

CIVILTEST ALBURY WODONGA

Soils Engineering Laboratory

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21.10.2011

Report No. : 11CT853/86

Arbor Estates Pty Ltd
C/- EDM Group
P O Box 317
Wodonga, Vic, 3689

**Re: Site Classification for proposed residence
Lot 86 Silky Oak Estate, Stage 6
Wodonga, Vic, 3690**

An investigation was carried out on 21.9.2011 to determine a soil classification for the above site. The site is moderately sloping and lightly grassed. The surface drainage on site is good.

FIELD RESULTS

Materials encountered during the field investigation are described in the attached investigation log and in general consists of controlled fill overlaying sandy clays of medium to high plasticity.

SITE CLASSIFICATION

Based on the results of the investigation the site has been classified as Class "MD" Moderately Reactive-Deep site in accordance with AS 2870-2011 Residential Slabs and Footings - Site Classification by surface Movement Calculation.

Recommendations for this Site:

The footings of a conventional slab may be designed for a Class "MD" site classification with the external beams founded a minimum of 250mm below existing surface level.

If piers, stumps or strip footings are used on this site they should be founded a minimum of 600mm below existing surface level.

The site should be stripped of all vegetation and topsoil, with any areas of soft, loose or wet material selectively excavated to provide a firm, working base.

The allowable bearing pressure for this site is 125kPa from 250mm in depth.

GENERAL NOTE : FILL MATERIAL

Some building sites may contain areas of fill, which cannot be visually identified at the time of investigation. It is also often difficult to determine fill from natural insitu materials during a site investigation borehole. If fill is encountered during excavation of footings, and it is not described in the field investigation log, further advice must be obtained.

Where controlled (compacted) fill is encountered, the amount of compacted fill allowable is up to 800mm of "sand" fill or 400mm of "other" fill. AS 2870 - 2011 provides details of additional construction requirements for controlled fill sites.



P.C. Vella

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Form CT132/3

SOILS ENGINEERING LABORATORY

Borehole/Trench No: 1

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INVESTIGATION LOG REPORT NO: 11CT853

| | |
|---|-----------------------------|
| Client: Arbor Estates Pty Ltd | Date Logged: 21/9/11 |
| Investigation For: Site Classification | Logged By: PJ |
| Location: Lot 86 Silky Oak Estate, Stage 6, Wodonga | Checked By: PCV |
| Borehole/Trench Location: Centre of Lot | Date: 22/9/2011 |
| Method: <input type="checkbox"/> Hand Auger <input type="checkbox"/> Backhoe <input checked="" type="checkbox"/> Drill Rig <input type="checkbox"/> Other | |
| Alignment: 90° | |

| DEPTH mm | MATERIAL DESCRIPTION & CLASSIFICATION | MOISTURE CONDITION | CONSIST. DENSITY INDEX | VS kPa | SAMPLE TAKEN | REMARKS |
|-------------|--|-----------------------|------------------------------|-----------|-----------------|---------|
| 300 | Gravelly Sandy CLAY, dark brown Fine to coarse grained Medium plasticity, gravel to 20mm | Moist | Stiff | | | FILL |
| | Gravelly Sandy CLAY, brown Fine to coarse grained Medium plasticity, gravel to 40mm | | | | | |
| 800 | Sandy CLAY, brown Fine to medium grained, medium plasticity | | Very Stiff | | | |
| | Sandy CLAY, orange-brown mottled Fine to medium grained High plasticity | | | | | |
| 1600 | Gravelly Sandy CLAY, brown Fine to coarse grained, high plasticity gravel to 20mm | | | | | |
| | Sandy CLAY, red-brown Fine to medium grained, high plasticity | | | | | |
| 1800 | Refusal at 1.8m | | | | | |

ISS - Shrink Swell Index

LL - Liquid Limit

LS - Linear Shrinkage

DRAINAGE: -General Good Fair Poor Free Water Swampy Subject to Flooding

TOPOGRAPHY:

-General Flat Undulating Hilly

-Local Flat Moderate Slope Dip Valley High Flat Low Flat Crest Steep Slope

----W---- - Water Level
 <----- - Water Inflow
MD - Medium Dense
Vst - Very Stiff

D -Disturbed Sample
U50 -Undisturbed Sample 50mm dia
CBR* -9kg Scala Dynamic Cone
MC -Moisture Content Taken