THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

Office of the Planning Director
Prince George's County Planning Department

14741 Governor Oden Bowie Drive
Upper Marlboro, Maryland 20772
www.mncppc.org/pgco

July 17, 2019

Mr. Marcel Acosta, Executive Director
National Capital Planning Commission
401 Ninth Street, N.W.
North Lobby, Suite 500
Washington, D.C. 20576

RE: BARC Proposed Solar Energy Systems Installation (MR-1917A)

Dear Mr. Acosta:

The Prince George's County Planning Department appreciates the opportunity to review the proposed Solar Photovoltaic Array (Energy Performance Savings Contract) Installation Project at the Beltsville Agricultural Research Center (BARC) in Beltsville, Maryland. The application is being reviewed through Mandatory Referral pursuant to the Land Use Article §§20-301 through 305 of the Maryland Annotated Code in accordance with the Procedures for Intergovernmental Cooperation in Federal Planning in the National Capital Region.

In 2018 the Prince George's County Planning Board adopted the County Solar Energy Systems (SES) Guidelines for Mandatory Referral Cases. The guidelines are designed to provide consistent parameters for the preparation of SES projects located in the County that require approval from the Public Service Commission or any other public body.

These guidelines also provide a framework for the analysis and review of the project's conformance with the County's comprehensive land use plans.

STAFF RECOMMENDATIONS

A staff review of the subject application resulted in the recommendations outlined below:

- The applicant should prioritize the utilization of existing standing structures for SES placement (building rooftops, agricultural rooftops, and carports) as the highest ranked option during the site selection process.

- The applicant should first consider sites that are not located on prime agricultural land for ground mainland solar systems. Open, unforested land is preferred.

- The applicant should provide a minimum of 20-foot-wide landscape bufferyard wherever the proposed Solar Photovoltaic System (SPVS) installations are adjacent to multi-family residential uses (such as site W-74). The landscape bufferyard should be planted with 80 planting units per 100 linear feet of property line. All plants should be native species.

- The applicant should provide a minimum of 30-foot-wide landscape bufferyard wherever the proposed SPVS installations are adjacent to single-family detached subdivisions (such as site W-71). The landscape bufferyard should be planted with 120 planting units per 100 linear feet of property line. All plants should be native species.

- The applicant should provide a minimum 10-foot-wide landscape strip wherever the proposed SPVS installations are fronting any public roadways. The landscape strip should be planted with one shade tree and shrubs per 35 feet of the frontage. All plants should be native species.

- The applicant should provide an herbaceous mix of cover vegetation for the enhancement of habitat and site pollinator value for those selected sites that have vegetative coverage.

- The applicant should be aware that once specific sites are selected, and a building permit is applied for, the Prince George's County Fire Department will determine if the site falls within the five-minute response time for the assigned first due station. Based on the results of the Prince George's Fire Department's emergency response analysis, the site may or may not require mitigation efforts.

- Because the proposed solar installations lack specifics and do not provide exact locations and design for each site, staff requests that BARC submit illustrations of the final locations after a contractor is selected.

Enclosed are staff memoranda from the Community Planning Division, and Environmental Planning Section Urban Design Section, Transportation Planning Section, Historic Preservation Section and Special Projects Section with general comments pertaining to the proposed solar installation project at BARC.

If you should have any questions or need additional information, please contact Christine A. Osei, Project Manager, at 301-952-3313, or via email at Christine.Osei@ppd.mncppc.org.

Sincerely,

Andree Green Checkley

Andree Green Checkley
Planning Director

Enclosures

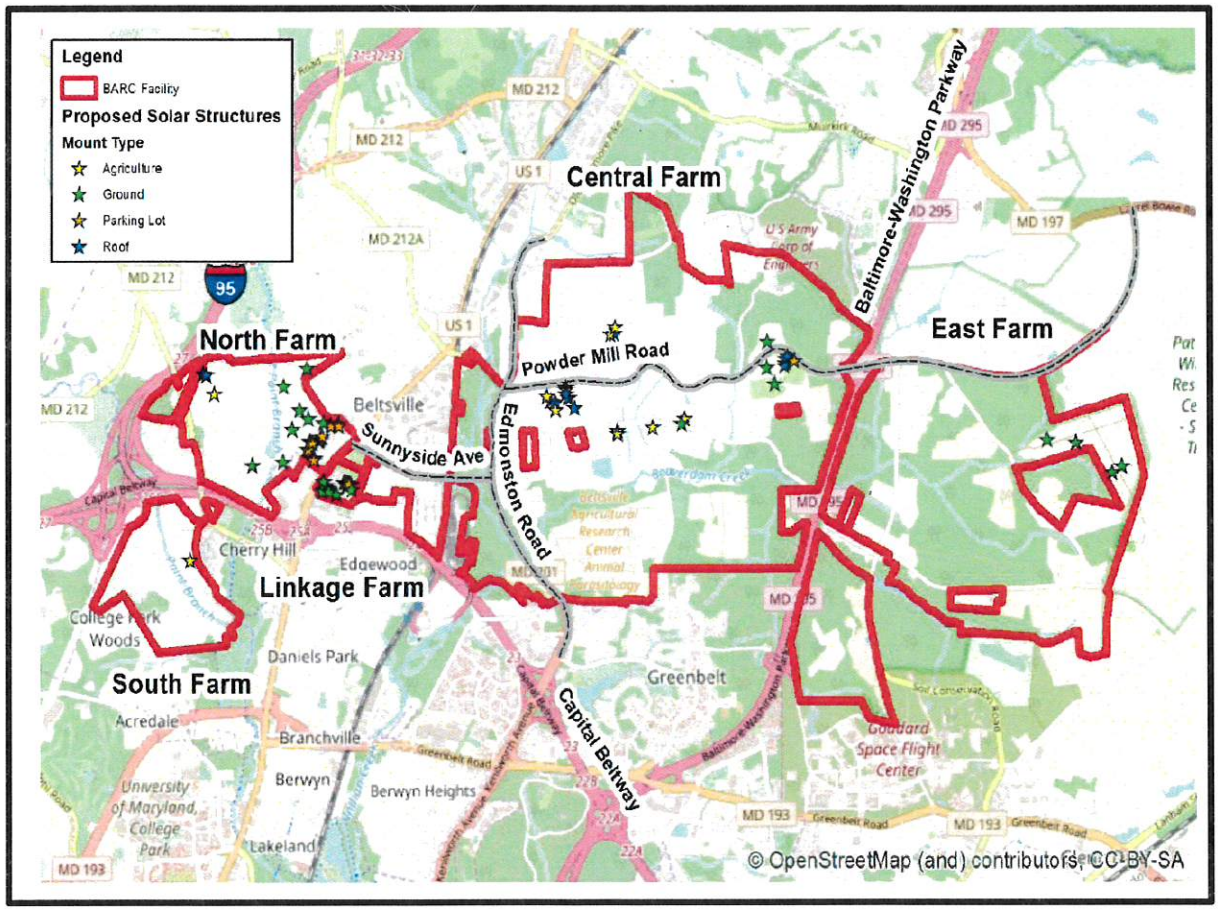
c: Debra Borden, Principal Counsel, Legal Office, M-NCPPC
Katina Shoulars, Acting Chief, Countywide Planning Division
Crystal Hancock, Acting Planning Supervisor, Special Projects Section, Countywide Planning Division
Christine A. Osei, Planner Coordinator, Special Projects Section, Countywide Planning Division
Donna J. Brown, Clerk of the Council, Prince George's County Council

