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December 14, 2018

Oakland County Water Resources Commissioner  
One Public Works Drive, Building 95 West  
Waterford, MI 48328-1907

RE: Berkshire Site Condominium  
City of Rochester Hills, Section 25

Dear Commissioner,

This is an engineering certification letter for enlarging the Ireland Drain drainage district. The Ireland Drain is the best option for a storm sewer outlet for the site. It is not feasible for the proposed site condominium to have two storm sewer outlets, and the Ireland Drain is easily accessible from the site.

Also, the Ireland Drain has sufficient capacity to service the entire site. Under the current conditions, the OCWRC designed this parcel to outlet to the Ireland Drain with a "C" factor of 0.298. Setting the allowable outflow per the rational method ( $Q=CiA$  with  $C=0.298$ ;  $i=175/(T+25)$ ;  $T=20$  minutes;  $A=2.31$  Acres) the allowable outflow is 2.68 CFS. We have set this as the allowable outflow for the proposed site condominium to minimize downstream impacts.

For these reasons, we believe that the Ireland Drain is the best storm sewer outlet for this site, and by enlarging its drainage district the current drainage service will not be diminished. Please contact us if you have any questions or comments.

Sincerely,

A handwritten signature in black ink, appearing to read 'R. Lindh', is written over a large, faint, stylized signature graphic.

Robert Lindh, P.E.  
Urban Land Consultants, LLC

cc: Frank Bartolotta