



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

13<sup>th</sup> October 2020

Our Reference: 20024:NB825

Winslow Constructors Pty Ltd  
50 Barry Road  
CAMPBELLFIELD VIC 3061

Dear Sirs/Madams,

**RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING**  
**OLIVINE – STAGE 11 (DONNYBROOK)**

Please find attached our Report No's 20024/R001 and 20024/R002 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 was performed in January 2020.

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).

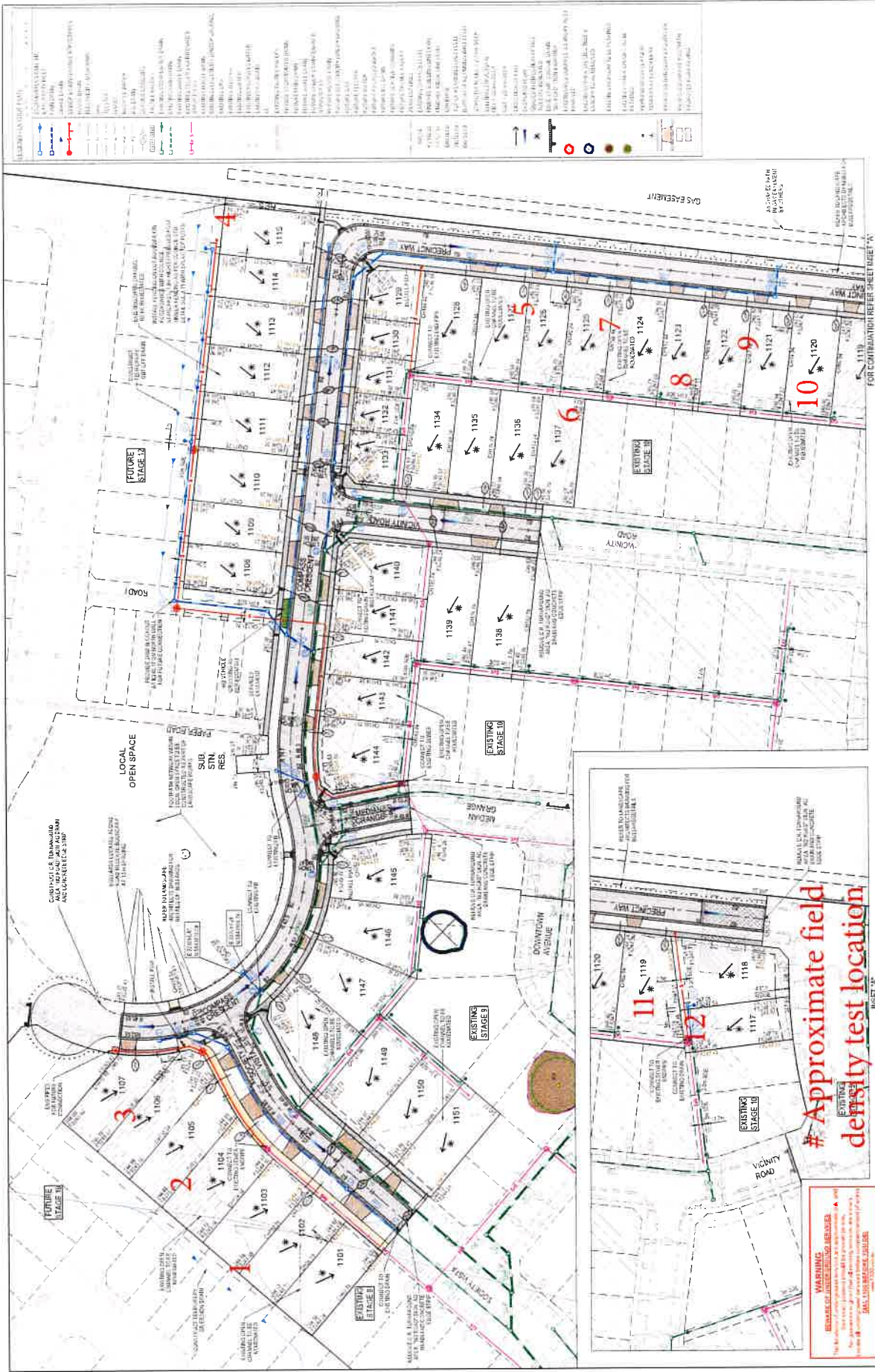
Please contact the undersigned if you require any additional information.

Civil Geotechnical Services

A handwritten signature in blue ink, appearing to read 'Nick Brock', is written over a faint circular stamp.

