

June 27, 2023

Ms. Breeka Lí Goodlander, Agent
Town of Franklin Conservation Commission
355 East Central Street
Franklin, MA 02038

**Re: Proposed Solar Farm
160 Maple Street
MassDEP File No. 159-1268
Notice of Intent Peer Review**

Dear Ms. Goodlander:

BETA Group, Inc. (BETA) has reviewed documents and plans for the project entitled: **Proposed Solar Array – Parcel 1**, located in Franklin, Massachusetts (the “Site”). This letter is provided to present BETA’s findings, comments, and recommendations.

BASIS OF REVIEW

The following supplemental documents were received by BETA and will form the basis of the review:

- Notice of Intent entitled **Notice of Intent Application Proposed Solar Array—Parcel 1**; prepared by LEC Environmental Consultants Inc.; dated April 13, 2023.
- Plan (47 Sheets) entitled **Proposed Site Plan Documents**; prepared by Bohler Engineering, Inc.; dated April 13, 2023; stamped and signed by John Kucich, MA P.E. No. 41530.
- Drainage report entitled **Drainage Report for NextGrid Mescalbean, LLC, “Proposed Solar Array—Parcel 1”**; prepared by Bohler Engineering; dated April 13, 2023; stamped and signed by John Kucich, MA P.E. No. 41530.

Review by BETA included the above items along with the following, as applicable:

- Site visits on June 9 and 13, 2023
- **Massachusetts Wetlands Protection Act 310 CMR 10.00** effective October 24, 2014
- **Wetlands Protection Chapter 181 From the Code of the Town of Franklin**, dated August 20, 1997
- **Conservation Commission Bylaws Chapter 271 From the Code of the Town of Franklin**, dated July 11, 2019
- **Town of Franklin Conservation Commission Regulations**, dated October 3, 2019
- **Town of Franklin Best Development Practices Guidebook**, dated September 2016

SITE AND PROJECT DESCRIPTION

The Site includes a total of five (5) parcels located at 160 Maple Street, 0 Maplegate, and 0 Mine Brook in Franklin, Massachusetts, further identified by the Franklin Assessor’s Office as Assessor’s Parcels 237-036-000-000, 237-027-000-000, 239-009-000-000, 239-010-000-000, and 239-012-000-000. The Site is bounded by undeveloped forest and forested wetlands to the north and east, industrial parcels to the west, and by the Interstate 495 to the south. The Site encompasses a portion of an active golf course

known as the Maplegate Country Club; existing improvements at the Site that support this land use include managed fairways, sand bunkers, ponded areas, site drainage, bituminous cart paths, footbridges, and forested areas. Within a forested “strip” at the central portion of the Site, BETA observed dense populations of what appeared to be pink lady’s slipper (*Cypripedium acaule*).

Resource Areas Subject to Protection and Jurisdiction under the Massachusetts Wetlands Protection Act (M.G.L. ch.131 s.40) and its implementing regulations at 310 CMR 10.00 (collectively “the Act”), as well as the Town of Franklin Wetlands Protection Bylaw (Chapter 181) and its associated regulations (collectively “the Bylaw”) present at the Site include:

- Bordering Vegetated Wetlands;
- Isolated Land Subject to Flooding;
- 0-25’ Buffer Zone;
- 25-50’ Buffer Zone; and
- 50-100’ Buffer Zone.

Specifically, there is a total of 184,601 sf of alteration proposed, 16,189 sf of which will be in the 0-25’ Buffer Zone, 28,328 sf in the 25-50’ Buffer Zone, and 140,084 sf in the 50-100’ Buffer Zone.

Portions of the Site are located within a Zone II Wellhead Protection Area and within proximity to a Zone I Wellhead Protection Area. There are no Surface Water Protection Areas (Zone A, B, or C) or any Areas of Critical Environmental Concern (ACEC) present. There are no Natural Heritage and Endangered Species (NHESP) Estimated Habitat of Rare Wildlife or Priority Habitat of Rare Species at the Site. In addition, there are no NHESP-mapped Certified or Potential Vernal Pools located on or within proximity to the Site; however, the Applicant has identified Vernal Pool habitat during their due diligence work. It is BETA’s understanding that the Site is subject to the provisions of the Chapter 61B tax program as open space and recreational land use.

