

# AUSLEY & McMULLEN

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TALLAHASSEE, FLORIDA 32301  
(850) 224-9115 FAX (850) 222-7560

November 1, 2002

HAND DELIVERED

021118-E1

Ms. Blanca S. Bayo, Director  
Division of Commission Clerk  
and Administrative Services  
Florida Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee, FL 32399-0850

Re: Petition of Tampa Electric Company for Approval of Revised Tariffs and Updated Charges for Underground Residential and Commercial Distribution Service

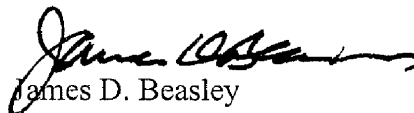
Dear Ms. Bayo:

Enclosed for filing in the above-styled matter are the original and fifteen (15) copies of Tampa Electric Company's Petition for Approval of Revised Tariffs and Updated Charges for Underground Residential and Commercial Distribution Service.

Please acknowledge receipt and filing of the above by stamping the duplicate copy of this letter and returning same to this writer.

Thank you for your assistance in connection with this matter.

Sincerely,

  
James D. Beasley

JDB/pp  
Enclosures

DOCUMENT NUMBER-DATE

11984 NOV-18

FPSC-COMMISSION CLERK

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

Tampa Electric Company's Petition)  
for Approval of Revised Tariffs )  
and Updated Charges for )  
Underground Residential and )  
Commercial Distribution Service. )  
\_\_\_\_\_ )

DOCKET NO. \_\_\_\_\_  
FILED: November 1, 2002

**PETITION OF  
TAMPA ELECTRIC COMPANY**

Tampa Electric Company ("Tampa Electric" or "the company") files this Petition for Approval of Revised Tariffs and Updated Charges for Underground Residential and Commercial Distribution Service. The updated charges, based on cost differentials between overhead and underground service, are shown on the revised tariff sheets attached hereto in standard and legislative formats as Exhibits A and B, respectively. In support thereof, the company says:

1. Tampa Electric is a Florida corporation with its headquarters located at 702 North Franklin Street, Tampa, Florida 33602. The company is an investor-owned electric utility operating under the jurisdiction of this Commission. This petition is filed under Section 366.06, Florida Statutes, and Rules 25-6.033 and 25-6.078 (2), Florida Administrative Code with respect to changing of electric utility rates and charges under the jurisdiction of the Commission.

2. The names and addresses of the persons authorized to receive notice and communications in respect to this petition are:

Mr. Lee L. Willis  
Mr. James D. Beasley  
Ausley & McMullen  
Post Office Box 391  
Tallahassee, Florida 32302

Ms. Angela Llewellyn  
Administrator, Regulatory Coordination  
Tampa Electric Company  
Post Office Box 111  
Tampa, Florida 33601

### **Charges for Underground Distribution Facilities**

3. Pursuant to Rule 25-6.078 (2), Florida Administrative Code, Tampa Electric has updated its URD charges based on the cost differentials between the installation of overhead and underground residential service. The proposed charges for residential subdivisions have increased over the current charges established in 2000 from \$278.00 to \$382.19, or 37.5% per lot, for low density subdivisions and from \$217.00 to \$322.41, or 48.6% per lot, for high density individually metered subdivisions. The increase in the low density URD charge is attributable in part to increased labor costs for conduit installation and decreased labor and material costs for overhead services. The increase in the high density URD charge is attributable in part to increased labor costs for conduit installation, decreased labor and materials cost for overhead services, and the addition of inspection costs inadvertently excluded from the cost support for the current charge. Supporting data and analyses for the updated URD charges are contained in Form PSC/EAG 13 attached hereto as Exhibit C.

4. The company is proposing modifications to the installation charges and credits for New Underground Service Laterals from Overhead Distribution (Tariff Sheet No. 5.510 Subsection 3.7.1.2). The current charge is \$4.04 per foot including a 10-foot credit for services of 100 feet or less and a 38-foot credit for services greater than 100 feet. The current credits are comprised of the differential fixed costs of providing underground service and avoided service pole costs, if applicable. In the company's proposed modifications, the per-foot credits are replaced by a base charge representing a fixed differential cost of (\$5.57) and a credit of \$153.27 for the avoided cost of installing a service pole, if otherwise required for overhead service. The updated machine trench charge covering the variable differential cost is \$5.07 per foot. The proposed

modifications are more straightforward from costing and application perspectives as the credit is now clearly associated with the avoided service pole instead of service length.

5. Similar modified charges as described in Paragraph 4 above are also proposed for Underground Service Laterals Converted from Existing Overhead Service Drops (Tariff Sheet No. 5.515 Subsection 3.7.1.3). In addition, the charges associated with removal of existing overhead services are proposed to change. The proposed charges have increased from \$91 to \$108, for services having no service pole, and from \$233 to \$256, for services with a service pole. The revised removal charge descriptions now differentiate the two charges by the presence or absence of a service pole instead of service length.

6. The company requests approval to eliminate the CIAC charges for New Commercial Three-phase Pad-mounted Transformers under Subsection 3.7.1.4 of Tariff Sheet No. 5.515. Transformation costs will now be included as part of the overall estimated cost differential between the equivalent overhead and underground services consistent with the methodology set forth in Subsection 3.5.5 on Tariff Sheet No. 5.470.

#### **Other Proposed Underground Tariff Sheet Revisions**

7. References to a 200-foot service lateral limitation in Subsections 3.4.3.3 (a) and (b) (Tariff Sheet Nos. 5.400 and 5.410) have been deleted. The limitation was required when applying the current charges of Subsection 3.7.1.2 and 3.7.1.3. As described in paragraph 4 above, Tampa Electric is proposing modifications to these charges that would make them applicable for service laterals of any length so the references are no longer necessary.

