

2 Center Plaza, Suite 430 Boston, MA 02108-1928 T: 617-338-0063 F: 617-338-6472

www.nitscheng.com

April 13, 2018

Mr. Craig Dixon Chairman New Bedford Conservation Commission New Bedford City Hall 133 William Street New Bedford, MA 02744 RE: Nitsch Project #9972
Plumbers Supply Company
Flaherty Drive
New Bedford, MA

Dear Mr. Dixon:

This letter is in regard to the proposed Plumbers Supply Company located on Flaherty Drive 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 "Proposed Site Development, Plumbers Supply Company, Map 133 Lot 61, Flaherty Drive, New Bedford, Massachusetts," prepared by Field Engineering Co., Inc., dated March 16, 2018.
- Notice of Intent Application Documents, Proposed Site Development, 0 Flaherty Drive, Assessor's Map 133, Lot 61, New Bedford, Massachusetts, prepared by Field Engineering Co., Inc., dated March 22, 2018
- Report entitled "Stormwater Management System Report, Plumbers Supply Company, Proposed Office/Warehouse Facility, Flaherty Drive, New Bedford, Massachusetts," prepared by Field Engineering Co., Inc., dated March 16, 2018.

The proposed project includes the development of a 156,480-square-foot office and warehouse building with associated access driveways, parking, utilities, and a stormwater management system.

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

- 1. The project shows the construction of a 156,480-square-foot office and warehouse building. It appears that the stormwater system was designed to accommodate this building and parking only. However, the site layout plan also shows an approximately 156,000-square-foot addition with expanded parking and access driveways. The site of the warehouse expansion is also depicted as a possible stockpile area. The calculations do not account for either the expansion or the stockpile area. In order for the stockpile area to be developed we assume the area will need to be cleared, changing the ground cover.
- 2. Four test holes were performed on the property indicating that seasonal high groundwater is between two and three feet from the surface. It does not appear that the test holes correspond to either the infiltration trench location or the detention basin. Due to the length of the infiltration trench, we recommend additional testing along the trench. Existing grade on the east side of the trench is approximately elevation 88, which indicates seasonal high groundwater at approximately elevation 85. The bottom of the trench is at elevation 83. The Stormwater Management Guidelines require two feet of separation between the bottom of infiltration facilities and seasonal high groundwater.
- 3. We also recommend that additional soil testing be performed in the extended detention/infiltration basin. Existing ground is between elevation 81 and 78 in the vicinity of the basin. The bottom of the basin is at elevation 78. Therefore, we believe there will not be two feet of separation between the bottom of the basin and seasonal high groundwater.
- 4. There is a five-foot earth cut proposed in the island north of the building. There may be some issues with groundwater associated with that cut.
- 5. The plans indicate that the wetlands line was approved in 2003. Any significant changes to the wetlands line could impact the site development and ultimately the stormwater management system.
- 6. We recommend that double washed stone be used in the infiltration trench.

Mr. Craig Dixon: Nitsch Project #9972 April 13, 2018 Page 2 of 2

7. We recommend that Note 7 in the Operation and Maintenance Plan specify that the site be swept following the snow melt in the spring.

8. Slightly different infiltration rates were used for the detention basin (1.020 in/hr) and infiltration trench (1.030 in/hr).

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

SDT/mma

P:\9972 New Bedford NOIPR\Correspondence\Outgoing\2018 -04-12 Plumbers Supply review letter.docx