

POWER SYMBOLS

	SINGLE RECEPTACLE - WALL, CEILING, FLOOR
	DUPLX RECEPTACLE - WALL, CEILING, FLOOR SURFACE
	DOUBLE DUPLX RECEPTACLE - WALL, CEILING, FLOOR
	RECEPTACLE 220V, 3 PHASE - SINGLE, DUPLX
	RECEPTACLE 240/208V, 1 PHASE - WALL, FLOOR
	RECEPTACLE 480V, 3 PHASE - WALL, FLOOR
RECEPTACLE IDENTIFIERS	
"A"	ABOVE COUNTER
"C"	CEILING
"GFCI"	GROUND FAULT CIRCUIT INTERRUPTER
"WP"	WEATHERPROOF
PP / 18 PP	POWER POLE - NEW / EXISTING
P/D	POWER AND DATA FURNITURE FEED
M	UTILITY METER
D	DIGITAL METER
M/D	MAIN DISTRIBUTION PANEL
	RECESSED ELECTRICAL PANEL - NEW / EXISTING
	SURFACE MOUNTED ELECTRICAL PANEL - NEW / EXISTING
	TELEPHONE TERMINAL CABINET
	CONTROL PANEL
	NON-FUSED DISCONNECT SWITCH
	FUSED DISCONNECT SWITCH
	MOTOR STARTER
	COMBINATION DISCONNECT SWITCH / MOTOR STARTER
	SINGLE-PHASE MOTOR
	THREE-PHASE MOTOR
	VARIABLE FREQUENCY DRIVE
	PUSHBUTTON - 1 BUTTON, 2 BUTTON, 3 BUTTON
	PUSHBUTTON - EMERGENCY OFF

LIGHTING SYMBOLS

	POLE MOUNTED FIXTURE - SINGLE HEAD
	POLE MOUNTED FIXTURE - DOUBLE HEAD
	RECTANGULAR CEILING FIXTURE
	RECTANGULAR EMERGENCY CEILING FIXTURE
	RECTANGULAR WALL MOUNTED FIXTURE
	RECTANGULAR WALL MOUNTED EMERGENCY FIXTURE
	ROUND/MISCELLANEOUS LIGHT FIXTURE - CEILING / WALL MOUNTED
	ROUND/MISCELLANEOUS EMERGENCY LIGHT FIXTURE - CEILING / WALL MOUNTED
	WALL WASHER FIXTURE
	SPOT LIGHT FIXTURE
	TRACK LIGHTING
	LINEAR FIXTURE
	EMERGENCY LINEAR FIXTURE
	WALL MOUNTED LINEAR FIXTURE
	WALL MOUNTED EMERGENCY LINEAR FIXTURE
	EXIT LIGHT - CEILING / WALL MOUNTED. HATCH INDICATES NUMBER OF FACES, ARROWS AS INDICATED ON PLANS
	BATTERY OPERATED EMERGENCY LIGHTING UNIT
	COMBINATION EMERGENCY/EXIT LIGHTING UNIT
	DUAL REMOTE HEAD EMERGENCY UNIT - CEILING/WALL MOUNT
	EMERGENCY LIGHTING UNIT BATTERY
"NL"	"NL" INDICATES UNSWITCHED NIGHT LIGHT

WIRING SYMBOLS

	CONDUIT RUN
	EXISTING CONDUIT / WIRE
	CONDUIT / WIRE TO BE REMOVED (DEMOLITION)
	CONDUIT UP
	CONDUIT DOWN
	CONDUIT HOMERUN TO PANEL
	FEEDER NUMBER. REFER TO BRANCH WIRING SCHEDULE
	UNDERGROUND GROUND WIRE
	UNDERGROUND TELECOMMUNICATIONS CONDUIT / DUCT
	UNDERGROUND ELECTRICAL CONDUIT / DUCT
	JUNCTION BOX
	PULL BOX
	GROUND ROD
	TAP