8. Several modifications are proposed to Tariff Sheet No. 5.470. One is the deletion of the 50 kW size limit from Subsection 3.5.5 (1) because the differential cost

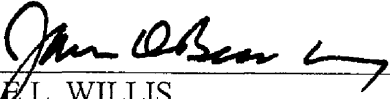
methodology applies to all new loads regardless of size. Tampa Electric is also proposing to strike Subsection 3.5.5 (2) and (3) as the loads referenced within these subparts are covered under the general differential cost methodology described in 3.5.5 (1).

9. Tampa Electric knows of no disputed issues of material fact relative to the tariff revisions proposed herein.

WHEREFORE, Tampa Electric requests that this Commission consent to the above described Revised Tariff Sheets as set forth in Exhibit "A" under the provisions of Section 366.03(3), Florida Statutes.

DATED this 1<sup>st</sup> day of November 2002.

Respectfully submitted,

  
\_\_\_\_\_  
LEE L. WILLIS  
JAMES D. BEASLEY  
Ausley & McMullen  
Post Office Box 391  
Tallahassee, FL 32302  
(850) 224-9115

ATTORNEYS FOR TAMPA ELECTRIC COMPANY

# **EXHIBIT A**

Continued from Sheet No. 5.390

Close coordination between the applicant and the utility is imperative when the applicant installs any portion of the underground electrical system. This coordination process is even more critical when the applicant installs facilities other than the conduit system. If the applicant requests to provide for the installation of electrical facilities other than trenching, backfilling, and installation of conduit, the appropriate CIAC will be calculated on an individual project basis.

### **3.4.2.3 Point of Delivery**

The point of delivery shall be determined by the Company and will normally be on the building nearest the point at which the underground secondary electric supply is available to the property. If for the convenience of the Applicant, the Company is requested to agree on a different point of delivery, any additional costs shall be borne by the Applicant.

### **3.4.3 UNDERGROUND SERVICE LATERALS FROM OVERHEAD ELECTRIC DISTRIBUTION SYSTEMS**

#### **3.4.3.1 Applicability**

- (a) When requested by the Applicant, the Company will install underground service laterals from overhead systems to newly constructed residential buildings containing less than five separate dwelling units, with provisions as described in 3.4.3.3 (a).
- (b) When requested by a residential Applicant, the Company will install an underground service lateral from an existing overhead line to replace an existing overhead service to an existing residential building containing less than five separate dwelling units with provisions as described in 3.4.3.3 (b).

#### **3.4.3.2 Rearrangement of Service Entrance**

The Applicant shall be responsible for and shall pay the cost of any necessary rearranging of his existing electric service entrance facilities to accommodate the underground service lateral in accordance with the Company's specifications.

#### **3.4.3.3 Contribution by Applicant**

- (a) For new laterals, the Applicant shall pay the Company the applicable charge as listed in Section 3.7.1.2.

Continued to Sheet No. 5.410

Continued from Sheet No. 5.400

- (b) For converted laterals, the Applicant shall pay the Company the applicable charge as listed in Section 3.7.1.3.
- (c) Credit, not to exceed the estimated cost differential, will be allowed whereby mutual agreement the Applicant provides trenching, conduit and back-filling, in accordance with Company specifications and for the use of the Company's facilities. Such credit is to be determined by the estimated cost of trenching, conduit and back-filling less any additional inspection, engineering and coordination expenses. Any requests by the applicant to install all or a portion of the underground electrical facilities will be governed by the rules and regulations outlined in 3.4.2.2.(e)

### **3.4.4 UNDERGROUND DISTRIBUTION FACILITIES TO MULTIPLE - OCCUPANCY RESIDENTIAL BUILDINGS**

#### **3.4.4.1 Availability**

Underground electric distribution facilities may be installed within the tract of land upon which multiple-occupancy residential buildings containing five or more separate individually metered dwelling units will be constructed. (Metering equipment shall be approved by the Company)

#### **3.4.4.2 Contribution by Applicant**

- (a) There will be no contribution from the Applicant for single-phase distribution facilities so long as the Company is free to construct its facilities in the manner it believes to be the most economical and reasonably full use is made of the tract of land upon which the multiple-occupancy buildings will be constructed. If the Company is asked to construct its facilities in any other manner, the applicant must pay in advance for the engineering evaluation of the alternative. If an alternative is agreed upon, the applicant must pay for the estimated cost differential of the construction.
- (b) If feeder mains or other three-phase facilities are deemed necessary by the Company to provide and/or maintain adequate service and are required by the Applicant or a governmental agency to be installed underground, the request shall be governed by Section 3.4.1.4 of these Rules and Regulations.

Continued to Sheet No. 5.420



Continued from Sheet No. 5.460

- (6) Where the point of delivery is a padmount transformer, the ownership line shall be between the transformer secondary bushings and the service entrance conductor terminals.

**3.5.4 Point of Delivery - Ownership Line - Primary Service**

The point of delivery shall be determined by mutual agreement between the applicant and the Company and will normally be at a point on the property nearest to the most accessible source of primary supply. If for the convenience of applicant, the Company is requested to agree on a different point of delivery, all additional costs (if any) shall be borne by the applicant.

**3.5.5 Contribution by Applicant**

- (1) For new loads, the customer contribution will be the Company's estimated cost differential between equivalent overhead service and the underground service.
- (2) For installations requiring specialized equipment or enclosures (switchgear, translosures, etc.) the customer will pay the estimated cost over and above that of a normal overhead service.

Continued to Sheet No. 5.480

Continued from Sheet No. 5.500

**3.6.5.1 Single Meter commercial Service**

Mobile Home Parks will be supplied single-meter commercial service only where park owner or operator supplies (furnishes) electrical service as a part of his rental and/or general service charge to tenants. Resale of electric energy through park owned meters will not be permitted (See Paragraph 2.2.1)

**3.6.5.2 Individual Company Metered Service**

Mobile Home Parks will be supplied through Company installed individual meters for individual tenants and other types of service required in park under the provisions required on Paragraph 3.4.3 and 3.4.4 and the subparagraphs appertaining thereto.

