

MEMORANDUM

TO: Lee Bergus, Chairman & Planning Board

FROM: Dominick F. Arico, PE, Consultant Engineer

SUBJECT: Response to Comments - Memo 83-22-007
Owens Road Solar
Subdivision, Special Permit & Site Plan – Revised Plans
File # 10-1-10.22

DATE: February 16, 2022

CC: Neal Halloran, Building Inspector; Kelly Naughton, Esq., Planning Board Attorney; Sean T. Hoffman, PE, Town Engineer

We offer the following information in response to the project comment letter from Town Designated Engineer, Sean T. Hoffman, PE H2M Architects + Engineers, dated January 28, 2022. Comments are in *italic* text and responses are in **bold** text below. On behalf of Borrego Solar Systems, we are submitting the following documents that have been revised or are in addition to documents submitted under previous submissions, they are as follows:

A. Materials Submitted:

- 5 copies Site Use Plan (SUP) Set (24"x36")
- 5 copies Project Narrative
- 5 copies Updated Wetlands Delineation Report Dated: 10/12/2021
- 5 copies Habitat Assessment and Tree Study – See Appendix A of Project Narrative
- 5 copies Sight Distance Memo – See Appendix C of Project Narrative
- 5 copies Traffic Analysis Memo – See Appendix B of Project Narrative
- 5 copies Glare Analysis Study

B. *Review of Submitted Materials* – This application requires review by the Town Board and Planning Board. We recommend you consult with Attorney Naughton regarding coordination and review responsibilities. Additionally, this application requires a significant number of area variances from the ZBA. We understand the applicant intends to appear before the ZBA next month (February 2022). As such, our comments are directed primarily toward compliance with zoning requirements with a number of issues noted for further consideration as a site plan details are developed.

The applicant provided responses to our previous comments which assisted with our review of the revised plans. Previous comments which are still applicable are repeated below.

1. Zoning –

- a) Use – Applicant proposes construction of a 14-megawatt (AC) solar energy facility consisting of ground-mounted solar photovoltaic (PV) modules/panels switchgear, transformers, underground and aerial power lines for the interconnection to the electrical distribution system. We believe this meets the definition of a large solar energy system under the Code¹ and may be considered a principal use in all zoning districts subject to major site plan approval by the Planning Board and special permit approval by the Town Board [§97-55E]. **No response needed.**
- b) Subdivision - The plan shows the subdivision of the parcel into two (2) lots each with its own array². We understand the purpose of the subdivision is to comply with Public Service Commission

requirements relative to the maximum system size on a lot. We understand the maximum system size is 5-megawatts (AC) which results in a 10-megawatt (AC) maximum from this site. The System Description on the Title Page, Sheet No. T-1 indicates the system size is 14,000-kilowatt AC (i.e., 14-megawatt AC). The applicant should verify the system size. **Title page has been updated with system sizes.**

- c) Special Permit – In order to ensure the compatibility of uses with surrounding properties, the Town Code permits certain uses only upon issuance of a special permit. Prior to granting or denying a major project special permit, specific criteria listed in the Code [§97-73] which includes nuisances (e.g., noises, dust and odors), traffic and emergency service access are to be considered. The applicant submitted a revised Project Narratives addressing visual & noise, drainage, wastewater and water services. In addition, we recommend the applicant address the following special permit criteria:

- The Code requires the applicant to confirm the project will not cause significant traffic congestion or overload existing roads [§97-73A(3)]. Although it is unlikely the proposed project will impact traffic once the sites are operational, the applicant should quantify approximate traffic volumes including during construction. Additionally, the applicant should address whether the existing roadways are adequate for anticipated delivery truck traffic (e.g., geometry, etc.). **Turn offs, widening the road way to 26 feet, have been provided in selected locations to enhance two-way traffic for emergency vehicles along the entire length of road from Owens Road. Truck turning radius along the road have been evaluated and modified where necessary for emergency vehicles and delivery trucks.**

Existing roadways were visually evaluated and found to the extent that turning radii and roadway conditions are adequate for truck deliveries. A map showing delivery routes are attached in this submission.

