478 m) MOUNTING HEIGHT

SINGLE ARM POLE

(3.96 m)

(2.13 m)

TOP OF ANCHOR ROD

- 60" (1500)

FOUNDATION EXTENSION DETAIL

4" (100) MAX.

SOIL CONDITIONS

SOFT CLAY Qu = 0.375 TON/SQ. FT.

MEDIUM CLAY

STIFF CLAY

Qu = 1.50 TON/SQ. FT

LOOSE SAND

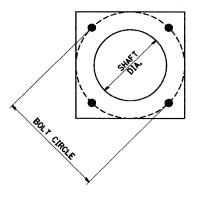
DESIGN DEPTH "D" OF FOUNDATION

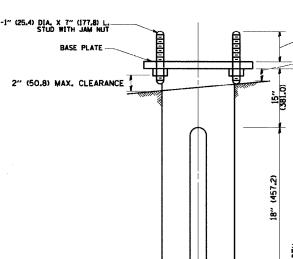
TWIN ARM POLE

(2.44 m)

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

LIGHT POLE FOUNDATION	F.A RTÉ.	SECTION	COUNTY TOT SHEE		OTAL SHEET HEETS NO.	
40' (12.192 m) TO 47 1/2' (14.478 m) M.H. 15" (381 mm) BOLT CIRCLE	339	09-00100-00-LT	соок	64	53	
		BE-301	CONTRACT	NO.		
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					





HELIX FOUNDATION SIZE

POLE MOUNTING HEIGHT	BOLT CIRCLE	SHAFT DIAMETER	SHAFT LENGTH	BASEPLATE
30 FT.	111/2"	85%"	6 FT.	12"x12"x1"
31 FT35 FT.	111/2"	85%"	6 FT.	12"x12"x1"
36 FT40FT.	15"	85%"	6 FT.,	15"×15"×11/4"
41 FT45 FT.	15"	85%"	6 FT.	15"×15"×1 ¹ / ₄ "
46 FT50 FT.	15"	10"	8 FT.	15"x15"x1 ¹ / ₄ "

METAL HELIX FOUNDATION MATERIALS

ITEM	MATERIAL REQUIREMENT
BASEPLATE	AASHTO M 270M, GRADE 36 (M270M, GRADE 250)
SHAFT	ASTM A 252, GRADE 2 (PHOSPHOROUS 0.04% MAXIMUM, SULFUR 0.05% MAXIMUM)
HELIX SCREW	AASHTO M 183 (ASTM A 635)
PILOT POINT	AASHTO M 270 (ASTM A 575)
ANCHOR RODS/STUDS	AASHTO M 314 (ASTM F 1554)
HEXAGON NUTS	AASHTO M 291M (ASTM A 563) GRADE DH, OR AASHTO M 292 (ASTM A 194) GRADE 2H
WASHERS	AASHTO M 293 (ASTM F 436)

SEE NOTE NO. 6 1" (25.4) MIN. CLEARANCE 2¹/2" (63.5) -0.25" WALL, MIN. SHAFT DIA. 11/4" (31.75) DIA.

NOTES:

- 1. ALL DIMENSION IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- 2. ALL MATERIAL SHALL BE GALVINIZED ACCORDING TO AASHTO M111, UNLESS OTHERWISE SPECIFIED.
- 3. ALL WELDS SHALL BE CONTINUOUS AND NOT LESS THAN 1/4" (6.35 mm) FILLET WELDS. THE WELDED FOUNDATION SHALL BE CAPABLE OF WITHSTANDING 10,000 FT/LBS (13558.18 n.m) OF INSTALLATION TORQUE APPLIED ABOUT THE AXIS OF THE FOUNDATION.
- 4. THE HELIX FOUNDATION SHAFT SHALL BE INSTALLED VERTICAL AND THE BASE PLATE SHALL BE IN LEVEL. THE BREAKAWAY COUPLINGS AND HARDWARE SHALL NOT BE USED TO ALIGN THE POLE INSTALLATION.
- 5. THE CABLE TRENCH SHALL BE BACKFILLED AND FIRMLY COMPACTED BEFORE THE INSTALLATION OF THE LIGHT POLE.
- 6. THE CONTRACTOR SHALL COORDINATE EXTENSION OF ANCHOR BOLTS ABOVE TOP OF THE BASE PLATE WITH THE BREAKAWAY DEVICE MANUFACTURER'S REQUIREMENTS.
- 7. ANY VOIDS WITHIN THE METAL FOUNDATION SHALL BE FILLED WITH FINE AGGREGATE.
- 8. METAL FOUNDATIONS SHALL BE INSTALLED IN UNDISTURBED SOIL. PREDRILLING A PILOT HOLE AND/OR BACKFILLING AROUND THE FOUNDTION IS NOT ALLOWED.
- 9. THE METAL FOUNDATION SHALL NOT BE INSTALLED TO A TORQUE WHICH EXCEEDS THE MANUFACTURER'S MAXIMUM TORQUE RATING NOR SHALL IT BE INSTALLED TO AN INSTALLATION TORQUE VALUE OF LESS THAN 3,500 FT LB (4,750 KNM). METAL FOUNDATIONS THAT ARE NOT INSTALLED TO FULL INSTALLATION DEPTH OR DO NOT ACHIEVE THE MINIMUM INSTALLATION TORQUE SHALL BE REMOVED AND REPLACED WITH A CONCRETE FOUNDATION AT NO ADDITIONAL COST.
- 10. THE BASEPLATE SHALL BE PERPENDICULAR TO THE SHAFT AXIS (± 1°) AND THE HOLE CENTERLINE SHALL BE CONCENTRIC (± 0.188) TO THE SHAFT AXIS.
- 11. THE PILOT POINT AND SHAFT AXIS SHALL BE CONCENTRIC (± 0.125) AND IN LINE (± 2°).
- 12. THE BASEPLATE SHALL BE STAMPED WITH THE MANUFACTURERS NAME AND DATE OF MANUFACTURE.