**3.6.6 Miscellaneous Types Of Electric Service**

Certain other types of electric service are available from the Company. Information on such services not specifically covered in this Tariff may be obtained at the nearest Company office. Such special cases will be given individual consideration.

**3.7 SCHEDULE OF STANDARD CHARGES AND NON-REFUNDABLE DEPOSITS FOR COST ESTIMATES FOR UNDERGROUND ELECTRIC DISTRIBUTION SYSTEMS**

**3.7.1 Standard Charges**

The Standard Charges listed here are Contributions In Aid of Construction (CIAC) which are referenced by other sections of these rules and regulations.

**3.7.1.1 Residential Subdivision**

Low Density Subdivisions per service lateral or dwelling unit...	\$382.19
High Density Subdivisions per service lateral or dwelling unit...	\$322.41

**3.7.1.2 New Single-phase UG Service Laterals from Overhead Distribution Systems**

Base Charge	(\$5.57)
Per trench foot charge for service lateral	\$5.07
Credit for service pole if otherwise required for overhead service	(\$153.27)

Continued to Sheet No. 5.515

Continued from Sheet No. 5.510

**3.7.1.3 Single-phase UG Service Laterals Converted from Existing Overhead Service Drops**

Removal charge for overhead service with no service pole	\$108.25
Removal charge for overhead service with a service pole	\$233.37
Base Charge	(\$5.57)
Per trench foot charge for service lateral	\$5.07
Credit for service pole if otherwise required for overhead service	(\$153.27)

**3.7.2 Non-refundable Deposits for Estimates of CIAC**

**3.7.2.1 New Construction**

Requests for construction of new underground systems, except for residential subdivisions covered under Section 3.4.2, will be accompanied by a non-refundable amount as follows:

<b>Density Class</b>	<b>Deposit Amount</b>
Urban Commercial or Residential.....	\$3,904 per mile*
Rural Commercial or Residential.....	\$2,196 per mile*

\* Measured along centerline of roadways or proposed roadways

Continued to Sheet No. 5.516

## **EXHIBIT B**

Continued from Sheet No. 5.390

Close coordination between the applicant and the utility is imperative when the applicant installs any portion of the underground electrical system. This coordination process is even more critical when the applicant installs facilities other than the conduit system. If the applicant requests to provide for the installation of electrical facilities other than trenching, backfilling, and installation of conduit, the appropriate CIAC will be calculated on an individual project basis.

### **3.4.2.3 Point of Delivery**

The point of delivery shall be determined by the Company and will normally be on the building nearest the point at which the underground secondary electric supply is available to the property. If for the convenience of the Applicant, the Company is requested to agree on a different point of delivery, any additional costs shall be borne by the Applicant.

### **3.4.3 UNDERGROUND SERVICE LATERALS FROM OVERHEAD ELECTRIC DISTRIBUTION SYSTEMS**

#### **3.4.3.1 Applicability**

- (a) When requested by the Applicant, the Company will install underground service laterals from overhead systems to newly constructed residential buildings containing less than five separate dwelling units, with provisions as described in 3.4.3.3 (a).
- (b) When requested by a residential Applicant, the Company will install an underground service lateral from an existing overhead line to replace an existing overhead service to an existing residential building containing less than five separate dwelling units with provisions as described in 3.4.3.3 (b).

#### **3.4.3.2 Rearrangement of Service Entrance**

The Applicant shall be responsible for and shall pay the cost of any necessary rearranging of his existing electric service entrance facilities to accommodate the underground service lateral in accordance with the Company's specifications.

#### **3.4.3.3 Contribution by Applicant**

- (a) For new laterals up to 200 feet in length, the Applicant shall pay the Company the applicable charge as listed in Section 3.7.1.2. ~~For laterals in excess of 200 feet, the Applicant shall pay the Company the estimated cost differential between an overhead and an underground service lateral.~~

Continued to Sheet No. 5.410

Continued from Sheet No. 5.400

- (b) For converted laterals ~~up to 200 feet in length~~, the Applicant shall pay the Company the applicable charge as listed in Section 3.7.1.3. ~~For laterals in excess of 200 feet, the Applicant shall pay the Company using the method outlined in Section 3.4.1.4 of these Rules and Regulations.~~
- (c) Credit, not to exceed the estimated cost differential, will be allowed whereby mutual agreement the Applicant provides trenching, conduit and back-filling, in accordance with Company specifications and for the use of the Company's facilities. Such credit is to be determined by the estimated cost of trenching, conduit and back-filling less any additional inspection, engineering and coordination expenses. Any requests by the applicant to install all or a portion of the underground electrical facilities will be governed by the rules and regulations outlined in 3.4.2.2.(e)

### **3.4.4 UNDERGROUND DISTRIBUTION FACILITIES TO MULTIPLE - OCCUPANCY RESIDENTIAL BUILDINGS**

#### **3.4.4.1 Availability**

Underground electric distribution facilities may be installed within the tract of land upon which multiple-occupancy residential buildings containing five or more separate individually metered dwelling units will be constructed. (Metering equipment shall be approved by the Company)

#### **3.4.4.2 Contribution by Applicant**

- (a) There will be no contribution from the Applicant for single-phase distribution facilities so long as the Company is free to construct its facilities in the manner it believes to be the most economical and reasonably full use is made of the tract of land upon which the multiple-occupancy buildings will be constructed. If the Company is asked to construct its facilities in any other manner, the applicant must pay in advance for the engineering evaluation of the alternative. If an alternative is agreed upon, the applicant must pay for the estimated cost differential of the construction.
- (b) If feeder mains or other three-phase facilities are deemed necessary by the Company to provide and/or maintain adequate service and are required by the Applicant or a governmental agency to be installed underground, the request shall be governed by Section 3.4.1.4 of these Rules and Regulations.

Continued to Sheet No. 5.420

Continued from Sheet No. 5.460

- (6) Where the point of delivery is a padmount transformer, the ownership line shall be between the transformer secondary bushings and the service entrance conductor terminals.