ELECTRICAL SHEET INDEX

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ELECTRICAL GENERAL NOTES

1 CONTRACTOR SHALL COMPLY WITH THE LATEST EDITIONS OF ALL RELEVANT NFPA AND FBC REQUIREMENTS	ADDITIONAL ACCESS PANEL LOCATIONS SHALL BE APPROVED BY THE ARCHITECT
2 DRAWINGS ARE DIAGRAMMATICAL AND INDICATE DESIGN INTENT	18 MOUNTING HEIGHTS OF ELECTRICAL DEVICES ARE TO CENTER OF DEVICE UNLESS OTHERWISE NOTED
3 DO NOT SCALE DRAWINGS	19 ELECTRICAL DEVICE OUTLETS SHALL NOT BE LOCATED BACK TO BACK WITHIN THE SAME STUD SPACE IN INTERIOR WALLS, WHICH ARE INSULATED. THE DEVICES IN ONE ROOM SHALL BE OFFSET TO THE NEXT STUD SPACE
4 FIELD VERIFY EXISTING CONDITIONS AND ACTUAL DIMENSIONS PRIOR TO START OF WORK	20 MULTIGANG DEVICES SHALL BE GANGED UNDER SINGLE MULTIGANG COVERPLATE
5 THOROUGHLY COORDINATE ELECTRICAL WORK WITH OTHER TRADES TO AVOID PHYSICAL CONFLICTS AND CONFLICTS WITH WORK SEQUENCE	21 WHERE ELECTRICAL DEVICES ARE INDICATED ON A COLUMN, THE DEVICE SHALL BE CENTERED ON THE COLUMN SURFACE
6 REFER TO ARCHITECTURAL DRAWINGS FOR WALLS WITH SPECIAL WALL FINISHES. COORDINATE OVERALL WALL COVERING THICKNESS AND PROVIDE PLASTER RING WITH APPROPRIATE DEPTH	22 ALL EMERGENCY WIRING SHALL BE IN SEPARATE CONDUIT FROM NON-EMERGENCY WIRING (EXCEPT AT J-BOX AND FINAL CONNECTION TO LIGHT FIXTURES)
7 ALL CONDUITS SHALL CONTAIN PROPERLY SIZED GROUND WIRE	23 REFER TO ONE LINE DIAGRAM FOR CONDUIT AND WIRE SIZES
8 ALL CONDUIT AND WIRING SHALL BE CONCEALED IN WALL OR CEILING CAVITY EXCEPT FOR EXISTING BLOCK WALLS AND AREAS WITH EXPOSED CEILING CONSTRUCTION. ALL AREAS WITH NEW WALLS OR RECONSTRUCTED WALLS SHALL HAVE CONDUIT AND WIRING CONCEALED IN WALL CAVITY. EXPOSED CONDUIT IN HIGH BAY STORAGE, MAINTENANCE AND DELIVERY STORAGE SHALL BE RGS UP TO 10 FT HEIGHT ABOVE FINISHED FLOOR, WHERE MOUNTED EXPOSED	24 PROVIDE CONDUIT CONNECTOR OR BUSHING ON END OF CONDUIT FOR ALL CONDUIT STUB OUTS
9 THE ELECTRICAL CONTRACTOR MAY, AT THEIR OPTION, REUSE A PORTION OR ALL OF EXISTING MULTI-BRANCH CIRCUIT WIRING AND/OR CONDUIT(S) PROVIDED THEY MEET ALL THE REQUIREMENTS OF THE NEW INSTALLATIONS (I.E., APPROPRIATE ROUTING, CONDUIT SIZE, CONDUIT TYPE, WIRE SIZE FOR LENGTH WITH DERATING, ETC.)	25 WALL COMMUNICATION OUTLET ROUGH IN SHALL BE PROVIDED WITH 2 GANG BACKBOX, REDUCING 1 GANG PLASTER RING. 3/4" CONDUIT STUB TO ACCESSIBLE CEILING SPACE AND NYLON PULL STRING
10 BRANCH CIRCUIT WIRING SHALL BE DERATED PER NEC 310-15 DUE TO HARMONIC LOADING. THE NEUTRAL CONDUCTOR SHALL BE CONSIDERED AS CURRENT CARRYING CONDUCTOR FOR DERATING PURPOSES	35 ALL 120 VOLT BRANCH CIRCUITS SHALL BE PROVIDED WITH SEPARATE FULL SIZE NEUTRAL CONDUCTORS
11 MAIN BRANCH CIRCUIT CONDUIT RUNS SHALL BE EMT, FLEXIBLE CONDUIT OR MC CABLE MAY BE USED FOR FINAL RUN TO POWER POLE (MAXIMUM OF 10 FEET LENGTH) OR FOR FISHING DOWN EXISTING WALLS. REFER TO SPECIFICATIONS FOR ADDITIONAL RACEWAY RESTRICTIONS	36 120 VOLT BRANCH CIRCUITS MAY SHARE FULL SIZE GROUND WITH UP TO 3 CIRCUITS WHICH SERVE SIMILAR LOADS
12 WHERE GFCI PROTECTION IS INDICATED, A GFCI TYPE RECEPTACLE SHALL BE PROVIDED AT EACH LOCATION. LOAD SIDE PROTECTION OF DOWN STREAM DEVICES WILL NOT BE ACCEPTABLE. GFCI RECEPTACLES SHALL BE READILY ACCESSIBLE	37 CIRCUIT NUMBERS ARE INDICATED FOR CIRCUIT QUANTITIES AND GENERAL CONFIGURATION ONLY. ACTUAL CIRCUIT NUMBERS MAY VARY. FIELD VERIFY. PROVIDE ACTUAL CIRCUIT NUMBERS ON AS-BUILTS
13 RECEPTACLES WITHIN 6 FT OF SINKS SHALL BE GFCI	38 PROVIDE FIELD LABELING OF ALL NEW BRANCH CIRCUITS AND ALL EXISTING RECEPTACLE DEVICES TO INDICATE PANEL BOARD AND CIRCUIT NUMBER OF SOURCE. PROVIDE LABELING ON DEVICE COVER PLATE OR J-BOX COVER
14 ELECTRICAL CONTRACTOR IS RESPONSIBLE TO PROVIDE POWER FEED(S) TO ANY ALL MECHANICAL EQUIPMENT THAT REQUIRE A POWER FEED, UNLESS OTHERWISE NOTED. COORDINATE WITH INFORMATION ON MECHANICAL DRAWINGS AND MECHANICAL TRADES ON SITE	39 ELECTRICAL TRADES TO VERIFY EXISTING CIRCUITS WHICH REMAIN AND QUANTITY OF AVAILABLE SPARE CIRCUITS IN EACH PANEL BOARD AFTER PRE-BID/PRE-DEMOLITION INVESTIGATION IS COMPLETE. IF QUANTITY OF AVAILABLE CIRCUITS IS LESS THAN QUANTITY INDICATED TO BE USED ON NEW WORK PLANS, REVIEW CIRCUITING WITH OWNER'S REPRESENTATIVE AND ENGINEER FOR REVISION OF CIRCUIT QUANTITIES AND LOAD SERVED. CIRCUIT QUANTITY ADJUSTMENTS TO BE MADE BASED ON UNIT PRICING
15 REFER TO ARCHITECTURAL DRAWINGS FOR WALLS TO BE PROVIDED WITH INSULATION FOR ACOUSTICAL PURPOSES	40 CONDUCTORS SIZED FOR VOLTAGE DROP THAT ARE TOO LARGE FOR LUGS SHALL BE REDUCED USING STRAIGHT PIN TERMINALS WITH STRANDED PIGTAIL AND INSULATING COVERS. USE STRANDED BI-METALLIC PIN TERMINALS
16 ALL EMPTY CONDUITS SHALL BE DEBURRED, CLEANED, TAGGED AND PROVIDED WITH A NYLON PULL STRING AND CAPPED AT OPEN ENDS NOT TERMINATED ANY WHERE	41 PROVIDE PULL BOXES AS REQUIRED TO INTERCEPT FEEDER AND BRANCH CIRCUITS AND EXTEND TO NEW PANEL LOCATION. REFER TO SPECIFICATIONS FOR APPROVED SPLICING METHODS. LOCATE PULL BOXES IN JOIST
17 IN AREAS WITH GYPSUM BOARD CEILINGS THE ELECTRICAL TRADES SHALL ROUTE CONDUIT AND POSITION PULL/JUNCTION BOXES TO ALLOW ACCESS THRU ACCESS PANELS BY ARCHITECTURAL TRADES, WHERE POSSIBLE. WHERE ADDITIONAL ACCESS PANELS ARE REQUIRED FOR ELECTRICAL EQUIPMENT, THE ELECTRICAL TRADES SHALL INCLUDE THE ACCESS PANEL IN THE BID. ACCESS PANEL SHALL BE INSTALLED BY THE CEILING INSTALLER	42 COORDINATE SEQUENCING AND TEMPORARY REQUIREMENTS TO MAINTAIN LIGHTING SYSTEM OPERATION DURING CONSTRUCTION
	43 THE ELECTRICAL TRADES SHALL PROVIDE FIELD INVESTIGATION TO VISUALLY AND ELECTRICALLY TRACE BRANCH CIRCUITS, WHICH ARE TO BE REMOVED. IF BRANCH CIRCUITS SERVE LIGHTING OR EQUIPMENT OUTSIDE OF THE PROJECT SCOPE, THE EXISTING BRANCH CIRCUIT WIRING SHALL BE MAINTAINED TO SERVE THESE LOADS

