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November 12, 2021

VIA: ELECTRONIC FILING

Mr. Adam J. Teitzman
Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

Re: Amended Petition of Tampa Electric Company for Approval of Revised
Underground Residential Distribution Tariff
FPSC Dkt. No. 20210164-EI

Dear Mr. Teitzman:

Attached for filing in the above-styled matter is Tampa Electric Company's Amended
Petition for Approval of Revised Tariffs for Underground Residential Distribution.

Thank you for your assistance in connection with this matter.

Sincerely,



Malcolm N. Means

MNM:bmp
Attachment
cc: All parties of record

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing Amended Petition of Tampa Electric Company for Approval of Revised Underground Residential Distribution Tariff, has been furnished by electronic mail on this 12th day of November 2021 to the following:

Shaw Stiller
Attorney
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Florida Public Service Commission
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ATTORNEY

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition of Tampa Electric Company)
for Approval of Revised Underground)
Residential Distribution Tariff)
_____)

DOCKET NO. 20210064
FILED: November 12, 2021

**AMENDED PETITION OF
TAMPA ELECTRIC COMPANY**

In accordance with Commission Rule 28-6.078(2), Florida Administrative Code (“F.A.C.”), Tampa Electric Company (“Tampa Electric” or “the company”) files this Amended Petition for Approval of Revised Tariffs for Underground Residential Distribution. The revised tariff sheets containing updated Underground Residential Distribution (“URD”) charges that reflect the cost differential between overhead (“OH”) and underground (“UG”) distribution service are attached hereto in standard and legislative formats as Exhibits “A” and “B”, respectively. Form PSC/EAG 13, *Overhead/Underground Residential Differential Cost Data*, and supporting data and analyses for the proposed URD charges are provided in Exhibit “C”. In support thereof, the company says:

1. The name, address, telephone number and facsimile number of the petitioner are:

Tampa Electric Company
Post Office Box 111
Tampa, FL 33601
(813) 228-4111
(813) 228-1770 (fax)

2. Tampa Electric is an investor-owned public utility subject to the jurisdiction of the Commission under Chapter 366, Florida Statutes.

3. All notices, pleadings and correspondence required to be served on the Petitioner should be directed to:

James D. Beasley
J. Jeffrey Wahlen
Malcolm N. Means
Ausley & McMullen
Post Office Box 391
Tallahassee, FL 32302
(850) 224-9115
(850) 222-7960 (fax)
jbeasley@ausley.com (email)
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Paula Brown, Manager
Regulatory Coordination
Tampa Electric Company
Post Office Box 111
Tampa, FL 33602
(813) 228-1444
(813) 228-1770 (fax)
regdept@tecoenergy.com (email)

Background

4. On April 2, 2018, Tampa Electric Company filed a petition for approval of revised tariffs for underground residential distribution. *See* Docket No. 20180086. The Commission approved this petition in Order Nos. PSC-2018-0319-TRF-EI and PSC-2018-0356-CO-EI, issued June 25, 2018 and July 23, 2018, respectively. These Orders approved a cost differential of \$0.00 for both high- and low-density subdivisions.

5. Pursuant to Rule 25-6.078(3), F.A.C., Tampa Electric filed an annual report containing Form PSC/EDR 13-E, Schedule 1, using current material and labor costs in October 2018, 2019, and 2020. These reports indicated that there were no changes in the differential costs since the company's filing in April of 2018.

6. Pursuant to Rule 25-6.078(3), F.A.C, a utility is required to file "a written policy and supporting data and analyses at least once every 3 years." Since the company's last filing was in April of 2018, Tampa Electric filed its initial Petition in this docket on April 1, 2021. Tampa Electric files this Amended Petition to remove its request in the initial Petition for a waiver of the high- and low-density subdivision URD charges calculated in the cost support provided in that initial Petition pursuant to Rule 25-6.078(10), F.A.C.

7. The proposed charges and credits contained in Revised Tariff Sheet Nos. 5.510, 5.515, and 5.516 attached to this Amended Petition are based on current labor and material costs from the twelve-month period prior to the April 2021 initial Petition and are prepared in accordance with the requirements of Rules 25-6.064, 25-6.078, and 25-6.115, F.A.C.

8. In preparing the proposed per lot charges in this Amended Petition, Tampa Electric moved from a calculation of the 3-year average based on actual storm costs to a long-term potential cost based on hurricane simulations. The estimated actual hurricane loss value used in this calculation is drawn from the testimony of Steven P. Harris in Docket No. 20210034-EI, Exhibit No. SPH-1, Document No. 1, Page 12 of 19, filed April 9, 2021. At this time, Tampa Electric anticipates utilizing this report, or a subsequently calculated report like it, in the company's next filing regarding proposed lot charges.

Proposed “Per Lot” Charges for Low Density and High Density Subdivisions

9. Tampa Electric's proposed differential charge for Low-Density URD subdivision lots is \$370.29 per lot which is higher than the current charge of \$0.00 per lot. The company's proposed differential charge for High-Density URD subdivision lots is \$0.00 per lot which is the same as the current charge of \$0.00 per lot.

Proposed Charges for UG Services from OH Distribution Sources

10. For new single-phase UG services from OH distribution sources, the proposed Fixed Charge, representing fixed labor and material costs that are not impacted by the variable service length, has decreased from \$71.36 to \$18.46 for 2/0 UG service laterals and decreased from \$106.53 to \$92.54 for 4/0 UG service laterals.

11. The proposed “Per Trench Foot” charges have increased from \$10.02 to \$11.62 per foot for 2/0 cable and from \$9.91 to \$12.18 per foot for 4/0 cable.

12. The proposed credit for avoiding a service pole has increased from \$592.39 to \$801.36. None of these proposed charges is changed from the initial petition.

Proposed Charges for Conversion of Existing OH Services to UG

13. For converted single phase UG services, the proposed OH service removal charge has increased from \$167.70 to \$205.08 for service cable only and has increased from \$752.94 to \$885.91 when removal involves a service pole. None of these proposed charges is changed from the initial petition.

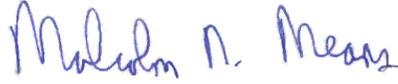
13. Tampa Electric is also proposing an updated non-refundable deposit charge for binding estimates conversion of existing OH distribution facilities to UG. Those charges, escalated by CPI over the three-year period, increase from \$9,896 to \$10,391 per mile for the urban density class, from \$5,657 to \$5,940 per mile for the rural density class, and \$47 to \$49 per lot for the per lot subdivisions class. None of these proposed charges is changed from the initial petition.

14. 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 12th day of November, 2021.

Respectfully submitted,



JAMES D. BEASLEY
J. JEFFRY WAHLEN
MALCOLM N. MEANS
Ausley & McMullen
Post Office Box 391
Tallahassee, FL 32302
(850) 224-9115

ATTORNEYS FOR TAMPA ELECTRIC COMPANY

Exhibit "A"

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 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 3.4.3 and 3.4.4 and the subparts 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...	\$370.29
High Density Subdivisions per service lateral or dwelling unit...	\$0.00

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

Fixed Charge for 2/0 service lateral	\$18.46
Fixed Charge for 4/0 service lateral	\$92.54
Per trench foot charge for 2/0 service lateral	\$11.62
Per trench foot charge for 4/0 service lateral	\$12.18
Credit for service pole if otherwise required for overhead service	\$801.36

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	\$205.08
Removal charge for overhead service with a service pole	\$885.91
Fixed Charge for 2/0 service lateral	\$ 18.46
Fixed Charge for 4/0 service lateral	\$ 92.54
Per trench foot charge for 2/0 service lateral	\$ 11.62
Per trench foot charge for 4/0 service lateral	\$ 12.18
Credit for service pole if otherwise required for overhead service	\$801.36

Continued to Sheet No. 5.516

Continued from Sheet No. 5.515

3.7.2 Non-refundable Deposits for Estimates of CIAC for Conversion of Existing Overhead Distribution Facilities to Underground Facilities

Qualified applicants can request, upon payment of a non-refundable deposit as listed below, the conversion of overhead distribution facilities to underground in accordance with these Rules and Regulations for conversion areas of not less than one (1) city block in length along both sides of the main distribution system, or in the absence of city blocks, not less than five (5) contiguous building lots along both sides of the main distribution system, or in the absence of both, not the less than 600 pole-feet of the main distribution system, including all customers served along both sides of the main distribution system, and so as to result in a decrease in the number of non-lighting poles in the system.

Requests for conversions, except for individual residential service covered under Section 3.4.3.3, will be accompanied by a non-refundable amount as follows:

Density Class	Deposit Amount
Urban Commercial or Residential	\$10,391 per mile*
Rural Commercial or Residential	\$ 5,940 per mile*
High or Low Density Subdivision	\$ 49 per lot

* As measured along the existing overhead primary and secondary distribution system.

Exhibit "B"



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 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 3.4.3 and 3.4.4 and the subparts 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...	\$0370.29.00
High Density Subdivisions per service lateral or dwelling unit...	\$0.00

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

Fixed Charge for 2/0 service lateral	\$18.4671.36
Fixed Charge for 4/0 service lateral	\$92.54106.53
Per trench foot charge for 2/0 service lateral	\$11.6210.02
Per trench foot charge for 4/0 service lateral	\$12.189.91
Credit for service pole if otherwise required for overhead service	\$801.36592.39



~~TENTH~~ ELEVENTH REVISED SHEET NO. 5.510
CANCELS ~~NINTH~~ TENTH REVISED SHEET NO. 5.510

Continued to Sheet No. 5.515

ISSUED BY: ~~N. G. Tower~~ A. D. Collins,
President

DATE EFFECTIVE: ~~June 5, 2018~~



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	\$ 205.08167.70
Removal charge for overhead service with a service pole	\$ 885.91752.94
Fixed Charge for 2/0 service lateral	\$ 18.4671.36
Fixed Charge for 4/0 service lateral	\$ 92.54106.53
Per trench foot charge for 2/0 service lateral	\$ 11.6210.02
Per trench foot charge for 4/0 service lateral	\$ 12.189.94
Credit for service pole if otherwise required for overhead service	\$ 801.36592.39

Continued to Sheet No. 5.516



Continued from Sheet No. 5.515

3.7.2 Non-refundable Deposits for Estimates of CIAC for Conversion of Existing Overhead Distribution Facilities to Underground Facilities

Qualified applicants can request, upon payment of a non-refundable deposit as listed below, the conversion of overhead distribution facilities to underground in accordance with these Rules and Regulations for conversion areas of not less than one (1) city block in length along both sides of the main distribution system, or in the absence of city blocks, not less than five (5) contiguous building lots along both sides of the main distribution system, or in the absence of both, not the less than 600 pole-feet of the main distribution system, including all customers served along both sides of the main distribution system, and so as to result in a decrease in the number of non-lighting poles in the system.

Requests for conversions, except for individual residential service covered under Section 3.4.3.3, will be accompanied by a non-refundable amount as follows:

Density Class	Deposit Amount
Urban Commercial or Residential.....	\$ 10,3919,896 per mile*
Rural Commercial or Residential.....	\$ 5,9405,657 per mile*
High or Low Density Subdivision.....	\$ <u>4947</u> per lot

* As measured along the existing overhead primary and secondary distribution system.

Exhibit "C"

OVERHEAD VS UNDERGROUND SUMMARY SHEET

Single Occupancy Low Density 210 Lot Subdivision
Cost per Lot

ITEM	OVERHEAD	UNDERGROUND	DIFFERENTIAL
Labor	\$719.59	\$1,213.14	\$493.55
Material	\$708.94	\$1,227.97	\$519.03
TOTAL	\$1,428.53	\$2,441.11	\$1,012.58
NPV Operational Cost Including Storm Restoration and Lost Pole Attachment Revenue	\$1,896.66	\$1,254.37	-\$642.29
TOTAL Including NPV Operational Cost	\$3,325.19	\$3,695.48	\$370.29

COST PER SERVICE LATERAL OVERHEAD MATERIAL AND LABOR

Single Occupancy Low Density 210 Lot Subdivision
Cost per Lot

ITEM	MATERIAL	LABOR ¹	TOTAL
Service ²	\$134.88	\$79.94	\$214.82
Primary	\$16.04	\$47.12	\$63.16
Secondary	\$121.20	\$160.21	\$281.41
Initial Tree Trim	\$0.00	\$0.00	\$0.00
Poles	\$150.71	\$278.42	\$429.13
Transformers	\$208.91	\$88.24	\$297.15
Subtotal	\$631.74	\$653.93	\$1,285.67
Stores Handling ³	\$77.20	\$0.00	\$77.20
Subtotal	\$708.94	\$653.93	\$1,362.87
Engineering		\$65.66	\$65.66
TOTAL	\$708.94	\$719.59	\$1,428.53

¹ Includes Administration, General, Energy Delivery Supervision, & Transportation

² Includes Meter

³ 12.22% of all Material

COST PER SERVICE LATERAL UNDERGROUND MATERIAL AND LABOR

Single Occupancy Low Density 210 Lot Subdivision
Cost per Lot

ITEM	MATERIAL	LABOR¹	TOTAL
Service ²	\$331.03	\$248.42	\$579.45
Primary	\$304.40	\$109.34	\$413.74
Secondary	\$79.99	\$64.92	\$144.91
Transformers	\$378.83	\$86.18	\$465.01
Pri. and Sec. Trenching	\$0.00	\$319.74	\$319.74
Service Trenching	\$0.00	\$318.88	\$318.88
Subtotal	\$1,094.25	\$1,147.48	\$2,241.73
Stores Handling ³	\$133.72	\$0.00	\$133.72
Subtotal	\$1,227.97	\$1,147.48	\$2,375.45
Engineering		\$65.66	\$65.66
TOTAL	\$1,227.97	\$1,213.14	\$2,441.11

¹ Includes Administration, General, Energy Delivery Supervision, & Transportation

² Includes Meter

³ 12.22% of all Material

OVERHEAD VS UNDERGROUND SUMMARY SHEET

Single Occupancy High Density 176 Lot Subdivision
Individually Metered
Cost per Lot

ITEM	OVERHEAD	UNDERGROUND	DIFFERENTIAL
Labor	\$570.46	\$1,015.10	\$444.64
Material	\$551.19	\$866.33	\$315.14
TOTAL	\$1,121.65	\$1,881.43	\$759.78
NPV Operational Cost Including Storm Restoration and Lost Pole Attachment Revenue	\$1,408.20	\$583.66	-\$824.54
TOTAL Including NPV Operational Cost	\$2,529.85	\$2,465.09	-\$64.76

COST PER SERVICE LATERAL OVERHEAD MATERIAL AND LABOR

Single Occupancy High Density 176 Lot Subdivision
Individually Metered
Cost per Lot

ITEM	MATERIAL	LABOR¹	TOTAL
Service ²	\$142.24	\$91.83	\$234.07
Primary	\$12.88	\$35.17	\$48.05
Secondary	\$64.40	\$106.36	\$170.76
Initial Tree Trim			\$0.00
Poles	\$113.97	\$205.55	\$319.52
Transformers	\$157.68	\$70.27	\$227.95
Subtotal	\$491.17	\$509.18	\$1,000.35
Stores Handling ³	\$60.02	\$0.00	\$60.02
Subtotal	\$551.19	\$509.18	\$1,060.37
Engineering		\$61.28	\$61.28
TOTAL	\$551.19	\$570.46	\$1,121.65

¹ Includes Administration, General, Energy Delivery Supervision, & Transportation

² Includes Meter

³ 12.22% of all Material

COST PER SERVICE LATERAL UNDERGROUND MATERIAL AND LABOR

Single Occupancy High Density 176 Lot Subdivision
Individually Metered
Cost per Lot

ITEM	MATERIAL	LABOR¹	TOTAL
Service ²	\$288.33	\$260.66	\$548.99
Primary	\$138.27	\$61.14	\$199.41
Secondary	\$78.14	\$70.32	\$148.46
Transformers	\$267.25	\$68.77	\$336.02
Pri. and Sec. Trenching		\$175.02	\$175.02
Service Trenching		\$317.91	\$317.91
Subtotal	\$771.99	\$953.82	\$1,725.81
Stores Handling ³	\$94.34	\$0.00	\$94.34
Subtotal	\$866.33	\$953.82	\$1,820.15
Engineering		\$61.28	\$61.28
TOTAL	\$866.33	\$1,015.10	\$1,881.43

¹ Includes Administration, General, Energy Delivery Supervision, & Transportation

² Includes Meter

³ 12.22% of all Material

OVERHEAD VS UNDERGROUND SUMMARY SHEET

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

ITEM	OVERHEAD	UNDERGROUND	DIFFERENTIAL
Labor	NA	NA	NA
Material	NA	NA	NA
TOTAL	NA	NA	NA

Tampa Electric's URD policy does not include "per lot" charges for multi-unit meter centers. These installations are covered in Tariff Section 5 Subsection 3.4.4.

COST PER SERVICE LATERAL OVERHEAD MATERIAL AND LABOR

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

ITEM	MATERIAL	LABOR ¹	TOTAL
Service ²			\$0.00
Primary			\$0.00
Secondary			\$0.00
Initial Tree Trim			\$0.00
Poles			\$0.00
Transformers			\$0.00
Subtotal	\$0.00	\$0.00	\$0.00
Stores Handling ³			\$0.00
Subtotal	\$0.00	\$0.00	\$0.00
Engineering			\$0.00
TOTAL	\$0.00	\$0.00	\$0.00

¹ Includes Administration, General & Transportation

² Includes Meter

³ 12.22% of all Material

Tampa Electric's URD policy does not include "per lot" charges for multi-unit meter centers. These installations are covered in Tariff Section 5 Subsection 3.4.4.

COST PER SERVICE LATERAL UNDERGROUND MATERIAL AND LABOR

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

ITEM	MATERIAL	LABOR¹	TOTAL
Service ²			\$0.00
Primary			\$0.00
Secondary			\$0.00
Transformers			\$0.00
Pri. and Sec. Trenching			\$0.00
Service Trenching			\$0.00
Subtotal	\$0.00	\$0.00	\$0.00
Stores Handling ³			\$0.00
Subtotal	\$0.00	\$0.00	\$0.00
Engineering			\$0.00
TOTAL	\$0.00	\$0.00	\$0.00

¹ Includes Administration, General & Transportation

² Includes Meter

³ 12.22% of all Material

Tampa Electric's URD policy does not include "per lot" charges for multi-unit meter centers. These installations are covered in Tariff Section 5 Subsection 3.4.4.

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 cost are not included in Tampa Electric "per lot" charges. Feeder installation policy addressed in Tampa Electric's Tariff Section 5 Subsection 3.4.1.1.

ACTUAL OPERATIONAL DISTRIBUTION EXPENSES IN 2020
For Overhead and Underground

	OVERHEAD	UNDERGROUND
Operational Expense - Distribution	\$63,394,096	\$33,194,939

JOINT TRENCHING WITH OTHER UTILITIES
In RESIDENTIAL DISTRIBUTION

2011- 2020 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 To</u> <u>Other</u> <u>Utility</u>
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Tampa Electric did not engage in joint trenching during calendar year 2020.

JOINT TRENCHING WITH OTHER UTILITIES
In RESIDENTIAL DISTRIBUTION
(continued)

<u>Year</u>	<u>Footage Feet</u>	<u>Amount Due From Other Utility</u>	<u>Amount Due To Other Utility</u>
Total For 2011	0	\$0.00	\$0.00
Total For 2012	0	\$0.00	\$0.00
Total For 2013	0	\$0.00	\$0.00
Total For 2014	0	\$0.00	\$0.00
Total For 2015	0	\$0.00	\$0.00
Total For 2016	0	\$0.00	\$0.00
Total For 2017	0	\$0.00	\$0.00
Total For 2018	0	\$0.00	\$0.00
Total For 2019	0	\$0.00	\$0.00
Total For 2020	0	\$0.00	\$0.00
10-Year Total	0	\$0.00	\$0.00

4/2021

LOW DENSITY MODEL

(210 lots)

Underground Costs (per lot)

With overheads filed in rate case

ITEM	MATERIAL		LABOR		TOTAL		EXPLANATION OF % CHANGE
	COST	% CHANGE	COST	% CHANGE	COST	% CHANGE	
SERVICE	331.03	64.92%	248.42	46.79%	579.45	56.63%	Underground material up, contractor rates up
PRIMARY	304.40	30.81%	109.34	51.40%	413.74	35.68%	Underground material up, Cable labor re-evaluation caused labor increase
SECONDARY	79.99	84.78%	64.92	28.28%	144.91	54.32%	Underground material up, Cable labor re-evaluation caused labor increase
TRANSFORMERS	378.83	9.14%	86.18	10.13%	465.01	9.32%	Underground material up, TEC & Contractor overhead down
TRENCHING							
PRIMARY & SECONDARY			319.74	-12.14%	319.74	-12.14%	Contractor rates down
SERVICES			318.88	-7.16%	318.88	-7.16%	Contractor rates down
SUB-TOTAL	1,094.25	32.82%	1,147.48	6.48%	2,241.73	17.89%	
STORES HANDLING	133.72	16.11%			133.72	16.11%	Higher material costs produces higher handling costs
SUB-TOTAL	1,227.97	30.77%	1,147.48	6.48%	2,375.45	17.79%	
ENGINEERING			65.66	0.00%	65.66	0.00%	
TOTAL	1,227.97	30.77%	1,213.14	6.10%	2,441.11	17.23%	
					1,254.37	Net Present Value of the Life Cycle Operational Cost Including Storm Restoration and Lost Pole Attachment Revenue	
Total with NPV Factor					3,695.48	Total Including NPV of Operational Cost	

Overhead Costs (per lot)

ITEM	MATERIAL		LABOR		TOTAL		EXPLANATION OF % CHANGE
	COST	% CHANGE	COST	% CHANGE	COST	% CHANGE	
SERVICE	134.88	70.67%	79.94	6.94%	214.82	39.69%	Material up, Labor up
PRIMARY	16.04	15.73%	47.12	12.78%	63.16	13.52%	Material up, Labor up
SECONDARY	121.20	11.24%	160.21	6.02%	281.41	8.21%	Material up, Labor up
INITIAL TREE TRIM			0.00		0.00		
POLES	150.71	8.41%	278.42	8.73%	429.13	8.62%	Material up, Labor up
TRANSFORMERS	208.91	3.31%	88.24	9.53%	297.15	5.08%	Material up, Labor up
SUB-TOTAL	631.74	16.33%	653.93	8.22%	1,285.67	12.06%	
STORES HANDLING	77.20	1.69%			77.20	1.69%	Higher material costs produces higher handling costs
SUB-TOTAL	708.94	14.53%	653.93	8.22%	1,362.87	11.41%	
ENGINEERING			65.66	0.00%	65.66	0.00%	
TOTAL	708.94	14.53%	719.59	7.41%	1,428.53	10.83%	
					1,896.66	Net Present Value of the Life Cycle Operational Cost Including Storm Restoration and Lost Pole Attachment Revenue	
Total with NPV Factor					3,325.19	Total Including NPV of Operational Cost	

Differential Costs (per lot)

ITEM	MATERIAL		LABOR		TOTAL	
	COST	% CHANGE	COST	% CHANGE	COST	% CHANGE
Differential (per lot)	519.03	62.19%	493.55	4.25%	1,012.58	27.62%
NPV amount					-642.29	
Differential¹ (per lot)	0.00		0.00		370.29	-175.42%

¹ Includes NPV of Operational Cost

LEGEND
200 AMP SERVICE

- PAD-MOUNTED TRANSFORMER
- HANDHOLE (SECONDARY)
- SPLICEBOX
- 1/0 PRIMARY CABLE
- 4/0 SECONDARY CABLE
- 2/0 SERVICE CABLE
- 4/0 SERVICE CABLE



- 1250 TOTAL CONNECTED KVA
1272.2 TOTAL INITIAL PEAK DEMAND KVA
6 25 KVA TRANSFORMERS
8 37.5 KVA TRANSFORMERS
16 50 KVA TRANSFORMERS
0 75 KVA TRANSFORMERS
14003 TRENCH FEET OF 1/0 AL PRIMARY CABLE
1803 EXISTING TRENCH FEET OF 1/0 AL PRIMARY CABLE
0 TRENCH FEET OF 2/0 AL SECONDARY CABLE
0 EXISTING TRENCH FEET OF 2/0 AL SECONDARY CABLE
1597 TRENCH FEET OF 4/0 AL SECONDARY CABLE
384 EXISTING TRENCH FEET OF 4/0 AL SECONDARY CABLE
0 TRENCH FEET OF 500 MCM AL SECONDARY CABLE
0 EXISTING TRENCH FEET OF 500 MCM AL SECONDARY CABLE
9233 TRENCH FEET OF 2/0 AL SERVICE CABLE
5084 EXISTING TRENCH FEET OF 2/0 AL SERVICE CABLE
1265 TRENCH FEET OF 4/0 AL SERVICE CABLE
1741 EXISTING TRENCH FEET OF 4/0 AL SERVICE CABLE
0 LOAD BREAK CABINET

- NOTES:**
1. PRIMARY: 1C1/0 ALJCN 15KV IN 2" PVC (GALV ELLS)
 2. SERVICES: 3C2/0 AL 600V IN 2" PVC UNLESS NOTED (PVC ELLS)
 - a. 2" PVC IN ELECTRIC POWER EASEMENT UNLESS NOTED
 - b. 2" PVC (10' SECTIONS) STUBBED OUT OF REAR OF PMT AND HANDHOLES
 3. SECONDARY: 3C4/0 AL 600V IN 4" PVC FOR STREET CROSSINGS UNLESS NOTED
 4. 3C4/0 AL 600V IN 3" PVC ALONG EASEMENT WITH 14 X 18 LARGE PEDESTAL UNLESS NOTED
 5. INSTALL ALL CONDUIT AS PER TEC SPEC 1-43 AND 1-44
 6. SERVICES BASED ON 2000 SF. 3.5 TON AC, (119AMPS)
 7. 40FT RUN FROM EASEMENT TO METER
 8. VOLTAGE DROP LESS THAN OR EQUAL TO 12.0 VOLTS
 9. VOLTAGE FLICKER LESS THAN OR EQUAL TO 12.0 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 EXCAVATE IN THE GENERAL AREA OF INDICATED ELECTRICAL LINES, PRIOR TO DIGGING 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.
FET: _____ DATE: / /
LFET: _____ DATE: / /

LD-2

TAMPA ELECTRIC COMPANY	
SCALE: 1" = 100'	GIS: _____
FET/LFET APPROV: _____	Completion DATE: _____
FET: _____	DATE: _____
LFET: _____	DATE: _____
DISTRIBUTION ENGINEERING	

**UNDERGROUND
LOW DENSITY
SUBDIVISION DESIGN**

2000 SQUARE FOOT LOW DENSITY - 210 LOTS

**UG Construction Cost Data Summary
Low Density (210-Lot) UG Subdivision Costs**

A	B	C	D	E	F	G	H	I	J	K	L	M	N	
Line #	Work Type/WR #	Description	(C + M) Material and Handling	Material	(F + L) Total Labor Plus Vehicles	Total Labor	Base Labor	(G x J x TLF) TEC Labor Overheads	(G x K x CLF) Contract Labor Overheads	TEC Work %	Contractor Work %	Vehicle	(D x MHR) Material Handling	(C+E) Total
1	Transformers													
2	924920	Install & Ground Transformers	89,275.93	\$79,554.38	12,917.76	11,552.89	6,726.81	4,286.32	539.76	60%	40%	\$1,364.87	9,721.55	102,193.69
3	Contractor	Prepare Pad Site	-	-	5,179.75	5,179.75	4,314.30	-	865.45	0%	100%	-	-	5,179.75
4			89,275.93	79,554.38	18,097.51	16,732.64	11,041.11	4,286.32	1,405.21			1,364.87	9,721.55	107,373.44
5														
6	Primary													
7	924957	Primary Line - OH-UG Takeoffs	1,615.06	\$1,439.19	1,910.80	1,708.90	995.03	634.03	79.84	60%	40%	\$201.89	175.87	3,525.85
8	925017	Primary Conduit (Material Only)	25,221.49	\$22,475.04	-	-	-	-	-			-	2,746.45	25,221.49
9	925022	Primary Cable	44,899.79	\$40,010.51	21,050.29	18,826.15	10,961.75	6,984.83	879.57	60%	40%	\$2,224.14	4,889.28	65,950.08
10			71,736.34	63,924.74	22,961.08	20,535.05	11,956.78	7,618.86	959.41			2,426.03	7,811.60	94,697.43
11	Secondary													
12	925024	Secondary Cable	11,440.67	\$10,194.86	13,633.22	12,192.76	7,099.38	4,523.72	569.65	60%	40%	\$1,440.46	1,245.81	25,073.90
13	925026	Secondary Conduit (Material Only)	7,409.08	\$6,602.28	-	-	-	-	-			-	806.80	7,409.08
14			18,849.75	16,797.14	13,633.22	12,192.76	7,099.38	4,523.72	569.65			1,440.46	2,052.61	32,482.97
15	Service													
16	925028	Service Cable	26,226.15	\$23,370.30	48,611.12	48,611.12	40,489.02	-	8,122.10	0%	100%	-	2,855.85	74,837.27
17	925029	Set Meters	21,181.30	\$18,874.80	3,556.32	3,180.56	1,851.92	1,180.04	148.60	60%	40%	\$375.75	2,306.50	24,737.62
18	925030	Service Conduit Material	30,604.71	\$27,272.06	-	-	-	-	-			-	3,332.65	30,604.71
19			78,012.16	69,517.16	52,167.43	51,791.68	42,340.94	1,180.04	8,270.70			375.75	8,495.00	130,179.59
20														
21	Trenching													
22	Contractor	Primary Trenching	-	-	45,216.01	45,216.01	37,661.18	-	7,554.83	0%	100%	-	-	45,216.01
23	Contractor	Secondary Trenching	-	-	5,475.70	5,475.70	4,560.80	-	914.90	0%	100%	-	-	5,475.70
24		TEC Inspection for Primary	-	-	16,452.69	15,594.97	-	-	-	100%	0%	857.72	-	16,452.69
25			-	-	67,144.40	66,286.68	42,221.98	-	8,469.73			857.72	-	67,144.40
26														
27	Contractor	Svc Trenching Pri. Prop	-	-	39,974.94	39,974.94	33,295.80	-	6,679.14	0%	100%	-	-	39,974.94
28	Contractor	Svc Trenching Rts-of-Wy	-	-	17,238.59	17,238.59	14,358.31	-	2,880.28	0%	100%	-	-	17,238.59
29		TEC Inspection for Service	-	-	9,750.62	9,242.42	-	-	-	100%	0%	508.20	-	9,750.62
30			-	-	66,964.14	66,455.94	47,654.11	-	9,559.41			508.20	-	66,964.14
31														
32	Engineering	Design/Inspection/Coordination	-	-	13,788.39	13,788.39	-	-	-			-	-	13,788.39
33														
34	Totals (Sum of lines 4, 10, 14, 19, 25, 30, and 32)		\$ 257,874.18	\$ 229,793.42	\$ 254,756.18	\$ 247,783.15	\$ 162,314.30	\$ 17,608.95	\$ 29,234.11			\$ 6,973.04	\$ 28,080.76	\$ 512,630.36
35	Cost per Lot (line 34 /210 lots)		\$ 1,227.97		\$ 1,213.12									\$ 2,441.10

Adjustment Factors	
TEC Operations Labor Overhead Factor	TLF = 1.062
Contractor Labor Overhead Factor	CLF = 0.2006
Current year material handling charge rate	MHR = 0.1222

UG Contractor Labor Estimate - 210 lot low density

Prepare pad site (Primary Contractor Labor Costs)

	Total	Cost	Pad sites
Pad site preparation	\$4,314.30	\$143.81	30

Primary Trenching & Conduit (Primary Contractor Labor Costs)

	Total	Cost	Feet	
	\$29,126.24	\$2.08	14003	Machine Trenching Cost Only
	\$8,061.06	\$0.51	15806	2" Conduit Installation (both trenching and in existing trench)
	\$0.00	\$0.00	14003	Pull-tape Installation (used exact length for labor cost not 5% extra)
	\$473.88	\$157.96	3	1ø splice box (30" x 48" x 18"), UG GR&S 6-21
Primary Trenching	Sub-total \$37,661.18			

Secondary Trenching & Conduit (Primary Contractor Labor Costs)

	Total	Cost	Feet	
	\$3,321.76	\$2.08	1597	Machine Trenching Cost Only
	\$0.00	\$0.51	0	2" Conduit Installation
	\$176.00	\$0.55	320	3" Conduit Installation
	\$1,063.04	\$0.64	1661	4" Conduit Installation
	\$0.00	\$0.00	1597	Pull-tape Installation (used exact length not 5% extra)
Secondary Trenching	Sub-total \$4,560.80			

Primary Contractor Labor **Total \$42,221.98**

Service Trenching & Conduit (Primary Contractor Labor Costs)

	Total	Cost	Feet	
	\$7,473.44	\$2.08	3593	Trenching Cost -Trenching feet required for 2" service conduit
	\$1,196.00	\$2.08	575	Trenching Cost -Trenching feet required for 3" service conduit
	\$4,415.07	\$0.51	8657	2" Conduit Installation
	\$1,273.80	\$0.55	2316	3" Conduit Installation
	\$0.00	\$0.00	10973	Pull-tape Installation (used exact length not 5% extra)
Svc Trenching Rts-of-Wy	Sub-total \$14,358.31			

Service Trenching & Conduit on Private Property (Service Contractor Labor Costs)

	Total	Cost	Feet	
Svc Trenching Pri. Prop	Sub-total \$33,295.80	\$5.26	6330	Trenching & conduit labor cost - Trenching feet = 30 ft x 210 lots

Service Cable (Service Contractor Labor Costs)

	Total	Cost	Feet	
Service Cable Labor	Sub-total \$40,489.02	\$2.34	17303	Installing 2/0 or 4/0 Cable in existing conduit from source to meter

Service Contractor Labor **Total \$88,143.13**

Total Contractor Labor Cost \$130,365.11

Inspection (TECO Labor Cost)

	TEC Labor Total	TEC Labor Rate	Feet/Qty	TEC Vehicle Rate	TEC Vehicle Total	Inspection costs for Primary Contractor (TECO Labor Cost)
	\$10,953.46	\$88.00	14003	\$4.84	\$602.44	Primary Inspection chg = (mach. trnch ft / 900 ft per day)*(8 hr/day)*Contractor rate
	\$1,249.21	\$88.00	1597	\$4.84	\$68.71	Secondary Inspection chg = (mach. trnch ft / 900 ft per day)*(8 hr/day)*Contractor rate
	\$3,260.30	\$88.00	4168	\$4.84	\$179.32	Service ROW Inspection chg = (machine trench ft / 900 ft per day)*(8 hr/day)*Contractor rate
	\$132.00	\$44.00	3	\$2.42	\$7.26	1ø splice box (30" x 48" x 18"), UG GR&S 6-21
Inspection costs for Primary Contractor	Sub-total \$15,594.97				\$857.72	

Inspection costs for Service Contractor (TECO Labor Cost)

	TEC Labor Total	TEC Labor Rate	Feet/Qty	TEC Vehicle Rate	TEC Vehicle Total	Inspection costs for Service Contractor (TECO Labor Cost)
Inspection costs for Service Contractor	Sub-total \$9,240.00	\$44.00	210	\$2.42	\$508.20	Service Private Property Inspection = .5hr x # of lots x rate

Total TEC Inspection Cost \$24,837.39

Please modify the low density construction drawing legend as shown below.

