

COMMUNITY LAND AND WATER COALITION

February 17, 2021

Ms. Sandra Slavin, Chair
Conservation Commission
Town of Wareham
Attention: David Pichette, Conservation Administrator

Mr. George Barrett, Chair
Planning Board
Town of Wareham
Attention: Kenneth Buckland, Town Planner

Re: 140 Tihonet Road, Wareham MA
AD Makepeace, Inc./Borrego Solar
Wetlands Notice of Intent, SE 76 2611
Planning Site Plan Review 8-20

Via email to kbuckland@wareham.ma.us sraposo@wareham.ma.us and
dpichette@wareham.ma.us

Dear Conservation Commissioners and Planning Board,

We respectfully submit these comments for your consideration on the Borrego Solar Notice of Intent (NOI) and Site Plan Review application for 140 Tihonet Road. Our comments are in addition to those we submitted on February 1, 2021 to the Conservation Commission (the Commission) and to the Planning Board on January 25, 2021.

We urge you to reject the Site Plan Review application and NOI because they are incomplete and inaccurate as described below.

I. Failure to disclose material facts and the impacts of the AD Makepeace strip mining of the site prior to solar installation

The Applicant has failed to fully disclose material information about the project. Beals + Thomas consistently described the Project as the installation of a 65+/- acre solar project with about 47,000 ground mounted solar panels (the Project). Not **until February 2, 2021** did the Applicant provide written disclosure that "site preparation" for the solar installation entails reducing the site elevation to ground level by strip mining 2,108,000 cubic yards of sand and gravel. This disclosure came only after repeated inquiries by the Town -- nine months after the June 2020 application and after numerous meetings, site visits and peer reviews.

A 2 million cubic yard strip mine operation has a massive negative impact on the environment and the community. Excavating and hauling 2 million cubic yards of aggregate off a site can take about three years, based on 80 round trip truck trips **per day**, 6 days a week. The trucking along with the industrial logging, excavation, sorting and sifting of aggregate emit greenhouse gases and destroy carbon sequestering soils and trees as well as completely obliterate the ecosystems, wildlife and plants at the site. The NOI and Site Plan Review both fail to describe the strip mine and earth removal impacts which include impacts on environmental features on the site and adjacent areas, drainage, sight, sound, dust, vibration, wetlands, traffic, erosion, alteration of topography and impacts to natural resources. They fail to describe why this is necessary for the solar installation and what the alternatives are, as required. See, Site Plan Review Section 1510.

The Applicant's belated, 11th hour admission completely undermines the credibility and integrity of the NOI and Site Plan review process to date and various verbal representations to the Town.

The Applicant was required to include the **use** of the site as a strip mine in the Site Plan Review application and NOI application. This **use** is a pre-condition to the solar installation. (The value of this sand and gravel is about \$18,000,000.00). Instead of accurately describing the use, the Applicant made vague references to "site preparation" without describing when or how this will occur.

For example, Site Plan Application states,

"The array and energy storage area will have been cleared of vegetation and roughly graded in association with the landowner's existing agricultural operations on the Property. This work will occur prior to the installation of the solar modules, transformers, and inverters. Siting the project at this location therefore minimizes overall disturbances." Site Plan Review, page 2-4.

