

June 25, 2020

Mr. Dennis Audette
Chairman
New Bedford Conservation Commission
New Bedford City Hall
133 William Street
New Bedford, MA 02744

RE: Nitsch Project #9972
Photovoltaic Solar Array
Braley Road
New Bedford/Dartmouth, MA

Dear Mr. Audette:

This letter is regarding the Notice of Intent (NOI) submitted for the proposed Photovoltaic Solar Array on Braley Road in New Bedford and Dartmouth, Massachusetts. In response to our initial letter dated May 20, 2020, Nitsch Engineering received and reviewed the following documents from the Applicant:

- Plans entitled "Proposed Ground Mounted Photovoltaic Solar Array & Underground Utility Interconnection on John Vertente Boulevard & Braley Road in New Bedford, MA," prepared by Prime Engineering, Inc., revised June 8, 2020;
- Report entitled "Narrative in Support of Proposed Ground Mounted Photovoltaic Solar Array, Braley Road, New Bedford," prepared by Prime Engineering, Inc., revised June 8, 2020;
- Report entitled "Proposed Buffer Zone Enhancement at the Proposed Solar Array at Braley Road, New Bedford, MA," prepared by Prime Engineering, Inc., dated June 8, 2020; and
- Response to Comments Letter, prepared by Prime Engineering, Inc., dated June 10, 2020

For clarity, we have provided our initial comments from December 3, 2019 in **blue font**, the Prime Engineering response in black font, and our updated response is provided in **blue bolded font**.

General Comments

1. The project includes alterations within the 25'-setback to BVW consisting of tree clearing with stumps and low-lying vegetation to remain. It is assumed the clearing is to allow the maximum amount of sunlight possible to reach the solar array in the developable area. Nitsch Engineering recommends the Applicant further analyze the existing vegetation within the 25'-setback and reduce the alterations/clearing where possible due to shadows.

Prime Response (06/10/2020): A vegetative assessment of the 25 foot buffer has been made and is enclosed within the report entitled "Proposed Buffer Zone Enhancement at the Proposed Solar Array at Braley Road" dated June 8, 2020.

Nitsch Response (06/25/2020): The project still proposes alterations within the 25'-setback adjacent to the panels; however, steps have been taken to minimize disturbance around the project area. We defer to the Commission on their approval of the proposed limit of work and associate impacts. Comment closed.
2. There is a Sediment Trap Detail provided on sheet number 5; however, the location of the sediment trap is not shown on sheet number 4, Solar Array. The intended location should be shown on the plans.

Prime Response (06/10/2020): The sediment trap is not required. The windrows of stump tub grindings have proven very effective in the John Vertente Blvd. solar array. As noted on the sediment sump detail "This sediment trap is to be installed as necessary when existing ground is disturbed and the site engineer determines that silt fence, compost tubes shown on sheet C-1 or stump grinding windrows may not be adequate."

Nitsch Response (06/25/2020): Noted. We recommend the detail remain and that the note be revised to read, "This sediment trap is to be installed as necessary when existing ground is disturbed and the site engineer and/or Conservation Commission determines that silt fence, compost tubes shown on sheet C-1 or stump grinding windrows may not be adequate." Comment closed.

3. Section 5.2 of the report describes three (3) separate arrays. There is only one (1) array shown on the plans. Please revise the report and/or plans for consistency and to reflect the conditions proposed at Braley Road.

Prime Response (06/10/2020): The reference to 3 arrays has been corrected in the Narrative in Support of the Array.

Nitsch Response (06/25/2020): The Applicant has revised the narrative to remove the reference to the three (3) arrays. Comment closed.

MassDEP Stormwater Management Standards

4. The Applicant suggests there will not be an increase in the post-development peak rate of runoff or discharge volume from pre-development conditions because the curve number (30) is unchanged from the conversion of woods to meadow with Hydrologic Soil Group (HSG) rating A. Based on the Natural Resources Conservation Service (NRCS) Web Soil Survey, the site appears to also include soils with HSG rating D. Given the sites location in and around wetland resource areas, the stormwater analysis should utilize soils with HSG rating D. Additionally, the proposed project includes the clearing and stumping of large forested areas and construction of gravel access roads. These alterations will result in the change of the curve numbers used in the drainage analysis and increased stormwater runoff if left unmitigated. A Stormwater Report should be provided with drainage calculations documenting compliance with the MassDEP Stormwater Management Standards.