UG Material List - 1501-2500 sq ft same trench 210 lot low density

1250	Total Connected KVA
1272.2	Total initial peak demand KVA
6	25 kVA Transformers
8	37.5 kVA Transformers
16	50 kVA Transformers
0	75 kVA Transformers
14003	Trench Feet of 1/0 AL Primary Cable
1803	Existing trench feet of 1/0 AL Primary Cable
0	Trench Feet of 2/0 AL Secondary Cable
0	Existing trench feet of 2/0 AL Secondary Cable
1597	Trench Feet of 4/0 AL Secondary Cable
384	Existing trench feet of 4/0 AL Secondary Cable
0	Trench Feet of 500 MCM AL Secondary Cable
0	Existing trench feet of 500 MCM AL Secondary Cable
9233	Trench Feet of 2/0 AL Service Cable
5064	Existing trench feet of 2/0 AL Service Cable
1265	Trench Feet of 4/0 AL Service Cable
1741	Existing trench feet of 4/0 AL Service Cable
0	Load Break Cabinet

Notes:

1. 1501-2500 SF Homes
2. 3.5 Ton AC Units
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

UG CU Totals (Material and Labor) - 2000 sq ft - 210 lot low density

Links allow this worksheet to summarize the material and CU entries from the ParkhurstPole worksheet through the BentTreePole worksheet. The totals are broken down into material construction units (CUs) for WorkPro work requests and labor inputs for the Contractor Labor worksheet.

Station All Stations - This information is used to create Work Requests to obtain costs.

924920 <=== Blue shading indicates fields to be updated. In WorkPro search for each Work Request Number shown in the blue areas. Then copy each work request which will create a new work request number to be entered.

Transfer the values from Qty and CU columns highlighted in yellow to the new WorkPro Work Requests to obtain new costs.

Those costs are then entered into the LDdifferentialMonth-Year.xls workbook to calculate the Low Density Differential cost.

Work Request Number

924920

Transformers - Cost for: Material only, TEC labor & overhead, vehicle

Qty	CU	Definition	Total Connected KVA	
0	pku51a3n	25 kva, 6 tap 250mcm	0	
6	pku51c3n	25 kva, 8 tap 250mcm	150	150
0	pku51a4n	37.5 kva, 6 tap 250mcm	0	150
1	pku51b4n	37.5 kva, 6 tap 500mcm	37.5	187.5
0	pku51c4n	37.5 kva, 8 tap 250mcm	0	187.5
7	pku51d4n	37.5 kva, 8 tap 500mcm	262.5	450
0	pku51a5n	50 kva, 6 tap 250mcm	0	450
0	pku51b5n	50 kva,6 tap 500mcm	0	450
0	pku51c5n	50 kva,8 tap 250mcm	0	450
16	pku51d5n	50 kva,8 tap 500mcm	800	1250
0	pku51a6n	75 kva, 6 tap 250mcm	0	1250
0	pku51b6n	75 kva, 6 tap 500mcm	0	1250
0	pku51c6n	75 kva,8 tap 250mcm	0	1250
0	pku51d6n	75 kva, 8 tap 500mcm	0	1250
1	bushcover_arrester	open position on loop tx used as radial		1250
1	bushdummy_arrester	normal open tx in loop		
2	bushinsert_arrester	at adjacent tx to normal open in a loop		
33	grdmeg1/2	megggar ground, drive rods, 1 location, 1/2" rods		

Work Request Number

924957

OH Primary - Cost for: Material only, TEC labor & overhead, vehicle

Qty	CU	Definition
4	PKE601WF1B	TEC material & labor to frame terminal pole CO & LA
4	FLOH103	Fuse
4	grdmeg1/2	megggar ground, drive rods, 1 location, 1/2" rods

Primary Trenching - Labor Only Done by contractors
Used to determine contractor labor cost on the Contractor Labor worksheet

Qty	CU	Definition
14003		Trenching feet required for 2" primary conduit
1803		Existing trench feet used for 2" primary conduit
14003		Install Pulling Tape (blow in tape for pull - trench feet used to determine contractor cost)

Work Request Number

925017

Primary Conduit - Cost for Material only

Material used by contractors to install the conduit system

Qty	CU	Definition
40	COND2G	Conduit, galvanized 2", 10' with coupling, for up terminal pole TEC # 2004389
16156	COND2_SCHA	2" PVC Schedule A conduit TEC # 2004488
16506	MULE TAPE	Pulling tape - actual length - does not need any 5% adder TEC # 2007414
88	ELL2G90	2" elbow 90 galv 9.5" radius TEC # 2004395
1	ELL2G45	2" elbow 45 galv 9.5" radius TEC # 2004394
178	COUP2P	Coupling, 2" PVC (2 per elbow) TEC # 2004507
33	GLUECONDF	2"& 3" pvc 1 qt for 500' fast dry
3	HH1PHPRI	1ø splice box (30" x 48" x 18"), UG GR&S 6-21

**Work Request
Number**

925022

Primary Cable - Cost for: Material only, TEC labor & overhead, vehicle

Qty	CU	Definition	
4	PKU16WF	pothead, 38' 1c 1/0AL cable, 20' pvc, ground conn, wood pole	152
61	PKU11F	safebreak, 5' 1c 1/0AL cable, ground conn	305
0	PKU31P3	switch cubicle(lbc) 1ph, 200a deadfront, 3 position w/pad, grd	
0	PKU31P4	switch cubicle(lbc) 1ph, 200a deadfront, 4 position w/pad, grd	
0	FAULT1PA	fault indicator, 1ph 1/0-4/0 above grade, 400a	
15806	CA1/0CN1CAL_SOL	cable, 1/0AL concentric neutral 15kV, includes labor	15806
0	WIU1F	labor to pull ug cable in conduit	
Our check! -Work request material 1/0AL concentric neutral 15kV cable total should be ==>			17060.9

Secondary Trenching - Labor Only - Done By Contractors

Used to determine contractor labor cost on the Contractor Labor worksheet

Qty	CU	Definition
0		Trenching feet required for 2" secondary conduit
0		Existing trench feet used for 2" secondary conduit
0		Trenching feet required for 3" secondary conduit used for 2/0 service cable
0		Existing trench feet used for 3" secondary conduit used for 2/0 service cable
0		Trenching feet required for 3" secondary conduit used for 4/0 service cable
320		Existing trench feet used for 3" secondary conduit used for 4/0 service cable
1597		Trenching feet required for 4" secondary conduit used for 4/0 service cable
64		Existing trench feet used for 4" secondary conduit used for 4/0 service cable
0		Trenching feet required for 4" secondary conduit used for 500 service cable
0		Existing trench feet used for 4" secondary conduit used for 500 service cable
1597		Install Pulling Tape (blow in tape for pull - trench feet used to determine contractor cost)

**Work Request
Number**

925024

Secondary Cable & Hand Holes - Cost for: Material only, TEC labor & overhead, vehicle

Qty	CU	Definition
0	wiu3sb	2c 2/0 1c 1 neutral, 600 v - added 5% here This CU adds 5% and we want it to.
2171	CA4/0INS3CAL	2c 4/0 1c 2/0 neutral, 600v includes labor - added 5% This CU adds 5% and we want it to.
0	wiu3sn	2c 500 1c 350 neutral, 600v - added 5% here This CU adds 5% and we want it to.
0	insbus350/4	crab 4 position up to 350mcm
0	insbus350/6	crab 6 position up to 350mcm
0	insbus500/4	crab 4 position up to 500mcm
69	insbus500/6	crab 6 position up to 500mcm
0	insbus500/8	crab 8 position up to 500mcm
0	wiu1f	labor to pull ug cable in conduit
23	svhottx	energize ug secondary in transformer
23	svhothh	energize ug secondary in hand hole
0	hhsec	secondary h/h 12"x20", 3 or 4 2/0 or 4/0 svc w/ 2/0 or 4/0 sec
23	HH LARGE PEDEST	secondary h/h 14"x18" large pedestal, 5 to 7 2/0 or 4/0 svc w/ 4/0 or 500 sec (any time 500 used)

**Work Request
Number**

925026

Secondary Conduit - Cost for Material Only

Material used by contractors to install the conduit system

Qty	CU	Definition
0	COND2_SCHA	2" conduit sched A bell end TEC # 2004488
340	COND3_SCHA	3" conduit sched A bell end TEC # 2004517
1871	COND4_PVC_SCHA	4" conduit sched A bell end TEC # 2004529
2326	MULE TAPE	Pulling tape, plus adding 5% extra here TEC # 2007414
0	ELL2P90	2" elbow 90 PVC 9.5" radius TEC # 2004511
0	ELL2P45	2" elbow 45 PVC 9.5" radius TEC # 2004510
4	ELL3P90	3" elbow 90 PVC 13" radius TEC # 2004524
0	ELL3P45	3" elbow 45 PVC 13" radius TEC # 2004523
42	ELL4P90	4" elbow 90 PVC 16" radius TEC # 2004538
0	ELL4G45	4" elbow 45 galv 16" radius TEC # 2004427
0	COUP2P	Coupling, 2" PVC (2 per elbow) TEC # 2004507
8	COUP3P	Coupling, 3" PVC (2 per elbow) TEC # 2004521
84	COUP4P	Coupling, 4" PVC (2 per elbow) TEC # 2004535
1	GLUECONDF	2"& 3" pvc 1 qt for 500' fast dry
8	GLUECONDM	4"& 6" pvc 1 qt for 250' medium dry

Work Request**Number****925028****Service Cable - Cost for Material Only**

Material used by contractors to install the conduit system

Qty	CU	Definition	
16177	CA2/0INS3CAL	2c 2/0 & 1c 1 neutral, 600 v service cable	This CU adds 5% and we want it to.
3236	CA4/0INS3CAL	2c 4/0 & 1c 2/0 neutral, 600 v service cable	This CU adds 5% and we want it to.

Work Request**Number****925029****Set Meter - Cost for: Material only, TEC labor & overhead, vehicle**

Qty	CU	Definition
210	meterlabor	
210	1900006	meter, kwh 30a 240v

Service Trenching - Labor Only - Done By Contractors

Used to determine contractor labor cost on the Contractor Labor worksheet

Qty	CU	Definition
188		Number of 2/0 services installed in 2" conduit
0		Number of 2/0 services installed in 3" conduit
23		Number of 4/0 services installed in 3" conduit
5640		Trenching feet for 2" service conduit on private property-service contractor
1880		Trenching feet for 10' stub of 2" service conduit installed by primary contractor
1713		Trenching feet for 2" service conduit installed by primary contractor
5064		Existing trench feet used for 2" service conduit installed by primary contractor
8657		Install Pulling Tape for 2" conduit (blow in tape for pull - Primary Contractor)
0		Trenching feet for 3" service conduit on private property-service contractor for 2/0 service
0		Trenching feet for 10' stub of 3" service conduit installed by primary contractor for 2/0 service
0		Trenching feet for 3" service conduit installed by primary contractor for 2/0 service
0		Existing trench feet used for 3" service conduit installed by primary contractor for 2/0 service
0		Install Pulling Tape for 3" conduit for 2/0 service (blow in tape for pull - Primary Contractor)
690		Trenching feet for 3" service conduit on private property-service contractor for 4/0 service
230		Trenching feet for 10' stub of 3" service conduit installed by primary contractor for 4/0 service
345		Trenching feet for 3" service conduit installed by primary contractor for 4/0 service
1741		Existing trench feet used for 3" service conduit installed by primary contractor for 4/0 service
2316		Install Pulling Tape for 3" conduit for 4/0 service (blow in tape for pull - Primary Contractor)

Work Request**Number****925030****Service Conduit - Cost for Material Only**

Material used by contractors to install the conduit system

Qty	CU	Definition	Used by contractors to install conduit system
5640		Conduit for 2" service on private property-service contractor	
2820		Conduit for 10' stub of 2" service installed by primary contractor	
6777		Conduit for 2" service installed by primary contractor	
10537		Pulling Tape installed in 2" conduit by Primary Contractor)	
15237	COND2_SCHA	Total quantity of 2" conduit for work order - TEC # 2004488	
504	ELL2P90	2" elbow 90 PVC 9.5" radius TEC # 2004395	
0	ELL2P45	2" elbow 45 PVC 9.5" radius TEC # 2004394	
188	LOCKNUT2	2" galvanized Lock Nut TEC # 2004396	
2070	CONDFLEX2	2" Flexible PVC conduit TEC # 2004491	
188	ADAPT2F/M	2" PVC Adapter, male thread/female slip TEC # 2004493	
188	RISER2G7	2" PVC Service Riser TEC # 2004401	
1008	COUP2P	Coupling, 2" PVC (2 per elbow) TEC # 2004507	
690		Conduit for 3" service on private property-service contractor	
345		Conduit for 10' stub of 3" service installed by primary contractor	
2086		Conduit for 3" service installed by primary contractor	
2546		Pulling Tape installed in 3" conduit by Primary Contractor)	
3121	COND3_SCHA	Total quantity of 3" conduit for work order - TEC # 2004517	
69	ELL3P90	3" elbow 90 PVC 13" radius TEC # 2004524	
0	ELL3P45	3" elbow 45 PVC 13" radius TEC # 2004523	
23	RISER21/2G7	2-1/2" house riser TEC # 2004409	
23	LOCKNUT21/2	2-1/2" galvanized Lock Nut TEC # 2004408	
23	CONDFLEX3	3" Flexible PVC conduit TEC # : Used by contractors to install conduit system	
23	ADAPT2F/F	2-1/2"PVC Adapter, male thread/female slip TEC # 2004462	
138	COUP3P	Coupling, 3" PVC (2 per elbow) TEC # 2004521	
37	GLUECONDF	2"& 3" pvc 1 qt for 500' fast dry	
13083	MULE TAPE	Total Pulling Tape installed in conduit by Primary Contractor) TEC # 2007414	



Estimate Summary

Design Number 1

Printed Date: 3/10/2021

District: CSA

WR No. 924920

Distribution Services
Transformers 2000 Sq Ft

Contact Name:
Tampa Electric

Date Sched: 4/1/21

Date Required: 4/1/21

Additional Information: URD filing for 1501-2500 sq ft low density

WR Description: LDUG 2000 sq ft TRANSFORMERS

INSTALLATION:	Capital	Oper./Maint.	Total
MATERIAL:	\$79,554.38	\$0.00	\$79,554.38
OVERHEAD:	\$11,002.38	\$0.00	\$11,002.38
	\$90,556.76	\$0.00	\$90,556.76
LABOR HOURS:	152.8	0	152.8
LABOR COST:	\$6,726.81	\$0.00	\$6,726.81
OVERHEAD:	\$8,913.02	\$0.00	\$8,913.02
	\$15,639.83	\$0.00	\$15,639.83
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$106,196.59	\$0.00	\$106,196.59
REMOVAL:			
MATERIAL:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TRANSFER:			
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TOTALS:	\$106,196.59	\$0.00	\$106,196.59

THIS FORM IS NOT TO BE USED FOR CONTRIBUTION IN AID CONSTRUCTION (CIAC).



Work Request Material Summary

Includes Truck Stock

Design Number 1

Printed Date: 3/10/2021

Dist: CSA

WR No. 924920

Page 1 of 1

Material Number	Description	Unit Price	Total Cost	Asset?
INSTALL				
2	2003816 ARRESTER, UD, 10KV PARKING L/A, 8.40 KVR	\$144.06	\$288.12	Y
2	2003815 ARRESTER, URD, 10KV ELBOW L/A, 8.40 KVRM	\$63.66	\$127.32	Y
4	2003817 ARRESTER, URD, 10KV, BUSHING L/A, 8.40KV	\$192.51	\$770.04	Y
30	2077906 CLAMP, GROUND ROD, F/U/W 1/2"ROD	\$1.80	\$54.00	N
60	2078000 CLAMP,GND,TRANSFORMER,#10 SOL-#1 STR CU	\$2.31	\$138.60	N
4	2077931 CONNECTOR, VICE CU #2 STR	\$2.38	\$9.52	N
90	2077939 COUPLER, GROUND ROD, F/U/W 1/2"ROD	\$4.78	\$430.20	N
30	2001315 PAD, CONCRETE 40" X 45" X 4" 25- 50KVA T	\$103.25	\$3,097.50	N
0	2001316 PAD, CONCRETE 44" X 52" X 4" 75-250KVA T	\$115.55	\$0.00	N
30	2007395 PADLOCK, RED BRASS BODY 1/4" BRASS SHACK	\$22.97	\$689.10	N
30	2007489 REPELLENT, FIRE ANT GRANULE 4 OZ BIFENTH	\$2.77	\$83.10	N
120	2077980 ROD,GROUND,CU BONDED,1/2"X10',THREADLESS	\$13.72	\$1,646.40	N
60	2004031 STUD, GALVANIZED, 11 THREAD PER INCH ALL	\$2.47	\$148.20	N
90	2004904 TERMINAL, SLIP FIT AL 5/8 IN 8-POS #2-50	\$17.94	\$1,614.60	N
0	2004948 TERMINAL, SLIP FIT ALUMINUM STUD TYPE, 6	\$7.54	\$0.00	N
0	2004954 TERMINAL, SLIP FIT ALUMINUM STUD TYPE, 6	\$16.58	\$0.00	N
0	2004950 TERMINAL, SLIP FIT ALUMINUM STUD TYPE, 8	\$8.28	\$0.00	N
6	2001518 TX,PM,LP,1P,25 kVA,240/120,FR3,SS	\$2,001.00	\$12,006.00	Y
8	2001519 TX,PM,LP,1P,37.5 kVA,240/120,FR3,SS	\$2,108.00	\$16,864.00	Y
16	2001520 TX,PM,LP,1P,50 kVA,240/120,FR3,SS	\$2,592.00	\$41,472.00	Y
0	2001521 TX,PM,LP,1P,75 kVA,240/120,FR3,SS	\$3,044.00	\$0.00	Y
180	2004184 WIRE, COPPER, BARE, #4 SOFT DRAWN 7 STR	\$0.63	\$113.40	N
6	2078011 WIRE, COPPER, TIE, #6 SOLID SOFT DRAWN	\$0.38	\$2.28	N
	Total		\$79,554.38	



Estimate Summary

Design Number 1

Printed Date: 3/10/2021

District: CSA

WR No. 924957

Date Sched: 4/1/21

Date Required: 4/1/21

Contact Name:

Distribution Services
Term Poles - low density 2000 sq ft

Additional Information: Low density URD filing - 2000 sq ft homes

WR Description: LDUG 2000 sq ft TAKEOFFS

INSTALLATION:	Capital	Oper./Maint.	Total
MATERIAL:	\$1,439.19	\$0.00	\$1,439.19
OVERHEAD:	\$199.05	\$0.00	\$199.05
	\$1,638.24	\$0.00	\$1,638.24
LABOR HOURS:	22.62	0	22.62
LABOR COST:	\$995.03	\$0.00	\$995.03
OVERHEAD:	\$1,318.42	\$0.00	\$1,318.42
	\$2,313.45	\$0.00	\$2,313.45
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$3,951.69	\$0.00	\$3,951.69
REMOVAL:			
MATERIAL:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TRANSFER:			
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TOTALS:	\$3,951.69	\$0.00	\$3,951.69

THIS FORM IS NOT TO BE USED FOR CONTRIBUTION IN AID CONSTRUCTION (CIAC).



Work Request Material Summary

Includes Truck Stock

Design Number 1

Printed Date: 3/10/2021

Dist: CSA

WR No. 924957

Page 1 of 1

Material Number	Description	Unit Price	Total Cost	Asset?
INSTALL				
4	2003651 ARRESTER, LIGHTNING DISTRIBUTION CLASS 8	\$41.28	\$165.12	Y
4	2077754 BOLT, MACHINE 5/8" X 10", GALV. FULL	\$1.04	\$4.16	N
4	2131366 BRACKET, FG, 1 PH, 1 POS, 18"	\$30.03	\$120.12	N
4	2077906 CLAMP, GROUND ROD, F/U/W 1/2"ROD	\$1.80	\$7.20	N
4	2077911 CLAMP, HOT LINE CU TO CU #6 SOL- 2 STR T	\$5.73	\$22.92	N
160	2078012 CONDUCTOR, COPPERCLAD, 3 STR. #9, DSA 30	\$0.84	\$134.40	N
12	2004187 CONDUCTOR, BARE, #2 CU, 7-STR, SOFT-DRAWN	\$0.98	\$11.76	N
4	2077837 CONNECTOR, COMPRESSION H-BLOCK ACSR 2/0	\$0.66	\$2.64	N
8	2077930 CONNECTOR, VICE CU #4 STR	\$1.91	\$15.28	N
15	2077939 COUPLER, GROUND ROD, F/U/W 1/2"ROD	\$4.78	\$71.70	N
4	2003846 CUTOFF, 15KV, 100A FUSE HLDR, 300A UNVRS	\$70.74	\$282.96	Y
4	2077793 FUSE LINK, 80A UNVRS 100A CUTOFF 23" OA	\$6.67	\$26.68	N
4	2077822 KIT, ATTACHMENT, FOR ATTACHING "FLYING"	\$63.00	\$252.00	N
8	2077965 MOULDING, GROUND WIRE, PVC 1/2 IN X 8 FT	\$1.74	\$13.92	N
16	2077980 ROD, GROUND, CU BONDED, 1/2"X10', THREADLESS	\$13.72	\$219.52	N
4	2077789 SCREW, LAG PILOT POINT 3/8 X 3	\$0.27	\$1.08	N
40	2077997 STAPLE, SECURES 1/2" PVC MOULDING TO WOOD	\$0.27	\$10.80	N
4	2077828 STIRRUP, AL BODY & CU BAIL 1/0-397	\$17.19	\$68.76	N
4	2078006 WASHER, FLAT, GALVANIZED, 2" X 2" X 1/8"	\$0.24	\$0.96	N
4	2004184 WIRE, COPPER, BARE, #4 SOFT DRAWN 7 STR	\$0.63	\$2.65	N
12	2078011 WIRE, COPPER, TIE, #6 SOLID SOFT DRAWN	\$0.38	\$4.56	N
	Total		\$1,439.19	



Estimate Summary

Design Number 1

Printed Date: 3/10/2021

District: CSA

WR No. 925017

Date Sched: 4/1/21

Date Required: 4/1/21

Contact Name:

Distribution Services
Primary conduit 2000 Sq Ft

Additional Information: Low density 2000 sq ft URD filing

WR Description: LDUG 2000 sq ft PRIMARY CONDUIT

INSTALLATION:	Capital	Oper./Maint.	Total
MATERIAL:	\$22,475.04	\$0.00	\$22,475.04
OVERHEAD:	\$3,108.30	\$0.00	\$3,108.30
	\$25,583.34	\$0.00	\$25,583.34
LABOR HOURS:	223.84	0	223.84
LABOR COST:	\$9,853.36	\$0.00	\$9,853.36
OVERHEAD:	\$13,055.70	\$0.00	\$13,055.70
	\$22,909.06	\$0.00	\$22,909.06
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$48,492.40	\$0.00	\$48,492.40
REMOVAL:			
MATERIAL:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TRANSFER:			
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TOTALS:	\$48,492.40	\$0.00	\$48,492.40

THIS FORM IS NOT TO BE USED FOR CONTRIBUTION IN AID CONSTRUCTION (CIAC).



Work Request Material Summary

Includes Truck Stock

Design Number 1

Printed Date: 3/10/2021

Dist: CSA

WR No. 925017

Page 1 of 1

Material Number	Description	Unit Price	Total Cost	Asset?	
INSTALL					
33	2007227	CEMENT, PVC CLEAR FAST DRY QUART W/DAUBE	\$6.22	\$205.26	N
40	2004389	CONDUIT, GALVANIZED 2 IN 10 FT WITH COUP	\$6.78	\$271.20	Y
16156	2004488	CONDUIT, PVC 2 IN 20 FT BELL END	\$1.03	\$16,640.68	Y
178	2004507	COUPLING, PVC 2 IN SCH 40 TEMS 13.01	\$0.60	\$106.80	N
88	2004395	ELBOW, 2" 90 DEGREE ,GALVANIZED, 24" MIN	\$34.29	\$3,017.52	N
1	2004394	ELBOW, GALV 2 INCH 45 DEG THD 15" RADIUS	\$26.25	\$26.25	N
3	2004719	HANDHOLE, SPLICING SINGLE PHASE PRIMARY	\$554.21	\$1,662.63	Y
18157	2007414	TAPE, PULLING, POLYSTER, RATED AT 1250#,	\$0.03	\$544.70	N
Total			\$22,475.04		



Estimate Summary

Design Number 1

Printed Date: 3/11/2021

District: CSA

WR No. 925022

Contact Name:

Distribution Services
Primary cable - 2000 Sq Ft

Date Sched: 4/1/21

Date Required: 4/21/21

Additional Information: URD Low Density 2000 PSC filing
WR Description: LDUG 2000 sq ft PRIMARY CABLE

INSTALLATION:	Capital	Oper./Maint.	Total
MATERIAL:	\$40,010.51	\$0.00	\$40,010.51
OVERHEAD:	\$5,533.47	\$0.00	\$5,533.47
	\$45,543.98	\$0.00	\$45,543.98
LABOR HOURS:	249.02	0	249.02
LABOR COST:	\$10,961.75	\$0.00	\$10,961.75
OVERHEAD:	\$14,524.30	\$0.00	\$14,524.30
	\$25,486.05	\$0.00	\$25,486.05
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$71,030.03	\$0.00	\$71,030.03
REMOVAL:			
MATERIAL:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TRANSFER:			
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TOTALS:	\$71,030.03	\$0.00	\$71,030.03

THIS FORM IS NOT TO BE USED FOR CONTRIBUTION IN AID CONSTRUCTION (CIAC).



Work Request Material Summary

Includes Truck Stock

Design Number 1

Printed Date: 3/10/2021

Dist: CSA

WR No. 925022

Page 1 of 1

Material Number	Description	Unit Price	Total Cost	Asset?
INSTALL				
0	2004577 ANCHOR, LEAD EXPANSION, MEDIUM DUTY, SIZ	\$0.66	\$0.00	N
0	2003157 BOLT, 1/2" - 13 X 1-1/2" 18-8 SS HEX HEA	\$2.59	\$0.00	N
0	2003167 BOLT, MACHINE GALV HEX HEAD 5/8 X 1-1/4"	\$0.18	\$0.00	N
17554	2004343 CABLE, ALUMINUM, 15KV, 1/C, 1/0 AWG SOLI	\$2.08	\$33,192.64	Y
4	2004514 CAP, CONDUIT 2"	\$12.21	\$48.84	N
4	2004453 CAP, END CABLE 600 V CABLE RANGE .940 -	\$1.96	\$7.84	N
4	2003752 CLAMP, CONDUIT GROUND 1-1/4 IN - 2 IN CO	\$7.92	\$31.68	N
0	2077906 CLAMP, GROUND ROD, F/U/W 1/2"ROD	\$1.80	\$0.00	N
80	2004488 CONDUIT, PVC 2 IN 20 FT BELL END	\$1.03	\$82.40	Y
8	2077837 CONNECTOR, COMPRESSION H-BLOCK ACSR 2/0	\$0.66	\$5.28	N
0	2005009 CONNECTOR, LDBRK 8.3/14.4KV 200A 3POS	\$108.70	\$0.00	N
77	2077931 CONNECTOR, VICE CU #2 STR	\$2.38	\$183.26	N
0	2077939 COUPLER, GROUND ROD, F/U/W 1/2"ROD	\$4.78	\$0.00	N
0	2004982 ENCLOSURE, 200A AL SWITCH MOD/1 PH DUMMY	\$1,122.04	\$0.00	Y
61	2004642 KIT, SEALING, CABLE ACCESSORY, 1/0 - 4/0	\$9.46	\$577.06	N
0	2001315 PAD, CONCRETE 40" X 45" X 4" 25- 50KVA T	\$103.25	\$0.00	N
0	2007394 PADLOCK, GREEN, TESS, BRASS BODY, WR2	\$21.24	\$0.00	N
0	2007489 REPELLENT, FIRE ANT GRANULE 4 OZ BIFENTH	\$2.77	\$0.00	N
0	2077980 ROD,GROUND,CU BONDED,1/2"X10',THREADLESS	\$13.72	\$0.00	N
32	2004403 STRAP, GALV 2 IN 2 HOLE	\$0.28	\$8.96	N
61	2004883 TERMINATOR, LOADBREAK 200 AMP, 1/0 SOL	\$37.76	\$2,303.36	Y
4	2004634 TERMINATOR, POTHEAD, 1/0 TO 4/0, STEM	\$61.22	\$244.88	Y
0	2078005 WASHER, FLAT, GALVANIZED, 2" X 2" X 1/8	\$0.23	\$0.00	N
0	2078006 WASHER, FLAT, GALVANIZED, 2" X 2" X 1/8"	\$0.24	\$0.00	N
8	2004184 WIRE, COPPER, BARE, #4 SOFT DRAWN 7 STR	\$0.63	\$5.04	N
		Total	\$40,010.50	



Estimate Summary

Design Number 1

Printed Date: 3/11/2021

District: CSA

WR No. 925024

Date Sched: 4/1/21

Date Required: 4/1/21

Contact Name:

Distribution Services
Sec Cable and Handholes 2000 sq ft

Additional Information: URD low density 2000 homes - PSC filing

WR Description: LDUG 2000 sq ft SECONDARY CABLE

INSTALLATION:	Capital	Oper./Maint.	Total
MATERIAL:	\$10,194.86	\$0.00	\$10,194.86
OVERHEAD:	\$1,409.95	\$0.00	\$1,409.95
	\$11,604.81	\$0.00	\$11,604.81
LABOR HOURS:	161.28	0	161.28
LABOR COST:	\$7,099.38	\$0.00	\$7,099.38
OVERHEAD:	\$9,406.70	\$0.00	\$9,406.70
	\$16,506.08	\$0.00	\$16,506.08
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$28,110.89	\$0.00	\$28,110.89
REMOVAL:			
MATERIAL:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TRANSFER:			
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TOTALS:	\$28,110.89	\$0.00	\$28,110.89

THIS FORM IS NOT TO BE USED FOR CONTRIBUTION IN AID CONSTRUCTION (CIAC).



