PROJECT NAME: **FPL PATHWAY LIGHTING** PROJECT NUMBER: **EN1901**

ADDENDUM NUMBER : FIVE

DATE OF ISSUANCE: February 18, 2021

TO: Prospective Bidders

THIS ADDENDUM NO. FIVE INCLUDES THE FOLLOWING:

- 1) Revise the dates of all specification documents, such as FDOT Road and Bridge Specifications, to the 2021 editions.
- 2) Bid Docs: Please replace pages ID-4, BP-17, BP-18, RT-110, PG-134, and PG-135 with Addendum 4 versions.
 - a. ID-4: Updated Index of Drawings to include the addition of Sheet 10
 - b. BP-17: Updated Bid Form to add/adjust items related to replacing existing 25' poles.
 - c. BP-18: Add field to fill in manufacturer and model of poles and lights
 - d. RT-110: Add element description
 - e. PG-134: Correct formatting and add Photometric Plans to As-Built requirements
 - f. PG-135: No content change. Text was pushed down by the change to PG-134
- 3) Plans:
 - a. Please replace sheets 1, 9, S1, E-0 through E-4, E-6, and E-9
 - i. 1: Update Sheet List Table
 - ii. 9: Add 25' Poles to Typical Sections
 - iii. S1: Updated Spread Footer Structural Details. Add Dewatering Note 5 under "FOUNDATIONS AND SLABS ON GROUND" section.
 - iv. E-0 through E-4, E-6: Add notes and update drawings to reflect the addition of replacing existing 25' Poles.
 - 1. Please note on Sheet E-6 that the 18' assembly detail has the pole height corrected to 16', rather than 13'-11".
 - v. E-9: Pullbox specs updated and canal section added to directional bore detail.
 - b. Add sheet 10: Spread Footer Installation Details

APPROVED BY: Christopher A. Marsh, P.E., Village Engineer ACKNOWLEDGMENT OF RECEIPT: _____

Bidder

INDEX OF DRAWINGS

Project:FPL Pathway LightingProject No.:VPN: EN1901 FM#: 441531-1

Sheet Number Sheet Title

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- 02 GENERAL NOTES
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- 08 SWPPP
- 09 TYPICAL SECTIONS AND CROSSWALK DETAIL
- 10 SPREAD FOOTER INSTALLATION DETAIL
- S-1 GENERAL STRUCTURAL NOTES & FOUNDATION DETAILS
- E-0 LIGHTING OVERVIEW
- E-1 ELECTRICAL PLAN SHEET 1
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- E-9 ELECTRICAL DETAILS

BID PROPOSAL FORM

Project Name:	FPL Pathway Lighting				
Project Number:	EN1901				
Item No.	Description	Unit	Quantity	Unit Price	Estimated Cost
101-1	Mobilization	1	LS		
102-1	Maintenance of Traffic	1	LS		
104-18-RPB-1	Inlet Protection Sock	17	EA		
110-1-1	Clearing & Grubbing	1	LS		
110-RPB-1	Completely Remove Existing 25' Direct Burial Concrete Light Pole	16	EA		
120-RPB-1	Earthwork	1	LS		
630-2-11	2" PVC Conduit, Furnish and Install, Open Trench	14182	LF		
630-2-12	2" PVC Conduit, Furnish and Install, Directional Bore	1060	LF		
630-2-RPB-1	2" PVC Conduit, Furnish and Install, Missile Bore	75	LF		
635-2-11	Pull & Splice Box, Furnish and Install, 13"x24" Cover Size	109	EA		
639-1122	100 Amp Service Point, Furnish and Install (*)	2	EA		
646-RPB-1	LED Light Fixture & 18' Concrete Pole; Surface-Mounted on Precast Concrete Pile; Complete	38	EA		
646-RPB-2	LED Light Fixture & 18' Concrete Pole; Surface-Mounted on Concrete Spread Footer; Complete	71	EA		
646-RPB-2-1	Dewatering for Spread Footings (**)	71	EA		
646-RPB-2-2	1' of #57 Stone Beneath 6'x12' Spread Footings (***)	10	EA		
646-RPB-3	LED Light Fixture & 25' Concrete Pole with Arm; Surface-Mounted on Precast Concrete Pile; Complete	16	EA		
711-11-RPB-1	24' Special Emphasis Crosswalk Thermoplastic Striping	2	EA		
715-1-2	No. 6 Lighting Conductor Service Wire, Insulated, Furnish and Install	1	LS		
	TOTAL				

(*) The Village will reimburse for FPL connection fees. The contractor is responsible for any FPL energy fees up until Substantial Completion.

(**) Dewatering Pump size and number of points shall be selected to allow for adequate compaction per sheet S-1. Any pump left on between the hours of 11:00 p.m. and 7:00 a.m. shall not exceed the Village Maximum Permissible Sound Level requirement of 50 decibels.

(***) Contingency Item: If dewatering to the required 1' below a spread footer is unachievable after reasonable effort, the foundation shall be over excavated and backfilled with 1' of #57 Stone. Rock shall be covered with visqueen prior to placement of concrete.

Please provide the Manufacturer and Model used to bid the following items:

18' Assembly
Concrete Pole
LED Fixture
25' Assembly
Concrete Pole
LED Fixture
TOTAL BASE BID: \$
Dollars
(Amount written in words has precedence)
TOTAL NUMBER OF DAYS:Days
Days
Date:
The contractor's signature below provides assurance that Addenda #1 through have been received and are included in the estimate in the above bid.
CONTRACTOR:

SECTION 110 CLEARING AND GRUBBING

PART 1 GENERAL

1.01 SUMMARY

It is the intent of these specifications that Division I, II and III of the Florida Department of Transportation "Standard Specifications for Roads and Bridge Construction" dated 2021 be used as the basis for the work as amended by the General Conditions, and the following Supplemental Technical Specification which pertains to the pertinent items of construction.

Article 110-1 Description – Delete this section and substitute the following:

Clear and grub within the areas shown in the Plans. Remove and dispose of all trees, stumps, roots and other such protruding objects, buildings, structures, appurtenances, existing flexible asphalt pavement, existing concrete pavement, and other facilities necessary to prepare the area for the proposed construction. Remove and dispose of all product and debris not required to be salvaged or not required to complete the construction. Perform miscellaneous work necessary for the complete preparation of the overall project site as specified in 110-10.

Article 110-12.1 Lump Sum Payment – Delete this section and substitute the following:

When clearing and grubbing is specified to be paid for at a lump sum price, such lump sum price and payment shall be full compensation for all clearing and grubbing required for the roadway right of way, lateral ditches, channel changes or other outfall areas, areas required for restoration of adjacent properties, and any other clearing and grubbing indicated or required for the construction of the entire project, except for any areas designated to be paid for separately or to be specifically included in the cost of other work items.

Restoration of adjacent properties and the limits of clearing and grubbing for these areas are dependent upon the final construction requirements, no adjustment will be made in the lump sum price and payment for Clearing and Grubbing, either over or under.