MR-1917A Staff Analysis: The Beltsville Agricultural Research Center (BARC) Proposed Installation of Photovoltaic Arrays

The United States Department of Agriculture (USDA) and Agricultural Research Service (ARS) proposes to enter into a Power Purchase Agreement (PPA) and provide easements at specific locations throughout the BARC facility to an Independent Power Producer (IPP). The IPP will be responsible for the construction, operation, maintenance, electrical connectivity and dismantling of the Solar Photovoltaic System (SPVS). The solar energy would be generated within the easements and established under the specifications of the PPA for a 20-year term in an effort to meet future energy requirements pursuant to new federal regulations. The overall 6,615-acre BARC site is comprised of agriculture fields, supporting infrastructure, laboratories and offices, as well as temporary and permanent storage structures for the United States Department of Agriculture (USDA).

This project is being reviewed through Mandatory Referral in accordance with the National Capital Planning Commission's "Procedures for Intergovernmental Cooperation in Federal Planning in the National Capital Region". The potential project sites are located on the Beltsville Agricultural Research Center (BARC) property, which is under the jurisdiction of the United States Department of Agriculture (USDA) in Beltsville, Maryland. See Map 1 below. It should be noted that a final location and design of the SPVS has not been determined by the applicant.

Map 1 - Proposed Types Solar Installations



The BARC campus is zoned Reserved Open Space (R-O-S) and is divided into five quadrants known as North Farm, Central Farm, East Farm, Linkage Farm and South Farm. See Map 1above. The overall BARC campus is surrounded by numerous developed and vacant properties in the Rural Residential (R-R), Reserved Open Space (R-O-S), One-Family Semi-detached and Two-Family Detached Residential (R-35), One-Family Detached Residential (R-55), Multi-family High Density Residential (R-10), Heavy Industrial (I-2) and Mixed Use -Transportation Oriented (M-X-T) Zones.

2018 Prince George's County (Planning Board) Solar Energy Systems (SES) Guidelines for Mandatory Referral Cases: The Guidelines are designed to provide consistent parameters for the applicant's preparation of all SES located in the County that require approval from the Public Service Commission (PSC) or any other public body. These guidelines also provide a framework for review of SES and analysis of the project's conformance with the County's comprehensive land use plans.

Siting Preferences: **The Board strongly discourages locations that result in significant loss of prime agricultural land, affect cultural and natural resources, or impact significant scenic viewsheds.** The potential SES sites were selected by the applicant using the following criteria: buildings less than 50 years old, buildings with metal roof tops, and open land that is unsuitable for cultivation. The applicant included aerial photos of each potential site and their respective locations. Based on staff's review, a majority of the potential sites are consistent with the siting preferences described above; however, there are several sites that may be considered well-suited for cultivation based on their soil classifications as "prime farmland," and further analysis of these sites may be necessary.

The Board's siting preference hierarchy is as follows, listed from most suitable to least suitable in descending order:

1) Locations on disturbed land such as brownfields, reclaimed surface mines, abandoned rubble fills, and closed landfills.
2) Locations in industrial and commercial zoning districts.
3) Locations in residential zoning districts other than R-O-S, O-S, and R-A zones.
4) R-O-S, O-S, and R-A zoned properties. Proposals in these zoning districts are subject to the following additional guidelines:

    a. The least productive agricultural soils classified as class IV through VIII (as determined by USDA-NRCS Soil Survey) should be considered first if buildable.
    b. A dual-use land-design concept should be considered to preserve productive farmland by: (i) continuing crop production underneath high-mounted and well-spaced panels; or (ii) maintaining and grazing livestock, or poultry underneath panels; or (iii) Maintaining and planting an herbaceous cover with pollinator value.
    c. If dual-use concepts are determined to be impractical, the Board strongly discourages installing SES on soils with classification of I, II, and III as determined by USDA-NRCS Soil Survey, as these are the most productive soils. If proposed, such projects would be expected to provide mitigation for the loss of productive soils.

