PUBLIC WORKS DEPARTMENT

MANATEE COUNTY PROJECT No: 6108260

INDEX OF LIGHTING PLANS

SHEET NO. SHEET DESCRIPTION

L-1 KEY SHEET

L-2 SIGNATURE SHEET
L-3 TABULATION OF QUANTITIES

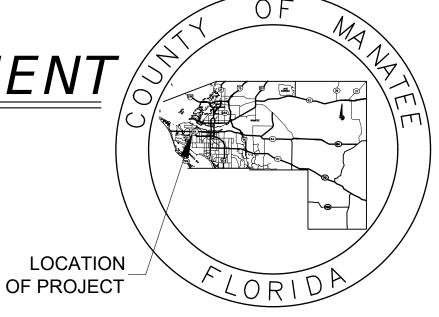
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L-6 TO L-15 LIGHTING PLAN

75TH STREET WEST FROM 20TH AVENUE W. TO MANATEE AVENUE W. (SR 64) BRADENTON, FLORIDA

LIGHTING PLANS



90% SUBMITTAL JULY 2023

(NOT FOR CONSTRUCTION)



ATTENTION IS DIRECTED TO THE FACT THAT THESE PLANS MAY HAVE BEEN ENLARGED IN SIZE BY REPRODUCTION. THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA.

LIGHTING PLANS ENGINEER OF RECORD:

DAVID J. ALLEN, P.E. NO. 58540 STANTEC CONSULTANT SERVICES, INC. 380 PARK PLACE BOULEVARD SUITE 300 CLEARWATER, FLORIDA, 33759 727-531-3505



COUNTY PROJECT MANAGER: ANTHONY RUSSO, P.E.

FISCAL	SHEET
YEAR	NO.
23	L-1



THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY:

ON THE DATE ADJACENT TO THE SEAL

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

DAVID J. ALLEN, PE STANTEC CONSULTING SERVICES, INC. 380 PARK PLACE BOULEVARD SUITE 300 CLEARWATER, FLORIDA, 33759 (727) 531-3505

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

LIGHTING PLANS

SHEET NO. SHEET DESCRIPTION KEY SHEET SIGNATURE SHEET L-2

L-3 TABULATION OF QUANTITIES L-4 GENERAL NOTES AND LEGEND

FP&L LIGHT POLE DATA TABLE AND LEGEND L-5

L-6 TO L-15 LIGHTING PLAN

				REVISIONS	
		BY	DATE	DESCRIPTION	NO.
Stantec					
CONSULTING SERVICES, INC.	STANTEC				

DAVID J. ALLEN, P.E. P.E. LICENSE NUMBER 58540 380 PARK PLACE BOULEVARD SUITE 300 CLEARWATER, FLORIDA, 33759 (727)531-3505



76TH STREET WEST FROM	SHEET
20TH AVENUE W. TO MANATEE AVENUE W. (SR 64)	NO.
SIGNATURE SHEET	1-2

L-2

TABULATION OF QUANTITIES

PAY ITEM DESCRIPTION U		UNIT	SHEET NUMBERS												GRAND TOTAL	
NO.	DESCRIPTION		L-6		L-7 L-		L-8 L-9		L-9 L-10		L - 11	L-12	SHEET		10174	
			PLAN	FINAL	PLAN FINAL	PLAN	FINAL	PLAN	FINAL	PLAN FINAL	PLAN FINAL	PLAN FINAL	PLAN	FINAL	PLAN	FINAL
630-2-91	CONDUIT, INSTALL, OPEN TRENCH	LF	10		170	20		20		20	30	25	295			
630-2-92	CONDUIT, INSTALL, DIRECTIONAL BORE	LF	130		530	565		560		555	640	700	3680			
635-2-30	PULL & SPLICE BOX, INSTALL	EA	2		6	4		4		4	7	6	33			

