State of Florida
Department of Transportation

EXHIBIT "A", SCOPE OF WORK

F6003

DISTRICT SIX LAKESIDE GENERATOR INSTALLATION PROJECT

CONTRACT NUMBER: F6003
FINANCIAL PROJECT NUMBER: 446788-1-52-01

EXHIBIT “A”
SCOPE OF WORK

THE FLORIDA DEPARTMENT OF TRANSPORTATION, DISTRICT SIX, LAKESIDE BUILDING GENERATOR PROJECT

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EXHIBIT "A"
SCOPE OF WORK
THE FLORIDA DEPARTMENT OF TRANSPORTATION,
DISTRICT SIX LAKESIDE GENERATOR INSTALLATION PROJECT

1.0 Purpose:

1.1 The Florida Department of Transportation requires the services of an appropriately licensed and insured certified Electrical and/or General contractor to provide everything required for the installation of a 350KW Diesel Generator, located at the FDOT, District 6 Headquarters, Lakeside Building, 1000 NW 111th Avenue, Miami Florida 33172.

1.2 This turnkey project shall provide everything that is (or may be) required to safely and properly perform the services to the satisfaction of the Departments Project Manager or Designee, including but not limited to:

1.2.1 Installation of the new 350KW MTU Onsite Energy model – DS350D6SRA Generator Unit.

1.2.2 The Vendor awarded this turnkey project through the Invitation to Bid process shall provide to the Department, a complete, operational, and properly functioning standby power system that has been tested as required during and after installation, proven and documented to meet the manufacturers and the Department's specifications.

1.2.3 The completed system will consist of a completely integrated emergency diesel generator system to provide an alternate source of electrical power to the Lakeside Office Building and the D6 Data Center located in the Main Building electrical loads in the event of utility power outages such as weather related, accidental, or commanded outages. All generators set and related component accessories shall be sized to accommodate the entire building electrical loading.

1.2.4 This project includes, but is not limited to: The preparation, provision and handling of all required permitting and permits, inspections, signed / sealed engineering drawings / plans, as-built drawings / plans, supervision, labor, materials, ancillary components, fuel tanks, concrete mounting pad, fuel, service entrance rated automatic transfer switch, automatic transfer switches and protected / vandal resistant housing structures, wiring, installation, start up commissioning , testing etc., any and all related systems and required building structures, providing and installation of outdoor rated enclosed, while providing safe full operator / technician access to the equipment as needed for servicing and operations, all freight & freight expediting, supplies, equipment,

mobilization, set up, all testing, construction site safety, maintenance, cleanup, site restoration / any repairs to damages resulting from this project, and anything else required to complete the project to the Departments satisfaction at the Department's Lakeside Office Building located at 1000 NW 111th Ave. Miami Fl. 33172.

2.0 Definitions:

2.1 **F.D.O.T**: The Florida Department of Transportation, hereafter known as the Department.

2.2 **Contractor**: The firm retained by the Department to provide all equipment, labor, installation and services as described within this Scope of Services.

2.3 **Contract Manager:** The Contractor's assigned representative to coordinate all activities associated with this Scope of Services.

2.4 **Project Manager:** The Departments representative responsible for enforcing the Contractors performs in accordance with the contract terms and conditions and serving as liaison between the Department and Contractor.

2.5 **Contractor – Normal Working Hours:** Unless otherwise specifically authorized in advance by the Department in writing, all contractor services shall occur as indicated below:

2.5.1 The project work shall not interfere with the Department's normal operations. **Exceptions to this will require pre-approval by the Department Project Manager or designee**. Proposed Contractor work schedules (and any subsequent proposed schedule change requests) by the Contractor shall be submitted in advance for pre-approval by the **Department Project Manager or designee**.

2.5.2 For this Scope of Work, the Department's current normal working hours are from 7:30 AM to 5:00 PM, Monday through Friday, except for nine State Holidays, declared state of emergency and days of state or national mourning etc.

2.5.3 While it is expected that the majority of this work will occur during regular day hours, night and/or weekend / Holiday work hours may be required to perform and/or complete certain portions of the project.

2.6 **Sub-Contractor(s):** Any sub-contractors that are, or may be utilized, by the Contractor during the course of this contract, which includes any modifications / changes, renewals and/or extensions thereto. Unless otherwise previously

agreed to in writing by the Department, all Sub-Contractor(s) shall be required to meet the requirements of EXHIBIT "A", SCOPE OF WORK, MINIMUM QUALIFICATIONS, and any other contract documentation.

2.7 **"I. T. B."** shall refer to: THE FLORIDA DEPARTMENT OF TRANSPORTATION LAKESIDE BUILDING GENERATOR INSTALLATION PROJECT", "Invitation To Bid process" itself, and to the derived document package, and shall include all other related contract documents, exhibits, attachments etc.

2.8 **"Exhibit "A" or Exh. "A" shall refer to:** This document, titled "EXHIBIT "A", SCOPE OF WORK, THE FLORIDA DEPARTMENT OF TRANSPORTATION, DISTRICT 6, LAKESIDE BUILDING GENERATOR INSTALLATION PROJECT" in its entirety, ***AND to any attachments.***

2.9 **"Exhibit "B" or Exh. "B" shall refer to:** "EXHIBIT "B", METHOD OF COMPENSATION, THE FLORIDA DEPARTMENT OF TRANSPORTATION, DISTRICT 6, LAKESIDE BUILDING GENERATOR INSTALLATION PROJECT" in its entirety.

2.10 **"Exhibit "C" or Exh. "C" shall refer to:** "EXHIBIT "C", PRICE PROPOSAL, THE FLORIDA DEPARTMENT OF TRANSPORTATION, DISTRICT 6, LAKESIDE BUILDING GENERATOR INSTALLATION PROJECT" in its entirety.

3.0 Project Approach:

3.1 Unless otherwise specifically approved in writing by the Department, the awarded Contractor will be responsible for the following: CONTRACTOR NOTE: When preparing its response to the proposal and project approach documents as requested here and elsewhere in the I.T.B. package, the Proposer shall detail how it intends to address the concerns indicated.

3.2 ALL engineering, permitting and fees / fines etc., ordering / handling / storage / transportation / material and equipment freight expedition and delivery, receiving of materials etc., / demolition and debris removal handling, cleaning, proper transportation, and disposal thereof / set up and layout, installation / cutting / setting / replacement of all materials / final project clean up to the satisfaction of the Department.

3.3 Working harmoniously with the Department and any other contractors / vendors / that may be involved with this project.

3.4 Contractor shall utilize, and maintain odor, noise, material storage, dust, and debris control methods in a manner acceptable to, and in compliance with the Department's safety and security procedures.

3.5 The specifications, materials, and installation method should adhere to all applicable Codes, Standards, and project documents.

4.0 Contractors Minimum Qualifications:

4.1 Certification / Registration.

4.1.1 The Contractor shall hold (and maintain) a valid and current license as an Electrical and/or General contractor in accordance with the laws of the State of Florida and any other authorities having jurisdiction as appropriate and required for this project, authorizing the Contractor to perform the specified work.

4.2 The Contractor and installing Technicians shall have provided similar type services and installation of the same products and as outlined within these contract documents.

4.3 Have been actively involved in providing Commercial generator installation and related services for a minimum of 3 continuous years will be considered for this project. All certifications must be submitted with the Contractors bid package. The Contractor shall adhere to all Federal, State, Local Codes and Generator industry standards.

4.3.1 The Contractor shall only use qualified, certified, and experienced installing technicians for the same type of equipment, systems, and installation as being requested for this project.

4.3.2 Installation technicians shall be factory trained on all proposed equipment and installation methods with a minimum of three (3) years' experience in the installation of all proposed equipment.

4.3.3 Must have worked on similar projects of similar project size or larger (The Contractor shall provide a list of projects and contact information of similar project locations)

4.3.4 Must have appropriate license, certification, and registrations, to inspect, install, service and warranty all proposed system equipment.

4.4 **Note:** Whenever a conflict arises in codes and/or standards the Contractor shall apply the most stringent code and/or standard as applicable to the type of systems application/installation. Whenever such a conflict exists the Contractor shall immediately notify the Department in writing of the conflict and the contractor's proposed resolution prior to finalizing any decisions.

4.5 Submittals to be Included with Bid:

4.5.1 Contractor References: Contractor to Submit evidence that this firm has a minimum of five (5) years' experience in successfully completing projects of equal scope and magnitude as herein specified. This evidence shall consist of a list of three (3) projects that have been completed and operational for the last five (5) years. *For each facility above, list the name, location and date of installation; Owner's representative to contact and telephone number.*

4.5.2 Contractor Licenses and Certifications: Provide current copies of all relevant Licenses and Certifications.

4.5.3 For the substitution, a complete product specification sheets of the same format in Attachment 1 "Schematic and Equipment specifications / Plans" from E-1 through E-6 for comparison purposes.

4.5.4 Failure to fully comply with the Bid Submittal requirements detailed above shall grounds for Bid disqualifications.

5.0 Site Conditions:

5.1 It shall be and remain the Proposer's responsibility to properly and completely field verify the full entire scope of work, all existing / anticipated site conditions, all required additional equipment and efforts necessary to provide all services as required herein. This includes but not limited to the determination of an accurate site layout, all actual site conditions, the full extent of all work to be performed, and the conditions surrounding the performance, thereof.

5.2 The failure or neglect of the Contractor to familiarize themselves with this project, the existing equipment, operating systems, hardware / software / firmware etc., wiring, infrastructure and operating conditions shall in no way relieve the Contractor from any obligations with respect to completing all work in a safe, proper, and timely as outlined within this Scope of Services.

5.2.1 NOTE: *There will be certain additional information provided only to those properly qualified contractors attending the mandatory pre-bid / site review meeting.*

6.0 Proposed 350KW Diesel Generator:

6.1 Please see Attachment 1 "Site plan, System Riser, Equipment Plans and General Specs" E-1 through E-6 for details and requirements.

6.1.1 The Contractor shall provide all the required services, including, but not limited, to the following:

6.1.1.1 All electrical work to disconnect and re-installation of all conduits, electrical and control wiring.

6.1.1.2 Electrical feed and Service entrance.

6.1.1.3 Provide crane and labor services for hoisting and rigging.

6.1.1.4 Legal and proper disposal of the old equipment.

6.1.1.5 The Contractor shall set up and tie-in the new remote annunciator unit. This includes all application engineering, set up, installation and programming.

6.1.1.6 All necessary power supplies as required by the suggested manufacturing equipment specifications.

6.1.1.7 Provide all necessary protection to prevent damage around the working area including but not limited to parking lot area etc.

7.0 Substitutions:

7.1 Throughout the specifications, Product Data is specified in Attachment 1 as a minimum specification in order to establish standards of quality and performance. If the bidder elects to substitute, he may provide any product that meets or exceeds the applicable specifications. The Contractor shall demonstrate comparability, including appropriate catalog materials, literature, and specifications.

