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January 6, 2012

Town of Seekonk
Conservation Commission & Planning Board
100 Peck Street
Seekonk, MA 02771

Re: Proposed Walmart Store
1300 Fall River Avenue
Responses to Peer Review Comments – Second Review

Dear Members of the Conservation Commission & Planning Board:

Below please find our responses to a Second Review comment letter from Woodard & Curran, dated December 6, 2011. Below are the remaining items that Woodard & Curran feel were not completely addressed. For clarity, the original comments are in italics while our responses are directly below in normal font.

Planning Board Review

3. *The Applicant has stated that the minimum illumination of 2.0 foot-candles in all parking spaces is appropriate for the proposed use for the Site and has presented a lighting plan indicating a minimum of 2.0 foot-candles in all parking spaces. Since the Zoning By-law does not specifically define the designated use for Commercial (minimum of 2.0 foot-candles per Zoning) or Shopping Centers (minimum of 3.0 foot-candles per Zoning), Woodard & Curran will defer to the Planning Board to define the proposed use and minimum illumination level required.*

   We respectfully request approval from the Planning Board for the proposed lighting as shown on the current plans. As mentioned in our prior letter, the proposed LED light fixtures provide a more uniform light level than standard Halide or High Pressure Sodium lights and therefore a lower foot-candle output is appropriate.

5. *The Applicant has stated the proposed wastewater treatment plant (WWTP) has not yet been designed and stated, further, that the submission to the Town of the final WWTP design, which will require approval and a permit from the Massachusetts Department of Protection (MassDEP), can instead be made a condition of approval by the Town. Woodard & Curran agrees that the MassDEP has responsibility for issuing a permit for the WWTP; however, we recommend that the Board require the Applicant to provide the wastewater treatment plant design plans to the Board for review PRIOR to submission and final approval by the MADEP. The Board should review the plans for potential impacts of equipment sound levels and odor levels to the adjoining residences, which are elements that the MassDEP may not consider in its permit review.*

We will provide the wastewater treatment plant design plans to the Planning Board prior to submission and final approval by the MA DEP.

Traffic Review

It is our understanding that VAI will prepare a functional design report and off-site improvement plan to MassDOT for a 25% design submission to the agency for its review. The 25% design submission will include an extension of the rumble strip at the un-signalized intersection and also will incorporate lengthening of the left-hand turn lane at the signalized site entrance. At a minimum, to protect the Town's interest, as a condition of approval the Applicant shall incorporate these specific off-site improvements into the project. It is recommended that the Town:

- *Review the FDR and 25% plans prior to submission to MassDOT;*
- *Review the curb cut and/or access permit prepared for MassDOT;*
- *Receive MassDOT's comments and approval relative to the 25% submission; and*
- *If MassDOT's finding requires greater or lesser improvements on Route 6 by the applicant than was presented to the Town in the original plans or recommended by the Town in the previous review recommendations, the Applicant should present the differing improvements to the Town for further review and approval before submitting final documents to both MassDOT and the Town.*

Comments noted.

Conservation Commission Review and Vernal Pool Assessment

The Applicant has indicated the general location of the buffer zone/vernal pool restoration area and provided a vernal pool buffer area planting schedule on the Landscape Plan, Sheet C-4. The planting schedule includes the type, size, approximate quantity and spacing requirements for the proposed plants. The exact locations of the plants are not depicted on the plans. Since the exact number and locations of the plantings will be determined in the field at the time of construction, Woodard & Curran recommends that a wetland scientist be present during the installation of the plantings. We further recommend that the Applicant revise the planting plan to include the location and minimum quantity of plantings.

The Landscape Plan, Sheet C-4 has been updated to include a reference to the buffer zone restoration proposed and an enlarged Vernal Pool Buffer Area Planting Restoration Plan has been added to the Landscape Specifications and Details Sheet C-5, illustrating the locations and total quantity of plantings required.