Woodland Conservation: **The Board strongly discourages the clearing of woodlands for the installation of SES.** In cases where clearing of woodlands is unavoidable, the applicant shall be required to comply with Subtitle 25, Division 2 of the County Code, the Woodland and Wildlife Habitat Conservation Ordinance. The applicant shall submit a Type 2 Tree Conservation Plan that is consistent with all ordinance requirements. Whenever possible, all reforestation area(s) should be located within the impacted sub-watershed and should be designed to contribute to the maximum extent practical to improving the water quality of the impacted watershed.

Screening and Buffering: SES should be designed to minimize visibility from roads and neighboring properties. SES should strive to implement landscaping and screening set forth in the Prince George's County Landscape Manual. For purposes of applying Table 4.7-1 of the Landscape Manual, SES will be considered a Low Impact use and will be reviewed in accordance with the corresponding landscape buffering requirements.

Protection of Rural Character and Scenic and Historic Resource Areas: To the maximum extent practical SES should be sited behind natural topography, existing vegetation, or supplemental indigenous landscaping to screen the facility from public view. SES facilities should be screened in accordance with the Prince George's County Landscape Manual from all scenic and historic-designated roads, properties within a County-designated Historic District, National Register properties, historic sites and environmental settings. The Board will consider the impact of SES on properties designated as historic.

Fencing: Metal fencing (chain-link or equivalent), when necessary for security and public safety purposes, should be non-reflective and black in color to minimize visibility of the fencing material in the landscape. Fencing over seven feet in height is discouraged.

USDA/ARS has identified 72 possible sites to install four types of Solar Photovoltaic System (SPVS) such as rooftops, open ground, agriculture sites and parking lots canopies to generate approximately 1,325 kW to 1,450 kW in nominal power. Examples are shown below.

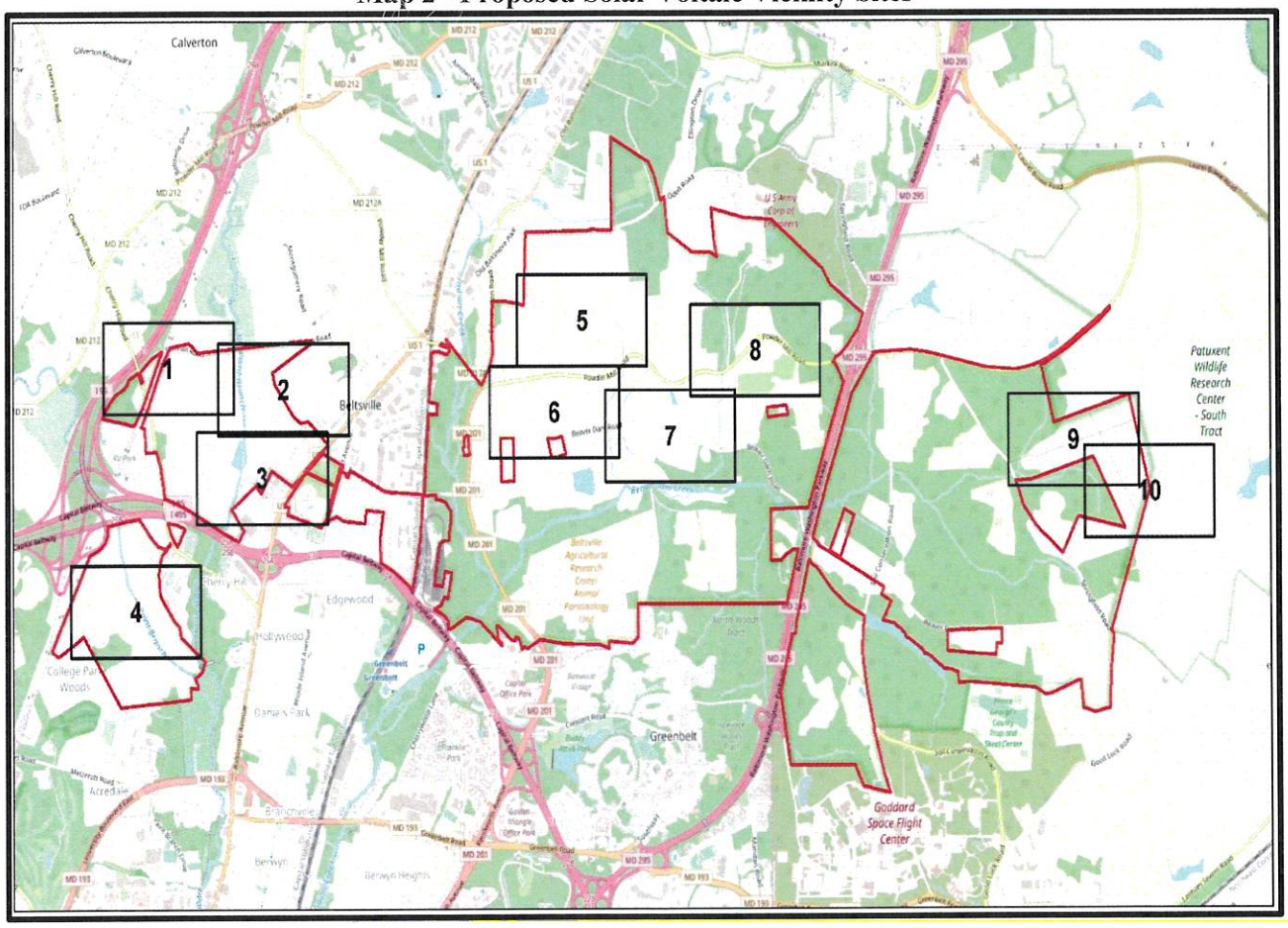
Final View of the Four Types of Solar Installations

Permitting Agencies

Agency Name	Required Permit
MDE and U.S. Corp of Engineers	Wetland/Waterway and General Discharge. Joint Jurisdiction Determination/Joint Permit

The project will install, maintain, operate, and manage a series (up to 64) of rooftop, canopy, and ground-mounted solar arrays across the BARC campus as part of an Energy Performance Savings Contract. See Map 2 below.

