

Site Classification

AS2870-2011 Residential Slabs and Footings



SAMPLE

Date: 11/12/2019
Date of Fieldwork: 9/12/2019
Site Number: XXXX
Site Address: Lot. XXX No. xx, Address, Suburb Vic, XXXX
Client:

Summary of Assessment Results

Site Classification:	'X' in accordance with AS2870-2011
Climatic Zone:	'X' in accordance with AS2870-2011
Wind Rating:	'XX' in accordance with AS4055-2012
Bushfire Attack Level:	'XX' in accordance with AS3959:2018

Intrax Consulting Engineers Pty Ltd
 ABN: 31 106 481 252

Head Office
 Level 4, 469 La Trobe Street
 Melbourne, Vic 3000
 p: 03 8371 0100 f: 03 8371 0199
 w: www.intrax.com.au

Confidentiality

All documents are subject to the 'Intrax Terms and Conditions' and 'Intrax Terms and Conditions -NAC' documents. These documents are available on our website for your perusal.

Conditions of Use

This report is not intended for use by any other person or third party other than the named client. This report is not to be used or quoted except as a complete document including all appendices and subject to the report limitations as stipulated in Section 5 of this document.

Direct Contact

Any questions or queries regarding this report should be directed to Intrax Consulting Engineers on -03 8371 0100 or email at info@intrax.com.au.

Copyright

©2019 Intrax Consulting Engineers Pty Ltd (ABN 31 106 481 252).

This document has been produced expressly for the client. The 'client' is defined as the person or persons named in this report/proposal or the purchaser of the services.

No part of this report/proposal including the whole or same shall be used for any other purpose nor by any third party without the prior written consent of Intrax Consulting Engineers Pty Ltd.

Document Revision History

Date	Rev	Engineer	Comments
11/12/2019	A	XXXXXXXXXX	First Edition

SAMPLE

1 Introduction

Intrax Consulting Engineers Pty Ltd (Intrax) have been engaged by the client to conduct an investigation of the surface and subsurface conditions at **Lot. xxx**, **No.xx**, **Address, Suburb**, **Vic, xxxx** as depicted on the cover page with a view to reporting on the Site Classification for a proposed residential dwelling.

2 Site Classification

2.1 Site Geology

The available Geological Survey Maps showed the site to be underlain by xxxxxxxxxxxxxxxx. The subsurface profile encountered in the boreholes is considered to be consistent with the geological map indications.

2.2 Field Investigation

THREE(3) boreholes were advanced using a **Mechanical Auger** xxx de, xx, **Address, Suburb** hole logs (refer to Appendix B). These boreholes were positioned as indicated on the site plan (refer to Appendix A) along with details of the existing surface conditions such as slope, trees, and existing buildings. Disturbed materials obtained from augering boreholes were logged in accordance with AS1726-2016 and then classified in accordance with AS2870-2011.

A guide to the existing/natural soil profile consisted of:

FILL – CLAY overlying the naturally occurring:

SILT and

CLAY

Full details of the observed subsurface material and conditions have been recorded on the borehole logs and presented in Appendix B.

2.3 Site Classification in Accordance With AS2870-2011

In accordance with AS2870-2011 "Residential Slabs and Footings Construction" a site classification of xxxxxx is applicable to this site xxxxxxxx.

In the absence of the fill material, the designing engineer should recognise that the natural soils encountered on this site result in a 'xxxxxxx' site classification applying to this site.

XXXX

Based on the findings of this investigation, the soil profile combined with this writer's local knowledge and experience, the characteristic surface movement (Ys) on this site, under normal condition, has been estimated to be in the range of xxx - xxxxx

Should a more detailed investigation (by others) with relevance to the reactivity of the soils in the local area be available, Intrax should be provided with this documentation. It is a condition of this report that any information the client may have with regards to the site and its history be provided to Intrax. This may lead to Intrax reviewing the above classification and conducting a more detailed geotechnical investigation with regards to the additional information. This

report is not a detailed geotechnical investigation. It complies with the requirements of AS2870-2011 and is limited to the items required under Clause 2.2.2(a). Should a more rigorous assessment be required, Intrax can provide a Geotechnical Investigation of the site upon request.