NOTE: ***Grounds for rejection shall exist if in the opinion of the FDOT, the information submitted is inaccurate or does not satisfy the minimum qualification requirements.***

8.0 System Warranties:

8.1 Upon project completion the Contractor shall provide, to the Department, the Project Closed out document indicating and certifying, in writing, all optional items, components, standard features are all included, properly installed and in place and fully operational, programming of system and components have been properly installed according to the manufacture recommendation.

8.2 The Contractor shall provide a full one (1) year warranty to include all parts and labor effective from the date of final Department acceptance of the Generator Unit.

8.3 The warranty shall include service response for all service calls by phone and on-site service provided by Technicians with full experience servicing these specific models of equipment. A service technician shall return all service calls within two (2) hours and four (4) hour response on-site as needed to ensure the unit is functional.

8.4 All required labor, parts and or repairs of defective or damaged components shall be repaired or replaced with only new parts of the same make and model as necessary to ensure a fully functional and operating Generator unit at no additional cost.

9.0 System Commissioning and Staff Training:

9.1 All commissioning of equipment to be conducted by a product factory trained Technician.

9.1.1 At system start-up, the Contractor shall provide a factory trained Technician to perform system checkout of all components, input required data and place the system in operation.

9.1.2 The Contractor shall also be responsible for checking subsystem functionality and verifying proper operation of all hardware and software.

9.1.3 Testing shall be witnessed and monitored for acceptance by a Department representative as part of the commissioning operations.

9.2 The Contractor shall provide a minimum of four hours of training on the equipment operations for the Facilities Services Staff. Training scheduling shall be coordinated with and approved by Facilities Services prior to the training.

9.2.1 Two (2) complete sets of maintenance and parts manuals shall be delivered to the Department prior to training and final project acceptance

10.0 Working Hours/Schedule:

10.1 Unless otherwise approved in advance and in writing by the Department, all work involving system shutdown shall be performed after normal working hours starting at Friday 5:00 P.M to Monday 6:00 A.M. after the weekend.

10.1.1 If the Contractor chooses to perform the work during normal working hours, an alternate source of power system approved by the Department Project Manager shall be in place to avoid workplace downtime.

10.2 Upon awarding of this contract the Contractor shall provide to the Department's Project Manager a project work schedule which shall include the following information:

10.2.1 Provide a complete list of all proposed employees who are expected to work on this project along with their work experience and other related qualifications and project responsibility.

10.2.2 All work schedules shall include project start and end dates & identify all tasks and time frames, assignments, and personnel responsible for carrying out all work.

11.0 Safety/Work Area Clean up:

11.1 Staging area and parking shall not create any safety hazards / issues or impede automobile traffic to/from and/or around the facility.

11.2 The contractor shall be responsible for all repairs and/or replacement of damaged walls, etc. that are a result of this project, and shall carefully inspect and clean the entire workspace to ensure that debris is not left.

11.3 All new wall or floor penetrations required will be properly repaired and sealed, including the replacement of any existing sealant removed from walls, floor penetrations as necessary to run new pipes and wire.

11.4 All exposed wiring within the cabinets, consoles, and terminals shall be formed neatly with wires grouped in bundles using non-metallic, flame-resistant wiring cleats or wire ties.

11.5 The Contractor and assigned workers to this project shall only be permitted to work in areas identified as work areas, anyone outside of these areas shall be asked to leave the property, and this shall be strictly enforced throughout the term of this contract.

11.6 The Contractor shall immediately notify the Department's Project Manager, of any problems along with possible solutions and any increase to the project cost. Only upon written approval by the Department's Project Manager shall any changes be made to the scope of work, equipment materials used and installation of same.

12.0 Loss and Damages:

12.1 The Contractor agrees to make a claim(s) settlement offer, on all damage claim(s) within twenty (20) working days after submission of appropriate claims form(s), including a complete inspection report at which time the Department shall provide a repair cost estimate. Failure to meet these requirements shall result in payment of **$500** per day, per claim settlement, paid by the Contractor to the Department for each day past the (20) working day period, this shall include any sub-contractors utilized to provide services under this agreement.

12.2 The Contractor shall notify the Department's Project Manager at the time of any incident, accident or damage to persons, vehicles, or property, incurred prior to or during the Contractor performing services.

12.3 The Contractor shall provide a written narrative report describing what, when, where and how any of the above occurred, and what actions were taken immediately afterwards, a copy of this report shall be given to the Departments Project Manager, the Department shall proceed with all appropriate actions with regards to insurance & procedures.

12.4 The Contractor shall be responsible for all repairs or replacement of any damaged areas, infrastructure, structures, systems and / or any other items damaged in any manner by the Contractor, their employees and / or any other sub-contractors and / or other agents that it causes to be utilized to perform any portion(s) of this Contract. All repairs or replacements shall be accomplished utilizing qualified craftsmen with experience within the trade(s) necessary to complete the type of work required. All repairs shall be subject to the Departments inspection and approval.

12.5 The Contractor shall be responsible for the security of all tools and material supplied and used on this project at all times. The Contractor shall bear sole responsibility as to the result of any accidents involving State- or privately-owned property including but not limited to all office equipment and structure of the facility while providing services.

12.6 The Department shall not be held responsible for any loss or stolen equipment, or materials provided by the Contractor, to perform services as described within the Scope of Services. The Contractor shall replace and/or repair, as required

by the Department, any item(s), damaged, or destroyed while providing services as a result of an accident, neglect or willfulness act. The Department shall make the determination whether an item is repairable or must be replaced. All repairs shall be approved by the Department's Project Manager. The Department reserves the right to reject any proposed vendor that the Contractor recommends to perform repairs or replacements.

12.7 Upon rejection the Contractor shall submit a list of three (3) additional vendors qualified to perform repairs or replacement as identified above. The Department shall select, at its discretion, a qualified vendor, from the submission of the Contractor, to provide the necessary services, if the Department feels the submitted vendors list are not qualified to perform the type of work required, the Department shall provide to the Contractor a list of acceptable vendors to select from.

13.0 Department Responsibilities

The Department shall provide to the Contractor full access to the project site as well as other areas that are necessary for the Contractor to successfully perform all services as required by the terms and conditions of this contract. The Department shall make available to the Contractor any available necessary information to perform all work as outlined within the Scope of Services i.e. floor plans, electrical plans and other specifications as needed.

>> END OF EXHIBIT "A" SCOPE OF WORK <<
THE FLORIDA DEPARTMENT OF TRANSPORTATION
DISTRICT SIX, LAKESIDE GENERATOR INSTALLATION PROJECT

State of Florida
Department of Transportation

ATTACHMENT “1” E-1 TO E-6 PLANS of EXHIBIT "A"

CONTRACT #: F6003

DISTRICT SIX LAKESIDE GENERATOR INSTALLATION PROJECT

CONTRACT NUMBER: F6003
FINANCIAL PROJECT NUMBER: 446788-1-52-01

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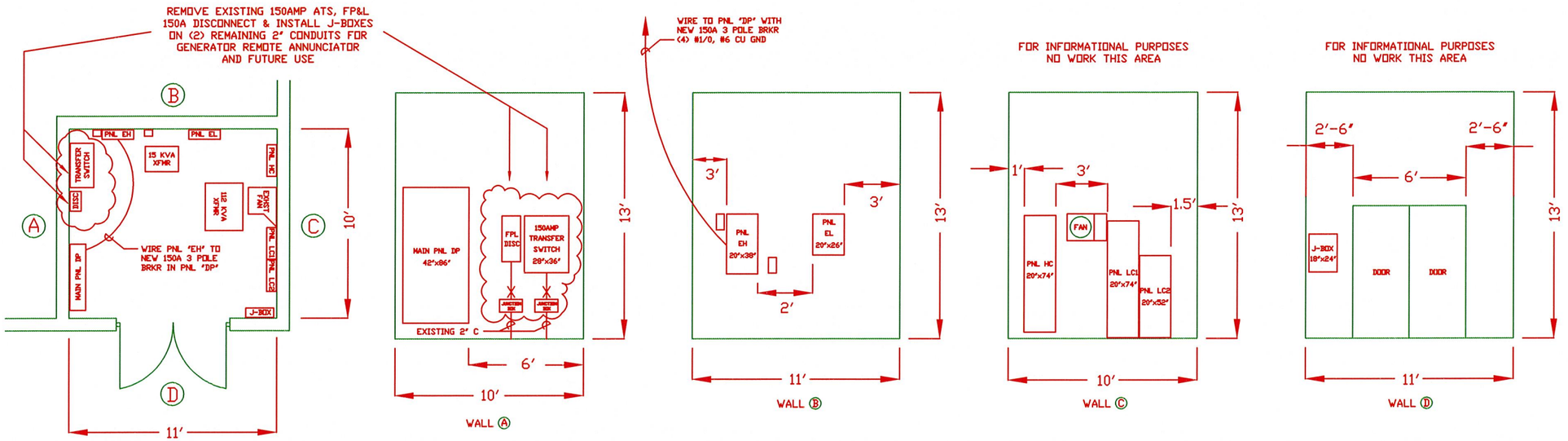
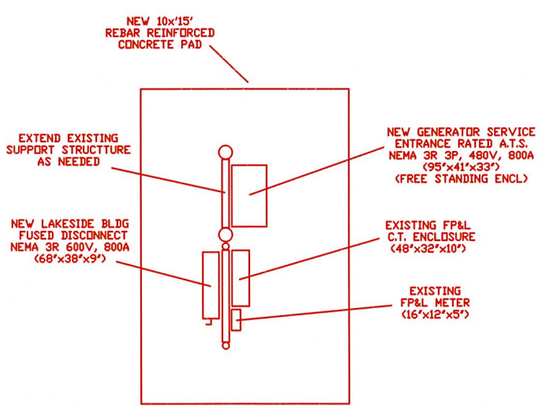


LAKESIDE BLDG MAIN ELECTRICAL RM PLANS

0 1' 2' 4' 6'

GRAPHIC SCALE IN FEET

NOTE:
REFER TO DWG E-3 FOR CONDUIT AND CONDUCTOR SIZES



NEW LAKESIDE BUILDING
A.T.S. & BLDG MAIN DISCONNECT

SCALE AS SHOWN

ENGINEER INFORMATION	
NAME :	SAUL SMUKLER
ADDRESS :	9375 Park Drive, Suite #1
PHONE NUMBER :	(305) 759-5552
STATE REG. NUMBER :	44148
DISCIPLINE :	ELECTRICAL
CONSULTANTS :	NONE

OWNER INFORMATION	
NAME :	Florida Department of Transportation
ADDRESS :	1000 NW 111 Ave, Miami, FL 33172
PHONE NUMBER :	(305) 470-5455 Mr. Ruel Umbay

SEAL

REVISIONS	DATE

MIAMI MICROTRONIX INCORPORATED
9375 Park Drive, Suite #1
Miami Shores, Florida 33138
(305) 759-5552

