

August 10, 2018

MKE and Associates Attn: Allen Crisanaz, PE 6915 SE Macadam Avenue, Suite 200 Portland, Oregon 97219

RE: Geotechnical Recommendations for Foundation Undermining Repair

Ainsworth Elementary School, Portland Public Schools

2350 SW Vista Avenue, Portland, Oregon RhinoOne Project Number MKE-2018-001

Dear Mr. Crisanaz,

RhinoOne Geotechnical Engineering (ROG) has prepared this memorandum in order to provide recommendations for backfill of an undermined area below the foundations of Ainsworth Elementary School. The area of concern is beneath the exterior stair/entryway on the northeast corner of the gymnasium. A site visit was conducted by several members of the team on May 21<sup>st</sup> and August 1<sup>st</sup>. It appears the undermining of the foundations was by members of the Portland Public School maintenance staff.

We recommend the undermined area be backfilled entirely in order to provide adequate support for the overlying foundations. The area can be filled with a controlled low strength material (CLSM) per Oregon Department of Transportation (ODOT) Standard Specifications for Construction (2018) Section 00442.12.

If you have any questions or wish to further discuss the topic discussed, please contact me at 360-258-1738.

Sincerely,

Rajiv Ali, PE

Principal Geotechnical Engineer