

**RESOLUTION**

**PLAINSBORO TOWNSHIP PLANNING BOARD**  
**Middlesex County, New Jersey**

**P22-12 PPL Safari Holdings, LLC d/b/a Safari Energy LLC**  
**Block 701, Lots 10 & 11**  
**(600 & 650 College Road East)**

**PMUD Planned Unit Development Zone**

**~ MINOR SITE PLAN APPROVAL WITH SUBMISSION WAIVERS ~**  
**(Solar Canopy Project)**

**WHEREAS**, PPL Safari Holdings, LLC d/b/a Safari Energy LLC (“applicant” or “Safari Energy”) has applied to the Plainsboro Township Planning Board (“Board”) for minor site plan approval to install solar canopy mounted solar arrays on properties located at 600 and 650 College Road East and designated on the Plainsboro Township tax maps as Block 701, Lots 10 and 11, respectively (“site,” “property” or “subject property”); and

**WHEREAS**, the property is owned by TGA 600 College Road LLC, which has consented to the within application; and

**WHEREAS**, the property is located in the PMUD Planned Unit Development Zone; and

**WHEREAS**, the details regarding the applicant’s proposal are set forth in the following materials submitted by the applicant:

- Signed application form, checklists, and submission waiver requests
- Safari Energy Solar Canopy Project Design Narrative with attached exhibits (see Schedule A for list)
- Plan set entitled “Minor Site Plan of Solar Canopy System Array for Safari Energy, Block 701, Lots 10 and 11, Plainsboro Township, Middlesex County, New Jersey,” prepared by Van Note-Harvey Associates, P.C. (Ralph A Petrella, NJPE), dated September 9, 2022, last revised February 27, 2023 (seventeen sheets total)

- Engineering Report prepared by Van Note-Harvey Associates, P.C. (Ralph A Petrella, NJPE), dated September 9, 2022

and

**WHEREAS**, the Board reviewed the application at a virtual public hearing held via Accession Meeting on March 20, 2023, during which the applicant was represented by Ryan P. Kennedy, Esq. (Stevens & Lee, P.C.); and

**WHEREAS**, all applicable notice requirements for the public hearing were met; and

**WHEREAS**, instructions for how to access the meeting were printed on the Planning Board's meeting agenda and posted on the Township's website, including instructions to the public for how to ask questions and make comments on the application, both in advance of and during the public hearing; and

**WHEREAS**, during the hearing, the Board reviewed the exhibits set forth in Schedule A attached hereto and made a part hereof; and

**WHEREAS**, during the hearing, the Board heard testimony from the witnesses set forth in Schedule B attached hereto and made a part hereof; and

**WHEREAS**, the Board also considered the Planning Board Review Memo dated March 9, 2023 attached hereto as Schedule C and made a part hereof; and

**WHEREAS**, all of the materials related to the application and referenced herein were posted online and made available for public review and download more than forty-eight hours prior to the public hearing, and remained available to the public during and after the hearing; and

**WHEREAS**, members of the public and interested parties were provided with the opportunity to ask questions, cross-examine witnesses, and offer comments during the hearing,

and were also provided the opportunity to submit written comments and questions in advance of the public hearing; and

**WHEREAS**, the Board based its review of the application on the plans, reports, and exhibits identified herein and the testimony provided during the hearing, as well as on its own knowledge of and expertise in the subject matter; and

**WHEREAS**, after due deliberation, the Board makes the following findings:

**PREAMBLE**

1. The findings set forth in the preamble to this resolution are incorporated herein as if restated at length.

**SUBJECT PROPERTY**

2. The subject property consists of two adjacent parcels located at 600 and 650 College Road East and designated on Plainsboro's tax maps as Block 701, Lots 10 and 11. Both sites are fully developed with office buildings, parking lots, and other related site improvements.