2.3.1 Additional Notes Relating to This Site Classification

XXXXXX

2.4 Wind Rating

At the time of our site visit an investigation of this site and the surrounding terrain was conducted to determine the Wind Classification Design Speed. The maximum design gust wind speed for this site is XXX based on wind speed calculations (Vh) for use in ultimate limit state design only calculated in accordance with the limitations as in AS4055 Section 1.2.

The Wind Rating for this site has been assessed as XX

SAMPLE

3 Founding Recommendations

XXXXX

3.1 Allowable Bearing Pressures

The following allowable bearing pressures can be adopted for the soils listed in the table below. These bearing pressures apply where typically the embedment is a minimum of 100mm into the specified material.

Table 1: Allowable Bearing Pressures

Soil Type	Indicative Founding Depth (mm)	Maximum Allowable Bearing Capacity (kPa)
Controlled Fill¹	xxx mm into layer	xxx
Natural Silts²	xxx mm into layer	xxx
Natural Clay²	xxx mm into layer	xxx
Natural Clay²	xxx mm into layer	xxx

SILT * xxxxxx

Controlled Fill xxxxxx

Natural Material xxxxxx

4 Construction Techniques and Difficulties

SAMPLE

5 Conditions of Use of This Report

SAMPLE

5.2 Variations to This Report

5.3 Loss or Damages

For and on behalf of Intrax Consulting Engineers Pty Ltd

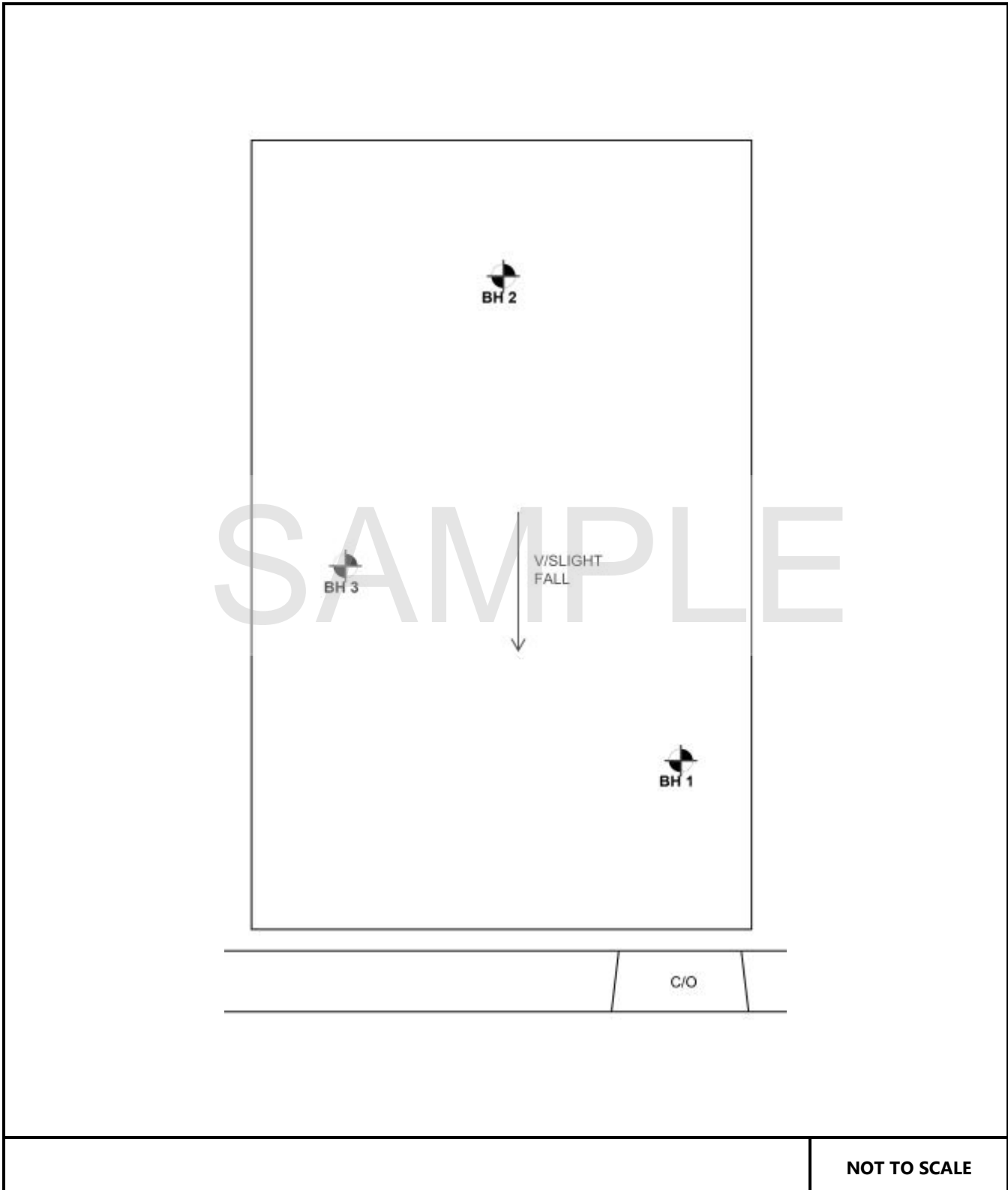
SAMPLE

Appendix A

Site Plan

SAMPLE

Site Plan




NOT TO SCALE

Appendix B

Borehole Logs

SAMPLE

Borehole Logs

Site Address: Lot. xxxx, No. xxxxx, Street name, Suburb, State, Postcode							MECHANICAL AUGER	MECHANICAL AUGER	MECHANICAL AUGER
Horizon	USC	Soil Type	Moisture	Density/ Consistency/ Strength	Plasticity	Description	Borehole 1	Borehole 2	Borehole 3
