

15 April 2013

Mr. Don Brockel, Chairman
The Deal Lake Commission
100 Grasmere Ave
Interlaken, NJ 07712

*Scientists, Engineers &
Environmental Planners
Designing Innovative
Solutions for Water,
Wetland and Soil
Resource Management*

**Re: Sansone Auto Dealership
Block 141, Lots 7.01 and 9
Ocean Township, New Jersey**

Dear Mr. Brockel:

Princeton Hydro, LLC (Princeton Hydro) has completed our review of the stormwater management system proposed for the planned expansion of the Sansone Auto Dealership, Block 141, Lots 7.01 and 9, Ocean Township. This is essentially a redevelopment project that involves in part the razing of existing structures located on Lot 9 and the reuse of an existing parking lot on Lot 7.01. The project consists of three phases, with the majority of the new development work associated with Phase II. Our analysis reflects our assessment of the entire stormwater management system that will be in place at full build-out; the completion of Phase III of the project. Princeton Hydro's comments are based on the plans, drainage calculations and supporting reports prepared by KZA Engineering. The most recent revisions of the KZA documents are dated 28 March 2013.

Our review of the plans show that this development will rely on a combination of stormwater management measures including pervious pavement, manufactured treatment devices (MTDs) and a sub-surface detention system to control and treat the post-development runoff generated from the site. Overall we find the proposed measures to be consistent with the NJDEP stormwater management rules and the DLC's objectives in improving stormwater inputs to Deal Lake. Details of the stormwater management system are provided on Sheets 6-8, 12-14 and 23-24 of the KZA plans.

It should be noted that not all of the runoff that will be generated from the site will be controlled or treated by the proposed stormwater management system. Review of the plans show that sub-watersheds A and B will not be managed. Sub-watershed B consists of largely undeveloped land that lies outside of the lot boundaries of the site (off-site drainage). Sub-watershed A consists of an existing parking lot located on a currently developed portion of Lot 7.01. Runoff from both areas A and B eventually drain to the Route 35 drainage system. It should be noted that although the runoff from sub-watershed A is not treated, the overall area draining to the Route 35 drainage system will actually be reduced following completion of the site's development, because a portion of existing sub-watershed A will become part of sub-watershed D. The drainage from sub-watershed D is controlled and treated. Although no new treatment is proposed for the remaining runoff from sub-watershed A, the stormwater from that portion of the site does flow at

least flow through an approximately 120' long stone lined swale that runs along the property divide between Lot 7.01 and Lot 8 before emptying into a catch basin along Route 35.

Overall, the stormwater management system that is being proposed is acceptable. First, the proposed stormwater management system meets the peak flow reduction requirements of State's stormwater rules, NJAC 7:8. Second, the suspended solids removal projected for those portions of the site that will be redeveloped is in the 90% range, which exceeds the minimum standard required by NJAC 7:8. Third, the complete Phase III stormwater management system should result in a reduction of the total volume of runoff generated from the site owing to the functionality of the pervious pavement. Fourth, the Phase III design also satisfies the post-development recharge requirement of NJAC 7:8. Thus, overall the proposed stormwater management system is consistent with the stormwater management goals of the DLC, especially for a redevelopment site.

It should be noted that the proposed development will result in the loss of some existing wetlands and trees. The wetland area in question is located along the northern edge of the existing parking lot located on Lot 7.01, adjacent to Lot 16. The applicant has filed for General Permit 6, but the permit is still being reviewed by the NJDEP and is thus pending. This project also involves a number of variances and waivers. The majority of the variances are required largely due to the existing non-conforming use of the site and the expanded use of Lot 7.01. Many of the waivers are outdoor vehicle display, sign and signage related. None of the variances and waivers are environmental or stormwater related. All of the proposed erosion and sediment control measures appear consistent with that required by the Freehold SCD (refer to Sheets 19-22).

The only item that appears to be outstanding is a detailed Operations and Maintenance Plan for the stormwater management system. This is a requirement of NJAC 7:8. Given the heavy reliance of the proposed stormwater management system on pervious pavement and sub-surface stormwater controls (MTDs and detention system), we strongly suggest that the DLC request a copy of the plan. Details should be provided in the O&M plan of the frequency of inspection (minimum of four times per year) and maintenance of the overall system. This should include a sweeping/vacuuming schedule for the pervious pavement. Also the plan should contain reporting sheets and a reporting schedule (typically annually). If possible the DLC should ask to receive a copy of the annual maintenance report.

This concludes our report. If you have any questions, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read 'Stephen J. Souza', written in a cursive style.

Stephen J. Souza, Ph.D.
President