### 3.5.4 Point of Delivery - Ownership Line - Primary Service

The point of delivery shall be determined by mutual agreement between the applicant and the Company and will normally be at a point on the property nearest to the most accessible source of primary supply. If for the convenience of applicant, the Company is requested to agree on a different point of delivery, all additional costs (if any) shall be borne by the applicant.

### 3.5.5 Contribution by Applicant

- (1) For new loads ~~that are less than 50 kW~~, the customer contribution will be the Company's estimated cost differential between equivalent overhead service and the underground service.

- ~~(2) For loads that are served by 75 kVA - 750 kVA pad-mounted transformers, in addition to the guidelines set forth in 3.5 through 3.5.4, the charges listed in Section 3.7.1.4 will apply.~~

~~If the primary cable run to the closest delivery point exceeds 300 feet, the customer will pay in addition to the above, the total installed cost difference between the underground cable and the equivalent overhead line work for the portion over 300 feet.~~

~~If the customer requests a primary cable run beyond the closest delivery point, the customer will pay, in addition to the above, the total installed cost of the underground cable beyond the closest delivery point.~~

- ~~(3) For loads that are served by a pad-mounted transformer greater than 750kVA, there will be no charge for underground service provided the primary length is 300 feet or less and the guidelines set in Sections 3.5 through 3.5.3 are followed.~~

- ~~(2)(4)~~ For installations requiring specialized equipment or enclosures (switchgear, translosures, etc.) the customer will pay the estimated cost over and above that of a normal overhead service.

Continued to Sheet No. 5.480

Continued from Sheet No. 5.500

**3.6.5.1 Single Meter commercial Service**

Mobile Home Parks will be supplied single-meter commercial service only where park owner or operator supplies (furnishes) electrical service as a part of his rental and/or general service charge to tenants. Resale of electric energy through park owned meters will not be permitted (See Paragraph 2.2.1)

**3.6.5.2 Individual Company Metered Service**

Mobile Home Parks will be supplied through Company installed individual meters for individual tenants and other types of service required in park under the provisions required on Paragraph 3.4.3 and 3.4.4 and the subparagraphs appertaining thereto.

**3.6.6 Miscellaneous Types Of Electric Service**

Certain other types of electric service are available from the Company. Information on such services not specifically covered in this Tariff may be obtained at the nearest Company office. Such special cases will be given individual consideration.

**3.7 SCHEDULE OF STANDARD CHARGES AND NON-REFUNDABLE DEPOSITS FOR COST ESTIMATES FOR UNDERGROUND ELECTRIC DISTRIBUTION SYSTEMS**

**3.7.1 Standard Charges**

The Standard Charges listed here are Contributions In Aid of Construction (CIAC) which are referenced by other sections of these rules and regulations.

**3.7.1.1 Residential Subdivision**

Low Density Subdivisions per service lateral or dwelling unit...	\$382.19
	<del>\$278.00</del>
High Density Subdivisions per service lateral or dwelling unit...	\$322.41
	<del>\$217.00</del>

**3.7.1.2 New Single-phase UG Service Laterals from Overhead Distribution Systems**

Base Charge	(\$5.57)
Per trench foot charge for service lateral	\$5.07
Credit for service pole if otherwise required for overhead service	(\$153.27)
For 200' lateral or less per trench foot (w/10' of credit for service 100' or less and 38' of credit for services greater than 100').....	\$4.04

Continued to Sheet No. 5.515



Continued from Sheet No. 5.510

**3.7.1.3 Single-phase UG Service Laterals Converted from Existing Overhead Service Drops**

Removal charge for overhead service with no service pole	\$108.25
For 100' lateral or less.....	\$91.00
Removal charge for overhead service with a service pole	\$233.37
For 101'-200' lateral.....	\$256.00
 Base Charge	 (\$5.57)
Per trench foot charge for service lateral	\$5.07
Credit for service pole if otherwise required for overhead service	(\$153.27)
For 200' lateral or less per trench foot (w/10' of credit for services 100' or less and 38' of credit for services greater than 100').....	\$4.04

**3.7.1.4 New Commercial Three-phase Pad-mounted Transformers**

<u>Transformer-Size</u>	<u>CIAC</u>
75 KVA	\$1,000
150 KVA	1,000
225 KVA	1,250
300 KVA	1,500
500 KVA	1,750
750 KVA	2,000

**3.7.2 Non-refundable Deposits for Estimates of CIAC**

**3.7.2.1 New Construction**

Requests for construction of new underground systems, except for residential subdivisions covered under Section 3.4.2, will be accompanied by a non-refundable amount as follows:

<b>Density Class</b>	<b>Deposit Amount</b>
Urban Commercial or Residential.....	\$3,904 per mile*
Rural Commercial or Residential.....	\$2,196 per mile*

\* Measured along centerline of roadways or proposed roadways

Continued to Sheet No. 5.516

## **EXHIBIT C**

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OVERHEAD VS. UNDERGROUND SUMMARY SHEET

Single Occupancy 210 Lot Subdivision  
Cost per Lot

ITEM	OVERHEAD	UNDERGROUND	DIFFERENTIAL
Labor	\$380.71	\$637.90	\$257.19
Material	\$331.51	\$456.51	\$125.00
<b>TOTAL</b>	<b>\$712.22</b>	<b>\$1,094.41</b>	<b>\$382.19</b>

COST PER SERVICE LATERAL OVERHEAD MATERIAL AND LABOR

Single Occupancy 210 Lot Subdivision  
Cost per Lot

ITEM	MATERIAL <sup>1</sup>	LABOR <sup>4</sup>	TOTAL
Service <sup>2</sup>	\$ 56.79	\$84.87	\$141.66
Primary	\$ 7.79	\$21.02	\$28.81
Secondary	\$ 56.31	\$87.32	\$143.63
Initial Tree Trim	---	---	---
Poles	\$73.59	\$90.89	\$164.48
Transformers	\$98.09	\$51.57	\$149.66
Subtotal	\$292.57	\$335.67	\$628.24
Stores Handling <sup>3</sup>	\$38.94	---	\$38.94
Subtotal	\$331.51	\$335.67	\$667.18
Engineering <sup>5</sup>	---	\$45.04	\$45.04
<b>TOTAL</b>	<b>\$331.51</b>	<b>\$380.71</b>	<b>\$712.22</b>