Article 110-12.7 Payment Items: Payment will be made under: Item No. 110-1-1 Clearing and Grubbing – Lump Sum

END OF SECTION

EARTHWORK AND RELATED OPERATIONS FOR LAP (OFF-SYSTEM). (REV 1-23-12) (FA 2-27-12)

- 2. Provide stations, offset to edge of pavement or center of structure, EP elevation, grate or top of structure elevation, invert elevations for pipes and structure bottoms of all drainage structure. Indicate final pipe diameters, material and lengths.
- 3. Provide vertical locations at 50-foot intervals. Vertical location will be depth of cover or pipe overt elevation, whichever is called for on the drawings.
- 4. All fittings, including sleeves and valves are to be located horizontally by two measurements to permanent surface reference points, and measured at 90 degree angles. All fittings are to be located vertically also.
- 5. Permanent surface reference points must be manholes, catch basins, power poles, concrete sidewalk or concrete curbs. Edge of pavement and road intersections may not be used without the Engineer's approval.
- 6. Field changes of dimension and detail.
- 7. Changes made by Field Order or by Change Order.
- 8. Details not on original Contract Drawings.
- 9. Photometric As-Built Plans that meet the specifications given in Attachment 1.
- D. Specifications and Addenda; Legibly mark each Section to record:
 - 1. Manufacturer, trade name, catalog number, and supplier of each item actually installed.
 - 2. Changes made by Field Order or by Change Order.
- E. Provide color scanned copy of record drawings in TIF format on CD or DVD.
- F. CONTRACTOR may make application for final payment (following the procedure for progress payments) after it has, in the opinion of the ENGINEER, satisfactorily completed all of the following:
 - 1) Corrections identified during the final inspection
 - 2) Removal and disposal of all temporary utilities developed to meet the requirements of the Contract
 - 3) Delivery, in accordance with the Contract Documents, of the following:
 - a. All maintenance and operating instructions
 - b. Schedules
 - c. Guarantees
 - d. Bonds
 - e. Certificates or other evidence of insurance
 - f. Certificates of inspection
 - g. Electronic copy of Record Plans in PDF format
 - h. Electronic copy of As Built Plans in DWF format
 - i. Include all sheets (cover, plans, details, etc.)

ii. Shall include northing, easting, and elevation (XYZ) data for the following: Permanent structures, sanitary sewer structures and pipes, water structures and pipes, storm sewer structures and pipes, grade breaks on permanent surfaces, electrical pullboxes and light poles, irrigation valves and pumps, and any other features required by OWNER

- iii. Data shall be provided utilizing the same horizontal and vertical controls as Construction Plans
- i. Electronic copy of As Built Data in XLS format (template provided by OWNER)
- j. Hardcopy of As Built Data signed & sealed by a professional surveyor

1.05 SUBMITTAL

- A. At Contract close-out, deliver Record Documents to Engineer for the Owner.
- B. Accompany submittal with transmittal letter in duplicate, containing:
 - 1. Date
 - 2. Project title and number
 - 3. Contractor's name and address
 - 4. Title and number of each Record Document
 - 5. Signature of Contractor or his authorized representative.
- 6. Engineer/Land Surveyor Certification.

END OF SECTION

THE VILLAGE OF ROYAL PALM BEACH Addendum 5 2/18/2021

FPL PATHWAY LIGHTING

EN1901 / 441531-1



Fred Pinto

Jeff Hmara





	Sheet List Table
Sheet Number	Sheet Title
01	KEY SHEET
02	GENERAL NOTES
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07	MOT DETAILS 5
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10	SPREAD FOOTER INSTALLATION DETAIL
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E-6	FIXTURE CUTSHEET AND PATHWAY LIGHTING POLE DETAIL
E-7	SERVICE POINT 'A' RISER DIAGRAM
E-8	SERVICE POINT 'B' RISER DIAGRAM
E-9	ELECTRICAL DETAILS

Sheets 1-10, E-0 are signed and sealed by Chris Marsh Sheet S-1 is signed and sealed by Alan Gerwig Sheets E-1 - E-9 are signed and sealed by Larry Smith

GOVERNING STANDARDS AND SPECIFICATIONS: FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD PLANS DATED 2021 AND STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION DATED JULY 2021, AS AMENDED BY CONTRACT DOCUMENTS.

BID PLANS

- Selena Samios
- Jan Rodusky
- **Richard Valuntas**

- Mayor
- Vice Mayor
- Councilmember
- Councilmember
- Councilmember

	ROYAL PALA				
	Т	DATE: FFB 2021		SHEET: UT OF TO	
DESIGNED BY: AL		DRAWN BY: AC		KEVIEWED BY:CM	
Revision Description					
By Date					
T FPL PATHWAY LIGHTING		EN1901 / 441531-1		KEY SHEEI	OCUMENTS/BID PACKAGE\2) DRAMINGS\02_KEYSHEFT_EN1901.DWG 2/17/2021
Village of Royal Palm Beach	Planning & Engineering	Christopher A. Marsh, P.E., 62560	1050 Royal Palm Beach El. 33411 Royal Palm Reach El. 33411	Phone (561) 790-5131 Fax (561) 791-7095	SVEN1901_FPL PATHWAY LIGHTING PRE-BID DA
SEAL					PROJECT





PATHWAY LIGHTING\PRE-BID DOC NTS\BID PACKAGE\2> DRAWINGS\12_ELEC-D_EN901.DWG 2/17/202 CAPITAL PROJECTS

GENERAL NOTES

- STRUCTURAL WORK SHALL BE IN ACCORDANCE WITH THE FLORIDA BUILDING CODE 2017. 2. VERIFY ALL DIMENSIONS AND SITE CONDITIONS PRIOR TO STARTING CONSTRUCTION. NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR INCONSISTENCIES.
- 3. FOR PLAN LOCATIONS OF EXISTING UTILITIES, SEE CIVIL PLAN,
- 4. DO NOT SCALE DRAWINGS.
- 5. NO STRUCTURAL MEMBER SHALL BE CUT, NOTCHED OR OTHERWISE ALTERED UNLESS APPROVED IN WRITING BY THE ENGINEER.
- 6. THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER THE STRUCTURE IS COMPLETE, IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCE TO ENSURE SAFETY OF THE STRUCTURE AND ITS COMPONENTS DURING ERECTION. THIS INCLUDES THE ADDITION OF NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUYS OR TIEDOWNS.
- DETAILS LABELED "TYPICAL DETAILS" ON THE DRAWING SHALL APPLY TO ALL STIUATIONS OCCURRING ON THE PROJECT THAT ARE THE SAME OR SIMILAR TO THOSE SPECIFICALLY DETAILED. THE APPLICABILITY OF THE DETAIL TO ITS LOCATION ON THE PLANS CAN BE DETERMINED BY THE TITLE OF DETAIL. SUCH DETAILS SHALL APPLY WHETHER OR NOT THEY ARE KEYED IN AT EACH LOCATION, DECATIONS REGARDING APPLICABILITY OF TYPICAL DETAILS SHALL BE DETERMINED BY THE ENGINEER OF RECORD.
- 8. THE GENERAL CONTRACTOR SHALL COMPARE THE OTHER DISCIPLINE DRAWINGS AND THE STRUCTURAL DRAWINGS AND REPORT ANY DISCREPANCIES BETWEEN EACH SET OF DRAWINGS AND WITHIN EACH SET OF DRAWINGS TO THE APPROPRIATE ENGINEER OF RECORD PRIOR TO THE FABRICATION AND INSTALLATION OF ANY STRUCTURAL MEMBERS.
- THE STRUCTURAL DRAWINGS ARE PART OF THE CONSTRUCTION DOCUMENTS, AND SHALL BE USED IN CONJUNCTION WITH THE CIVIL, MECHANICAL, ELECTRICAL, AND PROCESS DRAWINGS AND SPECIFICATIONS. THE CONFRAL CONFRACTOR IS RESPONSIBLE FOR COORDINATING INFORMATION IN THE CONSTRUCTION DOCUMENTS TO PROPERLY CONSTRUCT THE PROJECT.
- 10. PRIOR TO SHOP DRAWING PREPARATION, THE CONTRACTOR IS TO INVESTIGATE AND VERIFY ACTUAL FIELD CONDITIONS, EXPOSED OR CONCEALED, AND TAKE INTO ACCOUNT ANY POSSIBLE CONSTRUCTION INTERFERENCES AND RELOCATIONS OF, BUT NOT LIMITED TO STRUCTURES, EQUIPMENT, UTILITIES, CABLES, PIPING, DRAINLINES, ETC.
- . ANY PORTION OF EXISTING STRUCTURES ADJACENT TO THE NEW CONSTRUCTION WHICH MAYBE DISTURBED OR DAMAGED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE RESTORED BY THE CONTRACTOR TO AS GOOD A CONDITION AS BEFORE THE COMMENCEMENT OF THE WORK AT NO ADDITIONAL COST TO THE OWNER.
- 12. SEE CIVIL AND ELECTRICAL DRAWINGS FOR MISCELLANEOUS ITEMS NOT SHOWN HEREON SEE CIVIL AND ELECTRICAL DRAWINGS FOR ANCHORED, SUPPORTED AND EMBEDDED ITEMS WHICH AFFECT THE STRUCTURAL WORK. VERIFY DETAILS AND DIMENSIONS WI EQUIPMENT PURCHASED.
- 14. THE CONTRACTOR SHALL PROTECT ADJACENT PROPERTY, HIS OWN WORK AND THE PUBLIC FROM HARM. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS AND METHODS, AND JOBSTE SAFETY INCLUDING ALL OSHA REQUIREMENTS.

