

ENGINEERING, INC Consulting Structural and Civil Engineer 5907 Raytown Trafficway

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August 24, 2021

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

Re: Soil Inspection – 617 SE 6<sup>th</sup> Street, Lees Summit, MO

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 developed site and has been excavated to subgrade for the basement. The pad is on two levels with the upper level being under the garage. At the upper level, probe resistance was moderate at all perimeter and 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 and the interior 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, a 42" square pad called out on the drawing would need to be 54" square with 6 #4 each way. At the lower level, there was moderately stiff resistance to probe penetration. I would estimate that a safe bearing. I would estimate that a safe bearing. I would estimate that a safe bearing the area of what would need to be 54" square with 5 #4 each way. At the lower level, there was moderately stiff resistance to probe penetration. I would estimate that a safe bearing pressure is 2000 psf and the foundation may be installed as shown on the plans without modification.

If there are any questions, please let me know.

