

March 19, 2024

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

Re: 147 Pond St - Franklin, MA MassDEP File No. 159-1277

Abbreviated Notice of Resource Area Delineation Peer Review #3

Dear Ms. Goodlander,

BETA Group, Inc. (BETA) is pleased to provide continued peer review services for the Abbreviated Notice of Resource Area Delineation (ANRAD) submitted for the parcel located at **147 Pond Street**, further identified as the Town of Franklin Assessor's Parcel Number 259-004-000-000 in Franklin, Massachusetts (the Site). This letter provides BETA's peer review findings and comments as they relate to the Massachusetts Wetlands Protection Act (M.G.L. ch.131, §40) and its implementing regulations at 310 CMR 10.00 (collectively "the Act") and the Town of Franklin Wetlands Protection Bylaw (Chapter 181) and its implementing regulations (collectively "the Bylaw").

BETA Wetland Scientists performed Site visits on October 3, 2023 and October 5, 2023 to review the onsite Resource Area boundaries and confirm existing conditions as they relate to the ANRAD filing. A follow-up Site visit was conducted with the Applicant on November 14, 2023 to review BETA's findings in the field. Most recently, a Site visit was conducted on February 1, 2024 to review additional flagging placed in the field with the Applicant.

DOCUMENTS REVIEWED

- Abbreviated Notice of Resource Area Delineation entitled *Tri-County Regional Vocational Technical High School, 147 Pond St*; prepared by Samiotes Consultants, Inc. dated August 2023.
- Plan (7 Sheet) entitled *Tri-County Regional Vocational Technical High School, Abbreviated Notice of Resource Area Delineation*; prepared by Samiotes Consultants, Inc.; dated August 2023;
 stamped and signed by Daniel F. Fleming, II. MA PLS No. 55476.
- Peer Review Response entitled *Tri-County Regional Vocational Technical High School ANRAD Delineation Peer Review Response*; prepared by Samiotes Consultants, Inc. dated November 21, 2023, revised March 1, 2024.
- Plan Set (13 Sheet) entitled Preliminary & Final Site Plan Drawings for Ground Monted Photovoltaic System; prepared by Whitman; dated March 27, 2014; stamped and signed by John W Colagrande Jr. MA PE No.48784.
- Stormwater Report entitled **Stormwater Engineering Report**; prepared by Strong Civil Design, LLC and SLB Group, LLC. dated March 3, 2014.
- Plan (6 Sheet) entitled *Tri-County Regional Vocational Technical High School*; prepared by Samiotes Consultants, Inc.; dated May 3, 2023; revised March 4, 2023; unstamped.

- Letter entitled Wetland Delineation Report Updated; prepared by Environmental Consulting & Restoration, LLC.; dated March 4, 2024.
- Letter correspondence entitled Town of Franklin Site Observation Report, Tri-County Solar, 147
 Pond Street; prepared by BETA Group Inc., Town of Franklin DPW, Pro-tech Energy Solutions LLC.
 and Bertin Engineering; dated June 17, 2015, June 24, 2015, June 29, 2015 and August 21, 2015.

PEER REVIEW UPDATE—March 19, 2023

Throughout the peer review process, the following correspondence has occurred:

- BETA's comments from the October 13, 2023 peer review letter are included below in plain text.
- Comment responses attributed to the Samiotes Consulting, Inc. (SCI) letter dated November 21, 2023 are provided in *italics* and prefaced with "SCI:".
- BETA's responses from the December 7, 2023 letter are provided in **bold** and prefaced with "BETA2:".
- Comment responses attributed to the SCI second response letter dated March 4, 2024 are provided in *italics* and prefaced with "SCI2:".

BETA's most recent responses are provided in bold and are prefaced with "BETA3:". These final peer review responses reflect the Site visit that occurred on February 1, 2024 and BETA's review of the most recently submitted materials. At this time, the Commission has been provided with sufficient information to issue an accurate ORAD for the Site.

SCOPE SUMMARY

The Applicant is requesting that the Conservation Commission confirm the following Resource Areas boundaries, as noted in the application materials, and as delineated and depicted on the ANRAD plan:

- 2,609 linear feet (If) of Bordering Vegetated Wetland (BVW); and
- 775 If of Isolated Vegetated Wetland (IVW).