<sup>1</sup> Includes Sales Tax<sup>2</sup> Includes Meter<sup>3</sup> 13.31% of all Material.<sup>4</sup> Includes Administration, General & Transportation<sup>5</sup> 6.75% of Material and Labor

COST PER SERVICE LATERAL UNDERGROUND MATERIAL AND LABOR

Single Occupancy 210 Lot Subdivision  
Cost per Lot

ITEM	MATERIAL <sup>1</sup>	LABOR <sup>4</sup>	TOTAL
Service <sup>2</sup>	\$172.83	\$112.95	\$285.78
Primary	\$87.48	\$35.36	\$122.84
Secondary	\$31.12	\$29.60	\$60.72
Transformers	\$111.46	\$26.17	\$137.63
Primary & Secondary Trenching	---	\$172.96	\$172.96
Service Trenching	---	\$215.82	\$215.82
Subtotal	\$402.89	\$592.86	\$995.75
Stores Handling <sup>3</sup>	\$53.62	---	\$53.62
Subtotal	\$456.51	\$592.86	\$1,049.37
Engineering <sup>5</sup>	---	\$46.39	\$46.39
<b>TOTAL</b>	<b>\$456.51</b>	<b>\$637.90</b>	<b>\$1,094.41</b>

<sup>1</sup> Includes Sales Tax

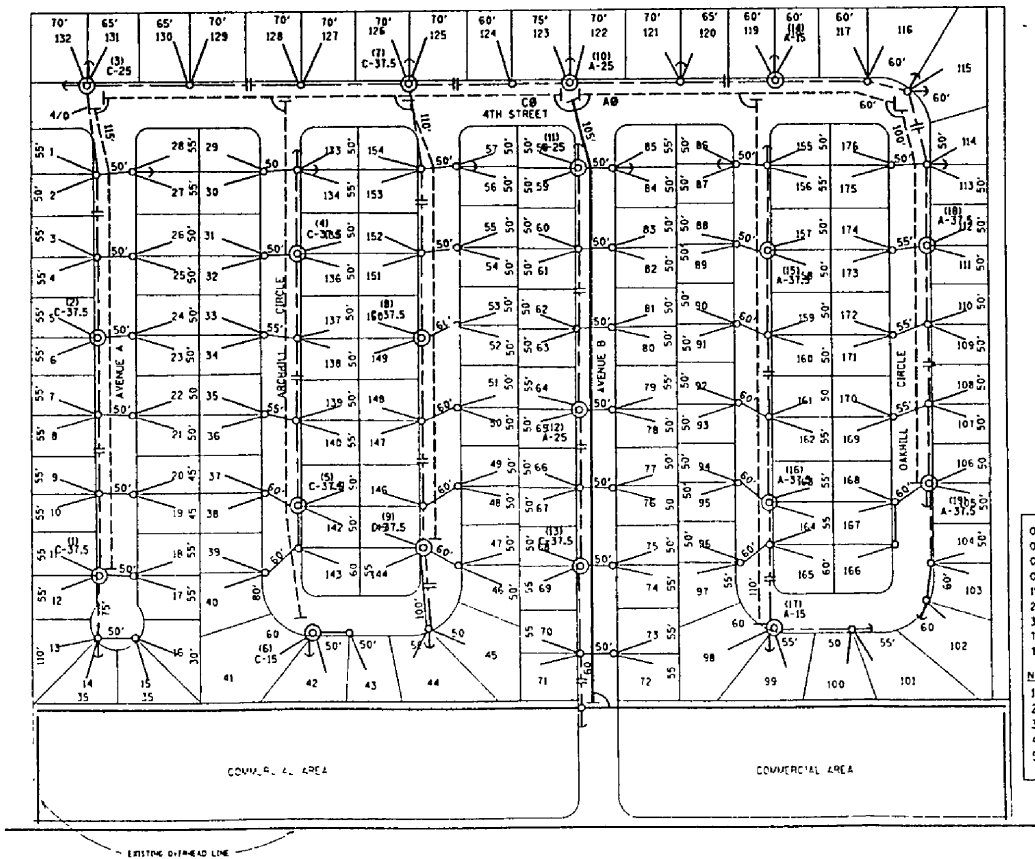
<sup>2</sup> Includes Meter & Meter Socket

<sup>3</sup> 13.31% of all Material

<sup>4</sup> Includes Administration, General & Transportation

<sup>5</sup> 4.42% of Material and Labor

TYPICAL SINGLE OCCUPANCY 210 LOT SUBDIVISION LAYOUT  
Overhead Design



LEGEND  
200AMP SERVICE

- WOOD POLE
- ⊙ TRANSFORMER
- +— 2/0 TRIPLEX SERVICE CABLE
- 2/0 TRIPLEX SECONDARY
- #2 AAAC PRIMARY
- 2 #2 AAAC PRIMARY
- DOWN CUY
- SPAN CUY

OVERHEAD #2 AAAC PRIMARY - 5815  
 OVERHEAD 2/0 TRIPLEX SECONDARY - 6915  
 OVERHEAD 4/0 TRIPLEX SECONDARY - 115  
 OVERHEAD 2/0 TRIPLEX SERVICE - 7245  
 15 KVA TRANSFORMERS - 3  
 25 KVA TRANSFORMERS - 4  
 37.5 KVA TRANSFORMERS - 12  
 TOTAL TRANSFORMER KVA - 595  
 TOTAL LOTS - 176

NOTE:  
 1. 1250 SF HOMES  
 2. 2.5 TON AC UNIT  
 3. 40' SERVICE RUN FROM PROPERTY CORNER TO METER LOCATION  
 4. VOLTAGE DROP LESS THAN OR EQUAL TO 12.0 VOLTS  
 5. VOLTAGE FLICKER LESS THAN OR EQUAL TO 12.0 VOLTS

THIS DRAWING IS THE PROPERTY OF TAMPA ELECTRIC COMPANY. IT IS TO BE USED ONLY FOR THE PROJECT AND LOCATION SPECIFICALLY IDENTIFIED HEREON. IT IS NOT TO BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF TAMPA ELECTRIC COMPANY.

