



May 28, 2025
Job No. 1111-029-22

Mr. Benjamin Wheat
Roderick Enterprises
1981 East Murray Holladay Road, #100
Holladay, Utah 84117

Mr. Wheat:

Re: Letter – Structure Support Options – Catalyst 7
Proposed Catalyst Business Park Buildings 6, 7, 8, and 9
South of 5750 West and 1500 South
American Fork, Utah

After reading through the report, we provided two options to consider for supporting the proposed structures at the site. The first option is to support the structures upon conventional spread and continuous wall foundations established upon structural fill extending to suitable stabilized natural soils. Groundwater was encountered as shallow as 1.8 feet beneath the ground surface in Boring B-4 (center of the building 7 footprint) in August of 2022. The consolidation tests and low blow counts (as presented on the boring logs) indicate that soft clay soils are present at the site. Due to the shallow groundwater and soft clay soils, the subgrade will need to be stabilized prior to the placement of structural fill. Stabilization usually consists of the placement of a mixture of angular gravels and cobbles and/or 1.5- to 2.0-inch gravel. It may help to utilize a stabilization fabric as well.

Non-engineered fills were encountered across the area of the building 7 footprint to depths ranging from 1 to 2.5 feet beneath the ground surface with a deeper pocket up to 5 feet encountered in the northwest corner of the building footprint. The fill soils may be treated with a few options. First, the non-engineered fills must be completely removed from beneath all footings, no exception. In floor slab areas, the fills may be treated as follows: Excavate a minimum of 1 foot of the non-engineered fills. Scarify the exposed fills to a depth of at least 12 inches. Moisture prepare and compact these fills in place. Place and compact the 12 inches that were removed previously into place over the compacted fill.

The second option would be to support the proposed structure upon a grid of rammed-aggregate piers. We provided this as an option due to the presence of the soft clay soils, shallow groundwater, and depth of non-engineered fills. The option of piers would also provide an increased bearing

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capacity and no required structural replacement fill. However, this recommendation is given so that the owner/contractor can look at comparative pricing to see if it is even feasible.

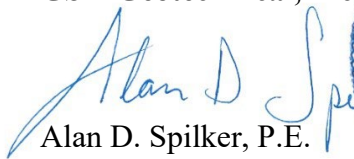
I will say that in the area of the building 7 footprint, the non-engineered fills were shallower than compared to the rest of the site, therefore piers may not be the most cost effective option compared to the removal of the non-engineered fill, subgrade stabilization, and placement of structural fill.

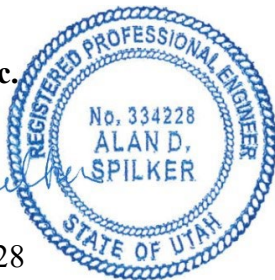
Both of the options presented are viable, so it comes down to a cost analysis on your end as far as which one to go with. Hope this helps clarify things, let me know if you have any further questions at the moment.

If you have any questions or would like to discuss these items further, please feel free to contact us at (801) 685-9190.

Respectfully submitted,

GSH Geotechnical, Inc.


Alan D. Spilker, P.E.
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ADS:jmt:

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