# LEE COUNTY BOARD OF COUNTY COMMISSIONERS

PUBLIC WORKS ADMINISTRATION DEPARTMENT OF TRANSPORTATION CONTRACT PLANS

LIGHTING PLANS

### INDEX OF LIGHTING PLANS

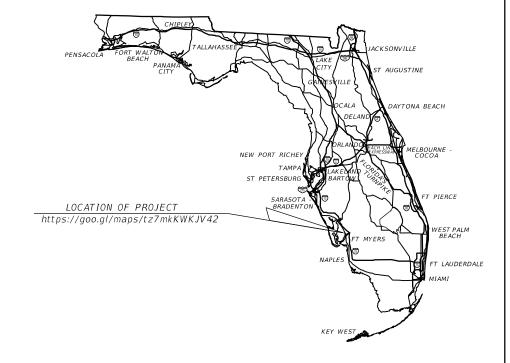
L-8

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SERVICE POINT/LOAD CENTER DETAIL

## LITTLETON / KISMET REALIGNMENT

COUNTY PROJECT NO. CN160459DLK





THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY:

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED. THE SIGNATURE MUST BE VERIFIED IN THE ELECTRONIC DOCUMENTS.

### LIGHTING PLANS ENGINEER OF RECORD:

ALAN T. KALTENBAUGH, P.E. P.E. No.: 85339 GANNETT FLEMING 79119 CORPORATE LAKE DRIVE, SUITE 150 TAMPA, FL 33634-6323 CONTRACT No.: C-9E24 VENDOR NO.: 25-1613591 CERTIFICATE OF AUTHORIZATION No.: 5564

#### LEE COUNTY PROJECT MANAGER:

VINCENT J. MILLER, P.E.

SHEET NO.

PAY ITEM	DESCRIPTION	UNIT	SHEET NUMBERS										TOTAL THIS		GRAND TOTAL		
NO.	DESCRIFTION	UNIT	L -	. 5	L-6	L - 7								SHE	ET	, , ,	
			PLAN	FINAL	PLAN   FINA	L PLAN FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL PLAN	FINAL	PLAN	FINAL	PLAN	FINA
630-2-11	CONDUIT, FURNISH & INSTALL, OPEN TRENCH	LF	320		700	1305								2325		2325	
630-2-12	CONDUIT, FURNISH & INSTALL, DIRECTIONAL BORE	LF	195		75	267								537		537	
635-2-11	PULL & SPLICE BOX, F&I, 17" x 30" COVER SIZE	EA	3		4	16								23		23	
715-1-12	LIGHTING CONDUCTORS, F&I, INSULATED, NO. 6	LF	587		839	1932								3358		3358	
715-4-11	LIGHT POLE COMPLETE, FURNISH & INSTALL STANDARD POLE STANDARD FOUNDATION, 30' MOUNTING HEIGHT	EA				1								1		1	
715-4-12	LIGHT POLE COMPLETE, FURNISH & INSTALL STANDARD POLE STANDARD FOUNDATION, 35' MOUNTING HEIGHT	EA	3			12								15		15	
715-7-11	LOAD CENTER, F&I, SECONDARY VOLTAGE	EA			1									1		1	
715-11-211	LUMINAIRE, F&I- REPLACE EXISTING LUMINAIRE ON EXISTING POLE/ARM, ROADWAY, COBRA HEAD	EA	1											1		1	

_	NO.	DATE	BY	REVISIONS - DESCRIPTION



APPROVED BY:

ALAN T. KALTENBAUGH, P.E.

REGISTERED PROFESSIONAL ENGINEER
FLORIDA CERTIFICATE NO. 85339



PUBLIC WORKS

LEE COUNTY

SOUTHWEST
FLORIDA
1500 MONROE STREET
12391 479-8900 www.lee-county.com/publicworks/doi!ile.htm

TABULATION OF QUANTITIES

SHEET NO.

L-2

M CNE TOBS/ORAS21 - AIM-Lagfo Littlaton-Kismat/Draiart Working/Dians/Linthing/TA

0100/06/9

q.