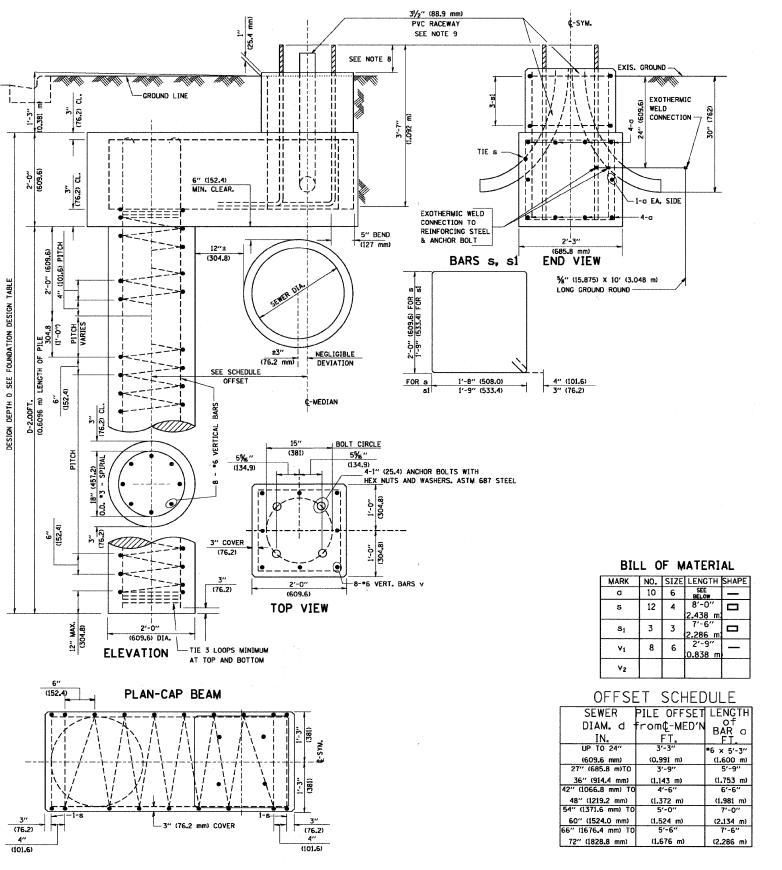
FILE NAME =	USER NAME = gaglianobt	DESIGNED -	REVISED -		LIGHT POLE FOUNDATION, METAL	F.A	SECTION	COUNTY TO	OTAL SHEET
W:\distatd\22x34\be3Ø5.dgn		DRAWN - DLB	REVISED -	STATE OF ILLINOIS	LIGHT PULE FOUNDATION, METAL		09-00100-00-LT	COOK	64 54
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION	· ·		BE-305	CONTRACT N	10.
	PLOT DATE ~ 1/4/2008	DATE - 02-27-07	REVISED -		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.		DIST. NO. 1 ILLINOIS FED		~

FOUNDATION DESIGN TABLE

	DESIGN DEPTH (OF FOUNDATION	REINFORCEMENT IN FOUNDATION				
TYPE OF SOIL	SINGLE ARM TWIN ARM		SINGLE	ARM	TWIN ARM		
	D	D	VERT BARS	SPIRAL	VERT BARS	SPIRAL	
SOFT CLAY	13'-0''	15'-0''	8-#6X12'-6''	#3X122'	8-#6X14'-3''	#3X141′	
	(3 . 962 m)	(4 . 572 m)	(3.810 m)	(37.186 m)	(4.343 m)	(42.977 m)	
MEDIUM CLAY	9'~6''	10′-9′′	8-#6X9'-0''	#3X90′	8-#6X10'-0''	#3X100'	
	(2 . 896 m)	(3 . 277 m)	(2.743 m)	(27.432 m)	(3.048 m)	(30.480 m)	
STIFF CLAY	7'-0''	8'-0''	8-#6X6'-6''	#3X66′	8-#6X7'-6''	#3X76′	
	(2.134 m)	(2.438 m)	(1.981 m)	(20 . 112 m)	(2.286 m)	(23 . 165 m)	
LOOSE SAND	9'-0''	10′-0′′	8-#6X8'-6''	#3X85′	8-#6X9'-6''	#3X94′	
	(2.743 m)	(3₌048 m)	(2 . 591 m)	(25.908 m)	(2.896 m)	(28 . 651 m)	
MEDIUM SAND	8'-3"	9'-0''	8-#6X8'-0''	#3X78′	8-*6X8'-6''	#3X85′	
	(2 . 515 m)	(2 . 743 m)	(2.438 m)	(23.774 m)	(2.591 m)	(25.908 m)	
DENSE SAND	7′-9′′	9'-0''	8-#6X7'-6''	#3X73′	8-#6X8'-6''	#3X85′	
	(2.362 m)	(2.743 m)	(2.286 m)	(22.250 m)	(2.591 m)	(25.908 m)	
ROCK OR SOLIDIFIED SLAG	5′-0′′ (1.524 m)	5'-0'' (1 . 524 m)	NONE	NONE	NONE	NONE	

NOTES

- 1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- THE ENGINEER SHALL DETERMINE THE CLASS OF SOIL DURING EXCAVATION AND SELECT THE DESIGN DEPTH OF FOUNDATION FROM THE DESIGN TABLE.
- 3. EXCAVATION OF THE POLE FOUNDATION SHALL BE MADE WITH AN AUGER, 24" (609.6 mm) OR 30" (762.0 mm) IN DIAMETER.
- 4. THE ANCHOR ROD SHALL BE A HOOK ROD TYPE. COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER.
- 5. THE ANCHOR BOLTS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED IN THE FORM.
- 6. THE ANCHOR RODS SHALL BE ACCORDING TO ASTM F1554 GRADE 725 (GRADE 105). NUTS SHALL BE HEXAGON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 DH, AND WASHERS SHALL BE ACCORDING TO ASTM F 436.
- 7. THE CONTRACTOR SHALL COORDINATE EXTENSION OF ANCHOR BOLTS ABOVE TOP OF FOUNDATION WITH THE BREAKAWAY DEVICE MANUFACTURER'S REQUIREMENTS. IF LIGHT POLE IS MOUNTED WITHOUT BREAKAWAY DEVICE, ANCHOR BOLTS SHALL PROJECT 2¾" (69.9 mm) ABOVE TOP OF THE FOUNDATION. THE CONTRACTOR SHALL CONFIRM ANCHOR BOLT EXTENTION WITH ENGINEER.
- 8. RACEWAYS SHALL PROJECT 1" (25.4 mm) ABOVE THE TOP OF THE FOUNDATION.
- THE CABLE TRENCH SHALL BE BACKFILLED AND FIRMLY COMPACTED BEFORE THE LIGHT IS ERECTED.