Woodard & Curran recommends that the Applicant provide a monitoring plan for the buffer zone/vernal pool restoration area. The contents of this plan should include criteria for defining restoration success, an approach for monitoring vegetation growth and vitality, proposed mitigation measures, and a schedule for reporting findings to the Commission. We further recommend that monitoring be conducted for a minimum of two years post-restoration.

After consulting with the wetlands consultant AECOM, we propose that the restoration area be reviewed by site observations performed by a biologist a minimum of two (2) times each growing season. These site observations shall include the preparation of a record/log containing the vegetative composition of the % cover by each species. The planted vegetation

shall also be evaluated to ensure 80% survivability with replacement plantings installed for each planted specimen that does not survive the proposed monitoring period. The overall goal shall be 80% cover by non-invasive plant species after two (2) growing seasons and a memo with the log and summary of findings/recommendations would be issued to the Conservation Commission agent after each observation. We take no exception to the request of performing same for two (2) years post-restoration and ask that this be included as a condition of approval.

Notice of Intent – WPA Form 3

The Applicant has stated that a construction schedule has not been developed and that work within the Isolated Land Subject to Flooding (ILSF) wetland resource area will be avoided in the springtime to the extent that it will not cause delays to the overall construction schedule. Woodard & Curran recommends that the Applicant provide the detailed construction schedule to the Board and Commission. The schedule should be placed on the plans and the Commission shall be notified in advance if work within the ILSF will occur in the springtime.

As noted in our prior letter, a schedule has not yet been developed, due to the additional state and local permits required for this project. As such, we respectfully request that these requests be included within the conditions of approval, as the actual construction schedule will not be developed until the furtherance of the MEPA, MassDOT and MA DEP permitting processes.

Stormwater Review

6. *The Applicant has provided boring logs and a Groundwater and Borings Exhibit indicating the test locations to document the on-site soil characteristics. The Applicant has also established the estimated seasonal high groundwater for the site based on observed groundwater elevations in on-site monitoring wells. The Massachusetts Department of Environmental Protection (MassDEP) Stormwater Management Standards (SWMS) design criteria for Best Management Practices (BMPs) requires that soil evaluations for infiltration BMPs be performed in the location where the BMP will be sited. The MassDEP also requires that a minimum of three test pits or borings be performed within infiltration basins and a minimum of two test pits or borings be performed for subsurface infiltration chamber systems one hundred feet or less in length. For each additional fifty (50) foot increment above the one hundred foot length of an infiltration chamber system, an additional test is required. If borings will be performed, MassDEP requires that the borings be a minimum of twenty (20) feet deep or extend to the depth of the limiting layer when testing for infiltration basins. The number of soil tests required by MassDEP at the location of each BMP has not been met by the Applicant.*

   Woodard & Curran recommends additional testing be performed in compliance with MassDEP design criteria for the proposed infiltration BMPs. The table below indicates the number of soil tests required to be performed for each BMP to comply with MassDEP requirements. The testing shall be witnessed by Beth Hallal, Board of Health (BOH) agent. Applicant is responsible for coordinating testing with the Board of Health.

BMP	*Number of Soil Tests*
Basin #1	*Three (3) tests*
Basin #2	*Three (3) borings provided. No further testing required.*
Basin #3	*Three (3) tests*
Basin #4	*One (1) boring provided. Two additional (2) tests required*
Basin #5	*Three (3) tests*
Basin #6	*Two (2) tests*
Basin #7	*Three (3) tests*
Basin #8	*Three (3) tests*

The additional requested test pits were excavated and evaluated on December 22, 2011 and December 27, 2011 under the observation of our field engineer and Ms. Beth Hallal from the Seekonk Board of Health. A total of 22 deep test pits were performed as shown on the enclosed "Soil Test Pit Locations Plan" and soil boring logs.