Natural Resource Conservation Service (NRCS) soil maps of the Site indicate the presence of Scarboro Birdsall with a Hydrologic Soil Group (HSG) rating of A/D, Freetown muck with a HSG rating of B/D, and Montauk fine sandy loam with a HSG of C. According to the FEMA Flood Insurance Rate Map (FIRM) community panel number 25021C0302E, dated July 17, 2012, areas east of the Site are located within a Zone AE Flood Hazard with a BFE of 183.3 feet (NAVD88).

The Applicant’s submission seeks approval for construction of a 15,000 KW solar field and associated Site improvements within Buffer Zone. Proposed work includes the following activities (collectively referred to as the “Project”):

- Construction of a 15,000 KW solar array;
- Construction of associated gravel access drives;
- Installation of necessary electric utilities; and,
- The construction of a stormwater basin.

The Project will result in temporary and permanent impacts within the buffer zone to BVW, IVW, and Bank Subject to Protection under the Act and the Bylaw.

ADMINISTRATIVE AND PLAN COMMENTS

The plan set (as identified above) is missing information and requires additional information for clarity.

Table 1. NOI Plan

NOI Plan Requirements	Yes	No
Scale of 40'=1" or larger	✓	
North Arrow (with reference)	✓	
Topographic contours (2' intervals)	✓	
Existing Conditions Topography (with source and date of survey)	✓	
Proposed Topography	✓	
Existing and Proposed Vegetation	✓	
Existing Structures and Improvements	✓	
Resource Areas and Buffer Zones labeled		✓ (See comment A2)
Location of Erosion Controls	✓	
Details of Proposed Structures	✓	
Construction Sequence and Schedule	✓	
Registered PLS Stamp (Existing Condition Plans Only)	✓	
Assessors' Reference	✓	
Abutting Property Assessors' Reference	✓	
Survey Benchmark	✓	
Accurate Plan Scale	✓	

PLAN AND GENERAL COMMENTS

- A1. A MassDEP NOI File number has been issued with no technical comments.
- A2. The existing conditions plan sheets should be revised to depict and label all Act and Bylaw Buffer Zones.
- A3. A constructed overflow/spillway was observed between flag WF-167 and WF-3F and should be depicted on the plans.
- A4. The Existing Conditions plans should be stamped by a Professional Land Survey (PLS) registered in the state of Massachusetts.
- A5. The notes on the Existing Conditions plans should be incorporated into the General Notes on the construction drawings, and also include the date(s) and method(s) of survey.

WETLAND RESOURCE AREAS AND REGULATORY REVIEW

BETA conducted an onsite and completed a regulatory review of the submitted documents and plans, focusing on compliance with Resource Area definitions and Performance Standards set forth in the Act and the Bylaw. The Project is subject to the MassDEP Stormwater Standards and a review of compliance with these Standards has been completed as part of the Site Plan Review process with the Planning Board.

During BETA's Site visits, several wetland delineation discrepancies were observed in the field, generally consisting of the observation of hydric soils upgradient of wetland boundaries within areas with disturbed vegetation. These discrepancies will require clarification to ensure an accurate depiction of protected and

jurisdictional areas at the Site. The NOI application and associated plans will require revisions to demonstrate compliance with the Act and the Bylaw through providing a Functions and Characteristics Statement and Vernal Pool Statement, providing an Alternatives Analysis for structures within the 50-foot Buffer Zone, clarifying the limits of work and extents of grading, and providing additional details on mitigation/Site restoration.

The Project proposes structures (panels) within portions of the 50-foot Buffer Zone that are noted by the Applicant as legally altered. BETA observed vegetative maintenance occurring within Resource Areas such as the M- and N-Series BVWs at the Site. It is recommended that the Applicant provide historic permitting and operation and maintenance documents associated with the construction of the golf course in the 1990's and confirm that ongoing activities are per the approved plans and documents.

At this time, the Applicant is required to provide the Conservation Commission with additional information to describe the Site, the work, and the effect of the work on the interests identified in the Act and the Bylaw.

RESOURCE AREA AND BOUNDARY COMMENTS

BETA conducted Site visits on June 9 and 13, 2023 to assess existing conditions and review Resource Area delineations, focusing on the definitions and methodologies referenced under the Act and the Bylaw. BETA's review of the wetland delineations at the Site consisted of a flag-by-flag review of all Resource Areas that project jurisdiction onto the limits of work, and a more cursory review of Resource Areas well outside of the limits of work. Although the majority of flags associated with the latter were missing in the field, BETA generally confirmed the "offsite" Resource Area boundaries as appearing accurate per the plans.

