

ENVIRONMENT AND ENERGY CONSERVATION COMMISSION

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

March 28, 2017

The Honorable Jay Fiset, Chair
Arlington County Board
2100 Clarendon Blvd.
Arlington, VA 22201

Re: New Elementary School at Thomas Jefferson - Environmental Assessment

Dear Mr. Fiset:

The Environment and Energy Conservation Commission (E2C2) provides these comments on the Environmental Assessment Checklist (EA) dated October 28, 2016 for the new elementary school to be constructed adjacent to the Thomas Jefferson Middle School on County owned property. Members of the Commission served on the Thomas Jefferson Working Group and the Public Facilities Review Committee (PFRC) for the new elementary school, participated in the presentation on the EA provided by Arlington Public Schools (APS) staff on February 27, 2017, and reviewed the draft Use Permit and other materials made available to the Commission in February.

Though it is impossible to construct an entirely new 750 student school facility with no environmental impact, the Commission commends APS and Arlington County staff for their focus on developing this project with the minimum impact to the environment and the County's limited natural resources. By siting the facility on a previously developed site, including structured parking as part of the project, and combining uses with other school and County activities where possible, the new elementary school project should be seen as a model for public facility development in the future.

Though we are generally pleased with and support the use permit application, we provide the following additional comments and recommendations.

Solar Power

The Commission supports the design of the new school building as a net zero energy facility but is concerned that the installation of solar panels was not included in the base project. The Commission encourages both the County and APS to pursue renewable energy where feasible, and to consider a complete life-cycle cost analysis (both capital and long-term operating cost savings), rather than only capital budget limits when considering the inclusion of solar power. We are encouraged by APS's pursuit of a third-party power purchase agreement (PPA) as an alternative to including solar panels in the capital project. E2C2 encourages APS to select the

most economically viable solution to implement solar into the project. In order to meet the County's relatively aggressive goals under its Community Energy Plan, every opportunity for renewable energy should be realized.

Geothermal Heating and Cooling

The Commission is pleased to confirm that the use of geothermal energy is included in the base project. This is a key element of realizing a net zero energy facility. APS has assured the Commission that future budget constraints will not threaten the inclusion of this feature as the project moves through detailed design and construction.

Stormwater Management

It is a rare project that can construct an entirely new facility and result in a net reduction of site imperviousness and improved stormwater quality. It is also noted that additional stormwater management facilities (vegetated swales and bio-retention features) have been incorporated into the site design without giving up open natural space outside of the project footprint. APS should be commended for both of these items. It should be noted, however, that the stormwater management plan depends, at least in part, on semi-pervious pavement. This pavement will require long-term maintenance in order to continue to provide positive environmental impact. APS has indicated that this maintenance will be provided under contract. DES should ensure that APS keeps these contracts in place over the long-term. ***The County should consider this as a special site condition under the proposed use permit.***

Site Lighting

APS has indicated that site lighting will be dark-sky compliant where possible. However, APS has indicated that the County is requiring the County's standard street lights be installed down South Old Glebe and that these fixtures do not meet dark-sky requirements. If this is the case, DES should consider changing its standard (possibly through the on-going Street Lighting Master Plan process), to allow APS to provide all dark-sky compliant lighting.

The Commission has also noted that to meet current Dark Sky certification requirements, fixtures should have a correlated color temperature less than 3000K. Once again, APS has indicated that they are restricted from meeting this recommendation by a requirement that they use the County's standard post top fixtures, which have a color temperature of 4000K. This should also be reviewed against current state-of-the-art lighting guidelines, to confirm that APS and Arlington County are providing the most environmentally protective lighting design.

The Commission also notes the proximity of residential properties to the school site, and the potential for impacts on these properties from site lighting. We recommend that a glare study be conducted to ensure that the placement and design of school lighting and site screening minimizes the impact to adjoining properties. APS should engage neighbors with the results of this study and solicit input, prior to finalizing the design or beginning construction.

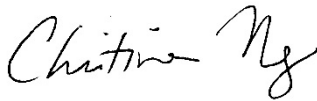
Recommendations

The Commission supports approval of the use permit and acceptance of the Environmental Assessment with the following recommendations:

1. That APS and the County take steps to ensure the inclusion of solar panels and a net zero energy facility, whether through this capital project, as a separate capital project or through a PPA or other delivery vehicle.
2. That the geothermal system be maintained in the project.
3. That a site condition be included in the use permit to ensure that APS obtains a maintenance contract for long-term maintenance of semi-pervious pavement.
4. That County policies be reviewed with regard to standard fixtures, such that new facilities are built meeting up-to-date standards.
5. That APS perform a light glare study and work with neighboring residents to minimize negative impacts.
6. That APS include EV charging stations as part of the structured parking.

Thank you very much.

Sincerely,

A handwritten signature in black ink that reads "Christine Ng". The signature is written in a cursive, flowing style.

Christine Ng

Chair, E2C2