STATE OF FL, DEPT OF TRANSPORTATION
DISTRICT SIX HEADQUARTERS
1000 NW 111 AVENUE
MIAMI, FLORIDA 33172

LAKESIDE BLDG NEW GENERATOR PROJECT
LAKESIDE BLDG PARTIAL PLANS

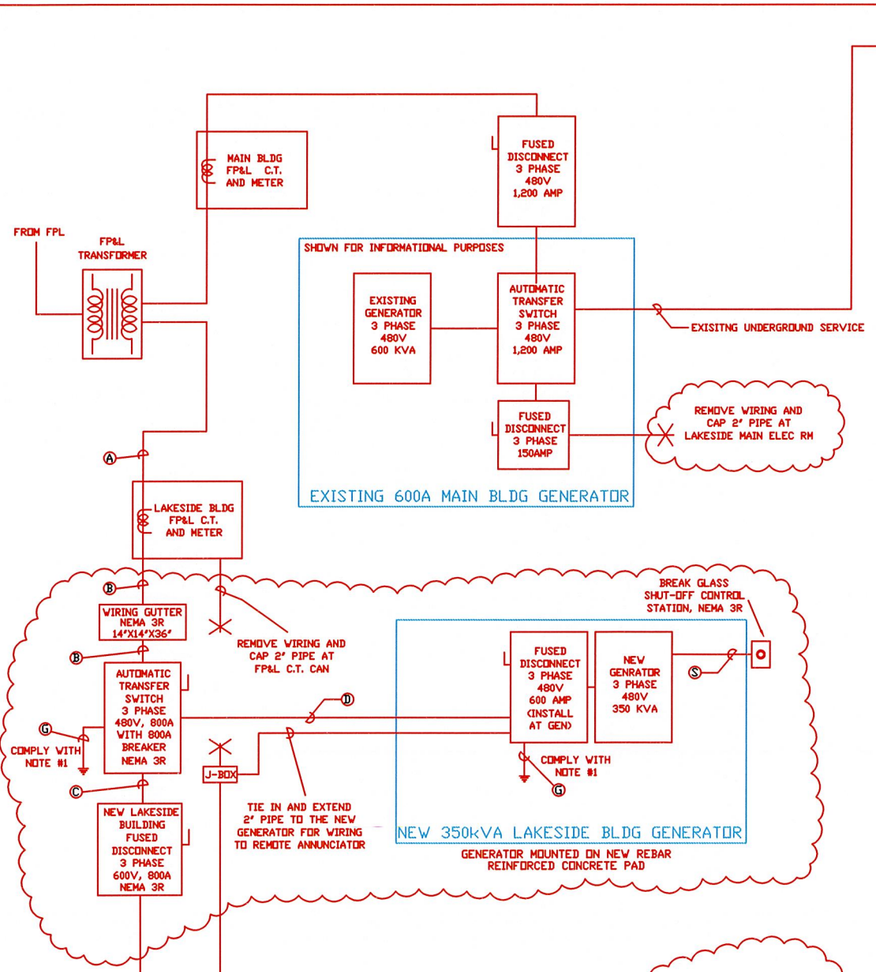
DATE:	PROJECT MANAGER:
7/28/2021	-
DRAWN BY:	PROJECT ENGINEER:
SMUKLER	-

PROJECT NUMBER:
446788-1-52-01

DRAWING NO.:
E-2

PARTIAL ELECTRICAL POWER RISER

N.T.S.



WIRE/CONDUIT LEGEND

SYMBL	Existing New or ref	CONDUIT SIZE	CONDUCTORS PHASE	NEUTRAL	GND	
(A)	Existing	2-4"	3-600MCM,EA	600MCM		
(B)	New	2-4"	3-600MCM,EA	600MCM		
(C)	New	2-4"	3-600MCM,EA	600MCM	1/0	
(D)	New	2-3"	3-350MCM,EA	350MCM	#1	
(E)	Existing	2"	SHOWN ONLY	FOR INFO	NO WORK	
(F)	Reuse	1-1/4"				
(G)	New	1"			3/0	
(H)	Existing	3"	3-350MCM	350MCM	#4	
(I)	Existing	2"	3-1/0	1/0	#6	
(J)	New	2"	3-1/0	1/0	#6	
(K)	New	2"	3-#2	#2	#6	
(L)	New	1"	3-#3		#8	
(M)	New	1-1/4"	3-#2	#2	#8	
(N)	New	1-1/2"	3-#2	#2	#8	
(P)	Existing	2"	3-#1	#1	#8	
(R)	Existing	1-1/2"	3-#2	#2	#8	
(S)	New	3/4"	GENERATOR	ANNUN	T.B.B.	
(T)	Existing		SHOWN ONLY	FOR INFO	NO WORK	
(U)	New	3/4"			#8	

NOTES:

1. CU GROUNDING ELECTRODE CONDUCTOR, 5/8"x8' GROUND ROD AND NEW REBAR IN (3) CONCRETE PADS.
2. GENERALLY ALL NEW WORK IS SHOWN CLOUDED.

ENGINEER INFORMATION

NAME :	SAUL SMUKLER
ADDRESS :	9375 Park Drive, Suite #1
PHONE NUMBER :	(305) 759-5552
STATE REG. NUMBER :	44148
DISCIPLINE :	ELECTRICAL
CONSULTANTS :	NONE

OWNER INFORMATION

NAME :	Florida Department of Transportation
ADDRESS :	1000 NW 111 Ave, Miami, FL 33172
PHONE NUMBER :	(305) 470-5455 Mr. Ruel Umbay

SEAL

DATE	REVISIONS
	1
	2
	3
	4
	5
	6

MIAMI MICROTRONIX INCORPORATED
9375 Park Drive, Suite #1
Miami Shores, Florida 33138
(305) 759-5552

STATE OF FL, DEPT OF TRANSPORTATION
DISTRICT SIX HEADQUARTERS
1000 NW 111 AVENUE
MIAMI, FLORIDA 33172

LAKESIDE BLDG NEW GENERATOR PROJECT
PARTIAL ELECTRICAL RISER DIAGRAM

DATE:	PROJECT MANAGER:
7/28/2021	–
DRAWN BY:	PROJECT ENGINEER:
SMUKLER	–
PROJECT NUMBER:	
446788-1-52-01	

DRAWING NO.: E-3

SHOWN FOR INFORMATIONAL PURPOSES

LOCATION: LAKESIDE BLDG - MAIN ELECT RM — PANEL 'DP'
EXISTING ☐ NEW — BUS: 800 AMPS
MAINS: ☐ M.L.O. ■ BREAKER: 800 AMP — 277/480 VOLTS 3 PHASE 4 WIRE

LOAD KVA	COND.	WIRE	TRIP	POLE	TYPE	LOAD DESCRIPTION	POS
–	–	–	–	3		SPACE	1
						SPACE	
						SPACE	
7	2"	#2	100	3		NEW FEED TO MAIN BLDG DATA CENTER	2
7							
7							
22	2"	1/0	150	3		NEW FEED TO PNL "EH"	3
22							
22							
8.3	2"	1/0	150	3		PANEL HA (ELECT RM 6149)	10
8.3							11
8.3							12
7.8	2"	1/0	150	3		PANEL HB (ELECT RM 6244)	13
7.8							14
7.8							15
15.4	3"	250MCM	300	3		PANEL HC (MAIN ELECT RM)	16
15.4							17
15.4							18
23	3"	250MCM	300	3		A/C CHILLER (OUTSIDE BLDG)	19
23							20
23							21

NOTE: POS EQUALS A 3 POLE BREAKER IN THIS DISTRIBUTION PANEL

MOUNTING: ■ SURFACE ☐ FLUSH ☐ FREE STANDING
ENCLOSURE: ■ NEMA 1 ☐ NEMA 3R ☐ NEMA 4X

CIRCUIT TYPE: (T) SHUNT TRIP (G) GROUND FAULT (D) DEDICATED (I) ISOLATED GRD.

FEEDER SIZE: SEE RISER
TOTAL MEASURED LOAD = 300 AMPS — ESTIMATED DEMAND LOAD = 285 KVA

INSTALL NEW 3P, 100A BREAKER FOR FUTURE MAIN BLDG DATA CNTR SECONDARY BACKUP

INSTALL NEW 3P, 150A BREAKER FOR EXISTING PANEL EH IN MAIN ELEC RM

SHOWN FOR INFORMATIONAL PURPOSES

LOCATION: LAKESIDE BLDG - MAIN ELECTRICAL ROOM — PANEL 'HC'
■ EXISTING ☐ NEW — BUS: 400 AMPS
MAINS: ■ M.L.O. ☐ BREAKER: — 277/480 VOLTS 3 PHASE 4 WIRE

LOAD	COND.	WIRE	TRIP	POLE	TYPE	LOAD DESCRIPTION	CKT	CKT	LOAD DESCRIPTION	TYPE	POLE	TRIP	WIRE	COND.	LOAD
4500	3/4"	#10	30	3		CHVP - PUMP #1	1	2	CHVP - PUMP #2		3	30	#10	3/4"	4500
4500							3	4							4500
4500							5	6							4500
3000	3/4"	#12	15	3		AHU #2	7	8	AHU #3		3	30	#10	3/4"	3000
3000							9	10							3000
3000							11	12							3000
–	–	–	15	3		SPARE	13	14	KEF FAN #1		3	15	#12	3/4"	3000
							15	16							3000
							17	18							3000
1200	3/4"	#12	20	1		LIGHTING	19	20	FVAV FAN #3-1		1	20	#12	3/4"	500
1200	3/4"	#12	20	1		LIGHTING	21	22	FVAV FAN #3-2		1	20	#12	3/4"	500
1200	3/4"	#12	20	1		LIGHTING	23	24	FVAV FAN #3-3		1	20	#12	3/4"	500
–	–	–	20	1		SPARE	25	26	FVAV FAN #3-4		1	20	#12	3/4"	500
–	–	–	20	1		SPARE	27	28	FVAV FAN #3-5		1	20	#12	3/4"	500
–	–	–	20	1		SPARE	29	30	SPACE						
–	–	–	20	1		SPARE	31	32	SPACE						
–	–	–	20	1		SPARE	33	34	SPACE						
						SPACE	35	36	SPACE						

112.5KVA	2"	2/0	175	3		112.5 KV TRANSFORMER #3

MOUNTING: ■ SURFACE ☐ FLUSH ☐ FREE STANDING
ENCLOSURE: ■ NEMA 1 ☐ NEMA 3R ☐ NEMA 4X

CIRCUIT TYPE: (T) SHUNT TRIP (G) GROUND FAULT (D) DEDICATED (I) ISOLATED GRD.

