STATE OF FLORIDA
BOARD OF PROFESSIONAL ENGINEERS

FLORIDA ENGINEERS
MANAGEMENT CORPORATION,

Petitioner,

vs.

SANTIAGO BOLIVAR, P.E.

FEMC Case No.: 2018013938 &
2017023531

FINAL ORDER ADOPTING SETTLEMENT STIPULATION

THIS CAUSE came before the FLORIDA BOARD OF PROFESSIONAL ENGINEERS
(“Board”), pursuant to Sections 120.569 and 120.57(4), Florida Statutes, on February 21, 2019 in
Daytona, Florida, for the purpose of considering a Settlement Stipulation (attached hereto as
“Exhibit A to Final Order”) entered into between the parties in this cause. Upon consideration of
the stipulation, the documents submitted in support thereof, and the arguments of the parties, it is
hereby:

ORDERED AND ADJUDGED that the Settlement Stipulation as submitted be and is
hereby adopted in toto and incorporated herein by reference. Accordingly, the parties shall
adhere to and abide by all the terms and conditions of the stipulation, with the following
modification:

1. The Six (6) month Suspension shall not take place for a period of 30 days from the
filing of the Final Order with the Department of the Business and Professional
Regulation.
This Final Order shall take effect upon being filed with the Clerk of the Department of Business and Professional Regulation.

DONE AND ORDERED this 15 day of April, 2019.

FLORIDA BOARD OF PROFESSIONAL ENGINEERS

[Signature]
Zana Raybon, Executive Director
For KENNETH TODD, P.E., CHAIR

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing filed Final Order Adopting Settlement Stipulation has been provided by U.S. Mail to: Santiago Bolivar, by service upon his attorney of record: John R. Samaan, P.A., 337 N. Ferncreek Avenue, Orlando, Florida 32803; by interoffice mail to Board of Professional Engineers, 2639 N. Monroe Street, Suite B-112, Tallahassee, Florida 32303; and by electronic mail to Lawrence D. Harris, Senior Assistant Attorney General, Lawrence.Harris@myfloridalegal.com this 16 day of April, 2019.

[Signature]
Rebecca Valentine,
Paralegal
STATE OF FLORIDA
FLORIDA BOARD OF PROFESSIONAL ENGINEERS

FLORIDA BOARD OF PROFESSIONAL ENGINEERS,

Petitioner,

v. FEMC Case Nos. 2017023531, 2018013938
SANTIAGO BOLIVAR, P.E.

Respondent,

________________________________________

SETTLEMENT STIPULATION

SANTIAGO BOLIVAR, P.E. ("Respondent") and the Florida Engineers Management Corporation ("FEMC") hereby stipulate and agree to the following Joint Settlement Stipulation ("Stipulation") and to entry of a Final Order of the Florida Board of Professional Engineers ("Board"), incorporating this Stipulation in the above-styled matter.

STIPULATED FACTS

1. For all times pertinent hereto, Respondent, SANTIAGO BOLIVAR, P.E., was a licensed engineer in the State of Florida, having been issued license number PE 53326.

2. Respondent was charged with violations of Chapter 471, Florida Statutes, in two (2) Administrative Complaints filed by the Florida Engineers Management Corporation, and properly served upon Respondent. True and correct copies of the filed Administrative Complaints are attached hereto and incorporated herein by reference as "Composite Exhibit A to Settlement Stipulation".

STIPULATED CONCLUSIONS OF LAW
1. Respondent, in Respondent’s capacities as a licensed professional engineer admits that, in such capacity, Respondent is subject to the provisions of Chapter 471, Florida Statutes, and the jurisdiction of the Department of Business and Professional Regulation ("Agency" or "Department"), FEMC, and the Board.

2. Respondent admits that the facts set forth in the Administrative Complaint, if proven, constitute violations of Chapter 471, Florida Statutes, as alleged in the Complaint.

STIPULATED DISPOSITION OF LAW

1. Respondent shall, in the future, comply with Chapters 471 and 455, Florida Statutes, and the rules promulgated pursuant thereto.

2. Should Respondent fail to comply with the terms of the Final Order, an administrative complaint for failure to comply with final order will automatically be opened against Respondent.

3. Respondent’s license to practice engineering shall be REPRIMANDED.

4. Respondent shall APPEAR before the Board when this Stipulation is presented. Respondent must be prepared to discuss: how this situation occurred, what improvements and quality control measures Respondent plans to implement to improve Respondent’s work product, and how Respondent intends to prevent this circumstance from occurring in the future.

5. Respondent shall pay an ADMINISTRATIVE FINE of $2,000.00 and COSTS of $5000.00 to the Board within One (1) year of the conclusion of the Suspension.

6. Respondent’s Professional Engineer license shall be SUSPENDED for a period of Six (6) Months commencing upon the date the Final Order adopting this Stipulation is filed with the Agency Clerk.
7. After the SUSPENSION has been completed, Respondent shall submit to the Board a detailed list of all completed projects (signed, sealed, and dated), by the Respondent for PROJECT REVIEW at six (6) and eighteen (18) month intervals from the date the SUSPENSION has been completed. The projects shall include: all completed mechanical engineering projects and reports signed and sealed by Respondent.

   a. A FEMC Consultant will select two (2) projects from each submitted list for review. Respondent is responsible for promptly furnishing any set of completed plans (signed, sealed, and dated), calculations, and any other supporting documentation requested by the Consultants. The Respondent must sign, date, and seal all materials that are submitted for project review using a non-embossed, seal. Sealed project review materials may be copied and submitted electronically, if desired by the Respondent. Respondent is also responsible for the Consultant’s fees for reviewing the projects, and shall remit payment in the amount of $2,000.00 by check or money order made payable in the name of the Board’s Consultant at the time that the project lists are submitted to FEMC. In the event that the project review cost exceeds $2,000.00, then the Respondent is responsible for the deficiency. In the event that the cost of the reviews is less than $2,000.00, then the unused portion will be refunded to. Should the Consultant return an unfavorable report concerning Respondent’s projects, that report shall be submitted to the Probable Cause Panel for determination of whether additional disciplinary proceedings should be initiated.

   b. If the Respondent has not performed engineering services on a sufficient number of projects to make the submissions required by 7, above, the initial or, if applicable, the subsequent submission required by the terms of probation shall be extended for a period of six (6) months to allow Respondent to perform the services necessary for the required review.
However, if, after the extension has expired, Respondent does not perform sufficient engineering services to meet the requirements of the terms of probation, Respondent’s license will be placed on voluntary inactive status as defined in Section 455.227, Florida Statutes, by the Board, without any further necessity for action on the part of Respondent. Respondent’s license shall remain on such status, provided Respondent meets the requirements of Section 455.227, unless and until Respondent notifies the Board that he wishes to recommence practice and obtains Board authorization to reactivate his license under such terms of probation that the Board deems appropriate at that time.

8. a. Respondent shall successfully complete a Board-approved course in INTERMEDIATE ENGINEERING PROFESSIONALISM AND ETHICS within one (1) year of the date the Final Order adopting this Stipulation is filed with the Agency Clerk. Prior to that date, Respondent shall submit to the Board a Certificate of Completion of the course. It is the Respondent’s responsibility to notify the Board that he has completed the course in a timely manner. Respondent may contact the Florida Engineering Society ("FES"), 125 South Gadsden St., Tallahassee, FL 32301, (850)224-7121, for information regarding the availability of such courses in Florida; however, if the FES provides any information regarding such a course to the Respondent, the Respondent must submit that course information to the FEMC for review and determination as to whether or not it will comply with the Board’s requirements. Respondent may also elect to complete one of the following correspondence courses offered by:

Murdough Center for Engineering Professionalism
Texas Tech University, PO Box 41023, Lubbock, Texas 79409
Engineering Ethics Intermediate
Telephone 806-742-3525; Fax 806-742-0444; E-mail: engineering.ethics@ttu.edu
Courses offered by Continuing Education Programs or Professional Business Programs (Exp: SunCam, Inc., C2Ed), are not Board Certified, and will not meet the requirements.

b. Respondent shall successfully complete the STUDY GUIDE which has been prepared by the Board and which will be furnished to Respondent, regarding the Engineering Practice Act, Chapter 471, Florida Statutes, and the Rules of the Board. Respondent is required to provide a personal email address that will be used to access the on-line study guide. The study guide must be completed within thirty (30) days of the date on which the Final Order incorporating this Stipulation is filed with the Agency Clerk.

