

**RGrid Power PLLC**  
501 North Main Street  
Wake Forest, North Carolina 27587

February 17, 2021

Mr. Mike Gai  
Sun-Tech Engineering, Inc.  
4577 Nob Hill Road, Suite 102  
Sunrise, Florida 33351

**Subject:           Summary Report for  
Firstgate Commerce Center Utilities Overhead to Underground Conversion  
Engineering Cost Estimate and Opinion**

Dear Mike,

Attached is a detailed cost estimate for the overhead to underground conversion of electric power and communications utilities which cross the property currently under development for the proposed Firstgate Commerce Center in the City of Margate, Florida. This letter summarizes the development of the cost estimate which is based upon information provided to RGrid Power PLLC by Sun-Tech Engineering, Inc.

Sun-Tech Engineering engaged RGrid Power to review the project location and preliminary cost estimate prepared by FPL for the overhead to underground conversion of utilities and prepare an independent estimate of likely costs for the utility construction. RGrid Power's scope of work consisted of the following:

1. Review data and plans provided by Sun-Tech Engineering, and online imagery for the project area.
2. Determine a likely approach to the design of underground electric and communications utilities along the route based upon site constraints, utility standards, and reasonable engineering judgement.
3. Develop a cost opinion and estimate for the proposed labor and materials to complete the undergrounding of the aerial utilities in the project area.
4. Provide a draft report for review by Sun-Tech Engineering.
5. Provide a finalized sealed report of the likely costs for the overhead to underground conversion of observed utilities along the route for use by Sun-Tech Engineering to satisfy local municipal requirements.

RGrid Power team members have completed undergrounding of similar utilities for the City of Coconut Creek, and the cost estimate is based upon experience with FPL, ATT, and Comcast facilities placed within a utility corridor established along the lot frontage similar to that proposed for Firstgate Commerce Center. RGrid Power also reviewed recent underground labor and material construction costs from several other utilities to develop reasonable expectation of likely costs in 2021 dollars for each part of the work.

The cost opinion is limited by several factors. RGrid Power utilized imagery available within Google Earth Pro to review the facilities and did not conduct a site visit. However, the views available were clear and the available imagery was recent. Aerial imagery was dated March 2020 and street view imagery was



dated April 2019. Observed facilities were consistent with what was described by FPL in their non-binding cost estimate letter dated December 4<sup>th</sup>, 2020. RGrid Power did not have any design or facilities information available from the owners of the overhead utilities and based costs upon visual observations from the aforementioned imagery, the survey provided by Sun-Tech Engineering and experience with similar projects. Given the limited length of the project, estimated costs are expected to be within an acceptable range close to the actual costs when they are incurred. Actual designs prepared by each utility may differ from assumptions made by RGrid Power which could result in costs which are higher or lower than this cost estimate. Changes to the facilities which occur prior to construction could also affect the total actual cost of the conversion.

Due to the nature of the required connections, the conversion area runs along the west side of Banks Road from just south the intersection with West Copans Road to just north of NW 24<sup>th</sup> Street. The estimate assumes that all utility sections within the lot frontage will be installed using open cut trench and that road crossings will be completed using directional boring. Conduits will be direct buried at depths which comply with the 2017 National Electrical Safety Code (NESC) and accepted utility practices. The estimated lengths and quantities of construction units are listed on the attached cost estimate breakdown. All poles which contain streetlights are retained in place with low voltage electrical feed to the luminaires. The attached medium voltage power circuit and communications lines are included in the overhead to underground conversion estimate. The cost estimate also includes a line item for engineering and supervision at twelve (12) percent of the estimated construction cost for each utility. No allowance has been made for any grants, credits, or incentives by any of the utilities or others for completion of the utility's conversion.

The total estimated cost of the overhead to underground conversion at the Firstgate Commerce site in the City of Margate, Florida is \$398,048.00 which includes both the utility costs as well as those normally incurred by the property owner. As shown in the summary, the breakdown is \$256,984.00 for the electric power facilities and \$141,064.00 for the communications facilities. This is for replacement-in-kind and does not include service to any proposed development on the Firstgate Commerce Center lot.

The cost estimate has been prepared by and under the direct supervision of Peter J. Rant, PE, Florida License Number 59619. RGrid Power is located at 10300 Crisp Drive, Raleigh, North Carolina 27614 and 501 N. Main Street, Wake Forest, North Carolina 27587. Any questions related to this estimate may be directed to Mr. Peter Rant at (919) 602-3094 or prant@rgridpower.com.

Sincerely,

A handwritten signature in black ink, appearing to read "Peter J. Rant", with a horizontal line extending from the end of the signature.