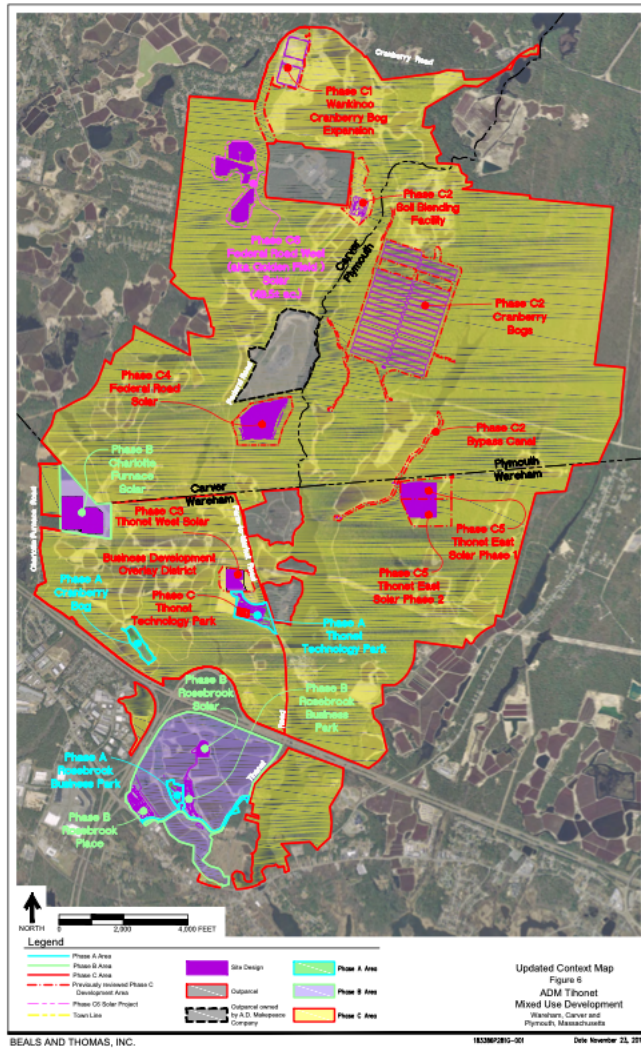
The Applicant's claim that "site preparation" is an AD Makepeace "agricultural operation" is not supported by any documentation such as a farm plan or an explanation of how AD Makepeace will use 2,108,000 cubic yards of sand and gravel on its cranberry bogs. The earth removal is not needed to build a new cranberry bog on the site because the site is going to be used for an industrial solar installation, not an agricultural use.

The Applicant's agricultural claim is at odds with the ongoing strip mining by AD Makepeace of its land to provide aggregate for its "soil blending facility." AD Makepeace owns and operates Read Custom Soils adjacent to the Project site in Carver. Read Custom Soils is the largest sand and gravel mining and sales operation East of the Mississippi. www.readcustomsoils.com

AD Makepeace has been strip mining its ADM Tihonet Master Plan area for sand and gravel for sale off site since at least 2012, if not decades. It appears the proposed strip mine at

140 Tihonet Road is an industrial operation to generate material to supply the AD Makepeace Read Custom Soils operation. The Read Custom Soils website describes how the aggregate is extracted from the ADM Tihonet Master Plan site, describing its “blending facility” located on the ADM Tihonet site “in the heart of our enormous reserves of USGA quality sand.” www.readcustomsoils.com, last visted 2/16/2021. It seems highly likely that the aggregate mined from 140 Tihonet, being in the “heart of” ADM’s enormous reserves, will be used for the industrial aggregate business, not an “agricultural operation.”

Since 2012, the major activities in the ADM Master Plan have been strip mining the land to supply aggregate for sale off site. This is referred to in various state and local AD Makepeace permitting documents as “site preparation” for ground mounted solar installations. The 160 Tihonet Road solar project is one such example – there are a total of about seven such sites on the ADM Tihonet Master Plan site. See: AD Makepeace site map below. At 160 Tihonet, AD Makepeace strip mined at least 29.5 acres of undeveloped land, reducing the site elevation by 30 feet. The entire site is within Natural Heritage and Endangered Species Program (NHESP) habitat. The “site preparation” was for a solar project promoted as clean, renewable energy and a benefit to the climate. The installation of Borrego Solar projects on AD Makepeace land that has been strip mined for Read Custom Soils is on-going. Proper environmental reviews have been evaded. At least one U.S. EPA penalty has been levied for violations of the Clean Water Act at one of these solar sites.



II. Improper segmentation.

The Applicant's failure to disclose the strip mine operation at 140 Tihonet Road until the 11th hour raises more concerns about the improper segmentation of the project in order to evade environmental review. We raised improper segmentation in our February 1, 2021 comments because 140 Tihonet is segmented from AD Makepeace's other two solar projects at 27 Charge Pond Road and 150 Tihonet, as well as 160 Tihonet and the other mining and solar projects since 2012. They are all on the land of one landowner and being operated and constructed by Borrego Solar or its subsidiary Clearway. There is a cumulative impact to land and waterways. Now, the 140 Tihonet strip mine is being segmented from the solar project **and** from the abutting 150 Tihonet project and prior projects. The 140 Tihonet strip mine operation

must be review before and in tandem all prior and proposed solar installations so that the cumulative impacts can be evaluated as required by the Wetland Protective Bylaw and Site Plan Review.