STRUCTURAL DESIGN CRITERIA AND CODES

- STRUCTURAL WORK SHALL BE IN ACCORDANCE WITH THE FLORIDA BUILDING CODE 2017, ACI-318-14 AND OTHER CODES REFERENCED BELOW.
- WIND DESIGN IS BASED ON THE ASCE-7-10 MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES.

THE POLE IS ASSUMED TO BE 18"0 & 32' HIGH WITH LIGHT FIXTURE THAT HAS EFFECTIVE PROJECTED AREA = 0.78 SQ. FT.

151 mph=VuLT, 117 mph=VASD

- WIND DESIGN CRITERIA:
 151 mph=V

 o. BASE WIND SPEED
 151 mph=V

 b. EXPOSURE
 C

 c. RISK CATEGORY
 I

 d. BASE VELOCITY PRESSURE
 47.7 psf.
- ANCHORING TO CONCRETE PER ACI-318-1-APPENDIX D.

6. AUGER PILES DESIGN CRITERIA:

- AUGER PILES DESIGN CRITERIA: 0. FBC 2017 CHAPTER VALUE: 150 PSF b. LATERAL SOLL BEARING VALUE: 150 PSF C. DESIGN LOAD AT TOP OF PILES PROVIDED BY P&K TUBULAR PRODUCTS, INC.): MAX. VERTICAL LOAD: 246.7 LBS. MAX. MORIZONTAL LOAD: 60.96 LBS. MAX. BENDING MOMENT: 12,574 LBS./FT. MAX. TORSION: 1,908.3 LBS./FT.

FOUNDATIONS AND SLABS ON GROUND

- ALL FOUNDATION DESIGN IS BASED ON THE 2017 FLORIDA BUILDING CODE THE PRESUMPTIVE LOAD BEARING VALUE TABLE 1806.2. ALLOWABLE BEARING PRESSURE IS 2000 PSF. COEFFICIENT OF FRICTION BETWEEN THE SOIL AND THE BASE PSF THE FOUNDATION IS 0.25
- THE CONTRACTOR SHALL EITHER a. COMPACT THE UPPER 12 INCHES OF THE FOUNDATION SOIL TO MINIMUM 95% OF THE MAXIMUM DRY DEVISITY DETERMINED IN ACCORDANCE WITH MODIFIED PROCTOR (ASTM D 1557), OR b. OVER-EXCAVATE THE FOOTING TO 12 INCHES BELOW THE FOOTING BOTTOM LEVEL AND REPLACE IT WITH FDOT NO. 57 STONE WRAPPED TOP AND BOTTOM AND SIDES IN FILTER FABRIC.
- ALL FOUNDATION SURFACES SHALL BE FORMED TO RECEIVE CONCRETE. EARTH FORMING IS NOT PERMITTED FOR FOUNDATIONS.
- AN INDEPENDENT GEOTECHNICAL TESTING COMPANY, EMPLOYED BY THE CONTRACTOR, WILL VERIFY THE BEARING CAPACITY AND COMPACTION REQUIREMENT OF THE SUBGRADE PRIOR TO FOUNDATION CONSTRUCTION.
- ALL FOUNDATION SURFACES SHALL BE FORMED TO RECEIVE CONCRETE. EARTH FORMING IS NOT PERMITTED FOR FOUNDATIONS.
- 6. FOUNDATION SHALL BE CAST IN THE DRY, IF GROUNDWATER IS ENCOUNTERED, DEWATER OF THE EXCAVATION TO 1.0' MINIMUM BELOW THE BOTTOM OF THE FOUNDATION. IF THE 1.0' MINIMUM CLEARANCE BETWEEN GROUNDWATER AND BOTTOM OF FOOTING IS UNACHEVABLE THE FOUNDATION SHALL BE OVEREXCAVATED AND BACKFILLED WITH 1' OF #57 ROCK. COVER ROCK WITH VISQUEEN PRIOR TO PLACEMENT OF CONCRETE.
- REINFORCED CONCRETE
- ALL CONCRETE DESIGN AND PLACEMENT SHALL BE IN STRICT ACCORDANCE WITH ACI 318-14, (BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE) AND ACI 350-06 (CODE REQUIREMENTS FOR ENVIRONMENTAL ENGINEERING CONCRETE STRUCTURES).
- STRUCTURAL CONCRETE SHALL CONFORM TO ACI 301-16 (SPECIFICATIONS FOR STRUCTURAL CONCRETE) AND THE FOLLOWING CONCRETE MIX DESIGNS:
 - i. COMPRESSIVE STRENGTH AT 28 DAYS: 3400 PSI 1. ACI 350, TABLE 4.2.2 ii. MIN CEMENTITIOUS MATERIAL CONTENT: 560 LB/CY
- 1. ACI 350, TABLE 4.1.2.1 FOR 3/4" (#67) COARSE AGG 2. FLY ASH (MAX 20%) SUBSTITUTION ALLOWED
- III. MAX W/C RATIO: 0.53 1. ACI 350. TABLE 4.2.2 FOR SEAWATER EXPOSURE
- iv. HIGH RANGE WATER-REDUCING ADMIXTURE REQ (TYPE F)
- W. RETARDING ADMIXTURE REQ (TYPE D)
 V. RETARDING ADMIXTURE REQ (TYPE D)
 V. MAX WATER SOLUBLE CHLORIDE ION CONTENT: 0.10% BY WT. OF CEMENT. 1. ACI 350, TABLE 4.4.1
 2. TESTING FOR COARSE AGGREGATE REQUIRED

