MEMORANDUM

Re: Tri-County Regional Vocational Technical High School SCI File # 52033.00
ANRAD Delineation Peer Review Response

To: Breeka Li Goodlander, Town of Franklin Conservation Commission

From: Gregory Melnyk (SCI) November 21, 2023
Stephen Powers, PE (SCI)
Brad Holmes (ECR)

This memo is a response to the Peer Review comments received on October 13, 2023, prepared by Anna Haznar and Jonathan Niro of BETA Group, Inc. (BGI), regarding the Abbreviated Notice of Resource Area Delineation (ANRAD) submission package dated August 2023, for the above referenced project. Both Stephen Powers of Samiotes Consultants (SCI) and Brad Holmes of ECR have contributed to the compiled responses below.

Included for review and reference (and to support our responses below), please see the following files:

- 14-03-05 Stormwater Engineering Report by Strong Civil
- Preliminary and Final Site Plan Drawings, by Whitman, approved by Planning Board 3-24-14

Please note that DEP has issued a file number of 159-1277 for the ANRAD application. The following comments from Peer Reviewer are in italics with our response in "Bold":

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 the 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 RESPONSE: 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.

W2. MassDEP has issued File No. 1599-1277 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."

Samiotes Consultants, Inc.
Civil Engineers + Land Surveyors

20 A Street
Framingham, MA 01701-4102

T 508.877.6688
F 508.877.8349

www.samiotes.com

SCI RESPONSE: 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.

W3. BGI 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, jewelweed, and wrinkle-leaved goldenrod.

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-reference BVW should be delineated as well.

SCI RESPONSE: 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.

W4. BGI 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 and sensitive fern, were observed upgradient of flag B19.

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

SCI RESPONSE: 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.

W5. BGI 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. BGI also observed leaf stating and vegetation such as red maple and arrowwood virburnum 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, BGI 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. BGI 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 RESPONSE: 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.

W6. BGI 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 RESPONSE: No response necessary.

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 RESPONSE: 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.

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

SCI RESPONSE: No response necessary.

W9. BGI 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 RESPONSE: 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.

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 under the Act. Even if determined to not be jurisdictional under the Act, the features identified in the following

comments may be considered jurisdictional under the Bylaw.

a. *BGI 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. This feature does not appear to constitute an Area Subject to Protection under the Act or the Bylaw.*

SCI RESPONSE: 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 to 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.

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, BGI observed hydrophytic vegetation including cattail, soft rush, and sensitive fern, as well as hydric soils consisting of a depleted matrix starting near the soil surface. Therse 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 RESPONSE: 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.

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, grass-leaved-goldenrod, bush clover, and sweet fern, 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 RESPONSE: No response necessary.

d. *A large depression with deep standing water was observed within the southwestern corner of the solar field. BGI observed hydric soils consisting of a depleted matrix near the soil surface, as well as hydrophytic vegetation including purple loosestrife, cattail, woolgrass, and soft rush. During BGI's Site visit, a wood frog call was heard, and a caddisfly 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, BGI did not conduct a vernal pool survey due to the time of year and the scope of the ANRAD. The Commission could consider nothing this as a finding in the ORAD.

SCI RESPONSE: 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.

e. *BGI 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, and willow. The Applicant should reassess this area and flag the extents of BVW/IVW.*

SCI RESPONSE: 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.

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 RESPONSE: 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.

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, and mugwort. 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 RESPONSE: No response necessary

If you have any questions, or require further information, please call or email me: gmelnyk@samiotes.com or (508)-877-6688 (ext. 25) or Stephen Powers, PE at spowers@samiotes.com or (508)-877-6688 (ext. 14).