EXHIBIT G
S&S Electrical Plans



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Date: 2023-12-11 10:34:57

RAJI SAYEGH - FL PE#12702

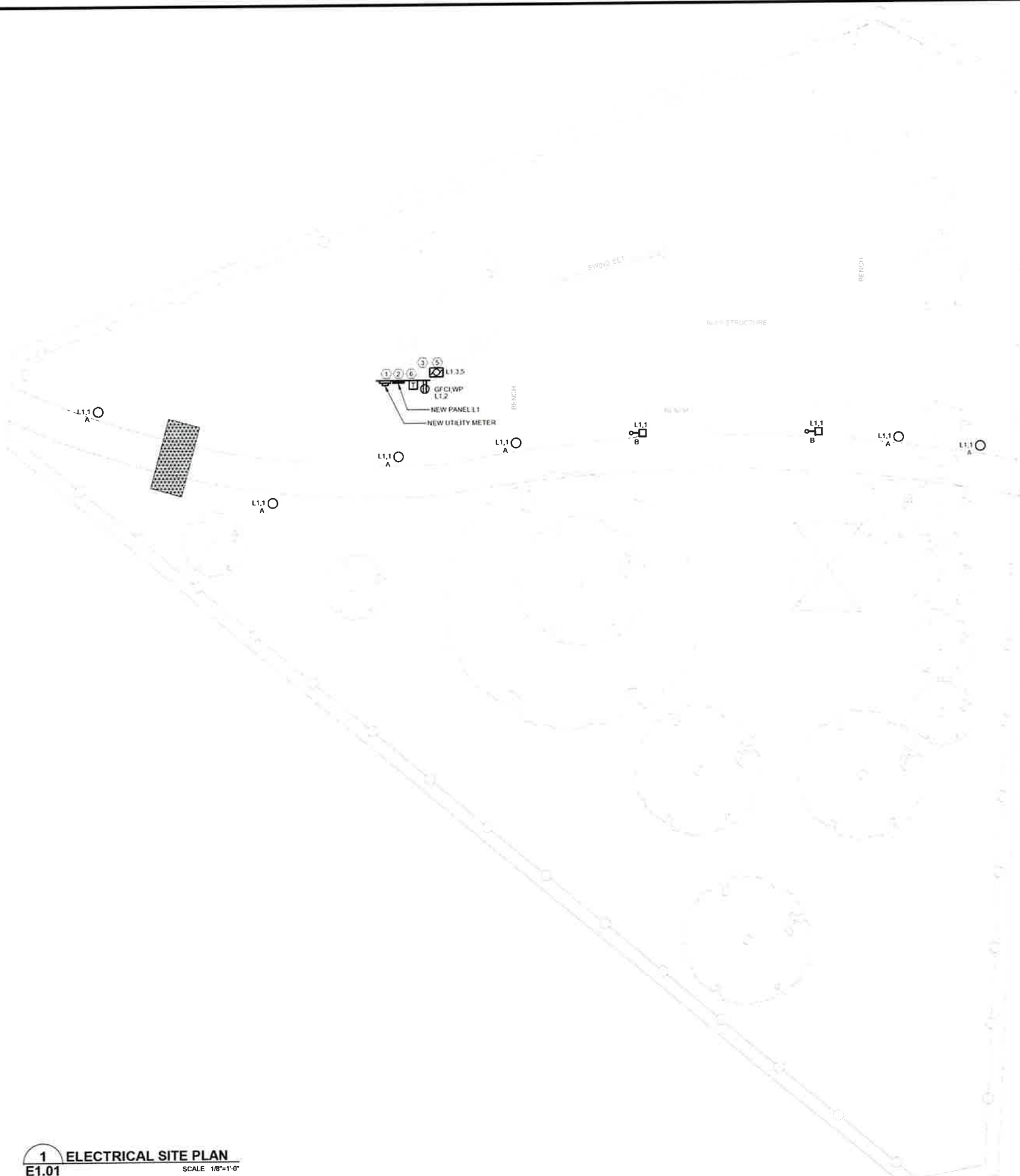
ILEX PARK
WEST ILEX DRIVE
8TH STREET
LAKE PARK, FL 33403

DRAWN: AK
CHECKED: RS
DATE: 11/28/2023

PROJECT#:

ELECTRICAL
LEGEND &
GENERAL
NOTES

E0.01



1 ELECTRICAL SITE PLAN
 SCALE: 1/8"=1'-0"

GENERAL NOTES
 1 REFER TO SHEET E6 00 FOR RISER AND SCHEDULES

- KEY NOTES:**
- ① PROVIDE A NEW METER CAN AND CONNECT TO EXISTING OVERHEAD SERVICE CONDUCTOR. MOUNT NEW METER ON NEW UNISTRUT STRUCTURE. REFER TO SHEET E6 00 FOR DETAILS AND COORDINATE EXACT LOCATION WITH OWNER ON SITE.
 - ② REPLACE EXISTING PANELBOARD WITH A NEW SERVICE RATED NEMA-3R PANELBOARD WITH LOCKABLE COVER AND MOUNT ON UNISTRUT STRUCTURE. RECONNECT CIRCUITS FROM EXISTING PANELBOARD REPLACING ANY DETERIORATED WIRES. REFER TO SHEET E6 00 FOR DETAILS.
 - ③ PROVIDE A NEW RECEPTACLE WITH LOCKABLE WEATHERPROOF COVER MOUNTED UNISTRUT STRUCTURE.
 - ④ COORDINATE EXACT LOCATION OF FIXTURES WITH LANDSCAPING IN COORDINATION WITH OWNER.
 - ⑤ PROVIDE A NEW UNISTRUT STRUCTURE AND MOUNT EXISTING AND NEW IRRIGATION EQUIPMENT. MOUNT EQUIPMENT WITH A MINIMUM OF 24" CLEARANCE ABOVE GRADE. REPLACE CORRODED DISCONNECT SWITCH AND RECEPTACLE SERVING THIS EQUIPMENT WITH NEW NEMA3R DISCONNECT SWITCH AND WEATHERPROOF GFCI RECEPTACLE AND RECONNECT WITH NEW WIRING TO NEW PANELBOARD.
 - ⑥ INSTALL NEW 7 DAY PROGRAMMABLE TIMER AND CONNECT TO LIGHTING CIRCUIT.



