

Lot 12 The Perch White Hills

Site Classification
for
JLEJ Investments

Report 17C 0396
June, 2017

Lot 12 The Perch, White Hills

Site Classification for JLEJ Investments

Revision

| Revision | Date | Authorised |
|----------|---------|------------|
| 17C 0396 | 27/6/17 | SEH |

Distribution (this revision only)

| Recipient | Format | Date |
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| GTSS | On file | 27/6/17 |
| JLEJ Investments c/- Spiire Attn: Jason Fehring | Email PDF jason.fehring@spiire.com.au | 27/6/17 |

1 INTRODUCTION

JLEJ Investments commissioned Geotechnical Testing Services to conduct a geotechnical investigation for the proposed residential development located at Lot 12 The Perch, White Hills.

The investigation has been conducted for the purpose of assessing general subsurface conditions at the site and consequently assigning a Site Classification in accordance with AS2870 – 2011 “Residential Slabs and Footings”.

2 INVESTIGATION

The investigation was conducted by a technician on the 9th of June, 2017 using a vehicle mounted drill-rig and drilling 2 boreholes to depths of 1.5 metres within the designated area. The subsequent soil profiles are presented in page 6 and the location of the boreholes are presented on page 7.

At the time of this investigation, the type of development proposed is unknown to GTS.

3 SITE CONDITIONS

The site has a medium fall to the front and is currently vacant. At the time of the investigation the surface of the site was dry with no grass cover. There are some medium to large sized trees present in the nature strip. There was visual evidence of surface rock in the region, and no visual evidence of surface cracking. No groundwater seepage was encountered over the investigated depths.

Full details of soil conditions are presented in the borehole logs.

4 SITE CLASSIFICATION

After allowing due consideration to the site geology, the trees, soil conditions, drainage and known details of the proposed structure, the site has been classified as **Class M** (AS2870 – 2011).

Foundations designed in accordance with this classification are to be subject to the overriding conditions of Section 5 below.

5 DISCUSSION

Particular attention should be paid to the design of footings as required by AS2870 – 2011.

In addition to the normal founding requirements arising from the above classification, particular conditions at the site dictate that the founding medium and minimum depth below existing surface levels for all footings should be as follows:

- Silty CLAY, medium plasticity, dark brown, brown, stiff
At depths below 0.0 metres in the region of BH1 and 0.1 metres in the region of BH2

An allowable bearing pressure of 100kPa is available for edge beams, strips and stump footings founded as above. All foundations should extend a minimum of 100mm into the above founding material.

6 IMPORTANT NOTES ABOUT THIS REPORT

- The site classification presented in Section 4 assumes that the current natural drainage and infiltration conditions at the site will not be markedly affected by the proposed site development work. Care should therefore be taken to ensure that surface water is not permitted to collect adjacent to the structure and that significant changes to seasonal soil moisture equilibria do not develop as a result of service trench construction or tree root action.
- Attention is drawn to Appendix B of AS 2870 and CSIRO document, BTF 18 – “Foundation Maintenance and Footing Performance: A Homeowner’s Guide” as a guide to maintenance requirement for the proposed structure.
- This is not a comprehensive investigation nor is it economic or practical to determine every subsurface feature on the site. Although this investigation indicates that soil conditions are relatively uniform across the site, it is recommended that the base of all footing excavations be inspected to ensure that the founding medium meets that requirements referenced herein with respect to type and strength of founding materials. If further variations in descriptions in soil types, colour or depths are discovered during construction, this office should be notified immediately so that potential influence on the footings may be assessed.
- The soil colours provided in the borelogs attached may vary with soil moisture content and individual interpretation, therefore colour alone should not be used to identify these soils.
- Strength characteristics of soils often exhibit a large variation between wet and dry conditions. Soil characteristics of a soil profile are given on the soil conditions at the time of the investigation.

- In the event of significant earthworks being undertaken on the site after this investigation, this report may require an amendment if appropriate.
- If FILL is found during this investigation, it is an indication of what was found during the investigation and it may vary over the site. It may be in the best interest of the buyer / seller to undertake a more detailed investigation, in this instance.

Should you have any further queries concerning these results, please do not hesitate in contacting this office on 5441 4881



Shane Hampton BE (Hons)
Senior Geotechnical Engineer

Enclosed

Borehole Logs (Page 6)

Site Map (Page 7)

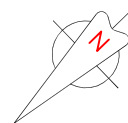
Borehole Logs

| | | | |
|----------|-------------------------------|-------------------|---------|
| Client: | JLEJ Investments | Borehole Log No.: | 1-2 |
| | | Report Number: | 17C 396 |
| | | Date Drilled: | 9/06/17 |
| Project: | Lot 12 The Perch, White Hills | Logged By: | RC |
| | | Drilling Method | AS |

| Profile (mm): | * Structure: (see key) | Material Description: | Moisture Description: | Cohesion Density: | Plasticity: | Testing / Sampling: |
|----------------|------------------------|--|-----------------------|-------------------|-------------|---------------------|
| 0 To 600 | Soil Profile | BH1 Silty CLAY Dark brown | M | St | Medium | |
| To 1500 | Rock | SILTSTONE Extremely weathered, brown | M | M-H | - | |
| 0 To 100 | Fill | BH1 Sandy SILT Dark brown | M | MD | - | |
| To 600 | Soil Profile | Silty CLAY brown | M | St | Medium | |
| To 1500 | Rock | SILTSTONE Extremely weathered, pale brown | D | M-H | - | |

Key:

| Drilling Method: | Moisture Condition | Cohesion: | Density: | Testing/Sampling: |
|---------------------|--------------------|------------------|-------------------|--------------------------------------|
| AS - Auger Screwing | D - Dry | VS - Very Soft | VL - Very Loose | PP – Pocket Penetrometer |
| HA - Hand Auger | M - Moist | S - Soft | L - Loose | V – Hand Vane Sheer |
| | W - Wet | F - Firm | MD - Medium Dense | DCP – Dynamic Cone Penetrometer |
| | | ST - Stiff | D - Dense | SPT – Standard Penetration Test |
| | | VST - Very Stiff | VD - Very Dense | US – Undisturbed Sampling |
| | | H - Hard | | DS – Disturbed Sampling |
| | | VH – Very hard | | * See notes on borelog location page |



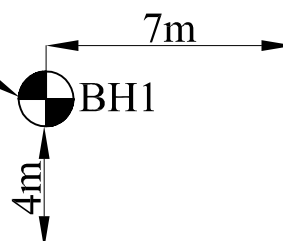
LOT 11

SCOTT STREET

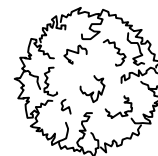
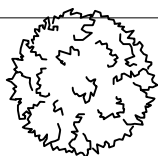


BH2

16m



BH1



ST KILLIANS STREET



**GEOTECHNICAL
INVESTIGATION**

APPROXIMATE LOCATIONS
NOT TO SCALE

**CLIENT: JLEJ INVESTMENTS
PROJECT: LOT 12 THE PERCH,
WHITE HILLS**

GTS REF: 17C 0396

DATE: 20 JUNE 2017