



**Dennis D. Smith, AIA**

**Inspire. Create. Achieve.**

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January 30, 2019

Mr. Max Ferentinos  
1651 Old Meadow Road  
Suite 100  
McLean, VA 22102

RE: Sustainable design overview  
Artis Senior Living of Tarrytown  
Tarrytown, NY  
LK Job Number: 16358.00

Dear Mr. Ferentinos,

The building we are designing for the Artis Senior Living project in Tarrytown, NY incorporates multiple sustainable features, some of which will be briefly described in this letter. We have found this design approach to be a successful model for senior care facilities while also reducing the environmental impact of the building on the site and its surroundings.

Creating an energy efficient building envelope was essential to reducing the cooling and heating demand for the building. The typical exterior wall section will be insulated with R-19 spray foam insulation. This not only helps achieve a high R-value for the walls, but also acts as a vapor and air barrier. The spray foam insulation will reduce moisture infiltration into the building, helping eliminate the concern of mold and mildew issues. The typical roof section will be insulated with R-30 continuous insulation.

The majority of the roof will have a high-albedo roofing membrane that has an initial solar reflectance index of 99 and a 3-year aged solar reflectance index of 85. This roofing material will reflect solar heat and greatly reduce the HVAC cooling demand on the building. Using a high-albedo roof material also helps to reduce urban heat islands.

It was important to consider the design of the building shape and the placement and size of the windows to maximize interior daylighting. The resident rooms and public spaces throughout the building are designed to have generously sized windows. Also, the building floor plate depth was designed to be narrow, allowing natural daylight to penetrate deep into every room. Besides reducing energy demand, this creates a healthy environment that helps the resident connect with the natural environment outside the building and enhances the residents' psychological well-being.

The design for the interior lighting incorporates motion sensors for energy savings. The lighting design also incorporates LED fixtures to reduce the overall energy load on the building.

Efficiency was important in selecting the appliances throughout the facility and includes energy star rated appliances.

Mr. Ferentinos  
January 30, 2019  
Page 2

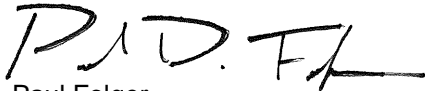
Selecting interior finishes that would encourage a healthy environment was important for this facility. This includes choosing low or zero VOC paints, stains, and varnishes. Also, the furnishings and finishes are selected to help reduce the toxins in the building and promote a healthy indoor environment.

The project will include a bike rack to encourage bike commuting since Artis wants to promote a healthy environment for the residents, guests, and employees.

Should you have questions or need additional information, please contact me by phone at 316-268-0230 or by e-mail at [pfolger@lk-architecture.com](mailto:pfolger@lk-architecture.com).

Sincerely,

Dennis D Smith, AIA

A handwritten signature in black ink, appearing to read "P.D. FL". The letters are stylized and connected, with a long horizontal stroke at the end.

Paul Folger  
Project Manager

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