The applicant has indicated the posted speed limit for Owens Road is 30 MPH and the minimum provided sight distance is 280-feet which corresponds to the Lot No. 1 looking right. According to Google Street View images (2009) the posted speed limit is 35 MPH along Owens Road. The design speed equals posted speed plus 10 MPH (45 MPH). Under these conditions AASHTO – Geometric Design of Highways and Streets (2004) recommends an intersection sight distance of 555-feet for passenger cars to turn left and 480-feet for passenger cars to turn right. The applicant should review the existing sight distance and advise whether any modifications in the driveway design/location or vegetation clearing can improve sight distances. **It is agreed the speed limit on Owens Road is posted at 35 MPH. Based on this speed limit, plus the 10 MPH a design speed of 45 MPH will be used to evaluate the sight distance for each of the driveways. Field measurements have been taken from the line of sight (LOS) at each drive access in making a left or right turn onto Owens Road. Based on our findings, the minimum LOS was 510 feet and the maximum LOS was 1,000+ feet.**

- The Code requires the site be accessible to fire, police and other emergency vehicles [§97-73A(4)]. The plan shows two (2) access points from Owens Road. We suggest access (20-foot wide) and turnarounds (no dimensions provided) be reviewed with local emergency services and Building Inspector Halloran. **Turnoffs, widening the road way to 26 feet, have been provided in selected locations to enhance two-way traffic for emergency vehicles along the entire length of road from Owens Road. Truck turning radius along the road have been evaluated and modified where necessary for emergency vehicles and delivery trucks. With this submission a set of plans will be forwarded to the Highway Superintendent and Emergency Services for review and comment.**
- b) Public Hearing – This is a major site plan; a public hearing is required for site plan [§97-76F] and subdivision [§83-22K] approvals. Since a public hearing is also required in connection with the special permit to be reviewed by the Town Board and variances to be reviewed by the ZBA, we suggest you discuss with Attorney Naughton whether a joint hearing is feasible. **Understood.**

- d) Stream Corridor & Reservoir Watershed Overlay – The purpose of the Stream Corridor & Reservoir Watershed Overlay (SC) district is to protect water quality, scenic resources and reduce the risk of flood damage. The SC district extends 150 feet from the mean high-water line of the Walkkill River and any stream or stream segment shown within the SC district on the Overlay District Map. The Walkkill River (identified on the plan as an existing stream) forms a portion of the southwesterly parcel boundary. Site plan approval may only be granted if the Board finds, with appropriate conditions, the proposed: (1) will not result in degradation of scenic character and will be aesthetically compatible with its surroundings and (2) will not result in erosion or surface water pollution from surface or subsurface runoff [paraphrased from Code §97-26B(3)]. SC Overlay District has been shown on the plan all proposed improvements are located outside the district. **No response needed.**
- e) Scenic Road Corridor Overlay – The purpose of the Scenic Road Corridor Overlay (SR) District is to protect the Town's scenic and rural character. The SR District extends 500-feet from the right-of-way of a portion of Owens Road. The SR Overlay District has been shown on the plan and a portion of the Lot No. 1 array and fence encroach within the district. The applicant has requested a waiver from the SR District requirements which we suggest you discuss with Attorney Naughton. Additionally, we have the following comments:
- Site plan approval may only be granted if the Board finds, with appropriate conditions (paraphrase from Code): (1) no degradation of the scenic character and/or aesthetically compatible with surroundings; (2) minimal removal of native vegetation; (3) minimal visibility of structures from the road to the greatest extent practical; and (4) compliance with the landscaping, architecture, and fence requirements. We recommend the applicant provide additional information regarding the potential visibility of structures within the SR District. Further, the plans (Sheet C- 3.0) indicate agricultural style woven wire fence at this location (i.e., southerly corner of Lot No. 1). **The project will provide additional landscaping along the SC District buffer to enhance the existing visual buffer. The landscaping plan has been updated and revised in the plan set. In addition, an agricultural woven wire fence is shown along the entire perimeter of the solar array, except where gates are proposed, they will need to be chain link.**

In general, the corridor, though important in the town's scenic character, stops at the southern property line of the site. In light of this, the corridor extends 500 feet onto the property and overlaps the lower portion of the solar array. No tree and/or brush removal is proposed within this area and the 50+ feet of existing buffer will be maintained. In addition, a new landscaping buffer of evergreens and dense shrubbery has been placed between the existing buffer and the solar array to enhance the visual buffer from Owens Road. The following considerations mentioned below we believe are true and hope to assist the board in their decision that the proposed solar project:

- (1) Will not result in degradation of scenic character and/or will be aesthetically compatible with its surroundings. **There is no removal or degradation of the existing corridors setback from Owens Road or adjacent properties along Owens Road.**
- (2) Will minimize the removal of native vegetation, except where such removal may be necessary to open up scenic views and panoramas. **There is no removal of native vegetation...in fact the vegetation will be increased with native species within the buffer, making the buffer denser.**
- (3) Will locate and cluster buildings and other structures in a manner that minimizes their visibility from the road to the extent practical. **There are no building structures, but the consideration of the solar array is only 9.0' in height and only a small portion (1.2+/- acres) will be located within the 500-foot setback.**
- (4) Will comply with the requirements in Subsections G through J below, except where site features are screened from the road. **See Below.**
 - g. Landscape. (1) A continuous buffer will be maintained; (2) shade trees are existing along Owens Road; (3) existing trees, lawns and shrubs are being preserved.
 - h. Architecture. (1), (2) and (3) there are no building structures for this project.

- i. *Fences.* Agricultural web wire fencing will be used for the entire perimeter for the project.
- j. *Rural Siting Principals.* Paragraphs A, B, E, G and H are notable as Paragraphs C, D and F are not applicable. **Responses to paragraphs noted are: (A) where applicable, existing farm roads were utilized before planning for new gravel drives; (B) stone wall and hedge row were maintained where possible. Natural ways for wildlife have not been interrupted and any fence installed will have a 6-inch gap along the bottom for small wildlife corridors; (E) clearing has been minimize at the entrances to maintain proper sights distances; (G) drives have been placed in areas to minimize steep slopes; and (H) the layout does follow the natural terrain, as the only areas that will require some minor grading is along the gravel access roads.**
- *The Code requires a continuous green buffer at least 50-feet deep to be maintained. This buffer may consist of native trees and shrubs, fields, meadows and lawns [§97- 29G(1)]. The applicant has indicated there is existing tree, brush meadows that create this 50-foot buffer; we recommend this buffer also be shown on the plan. **The 50-foot buffer has been added to the landscape plan and x-sections.***
 - *The Code requires one (1) shade trees per 1,000 square feet of proposed floor area [§97- 29G(2)]. You should confirm with Building Inspector Halloran no shade trees are required since no new floor areas are proposed. **No further need to address. CEO stated this is not applicable.***
- f) *Floodplain & Ponding Area Overlay - The purpose of the Floodplain & Ponding Area Overlay (FP) district is to protect human life, prevent material losses and reduce the cost to the public of rescue and relief efforts caused by unwise occupancy of areas subject to floods and ponding [§97-25]. The FP district is defined on the National Flood Insurance Mapping Program Flood Insurance Rate Maps (FIRM) as "A" ("Special Flood Hazard Areas") Zones for the one-hundred-year floodplain. The Flood Insurance Rate Map dated August 3, 2009 shows a portion of the parcel along the southwesterly side of the parcel within the Special Flood Hazard Area. We understand no improvements are proposed and recommend you confirm with Attorney Naughton you are not required to make any findings relative to the floodplain overlay district. **No additional work needed. This matter was discussed and confirmed at the February 3, 2022 planning board meeting.***
- g) *Dimensional Regulations – The applicant has provided Zoning Summary Tables for each proposed lot (Table) on the Layout and Materials Plan, Sheet No. C-3.0, listing the required and provided (i.e., proposed) dimensions established by the Code. We have the following comments:*
- *Road Frontage - The Table indicates the lot width required is 100-feet and the proposed lot width is 1,019.4-feet for Lot No.1 and 260.6-feet for Lot No. 2. We understand this is intended to reference the minimum road frontage since the Code does not include a lot width requirement. If Building Inspector Halloran confirms the dimensional regulations listed at §97-19C are applicable, we understand the minimum road frontage required is 200-feet. Although both lots comply, the Table should be revised to correspond with the Town Code. **Table has been updated to show the 200-foot frontage required.***
 - *Setbacks – The Table indicates the front, side and rear yards required are 100-feet and the minimum proposed setback is 43-feet (for Lot No. 1). The Layout and Materials Plan, Sheet No. C-3.0, graphically depicts multiple modules for the Lot No.1 array encroaching into the required setback toward the northeast and the minimum setback to be 40-feet. This will require an area variance as indicated in the Table. **Table and plan dimensions have been updated.***
 - *Fencing – The Code requires all fencing greater than four (4) feet in height to be located 80-feet from all property lines [§97-55F(12)(d)]. The Table indicates the fence setback required is 80-feet and the minimum proposed setback is a complying 80-feet however the Table notes the need for variances. The Layout and Materials Plan, Sheet No. C-3.0, graphically depicts portions of the Lot No. 1 fence encroaching into the required setback toward the northeast*

which will require an area variance. We note the minimum fence setback identified on the plan is 19-feet and recommend the Table be revised to correspond with the plan. **Table and plan dimensions have been updated. Variance dimension for Lot 1 setbacks for fence and module locations are depicted on the plans, Sheet C-3.0.**