FEEDER SIZE: SEE RISER — FED FROM: PNL DP
TOTAL MEASURED LOAD = 461 AMPS — ESTIMATED DEMAND LOAD = 200 KVA

SHOWN FOR INFORMATIONAL PURPOSES

LOCATION: LAKESIDE BLDG - MAIN ELECTRICAL ROOM — PANEL 'LC1'
■ EXISTING ☐ NEW — BUS: 400 AMPS
MAINS: ☐ M.L.O. ■ BREAKER: 400 AMP — 120/208 VOLTS 3 PHASE 4 WIRE

LOAD	COND.	WIRE	TRIP	POLE	TYPE	LOAD DESCRIPTION	CKT	CKT	LOAD DESCRIPTION	TYPE	POLE	TRIP	WIRE	COND.	LOAD
1000	3/4"	#12	20	1		RECEPTACLES	1	2	CUBICLE RECEPTACLES		1	20	#12	3/4"	1000
1000	3/4"	#12	20	1		RECEPTACLES	3	4	CUBICLE RECEPTACLES		1	20	#12	3/4"	1000
1000	3/4"	#12	20	1		RECEPTACLES	5	6	CUBICLE RECEPTACLES		1	20	#12	3/4"	1000
1000	3/4"	#12	20	1		RECEPTACLES	7	8	CUBICLE RECEPTACLES		1	20	#12	3/4"	1000
1000	3/4"	#12	20	1		RECEPTACLES	9	10	CUBICLE RECEPTACLES		1	20	#12	3/4"	1000
1000	3/4"	#12	20	1		RECEPTACLES	11	12	CUBICLE RECEPTACLES		1	20	#12	3/4"	1000
4000	1"	#6	40	3		WATER HEATER	13	14	VENDING MACH RECEPTACLE		1	20	#12	3/4"	1200
4000							15	16	VENDING MACH RECEPTACLE		1	20	#12	3/4"	1200
4000							17	18	VENDING MACH RECEPTACLE		1	20	#12	3/4"	1200
600	3/4"	#12	20	1		WATER COOLER	19	20	VENDING MACH RECEPTACLE		1	20	#12	3/4"	1200
1000	3/4"	#12	20	1		RECEPTACLES	21	22	VENDING MACH RECEPTACLE		1	20	#12	3/4"	1200
1000	3/4"	#12	20	1		EXHAUST FAN VEF 81	23	24	VENDING MACH RECEPTACLE		1	20	#12	3/4"	1200
1200	3/4"	#12	20	1		ICE MAKER	25	26	VENDING MACH RECEPTACLE		1	20	#12	3/4"	1200
1500	3/4"	#12	20	1		FREEZER	27	28	MICROWAVE		1	20	#12	3/4"	1200
1500	3/4"	#12	20	1		FREEZER	29	30	ICE MAKER MACHINE		1	20	#12	3/4"	1200
1000	3/4"	#12	20	1		RECEPTACLES	31	32	HOOD LIGHTS		1	20	#12	3/4"	600
1000	3/4"	#10	30	1		RECEPTACLES	33	34	REFRIGERATOR		1	20	#12	3/4"	1200
1000	3/4"	#12	20	1		RECEPTACLES	35	36	DOUBLE OVEN RECEPT		2	50	#6	1"	4000
1000	3/4"	#12	20	1		RECEPTACLES	37	38							4000
1000	3/4"	#10	30	1		RECEPTACLES	39	40	SPARE		1	20	–	–	–
1000	3/4"	#12	20	1		RECEPTACLES	41	42	SPARE		1	20	–	–	–

MOUNTING: ■ SURFACE ☐ FLUSH ☐ FREE STANDING
ENCLOSURE: ■ NEMA 1 ☐ NEMA 3R ☐ NEMA 4X

CIRCUIT TYPE: (T) SHUNT TRIP (G) GROUND FAULT (D) DEDICATED (I) ISOLATED GRD.

FEEDER SIZE: SEE RISER
TOTAL CONNECTED LOAD = 257.3 AMPS — ESTIMATED DEMAND LOAD = 97.5 KVA

SHOWN FOR INFORMATIONAL PURPOSES

LOCATION: LAKESIDE BLDG - MAIN ELECTRICAL ROOM — PANEL 'LC2'
■ EXISTING ☐ NEW — BUS: 400 AMPS
MAINS: ■ M.L.O. ☐ BREAKER: — 120/208 VOLTS 3 PHASE 4 WIRE

LOAD	COND.	WIRE	TRIP	POLE	TYPE	LOAD DESCRIPTION	CKT	CKT	LOAD DESCRIPTION	TYPE	POLE	TRIP	WIRE	COND.	LOAD
600	3/4"	#12	20	1		CONVEY FAN #3	1	2	ICEMAKER		1	20	#12	3/4"	1500
1000	3/4"	#12	20	1		RECEPTACLES	3	4	RANGE / OVEN		2	50	#6	1-1/4"	4000
1000	3/4"	#12	20	1		LIGHTING	5	6							4000
1000	3/4"	#12	20	1		LIGHTING	7	8	OUTSIDE LIGHTING		1	20	#12	3/4"	1000
1000	3/4"	#12	20	1		RECEPTACLES	9	10	RECEPTACLES		1	20	#12	3/4"	1000
1000	3/4"	#12	20	1		RECEPTACLES	11	12	RECEPTACLES		1	20	#12	3/4"	1000
1000	3/4"	#12	20	1		RECEPTACLES	13	14	RECEPTACLES		1	20	#12	3/4"	1000
1000	3/4"	#12	20	1		RECEPTACLES	15	16	GRILLE		1	20	#12	3/4"	1500
1500	3/4"	#12	20	1		KITCHEN RECEPTACLES	17	18	FREEZER EVAPORATOR		2	20	#12	3/4"	1200
1500	3/4"	#12	20	1		FREEZER	19	20							1200
1500	3/4"	#12	20	1		COOLER	21	22	SUPPLY FAN		1	20	#12	3/4"	600
1200	3/4"	#12	20	2		FREEZER EVAPORATOR	23	24	SPARE		1	20	–	–	–
1200							25	26	RESTROOM RECEPTACLES		1	20	#12	3/4"	1000
1200	3/4"	#12	20	2		FREEZER CONDENSER	27	28	RECEPTACLES		1	20	#12	3/4"	1000
1200							29	30	REFRIGERATOR		1	20	#12	3/4"	1000

MOUNTING: ■ SURFACE ☐ FLUSH ☐ FREE STANDING
ENCLOSURE: ■ NEMA 1 ☐ NEMA 3R ☐ NEMA 4X

CIRCUIT TYPE: (T) SHUNT TRIP (G) GROUND FAULT (D) DEDICATED (I) ISOLATED GRD.

FEEDER SIZE: SEE RISER
TOTAL CONNECTED LOAD = 105.3 AMPS — ESTIMATED DEMAND LOAD = 85 KVA

SHOWN FOR INFORMATIONAL PURPOSES

LOCATION: LAKESIDE BLDG - MAIN ELECTRICAL ROOM — PANEL 'EH'
■ EXISTING ☐ NEW — BUS: 100 AMPS
MAINS: ■ M.L.O. ☐ BREAKER: — 277/480 VOLTS 3 PHASE 4 WIRE

LOAD	COND.	WIRE	TRIP	POLE	TYPE	LOAD DESCRIPTION	CKT	CKT	LOAD DESCRIPTION	TYPE	POLE	TRIP	WIRE	COND.	LOAD
1200	3/4"	#12	20	1		GENERAL LIGHTING	1	2	GENERAL LIGHTING		1	20	#12	3/4"	1200
1200	3/4"	#12	20	1		GENERAL LIGHTING	3	4	GENERAL LIGHTING		1	20	#12	3/4"	1200
1200	3/4"	#12	20	1		GENERAL LIGHTING	5	6	GENERAL LIGHTING		1	20	#12	3/4"	1200
1200	3/4"	#12	20	1		GENERAL LIGHTING	7	8	GENERAL LIGHTING		1	20	#12	3/4"	1200
1200	3/4"	#12	20	1		GENERAL LIGHTING	9	10	SPARE		1	20	–	–	–
–	–	–	20	1		SPARE	11	12	SPARE		1	20	–	–	–
12,200	1"	#4	60	3		ELEVATOR	13	14	15KV TRANSFORMER #4		3	30	#10	(-1/4"	15,000
12,200	–	–					15	16						–	15,000
12,200	–	–					17	18						–	15,000
						SPACE	19	20	SPACE						
						SPACE	21	22	SPACE						
						SPACE	23	24	SPACE						
						SPACE	25	26	SPACE						
						SPACE	27	28	SPACE						
						SPACE	29	30	SPACE						

MOUNTING: ■ SURFACE ☐ FLUSH ☐ FREE STANDING
ENCLOSURE: ■ NEMA 1 ☐ NEMA 3R ☐ NEMA 4X

CIRCUIT TYPE: (T) SHUNT TRIP (G) GROUND FAULT (D) DEDICATED (I) ISOLATED GRD.

FEEDER SIZE: SEE RISER
TOTAL MEASURED LOAD = 35 AMPS — ESTIMATED DEMAND LOAD = 66 KVA

SHOWN FOR INFORMATIONAL PURPOSES

LOCATION: LAKESIDE BLDG - MAIN ELECTRICAL ROOM — PANEL 'EL'
■ EXISTING ☐ NEW — BUS: 60 AMPS
MAINS: ☐ M.L.O. ■ BREAKER: 60 AMP — 120/208 VOLTS 3 PHASE 4 WIRE

LOAD	COND.	WIRE	TRIP	POLE	TYPE	LOAD DESCRIPTION	CKT	CKT	LOAD DESCRIPTION	TYPE	POLE	TRIP	WIRE	COND.	LOAD
1000	3/4"	#12	20	1		RECEPTACLE DATA RM 136	1	2	RECEPTACLE DATA RM 136		1	20	#12	3/4"	1000
1000	3/4"	#12	20	1		RECEPTACLE DATA RM 136	3	4	RECEPTACLE DATA RM 136		1	20	#12	3/4"	1000
600	3/4"	#12	20	1		STAIRWELLS ELECTRICAL BRDS	5	6	FIRE ALARM PANEL		1	20	#12	3/4"	600
600	3/4"	#12	20	1		ELEV CAR LIGHTS & CNTRLS	7	8	SECURITY SYSTEM		1	20	#12	3/4"	600
600	3/4"	#12	20	1		ELEV EXHAUST FAN	9	10	ELEV PIT LIGHTS & RECEPT		1	20	#12	3/4"	600
–	–	–	20	1		SPARE	11	12	ELEV PIT SUMP PUMP		1	20	#12	3/4"	1000
–	–	–	20	1		SPARE	13	14	BRIDGEWAY PATIO FANS		1	20	#12	3/4"	720
–	–	–	20	1		SPARE	15	16	SPARE		1	20	–	–	–
–	–	–	20	1		SPARE	17	18	SPARE		1	20	–	–	–
–	–	–	–	–		SPACE	19	20	SPACE						
–	–	–	–	–		SPACE	21	22	SPACE						
–	–	–	–	–		SPACE	23	24	SPACE						

MOUNTING: ■ SURFACE ☐ FLUSH ☐ FREE STANDING
ENCLOSURE: ■ NEMA 1 ☐ NEMA 3R ☐ NEMA 4X

CIRCUIT TYPE: (T) SHUNT TRIP (G) GROUND FAULT (D) DEDICATED (I) ISOLATED GRD.