Map 2 - Proposed Solar Voltaic Vicinity Sites



STAFF COMMENTS

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

14741 Governor Oden Bowie Drive
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Countywide Planning Division
Environmental Planning Section

301-952-3650

June 6, 2019

MEMORANDUM

TO: Christine Osei, Planner Coordinator, Special Projects Section

VIA: Megan Reiser, Acting Supervisor, Environmental Planning Section MKR

FROM: Brent Efune, Senior Planning Technician, Environmental Planning Section BFE

SUBJECT: **MR-1917A BARC Solar ARS Photovoltaic ESPC Project**

The Environmental Planning Section has completed its review of MR-1917A for 60-70 potential Solar Array sites proposed throughout the approximately 6,650-acre Beltsville Agricultural Research Center (BARC) facility, located in Beltsville, Prince George's County.

Background

The Environmental Planning Section has not previously reviewed this site as part of a Development Review application, however, a Mandatory Referral (MR-1527A) was reviewed for the site for a proposed breeding orchard.

The property is located in the R-O-S (reserved open space) zone. *Plan Prince George's 2035 Approved General Plan* placed the property in Rural and Agricultural Area of the Growth Policy Land Use and recommended future land uses as both Parks and Open Space, and Institutional.

A pre-acceptance meeting took place on May 24th, 2019 and verbal comments were given on the presented scope and project. The plans presented at the meeting showed numerous potential sites for the placement of four types of solar photovoltaic systems (SPVS) – building rooftop, ground mount, agriculture type "pole barn" roof top mounted, and carport parking. No follow up site visits have been conducted by M-NCPPC staff at this time.

Compliance with Solar Energy Program Guidelines for Mandatory Referral Cases

This application is subject to "Prince George's County Solar Energy Program Guidelines for Mandatory Referral Cases (Attachment 3)" contained in the Adopted Uniform Standards for Mandatory Referral Review adopted by the Planning Board on April 18, 2018. The guidelines in apply to Solar Energy Systems (SES) that are reviewed under the Prince George's County Planning Board's (the "Board") Mandatory Referral Process, and that require approval from the Maryland Public Service Commission (PSC) or any other public body subject to the Board's Mandatory Referral Process. The Board expects applicants to demonstrate that their proposals comply with these Guidelines.

The Guidelines are designed to provide consistent parameters for the Board to review all SES located in the County that require approval from the PSC or any other public body. These Guidelines provide a framework for review of SES and analysis of the project's conformance with the County's comprehensive land use plans. The Board invites the PSC and other public agencies to give "due consideration" to these Guidelines and to the Board's specific Mandatory Referral comments for each SES, as required by §7-207(e) of the Public Utilities Article. Review in accordance with these guidelines occurs during the Mandatory Referral Process.

The guidelines are provided in bold font and comments are provided in regular font.

Siting Preferences: Site selection and placement on the site are important considerations for SES projects. The Board strongly discourages locations that result in significant loss of prime agricultural land, affect cultural and natural resources, or impact significant scenic viewsheds.

The potential SES sites were selected by the applicant using the following criteria: buildings less than 50 years old, buildings with metal roof tops, and open land, not considered well-suited for cultivation. The applicant included aerial photos of each site and their respective locations. Based on staff's review, a majority of the potential sites are consistent with the siting preferences described above; however, there are several sites that may be considered well-suited for cultivation based on their soil classifications as "prime farmland," and further analysis of these sites may be necessary.

Staff recommends prioritizing the utilization of existing standing structures for SES placement (building rooftops, agricultural rooftops, and carports) as the highest ranked option during the site selection process.

Location Restrictions:

The Board does not support SES in the Chesapeake Bay Critical Area or the Mount Vernon Viewshed Area of Primary Concern.

The site is not located in the CBCA or the Mount Vernon Viewshed Area of Primary Concern.

The Board's siting preference hierarchy is as follows, listed from most suitable to least suitable in descending order:

1. **Locations on disturbed land such as brownfields, reclaimed surface mines, abandoned rubble fills, and closed landfills.**
2. **Locations in industrial and commercial zoning districts.**
3. **Locations in residential zoning districts other than R-O-S, O-S, and R-A zones.**
4. **R-O-S, O-S, and R-A zoned properties. Proposals in these zoning districts are subject to the following additional guidelines:**
   a. **The least productive agricultural soils classified as class IV through VIII (as determined by USDA-NRCS Soil Survey) should be considered first if buildable.**
   b. **A dual-use land-design concept should be considered to preserve productive farmland by: (a) continuing crop production underneath high-mounted and well-spaced panels; or (b) maintaining and grazing livestock, or poultry underneath panels; or (c) Maintaining and planting an herbaceous cover with pollinator value.**

c. If dual-use concepts are determined to be impractical, the Board strongly discourages installing SES on soils with classification of I, II, and III as determined by USDA-NRCS Soil Survey, as these are the most productive soils. If proposed, such projects would be expected to provide mitigation for the loss of productive soils.

Item 1: BARC contains 12 hazardous waste Areas of Concern (AOCs) that are either within or adjacent to potential solar sites: E-1, E-2, E-4, E-10, E-66, E-75, E-76, L-50, W-23, W-24, W-25, W-70.

As these sites satisfy Item 1 in the Board's siting preference hierarchy, staff recommends prioritizing their use as the second-highest ranked option in the site selection process.

Items 2 and 3: No potential sites fulfill the criteria described in items 2 and 3.

Item 4: The site is zoned R-O-S (reserved open space).

Items 4a: According to the US Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) National Cooperative Soil Survey, 24 different soil types exist within the BARC. These soil types have been classified into 4 categories pertaining to agricultural quality: Prime Farmland; Prime Farmland if Irrigated; Farmland of Statewide Importance; and Not Prime Farmland.