9. Respondent's license shall be RESTRICTED from practicing any ELECTRICAL ENGINEERING until such time that he completes, passes and submits proof of passing the NCEES 8 HOUR Electrical examination. The terms "Electrical Engineering" encompasses all services encompassed by Rule Chapter 61G15-33 and 61G15-34, Florida Administrative Code.

a. Subsequent to taking and passing the NCEES Electrical Examination, Respondent shall submit to the Board a detailed list of all completed Electrical Engineering projects (signed, sealed, and dated), by the Respondent for PROJECT REVIEW at six (6) and eighteen (18) month intervals from the date on which Respondent passes the examination. The projects shall include: all Electrical Engineering projects and reports signed and sealed by Respondent. This Paragraph and the remainder of Paragraph 9 only become active if and when Respondent takes and passes the NCEES Electrical Examination.

b. A FEMC Consultant will select two (2) projects from each submitted list for review. The Respondent is responsible for promptly furnishing any set of completed plans
(signed, sealed, and dated), calculations, and any other supporting documentation requested by the Consultant. The Respondent must sign, date, and seal all materials that are submitted for project review using a non-embossed, rubber stamp seal. Sealed project review materials may be copied and submitted electronically, if desired, by the Respondent. Respondent is also responsible for the Consultant’s fees for reviewing the projects, and shall remit payment in the amount of $2,000.00 by check or money order made payable in the name of the Board’s Consultant at the time that the project lists are submitted to FEMC. In the event that the project reviews cost exceed $2,000.00, then the Respondent is responsible for the deficiency. In the event that the cost of the reviews is less than $2,000.00, then the unused portion will be refunded to Respondent. Should the Consultant return an unfavorable report concerning Respondent’s projects, that report shall be submitted to the Probable Cause Panel for determination of whether additional disciplinary proceedings should be initiated.

c. If the Respondent has not performed electrical engineering services on a sufficient number of projects to make the submissions required by 9a., above, the initial or, if applicable, the subsequent submission required by the terms of the project review shall be extended for a period of six (6) months to allow Respondent to perform the services necessary for the required review. However, if, after the extension has expired, Respondent does not perform sufficient engineering services to meet the requirements of the terms of probation, the RESTRICTION on Respondent’s license regarding ELECTRICAL ENGINEERING will be reimposed without any further necessity for action on the part of the Board. Respondent’s license shall remain on such RESTRICTED status, unless and until Respondent notifies the Board that he wishes to recommence ELECTRICAL
ENGINEERING practice at which time the conditions of PROBATION set out in Paragraphs 9 (a)-(b) will apply.

d. Should the Respondent fail to timely comply with the terms of the Final Order with regard to the Project Reviews discussed herein, this case will be submitted to the Probable Cause Panel for review and determination of whether additional disciplinary action should be taken.

10. Should the Respondent fail to timely comply with the terms of the Final Order with regard to the Project Reviews discussed herein, this case will be submitted to the Probable Cause Panel for review and determination of whether additional disciplinary action should be taken.

11. Respondent acknowledges that neither Respondent’s attendance at the Board Meeting when this Stipulation is presented, nor any continuing education or college level courses taken as a requirement of the terms of this Stipulation may be used to comply with the continuing education requirements of Chapter 61G15-22, Florida Administrative Code.

12. It is expressly understood that this Stipulation is subject to approval of the Board and FEMC and has no force or effect until the Board issues a Final Order adopting this Stipulation.

13. This Stipulation is executed by Respondent for the purpose of avoiding further administrative action with respect to this cause. In this regard, Respondent authorizes the Board to review and examine all investigative file materials concerning Respondent prior to, or in conjunction with, consideration of this Stipulation. Furthermore, should this Stipulation not be accepted by the Board, it is agreed that presentation to and by the Board shall not
unfairly or illegally prejudice the Board or any of its members from further participation, consideration, or resolution of these proceedings.

14. Respondent expressly waives all further procedural steps and expressly waives all rights to seek judicial review of or otherwise challenge or contest the validity of the joint Stipulated Facts, Conclusions of Law, imposition of discipline, and the Final Order of the Board incorporating this Stipulation.

15. Respondent waives the right to seek any attorney’s fees or costs from the Board in connection with this disciplinary proceeding.

WHEREFORE, the parties hereto request the Board to enter a Final Order accepting and implementing the terms contained herein.

Santiago Bolivar
Santiago Bolivar, P.E.,
Respondent
Case Nos. 2017023531, 2018013938
Dated: 3/27/19

APPROVED this 28 day of , 2019.

Zana Raybon, Executive Director
Florida Board of Professional Engineers

BY: John J. Rimes, III
Chief Prosecuting Attorney
FLORIDA BOARD OF PROFESSIONAL ENGINEERS,

Petitioner,

v.

SANTIAGO BOLIVAR, P.E.

Respondent,

________________________________________/

ADMINISTRATIVE COMPLAINT

COMES NOW the Florida Engineers Management Corporation (FEMC) on behalf of Petitioner, Florida Board of Professional Engineers, hereinafter referred to as "Petitioner," and files this Administrative Complaint against SANTIAGO BOLIVAR, P.E., hereinafter referred to as "Respondent." This Administrative Complaint is issued pursuant to Sections 120.60 and 471.038, Florida Statutes. Any proceeding concerning this complaint shall be conducted pursuant to Section 120.57, Florida Statutes. In support of this complaint, Petitioner alleges the following:

1. Petitioner, Florida Board of Professional Engineers, is charged with regulating the practice of engineering pursuant to Chapter 455, Florida Statutes. This complaint is filed by the Florida Engineers Management Corporation (FEMC) on behalf of Petitioner. FEMC is charged with providing administrative, investigative, and prosecutorial services to the Florida Board of Professional Engineers pursuant to Section 471.038, Florida Statutes (1997).

2. Respondent is, and has been at all times material hereto, a licensed professional engineer in the State of Florida, having been issued license number PE 53326. Respondent’s last known address is 265 South Federal Highway #453, Deerfield Beach, Florida 33441.
3. On October 15, 2015, a Final Order (Final Order) was entered in Florida Board of Professional Engineers v. Santiago Bolivar, FEMC CASE # 2014030707. This Order was not appealed.

4. The Final Order imposed the following disciplinary sanctions upon Respondent:

b. Respondent shall submit to the Board a detailed list of all completed projects which are signed, sealed, and dated by the Respondent for PROJECT REVIEW at six (6) and eighteen (18) month intervals from the date that the Final Order adopting this Stipulation is filed with the Agency Clerk. The projects shall include: all projects and reports signed and sealed by Respondent. This list must include electrical, mechanical plumbing, electrical HVAC, and structural engineering disciplines, which do not necessarily need all to appear in the same project, but all four disciplines must be available for review.

c. Due to the variety of engineering disciplines for which projects need to be reviewed, two FEMC Consultants will select one (1) project each from each submitted list for review. One FEMC Consultant will review the structural project and a different FEMC Consultant will review the electrical, mechanical HVAC, and mechanical plumbing disciplines. The Respondent is responsible for promptly furnishing any set of completed plans (signed, sealed, and dated), calculations, and any other supporting documentation requested by the Consultants. The Respondent must sign, date, and seal all materials that are submitted for project review using a non-embossed, rubber stamp seal. Sealed project review materials may be copied and submitted electronically, if desired by the Respondent. Respondent is also responsible for the Consultants' fees for reviewing the projects. Since there are two consultants involved in these project reviews, Respondent shall remit payment in two separate checks (or money orders) in the amount of $1,500.00, made payable in the name of each of the Board's Consultants who will be reviewing the projects. These payments shall be submitted at the time that the project lists are submitted to FEMC. Respondent will be advised prior to submitting the projects lists and payment to whom to make the checks or money orders payable. In the event that the project review costs exceed $1,500.00 by either consultant, then the Respondent is responsible for the deficiency. In the event that the cost of the reviews is less than $1,500.00 by either consultant, then the unused portion will be refunded to Respondent. Should either Consultant return an unfavorable report concerning Respondent's projects, that report shall be submitted to the Probable Cause Panel for determination of whether additional disciplinary proceedings should be initiated.

5. Respondent's 18 month plan's review was completed and resulted in a charge of $4500.00 for the electrical engineering plans review. As provided above, Respondent was
responsible for the additional $3000.00 charge to the engineering consultant. Respondent, despite numerous written and oral communications from FEMC reminding Respondent of his obligations under the Final Order, has not paid the consultant fee charge of $3000.00 imposed by the terms of the Final Order.

