

## CIVIL GEOTECHNICAL SERVICES ABN 26 474 013 724 PO Box 678 Croydon Vic 3136 Telephone: 9723 0744 Facsimile: 9723 0799

16<sup>th</sup> October 2018

Our Reference: 18639:NB299

Winslow Constructors Pty Ltd 50 Barry Road CAMPBELLFIELD VIC 3061

Dear Sirs/Madams,

## RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING ARMSTRONG ESTATE – STAGE 41 (MOUNT DUNEED)

Please find attached our Report No 18639/R001 which relate to the field density testing that was conducted within the filled allotments at the above subdivision. The level 1 inspections and associated field density testing were performed in August 2017.

The inspections and testing of the earthworks was undertaken in general accordance with the Level 1 requirements of AS 3798 - Guidelines on Earthworks for Commercial and Residential Developments.

The site inspection and testing was performed by experienced geotechnicians from this office. Any areas that were deemed unsatisfactory were reworked and retested under their supervision. The testing was performed to the relevant Australian Standards and the accompanying test reports carry NATA endorsement. The attached compaction results, which were located randomly throughout the fill profile, are considered to be representative of the bulk fill materials that were placed across the reported allotments by Winslow Constructors during the aforementioned period. The approximate locations of the field density tests can be seen on the attached plan (Figure 1).

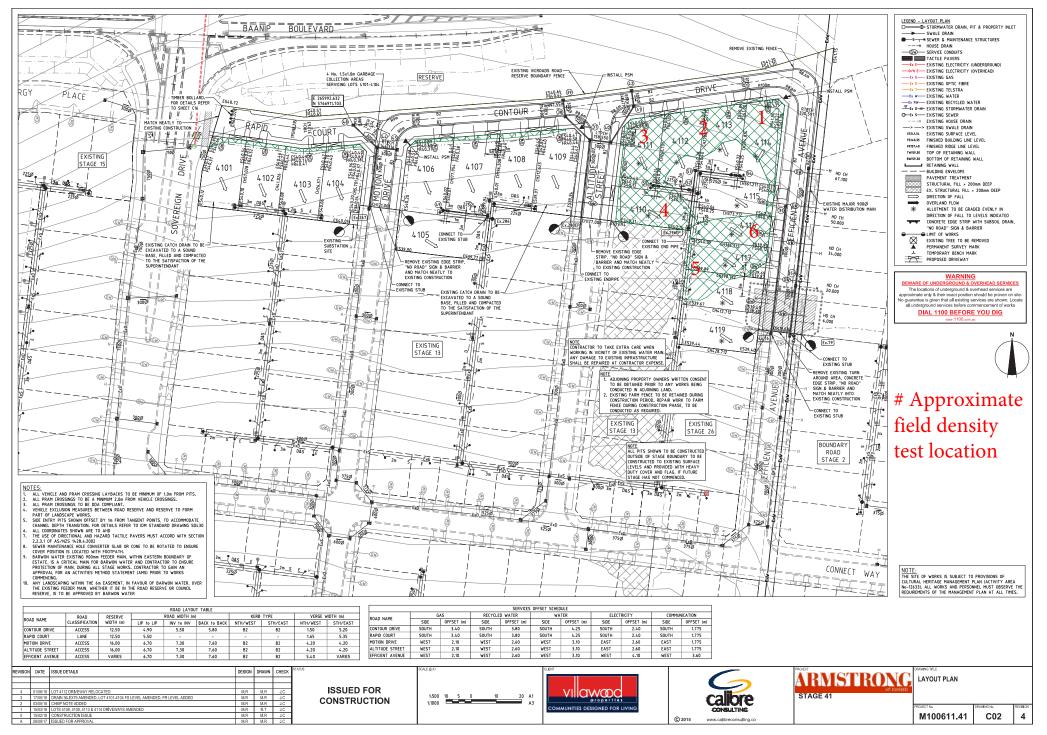
We are of the view that the bulk fill materials that have been placed across the reported allotments by Winslow Constructors during the aforementioned period can be considered as having been placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

Please contact the undersigned if you require any additional information.