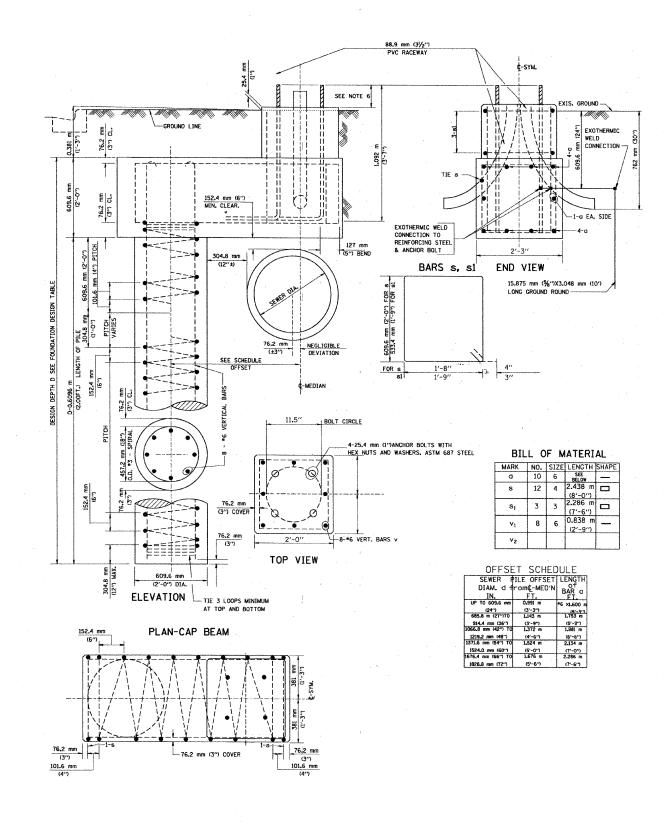


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K:\d:ststd22x34\be310.dgn		DRAWN -	REVISED -	STATE OF ILLINOIS	40' (12.192 m) TO 47 12 ' (14.478 m) M.H.	339	09-00100-00-LT	COOK 6	64 55
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION	15" (381 mm) BOLT CIRCLE		BE-310	CONTRACT NO.	
See and Section of the	PLOT DATE = 6/16/2008	DATE -	REVISED -		SCALE: SHEET NO. 1 OF 1 SHEETS STA. TO STA.		ILLINOIS FED.		

FOUNDATION DESIGN TABLE

T	دنالافد	SE FOUNDATION			THE COUNTY ATTOM			
	DESIGN DEPTH (OF FOUNDATION	671101	REINFORCEMENT	T			
TYPE OF SOIL	SINGLE ARM TWIN ARM		SINGLE		TWIN	r		
	D	D	VERT BARS	SPIRAL	VERT BARS	SPIRAL		
SOFT CLAY	3.962 m	4.572 m	8-#6X3.810 m	*3X37.186 m	8-#6X4.343 m	*3X42.977 m		
	(13'-0'')	(15'-0'')	(12'-6'')	(122')	(14'-3'')	(141')		
MEDIUM CLAY	2.896 m	3,277 m	8-#6X2.743 m	#3X27.432 m	8-#6X3.048 m	#3X30.480 m		
	(9'-6'')	(10′-9′′)	(9'-0'')	(90')	(10'-0'')	(100')		
STIFF CLAY	2.134 m	2.438 m	8-#6X1.981 m	#3X20.112 m	8-#6X2.286 m	#3X23 . 165 m		
	(7'-0'')	(8'-0'')	(6'-6'')	(66')	(7'-6'')	(76')		
LOOSE SAND	2.743 m	3.048 m	8-#6X2.591 m	#3X25 . 908 m	8-#6X2.896 m	#3X28.651 m		
	(9′-0′′)	(10'-0'')	(8'-6'')	(85′)	(9'-6'')	(94')		
MEDIUM SAND	2.515 m	2.743 m	8-#6X2.438 m	#3X23.774 m	8-#6X2.591 m	#3X25.908 m		
	(8'-3'')	(9'-0''((8'-0'')	(78')	(8'-6'')	(85')		
DENSE SAND	2.362 m	2.743 m	8-#6X2 . 286 m	#3X22.250 m	8-#6X2.591 m	#3X25.908 m		
	(7'-9'')	(9'-0'')	(7'-6'')	(73′)	(8'-6'')	(85')		
ROCK OR SOLIDIFIED SLAG	1.524 m (5′-0′′)	1.524 m (5'-0'')	NONE	NONE	NONE	NONE		

- THE ENGINEER WILL DETERMINE THE CLASS OF SOIL DURING EXCAVATION AND SELECT THE DESIGN DEPTH OF THE FOUNDATION FROM THE DESIGN
- 2.) EXCAVATION OF THE POLE FOUNDATION MUST BE MADE WITH AN AUGER, 24" OR 30" IN DIAMETER.
- 3.) THE ANCHOR MUST BE A TACK WELDED TYPE BOLT OR HOOK TYPE BOLT. COLD BENDING OF THE HOOK BOLT IS NOT ALLOWED.
- 4.) THE ANCHOR BOLTS AND RACEWAYS MUST BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED IN THE FORM.
- 5.) THE ENTIRE LENGTH OF THE ANCHOR BOLTS, AS WELL AS THE NUTS AND WASHERS, MUST BE HOT DIP GALVANIZED IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM DESIGNATION A 153.
- 6.) THE CONTRACTOR MUST COORDINATE EXTENSION OF ANCHOR BOLTS ABOVE THE TOP OF FOUNDATION WITH THE BREAKAWAY DEVICE MANUFACTURER'S REQUIREMENTS. IF LIGHT POLE IS MOUNTED WITHOUT A BREAKAWAY DEVICE, ANCHOR BOLTS MUST COORDINATE WITH THE POLE MANUFACTURER'S
- 7.) THE CONTRACTOR MUST COORDINATE THE ANCHOR BOLT CIRCLE WITH THE LIGHT POLE MANUFACTURER'S RECOMMENDATIONS.
- 8.) RACEWAYS MUST PROJECT 1" ABOVE THE TOP OF FOUNDATION.
- 9.) CONCRETE SHALL BE CLASS "SI". CONCRETE FOUNDATIONS MUST BE CURED; FOR TEN (10) DAYS BEFORE THE LIGHT STANDARD IS ERECTED.
- 10.) THE CABLE TRENCH SHALL BE BACKFILLED AND FIRMLY COMPACTED BEFORE THE LIGHT STANDARD IS ERECTED.



