

September 15, 2022

Ms. Arlova Vonhm
Zoning Administrator
Arlington County
2100 Clarendon Boulevard, Suite 1000
Arlington, Virginia 22201

Kedrick N. Whitmore

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RE: LEED/EARTHCRAFT SCORECARD AND ENERGY MODEL LETTER
PROPERTY: 716 S. GLEBE ROAD (RPC #23-028-016, -026, -027, -028, -030, -031)
OWNER/APPLICANT: REVERA US ARLINGTON PROPCO, LLC

Dear Ms. Vonhm:

The purpose of this letter is to confirm that the Applicant will submit a LEED/EarthCraft Scorecard and Energy Model ("Scorecard") to the County in fulfillment of Administrative Regulation 4.1 filing requirements. The Applicant and the architectural team intend to discuss the creation of the Scorecard with County Staff. The Applicant will submit the Scorecard to the County under separate cover upon its completion.

Thank you for your consideration of this request, and please do not hesitate to contact me with any questions. As always, thank you for your attention to this matter.

Sincerely,



Kedrick N. Whitmore

MEMORANDUM

To: Scott Fleming, AIA
Rust and Orling Architecture

From: Jamal Anwar, PE

Date: 12/23/22

Re: Sunrise Senior Living of Arlington Preliminary Energy Model

GPI has performed a preliminary energy model for the SSL Arlington Project. Project is at design development phase. The scope consists of new construction of a 4 story senior living housing. The I-2 building will consist of assisted and memory care living units, Offices, Dining Rooms, Lounges, Commercial Kitchen, Laundry, and other miscellaneous spaces. Project will be designed for LEED certification. Energy efficient HVAC system, LED lights and hot water system are being selected to achieve the desired energy savings.

The energy savings measures are as follows:

Envelope:

Envelope is being designed to be more energy efficient than ASHRAE baseline.

Wall: U=0.056

Roof: U=0.03

Glass: U=0.4, SHGC=0.35

HVAC Equipment:

The baseline system for this project is PTAC units with hot water boiler for heating (ASHRAE 90.1-2010 system 1). The proposed system will consist of VRF units for the residential units along with energy recovery units (ERUs) for 24/7 exhaust and fresh outdoor air delivery into each resident unit, 6 single zone gas fired RTU's will condition common areas. There will be Makeup Air Unit for the kitchen hood.

Lighting:

High efficiency LED lights will be designed for this project. For design development phase it is assumed that lighting power density will be 0.6w/sf compared to 1w/sf for ASHRAE 90.1 baseline.

Plumbing:

The baseline system is 80% efficient gas fired domestic water heater. Proposed will consist of high efficiency 96% sealed combustion hot water heaters and low flow plumbing fixtures.

Summary:

The energy model is at a preliminary stage with various assumptions as noted. The model resulted in calculated savings of 17.6%. This is due to better envelope, LPD and HVAC equipment compared to baseline. This includes savings from reduced use of water, which results in hot water savings due to lesser use of energy for water heater. Additional savings can be achieved by utilizing other energy saving measures. Final savings will depend on equipment purchased and all the measures incorporated that have been included in the model.



LEED v4.1 BD+C
Project Checklist

Project Name: Sunrise of South Arlington
Date: December 27, 2022

Y	?	N		Possible
1	0	0	Integrative Process	1
1			Credit Integrative Process	1

9	4	19	Location and Transportation	16
		16	Credit LEED for Neighborhood Development Location	16
1			Credit Sensitive Land Protection	1
	1	1	Credit High Priority Site and Equitable Development	2
4	1		Credit Surrounding Density and Diverse Uses	5
3	1	1	Credit Access to Quality Transit	5
	1		Credit Bicycle Facilities	1
		1	Credit Reduced Parking Footprint	1
1			Credit Electric Vehicles	1

4	1	5	Sustainable Sites	10
Y			Prereq Construction Activity Pollution Prevention	Required
1			Credit Site Assessment	1
2			Credit Protect or Restore Habitat	2
1			Credit Open Space	1
		3	Credit Rainwater Management	3
	1	1	Credit Heat Island Reduction	2
		1	Credit Light Pollution Reduction	1

5	0	6	Water Efficiency	11
Y			Prereq Outdoor Water Use Reduction	Required
Y			Prereq Indoor Water Use Reduction	Required
Y			Prereq Building-Level Water Metering	Required
1		1	Credit Outdoor Water Use Reduction	2
4		2	Credit Indoor Water Use Reduction	6
		2	Credit Optimize Process Water Use	2
		1	Credit Water Metering	1

4	1	29	Energy and Atmosphere	33
Y			Prereq Fundamental Commissioning and Verification	Required
Y			Prereq Minimum Energy Performance	Required
Y			Prereq Building-Level Energy Metering	Required
Y			Prereq Fundamental Refrigerant Management	Required
		6	Credit Enhanced Commissioning	6
4	1	14	Credit Optimize Energy Performance	18
		1	Credit Advanced Energy Metering	1
		2	Credit Grid Harmonization	2
		5	Credit Renewable Energy	5
		1	Credit Enhanced Refrigerant Management	1

6	0	7	Materials and Resources	13
Y			Prereq Storage and Collection of Recyclables	Required
		5	Credit Building Life-Cycle Impact Reduction	5
2			Credit Environmental Product Declarations	2
		2	Credit Sourcing of Raw Materials	2
2			Credit Material Ingredients	2
2			Credit Construction and Demolition Waste Management	2

9	0	7	Indoor Environmental Quality	16
Y			Prereq Minimum Indoor Air Quality Performance	Required
Y			Prereq Environmental Tobacco Smoke Control	Required
2			Credit Enhanced Indoor Air Quality Strategies	2
3			Credit Low-Emitting Materials	3
1			Credit Construction Indoor Air Quality Management Plan	1
		2	Credit Indoor Air Quality Assessment	2
1			Credit Thermal Comfort	1
1		1	Credit Interior Lighting	2
		3	Credit Daylight	3
1			Credit Quality Views	1
		1	Credit Acoustic Performance	1

2	0	4	Innovation	6
1		4	Credit Innovation in Design: Occupant Comfort Survey	5
1			Credit LEED Accredited Professional	1

0	0	0	Regional Priority	4
			Credit Regional Priority: Specific Credit	1
			Credit Regional Priority: Specific Credit	1
			Credit Regional Priority: Specific Credit	1
			Credit Regional Priority: Specific Credit	1

40	6	77	TOTALS	110
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Certified: 40 to 49 points
Silver: 50 to 59 points
Gold: 60 to 79 points
Platinum: 80 to 112