

TOWN OF LANCASTER  
PLANNING BOARD  
Prescott Building, Nashaway Meeting Room  
Monday, August 27, 2018

Present: Phil Lawler, Chair; Jeanne Rich, Vice-Chair; Thomas Christopher and Russ Williston  
Absent: Frank Sullivan

Also Present: Noreen Piazza, Planning Director

List of Documents:

- Planning Board Agenda: August 27, 2018
- Site Use Plans Revised ( 6 Sheets) August 21, 2018 for 267 Brockelman Road Solar Electric System, Borrego Solar
- Letter dated August 27, 2018 from Hamwey Engineering Inc. concerning Borrego Solar Project Site Plan, 267 Brockelman.
- Letter dated August 21, 2018 from Borrego Solar Inc. - Peer Review Response 2 Comments for Borrego Solar Inc. Solar Project.
- Letter dated August 8, 2018 from Markey & Rubin, Inc. – Waiver Request Letter for Fort Pond Road Solar Project
- Solar Decommissioning Plan for 267 Brockelman Road Solar Project, dated August 22, 2018 from Borrego Solar Inc.
- Request for Waivers from Lancaster Bylaw Section 220-76 from Borrego Solar Inc. for 267 Brockelman Road Solar Project.
- Email from Michael Hanson, Lancaster Fire Chief dated August 23, 2018 concerning 267 Brockelman Road Solar Project.
- Pre-Development Runoff CN for 267 Brockelman Road Solar Project prepared by David Albrecht, Borrego Solar Inc.

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Chair Phil Lawler called the meeting to order at 7:02 PM.

**Discussion, Lot Subdivision, 50 Fire Road 12**

*Present: Hector Bianco, Owner*

Mr. Bianco said he wants to subdivide his three acre lot but doesn't meet the two acres requirement for each lot. Chairman Lawler questioned if he has wetlands. There was some discussion about looking into purchasing some land from Jewish Community Center to meet the acreage requirement.

**Continued Discussion, Site Plan-FC Stars Soccer Complex, 70 McGovern Boulevard**

Noreen Piazza informed the Board the applicant has requested a continuance to the September 10, 2018 meeting.

**Continuation of Review, Site Plan for Ground-mounted Solar Facility- Borrego Solar, 267 Brockelman Road and Continued Public Hearing, Special Permit and Stormwater Management Permit , 267 Brockelman Road**

*Present: David Albrecht, Brandon Smith and Weston Standish, Borrego Solar Systems Inc.*

The project site is limited to the northwest by 350 feet of electric utility easements and to the north and east by wetlands. The entire site area we are using is cleared and no tree clearing is proposed as part of this project. To maximize the available distribution capacity on this line, we need to push the design to within 70 feet of the southwesterly property line and 152 feet of the easterly property line.

The purpose of the setbacks and the fence height and material is to provide a visual and noise buffer from residences. To the east, the home at 407 Brockelman Road (Helfrick) is approximately 982 feet from the most southerly corner of the proposed solar project. There is over 350 feet of forest between the solar project and the home, with a horse farm and stables between. Directly to the south is the residence at 455 Brockelman Road (Siddell) (not an abutting parcel) and is approximately 983 feet from the same corner of the proposed solar project. There is over 830 feet of forest between the solar project and the home. In either case, there is a significant distance, with dense vegetation and some elevation change to assure the neighbors that the site will not be visible. Additional parcels to the south and to the southwest are landlocked and owned by the Town of Lancaster and D & R Farms, LLC. July 18, 2018.

Hamwey Engineering Inc. performed a review of the proposed 1,863.81 kW Ground Mounted PV Facility at 267 Brockelman Road. Borrego Solar Systems, Inc. submitted the following:

- One (1) 24" x 36" set of revised plans dated August 21, 2018.
- One (1) copy of the updated waiver request document dated August 21, 2018.
- One (1) copy of the Decommissioning Estimate dated August 21, 2018.

Based on comments received from the Lancaster Conservation Commission on Tuesday, August 14th, 2018 Borrego Solar Systems Inc. has slightly modified the layout, the system size, the access road and equipment area location. This was done to accommodate the request to take the fence out of the 25-foot no impact zone to wetlands. As a result, the waiver request for the setback 220-76.H.3 from the equipment area is no longer needed.

Borrego Solar Systems, Inc. submitted their responses to Hamwey Engineering Inc.'s comment letter dated July 13, 2018, as follows:

#### **Zoning Table**

1) The required minimum lot area is 87,120 sf, not 64,000 sf.

