

February 5, 2018

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

RE: Nitsch Project #9972  
127 Duchaine Boulevard  
New Bedford, MA

Dear Mr. Dixon:

This letter is in regard to the proposed building addition and site improvements project located at 127 Duchaine Boulevard in New Bedford, Massachusetts. Nitsch Engineering has reviewed the following documents for compliance with the Massachusetts Department of Environmental Protection (MassDEP) Stormwater Management Standards:

- Plans entitled "Site Plan, Milhench Supply Company, 127 Duchaine Boulevard, Assessor's Map 133 Lot 21 & Portion of Lot 12, New Bedford, MA 02745," prepared by Farland Corp., dated December 15, 2017.
- Notice of Intent for "Site Plan, Assessor's Plot 133 Lot 21 and Portion of Lot 12, 127 Duchaine Boulevard, New Bedford, Massachusetts," prepared by Farland Corp., dated December 15, 2017.

Below are our comments on the proposed project, regarding stormwater management only:

1. The site is currently developed. Therefore, the project is a mix of redevelopment and new development.
2. The property currently includes development within the 25-foot setback from wetlands as well as development right up to the current wetlands line.
3. The proposed project includes the construction of a building addition within existing wetlands. The addition is substantially located within an existing parking area. However, a portion of the new building is within previously undisturbed wetlands. A portion of the parking lot has also been extended to within the existing wetlands.
4. Erosion controls (straw wattles) are located approximately 10 feet from the edge of the proposed building and pavement within the wetlands. We interpret the location of the erosion controls as the limit of work. The Applicant should verify that they will be able to perform the proposed work, including the construction of the building and parking lot and all associated earthwork within this small footprint.
5. Additional areas of development are proposed within 25 feet of wetlands. The parking area north of the building has been extended to within eight feet of wetlands. Grading in the vicinity of the parking area, including bioretention basin 1, is shown right up to the wetlands line.
6. The bottom of bioretention basin 1 is shown at elevation 79. The wetlands flags in the vicinity of the basin are shown at approximately elevation 81. Typically, groundwater is present within two feet or less of wetlands. A test hole has not been performed in this area to verify seasonal high groundwater. We are concerned that groundwater is effectively higher than the bottom of bioretention basin 1 and will impact storage in the basin, limiting its performance. Per the Stormwater Management Standards, two feet of separation is required between seasonal high groundwater and the bottom of the basin.
7. We recommend that additional spot grades be added to the parking area north of the building to confirm that appropriate slopes are provided to convey stormwater to bioretention basin 1. If the grading needs to be adjusted, it could result in additional earthwork in the wetlands located near the proposed building addition and parking areas.
8. There are significant overhead wires on the property. The Applicant should confirm that the proposed work beneath these wires is acceptable to the utility. Any changes required to the layout could result in changes to the proposed stormwater system.

Mr. Craig Dixon: Nitsch Project #9972  
February 5, 2018  
Page 2 of 2

9. We recommend that stone be added to the edge of the pavement that discharges to the sediment forebay to bioretention basin 3.
10. The existing conditions calculations for gravel roads use a curve number with D-soils in the existing conditions calculations and a curve number using A-soils for gravel roads in the proposed conditions calculations. Similar curve numbers should be used for both the existing and proposed conditions.
11. The calculations show a top elevation of 82.3 for Infiltration Basin 1. We recommend that spot elevations be added to the plans consistent with the calculations. We also recommend that the berm of the top of the infiltration basin be widened. The plans show it to be approximately three feet wide.
12. We recommend the bioretention basin cross section include two to four feet of soil mix consistent with the Standards.
13. It is unclear whether plantings are proposed as part of the bioretention basins.

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

Very truly yours,

**Nitsch Engineering, Inc.**



Scott D. Turner, PE, AICP, LEED AP ND  
Vice President, Director of Planning

JLJ/mma