



October 30, 2018

Keith Morell  
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Bedford, NS, B4A 3Z2  
(By Email: kmorell@dexter.ca)

**Subject: Geotechnical Pad Report  
Lot 232 Brunello Boulevard, Brunello Estates, Phase 2.1, Timberlea, NS**

Mr. Morell,

As requested, WSP Canada Inc. (WSP) has carried out geotechnical inspection services during placement of engineered fill at the above-mentioned site. The purpose of the work was to monitor and evaluate construction methods during placement and compaction of structural fill beneath proposed building foundations.

## PROJECT BACKGROUND

It is understood that Lot 232 will accommodate a wood-framed residential structure with slab-on-grade basement floor. The proposed structure will consist of conventional design and will measure 26 metres by 50 metres in maximum plan dimensions. The proposed basement floor elevation for Lot 232 is 98.9 metres, geodetic datum (ATS 77) and is shown on the enclosed Figure 1.

Surveying of the as-builts (as shown on attached figure 1) was conducted by Dexter Construction Company Limited.

The existing grades on Lot 232 were generally lower than proposed design grades. Subexcavation of organic soils, followed by placement and compaction of select rock fill was required to reach proposed design grades.

## INSPECTION SUMMARY

Field inspection was generally carried out during the spring and summer of 2018. Construction of the engineered pad included subexcavation of organic soils, followed by placement and compaction of select portions of on-site processed rock and/or imported fill. The fill was placed in 300 mm to 450 mm thick lifts and compacted with several passes of a large vibratory drum roller. The fill was placed to an approximate average elevation of 98.6 metres. WSP personnel were on-site periodically to monitor construction methods during structural fill placement.

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## SUMMARY

Based on our field inspections, we are of the opinion that generally good construction methods were practiced during placement and compaction of engineered fill. WSP personnel were on-site during placement and compaction of engineered fill at Lot 232 Brunello Boulevard. In our opinion, the prepared structural fill will support the proposed residential structure with only tolerable settlements anticipated.

## RECOMMENDATIONS

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

The engineered pad has been prepared for a structure measuring 26 metres x 50 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.

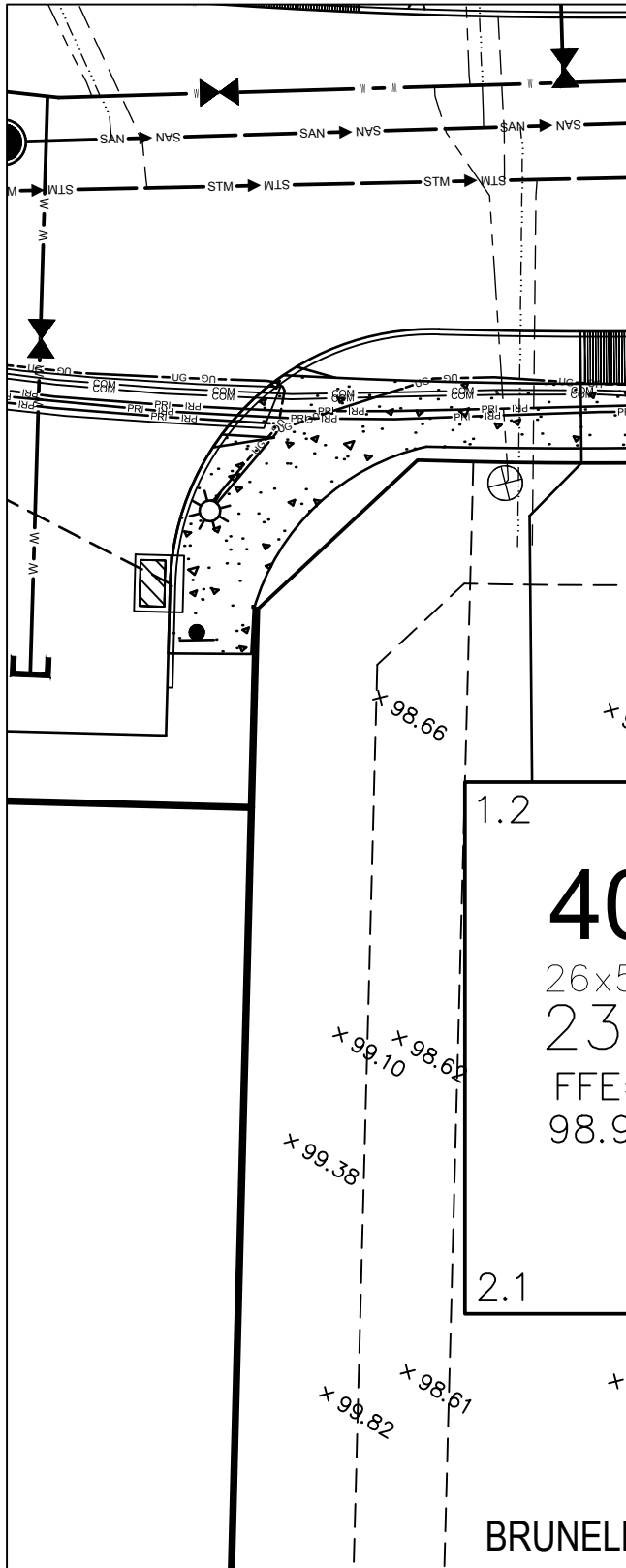
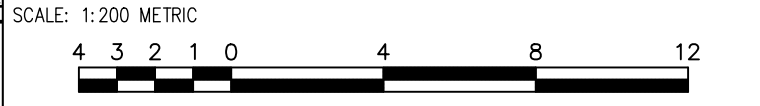
Yours truly,

A handwritten signature in black ink, appearing to read 'T Elson'.

Taylor Elson, P.Eng.  
Project Geotechnical Engineer

WSP ref.: 181-01557

LEGEND:	PROPOSED	EXISTING
EDGE OF PAVEMENT		
LOTLINE		
BOTTOM OF SLOPE		
TOP OF SLOPE		
SWALE / DITCH		
SPOT ELEVATION	<u>23.45</u>	x 23.89
STREET BOUNDARY		CULVERT
PROPERTY BOUNDARY		HEADWALL
EASEMENT		FENCE
CURB & DRIVEWAY CUT		CATCH BASIN
FLOW DIRECTION ARROW		SIDEWALK



1.2 0.0  
**40**  
 26x50  
 232  
 FFE=  
 98.90  
 2.1 1.5

0.6 0.0  
**40**  
 26x50  
 231  
 FFE=  
 98.20  
 2.1 1.5

BRUNELLO BOULEVARD



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TITLE:  
**BRUNELLO ESTATES  
 PHASE 2**  
**LOT 232, BRUNELLO BLVD**

SCALE:  
**1:200**  
 DATE: (YYYY/MM/DD)  
 2018/10/30  
 PROJECT NO:  
 181-01557

REVISION:  
 0  
 DRAWING NO:  
 Fig 1.

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