PAY ITEM						SHEET NUMBERS										GRAND TOTAL	
NO.	DESCRIPTION	OWIT	L - 13		L - 14	L - 15								TH SHE	ET	707712	// AL
			PLAN	FINAL	PLAN FINAL	PLAN FINAL	PLAN FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL PL	AN FIN	AL
	CONDUIT, INSTALL, OPEN TRENCH	LF	20		15	15								50		345	
630-2-92	CONDUIT, INSTALL, DIRECTIONAL BORE	LF	555		535	210								1300		4980	
635-2-30	PULL & SPLICE BOX, INSTALL	EA	4		3	3								10		43	

REVISIONS

NO. DESCRIPTION DATE BY

Stantec

STANTEC CONSULTING SERVICES, INC.

DAVID J. ALLEN, P.E.
P.E. LICENSE NUMBER 58540
380 PARK PLACE BOULEVARD
SUITE 300
CLEARWATER, FLORIDA, 33759
(727)531-3505



75TH	STREET WEST FROM	
20TH AVENUE W.	TO MANATEE AVENUE V	W. (SR 64)

TABULATION OF QUANTITIES

L-3

SHEET

NO.

FICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY S

LIGHTING GENERAL NOTES

- 1. FLORIDA POWER & LIGHT (FP&L) WILL FURNISH ALL MATERIALS FOR THIS PROJECT. THE CONTRACTOR SHALL INSTALL ALL PULL BOXES, CONDUIT AND PULL WIRE AS FURNISHED BY FP&L. THE CONTRACTOR SHALL COORDINATE PICK UP OF THE MATERIALS WITH FP&L.
- 2. THE CONTRACTOR SHALL REQUEST ALL NECESSARY SPECIFICATIONS AND STANDARDS FROM ERIC CULLING (FP&L) FOR THE INSTALLATION OF THE LIGHTING CONDUIT AND PLACEMENT OF THE LIGHTING PULL BOXES PRIOR TO THE START OF INSTALLATION.

ERIC CULLING PHONE: 239-410-4763 EMAIL: ERIC.CULLING@FPL.COM.

