

March 13, 2020

Mr. Chris Shaw Shaw Construction P.O. Box 281 Bates City, MO 64011

> Re: Soil Inspection – 1614 SW Blackstone Place, Lee's Summit, MO Lot 126 Napa Valley – 3<sup>rd</sup> Plat

Mr. Shaw,

At your request, I have inspected the soil conditions at the above referenced site. The inspection took place earlier today and concentrated on the area of the perimeter footings and the interior spread footings. A 4' long soil probe and visual inspection were used to evaluate the soil conditions.

The building pad is situated on what appears to be a previously undeveloped site and has been excavated to subgrade for the basement. The rear foundation footing will likely be trenched as the subgrade is approximately the same elevation as the adjacent grade. Probe resistance was high to moderate at all perimeter footing locations. Probe resistance was high to moderate as well at the interior footing locations. I would estimate that a safe bearing pressure is 1500 psf which would mean perimeter footings 24" wide with 3 #4 continuous. At the interior footings, a safe bearing pressure is 1500 psf which means that footing sizes would need to be 1.33 times the area of what would have been designed for 2000 psf. As an example, a 36" square pad called out on the drawing would need to be 42" square with 5 #4 each way and a 48" square pad called out on the drawing would need to be 60" square with 7 #4 each way.

If there are any questions, please let me know.

Yours truly,

Albert Hermans, P.E.