



CITY OF NEW BEDFORD
JONATHAN F. MITCHELL, MAYOR

November 27, 2019

MEMORANDUM

TO: Conservation Commission

FROM: Sarah E. Porter, Conservation Agent

cc: R. Rheume, Prime Engineering

RE: SE49-0838

Proposed Photovoltaic Solar Array
John Vertente Boulevard
(Map 135, Lots 1,14,15 & 47)

I have reviewed the Notice of Intent received 10/30/2019, plans titled Proposed Large Scale Photovoltaic Array dated 10/25/2019 and consisting of a Title Sheet, EX-1, EX-2, C-1 through C-5 and D-1. Also reviewed were the Jurisdictional Assessment of Depression on the North Side of John Vertente Boulevard Extension dated 11/4/2019 and accompanying plans titled Jurisdictional Isolated Land Subject to Flooding (sheets 1 through 4 of 4). I offer the following comments on these documents:

1. As noted by MA DEP, the northern portion of the parcel contains a Zone A Surface Water Supply Protection Area and drains to an Outstanding Resource Water (ORW). We have a geo-referenced map provided by Mike O'Reilly the Town of Dartmouth Environmental Affairs Coordinator, which shows the ORW boundary within the project area. The current plans show the wetland crossing within the ORW as well as the northern most portion of the solar array and a piece of another solar array field. PRIME Engineering also showed the Commission the Zone A Surface Water boundary which overlapped solar panels as well. We were informed by PRIME that they would be willing to eliminate the wetland crossing and the northern most portion of the array to avoid impacts to these critical areas.
2. The MA DEP Wetland Program Policy 17-1: Photovoltaic System Solar Array Review recommends that "no work is proposed in a buffer zone of a Resource Areas that border a Critical Area as defined in 314 CMR 9.02 ..." If this can not be achieved than the applicant "may provide documentation for consideration demonstrating that the peak rate of runoff, recharge and TSS requirements are still met..." As mentioned above the wetland crossing and northern most portion of the solar array may be eliminated due to their location within the critical area.

However, a portion of the ORW line crosses the solar array directly south of the northernmost solar array. It is not known if the portion of this solar array in the buffer zone will be eliminated.

3. The twenty five foot setback (or no disturb zone) is proposed to be clear cut with the stumps and low growing vegetation to remain. This is a significant alteration of the 25' setback. The setback is established to protect the adjacent bordering vegetated wetland. Section 15-102 of the City of New Bedford Wetlands Ordinance states: *The conservation commission will also work with each individual applicant to achieve up to a twenty five foot setback from resource areas. However, this twenty five foot setback is not a mandate of this article. Science and conservation commission experience have proven the significant benefits of a twenty five-foot setback to the resource areas and the residents.* Although not a mandate of the Ordinance, the Conservation Commission has steadily achieved the 25' setback on applications with only a few incursions approved when absolutely necessary (normally for stormwater management purposes). It was not stated why the 25' setback needs to be cleared of trees.
4. Alteration of the 25' setback will result in light penetration into the bordering vegetated wetland. This is detrimental to wildlife that require continuous forested habitat causing displacement of some species. In addition, construction noise up to the edge of the wetland, although temporary has the ability to displace wildlife. Wetland vegetative communities will also be altered due to the increased light in the wetland edge.
5. The project needs to clearly state how wide the roadway is through the wetland. The site plans show 16', the narrative states it is 14' and the detail shows it as 12'. What width was used to determine the wetland impacts?
6. How much temporary wetland alteration is proposed to facilitate construction of the roadway? At a minimum, vegetation will need to be removed and soil disturbed *so that erosion controls can be installed.
7. The erosion controls shown on the plans call for silt fence with straw wattles. Straw wattles are not approved by the conservation commission due to their inability to stop sediment from running underneath them. It is recommended that compost tubes be used instead.
8. The wetland replication area requires on the ground survey to properly design. Following this survey, a cross section (drawn to scale) should be provided through the proposed replication area.
9. The projected seasonal high groundwater elevation in the wetland replication area needs to be provided.
10. A planting plan of the replication area should be provided which shows the spacing, size and species to be planted. It is not recommended to plant obligate wetland shrubs such as buttonbush and smooth alder in a replication area as they often do not survive.
11. The New Bedford Con Com only requires 1.5:1 wetland replication. Approximately 2.4:1 is provided. It is recommended that the replication area be reduced to provide 1.5:1 to minimize the loss of mature upland trees.
12. Requirements for the replication area shall include the following inspections by the Conservation Agent: inspection of the staked out replication area prior to excavation, inspection of the subgrade

of the wetland replication area, inspection of the final grade of the replication area prior to planting and inspection of the replication area following planting and seeding.

13. The resume of the wetland scientist who will monitor the construction of the wetland replication area and prepare all of the reports shall be sent to the Conservation Commission two weeks prior to onset of the replication construction for acceptance.
14. 3 reports shall be submitted to the Conservation Commission describing the success of the replication area: a post construction report detailing the methods of construction (this report shall be submitted within 60 days of the completion of the replication area). The second report shall be provided following the first full year of growth, and the third report following the second full year of growth. The reports shall document whether at least 75% of indigenous wetland vegetation is covering the replication area.
15. An as-built of the replication area shall be provided within 60 days of completion of the replication area which provides the planting locations and the final elevations of the replication area at 0.5 contour intervals. The seasonal high groundwater elevation shall be noted on the plan which shall be stamped by a registered land surveyor.
16. A sediment trap has been shown on the detail sheet. Where will this be used? The location(s) need to be shown on the site plans.
17. The non-jurisdictional wetland areas are to be filled according to the site plans. No grading of these areas has been shown or what type of fill will be used. From communication with the MA DEP, a water quality certification will be required since the amount of isolated vegetated wetland filling exceeds 5000 square feet.
18. The site is rocky and undulating in places, due to the past use for gravel operations. No grading is shown on the plans. The site plans need to provide a note stating that no grade changes or changes in existing drainage patterns is permitted.
19. Wood chips shall not be placed within 25' of the wetland boundary.
20. The Specifications for the upland meadow mix need to be provided (species to be planted and their percentage of the seed mix). During what phase of construction will the meadow mix be planted?