



Ref. No. D09109

September 21, 2011

Mr. G. Murphy  
Dexter Construction  
P.O. Box 48100  
927 Rocky Lake Drive  
Bedford, NS  
B4A 3Z2  
(Email: [gmurphy@dexter.ca](mailto:gmurphy@dexter.ca))

**Re: Geotechnical Inspection – Brunello Estates (Phase 1)  
Lot TH3A – 3E – Maple Grove Avenue, Timberlea, NS**

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Dear Mr. Murphy:

As requested, GENIVAR has carried out geotechnical inspection services for the above-mentioned site. The purpose of the work was to monitor and evaluate construction methods during foundation subsoil preparation for building construction.

### **1.0 Project Background**

It is understood that Lot TH3A-3E will accommodate a wood-framed residential structure with slab-on-grade basement floor. The proposed structure will consist of conventional design and each unit will measure 12.0 metres by 6.0 metres in maximum plan dimensions. The proposed basement floor elevation for Lot TH3A-3E ranges from 109.21 metres to 109.81 metres, geodetic datum (ATS 77) and is shown on the enclosed Figure 1.0. Surveying during construction of the engineered pad was conducted by Dexter Construction. Ground elevations at the time of construction completion were surveyed by GENIVAR and are also shown on the enclosed Figure 1.0.

Existing grades at Lot TH3A-3E were generally lower than proposed design grades. Subexcavation of organic soils, followed by placement and compaction of select rockfill was required to reach proposed design grades.

### **2.0 Inspection Summary**

Field inspection was generally carried out during the spring and summer of 2011. Construction of the engineered pad consisted of subexcavation of organic soils followed by placement and compaction of select portions of the onsite blasted bedrock. The fill was placed in 450 mm thick lifts and compacted with several passes of a large vibratory drum roller. The fill was placed to an approximate elevation ranging from 108.91 metres to 109.51 metres (300 mm below proposed finished floor elevation is typically industry standard). GENIVAR personnel were on-site periodically to monitor construction methods during structural fill placement.

### 3.0 Summary

Based on our field inspections and test results, we are of the opinion that generally good construction methods were practiced during placement and compaction of engineered fill. GENIVAR personnel were on-site during placement and compaction of engineered fill for Lot TH3A-3E Maple Grove Avenue. In our opinion, the prepared structural fill will support the proposed residential structure with only tolerable settlements anticipated.

### 4.0 Recommendations

Additional fill placed at the site (i.e. wall backfill, underslab base course, interior fill, etc.) is to be prepared using similar methods for placement of engineered fill.

The engineered pad has been prepared for a structure measuring 6.0 metres x 12.0 metres in maximum plan dimensions, as indicated on the enclosed Figure 1. Any changes or relocation with the structure on the lot should be certified by a geotechnical engineer.

Any disturbance to the prepared lot as a result of freeze/thaw, vegetation growth, construction traffic, erosion, etc., would require that the lot be re-inspected by qualified geotechnical personnel prior to placement of concrete foundations.

This letter is based on our inspections conducted to date, at the completion of site grading work. If site conditions differ at time of building construction, we require immediate notification to permit reassessment of our recommendations.

If you have any questions regarding the enclosed information, please contact the undersigned at your convenience.