The Applicant is requesting the conformation of the following flag series:

- BVW A1 to A30;
- BVW B1 to B40;
- IVW C1 to C12;
- BVW D1 to D17;
- BVW E1 to E9;
- BVW F1 to F25; and
- IVW G1 to G13.

BETA2: The Applicant has confirmed that they are not seeking approval of BVW flags E1 to E9. A revised length of BVW/IVW boundaries associated with this ANRAD should be provided to the Conservation Commission once all comments are resolved.

BETA3: Comment remains. This could be considered a condition of approval.

ADMINISTRATIVE REQUIREMENTS

The following provides an assessment of the plans in light of generally accepted existing conditions plan standards and the applicable plan requirements under Section 7.18 of the Bylaw Regulations:



Table 1 – ANRAD Plan Requirements

Plan Requirements	Yes	No
North Arrow (with reference)	✓	
Registered PLS Stamp	BETA3:√	
Assessors' Reference	✓	
Abutting Property Assessors' Reference	BETA3:√	
Survey Benchmark	✓	
Existing Conditions and Topography Sourced with date of survey	✓	
Topography/Contours	✓	
Lot Line Surveyed		√(Comment W1.c.)
Accurate Plan Scale	✓	
Resource Areas Identified and Labeled (including Buffer Zones)	BETA3:√	

EXISTING CONDITIONS AND ONSITE RESOURCES

The 59.96-acre Site consists of one (1) parcel identified along the eastern side of Pond Street. The Site is bounded to the north and east by residential homes, to the west by Hilltop Road and residential homes, and to the south by commercial businesses and residential homes. The Site is currently improved by a school identified as Tri-County Regional Vocational Technical High School, paved driveways, paved parking lots, a solar array, various sports fields, and lawn areas. The remainder of the Site consists of mixed hardwood and softwoods upland vegetation, including but not limited to Eastern white pine (*Pinus strobus*), red maple (*Acer rubrum*), red oak (*Quercus rubra*), and black cherry (*Prunus serotina*). Wetland and stream complexes are present within portions of these vegetated areas. Topographic relief at the Site generally follows a west-to-east orientation.

MassGIS environmental data layers mapped within or near the Site include the following:

Table 3 – GIS-Mapped Areas

Mapped Resource On or Within Proximit	y 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			√

As depicted on the plan, and as described in the ANRAD application, the Applicant has stated that the following Jurisdictional Areas exist within 100 feet of the Site:

- Bordering Vegetated Wetland (BVW);
- Isolated Vegetated Wetland (IVW); and



Buffer Zone.

Table 3 further details these Resource Areas.

Table 3 – Resource Areas and Act/Bylaw Jurisdiction (As identified by the Applicant)

Resource Area	Flag Series	Act	Bylaw
BVW / Freshwater Wetland	A1 to A30	✓	✓
BVW / Freshwater Wetland	B1 to B40	✓	✓
BVW / Freshwater Wetland	D1 to D17	✓	✓
BVW / Freshwater Wetland	E1 to E9	✓	✓
BVW / Freshwater Wetland	F1 to F25	✓	✓
BVW	C1, C1-1R, C2R, & C3 to C12	✓	✓
IVW	G1 to G13		✓
IVW	SW1 to SW6, SW100 to SW106, & BA1 to BA 9		✓
IVW	200 to 219		✓
IVW	N/A – Various Small IVWs Under Solar Panels – Survey Located Only		✓

BETA2: The Applicant has confirmed that they are not seeking approval of BVW flags E1 to E9.

BETA3: Updates to the list of Resource Areas has been provided above in bold text.

COMMENTS

- W1. BETA provides the following administrative and plan comments after conducting a review of the submitted application and plan set:
 - a. Provide Assessor's references for the abutting properties.
 - b. Clearly depict and label all Buffer Zone boundaries, including the Bylaw 25-foot No Disturb Zone and 50-foot Buffer Zones.
 - c. The plans indicate that property lines are sourced from MassGIS and do not constitute a formal boundary survey. BETA defers to the Commission on whether this is suitable for the purposes of this ANRAD filing; however, it appears to be appropriate given that a conventional topographic survey was conducted under the direction of a Professional Land Surveyor.
 - d. The Applicant should remove test pit locations from the plans, as ANRAD plans should not depict any work.