If ground mounted SES are proposed, staff recommends prioritizing sites located on soils predominantly categorized as "Not Prime Farmland" as the third-highest ranked option in the selection process.

Item 4b and 4c: A dual-use land design was suggested by the applicant as a potential SES choice during the Pre-Mandatory Referral Meeting on May 24, 2019. If sites are to be chosen within the soil classifications: "Prime Farmland," "Prime Farmland if Irrigated" or "Farmland of Statewide Importance," the applicant is strongly urged to develop a dual- or multi-use plan satisfying any or all three of the options cited.

These sites should be prioritized as the fourth-highest ranked option in the selection process.

In such scenarios, staff strongly recommends that plant species be selected from the NRCS Conservation Practice Standard for Conservation Cover (Code 327), Table 6: Native Shrubs and Small Trees for Pollinator Habitat, in order to enhance the habitat and pollinator value of the site. The mixes and species contained in the table are focused on high diversity plantings to support wildlife habitat, with special consideration for pollinators and beneficial insects, consistent with USDA Biology Technical Note No. 78, 2nd Edition: Using 2014 Farm Bill Programs for Pollinator Conservation.

If dual- or multi-use plans are deemed impractical, and site(s) are chosen with the above classifications, mitigation will be expected for the loss of productive soils.

Woodland Conservation

The Board strongly discourages the clearing of woodlands for the installation of SES. In cases where clearing of woodlands is unavoidable, the applicant shall be required to comply with Subtitle 25, Division 2 of the County Code, the Woodland and Wildlife Habitat Conservation Ordinance. The applicant shall submit a Type 2 Tree Conservation Plan that is consistent with all ordinance requirements. Whenever possible, all reforestation area(s) should be located within the impacted sub-watershed and should be designed to contribute to the maximum extent practical to improving the water quality of the impacted watershed

The Environmental Planning Section has determined that as a federal property, the site is not subject to the Prince George's County Woodland and Wildlife Habitat Conservation Ordinance (WCO). The project will be subject to state-level review by the Maryland Department of Natural Resources (NRCS) and Maryland Department of Environment (MDE) for conformance with the Forest Conservation Act and the Clean Water Act, if found applicable.

Screening and Buffering

SES should be designed to minimize visibility from roads and neighboring properties. SES should strive to implement landscaping and screening set forth in the Prince George's County Landscape Manual. For purposes of applying Table 4.7-1 of the Landscape Manual, SES will be considered a Low Impact use and will be reviewed in accordance with the corresponding landscape buffering requirements.

Protection of Rural Character and Scenic and Historic Resource Areas

To the maximum extent practical SES should be sited behind natural topography, existing vegetation, or supplemental indigenous landscaping to screen the facility from public view. SES facilities should be screened in accordance with the Prince George's County Landscape Manual from all scenic and historic-designated roads, properties within a County-designated Historic District, National Register properties, historic sites and environmental settings. The Board will consider the impact of SES on properties designated as historic.

It is recommended that at time of permit application, that a landscape plan be submitted to provide screening and buffering to the standards established in the Prince George's County Landscape Manual.

Fencing

Metal fencing (chain-link or equivalent), when necessary for security and public safety purposes, should be non-reflective and black in color to minimize visibility of the fencing material in the landscape. Fencing over seven feet in height is discouraged.

According to the applicant's Environmental Impact Statement, security fencing will be provided for the SES.

Lighting

If lighting is required, all fixtures should be energy efficient, motion-sensor, full-optic cutoff, and downward casting such that light does not spill onto adjacent parcels or the night sky. Floodlights of any type are strongly discouraged.

No specifics about proposed lighting of the SES have been provided in the narrative, or on the plan set. If lighting is proposed, it should be selected in accordance with this guideline.

Vegetation Management

For the enhancement of habitat and site pollinator value, an herbaceous cover mix selected from the Natural Resources Conservation Service Conservation Practice Standards for Conservation Cover (Code 327), Table 2: Selected List of Herbaceous Cover Mixes based on the specific characteristics of the site should be utilized.

The applicant is strongly encouraged to install an herbaceous cover with high pollinator value, which qualifies as a dual-use land use concept to stabilize the soils and provide sediment and erosion control.

To enhance the habitat and pollinator value of the site, it is strongly recommended that an herbaceous cover mix be selected from the NRCS Conservation Practice Standard for Conservation Cover (Code 327), Table 2: Selected List of Herbaceous Cover Mixes based on the specific characteristics of the site. The mixes and species contained in the table are focused on high diversity plantings to support wildlife habitat, with special consideration for pollinators and beneficial insects, consistent with USDA Biology Technical Note No. 78, 2nd Edition: Using 2014 Farm Bill Programs for Pollinator Conservation.

Additionally, to promote native bird populations, it is recommended that native plant species found to foster caterpillar propagation be planted onsite. Localized plant species can be identified using the National Wildlife Federation tool: Native Plant Finder (https://www.nwf.org/NativePlantFinder/Plants). This tool ranks local plant species by their value to beneficial caterpillar species, which native birds rely on as a vital energy source.

ENVIRONMENTAL REVIEW

Existing Conditions/Natural Resources Inventory:

Tier II Catchment and TMDL: A majority of the potential sites are within a Tier II catchment (Beaverdam Creek) as defined in COMAR 26.08.02.04.

Woodland Conservation: The overall site is not subject to the Prince George's County Woodland and Wildlife Habitat Conservation Ordinance (WCO) because the proposal is a federal project on federal land; however, the clearing of woodland for the proposed SES is strongly discouraged.

Soils: The overall site contains 24 soil mapping units, composed primarily of silty to sandy loams with clay loams in deeper layers. A determination of appropriate erosion and sediment control measures for the site will be made by the Prince George's Soil Conservation District.

