



Mr and Mrs J & C Mantilla  
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10 October 2014

Attention: Mr and Mrs Mantilla

**RE: PROPOSED DWELLING - LOT 6 PADDOCK CLOSE, ELERMORE VALE  
REVIEW OF DRAWINGS**

The drawing review has been carried out aiming to achieve the requirements of Lake Macquarie City Council; Coffey's assessment of the site included slope stability aspects of the proposed redevelopment of Lot 6 DP 1196932 Paddock Close, Elermore Vale. General advice was given on footing design. Reference is made to Coffey Pty Ltd report Ref. N7550/1-AC, dated 7 June 2000. General site observation of the development area was carried out.

The Drawing Review has not specifically included comment on the design of the foundations or structural aspects of the building or retaining walls as, at the time of writing, no detail has been disclosed to Coffey, and such is not ordinarily required at the Development Application stage.

The review assumes that the details of surface levels, cuts, fills and retaining walls as shown on the drawings are accurate. Where consideration may be given to the fill constituting structural support for footings or ground bearing slabs, verification of the presence of controlled fill will be necessary. Fill must be placed onto a sound foundation, must comprise appropriately selected materials, and must be placed in horizontal layers and compacted to an appropriate specification under the observation of a geotechnical inspection and testing authority (Australian Standard 3798-2007, *Guidelines for Earthworks for Commercial and Residential Developments*).

Footings must be designed and positioned in consideration of their potential to surcharge load the crest of any slopes (including cuttings for retaining walls). Consideration must be given to the placement of any additional filling and the position of footings above the wall, and to ensure support of the retained site is provided. Particular attention is also drawn to support of the proposed water tank, where consolidation of soils beneath may adversely influence adjacent footings.

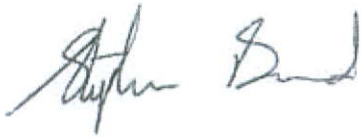
Excavations for the construction might promote instability and require to be retained. Key to any retention system will be appropriately engineered, maintenance free, drainage of the retained soils.

Retaining structures must be designed to withstand potential for sliding, overturning and bearing failure (including 'global' stability), with particular attention paid to shear strength of any fill and / or slopewash (colluvium) soils and slope geometry above the crest and beyond the toe of walls.

Stepped retaining walls and any wall constructed close to (within influence) of the crest and slope of an embankment or cutting should be considered as a composite wall. Such must be designed by an appropriately qualified engineer, taking into consideration the full height of the walls and slopes.

If you have any questions regarding this matter please contact Iain Turner or the undersigned.

For and on behalf of Coffey

A handwritten signature in black ink, appearing to read "Stephen Board". The signature is written in a cursive, fluid style.

**Stephen Board**

Senior Engineering Geologist

**Attachments:**

Reviewed Drawings (Ref No. 6269-WD3 Sheets 1 to 11, dated 26 August 2014)