SCI: The ANRAD plans will be revised to include/remove the requested information above. As discussed during the November 14th site meeting, the property lines are sourced from MassGIS and online property research, but a formal boundary survey has not yet been performed. It is our understanding that the Existing Conditions plans with approximate boundary are acceptable for this ANRAD application at this time, with the understanding that an updated Existing Conditions Plan with a full boundary survey will be submitted to the Conservation Commission, once completed at a later date, for their records. Our office will address Comments a-d, once the revised wetlands delineation flags are surveyed and provide an updated plan to the Conservation Commission as part of the ORAD record.

BETA2: BETA will provide a response following the issuance of revised plans.

SCI2: Comments have been addressed (Including updated new and revised delineations per Multiple site walks with the Con-Com Agent and BETA) and the plans have been revised accordingly. It should be noted that the boundary survey is in the process of being conducted. We will provide an updated Boundary survey during the Notice of Intent process.

BETA3: The plans were updated to include the abutting properties assessors' references, all necessary Buffer Zones, and the new locations of wetland flags. BETA understands that the Commission may be willing to accept the ANRAD plan without a boundary survey, contingent on one being provided for a future filing. Comment resolved.

W2. MassDEP has issued File No. 159-1277 for this ANRAD and has provided the following comments:

The Commission should confirm the location of all wetland resource areas shown on the plan, including the area labeled isolated wetland and confirm there is no hydrologic connection to the nearby wetland resource areas. Calculations should be provided to determine if the isolated wetlands shown on the plans qualify as ILSF. The Commission may want to add a special condition clarifying which resource areas are confirmed as part of the Order of Conditions and those that are not confirmed.

BETA recommends that the Applicant provide responses to these comments as part of the next submission.

SCI: The Isolated Vegetated Wetlands (IVW) delineated as the G-Series wetland is not large enough to qualify as Isolated Land Subject to Flooding (ILSF). Per the definition of ILSF given in 310 CMR 10.57(2)(b)1.:

ILSF is "an isolated depression or closed basin without an inlet or an outlet. It is an area which at least once a year confines standing water to a volume of at least ¼ acre-feet and to an average depth of at least six inches."

The IVW in question is delineated as the G-Series area shown on the plan. This IVW has a surface area of approximately 0.041 acres. In order for this area to hold the volume required to qualify as an ILSF under the definition provided, this area would have to have a uniform depth of approximately 6.25 feet (0.75 feet were previously observed) before overtopping and continuing to flow down the hill. Based on the location of the IVW on a slope and surrounding existing elevations, this is highly unlikely. As depicted by the topography provided on the plans, this area does not achieve the required depth and therefore it is our professional opinion that this area does not qualify as an ILSF under the definition.

BETA2: BETA concurs with the Applicant's assessment and conclusion that the G-Series IVW could not qualify as ILSF due to existing topography and observed water levels. Comment resolved.



W3. BETA agrees with the delineation of the A-Series BVW boundary based on the presence of hydrophytic vegetation, hydric soils, and indicators of hydrology. However, channelized flow was observed upgradient of flag A5. Hydrology associated with this channel appears to be provided by a partially buried pipe along the gravel path under the onsite electric utility corridor; however, the source of water flowing out of this pipe could not be determined. At the location of this pipe, BETA observed an area of fringe BVW consisting of sandy and depleted soils within 12 inches of the soil surface and hydrophytic vegetation including sensitive fern (*Onoclea sensibilis*), jewelweed (*Impatiens capensis*) and wrinkle-leaved goldenrod (*Solidago rugosa*).

Due to the presence of a BVW at this location, the entirety of the channel from this location downstream to flag A5 qualifies as an intermittent stream that should be delineated in the field and depicted on the plans. The above-referenced BVW should be delineated as well.

SCI: The area upgradient of A-series delineation was reviewed together during the November 14th Site Review. SCI and ECR are not in agreement that this area qualifies as BVW. This area is located at the outlet of a stormwater pipe that discharges water collected from the onsite stormwater management system. ECR did observe some wetland vegetation as noted by BGI but the amount of wetland species is less than 50% when reviewed per DEP's vegetation analysis plot. This area is dominated by upland vegetation consisting mainly of non-native invasive plant species. As discussed with BGI during the site review, we have investigated and confirmed that the source of this hydrology leaving the stormwater pipe is stormwater and not from an upgradient wetland resource area. Therefore, it is in our professional opinion that this upgradient area does not qualify as a BVW.