- Driveways - The Code requires driveways on lots with 100-feet or more of road frontage to be set back at least 10-feet from side lot line [§97-40C(4)]. The Table indicates the driveway setback required is 10-feet and the minimum proposed setback is a complying 15-feet for Lot No. 1 and 24-feet for Lot No. 2. This appears to be a typographic error. The Layout and Materials Plan, Sheet No. C-3.0, shows the proposed driveway setback for Lot No. 1 to be approximately 500-feet (by scale) and the proposed driveway setback for Lot No. 2 to be 15-feet. **Table and plan dimensions have been updated.**
 - Module Height – The Table indicates a proposed maximum solar panel height of 9.5-feet however this is inconsistent with the dimension on the Typical Rack Section, Sheet No. C-5.0, which indicates a panel height of 9.8-feet. Although both configurations comply with the Code the plans should be revised for consistency. **Detail sheet has been updated to show the module height at 9.0 feet.**
 - Lot Coverage – The Table indicates the maximum lot coverage permitted is 50%. It appears the requirement referenced by the applicant (i.e., §97-55D(3)(h) applies to “solar and photovoltaic energy systems as accessory uses/structures on preserved farmland, commercial farms and other farms”. We suggest you discuss with Building Inspector Halloran whether this requirement applies to this application. **No further work needed...CEO confirms not an accessory use during the February 3, 2022 planning board meeting.**
- h) Supplementary Regulations – Development of wind and solar energy systems requires compliance with the supplementary regulations listed under §97-55 (paraphrased below in italics):
1. *The installation of any solar or photovoltaic energy system, including any accessory equipment, shall be outside any land area exhibiting sensitive environmental characteristics such as freshwater wetlands, one-hundred-year flood hazard areas, severe topography (slopes more than 15%), stream corridors, wetland transition areas, habitats for endangered, rare, or threatened species, historic and/or culturally significant areas. Systems shall not be within any conservation easement or conservation deed restricted area. **The project as currently proposed does not include clearing or crossing of existing easements or restrictive areas except for ACOE wetlands. A permit application has been prepared and in the process of permitting filling the wetland area for access road to Site 2. There are no panels or system components in the wetlands or other restrictive easements.***

*The plans show two (2) areas of wetland disturbance (areas are not quantified) to construct the driveway to access Lot No. 2. The applicant's December 16, 2021 correspondence indicates they are seeking permits for these disturbances. We recommend the applicant provide information on the wetland delineation, quantify the areas of wetland disturbance and obtain a jurisdiction determination. Only some of these areas appear to have been shown on the plans. Additionally, the applicant should address whether there are any habitats for endangered, rare, or threatened species, historic and/or culturally significant areas, conservation easements or conservation deed restricted areas onsite. **The discrepancy in wetlands depicted on the plans is due to review of the original delineation of the wetlands by the Army Corps of Engineers, specifically reviewer Brian Orzell, the plans currently show the wetlands as agreed upon with that department. The updated delineation has been attached to this submittal, and we are currently in the pre application discussion phase of the Joint Permit Application. At this point it was agreed upon that Borrego Solar will propose a 2.5:1 mitigation for any areas impacted for the wetlands crossing, the ACOE has stated this is a favorable proposal. Initial discussions included onsite mitigation as no wetland credits in the area were available at the time, but recently wetland credits have become available***

in the area and Borrego Solar has reserved one credit for this mitigation. Generally speaking, while somewhat counterintuitive, offsite mitigation is often preferred by the ACOE as these future proposed wetlands often create much higher value habitats and are created and monitored by experts in these fields. As this discussion is still preliminary there are no applications to submit, but if requested, the correspondence with Brian Orzell's office can be forwarded to the town. Currently the proposal being submitted consists of 0.356± Ac of wetland impacts, and 0.89± Ac of mitigation is being proposed.

