

27 March 2020

PR-19/0093 - B

Buttrose Earthmovers
10 Caribou Dr
Direk, SA 5110

Attention: Mr. Jim Callander

Dear jim,

**CONTROLLED FILL,
STAGE 8 – VIRGINIA GROVE
RE: ALLOTMENT FILL LOTS – (626 TO 630), (640 TO 656), (658 TO 665)**

**LEVEL 1 INSPECTION AND TESTING
(BULK EARTHWORKS)**

Earthworks for controlled fill commenced on the 10th October 2019 and were completed on the 20 January 2020. This work was undertaken by Buttrose Earthmovers.

Earthworks commenced with stripping of vegetation, removal of all topsoil, uncontrolled fill and unsuitable materials within the allotment area. All of which was visually inspected by Lab SA personnel.

Controlled fill was placed on the allotments for residential construction by Buttrose Earthmovers with the placement of approximately 250 mm thick layers compacted to 95% standard compaction (AS 1289 5.1.1). Lab SA Pty Ltd provided earthworks inspection and testing services during fill placement to Level 1 engagement, as defined in Australian Standard AS 3798, Clause 8.2 “Guidelines on earthworks for commercial and residential developments”. Testing was randomly selected at various locations and layers as shown in the field density reports.

In large scale controlled fill areas, testing is generally one test per layer/ per 2500 m² throughout the fill being placed. In general, one test was performed at finish level on each area at the completion of the final layer of fill being placed within the filling foot print. All compaction test results achieved or exceeded the minimum dry density ratio as specified for each material.

Based on survey and design plans information presented by Buttrose Earthmovers, it is estimated that a maximum of 1.9m of controlled fill was placed comprising up to 7 layers of controlled fill.

The levels presented on this letter are not intended to identify the absolute thickness of compacted materials therefore the difference between measurements may not represent the maximum field depth on site and may be used only as reference. Lab SA does not take any responsibility for any uncontrolled fill below these surface levels.

The fill was sourced from suitable off site material and may be considered “controlled fill” for the purposes of footing design to Australian Standard AS2870, Clause 6.4.2 “Residential Slabs and Footings”.

We trust the foregoing is suitable for your consideration in this matter, however should you have any further queries or would like us to expand upon this letter further please contact us on 8258 5594.

Yours faithfully
LAB SA Pty Ltd



Darren Neale
Senior Laboratory Technician