BETA2: BETA acknowledges that the BVW is a small, fringe wetland within a historically disturbed area and is vegetated by both invasive upland species and wetland plant species. However, BETA also observed sandy/depleted soils within 12 inches of the surface and hydrology including water-stained leaves and saturation in support of 310 CMR 10.55(3)¹. Further, supporting evidence of the source of water flowing through the pipe has not been provided. BETA recommends that this area be depicted on the plans as BVW and that the Bank of the stream be delineated – comment remains.

SCI2: Samiotes performed a field investigation (i.e. dye testing) on 1/10/24 to confirm that on-site stormwater infrastructure conveys runoff picked up by catch basin inlets is routed by gravity pipe to this small depression. Video documentation is being submitted to document out observations. We therefore do not consider it a BVW.

BETA3: The Applicant has demonstrated that this piped discharge does not originate from a Resource Area and is therefore not considered a stream under the Act or Bylaw. Upon further discussion with the Applicant and additional investigation of the "fringe wetland" identified above, BETA concurs that the area would not qualify as a wetland due to the dominance of woody upland shrubs and vines within a 15-foot-radius plot. Comment resolved.

W4. BETA agrees with the delineation of the B-Series BVW with the exception of an area adjacent to flag B19. Hydric soil indicators, consisting of a depleted B-horizon with prominent redoximorphic concentrations within 12 inches of the soil surface, and hydrophytic vegetation, including poison ivy (*Toxicodendron radicans*) and sensitive fern, were observed upgradient of flag B19.

¹310 CMR 10.55(3): Where an area has been disturbed (e.g. by cutting, filling, or cultivation), the boundary is the line within which there are indicators of saturated or inundated conditions sufficient to support a predominance of wetland indicator plants.



Flagging within this area should be revised to encompass the wetland indicators described above.

SCI: Wetland flag adjustments were made in the field on November 14th to revise flag B19 as indicated on the attached sketch. Revised Existing Conditions Plans will be submitted at a later date once all adjusted delineations have been field located.

BETA2: BETA concurs with the relocation of flag B19 as discussed in the field; however, review of the revised existing conditions plan will be required to confirm that the flag is accurately depicted on the plan.

SCI2: Updated ECP is included in resubmittal for review.

BETA3: Flag B19 has been accurately depicted on the revised plans. Comment resolved.

W5. BETA observed hydric soil indicators consisting of a depleted matrix within 12 inches of the soil surface and hydrophytic vegetation, including dense cover of sensitive fern and poison ivy, approximately 20 to 30 feet upgradient of flags C1 and C2. BETA also observed leaf staining and vegetation such as red maple (*Acer rubrum*) and arrowwood viburnum (*Viburnum dentatum*) upgradient of flags C7 and C8; however, no hydric soils were observed. The Applicant should reassess the area upgradient of flags C1 and C2 and adjust the wetland boundary as needed.

In addition, portions of this wetland are located offsite; accordingly, BETA could not confirm its status as either an Isolated or Bordering Vegetated Wetland. The Commission could consider including this as a finding in the Order of Resource Area Delineation (ORAD).

Standing water approximately three (3) inches in depth with visible iron oxide was also observed within the C-Series wetland. BETA assumes this area is too shallow to support breeding habitat of vernal pool indicator species; however, a vernal pool survey was not conducted due to the time of year and scope of the ANRAD.

SCI: Wetland flag adjustments were made in the field on November 14th to revise flags C1, C1-1, and C2 Revised Existing Conditions Plans will be submitted at a later date once all adjusted delineations have been field located. This wetland continues offsite onto the land of others. MassGIS data does not show wetland resource areas in this location or hydraulic connections, therefore ECR is classifying this as an IVW for the purposes of this ANRAD application.

BETA2: BETA concurs with the relocation of flags C1 and C2 and the addition of flag C1-1 as discussed in the field; however, review of the revised existing conditions plan will be required to confirm that the flags are accurately depicted on the plan. In addition, BETA recommends that the wetland be classified as BVW unless evidence to the contrary can be provided by the Applicant.