- 3. CONTRACTOR MAINTENANCE RESPONSIBILITIES: CONTRACTOR SHALL PROVIDE 24-HOUR CONTACT PERSON(S), TELEPHONE NUMBERS AND E-MAIL ADDRESSES AT THE TIME OF TRANSFER. FAILURE TO RESPOND TO MAINTENANCE RESPONSIBILITIES IN A TIMELY MANNER WILL TRIGGER A "VENDOR/CONTRACTOR COMPLAINT" NOTICE TO LEE COUNTY CONTRACTS AS WELL AS FDOT. TIMELY MANNER IN RESPONSE TO MAINTENANCE RESPONSIBILITIES IS DEFINED AS RESPONSE TO SITE NO LATER THAN TWO (2) HOURS AFTER NOTIFICATION. IN THE EVENT THAT LEE COUNTY FORCES ARE CALLED OUT TO RESPOND, THE CONTRACTOR WILL BE BILLED THE ENTIRE COST AS A "DEDUCT" ON THE NEXT PAYMENT REQUEST. BEING AN "OUT OF TOWN" CONTRACTOR DOES NOT RELIEVE THIS RESPONSIBILITY.
- 4. LOCATES: ONE (1) COURTESY LOCATE SHALL BE PERFORMED BY LEE COUNTY AT THE START OF THE PROJECT AT THE CONTRACTOR'S REQUEST. THE CONTRACTOR SHALL DOCUMENT THE LOCATION OF THE EXISTING UNDERGROUND AND ABOVE GROUND FACILITIES. AFTER THE COURTESY LOCATE, ALL LOCATES WITHIN THE PROJECT LIMITS ARE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE PERFORMED IN A TIMELY MANNER. TIMELY MANNER IN RESPONSE TO LOCATES IS DEFINED AS LOCATE SHALL BE PERFORMED NO LATER THAN TWENTY-FOUR (24) HOURS AFTER NOTIFICATION OR AS REQUIRED BY FLORIDA STATUTE. LEE COUNTY WILL ADVISE THE CONTRACTOR VIA E-MAIL OR FAX OF SUNSHINE LOCATE REQUESTS WITHIN THE WORK ZONE. ANY DAMAGE INCURRED DUE TO CONTRACTOR FAILURE TO LOCATE SHALL BE REPAIRED BY THE CONTRACTOR. SHOULD LEE COUNTY FORCES BE CALLED OUT TO MAKE REPAIRS DUE TO CONTRACTOR REFUSAL OR INABILITY TO MAKE REPAIRS, THE CONTRACTOR WILL BE BILLED THE ENTIRE COST AS A "DEDUCT" ON THE NEXT PAYMENT REQUEST AND WILL TRIGGER A "VENDOR/CONTRACTOR COMPLAINT" NOTICE TO BE FILED WITH LEE COUNTY CONTRACTS AS WELL AS FOOT. BEING AN "OUT OF TOWN" CONTRACTOR DOES NOT RELIEVE THIS RESPONSIBILITY.
- 5. DAMAGE TO EXISTING FACILITIES: ANY DAMAGE TO LEE COUNTY FACILITIES SHALL BE REPAIRED BY THE CONTRACTOR. REPAIRS SHALL BE MADE TO ENSURE FACILITIES ARE LIKE NEW OR BETTER.
- 6. TWENTY-FOUR (24) HOUR NOTICE IS REQUIRED, THE CONTRACTOR IS HEREBY DIRECTED TO CALL LEE COUNTY TRAFFIC DEPARTMENT AT 239-533-9500 AND ASK FOR THE SIGNAL INSPECTION DEPARTMENT.
- 7. PRIOR TO ANY EQUIPMENT ORDER, THE CONTRACTOR SHALL SUBMIT FOR APPROVAL EQUIPMENT SPECIFICATION OR DESIGN DATA FOR ALL MATERIAL PROPOSED FOR THE PROJECT. SHOP DRAWINGS AND DESIGN DATA FOR ROADWAY LIGHTING EQUIPMENT SHALL BE SUBMITTED TO THE ENGINEER OF RECORD IN ACCORDANCE WITH THE SPECIFICATIONS.
- 8. THE LOCATION OF EXISTING UTILITIES, AS SHOWN ON THIS PLANS, ARE APPROXIMATE AND BASED ON THE INFORMATION FURNISHED TO THE ENGINEER BY THE UTILITY OWNERS AND ARE SHOWN AS NOTICE TO THE CONTRACTOR THAT UNDERGROUND UTILITIES EXIST. THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANY OWNERS FOR LOCATION AND STAKING OF UNDERGROUND FACILITIES BEFORE EXCAVATING.

#### GENERAL NOTES CONT'D

9. STATE OF FLORIDA STATUTE 556.105 REQUIRES THAT BEFORE EXCAVATING, NOTICE BE GIVEN TO THE UTILITY OWNER A MINIMUM OF TWO (2) FULL BUSINESS DAYS AND A MAXIMUM OF (5) FULL BUSINESS DAYS. NOT ALL UTILITY OWNERS ARE A MEMBER OF "SUNSHINE ONE" 1-800-432-4770.

10. THE LOCATION OF THE POLES, CONDUCTORS, CONDUITS, JUNCTION BOXES, AND SERVICE POLES ARE DIAGRAMMATIC ONLY AND MAY BE SHIFTED BY THE ENGINEER TO ACCOMMODATE LOCAL CONDITIONS AND EXISTING UTILITY LOCATIONS.

- 11. ALUMINUM POLES, LUMINAIRES, AND BASES SHALL BE FABRICATED IN ACCORDANCE WITH AASHTO'S "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" AND SHALL HAVE BEEN TESTED BY F.H.W.A. APPROVED METHODS (1994 EDITION). CERTIFICATION FOR TESTS SHALL BE SUBMITTED WITH THE SHOP DRAWINGS.
- 12. MEET ALL REQUIREMENTS OF THE LATEST ADOPTED EDITIONS OF NFPA 70 NATIONAL ELECTRICAL CODE (NEC), AND NFPA 70E (STANDARD FOR ELECTRICAL SAFETY IN THE WORKPLACE) FOR ALL ELECTRICAL WORK, THE JANUARY 2017 FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AND THE 2016-17 FDOT DESIGN STANDARDS.
- 13. INSTALL LIGHTNING ARRESTORS, PROPERLY GROUNDED, IN POWER (SECONDARY) ENTRANCES
- 14. IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE, IDENTIFY ALL CIRCUITS AND EQUIPMENT WITH "LAMACOID TAGS". INSTALL SIMILAR TAGS OF STAINLESS STEEL IDENTIFYING CIRCUITS FOR EACH LUMINAIRE AT THE ACCESS HANDHOLE FOR EACH POLE
- 15. CONTRACTOR SHALL MEET ALL APPLICABLE OSHA REQUIREMENT, A MINIMUM 10-FOOT DISTANCE SHALL BE MAINTAINED BETWEEN THE EQUIPMENT AND THE ELECTRICAL OVERHEAD FACILITY. ALL EXISTING OVERHEAD POWER LINES SHALL STAY IN PLACE BOTH VERTICALLY AND HORIZONTALLY. ANY WORK DONE RELATED TO THIS REQUIREMENT SHALL BE AT NO ADDITIONAL COST TO THE COUNTY.
- 16. CONTRACTOR SHALL STAKE ALL POLE LOCATIONS AND REQUEST UTILITY COMPANIES TO LOCATE AND STAKE UNDERGROUND UTILITIES PRIOR TO EXCAVATING.
- 17. THE CONTRACTOR SHALL FURNISH AND INSTALL AN ALUMINUM IDENTIFICATION TAG ON EACH ROADWAY LIGHTING STANDARD. TAGS SHALL BE 2" x 8" IN SIZE WITH BLACK LETTERS ON A YELLOW BACKGROUND, ATTACHED WITH RIVETS, (NO SCREWS). NUMBERS SHALL BE AS SHOWN ON THE POLE DATA SHEETS AND THE POLE IDENTIFICATION TAG DETAIL. COST OF TAGS SHALL BE INCLUDED IN THE PAY ITEM.
- 18. DIRECTIONAL BORE OPERATIONS SHALL MEET THE REQUIREMENTS OF THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION UTILITY ACCOMMODATION GUIDE (LATEST EDITION).
- 19. AT LOCATIONS WHERE UNDERGROUND UTILITIES ARE IN CLOSE PROXIMITY TO THE LIGHTING POLE FOUNDATIONS OR CONDUIT RUN, AS DETERMINED BY THE CONTRACTOR, THE CONTRACTOR SHALL HAND DIG THE FIRST 4.0' OF THE HOLE FOR THE POLE FOUNDATION AND CONDUIT RUN.
- 20. ALL CONDUIT TRENCHES SHALL BE BACK FILLED COMPLETELY TO PROVIDE SAFE CROSSING BY THE END OF EACH WORKING DAY. THE CONTRACTOR SHALL NOT OPEN ANY AREA THAT CAN NOT BE BACK FILLED IN THE SAME DAY/NIGHT OPERATION.
- 21. ALL EXCESS DIRT AND DEBRIS EXCAVATED FROM POLE FOUNDATIONS SHALL BE REMOVED DAILY TO AREAS APPROVED BY THE ENGINEER AT NO ADDITIONAL COST TO LEE COUNTY.
- 22. THE LIGHTING SYSTEM SHALL BE MAINTAINED BY LEE COUNTY UPON FINAL ACCEPTANCE. THE CONTRACTOR SHALL SUBMIT THE AS-BUILT PLANS TO THE ENGINEER. PRIOR TO FINAL ACCEPTANCE.
- 23. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL SIDE STREETS, PRIVATE AND COMMERCIAL DRIVEWAYS AT ALL TIMES DURING THE CONSTRUCTION OPERATION.
- 24. INSTALL GROUNDING PER FDOT STANDARD SPECIFICATIONS, UNLESS OTHERWISE NOTED. WHEN THE GROUNDING ELECTRODE CONDUCTOR IS ENCLOSED IN A METAL RACEWAY, BOTH ENDS OF THE RACEWAYS AND ALL INTERVENING RACEWAYS AND METALLIC ENCLOSURES CONTAINING THE GROUNDING ELECTRODE CONDUCTOR MUST BE BONDED TO THE GROUNDING ELECTRODE CONDUCTOR. EXOTHERMICALLY WELD ALL GROUND ROD CONNECTIONS.