Response: *Zoning table has been revised.*

2) The required maximum building height is 20', not 35'.

Response: *Zoning table has been revised.*

3) What is the height of the electrical equipment?

Response: *Zoning table does show the modules/racking at 9'. We have added the heights of the various equipment on sheet C-2.0. The tallest piece of equipment is the energy storage unit at 86 inches (7'-2") feet above grade.*

4) Show the required and provided frontage for the lot.

Response: *Zoning table has been revised.*

5) Show the required setbacks for equipment (250'), not 200'.

Response: *Zoning table has been updated to include this. We have spoken to Noreen Piazza about this and she has opined that the waivers we are requesting are waivers and not variances. Refer to attached e-mail dated August 16th. This is outlined in section 220-76.E and N. of the zoning bylaws.*

6) Show the required (200') and provided (<200') widths of buffer strips.

Response: *Zoning table has been updated to include these. A waiver has been requested from this requirement. Refer to attached waiver requests. See response to comment 5) above.*

7) Submit a list of requested variances. Response: *Zoning table has been updated to show requested waivers. See response to comment 5) above.*

#### **PLAN SHEET C-1.0**

1) Is there a Wetland Area C?

Response: *Yes. It is offsite and to the south of the access road. See attached SWCA wetland memorandum.*

#### **PLAN SHEET C-2.0**

1) Show the sight distance at the entrance in both directions along Brockelman Road.

Response: *we will be visiting the site to determine the sight distances and provide those on the final plans.*

2) Show the entire gravel road (including the existing farm road) to be constructed to a 20' width in accordance with the detail.

Response: *The existing gravel road will be maintained at its current width. The plans have been modified to reflect this. The fire department has agreed that the existing road is adequate for access to the site. We will discuss with the department the new layout prior to the next planning board meeting.*

3) Show all residential buildings within 300' of the proposed installation and a profile view of the installation if applicable.

Response: *These buildings are already shown on the plans. The nearest abutting residence is over 900 feet from the solar system fence.*

4) The required side yard and rear yard setbacks have not been met.

Response: *We have requested a waiver from that requirement. See attached request submitted with the original submission. See response to Zoning Table comment 5) above.*

5) The required buffer strip widths have not been met.

Response: *We have requested a waiver from that requirement. See updated waiver request document. See response to Zoning Table comment 5) above.*

6) Is the 48" culvert structurally sound and have adequate cover to protect it from construction vehicles?

Response: *This same road was used for the construction of the other solar project and was deemed structurally sound at that time. It was also protected with steel plates and that is our plan for this project.*

### **PLAN SHEET C-3.0**

1) Show the proposed grades of the new gravel road.

Response: *The existing gravel road will be maintained and no grading changes are proposed. The existing topography is such that no "grading" is needed for the new gravel road. The area will be excavated the required (TBD) depth of the road and installed flush with existing elevations. No changes to 1<sup>st</sup> response.*

7) The radius of the road curve at the corner of the property is too sharp for emergency vehicles.

Response: *This route was utilized for the construction of the 2013 solar project and is sufficient for emergency vehicle access. We will confirm with fire department. We will discuss with the department the new layout prior to the next planning board meeting.*

8) Check radii at all curves in the road way.

Response: *We have included a blow up of the turnaround and added radii. This route was utilized for the construction of the 2013 solar project and is sufficient for emergency vehicle access. We will confirm with fire department. We will discuss with the department the new layout prior to the next planning board meeting.*

9) Show dimensions of turnaround. Submit the information to the Fire Department for their approval.

Response: *Refer to detail of turnaround with dimensions and radii. This design is based on the state fire code (ICC Appendix D Figure D103.1). We will confirm with fire department. We will discuss with the department the new layout prior to the next planning board meeting.*

3) Silt fence is shown on the plans. The Conservation Commission may want hay bales added to the silt fence.

Response: *Understood.*

4) The Filtrex sock may not be acceptable at the culvert crossing. This should be submitted to the Conservation Commission for their approval. If the Filtrex socks are acceptable, the dimensions of the sock should be shown.

*Response: We will be submitting to the conservation commission for their August 14, 2018 meeting.*

5) Under Phase III, revise statement...(complete means that *construction vehicle* traffic is no longer necessary).

*Response: This change has been made.*

#### **PLAN SHEET C-4.0**

1) Typical Trench Detail a. Should sandy loam be used as fill around the conduit?