Prime Response (06/10/2020): The surficial soil types have been added to the existing conditions plan and to the overall development plan. This demonstrates how the array and most of the access road falls in the hydrologic Group A soil. It was confirmed in a site walk that all of the array will fall in hydrologic soil Group A. A portion of the existing access road does fall in a Scarborough Soil area which is hydrologic soil Group D. However, this carpath will be upgraded from a hard packed dirt road to a crushed stone drive which will have less runoff than under existing conditions. The reviewer stated "the clearing and stumping of large forested areas... will result in the change of curve numbers used in the drainage analysis". Please note however that the forest in good condition has a runoff curve number of 30 and the proposed meadow will have a curve number of 30. The proposed level, crushed stone driveway over Hinckley gravelly fine sandy loam will not increase the runoff.

Nitsch Response (06/25/2020): The Applicant cites MassDEP Policy 17-1.4 Stormwater Management recommendations as measures to control the peak runoff rate, provide recharge, and treat TSS; however, the Applicant is still required to meet the Stormwater Standards per CMR 10.05(6)(k). The area of the existing cart path in comparison to the area of the proposed gravel access road is minimal and there is an increase in the CN associated with this

conversion of cart path/forest to gravel access road. A Stormwater Report should be provided with drainage calculations documenting compliance with the MassDEP Stormwater Management Standards. Per the policy, when calculations show an increase in peak flow, MassDEP recommends that re-engineering be conducted to include construction of stormwater BMPs.

5. The project Site is located within an Outstanding Resource Waters area. The Stormwater Report should specify how the Project is meeting the requirements of Standard 6 for work within critical areas should the stormwater analysis result in the use of any Best Management Practices (BMPs).

Prime Response (06/10/2020): The project does not fall in an Outstanding Resource Area Watershed. The online mapping is incorrect. Our previously submitted survey spot elevations demonstrate that the area drains to the south. On the attached excerpt from the USGS New Bedford North Quadrangle, it can be seen that the cranberry bog and surrounding areas drain southerly to the Greater New Bedford Industrial Park drainage system which flows southerly to the Acushnet Cedar Swamp.

Nitsch Response (06/25/2020): Noted – we concur that the site does not appear to drain towards an ORW. Comment closed.

Impacts to Wetland Resource Areas

6. The report and plans indicate that the site contains BVWs, non-jurisdictional depressions, and a potential vernal pool. The 25- and 100-foot Buffer Zone associated with the bog appear to only be shown. The plans should be updated to include the associated Buffer Zones for all resource areas.

Prime Response (06/10/2020): The buffer zone to the Bordering Vegetated Wetlands has been added to the plan. The Isolated Land Subject to Flooding does not have a buffer zone.

Nitsch Response (06/25/2020): The Applicant has revised the plans to include the buffer zone of the BVW as requested. Comment closed.

7. The Applicant should provide the Wetlands Evaluation for verification of the non-jurisdictional depressions and potential vernal pool. The potential vernal pool is shown in a wetland per Massachusetts Geographic Information System (MassGIS).

Prime Response (06/10/2020): The large depression which has characteristics of a vernal pool will be preserved and, even though it has no buffer zone, a 25 foot no disturb area will be voluntarily preserved.

Nitsch Response (06/25/2020): Noted; however, the Applicant should provide calculations for the assessment of the depressions as non-jurisdictional Isolated Land Subject to Flooding (ILSF).

8. There is a detail for the proposed modification of side slopes of the non-jurisdictional wetlands. The plans should be revised to reflect this grading and limit of work.

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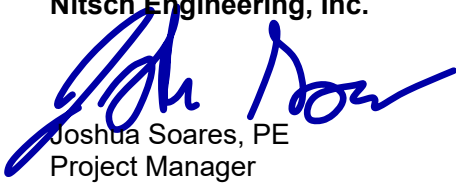
Prime Response (06/10/2020): The side slopes do not need to be graded. The detail has been removed.

Nitsch Response (06/25/2020): The Applicant has removed the detail in question as it does not pertain to this project. Comment closed.

If you have any questions, please call us at 617-338-0063.

Very truly yours,

Nitsch Engineering, Inc.

A handwritten signature in blue ink, appearing to read "Josh Soares", is written over the printed name and title.

Joshua Soares, PE
Project Manager

JMS/jlj

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