



**MEMORANDUM**

**TO:** District of Columbia Zoning Commission  
**FROM:** *JL for* Jennifer Steingasser, Deputy Director  
**DATE:** December 21, 2021  
**SUBJECT:** ZC #12-01E – Catholic University – Campus Plan Amendments and Further Processing for a New Solar Energy Facility

**I. SUMMARY RECOMMENDATION**

Pursuant to Subtitle X § 101, the applicant requests an amendment to the approved Catholic University 2012 Campus Master Plan and a further processing application to construct a new solar energy facility. The new facility would be in a location shown in the current campus plan as open space and parking, with formal entrances from North Capitol Street and on Harewood Road, and a formal visual and landscaped corridor focused on historic Caldwell Hall.

The Office of Planning (OP) is supportive of the addition of the solar array, which would generate clean electricity for the District, and recommends **approval** of the campus plan amendment, as the changes proposed would have little to no impact on surrounding neighborhoods, and the revised campus plan would still achieve most of the goals of the approved campus plan. OP also recommends approval of the further processing. The proposed site plan is consistent with the campus plan, as revised.

**II. APPLICATION IN BRIEF**

|                                                 |                                                                                                                                                                                                                                                                                                      |
|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Applicant</b>                                | Catholic University of America                                                                                                                                                                                                                                                                       |
| <b>Location</b>                                 | Catholic University’s West Campus, between Harewood Road and North Capitol Street.<br>Ward 5, ANC 5A -- Square 3667, Lot 7                                                                                                                                                                           |
| <b>Zoning</b>                                   | RA-1 – Low Density Apartment Zone; University uses permitted by special exception                                                                                                                                                                                                                    |
| <b>Existing Use of Property</b>                 | Vacant land / forested land / outdoor maintenance and storage                                                                                                                                                                                                                                        |
| <b>Comp. Plan Policy Map</b>                    | Land Use Change Area                                                                                                                                                                                                                                                                                 |
| <b>Comp. Plan Future Land Use</b>               | Institutional Uses                                                                                                                                                                                                                                                                                   |
| <b>Application and Proposed Use of Property</b> | The application proposes a new solar energy facility on the University’s West Campus. The proposal requires a campus plan amendment to permit the use in that location, and the further processing application indicates the configuration of the solar panels and their exact location on the site. |



### III. SITE AND PROJECT DESCRIPTION

The subject site is on the University's West Campus, which is between Harewood Road and North Capitol Street. University uses are across Harewood Road to the east. The Armed Forces Retirement Home (AFRH) is across North Capitol Street to the west, and the portion of the AFRH campus nearest the subject site is planned for redevelopment with mixed use buildings. To the north is the Saint John Paul II National Shrine. To the south of the proposed solar facility would be the undeveloped remainder of the West Campus, the North Capitol / Irving interchange, a parking lot for the Basilica of the National Shrine of the Immaculate Conception, and a piece of vacant land owned by the Basilica. See the vicinity map below.



The proposal would require a campus plan amendment to permit the solar array in this location. The array would replace, in the plan, a view and landscape corridor focused on Caldwell Hall, intended as an organizing element for future building development on the West Campus. The solar facility would also replace a proposed temporary parking lot, as well as the planned ceremonial entrances to campus from North Capitol and Harewood Road. The following excerpts from the campus plan illustrate what uses and organizing elements were approved on the subject site.



Excerpt from approved Campus Plan: “Proposed Master Plan”, p. 67, showing proposal for the West Campus, and alternative with parking lot removed.



Excerpt from approved Campus Plan: “Proposed Focal Points and Views”, p. 81.

The further processing request seeks approval of the specific aspects of the design, including the height of the solar panels, the exact boundaries of the solar facility, the preservation of heritage trees, the establishment of a new landscape screen along Harewood Road, and the establishment of a pollinator buffer around most of the solar panel area. Please refer to Exhibit 3B. The total size of the solar facility would be about 25 acres. The panels themselves would be about 9’6” above grade at their highest point. The determination letter from the Zoning Administrator which addresses the solar facility, and which the ZA provided to OP, states that “the facility will be designed, built and operated by a solar development company that will ground lease the land from the University for a 15-year term with options to extend for a maximum of ten additional years.” Page 3 of Exhibit 3 states that “The power generated will be sold to the grid thereby increasing the amount of clean energy produced and distributed on the grid within the District of Columbia.”

#### **IV. CAMPUS PLAN AMENDMENT AND FURTHER PROCESSING REVIEW**

University or college use in a low or moderate density residential zone is permitted as a special exception as part of a campus plan. The current Campus Plan for Catholic University was approved on May 25, 2012 and will expire on May 25, 2027. In addition to the campus plan application itself, reviews are required for individual buildings or structures in “further processing” applications, which may be evaluated concurrently with campus plan amendments, if necessary. Subtitle X Section 101 of the Zoning Regulations provides standards for reviewing campus plan and further processing applications. OP’s analysis of the application against those criteria is below.

