

March 15, 2016

Mr. John G. Radcliffe
Chairman
New Bedford Conservation Commission
New Bedford City Hall
133 William Street
New Bedford, MA 02744

RE: Nitsch Project #9972
Polymerine Site
New Plainville Road
New Bedford, MA

Dear Mr. Radcliffe:

This letter is in regards to the Site Improvements Project at the Former Polymerine Site in New Bedford, Massachusetts. Nitsch Engineering has reviewed the following revised items submitted as part of the proposed project:

- Response to comments letter dated March 9, 2016, prepared by Tighe and Bond;
- Plans entitled, "City of New Bedford, Former Polymerine Site, Site Improvements Project, 241 Duchaine Boulevard, New Bedford, Massachusetts," prepared by Tighe and Bond, revised March 2016; and
- Supporting documents including an Operations and Maintenance Plan.

Subsequent to this submittal, a phone conversation was held on March 10, 2016 to discuss the response to comments between representatives from the City of New Bedford, Tighe and Bond, and Nitsch Engineering. This discussion mainly focused on the need to provide stormwater best management practices to the maximum extent practicable consistent with the Stormwater Management Guidelines. Tighe and Bond produced additional documents based on the results of that conversation, as follows:

- Response to comments letter dated March 14, 2016, prepared by Tighe and Bond;
- Plans entitled, "City of New Bedford, Former Polymerine Site, Site Improvements Project, 241 Duchaine Boulevard, New Bedford, Massachusetts," prepared by Tighe and Bond, revised March 2016 (sheets 6 and 7 only);
- Report entitled, "Stormwater Report, Former Polymerine Site – 241 Duchaine Boulevard," prepared by Tighe and Bond, dated December 2015; and
- Supporting documents including best management practices sizing calculations, grassed channel design calculations, Total Suspended Solids (TSS) removal calculations, and a revised Operations and Maintenance Plan.

Nitsch Engineering has reviewed the recently revised information. We have the following comments:

1. The project has been revised to include additional stormwater management water quality best management practices including a crushed stone filter strip, water quality swales, a vegetated filter strip, and a sediment forebay. The proposed water quality best management practices do not meet the 80% TSS removal requirement. Each train provides between 63% and 73% TSS removal. Because the project is a redevelopment project, it is only required to meet this requirement to the maximum extent practicable.

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2. The proposed driveways are graded to drain overland and eventually to water quality swales located to the east and north of the proposed parking area. Therefore, water quality treatment provided on the entry driveways is lower than described in the TSS removal spreadsheets. As discussed with Tighe and Bond, water quality best management practices should be provided along the driveways such as swales, etc.
3. We recommend that additional grading information, including spot grading, be added to the plans in order to provide the contractor additional information to insure the water quality best management practices are built properly. As shown, the swale located to the south of the proposed parking lot appears flat when it should really convey flow towards the sediment forebay. The swale located to the northwest of the parking area should include additional grading. As drawn, the swale only appears 60 feet long. We recommend lengthening the swale along the entire length of the parking lot as much as possible.
4. We recommend that additional information be added to the swale detail. The provided detail doesn't show swale depths, widths, etc. The sizing sheets developed for the swales shows each swale as different widths. The Contractor should be able to understand the width of each swale from the plans and details.
5. During our phone conversation with Tighe and Bond, there was concern about installing best management practices that may create a situation where stormwater will infiltrate into the contaminated soils. We discussed lining the best management practices with an impervious membrane or clay liner. The liner should be added to the best management practices details.
6. As designed, the sediment forebay will only detain water generated by a small portion of the southwestern side of the parking lot. We recommend moving the riprap berm so the forebay detains water that is conveyed by the swale located to the south of the parking area.
7. The sediment forebay berm should be revised so there is a consistent top elevation. The top of the berm should extend to the top elevation of the forebay.

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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