*In accordance with our request, the applicant has identified the areas of steep slope however these areas have been identified on the Existing Conditions Plan, Sheet No. C-1.0, and it is infeasible to determine whether the proposed arrays will disturb these areas. We recommend the steep slope analysis be added to the Layout and Materials Plan, Sheet No. C-3.0, so you may verify compliance with the Code. **The 15%+ slope analysis has been shown on the existing plan, grading plan and layout plan.***

2. Any proposal for a wind, solar or photovoltaic energy system shall conform to the provisions of §97-47, "Protection and Regulation of Agriculture," and Chapter 53, Clearing and Grading Control).

We suggest your action include a requirement to comply with these Code provisions. The Code also requires conformance with the following:

- Any trees and/or shrubs to be removed or topped to accommodate the installation of a solar or photovoltaic energy system shall be accompanied by a site plan identifying the location, size and species of trees to be removed or topped and demonstrating the need to remove or top the trees.
- Solar energy systems shall be designed so tree removal is not required to the greatest extent practical. Where trees are to be removed the Planning Board may require replacement trees on the subject property at up to a one-to-one ratio, depending upon the consideration of environmental factors and the good judgment of the authority having jurisdiction.

*The applicant has provided a Tree Clearing Plan, Sheet No. C-2.0, graphically identifying areas to be cleared (cutting and stumping) and topped (cutting) to eliminate panel shading. Additionally, the applicant provided a Landscaping Plan, Sheet No. C-3.1 showing the conceptual location of proposed plantings and indicating species, density and location of plantings to be finalized by a landscape architect. The applicant should provide a plan identifying the location, size and species of trees to be removed or topped as well as the final landscaping plan. Once this information is provided, we recommend you consider the replacement trees to be required. **A Habitat Assessment and Tree Survey has been completed and is part of this submission. In summary the following are points that are worth noting:***

- **20.19+/- acres of trees will be cleared**
- **Tree survey consisted of 6" diameter-at-breast-height (dbh) or larger**
- **1,897 trees were surveyed and identified**
- **1,419 trees were in the range of 6" dbh to 11" dbh or 75%**
- **368 trees were in the range of 12" dbh and 17" dbh or 19%**
- **77 trees in the range of 18" dbh to 23" dbh or 5%**
- **33 trees larger than 24" or 1%**
- **Invasive species, such as Tree of Heaven were found throughout the majority of the clearing limits as well as Multi-flora Rose, Buckhorn and others**
- **Given the number of mature trees is low, the carbon loss from the clearing is minimum and the replanting of species will replenish the carbon levels**

as they mature.

- **An 8-10 acre area of suitable mitigation area has been denoted on the plans, the current proposal is to utilize this mitigation area at a density of 190-237 trees per acre which will allow for a 1:1 mitigation area. A planting plan for this mitigation area will be submitted at a later date under separate cover.**
- *The installation of any solar energy system shall respect the landscaping and trees within any conservation easement or deed restricted area or within any required buffer area so that there is no damage or harm to the plant materials within those areas.*

*The plans show several existing permanent easements as well as rights-of-way and clearing in the vicinity of the northeasterly and southwesterly parcel boundaries. The applicant has provided portions of a title report for this parcel and should confirm there are any restrictions on clearing. **The project as currently proposed does not include clearing or crossing of the existing easements.***

- *Any tree clearing shall be justified with emphasis on development of previously cleared areas and any proposed clearing not to exceed an area more than 50% of the subject property's size. Clearing shall be minimized and limited to the area necessary for site access and the installation and operation of solar panels and related equipment. Natural vegetation shall be maintained to the greatest extent practicable.*

*The applicant has provided a Tree Clearing Plan, Sheet No. C-2.0, quantifying the total clearing on Lot No. 1 as 4.23-acres and total clearing on Lot No. 2 as 16.87-acres which corresponds with 15.64% and 17.00% respectively. **The tree clearing plan has been revised based on the removal of the panels from areas of slopes greater than 15%. The revision quantifies the clearing limits to 3.48+/- acres (12.9%) on Lot No. 1 and 16.71+/- acres (16.8%) on Lot No. 2.***

- *Once constructed, ground cover below the solar energy system must be restored with low-maintenance, drought-resistant, native, non-fertilizer dependent flora or other protective low-maintenance surface as the Planning Board may approve. Additionally, the Code prohibits the use of stone beneath solar panels and requires a seed mixture of native, noninvasive, shade tolerate grasses.*

