

December 3, 2019

Mr. Craig Dixon
Chairman
New Bedford Conservation Commission
New Bedford City Hall
133 William Street
New Bedford, MA 02744

RE: Nitsch Project #9972
Photovoltaic Solar Array
John Vertente Boulevard
New Bedford/Dartmouth, MA

Dear Mr. Dixon:

This letter is regarding the Notice of Intent (NOI) submitted for the proposed Photovoltaic Solar Array on John Vertente Boulevard in New Bedford and Dartmouth, Massachusetts. Nitsch Engineering received and reviewed the following documents:

- Plans entitled "Proposed Large Scale, Ground Mounted Photovoltaic Solar Array on John Vertente Boulevard in Dartmouth and New Bedford, MA," prepared by Prime Engineering, Inc., dated October 25, 2019;
- Report entitled "Jurisdictional Assessment of Depression on the North Side of John Vertente Blvd. Extension," prepared by Prime Engineering, Inc., dated November 4, 2019; and
- Plans entitled "Jurisdictional Isolated Land Subject to Flooding Assessment," prepared by Prime Engineering, Inc., dated November 1, 2019.

This Project involves the construction of a ground mounted photovoltaic solar array off John Vertente Boulevard located in Dartmouth and New Bedford, Massachusetts. The Project site includes Bordering Vegetated Wetlands (BVWs) and Isolated Land Subject to Flooding (ILSF) requiring the submission of a NOI to the City of New Bedford Conservation Commission.

As requested, Nitsch Engineering is providing comments based on our review of the Project against the Massachusetts Department of Environmental Protection (MassDEP) Stormwater Management Standards. We also reviewed the intended limit of work and the impacts within the BVW resource areas and ILSF. Please note that these are preliminary comments because additional documentation is needed to confirm the project aligns with the MassDEP Stormwater Management Standards. Upon receipt of the requested information, we may have additional comments.

General Comments

1. 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 (CN) 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.
2. 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.

3. There is an existing active culvert and stream located next to wetland flag WF-34 in the upland wetland located in the northwestern corner of the project site as witnessed during a site visit on 11/26/19. This culvert appears to be outside the limit of work; however, a note specifying the maintenance and protection of this culvert should be included in the plans. Should the stream/culvert be a design point in the drainage analysis?
4. There is a Sediment Trap Detail provided on sheet D-1; however, the location of the sediment trap is not shown on sheet C-1, Clearing and Grubbing Plan.
5. The plans do not appear to provide stormwater mitigation for the proposal solar panels. Concentrated flows from the panels may cause erosion and potentially increase stormwater runoff from the project limits. The Applicant should provide mitigation measures that meet the MassDEP Stormwater Management Standards.
6. Based on the site plans and Typical Rack Assembly Detail there does not appear to be any grading proposed at the site. The Applicant should clarify how the solar arrays will be constructed with the existing undulating surface. If the racks are to maintain a constant height, there may be additional erosion concerns at the dripline with higher rack assemblies in low points.

Jurisdictional Assessment of Depression on the North Side of John Vertente Blvd. Extension

7. The calculations provided with the assessment of the ILSF areas appear to be correct and per the Wetlands Protection Act (WPA, 310CMR 10.00) Section 10.57(2)(b) definition of an ILSF.
8. The analysis of the ILSF areas should be included in the Stormwater Report.
9. Depression D-5 shall be annotated and shown similarly as depressions D-1 & D-2, D-3 & D-4, NB-1 & NB-2, and NB-3 on sheets 2, 3, and 4 of the plans provided with the assessment. Provide a summary of the HydroCAD analysis and findings in the Assessment report.

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

Very truly yours,



Joshua Soares, PE
Project Manager



Jennifer L. Johnson, PE, CPSWQ, CFM, LEED AP
Project Manager

JMS/jlj/mma