- 3. ALL LUMINAIRES ON THE WEST SIDE OF 75TH STREET SHALL BE MOUNTED ON THE PROPOSED POWER POLES BY FP&L AND DO NOT REQUIRE
- 4. THE LOCATIONS OF EXISTING UTILITIES, AS SHOWN ON THESE PLANS, ARE APPROXIMATE AND BASED ON THE INFORMATION FURNISHED TO THE ENGINEER BY THE UTILITY OWNER(S) AND ARE SHOWN AS NOTICE TO THE CONTRACTOR THAT UNDERGROUND UTILITIES EXIST.
- 5. BEFORE EXCAVATING, IT IS REQUIRED THAT NOTICE BE GIVEN TO SUNSHINE STATE ONE CALL OF FLORIDA, INC. (SSOCOF) AT 1-800-432-4770 A MINIMUM OF TWO (2) FULL BUSINESS DAYS BEFORE WORK BEGINS. NOT ALL UTILITY COMPANIES ARE MEMBERS OF SSOCOF.
- 6. THE LOCATION OF THE CONDUITS ARE DIAGRAMMATIC ONLY AND MAY BE ADJUSTED WITHIN THE RIGHT-OF-WAY BY THE CONTRACTOR WITH APPROVAL FROM THE ENGINEER TO ACCOMMODATE LOCAL CONDITIONS AND EXISTING UTILITY LOCATIONS.
- 7. THE CONTRACTOR SHALL STAKE ALL POLE LOCATIONS TO ASSIST FP&L IN THE LIGHT POLE INSTALLATION LOCATIONS.
- 8. THE CONTRACTOR SHALL PLACE THE PULL BOX FOR EACH LIGHT POLE LOCATED ON THE EAST SIDE OF 75TH STREET PER FP&L STANDARDS AND SPECIFICATIONS. THE PULL BOX SHALL BE THREE FEET FROM THE STAKED PROPOSED LIGHT POLE ON THE SIDE DEPICTED IN THE PLANS. THE CONTRACTOR SHALL ALSO INSTALL CONDUIT TO CONNECT THE PULL BOX AND THE PROPOSED LIGHT POLE INSTALLED BY FPL.
- 9. DIRECTIONAL BORE OPERATIONS SHALL MEET THE REQUIREMENTS OF FDOT'S UTILITY ACCOMMODATION MANUAL (LATEST EDITION).
- 10. AT LOCATIONS WHERE UNDERGROUND UTILITIES ARE WITHIN TWO FEET OF THE CONDUIT RUN, THE CONTRACTOR SHALL HAND DIG THE FIRST FOUR (4) FEET FOR THE CONDUIT RUN.
- 11. THE CONTRACTOR SHALL BE AWARE THAT NO TEST BORINGS WHERE MADE WHERE CONDUIT OR PULL BOXES ARE TO BE INSTALLED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR EXAMINING THE JOB SITE CONDITIONS BEFORE SUBMITTING BID PROPOSALS.
- 12. ALL CONDUIT TRENCHES SHALL BE BACKFILLED COMPLETELY TO PROVIDE SAFE CROSSING BY THE END OF EACH WORKING DAY OR WHENEVER THE WORK ZONE BECOMES INACTIVE. THE CONTRACTOR SHALL NOT OPEN ANY AREA THAT CAN NOT BE BACKFILLED IN THE SAME WORK
- 13. MAINTAIN ACCESS TO ALL SIDE STREETS, PRIVATE AND COMMERCIAL DRIVEWAYS AT ALL TIMES DURING THE CONSTRUCTION OPERATION.
- 14. THE CONTRACTOR SHALL NOTIFY MANATEE COUNTY BEFORE ANY TRENCHING OR DIGGING AT SIGNALIZED INTERSECTIONS SO THAT ALL UNDERGROUND LOOP LEAD-INS AND ELECTRICAL CABLES CAN BE IDENTIFIED AND MARKED APPROPRIATELY
- 15. THE LIGHTING SYSTEM WILL BE MAINTAINED BY FLORIDA POWER AND LIGHT UPON FINAL ACCEPTANCE.
- 16. WHEN CONSTRUCTION IS COMPLETE, A HARD COPY SET OF "AS-BUILT" PLANS IN ADDITION TO AN ELECTRONIC COPY (PDF) IS TO BE

FLORIDA POWER AND LIGHT ATTN: ERIC CULLING SENIOR REPRESENTATIVE - LED LIGHTING SOLUTIONS EMAIL: ERIC.CULLING@FPL.COM

- 17. ALL EXISTING UTILITIES ARE TO REMAIN IN PLACE UNLESS OTHERWISE NOTED.
- 18. PULL BOXES SHALL NOT BE LOCATED IN DRAINAGE SWALES, DITCHES, WETLANDS, DRIVEWAYS, SURFACE WATER, PAVED SHOULDERS OR PEDESTRIAN RAMPS. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER FOR AN APPROVED OFFSET ADJUSTMENT IF NECESSARY.

	REVISIONS			
NO.	DESCRIPTION	DATE	BY	
				CT



DAVID J. ALLEN, P.E. P.E. LICENSE NUMBER 58540 380 PARK PLACE BOULEVARD SUITE 300 CLEARWATER, FLORIDA, 33759 (727) 531-3505



MANATEE COUNTY PUBLIC WORKS COUNTY PROJECT NO: 6108260

20TH AVENUE W. TO MANATEE AVENUE W. (SR 64)

75TH STREET WEST FROM

SHEET NO.

