



MECHANICAL  
ELECTRICAL  
PLUMBING  
FIRE PROTECTION  
TELECOMMUNICATIONS

August 18, 2017

City of Clearwater  
100 S Myrtle Ave, 3rd Fl  
Clearwater FL 33756-5520

Attn: Rick Osorio  
Risk Manager

**RE:** National Fire Protection Association Standard, NFPA 70E, 2015 Edition  
Compliance for City of Clearwater, FL

Dear Rick,

Thank you for the opportunity to present our proposal to perform professional engineering services for the project description referenced above.

**SCOPE OF WORK**

The original NFPA 70E compliance project as fully defined within the City of Clearwater RFP #05-16 Scope of Work (including a 5% contingency), was for a maximum 5,175 pieces of electrical equipment. This was based on an estimate provided by the City of Clearwater. After conducting a detailed arc flash risk assessment on most of the facilities, it has become evident that more electrical equipment actually exists. The scope of work as described below, is for an additional estimated 1,260 pieces of electrical equipment. This estimate is based on the electrical equipment count assembled per the attachment EXHIBIT A.

The project will include services necessary for compliance with the requirements of the National Fire Protection Association Standard, NFPA 70E, Handbook for Electrical Safety in the Workplace, 2015 edition. Perform a complete equipment inventory/data study by collecting relative data, analyze the results received, provide the resulting data to the City, provide equipment labels, label the relevant equipment, and provide training guidance to the City.

Deliverables to include the following:

- Complete Engineering Analysis and Review of electrical distribution system to include Short Circuit, Fault Current, Load Study (as needed), Protective Device Coordination Study, and Arc Flash Analysis with detailed engineering analysis and recommendations by a State of Florida Certified Professional Engineer
- Prepare report with findings and recommendations
- Provide Arc Flash Hazard label per NFPA-70E

- Training and/or training documentation

Owner shall be responsible for furnishing access to facility during normal business hours for gathering pertinent information and/or applying labels to equipment. Owner shall also provide access to all available electrical plans and power diagrams necessary to complete the arc flash risk assessment. The arc flash risk assessment is a representation of the incident energy levels based on existing conditions. Any change to the power system (circuit breaker settings, adding major equipment, etc.) will affect the incident energy levels/PPE requirements of the arc flash risk assessment. Recognizing that the study is based upon the validity of the power system study at a given point in time, all changes to the power system after APG Engineering begins their work will be considered a "Change In Service" and subject to additional fee to modify/re-evaluate the arc flash risk assessment.

#### **BASIC FORM OF AGREEMENT**

- Any general contractual conditions which may arise during the course of this service which are not specifically covered herein shall be governed by the American Institute of Architects standard form of agreement AIA Document Number C401™ - 2007 (Standard Form of Agreement Between Architect and Consultant) which is made part of this agreement by reference.
- For hourly work, or work considered "Change in Service", APG Engineering will be reimbursed on an hourly basis at the rates indicated below:
  - Principal- \$230
  - Project Manager/Senior Engineer- \$185
  - Engineer/Senior Designer- \$165
  - Designer- \$125
  - CAD Operator- \$95
  - Administrative- \$75

#### **PROPOSED FEES**

Based on the scope of work as described above, APG Engineering's fee is a lump sum not-to-exceed, all-inclusive price of **One Hundred Twenty-Eight Thousand Three Hundred Six Dollars (\$128,306.00)**. This lump sum shall be adjusted upward pro rata if the scope increases from the above. Should the actual electrical component count decrease below 1,260 during the life of the contract, this lump sum shall be adjusted downward accordingly.

Our fee is based on the following:

- Fee per estimated electrical component: \$101.83

#### **Additional Options:**

**Option 1** Additional Arc flash training classes, **\$1,000.00 each.**



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### **BILLING**

- Fees shall be billed on a monthly basis from the beginning of the project.
- Payment of all invoices shall be due within thirty (30) days from the date of invoice.

### **ACCEPTANCE OF PROPOSAL**

We appreciate the opportunity to provide you with this proposal. If all of this is satisfactory with you, please sign one copy of this letter and return it to us. In the event we do not receive a signed copy of this letter, and we are authorized to begin work, we will assume the terms and conditions of this proposal have been accepted by you.

Sincerely,  
APG Engineering

A handwritten signature in black ink, appearing to read "Michael Dobbs", written over a horizontal line.

Michael Dobbs  
Principal

CLIENT: City of Clearwater

BY: \_\_\_\_\_

DATE: \_\_\_\_\_

\_\_\_\_\_  
(Print Name)

\_\_\_\_\_  
(Title)



### EXHIBIT 'A' - ESTIMATED COMPONENT COUNT

Department	Electrical Component Count (Buses)			
	Estimated by City of Clearwater	Actual to Date	Estimated Equipment Remaining	Total
B&M & General Serv.	95	4	140	144
Solid Waste (Excluding transfer station)	38	48		48
Libraries (beach & countryside included with rec centers)	145	93		93
MSB	68	103		103
City Hall	22	48		48
Fire Dept (Excluding 46 & 50)	128	16	93	109
Police Dept. Main.	82	148		148
Police Sub Startions (Excluding Countryside)	48	22	36	58
Parking Garages (2)	26	31	12	43
Airpark	23	2	31	33
Parks & Rec (ball fields, fld., street, bridge lighting, parks, etc.)	1,195	1,212	468	1,680
Bright House Stadium	155	223		223
Carpenter Field (4)	58	58		58
Public Works Complex	49	69		69
Radio Towers (2)	46	4	62	66
Gas Dept	52	40	24	64
Spanish outreach (612 Franklin St)	4	2	4	6
Marina (2)	81	56	40	96
Reverse Osmosis Plants 1 & 2	108	171	50	221
Water Treatment Plant 3	15	60		60
Reclaimed water booster stations	45	6	44	50
Water wells & county connection (Including Tanks)	285	314	20	334
Lift stations	309	423	4	427
East wastewater plant	252	252		252
Northeast Wastewater plant	504	641		641
Marshall Street Wastewater plant	468	343	190	533
Citywide traffic control cabinets (Including "Engineering" services)	628	789	39	828
<b>Totals</b>	<b>4,929</b>	<b>5,178</b>	<b>1,257</b>	<b>6,435</b>

### SUMMARY

Original Estimate + 5% Contingency	5,175
Estimated Additional Bus Count	1,260