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- 3. CONCRETE SHALL BE READY-MIX, NORMAL WEIGHT FOR ALL STRUCTURAL USES.
- REINFORCING STEEL SHALL BE DETAILED, FABRICATED AND INSTALLED IN ACCORDANCE WITH ACI 318-14 AND ACI DETAILING MANUAL, ACI 315.
- REINFORCING STEEL SHALL BE NEW, DEFORMED BARS, FREE OF RUST, SCALE AND OIL, CONFORMING TO ASTM A615, GRADE 60 WITH A MINIMUM YIELD STRENGTH = 60,000 PSI, UNLESS OTHERWISE SHOWN.
- 6. WHERE SPLICE LENGTHS ARE NOT SHOWN OR NOTED, PROVIDE CLASS "B" LAP SPLICE
- 7. PROVIDE THE FOLLOWING MINIMUM CONCRETE COVERAGE CLEARANCE OVER REINFORCING UNLESS NOTED OTHERWISE:
- FOOTINGS, POURED AGAINST THE EARTH: 4" FOOTINGS, TOP AND SIDES: 3"
- NO REINFORCING SHALL BE CUT OR OTHERWISE MODIFIED IN THE FIELD. REINFORCING BARS SHALL NOT BE DISPLACED PRIOR TO OR DURING CASTING TO ACCOMMODATE ANCHORS, EMBEDS OR OTHER ITEMS.
- 9. ALL EMBEDDED ITEMS SHALL BE SECURELY FIXED AND MAINTAINED IN POSITION PRIOR TO AND DURING CONCRETE PLACEMENT.
- PROVIDE REINFORCEMENT SPLICES AS INDICATED BELOW IN CONFORMANCE WITH AN ACI CLASS B TENSION SPLICE, (ACI 318-14 CODE). NO REDUCTION SHALL BE PERMITTED DUE TO BARS SPACING: CLASS B SPLICES FOR REINFORCEMENT, OTHER THAN TOP BARS:
- 3,000 & 4,000 PSI BAR SIZE 22" 19" 29" 25" 36" 31" 43" 38" 63" 55" #3 #4 CLASS B SPLICES FOR REINFORCEMENT, AS TOP BARS:

BAR SIZE	3,000 &	4,000 PSI
#3	28"	25"
#4	38"	33"
#5	47"	41"
#6	56"	49"
#7	82"	71"

- READY-MIXED CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF ASTM C94. IN CASE OF DISCREPANCY, THE PLANS AND SPECIFICATIONS SHALL GOVERN.
- 12. CEMENT SHALL CONFORM TO ASTM C150, TYPE I. FLY ASH SHALL CONFORM TO ASTM C618, CLASS C OR F. THE RATIO OF THE AMOUNT (BY WEIGHT) OF FLY ASH TO THE AMOUNT OF PORTLAND CEMENTIN THE MIX SHALL NOT EXCEED 25 PERCENT. SLAG, CONFORMING TO ASTM C989, IS AN ACCEPTABLE ALTERNATURE TO FLY ASH AS A CEMENTITIOUS MATERIAL.
- 13. NORMAL WEIGHT AGGREGATES SHALL CONFORM TO ASTM C33. 14. WATER-REDUCING ADMIXTURES SHALL CONFORM TO ASTM C494.
- 15. AIR-ENTRAINING ADMIXTURES OR ADMIXTURES CONTAINING MORE THAN 0.1% CHLORIDE IONS SHALL NOT BE USED.
- 16. CONCRETE TICKETS SHALL BE TIMED STAMPED WHEN BATCHED. THE MAXIMUM TIME ALLOWED FROM THE TIME MIXING WATER ADDED UNTIL IT IS DEPOSITED IN ITS FINAL POSITION SHALL NOT EXCEED ONE AND ONE HALF (1½) HOURS. IF FOR ANY REASON THERE IS A LONGER DELAY THAN THAT STATED ABOVE, THE CONCRETE SHALL NOT BE USED IN THE PROJECT. IT SHALL BE THE RESPONSIBILITY OF THE TESTING LAB TO NOTIFY THE OWNERS' REPRESENTATIVE, THE CONTRACTOR AND THE STRUCTURAL ENGINEER OF ANY NON-COMPLIANCE WITH THE ABOVE.
- STRUCTURAL ELEMENTS SHALL BE CONSTRUCTED WITH CONCRETE MIXES WHICH UTILIZE NORMAL SIZE AGGREGATE. PEAROCK MIXES ARE NOT ACCEPTABLE.
- ALL CONCRETE SHALL BE PROPERLY CURED IN ACCORDANCE WITH ACI 301-16
- JOINTO AN ANY NOT BE ADDED AT THE SITE EXCEPT AT THE DIRECTION OF A REPRESENTATIVE OF THE SUPPLIER. ANY ALLOWABLE WATER MUST BE ADDED TO THE FULL MIX PROR TO PLACING ANY CONCRETE. MIXES WITH WATER ADDED AT THE SITE. OTHER THAN AS INDICATED ABOVE. ARE SUBJECT TO REJECTION AND REMOVAL FROM THE PROJECT. IN ALL INSTANCES, MIXES WITH WATER ADDED AT THE SITE SHALL BE INDICATED ON THE TEST REPORTS AND A SLUMP TEST PERFORMED AFTER ADDITION OF WATER. ALL CONCRETE TICKETS SHALL CLEARLY STATE THE ALDOWABLE JOB SITE WATER THAT MAY BE ADDED WITHOUT INVALIDATING THE MIX.
- 20. IN HOT WEATHER CONDITIONS, MIXING, PLACING, FINISHING, CURING AND PROTECTION OF CONCRETE SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF ACI 305R, HOT WEATHER CONCRETING.
- USE OF CONTROL JOINTS AT LOCATIONS OTHER THAN THOSE INDICATED ON THE DRAWINGS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR APPROVAL.
- 22. CONCRETE FINISHES: CONCRETE SURFACES SHALL BE TROWELED SMOOTH.

SHOP DRAWING REVIEW

- 1. SHOP DRAININGS WILL BE REVIEWED AND STAMPED APPROVED FOR GENERAL COMPLIANCE WITH THE DESIGN INITENT OF THE CONTRACT DOCUMENTS ONLY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIEY COMPLIANCE WITH THE CONTRACT DOCUMENTS AS TO QUANTITY, LENGTH, ELEVATIONS, DIMENSIONS, ETC.

- SHOP DRAWINGS SHALL BE REVIEWED BY THE CONTRACTOR'S FIELD ENGINEER PRIOR TO SUBMITTAL TO THE ENGINEER. DRAWINGS SUBMITTED WITHOUT REVIEW WILL BE RETURNED UNCHECKED. ALLOW TEN BUSINESS DAYS FOR REVIEW TIME OF SHOP DRAWING SUBMITTALS.