*Response: This is our standard detail for all of our solar projects over the past 5+ years and has been successful. No change made.*

2) Silt Fence Detail

a. The Conservation Commission may want hay bales added to the silt fence.

*Response: Understood.*

3) Stabilized Construction Exit Detail a. The width should be 20' min., same as the road width.

*Response: The width will be the same as the current driveway entrance. This location (and dimensions) were used for the 2013 solar project.*

b. The radii should be large enough to accommodate the largest construction delivery

c. The 2"-3" stone size will easily fill with silt over time, creating smooth surface. 4"-8" riprap should be installed (min. depth 10") to create a rough surface to vibrate the tires.

*Response: Based on the MA DEP Erosion and Sediment Control Practices page 68 Construction Entrance the detail specifies 1-3" crushed rock.*

d. The intention of Note 1 is not clear.

*Response: The width at the public road shall be a minimum of 24 feet so that vehicles can pass at that point (where "ingress or egress occurs"). We have deleted note #1.*

*Response: This location (and dimensions) were used for the 2013 solar project.*

4) Gravel Access Road Detail

a. Show the 20' width on the detail.

Response: *Revised.*

b. The gravel should be MSSHB spec M.1.03.3, Type b, 12" depth.

Response: *The type should be "C" and depth will be recommended by our geotechnical investigation.*

c. Add a note stating that sieve test results must be submitted for the gravel.

Response: *Note has been added.*

#### 5) Vehicle Gate Detail

a. The required "solid slatted" fence height is 8'.

Response: *We are requesting a waiver from this requirement.*

b. The solid slats should be shown and installed diagonally in both directions.

Response: *See 5) a. above. See response to Zoning Table comment 5) above.*

c. If the road is 20' wide, the fence posts should be greater than 20' apart.

Response: *This is not an issue for us or fire departments. No change made.*

#### 6) Chain Link Fence-Wildlife Gap Detail

a. The required "solid slatted" fence height is 8'.

Response: *See 5) a. above. See response to Zoning Table comment 5) above.*

b. The solid slats should be shown and installed diagonally in both directions.

Response: *See 5) a. above. See response to Zoning Table comment 5) above.*

#### 7) 4' Man gate Detail

a. The required "solid slatted" fence height is 8'.

Response: *See 5) a. above. See response to Zoning Table comment 5) above.*

b. The solid slats should be shown and installed diagonally in both directions.

Response: *See 5) a. above. See response to Zoning Table comment 5) above.*

8) Mulch Tube Detail a. The title of the detail should be changed to "Filtrex Socks".

Response: *Note on C-3.0 added vs. changing the detail title.*

b. The size should be 12" diameter min.

Response: *This is already shown on the detail. We have added "DIA." to the note.*

#### **PLAN SHEET E-2.0**

This plan was not reviewed by Hamwey Engineering, Inc.

Response: *Noted.*

#### **PROJECT NARRATIVE**

The Zoning Table should be the same as the Zoning Table on the plans.

Response: *Revised. See attached project narrative.*

The fence must be an 8' high "solid slatted" fence.

Response: *See 5) a. above. See response to Zoning Table comment 5) above.*

#### **STORMWATER MEMO**

##### **1) Proposed Construction**

a. The fence must be an 8' high "solid slatted" fence.

Response: *See 5) a. above. See response to Zoning Table comment 5) above.*

b. The proposed gravel road appears to be 30,000 sf (including the existing farm road), not 6,000 sf.

Response: *The existing farm road width and grade will be maintained; no additional material or width is proposed. Based on the revised layout, the proposed gravel road is 10,150 sf.*

##### **2) Standard No. 2**

a. The proposed gravel road appears to be 30,000 sf (including the existing farm

b. A majority of the existing farm road is in the Woodbridge soil area (Cover Type C/D, CN 89/91)

c. A majority of the proposed gravel road (widen 10') is in the Woodbridge soil area (Cover Type C/D, CN 89/91)

d. The proposed gravel road appears to be 30,000 sf (including the existing farm road), not 6,000 sf. Or 0.388Ac.

Response: *See above response.*

e. The cumulative CN's should be recalculated.

Response: *No revised calculations needed since existing farm road to remain in its current condition. See revised CN calculations.*

3) Standard No. 3

a. Please explain the calculated gravel and concrete pad areas in the Recharge Volume Provided.