6. Respondent’s plans for the 6 month review were due for submission on or about April 18, 2017. Respondent’s submissions did not include a remodeling project for a residence located at 919 North Lake Drive, Hollywood, Florida 33020 which Respondent signed, sealed and dated in December 2016. This project met the requirements for submission on Respondent’s list of projects and covered all aspects of engineering required to be found in the submitted projects. As such, this project was mandated by the Final Order to have been listed in Respondent’s projects submitted for review.

7. Section 471.033(1)(k), Florida Statutes, provides in relevant part that “[t]he following acts constitute grounds for which the disciplinary actions in [Section 471.033(3), Florida Statutes] may be taken: … (k) Violating any order of the board or department previously entered in a disciplinary hearing; …. ” Rule 61G15-19.001(6), Florida Administrative Code, provides that “[a] professional engineer shall not commit misconduct in the practice of engineering. Misconduct in the practice of engineering as set forth in Section 471.033(1)(g), F.S., shall include, but not be limited to:… (o) Failure on the part of any professional engineer …to obey the terms of a final order imposing discipline upon said professional engineer….”

8. In February and December 2017 Respondent submitted plans for the 6 and 18 month plans reviews were reviewed under the terms of the Final Order. The 6 months plans review completed in April 2017 consisted of documents for the New Garage at 2175 N.E. 120 St., North Miami, FL (New Garage Project). The plans consisted of 12 sheets of plans, five Architectural
sheets; four Structural sheets; one HVAC sheet; one Electrical sheet and one Plumbing sheet. The plans also included design documents for the Night Club at 2650 S. Military Trail, Village of Palm Springs, FL (Night Club Project). These plans consisted of 8 sheets, four Architectural sheets, one Mechanical sheet, two Electrical sheets, and one Plumbing sheet.

9. The December 2017 review of the 18 month set of plans was for design documents for the Horn Family Company, 4101 Pine Tree Drive, Apt. #1614, Miami Beach, FL 33140; dated 1/31/2017; signed and sealed 6/19/17 (Horn Project). The 18 month review also included plans for the Lopez Leonor Residence, 1008 Guilford A, Century Village, Boca Baton, FL 33434; dated 3/19/17; signed and sealed 6/19/17 (Lopez Leonor Project).

10. Rule 61G15-19.001(4), Fla. Admin. Code, also provides that “[f]ailure to comply with the procedures set forth in the Responsibility Rules as adopted by the Board of Professional Engineers shall be considered as non-compliance with this section unless the deviation or departures therefrom are justified by the specific circumstances of the project in question and the sound professional judgment of the professional engineer.”

11. Rule 61G15-30.002(1), Fla. Admin. Code, mandates that Respondent, as the engineer of record for all engineering work delineated in the Specific Allegations, is professionally responsible for the documents prepared. As such, Respondent is responsible for producing documents that comply with the applicable portions of the Responsibility Rules.

12. Respondent acted as the Electrical and Mechanical (Plumbing and HVAC) Engineer of Record for the New Garage Project and the Night Club Project and the Electrical Engineer of Record for the Horn Project and the Lopez Leonor Project, as that term is defined in Rules 61G15-30.002(1), 61G15-33.002(1) and 61G15-34.002(1), Fla. Admin. Code. As such, all
engineering documents prepared, signed, sealed and dated by Respondent must contain the information set out in Rule 61G15-30.003(1):

When prepared for inclusion with an application for a general building permit, the Documents shall meet all Engineer's Responsibility Rules, set forth in Chapters ...61G15-33, and 61G15-34, F.A.C., and be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of the Florida Building Code[FBC], adopted in Section 553.73, F.S., and applicable laws, ordinances, rules and regulations, as determined by the Agency Having Jurisdiction (AHJ). The Documents shall include:

(a) Information that provides material specifications required for the safe operation of the system that is a result of engineering calculations, knowledge and experience.

(b) List Federal, State, Municipal, and County standards, codes, ordinances, laws, and rules, with their effective dates, that the Engineering Documents are intended to conform to.

(c) Information, as determined by the Engineer of Record, needed for the safe and efficient operation of the system.

(d) List engineering design criteria; reference project specific studies, reports, and delegated Engineering Documents.

(e) Identify clearly elements of the design that vary from the governing standards and depict/identify the alternate method used to ensure compliance with the stated purpose of these Responsibility Rules.

clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of this code and relevant laws, ordinances, rules and regulations,...”

FBC-B Section 2701.1 “Scope” states: “This chapter governs the electrical components, equipment and systems used in buildings and structures covered by this code. Electrical components, equipment and systems shall be designed and constructed in accordance with the provisions of the NFPA 70, National Electrical Code (NEC).” FBC-B Section 2801.1 “Scope,” states: Mechanical appliances, equipment and systems shall be constructed, installed and maintained in accordance with the Florida Building Code, Mechanical (FBC-M). FBC-B Section 107.3.5 “Minimum plan review criteria for buildings” states: The examination of the documents by the building official shall include the following minimum criteria and documents: Electrical: Wiring ... branch circuits, Overcurrent protection, Grounding, Wiring methods and Materials, GFCIs; Emergency systems; Mechanical: Energy calculations; Exhaust systems: Clothes Dryer Closet; Kitchen equipment exhaust; Make-up air; Duct systems; Ventilation; Combustion air.

FBC-B Section 2901.1 Scope, states: “Plumbing systems and equipment shall be constructed, installed and maintained in accordance with the Florida Building Code, Plumbing (FBC-P).” FBC-B Section 107.3.5 “Minimum plan review criteria for buildings” states: The examination of the documents by the building official shall include the following minimum criteria and documents: Mechanical: Energy calculations; Combustion air;

14. Rule 61G15-33.001 “Responsibility Rules of Professional Engineers Concerning the Design of Electrical Systems” “General Responsibility” states in material part that: “Electrical Engineering documents shall be prepared in accordance with applicable technology and with the requirements of the authority having jurisdiction. The documents shall identify the Engineer of
record for the electrical systems project. Electrical Engineering documents shall demonstrate compliance with the requirements of the applicable codes and standards . . . .”

15. Rule 61G15-33.003(2) “Design of Power Systems,” requires in material part that “Electrical Engineering Documents applicable to the design of electrical power systems shall, at a minimum, indicate the following: a) Power Distribution Riser Diagram with short circuit values. (c) Circuit interrupting devices and fault current interrupting capability. (d) Location and characteristics of surge protective devices. (e) Main and distribution equipment, control devices, locations and sizes. (f) Voltage drop calculations for the feeders and customer-owned service conductors . . . . (g) Circuitry of all outlets equipment and devices. (h) Load computations. (l) Record documents applicable to power systems shall, at a minimum, contain information as required by Florida Building Code.

16. Rule 61G15-33.004(2) "Design of Lighting Systems," requires that Electrical Engineering Documents applicable to the design of lighting systems shall, at a minimum, indicate the following: (a) Lighting fixture performance specifications and arrangements. (b) Emergency Lighting, egress and exit lighting. (d) Lighting control and circuiting. (e) Calculated values to demonstrate compliance with the Florida Energy code for building Construction.

17. FBC-B Section 2801.1 “Scope,” states: Mechanical appliances, equipment and systems shall be constructed, installed and maintained in accordance with the Florida Building Code, Mechanical (FBC-M). FBC-B Section 107.3.5 “Minimum plan review criteria for buildings” states: The examination of the documents by the building official shall include the following minimum criteria and documents: Mechanical: Exhaust systems: Clothes dryer exhaust, Equipment, Make-up air, Ventilation, Combustion air. Plumbing: Fixture requirements; Back flow prevention; Location of water supply line; Grease traps.
18. Rule 61G15-34 "Mechanical Systems" Section 61G15-34.001 "General Responsibility" states in material part: Mechanical Engineering Documents shall be prepared in accordance with the applicable technology and with the requirements of the authority having jurisdiction. The documents shall identify the Engineer of Record for the mechanical systems project. Mechanical Engineering documents shall demonstrate compliance with the requirements of the applicable codes and standards . . . .