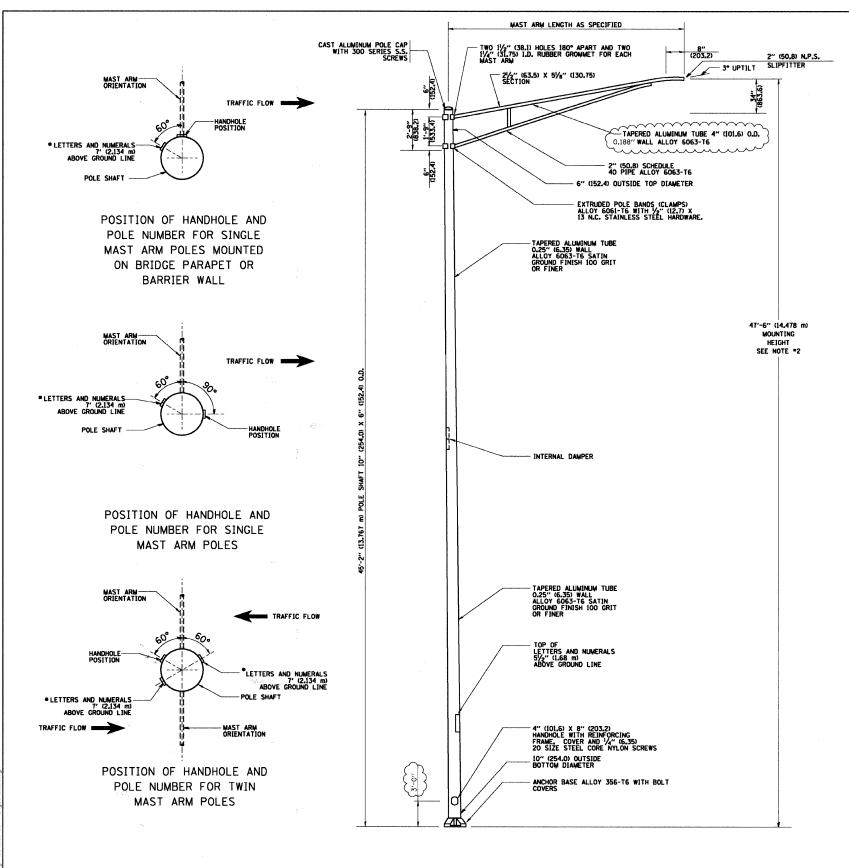


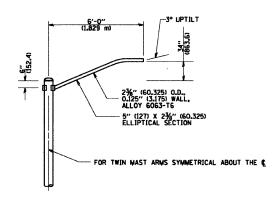
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	DRAWN	-	RJR	REVISED	-	
PLOT SCALE = 1.0000 '/ IN.	CHECKED	-	JMV	REVISED	-	
PLOT DATE = 7/12/2010	DATE	-	6/16/2010	REVISED	*	

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

	LIGHT	ALGONQUIN POLE FOUNDA				VEMENTS 1.5" BOLT CIRCLE
SCALE:		SHEET NO.	OF	SHEETS	STA.	TO STA.

F.A.F RTE.	<u>`</u>	SECTION					COUNTY	SHEE	AL TS	SHEET NO.		
339		09-00100-00-LT				COOK	64		56			
								CONTRACT	NO.	63	3426	-
FED.	ROAD	DIST.	NO.	1	ILLINOIS	FED.	Al	D PROJECT				





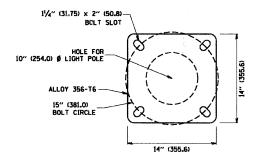
6' (1.8 m) SINGLE MEMBER MAST ARM (N.T.S.)

NOTES:

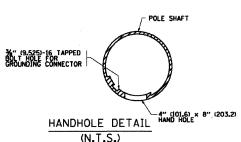
- 1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

- 4. THE LIGHT POLE WILL MEET AASHTO DESIGN CRITERIA AS SPECIFIED.
- 5. THE INSTALL INC CONTRACTOR WILL PROVIDE A UL LISTED GROUNDING CONNECTOR. BURNDY K2C23, TAB SPADL OR APPROVED EQUAL.

 6. LIGHT POLES WILL NOT BE INSTALLED WITHOUT MAST ARMS AND LUMINAIRES.



LIGHT POLE BASE PLATE DETAIL 15 INCH (381.0) BOLT CIRCLE



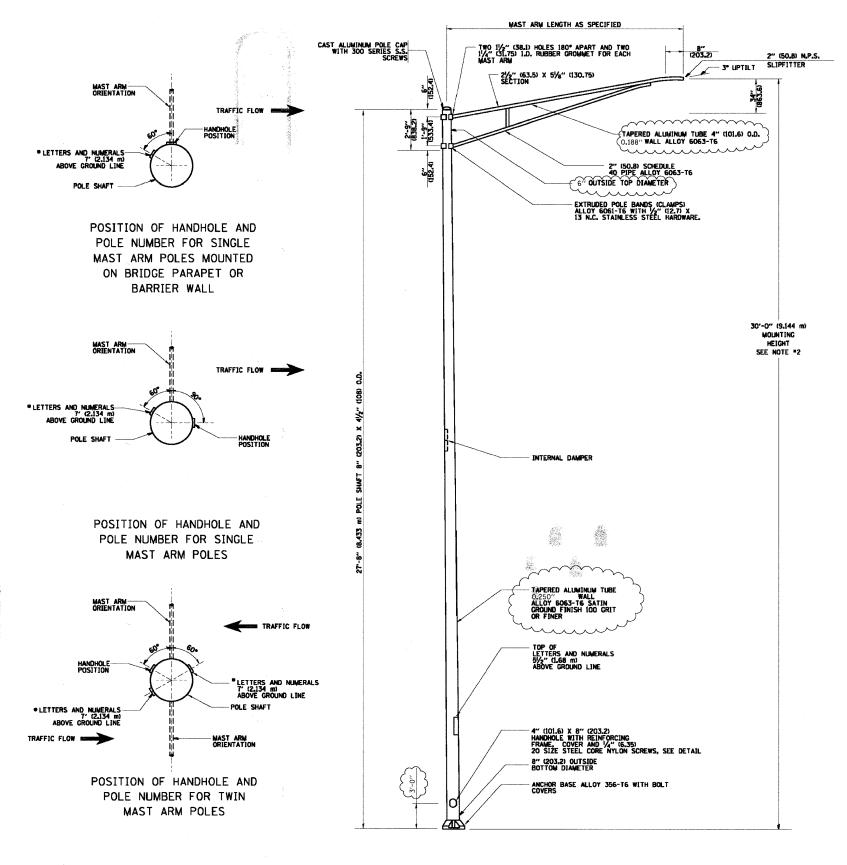
SCALE:

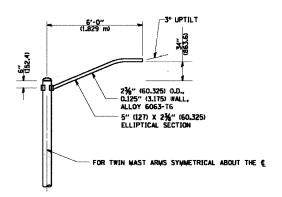
	Ciorba Gr	oup, Inc.
:: ::	CONSULTING ENGINE	
	5507 North Cumberlan Chicago, Illinois 60656	
	Tel. 773.775.4009	Fax 773.775.4014

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THE THE STATE OF T	PLOT SCALE = 1.0000 '/ IN.	
PLOT DATE = 7/12/2010 DATE - 6/16/2010 REVISED -	PLOT DATE = 7/12/2010	

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

A	LGON	DUIN	ROAI	LIGHTIN	G IMPROVE	MENTS	F.A.P. RTE.	SECTION		COUNTY	TOTAL	SHEE NO.
A 1 1 1 8 A 1	ALUMINUM LIGHT POLE, 47'-6" MOUNTING HEIGHT					339	09-00100-00-	COOK	64	57		
ALUMINUM LIGHT POLE, 47'-6" MOUNTING		nciuni				CONTRACT	NO.	53426				
	SHEET	NO.	0F	SHEETS	STA.	TO STA.	FED. R	OAD DIST. NO. 1 ILLINO	IS FED. A	ID PROJECT		





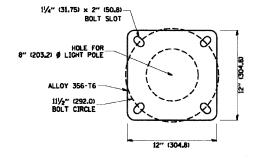
6' (1.8 m) SINGLE MEMBER MAST ARM (N.T.S.)