*The plans include a Seeding Specifications Table indicating a northeast pollinator mix between and under the solar panels. **No further work needed.***

3. *The design of a solar energy system shall, to the extent possible, use materials, colors, textures, screening and landscaping that will blend into the natural setting and existing environment.*

*The applicant provided equipment catalog cutsheets showing some systems components. Additionally, the plans include information on the general arrangement and scale of equipment on each equipment pad. We recommend the plan be revised to identify each component. **A sheet has been added to the plan set where each piece of electrical equipment is identified, please see sheet E-2.0.***

4. *Wind and solar energy systems and any associated structures shall not be used for displaying any advertising or signage, except for reasonable identification of the operator of the system and appropriate warning signs, with phone numbers for ESO/emergency contacts all not to exceed, in aggregate, four square feet in area per 100 lineal feet of running perimeter. All signs shall be affixed to equipment unless otherwise authorized by the approving authority.*

*The Vehicle Gate Detail, Sheet No. C-5.0, shows the location of the owner and emergency contact information placard/sign on the fence. We recommend, as a condition of your action, the applicant install warning signs and an emergency contact sign for ESO use. **Detail 8 of Sheet C-5.0 has been updated to address this comment, in addition, an electrical placard detail sheet has been provided in the updated plan set. Please see sheet E-6.0.***

5. *The installation of a clearly visible warning sign concerning voltage must be placed at the base of all area mounted transformers and substations.*

*A detail has been added to the plans and we recommend you confirm this detail meets National Electric Code requirements with Building Inspector Halloran. **An electrical placard detail sheet has been provided in the updated plan set, please see sheet E-6.0.***

6. *All solar and wind energy systems shall be designed and located in order to prevent any unabated reflective glare toward any inhabited buildings on adjacent properties as well as adjacent roadways with sufficient studies submitted to confirm this has been mitigated to the extent practicable.*

*The applicant's December 16, 2021 correspondence indicates a glare analysis has been recently submitted however we did not receive this analysis. We recommend you defer scheduling the public hearing until receipt of a glare analysis evaluating potential glare toward the existing dwellings along Owens Road. **The glare analysis has been attached to this submittal for review.***

7. *Lighting of the pertinent structures shall be limited to that minimally required for safety and operational purposes and shall be reasonably shielded from abutting properties.*

*The EAF indicates a motion-activated light will be installed at each electrical equipment area. Any lighting provided should be directed downward and shielded from abutting properties. **Please see detail 10 on sheet C-5.0.***

8. *When a new driveway or road is required for access to the wind, solar or photovoltaic systems, the surface shall be either pervious pavement or gravel and shall be the minimum width to accommodate maintenance as well as emergency vehicles.*

*The plan indicates two (2) new gravel access driveways from Owens Road will be provided. If these driveways are considered fire access roads, they may need to be wider and include larger turnarounds (see comment above). We recommend reviewing this with Building Inspector Halloran to determine if the fire access requirements of the International Fire Code apply. We recommend you confirm with the Emergency Services the proposed will provide passable conditions at all times for emergency service vehicles. Additionally, we note the driveway access will require approval from the Highway Superintendent (see comment below). **Turnoffs, widening the road way to 26 feet, have been provided in selected locations to enhance two-way traffic for emergency vehicles along the entire length of road from Owens Road. Truck turning radius along the road have been evaluated and modified where necessary for emergency vehicles and delivery trucks. With this submission a set of plans will be forwarded to the Highway Superintendent and Emergency Services for review and comment.***

9. *All wind and solar energy system installations must be securely fenced. Fencing may be chain-link or other suitable fence acceptable to the Planning Board and consistent with this chapter. **Architectural web fencing has been placed along the entire perimeter for the project.***

See §97-55(F)(12) below.

10. *All wind, solar and photovoltaic energy system installations must be performed by a qualified installer, and, prior to operation, the electrical connections must be inspected by the Town or other appropriate electrical inspection agency, as determined by the Town. In addition, any interconnection to the public utility grid must be inspected by the appropriate public utility. (a) All power lines from a wind, solar or photovoltaic energy system to onsite interconnection equipment shall be located underground and installed by a certified professional and must meet all applicable national, state, and local electrical codes. (b) The installation of any energy system shall conform to the National Electric Code. (c) Wind, solar and photovoltaic energy systems that connect to the electric utility grid shall comply with Article 7 of the New York State Public Service Law and Section 68 if the plant is to generate more than 80 mw of energy as required by the electric utility servicing the property and (d) Systems shall be installed by a qualified*

installer as listed on the NYSERDA Approved Installers list with a North American Board of Certified Energy Practitioners (NABCEP) certified installer.