2 EXISTING ELECTRICAL SERVICE
 SCALE: N.T.S.

Bildwork Design
 300 SE 2ND STREET, STE 600
 FORT LAUDERDALE, FL 33301
 PHONE (954) 933-8246
 www.bildwork.com

Florida Registration: 32813

CORPORATE NAME: BILDWORK DESIGN, LLC REGISTERED IN THE STATE OF FLORIDA. THESE DRAWINGS ARE THE PROPERTY OF BILDWORK DESIGN, LLC AND SHALL NOT BE REPRODUCED WITHOUT WRITTEN PERMISSION FROM A PRINCIPAL OF THE FIRM OR BE LIABLE FOR THE FULLEST LEGAL REMEDY.



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 Date: 2023-12-11 11:02:15

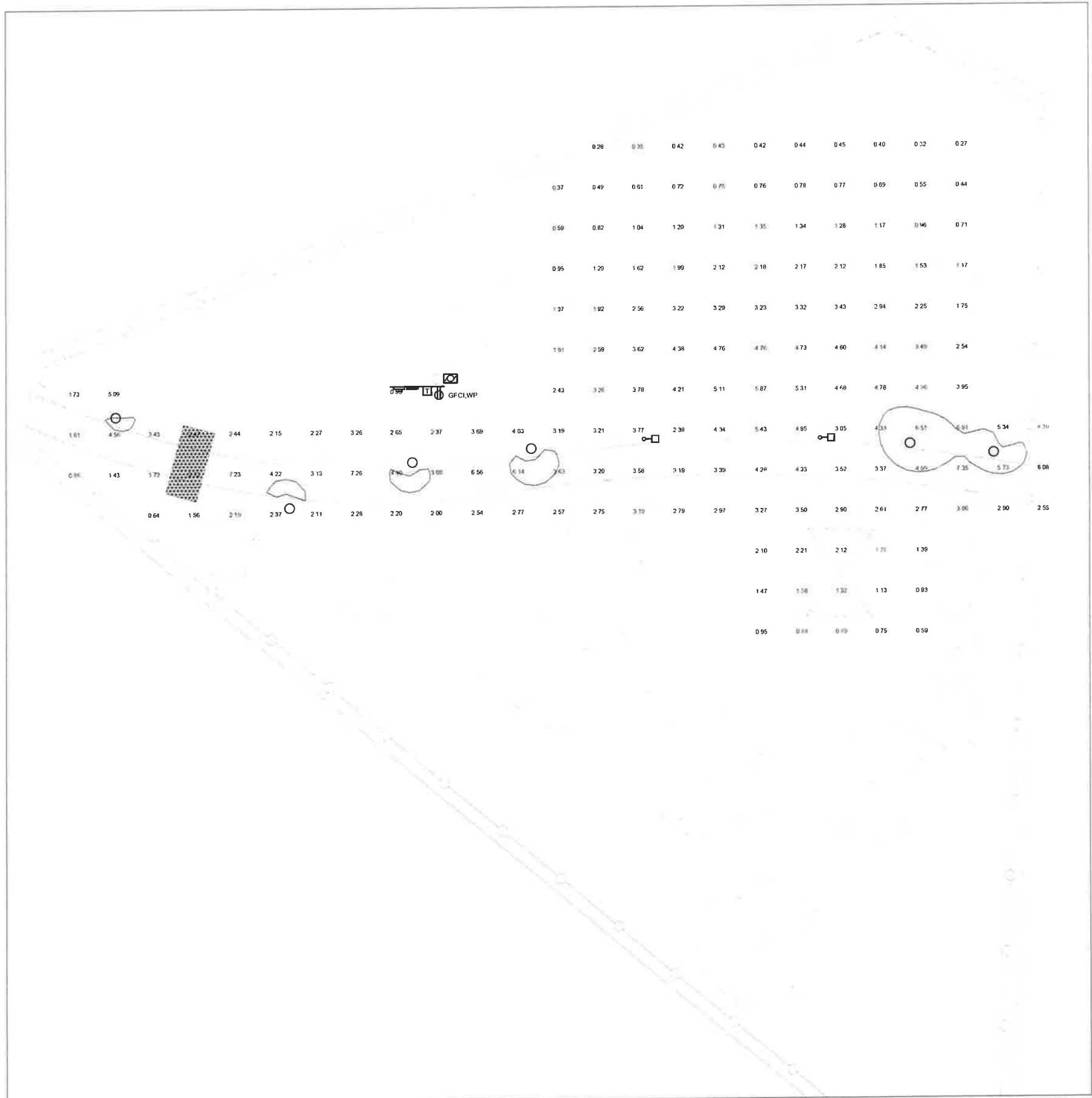
RAJI SAYEGH - FL PE#78700

ILEX PARK
 WEST ILEX DRIVE
 8TH STREET
 LAKE PARK, FL 33403

DRAWN: AK
 CHECKED: RS
 DATE: 11/28/2023

PROJECT#:
ELECTRICAL SITE PLAN

E1.01



SITE PHOTOMETRICS			
ROOM NAME	Eav (FC)	Emin (FC)	Emax (FC)
WALKWAYS	4.41	1.53	11

Bildwork Design
 300 SE 2ND STREET, STE 600
 FORT LAUDERDALE, FL 33301
 PHONE (954) 933-8246
 www.bildwork.com

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RAJI SAYEGH - FL PE#18100

ILEX PARK
 WEST ILEX DRIVE
 8TH STREET
 LAKE PARK, FL 33403

DRAWN: AK
 CHECKED: RS
 DATE: 11/28/2023

PROJECT#:
 ELECTRICAL
 PHOTOMETRICS

E1.02

ELECTRICAL SPECIFICATIONS

GENERAL:

1. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO SUBMITTING BID TO BE FAMILIARIZED WITH THE PROJECT AND ALL ASPECTS OF THE WORK TO BE PERFORMED.
2. ALL WORK SHALL CONFORM TO AND COMPLY WITH APPLICABLE BUILDING CODES. REFER TO ARCHITECTURAL COVER SHEET FOR A LIST OF CODES BEING USED ON THIS PROJECT. NOTE: CONTRACTOR SHALL ALSO VERIFY WITH LOCAL AUTHORITY HAVING JURISDICTION AND LOCAL FIRE MARSHAL FOR ANY REQUIREMENTS NOT LISTED IN REQUIRED CODES AND REFERENCES.
3. INSTALL ALL WORK IN A NEAT AND WORKMANLIKE MANNER.
4. GUARANTEE THE WORK FOR A PERIOD OF ONE YEAR.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND PAYING FOR ALL PERMITS INCLUDING ARRANGING ALL INSPECTIONS REQUIRED FOR THE WORK TO BE UNDERTAKEN AND ACCEPTED.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH UTILITY COMPANIES FOR ALL FINAL SERVICE CONNECTION REQUIREMENTS. THE CONTRACTOR SHALL INCLUDE IN CONTRACT PRICE ANY FEES REQUIRED BY UTILITY COMPANIES FOR SERVICE CONNECTIONS.
7. CUT ALL SURFACES AS REQUIRED FOR THE INSTALLATION AND PATCH TO MATCH EXISTING CONDITIONS AND FINISH.
8. ALL MATERIALS AND EQUIPMENT SHALL BE NEW UNLESS OTHERWISE NOTED AND SHALL BE TESTED AND LISTED BY UNDERWRITERS LABORATORIES (UL).
9. ALL MATERIALS AND EQUIPMENT SHALL BE INSTALLED PER NEMA STANDARDS, APPLICABLE ANSI STANDARDS AND IEEE STANDARDS.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FINAL CONNECTIONS TO ALL EQUIPMENT REQUIRING POWER.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING SHOP DRAWINGS, PRODUCT DATA AND WIRING DIAGRAMS AS REQUIRED BY EACH SECTION. PRODUCT DATA SHALL BE MARKED TO IDENTIFY THE EXACT MODEL NUMBER AND OPTIONS THAT ARE TO BE PROVIDED. SHOP DRAWINGS SHALL BE SUBMITTED ELECTRONICALLY TO THE ARCHITECT FOR ENGINEER'S APPROVAL. ONCE THE ENGINEER RECEIVES THE SUBMITTAL, THE REVIEW PROCESS WILL REQUIRE FIVE (5) BUSINESS DAYS.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING OPERATION AND MAINTENANCE (O&M) MANUALS. THESE MANUALS SHALL BE A VINYL THREE RING BINDER WHICH IS TO BE LABELED WITH THE OWNER'S PROJECT NAME AND NUMBER ON THE BINDER. THE O&M MANUALS SHALL INCLUDE PRODUCT DATA CUT SHEETS, MAINTENANCE REQUIREMENTS, PROGRAMMING INSTRUCTIONS AND WARRANTIES OF ALL EQUIPMENT.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FINAL CLEANING OF EQUIPMENT INSTALLED.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEMOLITION OF EXISTING ELECTRICAL EQUIPMENT TO BE REMOVED. ALL MATERIALS SHALL BE REMOVED FROM SITE AND DISPOSED OF PROPERLY BY CONTRACTOR.
15. ALL PENETRATIONS THROUGH FIRE WALLS SHALL BE PROPERLY FIRE SEALED TO CONFORM WITH UL SYSTEM NUMBERS AS LISTED IN VOLUME 2 OF THE UL FIRE RESISTANCE DIRECTORY FOR EACH DIFFERENT INTENDED PROJECT APPLICATION, SUCH AS CABLE TRAY PENETRATION AND CONDUIT PENETRATIONS.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ACCESS DOORS AND FRAMES AT LOCATIONS OF EQUIPMENT REQUIRING ACCESS WHICH IS CONCEALED IN WALLS OR CEILINGS.

RACEWAY AND BOXES:

1. UNLESS NOTED OTHERWISE, USE EMT CONDUIT WITH STEEL COMPRESSION FITTINGS.
2. THE MINIMUM SIZE OF CONDUIT SHALL BE 3/4".
3. ALL RACEWAY SHALL BE CONCEALED UNLESS OTHERWISE NOTED.
4. UNLESS NOTED OTHERWISE USE RIGID GALVANIZED STEEL CONDUIT UP TO 10" A.F.F. OUTDOORS. USE GALVANIZED IMC OVER 10", PROVIDE EXPANSION COUPLINGS AS REQUIRED.
5. USE PVC SCHEDULE 40 CONDUIT UNDERGROUND.
6. FLEXIBLE METAL CONDUIT SHALL BE USED FOR THE FINAL CONNECTIONS TO ROTATING MACHINERY, VIBRATING EQUIPMENT AND LIGHTING FIXTURES. 3/8" SIZE IS ALLOWED FOR CONNECTIONS TO LIGHTING FIXTURES. USE LIQUIDTIGHT FOR OUTDOOR USE OR FOR CONNECTIONS TO MOTORS OR EQUIPMENT IN AREAS WHERE THE RUPTURE OF A PIPE COULD SPRAY OR LEAK ON THE CONDUIT, SUCH AS IN MECHANICAL ROOMS.
7. PROVIDE PULL AND JUNCTION BOXES AS REQUIRED.
8. ALL OUTLET BOXES SHALL BE 4" SQUARE OR 4-11/16" SQUARE. GALVANIZED METAL. INSTALL TRUE AND PLUMB WITH THE BUILDING FINISH. INSTALL SECURELY AND INDEPENDENT OF RACEWAY. PROVIDE SINGLE OR MULTIGANG RINGS AS REQUIRED. LIGHTING FIXTURE BOXES MAY BE 4" OCTAGONAL.
9. INSTALL ALL RACEWAYS PARALLEL AND PERPENDICULAR TO THE BUILDING WALLS, FLOOR AND CEILING.
10. ALL BOXES FOR RECEPTACLES, TELEPHONE AND DATA OUTLETS SHALL BE MINIMUM 2-1/8" DEEP. ALL BOXES FOR SWITCHES, LOCAL LIGHT CONTROL, AND RECESSED LIGHT FIXTURES TO BE MINIMUM 1-1/2" DEEP.
11. PROVIDE BLANK COVERS ON ALL BOXES THAT ARE NOT TO RECEIVE A DEVICE.
12. ALL RACEWAY SHALL BE INDEPENDENTLY SUPPORTED FROM THE STRUCTURE USING APPROVED CLAMPS, RODS, FITTINGS, ETC. DO NOT SUPPORT FROM HUNG CEILING WIRES OR THE WORK OF OTHER TRADES. SUPPORT AT INTERVALS AS REQUIRED BY NEC.
13. UNDERGROUND CONDUIT WALL PENETRATIONS SHALL BE SEALED WITH "WS" STEEL SLEEVE AND RUBBER LINKS WHICH WILL CREATE A WATER-TIGHT SEAL. SLEEVES AND SEALS SHALL BE PSI-THUNDERLINE "LINK-SEAL" MODEL C.
14. USE STEEL SURFACE RACEWAY (2 SECTIONS) ONE SECTION FOR POWER AND ONE FOR LOW VOLTAGE IN AREAS WHERE CONDUITS MAY NOT BE ROUTED CONCEALED DUE TO EXISTING WALL/CEILING CONSTRUCTION. ALL USE OF SURFACE RACEWAYS MUST BE APPROVED BY OWNER/ARCHITECT PRIOR TO INSTALLATION. SURFACE RACEWAYS SHALL BE EQUAL TO WIREMOLD. ALL SURFACE RACEWAYS PRODUCT DATA CUT SHEETS MUST BE SUBMITTED FOR APPROVAL TO ARCHITECT/ENGINEER.