BETA3: The new and revised flags have been accurately depicted. Comment resolved.

W6. BETA agrees with the delineation of the D-Series BVW boundary based on observations of hydrophytic vegetation, hydric soils, and indicators of hydrology. Leaf staining and presence of vegetative species including poison ivy and sensitive fern were observed upgradient of flag D16; however, no hydric soils were observed.

SCI: No response necessary.

BETA2: No respond required.

W7. It is unclear based on the ANRAD application whether the Applicant seeks confirmation of the E-Series BVW. Although the flags are depicted on the plans, they cannot be confirmed as part of this



filing unless the abutting property owner provides a signature on the ANRAD application. The Applicant should clarify if they intend to seek permission from the abutting property owner to approve this wetland boundary, or if the Commission will be required to include a finding in the ORAD stating that the boundary of the E-Series BVW is not confirmed but appears to project buffer zone and/or Buffer Zone Resource Areas onto the Site.

SCI: The ANRAD application does not include confirming the location of the E-Series BVW flags since these flags are on the land of others and the Owner does not want to place any undue burden on adjacent properties not owned by the Applicant. The E-Series wetland was delineated to identify the buffer zone associated with this offsite wetland system.

BETA2: Comment resolved. BETA recommends that a finding be included in the ORAD stating that these flags were not approved and that the associated Buffer Zone is approximate. The E-Series flagging should also be removed from the plans.

W8. BETA agrees with the delineation of the F-series BVW boundary based on observations of hydrophytic vegetation, hydric soils, and indicators of hydrology.

SCI: No response necessary.

BETA2: No response required.

W9. BETA agrees with the delineation of the G-Series IVW based on observations of hydrophytic vegetation, hydric soils, and indicators of hydrology.

A depression with standing water approximately nine (9) inches in depth was observed within the G-Series wetland. Due to the observed water depth and presence of suitable attachment sites for vernal pool species, the G-Series wetland may contain a potential vernal pool; however, a vernal pool survey was not conducted due to the time of year and scope of the ANRAD. The Commission could consider including this information as a finding in the ORAD.

SCI: While it is our belief the G-Series IVW is not a vernal pool, it is our understanding we are unable to make a determination until the Spring season. As such, if the Commission desires, we would accept a condition to perform a vernal pool survey at this location at the appropriate time.

BETA2: BETA recommends that the Commission include a finding in the ORAD stating that a Vernal Pool study was not conducted as part of the ANRAD process; therefore, the G-Series IVW's status as a Vernal Pool cannot be confirmed. The Commission could consider requiring this study if development is proposed in the vicinity of this wetland in the future.

- W10. BETA assessed the area within and around the solar array at the eastern extent of the Site and made the following observations, which are depicted on Attachment A BETA Solar Field Sketch. These observations were made without the benefit of a review of the solar array development plans and permits. The Applicant should provide additional documentation to determine whether these are stormwater features that would not be considered jurisdictional under the Act. Even if determined to not be jurisdictional under the Act, the features identified in Comments W10.b., d., and e. may be considered jurisdictional under the Bylaw.
 - a. BETA observed hydric soils within a swale interior to the western fence line associated with the solar array; however, the vegetation predominately consisted of turf grass and red clover (*Trifolium pratense*). This feature does not appear to constitute an Area Subject to Protection under the Act or the Bylaw.



SCI: As discussed during the November 14th Site Review, the swale within the solar array field was constructed as part of the solar array construction project for stormwater management purposes. Additional review of past permits and site plans pertaining to the permitting and construction of the solar array in 2015 indicates that low impact design stormwater management systems such as swales, basins, etc. were included control stormwater runoff from the solar array design plans, vegetated wetlands were not present on or near the solar array. It is in our professional opinion, that these stormwater management areas should not be classified as Bordering Vegetated Wetlands since these areas were constructed after 1996 in accordance with Stormwater Management Standards. Additional plans and supporting documentation (e.g. the Stormwater Management Report) as previously approved by the Planning Board have been included to provide additional context to the Commission. While we agree with the Peer reviewer that these areas have developed wetlands characteristics, as described above, we respectfully request that the Conservation Commission consider these areas exempt under 310 CMR 10.02(2)(b)(3)(c), as Planning Board Approvals and Site construction took place in 2014.

