

September 08, 2023

City of Lee's Summit
220 SE Green St
Lee's Summit, MO 64063

Re: Jim Hubbard Insurance
111 SW Raintree Plaza Drive
Lot 2, Raintree Plaza Lots 1-7
Final Stormwater Management Plan

Phelps Engineering, Inc. is pleased to submit this Final Stormwater Management Plan for the above referenced project. The proposed project includes a new commercial insurance building and parking lot being constructed on Lot 2, Raintree Plaza Lots 1-7 which is 0.67 acres.

An existing underground detention system is located directly southeast of the project and was sized to accommodate the development of Lot 2, Raintree Plaza Lots 1-7 as a commercial development. Per APWA 5600, the standard rational "C" value for a "Business – Neighborhood Area" is 0.81.

The proposed development results in a total impervious area on the property equal to 0.25 acres. This results in a proposed rational "C" value, per APWA 5600 equal to 0.52 as calculated below.

Proposed Rational "C" = $0.3 + 0.6 \times (0.25 / 0.67) = 0.52$

The proposed development results in less impervious area and a lower rational "C" value than a standard commercial development per APWA 5600. Therefore, the existing detention system, which was designed to accommodate the commercial development of Lot 2, Raintree Plaza Lots 1-7, will accommodate the proposed development and no additional detention is required.

This completes Phelps Engineering's submittal of the Final Stormwater Management Plan for the Jim Hubbard Insurance development on Lot 2, Raintree Plaza Lots 1-7. Please feel free to contact PEI at (913) 393-1155 if you require additional information.

Sincerely,

Judd D. Claussen, P.E.

Phelps Engineering Inc.



PHELPS ENGINEERING, INC.