Noise and Vibration: During construction and during operation post construction, the Maryland noise pollution standards referenced in COMAR 26.02.03 for residential zoning designations should not be exceeded at the property line, or noise mitigation may be appropriate.

Stormwater Management: Stormwater management on the site will be subject to review and approval by the Maryland Department of Environment. As required by MDE, full Environmental Site Design (ESD) treatment must be provided for all new impervious as well as 50-percent for all existing impervious area. No further information pertaining to SWM is required with the current application.

CONCLUSION

Because of the numerous site selections were submitted, and the applicant has not selected a final location(s) for the project, staff is unable to provide specific recommendations for the proposed future SES. The following recommendations prioritize the criteria the applicant should use in selectin the final location(s) of the SES/SPVS placement:

1. Utilize existing structures over open ground sites.
2. If ground sites are selected, utilize brownfield and hazardous waste sites (Areas of Concern).
3. If ground sites are selected, utilize non-prime farmland over prime farmland.
4. Utilize dual- and multi-use plans when placing SES/SPVS in prime farmland and place emphasis on native plant varieties that provide for pollinator insect species and which promote caterpillar proliferation.
5. Avoid the removal of woodland and native tree species.

Thank you for the opportunity to comment on MR-1917A, BARC Solar ARS Photovoltaic ESPC Project. If you have questions regarding these comments, please contact the Environmental Planning Section at 301-952-3650.

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION
Prince George's County Planning Department
Community Planning Division
14741 Governor Oden Bowie Drive
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301-952-3972

June 5, 2019

MEMORANDUM

TO: Christine Osei, Planner Coordinator, Special Projects Section, Countywide Division

VIA Scott Rowe, AICP, CNU-A, Planning Supervisor, Community Planning Division BSR
David A. Green, MBA, Master Planner, Community Planning Division

FROM: Adam Dodgshon, MA, Planning Supervisor, Community Planning Division AD

SUBJECT: **MR-1917A Beltsville Agricultural Research Center (BARC) Solar Array Project**

FINDINGS:

General Plan:
This application is consistent with the 2014 *Plan Prince George's* 2035 *General Plan* which designates this application in the Priority Preservation Area (PPA).

Master Plan:
This application conforms with the land use recommendations for the 2010 *Approved Master Plan for Subregion 1*:

BACKGROUND

Location: Henry A. Wallace Beltsville Agricultural Research Center, Beltsville, MD, 20705

Existing Uses: Agricultural Research Center

Proposal:
Installation of photovoltaic arrays across the BARC facility, both on buildings and ground-mounted

GENERAL PLAN, MASTER PLAN AND SMA

General Plan: This application is located in the Priority Preservation Area (PPA). The vision for the PPA is to protect agricultural and forest resources and promote the long-term viability of the agricultural sector. The proposal conforms to Plan 2035's policies to encourage investment in energy infrastructure and renewable energy (Natural Environment Chapter, Policy 9, page 178), and to encourage the generation of low-carbon and clean, renewable energy sources (Natural Environment Chapter, Policy 10, page 179)

Master Plan:

This application site is covered by two (2) master plans. The 2010 *Approved Master Plan for Subregion 1* recommends Institutional land uses on the subject property and the 1989 *Approved Master Plan for Langley Park-College Park-Greenbelt* recommends Public/Quasi-Public land uses on the subject property.

In addition, the site is identified as both a Special Conservation Area (SCA) in the Environmental Infrastructure Chapter, (page 35) and a Priority Preservation Area (PPA) in the Environmental Infrastructure Chapter (page 37). Policy 4 in the Environmental Infrastructure Chapter (page 42) states "Implement more environmentally sensitive building techniques and reduce overall energy consumption" with a strategy to "encourage the use of alternative energy sources such as solar, wind and hydrogen power" (page 42).

Planning Area: 61, 62, 66, 67
Community: Fairland-Beltsville & Vicinity; South Laurel-Montpelier; College Park-Berwyn Heights & Vicinity; Greenbelt & Vicinity

Aviation/MIOZ:
This application is not located within an Aviation Policy Area or the Military Installation Overlay Zone.

SMA/Zoning:
The 2010 Approved Subregion 1 Sectional Map Amendment retained the Reserved Open Space (R-O-S) zone on the parts of the subject property within this plan area. The 1990 Approved Langley Park – College Park – Greenbelt Sectional Map Amendment retained the Open Space (O-S) zone on the parts of the subject property within this plan area.

In 1998, the County adopted a Comprehensive Map Amendment to introduce the R-O-S zone. The 1998 Approved Countywide Map Amendment reclassified the parts of the subject property from the O-S zone into the R-O-S zone.

ADDITIONAL INFORMATION

The 2012 Adopted Priority Preservation Area Functional Master Plan makes the following recommendations on the subject property: "Support profitable agricultural operations by encouraging new farm and forest enterprises that complement the existing agricultural industry" (Policy 6, Page 4) and "Designated PPA should be prioritized for renewable energy production, i.e. wind, biomass, and solar energy production using available farmland" (Strategy c, page 5).

The Prince George's County Planning Board adopted uniform standards for solar energy systems (SES) that are reviewed under the Prince George's County Planning Board's Mandatory Referral process, and that require approval from the Maryland Public Service Commission (PSC). Per the standards the Board strongly discourages the clearing of woodlands for the installation of SES or the location of SES on prime farmland and residential zoning districts such as R-O-S, O-S, and R-A zoned properties. Instead, the Planning Board supports SES sites that are restricted to locations in industrial and commercial zoning districts, and on disturbed land such as brownfields, reclaimed surface mines, abandoned rubble fills, and closed landfills.