Please refer to 310 CMR 10.02(2)(b)(3)(c) which states:

Notwithstanding the provisions of 310 CMR 10.02(1) and (2)(a) and (b), stormwater management systems designed, constructed, installed, operated, maintained, and/or improved as defined in 310 CMR 10.04 in accordance with the Stormwater Management Standards as provided in the Stormwater Management Policy(1996) or 310 CMR 10.05(6)(k) through (q) do not by themselves constitute Areas Subject to Protection under M.G.L. c. 131, § 40 or Buffer Zone provided that:

- 1. the system was designed, constructed, installed, and/or improved as defined in 310 CMR 10.04 on or after November 18, 1996; and
- 2. if the system was constructed in an Area Subject to Protection under M.G.L. c. 131, § 40 or Buffer Zone, the system was designed, constructed, and installed in accordance with all applicable provisions in 310 CMR 10.00.

BETA2: BETA did not observe hydrophytic vegetation within this swale; therefore, this feature does not constitute an Area Subject to Protection under the Act or the Bylaw. No further response required.

- b. Numerous depressions were observed under and between panel rows with standing water with depths of three (3) to four (4) inches at the time of the Site visit. Within these areas, BETA observed hydrophytic vegetation including cattail (*Typha latifolia*), soft rush (*Juncus effusus*), and sensitive fern, as well as hydric soils consisting of a depleted matrix starting near the soil surface. These areas should be reassessed by the Applicant to determine if they meet the criteria to be considered Isolated Vegetated Wetlands and Subject to Protection under the Bylaw.
 - SCI: Our office and ECR has reviewed this area as part of the 11/14/23 site walk with the Town representatives and believe this area qualifies as a Stormwater Management site element, designed and approved as part of the original submitted Solar Farm Plans and Documentation submitted to the Planning Board. Based on our review of record plans and documentation, we present the following findings:



- -Rows of depressions labelled as "Proposed Drainage Ditches" on Planning Board approved plans, Grading Plans Sheets SP-4 and SP-4.1. Detail for "Racking Drainage Ditch" shown on Sheet SP-7.
- Rows of areas labelled "Retention Areas" lining up with solar arrays shown on Stormwater Engineering Report (by Strong Civil Design, dated March 3, 2014, included for reference) page 6 "Proposed Catchment Areas" Map
- Referred to as "Depressions B1-B17" outflowing to "Outfall B" or "Depressions C1-C18" outflowing to "Outfall C" in Stormwater Engineering Report, page 55

In summary, the Stormwater Engineering Report (and design plans) clearly identify these areas as part of the overall post-construction stormwater management plan for the solar field development. While we agree with the Peer reviewer that these areas have developed wetlands characteristics, as described above, we respectfully request that the Conservation Commission consider these areas exempt under 310 CMR 10.02(2)(b)(3)(c), as Planning Board Approvals and Site construction took place in 2014.

BETA2: The Applicant has provided historic permitting documents and plans depicting the proposed "drainage ditches" under the panel rows. It is BETA's understanding that these "drainage ditches" were solely intended to provide attenuation of stormwater sheet flow generated by the panels, which is consistent with the MassDEP Wetlands Program Policy 17-1 directive that solar panels themselves do not require treatment of total suspended solids (TSS).

BETA concurs that the "drainage ditches" would not be considered Areas Subject to Protection under the Act pursuant to 310 CMR 10.02(2)(b)3.(c); however, they would qualify as Freshwater Wetlands (i.e., IVWs) under the Bylaw due to the presence of hydrophytic vegetation, hydric soils, and indicators of hydrology. BETA defers to the Commission on their interpretation and application of the Bylaw.

SCI2: Samiotes Consultants requests, that the Conservation Commission interpret there "drainage" ditches as not jurisdictional IVW's and therefore not applicable under the Town Wetlands Bylaw.

BETA3: BETA defers to the Commission on whether they take jurisdiction over these features as IVWs.

c. A large depression with standing water was observed within the southeastern corner of the solar field. Vegetation within this depression consisted of primarily upland species including little bluestem (*Schizachyrium scoparium*), grass-leaved-goldenrod (*Euthamia graminifolia*), bush clover (*Lespedeza virginica*) and sweet fern (*Comptonia peregrina*) and no hydric soil indicators were observed. Accordingly, this area does not appear to qualify as an Area Subject to Protection under the Act or the Bylaw.