Work Request Material Summary

Includes Truck Stock

Design Number 1

Printed Date: 3/10/2021

Dist: CSA

WR No. 925024

Page 1 of 1

Material Number	Description	Unit Price	Total Cost	Asset?	
INSTALL					
0	2004351	CABLE, CONVERSE, AL, UG, 600V, 2/C, 2/0,	\$1.01	\$0.00	Y
2605	2004354	CABLE, SWEETBRIAR, AL,UG,600V,2/C,4/0 AW	\$1.39	\$3,621.23	Y
0	2004356	CABLE, XHHW-2,AL,UG,600V,2/C,500 MCM, 37	\$4.33	\$0.00	Y
0	2005021	CONNECTOR, 600V URD, 4 POSITION, CONDUCT	\$16.25	\$0.00	N
0	2005022	CONNECTOR, 600V URD, 6 POSITION, CONDUCT	\$14.92	\$0.00	N
69	2005024	CONNECTOR, 600V URD, 6 POSITION, CONDUCT	\$23.41	\$1,615.29	N
0	2005025	CONNECTOR, 600V, URD, 8 POSITION, CONDUCT	\$30.35	\$0.00	N
0	2005020	CONNECTOR, URD 600 V 4 POSITION #10-350M	\$10.92	\$0.00	N
23	2000241	DECAL,WARNING,NOTICE,CLEARANCE,10" X 7"	\$3.56	\$81.88	N
23	2004714	HANDHOLE, ABOVE GRADE, LARGE DOME	\$186.22	\$4,283.06	N
23	2005212	MARKER, CURB LEXAN .040 THICK, ROUND 2.5	\$2.83	\$65.09	N
23	2007395	PADLOCK, RED BRASS BODY 1/4" BRASS SHACK	\$22.97	\$528.31	N
		Total	\$10,194.86		



Estimate Summary

Design Number 1

Printed Date: 3/10/2021

District: CSA

WR No. 925026

Date Sched: 4/1/21

Date Required: 4/1/21

Contact Name:

Distribution Services
Secondary conduit-2000 sq ft

Additional Information: URD low density 2000 sq ft PSC filing

WR Description: LDUG 2000 sq ft SECONDARY CONDUIT

INSTALLATION:	Capital	Oper./Maint.	Total
MATERIAL:	\$6,602.28	\$0.00	\$6,602.28
OVERHEAD:	\$913.09	\$0.00	\$913.09
	\$7,515.37	\$0.00	\$7,515.37
LABOR HOURS:	63.08	0	63.08
LABOR COST:	\$2,776.65	\$0.00	\$2,776.65
OVERHEAD:	\$3,679.04	\$0.00	\$3,679.04
	\$6,455.69	\$0.00	\$6,455.69
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$13,971.06	\$0.00	\$13,971.06
REMOVAL:			
MATERIAL:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TRANSFER:			
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TOTALS:	\$13,971.06	\$0.00	\$13,971.06

THIS FORM IS NOT TO BE USED FOR CONTRIBUTION IN AID CONSTRUCTION (CIAC).



Work Request Material Summary

Includes Truck Stock

Design Number 1

Printed Date: 3/10/2021

Dist: CSA

WR No. 925026

Page 1 of 1

Material Number	Description	Unit Price	Total Cost	Asset?
INSTALL				
1	2007227 CEMENT, PVC CLEAR FAST DRY QUART W/DAUBE	\$6.22	\$6.22	N
8	2007228 CEMENT, PVC GRAY MEDIUM DRY QUART W/DAUB	\$7.27	\$58.16	N
0	2004488 CONDUIT, PVC 2 IN 20 FT BELL END	\$1.03	\$0.00	Y
340	2004517 CONDUIT, PVC P & C 3 IN 20 FT	\$1.70	\$578.00	Y
1871	2004529 CONDUIT, PVC, 4" X 20', DB-60-TC-6	\$2.78	\$5,201.38	Y
0	2004507 COUPLING, PVC 2 IN SCH 40 TEMS 13.01	\$0.60	\$0.00	N
8	2004521 COUPLING, PVC 3 IN SCH 40 TEMS 13.01	\$2.95	\$23.60	N
84	2004535 COUPLING, PVC 4 IN SCH 40 TEMS 13.01	\$4.28	\$359.52	N
0	2004511 ELBOW, CONDUIT PVC 2 IN SCH 40 90 DEG 9-	\$1.26	\$0.00	N
0	2004427 ELBOW, GALV 4 IN 45 DEG THD 16 IN RAD	\$45.37	\$0.00	N
0	2004510 ELBOW, PVC 2 IN 45 DEG 9-1/2 IN RAD SCH	\$0.94	\$0.00	N
0	2004523 ELBOW, PVC 3 IN 45 DEG 13 IN RAD SCH 40	\$3.62	\$0.00	N
4	2004524 ELBOW, PVC 3 IN 90 DEG 13 IN RAD SCH 40	\$4.52	\$18.08	N
42	2004538 ELBOW, PVC 4", 90 DEG., 16" RADIUS, SCHE	\$6.68	\$280.56	N
2559	2007414 TAPE, PULLING, POLYSTER, RATED AT 1250#,	\$0.03	\$76.76	N
		Total	\$6,602.28	



Estimate Summary

Design Number 1

Printed Date: 3/11/2021

District: CSA

WR No. 925028

Contact Name:

Distribution Services
Service Cable-2000 sq ft

Date Sched: 4/1/21

Date Required: 4/1/21

Additional Information: Low density URD filing 2000 sq ft
WR Description: LDUG 2000 sq ft SERVICE CABLE

INSTALLATION:	Capital	Oper./Maint.	Total
MATERIAL:	\$23,370.30	\$0.00	\$23,370.30
OVERHEAD:	\$3,232.12	\$0.00	\$3,232.12
	\$26,602.42	\$0.00	\$26,602.42
LABOR HOURS:	1.94	0	1.94
LABOR COST:	\$85.46	\$0.00	\$85.46
OVERHEAD:	\$113.22	\$0.00	\$113.22
	\$198.68	\$0.00	\$198.68
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$26,801.10	\$0.00	\$26,801.10
REMOVAL:			
MATERIAL:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TRANSFER:			
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TOTALS:	\$26,801.10	\$0.00	\$26,801.10

THIS FORM IS NOT TO BE USED FOR CONTRIBUTION IN AID CONSTRUCTION (CIAC).



Work Request Material Summary

Includes Truck Stock

Design Number 1

Printed Date: 3/11/2021

Dist: CSA

WR No. 925028

Page 1 of 1

Material Number	Description	Unit Price	Total Cost	Asset?
INSTALL				
17795 2004351	CABLE, CONVERSE, AL, UG, 600V, 2/C, 2/0,	\$1.01	\$16,338.77	Y
3883 2004354	CABLE, SWEETBRIAR, AL,UG,600V,2/C,4/0 AW	\$1.39	\$4,498.04	Y
		Total	\$23,370.30	



Estimate Summary

Design Number 1

Printed Date: 3/10/2021

District: CSA

WR No. 925029

Contact Name:

Distribution Services
Meter Labor- 2000 sq ft

Date Sched: 4/1/21

Date Required: 4/1/21

Additional Information: Low density URD filing 2000 sq ft homes

WR Description: LDUG 2000 sq ft METERS

INSTALLATION:	Capital	Oper./Maint.	Total
MATERIAL:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
LABOR HOURS:	42.07	0	42.07
LABOR COST:	\$1,851.92	\$0.00	\$1,851.92
OVERHEAD:	\$2,453.80	\$0.00	\$2,453.80
	\$4,305.72	\$0.00	\$4,305.72
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$4,305.72	\$0.00	\$4,305.72
REMOVAL:			
MATERIAL:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TRANSFER:			
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TOTALS:	\$4,305.72	\$0.00	\$4,305.72

THIS FORM IS NOT TO BE USED FOR CONTRIBUTION IN AID CONSTRUCTION (CIAC).



Estimate Summary

Design Number 1

Printed Date: 3/10/2021

District: CSA

WR No. 925030

Date Sched: 4/1/21

Date Required: 4/1/21

Contact Name:

Distribution Services
Service Conduit- 2000 sq ft

Additional Information: Low density URD filing for 2000 sq ft homes

WR Description: LDUG 2000 sq ft SERVICE CONDUIT

INSTALLATION:	Capital	Oper./Maint.	Total
MATERIAL:	\$27,272.06	\$0.00	\$27,272.06
OVERHEAD:	\$3,771.72	\$0.00	\$3,771.72
	\$31,043.78	\$0.00	\$31,043.78
LABOR HOURS:	767.62	0	767.62
LABOR COST:	\$33,791.97	\$0.00	\$33,791.97
OVERHEAD:	\$44,774.34	\$0.00	\$44,774.34
	\$78,566.31	\$0.00	\$78,566.31
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$109,610.09	\$0.00	\$109,610.09
REMOVAL:			
MATERIAL:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TRANSFER:			
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TOTALS:	\$109,610.09	\$0.00	\$109,610.09

THIS FORM IS NOT TO BE USED FOR CONTRIBUTION IN AID CONSTRUCTION (CIAC).



Work Request Material Summary

Includes Truck Stock

Design Number 1

Printed Date: 3/10/2021

Dist: CSA

WR No. 925030

Page 1 of 1

Material Number	Description	Unit Price	Total Cost	Asset?	
INSTALL					
23	2004492	ADAPTER,COND PVC FMLE 2" SCH 40 SOCXFPT	\$0.57	\$13.11	N
188	2004493	ADAPTOR, 2" PVC, FEMALE SLIP TO MALE THR	\$0.40	\$75.20	N
37	2007227	CEMENT, PVC CLEAR FAST DRY QUART W/DAUBE	\$6.22	\$230.14	N
23	2004409	COND,SRVC RISER,TYPE IIPVC,40,2.5"X7'	\$12.00	\$276.00	N
15237	2004488	CONDUIT, PVC 2 IN 20 FT BELL END	\$1.03	\$15,694.11	Y
2070	2004491	CONDUIT, PVC 2 IN 250 FT ROLL FLEXIBLE	\$1.13	\$2,339.10	N
23	2004518	CONDUIT, PVC 3 IN X 250 FT ROLL FLEXIBL	\$2.16	\$49.68	N
3121	2004517	CONDUIT, PVC P & C 3 IN 20 FT	\$1.70	\$5,305.70	Y
188	2004401	CONDUIT, SERVICE RISER, PVC, 2"	\$4.92	\$924.96	N
754	2004507	COUPLING, PVC 2 IN SCH 40 TEMS 13.01	\$0.60	\$452.40	N
138	2004521	COUPLING, PVC 3 IN SCH 40 TEMS 13.01	\$2.95	\$407.10	N
504	2004511	ELBOW, CONDUIT PVC 2 IN SCH 40 90 DEG 9-	\$1.26	\$635.04	N
0	2004510	ELBOW, PVC 2 IN 45 DEG 9-1/2 IN RAD SCH	\$0.94	\$0.00	N
0	2004523	ELBOW, PVC 3 IN 45 DEG 13 IN RAD SCH 40	\$3.62	\$0.00	N
69	2004524	ELBOW, PVC 3 IN 90 DEG 13 IN RAD SCH 40	\$4.52	\$311.88	N
188	2004396	NUT, LOCK GALV 2 IN	\$0.54	\$101.52	N
23	2004408	NUT, LOCK GALV 2-1/2 IN	\$1.06	\$24.38	N
14391	2007414	TAPE, PULLING, POLYSTER, RATED AT 1250#,	\$0.03	\$431.74	N
Total			\$27,272.06		

LEGEND
200 AMP SERVICE

- WOOD POLE
- ▽ TRANSFORMER
- 2/0 TRIPLEX SERVICE DROP
- 4/0 4/0 TRIPLEX SECONDARY
- #2 AAAC PRIMARY
- DOWN GUY
- SPAN GUY
- OPEN



1225 TOTAL CONNECTED KVA
 1258.9 TOTAL PEAK DEMAND KVA
 0 25 KVA TRANSFORMERS
 4 37.5 KVA TRANSFORMERS
 17 50 KVA TRANSFORMERS
 3 75 KVA TRANSFORMERS
 10130 #2AAAC PRIMARY
 65 PRIMARY POLES (5 45' CLASS 2, 60 40' CLASS 2)
 0 2/0 AWG TRIPLEX SECONDARY
 8000 4/0 AWG TRIPLEX SECONDARY
 2135 #2AAAC SECONDARY NEUTRAL
 1515 2-2/0 & 1-1/0 AL TRIPLEX SERVICE DROP (CONSIDERED SECONDARY)
 545 2-4/0 & 1-2/0 AL TRIPLEX SERVICE DROP (CONSIDERED SECONDARY)
 35 SECONDARY POLES (35' CLASS 4)
 9360 2-2/0 & 1-1/0 AL TRIPLEX SERVICE DROP
 0 2-4/0 & 1-2/0 AL TRIPLEX SERVICE DROP

NOTES:
 1. 2000 SF HOMES
 2. 3.5 TON A/C UNITS
 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

ONLY AN AUTHORIZED REPRESENTATIVE OF TAMPA ELECTRIC CO. SHALL UTILIZE THIS DRAWING TO DETERMINE EXACT LOCATION OF UNDERGROUND LINES. IF IT IS NECESSARY TO EXCAVATE IN THE GENERAL AREA OF INDICATED ELECTRICAL LINES PRIOR TO DIGGING 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.
 FET: _____ DATE: / /
 LFET: _____ DATE: / /

LD-26

TAMPA ELECTRIC COMPANY	
SCALE: 1" = 100'	GIS: _____
FET/LEF APPROV: _____	Completion DATE: _____
FET: _____	DATE: _____
LFET: _____	DATE: _____
DISTRIBUTION ENGINEERING	

OVERHEAD
LOW DENSITY
SUBDIVISION DESIGN

WR: _____

SHEET 1 OF 1

2000 SQUARE FOOT LOW DENSITY - 210 LOTS

**OH Construction Cost Data Summary
Low Density (210-Lot) OH Subdivision Costs**

A	B	C	D	E	F	G	H	I	J	K	L	M	N	
Line #	Work Type/WR #	Description	(C + M) Material and Handling	Material	(F + L) Total Labor Plus Vehicles	(G + H + I) Total Labor	Base Labor	(G x J x TLF) TEC Labor Overheads	(G x K x CLF) Contract Labor Overheads	TEC Work %	Contractor Work %	Vehicle	(D x MHR) Material Handling	(C+E) Total
1	Transformers													
2	925037	Install & Ground Transformers	49,232.37	\$43,871.30	18,530.21	16,572.33	9,649.44	6,148.62	774.27	60%	40%	\$1,957.87	5,361.07	67,762.58
3														
4	Primary													
5	925038	Install Primary Line includes Grounding Primary Takeoffs	3,780.00	\$3,368.38	9,895.97	8,850.38	5,153.24	3,283.64	413.50	60%	40%	\$1,045.59	411.62	13,675.97
6														
7	Poles													
8	925039	Install Poles and Guy Stubs Includes Haul Poles Out	35,516.15	\$31,648.68	58,469.09	52,291.34	30,447.26	19,400.99	2,443.09	60%	40%	\$6,177.75	3,867.47	93,985.24
9														
10	Secondary													
11	925040	Install Secondary Cable	28,563.08	\$25,452.75	33,643.82	30,089.07	17,519.72	11,163.57	1,405.78	60%	40%	\$3,554.75	3,110.33	62,206.90
12														
13	Services													
14	926547	Install Service Cable & Meters	31,785.04	\$28,323.86	16,788.28	15,014.46	8,742.35	5,570.63	701.49	60%	40%	\$1,773.82	3,461.18	48,573.32
15														
16														
17	Engineering	Design/Inspection/Coordination	-	-	13,788.39	13,788.39	-	-	-	100%	0%	-	-	13,788.39
18														
19	Tree Trim		-	-	-	-	-	-	-			-	-	-
20														
21	Totals (Sum of lines 2, 5, 8, 11, 14, 17, and 19)		\$ 148,876.63	\$ 132,664.97	\$ 151,115.76	\$ 136,605.98	\$ 71,512.01	\$ 45,567.45	\$ 5,738.12			\$ 14,509.79	\$ 16,211.66	\$ 299,992.39
22	Cost per Lot (line 21 / 210 lots)		\$ 708.94		\$ 719.60									\$ 1,428.54

Adjustment Factors	
TEC Operations Labor Overhead Factor	TLF = 1.062
Contractor Labor Overhead Factor	CLF = 0.2006
Current year material handling charge rate	MHR = 0.1222

Low Density - 210 Lots - Overhead Material List

This worksheet lists the totals for major materials to be listed on the associated work request print as requested by the PSC.

1225.0	Total Connected KVA
1258.9	Total peak demand KVA
0	25 kVA Transformers
4	37.5 kVA Transformers
17	50 kVA Transformers
3	75 kVA Transformers
10130	#2AAAC Primary
65	Primary Poles
0	2/0 AWG Triplex Secondary
8000	4/0 AWG Triplex Secondary
2135	#2AAAC Secondary Neutral
1515	2-2/0 & 1-1/0 AL Triplex Service Drop (considered secondary)
545	2-4/0 & 1-2/0 AL Triplex Service Drop (considered secondary)
35	Secondary Poles
9360	2-2/0 & 1-1/0 AL Triplex Service Drop
0	2-4/0 & 1-2/0 AL Triplex Service Drop

Summary of assemblies (CU's) for Low Density 2000 sq ft Overhead Design - March 2021

Work Request #1	925037 - Transformers (enter these Construction Units into WorkPro)							
Should be ==>>>	25 KVA	37.5 KVA	50 KVA	75 KVA	Stirrup	Spacer	Grounding	
Assemblies ==>>>	PKT11W3F	PKT11W4F	PKT11W5F	PKT11W6F	ALSTRP1/0	SEWC	GRDMEG1/2	
Total Quantities ==>>	0	4	17	3	24	24	24	

Work Request #2	925038 - Primary							
Should be ==>>>	#2 AAAC	1st span	Add'l	Fused cutout	Deadend & tap	2 way lateral	Fuse	Grounding
Assemblies ==>>>	WIOPA	WIO1F	WIO1A	PKP102WB3A	PKP101WA3A	PKP105WA4A	FLOH103	GRDMEG1/2
Total Quantities ==>>	10130	19	43	2	7	2	2	5

Work Request #3	925039 - Poles and Guys												
Should be ==>>>	Pole haul	1ø tangent	1ø tangent	1ø Deadend	1ø angle <20	1ø angle <20	1ø angle >20	1ø angle >20	3 ø	Down guys	Pole hardware	Guy wire	Down guys
Assemblies ==>>>	POLE_HAUL	STP101_TAN_40C2	STP101_TAN_45C2	STP401_DE_40C2	STP101_ANG_40C2	STP101_ANG_45C2	STP301_RC_40C2	STP301_RC_45C2	STP104_TAN_45C2	PKG12W2H	PKG31W1H	GUYSTR3/8	PKG11W1H
Total Quantities ==>>	65	12	1	11	20	1	17	1	2	56	2	70	0

Work Request #4	925040 - Secondary - From Secondary&Neutral worksheet										
Should be ==>>>	2/0	4/0	#2 Neutral	1st span	Add'l	1st span	Add'l	Eyebolt	Eyenum	DE+Bolt	CABLEOPEN
Assemblies ==>>>	WIO3SB	WIO3SC	WIOPA	WIO1F	WIO1A	WIOCF	WIOCA	SEW1DEN	SEG1DEN	PKS11W	
Total Quantities ==>>	0	8000	2135	9	2	33	20	4	12	30	12

More of Work Request #4	- Secondary continued - From Secondary&Neutral worksheet and SlackSecondary (service cable) & Secondary Poles worksheet										
Should be ==>>>	Pole hardware	Guy wire		35' Class 4	35' Class 6	30' Class 6	Down guy				
Assemblies ==>>>	PKG31W1H	GUYSTR3/8	POLE_HAUL	STS11C	STS11B	STS11A	PKG11W1H	PKS21G	CA2/0TPX	CA4/0TPX	SVLABOR
Total Quantities ==>>	16	1390	35	35	0	0	0	34	1515	545	34

Work Request #5	926547 - Services			
Assemblies ==>>>	CA2/0TPX	CA4/0TPX	SVLABOR	METERLABOR
Total Quantities ==>>	9360	0	0	210



Estimate Summary

Design Number 1

Printed Date: 3/10/2021

District: CSA

WR No. 925037

Contact Name:

Distribution Services
LDOH 2000 sq ft Transformers

Date Sched: 4/1/21

Date Required: 4/1/21

Additional Information: Used for Low Density 2000 sq ft 3.5 ton ac

WR Description: LDOH 2000 sq ft TRANSFORMERS

INSTALLATION:	Capital	Oper./Maint.	Total
MATERIAL:	\$43,871.30	\$0.00	\$43,871.30
OVERHEAD:	\$6,067.39	\$0.00	\$6,067.39
	\$49,938.69	\$0.00	\$49,938.69
LABOR HOURS:	219.24	0	219.24
LABOR COST:	\$9,649.44	\$0.00	\$9,649.44
OVERHEAD:	\$12,785.56	\$0.00	\$12,785.56
	\$22,435.00	\$0.00	\$22,435.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$72,373.69	\$0.00	\$72,373.69
REMOVAL:			
MATERIAL:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TRANSFER:			
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TOTALS:	\$72,373.69	\$0.00	\$72,373.69

THIS FORM IS NOT TO BE USED FOR CONTRIBUTION IN AID CONSTRUCTION (CIAC).



Work Request Material Summary

Includes Truck Stock

Design Number 1

Printed Date: 3/10/2021

Dist: CSA

WR No. 925037

Page 1 of 1

Material Number	Description	Unit Price	Total Cost	Asset?	
INSTALL					
24	2003646	ARRESTER, DISTRIBUTION, 10KV, 8.4KV MCOV	\$39.68	\$952.32	Y
24	2077754	BOLT, MACHINE 5/8" X 10", GALV. FULL	\$1.04	\$24.96	N
48	2077755	BOLT,MACHINE,SQ HEAD,5/8"X12",ONE SQ NUT	\$1.16	\$55.68	N
24	2003690	BRACKET, CUTOUT, ARRESTER & POTHEAD DWG	\$7.22	\$173.28	N
24	2004660	BRACKET,"L" 5-5/8"IN LENGTH FOR MTG CUTO	\$10.41	\$249.84	N
312	2004197	CABLE, HANDCOIL, COPPER, 600V, 2/0 AWG,	\$2.32	\$723.84	N
36	2004199	CABLE, HANDCOIL, COPPER, 600V, 4/0 AWG,	\$3.75	\$135.00	N
24	2077906	CLAMP, GROUND ROD, F/U/W 1/2"ROD	\$1.80	\$43.20	N
24	2077911	CLAMP, HOT LINE CU TO CU #6 SOL- 2 STR T	\$5.73	\$137.52	N
48	2078000	CLAMP,GND,TRANSFORMER,#10 SOL-#1 STR CU	\$2.31	\$110.88	N
960	2078012	CONDUCTOR, COPPERCLAD, 3 STR. #9, DSA 30	\$0.84	\$806.40	N
6	2003528	CONNECTOR, 2-BOLT AL MAIN 336-500MCM TAP	\$25.78	\$154.68	N
63	2077839	CONNECTOR, COMPRESSION H-BLOCK ACSR 1/0-	\$0.53	\$33.39	N
24	2077837	CONNECTOR, COMPRESSION H-BLOCK ACSR 2/0	\$0.66	\$15.84	N
3	2077845	CONNECTOR, COMPRESSION H-BLOCK ACSR 4/0	\$0.68	\$2.04	N
96	2077930	CONNECTOR, VICE CU #4 STR	\$1.91	\$183.36	N
72	2077939	COUPLER, GROUND ROD, F/U/W 1/2"ROD	\$4.78	\$344.16	N
42	2003516	COVER, SNAP-ON SQUEEZON CONNECTOR D DIE	\$0.39	\$16.38	N
24	2003846	CUTOUT, 15KV, 100A FUSE HLDR, 300A UNVRS	\$70.74	\$1,697.76	Y
17	2077806	FUSE LINK, 10A UNVRSL 100A CUTOUT 23" OA	\$3.91	\$66.47	N
3	2077807	FUSE LINK, 15A UNVRSL 100A CUTOUT 23" OA	\$3.93	\$11.79	N
4	2077805	FUSE LINK, 7A UNVRSL 100A CUTOUT 23" OAL	\$3.89	\$15.56	N
48	2077965	MOULDING, GROUND WIRE, PVC 1/2 IN X 8 FT	\$1.74	\$83.52	N
24	2007368	PROTECTOR, WILD LIFE, SLIP-ON TYPE	\$5.35	\$128.40	N
96	2077980	ROD,GROUND,CU BONDED,1/2"X10',THREADLESS	\$13.72	\$1,317.12	N
24	2077767	ROLLED BOLT, DOUBLE-ARMING, 5/8"X 16"	\$2.65	\$63.60	N
24	2077789	SCREW, LAG PILOT POINT 3/8 X 3	\$0.27	\$6.48	N
24	2077812	SPACER, CABLED SECONDARY	\$6.79	\$162.96	N
240	2077997	STAPLE, SECURES 1/2" PVC MOULDING TO WOO	\$0.27	\$64.80	N
24	2077826	STIRRUP, AL BODY & CU BAIL 2-4/0	\$10.18	\$244.32	N
4	2001368	TX,OH,37.5 kVA,7.62/13.2Y,120/240,FR3	\$1,253.83	\$5,015.32	Y
17	2001369	TX,OH,50 kVA,7.62/13.2Y,120/240,FR3	\$1,463.60	\$24,881.20	Y
3	2001370	TX,OH,75 kVA,7.62/13.2Y,120/240,FR3	\$1,924.56	\$5,773.68	Y
120	2078006	WASHER, FLAT, GALVANIZED, 2" X 2" X 1/8"	\$0.24	\$28.80	N
72	2078014	WIRE, ALUMINUM, TIE, #4 BARE ANNEALED	\$0.11	\$7.92	N
76	2004184	WIRE, COPPER, BARE, #4 SOFT DRAWN 7 STR	\$0.63	\$47.63	N
240	2078011	WIRE, COPPER, TIE, #6 SOLID SOFT DRAWN	\$0.38	\$91.20	N
		Total		\$43,871.30	



Estimate Summary

Design Number 1

Printed Date: 3/10/2021

District: CSA

WR No. 925038

Distribution Services
LDOH 2000 sq ft Primary

Date Sched: 4/1/21

Date Required: 4/1/21

Contact Name:

Additional Information: Used for 2000 square foot design

WR Description: LDOH 2000 sq ft PRIMARY

INSTALLATION:	Capital	Oper./Maint.	Total
MATERIAL:	\$3,368.38	\$0.00	\$3,368.38
OVERHEAD:	\$465.86	\$0.00	\$465.86
	\$3,834.24	\$0.00	\$3,834.24
LABOR HOURS:	117.08	0	117.08
LABOR COST:	\$5,153.24	\$0.00	\$5,153.24
OVERHEAD:	\$6,828.03	\$0.00	\$6,828.03
	\$11,981.27	\$0.00	\$11,981.27
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$15,815.51	\$0.00	\$15,815.51
REMOVAL:			
MATERIAL:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TRANSFER:			
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TOTALS:	\$15,815.51	\$0.00	\$15,815.51

THIS FORM IS NOT TO BE USED FOR CONTRIBUTION IN AID CONSTRUCTION (CIAC).



Work Request Material Summary

Includes Truck Stock

Design Number 1

Printed Date: 3/10/2021

Dist: CSA

WR No. 925038

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Material Number	Description	Unit Price	Total Cost	Asset?
INSTALL				
5	2003646 ARRESTER, DISTRIBUTION, 10KV, 8.4KV MCOV	\$39.68	\$198.40	Y
9	2077739 BOLT, EYE, 5/8 IN. X 10 IN., GALVANIZED	\$3.12	\$28.08	N
7	2077754 BOLT, MACHINE 5/8" X 10", GALV. FULL	\$1.04	\$7.28	N
2	2077780 BOLT, SPOOL, 5/8" X 10", GALV. SINGLE UP	\$4.16	\$8.32	N
5	2003681 BRACKET, "L", LIGHTNING ARRESTER 10 KV	\$7.95	\$39.75	N
2	2003685 BRACKET, FIBERGLASS STANDOFF VERTICAL 16"	\$25.98	\$51.96	N
2	2004660 BRACKET,"L" 5-5/8"IN LENGTH FOR MTG CUTO	\$10.41	\$20.82	N
18	2077818 CLAMP, DEADEND ACSR OR AAC #2-4/0OR .30-	\$9.12	\$164.16	N
5	2077906 CLAMP, GROUND ROD, F/U/W 1/2"ROD	\$1.80	\$9.00	N
16	2077911 CLAMP, HOT LINE CU TO CU #6 SOL- 2 STR T	\$5.73	\$91.68	N
10637	2004331 CONDUCTOR, BARE OVERHEAD, 2 AWG, AAAC, 7	\$0.15	\$1,595.48	Y
200	2078012 CONDUCTOR, COPPERCLAD, 3 STR. #9, DSA 30	\$0.84	\$168.00	N
22	2077838 CONNECTOR, COMPRESSION H-BLOCK ACSR #2-1	\$0.41	\$9.02	N
16	2077837 CONNECTOR, COMPRESSION H-BLOCK ACSR 2/0	\$0.66	\$10.56	N
10	2077930 CONNECTOR, VICE CU #4 STR	\$1.91	\$19.10	N
15	2077939 COUPLER, GROUND ROD, F/U/W 1/2"ROD	\$4.78	\$71.70	N
2	2003846 CUTOUT, 15KV, 100A FUSE HLDR, 300A UNVRS	\$70.74	\$141.48	Y
4	2077765 DOUBLE-ARMING, GALVANIZED 5/8 "X 12"	\$2.35	\$9.40	N
2	2077794 FUSE LINK, 103A UNVRS 100A CUTOUT 23" O	\$24.29	\$48.58	N
2	2077954 INSULATOR, PIN TYPE, 10KV, ANSI CLASS 55	\$3.75	\$7.50	N
2	2077952 INSULATOR, SPOOL, ANSI CLASS 53-3, TRANS	\$1.21	\$2.42	N
9	2077959 INSULATOR, SUSPENSION, POLYMER, 25KV, AP	\$11.86	\$106.74	N
10	2077965 MOULDING, GROUND WIRE, PVC 1/2 IN X 8 FT	\$1.74	\$17.40	N
9	2077783 NUT, EYE, STANDARD, 1-1/2" GALVANIZED FO	\$1.51	\$13.59	N
20	2077980 ROD,GROUND,CU BONDED,1/2"X10',THREADLESS	\$13.72	\$274.40	N
7	2077789 SCREW, LAG PILOT POINT 3/8 X 3	\$0.27	\$1.89	N
50	2077997 STAPLE, SECURES 1/2" PVC MOULDING TO WOO	\$0.27	\$13.50	N
2	2077828 STIRRUP, AL BODY & CU BAIL 1/0-397	\$17.19	\$34.38	N
14	2077826 STIRRUP, AL BODY & CU BAIL 2-4/0	\$10.18	\$142.52	N
2	2003613 TIE, TOP, FORMED WIRE #2 ACSR OR #2 AAAC	\$2.87	\$5.74	N
22	2078006 WASHER, FLAT, GALVANIZED, 2" X 2" X 1/8"	\$0.24	\$5.28	N
4	2078014 WIRE, ALUMINUM, TIE, #4 BARE ANNEALED	\$0.11	\$0.44	N
67	2004184 WIRE, COPPER, BARE, #4 SOFT DRAWN 7 STR	\$0.63	\$42.21	N
20	2078011 WIRE, COPPER, TIE, #6 SOLID SOFT DRAWN	\$0.38	\$7.60	N
		Total	\$3,368.37	



Estimate Summary

Design Number 1

Printed Date: 3/10/2021

District: CSA

WR No. 925039

Contact Name:

Distribution Services
LDOH 2000 sq ft - POLES

Date Sched: 4/1/21

Date Required: 4/1/21

Additional Information: Used for 2000 square foot design

WR Description: LDOH 2000 sq ft POLES

INSTALLATION:	Capital	Oper./Maint.	Total
MATERIAL:	\$31,648.68	\$0.00	\$31,648.68
OVERHEAD:	\$4,377.02	\$0.00	\$4,377.02
	\$36,025.70	\$0.00	\$36,025.70
LABOR HOURS:	691.7	0	691.7
LABOR COST:	\$30,447.26	\$0.00	\$30,447.26
OVERHEAD:	\$40,342.60	\$0.00	\$40,342.60
	\$70,789.86	\$0.00	\$70,789.86
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$106,815.56	\$0.00	\$106,815.56
REMOVAL:			
MATERIAL:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TRANSFER:			
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TOTALS:	\$106,815.56	\$0.00	\$106,815.56

THIS FORM IS NOT TO BE USED FOR CONTRIBUTION IN AID CONSTRUCTION (CIAC).