The groundwater levels were generally found to be similar to, or higher than the levels recorded in the permanent observation wells used to design the stormwater management facilities possibly due to recent rainfall in the preceding days. Data from the National Weather Service's Providence office shows that the 2011 annual rainfall total is nearly 10 inches above average, which may be a factor in abnormally higher than normal groundwater levels. We also note that test pits 9, 10, and 11 (located within proposed Drainage Basin #8) yielded groundwater elevations four to five feet higher than expected, and are located adjacent to an active septic system, which likely accounts for artificially high groundwater levels. As a result of these findings, we revised the drainage designs for Drainage Basins #8 and #5 based on the observed groundwater data.

Drainage Basin #8 is now combined with Drainage Basin #1 and has a bottom elevation more than four feet above any observed groundwater levels. Further, the bottom elevation of Basin #5 has been raised 1.5 feet to provide two feet of separation to the observed groundwater level. Revised hydrologic routing calculations are included with this letter.

Groundwater mounding analyses have been provided for Basins #6 & former Basin #9 (currently Basin #8) based on the new data showing the bottoms of those basins to be within four feet of groundwater. Revised groundwater analyses for Basins #5 and #8 were also calculated and are also included with this letter.

7. *The Applicant has provided groundwater mounding calculations that indicate the groundwater mounding under the infiltration structures will not rise above the bottom of the infiltration structures. The Applicant should provide documentation to confirm the height of the water table above the base of the aquifer parameter (hi) used in the groundwater mounding calculations is 100 feet.*

Please refer to the attached cover and pertinent page taken from the "Guidelines for Geotechnical Site Investigations in Rhode Island" document, published by the University of Rhode Island for the Rhode Island Department of Transportation in 2005. The guidelines

note that bedrock in East Providence, RI is 70 to 140 feet below the mudline of the Seekonk River. The average height of the Walmart site is approximately 50 feet. The elevation of the Seekonk River at East Providence is sea level (0 feet) and the mudline is even lower, so if the bedrock elevation remains somewhat similar in adjacent Seekonk, the bedrock should be at least 120 to 190 feet below the ground surface. Therefore, we believe that 100 feet to bedrock is an appropriate and conservative depth

27. *Stormwater Standard 8, Erosion and Sedimentation Control comments:*

Woodard & Curran recommends the infiltration areas be encompassed with construction fence and siltation protection devices in order to avoid incidental compaction and clogging during construction operations.

The proposed E&S measures planned include extensive BMP's which eliminate the transport of sediments to downstream structures. As such, we take no exception to the installation of construction fence, where practicable, once each infiltration area is constructed. However, additional siltation protection devices do not appear to be warranted or of a concern. Further, as noted in our prior response letter, a note has been added to the Grading and Drainage Plan, Sheet C-2 instructing the contractor to limit construction traffic over infiltration areas.

Woodard & Curran also recommends that, as a condition of approval, the Applicant submits the final Stormwater Pollution Prevention Plan to the Commission prior to construction for their review.

We take no exception to this condition of approval as noted in our prior response letter.

30. *Stormwater Standard 10, Illicit Discharge comment:*

Woodard & Curran recommends that the applicant provide an Illicit Discharge Compliance Statement signed by the Owner to the Commission.

As noted in our prior response letter, an Illicit Discharge Compliance Statement signed by the Owner will be provided to the Commission prior to the discharge of any stormwater to post-construction BMPs. As such, we respectfully request that this be included as a condition of approval.

Conclusion & Recommendations

The applicant has provided documentation to address Woodard & Curran's comments noted in our initial review correspondence dated November 11, 2011. Woodard & Curran met with members of the Applicant's design team to discuss the additional documentation. Based on this meeting and our review of the additional documentation provided, Woodard & Curran recommends that the Applicant address the bulleted items listed above.

Woodard & Curran recommends the additional soil testing be performed & submitted prior to Planning Board & Conservation Commission approval.

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Comment noted. As mentioned above, copies of the soil testing findings and revised drainage calculations have been included within.

We believe that the above issues have been adequately addressed in our preceding responses. We look forward to discussing the above further with the Conservation Commission, Planning Board, and Woodard & Curran. Should you have any questions or require additional information, please do not hesitate to contact either of us at (508) 480-9900.

Sincerely,

BOHLER ENGINEERING

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