



ENGINEERING A BETTER TOMORROW
ENGINEERING | SITE WORK | LAND SURVEYING

September 29, 2017

Mr. Craig Dixon., Chairman
New Bedford Conservation Commission
New Bedford City Hall
133 Williams Street
New Bedford, MA 02740

RE: Respons to Peer Review Comments
61 John Vertente Boulevard – New Bedford, MA
SE 049-0770

Dear Mr. Dixon and Commission members:

On behalf of the applicant, Parallel Products of New England, please find revised Site Plans and Stormwater Report enclosed with this letter. Revisions have been made in response to the comment letter prepared by the Nitsch Engineering dated September 1, 2017 in regards to their review of the Site Plans. Revisions have also been made in response to the comment letter prepared by the New Bedford Department of Environmental Stewardship dated September 8, 2017 in regards to their review of the proposed Wetland Replication Area. Our responses to the comments provided in both letters are provided on the following pages.

We trust the attachments noted above and included herewith will provide the necessary documentation to address their comments. If you should have any questions, please feel free to contact us.

Very truly yours,

FARLAND CORP., INC.

Christian A. Farland

Christian A. Farland, P.E., LEED AP
Principal Engineer and President

Nitsch Engineering Comments

Comment #1:

The site includes C and D soils. The area of proposed work is in D soils. Therefore, groundwater recharge is not required.

RE: No response necessary.

Comment #2:

The proposed culverts underneath the proposed driveway in the area of the wetlands fill do not have sufficient cover. We recommend these culverts be revised to ductile iron pipe to provide additional cover.

RE: Culverts have been revised to ductile iron pipe.

Comment #3:

The proposed basin does not include any pretreatment prior to discharge to the proposed stormwater basin.

RE: The proposed stormwater basin has been designed as a dry detention basin, which does not provide water quality treatment or TSS removal. The basin is provided for peak rate attenuation only. Because no water quality treatment is provided within the basin, Dry Detention Basins are not required by the Stormwater Handbook to provide pre-treatment.

Comment #4:

It does not appear that test holes have been performed in the vicinity of the proposed stormwater basin. Test holes should be performed to verify seasonal high groundwater elevation.

RE: A test hole has been performed at the location of the proposed dry detention basin to verify seasonal high groundwater elevation.

Comment #5:

The existing conditions and proposed conditions drainage areas are slightly different.

RE: Calculations have been revised such that the overall area evaluated in pre- and post-development conditions is consistent.

Comment #6:

The time span used in the existing conditions hydrologic calculations is different than the time span used in the proposed conditions calculations. The time spans should be the same.

RE: The time span utilized for pre- and post-development calculation have been revised for consistency.

Comment #7:

The Total Suspended Solids calculations do not include the gravel parking area.

RE: Gravel parking areas are not impervious surfaces for the purposed of determining compliance with Stormwater Standard 4.

Comment #8:

The project includes the filling of 700 square feet of wetlands and 930 square feet of replication.

RE: Additional wetland replication area has been provided in response to comments provided by the Department of Environmental Stewardship

Comment #9:

We recommend that rip-rap be placed on the downstream end of the overflow weir.

RE: The outlet from the stormwater basin has been revised to include an outlet control structure. Rip-rap has been provided on the downstream end of the outlet control structure's piped outlet, as well as the downstream side of the proposed emergency spillway.

Comment #10:

It is unclear how the extents of the drainage analysis were determined. For instance, the large parking lot on the west side of the site was included in the analysis but the stormwater basin and areas contributing to it were not. Both areas discharge to the drainage swale.

RE: The extents of the areas analyzed reflect those areas where alterations resulting from the proposed work are anticipated to affect the existing drainage pattern. Proposed work will not contribute to runoff entering the existing stormwater basin.

Comment #11:

The relocated fuel tank appears to have been placed on the side slope of the existing stormwater basin. We recommend it be moved to a flatter area.

RE: The fuel tank has been moved to a flatter area.

Comment #12:

The applicant should provide calculations documenting that the existing piping system in the existing parking lot can accommodate the additional flows generated by the new pavement. Pipe sizing calculations should be provided.

RE: Pipe sizing calculations have been provided. Calculations indicate that the existing piping system cannot adequately accommodate existing stormwater flows. Given the elevation of the existing discharge pipe within the wetlands, altering the pipe elevation

to provide adequate slope is not possible. The minimum amount of cover over the proprietary separator's outlet pipe has been provided. The proposed water quality unit will not negatively affect the existing piping system.

Comment #13:

We understand that the limits of the existing wetlands on site need to be verified. If the limits of the wetlands are expanded, it could impact the design of the 'infiltration' basin as well as expand the 25-foot buffer to the wetlands.