**ZONING**

3. The sites are located in the PMUD Planned Unit Development District with roadway frontage on College Road East.

**OVERVIEW OF APPLICANT'S PROPOSAL**

4. The applicant seeks minor site plan approval with submission waivers to install a solar canopy system array over the majority of the 650 College Road parking lot as well as the majority of the southern parking lot of 600 College Road.<sup>1</sup> Other improvements include trenching for conduit installation, installation of a switchgear in landscape areas (one for each site), selective tree and light pole removal, as well as landscape screening for the switchgear and tree planting.

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<sup>1</sup> The applicant's engineering report indicates that at this time, there is no plan to add the solar canopies in the northern parking lot of 600 College Road.

5. More specifically, the solar canopy systems will be constructed using Seraphim Energy Group hi-facial solar modules and SMA America solar technology inverters.<sup>2</sup> The canopy structure will be designed by United Structural using a cantilever “tee”-shaped design, which the applicant’s engineer indicates is an industry standard for large commercial solar systems nationwide. In accordance with Section 85-33.1 of Plainsboro Township’s Subdivision and Site Plan Review regulations, entitled Design Criteria for Solar and Wind Energy Installations, all columns and beams will be constructed with high quality components, and consist of boxed vertical and horizontal structural elements, with a white powder coated paint finish. The solar canopies will have a 3-degree pitch “tee” design as well as hi-facial panel design. The hi-facial panels are able to collect energy on both sides of the panels and while not covered to allow for sun exposure on both sides, do have a “finished” and clean look.
6. The solar canopies will be connected to inverters that are mounted to the canopy structures (see Exhibit A-5 and site plan sheet G100), and then, via underground conduit, to proposed switch gear electrical equipment to be installed on 48 square foot concrete pads located next to the side and rear of the buildings at 600 and 650 College Road East, respectively.
7. The columns for the solar array are 1.5-feet in diameter within a 24” concrete footing, which equates to approximately 3.14 square feet of impervious surface per column. At 600 College Road, there will be 18 columns installed within the landscape areas; therefore, the impervious increase associated with the columns will be 56.5 square feet (3.14 sf/column X 18 columns). At 650 College Road, there will be 23 columns installed in the landscape islands; therefore, the impervious increase associated with the columns will be 72.2 square feet (3.14 sf/column X 23 columns).
8. In total, the solar energy system proposed by the applicant will generate 2.88± megawatts of electric power, equivalent to an off-set of carbon dioxide emissions of over 90 tons or the planting of over two million trees or removing 16,000 cars from our roads for a year.

#### ADDITIONAL DETAILS

9. Parking.
  - a. Sheets CE-2 and 3 of the applicant’s plans (Site Engineering Plan) identify the location of each of the support columns to carry the load of the solar canopy structures in the parking lot. The plan is designed so that each of the columns will be located in a manner that will not diminish the use of any of the parking spaces.

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<sup>2</sup> According to the applicant, Seraphim and SMA are two of the largest solar panel and inverter manufacturing companies in the world who have found success thanks to their focus on equipment efficiency, durability, and most importantly safety.

**10. Vehicular circulation.**

- a. The canopy structures will have a minimum clearance of approximately 13½ feet and a maximum height of approximately 15½ feet, and will be supported by columns to be located so as to avoid interference with the parking spaces below.

**11. Grading and drainage and stormwater management**

- a. Similar to the way the solar canopies were designed and built at Siemens and those approved for installation at 150 College Road, the proposed solar canopies will be constructed so that the solar panels mounted on the top of the structure will have a narrow gap between them, which will allow rain and melting snow to pass through the canopy structures to the ground below and then flow to the nearby storm sewer inlets, consistent with the current pattern of on-site drainage.
- b. Because the solar canopy arrays will be constructed over the existing parking lot, only the proposed columns that are within existing landscape islands and the two switchgear equipment pads constitute additional impervious surface in conjunction with this project. The solar improvements associated with the Project will result in an area of disturbance of 0.27 acres for 600 College Road and 0.23 acres for 650 College Road sites, and will not impact or change the current runoff patterns of the site.