#### GENERAL NOTES CONT'D

25. USE CONDUCTORS THAT ARE SUITABLE FOR DIRECT BURIAL, AND SPLICED WITH SUBMERSIBLE RATED SPLICE KITS. PERFORM INSULATION-TEST RESISTANCE ON EACH CONDUCTOR WITH RESPECT TO GROUND AND ADJACENT PHASE CONDUCTORS. APPLIED POTENTIAL SHALL BE 1000 VOLTS DC FOR 600V RATED CABLE. MINIMUM TEST DURATION SHALL BE 1 MINUTE. INSULATION-RESISTANCE VALUES SHOULD NOT BE LESS THAN 100 MEGA OHMS. REPLACE ALL CABLES WITH INSULATION RESISTANCE VALUES LESS THAN 100 MEGA OHMS. TEST THAT ALL SPLICES ARE WATERPROOF AND INSPECT FOR PHYSICAL DAMAGE.

26. SURGE ARRESTORS SHALL BE INSTALLED AT EACH POLE. USE 10# STRANDED WIRE TO FEED STREET LIGHT HEAD FROM POLE BASE (HOT-HOT/NEUTRAL-GROUND).

27. ALL CONDUCTORS INSTALLED FROM LOAD CENTER PULLED THROUGH CONDUITS TO EACH STREET LIGHT POLE ON A 480 VOLT 2-WIRE SYSTEM SHALL HAVE THE FOLLOWING COLOR DESIGNATIONS: BLACK (HOT), WHITE (NEUTRAL), AND GREEN (GROUND). ALL CONDUCTORS SHALL BE CONTINUOUS IN COLOR FROM THE LOAD CENTER TO EACH STREET LIGHT POLE. THE UTILIZATION OF PHASE TAPE OR TAGS TO IDENTIFY THE HOT, NEUTRAL, OR GROUND CONDUCTORS SHALL NOT BE SUBSTITUTED FOR CONTINUOUS BLACK, WHITE, AND GREEN COLORED INSULATION.

28. ALL APPLICABLE INSTALLATION SHALL BE COMPLETED IN ACCORDANCE WITH THE LATEST EDITION OF THE LEE COUNTY DEPARTMENT OF TRANSPORTATION PLAN SPECIFICATIONS.

http://www.lee-county.com/publicworks/pdf/traffic/DOT\_Plan\_Specifications.pdf

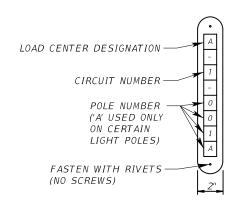
#### PAY ITEM NOTES

PAY ITEM 635-2-11:
REFER TO THE LEE COUNTY DEPARTMENT OF TRANSPORTATION PLAN SPECIFICATIONS
FOR SIGNAL & STREET LIGHTING SECTION 3 FOR PULL BOX PRODUCT AND
INSTALLATION SPECIFICATIONS.

PAY ITEM 715-1-12: SHALL INCLUDE CONDUCTORS AS INDICATED IN THE PLANS AND THE LEE COUNTY DEPARTMENT OF TRANSPORTATION PLAN SPECIFICATIONS. PAYMENT SHALL BE MADE BASED ON LINEAR FOOT OF SINGLE CONDUCTOR.

