May 15, 2017

Weston Zoning Board of Appeals  
c/o Mrs. Winifred I. Li  
Zoning Board of Appeals, Chair  
11 Town House Road  
Weston, MA 02493

Dear Mrs. Li:

Nitsch Engineering is pleased to provide the Town of Weston (the Town) Zoning Board of Appeals (ZBA) with this review of the drainage report and plan sets for the Chapter 40B Comprehensive Permit Development known as Stony Brook Weston, located at 104 Boston Post Road in Weston, Massachusetts. Nitsch Engineering’s review was for conformance with the Town Stormwater By-Law, Massachusetts Stormwater Management Regulations, and general engineering practice.

The Applicant submitted the following preliminary site development and utility plans for review:

- Plan set entitled “Stony Brook Weston, 104 Boston Post Road, Weston, MA,” dated March 28, 2017;
- “Drainage Report Cover Letter,” prepared by Allen & Major Associates Inc., dated May 5, 2017; and

Nitsch Engineering reviewed these documents based on the Massachusetts Department of Environmental Protection (MassDEP) Stormwater Management Standards, the Town Stormwater and Erosion Control Regulations, and Standard Engineering Practices. Nitsch Engineering’s comments are intended to assist the ZBA in understanding the proposed project, identifying technical issues related to the site development, and making recommendations of possible technical improvements to the proposed design.

Nitsch Engineering offers the following comments and recommendations:

1. On sheet C-3A of the Site Development Plans, the lower level garage finish floor elevation is 104±.

The lower level garage will be 27± below the existing grade. A geotechnical report has not been provided with the high ground water, so it is unknown if the lower level garage will encounter groundwater. The site stormwater water management system does not consider additional groundwater via foundation drains, sump pumps, or other methods of groundwater mitigation from the lower level garage.

Additional flows from any dewatering/groundwater sources need to be quantified to ensure that the stormwater management system works as designed and that compliance with stormwater management standards is met.

2. No infiltration is proposed for the project. Per Massachusetts Stormwater Manual Standard 3 and
because the site is being considered a new development, infiltration should be proposed for the site. The Drainage Report states the following: "Stormwater infiltration for the project is not proposed due to the inability to confirm groundwater elevations and infiltration rates based on the change in topography. Once the project is established at its proposed subgrade, soil testing can be accomplished and if found favorable, the detention system will be modified to an infiltration system." Due to the depth of the detention system, it is unlikely the soils and groundwater will be favorable for infiltration. It is recommended that other design approaches be evaluated to satisfy Massachusetts Stormwater Manual Standard 3.

3. Per Town Stormwater and Erosion Control Regulations, "Projects are to be designed such that the peak rates of stormwater run-off volumes in the post development conditions are less than in the pre-development conditions." The total run-off volumes for pre-development versus post-development conditions are increases from pre-development to post-development. For some storm events, the increase in stormwater volumes from the site increase over approximately 90% in the post-development condition.

4. Internal garage drainage information is not provided on the plans. The Applicant should confirm that the garage drainage will not be connected to the stormwater management system, or, if it is, that stormwater quality measures will be in place to ensure compliance with stormwater standards.

5. The existing site is steeply sloped. Slopes on the southern portion of the site are typically between 20% and 30%. Temporary (during construction) protection for these slopes should be provided for on the plan set.

6. The proposed site run-off is directed to a single discharge point. Currently stormwater flows from the site are dispersed across the southern property line. Erosion may occur downslope of the proposed discharge point due to increase in stormwater run-off volumes and the downstream slopes of approximately 10%. The effects of concentrating the discharge should be investigated by the Applicant to ensure that there are no downstream impacts to Sibley Road or abutting properties.

7. It is not clear from the drawings how trach will be stored/removed from the site.

8. In the HydroCAD report, subcatchment E-2A is used in both pre-development and post-development models. The contributing areas to E-2A are not the same for both the models. It is unclear why the contributing areas are not the same.

Nitsch Engineering’s review of the project did not include review of the wastewater treatment system or of traffic impacts from the project. Nitsch Engineering understands that separate consultants will be reviewing those aspects of the project. Regarding the wastewater treatment system, Nitsch Engineering would be interested in understanding the following aspects of the system as they may relate to stormwater and wetland resources:

A. Are any chemicals proposed to be stored onsite as part of the wastewater treatment system;

B. Are there any emergency overflows or by-pass valves as part of the wastewater treatment system? If not, what measures are in place to ensure that untreated wastewater is not discharged from the site?

C. Are any emergency generators proposed as part of the project? If they are, where are they to be located and what type of fuel (and fuel storage) is being proposed?

D. How will waste products from the wastewater treatment system be stored and how will they be removed from the site? How often will waste products need to be removed and what measures are
being taken to for spill prevention?

E. How are odors from the wastewater treatment system being address?

We look forward to meeting with the ZBA at the hearing scheduled for Monday, May 22, 2017 to further discuss the project. Please contact us should you have any questions prior to the hearing.

Very truly yours,

Nitsch Engineering, Inc.

David M. Conway, PE, LEED AP BD+C
Senior Project Manager

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