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February 12, 2018

Mr. Nathan Radach
Inspire Development Centers
105 South 6th Avenue
Sunnyside, WA 98944

**RE: Geotechnical Recommendations
Proposed Granger Development Center, PLSA 17236
900 "E" Street Granger, WA**

Dear Nathan,

On February 9, 2018, an engineer from PLSA Engineering observed the partial foundation and crawl space excavation for the facility referenced above. In addition, a test pit was excavated, near the northeast corner of the proposed foundation. The excavation extended to a depth of 64 inches below the ground surface (bgs). The soil was moist and firm to a depth of 54 inches bgs and was very firm to 64 inches bgs, where backhoe refusal was met. Groundwater was not encountered; however, wet seasonal conditions have elevated soil moisture contents above optimum for preparing foundation trenches with a firm and unyielding base.

To mitigate this condition PLSA recommends the following: Over excavate footing trenches 12 inches deeper than the proposed bottom of concrete footing depth and 2 feet wider than desired footing width. Proof roll the bottom of the footing trench to a uniform surface, then place Mirafi 500x, or equivalent, geotechnical fabric across the bottom and up 1 foot on all sides. Keep fabric taut and smooth with no wrinkles. Fabric should overlap a minimum of 12 inches at all seams.

After fabric is in place, backfill the footing trench with a 12 inch thickness of 1-¼ minus crushed surfacing base course gravel. Gravel shall be placed in lifts and compacted to 95% of its maximum density as determined by ASTM D1557. Following the recommendations herein, will provide, at minimum, the International Building code prescriptive soil bearing values, for the soil observed on the site and minimize settlement. Please contact me if there are any further questions.

Scott Garland P.E.
Principle Engineer