**12. Stormwater management**

- a. The applicant's engineering report indicates an aggregate increase of 224.7 square feet of impervious area. Since a quarter-acre (10,890 sq. ft.) is the minimum threshold for compliance with the stormwater management regulations, no modification to the existing stormwater management system is required as a result of this increase.

**13. Landscaping**

- a. 71 existing trees located in parking lot landscape islands beneath the proposed solar canopy structures will need to be removed as a result of canopy installation. The tree removal and relocation schedule and landscape plan included in the applicant's plan set (Sheet LS-1) indicates that 144 replacement trees are needed. 77 trees will be planted on site, including Tulip, Sycamore, and Red American Linden trees. The balance (67) will be satisfied through an in-lieu payment to the Township's Forrest Restoration Trust Fund.
- b. The landscaped islands in the existing parking lots impacted by the applicant's plan currently include grassed and mulched areas with tree plantings. The applicant's

plans show River Jack Stone as the proposed treatment for these areas (see plan sheets CE-2 and CE-3).

**14. Lighting**

- a. The installation will require the removal of thirteen existing light poles in the parking areas. These will be replaced by LED under-canopy lights. The Board's planning staff and consultants indicated to the Board that between the existing light poles that will remain and the proposed under-canopy LED lights, appropriate light levels will be maintained throughout the portions of the parking areas affected by the canopy installation.
- b. The Planning Board Review Memo indicates that the DRC recommended the applicant consider installing occupancy sensors for the under-canopy lighting, which sensors would be triggered when a vehicle entered a parking space or by a person entering the space on foot to access their parked vehicle. The DRC further recommended that if such option is not readily feasible, the applicant should consider utilizing a two-level lighting approach similar to what was approved for the hospital parking lots, whereby a lower level of under-canopy lighting (security lighting) would be utilized during after business hours (e.g., after 9 PM). The Board agrees with the DRC's recommendation.

**15. Signage**

- a. There is no proposed signage associated with this application.

**16. Solid waste and recycling.** N/A

**17. Utilities**

- a. All existing utility services that supply the existing buildings are to remain and not be impacted by this project. The solar canopy system will be implemented in accordance with the current New Jersey State Standards. Coordination with Public Service Electric and Gas (PSE&G) will be handled by the applicant in accordance with PSE&G requirements.

**18. Soil erosion and sediment control**

- a. All soil erosion and sediment control measures are shown graphically on the associated project site plans, including tree protection, inlet protection, and the project site limit of disturbance. All soil erosion control measures will be implemented in accordance with the current Standards for Soil Erosion and Sediment Control of New Jersey.

**CONFORMANCE TO ZONING REGULATIONS**

19. Both the principal use of the subject property (office) and the proposed canopies are permitted uses in the PMUD zone and are consistent with the property's land use designation (Office/Research) on the PMUD Use Location Map. No variances are required in connection with this application.

**CONFORMANCE TO SITE PLAN REQUIREMENTS**

20. The project conforms to all applicable site plan requirements.

**SUBMISSION WAIVERS**

21. The applicant has submitted the required Site Plan Review Check List (Form 13) portion of the application and has identified 20 items for which submission waivers are being requested, with an explanation and justification for each waiver. Based on the recommendations of the DRC and Planning Board staff, the Board finds that the waivers are reasonable and can be granted.

**NOW, THEREFORE, BE IT RESOLVED** by the Plainsboro Township Planning Board on this 20<sup>th</sup> day of March, 2023, that the application by PPL Safari Holdings, LLC d/b/a Safari Energy LLC for minor site plan approval with submission waivers be and is hereby granted, subject to the following conditions (to which the applicant has agreed):

1. As agreed to by the applicant, the box vertical support columns and the box horizontal support beams will have a white powder coat paint finish similar to the solar canopy installation at the hospital and Munich Re.
2. The applicant will make every effort to minimize the visibility of the switchgear units through coloration of the units and landscape screening, to the satisfaction of Planning Board staff.
3. As recommended by the DRC, the applicant shall install occupancy sensors for the under-canopy lighting, which sensors would be triggered when a vehicle entered a parking space or by a person entering the space on foot to access their parked vehicle. If such option is not readily feasible, alternatively, the applicant shall utilize a two-level lighting approach similar to what was approved for the hospital parking lots, whereby a lower level of under-canopy lighting (security lighting) would be utilized during after business hours (e.g., after 9 PM).

