

September 1, 2017

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

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

Dear Mr. Dixon:

This letter is in regards to the proposed project located at 100 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, 100 Duchaine Boulevard, Assessor's Map #134 Lot #5, New Bedford, Massachusetts," prepared by Farland Corp., dated August 10, 2017; and
- Notice of Intent entitled, "Site Plan, Assessors Map 134 – Lot 5, 100 Duchaine Boulevard, New Bedford, Massachusetts," prepared by Farland Corporation., including stormwater calculations, dated August 10, 2017.

This project includes additional construction at 100 Duchaine Boulevard including revisions to an existing parking area located to the east of the existing building, a 150-foot by 100-foot building addition, the installation of an underground infiltration facility, layout changes in the vicinity of the new addition, and expansion on an existing stormwater basin.

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

1. The improvements on the parking lot to the east of the existing building include a new 100-foot-long access driveway. The plans do not show any proposed grades on this driveway, implying that the driveway is flat. The plans should be revised to show proposed grades and indicate how stormwater generated by the driveway will be handled.
2. The proposed discharge to the existing detention basin should include a flared end and rip-rap pad.
3. The applicant should perform a test hole in the vicinity of the proposed underground infiltration facility to determine seasonal high groundwater elevation and insure that there is two feet of separation between the bottom of the system and seasonal high groundwater. The detail shows seasonal high groundwater elevation as 96.7, which is incorrect.
4. The infiltration basin shows the 100-year storm elevation above the elevation of the berm for this facility. The Stormwater Management Guidelines require one foot of freeboard between the 100-year storm elevation and the top of the basins berm.
5. The hydrologic calculations provided include only flows from subcatchments and do not include flows for the existing and proposed stormwater basin or the underground infiltration facility. The complete calculations for all storms need to be provided. It appears that the flows shown in the summary table are inconsistent with the flows shown on the subcatchments.

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6. The routing diagram for the hydrologic calculations show the underground infiltration system discharging to the stormwater basin. It is unclear how this connection occurs. The plans – and perhaps the existing conditions plans – should show this connection.
7. Pipe sizing calculations should be provided.
8. We recommend that additional information be provided describing the outlet control structure from the underground infiltration system.
9. The plans seem to imply that there is a stone diaphragm proposed along the paved pad. The pad also contains a water quality treatment device. It is unclear whether all the stormwater runoff over the pad is intended to flow towards the water quality structure. If so, there should be curb shown on the plans that directs water to the structure.
10. A water quality treatment device detail should be added to the plans.

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
Director of Planning

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