

20220528
17th May 2022

Adam Bryce
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Dear Adam

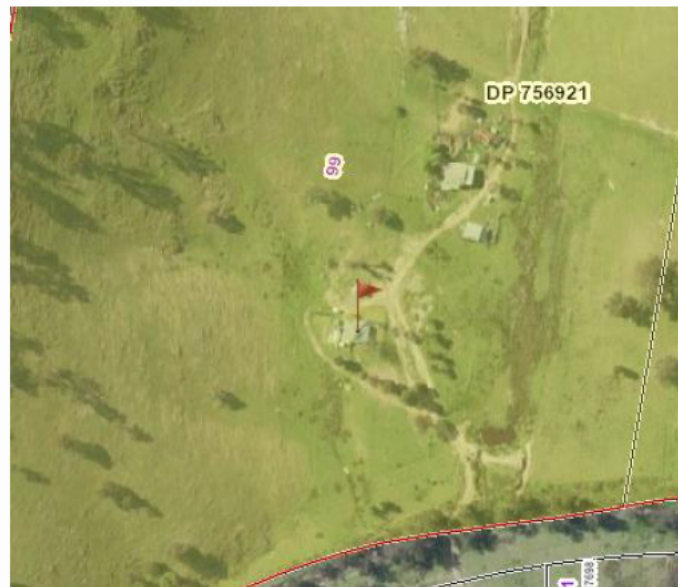
RE: 248 GRATTAI CREEK ROAD, GRATTAI

At your request, we have carried out a Geotechnical investigation for the above project. The objectives of this work were to i) Identify the subsoils underlying the site, ii) Classify the site in accordance with AS2870.2011 Residential Slabs and Footings Code.

LOCATION

The lot is located in a rural area south west of Mudgee.

The site was covered by low grasses at the time of the fieldwork.



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FIELDWORK

The fieldwork of 16th May 2022, comprised the drilling, logging and sampling of one test hole on the site using a hand auger. The test hole was located at the site of the proposed new building.

Representative soil samples were retrieved from the site for assessment.

SUBSURFACE CONDITIONS

The site stratigraphy as revealed by the test hole logging, basically comprises the following:

- 0-50mm – veneer topsoil.
- 50mm-300mm – Light brown, silty Gravel
- EOB – refusal on dense gravel.

Ground water was not encountered during the fieldwork.

REACTIVITY CLASSIFICATION

Visual/tactile assessment indicates that the subsoil has low potential for shrink/swell movement.

Therefore, taking into account the depth and distribution of soils within the profile, we have therefore classified the site as **CLASS 'S'** (Slightly Reactive, $Y_s=5-10\text{mm}$) in accordance with AS2870.2011. (The Code specification reflects minimum requirements based on all site treatment being properly attended throughout, i.e drainage etc.)

Shallow raft/strip footing systems may be adopted for design. All footings shall be founded on the hard underlying profile.

SITE PREPARATION

Following the initial site preparation (removal of grass and vegetation), the site should be proof rolled and any remnant soft spots removed and replaced with imported granular fill material compacted to 100% std compaction in accordance with AS1289.5.1.1. The recommended material is CBR >80%, $PI \leq 6\%$.

SITE MANAGEMENT

The building site must be carefully managed to minimise moisture changes by proper attention to tree planting, drainage, and garden watering. The attached advisory notes make recommendations that must be followed by the owner/occupier of the building.

Yours faithfully,
CALARE CIVIL PTY LTD



Garth Dean
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