



# RAFELETOS ZANUTTINI

## Consulting Engineers

**DATE :** 3/05/2017  
**OUR REFERENCE:** 76800MT  
**YOUR REFERENCE:** COTTEE/MARTIN  
**LOCATION:** LOT 101 NO.43 BEATRICE STREET BALGOWLAH HEIGHTS



## PROPERTY FEATURES

Property locality :	Established residential area
Existing building :	Residence remains
Building platform :	Not constructed
Exposed rock visible :	Not evident
Signs of soil reactivity :	No significant signs evident
Natural site slope :	Gentle fall
Retaining walls :	Existing on side boundaries
Environmental exposure :	Near coastal open water
Significant Trees :	Group of significant trees on site

## WIND CLASSIFICATION

Wind Region :	A
Terrain Category :	TC3.0
Topographic Classification :	T2
Shielding Classification :	Full
Wind Classification :	N2

## SITE INVESTIGATION

Fill encountered :	No
Soft or collapsing soils :	No
Floating boulders encountered :	No
Presence of bedrock or shale :	Yes
Seepage evident during borehole:	No
Approximate soil bearing pressure (kPa) :	800

## RESULTS AND RECOMMENDATIONS

Approx pier depth (mm) :	Variable to bedrock
Site Classification :	<b>Refer to lab results</b>
Comments :	

## FIELD INVESTIGATION:

BOREHOLE 1	
Depth mm	Material description
00	----- Surface level -----
100	
200	grey brown white yellow
300	Sandy Clay material
400	moist and soft also crumbly
500	---- Refusal on Sandstone ----
600	
700	
800	
900	
1000	
1100	
1200	
1300	
1400	
1500	

**Taken :** Left of existing dwelling

BOREHOLE 2	
Depth mm	Material description
00	----- Surface level -----
100	
200	grey dark brown white
300	Sandy Clay material
400	moist and soft
500	---- Refusal on Sandstone ----
600	
700	
800	
900	
1000	
1100	
1200	
1300	
1400	
1500	

**Taken :** Rear of existing residence

## CERTIFICATION

**Engineer**      John Rafeletos B.E. MIE Aust.



### Notations:

- Provide piercing through any uncontrolled fill, founded to natural ground. The extent of piercing shall be established on site.
- Where rock is encountered, the slab and footings are to be founded or pierced to rock. The extent of piercing determined on site.
- Some difficult soil conditions may require the use of helical screw piers or driven piles at the discretion of the engineer.
- This report is based on observations and investigations by Rafeletos Zanuttini Pty Ltd for the purpose of establishing design criteria to be adopted exclusively by Rafeletos Zanuttini Pty Ltd for the design of any future slab and/or footing system.
- This report is to be read in conjunction with any other design documentation and instructions given by Rafeletos Zanuttini
- The site conditions at the time of issuing this report shall be confirmed by the client prior to and during any construction works.
- This report does not include any field or laboratory assessment of the acid sulfate soils or salinity requirements of the site, and is to be investigated by the client if specifically required. However it is advised that certain Sydney councils such as Camden, Fairfield, Wollondilly etc have adopted a council wide acid sulfate soils policy and that all properties within these councils need to be designed and constructed to saline affected requirements unless site specific testing is undertaken and confirms otherwise.
- Deep excavations may encounter bedrock or shale, in such circumstances deeper piers to even bearing may be required.