FEEDER SIZE: SEE RISER
TOTAL CONNECTED LOAD = 25.9 AMPS — ESTIMATED DEMAND LOAD = 15 KVA

FP&L CONSUMPTION, PEAK LOAD RECORDS AND FIELD READINGS

LAKESIDE BLDG

MONTH	KWh	KWd
7/2018	54120	145
8/2018	66120	149
9/2018	57480	136
10/2018	60480	138
11/2018	59640	138
12/2018	46800	120
1/2019	50400	119
2/2019	47400	116
3/2019	52080	145
4/2019	55920	125
5/2019	58200	142
6/2019	63600	142
7/2019	65040	146
8/2019	63720	174
9/2019	60240	143
10/2019	58080	161
11/2019	53520	127
12/2019	48360	107

MAIN BLDG - DATA CNTR CONSUMPTION

PANEL	AMPS	KWd
PANEL IC1	29A	10.4 KW
PANEL IC2	30A	10.8 KW

NOTES:

1. ACTUAL ON-SITE MEASUREMENTS OF PANELS IC1 AND IC2 WAS PERFORMED ON 7/9/2021
2. 174 + 10.4+ 10.8 = 195.2 KW (TOTAL ESTIMATED DEMAND)
3. ADDING A 30% SAFETY MARGIN: 192.5 x 1.3 = 250.3 KW

LAKESIDE OFFICE BLDG - MAIN ELECTRICAL ROOM PANEL SCHEDULES

(SHOWN FOR INFORMATIONAL PURPOSES ONLY)

ENGINEER INFORMATION	
NAME :	SAUL SMUKLER
ADDRESS :	9375 Park Drive, Suite #1
PHONE NUMBER :	(305) 759-5552
STATE REG. NUMBER :	44148
DISCIPLINE :	ELECTRICAL
CONSULTANTS :	NONE
OWNER INFORMATION	
NAME :	Florida Department of Transportation
ADDRESS :	1000 NW 111 Ave, Miami, FL 33172
PHONE NUMBER :	(305) 470-5455 Mr. Ruel Umbay

SEAL

REVISIONS	DATE
A	
A	
A	
A	
A	
A	
A	

MIAMI MICROTRONIX INCORPORATED
9375 Park Drive, Suite #1
Miami Shores, Florida 33138
(305) 759-5552

STATE OF FL, DEPT OF TRANSPORTATION
DISTRICT SIX HEADQUARTERS
1000 NW 111 AVENUE
MIAMI, FLORIDA 33172

LAKESIDE BLDG NEW GENERATOR PROJECT
LAKESIDE BLDG PANEL SCHEDULES

DATE:	PROJECT MANAGER:
7/28/2021	–
DRAWN BY:	PROJECT ENGINEER:
SMUKLER	–
PROJECT NUMBER:	
446788-1-52-01	

DRAWING NO.: E-4

2ND FL N (MAIN) ELECT RM

SHOWN FOR INFORMATIONAL PURPOSES

LOCATION: 2ND FL MAIN NORTH ELECTRICAL ROOM 6203 — PANEL 'MDP' — BUS: 1,200 AMPS
EXISTING ☐ NEW — MAINS: ☐ M.L.O. ☒ BREAKER: 1,200 AMP — 277/480 VOLTS 3 PHASE 4 WIRE

LOAD GVA	COND.	WIRE	TRIP	POLE	TYPE	LOAD DESCRIPTION	POS	POS	LOAD DESCRIPTION	TYPE	POLE	TRIP	WIRE	COND.	LOAD GVA
7	1-1/4"	#3	100	3		A/C #3	1	2	SPACE		3	-	-	-	-
7															7
7															7
7	1-1/4"	#3	100	3		A/C #4	3	4	SPARE		3	200	-	-	-
7															7
7															7
3	1-1/2"	1/0	150	3		PNL AC1 (SOUTH ELECT RM)	5	6	SPARE		3	60	-	-	-
3															3
3															3
9.7	2-1/2"	1/0	150	3		PANEL AC2	7	8	SPARE		3	70	-	-	-
9.7															9.7
9.7															9.7
-	-	-	-	3		BAD BUSS	9	10	MAIN PNL 3P2 (NORTH MAIN ELECT RM)		3	200	3/0	2"	11.3
															11.3
															11.3
7	1-1/4"	#3	100	3		A/C #1	11	12	MAIN PNL 3P1 (SOUTH ELECT RM)		3	200	3/0	2"	10.7
7															10.7
7															10.7
-	-	-	-	3		SPACE	13	14	DATA CENTER LIEBERT A/C (1ST FL DATA CENTER)		3	100	#3	1/4"	3.4
															3.4
															3.4
-	-	-	-	3		SPACE	15	16	PANEL EL1		3	100	#3	1/4"	12.1
															12.1
															12.1
-	-	-	20	3		SPARE	17	18	PANEL EL2		3	100	#3	1/4"	9.6
															9.6
															9.6
-	-	-	20	3		SPARE	19	20	MAIN ELEVATOR		3	100	#3	1/4"	6.1
															6.1
															6.1
7	1-1/4"	#3	100	3		A/C #2	21	22	PANEL 'A' (AUDITORIUM BLDG)		3	200	3/0	2"	13.3
7															13.3
7															13.3

NOTE: POS EQUALS A 3 POLE BREAKER IN THIS DISTRIBUTION PANEL

MOUNTING: ☒ SURFACE ☐ FLUSH ☐ FREE STANDING
ENCLOSURE: ☒ NEMA 1 ☐ NEMA 3R ☐ NEMA 4X

CIRCUIT TYPE: (T) SHUNT TRIP (G) GROUND FAULT (B) BCDICATED (I) ISOLATED GRD.

FEEDER SIZE: SEE RISER
TOTAL CONNECTED LOAD = 383 AMPS — ESTIMATED DEMAND LOAD = 318.6 KVA
TOTAL LOAD x 125 % = 478.8 AMPS — DEMAND LOAD x 125% = 398.3 KVA

SHOWN FOR INFORMATIONAL PURPOSES

LOCATION: 2ND FL MAIN NORTH ELECTRICAL ROOM 6203 — PANEL 'DP2' — BUS: 400 AMPS
EXISTING ☐ NEW — MAINS: ☐ M.L.O. ☒ BREAKER: 400 AMP — 120/208 VOLTS 3 PHASE 4 WIRE

LOAD GVA	COND.	WIRE	TRIP	POLE	TYPE	LOAD DESCRIPTION	CKT	CKT	LOAD DESCRIPTION	TYPE	POLE	TRIP	WIRE	COND.	LOAD GVA
8.4	1-1/2"	1/0	150	3		PNL 1P4	1	2	PANEL 2P4		3	225	4/0	2-1/2"	8.4
8.4							3	4							8.4
8.4							5	6							8.4
1.8	1-1/2"	1/0	150	3		PANEL 1P3	7	8	SPARE		3	100	-	-	-
1.8							9	10							1.8
1.8							11	12							1.8
8.2	1-1/2"	1/0	150	3		PANEL 2P2	13	14	SPARE		3	100	-	-	-
8.2							15	16							8.2
8.2							17	18							8.2
-	-	-	100	3		SPARE	19	20	SPACE						
							21	22							
							23	24							
						SPACE	25	26	SPACE						
							27	28							
							29	30							

MOUNTING: ☒ SURFACE ☐ FLUSH ☐ FREE STANDING
ENCLOSURE: ☒ NEMA 1 ☐ NEMA 3R ☐ NEMA 4X

CIRCUIT TYPE: (T) SHUNT TRIP (G) GROUND FAULT (B) BCDICATED (I) ISOLATED GRD.

FEEDER SIZE: SEE RISER — FED FROM: PNL MDP
TOTAL CONNECTED LOAD = 109 AMPS — ESTIMATED DEMAND LOAD = 90.4 KVA

2ND FL S ELECT RM

SHOWN FOR INFORMATIONAL PURPOSES

LOCATION: 2ND FL SOUTH ELECTRICAL ROOM — PANEL 'DP1' — BUS: 400 AMPS
EXISTING ☐ NEW — MAINS: ☐ M.L.O. ☒ BREAKER: 400 AMP — 120/208 VOLTS 3 PHASE 4 WIRE

LOAD GVA	COND.	WIRE	TRIP	POLE	TYPE	LOAD DESCRIPTION	CKT	CKT	LOAD DESCRIPTION	TYPE	POLE	TRIP	WIRE	COND.	LOAD GVA
1.1	1-1/2"	1/0	150	3		PANEL 1P2	1	2	PANEL 2P3		3	100	#3	1-1/4"	2.1
1.1							3	4							2.1
1.1							5	6							2.1
1.3	1-1/2"	1/0	150	3		PANEL 1P1	7	8	EMERG DPER CNTR - PANEL		3	100	#3	1-1/4"	1.6
1.3							9	10							1.6
1.3							11	12							1.6
1.4	1-1/2"	1/0	150	3		PANEL 1P1	13	14	SPARE		3	100	-	-	-
1.4							15	16							-
1.4							17	18							-
-	1-1/4"	#3	100	3		UPS TO PNL 1C2 (DATA CNTR 1ST FL DIT AREA)	19	20	SPACE						
							21	22	SPACE						
							23	24	SPARE						
-	1-1/4"	#3	100	3		PANEL 1C1 (DATA CNTR 1ST FL DIT AREA)	25	26	SPACE						
							27	28	SPACE						
							29	30	SPACE						

MOUNTING: ☒ SURFACE ☐ FLUSH ☐ FREE STANDING
ENCLOSURE: ☒ NEMA 1 ☐ NEMA 3R ☐ NEMA 4X

CIRCUIT TYPE: (T) SHUNT TRIP (G) GROUND FAULT (B) BCDICATED (I) ISOLATED GRD.