Work Request Material Summary

Includes Truck Stock

Design Number 1

Printed Date: 3/10/2021

Dist: CSA

WR No. 925039

Page 1 of 1

Material Number	Description	Unit Price	Total Cost	Asset?
INSTALL				
56	2003632 ANCHOR,SCRW GALV 10" WING 1-1/4" ROD 8"	\$48.15	\$2,696.40	N
37	2077739 BOLT, EYE, 5/8 IN. X 10 IN., GALVANIZED	\$3.12	\$115.44	N
114	2077764 BOLT, MACHINE 3/4" X 12", GALV	\$2.41	\$274.74	N
68	2077754 BOLT, MACHINE 5/8" X 10", GALV. FULL	\$1.04	\$70.72	N
40	2077753 BOLT, MACHINE 5/8" X 8", GALV.	\$1.05	\$42.00	N
2	2077780 BOLT, SPOOL, 5/8" X 10", GALV. SINGLE UP	\$4.16	\$8.32	N
44	2077755 BOLT,MACHINE,SQ HEAD,5/8"X12",ONE SQ NUT	\$1.16	\$51.04	N
4	2003686 BRACKET, FIBERGLASS STANDOFF VERTICAL24"	\$48.88	\$195.52	N
18	2077818 CLAMP, DEADEND ACSR OR AAC #2-4/0OR .30-	\$9.12	\$164.16	N
19	2003508 CLAMP, SUSPENSION AL ANGLE RANGE .50 TO	\$13.95	\$265.05	N
40	2077924 CLEVIS, STEEL LESS INSULATOR 5/8 IN PIN	\$9.38	\$375.20	N
315	2078012 CONDUCTOR, COPPERCLAD, 3 STR. #9, DSA 30	\$0.84	\$264.60	N
60	2077837 CONNECTOR, COMPRESSION H-BLOCK ACSR 2/0	\$0.66	\$39.60	N
63	2077930 CONNECTOR, VICE CU #4 STR	\$1.91	\$120.33	N
4	2077765 DOUBLE-ARMING, GALVANIZED 5/8 "X 12"	\$2.35	\$9.40	N
56	2003636 EXTENSION ROD, ANCHOR 1-1/4 X 72 6 FT	\$50.54	\$2,830.24	N
36	2077901 FIBERGLASS RIDGE-PIN	\$28.87	\$1,039.32	N
226	2077949 GRIP,GUY,FORMED WIRE DEADEND,3/8"EHS	\$2.27	\$513.02	N
37	2077862 GUARD, LINE #2 ACSR & AAAC STR 6/1, 7	\$1.95	\$72.15	N
114	2077951 HOOK, GUY	\$2.73	\$311.22	N
40	2077954 INSULATOR, PIN TYPE, 10KV, ANSI CLASS 55	\$3.75	\$150.00	N
2	2077952 INSULATOR, SPOOL, ANSI CLASS 53-3, TRANS	\$1.21	\$2.42	N
58	2077961 INSULATOR, STRAIN FIBERGLASS 36 IN 15,00	\$14.73	\$854.34	N
37	2077959 INSULATOR, SUSPENSION, POLYMER, 25KV, AP	\$11.86	\$438.82	N
56	2077979 MARKER, GUY WIRE PLASTIC 8' IN LENGTH CO	\$4.43	\$248.08	N
60	2002857 POLE, WOOD, 40FT CLASS 2, CCA TREATED	\$272.68	\$16,360.80	Y
5	2002858 POLE, WOOD, 45 FT CLASS 2, CCA TREATED.	\$323.31	\$1,616.55	Y
31	2077767 ROLLED BOLT, DOUBLE-ARMING, 5/8"X 16"	\$2.65	\$82.15	N
114	2077790 SCREW, LAG 1/2" X 4", GALV., TWIST DRIVE	\$0.47	\$53.58	N
71	2077812 SPACER, CABLED SECONDARY	\$6.79	\$482.09	N
21	2003612 TIE, PREFORMED SIDE TIE #2 ACSR OR #2 A	\$2.64	\$55.44	N
19	2003613 TIE, TOP, FORMED WIRE #2 ACSR OR #2 AAAC	\$2.87	\$54.53	N
114	2078002 WASHER, CURVED, MALLEABLE, 3" X 3"	\$1.22	\$139.08	N
221	2078006 WASHER, FLAT, GALVANIZED, 2" X 2" X 1/8"	\$0.24	\$53.04	N
217	2078014 WIRE, ALUMINUM, TIE, #4 BARE ANNEALED	\$0.11	\$23.87	N
4774	2005879 WIRE,GUY,EHS STEEL,GALV,3/8",15.4K RBS	\$0.33	\$1,575.42	N
		Total	\$31,648.68	



Estimate Summary

Design Number 1

Printed Date: 3/10/2021

District: CSA

WR No. 925040

Date Sched: 4/1/21

Date Required: 4/1/21

Contact Name:

Distribution Services
LDOH 2000 sq ft Secondary

Additional Information: Used for 2000 sq ft 3.5 TON AC design

WR Description: LDOH 2000 sq ft SECONDARY

INSTALLATION:	Capital	Oper./Maint.	Total
MATERIAL:	\$25,452.75	\$0.00	\$25,452.75
OVERHEAD:	\$3,520.12	\$0.00	\$3,520.12
	\$28,972.87	\$0.00	\$28,972.87
LABOR HOURS:	397.97	0	397.97
LABOR COST:	\$17,519.72	\$0.00	\$17,519.72
OVERHEAD:	\$23,213.62	\$0.00	\$23,213.62
	\$40,733.34	\$0.00	\$40,733.34
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$69,706.21	\$0.00	\$69,706.21
REMOVAL:			
MATERIAL:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TRANSFER:			
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TOTALS:	\$69,706.21	\$0.00	\$69,706.21

THIS FORM IS NOT TO BE USED FOR CONTRIBUTION IN AID CONSTRUCTION (CIAC).



Work Request Material Summary

Includes Truck Stock

Design Number 1

Printed Date: 3/10/2021

Dist: CSA

WR No. 925040

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Material Number	Description	Unit Price	Total Cost	Asset?
INSTALL				
8	2003632 ANCHOR,SCRW GALV 10" WING 1-1/4" ROD 8"	\$48.15	\$385.20	N
34	2077739 BOLT, EYE, 5/8 IN. X 10 IN., GALVANIZED	\$3.12	\$106.08	N
24	2077764 BOLT, MACHINE 3/4" X 12", GALV	\$2.41	\$57.84	N
8	2077755 BOLT,MACHINE,SQ HEAD,5/8"X12",ONE SQ NUT	\$1.16	\$9.28	N
8400	2004339 CABLE, OVERHEAD SECONDARY, TRIPLEX, 4/0	\$1.72	\$14,448.00	Y
1591	2004364 CABLE, SERVICE DROP AL 2-2/0 & 1-1/0 NEU	\$0.96	\$1,527.17	Y
627	2004366 CABLE, SERVICE DROP AL 2-4/0 & 1-2/0 NEU	\$1.42	\$890.06	Y
64	2077818 CLAMP, DEADEND ACSR OR AAC #2-4/0OR .30-	\$9.12	\$583.68	N
2242	2004331 CONDUCTOR, BARE OVERHEAD, 2 AWG, AAAC, 7	\$0.15	\$336.27	Y
192	2077839 CONNECTOR, COMPRESSION H-BLOCK ACSR 1/0-	\$0.53	\$101.76	N
30	2077837 CONNECTOR, COMPRESSION H-BLOCK ACSR 2/0	\$0.66	\$19.80	N
30	2077931 CONNECTOR, VICE CU #2 STR	\$2.38	\$71.40	N
128	2003516 COVER, SNAP-ON SQUEEZON CONNECTOR D DIE	\$0.39	\$49.92	N
8	2003636 EXTENSION ROD, ANCHOR 1-1/4 X 72 6 FT	\$50.54	\$404.32	N
32	2077949 GRIP,GUY,FORMED WIRE DEADEND,3/8"EHS	\$2.27	\$72.64	N
24	2077951 HOOK, GUY	\$2.73	\$65.52	N
16	2077961 INSULATOR, STRAIN FIBERGLASS 36 IN 15,00	\$14.73	\$235.68	N
8	2077979 MARKER, GUY WIRE PLASTIC 8' IN LENGTH CO	\$4.43	\$35.44	N
46	2077783 NUT, EYE, STANDARD, 1-1/2" GALVANIZED FO	\$1.51	\$69.46	N
0	2002836 POLE, WOOD 30 FT CLASS 6 CCA TREATED NO	\$82.69	\$0.00	Y
35	2002842 POLE, WOOD, 35 FT, CLASS 4, CCA TREATED.	\$141.93	\$4,967.55	Y
35	2077767 ROLLED BOLT, DOUBLE-ARMING, 5/8"X 16"	\$2.65	\$92.75	N
24	2077790 SCREW, LAG 1/2" X 4", GALV., TWIST DRIVE	\$0.47	\$11.28	N
35	2077812 SPACER, CABLED SECONDARY	\$6.79	\$237.65	N
24	2078002 WASHER, CURVED, MALLEABLE, 3" X 3"	\$1.22	\$29.28	N
108	2078006 WASHER, FLAT, GALVANIZED, 2" X 2" X 1/8"	\$0.24	\$25.92	N
105	2078014 WIRE, ALUMINUM, TIE, #4 BARE ANNEALED	\$0.11	\$11.55	N
60	2004184 WIRE, COPPER, BARE, #4 SOFT DRAWN 7 STR	\$0.63	\$37.80	N
1726	2005879 WIRE,GUY,EHS STEEL,GALV,3/8",15.4K RBS	\$0.33	\$569.58	N
		Total	\$25,452.75	



Estimate Summary

Design Number 1

Printed Date: 3/10/2021

District: CSA

WR No. 926547

Date Sched: 4/1/21

Date Required: 4/1/21

Contact Name:

Distribution Services
LDOH 2000 sq ft SERVICE

Additional Information: Used for 2000 square foot design

WR Description: LDOH 2000 sq ft SERVICE

INSTALLATION:	Capital	Oper./Maint.	Total
MATERIAL:	\$9,449.06	\$0.00	\$9,449.06
OVERHEAD:	\$1,306.80	\$0.00	\$1,306.80
	\$10,755.86	\$0.00	\$10,755.86
LABOR HOURS:	198.6	0	198.6
LABOR COST:	\$8,742.35	\$0.00	\$8,742.35
OVERHEAD:	\$11,583.63	\$0.00	\$11,583.63
	\$20,325.98	\$0.00	\$20,325.98
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$31,081.84	\$0.00	\$31,081.84
REMOVAL:			
MATERIAL:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TRANSFER:			
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TOTALS:	\$31,081.84	\$0.00	\$31,081.84

THIS FORM IS NOT TO BE USED FOR CONTRIBUTION IN AID CONSTRUCTION (CIAC).



Work Request Material Summary

Includes Truck Stock

Design Number 1

Printed Date: 3/10/2021

Dist: CSA

WR No. 926547

Page 1 of 1

Material Number		Description	Unit Price	Total Cost	Asset?
INSTALL					
9828	2004364	CABLE, SERVICE DROP AL 2-2/0 & 1-1/0 NEU	\$0.96	\$9,434.88	Y
0	2004366	CABLE, SERVICE DROP AL 2-4/0 & 1-2/0 NEU	\$1.42	\$0.00	Y
2	2003770	CLAMP, MID SPAN ALUMINUM 1/4 IN - 1/2 IN	\$7.09	\$14.18	N
Total				\$9,449.06	

4/2021

HIGH DENSITY MODEL
(176 lots)

Underground Costs (per lot)

ITEM	MATERIAL		LABOR		TOTAL		EXPLANATION OF % CHANGE
	COST	% CHANGE	COST	% CHANGE	COST	% CHANGE	
SERVICE	288.33	66.47%	260.66	46.99%	548.99	56.62%	Underground material up, contractor rates up
PRIMARY	138.27	29.97%	61.14	18.53%	199.41	26.23%	Underground material up, Cable labor re-evaluation caused labor increase
SECONDARY	78.14	99.59%	70.32	26.07%	148.46	56.39%	Underground material up, Cable labor re-evaluation caused labor increase
TRANSFORMERS	267.25	7.38%	68.77	11.21%	336.02	8.14%	Underground material up, TEC & Contractor overhead down
TRENCHING							
PRIMARY & SECONDARY			175.02	-11.71%	175.02	-11.71%	Contractor rates down
SERVICES			317.91	-7.46%	317.91	-7.46%	Contractor rates down
SUB-TOTAL	771.99	36.00%	953.82	7.38%	1,725.81	18.54%	
STORES HANDLING	94.34	18.89%			94.34	18.89%	Higher material costs produces higher handling costs
SUB-TOTAL	866.33	33.90%	953.82	7.38%	1,820.15	18.56%	
ENGINEERING			61.28	0.00%	61.28	0.00%	
TOTAL	866.33	33.90%	1,015.10	6.90%	1,881.43	17.84%	
					583.66	Net Present Value of the Life Cycle Operational Cost Including Storm Restoration and Lost Pole Attachment Revenue	
Total with NPV Factor					2,465.09	Total Including NPV of Operational Cost	

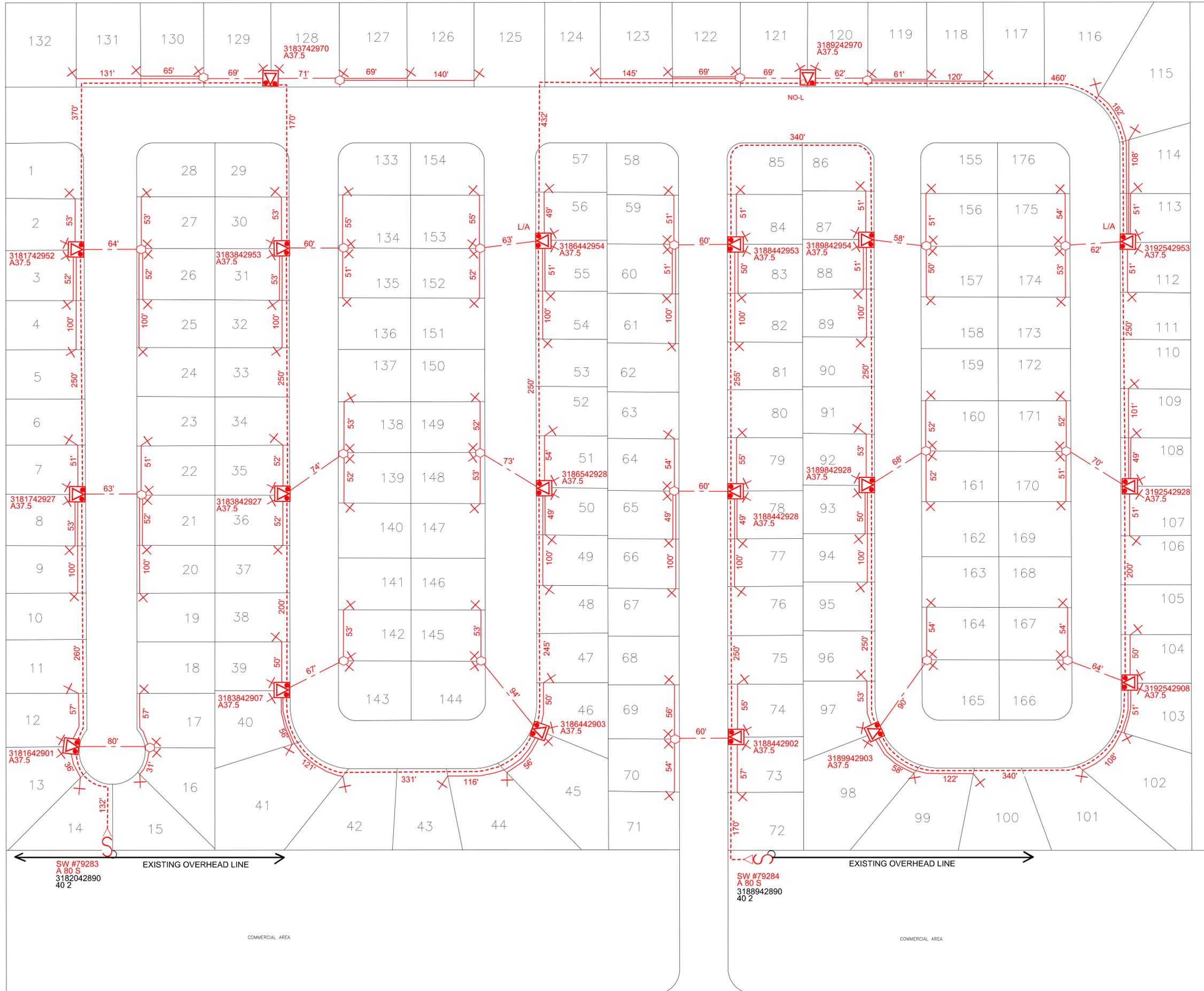
Overhead Costs (per lot)

ITEM	MATERIAL		LABOR		TOTAL		EXPLANATION OF % CHANGE
	COST	% CHANGE	COST	% CHANGE	COST	% CHANGE	
SERVICE	142.24	70.76%	91.83	6.98%	234.07	38.39%	Material up, Labor up
PRIMARY	12.88	19.59%	35.17	17.70%	48.05	18.20%	Material up, Labor up
SECONDARY	64.40	10.81%	106.36	-1.55%	170.76	2.77%	Material up, Labor down
INITIAL TREE TRIM			0.00		0.00		
POLES	113.97	8.83%	205.55	10.04%	319.52	9.61%	Material up, Labor up
TRANSFORMERS	157.68	3.30%	70.27	11.95%	227.95	5.82%	Material up, Labor up
SUB-TOTAL	491.17	19.93%	509.18	7.58%	1,000.35	13.31%	
STORES HANDLING	60.02	4.82%			60.02	4.82%	Higher material costs produces higher handling costs
SUB-TOTAL	551.19	18.07%	509.18	7.58%	1,060.37	12.79%	
ENGINEERING			61.28	0.00%	61.28	0.00%	
TOTAL	551.19	18.07%	570.46	6.71%	1,121.65	12.01%	
					1,408.20	Net Present Value of the Life Cycle Operational Cost Including Storm Restoration and Lost Pole Attachment Revenue	
Total with NPV Factor					2,529.85	Total Including NPV of Operational Cost	

Differential Costs (per lot)

ITEM	MATERIAL		LABOR		TOTAL	
	COST	% CHANGE	COST	% CHANGE	COST	% CHANGE
Differential (per lot)	315.14	74.92%	444.64	7.15%	759.78	27.66%
NPV amount					-824.54	
Differential¹ (per lot)					-64.76	-90.55%

¹ Includes NPV of Operational Cost



LEGEND
200 AMP SERVICE

- PAD-MOUNTED TRANSFORMER
- HANDHOLE (SECONDARY)
- 1/0 PRIMARY CABLE
- 4/0 SECONDARY CABLE
- 2/0 SERVICE CABLE

750 TOTAL CONNECTED KVA
 804.4 TOTAL PEAK DEMAND KVA
 0 25 KVA TRANSFORMERS
 20 37.5 KVA TRANSFORMERS
 0 50 KVA TRANSFORMERS
 0 75 KVA TRANSFORMERS
 5655 TRENCH FEET OF 1/0 AL PRIMARY CABLE
 0 EXISTING TRENCH FEET OF 1/0 AL PRIMARY CABLE
 0 TRENCH FEET OF 2/0 AL SECONDARY CABLE
 0 EXISTING TRENCH FEET OF 2/0 AL SECONDARY CABLE
 1301 TRENCH FEET OF 4/0 AL SECONDARY CABLE
 200 EXISTING TRENCH FEET OF 4/0 AL SECONDARY CABLE
 TRENCH FEET OF 500 MCM AL SECONDARY CABLE
 0 EXISTING TRENCH FEET OF 500 MCM AL SECONDARY CABLE
 9044 TRENCH FEET OF 2/0 AL SERVICE CABLE
 4464 EXISTING TRENCH FEET OF 2/0 AL SERVICE CABLE
 0 TRENCH FEET OF 4/0 AL SERVICE CABLE
 0 EXISTING TRENCH FEET OF 4/0 AL SERVICE CABLE
 0 LOAD BREAK CABINET

NOTES:
 1. PRIMARY: 1C1/0 ALJCN 15KV IN 2" PVC (GALV ELLS)
 2. SERVICES: 3C2/0 AL 600V IN 2" PVC UNLESS NOTED (PVC ELLS)
 a. 2" PVC IN ELECTRIC POWER EASEMENT UNLESS NOTED
 b. 2" PVC (10' SECTIONS) STUBBED OUT REAR OF PMT AND HANDHOLES
 3. SECONDARY: 3C4/0 AL 600V IN 4" PVC FOR STREET CROSSINGS UNLESS NOTED
 3C4/0 AL 600V IN 3" PVC ALONG EASEMENT WITH 14 X 18 LARGE PEDESTAL UNLESS NOTED
 4. INSTALL ALL CONDUIT AS PER SPEC 1-43 AND 1-44
 5. SERVICES BASED ON 1250 SF, 2.5 TON AC (85 AMP)
 40 FT RUN FROM EASEMENT TO METER
 6. 20 37.5 KVA TRANSFORMERS/ CONNECTED KVA 750, DEMAND KVA 804
 7. VOLTAGE DROP LESS THAN OR EQUAL TO 12.0 VOLTS
 8. VOLTAGE FLICKER LESS THAN OR EQUAL TO 12.0 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 EXCAVATE IN THE GENERAL AREA OF INDICATED ELECTRICAL LINES, PRIOR TO DIGGING 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.
 FET: _____ DATE: / /
 LFET: _____ DATE: / /

HD-2

TAMPA ELECTRIC COMPANY	
SCALE: 1" = 50'	GIS: _____
FET/LFET APPROV: _____	Completion DATE: _____
FET: _____	DATE: _____
LFET: _____	DATE: _____
DISTRIBUTION ENGINEERING	

**UNDERGROUND
HIGH DENSITY
SUBDIVISION DESIGN**

WR: _____

SHEET 1 OF 1

Revised 3/23/21

UG Construction Cost Data Summary
High Density (176-Lot) UG Subdivision Costs

A	B	C (D+M) Material and Handling	D Material	E (F+L) Total Labor Plus Vehicles	F (G+H+I) Total Labor	G Base Labor	H (G x J x TLF) Operations Labor Overheads	I (G x K x CLF) Contract Labor Overheads	J TEC Work %	K Contractor Work %	L Vehicle	M (D x MHR) Material Handling	N (C+E) Total	
Line #	Work Type/WR #	Description												
1	Transformers													
2	925091	Install Transformer	51,230.95	\$45,652.25	5,902.34	5,278.71	\$3,073.59	1,958.49	246.62	60%	40%	\$623.63	5,578.70	57,133.29
3	925095	Ground Transformer	1,553.57	\$1,384.40	2,747.51	2,457.21	\$1,430.74	911.67	114.80	60%	40%	\$290.30	169.17	4,301.08
4		Contractor Prepare Pad Site	-	-	3,453.17	3,453.17	\$2,876.20	-	576.97	0%	100%	-	-	3,453.17
5			52,784.53	47,036.65	12,103.01	11,189.08	7,380.53	2,870.16	938.39			913.93	5,747.88	64,887.54
6	Primary													
7	925096	Primary Line - OH-UG Takeoffs	683.67	\$609.22	710.03	635.01	\$369.74	235.60	29.67	60%	40%	\$75.02	74.45	1,393.69
8	925097	Ground OH to UG Take-offs	155.36	\$138.44	317.36	283.82	\$165.26	105.30	13.26	60%	40%	\$33.53	16.92	472.71
9	925098	Primary Conduit (Material Only)	9,381.68	\$8,360.08	-	-	-	-	-			-	1,021.60	9,381.68
10	925100	Primary Cable	17,088.65	\$15,227.81	9,733.47	8,705.05	\$5,068.62	3,229.72	406.71	60%	40%	\$1,028.42	1,860.84	26,822.12
11			27,309.35	24,335.55	10,760.86	9,623.88	5,603.62	3,570.63	449.63			1,136.97	2,973.80	38,070.21
12	Secondary													
13	925103	Secondary Cable	9,649.74	\$8,598.95	12,377.13	11,069.38	\$6,445.28	4,106.93	517.17	60%	40%	\$1,307.75	1,050.79	22,026.87
14	925104	Secondary Conduit (Material Only)	5,783.11	\$5,153.37	-	-	-	-	-			-	629.74	5,783.11
15			15,432.85	13,752.32	12,377.13	11,069.38	6,445.28	4,106.93	517.17			1,307.75	1,680.53	27,809.98
16	Service													
17	925106	Service Cable	18,244.13	\$16,257.47	42,893.98	42,893.98	\$35,727.12	-	7,166.86	0%	100%	-	1,986.66	61,138.11
18	925108	Set Meters	17,751.95	\$15,818.88	2,981.50	2,666.48	\$1,552.59	989.31	124.58	60%	40%	\$315.02	1,933.07	20,733.45
19	925110	Service Conduit (Material Only)	20,950.73	\$18,669.34	-	-	-	-	-			-	2,281.39	20,950.73
20			56,946.81	50,745.69	45,875.48	45,560.46	37,279.71	989.31	7,291.44			315.02	6,201.12	102,822.29
21	Trenching													
22	Contractor	Primary Trenching	-	-	17,584.53	17,584.53	\$14,646.45	-	2,938.08	0%	100%	-	-	17,584.53
23	Contractor	Secondary Trenching	-	-	4,372.98	4,372.98	\$3,642.33	-	730.65	0%	100%	-	-	4,372.98
24		TEC Inspection for Primary	-	-	8,846.62	8,385.42	\$8,385.42	-	-	0%	0%	\$461.20	-	8,846.62
25			-	-	30,804.13	30,342.93	26,674.20	-	3,668.73			461.20	-	30,804.13
26														
27	Contractor	Svc Trenching Pri. Prop	-	-	33,344.02	33,344.02	\$27,772.80	-	5,571.22	0%	100%	-	-	33,344.02
28	Contractor	Svc Trenching Rts-of-Wy	-	-	14,437.70	14,437.70	\$12,025.40	-	2,412.30	0%	100%	-	-	14,437.70
29		TEC Inspection for Service	-	-	8,169.92	7,744.00	\$7,744.00	-	-	0%	0%	\$425.92	-	8,169.92
30			-	-	55,951.64	55,525.72	47,542.20	-	7,983.52			425.92	-	55,951.64
31														
32	Engineering	Design/Inspection/Coordination	-	-	10,785.62			-	-			-	-	10,785.62
33														
34	Totals (Sum of lines 5, 11, 15, 20, 25, 30, and 32)		152,473.55	178,657.87	163,311.45	130,925.54	11,537.03	20,848.89			4,560.79	16,603.34	331,131.42	
35	Cost "Per Lot" (Line 34/ 176 lots)		866.33	1,015.10									1,881.43	

Adjustment Factors		
TEC Labor Overhead Factor (excludes engineering)	TLF =	1.062
Contractor Labor Overhead Factor	CLF =	0.2006
Current year material handling charge rate	MHR =	0.1222

High Density - 176 lot - Contractor Labor - Underground Estimate

1. Update the contractor labor rates on this page. The numbers to be updated are highlighted in blue.
- 1a. Hover over the red comment symbol in the corner of the cell. That refers to the source of the information.
The contractor labor rates come from the E.D. Field Construction Department - the Conduit Coordinators - Mike Capparelli, Steve Furry, Jerry Manning, Bill Baxter.
2. Transfer the contractors costs to the HDdifferentialMonth-Year.xls file. The numbers are highlighted in yellow.
- 2a. Hover over the red comment symbol in the corner of the cell that refers to the destination of the contractor cost.
3. In 2006 TEC added pad site preparation cost, a contractor cost.

Prepare pad site (Primary Contractor Labor Costs)

	<u>Total</u>	<u>Cost</u>	<u>Pad sites</u>
Pad site preparation	\$2,876.20	\$143.81	20

Primary Trenching & Conduit (Primary Contractor Labor Costs)

	<u>Total</u>	<u>Cost</u>	<u>Feet</u>	
	\$11,762.40	\$2.08	5655	Trenching Cost
	\$2,884.05	\$0.51	5655	Conduit Installation - 2"
	\$0.00	\$0.00	5655	Pull-tape Installation (used exact length for labor cost not 5% extra)
Primary Trenching	\$14,646.45			

Secondary Trenching & Conduit (Primary Contractor Labor Costs)

	<u>Total</u>	<u>Cost</u>	<u>Feet</u>	
	\$2,706.08	\$2.08	1301	Trenching Cost
	\$0.00	\$0.51	0	Conduit Installation - 2"
	\$149.05	\$0.55	271	Conduit Installation - 3"
	\$787.20	\$0.64	1230	Conduit Installation - 4"
	\$0.00	\$0.00	1501	Pull-tape Installation (used exact length not 5% extra)
Secondary Trenching	\$3,642.33			

Service Trenching & Conduit (Primary Contractor Labor Costs)

	<u>Total</u>	<u>Cost</u>	<u>Feet</u>	
	\$7,829.12	\$2.08	3764	Trenching feet required for 2" service conduit
	\$0.00	\$2.08	0	Trenching feet required for 3" service conduit
	\$4,196.28	\$0.51	8228	Conduit Installation - 2"
	\$0.00	\$0.55	0	Conduit Installation - 3"
	\$0.00	\$0.00	8228	Pull-tape Installation (used exact length not 5% extra)
Svc Trenching Rts-of-Wy	\$12,025.40			

Service Trenching & Conduit on Private Property (Service Contractor Labor Costs)

	<u>Total</u>	<u>Cost</u>	<u>Feet</u>	
Svc Trenching Pri. Prop	\$27,772.80	\$5.26	5280	Trenching feet and conduit = 30ft x 176

Service Cable (Service Contractor Labor Costs)

	<u>Total</u>	<u>Cost</u>	<u>Feet</u>	
Service Cable Labor	\$35,727.12	\$2.34	15268	Installing 2/0 or 4/0 Cable in existing conduit
Service Labor	\$75,525.32			

Inspection (TECO Labor Cost)

	<u>TEC Labor Total</u>	<u>TEC Labor Rate</u>	<u>TEC Labor Feet/Qty</u>	<u>TEC Vehicle Rate</u>	<u>TEC Vehicle Total</u>	<u>Inspection costs for Primary Contractor (TECO Labor Cost)</u>
	\$4,423.47	\$88.00	5655	\$4.84	\$243.29	Primary Inspection chg = (mach. trnch ft / 900 ft per day)*(8 hr/day)*Contractor rate
	\$1,017.67	\$88.00	1301	\$4.84	\$55.97	Secondary Inspection chg = (mach. trnch ft / 900 ft per day)*(8 hr/day)*Contractor rate
	\$2,944.28	\$88.00	3764	\$4.84	\$161.94	Service ROW Inspection chg = (machine trench ft / 900 ft per day)*(8 hr/day)*Contractor rate
Sub-total	\$8,385.42				\$461.20	

	<u>TEC Labor Total</u>	<u>TEC Labor Rate</u>	<u>TEC Labor Feet/Qty</u>	<u>TEC Vehicle Rate</u>	<u>TEC Vehicle Total</u>	<u>Inspection costs for Service Contractor (TECO Labor Cost)</u>
	\$7,744.00	\$88.00	176	\$2.42	\$425.92	Service Private Property Inspection = .5hr x # of lots x rate
Sub-total	\$7,744.00				\$425.92	

High Density - 176 Lots - Underground Material List

This worksheet lists the totals for major materials to be listed on the associated work request print as requested by the PSC.