PAY ITEM 715-4-11/12: SHALL INCLUDE THE POLE, LUMINAIRE WITH LAMP, ANCHOR BOLTS WITH LOCK NUTS AND WASHERS, FRANGIBLE BASE, AND FOUNDATION AS INDICATED IN THE DESIGN STANDARDS. THE COST OF BREAK-AWAY WATERTIGHT, IN-LINE FUSE HOLDERS, THE STRAIN RELIEF, AND THE SURGE ARRESTOR PER LEE COUNTY DEPARTMENT OF TRANSPORTATION PLAN SPECIFICATIONS FOR SIGNAL & STREET LIGHTING, IS ALSO INCLUDED.

PAY ITEM 715-7-11:
FOR PRODUCT AND INSTALLATION DETAILS REFER TO LEE COUNTY DEPARTMENT OF TRANSPORTATION PLAN SPECIFICATIONS FOR SIGNAL & STREET LIGHTING SECTION 12. SHALL INCLUDE STRUCTURE, METER BASE, SERVICE POLE INSULATORS, WEATHERHEADS, TRANSFORMERS, ENCLOSURES, PANEL BOARDS, BREAKERS, FUSES, LIGHTNING PROTECTOR, PHOTO-ELECTRIC ASSEMBLY, CONDUIT, FEEDER CONDUCTORS, PULL BOXES, AND ALL MISCELLANEOUS HARDWARE. SHALL INCLUDE ALL ASSOCIATED COSTS OF FURNISHING AND INSTALLING.



FDOT POLE IDENTIFICATION TAG DETAIL
(SEE NOTE 17)

NO. DATE BY REVISIONS - DESCRIPTION



ALAN T. KALTENBAUGH, P.E.
REGISTERED PROFESSIONAL ENGINEER
FLORIDA CERTIFICATE NO. 85339



PUBLIC WORKS

LEE COUNTY

SOUTHWEST TRANSPORTATION

F L O R I D A

ISOO MONROE STREET FORT MYERS, FLORIDA 33901

(239) 479-8900 www.lee-county.com/publicworks/doi:111e.htm

GENERAL NOTES

SHEET NO.

### POLE DATA

POLE NO.	CIRCUIT	STATION	DIST. OR ARM	LUMINAIRE WATTAGE	MOUNTING HEIGHT	POLE SETBACK	PAY ITEM	OPTION
1	A-1	9+81.58	8.0'	168	35'	4' FROM EOP	715-4-12	NEW
2	A-1	10+40.70	8.0'	168	35'	17' FROM EOP	715-4-12	NEW
3	A-1	10+66.17	8.0'	168	35'	10' FROM EOP	715-4-12	NEW
4-EXT	EXISTING	EXISTING	8.0'	168	EXISTING	EXISTING	715-11-211	RETRO
5	A-2	20+58.92	8.0'	210	35'	7' FROM BOC	715-4-12	NEW
6	A-2	22+01.53	8.0'	255	35'	16' FROM BOC	715-4-12	NEW
7	A-2	22+76.54	8.0'	255	35'	15' FROM BOC	715-4-12	NEW
8	A-2	24+15.15	8.0'	255	30'	15' FROM BOC	715-4-12	NEW
9	A-2	25+21.75	8.0'	210	35'	15' FROM BOC	715-4-12	NEW
10	A-2	26+48.45	8.0'	210	35'	10' FROM FOG	715-4-12	NEW
11	A-2	20+55.62	8.0'	210	35'	10' FROM BOC	715-4-12	NEW
12	A-2	22+17.62	8.0'	255	35'	15' FROM BOC	715-4-12	NEW
13	A-2	23+00.34	8.0'	255	35'	20" FROM BOC	715-4-12	NEW
14	A-2	302+53.83	8.0'	210	35'	8' FROM EOP	715-4-12	NEW
15	A-2	23+95.12	8.0'	255	35'	4' FROM BOC	715-4-12	NEW
16	A-2	24+24.54	8.0'	255	35'	15' FROM BOC	715-4-12	NEW
17	A-2	25+19.66	8.0'	210	35'	13' FROM BOC	715-4-12	NEW

### *LEGEND*

**⊕** •••

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#### SYMBOLS DESCRIPTION

LED LUMINAIRE ATTA **@** TRANSFER BASE, PUL THROUGH OPTICS, 17.

LED LUMINAIRE ATTAC TRANSFER BASE, PUL OPTICS, 21514 ABSOL

LED LUMINAIRE ATTAC TRANSFER BASE, PUL OPTICS, 21514 ABSOL

LED LUMINAIRE ATTA TRANSFER BASE, PUL OPTICS, 25609 ABSOL

LED LUMINAIRE ATTAC TRANSFER BASE, PUL OPTICS, 25609 ABSOL

LED LUMINAIRE ATTAC TRANSFER BASE, PUL OPTICS, 25609 ABSOL

LED LUMINAIRE ATTA HOLOPHANE MONGOOS PHOTOMETRIC CURVE

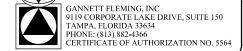
OPEN TRENCH, HDPE BOND CONDUCTOR (TW

DIRECTIONAL BORE, H

PULL BOX. FOR SPECIFICATIONS SEE SECTION 3 OF LEE COUNTY DEPARTMENT OF TRANSPORTATION PLAN SPECIFICATIONS FOR SIGNAL & STREET LIGHTING.

LOAD CENTER. FOR REQUIREMENTS SEE SECTION 12 OF LEE COUNTY DEPARTMENT OF TRANSPORTATION PLAN SPECIFICATIONS FOR SIGNAL & STREET LIGHTING. ГО

NO.	DATE	BY	REVISIONS - DESCRIPTION	`







DEPARTMENT of TRANSPORTATION FORT MYERS, FLORIDA 33901

POLE DATA AND LEGEND

CONVENTIONAL LIGHTING DESIGN CRITERIA

Average Initial Vertical Intensity

Uniformity Ratio Avg./Min.

Max./Min.