FEEDER SIZE: SEE RISER — FED FROM: PNL MDP
TOTAL CONNECTED LOAD = ??? AMPS — ESTIMATED DEMAND LOAD = ??? KVA

1ST FL DIT AREA

SHOWN FOR INFORMATIONAL PURPOSES

LOCATION: 1ST FLOOR DIT OFFICE AREA — PANEL 'IC1' — USE: DATA CENTER - NON CRITICAL LOADS — BUS: 100 AMPS
EXISTING ☐ NEW — MAINS: ☐ M.L.O. ☒ BREAKER: 100 AMP — 120/208 VOLTS 3 PHASE 4 WIRE

LOAD	COND.	WIRE	TRIP	POLE	TYPE	LOAD DESCRIPTION	CKT	CKT	LOAD DESCRIPTION	TYPE	POLE	TRIP	WIRE	COND.	LOAD
720	3/4"	#12	20	1		EXISTING	1	2	EXISTING		1	20	#12	3/4"	720
720	3/4"	#12	20	1		EXISTING	3	4	EXISTING		1	20	#12	3/4"	720
-	-	-	20	1		SPARE	5	6	EXISTING		1	20	#12	3/4"	720
720	3/4"	#12	20	1		EXISTING	7	8	EXISTING		1	20	#12	3/4"	720
720	3/4"	#12	20	1		EXISTING	9	10	EXISTING		1	20	#12	3/4"	720
720	3/4"	#10	30	2		EXISTING	11	12	EXISTING		1	20	#12	3/4"	720
720							13	14	EXISTING		1	20	#12	3/4"	720
-	-	-	20	1		SPARE	15	16	EXISTING		1	20	#12	3/4"	720
-	-	-	20	1		SPARE	17	18	EXISTING		1	20	#12	3/4"	720
-	-	-	20	1		SPARE	19	20	EXISTING		1	20	#12	3/4"	720
-	-	-	20	1		SPARE	21	22	EXISTING		1	20	#12	3/4"	720
-	-	-	20	1		SPARE	23	24	EXISTING		1	20	#12	3/4"	720
-	-	-	20	1		SPARE	25	26	SPARE		1	20	-	-	-
-	-	-	20	1		SPARE	27	28	SPACE						
						SPACE	29	30	SPACE						
720	3/4"	#12	20	1		EXISTING	31	32	A/C #1		2	40	#3	3/4"	1400
8700	1"	#6	60	2		A/C #2 COMPRESSOR	33	34							1400
8700							35	36	A/C #2 AIR HANDLER		2	30	#10	3/4"	310
						SPACE	37	38							310
						SPACE	39	40	SPACE						
						SPACE	41	42	SPACE						

MOUNTING: ☒ SURFACE ☐ FLUSH ☐ FREE STANDING
ENCLOSURE: ☒ NEMA 1 ☐ NEMA 3R ☐ NEMA 4X

CIRCUIT TYPE: (T) SHUNT TRIP (G) GROUND FAULT (B) BCDICATED (I) ISOLATED GRD.

FEEDER SIZE: SEE RISER — FED FROM: PNL 1P1
TOTAL CONNECTED LOAD = 69 AMPS — ESTIMATED DEMAND LOAD = 24.6 KVA

SHOWN FOR INFORMATIONAL PURPOSES

LOCATION: 1ST FLOOR DIT OFFICE AREA — PANEL 'IC2' — USE: DATA CENTER - CRITICAL LOADS — BUS: 100 AMPS
EXISTING ☐ NEW — MAINS: ☐ M.L.O. ☒ BREAKER: 100 AMP — 120/208 VOLTS 3 PHASE 4 WIRE

LOAD	COND.	WIRE	TRIP	POLE	TYPE	LOAD DESCRIPTION	CKT	CKT	LOAD DESCRIPTION	TYPE	POLE	TRIP	WIRE	COND.	LOAD
720	3/4"	#12	20	1		CAD EQUIPMENT	1	2	CAD EQUIPMENT		1	20	#12	3/4"	720
720	3/4"	#12	20	1		CAD EQUIPMENT	3	4	CAD EQUIPMENT		1	20	#12	3/4"	720
720	3/4"	#12	20	1		CAD EQUIPMENT	5	6	CAD EQUIPMENT		1	20	#12	3/4"	720
720	3/4"	#12	20	1		EDC	7	8	CAD EQUIPMENT		1	20	#12	3/4"	720
720	3/4"	#12	20	1		EDC	9	10	CAD EQUIPMENT		1	20	#12	3/4"	720
720	3/4"	#12	20	2		CAD EQUIPMENT	11	12	RM 6107 COPY MACHINE		1	20	#12	3/4"	1050
720							13	14	SPARE		1	20	-	-	-
-	-	-	20	1		SPARE	15	16	MEV OUTLET		1	20	#12	3/4"	720
-	-	-	30	3		SPARE	17	18	MEV OUTLET		1	20	#12	3/4"	720
-							19	20	MEV OUTLET		1	20	#12	3/4"	720
-							21	22	MEV OUTLET		1	20	#12	3/4"	720
-	-	-	30	2		SPARE	23	24	SPARE		1	20	-	-	-
-							25	26	SPARE		1	20	-	-	-
-	-	-	20	1		SPARE	27	28	SPARE		1	20	-	-	-
-	-	-	20	1		SPARE	29	30	SPARE		1	20	-	-	-
-	-	-	20	1		SPARE	31	32	SPARE		1	20	-	-	-
-	-	-	20	1		SPARE	33	34	SPARE		1	20	-	-	-
-	-	-	20	1		SPARE	35	36	SPARE		1	20	-	-	-
-	-	-	20	1		SPARE	37	38	SPARE		1	20	-	-	-
-	-	-	20	1		SPARE	39	40	SPARE		1	20	-	-	-
-	-	-	20	1		SPARE	41	42	SPARE		1	20	-	-	-

MOUNTING: ☒ SURFACE ☐ FLUSH ☐ FREE STANDING
ENCLOSURE: ☒ NEMA 1 ☐ NEMA 3R ☐ NEMA 4X

CIRCUIT TYPE: (T) SHUNT TRIP (G) GROUND FAULT (B) BCDICATED (I) ISOLATED GRD.

FEEDER SIZE: SEE RISER — FED FROM: PNL 1P1
TOTAL CONNECTED LOAD = 35 AMPS — ESTIMATED DEMAND LOAD = 12.6 KVA

D6 MAIN BLDG - EXISTING RELEVANT ELECTRICAL PANEL SCHEDULES

(SHOWN FOR INFORMATIONAL PURPOSES ONLY)

ENGINEER INFORMATION	
NAME :	SAUL SMUKLER
ADDRESS :	9375 Park Drive, Suite #1
PHONE NUMBER :	(305) 759-5552
STATE REG. NUMBER :	44148
DISCIPLINE :	ELECTRICAL
CONSULTANTS :	NONE

OWNER INFORMATION	
NAME :	Florida Department of Transportation
ADDRESS :	1000 NW 111 Ave, Miami, FL 33172
PHONE NUMBER :	(305) 470-5455 Mr. Ruel Umbay

SEAL

REVISIONS | DATE

MIAMI MICROTRONIX INCORPORATED
9375 Park Drive, Suite #1
Miami Shores, Florida 33138
(305) 759-5552

STATE OF FL, DEPT OF TRANSPORTATION
DISTRICT SIX HEADQUARTERS
1000 NW 111 AVENUE
MIAMI, FLORIDA 33172

LAKESIDE BLDG NEW GENERATOR PROJECT
MAIN BLDG RELEVANT PANEL SCHEDULES

DATE: 7/28/2021 — PROJECT MANAGER: -
DRAWN BY: SMUKLER — PROJECT ENGINEER: -
PROJECT NUMBER: 446788-1-52-01

DRAWING NO.: E-5

GENERAL NOTES

1. SCOPE OF WORK: CONTRACTOR SHALL REMOVE, RE-USE AND INSTALL ELECTRICAL EQUIPMENT AND RELATED FACILITIES IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AS FOLLOWS:
   A. THE FOLLOWING EXISTING ELECTRICAL EQUIPMENT SHALL BE REMOVED: LAKESIDE BLDG MAIN ELECTRICAL ROOM - LIFE SAFETY 150A A.T.S., 150A FP&L FUSED DISCONNECT, THE ASSOCIATED WIRING, CONDUIT AND RELATED EQUIPMENT. UNDERGROUND 150A LAKESIDE BLDG SERVICE CONDUCTORS (FROM THE LAKESIDE BLDG MAIN ELECT RM TO THE FP&L C.T.).
   B. THE FOLLOWING NEW EQUIPMENT SHALL BE PROVIDED & INSTALLED:
   SITE: 350KW DIESEL GENERATOR WITH FUEL TANK, 600V, 800A 3 PHASE SERVICE ENTRANCE RATED AUTOMATIC TRANSFER SWITCH, 3 PHASE 800A AND 600A NEMA 3R FUSED DISCONNECTS, BREAK GLASS SHUT-OFF CONTROL STA, ALL REQUIRED J-BOXES, WIRING GUTTERS, WIRE/CABLE.
   LAKESIDE BLDG MAIN ELEC RM: INSTALL (2) 3 PHASE BREAKERS IN 480V PANEL 'DP' (150A TO RE-POWER LIFE SAFETY PNL 'EH', AND 100A TO SUPPLY THE MAIN BUILDING DATA CENTER PANELS IC1 & IC2 WITH 'SECONDARY' GENERATOR BACKUP POWER).
   LAKESIDE BLDG: INSTALL GENERATOR REMOTE ANNUNCIATOR, ALL REQUIRED J-BOXES & WIRE, RE-USE & EXTEND UNDERGROUND 2" C FROM THE LIFE SAFETY 150A SERVICE FOR THE ANNUN.
   MAIN BLDG: INSTALL (2) 100A AUTOMATIC TRANSFER SWITCHES, (2) 100A NEMA 3R FUSED DISC's, 75KVA 3 PHASE 480V-120/208V NEMA 3R TRANSFORMER WITH 3 PHASE 480V, 100A NEMA 3R FUSED DISCONNECT. ALL REQUIRED CONDUIT, JUNCTION BOXES, WIRING GUTTERS, WIRE AND CABLE NEEDED TO INTERCEPT/WIRE IN THE (2) 100A A.T.S's TO THE EXISTING CONDUCTORS FEEDING THE MAIN BUILDING DATA CENTER PANELS 'IC1' AND 'IC2'.

   ALL ITEMS NOT SHOWN BUT OBVIOUSLY REQUIRED FOR THE INSTALLATION SHALL BE INCLUDED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR BUILDING (3) NEW REBAR REINFORCED CONCRETE PADS ADEQUATE FOR THE NEW GENERATOR, THE SERVICE ENTRANCE RATED A.T.S., AND THE OTHER OUTDOOR EQUIPMENT, INCLUDING EXTENDING REQUIRED EXISTING CONDUITS AND WIRE. ALL OF THE REINFORCED CONCRETE PADS SHALL BE DESIGNED THREE FEET LARGER ALL AROUND THE EQUPMENT INSTALLED FOR CLEAR, UNOBSTRUCTED SERVICE ACCESS. ALL EQUIPMENT SHALL BE SUFFICIENTLY ANCHORED TO THE REINFORCED CONCRETE FLOOR PADS WHICH ARE SEISMICALLY DESIGNED & PERMIT APPROVED BY THE CONTRACTOR TO RESIST SEISMIC LOADS FROM THE EQUIPMENT BEING ANCHORED TO THE PADS. THE CONTRACTOR SHALL OBTAIN ALL NECCESSARY PERMITS AND SURVEYS FOR THE WORK AND INCLUDE ALL PERMIT COSTS IN HIS BID. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRENCHING, CUTTING, PATCHING, REFINISHING AND RESTORING ALL OF THE SITE CONDITIONS TO THEIR PRE-CONSTRUCTION CONDITIONS.