750 Total Connected KVA
804 Total peak demand KVA
0 25 kVA Transformers
20 37.5 kVA Transformers
0 50 kVA Transformers
0 75 kVA Transformers
5655 Trench Feet of 1/0 AL Primary Cable
0 Existing trench feet of 1/0 AL Primary Cable
0 Trench Feet of 2/0 AL Secondary Cable
0 Existing trench feet of 2/0 AL Secondary Cable
1301 Trench Feet of 4/0 AL Secondary Cable
200 Existing trench feet of 4/0 AL Secondary Cable
Trench Feet of 500 MCM AL Secondary Cable
0 Existing trench feet of 500 MCM AL Secondary Cable
9044 Trench Feet of 2/0 AL Service Cable
4464 Existing trench feet of 2/0 AL Service Cable
0 Trench Feet of 4/0 AL Service Cable
0 Existing trench feet of 4/0 AL Service Cable
0 Load Break Cabinet

Notes:

1. 1250 SF Homes
2. 2.5 Ton AC Units
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

High Density - 176 Lots - Underground Material CU List

This worksheet summarizes the entries from the other worksheets (from PoleAveA through PoleOakHill) and provides the Contractor Labor worksheet with input totals to calculate contractor costs.

Station All Stations - This information is used to create Work Requests to obtain costs. Transfer the values from Qty and CU columns highlighted in yellow to the WorkPro Work Requests to obtain costs. Those costs are then entered into the HDdifferential.xls workbook to calculate the High Density Differential cost.

<=== Blue shading indicates fields to be updated.

Work Request

Number

Transformer Material CUs

925091

Qty	CU	Definition	Total Connected KVA	
0	pku51a3n	25 kva, 6 tap 250mcm	0	
0	pku51c3n	25 kva, 8 tap 250mcm	0	0
0	pku51a4n	37.5 kva, 6 tap 250mcm	0	0
0	pku51b4n	37.5 kva, 6 tap 500mcm	0	0
0	pku51c4n	37.5 kva, 8 tap 250mcm	0	0
20	pku51d4n	37.5 kva, 8 tap 500mcm	750	750
0	pku51a5n	50 kva, 6 tap 250mcm	0	750
0	pku51b5n	50 kva,6 tap 500mcm	0	750
0	pku51c5n	50 kva,8 tap 250mcm	0	750
0	pku51d5n	50 kva,8 tap 500mcm	0	750
0	pku51a6n	75 kva, 6 tap 250mcm	0	750
0	pku51b6n	75 kva, 6 tap 500mcm	0	750
0	pku51c6n	75 kva,8 tap 250mcm	0	750
0	pku51d6n	75 kva, 8 tap 500mcm	0	750
1	bushcover	Cover hot Tx bushing - at open position on loop tx, or at radial Tx		
1	bushdummy	Parking bushing at normal open tx in loop		

Work Request

Number

Ground Pad Mounted Tx - Material CUs

925095

Qty	CU	Definition
20	grdmeg1/2	meggat ground, drive rods, 1 location, 1/2" rods

Work Request

Number

Primary Overhead - Material CUs

925096

Qty	CU	Definition
2	PKE601WF1B	TEC material & labor to frame terminal pole CO & LA
2	FLOH103	Fuse

Work Request

Number

Meggat Ground at Terminal Pole

925097

Qty	CU	Definition
2	grdmeg1/2	meggat ground, drive rods, 1 location, 1/2" rods

Primary Trenching - Labor Only - Done By Contractors

Used to determine contractor labor cost on the Contractor Labor worksheet

Qty	CU	Definition
5655		Trenching feet required for 2" primary conduit
0		Existing trench feet used for 2" primary conduit
5655		Install Pulling Tape (blow in tape for pull - trench feet used to determine contractor cost)

Work Request

Number

Primary Cable

925100

Qty	CU	Definition	
2	pku16wf	pothead, 38' 1c 1/0AL cable, 20' pvc, ground conn, wood pole	76
40	pku11f	safebreak, 5' 1c 1/0AL cable, ground conn	200
0	pku31p3	switch cubicle(lbc) 1ph, 200a deadfront, 3 position w/pad, grnd	
0	pku31p4	switch cubicle(lbc) 1ph, 200a deadfront, 4 position w/pad, grnd	
0	fault1pa	fault indicator, 1ph 1/0-4/0 above grade, 400a	
5655	CA1/0CN1CAL	cable, 1/0AL concentric neutral 15kV includes labor - round up to	6524.1
0	wiu1f	labor to pull ug cable in conduit	

Work Request**Number****925098****Primary Conduit - Material Only**

Material used by contractors to install the conduit system

Qty	CU	Definition
20	5512000	Conduit, galvanized 2", 10' with coupling, for up terminal pole
5875	5522000	2" conduit
6095	5853530	Pulling tape - actual length
48	5512220	2" elbow 90 galv 9.5" radius
8	5512210	2" elbow 45 galv 9.5" radius
112	5522180	Coupling, 2" PVC (2 per elbow)
12	gluecondf	2"&3" pvc 1 qt for 500' fast dry

Secondary Trenching - Labor Only - Done By Contractors

Used to determine contractor labor cost on the Contractor Labor worksheet

Qty	CU	Definition
0		Trenching feet required for 2" secondary conduit
0		Existing trench feet used for 2" secondary conduit
71		Trenching feet required for 3" secondary conduit
200		Existing trench feet used for 3" secondary conduit
1230		Trenching feet required for 4" secondary conduit
0		Existing trench feet used for 4" secondary conduit
1501		Install Pulling Tape (blow in tape for pull - trench feet used to determine contractor cost)

Work Request**Number****925103****Secondary Cable & Hand Holes**

Qty	CU	Definition
0	wiu3sb	2c 2/0 1c 1 neutral, 600 v - added 5% here
1691	CA4/0INS3CA	2c 4/0 1c 2/0 neutral, 600v includes labor - added 5% here 2029.2
0	wiu3sn	2c 500 1c 350 neutral, 600v - added 5% here
0	insbus350/4	crab 4 position up to 350mcm
0	insbus350/6	crab 6 position up to 350mcm
0	insbus500/4	crab 4 position up to 500mcm
66	insbus500/6	crab 6 position up to 500mcm
0	insbus500/8	crab 8 position up to 500mcm
0	wiu1f	labor to pull ug cable in conduit
22	svhottx	energize ug secondary in transformer
22	svhothh	energize ug secondary in hand hole
0	hhsec	secondary h/h 12"x20", 3 or 4 2/0 or 4/0 svc w/ 2/0 or 4/0 sec
22	HH LARGE PE	secondary h/h 14"x18" large pedestal, 5 to 7 2/0 or 4/0 svc w/ 4/0 or 500 sec (any time 500 u

Work Request**Number****925104****Secondary Conduit - Material Only**

Material used by contractors to install the conduit system

Qty	CU	Definition
0	5522000	2" conduit sched A bell end
291	5523000	3" conduit sched A bell end
1410	5524000	4" conduit sched A bell end
1901	5853530	Pulling tape, plus adding 5% extra here
0	5522220	2" elbow 90 PVC 9.5" radius
0	5522210	2" elbow 45 PVC 9.5" radius
8	5523220	3" elbow 90 PVC 13" radius
0	5523210	3" elbow 45 PVC 13" radius
36	5524220	4" elbow 90 PVC 16" radius
0	5514300	4" elbow 90 galv 30" radius
0	5514210	4" elbow 45 galv 16" radius
0	5522180	Coupling, 2" PVC (2 per elbow)
16	5523180	Coupling, 3" PVC (2 per elbow)
72	5524180	Coupling, 4" PVC (2 per elbow)
1	gluecondf	2"&3" pvc 1 qt for 500' fast dry
6	gluecondm	4"& 6" pvc 1 qt for 250' medium dry

Work Request

Number

925108

Set Meter

Qty	CU	Definition
176	meterlabor	
176	1900006	meter, kwh 30a 240v

Service Trenching - Labor Only - Done By Contractors

Used to determine contractor labor cost on the Contractor Labor worksheet

Qty	CU	Definition
176		Number of 2/0 services
5280		Trenching feet for 2" service conduit on private property-service contractor
1760		Trenching feet for 10' stub of 2" service conduit installed by primary contractor
2004		Trenching feet for 2" service conduit installed by primary contractor
4464		Existing trench feet used for 2" service conduit installed by primary contractor
8228		Install Pulling Tape for 2" conduit (blow in tape for pull - Primary Contractor)
0		Trenching feet for 3" service conduit on private property-service contractor
0		Trenching feet for 10' stub of 3" service conduit installed by primary contractor
0		Trenching feet for 3" service conduit installed by primary contractor
0		Existing trench feet used for 3" service conduit installed by primary contractor
0		Install Pulling Tape for 3" conduit (blow in tape for pull - Primary Contractor)

13508

1760 **Work Request**

15268 **Number**

925106

Service Cable Material Only

Material used by contractors to install the conduit system

Qty	CU	Definition	
15268	wiu3sb	2c 2/0 & 1c 1 neutral, 600 v service cable	16031.4
0	wiu3sc	2c 4/0 & 1c 2/0 neutral, 600 v service cable	0

Work Request

15268 **Number**

925110

Service Conduit Material Only

Material used by contractors to install the conduit system

Qty	CU	Definition
5280		Conduit for 2" service on private property-service contractor
3520		Conduit for 10' stub of 2" service installed by primary contractor
6468		Conduit for 2" service installed by primary contractor
11748		Pulling Tape installed in 2" conduit by Primary Contractor)
15268	5522000	Total 2" conduit for work order quantity
448	5522220	2" elbow 90 PVC 9.5" radius
0	5522210	2" elbow 45 PVC 9.5" radius
176	5512260	2" galvanized Lock Nut
176	5522030	2" Flexible PVC conduit
176	5522050	2" PVC Adapter, male thread/female slip
176	5512370	2" PVC Service Riser
896	5522180	Coupling, 2" PVC (2 per elbow)
0		Conduit for 3" service on private property-service contractor
0		Conduit for 10' stub of 3" service installed by primary contractor
0		Conduit for 3" service installed by primary contractor
0		Pulling Tape installed in 3" conduit by Primary Contractor)
0	5523000	Total 3" conduit for work order quantity
0	5523220	3" elbow 90 PVC 13" radius
0	5523210	3" elbow 45 PVC 13" radius
0	5512770	2-1/2" house riser
0	5523220	3" elbow 90 PVC 13" radius at house riser
0	5512670	2-1/2" galvanized Lock Nut Used by contractors to install conduit system
0	5523030	3" Flexible PVC conduit
0	5521000	2-1/2"PVC Adapter, male thread/female slip
0	5523180	Coupling, 3" PVC (2 per elbow)
31	glueconf	2"&3" pvc 1 qt for 500' fast dry
11748	5853530	Total Pulling Tape installed in conduit by Primary Contractor)



Estimate Summary

Design Number 1

Printed Date: 3/11/2021

Contact Name:
Tampa Electric

Distribution Services
HDUG Transformers

District: CSA

WR No. 925091

Date Sched: 4/1/21

Date Required: 4/1/21

Additional Information: Full PSC Filing 10/2010

WR Description: HDUG 1250 sq ft TRANSFORMERS

INSTALLATION:	Capital	Oper./Maint.	Total
MATERIAL:	\$45,652.25	\$0.00	\$45,652.25
OVERHEAD:	\$6,313.70	\$0.00	\$6,313.70
	\$51,965.95	\$0.00	\$51,965.95
LABOR HOURS:	69.84	0	69.84
LABOR COST:	\$3,073.59	\$0.00	\$3,073.59
OVERHEAD:	\$4,072.50	\$0.00	\$4,072.50
	\$7,146.09	\$0.00	\$7,146.09
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$59,112.04	\$0.00	\$59,112.04
REMOVAL:			
MATERIAL:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TRANSFER:			
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TOTALS:	\$59,112.04	\$0.00	\$59,112.04

THIS FORM IS NOT TO BE USED FOR CONTRIBUTION IN AID CONSTRUCTION (CIAC).



Work Request Material Summary

Includes Truck Stock

Design Number 1

Printed Date: 3/11/2021

Dist: CSA

WR No. 925091

Page 1 of 1

Material Number	Description	Unit Price	Total Cost	Asset?	
INSTALL					
1	2004816	BUSHING, PARKING, 15KV, INSULATED	\$38.70	\$38.70	N
20	2077906	CLAMP, GROUND ROD, F/U/W 1/2"ROD	\$1.80	\$36.00	N
40	2078000	CLAMP,GND,TRANSFORMER,#10 SOL-#1 STR CU	\$2.31	\$92.40	N
2	2077931	CONNECTOR, VICE CU #2 STR	\$2.38	\$4.76	N
1	2004817	COVER, BUSHING 15 KV PDMT EQUIP W/FLEXIB	\$25.11	\$25.11	N
20	2001315	PAD, CONCRETE 40" X 45" X 4" 25- 50KVA T	\$103.25	\$2,065.00	N
20	2007395	PADLOCK, RED BRASS BODY 1/4" BRASS SHACK	\$22.97	\$459.40	N
20	2007489	REPELLENT, FIRE ANT GRANULE 4 OZ BIFENTH	\$2.77	\$55.40	N
40	2004031	STUD, GALVANIZED, 11 THREAD PER INCH ALL	\$2.47	\$98.80	N
9	2004948	TERMINAL, SLIP FIT ALUMINUM STUD TYPE, 6	\$7.54	\$67.86	N
6	2004954	TERMINAL, SLIP FIT ALUMINUM STUD TYPE, 6	\$16.58	\$99.48	N
45	2004950	TERMINAL, SLIP FIT ALUMINUM STUD TYPE, 8	\$8.28	\$372.60	N
20	2001519	TX,PM,LP,1P,37.5 kVA,240/120,FR3,SS	\$2,108.00	\$42,160.00	Y
120	2004184	WIRE, COPPER, BARE, #4 SOFT DRAWN 7 STR	\$0.63	\$75.60	N
3	2078011	WIRE, COPPER, TIE, #6 SOLID SOFT DRAWN	\$0.38	\$1.14	N
Total			\$45,652.25		



Estimate Summary

Design Number 1

Printed Date: 3/11/2021

District: CSA

WR No. 925095

Date Sched: 4/1/21

Date Required: 4/1/21

Contact Name:

Distribution Services
HDUG GRD Transformers

Additional Information: Full PSC Filing 10/2010

WR Description: HDUG 1250 sq ft GROUND TRANSFORMERS

INSTALLATION:	Capital	Oper./Maint.	Total
MATERIAL:	\$1,384.40	\$0.00	\$1,384.40
OVERHEAD:	\$191.46	\$0.00	\$191.46
	\$1,575.86	\$0.00	\$1,575.86
LABOR HOURS:	32.5	0	32.5
LABOR COST:	\$1,430.74	\$0.00	\$1,430.74
OVERHEAD:	\$1,895.73	\$0.00	\$1,895.73
	\$3,326.47	\$0.00	\$3,326.47
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$4,902.33	\$0.00	\$4,902.33
REMOVAL:			
MATERIAL:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TRANSFER:			
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TOTALS:	\$4,902.33	\$0.00	\$4,902.33

THIS FORM IS NOT TO BE USED FOR CONTRIBUTION IN AID CONSTRUCTION (CIAC).



Work Request Material Summary

Includes Truck Stock

Design Number 1

Printed Date: 3/11/2021

Dist: CSA

WR No. 925095

Page 1 of 1

Material Number	Description	Unit Price	Total Cost	Asset?
INSTALL				
60 2077939	COUPLER, GROUND ROD, F/U/W 1/2"ROD	\$4.78	\$286.80	N
80 2077980	ROD,GROUND,CU BONDED,1/2"X10',THREADLESS	\$13.72	\$1,097.60	N
	Total		\$1,384.40	



Estimate Summary

Design Number 1

Printed Date: 3/11/2021

District: CSA

WR No. 925096

Contact Name:

Distribution Services
HDUG FRAME OH Takeoff

Date Sched: 4/1/21

Date Required: 4/1/21

Additional Information: Full PSC Filing 10/2010

WR Description: HDUG 1250 sq ft TAKEOFFS

INSTALLATION:	Capital	Oper./Maint.	Total
MATERIAL:	\$609.22	\$0.00	\$609.22
OVERHEAD:	\$84.24	\$0.00	\$84.24
	\$693.46	\$0.00	\$693.46
LABOR HOURS:	8.4	0	8.4
LABOR COST:	\$369.74	\$0.00	\$369.74
OVERHEAD:	\$489.92	\$0.00	\$489.92
	\$859.66	\$0.00	\$859.66
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$1,553.12	\$0.00	\$1,553.12
REMOVAL:			
MATERIAL:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TRANSFER:			
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TOTALS:	\$1,553.12	\$0.00	\$1,553.12

THIS FORM IS NOT TO BE USED FOR CONTRIBUTION IN AID CONSTRUCTION (CIAC).



Work Request Material Summary

Includes Truck Stock

Design Number 1

Printed Date: 3/11/2021

Dist: CSA

WR No. 925096

Page 1 of 1

Material Number	Description	Unit Price	Total Cost	Asset?	
INSTALL					
2	2003651	ARRESTER, LIGHTNING DISTRIBUTION CLASS 8	\$41.28	\$82.56	Y
2	2077754	BOLT, MACHINE 5/8" X 10", GALV. FULL	\$1.04	\$2.08	N
2	2131366	BRACKET, FG, 1 PH, 1 POS, 18"	\$30.03	\$60.06	N
2	2077906	CLAMP, GROUND ROD, F/U/W 1/2"ROD	\$1.80	\$3.60	N
2	2077911	CLAMP, HOT LINE CU TO CU #6 SOL- 2 STR T	\$5.73	\$11.46	N
80	2078012	CONDUCTOR, COPPERCLAD, 3 STR. #9, DSA 30	\$0.84	\$67.20	N
6	2004187	CONDUCTOR, BARE, #2 CU, 7-STR, SOFT-DRAWN	\$0.98	\$5.88	N
2	2077837	CONNECTOR, COMPRESSION H-BLOCK ACSR 2/0	\$0.66	\$1.32	N
4	2077930	CONNECTOR, VICE CU #4 STR	\$1.91	\$7.64	N
0	2077939	COUPLER, GROUND ROD, F/U/W 1/2"ROD	\$4.78	\$0.00	N
2	2003846	CUTOUT, 15KV, 100A FUSE HLDR, 300A UNVRS	\$70.74	\$141.48	Y
2	2077794	FUSE LINK, 103A UNVRSL 100A CUTOUT 23" O	\$24.29	\$48.58	N
2	2077822	KIT, ATTACHMENT, FOR ATTACHING "FLYING"	\$63.00	\$126.00	N
4	2077965	MOULDING, GROUND WIRE, PVC 1/2 IN X 8 FT	\$1.74	\$6.96	N
0	2077980	ROD, GROUND, CU BONDED, 1/2"X10', THREADLESS	\$13.72	\$0.00	N
2	2077789	SCREW, LAG PILOT POINT 3/8 X 3	\$0.27	\$0.54	N
20	2077997	STAPLE, SECURES 1/2" PVC MOULDING TO WOO	\$0.27	\$5.40	N
2	2077828	STIRRUP, AL BODY & CU BAIL 1/0-397	\$17.19	\$34.38	N
2	2078006	WASHER, FLAT, GALVANIZED, 2" X 2" X 1/8"	\$0.24	\$0.48	N
2	2004184	WIRE, COPPER, BARE, #4 SOFT DRAWN 7 STR	\$0.63	\$1.32	N
6	2078011	WIRE, COPPER, TIE, #6 SOLID SOFT DRAWN	\$0.38	\$2.28	N
		Total		\$609.22	



Estimate Summary

Design Number 1

Printed Date: 3/11/2021

District: CSA

WR No. 925097

Date Sched: 4/1/21

Date Required: 4/1/21

Contact Name:

Dist Svcs
HDUG GRD takeoff POLE

Additional Information: Full PSC Filing 10/2010

WR Description: HDUG 1250 sq ft GROUND TAKEOFFS

INSTALLATION:	Capital	Oper./Maint.	Total
MATERIAL:	\$138.44	\$0.00	\$138.44
OVERHEAD:	\$19.15	\$0.00	\$19.15
	\$157.59	\$0.00	\$157.59
LABOR HOURS:	3.75	0	3.75
LABOR COST:	\$165.26	\$0.00	\$165.26
OVERHEAD:	\$218.97	\$0.00	\$218.97
	\$384.23	\$0.00	\$384.23
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$541.82	\$0.00	\$541.82
REMOVAL:			
MATERIAL:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TRANSFER:			
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TOTALS:	\$541.82	\$0.00	\$541.82

THIS FORM IS NOT TO BE USED FOR CONTRIBUTION IN AID CONSTRUCTION (CIAC).



Work Request Material Summary

Includes Truck Stock

Design Number 1

Printed Date: 3/11/2021

Dist: CSA

WR No. 925097

Page 1 of 1

Material Number	Description	Unit Price	Total Cost	Asset?
INSTALL				
6	2077939 COUPLER, GROUND ROD, F/U/W 1/2"ROD	\$4.78	\$28.68	N
8	2077980 ROD,GROUND,CU BONDED,1/2"X10',THREADLESS	\$13.72	\$109.76	N
		Total	\$138.44	



Estimate Summary

Design Number 1

Printed Date: 3/11/2021

District: CSA

WR No. 925098

Date Sched: 4/1/21

Date Required: 4/1/21

Contact Name:

Distribution Engineering
HDUG Pri Conduit Material

Additional Information: Full PSC Filing 10/2010

WR Description: HDUG 1250 sq ft PRIMARY CONDUIT

INSTALLATION:	Capital	Oper./Maint.	Total
MATERIAL:	\$8,360.08	\$0.00	\$8,360.08
OVERHEAD:	\$1,156.20	\$0.00	\$1,156.20
	\$9,516.28	\$0.00	\$9,516.28
LABOR HOURS:	0	0	0
LABOR COST:	\$0.05	\$0.00	\$0.05
OVERHEAD:	\$0.07	\$0.00	\$0.07
	\$0.12	\$0.00	\$0.12
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$9,516.40	\$0.00	\$9,516.40
REMOVAL:			
MATERIAL:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TRANSFER:			
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TOTALS:	\$9,516.40	\$0.00	\$9,516.40

THIS FORM IS NOT TO BE USED FOR CONTRIBUTION IN AID CONSTRUCTION (CIAC).



Work Request Material Summary

Includes Truck Stock

Design Number 1

Printed Date: 3/11/2021

Dist: CSA

WR No. 925098

Page 1 of 1

Material Number	Description	Unit Price	Total Cost	Asset?	
INSTALL					
12	2007227	CEMENT, PVC CLEAR FAST DRY QUART W/DAUBE	\$6.22	\$74.64	N
20	2004389	CONDUIT, GALVANIZED 2 IN 10 FT WITH COUP	\$6.78	\$135.60	Y
5935	2004488	CONDUIT, PVC 2 IN 20 FT BELL END	\$1.03	\$6,113.05	Y
108	2004507	COUPLING, PVC 2 IN SCH 40 TEMS 13.01	\$0.60	\$64.80	N
46	2004395	ELBOW, 2" 90 DEGREE ,GALVANIZED, 24" MIN	\$34.29	\$1,577.34	N
8	2004394	ELBOW, GALV 2 INCH 45 DEG THD 15" RADIUS	\$26.25	\$210.00	N
6155	2007414	TAPE, PULLING, POLYSTER, RATED AT 1250#,	\$0.03	\$184.65	N
Total			\$8,360.08		



Estimate Summary

Design Number 1

Printed Date: 3/11/2021

District: CSA

WR No. 925100

Date Sched: 4/1/21

Date Required: 4/1/21

Contact Name:

Dist Svcs
HDUG PRIMARY

Additional Information: Full PSC Filing 10/2010

WR Description: HDUG 1250 sq ft PRIMARY CABLE

INSTALLATION:	Capital	Oper./Maint.	Total
MATERIAL:	\$15,227.81	\$0.00	\$15,227.81
OVERHEAD:	\$2,106.01	\$0.00	\$2,106.01
	\$17,333.82	\$0.00	\$17,333.82
LABOR HOURS:	115.14	0	115.14
LABOR COST:	\$5,068.62	\$0.00	\$5,068.62
OVERHEAD:	\$6,715.92	\$0.00	\$6,715.92
	\$11,784.54	\$0.00	\$11,784.54
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$29,118.36	\$0.00	\$29,118.36
REMOVAL:			
MATERIAL:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TRANSFER:			
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TOTALS:	\$29,118.36	\$0.00	\$29,118.36

THIS FORM IS NOT TO BE USED FOR CONTRIBUTION IN AID CONSTRUCTION (CIAC).



Work Request Material Summary

Includes Truck Stock

Design Number 1

Printed Date: 3/11/2021

Dist: CSA

WR No. 925100

Page 1 of 1

Material Number	Description	Unit Price	Total Cost	Asset?	
INSTALL					
6304	2004343	CABLE, ALUMINUM, 15KV, 1/C, 1/0 AWG SOLI	\$2.08	\$13,112.53	Y
2	2004514	CAP, CONDUIT 2"	\$12.21	\$24.42	N
2	2004453	CAP, END CABLE 600 V CABLE RANGE .940 -	\$1.96	\$3.92	N
2	2003752	CLAMP, CONDUIT GROUND 1-1/4 IN - 2 IN CO	\$7.92	\$15.84	N
0	2004488	CONDUIT, PVC 2 IN 20 FT BELL END	\$1.03	\$0.00	Y
2	2077837	CONNECTOR, COMPRESSION H-BLOCK ACSR 2/0	\$0.66	\$1.32	N
44	2077931	CONNECTOR, VICE CU #2 STR	\$2.38	\$104.72	N
40	2004642	KIT, SEALING, CABLE ACCESSORY, 1/0 - 4/0	\$9.46	\$378.40	N
8	2004403	STRAP, GALV 2 IN 2 HOLE	\$0.28	\$2.24	N
40	2004883	TERMINATOR, LOADBREAK 200 AMP, 1/0 SOL	\$37.76	\$1,510.40	Y
2	2004633	TERMINATOR, POTHEAD 15KV OUTDOOR 1/0 JCN	\$35.75	\$71.50	Y
4	2004184	WIRE, COPPER, BARE, #4 SOFT DRAWN 7 STR	\$0.63	\$2.52	N
Total			\$15,227.81		



Estimate Summary

Design Number 1

Printed Date: 3/11/2021

District: CSA

WR No. 925103

Date Sched: 4/1/21

Date Required: 4/1/21

Contact Name:

Dist Svcs
HDUG SECONDARY

Additional Information: Full PSC Filing 10/2010

WR Description: HDUG 1250 sq ft SECONDARY CABLE

INSTALLATION:	Capital	Oper./Maint.	Total
MATERIAL:	\$8,598.95	\$0.00	\$8,598.95
OVERHEAD:	\$1,189.23	\$0.00	\$1,189.23
	\$9,788.18	\$0.00	\$9,788.18
LABOR HOURS:	146.42	0	146.42
LABOR COST:	\$6,445.28	\$0.00	\$6,445.28
OVERHEAD:	\$8,540.02	\$0.00	\$8,540.02
	\$14,985.30	\$0.00	\$14,985.30
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$24,773.48	\$0.00	\$24,773.48
REMOVAL:			
MATERIAL:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TRANSFER:			
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TOTALS:	\$24,773.48	\$0.00	\$24,773.48

THIS FORM IS NOT TO BE USED FOR CONTRIBUTION IN AID CONSTRUCTION (CIAC).



Work Request Material Summary

Includes Truck Stock

Design Number 1

Printed Date: 3/11/2021

Dist: CSA

WR No. 925103

Page 1 of 1

Material Number	Description	Unit Price	Total Cost	Asset?	
INSTALL					
2029	2004354	CABLE, SWEETBRIAR, AL,UG,600V,2/C,4/0 AW	\$1.39	\$2,820.59	Y
45	2005022	CONNECTOR, 600V URD, 6 POSITION, CONDUCT	\$14.92	\$671.40	N
12	2005025	CONNECTOR, 600V, URD, 8 POSITION, CONDUCT	\$30.35	\$364.20	N
22	2000241	DECAL,WARNING,NOTICE,CLEARANCE,10" X 7"	\$3.56	\$78.32	N
22	2004714	HANDHOLE, ABOVE GRADE, LARGE DOME	\$186.22	\$4,096.84	N
22	2005212	MARKER, CURB LEXAN .040 THICK, ROUND 2.5	\$2.83	\$62.26	N
22	2007395	PADLOCK, RED BRASS BODY 1/4" BRASS SHACK	\$22.97	\$505.34	N
Total			\$8,598.95		



Estimate Summary

Design Number 1

Printed Date: 3/11/2021

District: CSA

WR No. 925104

Contact Name:

Dist Svcs
HDUG SEC CONDUIT

Date Sched: 4/1/21

Date Required: 4/1/21

Additional Information: Full PSC Filing 10/2010

WR Description: HDUG 1250 sq ft SECONDARY CONDUIT

INSTALLATION:	Capital	Oper./Maint.	Total
MATERIAL:	\$5,153.37	\$0.00	\$5,153.37
OVERHEAD:	\$712.71	\$0.00	\$712.71
	\$5,866.08	\$0.00	\$5,866.08
LABOR HOURS:	0	0	0
LABOR COST:	\$0.03	\$0.00	\$0.03
OVERHEAD:	\$0.05	\$0.00	\$0.05
	\$0.08	\$0.00	\$0.08
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$5,866.16	\$0.00	\$5,866.16
REMOVAL:			
MATERIAL:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TRANSFER:			
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TOTALS:	\$5,866.16	\$0.00	\$5,866.16

THIS FORM IS NOT TO BE USED FOR CONTRIBUTION IN AID CONSTRUCTION (CIAC).



Work Request Material Summary

Includes Truck Stock

Design Number 1

Printed Date: 3/11/2021

Dist: CSA

WR No. 925104

Page 1 of 1

Material Number	Description	Unit Price	Total Cost	Asset?	
INSTALL					
1	2007227	CEMENT, PVC CLEAR FAST DRY QUART W/DAUBE	\$6.22	\$6.22	N
6	2007228	CEMENT, PVC GRAY MEDIUM DRY QUART W/DAUB	\$7.27	\$43.62	N
291	2004517	CONDUIT, PVC P & C 3 IN 20 FT	\$1.70	\$494.70	Y
1410	2004529	CONDUIT, PVC, 4" X 20', DB-60-TC-6	\$2.78	\$3,919.80	Y
16	2004521	COUPLING, PVC 3 IN SCH 40 TEMS 13.01	\$2.95	\$47.20	N
72	2004535	COUPLING, PVC 4 IN SCH 40 TEMS 13.01	\$4.28	\$308.16	N
8	2004524	ELBOW, PVC 3 IN 90 DEG 13 IN RAD SCH 40	\$4.52	\$36.16	N
36	2004538	ELBOW, PVC 4", 90 DEG., 16" RADIUS, SCHE	\$6.68	\$240.48	N
1901	2007414	TAPE, PULLING, POLYSTER, RATED AT 1250#,	\$0.03	\$57.03	N
Total			\$5,153.37		



Estimate Summary

Design Number 1

Printed Date: 3/11/2021

District: CSA

WR No. 925106

Date Sched: 4/1/21

Date Required: 4/1/21

Contact Name:

Dist Svcs
HDUG SERVICE CABLE

Additional Information: Full PSC Filing 10/2010

WR Description: HDUG 1250 sq ft SERVICE CABLE

INSTALLATION:	Capital	Oper./Maint.	Total
MATERIAL:	\$16,257.47	\$0.00	\$16,257.47
OVERHEAD:	\$2,248.40	\$0.00	\$2,248.40
	\$18,505.87	\$0.00	\$18,505.87
LABOR HOURS:	1.53	0	1.53
LABOR COST:	\$67.48	\$0.00	\$67.48
OVERHEAD:	\$89.41	\$0.00	\$89.41
	\$156.89	\$0.00	\$156.89
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$18,662.76	\$0.00	\$18,662.76
REMOVAL:			
MATERIAL:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TRANSFER:			
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TOTALS:	\$18,662.76	\$0.00	\$18,662.76

THIS FORM IS NOT TO BE USED FOR CONTRIBUTION IN AID CONSTRUCTION (CIAC).



Work Request Material Summary

Includes Truck Stock

Design Number 1

Printed Date: 3/11/2021

Dist: CSA

WR No. 925106

Page 1 of 1

Material Number	Description	Unit Price	Total Cost	Asset?
INSTALL				
16097 2004351	CABLE, CONVERSE, AL, UG, 600V, 2/C, 2/0,	\$1.01	\$16,257.47	Y
		Total	\$16,257.47	



Estimate Summary

Design Number 1

Printed Date: 3/11/2021

District: CSA

WR No. 925108

Contact Name:

Dist Svcs
HDUG SET METERS

Date Sched: 4/1/21

Date Required: 4/1/21

Additional Information: Full PSC Filing 10/2010

WR Description: HDUG 1250 sq ft METERS

INSTALLATION:	Capital	Oper./Maint.	Total
MATERIAL:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
LABOR HOURS:	35.27	0	35.27
LABOR COST:	\$1,552.59	\$0.00	\$1,552.59
OVERHEAD:	\$2,057.18	\$0.00	\$2,057.18
	\$3,609.77	\$0.00	\$3,609.77
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$3,609.77	\$0.00	\$3,609.77
REMOVAL:			
MATERIAL:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TRANSFER:			
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TOTALS:	\$3,609.77	\$0.00	\$3,609.77

THIS FORM IS NOT TO BE USED FOR CONTRIBUTION IN AID CONSTRUCTION (CIAC).