Nick Brock

**FIGURE 1**



**WARNING - REBAR/CLAS - REBARER**  
 This drawing is intended for use by a qualified professional only. It is not to be used for construction purposes. No liability is accepted for any errors or omissions. The user must ensure that all dimensions and specifications are correct before construction begins.

**# Approximate field density test location**

Olive Estate - Stage 11  
 Whittlesea City Council  
 Road and Drainage  
 Layout Plan

8 M2 1700E-11-02 02 of 20 C

**MIRVAC**

**SMCC**  
 Member of the Melbourne Planning Group  
 1000 Collins Street  
 Melbourne VIC 3000

N

1:100

DATE	11/01/20	BY	MM
REVISION		BY	MM
DATE	11/01/20	BY	MM
REVISION		BY	MM

**SUBJECT TO APPROVAL**



## COMPACTION ASSESSMENT

**CIVIL GEOTECHNICAL SERVICES**

6 - 8 Rose Avenue, Croydon 3136

Job No 20024  
 Report No 20024/R001  
 Date Issued 16/03/2020

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	OLIVINE - STAGE 11	Date tested	24/01/20
Location	DONNYBROOK	Checked by	JHF

<b>Feature</b>	<b>EARTHWORKS</b>	Layer thickness	200 mm	Time: 11:07
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	1	2	3	4	5	6
Location	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1
Approximate depth below FSL						
Measurement depth <i>mm</i>	175	175	175	175	175	175
Field wet density <i>t/m<sup>3</sup></i>	1.83	1.87	1.86	1.84	1.84	1.85
Field moisture content %	13.8	24.0	19.4	18.2	21.5	13.6

Test procedure AS 1289.5.7.1

Test No	1	2	3	4	5	6
Compactive effort	Standard					
Oversize rock retained on sieve <i>mm</i>	19.0	19.0	19.0	19.0	19.0	19.0
Percent of oversize material <i>wet</i>	0	0	0	0	0	0
Peak Converted Wet Density <i>t/m<sup>3</sup></i>	1.83	1.86	1.86	1.84	1.83	1.88
Adjusted Peak Converted Wet Density <i>t/m<sup>3</sup></i>	-	-	-	-	-	-
Optimum Moisture Content %	16.5	26.5	21.0	17.0	19.5	16.0

Moisture Variation From Optimum Moisture Content	2.5% dry	2.5% dry	2.5% dry	1.5% wet	2.0% wet	2.5% dry
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Density Ratio ( $R_{HD}$ )	%	100.0	101.0	100.5	99.5	100.5	98.5
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Material description

No 1 - 6 Clay Fill
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AVRLOT-HILF V1.10 MAR 13



The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards. Accredited for compliance with ISO/IEC 17025 - Testing

Accreditation No 9909

Approved Signatory : Justin Fry





## COMPACTION ASSESSMENT

**CIVIL GEOTECHNICAL SERVICES**

6 - 8 Rose Avenue, Croydon 3136

Job No 20024  
 Report No 20024/R002  
 Date Issued 06/03/2020

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	OLIVINE - STAGE 11	Date tested	28/01/20
Location	DONNYBROOK	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 12:09
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	7	8	9	10	11	12
Location	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1
Approximate depth below FSL						
Measurement depth <i>mm</i>	175	175	175	175	175	175
Field wet density <i>t/m<sup>3</sup></i>	1.90	1.92	1.92	1.91	1.91	1.94
Field moisture content <i>%</i>	16.4	17.1	13.5	15.1	19.2	10.7

Test procedure AS 1289.5.7.1

Test No	7	8	9	10	11	12
Compactive effort	Standard					
Oversize rock retained on sieve <i>mm</i>	19.0	19.0	19.0	19.0	19.0	19.0
Percent of oversize material <i>wet</i>	0	0	0	0	0	0
Peak Converted Wet Density <i>t/m<sup>3</sup></i>	1.95	2.00	2.00	1.99	1.99	2.00
Adjusted Peak Converted Wet Density <i>t/m<sup>3</sup></i>	-	-	-	-	-	-
Optimum Moisture Content <i>%</i>	19.0	19.5	16.0	17.0	21.5	12.5

Moisture Variation From Optimum Moisture Content	2.5% dry	2.5% dry	2.5% dry	2.0% dry	2.5% dry	2.0% dry
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Density Ratio ( $R_{HD}$ ) <i>%</i>	<b>97.5</b>	<b>96.0</b>	<b>96.5</b>	<b>96.0</b>	<b>96.0</b>	<b>97.0</b>
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Material description

No 7 - 12 Clay Fill

AVRLOT HILF V1.10 MAR 13



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