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VIA Email (Csplendore@rpmcbriidelaw.com)

October 24, 2014

The Cutler Group
5 Apollo Road, Suite 1
Plymouth Meeting, PA 19462

Attn: Charles P. Splendore, Jr.

**RE: Proposed Stormwater Infiltration Facilities
Zieger Subdivision
Upper Dublin Township, Montgomery County, PA
DelVal #05-611a**

Mr. Splendore:

DelVal Soil & Environmental Consultants, Inc. (DelVal) has reviewed the soil, topographic, and geologic information available for the above referenced property to provide a response to the following plan review comment number 4 on page 7 of the Metz Engineers October 15, 2014 review letter:

"There are a number of houses with basements that are close to Basins A and B and Bio Basins A1, B1, and B2. We have concerns about stored runoff affecting the following units: 4-10, 16-27, and 42-46. S.M.O. 206-36. We request an engineer analyze this situation and provide documentation that the basins will have no effect on the basements listed or any adjoining properties. We recommend the consideration of a clay liner."

The site is underlain by the Stockton formation which is composed of weathered sandstone and shale bedrock. The site is not underlain by limestone and contains no karst features. In addition, detailed soil testing has been performed throughout the site to demonstrate suitable soil permeability for stormwater infiltration facilities. The soil testing indicated relatively high vertical hydraulic conductivities at the stormwater infiltration facilities. Based on the documented soil and geologic conditions on site, the flow of stormwater is projected to be vertical with little to no lateral movement of the infiltrated stormwater anticipated.

A review of the proposed BMP locations relative to the proposed homes shows that the BMP's will be located approximately 20 to 116 feet from the nearest home. The bottom elevations of the proposed BMP facilities are lower than the proposed basement floor elevations of the adjacent homes. As the BMP facilities are located down-gradient of the proposed basements, stormwater will not migrate horizontally or vertically from the BMP's up-gradient into the proposed basements. Based on this evaluation, the proposed BMP's are located a sufficient distance from the proposed homes and a clay liner is not required.

A review of the offsite homes relative to the infiltration facilities shows the nearest off site home is located 80 feet from an infiltration facility. Based on the relatively high vertical hydraulic conductivity of the soil and geologic conditions, the projected stormwater flow is vertical from the base of the infiltration BMP's and will not flow laterally to the existing homes. It is our professional opinion, the proposed infiltration facilities are located a sufficient distance from the offsite home and a clay liner is not required.

If you have any questions, please do not hesitate to contact our office.

Sincerely,
**DeVal Soil & Environmental
Consultants, Inc.**


Jeffrey S. Clark, P.G.
Senior Hydrogeologist

