



August 26, 2016
SGS #16167

Luminato Condominium, LLC
c/o NewHeight Group
118 Congress Street, #401
Portland, ME 04101
Attn: Erin Cooperrider

Reference: Excavation and Shoring Evaluation, Luminato Condominiums
169 Newbury St, Portland, Maine

Dear Erin;

SGS has evaluated the site conditions and the proposed excavations required to construct the foundations for the new building. Our evaluations are based on a review of subsurface explorations completed by SGS in 2012 and site visits on August 4 and August 21, 2016.

The soil at the site generally consists of a layer of miscellaneous fill over stiff silty clay over bedrock. Based on borings completed by SGS in 2012, bedrock depths vary from 9.5 to 15.4 feet below the original ground surface. The following recommendations are based on permissible OSHA slopes of 1.5H to 1V in the fill soil and 0.75H to 1V in the stiff native silty clay soil, confirmed during my August 4 and August 21, 2016 site visits.

32 Hampshire Street Property

The existing building has a basement level that consists of a concrete wall topped with brick. Based on rough measurements taken, the bottom of the wall is at about elevation 39 feet. The bottom of the new footing is at elevation 32.67 feet. The distance between the existing wall footing (assuming the footing sticks out 12 inches from the face of the existing wall) and the edge of the new footing is about 11 feet. Assuming a 2 foot wide level working platform beyond the edge of the new footing, the slope from the bottom of the existing footing to the elevation 32.67 excavation platform is approximately 1.5H to 1V. Based on this, no shoring or special protection will be required for construction of the new foundations in this area.

Section Between 32 and 40 Hampshire Street

The section includes construction of the stairway and elevator pit. The bottom of the footing for both the elevator and stair sections is at elevation 32.67 feet. The edge of the elevator pit footing is approximately 11 feet from the property line. Based on the Grading and Utilities Plan, the existing ground surface at the property line is at or close to elevation 44 feet. The soil in this area consists of about 4 feet of fill over stiff silty clay. Using the permissible OSHA slopes, this



excavation can be open cut to within 1 foot of the edge of the new footing. We recommend that construction planning include a reduction in the distance from the edge of the footing to the toe of the slope from 2 feet to 1 foot.

Due to unknown conditions in this area, we recommend that SGS make a visual inspection of this excavation when it is completed to confirm that it meets OSHA requirements.

40 Hampshire Street Property

A foundation wall used for support of the previously removed garage structure is present about 3 feet from the building at 40 Hampshire. The foundation wall consists of a concrete cap over a rubble stone wall. The wall extends to a depth of about 5 feet. SGS previously submitted a temporary shoring design for this section.

42 Hampshire Street Property

This property is owned by the owners of the new building. We understand that the existing porch will be temporary supported during construction of the new foundation to allow for an open cut down to the new footing. This approach will be effective in allowing for construction of the new footing in this area without shoring.

100 Federal Street Property

This building has a full basement. Excavation in this area can be completed by excavating adjacent to and exposing the existing foundation wall down to the top of the existing footing and sloping the excavation at the permissible OSHA slopes for each soil type noted above. We believe that this will allow ample room for construction of the new footings.

If there are any questions, please contact me.

Sincerely
Summit Geoengineering Services, Inc.

A handwritten signature in blue ink that reads "William M. Peterlein".

William M. Peterlein, P.E.
President & Principal Engineer