2. THE CONTRACTOR SHALL MAKE EARLY CONTACT WITH FP&L FOR THE TIMELY COORDINATION AND AND MINIMIZATION OF POWER OUTAGES DURING THE GENERATOR UPGRADE. THE CONTRACTOR SHALL INCLUDE IN HIS BID THE COST TO PROVIDE, INSTALL, FUEL AND MAINTAIN A TEMPORARY PORTABLE GENERATOR CAPABLE OF CONTINUOUSLY POWERING THE EXISTING LIFE SAFETY LOADS DURING PERIODS WHEN POWER WILL BE DISCONNECTED, UNAVAILABLE OR UNFORSEEN OUTAGES.

3. THE TOTAL ELECTRICAL INSTALLATION MUST MEET THE REQUIREMENTS OF THE 2017 EDITION OF NFPA 70, THE NATIONAL ELECTRICAL CODE, AND THE 2016 EDITION OF NFPA 110, STANDARD FOR EMERGENCY AND STANDBY POWER SYSTEMS, THE CURRENT EDITION OF THE FLORIDA BUILDING CODE, ALL STANDARDS REFERENCED THEREIN INCLUDING WORKING CLEARANCES COMPLYING WITH ARTICLE 110 OF THE NEC. PAVEMENT AND LANDSCAPE SHALL BE RESTORED TO CONDITIONS FOUND OR BETTER, AND SHALL MEET THE REQUIREMENTS OF THE FLORIDA DEPARTMENT OF TRANSPORTATION MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION & MAINTENANCE FOR STREETS AND HIGHWAYS (FLORIDA GREENBOOK).

4. ALL MATERIALS AND EQUIPMENT INSTALLED SHALL BE ENTIRELY NEW, AND SHALL BE LISTED.

5. EQUIPMENT SHALL BE OF MATERIALS SUITABLE FOR AND RATED FOR THE ENVIRONMENT IN WHICH THEY ARE TO BE INSTALLED.

6. ALL PANELBOARDS, SWITCHBOARDS AND DISCONNECT SWITCHES SHALL HAVE COPPER BUS.

7. CONTRACTOR SHALL INCLUDE IN HIS BID TO TRACE AND FIELD VERIFY ALL LOADS FROM PANELS, DISCONNECTS, TIME CLOCKS AND CONTACTORS WITH THE PANEL SCHEDULES. CONTRACTOR SHALL ADVISE OF ANY DISCREPANCIES FOUND AND IMPLEMENT CORRECTIONS. CONTRACTOR SHALL PROVIDE AND INSTALL NEW PERMANENT W.P. ENGRAVED LABELS ON ALL NEW AND EXISTING PANELS. THE IDENTIFICATION ON THE LABELS MUST CONFORM TO THESE DRAWINGS.

8. CONDUIT FOR UNDERGROUND SHALL BE SCHEDULE 40 PVC UNLESS OTHERWISE SHOWN AND/OR REQUIRED BY CODE. CONDUIT FOR ABOVE GRADE SHALL BE 'GRC', 'IMC', 'SCH 80 PVC' OR 'EMT'. SPARE CONDUITS SHALL HAVE A PULL WIRE INSTALLED.

9. CONDUCTORS SHALL BE THHN/THWN EXCEPT WHERE SPECIFIED OTHERWISE ON THE DRAWINGS SUCH AS THE REQUIREMENT FOR MTW INSULATION ON THE CONDUCTORS BETWEEN THE A.T.S. GENERATOR AND ASSOCIATED PANELS. CONDUCTORS NO. 8 AWG AND LARGER SHALL BE JOINED BY AN APPROVED PRESSURE CONNECTOR. CONNECTION TO GROUND CONDUCTORS NO. 1/0 AWG AND LARGER SHALL BE CAST BY FUSIBLE METAL PROCESS. ALL CONDUCTORS MUST BE INSTALLED IN CONDUIT, MC CABLE, OR LFNC. CONDUCTORS IN PANELS SHALL HAVE THEIR FACTORY LABELS VISIBLE TO A PERSON IN THE WORKING SPACE. ALL CONDUCTORS SHALL BE COPPER.

10. COLOR CODE FOR ALL WIRING SHALL CONFORM TO INDUSTRY STANDARDS.

11. CONTRACTOR SHALL MAKE TESTS AND ADJUSTMENTS AS REQUIRED, UPON COMPLETION OF THE WORK AND BEFORE FINAL ACCEPTANCE BY THE OWNER, THE CONTRACTOR SHALL TEST THE COMPLETE ELECTRICAL SYSTEM IN THE PRESENCE OF THE PROJECT MANAGER OR DESIGNEE FOR THE CONTINUITY, FUNCTION, CONTROL, PERFORMANCE, LOAD BALANCE, GROUNDS, SHORTS AND TO INSURE SATISFACTORY OPERATION AND CONFORMANCE. START UP TESTING PER NFPA 110, 350KW 4 HOURS LOAD BANK TEST.

12. ALL EQUIPMENT, LABOR AND MATERIALS REQUIRED FOR TESTING SHALL BE FURNISHED BY THE CONTRACTOR AS PART OF THIS CONTRACT.

13. AFTER COMPLETION OF THE WORK, THE CONTRACTOR SHALL SECURE CERTIFICATES OF FINAL INSPECTION AND APPROVAL FROM THE AUTHORITIES HAVING JURISDICTION (AHJ).

14. WITHIN 30 DAYS OF ELECTRICAL SYSTEM ACCEPTANCE BY THE AHJ, THE CONTRACTOR SHALL PROVIDE THE BUILDING OWNER WITH RECORD DRAWINGS OF THE ACTUAL INSTALLATION. THE RECORD DRAWINGS SHALL INCLUDE A SINGLE-LINE DIAGRAM OF THE BUILDING ELECTRICAL DISTRIBUTION SYSTEM AND FLOOR PLANS INDICATING LOCATION AND AREA SERVED FOR ALL DISTRIBUTION.

15. WITHIN 30 DAYS OF ELECTRICAL SYSTEM ACCEPTANCE BY THE AHJ, THE CONTRACTOR SHALL PROVIDE THE BUILDING OWNER THREE (3) COPIES OF OPERATING AND MAINTENANCE MANUALS AND A MINIMUM OF FOUR HOURS OF ON-SITE OPERATIONS & MAINTENANCE TRAINING OF THE ELECTRICAL SYSTEMS INSTALLED. THE MANUALS SHALL INCLUDE:
   A. EQUIPMENT RATING AND SELECTED OPTIONS FOR EACH PIECE OF EQUIPMENT REQUIRING MAINTENANCE.
   B. OPERATION MANUALS AND MAINTENANCE MANUALS FOR EACH PIECE OF EQUIPMENT REQUIRING MAINTENANCE SHALL CLEARLY IDENTIFY MAINTENANCE ACTIONS.
   C. NAMES AND ADDRESSES OF AT LEAST ONE QUALIFIED SERVICE AGENCY.

GENERAL NOTES (continued)

16. WORKMANSHIP, MATERIALS AND APPARATUS UNDER THIS CONTRACT SHALL BE GUARANTEED FOR A MINIMUM PERIOD OF TWO (2) YEARS FROM THE DATE OF FINAL ACCEPTANCE BY THE OWNER. ALL MANUFACTURER WARRANTIES SHALL BE PROVIDED AND TRANSFERED TO THE FDOT AT THE TIME OF FINAL ACCEPTANCE.

17. THE CONTRACTOR SHALL VISIT AND CAREFULLY EXAMINE THOSE PORTIONS OF THE BUILDING AND SITE AFFECTED BY THIS WORK BEFORE SUBMITTING PROPOSAL SO AS TO BECOME FAMILIAR WITH THE EXISTING WORK. SUBMISSION OF PROPOSAL WILL BE CONSTRUED AS EVIDENCE THAT SUCH EXAMINATION HAS BEEN MADE AND LATER CLAIMS FOR LABOR, EQUIPMENT OR MATERIALS REQUIRED BECAUSE OF DIFFICULTIES ENCOUNTERED WILL NOT BE RECOGNIZED. IT IS TO BE UNDERSTOOD THAT UNFORSEEN CONDITIONS PROBABLY EXIST AND NEW WORK MAY NOT BE FIELD LOCATED EXACTLY AS SHOWN ON THESE DRAWINGS.

18. THE CONTRACTOR IS TO FIELD VERIFY EXISTING CONDITIONS PRIOR TO BID, BRING ANY FOUND DISCREPANCIES TO THE ATTENTION OF THE PROJECT MANAGER OR DESIGNEE, AND INCLUDE ANY DEVIATIONS IN THE CONTRACT.

GENERATOR AND A.T.S. SPECIFICATIONS

1. POWER RATINGS:
   FREQUENCY: 60 HZ.
   VOLTAGE: THREE PHASE 277/480 VOLTS ALTERNATING CURRENT.
   POWER RATING: 350 KW, 438KVA.
   DESIGN SPEC: MTU ONSITE ENERGY, MODEL DS350D6SRA GENSET, OR APPROVED SUBSTITUTION.
   MTU ONSITE ENERGY, MODEL MGC-2000 CONTROL PANEL, OR APPROVED SUBSTITUTION.
   MTU ONSITE ENERGY, MODEL RDP-110 ANNUNCIATOR PANEL, OR APPROVED SUBSTITUTION.

2. FUEL SYSTEM:
   A. THE GENERATOR SHALL OPERATE ON ULTRA LOW SULFUR DIESEL FUEL.
   B. FUEL TANK VOLUME SHALL BE SUFFICIENT TO CONTINUOUSLY OPERATE THE UNIT AT 50% LOAD FOR A MINIMUM OF 24 HOURS. FUEL TANK CAPACITY SHALL BE NO LESS THAN 300 GALLONS. BIDDER SHALL PROVIDE FUEL CAPACITY AND CONSUMPTION RATE WITH BID.
   C. CONTRACTOR SHALL INCLUDE ALL COSTS TO PROVIDE THE APPLICABLE AHJ FUEL TANK PLANS AND SPECIFICATIONS, WHICH SHALL INCLUDE AT A MINIMUM:
      1. ABOVE GROUND TANK, DOUBLE WALL CONSTRUCTION.
      2. OVERFILL PREVENTION AND OVERSPILL PROTECTION.
      3. TANK INTERSTITIAL MONITORING.
      4. CONTINUOUS AUTOMATIC LEAK DETECTION.
      5. FUEL GUAGE VISIBLE FROM FILLING POINT AND WATERTIGHT FUEL FILLING CAP.

