

Job No	Project	Page	1
8972	9 Maresfield Gardens	Date	13.12.2016
		By	I. Tozluoglu



Re: 9 Maresfield Gardens

Our comments are below for the email dating 14.11.2016 by Campbell Reith.

- 1) We have used 10000kN/m^3 stiffness for soil modelling considering a maximum consolidation value of 10mm and 100kN/m^2 maximum ground bearing stress. Area of soil contact in the new model has been defined only under the slab thickenings to allow area reduction for heave forms raised in your previous comments. A new calculation package considering this condition has been attached.

Maximum stress 111kN/m^2 appears in a local area in the analysis with the reduced soil contact. This extra stress can easily be dealt with additional widening of the local area during the detail design stage.

- 2) Majority of heave will take part during the excavation and the excavation is not too deep to create a big concern regarding this. Attached new analysis considers a state with heave forms under the slab spans. Soil contact area is limited to the slab thickenings and spans are suspended. This also resulted with a change in previous reinforcement design values.
- 3) Yes, load values from steel masonry support beams included in the model.
- 4) All horizontal forces from the retaining wall have been applied to the model. Wall and slab rigidity helps the distribution of the stresses arising from eccentricity of retaining wall forces.