NOTES

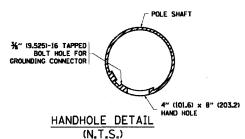
- 1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- 2. MOUNTING HEIGHT IS DEFINED AS THE DISTANCE FROM THE CENTERLINE OF THE TENON TO THE BOTTOM OF THE ANCHOR BASE.
- 3. THE LIGHT POLE WILL MEET AASHTO DESIGN CRITERIA AS SPECIFIED.
- 4. THE INSTALLING CONTRACTOR WILL PROVIDE /
 UL LISTED GROUNDING CONNECTOR, BURNDY
 K2C23, T&B SP4DL OR APPROVED EQUAL. LIGHT POLES WILL NOT BE INSTALLED WITHOUT MAST ARMS AND LUMINAIRES.

- CALIGHT POLES WILL BE SET PLUMB ON THE FOUNDATION WITHOUT THE USE OF LEVELING NUTS, WASHERS OR SHIMS.

 7. LIGHTING UNIT IDENTIFICATION NUMBERS SHALL BE INSTALLED BEFORE THE LIGHTING UNIT IS ENERGIZED.



LIGHT POLE BASE PLATE DETAIL 111/2" (292.0) BOLT CIRCLE



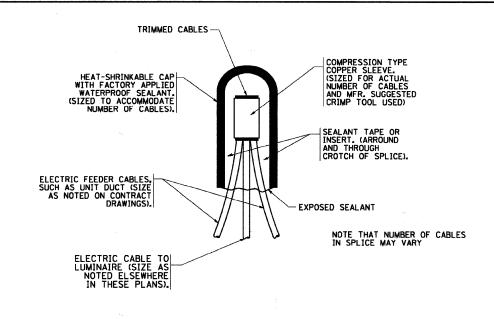
SCALE:

Ciorba Group, Inc. CONSULTING ENGINEERS 5507 North Cumberland Avenue, Suite 402 Chicago, Illinois 60656	
Tel. 773.775.4009 Fax 773.775.4014	

-	USER NAME = jvondra	DESIGNED	-	RJR	REVISED	-
		DRAWN	-	RJR	REVISED	-
	PLOT SCALE = 1.0000 '/ IN.	CHECKED	-	JMV	REVISED	-
	PLOT DATE = 7/12/2010	DATE		6/16/2010	REVISED	-
	771272012	DATE		071072010	INE VISED	

STATI	E OF	ILLINOIS
DEPARTMENT	0F	TRANSPORTATION

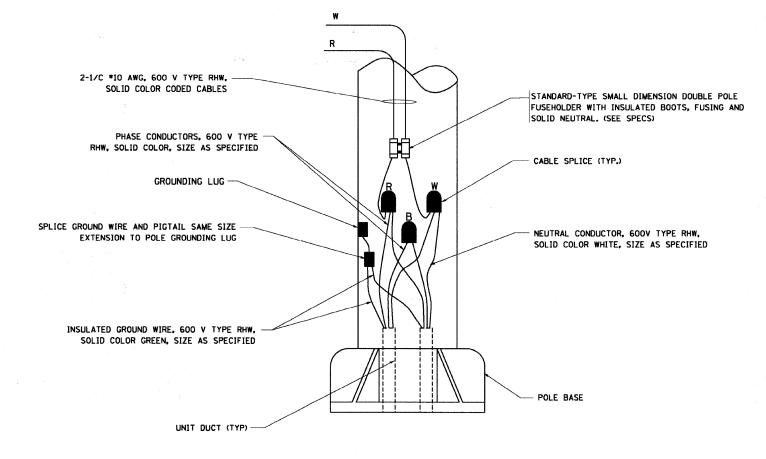
ALGONOUIN ROAD LIGHTING IMPROVEMENTS	F.A.P. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
ALUMINUM LIGHT POLE, 30'-0" MOUNTING HEIGHT	339	09-00100-00-LT	COOK	64	58
SHEET NO. OF SHEETS STA. TO STA.	FED. R	OAD DIST. NO. 1 ILLINOIS FED. A		NO. 6	3426



TYPICAL SPLICE DETAIL

N.T.S.

125) Dia.



POLE WIRING DETAIL

N.T.S.

FILE NAME =	USER NAME = gaglianobt	DESIGNED ~	REVISED - 08-08-03			MISC. ELECTRICAL DETAILS		F.A.	SECTION	COUNTY	TOTAL	HEET
Wr\distatd\\22x34\be702.dgn		DRAWN	REVISED -	STATE OF ILLINOIS				339	09-00100-00-LT	соок	64	59
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION		SHEET A			CONTRACT NO.			
	PLOT DATE = 1/4/2008	DATE -	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA.	TO STA.	FED. ROA	D DIST. NO. 1 ILLINOIS FED. A		1 1141	
				100		· ·						

- 12" (305) MAXIMUM WIDTH EXCEPT AS APPROVED BY THE ENGINEER

12" (305)

WARNING TAPE AS SPECIFIED

UNIT DUCT OR OTHER RACEWAY
AND WIRING AS PER PLANS. COMPLETE

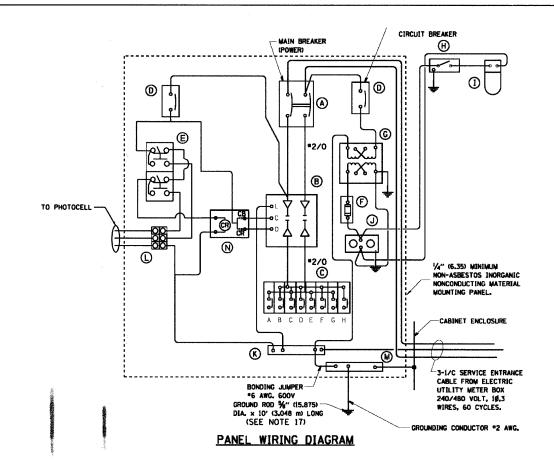
WITH INTERNAL INSULATED EQUIPMENT GROUND WIRE.

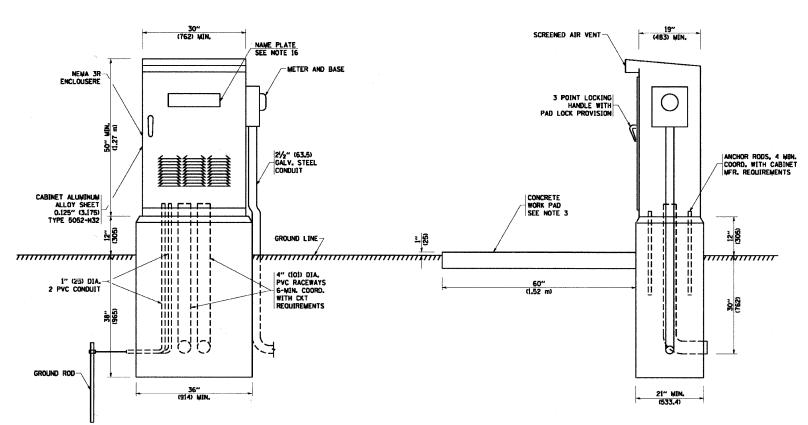
TYPICAL WIRING IN TRENCH DETAIL

N.T.S.