19. Rule 61G15-34.003(4) "Design of Heating, Ventilation and Air Conditioning (HVAC) Systems," requires that Mechanical Engineering Documents pertaining to HVAC systems . . . shall indicate the following: (a) Demonstrate and provide adequate information for the AHJ to determine compliance with codes and ordinances. (b) Equipment selection schedule for each piece of mechanical equipment. All equipment shall have capacities listed including efficiencies, electrical or fuel requirements, static pressure and fan air quantities as applicable to the system, . . . . (d) Outside (fresh) air make-up conditions. (e) Cooling coil requirements based on sensible heat, latent heat and total heat gains. (g) Outside and inside design dry and wet bulb conditions. (k) Condensate discharge piping layout with pipe sizes. (m) Ductwork layout and sizing; and outside air intake sizes; (n) All data needed to complete the Florida Energy Code calculations as applicable.

20. FBC-B Section 2901.1 "Scope," states: Plumbing systems and equipment shall be constructed, installed and maintained in accordance with the Florida Building Code, Plumbing (FBC-P).

21. Rule 61G15-34 "Mechanical Systems" states that construction documents shall . . . define the required mechanical systems, including plumbing components, processes, equipment and material . . . . Rule 61G15-34.007(2) "Design of Plumbing Systems," requires that Mechanical
Engineering Documents applicable to Plumbing Systems shall when applicable, include but are not limited to the following: (a) Equipment schedules for all plumbing fixtures, water heaters, . . . (c) Potable Water isometric diagrams with pipe sizes . . . (d) Sanitary riser diagrams with pipe sizes and total sanitary waste fixture units. (e) Storm riser diagrams with pipe sizes and cumulative drain area square footages. (i) List of ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers), ASME (American Society of Mechanical Engineers), ASPE (American Society of Plumbing Engineers), ANSI (American National Standards Institute) and other applicable codes, design standards and requirements.

NEW GARAGE PROJECT

22. Respondent’s Electrical Engineering Design Documents for the New Garage Project are materially deficient as follows:

    (a) The drawing (Sheet E) contains an Electrical Riser Diagram but no short circuit values and no voltage drop calculations for the feeders and customer-owned service conductors. These omissions constitute violations of Rule 61G15-33.003(2)(a) and (t).

    (b) Circuit interrupting devices are shown on the panel schedule (Sheet E), but fault current interrupting capacity is not addressed in the drawings. The omission of fault current interrupting capacity constitutes a violation of Rule 61G15-33.003(2)(c).

    (c) The electrical panel schedule (Sheet E) contains circuit interrupting devices for one AHU, one condensing unit and one Mini split A/C. The HVAC drawing (Sheet M) shows a relocated existing AHU and one relocated condenser unit, plus one new AHU and one new condensing unit, plus two mini split A/C's. Circuit breakers and supply circuits are provided on the Electrical plan for only one of each vs. two of each that are shown on the HVAC drawing. This violates NEC 210.11, which states in part: Branch Circuits Required. Branch
circuits for lighting and for appliances, including motor-operated appliances, shall be provided to supply the loads.

(d) The electrical panel schedule also has two 5000 VA (volt amps) loads being served from 20 amp, 2-pole breakers (circuits 25, 27 and 34, 36). The 5000 VA loads calculates to 20.8 amps at 240 volts, 2 poles. Serving this load from a 20 amp breaker violates NEC 210.23, which states in part: Permissible Loads. In no case shall the load exceed the branch-circuit ampere rating.

(e) No surge protective devices are shown on the drawings. This constitutes a violation of Rule 61G15-33.003(2)(d).

(f) The drawings contain no electrical circuitry for lighting, receptacle or equipment. The absence of electrical circuitry constitutes a violation of Rule 61G15-33.003(2)(g).

(g) The electrical drawing does not contain information as required by the FBC. FBC-B Section 107.3.5 "Minimum plan review criteria for buildings" states: The examination of the documents by the building official shall include the following minimum criteria and documents: Electrical: 1. Overcurrent protection; 2. Equipment. The incorrect under sizing of circuit breakers and the absence of these other FBC-B requirements constitutes a violation of Rule 61G15-33.003(2)(1).

23. Respondent’s Mechanical (HVAC) Engineering Design Documents for the New Garage Project are materially deficient as follows:

(a) The HVAC drawing (Sheet M) shows no exhaust vent for the clothes dryer and specifies only one of two mini split A/C units. These omissions constitute a violation of FBC-B 107.3.5.
(b) HVAC Sheet M contains conflicting specifications. The Split System Schedule specifies the cooling and heating capacity for the condensing unit to be 21,000 BTU/Hr, while the design requirements state that the nominal cooling capacity is 18,000 BTU/Hr and the heating capacity is 19,000 BTU/Hr.

(c) The mechanical drawing (Sheet M) does not contain adequate information to allow the AHJ to determine compliance with codes and ordinances. These omissions constitute a violation of Rule 61G15-34.003(4)(a).

(d) The mechanical drawing (Sheet M) contains an air conditioning equipment schedule. However, the drawing does not contain equipment static pressure, cooling coil requirements based on sensible heat, latent heat and total heat gains; nor outside and inside design dry and wet bulb conditions. These omissions constitute violations of Rule 61G15-34.003(4)(b), (e) and (g).

(e) The mechanical drawing (Sheet M) does not contain all data needed to complete the Florida Energy Code calculations. The absence of data necessary to complete the Florida Energy Code calculations constitutes a violation of Rule 61G15-34.003(4)(n).

24. Respondent’s Mechanical (Plumbing) Engineering Design Documents for the New Garage Project are materially deficient as follows:

(a) No potable water isometric diagrams are shown. Total water fixture units are not shown on the drawing. The omission of a potable water isometric diagram and the omission of total water fixture units constitutes a violation of FAC Responsibility Rule 61G15-34.007(2)(c).

(b) An isometric sanitary riser diagram is shown; however, total flow waste fixture units are not shown on the drawings. The omission of total waste fixture units constitutes a violation of Rule 61G15-34.007(2)(d).
NIGHT CLUB PROJECT

25. Respondent’s Electrical Engineering Design Documents for the Night Club Project are materially deficient as follows:

(a) The drawings contain an Electrical Riser Diagram, but contain no short circuit values and no voltage drop calculations for the feeders and customer-owned service conductors. These omissions constitute violations of Rule 61G15-33.003(2)(a) and (f).

(b) The Electrical Riser Diagram (on Sheet E1) contains many omissions, errors and discrepancies.

1. No Conductor sizes are shown on the service weatherhead or the service gutter.

2. The panel schedules (Sheet E2) show total connected building current at 1080 amps; the Main disconnect size is 600 amps. There are no calculations to conclude and justify that the 600 amp disconnect is code compliant. This discrepancy violates NEC 408.30, which states in part: All pane/boards shall have a rating not less than the minimum feeder capacity required for the calculated load.

3. Panel E, shown to be a 200 amp panel, is served by a 100 amp, 3-pole circuit breaker. Panel Schedule E (Sheet E2) shows a load of 172 amps. The circuit breaker should be 200 amps, 3-pole. The sizing of the circuit breaker (100 amps) violates NEC 408.36, which states in part: A panel board shall be protected by an overcurrent protective device having a rating not greater than that of the pane/board.

4. Panels C and D are each shown to be 100 amps and controlled by 3-pole circuit breakers; Panel Schedules (Sheet E2) show both being single phase (2 poles), 3 wire panels. The circuit breaker controlling Panel D is sized at 200 amps, while the Panel D schedule shows
Panel D to be 100 amps. The circuit breaker controlling Panel C is sized at 100 amps, while the Panel C schedule shows Panel C to be 200 amps. These discrepancies violate NEC 408.30, which states in part: All pane/boards shall have a rating not less than the minimum feeder capacity required for the calculated load.

5. The service conductors for 200 amps, 3 phase panels (A, B, E, F and G) are shown to be 3 #3/0 copper, while the panel schedules show each to be 3 phase, 4 wire panels. The service conductors should be 4 #3/0 Cu, not 3 #3/0 Cu. This error violates NEC 310.15(B)(5)(c), which states: On a 4-wire, 3-phase wye circuit where the major portion of the load consist of nonlinear loads, harmonic currents are present in the neutral conductor; the neutral conductor shall therefore be considered a current-carrying conductor.

(c) Circuit interrupting devices are shown on the panel schedules (Sheet E2), but fault current interrupting capacity is not addressed in the drawings. The omission of fault current interrupting capacity constitutes a violation of Rule 61G15-33.003(2)(c).

(d) No surge protective devices are shown on the drawings. This omission constitutes a violation of Rule 61G15-33.003(2)(d).