Response: *The area of the rectangles is calculated and the concrete pads are subtracted. We have added a note to the detail on sheet C-2.0 about gravel depth.*

#### **MANUAL for PUBLIC SAFETY DEPARTMENTS**

1) This manual was not reviewed by Hamwey Engineering, Inc.

Response: *Noted.*

#### **ADDITIONAL QUESTIONS/COMMENTS to the PLANNING BOARD**

1) Does the Fire/Police/Emergency departments require access around the site?

Response: *We have contacted Chief Hanson and are awaiting an opportunity to discuss the project. The fire department has no issues with the project. We will discuss the changes in the access with the fire department prior to the next planning board meeting.*

2) There is no vegetative screening proposed along the fence.

Response: *The project is not visible from adjoining residences.*

3) There is no lighting shown on the plans.

Response: *Note has been added to C-2.0 for the lighting.*

4) A decommissioning plan has not been submitted.

Response: *This was included in the original submission. A revised decommissioning estimate is provided with this letter.*

5) A security plan has not been submitted.

Response: *Our plan for security is shown on the Site Z Use Plans. A 6-foot high chain link fence with 3 strands of barbed wire (another 12-inches), locked vehicular and man gates, and the motion-activated light are all the security provided. No cameras are proposed.*

6) The project should require an Order of Conditions from the Conservation Commission.

Response: *We have commenced the NOI process with the Conservation Commission.*

The applicant asked for the following waivers:

- Setbacks, Article XVIII, §220-76.(H)(2)(b and C)
- Buffer strips, Article XVIII, §220-76.(H)(1)(b)
- Fence height/material, Article XVIII, §220-74. Definitions Fence

The applicant felt the waivers should be approved for the following reasons:

- Project is not visible due to distance from system to closest residences which exceeds 900 feet (3 football fields) and is screened through existing dense forest;
- Solar project is screened from view by topographic (elevation) differences;
- Noise levels generated by the project are at or below ambient noise levels at the sensitive receptors; and
- The waiver request is in general harmony with the purpose and intent of the bylaw.

The Board and the applicant discussed the 61A status. David Albright commented the 61A status is yet to be determined. He discussed if the site is a dual-use project it can remain in 61A status. Tom Christopher said he wants to defer the decision until the 61A status is resolved.

The Board still needs sight distance, fire review, waivers/variances and the 61A status clarified.

**Jeanne Rich made a motion to continue the Site Plan, Special Permit Public Hearing and the Stormwater Permit Public Hearing for the Ground-mounted Solar facility located at 267 Brockelman Road until the next meeting on September 10, 2018. Russ Williston seconded the motion. No discussion. VOTE: 5-0-0.**

**Signature, Stormwater Management Permit, 580 Fort Pond Road**

The Board signed the Stormwater Management Permit for 580 Fort Pond Road.

**General Business**

The Board reviewed the following information: (5) Invoices from Haley and Ward Inc. for professional service through July 31, 2018:

- **Jeanne Rich made a motion to pay the invoice from Haley and Ward Inc. in the amount of \$189.24 for professional services through July 31, 2018 for the Filling Station and Convenience Store located at 1424 Lunenburg Road. Tom Christopher seconded the motion. No discussion. VOTE: 4-0-0.**
- **Jeanne Rich made a motion to pay the invoice from Haley and Ward Inc. in the amount of \$591.54 for professional services through July 31, 2018 for the South Lancaster Academy Site Plan. Russ Williston seconded the motion. No discussion. VOTE: 4-0-0.**
- **Jeanne Rich made a motion to pay the invoice from Haley and Ward Inc. in the amount of \$1,757.00 for professional services through July 31, 2018 for the TJA Pope Solar Facility located on Fort Pond. Russ Williston seconded the motion. No discussion. VOTE: 4-0-0.**

- **Jeanne Rich made a motion to pay the invoice from Haley and Ward Inc. in the amount of \$747.83 for professional services through July 31, 2018 for the FC Stars 2017 Field Expansion. Russ Williston seconded the motion. No discussion. VOTE: 4-0-0.**
- **Jeanne Rich made a motion to pay the invoice from Haley and Ward Inc. in the amount of \$2,150.03 for professional services through July 31, 2018 for the Poras Realty Trust Subdivision. Russ Williston seconded the motion. No discussion. VOTE: 4-0-0.**

**Adjourn**

**At 8:37 PM, Tom Christopher made a motion to adjourn the Planning Board meeting. Jeanne Rich seconded the motion. No discussion. VOTE: 4-0-0.**

Respectfully submitted,

Debra Dennis, Office Manager