30" (762) MINIMUM COVER

AND IN





PANEL EQUIPMENT

		BILL OF MATERIAL
ITEM	QUANTITY	DESCRIPTION
A	1	MAIN CIRCUIT BREAKER, 2 POLE, 600 VOLT 100 AMP. FRAME, 100 AMP. NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA-22000 AMP. AT 480 VOLT.
В	1	REMOTE CONTROL SWITCH, ELECTRICALLY OPERATED, MECHANICALLY HELD, 2 POLE, SINGLE THROW, 100 AMP., 600 VOLTS CONTROL CIRCUIT 240 VOLT.
С	*	CIRCUIT BREAKERS, 1 POLE, 100AMP. FRAME, 50 AMP. NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA-10,000 AMP. AT 240 V.
D	2	CONTROL CIRCUIT-CIRCUIT BREAKER. 1 POLE, 240 V., 100 AMP, FRAME, 15 AMP. NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA-5000 AMP. AT 240 V.
E	1 - 26-2	HAND-OFF-AUTOMATIC SWITCH SOUARE D 9001 KYK-111 OR EQUIVALENT
F	1	20 A., 120 V. FUSE.
G	1	1.5 KVA, SINGLE PHASE, ENCAPSULATED TRANSFORMER 240 X 480 / 120 X 240 VOLT, 60 Hz.
н	1	SPST 20A SWITCH ON DOOR, TO TURN LIGHT ON WHEN DOOR IS OPEN,
ı.I	1	INCANDESCENT LIGHTING FIXTURE ENCLOSED AND GASKETED WITH 60 WATT, 120 V. LAMP.
J	1	20 A., 120 V., DUPLEX RECEPTACLE, GFCI.
K	1	COPPER GROUND BUS 1/4" (6.35) X 1" (25.4) X 12" (304.8 mm) LONG MOUNTED ON PANEL WITH LUGS AND 4 SPARE LUGS
. L	1	PHOTOCELL TERMINAL BLOCK
М	1	COPPER GROUND BUS 1/4" (6.35) X X" (25.4) X 12" (304.8 mm) LONG MOUNTED ON PANEL WITH LUGS AND SPARE LUGS
N	1	RELAY, DPDT, 240V
-63	ter. 1	CABINET MOUNT, BUTTON TYPE PHOTOCELL

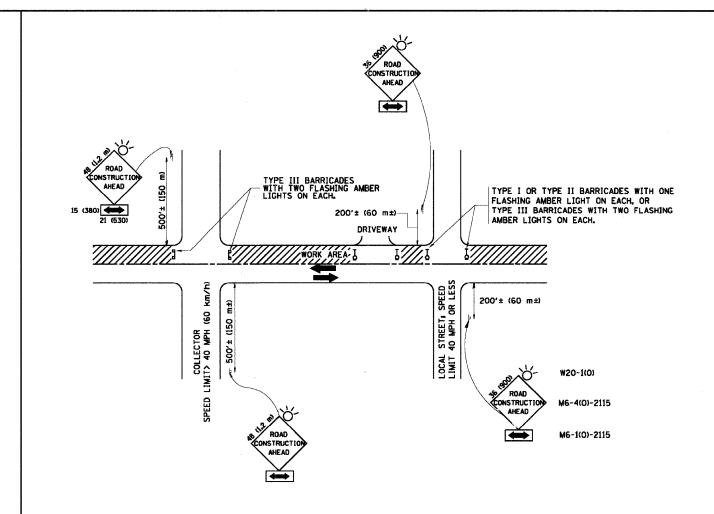
. = AS NEEDED. SEE ONE LINE DIAGRAM.

- 1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- 2. FOUNDATION SIZE SHALL BE COORDINATED WITH CABINET SIZE AND MFR.
- 3. IN FRONT OF CONTROL CABINET DOOR, REMOVE VEGETATION AND 2" (50.8 mm) TOP SOIL, LEVEL THE 12. ALL WIRING WITHIN THE CABINET SHALL BE TO CONTROL CABINET, A CONCRETE PAD 36" (914.4 mm) × 60" (18.288 m) × 4" (101 mm) MIN. SIZE. THE COST OF LABOR AND MATERIALS ARE INCLUDED IN THE COST OF THE CONTROLLER.
- 4. DOOR SHALL BE CONSTRUCTED FROM SAME TYPE OF MATERIAL AND THICKNESS AS CABINET.
- 5. DOOR SHALL BE EQUIPPED WITH THREE POINT LATCHING MECHANISM WITH NYLON ROLLERS AT TOP THE BOTTOM.
- 6. DOOR HINGE SHALL BE A HEAVY GAUGE CONTINUOUS HINGE WITH A 1/4" (6.35 mm) DIA. STAINLESS STEEL HINGE PIN.
- 7. ALL EXTERNAL HARDWARE SHALL BE STAINLESS STEEL.
- 8. CONTROL WIRING TO BE *12 AWG, 600V, TYPE "SIS" GRAY SWITCH BOARD WIRE, STRANDED
- METER BOX SHALL BE MOUNTED ON THE SIDE OF CONTROL CABINET, NEAR TO THE SERVICE POLE.

- 10. CABINETS SHALL BE PRIMED AND PAINTED AS SPECIFIED.
- 11. THE HEADS OF CONNECTORS SCREWS SHALL BE PAINTED WHITE FOR NEUTRAL BAR CONNECTION AND GREEN FOR GROUND BAR CONNECTORS.
- COLOR CODED AS INDICATED.

 R = RED BL = BLUE W = WHITE B = BLACK Y = YELLOW
- 13. PROVIDE SEALING GROMMETS FOR ALL OPEN WIRING EXTENDED FROM DEVICES IN BOXES OR CABINETS WITHIN THE CONTROL CABINET.
- 14. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.
- 15. THE CONTROLLER SHALL BE CONSTRUCTED TO U.L. STD. 508 AND BEAR THE U.L. LABEL "ENCLOSED INDUSTRIAL CONTROL PANEL".
- 16. 12" (304.8) X 16" (406.4 mm) STAINLESS STEEL EXTERIOR NAMEPLATE SHALL BE ENGRAVED TO "STATE OF ILLINOIS LIGHTING CONTROLS" UNLESS OTHERWISE SPECIFIED.
- 17. WHEN A SERVICE INSTALLATION, TYPE C IS SPECIFIED, THE BONDING JUMPER SHALL BE OMITTED.