4. The applicant shall provide detailed hauling and staging plans for the project, to be reviewed and approved by the Planning Board Engineer's office, in accordance with the following notes on the applicant's construction plans:

“A hauling plan shall be submitted to the Township for review and approval for the movement of any construction materials or demolition debris on roadways leading from the Township border and vice versa.”

“A detailed sequence of construction and contractor's staging plan shall be provided to separate and manage construction traffic and public traffic. This will further establish contractor's work and staging areas for each phase of construction, and shall include items such as the walkways, the pedestrian crosswalks, and the installation of underground utilities, road construction, and offsite improvements.”

5. Unless expressly modified herein, the applicant will comply with all unfulfilled conditions and requirements, if any, set forth in the Planning Board Review Memo attached hereto as Schedule C, even if omitted from this resolution.
6. The applicant shall comply with all representations made and conditions agreed to on the record, even if omitted from this resolution.
7. The applicant will obtain the approval of and/or waivers, exemptions, or letters of no interest from the following outside agencies as applicable:
  - a. Middlesex County Planning Board
  - b. Delaware and Raritan Canal Commission
  - c. Freehold Soil Conversation District
  - d. Princeton University/PFC Real Estate Office
  - e. Any other agencies having jurisdiction over the applicant's proposal
8. The applicant shall submit revised plans if and as called for in the foregoing conditions.
9. The applicant shall pay all outstanding real estate taxes, if any, within thirty days of the date of this approval.
10. The applicant shall post such engineering inspection fees, performance guarantees, temporary certificate of occupancy guarantees, maintenance guarantees, and other guarantees as may be required, consistent with the provisions of S-3233 (P.L. 2017, c. 312), and shall provide cost estimates to the Planning Board Engineer from which to calculate all such guarantees and inspections fees.

11. Unless otherwise specifically set forth herein, all conditions of approval must be satisfied prior to the signing of the final plans and issuance of any construction or other permits.

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DRAFT

**ROLL CALL ON THE APPLICATION AND RESOLUTION, March 20, 2023**

Yes:

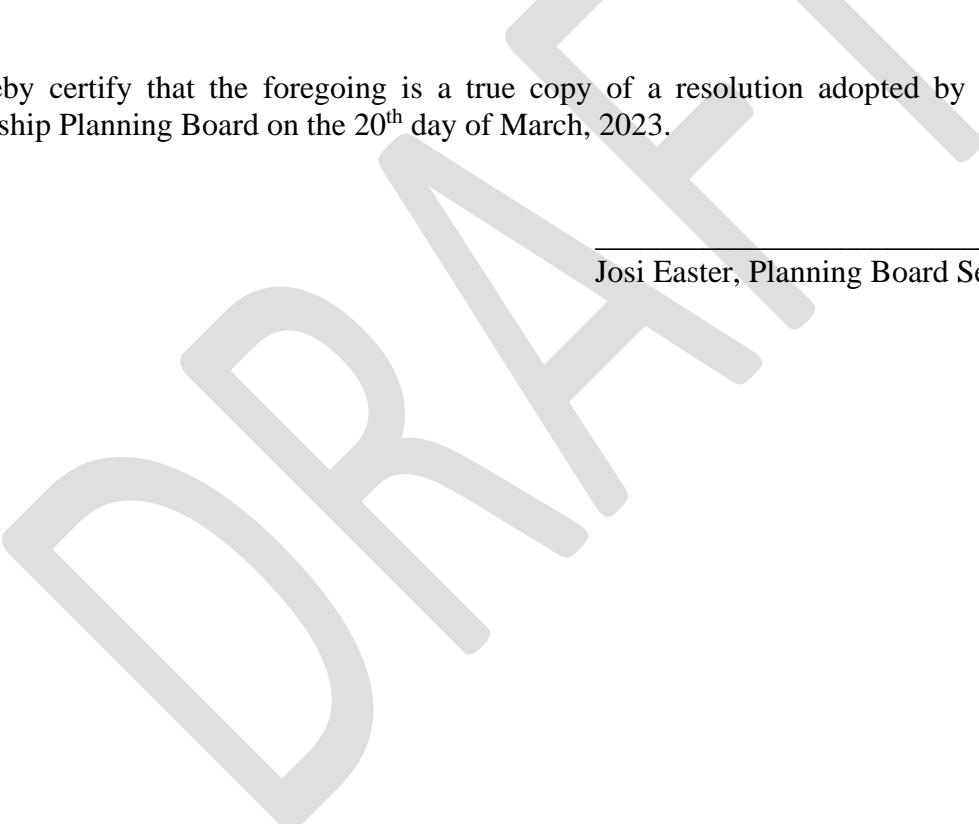
No:

Absent:

Abstain/Not Voting:

S. Agarwal:		A. Lehrhaupt:	
P. Cantu:		S. Raturi:	
J. Doshi:		C. Spiegel:	
J. Greer:		E. Yates:	
R. Keevey:		R. Rajagopal (Alt. 1):	
		[vacant] (Alt. 2):	(n/a)

I hereby certify that the foregoing is a true copy of a resolution adopted by the Plainsboro Township Planning Board on the 20<sup>th</sup> day of March, 2023.

Josi Easter, Planning Board Secretary

## **SCHEDULE A**

### **APPLICANT'S EXHIBITS**

<u>A-1</u>	Annotated Project Rendering – 600 College Road (overhead view of proposed canopy)
<u>A-2</u>	Annotated Project Rendering – 600 College Road (closer up overhead view of proposed canopy)
<u>A-3</u>	Annotated Project Rendering – 600 College Road (side view of proposed canopy from overhead)
<u>A-4</u>	Annotated Project Rendering – View of Underside of Proposed Canopy (ground level view)
<u>A-5</u>	Annotated Project Rendering – View of Underside of Proposed Canopy showing example inverter equipment
<u>A-6</u>	Annotated Project Rendering – View of Underside of Proposed Canopy
<u>A-7</u>	Annotated Project Rendering – Nighttime View of Underside of Proposed Canopy
<u>B-1</u>	Rendering of overhead view of solar panel
<u>B-2</u>	Construction schematic showing gaps between panels
<u>C</u>	Rendering showing proposed “box” vertical column and foundation proposed for project
<u>D-1</u>	Annotated photo of similar installation to show horizon beams, edge detail and undersize of by-faced panels.
<u>D-2</u>	Annotated photo of similar installation to show horizon beams, edge detail and undersize of by-faced panels.
<u>D-3</u>	Annotated photo of similar installation to show horizon beams, edge detail and undersize of by-faced panels.

**SCHEDULE B**

**WITNESSES**

***Applicant's Witnesses:***

- [Ralph Petrella, Principal Engineer, Van Note-Harvey]
- [Emilio Arrieta, Project Development C&I Director, Safari Energy]
- [Sophia Feldman, Project Development, Safari Energy]
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***Planning Board Staff and Consultants:***

- Bonnie N. Flynn, AICP/PP, Township Director of Planning and Community Development
- Ronald Yake, AICP/PP, Township Planner and Zoning Officer
- Lou Ploskonka, PE (CME Associates), Board Engineer
- Trishka Waterbury Cecil, Esq. (Mason, Griffin & Pierson, P.C.), Board Attorney