

Town of Waterford Planning Board

Findings of Fact and Conclusions of Law Regarding:

Bisbee Town Road Waterford Solar. LLC solar farm in North Waterford

Applicant: Bisbee Town Road Waterford Solar. LLC, represented by Kevin Corbett (SunRaise) and Kara Moody (Stantec Consulting Services, Inc.)

FINDINGS OF FACT:

The Applicant proposes to construct a solar energy facility with an installed capacity of 5 megawatts direct current (MW DC) of electricity. The proposed Project is located on the north side of Bisbee Town Road, approximately 300 feet north of the intersection with Forgotten Alley (see application package Figure 1).

The total Project area consists of 18.41 acres of primarily forested uplands located on Map 75 Lot 36. Recent logging operations have cleared a large portion of the property extending from the center of the parcel to the southeastern boundary. A survey of the parcel was conducted by a Licensed Professional Land Surveyor and is included in Attachment C of the application.

Linear arrays of photovoltaic (PV) panels will be mounted on fixed tilt metal racks supported by vertical pile foundations driven into the ground (see Plans in application Attachment D). Approximately 12,640 PV panels will be installed at a 25° fixed tilt. The Project has been designed using monocrystalline 400-watt PV panels (Hanwha Q.Peak Duo L-G7.2). Panels will be approximately 3 feet from the ground in the front and approximately 8 feet and 8 inches from the ground in the rear.

The Project will include 30 inverters (SG 125HV) with a rating of 125 kilowatts. Inverters will convert the DC output of the PV panels to alternating current (AC). The Project will also include three equipment pads, which will contain low voltage switchgear and a transformer. One of the equipment pads will also include three battery containers composed of energy storage system batteries (Samsung SDI, E3-M090) to store generated electricity.

Electricity from the equipment pads will be routed via underground collection cables to a utility pole located near the site entrance on Bisbee Town Road. An overhead collection line of approximately 307 feet will be installed from the equipment pad designated as Equipment Area #3 on the Plans to the point of interconnection at a utility pole directly adjacent to Bisbee Town Road. An existing gravel road off Bisbee Town Road will serve as the access road for the Project. A new segment of gravel access road will be constructed to access the arrays. The new segment of road will extend for approximately 1,298 linear feet and will be 14 feet wide.

A 7-foot-tall perimeter chain link fence will be installed around the Project to prevent the general public from accessing the site. Perimeter fencing is a safety requirement of the National Electrical Safety Code. A gate in the fence will be installed and secured with a lock. The total fenced area will include approximately 14.83 acres. Following Project construction, the cleared area in and around the PV panels will be converted to a meadow. The Project area will be

mowed one to two times per year to prevent vegetation from shading the PV panels. An Operations and Maintenance Plan for the Project is provided in Attachment E of the application.

The anticipated life of the Project is 25 to 30 years. At the end of the useful life of the Project, the site will be decommissioned. During decommissioning, all Project components will be removed, and land will be allowed to revert to prior land use following decommissioning.

Materials submitted for the application include:

1. Main Application dated 3/3/2020
2. Addendum dated 5/12/2020
3. Drawings dated 5/21/2020

The Main Application included:

- Attachment A – Written Statement
- Attachment B – Purchase Option Agreement
- Attachment C – Survey Plan
- Attachment D – Site Plans and Erosion and Sedimentation Control Plan (Plans)
- Attachment E – Operations and Maintenance Plan
- Attachment F – Title Report
- Attachment G – Decommissioning Bond
- Attachment H – Noise Impact Study
- Attachment I – Phosphorous Analysis
- Attachment J – Agency Correspondence
- Attachment K – Letter of Financing

Plans and Drawings which hereby become part of the site plan and approval record for this project include the final Site Plan application dated 3/3/2020, and addendum dated 5/12/2020 and drawings submitted by the applicant and dated 5/21/2020.

CONCLUSIONS OF LAW

Compliance with Town Site Plan Review Criteria

Section 5. A. General Standards

1. **Preserve and Enhance the Landscape:** The site was a disturbed site, mostly cut and with several gravel excavations. It is not visible to neighbors.
2. **Relationship of the Proposed Buildings to the Environment:** This standard was met by the applicant. The project is screened from neighbors and not visible from key scenic points in North Waterford.
3. **Vehicular and Pedestrian Access:** These standards are not applicable to this project.
4. **Parking and Circulation:** These standards are not applicable to this project.

5. **Surface Water Drainage:** This standard was met by the applicant and was addressed in the plans.
6. **Utilities:** The project will not impose any unreasonable new burden on public utilities.
7. **Advertising Features:** These standards are not applicable to this project. .
8. **Special Features of the Development:** These standards are not applicable to this project. The project is screened from neighbors.
9. **Exterior Lighting:** This standard was met by the applicant and was addressed in the plans. There is some motion-detector lighting for nighttime service to equipment.
10. **Emergency Vehicle Access:** Safe emergency vehicle access will be provided through the existing driveway.
11. **Municipal Services:** This project will not have any unreasonable adverse impact on existing community services.
12. **Surface Water Quality:** The project is located above the floodplain. The project also incorporates phosphorus control standards for stormwater and erosion control standards for construction.
13. **Conservation and Erosion Control:** These standards are addressed in the project's Erosion and Sedimentation Control Narrative.
14. **Phosphorus Export:** This standard was met by the applicant and was addressed in the plans. The Maine DEP is also reviewing the project.
15. **Ground Water:** A small portion of the site is within an aquifer, but there will be little to no impact to that aquifer .
16. **Air Emission:** These standards are not applicable to this project.
17. **Electromagnetic Interference:** These standards are not applicable to this project.
18. **Odor Control:** These standards are not applicable to this project.
19. **Water Supply:** These standards are not applicable to this project.
20. **Sewage Disposal:** These standards are not applicable to this project.
21. **Waste Disposal:** This standard was met by the applicant and was addressed in the plans.
22. **Scenic Locations and Views:** The project does not affect scenic views or locations identified in Waterford's Comprehensive Plan.
23. **Noise:** This standard was met by the applicant and was addressed in the plans. There will be no noise post-implementation.
24. **Protection of Wildlife Habitat:** Met. No significant habitat was identified at the site by the Maine Department of Environmental Protection.
25. **Archeological Sites:** Met. There are no archeological sites on the property that are listed with the National Register of Historic Places.
26. **Endangered and Threatened Plants:** Met. No endangered or threatened plants were identified on the site.
27. **Conformance with Comprehensive Plan:** The project is in conformance with Waterford's Comprehensive Plan.
28. **Financial and Technical Capacity:** The applicants demonstrated financial capacity through correspondence from their bank and technical capacity was addressed through the site plan review process.


State of Maine DEP permitting is currently underway.


APPROVAL:

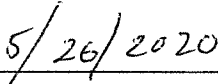
Therefore, the Board approves the final Site Plan review for the Bisbee Town Road Waterford Solar. LLC solar farm project.

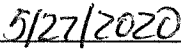
Planning Board Signatures:

Date:









Approved 5/20/2020

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Planning Board Signatures:

Alan Hlee

Date:

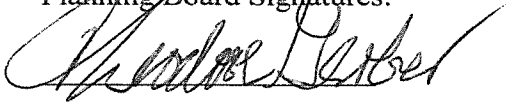
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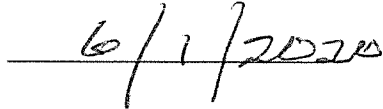
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