*We suggest you make these requirements a condition of your action. **Understood.***

11. *When batteries are included as part of the wind, solar or photovoltaic energy system, the batteries require a charge controller and must be placed in a secure container or enclosure meeting the requirements of the New York State Uniform Fire Prevention Code when in use, and, when no longer used, the batteries shall be disposed of in accordance with the laws and regulations of Orange County and other applicable laws and regulations. Unless practically infeasible, the energy system shall be connected to the energy grid in lieu of stand-alone systems relying upon batteries to store excess power.*

*The applicant has confirmed in their December 16, 2021 correspondence no battery systems are proposed as part of this facility. **No response needed.***

12. *Landscaped vegetative screening shall be required, as well as fencing as may be determined appropriate by the Planning Board, between any ground-mounted solar collectors or any ground-mounted equipment for any energy system and adjacent properties and streets in accordance with the following: (a) The overall purpose of the landscaped screening is to obscure or substantially buffer the view of the solar energy system year-round; (b) The landscaped screening shall be comprised of a minimum of one evergreen tree, at least six feet high at time of planting, plus two supplemental shrubs, all planted within each 10 linear feet of the area to be screened or such other equivalent and appropriate landscape solution as is acceptable to the Planning Board; (c) Existing vegetation may be used to satisfy all or a portion of the required landscaped screening; (d) Fencing shall provide security protection for the facility and may also provide screening of the facility for visual protection of neighboring properties. Fencing shall satisfy all NEC requirements as needed and may be a maximum of eight feet in height, unless otherwise required by the NEC [see § 97-55F(9)].*

*The plan show conceptual locations of proposed plantings and indicate species, density and location of plantings to be finalized by a landscape architect. Since screening of adjacent properties will likely be a primary concern during the public hearing we recommend the applicant submit the final landscaping plans and perhaps renderings of the screening prior to scheduling a public hearing. If the applicant intends to rely on existing vegetation for screening site-cross sections and photographs should be submitted. **Updated renderings are currently being completed by Saratoga Associates and will be presented at the next planning board meeting.***

*The plans show a seven (7) foot high chain-link fence mounted six (6) inches above grade to provide a "wildlife gap" as well as an eight (8) foot woven wire agricultural fence. In accordance with your prior practice, we recommend all fences be woven wire (i.e., no chain-link) and the applicant provide areas for wildlife to pass. **fence detail has been updated to a agricultural woven wire fence with height not to exceed 8 ft, including gap.***

13. *If a solar energy system ceases to perform its originally intended function for more than 12 consecutive months or construction is not completed within 18 months of final site plan approval, the property owner shall remove the equipment and facilities and restore the property to its original condition unless he can show to the satisfaction of the Building Inspector good cause as to why this time should be extended and then only to a maximum extension of an additional 45 calendar days. To secure such removal, the developer shall post a decommissioning cash bond with the Town in an amount to be established by the Town Board upon recommendation from the Town Engineer.*

*We recommend this be a condition of your action. **Understood.***

14. *A copy of the manual shall be provided to the Building Department and Fire Department when the applicant requests a building permit be issued.*

*We recommend this be a condition of your action. **Understood.***

15. *Solar energy systems shall be designed to sustain wind loads up to 110 miles per hour (mph) and snow loads of 50 pounds per square foot (psf) unless more stringent requirements are mandated by other regulatory agencies.*

*We recommend your action include a requirement for this information to be submitted and reviewed to our satisfaction prior to the issuance of a Building Permit. **Understood.***

16. *The site is outside the Scenic Road Corridor Overlay District Code and the Code requires a visual impact assessment including a viewshed analyses, before and after graphical representations and alternative designs and colors.*

*A portion of the site is within the Scenic Reservoir Corridor. The applicant provided a Viewshed Analysis which shows site visibility from several vantage points based on existing topography. Additionally, the applicant provided two (2) views of the project as viewed from Owens Road. We recommend you discuss with the applicant whether the submitted sufficiently addresses before and after views such that the visual impact from abutting properties and streets may be assessed and mitigations contemplated pursuant with §97-55F(19)(b). **Please see sheet C-6.0 for cross-sectional views from Owens Road.***