Peter J. Rant, PE  
President

Cc: Mr. Harry G. Buckner

# RGrid Power PLLC

## Construction Cost Estimate

Owner: FPL	Date:	2/17/2021
Facility: Electric Utility Distribution Lines	Est. By:	PJR, HGB
Underground Conversion	Project No.:	
Description: Cost Opinion		

Line Item	Item or Construction Unit Description	Quantity	Unit of Measure	Labor Cost	Material Cost	Labor & Material	Extended Cost
1	Poles, Deadend, Direct Buried, Concrete	2	Each	\$900.00	\$1,100.00	\$2,000.00	\$4,000.00
2	Poletop Assembly, Deadend	2	Each	\$800.00	\$900.00	\$1,700.00	\$3,400.00
3	Guys and Anchors	4	Each	\$250.00	\$300.00	\$550.00	\$2,200.00
4	Riser Assembly, 23 kV, 3-Phase, 1000 kcmil cable	3	Each	\$1,500.00	\$2,400.00	\$3,900.00	\$11,700.00
5	Switch, padmounted, PME-11, complete	1	Each	\$5,000.00	\$19,000.00	\$24,000.00	\$24,000.00
6	Switch, padmounted, PME-9, complete	2	Each	\$5,000.00	\$16,000.00	\$21,000.00	\$42,000.00
7	Power Cable, 25 kV, 1000 kcmil AL	3750	Feet	\$4.00	\$12.00	\$16.00	\$60,000.00
8	Power Cable, 25 kV, 1/0 AWG AL	50	Feet	\$4.00	\$4.00	\$8.00	\$400.00
9	Open Cut Trench, (4 ft x 3 ft) (DxW) w/Marker Tape	850	Feet	\$35.00	\$10.00	\$45.00	\$38,250.00
10	Directional Bore (2-6 inch HDPE)	400	Feet	\$45.00	\$6.00	\$51.00	\$20,400.00
11	Conduit Direct-Buried (2-6 inch PVC)	850	Feet	\$10.00	\$6.00	\$16.00	\$13,600.00
12	Padmount lighting transformer, 23 kV, 25 kVA	1	Each	\$500.00	\$1,000.00	\$1,500.00	\$1,500.00
13	Underground lighting and signal feeds (Conduit, cable, connections)	1	Each	\$1,000.00	\$1,000.00	\$2,000.00	\$2,000.00
14	Remove existing overhead conductor and facilities	1	Lot	\$6,000.00	\$0.00	\$6,000.00	\$6,000.00
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			Subtotal - Construction w/o contingencies				\$229,450.00
			Contingencies				\$0.00
			Construction Subtotal				\$229,450.00
			Engineering & Supervision				\$27,534.00
			Installation Total				\$256,984.00

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Construction Cost Estimate

<b>Owner: Multiple Owners</b>	<b>Date:</b>	<b>2/17/2021</b>
<b>Facility: Communications Lines</b>	<b>Est. By:</b>	<b>PJR, HGB</b>
<b>Underground Conversion</b>	<b>Project No.:</b>	
<b>Description: Cost Opinion</b>		

Line Item	Item or Construction Unit Description	Quantity	Unit of Measure	Labor Cost	Material Cost	Labor & Material	Extended Cost
1	Cable, CATV	1200	Feet	\$4.00	\$1.25	\$5.25	\$6,300.00
2	Riser, CATV with connections	2	Each	\$300.00	\$400.00	\$700.00	\$1,400.00
3	Cable, Fiber, Distribution, 48 count	1200	Feet	\$6.00	\$1.25	\$7.25	\$8,700.00
4	Riser, Fiber with Closure, splice, storage, 48 count	2	Each	\$3,000.00	\$1,000.00	\$4,000.00	\$8,000.00
5	Cable, Fiber, Feeder, 144 count	1200	Feet	\$8.00	\$1.50	\$9.50	\$11,400.00
6	Riser, Fiber with Closure, splice, storage, 144 count	2	Each	\$7,000.00	\$2,000.00	\$9,000.00	\$18,000.00
7							
8	Open Cut Trench, (3 ft x 4 ft) (DxW) w/Marker Tape	750	Feet	\$35.00	\$10.00	\$45.00	\$33,750.00
9	Directional Bore (3-4 inch HDPE)	400	Feet	\$45.00	\$6.00	\$51.00	\$20,400.00
10	Conduit Direct-Buried (3-4 inch PVC)	750	Feet	\$10.00	\$6.00	\$16.00	\$12,000.00
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14	Remove existing overhead cable and facilities	3	Each	\$2,000.00	\$0.00	\$2,000.00	\$6,000.00
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			Subtotal - Construction w/o contingencies				\$125,950.00
			Contingencies				\$0.00
			<b>Construction Subtotal</b>				\$125,950.00
			Engineering & Supervision				\$15,114.00
			<b>Installation Total</b>				\$141,064.00

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Construction Cost Estimate

<b>Owner: Multiple Utilities</b>	<b>Date:</b>	<b>2/17/2021</b>
<b>Facility: Overhead Utility Lines</b>	<b>Est. By:</b>	<b>PJR, HGB</b>
<b>Underground Conversion</b>	<b>Project No.:</b>	
<b>Description: Cost Opinion</b>		

<b>Line</b>		<b>Estimated</b>
<b>Item</b>	<b>Item or Description</b>	<b>Costs</b>
1	Overhead Electric Line Conversion	\$256,984.00
2	Overhead Communication Line Conversion	\$141,064.00
3		
4		
5		
6	<b>Total Estimated Project Costs (Except Permitting)</b>	<b>\$398,048.00</b>