- 3. THE CONTRACT DOCUMENTS WILL GOVERN OVER THE SHOP DRAWINGS UNLESS OTHERWISE SPECIFIED IN WRITING BY THE ENGINEER.
- 4. CHANGES AND ADDITIONS MADE ON THE RE-SUBMITTALS SHALL BE CLEARLY FLAGGED AND NOTED. THE PURPOSE OF THE RE-SUBMITTALS SHALL BE CLEARLY NOTED ON THE LETTER TRANSMITTAL. BROINEER REVOLW WILL BE LIMITED TO THOSE ITEMS CAUSING THE
- LETTER TRANSM RE-SUBMITTAL.
- SHOP DRAWING SUBMITALS ARE REQUIRED FOR ALL ITEMS SHOWN ON THESE DRAWINGS INCLUDING BUT NOT LIMITED TO:

 O. CONCRETE MIX DESIGN
 CONCRETE REINFORCIMG
 C. FABRICATED COMPONENTS (EMBEDS)

- 6. PRODUCT DATA SUBMITTALS: a. CONCRETE CURING COMPOUND

SPREAD FOOTING - WARNING MARKER PLAN

490

- CONCRETE TESTING

- CONCRETE TESTING SHALL BE IN ACCORDANCE WITH THE FOLLOWING PARAMETERS. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING THE SERVICES OF AN INDEPENDENT TESTING LABORATORY APPROVED BY THE OWNER AND THE ENGINEER.
 CONCRETE MIXES WHICH HAVE WATER ADDED AT THE SITE SHALL BE TESTED AS INDICATED IN THE CONCRETE NOTES.
 FORWARD COPIES OF TEST RESULTS TO THE ENGINEER, CONCRETE SUPPLIER AND CONTRACTOR WITHIN 24 HOURS AFTER TESTING.
 AN INDEPENDENT TEST LABORATORY SHALL PERFORM THE FOLLOWING TESTS ON CAST IN PLACE CONCRETE.
 AN INDEPENDENT TEST LABORATORY SHALL PERFORM THE FOLLOWING TESTS ON CAST IN PLACE CONCRETE.

CONCRETE MIX DESIGN SUBMITTAL

MARKER MAY BE FLAT OF D, BUT SHALL BE ALLED FLUSH WITH FOUNDATION SLAB

AN INDEPENDENT TEST LABORATORY SHALL PERFORM THE FOLLOWING TESTS ON CAST IN PLACE CONCRETE.
 ASTM C143 "STANDARD TEST METHOD FOR SLUMP OF PORTLAND CEMENT CONCRETE." MINIMUM SLUMP SHALL BE AS INDICATED IN THE CONCRETE NOTES SECTION OR AS SPECIFIED IN APPROVED MIX DESIGN SUBMITTALS.
 ASTM C39 "STANDARD TEST METHOD FOR COMPRESSIVE STRENGTH OF CYLINDRICAL CONCRETE SPECIMENS". A SEPARATE TEST SHALL BE CONDUCTED FOR EVERY 50 CUBIC YARDS (OR FRACTION THEREOF), PLACED PER DAY. REQUIRED CYLINDER(S) QUANTITIES AND TEST AGE AS FOLLOWS:

 AT 3 DAYS
 AT 3 DAYS
 CONTRACTOR TO PROVIDE ONE ADDITIONAL RESERVE CYLINDER TO BE TESTED UNDER THE DIRECTION OF THE ENGINEER, IF REQUIRED. IF 28 DAY STRENGTH IS ACHIEVED, THE ADDITIONAL CYLINDER(S) MAY BE DISPOSED.

THE CONTRACTOR SHALL SUBMIT FOR THE REVIEW OF THE STRUCTURAL ENGINEER A MIX DESIGN FOR EACH PROPOSED CLASS OF CONCRETE, EACH MIX DESIGN SHALL BE IDENTIFIED BY A MIX NUMBER OR OTHER UNIQUE IDENTIFICATION. THE CONTRACTOR SHALL NOT VARY FROM THE MIX DESIGN SNOR USE ANY CONCRETE OTHER THAN THE APPROVED MIX DESIGNS WITHOUT THE APPROVAL OF THE ENGINEER. MIX DESIGN SUBMITTALS SHALL INCLUDE THE FOLLOWING INFORMATION:
 MIX DESIGN NUMBER OR UNIQUE IDENTIFICATION AND INTENDED LOCATION OF PLACEMENT.
 MIX DESIGN NUMBER OR UNIQUE IDENTIFICATION AND INTENDED LOCATION OF PLACEMENT.
 CENENT TYPE, PROPORTION AND NUMBER OF MANUFACTURER.
 ALTERNATE CEMENTITUOUS WATERIALS PROPORTION (WHEN USED), LABORATORY ANALYSIS CERTIFICATION, AND NAME AND LOCATION OF SUPPLER.
 CARSE AGGREGATE PROPORTION, GRADATION REPORT, NAME AND LOCATION OF SUPPLIER.
 MIXING WATER PROPORTION, GRADATION REPORT, NAME AND LOCATION OF SUPPLIER.
 MIXING WATER PROPORTION, GRADATION REPORT, NAME AND LOCATION OF SUPPLIER.
 MIXING WATER PROPORTION, GRADATION REPORT, NAME AND LOCATION OF SUPPLIER.
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 MIXING WATER PROPORTION, GRADATION REPORT, NAME AND LOCATION OF SUPPLIER.
 MIXING WATER PROPORTION, GRADATION REPORT, NAME AND LOCATION OF SUPPLIER.
 MIXING WATER PROPORTION AND SOURCE.
 MIXING WATER PROPORTION AND SOURCE.
 DESIGN 128-DAY COMPRESSIVE STRENGTH (f'C).
 DESIGN AR-ENTRANNENT (FOR CONCRETE REQUIRING ENTRAINED AIR).
 DESIGN ALLY RANGE.
 MAINNESS OF REPORTING CONCRETE REQUIRING ENTRAINED AIR).
 MIXING MATER ENTRAINEENT (FOR CONCRETE REQUIRING ENTRAINED AIR).

DESIGN SLUMP RANGE.
 CDSIGN ART-ENTRAINENT (FOR CONCRETE REQUIRING ENTRAINED AIR).
 STATISTICAL ANALYSIS OF LABORATORY STRENGTH TEST DATA IN ACCORDANCE WITH STANDARD DEVIATION DETERMINATION OUTLINE IN ACI 318.
 MATER/CEMENTITIOUS MATERIALS RATIO.