\sim	Ciorba Group, Inc.	USER NAME = jvondra	DESIGNED -	RJR	REVISED -	, <u></u>		ALGONQUIN ROAD LIGHTING I	MPROVEMENTS	F.A.P. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
	CONSULTING ENGINEERS		DRAWN -	RJR	REVISED -	STATE OF ILLINOIS		LIGHTING CONTROLLER		339	09-00100-00-LT	соок	64	60
	5507 North Cumberland Avenue, Suite 402 Chicago, Illinois 60656 Tel. 773.775.4009 Fax 773.775.4014	PLOT DATE = 7/12/2010	DATE -	6/16/2010	REVISED -	DEPARTMENT OF TRANSPORTATION	SCALE:	SHEET NO. OF SHEETS ST	A. TO STA.	EED BOA	D DIST. NO. 1 ILLINOIS FED. A	CONTRACT	NO. 63	426



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

NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- 1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER≥
- O) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEERS
- o) ONE ROAD CONSTRUCTION AHEAD SIGN 48 \times 48 (1.2 m \times 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

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

All dimensions are in millimeters (inches)

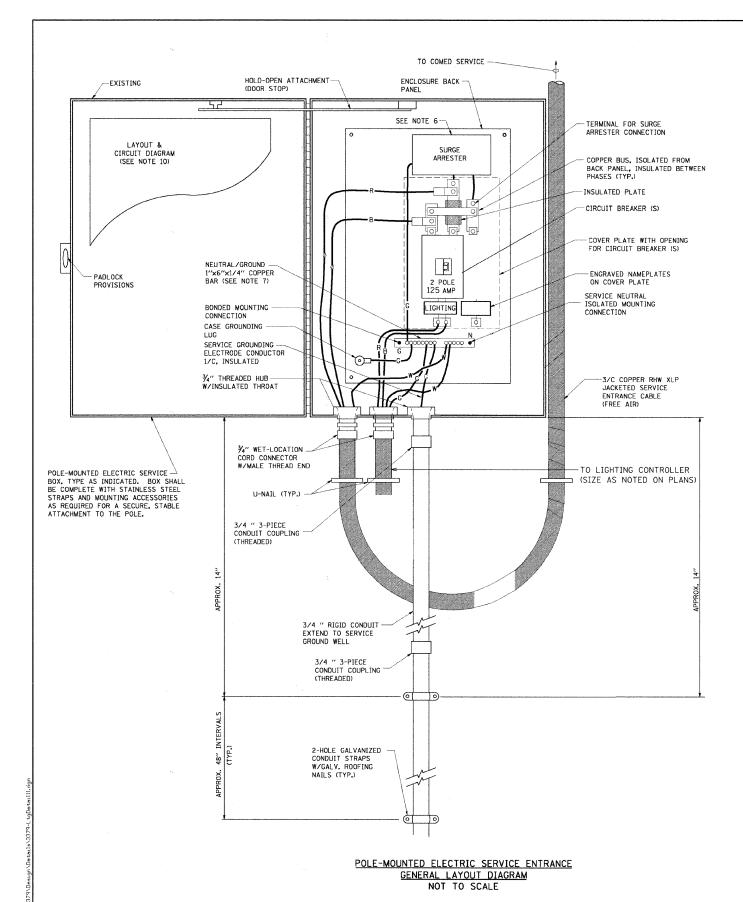
FILE NAME =	USER NAME = gaglianobt	DESIGNED - LHA	REVISED - J. OBERLE 10-18-95
W:\diststd\22x34\tc10.dgn		DRAWN	REVISED - A. HOUSEH 03-06-96
	PLDT SCALE = 50.000 '/ IN.	CHECKED ~	REVISED - A. HOUSEH 10-15-96
	PLOT DATE ~ 1/4/2008	DATE - 06-89	REVISED -T. RAMMACHER 01-06-00

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

TRAFFIC CONTROL AND PROTECTION FOR	F.A RTE.	SECTION		
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS	339	09-00100-00-LT		
SIDE NOADS, INTERSECTIONS, AND UNIVERSALS	TC-10			
SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. RO	AD DIST. NO. 1 ILLINOIS FED.		

COUNTY TOTAL SHEET NO.

COOK 64 61 CONTRACT NO.

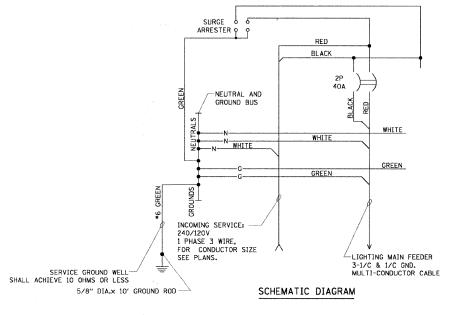


NOTES:

- ELECTRIC SERVICE SHALL BE OF THE VOLTAGE INDICATED OR DESIGNATED BY THE ENGINEER, AND SERVICE DROP CABLE SHALL BE COMPATIBLE WITH THE SERVICE ACCORDINGLY, SOME INSTALLATIONS MAY CALL FOR SERVICE ENTRANCE EQUIPMENT SUITABLE FOR 3-WIRE SERVICE EVEN THOUGH INITIALLY WIRED FOR Z-WIRE SERVICE.
- THE POLE-MOUNTED ELECTRIC SERVICE BOX SHALL BE CONFIGURED AND FULLY EQUIPPED FOR 240/120V 3W SERVICE, COMPLETE WITH LIGHTING MAIN BREAKER.
- 3. THE ELECTRIC SERVICE EQUIPMENT ASSEMBLY SHALL BE UL LISTED AS SUITABLE FOR USE AS SERVICE ENTRANCE EQUIPMENT
- 4. THE ELECTRIC SERVICE EQUIPMENT ENCLOSURE SHALL BE
 NEMA 4X STAINLESS STEEL, NOMINALLY 12"W X 16"H X 8"D, WITH
 A PIANO-HINGED DOOR, STEEL BACK PANEL, FAST-ACTING
 STAINLESS STEEL ENCLOSURE CLAMPS, PADLOCK PROVISIONS
 AND DOOR STOP, HOFMAN CATALOG NO. A-16HIZOBSS6LP/A-16
 P12/A-DSTOPK/C-PMKIZ, OR APPROVED EQUAL.
- 5. CIRCUIT BREAKER SHALL BE THERMAL MAGNETIC BOLT-ON TYPE WITH A MINIMUM INTERRUPTING CAPACITY OF 25,000 SYMMETRICAL AMPERES AT 240 VOLTS. IT SHALL BE LOCKABLE IN THE "OFF" POSITION FOR COMPLIANCE WITH OSHA LOCK-OUT/TAG-OUT REQUIREMENTS. HANDLE SHALL BE TRIP FREE.
- 6. THE SURGE PROTECTOR SHALL BE SUITABLE FOR THE SERVICE VOLTAGE SINGLE PHASE 60HZ AC, WITH A SURGE ENERGY CAPABILITY OF 2160 JOULES OR BETTER AT 8/20 MICRO-SECONDS, RATED -40 TO 60 DEGREES C., WITH LED OPERATING INDICATORS, AND SHALL BE UL LISTED PER UL 1449, CUTLER-HAMMER CMOV230L065XST OR APPROVED EQUAL.