Estimate Summary

Design Number 1

Printed Date: 3/11/2021

District: CSA

WR No. 925110

Date Sched: 4/1/21

Date Required: 4/1/21

Contact Name:

Dist Svcs
HDUG SERVICE CONDUIT

Additional Information: Full PSC Filing 10/2010

WR Description: HDUG 1250 sq ft SERVICE CONDUIT

INSTALLATION:	Capital	Oper./Maint.	Total
MATERIAL:	\$18,669.34	\$0.00	\$18,669.34
OVERHEAD:	\$2,581.97	\$0.00	\$2,581.97
	\$21,251.31	\$0.00	\$21,251.31
LABOR HOURS:	0	0	0
LABOR COST:	\$0.13	\$0.00	\$0.13
OVERHEAD:	\$0.19	\$0.00	\$0.19
	\$0.32	\$0.00	\$0.32
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$21,251.63	\$0.00	\$21,251.63
REMOVAL:			
MATERIAL:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TRANSFER:			
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TOTALS:	\$21,251.63	\$0.00	\$21,251.63

THIS FORM IS NOT TO BE USED FOR CONTRIBUTION IN AID CONSTRUCTION (CIAC).



Work Request Material Summary

Includes Truck Stock

Design Number 1

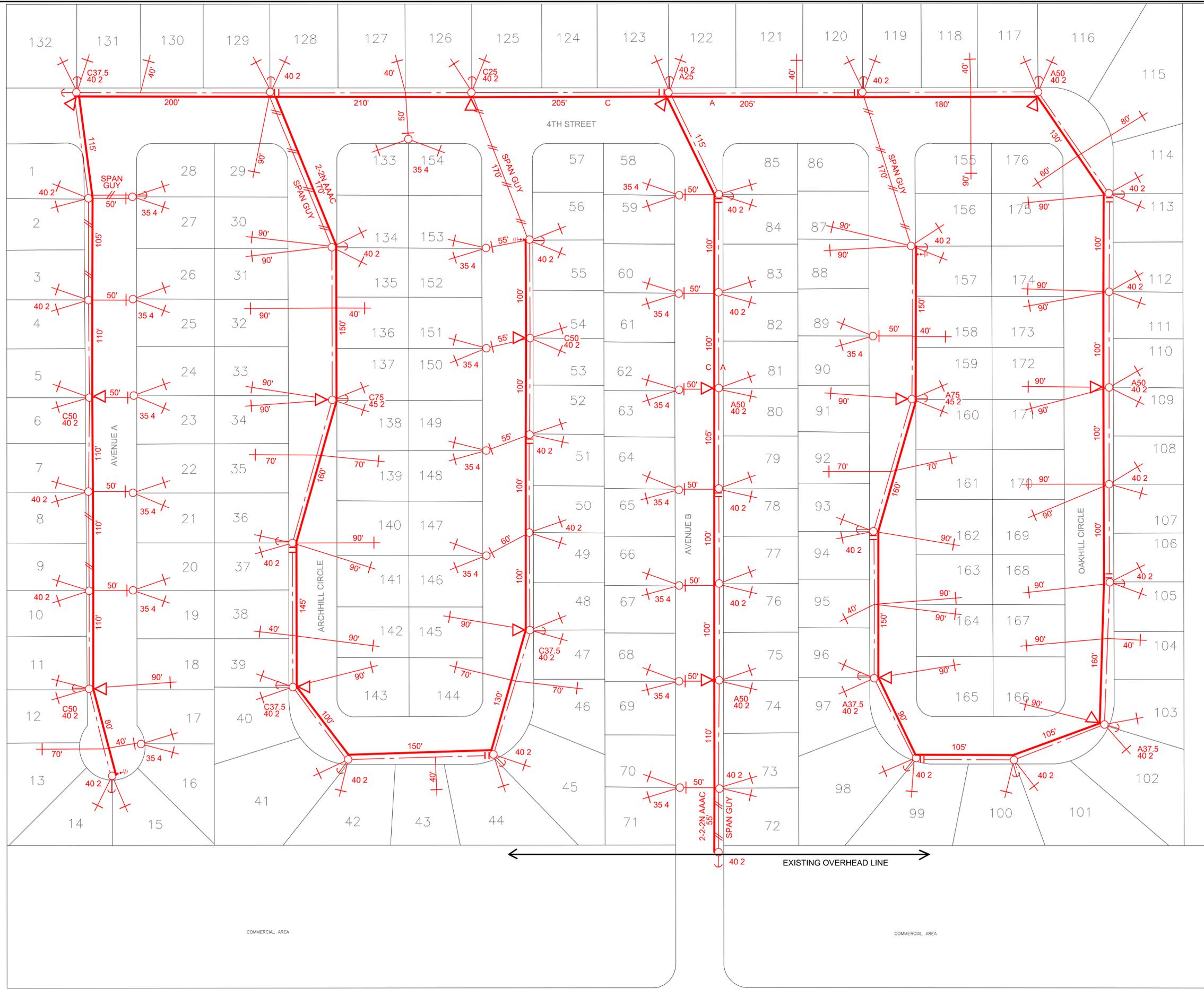
Printed Date: 3/11/2021

Dist: CSA

WR No. 925110

Page 1 of 1

Material Number	Description	Unit Price	Total Cost	Asset?	
INSTALL					
176	2004493	ADAPTOR, 2" PVC, FEMALE SLIP TO MALE THR	\$0.40	\$70.40	N
31	2007227	CEMENT, PVC CLEAR FAST DRY QUART W/DAUBE	\$6.22	\$192.82	N
15330	2004488	CONDUIT, PVC 2 IN 20 FT BELL END	\$1.03	\$15,789.90	Y
176	2004491	CONDUIT, PVC 2 IN 250 FT ROLL FLEXIBLE	\$1.13	\$198.88	N
176	2004401	CONDUIT, SERVICE RISER, PVC, 2"	\$4.92	\$865.92	N
896	2004507	COUPLING, PVC 2 IN SCH 40 TEMS 13.01	\$0.60	\$537.60	N
448	2004511	ELBOW, CONDUIT PVC 2 IN SCH 40 90 DEG 9-	\$1.26	\$564.48	N
176	2004396	NUT, LOCK GALV 2 IN	\$0.54	\$95.04	N
11810	2007414	TAPE, PULLING, POLYSTER, RATED AT 1250#,	\$0.03	\$354.30	N
Total			\$18,669.34		



LEGEND
200 AMP SERVICE

- WOOD POLE
- ▽ TRANSFORMER
- 2/0 TRIPLEX SERVICE DROP
- - - 2/0 TRIPLEX SECONDARY
- #2 AAAC PRIMARY
- DOWN GUY
- SPAN GUY
- - - OPEN

737.5 TOTAL CONNECTED KVA
 800 TOTAL PEAK DEMAND KVA
 2.25 KVA TRANSFORMERS
 5.375 KVA TRANSFORMERS
 7.59 KVA TRANSFORMERS
 2.75 KVA TRANSFORMERS
 0.100 KVA TRANSFORMERS
 6165 #2AAAC PRIMARY
 44 PRIMARY POLES (2.45' CLASS 2, 42.40' CLASS 2)
 5155 2/0 AWG TRIPLEX SECONDARY
 0.40 AWG TRIPLEX SECONDARY
 225 #2AAAC SECONDARY NEUTRAL
 965 2-2/0 & 1-1/0 AL TRIPLEX SERVICE DROP (CONSIDERED SECONDARY)
 0.2-4/0 & 1-2/0 AL TRIPLEX SERVICE DROP (CONSIDERED SECONDARY)
 19 SECONDARY POLES (35' CLASS 4)
 8960 2-2/0 & 1-1/0 AL TRIPLEX SERVICE DROP
 0.2-4/0 & 1-2/0 AL TRIPLEX SERVICE DROP

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

ONLY AN AUTHORIZED REPRESENTATIVE OF TAMPA ELECTRIC CO. SHALL UTILIZE THIS DRAWING TO DETERMINE EXACT LOCATION OF UNDERGROUND LINES. IF IT IS NECESSARY TO EXCAVATE IN THE GENERAL AREA OF INDICATED ELECTRICAL LINES, PRIOR TO DIGGING 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.
 FET: _____ DATE: / /
 LFET: _____ DATE: / /

HD-30

TAMPA ELECTRIC COMPANY
 SCALE: 1" = 50'
 FET/LEF APPROV: _____
 FET: _____
 LFET: _____
 DISTRIBUTION ENGINEERING

OVERHEAD HIGH DENSITY SUBDIVISION DESIGN

WR: _____
 SHEET 1 OF 1

OH Construction Cost Data Summary
High Density (176-Lot) OH Subdivision Costs

A	B	C (D+ M) Material and Handling	D Material	E (F + L) Total Labor Plus Vehicles	F (G + H + I) Total Labor	G Base Labor	H (G x J x TLF) Operations Labor Overheads	I (G x K x CLF) Contract Labor Overheads	J TEC Work %	K Contractor Work %	L Vehicle	M (D x MHR) Material Handling	N (C+E) Total	
Line #	Work Type/WR #	Description												
1	Transformers													
2	925111	Install & Ground Transformers	31,143.07	27,751.80	12,366.93	11,060.26	6,439.97	4,103.55	516.74	60%	40%	\$1,306.67	3,391.27	43,510.00
3														
4	Primary													
5	925112	Install Primary Line includes Grounding Primary Takeoffs	2,544.16	2,267.12	6,190.06	5,536.03	3,223.42	2,053.96	258.65	60%	40%	\$654.03	277.04	8,734.22
6														
7	Poles													
8	925113	Install Poles and Guy Stubs Includes Haul Poles Out	22,510.66	20,059.40	36,177.05	32,354.65	18,838.88	12,004.13	1,511.63	60%	40%	\$3,822.41	2,451.26	58,687.71
9														
10	Secondary													
11	925114	Install Secondary Cable	12,719.79	11,334.69	18,719.51	16,741.64	9,748.02	6,211.44	782.18	60%	40%	\$1,977.87	1,385.10	31,439.30
12														
13	Services													
14	927142	Install Service Cable	10,342.22	9,216.02	12,847.44	11,490.00	6,690.19	4,262.99	536.82	60%	40%	\$1,357.44	1,126.20	23,189.66
15	927163	Install Meters	17,751.95	\$15,818.88	3,314.51	2,666.48	1,552.59	989.31	124.58	60%	40%	648.03	1,933.07	21,066.46
16			28,094.16	25,034.90	16,161.95	14,156.48	8,242.78	5,252.30	661.40			2,005.47	3,059.26	44,256.11
17														
18	Engineering	Design/Inspection/Coordination	-	-	10,785.62		-	-	-	100%	0%		-	10,785.62
19														
20	Tree Trim		-	-	-	-	-	-	-			-	-	-
21														
22	Totals (Sum of lines 2, 5, 8, 11, 16, 18, and 20)		97,011.84	86,447.91	100,401.14	79,849.06	46,493.07	29,625.38	3,730.60			9,766.45	10,563.93	197,412.98
23	Cost "Per Lot" (Line 34/ 176 lots)		551.20		570.46									1,121.66

Adjustment Factors		
TEC Labor Overhead Factor (excludes engineering)	TLF =	1.062
Contractor Labor Overhead Factor	CLF =	0.2006
Current year material handling charge rate	MHR =	0.1222

High Density - 176 Lots - Overhead Material List

This worksheet lists the totals for major materials to be listed on the associated work request print as requested by the PSC.

737.5 Total Connected KVA
800 Total peak demand KVA
2 25 kVA Transformers
5 37.5 kVA Transformers
7 50 kVA Transformers
2 75 kVA Transformers
0 100 kVA Transformers
6165 #2AAAC Primary
44 Primary Poles
5155 2/0 AWG Triplex Secondary
0 4/0 AWG Triplex Secondary
225 #2AAAC Secondary Neutral
965 2-2/0 & 1-1/0 AL Triplex Service Drop (considered secondary)
0 2-4/0 & 1-2/0 AL Triplex Service Drop (considered secondary)
19 Secondary Poles
8960 2-2/0 & 1-1/0 AL Triplex Service Drop
0 2-4/0 & 1-2/0 AL Triplex Service Drop

Summary of assemblies (CU's) for High Density Overhead Design - March 2018

Work Request #1	925111 - Transformers (enter these Construction Units into WorkPro)								
Assemblies ==>	25 KVA	37.5 KVA	50 KVA	75 KVA	100 KVA	Stirrup	Spacer	Grounding	
	PKT11W3F	PKT11W4F	PKT11W5F	PKT11W6F	PKT11W7F	ALSTRP1/0	SEWC	GRDMEG1/2	
Total Quantities ==>	2	5	7	2	0	16	16	16	

Work Request #2	925112 - Primary								
Assemblies ==>	#2 AAAC	1st span	Additional	1st span	Additional	Fused cutouts	DE & TAP	Fuses	Grounding
	WIOPA	WIO2F	WIO2A	WIO1F	WIO1A	PKP208WB3A	PKP101WA3A	FLOH103	GRDMEG1/2
Total Quantities ==>	6165	1	7	3	32	1	4	2	3

Work Request #3	925113 - Poles and Guys												
Should be ==>	Pole haul	2ø Deadend	2 ø tangent	2 ø Corner	1ø Deadend	1ø angle <20	1ø angle <20	1ø Tangent	1ø angle >20	3 ø	Down guys	Pole hardware	Guy wire
Assemblies ==>	POLE_HAUL	STP402_DE_40C2	STP103_TAN_40C2	STP302_RC_40C2	STP401_DE_40C2	STP101_ANG_40C2	STP101_ANG_45C2	STP101_TAN_40C2	STP301_RC_40C2	STP104E4B	PKG12W2H	PKG31W1H	GUYSTR3/8
Total Quantities ==>	44	1	6	1	4	5	2	13	11	1	29	4	340

Work Request #4	925114 - Secondary - From Secondary&Neutral worksheet												
Assemblies ==>	35' CL 4	0	2/0	4/0	#2 Neutral	Labor	Labor	Eyebolt	Eyenu	DE+Bolt	Pole hardware	Guy wire	
	STS11C	POLE_HAUL	WIO3SB	WIO3SC	C2AAAC	WIOCF	WIOCA	SEW1DEN	SEG1DEN	PKS11W	CABLEOPEN	PKG31W1H	GUYSTR3/8
Total Quantities ==>	0	0	5155	0	225	6	37	2	2	8	14	8	565

More of Work Request #4	- Secondary continued - From Secondary&Neutral worksheet and SlackSecondary (service cable) & Secondary Poles worksheet										
Assemblies ==>	POLE_HAUL	35' Class 4	Deadend	Clamp	2/0 triplex	4/0 triplex	0	Down guys	Pole hardware	Guy wire	
		STS11C	PKS21G	CLMIDSPAN	CA2/0TPX	CA4/0TPX	SVLABOR	PKG11W1H	PKG31W1H	GUYSTR3/8	
Total Quantities ==>	19	19	35	3	965	0	19	1	2	50	

Work Request #5	927142 - Services			
Assemblies	2/0 triplex	4/0 triplex	Clamp	
	CA2/0TPX	CA4/0TPX	CLMIDSPAN	SVLABOR
Quantities	8960	0	26	0

Work Request #5	927163 - Set Meter
Assemblies	METERLABOR
Quantities	176



Estimate Summary

Design Number 1

Printed Date: 3/11/2021

District: CSA

WR No. 925111

Distribution Services
HDOH TRANSFORMER

Date Sched: 4/1/21

Date Required: 4/1/21

Contact Name:
Tampa Electric

Additional Information: Full PSC Filing 10/2010

WR Description: HDOH 1250 sq ft TRANSFORMERS

INSTALLATION:	Capital	Oper./Maint.	Total
MATERIAL:	\$27,751.80	\$0.00	\$27,751.80
OVERHEAD:	\$3,838.05	\$0.00	\$3,838.05
	\$31,589.85	\$0.00	\$31,589.85
LABOR HOURS:	146.26	0	146.26
LABOR COST:	\$6,439.97	\$0.00	\$6,439.97
OVERHEAD:	\$8,532.90	\$0.00	\$8,532.90
	\$14,972.87	\$0.00	\$14,972.87
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$46,562.72	\$0.00	\$46,562.72
REMOVAL:			
MATERIAL:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TRANSFER:			
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TOTALS:	\$46,562.72	\$0.00	\$46,562.72

THIS FORM IS NOT TO BE USED FOR CONTRIBUTION IN AID CONSTRUCTION (CIAC).



Work Request Material Summary

Includes Truck Stock

Design Number 1

Printed Date: 3/11/2021

Dist: CSA

WR No. 925111

Page 1 of 1

Material Number	Description	Unit Price	Total Cost	Asset?
INSTALL				
16	2003646 ARRESTER, DISTRIBUTION, 10KV, 8.4KV MCOV	\$39.68	\$634.88	Y
14	2077754 BOLT, MACHINE 5/8" X 10", GALV. FULL	\$1.04	\$14.56	N
32	2077755 BOLT,MACHINE,SQ HEAD,5/8"X12",ONE SQ NUT	\$1.16	\$37.12	N
16	2003690 BRACKET, CUTOUT, ARRESTER & POTHEAD DWG	\$7.22	\$115.52	N
16	2004660 BRACKET,"L" 5-5/8"IN LENGTH FOR MTG CUTO	\$10.41	\$166.56	N
208	2004197 CABLE, HANDCOIL, COPPER, 600V, 2/0 AWG,	\$2.32	\$482.56	N
24	2004199 CABLE, HANDCOIL, COPPER, 600V, 4/0 AWG,	\$3.75	\$90.00	N
16	2077906 CLAMP, GROUND ROD, F/U/W 1/2"ROD	\$1.80	\$28.80	N
16	2077911 CLAMP, HOT LINE CU TO CU #6 SOL- 2 STR T	\$5.73	\$91.68	N
32	2078000 CLAMP,GND,TRANSFORMER,#10 SOL-#1 STR CU	\$2.31	\$73.92	N
640	2078012 CONDUCTOR, COPPERCLAD, 3 STR. #9, DSA 30	\$0.84	\$537.60	N
4	2003528 CONNECTOR, 2-BOLT AL MAIN 336-500MCM TAP	\$25.78	\$103.12	N
42	2077839 CONNECTOR, COMPRESSION H-BLOCK ACSR 1/0-	\$0.53	\$22.26	N
16	2077837 CONNECTOR, COMPRESSION H-BLOCK ACSR 2/0	\$0.66	\$10.56	N
2	2077845 CONNECTOR, COMPRESSION H-BLOCK ACSR 4/0	\$0.68	\$1.36	N
64	2077930 CONNECTOR, VICE CU #4 STR	\$1.91	\$122.24	N
48	2077939 COUPLER, GROUND ROD, F/U/W 1/2"ROD	\$4.78	\$229.44	N
24	2003516 COVER, SNAP-ON SQUEEZON CONNECTOR D DIE	\$0.39	\$9.36	N
16	2003846 CUTOUT, 15KV, 100A FUSE HLDR, 300A UNVRS	\$70.74	\$1,131.84	Y
7	2077806 FUSE LINK, 10A UNVRSL 100A CUTOUT 23" OA	\$3.91	\$27.37	N
2	2077807 FUSE LINK, 15A UNVRSL 100A CUTOUT 23" OA	\$3.93	\$7.86	N
2	2077804 FUSE LINK, 5A UNVRSL 100A CUTOUT 23" OAL	\$3.90	\$7.80	N
5	2077805 FUSE LINK, 7A UNVRSL 100A CUTOUT 23" OAL	\$3.89	\$19.45	N
32	2077965 MOULDING, GROUND WIRE, PVC 1/2 IN X 8 FT	\$1.74	\$55.68	N
16	2007368 PROTECTOR, WILD LIFE, SLIP-ON TYPE	\$5.35	\$85.60	N
64	2077980 ROD,GROUND,CU BONDED,1/2"X10',THREADLESS	\$13.72	\$878.08	N
16	2077767 ROLLED BOLT, DOUBLE-ARMING, 5/8"X 16"	\$2.65	\$42.40	N
16	2077789 SCREW, LAG PILOT POINT 3/8 X 3	\$0.27	\$4.32	N
16	2077812 SPACER, CABLED SECONDARY	\$6.79	\$108.64	N
140	2077997 STAPLE, SECURES 1/2" PVC MOULDING TO WOO	\$0.27	\$37.80	N
2	2001367 TX,OH,25 kVA,7.62/13.2Y,120/240,FR3	\$1,046.46	\$2,092.92	Y
5	2001368 TX,OH,37.5 kVA,7.62/13.2Y,120/240,FR3	\$1,253.83	\$6,269.15	Y
7	2001369 TX,OH,50 kVA,7.62/13.2Y,120/240,FR3	\$1,463.60	\$10,245.20	Y
2	2001370 TX,OH,75 kVA,7.62/13.2Y,120/240,FR3	\$1,924.56	\$3,849.12	Y
80	2078006 WASHER, FLAT, GALVANIZED, 2" X 2" X 1/8"	\$0.24	\$19.20	N
48	2078014 WIRE, ALUMINUM, TIE, #4 BARE ANNEALED	\$0.11	\$5.28	N
50	2004184 WIRE, COPPER, BARE, #4 SOFT DRAWN 7 STR	\$0.63	\$31.75	N
160	2078011 WIRE, COPPER, TIE, #6 SOLID SOFT DRAWN	\$0.38	\$60.80	N
	Total		\$27,751.80	



Estimate Summary

Design Number 1

Printed Date: 3/11/2021

District: CSA

WR No. 925112

Date Sched: 4/1/21

Date Required: 4/1/21

Contact Name:
Tampa Electric

Distribution Services
HDOH PRIMARY

Additional Information: Full PSC Filing 10/2010

WR Description: HDOH 1250 sq ft PRIMARY

INSTALLATION:	Capital	Oper./Maint.	Total
MATERIAL:	\$2,267.12	\$0.00	\$2,267.12
OVERHEAD:	\$313.55	\$0.00	\$313.55
	\$2,580.67	\$0.00	\$2,580.67
LABOR HOURS:	73.22	0	73.22
LABOR COST:	\$3,223.42	\$0.00	\$3,223.42
OVERHEAD:	\$4,271.04	\$0.00	\$4,271.04
	\$7,494.46	\$0.00	\$7,494.46
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$10,075.13	\$0.00	\$10,075.13
REMOVAL:			
MATERIAL:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TRANSFER:			
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TOTALS:	\$10,075.13	\$0.00	\$10,075.13

THIS FORM IS NOT TO BE USED FOR CONTRIBUTION IN AID CONSTRUCTION (CIAC).



Work Request Material Summary

Includes Truck Stock

Design Number 1

Printed Date: 3/11/2021

Dist: CSA

WR No. 925112

Page 1 of 1

Material Number	Description	Unit Price	Total Cost	Asset?
INSTALL				
3	2003646 ARRESTER, DISTRIBUTION, 10KV, 8.4KV MCOV	\$39.68	\$119.04	Y
2	2077738 BOLT, 5/8" X 8" EYE GALV RTS 12,400 LBS.	\$2.99	\$5.98	N
4	2077739 BOLT, EYE, 5/8 IN. X 10 IN., GALVANIZED	\$3.12	\$12.48	N
2	2077744 BOLT, MACHINE 1/2 INCH X 7 INCH	\$0.92	\$1.84	N
4	2077754 BOLT, MACHINE 5/8" X 10", GALV. FULL	\$1.04	\$4.16	N
1	2077756 BOLT,MACHINE,SQ HEAD,5/8"X14",ONE SQ NUT	\$1.29	\$1.29	N
3	2003681 BRACKET, "L", LIGHTNING ARRESTER 10 KV	\$7.95	\$23.85	N
2	2004660 BRACKET,"L" 5-5/8"IN LENGTH FOR MTG CUTO	\$10.41	\$20.82	N
8	2077818 CLAMP, DEADEND ACSR OR AAC #2-4/0OR .30-	\$9.12	\$72.96	N
3	2077906 CLAMP, GROUND ROD, F/U/W 1/2"ROD	\$1.80	\$5.40	N
9	2077911 CLAMP, HOT LINE CU TO CU #6 SOL- 2 STR T	\$5.73	\$51.57	N
3	2077813 CLAMP, SLACK SPAN DEADEND #2 ACSR - 2/0	\$10.09	\$30.27	N
6473	2004331 CONDUCTOR, BARE OVERHEAD, 2 AWG, AAAC, 7	\$0.15	\$971.00	Y
120	2078012 CONDUCTOR, COPPERCLAD, 3 STR. #9, DSA 30	\$0.84	\$100.80	N
11	2077838 CONNECTOR, COMPRESSION H-BLOCK ACSR #2-1	\$0.41	\$4.51	N
7	2077837 CONNECTOR, COMPRESSION H-BLOCK ACSR 2/0	\$0.66	\$4.62	N
6	2077930 CONNECTOR, VICE CU #4 STR	\$1.91	\$11.46	N
9	2077939 COUPLER, GROUND ROD, F/U/W 1/2"ROD	\$4.78	\$43.02	N
1	2002955 CROSSARM, 5' DEADEND COMPOSITE	\$116.70	\$116.70	N
2	2003846 CUTOUT, 15KV, 100A FUSE HLDR, 300A UNVRS	\$70.74	\$141.48	Y
2	2077794 FUSE LINK, 103A UNVRS 100A CUTOUT 23" O	\$24.29	\$48.58	N
1	2077954 INSULATOR, PIN TYPE, 10KV, ANSI CLASS 55	\$3.75	\$3.75	N
2	2003882 INSULATOR, POLYMER VERTICAL LINE POST 25	\$50.80	\$101.60	N
4	2077959 INSULATOR, SUSPENSION, POLYMER, 25KV, AP	\$11.86	\$47.44	N
6	2077965 MOULDING, GROUND WIRE, PVC 1/2 IN X 8 FT	\$1.74	\$10.44	N
5	2077783 NUT, EYE, STANDARD, 1-1/2" GALVANIZED FO	\$1.51	\$7.55	N
1	2077971 PIN, CROSSARM 5/8" X 6-1/2" BOLT, 1" LEA	\$5.16	\$5.16	N
12	2077980 ROD,GROUND,CU BONDED,1/2"X10',THREADLESS	\$13.72	\$164.64	N
3	2077789 SCREW, LAG PILOT POINT 3/8 X 3	\$0.27	\$0.81	N
30	2077997 STAPLE, SECURES 1/2" PVC MOULDING TO WOO	\$0.27	\$8.10	N
2	2077828 STIRRUP, AL BODY & CU BAIL 1/0-397	\$17.19	\$34.38	N
7	2077826 STIRRUP, AL BODY & CU BAIL 2-4/0	\$10.18	\$71.26	N
2	2004029 STUD-LINEPOST INSULATOR 3/4"X5/8 7"BOLT	\$4.09	\$8.18	N
1	9999999 USED AS A STOCK NUMBER PLACEHOLDER	\$0.00	\$0.00	N
4	2078005 WASHER, FLAT, GALVANIZED, 2" X 2" X 1/8	\$0.23	\$0.92	N
13	2078006 WASHER, FLAT, GALVANIZED, 2" X 2" X 1/8"	\$0.24	\$3.12	N
2	2008135 WASHER, LOCK T316SS 1/2 IN	\$0.18	\$0.36	N
3	2004184 WIRE, COPPER, BARE, #4 SOFT DRAWN 7 STR	\$0.63	\$1.89	N
15	2078011 WIRE, COPPER, TIE, #6 SOLID SOFT DRAWN	\$0.38	\$5.70	N
		Total	\$2,267.12	



Estimate Summary

Design Number 1

Printed Date: 3/11/2021

District: CSA

WR No. 925113

Distribution Services
HDOH POLES

Date Sched: 4/1/21

Date Required: 4/1/21

Contact Name:
Tampa Electric

Additional Information: Full PSC Filing 10/2010
WR Description: HDOH 1250 sq ft POLES

INSTALLATION:	Capital	Oper./Maint.	Total
MATERIAL:	\$20,059.40	\$0.00	\$20,059.40
OVERHEAD:	\$2,774.22	\$0.00	\$2,774.22
	\$22,833.62	\$0.00	\$22,833.62
LABOR HOURS:	427.97	0	427.97
LABOR COST:	\$18,838.88	\$0.00	\$18,838.88
OVERHEAD:	\$24,961.48	\$0.00	\$24,961.48
	\$43,800.36	\$0.00	\$43,800.36
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$66,633.98	\$0.00	\$66,633.98
REMOVAL:			
MATERIAL:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TRANSFER:			
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TOTALS:	\$66,633.98	\$0.00	\$66,633.98

THIS FORM IS NOT TO BE USED FOR CONTRIBUTION IN AID CONSTRUCTION (CIAC).



Work Request Material Summary

Includes Truck Stock

Design Number 1

Printed Date: 3/11/2021

Dist: CSA

WR No. 925113

Page 1 of 1

Material Number	Description	Unit Price	Total Cost	Asset?
INSTALL				
29	2003632 ANCHOR,SCRW GALV 10" WING 1-1/4" ROD 8"	\$48.15	\$1,396.35	N
20	2077739 BOLT, EYE, 5/8 IN. X 10 IN., GALVANIZED	\$3.12	\$62.40	N
62	2077764 BOLT, MACHINE 3/4" X 12", GALV	\$2.41	\$149.42	N
40	2077754 BOLT, MACHINE 5/8" X 10", GALV. FULL	\$1.04	\$41.60	N
19	2077753 BOLT, MACHINE 5/8" X 8", GALV.	\$1.05	\$19.95	N
1	2077780 BOLT, SPOOL, 5/8" X 10", GALV. SINGLE UP	\$4.16	\$4.16	N
45	2077755 BOLT,MACHINE,SQ HEAD,5/8"X12",ONE SQ NUT	\$1.16	\$52.20	N
8	2003686 BRACKET, FIBERGLASS STANDOFF VERTICAL24"	\$48.88	\$391.04	N
7	2077818 CLAMP, DEADEND ACSR OR AAC #2-4/0OR .30-	\$9.12	\$63.84	N
13	2003508 CLAMP, SUSPENSION AL ANGLE RANGE .50 TO	\$13.95	\$181.35	N
19	2077924 CLEVIS, STEEL LESS INSULATOR 5/8 IN PIN	\$9.38	\$178.22	N
105	2078012 CONDUCTOR, COPPERCLAD, 3 STR. #9, DSA 30	\$0.84	\$88.20	N
25	2077837 CONNECTOR, COMPRESSION H-BLOCK ACSR 2/0	\$0.66	\$16.50	N
21	2077930 CONNECTOR, VICE CU #4 STR	\$1.91	\$40.11	N
2	2077765 DOUBLE-ARMING, GALVANIZED 5/8 "X 12"	\$2.35	\$4.70	N
29	2003636 EXTENSION ROD, ANCHOR 1-1/4 X 72 6 FT	\$50.54	\$1,465.66	N
27	2077901 FIBERGLASS RIDGE-PIN	\$28.87	\$779.49	N
120	2077949 GRIP,GUY,FORMED WIRE DEADEND,3/8"EHS	\$2.27	\$272.40	N
22	2077862 GUARD, LINE #2 ACSR & AAAC STR 6/1, 7	\$1.95	\$42.90	N
3	2077863 GUARD, LINE 2/0 ACSR & AAAC STR 6/1, 7	\$2.68	\$8.04	N
62	2077951 HOOK, GUY	\$2.73	\$169.26	N
35	2077954 INSULATOR, PIN TYPE, 10KV, ANSI CLASS 55	\$3.75	\$131.25	N
1	2077952 INSULATOR, SPOOL, ANSI CLASS 53-3, TRANS	\$1.21	\$1.21	N
33	2077961 INSULATOR, STRAIN FIBERGLASS 36 IN 15,00	\$14.73	\$486.09	N
19	2077959 INSULATOR, SUSPENSION, POLYMER, 25KV, AP	\$11.86	\$225.34	N
29	2077979 MARKER, GUY WIRE PLASTIC 8' IN LENGTH CO	\$4.43	\$128.47	N
42	2002857 POLE, WOOD, 40FT CLASS 2, CCA TREATED	\$272.68	\$11,452.56	Y
2	2002858 POLE, WOOD, 45 FT CLASS 2, CCA TREATED.	\$323.31	\$646.62	Y
23	2077767 ROLLED BOLT, DOUBLE-ARMING, 5/8"X 16"	\$2.65	\$60.95	N
62	2077790 SCREW, LAG 1/2" X 4", GALV., TWIST DRIVE	\$0.47	\$29.14	N
48	2077812 SPACER, CABLED SECONDARY	\$6.79	\$325.92	N
7	2003612 TIE, PREFORMED SIDE TIE #2 ACSR OR #2 A	\$2.64	\$18.48	N
28	2003613 TIE, TOP, FORMED WIRE #2 ACSR OR #2 AAAC	\$2.87	\$80.36	N
62	2078002 WASHER, CURVED, MALLEABLE, 3" X 3"	\$1.22	\$75.64	N
156	2078006 WASHER, FLAT, GALVANIZED, 2" X 2" X 1/8"	\$0.24	\$37.44	N
146	2078014 WIRE, ALUMINUM, TIE, #4 BARE ANNEALED	\$0.11	\$16.06	N
2776	2005879 WIRE,GUY,EHS STEEL,GALV,3/8",15.4K RBS	\$0.33	\$916.08	N
		Total	\$20,059.40	



Estimate Summary

Design Number 1

Printed Date: 3/11/2021

District: CSA

WR No. 925114

Contact Name:

Dist Eng
HDOH SECONDARY

Date Sched: 4/1/21

Date Required: 4/1/21

Additional Information: Full PSC Filing 10/2010

WR Description: HDOH 1250 sq ft SECONDARY

INSTALLATION:	Capital	Oper./Maint.	Total
MATERIAL:	\$11,334.69	\$0.00	\$11,334.69
OVERHEAD:	\$1,567.60	\$0.00	\$1,567.60
	\$12,902.29	\$0.00	\$12,902.29
LABOR HOURS:	221.46	0	221.46
LABOR COST:	\$9,748.02	\$0.00	\$9,748.02
OVERHEAD:	\$12,916.13	\$0.00	\$12,916.13
	\$22,664.15	\$0.00	\$22,664.15
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$35,566.44	\$0.00	\$35,566.44
REMOVAL:			
MATERIAL:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TRANSFER:			
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TOTALS:	\$35,566.44	\$0.00	\$35,566.44

THIS FORM IS NOT TO BE USED FOR CONTRIBUTION IN AID CONSTRUCTION (CIAC).