Wind Speed

Average Initial Horizontal Intensity 3.0 Foot Candles

2.3 Foot Candles

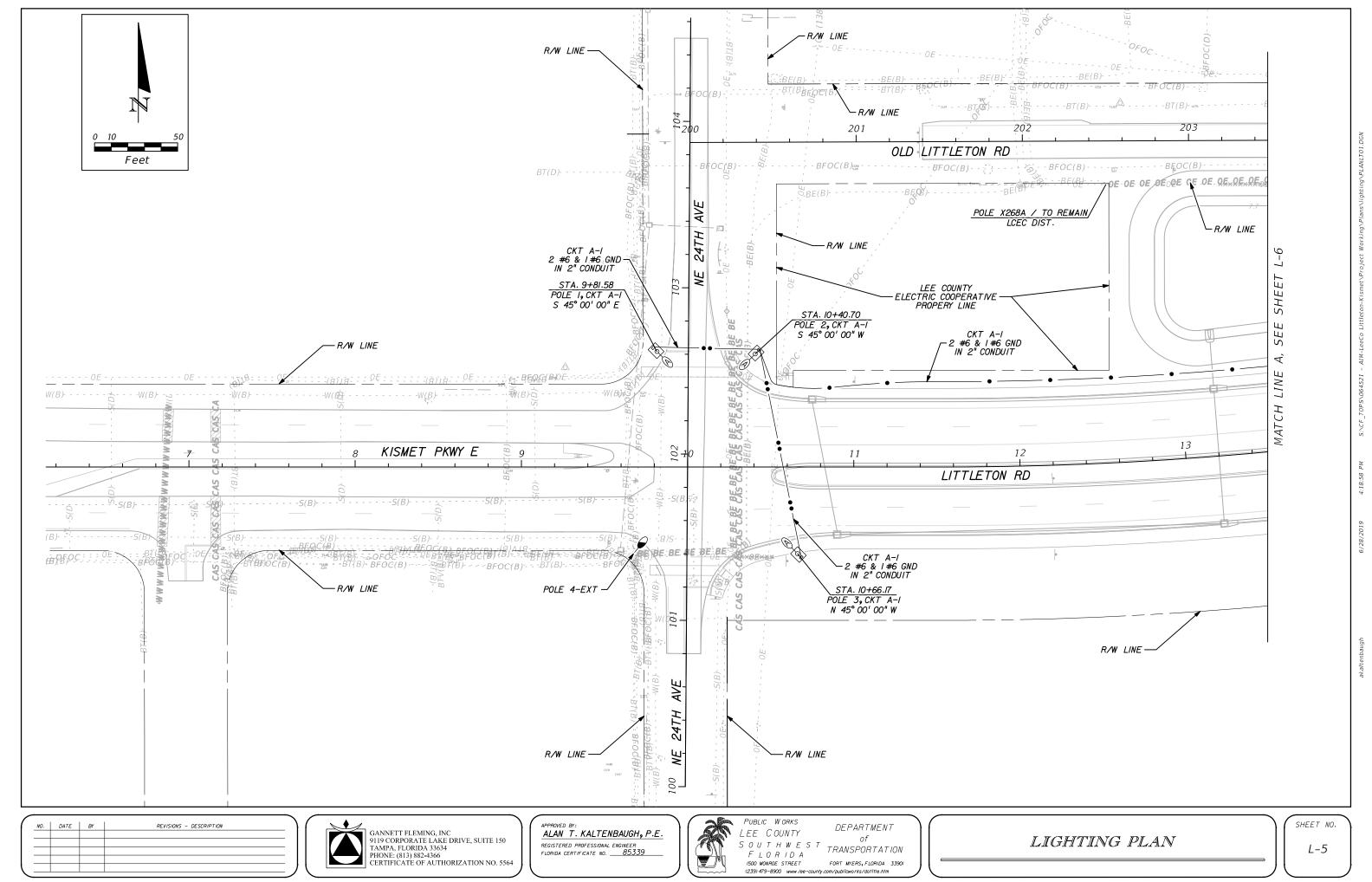
4:1 Or Less

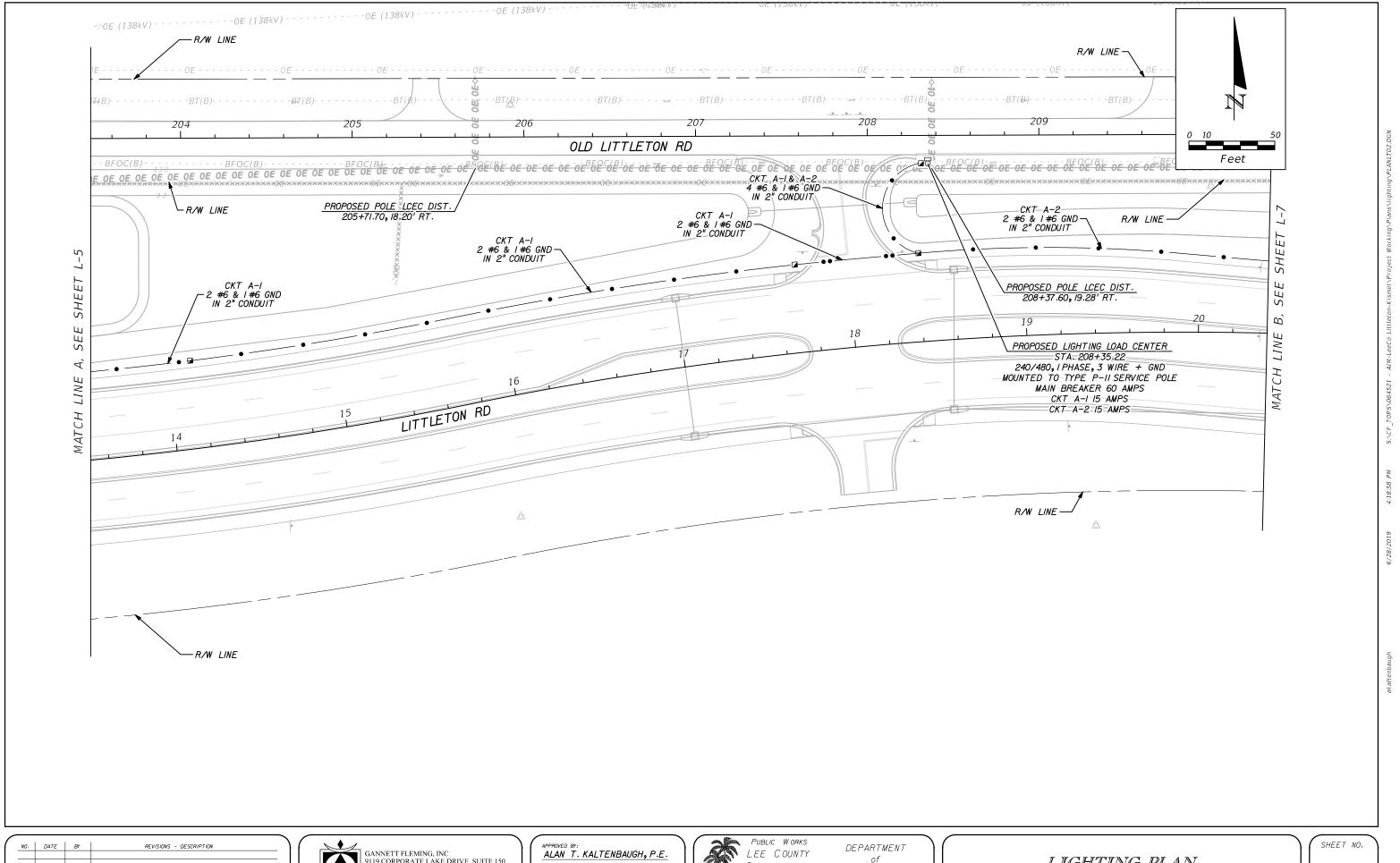
10:1 Or Less

170 MPH

SHEET NO.

ACHED ON SHOULDER MOUNT LIGHT POLE. MOUNTING HEIGHT IS 35 FT AND LUMINAIRE IS ON AN 8 FT ARM. SYMBOL INCLUDES LUMINAIRE, LIGHT POLE, BREAKWAY JLL BOX, CONCRETE SLAB, AND FOUNDATION. THE DESIGN IS BASED ON HOLOPHANE MONGOOSE LED MGLED4 LUMINAIRE, DESIGNED FOR 4 LED COUNT, FORWARD 7357 ABSOLUTE LUMENS, 168 WATTS, 4000 K COLOR TEMPERATURE, PHOTOMETRIC CURVE NUMBER MGLED_4_4_5K_AX_F_X_X_US.ies. WIRED FOR 480V OPERATION.
ACHED ON SHOULDER MOUNT LIGHT POLE. MOUNTING HEIGHT IS 35 FT AND LUMINAIRE IS ON AN 8 FT ARM. SYMBOL INCLUDES LUMINAIRE, LIGHT POLE, BREAKWAY JUL BOX, CONCRETE SLAB, AND FOUNDATION. THE DESIGN IS BASED ON HOLOPHANE MONGOOSE MGLED LUMINAIRE, DESIGNED FOR 5 LED COUNT, MEDIUM ROADWAY DUTE LUMENS, 210 WATTS, 4000 K COLOR TEMPERATURE, PHOTOMETRIC CURVE NUMBER MGLED_4_4_5K_AX_M_x_x_US.ies. WIRED FOR 480V OPERATION.
ACHED ON SHOULDER MOUNT LIGHT POLE. MOUNTING HEIGHT IS 35 FT AND LUMINAIRE IS ON AN 8 FT ARM. SYMBOL INCLUDES LUMINAIRE, LIGHT POLE, BREAKWAY JUL BOX, CONCRETE SLAB, AND FOUNDATION. THE DESIGN IS BASED ON HOLOPHANE MONGOOSE MGLED LUMINAIRE, DESIGNED FOR 5 LED COUNT, WIDE ROADWAY DLUTE LUMENS, 210 WATTS, 4000 K COLOR TEMPERATURE, PHOTOMETRIC CURVE NUMBER MGLED_4_4_5K_AX_W_x_x_US.ies. WIRED FOR 480V OPERATION.
ACHED ON SHOULDER MOUNT LIGHT POLE. MOUNTING HEIGHT IS 35 FT AND LUMINAIRE IS ON AN 8 FT ARM. SYMBOL INCLUDES LUMINAIRE, LIGHT POLE, BREAKWAY JUL BOX, CONCRETE SLAB, AND FOUNDATION. THE DESIGN IS BASED ON HOLOPHANE MONGOOSE MGLED LUMINAIRE, DESIGNED FOR 6 LED COUNT, FORWARD THROW DLUTE LUMENS, 255 WATTS, 4000 K COLOR TEMPERATURE, PHOTOMETRIC CURVE NUMBER MGLED_6_4_5K_AX_F_X_US.ies. WIRED FOR 480V OPERATION.