*101.1 Education use by a college or university shall be permitted as a special exception subject to review and approval by the Zoning Commission after its determination that the use meets the applicable standards and condition of this chapter.*

Catholic University is an educational use with associated academic buildings. The solar electricity generating facility has been determined by the Zoning Administrator – based on past BZA and Court of Appeals precedent – to be accessory to the educational use.

*101.2 The uses shall be located so that they are not likely to become objectionable to neighboring property because of noise, traffic, parking, number of students, or other objectionable conditions.*

The proposed solar generating facility would be located on the west campus, away from the rest of the existing University uses and away from any nearby residential neighborhoods. The use should not generate any noise, and vehicular traffic should be minimal. The site would have limited visibility from nearby roads, with existing vegetation and new planted buffers providing screening.

*101.3 Any commercial use customarily incidental to a university use in an R, RF, or RA zone, or as an adjunct use to a university building, shall be subject to the following conditions:*

- a) *There shall be a demonstrated and necessary relationship between the use and the university functions;*
- b) *The total floor area of all commercial uses, including basement or cellar space, shall occupy no more than ten percent (10%) of the gross floor area of the total campus plan floor area; and*
- c) *The commercial use shall be located so that it will not become objectionable to non-university residential neighbors due to hours of operation, noise, parking, loading, lighting, trash, or other operational characteristics that are not customarily associated with a residential use.*

The application does not propose a commercial use, other than selling electricity.

*101.4 The campus plan process shall not serve as a process to create general commercial activities or developments unrelated to the educational mission of the applicant or that would be inconsistent with the Comprehensive Plan.*

The proposal would not create commercial activities.

*101.5 The following development standards shall apply to the maximum total density of all buildings and structures on the campus in an R, RF, RA, or RC-1 zone:*

**TABLE X § 101.5: MAXIMUM TOTAL DENSITY OF ALL BUILDINGS AND STRUCTURES**

| <i>Zone</i>                               | <i>Maximum Height (Feet)</i> | <i>Maximum Floor Area Ratio</i> |
|-------------------------------------------|------------------------------|---------------------------------|
| <i>All R and RF zones</i>                 | <i>50</i>                    | <i>1.8</i>                      |
| <i>RA-1, RA-2, RA-6, RA-7, RA-8, RC-1</i> | <i>50</i>                    | <i>1.8</i>                      |
| <i>RA-3, RA-4, RA-5, RA-9, RA-10</i>      | <i>90</i>                    | <i>3.5</i>                      |

The proposed solar facility would not add floor area, or therefore FAR, to the campus total. After construction of the new nursing school building is complete (ZC #12-01D), the total campus FAR would be 0.28, well below the limit of 0.39 established by the campus plan.

*101.6 Because of permissive increases as applicable to normal bulk requirements in the low-density zones regulated by this title, it is the intent of this subsection to prevent unreasonable campus expansion into improved low-density zones.*

The proposed solar array would not result in an expansion into improved low-density zones. The use is not inconsistent with the approved Campus Plan, as amended, and would be constructed on the West Campus, away from any nearby neighborhoods.

*101.7 In calculating floor area ratio (FAR), the land area shall not include public streets and alleys, but may include interior private streets and alleys within the campus boundaries.*

The proposed solar array would not change the FAR of the campus.

*101.8 As a prerequisite to requesting a further processing for each college or university use, the applicant shall have submitted to the Zoning Commission for its approval a plan for developing the campus as a whole, showing the location, height, and bulk, where appropriate, of all present and proposed improvements including, but not limited to, the following:*

- a) Buildings and parking and loading facilities;*
- b) Screening, signs, streets, and public utility facilities;*
- c) Athletic and other recreational facilities; and*
- d) A description of all activities conducted or to be conducted on the campus, and of the capacity of all present and proposed campus development.*

With application #12-01, the Commission approved the Catholic University campus plan, which illustrated, among other items, the locations of buildings, open spaces, parking facilities, loading facilities, pedestrian ways, streets, and athletic and recreation facilities, and also described the capacity of the campus in terms of students, faculty and staff. The proposed amendment to the campus plan would alter the concept for the West Campus, including its open spaces, view corridors, streets and campus entrances, and the potential future location of buildings. The amendment, however, should not have an impact on the number of students, faculty or staff, nor should it increase the amount of vehicular traffic going to and from the University. OP has no objection to the proposed campus plan amendment, as it would have no impact on surrounding neighborhoods, and would enable the creation of clean electricity for the District.

