



**ENGINEERING, INC.**

Consulting Structural and Civil Engineers

5907 Raytown Trafficway  
Raytown, Missouri 64133  
816-356-1445

June 13, 2024

Mr. Brian O'Rourke  
New Mark Homes  
5207 NW Crooked Road  
Parkville, MO 64152

**Re: Soil Inspection – 366 NW Patch Court, Lees Summit, MO  
Lot 162 Woodside Ridge – 2<sup>nd</sup> Plat**

Mr. O'Rourke,

At your request, I have inspected the soil conditions at the above referenced site. The inspection took place on June 11, 2024 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 area under the rear wall has been excavated below the balance of the basement. There appears to be a root line just above the subgrade at the front of the basement. The root line reappears just above the subgrade at the front of the rear wall excavation. This would indicate that the majority of the basement is on fill material. Probe resistance was moderate which would mean perimeter footings should be 24" wide with 3 #4 continuous. Column footings should 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 6 #4 each way, a 42" square pad called out on the drawing would need to be 54" square with 7 #4 each way, and a 48" square pad called out on the drawing would need to be 60" square with 8 #4 each way.

At the south side of the excavation, the sump pump drain pipe from the neighbor's house discharges into the excavation. This will need to be re0directed away from the house.

If there are any questions, please let me know.

Yours truly,

Albert Hermans, P.E.