ACHED ON SHOULDER MOUNT LIGHT POLE. MOUNTING HEIGHT IS 35 FT AND LUMINAIRE IS ON AN 8 FT ARM. SYMBOL INCLUDES LUMINAIRE, LIGHT POLE, BREAKWAY JUL BOX, CONCRETE SLAB, AND FOUNDATION. THE DESIGN IS BASED ON HOLOPHANE MONGOOSE MGLED LUMINAIRE, DESIGNED FOR 6 LED COUNT, MEDIUM ROADWAY DLUTE LUMENS, 255 WATTS, 4000 K COLOR TEMPERATURE, PHOTOMETRIC CURVE NUMBER MGLED_6_4_5K_AX_M_X_X_US.ies. WIRED FOR 480V OPERATION.
ACHED ON SHOULDER MOUNT LIGHT POLE. MOUNTING HEIGHT IS 30 FT AND LUMINAIRE IS ON AN 8 FT ARM. SYMBOL INCLUDES LUMINAIRE, LIGHT POLE, BREAKWAY JUL BOX, CONCRETE SLAB, AND FOUNDATION. THE DESIGN IS BASED ON HOLOPHANE MONGOOSE MGLED LUMINAIRE, DESIGNED FOR 6 LED COUNT, FORWARD THROW DLUTE LUMENS, 255 WATTS, 4000 K COLOR TEMPERATURE, PHOTOMETRIC CURVE NUMBER MGLED_6_4_5K_AX_F_x_US.ies. WIRED FOR 480V OPERATION.
ACHED ON EXISTING SHOULDER MOUNT UTILITY POLE. MOUNTING IS TO UTILIZE EXISTING ARM. SYMBOL INCLUDES LUMINAIRE ONLY. THE DESIGN IS BASED ON USE LED MGLED4 LUMINAIRE, DESIGNED FOR 4 LED COUNT, FORWARD THROUGH OPTICS, 17357 ABSOLUTE LUMENS, 168 WATTS, 4000 K COLOR TEMPERATURE, E NUMBER MGLED_4_4_5K_AX_F_X_X_US.ies. WIRED FOR 480V OPERATION.
E OR SCHEDULE 40 PVC CONDUIT WITH THWN-2 CONDUCTORS INSIDE (CONDUIT AND CONDUCTOR SIZE AS SHOWN ON PLAN SHEETS). RUN ONE (1) 6 AWG COPPER W GREEN INSULATION) INSIDE CONDUIT WITH OTHER CONDUCTORS.
HDPE OR SCHEDULE 40 PVC CONDUIT WITH THWN-2 CONDUCTORS INSIDE (CONDUIT AND CONDUCTOR SIZE AS SHOWN ON PLAN SHEETS).