Also, the proposal would still achieve goals of the campus plan, including sustainability. In the introduction, the plan, approved in 2012, stated that goal and recognized the University's early commitment to solar power:

*“Promoting responsible environmental stewardship is a University priority... In December 2009, the University installed 1,000 solar photovoltaic panels on the rooftops of four campus buildings. In 2011, the number of solar panels was increased by 440. CUA's solar-power system is one of the largest in Washington, D.C., and is expected to generate more than 500,000 kilowatt hours of power each year” (p. 6).*

Since that time, Catholic University has continued to install solar panels on buildings, and the proposed facility would generate 11,000 Megawatt hours of power each year, approximately 25% of the entire electricity demand for the campus.

OP also supports the further processing application. The location of the solar array is appropriate, and its low height and surrounding screening would minimize potential visibility from nearby

properties or public spaces. The existing and proposed screening, pollinator garden and preservation of specimen trees would also help to create a pleasing environment around the facility.

*101.9 The further processing of specific buildings, structures, and uses within an approved campus plan shall be processed as a special exception unless the campus plan approval was included in an order granting a first-stage planned unit development (PUD) for the campus, in which case the further processing shall be in the form of second-stage planned unit development applications filed consistent with the conditions of the approved campus plan/PUD.*

As determined by the Zoning Administrator, the present application is appropriately filed as a special exception for a further processing to the original campus plan, as well as an amendment to the campus plan.

*101.10 Within a reasonable distance of the college or university campus, and subject to compliance with Subtitle X § 101.2, the Zoning Commission may also permit the interim use of land or improved property with any use that the Zoning Commission may determine is a proper college or university function. The land need not be included in the campus plan. When a major new building that has been proposed in a campus plan is instead moved off-campus, the previously designated site shall not be designated for, or devoted to, a different major new building unless the Zoning Commission has approved an amendment to the campus plan applicable to the site; provided, that for this purpose a major new building is defined as one specifically identified in the campus plan.*

The Applicant is not proposing an interim use of property.

*101.11 In reviewing and deciding a campus plan application or new building construction pursuant to a campus plan, the Zoning Commission shall consider, to the extent they are relevant, the policies of the District Elements of the Comprehensive Plan.*

As part of Zoning Commission case #12-01, the Commission found that the overall campus plan was not inconsistent with the policies of the Comprehensive Plan, including the Upper Northeast Area Element and the Brookland Small Area Plan. Please refer to ZC Order #12-01, Exhibit 30, page 5, paragraph 31. The present application would not change the relationship of the campus or campus plan to the Comprehensive Plan. The Plan's Generalized Policy Map indicates that the subject site is appropriate for a change of land use, and Future Land Use Map describes the site as appropriate for institutional uses. The generation of electricity has been found to be an appropriate accessory use to a university, so the solar array would not be inconsistent with those map designations. The creation of green energy infrastructure would further policies of the new Comprehensive Plan's Environmental Protection Element, which emphasizes the use of sustainably produced electricity. The following are policies relevant to renewable energy:

***Policy E-3.2.1: Carbon Neutrality***

*Support land use policies that move Washington, DC toward achieving Districtwide carbon neutrality by 2050. This means that the District will eliminate GHG emissions, or offset any remaining emissions, by supporting initiatives that will reduce emissions, such as tree planting, renewable energy generation, and land conservation. In the short term, the District government will develop a detailed implementation plan with clear milestones in order to achieve carbon neutrality by 2050. § 612.3*

***Policy E-3.2.4: Energy Availability***

*Improve energy availability and buffer District consumers from fluctuations in energy supply and prices. This should be achieved through the District’s energy purchasing policies, financial assistance programs for lower-income customers, incentives for green power, and regulatory changes that ensure that local energy markets are operating efficiently. § 612.6*

***Policy E-3.2.6: Alternative Sustainable and Innovative Energy Sources***

*Support the development and application of renewable energy technologies, such as active, passive, and photovoltaic solar energy; fuel cells; and other sustainable sources such as shared solar facilities in neighborhoods and low- or zero-carbon thermal sources, such as geothermal energy or wastewater heat exchange. Such technology should be used to reduce GHGs and imported energy, provide opportunities for economic and community development, and benefit environmental quality. A key goal is the continued availability and access to unobstructed, direct sunlight for distributed-energy generators and passive solar homes relying on the sun as a primary energy source. § 612.8*

***Policy E-3.2.8: Locally Generated Electricity***

*Support locally generated electricity from renewable sources, including both commercial and residential renewable energy projects. Policies could support the option to share a solar project among several neighbors (i.e. community solar), financial incentives, research and education, and maximizing existing programs to help install solar panels and solar thermal systems throughout the District. § 612.10*

*101.12 As an integral part of the application requesting approval of new building construction pursuant to a campus plan, the college or university shall certify and document that the proposed building or amendment is within the FAR limit for the campus as a whole, based upon the computation included in the most recently approved campus plan and the FARs of any other buildings constructed or demolished since the campus plan was approved.*

The campus plan established a limit of 0.39 FAR for the entire campus, and the proposed solar facility would not add floor area, or therefore FAR, to the campus total.. After construction is complete on the new nursing school building (ZC #12-01D), the total campus FAR would be 0.28.