RE: The limits of the bordering vegetated wetland have been reviewed by EcoSystem Solutions. Wetland flags 226A and 226B have been added to the swale portion of the line to the west of the existing driveway gate. It was determined that the remainder of the swale to the west of the existing gate does not constitute a wetland resource area. The swale is lined with rip-rap from the new flags to its western terminus. The basin has been revised to maintain the required buffer zone.

Comment #14:

We recommend that spot elevation be provided on the grading plan consistent with the top of berm elevation shown on the details.

RE: Spot grades have been added to the grading plan depicting the top of berm elevations shown on the details.

Department of Environmental Stewardship Comments

Comment #1:

Please revise Note #4 under Wetland Replication Construction to state access to the wetland replication area shall occur from upland areas and shall not result in impact to existing wetlands (access can be facilitated from west of the stormwater basin 1 where truck access is proposed).

RE: Note #4 has been revised as recommended.

Comment #2:

As discussed at the Conservation Commission meeting of 8/8/2017, please increase the size of the replication area so that is 1 ½ part wetland replication to 1 part wetland impact area.

RE: The proposed wetland replication area has been increased to meet the recommended ratio.

Comment #3:

Additional straw wattles should be placed from wetland flag 232 to 236 and wetland flag 241 to 243 to protect the adjacent wetlands during construction of the wetland replication area.

RE: Additional straw wattles have been proposed at the requested locations.

Comment #4:

A soil profile of the wetland replication area is required. The profile shall indicate, among other characteristics, the depth to seasonal high water table and depth of soil horizons.

RE: A soil profile of the proposed wetland replication area has been provided.

Comment #5:

The wetland scientist is to provide a list of species in the surrounding wetland to validate that the proposed wetland plantings match the existing wetland vegetation.

RE: A list of species in the surrounding wetland has been provided by Ecosystem Solutions.

Comment #6:

The proposed Nyssa sylvatica tree is within the utility easement which is kept clear of any tall trees. Please provide a shrub substitution for this tree.

RE: The Nyssa sylvatica tree has been removed and replaced with a shrub substitution.

Comment #7:

The shrub and fern density proposed (8' on center) is too sparse. Please revise to have shrubs planted at 5' or 6' on center. The ferns should be planted 3'-5' on center.

RE: Shrub and fern density has been revised to reflect the recommended spacing.

Comment #8:

The replication area shall be excavated to 12" below final finish grade (not 6") and backfilled with the wetland soils from the impact area or with a blend of one part sandy loam and one part composted leaves or peat moss.

RE: Construction notes have been revised to reflect the recommended excavation depth and backfill materials.

Comment #9:

Boulders are not to comprise more than 15% of the coverage of the replication area.

RE: A note has been added to restrict the boulder coverage in the replication area.

Comment #10:

The resume of the Applicant's Wetland Professional who shall oversee the construction of the wetland and the wetland replication area, is to be submitted to the Conservation Commission or its designated agent, for acceptance two weeks prior to the initiation of replication activities.

RE: Agreed. No response necessary.

Comment #11:

The final elevations of the wetland replication area shall be shown on an as-built plan (0.50' contours) and stamped by a Massachusetts Professional Land Surveyor. A copy of the stamped as-built shall be provided to the New Bedford Conservation Commission for acceptance prior to the wetland plantings.

RE: Agreed. No response necessary.

Comment #12:

The seasonal high groundwater elevation in the wetland replication area shall be verified by a Certified Soil Scientist, Wetland Professional, or Professional Civil Engineer prior to planting. A stamped plan showing the elevation of the seasonal high groundwater table shall be provided along with verification that it will support the proposed wetland plantings.

RE: The estimated seasonal high groundwater in the vicinity of the proposed wetland replication area was determined by the wetland professional at the time of delineation. The seasonal high groundwater was determined to be approximately 18" below surface elevation. The profile of the wetland replication area provided on the site plans indicate the estimated seasonal high groundwater.

Comment #13:

In compliance with 310 CMR 10.55(4), the wetland professional shall submit monitoring reports documenting the success of the wetland replication areas. These reports shall document the establishment of at least 75% coverage of indigenous wetland plants within the replication area. These reports shall be provided at the end of construction and once a year for two years. The Conservation Commission reserves the right to request additional seeding or planting to guarantee the success of the replication areas. Proposed shrub and tree plantings that die during this time period shall be replaced. The report shall also document the presence of invasive species within the replication area and recommend controls methods.

RE: Agreed. No response necessary.

Comment #14:

The applicant shall be responsible for conducting invasive species control methods in the wetland replication area as recommended by the wetland professional and/or the Conservation Commission.

RE: Agreed. No response necessary.