THIS WORK ORDER HAS BEEN DESIGNED IN COMPLIANCE WITH TAMPA ELECTRIC COMPANY CONSTRUCTION STANDARDS AND/OR THE NATIONAL ELECTRICAL SAFETY CODE.

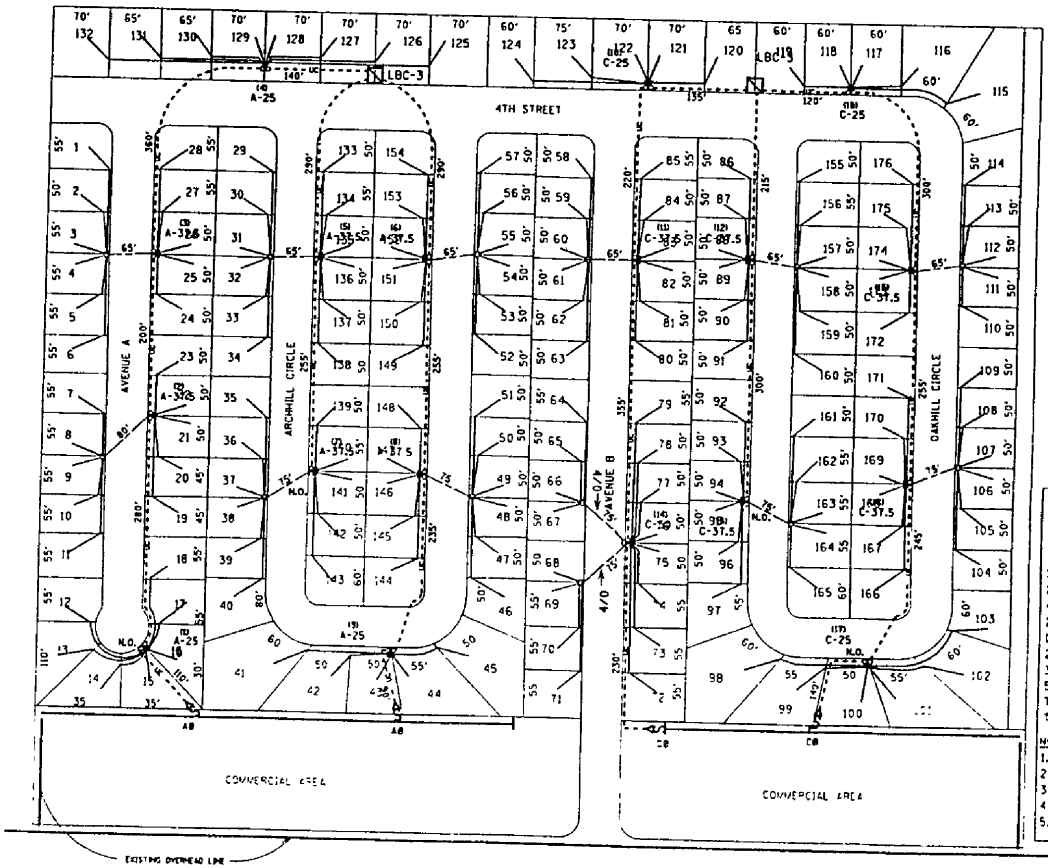
BY: \_\_\_\_\_ DATE: \_\_\_\_/\_\_\_\_/\_\_\_\_

TAMPA ELECTRIC CO. ENG. DEPT.	
SCALE: 1"=100'	PAR: _____
DRAWN: TB	DATE: 3/00
APPR: _____	DATE: _____

OVERHEAD HIGH DENSITY  
SUBDIVISION  
DESIGN

Q - OHHD -
1 of 2

TYPICAL SINGLE OCCUPANCY 210 LOT SUBDIVISION LAYOUT  
Underground Design



LEGEND  
200AMP SERVICE

- ⊗ PADMOUNT TK.
- HANDHOLE
- ☐ LOAD BREAK CABINET
- 3/C - 2/0 SVC.
- - - 3/C - 2/0 SEC.
- - - 3/C - 4/0 SEC.
- - - 1/C - 1/0 15KV PRI.
- OH - UG TERMINATION (100)
- N.O. NORMAL OPEN

TRENCH FEET OF 1/0 AL PRIMARY CABLE - 5000  
 TRENCH FEET OF 2/0 AL SECONDARY CABLE - 920  
 TRENCH FEET OF 4/0 AL SECONDARY CABLE - 150  
 TRENCH FEET OF 2/0 AL SERVICE CABLE - 10,150  
 1/0 AL PRIMARY CABLE IN EXISTING TRENCH - 0  
 2/0 AL SECONDARY CABLE EXISTING TRENCH - 0  
 4/0 AL SECONDARY CABLE EXISTING TRENCH - 0  
 2/0 AL SERVICE CABLE IN EXISTING TRENCH - 5525  
 LOAD BREAK CABINETS - 2  
 25 KVA TRANSFORMERS - 6  
 37.5 KVA TRANSFORMER - 11  
 50 KVA TRANSFORMERS - 1  
 TOTAL TRANSFORMER KVA - 612.5  
 TOTAL LOTS - 176

NOTE:  
 1. 1250 SF HOMES  
 2. 2.5 TON AC UNIT  
 3. 40' SERVICE RUN FROM PROPERTY CORNER TO METER LOCATION  
 4. VOLTAGE DROP LESS THAN OR EQUAL TO 12% @ 15  
 5. VOLTAGE FLICKER LESS THAN OR EQUAL TO 1% VOLTS

ONLY AN AUTHORIZED REPRESENTATIVE OF TAMPA ELECTRIC CO. SHALL UTILIZE THIS DRAWING TO DETERMINE EXACT LOCATION OF UNDERGROUND LINES. IF IT IS NECESSARY TO LOCATE IN THE GENERAL AREA OF INDICATED ELECTRICAL LINES, PLEASE CONTACT TAMPA ELECTRIC CO.