Yours truly,

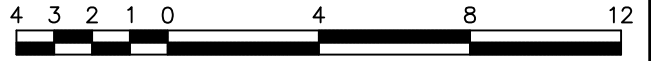
GENIVAR Inc



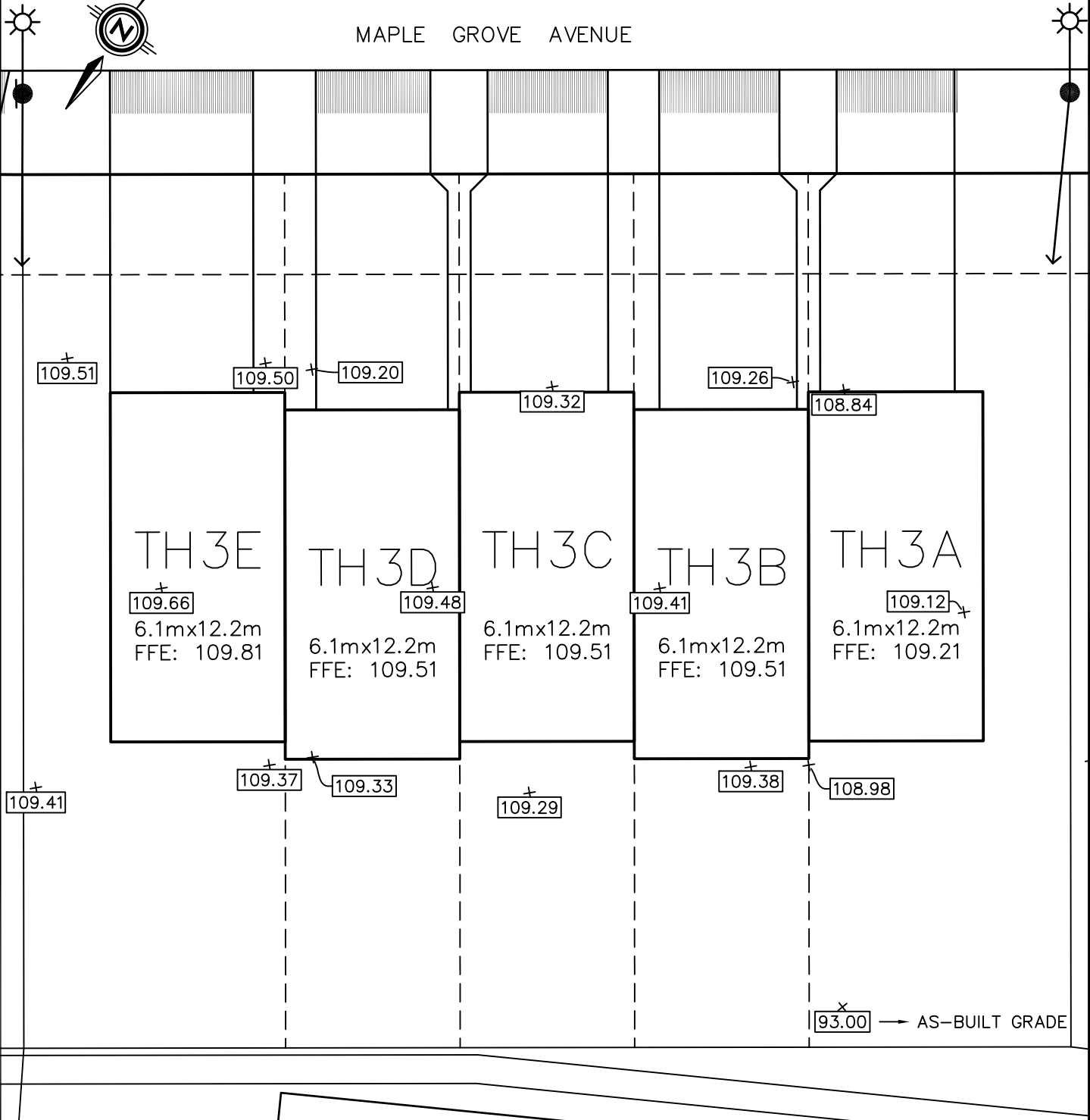
Clayton J. Rogers, P. Eng.  
Project Geotechnical Engineer



SCALE: 1:200 METRIC



MAPLE GROVE AVENUE



K:\DARTMOUTH\2009\009109\DWG\ENG\DA09109-ASBUILT-ENG.PDS.DWG LOT TH3 PRINTED: 3:41 PM 2011/09/15 BY: KYLE.BLADES



1 SPECTACLE LAKE DRIVE  
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TITLE:

BRUNELLO ESTATES  
 MAPLE GROVE AVENUE  
 LOT TH3A-TH3E

A SENSE OF PLACE



SCALE:

1:200  
 DATE: (YYYY/MM/DD)

15-SEP-2011

FIGURE 1.0

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