Civil Geotechnical Services

Nick Brock

## FIGURE 1





## **COMPACTION ASSESSMENT**

CIVIL GEOTE	CHNICAL SERVICES	Job No Report No	18639 18639/R001	
6 - 8 Rose Aven	ue, Croydon 3136	Date Issued	13/10/2017	
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AG	
Project	ARMSTRONG - STAGE 41	Date tested	15/08/17	
Location	MOUNT DUNNED	Checked by	JHF	

Feature

EARTHWORKS

Layer thickness

200 mm

*Time:* 09:05

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		1	2	3	4	5	6
Location							
		REFER	REFER	REFER	REFER	REFER	REFER
		то	то	то	то	то	то
		FIGURE 1	FIGURE 1	FIGURE 1	FIGURE 1	FIGURE 1	FIGURE 1
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	ļ						
Approximate depth below FSL							
Measurement depth	тт	175	175	175	175	175	175
Field wet density	t∕m³	1.83	1.84	1.90	1.89	1.90	1.93
		05.0	26.5	23.3	27.3	26.0	24.3
Field moisture content	%	25.0	20.0	23.3	21.3	20.0	24.3
	%	25.0	20.3	23.3	21.3	20.0	24.3
Test procedure AS 1289.5.7.1					-		
Test procedure AS 1289.5.7.1 Test No	<u>%</u>	25.0	20.5	3	4	5	6
Test procedure AS 1289.5.7.1 Test No Compactive effort	<u>%</u>	1	2	3 Stan	4 dard	5	6
Test procedure AS 1289.5.7.1 Test No	% 			3	4		
Test procedure AS 1289.5.7.1 Test No Compactive effort		1	2	3 Stan	4 dard	5	6
Test procedure AS 1289.5.7.1 Test No Compactive effort Oversize rock retained on sieve	mm	1	2 19.0	3 Stan 19.0	4 dard 19.0	5	6 19.0
Test procedure AS 1289.5.7.1 Test No Compactive effort Oversize rock retained on sieve Percent of oversize material	mm wet	1 19.0 0	2 19.0 0	3 Stan 19.0 0	4 dard 19.0 0	5 19.0 0	6 19.0 0
Test procedure AS 1289.5.7.1 Test No Compactive effort Oversize rock retained on sieve Percent of oversize material Peak Converted Wet Density	mm wet t/m³	1 19.0 0 1.91	2 19.0 0	3 Stan 19.0 0	4 dard 19.0 0 1.91	5 19.0 0	6 19.0 0
Test procedure AS 1289.5.7.1 Test No Compactive effort Oversize rock retained on sieve Percent of oversize material Peak Converted Wet Density Adjusted Peak Converted Wet Density	mm wet t/m <sup>3</sup>	1 19.0 0 1.91 -	2 19.0 0 1.91 -	3 Stan 19.0 0 1.97 -	4 dard 19.0 0 1.91 -	5 19.0 0 1.95 -	6 19.0 0 2.00 -
Test procedure AS 1289.5.7.1 Test No Compactive effort Oversize rock retained on sieve Percent of oversize material Peak Converted Wet Density Adjusted Peak Converted Wet Density	mm wet t/m <sup>3</sup>	1 19.0 0 1.91 -	2 19.0 0 1.91 -	3 Stan 19.0 0 1.97 -	4 dard 19.0 0 1.91 -	5 19.0 0 1.95 -	6 19.0 0 2.00 -

Demoits Potio ( D )	0/	96.0	96.0	06 5	99.0	98.0	96.5
Density Ratio (R <sub>HD</sub> )	%	90.0	90.0	96.5	99.0	90.0	90.5

Material description

No 1 - 6 Clay Fill



The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National standards. Accredited for compliance to ISO/IEC 17025. Accreditation No 9909

AVRLOT HILF V1.10 MAR 13

Approved Signatory : Justin Fry