Table 2 lists the MassGIS Environmental Data Layers mapped within or near the Site.

Table 2– GIS-Mapped Areas

Mapped Resource On or Within Proximity to the Survey Area	Yes	No
Area of Critical Environmental Concern		✓
NHESP Certified Vernal Pool		✓
NHESP Potential Vernal Pool		✓
NHESP Estimated Habitat of Rare Wildlife		✓
NHESP Priority Habitat of Rare Species		✓
Outstanding Resource Waters		✓
FEMA Floodplain	✓	
Surface Water Protection Area (Zone A, B, or C)		✓
Interim Wellhead Protection Area		✓
Zone I Wellhead Protection Area		✓
Zone II Wellhead Protection Area	✓	

The Applicant has identified a total of 13 Resource Area in the submitted materials, as summarized in Tables 3 and 4 below:

Table 3—Bordering Vegetated Wetlands

Flag Series	Act	Bylaw
1 through 64	✓	✓
65 through 187	✓	✓
187 through 202*	✓	✓
202 through 374	✓	✓
375 through 567	✓	✓
E1 through E15	✓	✓
E16 through E47	✓	✓
G1 through G55	✓	✓
J1 through J28	✓	✓
M1 through M15	✓	✓
N1 through N7	✓	✓

*Wetland Series 187 through 202 is identified as a “BVW/Vernal Pool”

Table 4—Isolated Land Subject to Flooding

Flag Series	Act	Bylaw
F1 through F9	✓	✓
H1 through H24*	✓	✓

*Isolated Land Subject to Flooding Series H1 through H24 is identified as a “ILSF/Vernal Pool”

GENERAL RESOURCE AREA COMMENTS

W1. During the Site visits noted above, BETA reviewed the Resource Area delineations and offers the following comments on discrepancies observed in the field that may affect that extent of jurisdiction within the limits of work:

- i. An unflagged wetland was located between wetland series flags WF-6E and WF-7E and WF-N5 and WF-N2,
- ii. An unflagged wetland with a pipe and a catch basin was observed south of the existing clubhouse;
- iii. Hydric soils were observed upgradient of flags WF-179 through WF-180; WF-167 through WF-169; WF-206 through WF-209; WF-213 through WF-216; WF-278 through WF-280; WF-298 through WF-300; and WF-304 through WF-308;
- iv. An intermittent stream within the wetland identified with flags labeled WF-271 through WF-308 interior stream was not flagged or confirmed as intermittent/perennial; and

- v. An additional ponded area was observed near the existing garage along the existing solar field, vegetated with hydrophytic species. The Applicant should review this area to determine whether it meets the definition of a protected Resource Area.

Generally, areas where hydric soils were observed upgradient of wetland flags in the field were within areas of disturbed vegetation; therefore, hydric soils indicators were used to determine the extent of the wetland boundaries. It is recommended that the Applicant revise the delineations as noted above and provide the Conservation Commission with updated plans.

CONSTRUCTION COMMENTS

- W2. Hay bales are not a permitted form of erosion control in the Town of Franklin and should be removed from the plans and replaced with permissible controls (e.g., sheet C-604).
- W3. The Project will result in clearing within jurisdictional Buffer Zones. These areas should be quantified for the Conservation Commission's review. Further, the Applicant should identify if any additional clearing along the Site is required to reduce shading on the proposed panels; if so, this must be qualified and quantified.
- W4. The purpose of the shading/hatching on the Grading Plans is stated to identify areas where regrading is required to maintain no greater than a 15% slope within the limits of work. According to this shading, there will be direct Resource Area impacts (e.g., the M Series wetland) that have not been quantified by the Applicant. The Applicant should either quantify Resource Area impacts or revise the plans. It is recommended that all shading outside the limits of work also be removed for clarity.
- W5. The plans should be revised to depict all activities ancillary to the construction of the Project including the locations of stockpiling and concrete washout. These activities should be located outside of Buffer Zone.