Beals+Thomas states AD Makepeace will seek an Earth Removal permit from the Board of Selectmen and it is working with an engineer to secure that. This permit should not be segmented from and treated as an afterthought to the NOI and Planning Department regulatory review.

III. The failure to disclose the strip mine use at 140 Tihonet violates Applicant's duty of complete disclosure

The Applicant did not disclose the fact that the Project entails the removal of 2,108,000 cubic yards of material until February 2, 2021 and then only in response to the peer review questions posed by Mr. Rowley on behalf of the Town. In June, 2020, Borrego Solar (Zak Farkis) and Beals + Thomas (Stacy H. Minihane) signed the following statement as part of its NOI application stating that they provided information that was "**true and complete** to the best of my knowledge."

F. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Notice of Intent and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge. I understand that the Conservation Commission will place notification of this Notice in a local newspaper at the expense of the applicant in accordance with the wetlands regulations, 310 CMR 10.05(5)(a).

I further certify under penalties of perjury that all abutters were notified of this application, pursuant to the requirements of M.G.L. c. 131, § 40. Notice must be made by Certificate of Mailing or in writing by hand delivery or certified mail (return receipt requested) to all abutters within 100 feet of the property line of the project location.

1. Signature of Applicant	5/27/2020
2. Date	
3. Signature of Property Owner (if different)	5/27/2020
4. Date	
5. Signature of Representative (if any)	5/26/20
6. Date	

It would defy common sense and due diligence for the Applicant to now claim that they had no knowledge in May 2020 when they signed the certification that 2 million cubic yards would be excavated off the 140 Tihonet Road site to "prepare" for the solar installation. The Beals+Thomas engineering plans were based on the post-mining elevation and not the existing elevation. It strains credibility to claim that neither Mr. Farkis nor Ms. Minihane had knowledge of the means by which the site elevation would go from the existing level to ground level for the solar installation. Beals+Thomas has done dozens of NOI and Site Plan review applications in the region for years. Borrego promotes itself as sophisticated and experienced solar installers

with a global reputation. The Applicant has committed an improper act by failing to disclose the means by which the site would be prepared.

IV. Incomplete information about greenhouse gas emissions and lack of credible information to support claims that the Project is a benefit

Applicant's repeatedly portray the "site preparation" and solar installation as having environmental benefits. This claim requires the Commission and Board to turn a blind eye to the environmental destruction that is caused when AD Makepeace strip mines land and then installs ground mounted solar installations.

On its face their claims of environmental benefit from this type of activity are not credible. These inaccurate claims include the repeated statement that the project will not "create impervious areas of greenhouse gases (GHG)." NOI, Project Narrative, page 2-7; Site Plan Application Section 2.3. This is false: while the amount of GHG emitted by solar electricity varies depending on type, location etc. it is certainly not zero as claimed by the Applicant. See, e.g., U.S. Energy Information System.

https://www.eia.gov/environment/emissions/ghg_report/tables_ghg.php The calculation of GHG from ground-mounted industrial solar includes measuring the carbon and methane released during land clearing that results in releasing a sudden pulse of GHG from soil and tree clearing. Borrego has not done this.

Under Proposed Mitigation, the application states "the overall anticipated impacts of this renewable energy project are minimal. The Project will provide benefits of its own." These benefits have not been documented in any credible manner.

V. Incomplete information in the NOI

The NOI is incomplete in the following ways.

Wetlands Form: WPA Form 3:

- Part A, Paragraph 7a. Misrepresents the Project Type by checking off "other." The accurate Project Type is "Commercial Industrial" Box 3. Ground mounted solar is an industrial use under the Wareham zoning law.
- Part C(2)(a) and (b): fails to provide "Project plans for entire project site, including wetland resource areas and areas outside of wetlands jurisdiction, showing existing and proposed conditions, existing and proposed tree/vegetation clearing line, and clearly demarcated limits of work"

Does not show adjoining Priority & Estimated habitat boundaries to the north and west of the site and on the Property. The entirety of Tihonet Pond and the site is in a BioMap 2 Core Habitat.