The applicant should consider more suitable sites such as a closed rubble landfill to the east, and several closed sand and gravel mines that immediately adjoin the proposed solar project. These alternative locations are more in keeping with the Planning Board's SES guidelines.

cc: Long Range Book

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION
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TTY: (301) 952-4366
www.mncppc.org/pgco

May 30, 2019

MEMORANDUM

TO: Christine Osei, Special Projects Section, Countywide Planning Division

VIA: Howard Berger, Supervisor, Historic Preservation Section, Countywide Planning Division HB

FROM: Jennifer Stabler, Historic Preservation Section, Countywide Planning Division JAS
Tyler Smith, Historic Preservation Section, Countywide Planning Division TAS

SUBJECT: MR-1917A: Proposed Solar at BARC

The locations of the proposed solar arrays are within the Beltsville Agricultural Research Center (BARC). BARC is comprised of approximately 6,615 acres and is a campus of agricultural fields and supporting infrastructure, laboratories and offices. The Environmental Assessment examines 72 individual locations where Solar Photovoltaic Systems (SPVS) could be installed.

Historic Preservation

BARC contains a number of Prince George's County Historic Sites. Several of the proposed locations for SPVS may be visible from the Prince George's County Historic Sites; W-23 may be visible from the Sellman House (61-012), L-78 from the Brown's Tavern Site (66-001), E-13 from Walnut Grange, and E-1- from CCC Lodge (67-008). Undertakings at these sites may require additional coordination with Historic Preservation Section Staff.

Archeology

Photovoltaic panels that will be mounted on parking lots will have no adverse effects on archeological resources. Several areas within BARC have been previously investigated for archeological resources. No additional archeological investigations are recommended in those areas. However, there are several archeologically sensitive areas that have not been systematically surveyed.

Historic Preservation staff recommends that the following areas be investigated for potential impacts to archeological resources:

1) Proposed sites W-70, W-71, W-72, W-73 and W-74. Several prehistoric archeological sites were identified in the 1970s through surface collections on the western side of Little Paint Branch. There is no evidence that the eastern side of Little Paint Branch has been systematically surveyed for archeological resources. Early USGS maps indicate that there were several houses on the W-71 site along Sellman Road. There is a moderate to high probability that prehistoric and historic archeological resources will be present in these proposed sites.

2) Proposed sites W-28 and W-69. Several archeological surveys were conducted in the vicinity of these areas, but no archeological resources were identified. Because these two proposed sites are near Little Paint Branch, there is a high probability that prehistoric archeological sites will be present. These proposed sites have not been surveyed for archeological resources.

3) Proposed Site S-22. This area is on the east side of Little Paint Branch and has not been systematically surveyed. Several prehistoric archeological sites identified in the vicinity on the west side of Little Paint Branch in the early 1970s. Given the proximity of this site to Little Paint Branch, there is a moderate to high probability that prehistoric archeological resources will be identified in this proposed site.

4) Proposed Sites E-75, E-76 and E-77. Portions of these sites located along Powder Mill Road were previously surveyed for archeological resources and no archeological resources were identified. However, much of the area within these sites have not been systematically survey for archeological resources. Historic USGS maps show an old farm road running through this area, with several houses in the vicinity prior to the establishment of the agricultural farm in 1910. Several branches of Beaverdam Branch also extend through this area. There is a moderate to high probability that prehistoric and historic archeological resources will be identified in these proposed site locations.

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Upper Marlboro, Maryland 20772
www.mncppc.org/pgco

Countywide Planning Division
Special Projects Section

301-952-3065

June 4, 2019

MEMORANDUM

TO: Christine Osei, Planner Coordinator, Countywide Planning Division

VIA: Crystal Hancock, Acting Planning Supervisor, Countywide Planning Division

FROM: Theodore Kowaluk, Planner Coordinator, Countywide Planning Division

SUBJECT: **MR-1917F BARC Solar**

Without a specific project location the Prince George's County Fire Department is unable to perform the required response time analysis. The applicant should be aware that once a specific site is chosen and a building permit is applied for the Prince George's County Fire Department will determine if the site falls within the 5-minute response time for the assigned first due station. Based on the results of the analysis the Prince George's Fire Department may or may not require mitigation efforts.

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION
14741 Governor Oden Bowie Drive
Upper Marlboro, Maryland 20772
www.pgplanning.org

301-952-3530

June 5, 2019

MEMORANDUM

TO: Christine Osei, Planner Coordinator, Special Projects Section,

VIA: Jill Kosack, Planning Supervisor, Urban Design Section JSK

FROM: Jonathan Bush, Senior Planner, Urban Design Section JLB

SUBJECT: Mandatory Referral MR–1917A
Beltsville Agricultural Research Center (BARC) Proposed Solar Project

The Urban Design Section has reviewed the information submitted in support of MR–1917A – Beltsville Agricultural Research Center (BARC) Proposed Solar Photovoltaic System (SPVS) Project. The applicant proposes to install a number of solar photovoltaic arrays throughout the campus with a 20-year term to an independent power producer (IPP) at the Henry A. Wallace Beltsville Agricultural Research Center in Beltsville, MD in an effort to meet future energy requirements pursuant to new federal regulations. The larger 6,615-acre BARC site is comprised of agriculture fields, and supporting infrastructure, laboratories, and offices as well as temporary and permanent storage structures for the United States Department of Agriculture (USDA).

The applicant has identified 72 possible locations on the larger site where SPVS could be installed. Four types of SPVS installations according to possible locations including rooftop, open ground, agriculture site and parking lot canopies have been proposed with plans for those solar panels to produce approximately 1,325 kW to 1,450 kW in nominal power. The BARC campus is zoned Reserved Open Space (R-O-S), and is divided into five quadrants known as North Farm, Central Farm, East Farm, Linkage Farm and South Farm. The larger BARC campus is surrounded by numerous developed and vacant properties in the Rural Residential (R-R), R-O-S, One-Family Semidetached and Two-Family Detached Residential (R-35), One-Family Detached Residential (R-55), Multifamily High Density Residential (R-10), Heavy Industrial (I-2) and Mixed Use -Transportation Oriented (M-X-T) Zones

The Urban Design Section offers the following comments and recommendations regarding the proposed project:

Siting Preferences
The proposed SPVS locations to be used for the proposed solar arrays installation include the agricultural lands. In accordance with the *Prince George's County Solar Energy Systems (SES) Guidelines*, siting the solar arrays on prime agricultural lands or where contractual ongoing research activities are in use, is strongly discouraged. The Urban Design Section encourages the roof and parking lot canopy SPVS installations.