SCI: No response necessary.

BETA2: No response required.

d. A large depression with deep standing water was observed within the southwestern corner of the solar field. BETA observed hydric soils consisting of a depleted matrix near the soil surface, as well as hydrophytic vegetation including purple loosestrife (*Lythrum* salicaria), cattail, woolgrass (*Scirpus cyperinus*), and soft rush. During BETA's Site visit, a wood frog (*Lithobates sylvaticus*) call was heard, and a caddisfly (*Trichoptera* spp.) larvae



molt was observed within the standing water. The aforementioned wetland indicators were also observed directly west of the depression and appear to form a BVW complex that drains to a swale flowing to the southwest. Due to the presence of an upgradient wetland, this swale would meet the definition of a stream per the Act and the Bylaw. The Applicant should reassess this area and delineate the BVW and Bank to stream.

The depression described above appears to be a potential vernal pool; however, BETA did not conduct a vernal pool survey due to the time of year and the scope of the ANRAD. The Commission could consider noting this as a finding in the ORAD.

SCI: Our office and ECR has reviewed this area as part of the 11/14/23 site walk with the Town representatives and believe this area qualifies as a Stormwater Management site element, designed and approved as part of the original submitted Solar Farm Plans and Documentation submitted to the Planning Board. Based on our review of record plans and documentation, we present the following findings:

- Area labelled "Catchment Area B Discharge Location" on Planning board approved plans, Soil Erosion Plan Sheet SP-8.1 Referred to as "Outfall B" in HydroCad report, Pages 27 and 43 of the Stormwater Engineering Report (prepared by Strong Civil Design, dated March 3 2014, included for reference)

In summary, the Stormwater Engineering Report (and design plans) clearly identify these areas as part of the overall post-construction stormwater management plan for the solar field development. While we agree with the Peer reviewer that these areas have developed wetlands characteristics, as described above, we respectfully request that the Conservation Commission consider these areas exempt under 310 CMR 10.02(2)(b)(3)(c), as Planning Board Approvals and Site construction took place in 2014.

BETA2: BETA reviewed the Applicant's response and the plans depicting the depression at the southwest corner of the solar field. It is BETA's understanding that the current layout of the basin differs from the design plans due to a field change for the presence of ledge; therefore, it was not constructed in accordance with the approved plans. In addition, the solar project did not receive final closeout from the Planning Board, and analysis and design documentation supporting the field change(s) being constructed in full compliance with the Stormwater Management Standards/Regulations was not provided. This depression and the adjacent area to the west should be delineated as BVW, and the associated downgradient channel along the roadway should be delineated as an intermittent stream with jurisdictional Bank and LUW Subject to Jurisdiction under the Act and the Bylaw.

SCI2: Based on additional information discovered during our research, we request that the Conservation Commission not consider this area as a jurisdictional wetland resource area under the Wetland Protection Act. Additional information found includes a final construction inspection by Town consultant (BETA), submittal of a Form H intended for Planning Board sign-off/certification and additional certification documentation for the Design Engineer (Bertin Engineering) stating the reconfigured basin as construction in accordance with Approved stormwater design parameters, despite being relocated in the field due to presence of ledge. It is our understanding that the Planning Board approved the design change and certified the construction prior to the Building Department's final sign-off.



BETA3: BETA reviewed the flagging placed in the field to demarcate this area during the February 1, 2024 Site visit. During this Site visit, surface water levels were significantly higher compared to previous Site visit and it became apparent that the "swale" portion of this wetland does not exhibit evidence on concentrated flow along a hydraulic gradient. Therefore, BETA concurs that this area can be classified as IVW but defers to the Commission on whether they find this IVW jurisdictional under the Bylaw.

e. BETA reviewed the areas along the outside of the western, northwestern, and northern portions of the solar field fence line and observed well-established areas of wetland consisting of hydric soils and hydrophytic vegetation including cattail, purple loosestrife, white meadowsweet (*Spiraea alba*), and willow (*Salix* spp.). The Applicant should reassess this area and flag the extents of BVW/IVW.