(e) The main disconnect switch is shown on the Electrical Riser, but it is not located on the plans. This omission constitutes a violation of Rules 61G-33.003 (2)(e) and NEC Section 225.32, which states in part: The disconnecting means shall be installed either inside or outside of the building or structure served or where the conductors pass through the building or structure. The disconnecting means shall be at a readily accessible location nearest the point of entrance of the conductors.

(f) The drawings show no circuitry for outlets, equipment, lighting, or devices, except for panel schedule designations, which do not identify the loads being controlled by each
circuit breaker. The absence of circuitry for all electrical power and lighting loads constitutes a violation of Rules 61G15-33.003(2)(g) and 61G15-33.004(2)(d).

(f) The drawings contain no load computations. This omission constitutes a violation of Rule 61G-15-33.003(2)(h).

(g) The load calculated for the Water Heater (at 208 volts, 3 phase) is 46 amps. The circuit breaker serving this water heater (circuit A-10, 12) is sized at 40 amps, 2 poles. This undersized circuit breaker violates NEC 210.23, which states in part: Permissible Loads. In no case shall the load exceed the branch-circuit ampere rating.

(h) The circuit breaker in Panel F (F-2, 4, 6) serves A/C #7. This 100 amp, 3-pole breaker serves the load through #6 copper conductors. NEC Table 310.15(B)(16) limits #6 copper conductors (75° C wire) to 65 amps. This table requires #3 copper conductors for the 100 amp breaker. Thus, the specification of the #6 copper wire is a violation of NEC Table 310.15(B)(16).

(i) Many discrepancies exist between the contents of the panel schedules (Sheet E2) and the A/C Schedule (on Sheet M). Many of the circuit sizes clearly show lack of engineering correlation between the mechanical and electrical sheets. These discrepancies constitute violations of various sections of the NEC, including 210.11 and 210.23, which state in part: 210.11

Branch Circuits Required. Branch circuits for lighting and for appliances, including motor-operated appliances, shall be provided to supply the loads. 210.23 Permissible Loads. In no case shall the load exceed the branch-circuit ampere rating.

(j) The drawings do not contain information as required by the FBC. FBC-B Section 107.3 .5 "Minimum plan review criteria for buildings" states: The examination of the
documents by the building official shall include the following minimum criteria and documents:


(k) The drawings contain no information on the specifications of any lighting fixtures. This constitutes a violation of Rule 61G15-33.004(2)(a).

(l) Drawing E1 shows some egress and exit lighting fixtures, but insufficient to comply with the requirements of the Florida Fire Prevention Code (FFPC). These omissions constitute a violation of Rule 61G15-33.004(2)(b).

(m) The lighting design drawings contain no calculated values to demonstrate compliance with the Florida Energy Code for Building Construction. These omissions constitute a violation of Rule 61G15-33.004(2)(e).

26. Respondent’s Mechanical (HVAC) Engineering Design Documents for the Night Club Project are materially deficient as follows:

(a) The HVAC drawing (Sheet M) contains no Energy calculations and no combustion air calculations. These omissions constitute a violation of FBC-B 107.3.5.

(b) The HVAC drawing (Sheet M) does not contain adequate information for the AHJ to determine compliance with codes and ordinances. This omission violates Rule 61G15-34.003(4)(a).

(c) The HVAC drawing (Sheet M) does not contain cooling coil requirements based on sensible heat, latent heat and total heat gains; nor outside and inside design dry and wet bulb conditions. These omissions constitute violations of Rules 61G15-34.003(4)(c) and (g).
(d) The drawings contain no condensate discharge piping layouts. The absence of condensate discharge piping constitutes a violation of Rule 61G15-34.003(4)(k).

(e) The HVAC drawings (Sheet M) does not contain all data required to complete the Florida Energy Code calculations, as required by the FBCB, Chapter 13. The absence of all data required to complete the Florida Energy Code calculations constitutes a violation of Rule 61G15-34.003(4)(n).

27. Respondent’s Mechanical (Plumbing) Engineering Design Documents for the Night Club Project are materially deficient as follows:

(a) The Plumbing drawing (Sheet P) contains no plumbing equipment schedules. This omission violates Rules 61G15-34.007(2)(a) and (1).

(b) A potable water isometric diagram is shown; however, total water fixture units are not shown on the drawings. The omission of total water fixture units constitutes a violation of Rule 61G15-34.007(2)(c).

(c) An isometric sanitary riser diagram is shown; however, total flow waste fixture units are not shown on the drawings. This omission of total waste fixture units constitutes a violation of Rule 61G15-34.007(2)(d).

(d) No storm riser diagram is shown on the drawings. No area drainage calculations are shown on the drawings. This omissions of a storm riser diagram and drainage calculations constitutes a violation of Rule 61G15-34.007(2)(e).

HORN PROJECT

28. Respondent’s Electrical Engineering Design Documents for the Horn Project are materially deficient as follows:
(a) The Scope of Work (on Sheet A1) limited to the partial renovation of one bathroom, states that lighting is to be added (presumably to the bathroom). However no load computations are shown on the drawings to conclude that the addition of lighting fixtures in the bathroom did not cause the electrical service to the apartment’s existing electrical panel to be exceeded. This omission of load computations constitutes a violation of Rule 61G15-33.003(2)(h).

LOPEZ LEONOR PROJECT

29. Respondent’s Electrical Engineering Design Documents for the Lopez Leonor Project are materially deficient as follows:

(a) Circuit 12, 14 (in the Panel Schedule on Sheet E) serves a 10 kW water heater through a 20 amp, 2 pole (20/2) circuit breaker and #12 wire. The amp draw for a 10 kW load calculates to 41.6 amps of current at 24 volts, single phase. According to NEC Table 310.15(B)(16), a #12 copper wire is rated to carry only 25 amps. This load (the water heater) should have been served by a 60 amp, 2 pole breaker through # 6 wire. The error in specifying a non-code-compliant breaker and wire constitutes a violation of Rule 61G15-33.003(2)(c).

(b) The Scope of Work (on Sheet A1) is limited to remodeling one of two bathrooms and the kitchen, replacing lighting fixtures and adding recessed canister light fixtures. The load computations associated with the Panel Schedule on Sheet E are erroneous. The calculation includes 5000 VA (volt amps= watts) for the AHU where the 7500 VA for the condensing unit should have been used in this calculation. The error in the load computations constitutes a violation of Rule 61G15-33.003(2)(h).

COUNT I

ELECTRICAL DESIGN DOCUMENTS- NEW GARAGE PROJECT

30. Petitioner realleges and incorporates Paragraphs One (1), Two (2), Eight (8) through Sixteen (16) and Twenty-Two (22) as if fully set forth in this Count One.
31. Respondent’s electrical engineering drawings for the New Garage Project contain deficiencies including; but not limited to, those set forth in Paragraph Twenty-Two (22). As a result of those deficiencies, Respondent violated the provisions of Section 471.033(1)(g), Florida Statutes, and Rule 61G15-19.001(4), F. A. C., by sealing and signing electrical engineering documents that were issued and filed for public record when such documents were materially deficient in that Respondent: (1) did not exercise due care in the preparation of the final engineering documents for the New Garage Project and (2) the final engineering documents for the New Garage Project were not issued in compliance with acceptable engineering principles.

32. Based on the foregoing, Respondent is charged with violating Section 471.033(1)(g), Florida Statutes, and Rule 61G15-19.001(4), F. A. C., by being negligent in the practice of engineering.

COUNT II

MECHANICAL (HVAC) DESIGN DOCUMENTS- NEW GARAGE PROJECT

33. Petitioner realleges and incorporates Paragraphs One (1), Two (2), Eight (8) through Thirteen (13), Seventeen (17) through Nineteen (19) and Twenty Three (23) as if fully set forth in this Count Two.

34. Respondent’s mechanical (HVAC) engineering drawings for the New Garage Project contain deficiencies including; but not limited to, those set forth in Paragraph Twenty-Three (23). As a result of those deficiencies, Respondent violated the provisions of Section 471.033(1)(g), Florida Statutes, and Rule 61G15-19.001(4), F. A. C., by sealing and signing mechanical (HVAC) engineering documents that were issued and filed for public record when such documents were materially deficient in that Respondent: (1) did not exercise due care in the preparation of the final engineering documents for the New Garage Project and (2) the final
engineering documents for the New Garage Project were not issued in compliance with acceptable engineering principles.