WARNING MARKER PLAN (BRASS/BRONZE)

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	18'	POLE A	AND LI	GHT DA	ATA	
POLE NUMBER	LATITUDE	LONGITUDE	SHIELDING	FOUNDATION	CIRCUIT	SERVICE POINT
1	872548.57	911638.80	HS	PILE	1	А
2	872459.67	911674.15	HS	SFTG	1	А
3	872208.10	911671.33	нs	SFTG	1	A
4	872057.74	911667.52	HS	SFTG	1	A
5	871928.14	911664.29	HS	SFTG	1	A
6	871788.15	911661.22	нѕ	SFTG	1	A
7	871648.14	911658.83	нѕ	SFTG	1	A
8	871508.16	911654.33	нѕ	SFTG	1	A
9	871355.39	911650.34	нѕ	SFTG	1	A
10	871094.11	911644.42	нѕ	SFTG	1	A
11	870939.01	911640.48	нѕ	SFTG	1	A
12	870704.37	911634.58	нѕ	SFTG	1	A
13	870581.17	911647.46	LP	SFTG	1	A
14	870429.99	911675.87	IP	SETG	1	A
15	870355 74	911750.31	NONE	PILF	1	
16	870256 21	011728.53	NONE	PILE	1	
17	870210.21	011671.02		SETC	1	<u>^</u>
10	970000 69	011635.02		SETC	1	<u>^</u>
10	870090.08	011610.64		SETO	1	^ _
19	009010.04	911012.04	пэ 110	SF IG	1	A
20	869705.66	911610.16	HS	SFIG	1	A
21	869579.16	911607.23	HS	SFIG	1	A
22	869439.18	911603.95	HS	SFIG	1	A
23	869299.21	911604.48	HS	SFIG	1	A
24	869159.26	911600.93	HS	SFIG	1	A
25	869019.32	911594.90	HS	SFTG	1	A
26	868894.51	911592.48	HS	SFTG	1	A
27	868754.56	911589.61	HS	SFTG	1	A
28	868614.62	911585.98	HS	SFIG	1	A
29	868318.79	911577.08	HS	SFTG	1	A
30	868194.83	911572.21	HS	SFTG	2	A
31	868089.85	911568.10	HS	SFTG	2	A
32	867915.04	911561.27	HS	SFTG	2	A
33	867740.99	911554.30	HS	SFTG	2	A
34	867620.10	911549.29	HS	SFTG	2	A
35	867499.21	911544.07	HS	SFTG	2	A
36	867378.30	911539.51	HS	SFTG	2	A
37	867232.39	911533.96	HS	SFTG	2	A
38	866977.29	911522.68	HS	SFTG	2	A
39	866837.39	911517.30	HS	SFTG	2	A
40	866697.54	911512.22	HS	SFTG	2	A
41	866557.65	911506.84	HS	SFTG	2	A
42	866417.75	911501.46	HS	SFTG	2	A
43	866277.90	911496.11	HS	SFTG	2	A
44	865998.12	911485.11	HS	SFTG	2	A
45	865858.23	911479.56	HS	SFTG	2	A
46	865572.49	911468.42	HS	SFTG	2	A
47	865475.74	911464.62	HS	SFTG	2	Α
48	865358.74	911459.96	HS	SFTG	2	A
49	865162.32	911452.04	HS	SFTG	2	Α
50	865074.61	911517.49	NONE	PILE	2	Α
51	865007.82	911520.57	NONE	PILE	2	Α
52	864955.19	911476.48	LP	PILE	2	А
53	864815.57	911470.62	NONE	SFTG	2	А
54	864675.49	911465.08	NONE	SFTG	2	А
55	864535.42	911459.77	NONE	SFTG	2	А

						2/18/	202
	18' F	POLE A	AND LI	GHT	DA	ATA	
POLE NUMBER	LATITUDE	LONGITUDE	SHIELDING	FOUNDAT	10N	CIRCUIT	SER VI POIN
56	864395.34	911455.78	NONE	SFTG		2	A
57	864255.26	911446.72	NONE	SFTG		2	А
58	864115.15	911440.59	NONE	SFTG		2	А
59	863997.61	911400.61	NONE	PILE		2	А
60	863630.66	911724.68	NONE	SFTG		3	В
61	863613.13	911627.85	NONE	PILE		3	В
62	863593.12	911519.45	NONE	PILE		3	В
63	863533.05	911497.97	NONE	PILE		3	В
64	863490.08	911435.06	NONE	SFTG		3	В
65	863359.40	911442.69	NONE	SFTG		3	В
66	863223.12	911423.46	HS	PILE		3	В
67	863082.88	911406.16	HS	PILE		3	В
68	862870.29	911417.87	NONE	SFTG		3	В
69	862766.51	911414.14	NONE	SFTG		3	В
70	862662.90	911407.52	NONE	SFTG		3	В
71	862522.77	911397.81	LP	SFTG		3	в
72	862382.69	911391.90	LP	SFTG		3	В
73	862242.60	911385.76	LP	SFTG		3	В
74	862098.99	911374.03	LP	SFTG		3	В
75	861962.60	911385.79	LP	SFTG		3	В
76	861822.37	911368.82	LP	SFTG		3	В
77	861682.32	911362.49	LP	SFTG		3	В
78	861542.13	911353.97	LP	SFTG		3	В
79	861402.05	911345.52	LP	SFTG		3	В
80	861262.50	911337.50	LP	SFTG		3	В
81	861122.99	911335.78	LP	SFTG		3	В
82	860983.27	911327.93	LP	SFTG		3	В
83	860843.78	911320.12	LP	SFTG		3	В
84	860768.98	911377.72	NONE	PILE		3	В
85	860709.63	911477.25	HS	PILE		3	В
86	860589.45	911459.57	NONE	PILE		3	В
87	860566.44	911353.75	LP	PILE		3	В
88	860459.51	911320.64	LP	PILE		3	в
89	860319.54	911307.52	LP	PILE		3	в
90	860179.54	911292.30	LP	PILE		4	в
91	860039.70	911288.62	LP	PILE		4	в
92	859903.70	911284.33	LP	PILE		4	в
93	859759.89	911277.99	LP	PILE		4	в
94	859619.82	911267.72	LP	PILE		4	в
95	859479.70	911260.37	LP	PILE		4	В
96	859339.72	911262.28	LP	PILE		4	в
97	859199.73	911264.16	LP	PILE		4	в
98	859060.23	911268.08	LP	PILE		4	в
99	858920.23	911268.71	LP	PILE		4	в
100	858780.72	911257.88	LP	PILE		4	в
101	858640.93	911250.27	LP	PILE		4	в
102	858501.11	911216.62	LP	PILE		4	в
103	858395.76	911218.28	НS	PILE		4	в
104	858264.10	911220.09	нs	PILE		4	в
105	858123.70	911216.74	нs	PILE		4	в
106	857983.05	911214.19	HS	PILE		4	в
107	857929.17	911288.28	NONE	PILE		4	в
108	857926.78	911428.21	LP	PILE		4	В
	30.020.70	5					-

ABBREVIATIO	DNS	COUNTS
HS	HOUSE-SIDE SHIELD	50
LP	LOW PROFILE SHIELD	36
PILE	PRECAST PILE FOUNDATION	38
SFTG	SPREAD FOOTING FOUNDATION	71

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SF

NOTE: PLEASE SEE PLAN SHEETS FOR LOCATIONS OF EXISTING 25' POLE REPLACEMENTS, WHICH ARE NUMBERED T1 - T16

STAGING AREA 10996 OKEECHOBEE BLVD

ROYAL PALM BEACH, FL 33411

LEGEND

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0-PROPOSED 18' LIGHT POLE WITH HOUSE-SIDE SHIELD (50 TOTAL) POLES P1-P12, P19-P49, P66, P67, P85, P103-P106 PROPOSED 18' LIGHT POLE WITH LOW PROFILE HOUSESIDE -`0 SHIELD (36 TOTAL) POLES P13, P14, P17, P18, P52, P71-P83, P87-P102, P108, P109