SCI: Our office and ECR has reviewed this area as part of the 11/14/23 site walk with the Town representatives and believe this area qualifies as a Stormwater Management site element, designed and approved as part of the original submitted Solar Farm Plans and Documentation submitted to the Planning Board. Based on our review of record plans and documentation, we present the following findings:

Area labelled "Catchment Area A Retention Area" on Page 6 "Proposed Catchment Areas" map of Stormwater Engineering Report (By Strong Civil Design, dated March 3, 2014, included as reference).

- Area referred to as "Depression A1" in HydroCAD reports in Stormwater Engineering Report, page 25.
- Shown as depressed area with Inv. 374 on Planning Board approved plans, Grading Plan Sheet SP-4.
- Area labelled "Catchment Area A Discharge Location" on Planning Board approved plans, Soil Erosion Plan Sheet SP-8

In summary, the Stormwater Engineering Report (and design plans) clearly identify these areas as part of the overall post-construction stormwater management plan for the solar field development. While we agree with the Peer reviewer that these areas have developed wetlands characteristics, as described above, we respectfully request that the Conservation Commission consider these areas exempt under 310 CMR 10.02(2)(b)(3)(c), as Planning Board Approvals and Site construction took place in 2014.

BETA2: The Applicant has provided historic permitting documents and plans depicting the proposed basin area to the west and north of the solar field. It appears that these areas were constructed per the approved plans to form a basin for stormwater management purposes as described in the Stormwater Management Report previously submitted to the Planning Board. Therefore, BETA concurs that these areas would not be considered Areas Subject to Protection under the Act pursuant to 310 CMR 10.02(2)(b)3.(c); however, they would qualify as Freshwater Wetlands under the Bylaw due to the presence of hydrophytic vegetation, hydric soils, and indicators of hydrology. BETA defers to the Commission on their interpretation and application of the Bylaw.

SCI2: We defer to the Conservation Commission's interpretation of the findings, as noted above.

BETA3: BETA defers to the Commission on whether this IVW is jurisdictional under the Bylaw.



W11. Several streams were observed interior to the onsite wetlands, including:

- a. Two (2) streams were observed interior to the A-series wetland.
- b. Two (2) streams that converge into a single stream were observed interior to the B-series wetland near flag B25.
- c. A stream was observed interior to the D-series wetland near flag D9.
- d. A stream was observed internal to the F-series wetland.

The Applicant should determine whether these streams are perennial or intermittent. If perennial, the Mean Annual High Water marks of the streams should be delineated to determine the extent of Riverfront Area at the Site. If intermittent, the Applicant could either delineate the associated Banks or the Commission could include a finding in the ORAD stating that these streams are present but were not delineated.

SCI: All streams within the BVWs are intermittent and are mainly the result of upgradient stormwater discharges. There are no mapped streams on or near the site according to the U.S.G.S. maps. There are no mapped streams shown on or near the site according to the Massachusetts Streamstats Program. Therefore, all streams within the BVWs at the site are intermittent. Since these intermittent streams are found in the interior of the BVW systems, we are not seeking confirmation of the stream locations as part of this ANRAD application, as the BVWs contain these intermittent streams.

BETA2: Comment resolved; both StreamStats and USGS topographic maps do not depict these stream channel and they are therefore presumed to be intermittent. BETA recommends that the Commission include a finding in the ORAD stating that intermittent streams are present within wetland complexes at the Site but were not delineated or approved as part of this ANRAD.

W12. Along Tri County Drive off of Pond Street, a stormwater conveyance was observed on the side of the road and is vegetated with species including jewelweed, climbing nightshade (*Solanum dulcamara*) and mugwort (*Artemisia vulgaris*). This conveyance appeared to be lined with stone, underlain by upland soils, and vegetated with primarily upland species. Wetlands were not observed upgradient of, or along, this channel. Therefore, this channel would not qualify as an Area Subject to Protection under the Act or the Bylaw.

SCI: No respond necessary.

BETA2: Comment resolved.



Review Summary

Based on our review of the ANRAD submittal and plan, and the existing conditions at the Site, it is BETA's opinion that the Applicant has provided sufficient information for the Commission to issue an accurate ORAD, subject to the recommended findings noted above.

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

Very truly yours, BETA Group, Inc.

Anna Haznar Staff Scientist Jonathan Niro Project Scientist