FP&L LIGHT POLE DATA TABLE

POLE NO.	STATION & OFFSET	ARM LEGNTH	ARM RISE	FP&L POLE TYPE	LUMINAIRE WATTAGE	BRACKET ANGLE *	MOUNTING HEIGHT
1	102+66, 48.8' RT	12'	42"	7	60	0	30'
2	103+96, 44.7' RT	12'	42"	7	60	0	30'
3	105+61, 49.3' RT	12'	42"	7	90	0	30'
4	106+26, 63.0' RT	12'	42"	7	60	0	30'
5	107+23, 59.6' RT	12'	42"	7	90	0	22.5'
6	107+75, 44.3' RT	12'	42"	7	60	0	30'
7	107+69, 49.3' LT	12'	42"	7	60	0	30'
8	109+19, 44.4' RT	12'	42"	7	60	0	30'
9	110+63, 43.9' RT	12'	42"	7	60	0	30'
10	112+03, 44.1' RT	12'	42"	7	60	0	30'
11	113+36, 44.2' RT	12'	42"	7	60	0	30'
12	114+53, 44.4' RT	12'	42"	7	60	0	30'
13	115+88, 44.4' RT	12'	42"	7	60	0	30'
14	117+29. 44.4' RT	12'	42"	7	60	0	30'
15	118+57, 44.3' RT	12'	42"	7	60	0	30'
16	120+04, 44.3' RT	12'	42"	7	60	0	30'
17	121+42, 44.6' RT	12'	42"	7	60	0	30'
18	122+71, 44.3' RT	12'	42"	7	60	0	30'
19	124+10, 44.4' RT	12'	42"	7	60	0	30'
20	125+54, 44.2' RT	12'	42"	7	60	0	30'
21	126+86, 44.5' RT	12'	42"	7	60	0	30'
22	128+01, 44.3' RT	12'	42"	7	60	0	30'
23	129+30, 44.5' RT	12'	42"	7	60	0	30'
24	130+04, 48.7' LT	12'	42"	7	60	0	30'
25	130+60, 44.0' RT	12'	42"	7	60	0	30'
26	131+80, 39.3' RT	12'	42"	7	60	0	30'
27	132+99, 39.5' RT	12'	42"	7	60	0	30'
28	134+21, 39.4' RT	12'	42"	7	60	0	30'
29	134+93, 48.9' LT	12'	42"	7	60	0	30'
30	135+65, 39.4' RT	12'	42"	7	60	0	30'
31	137+06, 39.5' RT	12'	42"	7	60	0	30'
32	138+91, 43.0' RT	12'	42"	7	60	0	30'
33	140+61, 43.8' RT	12'	42"	7	60	0	30'
34	141+84, 43.1' RT	12'	42"	7	60	0	30'
35	143+03, 43.2' RT	12'	42"	7	60	0	30'
36	144+48, 43.0' RT	12'	42"	7	60	0	30'
37	146+37, 42.2 RT	12'	42"	7	60	0	30'
38	147+68, 42.2' RT	12'	42"	7	60	0	30'
39	148+96, 42.3' RT	12'	42"	7	60	0	30'
40	150+33, 42.2' RT	12'	42"	7	60	0	30'
41	151+13, 42.8' RT	12'	42"	7	90	20	30'

- BRACKET ARM ORIENTATION BASED ON THE ROTATION IN DEGREES FROM PERPINDICULAR TO THE ROAD. FP&L TO INSTALL THE POLE TO ACCOMMODATE THE ORIENTATION WHERE NECESSARY.
- ** THIS TABLE DOES NOT INCLUDE THE PROPOSED LUMINAIRE AND BRACKET ARMS TO BE INSTALLED ON THE POWER POLES AS SHOWN IN THE PLANS. THE LABELS PROVIDE THE NECESSARY INFORMATION.