THIS WORK ORDER HAS BEEN DESIGNED IN COMPLIANCE WITH TAMPA ELECTRIC CO. CONSTRUCTION STANDARDS - MD/DR THE NATIONAL ELECTRICAL SAFETY CODE.  
 BY: \_\_\_\_\_ DATE: \_\_\_\_\_

TAMPA ELECTRIC CO. ENGR. DEPT.	PAR.1
SCALE: 1" = 100'	DATE: 3/00
DRAWN: TB	DATE:
APPR.	

NO.	DATE	DESCRIPTION	APP.	DT.
		Q-UGHD02		
UNDERGROUND HIGH DENSITY SUBDIVISION DESIGN			SH.2 of 2	



OVERHEAD VS. UNDERGROUND SUMMARY SHEET

Single Occupancy 176 Lot Subdivision  
Individually Metered  
Cost per Lot

<b>ITEM</b>	<b>OVERHEAD</b>	<b>UNDERGROUND</b>	<b>DIFFERENTIAL</b>
Labor	\$329.22	\$547.47	\$218.25
Material	\$277.00	\$381.16	\$104.16
<b>TOTAL</b>	<b>\$606.22</b>	<b>\$928.63</b>	<b>\$322.41</b>

COST PER SERVICE LATERAL OVERHEAD MATERIAL AND LABOR

Single Occupancy 176 Lot Subdivision  
 Individually Metered  
 Cost per Lot

ITEM	MATERIAL <sup>1</sup>	LABOR <sup>4</sup>	TOTAL
Service <sup>2</sup>	\$54.27	\$84.87	\$139.14
Primary	\$6.56	\$20.67	\$27.23
Secondary	\$51.64	\$65.64	\$117.28
Initial Tree Trim	---	---	---
Poles	\$49.51	\$63.57	\$113.08
Transformers	\$82.48	\$46.69	\$129.17
Subtotal	\$244.46	\$281.44	\$525.90
Stores Handling <sup>3</sup>	\$32.54	---	\$32.54
Subtotal	\$277.00	\$281.44	\$558.44
Engineering <sup>5</sup>	---	\$47.78	\$47.78
<b>TOTAL</b>	<b>\$277.00</b>	<b>\$329.22</b>	<b>\$606.22</b>

<sup>1</sup> Includes Sales Tax

<sup>2</sup> Includes Meter

<sup>3</sup> 13.31% of all Material

<sup>4</sup> Includes Administration, General & Transportation

<sup>5</sup> 8.56% of Material and Labor

COST PER SERVICE LATERAL UNDERGROUND MATERIAL AND LABOR

Single Occupancy 176 Lot Subdivision  
 Individually Metered  
 Cost per Lot

ITEM	MATERIAL <sup>1</sup>	LABOR <sup>4</sup>	TOTAL
Service <sup>2</sup>	\$144.17	\$99.83	\$244.00
Primary	\$67.88	\$44.27	\$112.15
Secondary	\$16.13	\$20.26	\$36.39
Transformers	\$108.21	\$25.49	\$133.70
Primary & Secondary Trenching	---	\$113.12	\$113.12
Service Trenching	---	\$196.72	\$196.72
Subtotal	\$336.39	\$499.69	\$836.08
Stores Handling <sup>3</sup>	\$44.77	---	\$44.77
Subtotal	\$381.16	\$499.69	\$880.85
Engineering <sup>5</sup>	---	\$47.78	\$47.78
<b>TOTAL</b>	<b>\$381.16</b>	<b>\$547.47</b>	<b>\$928.63</b>

<sup>1</sup> Includes Sales Tax

<sup>2</sup> Includes Meter

<sup>3</sup> 13.31% of all Material

<sup>4</sup> Includes Administration, General & Transportation

<sup>5</sup> 5.71% of Material and Labor

OVERHEAD VS. UNDERGROUND SUMMARY SHEET

Single Occupancy 176 Lot Subdivision  
 Multi-Unit Meter Centers  
 Cost per Lot

ITEM	OVERHEAD	UNDERGROUND	DIFFERENTIAL
Labor	NA	NA	NA
Material	NA	NA	NA
<b>TOTAL</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>

Tampa Electric's URD policy does not include "per lot" charges for multi-unit meter centers. These installations are covered in Tariff Section 5 Subsections 3.4.4.2 and 3.4.1.4.

COST PER DWELLING OVERHEAD MATERIAL AND LABOR

Single Occupancy 176 Lot Subdivision  
 Multi-Use Meter Centers  
 Cost per Lot

ITEM	MATERIAL <sup>1</sup>	LABOR <sup>4</sup>	TOTAL
Service <sup>2</sup>			
Primary			
Secondary			
Initial Tree Trim			
Poles			
Transformers			
Subtotal			
Stores Handling <sup>3</sup>			
Subtotal			
Engineering <sup>5</sup>			
<b>TOTAL</b>			

<sup>1</sup> Includes Sales Tax

<sup>2</sup> Includes Meter

<sup>3</sup> \_\_\_\_% of all Material

<sup>4</sup> Includes Administration, General & Transportation

<sup>5</sup> \_\_\_\_% of Material and Labor

**Tampa Electric’s URD policy does not include “per lot” charges for multi-unit meter centers. These installations are covered in Tariff Section 5 Subsections 3.4.4.2 and 3.4.1.4.**

