CLIMATE CHANGE, ENERGY AND ENVIRONMENT COMMISSION

c/o Department of Environmental Services 2100 Clarendon Blvd., Suite 705 Arlington, VA 22201

June 8, 2021

Honorable Matt de Ferranti, Chair Arlington County Board 2100 Clarendon Blvd., Suite 300 Arlington, VA 22201

Re: 1901 N. Moore St. - Rosslyn RCA Site

Dear Chair de Ferranti,

The Climate Change, Energy and Environment Commission (C2E2) has reviewed the application for the 1901 N. Moore St. – Rosslyn RCA Site project. Based on our review, the C2E2 assesses that the project includes a number of positive sustainability elements, but does not sufficiently advance Arlington's Community Energy Plan (CEP) goals for carbon neutrality. In particular, the project incorporates biophilia in its design to a commendable level, by having a green roof, a sky window and a rain garden on level 7. We commend the applicant's commitment to LEED Gold and a 22 percent improvement in energy efficiency as well as its willingness to conduct a zero-carbon assessment.

The success of Arlington's CEP depends, in large measure, on the County's resolve in ensuring that all buildings are at least zero carbon ready. In practical terms that means three things for every new and renovated building: Make it highly efficient; make it electric; and make the electricity renewable. In this case, Shalom Baranes Associates application falls short on meeting all of these essential categories, as follows:

Energy Efficiency

Making a building energy efficient is the first step toward reducing the building's energy use and therefore its carbon emissions. The applicant has committed to improving energy efficiency by a respectable 22 percent over the ASHREA baseline. The energy model and zero carbon analysis indicate that the building could achieve at least a 25 percent improvement, indicating that there are still some additional opportunities to achieve a higher target.

Electrification of Systems:

All-electric buildings are essential for achieving the County's climate goal of carbon neutrality. The electric grid that serves Arlington is becoming cleaner each year, so buildings that are all-electric will *automatically* result in a steady reduction in greenhouse gas as the electric grid shifts to renewable energy sources. As soon as the County achieves its 100% renewable electricity goal, all electrified buildings in Arlington will be operationally carbon neutral, while buildings still using fossil fuels will not.

All electric buildings also will improve public health and safety by eliminating a major source of indoor air pollution and risk of fire and explosion.¹

In the case of 1902 N. Moore St, the Applicant has proposed using natural gas for its HVAC and centralized hot water systems and the zero-carbon analysis indicated that meeting this criteria would be challenging for a building of this size. Other studies such as the Steve Winter Associates Assessment for the County suggests that the HVAC technology is mature and with careful design can be achieved in multi-family buildings of this size. We urge the County staff and the developer to continue to monitor rapidly evolving technology and explore the potential for electric HVAC and hot water systems, or at a minimum to build in the infrastructure to facilitate a future transition. Leverage the planned zero carbon assessment to help them consider how the building could be made highly energy efficient and identify a pathway toward becoming a zero-carbon building and describe steps it will take to make building systems electric-ready (including first-floor retail).

Renewable Electricity (Energy):

The Green Building Incentive Policy update requires on-site and off-site solar or the option to contribute to the Green Building Fund. The Applicant is exploring the installation of Solar PV on the roof of the building, which we commend. However, the space available is small and we do not expect this to off-set much of the buildings electric load.

We urge the Applicant to pursue the purchase of off-site renewable energy through a VPPA or other mechanism to meet future electricity use with renewable energy. We also recommend that the Applicant consider battery storage and smart technologies to manage the electric load consumption of the building to reduce peak consumption.

Electric Vehicle Charging Infrastructure

The applicant is proposing 4% EV parking spots and 22% EV ready parking spots. We urge the County staff and developer to explore the possibility of increasing the buildings EV ready parking spots (conduits in place) to 50%.

The world is facing a catastrophic climate crisis which requires immediate action by individuals, governments, and businesses to avoid the worst consequences, and all future development needs to align to these goals. I urge the County to ask the Applicant to move into the forefront by offering a climate-friendly building with this project.

Sincerely,

Joan McIntyre

Joan J. Mc Intyre

Chair, Climate Change, Energy and Environment Commission

¹ Gas Stoves: Health and Air Quality Impacts and Solutions, Rocky Mountain Institute, 2020.