PROPOSED 18' LIGHT POLE WITH NO SHIELD

(23 TOTAL) POLES P15, P16, P50, P51, P53-P65, P68-P70, P84, P86, P107

REMOVE AND REPLACE EXISTING 25' DIRECT BURIAL LIGHT POLE WITH NEW 25' PRECAST PIL'은개언UNTED LIGHT POLE WITH ARM, LED FIXTURE, AND NO SHIELDING. (16 TOTAL) POLES T1-T16

	PROPOSED LIGHT ON EXISTING FPL POLE, BY OTHERS (3 TOTAL)		FPL TRANSMISSION EASEMENT
	(2 · 2 · · · _)	— — — ELEC —	EXISTING FPL DISTRIBUTION LINES
CKT#1	LIGHTING CIRCUIT #. SEE PANEL SCHEDULE	ELEC OFFS	12.5' SEPARATION FROM EXISTING FPL DISTRIBUTION LINES
P1 T1	18' POLE NUMBER 25' POLE NUMBER	— — UT— —	EXISTING UNDERGROUND
	PROPOSED 2" CONDUIT		

PROPERTY LINES

NOTE

- CONTRACTOR SHALL PROVIDE PRECAST PILES PER SHEET S1.
- SEE SHEET E-0 FOR THE FOUNDATION TYPE OF EACH 18 POLE. FOR POLES P1, INSTALL CONDUIT AND PULL BOXES ON EAST SIDE OF THE SIDEWALK. FOR RECAST PILE FOUNDATIONS, USE A 15' MISSILE BORE UNDER SIDEWALK BETWEEN POLE AND PULL BOX. FOR SPREAD FOOTING FOUNDATIONS, SEE SHEET
- 4. ALL CONDUIT NOT LABELED AS MISSILE OR DIRECTIONAL BORE OR DESCRIBED IN NOTE 3 ABOVE SHALL BE OPEN TRENCH.

Addendum 5 2/18/2021

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- PROJECT LOCATIONS LABELED AS "T#" INDICATE THE REMOVAL 5. AND REPLACEMENT OF EXISTING 25' LIGHT POLES. THE EXISTING POLE AND FIXTURE SHALL BE REMOVED COMPLETELY. EXISTING WIRING AND PULL BOXES SHALL BE REUSED FOR THE NEW POLES. NEW LED FIXTURES SHALL HAVE A TYPE V LIGHT DISTRIBUTION TO LIGHT BOTH THE STREET
- AND PATHWAY. SOILS IN THE AREA ARE KNOWN TO BE SATURATED. SPREAD FOOTING FOUNDATIONS SHALL NOT BE POURED IN THE WET. SEE SHEET S-1. 6

FPL TRANSMISSION EASEMENT		1		FPL PATHWAY LIGHTING EN1901/441531-1 ELECTRICAL PLAN – SHEET 1
00 	 Sugari - Elec	n <u>510 011</u> - <u>ELEO</u>	50+00	كوyal Palm Beach & Engineering الله Beach Beach الله Beach Beach الله Beach Beach الله Beach Beach Beach الله Feach Pair Pair
	Larry M Smith c=US, o=Smith Engineering Consultants Inc, ou=A01410C0000016BF67 5639400004D89, cn=Larry M Smith 2021.02.12 15:45:29 -05'00'	2#6.1#4 SEEC 2161 Palm Beach, (561) 616-3911 Fax www.smithengine	Smith Engineering Consultants, Inc. Lates Auth. #8228 Askes Birda, Suite 312 FL 33409 < (561) 616-3912 rringconsultants.com	Tillage of f Planning Considenting Phone Bely Year

LEGEND

Ý-	PROPOSED 18' LIGHT POLE WITH HOUSE-SIDE SHIELD (50 TOTAL) POLES P1-P12, P19-P49, P66, P67, P85, P103-P106
- \	PROPOSED 18' LIGHT POLE WITH LOW PROFILE HOUSESIDE SHIELD (36 TOTAL) POLES P13, P14, P17, P18, P52, P71-P83, P87-P102, P108, P109

PROPOSED 18' LIGHT POLE WITH NO SHIELD (23 TOTAL)

(•) POLES P15, P16, P50, P51, P53-P65, P68-P70, P84, P86, P107

REMOVE AND REPLACE EXISTING 25' DIRECT BURIAL LIGHT POLE WITH NEW 25' PRECAST PILE-MOUNTED LIGHT POLE WITH ARM, LED FIXTURE, AND NO SHIELDING. (16 TOTAL) POLES T1-T16

	PROPOSED LIGHT ON EXISTING FPL POLE, BY OTHERS (3 TOTAL)		FPL TRANSMISSIO
	()	— — — — ELEC —	EXISTING FPL DIS
	LIGHTING CIRCUIT #. SEE PANEL SCHEDULE	ELEC OFFS	12.5' SEPARATION FPL DISTRIBUTION
	18' POLE NUMBER 25' POLE NUMBER	— — UT— —	
-	PROPOSED 2" CONDUIT		UTILITIES

PROPERTY LINES

CKT#1

P1

T1

ON EASEMENT

STRIBUTION LINES FROM EXISTING

ON LINES

GROUND

NOTE

- ---CONTRACTOR SHALL PROVIDE PRECAST PILES PER SHEET S1. SEE SHEET E-0 FOR THE FOUNDATION TYPE OF EACH 18' POLE.
- FOR POLES P1, INSTALL CONDUIT AND PULL BOXES ON EAST 3.
- SIDE OF THE SIDEWALK. FOR RECAST PILE FOUNDATIONS, USE A 15' MISSILE BORE UNDER SIDEWALK BETWEEN POLE AND PULL BOX. FOR SPREAD FOOTING FOUNDATIONS, SEE SHEET
- ALL CONDUIT NOT LABELED AS MISSILE OR DIRECTIONAL BORE OR DESCRIBED IN NOTE 3 ABOVE SHALL BE OPEN TRENCH.

- 5. PROJECT LOCATIONS LABELED AS "T#" INDICATE THE REMOVAL AND REPLACEMENT OF EXISTING 25' LIGHT POLES. THE EXISTING POLE AND FIXTURE SHALL BE REMOVED COMPLETELY. EXISTING WIRING AND PULL BOXES SHALL BE REUSED FOR THE NEW POLES. NEW LED FIXTURES SHALL HAVE A TYPE V LIGHT DISTRIBUTION TO LIGHT BOTH THE STREET AND PATHWAY.
- SOILS IN THE AREA ARE KNOWN TO BE SATURATED. SPREAD FOOTING FOUNDATIONS SHALL NOT BE POURED IN THE WET. SEE SHEET S-1.