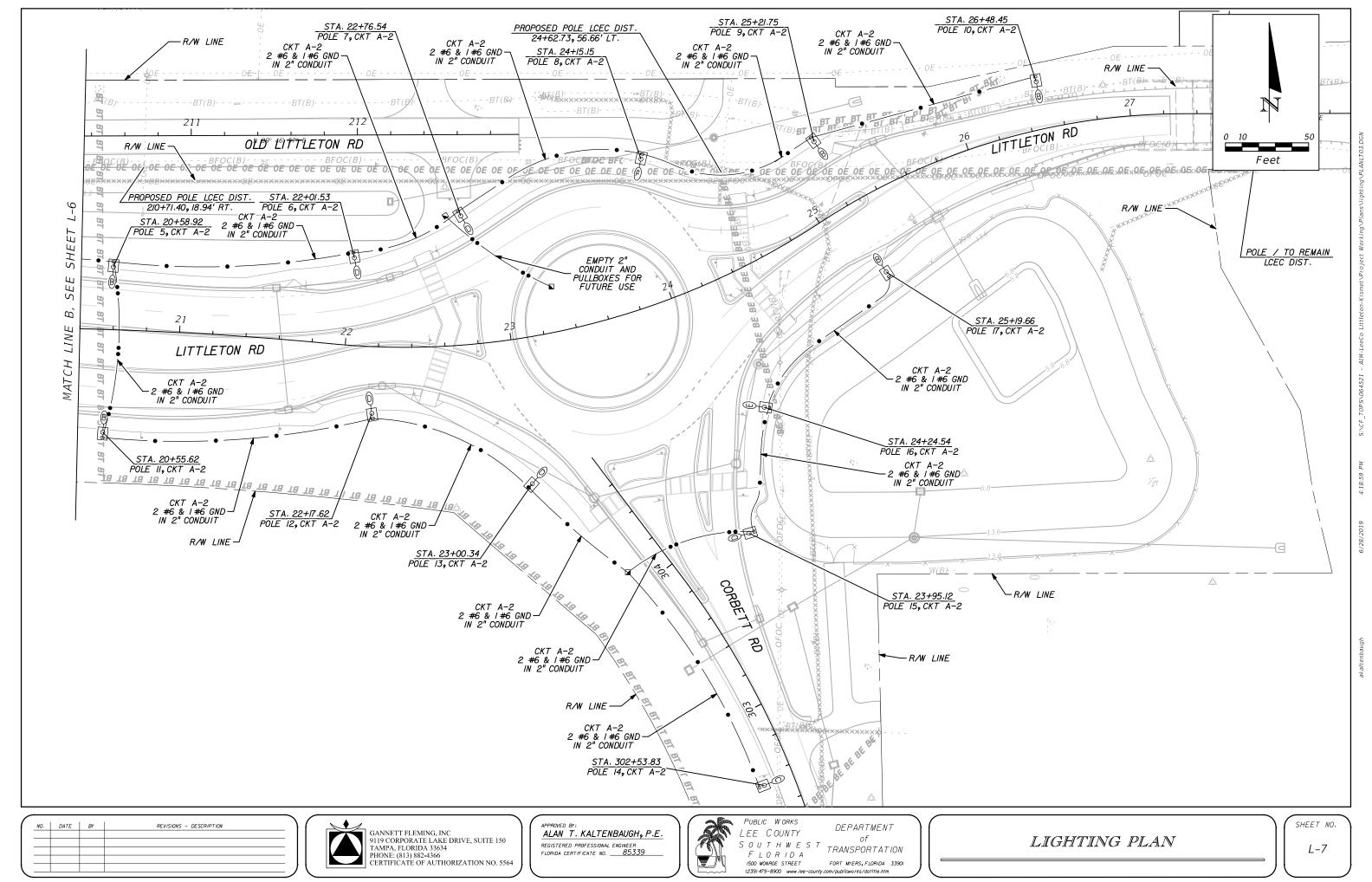
9119 CORPORATE LAKE DRIVE, SUITE 150 TAMPA, FLORIDA 33634 PHONE: (813) 882-4366 CERTIFICATE OF AUTHORIZATION NO. 5564 REGISTERED PROFESSIONAL ENGINEER FLORIDA CERTIFICATE NO. 85339