35. Based on the foregoing, Respondent is charged with violating Section 471.033(1)(g), Florida Statutes, and Rule 61G15-19.001(4), F. A. C., by being negligent in the practice of engineering.

COUNT III

MECHANICAL (Plumbing) DESIGN DOCUMENTS- NEW GARAGE PROJECT

36. Petitioner realleges and incorporates One (1), Two (2), Eight (8) through Thirteen (13), Seventeen (17), Eighteen (18), Twenty (20), Twenty-One (21) and Twenty Four (24) as if fully set forth in this Count Three.

37. Respondent’s mechanical (plumbing) engineering drawings for the New Garage Project contain deficiencies including; but not limited to, those set forth in Paragraph Twenty Four (24). As a result of those deficiencies, Respondent violated the provisions of Section 471.033(1)(g), Florida Statutes, and Rule 61G15-19.001(4), F. A. C., by sealing and signing mechanical (plumbing) engineering documents that were issued and filed for public record when such documents were materially deficient in that Respondent: (1) did not exercise due care in the preparation of the final engineering documents for the New Garage Project and (2) the final engineering documents for the New Garage Project were not issued in compliance with acceptable engineering principles.

38. Based on the foregoing, Respondent is charged with violating Section 471.033(1)(g), Florida Statutes, and Rule 61G15-19.001(4), F. A. C., by being negligent in the practice of engineering.
COUNT IV

ELECTRICAL DESIGN DOCUMENTS- NIGHT CLUB PROJECT

39. Petitioner realleges and incorporates Paragraphs One (1), Two (2), Eight (8) through Thirteen (13), Seventeen (17) through Nineteen (19) and Twenty Five (25) as if fully set forth in this Count Four.

40. Respondent's electrical engineering drawings for the Night Club Project contain deficiencies including; but not limited to, those set forth in Twenty Five (25). As a result of those deficiencies, Respondent violated the provisions of Section 471.033(1)(g), Florida Statutes, and Rule 61G15-19.001(4), F. A. C., by sealing and signing electrical engineering documents that were issued and filed for public record when such documents were materially deficient in that Respondent: (1) did not exercise due care in the preparation of the final engineering documents for the Night Club Project and (2) the final engineering documents for the Night Club Project were not issued in compliance with acceptable engineering principles.

41. Based on the foregoing, Respondent is charged with violating Section 471.033(1)(g), Florida Statutes, and Rule 61G15-19.001(4), F. A. C., by being negligent in the practice of engineering.

COUNT V

MECHANICAL (HVAC) DESIGN DOCUMENTS- NIGHT CLUB PROJECT

42. Petitioner realleges and incorporates Paragraphs One (1), Two (2), Eight (8) through Thirteen (13), Seventeen (17) through Nineteen (19) and Twenty Six (26) as if fully set forth in this Count Five.

43. Respondent's mechanical (HVAC) engineering drawings for the Night Club Project contain deficiencies including; but not limited to, those set forth in Paragraph Twenty Six (26). As a result of those deficiencies, Respondent violated the provisions of Section
471.033(1)(g), Florida Statutes, and Rule 61G15-19.001(4), F. A. C., by sealing and signing mechanical (HVAC) engineering documents that were issued and filed for public record when such documents were materially deficient in that Respondent: (1) did not exercise due care in the preparation of the final engineering documents for the Night Club Project and (2) the final engineering documents for the Night Club Project were not issued in compliance with acceptable engineering principles.

44. Based on the foregoing, Respondent is charged with violating Section 471.033(1)(g), Florida Statutes, and Rule 61G15-19.001(4), F. A. C., by being negligent in the practice of engineering.

**COUNT VI**

**MECHANICAL (Plumbing) DESIGN DOCUMENTS- NIGHT CLUB PROJECT**

45. Petitioner realleges and incorporates One (1), Two (2), Eight (8) through Thirteen (13), Seventeen (17), Eighteen (18), Twenty (20), Twenty-One (21) and Twenty Seven (27) as if fully set forth in this Count Six. Respondent's mechanical (plumbing) engineering drawings for the Night Club Project contain deficiencies including; but not limited to, those set forth in Paragraph Twenty Seven (27). As a result of those deficiencies, Respondent violated the provisions of Section 471.033(1)(g), Florida Statutes, and Rule 61G15-19.001(4), F. A. C., by sealing and signing mechanical (plumbing) engineering documents that were issued and filed for public record when such documents were materially deficient in that Respondent: (1) did not exercise due care in the preparation of the final engineering documents for the Night Club Project and (2) the final engineering documents for the Night Club Project were not issued in compliance with acceptable engineering principles.
Based on the foregoing, Respondent is charged with violating Section 471.033(1)(g), Florida Statutes, and Rule 61G15-19.001(4), F. A. C., by being negligent in the practice of engineering.

COUNT VII

ELECTRICAL DESIGN DOCUMENTS- HORN PROJECT

Petitioner realleges and incorporates Paragraphs One (1), Two (2), Eight (8) through Sixteen (16) and Twenty-Eight (28) as if fully set forth in this Count Seven.

Respondent's electrical engineering drawings for the Horn Project contain deficiencies including; but not limited to, those set forth in Paragraph Twenty-Eight (28). As a result of those deficiencies, Respondent violated the provisions of Section 471.033(1)(g), Florida Statutes, and Rule 61G15-19.001(4), F. A. C., by sealing and signing electrical engineering documents that were issued and filed for public record when such documents were materially deficient in that Respondent: (1) did not exercise due care in the preparation of the final engineering documents for the Horn Project and (2) the final engineering documents for the Horn Project were not issued in compliance with acceptable engineering principles.

Based on the foregoing, Respondent is charged with violating Section 471.033(1)(g), Florida Statutes, and Rule 61G15-19.001(4), F. A. C., by being negligent in the practice of engineering.

COUNT VIII

ELECTRICAL DESIGN DOCUMENTS - LOPEZ LEONOR PROJECT

Petitioner realleges and incorporates Paragraphs One (1), Two (2), Eight (8) through Sixteen (16) and Twenty-Nine (29) as if fully set forth in this Count Eight.

Respondent's electrical engineering drawings for the Lopez Leonor Project contain deficiencies including; but not limited to, those set forth in Paragraph Twenty-Nine (29).
As a result of those deficiencies, Respondent violated the provisions of Section 471.033(1)(g), Florida Statutes, and Rule 61G15-19.001(4), F. A. C., by sealing and signing electrical engineering documents that were issued and filed for public record when such documents were materially deficient in that Respondent: (1) did not exercise due care in the preparation of the final engineering documents for the Lopez Leonor Project and (2) the final engineering documents for the Lopez Leonor Project were not issued in compliance with acceptable engineering principles.

52. Based on the foregoing, Respondent is charged with violating Section 471.033(1)(g), Florida Statutes, and Rule 61G15-19.001(4), F. A. C., by being negligent in the practice of engineering.

COUNT IX

VIOLATION OF TERMS OF FINAL ORDER

53. Petitioner realleges and incorporates Paragraphs One (1) through Seven (7) as if fully set forth in this Count Nine.

54. By failing to provide payment for the 18th month plans review and by failing to list all sealed and signed projects for the 6th month plans review Respondent failed to comply with the terms of the Final Order entered in Florida Board of Professional Engineers v. Santiago Bolivar, FEMC CASE # 2014030707.

55. Based on the foregoing, Respondent is charged with violating Section 471.033(1)(k) Florida Statutes, and Rule 61G15-19.001(6)(o), Florida Administrative Code, by violating and failing to comply with the terms of a Final Order entered by the Board of Professional Engineers.

WHEREFORE, the Petitioner respectfully requests the Board of Professional Engineers to enter an order imposing one or more of the following penalties: permanent revocation or suspension of the Respondent’s license, restriction of the Respondent’s practice, imposition of an

FBPE vs. Santiago Bolivar, P.E., Case No. 2018013938
administrative fine, issuance of a reprimand, placement of the Respondent on probation, the assessment of costs related to the investigation and prosecution of this case, other than costs associated with an attorney’s time, as provided for in Section 455.227(3), Florida Statutes, and/or any other relief that the Board deems appropriate.

SIGNED this __ day of ______________, 2018.