SCALE:

- 7. BUS BARS, CONNECTORS, AND LUGS SHALL BE COPPER,
 INSULATED AND ISOLATED, AND CONFIGURED TO PREVENT
 SHORTED CONDITIONS FROM TIGHTENING TERMINATIONS, ETC.
 THE OVERALL BUS SECTION SHALL BE CONFIGURED BEHIND AN
 INSULATING BARRIER SHIELD WHICH IS REMOVABLE FOR ACCESS TO
 CONNECTIONS, OR THE ASSEMBLY SHALL BE A MANUFACTURED
 SPECIALTY PANELBOARD, CUTLER-HAMMER PRL2A OR APPROVED
 EQUAL.
- 8. THE COMBINATION GROUND AND NEUTRAL BAR SHALL BE CONFIGURED WITH SEPARATE GROUND AND NEUTRAL SECTIONS AND SPARE TERMINALS AS INDICATED. THE HEADS OF GROUND SCREWS SHALL BE PAINTED GREEN. THE HEADS OF NEUTRAL SCREWS SHALL BE PAINTED WHITE. THE SERVICE NEUTRAL AND SERVICE GROUNDING ELECTRODE CONDUCTOR SHALL BE TERMINATED ADJACENT TO EACH OTHER AT THE DIVIDE BETWEEN THE SECTIONS AND WIRING SHALL BE TERMINATED ONLY UPON THE APPROPRIATE SECTION.
- THE WIRING TERMINALS, INCLUDING THE GROUND/NEUTRAL BAR SHALL BE ARRANGED TO PROVIDE ADEQUATE ROOM FOR PERFORMING FIELD TERMINATIONS.
- 10. A PLASTIC LAMINATED LAYOUT AND CIRCUIT DIAGRAM SHALL BE MECHANICALLY SECURED TO THE INTERIOR SIDE OF THE ENCLOSURE DOOR.
- A 2-COLOR ENGRAVED PLASTIC NAMEPLATE, ATTACHED WITH SCREWS, AND ENGRAVED AS INDICATED, SHALL BE PROVIDED FOR EACH MAIN REFAKER
- 12. LUGS AND CONNECTORS SHALL BE RATED FOR 75 C CONDUCTOR.
- 13. THE EXACT MOUNTING HEIGHT OF THE BOX SHALL BE FIELD DETERMINED TO AVOID OBSTRUCTIONS AND PUBLIC ACCESS. TYPICAL HEIGHT SHALL BE APPROXIMATELY 10 FEET ABOVE GRADE.

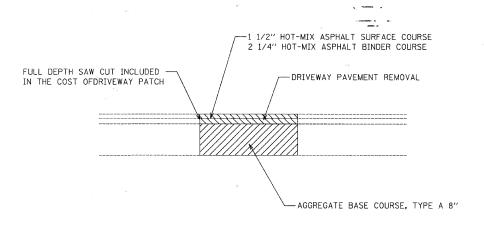


Ciorba Group, Inc.

CONSULTING ENGINEERS
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Chicago, Illinois 60856
Tel. 773 775 4009
Fex 773 775 4014

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ALGONQUIN ROAD LIGHTING IMPROVEMENTS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEET:	SHEE NO.
SERVICE INSTALLATION, TYPE C (SPECIAL)	339	09-00100-00-LT	COOK	64	62
SERVICE INSTALLATION, TIPE C (SPECIAL)			CONTRACT	NO. 6	3426
SHEET NO. OF SHEETS STA. TO STA.	FED. RO	DAD DIST. NO. 1 ILLINOIS FED. A	D PROJECT		



HOT-MIX ASPHALT MIXTURE REQUIREMENTS:

SCALE:

MIXTURE TYPE	AIR VOIDS @Ndes
HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 (IL-9.5mm) 1 1/2"	4% @ 50 GYR.
HOT-MIX ASPHALT BASE COURSE (HMA BINDER IL-19.0mm) 2 1/4"	4% @ 50 GYR.

THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANITIES IS 112 LB/SQ YD/IN.

THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 70-22" AND FOR NON-POLYMERIZED HMA, THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS.

FOR "PERCENT OF RAP", SEE DISTRICT ONE SPECIAL PROVISIONS.

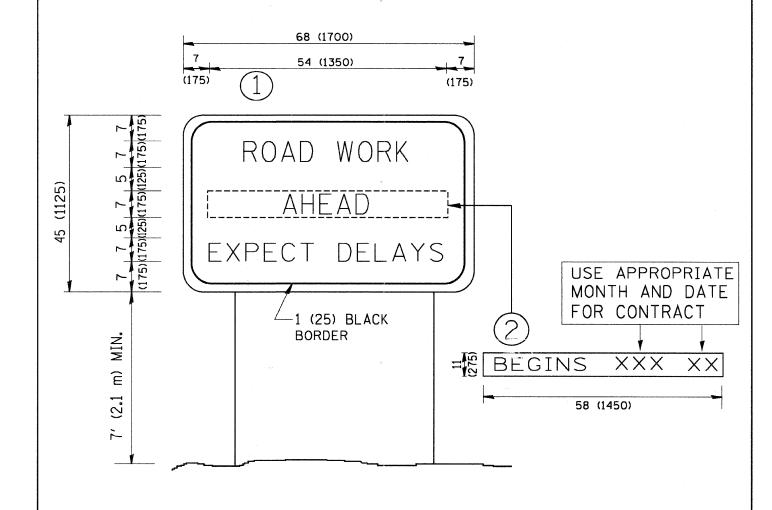
DRIVEWAY PATCHING DETAIL



	USER NAME = jvondra	DESIGNED	-	RJR	REVISED	m
•		DRAWN	-	RJR	REVISED	-
2	PLOT SCALE = 1.0000 '/ IN.	CHECKED	-	JMV	REVISED	-
	PLOT DATE = 7/12/2010	DATE	-	6/16/2010	REVISED	-

STAT	TE OF	ILLINOIS
DEPARTMENT	OF	TRANSPORTATION

						F.A.P. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.	
						339	09-00100-00-LT	соок	64	63	
MISGELLANEUUS DEIAILS						CONTRACT	NO. 6	3426			
	SHEET	NO.	OF	SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



NOTES:

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

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

FILE NAME =	USER NAME = gaglianobt	DESIGNED -	REVISED - R. MIRS 09-15-97		ARTERIAL ROAD			SECTION	COUNTY	TOTAL SHEET
Wi\diststd\22x34\tc22.dgn		DRAWN -	REVISED - R. MIRS 12-11-97	STATE OF ILLINOIS			RTE.	09-00100-00-LT	СООК	SALETS NO.
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED -T. RAMMACHER 02-02-99	DEPARTMENT OF TRANSPORTATION	INFORMATION SIGN		333	TC-22	CONTRACT	C NO
	PLOT DATE = 1/4/2008	DATE	REVISED - C. JUCIUS 01-31-07		SCALE: NONE SHEET NO. 1 OF 1	SHEETS STA. TO STA.	FED. ROAD	DIST. NO. 1 ILLINOIS FED. AL		1102