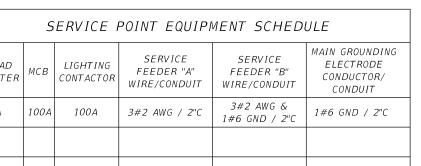


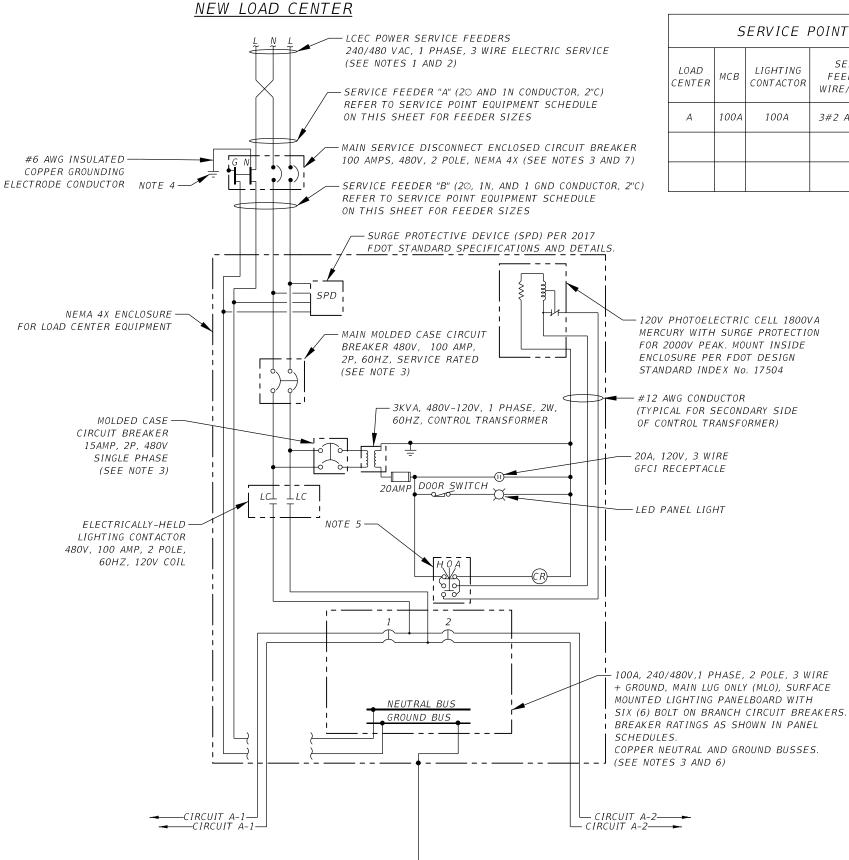
SOUTHWEST TRANSPORTATION FLORIDA FORT MYERS, FLORIDA 33901 1500 MONROE STREET

(239) 479-8900 www.lee-county.com/publicworks/dotitle.htm

LIGHTING PLAN







	BRANCH CIRCUIT BREAKER SCHEDULE								
LOAD CIRCUIT NUMBER TOTAL									
CENTER	1	2	3	4	5	6	CONNECTED LOAD		
А	15A	15A	15A SPARE	15A SPD	SPACE	SPACE	3.94 kVA		

#### NOTES:

- 1. INSTALLATION SHALL COMPLY WITH LEE COUNTY DEPARTMENT OF TRANSPORTATION PLAN SPECIFICATIONS FOR SIGNAL AND STREET LIGHTING, EXCEPT WHERE SHOWN OTHERWISE IN THE PLAN SHEETS.
- 2. THE ELECTRICAL SERVICE DROP CONDUCTORS WILL BE PROVIDED, SIZED AND INSTALLED BY LCEC. SINCE UTILITY SERVICE DROP CONDUCTORS ARE ALUMINUM, CONTRACTOR SHALL USE A TIN PLATED MECHANICAL CONNECTOR UL APPROVED FOR COPPER TO ALUMINUM SPLICES.
- 3. ALL MAIN SERVICE DISCONNECT CIRCUIT BREAKERS SHALL HAVE A MINIMUM SHORT CIRCUIT CAPACITY OF 35,000 AMPS AND SHALL BE LOCKABLE IN THE OPEN/OFF POSITION. ALL BRANCH CIRCUIT BREAKERS SHALL HAVE A MINIMUM SHORT CIRCUIT CAPACITY OF 18,000 AMPS.
- 4. INSTALL A MINIMUM OF ONE 5/8 INCH DIAMETER 20 FOOT LONG (SECTIONAL TYPE) COPPER CLAD STEEL GROUND ROD IN COMPLIANCE WITH LEE COUNTY DEPARTMENT OF TRANSPORTATION PLAN SPECIFICATIONS FOR SIGNAL AND STREET LIGHTING AND THE 2014 NATIONAL ELECTRIC CODE (NEC) INCLUDING MAXIMUM RESISTANCE CRITERIA.
- 5. HAND-OFF-AUTO (HOA) SWITCH. THE SELECTOR SWITCH POSITION INDICATES OPERATION MODE: "HAND" POSITION INDICATES "ALWAYS ON", "OFF" POSITION INDICATES "ALWAYS OFF" AND "AUTO" POSITION INDICATES "AUTOMATIC" OPERATION.
- 6. USE SOLID CRIMP CONNECTOR REDUCERS, WHERE NECESSARY, FOR CONDUCTORS LARGER THAN WHAT THE BRANCH CIRCUIT BREAKER TERMINALS ARE LISTED FOR. USE BURNDY YE/AYP OR APPROVED EQUAL.
- 7. THE GROUNDING ELECTRODE CONDUCTOR CONNECTION TO THE GROUNDED (NEUTRAL) CONDUCTOR SHALL BE MADE AT THE SERVICE DISCONNECT CIRCUIT BREAKER. MAINTAIN ISOLATION OF NEUTRALS AND EQUIPMENT GROUND CONDUCTORS AT ALL POINTS ON THE LOAD SIDE OF THIS CIRCUIT BREAKER EXCEPT WHERE NECESSARY FOR A SEPARATELY DERIVED SYSTEM PER NEC ARTICLE 250.
- 8. SPDS SHALL MEET THE REQUIREMENTS OF NEC ARTICLE 285.

NO.	DATE	BY	REVISIONS - DESCRIPTION



-GROUND



-GROUND



PUBLIC WORKS

LEE COUNTY

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SERVICE POINT/ LOAD CENTER DETAIL SHEET NO.