Zana Raybon
Executive Director

BY: John J. Rimes, III
Prosecuting Attorney

COUNSEL FOR FEMC:

John J. Rimes, III
Prosecuting Attorney
Florida Engineers Management Corporation
2639 North Monroe Street, Suite B-112
Tallahassee, Florida 32303
Florida Bar No. 212008
JR/rv
PCP DATE: November 07, 2018
PCP Members: MATTHEWS, DRURY & ALBERGO

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing was furnished to Santiago Bolivar, P.E. at 265 South Federal Highway #453, Deerfield Beach, Florida 33441, by certified mail and First Class U.S. Mail, on the ___ day of November, 2018.

Rebecca Valentine, Paralegal
STATE OF FLORIDA
FLORIDA BOARD OF PROFESSIONAL ENGINEERS

FLORIDA BOARD OF PROFESSIONAL ENGINEERS,

Petitioner,

v.

SANTIAGO BOLIVAR, P.E.,

Respondent,

________________________________

ADMINISTRATIVE COMPLAINT

COMES NOW the Florida Engineers Management Corporation (FEMC) on behalf of Petitioner, Florida Board of Professional Engineers, hereinafter referred to as “Petitioner,” and files this Administrative Complaint against SANTIAGO BOLIVAR, P.E., hereinafter referred to as “Respondent.” This Administrative Complaint is issued pursuant to Sections 120.60 and 471.038, Florida Statutes. Any proceeding concerning this complaint shall be conducted pursuant to Section 120.57, Florida Statutes. In support of this complaint, Petitioner alleges the following:

1. Petitioner, Florida Board of Professional Engineers, is charged with regulating the practice of engineering pursuant to Chapter 455, Florida Statutes. This complaint is filed by the Florida Engineers Management Corporation (FEMC) on behalf of Petitioner. FEMC is charged with providing administrative, investigative, and prosecutorial services to the Florida Board of Professional Engineers pursuant to Section 471.038, Florida Statutes (1997).
2. Respondent is, and has been at all times material hereto, a licensed professional engineer in the State of Florida, having been issued license number PE 53326. Respondent’s last known address is 266 South Federal Highway #543, Deerfield Beach, Florida 33441.


4. Section 471.033(1)(g), Florida Statutes, provides that an engineer is subject to discipline for engaging in negligence in the practice of engineering. Rule 61G15-19.001(4), Fla. Admin. Code, provides that negligence constitutes “failure by a professional engineer to utilize due care in performing in an engineering capacity or failing to have due regard for acceptable standards of engineering principles.”


6. Rule 61G15-19.001(4), Fla. Admin. Code, also provides that “[f]ailure to comply with the procedures set forth in the Responsibility Rules as adopted by the Board of Professional Engineers shall be considered as non-compliance with this section unless the deviation or departures therefrom are justified by the specific circumstances of the project in question and the sound professional judgment of the professional engineer.”

7. Rule 61G15-30.002(1), Fla. Admin. Code, mandates that Respondent, as the engineer of record for the Hollywood Project, is professionally responsible for the documents prepared. As
such, Respondent is responsible for producing documents that comply with the applicable portions of the Responsibility Rules.


When prepared for inclusion with an application for a general building permit, the Documents shall meet all Engineer’s Responsibility Rules, set forth in Chapters ...61G15-31, 61G15-33, and 61G15-34, F.A.C., and be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of the Florida Building Code[FBC], adopted in Section 553.73, F.S., and applicable laws, ordinances, rules and regulations, as determined by the Agency Having Jurisdiction (AHJ). The Documents shall include:

(a) Information that provides material specifications required for the safe operation of the system that is a result of engineering calculations, knowledge and experience.

(b) List Federal, State, Municipal, and County standards, codes, ordinances, laws, and rules, with their effective dates, that the Engineering Documents are intended to conform to.

(c) Information, as determined by the Engineer of Record, needed for the safe and efficient operation of the system.

(d) List engineering design criteria; reference project specific studies, reports, and delegated Engineering Documents.

(e) Identify clearly elements of the design that vary from the governing standards and depict/identify the alternate method used to ensure compliance with the stated purpose of these Responsibility Rules.
9. The Florida Building Code (2010) – Building (FBC-B) Section 107.2.1 “Information on construction documents” states: “Construction documents shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of this code and relevant laws, ordinances, rules and regulations,...” FBC-B Section 2701.1 “Scope” states: “This chapter governs the electrical components, equipment and systems used in buildings and structures covered by this code. Electrical components, equipment and systems shall be designed and constructed in accordance with the provisions of the NFPA 70, National Electrical Code (NEC).”

10. Rule 61G15-33.001 “Responsibility Rules of Professional Engineers Concerning the Design of Electrical Systems” “General Responsibility” states in material part that: “Electrical Engineering documents shall be prepared in accordance with applicable technology and with the requirements of the authority having jurisdiction. The documents shall identify the Engineer of record for the electrical systems project. Electrical Engineering documents shall demonstrate compliance with the requirements of the applicable codes and standards . . . .”

11. Rule 61G15-33.003(2) “Design of Power Systems,” requires in material part that “Electrical Engineering Documents applicable to the design of electrical power systems shall, at a minimum, indicate the following: (a) Power Distribution Riser Diagram with short circuit values. (c) Circuit interrupting devices and fault current interrupting capability. (d) Location and characteristics of surge protective devices. (e) Main and distribution equipment, control devices, locations and sizes. (f) Voltage drop calculations for the feeders and customer-owned service conductors . . . . (g) Circuitry of all outlets, equipment and devices. (l) Record documents applicable to power systems shall, at a minimum, contain information as required by Florida Building Code.

12. FBC-B Section 2801.1 "Scope," states: Mechanical appliances, equipment and systems shall be constructed, installed and maintained in accordance with the Florida Building
Code, Mechanical (FBC-M). FBC-B Section 107.3.5 "Minimum plan review criteria for buildings" states: The examination of the documents by the building official shall include the following minimum criteria and documents: Mechanical: 1. Energy calculations, 2. Exhaust systems: Kitchen equipment exhaust. 3. Equipment, 4. Equipment location, 5. Make-up air, 8. Duct systems, 9. Combustion air. FBC-B Section 2901.1 "Scope," states: Mechanical appliances, equipment and systems shall be constructed, installed and maintained in accordance with the Florida Building Code, Plumbing (FBC-P).

13. Rule 61G15-34.001 "Mechanical Systems" states that "Mechanical Engineering Documents shall be prepared in accordance with the applicable technology and with the requirements of the authority having jurisdiction. The documents shall identify the Engineer of Record for the mechanical systems project. Mechanical Engineering documents shall demonstrate compliance with the requirements of the applicable codes and standards.... [The Rule further states] that construction documents shall. . . define the required mechanical systems components, processes, equipment and material . . .”

14. Rule 61G15-34.007(2) “Design of Plumbing Systems,” requires that “Mechanical Engineering Documents applicable to Plumbing Systems shall when applicable, include but are not limited to the following: (a) Equipment schedules for all plumbing fixtures, . . . (c) Potable Water isometric diagrams with pipe sizes and total water fixture units; (d) Sanitary riser diagrams with pipe sizes and total sanitary waste fixture units; (e) Storm riser diagrams with pipe sizes and cumulative drain area square footages; (f) cold water, hot water, sanitary, and storm drainage piping layouts; (i) List of ASHRAE, ASME, ASPE, ANSI and other applicable codes, design standards and requirements.; (l) All plumbing fixtures, valves, pumps, tanks, accessories, specialties, enclosures, and such equipment shall be described and located on the drawings; (m) material for all plumbing systems shall be specified.”
ELECTRICAL DESIGN DOCUMENTS

15. Respondent's Electrical Engineering Design Documents for the Hollywood Project are materially deficient as follows:

(a) The drawings contain no Electrical Riser Diagram, and no short circuit values and no voltage drop calculations for the feeders and customer-owned service conductors. These omissions constitute violations of Rule 61G15-33.003(2)(a and f).

(b) No surge protective devices are shown on the electrical drawing and there is no explanation on the electrical drawing for this deviation by the Engineer of Record (EOR). These omissions constitute a violation of Rule 61G15-33.003(2)(d).

(c) The locations of the utility meter, the main disconnecting means for the dwelling, and the electrical panel(s) are not shown on the electrical sheet E-1. These omissions constitute a violation of Rule 61G15-33.003(2)(e).

(d) NEC 210.52(E)(1) requires for a one-family dwelling, at least one outdoor receptacle outlet ... shall be installed at the front and back of the dwelling. No receptacles are specified for either the entry or the back of the dwelling. The absence of such receptacles constitutes a violation of NEC 210.52(E)(1).