Does not show areas outside of wetlands jurisdiction, does not describe mining operation and explain alterations of topography.

Did not check exempt from MESA review if that is the claim. It does not appear to be the claim, since D(9) states that Applicant attached “proof of mailing for Natural Heritage and Endangered Species Program”. No proof of mailing appears to be attached.

Did not include vegetation cover type map of the site.

- Did not provide Forest Cutting Plan as required under MGL c. 132 Sections 40-46-for the cutting and removal of trees for sale.

VI. Misleading statements in NOI and Site Plan application about the extent of alteration of topography for solar installation

- Project narrative: “The proposed Project is the construction of a ± 5 MW AC (± 21 MW DC) ground-mounted solar facility to generate clean, renewable energy.” *Fails to document GHG emissions from land use change.*
- Page 2-6: “The Project **limits earthwork and vegetation clearing** to the extent feasible. However, an area of clearing beyond the arrays is required to accommodate stormwater facilities, and also to avoid shading impacts to the arrays, as well as to maintain a fall hazard safety zone around the array. Clearing outside of the array area is limited to the minimum necessary, and the area will be allowed to re-vegetate.” *Fails to describe “extent” of “earthwork and vegetation clearing” in an accurate and complete manner.*
- Page 2-8. “The Project will **limit earthwork and vegetation** clearing to the extent feasible for operation of a ground-mounted solar energy collection system. The Site will be vegetated and stabilized after construction. Areas outside of the solar array within the shade clearing area will be left to revegetate. Therefore the fisheries, shellfisheries, wildlife habitat, and rare species habitat including rare plant species interests of the Act and By-Law will be protected.” *Fails to describe how “earthwork and vegetation clearing” of 2,108,000 cubic yards of “earth” is required to install and operate the solar project.*
- Stormwater plan: 3.0 POST-DEVELOPMENT CONDITIONS 3.1 Design Strategy “During the design phase of the site layout, consideration was given to conserving environmentally sensitive features and minimizing impact on the existing hydrology. To achieve this, the proposed grading endeavored to match the existing drainage patterns where feasible.” *Fails to describe how earth removal operations for 2,108,000 cubic yards will be “conserving environmentally sensitive features” and “minimizing impact on existing hydrology.” Fails to justify why extent of earth removal is necessary; fails to meet standard for minimizing environmental impacts.*
- Stormwater plan: Standard 3: “The proposed solar panels, while covering a large footprint, will **allow water to sheet flow to the ground below where it can be absorbed into the sandy on-site soils.** Other minimal areas of impervious (i.e. concrete pads) as

well as the proposed **changes in vegetative cover** have been accounted for in the design. Proposed infiltration basins will provide the required recharge based on the footprint of the impervious concrete pads. Therefore, recharge of groundwater will be maintained under the post-development condition.” *Fails to describe how removal of 2,108,000 cubic yards will impact groundwater quality and impact of removing vegetation on filtration of groundwater.*

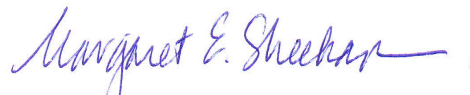
Conclusion

The applications before the Board and the Commission contain many deficiencies. Based on past history and lack of documentation, it appears that the project is a ruse by AD Makepeace to extract aggregate to supply Read Custom Stone and then to extract private profits by greenwashing the solar project as beneficial to the climate and environment, using its agricultural operations as a cover.

We urge the Commission and the Board to carefully review the plans, which we believe will lead to one inescapable conclusion: that the permit applications should be rejected.

Please feel free to contact me with any questions. I can be reached at EnvironmentWatchSoutheasternMA@gmail.com or by phone at 508-259-9154. Thank you for consideration of these comments.

Very truly yours,



Meg Sheehan
Volunteer
Community Land & Water Coalition

Cc: Town Administrator, Town of Wareham
Board of Selectmen, Town of Wareham