Work Request Material Summary

Includes Truck Stock

Design Number 1

Printed Date: 3/11/2021

Dist: CSA

WR No. 925114

Page 1 of 1

Material Number	Description	Unit Price	Total Cost	Asset?
INSTALL				
1	2003632 ANCHOR,SCRW GALV 10" WING 1-1/4" ROD 8"	\$48.15	\$48.15	N
10	2077739 BOLT, EYE, 5/8 IN. X 10 IN., GALVANIZED	\$3.12	\$31.20	N
11	2077764 BOLT, MACHINE 3/4" X 12", GALV	\$2.41	\$26.51	N
1	2077755 BOLT,MACHINE,SQ HEAD,5/8"X12",ONE SQ NUT	\$1.16	\$1.16	N
5413	2004338 CABLE, OVERHEAD SECONDARY, TRIPLEX, 2/0	\$1.15	\$6,224.72	Y
1013	2004364 CABLE, SERVICE DROP AL 2-2/0 & 1-1/0 NEU	\$0.96	\$972.77	Y
43	2077818 CLAMP, DEADEND ACSR OR AAC #2-4/0OR .30-	\$9.12	\$392.16	N
3	2003770 CLAMP, MID SPAN ALUMINUM 1/4 IN - 1/2 IN	\$7.09	\$21.27	N
236	2004331 CONDUCTOR, BARE OVERHEAD, 2 AWG, AAAC, 7	\$0.15	\$35.45	Y
129	2077839 CONNECTOR, COMPRESSION H-BLOCK ACSR 1/0-	\$0.53	\$68.37	N
8	2077837 CONNECTOR, COMPRESSION H-BLOCK ACSR 2/0	\$0.66	\$5.28	N
8	2077931 CONNECTOR, VICE CU #2 STR	\$2.38	\$19.04	N
86	2003516 COVER, SNAP-ON SQUEEZON CONNECTOR D DIE	\$0.39	\$33.54	N
1	2003636 EXTENSION ROD, ANCHOR 1-1/4 X 72 6 FT	\$50.54	\$50.54	N
12	2077949 GRIP,GUY,FORMED WIRE DEADEND,3/8"EHS	\$2.27	\$27.24	N
11	2077951 HOOK, GUY	\$2.73	\$30.03	N
10	2077961 INSULATOR, STRAIN FIBERGLASS 36 IN 15,00	\$14.73	\$147.30	N
1	2077979 MARKER, GUY WIRE PLASTIC 8' IN LENGTH CO	\$4.43	\$4.43	N
37	2077783 NUT, EYE, STANDARD, 1-1/2" GALVANIZED FO	\$1.51	\$55.87	N
19	2002842 POLE, WOOD, 35 FT, CLASS 4, CCA TREATED.	\$141.93	\$2,696.67	Y
19	2077767 ROLLED BOLT, DOUBLE-ARMING, 5/8"X 16"	\$2.65	\$50.35	N
11	2077790 SCREW, LAG 1/2" X 4", GALV., TWIST DRIVE	\$0.47	\$5.17	N
19	2077812 SPACER, CABLED SECONDARY	\$6.79	\$129.01	N
11	2078002 WASHER, CURVED, MALLEABLE, 3" X 3"	\$1.22	\$13.42	N
50	2078006 WASHER, FLAT, GALVANIZED, 2" X 2" X 1/8"	\$0.24	\$12.00	N
57	2078014 WIRE, ALUMINUM, TIE, #4 BARE ANNEALED	\$0.11	\$6.27	N
16	2004184 WIRE, COPPER, BARE, #4 SOFT DRAWN 7 STR	\$0.63	\$10.08	N
657	2005879 WIRE,GUY,EHS STEEL,GALV,3/8",15.4K RBS	\$0.33	\$216.81	N
		Total	\$11,334.69	



Estimate Summary

Design Number 1

Printed Date: 3/11/2021

District: CSA

WR No. 927142

Date Sched: 4/1/21

Date Required: 4/1/21

Contact Name:

Distribution Services
HDOH SERVICE

Additional Information: Full PSC Filing 10/2010

WR Description: HDOH 1250 sq ft SERVICE

INSTALLATION:	Capital	Oper./Maint.	Total
MATERIAL:	\$9,216.02	\$0.00	\$9,216.02
OVERHEAD:	\$1,274.57	\$0.00	\$1,274.57
	\$10,490.59	\$0.00	\$10,490.59
LABOR HOURS:	151.98	0	151.98
LABOR COST:	\$6,690.19	\$0.00	\$6,690.19
OVERHEAD:	\$8,864.50	\$0.00	\$8,864.50
	\$15,554.69	\$0.00	\$15,554.69
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$26,045.28	\$0.00	\$26,045.28
REMOVAL:			
MATERIAL:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TRANSFER:			
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TOTALS:	\$26,045.28	\$0.00	\$26,045.28

THIS FORM IS NOT TO BE USED FOR CONTRIBUTION IN AID CONSTRUCTION (CIAC).



Work Request Material Summary

Includes Truck Stock

Design Number 1

Printed Date: 3/11/2021

Dist: CSA

WR No. 927142

Page 1 of 1

Material Number		Description	Unit Price	Total Cost	Asset?
INSTALL					
9408	2004364	CABLE, SERVICE DROP AL 2-2/0 & 1-1/0 NEU	\$0.96	\$9,031.68	Y
0	2004366	CABLE, SERVICE DROP AL 2-4/0 & 1-2/0 NEU	\$1.42	\$0.00	Y
26	2003770	CLAMP, MID SPAN ALUMINUM 1/4 IN - 1/2 IN	\$7.09	\$184.34	N
Total				\$9,216.02	



Estimate Summary

Design Number 1

Printed Date: 3/11/2021

District: CSA

WR No. 927163

Date Sched: 4/1/21

Date Required: 4/1/21

Contact Name:

Dist Svcs
HDOH METERS

Additional Information: Full PSC Filing 10/2010

WR Description: HDOH 1250 sq ft METERS

INSTALLATION:	Capital	Oper./Maint.	Total
MATERIAL:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
LABOR HOURS:	35.27	0	35.27
LABOR COST:	\$1,552.59	\$0.00	\$1,552.59
OVERHEAD:	\$2,057.18	\$0.00	\$2,057.18
	\$3,609.77	\$0.00	\$3,609.77
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$3,609.77	\$0.00	\$3,609.77
REMOVAL:			
MATERIAL:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TRANSFER:			
LABOR HOURS:	0	0	0
LABOR COST:	\$0.00	\$0.00	\$0.00
OVERHEAD:	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
VEHICLE:	\$0.00	\$0.00	\$0.00
CONTRACTOR:	\$0.00	\$0.00	\$0.00
ADDITIONAL ITEMS:	\$0.00	\$0.00	\$0.00
SUBTOTAL:	\$0.00	\$0.00	\$0.00
TOTALS:	\$3,609.77	\$0.00	\$3,609.77

THIS FORM IS NOT TO BE USED FOR CONTRIBUTION IN AID CONSTRUCTION (CIAC).

Differential costs for single phase (1Ø) services from an overhead source

OVERHEAD SERVICE

OH Service Cable - Material Per Foot Cost

This cost includes all service clamps, connectors and connector covers required. The per foot cost is a material only number.

<u>Action</u>	<u>Description</u>	<u>Material</u>		<u>(Material Handling) Overhead</u>		<u>OH Service Material Cost Per Foot</u>
install	76' - 1Ø - 2/0 AWG Triplex	\$92.14	+	\$11.26	= \$103.40 ÷ 76 =	\$1.36
install	76' - 1Ø - 4/0 AWG Triplex	\$140.93	+	\$17.22	= \$158.15 ÷ 76 =	\$2.08

OH Service Cable - Fixed Cost

Fixed Cost = TEC labor plus Contractor labor cost to install the service cable, includes labor plus overheads and vehicle plus the Net Present Value of Operation Cost with Storm Cost.

OH Service - Net Present Value of Operation Cost with Storm Cost	\$106.81
Labor cost to install 2/0 triplex service cable	\$151.14
Labor cost to install 4/0 triplex service cable	\$151.92

OH SERVICE CABLE - Cost Table

<u>OH Description</u>			<u>Installation Cost</u>	
			<u>Fixed</u>	<u>Per Foot</u>
1Ø - 2/0 AWG Triplex	\$106.81	+\$151.14=	\$257.95	\$1.36
1Ø - 4/0 AWG Triplex	\$106.81	+\$151.92=	\$258.73	\$2.08

OH Service - Poles

This is the cost to haul a service pole to the site and install an overhead service pole.

<u>Action</u>	<u>Description</u>	<u>Total</u>
install	Accessible 35' wood pole	\$801.36
	Average cost to install a service pole	\$801.36

UNDERGROUND SERVICE

UG Service from an OH Source - Per Foot Cost

This is the material cost of the conduit and cable in the trench, plus the contractor labor to dig the trench and install the conduit and cable in the trench, plus the cost of the TEC inspector.

<u>Action</u>	<u>Description</u>	<u>UG Cable Material Cost Per Foot</u>		<u>UG Conduit Material Cost Per Foot</u>		<u>Teco Inspection Labor Per Foot</u>		<u>Contractor labor Machine Trench Per Foot</u>		<u>UG Cable Machine Trench Total Cost Per Foot</u>
install	1Ø - 2/0 AWG Triplex	\$1.19	+	\$1.45	+	\$1.16	+	\$9.17	=	\$12.98
install	1Ø - 4/0 AWG Triplex	\$1.56	+	\$2.36	+	\$1.16	+	\$9.17	=	\$14.26

UG SERVICE CABLE TO METER FROM OH SOURCE - Fixed Cost

This is the cost for the material down the pole and the material at the house riser to the meter can, plus the contractor cost to install the conduit, cable and make the connection on the pole, plus the Net Present Value of Operation Cost with Storm Cost.

UG Service - Net Present Value of Operation Cost with Storm Cost

<u>Action</u>	<u>Description</u>	<u>Material</u>		<u>(Material Handling) Overhead</u>		<u>Contractor Labor</u>		<u>NPV OC + SC</u>		<u>Total Fixed Cost</u>
install	1Ø - 2/0 AWG Tpx - 2" conduit	\$93.50	+	\$11.42	+	\$87.62	+	\$83.87	=	\$276.41
install	1Ø - 4/0 AWG Tpx - 3" conduit	\$160.21	+	\$19.58	+	\$87.62	+	\$83.87	=	\$351.28

UG Service Cable from an OH Source - Cost Table

<u>UG Service Cable from an OH Source to a meter can</u>		<u>Installation Cost</u>		<u>OH Service Equivalent</u>		<u>Installation Cost</u>		<u>Service Differential Cost</u>	
<u>Cable & Conduit With Machine Trench</u>	<u>Fixed</u>	<u>Per Foot</u>		<u>Description</u>	<u>Fixed</u>	<u>Per Foot</u>	<u>Fixed</u>	<u>Per Foot</u>	
1Ø - 2/0 AWG Triplex	\$276.41	\$12.98		1Ø - 2/0 AWG Triplex	\$257.95	\$1.36	\$18.46	\$11.62	
1Ø - 4/0 AWG Triplex	\$351.28	\$14.26		1Ø - 4/0 AWG Triplex	\$258.73	\$2.08	\$92.54	\$12.18	

Differential costs for single phase (1Ø) services from an overhead source

<u>Fixed Charge</u>	<u>Cost/ft</u>	<u>1Ø UG Secondary or 1Ø UG service in conduit from OH source (Base Charge + service length times Cost/ft)</u>
\$18.46	\$11.62	1Ø 2/0 AWG, 100 ft or less, machine trench, /ft (differential) - a service 100' or less is one that would not have a service pole if it was overhead
\$92.54	\$12.18	1Ø 4/0 AWG, 100 ft or less, machine trench, /ft (differential) - a service 100' or less is one that would not have a service pole if it was overhead
(\$782.90)	\$11.62	1Ø 2/0 AWG, greater than 100 ft, machine trench, /ft (differential) - a service greater than 100' is one that would require a service pole if it was overhead
(\$708.82)	\$12.18	1Ø 4/0 AWG, greater than 100 ft, machine trench, /ft (differential) - a service greater than 100' is one that would require a service pole if it was overhead

Conversion Cost - Conversions of single phase (1Ø) OH Services to UG Services

The "Conversion Cost" is the sum of: 1) the cost to remove whatever overhead facilities exist;

2) the cost of the remaining book value for those overhead facilities.

After paying the cost to remove and the book value, the Customer essentially becomes a new Customer and is charged the differential cost for his new underground service. The OH Service Cable Removal Cost and the Handy Whitman depreciation tables below are used to calculate the Conversion Cost. The total cost for a customer to convert his overhead service to underground service is the applicable Differential Cost for the new underground service plus the conversion cost.

1) the cost to remove whatever overhead facilities exist

<u>Action</u>	<u>Average length service</u>	<u>Total Removal Cost</u>	<u>System %</u>	<u>System Average Cost</u>
remove	1Ø - #2 AWG Triplex	\$87.60	10%	\$8.76
remove	1Ø - 2/0 AWG Triplex	\$87.60	70%	\$61.32
remove	1Ø - 4/0 AWG Triplex	\$87.60	20%	\$17.52
System Average cost to remove average length 1Ø service				\$87.60

<u>Action</u>	<u>Service length with a service pole</u>	<u>Total Removal Cost</u>	<u>System %</u>	<u>System Average Cost</u>
remove	1Ø - #2 AWG Triplex	\$147.57	10%	\$14.76
remove	1Ø - 2/0 AWG Triplex	\$147.57	70%	\$103.30
remove	1Ø - 4/0 AWG Triplex	\$147.57	20%	\$29.51
remove	30' wood pole, drive hook	\$303.06	50%	\$151.53
remove	35' wood pole, drive hook	\$313.38	50%	\$156.69
System Average cost to remove average long 1Ø service with service pole				\$455.79

2) the cost of the remaining book value for those overhead facilities.

Book Value Assumptions:

- 1. Average depreciation 0.036
- 2. Age of pole & service, yrs. 11
- 3. Handy Whitman Ratio, total dist.plant, 2007/2017 0.74

Book Value = (System Value Today) x (Handy Whitman Ratio) x (1 - (Std Dep. x Age))

<u>Action</u>	<u>Average length service</u>	<u>Total Installation Cost</u>	<u>System %</u>	<u>System Average Cost</u>
install	1Ø - #2 AWG Triplex	\$219.14	10%	\$21.91
install	1Ø - 2/0 AWG Triplex	\$254.54	70%	\$178.18
install	1Ø - 4/0 AWG Triplex	\$310.07	20%	\$62.01
System Average cost to install average length 1Ø service				\$262.11
Book Value for average length 1Ø service				\$117.48

<u>Action</u>	<u>Service length that requires a service pole</u>	<u>Total Installation Cost</u>	<u>System %</u>	<u>System Average Cost</u>
install	1Ø - #2 AWG Triplex	\$377.23	10%	\$37.72
install	1Ø - 2/0 AWG Triplex	\$447.11	70%	\$312.98
install	1Ø - 4/0 AWG Triplex	\$555.30	20%	\$111.06
install	35' wood pole, cable spacer	\$606.95	50%	\$303.48
	Haul pole to job site	\$194.41	100%	\$194.41
System Average cost to install average long 1Ø service with service pole				\$959.65
Book Value for average long 1Ø service with service pole				\$430.12

1Ø Conversion Cost from OH to UG service

1Ø Average Service - 100 ft or less(Svc without pole) = (book value + removal)

1Ø Average Long Service- Greater than 100 ft (svc with one pole) = (book value + removal)

<u>Remove Cost</u>	<u>Book value Cost</u>	<u>Conversion Cost</u>
\$87.60	\$117.48	\$205.08
\$455.79	\$430.12	\$885.91

Tariff Sheet No. 5.516 (3.7.2)

Density Class		Current Deposit 2018	CPI -U			Proposed Deposit 2021
			2018	2019	2020	
Urban commercial or residential (\$/mile)	\$	9,896	2.40%	1.80%	0.80%	\$ 10,391
Rural commercial or residential (\$/mile)	\$	5,657	2.40%	1.80%	0.80%	\$ 5,940
Per Lot Subdivisions (\$/lot)	\$	47	2.40%	1.80%	0.80%	\$ 49

**Table I
OPERATING COSTS**

		2018 Actual \$	2019 Actual \$	2020 Actual \$	3-Yr Average \$	OH Ratio	UG Ratio	3-Yr Average Allocated Overhead \$	3-Yr Average Allocated Underground \$
Overhead - Blanket Account									
D-CRR-Voltage-OH (NEW)	New SAP/Funding project								
PRE - Dist Line - Fault Indicators	CRR-02630, CRR-02879	\$173,845	\$236,000	\$263,090	\$224,312	100.0%	0.0%	\$224,312	\$0
Distr - Maint - Corrective - OH Line	PRE-05080	\$5,602	\$6,977	\$13,005	\$8,528	100.0%	0.0%	\$8,528	\$0
Distribution - Maint - OH System Improvements	CRR-02682, CRR-03641, PRE-04820	\$9,965,721	\$11,118,166	\$10,246,537	\$10,443,475	100.0%	0.0%	\$10,443,475	\$0
Distribution - Maint - Mgmt & Coordination		\$0	\$0	\$0	\$0	100.0%	0.0%	\$0	\$0
Distr - Maint - Preventative - OH Line		\$0	\$0	\$0	\$0	100.0%	0.0%	\$0	\$0
Distr - Maint - Trouble - OH Storm	PRE-02805, PRE-02627	\$6,761,430	\$9,140,424	\$6,448,231	\$7,450,028	100.0%	0.0%	\$7,450,028	\$0
Distr - Maint - Pole Inspect & Change-Outs	CRR-02625, CRR-07052	\$2,215,981	\$7,584,782	\$687,761	\$3,496,175	100.0%	0.0%	\$3,496,175	\$0
Distr - Maint - Damage Replacement - OH Line	PRE-02624	\$15,267,786	\$19,949,764	\$11,097,693	\$15,438,414	100.0%	0.0%	\$15,438,414	\$0
CRR - Dist Line - Reclosers / Trip-savers	CRR-02629, CRR-07072	\$1,689,413	\$2,037,373	\$2,655,044	\$2,127,277	100.0%	0.0%	\$2,127,277	\$0
Distr - Maint - Capacitors	CRR-12716	\$229,616	\$240,114	\$512,584	\$327,438	100.0%	0.0%	\$327,438	\$0
Distr - Maint - Trouble - Non-Storm	PRE-02631, CRR-02628	\$435,897	\$131,914	\$298,534	\$288,782	100.0%	0.0%	\$288,782	\$0
Distr - Maint - Tree Trimming - Planned		\$0	\$0	\$0	\$0	0.0%	0.0%	\$0	\$0
Distr - Env - Train/Permit/Inspect/Audit/Protect		\$0	\$0	\$0	\$0	100.0%	0.0%	\$0	\$0
Distr - Maint - Tree Trimming - Unplanned		\$0	\$0	\$0	\$0	0.0%	0.0%	\$0	\$0
Distr - Maint - Pole Reinforcements	PRE-03670	\$467,400	\$401,509	\$434,229	\$434,379	100.0%	0.0%	\$434,379	\$0
Distr - Maint - Pole CLAs & Change-Outs	PRE-03640	\$254,663	\$84,313	\$67,705	\$135,560	100.0%	0.0%	\$135,560	\$0
Distr - Maint - Infrared Thermography		\$0	\$0	\$0	\$0	100.0%	0.0%	\$0	\$0
Distr - Maint - Services - OH Line	CRR-02680	\$774,551	\$892,002	\$966,573	\$877,709	0.0%	0.0%	\$0	\$0
Subtotal		\$38,241,906	\$51,823,336	\$33,690,986	\$41,252,076				
Underground - Blanket Account									
D-CRR-Voltage-UG	CRR-03814	\$7,589	\$10,670	\$23,632	\$13,964	0.0%	100.0%	\$0	\$13,964
D-PRE-Transformers-UG	PRE-03623	\$3,504,752	\$1,551,277	\$2,084,383	\$2,380,137	0.0%	100.0%	\$0	\$2,380,137
Distr - Maint - Corrective - UG Line	CRR-02644, CRR-03642	\$13,068,396	10,753,405	\$10,427,986	\$11,416,595	0.0%	100.0%	\$0	\$11,416,595
Distribution - Maint - UG System Improvements		\$0	0	\$0	\$0	0.0%	100.0%	\$0	\$0
Distribution - Maint - Mgmt & Coordination		\$0	\$0	\$0	\$0	0.0%	100.0%	\$0	\$0
Distr - Maint - Preventative - UG Line	PRE-02809, PRE-02646	\$1,084,178	\$3,983,848	\$9,506,194	\$4,858,073	0.0%	100.0%	\$0	\$4,858,073
Distr - Maint - Network Corrective	CRR-02636	\$77,136	\$250,177	\$33,100	\$120,138	0.0%	100.0%	\$0	\$120,138
Distr - Maint - Network Preventative	PRE-04357	\$762,566	\$1,290,770	\$25,243	\$692,860	0.0%	100.0%	\$0	\$692,860
Distr - Maint - Capacitors - UG	CRR-02651, PRE-03813	\$12,430	\$396	\$53,629	\$22,152	0.0%	100.0%	\$0	\$22,152
Distr - Maint - UG Cable Rplcmnt - Planned	CRR-02649	\$3,724,487	\$3,944,431	\$2,906,062	\$3,524,993	0.0%	100.0%	\$0	\$3,524,993
Distr - Maint - Trouble - UG Storm	CRR-02645	\$838,010	\$629,674	\$265,878	\$577,854	0.0%	100.0%	\$0	\$577,854
Distr - Maint - Damage Replacement - UG Line	CRR-02652	\$586,171	\$1,105,493	\$1,211,387	\$967,684	0.0%	100.0%	\$0	\$967,684
Distr - Maint - UG Cable Rplcmnt - Unplanned		\$0	\$0	\$0	\$0	0.0%	100.0%	\$0	\$0
Distr - Maint - Services - UG Line	CRR-02679	\$1,089,934	\$895,524	\$812,991	\$932,817	0.0%	0.0%	\$0	\$0
Subtotal		\$24,755,648	\$24,415,665	\$27,350,485	\$25,507,266				
Overhead - O&M Account									
D-CRR-Voltage-OH (NEW)	CRR-02630, CRR-02879	\$38,513	\$61,979	\$45,644	\$48,712	100.0%	0.0%	\$48,712	\$0
Distr - Maint - Corrective - OH Line	CRR-02858, CRR-02682	\$5,989,559	\$6,759,090	\$7,002,950	\$6,583,866	100.0%	0.0%	\$6,583,866	\$0
Distribution - Maint - OH System Improvements		\$0	\$0	\$0	\$0	100.0%	0.0%	\$0	\$0
Distribution - Maint - Mgmt & Coordination		\$0	\$0	\$0	\$0	100.0%	0.0%	\$0	\$0
Distr - Maint - Preventative - OH Line	PRE-02627, PRE-02867, PRE-02868	\$98,503	\$176,940	\$124,407	\$133,283	100.0%	0.0%	\$133,283	\$0
Distr - Maint - Trouble - OH Storm	CRR-02625, CRR-02877	\$1,308,631	\$1,221,253	\$593,755	\$1,041,213	100.0%	0.0%	\$1,041,213	\$0
Distr - Maint - Pole Inspect & Change-Outs	PRE-04039, PRE-02859	\$1,929,160	\$1,959,009	\$904,908	\$1,597,692	100.0%	0.0%	\$1,597,692	\$0
Distr - Maint - Damage Replacement - OH Line	CRR-02861, CRR-02629	\$178,520	\$257,726	\$184,081	\$206,775	100.0%	0.0%	\$206,775	\$0
Distr - Maint - Capacitors	CRR-02628, CRR-02857	\$190,258	\$149,581	\$29,990	\$123,276	100.0%	0.0%	\$123,276	\$0
Distr - Maint - Trouble - Non-Storm	CRR-02876	\$2,387,796	\$2,807,237	\$2,814,800	\$2,669,944	0.0%	0.0%	\$0	\$0
CRR - Dist Line - Storms - OH - Restoration	CRR-10852	\$0	\$13,636	\$0	\$4,545	0.0%	0.0%	\$0	\$0
CRR - Dist Line - Reclosers / Trip-savers	CRR-12716	\$7	\$6,425	\$137	\$2,190	0.0%	0.0%	\$0	\$0
Distr - Maint - Tree Trimming - Planned	PRE-04067	\$10,316,539	\$13,767,350	\$16,990,720	\$13,691,536	0.0%	0.0%	\$0	\$0
Distr - Env - Train/Permit/Inspect/Audit/Protect	OPS-04740, PRE-04060	\$21,039	\$13,489	\$26,923	\$20,484	100.0%	0.0%	\$20,484	\$0
Distr - Maint - Tree Trimming - Unplanned	CRR-03621	\$1,562,584	\$2,222,800	\$2,026,699	\$1,937,361	0.0%	0.0%	\$0	\$0
Distr - Maint - Pole Reinforcements		\$0	\$0	\$0	\$0	100.0%	0.0%	\$0	\$0
Distr - Maint - Pole CLAs & Change-Outs	PRE-04062	\$0	\$0	\$0	\$0	100.0%	0.0%	\$0	\$0
Distr - Maint - Infrared Thermography		\$0	\$0	\$0	\$0	100.0%	0.0%	\$0	\$0
Distr - Maint - Services - OH Line	CRR-02680, CRR-02871	\$786,519	\$808,204	\$839,741	\$811,488	0.0%	0.0%	\$0	\$0
Subtotal		\$24,807,628	\$30,224,718	\$31,584,755	\$28,872,367				
Underground - O&M Account									
D-PRE-Transformers-UG	PRE-03623	\$3,479	\$0	\$0	\$1,160	0.0%	100.0%	\$0	\$1,160
Distr - Maint - Corrective - UG Line	CRR-02860, CRR-02644	\$1,548,934	1,449,637	\$1,710,255	\$1,569,609	0.0%	100.0%	\$0	\$1,569,609
Distribution - Maint - UG System Improvements		\$0	\$0	\$0	\$0	0.0%	100.0%	\$0	\$0
Distribution - Maint - Mgmt & Coordination		\$0	\$0	\$0	\$0	0.0%	100.0%	\$0	\$0
Distr - Maint - Preventative - UG Line	PRE-02869, PRE-02809, PRE-02646, PRE-02870	\$306,486	\$300,272	\$220,874	\$275,877	0.0%	100.0%	\$0	\$275,877
Distr - Maint - Network Corrective	CRR-02636, CRR-02863	\$20,524	\$7,379	\$5,573	\$11,159	0.0%	100.0%	\$0	\$11,159
Distr - Maint - Network Preventative	PRE-02864	\$513,913	\$635,686	\$660,604	\$603,401	0.0%	100.0%	\$0	\$603,401
Distr - Locate Facilities	PRE-04063	\$760,468	\$912,001	\$948,183	\$873,551	0.0%	100.0%	\$0	\$873,551
Distr - Maint - UG Cable Rplcmnt - Planned	CRR-03635, CRR-02649	\$127,829	\$71,431	\$23,766	\$74,342	0.0%	100.0%	\$0	\$74,342
Distr - Maint - Trouble - UG Storm	CRR-02878	\$120,874	\$29,492	\$19,316	\$56,561	0.0%	100.0%	\$0	\$56,561
D-CRR-Capacitors-UG	CRR-02651	\$0	\$773	\$0	\$258	0.0%	100.0%	\$0	\$258
D-CRR-Storms-UG	CRR-02645	\$0	\$0	\$0	\$0	0.0%	100.0%	\$0	\$0
Distr - Maint - Damage Replacement - UG Line	CRR-02862, CRR-02652	\$103,901	\$173,424	\$174,701	\$150,675	0.0%	100.0%	\$0	\$150,675
Distr - Maint - UG Cable Rplcmnt - Unplanned		\$0	\$0	\$0	\$0	0.0%	100.0%	\$0	\$0
Distr - Maint - Services - UG Line	CRR-02679, CRR-02872	\$423,145	\$654,095	\$712,258	\$596,499	0.0%	0.0%	\$0	\$0
Subtotal		\$3,929,552	\$4,234,190	\$4,475,530	\$4,213,091				
								\$50,129,670	\$28,191,041

Table II
PRIMARY VOLTAGE SYSTEM

	2018 Actual \$	2019 Actual \$	2020 Actual \$	3-Yr Average \$	OH Ratio	UG Ratio	Allocated Overhead \$	Allocated Underground \$	
Distribution - Maint - Trouble Calls - Non-storm									
Blanket	\$0	\$0	\$0	\$0	77.7%	22.3%	\$0	\$0	
O&M	\$2,387,796	\$2,807,237	\$2,814,800	\$2,669,944	77.7%	22.3%	\$2,074,547	\$595,398	
Operating Cost Total from Table I							\$50,129,670	\$28,191,041	
							(A) 3 Yr Avg Annual Operational Cost	\$52,204,216	\$28,786,439
Distr - Maint - Tree Trimming - Planned									
Blanket	\$0	\$0	\$0	\$0	96.1%	3.9%	\$0	\$0	
O&M	\$10,316,539	\$13,767,350	\$16,990,720	\$13,691,536	96.1%	3.9%	\$13,157,894	\$533,642	
Distr - Maint - Tree Trimming - Unplanned									
Blanket	\$0	\$0	\$0	\$0	96.1%	3.9%	\$0	\$0	
O&M	\$1,562,584	\$2,222,800	\$2,026,699	\$1,937,361	96.1%	3.9%	\$1,861,851	\$75,511	
							(B) 3 Yr Avg Annual Line Clearance Cost	\$15,019,745	\$609,153
Annual Estimated Storm Costs									
Storm Damage Annual Accrual									
Percent for Distribution Lines & Substations									
Percent for Substations									
Percent for Distribution Lines									
Overall Distribution Percent									
Storm Cost Distribution Lines	\$27,000,000	\$27,000,000	\$27,000,000	\$ 27,000,000	96.0%	4.0%	\$25,920,000	\$1,080,000	
							(C) Estimated Annual Storm Cost	\$25,920,000	\$1,080,000
Pole Attachment Revenue	\$4,429,688	\$4,495,861	\$4,591,960	\$4,505,836	100.0%	0.0%	\$4,505,836	\$0	
							(D) 2010 Annual Pole Attachment Revenue	\$4,505,836	\$0