COST PER DWELLING UNDERGROUND MATERIAL AND LABOR

Single Occupancy 176 Lot Subdivision  
 Multi-Use Meter Centers  
 Cost per Lot

ITEM	MATERIAL <sup>1</sup>	LABOR <sup>4</sup>	TOTAL
Service <sup>2</sup>			
Primary			
Secondary			
Transformers			
Primary Trenching			
Secondary Trenching			
Service Trenching			
Subtotal			
Stores Handling <sup>3</sup>			
Subtotal			
Engineering <sup>5</sup>			
<b>TOTAL</b>			

<sup>1</sup> Includes Sales Tax

<sup>2</sup> Includes Meter

<sup>3</sup> \_\_\_\_% of all Material

<sup>4</sup> Includes Administration, General & Transportation

<sup>5</sup> \_\_\_\_% of Material and Labor

**Tampa Electric’s URD policy does not include “per lot” charges for multi-unit meter centers. These installations are covered in Tariff Section 5 Subsections 3.4.4.2 and 3.4.1.4.**

TYPICAL SINGLE OCCUPANCY 176 LOT SUBDIVISION LAYOUT  
Overhead Design - Individually Metered



**LEGEND**  
**200 AMP SERVICE**

- WOOD POLE
- ⊗ TRANSFORMER POLE
- - - 7/0 TRIPLEX SERVICE DROP
- - - 4/0 TRIPLEX SECONDARY
- - - 4/0 TRIPLEX SEC.
- - - 12 3/4\"/>

**NOTES**

1. 200 AMP SERVICE
2. 3 PHASE AC SYSTEM
3. ALL SERVICE FROM PROPERTY CORNER TO METER LOCATION
4. VOLTAGE DROP LESS THAN OR EQUAL TO 4% PER 100 FEET
5. VOLTAGE FLICKER LESS THAN OR EQUAL TO 12.5 VOLTS

ONLY AN AUTHORIZED REPRESENTATIVE OF TAMPA ELECTRIC CO. SHALL UTILIZE THIS DRAWING TO DETERMINE EXACT LOCATION OF ABOVE-GROUND LINES. IT IS NECESSARY TO EXCAVATE IN THE GENERAL AREA OF INDICATED ELECTRICAL LINES PRIOR TO MAKING CONTACT. TAMPA ELECTRIC CO.

THIS WORK ORDER HAS BEEN DESIGNED IN COMPLIANCE WITH TAMPA ELECTRIC CO. CONSTRUCTION STANDARDS AND/OR THE NATIONAL ELECTRICAL SAFETY CODE BY: \_\_\_\_\_ DATE: / /

TAMPA ELECTRIC COMPANY		TYPICAL LOW DENSITY SUBDIVISION (OVERHEAD)		F- OHLD.	
SCALE - P/200'	DATE: 11/1/02	SCALE - 1/8\"/>			
DATE: 11/1/02	DATE: 11/1/02	DATE: 11/1/02	DATE: 11/1/02	DATE: 11/1/02	DATE: 11/1/02
DATE: 11/1/02	DATE: 11/1/02	DATE: 11/1/02	DATE: 11/1/02	DATE: 11/1/02	DATE: 11/1/02





AVERAGE UNDERGROUND FEEDER COSTS

Underground \$/Ft..._____	Overhead \$/Ft...._____	Difference \$/Ft...._____
With Favorable Trenching \$/Ft ..._____		\$/Ft...._____
Additional Trenching Cost * (Difficult Trenching) \$/Ft ..._____		\$/Ft...._____

\* Difficult trenching charges include underground cost of cable-in-conduit and rock trench adder.

Note: Above costs reflect adjustment of \$\_\_\_\_\_ for Overhead estimates and \$\_\_\_\_\_ for Underground estimates.

**Feeder Costs are not included in Tampa Electric’s “per lot” charges. Feeder installation policy is addressed in Tampa Electric’s Tariff Section 5 Subsections 3.4.1.4 and 3.4.4.2 (d).**

ACTUAL OPERATING & MAINTENANCE DISTRIBUTION EXPENSES IN 2001  
For Overhead and Underground

	<u>OVERHEAD</u>	<u>UNDERGROUND</u>
Operation - Distribution Line	\$642,336	\$256,805
Maintenance - Distribution Line	\$11,149,023	\$1,295,159
Maintenance - Distribution Transformers	<u>\$108,729</u>	<u>\$180,043</u>
TOTAL	\$11,900,088	\$1,732,007

JOINT TRENCHING WITH OTHER UTILITIES  
In RESIDENTIAL DISTRIBUTION

2001 ADDITIONS

<u>Date</u> <u>Closed</u>	<u>Location</u>	<u>Work</u> <u>Order</u> <u>Number</u>	<u>Footage</u>	<u>Total</u> <u>Amount</u> <u>Due From</u> <u>Other</u> <u>Utility</u>	<u>Total</u> <u>Amount</u> <u>Due From</u> <u>Other</u> <u>Utility</u>
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**Tampa Electric did no joint trenching with other utilities during calendar year 2001.**

JOINT TRENCHING WITH OTHER UTILITIES  
In RESIDENTIAL DISTRIBUTION  
(continued)

Year	Footage <u>Feet</u>	Amount Due From <u>Other Utility</u>	Amount Due To <u>Other Utility</u>
Total for 1992	0	\$0.00	\$0.00
Total for 1993	0	\$0.00	\$0.00
Total for 1994	0	\$0.00	\$0.00
Total for 1995	0	\$0.00	\$0.00
Total for 1996	0	\$0.00	\$0.00
Total for 1997	0	\$0.00	\$0.00
Total for 1998	0	\$0.00	\$0.00
Total for 1999	0	\$0.00	\$0.00
Total for 2000	0	\$0.00	\$0.00
Total for 2001	<u>0</u>	<u>\$0.00</u>	<u>\$0.00</u>
10-Year Total	0	\$0.00	\$0.00

**Tampa Electric did no joint trenching with other utilities during the 10-year period.**