Landscaping
The project is exempt from the requirements of the 2010 *Prince George's County Landscape Manual.* The Urban Design Section notes that the site would normally be required to demonstrate conformance with the following Sections: 4.2, Requirements for Landscape Strips Along Streets, 4.4 Screening Requirements, 4.7 Buffering Incompatible Uses, and 4.9, Sustainable Landscaping Requirements.

Specifically, the Urban Design staff recommends that the applicant provide a minimum 20 foot-wide bufferyard where the proposed SPVS are adjacent to multifamily residential uses (such as site W-74) and a minimum 30-foot-wide bufferyard where the proposed SPVS are adjacent to single-family detached subdivisions (such as site W-71). Staff also encourages the applicant to work with the contracting agency to narrow down site selections to those located interior on the campus and to use rooftops and parking lots as the priority locations. In addition, staff suggests that shade trees and shrubs be provided to screen the facilities from public views if any proposed sites have frontage on public streets. All plants should be native species.

Vegetation Management
According to the *Prince George's County Solar Energy Systems Guidelines,* an herbaceous mix of cover vegetation should be provided for the enhancement of habitat and site pollinator value, if any open space or agricultural land locations will be selected.

Conclusion
The Urban Design Section recommends the following in regard to Mandatory Referral MR–1917A:

1. The applicant is encouraged to use sites not located on prime agricultural land and to use primarily rooftops and parking lots for SPVS installations.

2. Provide a minimum 20-foot-wide landscape bufferyard wherever the proposed SPVS installations are adjacent to multifamily residential uses (such as site W-74). The landscape bufferyard should be planted with 80 planting units per 100 linear feet of property line. All plants should be native species.

3. Provide a minimum 30-foot-wide landscape bufferyard wherever the proposed SPVS installations are adjacent to single-family detached subdivisions (such as site W-71). The landscape bufferyard should be planted with 120 planting units per 100 linear feet of property line. All plants should be native species.

4. Provide a minimum 10-foot-wide landscape strip wherever the proposed SPVS installations are fronting any public roadways. The landscape strip should be planted with one shade tree and 10 shrubs per 35 feet of the frontage. All plants should be native species.

5. Provide an herbaceous mix of cover vegetation for the enhancement of habitat and site pollinator value for those selected sites that have vegetative coverage.

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

Countywide Planning Division
Transportation Planning Section

14741 Governor Oden Bowie Drive
Upper Marlboro, Maryland 20772
www.mncppc.org/pgco

301-952-3680

June 3, 2019

MEMORANDUM

TO: Christine Osei, Special Projects Section, Countywide Planning Division

VIA: Tom Masog, Transportation Planning Section, Countywide Planning Division

FROM: Iftin Thompson, Transportation Planning Section, Countywide Planning Division

SUBJECT: MR-1917A Proposed Solar at BARC

The Transportation Planning Section has reviewed the mandatory referral referenced above. The project site is located at the Henry A. Wallace Beltsville Agricultural Research Center (BARC).

Plan Review

The applicant proposes to install photovoltaic arrays in several locations within the BARC facility. There would be a temporary increase in traffic accessing the BARC facility while a staging area is set up for construction and dismantling activities of the solar arrays. However, once the staging area is established, the increase in traffic created by large delivery trucks and heavy equipment would then be limited to only construction workers accessing the BARC facility. There will be minor traffic impacts during construction. The transportation of construction equipment and materials over local roads are scheduled to occur after peak traffic periods, whenever possible. Following construction, the solar facility will in general be unmanned, with occasional staffing for maintenance. Minimal traffic and parking would be required on a periodic basis for personnel to access the site for maintenance and upkeep duties. As such, traffic impacts post-construction will be minimal.

The BARC facility has adequate roads and parking to accommodate utility vehicles during and after construction. Therefore, no new roads or access points are proposed. Existing site access points will remain. Access and circulation are acceptable.

Several master plan roadways provide access to various parts of the BARC facility. Baltimore Avenue (US 1) is listed in the *Approved Countywide Master Plan of Transportation* as a master plan arterial facility with a proposed right-of-way of 100 to 120 feet. Cherry Hill Road is a master plan collector facility with a proposed right-of-way of 80 feet. Sunnyside Avenue connects the north and central farms. It is a master plan collector facility with a proposed right-of-way of 80 to 120 feet. Edmonston Road (MD 201) is a master plan arterial facility with a proposed right-of-way of 90 to 120 feet and four to six lanes. Powder Mill Road is a master plan collector facility with a proposed right-of-way of 80 feet. Odell Road is a master plan collector facility with a proposed right-of-way of 70 feet. The Capital Beltway (I-95/I-495) is a master plan freeway facility with a proposed right-of-way of 300 feet. The Baltimore-Washington Parkway (MD 295) is a master plan freeway facility with a variable right-of-way. Both the Capital Beltway and Baltimore-Washington Parkway are within proximity of the BARC facility.

There are currently no access points connecting to either freeways and none are proposed. It is noted that each proposed site appears to be outside of the ultimate right-of-way for all master plan facilities within the vicinity of the facility. However, this cannot be ascertained because detailed plans for each possible installation were not provided.

Conclusion

As presented, the concept for multiple solar installations within the BARC facility is acceptable. To properly evaluate each site, the Transportation Planning Section would require a detailed site plan for each installation to ensure structures are not proposed within the County's planned ultimate rights-of-way.