Table III
SERVICE CONDUCTOR

Distr - Maint - Services - OH Line									
Blanket	\$774,551	\$892,002	\$966,573	\$877,709	100.0%	0.0%	\$877,709	\$0	
O&M	\$786,519	\$808,204	\$839,741	\$811,488	100.0%	0.0%	\$811,488	\$0	
Distr - Maint - Services - UG Line									
Blanket	\$1,089,934	\$895,524	\$812,991	\$932,817	0.0%	100.0%	\$0	\$932,817	
O&M	\$423,145	\$654,095	\$712,258	\$596,499	0.0%	100.0%	\$0	\$596,499	
							(A) 3 Yr Avg Annual Operational Cost	\$1,689,197	\$1,529,316

Table IV
ALLOCATION FACTORS

Line Clearance			
2020 No. of company owned distribution poles	418,770	96.1%	
2020 No. of Terminal Poles on System	16,322	3.9%	
Distribution - Maint - Trouble Calls - Non-storm			
	2020	2020	2020
	Entire System	Overhead System	Underground System
No Outage Events (N)	9,810	8,018	1,792
Outage Sys Avg Duration (L-Bar)	166.49	158.36	202.88
Trouble Calls Weighted Avg Proportion (N) X (L-Bar)	1,633,267	1,269,730	363,561
Allocation Percentage		77.7%	22.3%
Service Count (Based on Metered Accounts)			
	No of Services (Based on Metered Accounts)		
Overhead Single & Three Phase (Excluding Multi-Family)	246,960		
Underground Single Phase (Excluding Multi-Family)	284,735		

Table V (A)
NET PRESENT VALUE LIFECYCLE COST CALCULATION
 (Primary Voltage System - Installation of Facilities In Subdivisions)

Assumptions:

Inflation Rate	0.80 %
Discount Rate	6.70 %
Book Life	35 Yrs
Pole Attach Revenue Increase	2.1 %

Overhead System									
Yr	(A) 3 Yr Avg Annual Operational Cost (\$)	(D) 3 Yr Avg Annual Pole Attachment Revenue (\$)	(A)+(D) 3 Yr Avg		(C) Annual Storm Cost (\$)	(A)+(B)+(C)+ (D) NPV Incl Storm (\$)	(A)+(B)+(D) NPV Excl Storm (\$)	(C) NPV Storm Only (\$)	
			Annual Operational Cost Incl Lost Attachment Revenue(\$)	(B) 3 Yr Avg Annual Line Clearance Cost (\$)					
1	\$ 52,204,216	\$ (4,505,836)	\$ 47,698,380	\$ -	\$ 25,920,000	\$ 73,618,380	\$47,698,380	\$25,920,000	
2	52,621,850	(4,602,149)	48,019,701	-	26,127,360	69,491,154	\$45,004,406	\$24,486,748	
3	53,042,825	(4,700,520)	48,342,305	-	26,336,379	65,594,559	\$42,461,812	\$23,132,748	
4	53,467,168	(4,800,993)	48,666,174	-	26,547,070	61,915,739	\$40,062,122	\$21,853,617	
5	53,894,905	(4,903,615)	48,991,290	-	26,759,446	58,442,554	\$37,797,337	\$20,645,217	
6	54,326,064	(5,008,429)	49,317,635	-	26,973,522	55,163,537	\$35,659,902	\$19,503,635	
7	54,760,673	(5,115,484)	49,645,188	-	27,189,310	52,067,862	\$33,642,685	\$18,425,177	
8	55,198,758	(5,224,828)	49,973,930	-	27,406,825	49,145,304	\$31,738,951	\$17,406,353	
9	55,640,348	(5,336,509)	50,303,839	-	27,626,079	46,386,208	\$29,942,343	\$16,443,865	
10	56,085,471	(5,450,577)	50,634,894	-	27,847,088	43,781,455	\$28,246,857	\$15,534,598	
11	56,534,155	(5,567,083)	50,967,072	-	28,069,865	41,322,435	\$26,646,826	\$14,675,609	
12	56,986,428	(5,686,079)	51,300,349	-	28,294,424	39,001,017	\$25,136,899	\$13,864,118	
13	57,442,319	(5,807,619)	51,634,700	-	28,520,779	36,809,522	\$23,712,024	\$13,097,498	
14	57,901,858	(5,931,757)	51,970,101	-	28,748,945	34,740,700	\$22,367,431	\$12,373,269	
15	58,365,073	(6,058,548)	52,306,525	16,792,293	28,978,937	39,561,126	\$27,872,039	\$11,689,087	
16	58,831,993	(6,188,050)	52,643,944	16,926,631	29,210,768	37,342,951	\$26,300,215	\$11,042,736	
17	59,302,649	(6,320,319)	52,982,330	17,062,044	29,444,454	35,248,741	\$24,816,615	\$10,432,125	
18	59,777,071	(6,455,416)	53,321,654	17,198,540	29,680,010	33,271,584	\$23,416,305	\$9,855,279	
19	60,255,287	(6,593,401)	53,661,887	17,336,129	29,917,450	31,404,955	\$22,094,626	\$9,310,329	
20	60,737,329	(6,734,335)	54,002,995	17,474,818	30,156,790	29,642,691	\$20,847,179	\$8,795,512	
21	61,223,228	(6,878,281)	54,344,947	17,614,616	30,398,044	27,978,971	\$19,669,808	\$8,309,162	
22	61,713,014	(7,025,304)	54,687,710	17,755,533	30,641,228	26,408,300	\$18,558,594	\$7,849,706	
23	62,206,718	(7,175,470)	55,031,248	17,897,578	30,886,358	24,925,487	\$17,509,833	\$7,415,654	
24	62,704,372	(7,328,846)	55,375,526	18,040,758	31,133,449	23,525,631	\$16,520,027	\$7,005,604	
25	63,206,007	(7,485,500)	55,720,507	18,185,084	31,382,517	22,204,104	\$15,585,876	\$6,618,228	
26	63,711,655	(7,645,502)	56,066,152	18,330,565	31,633,577	20,956,535	\$14,704,264	\$6,252,271	
27	64,221,348	(7,808,925)	56,412,423	18,477,209	31,886,645	19,778,797	\$13,872,246	\$5,906,551	
28	64,735,119	(7,975,841)	56,759,278	18,625,027	32,141,739	18,666,992	\$13,087,045	\$5,579,947	
29	65,253,000	(8,146,324)	57,106,675	18,774,027	32,398,872	17,617,440	\$12,346,038	\$5,271,402	
30	65,775,024	(8,320,452)	57,454,572	18,924,220	32,658,063	16,626,665	\$11,646,746	\$4,979,919	
31	66,301,224	(8,498,302)	57,802,922	19,075,613	32,919,328	15,691,386	\$10,986,833	\$4,704,553	
32	66,831,634	(8,679,953)	58,151,681	19,228,218	33,182,683	14,808,503	\$10,364,090	\$4,444,414	
33	67,366,287	(8,865,487)	58,500,800	19,382,044	33,448,144	13,975,091	\$9,776,432	\$4,198,659	
34	67,905,217	(9,054,987)	58,850,230	19,537,100	33,715,729	13,188,385	\$9,221,892	\$3,966,493	
35	68,448,459	(9,248,537)	59,199,922	19,693,397	33,985,455	12,445,777	\$8,698,612	\$3,747,165	
					SUM	\$ 1,222,750,539	\$ 818,013,292	\$ 404,737,247	

NPV = (Annual Cost)/(1+(Discount Rate/100))^(Year -1)

Table V (B)
NET PRESENT VALUE LIFECYCLE COST CALCULATION
(Primary Voltage System - Installation of Facilities In Subdivisions)

Assumptions:

Inflation Rate	0.80 %
Discount Rate	6.70 %
Book Life	35 Yrs
Pole Attach Revenue Increase	2.1 %

Underground System						
Yr	(A) 3 Yr Avg Annual Operational Cost (\$)	(B) 3 Yr Avg Annual Line Clearance Cost (\$)	(C) Estimated Annual Storm Cost (\$)	(A)+(B)+(C) NPV Incl Storm (\$)	(A)+(B) NPV Excl Storm (\$)	(C) NPV Storm Only (\$)
	1	\$ 28,786,439	\$ -	\$ 1,080,000	\$ 29,866,439	\$ 28,786,439
2	29,016,730	-	1,088,640	\$ 28,214,967	\$ 27,194,686	\$1,020,281
3	29,248,864	-	1,097,349	\$ 26,654,815	\$ 25,690,950	\$963,864
4	29,482,855	-	1,106,128	\$ 25,180,931	\$ 24,270,363	\$910,567
5	29,718,718	-	1,114,977	\$ 23,788,546	\$ 22,928,328	\$860,217
6	29,956,468	-	1,123,897	\$ 22,473,153	\$ 21,660,501	\$812,651
7	30,196,119	-	1,132,888	\$ 21,230,495	\$ 20,462,779	\$767,716
8	30,437,688	-	1,141,951	\$ 20,056,550	\$ 19,331,285	\$725,265
9	30,681,190	-	1,151,087	\$ 18,947,519	\$ 18,262,358	\$685,161
10	30,926,639	-	1,160,295	\$ 17,899,811	\$ 17,252,537	\$647,275
11	31,174,052	-	1,169,578	\$ 16,910,037	\$ 16,298,554	\$611,484
12	31,423,445	-	1,178,934	\$ 15,974,993	\$ 15,397,322	\$577,672
13	31,674,832	-	1,188,366	\$ 15,091,652	\$ 14,545,923	\$545,729
14	31,928,231	-	1,197,873	\$ 14,257,156	\$ 13,741,603	\$515,553
15	32,183,657	681,042	1,207,456	\$ 13,743,512	\$ 13,256,467	\$487,045
16	32,441,126	686,490	1,217,115	\$ 12,983,561	\$ 12,523,447	\$460,114
17	32,700,655	691,982	1,226,852	\$ 12,265,632	\$ 11,830,961	\$434,672
18	32,962,260	697,518	1,236,667	\$ 11,587,402	\$ 11,176,765	\$410,637
19	33,225,959	703,098	1,246,560	\$ 10,946,674	\$ 10,558,743	\$387,930
20	33,491,766	708,723	1,256,533	\$ 10,341,375	\$ 9,974,895	\$366,480
21	33,759,700	714,392	1,266,585	\$ 9,769,546	\$ 9,423,331	\$346,215
22	34,029,778	720,107	1,276,718	\$ 9,229,337	\$ 8,902,266	\$327,071
23	34,302,016	725,868	1,286,932	\$ 8,718,999	\$ 8,410,013	\$308,986
24	34,576,432	731,675	1,297,227	\$ 8,236,880	\$ 7,944,980	\$291,900
25	34,853,044	737,529	1,307,605	\$ 7,781,420	\$ 7,505,660	\$275,759
26	35,131,868	743,429	1,318,066	\$ 7,351,145	\$ 7,090,633	\$260,511
27	35,412,923	749,376	1,328,610	\$ 6,944,661	\$ 6,698,555	\$246,106
28	35,696,226	755,371	1,339,239	\$ 6,560,655	\$ 6,328,157	\$232,498
29	35,981,796	761,414	1,349,953	\$ 6,197,882	\$ 5,978,240	\$219,642
30	36,269,651	767,506	1,360,753	\$ 5,855,169	\$ 5,647,672	\$207,497
31	36,559,808	773,646	1,371,639	\$ 5,531,406	\$ 5,335,383	\$196,023
32	36,852,286	779,835	1,382,612	\$ 5,225,546	\$ 5,040,362	\$185,184
33	37,147,105	786,074	1,393,673	\$ 4,936,598	\$ 4,761,654	\$174,944
34	37,444,281	792,362	1,404,822	\$ 4,663,628	\$ 4,498,357	\$165,271
35	37,743,836	798,701	1,416,061	\$ 4,405,751	\$ 4,249,619	\$156,132
			SUM	\$ 469,823,841	\$ 452,959,789	\$ 16,864,052

Table VI (A)
NET PRESENT VALUE LIFECYCLE COST CALCULATION
 (Services)

Assumptions:

Inflation Rate	0.80 %
Discount Rate	6.70 %
Book Life	35 Yrs
Pole Attach Revenue Increase	2.1 %

Overhead System									
Yr	(A) 3 Yr Avg Annual Operational Cost (\$)	(D) 3 Yr Avg Annual Pole Attachment Revenue (\$)	(A)+(D) 3 Yr Avg Annual Operational Cost Incl Attachment Revenue(\$)	(B) 3 Yr Avg Annual Line Clearance Cost (\$)	(C) Estimated Annual Storm Cost (\$)	(A)+(B)+(C)+ (D) NPV Incl Storm (\$)	(A)+(B)+(D) NPV Excl Storm (\$)	(C) NPV Storm Only (\$)	
1	\$ 1,689,197	\$ -	\$ 1,689,197	\$ -	\$ -	\$ 1,689,197	\$1,689,197	\$0	
2	1,702,710	-	1,702,710	-	-	1,595,792	\$1,595,792	\$0	
3	1,716,332	-	1,716,332	-	-	1,507,552	\$1,507,552	\$0	
4	1,730,062	-	1,730,062	-	-	1,424,192	\$1,424,192	\$0	
5	1,743,903	-	1,743,903	-	-	1,345,441	\$1,345,441	\$0	
6	1,757,854	-	1,757,854	-	-	1,271,044	\$1,271,044	\$0	
7	1,771,917	-	1,771,917	-	-	1,200,762	\$1,200,762	\$0	
8	1,786,092	-	1,786,092	-	-	1,134,365	\$1,134,365	\$0	
9	1,800,381	-	1,800,381	-	-	1,071,640	\$1,071,640	\$0	
10	1,814,784	-	1,814,784	-	-	1,012,384	\$1,012,384	\$0	
11	1,829,302	-	1,829,302	-	-	956,404	\$956,404	\$0	
12	1,843,937	-	1,843,937	-	-	903,519	\$903,519	\$0	
13	1,858,688	-	1,858,688	-	-	853,559	\$853,559	\$0	
14	1,873,558	-	1,873,558	-	-	806,361	\$806,361	\$0	
15	1,888,546	-	1,888,546	-	-	761,773	\$761,773	\$0	
16	1,903,655	-	1,903,655	-	-	719,651	\$719,651	\$0	
17	1,918,884	-	1,918,884	-	-	679,858	\$679,858	\$0	
18	1,934,235	-	1,934,235	-	-	642,265	\$642,265	\$0	
19	1,949,709	-	1,949,709	-	-	606,751	\$606,751	\$0	
20	1,965,307	-	1,965,307	-	-	573,200	\$573,200	\$0	
21	1,981,029	-	1,981,029	-	-	541,505	\$541,505	\$0	
22	1,996,877	-	1,996,877	-	-	511,562	\$511,562	\$0	
23	2,012,852	-	2,012,852	-	-	483,275	\$483,275	\$0	
24	2,028,955	-	2,028,955	-	-	456,553	\$456,553	\$0	
25	2,045,187	-	2,045,187	-	-	431,307	\$431,307	\$0	
26	2,061,548	-	2,061,548	-	-	407,458	\$407,458	\$0	
27	2,078,041	-	2,078,041	-	-	384,928	\$384,928	\$0	
28	2,094,665	-	2,094,665	-	-	363,643	\$363,643	\$0	
29	2,111,422	-	2,111,422	-	-	343,535	\$343,535	\$0	
30	2,128,314	-	2,128,314	-	-	324,539	\$324,539	\$0	
31	2,145,340	-	2,145,340	-	-	306,594	\$306,594	\$0	
32	2,162,503	-	2,162,503	-	-	289,641	\$289,641	\$0	
33	2,179,803	-	2,179,803	-	-	273,625	\$273,625	\$0	
34	2,197,241	-	2,197,241	-	-	258,495	\$258,495	\$0	
35	2,214,819	-	2,214,819	-	-	244,201	\$244,201	\$0	
						SUM \$ 26,376,573	\$ 26,376,573	\$ -	

NPV = (Annual Cost)/(1+(Discount Rate/100))^(Year -1)

Table VI (B)
NET PRESENT VALUE LIFECYCLE COST CALCULATION
 (Services)

Assumptions:
 Inflation Rate 0.80 %
 Discount Rate 6.70 %
 Book Life 35 Yrs
 Pole Attach Revenue Increase 2.1 %

Underground System						
Yr	<u>(A)</u> <u>3 Yr Avg</u> <u>Annual</u> <u>Operational</u> <u>Cost (\$)</u>	<u>(B)</u> <u>3 Yr Avg</u> <u>Annual Line</u> <u>Clearance</u> <u>Cost (\$)</u>	<u>(C)</u> <u>Estimated</u> <u>Annual Storm</u> <u>Cost (\$)</u>	<u>(A)+(B)+(C)</u> <u>NPV Incl Storm</u> <u>(\$)</u>	<u>(A)+(B)</u> <u>NPV Excl Storm</u> <u>(\$)</u>	<u>(C)</u> <u>NPV Storm</u> <u>Only (\$)</u>
1	\$ 1,529,316	\$ -	\$ -	\$ 1,529,316	\$ 1,529,316	\$0
2	1,541,550	-	-	1,444,752	1,444,752	\$0
3	1,553,883	-	-	1,364,864	1,364,864	\$0
4	1,566,314	-	-	1,289,394	1,289,394	\$0
5	1,578,844	-	-	1,218,096	1,218,096	\$0
6	1,591,475	-	-	1,150,741	1,150,741	\$0
7	1,604,207	-	-	1,087,111	1,087,111	\$0
8	1,617,041	-	-	1,026,999	1,026,999	\$0
9	1,629,977	-	-	970,211	970,211	\$0
10	1,643,017	-	-	916,563	916,563	\$0
11	1,656,161	-	-	865,881	865,881	\$0
12	1,669,410	-	-	818,002	818,002	\$0
13	1,682,765	-	-	772,771	772,771	\$0
14	1,696,228	-	-	730,040	730,040	\$0
15	1,709,797	-	-	689,672	689,672	\$0
16	1,723,476	-	-	651,537	651,537	\$0
17	1,737,264	-	-	615,510	615,510	\$0
18	1,751,162	-	-	581,475	581,475	\$0
19	1,765,171	-	-	549,322	549,322	\$0
20	1,779,292	-	-	518,947	518,947	\$0
21	1,793,527	-	-	490,252	490,252	\$0
22	1,807,875	-	-	463,143	463,143	\$0
23	1,822,338	-	-	437,534	437,534	\$0
24	1,836,917	-	-	413,340	413,340	\$0
25	1,851,612	-	-	390,485	390,485	\$0
26	1,866,425	-	-	368,893	368,893	\$0
27	1,881,356	-	-	348,495	348,495	\$0
28	1,896,407	-	-	329,225	329,225	\$0
29	1,911,578	-	-	311,020	311,020	\$0
30	1,926,871	-	-	293,822	293,822	\$0
31	1,942,286	-	-	277,575	277,575	\$0
32	1,957,824	-	-	262,227	262,227	\$0
33	1,973,487	-	-	247,727	247,727	\$0
34	1,989,275	-	-	234,029	234,029	\$0
35	2,005,189	-	-	221,088	221,088	\$0
SUM				\$ 23,880,057	\$ 23,880,057	\$ -

Table VII
Net Present Value of Operational Costs
Per Mile & Per Service Calculations

		<u>Overhead</u>		
Primary Voltage System		Incl Storm	Excl Storm	Storm Only
	NPV Life Cycle Cost	\$1,222,750,539	\$818,013,292	\$404,737,247
	System Miles OH	6,246	6,246	6,246
	NPV Life Cycle Cost / Mile	\$195,765.38	\$130,965.94	\$64,799.43
Services		Incl Storm	Excl Storm	Storm Only
	NPV Life Cycle Cost	\$26,376,573	\$26,376,573	\$0
	Number of Services	246,960	246,960	246,960
	NPV Life Cycle Cost / Service	\$106.81	\$106.81	\$0.00
		<u>Underground</u>		
Primary Voltage System		Incl Storm	Excl Storm	Storm Only
	NPV Life Cycle Cost	\$469,823,841	\$452,959,789	\$16,864,052
	System Miles OH	5,715	5,715	5,715
	NPV Life Cycle Cost / Mile	\$82,208.90	\$79,258.06	\$2,950.84
Services		Incl Storm	Excl Storm	Storm Only
	NPV Life Cycle Cost	\$23,880,057	\$23,880,057	\$0
	Number of Services	284,735	284,735	284,735
	NPV Life Cycle Cost / Service	\$83.87	\$83.87	\$0.00
		<u>Differential</u>		
Primary Voltage System		Incl Storm	Excl Storm	Storm Only
	NPV Life Cycle Cost / Mile	-\$113,556.48	-\$51,707.88	-\$61,848.59
Services		Incl Storm	Excl Storm	Storm Only
	NPV Life Cycle Cost / Service	-\$22.94	-\$22.94	\$0.00

Table VIII
Net Present Value of Operational Costs
Per Lot Calculations

		<u>Low Density Subdivision</u>					
		<u>Overhead</u>			Incl Storm	Excl Storm	Storm Only
	Number of Lots	Miles of Line		\$ / Lot	\$ / Lot	\$ / Lot	
Primary Voltage System ¹	210	1.92		\$1,789.85	\$1,197.40	\$592.45	
Services	NA	NA		\$106.81	\$106.81	\$0.00	
Primary & Service				\$1,896.66	\$1,304.21	\$592.45	
		<u>Underground</u>					
Primary Voltage System ¹	210	2.99		\$1,170.50	\$1,128.48	\$42.01	
Services	NA	NA		\$83.87	\$83.87	\$0.00	
Primary & Service				\$1,254.37	\$1,212.35	\$42.01	
Primary & Service			Differential	-\$642.29	-\$91.86	-\$550.44	
		<u>High Density Subdivision</u>					
		<u>Overhead</u>			Incl Storm	Excl Storm	Storm Only
	Number of Lots	Miles of Line		\$ / Lot	\$ / Lot	\$ / Lot	
Primary Voltage System ¹	176	1.17		\$1,301.39	\$870.63	\$430.77	
Services	NA	NA		\$106.81	\$106.81	\$0.00	
Primary & Service				\$1,408.20	\$977.44	\$430.77	
		<u>Underground</u>					
Primary Voltage System ¹	176	1.07		\$499.79	\$481.85	\$17.94	
Services	NA	NA		\$83.87	\$83.87	\$0.00	
Primary & Service				\$583.66	\$565.72	\$17.94	
Primary & Service			Differential	-\$824.54	-\$411.72	-\$412.83	

Note

1. Formula = (NPV Life Cycle Cost / Mile) x (Miles of Line) / (Number of Lots)

Table IX
2020 O&M - FORM 13

	2020 Actual \$	OH Ratio	UG Ratio	2020 Allocated Overhead \$	2020 Allocated Underground \$
Overhead - Blanket Account					
0 D-CRR-Voltage-OH (NEW)	\$263,090	100.0%	0.0%	\$263,090	\$0
0 PRE - Dist Line - Fault Indicators	\$13,005	100.0%	0.0%	\$13,005	\$0
51 Distr - Maint - Corrective - OH Line	\$10,246,537	100.0%	0.0%	\$10,246,537	\$0
49 Distribution - Maint - OH System Improvements	\$0	100.0%	0.0%	\$0	\$0
164 Distribution - Maint - Mgmt & Coordination	\$0	100.0%	0.0%	\$0	\$0
53 Distr - Maint - Preventative - OH Line	\$6,448,231	100.0%	0.0%	\$6,448,231	\$0
57 Distr - Maint - Trouble - OH Storm	\$687,761	100.0%	0.0%	\$687,761	\$0
59 Distr - Maint - Pole Inspect & Change-Outs	\$11,097,693	100.0%	0.0%	\$11,097,693	\$0
60 Distr - Maint - Damage Replacement - OH Line	\$2,655,044	100.0%	0.0%	\$2,655,044	\$0
61 Distr - Maint - Capacitors	\$298,534	100.0%	0.0%	\$298,534	\$0
65 Distr - Maint - Trouble - Non-Storm	\$0	0.0%	0.0%	\$0	\$0
67 Distr - Maint - Tree Trimming - Planned	\$0	0.0%	0.0%	\$0	\$0
162 Distr - Env - Train/Permit/Inspect/Audit/Protect	\$0	100.0%	0.0%	\$0	\$0
197 Distr - Maint - Tree Trimming - Unplanned	\$0	0.0%	0.0%	\$0	\$0
199 Distr - Maint - Pole Reinforcements	\$434,229	100.0%	0.0%	\$434,229	\$0
202 Distr - Maint - Pole CLAs & Change-Outs	\$67,705	100.0%	0.0%	\$67,705	\$0
NEW Distr - Maint - Infrared Thermography	\$0	100.0%	0.0%	\$0	\$0
204 Distr - Maint - Services - OH Line	\$966,573	0.0%	0.0%	\$0	\$0
Subtotal	\$33,178,402				
Underground - Blanket Account					
0 D-CRR-Voltage-UG	\$23,632	0.0%	100.0%	\$0	\$23,632
0 D-PRE-Transformers-UG	\$2,084,383	0.0%	100.0%	\$0	\$2,084,383
52 Distr - Maint - Corrective - UG Line	\$10,427,986	0.0%	100.0%	\$0	\$10,427,986
50 Distribution - Maint - UG System Improvements	\$0	0.0%	100.0%	\$0	\$0
164 Distribution - Maint - Mgmt & Coordination	\$0	0.0%	100.0%	\$0	\$0
54 Distr - Maint - Preventative - UG Line	\$9,506,194	0.0%	100.0%	\$0	\$9,506,194
55 Distr - Maint - Network Corrective	\$33,100	0.0%	100.0%	\$0	\$33,100
56 Distr - Maint - Network Preventative	\$25,243	0.0%	100.0%	\$0	\$25,243
0 Distr - Maint - Capacitors - UG	\$53,629	0.0%	100.0%	\$0	\$53,629
194 Distr - Maint - UG Cable Rplcmnt - Planned	\$2,906,062	0.0%	100.0%	\$0	\$2,906,062
195 Distr - Maint - Trouble - UG Storm	\$265,878	0.0%	100.0%	\$0	\$265,878
196 Distr - Maint - Damage Replacement - UG Line	\$1,211,387	0.0%	100.0%	\$0	\$1,211,387
201 Distr - Maint - UG Cable Rplcmnt - Unplanned	\$0	0.0%	100.0%	\$0	\$0
205 Distr - Maint - Services - UG Line	\$812,991	0.0%	0.0%	\$0	\$0
Subtotal	\$27,350,485				
Overhead - O&M Account					
0 D-CRR-Voltage-OH (NEW)	\$45,644	100.0%	0.0%	\$45,644	\$0
51 Distr - Maint - Corrective - OH Line	\$7,002,950	100.0%	0.0%	\$7,002,950	\$0
49 Distribution - Maint - OH System Improvements	\$0	100.0%	0.0%	\$0	\$0
164 Distribution - Maint - Mgmt & Coordination	\$0	100.0%	0.0%	\$0	\$0
53 Distr - Maint - Preventative - OH Line	\$124,407	100.0%	0.0%	\$124,407	\$0
57 Distr - Maint - Trouble - OH Storm	\$593,755	100.0%	0.0%	\$593,755	\$0
59 Distr - Maint - Pole Inspect & Change-Outs	\$904,908	100.0%	0.0%	\$904,908	\$0
60 Distr - Maint - Damage Replacement - OH Line	\$184,081	100.0%	0.0%	\$184,081	\$0
61 Distr - Maint - Capacitors	\$29,990	100.0%	0.0%	\$29,990	\$0
65 Distr - Maint - Trouble - Non-Storm	\$2,814,800	0.0%	0.0%	\$0	\$0
CRR - Dist Line - Storms - OH - Restoration	\$0	0.0%	0.0%	\$0	\$0
67 Distr - Maint - Tree Trimming - Planned	\$16,990,720	0.0%	0.0%	\$0	\$0
162 Distr - Env - Train/Permit/Inspect/Audit/Protect	\$26,923	100.0%	0.0%	\$26,923	\$0
197 Distr - Maint - Tree Trimming - Unplanned	\$2,026,699	0.0%	0.0%	\$0	\$0
199 Distr - Maint - Pole Reinforcements	\$0	100.0%	0.0%	\$0	\$0
202 Distr - Maint - Pole CLAs & Change-Outs	\$0	100.0%	0.0%	\$0	\$0
NEW Distr - Maint - Infrared Thermography	\$0	100.0%	0.0%	\$0	\$0
204 Distr - Maint - Services - OH Line	\$839,741	0.0%	0.0%	\$0	\$0
Subtotal	\$31,584,618				
Underground - O&M Account					
0 D-PRE-Transformers-UG	\$0	0.0%	100.0%	\$0	\$0
52 Distr - Maint - Corrective - UG Line	\$1,710,255	0.0%	100.0%	\$0	\$1,710,255
50 Distribution - Maint - UG System Improvements	\$0	0.0%	100.0%	\$0	\$0
164 Distribution - Maint - Mgmt & Coordination	\$0	0.0%	100.0%	\$0	\$0
54 Distr - Maint - Preventative - UG Line	\$220,874	0.0%	100.0%	\$0	\$220,874
55 Distr - Maint - Network Corrective	\$5,573	0.0%	100.0%	\$0	\$5,573
56 Distr - Maint - Network Preventative	\$660,604	0.0%	100.0%	\$0	\$660,604
127 Distr - Locate Facilities	\$948,183	0.0%	100.0%	\$0	\$948,183
194 Distr - Maint - UG Cable Rplcmnt - Planned	\$23,766	0.0%	100.0%	\$0	\$23,766
195 Distr - Maint - Trouble - UG Storm	\$19,316	0.0%	100.0%	\$0	\$19,316
196 D-CRR-Capacitors-UG	\$0	0.0%	100.0%	\$0	\$0
201 D-CRR-Storms-UG	\$0	0.0%	100.0%	\$0	\$0
205 Distr - Maint - Damage Replacement - UG Line	\$174,701	0.0%	100.0%	\$0	\$174,701
0 Distr - Maint - UG Cable Rplcmnt - Unplanned	\$0	0.0%	100.0%	\$0	\$0
0 Distr - Maint - Services - UG Line	\$712,258	0.0%	0.0%	\$0	\$0
Subtotal	\$4,475,530				
				\$41,124,487	\$30,300,766
Distribution - Maint - Trouble Calls - Non-storm					
Blanket	\$0	77.7%	22.3%	\$0	\$0
O&M	\$2,814,800	77.7%	22.3%	\$2,187,100	\$627,700
Distr - Maint - Tree Trimming - Planned					
Blanket	\$0	96.1%	3.9%	\$0	\$0
O&M	\$16,990,720	96.1%	3.9%	\$16,328,489	\$662,231
Distr - Maint - Tree Trimming - Unplanned					
Blanket	\$0	96.1%	3.9%	\$0	\$0
O&M	\$2,026,699	96.1%	3.9%	\$1,947,706	\$78,993
Distr - Maint - Services - OH Line					
Blanket	\$966,573	100.0%	0.0%	\$966,573	\$0
O&M	\$839,741	100.0%	0.0%	\$839,741	\$0
Distr - Maint - Services - UG Line					
Blanket	\$812,991	0.0%	100.0%	\$0	\$812,991
O&M	\$712,258	0.0%	100.0%	\$0	\$712,258
2020 O&M Cost - Form 13				\$63,394,096	\$33,194,939

ENERGY DELIVERY
"2021" ADDER STUDY
 Provided by ED Business Planning

	<u>Toolkit</u>
	Distribution CIAC
Total Corporate Accounting FRINGE Rates per Activity A&G (for PSTEW)	72.62%
Other "Operating Labor" related adders:	
Non-Productive Time*	13.00%
Energy Delivery (Supervisory/Administrative)	15.18%
Energy Delivery Engineering	0.00%
Small Tools *	5.39%
TOTAL Other "Labor" related Adders	33.58%
TOTAL Fully Loaded "Labor" adders	106.20%
Fleet* as a % of Labor (rate of settled labor w/ fringe)	14.81%
Fleet* as a % of Labor (rate excluding 37% fringe)	20.29%
"Material" related adders:	
Stores Carrying Cost (ED Stores Clearing) *	4.30%
Stores Carrying Cost (WH Space, Taxes, Insurance & Obsolete Mat)	4.83%
Stores Carrying Cost (Cost of Money - PDR only)	0.00%
Self Help *	3.09%
TOTAL "Material" related Adders	12.22%
Other "Contractor" related adders:	
Energy Delivery (Supervisory/Administrative/Engineering)	20.06%
TOTAL Fully Loaded "Contractor" adders	20.06%

* When determining final bill true up or calculating pay-after invoice using actual results, exclude these items, which will already be included in actuals