17. *A decommissioning plan must be submitted by the solar developer as part of the site plan and special permit applications. Although the agreement between the property owner and the company installing and operating the system may assign the decommissioning responsibilities to the company, the responsible party for the purposes of this code shall be the property owner. The decommissioning plan shall identify the anticipated life of the project, method and process for removing all components of the solar energy system and returning the site to its preexisting condition. It shall include an estimate of decommissioning costs. The decommissioning plan shall be initiated within the time frames provided in § 97-55F(13).*

*A decommissioning cost estimate/plan has been submitted. We will provide further comments prior to the Town Board's action on the estimate. **No response needed.***

18. *An agreement with a utility for interconnection of the completed facility must be established and clearly documented within the site plan and special permit review. **We have the CESIR Study for both sites. The 25% invoice is due in April. Once we pay the remaining 75% we will receive the Interconnection Agreement.***

*The applicant provided the preliminary screening form and should also provide the utility interconnection agreement and details of each interconnection for your consideration and address whether any additional tree clearing will be necessary for the interconnection. **The Interconnection Application was submitted with the pole layout represented on our plans. The final interconnection layout is determined by Orange and Rockland during a site visit. This occurs once construction drawings are submitted.***

2. Site Plan –

- a) *Access & Parking – The plan indicates two (2) driveway access points but does not address the connection with the Town road. The Code requires new driveways on Town roads, including the conversion of farm roads into residential driveways to require permission from the Town Superintendent of Highways [§97-52A]. We recommend the applicant provide construction details and sight distances so you may confirm compliance with the Code.*

*Additionally, the applicant should address parking; both during construction and facility operation. **Laydown areas, construction parking and staging on the plans have been shown as temporary areas.***

- b) *Utilities – This is an unmanned installation. The applicant has advised no water and/or sewer service is required.*
- c) *Stormwater – Per the NYSDEC SPDES General Permit for Construction Activities, soil disturbances greater than one acre requires a full Stormwater Pollution Prevention Plan (SWPPP). The applicant should quantify the area of disturbance and graphically delineate it on the Erosion*

Control Plan. Since the area exceeds one (1) acre we understand post construction stormwater management practices are required. The Project Narrative indicates stormwater management systems will be incorporated into the development plan. These should be shown at this time along with any collection and conveyance systems. Additionally, the applicant should submit the SWPPP. A full SWPPP is being prepared and will be submitted under separate cover or in the next submission. The SWPPP will clearly define water quality and quantity controls that are required under the NYSDEC SPDES General Permit for Construction Activities GP-0-020-001.

c) Miscellaneous –

- Sign & Seal – Future plan submissions should be signed and sealed by the professional who prepared the plans. **Understood**

Agricultural Data Statement – The project site is located within an agricultural district. Pursuant to the Code requirement, the applicant submitted an Agricultural Data Statement. The Code requires public hearings for major site plans to follow the provisions on agricultural data statements for special permits [§97-76F(1)] which requires the Secretary of the Planning Board to mail written notice of the application to the owners of the land as identified by the applicant in the agricultural data statement. **Understood. The Agricultural Data Statement was provided in previous submissions and there are no changes. The ADS has been added to this submission for clarity.**

- Owner's Endorsement – The applicant previously submitted an exhibit to the application identifying Borrego Solar Systems, Inc. as the Owner's agent. We recommend you confirm this is satisfactory with Attorney Naughton. **No response needed. This matter was discussed and confirmed at the February 3, 2022 planning board meeting.**

- Road Inventory – The applicant has indicated a road inventory survey (i.e., road condition assessment) will be performed prior to construction and at the conclusion of construction to identify any damage caused by the proposed projects. We recommend you consider requiring this as a condition of your action. **Using google maps and County GIS maps a traffic route was established to the site from the closest major arterial that would be used for deliveries. Existing local roadways were visually evaluated and found that there are no concerns to the conditions of the roadways. Once construction is scheduled, a roadway inventory will be conducted within 90 days to confirm the present conditions and supplied to the building department with the building permit application.**

d) SEQRA – During your November 18, 2021 meeting you declared your intent to be Lead Agency under SEQRA and classified this as a Type I action. We understand the Notice of Intent was circulated December 14, 2021. Unless Attorney Naughton advises otherwise, we believe you may assume Lead Agency status at this time.