EXISTING SURFACE LEVEL							0	0	0
CONTROLLED FILL	CH	CLAY	Moist, Near Plastic Limit	Stiff	High Plasticity	grey brown concrete/rubble, root material, gravelly pockets.	0 - 400	0 - 900	0 - 700
A	CI	SILT	Moist, Dry Of Plastic Limit	Stiff	Medium Plasticity	brown, root material.	---	---	700 - 900
B	CH	CLAY	Moist, Near Plastic Limit	Stiff	High Plasticity	brown to grey brown, calcareous pockets, tending to weathered rock.	400 - 1800	900 - 1900	900 - 1800
				Intrax ID #: XXXXX		NO REFUSAL	NO REFUSAL	NO REFUSAL	
				Date of Fieldwork XXXXX		Groundwater Not Encountered	Groundwater Not Encountered	Groundwater Not Encountered	

SAMPLE

Appendix C

Bushfire Attack Level

SAMPLE

Bushfire Attack Level Assessment

This site's BAL has been calculated using the Method 1 in accordance with the requirements of AS3959:2018 – Construction of Buildings in Bushfire Prone Areas.

For this particular site, with the house siting supplied, the following parameters were observed:

Fire Danger Index (FDI)		100			
Approximate Direction		North	East	South	West
Type of Vegetation Classified	Grassland	>50m	>50m	>50m	>50m
	Non - Grassland	>100m	>100m	>100m	>100m
Distance to Classifiable Vegetation from Proposed Siting		-	-	-	-
Slope of the land under classified vegetation		-	-	-	-
Bushfire Attack Level (BAL)		N/A*			

*- This site is within a non-designated bushfire prone area special BAL requirements not apply.

Notes:

1. If the house siting changes, the BAL will need to be reassessed to address the impact of moving the house further from or closer to the identified vegetation.
2. The above BAL rating is measured based on the condition of the vegetation at the time of assessment and it is valid on the condition that the vegetation is maintained as such.