(e) NEC 210.63 requires a receptacle outlet to be installed at an accessible location for servicing HVAC (Heating, Ventilation, and Air Conditioning) equipment. The HVAC unit(s) are not shown on the Electrical Sheet, and no servicing receptacles are shown. The absence of such receptacles violates NEC 210.63.

(f) NEC 406.9(A) requires that a receptacle installed outdoors in a location protected from the weather or in other damp locations shall have an enclosure for the receptacle that is weatherproof when the receptacle is covered. Drawing Sheet E-1 shows no weatherproof receptacles for the project, which violates NEC 406.9(A).
(g) The spacing of receptacles on the Electrical Sheet is inadequate, and violates NEC 210.52(A)(l), which states: Spacing. Receptacles shall be installed such that no point measured horizontally along the floor line of any wall space is more than 6 feet from a receptacle outlet. Omissions and errors associated with circuitry of outlets and devices constitute violations of Rule 61G15-33.003(2)(g).

(h) The Electrical drawing does not contain information as required by the FBC. FBC-B Section 107.3.5 "Minimum plan review criteria for buildings" states: The examination of the documents by the building official shall include the following minimum criteria and documents: Electrical: 1. Electrical wiring, services, feeders and branch circuits,. 2. Equipment. The absence of these FBC-B requirements constitutes a violation of Rule 61G15-33.003(2)(1).

MECHANICAL (HVAC) DESIGN DOCUMENTS

16. Respondent's Mechanical (HVAC) Engineering Design Documents for the Hollywood Project are materially deficient as follows:

(a) The HVAC Drawing (Sheet M-1) contains no equipment schedules for the HVAC systems that are existing or are to be installed, no make-up air or combustion air calculations, and no duct systems. Moreover, the specification for the Kitchen Aid Range Hood (on Sheet M-1) is not legible. These omissions and discrepancies constitute a violation of FBC-B 107.3.5.

(b) Other than providing bathroom exhaust calculations and specifying a non-legible detail and non-legible statements pertaining to a kitchen range hood, no other mechanical issues were addressed on Mechanical Sheet M-1. This lack of clarity and the omission of "the nature and extent of the work proposed" violates Rule 61G15-30.003(1).
MECHANICAL (PLUMBING) DESIGN DOCUMENTS

17. Respondent’s Mechanical (Plumbing) Engineering Design Documents for the Hollywood Project are materially deficient as follows:

(a) Plumbing Note 1 on Sheet P-1 states as follows: “All Plumbing Shall Be Done In Accordance With the Florida Building Code, 2007 (and amendments) State and Local Ordinances.” This conflicts with Sheet E-1 which requires all Electrical work to be performed in accordance with FBC 2014. This absence of specific code requirements violates Rule 61G15-30.003(1)(b).

(b) There is no equipment schedule to specify all plumbing fixtures and water heaters. This omission of a plumbing fixture and water heater schedule constitutes a violation of Rule 61G15-34.007(2)(a).

(c) No potable water isometric diagram with pipe sizes is shown on Plumbing Sheet P-1. The absence of a water isometric diagram with pipe sizes constitutes a violation of FAC Responsibility Rule 61G15-34.007(2)(c).

(d) No sanitary waste isometric diagram is shown; and total flow waste fixture units are not shown on the Plumbing Sheet P-1. The absence of a sanitary waste riser and total sanitary waste fixture units on the Plumbing Drawing constitutes a violation of Rule 61G15-34.007(2)(d).

(e) No storm water riser diagrams are shown on the drawings. No area drainage calculations are shown on the drawings. The omission of a storm water riser diagram and area drainage calculations constitutes a violation of Rule 61G15-34.007(2)(e).

(f) The Plumbing Sheet P-1 contains no cold water, hot water, sanitary, and storm drainage piping layouts. The omission of piping layouts for cold water, hot water, sanitary, and storm drainage constitutes a violation of Rule 61G15-34.007(2)(f).
No list of applicable plumbing codes, design standards or requirements is shown on the Drawings. The omission of applicable codes, design standards and requirements constitutes a violation of Rule 61G15-34.007(2)(i).

COUNT I

ELECTRICAL DESIGN DOCUMENTS

18. Petitioner realleges and incorporates Paragraphs One (1) through Eleven (11), and Fifteen (15) as if fully set forth in this Count One.

19. Respondent’s electrical engineering drawings for the Hollywood Project contain deficiencies including; but not limited to, those set forth in Paragraph Fifteen (15). As a result of those deficiencies, Respondent violated the provisions of Section 471.033(1)(g), Florida Statutes, and Rule 61G15-19.001(4), F. A. C., by sealing and signing electrical engineering documents that were issued and filed for public record when such documents were materially deficient in that Respondent:

(1) did not exercise due care in the preparation of the final engineering documents for the Hollywood Project and (2) the final engineering documents for the Hollywood Project were not issued in compliance with acceptable engineering principles.

20. Based upon the foregoing Respondent is hereby charged with violating Section 471.033(1)(g), Florida Statutes, and Rule 61G15-19.001(4), F. A. C.

COUNT II

MECHANICAL (Plumbing) DESIGN DOCUMENTS

21. Petitioner realleges and incorporates Paragraphs One (1) through Eight (8), Twelve (12) through Fourteen (14), and Sixteen (16) as if fully set forth in this Count Two.

22. Respondent’s Mechanical (HVAC) engineering drawings for the Hollywood Project contain deficiencies including; but not limited to, those set forth in Paragraph Sixteen (16). As a result of those deficiencies, Respondent violated the provisions of Section 471.033(1)(g), Florida
Statutes, and Rule 61G15-19.001(4), F. A. C., by sealing and signing Mechanical (HVAC) engineering documents that were issued and filed for public record when such documents were materially deficient in that Respondent: (1) did not exercise due care in the preparation of the final engineering documents for the Hollywood Project and (2) the final engineering documents for the Hollywood Project were not issued in compliance with acceptable engineering principles.

23. Based upon the foregoing Respondent is hereby charged with violating Section 471.033(1)(g), Florida Statutes, and Rule 61G15-19.001(4), F. A. C.

COUNT III

MECHANICAL (HVAC) DESIGN DOCUMENTS

24. Petitioner realleges and incorporates Paragraphs One (1) through Eight (8), Twelve (12) through Fourteen (14), and Seventeen (17) as if fully set forth in this Count Three.

25. Respondent’s Mechanical (Plumbing) engineering drawings for the Hollywood Project contain deficiencies including; but not limited to, those set forth in Paragraph Seventeen (17). As a result of those deficiencies, Respondent violated the provisions of Section 471.033(1)(g), Florida Statutes, and Rule 61G15-19.001(4), F. A. C., by sealing and signing Mechanical (Plumbing) engineering documents that were issued and filed for public record when such documents were materially deficient in that Respondent: (1) did not exercise due care in the preparation of the final engineering documents for the Hollywood Project and (2) the final engineering documents for the Hollywood Project were not issued in compliance with acceptable engineering principles.

26. Based upon the foregoing Respondent is hereby charged with violating Section 471.033(1)(g), Florida Statutes, and Rule 61G15-19.001(4), F. A. C.

WHEREFORE, the Petitioner respectfully requests the Board of Professional Engineers to enter an order imposing one or more of the following penalties: permanent revocation or suspension of the Respondent’s license, restriction of the Respondent’s practice, imposition of an
administrative fine, issuance of a reprimand, placement of the Respondent on probation, the
assessment of costs related to the investigation and prosecution of this case, other than costs
associated with an attorney’s time, as provided for in Section 455.227(3), Florida Statutes, and/or
any other relief that the Board deems appropriate.

SIGNED this 25 day of March, 2019.

Zana Raybon
Executive Director

BY: John J. Rimes, III
Prosecuting Attorney

COUNSEL FOR FEMC:

John J. Rimes, III
Prosecuting Attorney
Florida Engineers Management Corporation
2639 North Monroe Street, Suite B-112
Tallahassee, Florida 32303
Florida Bar No. 212008
JR/rv
PCP DATE: March 13, 2019
PCP Members: MATTHEWS, DRURY & ALBERGO

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing was furnished to Santiago Bolivar, P.E. at 266 South
Federal Highway #543, Deerfield Beach, Florida 33441, by certified mail and First Class U. S. Mail,
on the 25 of March, 2019.

Rebecca Valentine, Paralegal