

December 1, 2021

Mr. Sarkisian, Town Planner Town of Wayland 41 Cochituate Road Wayland, MA 01778

Attn: Mr. Sarkisian, Town Planner

Re: Wayland, MA – Lee's Farm Stand (136 Boston Post Road) Stormwater Review

Dear Mr. Sarkisian:

BETA Group, Inc. (BETA) is pleased to provide peer review services for stormwater management of Lee's Farm Stand at 1136 Boston Post Road. This letter is provided to outline BETA's findings, comments and recommendations based on a high-level review as requested.

#### **BASIS OF REVIEW**

BETA received the following items:

- Stormwater Management Narrative, Lee's Farm Stand 136 Boston Post Road, Wayland, MA dated November 2021, prepared by BSC Group
- ➤ Plan Set (6 sheets) titled: Roadside Farm Stand 136 Boston Post Road in Wayland MA, dated November 2021, prepared by BSC Group
- Test pit and groundwater monitoring data including:
  - Site Layout Plan with Test Pit Locations, dated June 8, 2012 with revision date July 16, 2012, prepared by Stephenson Design Group
  - Percolation Test Form 12 & Soil Suitability Assessment Form 11, dated April 27, 2011
  - Hydrogeologic Groundwater Mounding Evaluation Report for Proposed Soil Absorption System at 134 Boston Post Road, dated July 20, 2011, prepared by McPhail Associates

Review by BETA included the above items along with the following:

- > Town of Wayland Stormwater and Land Disturbance Zoning Bylaw, Chapter 193, Zoning
- Massachusetts Stormwater Handbook, effective January 2, 2008 by MassDEP

### **REVIEW SCOPE**

As requested, BETA's review of the project is limited to the stormwater management design for general conformance with MA stormwater standards and the Town bylaw. Detailed calculation review of other site plan components can be completed at the Town's request.

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### INTRODUCTION

The project site is located at 136 Boston Post Road in Wayland, MA. The proposed work is limited to a 2.4± acre section of the 4.58± acre property, a portion of which is developed as a roadside farm stand. The northern portion, outside of the limits of proposed work has been developed with an assisted living facility. The applicant is proposing to revive the former farm stand and expand the agricultural use by constructing a 1,040 SF barn, access road, parking areas, cultivation areas and stormwater management facilities. There is access proposed off Boston Post Road. The property is in the Roadside Business District. Proposed stormwater infrastructure includes a bioretention area adjacent to the existing farm stand, a stormceptor catch basin and subsurface infiltration system to treat parking and driveway pavement runoff and drywells to infiltrate roof runoff from the proposed barn.

Hayward Brook is located along the west side of the property with associated floodplain, wetlands and wetland buffer zone and riverfront area as depicted on the proposed plan set. The project keeps all proposed work outside of these resource and buffer areas. NHESP maps indicate this development does not contain endangered species or rare wildlife habitat areas on the site. NRCS Soils mapping indicates Merrimac fine sandy loam soils with loamy sand deeper in the profile and Haven-Urban land complex both with a Hydrologic group rating of "A" (high infiltration rate) and depth to water table estimated to be more than 80 inches. Monitoring well data provided indicates the site's ground water is at elevation 131+/- which provides adequate separation from proposed infiltration systems.

The project is part re-development with 0.29 ac (12.4%) existing impervious and 0.480 ac (20.5%) impervious in the proposed condition, a net gain of 0.19 ac or 8,275 sf of impervious area according to the stormwater narrative calculations.

CHAPTER 193 ZONING STORMWATER AND LAND DISTURBANCE REVIEW (INC. MA STORMWATER STANDARDS)

# Section 193-4 Applicability

The proposed project is subject to the stormwater and land disturbance bylaw because it proposed more than 5,000 square feet of disturbance and increases existing impervious surface by more than 500 square feet.

## Section 193-1 Purposes and Objectives

The proposal includes stormwater management design to control volume and rate of runoff from impervious areas through surface and subsurface infiltration best management practices (BMPs). Calculations have been provided indicating a negligible increase in peak rate of stormwater runoff from the site in the post construction condition. The proposal is an improvement to the existing condition where there is currently no stormwater management for the portion of the existing farm stand and associated parking area that discharges toward Boston Post Road. Construction phase erosion sediment and erosion controls are proposed. BETA's general comments and recommendations are as follows:

C1. Existing and proposed conditions coverage for runoff calculations are modeled using HSG B designation, however, the infiltration rate of 2.41in/hr (associated with HSG A soils) is used to model the BMP infiltration rates. Revise calculations to be consistent in the soil classification based on NRCS. MassDEP has a process for changing designation from NRCS mapping based on extensive on-site testing.



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- C2. Test pit data provided is difficult to decipher in relation to the proposed infiltration BMP locations. Test pits provided identify sandy loam (HSG B). Identify location of applicable test pits on the design plans. MassDEP stormwater standards require test pits within the proposed BMP locations to confirm soil texture. BETA recommends a condition of approval for inspection of subsoils by design engineer or a representative of the Town during installation of infiltration BMPs to verify design assumptions are met with field verified soil conditions.
- C3. The western portion of the site had been impacted by a historic gasoline release into the groundwater from a former gasoline station. Executive Office of Energy & Environmental Affairs Waste & Reportable Releases Database indicates that a Response Action Outcome was issued and the site does not have any restrictions listed where work is proposed. Provide confirmation from an LSP that the proposed infiltration will not exacerbate site conditions.
- C4. Provide a stormwater standards checklist with the stormwater narrative.
- C5. Provide a long-term O&M plan for structural stormwater controls and nonstructural stormwater management practices to ensure they continue to function as designed and are maintained. Include a map with BMP locations identified. Require signature of the plan by property owner.

If we can be of any further assistance regarding this matter, please contact us at our office.

Very truly yours, BETA Group, Inc.

Melissa Recos, PE

Senior Project Manager

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Job No: [10234]

