**Soil Engineers Ltd.**
CONSULTING ENGINEERS
GEOTECHNICAL • ENVIRONMENTAL • HYDROGEOLOGICAL • BUILDING SCIENCE
90 WEST BEAVER CREEK ROAD, SUITE #100, RICHMOND HILL, ONTARIO L4B 1E7 · TEL (416) 754-8515 · FAX (905) 881-8335

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| TEL: (705) 721-7863 | TEL: (905) 542-7605 | TEL: (905) 440-2040 | TEL: (905) 853-0647 | TEL: (705) 684-4242 | TEL: (905) 440-2040 | TEL: (905) 777-7956 |
| FAX: (705) 721-7864 | FAX: (905) 542-2769 | FAX: (905) 725-1315 | FAX: (905) 881-8335 | FAX: (705) 684-8522 | FAX: (905) 725-1315 | FAX: (905) 542-2769 |

January 24, 2018 Reference No. 1712-C075

Japi Homes
645 Sixth Street
Collingwood, ON L9Y 4M7

Attention: Mr. Sarab Singh

**Re: Test Pit Investigation**
**Proposed Residential Development**
**645 Sixth Street**
**Town of Collingwood**

Dear Sir,

We visited the site on January 9, 2018 to inspect one (4) test pits in order to facilitate a geotechnical assessment of the subsurface conditions for the design and construction of a proposed residential development. The test pit locations labeled TP1 through TP4, are plotted on Drawing No.1, enclosed.

Four (4) test pits were excavated by a rubber tire excavator to depths ranging from approximately 2.6 to 2.9 m below the prevailing ground surface. A summary of the subsurface findings is presented below:

**Table 1** – Summary of Subsurface Findings

| TP1 | TP2 | TP3 | TP3 |
|---|---|---|---|
| Topsoil 0.2 m | Topsoil 0.1 m | Topsoil 0.1 m | Topsoil 0.1 m |
| Alluvial sand/marl 0.3 m | Alluvial sand/marl 0.3 m | Alluvial sand/marl 0.2 m | Alluvial sand/marl 0.3 m |
| Silty clay to termination @ 2.9 m | Stones/cobbles 0.1 m | Sandy silt to termination @ 2.7 m | Stones/cobbles 0.1 m |
| | Silty clay to termination @ 2.6 m | | Silty clay to termination @ 2.6 m |

The test pits extended through an overburden of topsoil and alluvial soils, terminating into a native stratum of firm, grey silty clay (TP1, TP2 & TP4) and compact, grey sandy silt, capable of sustaining a maximum Allowable Soil Pressure of 150kPa. Appreciable seepage was detected at a depth of approximately 1.2 m below the prevailing ground surface in all 4 test pits. Due to the observed water level and in accordance with the Ontario Building Code, Section 9, we recommended the bearing pressure be reduced to 75 kPa.

The topsoil and alluvial soils are considered unstable and highly compressible under loads. These materials will undergo long-term decomposition and settlement and are not capable of supporting structures. All foundations must be placed beneath the topsoil, alluvial and weathered soils, onto the sound natural soils. Due to the presence of alluvial and weathered soils, the footing subgrade should be inspected by a geotechnical technician under the supervision of a geotechnical engineer or a building official with geotechnical knowledge prior to pouring concrete.

We trust this letter is explicit and meets your present needs however, should any queries arise please feel free to contact this office.

Yours very truly,
SOIL ENGINEERS LTD.

Darcy Heitzner, Geo.Tech.
Branch Manager
DH:
Encl.


Kayla Cres
TP1
TP4
TP3
TP2
32
Drawing No. 1
645 6th Street
Reference No. 1712-C075
January 24, 2018