*101.13 Pursuant to Subtitle Z § 405.1, as soon as the application is accepted, the Office of Zoning shall refer the application to the Office of Planning, the Department of Transportation, and the Department of Energy and Environment for review and written reports.*

As of this writing the record contains no reports from other District agencies.



*101.14 Approval of a campus plan shall be based on the determination by the Zoning Commission that the application will be in harmony with the general purpose and intent of the Zoning Regulations and Zoning Maps, and will not tend to affect adversely the use of neighboring property, in accordance with the Zoning Regulations and Zoning Maps, subject to the special conditions specified in this section.*

It is the intent of the Regulations that university uses should be compatible with their surroundings, especially in lower density residential zones. The proposed solar power facility, on the West Campus, away from nearby residential communities, should have little to no impact on its surroundings, and would provide clean electricity to the city's grid.

*101.15 Small deviations from plans approved under further processing that are determined necessary by the Zoning Administrator for compliance with life, safety, or building codes, may be permitted without an amendment to a further processing provided the deviation does not result in an increase in gross floor area of more than four-hundred and fifty square feet (450 sq. ft.) and the addition shall only be used for purposes of ingress, egress, or handicap access.*

This subsection appears to apply only to buildings, but OP would support the applicant's flexibility to make slight deviations from the plans provided with this Zoning Commission application.

*101.16 A further processing of a campus building shall not be filed simultaneously with a full campus plan application. However, an amendment to an approved campus plan may be considered simultaneously with the further processing if determined necessary by the Zoning Commission.*

Pursuant to this section, the applicant requests a campus plan amendment as well as a further processing.

## **V. COMMENTS OF OTHER DISTRICT AGENCIES**

OP has received comments from DOEE, which are included as Attachment 1.

## **VI. ANC COMMENTS**

As of this writing the record contains no comments from the ANC.

## **VII. COMMUNITY COMMENTS**

As of this writing the record contains two letters in support at Exhibits 12 and 13.

## **VIII. ATTACHMENTS**

1. DOEE Comments

**Attachment 1**  
**DOEE Comments**

# DOEE Development Review Comments

## ZC 12-01E: Catholic University Solar Array

Prior to the submission to the Zoning Commission, the applicant engaged DOEE on a number of topics related to the proposed solar project. As part of these discussions, DOEE shared information about the Solar for All program, which aims to bring the benefits of locally generated solar energy to 100,000 low-to-moderate income families in the District. If the applicant builds the proposed solar facility, DOEE encourages the applicant to participate in the Solar for All program. By designating a portion of the project as community solar for the Solar for All program, the applicant could share the benefits of solar with residents who are unable to install solar systems of their own. The applicant informed DOEE that it has applied for a community renewable energy facility (CREF) interconnection from Pepco, which could allow the solar facility to participate in the Solar for All program. However, the applicant has not yet applied for Solar for All participation.

DOEE advises that the implementation of this solar array will trigger stormwater management requirements. From looking at existing GIS data, the existing site conditions include steep slopes and heavily wooded areas containing a mix of special and heritage trees. DOEE's definition of land disturbance includes movement of earth, land, or sediment that disturbs the land surface and the related use of pervious land to support that movement. Land-disturbing activity includes stripping, grading, grubbing, trenching, excavating, transporting, and filling of land, as well as the use of pervious land for movement and storage of construction vehicles and materials. All land that will be disturbed due to grading and during the construction and installation of the solar panels along with the disturbance associated with the individual solar panel posts will be used to determine the stormwater retention volume for the site. A stormwater management plan showing how the site will meet the retention volume will be required to be submitted to DOEE through the Surface and Groundwater system for review and approval. Additionally, coordination with DDOT Urban Forestry Division will be required.

DOEE recommends adjusting the LOD to maintain a 100-foot buffer around the edge of the remnant forest. DOEE recommends managing the buffer zone between the solar array and the forest edge by monitoring for invasive plant species, and seasonally applying chemical and mechanical treatment to known non-native invasive species. DOEE recommends applying native meadow/wildflower seed mix to all areas of disturbed soil within the LOD. DOEE recommends no net loss of tree canopy across CUA's campus. DOEE recommends that any tree loss as a result of the solar array be offset by new tree planting and impervious cover removal in other parts of campus.