0 60 120		DATE: SEPT 2020	SMEEL: E-Z Of E-9	
DESIGNED BY:SPH		DRAWN BY: SPH	REVIEWED BY:LMS	
Revision Description				
Date				
By				
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C	<u>JEND</u>					
	PROPOSED 18' LIGHT POLE WITH HOUSE-SIDE SHIELD (50 TOTAL)		PROPOSED LIGHT ON EXISTING FPL POLE, BY OTHERS		FPL TRANSMISSION EASEMENT	<u>NC</u> 1 2
	POLES P1-P12, P19-P49, P66, P67, P85, P103-P106		(3 TOTAL)	— — — ELEC —	EXISTING FPL DISTRIBUTION LINES	3
	PROPOSED 18' LIGHT POLE WITH LOW PROFILE HOUSESIDE	CKT#1	LIGHTING CIRCUIT # SEE PANEL			
	POLES P13, P14, P17, P18, P52, P71-P83, P87-P102, P108, P109	GRI#1	SCHEDULE	ELEC OFFS	12.5' SEPARATION FROM EXISTING FPL DISTRIBUTION LINES	4
	PROPOSED 18' LIGHT POLE WITH NO SHIELD (23 TOTAL)	P1	18' POLE NUMBER			
	POLES P15, P16, P50, P51, P53-P65, P68-P70, P84, P86, P107	T1	25' POLE NUMBER	— — UT — —	EXISTING UNDERGROUND	
	REMOVE AND REPLACE EXISTING 25' DIRECT BURIAL LIGHT		PROPOSED 2" CONDUIT			
	WITH ARM, LED FIXTURE, AND NO SHIELDING. (16 TOTAL)					

- SIDE OF THE SIDEWALK. FOR RECAST PILE FOUNDATIONS, USE
- ALL CONDUIT NOT LABELED AS MISSILE OR DIRECTIONAL BORE

LEC	GEND					NOTE
¢-	PROPOSED 18' LIGHT POLE WITH HOUSE-SIDE SHIELD (50 TOTAL) POLES P1-P12, P19-P49, P66, P67, P85, P103-P106		PROPOSED LIGHT ON EXISTING FPL POLE, BY OTHERS (3 TOTAL)		FPL TRANSMISSION EASEMENT	NOTE: 1. CONTRACTOR SHALL PROVIDE PRECAST PILES PER SHEET S1. 2. SEE SHEET E-0 FOR THE FOUNDATION TYPE OF EACH 18' POLE. 3. FOR POLES P1, INSTALL CONDUIT AND PULL BOXES ON EAST
- >	PROPOSED 18' LIGHT POLE WITH LOW PROFILE HOUSESIDE SHIELD (36 TOTAL) POLES P13, P14, P17, P18, P52, P71-P83, P87-P102, P108, P109	CKT#1	LIGHTING CIRCUIT #. SEE PANEL SCHEDULE	ELEC	EXISTING FPL DISTRIBUTION LINES	SIDE OF THE SIDEWALK. FOR RECAST PILE FOUNDATIONS, USE A 15' MISSILE BORE UNDER SIDEWALK BETWEEN POLE AND PULL BOX. FOR SPREAD FOOTING FOUNDATIONS, SEE SHEET 10.
×.	PROPOSED 18' LIGHT POLE WITH NO SHIELD (23 TOTAL) POLES P15, P16, P50, P51, P53-P65, P68-P70, P84, P86, P107	P1 T1	18' POLE NUMBER 25' POLE NUMBER		EXISTING UNDERGROUND	OR DESCRIBED IN NOTE 3 ABOVE SHALL BE OPEN TRENCH.
	REMOVE AND REPLACE EXISTING 25' DIRECT BURIAL LIGHT POLE WITH NEW 25' PRECAST PILE-MOUNTED LIGHT POLE WITH ARM, LED FIXTURE, AND NO SHIELDING. (16 TOTAL) POLES T1-T16		PROPOSED 2" CONDUIT PROPERTY LINES			

- 5. PROJECT LOCATIONS LABELED AS "T#" INDICATE THE REMOVAL AND REPLACEMENT OF EXISTING 25' LIGHT POLES. THE EXISTING POLE AND FIXTURE SHALL BE REMOVED COMPLETELY. EXISTING WIRING AND PULL BOXES SHALL BE REUSED FOR THE NEW POLES. NEW LED FIXTURES SHALL HAVE A TYPE V LIGHT DISTRIBUTION TO LIGHT BOTH THE STREET AND PATHWAY.
- SOILS IN THE AREA ARE KNOWN TO BE SATURATED. SPREAD FOOTING FOUNDATIONS SHALL NOT BE POURED IN THE WET. SEE SHEET S-1.

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	0 60' 120 F F F Feet	DATE: SEPT. 2020	SHEET: E-4 of E-9	
	DESIGNED BY:SPH	DRAWN BY: SPH	REVIEWED BY:LMS	
	Revision Description			
	Date			
	By			
	FPL PATHWAY LIGHTING	EN1901/441531-1	ELECTRICAL PLAN - SHEET 4	<pre>(electrical Dwgs\12_elec-P_eng01.Dwg 2/12/2021</pre>
	Village of Royal Palm Beach	Charling & Charle Cring Charles phere A. Marsh, P.E., 62560 1060 Douglesher Booch Boulesond	Phone (561) 790-5131 Fax (561) 791-7095	PALM BEACH- FPL EASEMENT SIDEWALK LIGHTING
ing). 312	SEAL			EC 2020\S20004 R0YAL
om	E	E-4		S

Larry M Smith c=US, o=Smith Engineering Consultants Inc., ou=A01410C0000016BF675 639400004D89, cn=Larry M Smith Smith 2021.02.12 15:44:21 -05'00'

- Available for production of new luminaires
- Suitable for field installation into luminaires that have HSS tower holes located in the bottom portion of the optical system tower
- Available for all distribution patterns
- Shield coverage of 120°

Field installation into existing luminaires: Shield is easily secured to the lower portion of the tower using pre-existing HSS tower holes.

HOUSE SIDE SHIELD

- Suitable for P4 engine with no lens, plus sag, shallow or deep dish lens
- Factory installed house side lighting control
- Shield coverage of 150°
- Virtually invisible to the eye; eliminating the need of a large unsightly reflector

LOW PROFILE HOUSE SIDE SHIELD

18' PATHWAY LIGHTING POLE DETAIL

(FIXTURES FOR PROJECT LOCATIONS WITH P LABELS)

WINDLOAD NOTE:

ALL POLE INSTALLATIONS SHALL BE SUITABLE FOR WIND LOAD IN ACCORDANCE WITH THE FLORIDA BUILDING CODE. THE CONTRACTOR SHALL INCLUDE WITH THE SHOP DRAWING SUBMITTAL, A POLE WIND LOADING CALCULATION SEALED BY A STRUCTURAL ENGINEER REGISTERED IN FLORIDA SHOWING THAT THE PROPOSED INSTALLATION WILL MEET THE WIND LOADING REQUIREMENT.

PRECAST AUGER PILE DESIGNED AND INSTALLED PER MANUFACTURER'S SPECIFICATIONS AND DIRECTIONS.

NOTES: 1. PULL BOX SHALL BE INSTALLED AT EACH LIGHT POLE, ON EACH SIDE OF ROADWAY CROSSINGS AND AS NEEDED FOR PULLING DISTANCE WHETHER SHOWN ON PLAN OR NOT. 2. CONTRACTOR SHALL PROVIDE 8' OF EXTRA CONDUCTOR IN PULL BOXES COILED NEATLY.

> PULL BOX AND LIGHT POLE SHALL BE MOUNTED MIN OF 10' FROM CURB OF SIDE STREET. DO NOT MOUNT PULL BOX ON RAMP AREA <u>r/w lin</u>e

ELECII RICAL DWGS\12_ELEC-P_EN901.DWG PL EASEMENT SIDEWALK

E-9

State Auth. #8228 2161 Palm Beach Lakes Blvd., Suite 31

(561) 616-3911 Fax (561) 616-3912

West Palm Beach, FL 33409

ww.smithengine

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