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Attention: Eric Anderson and Brad Hibbert

Re: Pavement Structure Modifications

**New Multi-Tenant Commercial Development** 

2822 Carp Road Ottawa, ON

#### INTRODUCTION

This letter provides our comments concerning pavement structure modifications for the New Multi-Tenant Commercial Development Project located at 2822 Carp Road in the City of Ottawa, Ontario.

At the time of preparation of our original geotechnical report, the pavement structure included the placement of Hot-Mix Asphalt (HMA) as the riding surface. As the project progressed it was determined that the parking lot will no longer include HMA, but instead consist of a gravel surface. As such, comments regarding the changes to the pavement structure are included herein. This letter should be read in conjunction with the previously prepared report by GEMTEC Consulting Engineers and Scientists Limited (GEMTEC):

• "Geotechnical Investigation, New Multi-Tenant Commercial Development, 2822 Carp Road, Carp, Ontario". Dated October 28, 2020

### **RECOMMENDATIONS AND GUIDELINES**

# Parking Lot and Access Roadway

For the light duty parking areas and access roadways to be used by light vehicles (cars, etc.) the following minimum roadway structure is recommended:

- 210 millimetres of OPSS Granular A base; over
- 300 millimetres of OPSS Granular B Type II (or 450 millimetres of Granular B Type III), subbase.

For Heavy duty parking areas and access roadways to be used by heavy truck traffic (including emergency vehicles) the following minimum pavement structure is recommended:

- 250 millimetres of OPSS Granular A base; over
- 450 millimetres of OPSS Granular B Type II (or 525 millimetres of Granular B Type III), subbase.

The granular base and subbase materials should be compacted in maximum 200-millimetre thick lifts to at least 98 percent of the standard Proctor maximum dry density value. Periodic re-grading should be anticipated to ensure serviceability.

The above pavement structure assumes that the foundation wall backfill is adequately compacted and that the subgrade surface is prepared as described in the report. If the subgrade surface is disturbed or wetted due to construction operations, or precipitation, the granular thicknesses given above may no be adequate and it may be necessary to increase the thickness of the Granular B Type II subbase and/or incorporate a woven geotextile separator between the roadway subgrade surface and the granular subbase material. The adequacy of the design roadway thickness should be assessed by geotechnical personnel at the time of construction.

## **Additional Considerations**

Additional geotechnical guidelines and recommendations relevant to the proposed roadway construction are provided in the geotechnical report.

## **CLOSURE**

We trust this letter provides sufficient information for your present purposes. If you have any questions concerning this report, please do not hesitate to contact our office.

Pat Baxter Senior Technologist Steve Goodman, Ph.D., P.Eng Manager of Pavement and Materials

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