3. GENERAL SPECIFICATIONS:
   A. ENCLOSURE: ALUMINUM WEATHERPROOF, 190MPH WIND LOAD AND IMPACT RATED.
   B. SOUND: HOSPTAL GRADE MUFFLER (72.3 dBA @ 23') PROVIDED.
   C. EXPOSURE: OUTDOOR, FULL SUN, NO SHADE. ANTI FREEZE COOLANT REQUIRED. BLOCK HEATER REQUIRED.
   D. THE GENERATOR ENCLOSURE SHALL BE SUFFICIENTLY ANCHORED TO A REBAR REINFORCED CONCRETE FLOOR PAD THAT IS SEISMICALLY DESIGNED BY THE CONTRACTOR AND APPROVED TO RESIST THE SEISMIC LOADS FROM THE COMPONENTS BEING ANCHORED TO THE PAD.
   E. THE CONTRACTOR SHALL PROVIDE A NEMA 3R RATED EMERGENCY BREAK GLASS SHUT OFF CONTROL STATION AND ALL NECESSARY TRENCHING, CONDUIT AND CONTROL WIRING.

4. ENGINE SYSTEM:
   A. OIL HEATER.
   B. OIL DRAIN EXTENSION WITH S/O VALVE.
   C. FUEL LOCKOFF SOLENOID.
   D. SECONDARY FUEL WATER SEPARATOR FILTERS AND FLEXIBLE FUEL CONNECTORS.
   E. STANLESS STEEL FLEXIBLE EXHAUST CONNECTION.
   F. INDUSTRIAL EXHAUST SILENCER.
   G. 120VAC COOLANT HEATER.
   H. CLOSED COOLANT RECOVERY SYSTEM.
   I. UV/OZONE RESISTANT HOSES.
   J. FACTORY INSTALLED RADIATOR.
   K. RADIATOR DRAIN EXTENSION.
   L. BATTERY CHARGING 24V ALTERNATOR.
   M. BATTERY, BATTERY CABLES AND BATTERY TRAY.
   N. IOA UL FLOAT/EQUALIZE BATTERY CHARGER.
   O. SOLENOID ACTIVATED ELECTRIC STARTER MOTOR.
   P. AIR CLEANER.
   Q. FAN GUARD.
   R. ELECTRONIC ASYNCHRONOUS GOVERNOR.
   S. FULL FLOW OIL FILTERS.
   T. RUBBER BOOTED ENGINE ELECTRICAL CONNECTORS.

5. GENERATOR:
   A. SUSTAINED SHORT CIRCUIT RATED FOR 300% OF RATED CURRENT FOR UP TO 10 SECONDS.
   B. DIGITAL SOLID STATE REGULATOR - NO LOAD TO FULL LOAD REGULATION.
   C. 4 POLE, ROTATING FIELD BRUSHLESS DESIGN WITH FULL AMORTISSEUR WINDINGS.
   D. SEALED BEARINGS WITH 125% ROTOR BALANCING.

6. CONTROL SYSTEM:
   A. 7 DAY PROGRAMMABLE ENGINE EXERCISOR.
   B. FULL SYSTEM STATUS TO DISPLAY: POWER OUTPUT, AC VOLTAGE OUTPUT, AC CURRENT OUTPUT, POWER FACTOR, OIL PRESURE, COOLANT TEMPERATURE, COOLANT LEVEL, OIL TEMPERATURE, FUEL PRESURE, ENGINE SPEED, BATTERY VOLTAGE, FREQUENCY OUTPUT AND EVENT/ALARM LOG.

7. ALARMS:
   LOW FUEL, BATTERY VOLTAGE, COOLANT LEVEL, OIL PRESURE, COOLANT TEMPERATURE, OIL TEMPERATURE, FUEL PRESURE, ENGINE SPEED AND VOLTAGE OUTPUT.

800 AMP A.T.S. SPECIFICATIONS:
   A. 600V, 800 AMP, 3 POLE, NEMA 3R RATED ENCLOSURE. COPPER BUS, AUTOMATIC & MANUAL LOAD TRANSFER, AND RE-TRANSFER
   B. DESIGN SPEC: ASCO 300 SERIES, CAT#: H03AUSA30800NGXM, 11BE, 18RX, 44G, SERVICE ENTRANCE RATED AUTOMATIC TRANSFER SWITCH, OR APPROVED SUBSTITUTION.
   C. INPHASE TRANSFER CONTROL OF LOADS BETWEEN LIVE SOURCES.
   D. PROGRAMMABLE ENGINE EXERCISER.
   E. PROVIDE SIGNAGE PER NEC 700.7 AND 702.7.

100 AMP A.T.S. SPECIFICATIONS:
   A. 120/208V, 100 AMP, 3 POLE, NEMA 3R RATED ENCLOSURE. COPPER BUS, AUTOMATIC AND MANUAL LOAD TRANFER AND RE-TRANSFER
   B. DESIGN SPEC: ASCO 300 SERIES, CAT#: D03ATSA30104CGXF, 11BE, 18RX, 44G, AUTOMATIC TRANSFER SWITCH, OR APPROVED SUBSTITUTION.

ENGINEER INFORMATION	
NAME :	SAUL SMUKLER
ADDRESS :	9375 Park Drive, Suite #1
PHONE NUMBER :	(305) 759-5552
STATE REG. NUMBER :	44148
DISCIPLINE :	ELECTRICAL
CONSULTANTS :	NONE

OWNER INFORMATION	
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PHONE NUMBER :	(305) 470-5455 Mr. Ruei Umbay

SEAL

REVISIONS	DATE
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STATE OF FL, DEPT OF TRANSPORTATION
DISTRICT SIX HEADQUARTERS
1000 NW 111 AVENUE
MIAMI, FLORIDA 33172

LAKESIDE BLDG NEW GENERATOR PROJECT
GENERAL NOTES AND SPECIFICATIONS

DATE:	PROJECT MANAGER:
7/28/2021	-
DRAWN BY:	PROJECT ENGINEER:
SMUKLER	-

PROJECT NUMBER: 446788-1-52-01

DRAWING NO.: E-6

State of Florida
Department of Transportation

EXHIBIT "B"
METHOD OF COMPENSATION

F6003

DISTRICT SIX LAKESIDE GENERATOR INSTALLATION

PROJECT

CONTRACT NUMBER: F6003
FINANCIAL PROJECT NUMBER: 446788-1-52-01

1.0 PURPOSE:

This Exhibit defines the limits and method of compensation to be made to the Contractor for services set forth in Exhibit "A" Scope of Services and the method by which payments shall be made.

2.0 COMPENSATION:

For the satisfactory performance of the services detailed in Exhibit "A" Scope of Services, the Department will, at intervals make progress payments to the Contractor.

3.0 DETAILS OF COSTS AND FEES:

Details of costs and fees for the performance of the Contractor's services are attached as Exhibit "B" Bid Price sheet attached hereto and made part hereof.

4.0 PROGRESS PAYMENTS:

4.1 **Payments to Contractor**:

Thirty (30) calendar days shall be allowed for the Department's inspection and approval of the goods and services for which any application for payment is made. Based upon application for payment submitted to the **Department's Project Manager or Designee by the Contractor** and certificates of payment issued by the Department's Project Manager or designee and accepted by the Department, the Department shall make progress payments to the Contractor against the account of the contract sum in accordance with the following:

4.1.1 Within thirty (30) calendar days from the Department's receipt and acceptance of a certificate of payment, the Department shall pay, or cause to be paid to the **Contractor**, ninety percent (90%) of the portion of the contract sum properly allocable to labor, materials, and equipment incorporated into the work, and ninety percent (90%) of that portion of the contract sum properly allocable to materials and equipment suitably stored at the site or at some other location agreed upon in writing by the parties, less the aggregate of previous payments.

NOTE: For projects with contract sums exceeding, $25,000 (see section A-1 of Fixed Capital Outlay Non-technical Specifications for Building Construction Contracts for definition of "Contract Level", at the time work is fifty percent (50%) complete or thereafter, if the manner of completion of the work and its progress are and remain satisfactory to the Department's Project Manager or designee and the

Department, the Department may authorize a five percent (5%) retainage on future progress payments. The full ten percent (10%) retainage may be reinstated if the manner of completion of the work and its progress do not remain satisfactory to the Department's

Project Manager or designee and the Department or for other good and sufficient reasons.

4.1.2 The **Contractor** shall promptly pay each Sub-Contractor in accordance with Section 287.0585, Florida Statues, upon receipt of payment from the Department out of the amount paid to the **Contracto**r on account of such **Sub-Contractor's** work, the amount to which said **Sub-Contractor** is entitled, reflecting the percentage retained, if any, from payments to the **Contractor** on account of such **Sub-Contractor's** work.

4.1.3 The Department's Project Manager or designee may, on request, at its discretion, furnish to a Sub-Contractor, if practical, information regarding the percentages of completion of the amount applied for by the Contractor and the action taken thereon by the Department's Project Manager or designee on account of work done by such Sub-Contractor.

4.1.4 Neither the Department nor the Department's Project Manager or designee shall have any obligation to pay or to see to the payment of any monies to any Sub-Contractor except as may otherwise be required by law.

4.1.5 No certificate for a progress payment, nor any progress payment, nor any partial or entire use of occupancy of the project by the Department, shall constitute an acceptance of any work not in accordance with the Contract Documents.

4.1.6 The Contractor shall request such compensation by submitting:

4.1.6.1 A detailed invoice in a format pre-approved by the Department Project Manager.

5.0 FINAL PAYMENT:

5.1 Within thirty (30) calendar days from the date of Contract Completion, the Department shall pay or cause to be paid to the Contractor the entire unpaid balance of the then Contract Sum, less the amount of any sums which continue to be retained to satisfy the cost of performing any change in the work which is the subject of any claim or dispute and which has not been satisfactorily performed by the Contractor, provided that the parties have not otherwise stipulated in the certificate of Substantial Completion and provided further that the work has been satisfactorily completed, the Contractor's obligations under the contract have been fully performed, and a final Certificate for Payment has been issued by the Department's Project Manager or designee.

5.2 The Contractor shall submit all required documents along with final invoice to the Department no later than one hundred and twenty (120) days after the project is completed and final acceptance of work is issued by the Department. Invoices submitted after the one hundred and twenty (120) day –time period will not be paid.

5.3 The Contractor's application for FINAL PAYMENT shall be accompanied with the following:

5.3.1 Department's Certificate of Partial Payment marked as "FINAL PAYMENT" (4 copies with original signatures and original seals).

5.3.2 Final schedule of Contracts Values.

5.3.3 For Contracts exceeding $100,000, the consent of Surety to make Final Payment-Signed and Sealed.

5.3.4 Notice of release of Lien from each sub-Contractor, worker or supplier, who has filed Notices to Department.

5.3.5 Contractor's Guarantee of Construction for two (2) years from the date of Substantial Completion. Reference to exhibit "A" scope of work 18.0 warranty/Guarantee. 5.3.6 Copy of the Approval by the Department's Project Manager or designee and the Transmittal to the Owner of Manuals and other related close-out documents as per 8.3 of exhibit "A" scope of work.

5.3.6 Other special warranties as required by specifications, in the name of the Department and list of Sub-contractors with contact person's telephone number and addresses.

5.3.7 Fully executed Contractor's Certificate of No Asbestos-Containing Materials.

>> END OF EXHIBIT "B" METHOD OF COMPENSATION <<
DISTRICT SIX LAKESIDE GENERATOR INSTALLATION PROJECT