LUMINAIRES:

1. PROVIDE MANUFACTURERS PRODUCT DATA CUT SHEET SUBMITTALS FOR ENGINEERS AND ARCHITECTS APPROVAL FOR ALL LUMINAIRES.
2. LUMINAIRE TYPES ARE AS SCHEDULED OR NOTED. REFER TO LIGHT FIXTURE SCHEDULE AND LEGENDS ON ELECTRICAL AND ARCHITECTURAL DRAWINGS.
3. PROVIDE LUMINAIRES WITH THE NECESSARY FRAMES, FLANGES, FITTINGS, ETC., AS REQUIRED FOR INSTALLATION IN OR ON THE CEILING OR SURFACE IN OR ON WHICH THEY ARE TO BE INSTALLED AND TO ELIMINATE LIGHT LEAKAGE. CATALOG NUMBERS DO NOT NECESSARILY REFLECT THE TYPE OF CEILING IN WHICH A FIXTURE IS TO BE INSTALLED.
4. COORDINATE FINAL LOCATIONS OF LUMINAIRES IN THE FIELD WITH ARCHITECTURAL REFLECTED CEILING PLANS.

WIRE AND CABLE:

1. ALL WIRE AND CABLE SHALL HAVE COPPER CONDUCTORS.
2. USE NEC TYPE THHN/THWN OR XHHW INSULATION.
3. USE MINIMUM #12 AWG SIZE. #14 AWG MAY BE USED FOR CONTROL WIRING, FOR OTHER SYSTEMS. USE WIRING AS NOTED ON THE DRAWINGS AND AS RECOMMENDED BY THE SYSTEM MANUFACTURER.
4. CONTRACTOR SHALL UPGRADE CONDUCTOR SIZES FOR VOLTAGE DROP AS FOLLOWS:
 - FOR 120V CIRCUITS, UPGRADE BY 1 SIZE FOR EVERY 100' OF CIRCUIT LENGTH.
 - FOR 240-277V CIRCUITS, UPGRADE BY 1 SIZE FOR EVERY 150' OF CIRCUIT LENGTH.
 - FOR 480V CIRCUITS, UPGRADE BY 1 SIZE FOR EVERY 200' OF CIRCUIT LENGTH.

WIRING DEVICES:

1. ALL RECEPTACLES SHALL BE SAME MANUFACTURER. ALL RECEPTACLES SHALL BE COMMERCIAL GRADE 20A, 125 VOLTS, DUPLEX, WHITE COLOR. ACCEPTABLE MANUFACTURERS ARE HUBBELL, COOPER, PASS & SEYMOUR, OR LEVITON. INSTALL RECEPTACLES WITH THE LONG DIMENSION VERTICAL AND WITH THE GROUND SLOT ON TOP. FLUSH MOUNT IN OUTLET BOX AT 18" AFF UNLESS OTHERWISE NOTED.
2. SPECIAL PURPOSE RECEPTACLES SHALL BE AS NOTED ON THE DRAWINGS.
3. ALL SWITCHES SHALL BE SAME MANUFACTURER. ALL SWITCHES SHALL BE 20A, 120V, QUIET OPERATING TYPE, WHITE COLOR. ACCEPTABLE MANUFACTURERS ARE HUBBELL, PASS & SEYMOUR, OR LEVITON. INSTALL SWITCHES VERTICALLY WITH "ON" IN THE UP POSITION. FLUSH MOUNT IN OUTLET BOX AT 48" AFF UNLESS OTHERWISE NOTED.
4. TELEPHONE AND DATA OUTLET BOXES SHALL BE 4-11/16" SQUARE OUTLET BOX WITH A SINGLE GANG VERTICAL RING AND A 1" CONDUIT CONCEALED IN WALL AND STUBBED UP TO NEAREST CABLE TRAY OR ABOVE ACCESSIBLE CEILING. FLUSH MOUNT IN OUTLET BOX AT 18" AFF UNLESS OTHERWISE NOTED. OWNER WILL PROVIDE WIRING, PLATES AND JACKS.
5. PLATES SHALL BE FLEXIBLE THERMOPLASTIC, NON-BREAKABLE, SAME COLOR AS THE DEVICE. FOR SURFACE BOXES, USED RAISED METAL WITH THE SAME DIMENSIONS AS THE BOX. PLATES IN BREAKROOM, KITCHEN, AND TOILET ROOM SHALL BE STAINLESS STEEL.

GROUNDING:

1. INSTALL THE ELECTRICAL SYSTEM CONTINUOUSLY FROM BOX TO BOX AND FROM OUTLET TO OUTLET AND TO CABINETS TO FORM A CONTINUOUS PATH TO GROUND.
2. INSTALL A GREEN INSULATED EQUIPMENT GROUND WIRE, AT A MINIMUM SIZE OF #12 AWG OR LARGER IF REQUIRED BY NEC TABLE 250.95. ROUTE GROUND WIRE WITH CIRCUIT CONDUCTORS TO ALL RECEPTACLES, EQUIPMENT, MOTORS, LIGHTING FIXTURES, ETC. BOND TO THE EQUIPMENT AND TO THE GROUND BUS OR LUG AT THE SOURCE END.
3. SERVICE AND/OR TRANSFORMER GROUNDING. PROVIDE GROUNDING OF THE NEUTRAL CONDUCTOR FOR SERVICES AND SEPARATELY DERIVED SYSTEMS SUCH AS TRANSFORMERS USING A GROUND WIRE (S) SIZED IN ACCORDANCE WITH NEC TABLE 250-66 FOR SERVICE GROUNDING. PROVIDE CONNECTION TO WATER PIPE AND BUILDING STEEL. IN THE ABSENCE OF STEEL IN LIEU THEREOF USE A 3/4" ROUND X 10'-0" LONG COPPERCLAD GROUND ROD DRIVEN INTO UNDISTURBED EARTH.