MITIGATION COMMENTS

- W6. The Applicant states that the project will result in the reduction of on-site impervious surface by approximately 3 acres. The applicant should provide additional details regarding whether these reductions will take place within jurisdictional Buffer Zones.
- W7. Significant clearing will also be conducted outside of Areas Subject to Jurisdiction under the Act and the Bylaw. However, because the Site is classified as Chapter 61B land, BETA suggests that the Applicant consider working with the Town to preserve vegetated areas where possible. The Project will result in the destruction of a dense populations of pink lady's slipper, a species that could be either preserved or relocated as part of the Project.
- W8. The Applicant proposes to surround the Project with a chain link fence that includes a six (6)-inch reveal for wildlife passage. BETA concurs with this design choice.
- W9. Specifications for the proposed seed mixture should be provided for the Conservation Commission's review. This seed mixture should consist of species native to Massachusetts and provide diversity to support wildlife and pollinators. In addition, the Applicant should provide details on the establishment of this vegetation including any proposed aeration/decompaction of soils, soil amendments, and extents of seeding.

- W10. Provide provisions for mowing in the Operation and Maintenance Plan. It is recommended that any mowing, if required, be conducted no more than once per year between October 1st and November 15th.
- W11. It is recommended that the Applicant restores disturbed portions of wetlands at the Site, including those identified in Comment W1.iii. and any areas subject to ongoing vegetative maintenance (i.e., the M- and N-Series wetlands).

WPA PERFORMANCE STANDARDS COMMENTS

The Project does not propose any work within Resource Areas Subject to Protection under the Act; however, the Project does propose work within Buffer Zones afforded protection under the Bylaw.

BYLAW REGULATORY COMMENTS

- W12. The Applicant notes that structures (solar panels) can be permitted within the Bylaw 50-foot Buffer Zone due to the presence of previously disturbed areas per Section 4.3.1 of the Bylaw Regulations. The Applicant should furnish proof of the recorded Certificate of Compliance for the construction of the golf course that occurred in the 1990's and demonstrate that all disturbed areas are either per the original proposed plan or have since been permitted with the Conservation Commission.
- W13. Notwithstanding Comment W12, the Applicant is required to provide an Alternatives Analysis for structures within the 50-foot Buffer Zone per Section 7.13 of the Bylaw Regulations.
- W14. The Applicant should provide calculations pursuant to Section 4.4.1 of the Bylaw Regulations demonstrating that less than 30% of the 50-100-foot Buffer Zone is proposed to be impervious. It is BETA's understanding that MassDEP generally does not consider solar arrays to be impervious when there are pervious surfaces under/between the panels; however, BETA defers to the Conservation Commission on this interpretation of their Bylaw.
- W15. As required by the Bylaw Regulations, the Applicant must provide a Vernal Pool Statement (Section 7.7) and a Functions and Characteristics Statement (Section 7.10).
- W16. The Applicant has provided a construction sequence on the plans as required by Section 7.15 of the Bylaw Regulations. However, some of these activities do not appear relevant to the Project (i.e., seeding of proposed lawn areas) and relevant activities, such as the establishment of native vegetation, under the solar panels are absent. Revise the construction sequencing plan accordingly.

STORMWATER MANAGEMENT

Proposed stormwater management associated with the Project is generally limited to the construction of a stormwater basin along the Site entrance. A review and supplemental review of the Project's compliance with the Massachusetts Stormwater Management Standards and the applicable local Regulations were issued to the Planning Board on May 25 and June 21, 2023. Currently, the Project does not comply with the Massachusetts Stormwater Management Regulations.

Ms. Breeka Li Goodlander, Agent

June 27, 2023

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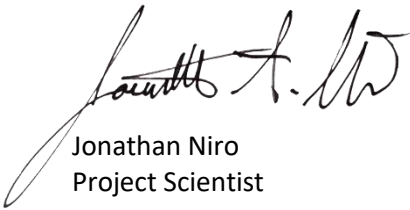
REVIEW SUMMARY

Based on our review of the NOI submittal and Project plans, the Applicant is required to provide the Conservation Commission with additional information to describe the Site, the work, and the effect of the work on the interests identified in the Act and the Bylaw. The Project also does not presently comply with the Massachusetts Stormwater Management Regulations.

If we can be of any further assistance regarding this matter, please contact us at our office.

Very truly yours,

BETA Group, Inc.



Jonathan Niro
Project Scientist



Laura Krause
Project Manager

cc: Amy Love, Town Planner

Bryan Taberner, AICP, Director of Planning & Community Development

Matt Crowley, P.E., BETA