February 10, 2022 Proj No: "22"-???

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**Attn:** Mr. ???

**Re:** ???

Geotechnical Survey

## Dear Sir:

We require a quotation to provide geotechnical information for the subject project. The information may be provided on a drawing, in a written report or a combination thereof and shall contain the following information:

- the name of the geotechnologist and, if applicable, the name of geotechnical firm represented;
- identification of the project and the date of the report;
- the geotechnologist or geotechnical firm shall provide a unique identifying number for the report;
- proof that liability insurance is provided at the time the report is prepared. Proof shall include the type of insurance, the carrier, and the extent of the coverage;
- location of all property corners, buildings, and location of boreholes. A digital copy of the site plan survey on which boreholes can be located will be provided;
- dimensions from objects on the site plan shall be provided to uniquely locate boreholes;
- boreholes shall be assigned a number or designation to identify them, uniquely;
- the site plan will have an established permanent benchmark on or near the site. Boreholes and borehole information shall be provided using this datum elevation;
- the site plan will have an established north arrow location stipulated as either geodetic or construction;
- the minimum number of boreholes shall be four. They shall be located in close proximity to the proposed work, but located outside the work proper. We shall be advised in a timely fashion and in writing if additional boreholes are necessary. We will provide confirmation of this, also, in a timely fashion. The requirement for additional boreholes should be based on new obtained data, prior obtained data, or personal experience; and
- provision of design loads for proportioning a retaining structure retaining approximately ???' of fill. Design parameters should include for drained and undrained conditions and values should include both active and passive earth pressures and anticipated short and long term soil movement; and
- a recommendation outlining the various suitable foundation types, their advantages and disadvantages and design parameters and anticipated short and long term settlement; and

The geotechnical information contained in the report shall include the following information for each borehole:

- the soil type and classification;
- samples shall be obtained using a Shelby split tube sampler in compliance with ??? and shall be stored in compliance with ???. Samples shall be retained for thirty days unless noted otherwise;
- soil samples shall be taken at locations corresponding to 20' maximum for the depth of the borehole;
- the elevation location of the soil samples shall be based on the previously noted datum elevation
- if the soil type should change within the depth of the borehole, the soil type and classification shall be identified and the elevation location of each change shall be recorded;
- depth to watertable;
- samples shall be of a sufficient size to determine:
  - the moisture content,
  - the gradation if required. The quotation for the geotechnical report shall not include costs for gradation testing but shall be identified for cohesive and non-cohesive soils,
  - Atterberg limits to determine the Plasticity Index,
  - the number of blows required to advance the Shelby tube by a distance of ???,
  - the drained and undrained shear strengths, as applicable,

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The geotechnical information is to be used for the design of [a foundation | an open channel | retaining structure] supporting ???.

The fee quotation and schedule of unit rates should include for the provision of three (3) copies of the report showing the above information, plus two (2) computer CD's containing a digital image of the above information. The quotation should be addressed to Mr. ??? at ??? with a copy to our firm. It is anticipated that this work will be required ??? and we require a response by ???.

Should you have further questions, or require clarification on the detail of the information required, please advise. Thank you for your time and consideration, we are

Yours truly,

Dik Coates, P.Eng.

cc: ???