DISCONNECTS AND STARTERS:

1. PROVIDE MANUFACTURERS PRODUCT DATA CUT SHEET SUBMITTALS FOR ENGINEERS APPROVAL FOR ALL DISCONNECT SWITCHES AND STARTERS.
2. USE HEAVY-DUTY, HORSEPOWER RATED DISCONNECTS, FUSIBLE OR NON-FUSIBLE AS NOTED ON PLANS.
3. ALL STARTERS AND DISCONNECTS LOCATED IN INTERIOR LOCATIONS SHALL BE NEMA 1 AND ALL EXTERIOR UNITS SHALL BE NEMA 3R UNLESS OTHERWISE NOTED.
4. USE 3 POLE FULL VOLTAGE NON-REVERSING MAGNETIC STARTERS WITH A NON-FUSED DISCONNECT SWITCH FOR ALL MOTORS 1/2 HP AND ABOVE. EQUIP WITH CLASS 10 OVERCURRENT PROTECTION, UNDER VOLTAGE, PHASE LOSS AND REVERSAL PROTECTION. EQUIP EACH STARTER WITH AN H-O-A SELECTOR SWITCH, A RED RUN PILOT LIGHT AND AUXILIARY CONTACTS FOR INTERLOCKING AND CONTROL FUNCTIONS AS NEEDED. COORDINATE WITH THE MECHANICAL CONTRACTOR. PROVIDE ENCLOSURE WITH RESET BUTTON, PILOT LIGHT AND SELECTOR SWITCH IN COVER.
5. USE MANUAL MOTOR STARTERS WITH THERMAL OVERLOAD PROTECTION FOR MOTORS LESS THAN 1/2 HP. PROVIDE RED RUN PILOT LIGHT IN COVER.
6. MOTORS 1/2 HP AND ABOVE SHALL BE THREE PHASE. MOTORS BELOW 1/2 HP SHALL BE SINGLE PHASE, 120 VOLTS.
7. PROVIDE A NAMEPLATE WITH 1/2" ENGRAVED WHITE LETTERS ON A BLACK FIELD ON ALL MOTOR STARTERS AND ALL DISCONNECTS WITH THE DESIGNATION OF THE LOAD SERVED (EQUIPMENT IDENTIFICATION).
8. ALL LUGS SHALL BE RATED FOR 75 DEGREE WIRE.
9. EXTERNAL CONTROL WIRING, EXCEPT FOR FIRE ALARM SYSTEM CONNECTIONS, SHALL BE BY MECHANICAL CONTRACTOR.

PANELBOARDS:

1. PROVIDE MANUFACTURERS PRODUCT DATA CUT SHEET SUBMITTALS FOR ENGINEERS AND ARCHITECTS APPROVAL FOR ALL NEW PANELBOARDS.
2. INTERIOR PANELBOARDS SHALL BE NEMA 1 RATED AND EXTERIOR PANELBOARDS SHALL BE NEMA-3R RATED U.O.N.
3. PROVIDE PANELBOARDS WITH HINGED FRONT COVER AND DIRECTORY CARD HOLDER.
4. PROVIDE NEW PRINTED PANEL SCHEDULE FOR ANY NEW OR MODIFIED PANELBOARD.
5. INCOMING MAINS LOCATION, TOP OR BOTTOM, SHALL BE DETERMINED BY CONTRACTOR BASED ON FIELD CONDITIONS.
6. ALL PANELBOARDS SHALL HAVE 100% RATED NEUTRAL BUS U.O.N.
7. ALL PANELBOARDS SHALL HAVE A PRINTED EQUIPMENT LABEL.
8. INSTALL PANELBOARDS WITH CLEARANCES BASED ON NEC REQUIREMENTS.
9. MOUNT PANELBOARD CABINET PLUMB AND RIGID WITHOUT DISTORTION OF BOX. MOUNT RECESSED PANELBOARDS WITH FRONTS UNIFORMLY FLUSH WITH WALL FINISH AND MATING WITH BACK BOX.
10. MOUNT TOP OF TRIM AT 90" ABOVE FINISHED FLOOR U.O.N.
11. INSTALL FILLER PLATES IN UNUSED SPACES.
12. PROVIDE EQUIPMENT FROM ONE OF THE FOLLOWING MANUFACTURERS:
 - 12.1. EATON
 - 12.2. SIEMENS
 - 12.3. SQUARE D
 - 12.4. GENERAL ELECTRIC



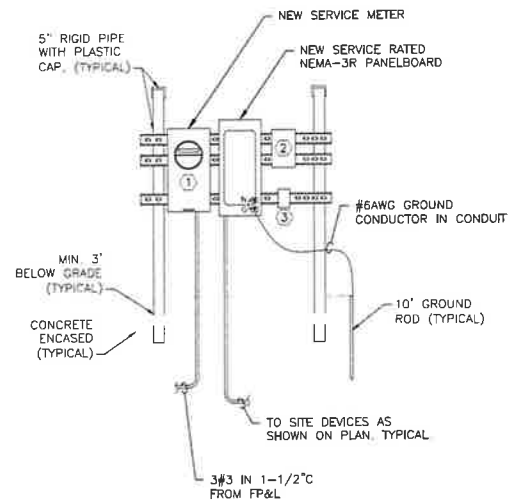
ILEX PARK
WEST ILEX DRIVE
8TH STREET
LAKE PARK, FL 33403

DRAWN: AK
CHECKED: RS
DATE: 11/28/2023

PROJECT#:

ELECTRICAL
SPECIFICATIONS

E5.00



GENERAL NOTES

1 CONTRACTOR SHALL PROVIDE PANELBOARD SCHEDULES

KEY NOTES

1 CONNECT NEW METER TO EXISTING SERVICE

2 NEW 7-DAY PROGRAMMABLE TIMER WITH LOCKABLE COVER FOR LIGHTING CIRCUIT

3 NEW GFCI RECEPTACLE WITH LOCKABLE WEATHERPROOF COVER

SERVICE METER & PANELBOARD

PANEL NAME	LOCATION	MOUNTING SURFACE	SUPPLIED FROM	VOLTAGE	BUS	MAIN
L1	OUTDOOR	SURFACE	FP&L	120/240V	100	100

CKT NO	LOAD DESCRIPTION	BUS A	BUS B	FEED CODE	TR	CB	TR	P	CODE	FEED	BUS A	BUS B	LOAD DESCRIPTION	CKT NO
1	OUTDOOR LIGHTS	500		2F01	L	1	20		R	2F01	360		OUTDOOR REC SPACE	2
3	IRRIGATION PUMP	1000		2F01	E	2	20						OUTDOOR REC SPACE	4
5	IRRIGATION CONTROL	500		2F01	E	1	20							6
7														8
9														10
11														12

LOAD DESCRIPTION	CONNECTED (KVA)	D.F.	DEMAND (KVA)	SUBFD LOADS (KVA)	CONNECTED PHA	VA
LIGHTING	0.5	1.00	0.5	0.5	PH A	1850
RECEPT EQUIPMENT	0.4	-	0.4	0.4	PH B	1500
TOTAL	3.4		2.7			

	L	E	R	S	TOTAL CONNECTED DEMAND	KVA	AMPS
	LIGHTING	EQUIPMENT	RECEPTACLE	SUBFD		3.4	14.0
						2.7	11.4

X	GROUND BUS	X	100% NEUTRAL BUS	ISC = 33 KAIC
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* DEMAND FACTOR FOR RECEPTACLES IS 100% UP TO 10KVA AND 50% FOR REMAINING LOADS PER NFPA70

BRANCH CIRCUIT SCHEDULE (LINEAR LOADS)

NOTES
 1 - USE THIS SCHEDULE FOR FEEDERS AND BRANCH CIRCUIT SIZING IF NOT SPECIFICALLY INDICATED ON DRAWINGS
 2 - 4-WIRE SYSTEM CONDUCTOR SIZES ARE BASED ON 90C INSULATION RATING
 3 - 3-WIRE SYSTEM CONDUCTOR SIZES ARE BASED ON 75C INSULATION RATING

OVERCURRENT DEVICE RATING (AMPS)	FEEDER CODE	WIRE & CONDUIT SIZE (2 WIRE SYSTEM)	FEEDER CODE	WIRE & CONDUIT SIZE (3-WIRE SYSTEM)	FEEDER CODE	WIRE & CONDUIT SIZE (4-WIRE SYSTEM)
15	2F01	2#12 & 1#12GND IN 3/4" C	3F01	3#12 & 1#12GND IN 3/4" C	4F01	4#12 & 1#12GND IN 3/4" C
20	2F01	2#12 & 1#12GND IN 3/4" C	3F01	3#12 & 1#12GND IN 3/4" C	4F01	4#12 & 1#12GND IN 3/4" C
25	2F02	2#10 & 1#10GND IN 3/4" C	3F02	3#10 & 1#10GND IN 3/4" C	4F02	4#10 & 1#10GND IN 3/4" C
30	2F02	2#10 & 1#10GND IN 3/4" C	3F02	3#10 & 1#10GND IN 3/4" C	4F02	4#10 & 1#10GND IN 3/4" C
35	2F03	2#8 & 1#10GND IN 3/4" C	3F03	3#8 & 1#10GND IN 3/4" C	4F03	4#8 & 1#10GND IN 3/4" C
40	2F03	2#8 & 1#10GND IN 3/4" C	3F03	3#8 & 1#10GND IN 3/4" C	4F03	4#8 & 1#10GND IN 3/4" C
45	2F03	2#8 & 1#10GND IN 3/4" C	3F03	3#8 & 1#10GND IN 3/4" C	4F03	4#8 & 1#10GND IN 3/4" C
50	2F03	2#8 & 1#10GND IN 3/4" C	3F03	3#8 & 1#10GND IN 3/4" C	4F03	4#8 & 1#10GND IN 3/4" C
60	2F04	2#6 & 1#10GND IN 3/4" C	3F04	3#6 & 1#10GND IN 3/4" C	4F04	4#6 & 1#10GND IN 1" C
70	2F05	2#4 & 1#8GND IN 1" C	3F05	3#4 & 1#8GND IN 1" C	4F05	4#4 & 1#8GND IN 1-1/2" C
80	2F05	2#4 & 1#8GND IN 1" C	3F05	3#4 & 1#8GND IN 1" C	4F05	4#4 & 1#8GND IN 1-1/2" C
90	2F06	2#3 & 1#8GND IN 1" C	3F06	3#3 & 1#8GND IN 1-1/2" C	4F06	4#3 & 1#8GND IN 1-1/2" C
100	2F06	2#3 & 1#8GND IN 1" C	3F06	3#3 & 1#8GND IN 1-1/2" C	4F06	4#3 & 1#8GND IN 1-1/2" C
110	2F07	2#2 & 1#8GND IN 1" C	3F07	3#2 & 1#8GND IN 1-1/2" C	4F07	4#2 & 1#8GND IN 1-1/2" C

LAKE PARK - ILEX PARK

LIGHTING FIXTURE SCHEDULE

DESIGNATION	PHOTO	MANUFACTURER	MODEL NUMBER	DESCRIPTION	LAMPS			VOLTS	MOUNTING	REMARKS
					COLOR	LUMENS	POWER			
A		RAB	BLED-18-N-K-STAND-120	LED BOLLARD	3000K	2225	18W	120-277	GROUND	
B		RAB	ALED 5T-78-Y-K	EXTERIOR POLE MOUNTED	3000K	3646	78W	120-277	GROUND	MOUNT ON 15' POLE PTR6-11-15WT

Bildworx Design
 300 SE 2ND STREET, STE 600
 FORT LAUDERDALE, FL 33301
 PHONE (954) 933-8246
 www.bildworx.com

Florida Registration 32813
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Digitally signed by Raji Sayegh
 Date: 2023-12-11 11:41:15

RAJI SAYEGH - FL PE#78700

ILEX PARK
 WEST ILEX DRIVE
 8TH STREET
 LAKE PARK, FL 33403

DRAWN: AK
 CHECKED: RS
 DATE: 11/28/2023

PROJECT#:
 ELECTRICAL RISER & SCHEDULES

E6.00