MANATEE COUNTY CONVENTIONAL ROADWAY LIGHTING DESIGN CRITERIA

AVERAGE INITIAL INTENSITY 1.0 FOOT CANDLE UNIFORMITY RATIO AVG./MIN. 4:1 OR LESS MAX./MIN. 10:1 OR LESS VEILING LUMINANCE RATIO 0.4:1 OR LESS WIND SPEED 140 MPH

FDOT INTERSECTION LIGHTING DESIGN CRITERIA

AVERAGE HORIZONTAL INTENSITY 1.5 FOOT CANDLES (1.0 FOOT CANDLE MINIMUM) UNIFORMITY RATIO AVG./MIN. 4:1 OR LESS MAX./MIN. 10:1 OR LESS 1.5 FOOT CANDLES
(1.2 FOOT CANDLES MINIMUM) AVERAGE VERTICAL INTENSITY

WIND SPEED 140 MPH

LEGEND

SYMBOLS

DESCRIPTION



FPL TO FURNISH AND INSTALL A FP&L TYPE 7 LIGHT POLE WITH 30-FOOT LUMINAIRE MOUNTING HEIGHT AND 12-FOOT BRACKET ARM WITH A 42 INCH RISE. THE LUMINAIRE FOR EACH POLE IS SPECIFIED ON THE PLAN SHEETS.



FPL TO FURNISH AND INSTALL A LUMINAIRE AND A 12-FOOT BRACKET ARM WITH A 42 INCH RISE ON THE EXISTING POWER POLE. THE LUMINAIRE IS SPECIFIED ON THE PLAN SHEETS. THE MOUNTING HEIGHT IS 30 FEET.



FPL TO REPLACE THE LUMINAIRE ON THE EXISTING POWER POLE WITH A LUMINAIRE THAT IS SPECIFIED ON THE PLAN



FPL TO FURNISH AND INSTALL A LUMINIAIRE ON A 12-BRACKET ARM ON THE PROPOSED POWER POLE ON THE WEST SIDE OF 75TH STREET. THE PROPOSED POLES ARE LOCATED WEST OF THE POWER POLES BEING REMOVED DUE TO THE ROADWAY WIDENING. THE LUMINAIRE IS SPECIFIED ON THE PLAN SHEETS AND THE BRACKET ARM IS 13-FOOT LONG WITH A RISE OF 42 INCHES. THE MOUNTING HEIGHT IS 30 FEET.



>-<> EXISTING LIGHT POLE TO REMAIN.



PROPOSED POWER POLE, NO LUMINAIRE IS NEEDED.

PROPOSED PULL BOX. FURNISHED BY FP&L AND INSTALLED BY THE CONTRACTOR.

LUMINAIRE PLAN SHEET LEGEND

- FPL ROADWAY 7,500L 60 WATT ARCHEON LED LUMINAIRE WITH DISTRIBUTION TYPE III AND 3000K COLOR TEMPERATURE. HOUSE SIDE SHIELDS AND ADJUSTABLE DIMMING MODULES OPTIONS/ACCESSORIES SHALL BE INCLUDED DUE TO THE PROXIMITY OF RESIDENTIAL UNITS. PHOTOMETRICS FILE USED FOR ANALYSIS IS ARCH-S-PAI-60-730-U-T3-HSS-59W.IES.
- FPL ROADWAY 12,000L 90 WATT ARCHEON LED LUMINAIRE WITH DISTRIBUTION TYPE III AND 3000K COLOR TEMPERATURE. HOUSE SIDE SHIELDS AND ADJUSTABLE DIMMING MODULES OPTIONS/ACCESSORIES SHALL BE INCLUDED DUE TO THE PROXIMITY OF RESIDENTIAL UNITS. PHOTOMETRICS FILE USED FOR ANALYSIS IS ARCH-M-PA2-90-730-U-T3-HSS-93W.

REVISIONS DESCRIPTION



DAVID J. ALLEN, P.E. P.E. LICENSE NUMBER 58540 380 PARK PLACE BOULEVARD SUITE 300 CLEARWATER, FLORIDA, 33759 (727) 531-3505



MANATEE COUNTY

SHEET NO.

FP&L LIGHT POLE DATA TABLE AND LEGEND

75TH STREET WEST FROM

20TH AVENUE W. TO MANATEE AVENUE W. (SR 64)

